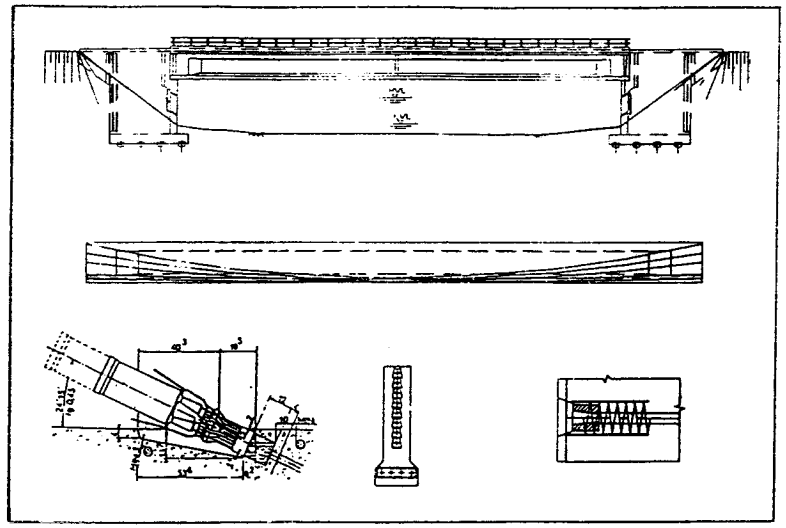
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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF LOCAL GOVERNMENT, RURAL DEVELOPMENT & CO-OPERATIVES
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

MANUAL ON PRESTRESSED CONCRETE BRIDGES
PART A - STANDARD DESIGNS



PREPARED BY:

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

In association with

ALLIED ENGINEERS ENTERPRISE LTD.

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1.0 INTRODUCTION

1.1 General

The Local Government Engineering Department, here-in-after written as LGED, under Ministry of Local Government Rural Development and Co-operatives, Government of Bangladesh (GOB), have been implementing a large number of bridges in rural areas all over Bangladesh. In order to facilitate easy implementation of these works a Road Structure Manual (RSM) in two parts namely, Part A-Standard Design and Part B-Guidelines and Design Criteria was prepared in 1989. The scope of this RSM was limited to the conventional design of masonry and RC road structures with a maximum limit of single span length 12 m and abutment height 8 m. The LGED with the assistance from CARE Bangladesh and USAID have now updated the above RSM '89. The new RSM '96 is divided into 3 parts namely, Part A-Road Structure Manual, Part B-Standard Drawings and Part C-Structure Works Software Manual.

Apart from the above standard masonry and RC structures of the RSM, LGED have also implemented large span RC bridges including balanced cantilever bridges. Besides, LGED, by now have constructed a few prestressed concrete (PC) bridges.

In the meantime, LGED have established two construction yards - one at Sylhet and the other at Cox's Bazar with adequate facilities for precasting PC/RC components of the low cost houses. Another PC yard is under implementation at Jessore by LGED now. They are at present considering construction of additional precast yards with higher capacities in the other regions of the country.

LGED's work load has increased in recent years. Further, they are undertaking larger span bridges also. A considerable number of these bridges are located over channel crossing having perennial flow, over tidal creeks and in weak foundation soil where cast-in-situ bridge superstructure has risk of scaffolding and formwork settlement. The use of precast PC girders can eliminate requirement of scaffolding over flowing channels and hazardous ground conditions. PC girders are generally lighter compared to RC girders which facilitate handling of the same during transportation and erection. The present Design Manual provides standard designs of the PC girders from 20-40 m span range along with the other components which will make the construction of larger span bridges in rural roads much easier. The Manual includes standard design of composite superstructures comprising of PC girders shear connected with RC deck for span range between 20m and 40m at an interval of 1.0 m and abutment heights varying between 6m and 10m at an interval of 0.5m. Prefabricated RC rail bars and rail posts are also included in this Manual. Wall type abutment and flag type wing walls are supported by 800mm thick pile cap on 600mm dia. cast-in-situ RC bored piles. The bridge bearings are of reinforced elastomeric type.

The structural analysis and design have been made by developing appropriate computer software. The drawings of the Manual have been prepared using the AutoCAD. AutoLISP program has been developed for the main components e.g., general arrangement drawings, bridge deck details, PC girders, abutment and wingwalls, pile foundations, etc.

It is expected that the present Manual on PC girder bridges in association with RSM'96 will enable the Deptt. to cope with their work load more efficiently and in a technically sound manner.

1.2 Scope of the Manual

The Manual contains the standard designs along with the bar bending schedule and quantities for the following components of the single 20-40 meter simply supported span bridges containing 6-10m high abutments:

a) Deck Slab : 4 types

TYPE IA:	Carriageway width	= 3.66 m
	Width of 2(two) sidewalks, each	= 0.40 m
	Out to out deck width	= 5.21 m
TYPE IB:	Carriageway width	= 3.66 m
	Sidewalks	= Nil
	Out to out deck width	= 4.41 m
TYPE IIA:	Carriageway width	= 4.33 m
	Width of 2(two) sidewalks, each	= 0.40 m
	Out to out deck width	= 5.88 m
TYPE IIB:	Carriageway width	= 4.33 m
	Sidewalks	= Nil
	Out to out deck width	= 5.08 m

b) PC Girder :

Span length (c/c bearing)	= 21 nos. between 20.00 m & 40.00 m at an interval of 1m.
Overall length of girders	= 20.80 m - 40.80 m

c) Abutment-Wingwalls:

	Height ranges	= 9 nos. between 6 m and 10 m at an interval of 0.5 m.
	Design Types	= 2
- TYPE AW1:	Height range	= 6.00 m - 8.00 m
- TYPE AW2:	Height range	= 8.50 m - 10.00 m

d) Pile Cap : Types = 9

e) Piles : 600 mm dia. cast-in-situ bored piles of length 12-25 m at a length interval of 1.00 m with variable reinforcement have been provided. This covers all span ranges of PC girders 20-40 m, abutment heights 6-10 m and loose to medium dense sub-soil condition having SPT N values about 10.

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f) Bridge Bearings : Multi-layer reinforced elastomeric

g) Railing : Precast RC rail post and rail bars

h) Miscellaneous : Expansion joint, rain water down pipe, etc.

The Manual is presented in two parts:

Part A: Standard Designs

Part B: Design Criteria and Guidelines

Part A comprises of 4 chapters.

Chapter 1 contains Introduction and Scope of the Manual.

Chapter 2 contains selection criteria of length of bridge, height of abutment, longitudinal profile grade, cross-slope, deck type and geometry, PC girder, Abutment-wingwall types, pile cap, piles, bridge bearings, joints, railings, wearing course and free board.

Chapter 3 contains the Bill of Quantities and Schedule of Concrete Quantities for Superstructure, Substructure, Foundation and Piles.

Chapter 4 contains the standard designs and the bar bending schedules.

Part B comprises of 17 chapters.

Chapter 1: INTRODUCTION

Chapter 2: DEFINITIONS

Chapter 3: PLANNING AND INVESTIGATIONS

Chapter 4: HYDRAULIC CONSIDERATIONS AND CLEARANCE

Chapter 5: SUB-SURFACE INVESTIGATION

Chapter 6: DESIGN CODES, STANDARDS AND LOADS

Chapter 7: MATERIAL STRENGTH, PROPERTIES AND QUALITY CONTROL TESTS

Chapter 8: DESIGN OF PRESTRESSED CONCRETE (PC) GIRDERS

Chapter 9: DESIGN OF RC DECK, CROSS-GIRDER, RAILING, SIDEWALK AND KERB

Chapter 10: DESIGN OF SUBSTRUCTURE

Chapter 11: DESIGN OF CAST-IN-SITU RC PILE FOUNDATION AND PILE CAP

Chapter 12: DESIGN OF ELASTOMERIC BRIDGE BEARINGS

Chapter 13: CONSTRUCTION AND ERECTION OF PC GIRDER

Chapter 14: CONSTRUCTION OF DECK SLAB, RAIL POST AND RAILING

Chapter 15: CONSTRUCTION OF CAST-IN-SITU BORED PILES

Chapter 16: INSTALLATION OF ELASTOMERIC BEARINGS AND EXPANSION JOINTS

Chapter 17: COMPUTER SOFTWARE AND USER'S GUIDE

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2.0 SELECTION CRITERIA

2.1 Length of the Bridge

Length of the bridge is determined mainly from the hydrogeological considerations. Narrow bridge increases unit discharge through the channel and thereby increases the scour depth. Further in scour calculation provision for actual grain size of the bed material has been kept.

For calculation of scour depth, usually the methods given by Lacey, Laursen and Blench are used in the subcontinent, out of which Lacey's method is more popular in the country. For the purpose of this Manual, scour depth for the noncohesive soil has been calculated using Lacey's method and the same for the cohesive soil has been calculated using the method of tractive forces given in R.V. Farrady and F.G. Charlton, Hydraulic Factors in Bridge Design, Hydraulic Research, Wallingford, U.K.

The selection criteria of the length of bridge incorporating the above factors is given in Flow Chart Fig. 2.1 and Part B, Chapter 4 of this Manual. RSM'89 provisions have been given due considerations in this regard.

2.2 Longitudinal Profile Grade

The horizontal profile grade has been chosen for the multiple span bridge of the standard structures of this Manual. It is suggested to adjust the height difference between the finished road surface at abutment and the top elevation of the approach road by providing parabolic curve with a maximum grade of 3% in the tangent line. The procedure for designing the profile grade is given in PART-B of this Manual and in RSM '89, Part B, Sec. 14.6, Vertical Curves.

2.3 Cross-Slope

2.5% cross-slope has been provided in the deck to ensure effective drainage of the straight bridge.

2.4 Deck Type and Geometry

The standard design has been made for basically two types of carriageways namely, Type-I 3.66m carriageway width and Type-II 4.33m carriageway width.

Each of these Types I and II has been subdivided into Types IA & IIA containing 0.4 m wide side walks and IB & IIB without sidewalk. The overall deck width for each of these types are given in Chapter 1.0. Type-I carriageway is the normal carriageway for the rural bridges. Type-II carriageway will be used near the rural market places and other places of importance. For type IA & IIA decks, 0.25 m high kerbs have been provided on either end of the carriageway as vehicle barrier. In addition 0.325m widex0.2m high continuous RC pedestals below rail posts have been provided along outer boundaries of each sidewalk as second traffic barrier during the accidental vehicular collision with the railing. For type IB & IIB carriageways without sidewalks, this is the only traffic barrier. Extra reinforcement in the traffic face of the rail posts has therefore been provided to strengthen the posts.

Two-girder arrangement for the deck has been used as it has been found economical compared to the three-girder arrangement.

Three cross-girders, two at C.L. bearings and one at mid-span have been provided in conformity with the provisions of AASHTO Standard Specifications for Highway Bridges, 1992.

2.5 PC Girder

Six different heights of PC girder sections have been provided as shown in Table 2.1 below

Table 2.1: Types of PC Girder

Sl. No.	Overall girder Length m	Girder Height m	Flange width mm Top	Flange width mm Bottom
1.	20.80 - 23.80	1.40	400	650
2.	24.80 - 26.80	1.60	400	650
3.	27.80 - 30.80	1.80	400	650
4.	31.80 - 33.80	2.20	400	650
5.	34.80 - 37.80	2.40	525	700
6.	38.80 - 40.80	2.60	600	750

In types 1 - 3, the size of the top and bottom bulbs have been kept 400 and 650 mm respectively. The width of web has been kept constant at 200 mm varying the heights of the webs only, to facilitate making of standard forms. In the larger span bridges of type 4, 5 & 6, the top and bottom bulbs and web thickness have been increased to accommodate the larger number of prestressing cables and to keep the concrete stresses in the members within allowable limits. End blocks have been provided as required by AASHTO Standard Specifications of Highway Bridges, 1992.

12 ø7 mm HT wire cables instead of strands have been provided in the PC girders because of the following advantages:

a) The imported HT wire is cheaper compared to the equivalent size of strands in Bangladesh market. HT wire cables are not manufactured in Bangladesh at present.

b) Freyssinet multi-wire jacks for 12 ø7 mm wire cables are available in the country with several local contractors.

2.6 Abutment and Wing Wall: Types and Heights

Two types of abutment wing-walls have been provided. The cantilever flag type wing walls have been kept common in all these two types. To take advantage in the structural design, a number of tie walls connecting the wing walls have been provided as shown in Table 2.2 below .

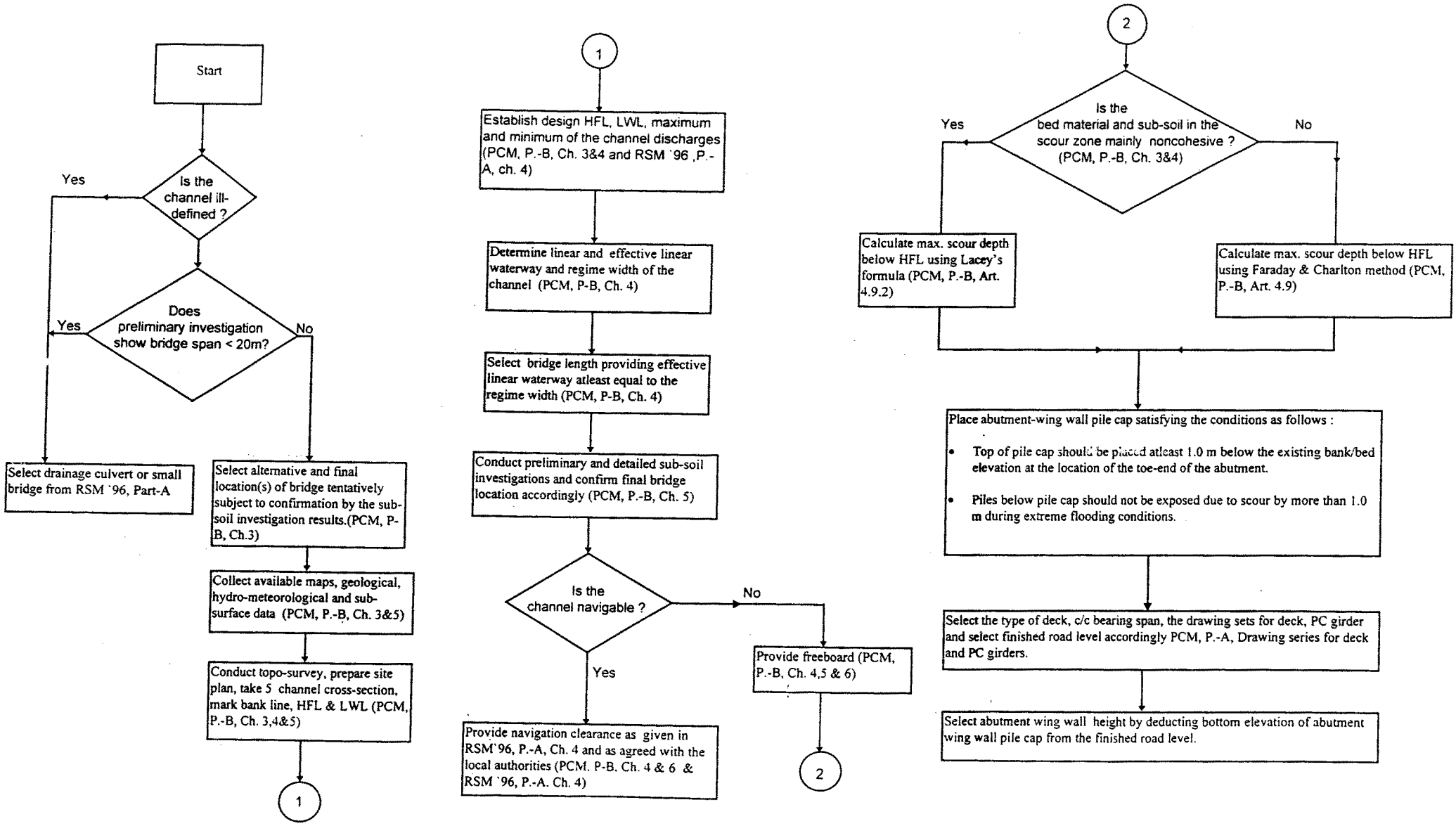
Table 2.2: Types of Abutment - Wing Walls

Sl. No.	Abutment height m	No. of counterforts in abutment	No. of tie walls in wing wall
1	6.00 - 8.00	Nil	1
2	8.50 - 10.00	Nil	2

For the flag type wing walls in single lane bridge, tie walls have been found more economical compared to the counterforts.

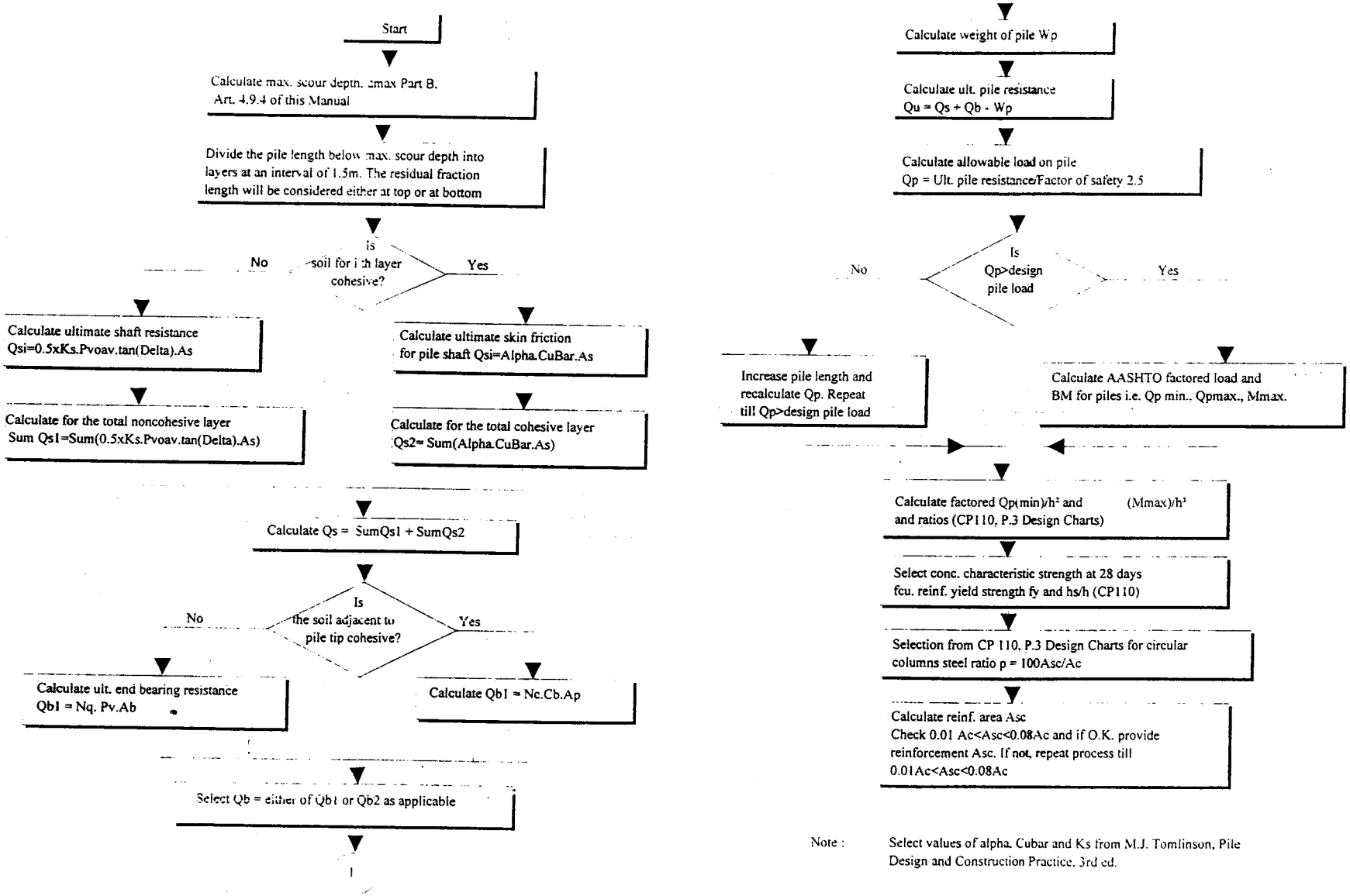
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Fig. 2.1 Flow Chart for Selection of Bridge Length, Abutment-Wing Wall Heights and Clearance



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Fig. 2.2 **Flow chart for selection of pile length**



Note : Select values of alpha, Cubar and Ks from M.J. Tomlinson, Pile Design and Construction Practice, 3rd ed.

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2.7 Abutment Pile Cap

For the 4 types of deck i.e., deck types IA, IIA, IB & IIB, 6.00 - 10.00m high abutments and 20.00 - 40.00 m c/c bearing span PC girders, 9 types of abutment pile caps have been provided.

Table 2.3 shows the sizes of the pile caps and the number of piles in each pile cap.

Table 2.3: Types of abutment pile caps along with size of pile caps and no. of piles

Sl. No.	Foundation Type	No. of Piles	Size of Pile Cap Lm x Bm
1	A	11	6.60 X 4.85
2	B	12	6.60 X 5.25
3	C	14	6.60 X 6.00
4	D	16	6.60 X 7.05
5	E	20	6.60 X 8.85
6	F	20	8.40 X 7.05
7	G	24	6.60 X 10.20
8	H	25	8.40 X 8.85
9	I	30	8.40 X 10.20

The pile cap top shall be placed about 1.00m below the prevailing natural ground level (NGL). The length of bridge and bottom elevation of abutment pile cap shall be so decided that the maximum scour below pile cap does not exceed 1.00 m.

2.8 Piles

600 mm dia. cast-in-situ bored piles have been provided. This has been found as the optimum pile diameter from consideration of easy availability of pile rigs, transportation facilities and skilled erection crew.

For 9 types of pile caps and height range varying between 6.00 m and 10.00 m reinforcement details for 12m to 25m length of piles at 1m interval has been provided. Pile details with Bar Bending Schedule for each of these pile types are furnished. Pile reinforcement near the pile top has been provided for the lateral load effects considering alluvial soil having Standard Penetration Test (SPT) N values about 10. For very large N values, the pile length and reinforcement need to be recalculated using the design software provided (ref. Part B, Chapter 11).

Pile spacing has been provided to minimum 3 times pile diameter so that full skin friction is mobilised.

Flow Chart for deciding the pile length from skin friction and end bearing is shown in Fig. 2.2

2.9 Bridge Bearings

Reinforced elastomeric bearings have been provided below each girder end. For design of the same and their specifications, refer to Part B, Chapter 12.0.

2.10 Bridge Joints

Steel plate joint has been provided as the expansion joint in accordance with the current practice of LGED. The design of the joint has been made stronger than the existing design generally followed in the country as the lighter joint provided so far in the bridge structures shows poor performance. Standard PVC joint would have been ideal, but these are expensive materials and not manufactured in the country. It is advisable to use in future, standard PVC joint to achieve durability of the bridge structure upto the design life which is about 100-120 years, as the relative cost of the standard joint is negligible compared to the total cost of the bridge.

2.11 Bridge Railing

Precast rail posts and rail bars have been provided because achieving quality of construction and finishing of the precast members is likely to be better than cast-in-situ railing. The method is kept simple so that faster construction can be achieved.

2.12 Wearing Course

40 mm thick plain concrete wearing course has been provided. Actually asphaltic concrete wearing course is always preferable for the bridge structure as this black top material reduces the temperature on the concrete surface of the deck slab considerably Yet this has not been provided as its construction requires expensive equipment and proper mix design which may be difficult to achieve in the rural areas of the country at present.

2.13 Free Board

Free board defined as the clear height between girder bottom and HFL for the purpose of this manual.

For the design structures of this Manual 1.00 m free board is considered where boat traffic is allowed and 0.5 m free board is allowed where boat traffic is not allowed. For the motorised launch crossing, this should be decided separately as a special case.

3.0 BILL OF QUANTITIES (BOQ)

The BOQ applicable for the standard structures of this Manual has been furnished in Table 3.1. The BOQ items have been organised in conformity with the existing practice of LGED. SI units with imperial units in the paranthesis () have been used. The Schedule of concrete quantities for each component of the structures are furnished in Art. 3.2 of this Chapter.
A floppy diskette cointaining the spread sheet program using Lotus 1-2-3 for completing the BOQ is also furnished separately.

3.1 SAMPLE BOQ

A sample BOQ is given in Table 3.1

3.2 SCHEDULE OF CONCRETE QUANTITIES

Schedule of concrete quantities of superstructure for four deck types and span 20 - 40m have been furnished in Dwg. No. SQ-SP-01. The same for substructure and pile foundation have been furnished in Dwg. No. SQ-SB-01 to SQ-SB-09 and SQ-PF-01 respectively.

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Table 3.1 Sample Bill of Quantities for prestressed concrete bridge (c/c abutment bearing)

Sl. No.	Item	Unit	Quantity	Rate Tk.	Cost Tk.	Remarks
1	2	3	4	5	6	7
	STANDARD ITEMS					
01.	Mobilisation of man, materials and equipment, preparation of site, clearing of all existing debris, jungles and obstructions, cutting of specified trees, construction of appurtenances, etc. for commencing the work as per direction of the Engineer-in-charge.		L.S.			
02.	Dismantling of existing structures of any type including removal of foundations (down to the required depth) and superstructure, stacking the removed debris and materials in a safe place, supply of all labour, equipment, taking all precautionary measures, etc. complete as per direction of the Engineer. (The salvaged materials are Government property).		L.S.			
03.	Earthwork in excavation of foundation trenches in all kinds of soil upto the required depth and width, providing the layout, construction of a centre line, brick/concrete reference pillar, preparation of bed, bailing out of water, removal of spoils to a safe distance, backfilling of sides of trenches upto original level, shoring, if necessary, etc. complete as per drawings, specifications and directions of the Engineer-in-charge.	m^3				
04.	Making earthen ring/cross bundh of required height and width to prevent water from entering in the working area for any type of foundation with earth arranged and carried by the contractor including bullah/bamboo palasiding and double tarja mat/drum sheets, walling as and where necessary and maintaining the same till the completion of work for which the ring/cross bundh is made including supply of all materials, labour & equipment and removal after completion of work as per direction of the Engineer-in-charge. (70% of payment will be made after completion of the construction of ring/cross bundh. The balance amount will be paid after full removal of the same).	Nos.				
05.	Providing a diversion with approaches at a place away from the construction site for the movement of pedestrian/ existing traffic including cost of all materials, labour, equipment and maintaining the same till the newly constructed bridge/culvert is open to traffic, as directed by the Engineer.		L.S.			
06.	Bailing out water/dewatering of working areas including supply, operation and maintenance of 2 nos. water pumps of not less than 60 L/S capacity each, for bailing out of water as required. Pumps are to be kept at site in good running condition for all work carried out below prevailing ground level and between the 1st April and 30th November each year.		L.S.			
07.	[5.1] Single layer brick flat soiling in foundation & other places designated by the Engineer with first class bricks, filling the joints with sand (FM 0.80) @ 0.012 cum of sand per sqm over 75mm thick sand cushion, watering, levelling, dressing including cost of all materials, labours, etc. complete as per direction of the Engineer-in-charge.	m^3				
08.	[4.01] Cement concrete work proportion (1:3:6) in foundation, with cement, coarse sand (F.M. 1.80) & 20mm downgraded crushed stone chips as per drawings, specifications and directions of the Engineer.	m^3				
09.	[4.30] Supply and fabrication of M.S. deformed/high yield deformed bar for all types of RCC works as per drawings including hooking, bending, binding with 22 BWG G.I. wire supported to spacer/mortar blocks (1:3) of cement and sand or metal chair separators and hangers, lapping including supplying, carrying, straightening, removing rust if any, cranking, cost of all materials and labour, etc. all complete as per direction of the Engineer-in-charge.					

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Table 3.1 Sample Bill of Quantities for prestressed concrete bridge (c/c abutment bearing)

Sl. No.	Item	Unit	Quantity	Rate Tk.	Cost Tk.	Remarks
1	2	3	4	5	6	7
	STANDARD ITEMS					
	Cont. (Measurement will be based on standard weight of 7850 kgf/m³. Chairs, laps and separators will not be measured for payment. The cost of these will be included in the unit rate). a) MS Deformed ASTM A615 grade 40 bar fy=276N/mm²(40000 psi)	Kg				
	b) High yield deformed ASTM A615 grade 60 bar fy = 410 N/mm²(60000 psi)	Kg				
10.	Earthwork in temporary coffer dams/ artificial island for convenience of drilling operation and concreting for cast-in-situ bored piles in all types of soil, including cutting, carrying, throwing and filling in layers not exceeding 150mm in thickness, with all leads & lifts and including close bamboo palasiding with matured barrack bamboo of minimum diameter 75mm including driving at least one third of its length below GL, carrying of all materials, fitting fixing with gazal, nail, battens at 0.5m c/c, etc. with double tarza walling including fixing with GI wire, etc. all complete as per direction of the Engineer-in-charge. (Materials are to be obtained from excavation of temporary diversion channel/foundation excavation, as directed; coffer dams shall be subsequently removed and the materials shall be placed as embankment or other permanent fill). 70% of payment will be made after construction of artificial island and the balance amount will be paid after full removal of the same. If barge is used instead of artificial island, the same payment will be made.	Nos.				
11.	Boring and casting of reinforced concrete cast-in-situ piles upto bottom of pile cap and/or top of permanent/temporary steel casing if required including necessary arrangement for staging, drilling, driving, bentonite circulation, placing of reinforcement and casting concrete with cement, sand (FM 1.8) and 20mm downgraded crushed stone chips in proportion not less than 1:1½:3 and a minimum ultimate cylinder crushing strength of concrete at 28 days 20 N/mm²(2900 psi) including supply of all equipment, material and labour but excluding cost of reinforcement and its fabrication/ permanent steel casing. Temporary steel casing shall be provided upto required depth and pulled out as per standard practice, etc. complete in all respect as per drawings, specifications & directions of the Engineer-in-charge at the cost of contractor. a) Boring i) 750mm (30 in. dia.) ii) 600mm (24 in. dia.) iii) 500mm (20 in. dia.) iv) 450mm (18 in. dia.)	 m m m m				
	a) Concreting i) 750mm (30 in. dia.) ii) 600mm (24 in. dia.) iii) 500mm (20 in. dia.) iv) 450mm (18 in. dia.)	 m³ m³ m³ m³				
12.	Welding at the splicing point of main reinforcement at 3 points (each point being 100mm in length) and at each alternate contact point of spiral binder/ tie rod with the main vertical reinforcement of the bored piles using appropriate electrodes including the cost of all materials, labours, tools & equipment, the cost of power, etc. complete as per drawings, specifications and directions of the Engineer. a) 600 dia piles i) For spiral spot welding ii) Lap welding of main reinforcement	 Each spot Each spot				

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Table 3.1 Sample Bill of Quantities for prestressed concrete bridge (c/c abutment bearing)

Sl. No	Item	Unit	Quantity	Rate Tk.	Cost Tk.	Remarks
1	2	3	4	5	6	7
	STANDARD ITEMS					
13.	Supplying the best quality MS pipes for bored pile casing of 6mm thickness and diameter as per drawings, carrying, handling, fitting, fixing in position, etc. complete as per specifications and directions of the Engineer.					
	a) 750mm (30 in. dia.)	m				
	b) 600mm (24 in. dia.)	m				
	c) 500mm (20 in. dia.)	m				
	d) 450mm (18 in. dia.)	m				
14.	Static load test of cast-in-situ concrete piles by the application of superimposed loads on the pile head, preparation of all arrangement including staging, supplying loads with approved means and keeping the full load in place for min. 24 hrs., measuring of settlements by calibrated gauges & subsequent removal of loads, staging, other temporary works, etc. complete. The test load shall not be less than double the design load of the pile & the applied load shall not be removed before 24 hrs. or until the rate of settlement is less than 0.25mm (0.01 inch) per half an hour, or as decided by the Engineer. (In case of precast piles this item will be provisional. Payment & execution will be made only as per direction of the Engineer.					
	Applied load:					
	i) Upto 60 Ton	Each				
	ii) Above 60 Ton	Each				
15.	[4.10] RCC work with min. proportion of portland cement, coarse sand (minimum FM 1.80) and 20mm down graded crushed stone chips including shuttering (watertight), mixing with mixer machine, casting, compacting with vibrator, curing, etc. all complete including breaking of stone chips and cost of all materials, their carrying & labour but excluding cost of reinforcement & its fabrication, etc.					

Sl. No.	Item	Unit	Quantity	Rate Tk.	Cost Tk.	Remarks
1	2	3	4	5	6	7
	STANDARD ITEMS					
	Cont. complete as per specifications, drawings and direction of the Engineer-in-charge. (No plastering shall be allowed over RC works. Ultimate cylinder crushing strength of concrete at 28 days shall be 20 N/mm² (2900 psi). Extra cement, if required to attain the strength, shall be provided by the contractor at his own cost).					
	a) [4.10.2 (ii)] Foundation/culvert base/Friction slab/cut-off wall/wing wall/pile cap for abutments and piers.	m^3				
	b) [4.10.2 (viii)] Vertical member, column, wing wall, retaining wall, abutment, pier, pier cap, extended bored pile above casing, walls of culvert, fillet of culvert, tie beam, breast walls, etc.	m^3				
	c) [4.10.2 (xiii)] Top slab of box, railing, rail post, wheel guard, side walk, etc. of bridge/culvert.	m^3				
	d) [4.10.2 (xii)] Deck slab	m^3				
	e) [4.10.2 (x)] Cross girder	m^3				
16.	[4.42] Providing average 38mm thick wearing course minimum proportion (1:1½:3), 28 days cylinder strength f'c = 20mm N/mm² on deck slab of bridge with cement, sand (FM 1.5) and 6mm down graded boulder chips, mixing concrete, laying including cost of all materials, labour and transportation to the site, etc. all complete as per direction of the Engineer-in-charge.	m^3				
17.	Providing & laying cement concrete of specified grades in prestressed concrete works including formwork, necessary ramming, vibrating, curing, finishing & launching, shifting, placing in position, etc. complete in conformity with drawings, specification & direction of the Engineer-in-charge Ultimate cylinder crushing strength of concrete at 28 days shall be 30 N/mm2(4350 psi).	m				

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Table 3.1 Sample Bill of Quantities for prestressed concrete bridge (c/c abutment bearing)

Sl. No.	Item	Unit	Quantity	Rate Tk.	Cost Tk.	Remarks
1	2	3	4	5	6	7
	STANDARD ITEMS					
24.	[2.1.5.] Extra over item no. [2.1.2] for each additional lift of 1m or part thereof beyond initial 2m lift, all as directed by the Engineer-in-charge (av. 2 nos).	m^3				
25.	[2.3.11] Turfing on embankment top & slope with good quality turf not less than 225 mm in size including supply of turf, placing, anchoring turfs with pegs, watering until grass is fully grown, and for all leads and lifts, etc. all complete as per direction of the Engineer-in-charge. (Payment shall be made only when grass is fully grown).	m^2				
26.	Supplying and placing of two layers of gunny bagged riprap filled with mixture of sand (F.M. 1.00), cement (8:1) along slopes of abutments, piers, banks of river/khal, tamping the bags in place, curing by sprinkling water over the bags including the cost of all materials, labour and incidentals necessary to complete the works as specified and directed by the Engineer.	m^2				
27.	Sand filling under culvert base or in any other foundation in layers with sand (F.M. 1.00) free from dust, impurities, including cost of all materials, watering, ramming, consolidating, dressing, etc. complete in all respect as per drawing & directions of the Engineer (Provisional item).	m^3				
28.	Hanging of sign board.		L.S.			
29.	Supplying, fitting and fixing 300 mm x 300 mm x 20 mm (1 ft x 1 ft x 3/4 in.) marble name plate at left hand wheel guard on each side, one in English and one in Bengali including cost of materials, labour, formwork, engraving neatly the approved inscriptions, etc.complete as per drawings and direction of the Engineer.	Nos				
30.	Providing nosing with M.S. angle of size 75mm x 75mm x 10mm where necessary as per drawings, welding with anchor bars using electrodes, including cost of all materials, carrying, local handling, fitting and incidentals necessary to complete the work as per drawings, specifications and directions of the Engineer.	m				
31.	Labour for breaking of head of cast-in-situ bored piles upto required length by any means and removing dismantled materials such as concrete to a safe distance including scraping and removing concrete from steel/ M.S. rods, preparation and making of platform where necessary, carrying all sorts of debris, handling, stacking the same properly after clearing, levelling, dressing the site and clearing the river bed, etc. complete as per direction of the Engineer-in-charge. (Measurement will be made for the actual pile head volume to be broken).	m^3				
32.	Demobilization & clearing of the work site, restoration of the channel bed to its original profile including removal of artificial island, contractor's materials, sheds, machinery, etc. from the work site after completion of the works, all to the satisfaction of the Engineer.		L.S.			
	TOTAL TAKA =					

Note : 1. Clauses in square brackets [ ] are reference clauses in LGED "Standard Specification and schedule of rate", 1994-95.

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Table 3.1 Sample Bill of Quantities for prestressed concrete bridge (c/c abutment bearing)

Sl. No.	Item	Unit	Quantity	Rate Tk.	Cost Tk.	Remarks
1	2	3	4	5	6	7
	STANDARD ITEMS					
18.	[5.53] Providing rain water down pipe & pipe for weep hole, placing these in position as per drawing including cost of all materials, their carrying and labour etc. all complete as per direction of the Engineer-in-charge.					
	i) 75 mm(3 in.) dia. PVC pipe (for spout)	L.m.				
	ii) 50 mm(2 in.) dia. PVC pipe for weep hole	L.m.				
19.	Supplying, fitting and fixing Bearings in exact position as per drawings, specifications and direction of the Engineer including cost of all materials, labour, welding, carrying, etc. complete. (The set shall mean all rollers, steel plates, pins, holding down bolts, dowel bars, rubber bearing consisting of one or more vulcanized natural/synthetic rubber pads bonded to metal plates to form a sandwich arrangement, etc. to complete the support of a girder at each end).					
	i) Roller bearings with required number of rollers, plates and other fittings complete as per drawings and specifications.					
	..... dia of roller.					
	ii) Hinge plate/free plate bearing with lead plate and other fittings complete as per drawings and specifications.					
	M.S. plate of thickness ..... mm					
	iii) Elastomeric/Neoprene bearing size as follows :					
	a) 250mm x 400mm x 39mm	Sets				
	b) 250mm x 400mm x 52mm	Sets				
	c) 250mm x 450mm x 52mm	Sets				
	d) 250mm x 500mm x 52mm	Sets				
	e) 300mm x 500mm x 52mm	Sets				
	f) 320mm x 500mm x 52mm	Sets				

Sl. No.	Item	Unit	Quantity	Rate Tk.	Cost Tk.	Remarks
1	2	3	4	5	6	7
	STANDARD ITEMS					
20.	[4.15] Providing expansion joint including supply of 75mm x 75mm x 9mm M.S. angle and 12mm thick M.S. plate over expansion joints as per drawing and design and providing 15mm or 20mm dia. anchor bar welded to it @ 0.5m interval including cost of materials, carrying and placing in position on both sides of joints at the edge of entire section of slab, etc. all complete as per direction of the Engineer-in-charge.	m				
21.	Backfilling behind abutment with 50:50 best quality picked jhama brick khoa & sand of min. F.M. 1.00 of 450mm width, in layers of 150mm thickness free from dust, impurities, etc., its compaction using steel or concrete drop hammer (durmus), watering & dressing, supplying and carrying including cost of all materials, labour, arranging and supplying of steel/concrete hammer and other tools required at work site, etc. all complete as per direction of the Engineer-in-charge. Payment shall be made for the compacted volume only for a min. compaction of 90% of the maximum dry density.	m^3				
22.	[2.1.2] Earthwork in bridge/culvert approaches with earth of approved quality arranged and supplied by the contractor, throwing and filling earth in layers of 150mm thickness, breaking clods to a maximum size of 75mm and compacting by mechanical means in all types of common soils except rocky & gravelly soil including benching in 150mm vertical steps along all existing earth slopes, including supply of all necessary tools and equipments, etc. complete as per direction of the Engineer-in-charge. (The dry density after compaction of the embankment will be 95% of standard compaction).	m^3				
23.	[2.1.4.] Extra over item no. [2.1.2] for each additional lead of 10m or part thereof beyond initial 20m lead, all as directed by the Engineer-in-charge.	m^3				

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SCHEDULE OF CONCRETE QUANTITIES FOR SUPERSTRUCTURE

ITEM DESCRIPTION	SPAN LENGTH, m	20.00	21.00	22.00	23.00	24.00	25.00	26.00	27.00	28.00	29.00	30.00
DECK SLAB TYPE IA	VOLUME, m³	29.16	30.56	31.97	33.37	34.77	36.17	37.57	38.98	40.38	41.78	43.18
DECK SLAB TYPE IIA	VOLUME, m³	31.95	33.48	35.02	36.56	38.09	39.63	41.16	42.70	44.24	45.77	47.31
DECK SLAB TYPE IB	VOLUME, m³	22.71	23.81	24.90	25.99	27.08	28.17	29.27	30.36	31.45	32.54	33.63
DECK SLAB TYPE IIB	VOLUME, m³	25.50	26.73	27.95	29.18	30.40	31.63	32.86	34.08	35.31	36.53	37.76
WC, DECK TYPE IA & IB	VOLUME, m³	3.05	3.19	3.34	3.48	3.63	3.78	3.92	4.07	4.22	4.36	4.51
WC, DECK TYPE IIA & IIB	VOLUME, m³	3.60	3.78	3.95	4.12	4.30	4.47	4.64	4.81	4.99	5.16	5.33
RAIL BAR	VOLUME, m³	0.83	0.87	0.91	0.95	0.99	1.03	1.07	1.11	1.15	1.19	1.23
RAIL POST	VOLUME, m³	1.16	1.24	1.24	1.32	1.40	1.40	1.49	1.57	1.57	1.65	1.73
PC GIRDER	VOLUME, m³	23.05	24.12	25.20	26.27	29.68	30.84	32.00	35.77	37.01	45.20	46.64
X-GIRDER, DECK TYPE-IA&IB	VOLUME, m³	1.87	1.87	1.87	1.87	2.22	2.22	2.22	2.56	2.56	3.24	3.24
X-GIRDER, DECK TYPE-IIA&IIB	VOLUME, m³	2.45	2.45	2.45	2.45	2.90	2.90	2.90	3.34	3.34	4.22	4.22

ITEM DESCRIPTION	SPAN LENGTH, m	31.00	32.00	33.00	34.00	35.00	36.00	37.00	38.00	39.00	40.00
DECK SLAB TYPE IA	VOLUME, m³	44.58	45.99	47.39	48.79	50.19	51.59	53.00	54.40	55.80	57.20
DECK SLAB TYPE IIA	VOLUME, m³	48.84	50.38	51.92	53.45	54.99	56.52	58.06	59.60	61.13	62.67
DECK SLAB TYPE IB	VOLUME, m³	34.73	35.82	36.91	38.00	39.09	40.19	41.28	42.37	43.46	44.55
DECK SLAB TYPE IIB	VOLUME, m³	38.99	40.21	41.44	42.66	43.89	45.12	46.34	47.57	48.79	50.02
WC, DECK TYPE IA & IB	VOLUME, m³	4.66	4.80	4.95	5.09	5.24	5.39	5.53	5.68	5.83	5.97
WC, DECK TYPE IIA & IIB	VOLUME, m³	5.51	5.68	5.85	6.03	6.20	6.37	6.55	6.72	6.89	7.07
RAIL BAR	VOLUME, m³	1.27	1.31	1.35	1.39	1.43	1.47	1.51	1.55	1.59	1.63
RAIL POST	VOLUME, m³	1.73	1.82	1.90	1.90	1.98	2.07	2.07	2.15	2.23	2.23
PC GIRDER	VOLUME, m³	48.09	49.53	50.98	64.13	65.84	67.56	69.28	83.08	85.06	87.04
X-GIRDER, DECK TYPE-IA&IB	VOLUME, m³	3.24	3.24	3.24	3.49	3.49	3.49	3.49	3.77	3.77	3.77
X-GIRDER, DECK TYPE-IIA&IIB	VOLUME, m³	4.22	4.22	4.22	4.55	4.55	4.55	4.55	4.94	4.94	4.94

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	SUPERSTRUCTURE
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		SCHEDULE OF CONCRETE QUANTITIES
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: SQ-SP-01 DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
6000	TYPE IA	A	1400	VOLUME, m³	7.57	25.59	21.90	8.31	11.91	**75.28**	51.22	4.80
			1600	VOLUME, m³	8.44	24.34	21.90	8.31	11.91	**74.90**	51.22	4.80
			1800	VOLUME, m³	9.31	23.08	21.90	8.31	11.91	**74.52**	51.22	4.80
			2200	VOLUME, m³	11.05	20.58	21.90	8.31	11.91	**73.76**	51.22	4.80
			2400	VOLUME, m³	11.92	19.33	21.90	8.31	11.91	**73.38**	51.22	4.80
			2600	VOLUME, m³	12.79	18.08	21.90	8.31	11.91	**73.00**	51.22	4.80
		B	1400	VOLUME, m³	7.57	25.59	25.24	7.18	12.02	**77.61**	55.44	5.20
			1600	VOLUME, m³	8.44	24.34	25.24	7.18	12.02	**77.23**	55.44	5.20
			1800	VOLUME, m³	9.31	23.08	25.24	7.18	12.02	**76.85**	55.44	5.20
			2200	VOLUME, m³	11.05	20.58	25.24	7.18	12.02	**76.08**	55.44	5.20
			2400	VOLUME, m³	11.92	19.33	25.24	7.18	12.02	**75.70**	55.44	5.20
			2600	VOLUME, m³	12.79	18.08	25.24	7.18	12.02	**75.32**	55.44	5.20
	TYPE IIA	A	1400	VOLUME, m³	8.51	28.88	21.90	8.31	13.48	**81.08**	51.22	4.80
			1600	VOLUME, m³	9.48	27.46	21.90	8.31	13.48	**80.65**	51.22	4.80
			1800	VOLUME, m³	10.46	26.05	21.90	8.31	13.48	**80.21**	51.22	4.80
			2200	VOLUME, m³	12.42	23.23	21.90	8.31	13.48	**79.34**	51.22	4.80
			2400	VOLUME, m³	13.39	21.82	21.90	8.31	13.48	**78.91**	51.22	4.80
			2600	VOLUME, m³	14.37	20.41	21.90	8.31	13.48	**78.47**	51.22	4.80
		B	1400	VOLUME, m³	8.51	28.88	25.24	7.18	13.60	**83.41**	55.44	5.20
			1600	VOLUME, m³	9.48	27.46	25.24	7.18	13.60	**82.97**	55.44	5.20
			1800	VOLUME, m³	10.46	26.05	25.24	7.18	13.60	**82.54**	55.44	5.20
			2200	VOLUME, m³	12.42	23.23	25.24	7.18	13.60	**81.67**	55.44	5.20
			2400	VOLUME, m³	13.39	21.82	25.24	7.18	13.60	**81.23**	55.44	5.20
			2600	VOLUME, m³	14.37	20.41	25.24	7.18	13.60	**80.80**	55.44	5.20
	TYPE IB	A	1400	VOLUME, m³	6.46	21.66	21.90	8.31	10.03	**68.36**	51.22	4.80
			1600	VOLUME, m³	7.20	20.60	21.90	8.31	10.03	**68.04**	51.22	4.80
			1800	VOLUME, m³	7.94	19.54	21.90	8.31	10.03	**67.72**	51.22	4.80
			2200	VOLUME, m³	9.43	17.42	21.90	8.31	10.03	**67.09**	51.22	4.80
			2400	VOLUME, m³	10.17	16.36	21.90	8.31	10.03	**66.77**	51.22	4.80
			2600	VOLUME, m³	10.91	15.31	21.90	8.31	10.03	**66.46**	51.22	4.80
		B	1400	VOLUME, m³	6.46	21.66	25.24	7.18	10.14	**70.68**	55.44	5.20
			1600	VOLUME, m³	7.20	20.60	25.24	7.18	10.14	**70.37**	55.44	5.20
			1800	VOLUME, m³	7.94	19.54	25.24	7.18	10.14	**70.05**	55.44	5.20
			2200	VOLUME, m³	9.43	17.42	25.24	7.18	10.14	**69.42**	55.44	5.20
			2400	VOLUME, m³	10.17	16.36	25.24	7.18	10.14	**69.10**	55.44	5.20
			2600	VOLUME, m³	10.91	15.31	25.24	7.18	10.14	**68.78**	55.44	5.20
	TYPE IIB	A	1400	VOLUME, m³	7.39	24.95	21.90	8.31	11.60	**74.16**	51.22	4.80
			1600	VOLUME, m³	8.24	23.73	21.90	8.31	11.60	**73.79**	51.22	4.80
			1800	VOLUME, m³	9.09	22.51	21.90	8.31	11.60	**73.42**	51.22	4.80
			2200	VOLUME, m³	10.79	20.07	21.90	8.31	11.60	**72.67**	51.22	4.80
			2400	VOLUME, m³	11.64	18.85	21.90	8.31	11.60	**72.30**	51.22	4.80
			2600	VOLUME, m³	12.49	17.63	21.90	8.31	11.60	**71.93**	51.22	4.80
		B	1400	VOLUME, m³	7.39	24.95	25.24	7.18	11.72	**76.48**	55.44	5.20
			1600	VOLUME, m³	8.24	23.73	25.24	7.18	11.72	**76.11**	55.44	5.20
			1800	VOLUME, m³	9.09	22.51	25.24	7.18	11.72	**75.74**	55.44	5.20
			2200	VOLUME, m³	10.79	20.07	25.24	7.18	11.72	**75.00**	55.44	5.20
			2400	VOLUME, m³	11.64	18.85	25.24	7.18	11.72	**74.63**	55.44	5.20
			2600	VOLUME, m³	12.49	17.63	25.24	7.18	11.72	**74.26**	55.44	5.20

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**SUBSTRUCTURE** SCHEDULE OF CONCRETE QUANTITIES TOTAL HEIGHT OF ABUT.: 6.0 m DWG. NO.: SQ-SB-01 DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
6500	TYPE IA	C	1400	VOLUME, m³	7.57	28.71	33.43	6.40	13.40	89.51	63.36	5.94
			1600	VOLUME, m³	8.44	27.46	33.43	6.40	13.40	89.13	63.36	5.94
			1800	VOLUME, m³	9.31	26.21	33.43	6.40	13.40	88.75	63.36	5.94
			2200	VOLUME, m³	11.05	23.71	33.43	6.40	13.40	87.99	63.36	5.94
			2400	VOLUME, m³	11.92	22.46	33.43	6.40	13.40	87.61	63.36	5.94
			2600	VOLUME, m³	12.79	21.21	33.43	6.40	13.40	87.23	63.36	5.94
		D	1400	VOLUME, m³	7.57	28.71	42.73	3.76	13.69	96.47	74.45	6.98
			1600	VOLUME, m³	8.44	27.46	42.73	3.76	13.69	96.09	74.45	6.98
			1800	VOLUME, m³	9.31	26.21	42.73	3.76	13.69	95.71	74.45	6.98
			2200	VOLUME, m³	11.05	23.71	42.73	3.76	13.69	94.95	74.45	6.98
			2400	VOLUME, m³	11.92	22.46	42.73	3.76	13.69	94.57	74.45	6.98
			2600	VOLUME, m³	12.79	21.21	42.73	3.76	13.69	94.19	74.45	6.98
	TYPE IIA	C	1400	VOLUME, m³	8.51	32.40	33.43	6.40	15.14	95.88	63.36	5.94
			1600	VOLUME, m³	9.48	30.99	33.43	6.40	15.14	95.44	63.36	5.94
			1800	VOLUME, m³	10.46	29.58	33.43	6.40	15.14	95.01	63.36	5.94
			2200	VOLUME, m³	12.42	26.76	33.43	6.40	15.14	94.14	63.36	5.94
			2400	VOLUME, m³	13.39	25.35	33.43	6.40	15.14	93.71	63.36	5.94
			2600	VOLUME, m³	14.37	23.94	33.43	6.40	15.14	93.27	63.36	5.94
		D	1400	VOLUME, m³	8.51	32.40	42.73	3.76	15.44	102.84	74.45	6.98
			1600	VOLUME, m³	9.48	30.99	42.73	3.76	15.44	102.41	74.45	6.98
			1800	VOLUME, m³	10.46	29.58	42.73	3.76	15.44	101.97	74.45	6.98
			2200	VOLUME, m³	12.42	26.76	42.73	3.76	15.44	101.10	74.45	6.98
			2400	VOLUME, m³	13.39	25.35	42.73	3.76	15.44	100.67	74.45	6.98
			2600	VOLUME, m³	14.37	23.94	42.73	3.76	15.44	100.23	74.45	6.98
	TYPE IB	C	1400	VOLUME, m³	6.46	24.30	33.43	6.40	11.32	81.91	63.36	5.94
			1600	VOLUME, m³	7.20	23.24	33.43	6.40	11.32	81.59	63.36	5.94
			1800	VOLUME, m³	7.94	22.19	33.43	6.40	11.32	81.27	63.36	5.94
			2200	VOLUME, m³	9.43	20.07	33.43	6.40	11.32	80.64	63.36	5.94
			2400	VOLUME, m³	10.17	19.01	33.43	6.40	11.32	80.32	63.36	5.94
			2600	VOLUME, m³	10.91	17.95	33.43	6.40	11.32	80.01	63.36	5.94
		D	1400	VOLUME, m³	6.46	24.30	42.73	3.76	11.61	88.87	74.45	6.98
			1600	VOLUME, m³	7.20	23.24	42.73	3.76	11.61	88.55	74.45	6.98
			1800	VOLUME, m³	7.94	22.19	42.73	3.76	11.61	88.23	74.45	6.98
			2200	VOLUME, m³	9.43	20.07	42.73	3.76	11.61	87.60	74.45	6.98
			2400	VOLUME, m³	10.17	19.01	42.73	3.76	11.61	87.28	74.45	6.98
			2600	VOLUME, m³	10.91	17.95	42.73	3.76	11.61	86.97	74.45	6.98
	TYPE IIB	C	1400	VOLUME, m³	7.39	28.00	33.43	6.40	13.06	88.28	63.36	5.94
			1600	VOLUME, m³	8.24	26.78	33.43	6.40	13.06	87.90	63.36	5.94
			1800	VOLUME, m³	9.09	25.56	33.43	6.40	13.06	87.53	63.36	5.94
			2200	VOLUME, m³	10.79	23.12	33.43	6.40	13.06	86.79	63.36	5.94
			2400	VOLUME, m³	11.64	21.90	33.43	6.40	13.06	86.42	63.36	5.94
			2600	VOLUME, m³	12.49	20.68	33.43	6.40	13.06	86.05	63.36	5.94
		D	1400	VOLUME, m³	7.39	28.00	42.73	3.76	13.36	95.24	74.45	6.98
			1600	VOLUME, m³	8.24	26.78	42.73	3.76	13.36	94.87	74.45	6.98
			1800	VOLUME, m³	9.09	25.56	42.73	3.76	13.36	94.50	74.45	6.98
			2200	VOLUME, m³	10.79	23.12	42.73	3.76	13.36	93.75	74.45	6.98
			2400	VOLUME, m³	11.64	21.90	42.73	3.76	13.36	93.38	74.45	6.98
			2600	VOLUME, m³	12.49	20.68	42.73	3.76	13.36	93.01	74.45	6.98

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	SUBSTRUCTURE
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		SCHEDULE OF CONCRETE QUANTITIES TOTAL HEIGHT OF ABUT.: 6.50 m
	IN ASSOCIATION WITH	LOCATION:	DWG. NO.: SQ-SB-02
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	ALLIED ENGINEERS ENTERPRISE LTD.	THANA: ZILA:	DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
7000	TYPE IA	C	1400	VOLUME, m³	7.57	31.84	36.78	9.58	14.56	**100.33**	63.36	5.94
			1600	VOLUME, m³	8.44	30.59	36.78	9.58	14.56	**99.95**	63.36	5.94
			1800	VOLUME, m³	9.31	29.34	36.78	9.58	14.56	**99.57**	63.36	5.94
			2200	VOLUME, m³	11.05	26.84	36.78	9.58	14.56	**98.81**	63.36	5.94
			2400	VOLUME, m³	11.92	25.59	36.78	9.58	14.56	**98.43**	63.36	5.94
			2600	VOLUME, m³	12.79	24.34	36.78	9.58	14.56	**98.05**	63.36	5.94
		D	1400	VOLUME, m³	7.57	31.84	47.01	6.53	14.85	**107.80**	74.45	6.98
			1600	VOLUME, m³	8.44	30.59	47.01	6.53	14.85	**107.42**	74.45	6.98
			1800	VOLUME, m³	9.31	29.34	47.01	6.53	14.85	**107.04**	74.45	6.98
			2200	VOLUME, m³	11.05	26.84	47.01	6.53	14.85	**106.28**	74.45	6.98
			2400	VOLUME, m³	11.92	25.59	47.01	6.53	14.85	**105.90**	74.45	6.98
			2600	VOLUME, m³	12.79	24.34	47.01	6.53	14.85	**105.52**	74.45	6.98
	TYPE IIA	C	1400	VOLUME, m³	8.51	35.93	36.78	9.58	16.47	**107.27**	63.36	5.94
			1600	VOLUME, m³	9.48	34.52	36.78	9.58	16.47	**106.83**	63.36	5.94
			1800	VOLUME, m³	10.46	33.11	36.78	9.58	16.47	**106.40**	63.36	5.94
			2200	VOLUME, m³	12.42	30.29	36.78	9.58	16.47	**105.53**	63.36	5.94
			2400	VOLUME, m³	13.39	28.88	36.78	9.58	16.47	**105.10**	63.36	5.94
			2600	VOLUME, m³	14.37	27.46	36.78	9.58	16.47	**104.66**	63.36	5.94
		D	1400	VOLUME, m³	8.51	35.93	47.01	6.53	16.76	**114.74**	74.45	6.98
			1600	VOLUME, m³	9.48	34.52	47.01	6.53	16.76	**114.31**	74.45	6.98
			1800	VOLUME, m³	10.46	33.11	47.01	6.53	16.76	**113.87**	74.45	6.98
			2200	VOLUME, m³	12.42	30.29	47.01	6.53	16.76	**113.00**	74.45	6.98
			2400	VOLUME, m³	13.39	28.88	47.01	6.53	16.76	**112.57**	74.45	6.98
			2600	VOLUME, m³	14.37	27.46	47.01	6.53	16.76	**112.13**	74.45	6.98
	TYPE IB	C	1400	VOLUME, m³	6.46	26.95	36.78	9.58	12.28	**92.05**	63.36	5.94
			1600	VOLUME, m³	7.20	25.89	36.78	9.58	12.28	**91.73**	63.36	5.94
			1800	VOLUME, m³	7.94	24.83	36.78	9.58	12.28	**91.41**	63.36	5.94
			2200	VOLUME, m³	9.43	22.72	36.78	9.58	12.28	**90.78**	63.36	5.94
			2400	VOLUME, m³	10.17	21.66	36.78	9.58	12.28	**90.46**	63.36	5.94
			2600	VOLUME, m³	10.91	20.60	36.78	9.58	12.28	**90.15**	63.36	5.94
		D	1400	VOLUME, m³	6.46	26.95	47.01	6.53	12.57	**99.52**	74.45	6.98
			1600	VOLUME, m³	7.20	25.89	47.01	6.53	12.57	**99.20**	74.45	6.98
			1800	VOLUME, m³	7.94	24.83	47.01	6.53	12.57	**98.89**	74.45	6.98
			2200	VOLUME, m³	9.43	22.72	47.01	6.53	12.57	**98.25**	74.45	6.98
			2400	VOLUME, m³	10.17	21.66	47.01	6.53	12.57	**97.94**	74.45	6.98
			2600	VOLUME, m³	10.91	20.60	47.01	6.53	12.57	**97.62**	74.45	6.98
	TYPE IIB	C	1400	VOLUME, m³	7.39	31.04	36.78	9.58	14.19	**98.98**	63.36	5.94
			1600	VOLUME, m³	8.24	29.82	36.78	9.58	14.19	**98.61**	63.36	5.94
			1800	VOLUME, m³	9.09	28.60	36.78	9.58	14.19	**98.24**	63.36	5.94
			2200	VOLUME, m³	10.79	26.17	36.78	9.58	14.19	**97.50**	63.36	5.94
			2400	VOLUME, m³	11.64	24.95	36.78	9.58	14.19	**97.13**	63.36	5.94
			2600	VOLUME, m³	12.49	23.73	36.78	9.58	14.19	**96.76**	63.36	5.94
		D	1400	VOLUME, m³	7.39	31.04	47.01	6.53	14.48	**106.46**	74.45	6.98
			1600	VOLUME, m³	8.24	29.82	47.01	6.53	14.48	**106.09**	74.45	6.98
			1800	VOLUME, m³	9.09	28.60	47.01	6.53	14.48	**105.72**	74.45	6.98
			2200	VOLUME, m³	10.79	26.17	47.01	6.53	14.48	**104.97**	74.45	6.98
			2400	VOLUME, m³	11.64	24.95	47.01	6.53	14.48	**104.60**	74.45	6.98
			2600	VOLUME, m³	12.49	23.73	47.01	6.53	14.48	**104.23**	74.45	6.98

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	SUBSTRUCTURE
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		SCHEDULE OF CONCRETE QUANTITIES TOTAL HEIGHT OF ABUT.: 7.00 m
	IN ASSOCIATION WITH	LOCATION:	DWG. NO.: SQ–SB – 03
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	ALLIED ENGINEERS ENTERPRISE LTD.	THANA: ZILA:	DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
7500	TYPE IA	D	1400	VOLUME, m³	7.57	34.96	47.75	8.07	15.99	**114.35**	74.45	6.98
			1600	VOLUME, m³	8.44	33.71	47.75	8.07	15.99	**113.97**	74.45	6.98
			1800	VOLUME, m³	9.31	32.46	47.75	8.07	15.99	**113.59**	74.45	6.98
			2200	VOLUME, m³	11.05	29.96	47.75	8.07	15.99	**112.83**	74.45	6.98
			2400	VOLUME, m³	11.92	28.71	47.75	8.07	15.99	**112.45**	74.45	6.98
			2600	VOLUME, m³	12.79	27.46	47.75	8.07	15.99	**112.07**	74.45	6.98
		F	1400	VOLUME, m³	7.57	34.96	47.75	8.07	15.99	**114.35**	94.75	8.88
			1600	VOLUME, m³	8.44	33.71	47.75	8.07	15.99	**113.97**	94.75	8.88
			1800	VOLUME, m³	9.31	32.46	47.75	8.07	15.99	**113.59**	94.75	8.88
			2200	VOLUME, m³	11.05	29.96	47.75	8.07	15.99	**112.83**	94.75	8.88
			2400	VOLUME, m³	11.92	28.71	47.75	8.07	15.99	**112.45**	94.75	8.88
			2600	VOLUME, m³	12.79	27.46	47.75	8.07	15.99	**112.07**	94.75	8.88
	TYPE IIA	D	1400	VOLUME, m³	8.51	39.46	47.75	8.07	18.07	**121.86**	74.45	6.98
			1600	VOLUME, m³	9.48	38.05	47.75	8.07	18.07	**121.42**	74.45	6.98
			1800	VOLUME, m³	10.46	36.64	47.75	8.07	18.07	**120.99**	74.45	6.98
			2200	VOLUME, m³	12.42	33.81	47.75	8.07	18.07	**120.12**	74.45	6.98
			2400	VOLUME, m³	13.39	32.40	47.75	8.07	18.07	**119.69**	74.45	6.98
			2600	VOLUME, m³	14.37	30.99	47.75	8.07	18.07	**119.25**	74.45	6.98
		F	1400	VOLUME, m³	8.51	39.46	47.75	8.07	18.07	**121.86**	94.75	8.88
			1600	VOLUME, m³	9.48	38.05	47.75	8.07	18.07	**121.42**	94.75	8.88
			1800	VOLUME, m³	10.46	36.64	47.75	8.07	18.07	**120.99**	94.75	8.88
			2200	VOLUME, m³	12.42	33.81	47.75	8.07	18.07	**120.12**	94.75	8.88
			2400	VOLUME, m³	13.39	32.40	47.75	8.07	18.07	**119.69**	94.75	8.88
			2600	VOLUME, m³	14.37	30.99	47.75	8.07	18.07	**119.25**	94.75	8.88
	TYPE IB	D	1400	VOLUME, m³	6.46	29.59	47.75	8.07	13.51	**105.39**	74.45	6.98
			1600	VOLUME, m³	7.20	28.54	47.75	8.07	13.51	**105.07**	74.45	6.98
			1800	VOLUME, m³	7.94	27.48	47.75	8.07	13.51	**104.75**	74.45	6.98
			2200	VOLUME, m³	9.43	25.36	47.75	8.07	13.51	**104.12**	74.45	6.98
			2400	VOLUME, m³	10.17	24.30	47.75	8.07	13.51	**103.80**	74.45	6.98
			2600	VOLUME, m³	10.91	23.24	47.75	8.07	13.51	**103.49**	74.45	6.98
		F	1400	VOLUME, m³	6.46	29.59	47.75	8.07	13.51	**105.39**	94.75	8.88
			1600	VOLUME, m³	7.20	28.54	47.75	8.07	13.51	**105 07**	94.75	8.88
			1800	VOLUME, m³	7.94	27.48	47.75	8.07	13.51	**104.75**	94.75	8.88
			2200	VOLUME, m³	9.43	25.36	47.75	8.07	13.51	**104.12**	94.75	8.88
			2400	VOLUME, m³	10.17	24.30	47.75	8.07	13.51	**103.80**	94.75	8.88
			2600	VOLUME, m³	10.91	23.24	47.75	8.07	13.51	**103.49**	94.75	8.88
	TYPE IIB	D	1400	VOLUME, m³	7.39	34.09	47.75	8.07	15.59	**112.89**	74.45	6.98
			1600	VOLUME, m³	8.24	32.87	47.75	8.07	15.59	**112.52**	74.45	6.98
			1800	VOLUME, m³	9.09	31.65	47.75	8.07	15.59	**112.15**	74.45	6.98
			2200	VOLUME, m³	10.79	29.21	47.75	8.07	15.59	**111.41**	74.45	6.98
			2400	VOLUME, m³	11.64	28.00	47.75	8.07	15.59	**111.04**	74.45	6.98
			2600	VOLUME, m³	12.49	26.78	47.75	8.07	15.59	**110.67**	74.45	6.98
		F	1400	VOLUME, m³	7.39	34.09	47.75	8.07	15.59	**112.89**	94.75	8.88
			1600	VOLUME, m³	8.24	32.87	47.75	8.07	15.59	**112.52**	94.75	8.88
			1800	VOLUME, m³	9.09	31.65	47.75	8.07	15.59	**112.15**	94.75	8.88
			2200	VOLUME, m³	10.79	29.21	47.75	8.07	15.59	**111.41**	94.75	8.88
			2400	VOLUME, m³	11.64	28.00	47.75	8.07	15.59	**111.04**	94.75	8.88
			2600	VOLUME, m³	12.49	26.78	47.75	8.07	15.59	**110.67**	94.75	8.88

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY:

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH
ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT:

LOCATION:

THANA:
ZILA:

SUBSTRUCTURE

SCHEDULE OF CONCRETE QUANTITIES
TOTAL HEIGHT OF ABUT.: 7.50 m

DWG. NO.: SQ-SB-04

DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
8000	TYPE IA	D	1400	VOLUME, m³	7.57	38.09	51.84	11.55	17.16	**126.20**	74.45	6.98
			1600	VOLUME, m³	8.44	36.84	51.84	11.55	17.16	**125.82**	74.45	6.98
			1800	VOLUME, m³	9.31	35.59	51.84	11.55	17.16	**125.44**	74.45	6.98
			2200	VOLUME, m³	11.05	33.09	51.84	11.55	17.16	**124.68**	74.45	6.98
			2400	VOLUME, m³	11.92	31.84	51.84	11.55	17.16	**124.30**	74.45	6.98
			2600	VOLUME, m³	12.79	30.59	51.84	11.55	17.16	**123.92**	74.45	6.98
		F	1400	VOLUME, m³	7.57	38.09	51.84	11.55	17.16	**126.20**	94.75	8.88
			1600	VOLUME, m³	8.44	36.84	51.84	11.55	17.16	**125.82**	94.75	8.88
			1800	VOLUME, m³	9.31	35.59	51.84	11.55	17.16	**125.44**	94.75	8.88
			2200	VOLUME, m³	11.05	33.09	51.84	11.55	17.16	**124.68**	94.75	8.88
			2400	VOLUME, m³	11.92	31.84	51.84	11.55	17.16	**124.30**	94.75	8.88
			2600	VOLUME, m³	12.79	30.59	51.84	11.55	17.16	**123.92**	94.75	8.88
	TYPE IIA	D	1400	VOLUME, m³	8.51	42.99	51.84	11.55	19.40	**134.28**	74.45	6.98
			1600	VOLUME, m³	9.48	41.58	51.84	11.55	19.40	**133.84**	74.45	6.98
			1800	VOLUME, m³	10.46	40.17	51.84	11.55	19.40	**133.41**	74.45	6.98
			2200	VOLUME, m³	12.42	37.34	51.84	11.55	19.40	**132.54**	74.45	6.98
			2400	VOLUME, m³	13.39	35.93	51.84	11.55	19.40	**132.11**	74.45	6.98
			2600	VOLUME, m³	14.37	34.52	51.84	11.55	19.40	**131.67**	74.45	6.98
		F	1400	VOLUME, m³	8.51	42.99	51.84	11.55	19.40	**134.28**	94.75	8.88
			1600	VOLUME, m³	9.48	41.58	51.84	11.55	19.40	**133.84**	94.75	8.88
			1800	VOLUME, m³	10.46	40.17	51.84	11.55	19.40	**133.41**	94.75	8.88
			2200	VOLUME, m³	12.42	37.34	51.84	11.55	19.40	**132.54**	94.75	8.88
			2400	VOLUME, m³	13.39	35.93	51.84	11.55	19.40	**132.11**	94.75	8.88
			2600	VOLUME, m³	14.37	34.52	51.84	11.55	19.40	**131.67**	94.75	8.88
	TYPE IB	D	1400	VOLUME, m³	6.46	32.24	51.84	11.55	14.48	**116.56**	74.45	6.98
			1600	VOLUME, m³	7.20	31.18	51.84	11.55	14.48	**116.24**	74.45	6.98
			1800	VOLUME, m³	7.94	30.12	51.84	11.55	14.48	**115.93**	74.45	6.98
			2200	VOLUME, m³	9.43	28.01	51.84	11.55	14.48	**115.29**	74.45	6.98
			2400	VOLUME, m³	10.17	26.95	51.84	11.55	14.48	**114.97**	74.45	6.98
			2600	VOLUME, m³	10.91	25.89	51.84	11.55	14.48	**114.66**	74.45	6.98
		F	1400	VOLUME, m³	6.46	32.24	51.84	11.55	14.48	**116.56**	94.75	8.88
			1600	VOLUME, m³	7.20	31.18	51.84	11.55	14.48	**116.24**	94.75	8.88
			1800	VOLUME, m³	7.94	30.12	51.84	11.55	14.48	**115.93**	94.75	8.88
			2200	VOLUME, m³	9.43	28.01	51.84	11.55	14.48	**115.29**	94.75	8.88
			2400	VOLUME, m³	10.17	26.95	51.84	11.55	14.48	**114.97**	94.75	8.88
			2600	VOLUME, m³	10.91	25.89	51.84	11.55	14.48	**114.66**	94.75	8.88
	TYPE IIB	D	1400	VOLUME, m³	7.39	37.14	51.84	11.55	16.72	**124.64**	74.45	6.98
			1600	VOLUME, m³	8.24	35.92	51.84	11.55	16.72	**124.27**	74.45	6.98
			1800	VOLUME, m³	9.09	34.70	51.84	11.55	16.72	**123.89**	74.45	6.98
			2200	VOLUME, m³	10.79	32.26	51.84	11.55	16.72	**123.15**	74.45	6.98
			2400	VOLUME, m³	11.64	31.04	51.84	11.55	16.72	**122.78**	74.45	6.98
			2600	VOLUME, m³	12.49	29.82	51.84	11.55	16.72	**122.41**	74.45	6.98
		F	1400	VOLUME, m³	7.39	37.14	51.84	11.55	16.72	**124.64**	94.75	8.88
			1600	VOLUME, m³	8.24	35.92	51.84	11.55	16.72	**124.27**	94.75	8.88
			1800	VOLUME, m³	9.09	34.70	51.84	11.55	16.72	**123.89**	94.75	8.88
			2200	VOLUME, m³	10.79	32.26	51.84	11.55	16.72	**123.15**	94.75	8.88
			2400	VOLUME, m³	11.64	31.04	51.84	11.55	16.72	**122.78**	94.75	8.88
			2600	VOLUME, m³	12.49	29.82	51.84	11.55	16.72	**122.41**	94.75	8.88

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**SUBSTRUCTURE** SCHEDULE OF CONCRETE QUANTITIES TOTAL HEIGHT OF ABUT.: 8.00 m DWG. NO.: SQ–SB–05 DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
8500	TYPE IA	E	1400	VOLUME, m³	7.57	41.22	70.88	6.67	37.58	163.92	93.46	8.76
			1600	VOLUME, m³	8.44	39.97	70.88	6.67	37.58	163.54	93.46	8.76
			1800	VOLUME, m³	9.31	38.71	70.88	6.67	37.58	163.16	93.46	8.76
			2200	VOLUME, m³	11.05	36.21	70.88	6.67	37.58	162.39	93.46	8.76
			2400	VOLUME, m³	11.92	34.96	70.88	6.67	37.58	162.01	93.46	8.76
			2600	VOLUME, m³	12.79	33.71	70.88	6.67	37.58	161.63	93.46	8.76
		H	1400	VOLUME, m³	7.57	41.22	70.88	6.67	37.58	163.92	118.94	11.15
			1600	VOLUME, m³	8.44	39.97	70.88	6.67	37.58	163.54	118.94	11.15
			1800	VOLUME, m³	9.31	38.71	70.88	6.67	37.58	163.16	118.94	11.15
			2200	VOLUME, m³	11.05	36.21	70.88	6.67	37.58	162.39	118.94	11.15
			2400	VOLUME, m³	11.92	34.96	70.88	6.67	37.58	162.01	118.94	11.15
			2600	VOLUME, m³	12.79	33.71	70.88	6.67	37.58	161.63	118.94	11.15
	TYPE IIA	E	1400	VOLUME, m³	8.51	46.52	70.88	6.67	42.40	174.98	93.46	8.76
			1600	VOLUME, m³	9.48	45.10	70.88	6.67	42.40	174.54	93.46	8.76
			1800	VOLUME, m³	10.46	43.69	70.88	6.67	42.40	174.11	93.46	8.76
			2200	VOLUME, m³	12.42	40.87	70.88	6.67	42.40	173.24	93.46	8.76
			2400	VOLUME, m³	13.39	39.46	70.88	6.67	42.40	172.80	93.46	8.76
			2600	VOLUME, m³	14.37	38.05	70.88	6.67	42.40	172.37	93.46	8.76
		H	1400	VOLUME, m³	8.51	46.52	70.88	6.67	42.40	174.98	118.94	11.15
			1600	VOLUME, m³	9.48	45.10	70.88	6.67	42.40	174.54	118.94	11.15
			1800	VOLUME, m³	10.46	43.69	70.88	6.67	42.40	174.11	118.94	11.15
			2200	VOLUME, m³	12.42	40.87	70.88	6.67	42.40	173.24	118.94	11.15
			2400	VOLUME, m³	13.39	39.46	70.88	6.67	42.40	172.80	118.94	11.15
			2600	VOLUME, m³	14.37	38.05	70.88	6.67	42.40	172.37	118.94	11.15
	TYPE IB	E	1400	VOLUME, m³	6.46	34.89	70.88	6.67	31.82	150.71	93.46	8.76
			1600	VOLUME, m³	7.20	33.83	70.88	6.67	31.82	150.40	93.46	8.76
			1800	VOLUME, m³	7.94	32.77	70.88	6.67	31.82	150.08	93.46	8.76
			2200	VOLUME, m³	9.43	30.65	70.88	6.67	31.82	149.45	93.46	8.76
			2400	VOLUME, m³	10.17	29.59	70.88	6.67	31.82	149.13	93.46	8.76
			2600	VOLUME, m³	10.91	28.54	70.88	6.67	31.82	148.81	93.46	8.76
		H	1400	VOLUME, m³	6.46	34.89	70.88	6.67	31.82	150.71	118.94	11.15
			1600	VOLUME, m³	7.20	33.83	70.88	6.67	31.82	150.40	118.94	11.15
			1800	VOLUME, m³	7.94	32.77	70.88	6.67	31.82	150.08	118.94	11.15
			2200	VOLUME, m³	9.43	30.65	70.88	6.67	31.82	149.45	118.94	11.15
			2400	VOLUME, m³	10.17	29.59	70.88	6.67	31.82	149.13	118.94	11.15
			2600	VOLUME, m³	10.91	28.54	70.88	6.67	31.82	148.81	118.94	11.15
	TYPE IIB	E	1400	VOLUME, m³	7.39	40.19	70.88	6.67	36.64	161.77	93.46	8.76
			1600	VOLUME, m³	8.24	38.97	70.88	6.67	36.64	161.40	93.46	8.76
			1800	VOLUME, m³	9.09	37.75	70.88	6.67	36.64	161.03	93.46	8.76
			2200	VOLUME, m³	10.79	35.31	70.88	6.67	36.64	160.29	93.46	8.76
			2400	VOLUME, m³	11.64	34.09	70.88	6.67	36.64	159.92	93.46	8.76
			2600	VOLUME, m³	12.49	32.87	70.88	6.67	36.64	159.55	93.46	8.76
		H	1400	VOLUME, m³	7.39	40.19	70.88	6.67	36.64	161.77	118.94	11.15
			1600	VOLUME, m³	8.24	38.97	70.88	6.67	36.64	161.40	118.94	11.15
			1800	VOLUME, m³	9.09	37.75	70.88	6.67	36.64	161.03	118.94	11.15
			2200	VOLUME, m³	10.79	35.31	70.88	6.67	36.64	160.29	118.94	11.15
			2400	VOLUME, m³	11.64	34.09	70.88	6.67	36.64	159.92	118.94	11.15
			2600	VOLUME, m³	12.49	32.87	70.88	6.67	36.64	159.55	118.94	11.15

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	**SUBSTRUCTURE**
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		SCHEDULE OF CONCRETE QUANTITIES TOTAL HEIGHT OF ABUT.: 8.50 m
	IN ASSOCIATION WITH	LOCATION:	DWG. NO.: SQ-SB-06
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	ALLIED ENGINEERS ENTERPRISE LTD.	THANA: ZILA:	DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
9000	TYPE IA	E	1400	VOLUME, m³	7.57	44.34	76.31	9.80	39.89	**177.93**	93.46	8.76
			1600	VOLUME, m³	8.44	43.09	76.31	9.80	39.89	**177.55**	93.46	8.76
			1800	VOLUME, m³	9.31	41.84	76.31	9.80	39.89	**177.17**	93.46	8.76
			2200	VOLUME, m³	11.05	39.34	76.31	9.80	39.89	**176.40**	93.46	8.76
			2400	VOLUME, m³	11.92	38.09	76.31	9.80	39.89	**176.02**	93.46	8.76
			2600	VOLUME, m³	12.79	36.84	76.31	9.80	39.89	**175.64**	93.46	8.76
		H	1400	VOLUME, m³	7.57	44.34	76.31	9.80	39.89	**177.93**	118.94	11.15
			1600	VOLUME, m³	8.44	43.09	76.31	9.80	39.89	**177.55**	118.94	11.15
			1800	VOLUME, m³	9.31	41.84	76.31	9.80	39.89	**177.17**	118.94	11.15
			2200	VOLUME, m³	11.05	39.34	76.31	9.80	39.89	**176.40**	118.94	11.15
			2400	VOLUME, m³	11.92	38.09	76.31	9.80	39.89	**176.02**	118.94	11.15
			2600	VOLUME, m³	12.79	36.84	76.31	9.80	39.89	**175.64**	118.94	11.15
	TYPE IIA	E	1400	VOLUME, m³	8.51	50.04	76.31	9.80	45.05	**189.72**	93.46	8.76
			1600	VOLUME, m³	9.48	48.63	76.31	9.80	45.05	**189.29**	93.46	8.76
			1800	VOLUME, m³	10.46	47.22	76.31	9.80	45.05	**188.85**	93.46	8.76
			2200	VOLUME, m³	12.42	44.40	76.31	9.80	45.05	**187.99**	93.46	8.76
			2400	VOLUME, m³	13.39	42.99	76.31	9.80	45.05	**187.55**	93.46	8.76
			2600	VOLUME, m³	14.37	41.58	76.31	9.80	45.05	**187.12**	93.46	8.76
		H	1400	VOLUME, m³	8.51	50.04	76.31	9.80	45.05	**189.72**	118.94	11.15
			1600	VOLUME, m³	9.48	48.63	76.31	9.80	45.05	**189.29**	118.94	11.15
			1800	VOLUME, m³	10.46	47.22	76.31	9.80	45.05	**188.85**	118.94	11.15
			2200	VOLUME, m³	12.42	44.40	76.31	9.80	45.05	**187.99**	118.94	11.15
			2400	VOLUME, m³	13.39	42.99	76.31	9.80	45.05	**187.55**	118.94	11.15
			2600	VOLUME, m³	14.37	41.58	76.31	9.80	45.05	**187.12**	118.94	11.15
	TYPE IB	E	1400	VOLUME, m³	6.46	37.53	76.31	9.80	33.73	**163.84**	93.46	8.76
			1600	VOLUME, m³	7.20	36.47	76.31	9.80	33.73	**163.53**	93.46	8.76
			1800	VOLUME, m³	7.94	35.42	76.31	9.80	33.73	**163.21**	93.46	8.76
			2200	VOLUME, m³	9.43	33.30	76.31	9.80	33.73	**162.58**	93.46	8.76
			2400	VOLUME, m³	10.17	32.24	76.31	9.80	33.73	**162.26**	93.46	8.76
			2600	VOLUME, m³	10.91	31.18	76.31	9.80	33.73	**161.94**	93.46	8.76
		H	1400	VOLUME, m³	6.46	37.53	76.31	9.80	33.73	**163.84**	118.94	11.15
			1600	VOLUME, m³	7.20	36.47	76.31	9.80	33.73	**163.53**	118.94	11.15
			1800	VOLUME, m³	7.94	35.42	76.31	9.80	33.73	**163.21**	118.94	11.15
			2200	VOLUME, m³	9.43	33.30	76.31	9.80	33.73	**162.58**	118.94	11.15
			2400	VOLUME, m³	10.17	32.24	76.31	9.80	33.73	**162.26**	118.94	11.15
			2600	VOLUME, m³	10.91	31.18	76.31	9.80	33.73	**161.94**	118.94	11.15
	TYPE IIB	E	1400	VOLUME, m³	7.39	43.24	76.31	9.80	38.89	**175.64**	93.46	8.76
			1600	VOLUME, m³	8.24	42.02	76.31	9.80	38.89	**175.27**	93.46	8.76
			1800	VOLUME, m³	9.09	40.80	76.31	9.80	38.89	**174.90**	93.46	8.76
			2200	VOLUME, m³	10.79	38.36	76.31	9.80	38.89	**174.16**	93.46	8.76
			2400	VOLUME, m³	11.64	37.14	76.31	9.80	38.89	**173.79**	93.46	8.76
			2600	VOLUME, m³	12.49	35.92	76.31	9.80	38.89	**173.42**	93.46	8.76
		H	1400	VOLUME, m³	7.39	43.24	76.31	9.80	38.89	**175.64**	118.94	11.15
			1600	VOLUME, m³	8.24	42.02	76.31	9.80	38.89	**175.27**	118.94	11.15
			1800	VOLUME, m³	9.09	40.80	76.31	9.80	38.89	**174.90**	118.94	11.15
			2200	VOLUME, m³	10.79	38.36	76.31	9.80	38.89	**174.16**	118.94	11.15
			2400	VOLUME, m³	11.64	37.14	76.31	9.80	38.89	**173.79**	118.94	11.15
			2600	VOLUME, m³	12.49	35.92	76.31	9.80	38.89	**173.42**	118.94	11.15

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**SUBSTRUCTURE** SCHEDULE OF CONCRETE QUANTITIES TOTAL HEIGHT OF ABUT.: 9.00 m DWG. NO.: SQ–SB–07 DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
9500	TYPE IA	G	1400	VOLUME, m³	7.57	47.47	96.70	7.13	42.96	**201.83**	107.71	10.10
			1600	VOLUME, m³	8.44	46.22	96.70	7.13	42.96	**201.45**	107.71	10.10
			1800	VOLUME, m³	9.31	44.97	96.70	7.13	42.96	**201.07**	107.71	10.10
			2200	VOLUME, m³	11.05	42.47	96.70	7.13	42.96	**200.31**	107.71	10.10
			2400	VOLUME, m³	11.92	41.22	96.70	7.13	42.96	**199.93**	107.71	10.10
			2600	VOLUME, m³	12.79	39.97	96.70	7.13	42.96	**199.55**	107.71	10.10
		I	1400	VOLUME, m³	7.57	47.47	96.70	7.13	42.96	**201.83**	137.09	12.85
			1600	VOLUME, m³	8.44	46.22	96.70	7.13	42.96	**201.45**	137.09	12.85
			1800	VOLUME, m³	9.31	44.97	96.70	7.13	42.96	**201.07**	137.09	12.85
			2200	VOLUME, m³	11.05	42.47	96.70	7.13	42.96	**200.31**	137.09	12.85
			2400	VOLUME, m³	11.92	41.22	96.70	7.13	42.96	**199.93**	137.09	12.85
			2600	VOLUME, m³	12.79	39.97	96.70	7.13	42.96	**199.55**	137.09	12.85
	TYPE IIA	G	1400	VOLUME, m³	8.51	53.57	96.70	7.13	48.45	**214.36**	107.71	10.10
			1600	VOLUME, m³	9.48	52.16	96.70	7.13	48.45	**213.93**	107.71	10.10
			1800	VOLUME, m³	10.46	50.75	96.70	7.13	48.45	**213.50**	107.71	10.10
			2200	VOLUME, m³	12.42	47.93	96.70	7.13	48.45	**212.63**	107.71	10.10
			2400	VOLUME, m³	13.39	46.52	96.70	7.13	48.45	**212.19**	107.71	10.10
			2600	VOLUME, m³	14.37	45.10	96.70	7.13	48.45	**211.76**	107.71	10.10
		I	1400	VOLUME, m³	8.51	53.57	96.70	7.13	48.45	**214.36**	137.09	12.85
			1600	VOLUME, m³	9.48	52.16	96.70	7.13	48.45	**213.93**	137.09	12.85
			1800	VOLUME, m³	10.46	50.75	96.70	7.13	48.45	**213.50**	137.09	12.85
			2200	VOLUME, m³	12.42	47.93	96.70	7.13	48.45	**212.63**	137.09	12.85
			2400	VOLUME, m³	13.39	46.52	96.70	7.13	48.45	**212.19**	137.09	12.85
			2600	VOLUME, m³	14.37	45.10	96.70	7.13	48.45	**211.76**	137.09	12.85
	TYPE IB	G	1400	VOLUME, m³	6.46	40.18	96.70	7.13	36.40	**186.87**	107.71	10.10
			1600	VOLUME, m³	7.20	39.12	96.70	7.13	36.40	**186.55**	107.71	10.10
			1800	VOLUME, m³	7.94	38.06	96.70	7.13	36.40	**186.23**	107.71	10.10
			2200	VOLUME, m³	9.43	35.95	96.70	7.13	36.40	**185.60**	107.71	10.10
			2400	VOLUME, m³	10.17	34.89	96.70	7.13	36.40	**185.28**	107.71	10.10
			2600	VOLUME, m³	10.91	33.83	96.70	7.13	36.40	**184.97**	107.71	10.10
		I	1400	VOLUME, m³	6.46	40.18	96.70	7.13	36.40	**186.87**	137.09	12.85
			1600	VOLUME, m³	7.20	39.12	96.70	7.13	36.40	**186.55**	137.09	12.85
			1800	VOLUME, m³	7.94	38.06	96.70	7.13	36.40	**186.23**	137.09	12.85
			2200	VOLUME, m³	9.43	35.95	96.70	7.13	36.40	**185.60**	137.09	12.85
			2400	VOLUME, m³	10.17	34.89	96.70	7.13	36.40	**185.28**	137.09	12.85
			2600	VOLUME, m³	10.91	33.83	96.70	7.13	36.40	**184.97**	137.09	12.85
	TYPE IIB	G	1400	VOLUME, m³	7.39	46.28	96.70	7.13	41.89	**199.40**	107.71	10.10
			1600	VOLUME, m³	8.24	45.06	96.70	7.13	41.89	**199.03**	107.71	10.10
			1800	VOLUME, m³	9.09	43.84	96.70	7.13	41.89	**198.66**	107.71	10.10
			2200	VOLUME, m³	10.79	41.41	96.70	7.13	41.89	**197.92**	107.71	10.10
			2400	VOLUME, m³	11.64	40.19	96.70	7.13	41.89	**197.55**	107.71	10.10
			2600	VOLUME, m³	12.49	38.97	96.70	7.13	41.89	**197.18**	107.71	10.10
		I	1400	VOLUME, m³	7.39	46.28	96.70	7.13	41.89	**199.40**	137.09	12.85
			1600	VOLUME, m³	8.24	45.06	96.70	7.13	41.89	**199.03**	137.09	12.85
			1800	VOLUME, m³	9.09	43.84	96.70	7.13	41.89	**198.66**	137.09	12.85
			2200	VOLUME, m³	10.79	41.41	96.70	7.13	41.89	**197.92**	137.09	12.85
			2400	VOLUME, m³	11.64	40.19	96.70	7.13	41.89	**197.55**	137.09	12.85
			2600	VOLUME, m³	12.49	38.97	96.70	7.13	41.89	**197.18**	137.09	12.85

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	**SUBSTRUCTURE**
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		SCHEDULE OF CONCRETE QUANTITIES TOTAL HEIGHT OF ABUT.: 9.50 m
	IN ASSOCIATION WITH	LOCATION:	DWG. NO.: SQ-SB-08
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	ALLIED ENGINEERS ENTERPRISE LTD.	THANA: ZILA:	DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES

ABUT. HEIGHT	DECK TYPE	FOUND. TYPE	GIRDER DEPTH	UNIT	SUBSTRUCTURE						FOUNDATION	
					BACK WALL	ABUT. STEM	WING WALL	FLAG WALL	TIE WALL	TOTAL VOL.	PILE CAP	LEAN CONC.
10000	TYPE IA	G	1400	VOLUME, m³	7.57	50.59	103.31	10.30	45.28	**217.06**	107.71	10.10
			1600	VOLUME, m³	8.44	49.34	103.31	10.30	45.28	**216.68**	107.71	10.10
			1800	VOLUME, m³	9.31	48.09	103.31	10.30	45.28	**216.30**	107.71	10.10
			2200	VOLUME, m³	11.05	45.59	103.31	10.30	45.28	**215.54**	107.71	10.10
			2400	VOLUME, m³	11.92	44.34	103.31	10.30	45.28	**215.15**	107.71	10.10
			2600	VOLUME, m³	12.79	43.09	103.31	10.30	45.28	**214.77**	107.71	10.10
		I	1400	VOLUME, m³	7.57	50.59	103.31	10.30	45.28	**217.06**	137.09	12.85
			1600	VOLUME, m³	8.44	49.34	103.31	10.30	45.28	**216.68**	137.09	12.85
			1800	VOLUME, m³	9.31	48.09	103.31	10.30	45.28	**216.30**	137.09	12.85
			2200	VOLUME, m³	11.05	45.59	103.31	10.30	45.28	**215.54**	137.09	12.85
			2400	VOLUME, m³	11.92	44.34	103.31	10.30	45.28	**215.15**	137.09	12.85
			2600	VOLUME, m³	12.79	43.09	103.31	10.30	45.28	**214.77**	137.09	12.85
	TYPE IIA	G	1400	VOLUME, m³	8.51	57.10	103.31	10.30	51.11	**230.33**	107.71	10.10
			1600	VOLUME, m³	9.48	55.69	103.31	10.30	51.11	**229.89**	107.71	10.10
			1800	VOLUME, m³	10.46	54.28	103.31	10.30	51.11	**229.46**	107.71	10.10
			2200	VOLUME, m³	12.42	51.45	103.31	10.30	51.11	**228.59**	107.71	10.10
			2400	VOLUME, m³	13.39	50.04	103.31	10.30	51.11	**228.16**	107.71	10.10
			2600	VOLUME, m³	14.37	48.63	103.31	10.30	51.11	**227.72**	107.71	10.10
		I	1400	VOLUME, m³	8.51	57.10	103.31	10.30	51.11	**230.33**	137.09	12.85
			1600	VOLUME, m³	9.48	55.69	103.31	10.30	51.11	**229.89**	137.09	12.85
			1800	VOLUME, m³	10.46	54.28	103.31	10.30	51.11	**229.46**	137.09	12.85
			2200	VOLUME, m³	12.42	51.45	103.31	10.30	51.11	**228.59**	137.09	12.85
			2400	VOLUME, m³	13.39	50.04	103.31	10.30	51.11	**228.16**	137.09	12.85
			2600	VOLUME, m³	14.37	48.63	103.31	10.30	51.11	**227.72**	137.09	12.85
	TYPE IB	G	1400	VOLUME, m³	6.46	42.82	103.31	10.30	38.32	**201.22**	107.71	10.10
			1600	VOLUME, m³	7.20	41.77	103.31	10.30	38.32	**200.90**	107.71	10.10
			1800	VOLUME, m³	7.94	40.71	103.31	10.30	38.32	**200.58**	107.71	10.10
			2200	VOLUME, m³	9.43	38.59	103.31	10.30	38.32	**199.95**	107.71	10.10
			2400	VOLUME, m³	10.17	37.53	103.31	10.30	38.32	**199.63**	107.71	10.10
			2600	VOLUME, m³	10.91	36.47	103.31	10.30	38.32	**199.31**	107.71	10.10
		I	1400	VOLUME, m³	6.46	42.82	103.31	10.30	38.32	**201.22**	137.09	12.85
			1600	VOLUME, m³	7.20	41.77	103.31	10.30	38.32	**200.90**	137.09	12.85
			1800	VOLUME, m³	7.94	40.71	103.31	10.30	38.32	**200.58**	137.09	12.85
			2200	VOLUME, m³	9.43	38.59	103.31	10.30	38.32	**199.95**	137.09	12.85
			2400	VOLUME, m³	10.17	37.53	103.31	10.30	38.32	**199.63**	137.09	12.85
			2600	VOLUME, m³	10.91	36.47	103.31	10.30	38.32	**199.31**	137.09	12.85
	TYPE IIB	G	1400	VOLUME, m³	7.39	49.33	103.31	10.30	44.15	**214.48**	107.71	10.10
			1600	VOLUME, m³	8.24	48.11	103.31	10.30	44.15	**214.11**	107.71	10.10
			1800	VOLUME, m³	9.09	46.89	103.31	10.30	44.15	**213.74**	107.71	10.10
			2200	VOLUME, m³	10.79	44.45	103.31	10.30	44.15	**213.00**	107.71	10.10
			2400	VOLUME, m³	11.64	43.24	103.31	10.30	44.15	**212.63**	107.71	10.10
			2600	VOLUME, m³	12.49	42.02	103.31	10.30	44.15	**212.26**	107.71	10.10
		I	1400	VOLUME, m³	7.39	49.33	103.31	10.30	44.15	**214.48**	137.09	12.85
			1600	VOLUME, m³	8.24	48.11	103.31	10.30	44.15	**214.11**	137.09	12.85
			1800	VOLUME, m³	9.09	46.89	103.31	10.30	44.15	**213.74**	137.09	12.85
			2200	VOLUME, m³	10.79	44.45	103.31	10.30	44.15	**213.00**	137.09	12.85
			2400	VOLUME, m³	11.64	43.24	103.31	10.30	44.15	**212.63**	137.09	12.85
			2600	VOLUME, m³	12.49	42.02	103.31	10.30	44.15	**212.26**	137.09	12.85

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**SUBSTRUCTURE** SCHEDULE OF CONCRETE QUANTITIES TOTAL HEIGHT OF ABUT.: 10.00 m DWG. NO.: SQ–SB–09 DATE: JUNE 1996

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SCHEDULE OF CONCRETE QUANTITIES FOR PILES

FOUNDATION TYPES	SIZE OF PILE CAP	NO. PILES	LENGTH OF PILE, m	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00
TYPE A	6.6m x 4.85m	11	VOLUME, m^3	74.64	80.86	87.09	93.31	99.53	105.75	111.97	118.19	124.41
TYPE B	6.6m x 5.25m	12	VOLUME, m^3	81.43	88.22	95.00	101.79	108.57	115.36	122.15	128.93	135.72
TYPE C	6.6m x 6.00m	14	VOLUME, m^3	95.00	102.92	110.84	118.75	126.67	134.59	142.50	150.42	158.34
TYPE D	6.6m x 7.05m	16	VOLUME, m^3	108.57	117.62	126.67	135.72	144.76	153.81	162.86	171.91	180.96
TYPE E	6.6m x 8.85m	20	VOLUME, m^3	135.72	147.03	158.34	169.65	180.96	192.27	203.58	214.89	226.20
TYPE F	8.4m x 7.05m	20	VOLUME, m^3	135.72	147.03	158.34	169.65	180.96	192.27	203.58	214.89	226.20
TYPE G	6.6m x 10.20m	24	VOLUME, m^3	162.86	176.43	190.00	203.58	217.15	230.72	244.29	257.86	271.43
TYPE H	8.4m x 8.85m	25	VOLUME, m^3	169.65	183.78	197.92	212.06	226.20	240.33	254.47	268.61	282.74
TYPE I	8.4m x 10.20m	30	VOLUME, m^3	203.58	220.54	237.50	254.47	271.43	288.40	305.36	322.33	339.29

FOUNDATION TYPES	SIZE OF PILE CAP	NO. PILES	LENGTH OF PILE, m	21.00	22.00	23.00	24.00	25.00
TYPE A	6.6m x 4.85m	11	VOLUME, m^3	130.63	136.85	143.07	149.29	155.51
TYPE B	6.6m x 5.25m	12	VOLUME, m^3	142.50	149.29	156.07	162.86	169.65
TYPE C	6.6m x 6.00m	14	VOLUME, m^3	166.25	174.17	182.09	190.00	197.92
TYPE D	6.6m x 7.05m	16	VOLUME, m^3	190.00	199.05	208.10	217.15	226.20
TYPE E	6.6m x 8.85m	20	VOLUME, m^3	237.50	248.81	260.12	271.43	282.74
TYPE F	8.4m x 7.05m	20	VOLUME, m^3	237.50	248.81	260.12	271.43	282.74
TYPE G	6.6m x 10.20m	24	VOLUME, m^3	285.01	298.58	312.15	325.72	339.29
TYPE H	8.4m x 8.85m	25	VOLUME, m^3	296.88	311.02	325.16	339.29	353.43
TYPE I	8.4m x 10.20m	30	VOLUME, m^3	356.26	373.22	390.19	407.15	424.12

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LOCAL GOVERNMENT ENGINEERING DEPARTMENT

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IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT:

LOCATION:

THANA:

ZILA:

PILE FOUNDATION

SCHEDULE OF CONCRETE QUANTITIES OF PILES

DWG. NO.: SQ-PF-01

DATE: JUNE 1996

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4.0 STANDARD DESIGNS AND BAR BENDING SCHEDULE

4.1.1 General Arrangement Drawing (GAD)

The GAD contains General Plan and Elevation of PC bridge, a total of 42 drawings. Dwg. No. GA-20-01 to GA-40-01 covers 20 m to 40 m span bridges with types IA and IIA decks. Similarly Dwg. nos. GA-20-02 to GA-40-02 covers 20 to 40 m span bridges with Types IB and IIB decks.

4.1.2 Deck Slab Cross Girder

For 4 types of deck such as type IA, IB, IIA and IIB standard cross-sections containing containing concrete outline details are shown in 4 drawings, Dwg. no. S-IA-01, S-1B-01, S-IIA-01 and S-IIB-01 respectively.

Reinforcement details with bar marks and arrangements are shown in 8 drawings. Dwg. nos. S-IA-20-02 and S-IA-33-02 show reinforcement details for deck type IA for span range 20m to 32m and 33m to 40m respectively. Dwg. nos. S-IIA-20-02 and S-IIA-33-02 show reinforcement details for deck type IIA for above span range. Similarly, Drwg. nos. S-IB-20-02 & S-IB-33-02, and S-IIB-20 & S-IIB-33-02 show equivalent reinforcement details for deck types IB and IIB respectively.

The bar bending schedules for deck slab and cross-girder for deck types IA, IB, IIA and IIB for 20.8m-40.8m long decks at 1m intervals are shown in 84 drawings containing Dwg. nos. S-IA-20-03 to S-IA-40-03, S-IIA-20-03 to S-IIA-40-03, S-IB-20-03 to S-IB-40-03 and S-IIB-20-03 to S-IIB-40-30 respectively.

4.1.3 PC Girder

Total 84 drawings are applicaple for 21 types of PC girders ranging from 20m to 40m c/c bearing spans at 1m interval, out of which two are applicable for all the PC girders of this Manual. The use of the drawings are explained by the example of a 20m span PC girder given in Table 4.3 below.

Table 4.3 List of Drawings (Example: 20m span PC Girder)

Sl. No.	Drwg. No.	Title of Drawings
1.	PC-GEN-01	Particular requirements for PC girder
2.	PC-20-01	Concrete Outline Details
3.	PC-20-02	Prestressing Cable Details
4.	PC-20-03	Non-prestressed reinforcement details
5.	PC-20-04	Bar Bending Schedule for non-prestressed reinforcement
6.	PC-MIS-00	Anchorage Details of Prestressing Cables

In the above Table 4.3 Dwg. nos. PC-GEN-01 and PC-MIS-00 contain standard details which is applicable for all the types of PC girders. The other 4 drawings, Dwg. no. PC-20-01 to PC-20-04 are applicable for 20m c/c bearing span PC girders only. In the drawings of the other girders, '20' will be replaced by the corresponding c/c bearing spans only.

Bar bending schedule is presented in sheet 04 of the drawing series, for exampl,e Dwg. no. PC-20-04 in the above list.

Concrete volume of PC girder is given in the sheet 01 of the drawing series e.g. Dwg. no. PC-20-01 in the above example.

4.1.4 Railings

The general arrangement of the precast railings and rail bars are shown in GAD Dwg no. GA-20-01 to GA-40-01 and GA-20-02 to GA-40-02.

Reinforcement details containing bar marks, diameter, spacings, shape of bars and total spanwise quantities of bars shown in the Dwg. nos. RA-00-01 and RA-00-02.

4.1.5 Abutment-Wing Walls

For the two type designs of abutment-wing walls., concrete outlines are shown in Dwg. no. AF-6A-01 to AF-10I-01.

Reinforcement details and bar bending schedules are shown in Dwg. nos. AF-6A-02 to AF-10I-02 and A-6A-01 to A-10I-06 respectively.

4.1.6 Abutment Pile Cap

All applicable foundation types are shown in Dwg. no. A-PF-01.
For the 9 types of pile cap, foundation plan for each type is shown in Dwg. nos. A-PF-02 & A-PF-03. The concrete outline and reinforcement details are shown in the Dwg. no. C-ST-00 and the bar bending schedules are shown in the Dwg. no. C - SC - 01 to C - SC - 03.

4.1.7 Piles

Maximum service load on each pile is presented in tabular form in Dwg. no. A-PF-04 For the 600 mm dia. cast-in-situ bored RC piles concrete outline and reinforcement details are shown in the Dwg. nos. P-ST-0I to P-ST-02 and their bending schedules are shown in Dwg. no. P-6A-01 to P-10I-02 for the intermediate drawings refer to list of drawings.

4.1.8 Elastomeric Bearings

The size of bearings, elastomer layers, internal reinforcement and other details of the are shown in the Dwg. no. PC-BR-01. The reinforced elastomeric bearings have been used in place of metallic bearings as their load transfer mechanism is superior, maintenance requirement is less and these are easy to instal and are economical.

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4.2 Guidelines for use of Standard Drawings

4.2.1 Drawings

After determining the waterway requirement from hydrological, hydraulic, bed and bank soil information, a PC girder bridge of suitable span should be chosen following the List of Drawings for PC girder bridges. The list of drawings is self explanatory and it contains drawings for four deck types such as Deck type IA, IIA, IB and IIB; six girder types related to girder depth of 1400 mm, 1600 mm, 1800 mm, 2200 mm , 2400 mm & 2600 mm and nine types of abutment depending on height from 6000 mm to 10000 mm at the increment of of 500 mm.

A total of 26 nos. of sheets will complete a standard set of drawings for a selected span length, deck type, abutment height, foundation type and length of piles.

4.2.2 Bar Bending Schedule

The drawings for PC girder bridges include all necessary details of bar bending schedules.

The bar bending schedules of deck slabs and cross girders have been furnished in drawing nos. S-IA-20-03 to S-IIB-40-03. The non-prestressed reinforcement requirement of PC girders has been furnished in drawings nos. PC-20-03 to PC-40-03. The bar bending schedules are presented in Tabular form in order to keep the Manual to a reasonable size convenient to handle during usage. The bar bending schedules of all other items, e.g. pile caps, piles, rail bars and posts etc. are also given in suitable form in drawing nos. C-SC-01 to C-SC-03, P-6A-01 to P-10I-02 and RA-00-02.

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LIST OF DRAWINGS FOR PC GIRDER BRIDGES

DWG. NO.	TITLE	NO. OF SHEETS
PC-L-01	LIST OF APPLICABLE DRAWINGS	01
PC-GN-00	GENERAL REQUIREMENTS FOR RC CONSTRUCTION	01
PC-GN-01	PARTICULAR REQUIREMENTS FOR PC GIRDER	01
GA-20-01 TO GA-40-01	GENERAL ARRANGEMENT DRAWING (DECK TYPE IA & IIA WITH SIDE WALK)	21
GA-20-02 TO GA-40-02	GENERAL ARRANGEMENT DRAWING (DECK TYPE IB & IIB WITHOUT SIDE WALK)	21
PC-20-01 TO PC-40-01	CONCRETE OUTLINE DETAILS OF PC GIRDER	21
PC-20-02 TO PC-40-02	PRESTRESSING CABLE DETAILS OF PC GIRDER	21
PC-20-03 TO PC-40-03	NON-PRESTRESSED REINFORCEMENT DETAILS OF PC GIRDER	21
PC-20-04 TO PC-40-04	NON-PRESTRESSED REINFORCEMENT BAR BENDING SCHEDULE OF PC GIRDER	21
PC-MS-00	TYPICAL PRESTRESSING ANCHORAGE DETAILS OF PC GIRDER	01
PC-BR-00	REINFORCED ELASTOMERIC BEARING DETAILS	01
S-IA-01 TO S-IIB-01	CONCRETE OUTLINE DETAILS OF DECK SLAB	04
S-IA-02 TO S-IIB-02	NON-PRESTRESSED REINFORCEMENT DETAILS OF DECK SLAB AND CROSS GIRDER	08
S-IA-20-03 TO S-IIB-40-03	BAR BENDING SCHEDULE OF DECK SLAB AND CROSS GIRDER	84
A-PF-01	TABLE SHOWING APPLICABLE FOUNDATION TYPES	01
A-PF-02 & A-PF-03	PLAN OF FOUNDATION TYPES	02
A-PF-04	TABLE SHOWING MAXIMUM SERVICE LOAD ON PILE	01
P-ST-01 & P-ST-02	REINFORCEMENT DETAILS OF PILE	02
P-6A-01 TO P-10I-02	BAR BENDING SCHEDULE OF PILE	18
C-ST-00	TYPICAL REINFORCEMENT DETAILS OF PILE CAP	01
C-SC-01 TO C-SC-03	BAR BENDING SCHEDULE OF PILE CAP	03
AF-6A-01 TO AF-10I-01	CONCRETE OUTLINE DETAILS OF ABUTMENT FOUNDATION AND PILE	10
AF-0-02 & AF-0-02A	NON-PRESTRESSED REINFORCEMENT DETAILS OF ABUTMENT-WINGWALL (TYPICAL)	02
A-6A-01 TO A-10I-06	BAR BENDING SCHEDULE OF ABUTMENT-WINGWALL	108
RA-00-01	NON-PRESTRESSED RFINFORCEMENT DETAILS OF PRECAST RAIL AND RAIL POST	01
RA-00-02	BAR BENDING SCHEDULE OF PRECAST RAIL AND RAIL POST	01
PC-SHC-01	SHAPE CODE DETAILS	01
MS-00-01	EXPANSION JOINT DETAILS	01
	TOTAL= 379*	

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ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

PC GIRDER BRIDGE

LIST OF DRAWINGS

DWG. NO. : PC-L-00

SCALE : NA

DATE : JUNE 1996

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LIST OF APPLICABLE DRAWINGS

SL. NO.	BRIDGE COMPONENTS	DECK TYPE			
		IA	IB	IIA	IIB
01	GENERAL REQUIREMENTS	PC-GN-00	PC-GN-00	PC-GN-00	PC-GN-00
02	SUPERSTRUCTURE	GA-XX-01	GA-XX-02	GA-XX-01	GA-XX-02
03	SUPERSTRUCTURE	S-IA-01	S-IB-01	S-IIA-01	S-IIB-01
04	SUPERSTRUCTURE	S-IA-02	S-IB-02	S-IIA-02	S-IIB-02
05	SUPERSTRUCTURE	S-IA-03	S-IB-03	S-IIA-03	S-IIB-03
06	PARTICULAR REQUIREMENTS	PC-GN-01	PC-GN-01	PC-GN-01	PC-GN-01
07	SUPERSTRUCTURE	PC-XX-01	PC-XX-01	PC-XX-01	PC-XX-01
08	SUPERSTRUCTURE	PC-XX-02	PC-XX-02	PC-XX-02	PC-XX-02
09	SUPERSTRUCTURE	PC-XX-03	PC-XX-03	PC-XX-03	PC-XX-03
10	SUPERSTRUCTURE	PC-XX-04	PC-XX-04	PC-XX-04	PC-XX-04
11	SUPERSTRUCTURE	PC-MS-00	PC-MS-00	PC-MS-00	PC-MS-00
12	ELASTOMERIC BEARING	PC-BR-00	PC-BR-00	PC-BR-00	PC-BR-00
13	FOUNDATION	A-PF-01	A-PF-01	A-PF-01	A-PF-01
14	FOUNDATION	A-PF-02 OR A-PF-03	A-PF-02 OR A-PF-03	A-PF-02 OR A-PF-03	A-PF-02 OR A-PF-03
15	FOUNDATION	A-PF-04	A-PF-04	A-PF-04	A-PF-04
16	FOUNDATION	P-ST-01 OR P-ST-02	P-ST-01 OR P-ST-02	P-ST-01 OR P-ST-02	P-ST-01 OR P-ST-02
17	FOUNDATION	P-YY-01 OR P-YY-02	P-YY-01 OR P-YY-02	P-YY-01 OR P-YY-02	P-YY-01 OR P-YY-02

SL. NO.	BRIDGE COMPONENTS	DECK TYPE			
		IA	IB	IIA	IIB
18	FOUNDATION	C-ST-00	C-ST-00	C-ST-00	C-ST-00
19	FOUNDATION	C-SC-01 OR C-SC-02 OR C-SC-03	C-SC-01 OR C-SC-02 OR C-SC-03	C-SC-01 OR C-SC-02 OR C-SC-03	C-SC-01 OR C-SC-02 OR C-SC-03
20	SUBSTRUCTURE	AF-YY-01	AF-YY-01	AF-YY-01	AF-YY-01
21	SUBSTRUCTURE	AF-0-02 OR AF-0-02A	AF-0-02 OR AF-0-02A	AF-0-02 OR AF-0-02A	AF-0-02 OR AF-0-02A
22	SUBSTRUCTURE	A-YY-01 OR A-YY-02 OR A-YY-03 OR A-YY-04 OR A-YY-05 OR A-YY-06	A-YY-01 OR A-YY-02 OR A-YY-03 OR A-YY-04 OR A-YY-05 OR A-YY-06	A-YY-01 OR A-YY-02 OR A-YY-03 OR A-YY-04 OR A-YY-05 OR A-YY-06	A-YY-01 OR A-YY-02 OR A-YY-03 OR A-YY-04 OR A-YY-05 OR A-YY-06
23	RAIL & RAIL POST	RA-00-01	RA-00-01	RA-00-01	RA-00-01
24	RAIL & RAIL POST	RA-00-02	RA-00-02	RA-00-02	RA-00-02
25	SHAPE CODE DETAILS	PC-SHC-01	PC-SHC-01	PC-SHC-01	PC-SHC-01
26	EXPANSION JOINT DETAILS	MS-00-01	MS-00-01	MS-00-01	MS-00-01

NOTES:

01 FOR EACH BRIDGE, A SET OF 26 DRAWINGS ARE REQUIRED.

NOTATION:

01 XX INDICATES SPAN LENGTH OF THE BRIDGE.

02 YY INDICATES APPLICABLE FOUNDATION TYPE TO BE SELECTED FROM SL. NO. 13, DWG. NO. A-PF-01.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

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IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

PC GIRDER BRIDGE

LIST OF APPLICABLE DRAWINGS

DWG. NO. : PC-L-01

SCALE : NA

DATE : JUNE 1996

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GENERAL REQUIREMENTS FOR RC CONSTRUCTION

1. **CEMENT**

TYPE ORDINARY PORTLAND CEMENT IN ACCORDANCE WITH ASTM DESIGNATION C150-86 OR EQUIVALENT

a) SETTING TIME :

INITIAL SETTING TIME : NOT LESS THAN 60 MINUTES
FINAL SETTING TIME : NOT MORE THAN 10 HOURS

b) STRENGTH :

COMPRESSIVE STRENGTH (STANDARD CUBE) :
3 DAYS : 12.40 N/mm² (1800 psi)
7 DAYS : 19.30 N/mm² (2800 psi)

TENSILE STRENGTH (STANDARD BRIQUETTE) :
3 DAYS : 1.03 N/mm² (150 psi)
7 DAYS : 19.30 N/mm² (275 psi)

2. **CONCRETE**

a) FOR PILE CAP, ABUTMENT, WING WALL, PIER, PILE, DIAPHRAGM, DECK SLAB, RAIL AND RAIL POST:
- 28 DAYS STANDARD CYLINDER CRUSHING STRENGTH : fc' =20 N/mm²(2900 psi)
- 28 DAYS STANDARD CUBE CRUSHING STRENGTH : fcu=24 N/mm²(3500 psi)
- CONCRETE MIX PORTION SHALL BE DECIDED BY MIX DESIGN IN ACCORDANCE WITH THE PORTLAND CEMENT ASSOCIATION (PCA) METHOD OF MIX DESIGN.
- MIN. MIX RATIO BY VOULME, CEMENT : SAND : COARSE AGGREGATE SHALL BE 1:2:4 OR A RICHER MIX IF THE ABOVE STRENGTH REQUIREMENT IS NOT SATISFIED.

b. FOR CAST-IN-SITU RC BORED PILE
- 28 DAYS STANDARD CYLINDER CRUSHING STRENGTH : fc' =20.68 N/mm²(3000 psi)
- 28 DAYS STANDARD CUBE CRUSHING STRENGTH : fcu=24 N/mm²(3500 psi)
- MIX RATIO BY VOULME, CEMENT : SAND : COARSE AGGREGATE SHALL BE 1:1.5:3 OR A RICHER MIX IF THE ABOVE STRENGTH REQUIREMENT IS NOT SATISFIED.
- ALLOWABLE SLUMP SHALL BE BETWEEN 100 AND 150 mm.

3. **REINFORCEMENT**

TYPE: DEFORMED AND PLAIN BILLET STEEL BARS IN ACCORDANCE WITH ASTM DESIGNATION : A615M-88 OR EQUIVALENT.

a) STRENGTH :
MINIMUM YIELD STRENGTH 276 N/mm²(40000 PSI)

b) SPLICES IN REINFORCEMENT :
- SPLICES IN REINFORCEMENT IF NECESSARY SHALL BE MADE ONLY AS AUTHORISED BY THE ENGINEER.
- SPLICES IN REINFORCEMENT AT POINTS OF MAXIMUM STRESS IN SLABS, BEAMS AND GIRDERS SHOULD BE AVOIDED.
- LAP LENGTH FOR MS DEFORMED BAR UNLESS OTHERWISE SHOWN WILL BE :

i. FOR TENSION BAR :
- 40 BAR DIAMETER WITHOUT HOOKS
- 30 BAR DIAMETER WITH STANDARD HOOKS

ii. FOR COMPRESSION M.S. BAR :
- 24 BAR DIAMETER WITHOUT HOOKS

4. **MINIMUM CLEAR COVER TO MAIN REINFORCING STEEL**

a) RAILPOST = 25 mm ALL FACES
RAIL BAR = 13 mm ALL FACES

b) SLAB
TOP BAR = 50 mm
BOTTOM BAR = 40 mm
EDGE = 50 mm

c) DIAPHRAGM AND PIER CAP

BOTTOM BAR = 40 mm
SIDE = 50 mm

d) PIER COLUMN = 50 mm

e) ABUTMENT-WING WALL :

EARTH FACE = 75 mm
WATER FACE = 50 mm

f) PILE CAP = 75 mm ALL FACES

g) MEMBERS CAST AGAINST SOIL AND PERMANENTLY EXPOSED TO NON-SALINE WATER/ SOIL = 75 mm

h) MEMBERS PERMANENTLY EXPOSED TO SALINE WATER/SOIL = 100 mm

5. MIXER MACHINE AND VIBRATOR MUST BE USED IN ALL STRUCTURAL CONCRETING.

6. WRITTEN DIMENSIONS ARE TO BE USED IN PREFERENCE TO SCALED ONES.

7. CONSTRUCTION JOINTS IN ADDITION TO THE PLACES SHOWN IN THE DRAWING IF REQUIRED SHALL BE PROVIDED AS PER DIRECTION OF THE ENGINEER-IN-CHARGE.

8. GUIDE TO READ REINFORCEMENT ABBREVIATIONS :

EXAMPLE 1 : A1-Y20-100 INDICATES AS FOLLOWS :

A1 : BAR MARK '1' IN ABUTMENT
Y20 : DEFORMED ROUND BAR 20 mm DIA.
100 : C/C BAR SPACING IN mm

EXAMPLE 2 : A3-10-R20 INDICATES AS FOLLOWS :

A3 : BAR MARK '3' IN ABUTMENT
10 : NO. OF BARS = 10
R20 : PLAIN ROUND BAR 20 mm DIA.

9. ALL DIMENSIONS ARE IN mm AND ELEVATIONS ARE IN mPWD UNLESS OTHERWISE SHOWN.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY :	NAME OF PROJECT :	PC GIRDER BRIDGE	
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.	LOCATION :		DWG. NO.: PC - GN - 00
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	THANA : ZILA :	GENERAL REQUIREMENTS	DATE : JUNE 1996

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GENERAL NOTES FOR PC GIRDER

A. MATERIAL STRENGTH

01 CONCRETE SHALL HAVE SPECIFIED COMPRESSIVE CYLINDER STRENGTH AT 28 DAYS f'c IN ACCORDANCE WITH ACI 318-89 (REVISED 1992) AS FOLLOWS

(a) FOR PC GIRDER = 30 N/mm²
(b) FOR SLAB = 20 N/mm²

02 REINFORCING STEEL SHALL BE CONFORMING TO ASTM A615m-88 GRADE 40 DEFORMED BARS OR EQUIVALENT, MIN. fy = 275 N/mm²

03 PRESTRESSING STEEL CABLES SHALL BE COMPOSED OF 12ø7 mm WIRES CONFORMING TO ASTM A421-80(1985) OR EQUIVALENT HAVING THE FOLLOWING STRENGTH

(a) MINIMUM ULTIMATE TENSILE STRENGTH (UTS) fs' = 1620 N/mm²
(b) MINIMUM YIELD STRENGTH fy*=1377 N/mm²

B. PRESTRESSING SYSTEM

01. THE DETAILS OF ANCHORAGES, DUCTS, CABLE SPACINGS AND END BLOCK REINFORCEMENT SHOWN ON THE DRAWINGS ARE BASED ON FREYSSINET 12ø7 MULTI-WIRE ANCHORAGE SYSTEM. THE CONTRACTOR MAY CHOOSE ALTERNATIVE EQUIVALENT STANDARD SYSTEM SUBJECT TO APPROVAL OF THE ENGINEER.

02. THE DUCTS FOR THE 12ø7 PRESTRESSING CABLES SHALL BE FORMED FROM 42mm INTERNAL DIA. (ID) CORRUGATED STEEL SHEATHS OF STRIP METAL HAVING MINIMUM THICKNESS 0.31 mm. THE OUTSIDE DIA. (OD) OF THE SHEATH SHOULD BE ABOUT 6 MM LARGER THAN THE ID. THE CONNECTING SLEEVES FOR SHEATH SHOULD HAVE A DIAMETER ABOUT 3.1 mm GREATER.

C. PLACING DETAILS OF PRESTRESSING STEEL AND DUCTS

01. BESIDES KEEPING ONE INJECTION HOLE OF ABOUT 12mm DIA. AT THE STRESSING END, ONE GROUT VENT OF THE SAME SIZE SHALL BE PROVIDED AT THE UNSTRESSING END. DRAIN TUBES MAY ALSO BE PROVIDED AT LOW POINTS OF LONG CABLES, IF REQUIRED BY THE ENGINEER.

02. THE CABLE AT THE STRESSING END SHALL BE PROTRUDED BY ABOUT 600 mm OUTSIDE THE ANCHORAGE TO FACILITATE STRESSING.

03. THE CABLE MUST BE PLACED STRAIGHT AND COAXIAL WITH THE ANCHORAGE FOR A DISTANCE OF ATLEAST 400 mm.

04. THE PROFILE OF LONGITUDINAL PRESTRESSING DUCTS SHALL BE MAINTAINED BY PROVIDING 8 mm DIA. U-SHAPED MS WELDED SADDLES ATTACHED TO ONE BRANCH OF THE STIRRUPS @ 1.15 m c/c APPROX.

05. NONPRESTRESSED REINFORCEMENT IS TO BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER, IF OBSTRUCTION TO CABLE DUCT OCCURS.

D. CLEAR COVER TO PRESTRESSING AND REINFORCING STEEL

01. MINIMUM CLEAR COVER TO PRESTRESSING DUCTS AND REINFORCING STEEL SHALL BE 40 mm.

E. PRESTRESSING AND GROUTING OPERATION

01. THE PRESTRESSING FORCE PER CABLE AT ANCHORAGE DURING STRESSING PRIOR TO LOCK OFF AND AT SERVICE CONDITION AFTER ALL LOSSES SHALL NOT EXCEED 555 kN AND 444 kN RESPECTIVELY.

02 ALL CABLES SHALL BE STRESSED FOLLOWING NOTES INCLUDED IN SHEET NO 02 OF DRAWING SERIES OF THE PC GIRDER.

03 THE APPLIED PRESTRESSING FORCES IN THE CABLES SHALL BE MEASURED BY READINGS ON THE RECENTLY CALIBRATED JACKS ACCOMPANIED BY ELONGATION MEASUREMENT IN PRESENCE OF THE ENGINEER OR HIS DESIGNATED REPRESENTATIVE. PROPER RECORDS OF THE ABOVE SHALL BE MAINTAINED

04 ALL DUCTS SHALL BE GROUTED AFTER SATISFACTORY COMPLETION OF THE STRESSING OPERATIONS AND APPROVAL OF THE ENGINEER.

05. FOR ALL STRESSING AND GROUTING OPERATIONS, THE PROCEDURES GIVEN IN THE GUIDE FOR FREYSSINET OR EQUIVALENT METHODS SHALL BE USED.

06. IN CASE THE CALCULATED ELONGATION AND JACK PRESSURE ARE NOT ACHIEVED SIMULTANEOUSLY DURING PRESTRESSING OPERATION, STRESSING SHALL BE CONTINUED TILL ELONGATION /JACK PRESSURE REACHES THE CALCULATED VALUES. THE MEASURED JACK PRESSURE/ELONGATION SHALL NOT EXCEED 1.05 TIMES THE CALCULATED VALUE.

07 WEDGE PULL-IN AT PASSIVE END ANCHORAGE, IF ANY, SHALL BE ADDED TO THE CABLE ELONGATION SEPARATELY.

F. INSTALLATION DETAILS

01. THE PC GIRDERS SHALL BE MOVED ATLEAST AFTER COMPLETION OF THE IST STAGE STRESSING OF THE CABLES AND GROUTING OF THE CABLE DUCTS ONLY.

02. THE PC GIRDERS SHALL BE LIFTED BY PROVIDING SUPPORTS IN THE VICINITY OF THE CENTRE LINE OF BEARINGS ONLY.

03. LATERAL SUPPORTS TO THE PRECAST PC GIRDER SHALL BE PROVIDED DURING ANY MOVEMENT OPERATION OF THE SAME AND CONCRETING OF THE CAST-IN-SITU DECK.

04. TIME DIFFERENCE BETWEEN GIRDER AND DECK CONCRETING SHALL NOT BE MORE THAN 60 DAYS.

G. MISCELLANEOUS

01. THE SURFACES OF THE TOP FLANGE OF THE PC GIRDER SHALL BE INTENTIONALLY ROUGHENED EXPOSING ABOUT 1/4th HEIGHT OF THE COARSE AGGREGATE WITHOUT BREAKING THEM TO DEVELOP COMPOSITE ACTION BETWEEN THE PC GIRDER AND THE CAST-IN-SITU DECK CONCRETE.

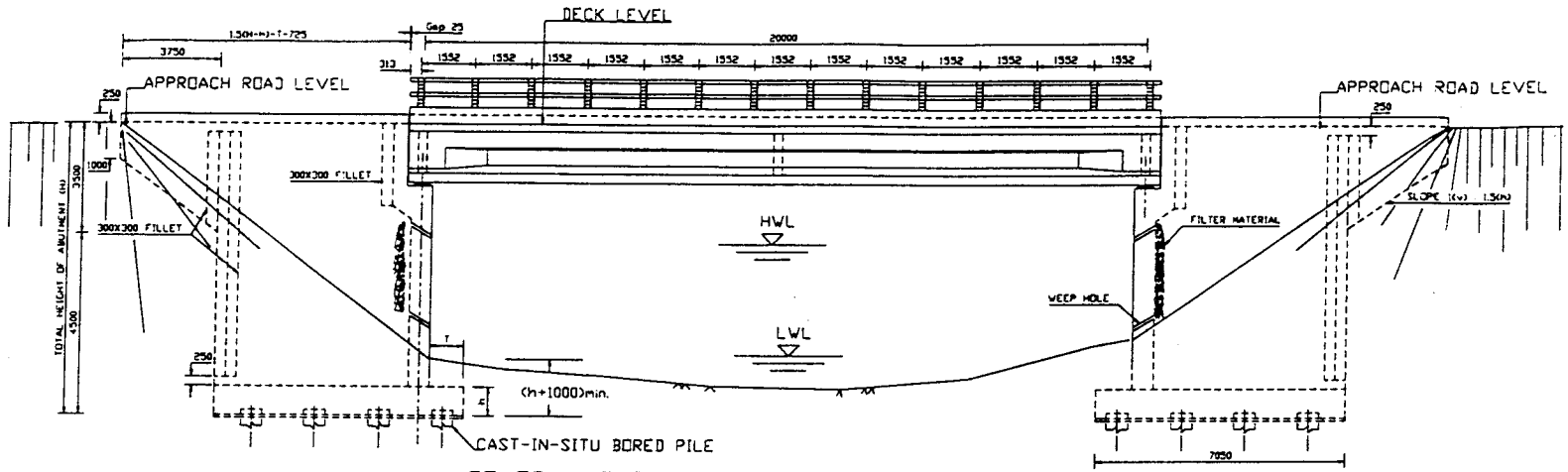
02. PRECAMBER TO THE GIRDER SHALL BE PROVIDED AS SHOWN IN THE SHEET 02 OF THE DRAWING SERIES OF THE PC GIRDER.

03. ALL LAP LENGTHS SHALL BE PROVIDED ATLEAST 40 x BAR DIA. AND SHALL BE STAGGERED BY ABOUT 50% UNLESS OTHERWISE SHOWN.

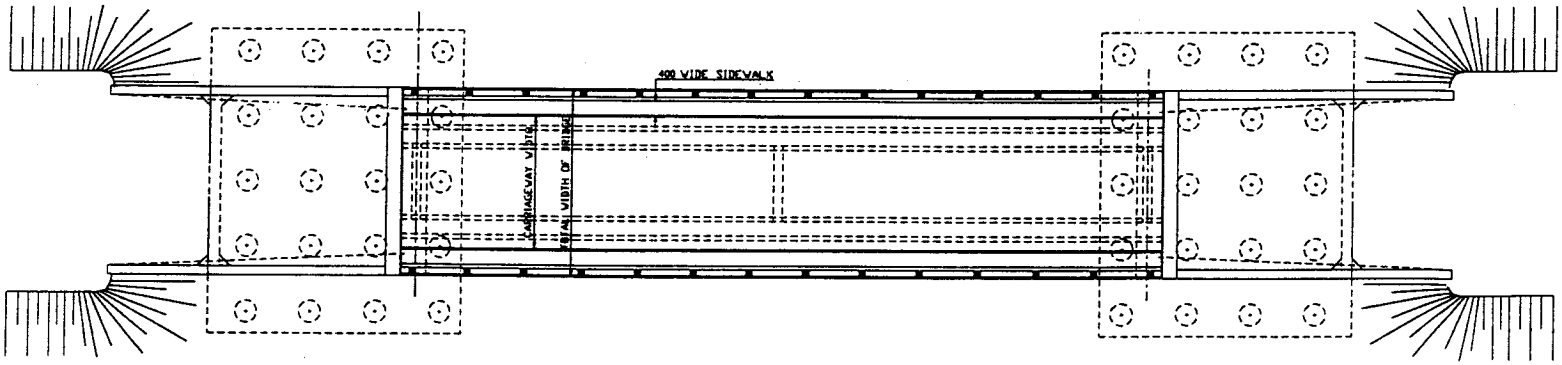
04. ALL DIMENSIONS ARE IN 'mm' UNLESS OTHER WISE SHOWN

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGN, DRAWN & CHECKED BY	NAME OF PROJECT	PRESTRESSED CONCRETE GIRDER	
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		LENGTH ALL	
	IN ASSOCIATION WITH	LOCATION		DWG NO PC- GN- 01
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	ALLIED ENGINEERS ENTERPRISE LTD	THANA	**GENERAL NOTES**	
		ZILA		DATE JUNE 1996

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GENERAL ELEVATION OF 20 m SPAN PC BRIDGE

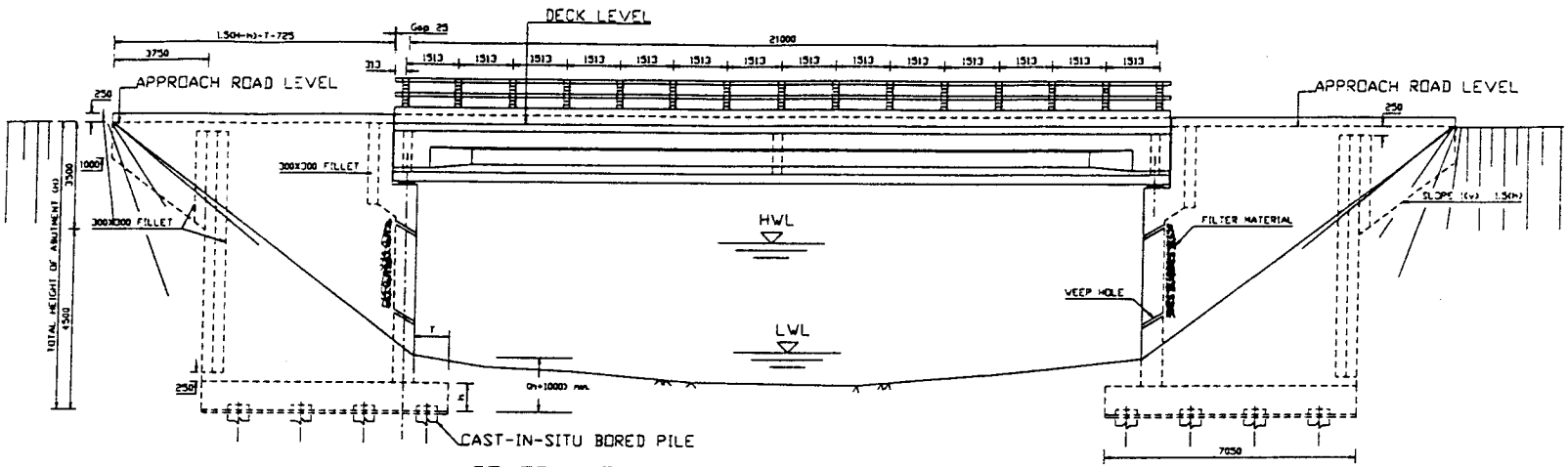


GENERAL PLAN

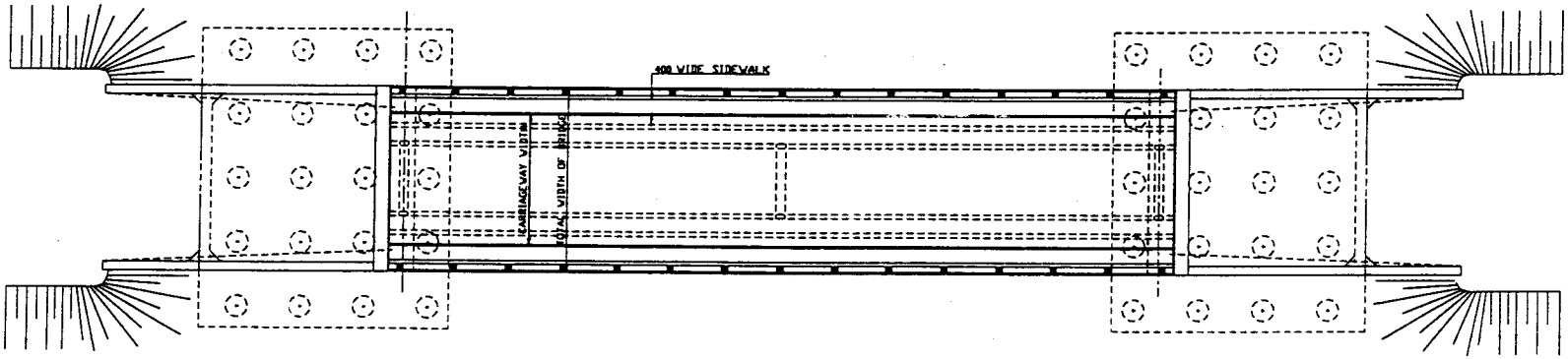
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 20.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-20-01 SCALE 1 150 — DATE JUNE 1996

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GENERAL ELEVATION OF 21 m SPAN PC BRIDGE

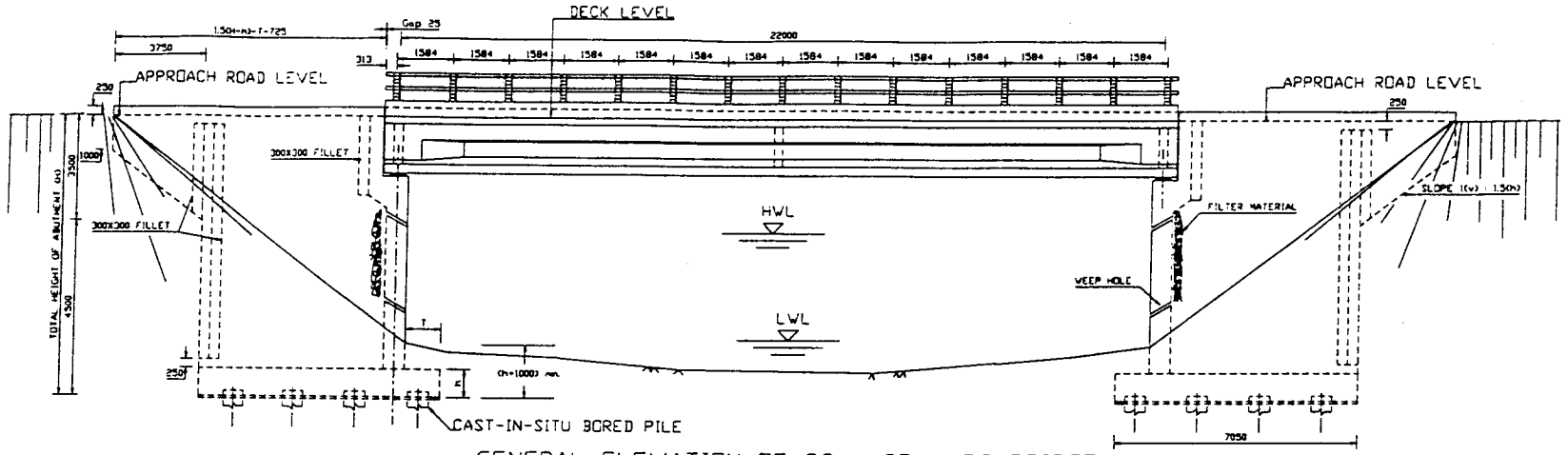


GENERAL PLAN

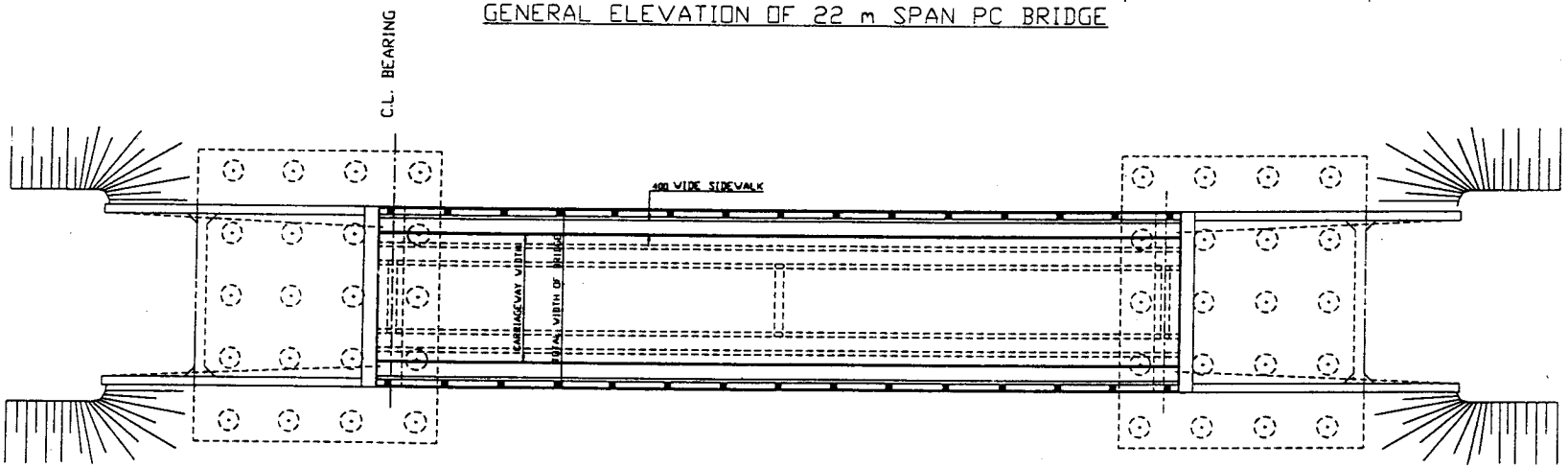
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY
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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 21.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO. GA-21-01 SCALE : 1:50 — DATE : JUNE 1996

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GENERAL ELEVATION OF 22 m SPAN PC BRIDGE

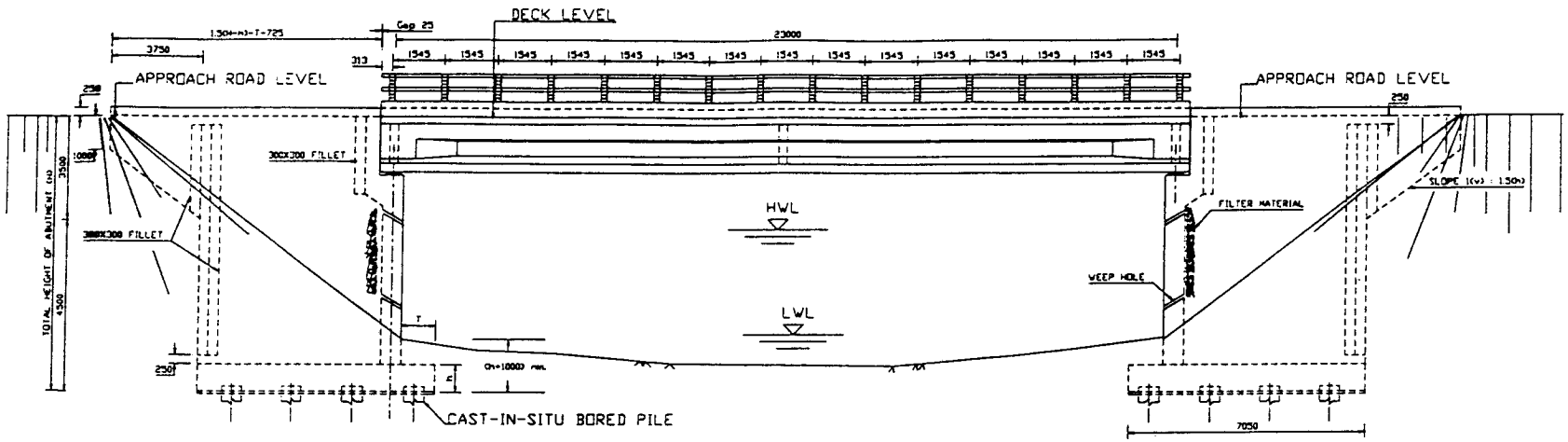


GENERAL PLAN

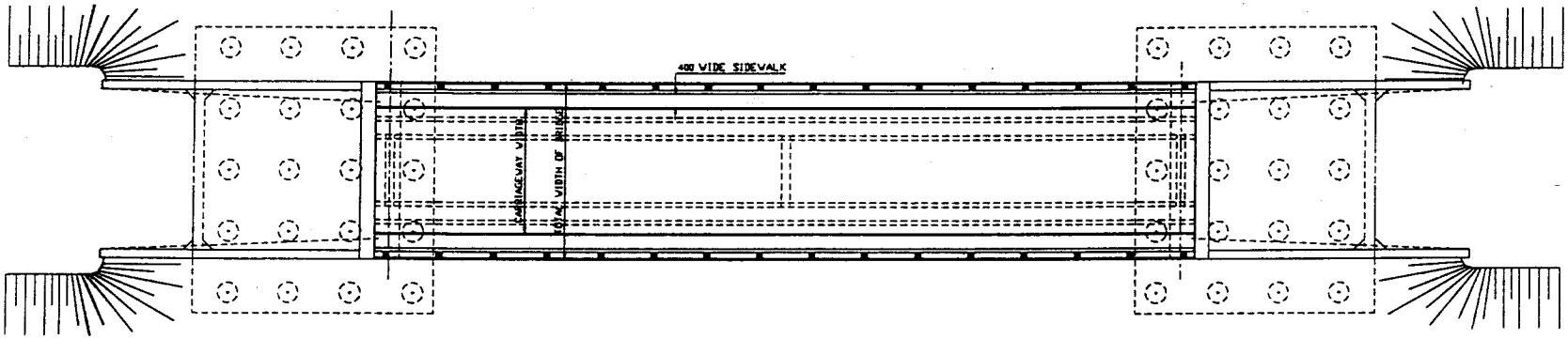
NOTES:
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2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 22.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO GA-22-01 SCALE 1 : 150 — DATE : JUNE 1996

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GENERAL ELEVATION OF 23 m SPAN PC BRIDGE

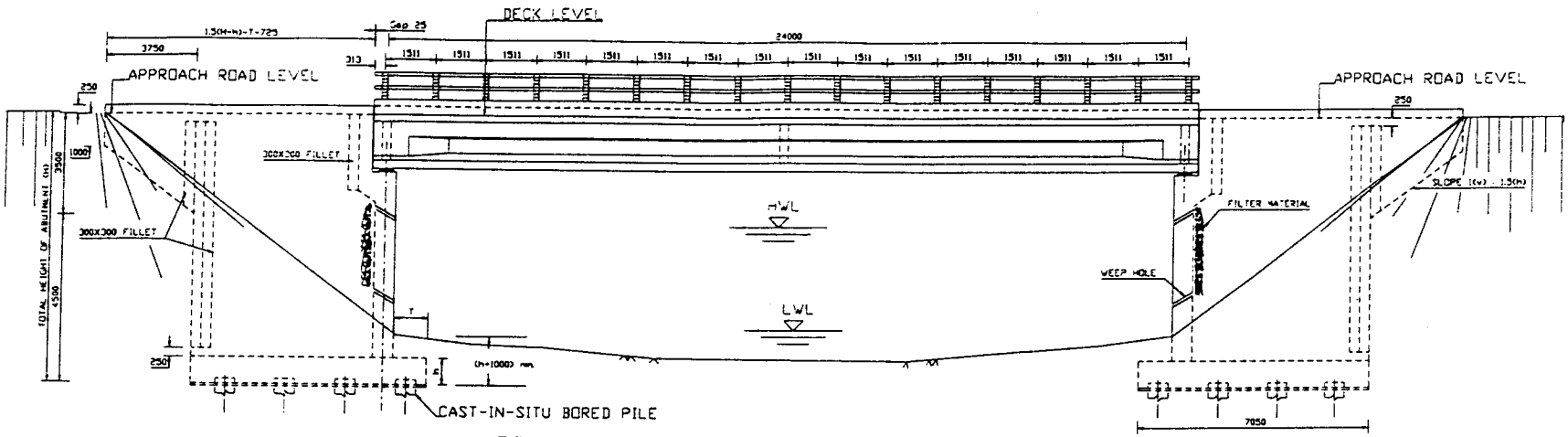


GENERAL PLAN

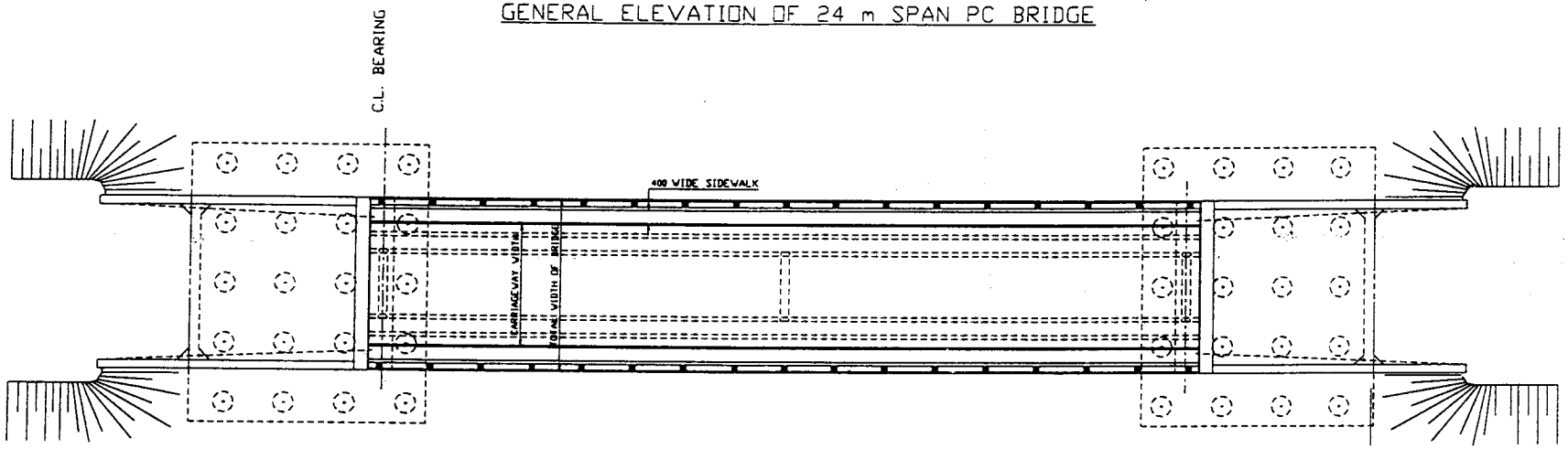
NOTES:
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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 23.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-23-01 SCALE 1 : 50 — DATE JUNE 1996

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GENERAL ELEVATION OF 24 m SPAN PC BRIDGE

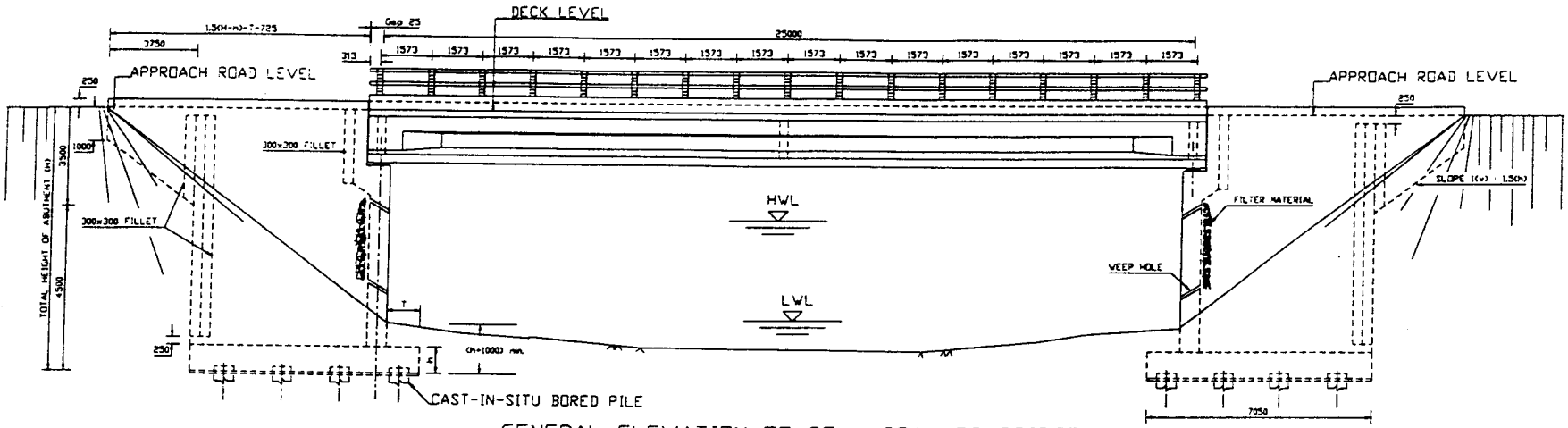


GENERAL PLAN

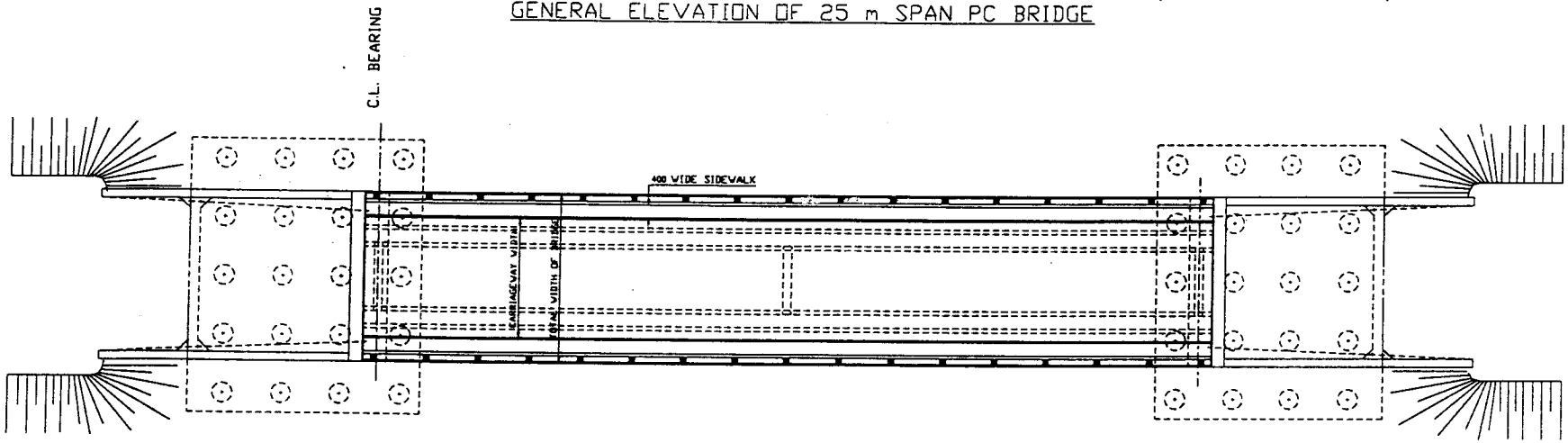
NOTES:
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2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 24.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO. GA-24-01 SCALE 1 : 150 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 25 m SPAN PC BRIDGE

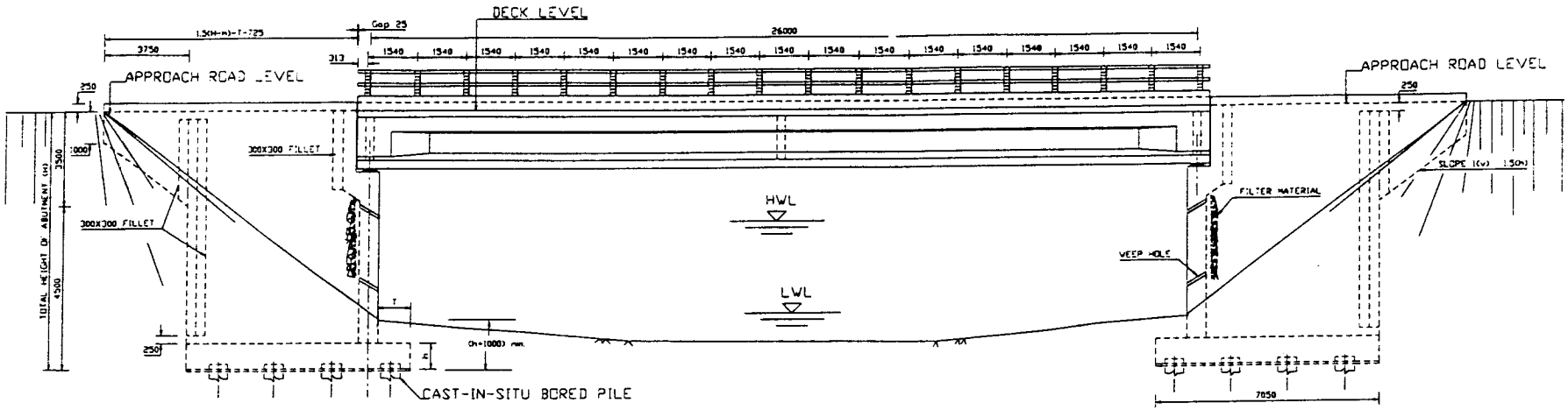


GENERAL PLAN

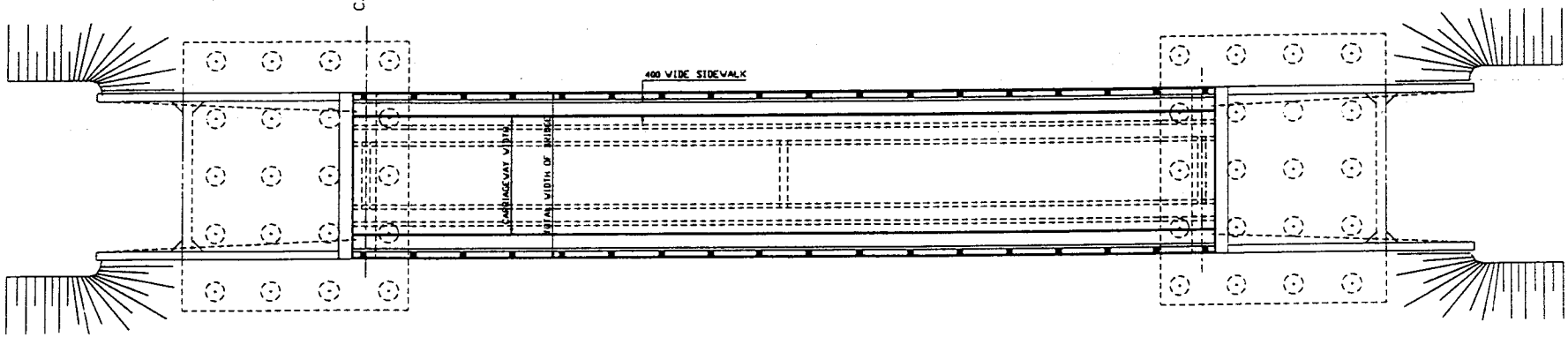
NOTES:
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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 25.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-25-01 SCALE 1 : 150 — DATE : JUNE 1996

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GENERAL ELEVATION OF 26 m SPAN PC BRIDGE

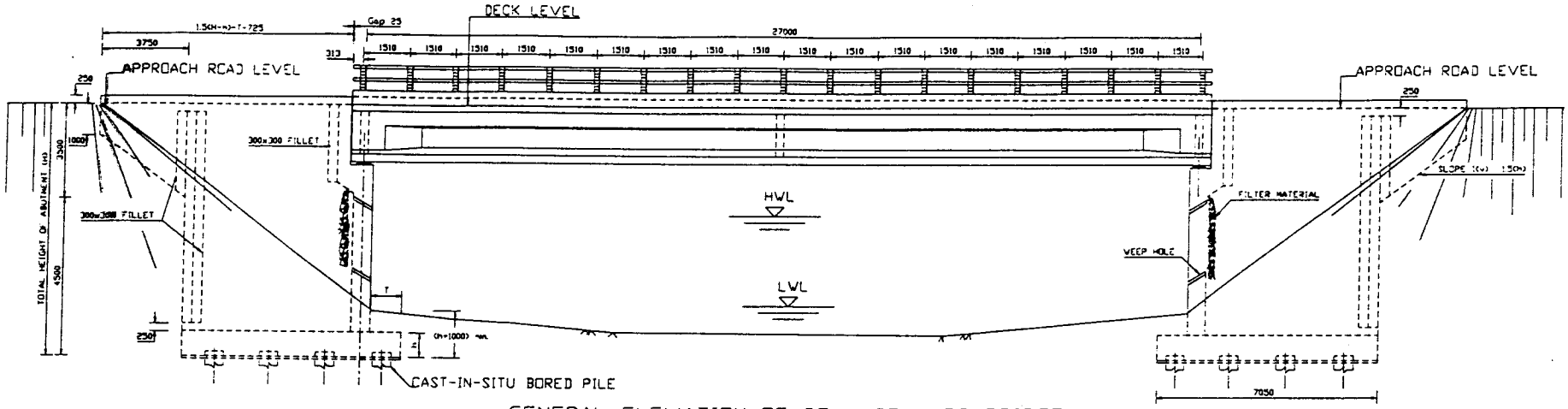


GENERAL PLAN

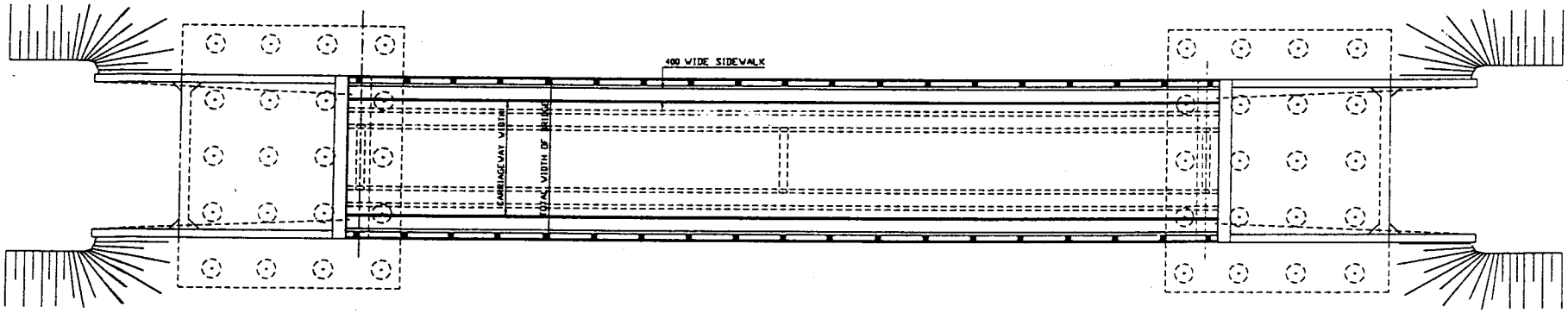
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 26.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-26-01 SCALE : 150 — DATE JUNE 1996

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GENERAL ELEVATION OF 27 m SPAN PC BRIDGE

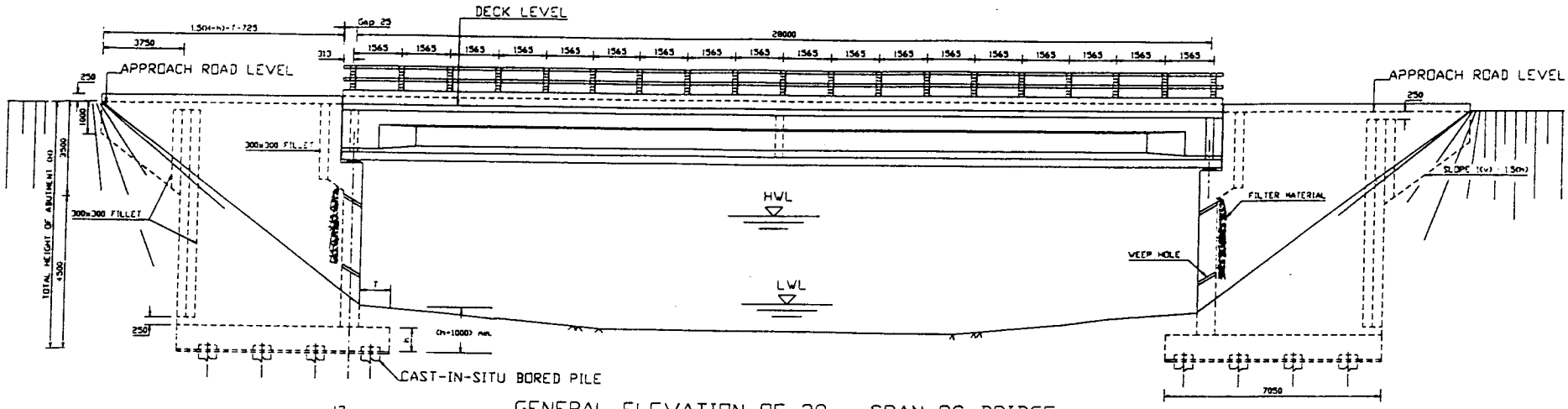


GENERAL PLAN

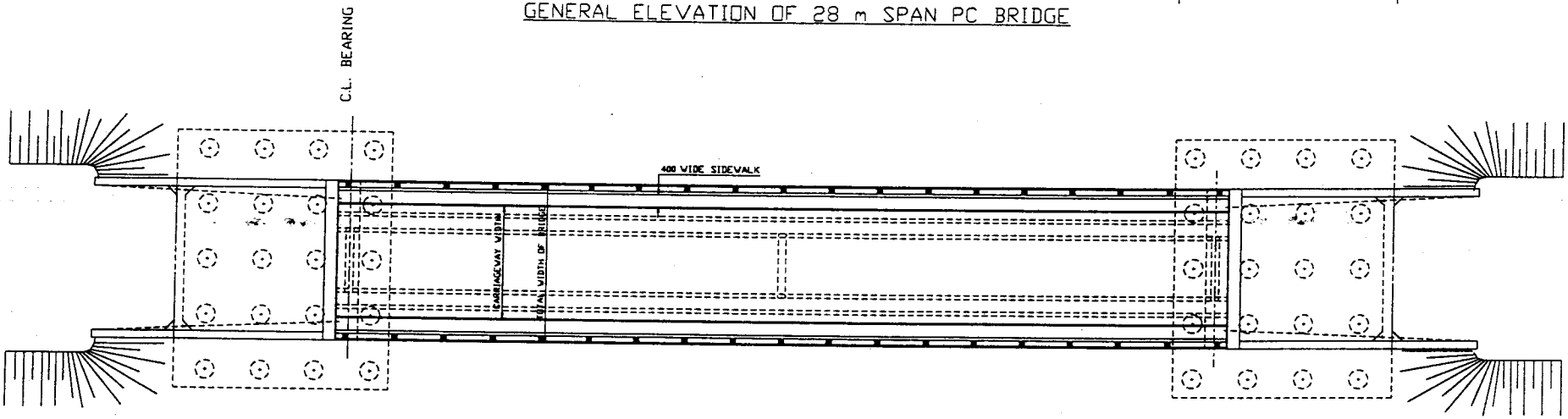
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210, TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 27.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-27-01 SCALE : 1:50 — DATE : JUNE 1996

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GENERAL ELEVATION OF 28 m SPAN PC BRIDGE

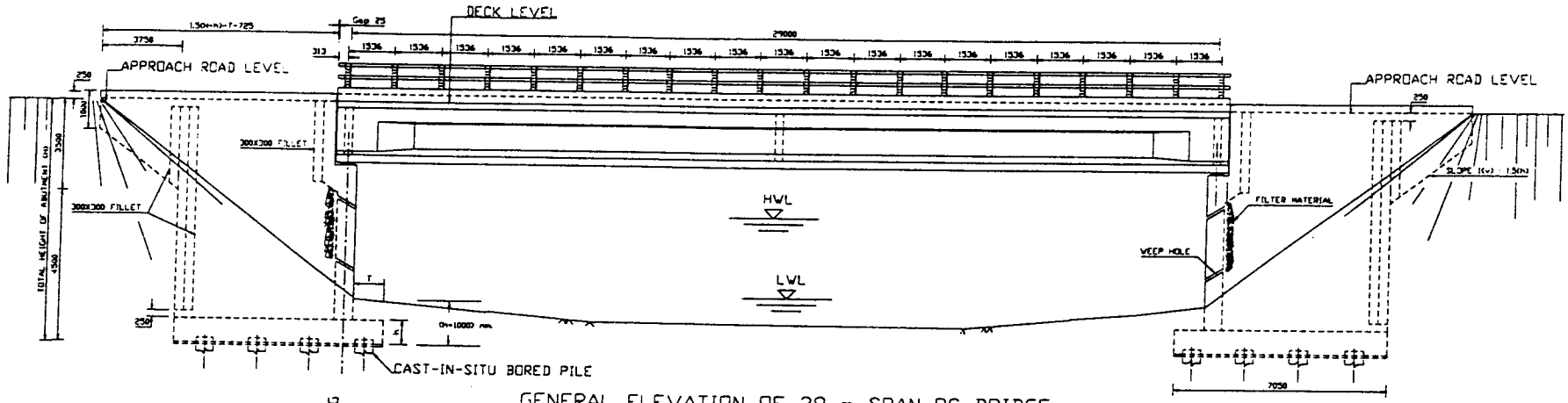


GENERAL PLAN

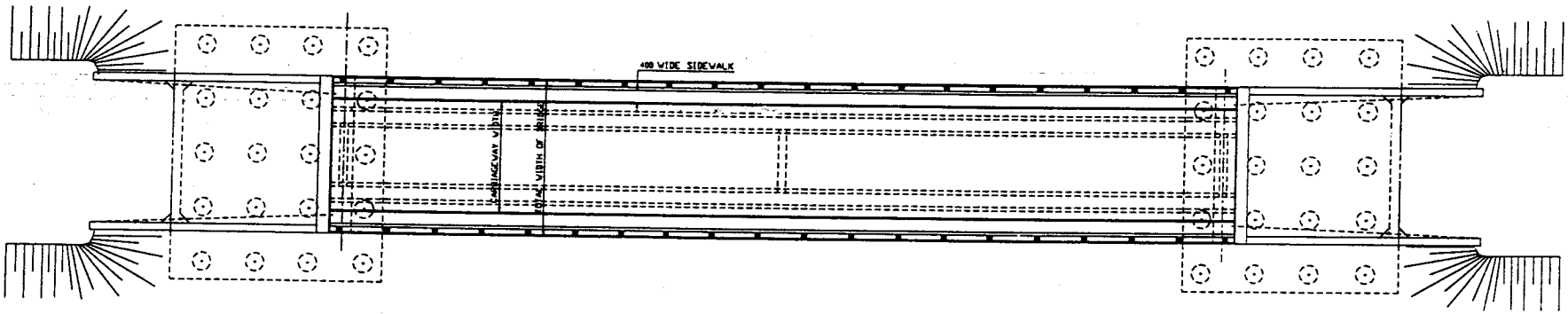
NOTES:
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2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 28.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. : GA-28-01 SCALE : 1 : 150 — DATE : JUNE 1996

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GENERAL ELEVATION OF 29 m SPAN PC BRIDGE

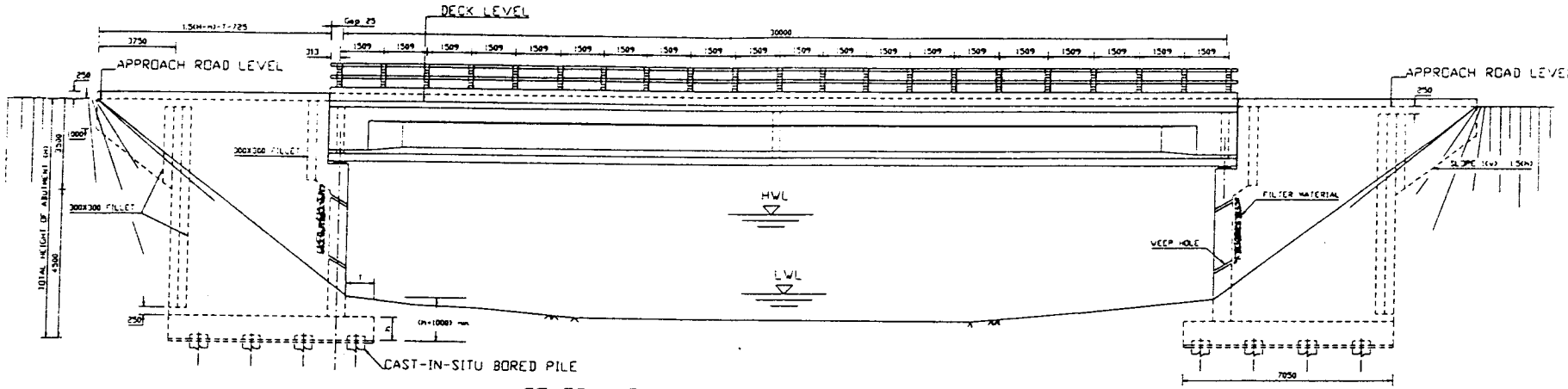


GENERAL PLAN

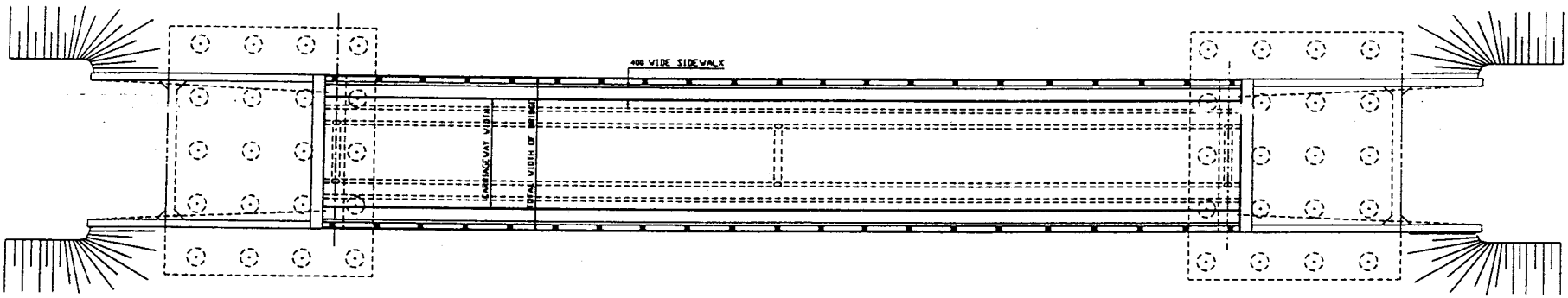
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 29.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. : GA-29-01 SCALE 1 : 160 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 30 m SPAN PC BRIDGE

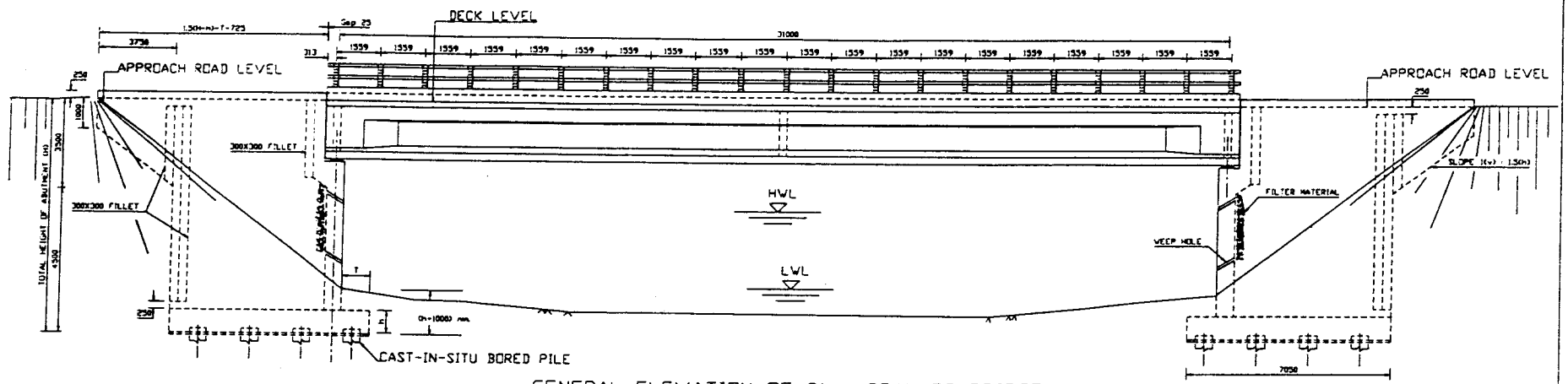


GENERAL PLAN

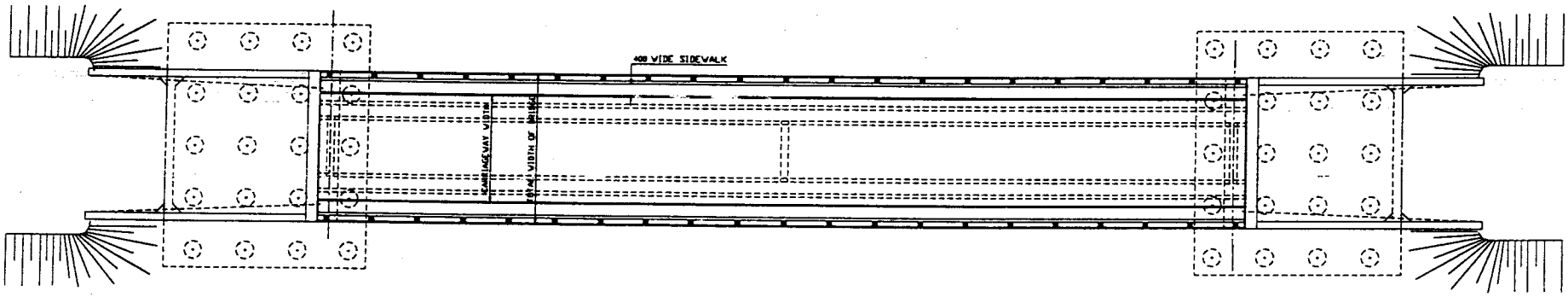
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 30.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO GA-30-01 SCALE 1 : 160 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 31 m SPAN PC BRIDGE

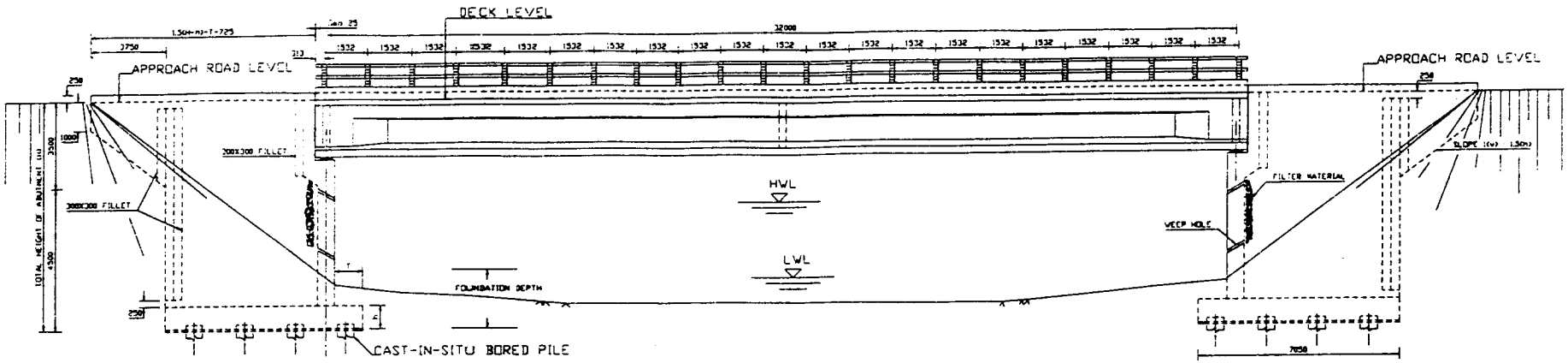


GENERAL PLAN

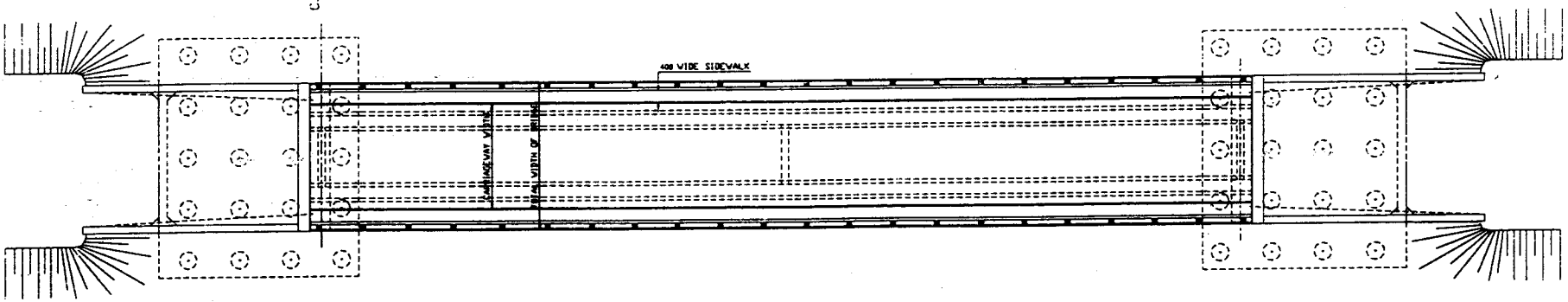
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 31.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. : GA-31-01 SCALE : 1 : 160 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 32 m SPAN PC BRIDGE

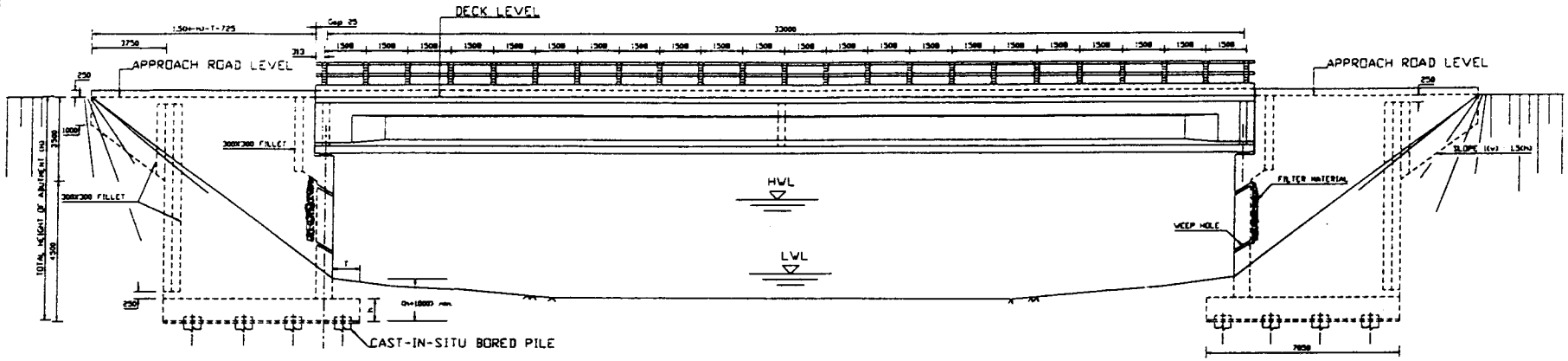


GENERAL PLAN

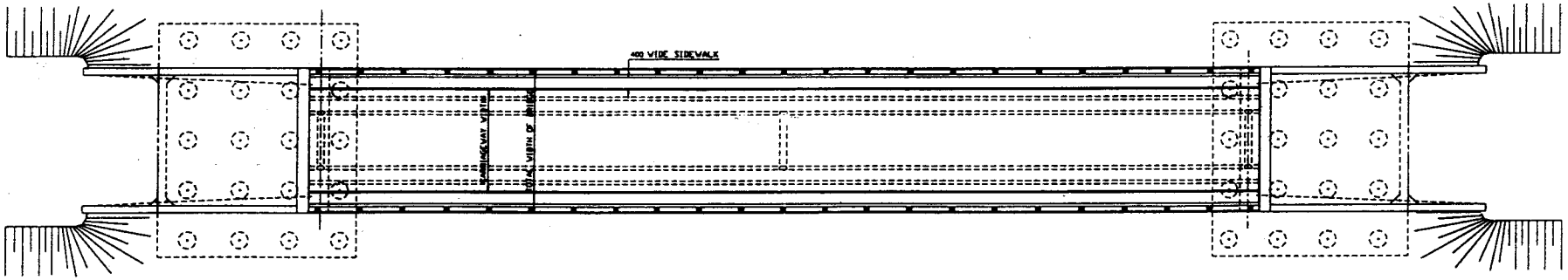
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 32.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO GA-32-01 SCALE 1 : 165 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 33 m SPAN PC BRIDGE

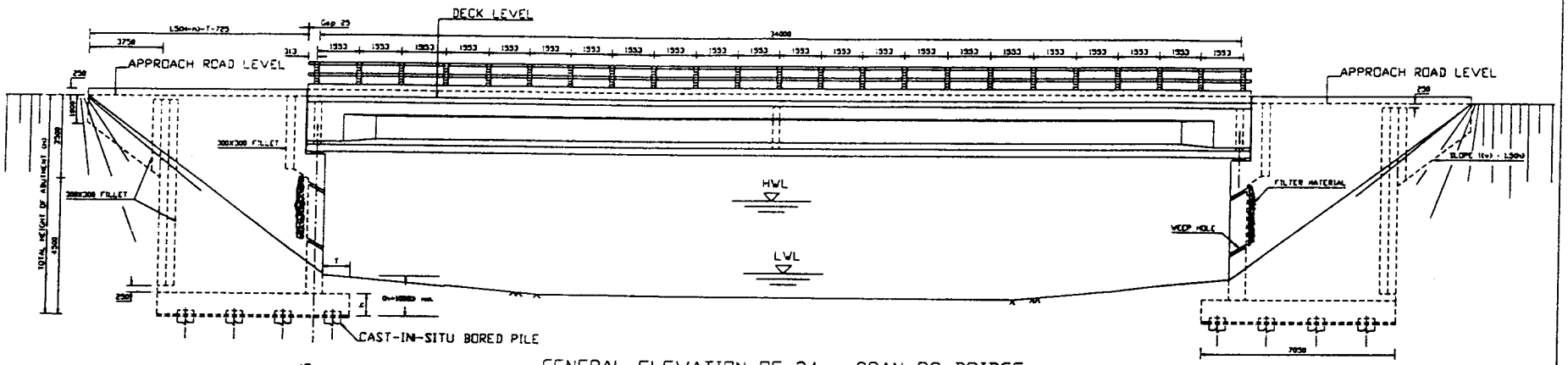


GENERAL PLAN

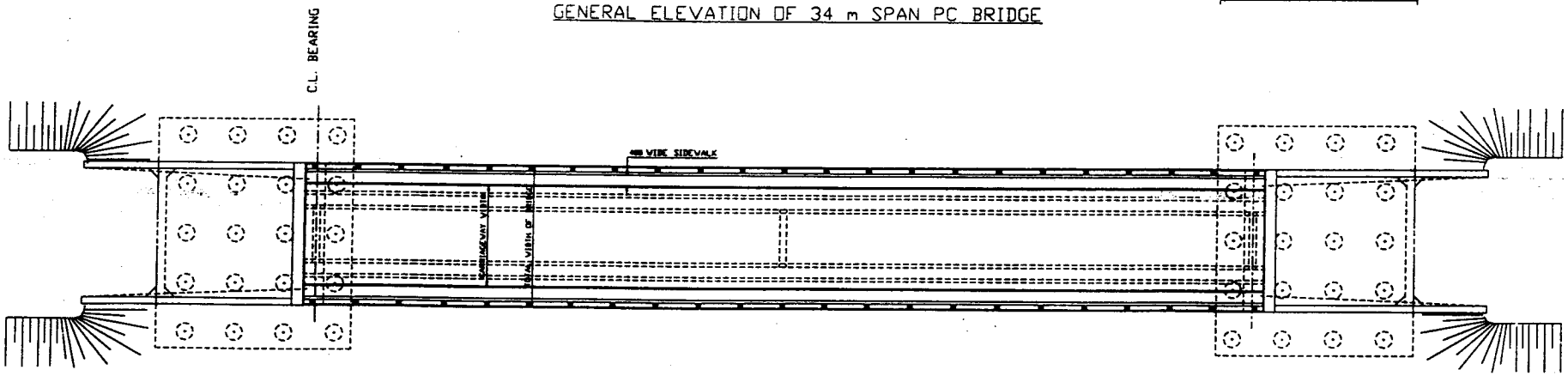
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 33.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO GA-33-01 SCALE 1 : 170 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 34 m SPAN PC BRIDGE

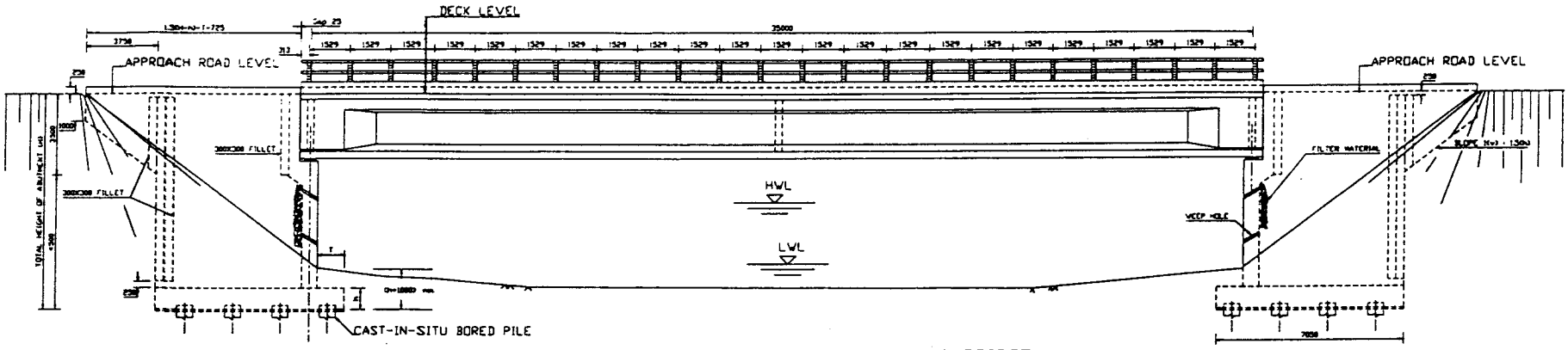


GENERAL PLAN

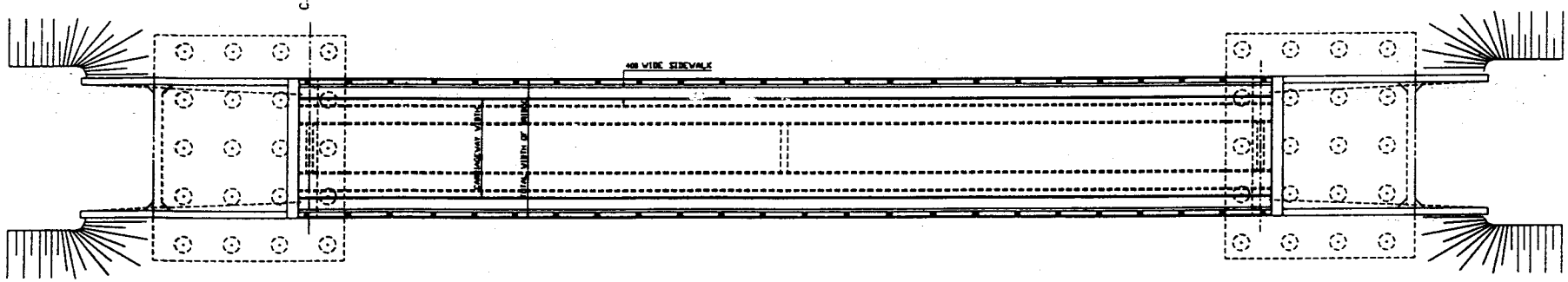
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 34.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-34-01 SCALE 1 : 170 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 35 m SPAN PC BRIDGE

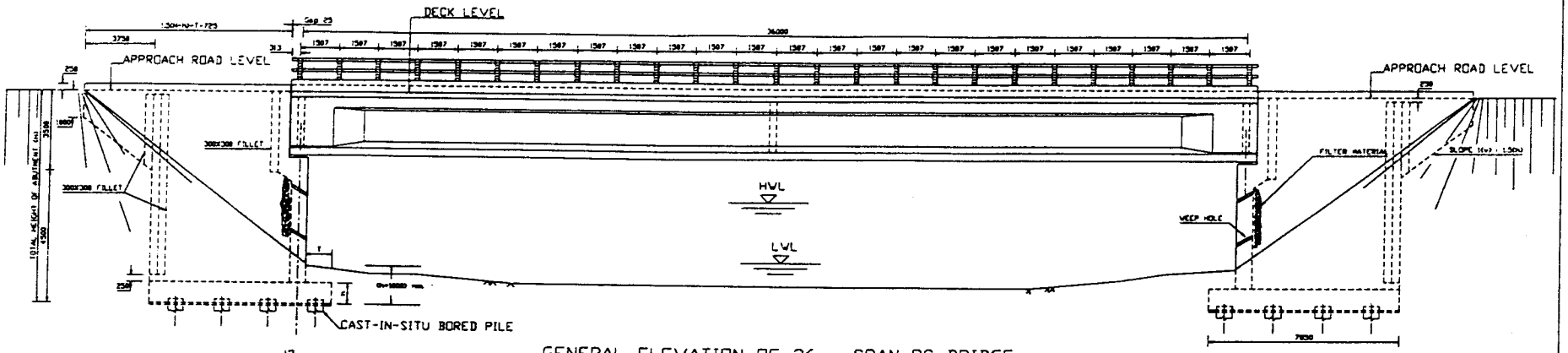


GENERAL PLAN

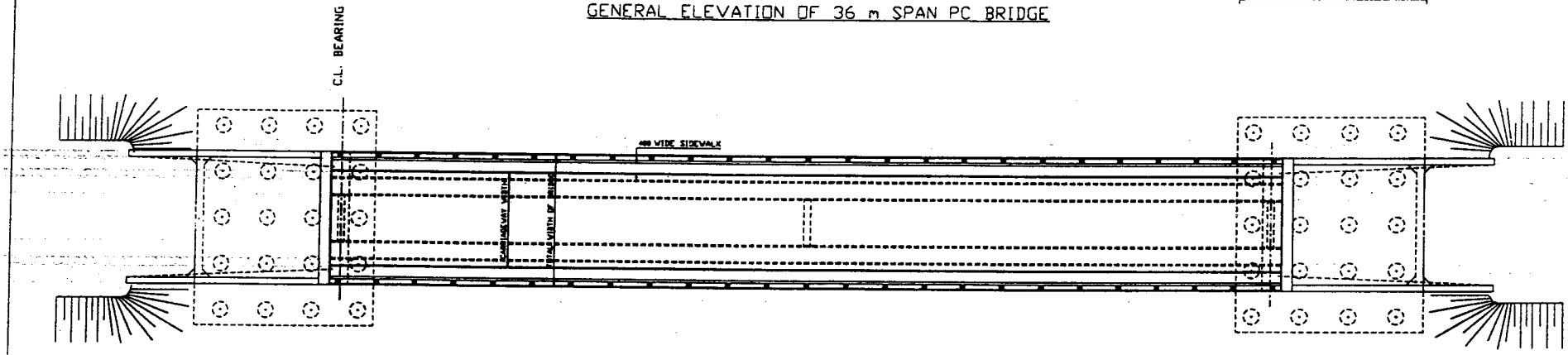
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 35.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. : GA-35-01 SCALE : 1/75 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 36 m SPAN PC BRIDGE

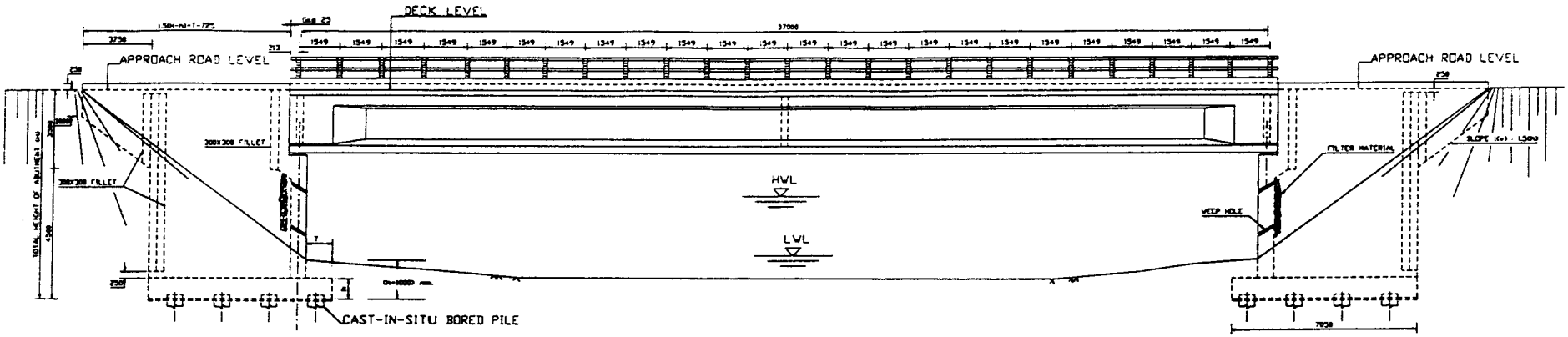


GENERAL PLAN

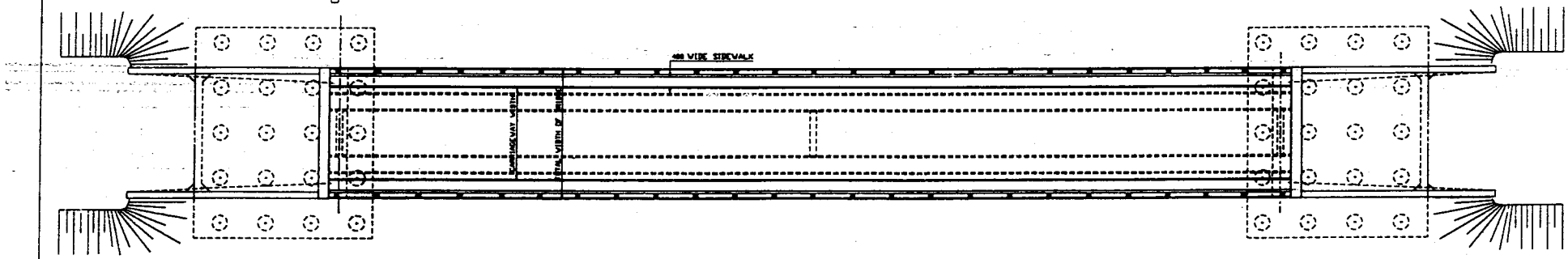
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 36.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-36-01 SCALE 1 : 175 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 37 m SPAN PC BRIDGE

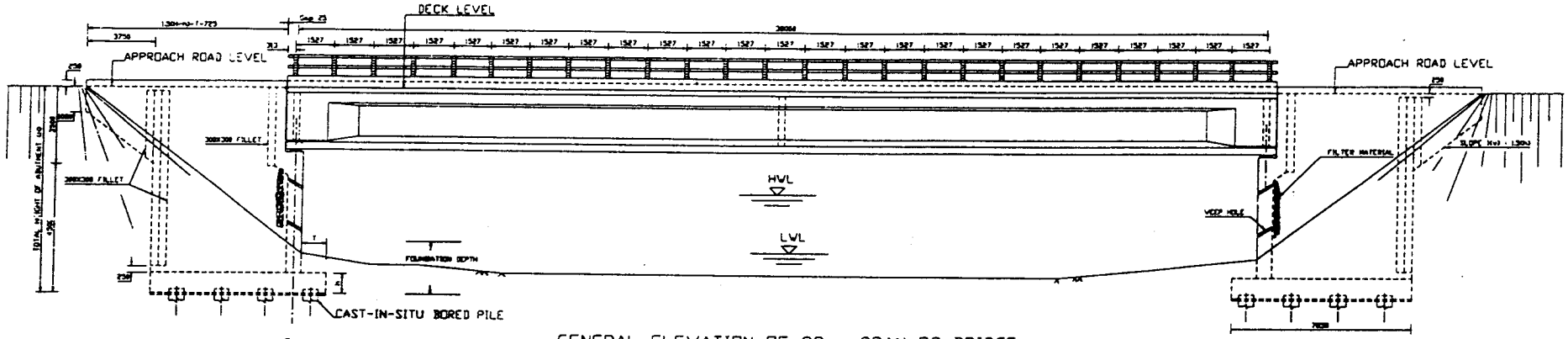


GENERAL PLAN

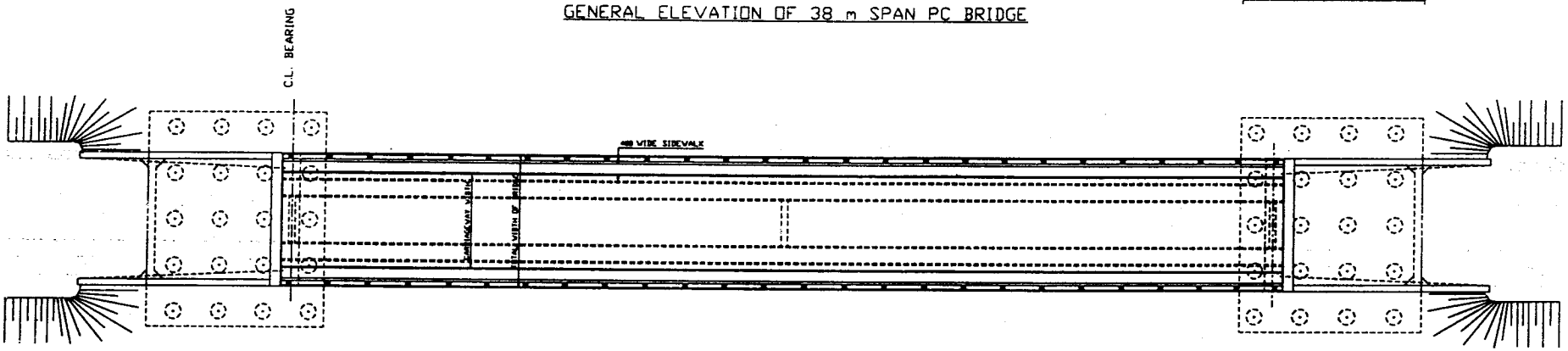
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 37.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. : GA-37-01 SCALE 1 : 175 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 38 m SPAN PC BRIDGE

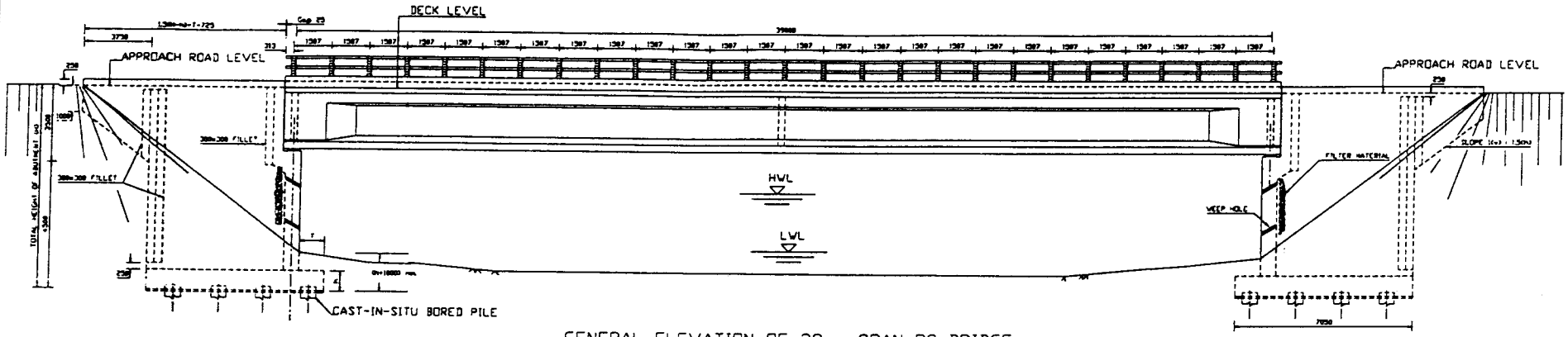


GENERAL PLAN

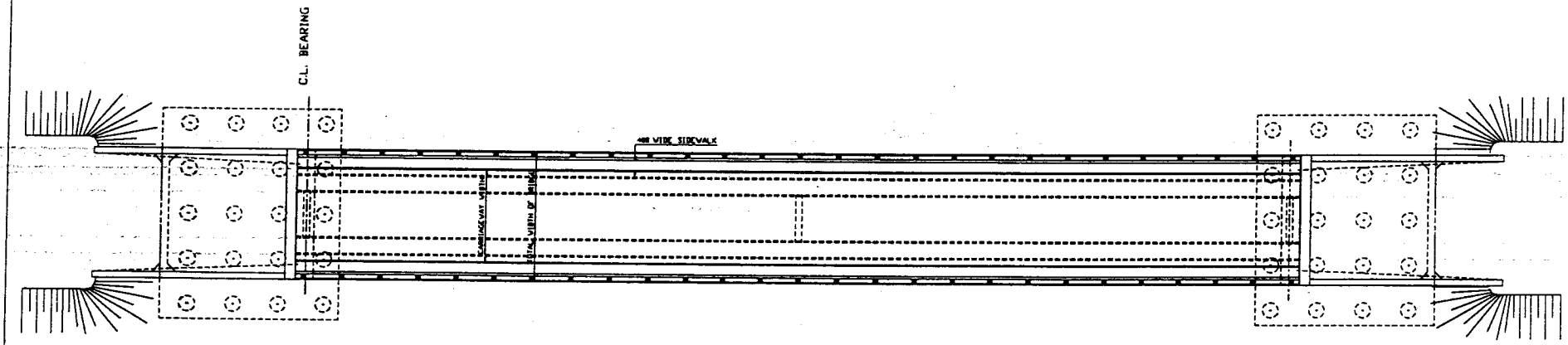
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 38.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-38-01 SCALE 1 : 180 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 39 m SPAN PC BRIDGE

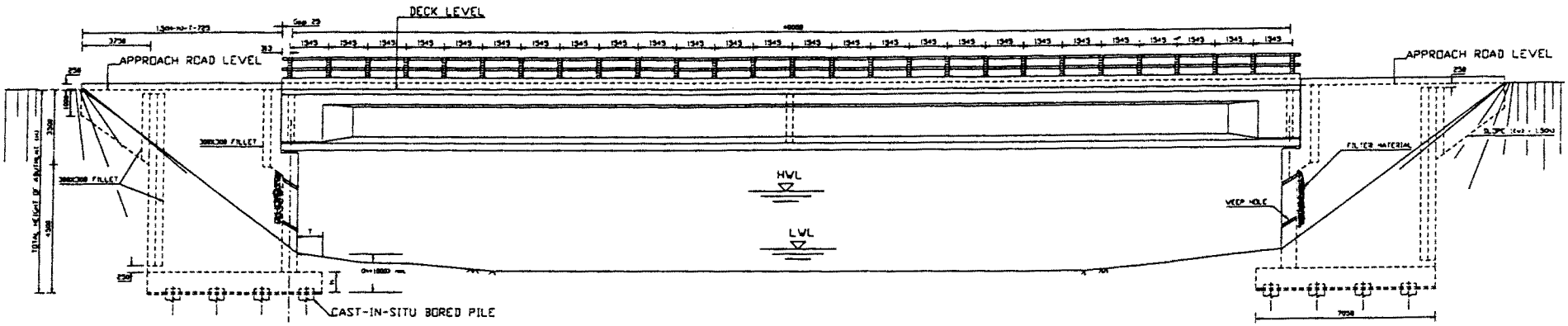


GENERAL PLAN

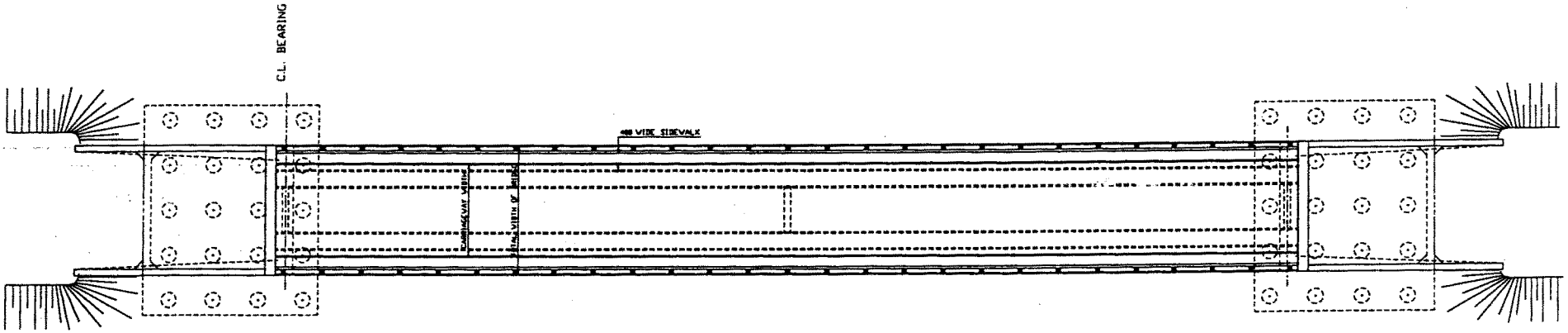
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 39.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. : GA-39-01 SCALE : 1 : 180 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 40 m SPAN PC BRIDGE

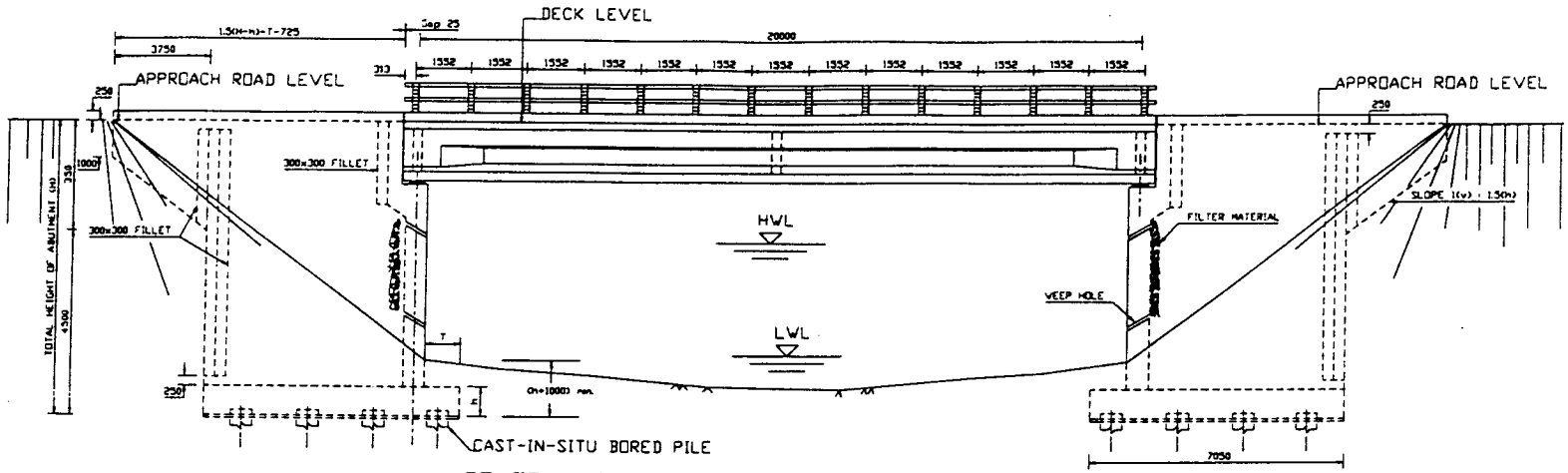


GENERAL PLAN

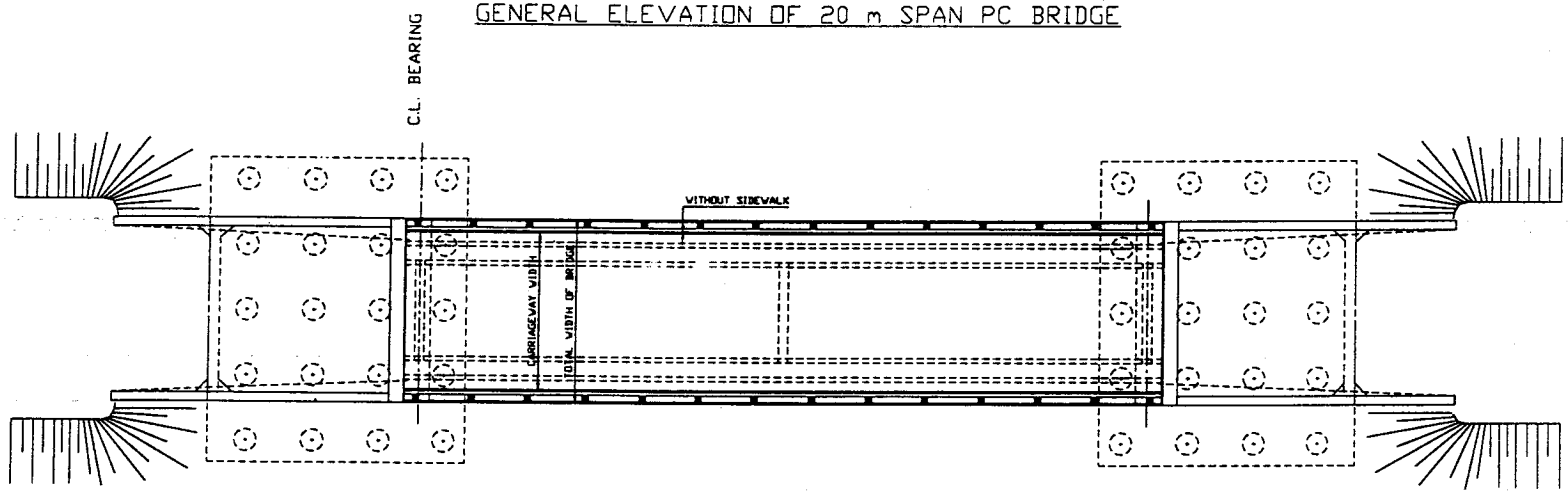
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IA = 3660; TYPE-IIA = 4330.
2. TOTAL WIDTH OF BRIDGE (WITH SIDEWALK): TYPE-IA = 5210; TYPE-IIA = 5880.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IA AND TYPE-IIA WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 40.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. : GA-40-01 SCALE 1 : 180 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 20 m SPAN PC BRIDGE

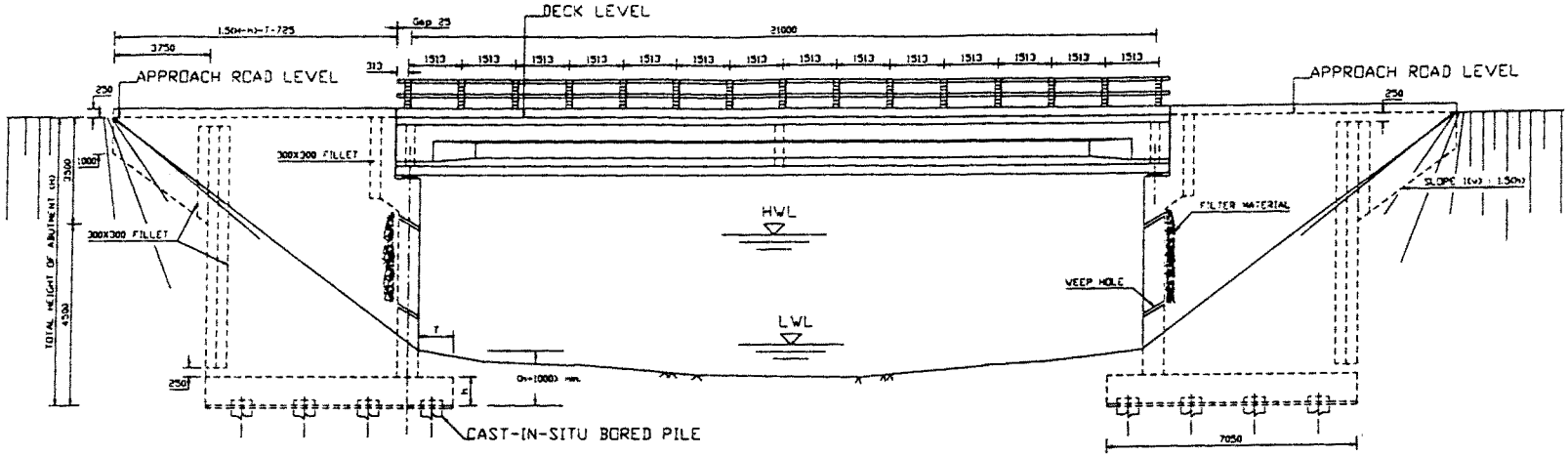


GENERAL PLAN

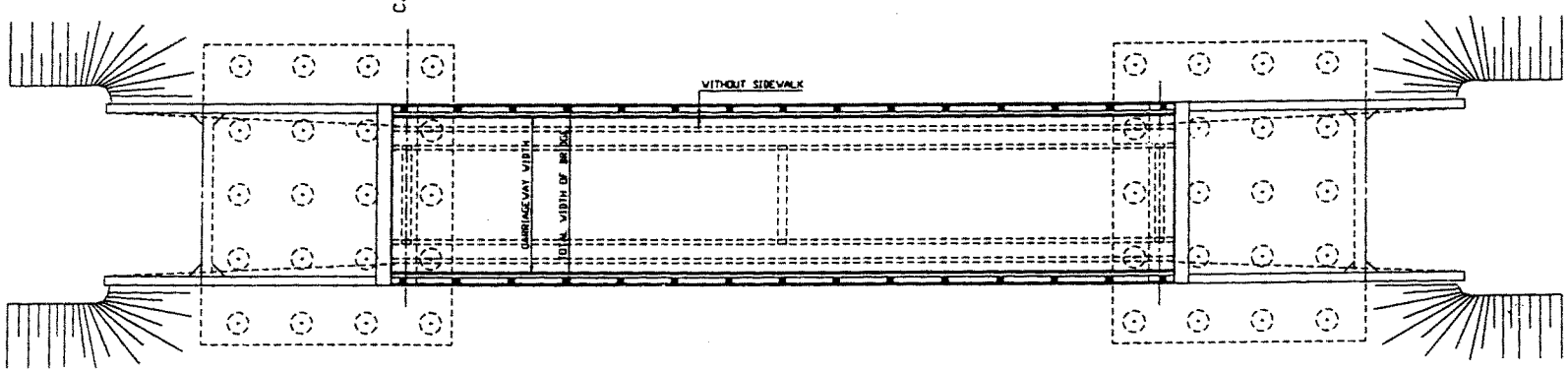
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 20.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-20-02 SCALE 1 : 150 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 21 m SPAN PC BRIDGE

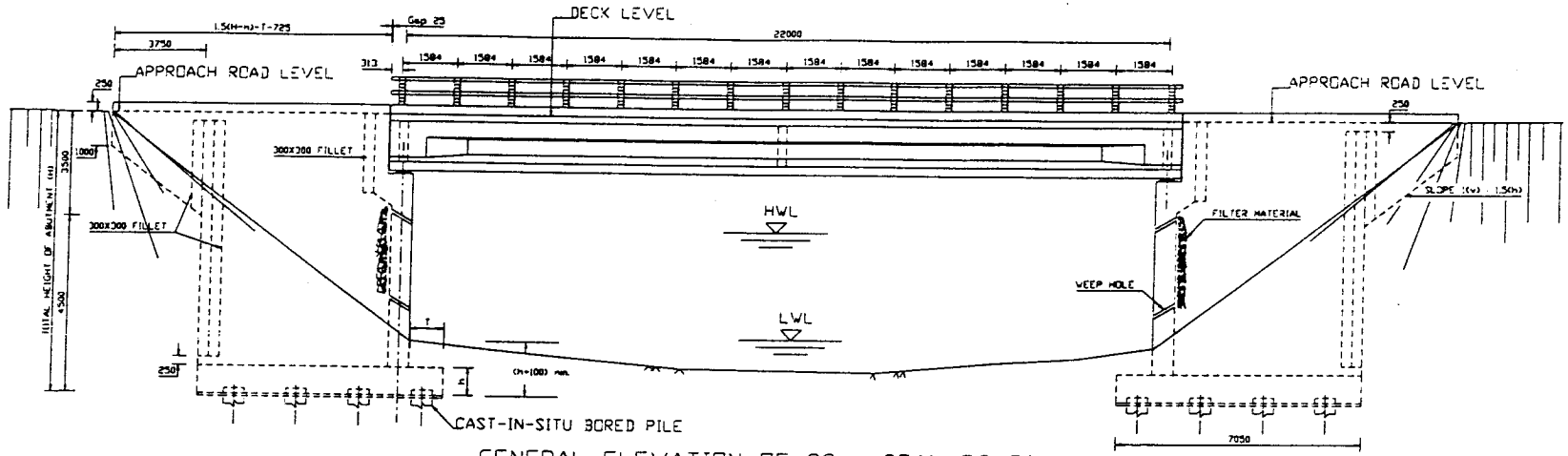


GENERAL PLAN

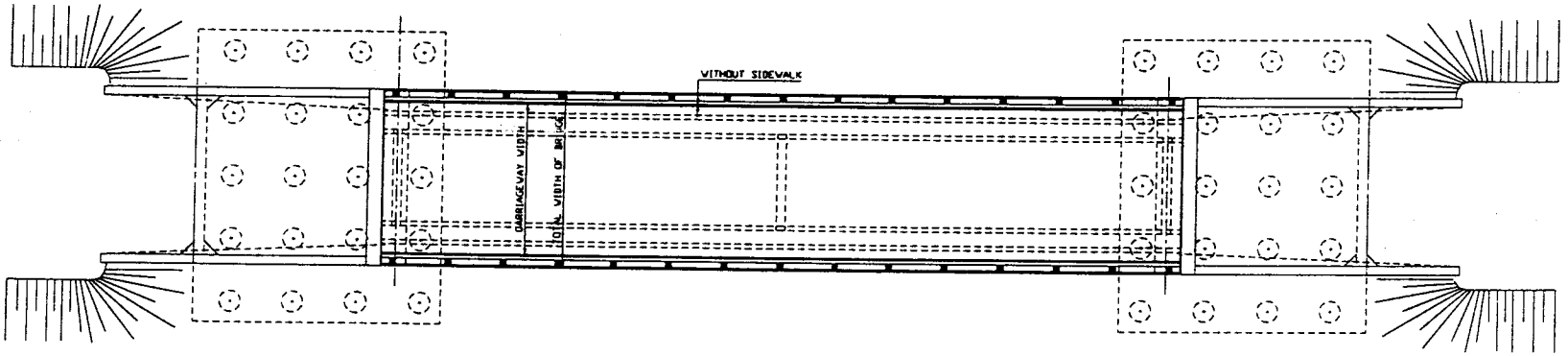
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY :	NAME OF PROJECT :	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 21.00 m
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION : THANA : ZILA :	GENERAL PLAN AND GENERAL ELEVATION — DWG. NO : GA-21-02
			SCALE : 1 : 150 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 22 m SPAN PC BRIDGE

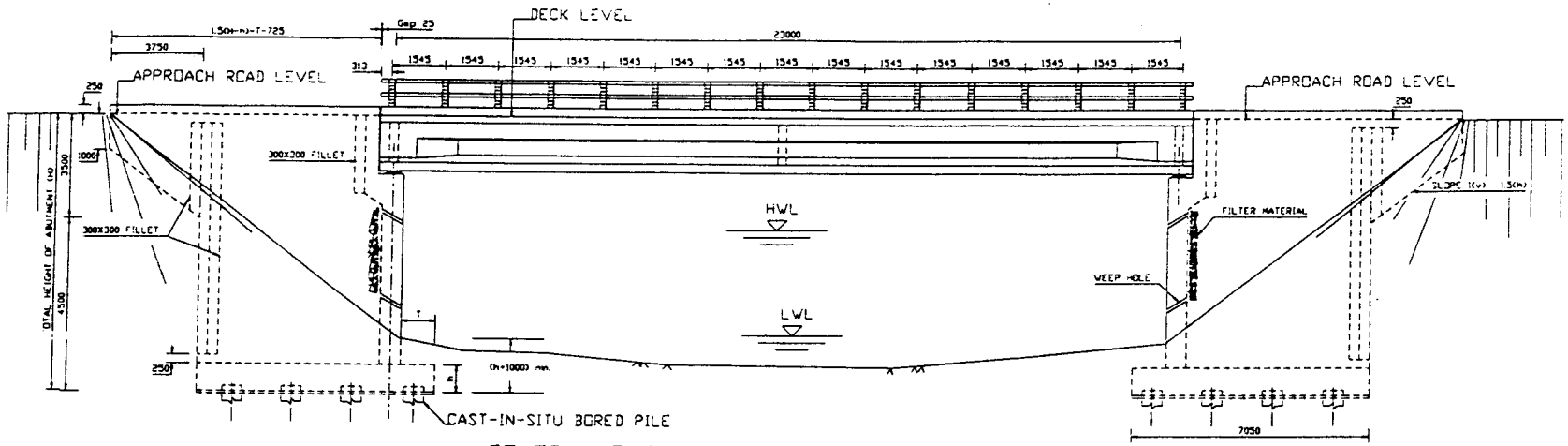


GENERAL PLAN

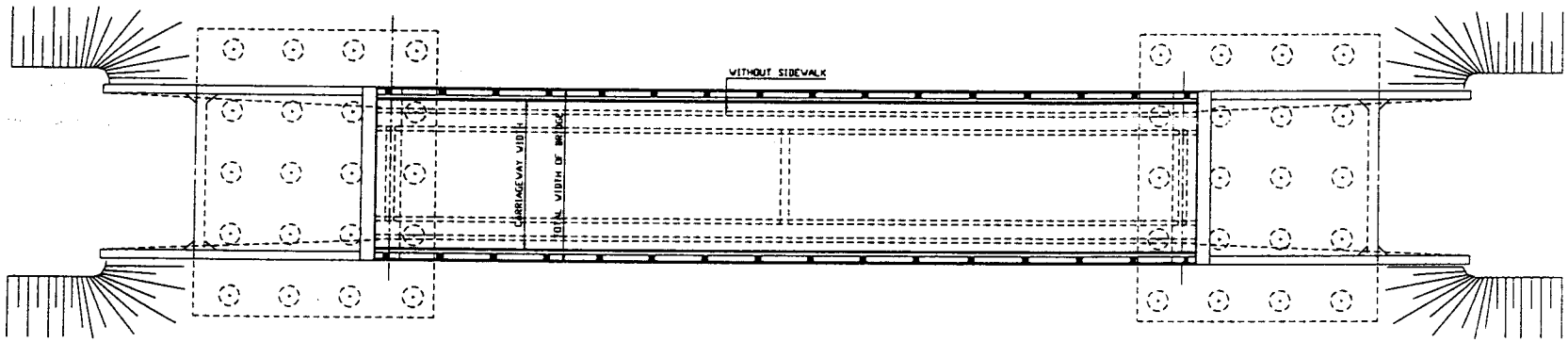
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 22.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO GA-22-02 SCALE 1 : 150 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 23 m SPAN PC BRIDGE

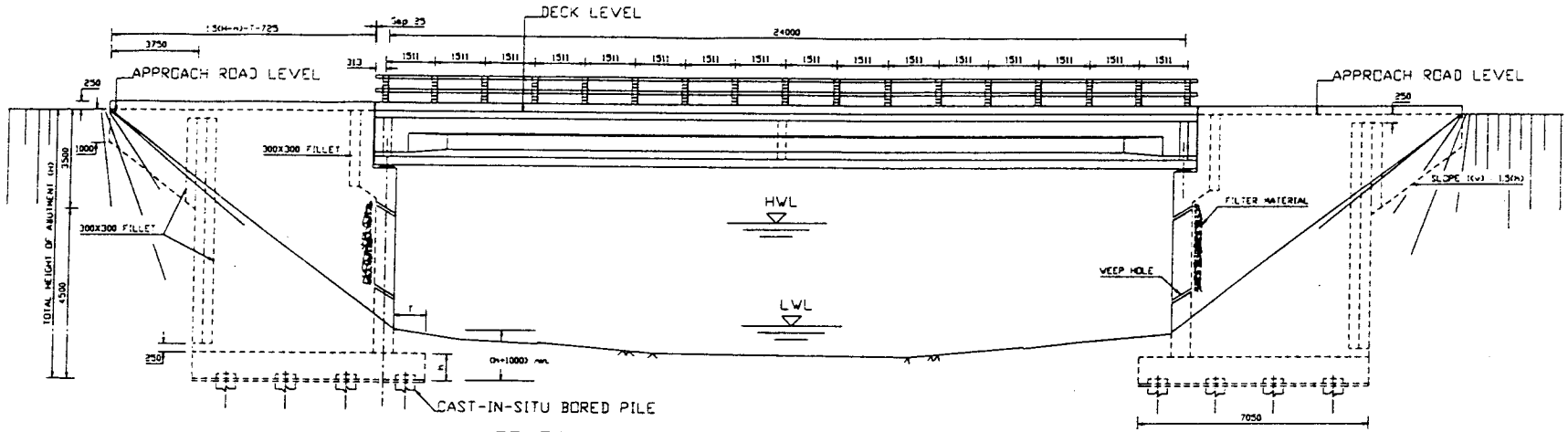


GENERAL PLAN

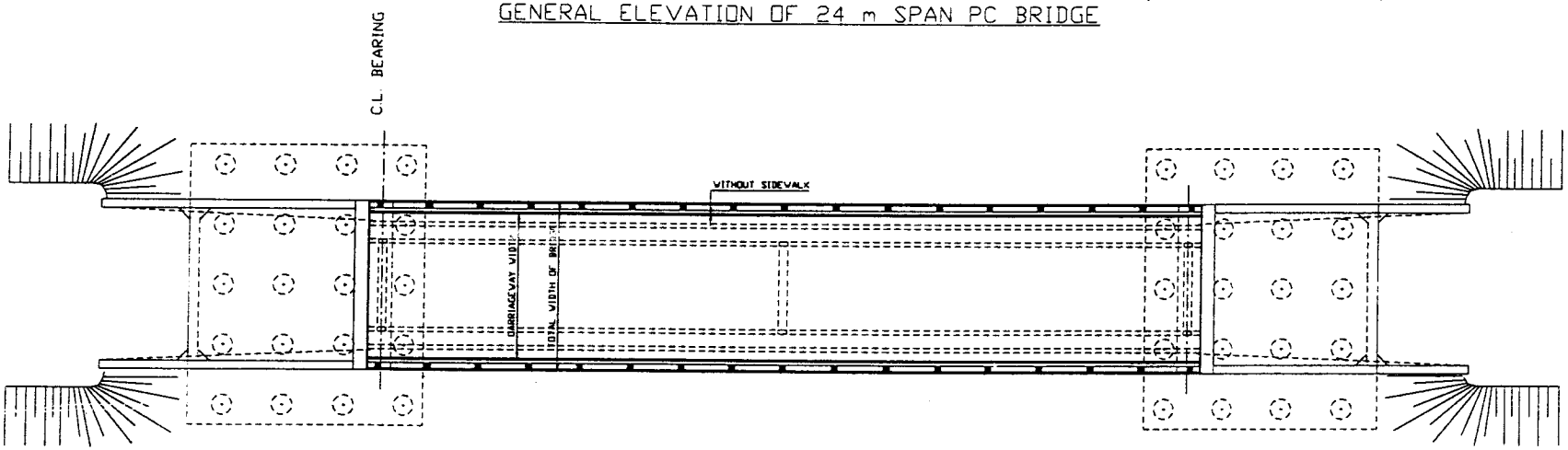
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410, TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 23.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO GA-23-02 SCALE 1 : 150 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 24 m SPAN PC BRIDGE

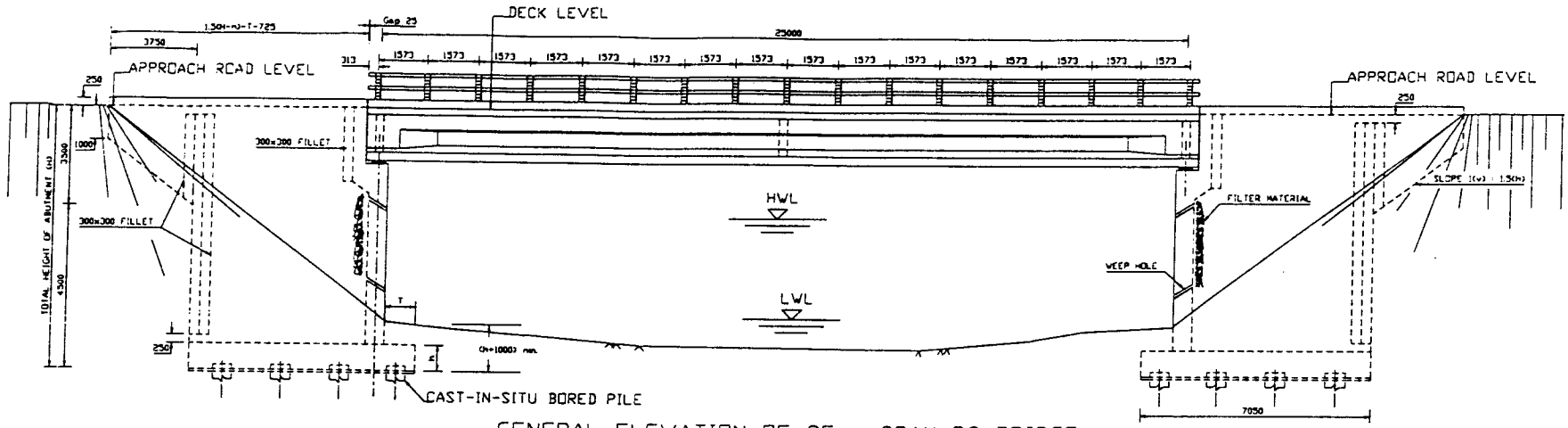


GENERAL PLAN

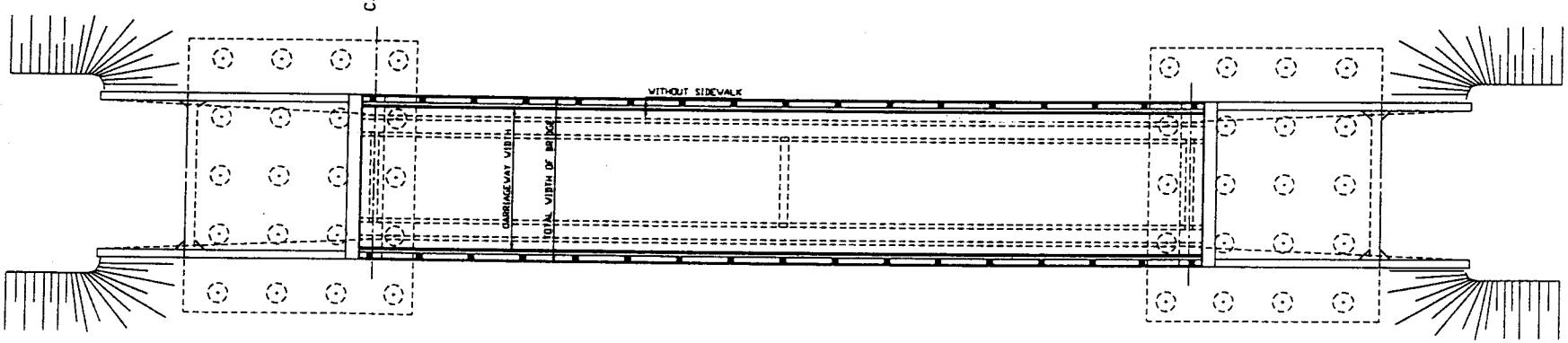
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 24.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO GA-24-02 SCALE 1 : 50 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 25 m SPAN PC BRIDGE

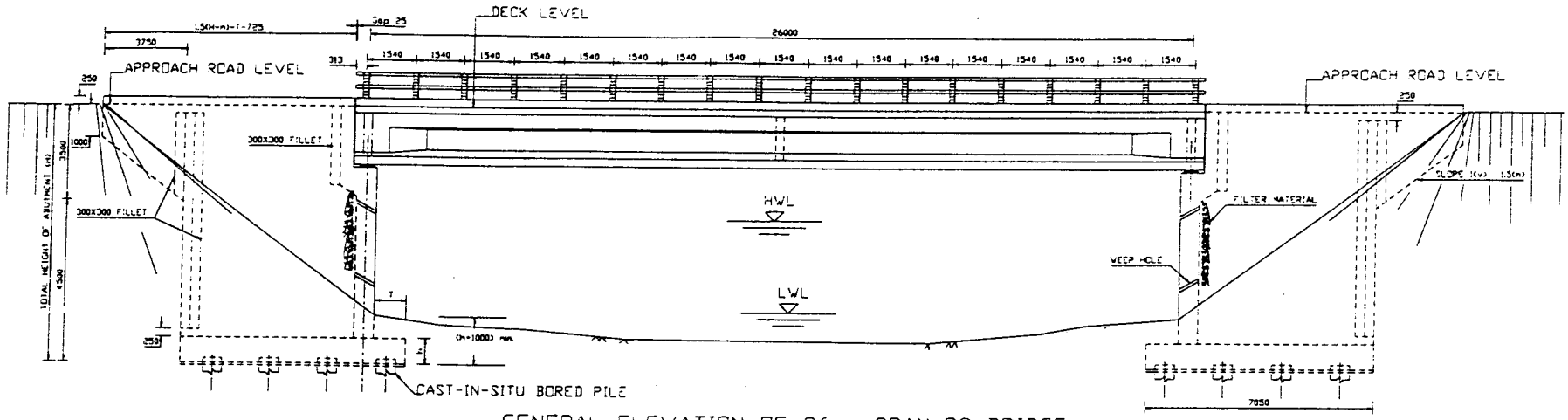


GENERAL PLAN

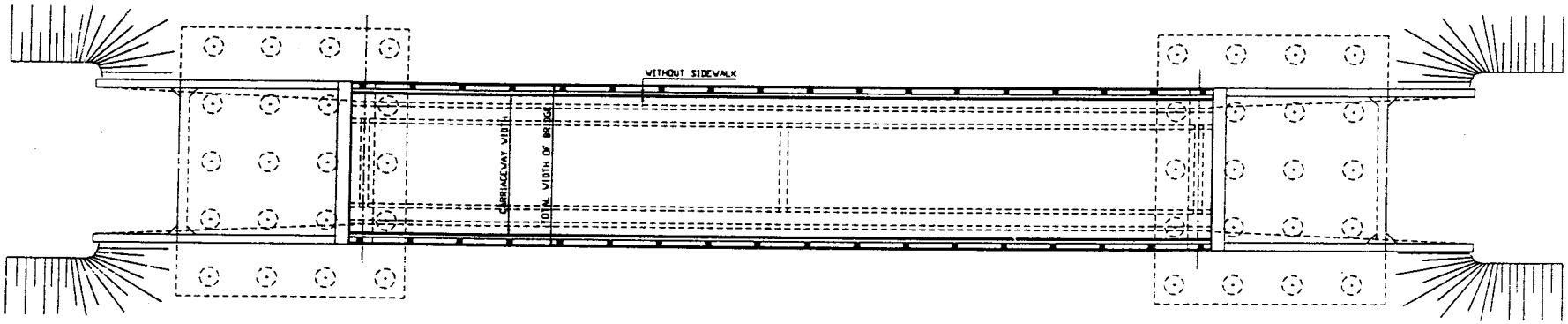
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410;, TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 25.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO : GA-25-02 SCALE : 150 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 26 m SPAN PC BRIDGE

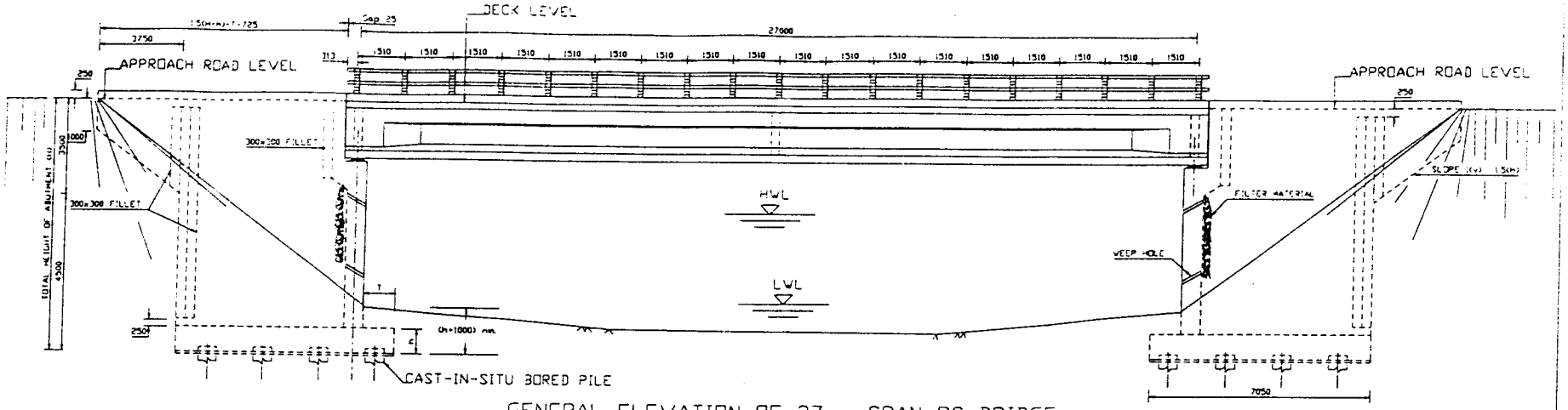


GENERAL PLAN

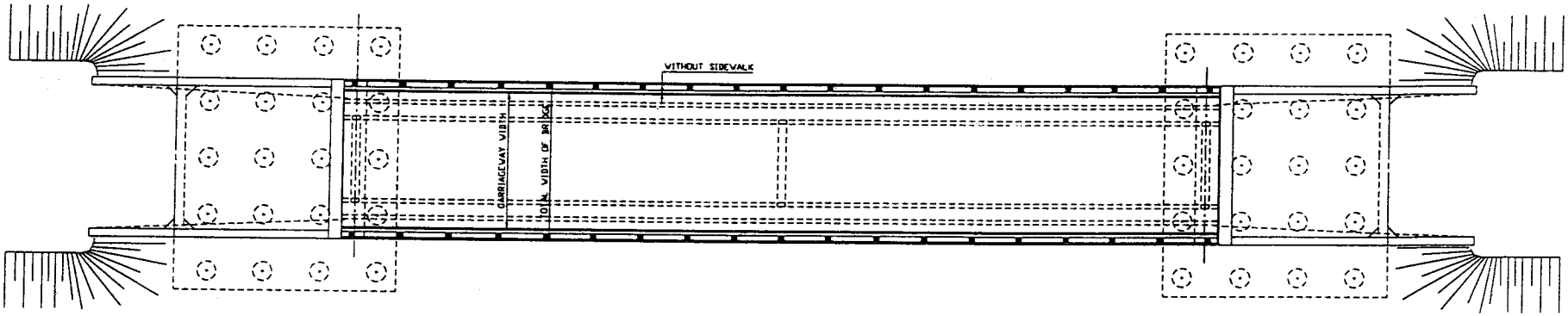
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 26.00 m GENERAL PLAN AND GENERAL ELEVATION SCALE : 150 DWG NO GA-26-02 DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 27 m SPAN PC BRIDGE

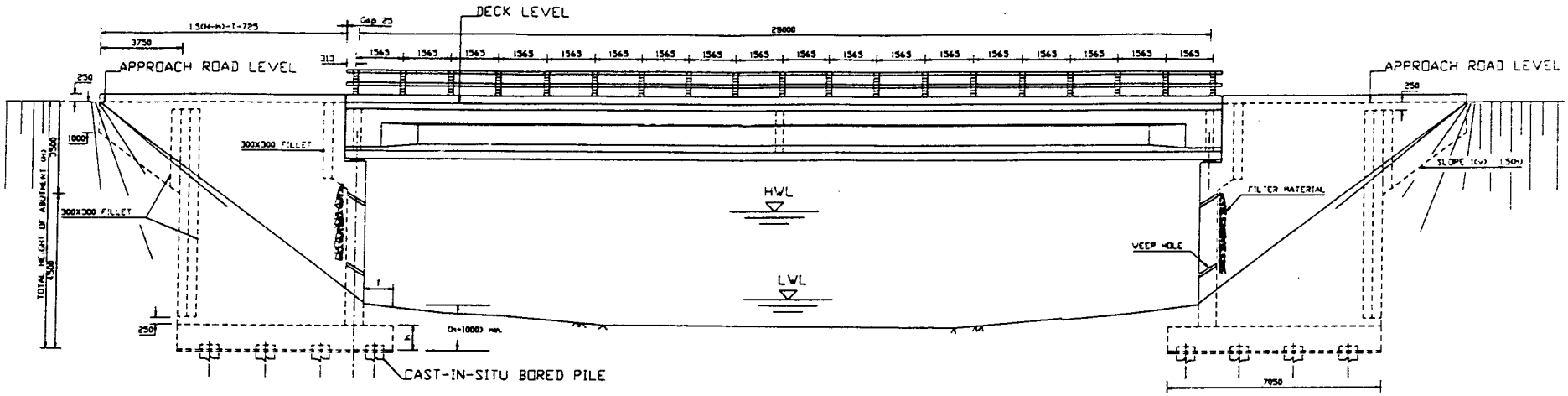


GENERAL PLAN

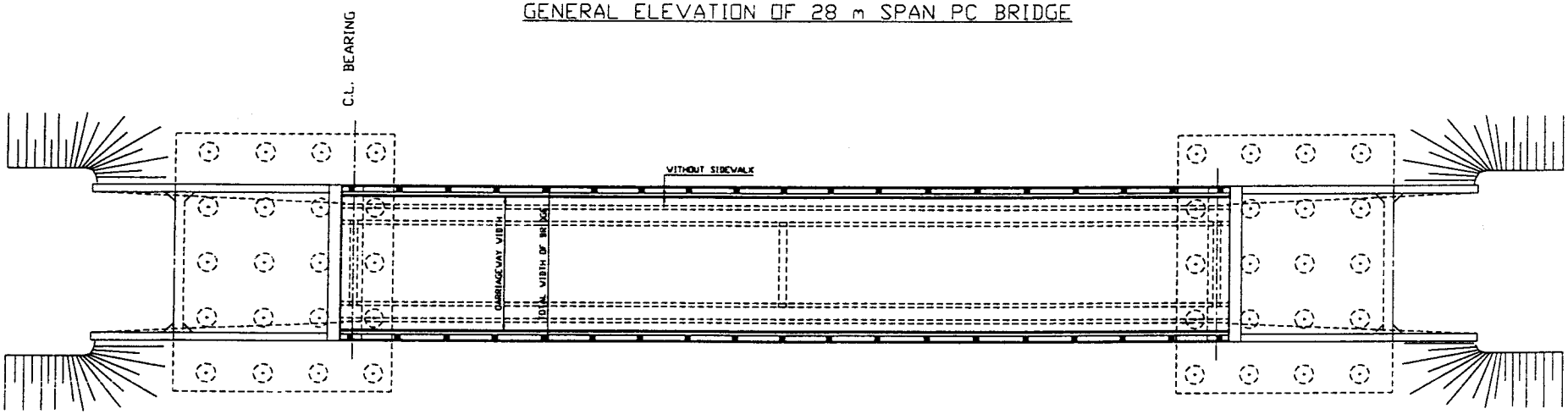
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 27.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO. GA-27-02 SCALE : 1:50 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 28 m SPAN PC BRIDGE

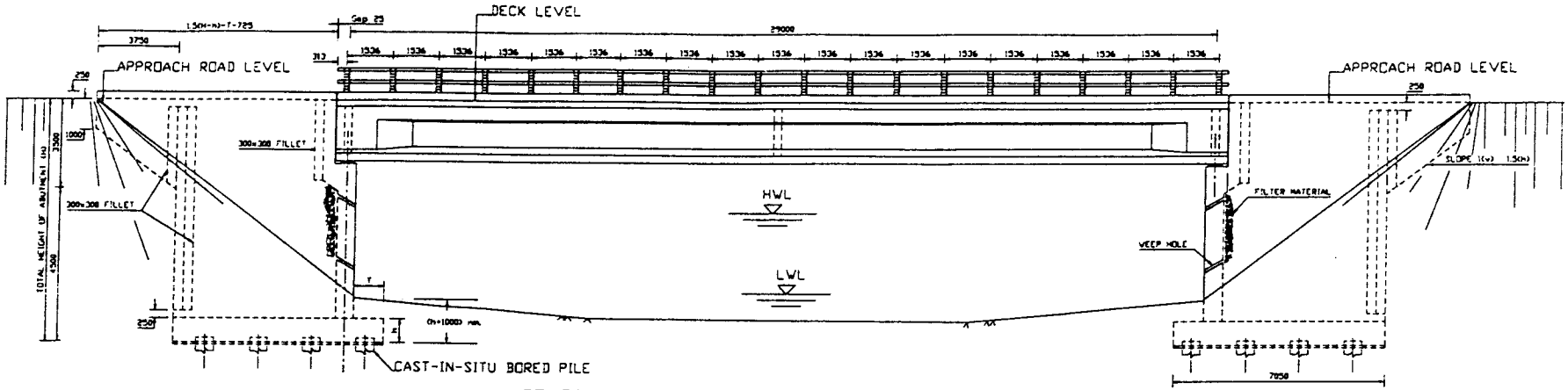


GENERAL PLAN

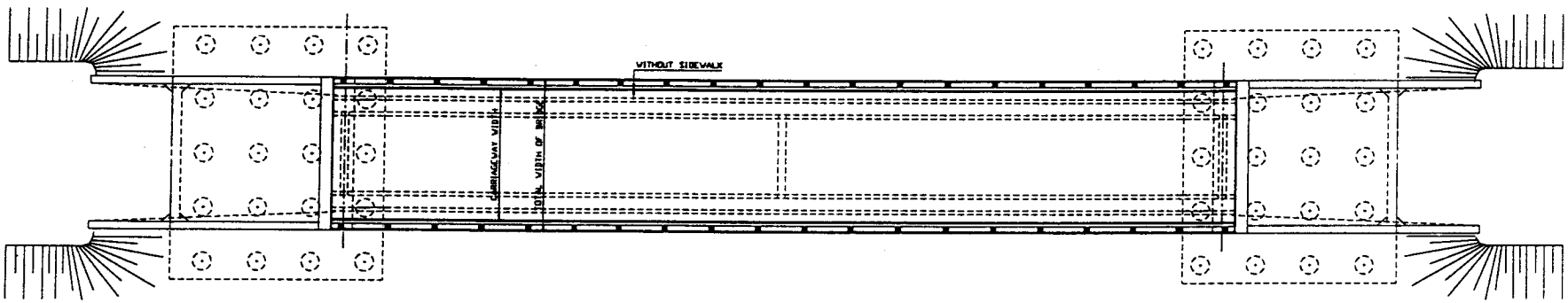
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660, TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 28.00 m GENERAL PLAN AND GENERAL ELEVATION DWG. NO. GA-28-02 SCALE 1 : 150 DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 29 m SPAN PC BRIDGE

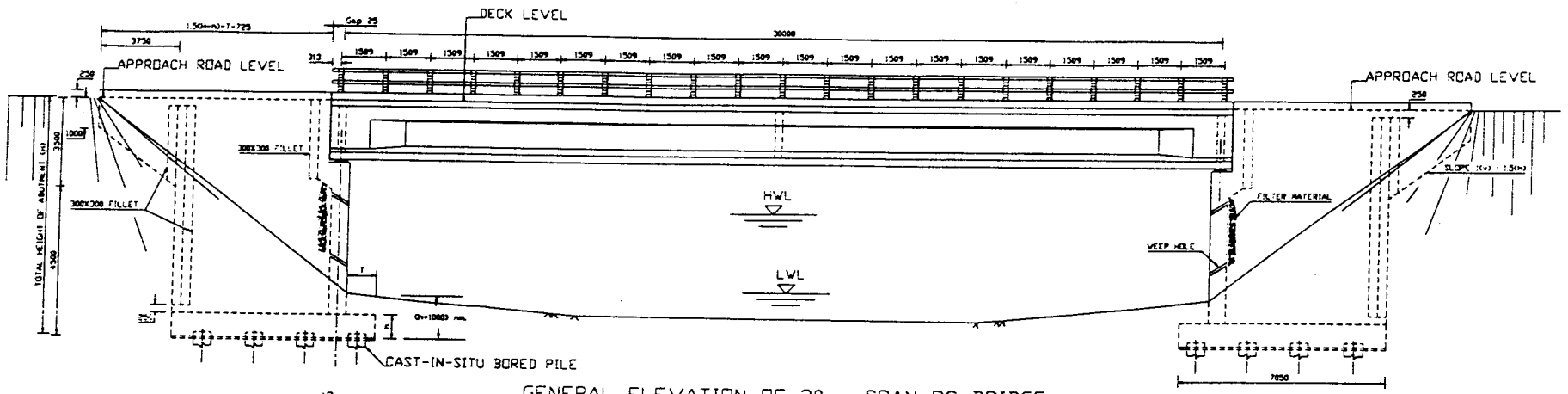


GENERAL PLAN

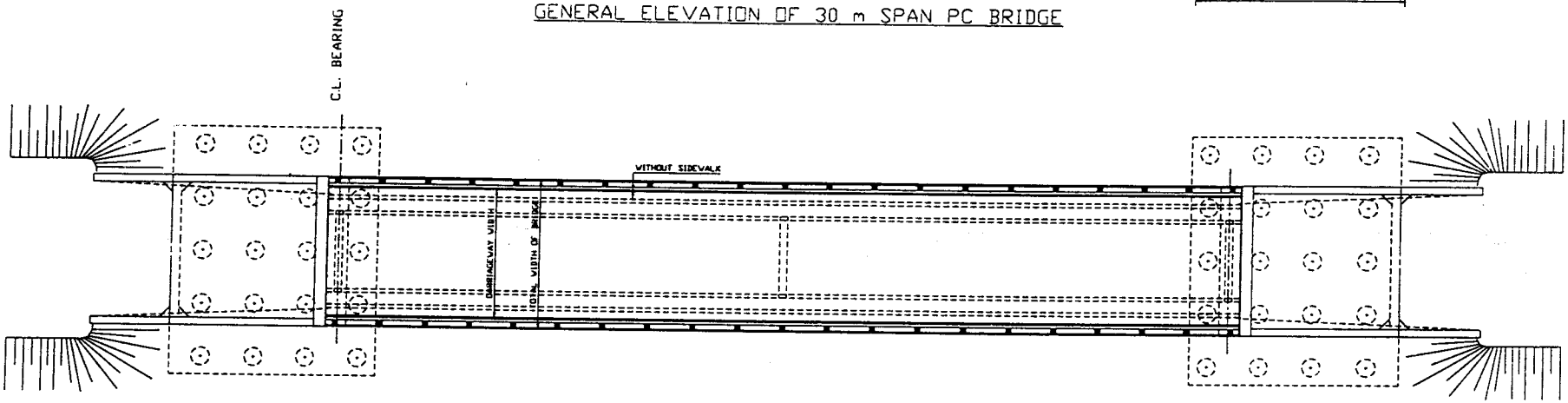
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 29.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. : GA-29-02 SCALE: 1 : 160 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 30 m SPAN PC BRIDGE

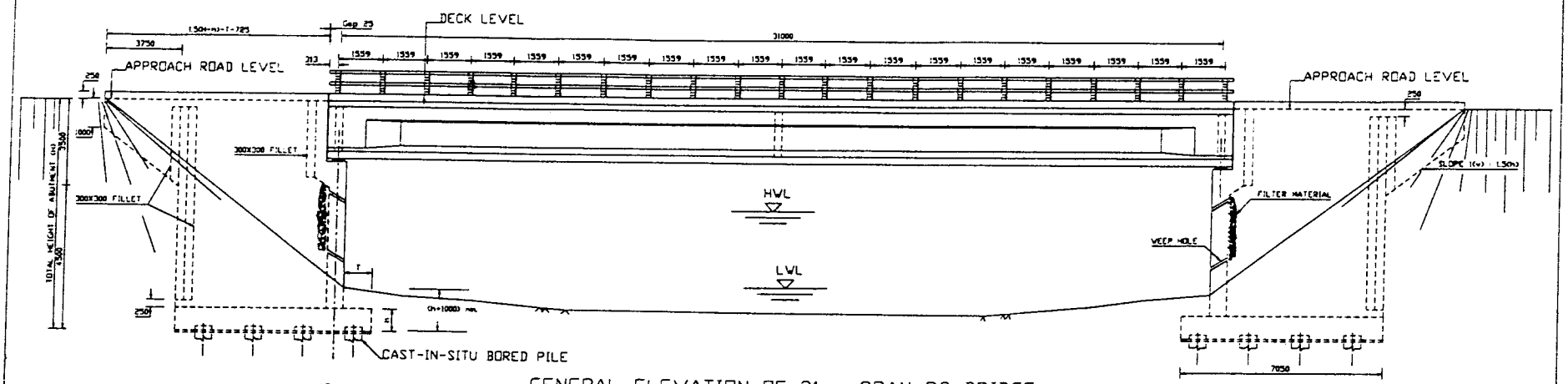


GENERAL PLAN

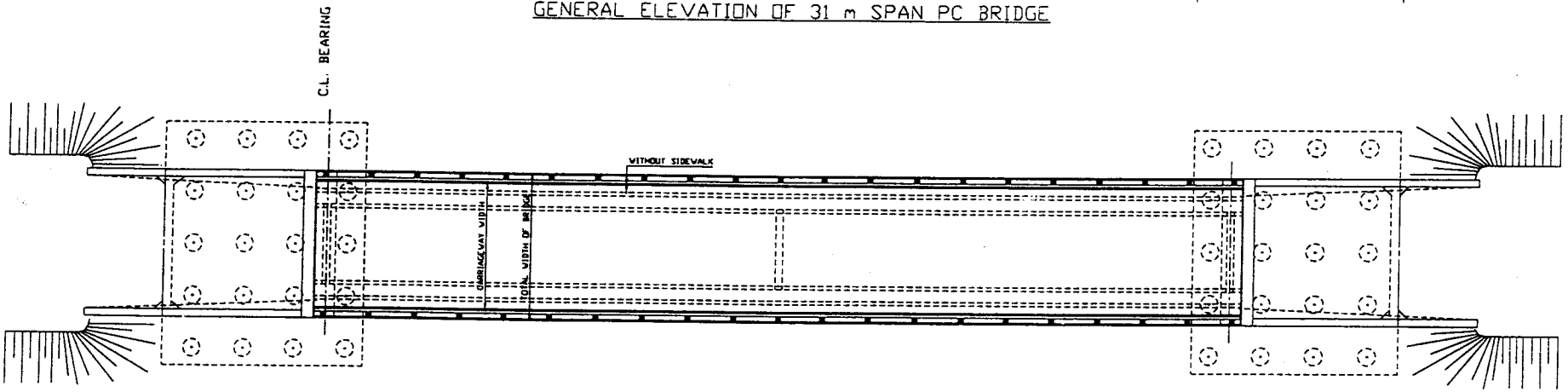
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITH SIDEWALK) SPAN LENGTH (C/C BRG.): 30.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO : GA-30-02 SCALE 1 : 160 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 31 m SPAN PC BRIDGE

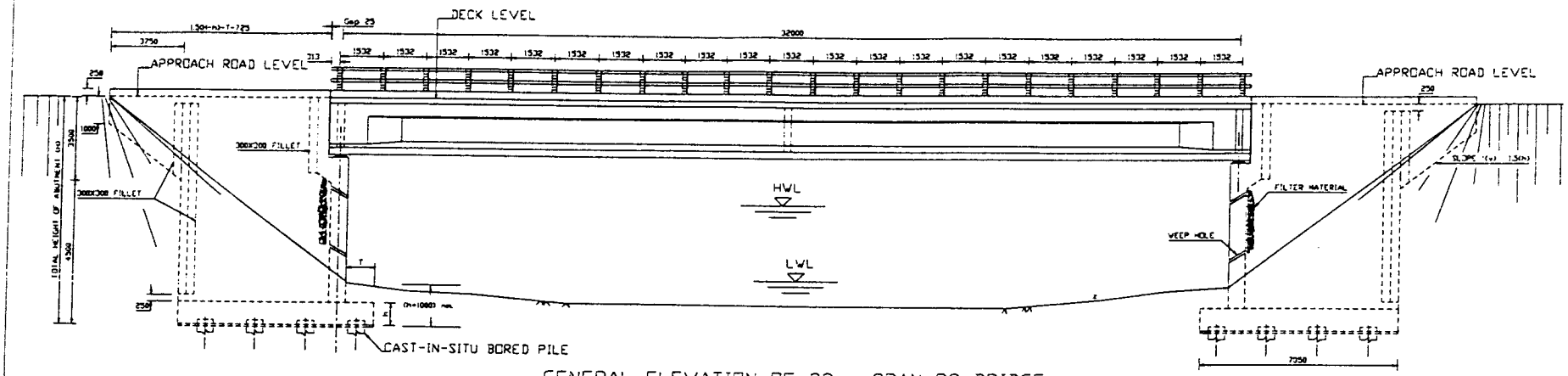


GENERAL PLAN

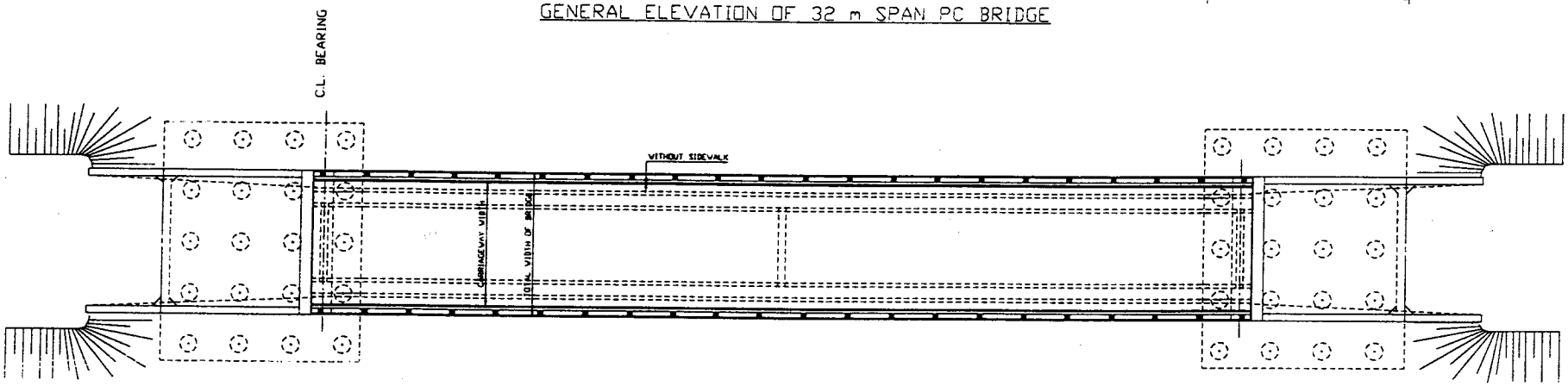
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 20.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO : GA-31-02 SCALE 1 : 160 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 32 m SPAN PC BRIDGE

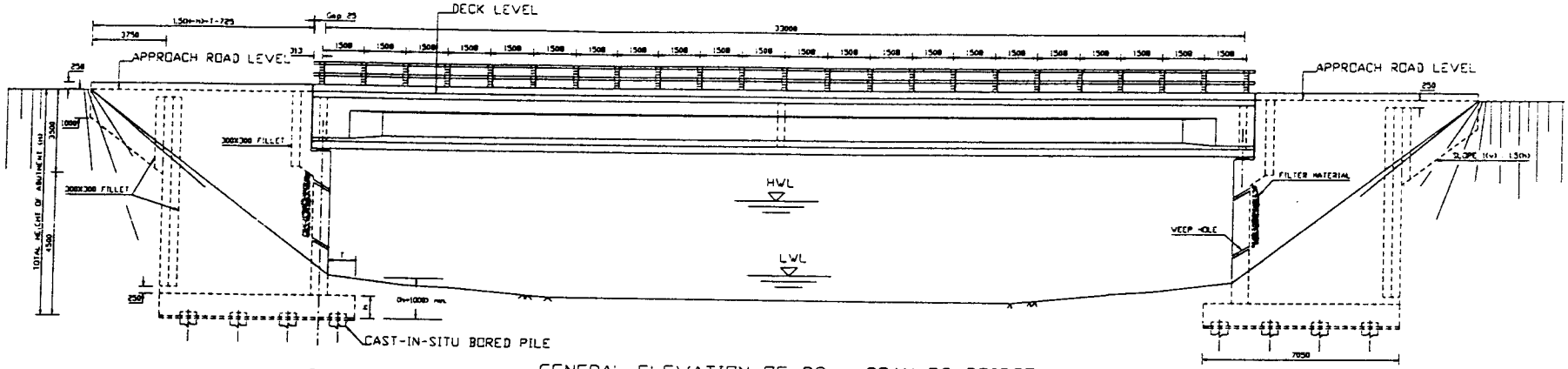


GENERAL PLAN

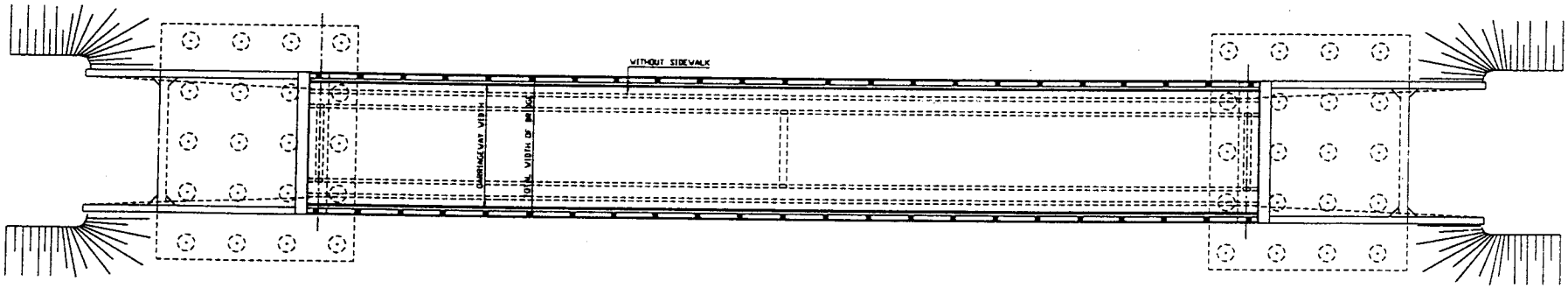
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 32.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO GA-32-02 SCALE 1 : 165 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 33 m SPAN PC BRIDGE

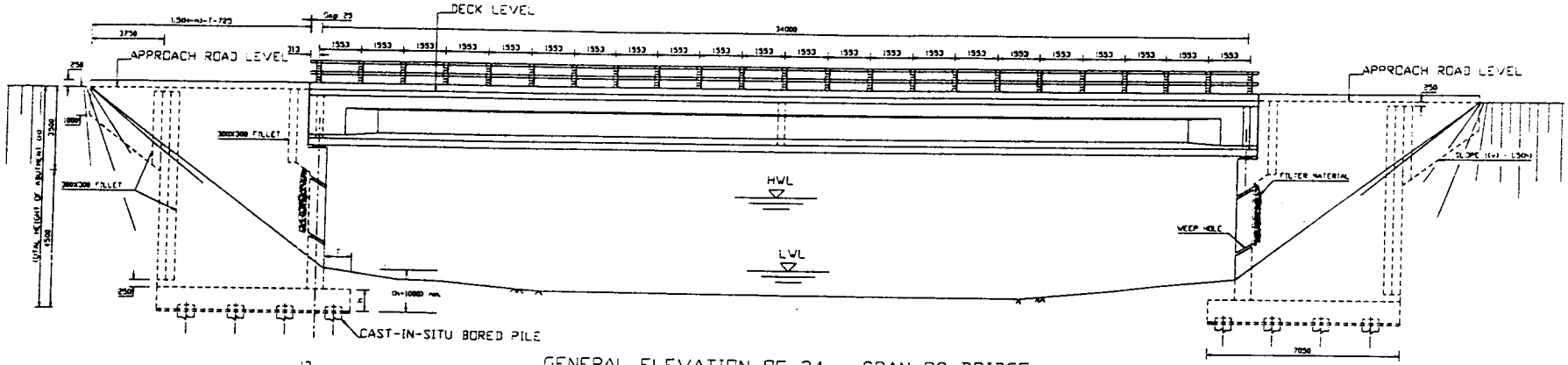


GENERAL PLAN

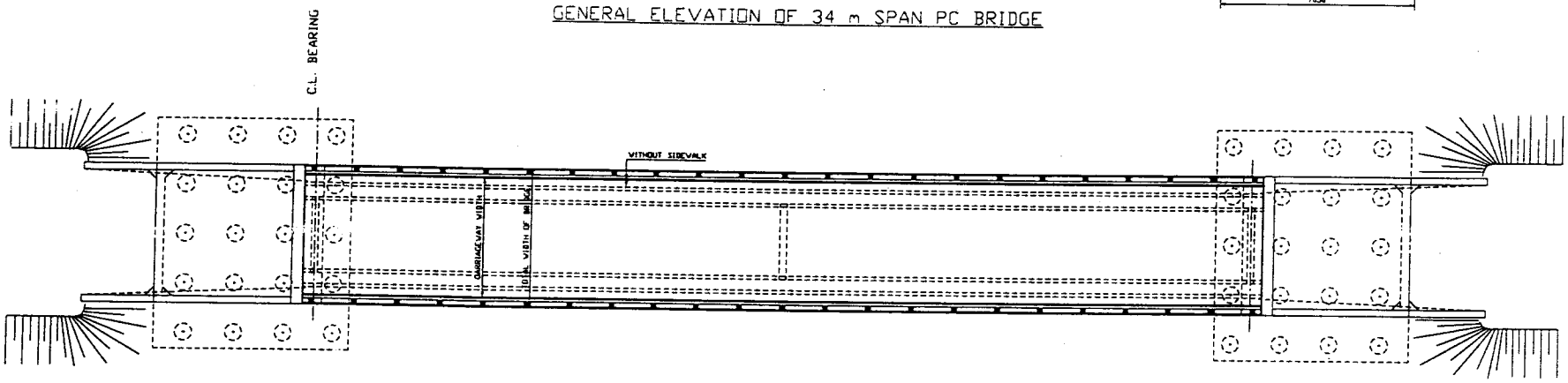
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 33.00 m GENERAL PLAN AND GENERAL ELEVATION DWG NO GA-33-02 SCALE 1 : 170 DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 34 m SPAN PC BRIDGE

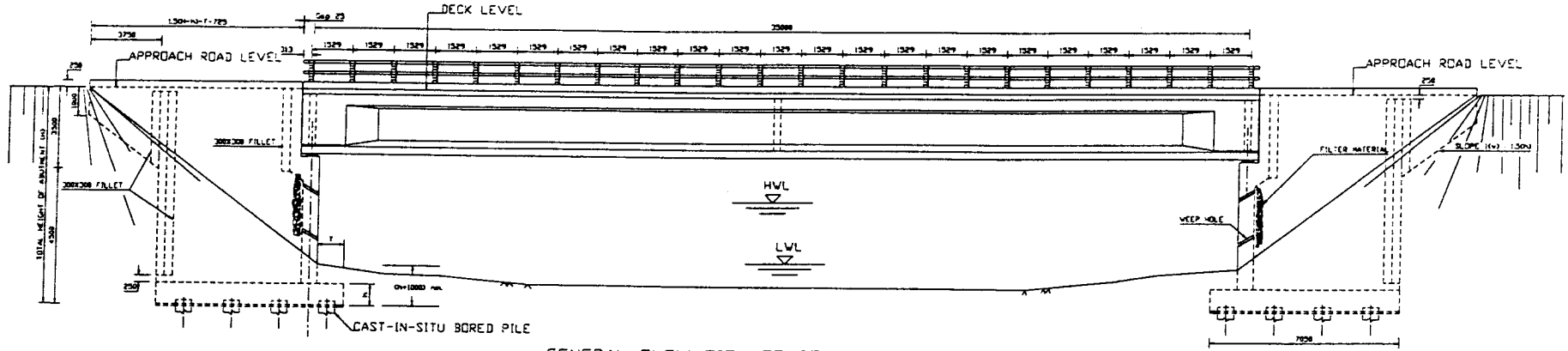


GENERAL PLAN

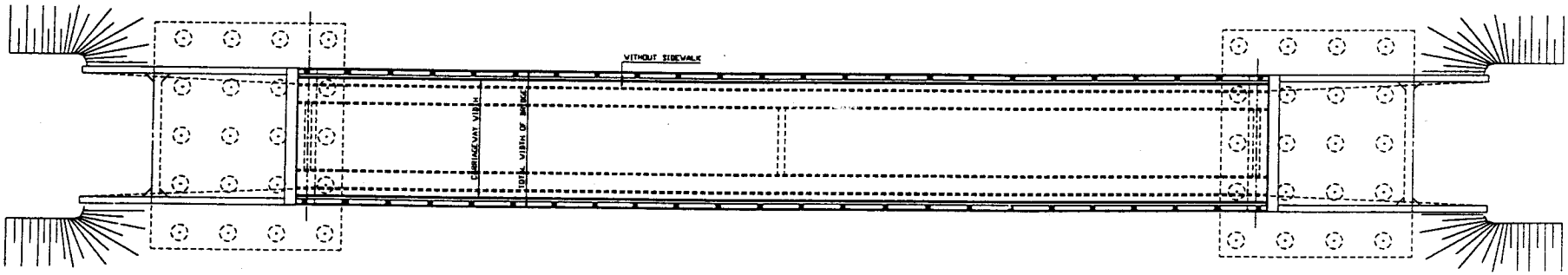
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 34.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO. GA-34-02 SCALE : 1/70 — DATE JUNE 1996

Web Copy



GENERAL ELEVATION OF 35 m SPAN PC BRIDGE

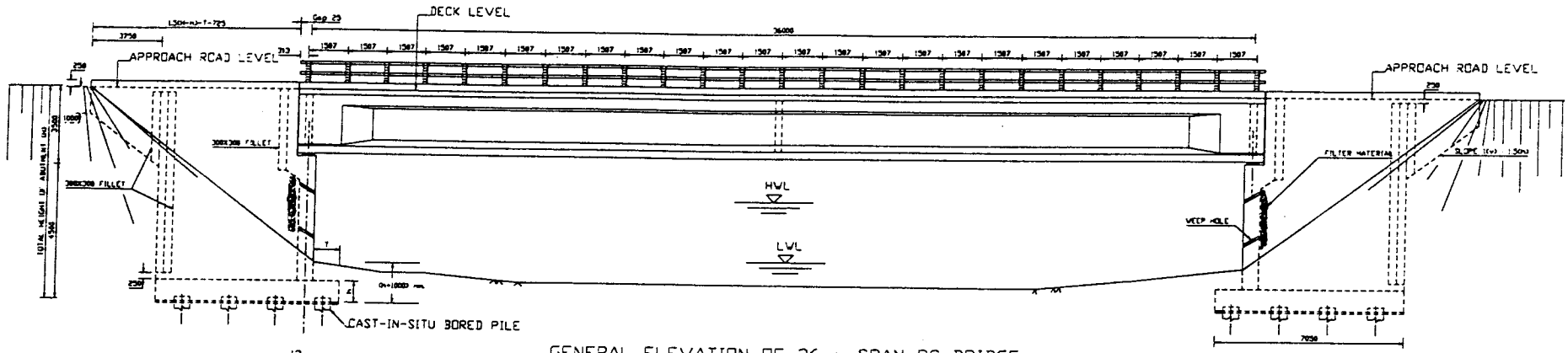


GENERAL PLAN

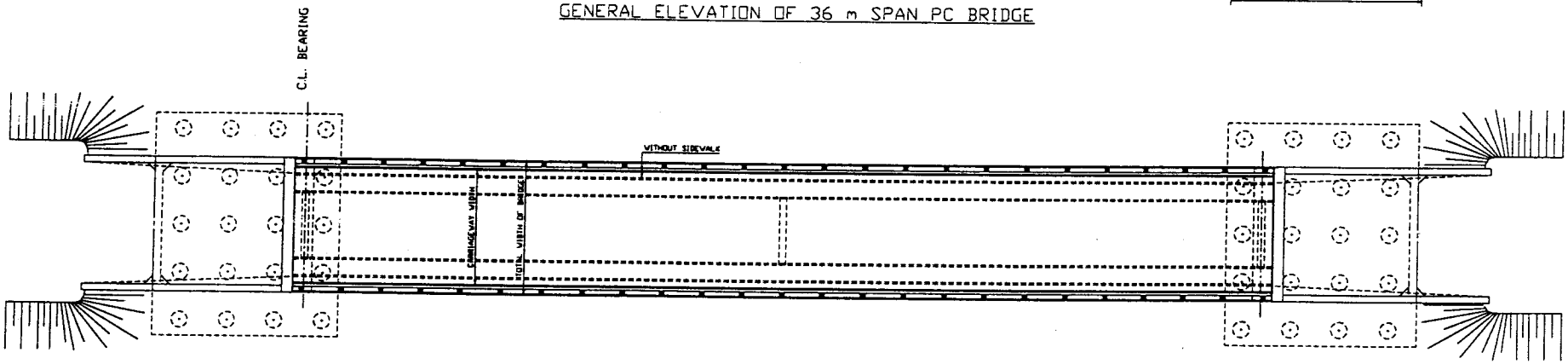
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 35.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG NO. GA-35-02 SCALE 1 : 175 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 36 m SPAN PC BRIDGE

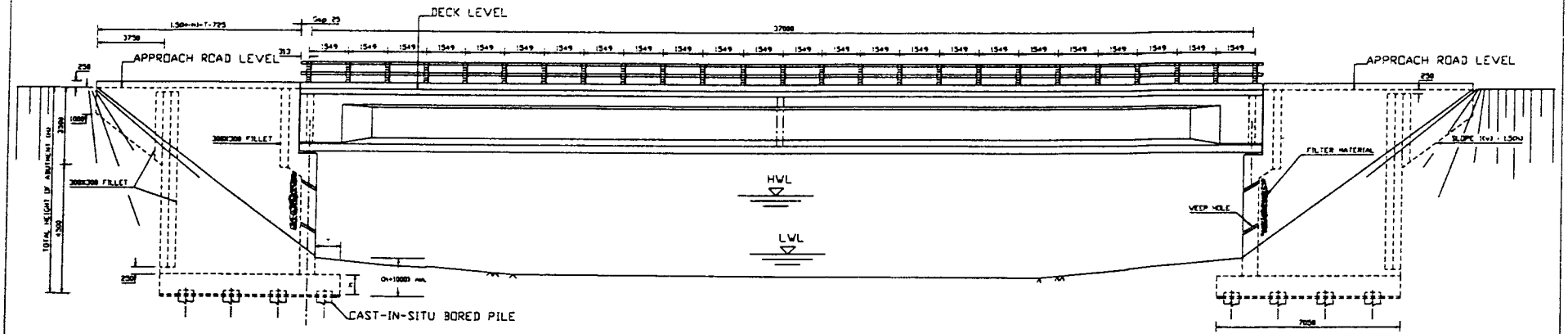


GENERAL PLAN

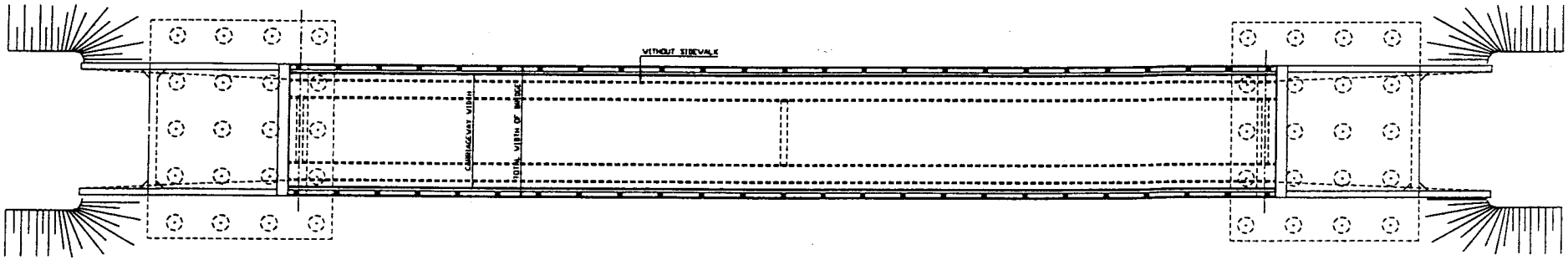
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 36.00 m GENERAL PLAN AND GENERAL ELEVATION | DWG. NO. : GA-36-02 SCALE : 1 : 175 | DATE : JUNE 1996

Web Copy



ENERAL ELEVATION OF 37 m SPAN PC BRIDGE

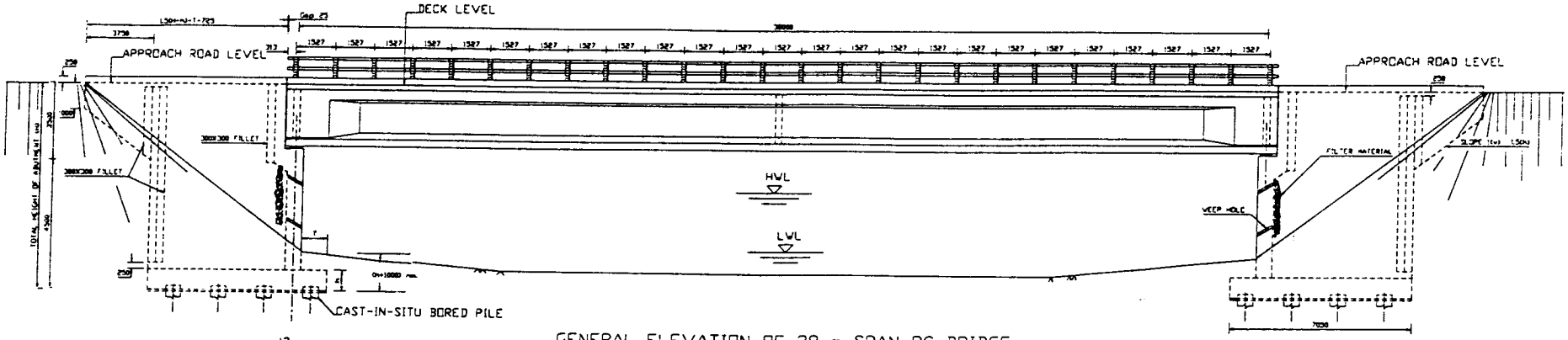


GENERAL PLAN

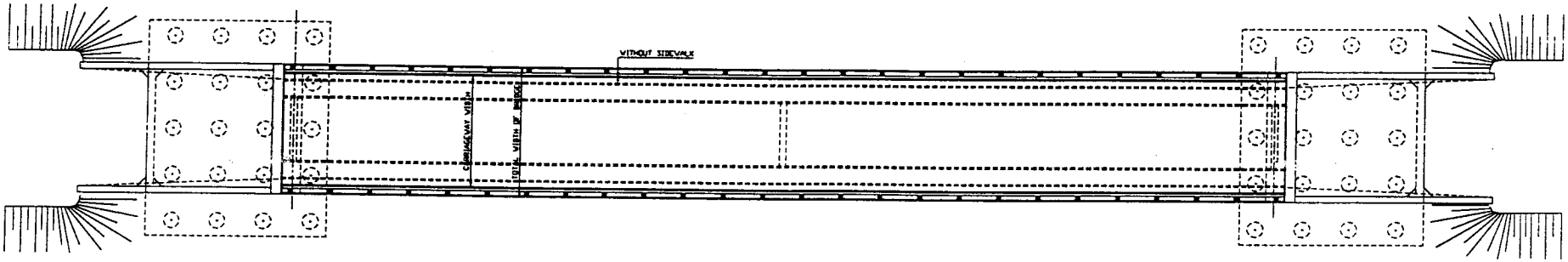
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 37.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-37-02 SCALE : 1/75 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 38 m SPAN PC BRIDGE

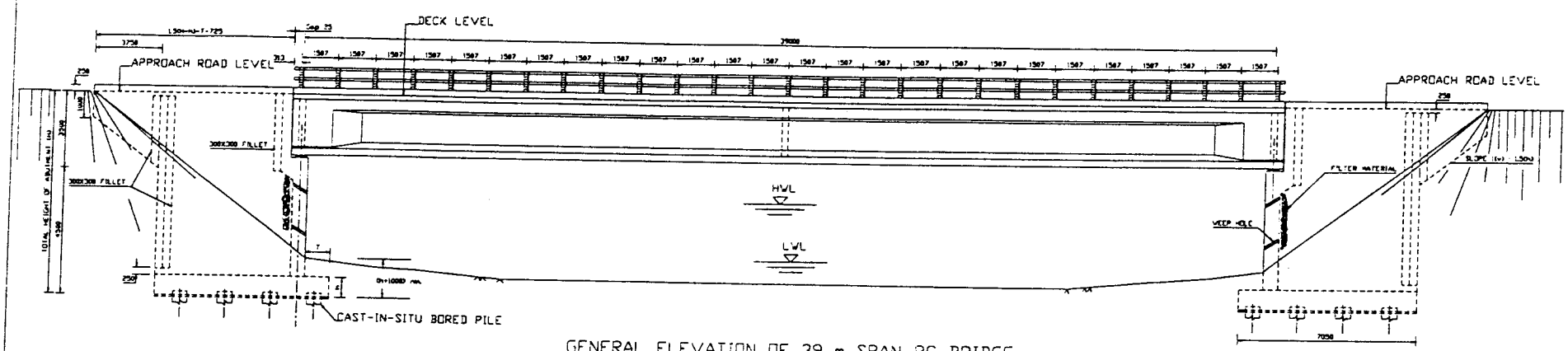


GENERAL PLAN

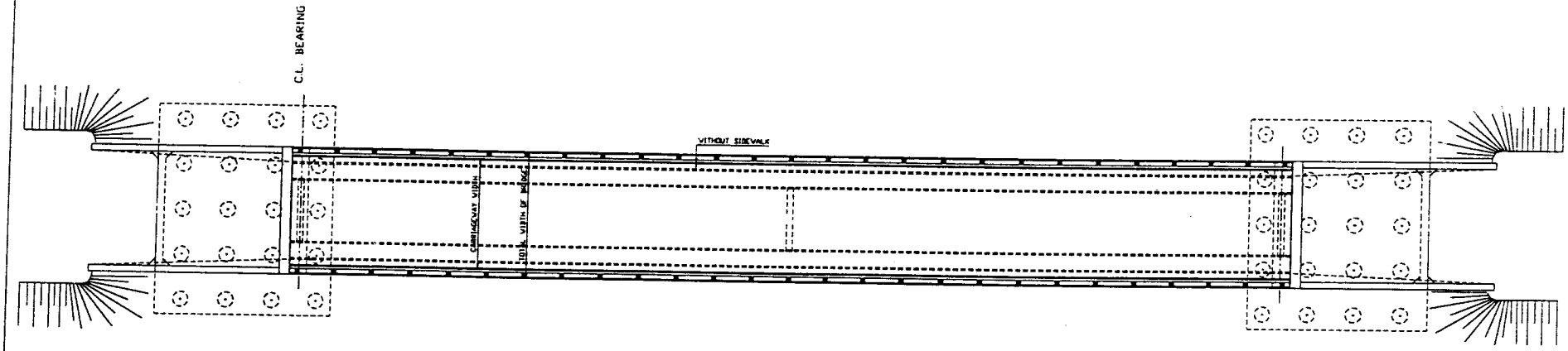
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 38.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO. GA-38-02 SCALE: 1 : 180 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 39 m SPAN PC BRIDGE

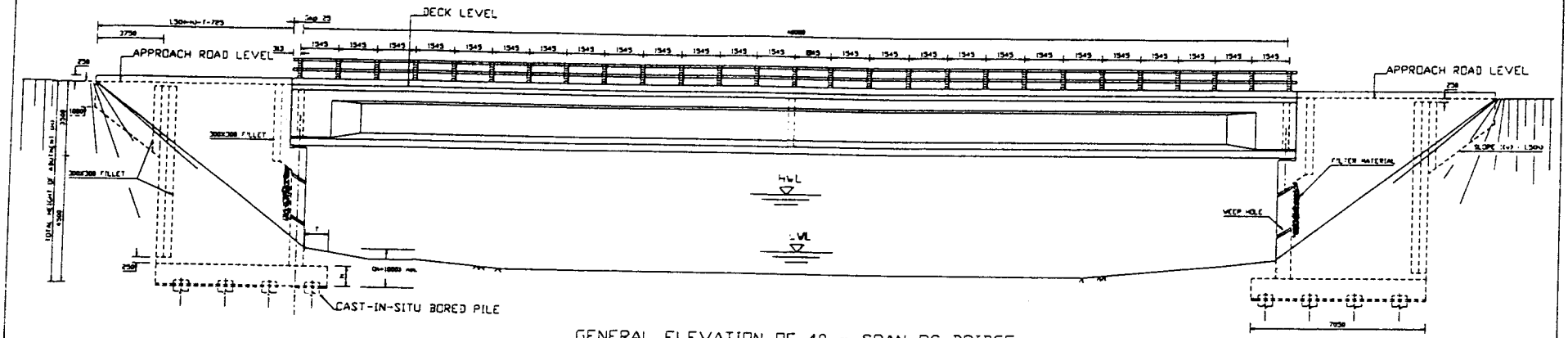


GENERAL PLAN

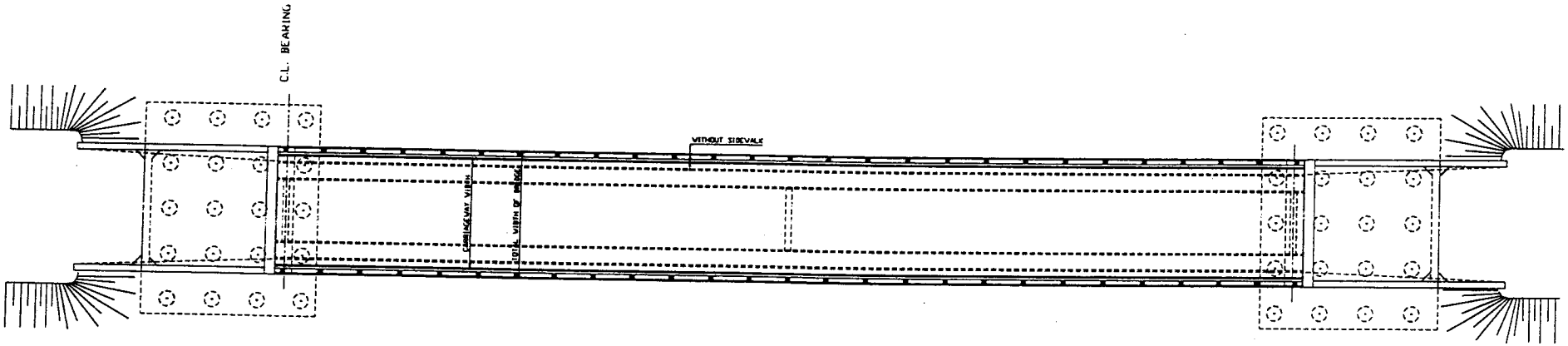
NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA :	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 39.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO : GA-39-02 SCALE 1 : 100 — DATE : JUNE 1996

Web Copy



GENERAL ELEVATION OF 40 m SPAN PC BRIDGE

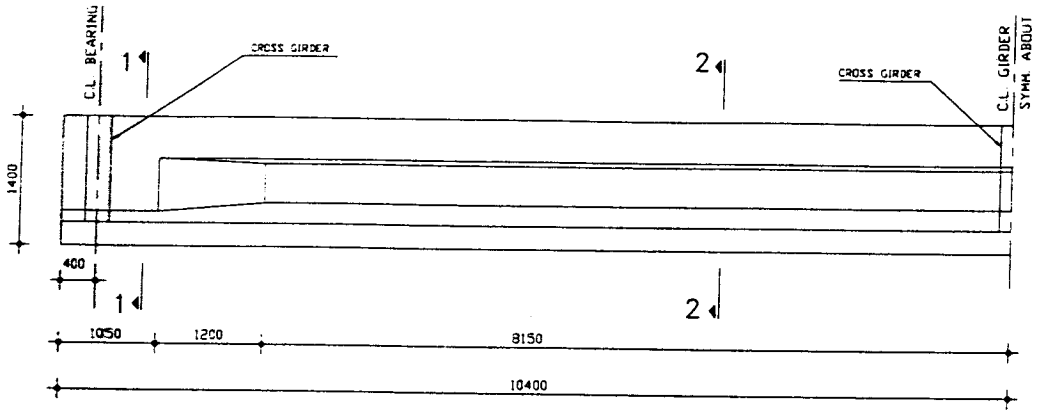


GENERAL PLAN

NOTES:
1. CARRIAGEWAY WIDTH: TYPE-IB = 3660; TYPE-IIB = 4330.
2. TOTAL WIDTH OF BRIDGE (WITHOUT SIDEWALK): TYPE-IB = 4410; TYPE-IIB = 5080.
3. PILE FOUNDATION AND SUBSTRUCTURE DETAILS SHOWN IN THIS DRAWING ARE TYPICAL ONLY.
4. ALL DIMENSIONS SHOWN ARE IN mm.

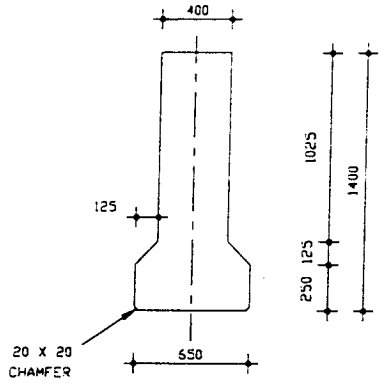
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	GENERAL ARRANGEMENT DRAWING (TYPE-IB AND TYPE-IIB WITHOUT SIDEWALK) SPAN LENGTH (C/C BRG.): 40.00 m GENERAL PLAN AND GENERAL ELEVATION — DWG. NO GA-40-02 SCALE: 1 : 180 — DATE JUNE 1996

Web Copy



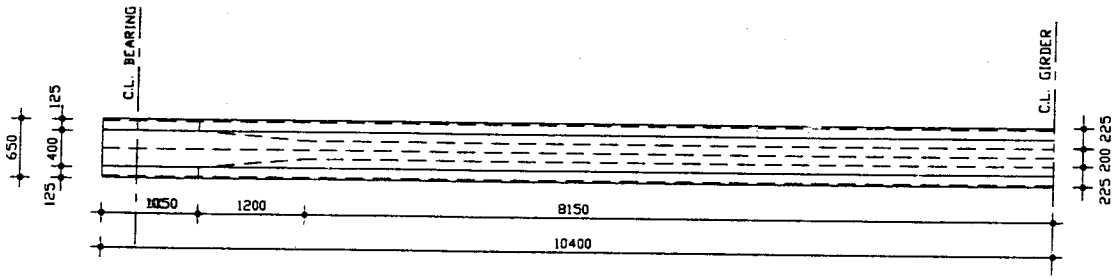
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



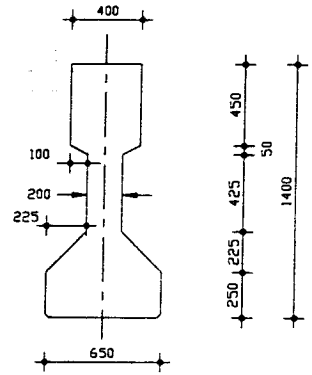
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



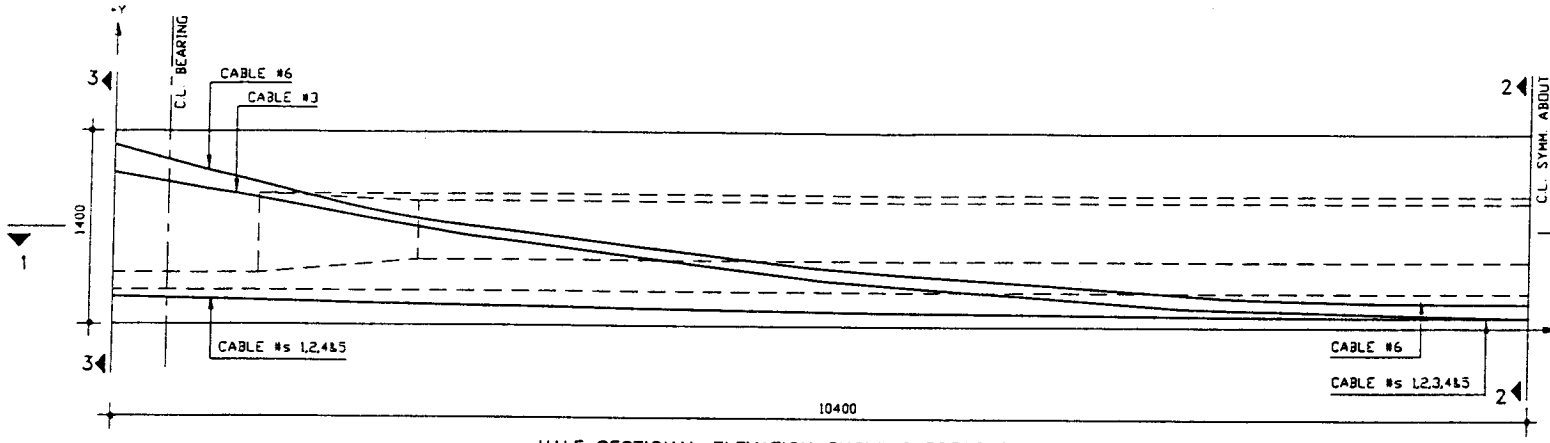
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 28.80 METRIC TON
2. CONCRETE VOLUME = 11.52 CUBIC METER

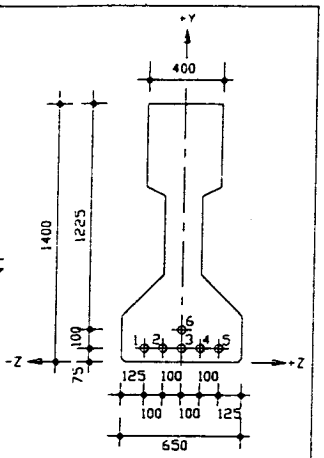
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 20.80 m CONCRETE OUTLINE DETAILS — DWG NO. PC-20-01 SCALE AS SHOWN — DATE JUNE 1996

Web Copy



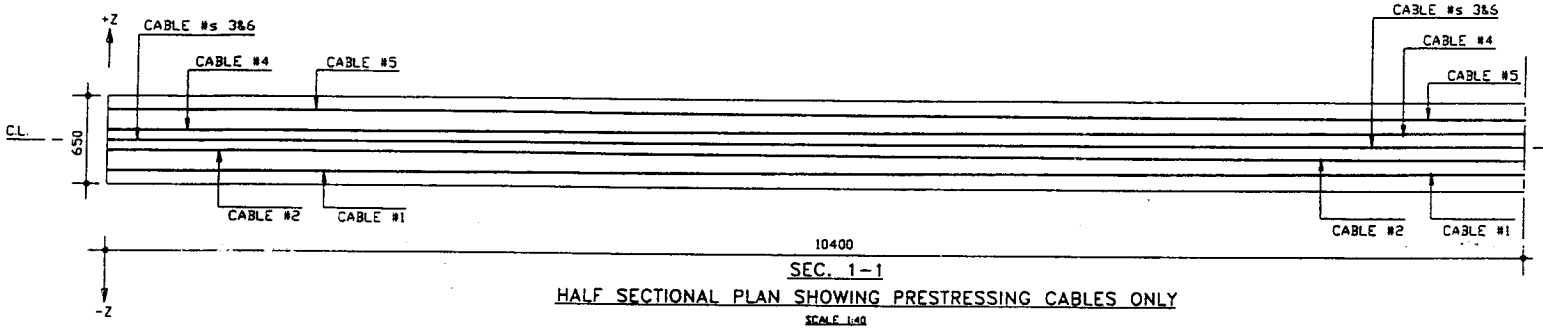
HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

SCALE 1:40



SEC. 2-2
(MID-SEC.)

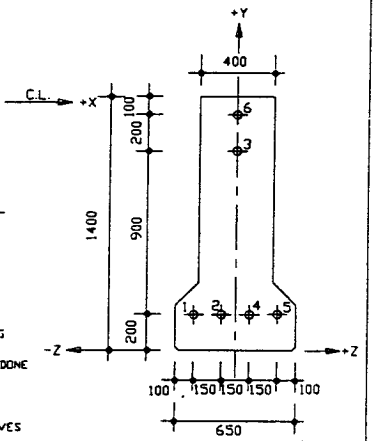
SCALE 1:20



SEC. 1-1

HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

SCALE 1:40



SEC. 3-3
(END BLOCK)

SCALE 1:20

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END
		X=0		X=L/8=2600		X=L/4=5200		X=3L/8=7800		X=L/2=10400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
6	12Ø7	12.68°	1300	0	808	0	456	0	245	0	175	0	117.42
3	12Ø7	11.585°	1100	0	652	0	331	0	139	0	75	0	119.05
5	12Ø7	1.432°	200	225	145	218	106	212	83	206	75	200	124.47
4	12Ø7	1.432°	200	75	145	81	106	87	83	93	75	100	124.47
2	12Ø7	1.432°	200	-75	145	-81	106	-87	83	-93	75	-100	124.47
1	12Ø7	1.432°	200	-225	145	-218	106	212	83	-206	75	-200	124.47

NOTES:

A. **STAGES AND SEQUENCE OF PRESTRESSING**

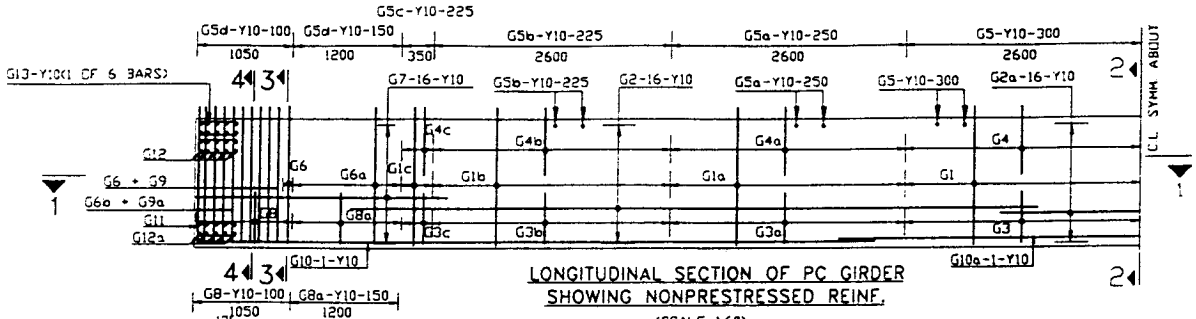
01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.
02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,&5 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.
03. IN STAGE-2 STRESSING OF CABLE NOS. 6 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 38 N/mm2 WHICHEVER IS LATER.
04. **SEQUENCE OF STRESSING:**
STAGE-1: CABLE NOS. 3,2,4,1&5
STAGE-2: CABLE NOS. 6

B. **PRECAMBER**
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 5 mm AT MID-SPAN.

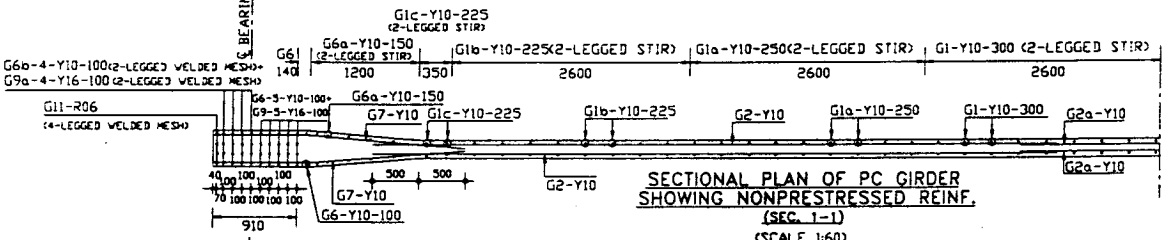
C. **ANCHORAGE DETAILS**
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 20.80 m PRESTRESSING CABLE DETAILS SCALE AS SHOWN DWG. NO. PC-20-02 DATE JUNE 1996

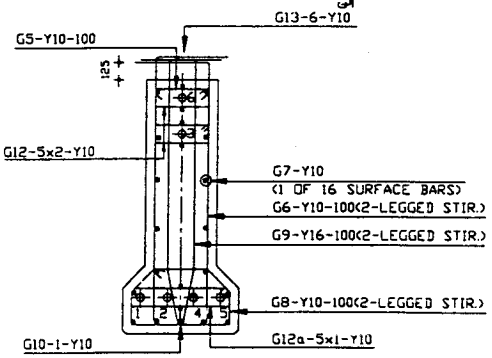
Web Copy



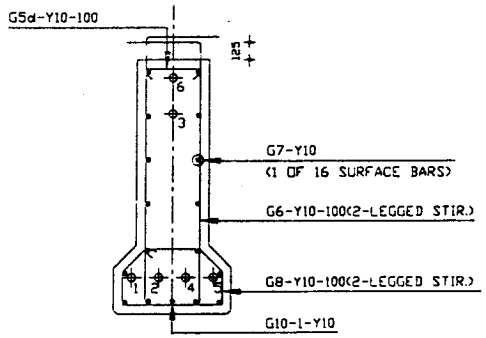
LONGITUDINAL SECTION OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



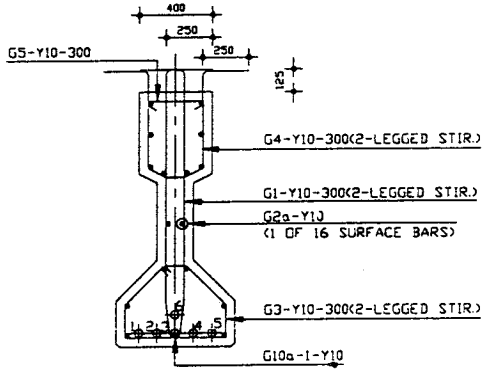
SECTIONAL PLAN OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE: 1:30)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 20.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO PC-20-03 SCALE AS SHOWN — DATE : JUNE 1996

Web Copy

BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1050	120	130	435		20		10	3418		18	61.524	0.616	37.899
	G1a	Y10	250	03	1050	120	130	435		20		10	3418		20	68.360	0.616	42.110
	G1b	Y10	225	03	1050	120	130	435		20		10	3418		24	82.032	0.616	50.532
	G1c	Y10	225	03	1050	120	130	435		20		10	3418		4	13.672	0.616	8.422
	G2	Y10		01	6033							10	6033		32	193.056	0.616	118.922
	G2a	Y10		01	6033							10	6033		16	96.528	0.616	59.461
	G3	Y10	300	04	210	570	120	225		20		10	1796		18	32.328	0.616	19.914
	G3a	Y10	250	04	210	570	120	225		20		10	1796		20	35.920	0.616	22.127
	G3b	Y10	225	04	210	570	120	225		20		10	1796		24	43.104	0.616	26.552
	G3c	Y10	225	04	210	570	120	225		20		10	1796		4	7.184	0.616	4.425
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		18	34.632	0.616	21.333
	G4a	Y10	250	05	575	120	250	100	50	20		10	1924		20	38.480	0.616	23.704
	G4b	Y10	225	05	575	120	250	100	50	20		10	1924		24	46.176	0.616	28.444
	G4c	Y10	225	05	575	120	250	100	50	20		10	1924		4	7.696	0.616	4.741
	G5	Y10	300	06	320						100	10	520		18	9.360	0.616	5.766
	G5a	Y10	250	06	320						100	10	520		20	10.400	0.616	6.406
	G5b	Y10	225	06	320						100	10	520		24	12.480	0.616	7.688
	G5c	Y10	225	06	320						100	10	520		4	2.080	0.616	1.281
	G5d	Y10	100	06	320						100	10	520		36	18.720	0.616	11.532
	G6a	Y10	150	02	1485	120 ~ 320 AVG. 220	130			20		10		3590	16	57.440	0.616	35.383
	G6+G6b	Y10	100	02	1485	320	130			20		10	3790		20	75.800	0.616	46.693
	G7	Y10		07	1010	1706						10	2716		32	86.912	0.616	53.538
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		20	34.280	0.616	21.116
	G9+G9a	Y16	100	03	1150	150	130	335		32		16	3451		18	62.118	1.579	98.084
	G10	Y10		01	7173							10	7173		2	14.346	0.616	8.837
	G10a	Y10		01	7173							10	7173		1	7.173	0.616	4.419
	G11	R06		01	1485							6	1485		8	11.880	0.222	2.637
	G12	Y10		09	320	100						10	960		20	19.200	0.616	11.827
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		6	2.220	0.616	1.368
	G14	R06		08	150	40	320					6	3619		12	43.428	0.222	9.641

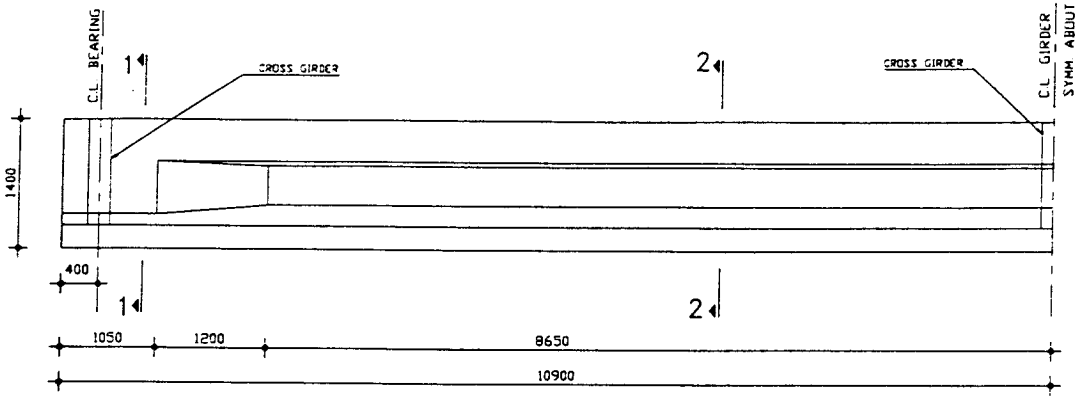
TOTAL WEIGHT: 821.093 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

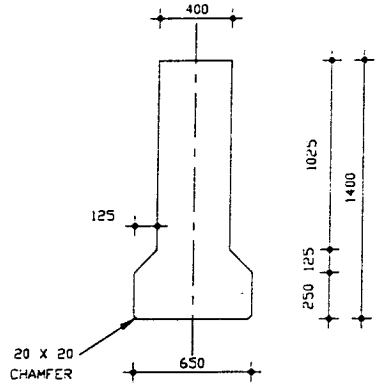
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 20.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-20-04
			DATE: JUNE 1996

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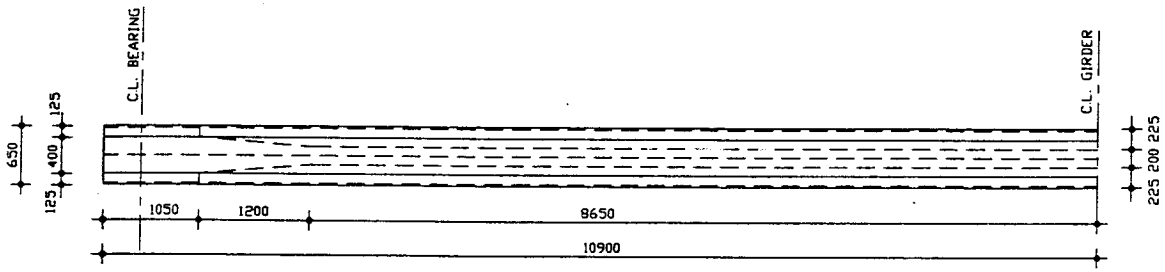
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



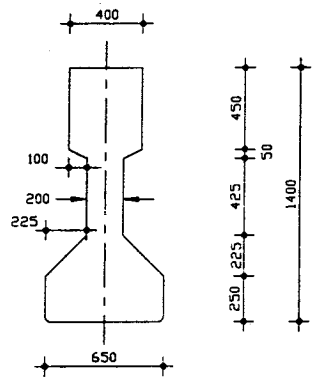
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



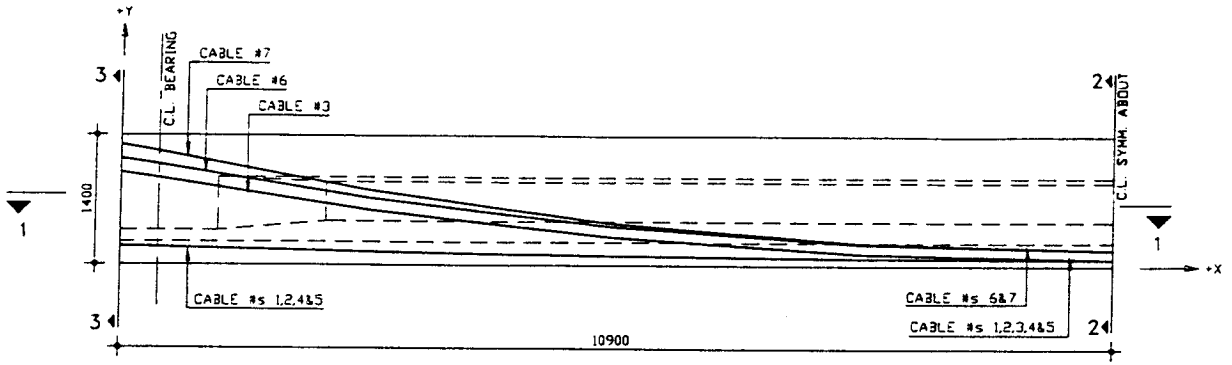
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 30.14 METRIC TON
2. CONCRETE VOLUME = 12.06 CUBIC METER

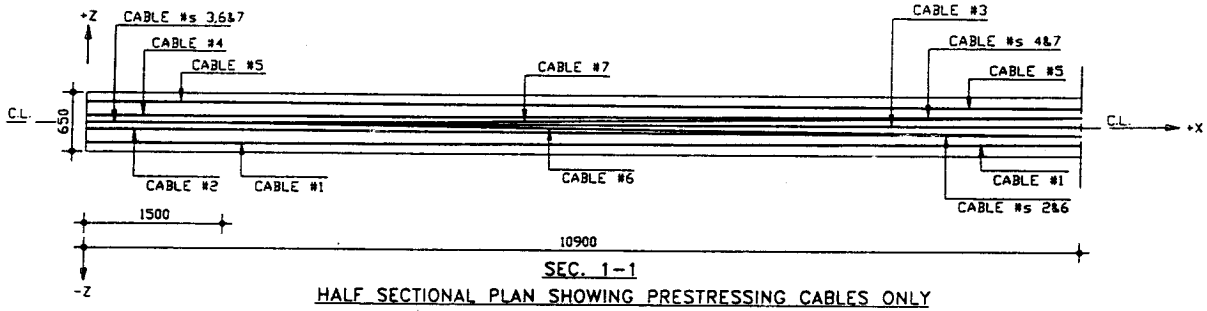
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 21.80 m CONCRETE OUTLINE DETAILS — DWG NO. : PC-21-01 SCALE AS SHOWN — DATE JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

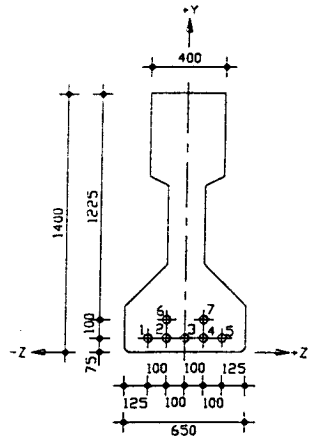
SCALE 1:40



SEC. 1-1

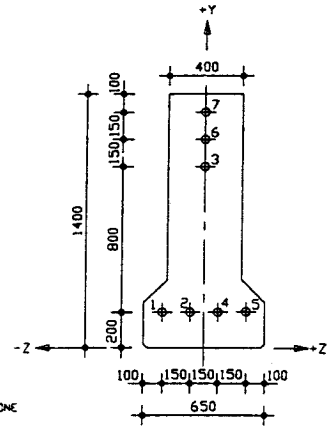
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

SCALE 1:40



SEC. 2-2
(MID-SEC.)

SCALE 1:30



SEC. 3-3
(END BLOCK)

SCALE 1:30

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END (mm)
		X=0		X=L/8=2725		X=L/4=5450		X=3L/8=8175		X=L/2=10900		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z
7	12Ø7	12.09°	1300	0	808	10	456	46	245	89	175	100	123.807
6	12Ø7	10.52°	1150	0	723	-10	419	-46	236	-89	175	-100	124.585
3	12Ø7	9.99°	1000	0	595	0	306	0	133	0	75	0	124.914
5	12Ø7	1.364°	200	225	145	218	106	212	83	206	75	-200	129.78
4	12Ø7	1.364°	200	75	145	81	106	87	83	93	75	100	129.78
2	12Ø7	1.364°	200	-75	145	-81	106	-87	83	-93	75	-100	129.78
1	12Ø7	1.364°	200	-225	145	-218	106	-212	83	-206	75	-200	129.78

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4&5 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6&7 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1&5
STAGE-2: CABLE NOS. 6&7

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 5 mm AT MID-SPAN

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 21.80 m

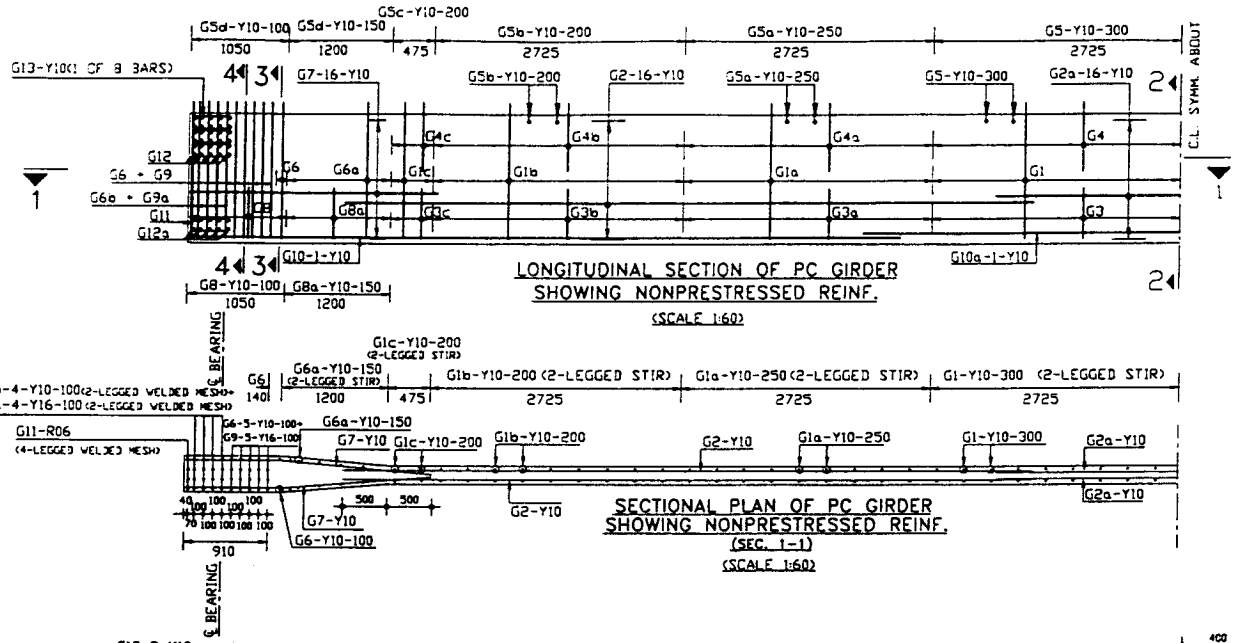
PRESTRESSING CABLE DETAILS

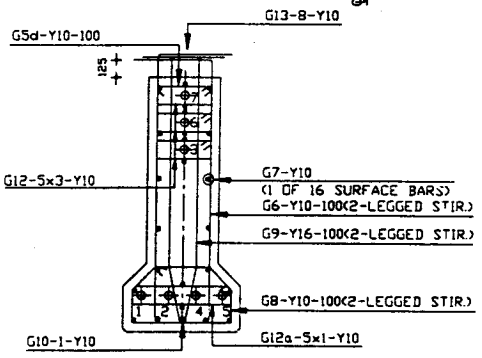
DWG. NO. PC-21-02

SCALE AS SHOWN

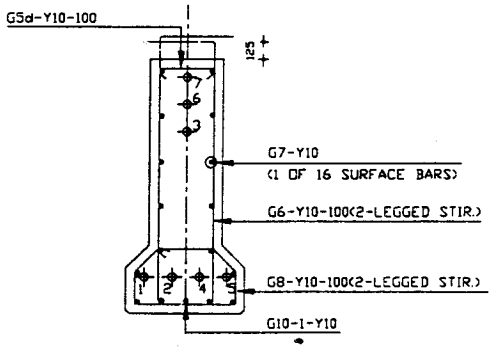
DATE JUNE 1996

Web Copy

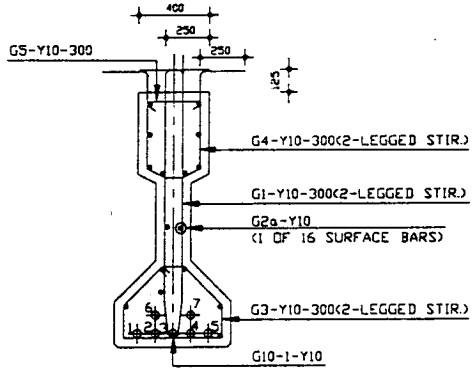




SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 21.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO. : PC-21-03 SCALE AS SHOWN — DATE JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1050	120	130	435		20		10	3418		19	64.942	0.616	40.004
	G1a	Y10	250	03	1050	120	130	435		20		10	3418		22	75.196	0.616	46.321
	G1b	Y10	200	03	1050	120	130	435		20		10	3418		28	95.704	0.616	58.954
	G1c	Y10	200	03	1050	120	130	435		20		10	3418		4	13.672	0.616	8.422
	G2	Y10		01	6367							10	6367		32	203.744	0.616	125.506
	G2a	Y10		01	6367							10	6367		16	101.872	0.616	62.753
	G3	Y10	300	04	210	570	120	225		20		10	1796		19	34.124	0.616	21.020
	G3a	Y10	250	04	210	570	120	225		20		10	1796		22	39.512	0.616	24.339
	G3b	Y10	200	04	210	570	120	225		20		10	1796		28	50.288	0.616	30.977
	G3c	Y10	200	04	210	570	120	225		20		10	1796		4	7.184	0.616	4.425
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		19	36.556	0.616	22.518
	G4a	Y10	250	05	575	120	250	100	50	20		10	1924		22	42.328	0.616	26.074
	G4b	Y10	200	05	575	120	250	100	50	20		10	1924		28	53.872	0.616	33.185
	G4c	Y10	200	05	575	120	250	100	50	20		10	1924		4	7.696	0.616	4.741
	G5	Y10	300	06	320						100	10	520		19	9.880	0.616	6.086
	G5a	Y10	250	06	320						100	10	520		22	11.440	0.616	7.047
	G5b	Y10	200	06	320						100	10	520		28	14.560	0.616	8.969
	G5c	Y10	200	06	320						100	10	520		4	2.080	0.616	1.281
	G5d	Y10	100	06	320						100	10	520		36	18.720	0.616	11.532
	G6a	Y10	150	02	1485	120 ~ 320 AVG. 220	130			20		10		3590	16	57.440	0.616	35.383
	G6+G6b	Y10	100	02	1485	320	130			20		10	3790		20	75.800	0.616	46.693
	G7	Y10		07	1010	1706						10	2716		32	86.912	0.616	53.538
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		20	34.280	0.616	21.116
	G9+G9a	Y16	100	03	1150	150	130	335		32		16	3451		18	62.118	1.579	98.084
	G10	Y10		01	7507							10	7507		2	15.014	0.616	9.249
	G10a	Y10		01	7507							10	7507		1	7.507	0.616	4.624
	G11	R06		01	1485							6	1485		8	11.880	0.222	2.637
	G12	Y10		09	320	100						10	960		30	28.800	0.616	17.741
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		8	2.960	0.616	1.823
	G14	R06		08	150	40	320					6	3619		14	50.666	0.222	11.248

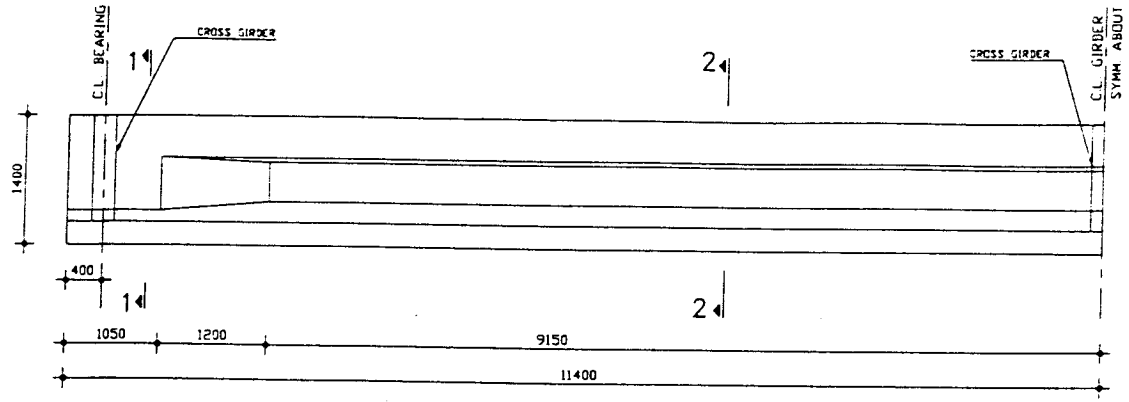
TOTAL WEIGHT: 872.584 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

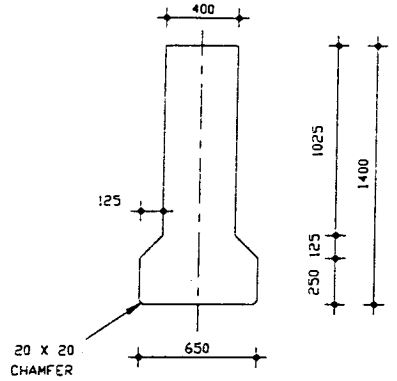
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 21.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-21-04 DATE: JUNE 1996

Web Copy



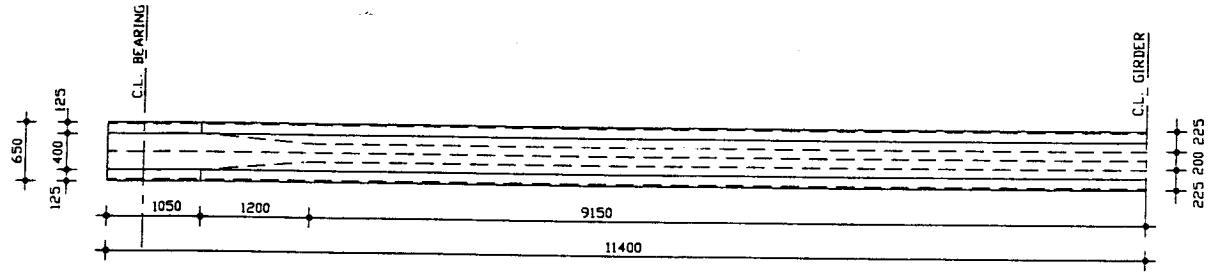
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



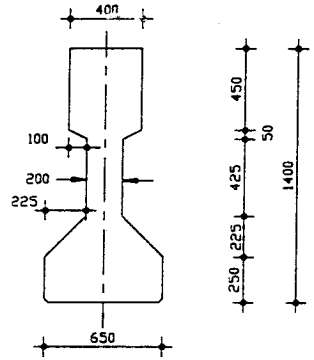
SEC. 1–1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



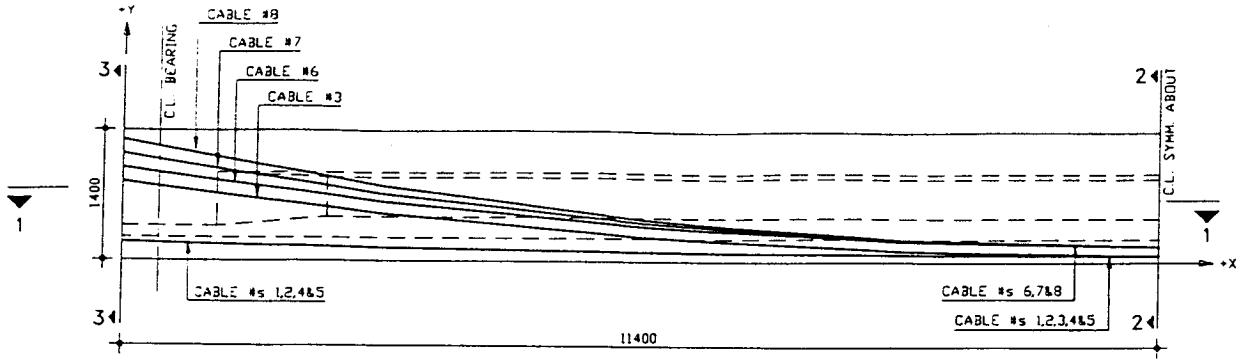
SEC. 2–2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 31.49 METRIC TON
2. CONCRETE VOLUME = 12.60 CUBIC METER

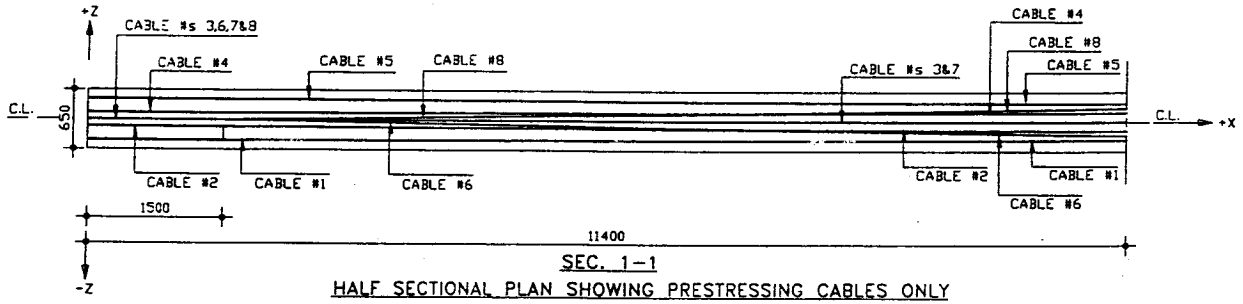
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 22.80 m CONCRETE OUTLINE DETAILS — DWG NO PC-22-01 SCALE AS SHOWN — DATE JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

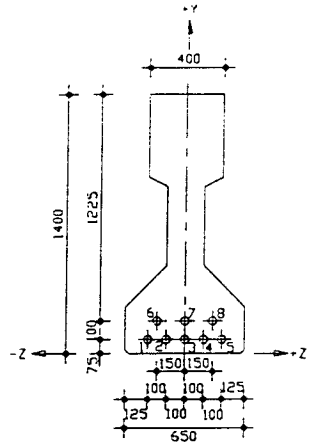
SCALE 1:40



SEC. 1–1

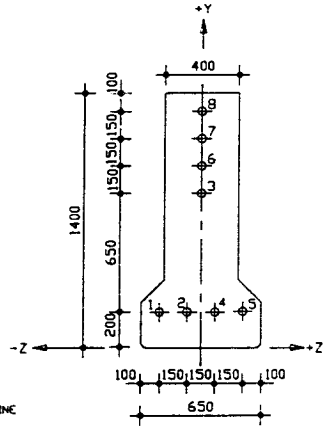
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

SCALE 1:40



SEC. 2–2
(MID–SEC.)

SCALE 1:20



SEC. 3–3
(END BLOCK)

SCALE 1:20

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END
		X=0		X=L/8=2850		X=L/4=5700		X=3L/8=8550		X=L/2=11400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
8	12Ø7	11.56°	1300	0	808	16	456	70	245	133	175	150	130.05
7	12Ø7	10.05°	1150	0	723	0	419	0	236	0	175	0	130.84
6	12Ø7	8.53°	1000	0	639	−16	381	−70	226	−133	175	−150	131.66
3	12Ø7	8.02°	850	0	511	0	269	0	123	0	75	0	130.97
5	12Ø7	1.302°	200	225	145	218	106	212	83	206	75	200	134.98
4	12Ø7	1.302°	200	75	145	81	106	87	83	93	75	100	134.98
2	12Ø7	1.302°	200	−75	145	−81	106	−87	83	−93	75	−100	134.98
1	12Ø7	1.302°	200	−225	145	−218	106	−212	83	−206	75	−200	134.98

NOTES;

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4&5 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6,7&8 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

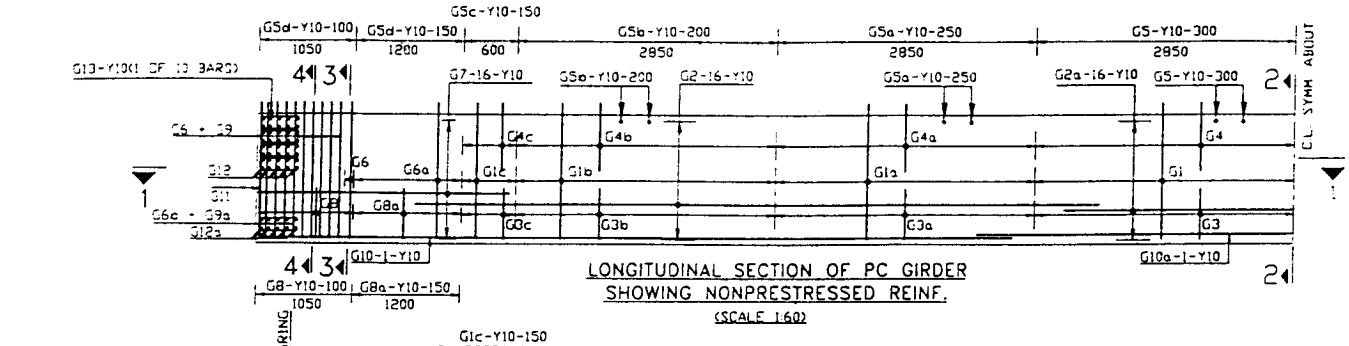
04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1&5
STAGE-2: CABLE NOS. 7,6,&8

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 5 mm AT MID-SPAN.

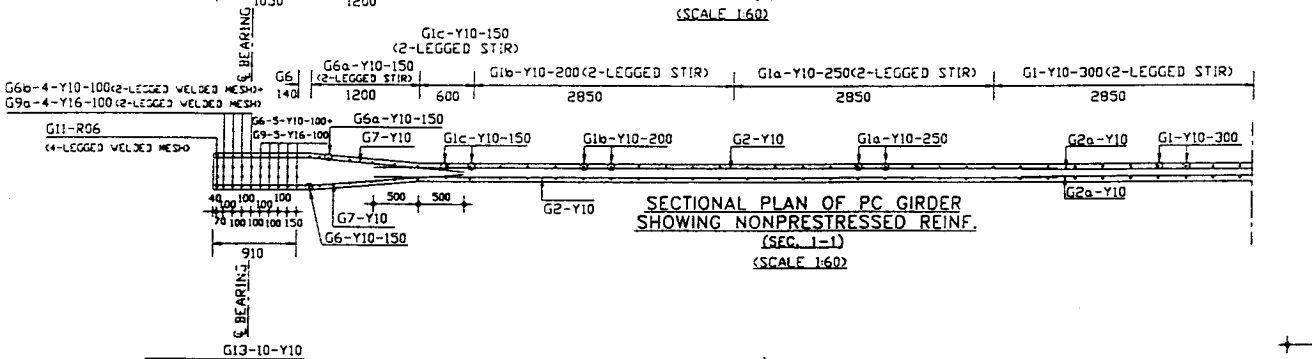
C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 22.80 m PRESTRESSING CABLE DETAILS SCALE AS SHOWN DWG. NO. PC-22-02 DATE JUNE 1996

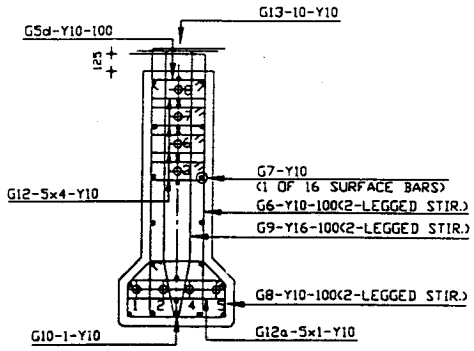
Web Copy



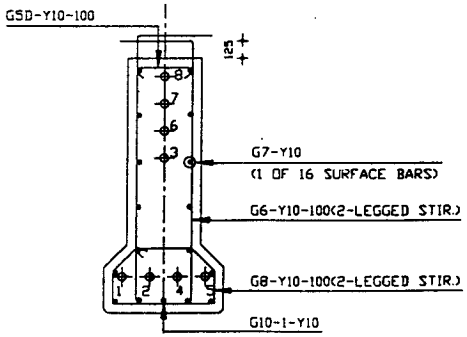
LONGITUDINAL SECTION OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



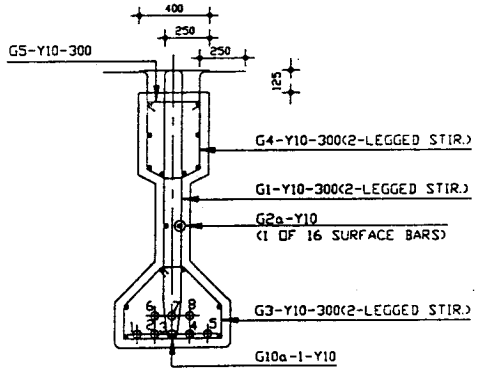
SECTIONAL PLAN OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE: 1:30)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 22.80 m NONPRESTRESSED REINF. DETAILS — DWG NO PC-22-03 SCALE AS SHOWN — DATE JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1050	120	130	435		20		10	3418		20	68.360	0.616	42.110
	G1a	Y10	250	03	1050	120	130	435		20		10	3418		22	75.196	0.616	46.321
	G1b	Y10	200	03	1050	120	130	435		20		10	3418		28	95.704	0.616	58.954
	G1c	Y10	150	03	1050	120	130	435		20		10	3418		8	27.344	0.616	16.844
	G2	Y10		01	6700							10	6700		32	214.400	0.616	132.070
	G2a	Y10		01	6700							10	6700		16	107.200	0.616	66.035
	G3	Y10	300	04	210	570	120	225		20		10	1796		20	35.920	0.616	22.127
	G3a	Y10	250	04	210	570	120	225		20		10	1796		22	39.512	0.616	24.339
	G3b	Y10	200	04	210	570	120	225		20		10	1796		28	50.288	0.616	30.977
	G3c	Y10	150	04	210	570	120	225		20		10	1796		8	14.368	0.616	8.851
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		20	38.480	0.616	23.704
	G4a	Y10	250	05	575	120	250	100	50	20		10	1924		22	42.328	0.616	26.074
	G4b	Y10	200	05	575	120	250	100	50	20		10	1924		28	53.872	0.616	33.185
	G4c	Y10	150	05	575	120	250	100	50	20		10	1924		8	15.392	0.616	9.481
	G5	Y10	300	06	320						100	10	520		20	10.400	0.616	6.406
	G5a	Y10	250	06	320						100	10	520		22	11.440	0.616	7.047
	G5b	Y10	200	06	320						100	10	520		28	14.560	0.616	8.969
	G5c	Y10	150	06	320						100	10	520		8	4.160	0.616	2.563
	G5d	Y10	100	06	320						100	10	520		36	18.720	0.616	11.532
	G6a	Y10	150	02	1435	120 ~ 320 AVG. 220	130			20		10		3590	16	57.440	0.616	35.383
	G6+G6b	Y10	100	02	1485	320	130			20		10	3790		20	75.800	0.616	46.693
	G7	Y10		07	1010	1706						10	2716		32	86.912	0.616	53.538
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		20	34.280	0.616	21.116
	G9+G9a	Y16	100	03	1150	150	130	335		32		16	3451		18	62.118	1.579	98.084
	G10	Y10		01	7840							10	7840		2	15.680	0.616	9.659
	G10a	Y10		01	7840							10	7840		1	7.840	0.616	4.829
	G11	R06		01	1485							6	1485		8	11.880	0.222	2.637
	G12	Y10		09	320	100						10	960		40	38.400	0.616	23.654
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		10	3.700	0.616	2.279
	G14	R06		08	150	40	320					6	3619		16	57.904	0.222	12.855

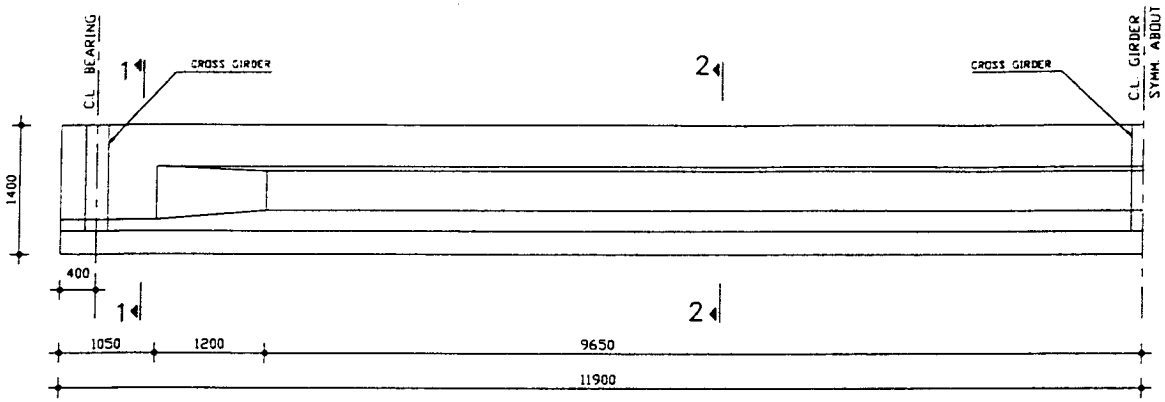
TOTAL WEIGHT: 914.608 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

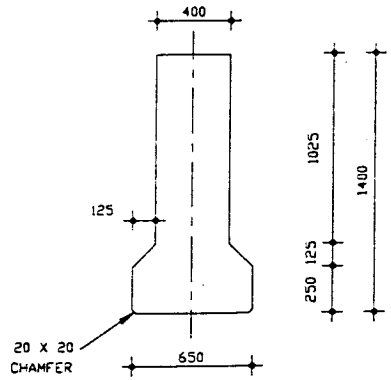
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	**PRESTRESSED CONCRETE GIRDER**
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 22.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-22-04
			DATE: JUNE 1996

Web Copy



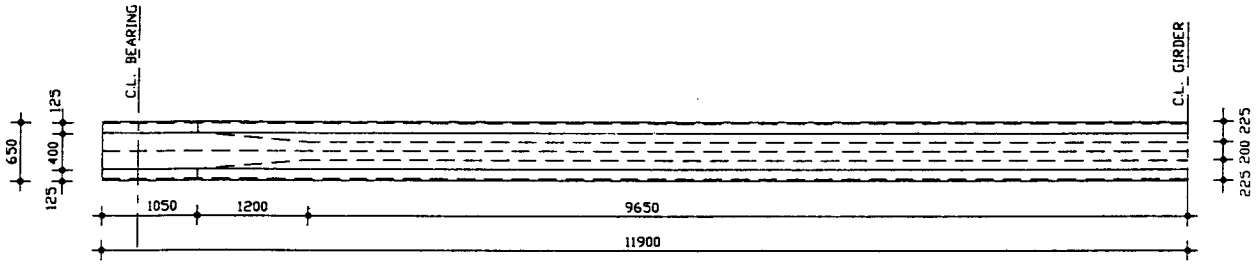
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



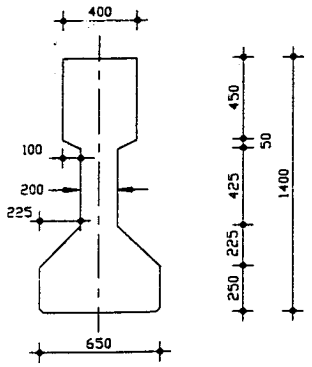
SEC. 1–1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



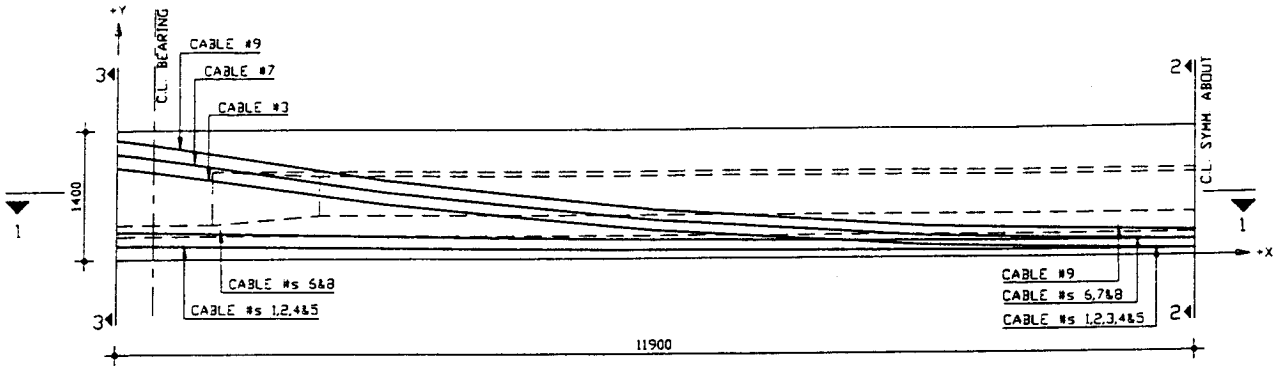
SEC. 2–2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 32.83 METRIC TON
2. CONCRETE VOLUME = 13.14 CUBIC METER

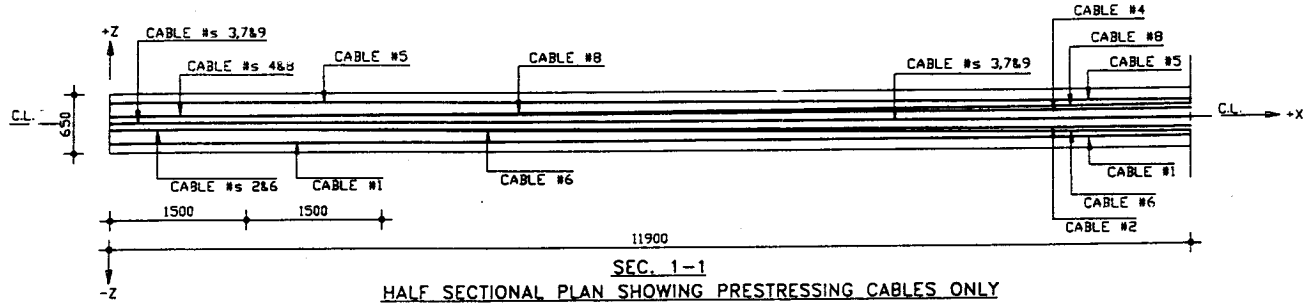
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 23.80 m CONCRETE OUTLINE DETAILS — DWG. NO. PC-23-01 SCALE AS SHOWN — DATE JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

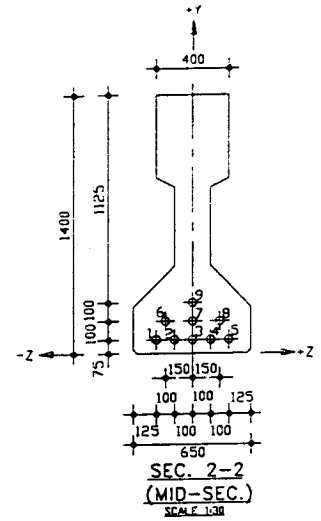
SCALE 1:40



SEC. 1–1

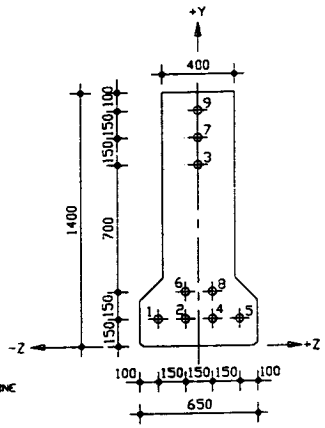
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

SCALE 1:40



SEC. 2–2
(MID–SEC.)

SCALE 1:30



SEC. 3–3
(END BLOCK)

SCALE 1:30

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END
		X=0		X=L/8=2975		X=L/4=5950		X=3L/8=8925		X=L/2=11900		
		CABLE ORDINATES ALONG Y & Z AXES (mm)										
		CABLE INCLIN. ANGLE	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
9	12Ø7	10.107°	1300	0	852	0	531	0	339	0	275	0	135.437
7	12Ø7	9.624°	1150	0	723	0	419	0	236	0	175	0	135.702
3	12Ø7	9.139°	1000	0	595	0	306	0	133	0	175	0	135.78
8	12Ø7	1.245°	300	75	245	94	206	113	183	131	175	150	140.801
6	12Ø7	1.245°	300	-75	245	-94	206	-113	183	-131	75	-150	140.801
5	12Ø7	0.747°	150	225	117	219	94	213	80	206	75	200	140.944
4	12Ø7	0.747°	150	75	117	81	94	88	80	94	75	100	140.944
2	12Ø7	0.747°	150	-75	117	-81	94	-88	80	-94	75	-100	140.944
1	12Ø7	0.747°	150	-225	117	-219	94	-213	80	-206	75	-200	140.944

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4&5 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6,7,8&9 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1&5
STAGE-2: CABLE NOS. 7,6,8&9

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 13 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA :

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 23.80 m

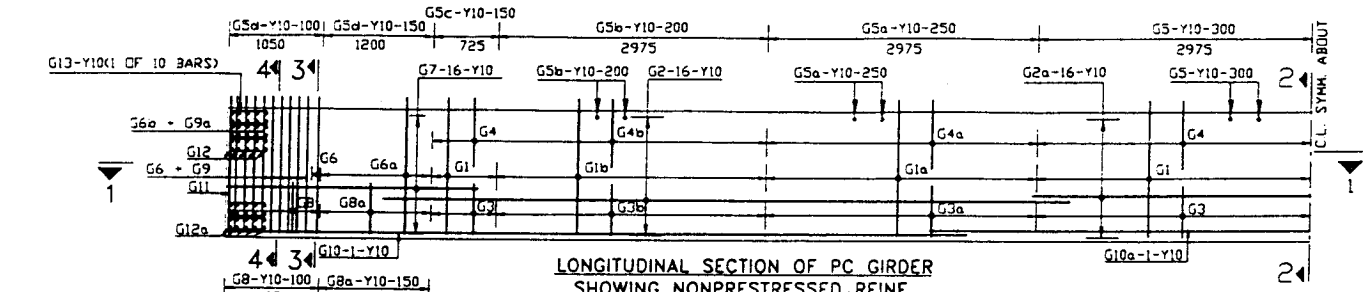
PRESTRESSING CABLE DETAILS

DWG. NO. PC-23-02

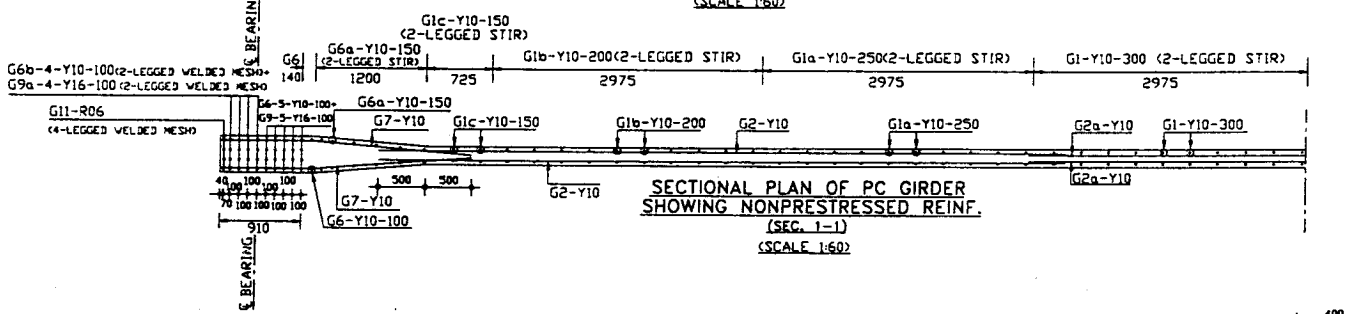
SCALE AS SHOWN

DATE JUNE 1996

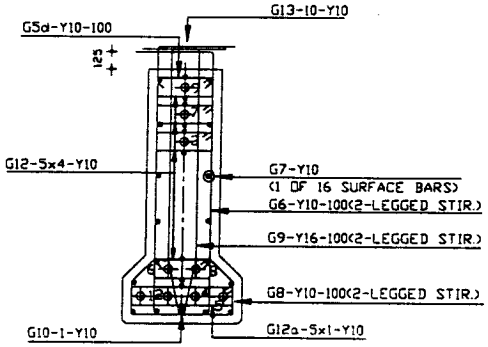
Web Copy



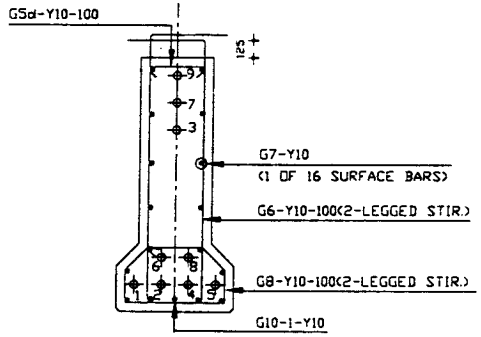
LONGITUDINAL SECTION OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



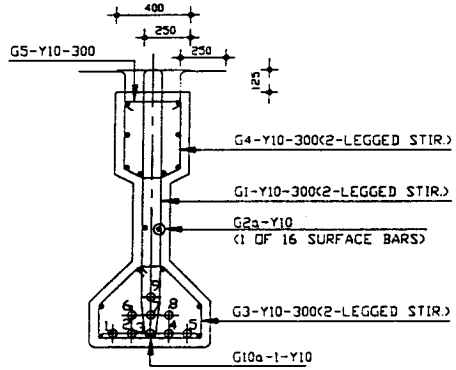
SECTIONAL PLAN OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE: 1:30)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 23.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO. PC-23-03 SCALE AS SHOWN — DATE JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1050	120	130	435		20		10	3418		21	71.778	0.616	44.215
	G1a	Y10	250	03	1050	120	130	435		20		10	3418		24	82.032	0.616	50.532
	G1b	Y10	200	03	1050	120	130	435		20		10	3418		30	102.540	0.616	63.165
	G1c	Y10	150	03	1050	120	130	435		20		10	3418		10	34.180	0.616	21.055
	G2	Y10		01	7033							10	7033		32	225.056	0.616	138.634
	G2a	Y10		01	7033							10	7033		16	112.528	0.616	69.317
	G3	Y10	300	04	210	570	120	225		20		10	1796		21	37.716	0.616	23.233
	G3a	Y10	250	04	210	570	120	225		20		10	1796		24	43.104	0.616	26.552
	G3b	Y10	200	04	210	570	120	225		20		10	1796		30	53.880	0.616	33.190
	G3c	Y10	150	04	210	570	120	225		20		10	1796		10	17.960	0.616	11.063
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		21	40.404	0.616	24.889
	G4a	Y10	250	05	575	120	250	100	50	20		10	1924		24	46.176	0.616	28.444
	G4b	Y10	200	05	575	120	250	100	50	20		10	1924		30	57.720	0.616	35.556
	G4c	Y10	150	05	575	120	250	100	50	20		10	1924		10	19.240	0.616	11.852
	G5	Y10	300	06	320						100	10	520		21	10.920	0.616	6.727
	G5a	Y10	250	06	320						100	10	520		24	12.480	0.616	7.688
	G5b	Y10	200	06	320						100	10	520		30	15.600	0.616	9.610
	G5c	Y10	150	06	320						100	10	520		10	5.200	0.616	3.203
	G5d	Y10	100	06	320						100	10	520		36	18.720	0.616	11.532
	G6a	Y10	150	02	1485	120 ~ 320 AVG. 220	130			20		10		3590	16	57.440	0.616	35.383
	G6+G6b	Y10	100	02	1485	320	130			20		10	3790		20	75.800	0.616	46.693
	G7	Y10		07	1010	1706						10	2716		32	86.912	0.616	53.538
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		20	34.280	0.616	21.116
	G9+G9a	Y16	100	03	1150	150	130	335		32		16	3451		18	62.118	1.579	98.084
	G10	Y10		01	8173							10	8173		2	16.346	0.616	10.069
	G10a	Y10		01	8173							10	8173		1	8.173	0.616	5.035
	G11	R06		01	1485							6	1485		8	11.880	0.222	2.637
	G12	Y10		09	320	100						10	960		40	38.400	0.616	23.654
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		10	3.700	0.616	2.279
	G14	R06		08	150	40	320					6	3619		18	65.142	0.222	14.462

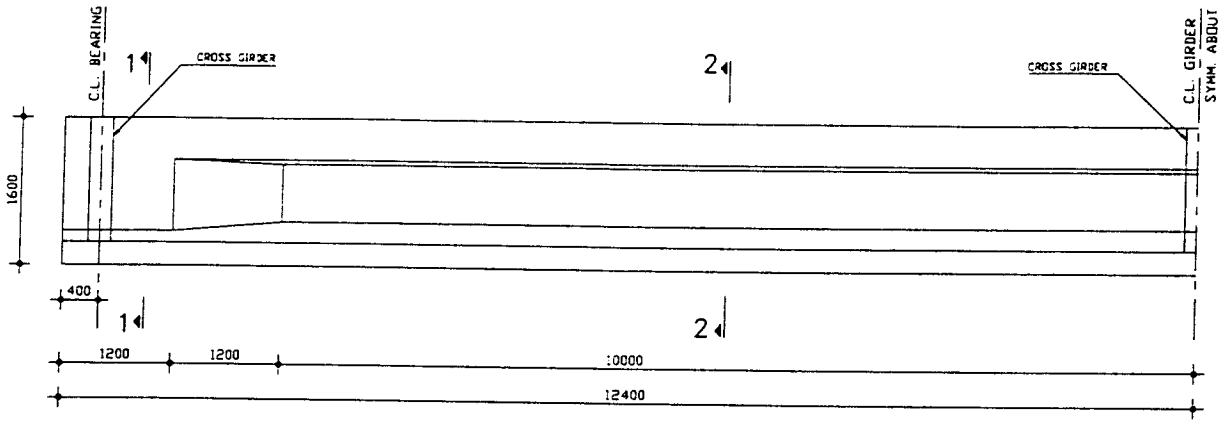
TOTAL WEIGHT: 959.698 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

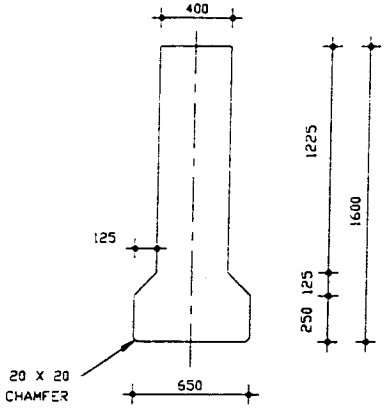
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 23.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-23-04
			DATE: JUNE 1996

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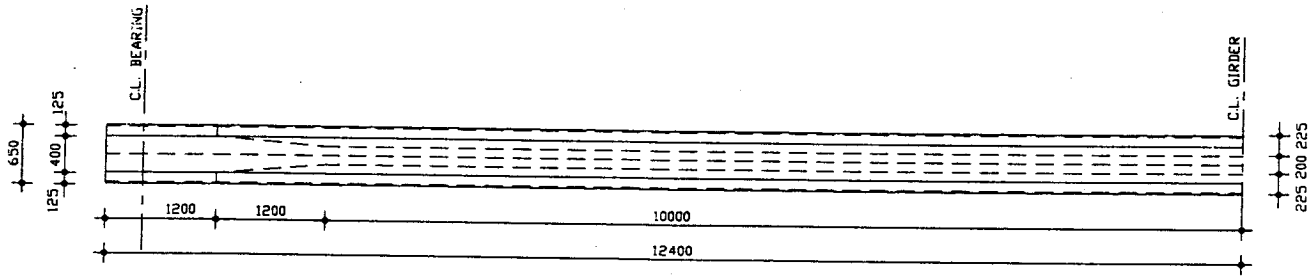
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



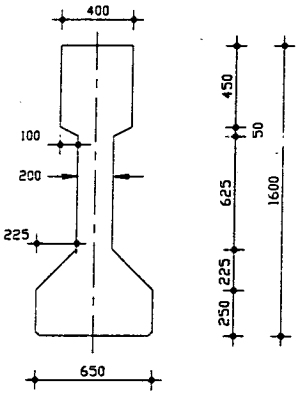
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



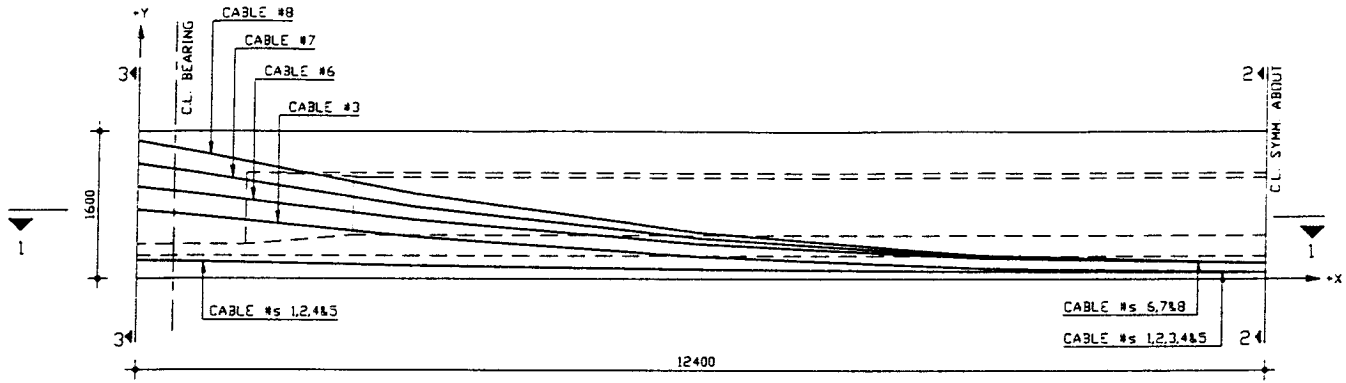
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 37.09 METRIC TON
2. CONCRETE VOLUME = 14.84 CUBIC METER

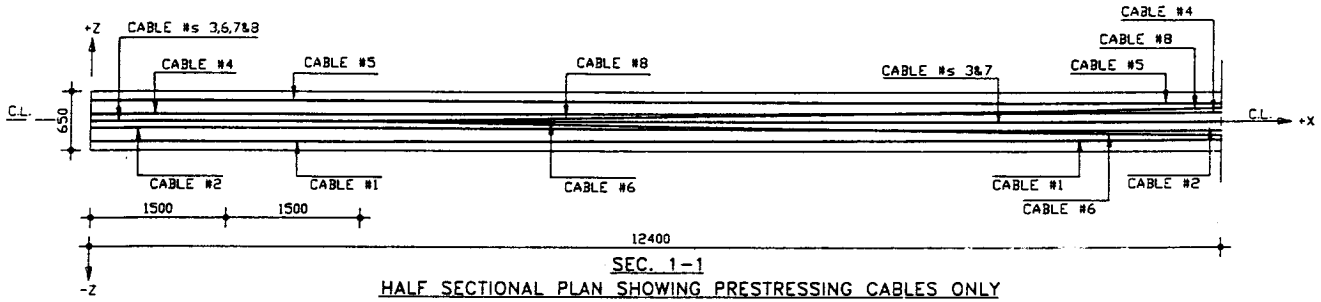
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 24.80 m CONCRETE OUTLINE DETAILS DWG. NO. PC-24-01 SCALE AS SHOWN DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

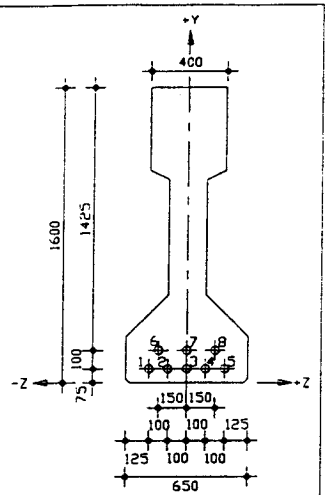
(SCALE 1:60)



SEC. 1-1

HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

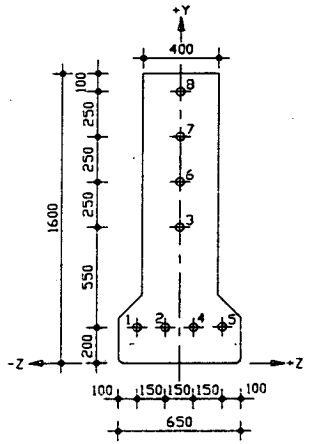
(SCALE 1:60)



SEC. 2-2

(MID-SEC.)

(SCALE 1:30)



SEC. 3-3

(END BLOCK)

(SCALE 1:30)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END (mm)
		X=0		X=L/8=3100		X=L/4=6200		X=3L/8=9300		X=L/2=12400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
8	12Ø7	12.453°	1500	0	920	18	506	65	258	134	175	150	139.058
7	12Ø7	10.156°	1250	0	780	0	444	0	242	0	175	0	140.311
6	12Ø7	7.829°	1000	0	639	-18	381	-65	227	-134	175	-150	142.103
3	12Ø7	6.419°	750	0	455	0	244	0	117	0	75	0	142.954
5	12Ø7	1.193°	200	225	145	219	106	213	83	206	75	200	146.368
4	12Ø7	1.193°	200	75	145	81	106	88	83	94	75	100	146.368
2	12Ø7	1.193°	200	-75	145	-81	106	-88	83	-94	75	-100	146.368
1	12Ø7	1.193°	200	-225	145	-219	106	-213	83	-206	75	-200	146.368

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5&7 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6&8 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1,5&7
STAGE-2: CABLE NOS. 6&8

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 5 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 24.80 m

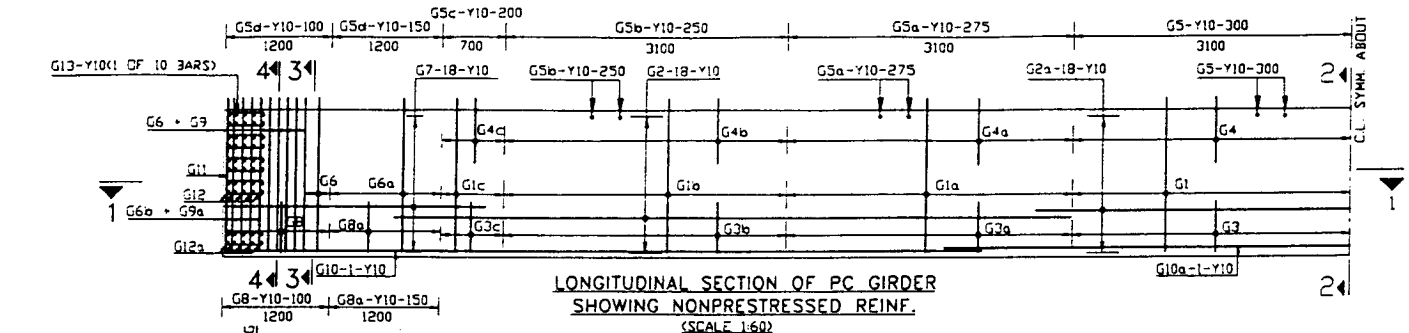
PRESTRESSING CABLE DETAILS

DWG. NO. PC-24-02

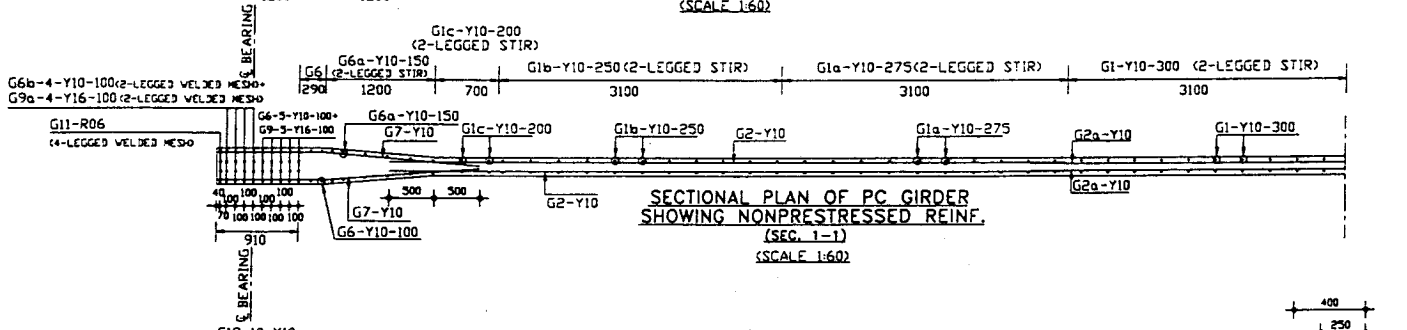
SCALE AS SHOWN

DATE JUNE 1996

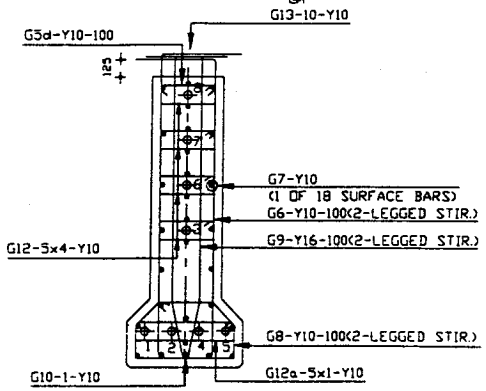
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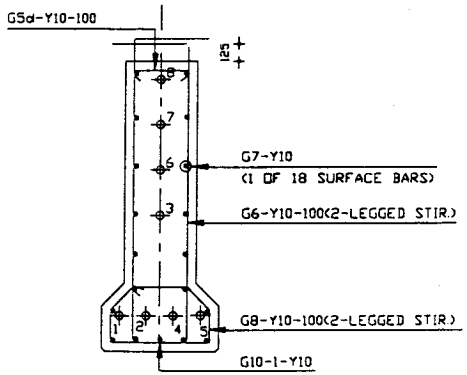
LONGITUDINAL SECTION OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



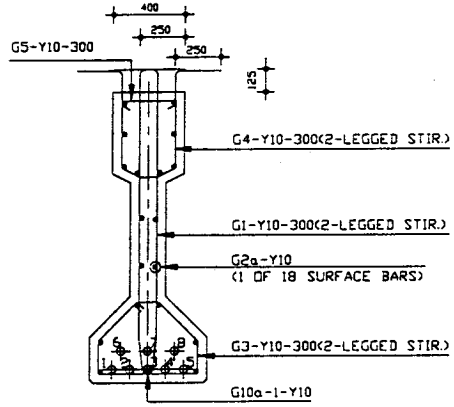
SECTIONAL PLAN OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE: 1:30)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 24.80 m NONPRESTRESSED REINF. DETAILS — DWG NO. PC-24-03 SCALE AS SHOWN — DATE JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1250	120	130	435		20		10	3818		22	83.996	0.616	51.742
	G1a	Y10	275	03	1250	120	130	435		20		10	3818		22	83.996	0.616	51.742
	G1b	Y10	250	03	1250	120	130	435		20		10	3818		24	91.632	0.616	56.445
	G1c	Y10	200	03	1250	120	130	435		20		10	3818		8	30.544	0.616	18.815
	G2	Y10		01	7267							10	7267		36	261.612	0.616	161.153
	G2a	Y10		01	7267							10	7267		18	130.806	0.616	80.576
	G3	Y10	300	04	210	570	120	225		20		10	1796		22	39.512	0.616	24.339
	G3a	Y10	275	04	210	570	120	225		20		10	1796		22	39.512	0.616	24.339
	G3b	Y10	250	04	210	570	120	225		20		10	1796		24	43.104	0.616	26.552
	G3c	Y10	200	04	210	570	120	225		20		10	1796		8	14.368	0.616	8.851
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		22	42.328	0.616	26.074
	G4a	Y10	275	05	575	120	250	100	50	20		10	1924		22	42.328	0.616	26.074
	G4b	Y10	250	05	575	120	250	100	50	20		10	1924		24	46.176	0.616	28.444
	G4c	Y10	200	05	575	120	250	100	50	20		10	1924		8	15.392	0.616	9.481
	G5	Y10	300	06	320						100	10	520		22	11.440	0.616	7.047
	G5a	Y10	275	06	320						100	10	520		22	11.440	0.616	7.047
	G5b	Y10	250	06	320						100	10	520		24	12.480	0.616	7.688
	G5c	Y10	200	06	320						100	10	520		8	4.160	0.616	2.563
	G5d	Y10	100	06	320						100	10	520		40	20.800	0.616	12.813
	G6a	Y10	150	02	1685	120 ~ 320 AVG. 220	130			20		10		3990	16	63.840	0.616	39.325
	G6+G6b	Y10	100	02	1685	320	130			20		10	4190		24	100.560	0.616	61.945
	G7	Y10		07	1160	1706						10	2866		36	103.176	0.616	63.556
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		24	41.136	0.616	25.340
	G9+G9a	Y16	100	03	1350	150	130	335		32		16	3851		18	69.318	1.579	109.453
	G10	Y10		01	8507							10	8507		2	17.014	0.616	10.481
	G10a	Y10		01	8507							10	8507		1	8.507	0.616	5.240
	G11	R06		01	1685							6	1685		8	13.480	0.222	2.993
	G12	Y10		09	320	100						10	960		40	38.400	0.616	23.654
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		10	3.700	0.616	2.279
	G14	R06		08	150	40	320					6	3619		16	57.904	0.222	12.855

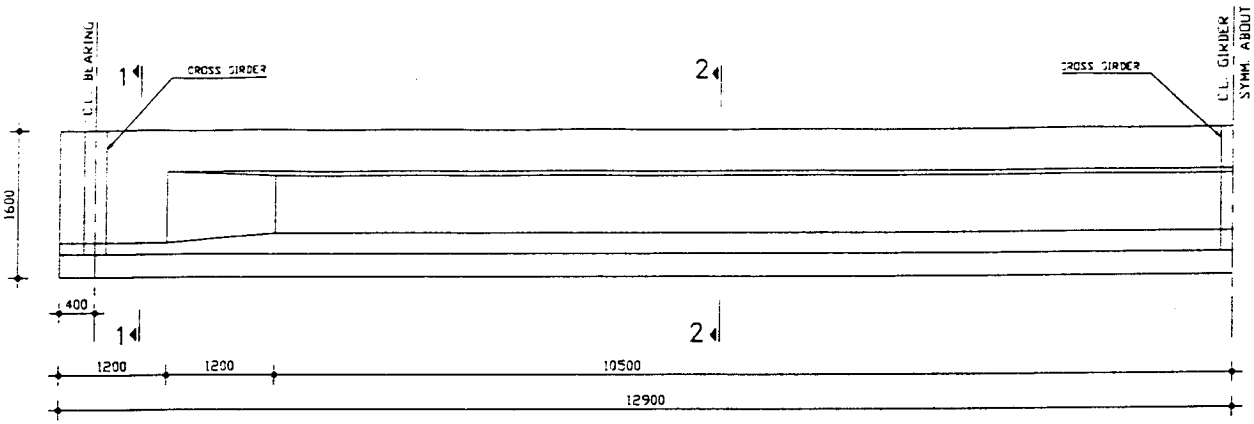
TOTAL WEIGHT: 1015.198 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

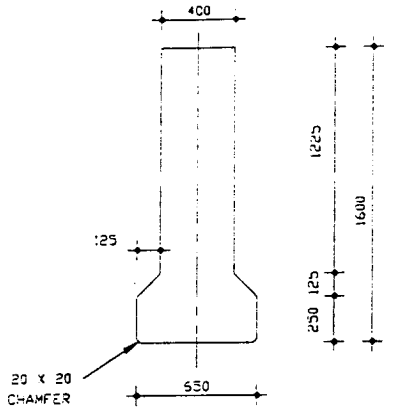
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 24.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-24-04 DATE: JUNE 1996

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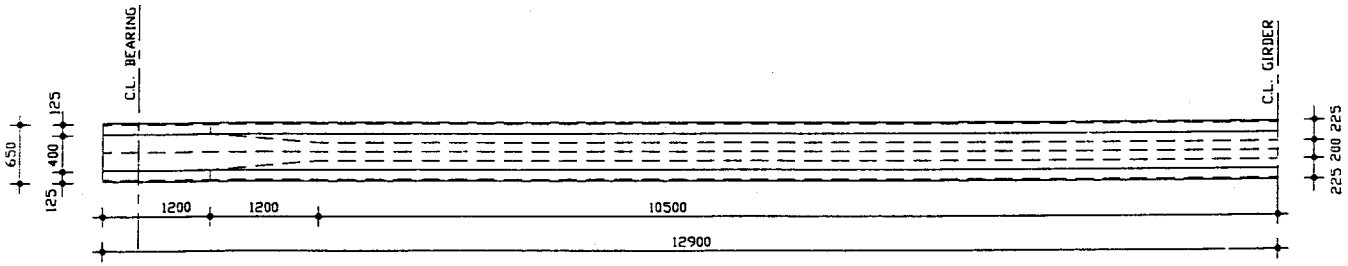
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



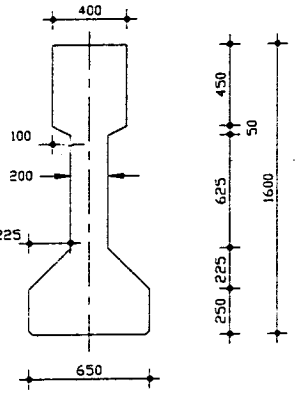
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



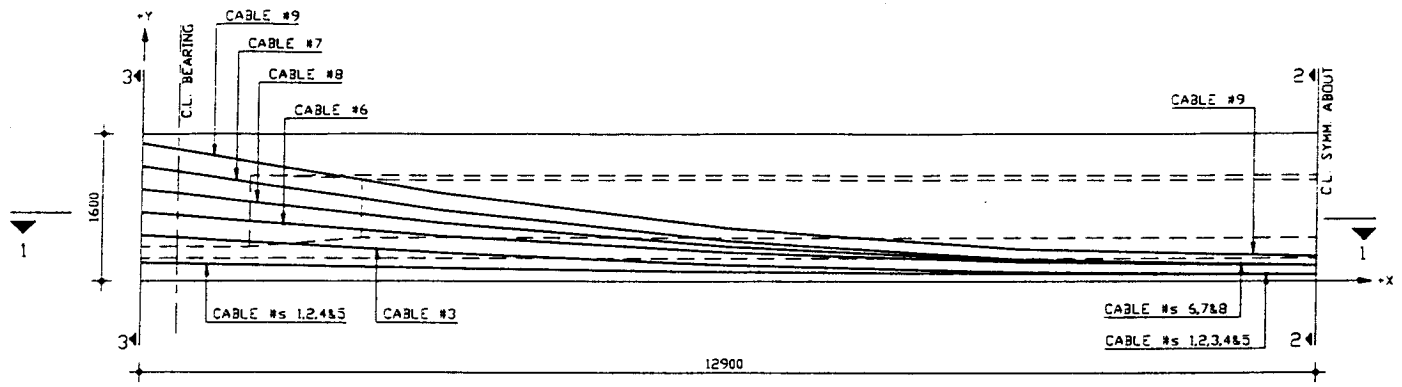
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 38.53 METRIC TON
2. CONCRETE VOLUME = 15.42 CUBIC METER

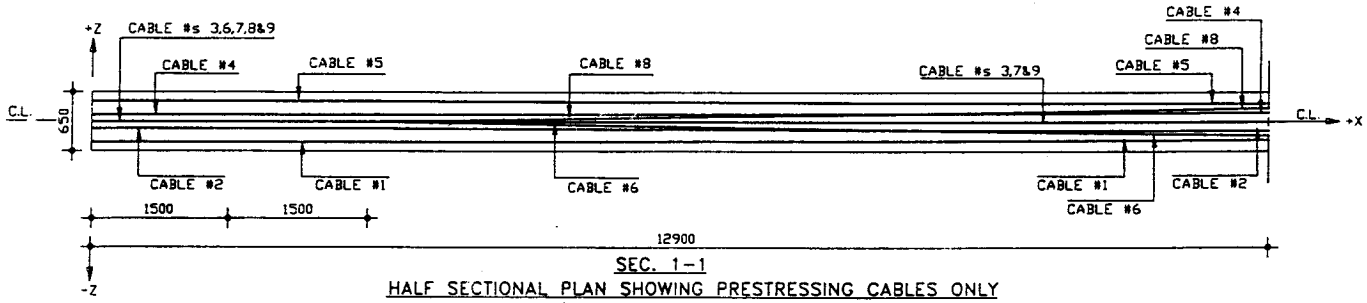
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 25.80 m	
			CONCRETE OUTLINE DETAILS	DWG NO. PC-25-01
			SCALE AS SHOWN	DATE JUNE 1996

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HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

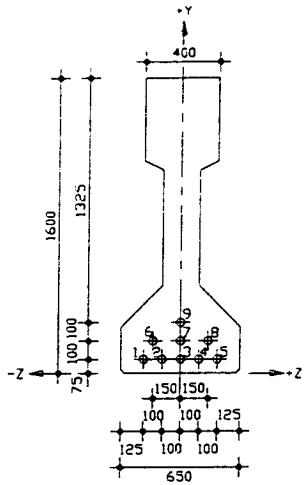
(SCALE 1:60)



SEC. 1–1

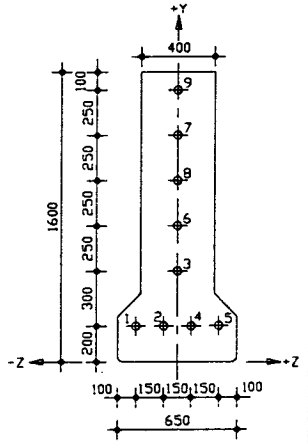
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:60)



SEC. 2–2
(MID-SEC.)

(SCALE 1:30)



SEC. 3–3
(END BLOCK)

(SCALE 1:30)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END
		X=0		X=L/8=3225		X=L/4=6450		X=3L/8=9675		X=L/2=12900		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
9	12Ø7	11.089°	1500	0	964	0	581	0	352	0	275	0	145.365
7	12Ø7	9.759°	1250	0	780	0	444	0	242	0	175	0	146.131
8	12Ø7	7.52°	1000	0	639	18	381	72	227	134	175	150	147.475
6	12Ø7	5.256°	750	0	498	-18	319	-72	211	-134	175	-150	148.538
3	12Ø7	3.89°	500	0	314	0	181	0	102	0	75	0	149.439
5	12Ø7	1.146°	200	225	145	219	106	213	83	206	75	200	151.341
4	12Ø7	1.146°	200	75	145	81	106	88	83	94	75	100	151.341
2	12Ø7	1.146°	200	-75	145	-81	106	-88	83	-94	75	-100	151.341
1	12Ø7	1.146°	200	-225	145	-219	106	-213	83	-206	75	-200	151.341

NOTES:

A. **STAGES AND SEQUENCE OF PRESTRESSING**

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.
02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5&7 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.
03. IN STAGE-2 STRESSING OF CABLE NOS. 6,8&9 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.
04. **SEQUENCE OF STRESSING:**
STAGE-1: CABLE NOS. 3,2,4,1,5&7
STAGE-2: CABLE NOS. 6,8&9

B. **PRECAMBER**
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 5 mm AT MID-SPAN.

C. **ANCHORAGE DETAILS**
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 25.80 m

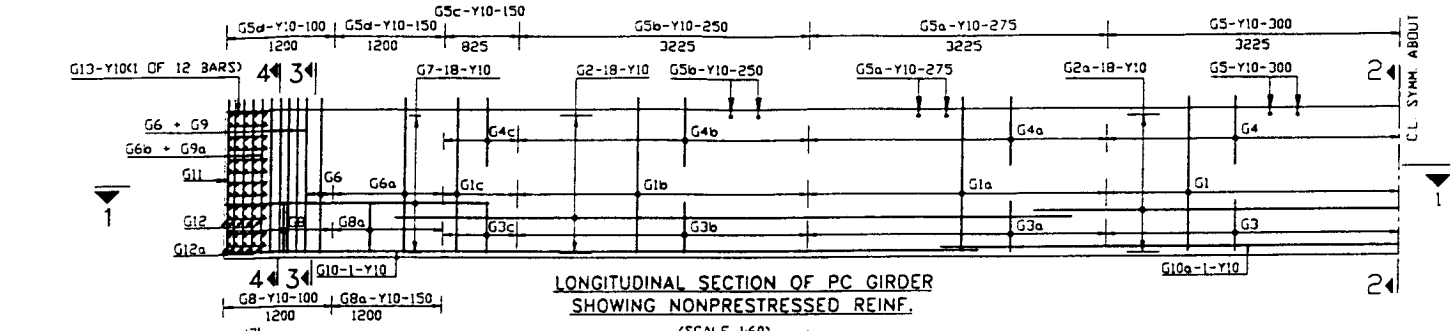
PRESTRESSING CABLE DETAILS

DWG. NO. PC-25-02

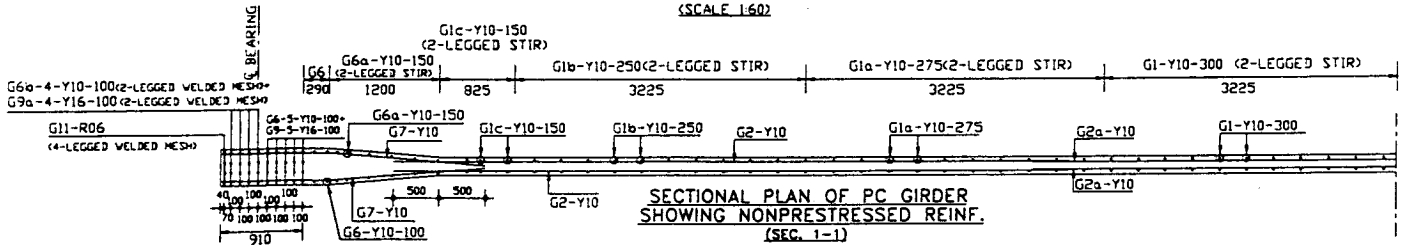
SCALE AS SHOWN

DATE JUNE 1996

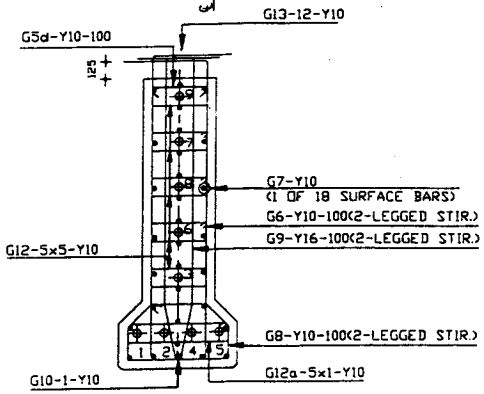
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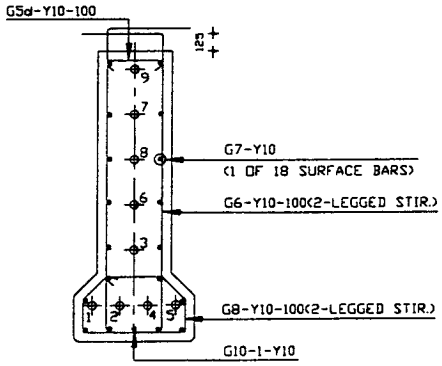
LONGITUDINAL SECTION OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



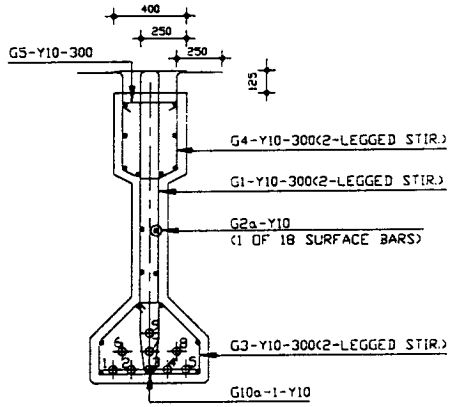
SECTIONAL PLAN OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 25.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO PC-25-03 SCALE : AS SHOWN — DATE : JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1250	120	130	435		20		10	3818		23	87.814	0.616	54.093
	G1a	Y10	275	03	1250	120	130	435		20		10	3818		24	91.632	0.616	56.445
	G1b	Y10	250	03	1250	120	130	435		20		10	3818		26	99.268	0.616	61.149
	G1c	Y10	150	03	1250	120	130	435		20		10	3818		12	45.816	0.616	28.223
	G2	Y10		01	7600							10	7600		36	273.600	0.616	168.538
	G2a	Y10		01	7600							10	7600		18	136.800	0.616	84.269
	G3	Y10	300	04	210	570	120	225		20		10	1796		23	41.308	0.616	25.446
	G3a	Y10	275	04	210	570	120	225		20		10	1796		24	43.104	0.616	26.552
	G3b	Y10	250	04	210	570	120	225		20		10	1796		26	46.696	0.616	28.765
	G3c	Y10	150	04	210	570	120	225		20		10	1796		12	21.552	0.616	13.276
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		23	44.252	0.616	27.259
	G4a	Y10	275	05	575	120	250	100	50	20		10	1924		24	46.176	0.616	28.444
	G4b	Y10	250	05	575	120	250	100	50	20		10	1924		26	50.024	0.616	30.815
	G4c	Y10	150	05	575	120	250	100	50	20		10	1924		12	23.088	0.616	14.222
	G5	Y10	300	06	320						100	10	520		23	11.960	0.616	7.367
	G5a	Y10	275	06	320						100	10	520		24	12.480	0.616	7.688
	G5b	Y10	250	06	320						100	10	520		26	13.520	0.616	8.328
	G5c	Y10	150	06	320						100	10	520		12	6.240	0.616	3.844
	G5d	Y10	100	06	320						100	10	520		40	20.800	0.616	12.813
	G6a	Y10	150	02	1685	120 ~ 320 AVG. 220	130			20		10		3990	16	63.840	0.616	39.325
	G6+G6b	Y10	100	02	1685	320	130			20		10	4190		24	100.560	0.616	61.945
	G7	Y10		07	1160	1706						10	2866		36	103.176	0.616	63.556
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		24	41.136	0.616	25.340
	G9+G9a	Y16	100	03	1350	150	130	335		32		16	3851		18	69.318	1.579	109.453
	G10	Y10		01	8840							10	8840		2	17.680	0.616	10.891
	G10a	Y10		01	8840							10	8840		1	8.840	0.616	5.445
	G11	R06		01	1685							6	1685		8	13.480	0.222	2.993
	G12	Y10		09	320	100						10	960		50	48.000	0.616	29.568
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		12	4.440	0.616	2.735
	G14	R06		08	150	40	320					6	3619		18	65.142	0.222	14.462

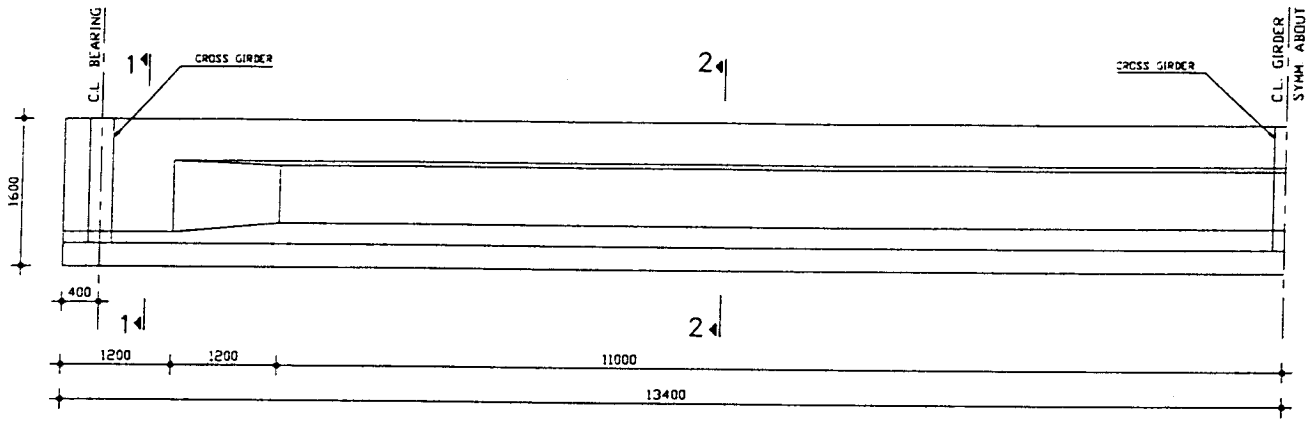
TOTAL WEIGHT: 1079.540 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

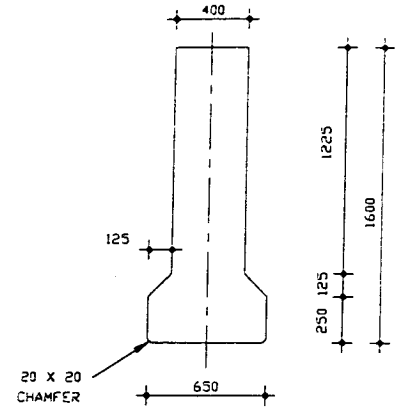
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 25.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-25-04
			DATE: JUNE 1996

Web Copy



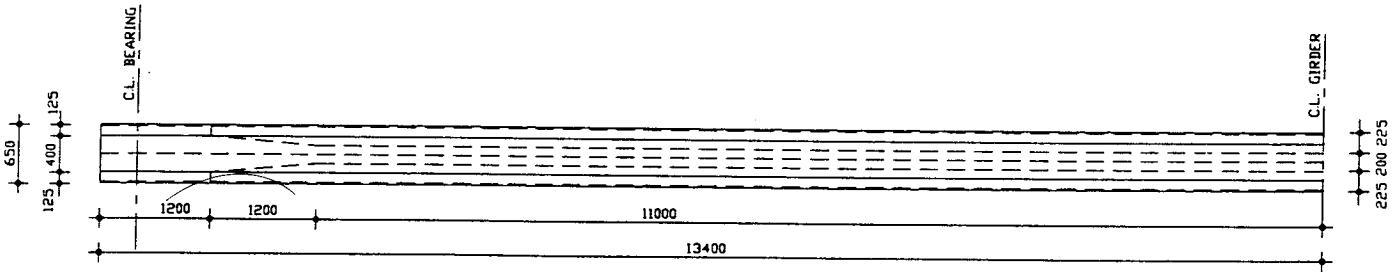
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



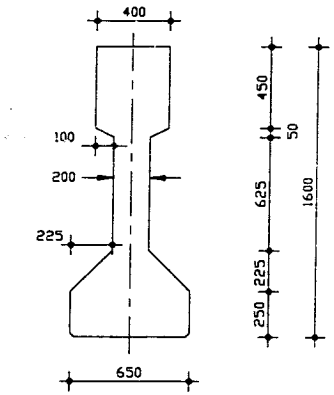
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



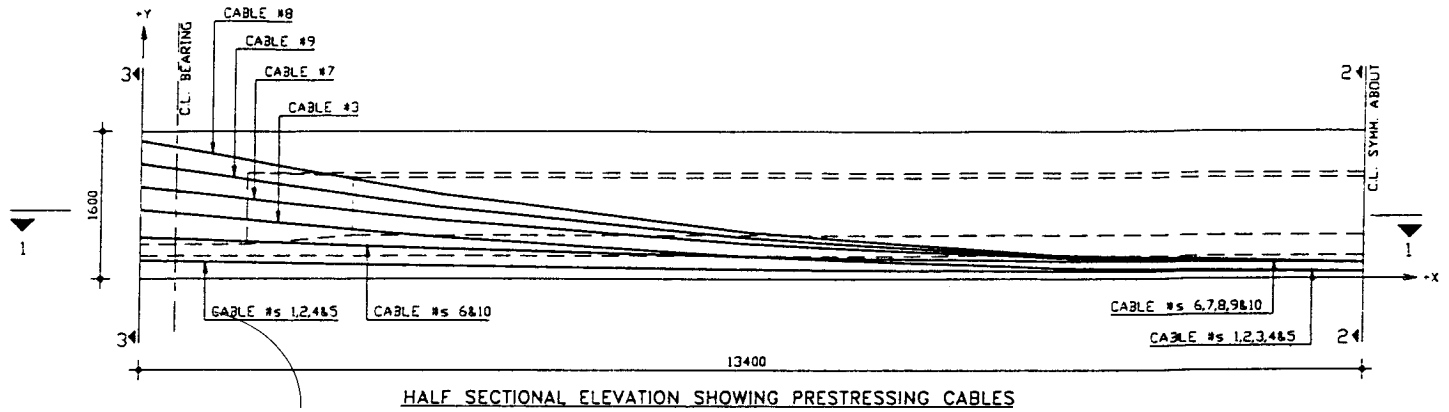
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 39.98 METRIC TON
2. CONCRETE VOLUME = 16.00 CUBIC METER

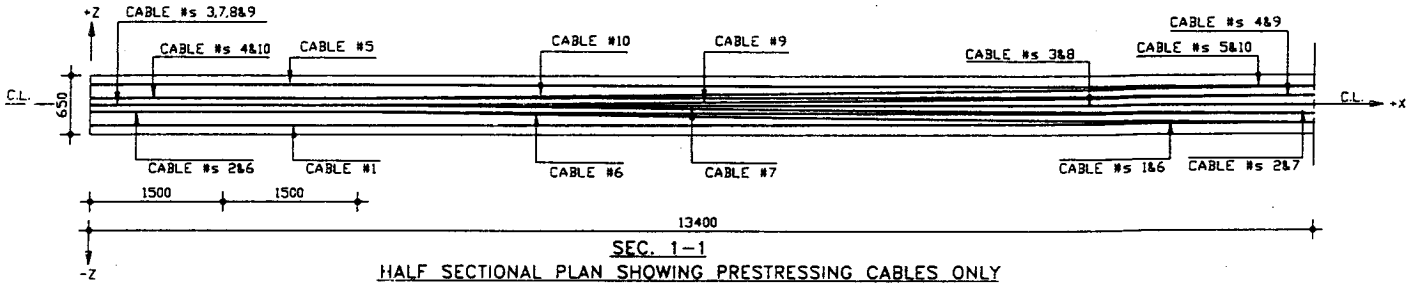
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 25.80 m CONCRETE OUTLINE DETAILS DWG NO. PC-25-01 SCALE AS SHOWN DATE JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

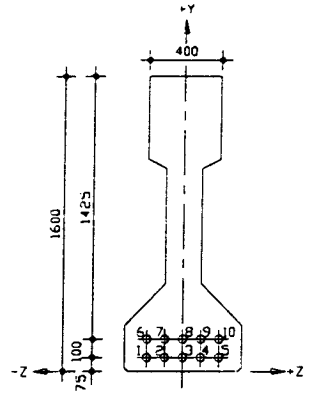
(SCALE 1:60)



SEC. 1–1

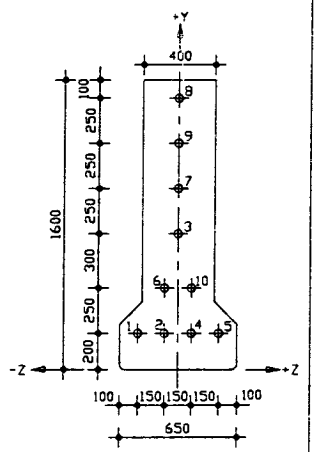
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:60)



SEC. 2–2
(MID–SEC.)

(SCALE 1:30)



SEC. 3–3
(END BLOCK)

(SCALE 1:30)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END
		X=0		X=L/8=3350		X=L/4=6700		X=3L/8=10050		X=L/2=13400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
8	12Ø7	11.522°	1500	0	920	0	506	0	258	0	175	0	149.77
9	12Ø7	9.391°	1250	0	780	12	444	59	242	97	175	100	151.028
7	12Ø7	7.233°	1000	0	639	-12	381	-59	227	-97	175	-100	153.541
3	12Ø7	5.929°	750	0	455	0	244	0	117	0	75	0	154.391
10	12Ø7	2.423°	450	75	330	106	244	138	192	169	175	200	158.812
6	12Ø7	2.423°	450	-75	330	-106	244	-138	192	-169	175	-200	158.812
5	12Ø7	1.102°	200	225	145	219	106	213	83	206	75	200	157.78
4	12Ø7	1.102°	200	75	145	81	106	88	83	94	75	100	157.78
2	12Ø7	1.102°	200	-75	145	-81	106	-88	83	-94	75	-100	157.78
1	12Ø7	1.102°	200	-225	145	-219	106	-213	83	-206	75	-200	157.78

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,7&9 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6,8&10 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1,5,7&9
STAGE-2: CABLE NOS. 8,6&10

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 5 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 26.80 m

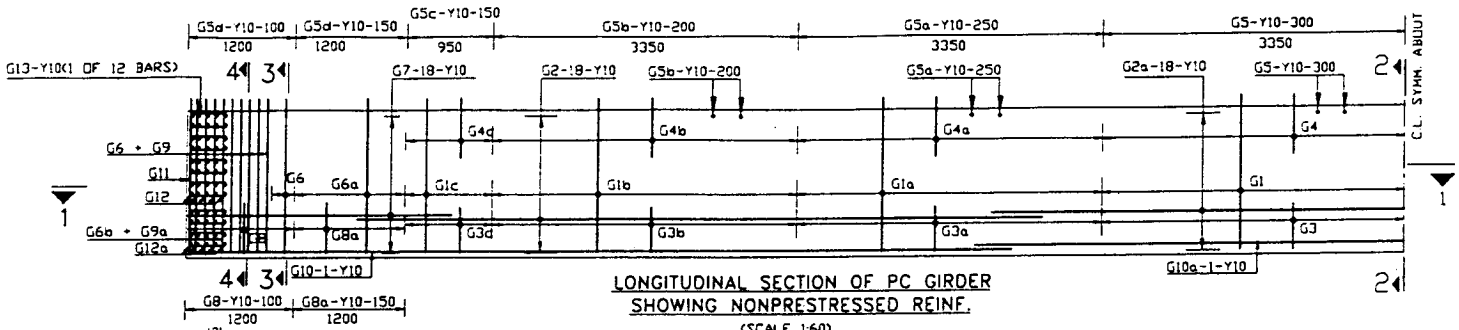
PRESTRESSING CABLE DETAILS

DWG. NO. PC-26-02

SCALE AS SHOWN

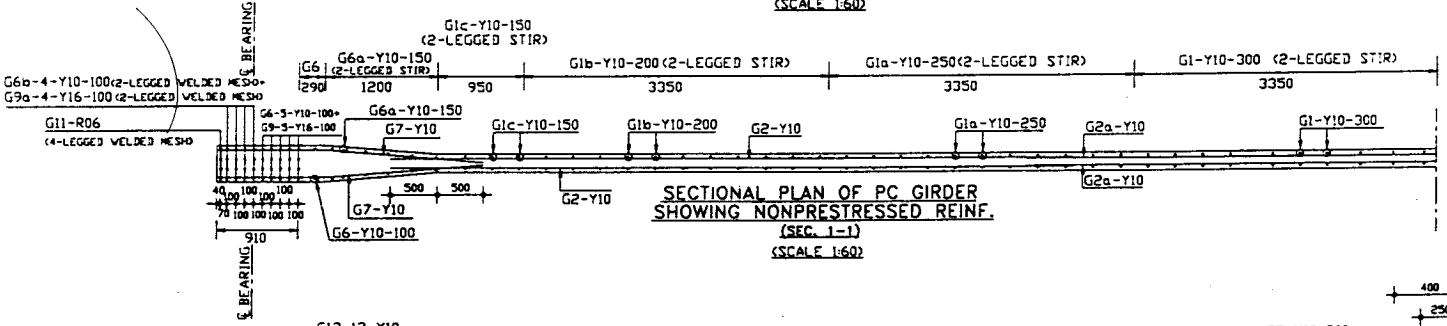
DATE : JUNE 1996

Web Copy



LONGITUDINAL SECTION OF PC GIRDER SHOWING NONPRESTRESSED REINF.

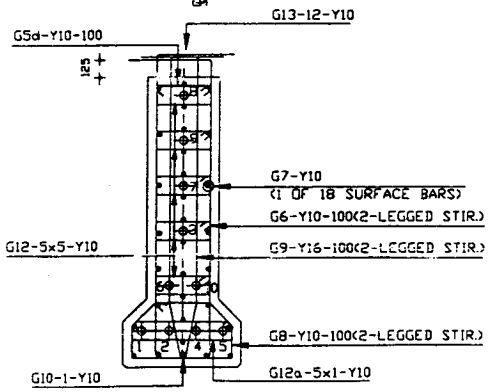
(SCALE 1:60)



SECTIONAL PLAN OF PC GIRDER SHOWING NONPRESTRESSED REINF.

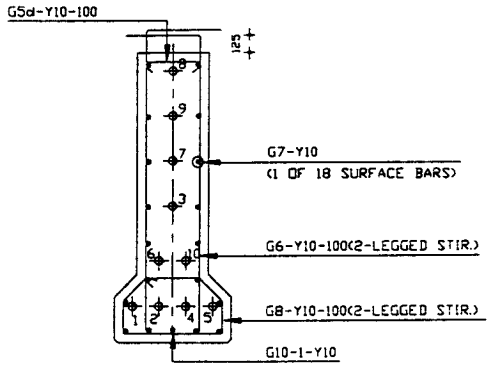
(SEC. 1-1)

(SCALE 1:60)



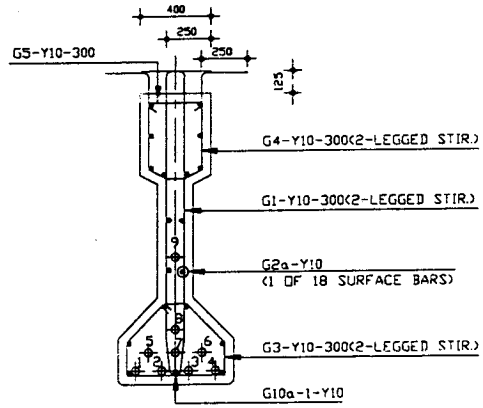
SEC.4-4 SHOWING NONPRESTRESSED REINF.

(SCALE 1:30)



SEC.3-3 SHOWING NONPRESTRESSED REINF.

(SCALE 1:30)



SEC.2-2 SHOWING NONPRESTRESSED REINF.

(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 26.80 m NONPRESTRESSED REINF. DETAILS SCALE AS SHOWN DWG. NO. PC-26-03 DATE : JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1250	120	130	435		20		10	3818		23	87.814	0.616	54.093
	G1a	Y10	250	03	1250	120	130	435		20		10	3818		26	99.268	0.616	61.149
	G1b	Y10	200	03	1250	120	130	435		20		10	3818		34	129.812	0.616	79.964
	G1c	Y10	150	03	1250	120	130	435		20		10	3818		12	45.816	0.616	28.223
	G2	Y10		01	7933							10	7933		36	285.588	0.616	175.922
	G2a	Y10		01	7933							10	7933		18	142.794	0.616	87.961
	G3	Y10	300	04	210	570	120	225		20		10	1796		23	41.308	0.616	25.446
	G3a	Y10	250	04	210	570	120	225		20		10	1796		26	46.696	0.616	28.765
	G3b	Y10	200	04	210	570	120	225		20		10	1796		34	61.064	0.616	37.615
	G3c	Y10	150	04	210	570	120	225		20		10	1796		12	21.552	0.616	13.276
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		23	44.252	0.616	27.259
	G4a	Y10	250	05	575	120	250	100	50	20		10	1924		26	50.024	0.616	30.815
	G4b	Y10	200	05	575	120	250	100	50	20		10	1924		34	65.416	0.616	40.296
	G4c	Y10	150	05	575	120	250	100	50	20		10	1924		12	23.088	0.616	14.222
	G5	Y10	300	06	320						100	10	520		23	11.960	0.616	7.367
	G5a	Y10	250	06	320						100	10	520		26	13.520	0.616	8.328
	G5b	Y10	200	06	320						100	10	520		34	17.680	0.616	10.891
	G5c	Y10	150	06	320						100	10	520		12	6.240	0.616	3.844
	G5d	Y10	100	06	320						100	10	520		40	20.800	0.616	12.813
	G6a	Y10	150	02	1685	120 ~ 320 AVG. 220	130			20		10		3990	16	63.840	0.616	39.325
	G6+G6b	Y10	100	02	1685	320	130			20		10	4190		24	100.560	0.616	61.945
	G7	Y10		07	1160	1706						10	2866		36	103.176	0.616	63.556
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		24	41.136	0.616	25.340
	G9+G9a	Y16	100	03	1350	150	130	335		32		16	3851		18	69.318	1.579	109.453
	G10	Y10		01	9173							10	9173		2	18.346	0.616	11.301
	G10a	Y10		01	9173							10	9173		1	9.173	0.616	5.651
	G11	R06		01	1685							6	1685		8	13.480	0.222	2.993
	G12	Y10		09	320	100						10	960		50	48.000	0.616	29.568
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		12	4.440	0.616	2.735
	G14	R06		08	150	40	320					6	3619		20	72.380	0.222	16.068

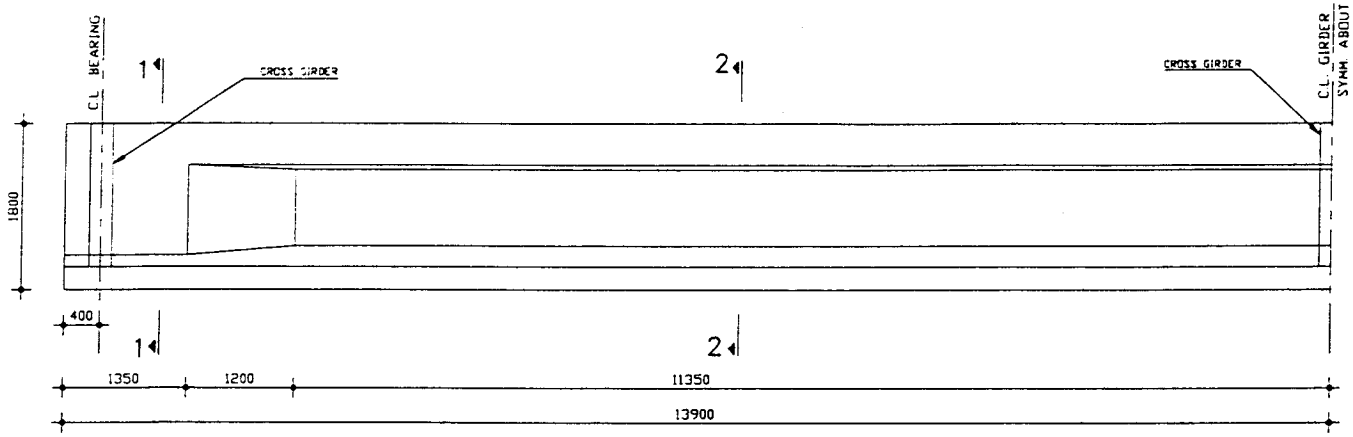
TOTAL WEIGHT: 1142.477 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

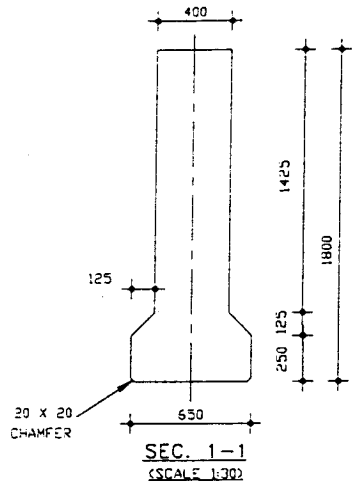
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 26.80 m NONPRESTRESSED REINF. BAR BENDING SCHEDULE DWG. NO.: PC-26-04 DATE: JUNE 1996

Web Copy



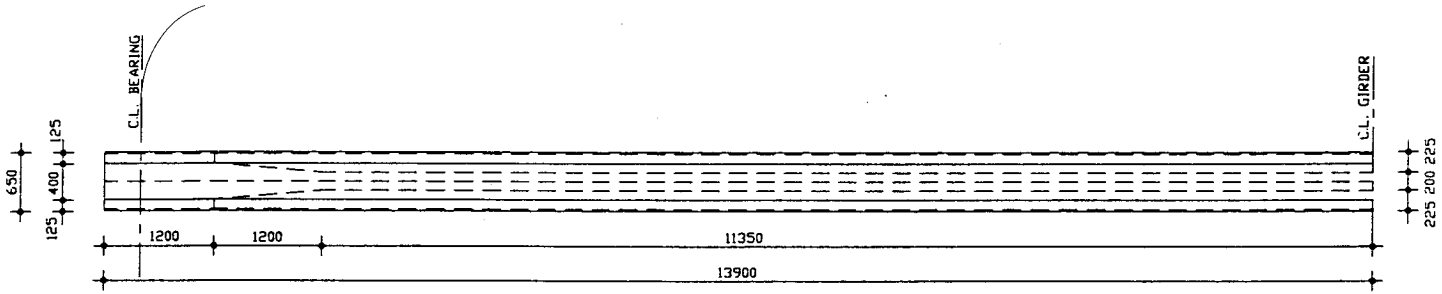
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



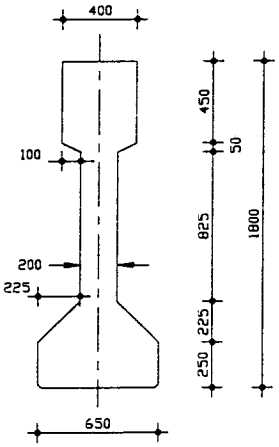
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



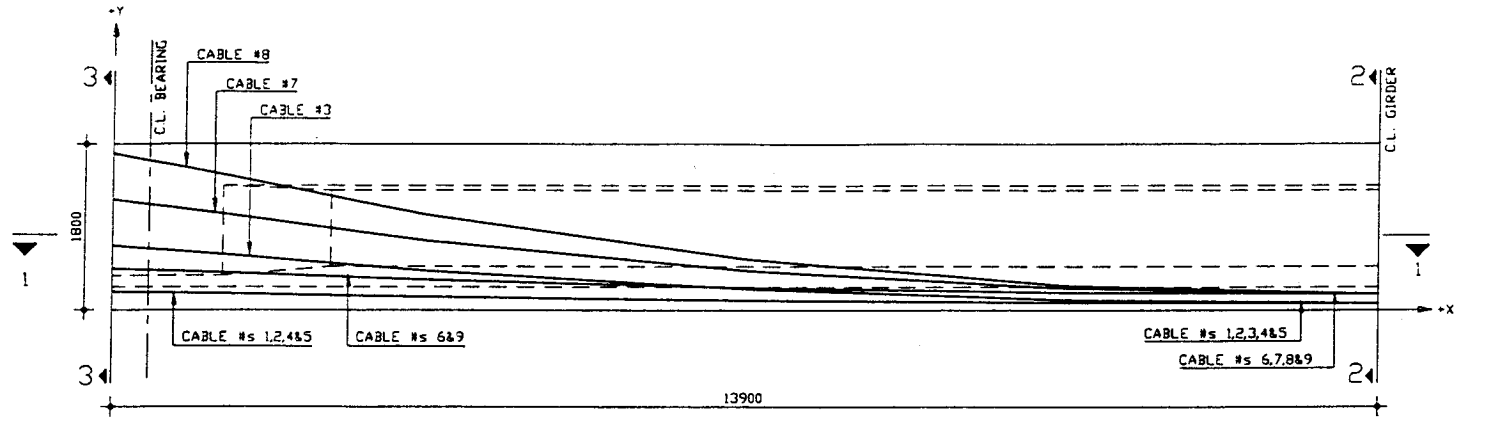
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 44.70 METRIC TON
2. CONCRETE VOLUME = 17.89 CUBIC METER

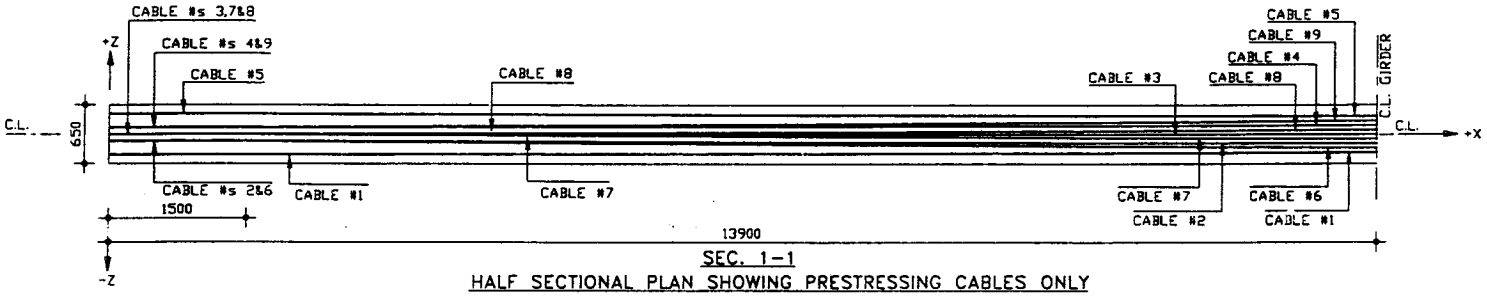
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 27.80 m CONCRETE OUTLINE DETAILS DWG. NO. PC-27-01 SCALE : AS SHOWN DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

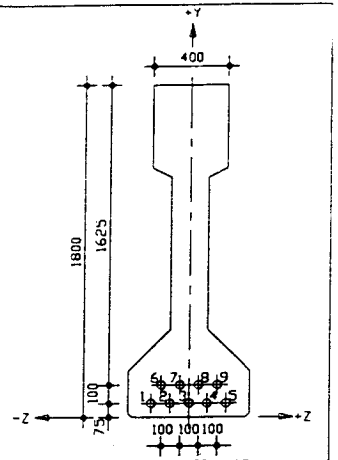
(SCALE 1:60)



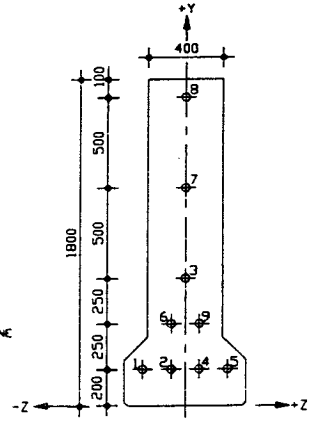
SEC. 1-1

HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:60)



SEC. 2-2
(MID-SEC.)
(SCALE 1:30)



SEC. 3-3
(END BLOCK)
(SCALE 1:30)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END
		X=0		X=L/8=3475		X=L/4=6950		X=3L/8=10425		X=L/2=13900		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
8	12Ø7	12.731°	1700	0	1033	6	556	27	270	46	175	50	152.50
7	12Ø7	8.634°	1200	0	752	-6	431	-27	239	-46	175	-50	157.463
3	12Ø7	5.29 °	700	0	427	0	231	0	114	0	75	0	159.679
9	12Ø7	2.333°	450	75	330	94	244	113	192	131	175	150	161.793
6	12Ø7	2.333°	450	-75	330	-94	244	-113	192	-131	175	-150	161.793
5	12Ø7	1.061°	200	225	145	219	106	213	83	206	75	200	162.751
4	12Ø7	1.061°	200	75	145	81	106	88	83	94	75	100	162.751
2	12Ø7	1.061°	200	-75	145	-81	106	-88	83	-94	75	-100	162.751
1	12Ø7	1.061°	200	-225	145	-219	106	-213	83	-206	75	-200	162.751

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,7&8 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6&9 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1,5,7&8
STAGE-2: CABLE NOS. 6&9

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 6 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 27.80 m

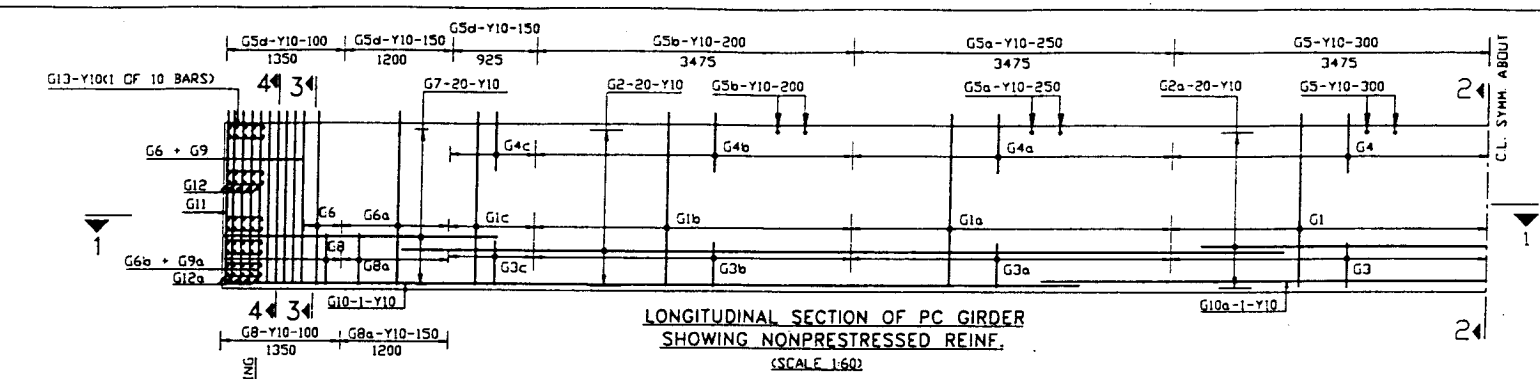
PRESTRESSING CABLE DETAILS

DWG. NO. PC-27-02

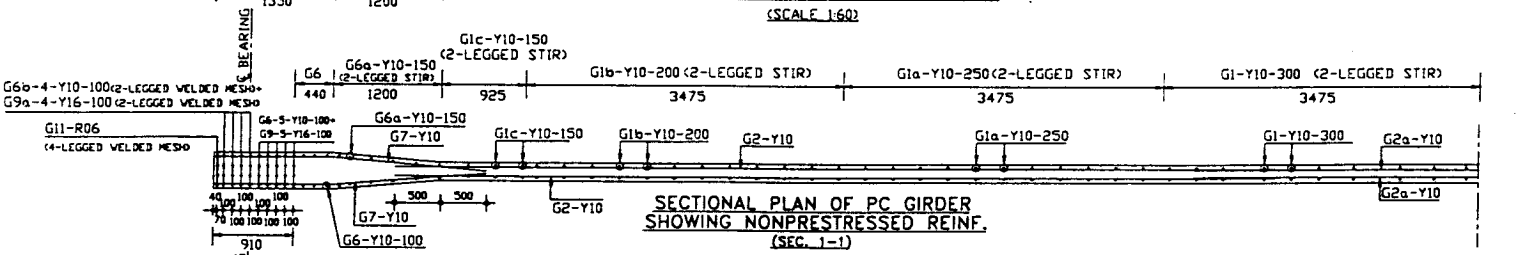
SCALE : AS SHOWN

DATE : JUNE 1996

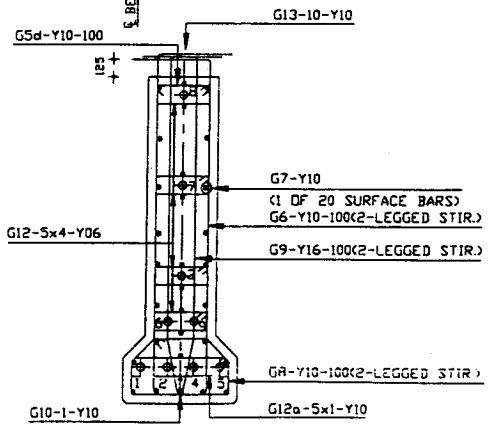
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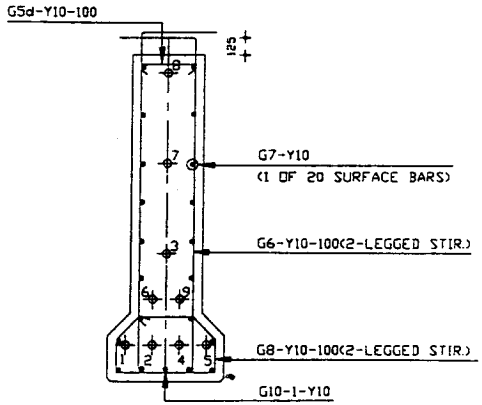
LONGITUDINAL SECTION OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



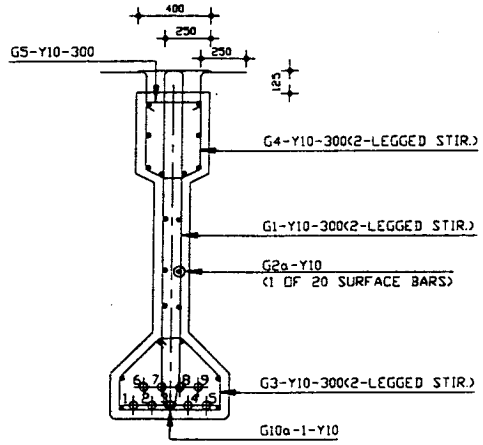
SECTIONAL PLAN OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 27.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO. PC-27-03 SCALE AS SHOWN — DATE JUNE 1996

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BAR BENDING SCHEDULE

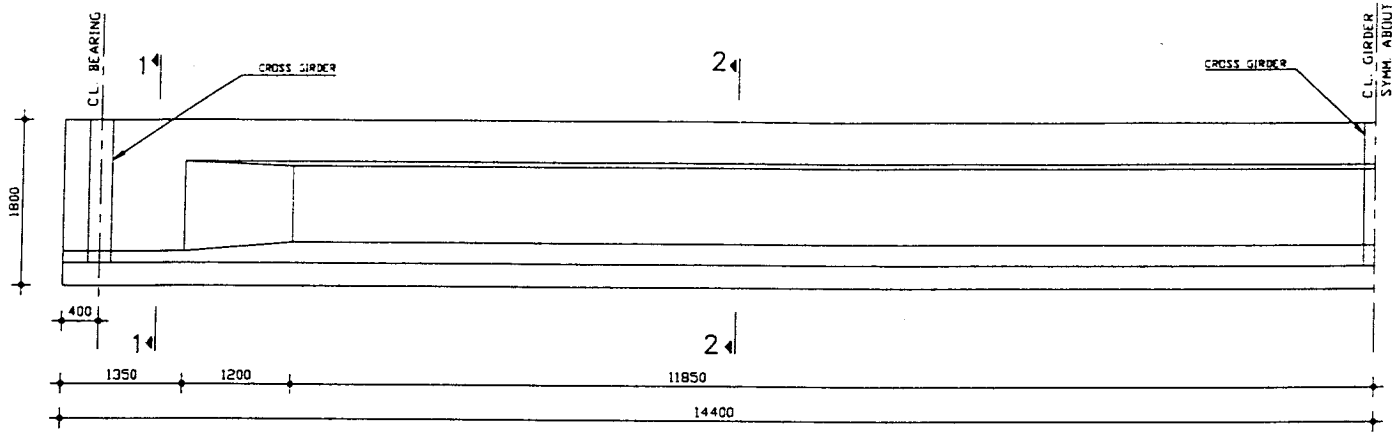
MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1450	120	130	435		20		10	4218		24	101.232	0.616	62.359
	G1a	Y10	250	03	1450	120	130	435		20		10	4218		28	118.104	0.616	72.752
	G1b	Y10	200	03	1450	120	130	435		20		10	4218		34	143.412	0.616	88.342
	G1c	Y10	150	03	1450	120	130	435		20		10	4218		12	50.616	0.616	31.179
	G2	Y10		01	8167							10	8167		40	326.680	0.616	201.235
	G2a	Y10		01	8167							10	8167		20	163.340	0.616	100.617
	G3	Y10	300	04	210	570	120	225		20		10	1796		24	43.104	0.616	26.552
	G3a	Y10	250	04	210	570	120	225		20		10	1796		28	50.288	0.616	30.977
	G3b	Y10	200	04	210	570	120	225		20		10	1796		34	61.064	0.616	37.615
	G3c	Y10	150	04	210	570	120	225		20		10	1796		12	21.552	0.616	13.276
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		24	46.176	0.616	28.444
	G4a	Y10	250	05	575	120	250	100	50	20		10	1924		28	53.872	0.616	33.185
	G4b	Y10	200	05	575	120	250	100	50	20		10	1924		34	65.416	0.616	40.296
	G4c	Y10	150	05	575	120	250	100	50	20		10	1924		12	23.088	0.616	14.222
	G5	Y10	300	06	320						100	10	520		24	12.480	0.616	7.688
	G5a	Y10	250	06	320						100	10	520		28	14.560	0.616	8.969
	G5b	Y10	200	06	320						100	10	520		34	17.680	0.616	10.891
	G5c	Y10	150	06	320						100	10	520		12	6.240	0.616	3.844
	G5d	Y10	100	06	320						100	10	520		42	21.840	0.616	13.453
	G6a	Y10	150	02	1885	120 ~ 320 AVG. 220	130			20		10		4390	16	70.240	0.616	43.268
	G6+G6b	Y10	100	02	1885	320	130			20		10	4590		26	119.340	0.616	73.513
	G7	Y10		07	1310	1706						10	3016		40	120.640	0.616	74.314
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		26	44.564	0.616	27.451
	G9+G9a	Y16	100	03	1550	150	130	335		32		16	4251		18	76.518	1.579	120.822
	G10	Y10		01	9507							10	9507		2	19.014	0.616	11.713
	G10a	Y10		01	9507							10	9507		1	9.507	0.616	5.856
	G11	R06		01	1885							6	1885		8	15.080	0.222	3.348
	G12	Y10		09	320	100						10	960		40	38.400	0.616	23.654
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		10	3.700	0.616	2.279
	G14	R06		08	150	40	320					6	3619		18	65.142	0.222	14.462
															TOTAL WEIGHT:			1252.870 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

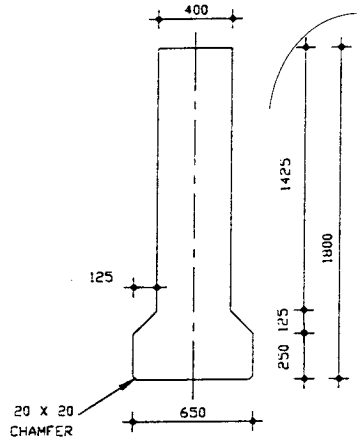
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 27.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-27-04
			DATE: JUNE 1996

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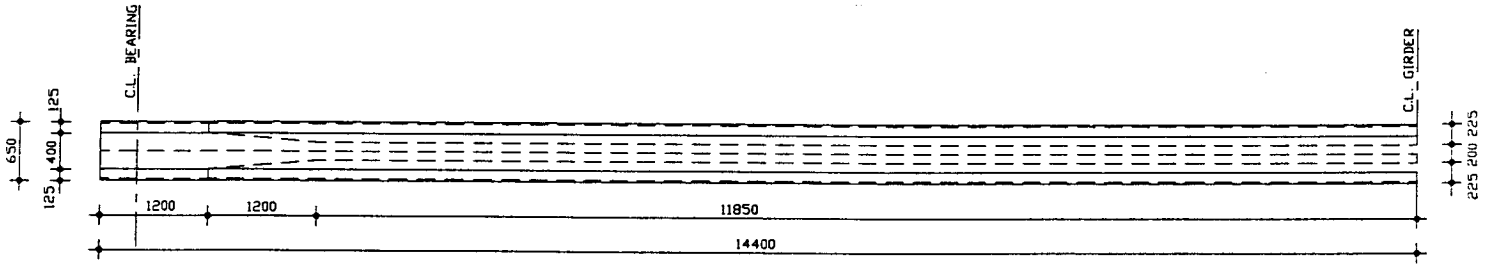
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



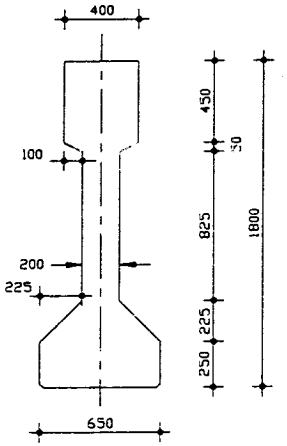
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



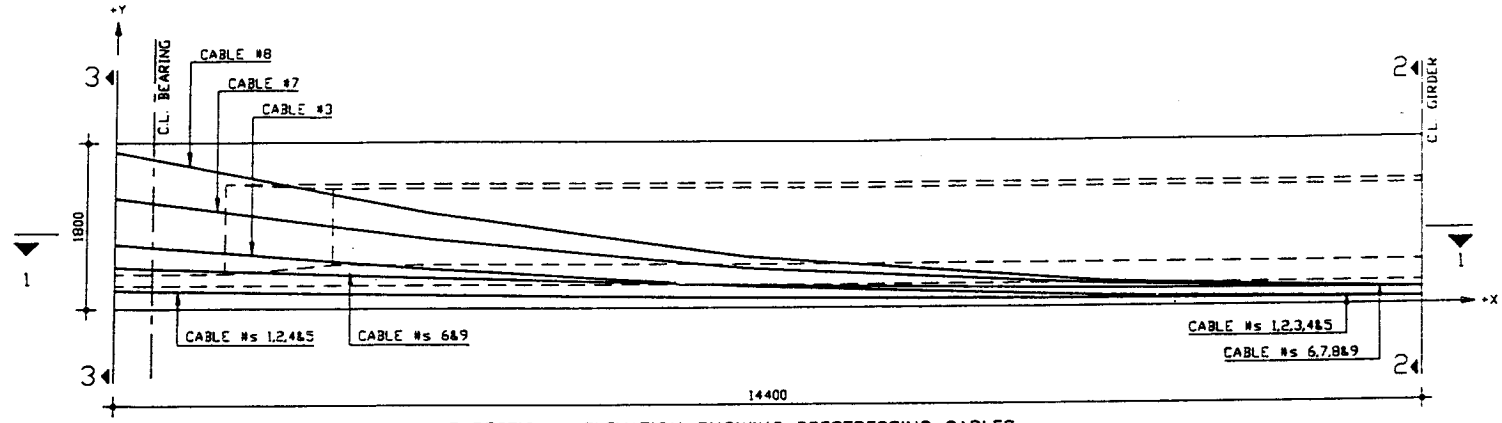
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 46.24 METRIC TON
2. CONCRETE VOLUME = 18.50 CUBIC METER

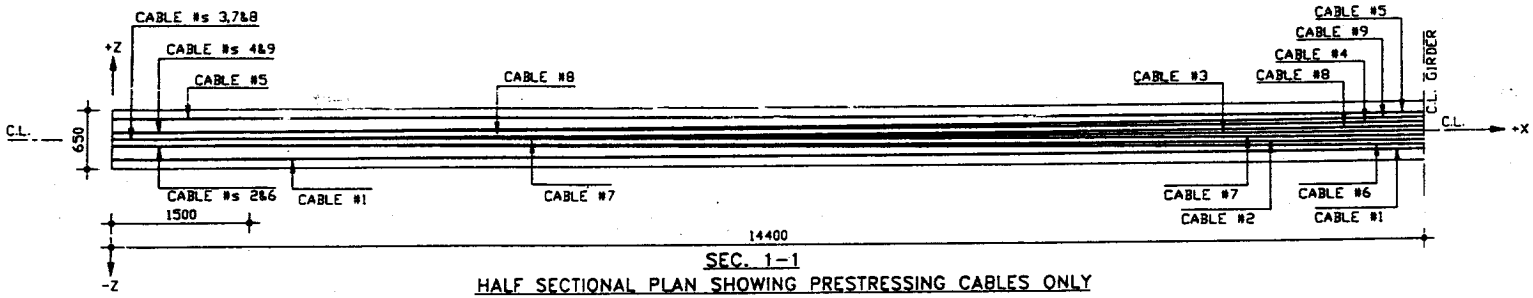
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 28.80 m CONCRETE OUTLINE DETAILS — DWG. NO. PC-28-01 SCALE AS SHOWN — DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

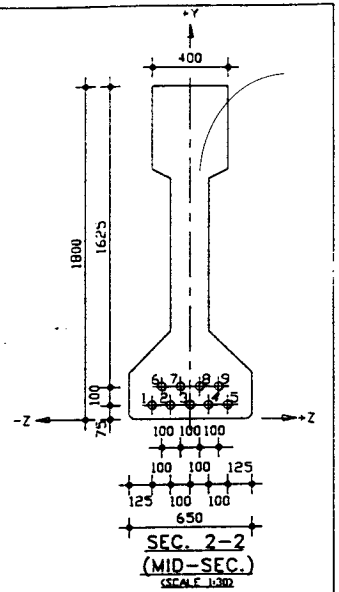
(SCALE 1:60)



SEC. 1-1

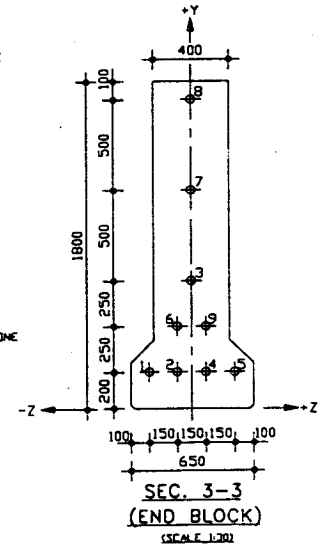
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:60)



SEC. 2-2
(MID-SEC.)

(SCALE 1:30)



SEC. 3-3
(END BLOCK)

(SCALE 1:30)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END (mm)
		X=0		X=L/8=3600		X=L/4=7200		X=3L/8=10800		X=L/2=14400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
8	12Ø7	12.29°	1700	0	1033	7	556	28	270	46	175	50	157.806
7	12Ø7	8.331°	1200	0	752	-7	431	-28	239	-46	175	-50	162.697
3	12Ø7	5.102°	700	0	427	0	231	0	114	0	75	0	164.905
9	12Ø7	2.25°	450	75	330	94	244	113	192	131	175	150	167.007
6	12Ø7	2.25°	450	-75	330	-94	244	-113	192	-131	175	-150	167.007
5	12Ø7	1.023°	200	225	145	219	106	213	83	206	75	200	167.957
4	12Ø7	1.023°	200	75	145	81	106	88	83	94	75	100	167.957
2	12Ø7	1.023°	200	-75	145	-81	106	-88	83	-94	75	-100	167.957
1	12Ø7	1.023°	200	-225	145	-219	106	-213	83	-206	75	-200	167.957

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,7&8 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6&9 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1,5,7&8
STAGE-2: CABLE NOS. 6&9

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 10 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 28.80 m

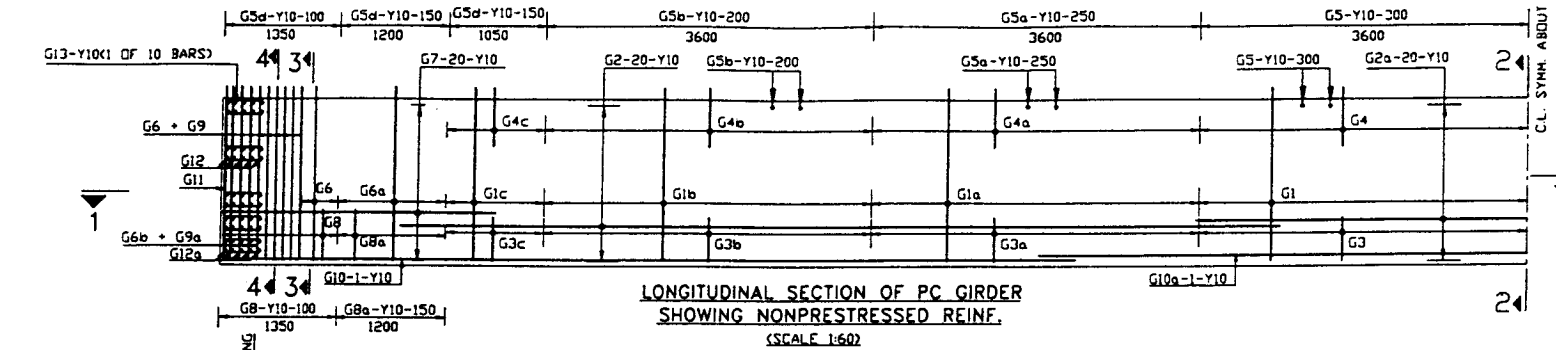
PRESTRESSING CABLE DETAILS

DWG. NO. PC-28-02

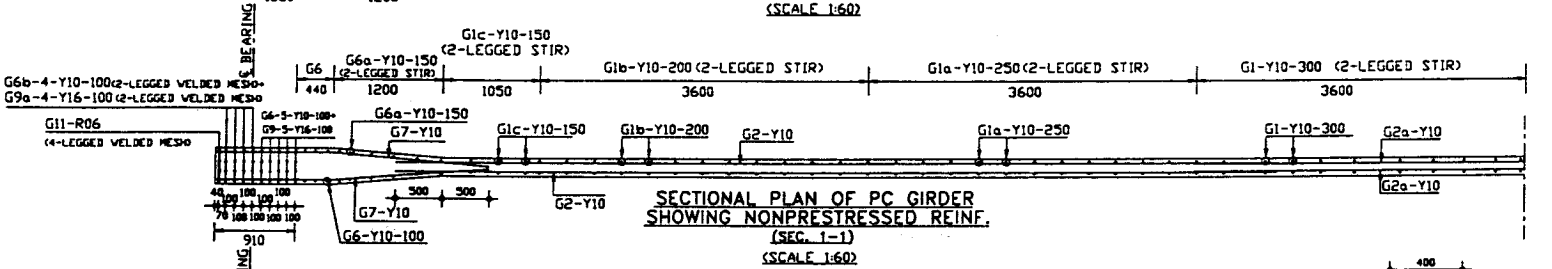
SCALE : AS SHOWN

DATE : JUNE 1996

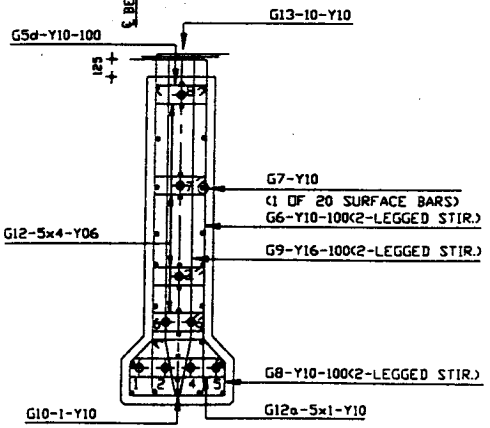
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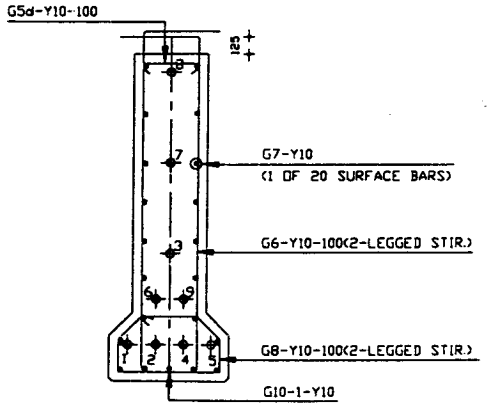
LONGITUDINAL SECTION OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



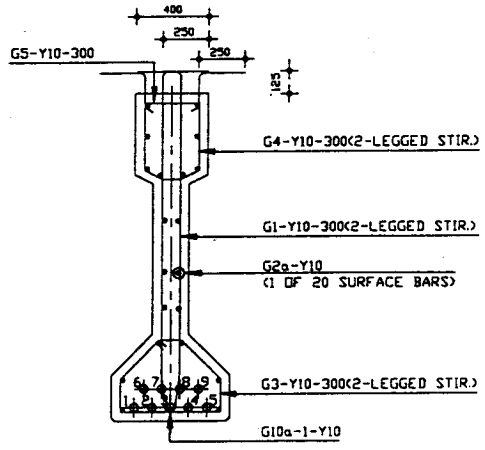
SECTIONAL PLAN OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:30)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 28.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO. PC-28-03 SCALE : AS SHOWN — DATE : JUNE 1996

Web Copy

BAR BENDING SCHEDULE

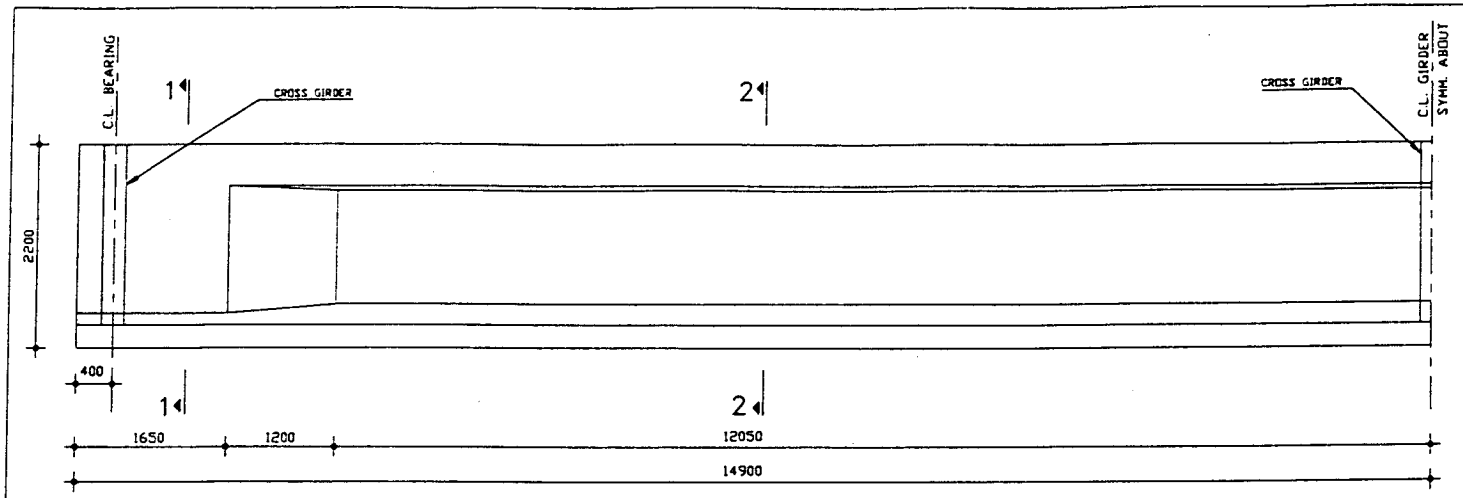
MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1450	120	130	435		20		10	4218		25	105.450	0.616	64.957
	G1a	Y10	250	03	1450	120	130	435		20		10	4218		28	118.104	0.616	72.752
	G1b	Y10	200	03	1450	120	130	435		20		10	4218		36	151.848	0.616	93.538
	G1c	Y10	150	03	1450	120	130	435		20		10	4218		14	59.052	0.616	36.376
	G2	Y10		01	8500							10	8500		40	340.000	0.616	209.440
	G2a	Y10		01	8500							10	8500		20	170.000	0.616	104.720
	G3	Y10	300	04	210	570	120	225		20		10	1796		25	44.900	0.616	27.658
	G3a	Y10	250	04	210	570	120	225		20		10	1796		28	50.288	0.616	30.977
	G3b	Y10	200	04	210	570	120	225		20		10	1796		36	64.656	0.616	39.828
	G3c	Y10	150	04	210	570	120	225		20		10	1796		14	25.144	0.616	15.489
	G4	Y10	300	05	575	120	250	100	50	20		10	1924		25	48.100	0.616	29.630
	G4a	Y10	250	05	575	120	250	100	50	20		10	1924		28	53.872	0.616	33.185
	G4b	Y10	200	05	575	120	250	100	50	20		10	1924		36	69.264	0.616	42.667
	G4c	Y10	150	05	575	120	250	100	50	20		10	1924		14	26.936	0.616	16.593
	G5	Y10	300	06	320						100	10	520		25	13.000	0.616	8.008
	G5a	Y10	250	06	320						100	10	520		28	14.560	0.616	8.969
	G5b	Y10	200	06	320						100	10	520		36	18.720	0.616	11.532
	G5c	Y10	150	06	320						100	10	520		14	7.280	0.616	4.484
	G5d	Y10	100	06	320						100	10	520		42	21.840	0.616	13.453
	G6a	Y10	150	02	1885	120 ~ 320 AVG. 220	130			20		10		4390	16	70.240	0.616	43.268
	G6+G6b	Y10	100	02	1885	320	130			20		10	4590		26	119.340	0.616	73.513
	G7	Y10		07	1310	1706						10	3016		40	120.640	0.616	74.314
	G8a	Y10	150	04	210	570	120 ~ 320 AVG. 220	225 ~ 125 AVG. 175		20		10		1755	16	28.080	0.616	17.297
	G8	Y10	100	04	210	570	320	125		20		10	1714		26	44.564	0.616	27.451
	G9+G9a	Y16	100	03	1550	150	130	335		32		16	4251		18	76.518	1.579	120.822
	G10	Y10		01	9840							10	9840		2	19.680	0.616	12.123
	G10a	Y10		01	9840							10	9840		1	9.840	0.616	6.061
	G11	R06		01	1885							6	1885		8	15.080	0.222	3.348
	G12	Y10		09	320	100						10	960		40	38.400	0.616	23.654
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		10	3.700	0.616	2.279
	G14	R06		08	150	40	320					6	3619		18	65.142	0.222	14.462
															TOTAL WEIGHT:			1291.844 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

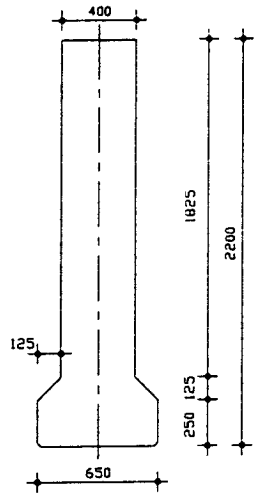
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 28.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-28-04
			DATE: JUNE 1996

Web Copy



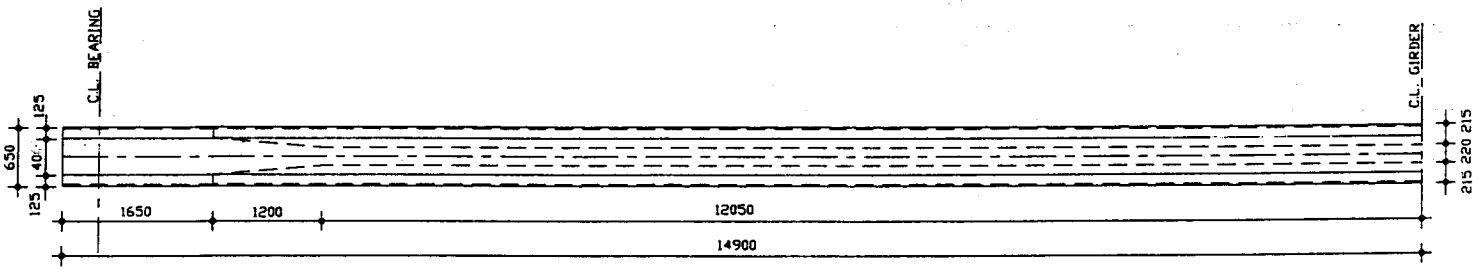
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



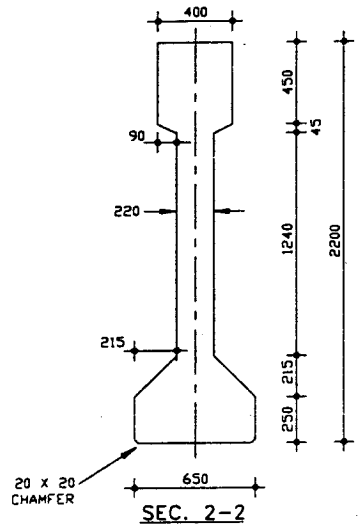
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



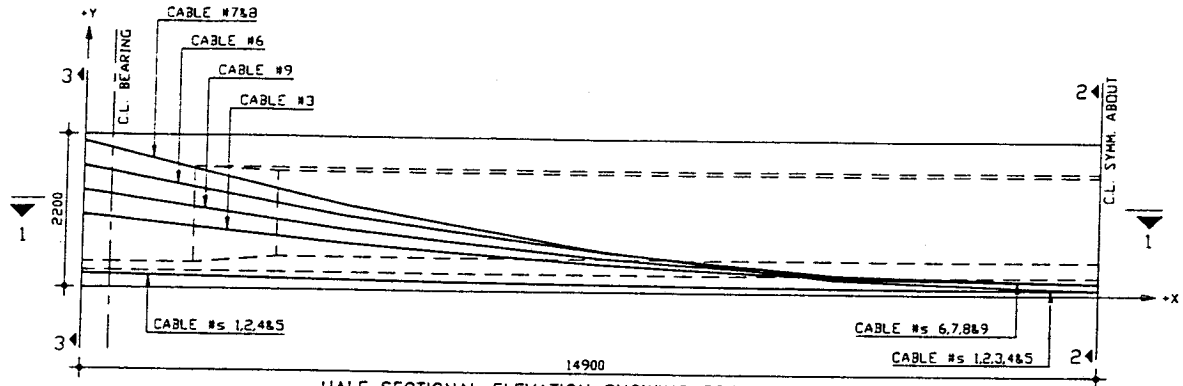
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 56.47 METRIC TON
2. CONCRETE VOLUME = 22.60 CUBIC METER

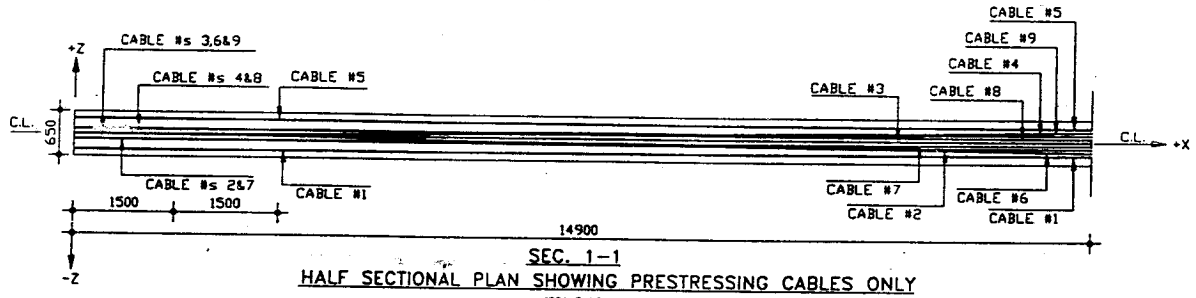
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 29.80 m CONCRETE OUTLINE DETAILS — DWG. NO. PC-29-01 SCALE : AS SHOWN — DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

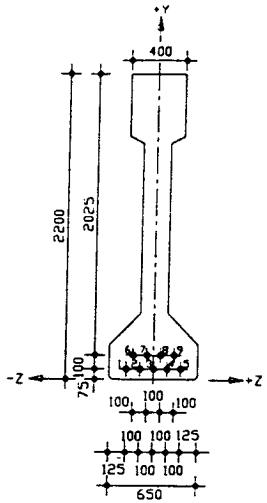
(SCALE 1:80)



SEC. 1-1

HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

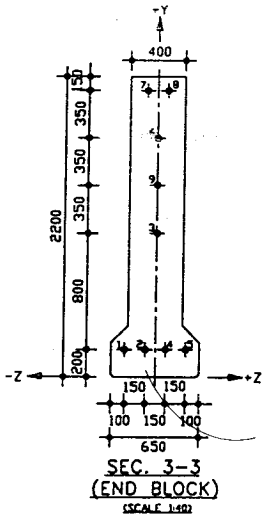
(SCALE 1:80)



SEC. 2-2

(MID-SEC.)

(SCALE 1:40)



SEC. 3-3

(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END
		X=0		X=L/8=3725		X=L/4=7450		X=3L/8=11175		X=L/2=14900		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
8	12Ø7	14.50°	2050	75	1230	60	644	58	292	56	175	50	166.745
7	12Ø7	14.50°	2050	-75	1230	-60	644	-58	292	-56	175	-50	166.745
6	12Ø7	11.879°	1700	0	1033	-20	556	-60	270	-141	175	-150	168.347
9	12Ø7	9.206°	1350	0	836	20	469	60	248	141	175	150	170.088
3	12Ø7	7.27°	1000	0	595	0	306	0	133	0	75	0	171.419
5	12Ø7	0.988°	200	-225	145	219	106	213	83	206	75	200	176.203
4	12Ø7	0.988°	200	75	145	81	106	88	83	94	75	100	176.203
2	12Ø7	0.988°	200	-75	145	-81	106	-88	83	-94	75	-100	176.203
1	12Ø7	0.988°	200	-225	145	-219	.106	-213	83	-206	75	-200	176.203

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,7,8&9 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. NIL SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

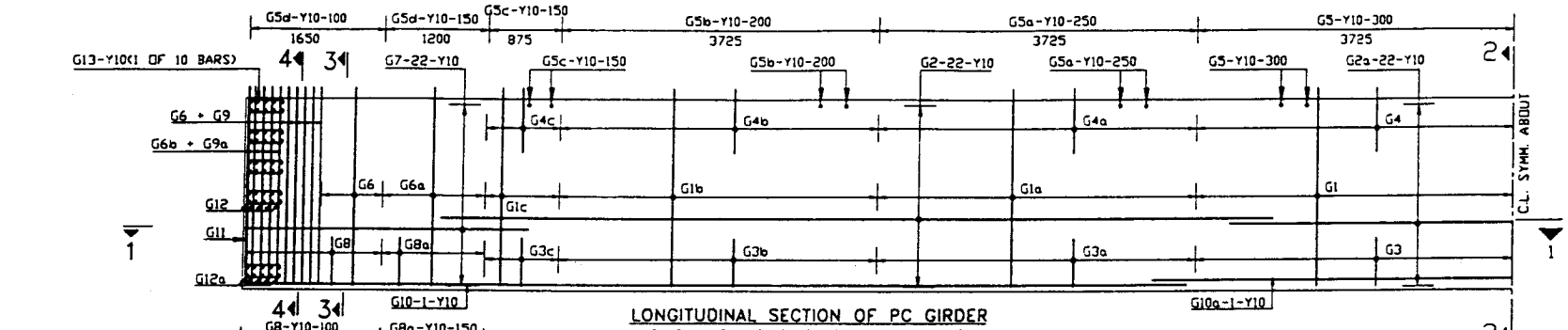
04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1,5,7,8,6&9
STAGE-2: CABLE NOS. NIL

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 6 mm AT MID-SPAN.

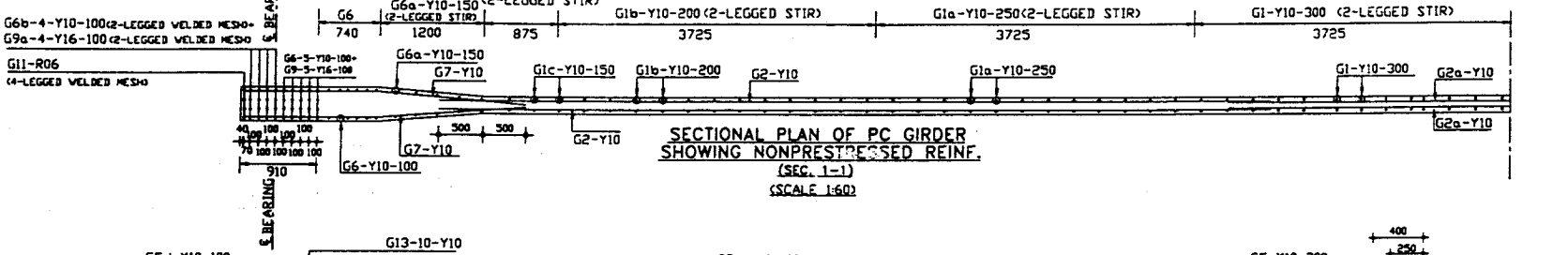
C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-HIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 29.80 m PRESTRESSING CABLE DETAILS SCALE : AS SHOWN DWG. NO. : PC-29-02 DATE : JUNE 1996

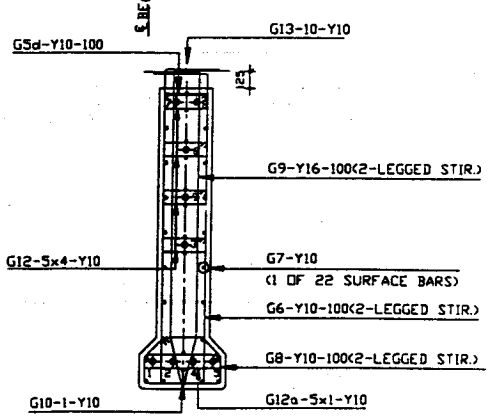
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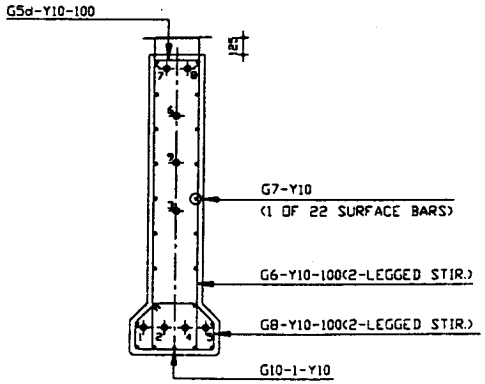
LONGITUDINAL SECTION OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



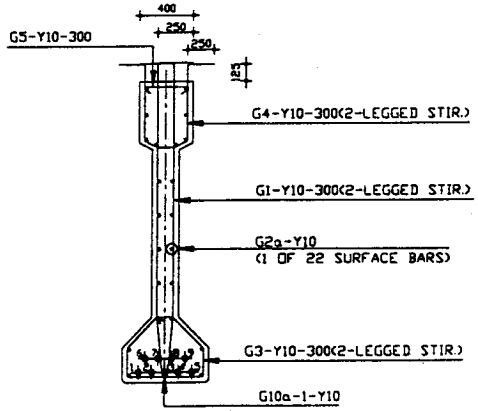
SECTIONAL PLAN OF PC GIRDER
SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.3-3 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.2-2 SHOWING
NONPRESTRESSED REINF.
(SCALE 1:40)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 29.80 m NONPRESTRESSED REINF. DETAILS DWG. NO. PC-29-03 SCALE : AS SHOWN DATE : JUNE 1996

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BAR BENDING SCHEDULE

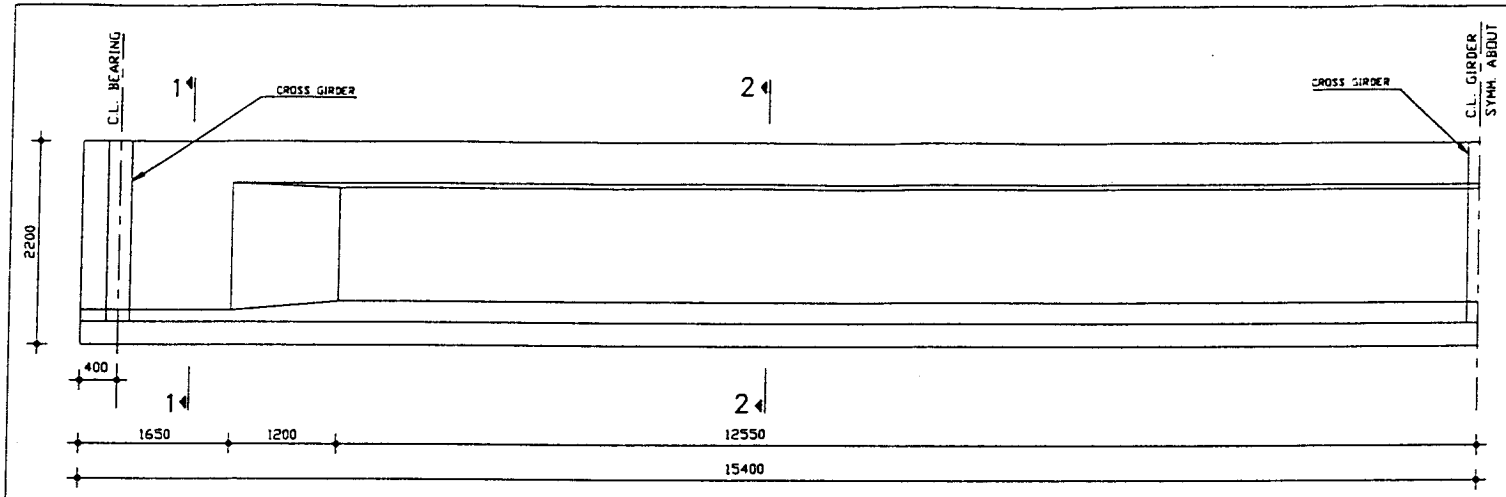
MEMBER	BAR MARK	BAR TYPE & DIA	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1860	140	130	425		20		10	5061		26	131.586	0.616	81.057
	G1a	Y10	250	03	1860	140	130	425		20		10	5061		30	151.830	0.616	93.527
	G1b	Y10	200	03	1860	140	130	425		20		10	5061		38	192.318	0.616	118.468
	G1c	Y10	150	03	1860	140	130	425		20		10	5061		12	60.732	0.616	37.411
	G2	Y10		01	8633							10	8633		44	379.852	0.616	233.989
	G2a	Y10		01	8633							10	8633		22	189.926	0.616	116.994
	G3	Y10	300	04	210	570	140	215		20		10	1788		26	46.488	0.616	28.637
	G3a	Y10	250	04	210	570	140	215		20		10	1788		30	53.640	0.616	33.042
	G3b	Y10	200	04	210	570	140	215		20		10	1788		38	67.944	0.616	41.854
	G3c	Y10	150	04	210	570	140	215		20		10	1788		12	21.456	0.616	13.217
	G4	Y10	300	05	575	140	250	90	45	20		10	1921		26	49.946	0.616	30.767
	G4a	Y10	250	05	575	140	250	90	45	20		10	1921		30	57.630	0.616	35.500
	G4b	Y10	200	05	575	140	250	90	45	20		10	1921		38	72.998	0.616	44.967
	G4c	Y10	150	05	575	140	250	90	45	20		10	1921		12	23.052	0.616	14.200
	G5	Y10	300	06	320						100	10	520		26	13.520	0.616	8.328
	G5a	Y10	250	06	320						100	10	520		30	15.600	0.616	9.610
	G5b	Y10	200	06	320						100	10	520		38	19.760	0.616	12.172
	G5c	Y10	150	06	320						100	10	520		12	6.240	0.616	3.844
	G5d	Y10	100	06	320						100	10	520		48	24.960	0.616	15.375
	G6a	Y10	150	02	2285	140 ~ 320 AVG. 230	130			20		10		5210	16	83.360	0.616	51.350
	G6+G6b	Y10	100	02	2285	320	130			20		10	5390		32	172.480	0.616	106.248
	G7	Y10		07	1610	1705						10	3315		44	145.860	0.616	89.850
	G8a	Y10	150	04	210	570	140 ~ 320 AVG. 230	215 ~ 125 AVG. 170		20		10		1751	16	28.016	0.616	17.258
	G8	Y10	100	04	210	570	320	125		20		10	1714		32	54.848	0.616	33.786
	G9+G9a	Y16	100	03	1950	150	130	335		32		16	5051		18	90.918	1.579	143.560
	G10	Y10		01	10173							10	10173		2	20.346	0.616	12.533
	G10a	Y10		01	10173							10	10173		1	10.173	0.616	6.267
	G11	R06		01	2285							6	2285		8	18.280	0.222	4.058
	G12	Y10		09	320	100						10	960		40	38.400	0.616	23.654
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		10	3.700	0.616	2.279
	G14	R06		08	150	40	320					6	3619		18	65.142	0.222	14.462
															TOTAL WEIGHT:			1487.256 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

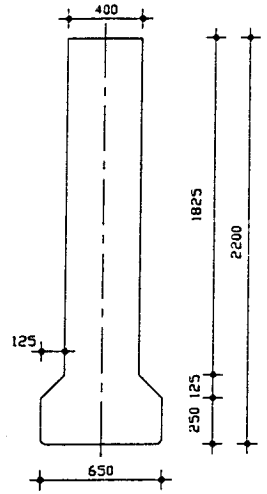
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 29.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-29-04 DATE: JUNE 1996

Web Copy



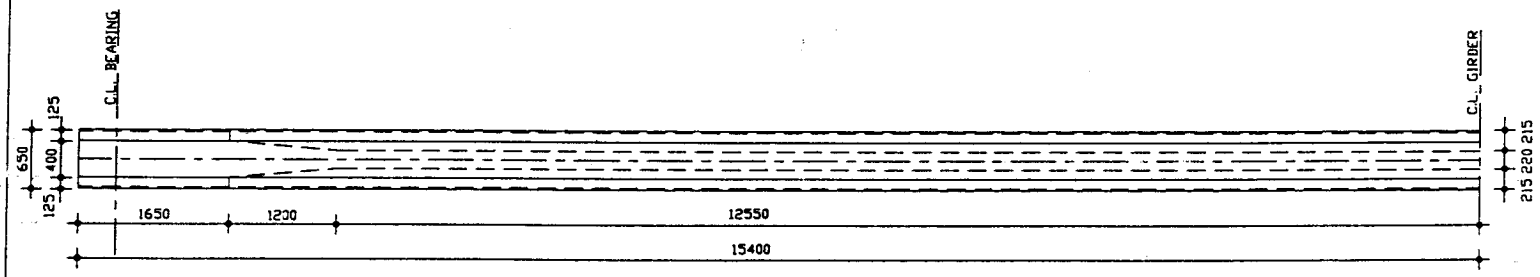
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



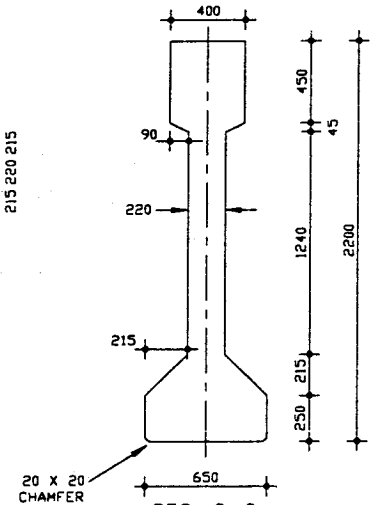
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



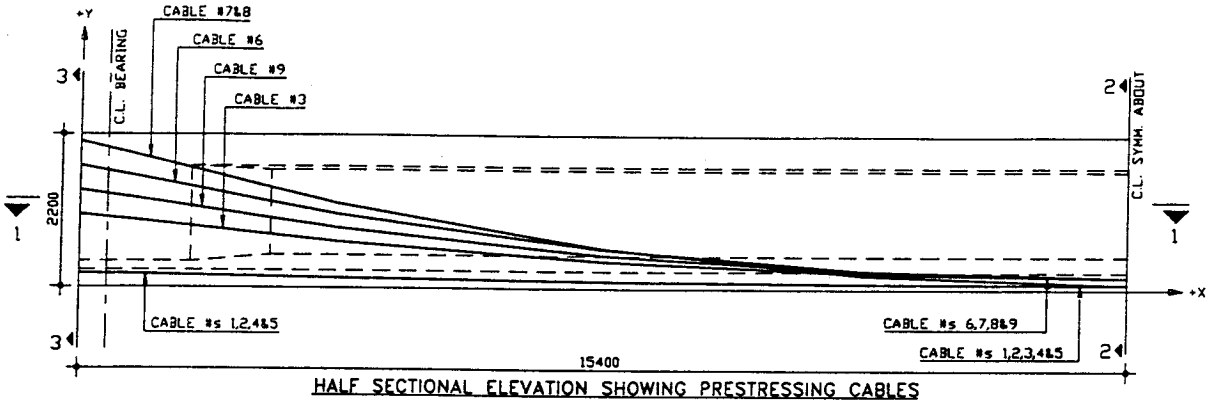
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 58.28 METRIC TON
2. CONCRETE VOLUME = 23.32 CUBIC METER

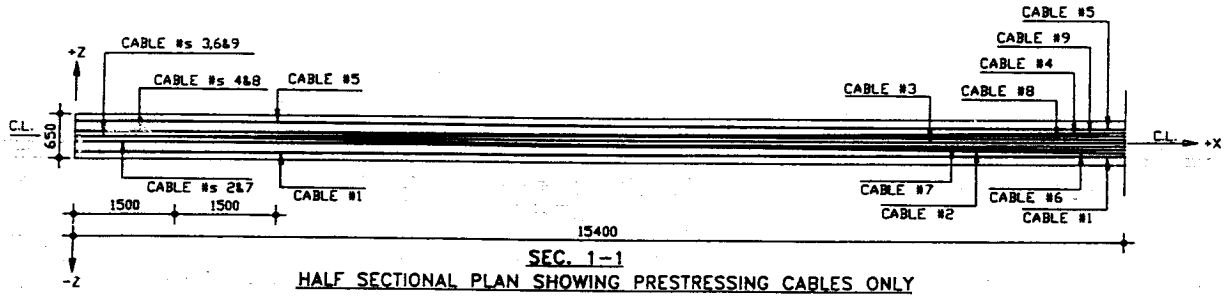
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 30.80 m CONCRETE OUTLINE DETAILS — DWG. NO. PC-30-01 SCALE AS SHOWN — DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

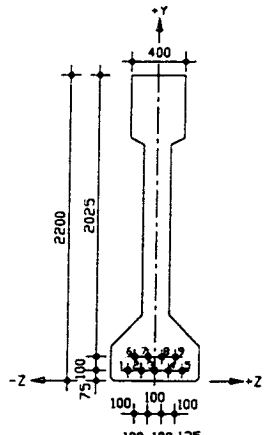
(SCALE 1:40)



SEC. 1-1

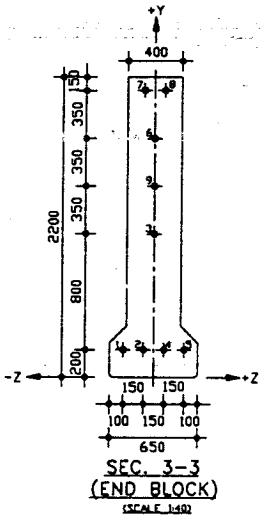
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:40)



SEC. 2-2
(MID-SEC.)

(SCALE 1:40)



SEC. 3-3
(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)											EXTENSION AT ONE END
		X=0		X=L/8=3850		X=L/4=7700		X=3L/8=11550		X=L/2=15400			
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)										
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
8	12Ø7	14.036°	2050	75	1230	60	644	60	292	56	175	50	172.088
7	12Ø7	14.036°	2050	-75	1230	-60	644	-60	292	-56	175	-50	172.088
6	12Ø7	11.493°	1700	0	1033	-20	556	-60	270	-141	175	-150	173.695
9	12Ø7	8.904°	1350	0	836	20	469	60	248	141	175	150	175.437
3	12Ø7	7.031°	1000	0	595	0	306	0	133	0	75	0	176.766
5	12Ø7	0.955°	200	-225	145	219	106	213	83	206	75	200	181.524
4	12Ø7	0.955°	200	75	145	81	106	88	83	94	75	100	181.524
2	12Ø7	0.955°	200	-75	145	-81	106	-88	83	-94	75	-100	181.524
1	12Ø7	0.955°	200	-225	145	-219	106	-213	83	-206	75	-200	181.524

NOTES:

A. **STAGES AND SEQUENCE OF PRESTRESSING**

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,7,8&9 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. NIL SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

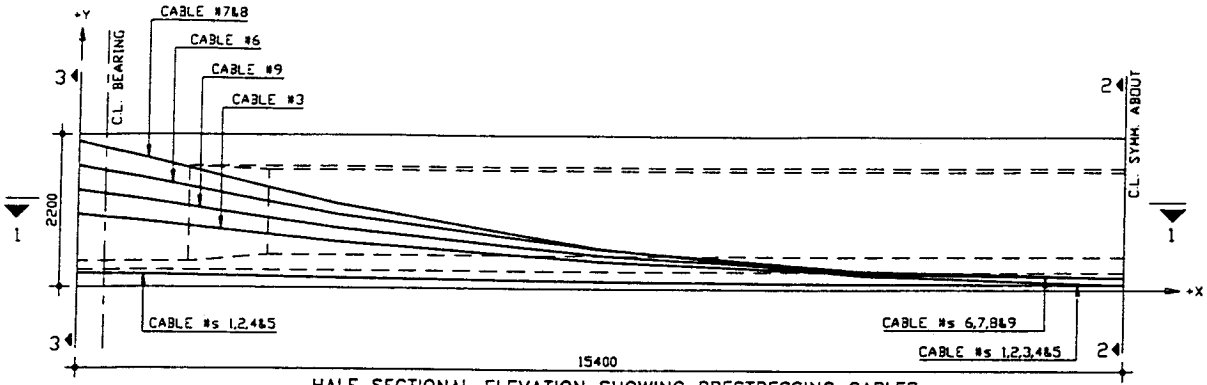
04. **SEQUENCE OF STRESSING:**
STAGE-1: CABLE NOS. 3,2,4,1,5,7,8,6&9
STAGE-2: CABLE NOS. NIL

B. **PRECAMBER**
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 10 mm AT MID-SPAN.

C. **ANCHORAGE DETAILS**
REFER TO DWG. NO. PC-MIS-00

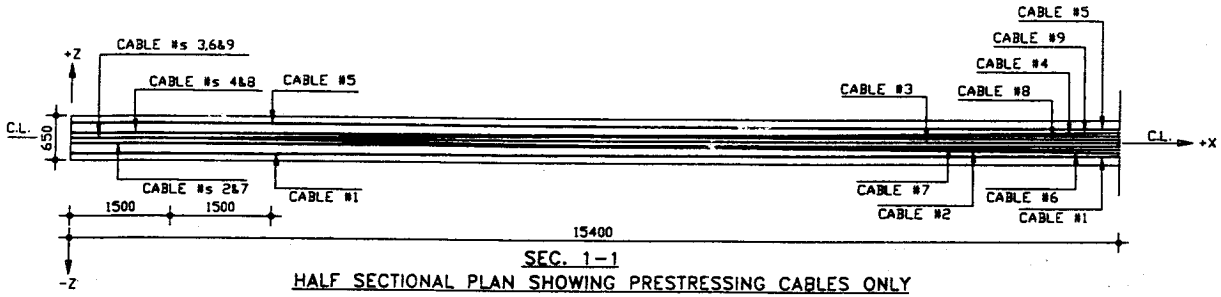
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA . ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 30.80 m PRESTRESSING CABLE DETAILS DWG. NO. : PC-30-02 SCALE AS SHOWN DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

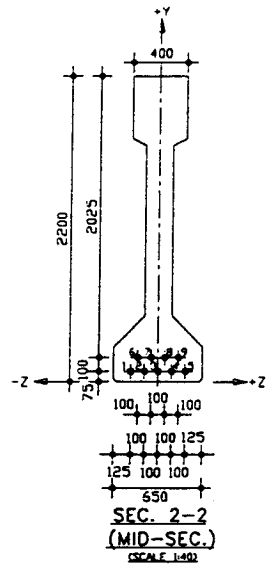
(SCALE 1:80)



SEC. 1-1

HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

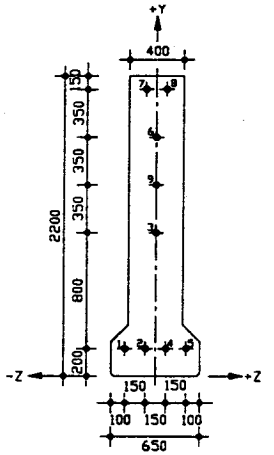
(SCALE 1:80)



SEC. 2-2

(MID-SEC.)

(SCALE 1:40)



SEC. 3-3

(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT ONE END
		X=0		X=L/8=3850		X=L/4=7700		X=3L/8=11550		X=L/2=15400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	(mm)
8	12Ø7	14.036°	2050	75	1230	60	644	60	292	56	175	50	172.088
7	12Ø7	14.036°	2050	-75	1230	-60	644	-60	292	-56	175	-50	172.088
6	12Ø7	11.493°	1700	0	1033	-20	556	-60	270	-141	175	-150	173.695
9	12Ø7	8.904°	1350	0	836	20	469	60	248	141	175	150	175.437
3	12Ø7	7.031°	1000	0	595	0	306	0	133	0	75	0	176.766
5	12Ø7	0.955°	200	-225	145	219	106	213	83	206	75	200	181.524
4	12Ø7	0.955°	200	75	145	81	106	88	83	94	75	100	181.524
2	12Ø7	0.955°	200	-75	145	-81	106	-88	83	-94	75	-100	181.524
1	12Ø7	0.955°	200	-225	145	-219	106	-213	83	-206	75	-200	181.524

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM ONE END. STRESSING END SHOULD BE ALTERNATED.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,7,8&9 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. NIL SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1,5,7,8,6&9
STAGE-2: CABLE NOS. NIL

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 10 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 30.80 m

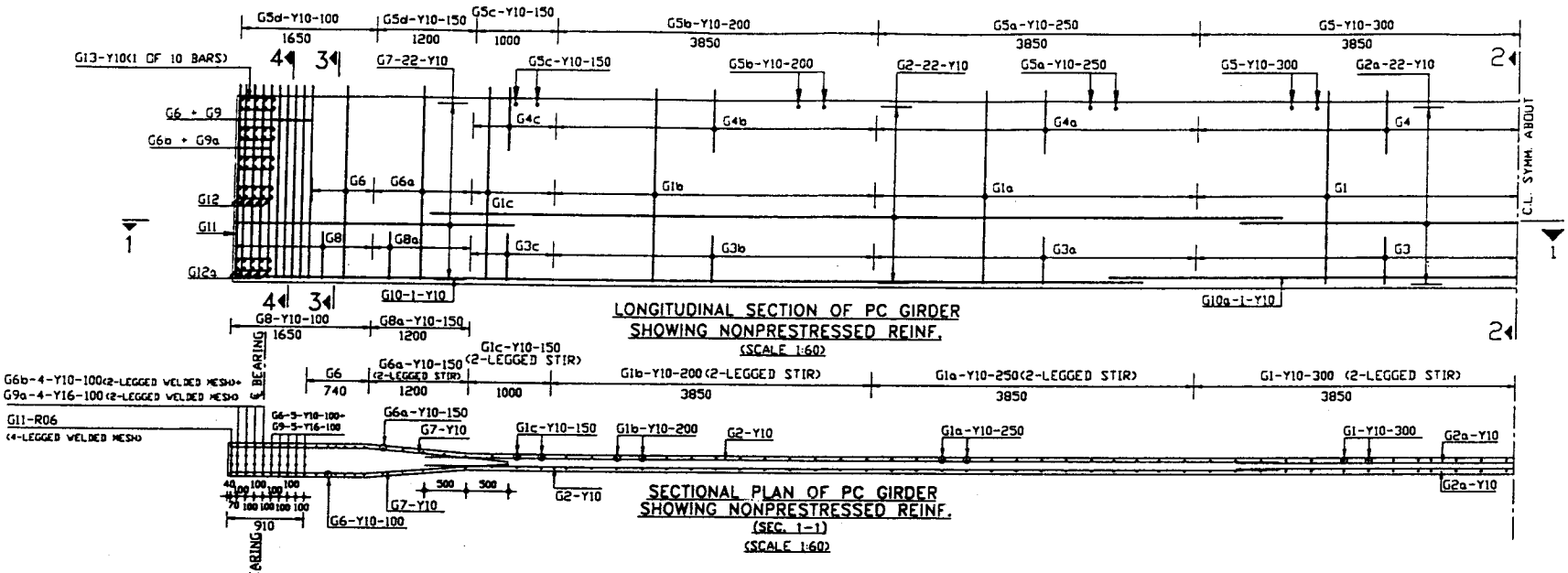
PRESTRESSING CABLE DETAILS

DWG. NO. PC-30-02

SCALE AS SHOWN

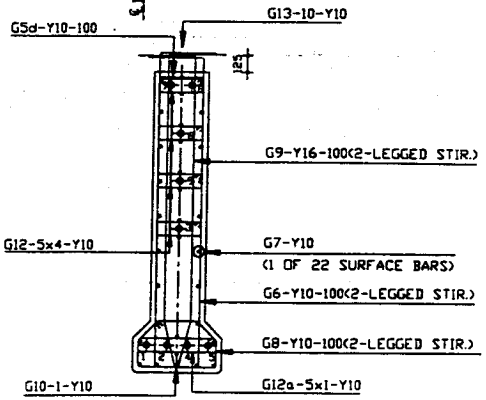
DATE JUNE 1996

Web Copy

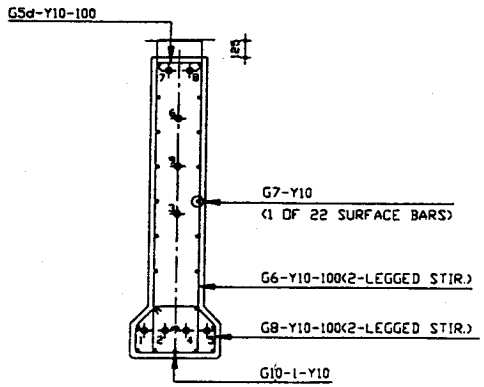


LONGITUDINAL SECTION OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)

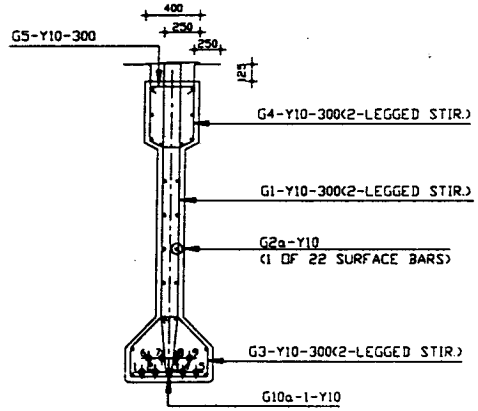
SECTIONAL PLAN OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.3-3 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.2-2 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 30.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO. PC-30-03 SCALE AS SHOWN — DATE JUNE 1996

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BAR BENDING SCHEDULE

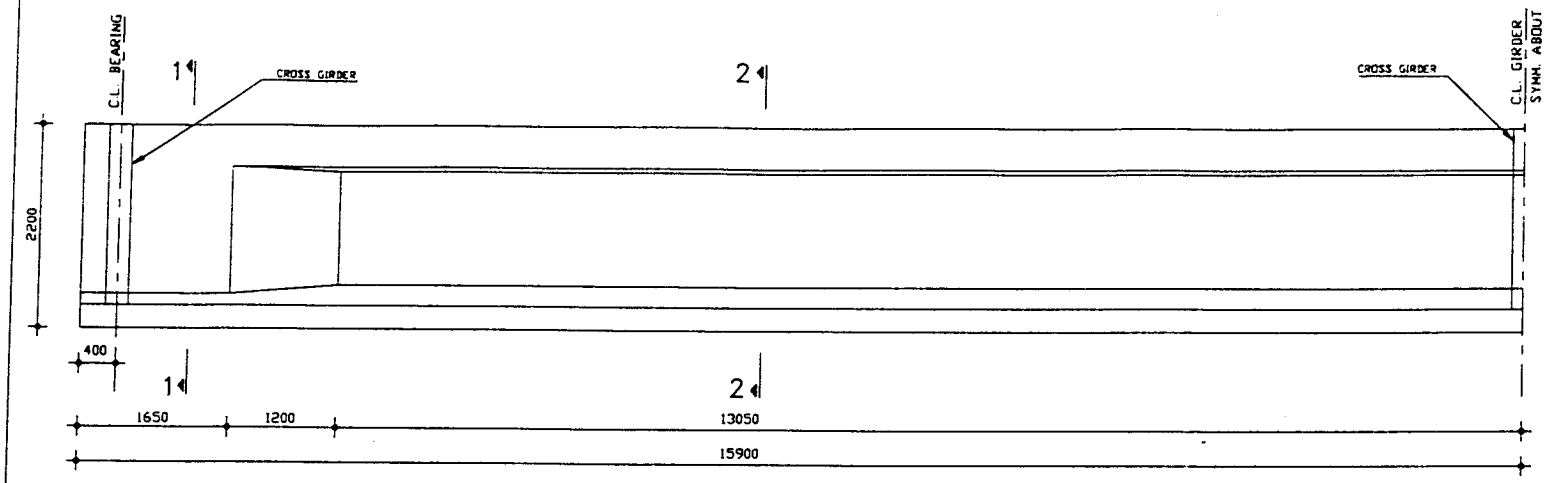
MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1860	140	130	425		20		10	5061		27	136.647	0.616	84.175
	G1a	Y10	250	03	1860	140	130	425		20		10	5061		30	151.830	0.616	93.527
	G1b	Y10	200	03	1860	140	130	425		20		10	5061		38	192.318	0.616	118.468
	G1c	Y10	150	03	1860	140	130	425		20		10	5061		14	70.854	0.616	43.646
	G2	Y10		01	8967							10	8967		44	394.548	0.616	243.042
	G2a	Y10		01	8967							10	8967		22	197.274	0.616	121.521
	G3	Y10	300	04	210	570	140	215		20		10	1788		27	48.276	0.616	29.738
	G3a	Y10	250	04	210	570	140	215		20		10	1788		30	53.640	0.616	33.042
	G3b	Y10	200	04	210	570	140	215		20		10	1788		38	67.944	0.616	41.854
	G3c	Y10	150	04	210	570	140	215		20		10	1788		14	25.032	0.616	15.420
	G4	Y10	300	05	575	140	250	90	45	20		10	1921		27	51.867	0.616	31.950
	G4a	Y10	250	05	575	140	250	90	45	20		10	1921		30	57.630	0.616	35.500
	G4b	Y10	200	05	575	140	250	90	45	20		10	1921		38	72.998	0.616	44.967
	G4c	Y10	150	05	575	140	250	90	45	20		10	1921		14	26.894	0.616	16.567
	G5	Y10	300	06	320						100	10	520		27	14.040	0.616	8.649
	G5a	Y10	250	06	320						100	10	520		30	15.600	0.616	9.610
	G5b	Y10	200	06	320						100	10	520		38	19.760	0.616	12.172
	G5c	Y10	150	06	320						100	10	520		14	7.280	0.616	4.484
	G5d	Y10	100	06	320						100	10	520		48	24.960	0.616	15.375
	G6a	Y10	150	02	2285	140 ~ 320 AVG. 230	130			20		10		5210	16	83.360	0.616	51.350
	G6+G6b	Y10	100	02	2285	320	130			20		10	5390		32	172.480	0.616	106.248
	G7	Y10		07	1610	1705						10	3315		44	145.860	0.616	89.850
	G8a	Y10	150	04	210	570	140 ~ 320 AVG. 230	215 ~ 125 AVG. 170		20		10		1751	16	28.016	0.616	17.258
	G8	Y10	100	04	210	570	320	125		20		10	1714		32	54.848	0.616	33.786
	G9+G9a	Y16	100	03	1950	150	130	335		32		16	5051		18	90.918	1.579	143.560
	G10	Y10		01	10507							10	10507		2	21.014	0.616	12.945
	G10a	Y10		01	10507							10	10507		1	10.507	0.616	6.472
	G11	R06		01	2285							6	2285		8	18.280	0.222	4.058
	G12	Y10		09	320	100						10	960		40	38.400	0.616	23.654
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		10	3.700	0.616	2.279
	G14	R06		08	150	40	320					6	3619		18	65.142	0.222	14.462
															TOTAL WEIGHT:			1518.620 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

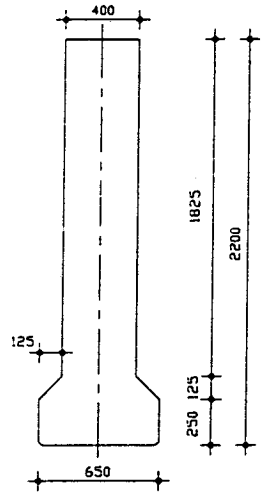
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 30.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-30-04
			DATE: JUNE 1996

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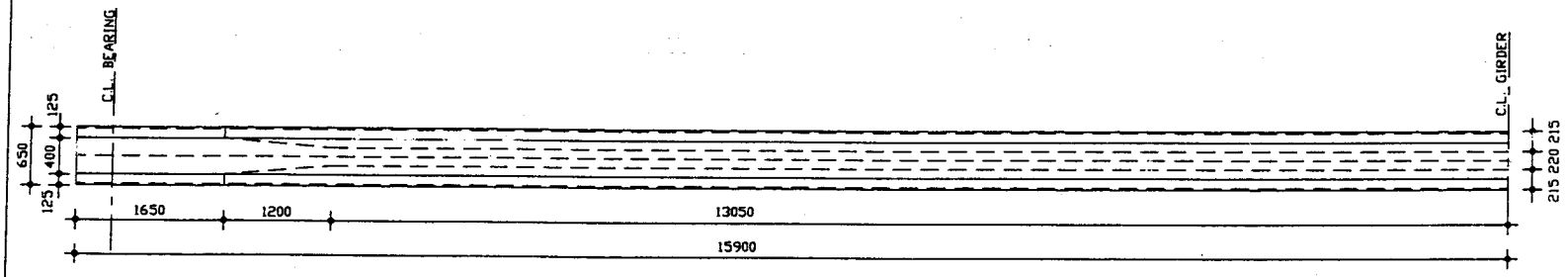
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



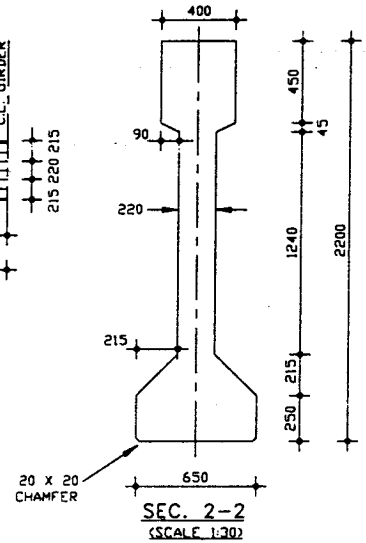
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



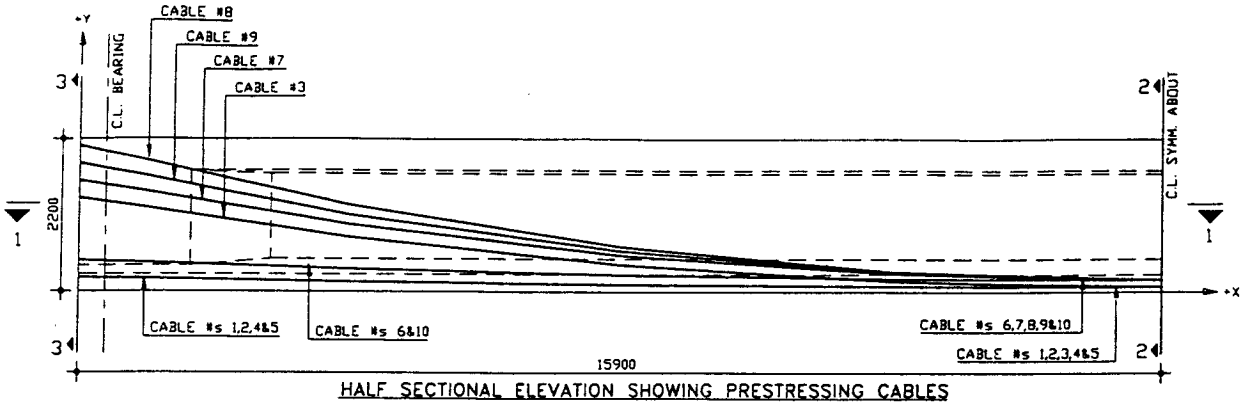
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 60.08 METRIC TON
2. CONCRETE VOLUME = 24.04 CUBIC METER

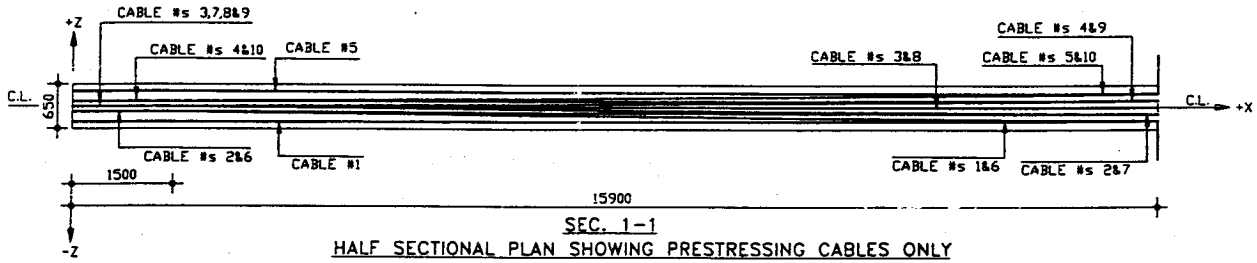
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 31.80 m CONCRETE OUTLINE DETAILS DWG. NO. PC-31-01 SCALE AS SHOWN DATE JUNE 1996

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HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

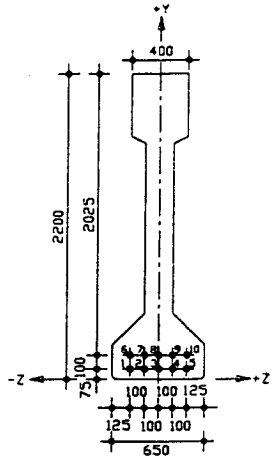
(SCALE 1:80)



SEC. 1–1

HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

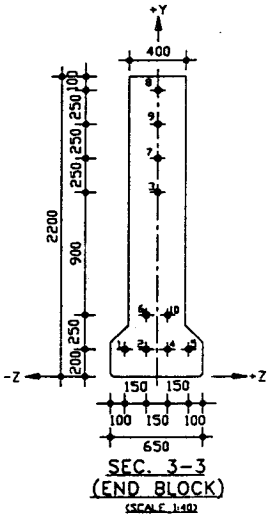
(SCALE 1:80)



SEC. 2–2

(MID–SEC.)

(SCALE 1:40)



SEC. 3–3

(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION FROM BOTH ENDS. (mm)
		X=0		X=L/8=3975		X=L/4=7950		X=3L/8=11925		X=L/2=15900		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z
8	12Ø7	13.949°	2100	0	1258	0	656	0	295	0	175	0	97.23
9	12Ø7	12.196°	1850	0	1117	14	594	60	280	97	175	100	94.024
7	12Ø7	10.419°	1600	0	977	-14	531	-60	264	-97	175	-100	96.934
3	12Ø7	9.342°	1350	0	792	0	394	0	155	0	75	0	96.905
10	12Ø7	2.032°	450	75	330	106	244	138	192	169	175	200	96.516
6	12Ø7	2.032°	450	-75	330	-106	244	-138	192	-169	175	-200	97.516
5	12Ø7	0.924°	200	225	145	219	106	213	83	206	75	200	97.737
4	12Ø7	0.924°	200	75	145	81	106	88	83	94	75	100	97.737
2	12Ø7	0.924°	200	-75	145	-81	106	-88	83	-94	75	-100	97.737
1	12Ø7	0.924°	200	-225	145	-219	106	-213	83	206	75	-200	97.737

NOTES:

A. **STAGES AND SEQUENCE OF PRESTRESSING**

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,7,8&9 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6&10 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. **SEQUENCE OF STRESSING:**
STAGE-1: CABLE NOS. 3,2,4,1,5,8,7&9
STAGE-2: CABLE NOS. 6&10

B. **PRECAMBER**
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 8 mm AT MID-SPAN.

C. **ANCHORAGE DETAILS**
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

PRESTRESSED CONCRETE GIRDER

LENGTH : 31.80 m

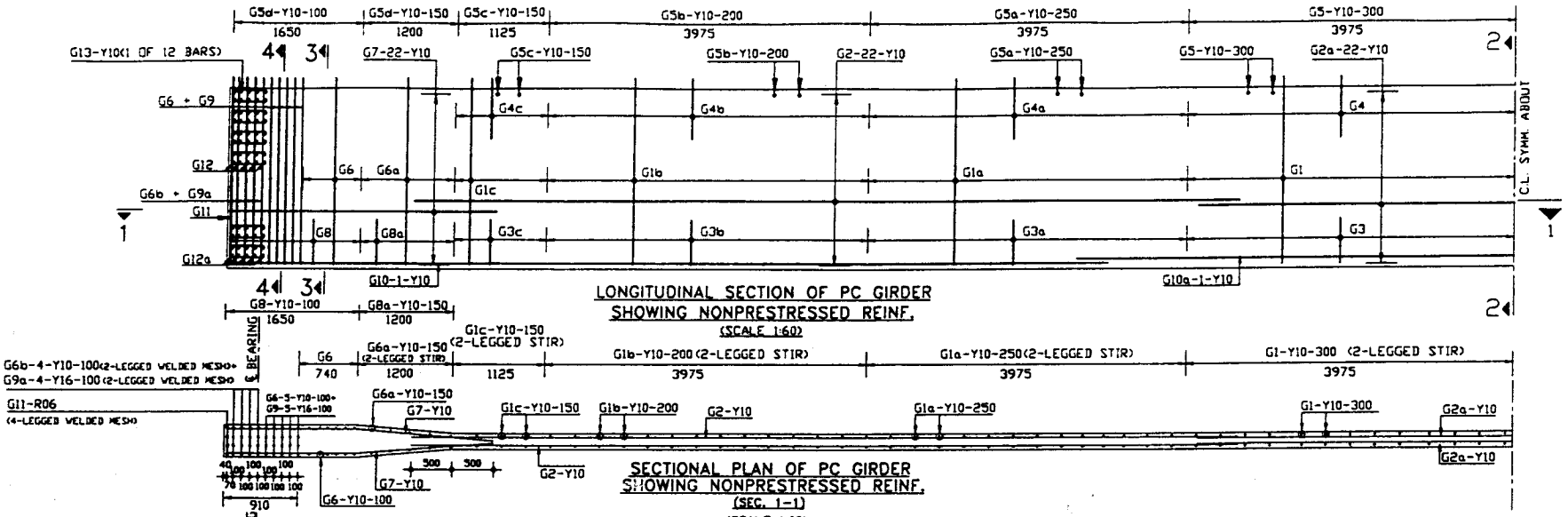
PRESTRESSING CABLE DETAILS

DWG. NO. : PC-31-02

SCALE : AS SHOWN

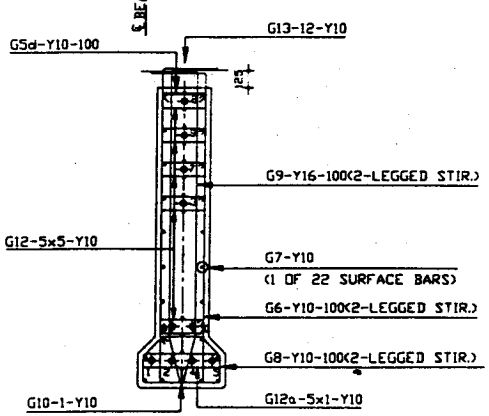
DATE : JUNE 1996

Web Copy

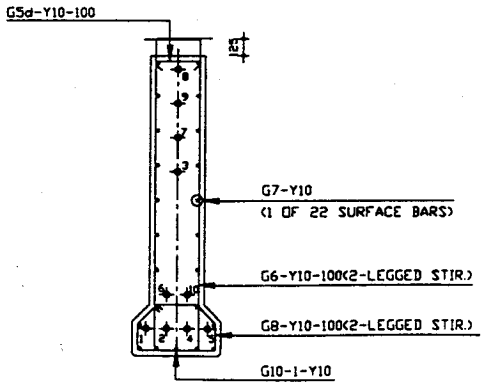


LONGITUDINAL SECTION OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)

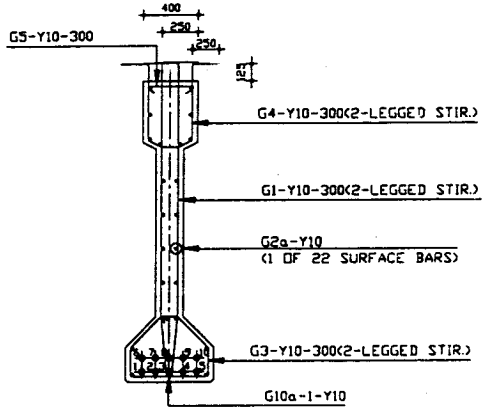
SECTIONAL PLAN OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.3-3 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.2-2 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 31.80 m NONPRESTRESSED REINF. DETAILS DWG. NO. PC-31-03 SCALE AS SHOWN DATE JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS (mm)								CUT LENGTH	AVG. CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	UNIT WT. OF BARS	TOTAL WEIGHT
		(mm)	(mm)		A	B	C	D	E	r	h	d	(mm)	(mm)		(m)	(Kg/m)	(Kg)
PC GIRDER	G1	Y10	300	03	1860	140	130	425		20		10	5061		28	141.708	0.616	87.292
	G1a	Y10	250	03	1860	140	130	425		20		10	5061		32	161.952	0.616	99.762
	G1b	Y10	200	03	1860	140	130	425		20		10	5061		40	202.440	0.616	124.703
	G1c	Y10	150	03	1860	140	130	425		20		10	5061		16	80.976	0.616	49.881
	G2	Y10		01	9300							10	9300		44	409.200	0.616	252.067
	G2a	Y10		01	9300							10	9300		22	204.600	0.616	126.034
	G3	Y10	300	04	210	570	140	215		20		10	1788		28	50.064	0.616	30.839
	G3a	Y10	250	04	210	570	140	215		20		10	1788		32	57.216	0.616	35.245
	G3b	Y10	200	04	210	570	140	215		20		10	1788		40	71.520	0.616	44.056
	G3c	Y10	150	04	210	570	140	215		20		10	1788		16	28.608	0.616	17.623
	G4	Y10	300	05	575	140	250	90	45	20		10	1921		28	53.788	0.616	33.133
	G4a	Y10	250	05	575	140	250	90	45	20		10	1921		32	61.472	0.616	37.867
	G4b	Y10	200	05	575	140	250	90	45	20		10	1921		40	76.840	0.616	47.333
	G4c	Y10	150	05	575	140	250	90	45	20		10	1921		16	30.736	0.616	18.933
	G5	Y10	300	06	320						100	10	520		28	14.560	0.616	8.969
	G5a	Y10	250	06	320						100	10	520		32	16.640	0.616	10.250
	G5b	Y10	200	06	320						100	10	520		40	20.800	0.616	12.813
	G5c	Y10	150	06	320						100	10	520		16	8.320	0.616	5.125
	G5d	Y10	100	06	320						100	10	520		48	24.960	0.616	15.375
	G6a	Y10	150	02	2285	140 ~ 320 AVG. 230	130			20		10		5210	16	83.360	0.616	51.350
	G6+G6b	Y10	100	02	2285	320	130			20		10	5390		32	172.480	0.616	106.248
	G7	Y10		07	1610	1705						10	3315		44	145.860	0.616	89.850
	G8a	Y10	150	04	210	570	140 ~ 320 AVG. 230	215 ~ 125 AVG. 170		20		10		1751	16	28.016	0.616	17.258
	G8	Y10	100	04	210	570	320	125		20		10	1714		32	54.848	0.616	33.786
	G9+G9a	Y16	100	03	1950	150	130	335		32		16	5051		18	90.918	1.579	143.560
	G10	Y10		01	10840							10	10840		2	21.680	0.616	13.355
	G10a	Y10		01	10840							10	10840		1	10.840	0.616	6.677
	G11	R06		01	2285							6	2285		8	18.280	0.222	4.058
	G12	Y10		09	320	100						10	960		50	48.000	0.616	29.568
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		12	4.440	0.616	2.735
	G14	R06		08	150	40	320					6	3619		20	72.380	0.222	16.068

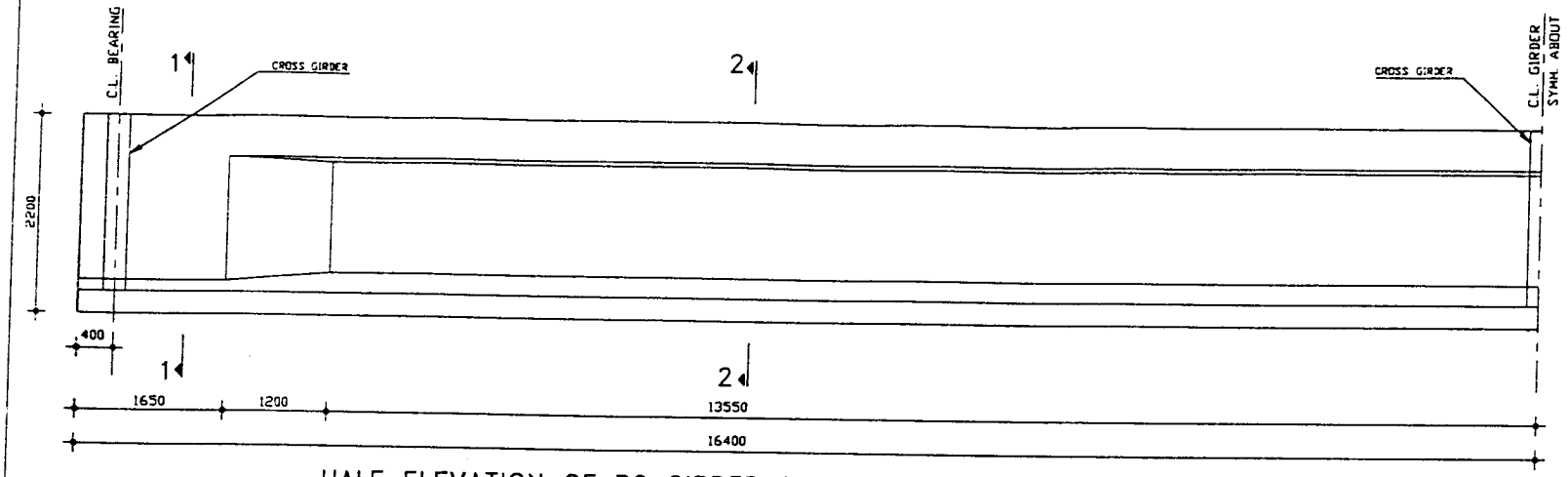
TOTAL WEIGHT: 1580.809 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

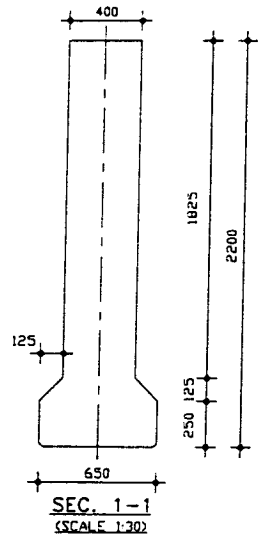
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 31.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-31-04 DATE: JUNE 1996

Web Copy



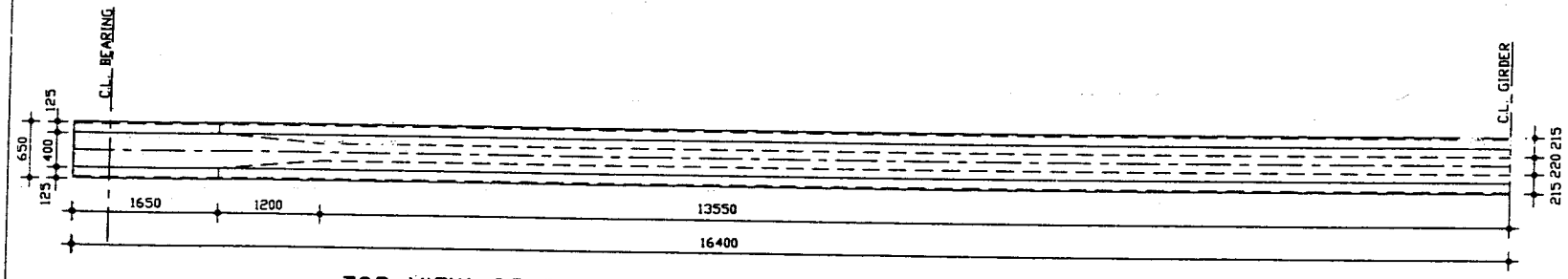
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



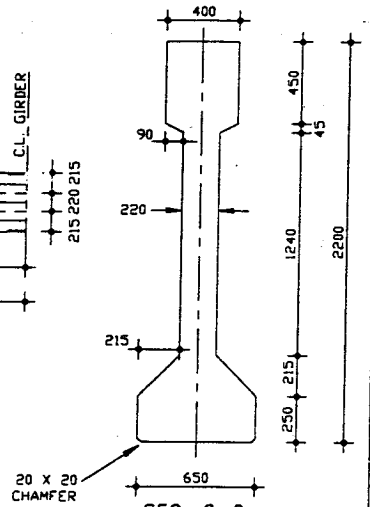
SEC. 1-1

(SCALE 1:30)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:60)



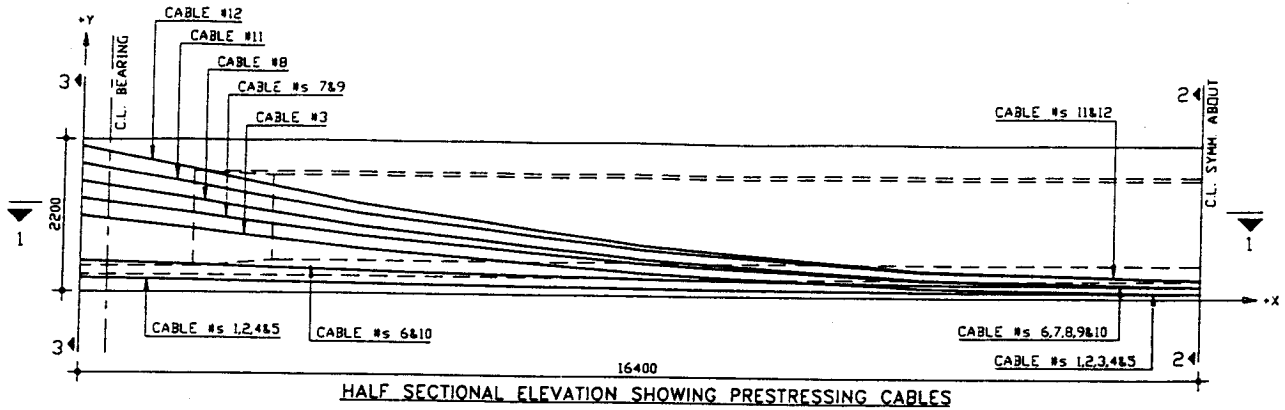
SEC. 2-2

(SCALE 1:30)

NOTES: 1. WEIGHT OF PC GIRDER = 61.89 METRIC TON
2. CONCRETE VOLUME = 24.77 CUBIC METER

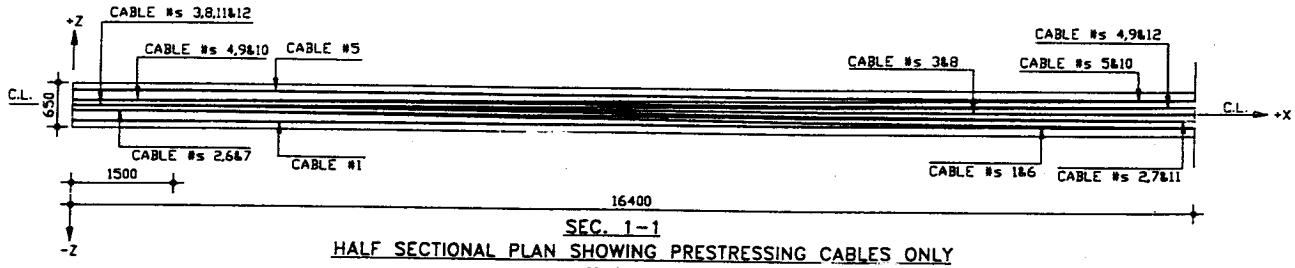
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 32.80 m CONCRETE OUTLINE DETAILS DWG. NO PC-32-01 SCALE AS SHOWN DATE JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

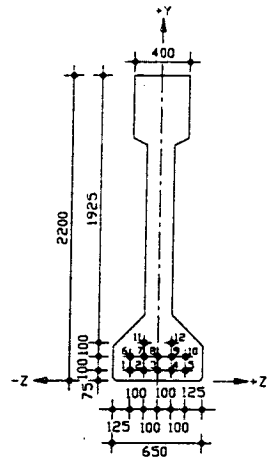
(SCALE 1:80)



SEC. 1-1

HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

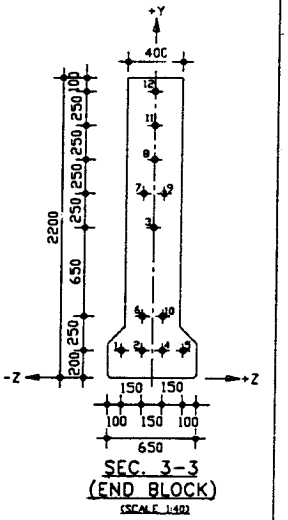
(SCALE 1:80)



SEC. 2-2

(MID-SEC.)

(SCALE 1:40)



SEC. 3-3

(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION FROM BOTH ENDS. (mm)
		X=0		X=L/8=4100		X=L/4=8200		X=3L/8=12300		X=L/2=16400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
12	12Ø7	12.851°	2100	0	1302	14	731	60	389	97	275	100	98.149
11	12Ø7	11.138°	1850	0	1161	-14	669	-60	373	-97	275	-100	98.01
8	12Ø7	10.10°	1600	0	977	0	531	0	264	0	175	0	99.312
9	12Ø7	8.356°	1350	75	836	70	469	88	248	94	175	100	99.292
7	12Ø7	8.356°	1350	-75	836	-70	469	-88	248	-94	175	-100	99.292
3	12Ø7	7.301°	1100	0	652	0	331	0	139	0	75	0	99.319
10	12Ø7	1.969°	450	75	330	106	244	138	192	169	175	200	99.926
6	12Ø7	1.969°	450	-75	330	-106	244	-138	192	-169	175	-200	99.926
5	12Ø7	0.895°	200	225	145	219	106	213	83	206	75	200	100.146
4	12Ø7	0.895°	200	75	145	81	106	88	83	94	75	100	100.146
2	12Ø7	0.895°	200	-75	145	-81	106	-88	83	-94	75	-100	100.146
1	12Ø7	0.895°	200	-225	145	-219	106	-213	83	206	75	-200	100.146

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,7,8&9 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6,10,11&12 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1,5,8,7&9
STAGE-2: CABLE NOS. 6,10,11&12

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 35 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 32.80 m

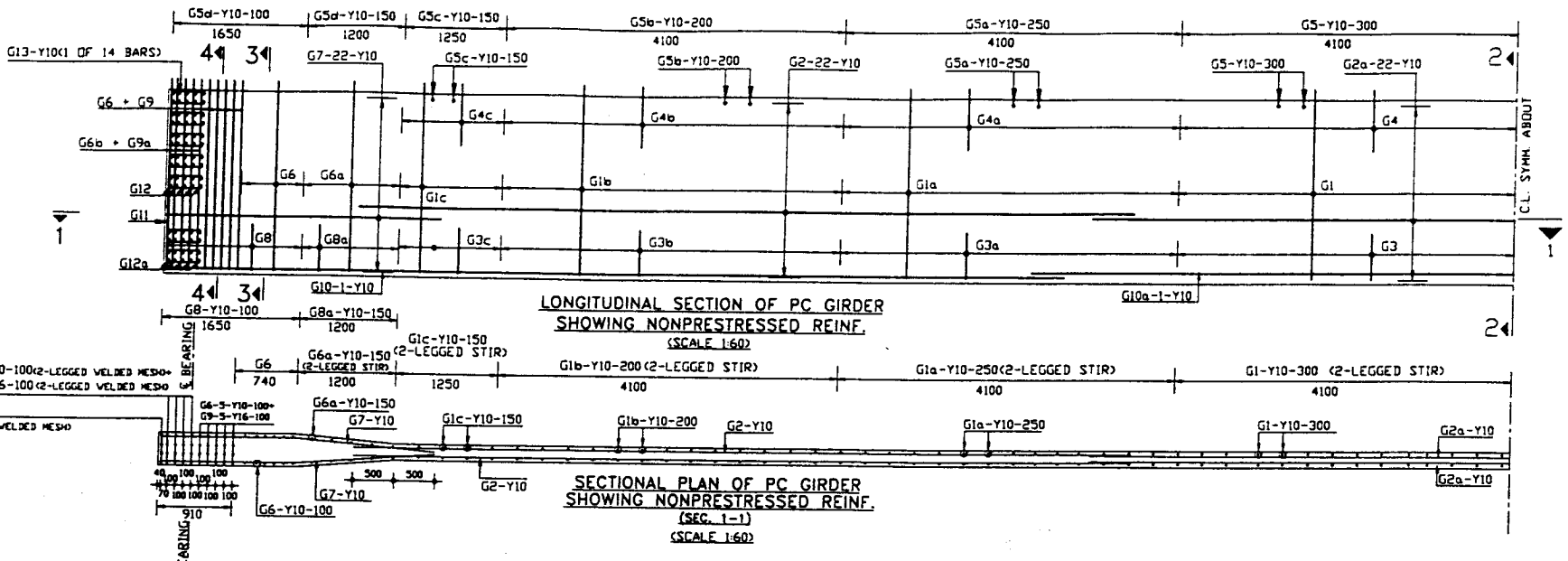
PRESTRESSING CABLE DETAILS

DWG NO. PC-32-02

SCALE AS SHOWN

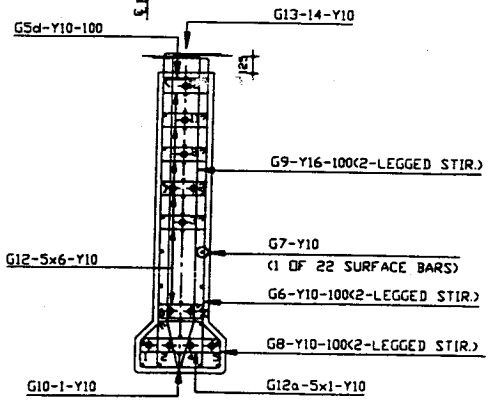
DATE : JUNE 1996

Web Copy

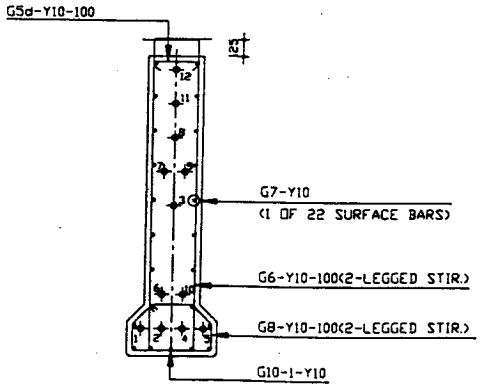


LONGITUDINAL SECTION OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)

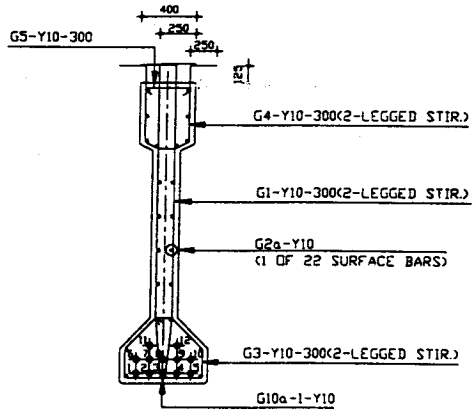
SECTIONAL PLAN OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.3-3 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.2-2 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 32.80 m	
			NONPRESTRESSED REINF. DETAILS	DWG. NO. : PC-32-03
			SCALE AS SHOWN	DATE : JUNE 1996

Web Copy

BAR BENDING SCHEDULE

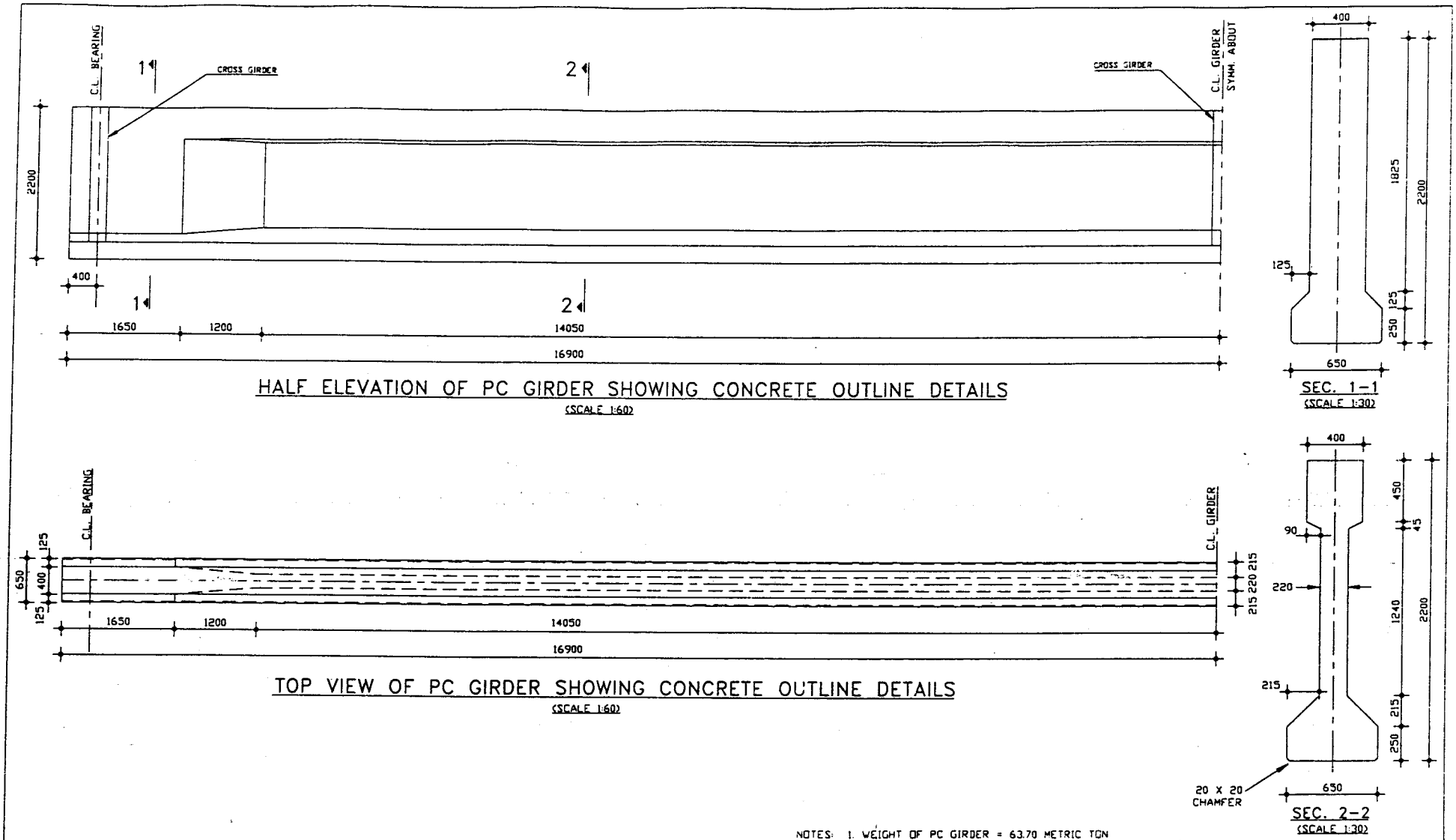
MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1860	140	130	425		20		10	5061		28	141.708	0.616	87.292
	G1a	Y10	250	03	1860	140	130	425		20		10	5061		32	161.952	0.616	99.762
	G1b	Y10	200	03	1860	140	130	425		20		10	5061		42	212.562	0.616	130.938
	G1c	Y10	150	03	1860	140	130	425		20		10	5061		16	80.976	0.616	49.881
	G2	Y10		01	9633							10	9633		44	423.852	0.616	261.093
	G2a	Y10		01	9633							10	9633		22	211.926	0.616	130.546
	G3	Y10	300	04	210	570	140	215		20		10	1788		28	50.064	0.616	30.839
	G3a	Y10	250	04	210	570	140	215		20		10	1788		32	57.216	0.616	35.245
	G3b	Y10	200	04	210	570	140	215		20		10	1788		42	75.096	0.616	46.259
	G3c	Y10	150	04	210	570	140	215		20		10	1788		16	28.608	0.616	17.623
	G4	Y10	300	05	575	140	250	90	45	20		10	1921		28	53.788	0.616	33.133
	G4a	Y10	250	05	575	140	250	90	45	20		10	1921		32	61.472	0.616	37.867
	G4b	Y10	200	05	575	140	250	90	45	20		10	1921		42	80.682	0.616	49.700
	G4c	Y10	150	05	575	140	250	90	45	20		10	1921		16	30.736	0.616	18.933
	G5	Y10	300	06	320						100	10	520		28	14.560	0.616	8.969
	G5a	Y10	250	06	320						100	10	520		32	16.640	0.616	10.250
	G5b	Y10	200	06	320						100	10	520		42	21.840	0.616	13.453
	G5c	Y10	150	06	320						100	10	520		16	8.320	0.616	5.125
	G5d	Y10	100	06	320						100	10	520		48	24.960	0.616	15.375
	G6a	Y10	150	02	2285	140 ~ 320 AVG. 230	130			20		10		5210	16	83.360	0.616	51.300
	G6+G6b	Y10	100	02	2285	320	130			20		10	5390		32	172.480	0.616	106.248
	G7	Y10		07	1610	1705						10	3315		44	145.860	0.616	89.850
	G8a	Y10	150	04	210	570	140 ~ 320 AVG. 230	215 ~ 125 AVG. 170		20		10		1751	16	28.016	0.616	17.258
	G8	Y10	100	04	210	570	320	125		20		10	1714		32	54.848	0.616	33.786
	G9+G9a	Y16	100	03	1950	150	130	335		32		16	5051		18	90.918	1.579	143.560
	G10	Y10		01	11173							10	11173		2	22.346	0.616	13.765
	G10a	Y10		01	11173							10	11173		1	11.173	0.616	6.883
	G11	R06		01	2285							6	2285		8	18.280	0.222	4.058
	G12	Y10		09	320	100						10	960		60	57.600	0.616	35.482
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		14	5.180	0.616	3.191
	G14	R06		08	150	40	320					6	3619		24	86.856	0.222	19.282
																TOTAL WEIGHT:		1615.991 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 32.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-32-04
			DATE: JUNE 1996

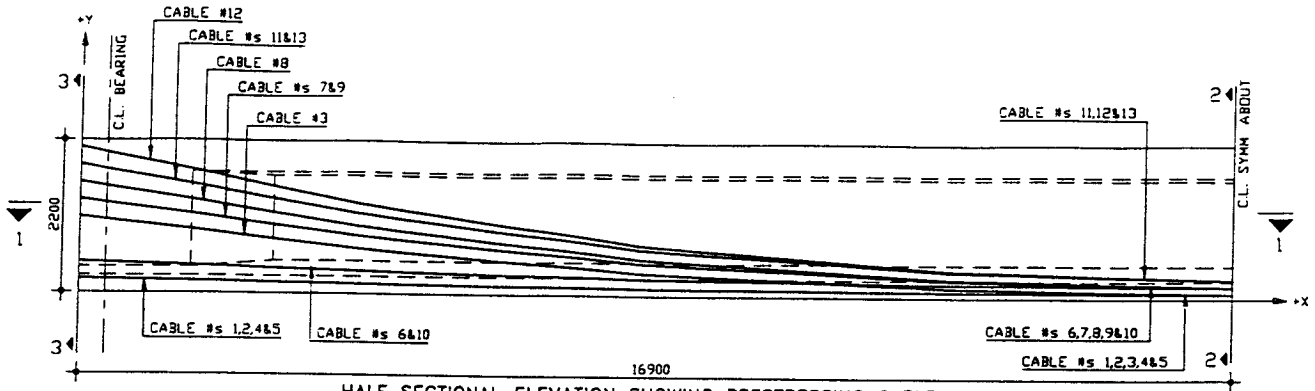
Web Copy



NOTES: 1. WEIGHT OF PC GIRDER = 63.70 METRIC TON
2. CONCRETE VOLUME = 25.49 CUBIC METER

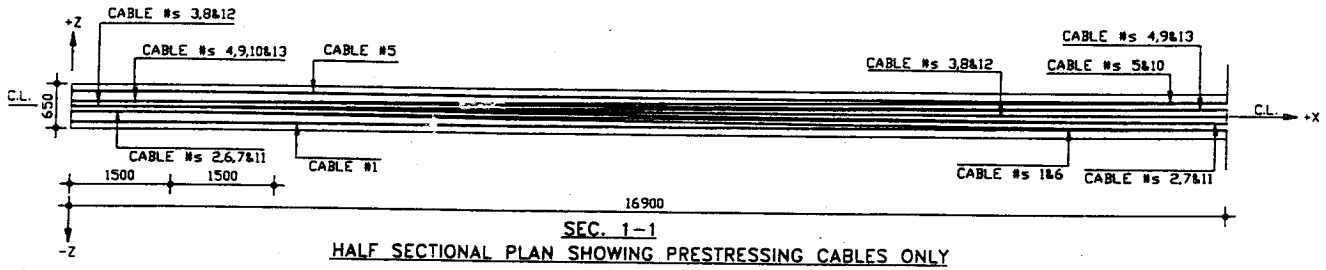
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 33.80 m CONCRETE OUTLINE DETAILS DWG. NO : PC-33-01 SCALE : AS SHOWN DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

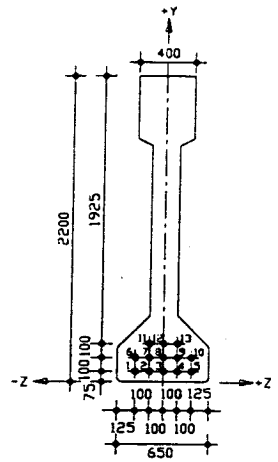
SCALE 1:80



SEC. 1–1

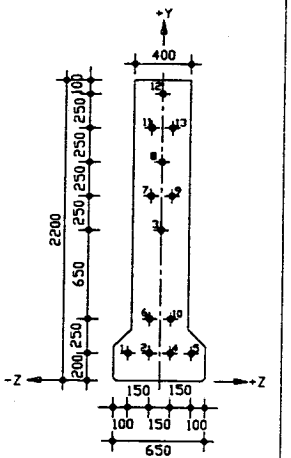
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

SCALE 1:80



SEC. 2–2
(MID–SEC.)

SCALE 1:40



SEC. 3–3
(END BLOCK)

SCALE 1:40

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION FROM BOTH ENDS (mm)
		X=0		X=L/8=4225		X=L/4=8450		X=3L/8=12675		X=L/2=16900		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
12	12Ø7	12.474°	2100	0	1302	0	731	0	389	0	275	0	101.513
13	12Ø7	10.808°	1850	75	1161	70	669	70	373	94	275	100	101.387
11	12Ø7	10.808°	1850	-75	1161	-70	669	-70	373	-94	275	-100	101.387
8	12Ø7	9.80°	1600	0	977	0	531	0	284	0	175	0	102.04
9	12Ø7	8.106°	1350	75	836	70	469	80	248	94	175	100	102.031
7	12Ø7	8.106°	1350	-75	836	-70	469	-80	248	-94	175	-100	102.031
3	12Ø7	7.082°	1100	0	652	0	331	0	139	0	75	0	102.063
10	12Ø7	1.909°	450	75	330	106	244	138	192	169	175	200	102.685
6	12Ø7	1.909°	450	-75	330	-106	244	-138	192	-169	175	-200	102.685
5	12Ø7	0.868°	200	225	145	219	106	213	83	206	75	200	102.906
4	12Ø7	0.868°	200	75	145	81	106	88	83	94	75	100	102.906
2	12Ø7	0.868°	200	-75	145	-81	106	-88	83	-94	75	-100	102.906
1	12Ø7	0.868°	200	-225	145	-219	106	-213	83	-206	75	-200	102.906

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,7,8&9 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 6,10,11,12&13 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,2,4,1,5,8,7&9
STAGE-2: CABLE NOS. 6,10,12,11&13

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 40 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

PRESTRESSED CONCRETE GIRDER

LENGTH : 33.80 m

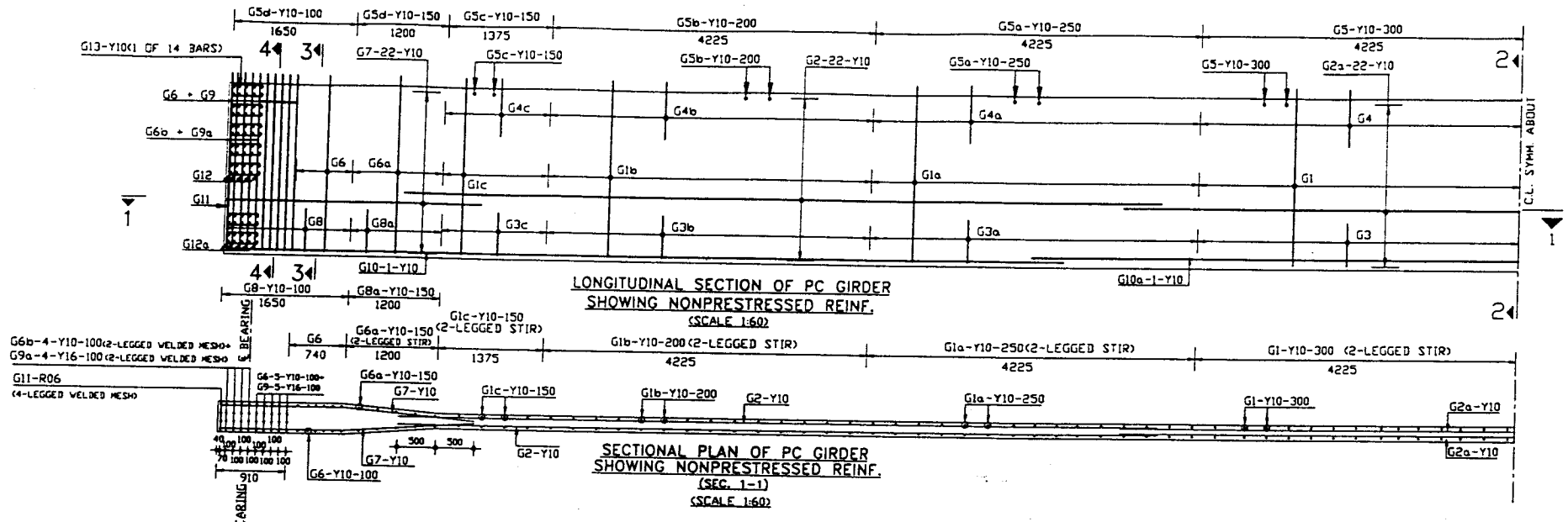
PRESTRESSING CABLE DETAILS

DWG. NO. : PC-33-02

SCALE : AS SHOWN

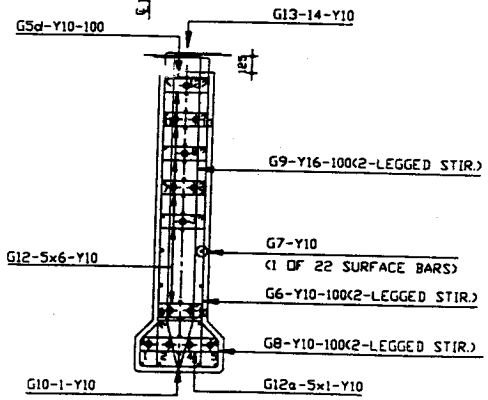
DATE : JUNE 1996

Web Copy

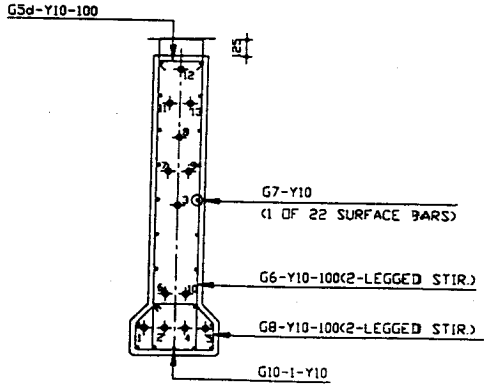


LONGITUDINAL SECTION OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)

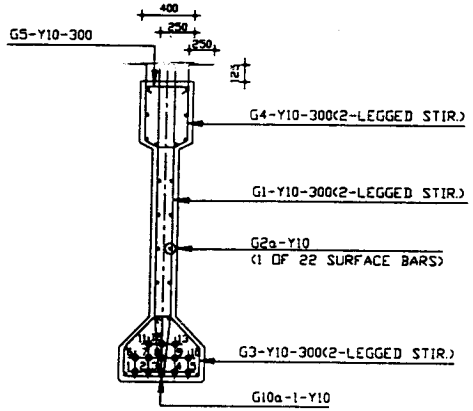
SECTIONAL PLAN OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:60)



SEC.4-4 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.3-3 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.2-2 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA . ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 33.80 m	
			NONPRESTRESSED REINF. DETAILS	DWG. NO. PC-33-03
			SCALE : AS SHOWN	DATE : JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	1860	140	130	425		20		10	5061		29	146.769	0.616	90.410
	G1a	Y10	250	03	1860	140	130	425		20		10	5061		34	172.074	0.616	105.998
	G1b	Y10	200	03	1860	140	130	425		20		10	5061		42	212.562	0.616	130.938
	G1c	Y10	150	03	1860	140	130	425		20		10	5061		18	91.098	0.616	56.116
	G2	Y10		01	9967							10	9967		44	438.548	0.616	270.146
	G2a	Y10		01	9967							10	9967		22	219.274	0.616	135.073
	G3	Y10	300	04	210	570	140	215		20		10	1788		29	51.852	0.616	31.941
	G3a	Y10	250	04	210	570	140	215		20		10	1788		34	60.792	0.616	37.448
	G3b	Y10	200	04	210	570	140	215		20		10	1788		42	75.096	0.616	46.259
	G3c	Y10	150	04	210	570	140	215		20		10	1788		18	32.184	0.616	19.825
	G4	Y10	300	05	575	140	250	90	45	20		10	1921		29	55.709	0.616	34.317
	G4a	Y10	250	05	575	140	250	90	45	20		10	1921		34	65.314	0.616	40.233
	G4b	Y10	200	05	575	140	250	90	45	20		10	1921		42	80.682	0.616	49.700
	G4c	Y10	150	05	575	140	250	90	45	20		10	1921		18	34.578	0.616	21.300
	G5	Y10	300	06	320						100	10	520		29	15.080	0.616	9.289
	G5a	Y10	250	06	320						100	10	520		34	17.680	0.616	10.891
	G5b	Y10	200	06	320						100	10	520		42	21.840	0.616	13.453
	G5c	Y10	150	06	320						100	10	520		18	9.360	0.616	5.766
	G5d	Y10	100	06	320						100	10	520		48	24.960	0.616	15.375
	G6a	Y10	150	02	2285	140 ~ 320 AVG. 230	130			20		10		5210	16	83.360	0.616	51.350
	G6+G6b	Y10	100	02	2285	320	130			20		10	5390		32	172.480	0.616	106.248
	G7	Y10		07	1610	1705						10	3315		44	145.860	0.616	89.850
	G8a	Y10	150	04	210	570	140 ~ 320 AVG. 230	215 ~ 125 AVG. 170		20		10		1751	16	28.016	0.616	17.258
	G8	Y10	100	04	210	570	320	125		20		10	1714		32	54.848	0.616	33.786
	G9+G9a	Y16	100	03	1950	150	130	335		32		16	5051		18	90.918	1.579	143.560
	G10	Y10		01	11507							10	11507		2	23.014	0.616	14.177
	G10a	Y10		01	11507							10	11507		1	11.507	0.616	7.088
	G11	R06		01	2285							6	2285		8	18.280	0.222	4.058
	G12	Y10		09	320	100						10	960		60	57.600	0.616	35.482
	G12a	Y10		09	570	100						10	1460		10	14.600	0.616	8.994
	G13	Y10		01	370							10	370		14	5.180	0.616	3.191
	G14	R06		08	150	40	320					6	3619		26	94.094	0.222	20.889

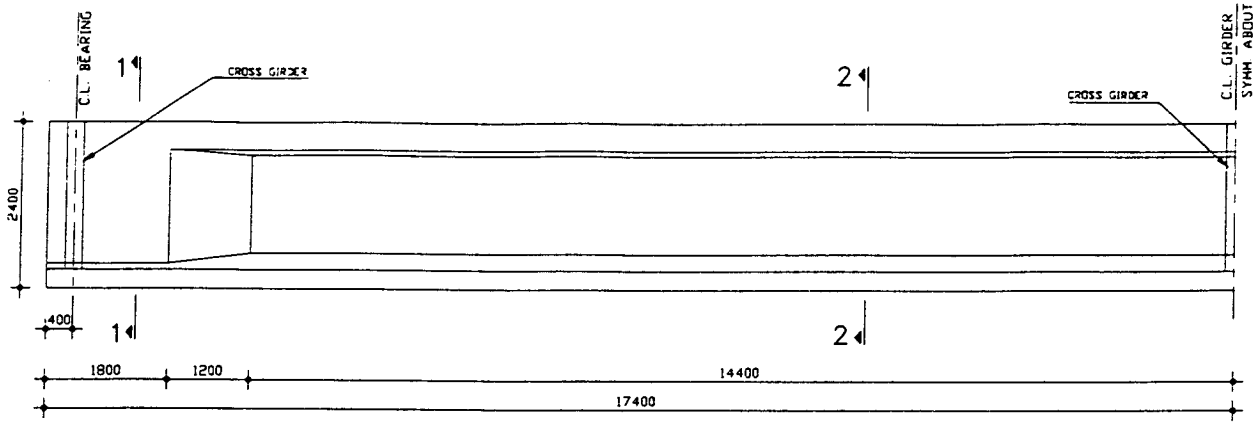
TOTAL WEIGHT: 1660.407 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

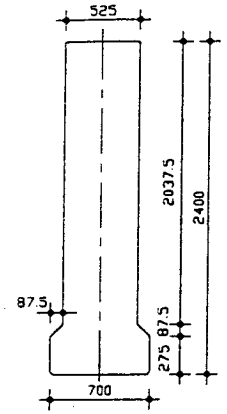
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 33.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-33-04 DATE: JUNE 1996

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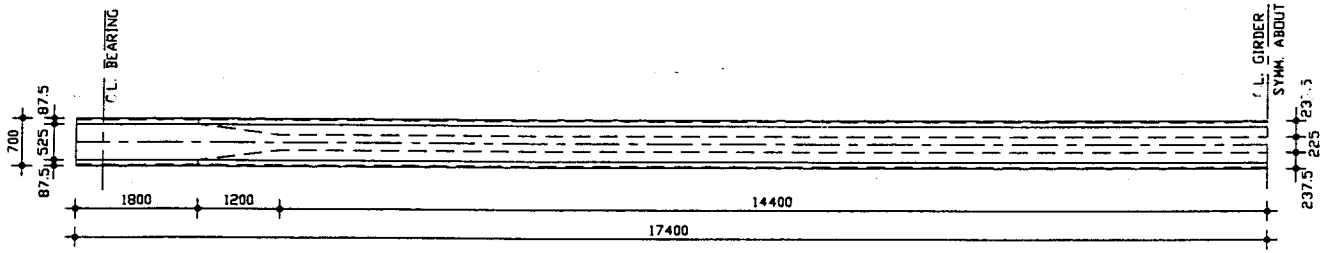
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



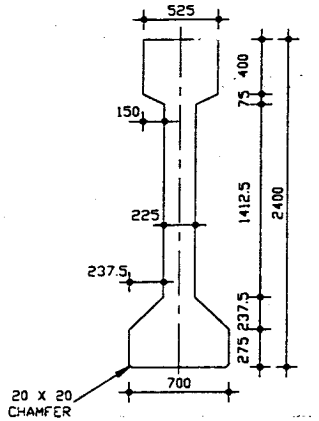
SEC. 1-1

(SCALE 1:40)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



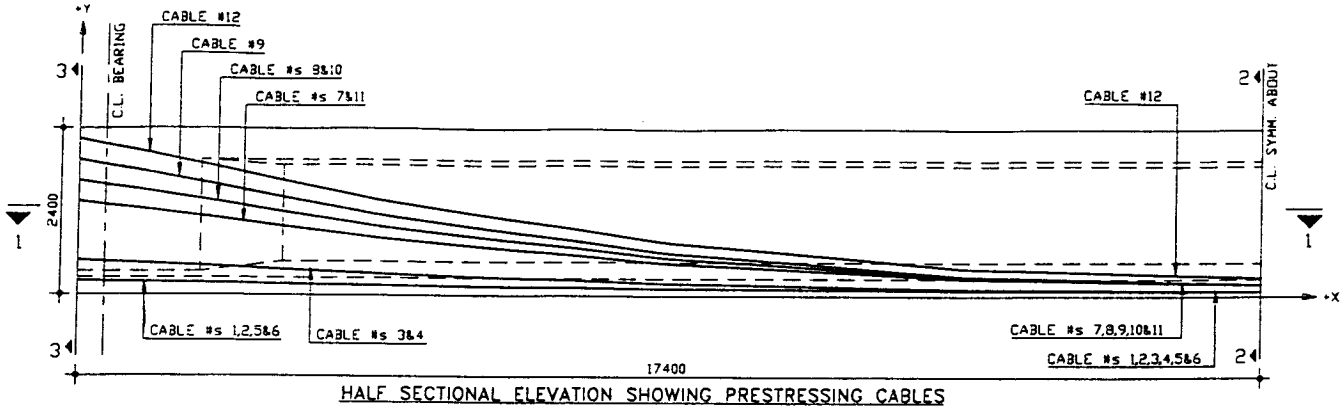
SEC. 2-2

(SCALE 1:40)

NOTES: 1. WEIGHT OF PC GIRDER = 80.13 METRIC TON
2. CONCRETE VOLUME = 32.06 CUBIC METER

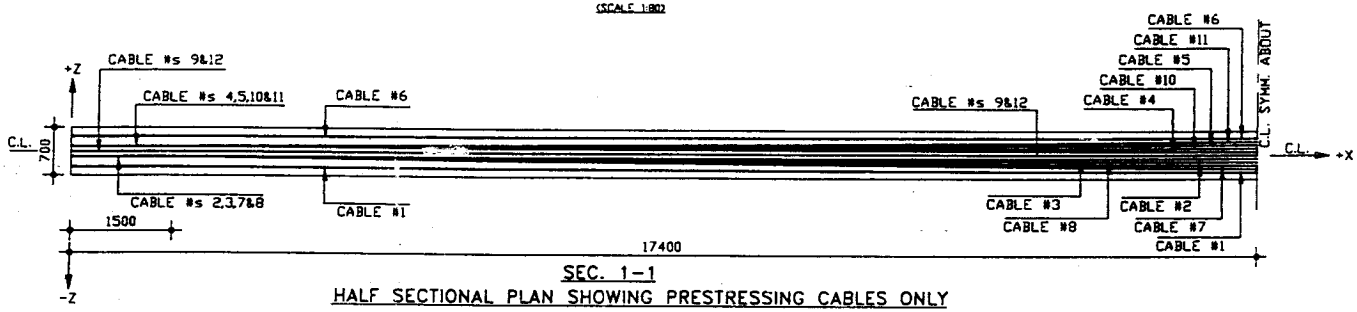
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 34.80 m CONCRETE OUTLINE DETAILS DWG. NO. : PC-34-01 SCALE : AS SHOWN DATE : JUNE 1996

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HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

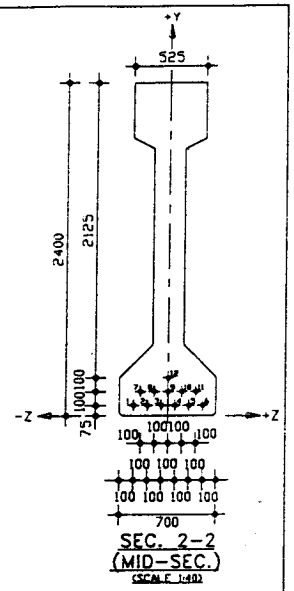
(SCALE 1:80)



SEC. 1–1

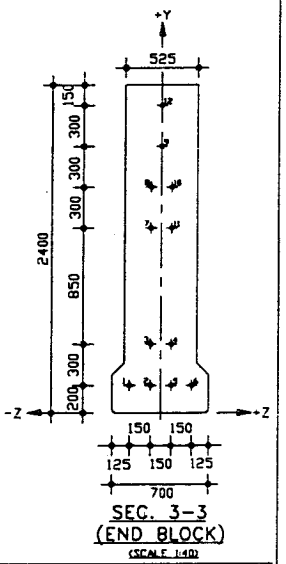
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:80)



SEC. 2–2
(MID–SEC.)

(SCALE 1:40)



SEC. 3–3
(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION FROM BOTH ENDS. (mm)
		X=0		X=L/8=4350		X=L/4=8700		X=3L/8=13050		X=L/2=17400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z
12	12Ø7	13.081°	2250	0	1386	0	769	0	398	0	275	0	102.502
9	12Ø7	11.795°	1950	0	1173	0	619	0	286	0	175	0	105.333
10	12Ø7	9.844°	1650	75	1005	71	544	72	267	94	175	100	105.22
8	12Ø7	9.844°	1650	-75	1005	-71	544	-72	267	-94	175	-100	105.22
11	12Ø7	7.87°	1350	75	836	72	469	110	248	169	175	200	105.212
7	12Ø7	7.87°	1350	-75	836	-72	469	-110	248	-169	175	-200	105.212
4	12Ø7	2.862°	500	75	314	69	181	63	102	56	75	50	105.699
3	12Ø7	2.862°	500	-75	314	-69	181	-63	102	-56	75	-50	105.699
6	12Ø7	0.843°	200	225	145	231	106	238	83	244	75	250	106.11
5	12Ø7	0.843°	200	75	145	94	106	113	83	131	75	150	106.11
2	12Ø7	0.843°	200	-75	145	-94	106	-113	83	-131	75	-150	106.11
1	12Ø7	0.843°	200	-225	145	231	106	-238	83	244	75	-250	106.11

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,8,9,10&12 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 7&11 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,4,2,5,1,6,9,8,10&12
STAGE-2: CABLE NOS. 7&11

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 8 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 34.80 m

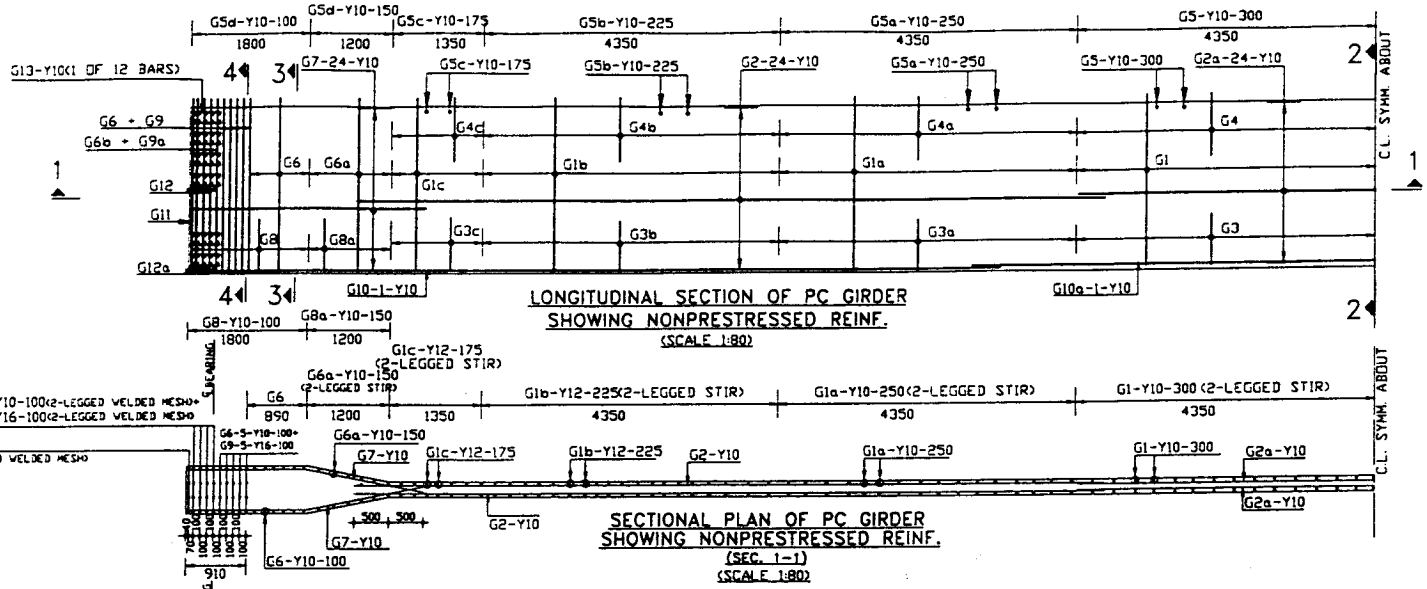
PRESTRESSING CABLE DETAILS

DWG. NO. : PC-34-02

SCALE : AS SHOWN

DATE : JUNE 1996

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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY :	NAME OF PROJECT :	PRESTRESSED CONCRETE GIRDER LENGTH : 34.80 m
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	LOCATION : THANA ZILA	NONPRESTRESSED REINF. DETAILS DWG. NO. PC-34-03 SCALE AS SHOWN DATE JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	2013	145	130	473		20		10	5471		30	164.130	0.616	101.104
	G1a	Y10	250	03	2013	145	130	473		20		10	5471		34	186.014	0.616	114.585
	G1b	Y12	225	03	2013	145	130	473		24		12	5459		38	207.442	0.888	184.208
	G1c	Y12	175	03	2013	145	130	473		24		12	5459		16	87.344	0.888	77.561
	G2	Y10		01	10200							10	10200		48	489.600	0.616	301.594
	G2a	Y10		01	10200							10	10200		24	244.800	0.616	150.797
	G3	Y10	300	04	235	620	145	238		20		10	1957		30	58.710	0.616	36.165
	G3a	Y10	250	04	235	620	145	238		20		10	1957		34	66.538	0.616	40.987
	G3b	Y12	225	04	235	620	145	238		24		12	1967		38	74.746	0.888	66.374
	G3c	Y12	175	04	235	620	145	238		24		12	1967		16	31.472	0.888	27.947
	G4	Y10	300	05	525	145	250	150	75	20		10	1960		30	58.800	0.616	36.221
	G4a	Y10	250	05	525	145	250	150	75	20		10	1960		34	66.640	0.616	41.050
	G4b	Y12	225	05	525	145	250	150	75	24		12	1946		38	73.948	0.888	65.666
	G4c	Y12	175	05	525	145	250	150	75	24		12	1946		16	31.136	0.888	27.649
	G5	Y10	300	06	445						100	10	645		30	19.350	0.616	11.920
	G5a	Y10	250	06	445						100	10	645		34	21.930	0.616	13.509
	G5b	Y10	225	06	445						100	10	645		38	24.510	0.616	15.098
	G5c	Y10	175	06	445						100	10	645		16	10.320	0.616	6.357
	G5d	Y10	100	06	445						100	10	645		52	33.540	0.616	20.661
	G6a	Y10	150	02	2485	145 ~ 445 AVG. 295	130			20		10		5740	16	91.940	0.616	56.573
	G6+G6b	Y10	100	02	2485	445	130			20		10	6040		36	217.440	0.616	133.943
	G7	Y10		07	1760	1713						10	3473		48	166.704	0.616	102.690
	G8a	Y10	150	04	235	620	145 ~ 445 AVG. 295	238 ~ 88 AVG. 163		20		10		1895	16	30.320	0.616	18.677
	G8	Y10	100	04	235	620	445	88		20		10	1833		36	65.988	0.616	40.649
	G9+G9a	Y16	100	03	2163	150	130	323		32		16	5453		18	98.154	1.579	154.985
	G10	Y10		01	11840							10	11840		2	23.680	0.616	14.587
	G10a	Y10		01	11840							10	11840		1	11.840	0.616	7.293
	G11	R06		01	2485							6	2485		8	19.880	0.222	4.413
	G12	Y10		09	445	100						10	1210		50	60.500	0.616	37.268
	G12a	Y10		09	620	100						10	1560		10	15.600	0.616	9.610
	G13	Y10		01	370							10	370		12	4.440	0.616	2.735
	G14	R06		08	150	40	320					6	3619		24	86.856	0.222	19.282

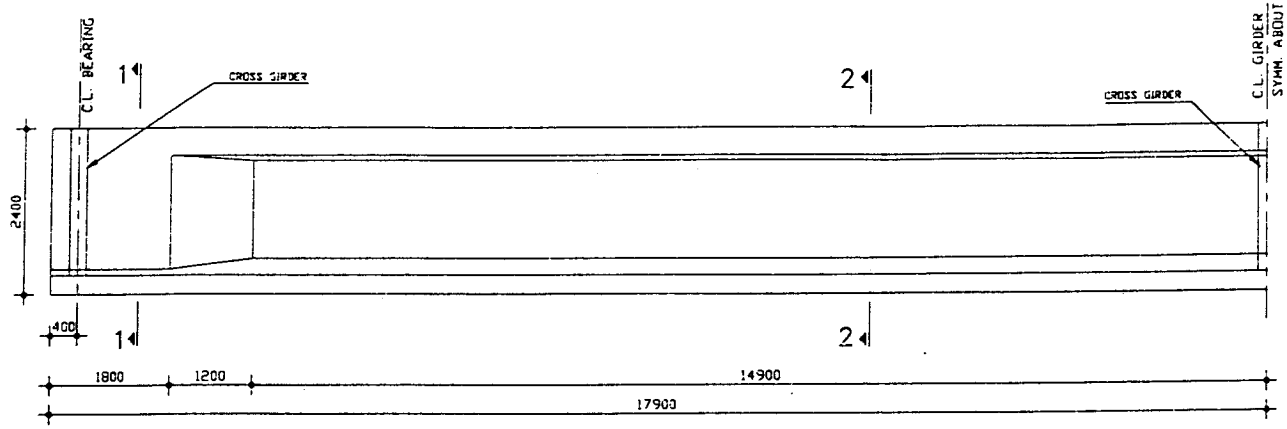
TOTAL WEIGHT: 1942.159 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

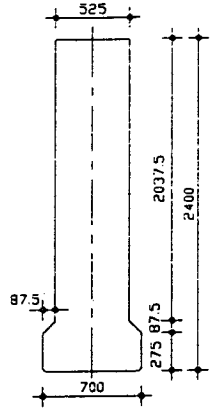
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 34.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-34-04
			DATE: JUNE 1996

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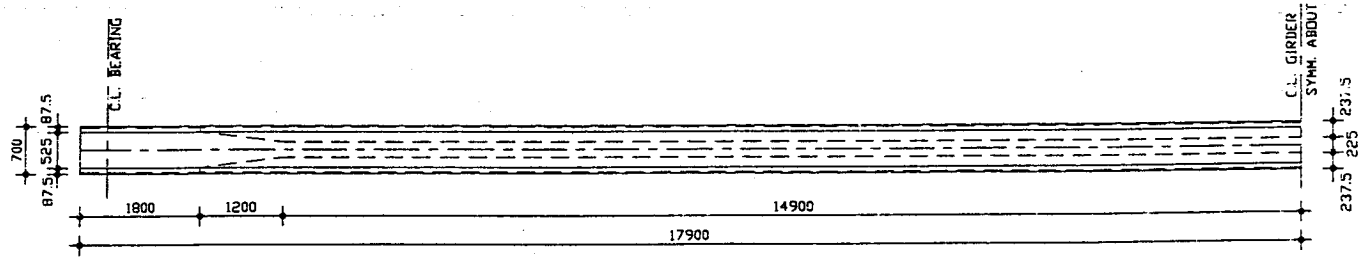
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



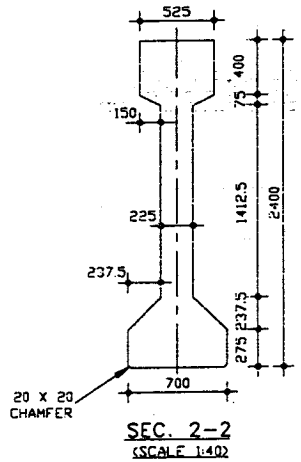
SEC. 1–1

(SCALE 1:40)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



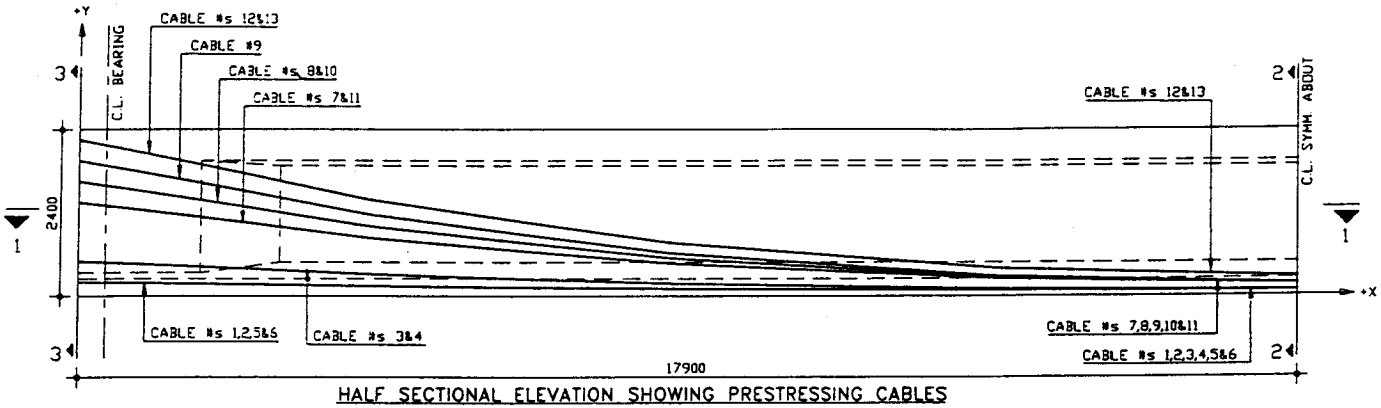
SEC. 2–2

(SCALE 1:40)

NOTES: 1. WEIGHT OF PC GIRDER = 82.27 METRIC TON
2. CONCRETE VOLUME = 32.92 CUBIC METER

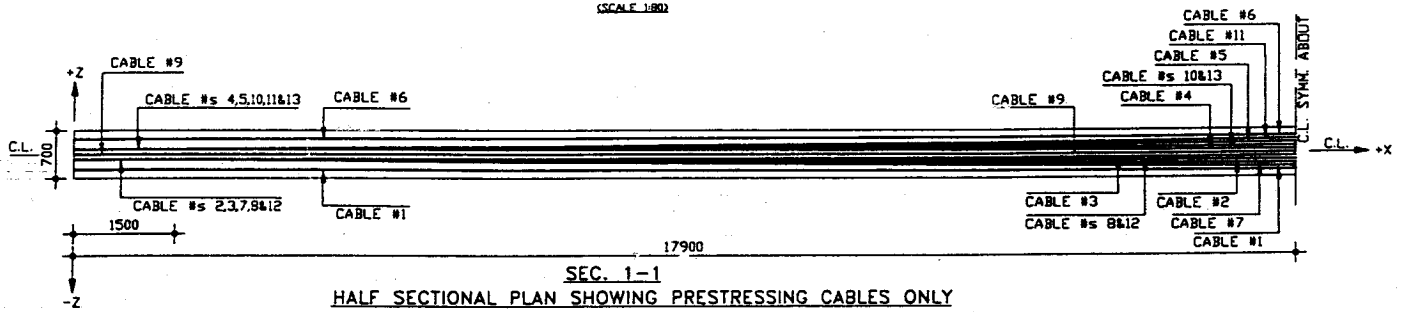
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 35.80 m CONCRETE OUTLINE DETAILS DWG NO. PC-35-01 SCALE : AS SHOWN DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

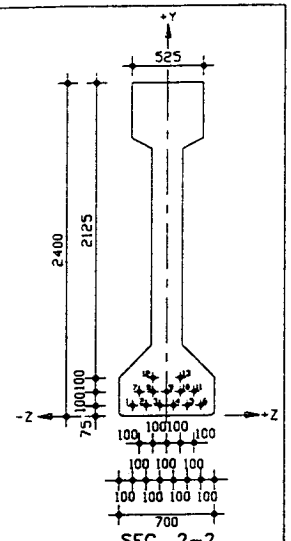
(SCALE 1:80)



SEC. 1–1

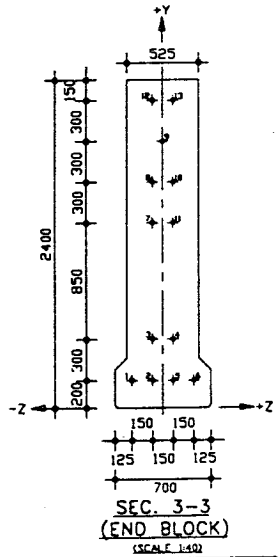
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:80)



SEC. 2–2
(MID-SEC.)

(SCALE 1:40)



SEC. 3–3
(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)											EXTENSION FROM BOTH ENDS. (mm)
		X=0		X=L/8=4475		X=L/4=8950		X=3L/8=13425		X=L/2=17900		
		CABLE ORDINATES ALONG Y & Z AXES (mm)										
		CABLE INCLIN. ANGLE	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
13	12Ø7	12.719°	2250	75	1386	71	769	72	398	94	275	100	105.866
12	12Ø7	12.719°	2250	-75	1386	-71	769	-72	398	-94	275	-100	105.866
9	12Ø7	11.467°	1950	0	1173	0	619	0	286	0	175	0	108.041
10	12Ø7	9.568°	1650	75	1005	55	544	70	267	94	175	100	107.941
8	12Ø7	9.568°	1650	-75	1005	-55	544	-70	267	-94	175	-100	107.941
11	12Ø7	7.848°	1350	75	838	72	469	110	248	169	175	200	107.945
7	12Ø7	7.848°	1350	-75	836	-72	469	-110	248	-169	175	-200	107.945
4	12Ø7	2.781°	500	75	314	69	181	63	102	56	75	50	108.45
3	12Ø7	2.781°	500	-75	314	-69	181	-63	102	-56	75	-50	108.45
6	12Ø7	0.818°	200	225	145	231	106	238	83	244	75	250	108.862
5	12Ø7	0.818°	200	75	145	94	106	113	83	131	75	150	108.862
2	12Ø7	0.818°	200	-75	145	-94	106	-113	83	-131	75	-150	108.862
1	12Ø7	0.818°	200	-225	145	-231	106	-238	83	-244	75	-250	108.862

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,8,10,12&13 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 7,9&11 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,4,2,5,1,6,8,10,12&13
STAGE-2: CABLE NOS. 9,7&11

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 25 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

PRESTRESSED CONCRETE GIRDER

LENGTH : 35.80 m

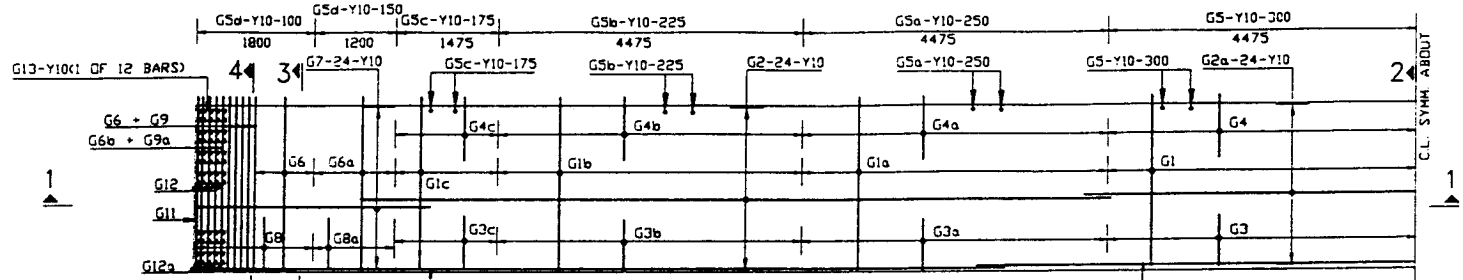
PRESTRESSING CABLE DETAILS

DWG. NO. : PC-35-02

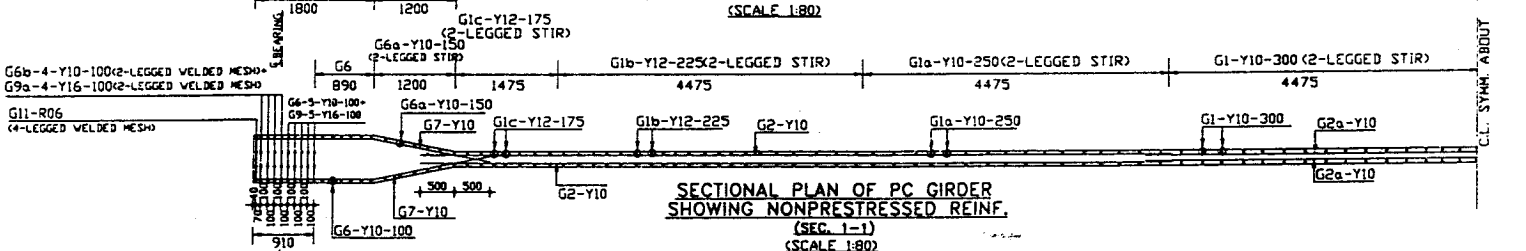
SCALE : AS SHOWN

DATE : JUNE 1996

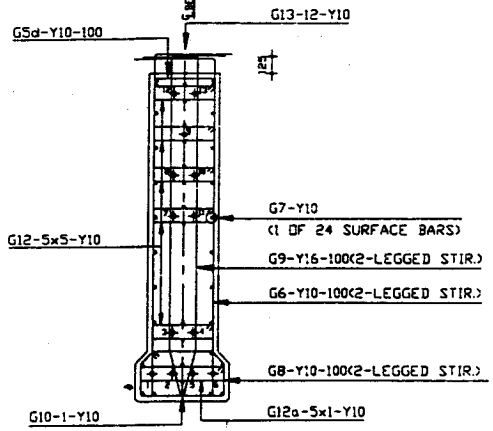
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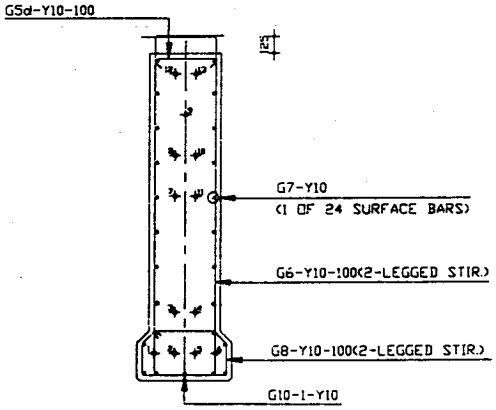
LONGITUDINAL SECTION OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SCALE 1:80)



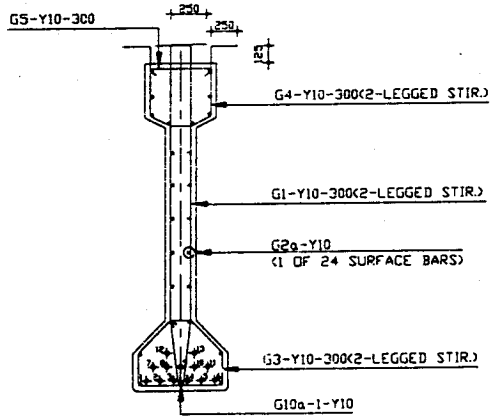
SECTIONAL PLAN OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:80)



SEC.4-4 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.3-3 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.2-2 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 35.80 m NONPRESTRESSED REINF. DETAILS DWG. NO. PC-35-03 SCALE AS SHOWN DATE JUNE 1995

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	2013	145	130	473		20		10	5471		31	169.601	0.616	104.474
	G1a	Y10	250	03	2013	145	130	473		20		10	5471		36	196.956	0.616	121.325
	G1b	Y12	225	03	2013	145	130	473		24		12	5459		40	218.360	0.888	193.904
	G1c	Y12	175	03	2013	145	130	473		24		12	5459		16	87.344	0.888	77.561
	G2	Y10		01	10533							10	10533		48	505.584	0.616	311.440
	G2a	Y10		01	10533							10	10533		24	252.792	0.616	155.720
	G3	Y10	300	04	235	620	145	238		20		10	1957		31	60.667	0.616	37.371
	G3a	Y10	250	04	235	620	145	238		20		10	1957		36	70.452	0.616	43.398
	G3b	Y12	225	04	235	620	145	238		24		12	1967		40	78.680	0.888	69.868
	G3c	Y12	175	04	235	620	145	238		24		12	1967		16	31.472	0.888	27.947
	G4	Y10	300	05	525	145	250	150	75	20		10	1960		31	60.760	0.616	37.428
	G4a	Y10	250	05	525	145	250	150	75	20		10	1960		36	70.560	0.616	43.465
	G4b	Y12	225	05	525	145	250	150	75	24		12	1946		40	77.840	0.888	69.122
	G4c	Y12	175	05	525	145	250	150	75	24		12	1946		16	31.136	0.888	27.649
	G5	Y10	300	06	445						100	10	645		31	19.995	0.616	12.317
	G5a	Y10	250	06	445						100	10	645		36	23.220	0.616	14.304
	G5b	Y10	225	06	445						100	10	645		40	25.800	0.616	15.893
	G5c	Y10	175	06	445						100	10	645		16	10.320	0.616	6.357
	G5d	Y10	100	06	445						100	10	645		52	33.540	0.616	20.661
	G6a	Y10	150	02	2485	145 ~ 445 AVG. 295	130			20		10		5740	16	91.840	0.616	56.573
	G6+G6b	Y10	100	02	2485	445	130			20		10	6040		36	217.440	0.616	133.943
	G7	Y10		07	1760	1713						10	3473		48	166.704	0.616	102.690
	G8a	Y10	150	04	235	620	145 ~ 445 AVG. 295	238 ~ 88 AVG. 163		20		10		1895	16	30.320	0.616	18.677
	G8	Y10	100	04	235	620	445	88		20		10	1833		36	65.988	0.616	40.649
	G9+G9a	Y16	100	03	2163	150	130	323		32		16	5453		18	98.154	1.579	154.985
	G10	Y10		01	12000							10	12000		2	24.000	0.616	14.784
	G10a	Y10		01	6460							10	6460		2	12.920	0.616	7.959
	G11	R06		01	2485							6	2485		8	19.880	0.222	4.413
	G12	Y10		09	445	100						10	1210		50	60.500	0.616	37.268
	G12a	Y10		09	620	100						10	1560		10	15.600	0.616	9.610
	G13	Y10		01	370							10	370		12	4.440	0.616	2.735
	G14	R06		08	150	40	320					6	3619		26	94.094	0.222	20.889

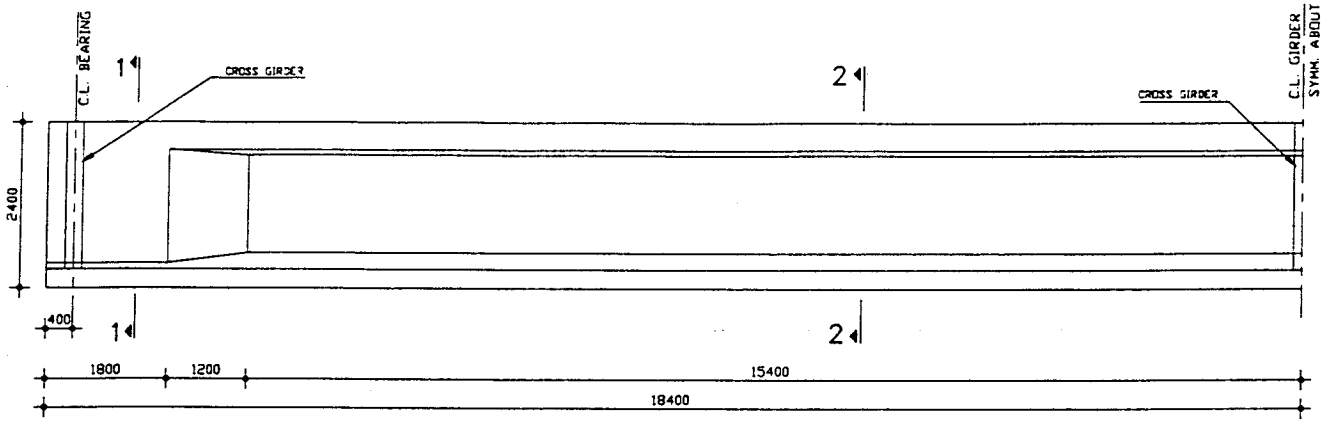
TOTAL WEIGHT: 1995.378 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

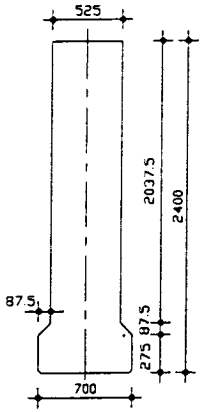
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 35.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-35-04
			DATE: JUNE 1996

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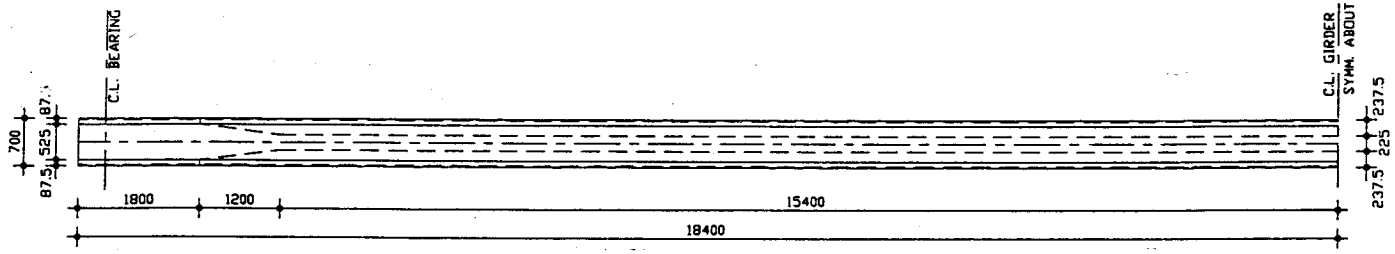
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



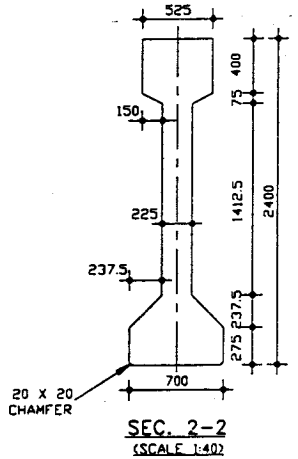
SEC. 1-1

(SCALE 1:40)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



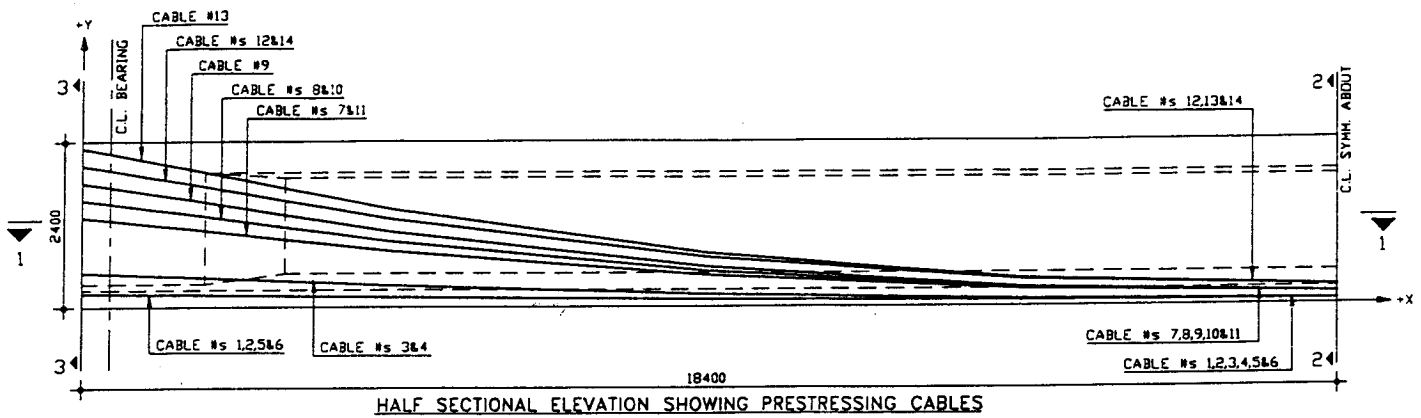
SEC. 2-2

(SCALE 1:40)

NOTES: 1. WEIGHT OF PC GIRDER = 84.42 METRIC TON
2. CONCRETE VOLUME = 33.78 CUBIC METER

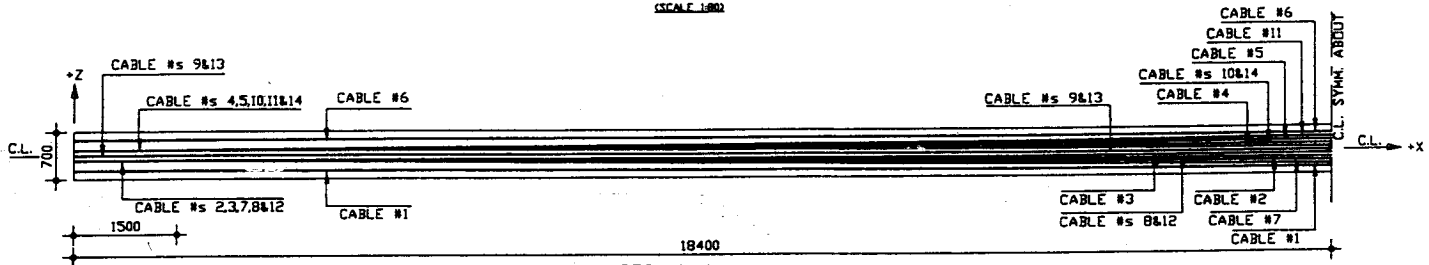
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 36.80 m CONCRETE OUTLINE DETAILS — DWG. NO. PC-36-01 SCALE : AS SHOWN — DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

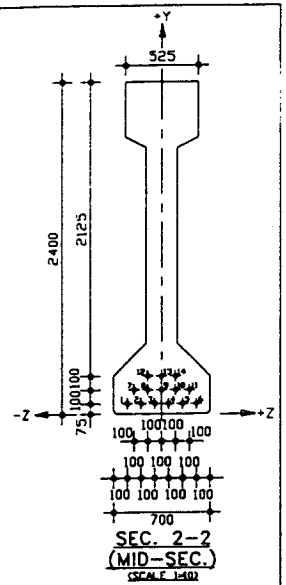
(SCALE 1:80)



SEC. 1–1

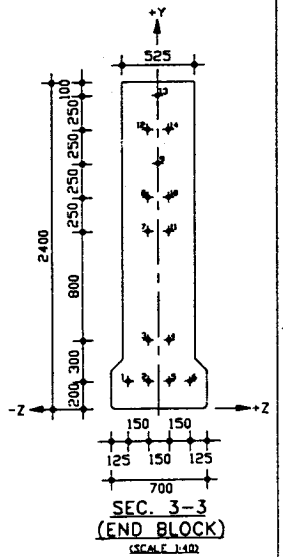
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:80)



SEC. 2–2
(MID–SEC.)

(SCALE 1:40)



SEC. 3–3
(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION FROM BOTH ENDS. (mm)
		X=0		X=L/8=4600		X=L/4=9200		X=3L/8=13800		X=L/2=18400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
13	12Ø7	12.68°	2300	0	1414	0	781	0	402	0	275	0	109.011
14	12Ø7	11.157°	2050	75	1273	71	719	72	386	94	275	100	108.87
12	12Ø7	11.157°	2050	-75	1273	-71	719	-72	386	-94	275	-100	108.87
9	12Ø7	10.235°	1800	0	1089	0	581	0	276	0	175	0	110.573
10	12Ø7	8.686°	1550	75	948	55	519	70	261	94	175	100	110.536
8	12Ø7	8.686°	1550	-75	948	-55	519	-70	261	-94	175	-100	110.536
11	12Ø7	7.125°	1300	75	808	72	456	110	245	169	175	200	110.57
7	12Ø7	7.125°	1300	-75	808	-72	456	-110	245	-169	175	-200	110.57
4	12Ø7	2.704°	500	75	314	69	181	63	102	56	75	50	111.077
3	12Ø7	2.704°	500	-75	314	-69	181	-63	102	-56	75	-50	111.077
6	12Ø7	0.796°	200	225	145	231	106	238	83	244	75	250	111.49
5	12Ø7	0.796°	200	75	145	94	106	113	83	131	75	150	111.49
2	12Ø7	0.796°	200	-75	145	-94	106	-113	83	-131	75	-150	111.49
1	12Ø7	0.796°	200	-225	145	-231	106	-238	83	-244	75	-250	111.49

NOTES:

A. **STAGES AND SEQUENCE OF PRESTRESSING**

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,8,9,10&13 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 7,11,12&14 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. **SEQUENCE OF STRESSING:**
STAGE-1: CABLE NOS. 3,4,2,5,1,6,9,8,10&13
STAGE-2: CABLE NOS. 7,11,12&14

B. **PRECAMBER**
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 10 mm AT MID-SPAN.

C. **ANCHORAGE DETAILS**
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 36.80 m

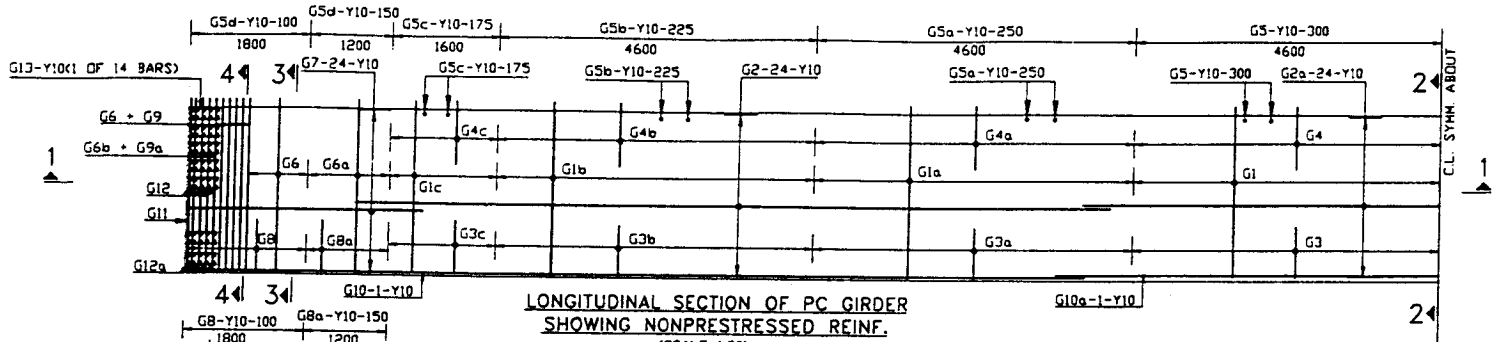
PRESTRESSING CABLE DETAILS

DWG. NO. PC-36-02

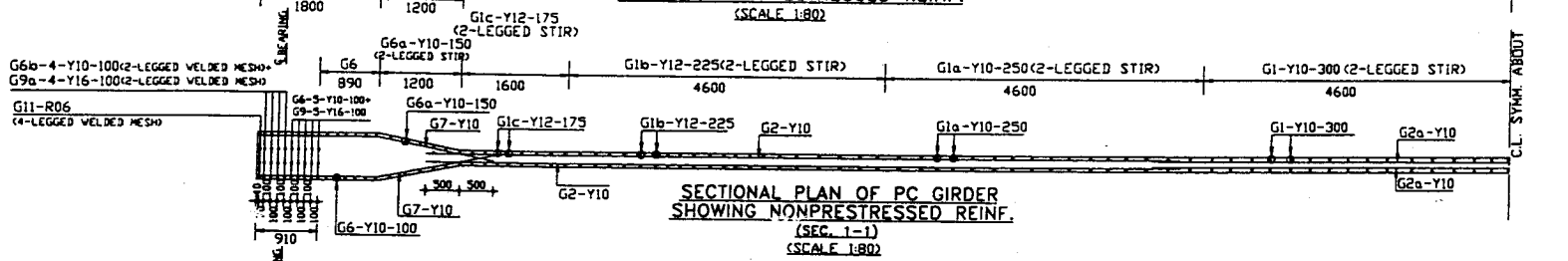
SCALE AS SHOWN

DATE JUNE 1996

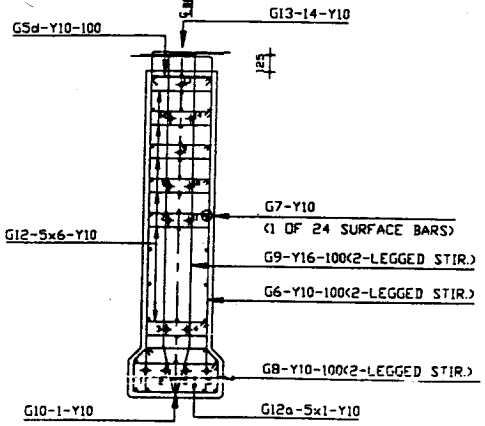
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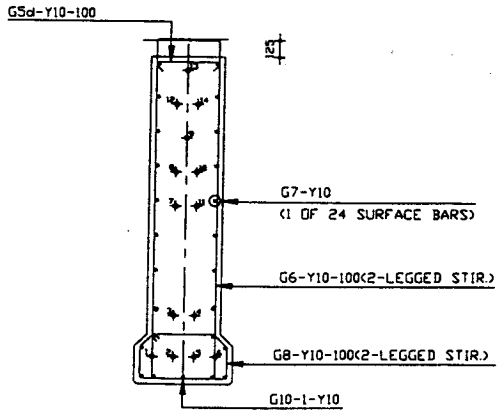
LONGITUDINAL SECTION OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SCALE 1:80)



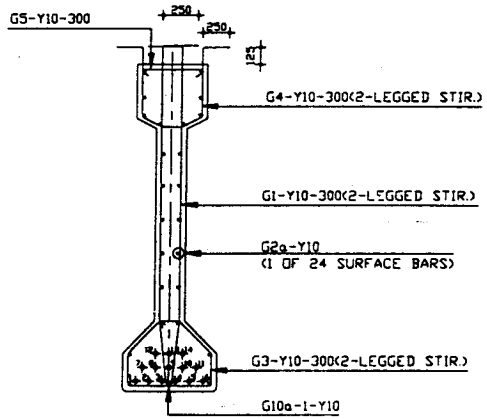
SECTIONAL PLAN OF PC GIRDER SHOWING NONPRESTRESSED REINF.
(SEC. 1-1)
(SCALE 1:80)



SEC.4-4 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.3-3 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)



SEC.2-2 SHOWING NONPRESTRESSED REINF.
(SCALE 1:40)

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 36.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO. : PC-36-03 SCALE : AS SHOWN — DATE : JUNE 1996

Web Copy

BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	2013	145	130	473		20		10	5471		32	175.072	0.616	107.844
	G1a	Y10	250	03	2013	145	130	473		20		10	5471		36	196.956	0.616	121.325
	G1b	Y12	225	03	2013	145	130	473		24		12	5459		40	218.360	0.888	193.904
	G1c	Y12	175	03	2013	145	130	473		24		12	5459		18	98.262	0.888	87.257
	G2	Y10		01	10867							10	10867		48	521.616	0.616	321.315
	G2a	Y10		01	10867							10	10867		24	260.808	0.616	160.658
	G3	Y10	300	04	235	620	145	238		20		10	1957		32	62.624	0.616	38.576
	G3a	Y10	250	04	235	620	145	238		20		10	1957		36	70.452	0.616	43.398
	G3b	Y12	225	04	235	620	145	238		24		12	1967		40	78.680	0.888	69.868
	G3c	Y12	175	04	235	620	145	238		24		12	1967		18	35.406	0.888	31.441
	G4	Y10	300	05	525	145	250	150	75	20		10	1960		32	62.720	0.616	38.636
	G4a	Y10	250	05	525	145	250	150	75	20		10	1960		36	70.560	0.616	43.465
	G4b	Y12	225	05	525	145	250	150	75	24		12	1946		40	77.840	0.888	69.122
	G4c	Y12	175	05	525	145	250	150	75	24		12	1946		18	35.028	0.888	31.105
	G5	Y10	300	06	445						100	10	645		32	20.640	0.616	12.714
	G5a	Y10	250	06	445						100	10	645		36	23.220	0.616	14.304
	G5b	Y10	225	06	445						100	10	645		40	25.800	0.616	15.893
	G5c	Y10	175	06	445						100	10	645		18	11.610	0.616	7.152
	G5d	Y10	100	06	445						100	10	645		52	33.540	0.616	20.661
	G6a	Y10	150	02	2485	145 ~ 445 AVG. 295	130			20		10		5740	16	91.840	0.616	56.573
	G6+G6b	Y10	100	02	2485	445	130			20		10	6040		36	217.440	0.616	133.943
	G7	Y10		07	1760	1713						10	3473		48	166.704	0.616	102.690
	G8a	Y10	150	04	235	620	145 ~ 445 AVG. 295	238 ~ 88 AVG. 163		20		10		1895	16	30.320	0.616	18.677
	G8	Y10	100	04	235	620	445	88		20		10	1833		36	65.988	0.616	40.649
	G9+G9a	Y16	100	03	2163	150	130	323		32		16	5453		18	98.154	1.579	154.985
	G10	Y10		01	12000							10	12000		2	24.000	0.616	14.784
	G10a	Y10		01	6960							10	6960		2	13.920	0.616	8.575
	G11	R06		01	2485							6	2485		8	19.880	0.222	4.413
	G12	Y10		09	445	100						10	1210		60	72.600	0.616	44.722
	G12a	Y10		09	620	100						10	1560		10	15.600	0.616	9.610
	G13	Y10		01	370							10	370		14	5.180	0.616	3.191
	G14	R06		08	150	40	320					6	3619		28	101.332	0.222	22.496

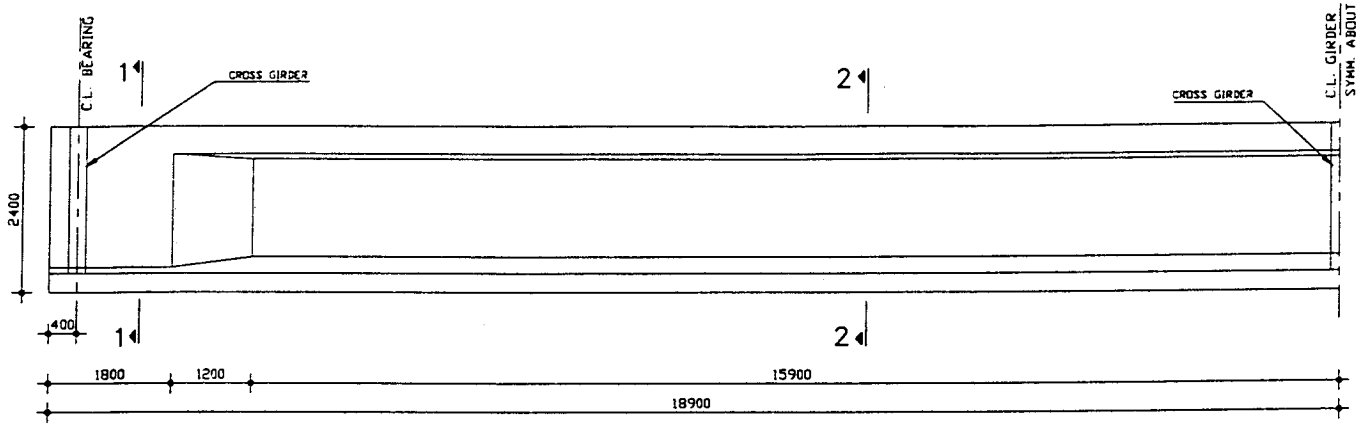
TOTAL WEIGHT: 2043.943 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

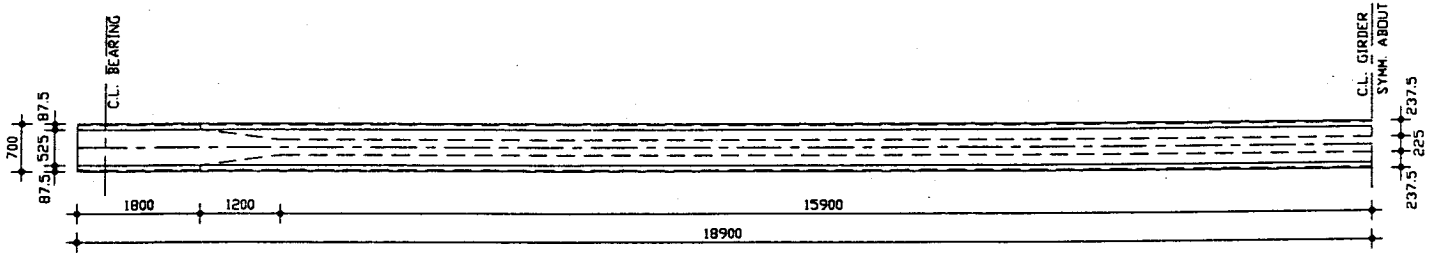
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 36.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-36-04
			DATE: JUNE 1996

Web Copy



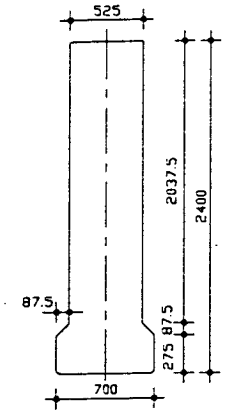
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



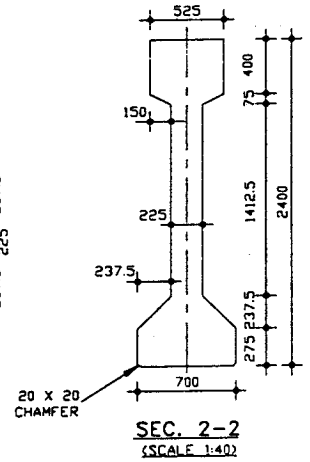
TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



SEC. 1-1

(SCALE 1:40)



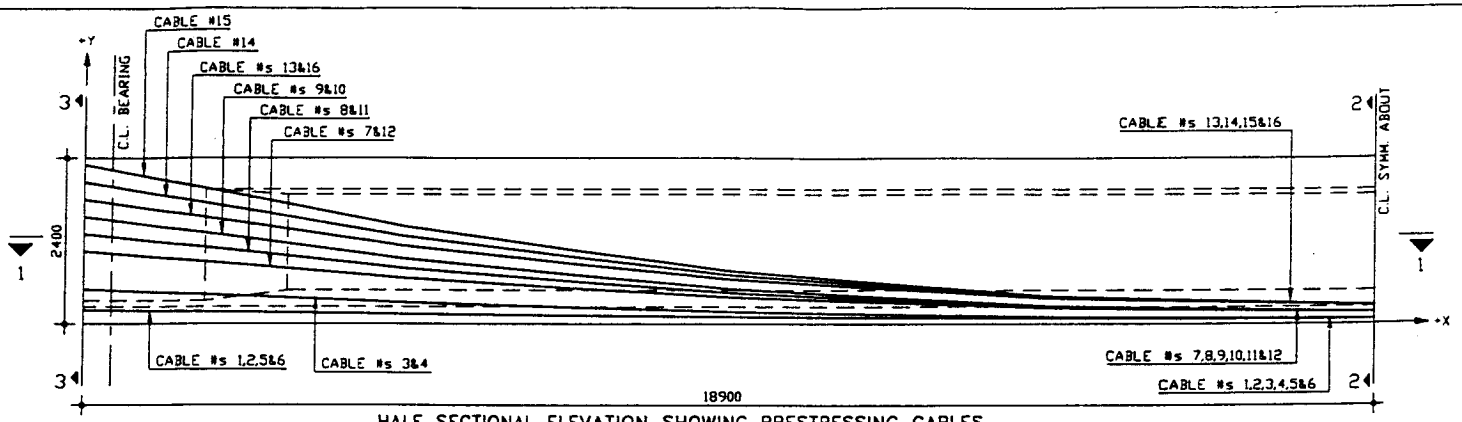
SEC. 2-2

(SCALE 1:40)

NOTES: 1. WEIGHT OF PC GIRDER = 86.56 METRIC TON
2. CONCRETE VOLUME = 34.64 CUBIC METER

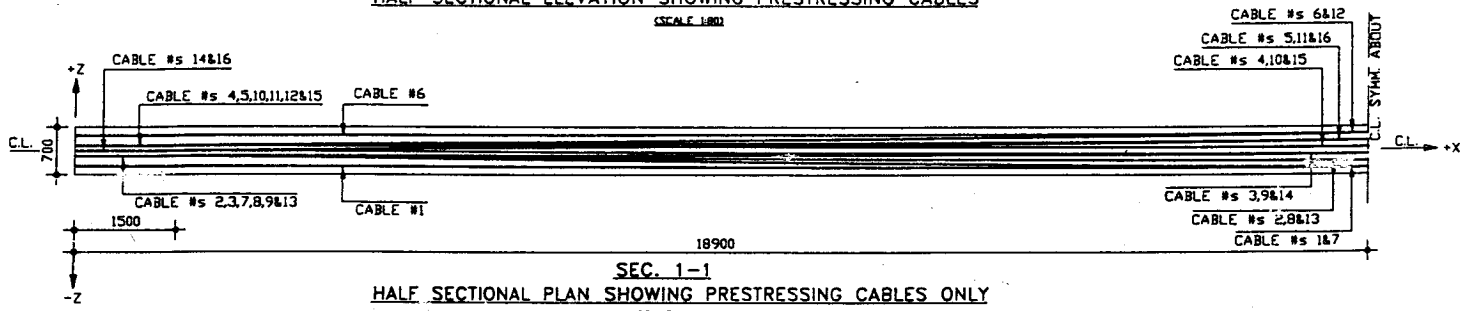
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 37.80 m CONCRETE OUTLINE DETAILS DWG. NO : PC-37-01 SCALE : AS SHOWN DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

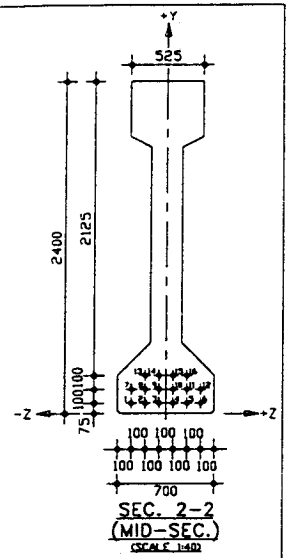
(SCALE 1:80)



SEC. 1–1

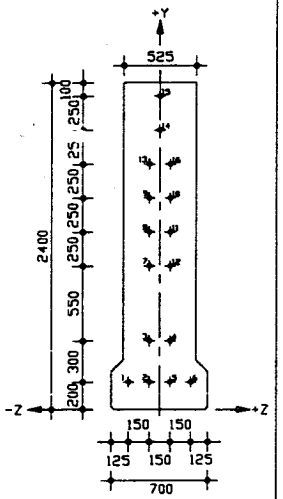
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:80)



SEC. 2–2
(MID–SEC.)

(SCALE 1:40)



SEC. 3–3
(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION FROM BOTH ENDS. (mm)
		X=0		X=L/8=4725		X=L/4=9450		X=3L/8=14175		X=L/2=18900		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
15	12Ø7	12.348°	2300	0	1414	7	781	31	402	49	275	150	112.234
14	12Ø7	10.863°	2050	0	1273	-7	719	-31	386	-49	275	-50	112.104
16	12Ø7	9.362°	1800	75	1133	71	656	96	370	125	275	50	113.037
13	12Ø7	9.362°	1800	-75	1133	-71	656	-96	370	-125	275	-150	112.037
10	12Ø7	8.455°	1550	75	948	69	519	63	261	56	175	50	113.08
9	12Ø7	8.455°	1550	-75	948	-69	519	-63	261	-56	175	-50	113.08
11	12Ø7	6.934°	1300	75	808	71	456	96	245	125	175	150	113.123
8	12Ø7	6.934°	1300	-75	808	-71	456	-96	245	-125	175	-150	113.123
12	12Ø7	5.404°	1050	75	667	71	394	138	230	206	175	250	113.24
7	12Ø7	5.404°	1050	-75	667	-71	394	-138	230	-206	175	-250	113.24
4	12Ø7	2.631°	500	75	314	69	181	63	102	56	75	50	113.643
3	12Ø7	2.631°	500	-75	314	-69	181	-63	102	-56	75	-50	113.643
6	12Ø7	0.774°	200	225	145	231	106	238	83	244	75	250	114.055
5	12Ø7	0.774°	200	75	145	94	106	113	83	131	75	150	114.055
2	12Ø7	0.774°	200	-75	145	-94	106	-113	83	-131	75	-150	114.055
1	12Ø7	0.774°	200	-225	145	-231	106	-238	83	-244	75	-250	114.055

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,8,9,10&11 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 7,12,13,14,15&16 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 3,4,2,5,1,6,9,10,8&11
STAGE-2: CABLE NOS. 14,15,13,16,7&12

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 10 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

PRESTRESSED CONCRETE GIRDER

LENGTH : 37.80 m

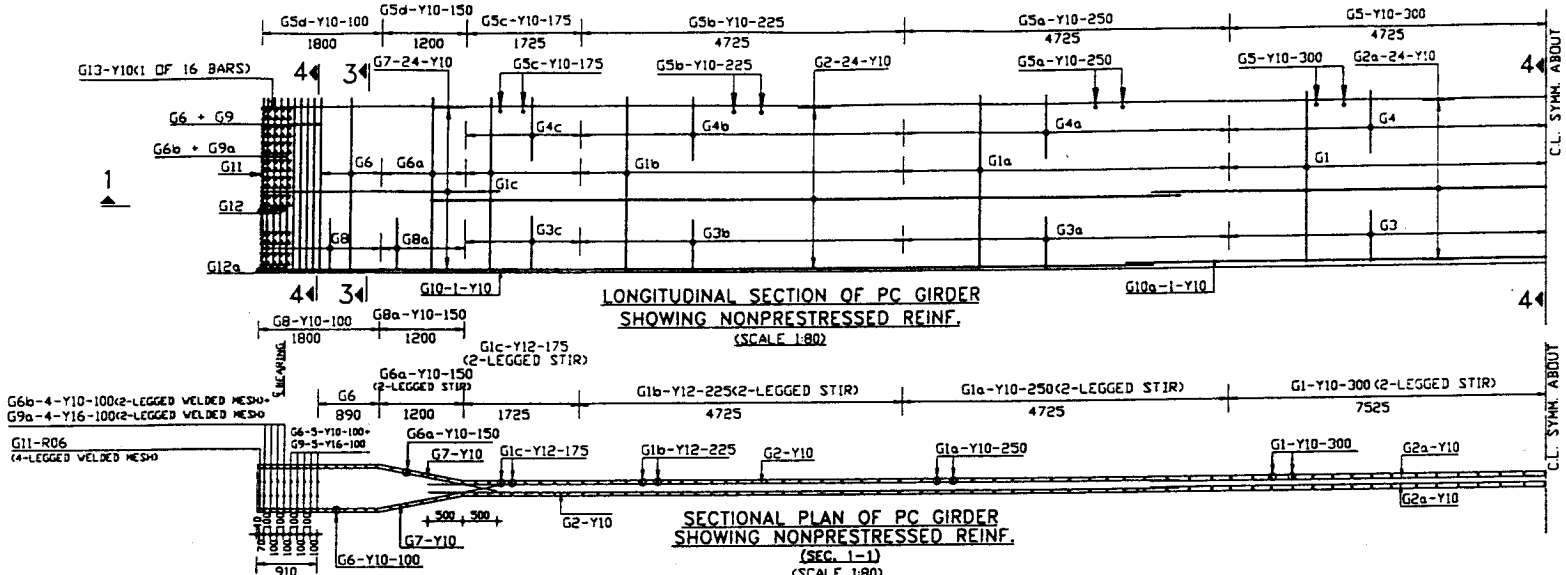
PRESTRESSING CABLE DETAILS

DWG. NO. : PC-37-02

SCALE : AS SHOWN

DATE : JUNE 1996

Web Copy



GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 37.80 m NONPRESTRESSED REINF. DETAILS DWG. NO. : PC-37-03 SCALE : AS SHOWN DATE : JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	2013	145	130	473		20		10	5471		33	180.543	0.616	111.214
	G1a	Y10	250	03	2013	145	130	473		20		10	5471		38	207.898	0.616	128.065
	G1b	Y12	225	03	2013	145	130	473		24		12	5459		42	229.278	0.888	203.599
	G1c	Y12	175	03	2013	145	130	473		24		12	5459		20	109.180	0.888	96.952
	G2	Y10		01	11200							10	11200		48	537.600	0.616	331.162
	G2a	Y10		01	11200							10	11200		24	268.800	0.616	165.581
	G3	Y10	300	04	235	620	145	238		20		10	1957		33	64.581	0.616	39.782
	G3a	Y10	250	04	235	620	145	238		20		10	1957		38	74.366	0.616	45.809
	G3b	Y12	225	04	235	620	145	238		24		12	1967		42	82.614	0.888	73.361
	G3c	Y12	175	04	235	620	145	238		24		12	1967		20	39.340	0.888	34.934
	G4	Y10	300	05	525	145	250	150	75	20		10	1960		33	64.680	0.616	39.843
	G4a	Y10	250	05	525	145	250	150	75	20		10	1960		38	74.480	0.616	45.880
	G4b	Y12	225	05	525	145	250	150	75	24		12	1946		42	81.732	0.888	72.578
	G4c	Y12	175	05	525	145	250	150	75	24		12	1946		20	38.920	0.888	34.561
	G5	Y10	300	06	445						100	10	645		33	21.285	0.616	13.112
	G5a	Y10	250	06	445						100	10	645		38	24.510	0.616	15.098
	G5b	Y10	225	06	445						100	10	645		42	27.090	0.616	16.687
	G5c	Y10	175	06	445						100	10	645		20	12.900	0.616	7.946
	G5d	Y10	100	06	445						100	10	645		52	33.540	0.616	20.661
	G6ℓ	Y10	150	02	2485	145 ~ 445 AVG. 295	130			20		10		5740	16	91.840	0.616	56.573
	G6+G6b	Y10	100	02	2485	445	130			20		10	6040		36	217.440	0.616	133.943
	G7	Y10		07	1760	1713						10	3473		48	166.704	0.616	102.690
	G8a	Y10	150	04	235	620	145 ~ 445 AVG. 295	238 ~ 88 AVG. 163		20		10		1895	16	30.320	0.616	18.677
	G8	Y10	100	04	235	620	445	88		20		10	1833		36	65.988	0.616	40.649
	G9+G9a	Y16	100	03	2163	150	130	323		32		16	5453		18	98.154	1.579	154.985
	G10	Y10		01	12000							10	12000		2	24.000	0.616	14.784
	G10a	Y10		01	7460							10	7460		2	14.920	0.616	9.191
	G11	R06		01	2485							6	2485		8	19.880	0.222	4.413
	G12	Y10		09	445	100						10	1210		70	84.700	0.616	52.175
	G12a	Y10		09	620	100						10	1560		10	15.600	0.616	9.610
	G13	Y10		01	370							10	370		16	5.920	0.616	3.647
	G14	R06		08	150	40	320					6	3619		32	115.808	0.222	25.709

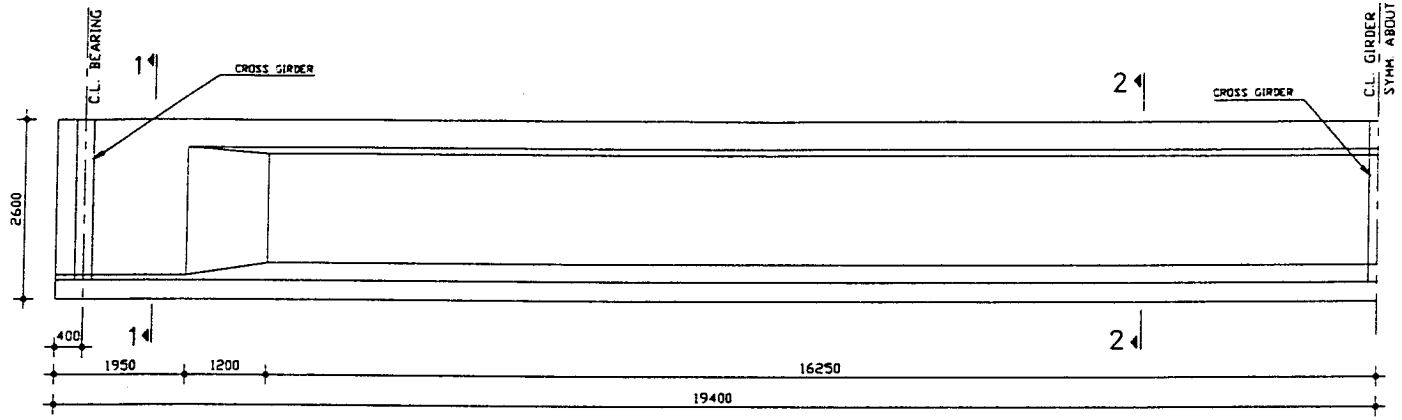
TOTAL WEIGHT: 2123.871 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

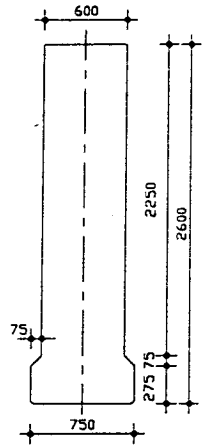
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 37.80 m NONPRESTRESSED REINF. BAR BENDING SCHEDULE DWG. NO.: PC-37-04 DATE: JUNE 1996

Web Copy



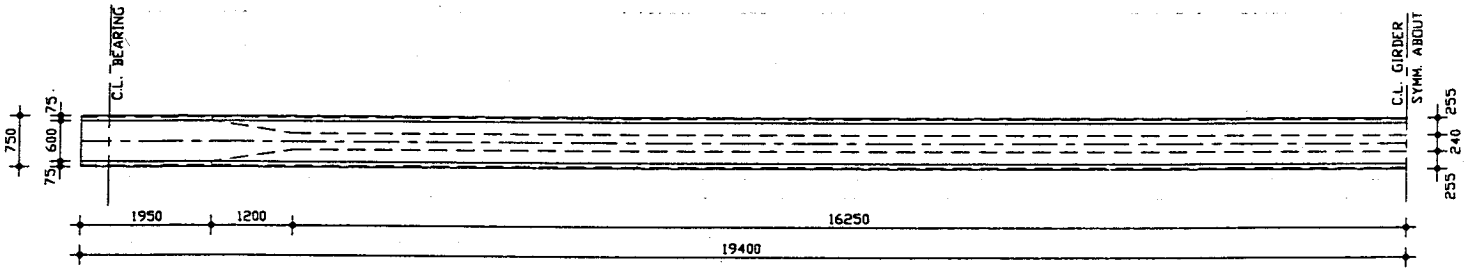
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



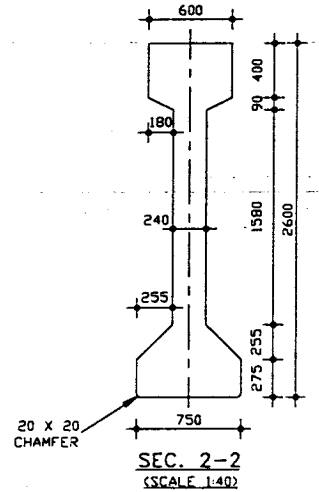
SEC. 1-1

(SCALE 1:40)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



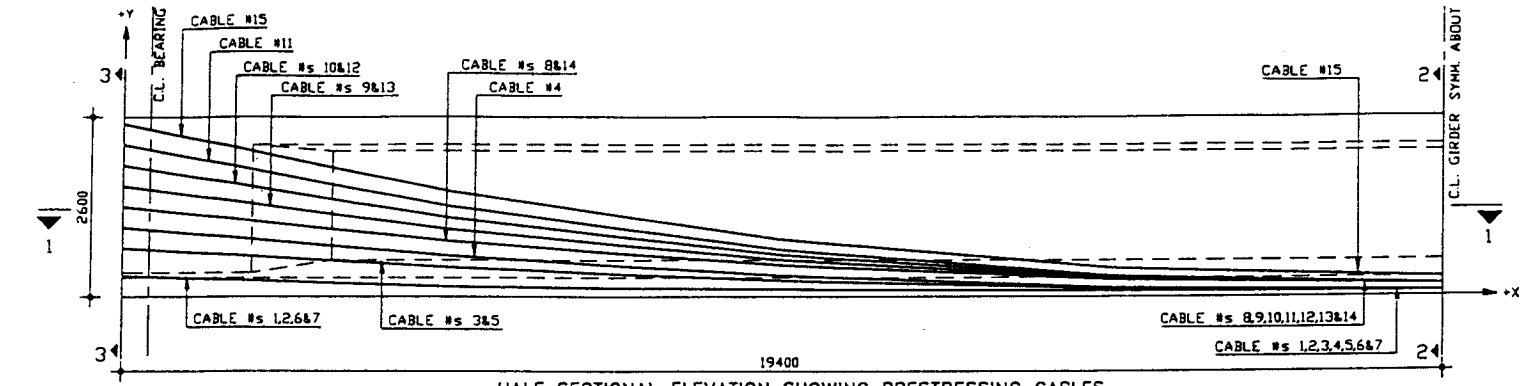
SEC. 2-2

(SCALE 1:40)

NOTES: 1. WEIGHT OF PC GIRDER = 103.81 METRIC TON
2. CONCRETE VOLUME = 41.54 CUBIC METER

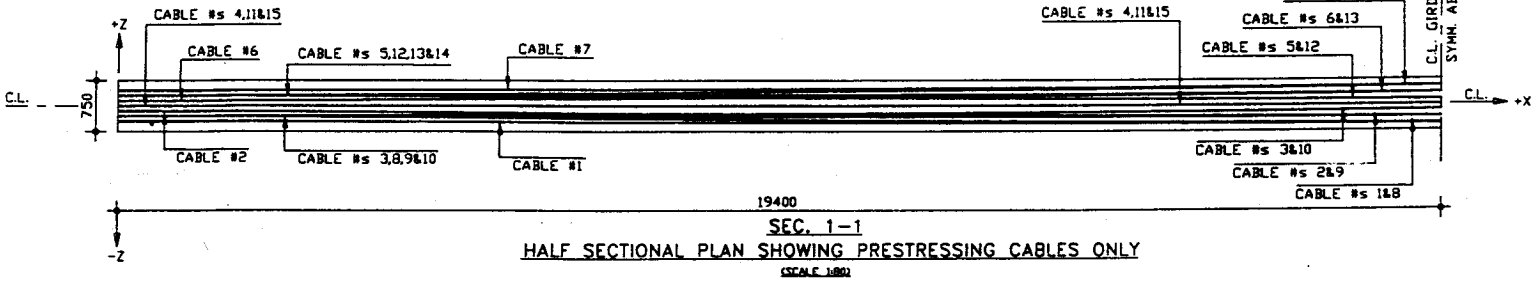
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 38.80 m CONCRETE OUTLINE DETAILS DWG. NO. PC-38-01 SCALE : AS SHOWN DATE : JUNE 1996

Web Copy



HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

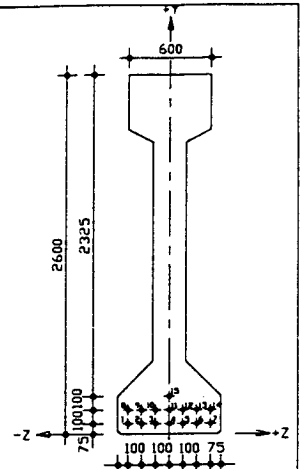
(SCALE 1:80)



SEC. 1-1

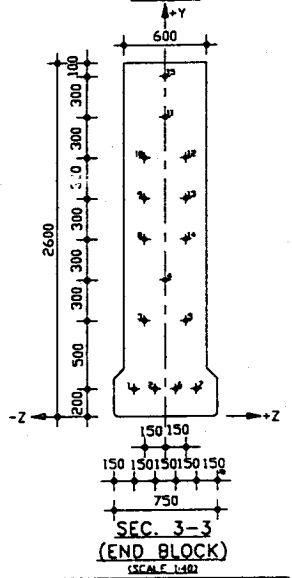
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:80)



SEC. 2-2
(MID-SEC.)

(SCALE 1:40)



SEC. 3-3
(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION FROM BOTH ENDS. (mm)
		X=0		X=L/8=4850		X=L/4=9700		X=3L/8=14550		X=L/2=19400		
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)									
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
15	12Ø7	13.182°	2500	0	1527	0	831	0	414	0	275	0	113.372
11	12Ø7	12.033°	2200	0	1314	0	681	0	302	0	175	0	116.51
12	12Ø7	10.292°	1900	150	1145	80	606	80	283	95	175	100	116.372
10	12Ø7	10.292°	1900	-150	1145	-80	606	-80	283	-95	175	-100	116.372
13	12Ø7	8.531°	1600	150	977	80	531	80	264	188	175	200	116.327
9	12Ø7	8.531°	1600	-150	977	-80	531	-80	264	-188	175	-200	116.327
14	12Ø7	6.754°	1300	150	808	80	456	180	245	249	175	300	116.38
8	12Ø7	6.754°	1300	-150	808	-80	456	-180	245	-249	175	-300	116.38
4	12Ø7	5.561°	1000	0	595	0	306	0	133	0	75	0	116.473
5	12Ø7	3.764°	700	150	427	138	231	125	114	113	75	100	116.701
3	12Ø7	3.764°	700	-150	427	-138	231	-125	114	-113	75	-100	116.701
7	12Ø7	0.754°	200	225	145	244	106	263	83	281	75	300	117.329
6	12Ø7	0.754°	200	75	145	106	106	138	83	169	75	200	117.329
2	12Ø7	0.754°	200	-75	145	-106	106	-138	83	-169	75	-200	117.329
1	12Ø7	0.754°	200	-225	145	-244	106	-263	83	-281	75	-300	117.329

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,7,9,10,11,12&13 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 8,14&15 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 4,3,5,2,6,1,7,11,10,12,9&13
STAGE-2: CABLE NOS. 8,14&15

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 10 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

PRESTRESSED CONCRETE GIRDER

LENGTH : 38.80 m

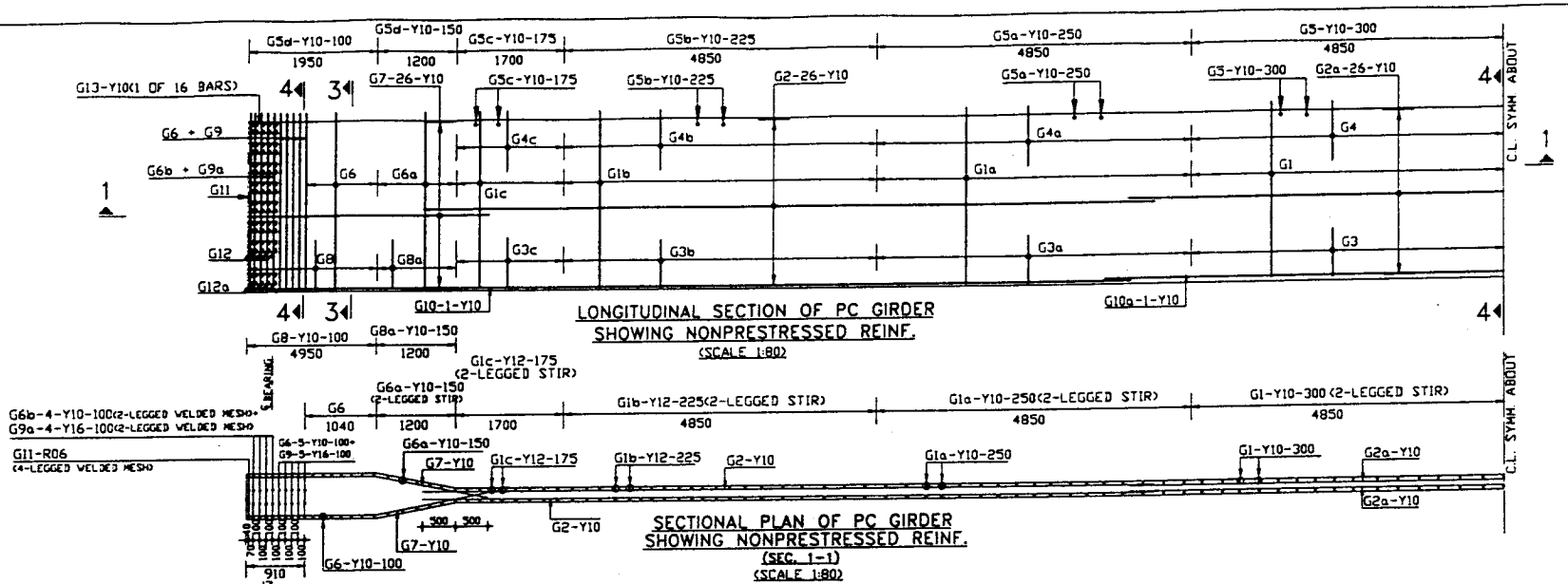
PRESTRESSING CABLE DETAILS

DWG. NO. : PC-38-02

SCALE : AS SHOWN

DATE : JUNE 1996

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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : 38.80 m NONPRESTRESSED REINF. DETAILS — DWG NO. : PC-38-03 SCALE AS SHOWN — DATE : JUNE 1996

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BAR BENDING SCHEDULE

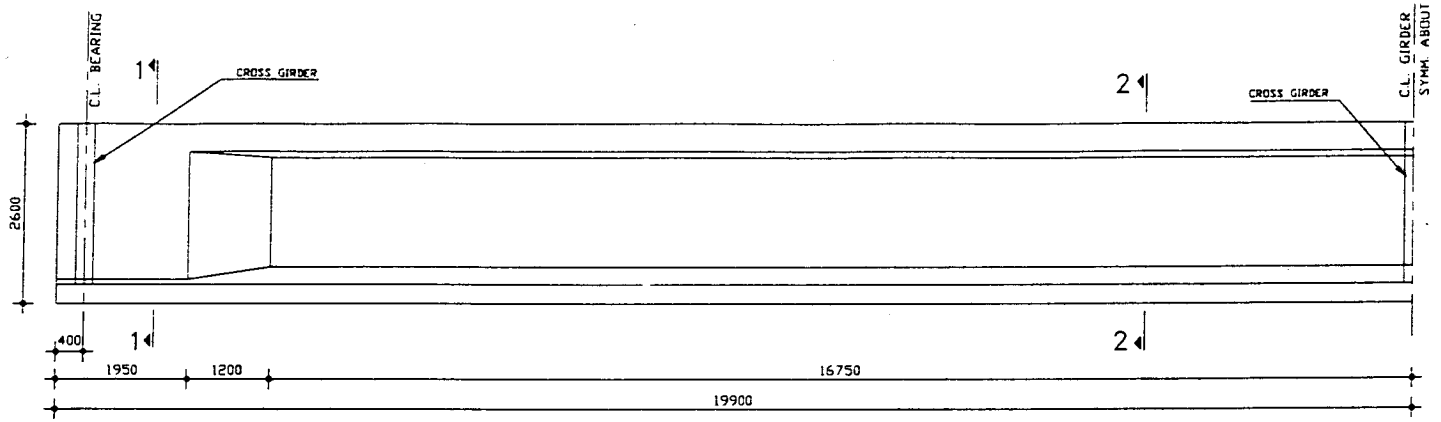
MEMBER	BAR MARK	BAR TYPE & DIA	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	2195	160	130	490		20		10	5903		33	194.799	0.616	119.996
	G1a	Y10	250	03	2195	160	130	490		20		10	5903		38	224.314	0.616	138.177
	G1b	Y12	200	03	2195	160	130	490		24		12	5891		48	282.768	0.888	251.098
	G1c	Y12	150	03	2195	160	130	490		24		12	5891		22	129.602	0.888	115.087
	G2	Y10		01	11433							10	11433		52	594.516	0.616	366.222
	G2a	Y10		01	11433							10	11433		26	297.258	0.616	183.111
	G3	Y10	300	04	235	670	160	255		20		10	2071		33	68.343	0.616	42.099
	G3a	Y10	250	04	235	670	160	255		20		10	2071		38	78.698	0.616	48.478
	G3b	Y12	200	04	235	670	160	255		24		12	2081		48	99.888	0.888	88.701
	G3c	Y12	150	04	235	670	160	255		24		12	2081		22	45.782	0.888	40.654
	G4	Y10	300	05	525	160	250	180	90	20		10	2042		33	67.386	0.616	41.510
	G4a	Y10	250	05	525	160	250	180	90	20		10	2042		38	77.596	0.616	47.799
	G4b	Y12	200	05	525	160	250	180	90	24		12	2028		48	97.344	0.888	86.441
	G4c	Y12	150	05	525	160	250	180	90	24		12	2028		22	44.616	0.888	39.619
	G5	Y10	300	06	520						100	10	720		33	23.760	0.616	14.636
	G5a	Y10	250	06	520						100	10	720		38	27.360	0.616	16.854
	G5b	Y10	200	06	520						100	10	720		48	34.560	0.616	21.289
	G5c	Y10	150	06	520						100	10	720		22	15.840	0.616	9.757
	G5d	Y10	100	06	520						100	10	720		54	38.880	0.616	23.950
	G6a	Y10	150	02	2685	160 ~ 520 AVG. 340	130			20		10		6230	16	99.680	0.616	61.403
	G6+G6b	Y10	100	02	2685	520	130			20		10	6590		38	250.420	0.616	154.259
	G7	Y10		07	1910	1719						10	3629		52	188.708	0.616	116.244
	G8a	Y10	150	04	235	670	160 ~ 520 AVG. 340	255 ~ 75 AVG. 165		20		10		1997	16	31.952	0.616	19.682
	G8	Y10	100	04	235	670	520	75		20		10	1922		38	73.036	0.616	44.990
	G9+G9a	Y16	100	03	2375	150	130	310		32		16	5852		18	105.336	1.579	166.326
	G10	Y10		01	12000							10	12000		2	24.000	0.616	14.784
	G10a	Y10		01	7960							10	7960		2	15.920	0.616	9.807
	G11	R06		01	2685							6	2685		8	21.480	0.222	4.769
	G12	Y10		09	520	100						10	1360		70	95.200	0.616	58.643
	G12a	Y10		09	670	100						10	1660		10	16.600	0.616	10.226
	G13	Y10		01	370							10	370		16	5.920	0.616	3.647
	G14	R06		08	150	40	320					6	3619		30	108.570	0.222	24.103
															TOTAL WEIGHT:			2384.360 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

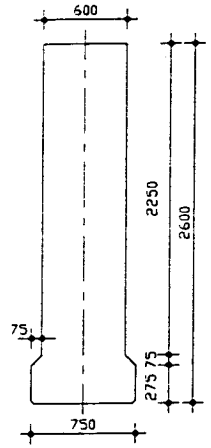
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 38.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-38-04
			DATE: JUNE 1996

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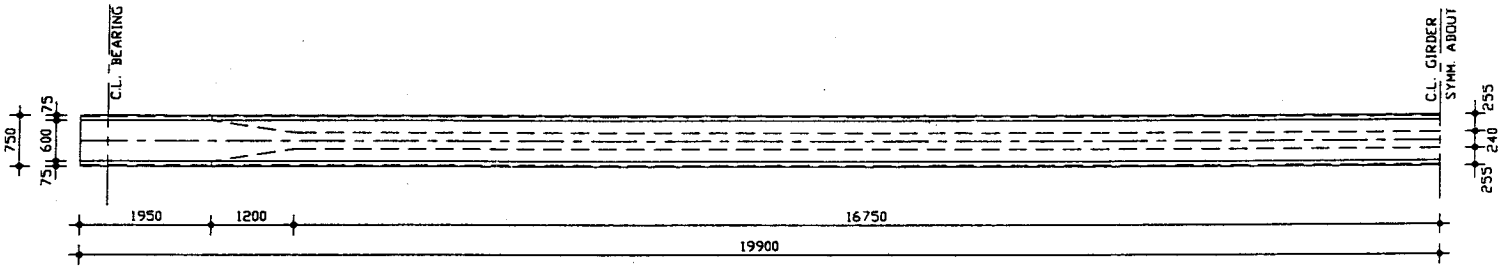
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



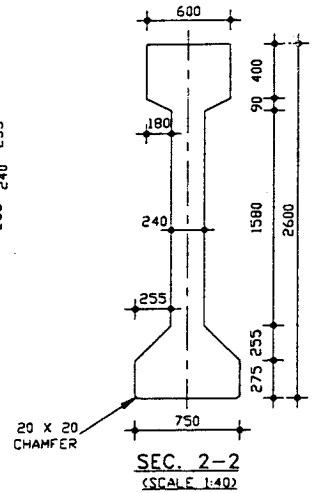
SEC. 1-1

(SCALE 1:40)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



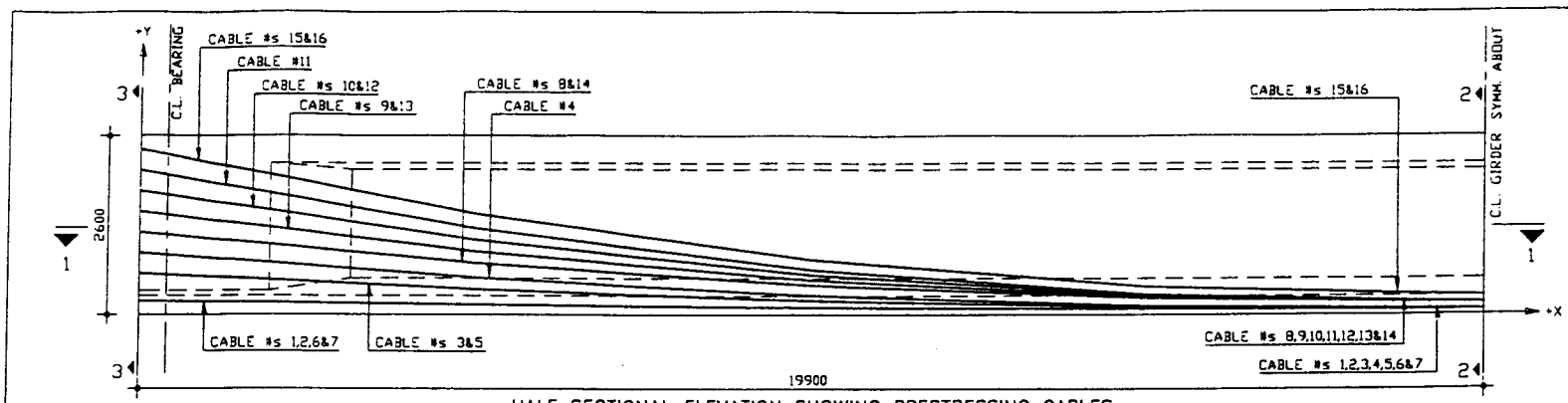
SEC. 2-2

(SCALE 1:40)

NOTES: 1. WEIGHT OF PC GIRDER = 106.28 METRIC TON
2. CONCRETE VOLUME = 42.53 CUBIC METER

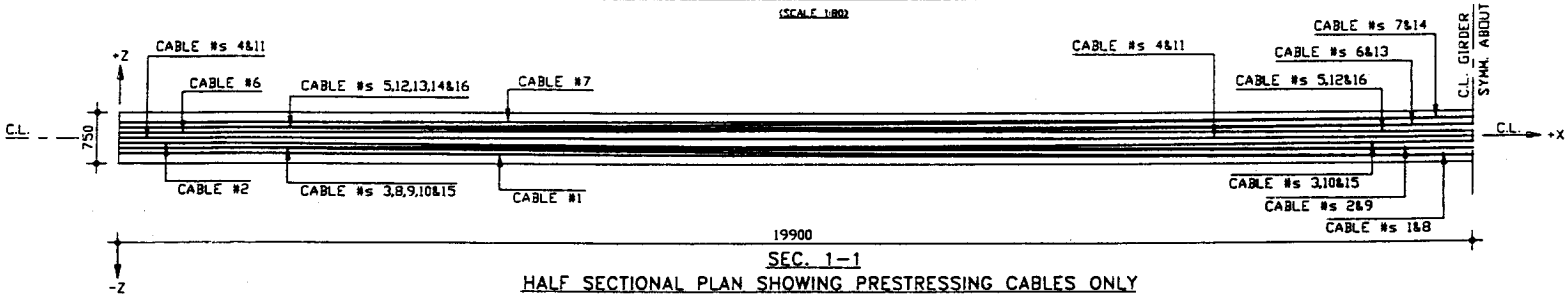
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 39.80 m CONCRETE OUTLINE DETAILS — DWG. NO. : PC-39-01 SCALE : AS SHOWN — DATE : JUNE 1996

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HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

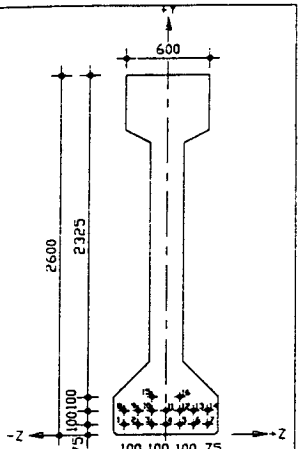
(SCALE 1:80)



SEC. 1–1

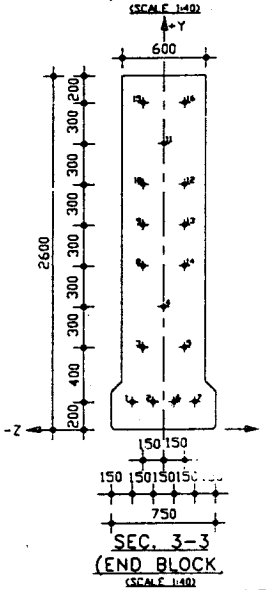
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:80)



SEC. 2–2
(MID–SEC.)

(SCALE 1:40)



SEC. 3–3
(END BLOCK

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)											EXTENSION FROM BOTH ENDS. (mm)
		X=0		X=L/8=4975		X=L/4=9950		X=3L/8=14925		X=L/2=19900			
		CABLE INCLIN. ANGLE	CABLE ORDINATES ALONG Y & Z AXES (mm)										
			VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
16	12∅7	12.295°	2400	150	1470	80	806	80	408	95	275	100	116.482
15	12∅7	12.295°	2400	−150	1470	−80	806	−80	408	−95	275	−100	116.482
11	12∅7	11.169°	2100	0	1259	0	656	0	295	0	175	0	119.033
12	12∅7	9.462°	1800	150	1089	80	581	80	277	95	175	100	118.938
10	12∅7	9.462°	1800	−150	1089	−80	581	−80	277	−95	175	−100	118.938+
13	12∅7	7.739°	1500	150	920	80	506	80	258	188	175	200	118.936
9	12∅7	7.739°	1500	−150	920	−80	506	−80	258	−188	175	−200	118.936
14	12∅7	6.00°	1200	150	752	80	431	180	239	249	175	300	119.032
8	12∅7	6.00°	1200	−150	752	−80	431	−180	239	−249	175	−300	119.032
4	12∅7	4.837°	900	0	539	0	281	0	127	0	75	0	119.152
5	12∅7	3.082°	600	150	370	138	206	125	108	113	75	100	119.421
3	12∅7	3.082°	600	−150	370	−138	206	−125	108	−113	75	−100	119.421
7	12∅7	0.735°	200	225	145	244	106	263	83	281	75	300	119.949
6	12∅7	0.735°	200	75	145	106	106	138	83	169	75	200	119.949
2	12∅7	0.735°	200	−75	145	−106	106	−138	83	−169	75	−200	119.949
1	12∅7	0.735°	200	−225	145	−244	106	−263	83	−281	75	−300	119.949

NOTES:

A. STAGES AND SEQUENCE OF PRESTRESSING

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,7,9,10,11,12&13 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 8,14,15&16 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. SEQUENCE OF STRESSING:
STAGE-1: CABLE NOS. 4,3,5,2,6,1,7,11,10,12,9&13
STAGE-2: CABLE NOS. 15,16,8&14

B. PRECAMBER
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 12 mm AT MID-SPAN.

C. ANCHORAGE DETAILS
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

PRESTRESSED CONCRETE GIRDER

LENGTH : 39.80 m

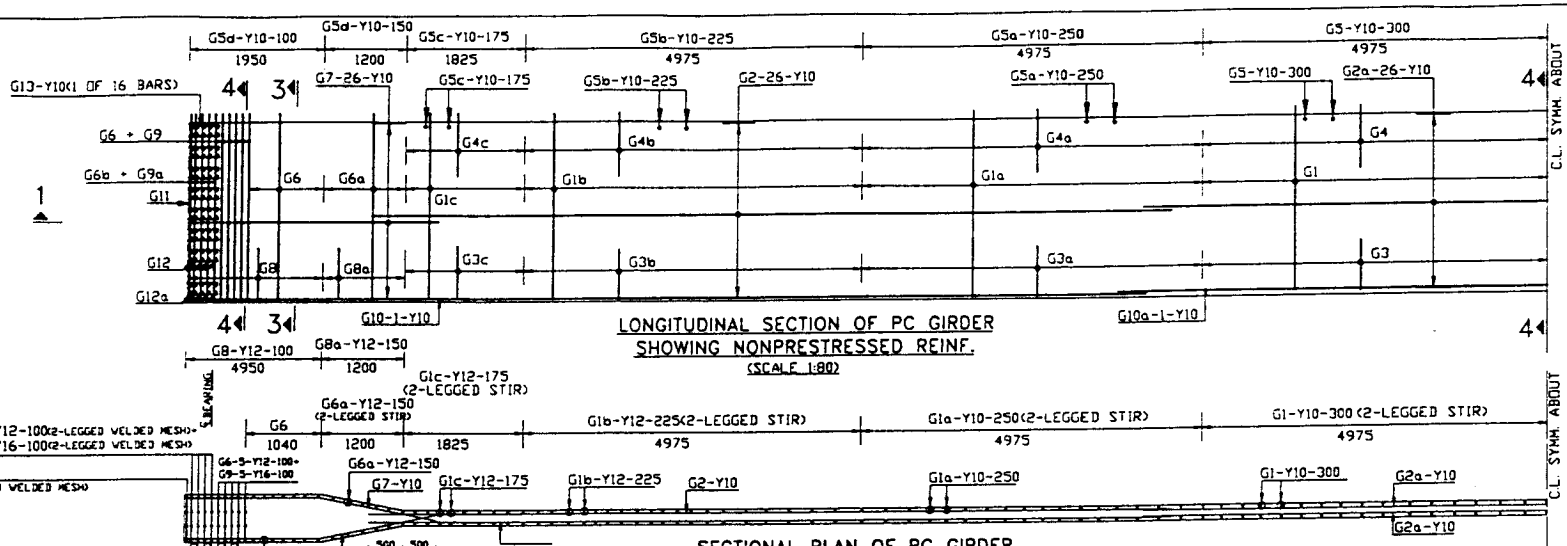
PRESTRESSING CABLE DETAILS

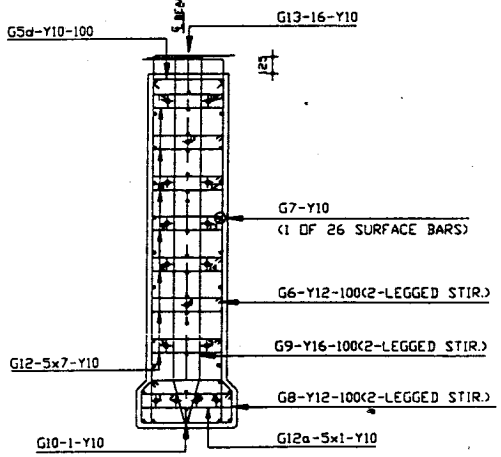
DWG. NO. PC-39-02

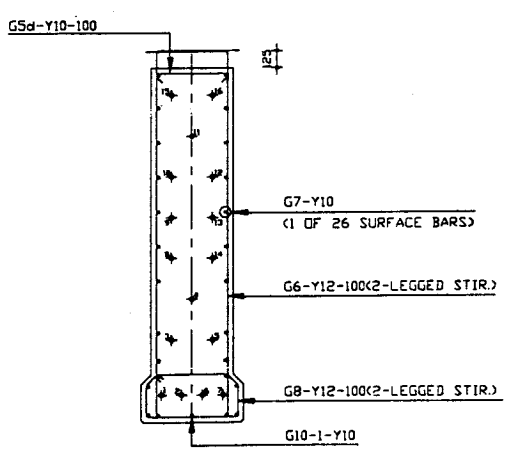
SCALE : AS SHOWN

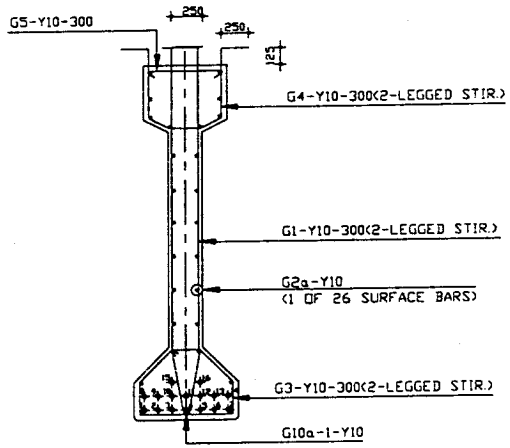
DATE : JUNE 1996

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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 39.80 m NONPRESTRESSED REINF. DETAILS — DWG. NO. : PC-39-03 SCALE : AS SHOWN — DATE : JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	2195	160	130	490		20		10	5903		34	200.702	0.616	123.632
	G1a	Y10	250	03	2195	160	130	490		20		10	5903		40	236.120	0.616	145.450
	G1b	Y12	200	03	2195	160	130	490		24		12	5891		50	294.550	0.888	261.560
	G1c	Y12	150	03	2195	160	130	490		24		12	5891		24	141.384	0.888	125.549
	G2	Y10		01	11767							10	11767		52	611.884	0.616	376.921
	G2a	Y10		01	11767							10	11767		26	305.942	0.616	188.460
	G3	Y10	300	04	235	670	160	255		20		10	2071		34	70.414	0.616	43.375
	G3a	Y10	250	04	235	670	160	255		20		10	2071		40	82.840	0.616	51.029
	G3b	Y12	200	04	235	670	160	255		24		12	2081		50	104.050	0.888	92.396
	G3c	Y12	150	04	235	670	160	255		24		12	2081		24	49.944	0.888	44.350
	G4	Y10	300	05	525	160	250	180	90	20		10	2042		34	69.428	0.616	42.768
	G4a	Y10	250	05	525	160	250	180	90	20		10	2042		40	81.680	0.616	50.315
	G4b	Y12	200	05	525	160	250	180	90	24		12	2028		50	101.400	0.888	90.043
	G4c	Y12	150	05	525	160	250	180	90	24		12	2028		24	48.672	0.888	43.221
	G5	Y10	300	06	520						100	10	720		34	24.480	0.616	15.080
	G5a	Y10	250	06	520						100	10	720		40	28.800	0.616	17.741
	G5b	Y10	200	06	520						100	10	720		50	36.000	0.616	22.176
	G5c	Y10	150	06	520						100	10	720		24	17.280	0.616	10.644
	G5d	Y10	100	06	520						100	10	720		54	38.880	0.616	23.950
	G6a	Y12	150	02	2685	160 ~ 520 AVG. 340	130			24		12		6214	16	99.424	0.888	88.289
	G6+G6b	Y12	100	02	2685	520	130			24		12	6574		38	249.812	0.888	221.833
	G7	Y10		07	1910	1719						10	3629		52	188.708	0.616	116.244
	G8a	Y12	150	04	235	670	160 ~ 520 AVG. 340	255 ~ 75 AVG. 165		24		12		2007	16	32.112	0.888	28.515
	G8	Y12	100	04	235	670	520	75		24		12	1932		3P	73.416	0.888	65.193
	G9+G9a	Y16	100	03	2375	150	130	310		32		16	5852		18	105.336	1.579	166.326
	G10	Y10		01	12000							10	12000		2	24.000	0.616	14.784
	G10a	Y10		01	8460							10	8460		2	16.920	0.616	10.423
	G11	R06		01	2685							6	2685		8	21.480	0.222	4.769
	G12	Y10		09	520	100						10	1360		70	95.200	0.616	58.643
	G12a	Y10		09	670	100						10	1660		10	16.600	0.616	10.226
	G13	Y10		01	370							10	370		16	5.920	0.616	3.647
	G14	R06		08	150	40	320					6	3619		32	115.808	0.222	25.709

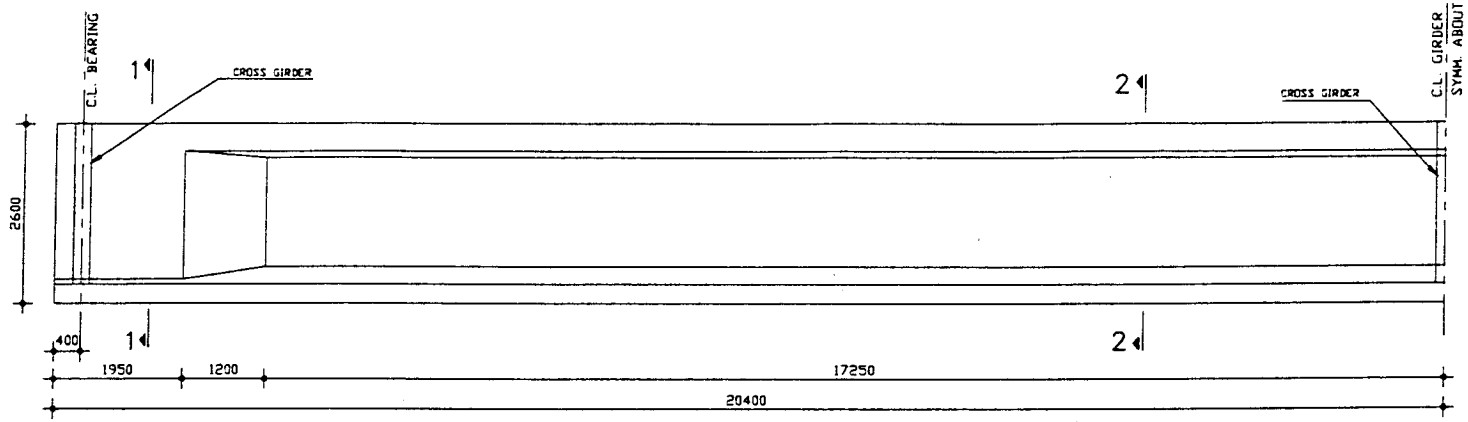
TOTAL WEIGHT: 2583.261 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

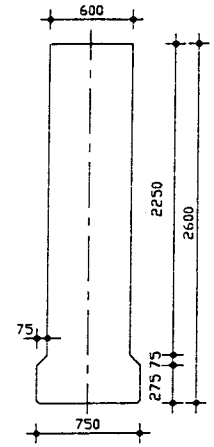
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRESTRESSED CONCRETE GIRDER
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 39.80 m
			NONPRESTRESSED REINF. BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: PC-39-04
			DATE: JUNE 1996

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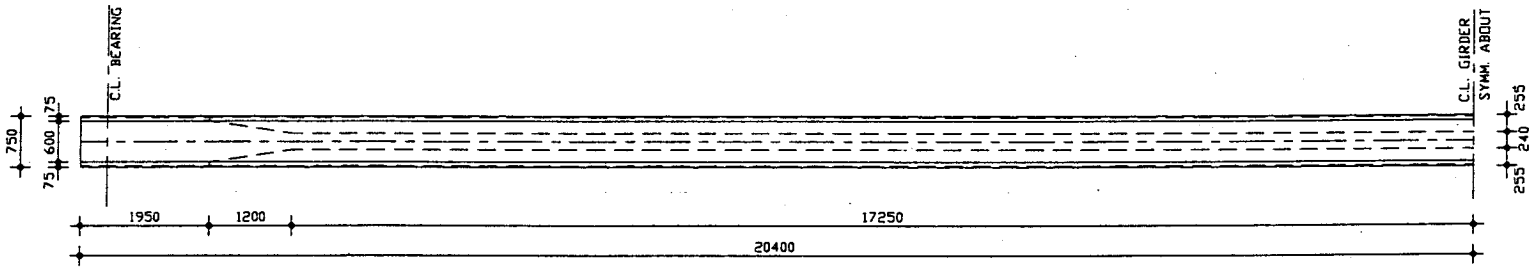
HALF ELEVATION OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



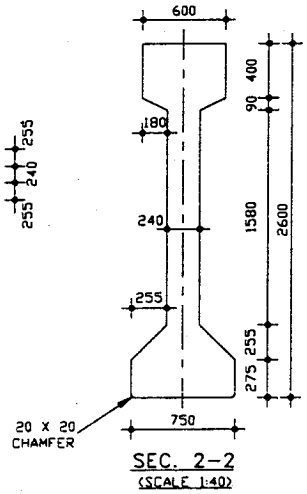
SEC. 1–1

(SCALE 1:40)



TOP VIEW OF PC GIRDER SHOWING CONCRETE OUTLINE DETAILS

(SCALE 1:80)



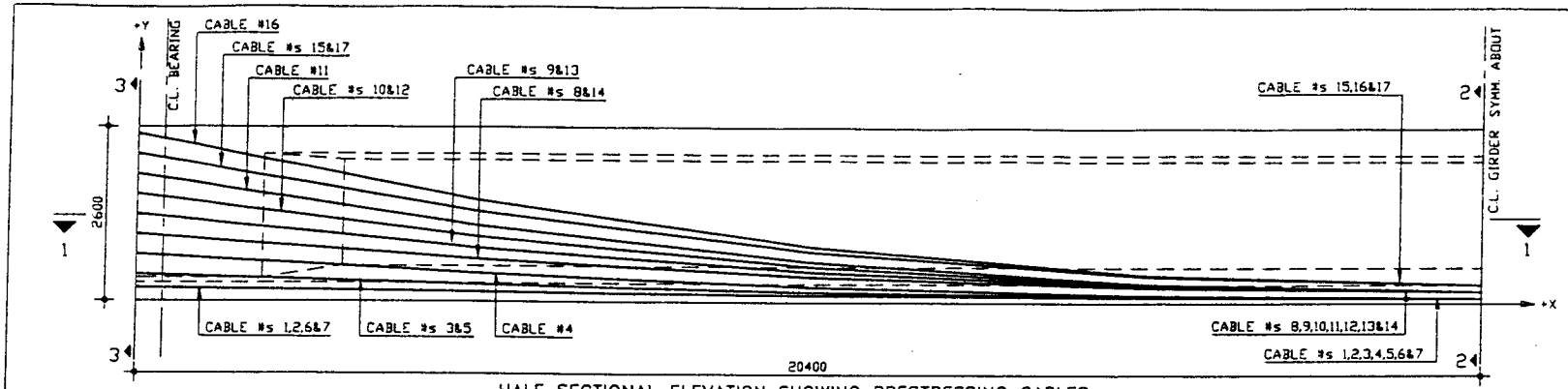
SEC. 2–2

(SCALE 1:40)

NOTES: 1. WEIGHT OF PC GIRDER = 108.75 METRIC TON
2. CONCRETE VOLUME = 43.52 CUBIC METER

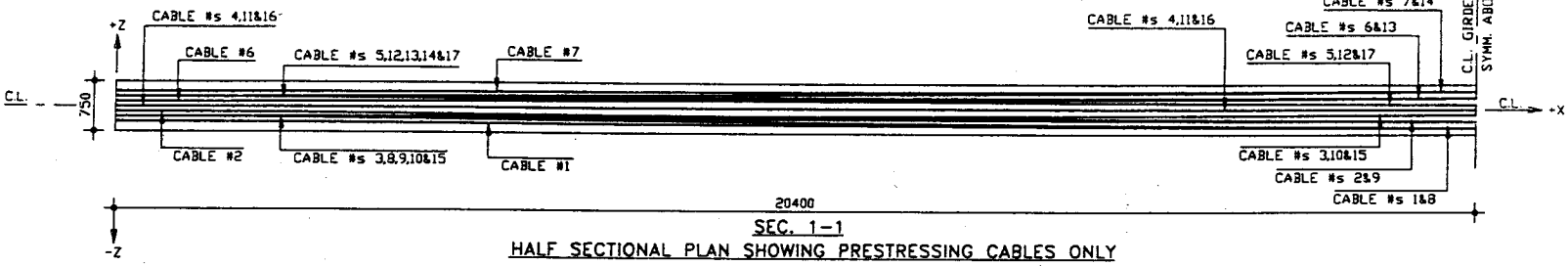
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 40.80 m	
			CONCRETE OUTLINE DETAILS	DWG. NO. : PC-40-01
			SCALE : AS SHOWN	DATE : JUNE 1996

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HALF SECTIONAL ELEVATION SHOWING PRESTRESSING CABLES

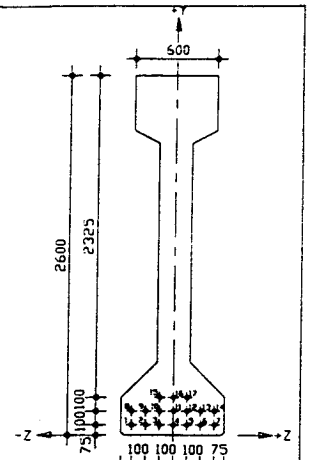
(SCALE 1:80)



SEC. 1–1

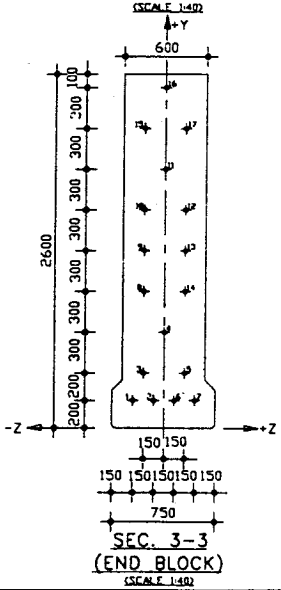
HALF SECTIONAL PLAN SHOWING PRESTRESSING CABLES ONLY

(SCALE 1:80)



SEC. 2–2
(MID–SEC.)

(SCALE 1:40)



SEC. 3–3
(END BLOCK)

(SCALE 1:40)

CABLE PROFILE ORDINATES

CABLE NO.	CABLE TYPE	X=DISTANCE MEASURED FROM GIRDER END (mm)										EXTENSION AT BOTH ENDS (mm)
		X=0		X=L/8=5100		X=L/4=10200		X=3L/8=15300		X=L/2=20400		
		CABLE ORDINATES ALONG Y & Z AXES (mm)										
		CABLE INCLIN. ANGLE	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	VER.:Y	HOR.:Z	
16	12Ø7	12.544°	2500	0	1527	0	831	0	414	0	275	0	119.589
17	12Ø7	10.896°	2200	150	1358	80	756	80	395	95	275	100	119.424
15	12Ø7	10.896°	2200	−150	1358	−80	756	−80	395	−95	275	−100	119.424
11	12Ø7	9.787°	1900	0	1145	0	606	0	283	0	175	0	121.492
12	12Ø7	9.787°	1600	150	977	80	531	80	264	95	175	100	121.469
10	12Ø7	8.11°	1600	−150	977	−80	531	−80	264	−95	175	−100	121.469
13	12Ø7	8.11°	1300	150	808	80	456	105	245	188	175	200	121.54
9	12Ø7	6.419°	1300	−150	808	−80	456	−105	245	−188	175	−200	121.54
14	12Ø7	6.419°	1000	150	639	80	381	180	227	249	175	300	121.71
8	12Ø7	4.716°	1000	−150	639	−80	381	−180	227	−249	175	−300	121.71
4	12Ø7	4.716°	700	0	427	0	231	0	114	0	75	0	121.88
5	12Ø7	3.576°	400	150	258	138	156	125	95	113	75	100	122.223
3	12Ø7	1.861°	400	−150	258	−138	156	−125	95	−113	75	−100	122.223
7	12Ø7	0.716°	200	225	145	244	106	263	83	281	75	300	122.511
6	12Ø7	0.716°	200	75	145	106	106	138	83	169	75	200	122.511
2	12Ø7	0.716°	200	−75	145	−106	106	−138	83	−169	75	−200	122.511
1	12Ø7	0.716°	200	−225	145	−244	106	−263	83	−281	75	−300	122.511

NOTES:

A. **STAGES AND SEQUENCE OF PRESTRESSING**

01. ALL CABLES SHALL BE STRESSED FROM BOTH ENDS.

02. IN STAGE-1 STRESSING OF CABLE NOS. 1,2,3,4,5,6,7,9,10,11,12&13 SHALL BE DONE AFTER 7 DAYS OR CONCRETE STRENGTH NOT LESS THAN 24 N/mm2 WHICHEVER IS LATER.

03. IN STAGE-2 STRESSING OF CABLE NOS. 8,14,15,16&17 SHALL BE DONE AFTER 21 DAYS OR THE GIRDER CONCRETE STRENGTH ACHIEVES MINIMUM 30 N/mm2 WHICHEVER IS LATER.

04. **SEQUENCE OF STRESSING:**
STAGE-1: CABLE NOS. 4,3,5,2,6,1,7,11,10,12,9&13
STAGE-2: CABLE NOS. 16,15,17,8&14

B. **PRECAMBER**
PRECAMBER TO PC GIRDER:
UPWARD PARABOLIC WITH MAX. ORDINATE 12 mm AT MID-SPAN.

C. **ANCHORAGE DETAILS**
REFER TO DWG. NO. PC-MIS-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

PRESTRESSED CONCRETE GIRDER

LENGTH : 40.80 m

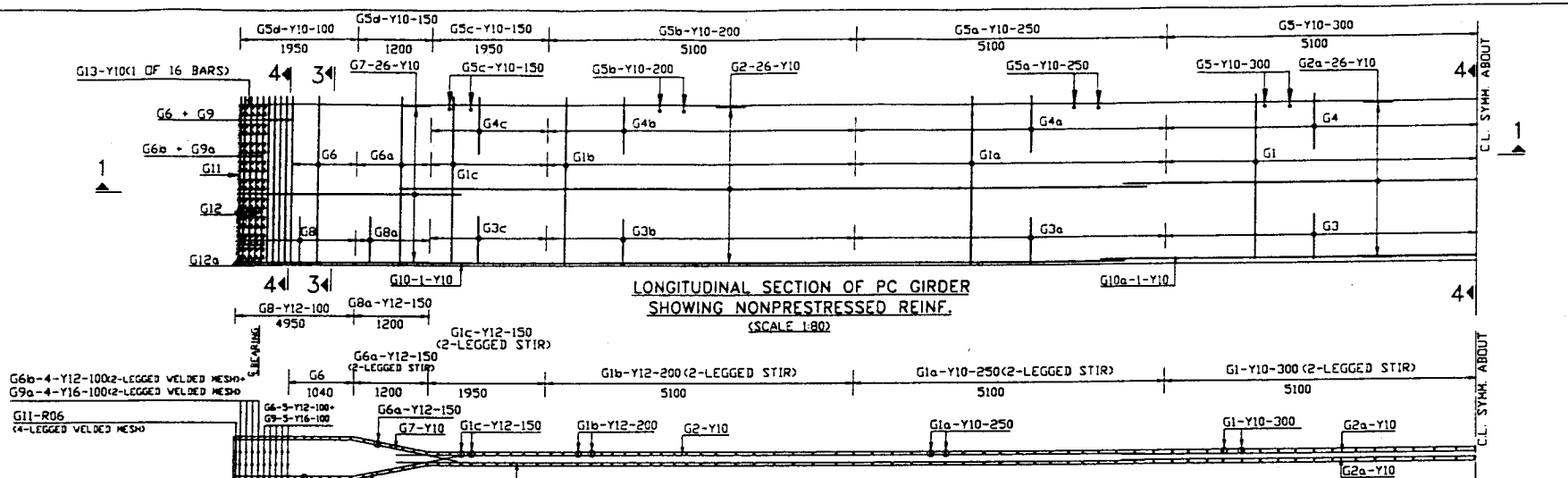
PRESTRESSING CABLE DETAILS

DWG. NO. PC-40-02

SCALE : AS SHOWN

DATE : JUNE 1996

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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	PRESTRESSED CONCRETE GIRDER LENGTH : 40.80 m NONPRESTRESSED REINF. DETAILS DWG. NO. : PC-40-03 SCALE AS SHOWN DATE JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	E	r	h	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
PC GIRDER	G1	Y10	300	03	2195	160	130	490		20		10	5903		35	206.605	0.616	127.269
	G1a	Y10	250	03	2195	160	130	490		20		10	5903		40	236.120	0.616	145.450
	G1b	Y12	200	03	2195	160	130	490		24		12	5891		52	306.332	0.888	272.023
	G1c	Y12	150	03	2195	160	130	490		24		12	5891		26	153.166	0.888	136.011
	G2	Y10		01	12000							10	12000		52	624.000	0.616	384.384
	G2a	Y10		01	6350							10	6350		52	330.200	0.616	203.403
	G3	Y10	300	04	235	670	160	255		20		10	2071		35	72.485	0.616	44.651
	G3a	Y10	250	04	235	670	160	255		20		10	2071		40	82.840	0.616	51.029
	G3b	Y12	200	04	235	670	160	255		24		12	2081		52	108.212	0.888	96.092
	G3c	Y12	150	04	235	670	160	255		24		12	2081		26	54.106	0.888	48.046
	G4	Y10	300	05	525	160	250	180	90	20		10	2042		35	71.470	0.616	44.026
	G4a	Y10	250	05	525	160	250	180	90	20		10	2042		40	81.680	0.616	50.315
	G4b	Y12	200	05	525	160	250	180	90	24		12	2028		52	105.456	0.888	93.645
	G4c	Y12	150	05	525	160	250	180	90	24		12	2028		26	52.728	0.888	46.822
	G5	Y10	300	06	520						100	10	720		35	25.200	0.616	15.523
	G5a	Y10	250	06	520						100	10	720		40	28.800	0.616	17.741
	G5b	Y10	200	06	520						100	10	720		52	37.440	0.616	23.063
	G5c	Y10	150	06	520						100	10	720		26	18.720	0.616	11.532
	G5d	Y10	100	06	520						100	10	720		54	38.880	0.616	23.950
	G6a	Y12	150	02	2685	160 ~ 520 AVG. 340	130			24		12		6214	16	99.424	0.888	88.289
	G6+G6b	Y12	100	02	2685	520	130			24		12	6574		38	249.812	0.888	221.833
	G7	Y10		07	1910	1719						10	3629		52	188.708	0.616	116.244
	G8a	Y12	150	04	235	670	160 ~ 520 AVG. 340	255 ~ 75 AVG. 165		24		12		2007	16	32.112	0.888	28.515
	G8	Y12	100	04	235	670	520	75		24		12	1932		38	73.416	0.888	65.193
	G9+G9a	Y16	100	03	2375	150	130	310		32		16	5852		18	105.336	1.579	166.326
	G10	Y10		01	12000							10	12000		2	24.000	0.616	14.784
	G10a	Y10		01	8960							10	8960		2	17.920	0.616	11.039
	G11	R06		01	2685							6	2685		8	21.480	0.222	4.769
	G12	Y10		09	520	100						10	1360		80	108.800	0.616	67.021
	G12a	Y10		09	670	100						10	1660		10	16.600	0.616	10.226
	G13	Y10		01	370							10	370		18	6.660	0.616	4.103
	G14	R06		08	150	40	320					6	3619		34	123.046	0.222	27.316

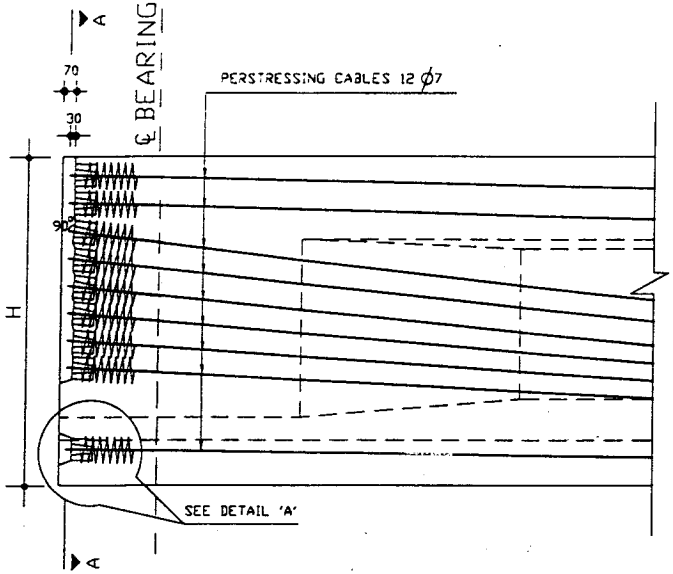
TOTAL WEIGHT: **2660.632** Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

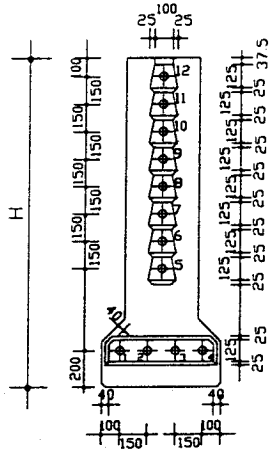
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	PRESTRESSED CONCRETE GIRDER OVERALL LENGTH: 40.80 m NONPRESTRESSED REINF. BAR BENDING SCHEDULE DWG. NO.: PC-40-04 DATE: JUNE 1996

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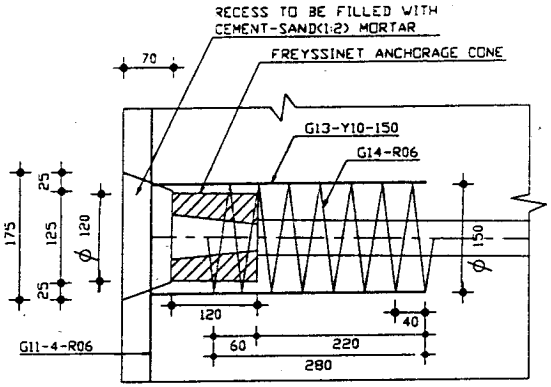
PART LONG. SECTION SHOWING TYPICAL
DETAILS OF ANCHORAGE AT PC GIRDER END

SCALE 1:30



END VIEW A-A
TYPICAL DETAILS OF
RECESS FOR ANCHORAGE

SCALE 1:30



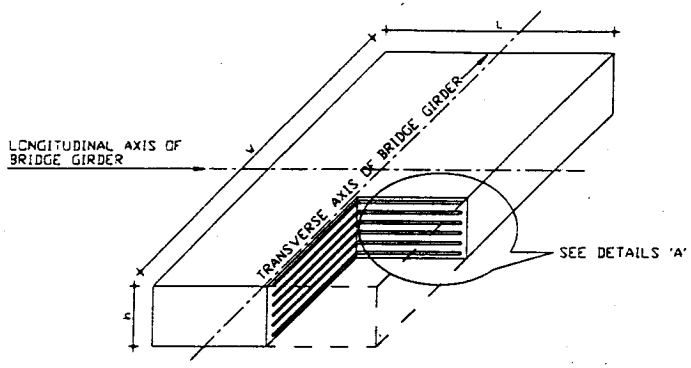
DETAIL 'A'
DETAILS OF ANCHORAGE

SCALE 1:7.5

ANCHORAGE DETAILS FOR 12 ϕ7 FRESSINET ANCHORAGE SYSTEM

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	PRESTRESSED CONCRETE GIRDER LENGTH : ALL TYPICAL PRESTRESSING ANCHORAGE DETAILS — DWG. NO PC-MS-00 SCALE AS SHOWN — DATE JUNE 1996

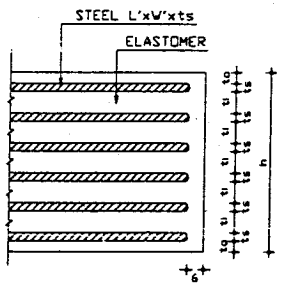
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ELASTOMERIC BRIDGE BEARINGS

SCHEDULE OF ELASTOMERIC BEARINGS

SL. NO.	SPAN RANGE m	SIZE OF BEARINGS L x W x h mm x mm x mm	L' mm	W' mm	ti mm	to mm	ts mm	N1	N2
1	20 - 23	250x400x39	238	388	10	5	3	2	3
2	24 - 26	250x400x52	238	388	10	5	3	3	4
3	27 - 30	250x450x52	238	438	10	5	3	3	4
4	31 - 33	250x500x52	238	488	10	5	3	3	4
5	34 - 37	300x500x52	288	488	10	5	3	3	4
6	38 - 40	320x500x52	308	488	10	5	3	3	4



DETAILS 'A'

NOTATIONS :

L = GROSS DIMENSION OF BEARING PARALLEL TO THE LONGITUDINAL AXIS, mm
L' = LENGTH OF EMBEDDED STEEL PLATE, mm = (L-12) mm
W = GROSS DIMENSION OF BEARING PARALLEL TO TRANSVERSE AXIS, mm
W' = WIDTH OF EMBEDDED STEEL PLATE, mm = (W-12) mm
h = GROSS THICKNESS OF BEARING, mm = N1xti+N2xts+2xto
ti = THICKNESS OF INTERNAL LAYER OF ELASTOMER, mm
to = THICKNESS OF OUTTER LAYER OF ELASTOMER, mm = 0.5xti <= 6 mm
ts = THICKNESS OF INTERNAL LAYER OF STEEL PLATE, mm
N1 = NUMBER OF INTERNAL LAYERS OF ELASTOMER
N2 = NUMBER OF INTERNAL LAYERS OF STEEL PLATE

NOTES :

1. EMBEDDED STEEL PLATE SHALL CONFORM TO AASHTO DESIGNATION: M183/M183M-90 (ASTM DESIGNATION: A 36/A 36M-88d) WITH MINIMUM fy=250 N/mm2.
2. SHORE 'A' HARDNESS OF ELASTOMER SHALL CONFORM TO MINIMUM 50.
3. SHEAR MODULUS OF ELASTOMER AT 73 DEG. F SHALL BE MINIMUM 0.8 N/mm2.
4. CREEP DEFLECTION AT 25 YEARS = 25%
5. ALL OTHER REQUIREMENTS OF ELASTOMERIC BEARINGS SHALL CONFORM TO THE LATEST EDITION OF THE AASHTO STANDARD SPEFICATIONS FOR HIGHWAY BRIDGES.
6. THE ELASTOMERIC BEARING MUST BE PLACED IN HORIZONTAL POSITION.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA

ZILA

REINFORCED ELASTOMERIC BRIDGE BEARINGS

(SPAN RANGE : 20 m TO 40m)

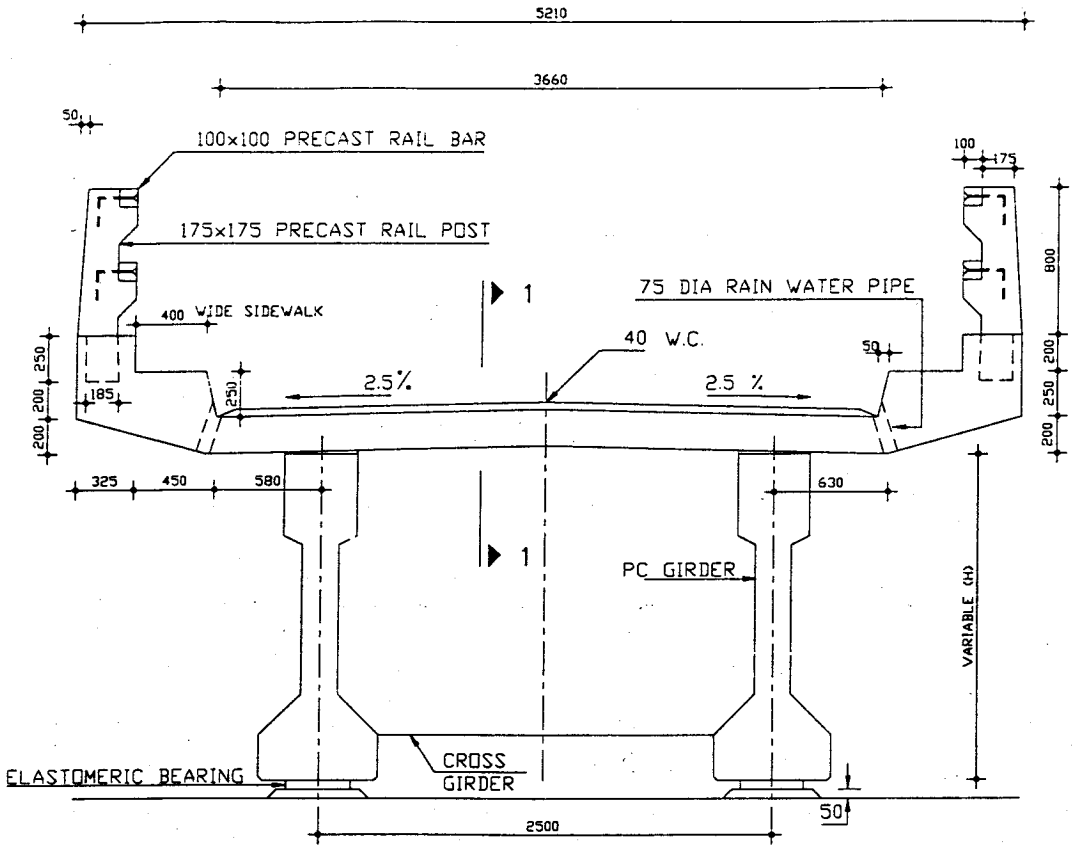
BEARING DETAILS

DWG. NO. : PC-BR-00

SCALE AS SHOWN

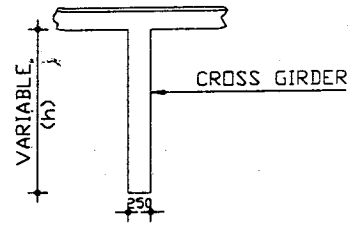
DATE JUNE 1996

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TYPICAL DECK CROSS-SECTION

SPAN LENGTH mm	DEPTH OF GIRDER (H) mm	DEPTH OF X-GIRDER (h) mm
20000 - 23000	1400	1150
24000 - 26000	1600	1350
27000 - 28000	1800	1550
29000 - 33000	2200	1950
34000 - 37000	2400	2125
38000 - 40000	2600	2325

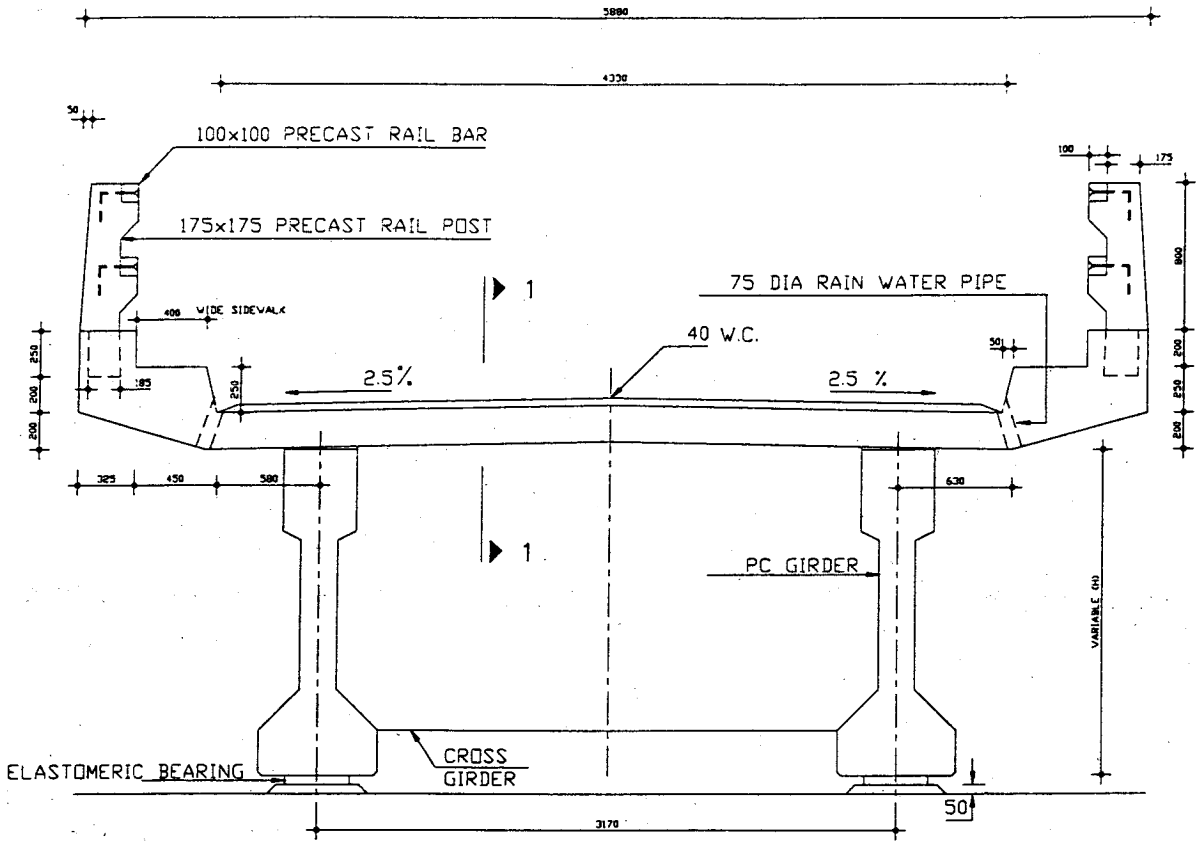


SECTION 1 – 1

NOTE: ALL SHARP CORNERS SHALL BE CHAMFERED 25x25

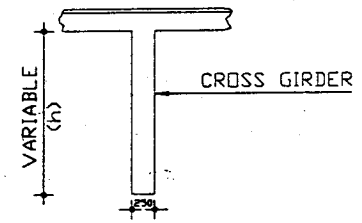
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA :	TYPICAL DECK CROSS-SECTION (TYPE IA) OVERALL WIDTH : 5.21 m CONCRETE OUTLINE DETAILS | DWG. NO. : S-IA-01 SCALE : 30 | DATE : JUNE 1996

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TYPICAL DECK CROSS-SECTION

SPAN LENGTH mm	DEPTH OF GIRDER (H) mm	DEPTH OF X-GIRDER (h) mm
20000 - 23000	1400	1150
24000 - 26000	1600	1350
27000 - 28000	1800	1550
29000 - 33000	2200	1950
34000 - 37000	2400	2125
38000 - 40000	2600	2325

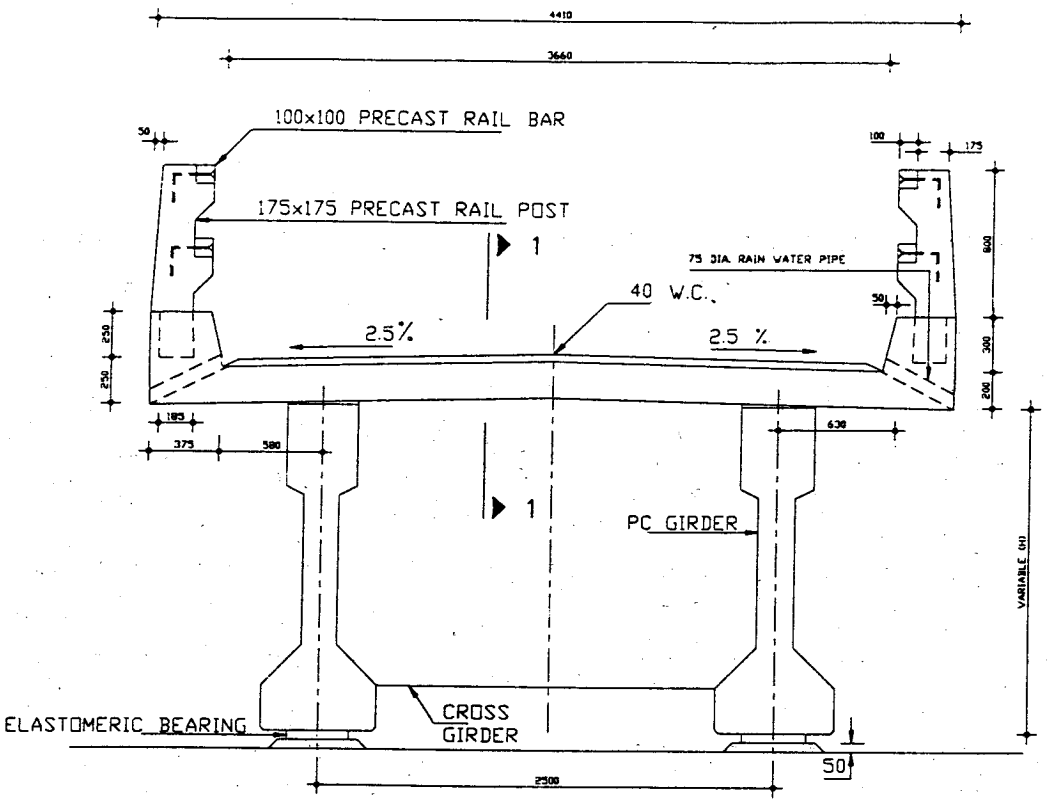


SECTION 1 – 1

NOTE: ALL SHARP CORNERS SHALL BE CHAMFERED 25x25

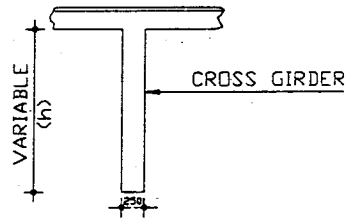
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT LOCATION : THANA ZILA	TYPICAL DECK CROSS-SECTION (TYPE IIA) OVERALL WIDTH : 5.88 m CONCRETE OUTLINE DETAILS — DWG. NO. : S-IIA-01 SCALE : 30 — DATE : JUNE 1996

Web Copy



TYPICAL DECK CROSS-SECTION

SPAN LENGTH mm	DEPTH OF GIRDER (H) mm	DEPTH OF X-GIRDER (h) mm
20000 - 23000	1400	1150
24000 - 26000	1600	1350
27000 - 28000	1800	1550
29000 - 33000	2200	1950
34000 - 37000	2400	2125
38000 - 40000	2600	2325

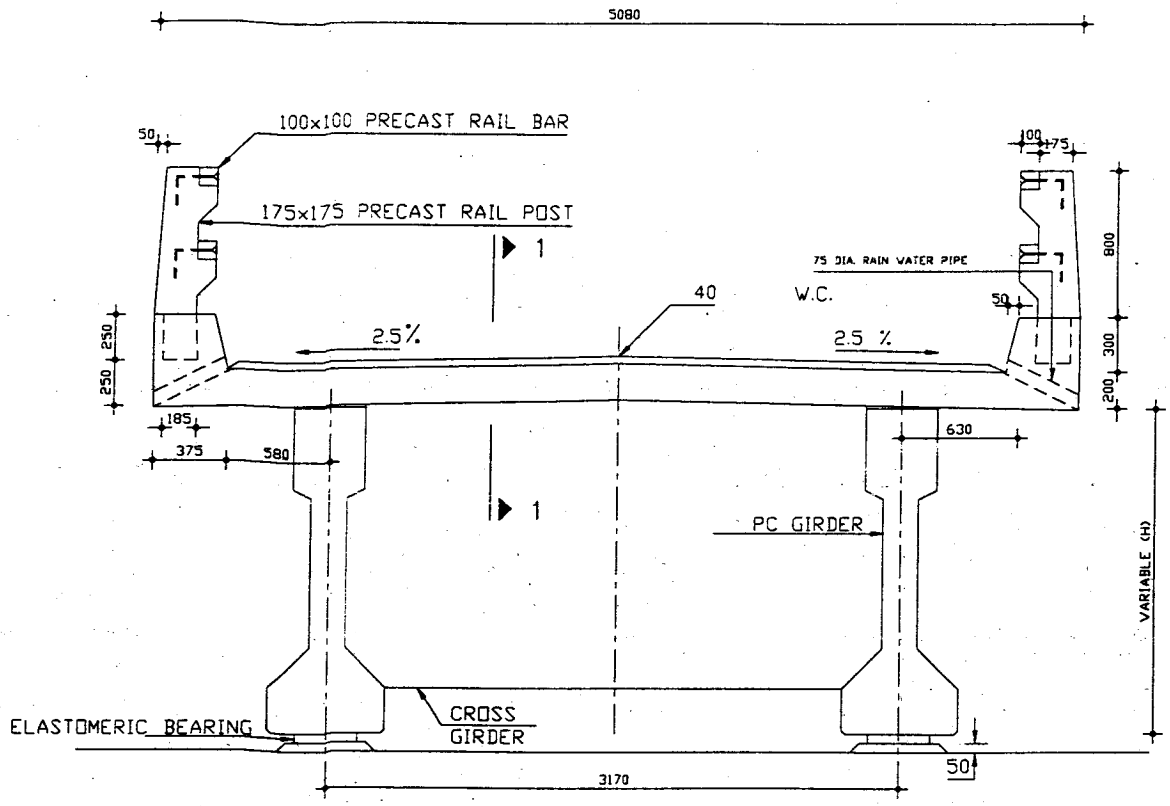


SECTION 1 – 1

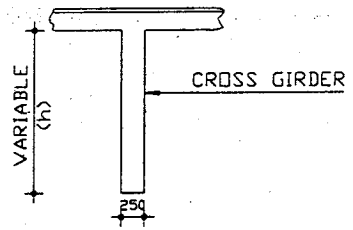
NOTE: ALL SHARP CORNERS SHALL BE CHAMFERED 25x25

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	TYPICAL DECK CROSS-SECTION (TYPE IB) OVERALL WIDTH : 4.41 m CONCRETE OUTLINE DETAILS — DWG. NO. S-IB-01 SCALE 1 : 30 — DATE JUNE 1996

Web Copy



SPAN LENGTH mm	DEPTH OF GIRDER (H) mm	DEPTH OF X-GIRDER (h) mm
20000 - 23000	1400	1150
24000 - 26000	1600	1350
27000 - 28000	1800	1550
29000 - 33000	2200	1950
34000 - 37000	2400	2125
38000 - 40000	2600	2325



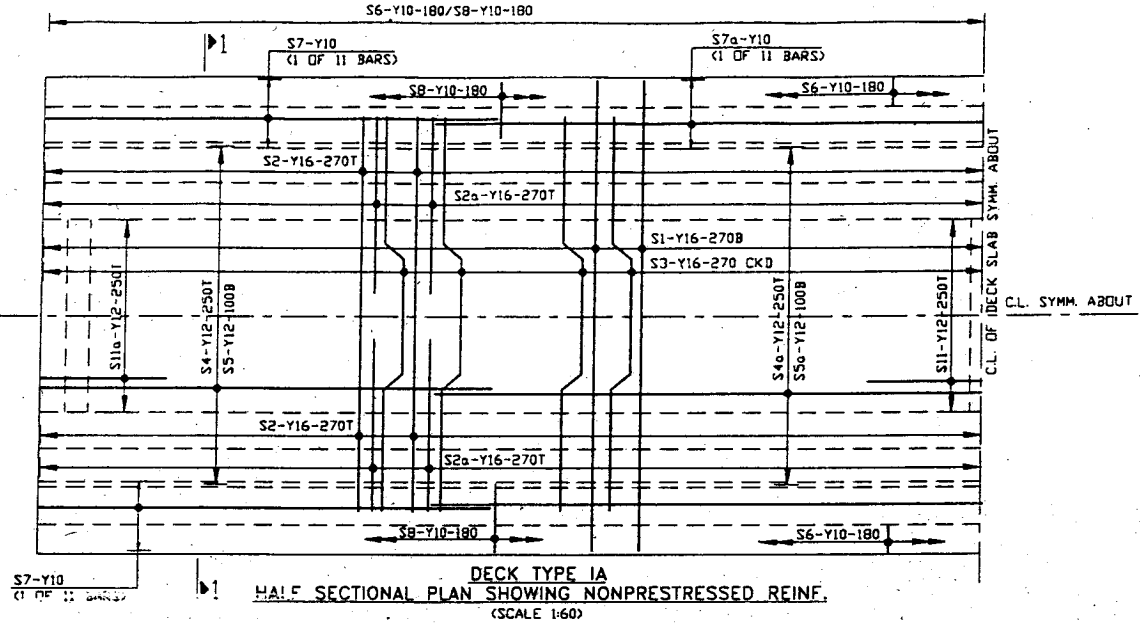
SECTION 1 – 1

TYPICAL DECK CROSS-SECTION

NOTE: ALL SHARP CORNERS SHALL BE CHAMFERED 25x25

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT LOCATION THANA ZILA	TYPICAL DECK CROSS-SECTION (TYPE IIB) OVERALL WIDTH : 5.08 m CONCRETE OUTLINE DETAILS — DWG. NO. : S-IIB-01 SCALE 1 : 30 — DATE : JUNE 1996

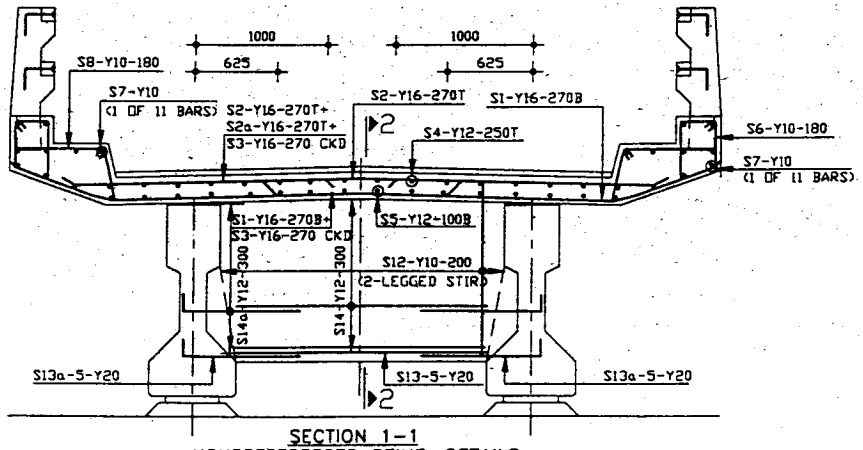
Web Copy



DECK TYPE IA

HALF SECTIONAL PLAN SHOWING NONPRESTRESSED REINF.

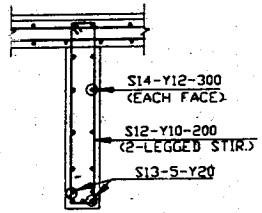
(SCALE 1:60)



SECTION 1-1

NONPRESTRESSED REINF. DETAILS

(SCALE 1:40)



SECTION 2-2

NONPRESTRESSED REINF. DETAILS

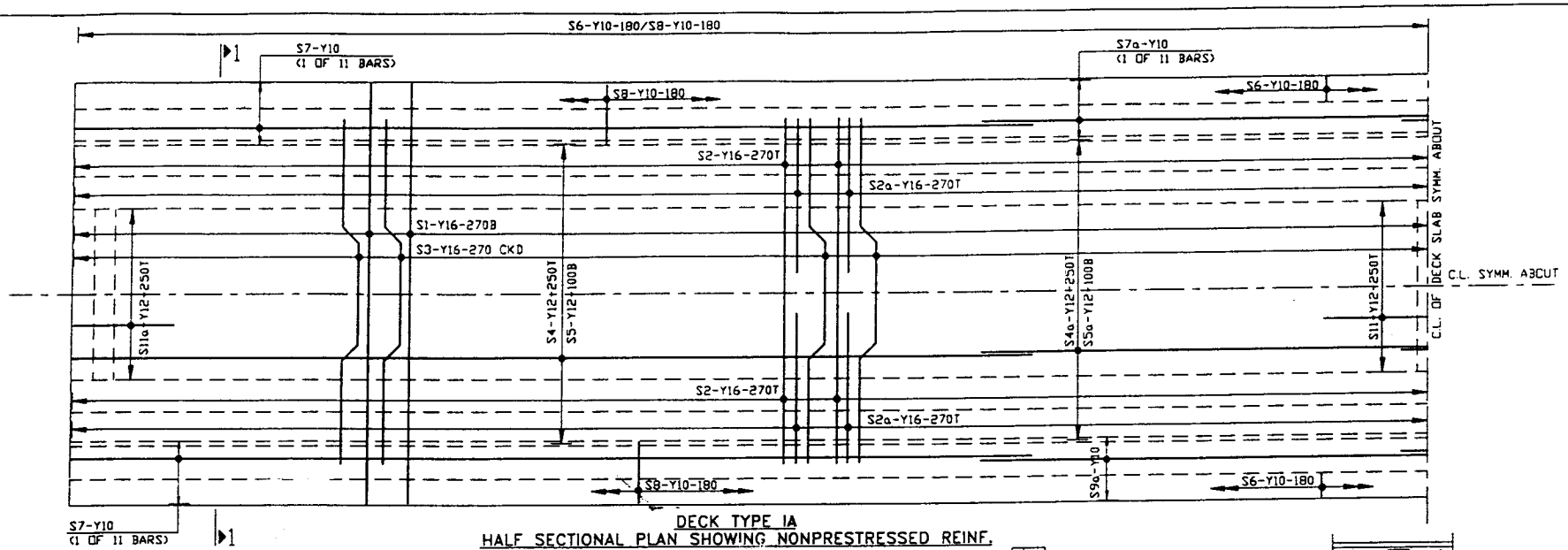
(SCALE 1:40)

NOTES:

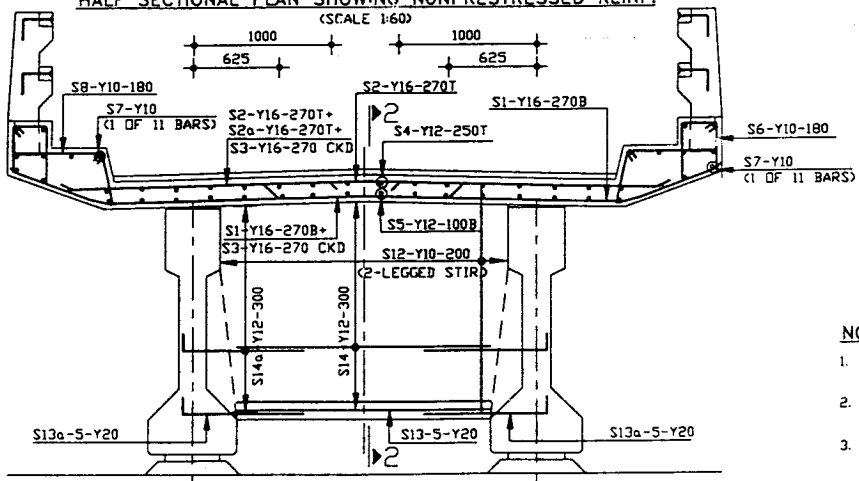
1. THIS DRAWING IS APPLICABLE FOR C/C BEARING SPAN 20m TO 32m.
2. B INDICATES BOTTOM BAR
   T INDICATES TOP BAR
3. BAR DETAIL, FOR EXAMPLE, S1-Y16-270B INDICATES AS FOLLOW:
   S1 = BAR MARK | IN DECK SLAB
   Y16 = ASTM A615 GRADE 40 DEFORMED BAR DIA. 16 mm
   270B = 270 mm SPACING OF BOTTOM BARS

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	DECK SLAB (TYPE IA) OVERALL LENGTH : 20.80 m TO 32.80 m TOTAL DECK WIDTH : 5.21 m NONPRESTRESSED REINF. DETAILS — DWG. NO. S-IA-02 SCALE AS SHOWN — DATE JUNE 1996

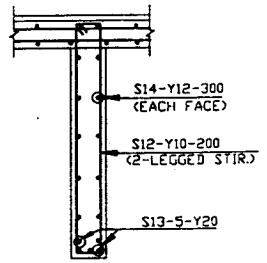
Web Copy



DECK TYPE IA
HALF SECTIONAL PLAN SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



SECTION 1-1
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)



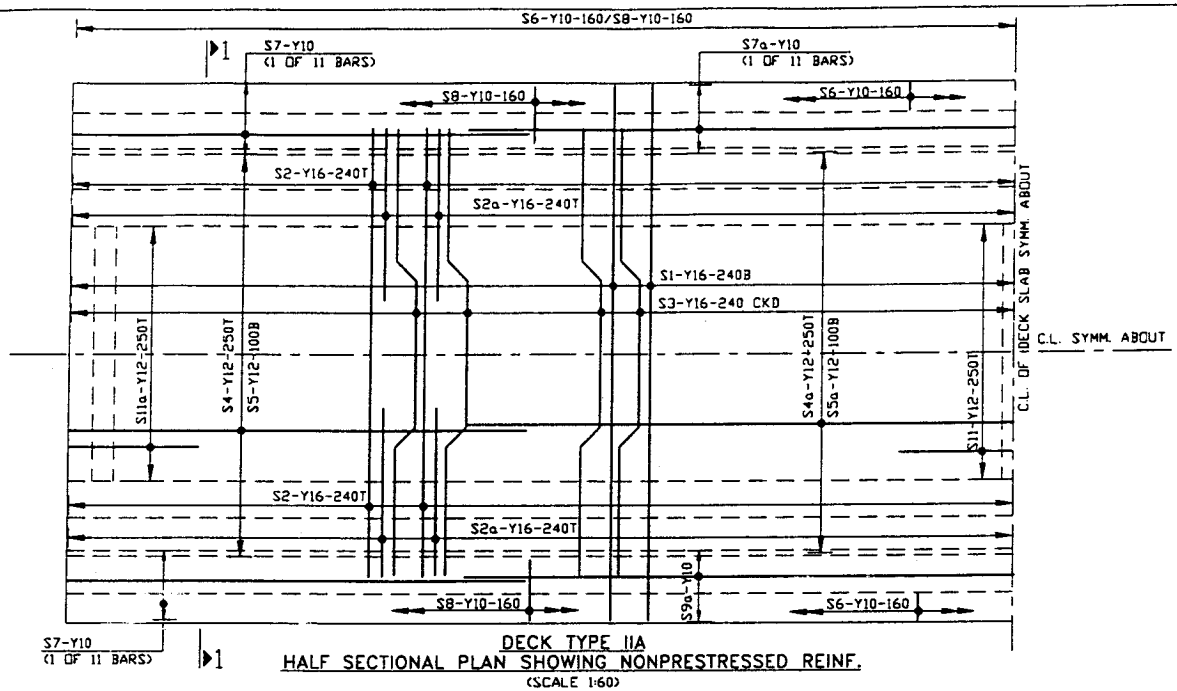
SECTION 2-2
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)

NOTES:

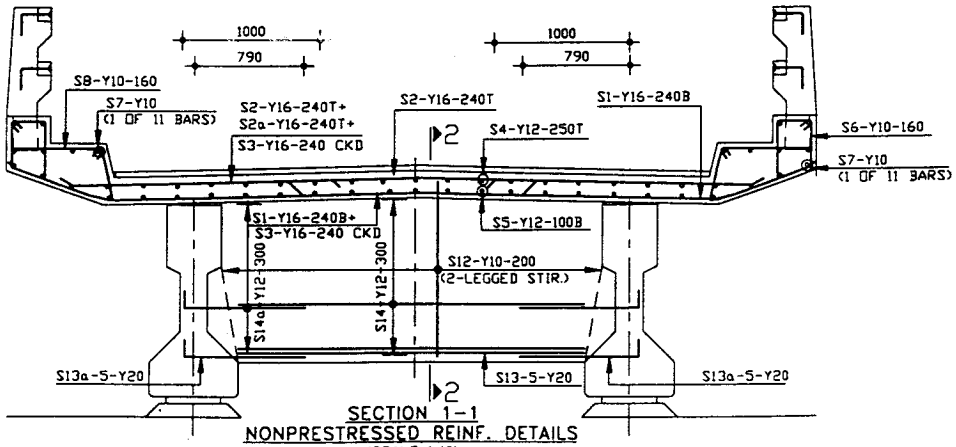
1. THIS DRAWING IS APPLICABLE FOR C/C BEARING SPAN 33m TO 40m.
2. B INDICATES BOTTOM BAR
   T INDICATES TOP BAR
3. BAR DETAIL, FOR EXAMPLE, S1-Y16-270B INDICATES AS FOLLOWS:
   S1 = BAR MARK 1 IN DECK SLAB
   Y16 = ASTM A615 GRADE 40 DEFORMED BAR DIA. 16 mm
   270B = 270 mm SPACING OF BOTTOM BARS

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	DECK SLAB (TYPE IA) OVERALL LENGTH : 33.80 m TO 40.80 m TOTAL DECK WIDTH : 5.21 m NONPRESTRESSED REINF. DETAILS — DWG. NO. : S-1A-02A SCALE AS SHOWN — DATE : JUNE 1996

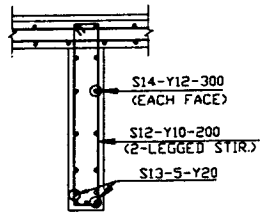
Web Copy



DECK TYPE IIA
HALF SECTIONAL PLAN SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



SECTION 1-1
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)



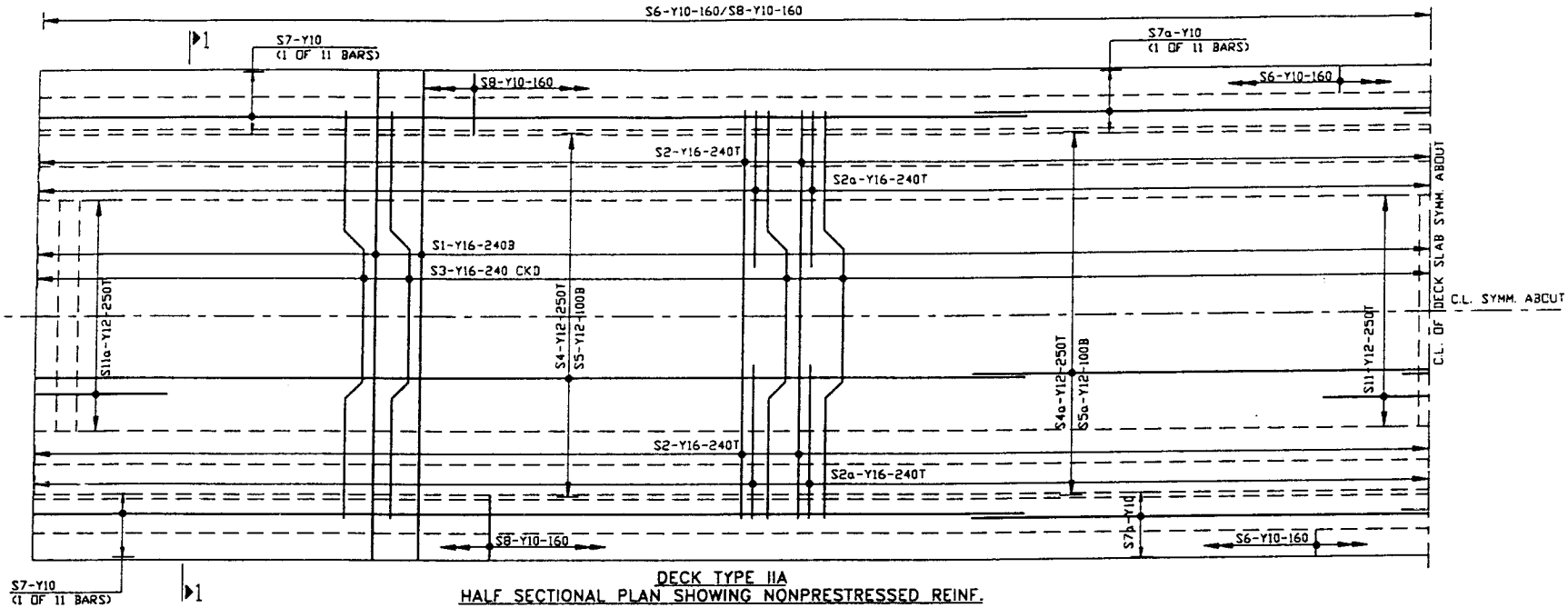
SECTION 2-2
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)

NOTES:

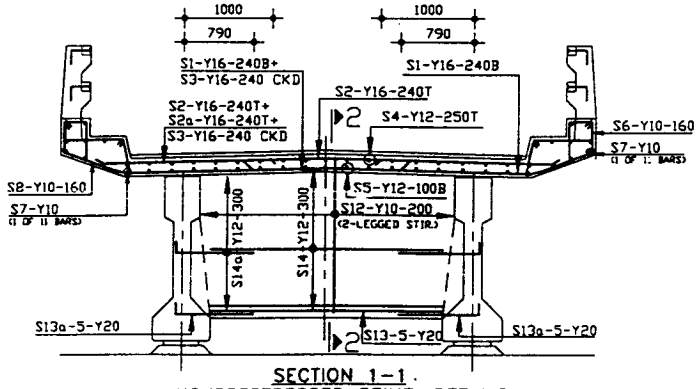
1. THIS DRAWING IS APPLICABLE FOR C/C BEARING SPAN 20m TO 32m.
2. B INDICATES BOTTOM BAR
   T INDICATES TOP BAR
3. BAR DETAIL, FOR EXAMPLE, S1-Y16-240B INDICATES AS FOLLOWS:
   S1 = BAR MARK 1 IN DECK SLAB
   Y16 = ASTM A615 GRADE 40 DEFORMED BAR DIA. 16 mm
   240B = 240 mm SPACING OF BOTTOM BARS

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	DECK SLAB (TYPE IIA) OVERALL LENGTH : 20.80 m TO 32.80 m TOTAL DECK WIDTH : 5.88 m	
			NONPRESTRESSED REINF. DETAILS	DWG. NO. : S-IIA-02
			SCALE AS SHOWN	DATE : JUNE 1996

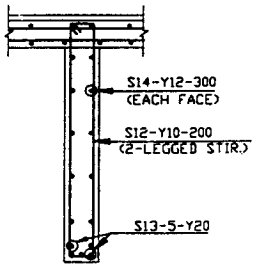
Web Copy



DECK TYPE IIA
HALF SECTIONAL PLAN SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



SECTION 1-1
NONPRESTRESSED REINF. DETAILS
(SCALE 1:60)



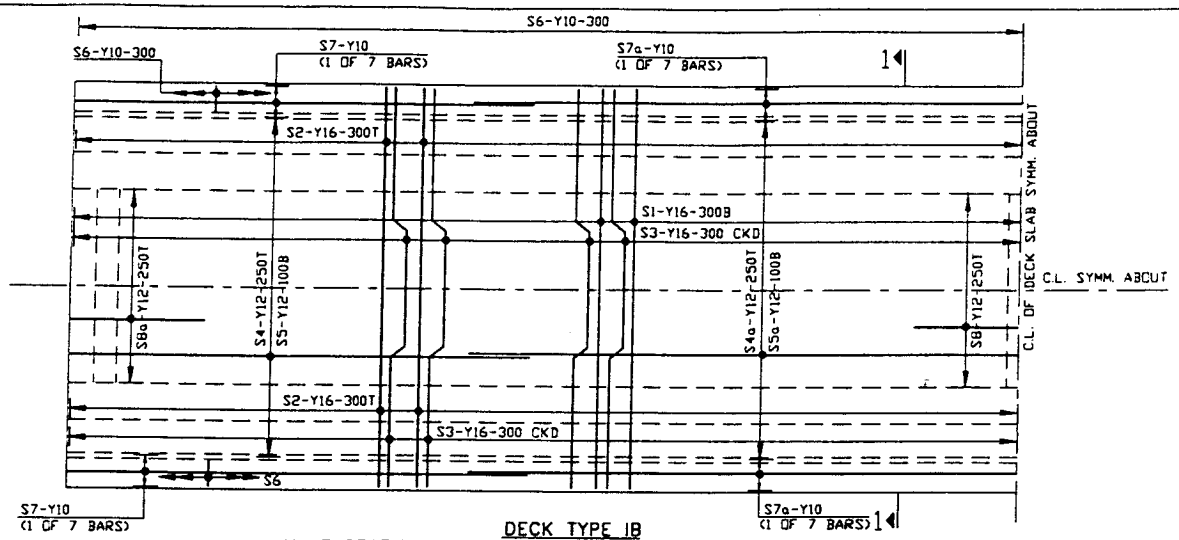
SECTION 2-2
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)

NOTES:

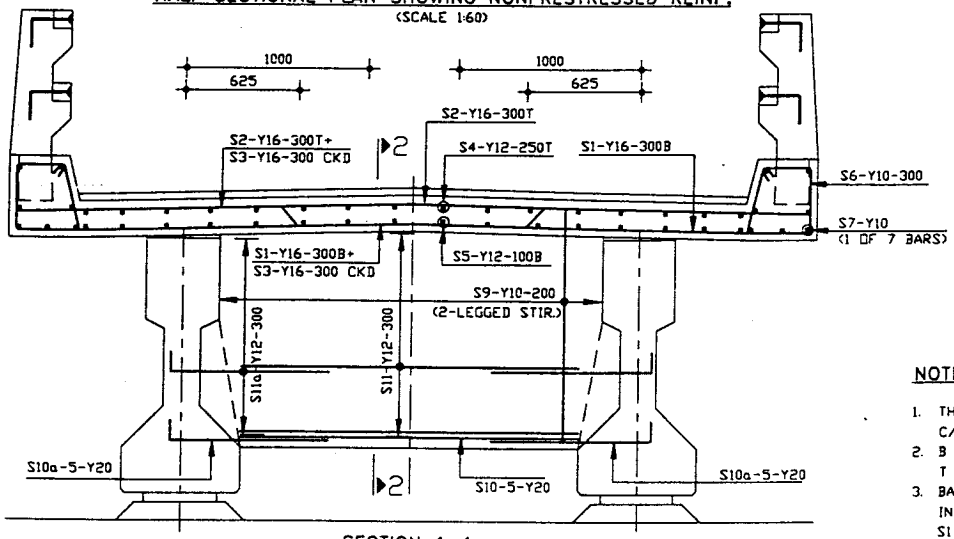
1. THIS DRAWING IS APPLICABLE FOR C/C BEARING SPAN 33m TO 40m.
2. B INDICATES BOTTOM BAR
   T INDICATE TOP BAR
3. BAR DETAIL, FOR EXAMPLE, S1-Y16-240B INDICATES AS FOLLOWS:
   S1 = BAR MARK 1 IN DECK SLAB
   Y16 = ASTM A615 GRADE 40 DEFORMED BAR DIA. 16 mm
   240B = 240 mm SPACING OF BOTTOM BARS

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT LOCATION : THANA : ZILA	DECK SLAB (TYPE IIA) OVERALL LENGTH : 33.80 m TO 40.80 m TOTAL DECK WIDTH : 5.88 m NONPRESTRESSED REINF. DETAILS — DWG. NO. : S-IIA-02A SCALE AS SHOWN — DATE : JUNE 1996

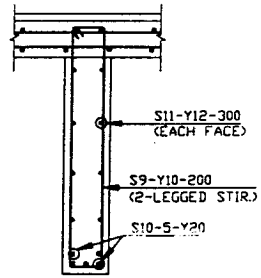
Web Copy



DECK TYPE 1B
HALF SECTIONAL PLAN SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



SECTION 1-1
NONPRESTRESSED REINF. DETAILS
(SCALE 1:30)



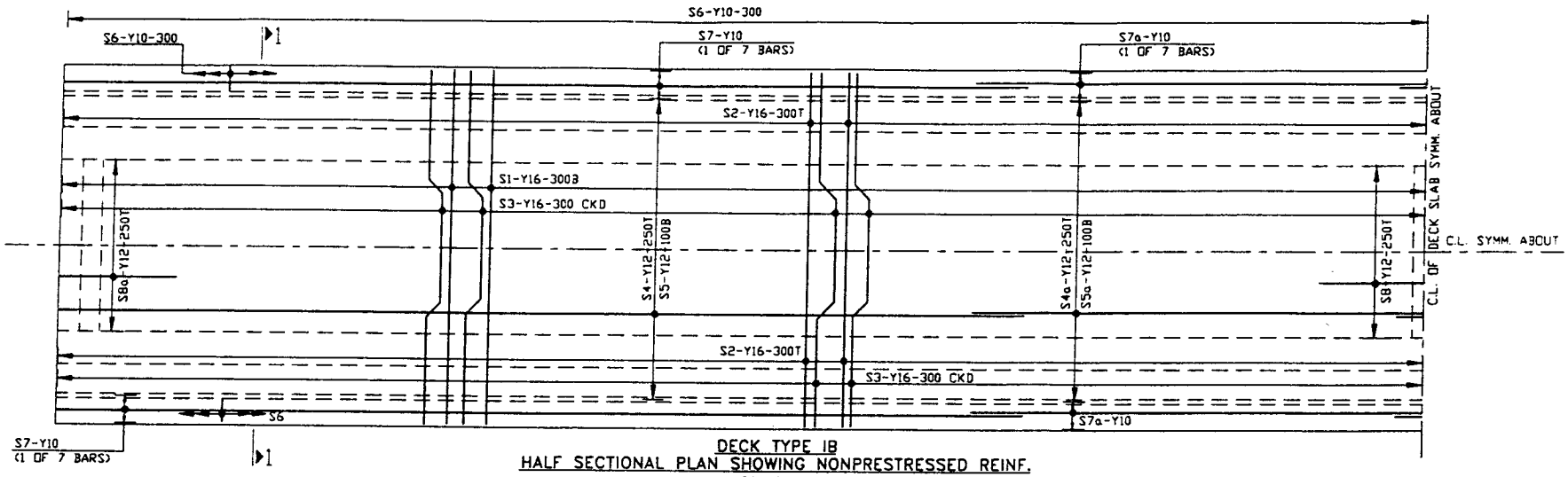
SECTION 2-2
NONPRESTRESSED REINF. DETAILS
(SCALE 1:30)

NOTES:

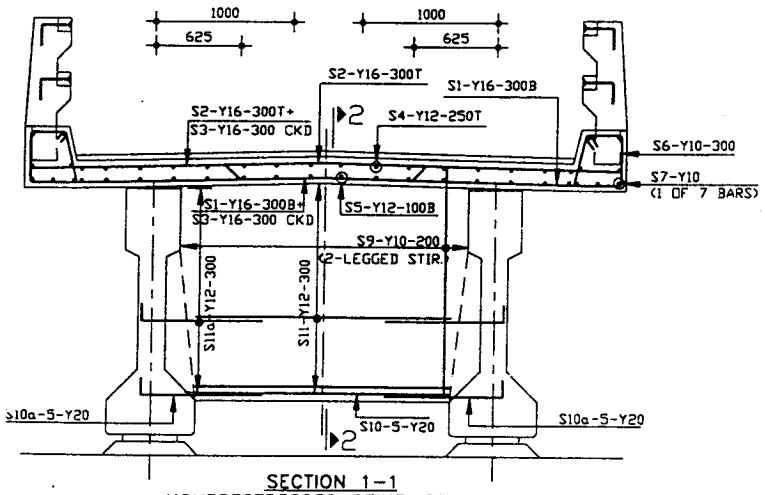
1. THIS DRAWING IS APPLICABLE FOR C/C BEARING SPAN 20m TO 32m.
2. B INDICATES BOTTOM BAR
   T INDICATES TOP BAR
3. BAR DETAIL, FOR EXAMPLE, S1-Y16-300B INDICATES AS FOLLOW:
   S1 = BAR MARK 1 IN DECK SLAB
   Y16 = ASTM A615 GRADE 40 DEFORMED BAR DIA. 16 mm
   300B = 300 mm SPACING OF BOTTOM BARS

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA	DECK SLAB (TYPE 1B) OVERALL LENGTH : 20.80 m TO 32.80 m TOTAL DECK WIDTH : 4.41 m NONPRESTRESSED REINF. DETAILS — DWG. NO : S-1B-02 SCALE AS SHOWN — DATE JUNE 1995

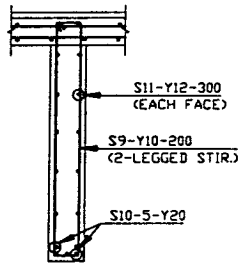
Web Copy



DECK TYPE IB
HALF SECTIONAL PLAN SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



SECTION 1-1
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)



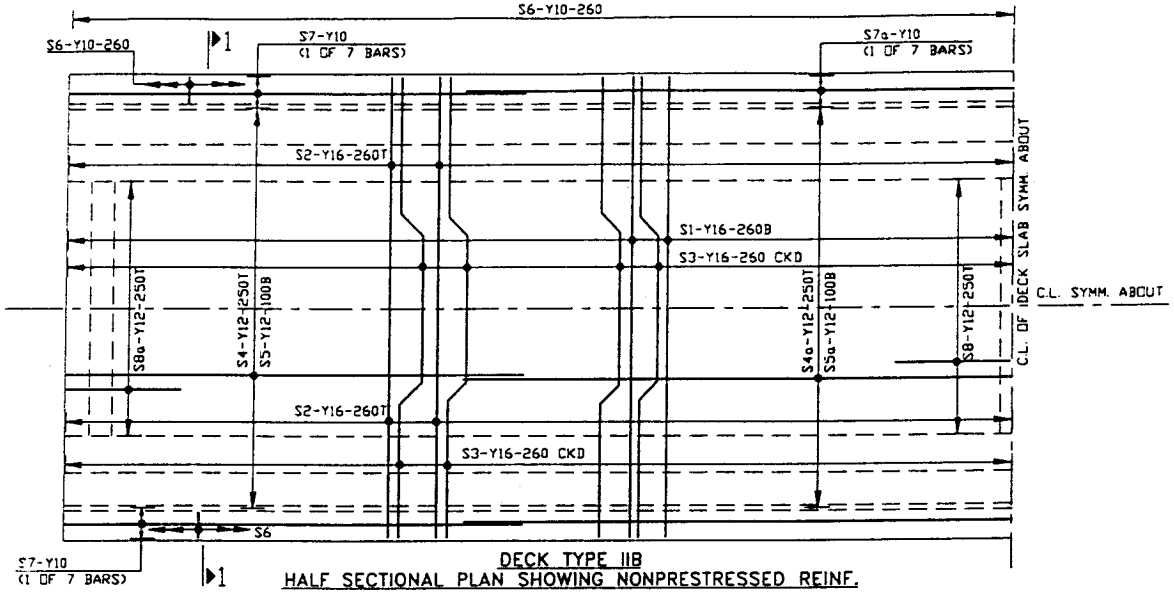
SECTION 2-2
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)

NOTES:

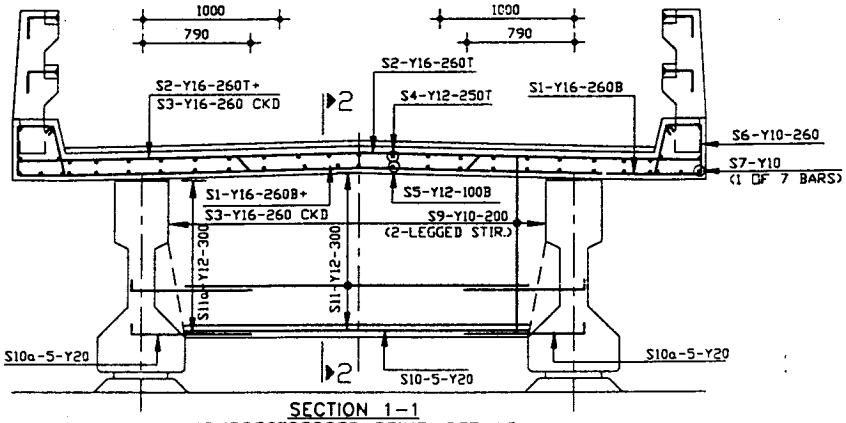
1. THIS DRAWING IS APPLICABLE FOR C/C BEARING SPAN 33m TO 40m.
2. B INDICATES BOTTOM BAR
   T INDICATES TOP BAR
3. BAR DETAIL, FOR EXAMPLE, S1-Y16-300B INDICATES AS FOLLOWS:
   S1 = BAR MARK 1 IN DECK SLAB
   Y16 = ASTM A615 GRADE 40 DEFORMED BAR DIA. 16 mm
   300B = 300 mm SPACING OF BOTTOM BARS

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	DECK SLAB (TYPE IB) OVERALL LENGTH : 33.80 m TO 40.80 m TOTAL DECK WIDTH : 4.41 m	
			NONPRESTRESSED REINF. DETAILS	DWG. NO. : S-IB-02A
			SCALE AS SHOWN	DATE : JUNE 1996

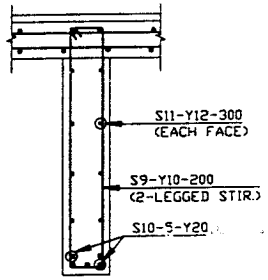
Web Copy



DECK TYPE IIB
HALF SECTIONAL PLAN SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



SECTION 1–1
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)



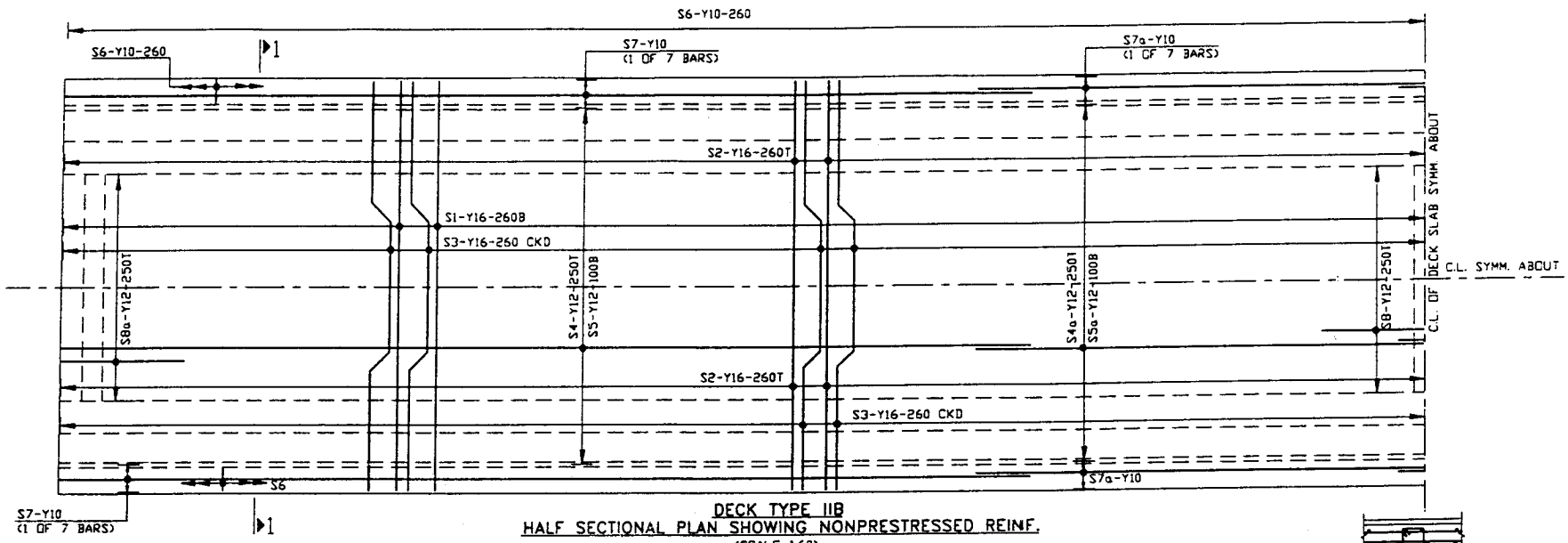
SECTION 2–2
NONPRESTRESSED REINF. DETAILS
(SCALE 1:30)

NOTES:

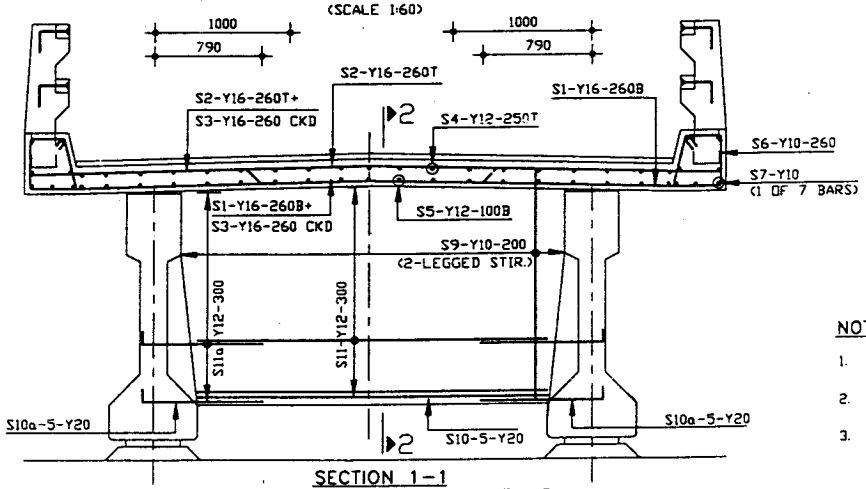
1. THIS DRAWING IS APPLICABLE FOR C/C BEARING SPAN 20m TO 32m.
2. B INDICATES BOTTOM BAR
   T INDICATES TOP BAR
3. BAR DETAIL, FOR EXAMPLE, S1-Y16-260B INDICATES AS FOLLOWS:
   S1 = BAR MARK 1 IN DECK SLAB
   Y16 = ASTM A615 GRDAE 40 DEFORMED BAR DIA. 16 mm
   260B = 260 mm SPACING OF BOTTOM BARS

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA ZILA	DECK SLAB (TYPE IIB) OVERALL LENGTH : 20.80 m TO 32.80 m TOTAL DECK WIDTH : 5.08 m NONPRESTRESSED REINF. DETAILS — DWG. NO. : S-11B-02 SCALE AS SHOWN — DATE : JUNE 1996

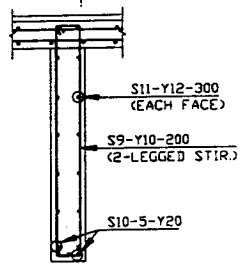
Web Copy



DECK TYPE IIB
HALF SECTIONAL PLAN SHOWING NONPRESTRESSED REINF.
(SCALE 1:60)



SECTION 1–1
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)



SECTION 2–2
NONPRESTRESSED REINF. DETAILS
(SCALE 1:40)

NOTES:

1. THIS DRAWING IS APPLICABLE FOR C/C BEARING SPAN 33m TO 40m.
2. B INDICATES BOTTOM BAR
   T INDICATES TOP BAR
3. BAR DETAIL, FOR EXAMPLE, S1-Y16-260B INDICATES AS FOLLOWS:
   S1 = BAR MARK 1 IN DECK SLAB
   Y16 = ASTM A615 GRADE 40 DEFORMED BAR DIA. 16 mm
   260B = 260 mm SPACING OF BOTTOM BARS

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA : ZILA :	DECK SLAB (TYPE IIB) OVERALL LENGTH : 33.80 m TO 40.80 m TATAL DECK WIDTH : 5.08 m	
			NONPRESTRESSED REINF. DETAILS	DWG. NO. S-IIB-02A
			SCALE AS SHOWN	DATE : JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		78	404.365	1.579	638.492
	S2	Y16	270	01	4648				16	4648		78	362.544	1.579	572.457
	S2a	Y16	270	01	2074				16	2074		156	323.544	1.579	510.876
	S3	Y16	270	07	1250	156	1809		16	5179		78	403.972	1.579	637.872
	S4	Y12	250	01	6906				12	6906		15	103.590	0.888	91.988
	S4a	Y12	250	01	8156				12	8156		15	122.340	0.888	108.638
	S4	Y12	250	01	6906				12	6906		15	103.590	0.888	91.988
	S5	Y12	100	01	6906				12	6906		37	255.522	0.888	226.904
	S5a	Y12	100	01	8156				12	8156		37	301.772	0.888	267.974
	S5	Y12	100	01	6906				12	6906		37	255.522	0.888	226.904
	S6	Y10	180	05	370	245	438	254	10	1427		232	331.064	0.616	203.935
	S7	Y10		01	6906				10	6906		22	151.932	0.616	93.590
	S7a	Y10		01	7948				10	7948		22	174.856	0.616	107.711
	S7	Y10		01	6906				10	6906		22	151.932	0.616	93.590
	S8	Y10	180	04	170	717	367	645	10	2019		232	468.408	0.616	288.539
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1260	170			10	2980		36	107.280	0.616	66.084
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240
														TOTAL WEIGHT:	4574.261 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IA) OVERALL LENGTH: 20.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-20-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		81	419.917	1.579	663.049
	S2	Y16	270	01	4648				16	4648		81	376.488	1.579	594.475
	S2a	Y16	270	01	2074				16	2074		162	335.988	1.579	530.525
	S3	Y16	270	07	1250	156	1809		16	5179		81	419.509	1.579	662.405
	S4	Y12	250	01	7240				12	7240		15	108.600	0.888	96.437
	S4a	Y12	250	01	8488				12	8488		15	127.320	0.888	113.060
	S4	Y12	250	01	7240				12	7240		15	108.600	0.888	96.437
	S5	Y12	100	01	7240				12	7240		37	267.880	0.888	237.877
	S5a	Y12	100	01	8488				12	8488		37	314.056	0.888	278.882
	S5	Y12	100	01	7240				12	7240		37	267.880	0.888	237.877
	S6	Y10	180	05	370	245	438	254	10	1427		244	348.188	0.616	214.484
	S7	Y10		01	7240				10	7240		22	159.280	0.616	98.116
	S7a	Y10		01	8280				10	8280		22	182.160	0.616	112.211
	S7	Y10		01	7240				10	7240		22	159.280	0.616	98.116
	S8	Y10	180	04	170	717	367	645	10	2019		244	492.636	0.616	303.464
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1260	170			10	2980		36	107.280	0.616	66.084
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 4750.219 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IA) OVERALL LENGTH: 21.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IA-21-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		85	440.654	1.579	695.792
	S2	Y16	270	01	4648				16	4648		85	395.080	1.579	623.831
	S2a	Y16	270	01	2074				16	2074		170	352.580	1.579	556.724
	S3	Y16	270	07	1250	156	1809		16	5179		85	440.226	1.579	695.117
	S4	Y12	250	01	7573				12	7573		15	113.595	0.888	100.872
	S4a	Y12	250	01	8822				12	8822		15	132.330	0.888	117.509
	S4	Y12	250	01	7573				12	7573		15	113.595	0.888	100.872
	S5	Y12	100	01	7573				12	7573		37	280.201	0.888	248.818
	S5a	Y12	100	01	8822				12	8822		37	326.414	0.888	289.856
	S5	Y12	100	01	7573				12	7573		37	280.201	0.888	248.818
	S6	Y10	180	05	370	245	438	254	10	1427		254	362.458	0.616	223.274
	S7	Y10		01	7573				10	7573		22	166.606	0.616	102.629
	S7a	Y10		01	8614				10	8614		22	189.508	0.616	116.737
	S7	Y10		01	7573				10	7573		22	166.606	0.616	102.629
	S8	Y10	180	04	170	717	367	645	10	2019		254	512.826	0.616	315.901
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1260	170			10	2980		36	107.280	0.616	66.084
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 4952.185 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC–SHC–01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IA) OVERALL LENGTH: 22.80 m BAR BENDING SCHEDULE DWG. NO.: S–IA–22–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm)					CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
					A	B	C	D	d						
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		89	461.390	1.579	728.535
	S2	Y16	270	01	4648				16	4648		89	413.672	1.579	653.188
	S2a	Y16	270	01	2074				16	2074		178	369.172	1.579	582.923
	S3	Y16	270	07	1250	156	1809		16	5179		89	460.942	1.579	727.828
	S4	Y12	250	01	7906				12	7906		15	118.590	0.888	105.308
	S4a	Y12	250	01	9156				12	9156		15	137.340	0.888	121.958
	S4	Y12	250	01	7906				12	7906		15	118.590	0.888	105.308
	S5	Y12	100	01	7906				12	7906		37	292.522	0.888	259.760
	S5a	Y12	100	01	9156				12	9156		37	338.772	0.888	300.830
	S5	Y12	100	01	7906				12	7906		37	292.522	0.888	259.760
	S6	Y10	180	05	370	245	438	254	10	1427		266	379.582	0.616	233.823
	S7	Y10		01	7906				10	7906		22	173.932	0.616	107.142
	S7a	Y10		01	8948				10	8948		22	196.856	0.616	121.263
	S7	Y10		01	7906				10	7906		22	173.932	0.616	107.142
	S8	Y10	180	04	170	717	367	645	10	2019		266	537.054	0.616	330.825
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1260	170			10	2980		36	107.280	0.616	66.084
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 5158.396 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IA) OVERALL LENGTH: 23.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-23-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		93	482.127	1.579	761.278
	S2	Y16	270	01	4648				16	4648		92	427.616	1.579	675.206
	S2a	Y16	270	01	2074				16	2074		184	381.616	1.579	602.572
	S3	Y16	270	07	1250	156	1809		16	5179		93	481.659	1.579	760.539
	S4	Y12	250	01	8240				12	8240		15	123.600	0.888	109.757
	S4a	Y12	250	01	9488				12	9488		15	142.320	0.888	126.380
	S4	Y12	250	01	8240				12	8240		15	123.600	0.888	109.757
	S5	Y12	100	01	8240				12	8240		37	304.880	0.888	270.733
	S5a	Y12	100	01	9488				12	9488		37	351.056	0.888	311.738
	S5	Y12	100	01	8240				12	8240		37	304.880	0.888	270.733
	S6	Y10	180	05	370	245	438	254	10	1427		276	393.852	0.616	242.613
	S7	Y10		01	8240				10	8240		22	181.280	0.616	111.668
	S7a	Y10		01	9280				10	9280		22	204.160	0.616	125.763
	S7	Y10		01	8240				10	8240		22	181.280	0.616	111.668
	S8	Y10	180	04	170	717	367	645	10	2019		276	557.244	0.616	343.262
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1460	170			10	3380		36	121.680	0.616	74.955
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 5355.343 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IA) OVERALL LENGTH: 24.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IA-24-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		96	497.679	1.579	785.836
	S2	Y16	270	01	4648				16	4648		96	446.208	1.579	704.562
	S2a	Y16	270	01	2074				16	2074		192	398.208	1.579	628.770
	S3	Y16	270	07	1250	156	1809		16	5179		96	497.196	1.579	785.073
	S4	Y12	250	01	8573				12	8573		15	128.595	0.888	114.192
	S4a	Y12	250	01	9822				12	9822		15	147.330	0.888	130.829
	S4	Y12	250	01	8573				12	8573		15	128.595	0.888	114.192
	S5	Y12	100	01	8573				12	8573		37	317.201	0.888	281.674
	S5a	Y12	100	01	9822				12	9822		37	363.414	0.888	322.712
	S5	Y12	100	01	8573				12	8573		37	317.201	0.888	281.674
	S6	Y10	180	05	370	245	438	254	10	1427		288	410.976	0.616	253.161
	S7	Y10		01	8573				10	8573		22	188.606	0.616	116.181
	S7a	Y10		01	9614				10	9614		22	211.508	0.616	130.289
	S7	Y10		01	8573				10	8573		22	188.606	0.616	116.181
	S8	Y10	180	04	170	717	367	645	10	2019		288	581.472	0.616	358.187
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1460	170			10	3380		36	121.680	0.616	74.955
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 5545.190 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	**DECK SLAB (TYPE IA)** OVERALL LENGTH: 25.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IA-25-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		100	518.416	1.579	818.579
	S2	Y16	270	01	4648				16	4648		100	464.800	1.579	733.919
	S2a	Y16	270	01	2074				16	2074		200	414.800	1.579	654.969
	S3	Y16	270	07	1250	156	1809		16	5179		100	517.913	1.579	817.784
	S4	Y12	250	01	8906				12	8906		15	133.590	0.888	118.628
	S4a	Y12	250	01	10156				12	10156		15	152.340	0.888	135.278
	S4	Y12	250	01	8906				12	8906		15	133.590	0.888	118.628
	S5	Y12	100	01	8906				12	8906		37	329.522	0.888	292.616
	S5a	Y12	100	01	10156				12	10156		37	375.772	0.888	333.686
	S5	Y12	100	01	8906				12	8906		37	329.522	0.888	292.616
	S6	Y10	180	05	370	245	438	254	10	1427		298	425.246	0.616	261.952
	S7	Y10		01	8906				10	8906		22	195.932	0.616	120.694
	S7a	Y10		01	9948				10	9948		22	218.856	0.616	134.815
	S7	Y10		01	8906				10	8906		22	195.932	0.616	120.694
	S8	Y10	180	04	170	717	367	645	10	2019		298	601.662	0.616	370.624
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1460	170			10	3380		36	121.680	0.616	74.955
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 5747.155 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IA)** OVERALL LENGTH: 26.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-26-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		104	539.153	1.579	851.322
	S2	Y16	270	01	4648				16	4648		104	483.392	1.579	763.276
	S2a	Y16	270	01	2074				16	2074		208	431.392	1.579	681.168
	S3	Y16	270	07	1250	156	1809		16	5179		104	538.629	1.579	850.496
	S4	Y12	250	01	9240				12	9240		15	138.600	0.888	123.077
	S4a	Y12	250	01	10488				12	10488		15	157.320	0.888	139.700
	S4	Y12	250	01	9240				12	9240		15	138.600	0.888	123.077
	S5	Y12	100	01	9240				12	9240		37	341.880	0.888	303.589
	S5a	Y12	100	01	10488				12	10488		37	388.056	0.888	344.594
	S5	Y12	100	01	9240				12	9240		37	341.880	0.888	303.589
	S6	Y10	180	05	370	245	438	254	10	1427		310	442.370	0.616	272.500
	S7	Y10		01	9240				10	9240		22	203.280	0.616	125.220
	S7a	Y10		01	10280				10	10290		22	226.160	0.616	139.315
	S7	Y10		01	9240				10	9240		22	203.280	0.616	125.220
	S8	Y10	180	04	170	717	367	645	10	2019		310	625.890	0.616	385.548
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1660	170			10	3780		36	136.080	0.616	83.825
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		30	55.500	0.888	49.284
	S14a	Y12	300	03	865	150			12	991		60	59.460	0.888	52.800

TOTAL WEIGHT: 5982.653 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IA)** OVERALL LENGTH: 27.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-27-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		107	554.705	1.579	875.880
	S2	Y16	270	01	4648				16	4648		107	497.336	1.579	785.294
	S2a	Y16	270	01	2074				16	2074		214	443.836	1.579	700.817
	S3	Y16	270	07	1250	156	1809		16	5179		107	554.167	1.579	875.029
	S4	Y12	250	01	9573				12	9573		15	143.595	0.888	127.512
	S4a	Y12	250	01	10822				12	10822		15	162.330	0.888	144.149
	S4	Y12	250	01	9573				12	9573		15	143.595	0.888	127.512
	S5	Y12	100	01	9573				12	9573		37	354.201	0.888	314.530
	S5a	Y12	100	01	10822				12	10822		37	400.414	0.888	355.568
	S5	Y12	100	01	9573				12	9573		37	354.201	0.888	314.530
	S6	Y10	180	05	370	245	438	254	10	1427		322	459.494	0.616	283.048
	S7	Y10		01	9573				10	9573		22	210.606	0.616	129.733
	S7a	Y10		01	10614				10	10614		22	233.508	0.616	143.841
	S7	Y10		01	9573				10	9573		22	210.606	0.616	129.733
	S8	Y10	180	04	170	717	367	645	10	2019		322	650.118	0.616	400.473
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1660	170			10	3780		36	136.080	0.616	83.825
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		30	55.500	0.888	49.284
	S14a	Y12	300	03	865	150			12	991		60	59.460	0.888	52.800

TOTAL WEIGHT: **6158.612** Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IA)** OVERALL LENGTH: 28.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-28-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		111	575.442	1.579	908.623
	S2	Y16	270	01	4648				16	4648		111	515.928	1.579	814.650
	S2a	Y16	270	01	2074				16	2074		222	460.428	1.579	727.016
	S3	Y16	270	07	1250	156	1809		16	5179		111	574.883	1.579	907.740
	S4	Y12	250	01	9906				12	9906		15	148.590	0.888	131.948
	S4a	Y12	250	01	11156				12	11156		15	167.340	0.888	148.598
	S4	Y12	250	01	9906				12	9906		15	148.590	0.888	131.948
	S5	Y12	100	01	9906				12	9906		37	366.522	0.888	325.472
	S5a	Y12	100	01	11156				12	11156		37	412.772	0.888	366.542
	S5	Y12	100	01	9906				12	9906		37	366.522	0.888	325.472
	S6	Y10	180	05	370	245	438	254	10	1427		332	473.764	0.616	291.839
	S7	Y10		01	9906				10	9906		22	217.932	0.616	134.246
	S7a	Y10		01	10948				10	10948		22	240.856	0.616	148.367
	S7	Y10		01	9906				10	9906		22	217.932	0.616	134.246
	S8	Y10	180	04	170	717	367	645	10	2019		332	670.308	0.616	412.910
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		36	164.880	0.616	101.566
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: **6399.374** Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IA)** OVERALL LENGTH: 29.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-29-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		115	596.179	1.579	941.366
	S2	Y16	270	01	4648				16	4648		115	534.520	1.579	844.007
	S2a	Y16	270	01	2074				16	2074		230	477.020	1.579	753.215
	S3	Y16	270	07	1250	156	1809		16	5179		115	595.600	1.579	940.452
	S4	Y12	250	01	10240				12	10240		15	153.600	0.888	136.397
	S4a	Y12	250	01	11488				12	11488		15	172.320	0.888	153.020
	S4	Y12	250	01	10240				12	10240		15	153.600	0.888	136.397
	S5	Y12	100	01	10240				12	10240		37	378.880	0.888	336.445
	S5a	Y12	100	01	11488				12	11488		37	425.056	0.888	377.450
	S5	Y12	100	01	10240				12	10240		37	378.880	0.888	336.445
	S6	Y10	180	05	370	245	438	254	10	1427		344	490.888	0.616	302.387
	S7	Y10		01	10240				10	10240		22	225.280	0.616	138.772
	S7a	Y10		01	11280				10	11280		22	248.160	0.616	152.867
	S7	Y10		01	10240				10	10240		22	225.280	0.616	138.772
	S8	Y10	180	04	170	717	367	645	10	2019		344	694.536	0.616	427.834
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		36	164.880	0.616	101.566
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 6605.585 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IA) OVERALL LENGTH: 30.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IA-30-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		118	611.731	1.579	965.923
	S2	Y16	270	01	4648				16	4648		118	548.464	1.579	866.025
	S2a	Y16	270	01	2074				16	2074		236	489.464	1.579	772.864
	S3	Y16	270	07	1250	156	1809		16	5179		118	611.137	1.579	964.985
	S4	Y12	250	01	10573				12	10573		15	158.595	0.888	140.832
	S4a	Y12	250	01	11822				12	11822		15	177.330	0.888	157.469
	S4	Y12	250	01	10573				12	10573		15	158.595	0.888	140.832
	S5	Y12	100	01	10573				12	10573		37	391.201	0.888	347.386
	S5a	Y12	100	01	11822				12	11822		37	437.414	0.888	388.424
	S5	Y12	100	01	10573				12	10573		37	391.201	0.888	347.386
	S6	Y10	180	05	370	245	438	254	10	1427		354	505.158	0.616	311.177
	S7	Y10		01	10573				10	10573		22	232.606	0.616	143.285
	S7a	Y10		01	11614				10	11614		22	255.508	0.616	157.393
	S7	Y10		01	10573				10	10573		22	232.606	0.616	143.285
	S8	Y10	180	04	170	717	367	645	10	2019		354	714.726	0.616	440.271
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		36	164.880	0.616	101.566
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 6777.298 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH **LOCAL GOVERNMENT ENGINEERING DEPARTMENT**	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IA)** OVERALL LENGTH: 31.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-31-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm)					CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
					A	B	C	D	d						
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		122	632.468	1.579	998.666
	S2	Y16	270	01	4648				16	4648		122	567.056	1.579	895.381
	S2a	Y16	270	01	2074				16	2074		244	506.056	1.579	799.062
	S3	Y16	270	07	1250	156	1809		16	5179		122	631.853	1.579	997.697
	S4	Y12	250	01	10906				12	10906		15	163.590	0.888	145.268
	S4a	Y12	250	01	6390				12	6390		30	191.700	0.888	170.230
	S4	Y12	250	01	10906				12	10906		15	163.590	0.888	145.268
	S5	Y12	100	01	10906				12	10906		37	403.522	0.888	358.328
	S5a	Y12	100	01	6390				12	6390		74	472.860	0.888	419.900
	S5	Y12	100	01	10906				12	10906		37	403.522	0.888	358.328
	S6	Y10	180	05	370	245	438	254	10	1427		366	522.282	0.616	321.726
	S7	Y10		01	10906				10	10906		22	239.932	0.616	147.798
	S7a	Y10		01	11948				10	11948		22	262.856	0.616	161.919
	S7	Y10		01	10906				10	10906		22	239.932	0.616	147.798
	S8	Y10	180	04	170	717	367	645	10	2019		366	738.954	0.616	455.196
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		36	164.880	0.616	101.566
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 7012.323 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IA) OVERALL LENGTH: 32.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IA-32-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		126	653.204	1.579	1031.410
	S2	Y16	270	01	4648				16	4648		126	585.648	1.579	924.738
	S2a	Y16	270	01	2074				16	2074		252	522.648	1.579	825.261
	S3	Y16	270	07	1250	156	1809		16	5179		126	652.570	1.579	1030.408
	S4	Y12	250	01	11240				12	11240		15	168.600	0.888	149.717
	S4a	Y12	250	01	6556				12	6556		30	196.680	0.888	174.652
	S4	Y12	250	01	11240				12	11240		15	168.600	0.888	149.717
	S5	Y12	100	01	11240				12	11240		37	415.880	0.888	369.301
	S5a	Y12	100	01	6556				12	6556		74	485.144	0.888	430.808
	S5	Y12	100	01	11240				12	11240		37	415.880	0.888	369.301
	S6	Y10	180	05	370	245	438	254	10	1427		376	536.552	0.616	330.616
	S7	Y10		01	11240				10	11240		22	247.280	0.616	152.324
	S7a	Y10		01	6400				10	6400		44	281.600	0.616	173.466
	S7	Y10		01	11240				10	11240		22	247.280	0.616	152.324
	S8	Y10	180	04	170	717	367	645	10	2019		376	759.144	0.616	467.633
	S11	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S11a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		36	164.880	0.616	101.566
	S13	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 7221.335 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IA) OVERALL LENGTH: 33.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-33-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		130	673.941	1.579	1064.153
	S2	Y16	270	01	4648				16	4648		130	604.240	1.579	954.095
	S2a	Y16	270	01	2074				16	2074		260	539.240	1.579	851.460
	S3	Y16	270	07	1250	156	1809		16	5179		130	673.287	1.579	1063.119
	S4	Y12	250	01	11573				12	11573		15	173.595	0.888	154.152
	S4a	Y12	250	01	6723				12	6723		30	201.690	0.888	179.101
	S4	Y12	250	01	11573				12	11573		15	173.595	0.888	154.152
	S5	Y12	100	01	11573				12	11573		37	428.201	0.888	380.242
	S5a	Y12	100	01	6723				12	6723		74	497.502	0.888	441.782
	S5	Y12	100	01	11573				12	11573		37	428.201	0.888	380.242
	S6	Y10	180	05	370	245	438	254	10	1427		388	553.676	0.616	341.064
	S7	Y10		01	11573				10	11573		22	254.606	0.616	156.837
	S7a	Y10		01	6567				10	6567		44	288.948	0.616	177.992
	S7	Y10		01	11573				10	11573		22	254.606	0.616	156.837
	S8	Y10	180	04	170	717	367	645	10	2019		388	783.372	0.616	482.557
	S11	Y12	250	01	3410				12	3410		9	30.690	0.888	27.253
	S11a	Y12	250	01	2065				12	2065		18	37.170	0.888	33.007
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2235	170			10	4930		33	162.690	0.616	100.217
	S13	Y20		01	1800				20	1800		15	27.000	2.466	66.582
	S13a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1800				12	1800		42	75.600	0.888	67.133
	S14a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718
													TOTAL WEIGHT:		7441.861 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH **LOCAL GOVERNMENT ENGINEERING DEPARTMENT**	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IA)** OVERALL LENGTH: 34.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-34-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm)					CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
					A	B	C	D	d						
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		133	689.493	1.579	1088.710
	S2	Y16	270	01	4648				16	4648		133	618.184	1.579	976.113
	S2a	Y16	270	01	2074				16	2074		266	551.684	1.579	871.109
	S3	Y16	270	07	1250	156	1809		16	5179		133	688.824	1.579	1087.653
	S4	Y12	250	01	11906				12	11906		15	178.590	0.888	158.588
	S4a	Y12	250	01	6890				12	6890		30	206.700	0.888	183.550
	S4	Y12	250	01	11906				12	11906		15	178.590	0.888	158.588
	S5	Y12	100	01	11906				12	11906		37	440.522	0.888	391.184
	S5a	Y12	100	01	6890				12	6890		74	509.860	0.888	452.756
	S5	Y12	100	01	11906				12	11906		37	440.522	0.888	391.184
	S6	Y10	180	05	370	245	438	254	10	1427		398	567.946	0.616	349.855
	S7	Y10		01	11906				10	11906		22	261.932	0.616	161.350
	S7a	Y10		01	6734				10	6734		44	296.296	0.616	182.518
	S7	Y10		01	11906				10	11906		22	261.932	0.616	161.350
	S8	Y10	180	04	170	717	367	645	10	2019		398	803.562	0.616	494.994
	S11	Y12	250	01	3410				12	3410		9	30.690	0.888	27.253
	S11a	Y12	250	01	2065				12	2065		18	37.170	0.888	33.007
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2235	170			10	4930		33	162.690	0.616	100.217
	S13	Y20		01	1800				20	1800		15	27.000	2.466	66.582
	S13a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1800				12	1800		42	75.600	0.888	67.133
	S14a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 7613.574 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IA) OVERALL LENGTH: 35.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IA-35-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		141	730.967	1.579	1154.196
	S2	Y16	270	01	4648				16	4648		141	655.368	1.579	1034.826
	S2a	Y16	270	01	2074				16	2074		282	584.868	1.579	923.507
	S3	Y16	270	07	1250	156	1809		16	5179		141	730.257	1.579	1153.076
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	7796				12	7796		30	233.880	0.888	207.685
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	7796				12	7796		74	576.904	0.888	512.291
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	180	05	370	245	438	254	10	1427		422	602.194	0.616	370.952
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	7640				10	7640		44	336.160	0.616	207.075
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	180	04	170	717	367	645	10	2019		422	852.018	0.616	524.843
	S11	Y12	250	01	3410				12	3410		9	30.690	0.888	27.253
	S11a	Y12	250	01	2065				12	2065		18	37.170	0.888	33.007
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2235	170			10	4930		33	162.690	0.616	100.217
	S13	Y20		01	1800				20	1800		15	27.000	2.466	66.582
	S13a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1800				12	1800		42	75.600	0.888	67.133
	S14a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 8025.995 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IA) OVERALL LENGTH: 37.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-37-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		144	746.519	1.579	1178.754
	S2	Y16	270	01	4648				16	4648		144	669.312	1.579	1056.844
	S2a	Y16	270	01	2074				16	2074		288	597.312	1.579	943.156
	S3	Y16	270	07	1250	156	1809		16	5179		144	745.794	1.579	1177.609
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	8296				12	8296		30	248.880	0.888	221.005
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	8296				12	8296		74	613.904	0.888	545.147
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	180	05	370	245	438	254	10	1427		432	616.464	0.616	379.742
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	8140				10	8140		44	358.160	0.616	220.627
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	180	04	170	717	367	645	10	2019		432	872.208	0.616	537.280
	S11	Y12	250	01	3290				12	3290		9	29.610	0.888	26.294
	S11a	Y12	250	01	2005				12	2005		18	36.090	0.888	32.048
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2435	170			10	5330		33	175.890	0.616	108.348
	S13	Y20		01	1750				20	1750		15	26.250	2.466	64.733
	S13a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1750				12	1750		48	84.000	0.888	74.592
	S14a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 8223.261 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IA)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 38.80 m
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IA-38-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		148	767.256	1.579	1211.497
	S2	Y16	270	01	4648				16	4648		148	687.904	1.579	1086.200
	S2a	Y16	270	01	2074				16	2074		296	613.904	1.579	969.354
	S3	Y16	270	07	1250	156	1809		16	5179		148	766.511	1.579	1210.321
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	8796				12	8796		30	263.880	0.888	234.325
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	8796				12	8796		74	650.904	0.888	578.003
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	180	05	370	245	438	254	10	1427		444	633.588	0.616	390.290
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	8640				10	8640		44	380.160	0.616	234.179
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	180	04	170	717	367	645	10	2019		444	896.436	0.616	552.205
	S11	Y12	250	01	3290				12	3290		9	29.610	0.888	26.294
	S11a	Y12	250	01	2005				12	2005		18	36.090	0.888	32.048
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2435	170			10	5330		33	175.890	0.616	108.348
	S13	Y20		01	1750				20	1750		15	26.250	2.466	64.733
	S13a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1750				12	1750		48	84.000	0.888	74.592
	S14a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448
													TOTAL WEIGHT:		8429.472 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IA) OVERALL LENGTH: 39.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IA-39-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	270	02	3680	752			16	5184		152	787.992	1.579	1244.240
	S2	Y16	270	01	4648				16	4648		152	706.496	1.579	1115.557
	S2a	Y16	270	01	2074				16	2074		304	630.496	1.579	995.553
	S3	Y16	270	07	1250	156	1809		16	5179		152	787.227	1.579	1243.032
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	9296				12	9296		30	278.880	0.888	247.645
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	9296				12	9296		74	687.904	0.888	610.859
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	180	05	370	245	438	254	10	1427		454	647.858	0.616	399.081
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	9140				10	9140		44	402.160	0.616	247.731
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	180	04	170	717	367	645	10	2019		454	916.626	0.616	564.642
	S11	Y12	250	01	3290				12	3290		9	29.610	0.888	26.294
	S11a	Y12	250	01	2005				12	2005		18	36.090	0.888	32.048
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2435	170			10	5330		33	175.890	0.616	108.348
	S13	Y20		01	1750				20	1750		15	26.250	2.466	64.733
	S13a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	1750				12	1750		48	84.000	0.888	74.592
	S14a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 8631.438 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IA) OVERALL LENGTH: 40.80 m BAR BENDING SCHEDULE DWG. NO.: S-IA-40-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm)					CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
					A	B	C	D	d						
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		87	509.312	1.579	804.204
	S2	Y16	240	01	5318				16	5318		87	462.666	1.579	730.550
	S2a	Y16	240	01	2074				16	2074		174	360.876	1.579	569.823
	S3	Y16	240	07	1920	156	1809		16	5849		87	508.874	1.579	803.512
	S4	Y12	250	01	6906				12	6906		17	117.402	0.888	104.253
	S4a	Y12	250	01	8156				12	8156		17	138.652	0.888	123.123
	S4	Y12	250	01	6906				12	6906		17	117.402	0.888	104.253
	S5	Y12	100	01	6906				12	6906		43	296.958	0.888	263.699
	S5a	Y12	100	01	8156				12	8156		43	350.708	0.888	311.429
	S5	Y12	100	01	6906				12	6906		43	296.958	0.888	263.699
	S6	Y10	160	05	370	245	438	254	10	1427		262	373.874	0.616	230.306
	S7	Y10		01	6906				10	6906		22	151.932	0.616	93.590
	S7a	Y10		01	7948				10	7948		22	174.856	0.616	107.711
	S7	Y10		01	6906				10	6906		22	151.932	0.616	93.590
	S8	Y10	160	04	170	717	367	645	10	2019		262	528.978	0.616	325.850
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1260	170			10	2980		45	134.100	0.616	82.606
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 5441.978 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IIA)** OVERALL LENGTH: 20.80 m BAR BENDING SCHEDULE DWG. NO.: S-IIA-20-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		92	538.583	1.579	850.422
	S2	Y16	240	01	5318				16	5318		91	483.938	1.579	764.138
	S2a	Y16	240	01	2074				16	2074		182	377.468	1.579	596.022
	S3	Y16	240	07	1920	156	1809		16	5849		92	538.120	1.579	849.691
	S4	Y12	250	01	7240				12	7240		17	123.080	0.888	109.295
	S4a	Y12	250	01	8488				12	8488		17	144.296	0.888	128.135
	S4	Y12	250	01	7240				12	7240		17	123.080	0.888	109.295
	S5	Y12	100	01	7240				12	7240		43	311.320	0.888	276.452
	S5a	Y12	100	01	8488				12	8488		43	364.984	0.888	324.106
	S5	Y12	100	01	7240				12	7240		43	311.320	0.888	276.452
	S6	Y10	160	05	370	245	438	254	10	1427		274	390.998	0.616	240.855
	S7	Y10		01	7240				10	7240		22	159.280	0.616	98.116
	S7a	Y10		01	8280				10	8280		22	182.160	0.616	112.211
	S7	Y10		01	7240				10	7240		22	159.280	0.616	98.116
	S8	Y10	160	04	170	717	367	645	10	2019		274	553.206	0.616	340.775
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1260	170			10	2980		45	134.100	0.616	82.606
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 5686.468 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 21.80 m BAR BENDING SCHEDULE DWG. NO.: S-IIA-21-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		96	561.999	1.579	887.397
	S2	Y16	240	01	5318				16	5318		96	510.528	1.579	806.124
	S2a	Y16	240	01	2074				16	2074		192	398.208	1.579	628.770
	S3	Y16	240	07	1920	156	1809		16	5849		96	561.516	1.579	886.634
	S4	Y12	250	01	7573				12	7573		17	128.741	0.888	114.322
	S4a	Y12	250	01	8822				12	8822		17	149.974	0.888	133.177
	S4	Y12	250	01	7573				12	7573		17	128.741	0.888	114.322
	S5	Y12	100	01	7573				12	7573		43	325.639	0.888	289.167
	S5a	Y12	100	01	8822				12	8822		43	379.346	0.888	336.859
	S5	Y12	100	01	7573				12	7573		43	325.639	0.888	289.167
	S6	Y10	160	05	370	245	438	254	10	1427		286	408.122	0.616	251.403
	S7	Y10		01	7573				10	7573		22	166.606	0.616	102.629
	S7a	Y10		01	8614				10	8614		22	189.508	0.616	116.737
	S7	Y10		01	7573				10	7573		22	166.606	0.616	102.629
	S8	Y10	160	04	170	717	367	645	10	2019		286	577.434	0.616	355.699
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1260	170			10	2980		45	134.100	0.616	82.606
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 5927.425 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 22.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-22-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		100	585.416	1.579	924.372
	S2	Y16	240	01	5318				16	5318		100	531.800	1.579	839.712
	S2a	Y16	240	01	2074				16	2074		200	414.800	1.579	654.969
	S3	Y16	240	07	1920	156	1809		16	5849		100	584.913	1.579	923.577
	S4	Y12	250	01	7906				12	7906		17	134.402	0.888	119.349
	S4a	Y12	250	01	9156				12	9156		17	155.652	0.888	138.219
	S4	Y12	250	01	7906				12	7906		17	134.402	0.888	119.349
	S5	Y12	100	01	7906				12	7906		43	339.958	0.888	301.883
	S5a	Y12	100	01	9156				12	9156		43	393.708	0.888	349.613
	S5	Y12	100	01	7906				12	7906		43	339.958	0.888	301.883
	S6	Y10	160	05	370	245	438	254	10	1427		298	425.246	0.616	261.952
	S7	Y10		01	7906				10	7906		22	173.932	0.616	107.142
	S7a	Y10		01	8948				10	8948		22	196.856	0.616	121.263
	S7	Y10		01	7906				10	7906		22	173.932	0.616	107.142
	S8	Y10	160	04	170	717	367	645	10	2019		298	601.662	0.616	370.624
	S1i	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1260	170			10	2980		45	134.100	0.616	82.606
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 6153.435 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION. THANA: ZILA:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 23.80 m BAR BENDING SCHEDULE DWG. NO.: S-IIA-23-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		104	608.833	1.579	961.347
	S2	Y16	240	01	5318				16	5318		104	553.072	1.579	873.301
	S2a	Y16	240	01	2074				16	2074		208	431.392	1.579	681.168
	S3	Y16	240	07	1920	156	1809		16	5849		104	608.309	1.579	960.520
	S4	Y12	250	01	8240				12	8240		17	140.080	0.888	124.391
	S4a	Y12	250	01	9488				12	9488		17	161.296	0.888	143.231
	S4	Y12	250	01	8240				12	8240		17	140.080	0.888	124.391
	S5	Y12	100	01	8240				12	8240		43	354.320	0.888	314.636
	S5a	Y12	100	01	9488				12	9488		43	407.984	0.888	362.290
	S5	Y12	100	01	8240				12	8240		43	354.320	0.888	314.636
	S6	Y10	160	05	370	245	438	254	10	1427		312	445.224	0.616	274.258
	S7	Y10		01	8240				10	8240		22	181.280	0.616	111.668
	S7a	Y10		01	9280				10	9280		22	204.160	0.616	125.763
	S7	Y10		01	8240				10	8240		22	181.280	0.616	111.668
	S8	Y10	160	04	170	717	367	845	10	2019		312	629.928	0.616	388.036
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1460	170			10	3380		45	152.100	0.616	93.694
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 6394.778 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT	DECK SLAB (TYPE IIA) OVERALL LENGTH: 24.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA ZILA:	DWG. NO.: S-IIA-24-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		108	632.249	1.579	998.322
	S2	Y16	240	01	5318				16	5318		108	574.344	1.579	906.889
	S2a	Y16	240	01	2074				16	2074		216	447.984	1.579	707.367
	S3	Y16	240	07	1920	156	1809		16	5849		108	631.706	1.579	997.463
	S4	Y12	250	01	8573				12	8573		17	145.741	0.888	129.418
	S4a	Y12	250	01	9822				12	9822		17	166.974	0.888	148.273
	S4	Y12	250	01	8573				12	8573		17	145.741	0.888	129.418
	S5	Y12	100	01	8573				12	8573		43	368.639	0.888	327.351
	S5a	Y12	100	01	9822				12	9822		43	422.346	0.888	375.043
	S5	Y12	100	01	8573				12	8573		43	368.639	0.888	327.351
	S6	Y10	160	05	370	245	438	254	10	1427		324	462.348	0.616	284.806
	S7	Y10		01	8573				10	8573		22	188.606	0.616	116.181
	S7a	Y10		01	9614				10	9614		22	211.508	0.616	130.289
	S7	Y10		01	8573				10	8573		22	188.606	0.616	116.181
	S8	Y10	160	04	170	717	367	645	10	2019		324	654.156	0.616	402.960
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1460	170			10	3380		45	152.100	0.616	93.694
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: **6620.788** Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT	DECK SLAB (TYPE IIA) OVERALL LENGTH: 25.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-25-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		112	655.666	1.579	1035.297
	S2	Y16	240	01	5318				16	5318		112	595.616	1.579	940.478
	S2a	Y16	240	01	2074				16	2074		224	464.576	1.579	733.566
	S3	Y16	240	07	1920	156	1809		16	5849		112	655.102	1.579	1034.406
	S4	Y12	250	01	8906				12	8906		17	151.402	0.888	134.445
	S4a	Y12	250	01	10156				12	10156		17	172.652	0.888	153.315
	S4	Y12	250	01	8906				12	8906		17	151.402	0.888	134.445
	S5	Y12	100	01	8906				12	8906		43	382.958	0.888	340.067
	S5a	Y12	100	01	10156				12	10156		43	436.708	0.888	387.797
	S5	Y12	100	01	8906				12	8906		43	382.958	0.888	340.067
	S6	Y10	160	05	370	245	438	254	10	1427		336	479.472	0.616	295.355
	S7	Y10		01	8906				10	8906		22	195.932	0.616	120.694
	S7a	Y10		01	9948				10	9948		22	218.856	0.616	134.815
	S7	Y10		01	8906				10	8906		22	195.932	0.616	120.694
	S8	Y10	160	04	170	717	367	645	10	2019		336	678.384	0.616	417.885
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1460	170			10	3380		45	152.100	0.616	93.694
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S14a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 6846.798 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED DRAWN & CHECKED BY	NAME OF PROJECT.	DECK SLAB (TYPE IIA) OVERALL LENGTH: 26.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-26-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		117	684.937	1.579	1081.515
	S2	Y16	240	01	5318				16	5318		116	616.888	1.579	974.066
	S2a	Y16	240	01	2074				16	2074		232	481.168	1.579	759.764
	S3	Y16	240	07	1920	156	1809		16	5849		117	684.348	1.579	1080.585
	S4	Y12	250	01	9240				12	9240		17	157.080	0.888	139.487
	S4a	Y12	250	01	10488				12	10488		17	178.296	0.888	158.327
	S4	Y12	250	01	9240				12	9240		17	157.080	0.888	139.487
	S5	Y12	100	01	9240				12	9240		43	397.320	0.888	352.820
	S5a	Y12	100	01	10488				12	10488		43	450.984	0.888	400.474
	S5	Y12	100	01	9240				12	9240		43	397.320	0.888	352.820
	S6	Y10	160	05	370	245	438	254	10	1427		348	496.596	0.616	305.903
	S7	Y10		01	9240				10	9240		22	203.280	0.616	125.220
	S7a	Y10		01	10280				10	10280		22	226.160	0.616	139.315
	S7	Y10		01	9240				10	9240		22	203.280	0.616	125.220
	S8	Y10	160	04	170	717	367	645	10	2019		348	702.612	0.616	432.809
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1660	170			10	3780		45	170.100	0.616	104.782
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		30	75.600	0.888	67.133
	S14a	Y12	300	03	865	150			12	991		60	59.460	0.888	52.800

TOTAL WEIGHT: 7126.362 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 27.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	LOCATION: THANA: ZILA:	DWG. NO. S-IIA-27-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		121	708.353	1.579	1118.490
	S2	Y16	240	01	5318				16	5318		121	643.478	1.579	1016.052
	S2a	Y16	240	01	2074				16	2074		242	501.908	1.579	792.513
	S3	Y16	240	07	1920	156	1809		16	5849		121	707.744	1.579	1117.528
	S4	Y12	250	01	9573				12	9573		17	162.741	0.888	144.514
	S4a	Y12	250	01	10822				12	10822		17	183.974	0.888	163.369
	S4	Y12	250	01	9573				12	9573		17	162.741	0.888	144.514
	S5	Y12	100	01	9573				12	9573		43	411.639	0.888	365.535
	S5a	Y12	100	01	10822				12	10822		43	465.346	0.888	413.227
	S5	Y12	100	01	9573				12	9573		43	411.639	0.888	365.535
	S6	Y10	160	05	370	245	438	254	10	1427		362	516.574	0.616	318.210
	S7	Y10		01	9573				10	9573		22	210.606	0.616	129.733
	S7a	Y10		01	10614				10	10614		22	233.508	0.616	143.841
	S7	Y10		01	9573				10	9573		22	210.606	0.616	129.733
	S8	Y10	160	04	170	717	367	645	10	2019		362	730.878	0.616	450.221
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	1660	170			10	3780		45	170.100	0.616	104.782
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		30	75.600	0.888	67.133
	S14a	Y12	300	03	865	150			12	991		60	59.460	0.888	52.800

TOTAL WEIGHT: 7371.565 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 28.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-28-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		125	731.770	1.579	1155.465
	S2	Y16	240	01	5318				16	5318		125	664.750	1.579	1049.640
	S2a	Y16	240	01	2074				16	2074		250	518.500	1.579	818.712
	S3	Y16	240	07	1920	156	1809		16	5849		125	731.141	1.579	1154.471
	S4	Y12	250	01	9906				12	9906		17	168.402	0.888	149.541
	S4a	Y12	250	01	11156				12	11156		17	189.652	0.888	168.411
	S4	Y12	250	01	9906				12	9906		17	168.402	0.888	149.541
	S5	Y12	100	01	9906				12	9906		43	425.958	0.888	378.251
	S5a	Y12	100	01	11156				12	11156		43	479.708	0.888	425.981
	S5	Y12	100	01	9906				12	9906		43	425.958	0.888	378.251
	S6	Y10	160	05	370	245	438	254	10	1427		374	533.698	0.616	328.758
	S7	Y10		01	9906				10	9906		22	217.932	0.616	134.246
	S7a	Y10		01	10948				10	10948		22	240.856	0.616	148.367
	S7	Y10		01	9906				10	9906		22	217.932	0.616	134.246
	S8	Y10	160	04	170	717	367	645	10	2019		374	755.106	0.616	465.145
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		45	206.100	0.616	126.958
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 7644.377 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 29.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-29-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		129	755.187	1.579	1192.440
	S2	Y16	240	01	5318				16	5318		129	686.022	1.579	1083.229
	S2a	Y16	240	01	2074				16	2074		258	535.092	1.579	844.910
	S3	Y16	240	07	1920	156	1809		16	5849		129	754.537	1.579	1191.415
	S4	Y12	250	01	10240				12	10240		17	174.080	0.888	154.583
	S4a	Y12	250	01	11488				12	11488		17	195.296	0.888	173.423
	S4	Y12	250	01	10240				12	10240		17	174.080	0.888	154.583
	S5	Y12	100	01	10240				12	10240		43	440.320	0.888	391.004
	S5a	Y12	100	01	11488				12	11488		43	493.984	0.888	438.658
	S5	Y12	100	01	10240				12	10240		43	440.320	0.888	391.004
	S6	Y10	160	05	370	245	438	254	10	1427		386	550.822	0.616	339.306
	S7	Y10		01	10240				10	10240		22	225.280	0.616	138.772
	S7a	Y10		01	11280				10	11280		22	248.160	0.616	152.867
	S7	Y10		01	10240				10	10240		22	225.280	0.616	138.772
	S8	Y10	160	04	170	717	367	645	10	2019		386	779.334	0.616	480.070
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		45	206.100	0.616	126.958
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 7870.387 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 30.80 m
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-30-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		133	778.603	1.579	1229.415
	S2	Y16	240	01	5318				16	5318		133	707.294	1.579	1116.817
	S2a	Y16	240	01	2074				16	2074		266	551.684	1.579	871.109
	S3	Y16	240	07	1920	156	1809		16	5849		133	777.934	1.579	1228.358
	S4	Y12	250	01	10573				12	10573		17	179.741	0.888	159.610
	S4a	Y12	250	01	11822				12	11822		17	200.974	0.888	178.465
	S4	Y12	250	01	10573				12	10573		17	179.741	0.888	159.610
	S5	Y12	100	01	10573				12	10573		43	454.639	0.888	403.719
	S5a	Y12	100	01	11822				12	11822		43	508.346	0.888	451.411
	S5	Y12	100	01	10573				12	10573		43	454.639	0.888	403.719
	S6	Y10	160	05	370	245	438	254	10	1427		398	567.946	0.616	349.855
	S7	Y10		01	10573				10	10573		22	232.606	0.616	143.285
	S7a	Y10		01	11614				10	11614		22	255.508	0.616	157.393
	S7	Y10		01	10573				10	10573		22	232.606	0.616	143.285
	S8	Y10	160	04	170	717	367	645	10	2019		398	803.562	0.616	494.994
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		45	206.100	0.616	126.958
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 8096.397 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH **LOCAL GOVERNMENT ENGINEERING DEPARTMENT**	DESIGNED, DRAWN & CHECKED BY: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IIA)** OVERALL LENGTH: 31.80 m BAR BENDING SCHEDULE DWG. NO.: S-IIA-31-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm)					CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
					A	B	C	D	d						
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		137	802.020	1.579	1266.390
	S2	Y16	240	01	5318				16	5318		137	728.566	1.579	1150.406
	S2a	Y16	240	01	2074				16	2074		274	568.276	1.579	897.308
	S3	Y16	240	07	1920	156	1809		16	5849		137	801.330	1.579	1265.301
	S4	Y12	250	01	10906				12	10906		17	185.402	0.888	164.637
	S4a	Y12	250	01	6390				12	6390		34	217.260	0.888	192.927
	S4	Y12	250	01	10906				12	10906		17	185.402	0.888	164.637
	S5	Y12	100	01	10906				12	10906		43	468.958	0.888	416.435
	S5a	Y12	100	01	6390				12	6390		86	549.540	0.888	487.992
	S5	Y12	100	01	10906				12	10906		43	468.958	0.888	416.435
	S6	Y10	160	05	370	245	438	254	10	1427		412	587.924	0.616	362.161
	S7	Y10		01	10906				10	10906		22	239.932	0.616	147.798
	S7a	Y10		01	11948				10	11948		22	262.856	0.616	161.919
	S7	Y10		01	10906				10	10906		22	239.932	0.616	147.798
	S8	Y10	160	04	170	717	367	645	10	2019		412	831.828	0.616	512.406
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		45	206.100	0.616	126.958
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 8359.899 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC–SHC–01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	**DECK SLAB (TYPE IIA)** OVERALL LENGTH: 32.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S–IIA–32–03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		142	831.291	1.579	1312.608
	S2	Y16	240	01	5318				16	5318		141	749.838	1.579	1183.994
	S2a	Y16	240	01	2074				16	2074		282	584.868	1.579	923.507
	S3	Y16	240	07	1920	156	1809		16	5849		142	830.576	1.579	1311.480
	S4	Y12	250	01	11240				12	11240		17	191.080	0.888	169.679
	S4a	Y12	250	01	6556				12	6556		34	222.904	0.888	197.939
	S4	Y12	250	01	11240				12	11240		17	191.080	0.888	169.679
	S5	Y12	100	01	11240				12	11240		43	483.320	0.888	429.188
	S5a	Y12	100	01	6556				12	6556		86	563.816	0.888	500.669
	S5	Y12	100	01	11240				12	11240		43	483.320	0.888	429.188
	S6	Y10	160	05	370	245	438	254	10	1427		424	605.048	0.616	372.710
	S7	Y10		01	11240				10	11240		22	247.280	0.616	152.324
	S7a	Y10		01	6400				10	6400		44	281.600	0.616	173.466
	S7	Y10		01	11240				10	11240		22	247.280	0.616	152.324
	S8	Y10	160	04	170	717	367	645	10	2019		424	856.056	0.616	527.330
	S11	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S11a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2060	170			10	4580		45	206.100	0.616	126.958
	S13	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S13a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S14a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 8611.436 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 33.80 m BAR BENDING SCHEDULE DWG. NO.: S-IIA-33-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		146	854.707	1.579	1349.583
	S2	Y16	240	01	5318				16	5318		146	776.428	1.579	1225.980
	S2a	Y16	240	01	2074				16	2074		292	605.608	1.579	956.255
	S3	Y16	240	07	1920	156	1809		16	5849		146	853.973	1.579	1348.423
	S4	Y12	250	01	11573				12	11573		17	196.741	0.888	174.706
	S4a	Y12	250	01	6723				12	6723		34	228.582	0.888	202.961
	S4	Y12	250	01	11573				12	11573		17	196.741	0.888	174.706
	S5	Y12	100	01	11573				12	11573		43	497.639	0.888	441.903
	S5a	Y12	100	01	6723				12	6723		86	578.178	0.888	513.422
	S5	Y12	100	01	11573				12	11573		43	497.639	0.888	441.903
	S6	Y10	160	05	370	245	438	254	10	1427		436	622.172	0.616	383.258
	S7	Y10		01	11573				10	11573		22	254.606	0.616	156.837
	S7a	Y10		01	6567				10	6567		44	288.948	0.616	177.992
	S7	Y10		01	11573				10	11573		22	254.606	0.616	156.837
	S8	Y10	160	04	170	717	367	645	10	2019		436	880.284	0.616	542.255
	S11	Y12	250	01	4482				12	4482		12	53.784	0.888	47.760
	S11a	Y12	250	01	2601				12	2601		24	62.424	0.888	55.433
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2235	170			10	4930		42	207.060	0.616	127.549
	S13	Y20		01	2470				20	2470		15	37.050	2.466	91.365
	S13a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2470				12	2470		42	103.740	0.888	92.121
	S14a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 8871.152 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC–SHC–01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 34.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S–IIA–34–03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		150	878.124	1.579	1386.558
	S2	Y16	240	01	5318				16	5318		150	797.700	1.579	1259.568
	S2a	Y16	240	01	2074				16	2074		300	622.200	1.579	982.454
	S3	Y16	240	07	1920	156	1809		16	5849		150	877.369	1.579	1385.366
	S4	Y12	250	01	11906				12	11906		17	202.402	0.888	179.733
	S4a	Y12	250	01	6890				12	6890		34	234.260	0.888	208.023
	S4	Y12	250	01	11906				12	11906		17	202.402	0.888	179.733
	S5	Y12	100	01	11906				12	11906		43	511.958	0.888	454.619
	S5a	Y12	100	01	6890				12	6890		86	592.540	0.888	526.176
	S5	Y12	100	01	11906				12	11906		43	511.958	0.888	454.619
	S6	Y10	160	05	370	245	438	254	10	1427		448	639.296	0.616	393.806
	S7	Y10		01	11906				10	11906		22	261.932	0.616	161.350
	S7a	Y10		01	6734				10	6734		44	296.296	0.616	182.518
	S7	Y10		01	11906				10	11906		22	261.932	0.616	161.350
	S8	Y10	160	04	170	717	367	645	10	2019		448	904.512	0.616	557.179
	S11	Y12	250	01	4482				12	4482		12	53.784	0.888	47.760
	S11a	Y12	250	01	2601				12	2601		24	62.424	0.888	55.433
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2235	170			10	4930		42	207.060	0.616	127.549
	S13	Y20		01	2470				20	2470		15	37.050	2.466	91.365
	S13a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2470				12	2470		42	103.740	0.888	92.121
	S14a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: **9097.162** Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 35.80 m BAR BENDING SCHEDULE DWG. NO.: S-IIA-35-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		154	901.541	1.579	1423.533
	S2	Y16	240	01	5318				16	5318		154	818.972	1.579	1293.157
	S2a	Y16	240	01	2074				16	2074		308	638.792	1.579	1008.653
	S3	Y16	240	07	1920	156	1809		16	5849		154	900.766	1.579	1422.309
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	7296				12	7296		34	248.064	0.888	220.281
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	7296				12	7296		86	627.456	0.888	557.181
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	160	05	370	245	438	254	10	1427		462	659.274	0.616	406.113
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	7140				10	7140		44	314.160	0.616	193.523
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	160	04	170	717	367	645	10	2019		462	932.778	0.616	574.591
	S11	Y12	250	01	4482				12	4482		12	53.784	0.888	47.760
	S11a	Y12	250	01	2601				12	2601		24	62.424	0.888	55.433
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2235	170			10	4930		42	207.060	0.616	127.549
	S13	Y20		01	2470				20	2470		15	37.050	2.466	91.365
	S13a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2470				12	2470		42	103.740	0.888	92.121
	S14a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 9327.417 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 36.80 m BAR BENDING SCHEDULE DWG. NO.: S-IIA-36-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		158	924.957	1.579	1460.508
	S2	Y16	240	01	5318				16	5318		158	840.244	1.579	1326.745
	S2a	Y16	240	01	2074				16	2074		316	655.384	1.579	1034.851
	S3	Y16	240	07	1920	156	1809		16	5849		158	924.162	1.579	1459.252
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	7796				12	7796		34	265.064	0.888	235.377
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	7796				12	7796		86	670.456	0.888	595.365
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	160	05	370	245	438	254	10	1427		474	676.398	0.616	416.661
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	7640				10	7640		44	336.160	0.616	207.075
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	160	04	170	717	367	645	10	2019		474	957.006	0.616	589.516
	S11	Y12	250	01	4482				12	4482		12	53.784	0.888	47.760
	S11a	Y12	250	01	2601				12	2601		24	62.424	0.888	55.433
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2235	170			10	4930		42	207.060	0.616	127.549
	S13	Y20		01	2470				20	2470		15	37.050	2.466	91.365
	S13a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2470				12	2470		42	103.740	0.888	92.121
	S14a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 9553.427 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 37.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-37-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		162	948.374	1.579	1497.483
	S2	Y16	240	01	5318				16	5318		162	861.516	1.579	1360.334
	S2a	Y16	240	01	2074				16	2074		324	671.976	1.579	1061.050
	S3	Y16	240	07	1920	156	1809		16	5849		162	947.559	1.579	1496.195
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	8296				12	8296		34	282.064	0.888	250.473
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	8296				12	8296		86	713.456	0.888	633.549
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	160	05	370	245	438	254	10	1427		486	693.522	0.616	427.210
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	8140				10	8140		44	358.160	0.616	220.627
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	160	04	170	717	367	645	10	2019		486	981.234	0.616	604.440
	S11	Y12	250	01	4362				12	4362		11	47.982	0.888	42.608
	S11a	Y12	250	01	2541				12	2541		22	55.902	0.888	49.641
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2435	170			10	5330		42	223.860	0.616	137.898
	S13	Y20		01	2420				20	2420		15	36.300	2.466	89.516
	S13a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2420				12	2420		48	116.160	0.888	103.150
	S14a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 9801.752 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 38.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-38-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		167	977.645	1.579	1543.701
	S2	Y16	240	01	5318				16	5318		166	882.788	1.579	1393.922
	S2a	Y16	240	01	2074				16	2074		332	688.568	1.579	1087.249
	S3	Y16	240	07	1920	156	1809		16	5849		167	976.804	1.579	1542.374
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	8796				12	8796		34	299.064	0.888	265.569
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	8796				12	8796		86	756.456	0.888	671.733
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	160	05	370	245	438	254	10	1427		498	710.646	0.616	437.758
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	8640				10	8640		44	380.160	0.616	234.179
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	160	04	170	717	367	645	10	2019		498	1005.462	0.616	619.365
	S11	Y12	250	01	4362				12	4362		11	47.982	0.888	42.608
	S11a	Y12	250	01	2541				12	2541		22	55.902	0.888	49.641
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2435	170			10	5330		42	223.860	0.616	137.898
	S13	Y20		01	2420				20	2420		15	36.300	2.466	89.516
	S13a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2420				12	2420		48	116.160	0.888	103.150
	S14a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 10046.242 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC–SHC–01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 39.80 m BAR BENDING SCHEDULE DWG. NO.: S–IIA–39–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	240	02	4350	752			16	5854		171	1001.062	1.579	1580.676
	S2	Y16	240	01	5318				16	5318		171	909.378	1.579	1435.908
	S2a	Y16	240	01	2074				16	2074		342	709.308	1.579	1119.997
	S3	Y16	240	07	1920	156	1809		16	5849		171	1000.201	1.579	1579.317
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	9296				12	9296		34	316.064	0.888	280.665
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	9296				12	9296		86	799.456	0.888	709.917
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	160	05	370	245	438	254	10	1427		512	730.624	0.616	450.064
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S7a	Y10		01	9140				10	9140		44	402.160	0.616	247.731
	S7	Y10		01	12000				10	12000		22	264.000	0.616	162.624
	S8	Y10	160	04	170	717	367	645	10	2019		512	1033.728	0.616	636.776
	S11	Y12	250	01	4362				12	4362		11	47.982	0.888	42.608
	S11a	Y12	250	01	2541				12	2541		22	55.902	0.888	49.641
CROSS GIRDER (3 NO.)	S12	Y10	200	06	2435	170			10	5330		42	223.860	0.616	137.898
	S13	Y20		01	2420				20	2420		15	36.300	2.466	89.516
	S13a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S14	Y12	300	01	2420				12	2420		48	116.160	0.888	103.150
	S14a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 10291.444 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	DECK SLAB (TYPE IIA) OVERALL LENGTH: 40.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: S-IIA-40-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		70	303.100	1.579	478.595
	S2	Y16	300	01	4330				16	4330		70	303.100	1.579	478.595
	S3	Y16	300	07	1250	156	1430		16	4422		70	309.540	1.579	488.764
	S4	Y12	250	01	6906				12	6906		15	103.590	0.888	91.988
	S4a	Y12	250	01	8156				12	8156		15	122.340	0.888	108.638
	S4	Y12	250	01	6906				12	6906		15	103.590	0.888	91.988
	S5	Y12	100	01	6906				12	6906		37	255.522	0.888	226.904
	S5a	Y12	100	01	8156				12	8156		37	301.772	0.888	267.974
	S5	Y12	100	01	6906				12	6906		37	255.522	0.888	226.904
	S6	Y10	300	05	245	420	329	428	10	1542		140	215.880	0.616	132.982
	S7	Y10		01	6906				10	6906		14	96.684	0.616	59.557
	S7a	Y10		01	7948				10	7948		14	111.272	0.616	68.544
	S7	Y10		01	6906				10	6906		14	96.684	0.616	59.557
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1260	170			10	2980		33	98.340	0.616	60.577
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 3188.285 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 20.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-20-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		73	316.090	1.579	499.106
	S2	Y16	300	01	4330				16	4330		73	316.090	1.579	499.106
	S3	Y16	300	07	1250	156	1430		16	4422		73	322.806	1.579	509.711
	S4	Y12	250	01	7240				12	7240		15	108.600	0.888	96.437
	S4a	Y12	250	01	8488				12	8488		15	127.320	0.888	113.060
	S4	Y12	250	01	7240				12	7240		15	108.600	0.888	96.437
	S5	Y12	100	01	7240				12	7240		37	267.880	0.888	237.877
	S5a	Y12	100	01	8488				12	8488		37	314.056	0.888	278.882
	S5	Y12	100	01	7240				12	7240		37	267.880	0.888	237.877
	S6	Y10	300	05	245	420	329	428	10	1542		146	225.132	0.616	138.681
	S7	Y10		01	7240				10	7240		14	101.360	0.616	62.438
	S7a	Y10		01	8280				10	8280		14	115.920	0.616	71.407
	S7	Y10		01	7240				10	7240		14	101.360	0.616	62.438
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1260	170			10	2980		33	98.340	0.616	60.577
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 3310.754 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 21.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-21-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		77	333.410	1.579	526.454
	S2	Y16	300	01	4330				16	4330		77	333.410	1.579	526.454
	S3	Y16	300	07	1250	156	1430		16	4422		77	340.494	1.579	537.640
	S4	Y12	250	01	7573				12	7573		15	113.595	0.888	100.872
	S4a	Y12	250	01	8822				12	8822		15	132.330	0.888	117.509
	S4	Y12	250	01	7573				12	7573		15	113.595	0.888	100.872
	S5	Y12	100	01	7573				12	7573		37	280.201	0.888	248.818
	S5a	Y12	100	01	8822				12	8822		37	326.414	0.888	289.856
	S5	Y12	100	01	7573				12	7573		37	280.201	0.888	248.818
	S6	Y10	300	05	245	420	329	428	10	1542		154	237.468	0.616	146.280
	S7	Y10		01	7573				10	7573		14	106.022	0.616	65.310
	S7a	Y10		01	8614				10	8614		14	120.596	0.616	74.287
	S7	Y10		01	7573				10	7573		14	106.022	0.616	65.310
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1260	170			10	2980		33	98.340	0.616	60.577
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 3455.779 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 22.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-22-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		80	346.400	1.579	546.966
	S2	Y16	300	01	4330				16	4330		80	346.400	1.579	546.966
	S3	Y16	300	07	1250	156	1430		16	4422		80	353.760	1.579	558.587
	S4	Y12	250	01	7906				12	7906		15	118.590	0.888	105.308
	S4a	Y12	250	01	9156				12	9156		15	137.340	0.888	121.958
	S4	Y12	250	01	7906				12	7906		15	118.590	0.888	105.308
	S5	Y12	100	01	7906				12	7906		37	292.522	0.888	259.760
	S5a	Y12	100	01	9156				12	9156		37	338.772	0.888	300.830
	S5	Y12	100	01	7906				12	7906		37	292.522	0.888	259.760
	S6	Y10	300	05	245	420	329	428	10	1542		160	246.720	0.616	151.980
	S7	Y10		01	7906				10	7906		14	110.684	0.616	68.181
	S7a	Y10		01	8948				10	8948		14	125.272	0.616	77.168
	S7	Y10		01	7906				10	7906		14	110.684	0.616	68.181
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1260	170			10	2980		33	98.340	0.616	60.577
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 3578.247 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 23.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-23-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		83	359.390	1.579	567.477
	S2	Y16	300	01	4330				16	4330		83	359.390	1.579	567.477
	S3	Y16	300	07	1250	156	1430		16	4422		83	367.026	1.579	579.534
	S4	Y12	250	01	8240				12	8240		15	123.600	0.888	109.757
	S4a	Y12	250	01	9488				12	9488		15	142.320	0.888	126.380
	S4	Y12	250	01	8240				12	8240		15	123.600	0.888	109.757
	S5	Y12	100	01	8240				12	8240		37	304.880	0.888	270.733
	S5a	Y12	100	01	9488				12	9488		37	351.056	0.888	311.738
	S5	Y12	100	01	8240				12	8240		37	304.880	0.888	270.733
	S6	Y10	300	05	245	420	329	428	10	1542		166	255.972	0.616	157.679
	S7	Y10		01	8240				10	8240		14	115.360	0.616	71.062
	S7a	Y10		01	9280				10	9280		14	129.920	0.616	80.031
	S7	Y10		01	8240				10	8240		14	115.360	0.616	71.062
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1460	170			10	3380		33	111.540	0.616	68.709
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 3708.847 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		OVERALL LENGTH: 24.80 m
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-24-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		87	376.710	1.579	594.825
	S2	Y16	300	01	4330				16	4330		87	376.710	1.579	594.825
	S3	Y16	300	07	1250	156	1430		16	4422		87	384.714	1.579	607.463
	S4	Y12	250	01	8573				12	8573		15	128.595	0.888	114.192
	S4a	Y12	250	01	9822				12	9822		15	147.330	0.888	130.829
	S4	Y12	250	01	8573				12	8573		15	128.595	0.888	114.192
	S5	Y12	100	01	8573				12	8573		37	317.201	0.888	281.674
	S5a	Y12	100	01	9822				12	9822		37	363.414	0.888	322.712
	S5	Y12	100	01	8573				12	8573		37	317.201	0.888	281.674
	S6	Y10	300	05	245	420	329	428	10	1542		174	268.308	0.616	165.278
	S7	Y10		01	8573				10	8573		14	120.022	0.616	73.934
	S7a	Y10		01	9614				10	9614		14	134.596	0.616	82.911
	S7	Y10		01	8573				10	8573		14	120.022	0.616	73.934
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1460	170			10	3380		33	111.540	0.616	68.709
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 3853.872 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 25.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-25-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		90	389.700	1.579	615.336
	S2	Y16	300	01	4330				16	4330		90	389.700	1.579	615.336
	S3	Y16	300	07	1250	156	1430		16	4422		90	397.980	1.579	628.410
	S4	Y12	250	01	8906				12	8906		15	133.590	0.888	118.628
	S4a	Y12	250	01	10156				12	10156		15	152.340	0.888	135.278
	S4	Y12	250	01	8906				12	8906		15	133.590	0.888	118.628
	S5	Y12	100	01	8906				12	8906		37	329.522	0.888	292.616
	S5a	Y12	100	01	10156				12	10156		37	375.772	0.888	333.686
	S5	Y12	100	01	8906				12	8906		37	329.522	0.888	292.616
	S6	Y10	300	05	245	420	329	428	10	1542		180	277.560	0.616	170.977
	S7	Y10		01	8906				10	8906		14	124.684	0.616	76.805
	S7a	Y10		01	9948				10	9948		14	139.272	0.616	85.792
	S7	Y10		01	8906				10	8906		14	124.684	0.616	76.805
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1460	170			10	3380		33	111.540	0.616	68.709
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		24	44.400	0.888	39.427
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 3976.341 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 26.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-26-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		93	402.690	1.579	635.848
	S2	Y16	300	01	4330				16	4330		93	402.690	1.579	635.848
	S3	Y16	300	07	1250	156	1430		16	4422		93	411.246	1.579	649.357
	S4	Y12	250	01	9240				12	9240		15	138.600	0.888	123.077
	S4a	Y12	250	01	10488				12	10488		15	157.320	0.888	139.700
	S4	Y12	250	01	9240				12	9240		15	138.600	0.888	123.077
	S5	Y12	100	01	9240				12	9240		37	341.880	0.888	303.589
	S5a	Y12	100	01	10488				12	10488		37	388.056	0.888	344.594
	S5	Y12	100	01	9240				12	9240		37	341.880	0.888	303.589
	S6	Y10	300	05	245	420	329	428	10	1542		186	286.812	0.616	176.676
	S7	Y10		01	9240				10	9240		14	129.360	0.616	79.686
	S7a	Y10		01	10280				10	10280		14	143.920	0.616	88.655
	S7	Y10		01	9240				10	9240		14	129.360	0.616	79.686
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1660	170			10	3780		33	124.740	0.616	76.840
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		30	55.500	0.888	49.284
	S11a	Y12	300	03	865	150			12	991		60	59.460	0.888	52.800

TOTAL WEIGHT: 4127.358 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 27.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-27-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		97	420.010	1.579	663.196
	S2	Y16	300	01	4330				16	4330		97	420.010	1.579	663.196
	S3	Y16	300	07	1250	156	1430		16	4422		97	428.934	1.579	677.287
	S4	Y12	250	01	9573				12	9573		15	143.595	0.888	127.512
	S4a	Y12	250	01	10822				12	10822		15	162.330	0.888	144.149
	S4	Y12	250	01	9573				12	9573		15	143.595	0.888	127.512
	S5	Y12	100	01	9573				12	9573		37	354.201	0.888	314.530
	S5a	Y12	100	01	10822				12	10822		37	400.414	0.888	355.568
	S5	Y12	100	01	9573				12	9573		37	354.201	0.888	314.530
	S6	Y10	300	05	245	420	329	428	10	1542		194	299.148	0.616	184.275
	S7	Y10		01	9573				10	9573		14	134.022	0.616	82.558
	S7a	Y10		01	10614				10	10614		14	148.596	0.616	91.535
	S7	Y10		01	9573				10	9573		14	134.022	0.616	82.558
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1660	170			10	3780		33	124.740	0.616	76.840
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		30	55.500	0.888	49.284
	S11a	Y12	300	03	865	150			12	991		60	59.460	0.888	52.800

TOTAL WEIGHT: 4272.382 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 28.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-28-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		100	433.000	1.579	683.707
	S2	Y16	300	01	4330				16	4330		100	433.000	1.579	683.707
	S3	Y16	300	07	1250	156	1430		16	4422		100	442.200	1.579	698.234
	S4	Y12	250	01	9906				12	9906		15	148.590	0.888	131.948
	S4a	Y12	250	01	11156				12	11156		15	167.340	0.888	148.598
	S4	Y12	250	01	9906				12	9906		15	148.590	0.888	131.948
	S5	Y12	100	01	9906				12	9906		37	366.522	0.888	325.472
	S5a	Y12	100	01	11156				12	11156		37	412.772	0.888	366.542
	S5	Y12	100	01	9906				12	9906		37	366.522	0.888	325.472
	S6	Y10	300	05	245	420	329	428	10	1542		200	308.400	0.616	189.974
	S7	Y10		01	9906				10	9906		14	138.684	0.616	85.429
	S7a	Y10		01	10948				10	10948		14	153.272	0.616	94.416
	S7	Y10		01	9906				10	9906		14	138.684	0.616	85.429
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		33	151.140	0.616	93.102
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 4432.170 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 29.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-29-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		103	445.990	1.579	704.218
	S2	Y16	300	01	4330				16	4330		103	445.990	1.579	704.218
	S3	Y16	300	07	1250	156	1430		16	4422		103	455.466	1.579	719.181
	S4	Y12	250	01	10240				12	10240		15	153.600	0.888	136.397
	S4a	Y12	250	01	11488				12	11488		15	172.320	0.888	153.020
	S4	Y12	250	01	10240				12	10240		15	153.600	0.888	136.397
	S5	Y12	100	01	10240				12	10240		37	378.880	0.888	336.445
	S5a	Y12	100	01	11488				12	11488		37	425.056	0.888	377.450
	S5	Y12	100	01	10240				12	10240		37	378.880	0.888	336.445
	S6	Y10	300	05	245	420	329	428	10	1542		206	317.652	0.616	195.674
	S7	Y10		01	10240				10	10240		14	143.360	0.616	88.310
	S7a	Y10		01	11280				10	11280		14	157.920	0.616	97.279
	S7	Y10		01	10240				10	10240		14	143.360	0.616	88.310
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		33	151.140	0.616	93.102
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 4554.638 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH **LOCAL GOVERNMENT ENGINEERING DEPARTMENT**	DESIGNED, DRAWN & CHECKED: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IB)** OVERALL LENGTH: 30.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-30-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		107	463.310	1.579	731.566
	S2	Y16	300	01	4330				16	4330		107	463.310	1.579	731.566
	S3	Y16	300	07	1250	156	1430		16	4422		107	473.154	1.579	747.110
	S4	Y12	250	01	10573				12	10573		15	158.595	0.888	140.832
	S4a	Y12	250	01	11822				12	11822		15	177.330	0.888	157.469
	S4	Y12	250	01	10573				12	10573		15	158.595	0.888	140.832
	S5	Y12	100	01	10573				12	10573		37	391.201	0.888	347.386
	S5a	Y12	100	01	11822				12	11822		37	437.414	0.888	388.424
	S5	Y12	100	01	10573				12	10573		37	391.201	0.888	347.386
	S6	Y10	300	05	245	420	329	428	10	1542		214	329.988	0.616	203.273
	S7	Y10		01	10573				10	10573		14	148.022	0.616	91.182
	S7a	Y10		01	11614				10	11614		14	162.596	0.616	100.159
	S7	Y10		01	10573				10	10573		14	148.022	0.616	91.182
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		33	151.140	0.616	93.102
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 4699.663 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB). OVERALL LENGTH: 31.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-31-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		110	476.300	1.579	752.078
	S2	Y16	300	01	4330				16	4330		110	476.300	1.579	752.078
	S3	Y16	300	07	1250	156	1430		16	4422		110	486.420	1.579	768.057
	S4	Y12	250	01	10906				12	10906		15	163.590	0.888	145.268
	S4a	Y12	250	01	6390				12	6390		30	191.700	0.888	170.230
	S4	Y12	250	01	10906				12	10906		15	163.590	0.888	145.268
	S5	Y12	100	01	10906				12	10906		37	403.522	0.888	358.328
	S5a	Y12	100	01	6390				12	6390		74	472.860	0.888	419.900
	S5	Y12	100	01	10906				12	10906		37	403.522	0.888	358.328
	S6	Y10	300	05	245	420	329	428	10	1542		220	339.240	0.616	208.972
	S7	Y10		01	10906				10	10906		14	152.684	0.616	94.053
	S7a	Y10		01	11948				10	11948		14	167.272	0.616	103.040
	S7	Y10		01	10906				10	10906		14	152.684	0.616	94.053
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		33	151.140	0.616	93.102
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 4850.946 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 32.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-32-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		113	489.290	1.579	772.589
	S2	Y16	300	01	4330				16	4330		113	489.290	1.579	772.589
	S3	Y16	300	07	1250	156	1430		16	4422		113	499.686	1.579	789.004
	S4	Y12	250	01	11240				12	11240		15	168.600	0.888	149.717
	S4a	Y12	250	01	6556				12	6556		30	196.680	0.888	174.652
	S4	Y12	250	01	11240				12	11240		15	168.600	0.888	149.717
	S5	Y12	100	01	11240				12	11240		37	415.880	0.888	369.301
	S5a	Y12	100	01	6556				12	6556		74	485.144	0.888	430.808
	S5	Y12	100	01	11240				12	11240		37	415.880	0.888	369.301
	S6	Y10	300	05	245	420	329	428	10	1542		226	348.492	0.616	214.671
	S7	Y10		01	11240				10	11240		14	157.360	0.616	96.934
	S7a	Y10		01	6400				10	6400		28	179.200	0.616	110.387
	S7	Y10		01	11240				10	11240		14	157.360	0.616	96.934
	S8	Y12	250	01	3610				12	3610		9	32.490	0.888	28.851
	S8a	Y12	250	01	2165				12	2165		18	38.970	0.888	34.605
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		33	151.140	0.616	93.102
	S10	Y20		01	1850				20	1850		15	27.750	2.466	68.432
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1850				12	1850		36	66.600	0.888	59.141
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 4977.899 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 33.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-33-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		117	506.610	1.579	799.937
	S2	Y16	300	01	4330				16	4330		117	506.610	1.579	799.937
	S3	Y16	300	07	1250	156	1430		16	4422		117	517.374	1.579	816.934
	S4	Y12	250	01	11573				12	11573		15	173.595	0.888	154.152
	S4a	Y12	250	01	6723				12	6723		30	201.690	0.888	179.101
	S4	Y12	250	01	11573				12	11573		15	173.595	0.888	154.152
	S5	Y12	100	01	11573				12	11573		37	428.201	0.888	380.242
	S5a	Y12	100	01	6723				12	6723		74	497.502	0.888	441.782
	S5	Y12	100	01	11573				12	11573		37	428.201	0.888	380.242
	S6	Y10	300	05	245	420	329	428	10	1542		234	360.828	0.616	222.270
	S7	Y10		01	11573				10	11573		14	162.022	0.616	99.806
	S7a	Y10		01	6567				10	6567		28	183.876	0.616	113.268
	S7	Y10		01	11573				10	11573		14	162.022	0.616	99.806
	S8	Y12	250	01	3410				12	3410		9	30.690	0.888	27.253
	S8a	Y12	250	01	2065				12	2065		18	37.170	0.888	33.007
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2235	170			10	4930		30	147.900	0.616	91.106
	S10	Y20		01	1800				20	1800		15	27.000	2.466	66.582
	S10a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1800				12	1800		42	75.600	0.888	67.133
	S11a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 5136.592 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 34.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-34-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		120	519.600	1.579	820.448
	S2	Y16	300	01	4330				16	4330		120	519.600	1.579	820.448
	S3	Y16	300	07	1250	156	1430		16	4422		120	530.640	1.579	837.881
	S4	Y12	250	01	11906				12	11906		15	178.590	0.888	158.588
	S4a	Y12	250	01	6890				12	6890		30	206.700	0.888	183.550
	S4	Y12	250	01	11906				12	11906		15	178.590	0.888	158.588
	S5	Y12	100	01	11906				12	11906		37	440.522	0.888	391.184
	S5a	Y12	100	01	6890				12	6890		74	509.860	0.888	452.756
	S5	Y12	100	01	11906				12	11906		37	440.522	0.888	391.184
	S6	Y10	300	05	245	420	329	428	10	1542		240	370.080	0.616	227.969
	S7	Y10		01	11906				10	11906		14	166.684	0.616	102.677
	S7a	Y10		01	6734				10	6734		28	188.552	0.616	116.148
	S7	Y10		01	11906				10	11906		14	166.684	0.616	102.677
	S8	Y12	250	01	3410				12	3410		9	30.690	0.888	27.253
	S8a	Y12	250	01	2065				12	2065		18	37.170	0.888	33.007
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2235	170			10	4930		30	147.900	0.616	91.106
	S10	Y20		01	1800				20	1800		15	27.000	2.466	66.582
	S10a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1800				12	1800		42	75.600	0.888	67.133
	S11a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 5259.060 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IB) OVERALL LENGTH: 35.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IB-35-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		123	532.590	1.579	840.960
	S2	Y16	300	01	4330				16	4330		123	532.590	1.579	840.960
	S3	Y16	300	07	1250	156	1430		16	4422		123	543.906	1.579	858.828
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	7296				12	7296		30	218.880	0.888	194.365
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	7296				12	7296		74	539.904	0.888	479.435
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	300	05	245	420	329	428	10	1542		246	379.332	0.616	233.669
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	7140				10	7140		28	199.920	0.616	123.151
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	3410				12	3410		9	30.690	0.888	27.253
	S8a	Y12	250	01	2065				12	2065		18	37.170	0.888	33.007
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2235	170			10	4930		30	147.900	0.616	91.106
	S10	Y20		01	1800				20	1800		15	27.000	2.466	66.582
	S10a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1800				12	1800		42	75.600	0.888	67.133
	S11a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 5381.529 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 36.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-36-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		127	549.910	1.579	868.308
	S2	Y16	300	01	4330				16	4330		127	549.910	1.579	868.308
	S3	Y16	300	07	1250	156	1430		16	4422		127	561.594	1.579	886.757
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	7796				12	7796		30	233.880	0.888	207.685
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	7796				12	7796		74	576.904	0.888	512.291
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	300	05	245	420	329	428	10	1542		254	391.668	0.616	241.267
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	7640				10	7640		28	213.920	0.616	131.775
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	3410				12	3410		9	30.690	0.888	27.253
	S8a	Y12	250	01	2065				12	2065		18	37.170	0.888	33.007
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2235	170			10	4930		30	147.900	0.616	91.106
	S10	Y20		01	1800				20	1800		15	27.000	2.466	66.582
	S10a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1800				12	1800		42	75.600	0.888	67.133
	S11a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 5526.554 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 37.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-37-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		130	562.900	1.579	888.819
	S2	Y16	300	01	4330				16	4330		130	562.900	1.579	888.819
	S3	Y16	300	07	1250	156	1430		16	4422		130	574.860	1.579	907.704
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	8296				12	8296		30	248.880	0.888	221.005
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	8296				12	8296		74	613.904	0.888	545.147
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	300	05	245	420	329	428	10	1542		260	400.920	0.616	246.967
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	8140				10	8140		28	227.920	0.616	140.399
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	3290				12	3290		9	29.610	0.888	26.294
	S8a	Y12	250	01	2005				12	2005		18	36.090	0.888	32.048
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2435	170			10	5330		30	159.900	0.616	98.498
	S10	Y20		01	1750				20	1750		15	26.250	2.466	64.733
	S10a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1750				12	1750		48	84.000	0.888	74.592
	S11a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 5673.836 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 38.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-38-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		133	575.890	1.579	909.330
	S2	Y16	300	01	4330				16	4330		133	575.890	1.579	909.330
	S3	Y16	300	07	1250	156	1430		16	4422		133	588.126	1.579	928.651
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	8796				12	8796		30	263.880	0.888	234.325
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	8796				12	8796		74	650.904	0.888	578.003
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	300	05	245	420	329	428	10	1542		266	410.172	0.616	252.666
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	8640				10	8640		28	241.920	0.616	149.023
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	3290				12	3290		9	29.610	0.888	26.294
	S8a	Y12	250	01	2005				12	2005		18	36.090	0.888	32.048
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2435	170			10	5330		30	159.900	0.616	98.498
	S10	Y20		01	1750				20	1750		15	26.250	2.466	64.733
	S10a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1750				12	1750		48	84.000	0.888	74.592
	S11a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 5796.305 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 39.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-39-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	300	01	4330				16	4330		137	593.210	1.579	936.679
	S2	Y16	300	01	4330				16	4330		137	593.210	1.579	936.679
	S3	Y16	300	07	1250	156	1430		16	4422		137	605.814	1.579	956.580
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S4a	Y12	250	01	9296				12	9296		30	278.880	0.888	247.645
	S4	Y12	250	01	12000				12	12000		15	180.000	0.888	159.840
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S5a	Y12	100	01	9296				12	9296		74	687.904	0.888	610.859
	S5	Y12	100	01	12000				12	12000		37	444.000	0.888	394.272
	S6	Y10	300	05	245	420	329	428	10	1542		274	422.508	0.616	260.265
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	9140				10	9140		28	255.920	0.616	157.647
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	3290				12	3290		9	29.610	0.888	26.294
	S8a	Y12	250	01	2005				12	2005		18	36.090	0.888	32.048
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2435	170			10	5330		30	159.900	0.616	98.498
	S10	Y20		01	1750				20	1750		15	26.250	2.466	64.733
	S10a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	1750				12	1750		48	84.000	0.888	74.592
	S11a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 5941.330 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IB) OVERALL LENGTH: 40.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IB-40-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		81	405.000	1.579	639.495
	S2	Y16	260	01	5000				16	5000		81	405.000	1.579	639.495
	S3	Y16	260	07	1920	156	1430		16	5092		81	412.452	1.579	651.262
	S4	Y12	250	01	6906				12	6906		17	117.402	0.888	104.253
	S4a	Y12	250	01	8156				12	8156		17	138.652	0.888	123.123
	S4	Y12	250	01	6906				12	6906		17	117.402	0.888	104.253
	S5	Y12	100	01	6906				12	6906		43	296.958	0.888	263.699
	S5a	Y12	100	01	8156				12	8156		43	350.708	0.888	311.429
	S5	Y12	100	01	6906				12	6906		43	296.958	0.888	263.699
	S6	Y10	260	05	245	420	329	428	10	1542		162	249.804	0.616	153.879
	S7	Y10		01	6906				10	6906		14	96.684	0.616	59.557
	S7a	Y10		01	7948				10	7948		14	111.272	0.616	68.544
	S7	Y10		01	6906				10	6906		14	96.684	0.616	59.557
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1260	170			10	2980		42	125.160	0.616	77.099
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 3949.123 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 20.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-20-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		85	425.000	1.579	671.075
	S2	Y16	260	01	5000				16	5000		84	420.000	1.579	663.180
	S3	Y16	260	07	1920	156	1430		16	5092		85	432.820	1.579	683.423
	S4	Y12	250	01	7240				12	7240		17	123.080	0.888	109.295
	S4a	Y12	250	01	8488				12	8488		17	144.296	0.888	128.135
	S4	Y12	250	01	7240				12	7240		17	123.080	0.888	109.295
	S5	Y12	100	01	7240				12	7240		43	311.320	0.888	276.452
	S5a	Y12	100	01	8488				12	8488		43	364.984	0.888	324.106
	S5	Y12	100	01	7240				12	7240		43	311.320	0.888	276.452
	S6	Y10	260	05	245	420	329	428	10	1542		170	262.140	0.616	161.478
	S7	Y10		01	7240				10	7240		14	101.360	0.616	62.438
	S7a	Y10		01	8280				10	8280		14	115.920	0.616	71.407
	S7	Y10		01	7240				10	7240		14	101.360	0.616	62.438
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1260	170			10	2980		42	125.160	0.616	77.099
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 4106.052 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 21.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IIB-21-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		88	440.000	1.579	694.760
	S2	Y16	260	01	5000				16	5000		88	440.000	1.579	694.760
	S3	Y16	260	07	1920	156	1430		16	5092		88	448.096	1.579	707.544
	S4	Y12	250	01	7573				12	7573		17	128.741	0.888	114.322
	S4a	Y12	250	01	8822				12	8822		17	149.974	0.888	133.177
	S4	Y12	250	01	7573				12	7573		17	128.741	0.888	114.322
	S5	Y12	100	01	7573				12	7573		43	325.639	0.888	289.167
	S5a	Y12	100	01	8822				12	8822		43	379.346	0.888	336.859
	S5	Y12	100	01	7573				12	7573		43	325.639	0.888	289.167
	S6	Y10	260	05	245	420	329	428	10	1542		176	271.392	0.616	167.177
	S7	Y10		01	7573				10	7573		14	106.022	0.616	65.310
	S7a	Y10		01	8614				10	8614		14	120.596	0.616	74.287
	S7	Y10		01	7573				10	7573		14	106.022	0.616	65.310
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1260	170			10	2980		42	125.160	0.616	77.099
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 4253.041 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 22.80 m
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO : S-IIB-22-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		92	460.000	1.579	726.340
	S2	Y16	260	01	5000				16	5000		92	460.000	1.579	726.340
	S3	Y16	260	07	1920	156	1430		16	5092		92	468.464	1.579	739.705
	S4	Y12	250	01	7906				12	7906		17	134.402	0.888	119.349
	S4a	Y12	250	01	9156				12	9156		17	155.652	0.888	138.219
	S4	Y12	250	01	7906				12	7906		17	134.402	0.888	119.349
	S5	Y12	100	01	7906				12	7906		43	339.958	0.888	301.883
	S5a	Y12	100	01	9156				12	9156		43	393.708	0.888	349.613
	S5	Y12	100	01	7906				12	7906		43	339.958	0.888	301.883
	S6	Y10	260	05	245	420	329	428	10	1542		184	283.728	0.616	174.776
	S7	Y10		01	7906				10	7906		14	110.684	0.616	68.181
	S7a	Y10		01	8948				10	8948		14	125.272	0.616	77.168
	S7	Y10		01	7906				10	7906		14	110.684	0.616	68.181
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1260	170			10	2980		42	125.160	0.616	77.099
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 4417.865 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 23.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IIB-23-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		96	480.000	1.579	757.920
	S2	Y16	260	01	5000				16	5000		96	480.000	1.579	757.920
	S3	Y16	260	07	1920	156	1430		16	5092		96	488.832	1.579	771.866
	S4	Y12	250	01	8240				12	8240		17	140.080	0.888	124.391
	S4a	Y12	250	01	9488				12	9488		17	161.296	0.888	143.231
	S4	Y12	250	01	8240				12	8240		17	140.080	0.888	124.391
	S5	Y12	100	01	8240				12	8240		43	354.320	0.888	314.636
	S5a	Y12	100	01	9488				12	9488		43	407.984	0.888	362.290
	S5	Y12	100	01	8240				12	8240		43	354.320	0.888	314.636
	S6	Y10	260	05	245	420	329	428	10	1542		192	296.064	0.616	182.375
	S7	Y10		01	8240				10	8240		14	115.360	0.616	71.062
	S7a	Y10		01	9280				10	9280		14	129.920	0.616	80.031
	S7	Y10		01	8240				10	8240		14	115.360	0.616	71.062
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1460	170			10	3380		42	141.960	0.616	87.447
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 4593.038 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 24.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IIB-24-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		100	500.000	1.579	789.500
	S2	Y16	260	01	5000				16	5000		100	500.000	1.579	789.500
	S3	Y16	260	07	1920	156	1430		16	5092		100	509.200	1.579	804.027
	S4	Y12	250	01	8573				12	8573		17	145.741	0.888	129.418
	S4a	Y12	250	01	9822				12	9822		17	166.974	0.888	148.273
	S4	Y12	250	01	8573				12	8573		17	145.741	0.888	129.418
	S5	Y12	100	01	8573				12	8573		43	368.639	0.888	327.351
	S5a	Y12	100	01	9822				12	9822		43	422.346	0.888	375.043
	S5	Y12	100	01	8573				12	8573		43	368.639	0.888	327.351
	S6	Y10	260	05	245	420	329	428	10	1542		200	308.400	0.616	189.974
	S7	Y10		01	8573				10	8573		14	120.022	0.616	73.934
	S7a	Y10		01	9614				10	9614		14	134.596	0.616	82.911
	S7	Y10		01	8573				10	8573		14	120.022	0.616	73.934
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1460	170			10	3380		42	141.960	0.616	87.447
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 4757.862 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT LOCATION: THANA: ZILA	DECK SLAB (TYPE IIB) OVERALL LENGTH: 25.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IIB-25-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		104	520.000	1.579	821.080
	S2	Y16	260	01	5000				16	5000		104	520.000	1.579	821.080
	S3	Y16	260	07	1920	156	1430		16	5092		104	529.568	1.579	836.188
	S4	Y12	250	01	8906				12	8906		17	151.402	0.888	134.445
	S4a	Y12	250	01	10156				12	10156		17	172.652	0.888	153.315
	S4	Y12	250	01	8906				12	8906		17	151.402	0.888	134.445
	S5	Y12	100	01	8906				12	8906		43	382.958	0.888	340.067
	S5a	Y12	100	01	10156				12	10156		43	436.708	0.888	387.797
	S5	Y12	100	01	8906				12	8906		43	382.958	0.888	340.067
	S6	Y10	260	05	245	420	329	428	10	1542		208	320.736	0.616	197.573
	S7	Y10		01	8906				10	8906		14	124.684	0.616	76.805
	S7a	Y10		01	9948				10	9948		14	139.272	0.616	85.792
	S7	Y10		01	8906				10	8906		14	124.684	0.616	76.805
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1460	170			10	3380		42	141.960	0.616	87.447
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		24	60.480	0.888	53.706
	S11a	Y12	300	03	865	150			12	991		48	47.568	0.888	42.240

TOTAL WEIGHT: 4922.686 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 26.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-26-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		108	540.000	1.579	852.660
	S2	Y16	260	01	5000				16	5000		108	540.000	1.579	852.660
	S3	Y16	260	07	1920	156	1430		16	5092		108	549.936	1.579	868.349
	S4	Y12	250	01	9240				12	9240		17	157.080	0.888	139.487
	S4a	Y12	250	01	10488				12	10488		17	178.296	0.888	158.327
	S4	Y12	250	01	9240				12	9240		17	157.080	0.888	139.487
	S5	Y12	100	01	9240				12	9240		43	397.320	0.888	352.820
	S5a	Y12	100	01	10488				12	10488		43	450.984	0.888	400.474
	S5	Y12	100	01	9240				12	9240		43	397.320	0.888	352.820
	S6	Y10	260	05	245	420	329	428	10	1542		216	333.072	0.616	205.172
	S7	Y10		01	9240				10	9240		14	129.360	0.616	79.686
	S7a	Y10		01	10280				10	10280		14	143.920	0.616	88.655
	S7	Y10		01	9240				10	9240		14	129.360	0.616	79.686
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1660	170			10	3780		42	158.760	0.616	97.796
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		30	75.600	0.888	67.133
	S11a	Y12	300	03	865	150			12	991		60	59.460	0.888	52.800

TOTAL WEIGHT: 5121.846 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 27.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IIB-27-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		111	555.000	1.579	876.345
	S2	Y16	260	01	5000				16	5000		111	555.000	1.579	876.345
	S3	Y16	260	07	1920	156	1430		16	5092		111	565.212	1.579	892.470
	S4	Y12	250	01	9573				12	9573		17	162.741	0.888	144.514
	S4a	Y12	250	01	10822				12	10822		17	183.974	0.888	163.369
	S4	Y12	250	01	9573				12	9573		17	162.741	0.888	144.514
	S5	Y12	100	01	9573				12	9573		43	411.639	0.888	365.535
	S5a	Y12	100	01	10822				12	10822		43	465.346	0.888	413.227
	S5	Y12	100	01	9573				12	9573		43	411.639	0.888	365.535
	S6	Y10	260	05	245	420	329	428	10	1542		222	342.324	0.616	210.872
	S7	Y10		01	9573				10	9573		14	134.022	0.616	82.558
	S7a	Y10		01	10614				10	10614		14	148.596	0.616	91.535
	S7	Y10		01	9573				10	9573		14	134.022	0.616	82.558
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	1660	170			10	3780		42	158.760	0.616	97.796
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1425	415			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		30	75.600	0.888	67.133
	S11a	Y12	300	03	865	150			12	991		60	59.460	0.888	52.800

TOTAL WEIGHT: 5260.940 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 28.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IIB-28-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		115	575.000	1.579	907.925
	S2	Y16	260	01	5000				16	5000		115	575.000	1.579	907.925
	S3	Y16	260	07	1920	156	1430		16	5092		115	585.580	1.579	924.631
	S4	Y12	250	01	9906				12	9906		17	168.402	0.888	149.541
	S4a	Y12	250	01	11156				12	11156		17	189.652	0.888	168.411
	S4	Y12	250	01	9906				12	9906		17	168.402	0.888	149.541
	S5	Y12	100	01	9906				12	9906		43	425.958	0.888	378.251
	S5a	Y12	100	01	11156				12	11156		43	479.708	0.888	425.981
	S5	Y12	100	01	9906				12	9906		43	425.958	0.888	378.251
	S6	Y10	260	05	245	420	329	428	10	1542		230	354.660	0.616	218.471
	S7	Y10		01	9906				10	9906		14	138.684	0.616	85.429
	S7a	Y10		01	10948				10	10948		14	153.272	0.616	94.416
	S7	Y10		01	9906				10	9906		14	138.684	0.616	85.429
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		42	192.360	0.616	118.494
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 5471.088 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	**DECK SLAB (TYPE IIB)** OVERALL LENGTH: 29.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-29-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		119	595.000	1.579	939.505
	S2	Y16	260	01	5000				16	5000		119	595.000	1.579	939.505
	S3	Y16	260	07	1920	156	1430		16	5092		119	605.948	1.579	956.792
	S4	Y12	250	01	10240				12	10240		17	174.080	0.888	154.583
	S4a	Y12	250	01	11488				12	11488		17	195.296	0.888	173.423
	S4	Y12	250	01	10240				12	10240		17	174.080	0.888	154.583
	S5	Y12	100	01	10240				12	10240		43	440.320	0.888	391.004
	S5a	Y12	100	01	11488				12	11488		43	493.984	0.888	438.658
	S5	Y12	100	01	10240				12	10240		43	440.320	0.888	391.004
	S6	Y10	260	05	245	420	329	428	10	1542		238	366.996	0.616	226.070
	S7	Y10		01	10240				10	10240		14	143.360	0.616	88.310
	S7a	Y10		01	11280				10	11280		14	157.920	0.616	97.279
	S7	Y10		01	10240				10	10240		14	143.360	0.616	88.310
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		42	192.360	0.616	118.494
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 5635.912 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 30.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-30-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		123	615.000	1.579	971.085
	S2	Y16	260	01	5000				16	5000		123	615.000	1.579	971.085
	S3	Y16	260	07	1920	156	1430		16	5092		123	626.316	1.579	988.953
	S4	Y12	250	01	10573				12	10573		17	179.741	0.888	159.610
	S4a	Y12	250	01	11822				12	11822		17	200.974	0.888	178.465
	S4	Y12	250	01	10573				12	10573		17	179.741	0.888	159.610
	S5	Y12	100	01	10573				12	10573		43	454.639	0.888	403.719
	S5a	Y12	100	01	11822				12	11822		43	508.346	0.888	451.411
	S5	Y12	100	01	10573				12	10573		43	454.639	0.888	403.719
	S6	Y10	260	05	245	420	329	428	10	1542		246	379.332	0.616	233.669
	S7	Y10		01	10573				10	10573		14	148.022	0.616	91.182
	S7a	Y10		01	11614				10	11614		14	162.596	0.616	100.159
	S7	Y10		01	10573				10	10573		14	148.022	0.616	91.182
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		42	192.360	0.616	118.494
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 5800.736 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 31.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-31-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		127	635.000	1.579	1002.665
	S2	Y16	260	01	5000				16	5000		127	635.000	1.579	1002.665
	S3	Y16	260	07	1920	156	1430		16	5092		127	646.684	1.579	1021.114
	S4	Y12	250	01	10906				12	10906		17	185.402	0.888	164.637
	S4a	Y12	250	01	6390				12	6390		34	217.260	0.888	192.927
	S4	Y12	250	01	10906				12	10906		17	185.402	0.888	164.637
	S5	Y12	100	01	10906				12	10906		43	468.958	0.888	416.435
	S5a	Y12	100	01	6390				12	6390		86	549.540	0.888	487.992
	S5	Y12	100	01	10906				12	10906		43	468.958	0.888	416.435
	S6	Y10	260	05	245	420	329	428	10	1542		254	391.668	0.616	241.267
	S7	Y10		01	10906				10	10906		14	152.684	0.616	94.053
	S7a	Y10		01	11948				10	11948		14	167.272	0.616	103.040
	S7	Y10		01	10906				10	10906		14	152.684	0.616	94.053
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		42	192.360	0.616	118.494
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 5998.806 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 32.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-32-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		131	655.000	1.579	1034.245
	S2	Y16	260	01	5000				16	5000		131	655.000	1.579	1034.245
	S3	Y16	260	07	1920	156	1430		16	5092		131	667.052	1.579	1053.275
	S4	Y12	250	01	11240				12	11240		17	191.080	0.888	169.679
	S4a	Y12	250	01	6556				12	6556		34	222.904	0.888	197.939
	S4	Y12	250	01	11240				12	11240		17	191.080	0.888	169.679
	S5	Y12	100	01	11240				12	11240		43	483.320	0.888	429.188
	S5a	Y12	100	01	6556				12	6556		86	563.816	0.888	500.669
	S5	Y12	100	01	11240				12	11240		43	483.320	0.888	429.188
	S6	Y10	260	05	245	420	329	428	10	1542		262	404.004	0.616	248.866
	S7	Y10		01	11240				10	11240		14	157.360	0.616	96.934
	S7a	Y10		01	6400				10	6400		28	179.200	0.616	110.387
	S7	Y10		01	11240				10	11240		14	157.360	0.616	96.934
	S8	Y12	250	01	4682				12	4682		12	56.184	0.888	49.891
	S8a	Y12	250	01	2701				12	2701		24	64.824	0.888	57.564
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2060	170			10	4580		42	192.360	0.616	118.494
	S10	Y20		01	2520				20	2520		15	37.800	2.466	93.215
	S10a	Y20		03	1435	405			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2520				12	2520		36	90.720	0.888	80.559
	S11a	Y12	300	03	875	150			12	1001		72	72.072	0.888	64.000

TOTAL WEIGHT: 6168.115 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	**DECK SLAB (TYPE IIB)** OVERALL LENGTH: 33.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-33-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		135	675.000	1.579	1065.825
	S2	Y16	260	01	5000				16	5000		134	670.000	1.579	1057.930
	S3	Y16	260	07	1920	156	1430		16	5092		135	687.420	1.579	1085.436
	S4	Y12	250	01	11573				12	11573		17	196.741	0.888	174.706
	S4a	Y12	250	01	6723				12	6723		34	228.582	0.888	202.981
	S4	Y12	250	01	11573				12	11573		17	196.741	0.888	174.706
	S5	Y12	100	01	11573				12	11573		43	497.639	0.888	441.903
	S5a	Y12	100	01	6723				12	6723		86	578.178	0.888	513.422
	S5	Y12	100	01	11573				12	11573		43	497.639	0.888	441.903
	S6	Y10	260	05	245	420	329	428	10	1542		270	416.340	0.616	256.465
	S7	Y10		01	11573				10	11573		14	162.022	0.616	99.806
	S7a	Y10		01	6567				10	6567		28	183.876	0.616	113.268
	S7	Y10		01	11573				10	11573		14	162.022	0.616	99.806
	S8	Y12	250	01	4482				12	4482		12	53.784	0.888	47.760
	S8a	Y12	250	01	2601				12	2601		24	62.424	0.888	55.433
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2235	170			10	4930		42	207.060	0.616	127.549
	S10	Y20		01	2470				20	2470		15	37.050	2.466	91.365
	S10a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2470				12	2470		42	103.740	0.888	92.121
	S11a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 6352.267 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 34.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-34-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		138	690.000	1.579	1089.510
	S2	Y16	260	01	5000				16	5000		138	690.000	1.579	1089.510
	S3	Y16	260	07	1920	156	1430		16	5092		138	702.696	1.579	1109.557
	S4	Y12	250	01	11906				12	11906		17	202.402	0.888	179.733
	S4a	Y12	250	01	6890				12	6890		34	234.260	0.888	208.023
	S4	Y12	250	01	11906				12	11906		17	202.402	0.888	179.733
	S5	Y12	100	01	11906				12	11906		43	511.958	0.888	454.619
	S5a	Y12	100	01	6890				12	6890		86	592.540	0.888	526.176
	S5	Y12	100	01	11906				12	11906		43	511.958	0.888	454.619
	S6	Y10	260	05	245	420	329	428	10	1542		276	425.592	0.616	262.165
	S7	Y10		01	11906				10	11906		14	166.684	0.616	102.677
	S7a	Y10		01	6734				10	6734		28	188.552	0.616	116.148
	S7	Y10		01	11906				10	11906		14	166.684	0.616	102.677
	S8	Y12	250	01	4482				12	4482		12	53.784	0.888	47.760
	S8a	Y12	250	01	2601				12	2601		24	62.424	0.888	55.433
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2235	170			10	4930		42	207.060	0.616	127.549
	S10	Y20		01	2470				20	2470		15	37.050	2.466	91.365
	S10a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2470				12	2470		42	103.740	0.888	92.121
	S11a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 6499.256 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 35.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-35-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		142	710.000	1.579	1121.090
	S2	Y16	260	01	5000				16	5000		142	710.000	1.579	1121.090
	S3	Y16	260	07	1920	156	1430		16	5092		142	723.064	1.579	1141.718
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	7296				12	7296		34	248.064	0.888	220.281
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	7296				12	7296		86	627.456	0.888	557.181
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	260	05	245	420	329	428	10	1542		284	437.928	0.616	269.764
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	7140				10	7140		28	199.920	0.616	123.151
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	4482				12	4482		12	53.784	0.888	47.760
	S8a	Y12	250	01	2601				12	2601		24	62.424	0.888	55.433
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2235	170			10	4930		42	207.060	0.616	127.549
	S10	Y20		01	2470				20	2470		15	37.050	2.466	91.365
	S10a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2470				12	2470		42	103.740	0.888	92.121
	S11a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 6664.080 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	**DECK SLAB (TYPE IIB)** OVERALL LENGTH: 36.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-36-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		146	730.000	1.579	1152.670
	S2	Y16	260	01	5000				16	5000		146	730.000	1.579	1152.670
	S3	Y16	260	07	1920	156	1430		16	5092		146	743.432	1.579	1173.879
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	7796				12	7796		34	265.064	0.888	235.377
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	7796				12	7796		86	670.456	0.888	595.365
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	260	05	245	420	329	428	10	1542		292	450.264	0.616	277.363
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	7640				10	7640		28	213.920	0.616	131.775
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	4482				12	4482		12	53.784	0.888	47.760
	S8a	Y12	250	01	2601				12	2601		24	62.424	0.888	55.433
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2235	170			10	4930		42	207.060	0.616	127.549
	S10	Y20		01	2470				20	2470		15	37.050	2.466	91.365
	S10a	Y20		03	1463	378			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2470				12	2470		42	103.740	0.888	92.121
	S11a	Y12	300	03	903	150			12	1029		84	86.394	0.888	76.718

TOTAL WEIGHT: 6828.904 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 37.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-37-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		150	750.000	1.579	1184.250
	S2	Y16	260	01	5000				16	5000		150	750.000	1.579	1184.250
	S3	Y16	260	07	1920	156	1430		16	5092		150	763.800	1.579	1206.040
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	8296				12	8296		34	282.064	0.888	250.473
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	8296				12	8296		86	713.456	0.888	633.549
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	260	05	245	420	329	428	10	1542		300	462.600	0.616	284.962
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	8140				10	8140		28	227.920	0.616	140.399
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	4362				12	4362		11	47.982	0.888	42.608
	S8a	Y12	250	01	2541				12	2541		22	55.902	0.888	49.641
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2435	170			10	5330		39	207.870	0.616	128.048
	S10	Y20		01	2420				20	2420		15	36.300	2.466	89.516
	S10a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2420				12	2420		48	116.160	0.888	103.150
	S11a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 7006.193 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED: **DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.** IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	**DECK SLAB (TYPE IIB)** OVERALL LENGTH: 38.80 m BAR BENDING SCHEDULE DRAWING NO.: S-IIB-38-03 DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		154	770.000	1.579	1215.830
	S2	Y16	260	01	5000				16	5000		154	770.000	1.579	1215.830
	S3	Y16	260	07	1920	156	1430		16	5092		154	784.168	1.579	1238.201
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	8796				12	8796		34	299.064	0.888	265.569
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	8796				12	8796		86	756.456	0.888	671.733
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	260	05	245	420	329	428	10	1542		308	474.936	0.616	292.561
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	8640				10	8640		28	241.920	0.616	149.023
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	4362				12	4362		11	47.982	0.888	42.608
	S8a	Y12	250	01	2541				12	2541		22	55.902	0.888	49.641
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2435	170			10	5330		39	207.870	0.616	128.048
	S10	Y20		01	2420				20	2420		15	36.300	2.466	89.516
	S10a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2420				12	2420		48	116.160	0.888	103.150
	S11a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 7171.017 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 39.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-39-03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE

MEMBER	BAR MARK	BAR TYPE & DIA (mm)	BAR SPACING (mm)	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	D	d	CUT LENGTH (mm)	AVG. CUT LENGTH (mm)	TOTAL NO. OF BARS	TOTAL LENGTH (m)	UNIT WT. OF BARS (Kg/m)	TOTAL WEIGHT (Kg)
DECK SLAB	S1	Y16	260	01	5000				16	5000		158	790.000	1.579	1247.410
	S2	Y16	260	01	5000				16	5000		158	790.000	1.579	1247.410
	S3	Y16	260	07	1920	156	1430		16	5092		158	804.536	1.579	1270.362
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S4a	Y12	250	01	9296				12	9296		34	316.064	0.888	280.665
	S4	Y12	250	01	12000				12	12000		17	204.000	0.888	181.152
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S5a	Y12	100	01	9296				12	9296		86	799.456	0.888	709.917
	S5	Y12	100	01	12000				12	12000		43	516.000	0.888	458.208
	S6	Y10	260	05	245	420	329	428	10	1542		316	487.272	0.616	300.160
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S7a	Y10		01	9140				10	9140		28	255.920	0.616	157.647
	S7	Y10		01	12000				10	12000		14	168.000	0.616	103.488
	S8	Y12	250	01	4362				12	4362		11	47.982	0.888	42.608
	S8a	Y12	250	01	2541				12	2541		22	55.902	0.888	49.641
CROSS-GIRDER (3 NO.)	S9	Y10	200	06	2435	170			10	5330		39	207.870	0.616	128.048
	S10	Y20		01	2420				20	2420		15	36.300	2.466	89.516
	S10a	Y20		03	1495	345			20	1800		30	54.000	2.466	133.164
	S11	Y12	300	01	2420				12	2420		48	116.160	0.888	103.150
	S11a	Y12	300	03	935	150			12	1061		96	101.856	0.888	90.448

TOTAL WEIGHT: 7335.841 Kg

NOTE:

FOR DETAILS OF SHAPE CODE, REFER TO DWG NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED:	NAME OF PROJECT:	DECK SLAB (TYPE IIB) OVERALL LENGTH: 40.80 m
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DRAWING NO.: S-IIB-40-03
			DATE: JUNE 1996

Web Copy

COMBINATION OF FOUNDATION TYPES FOR DIFFERENT ABUTMENT HEIGHTS AND DECK TYPES

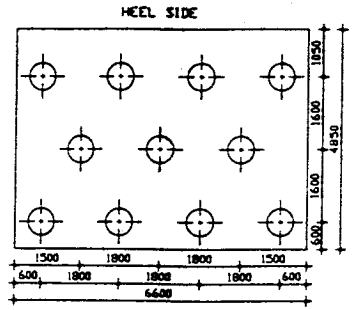
SPAN	ABUTMENT HEIGHT (m)	DESCRIPTION	DECK TYPE				REMARKS
			IA (W=5.21 m WITH FP)	IB (W=4.41 m WITHOUT FP)	IIA (W=5.88 m WITH FP)	IIB (W=5.08 m WITHOUT FP)	
20.0 m TO 40.0 m (C/C BRG.)	6.0	FDN. TYPE / NO. OF PILES	B / 12	A / 11	B / 12	A / 11	
		TOP CAGE MAIN REINF. IN EACH PILE	12 - Y32	12 - Y32	12 - Y32	12 - Y32	
	6.5	FDN. TYPE / NO. OF PILES	D / 16	C / 14	D / 16	C / 14	
		TOP CAGE MAIN REINF. IN EACH PILE	14 - Y32	14 - Y32	14 - Y32	14 - Y32	
	7.0	FDN. TYPE / NO. OF PILES	D / 16	C / 14	D / 16	C / 14	
		TOP CAGE MAIN REINF. IN EACH PILE	14 - Y32	14 - Y32	14 - Y32	14 - Y32	
	7.5	FDN. TYPE / NO. OF PILES	F / 20	D / 16	F / 20	D / 16	
		TOP CAGE MAIN REINF. IN EACH PILE	14 - Y32	14 - Y32	14 - Y32	14 - Y32	
	8.0	FDN. TYPE / NO. OF PILES	F / 20	D / 16	F / 20	D / 16	
		TOP CAGE MAIN REINF. IN EACH PILE	14 - Y32	14 - Y32	14 - Y32	14 - Y32	
	8.5	FDN. TYPE / NO. OF PILES	H / 25	E / 20	H / 25	E / 20	
		TOP CAGE MAIN REINF. IN EACH PILE	14 - Y32	14 - Y32	14 - Y32	14 - Y32	
	9.0	FDN. TYPE / NO. OF PILES	H / 25	E / 20	H / 25	E / 20	
		TOP CAGE MAIN REINF. IN EACH PILE	14 - Y32	14 - Y32	14 - Y32	14 - Y32	
	9.5	FDN. TYPE / NO. OF PILES	I / 30	G / 24	I / 30	G / 24	
		TOP CAGE MAIN REINF. IN EACH PILE	14 - Y32	14 - Y32	14 - Y32	14 - Y32	
	10.0	FDN. TYPE / NO. OF PILES	I / 30	G / 24	I / 30	G / 24	
		TOP CAGE MAIN REINF. IN EACH PILE	14 - Y32	14 - Y32	14 - Y32	14 - Y32	

NOTES:

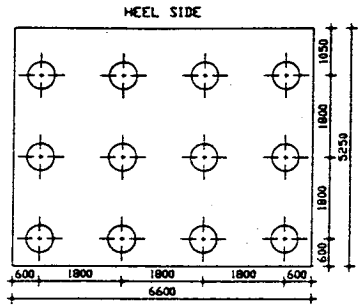
1. 'W' INDICATES TOTAL WIDTH OF DECK AND 'FP' INDICATES FOOTPATH.
2. ALL PILES ARE 600 mm DIA. CAST-IN-SITU BORED PILES.
3. FOR DETAILS OF FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-02 & A-PF-03.
4. FOR DETAILS OF PILE REINF.(12-Y32), REFER TO DWG. NO. P-ST-01.
5. FOR DETAILS OF PILE REINF.(14-Y32), REFER TO DWG. NO. P-ST-02.
6. FOR DETAILS OF ABUTMENT-WING WALL AND FOUNDATION, REFER TO DWG. NOS. AF-6A-01 TO AF-10I-01.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT FOUNDATION AND PILE TABLE SHOWING APPLICABLE FOUNDATION TYPES DWG. NO. : A-PF-01 SCALE : NA DATE : JUNE 1996

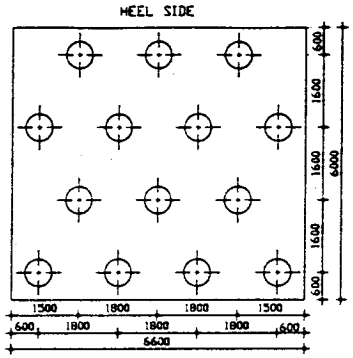
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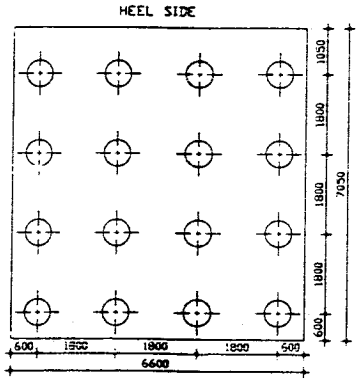
TYPE: A (6.60 m X 4.85 m)
DIA. 600 mm - 11 NOS. PILES



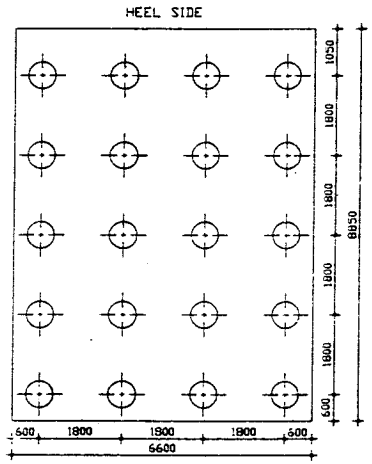
TYPE: B (6.60 m X 5.25 m)
DIA. 600 mm - 12 NOS. PILES



TYPE: C (6.60 m X 6.00m)
DIA. 600 mm - 14 NOS. PILES



TYPE: D (6.60 m X 7.05 m)
DIA. 600 mm - 16 NOS. PILES



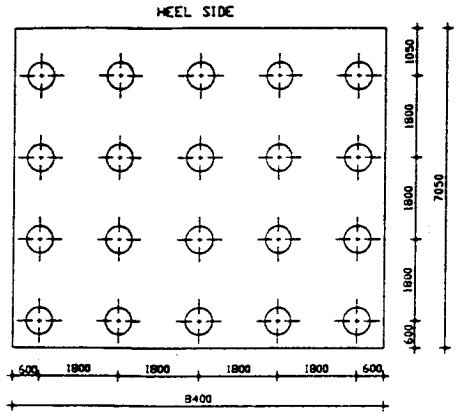
TYPE: E (6.60 m X 8.85 m)
DIA. 600 mm - 20 NOS. PILES

NOTES:

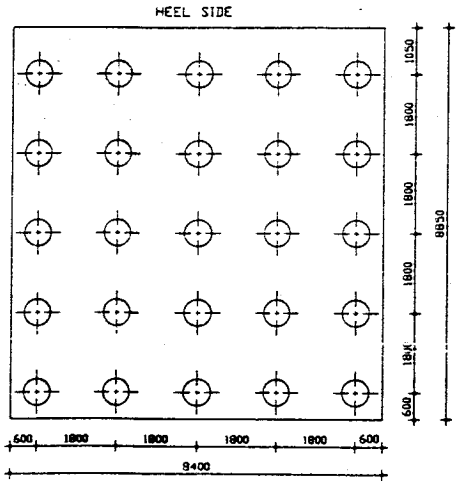
1. THESE FOUNDATION TYPES ARE APPLICABLE FOR GIRDER LENGTH 20.8 m TO 40.8 m, ABUTMENT HEIGHT 6.0 m TO 9.0 m AND DECK WIDTH 5.88 m, 5.21 m, 5.08 m & 4.41 m. APPROPRIATE FOUNDATION TYPE FOR A PARTICULAR BRIDGE SHALL BE SELECTED FROM DWG. NO. A-PF-01 .
2. FOR CONCRETE OUTLINE DETAILS OF ABUTMENT AND FOUNDATION, REFER TO DWG. NOS. AF-6A-01 TO AF-10I-01 .
3. FOR REINFORCEMENT DETAILS OF ABUTMENT - WING WALL, REFER TO DWG. NOS. AF-0-02 & AF-0-02A .
4. FOR BAR BENDING SCHEDULE OF ABUTMENT, REFER TO DWG. NOS. A-6A-01 TO A-10I-06 .
5. FOR REINFORCEMENT DETAILS OF PILE, REFER TO DWG. NOS. P-ST-01 & P-ST-02 .
6. FOR BAR BENDING SCHEDULE OF PILE, REFER TO DWG. NOS. P-6A-01/02 TO P-10I-01/02 .
7. FOR REINFORCEMENT DETAILS OF PILE CAP, REFER TO DWG. NO. C-ST-00 .
8. FOR BAR BENDING SCHEDULE OF PILE CAP, REFER TO DWG. NOS. C-SC-01 TO C-SC-03.
9. ALL PILES SHALL BE 600 mm DIA. CAST-IN-SITU RC BORED PILES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT FOUNDATION AND PILE PLAN OF FOUNDATION TYPES | DWG. NO. : A-PF-02 SCALE : NTS | DATE : JUNE 1996

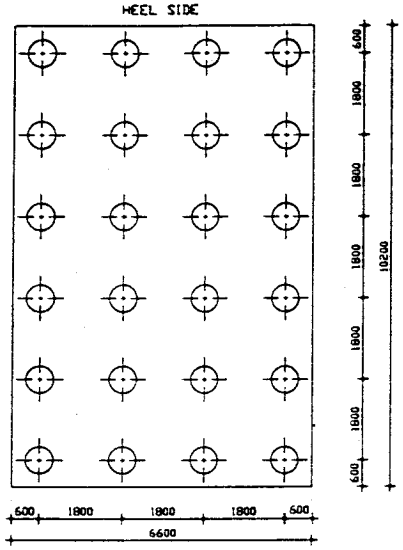
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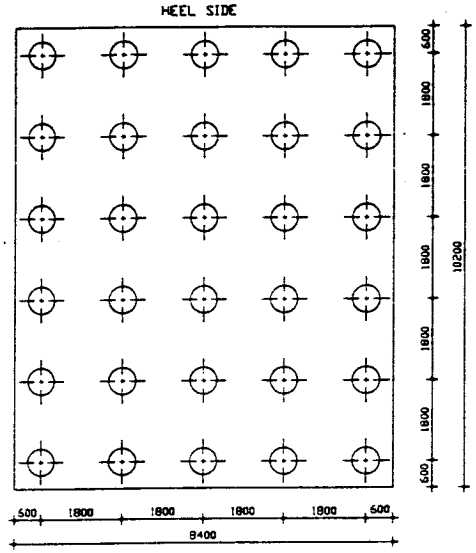
TYPE: F (8.40 m X 7.05 m)
DIA. 600 mm - 20 NOS. PILES



TYPE: H (8.40 m X 8.85 m)
DIA. 600 mm - 25 NOS. PILES



TYPE: G (6.60 m X 10.20 m)
DIA. 600 mm - 24 NOS. PILES



TYPE: I (8.40 m X 10.20 m)
DIA. 600 mm - 30 NOS. PILES

NOTES:

1. THESE FOUNDATION TYPES ARE APPLICABLE FOR GIRDER LENGTH 20.8 m TO 40.8 m, ABUTMENT HEIGHT 7.5 m TO 10.0 m AND DECK WIDTH 5.88 m, 5.21 m, 5.08 m & 4.41 m . APPROPRIATE FOUNDATION TYPE FOR A PARTICULAR BRIDGE SHALL BE SELECTED FROM DWG. NO. A-PF-01 .
2. FOR CONCRETE OUTLINE DETAILS OF ABUTMENT AND FOUNDATION, REFER TO DWG. NOS. AF-6A-01 TO AF-10I-01 .
3. FOR REINFORCEMENT DETAILS OF ABUTMENT - WING WALL, REFER TO DWG. NOS. AF-0-02 & AF-0-02A .
4. FOR BAR BENDING SCHEDULE OF ABUTMENT, REFER TO DWG. NOS. A-6A-01 TO A-10I-06 .
5. FOR REINFORCEMENT DETAILS OF PILE, REFER TO DWG. NOS. P-ST-01 & P-ST-02 .
6. FOR BAR BENDING SCHEDULE OF PILE, REFER TO DWG. NOS. P-6A-01/02 TO P-10I-01/02 .
7. FOR REINFORCEMENT DETAILS OF PILE CAP, REFER TO DWG. NO. C-ST-00 .
8. FOR BAR BENDING SCHEDULE OF PILE CAP, REFER TO DWG. NOS. C-SC-01 TO C-SC-03.
9. ALL PILES SHALL BE 600 mm DIA. CAST-IN-SITU RC BORED PILES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT FOUNDATION AND PILE PLAN OF FOUNDATION TYPES — DWG. NO. : A-PF-03 SCALE : NTS — DATE : JUNE 1996

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MAXIMUM SERVICE PILE LOADS FOR DIFFERENT FOUNDATION TYPES AND ABUTMENT HEIGHTS

ABUTMENT HEIGHT (m)	ABUT. FDN. TYPE	MAX. SERVICE LOAD PER PILE IN METRIC TONNE							
		BRIDGE SPAN 20.0 TO 30.0 m				BRIDGE SPAN 31.0 TO 40.0 m			
		DECK: IA (W=5.21 m)	DECK: IB (W=4.41 m)	DECK: IIA (W=5.88 m)	DECK: IIB (W=5.08 m)	DECK: IA (W=5.21 m)	DECK: IB (W=4.41 m)	DECK: IIA (W=5.88 m)	DECK: IIB (W=5.08 m)
6.0	A	-	41	-	44	-	43	-	46
	B	41	-	43	-	43	-	46	-
6.5	C	-	43	-	45	-	45	-	47
	D	40	-	42	-	46	-	48	-
7.0	C	-	44	-	46	-	47	-	50
	D	42	-	44	-	48	-	50	-
7.5	D	-	43	-	45	-	44	-	46
	F	38	-	40	-	39	-	41	-
8.0	D	-	45	-	47	-	46	-	48
	F	40	-	42	-	41	-	43	-
8.5	E	-	42	-	46	-	43	-	47
	H	40	-	43	-	41	-	44	-
9.0	E	-	45	-	49	-	46	-	50
	H	41	-	45	-	42	-	46	-
9.5	G	-	48	-	51	-	51	-	54
	I	42	-	43	-	45	-	48	-
10.0	G	-	48	-	50	-	53	-	56
	I	44	-	45	-	47	-	49	-

NOTES:

1. 'W' INDICATES TOTAL WIDTH OF DECK.
2. FOR DETAILS OF FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .
3. FOR DETAILS OF DECK TYPES, REFER TO DWG. NOS. S-IA-01 TO S-IIB-01 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

ABUTMENT FOUNDATION AND PILE

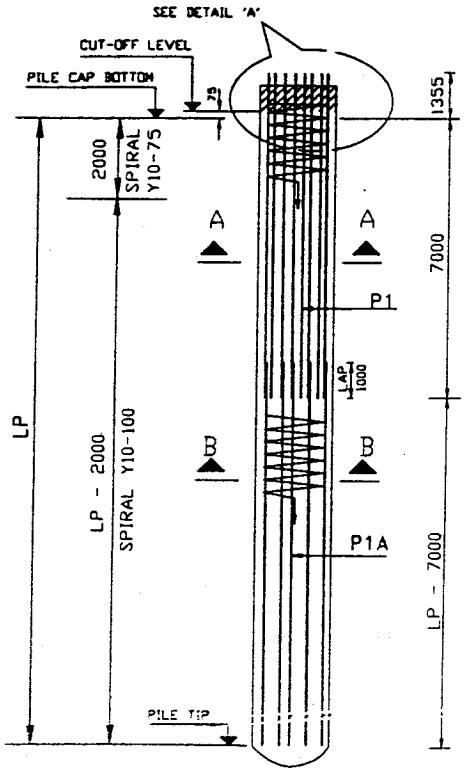
TABLE SHOWING MAX. PILE LOADS (SERVICE LOAD)

DWG. NO. : A-PF-04

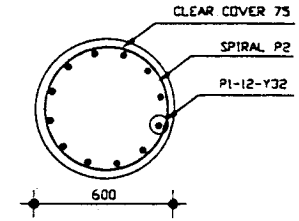
SCALE : NA

DATE : JUNE 1996

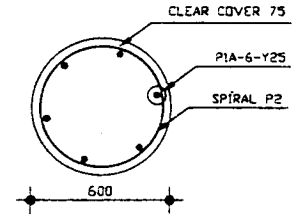
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DETAILS OF
CAST-IN-SITU BORED PILE
[FOR LP=12.0 m TO 18.0 m]



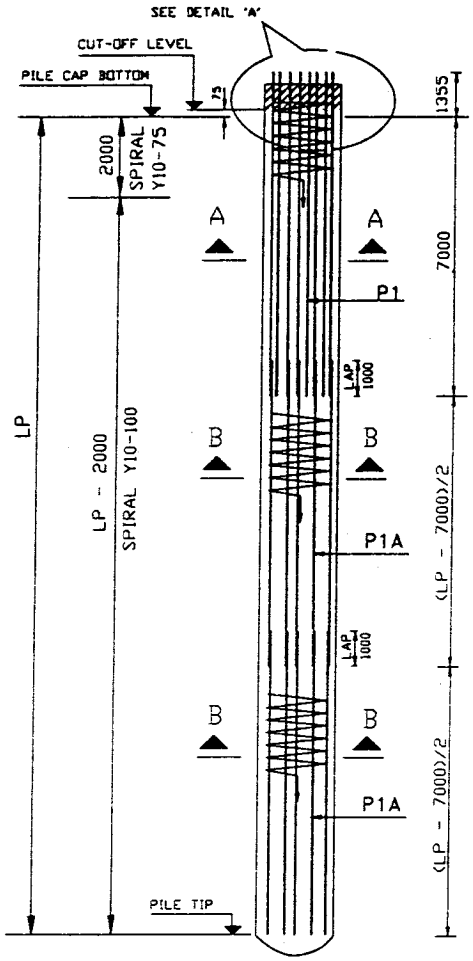
SECTION A-A



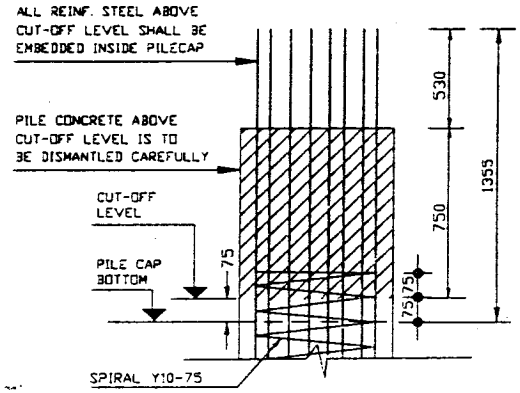
SECTION B-B

SHAPE OF BARS FOR PILE

SHAPE CODE	01	02	03
SHAPE OF BAR	A	A, H	A, B, C
CUT LENGTH	A	A+9·0.5π−d	$\frac{\pi}{8}(A-d)$



DETAILS OF
CAST-IN-SITU BORED PILE
[FOR LP=19.0 m TO 25.0 m]



DETAIL 'A'

NOTES:

1. FOR BAR BENDING SCHEDULE, REFER TO DWG. NOS. P-6A-01/02 TO P-10I-01/02
2. FOR STRENGTHS OF CONCRETE & REINF. STEE AND GENERAL NOTES, REFER TO DWG. NO. PC-

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

ABUTMENT FOUNDATION AND PILE

TOP CAGE MAIN REINF.: 12-Y32
LENGTH : 12.0 m TO 25.0 m

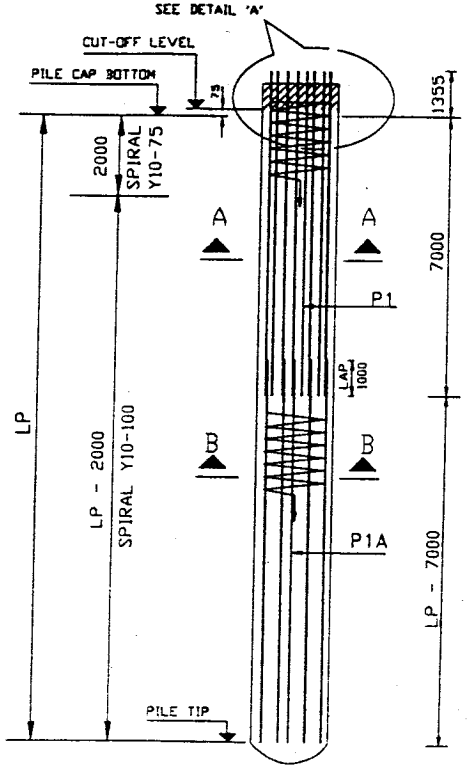
REINFORCEMENT DETAILS OF CAST-IN-SITU BORED PILE

DWG. NO. : P-ST-01

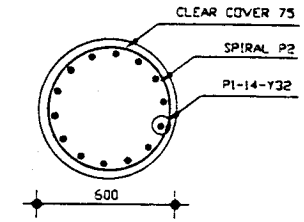
SCALE : NTS

DATE : JUNE 1996

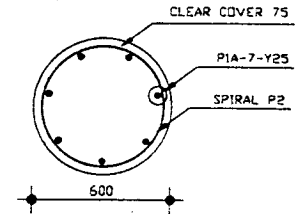
Web Copy



DETAILS OF
CAST-IN-SITU BORED PILE
(FOR LP=12.0 m TO 18.0 m)



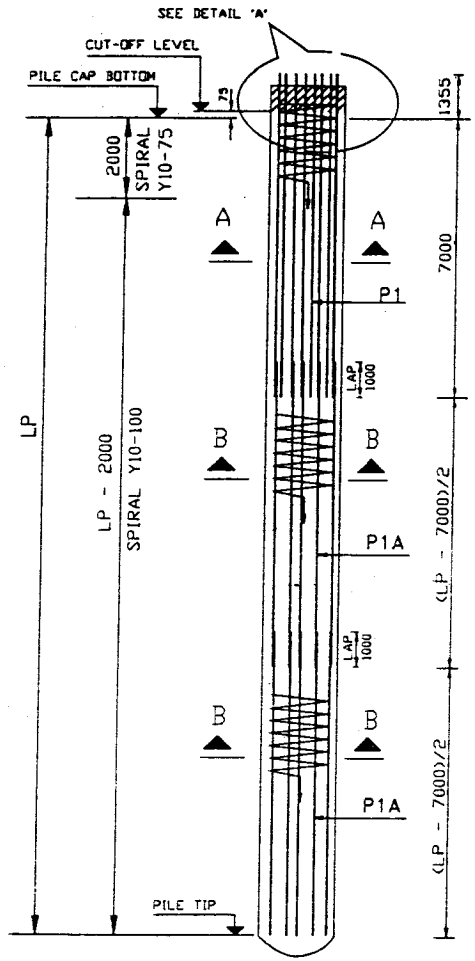
SECTION A-A



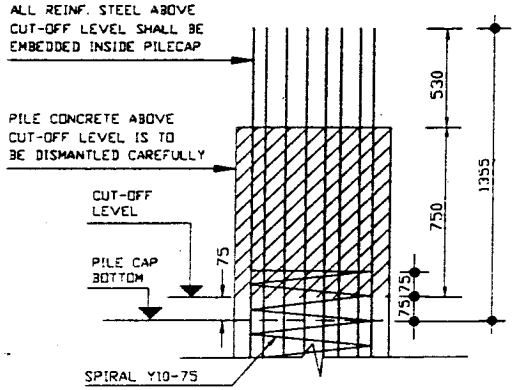
SECTION B-B

SHAPE OF BARS FOR PILE

SHAPE CODE	01	02	03
SHAPE OF BAR	A	A	A B C
CUT LENGTH	A	A+B-0.5r-d	



DETAILS OF
CAST-IN-SITU BORED PILE
(FOR LP=19.0 m TO 25.0 m)



DETAIL 'A'

NOTES:

1. FOR BAR BENDING SCHEDULE, REFER TO DWG. NOS. P-6A-01/02 TO P-10I-01/02
2. FOR STRENGTHS OF CONCRETE & REINF. STEE AND GENERAL NOTES, REFER TO DWG. NO. PC-

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

ABUTMENT FOUNDATION AND PILE

TOP CAGE MAIN REINF.: 14-Y32
LENGTH : 12.0 m TO 25.0 m

REINFORCEMENT DETAILS OF CAST-IN-SITU BORED PILE

DWG. NO. : P-ST-02

SCALE : NTS

DATE : JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT H=6.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm					CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS)			
							A	B	C	r	d		TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: A	11		P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
		12.00	P1A	Y25	6	01	6000			50	25	6000	132	792.000	3.854	3052.37
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	22	3912.833	0.616	2410.30
6.60m x 4.85m															TOTAL=	19387.38
			P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
		13.00	P1A	Y25	6	01	7000			50	25	7000	132	924.000	3.854	3561.10
			P2	Y10	1	03	450	75/100	13150	20	10	191679	22	4216.939	0.616	2597.63
															TOTAL=	20083.44
			P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
		14.00	P1A	Y25	6	01	8000			50	25	8000	132	1056.000	3.854	4069.82
			P2	Y10	1	03	450	75/100	14150	20	10	205502	22	4521.045	0.616	2784.96
										0					TOTAL=	20779.50
			P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
		15.00	P1A	Y25	6	01	9000			50	25	9000	132	1188.000	3.854	4578.55
			P2	Y10	1	03	450	75/100	15150	20	10	219325	22	4825.151	0.616	2972.29
										0					TOTAL=	21475.56
			P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
		16.00	P1A	Y25	6	01	10000			50	25	10000	132	1320.000	3.854	5087.28
			P2	Y10	1	03	450	75/100	16150	20	10	233148	22	5129.257	0.616	3159.62
										0					TOTAL=	22171.61
			P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
		17.00	P1A	Y25	6	01	11000			50	25	11000	132	1452.000	3.854	5596.01
			P2	Y10	1	03	450	75/100	17150	20	10	246971	22	5433.364	0.616	3346.95
										0					TOTAL=	22867.67
			P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
		18.00	P1A	Y25	6	01	12000			50	25	12000	132	1584.000	3.854	6104.74
			P2	Y10	1	03	450	75/100	18150	20	10	260794	22	5737.470	0.616	3534.28
															TOTAL=	23563.73

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-01 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-6A-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT H=6.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: A	11	19.00	P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
			*P1A	Y25	6	01	7000			50	25	7000	264	1848.000	3.854	7122.19
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	22	6041.576	0.616	3721.61
6.60m x 4.85m															TOTAL=	24768.51
		20.00	P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
			*P1A	Y25	6	01	7500			50	25	7500	264	1980.000	3.854	7630.92
			P2	Y10	1	03	450	75/100	20150	20	10	288440	22	6345.682	0.616	3908.94
															TOTAL=	25464.57
		21.00	P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
			*P1A	Y25	6	01	8000			50	25	8000	264	2112.000	3.854	8139.65
			P2	Y10	1	03	450	75/100	21150	20	10	302263	22	6649.788	0.616	4096.27
															TOTAL=	26160.63
		22.00	P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
			*P1A	Y25	6	01	8500			50	25	8500	264	2244.000	3.854	8648.38
			P2	Y10	1	03	450	75/100	22150	20	10	316086	22	6953.894	0.616	4283.60
															TOTAL=	26856.69
		23.00	P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
			*P1A	Y25	6	01	9000			50	25	9000	264	2376.000	3.854	9157.10
			P2	Y10	1	03	450	75/100	23150	20	10	329909	22	7258.001	0.616	4470.93
															TOTAL=	27552.74
		24.00	P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
			*P1A	Y25	6	01	9500			50	25	9500	264	2508.000	3.854	9665.83
			P2	Y10	1	03	450	75/100	24150	20	10	343732	22	7562.107	0.616	4658.26
															TOTAL=	28248.80
		25.00	P1	Y32	12	02	7919	500		64	32	8355	264	2205.720	6.313	13924.71
			*P1A	Y25	6	01	10000			50	25	10000	264	2640.000	3.854	10174.56
			P2	Y10	1	03	450	75/100	25150	20	10	357555	22	7866.213	0.616	4845.59
															TOTAL=	28944.86

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-01 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .
* 3. 'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-6A-02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT H=6.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: B	12		P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		12.00	P1A	Y25	6	01	6000			50	25	6000	144	864.000	3.854	3329.86
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	24	4268.545	0.616	2629.42
6.60m x 5.25m															TOTAL=	21149.87
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		13.00	P1A	Y25	6	01	7000			50	25	7000	144	1008.000	3.854	3884.83
			P2	Y10	1	03	450	75/100	13150	20	10	191679	24	4600.297	0.616	2833.78
															TOTAL=	21909.21
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		14.00	P1A	Y25	6	01	8000			50	25	8000	144	1152.000	3.854	4439.81
			P2	Y10	1	03	450	75/100	14150	20	10	205502	24	4932.049	0.616	3038.14
										0					TOTAL=	22668.54
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		15.00	P1A	Y25	6	01	9000			50	25	9000	144	1296.000	3.854	4994.78
			P2	Y10	1	03	450	75/100	15150	20	10	219325	24	5263.801	0.616	3242.50
										0					TOTAL=	23427.88
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		16.00	P1A	Y25	6	01	10000			50	25	10000	144	1440.000	3.854	5549.76
			P2	Y10	1	03	450	75/100	16150	20	10	233148	24	5595.554	0.616	3446.86
										0					TOTAL=	24187.21
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		17.00	P1A	Y25	6	01	11000			50	25	11000	144	1584.000	3.854	6104.74
			P2	Y10	1	03	450	75/100	17150	20	10	246971	24	5927.306	0.616	3651.22
										0					TOTAL=	24946.55
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		18.00	P1A	Y25	6	01	12000			50	25	12000	144	1728.000	3.854	6659.71
			P2	Y10	1	03	450	75/100	18150	20	10	260794	24	6259.058	0.616	3855.58
															TOTAL=	25705.88

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-01 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT) BAR BENDING SCHEDULE DWG. NO.: P-6B-01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT H=6.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: B	12		P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		19.00	*P1A	Y25	6	01	7000			50	25	7000	288	2016.000	3.854	7769.66
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	24	6590.810	0.616	4059.94
6.60m x 5.25m															TOTAL=	27020.20
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		20.00	*P1A	Y25	6	01	7500			50	25	7500	288	2160.000	3.854	8324.64
			P2	Y10	1	03	450	75/100	20150	20	10	288440	24	6922.562	0.616	4264.30
															TOTAL=	27779.53
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		21.00	*P1A	Y25	6	01	8000			50	25	8000	288	2304.000	3.854	8879.62
			P2	Y10	1	03	450	75/100	21150	20	10	302263	24	7254.314	0.616	4468.66
															TOTAL=	28538.87
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		22.00	*P1A	Y25	6	01	8500			50	25	8500	288	2448.000	3.854	9434.59
			P2	Y10	1	03	450	75/100	22150	20	10	316086	24	7586.067	0.616	4673.02
															TOTAL=	29298.20
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		23.00	*P1A	Y25	6	01	9000			50	25	9000	288	2592.000	3.854	9989.57
			P2	Y10	1	03	450	75/100	23150	20	10	329909	24	7917.819	0.616	4877.38
															TOTAL=	30057.54
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		24.00	*P1A	Y25	6	01	9500			50	25	9500	288	2736.000	3.854	10544.54
			P2	Y10	1	03	450	75/100	24150	20	10	343732	24	8249.571	0.616	5081.74
															TOTAL=	30816.87
			P1	Y32	12	02	7919	500		64	32	8355	288	2406.240	6.313	15190.59
		25.00	*P1A	Y25	6	01	10000			50	25	10000	288	2880.000	3.854	11099.52
			P2	Y10	1	03	450	75/100	25150	20	10	357555	24	8581.323	0.616	5286.10
															TOTAL=	31576.21

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-01 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .
* 3. 'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-68-02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT H=6.5 & 7.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: C	14		P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		12.00	P1A	Y25	7	01	6000			50	25	6000	196	1176.000	3.854	4532.30
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	28	4979.969	0.616	3067.66
6.60m x 6.00m															TOTAL=	28276.05
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		13.00	P1A	Y25	7	01	7000			50	25	7000	196	1372.000	3.854	5287.69
			P2	Y10	1	03	450	75/100	13150	20	10	191679	28	5367.013	0.616	3306.08
															TOTAL=	29269.85
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		14.00	P1A	Y25	7	01	8000			50	25	8000	196	1568.000	3.854	6043.07
			P2	Y10	1	03	450	75/100	14150	20	10	205502	28	5754.057	0.616	3544.50
										0					TOTAL=	30263.66
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		15.00	P1A	Y25	7	01	9000			50	25	9000	196	1764.000	3.854	6798.46
			P2	Y10	1	03	450	75/100	15150	20	10	219325	28	6141.102	0.616	3782.92
										0					TOTAL=	31257.46
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		16.00	P1A	Y25	7	01	10000			50	25	10000	196	1960.000	3.854	7553.84
			P2	Y10	1	03	450	75/100	16150	20	10	233148	28	6528.146	0.616	4021.34
										0					TOTAL=	32251.26
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		17.00	P1A	Y25	7	01	11000			50	25	11000	196	2156.000	3.854	8309.22
			P2	Y10	1	03	450	75/100	17150	20	10	246971	28	6915.190	0.616	4259.76
										0					TOTAL=	33245.07
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		18.00	P1A	Y25	7	01	12000			50	25	12000	196	2352.000	3.854	9064.61
			P2	Y10	1	03	450	75/100	18150	20	10	260794	28	7302.234	0.616	4498.18
															TOTAL=	34238.87

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-7C-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT H=6.5 & 7.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: C	14		P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		19.00	*P1A	Y25	7	01	7000			50	25	7000	392	2744.000	3.854	10575.38
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	28	7689.278	0.616	4736.60
6.60m x 6.00m															TOTAL=	35988.06
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		20.00	*P1A	Y25	7	01	7500			50	25	7500	392	2940.000	3.854	11330.76
			P2	Y10	1	03	450	75/100	20150	20	10	288440	28	8076.323	0.616	4975.01
															TOTAL=	36981.86
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		21.00	*P1A	Y25	7	01	8000			50	25	8000	392	3136.000	3.854	12086.14
			P2	Y10	1	03	450	75/100	21150	20	10	302263	28	8463.367	0.616	5213.43
															TOTAL=	37975.66
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		22.00	*P1A	Y25	7	01	8500			50	25	8500	392	3332.000	3.854	12841.53
			P2	Y10	1	03	450	75/100	22150	20	10	316086	28	8850.411	0.616	5451.85
															TOTAL=	38969.47
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		23.00	*P1A	Y25	7	01	9000			50	25	9000	392	3528.000	3.854	13596.91
			P2	Y10	1	03	450	75/100	23150	20	10	329909	28	9237.455	0.616	5690.27
															TOTAL=	39963.27
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		24.00	*P1A	Y25	7	01	9500			50	25	9500	392	3724.000	3.854	14352.30
			P2	Y10	1	03	450	75/100	24150	20	10	343732	28	9624.499	0.616	5928.69
															TOTAL=	40957.07
			P1	Y32	14	02	7919	500		64	32	8355	392	3275.160	6.313	20676.09
		25.00	*P1A	Y25	7	01	10000			50	25	10000	392	3920.000	3.854	15107.68
			P2	Y10	1	03	450	75/100	25150	20	10	357555	28	10011.544	0.616	6167.11
															TOTAL=	41950.88

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

* 3.'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-7C-02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H=6.5,7.0,7.5 & 8.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: D	16		P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		12.00	P1A	Y25	7	01	6000			50	25	6000	224	1344.000	3.854	5179.78
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	32	5691.393	0.616	3505.90
6.60m x 7.05m															TOTAL=	32315.49
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		13.00	P1A	Y25	7	01	7000			50	25	7000	224	1568.000	3.854	6043.07
			P2	Y10	1	03	450	75/100	13150	20	10	191679	32	6133.729	0.616	3778.38
															TOTAL=	33451.26
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		14.00	P1A	Y25	7	01	8000			50	25	8000	224	1792.000	3.854	6906.37
			P2	Y10	1	03	450	75/100	14150	20	10	205502	32	6576.066	0.616	4050.86
										0					TOTAL=	34587.04
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		15.00	P1A	Y25	7	01	9000			50	25	9000	224	2016.000	3.854	7769.66
			P2	Y10	1	03	450	75/100	15150	20	10	219325	32	7018.402	0.616	4323.34
										0					TOTAL=	35722.81
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		16.00	P1A	Y25	7	01	10000			50	25	10000	224	2240.000	3.854	8632.96
			P2	Y10	1	03	450	75/100	16150	20	10	233148	32	7460.738	0.616	4595.81
										0					TOTAL=	36858.59
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		17.00	P1A	Y25	7	01	11000			50	25	11000	224	2464.000	3.854	9496.26
			P2	Y10	1	03	450	75/100	17150	20	10	246971	32	7903.074	0.616	4868.29
										0					TOTAL=	37994.36
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		18.00	P1A	Y25	7	01	12000			50	25	12000	224	2688.000	3.854	10359.55
			P2	Y10	1	03	450	75/100	18150	20	10	260794	32	8345.411	0.616	5140 77
															TOTAL=	39130.14

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02.
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-8D-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H=6.5,7.0,7.5 & 8.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm					CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
							A	B	C	r	d					
TYPE: D	16		P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		19.00	*P1A	Y25	7	01	7000			50	25	7000	448	3136.000	3.854	12086.14
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	32	8787.747	0.616	5413.25
6.60m x 7.05m															TOTAL=	41129.21
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		20.00	*P1A	Y25	7	01	7500			50	25	7500	448	3360.000	3.854	12949.44
			P2	Y10	1	03	450	75/100	20150	20	10	288440	32	9230.083	0.616	5685.73
															TOTAL=	42264.98
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		21.00	*P1A	Y25	7	01	8000			50	25	8000	448	3584.000	3.854	13812.74
			P2	Y10	1	03	450	75/100	21150	20	10	302263	32	9672.419	0.616	5958.21
															TOTAL=	43400.76
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		22.00	*P1A	Y25	7	01	8500			50	25	8500	448	3808.000	3.854	14676.03
			P2	Y10	1	03	450	75/100	22150	20	10	316086	32	10114.755	0.616	6230.69
															TOTAL=	44536.53
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		23.00	*P1A	Y25	7	01	9000			50	25	9000	448	4032.000	3.854	15539.33
			P2	Y10	1	03	450	75/100	23150	20	10	329909	32	10557.092	0.616	6503.17
															TOTAL=	45672.31
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		24.00	*P1A	Y25	7	01	9500			50	25	9500	448	4256.000	3.854	16402.62
			P2	Y10	1	03	450	75/100	24150	20	10	343732	32	10999.428	0.616	6775.65
															TOTAL=	46808.08
			P1	Y32	14	02	7919	500		64	32	8355	448	3743.040	6.313	23629.81
		25.00	*P1A	Y25	7	01	10000			50	25	10000	448	4480.000	3.854	17265.92
			P2	Y10	1	03	450	75/100	25150	20	10	357555	32	11441.764	0.616	7048.13
															TOTAL=	47943.86

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .
* 3.'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-BD-02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H= 7.5 & 8.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: F	20		P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		12.00	P1A	Y25	7	01	6000			50	25	6000	280	1680.000	3.854	6474.72
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	40	7114.241	0.616	4382.37
8.40m x 7.05m															TOTAL=	40394.36
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		13.00	P1A	Y25	7	01	7000			50	25	7000	280	1960.000	3.854	7553.84
			P2	Y10	1	03	450	75/100	13150	20	10	191679	40	7667.162	0.616	4722.97
															TOTAL=	41814.08
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		14.00	P1A	Y25	7	01	8000			50	25	8000	280	2240.000	3.854	8632.96
			P2	Y10	1	03	450	75/100	14150	20	10	205502	40	8220.082	0.616	5063.57
										0					TOTAL=	43233.79
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		15.00	P1A	Y25	7	01	9000			50	25	9000	280	2520.000	3.854	9712.08
			P2	Y10	1	03	450	75/100	15150	20	10	219325	40	8773.002	0.616	5404.17
										0					TOTAL=	44653.51
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		16.00	P1A	Y25	7	01	10000			50	25	10000	280	2800.000	3.854	10791.20
			P2	Y10	1	03	450	75/100	16150	20	10	233148	40	9325.923	0.616	5744.77
										0					TOTAL=	46073.23
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		17.00	P1A	Y25	7	01	11000			50	25	11000	280	3080.000	3.854	11870.32
			P2	Y10	1	03	450	75/100	17150	20	10	246971	40	9878.843	0.616	6085.37
										0					TOTAL=	47492.95
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		18.00	P1A	Y25	7	01	12000			50	25	12000	280	3360.000	3.854	12949.44
			P2	Y10	1	03	450	75/100	18150	20	10	260794	40	10431.763	0.616	6425.97
															TOTAL=	48912.67

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-8F-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H= 7.5 & 8.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: F	20		P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		19.00	*P1A	Y25	7	01	7000			50	25	7000	560	3920.000	3.854	15107.68
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	40	10984.683	0.616	6766.56
8.40m x 7.05m															TOTAL=	51411.51
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		20.00	*P1A	Y25	7	01	7500			50	25	7500	560	4200.000	3.854	16186.80
			P2	Y10	1	03	450	75/100	20150	20	10	288440	40	11537.604	0.616	7107.16
															TOTAL=	52831.23
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		21.00	*P1A	Y25	7	01	8000			50	25	8000	560	4480.000	3.854	17265.92
			P2	Y10	1	03	450	75/100	21150	20	10	302263	40	12090.524	0.616	7447.76
															TOTAL=	54250.95
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		22.00	*P1A	Y25	7	01	8500			50	25	8500	560	4760.000	3.854	18345.04
			P2	Y10	1	03	450	75/100	22150	20	10	316086	40	12643.444	0.616	7788.36
															TOTAL=	55670.67
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		23.00	*P1A	Y25	7	01	9000			50	25	9000	560	5040.000	3.854	19424.16
			P2	Y10	1	03	450	75/100	23150	20	10	329909	40	13196.365	0.616	8128.96
															TOTAL=	57090.39
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		24.00	*P1A	Y25	7	01	9500			50	25	9500	560	5320.000	3.854	20503.28
			P2	Y10	1	03	450	75/100	24150	20	10	343732	40	13749.285	0.616	8469.56
															TOTAL=	58510.10
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		25.00	*P1A	Y25	7	01	10000			50	25	10000	560	5600.000	3.854	21582.40
			P2	Y10	1	03	450	75/100	25150	20	10	357555	40	14302.205	0.616	8810.16
															TOTAL=	59929.82

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .
* 3. 'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (500 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-8F-02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H = 8.5 & 9.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: E	20		P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		12.00	P1A	Y25	7	01	6000			50	25	6000	280	1680.000	3.854	6474.72
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	40	7114.241	0.616	4382.37
6.60m x 8.85m															TOTAL=	40394.36
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		13.00	P1A	Y25	7	01	7000			50	25	7000	280	1960.000	3.854	7553.84
			P2	Y10	1	03	450	75/100	13150	20	10	191679	40	7667.162	0.616	4722.97
															TOTAL=	41814.08
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		14.00	P1A	Y25	7	01	8000			50	25	8000	280	2240.000	3.854	8632.96
			P2	Y10	1	03	450	75/100	14150	20	10	205502	40	8220.082	0.616	5063.57
										0					TOTAL=	43233.79
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		15.00	P1A	Y25	7	01	9000			50	25	9000	280	2520.000	3.854	9712.08
			P2	Y10	1	03	450	75/100	15150	20	10	219325	40	8773.002	0.616	5404.17
										0					TOTAL=	44653.51
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		16.00	P1A	Y25	7	01	10000			50	25	10000	280	2800.000	3.854	10791.20
			P2	Y10	1	03	450	75/100	16150	20	10	233148	40	9325.923	0.616	5744.77
										0					TOTAL=	46073.23
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		17.00	P1A	Y25	7	01	11000			50	25	11000	280	3080.000	3.854	11870.32
			P2	Y10	1	03	450	75/100	17150	20	10	246971	40	9878.843	0.616	6085.37
										0					TOTAL=	47492.95
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		18.00	P1A	Y25	7	01	12000			50	25	12000	280	3360.000	3.854	12949.44
			P2	Y10	1	03	450	75/100	18150	20	10	260794	40	10431.763	0.616	6425.97
															TOTAL=	48912.67

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-9E-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H= 8.5 & 9.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: E	20		P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		19.00	*P1A	Y25	7	01	7000			50	25	7000	560	3920.000	3.854	15107.68
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	40	10984.683	0.616	6766.56
6.60m x 8.85m															TOTAL=	51411.51
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		20.00	*P1A	Y25	7	01	7500			50	25	7500	560	4200.000	3.854	16186.80
			P2	Y10	1	03	450	75/100	20150	20	10	288440	40	11537.604	0.616	7107.16
															TOTAL=	52831.23
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		21.00	*P1A	Y25	7	01	8000			50	25	8000	560	4480.000	3.854	17265.92
			P2	Y10	1	03	450	75/100	21150	20	10	302263	40	12090.524	0.616	7447.76
															TOTAL=	54250.95
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		22.00	*P1A	Y25	7	01	8500			50	25	8500	560	4760.000	3.854	18345.04
			P2	Y10	1	03	450	75/100	22150	20	10	316086	40	12643.444	0.616	7788.36
															TOTAL=	55670.67
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		23.00	*P1A	Y25	7	01	9000			50	25	9000	560	5040.000	3.854	19424.16
			P2	Y10	1	03	450	75/100	23150	20	10	329909	40	13196.365	0.616	8128.96
															TOTAL=	57090.39
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		24.00	*P1A	Y25	7	01	9500			50	25	9500	560	5320.000	3.854	20503.28
			P2	Y10	1	03	450	75/100	24150	20	10	343732	40	13749.285	0.616	8469.56
															TOTAL=	58510.10
			P1	Y32	14	02	7919	500		64	32	8355	560	4678.800	6.313	29537.26
		25.00	*P1A	Y25	7	01	10000			50	25	10000	560	5600.000	3.854	21582.40
			P2	Y10	1	03	450	75/100	25150	20	10	357555	40	14302.205	0.616	8810.16
															TOTAL=	59929.82

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

* 3.'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-9E-02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H= 8.5 & 9.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: H	25		P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		12.00	P1A	Y25	7	01	6000			50	25	6000	350	2100.000	3.854	8093.40
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	50	8892.802	0.616	5477.97
8.40m x 8.85m															TOTAL=	50492.95
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		13.00	P1A	Y25	7	01	7000			50	25	7000	350	2450.000	3.854	9442.30
			P2	Y10	1	03	450	75/100	13150	20	10	191679	50	9583.952	0.616	5903.71
															TOTAL=	52267.59
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		14.00	P1A	Y25	7	01	8000			50	25	8000	350	2800.000	3.854	10791.20
			P2	Y10	1	03	450	75/100	14150	20	10	205502	50	10275.102	0.616	6329.46
										0					TOTAL=	54042.24
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		15.00	P1A	Y25	7	01	9000			50	25	9000	350	3150.000	3.854	12140.10
			P2	Y10	1	03	450	75/100	15150	20	10	219325	50	10966.253	0.616	6755.21
										0					TOTAL=	55816.89
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		16.00	P1A	Y25	7	01	10000			50	25	10000	350	3500.000	3.854	13489.00
			P2	Y10	1	03	450	75/100	16150	20	10	233148	50	11657.403	0.616	7180.96
										0					TOTAL=	57591.54
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		17.00	P1A	Y25	7	01	11000			50	25	11000	350	3850.000	3.854	14837.90
			P2	Y10	1	03	450	75/100	17150	20	10	246971	50	12348.554	0.616	7606.71
										0					TOTAL=	59366.19
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		18.00	P1A	Y25	7	01	12000			50	25	12000	350	4200.000	3.854	16186.80
			P2	Y10	1	03	450	75/100	18150	20	10	260794	50	13039.704	0.616	8032.46
															TOTAL=	61140.84

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-9H-01
			DATE: JUNE 1996

Web Copy

BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H= 8.5 & 9.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: H	25		P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		19.00	*P1A	Y25	7	01	7000			50	25	7000	700	4900.000	3.854	18884.60
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	50	13730.854	0.616	8458.21
8.40m x 8.85m															TOTAL=	64264.39
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		20.00	*P1A	Y25	7	01	7500			50	25	7500	700	5250.000	3.854	20233.50
			P2	Y10	1	03	450	75/100	20150	20	10	288440	50	14422.005	0.616	8883.95
															TOTAL=	66039.04
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		21.00	*P1A	Y25	7	01	8000			50	25	8000	700	5600.000	3.854	21582.40
			P2	Y10	1	03	450	75/100	21150	20	10	302263	50	15113.155	0.616	9309.70
															TOTAL=	67813.68
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		22.00	*P1A	Y25	7	01	8500			50	25	8500	700	5950.000	3.854	22931.30
			P2	Y10	1	03	450	75/100	22150	20	10	316086	50	15804.305	0.616	9735.45
															TOTAL=	69588.33
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		23.00	*P1A	Y25	7	01	9000			50	25	9000	700	6300.000	3.854	24280.20
			P2	Y10	1	03	450	75/100	23150	20	10	329909	50	16495.456	0.616	10161.20
															TOTAL=	71362.98
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		24.00	*P1A	Y25	7	01	9500			50	25	9500	700	6650.000	3.854	25629.10
			P2	Y10	1	03	450	75/100	24150	20	10	343732	50	17186.606	0.616	10586.95
															TOTAL=	73137.63
			P1	Y32	14	02	7919	500		64	32	8355	700	5848.500	6.313	36921.58
		25.00	*P1A	Y25	7	01	10000			50	25	10000	700	7000.000	3.854	26978.00
			P2	Y10	1	03	450	75/100	25150	20	10	357555	50	17877.757	0.616	11012.70
															TOTAL=	74912.28

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

* 3. 'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-9H-02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H = 9.5 & 10.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm					CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
							A	B	C	r	d					
TYPE: G	24		P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		12.00	P1A	Y25	7	01	6000			50	25	6000	336	2016.000	3.854	7769.66
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	48	8537.090	0.616	5258.85
6.60m x 10.20m															TOTAL=	48473.23
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		13.00	P1A	Y25	7	01	7000			50	25	7000	336	2352.000	3.854	9064.61
			P2	Y10	1	03	450	75/100	13150	20	10	191679	48	9200.594	0.616	5667.57
															TOTAL=	50176.89
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		14.00	P1A	Y25	7	01	8000			50	25	8000	336	2688.000	3.854	10359.55
			P2	Y10	1	03	450	75/100	14150	20	10	205502	48	9864.098	0.616	6076.28
										0					TOTAL=	51880.55
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		15.00	P1A	Y25	7	01	9000			50	25	9000	336	3024.000	3.854	11654.50
			P2	Y10	1	03	450	75/100	15150	20	10	219325	48	10527.603	0.616	6485.00
										0					TOTAL=	53584.22
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		16.00	P1A	Y25	7	01	10000			50	25	10000	336	3360.000	3.854	12949.44
			P2	Y10	1	03	450	75/100	16150	20	10	233148	48	11191.107	0.616	6893.72
										0					TOTAL=	55287.88
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		17.00	P1A	Y25	7	01	11000			50	25	11000	336	3696.000	3.854	14244.38
			P2	Y10	1	03	450	75/100	17150	20	10	246971	48	11854.611	0.616	7302.44
										0					TOTAL=	56991.54
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		18.00	P1A	Y25	7	01	12000			50	25	12000	336	4032.000	3.854	15539.33
			P2	Y10	1	03	450	75/100	18150	20	10	260794	48	12518.116	0.616	7711.16
															TOTAL=	58695.20

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-10G-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H= 9.5 & 10.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: G	24		P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		19.00	*P1A	Y25	7	01	7000			50	25	7000	672	4704.000	3.854	18129.22
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	48	13181.620	0.616	8119.88
6.60m x 10.20m															TOTAL=	61693.81
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		20.00	*P1A	Y25	7	01	7500			50	25	7500	672	5040.000	3.854	19424.16
			P2	Y10	1	03	450	75/100	20150	20	10	288440	48	13845.124	0.616	8528.60
															TOTAL=	63397.47
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		21.00	*P1A	Y25	7	01	8000			50	25	8000	672	5376.000	3.854	20719.10
			P2	Y10	1	03	450	75/100	21150	20	10	302263	48	14508.629	0.616	8937.32
															TOTAL=	65101.14
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		22.00	*P1A	Y25	7	01	8500			50	25	8500	672	5712.000	3.854	22014.05
			P2	Y10	1	03	450	75/100	22150	20	10	316086	48	15172.133	0.616	9346.03
															TOTAL=	66804.80
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		23.00	*P1A	Y25	7	01	9000			50	25	9000	672	6048.000	3.854	23308.99
			P2	Y10	1	03	450	75/100	23150	20	10	329909	48	15835.638	0.616	9754.75
															TOTAL=	68508.46
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		24.00	*P1A	Y25	7	01	9500			50	25	9500	672	6384.000	3.854	24603.94
			P2	Y10	1	03	450	75/100	24150	20	10	343732	48	16499.142	0.616	10163.47
															TOTAL=	70212.12
			P1	Y32	14	02	7919	500		64	32	8355	672	5614.560	6.313	35444.72
		25.00	*P1A	Y25	7	01	10000			50	25	10000	672	6720.000	3.854	25898.88
			P2	Y10	1	03	450	75/100	25150	20	10	357555	48	17162.646	0.616	10572.19
															TOTAL=	71915.79

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

* 3. 'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-10G-02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H= 9.5 & 10.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: I	30		P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		12.00	P1A	Y25	7	01	6000			50	25	6000	420	2520.000	3.854	9712.08
SIZE: (L x B)			P2	Y10	1	03	450	75/100	12150	20	10	177856	60	10671.362	0.616	6573.56
8.40m x 10.20m															TOTAL=	60591.54
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		13.00	P1A	Y25	7	01	7000			50	25	7000	420	2940.000	3.854	11330.76
			P2	Y10	1	03	450	75/100	13150	20	10	191679	60	11500.742	0.616	7084.46
															TOTAL=	62721.11
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		14.00	P1A	Y25	7	01	8000			50	25	8000	420	3360.000	3.854	12949.44
			P2	Y10	1	03	450	75/100	14150	20	10	205502	60	12330.123	0.616	7595.36
										0					TOTAL=	64850.69
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		15.00	P1A	Y25	7	01	9000			50	25	9000	420	3780.000	3.854	14568.12
			P2	Y10	1	03	450	75/100	15150	20	10	219325	60	13159.503	0.616	8106.25
										0					TOTAL=	66980.27
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		16.00	P1A	Y25	7	01	10000			50	25	10000	420	4200.000	3.854	16186.80
			P2	Y10	1	03	450	75/100	16150	20	10	233148	60	13988.884	0.616	8617.15
										0					TOTAL=	69109.85
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		17.00	P1A	Y25	7	01	11000			50	25	11000	420	4620.000	3.854	17805.48
			P2	Y10	1	03	450	75/100	17150	20	10	246971	60	14818.264	0.616	9128.05
										0					TOTAL=	71239.43
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		18.00	P1A	Y25	7	01	12000			50	25	12000	420	5040.000	3.854	19424.16
			P2	Y10	1	03	450	75/100	18150	20	10	260794	60	15647.645	0.616	9638.95
															TOTAL=	73369.01

NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02.
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-101-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE FOR ABUTMENT HEIGHT, H= 9.5 & 10.0 m (TWO ABUTMENTS)

FDN. TYPE & SIZE OF ABUT. PILE CAP	NO. OF PILES PER ABUT.	LENGTH OF PILE (LP) m	BAR MARK	BAR TYPE & DIA. mm	NO. OF BARS PER CAGE	SHAPE CODE	BENDING DIMENSIONS mm					CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS)			
							A	B	C	r	d		TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: I	30		P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		19.00	*P1A	Y25	7	01	7000			50	25	7000	840	5880.000	3.854	22661.52
SIZE: (L x B)			P2	Y10	1	03	450	75/100	19150	20	10	274617	60	16477.025	0.616	10149.85
8.40m x 10.20m															TOTAL=	77117.26
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		20.00	*P1A	Y25	7	01	7500			50	25	7500	840	6300.000	3.854	24280.20
			P2	Y10	1	03	450	75/100	20150	20	10	288440	60	17306.406	0.616	10660.75
															TOTAL=	79246.84
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		21.00	*P1A	Y25	7	01	8000			50	25	8000	840	6720.000	3.854	25898.88
			P2	Y10	1	03	450	75/100	21150	20	10	302263	60	18135.786	0.616	11171.64
															TOTAL=	81376.42
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		22.00	*P1A	Y25	7	01	8500			50	25	8500	840	7140.000	3.854	27517.56
			P2	Y10	1	03	450	75/100	22150	20	10	316086	60	18965.167	0.616	11682.54
															TOTAL=	83506.00
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		23.00	*P1A	Y25	7	01	9000			50	25	9000	840	7560.000	3.854	29136.24
			P2	Y10	1	03	450	75/100	23150	20	10	329909	60	19794.547	0.616	12193.44
															TOTAL=	85635.58
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		24.00	*P1A	Y25	7	01	9500			50	25	9500	840	7980.000	3.854	30754.92
			P2	Y10	1	03	450	75/100	24150	20	10	343732	60	20623.927	0.616	12704.34
															TOTAL=	87765.16
			P1	Y32	14	02	7919	500		64	32	8355	840	7018.200	6.313	44305.90
		25.00	*P1A	Y25	7	01	10000			50	25	10000	840	8400.000	3.854	32373.60
			P2	Y10	1	03	450	75/100	25150	20	10	357555	60	21453.308	0.616	13215.24
															TOTAL=	89894.73

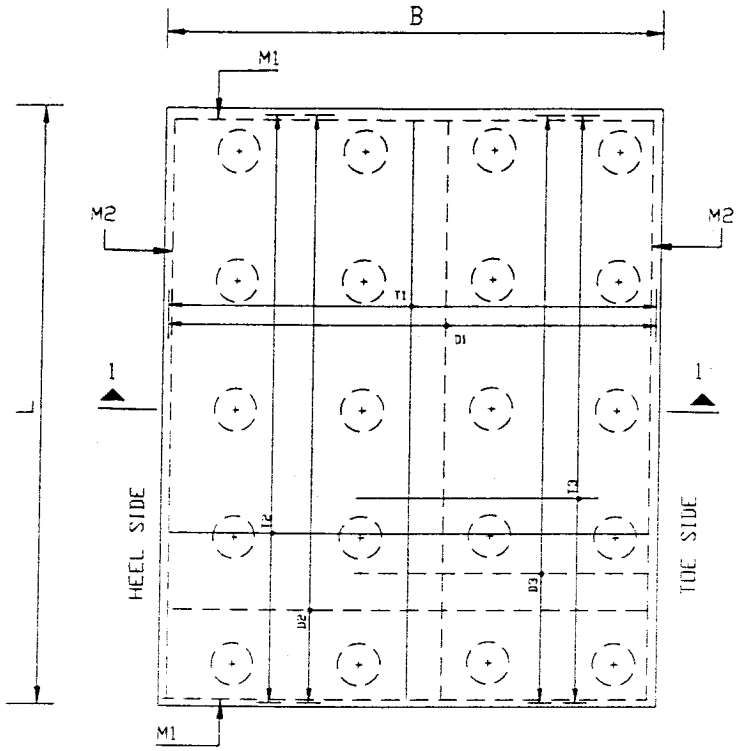
NOTES:

1. FOR SHAPE CODE AND REINF. DETAILS OF PILES, REFER TO DWG. NO. P-ST-02 .
2. FOR ABUTMENT FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03 .

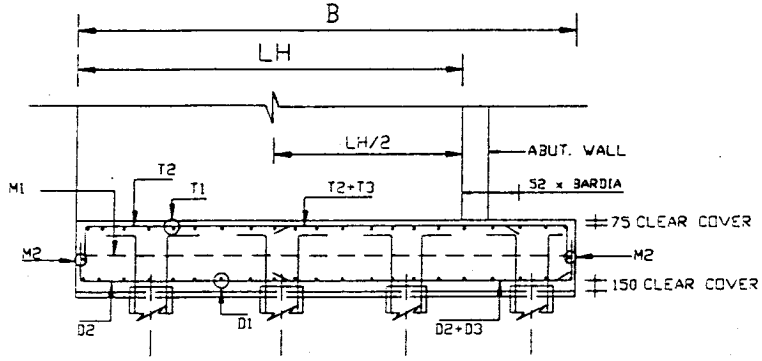
* 3.'P1A' IS THE MAIN BAR OF TWO LOWER CAGES .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	CAST-IN-SITU BORED PILE (600 DIA. FOR ABUTMENT)
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: P-101-02
			DATE: JUNE 1996

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TYPICAL PLAN OF PILE CAP



SECTION: 1-1

TABLE SHOWING BAR TYPE AND SPACING FOR DIFFERENT TYPES OF PILE CAP

FOUNDATION TYPE	L x B (m x m)	BAR TYPE & SPACING FOR BAR MARK							
		T1	D1	T2	D2	T3	D3	M1	M2
A	6.60 x 4.85	Y20-125	Y20-125	Y20-125	Y20-125	-	Y20-250	2-Y16	2-Y16
B	6.60 x 5.25	Y20-125	Y20-125	Y20-125	Y20-125	-	Y20-250	2-Y16	2-Y16
C	6.60 x 6.00	Y20-125	Y20-125	Y20-125	Y20-125	-	Y20-250	2-Y16	2-Y16
D	6.60 x 7.05	Y20-125	Y20-125	Y20-125	Y20-125	-	Y20-125	2-Y16	2-Y16
E	6.60 x 8.85	Y20-125	Y20-125	Y20-125	Y20-125	Y20-125	Y20-125	2-Y16	2-Y16
F	8.40 x 7.05	Y20-125	Y20-125	Y20-125	Y20-125	-	Y20-250	2-Y16	2-Y16
G	6.60 x 10.20	Y20-125	Y20-125	Y20-125	Y20-125	Y25-125	Y25-125	2-Y16	2-Y16
H	8.40 x 8.85	Y20-125	Y20-125	Y20-125	Y20-125	Y20-125	Y20-125	2-Y16	2-Y16
I	8.40 x 10.20	Y20-125	Y20-125	Y20-100	Y20-125	Y25-100	Y25-125	2-Y16	2-Y16

NOTES:

1. BARS D2 & D3 AND T2 & T3 SHALL BE BUNDLED TOGETHER.
2. FOR FOUNDATION TYPES, REFER TO DWG. NOS. A-PF-01 TO A-PF-03.
3. FOR BAR BENDING SCHEDULE, REFER TO DWG. NOS. C-SC-01 TO C-SC-03
4. FOR STRENGTHS OF CONCRETE & REINF. STEEL AND GENERAL NOTES, REFER TO DWG. NO. PC-GN-00

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA	ABUTMENT PILE CAP FOUNDATION TYPE: ALL TYPICAL REINFORCEMENT DETAILS SCALE NTS	DWG. NO. : C-ST-00 DATE JUNE 1996

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BAR BENDING SCHEDULE OF PILE CAP (FOR TWO ABUTMENTS)

FOUNDATION TYPE	LENGTH OF PILE CAP(L) m	WIDTH OF PILE CAP(B) m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: A	6.60	4.85	T1	Y-20	125	02	6500	375	40	20	7170	78	559.260	2.466	1379.14
			D1	Y-20	125	02	6500	375	40	20	7170	78	559.260	2.466	1379.14
			T2	Y-20	125	02	4750	375	40	20	5420	106	574.520	2.466	1416.77
			D2	Y-20	125	02	4750	375	40	20	5420	106	574.520	2.466	1416.77
			T3	–	–	01	–	–	–	–	–	–	–	–	0.00
			D3	Y-20	250	01	3575	–	40	20	3575	54	193.050	2.466	476.06
			M1	Y-16	–	01	4750	–	–	16	4750	4	19.000	1.579	30.00
			M2	Y-16	–	01	6500	–	–	16	6500	4	26.000	1.579	41.05
														TOTAL=	6138.92
TYPE: B	6.60	5.25	T1	Y-20	125	02	6500	375	40	20	7170	84	602.280	2.466	1485.22
			D1	Y-20	125	02	6500	375	40	20	7170	84	602.280	2.466	1485.22
			T2	Y-20	125	02	5150	375	40	20	5820	106	616.920	2.466	1521.32
			D2	Y-20	125	02	5150	375	40	20	5820	106	616.920	2.466	1521.32
			T3	–	–	01	–	–	–	–	–	–	–	–	0.00
			D3	Y-20	250	01	3775	–	40	20	3775	54	203.850	2.466	502.69
			M1	Y-16	–	01	5150	–	–	16	5150	4	20.600	1.579	32.53
			M2	Y-16	–	01	6500	–	–	16	6500	4	26.000	1.579	41.05
														TOTAL=	6589.37
TYPE: C	6.60	6.00	T1	Y-20	125	02	6500	375	40	20	7170	96	688.320	2.466	1697.40
			D1	Y-20	125	02	6500	375	40	20	7170	96	688.320	2.466	1697.40
			T2	Y-20	125	02	5900	375	40	20	6570	106	696.420	2.466	1717.37
			D2	Y-20	125	02	5900	375	40	20	6570	106	696.420	2.466	1717.37
			T3	–	–	01	–	–	–	–	–	–	–	–	0.00
			D3	Y-20	250	01	4150	–	40	20	4150	54	224.100	2.466	552.63
			M1	Y-16	–	01	5900	–	–	16	5900	4	23.600	1.579	37.26
			M2	Y-16	–	01	6500	–	–	16	6500	4	26.000	1.579	41.05
														TOTAL=	7460.49

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A-PF-01 TO A-PF-03 .
2. FOR SHAPE CODE, REFER TO DWG. NO. PC-SHC-01 .
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. C-ST-00 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT PILE CAP
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: C-SC-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE CAP (FOR TWO ABUTMENTS)

FOUNDATION TYPE	LENGTH OF PILE CAP(L) m	WIDTH OF PILE CAP(B) m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm				CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS)			
							A	B	r	d		TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: D	6.60	7.05	T1	Y–20	125	02	6500	375	40	20	7170	112	803.040	2.466	1980.30
			D1	Y–20	125	02	6500	375	40	20	7170	112	803.040	2.466	1980.30
			T2	Y–20	125	02	6950	375	40	20	7620	106	807.720	2.466	1991.84
			D2	Y–20	125	02	6950	375	40	20	7620	106	807.720	2.466	1991.84
			T3	–	–	01	–	–	–	–	–	–	–	–	0.00
			D3	Y–20	125	01	4675	–	40	20	4675	106	495.550	2.466	1222.03
			M1	Y–16	–	01	6950	–	–	16	6950	4	27.800	1.579	43.90
			M2	Y–16	–	01	6500	–	–	16	6500	4	26.000	1.579	41.05
														TOTAL=	9251.24
TYPE: E	6.60	8.85	T1	Y–20	125	02	6500	375	40	20	7170	142	1018.140	2.466	2510.73
			D1	Y–20	125	02	6500	375	40	20	7170	142	1018.140	2.466	2510.73
			T2	Y–20	125	02	8750	375	40	20	9420	106	998.520	2.466	2462.35
			D2	Y–20	125	02	8750	375	40	20	9420	106	998.520	2.466	2462.35
			T3	Y–20	125	01	4165	–	40	20	4165	106	441.490	2.466	1088.71
			D3	Y–20	125	01	5725	–	40	20	5725	106	606.850	2.466	1496.49
			M1	Y–16	–	01	8750	–	–	16	8750	4	35.000	1.579	55.27
			M2	Y–16	–	01	6500	–	–	16	6500	4	26.000	1.579	41.05
														TOTAL=	12627.69
TYPE: F	8.40	7.05	T1	Y–20	125	02	8300	375	40	20	8970	112	1004.640	2.466	2477.44
			D1	Y–20	125	02	8300	375	40	20	8970	112	1004.640	2.466	2477.44
			T2	Y–20	125	02	6950	375	40	20	7620	134	1021.080	2.466	2517.98
			D2	Y–20	125	02	6950	375	40	20	7620	134	1021.080	2.466	2517.98
			T3	–	–	01	–	–	–	–	–	–	–	–	0.00
			D3	Y–20	125	01	4675	–	40	20	4675	134	626.450	2.466	1544.83
			M1	Y–16	–	01	6950	–	–	16	6950	4	27.800	1.579	43.90
			M2	Y–16	–	01	8300	–	–	16	8300	4	33.200	1.579	52.42
														TOTAL=	11632.00

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03 .
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01 .
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. C–ST–00 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT PILE CAP
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: C–SC–02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF PILE CAP (FOR TWO ABUTMENTS)

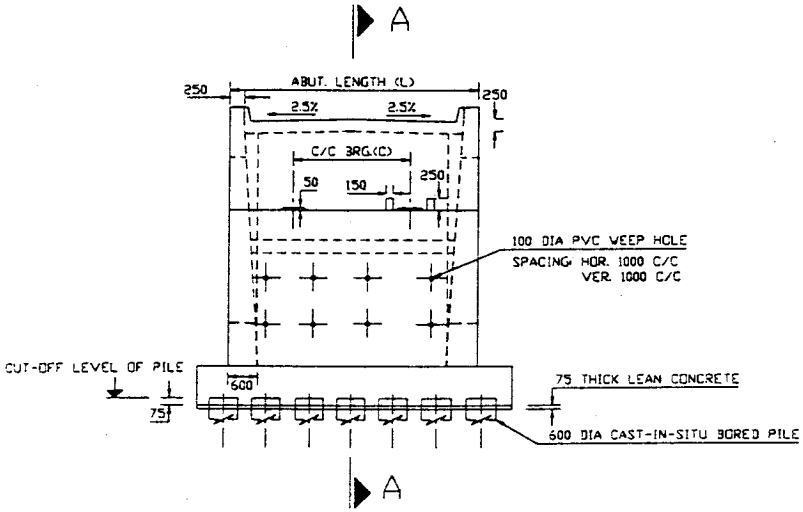
FOUNDATION TYPE	LENGTH OF PILE CAP(L) m	WIDTH OF PILE CAP(B) m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	r	d	CUT LENGTH mm	QUANTITY PER BRIDGE (TWO ABUTMENTS) TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
TYPE: G	6.60	10.20	T1	Y–20	125	02	6500	375	40	20	7170	162	1161.540	2.466	2864.36
			D1	Y–20	125	02	6500	375	40	20	7170	162	1161.540	2.466	2864.36
			T2	Y–20	125	02	10100	375	40	20	10770	106	1141.620	2.466	2815.23
			D2	Y–20	125	02	10100	375	40	20	10770	106	1141.620	2.466	2815.23
			T3	Y–25	125	01	5100	–	50	25	5100	106	540.600	3.854	2083.47
			D3	Y–25	125	01	6400	–	50	25	6400	106	678.400	3.854	2614.55
			M1	Y–16	–	01	10100	–	–	16	10100	4	40.400	1.579	63.79
			M2	Y–16	–	01	6500	–	–	16	6500	4	26.000	1.579	41.05
														TOTAL=	16162.06
TYPE: H	8.40	8.85	T1	Y–20	125	02	8300	375	40	20	8970	142	1273.740	2.466	3141.04
			D1	Y–20	125	02	8300	375	40	20	8970	142	1273.740	2.466	3141.04
			T2	Y–20	125	02	8750	375	40	20	9420	134	1262.280	2.466	3112.78
			D2	Y–20	125	02	8750	375	40	20	9420	134	1262.280	2.466	3112.78
			T3	Y–20	125	01	4165	–	40	20	4165	134	558.110	2.466	1376.30
			D3	Y–20	125	01	5725	–	40	20	5725	134	767.150	2.466	1891.79
			M1	Y–16	–	01	8750	–	–	16	8750	4	35.000	1.579	55.27
			M2	Y–16	–	01	8300	–	–	16	8300	4	33.200	1.579	52.42
														TOTAL=	15883.43
TYPE: I	8.40	10.20	T1	Y–20	125	02	8300	375	40	20	8970	162	1453.140	2.466	3583.44
			D1	Y–20	125	02	8300	375	40	20	8970	162	1453.140	2.466	3583.44
			T2	Y–20	100	02	10100	375	40	20	10770	168	1809.360	2.466	4461.88
			D2	Y–20	125	02	10100	375	40	20	10770	134	1443.180	2.466	3558.88
			T3	Y–25	100	01	5100	–	50	25	5100	168	856.800	3.854	3302.11
			D3	Y–25	125	01	6400	–	50	25	6400	134	857.600	3.854	3305.19
			M1	Y–16	–	01	10100	–	–	16	10100	4	40.400	1.579	63.79
			M2	Y–16	–	01	8300	–	–	16	8300	4	33.200	1.579	52.42
														TOTAL=	21911.16

NOTES:

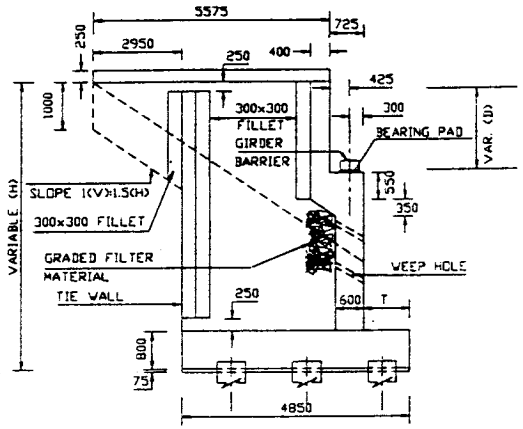
1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03 .
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01 .
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. C–ST–00 .

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT PILE CAP
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: C–SC–03
			DATE: JUNE 1996

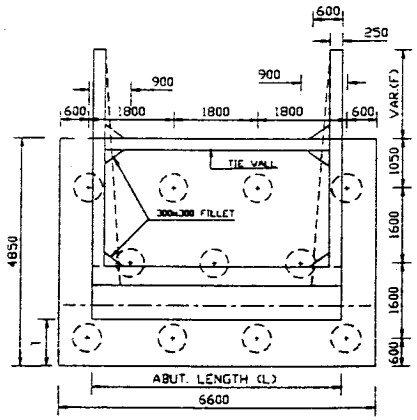
Web Copy



FRONT ELEVATION OF ABUTMENT WITH PILE CAP



SECTION A-A



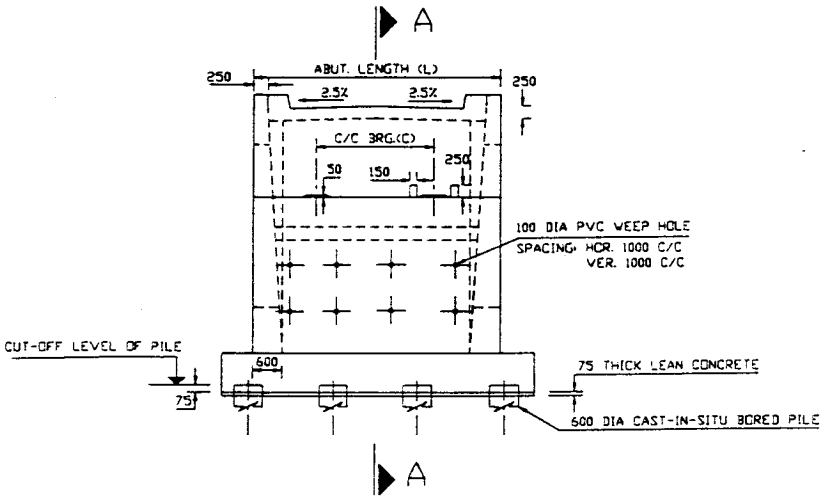
PLAN OF ABUTMENT AND FOUNDATION
(FOUNDATION TYPE: A)

FOUNDATION TYPE: A

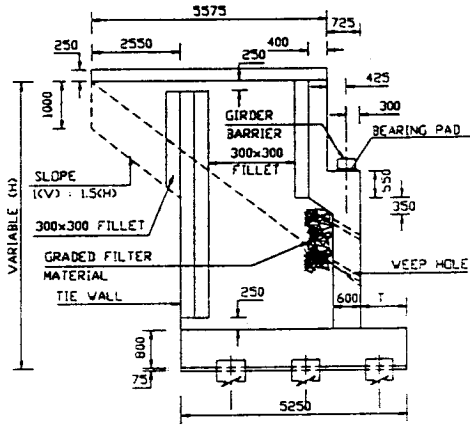
ABUTMENT. HT. (H) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST.OF TOE FROM ABUT. FACE (T) mm	DEPTH OF GIRDER (D) mm
6000	IB	4410	2500	1500	1400, 1600, 1800 2200, 2400 & 2600
6000	IIB	5080	3170	1500	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT FOUNDATION AND PILE (DECK TYPE: IB & IIB ; FOUNDATION TYPE: A) ABUTMENT HEIGHT: 6.0 m CONCRETE OUTLINE DETAILS — DWG. NO. : AF-6A-01 SCALE: 1 : 120 — DATE : JUNE 1996

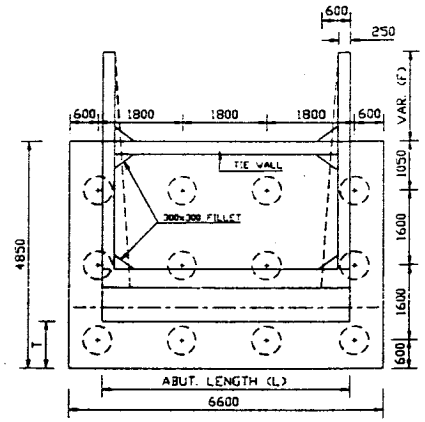
Web Copy



FRONT ELEVATION OF ABUT. WITH PILE CAP



SECTION A-A



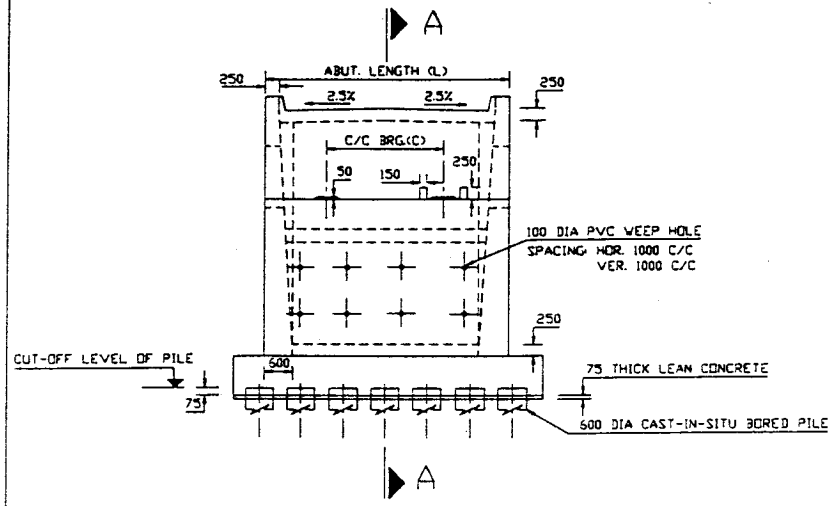
PLAN OF ABUTMENT AND FOUNDATION
(FOUNDATION TYPE: B)

FOUNDATION TYPE: B

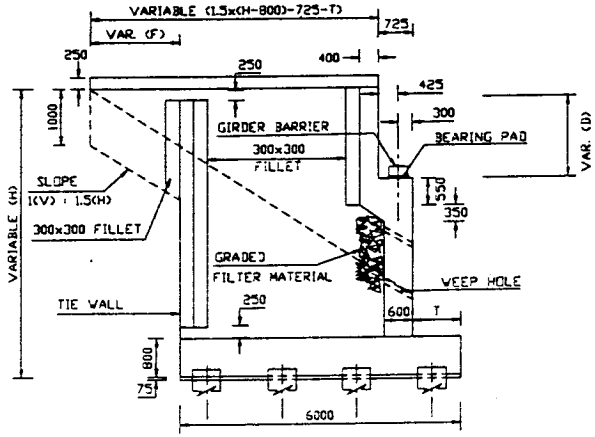
ABUTMENT. HT. (H) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST.OF TOE FROM ABUT. FACE (T) mm	DEPTH OF GIRDER (D) mm
6000	IA	5210	2500	1500	1400, 1600, 1800 2200, 2400 & 2600
6000	IIA	5880	3170	1500	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT FOUNDATION AND PILE (DECK TYPE: IA & IIA ; FOUNDATION TYPE: B) ABUTMENT HEIGHT 6.0 m CONCRETE OUTLINE DETAILS — DWG. NO. : AF-68-01 SCALE: 1 : 120 — DATE : JUNE 1996

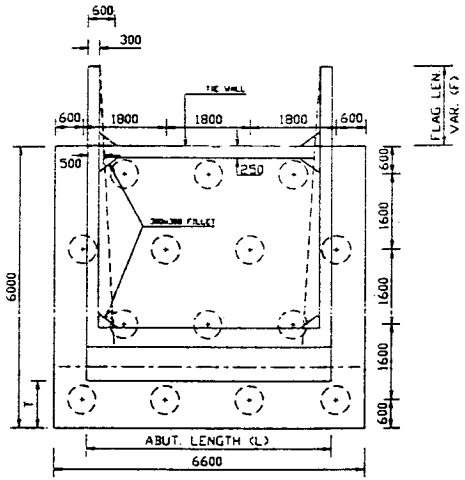
Web Copy



FRONT ELEVATION OF ABUTMENT WITH PILE CAP



SECTION A-A



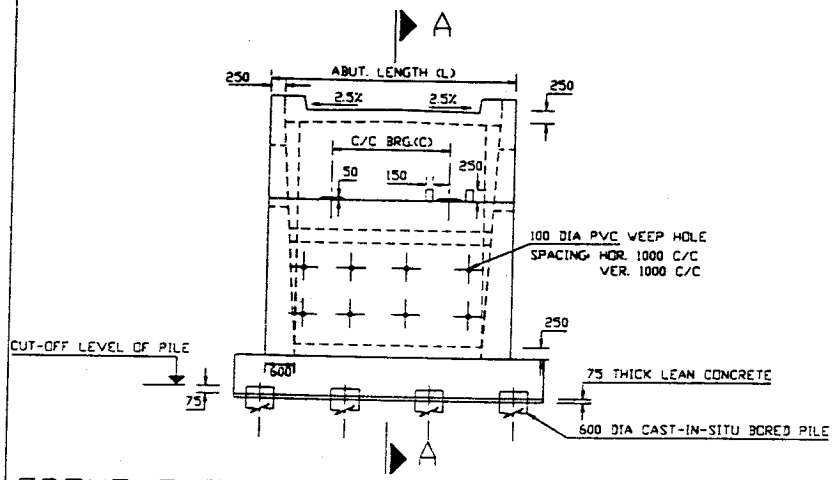
PLAN OF ABUTMENT AND FOUNDATION
(FOUNDATION TYPE: C)

FOUNDATION TYPE: C

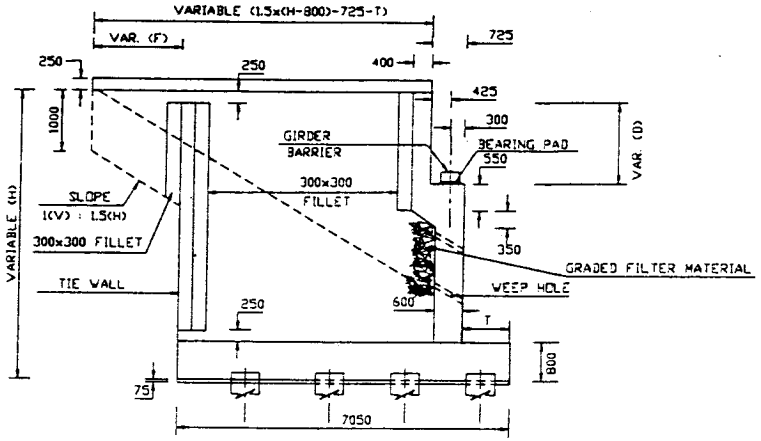
ABUTMENT. HT. (H) mm	FLAG LENGTH (F) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST. OF TOE (T) mm	DEPTH OF GIRDER (D) mm
6500 / 7000	2550 / 3300	IB	4410	2500	1500	1400, 1600, 1800, 2200, 2400 & 2600
6500 / 7000	2550 / 3300	IIB	5080	3170	1500	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT FOUNDATION AND PILE (DECK TYPE: IB & IIB ; FOUNDATION TYPE: C) ABUTMENT HEIGHT 6.5 m AND 7.0 m CONCRETE OUTLINE DETAILS — DWG. NO. : AF-7C-01 SCALE: 1 : 120 — DATE : JUNE 1996

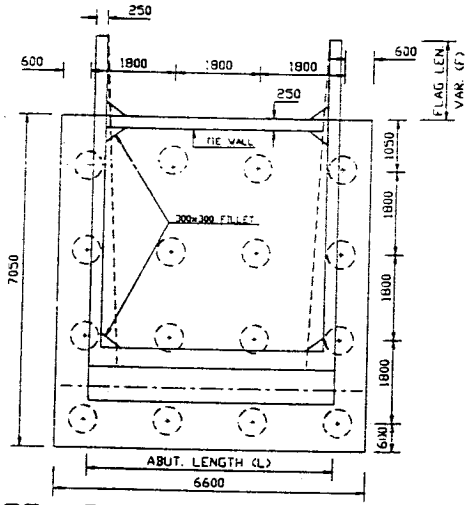
Web Copy



FRONT ELEVATION OF ABUTMENT AND FOUNDATION



SECTION A-A



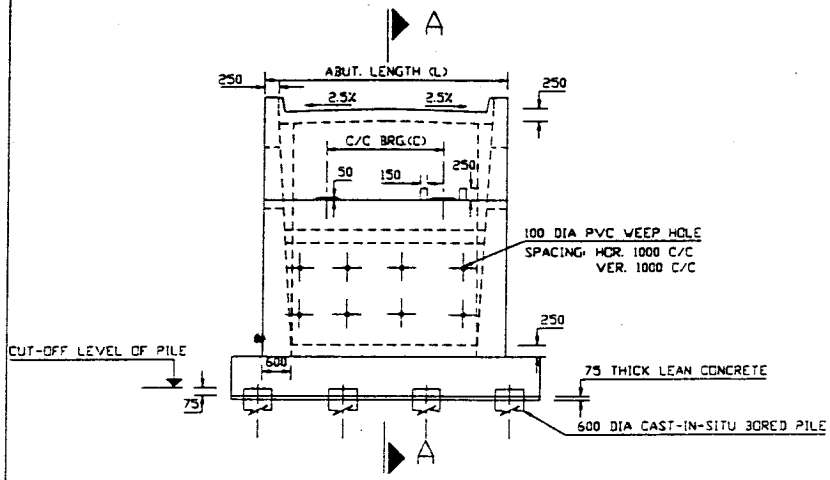
PLAN OF ABUTMENT AND FOUNDATION
(FOUNDATION TYPE: D)

FOUNDATION TYPE: D

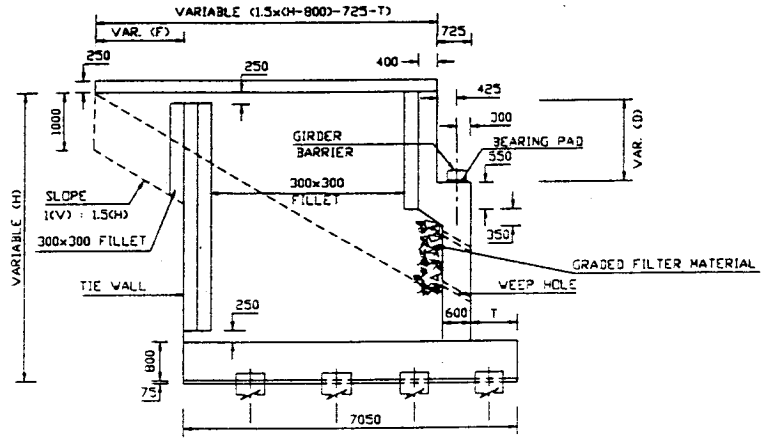
ABUTMENT. HT. (H) mm	FLAG LENGTH (F) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST. OF TOE (T) mm	DEPTH OF GIRDER (D) mm
6500 / 7000	1500 / 2250	IA	5210	2500	1500	1400, 1600, 1800, 2200, 2400 & 2600
6500 / 7000	1500 / 2250	IIA	5880	3170	1500	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT FOUNDATION AND PILE (DECK TYPE: IA & IIA ; FOUNDATION TYPE: D) ABUTMENT HEIGHT: 6.5m & 7.0 m CONCRETE OUTLINE DETAILS SCALE: 1 : 120	DWG. NO. : AF-7D-01 DATE : JUNE 1996

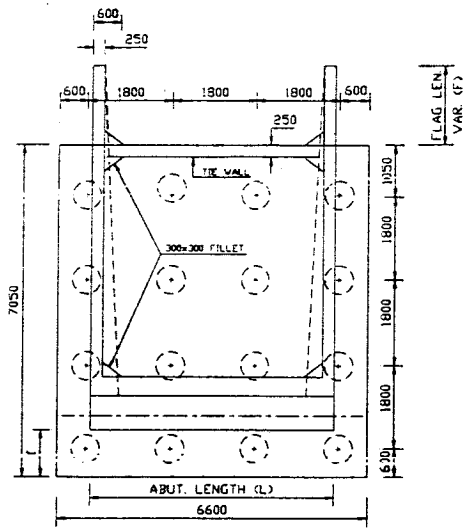
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FRONT ELEVATION OF ABUTMENT AND FOUNDATION



SECTION A-A



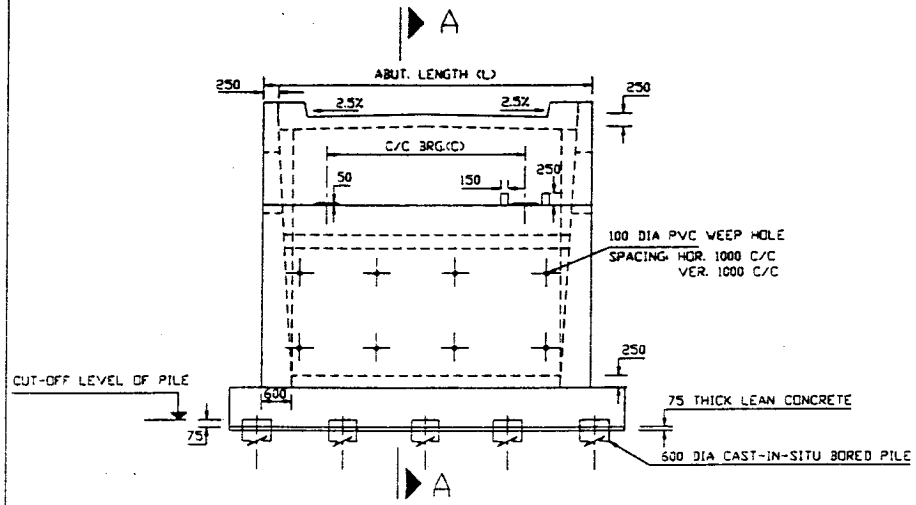
PLAN OF ABUTMENT AND FOUNDATION
(FOUNDATION TYPE: D)

FOUNDATION TYPE: D

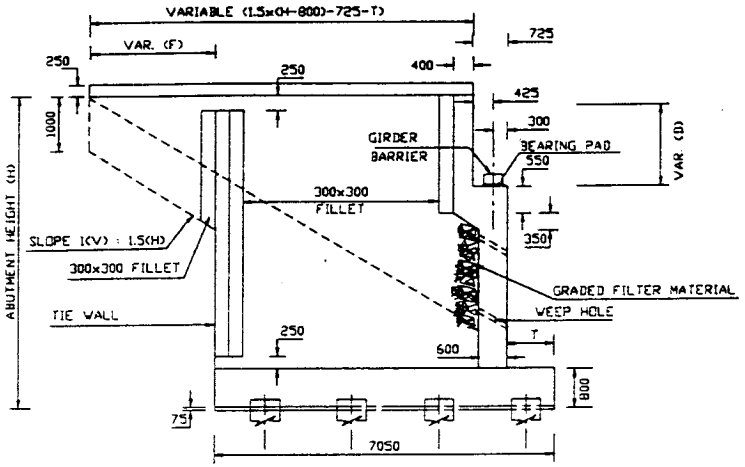
ABUTMENT. HT. (H) mm	FLAG LENGTH (F) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST. OF TOE (T) mm	DEPTH OF GIRDER (D) mm
7500 / 8000	3000 / 3750	IB	4410	2500	1700	1400, 1600, 1800, 2200, 2400 & 2600
7500 / 8000	3000 / 3750	IIB	5080	3170	1700	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT FOUNDATION AND PILE (DECK TYPE: IB AND IIB ; FOUNDATION TYPE: D) ABUTMENT HEIGHT: 7.5 m & 8.0 m CONCRETE OUTLINE DETAILS — DWG. NO. : AF-BD-01 SCALE: 1 : 120 — DATE : JUNE 1996

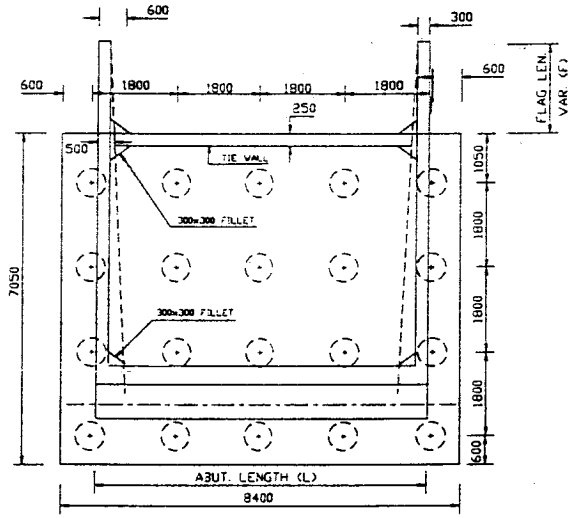
Web Copy



FRONT ELEVATION OF ABUTMENT WITH PILE CAP



SECTION A-A



PLAN OF ABUTMENT AND FOUNDATION
(FOUNDATION TYPE: F)

FOUNDATION TYPE: F

ABUTMENT. HT. (H) mm	FLAG LENGTH (F) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST. OF TOE (T) mm	DEPTH OF GIRDER (D) mm
7500 / 8000	3000 / 3750	IA	5210	2500	1700	1400, 1600, 1800, 2200, 2400 & 2600
7500 / 8000	3000 / 3750	IIA	5880	3170	1700	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

ABUTMENT FOUNDATION AND PILE
(DECK TYPE: IA & IIA ; FOUNDATION TYPE: F)
ABUTMENT HEIGHT: 7.5 m & 8.0 m

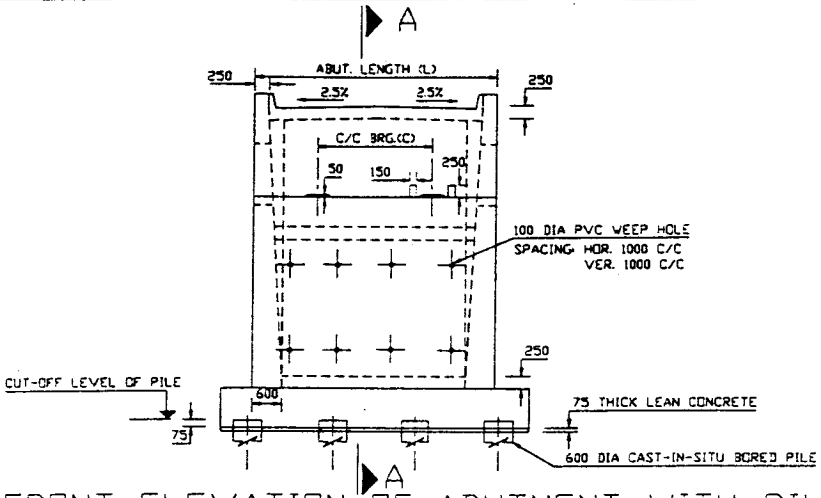
CONCRETE OUTLINE DETAILS

DWG. NO. : AF-8F-01

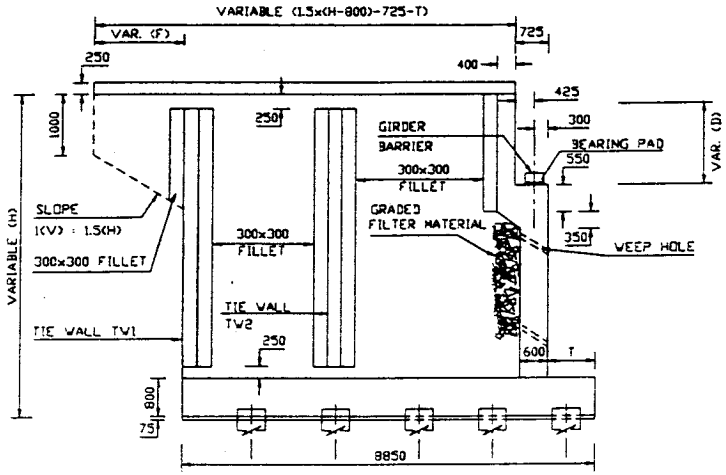
SCALE: 1 : 120

DATE : JUNE 1996

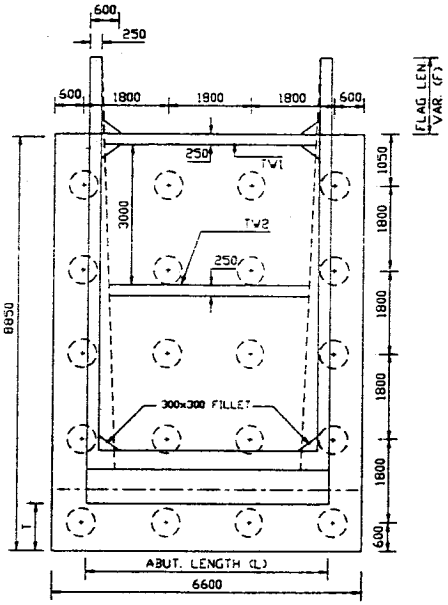
Web Copy



FRONT ELEVATION OF ABUTMENT WITH PILE CAP



SECTION A-A



PLAN OF ABUTMENT AND FOUNDATION (TYPE: E)

FOUNDATION TYPE: E

ABUTMENT. HT. (H) mm	FLAG LENGTH (F) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST. OF TOE (T) mm	DEPTH OF GIRDER (D) mm
8500 / 9000	2700 / 3450	IB	4410	2500	2000	1400, 1600, 1800, 2200, 2400 & 2600
8500 / 9000	2700 / 3450	IIB	5080	3170	2000	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

ABUTMENT FOUNDATION AND PILE
(DECK TYPE: IB & IIB ; FOUNDATION TYPE: E)
ABUTMENT HEIGHT: 8.5 m & 9.0 m

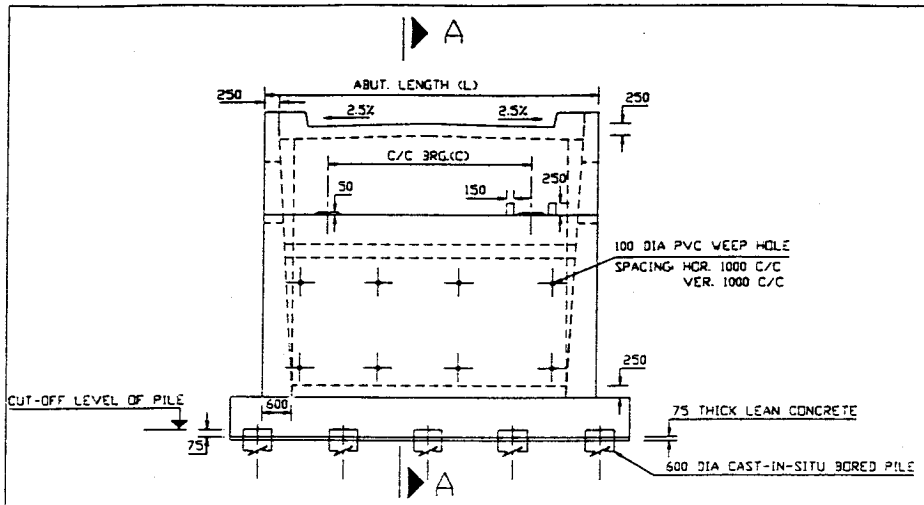
CONCRETE OUTLINE DETAILS

DWG. NO. : AF-9E-01

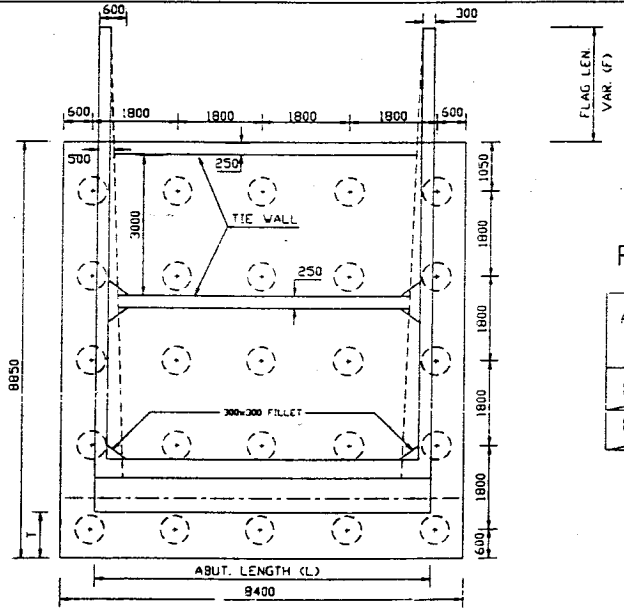
SCALE: 1 : 120

DATE : JUNE 1996

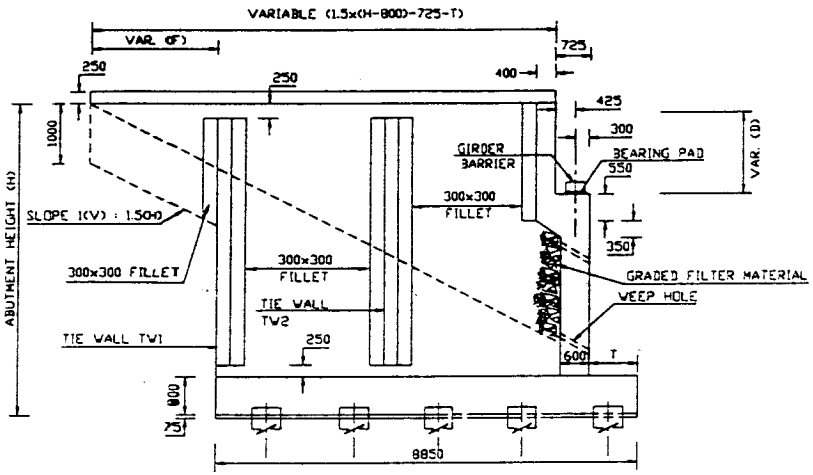
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FRONT ELEVATION OF ABUTMENT WITH PILE CAP



PLAN OF ABUTMENT AND FOUNDATION (TYPE: H)



SECTION A-A

FOUNDATION TYPE: H

ABUTMENT. HT. (H) mm	FLAG LENGTH (F) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST. OF TOE (T) mm	DEPTH OF GIRDER (D) mm
8500 / 9000	2700 / 3450	IA	5210	2500	2000	1400, 1600, 1800, 2200, 2400 & 2600
8500 / 9000	2700 / 3450	IIA	5880	3170	2000	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

ABUTMENT FOUNDATION AND PILE

(DECK TYPE: IA & IIA ; FOUNDATION TYPE: H)
ABUTMENT HEIGHT: 8.5 m AND 9.0 m

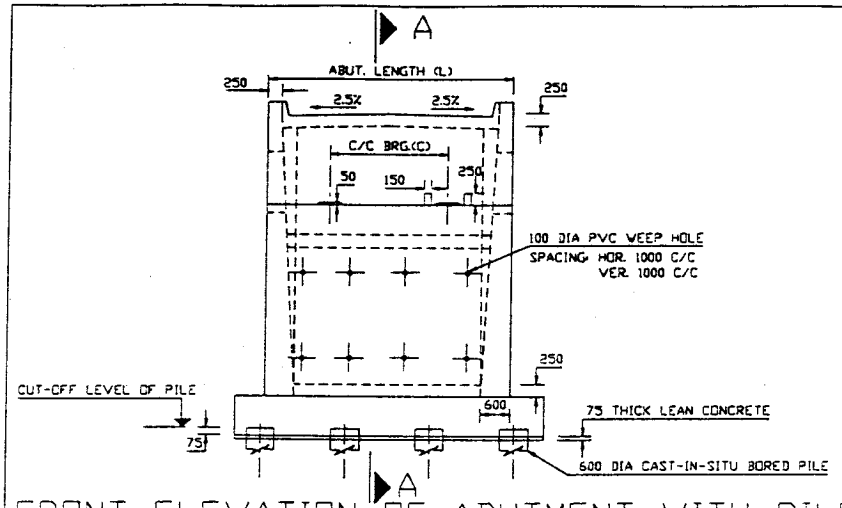
CONCRETE OUTLINE DETAILS

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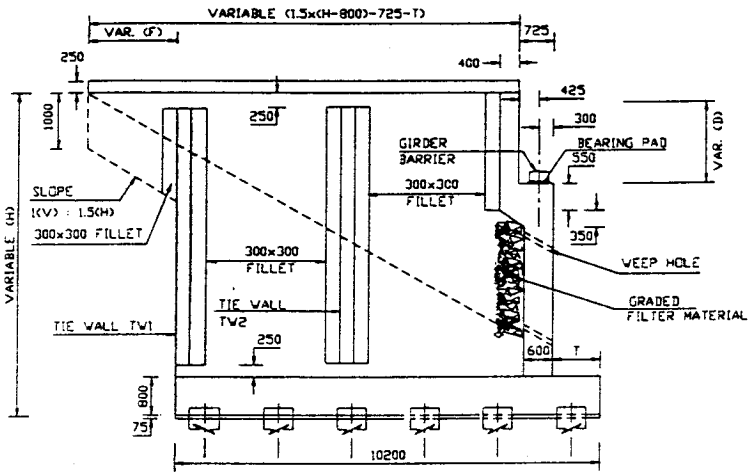
SCALE: 1 : 120

DATE : JUNE 1996

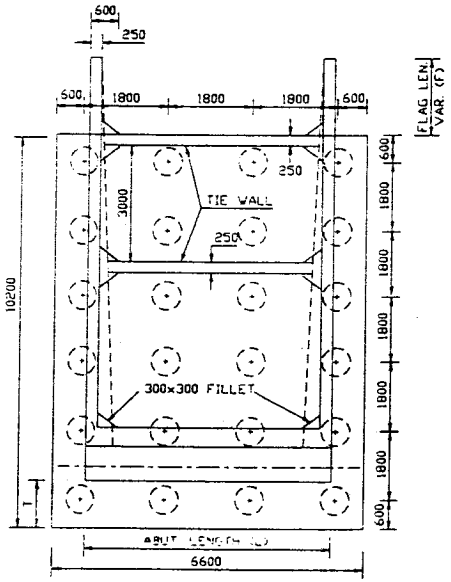
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FRONT ELEVATION OF ABUTMENT WITH PILE CAP



SECTION A-A



PLAN OF ABUTMENT AND FOUNDATION (TYPE: G)

FOUNDATION TYPE: G

ABUTMENT. HT. (H) mm	FLAG LENGTH (F) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST. OF TOE (T) mm	DEPTH OF GIRDER (D) mm
9500 / 10000	2850 / 3600	IB	4410	2500	2000	1400, 1600, 1800, 2200, 2400 & 2600
9500 / 10000	2850 / 3600	IIB	5080	3170	2000	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

ABUTMENT FOUNDATION AND PILE
(DECK TYPE: IB & IIB ; FOUNDATION TYPE: G)
ABUTMENT HEIGHT: 9.5 m & 10.0 m

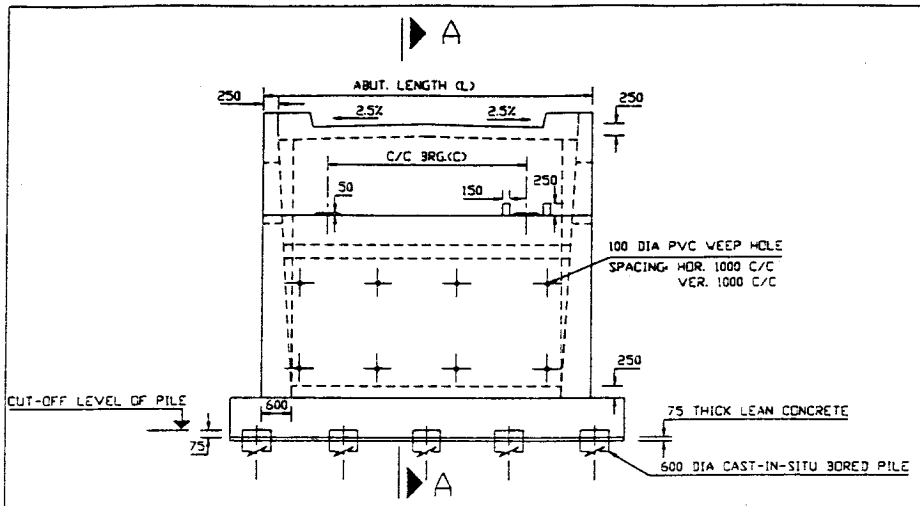
CONCRETE OUTLINE DETAILS

DWG. NO. : AF-10G-01

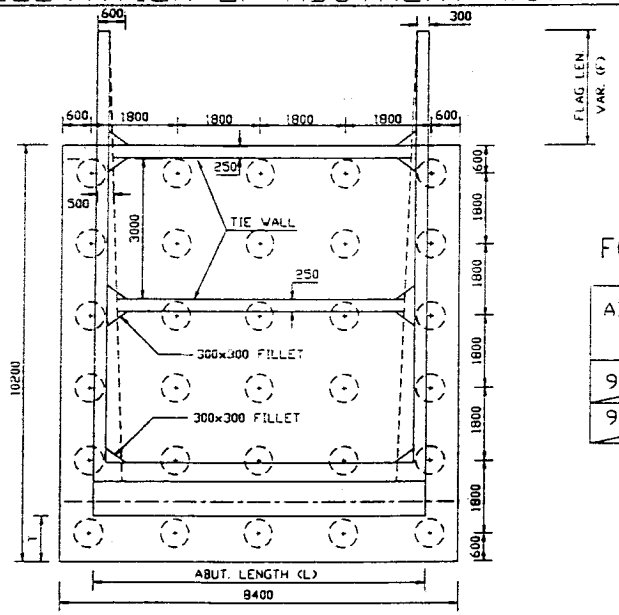
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DATE : JUNE 1996

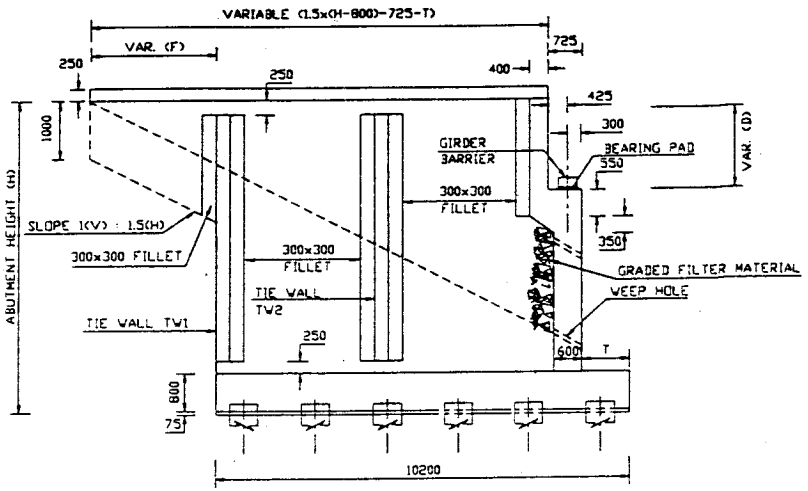
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FRONT ELEVATION OF ABUTMENT WITH PILE CAP



PLAN OF ABUTMENT AND FOUNDATION (TYPE: I)



SECTION A-A

FOUNDATION TYPE: I

ABUTMENT. HT. (H) mm	FLAG LENGTH (F) mm	DECK TYPE	ABUTMENT LENGTH (L) mm	C/C BRG. (C) mm	DIST. OF TOE (T) mm	DEPTH OF GIRDER (D) mm
9500 / 10000	2850 / 3600	IA	5210	2500	2000	1400, 1600, 1800, 2200, 2400 & 2600
9500 / 10000	2850 / 3600	IIA	5880	3170	2000	

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

ABUTMENT FOUNDATION AND PILE

(DECK TYPE: IA & IIA ; FOUNDATION TYPE: I)
ABUTMENT HEIGHT: 9.5 m AND 10.0 m

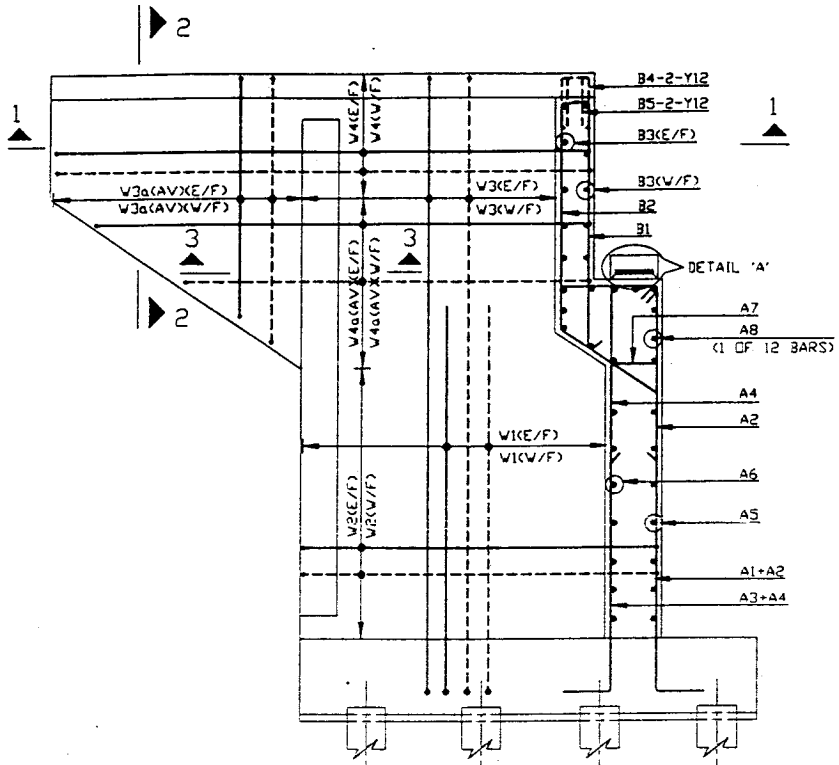
CONCRETE OUTLINE DETAILS

DWG. NO. : AF-101-01

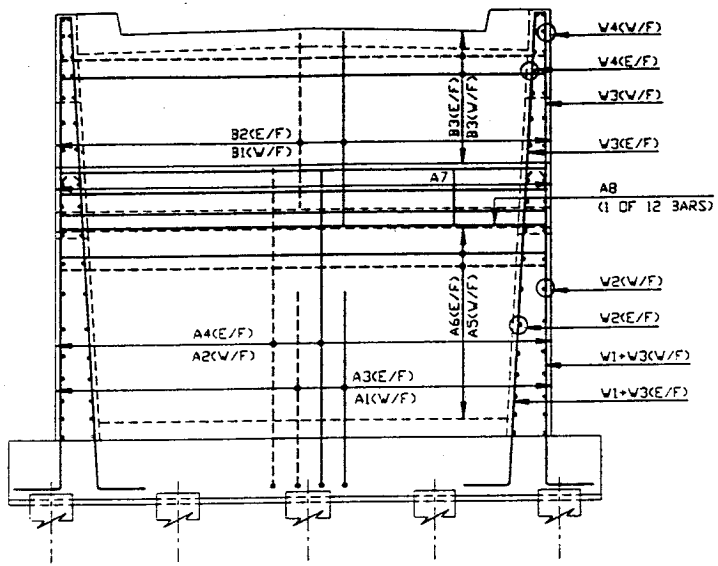
SCALE : 1 : 120

DATE : JUNE 1996

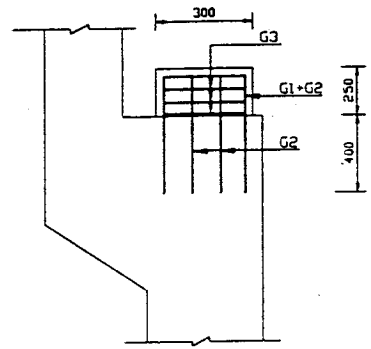
Web Copy



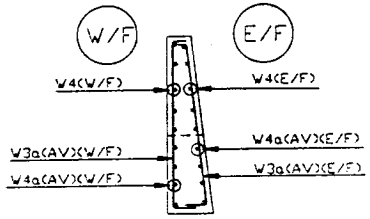
ABUTMENT-WINGWALL & PILE CAP (SEC. 1-1)
(SCALE: NTS)



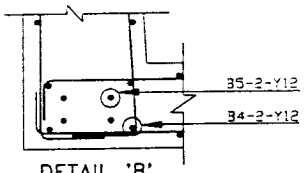
SECTIONAL ELEVATION OF ABUTMENT
(SCALE: NTS)



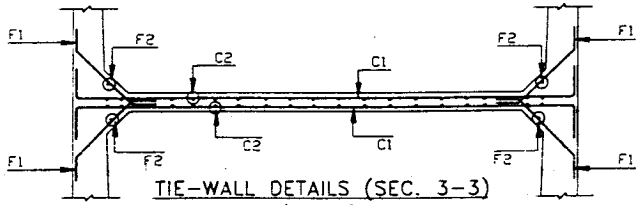
DETAIL 'A'
(SCALE 1:30)



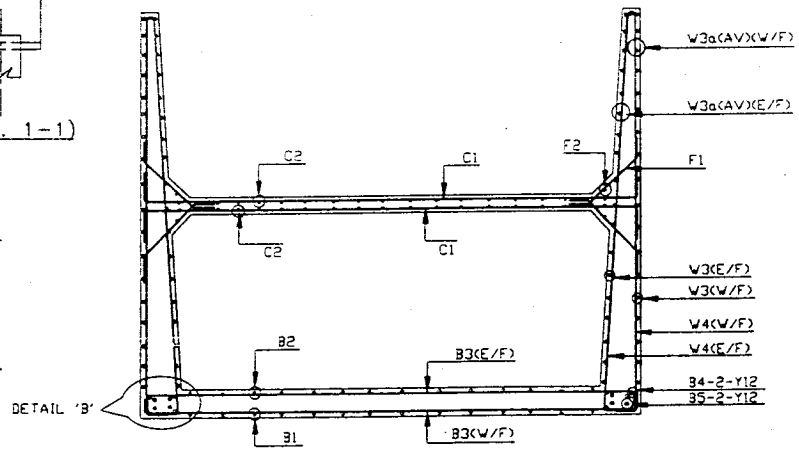
SEC. 2-2
(SCALE 1:50)



DETAIL 'B'
(SCALE 1:30)



TIE-WALL DETAILS (SEC. 3-3)
(SCALE: NTS)



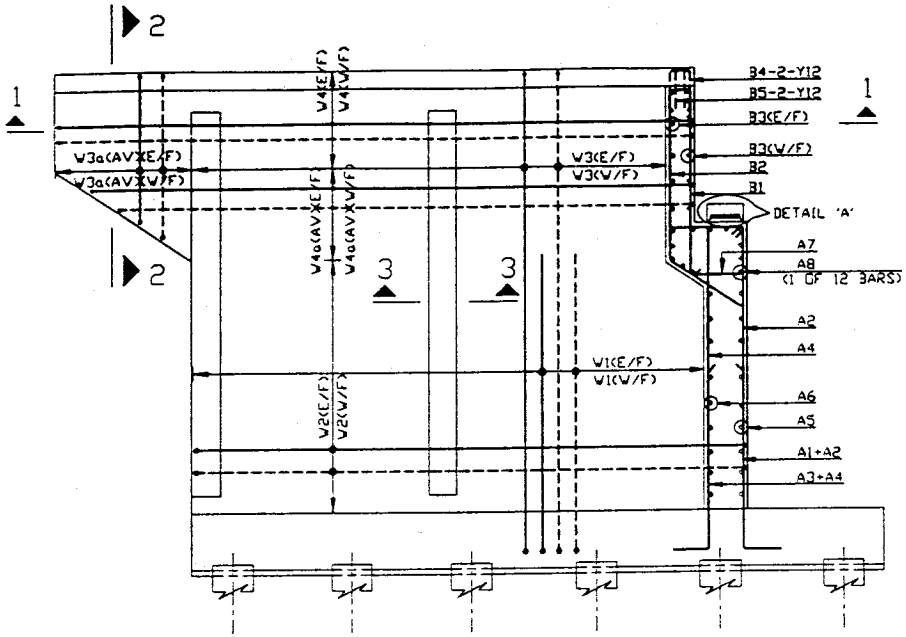
SECTIONAL PLAN (SEC. 1-1)
(SCALE: NTS)

NOTES:

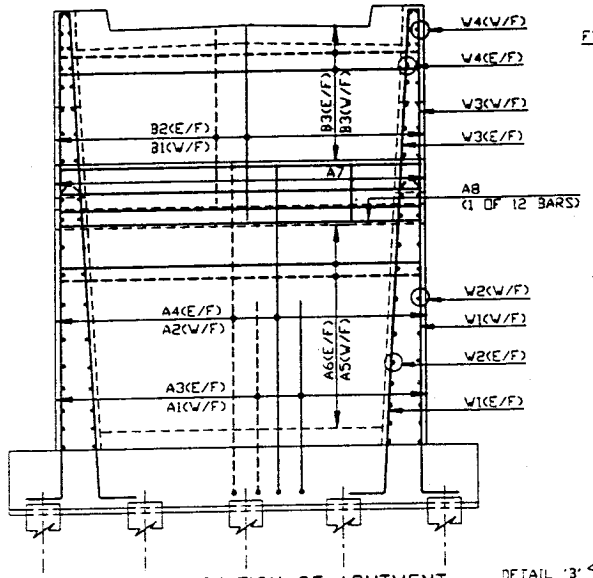
1. THE ABUTMENT-WING WALL DETAILS SHOWN ARE TYPICAL FOR ALL DECK AND GIRDER TYPES.
2. FOR BAR BENDING SCHEDULE REFER TO DWG. NO. A-6A-01 TO A-101-06
3. E/F INDICATES EARTH FACE & W/F INDICATES WATER FACE.
4. ——— INDICATES E/F REINF.
   - - - - - - - - INDICATES W/F REINF.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT-WING WALL ABUTMENT HEIGHT: 6.0 m TO 8.0 m NONPRESTRESSED REINF. DETAILS SCALE: AS SHOWN	DWG. NO. : AF-0-02 DATE : JUNE 1996

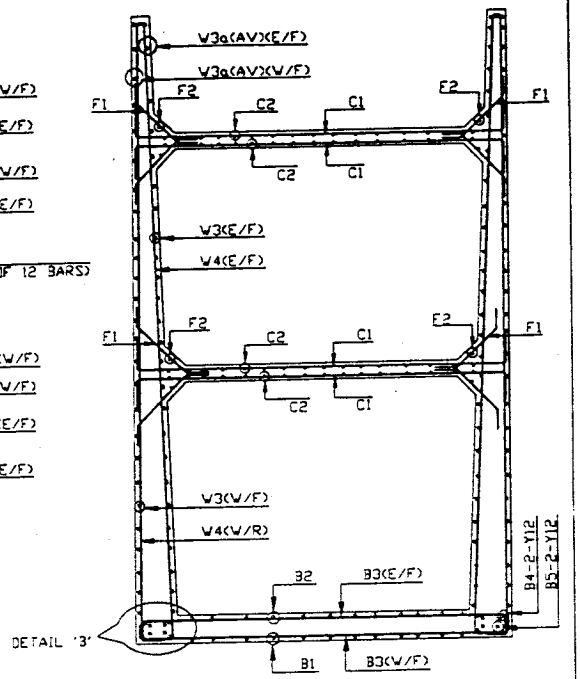
Web Copy



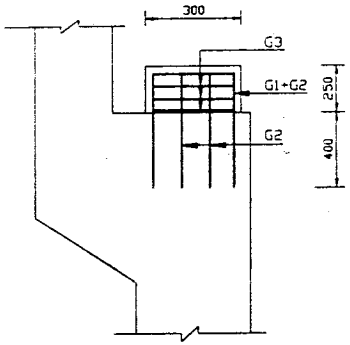
ABUTMENT-WINGWALL & PILE CAP (SEC. 1-1)
(SCALE: NTS)



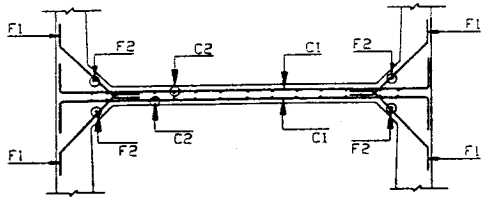
SECTIONAL ELEVATION OF ABUTMENT
(SCALE: NTS)



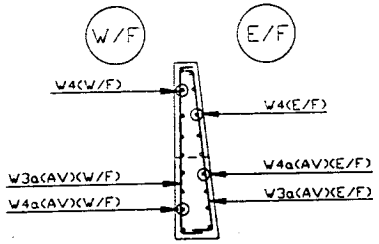
SECTIONAL PLAN (SEC. 1-1)
(SCALE: NTS)



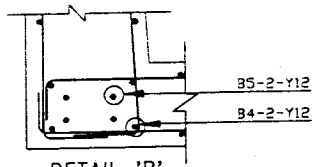
DETAIL 'A'
(SCALE 1:30)



TIE-WALL DETAILS (SEC. 3-3)
(SCALE: NTS)



SEC. 2-2
(SCALE 1:50)



DETAIL 'B'
(SCALE 1:30)

NOTES:

1. THE ABUTMENT-WING WALL DETAILS SHOWN ARE TYPICAL FOR ALL DECK AND GIRDER TYPES.
2. FOR BAR BENDING SCHEDULE REFER TO DWG. NO. A-6A-01 TO A-10I-06
3. E/F INDICATES EARTH FACE & W/F INDICATES WATER FACE.
4. ———— INDICATES E/F REINF.
   - - - - - - - - INDICATES W/F REINF.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	ABUTMENT-WING WALL ABUTMENT HEIGHT: 8.5 m TO 10.0 m NONPRESTRESSED REINF. DETAILS — DWG. NO. : AF-0-02A SCALE: AS SHOWN — DATE : JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IB				A1	Y12	300	02	2829	500	–	–	–	24	12	0.888
					A2	Y12	300	02	4008	500	–	–	–	24	12	0.888
6.00	4.41	4.85	1.50	1.40	A3	Y16	250	02	2829	500	–	–	–	32	16	1.579
	DECK TYPE IIB				A4	Y16	250	02	4008	500	–	–	–	32	16	1.579
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	3250	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	3250	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2133	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2133	150	–	–	24	12	0.888
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	175	05	150	4000	300	–	–	32	16	1.579
					W4a(AV)W/F	Y16	175	05	150	4000	300	–	–	32	16	1.579
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888
	NO. OF TIE–WALL:		1		C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)							
DECK TYPE IB				DECK TYPE IIB			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
3305	30	99.150	88.045	3305	36	118.980	105.654
4484	30	134.520	119.454	4484	36	161.424	143.345
3297	36	118.692	187.415	3297	42	138.474	218.650
4476	36	161.136	254.434	4476	42	187.992	296.839
4862	32	155.584	138.159	–	–	–	–
–	–	–	–	5532	32	177.024	157.197
4846	22	106.612	168.340	–	–	–	–
–	–	–	–	5516	22	121.352	191.615
3450	60	206.998	183.814	3450	68	234.598	208.323
4310	24	103.440	163.332	–	–	–	–
–	–	–	–	4980	24	119.520	188.722
2726	52	141.769	125.891	2726	58	158.127	140.417
3687	52	191.716	302.720	3687	58	213.837	337.649
4646	22	102.212	161.393	–	–	–	–
–	–	–	–	5316	22	116.952	184.667
4662	22	102.564	91.077	–	–	–	–
–	–	–	–	5332	22	117.304	104.166
1252	8	10.016	8.894	1252	8	10.016	8.894
1102	8	8.816	7.829	1102	8	8.816	7.829
4168	48	200.064	315.901	4168	48	200.064	315.901
4176	40	167.040	148.332	4176	40	167.040	148.332
3786	64	242.304	382.598	3786	64	242.304	382.598
3802	56	212.912	189.066	3802	56	212.912	189.066
6586	40	263.440	415.972	6586	40	263.440	415.972
6602	32	211.264	187.602	6602	32	211.264	187.602
2385	64	152.661	135.563	2385	80	190.827	169.454
2385	44	104.955	93.200	2385	80	190.827	169.454
5861	32	187.552	296.145	5861	32	187.552	296.145
5861	32	187.552	296.145	5861	32	187.552	296.145
4386	44	192.984	304.722	4386	44	192.984	304.722
4386	44	192.984	304.722	4386	44	192.984	304.722
1690	264	446.160	274.835	1690	264	446.160	274.835
4600	8	36.800	58.107	4600	8	36.800	58.107
1356	8	10.848	17.129	1356	8	10.848	17.129
1206	8	9.648	15.234	1206	8	9.648	15.234
470	16	7.520	4.632	470	16	7.520	4.632
5262	76	399.912	355.122	–	–	–	–
–	–	–	–	5932	76	450.832	400.339
4852	48	232.896	206.812	4852	56	271.712	241.280
TOTAL WEIGHT (IB):			6002.633	TOTAL WEIGHT (IIB):			6485.636

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY:

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT:

LOCATION:
THANA:
ZILA:

ABUTMENT–WING WALL
DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m
FOUNDATION TYPE: A

BAR BENDING SCHEDULE

DWG. NO.: A–6A–01

DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT.	LENGTH OF ABUT.	WIDTH OF FOUND.	TOE DIST. FROM ABUT.	DEPTH OF GIRDER	BAR MARK	BAR TYPE & DIA.	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS mm							UNIT WT. OF BAR	QUANTITY PER BRIDGE (TWO ABUTMENTS)							
																	DECK TYPE IB				DECK TYPE IIB			
																	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT
m	m	m	m	m		mm	mm		A	B	C	D	E	r	d	Kg/m	mm		m	Kg	mm		m	Kg
	DECK TYPE IB				A1	Y12	300	02	2729	500	–	–	–	24	12	0.888	3205	30	96.150	85.381	3205	36	115.380	102.457
					A2	Y12	300	02	3808	500	–	–	–	24	12	0.888	4284	30	128.520	114.126	4284	36	154.224	136.951
6.00	4.41	4.85	1.50	1.60	A3	Y16	250	02	2729	500	–	–	–	32	16	1.579	3197	36	115.092	181.730	3197	42	134.274	212.019
	DECK TYPE IIB				A4	Y16	250	02	3808	500	–	–	–	32	16	1.579	4276	36	153.936	243.065	4276	42	179.592	283.576
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	28	136.136	120.889	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	28	154.896	137.548
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	20	96.920	153.037	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	20	110.320	174.195
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	52	152.169	135.126	2926	58	169.727	150.718
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	52	202.116	319.142	3887	58	225.437	355.966
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	24	111.504	176.065	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	24	127.584	201.455
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	24	111.888	99.357	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	24	127.968	113.636
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	48	200.064	315.901	4168	48	200.064	315.901
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	40	167.040	148.332	4176	40	167.040	148.332
					W2(E/F)	Y16	150	05	300	3250	300	–	–	32	16	1.579	3786	64	242.304	382.598	3786	64	242.304	382.598
					W2(W/F)	Y12	175	05	300	3250	300	–	–	24	12	0.888	3802	56	212.912	189.066	3802	56	212.912	189.066
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	40	263.440	415.972	6586	40	263.440	415.972
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	32	211.264	187.602	6602	32	211.264	187.602
					W3(AV)E/F	Y12	200	05	150	2133	150	–	–	24	12	0.888	2385	64	152.661	135.563	2385	80	190.827	169.454
					W3(AV)W/F	Y12	300	05	150	2133	150	–	–	24	12	0.888	2385	44	104.955	93.200	2385	80	190.827	169.454
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					W4a(AV)W/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	268	452.920	278.999	1690	268	452.920	278.999
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	76	399.912	355.122	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	76	450.832	400.339
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	48	232.896	206.812	4852	56	271.712	241.280
																	TOTAL WEIGHT (IB):			5997.787	TOTAL WEIGHT (IIB):			6478.120

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY:

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH
ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT:

LOCATION:
THANA:
ZILA:

ABUTMENT–WING WAL
DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.
FOUNDATION TYPE: A

BAR BENDING SCHEDULE

DWG. NO.: A–6A–02

DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2629	500	–	–	–	24	12	0.888	3105	30	93.150	82.717	3105	36	111.780	99.261
					A2	Y12	300	02	3608	500	–	–	–	24	12	0.888	4084	30	122.520	108.798	4084	36	147.024	130.557
6.00	4.41	4.85	1.50	1.80	A3	Y16	250	02	2629	500	–	–	–	32	16	1.579	3097	36	111.492	176.046	3097	42	130.074	205.387
	DECK TYPE IIB				A4	Y16	250	02	3608	500	–	–	–	32	16	1.579	4076	36	146.736	231.696	4076	42	171.192	270.312
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	26	126.412	112.254	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	26	143.832	127.723
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	20	96.920	153.037	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	20	110.320	174.195
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	52	162.569	144.362	3126	58	181.327	161.019
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	52	212.516	335.563	4087	58	237.037	374.282
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	26	120.796	190.737	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	26	138.216	218.243
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	26	121.212	107.636	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	26	138.632	123.105
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	48	200.064	315.901	4168	48	200.064	315.901
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	40	167.040	148.332	4176	40	167.040	148.332
					W2(E/F)	Y16	150	05	300	3250	300	–	–	32	16	1.579	3786	64	242.304	382.598	3786	64	242.304	382.598
					W2(W/F)	Y12	175	05	300	3250	300	–	–	24	12	0.888	3802	56	212.912	189.066	3802	56	212.912	189.066
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	40	263.440	415.972	6586	40	263.440	415.972
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	32	211.264	187.602	6602	32	211.264	187.602
					W3(AV)E/F	Y12	200	05	150	2133	150	–	–	24	12	0.888	2385	64	152.661	135.563	2385	80	190.827	169.454
					W3(AV)W/F	Y12	300	05	150	2133	150	–	–	24	12	0.888	2385	44	104.955	93.200	2385	80	190.827	169.454
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					W4a(AV)W/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	272	459.680	283.163	1690	272	459.680	283.163
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	76	399.912	355.122	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	76	450.832	400.339
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	48	232.896	206.812	4852	56	271.712	241.280
																	TOTAL WEIGHT (IB):			6016.880	TOTAL WEIGHT (IIB):			6497.848

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: A
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6A–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST.. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2429	500	–	–	–	24	12	0.888	2905	30	87.150	77.389	2905	36	104.580	92.867
					A2	Y12	300	02	3208	500	–	–	–	24	12	0.888	3684	30	110.520	98.142	3684	36	132.624	117.770
6.00	4.41	4.85	1.50	2.20	A3	Y16	250	02	2429	500	–	–	–	32	16	1.579	2897	36	104.292	164.677	2897	42	121.674	192.123
	DECK TYPE IIB				A4	Y16	250	02	3208	500	–	–	–	32	16	1.579	3676	36	132.336	208.959	3676	42	154.392	243.785
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	22	106.964	94.984	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	22	121.704	108.073
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	16	77.536	122.429	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	16	88.256	139.356
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	60	211.580	187.883	3526	68	239.791	212.934
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	60	269.211	425.084	4487	68	305.106	481.762
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	36	167.256	264.097	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	36	191.376	302.183
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	36	167.832	149.035	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	36	191.952	170.453
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	48	200.064	315.901	4168	48	200.064	315.901
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	40	167.040	148.332	4176	40	167.040	148.332
					W2(E/F)	Y16	150	05	300	3250	300	–	–	32	16	1.579	3786	64	242.304	382.598	3786	64	242.304	382.598
					W2(W/F)	Y12	175	05	300	3250	300	–	–	24	12	0.888	3802	56	212.912	189.066	3802	56	212.912	189.066
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	40	263.440	415.972	6586	40	263.440	415.972
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	32	211.264	187.602	6602	32	211.264	187.602
					W3(AV)E/F	Y12	200	05	150	2133	150	–	–	24	12	0.888	2385	64	152.661	135.563	2385	80	190.827	169.454
					W3(AV)W/F	Y12	300	05	150	2133	150	–	–	24	12	0.888	2385	44	104.955	93.200	2385	80	190.827	169.454
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					W4a(AV)W/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	284	479.960	295.655	1690	284	479.960	295.655
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	76	399.912	355.122	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	76	450.832	400.339
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	48	232.896	206.812	4852	56	271.712	241.280
																	TOTAL WEIGHT (IB):			6179.206	TOTAL WEIGHT (IIB):			6687.564

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: A BAR BENDING SCHEDULE DWG. NO.: A–6A–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2329	500	–	–	–	24	12	0.888	2805	30	84.150	74.725	2805	36	100.980	89.670
					A2	Y12	300	02	3008	500	–	–	–	24	12	0.888	3484	30	104.520	92.814	3484	36	125.424	111.377
6.00	4.41	4.85	1.50	2.40	A3	Y16	250	02	2329	500	–	–	–	32	16	1.579	2797	36	100.692	158.993	2797	42	117.474	185.491
	DECK TYPE IIB				A4	Y16	250	02	3008	500	–	–	–	32	16	1.579	3476	36	125.136	197.590	3476	42	145.992	230.521
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	20	97.240	86.349	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	20	110.640	98.248
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	14	67.844	107.126	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	14	77.224	121.937
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	60	223.580	198.539	3726	68	253.391	225.011
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	60	281.211	444.032	4687	68	318.706	503.237
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	38	176.548	278.769	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	38	202.008	318.971
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	38	177.156	157.315	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	38	202.616	179.923
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	48	200.064	315.901	4168	48	200.064	315.901
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	40	167.040	148.332	4176	40	167.040	148.332
					W2(E/F)	Y16	150	05	300	3250	300	–	–	32	16	1.579	3786	64	242.304	382.598	3786	64	242.304	382.598
					W2(W/F)	Y12	175	05	300	3250	300	–	–	24	12	0.888	3802	56	212.912	189.066	3802	56	212.912	189.066
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	40	263.440	415.972	6586	40	263.440	415.972
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	32	211.264	187.602	6602	32	211.264	187.602
					W3(AV)E/F	Y12	200	05	150	2133	150	–	–	24	12	0.888	2385	64	152.661	135.563	2385	80	190.827	169.454
					W3(AV)W/F	Y12	300	05	150	2133	150	–	–	24	12	0.888	2385	44	104.955	93.200	2385	80	190.827	169.454
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					W4a(AV)W/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	288	486.720	299.820	1690	288	486.720	299.820
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	76	399.912	355.122	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	76	450.832	400.339
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	48	232.896	206.812	4852	56	271.712	241.280
																	TOTAL WEIGHT (IB):			6186.942	TOTAL WEIGHT (IIB):			6694.806

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: A
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6A–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2229	500	–	–	–	24	12	0.888	2705	30	81.150	72.061	2705	36	97.380	86.473
					A2	Y12	300	02	2808	500	–	–	–	24	12	0.888	3284	30	98.520	87.486	3284	36	118.224	104.983
6.00	4.41	4.85	1.50	2.60	A3	Y16	250	02	2229	500	–	–	–	32	16	1.579	2697	36	97.092	153.308	2697	42	113.274	178.860
	DECK TYPE IIB				A4	Y16	250	02	2808	500	–	–	–	32	16	1.579	3276	36	117.936	186.221	3276	42	137.592	217.258
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	18	87.516	77.714	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	18	99.576	88.423
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	12	58.152	91.822	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	12	66.192	104.517
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	48	200.064	315.901	4168	48	200.064	315.901
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	40	167.040	148.332	4176	40	167.040	148.332
					W2(E/F)	Y16	150	05	300	3250	300	–	–	32	16	1.579	3786	64	242.304	382.598	3786	64	242.304	382.598
					W2(W/F)	Y12	175	05	300	3250	300	–	–	24	12	0.888	3802	56	212.912	189.066	3802	56	212.912	189.066
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	40	263.440	415.972	6586	40	263.440	415.972
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	32	211.264	187.602	6602	32	211.264	187.602
					W3(AV)E/F	Y12	200	05	150	2133	150	–	–	24	12	0.888	2385	64	152.661	135.563	2385	80	190.827	169.454
					W3(AV)W/F	Y12	300	05	150	2133	150	–	–	24	12	0.888	2385	44	104.955	93.200	2385	80	190.827	169.454
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					W4a(AV)W/F	Y16	175	05	150	4000	300	–	–	32	16	1.579	4386	44	192.984	304.722	4386	44	192.984	304.722
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	296	500.240	308.148	1690	296	500.240	308.148
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	76	399.912	355.122	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	76	450.832	400.339
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	48	232.896	206.812	4852	56	271.712	241.280
																	TOTAL WEIGHT (IB):			6198.843	TOTAL WEIGHT (IIB):			6706.213

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: A BAR BENDING SCHEDULE DWG. NO.: A–6A–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IA				A1	Y12	300	02	2829	500	–	–	–	24	12	0.888
					A2	Y12	300	02	4008	500	–	–	–	24	12	0.888
6.00	5.21	5.25	1.50	1.40	A3	Y16	250	02	2829	500	–	–	–	32	16	1.579
	DECK TYPE IIA				A4	Y16	250	02	4008	500	–	–	–	32	16	1.579
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	3650	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	3650	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	175	05	150	4200	300	–	–	32	16	1.579
					W4a(AV)W/F	Y16	175	05	150	4200	300	–	–	32	16	1.579
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888
	NO. OF TIE–WALL:		1		C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)							
DECK TYPE IA				DECK TYPE IIA			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
3305	36	118.980	105.654	3305	40	132.200	117.394
4484	36	161.424	143.345	4484	40	179.360	159.272
3297	42	138.474	218.650	3297	48	158.256	249.886
4476	42	187.992	296.839	4476	48	214.848	339.245
–	–	–	–	–	–	–	–
5662	32	181.184	160.891	6332	32	202.624	179.930
–	–	–	–	–	–	–	–
5646	22	124.212	196.131	6316	22	138.952	219.405
–	–	–	–	3450	80	275.998	245.086
3450	70	241.498	214.450	–	–	–	–
5110	24	122.640	193.649	5780	24	138.720	219.039
–	–	–	–	2726	68	185.391	164.627
2726	60	163.580	145.259	3687	68	250.706	395.865
3687	60	221.211	349.292	–	–	–	–
5446	22	119.812	189.183	6116	22	134.552	212.458
–	–	–	–	–	–	–	–
5462	22	120.164	106.706	6132	22	134.904	119.795
–	–	–	–	1252	8	10.016	8.894
1252	8	10.016	8.894	1102	8	8.816	7.829
1102	8	8.816	7.829	4168	52	216.736	342.226
4168	52	216.736	342.226	4176	44	183.744	163.165
4176	44	183.744	163.165	4186	72	301.392	475.898
4186	72	301.392	475.898	4202	60	252.120	223.883
4202	60	252.120	223.883	6586	48	316.128	499.166
6586	48	316.128	499.166	6602	40	264.080	234.503
6602	40	264.080	234.503	2252	72	162.144	143.984
2252	56	126.112	111.987	2252	72	162.144	143.984
2252	36	81.072	71.992	5861	32	187.552	296.145
5861	32	187.552	296.145	5861	32	187.552	296.145
5861	32	187.552	296.145	4586	40	183.440	289.652
4586	40	183.440	289.652	4586	40	183.440	289.652
4586	40	183.440	289.652	1690	260	439.400	270.670
1690	260	439.400	270.670	4600	8	36.800	58.107
4600	8	36.800	58.107	1356	8	10.848	17.129
1356	8	10.848	17.129	1206	8	9.648	15.234
1206	8	9.648	15.234	470	16	7.520	4.632
470	16	7.520	4.632	–	–	–	–
6062	76	460.712	409.112	6732	76	511.632	454.329
–	–	–	–	4852	68	329.936	292.983
4852	60	291.120	258.515				
TOTAL WEIGHT (IA):			6664.585	TOTAL WEIGHT (IIA):			7150.210

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: B
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6B–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2729	500	–	–	–	24	12	0.888	3205	36	115.380	102.457	3205	40	128.200	113.842
					A2	Y12	300	02	3808	500	–	–	–	24	12	0.888	4284	36	154.224	136.951	4284	40	171.360	152.168
6.00	5.21	5.25	1.50	1.60	A3	Y16	250	02	2729	500	–	–	–	32	16	1.579	3197	42	134.274	212.019	3197	48	153.456	242.307
	DECK TYPE IIA				A4	Y16	250	02	3808	500	–	–	–	32	16	1.579	4276	42	179.592	283.576	4276	48	205.248	324.087
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	28	158.536	140.780	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	28	177.296	157.439
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	20	112.920	178.301	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	20	126.320	199.459
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	52	216.736	342.226	4168	52	216.736	342.226
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	44	183.744	163.165	4176	44	183.744	163.165
					W2(E/F)	Y16	150	05	300	3650	300	–	–	32	16	1.579	4186	72	301.392	475.898	4186	72	301.392	475.898
					W2(W/F)	Y12	175	05	300	3650	300	–	–	24	12	0.888	4202	60	252.120	223.883	4202	60	252.120	223.883
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	48	316.128	499.166	6586	48	316.128	499.166
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	40	264.080	234.503	6602	40	264.080	234.503
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					W4a(AV)W/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	264	446.160	274.835	1690	264	446.160	274.835
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	76	460.712	409.112	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	76	511.632	454.329
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	60	291.120	258.515	4852	68	329.936	292.983
																	TOTAL WEIGHT (IA):			6657.825	TOTAL WEIGHT (IIA):			7142.299

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: B
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6B–02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT.	LENGTH OF ABUT.	WIDTH OF FOUND.	TOE DIST. FROM ABUT.	DEPTH OF GIRDER	BAR MARK	BAR TYPE & DIA.	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS mm							UNIT WT. OF BAR	QUANTITY PER BRIDGE (TWO ABUTMENTS)							
																	DECK TYPE IA				DECK TYPE IIA			
																	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT
m	m	m	m	m		mm	mm		A	B	C	D	E	r	d	Kg/m	mm		m	Kg	mm		m	Kg
	DECK TYPE IA				A1	Y12	300	02	2629	500	–	–	–	24	12	0.888	3105	36	111.780	99.261	3105	40	124.200	110.290
					A2	Y12	300	02	3608	500	–	–	–	24	12	0.888	4084	36	147.024	130.557	4084	40	163.360	145.064
6.00	5.21	5.25	1.50	1.80	A3	Y16	250	02	2629	500	–	–	–	32	16	1.579	3097	42	130.074	205.387	3097	48	148.656	234.728
	DECK TYPE IIA				A4	Y16	250	02	3608	500	–	–	–	32	16	1.579	4076	42	171.192	270.312	4076	48	195.648	308.928
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	26	147.212	130.724	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	26	164.632	146.193
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	20	112.920	178.301	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	20	126.320	199.459
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	60	187.580	166.571	3126	68	212.591	188.781
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	60	245.211	387.188	4087	68	277.906	438.813
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	26	141.596	223.580	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	26	159.016	251.086
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	26	142.012	126.107	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	26	159.432	141.576
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	52	216.736	342.226	4168	52	216.736	342.226
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	44	183.744	163.165	4176	44	183.744	163.165
					W2(E/F)	Y16	150	05	300	3650	300	–	–	32	16	1.579	4186	72	301.392	475.898	4186	72	301.392	475.898
					W2(W/F)	Y12	175	05	300	3650	300	–	–	24	12	0.888	4202	60	252.120	223.883	4202	60	252.120	223.883
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	48	316.128	499.166	6586	48	316.128	499.166
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	40	264.080	234.503	6602	40	264.080	234.503
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					W4a(AV)W/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	268	452.920	278.999	1690	268	452.920	278.999
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	76	460.712	409.112	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	76	511.632	454.329
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	60	291.120	258.515	4852	68	329.936	292.983
																	TOTAL WEIGHT (IA):			6678.950	TOTAL WEIGHT (IIA):			7165.580

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: B
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–68–03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2429	500	–	–	–	24	12	0.888	2905	36	104.580	92.867	2905	40	116.200	103.186
					A2	Y12	300	02	3208	500	–	–	–	24	12	0.888	3684	36	132.624	117.770	3684	40	147.360	130.856
6.00	5.21	5.25	1.50	2.20	A3	Y16	250	02	2429	500	–	–	–	32	16	1.579	2897	42	121.674	192.123	2897	48	139.056	219.569
	DECK TYPE IIA				A4	Y16	250	02	3208	500	–	–	–	32	16	1.579	3676	42	154.392	243.785	3676	48	176.448	278.611
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	22	124.564	110.613	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	22	139.304	123.702
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	16	90.336	142.641	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	16	101.056	159.567
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.080	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	52	216.736	342.226	4168	52	216.736	342.226
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	44	183.744	163.165	4176	44	183.744	163.165
					W2(E/F)	Y16	150	05	300	3650	300	–	–	32	16	1.579	4186	72	301.392	475.898	4186	72	301.392	475.898
					W2(W/F)	Y12	175	05	300	3650	300	–	–	24	12	0.888	4202	60	252.120	223.883	4202	60	252.120	223.883
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	48	316.128	499.166	6586	48	316.128	499.166
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	40	264.080	234.503	6602	40	264.080	234.503
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					W4a(AV)W/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	280	473.200	291.491	1690	280	473.200	291.491
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	76	460.712	409.112	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	76	511.632	454.329
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	60	291.120	258.515	4852	68	329.936	292.983
																	TOTAL WEIGHT (IA):			6872.564	TOTAL WEIGHT (IIA):			7389.622

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: B
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6B–04
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2329	500	–	–	–	24	12	0.888	2805	36	100.980	89.670	2805	40	112.200	99.634
					A2	Y12	300	02	3008	500	–	–	–	24	12	0.888	3484	36	125.424	111.377	3484	40	139.360	123.752
6.00	5.21	5.25	1.50	2.40	A3	Y16	250	02	2329	500	–	–	–	32	16	1.579	2797	42	117.474	185.491	2797	48	134.256	211.990
	DECK TYPE IIA				A4	Y16	250	02	3008	500	–	–	–	32	16	1.579	3476	42	145.992	230.521	3476	48	166.848	263.453
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	20	113.240	100.557	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	20	126.640	112.456
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	14	79.044	124.810	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	14	88.424	139.621
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	70	260.843	231.629	3726	80	298.107	264.719
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	70	328.080	518.038	4687	80	374.948	592.043
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	38	206.948	326.771	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	38	232.408	366.972
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	38	207.556	184.310	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	38	233.016	206.918
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	52	216.736	342.226	4168	52	216.736	342.226
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	44	183.744	163.165	4176	44	183.744	163.165
					W2(E/F)	Y16	150	05	300	3650	300	–	–	32	16	1.579	4186	72	301.392	475.898	4186	72	301.392	475.898
					W2(W/F)	Y12	175	05	300	3650	300	–	–	24	12	0.888	4202	60	252.120	223.883	4202	60	252.120	223.883
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	48	316.128	499.166	6586	48	316.128	499.166
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	40	264.080	234.503	6602	40	264.080	234.503
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					W4a(AV)W/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	284	479.960	295.655	1690	284	479.960	295.655
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	76	460.712	409.112	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	76	511.632	454.329
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	60	291.120	258.515	4852	68	329.936	292.983
																	TOTAL WEIGHT (IA):			6880.793	TOTAL WEIGHT (IIA):			7398.878

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: B
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–68–05
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2229	500	–	–	–	24	12	0.888	2705	36	97.380	86.473	2705	40	108.200	96.082
					A2	Y12	300	02	2808	500	–	–	–	24	12	0.888	3284	36	118.224	104.983	3284	40	131.360	116.648
6.00	5.21	5.25	1.50	2.60	A3	Y16	250	02	2229	500	–	–	–	32	16	1.579	2697	42	113.274	178.860	2697	48	129.456	204.411
	DECK TYPE IIA				A4	Y16	250	02	2808	500	–	–	–	32	16	1.579	3276	42	137.592	217.258	3276	48	157.248	248.295
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	18	101.916	90.501	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	18	113.976	101.211
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	12	67.752	106.980	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	12	75.792	119.676
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	70	274.843	244.061	3926	80	314.107	278.927
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	70	342.080	540.144	4887	80	390.948	617.307
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	40	217.840	343.969	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	40	244.640	386.287
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	40	218.480	194.010	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	40	245.280	217.809
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3700	500	–	–	–	32	16	1.579	4168	52	216.736	342.226	4168	52	216.736	342.226
					W1(W/F)	Y12	300	02	3700	500	–	–	–	24	12	0.888	4176	44	183.744	163.165	4176	44	183.744	163.165
					W2(E/F)	Y16	150	05	300	3650	300	–	–	32	16	1.579	4186	72	301.392	475.898	4186	72	301.392	475.898
					W2(W/F)	Y12	175	05	300	3650	300	–	–	24	12	0.888	4202	60	252.120	223.883	4202	60	252.120	223.883
					W3(E/F)	Y16	250	05	150	6000	500	–	–	32	16	1.579	6586	48	316.128	499.166	6586	48	316.128	499.166
					W3(W/F)	Y12	300	05	150	6000	500	–	–	24	12	0.888	6602	40	264.080	234.503	6602	40	264.080	234.503
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4(W/F)	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	32	187.552	296.145	5861	32	187.552	296.145
					W4a(AV)E/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					W4a(AV)W/F	Y16	175	05	150	4200	300	–	–	32	16	1.579	4586	40	183.440	289.652	4586	40	183.440	289.652
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	292	493.480	303.984	1690	292	493.480	303.984
					F2(AV)	Y16	–	01	4600	–	–	–	–	32	16	1.579	4600	8	36.800	58.107	4600	8	36.800	58.107
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	76	460.712	409.112	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	76	511.632	454.329
					C2	Y12	300	05	150	4600	150	–	–	24	12	0.888	4852	60	291.120	258.515	4852	68	329.936	292.983
																	TOTAL WEIGHT (IA):			6893.187	TOTAL WEIGHT (IIA):			7412.297

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: B
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6B–06
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3079	500	–	–	–	24	12	0.888	3555	30	106.650	94.705	3555	36	127.980	113.646
					A2	Y12	300	02	4508	500	–	–	–	24	12	0.888	4984	30	149.520	132.774	4984	36	179.424	159.329
6.50	4.41	6.00	1.50	1.40	A3	Y16	250	02	3079	500	–	–	–	32	16	1.579	3547	36	127.692	201.626	3547	42	148.974	235.230
	DECK TYPE IIB				A4	Y16	250	02	4508	500	–	–	–	32	16	1.579	4976	36	179.136	282.856	4976	42	208.992	329.998
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	36	175.032	155.428	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	36	199.152	176.847
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	26	125.996	198.948	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	26	143.416	226.454
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.952	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	64	282.752	446.465	4418	64	282.752	446.465
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	56	247.856	220.096	4426	56	247.856	220.096
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	60	425.160	671.328	7086	60	425.160	671.328
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	48	340.896	302.716	7102	48	340.896	302.716
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					W4a(AV)W/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	272	459.680	283.163	1690	272	459.680	283.163
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	84	442.008	392.503	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	84	498.288	442.480
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	48	256.896	228.124	5352	56	299.712	236.144
																	TOTAL WEIGHT (IB):			7254.506	TOTAL WEIGHT (IIB):			7757.3..

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: C BAR BENDING SCHEDULE DWG. NO.: A–6.5C–01 DATE: JUNE 1996

Web Copy

BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT.	LENGTH OF ABUT.	WIDTH OF FOUND..	TOE DIST. FROM ABUT.	DEPTH OF GIRDER	BAR MARK	BAR TYPE & DIA.	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS mm							UNIT WT. OF BAR	QUANTITY PER BRIDGE (TWO ABUTMENTS)							
																	DECK TYPE IB				DECK TYPE IIB			
									A	B	C	D	E	r	d		CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT
m	m	m	m	m		mm	mm									Kg/m	mm		m	Kg	mm		m	Kg
	DECK TYPE IB				A1	Y12	300	02	2979	500	–	–	–	24	12	0.888	3455	30	103.650	92.041	3455	36	124.380	110.449
					A2	Y12	300	02	4308	500	–	–	–	24	12	0.888	4784	30	143.520	127.446	4784	36	172.224	152.935
6.50	4.41	6.00	1.50	1.60	A3	Y16	250	02	2979	500	–	–	–	32	16	1.579	3447	36	124.092	195.941	3447	42	144.774	228.598
	DECK TYPE IIB				A4	Y16	250	02	4308	500	–	–	–	32	16	1.579	4776	36	171.936	271.487	4776	42	200.592	316.735
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	34	165.308	146.794	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	34	188.088	167.022
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	24	116.304	183.644	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	24	132.384	209.034
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	52	152.169	135.126	2926	58	169.727	150.718
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	52	202.116	319.142	3887	58	225.437	355.966
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	24	111.504	176.065	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	24	127.584	201.455
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	24	111.888	99.357	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	24	127.968	113.636
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	64	282.752	446.465	4418	64	282.752	446.465
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	56	247.856	220.096	4426	56	247.856	220.096
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	60	425.160	671.328	7086	60	425.160	671.328
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	48	340.896	302.716	7102	48	340.896	302.716
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					W4a(AV)W/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	276	466.440	287.327	1690	276	466.440	287.327
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	84	442.008	392.503	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	84	498.288	442.480
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	48	256.896	228.124	5352	56	299.712	266.144
																	TOTAL WEIGHT (IB):			7258.295	TOTAL WEIGHT (IIB):			7759.685

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: C
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6.5C–02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2879	500	–	–	–	24	12	0.888	3355	30	100.650	89.377	3355	36	120.780	107.253
					A2	Y12	300	02	4108	500	–	–	–	24	12	0.888	4584	30	137.520	122.118	4584	36	165.024	146.541
6.50	4.41	6.00	1.50	1.80	A3	Y16	250	02	2879	500	–	–	–	32	16	1.579	3347	36	120.492	190.257	3347	42	140.574	221.966
	DECK TYPE IIB				A4	Y16	250	02	4108	500	–	–	–	32	16	1.579	4576	36	164.736	260.118	4576	42	192.192	303.471
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	32	155.584	138.159	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	32	177.024	157.197
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	24	116.304	183.644	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	24	132.384	209.034
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	52	162.569	144.362	3126	58	181.327	161.019
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	52	212.516	335.563	4087	58	237.037	374.282
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	26	120.796	190.737	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	26	138.216	218.243
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	26	121.212	107.636	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	26	138.632	123.105
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	64	282.752	446.465	4418	64	282.752	446.465
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	56	247.856	220.096	4426	56	247.856	220.096
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	60	425.160	671.328	7086	60	425.160	671.328
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	48	340.896	302.716	7102	48	340.896	302.716
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					W4a(AV)W/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	280	473.200	291.491	1690	280	473.200	291.491
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	84	442.008	392.503	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	84	498.288	442.480
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	48	256.896	228.124	5352	56	299.712	266.144
																	TOTAL WEIGHT (IB):			7277.387	TOTAL WEIGHT (IIB):			7779.414

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: C
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6.5C–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2679	500	–	–	–	24	12	0.888	3155	30	94.650	84.049	3155	36	113.580	100.859
					A2	Y12	300	02	3708	500	–	–	–	24	12	0.888	4184	30	125.520	111.462	4184	36	150.624	133.754
6.50	4.41	6.00	1.50	2.20	A3	Y16	250	02	2679	500	–	–	–	32	16	1.579	3147	36	113.292	178.888	3147	42	132.174	208.703
	DECK TYPE IIB				A4	Y16	250	02	3708	500	–	–	–	32	16	1.579	4176	36	150.336	237.381	4176	42	175.392	276.944
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	28	136.136	120.889	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	28	154.896	137.548
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	20	96.920	153.037	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	20	110.320	174.195
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	60	211.580	187.883	3526	68	239.791	212.934
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	60	269.211	425.084	4487	68	305.106	481.762
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	36	167.256	264.097	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	36	191.376	302.183
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	36	167.832	149.035	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	36	191.952	170.453
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	64	282.752	446.465	4418	64	282.752	446.465
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	56	247.856	220.096	4426	56	247.856	220.096
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	60	425.160	671.328	7086	60	425.160	671.328
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	48	340.896	302.716	7102	48	340.896	302.716
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					W4a(AV)W/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	292	493.480	303.984	1690	292	493.480	303.984
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	84	442.008	392.503	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	84	498.288	442.480
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	48	256.896	228.124	5352	56	299.712	266.144
																	TOTAL WEIGHT (IB):			7439.714	TOTAL WEIGHT (IIB):			7969.129

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: C
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6.5C–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2579	500	–	–	–	24	12	0.888	3055	30	91.650	81.385	3055	36	109.980	97.662
					A2	Y12	300	02	3508	500	–	–	–	24	12	0.888	3984	30	119.520	106.134	3984	36	143.424	127.361
6.50	4.41	6.00	1.50	2.40	A3	Y16	250	02	2579	500	–	–	–	32	16	1.579	3047	36	109.692	173.204	3047	42	127.974	202.071
	DECK TYPE IIB				A4	Y16	250	02	3508	500	–	–	–	32	16	1.579	3976	36	143.136	226.012	3976	42	166.992	263.680
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	26	126.412	112.254	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	26	143.832	127.723
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	18	87.228	137.733	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	18	99.288	156.776
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	60	223.580	198.539	3726	68	253.391	225.011
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	60	281.211	444.032	4687	68	318.706	503.237
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	38	176.548	278.769	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	38	202.008	318.971
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	38	177.156	157.315	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	38	202.616	179.923
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	64	282.752	446.465	4418	64	282.752	446.465
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	56	247.856	220.096	4426	56	247.856	220.096
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	60	425.160	671.328	7086	60	425.160	671.328
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	48	340.896	302.716	7102	48	340.896	302.716
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					W4a(AV)W/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	296	500.240	308.148	1690	296	500.240	308.148
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(iB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	84	442.008	392.503	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	84	498.288	442.480
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	48	256.896	228.124	5352	56	299.712	266.144
																	TOTAL WEIGHT (IB):			7447.450	TOTAL WEIGHT (IIB):			7976.372

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: C BAR BENDING SCHEDULE DWG. NO.: A–6.5C–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2479	500	–	–	–	24	12	0.888	2955	30	88.650	78.721	2955	36	106.380	94.465
					A2	Y12	300	02	3308	500	–	–	–	24	12	0.888	3784	30	113.520	100.806	3784	36	136.224	120.967
6.50	4.41	6.00	1.50	2.60	A3	Y16	250	02	2479	500	–	–	–	32	16	1.579	2947	36	106.092	167.519	2947	42	123.774	195.439
	DECK TYPE IIB				A4	Y16	250	02	3308	500	–	–	–	32	16	1.579	3776	36	135.936	214.643	3776	42	158.592	250.417
	5.08				A5(IB)	Y12	175	05	300	4310	300	–	–	24	12	0.888	4862	24	116.688	103.619	–	–	–	–
					A5(IIB)	Y12	175	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	24	132.768	117.898
					A6(IB)	Y16	250	05	300	4310	300	–	–	32	16	1.579	4846	16	77.536	122.429	–	–	–	–
					A6(IIB)	Y16	250	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	16	88.256	139.356
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	64	282.752	446.465	4418	64	282.752	446.465
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	56	247.856	220.096	4426	56	247.856	220.096
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	60	425.160	671.328	7086	60	425.160	671.328
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	48	340.896	302.716	7102	48	340.896	302.716
					W3(AV)E/F	Y12	200	05	150	2000	150	–	–	24	12	0.888	2252	56	126.112	111.987	2252	72	162.144	143.984
					W3(AV)W/F	Y12	300	05	150	2000	150	–	–	24	12	0.888	2252	36	81.072	71.992	2252	72	162.144	143.984
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					W4a(AV)W/F	Y16	175	05	150	4950	300	–	–	32	16	1.579	5336	40	213.440	337.022	5336	40	213.440	337.022
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	304	513.760	316.476	1690	304	513.760	316.475
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y12	250	05	500	4310	500	–	–	24	12	0.888	5262	84	442.008	392.503	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y12	250	05	500	4980	500	–	–	24	12	0.888	–	–	–	–	5932	84	498.288	442.480
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	48	256.896	228.124	5352	56	299.712	266.144
																	TOTAL WEIGHT (IB):			7459.350	TOTAL WEIGHT (IIB):			7987.779

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: C
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	BAR BENDING SCHEDULE DWG. NO.: A–6.5C–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT.	LENGTH OF ABUT.	WIDTH OF FOUND.	TOE DIST. FROM ABUT.	DEPTH OF GIRDER	BAR MARK	BAR TYPE & DIA.	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS mm							UNIT WT. OF BAR	QUANTITY PER BRIDGE (TWO ABUTMENTS)							
																	DECK TYPE IA				DECK TYPE IIA			
																	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT
m	m	m	m	m		mm	mm		A	B	C	D	E	r	d	Kg/m	mm		m	Kg	mm		m	Kg
	DECK TYPE IA				A1	Y12	300	02	3079	500	–	–	–	24	12	0.888	3555	36	127.980	113.646	3555	40	142.200	126.274
					A2	Y12	300	02	4508	500	–	–	–	24	12	0.888	4984	36	179.424	159.329	4984	40	199.360	177.032
6.50	5.21	7.05	1.50	1.40	A3	Y16	250	02	3079	500	–	–	–	32	16	1.579	3547	42	148.974	235.230	3547	48	170.256	268.834
	DECK TYPE IIA				A4	Y16	250	02	4508	500	–	–	–	32	16	1.579	4976	42	208.992	329.998	4976	48	238.848	377.141
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	36	203.832	181.003	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	36	227.952	202.421
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	26	146.796	231.791	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	26	164.216	259.297
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.865
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	84	371.112	585.986	4418	84	371.112	585.986
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	68	300.968	267.260	4426	68	300.968	267.260
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	76	538.536	850.348	7086	76	538.536	850.348
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	64	454.528	403.621	7102	64	454.528	403.621
					W3(AV)E/F	Y12	200	05	150	1650	150	–	–	24	12	0.888	1902	32	60.864	54.047	1902	44	83.688	74.315
					W3(AV)W/F	Y12	300	05	150	1650	150	–	–	24	12	0.888	1902	24	45.648	40.535	1902	44	83.688	74.315
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					W4a(AV)W/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	252	425.880	262.342	1690	252	425.880	262.342
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	84	509.208	452.177	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	84	565.488	502.153
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	60	321.120	285.155	5352	68	363.936	323.175
																	TOTAL WEIGHT (IA):			8333.463	TOTAL WEIGHT (IIA):			8793.840

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6.5D–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2979	500	–	–	–	24	12	0.888	3455	36	124.380	110.449	3455	40	138.200	122.722
					A2	Y12	300	02	4308	500	–	–	–	24	12	0.888	4784	36	172.224	152.935	4784	40	191.360	169.928
6.50	5.21	7.05	1.50	1.60	A3	Y16	250	02	2979	500	–	–	–	32	16	1.579	3447	42	144.774	228.598	3447	48	165.456	261.255
	DECK TYPE IIA				A4	Y16	250	02	4308	500	–	–	–	32	16	1.579	4776	42	200.592	316.736	4776	48	229.248	361.963
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	34	192.508	170.947	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	34	215.288	191.176
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	24	135.504	213.961	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	24	151.584	239.351
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	84	371.112	585.986	4418	84	371.112	585.986
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	68	300.968	267.260	4426	68	300.968	267.260
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	76	538.536	850.348	7086	76	538.536	850.348
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	64	454.528	403.621	7102	64	454.528	403.621
					W3(AV)E/F	Y12	200	05	150	1650	150	–	–	24	12	0.888	1902	32	60.864	54.047	1902	44	83.688	74.315
					W3(AV)W/F	Y12	300	05	150	1650	150	–	–	24	12	0.888	1902	24	45.648	40.535	1902	44	83.688	74.315
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					W4a(AV)W/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	256	432.640	266.506	1690	256	432.640	266.506
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	84	509.208	452.177	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	84	565.488	502.153
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	60	321.120	285.155	5352	68	363.936	323.175
																	TOTAL WEIGHT (IA):			8336.759	TOTAL WEIGHT (IIA):			8797.175

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6.5D–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2879	500	–	–	–	24	12	0.888	3355	36	120.780	107.253	3355	40	134.200	119.170
					A2	Y12	300	02	4108	500	–	–	–	24	12	0.888	4584	36	165.024	146.541	4584	40	183.360	162.824
6.50	5.21	7.05	1.50	1.80	A3	Y16	250	02	2879	500	–	–	–	32	16	1.579	3347	42	140.574	221.966	3347	48	160.656	253.676
	DECK TYPE IIA				A4	Y16	250	02	4108	500	–	–	–	32	16	1.579	4576	42	192.192	303.471	4576	48	219.648	346.824
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	32	181.184	160.891	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	32	202.624	179.930
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	24	135.504	213.961	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	24	151.584	239.351
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	60	187.580	166.571	3126	68	212.591	188.781
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	60	245.211	387.188	4087	68	277.906	438.813
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	26	141.596	223.580	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	26	159.016	251.086
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	26	142.012	126.107	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	26	159.432	141.576
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	84	371.112	585.986	4418	84	371.112	585.986
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	68	300.968	267.260	4426	68	300.968	267.260
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	76	538.536	850.348	7086	76	538.536	850.348
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	64	454.528	403.621	7102	64	454.528	403.621
					W3(AV)E/F	Y12	200	05	150	1650	150	–	–	24	12	0.888	1902	32	60.864	54.047	1902	44	83.688	74.315
					W3(AV)W/F	Y12	300	05	150	1650	150	–	–	24	12	0.888	1902	24	45.648	40.535	1902	44	83.688	74.315
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					W4a(AV)W/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	260	439.400	270.670	1690	260	439.400	270.670
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	84	509.208	452.177	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	84	565.488	502.153
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	60	321.120	285.155	5352	68	363.936	323.175
																	TOTAL WEIGHT (IA):			8357.884	TOTAL WEIGHT (IIA):			8820.455

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: D
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6.5D–03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2679	500	–	–	–	24	12	0.888	3155	36	113.580	100.859	3155	40	126.200	112.066
					A2	Y12	300	02	3708	500	–	–	–	24	12	0.888	4184	36	150.624	133.754	4184	40	167.360	148.616
6.50	5.21	7.05	1.50	2.20	A3	Y16	250	02	2679	500	–	–	–	32	16	1.579	3147	42	132.174	208.703	3147	48	151.056	238.517
	DECK TYPE IIA				A4	Y16	250	02	3708	500	–	–	–	32	16	1.579	4176	42	175.392	276.944	4176	48	200.448	316.507
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	28	158.536	140.780	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	28	177.296	157.439
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	20	112.920	178.301	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	20	126.320	199.459
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.080	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	84	371.112	585.986	4418	84	371.112	585.986
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	68	300.968	267.260	4426	68	300.968	267.260
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	76	538.536	850.348	7086	76	538.536	850.348
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	64	454.528	403.621	7102	64	454.528	403.621
					W3(AV)E/F	Y12	200	05	150	1650	150	–	–	24	12	0.888	1902	32	60.864	54.047	1902	44	83.688	74.315
					W3(AV)W/F	Y12	300	05	150	1650	150	–	–	24	12	0.888	1902	24	45.648	40.535	1902	44	83.688	74.315
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					W4a(AV)W/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	272	459.680	283.163	1690	272	459.680	283.163
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	84	509.208	452.177	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	84	565.488	502.153
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	60	321.120	285.155	5352	68	363.936	323.175
																	TOTAL WEIGHT (IA):			8551.498	TOTAL WEIGHT (IIA):			9044.497

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–6.5D–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER, m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2579	500	–	–	–	24	12	0.888	3055	36	109.980	97.662	3055	40	122.200	108.514
6.50	5.21	7.05	1.50	2.40	A2	Y12	300	02	3508	500	–	–	–	24	12	0.888	3984	36	143.424	127.361	3984	40	159.360	141.512
	DECK TYPE IIA				A3	Y16	250	02	2579	500	–	–	–	32	16	1.579	3047	42	127.974	202.071	3047	48	146.256	230.938
	5.88				A4	Y16	250	02	3508	500	–	–	–	32	16	1.579	3976	42	166.992	263.680	3976	48	190.848	301.349
					A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	26	147.212	130.724	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	26	164.632	146.193
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	18	101.628	160.471	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	18	113.688	179.513
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	70	260.843	231.629	3726	80	298.107	264.719
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	70	328.080	518.038	4687	80	374.948	592.043
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	38	206.948	326.771	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	38	232.408	366.972
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	38	207.556	184.310	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	38	233.016	206.918
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	84	371.112	585.986	4418	84	371.112	585.986
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	68	300.968	267.260	4426	68	300.968	267.260
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	76	538.536	850.348	7086	76	538.536	850.348
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	64	454.528	403.621	7102	64	454.528	403.621
					W3(AV)E/F	Y12	200	05	150	1650	150	–	–	24	12	0.888	1902	32	60.864	54.047	1902	44	83.688	74.315
					W3(AV)W/F	Y12	300	05	150	1650	150	–	–	24	12	0.888	1902	24	45.648	40.535	1902	44	83.688	74.315
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					W4a(AV)W/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	276	466.440	287.327	1690	276	466.440	287.327
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	84	509.208	452.177	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	84	565.488	502.153
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	60	321.120	285.155	5352	68	363.936	323.175
																	TOTAL WEIGHT (IA):			8559.727	TOTAL WEIGHT (IIA):			9053.753

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: D BAR BENDING SCHEDULE DWG. NO.: A–6.5D–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 6.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2479	500	–	–	–	24	12	0.888	2955	36	106.380	94.465	2955	40	118.200	104.962
					A2	Y12	300	02	3308	500	–	–	–	24	12	0.888	3784	36	136.224	120.967	3784	40	151.360	134.408
6.50	5.21	7.05	1.50	2.60	A3	Y16	250	02	2479	500	–	–	–	32	16	1.579	2947	42	123.774	195.439	2947	48	141.456	223.359
	DECK TYPE IIA				A4	Y16	250	02	3308	500	–	–	–	32	16	1.579	3776	42	158.592	250.417	3776	48	181.248	286.191
	5.88				A5(IA)	Y12	175	05	300	5110	300	–	–	24	12	0.888	5662	24	135.888	120.669	–	–	–	–
					A5(IIA)	Y12	175	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	24	151.968	134.948
					A6(IA)	Y16	250	05	300	5110	300	–	–	32	16	1.579	5646	16	90.336	142.641	–	–	–	–
					A6(IIA)	Y16	250	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	16	101.056	159.567
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	70	274.843	244.061	3926	80	314.107	278.927
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	70	342.080	540.144	4887	80	390.948	617.307
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	40	217.840	343.969	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	40	244.640	386.287
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	40	218.480	194.010	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	40	245.280	217.809
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	3950	500	–	–	–	32	16	1.579	4418	84	371.112	585.986	4418	84	371.112	585.986
					W1(W/F)	Y12	300	02	3950	500	–	–	–	24	12	0.888	4426	68	300.968	267.260	4426	68	300.968	267.260
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	6500	500	–	–	32	16	1.579	7086	76	538.536	850.348	7086	76	538.536	850.348
					W3(W/F)	Y12	300	05	150	6500	500	–	–	24	12	0.888	7102	64	454.528	403.621	7102	64	454.528	403.621
					W3(AV)E/F	Y12	200	05	150	1650	150	–	–	24	12	0.888	1902	32	60.864	54.047	1902	44	83.688	74.315
					W3(AV)W/F	Y12	300	05	150	1650	150	–	–	24	12	0.888	1902	24	45.648	40.535	1902	44	83.688	74.315
					W4(E/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4(W/F)	Y16	175	05	150	6225	300	–	–	32	16	1.579	6611	32	211.552	334.041	6611	32	211.552	334.041
					W4a(AV)E/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					W4a(AV)W/F	Y16	175	05	150	5475	300	–	–	32	16	1.579	5861	24	140.664	222.108	5861	24	140.664	222.108
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	284	479.960	295.655	1690	284	479.960	295.655
					F2(AV)	Y16	–	01	5100	–	–	–	–	32	16	1.579	5100	8	40.800	64.423	5100	8	40.800	64.423
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y12	250	05	500	5110	500	–	–	24	12	0.888	6062	84	509.208	452.177	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y12	250	05	500	5780	500	–	–	24	12	0.888	–	–	–	–	6732	84	565.488	502.153
					C2	Y12	300	05	150	5100	150	–	–	24	12	0.888	5352	60	321.120	285.155	5352	68	363.936	323.175
																	TOTAL WEIGHT (IA):			8572.121	TOTAL WEIGHT (IIA):			9067.173

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: D
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	BAR BENDING SCHEDULE DWG. NO.: A–6.5D–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3329	500	–	–	–	24	12	0.888	3805	30	114.150	101.365	3805	36	136.980	121.638
					A2	Y12	300	02	5008	500	–	–	–	24	12	0.888	5484	30	164.520	146.094	5484	36	197.424	175.313
7.00	4.41	6.00	1.50	1.40	A3	Y16	250	02	3329	500	–	–	–	32	16	1.579	3797	36	136.692	215.837	3797	42	159.474	251.809
	DECK TYPE IIB				A4	Y16	250	02	5008	500	–	–	–	32	16	1.579	5476	36	197.136	311.278	5476	42	229.992	363.157
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	50	243.100	215.873	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	50	276.600	245.621
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	58	281.068	443.806	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	58	319.928	505.166
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.952	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	64	298.752	471.729	4668	64	298.752	471.729
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	56	261.856	232.528	4676	56	261.856	232.528
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	60	455.160	718.698	7586	60	455.160	718.698
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	48	364.896	324.028	7602	48	364.896	324.028
					W3(AV)E/F	Y12	200	05	150	2250	150	–	–	24	12	0.888	2502	68	170.136	151.081	2502	92	230.184	204.403
					W3(AV)W/F	Y12	300	05	150	2250	150	–	–	24	12	0.888	2502	48	120.096	106.645	2502	92	230.184	204.403
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					W4a(AV)W/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	296	500.240	308.148	1690	296	500.240	308.148
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	92	482.632	762.076	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	92	544.272	859.405
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	48	280.896	249.436	5852	56	327.712	291.008
																	TOTAL WEIGHT (IB):			8801.585	TOTAL WEIGHT (IIB):			9455.738

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: C
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7C–01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT.	LENGTH OF ABUT.	WIDTH OF FOUND.	TOE DIST. FROM ABUT.	DEPTH OF GIRDER	BAR MARK	BAR TYPE & DIA.	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS mm							UNIT WT. OF BAR	QUANTITY PER BRIDGE (TWO ABUTMENTS)							
																	DECK TYPE IB				DECK TYPE IIB			
																	CUT LENGTH	TOTAL NO. OF	TOTAL LENGTH	TOTAL WEIGHT	CUT LENGTH	TOTAL NO. OF	TOTAL LENGTH	TOTAL WEIGHT
m	m	m	m	m		mm	mm		A	B	C	D	E	r	d	Kg/m	mm	BARS	m	Kg	mm	BARS	m	Kg
	DECK				A1	Y12	300	02	3229	500	–	–	–	24	12	0.888	3705	30	111.150	98.701	3705	36	133.380	118.441
	TYPE IB				A2	Y12	300	02	4808	500	–	–	–	24	12	0.888	5284	30	158.520	140.766	5284	36	190.224	168.919
7.00	4.41	6.00	1.50	1.60	A3	Y16	250	02	3229	500	–	–	–	32	16	1.579	3697	36	133.092	210.152	3697	42	155.274	245.178
	DECK				A4	Y16	250	02	4808	500	–	–	–	32	16	1.579	5276	36	189.936	299.909	5276	42	221.592	349.894
	TYPE IIB				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	46	223.652	198.603	–	–	–	–
	5.08				A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	46	254.472	225.971
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	56	271.376	428.503	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	56	308.896	487.747
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	52	152.169	135.126	2926	58	169.727	150.718
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	52	202.116	319.142	3887	58	225.437	355.966
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	24	111.504	176.065	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	24	127.584	201.455
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	24	111.888	99.357	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	24	127.968	113.636
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	64	298.752	471.729	4668	64	298.752	471.729
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	56	261.856	232.528	4676	56	261.856	232.528
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	60	455.160	718.698	7586	60	455.160	718.698
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	48	364.896	324.028	7602	48	364.896	324.028
					W3(AV)E/F	Y12	200	05	150	2250	150	–	–	24	12	0.888	2502	68	170.136	151.081	2502	92	230.184	204.403
					W3(AV)W/F	Y12	300	05	150	2250	150	–	–	24	12	0.888	2502	48	120.096	106.645	2502	92	230.184	204.403
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					W4a(AV)W/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	300	507.000	312.312	1690	300	507.000	312.312
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	92	482.632	762.076	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	92	544.272	859.405
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	48	280.896	249.436	5852	56	327.712	291.008
																	TOTAL WEIGHT (IB):			8796.739	TOTAL WEIGHT (IIB):			9448.222

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: C
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7C–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3129	500	–	–	–	24	12	0.888	3605	30	108.150	96.037	3605	36	129.780	115.245
					A2	Y12	300	02	4608	500	–	–	–	24	12	0.888	5084	30	152.520	135.438	5084	36	183.024	162.525
7.00	4.41	6.00	1.50	1.80	A3	Y16	250	02	3129	500	–	–	–	32	16	1.579	3597	36	129.492	204.468	3597	42	151.074	238.546
	DECK TYPE IIB				A4	Y16	250	02	4608	500	–	–	–	32	16	1.579	5076	36	182.736	288.540	5076	42	213.192	336.630
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	44	213.928	189.968	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	44	243.408	216.146
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	52	251.992	397.895	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	52	286.832	452.908
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	52	162.569	144.362	3126	58	181.327	161.019
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	52	212.516	335.563	4087	58	237.037	374.282
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	26	120.796	190.737	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	26	138.216	218.243
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	26	121.212	107.636	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	26	138.632	123.105
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	64	298.752	471.729	4668	64	298.752	471.729
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	56	261.856	232.528	4676	56	261.856	232.528
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	60	455.160	718.698	7586	60	455.160	718.698
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	48	364.896	324.028	7602	48	364.896	324.028
					W3(AV)E/F	Y12	200	05	150	2250	150	–	–	24	12	0.888	2502	68	170.136	151.081	2502	92	230.184	204.403
					W3(AV)W/F	Y12	300	05	150	2250	150	–	–	24	12	0.888	2502	48	120.096	106.645	2502	92	230.184	204.403
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					W4a(AV)W/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	304	513.760	316.476	1690	304	513.760	316.476
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	92	482.632	762.076	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	92	544.272	859.405
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	48	280.896	249.436	5852	56	327.712	291.008
																	TOTAL WEIGHT (IB):			8785.225	TOTAL WEIGHT (IIB):			9433.111

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: C
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	LOCATION: THANA: ZILA:	DWG. NO.: A–7C–03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2929	500	–	–	–	24	12	0.888	3405	30	102.150	90.709	3405	36	122.580	108.851
					A2	Y12	300	02	4208	500	–	–	–	24	12	0.888	4684	30	140.520	124.782	4684	36	168.624	149.738
7.00	4.41	6.00	1.50	2.20	A3	Y16	250	02	2929	500	–	–	–	32	16	1.579	3397	36	122.292	193.099	3397	42	142.674	225.282
	DECK TYPE IIB				A4	Y16	250	02	4208	500	–	–	–	32	16	1.579	4676	36	168.336	265.803	4676	42	196.392	310.103
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	38	184.756	164.063	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	38	210.216	186.672
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	46	222.916	351.984	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	46	253.736	400.649
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	60	211.560	187.883	3526	68	239.791	212.934
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	60	269.211	425.084	4487	68	305.106	481.762
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	36	167.256	264.097	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	36	191.376	302.183
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	36	167.832	149.035	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	36	191.952	170.453
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	64	298.752	471.729	4668	64	298.752	471.729
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	56	261.856	232.528	4676	56	261.856	232.528
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	60	455.160	718.698	7586	60	455.160	718.698
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	48	364.896	324.028	7602	48	364.896	324.028
					W3(AV)E/F	Y12	200	05	150	2250	150	–	–	24	12	0.888	2502	68	170.136	151.081	2502	92	230.184	204.403
					W3(AV)W/F	Y12	300	05	150	2250	150	–	–	24	12	0.888	2502	48	120.096	106.645	2502	92	230.184	204.403
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					W4a(AV)W/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	316	534.040	328.969	1690	316	534.040	328.969
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					C3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	92	482.632	762.076	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	92	544.272	859.465
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	48	280.896	249.436	5852	56	327.712	291.008
																	TOTAL WEIGHT (IB):			8923.612	TOTAL WEIGHT (IIB):			9595.582

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: C
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7C–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT.	LENGTH OF ABUT.	WIDTH OF FOUND.	TOE DIST. FROM ABUT.	DEPTH OF GIRDER	BAR MARK	BAR TYPE & DIA.	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS mm							UNIT WT. OF BAR	QUANTITY PER BRIDGE (TWO ABUTMENTS)							
																	DECK TYPE IB				DECK TYPE IIB			
																	CUT LENGTH	TOTAL NO. OF	TOTAL LENGTH	TOTAL WEIGHT	CUT LENGTH	TOTAL NO. OF	TOTAL LENGTH	TOTAL WEIGHT
m	m	m	m	m		mm	mm		A	B	C	D	E	r	d	Kg/m	mm	BARS	m	Kg	mm	BARS	m	Kg
	DECK TYPE IB				A1	Y12	300	02	2829	500	–	–	–	24	12	0.888	3305	30	99.150	88.045	3305	36	118.980	105.654
					A2	Y12	300	02	4008	500	–	–	–	24	12	0.888	4484	30	134.520	119.454	4484	36	161.424	143.345
7.00	4.41	6.00	1.50	2.40	A3	Y16	250	02	2829	500	–	–	–	32	16	1.579	3297	36	118.692	187.415	3297	42	138.474	218.650
	DECK TYPE IIB				A4	Y16	250	02	4008	500	–	–	–	32	16	1.579	4476	36	161.136	254.434	4476	42	187.992	296.839
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	36	175.032	155.428	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	36	199.152	176.847
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	42	203.532	321.377	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	42	231.672	365.810
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	60	223.580	198.539	3726	68	253.391	225.011
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	60	281.211	444.032	4687	68	318.706	503.237
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	38	176.548	278.769	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	38	202.008	318.971
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	38	177.156	157.315	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	38	202.616	179.923
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	64	298.752	471.729	4668	64	298.752	471.729
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	56	261.856	232.528	4676	56	261.856	232.528
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	60	455.160	718.698	7586	60	455.160	718.698
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	48	364.896	324.028	7602	48	364.896	324.028
					W3(AV)E/F	Y12	200	05	150	2250	150	–	–	24	12	0.888	2502	68	170.136	151.081	2502	92	230.184	204.403
					W3(AV)W/F	Y12	300	05	150	2250	150	–	–	24	12	0.888	2502	48	120.096	106.645	2502	92	230.184	204.403
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					W4a(AV)W/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	320	540.800	333.133	1690	320	540.800	333.133
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	92	482.632	762.076	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	92	544.272	859.405
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	48	280.896	249.436	5852	56	327.712	291.008
																	TOTAL WEIGHT (IB):			8916.045	TOTAL WEIGHT (IIB):			9585.406

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: C
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7C–05
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2729	500	–	–	–	24	12	0.888	3205	30	96.150	85.381	3205	36	115.380	102.457
					A2	Y12	300	02	3808	500	–	–	–	24	12	0.888	4284	30	128.520	114.126	4284	36	154.224	136.951
7.00	4.41	6.00	1.50	2.60	A3	Y16	250	02	2729	500	–	–	–	32	16	1.579	3197	36	115.092	181.730	3197	42	134.274	212.019
	DECK TYPE IIB				A4	Y16	250	02	3808	500	–	–	–	32	16	1.579	4276	36	153.936	243.065	4276	42	179.592	283.576
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	34	165.308	146.794	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	34	188.088	167.022
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	40	193.840	306.073	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	40	220.640	348.391
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	150	02	4200	500	–	–	–	32	16	1.579	4668	64	298.752	471.729	4668	64	298.752	471.729
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	56	261.856	232.528	4676	56	261.856	232.528
					W2(E/F)	Y16	150	05	300	4400	300	–	–	32	16	1.579	4936	84	414.624	654.691	4936	84	414.624	654.691
					W2(W/F)	Y12	175	05	300	4400	300	–	–	24	12	0.888	4952	72	356.544	316.611	4952	72	356.544	316.611
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	60	455.160	718.698	7586	60	455.160	718.698
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	48	364.896	324.028	7602	48	364.896	324.028
					W3(AV)E/F	Y12	200	05	150	2250	150	–	–	24	12	0.888	2502	68	170.136	151.081	2502	92	230.184	204.403
					W3(AV)W/F	Y12	300	05	150	2250	150	–	–	24	12	0.888	2502	48	120.096	106.645	2502	92	230.184	204.403
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					W4a(AV)W/F	Y16	150	05	150	5325	300	–	–	32	16	1.579	5711	60	342.660	541.060	5711	60	342.660	541.060
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	328	554.320	341.461	1690	328	554.320	341.461
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	92	482.632	762.076	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	92	544.272	859.405
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	48	280.896	249.436	5852	56	327.712	291.008
																	TOTAL WEIGHT (IB):			8927.945	TOTAL WEIGHT (IIB):			9596.812

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: C
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7C–06
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3329	500	–	–	–	24	12	0.888	3805	36	136.980	121.638	3805	40	152.200	135.154
					A2	Y12	300	02	5008	500	–	–	–	24	12	0.888	5484	36	197.424	175.313	5484	40	219.360	194.792
7.00	5.21	7.05	1.50	1.40	A3	Y16	250	02	3329	500	–	–	–	32	16	1.579	3797	42	159.474	251.809	3797	48	182.256	287.782
	DECK TYPE IIA				A4	Y16	250	02	5008	500	–	–	–	32	16	1.579	5476	42	229.992	363.157	5476	48	262.848	415.037
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	50	283.100	251.393	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	50	316.600	281.141
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	58	327.468	517.072	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	58	366.328	578.432
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.865
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	84	392.112	619.145	4668	84	392.112	619.145
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	68	317.968	282.356	4676	68	317.968	282.356
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	76	576.536	910.350	7586	76	576.536	910.350
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	64	486.528	432.037	7602	64	486.528	432.037
					W3(AV)E/F	Y12	200	05	150	1900	150	–	–	24	12	0.888	2152	48	103.296	91.727	2152	64	137.728	122.302
					W3(AV)W/F	Y12	300	05	150	1900	150	–	–	24	12	0.888	2152	32	68.864	61.151	2152	64	137.728	122.302
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5850	300	–	–	32	16	1.579	6236	40	249.440	393.866	6236	40	249.440	393.866
					W4a(AV)W/F	Y16	150	05	150	5850	300	–	–	32	16	1.579	6236	40	249.440	393.866	6236	40	249.440	393.866
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	276	466.440	287.327	1690	276	466.440	287.327
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	92	556.232	878.290	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	92	617.872	975.620
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	60	351.120	311.795	5852	68	397.936	353.367
																	TOTAL WEIGHT (IA):			9954.162	TOTAL WEIGHT (IIA):			10555.076

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: D BAR BENDING SCHEDULE DWG. NO.: A–7D–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3229	500	–	–	–	24	12	0.888	3705	36	133.380	118.441	3705	40	148.200	131.602
					A2	Y12	300	02	4808	500	–	–	–	24	12	0.888	5284	36	190.224	168.919	5284	40	211.360	187.688
7.00	5.21	7.05	1.50	1.60	A3	Y16	250	02	3229	500	–	–	–	32	16	1.579	3697	42	155.274	245.178	3697	48	177.456	280.203
	DECK TYPE IIA				A4	Y16	250	02	4808	500	–	–	–	32	16	1.579	5276	42	221.592	349.894	5276	48	253.248	399.879
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	46	260.452	231.281	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	46	291.272	258.650
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	56	316.176	499.242	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	56	353.696	558.486
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	84	392.112	619.145	4668	84	392.112	619.145
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	68	317.968	282.356	4676	68	317.968	282.356
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	76	576.536	910.350	7586	76	576.536	910.350
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	64	486.528	432.037	7602	64	486.528	432.037
					W3(AV)E/F	Y12	200	05	150	1900	150	–	–	24	12	0.888	2152	48	103.296	91.727	2152	64	137.728	122.302
					W3(AV)W/F	Y12	300	05	150	1900	150	–	–	24	12	0.888	2152	32	68.864	61.151	2152	64	137.728	122.302
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5850	300	–	–	32	16	1.579	6236	40	249.440	393.866	6236	40	249.440	393.866
					W4a(AV)W/F	Y16	150	05	150	5850	300	–	–	32	16	1.579	6236	40	249.440	393.866	6236	40	249.440	393.866
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	280	473.200	291.491	1690	280	473.200	291.491
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	92	556.232	878.290	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	92	617.872	975.620
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	60	351.120	311.795	5852	68	397.936	353.367
																	TOTAL WEIGHT (IA):			9947.402	TOTAL WEIGHT (IIA):			10547.166

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7D–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3129	500	–	–	–	24	12	0.888	3605	36	129.780	115.245	3605	40	144.200	128.050
					A2	Y12	300	02	4608	500	–	–	–	24	12	0.888	5084	36	183.024	162.525	5084	40	203.360	180.584
7.00	5.21	7.05	1.50	1.80	A3	Y16	250	02	3129	500	–	–	–	32	16	1.579	3597	42	151.074	238.546	3597	48	172.656	272.624
	DECK TYPE IIA				A4	Y16	250	02	4608	500	–	–	–	32	16	1.579	5076	42	213.192	336.630	5076	48	243.648	384.720
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	44	249.128	221.226	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	44	278.608	247.404
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	52	293.592	463.582	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	52	328.432	518.594
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	60	187.580	166.571	3126	68	212.591	188.781
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	60	245.211	387.188	4087	68	277.906	438.813
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	26	141.596	223.580	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	26	159.016	251.086
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	26	142.012	126.107	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	26	159.432	141.576
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	84	392.112	619.145	4668	84	392.112	619.145
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	68	317.968	282.356	4676	68	317.968	282.356
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	76	576.536	910.350	7586	76	576.536	910.350
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	64	486.528	432.037	7602	64	486.528	432.037
					W3(AV)E/F	Y12	200	05	150	1900	150	–	–	24	12	0.888	2152	48	103.296	91.727	2152	64	137.728	122.302
					W3(AV)W/F	Y12	300	05	150	1900	150	–	–	24	12	0.888	2152	32	68.864	61.151	2152	64	137.728	122.302
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5850	300	–	–	32	16	1.579	6236	40	249.440	393.866	6236	40	249.440	393.866
					W4a(AV)W/F	Y16	150	05	150	5850	300	–	–	32	16	1.579	6236	40	249.440	393.866	6236	40	249.440	393.866
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	284	479.960	295.655	1690	284	479.960	295.655
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	92	556.232	878.290	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	92	617.872	975.620
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	60	351.120	311.795	5852	68	397.936	353.367
																	TOTAL WEIGHT (IA):			9932.868	TOTAL WEIGHT (IIA):			10530.555

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: D BAR BENDING SCHEDULE DWG. NO.: A–7D–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2929	500	–	–	–	24	12	0.888	3405	36	122.580	108.851	3405	40	136.200	120.946
					A2	Y12	300	02	4208	500	–	–	–	24	12	0.888	4684	36	168.624	149.738	4684	40	187.360	166.376
7.00	5.21	7.05	1.50	2.20	A3	Y16	250	02	2929	500	–	–	–	32	16	1.579	3397	42	142.674	225.282	3397	48	163.056	257.465
	DECK TYPE IIA				A4	Y16	250	02	4208	500	–	–	–	32	16	1.579	4676	42	196.392	310.103	4676	48	224.448	354.403
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	38	215.156	191.059	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	38	240.616	213.667
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	46	259.716	410.092	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	46	290.536	458.756
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.080	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579	4668	84	392.112	619.145	4668	84	392.112	619.145
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888	4676	68	317.968	282.356	4676	68	317.968	282.356
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579	5986	104	622.544	982.997	5986	104	622.544	982.997
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888	6002	88	528.176	469.020	6002	88	528.176	469.020
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579	7586	76	576.536	910.350	7586	76	576.536	910.350
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888	7602	64	486.528	432.037	7602	64	486.528	432.037
					W3(AV)E/F	Y12	200	05	150	1900	150	–	–	24	12	0.888	2152	48	103.296	91.727	2152	64	137.728	122.302
					W3(AV)W/F	Y12	300	05	150	1900	150	–	–	24	12	0.888	2152	32	68.864	61.151	2152	64	137.728	122.302
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579	7361	36	264.996	418.429	7361	36	264.996	418.429
					W4a(AV)E/F	Y16	150	05	150	5850	300	–	–	32	16	1.579	6236	40	249.440	393.866	6236	40	249.440	393.866
					W4a(AV)W/F	Y16	150	05	150	5850	300	–	–	32	16	1.579	6236	40	249.440	393.866	6236	40	249.440	393.866
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	296	500.240	308.148	1690	296	500.240	308.148
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579	5600	8	44.800	70.739	5600	8	44.800	70.739
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	92	556.232	878.290	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	92	617.872	975.620
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888	5852	60	351.120	311.795	5852	68	397.936	353.367
																	TOTAL WEIGHT (IA):			10098.595	TOTAL WEIGHT (IIA):			10723.405

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: D
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	BAR BENDING SCHEDULE DWG. NO.: A–7D–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IA				A1	Y12	300	02	2829	500	–	–	–	24	12	0.888
					A2	Y12	300	02	4008	500	–	–	–	24	12	0.888
7.00	5.21	7.05	1.50	2.40	A3	Y16	250	02	2829	500	–	–	–	32	16	1.579
	DECK TYPE IIA				A4	Y16	250	02	4008	500	–	–	–	32	16	1.579
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	4200	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	4200	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	5450	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	5450	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	7000	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	7000	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	1900	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	1900	150	–	–	24	12	0.888
					W4(E/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579
					W4(W/F)	Y16	150	05	150	6975	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	150	05	150	5850	300	–	–	32	16	1.579
					W4a(AV)W/F	Y16	150	05	150	5850	300	–	–	32	16	1.579
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	5600	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579
					C2	Y12	300	05	150	5600	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)								
DECK TYPE IA					DECK TYPE IIA			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg		CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
3305	36	118.980	105.654		3305	40	132.200	117.394
4484	36	161.424	143.345		4484	40	179.360	159.272
3297	42	138.474	218.650		3297	48	158.256	249.886
4476	42	187.992	296.839		4476	48	214.848	339.245
5662	36	203.832	181.003		–	–	–	–
–	–	–	–		6332	36	227.952	202.421
5646	42	237.132	374.431		–	–	–	–
–	–	–	–		6316	42	265.272	418.864
3450	70	241.498	214.450		3450	80	275.998	245.086
5110	24	122.640	193.649		–	–	–	–
–	–	–	–		5780	24	138.720	219.039
3726	70	260.843	231.629		3726	80	298.107	264.719
4687	70	328.080	518.038		4687	80	374.948	592.043
5446	38	206.948	326.771		–	–	–	–
–	–	–	–		6116	38	232.408	366.972
5462	38	207.556	184.310		–	–	–	–
–	–	–	–		6132	38	233.016	206.918
1252	8	10.016	8.894		1252	8	10.016	8.894
1102	8	8.816	7.829		1102	8	8.816	7.829
4668	84	392.112	619.145		4668	84	392.112	619.145
4676	68	317.968	282.356		4676	68	317.968	282.356
5986	104	622.544	982.997		5986	104	622.544	982.997
6002	88	528.176	469.020		6002	88	528.176	469.020
7586	76	576.536	910.350		7586	76	576.536	910.350
7602	64	486.528	432.037		7602	64	486.528	432.037
2152	48	103.296	91.727		2152	64	137.728	122.302
2152	32	68.864	61.151		2152	64	137.728	122.302
7361	36	264.996	418.429		7361	36	264.996	418.429
7361	36	264.996	418.429		7361	36	264.996	418.429
6236	40	249.440	393.866		6236	40	249.440	393.866
6236	40	249.440	393.866		6236	40	249.440	393.866
1690	300	507.000	312.312		1690	300	507.000	312.312
5600	8	44.800	70.739		5600	8	44.800	70.739
1356	8	10.848	17.129		1356	8	10.848	17.129
1206	8	9.648	15.234		1206	8	9.648	15.234
470	16	7.520	4.632		470	16	7.520	4.632
6046	92	556.232	878.290		–	–	–	–
–	–	–	–		6716	92	617.872	975.620
5852	60	351.120	311.795		5852	68	397.936	353.367
TOTAL WEIGHT (IA):			10088.995		TOTAL WEIGHT (IIA):			10712.715

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7D–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3579	500	–	–	–	24	12	0.888	4055	30	121.650	108.025	4055	36	145.980	129.630
					A2	Y12	300	02	5508	500	–	–	–	24	12	0.888	5984	30	179.520	159.414	5984	36	215.424	191.297
7.50	4.41	7.05	1.70	1.40	A3	Y16	250	02	3579	500	–	–	–	32	16	1.579	4047	36	145.692	230.048	4047	42	169.974	268.389
	DECK TYPE IIB				A4	Y16	250	02	5508	500	–	–	–	32	16	1.579	5976	36	215.136	339.700	5976	42	250.992	396.316
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	56	272.272	241.778	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	56	309.792	275.095
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	66	319.836	505.021	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	66	364.056	574.844
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.952	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	308	520.520	320.640	1690	308	520.520	320.640
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	100	524.600	828.343	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	100	591.600	934.136
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	48	304.896	270.748	6352	56	355.712	315.872
																	TOTAL WEIGHT (IB):			10018.447	TOTAL WEIGHT (IIB):			10684.648

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: D BAR BENDING SCHEDULE DWG. NO.: A–7.5D–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3579	500	–	–	–	24	12	0.888	4055	30	121.650	108.025	4055	36	145.980	129.630
					A2	Y12	300	02	5508	500	–	–	–	24	12	0.888	5984	30	179.520	159.414	5984	36	215.424	191.297
7.50	4.41	7.05	1.70	1.40	A3	Y16	250	02	3579	500	–	–	–	32	16	1.579	4047	36	145.692	230.048	4047	42	169.974	268.389
	DECK TYPE IIB				A4	Y16	250	02	5508	500	–	–	–	32	16	1.579	5976	36	215.136	339.700	5976	42	250.992	396.316
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	56	272.272	241.778	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	56	309.792	275.095
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	66	319.836	505.021	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	66	364.056	574.844
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.952	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	308	520.520	320.640	1690	308	520.520	320.640
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	100	524.600	828.343	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	100	591.600	934.136
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	48	304.896	270.748	6352	56	355.712	315.872
																	TOTAL WEIGHT (IB):			10018.447	TOTAL WEIGHT (IIB):			10684.648

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: D BAR BENDING SCHEDULE DWG. NO.: A–7.5D–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3479	500	–	–	–	24	12	0.888	3955	30	118.650	105.361	3955	36	142.380	126.433
					A2	Y12	300	02	5308	500	–	–	–	24	12	0.888	5784	30	173.520	154.086	5784	36	208.224	184.903
7.50	4.41	7.05	1.70	1.60	A3	Y16	250	02	3479	500	–	–	–	32	16	1.579	3947	36	142.092	224.363	3947	42	165.774	261.757
	DECK TYPE IIB				A4	Y16	250	02	5308	500	–	–	–	32	16	1.579	5776	36	207.936	328.331	5776	42	242.592	383.053
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	54	262.548	233.143	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	54	298.728	265.270
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	64	310.144	489.717	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	64	353.024	557.425
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	52	152.169	135.126	2926	58	169.727	150.718
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	52	202.116	319.142	3887	58	225.437	355.966
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	24	111.504	176.065	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	24	127.584	201.455
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	24	111.888	99.357	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	24	127.968	113.636
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	312	527.280	324.804	1690	312	527.280	324.804
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	100	524.600	828.343	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	100	591.600	934.136
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	48	304.896	270.748	6352	56	355.712	315.872
																	TOTAL WEIGHT (IB):			10022.236	TOTAL WEIGHT (IIB):			10686.956

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7.5D–02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IB				A1	Y12	300	02	3379	500	–	–	–	24	12	0.888
					A2	Y12	300	02	5108	500	–	–	–	24	12	0.888
7.50	4.41	7.05	1.70	1.80	A3	Y16	250	02	3379	500	–	–	–	32	16	1.579
	DECK TYPE IIB				A4	Y16	250	02	5108	500	–	–	–	32	16	1.579
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)							
DECK TYPE IB				DECK TYPE IIB			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
3855	30	115.650	102.697	3855	36	138.780	123.237
5584	30	167.520	148.758	5584	36	201.024	178.509
3847	36	138.492	218.679	3847	42	161.574	255.125
5576	36	200.736	316.962	5576	42	234.192	369.789
4862	50	243.100	215.873	–	–	–	–
–	–	–	–	5532	50	276.600	245.621
4846	60	290.760	459.110	–	–	–	–
–	–	–	–	5516	60	330.960	522.586
3450	60	206.998	183.814	3450	68	234.598	208.323
4310	24	103.440	163.332	–	–	–	–
–	–	–	–	4980	24	119.520	188.722
3126	52	162.569	144.362	3126	58	181.327	161.019
4087	52	212.516	335.563	4087	58	237.037	374.282
4646	26	120.796	190.737	–	–	–	–
–	–	–	–	5316	26	138.216	218.243
4662	26	121.212	107.636	–	–	–	–
–	–	–	–	5332	26	138.632	123.105
1252	8	10.016	8.894	1252	8	10.016	8.894
1102	8	8.816	7.829	1102	8	8.816	7.829
4918	80	393.440	621.242	4918	80	393.440	621.242
4926	68	334.968	297.452	4926	68	334.968	297.452
5786	104	601.744	950.154	5786	104	601.744	950.154
5802	88	510.576	453.391	5802	88	510.576	453.391
8086	72	582.192	919.281	8086	72	582.192	919.281
8102	60	486.120	431.675	8102	60	486.120	431.675
2402	64	153.728	136.510	2402	84	201.768	179.170
2402	44	105.688	93.851	2402	84	201.768	179.170
7911	36	284.796	449.693	7911	36	284.796	449.693
7911	36	284.796	449.693	7911	36	284.796	449.693
6411	52	333.372	526.394	6411	52	333.372	526.394
6411	52	333.372	526.394	6411	52	333.372	526.394
1690	316	534.040	328.969	1690	316	534.040	328.969
6100	8	48.800	77.055	6100	8	48.800	77.055
1356	8	10.848	17.129	1356	8	10.848	17.129
1206	8	9.648	15.234	1206	8	9.648	15.234
470	16	7.520	4.632	470	16	7.520	4.632
5246	100	524.600	828.343	–	–	–	–
–	–	–	–	5916	100	591.600	934.136
6352	48	304.896	270.748	6352	56	355.712	315.872
TOTAL WEIGHT (IB):			10002.086	TOTAL WEIGHT (IIB):			10662.021

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY:

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT:

LOCATION:
THANA:
ZILA:

ABUTMENT–WING WALL
DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m
FOUNDATION TYPE: D

BAR BENDING SCHEDULE

DWG. NO.: A–7.5D–03

DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3179	500	–	–	–	24	12	0.888	3655	30	109.650	97.369	3655	36	131.580	116.843
					A2	Y12	300	02	4708	500	–	–	–	24	12	0.888	5184	30	155.520	138.102	5184	36	186.624	165.722
7.50	4.41	7.05	1.70	2.20	A3	Y16	250	02	3179	500	–	–	–	32	16	1.579	3647	36	131.292	207.310	3647	42	153.174	241.862
	DECK TYPE IIB				A4	Y16	250	02	4708	500	–	–	–	32	16	1.579	5176	36	186.336	294.225	5176	42	217.392	343.262
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	46	223.652	198.603	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	46	254.472	225.971
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	54	261.684	413.199	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	54	297.864	470.327
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	60	211.580	187.883	3526	68	239.791	212.934
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	60	269.211	425.084	4487	68	305.106	481.762
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	36	167.256	264.097	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	36	191.376	302.183
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	36	167.832	149.035	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	36	191.952	170.453
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	328	554.320	341.461	1690	328	554.320	341.461
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	100	524.600	828.343	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	100	591.600	934.136
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	48	304.896	270.748	6352	56	355.712	315.872
																	TOTAL WEIGHT (IB):			10149.109	TOTAL WEIGHT (IIB):			10834.317

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: D
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7.5D–04
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3079	500	–	–	–	24	12	0.888	3555	30	106.650	94.705	3555	36	127.980	113.646
					A2	Y12	300	02	4508	500	–	–	–	24	12	0.888	4984	30	149.520	132.774	4984	36	179.424	159.329
7.50	4.41	7.05	1.70	2.40	A3	Y16	250	02	3079	500	–	–	–	32	16	1.579	3547	36	127.692	201.626	3547	42	148.974	235.230
	DECK TYPE IIB				A4	Y16	250	02	4508	500	–	–	–	32	16	1.579	4976	36	179.136	282.856	4976	42	208.992	329.998
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	42	204.204	181.333	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	42	232.344	206.321
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	50	242.300	382.592	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	50	275.800	435.488
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	60	223.580	198.539	3726	68	253.391	225.011
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	60	281.211	444.032	4687	68	318.706	503.237
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	38	176.548	278.769	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	38	202.008	318.971
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	38	177.156	157.315	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	38	202.616	179.923
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	332	561.080	345.625	1690	332	561.080	345.625
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	100	524.600	828.343	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	100	591.600	934.136
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	48	304.896	270.748	6352	56	355.712	315.872
																	TOTAL WEIGHT (IB):			10132.907	TOTAL WEIGHT (IIB):			10814.315

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBUC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: D
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7.5D–05
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	2979	500	–	–	–	24	12	0.888	3455	30	103.650	92.041	3455	36	124.380	110.449
					A2	Y12	300	02	4308	500	–	–	–	24	12	0.888	4784	30	143.520	127.446	4784	36	172.224	152.935
7.50	4.41	7.05	1.70	2.60	A3	Y16	250	02	2979	500	–	–	–	32	16	1.579	3447	36	124.092	195.941	3447	42	144.774	228.598
	DECK TYPE IIB				A4	Y16	250	02	4308	500	–	–	–	32	16	1.579	4776	36	171.936	271.487	4776	42	200.592	316.735
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	40	194.480	172.698	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	40	221.280	196.497
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	48	232.608	367.288	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	48	264.768	418.069
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	340	574.600	353.954	1690	340	574.600	353.954
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	100	524.600	828.343	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	100	591.600	934.136
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	48	304.896	270.748	6352	56	355.712	315.872
																	TOTAL WEIGHT (IB):			10144.807	TOTAL WEIGHT (IIB):			10825.722

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: D BAR BENDING SCHEDULE DWG. NO.: A–7.5D–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3579	500	–	–	–	24	12	0.888	4055	36	145.980	129.630	4055	40	162.200	144.034
					A2	Y12	300	02	5508	500	–	–	–	24	12	0.888	5984	36	215.424	191.297	5984	40	239.360	212.552
7.50	5.21	7.05	1.70	1.40	A3	Y16	250	02	3579	500	–	–	–	32	16	1.579	4047	42	169.974	268.389	4047	48	194.256	306.730
	DECK TYPE IIA				A4	Y16	250	02	5508	500	–	–	–	32	16	1.579	5976	42	250.992	396.316	5976	48	286.848	452.933
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	56	317.072	281.560	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	56	354.592	314.878
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	66	372.636	588.392	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	66	416.856	658.216
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.865
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	308	520.520	320.640	1690	308	520.520	320.640
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	100	604.600	954.663	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	100	671.600	1060.456
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	60	381.120	338.435	6352	68	431.936	383.559
																	TOTAL WEIGHT (IA):			10654.365	TOTAL WEIGHT (IIA):			11325.349

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A IN BAR MARK (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: F BAR BENDING SCHEDULE DWG. NO.: A–7.5F–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3479	500	–	–	–	24	12	0.888	3955	36	142.380	126.433	3955	40	158.200	140.482
7.50	5.21	7.05	1.70	1.60	A2	Y12	300	02	5308	500	–	–	–	24	12	0.888	5784	36	208.224	184.903	5784	40	231.360	205.448
	DECK TYPE IIA				A3	Y16	250	02	3479	500	–	–	–	32	16	1.579	3947	42	165.774	261.757	3947	48	189.456	299.151
	5.88				A4	Y16	250	02	5308	500	–	–	–	32	16	1.579	5776	42	242.592	383.053	5776	48	277.248	437.775
					A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	54	305.748	271.504	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	54	341.928	303.632
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	64	361.344	570.562	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	64	404.224	638.270
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	312	527.280	324.804	1690	312	527.280	324.804
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	100	604.600	954.663	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	100	671.600	1060.456
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	60	381.120	338.435	6352	68	431.936	383.559
																	TOTAL WEIGHT (IA):			10657.661	TOTAL WEIGHT (IIA):			11328.684

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: F BAR BENDING SCHEDULE DWG. NO.: A–7.5F–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3379	500	–	–	–	24	12	0.888	3855	36	138.780	123.237	3855	40	154.200	136.930
7.50	5.21	7.05	1.70	1.80	A2	Y12	300	02	5108	500	–	–	–	24	12	0.888	5584	36	201.024	178.509	5584	40	223.360	198.344
	DECK TYPE IIA				A3	Y16	250	02	3379	500	–	–	–	32	16	1.579	3847	42	161.574	255.125	3847	48	184.656	291.572
	5.88				A4	Y16	250	02	5108	500	–	–	–	32	16	1.579	5576	42	234.192	369.789	5576	48	267.648	422.616
					A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	50	283.100	251.393	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	50	316.600	281.141
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	60	338.760	534.902	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	60	378.960	598.378
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	60	187.580	166.571	3126	68	212.591	188.781
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	60	245.211	387.188	4087	68	277.906	438.813
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	26	141.596	223.580	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	26	159.016	251.086
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	26	142.012	126.107	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	26	159.432	141.576
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	316	534.040	328.969	1690	316	534.040	328.969
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	100	604.600	954.663	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	100	671.600	1060.456
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	60	381.120	338.435	6352	68	431.936	383.559
																	TOTAL WEIGHT (IA):			10633.070	TOTAL WEIGHT (IIA):			11300.827

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: F BAR BENDING SCHEDULE DWG. NO.: A–7.5F–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3179	500	–	–	–	24	12	0.888	3655	36	131.580	116.843	3655	40	146.200	129.826
					A2	Y12	300	02	4708	500	–	–	–	24	12	0.888	5184	36	186.624	165.722	5184	40	207.360	184.136
7.50	5.21	7.05	1.70	2.20	A3	Y16	250	02	3179	500	–	–	–	32	16	1.579	3647	42	153.174	241.862	3647	48	175.056	276.413
	DECK TYPE IIA				A4	Y16	250	02	4708	500	–	–	–	32	16	1.579	5176	42	217.392	343.262	5176	48	248.448	392.299
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	46	260.452	231.281	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	46	291.272	258.650
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	54	304.884	481.412	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	54	341.064	538.540
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.090	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	328	554.320	341.461	1690	328	554.320	341.461
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	100	604.600	954.663	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	100	671.600	1060.456
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	60	381.120	338.435	6352	68	431.936	383.559
																	TOTAL WEIGHT (IA):			10808.854	TOTAL WEIGHT (IIA):			11504.923

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: F
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7.5F–04
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3079	500	–	–	–	24	12	0.888	3555	36	127.980	113.646	3555	40	142.200	126.274
					A2	Y12	300	02	4508	500	–	–	–	24	12	0.888	4984	36	179.424	159.329	4984	40	199.360	177.032
7.50	5.21	7.05	1.70	2.40	A3	Y16	250	02	3079	500	–	–	–	32	16	1.579	3547	42	148.974	235.230	3547	48	170.256	268.834
	DECK TYPE IIA				A4	Y16	250	02	4508	500	–	–	–	32	16	1.579	4976	42	208.992	329.998	4976	48	238.848	377.141
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	42	237.804	211.170	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	42	265.944	236.158
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	50	282.300	445.752	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	50	315.800	498.648
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	70	260.843	231.629	3726	80	298.107	264.719
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	70	328.080	518.038	4687	80	374.948	592.043
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	38	206.948	326.771	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5730	200	–	–	32	16	1.579	–	–	–	–	6116	38	232.408	366.972
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	38	207.556	184.310	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	38	233.016	206.918
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	332	561.080	345.625	1690	332	561.080	345.625
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	100	604.600	954.663	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	100	671.600	1060.456
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	60	381.120	338.435	6352	68	431.936	383.559
																	TOTAL WEIGHT (IA):			10789.198	TOTAL WEIGHT (IIA):			11482.987

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: F
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7.5F–05
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 7.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	2979	500	–	–	–	24	12	0.888	3455	36	124.380	110.449	3455	40	138.200	122.722
					A2	Y12	300	02	4308	500	–	–	–	24	12	0.888	4784	36	172.224	152.935	4784	40	191.360	169.928
7.50	5.21	7.05	1.70	2.60	A3	Y16	250	02	2979	500	–	–	–	32	16	1.579	3447	42	144.774	228.598	3447	48	165.456	261.255
	DECK TYPE IIA				A4	Y16	250	02	4308	500	–	–	–	32	16	1.579	4776	42	200.592	316.735	4776	48	229.248	361.983
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	40	226.480	201.114	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	40	253.280	224.913
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	48	271.008	427.922	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	48	303.168	478.702
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	70	274.843	244.061	3926	80	314.107	278.927
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	70	342.090	540.144	4887	80	390.948	617.307
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	40	217.840	343.969	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	40	244.640	386.287
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	40	218.480	194.010	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	40	245.280	217.809
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4450	500	–	–	–	32	16	1.579	4918	80	393.440	621.242	4918	80	393.440	621.242
					W1(W/F)	Y12	300	02	4450	500	–	–	–	24	12	0.888	4926	68	334.968	297.452	4926	68	334.968	297.452
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	7500	500	–	–	32	16	1.579	8086	72	582.192	919.281	8086	72	582.192	919.281
					W3(W/F)	Y12	300	05	150	7500	500	–	–	24	12	0.888	8102	60	486.120	431.675	8102	60	486.120	431.675
					W3(AV)E/F	Y12	200	05	150	2150	150	–	–	24	12	0.888	2402	64	153.728	136.510	2402	84	201.768	179.170
					W3(AV)W/F	Y12	300	05	150	2150	150	–	–	24	12	0.888	2402	44	105.688	93.851	2402	84	201.768	179.170
					W4(E/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4(W/F)	Y16	150	05	150	7525	300	–	–	32	16	1.579	7911	36	284.796	449.693	7911	36	284.796	449.693
					W4a(AV)E/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					W4a(AV)W/F	Y16	150	05	150	6025	300	–	–	32	16	1.579	6411	52	333.372	526.394	6411	52	333.372	526.394
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	340	574.600	353.954	1690	340	574.600	353.954
					F2(AV)	Y16	–	01	6100	–	–	–	–	32	16	1.579	6100	8	48.800	77.055	6100	8	48.800	77.055
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	100	604.600	954.663	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	100	671.600	1060.456
					C2	Y12	300	05	150	6100	150	–	–	24	12	0.888	6352	60	381.120	338.435	6352	68	431.936	383.559
																	TOTAL WEIGHT (IA):			10801.591	TOTAL WEIGHT (IIA):			11496.407

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: F
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–7.5F–06
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER: m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3829	500	–	–	–	24	12	0.888	4305	30	129.150	114.685	4305	36	154.980	137.622
					A2	Y12	300	02	6008	500	–	–	–	24	12	0.888	6484	30	194.520	172.734	6484	36	233.424	207.281
8.00	4.41	7.05	1.70	1.40	A3	Y16	250	02	3829	500	–	–	–	32	16	1.579	4297	36	154.692	244.259	4297	42	180.474	284.968
	DECK TYPE IIB				A4	Y16	250	02	6008	500	–	–	–	32	16	1.579	6476	36	233.136	368.122	6476	42	271.992	429.475
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	62	301.444	267.682	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	62	342.984	304.570
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	74	358.604	566.236	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	74	408.184	644.523
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.952	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	332	561.080	345.625	1690	332	561.080	345.625
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	108	566.568	894.611	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	108	638.928	1008.867
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	48	328.896	292.060	6852	56	383.712	340.736
																	TOTAL WEIGHT (IB):			11096.851	TOTAL WEIGHT (IIB):			11849.201

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8D–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IB				A1	Y12	300	02	3729	500	–	–	–	24	12	0.888
					A2	Y12	300	02	5808	500	–	–	–	24	12	0.888
8.00	4.41	7.05	1.70	1.60	A3	Y16	250	02	3729	500	–	–	–	32	16	1.579
	DECK TYPE IIB				A4	Y16	250	02	5808	500	–	–	–	32	16	1.579
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)							
DECK TYPE IB				DECK TYPE IIB			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
4205	30	126.150	112.021	4205	36	151.380	134.425
6284	30	188.520	167.406	6284	36	226.224	200.887
4197	36	151.092	238.574	4197	42	176.274	278.337
6276	36	225.936	356.753	6276	42	263.592	416.212
4862	60	291.720	259.047	–	–	–	–
–	–	–	–	5532	60	331.920	294.745
4846	72	348.912	550.932	–	–	–	–
–	–	–	–	5516	72	397.152	627.103
3450	60	206.998	183.814	3450	68	234.598	208.323
4310	24	103.440	163.332	–	–	–	–
–	–	–	–	4980	24	119.520	188.722
2926	52	152.169	135.126	2926	58	169.727	150.718
3887	52	202.116	319.142	3887	58	225.437	355.966
4646	24	111.504	176.065	–	–	–	–
–	–	–	–	5316	24	127.584	201.455
4662	24	111.888	99.357	–	–	–	–
–	–	–	–	5332	24	127.968	113.636
1252	8	10.016	8.894	1252	8	10.016	8.894
1102	8	8.816	7.829	1102	8	8.816	7.829
5168	80	413.440	652.822	5168	80	413.440	652.822
5176	68	351.968	312.548	5176	68	351.968	312.548
5786	104	601.744	950.154	5786	104	601.744	950.154
5802	88	510.576	453.391	5802	88	510.576	453.391
8586	72	618.192	976.125	8586	72	618.192	976.125
8602	60	516.120	458.315	8602	60	516.120	458.315
2652	80	212.160	188.398	2652	104	275.808	244.918
2652	52	137.904	122.459	2652	104	275.808	244.918
8661	44	381.084	601.732	8661	44	381.084	601.732
8661	36	311.796	492.326	8661	36	311.796	492.326
6786	68	461.448	728.626	6786	68	461.448	728.626
6786	68	461.448	728.626	6786	68	461.448	728.626
1690	336	567.840	349.789	1690	336	567.840	349.789
6600	8	52.800	83.371	6600	8	52.800	83.371
1356	8	10.848	17.129	1356	8	10.848	17.129
1206	8	9.648	15.234	1206	8	9.648	15.234
470	16	7.520	4.632	470	16	7.520	4.632
5246	108	566.568	894.611	–	–	–	–
–	–	–	–	5916	108	638.928	1008.867
6852	48	328.896	292.060	6852	56	383.712	340.736
TOTAL WEIGHT (IB):			11100.640	TOTAL WEIGHT (IIB):			11851.510

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: D
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8D–02
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3629	500	–	–	–	24	12	0.888	4105	30	123.150	109.357	4105	36	147.780	131.229
					A2	Y12	300	02	5608	500	–	–	–	24	12	0.888	6084	30	182.520	162.078	6084	36	219.024	194.493
8.00	4.41	7.05	1.70	1.80	A3	Y16	250	02	3629	500	–	–	–	32	16	1.579	4097	36	147.492	232.890	4097	42	172.074	271.705
	DECK TYPE IIB				A4	Y16	250	02	5608	500	–	–	–	32	16	1.579	6076	36	218.736	345.384	6076	42	255.192	402.948
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	58	281.996	250.412	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	58	320.856	284.920
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	68	329.528	520.325	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	68	375.088	592.264
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	52	162.569	144.362	3126	58	181.327	161.019
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	52	212.516	335.563	4087	58	237.037	374.282
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	26	120.796	190.737	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	26	138.216	218.243
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	26	121.212	107.636	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	26	138.632	123.105
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	340	574.600	353.964	1690	340	574.600	353.964
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	108	566.568	894.611	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	108	638.928	1008.867
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	48	328.896	292.060	6852	56	383.712	340.736
																	TOTAL WEIGHT (IB):			11089.125	TOTAL WEIGHT (IIB):			11836.399

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: D
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8D–03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3429	500	–	–	–	24	12	0.888	3905	30	117.150	104.029	3905	36	140.580	124.835
					A2	Y12	300	02	5208	500	–	–	–	24	12	0.888	5684	30	170.520	151.422	5684	36	204.624	181.706
8.00	4.41	7.05	1.70	2.20	A3	Y16	250	02	3429	500	–	–	–	32	16	1.579	3897	36	140.292	221.521	3897	42	163.674	258.441
	DECK TYPE IIB				A4	Y16	250	02	5208	500	–	–	–	32	16	1.579	5676	36	204.336	322.647	5676	42	238.392	376.421
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	52	252.824	224.508	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	52	287.664	255.446
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	62	300.452	474.414	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	62	341.992	540.005
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	60	211.580	187.883	3526	68	239.791	212.934
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	60	269.211	425.084	4487	68	305.106	481.762
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	36	167.256	264.097	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	36	191.376	302.183
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	36	167.832	149.035	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	36	191.952	170.453
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	352	594.880	366.446	1690	352	594.880	366.446
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	108	566.568	894.611	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	108	638.928	1008.867
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	48	328.896	292.060	6852	56	383.712	340.736
																	TOTAL WEIGHT (IB):			11227.513	TOTAL WEIGHT (IIB):			11998.871

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8D–04
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IB				A1	Y12	300	02	3329	500	–	–	–	24	12	0.888
					A2	Y12	300	02	5008	500	–	–	–	24	12	0.888
8.00	4.41	7.05	1.70	2.40	A3	Y16	250	02	3329	500	–	–	–	32	16	1.579
	DECK TYPE IIB				A4	Y16	250	02	5008	500	–	–	–	32	16	1.579
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)								
DECK TYPE IB				DECK TYPE IIB			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
3805	30	114.150	101.365	3805	36	136.980	121.638
5484	30	164.520	146.094	5484	36	197.424	175.313
3797	36	136.692	215.837	3797	42	159.474	251.809
5476	36	197.136	311.278	5476	42	229.992	363.157
4862	50	243.100	215.873	–	–	–	–
–	–	–	–	5532	50	276.600	245.621
4846	58	281.068	443.806	–	–	–	–
–	–	–	–	5516	58	319.928	505.166
3450	60	206.998	183.814	3450	68	234.598	208.323
4310	24	103.440	163.332	–	–	–	–
–	–	–	–	4980	24	119.520	188.722
3726	60	223.580	198.539	3726	68	253.391	225.011
4687	60	281.211	444.032	4687	68	318.706	503.237
4646	38	176.548	278.769	–	–	–	–
–	–	–	–	5316	38	202.008	318.971
4662	38	177.156	157.315	–	–	–	–
–	–	–	–	5332	38	202.616	179.923
1252	8	10.016	8.894	1252	8	10.016	8.894
1102	8	8.816	7.829	1102	8	8.816	7.829
5168	80	413.440	652.822	5168	80	413.440	652.822
5176	68	351.968	312.548	5176	68	351.968	312.548
5786	104	601.744	950.154	5786	104	601.744	950.154
5802	88	510.576	453.391	5802	88	510.576	453.391
8586	72	618.192	976.125	8586	72	618.192	976.125
8602	60	516.120	458.315	8602	60	516.120	458.315
2652	80	212.160	188.398	2652	104	275.808	244.918
2652	52	137.904	122.459	2652	104	275.808	244.918
8661	44	381.084	601.732	8661	44	381.084	601.732
8661	36	311.796	492.326	8661	36	311.796	492.326
6786	68	461.448	728.626	6786	68	461.448	728.626
6786	68	461.448	728.626	6786	68	461.448	728.626
1690	356	601.640	370.610	1690	356	601.640	370.610
6600	8	52.800	83.371	6600	8	52.800	83.371
1356	8	10.848	17.129	1356	8	10.848	17.129
1206	8	9.648	15.234	1206	8	9.648	15.234
470	16	7.520	4.632	470	16	7.520	4.632
5246	108	566.568	894.611	–	–	–	–
–	–	–	–	5916	108	638.928	1008.867
6852	48	328.896	292.060	6852	56	383.712	340.736
TOTAL WEIGHT (IB):			11219.946	TOTAL WEIGHT (IIB):			11988.694

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB : GIRDER DEPTH: 2.40 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8D–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3229	500	–	–	–	24	12	0.888	3705	30	111.150	98.701	3705	36	133.380	118.441
					A2	Y12	300	02	4808	500	–	–	–	24	12	0.888	5284	30	158.520	140.766	5284	36	190.224	168.919
8.00	4.41	7.05	1.70	2.60	A3	Y16	250	02	3229	500	–	–	–	32	16	1.579	3697	36	133.092	210.152	3697	42	155.274	245.178
	DECK TYPE IIB				A4	Y16	250	02	4808	500	–	–	–	32	16	1.579	5276	36	189.936	299.909	5276	42	221.592	349.894
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	46	223.652	198.603	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	46	254.472	225.971
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	56	271.376	428.503	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	56	308.896	487.747
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	364	615.160	378.939	1690	364	615.160	378.939
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	108	566.568	894.611	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	108	638.928	1008.867
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	48	328.896	292.060	6852	56	383.712	340.736
																	TOTAL WEIGHT (IB):			11223.211	TOTAL WEIGHT (IIB):			11990.276

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: D
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–BD–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3829	500	–	–	–	24	12	0.888	4305	36	154.980	137.622	4305	40	172.200	152.914
					A2	Y12	300	02	6008	500	–	–	–	24	12	0.888	6484	36	233.424	207.281	6484	40	259.360	230.312
8.00	5.21	7.05	1.70	1.40	A3	Y16	250	02	3829	500	–	–	–	32	16	1.579	4297	42	180.474	284.968	4297	48	206.256	325.678
	DECK TYPE IIA				A4	Y16	250	02	6008	500	–	–	–	32	16	1.579	6476	42	271.992	429.475	6476	48	310.848	490.829
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	62	351.044	311.727	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	62	392.584	348.615
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	74	417.804	659.713	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	74	467.384	737.999
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.988	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.865
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	332	561.080	345.625	1690	332	561.080	345.625
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	108	652.968	1031.036	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	108	725.328	1145.293
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	60	411.120	365.075	6852	68	465.936	413.751
																	TOTAL WEIGHT (IA):			11773.672	TOTAL WEIGHT (IIA):			12529.474

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: F
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8F–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3729	500	–	–	–	24	12	0.888	4205	36	151.380	134.425	4205	40	168.200	149.362
					A2	Y12	300	02	5808	500	–	–	–	24	12	0.888	6284	36	226.224	200.887	6284	40	251.360	223.208
8.00	5.21	7.05	1.70	1.60	A3	Y16	250	02	3729	500	–	–	–	32	16	1.579	4197	42	176.274	278.337	4197	48	201.456	318.099
					A4	Y16	250	02	5808	500	–	–	–	32	16	1.579	6276	42	263.592	416.212	6276	48	301.248	475.671
	DECK TYPE IIA				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	60	339.720	301.671	–	–	–	–
	5.88				A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	60	379.920	337.369
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	72	406.512	641.882	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	72	454.752	718.053
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	336	567.840	349.789	1690	336	567.840	349.789
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	108	652.968	1031.036	–	–	–	–
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	108	725.328	1145.293
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	60	411.120	365.075	6852	68	465.936	413.751
																	TOTAL WEIGHT (IA):			11776.968	TOTAL WEIGHT (IIA):			12532.809

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: F
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8F–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IA				A1	Y12	300	02	3629	500	–	–	–	24	12	0.888
					A2	Y12	300	02	5608	500	–	–	–	24	12	0.888
8.00	5.21	7.05	1.70	1.80	A3	Y16	250	02	3629	500	–	–	–	32	16	1.579
	DECK TYPE IIA				A4	Y16	250	02	5608	500	–	–	–	32	16	1.579
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579
	NO. OF TIE–WALL:	1			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)							
DECK TYPE IA				DECK TYPE IIA			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
4105	36	147.780	131.229	4105	40	164.200	145.810
6084	36	219.024	194.493	6084	40	243.360	216.104
4097	42	172.074	271.705	4097	48	196.656	310.520
6076	42	255.192	402.948	6076	48	291.648	460.512
5662	58	328.396	291.616	–	–	–	–
–	–	–	–	6332	58	367.256	326.123
5646	68	383.928	606.222	–	–	–	–
–	–	–	–	6316	68	429.488	678.162
3450	70	241.498	214.450	3450	80	275.998	245.086
5110	24	122.640	193.649	–	–	–	–
–	–	–	–	5780	24	138.720	219.039
3126	60	187.580	166.571	3126	68	212.591	188.781
4087	60	245.211	387.188	4087	68	277.906	438.813
5446	26	141.596	223.580	–	–	–	–
–	–	–	–	6116	26	159.016	251.086
5462	26	142.012	126.107	–	–	–	–
–	–	–	–	6132	26	159.432	141.576
1252	8	10.016	8.894	1252	8	10.016	8.894
1102	8	8.816	7.829	1102	8	8.816	7.829
5168	80	413.440	652.822	5168	80	413.440	652.822
5176	68	351.968	312.548	5176	68	351.968	312.548
5786	104	601.744	950.154	5786	104	601.744	950.154
5802	88	510.576	453.391	5802	88	510.576	453.391
8586	72	618.192	976.125	8586	72	618.192	976.125
8602	60	516.120	458.315	8602	60	516.120	458.315
2652	80	212.160	188.398	2652	104	275.808	244.918
2652	52	137.904	122.459	2652	104	275.808	244.918
8661	44	381.084	601.732	8661	44	381.084	601.732
8661	36	311.796	492.326	8661	36	311.796	492.326
6786	68	461.448	728.626	6786	68	461.448	728.626
6786	68	461.448	728.626	6786	68	461.448	728.626
1690	340	574.600	353.954	1690	340	574.600	353.954
6600	8	52.800	83.371	6600	8	52.800	83.371
1356	8	10.848	17.129	1356	8	10.848	17.129
1206	8	9.648	15.234	1206	8	9.648	15.234
470	16	7.520	4.632	470	16	7.520	4.632
6046	108	652.968	1031.036	–	–	–	–
–	–	–	–	6716	108	725.328	1145.293
6852	60	411.120	365.075	6852	68	465.936	413.751
TOTAL WEIGHT (IA):			11762.433	TOTAL WEIGHT (IIA):			12516.198

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
3. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: F
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	BAR BENDING SCHEDULE DWG. NO.: A–8F–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3429	500	–	–	–	24	12	0.888	3905	36	140.580	124.835	3905	40	156.200	138.706
					A2	Y12	300	02	5208	500	–	–	–	24	12	0.888	5684	36	204.624	181.706	5684	40	227.360	201.896
8.00	5.21	7.05	1.70	2.20	A3	Y16	250	02	3429	500	–	–	–	32	16	1.579	3897	42	163.674	258.441	3897	48	187.056	295.361
	DECK TYPE IIA				A4	Y16	250	02	5208	500	–	–	–	32	16	1.579	5676	42	238.392	376.421	5676	48	272.448	430.195
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	52	294.424	261.449	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	52	329.264	292.386
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	62	350.052	552.732	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	62	391.592	618.324
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.080	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	352	594.880	366.446	1690	352	594.880	366.446
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	108	652.968	1031.036	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	108	725.328	1145.293
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	60	411.120	365.075	6852	68	465.936	413.751
																	TOTAL WEIGHT (IA):			11928.161	TOTAL WEIGHT (IIA):			12709.048

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: F
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8F–04
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3329	500	–	–	–	24	12	0.888	3805	36	136.980	121.638	3805	40	152.200	135.154
					A2	Y12	300	02	5008	500	–	–	–	24	12	0.888	5484	36	197.424	175.313	5484	40	219.360	194.792
8.00	5.21	7.05	1.70	2.40	A3	Y16	250	02	3329	500	–	–	–	32	16	1.579	3797	42	159.474	251.809	3797	48	182.256	287.782
	DECK TYPE IIA				A4	Y16	250	02	5008	500	–	–	–	32	16	1.579	5476	42	229.992	363.157	5476	48	262.848	415.037
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	50	283.100	251.393	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	50	316.600	281.141
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	58	327.468	517.072	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	58	366.328	578.432
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	70	260.843	231.629	3726	80	298.107	264.719
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	70	328.080	518.038	4687	80	374.948	592.043
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	38	206.948	326.771	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	38	232.408	366.972
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	38	207.556	184.310	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	38	233.016	206.918
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	356	601.640	370.610	1690	356	601.640	370.610
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	108	652.968	1031.036	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	108	725.328	1145.293
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	60	411.120	365.075	6852	68	465.936	413.751
																	TOTAL WEIGHT (IA):			11918.560	TOTAL WEIGHT (IIA):			12698.358

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: F
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8F–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT.	LENGTH OF ABUT.	WIDTH OF FOUND.	TOE DIST. FROM ABUT.	DEPTH OF GIRDER	BAR MARK	BAR TYPE & DIA.	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS mm							UNIT WT. OF BAR	QUANTITY PER BRIDGE (TWO ABUTMENTS)							
																	DECK TYPE IA				DECK TYPE IIA			
																	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT	CUT LENGTH	TOTAL NO. OF BARS	TOTAL LENGTH	TOTAL WEIGHT
m	m	m	m	m		mm	mm		A	B	C	D	E	r	d	Kg/m	mm		m	Kg	mm		m	Kg
	DECK TYPE IA				A1	Y12	300	02	3229	500	–	–	–	24	12	0.888	3705	36	133.380	118.441	3705	40	148.200	131.602
					A2	Y12	300	02	4808	500	–	–	–	24	12	0.888	5284	36	190.224	168.919	5284	40	211.360	187.688
8.00	5.21	7.05	1.70	2.60	A3	Y16	250	02	3229	500	–	–	–	32	16	1.579	3697	42	155.274	245.178	3697	48	177.456	280.203
	DECK TYPE IIA				A4	Y16	250	02	4808	500	–	–	–	32	16	1.579	5276	42	221.592	349.894	5276	48	253.248	399.879
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	46	260.452	231.281	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	46	291.272	258.650
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	56	316.176	499.242	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	56	353.696	558.486
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	70	274.843	244.061	3926	80	314.107	278.927
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	70	342.090	540.144	4887	80	390.948	617.307
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	40	217.840	343.969	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	40	244.640	386.287
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	40	218.480	194.010	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	40	245.280	217.809
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4700	500	–	–	–	32	16	1.579	5168	80	413.440	652.822	5168	80	413.440	652.822
					W1(W/F)	Y12	300	02	4700	500	–	–	–	24	12	0.888	5176	68	351.968	312.548	5176	68	351.968	312.548
					W2(E/F)	Y16	150	05	300	5250	300	–	–	32	16	1.579	5786	104	601.744	950.154	5786	104	601.744	950.154
					W2(W/F)	Y12	175	05	300	5250	300	–	–	24	12	0.888	5802	88	510.576	453.391	5802	88	510.576	453.391
					W3(E/F)	Y16	250	05	150	8000	500	–	–	32	16	1.579	8586	72	618.192	976.125	8586	72	618.192	976.125
					W3(W/F)	Y12	300	05	150	8000	500	–	–	24	12	0.888	8602	60	516.120	458.315	8602	60	516.120	458.315
					W3(AV)E/F	Y12	200	05	150	2400	150	–	–	24	12	0.888	2652	80	212.160	188.398	2652	104	275.808	244.918
					W3(AV)W/F	Y12	300	05	150	2400	150	–	–	24	12	0.888	2652	52	137.904	122.459	2652	104	275.808	244.918
					W4(E/F)	Y16	125	05	150	8275	300	–	–	32	16	1.579	8661	44	381.084	601.732	8661	44	381.084	601.732
					W4(W/F)	Y16	150	05	150	8275	300	–	–	32	16	1.579	8661	36	311.796	492.326	8661	36	311.796	492.326
					W4a(AV)E/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					W4a(AV)W/F	Y16	150	05	150	6400	300	–	–	32	16	1.579	6786	68	461.448	728.626	6786	68	461.448	728.626
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	364	615.160	378.939	1690	364	615.160	378.939
					F2(AV)	Y16	–	01	6600	–	–	–	–	32	16	1.579	6600	8	52.800	83.371	6600	8	52.800	83.371
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	108	652.968	1031.036	–	–	–	–
	NO. OF TIE–WALL:		1		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	108	725.328	1145.293
					C2	Y12	300	05	150	6600	150	–	–	24	12	0.888	6852	60	411.120	365.075	6852	68	465.936	413.751
																	TOTAL WEIGHT (IA):			11920.898	TOTAL WEIGHT (IIA):			12700.532

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: F
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8F–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	4079	500	–	–	–	24	12	0.888	4555	30	136.650	121.345	4555	36	163.980	145.614
					A2	Y12	300	02	6508	500	–	–	–	24	12	0.888	6984	30	209.520	186.054	6984	36	251.424	223.265
8.50	4.41	8.85	2.00	1.40	A3	Y16	250	02	4079	500	–	–	–	32	16	1.579	4547	36	163.692	258.470	4547	42	190.974	301.548
	DECK TYPE IIB				A4	Y16	250	02	6508	500	–	–	–	32	16	1.579	6976	36	251.136	396.544	6976	42	292.992	462.634
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	70	340.340	302.222	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	70	387.240	343.869
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	82	397.372	627.450	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	82	452.312	714.201
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.952	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.357
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.357
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	708	1196.520	737.056	1690	708	1196.520	737.056
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	232	1217.072	1921.757	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	232	1372.512	2167.196
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	96	705.792	626.743	7352	112	823.424	731.201
																	TOTAL WEIGHT (IB):			13963.759	TOTAL WEIGHT (IIB):			14862.894

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: E BAR BENDING SCHEDULE DWG. NO.: A–8.5E–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3979	500	–	–	–	24	12	0.888	4455	30	133.650	118.681	4455	36	160.380	142.417
					A2	Y12	300	02	6308	500	–	–	–	24	12	0.888	6784	30	203.520	180.726	6784	36	244.224	216.871
8.50	4.41	8.85	2.00	1.60	A3	Y16	250	02	3979	500	–	–	–	32	16	1.579	4447	36	160.092	252.785	4447	42	186.774	294.916
	DECK TYPE IIB				A4	Y16	250	02	6308	500	–	–	–	32	16	1.579	6776	36	243.936	385.175	6776	42	284.592	449.371
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	66	320.892	284.952	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	66	365.112	324.219
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	80	387.680	612.147	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	80	441.280	696.781
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	52	152.169	135.126	2926	58	169.727	150.718
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	52	202.116	319.142	3887	58	225.437	355.966
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	24	111.504	176.065	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	24	127.584	201.455
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	24	111.888	99.357	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	24	127.968	113.636
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.357
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.357
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	712	1203.280	741.220	1690	712	1203.280	741.220
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE-WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	232	1217.072	1921.757	–	–	–	–
	NO. OF TIE-WALL:	2			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	232	1372.512	2167.196
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	96	705.792	626.743	7352	112	823.424	731.201
																	TOTAL WEIGHT (IB):			13958.913	TOTAL WEIGHT (IIB):			14855.378

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A-PF-01 TO A-PF-03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC-SHC-01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF-0-02 AND AF-0-02A
4. IN BAR MARK (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT-WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: E
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A-8.5E-02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3879	500	–	–	–	24	12	0.888	4355	30	130.650	116.017	4355	36	156.780	139.221
					A2	Y12	300	02	6108	500	–	–	–	24	12	0.888	6584	30	197.520	175.398	6584	36	237.024	210.477
8.50	4.41	8.85	2.00	1.80	A3	Y16	250	02	3879	500	–	–	–	32	16	1.579	4347	36	156.492	247.101	4347	42	182.574	288.284
	DECK TYPE IIB				A4	Y16	250	02	6108	500	–	–	–	32	16	1.579	6576	36	236.736	373.806	6576	42	276.192	436.107
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	64	311.168	276.317	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	64	354.048	314.395
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	76	368.296	581.539	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	76	419.216	661.942
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	52	162.569	144.362	3126	58	181.327	161.019
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	52	212.516	335.563	4087	58	237.037	374.282
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	26	120.796	190.737	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	26	138.216	218.243
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	26	121.212	107.636	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	26	138.632	123.105
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.357
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.357
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	716	1210.040	745.385	1690	716	1210.040	745.385
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	232	1217.072	1921.757	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	232	1372.512	2167.196
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	96	705.792	626.743	7352	112	823.424	731.201
																	TOTAL WEIGHT (IB):			13947.398	TOTAL WEIGHT (IIB):			14840.267

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: E
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8.5E–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3679	500	–	–	–	24	12	0.888	4155	30	124.650	110.689	4155	36	149.580	132.827
					A2	Y12	300	02	5708	500	–	–	–	24	12	0.888	6184	30	185.520	164.742	6184	36	222.624	197.690
8.50	4.41	8.85	2.00	2.20	A3	Y16	250	02	3679	500	–	–	–	32	16	1.579	4147	36	149.292	235.732	4147	42	174.174	275.021
	DECK TYPE IIB				A4	Y16	250	02	5708	500	–	–	–	32	16	1.579	6176	36	222.336	351.069	6176	42	259.392	409.580
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	58	281.996	250.412	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	58	320.856	284.920
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	70	339.220	535.628	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	70	386.120	609.683
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	60	211.580	187.883	3526	68	239.791	212.934
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	60	269.211	425.084	4487	68	305.106	481.762
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	36	167.256	264.097	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	36	191.376	302.183
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	36	167.832	149.035	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	36	191.952	170.453
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.367
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.367
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	728	1230.320	757.877	1690	728	1230.320	757.877
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	232	1217.072	1921.757	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	232	1372.512	2167.196
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	96	705.792	626.743	7352	112	823.424	731.201
																	TOTAL WEIGHT (IB):			14085.786	TOTAL WEIGHT (IIB):			15002.738

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: E
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8.5E–04
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3579	500	–	–	–	24	12	0.888	4055	30	121.650	108.025	4055	36	145.980	129.630
					A2	Y12	300	02	5508	500	–	–	–	24	12	0.888	5984	30	179.520	159.414	5984	36	215.424	191.297
8.50	4.41	8.35	2.00	2.40	A3	Y16	250	02	3579	500	–	–	–	32	16	1.579	4047	36	145.692	230.048	4047	42	169.974	268.389
	DECK TYPE IIB				A4	Y16	250	02	5508	500	–	–	–	32	16	1.579	5976	36	215.136	339.700	5976	42	250.992	396.316
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	56	272.272	241.778	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	56	309.792	275.095
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	66	319.836	505.021	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	66	364.056	574.844
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	60	223.580	198.539	3726	68	253.391	225.011
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	60	281.211	444.032	4687	68	318.706	503.237
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	38	176.548	278.769	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	38	202.008	318.971
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	38	177.156	157.315	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	38	202.616	179.923
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.357
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.357
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	732	1237.080	762.041	1690	732	1237.080	762.041
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	232	1217.072	1921.757	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	232	1372.512	2167.196
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	96	705.792	626.743	7352	112	823.424	731.201
																	TOTAL WEIGHT (IB):			14078.219	TOTAL WEIGHT (IIB):			14992.561

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: E
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8.5E–05
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3479	500	–	–	–	24	12	0.888	3955	30	118.650	105.361	3955	36	142.380	126.433
					A2	Y12	300	02	5308	500	–	–	–	24	12	0.888	5784	30	173.520	154.086	5784	36	208.224	184.903
8.50	4.41	8.85	2.00	2.60	A3	Y16	250	02	3479	500	–	–	–	32	16	1.579	3947	36	142.092	224.363	3947	42	165.774	261.757
	DECK TYPE IIB				A4	Y16	250	02	5308	500	–	–	–	32	16	1.579	5776	36	207.936	328.331	5776	42	242.592	383.053
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	54	262.548	233.143	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	54	298.728	265.270
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	64	310.144	489.717	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	64	353.024	557.425
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.367
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.367
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	740	1250.600	770.370	1690	740	1250.600	770.370
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	250	05	500	4310	500	–	–	32	16	1.579	5246	232	1217.072	1921.757	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	250	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	232	1372.512	2167.196
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	96	705.792	626.743	7352	112	823.424	731.201
																	TOTAL WEIGHT (IB):			14090.119	TOTAL WEIGHT (IIB):			15003.968

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: E
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8.5E–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4079	500	–	–	–	24	12	0.888	4555	36	163.980	145.614	4555	40	182.200	161.794
					A2	Y12	300	02	6508	500	–	–	–	24	12	0.888	6984	36	251.424	223.265	6984	40	279.360	248.072
8.50	5.21	8.85	2.00	1.40	A3	Y16	250	02	4079	500	–	–	–	32	16	1.579	4547	42	190.974	301.548	4547	48	218.256	344.626
	DECK TYPE IIA				A4	Y16	250	02	6508	500	–	–	–	32	16	1.579	6976	42	292.992	462.634	6976	48	334.848	528.725
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	70	396.340	351.950	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	70	443.240	393.597
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	82	462.972	731.033	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	82	517.912	817.783
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.365
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.357
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.357
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	708	1196.520	737.056	1690	708	1196.520	737.056
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	232	1402.672	2214.819	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	232	1558.112	2460.259
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	120	882.240	783.429	7352	136	999.872	887.886
																	TOTAL WEIGHT (IA):			14907.778	TOTAL WEIGHT (IIA):			15809.032

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: H
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	BAR BENDING SCHEDULE DWG. NO.: A–8.5H–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3979	500	–	–	–	24	12	0.888	4455	36	160.380	142.417	4455	40	178.200	158.242
					A2	Y12	300	02	6308	500	–	–	–	24	12	0.888	6784	36	244.224	216.871	6784	40	271.360	240.968
8.50	5.21	8.85	2.00	1.60	A3	Y16	250	02	3979	500	–	–	–	32	16	1.579	4447	42	186.774	294.916	4447	48	213.456	337.047
	DECK TYPE IIA				A4	Y16	250	02	6308	500	–	–	–	32	16	1.579	6776	42	284.592	449.371	6776	48	325.248	513.567
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	66	373.692	331.838	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	66	417.912	371.106
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	80	451.680	713.203	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	80	505.280	797.837
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.357
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.357
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	712	1203.280	741.220	1690	712	1203.280	741.220
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	232	1402.672	2214.819	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	232	1558.112	2460.259
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	120	882.240	783.429	7352	136	999.872	887.886
																	TOTAL WEIGHT (IA):			14901.018	TOTAL WEIGHT (IIA):			15801.121

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: H
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPPISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8.5H–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3679	500	–	–	–	24	12	0.888	4155	36	149.580	132.827	4155	40	166.200	147.586
					A2	Y12	300	02	5708	500	–	–	–	24	12	0.888	6184	36	222.624	197.690	6184	40	247.360	219.656
8.50	5.21	8.85	2.00	2.20	A3	Y16	250	02	3679	500	–	–	–	32	16	1.579	4147	42	174.174	275.021	4147	48	199.056	314.309
	DECK TYPE IIA				A4	Y16	250	02	5708	500	–	–	–	32	16	1.579	6176	42	259.392	409.580	6176	48	296.448	468.091
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	58	328.396	291.616	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	58	367.256	326.123
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	70	395.220	624.052	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	70	442.120	698.107
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.080	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.357
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.357
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	728	1230.320	757.877	1690	728	1230.320	757.877
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	232	1402.672	2214.819	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	232	1558.112	2460.259
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	120	882.240	783.429	7352	136	999.872	887.886
																	TOTAL WEIGHT (IA):			15052.211	TOTAL WEIGHT (IIA):			15977.360

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: H BAR BENDING SCHEDULE DWG. NO.: A–8.5H–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND.. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3579	500	–	–	–	24	12	0.888	4055	36	145.980	129.630	4055	40	162.200	144.034
					A2	Y12	300	02	5508	500	–	–	–	24	12	0.888	5984	36	215.424	191.297	5984	40	239.360	212.562
8.50	5.21	8.85	2.00	2.40	A3	Y16	250	02	3579	500	–	–	–	32	16	1.579	4047	42	169.974	268.389	4047	48	194.256	306.730
	DECK TYPE IIA				A4	Y16	250	02	5508	500	–	–	–	32	16	1.579	5976	42	250.992	396.316	5976	48	286.848	452.933
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	56	317.072	281.560	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	56	354.592	314.878
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	66	372.636	588.392	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	66	416.856	658.216
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	70	260.843	231.629	3726	80	298.107	264.719
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	70	328.080	518.038	4687	80	374.948	592.043
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	38	206.948	326.771	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	38	232.408	366.972
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	38	207.556	184.310	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	38	233.016	206.918
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579	5418	104	563.472	889.722	5418	104	563.472	889.722
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888	5426	88	477.488	424.009	5426	88	477.488	424.009
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579	9086	96	872.256	1377.292	9086	96	872.256	1377.292
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888	9102	80	728.160	646.606	9102	80	728.160	646.606
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888	2302	56	128.912	114.474	2302	76	174.952	155.357
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888	2302	40	92.080	81.767	2302	76	174.952	155.357
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579	9111	36	327.996	517.906	9111	36	327.996	517.906
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888	9127	36	328.572	291.772	9127	36	328.572	291.772
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579	7761	48	372.528	588.222	7761	48	372.528	588.222
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888	7777	40	311.080	276.239	7777	40	311.080	276.239
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	732	1237.080	762.041	1690	732	1237.080	762.041
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579	7100	16	113.600	179.374	7100	16	113.600	179.374
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579	6046	232	1402.672	2214.819	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	232	1558.112	2460.259
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888	7352	120	882.240	783.429	7352	136	999.872	887.886
																	TOTAL WEIGHT (IA):			15042.611	TOTAL WEIGHT (IIA):			15966.670

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: H
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–8.5H–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 8.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IA				A1	Y12	300	02	3479	500	–	–	–	24	12	0.888
					A2	Y12	300	02	5308	500	–	–	–	24	12	0.888
8.50	5.21	8.85	2.00	2.60	A3	Y16	250	02	3479	500	–	–	–	32	16	1.579
	DECK TYPE IIA				A4	Y16	250	02	5308	500	–	–	–	32	16	1.579
					A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888
	5.88				A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	4950	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	4950	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	8500	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	8500	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2050	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2050	150	–	–	24	12	0.888
					W4(E/F)	Y16	150	05	150	8725	300	–	–	32	16	1.579
					W4(W/F)	Y12	150	05	150	8725	300	–	–	24	12	0.888
					W4a(AV)E/F	Y16	150	05	150	7375	300	–	–	32	16	1.579
					W4a(AV)W/F	Y12	175	05	150	7375	300	–	–	24	12	0.888
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	7100	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IA)	Y16	250	05	500	5110	500	–	–	32	16	1.579
	NO. OF TIE–WALL:	2			C1(IIA)	Y16	250	05	500	5780	500	–	–	32	16	1.579
					C2	Y12	300	05	150	7100	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)								
DECK TYPE IA				DECK TYPE IIA			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
3955	36	142.380	126.433	3955	40	158.200	140.482
5784	36	208.224	184.903	5784	40	231.360	205.448
3947	42	165.774	261.757	3947	48	189.456	299.151
5776	42	242.592	383.053	5776	48	277.248	437.775
5662	54	305.748	271.504	–	–	–	–
–	–	–	–	6332	54	341.928	303.632
5646	64	361.344	570.562	–	–	–	–
–	–	–	–	6316	64	404.224	638.270
3450	70	241.498	214.450	3450	80	275.998	245.086
5110	24	122.640	193.649	–	–	–	–
–	–	–	–	5780	24	138.720	219.039
3926	70	274.843	244.061	3926	80	314.107	278.927
4887	70	342.080	540.144	4887	80	390.948	617.307
5446	40	217.840	343.969	–	–	–	–
–	–	–	–	6116	40	244.640	386.287
5462	40	218.480	194.010	–	–	–	–
–	–	–	–	6132	40	245.280	217.809
1252	8	10.016	8.894	1252	8	10.016	8.894
1102	8	8.816	7.829	1102	8	8.816	7.829
5418	104	563.472	889.722	5418	104	563.472	889.722
5426	88	477.488	424.009	5426	88	477.488	424.009
7286	136	990.896	1564.625	7286	136	990.896	1564.625
7302	116	847.032	752.164	7302	116	847.032	752.164
9086	96	872.256	1377.292	9086	96	872.256	1377.292
9102	80	728.160	646.606	9102	80	728.160	646.606
2302	56	128.912	114.474	2302	76	174.952	155.357
2302	40	92.080	81.767	2302	76	174.952	155.357
9111	36	327.996	517.906	9111	36	327.996	517.906
9127	36	328.572	291.772	9127	36	328.572	291.772
7761	48	372.528	588.222	7761	48	372.528	588.222
7777	40	311.080	276.239	7777	40	311.080	276.239
1690	740	1250.600	770.370	1690	740	1250.600	770.370
7100	16	113.600	179.374	7100	16	113.600	179.374
1356	8	10.848	17.129	1356	8	10.848	17.129
1206	8	9.648	15.234	1206	8	9.648	15.234
470	16	7.520	4.632	470	16	7.520	4.632
6046	232	1402.672	2214.819	–	–	–	–
–	–	–	–	6716	232	1558.112	2460.259
7352	120	882.240	783.429	7352	136	999.872	887.886
TOTAL WEIGHT (IA):			15055.004	TOTAL WEIGHT (IIA):			15980.090

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY:

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT:

LOCATION:
THANA:
ZILA:

ABUTMENT–WING WALL
DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.60 m
FOUNDATION TYPE: H

BAR BENDING SCHEDULE

DWG. NO.: A–8.5H–06

DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	4329	500	–	–	–	24	12	0.888	4805	30	144.150	128.005	4805	36	172.980	153.606
					A2	Y12	300	02	7008	500	–	–	–	24	12	0.888	7484	30	224.520	199.374	7484	36	269.424	239.249
9.00	4.41	8.85	2.00	1.40	A3	Y16	250	02	4329	500	–	–	–	32	16	1.579	4797	36	172.692	272.681	4797	42	201.474	318.127
	DECK TYPE IIB				A4	Y16	250	02	7008	500	–	–	–	32	16	1.579	7476	36	269.136	424.966	7476	42	313.992	495.793
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	76	369.512	328.127	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	76	420.432	373.344
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	90	436.140	688.665	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	90	496.440	783.879
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.952	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	772	1304.680	803.683	1690	772	1304.680	803.683
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE-WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	280	1468.880	2319.362	–	–	–	–
	NO. OF TIE-WALL:	2			C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	280	1656.480	2615.582
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	96	753.792	669.367	7852	112	879.424	780.929
																	TOTAL WEIGHT (IB):			15599.316	TOTAL WEIGHT (IIB):			16628.160

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A-PF-01 TO A-PF-03
2. FOR SHAPE CODE, REFER TO DWG. NO PC-SHC-01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF-0-02 AND AF-0-02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT-WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: E
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A-9E-01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	4229	500	–	–	–	24	12	0.888	4705	30	141.150	125.341	4705	36	169.380	150.409
					A2	Y12	300	02	6808	500	–	–	–	24	12	0.888	7284	30	218.520	194.046	7284	36	262.224	232.855
9.00	4.41	8.85	2.00	1.60	A3	Y16	250	02	4229	500	–	–	–	32	16	1.579	4697	36	169.092	266.996	4697	42	197.274	311.496
	DECK TYPE IIB				A4	Y16	250	02	6808	500	–	–	–	32	16	1.579	7276	36	261.936	413.597	7276	42	305.592	482.530
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	74	359.788	319.492	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	74	409.368	363.519
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	88	426.448	673.361	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	88	485.408	766.459
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	52	152.169	135.126	2926	58	169.727	150.718
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	52	202.116	319.142	3887	58	225.437	355.966
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	24	111.504	176.065	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579		–	–	–	5316	24	127.584	201.455
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	24	111.888	99.357	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	24	127.968	113.636
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	776	1311.440	807.847	1690	776	1311.440	807.847
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	280	1468.880	2319.362	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	280	1656.480	2615.582
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	96	753.792	669.367	7852	112	879.424	780.929
																	TOTAL WEIGHT (IB):			15603.105	TOTAL WEIGHT (IIB):			16630.469

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: E BAR BENDING SCHEDULE DWG. NO.: A–9E–02 DATE: JUNE 1996

Web Copy

BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT.	LENGTH OF ABUT.	WIDTH OF FOUND.	TOE DIST. FROM ABUT.	DEPTH OF GIRDER	BAR MARK	BAR TYPE & DIA.	BAR SPACING	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
m	m	m	m	m		mm	mm																	
	DECK TYPE IB				A1	Y12	300	02	4129	500	–	–	–	24	12	0.888	4605	30	138.150	122.677	4605	36	165.780	147.213
					A2	Y12	300	02	6608	500	–	–	–	24	12	0.888	7084	30	212.520	188.718	7084	36	255.024	226.461
9.00	4.41	8.35	2.00	1.80	A3	Y16	250	02	4129	500	–	–	–	32	16	1.579	4597	36	165.492	261.312	4597	42	193.074	304.864
	DECK TYPE IIB				A4	Y16	250	02	6608	500	–	–	–	32	16	1.579	7076	36	254.736	402.228	7076	42	297.192	469.266
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	70	340.340	302.222	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	70	387.240	343.869
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	84	407.064	642.754	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	84	463.344	731.620
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	52	162.569	144.362	3126	58	181.327	161.019
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	52	212.516	335.563	4087	58	237.037	374.282
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	26	120.796	190.737	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	26	138.216	218.243
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	26	121.212	107.636	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	26	138.632	123.105
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	780	1318.200	812.011	1690	780	1318.200	812.011
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	280	1468.880	2319.362	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	280	1656.480	2615.582
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	96	753.792	669.367	7852	112	879.424	780.929
																	TOTAL WEIGHT (IB):			15582.955	TOTAL WEIGHT (IIB):			16605.533

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA. ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: E BAR BENDING SCHEDULE DWG. NO.: A–9E–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IB				A1	Y12	300	02	3929	500	–	–	–	24	12	0.888
					A2	Y12	300	02	6208	500	–	–	–	24	12	0.888
9.00	4.41	8.85	2.00	2.20	A3	Y16	250	02	3929	500	–	–	–	32	16	1.579
	DECK TYPE IIB				A4	Y16	250	02	6208	500	–	–	–	32	16	1.579
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)							
DECK TYPE IB				DECK TYPE IIB			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
4405	30	132.150	117.349	4405	36	158.580	140.819
6684	30	200.520	178.062	6684	36	240.624	213.674
4397	36	158.292	249.943	4397	42	184.674	291.600
6676	36	240.336	379.491	6676	42	280.392	442.739
4862	66	320.892	284.952	–	–	–	–
–	–	–	–	5532	66	365.112	324.219
4846	78	377.988	596.843	–	–	–	–
–	–	–	–	5516	78	430.248	679.362
3450	60	206.998	183.814	3450	68	234.598	208.323
4310	24	103.440	163.332	–	–	–	–
–	–	–	–	4980	24	119.520	188.722
3526	60	211.580	187.883	3526	68	239.791	212.934
4487	60	269.211	425.084	4487	68	305.106	481.762
4646	36	167.256	264.097	–	–	–	–
–	–	–	–	5316	36	191.376	302.183
4662	36	167.832	149.035	–	–	–	–
–	–	–	–	5332	36	191.952	170.453
1252	8	10.016	8.894	1252	8	10.016	8.894
1102	8	8.816	7.829	1102	8	8.816	7.829
5668	104	589.472	930.776	5668	104	589.472	930.776
5676	88	499.488	443.545	5676	88	499.488	443.545
7286	136	990.896	1564.625	7286	136	990.896	1564.625
7302	116	847.032	752.164	7302	116	847.032	752.164
9586	96	920.256	1453.084	9586	96	920.256	1453.084
9602	80	768.160	682.126	9602	80	768.160	682.126
2552	72	183.744	163.165	2552	96	244.992	217.553
2552	48	122.496	108.776	2552	96	244.992	217.553
9861	44	433.884	685.103	9861	44	433.884	685.103
9861	36	354.996	560.539	9861	36	354.996	560.539
8136	60	488.160	770.805	8136	60	488.160	770.805
8152	52	423.904	376.427	8152	52	423.904	376.427
1690	792	1338.480	824.504	1690	792	1338.480	824.504
7600	16	121.600	192.006	7600	16	121.600	192.006
1356	8	10.848	17.129	1356	8	10.848	17.129
1206	8	9.648	15.234	1206	8	9.648	15.234
470	16	7.520	4.632	470	16	7.520	4.632
5246	280	1468.880	2319.362	–	–	–	–
–	–	–	–	5916	280	1656.480	2615.582
7852	96	753.792	669.367	7852	112	879.424	780.929
TOTAL WEIGHT (IB):			15729.978	TOTAL WEIGHT (IIB):			16777.830

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: E
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9E–04
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3829	500	–	–	–	24	12	0.888	4305	30	129.150	114.685	4305	36	154.980	137.622
					A2	Y12	300	02	6008	500	–	–	–	24	12	0.888	6484	30	194.520	172.734	6484	36	233.424	207.281
9.00	4.41	8.85	2.00	2.40	A3	Y16	250	02	3829	500	–	–	–	32	16	1.579	4297	36	154.692	244.259	4297	42	180.474	284.968
	DECK TYPE IIB				A4	Y16	250	02	6008	500	–	–	–	32	16	1.579	6476	36	233.136	368.122	6476	42	271.992	429.475
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	62	301.444	267.682	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	62	342.984	304.570
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	74	358.604	566.236	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	74	408.184	644.523
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	60	223.580	198.539	3726	68	253.391	225.011
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	60	281.211	444.032	4687	68	318.706	503.237
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	38	176.548	278.769	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	38	202.008	318.971
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	38	177.156	157.315	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	38	202.616	179.923
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.775
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	796	1345.240	828.668	1690	796	1345.240	828.668
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	280	1468.880	2319.362	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	280	1656.480	2615.582
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	96	753.792	669.367	7852	112	879.424	780.929
																	TOTAL WEIGHT (IB):			15713.775	TOTAL WEIGHT (IIB):			16757.828

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: E
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9E–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3729	500	–	–	–	24	12	0.888	4205	30	126.150	112.021	4205	36	151.380	134.425
					A2	Y12	300	02	5808	500	–	–	–	24	12	0.888	6284	30	188.520	167.406	6284	36	226.224	200.887
9.00	4.41	8.85	2.00	2.60	A3	Y16	250	02	3729	500	–	–	–	32	16	1.579	4197	36	151.092	238.574	4197	42	176.274	278.337
	DECK TYPE IIB				A4	Y16	250	02	5808	500	–	–	–	32	16	1.579	6276	36	225.936	356.753	6276	42	263.592	416.212
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	60	291.720	259.047	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	60	331.920	294.745
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	72	348.912	550.932	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	72	397.152	627.103
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	804	1358.760	836.996	1690	804	1358.760	836.996
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	280	1468.880	2319.362	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	280	1656.480	2615.582
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	96	753.792	669.367	7852	112	879.424	780.929
																	TOTAL WEIGHT (IB):			15725.676	TOTAL WEIGHT (IIB):			16769.235

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: E BAR BENDING SCHEDULE DWG. NO.: A–9E–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4329	500	–	–	–	24	12	0.888	4805	36	172.980	153.606	4805	40	192.200	170.674
					A2	Y12	300	02	7008	500	–	–	–	24	12	0.888	7484	36	269.424	239.249	7484	40	299.360	265.832
9.00	5.21	8.85	2.00	1.40	A3	Y16	250	02	4329	500	–	–	–	32	16	1.579	4797	42	201.474	318.127	4797	48	230.256	363.574
	DECK TYPE IIA				A4	Y16	250	02	7008	500	–	–	–	32	16	1.579	7476	42	313.992	495.793	7476	48	358.848	566.621
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	76	430.312	382.117	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	76	481.232	427.334
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	90	508.140	802.353	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	90	568.440	897.567
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.865
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	772	1304.680	803.683	1690	772	1304.680	803.683
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	280	1692.880	2673.058	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	280	1880.480	2969.278
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	120	942.240	836.709	7852	136	1067.872	948.270
																	TOTAL WEIGHT (IA):			16640.094	TOTAL WEIGHT (IIA):			17669.726

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: H
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	BAR BENDING SCHEDULE DWG. NO.: A–9H–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4329	500	–	–	–	24	12	0.888	4805	36	172.980	153.606	4805	40	192.200	170.674
					A2	Y12	300	02	7008	500	–	–	–	24	12	0.888	7484	36	269.424	239.249	7484	40	299.360	265.832
9.00	5.21	8.85	2.00	1.40	A3	Y16	250	02	4329	500	–	–	–	32	16	1.579	4797	42	201.474	318.127	4797	48	230.256	363.574
	DECK TYPE IIA				A4	Y16	250	02	7008	500	–	–	–	32	16	1.579	7476	42	313.992	495.793	7476	48	358.848	566.621
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	76	430.312	382.117	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	76	481.232	427.334
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	90	508.140	802.353	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	90	568.440	897.567
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.865
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	772	1304.680	803.683	1690	772	1304.680	803.683
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	280	1692.880	2673.058	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	280	1880.480	2969.278
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	120	942.240	836.709	7852	136	1067.872	948.270
																	TOTAL WEIGHT (IA):			16640.094	TOTAL WEIGHT (IIA):			17669.726

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: H BAR BENDING SCHEDULE DWG. NO.: A–9H–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4229	500	–	–	–	24	12	0.888	4705	36	169.380	150.409	4705	40	188.200	167.122
					A2	Y12	300	02	6808	500	–	–	–	24	12	0.888	7284	36	262.224	232.855	7284	40	291.360	258.728
9.00	5.21	8.85	2.00	1.60	A3	Y16	250	02	4229	500	–	–	–	32	16	1.579	4697	42	197.274	311.496	4697	48	225.456	355.995
	DECK TYPE IIA				A4	Y16	250	02	6808	500	–	–	–	32	16	1.579	7276	42	305.592	482.530	7276	48	349.248	551.463
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	74	418.988	372.061	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	74	468.568	416.088
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	88	496.848	784.523	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	88	555.808	877.621
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	776	1311.440	807.847	1690	776	1311.440	807.847
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	280	1692.880	2673.058	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	280	1880.480	2969.278
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	120	942.240	836.709	7852	136	1067.872	948.270
																	TOTAL WEIGHT (IA):			16643.389	TOTAL WEIGHT (IIA):			17673.061

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: H
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9H–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m
	DECK TYPE IA				A1	Y12	300	02	4129	500	–	–	–	24	12	0.888
					A2	Y12	300	02	6608	500	–	–	–	24	12	0.888
9.00	5.21	8.85	2.00	1.80	A3	Y16	250	02	4129	500	–	–	–	32	16	1.579
	DECK TYPE IIA				A4	Y16	250	02	6608	500	–	–	–	32	16	1.579
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579
	NO. OF TIE–WALL: 2				C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888

QUANTITY PER BRIDGE (TWO ABUTMENTS)							
DECK TYPE IA				DECK TYPE IIA			
CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
4605	36	165.780	147.213	4605	40	184.200	163.570
7084	36	255.024	226.461	7084	40	283.360	251.624
4597	42	193.074	304.864	4597	48	220.656	348.416
7076	42	297.192	469.266	7076	48	339.648	536.304
5662	70	396.340	351.950	–	–	–	–
–	–	–	–	6332	70	443.240	393.597
5646	84	474.264	748.863	–	–	–	–
–	–	–	–	6316	84	530.544	837.729
3450	70	241.498	214.450	3450	80	275.998	245.086
5110	24	122.640	193.649	–	–	–	–
–	–	–	–	5780	24	138.720	219.039
3126	60	187.580	166.571	3126	68	212.591	188.781
4087	60	245.211	387.188	4087	68	277.906	438.813
5446	26	141.596	223.580	–	–	–	–
–	–	–	–	6116	26	159.016	251.086
5462	26	142.012	126.107	–	–	–	–
–	–	–	–	6132	26	159.432	141.576
1252	8	10.016	8.894	1252	8	10.016	8.894
1102	8	8.816	7.829	1102	8	8.816	7.829
5668	104	589.472	930.776	5668	104	589.472	930.776
5676	88	499.488	443.545	5676	88	499.488	443.545
7286	136	990.896	1564.625	7286	136	990.896	1564.625
7302	116	847.032	752.164	7302	116	847.032	752.164
9586	96	920.256	1453.084	9586	96	920.256	1453.084
9602	80	768.160	682.126	9602	80	768.160	682.126
2552	72	183.744	163.165	2552	96	244.992	217.553
2552	48	122.496	108.776	2552	96	244.992	217.553
9861	44	433.884	685.103	9861	44	433.884	685.103
9861	36	354.996	560.539	9861	36	354.996	560.539
8136	60	488.160	770.805	8136	60	488.160	770.805
8152	52	423.904	376.427	8152	52	423.904	376.427
1690	780	1318.200	812.011	1690	780	1318.200	812.011
7600	16	121.600	192.006	7600	16	121.600	192.006
1356	8	10.848	17.129	1356	8	10.848	17.129
1206	8	9.648	15.234	1206	8	9.648	15.234
470	16	7.520	4.632	470	16	7.520	4.632
6046	280	1692.880	2673.058	–	–	–	–
–	–	–	–	6716	280	1880.480	2969.278
7852	120	942.240	836.709	7852	136	1067.872	948.270
TOTAL WEIGHT (IA):			16618.799	TOTAL WEIGHT (IIA):			17645.204

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: H
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9H–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER. m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3929	500	–	–	–	24	12	0.888	4405	36	158.580	140.819	4405	40	176.200	156.466
					A2	Y12	300	02	6208	500	–	–	–	24	12	0.888	6684	36	240.624	213.674	6684	40	267.360	237.416
9.00	5.21	8.85	2.00	2.20	A3	Y16	250	02	3929	500	–	–	–	32	16	1.579	4397	42	184.674	291.600	4397	48	211.056	333.257
	DECK TYPE IIA				A4	Y16	250	02	6208	500	–	–	–	32	16	1.579	6676	42	280.392	442.739	6676	48	320.448	505.967
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	66	373.692	331.838	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	66	417.912	371.106
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	78	440.388	695.373	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	78	492.648	777.891
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.080	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	792	1338.480	824.504	1690	792	1338.480	824.504
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	280	1692.880	2673.058	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	280	1880.480	2969.278
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	120	942.240	836.709	7852	136	1067.872	948.270
																	TOTAL WEIGHT (IA):			16794.583	TOTAL WEIGHT (IIA):			17849.300

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: H
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9H–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3829	500	–	–	–	24	12	0.888	4305	36	154.980	137.622	4305	40	172.200	152.914
					A2	Y12	300	02	6008	500	–	–	–	24	12	0.888	6484	36	233.424	207.281	6484	40	259.360	230.312
9.00	5.21	8.85	2.00	2.40	A3	Y16	250	02	3829	500	–	–	–	32	16	1.579	4297	42	180.474	284.968	4297	48	206.256	325.678
	DECK TYPE IIA				A4	Y16	250	02	6008	500	–	–	–	32	16	1.579	6476	42	271.992	429.475	6476	48	310.848	490.829
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	62	351.044	311.727	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	62	392.584	348.615
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	74	417.804	659.713	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	74	467.384	737.999
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	70	260.843	231.629	3726	80	298.107	264.719
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	70	328.080	518.038	4687	80	374.948	592.043
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	38	206.948	326.771	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	38	232.408	366.972
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	38	207.556	184.310	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	38	233.016	206.918
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	796	1345.240	828.668	1690	796	1345.240	828.668
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	280	1692.880	2673.058	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	280	1880.480	2969.278
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	120	942.240	836.709	7852	136	1067.872	948.270
																	TOTAL WEIGHT (IA):			16774.926	TOTAL WEIGHT (IIA):			17827.364

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: H
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9H–05 DATE: JUNE 1996

Web Copy

BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3729	500	–	–	–	24	12	0.888	4205	36	151.380	134.425	4205	40	168.200	149.362
					A2	Y12	300	02	5808	500	–	–	–	24	12	0.888	6284	36	226.224	200.887	6284	40	251.360	223.208
9.00	5.21	8.85	2.00	2.60	A3	Y16	250	02	3729	500	–	–	–	32	16	1.579	4197	42	176.274	278.337	4197	48	201.456	318.099
	DECK TYPE IIA				A4	Y16	250	02	5808	500	–	–	–	32	16	1.579	6276	42	263.592	416.212	6276	48	301.248	475.671
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	60	339.720	301.671	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	60	379.920	337.369
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	72	406.512	641.882	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	72	454.752	718.053
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	70	274.843	244.061	3926	80	314.107	278.927
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	70	342.080	540.144	4887	80	390.948	617.307
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	40	217.840	343.969	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	40	244.640	386.287
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	40	218.480	194.010	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	40	245.280	217.809
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5200	500	–	–	–	32	16	1.579	5668	104	589.472	930.776	5668	104	589.472	930.776
					W1(W/F)	Y12	300	02	5200	500	–	–	–	24	12	0.888	5676	88	499.488	443.545	5676	88	499.488	443.545
					W2(E/F)	Y16	150	05	300	6750	300	–	–	32	16	1.579	7286	136	990.896	1564.625	7286	136	990.896	1564.625
					W2(W/F)	Y12	175	05	300	6750	300	–	–	24	12	0.888	7302	116	847.032	752.164	7302	116	847.032	752.164
					W3(E/F)	Y16	250	05	150	9000	500	–	–	32	16	1.579	9586	96	920.256	1453.084	9586	96	920.256	1453.084
					W3(W/F)	Y12	300	05	150	9000	500	–	–	24	12	0.888	9602	80	768.160	682.126	9602	80	768.160	682.126
					W3(AV)E/F	Y12	200	05	150	2300	150	–	–	24	12	0.888	2552	72	183.744	163.165	2552	96	244.992	217.553
					W3(AV)W/F	Y12	300	05	150	2300	150	–	–	24	12	0.888	2552	48	122.496	108.776	2552	96	244.992	217.553
					W4(E/F)	Y16	125	05	150	9475	300	–	–	32	16	1.579	9861	44	433.884	685.103	9861	44	433.884	685.103
					W4(W/F)	Y16	150	05	150	9475	300	–	–	32	16	1.579	9861	36	354.996	560.539	9861	36	354.996	560.539
					W4a(AV)E/F	Y16	150	05	150	7750	300	–	–	32	16	1.579	8136	60	488.160	770.805	8136	60	488.160	770.805
					W4a(AV)W/F	Y12	175	05	150	7750	300	–	–	24	12	0.888	8152	52	423.904	376.427	8152	52	423.904	376.427
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	804	1358.760	836.996	1690	804	1358.760	836.996
					F2(AV)	Y16	–	01	7600	–	–	–	–	32	16	1.579	7600	16	121.600	192.006	7600	16	121.600	192.006
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	280	1692.880	2673.058	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	280	1880.480	2969.278
					C2	Y12	300	05	150	7600	150	–	–	24	12	0.888	7852	120	942.240	836.709	7852	136	1067.872	948.270
																	TOTAL WEIGHT (IA):			16787.320	TOTAL WEIGHT (IIA):			17840.784

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: H
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9H–06
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	4579	500	–	–	–	24	12	0.888	5055	30	151.650	134.665	5055	36	181.980	161.598
					A2	Y12	300	02	7508	500	–	–	–	24	12	0.888	7984	30	239.520	212.694	7984	36	287.424	255.233
9.50	4.41	10.20	2.00	1.40	A3	Y16	250	02	4579	500	–	–	–	32	16	1.579	5047	36	181.692	286.892	5047	42	211.974	334.707
					A4	Y16	250	02	7508	500	–	–	–	32	16	1.579	7976	36	287.136	453.368	7976	42	334.992	528.952
	DECK TYPE IIB				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	82	398.684	354.031	–	–	–	–
	5.08				A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	82	453.624	402.818
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	98	474.908	749.880	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	98	540.568	853.557
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.962	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	796	1345.240	828.668	1690	796	1345.240	828.668
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	296	1552.816	2451.896	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	296	1751.136	2765.044
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	96	801.792	711.991	8352	112	935.424	830.657
																			TOTAL WEIGHT (IB):	17810.845			TOTAL WEIGHT (IIB):	18849.005

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: G
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9.5G–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	4479	500	–	–	–	24	12	0.888	4955	30	148.650	132.001	4955	36	178.380	158.401
					A2	Y12	300	02	7308	500	–	–	–	24	12	0.888	7784	30	233.520	207.366	7784	36	280.224	248.839
9.50	4.41	10.20	2.00	1.60	A3	Y16	250	02	4479	500	–	–	–	32	16	1.579	4947	36	178.092	281.207	4947	42	207.774	328.075
	DECK TYPE IIB				A4	Y16	250	02	7308	500	–	–	–	32	16	1.579	7776	36	279.936	442.019	7776	42	326.592	515.689
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	80	388.960	345.396	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	80	442.560	392.993
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	96	465.216	734.576	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	96	529.536	836.137
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	52	152.169	135.126	2926	58	169.727	150.718
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	52	202.116	319.142	3887	58	225.437	355.966
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	24	111.504	176.065	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	24	127.584	201.455
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	24	111.888	99.357	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	24	127.968	113.636
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	800	1352.000	832.832	1690	800	1352.000	832.832
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	296	1552.816	2451.896	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	296	1751.136	2765.044
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	96	801.792	711.991	8352	112	935.424	830.657
																	TOTAL WEIGHT (IB):			17814.634	TOTAL WEIGHT (IIB):			18851.314

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: G BAR BENDING SCHEDULE DWG. NO.: A–9.5G–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA.	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	4379	500	–	–	–	24	12	0.888	4855	30	145.650	129.337	4855	36	174.780	155.205
					A2	Y12	300	02	7108	500	–	–	–	24	12	0.888	7584	30	227.520	202.038	7584	36	273.024	242.445
9.50	4.41	10.20	2.00	1.80	A3	Y16	250	02	4379	500	–	–	–	32	16	1.579	4847	36	174.492	275.523	4847	42	203.574	321.443
	DECK TYPE IIB				A4	Y16	250	02	7108	500	–	–	–	32	16	1.579	7576	36	272.736	430.650	7576	42	318.192	502.425
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	78	379.236	336.762	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	78	431.496	383.168
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	92	445.832	703.969	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	92	507.472	801.298
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	52	162.569	144.362	3126	58	181.327	161.019
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	52	212.516	335.563	4087	58	237.037	374.282
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	26	120.796	190.737	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	26	138.216	218.243
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	26	121.212	107.636	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	26	138.632	123.105
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	804	1358.760	836.996	1690	804	1358.760	836.996
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
TIE–WALL					C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	296	1552.816	2451.896	–	–	–	–
NO. OF TIE–WALL:		2			C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	296	1751.136	2765.044
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	96	801.792	711.991	8352	112	935.424	830.657
																	TOTAL WEIGHT (IB):			17803.119	TOTAL WEIGHT (IIB):			18836.203

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: G
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9.5G–03
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	4179	500	–	–	–	24	12	0.888	4655	30	139.650	124.009	4655	36	167.580	148.811
					A2	Y12	300	02	6708	500	–	–	–	24	12	0.888	7184	30	215.520	191.382	7184	36	258.624	229.658
9.50	4.41	10.20	2.00	2.20	A3	Y16	250	02	4179	500	–	–	–	32	16	1.579	4647	36	167.292	264.154	4647	42	195.174	308.180
	DECK TYPE IIB				A4	Y16	250	02	6708	500	–	–	–	32	16	1.579	7176	36	258.336	407.913	7176	42	301.392	475.898
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	72	350.064	310.857	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	72	398.304	353.694
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	86	416.756	658.058	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	86	474.376	749.040
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	60	211.580	187.883	3526	68	239.791	212.934
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	60	269.211	425.084	4487	68	305.106	481.762
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	36	167.256	264.097	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	36	191.376	302.183
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	36	167.832	149.035	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	36	191.952	170.453
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	816	1379.040	849.489	1690	816	1379.040	849.489
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	296	1552.816	2451.896	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	296	1751.136	2765.044
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	96	801.792	711.991	8352	112	935.424	830.657
																	TOTAL WEIGHT (IB):			17941.507	TOTAL WEIGHT (IIB):			18998.674

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: G BAR BENDING SCHEDULE DWG. NO.: A–9.5G–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	4079	500	–	–	–	24	12	0.888	4555	30	136.650	121.345	4555	36	163.980	145.614
					A2	Y12	300	02	6508	500	–	–	–	24	12	0.888	6984	30	209.520	186.054	6984	36	251.424	223.265
9.50	4.41	10.20	2.00	2.40	A3	Y16	250	02	4079	500	–	–	–	32	16	1.579	4547	36	163.692	258.470	4547	42	190.974	301.548
	DECK TYPE IIB				A4	Y16	250	02	6508	500	–	–	–	32	16	1.579	6976	36	251.136	396.544	6976	42	292.992	462.634
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	70	340.340	302.222	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	70	387.240	343.869
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	82	397.372	627.450	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	82	452.312	714.201
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	60	223.580	198.539	3726	68	253.391	225.011
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	60	281.211	444.032	4687	68	318.706	503.237
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	38	176.548	278.769	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	38	202.008	318.971
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	38	177.156	157.315	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	38	202.616	179.923
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	820	1385.800	853.653	1690	820	1385.800	853.653
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	296	1552.816	2451.896	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	296	1751.136	2765.044
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	96	801.792	711.991	8352	112	935.424	830.657
																	TOTAL WEIGHT (IB):			17933.939	TOTAL WEIGHT (IIB):			18988.497

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: G
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9.5G–05
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	300	02	3979	500	–	–	–	24	12	0.888	4455	30	133.650	118.681	4455	36	160.380	142.417
					A2	Y12	300	02	6308	500	–	–	–	24	12	0.888	6784	30	203.520	180.726	6784	36	244.224	216.871
9.50	4.41	10.20	2.00	2.60	A3	Y16	250	02	3979	500	–	–	–	32	16	1.579	4447	36	160.092	252.785	4447	42	186.774	294.916
	DECK TYPE IIB				A4	Y16	250	02	6308	500	–	–	–	32	16	1.579	6776	36	243.936	385.175	6776	42	284.592	449.371
	5.08				A5(IB)	Y12	150	05	300	4310	300	–	–	24	12	0.888	4862	66	320.892	284.952	–	–	–	–
					A5(IIB)	Y12	150	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	66	365.112	324.219
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	80	387.680	612.147	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	80	441.280	696.781
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	828	1399.320	861.981	1690	828	1399.320	861.981
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	225	05	500	4310	500	–	–	32	16	1.579	5246	296	1552.816	2451.896	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	225	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	296	1751.136	2765.044
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	96	801.792	711.991	8352	112	935.424	830.657
																	TOTAL WEIGHT (IB):			17937.205	TOTAL WEIGHT (IIB):			18990.079

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: G
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9.5G–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4579	500	–	–	–	24	12	0.888	5055	36	181.980	161.598	5055	40	202.200	179.554
					A2	Y12	300	02	7508	500	–	–	–	24	12	0.888	7984	36	287.424	255.233	7984	40	319.360	283.592
9.50	5.21	10.20	2.00	1.40	A3	Y16	250	02	4579	500	–	–	–	32	16	1.579	5047	42	211.974	334.707	5047	48	242.256	382.522
	DECK TYPE IIA				A4	Y16	250	02	7508	500	–	–	–	32	16	1.579	7976	42	334.992	528.952	7976	48	382.848	604.517
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	82	464.284	412.284	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	82	519.224	461.071
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	98	553.308	873.673	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	98	618.968	977.350
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.865
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	796	1345.240	828.668	1690	796	1345.240	828.668
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
TIE–WALL					C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	296	1789.616	2825.804	–	–	–	–
NO. OF TIE–WALL:		2			C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	296	1987.936	3138.951
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	120	1002.240	889.989	8352	136	1135.872	1008.654
																	TOTAL WEIGHT (IA):			18907.960	TOTAL WEIGHT (IIA):			19945.575

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: I
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9.5I–01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4479	500	–	–	–	24	12	0.888	4955	36	178.380	158.401	4955	40	198.200	176.002
					A2	Y12	300	02	7308	500	–	–	–	24	12	0.888	7784	36	280.224	248.839	7784	40	311.360	276.488
9.50	5.21	10.20	2.00	1.60	A3	Y16	250	02	4479	500	–	–	–	32	16	1.579	4947	42	207.774	328.075	4947	48	237.456	374.943
	DECK TYPE IIA				A4	Y16	250	02	7308	500	–	–	–	32	16	1.579	7776	42	326.592	515.689	7776	48	373.248	589.359
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	80	452.960	402.228	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	80	506.560	449.825
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	96	542.016	855.843	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	96	606.336	957.405
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	800	1352.000	832.832	1690	800	1352.000	832.832
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	296	1789.616	2825.804	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	296	1987.936	3138.951
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	120	1002.240	889.989	8352	136	1135.872	1008.654
																	TOTAL WEIGHT (IA):			18911.255	TOTAL WEIGHT (IIA):			19948.910

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: I
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9.5I–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4379	500	–	–	–	24	12	0.888	4855	36	174.780	155.205	4855	40	194.200	172.450
					A2	Y12	300	02	7108	500	–	–	–	24	12	0.888	7584	36	273.024	242.445	7584	40	303.360	269.384
9.50	5.21	10.20	2.00	1.80	A3	Y16	250	02	4379	500	–	–	–	32	16	1.579	4847	42	203.574	321.443	4847	48	232.656	367.364
	DECK TYPE IIA				A4	Y16	250	02	7108	500	–	–	–	32	16	1.579	7576	42	318.192	502.425	7576	48	363.648	574.200
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	78	441.636	392.173	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	78	493.896	438.580
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	92	519.432	820.183	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	92	581.072	917.513
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	60	187.580	166.571	3126	68	212.591	188.781
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	60	245.211	387.188	4087	68	277.906	438.813
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	26	141.596	223.580	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	26	159.016	251.086
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	26	142.012	126.107	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	26	159.432	141.576
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	804	1358.760	836.996	1690	804	1358.760	836.996
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	296	1789.616	2825.804	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	296	1987.936	3138.951
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	120	1002.240	889.989	8352	136	1135.872	1008.654
																	TOTAL WEIGHT (IA):			18896.721	TOTAL WEIGHT (IIA):			19932.299

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: I
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	BAR BENDING SCHEDULE DWG. NO.: A–9.5I–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4179	500	–	–	–	24	12	0.888	4655	36	167.580	148.811	4655	40	186.200	165.346
					A2	Y12	300	02	6708	500	–	–	–	24	12	0.888	7184	36	258.624	229.658	7184	40	287.360	255.176
9.50	5.21	10.20	2.00	2.20	A3	Y16	250	02	4179	500	–	–	–	32	16	1.579	4647	42	195.174	308.180	4647	48	223.056	352.205
	DECK TYPE IIA				A4	Y16	250	02	6708	500	–	–	–	32	16	1.579	7176	42	301.392	475.898	7176	48	344.448	543.883
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	72	407.664	362.006	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	72	455.904	404.843
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	86	485.556	766.693	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	86	543.176	857.675
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.080	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	816	1379.040	849.489	1690	816	1379.040	849.489
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	296	1789.616	2825.804	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	296	1987.936	3138.951
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	120	1002.240	889.989	8352	136	1135.872	1008.654
																	TOTAL WEIGHT (IA):			19062.448	TOTAL WEIGHT (IIA):			20125.149

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: I
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9.5I–04
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	4079	500	–	–	–	24	12	0.888	4555	36	163.980	145.614	4555	40	182.200	161.794
					A2	Y12	300	02	6508	500	–	–	–	24	12	0.888	6984	36	251.424	223.265	6984	40	279.360	248.072
9.50	5.21	10.20	2.00	2.40	A3	Y16	250	02	4079	500	–	–	–	32	16	1.579	4547	42	190.974	301.548	4547	48	218.256	344.626
	DECK TYPE IIA				A4	Y16	250	02	6508	500	–	–	–	32	16	1.579	6976	42	292.992	462.634	6976	48	334.848	528.725
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	.5662	70	396.340	351.950	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	70	443.240	393.597
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	82	462.972	731.033	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	82	517.912	817.783
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	70	260.843	231.629	3726	80	298.107	264.719
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	70	328.080	518.038	4687	80	374.948	592.043
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	38	206.948	326.771	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	38	232.408	366.972
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	38	207.556	184.310	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	38	233.016	206.918
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	820	1385.800	853.653	1690	820	1385.800	853.653
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	296	1789.616	2825.804	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	296	1987.936	3138.951
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	120	1002.240	889.989	8352	136	1135.872	1008.654
																	TOTAL WEIGHT (IA):			19052.848	TOTAL WEIGHT (IIA):			20114.459

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: I
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–9.5I–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 9.5 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	300	02	3979	500	–	–	–	24	12	0.888	4455	36	160.380	142.417	4455	40	178.200	158.242
					A2	Y12	300	02	6308	500	–	–	–	24	12	0.888	6784	36	244.224	216.871	6784	40	271.360	240.968
9.50	5.21	10.20	2.00	2.60	A3	Y16	250	02	3979	500	–	–	–	32	16	1.579	4447	42	186.774	294.916	4447	48	213.456	337.047
	DECK TYPE IIA				A4	Y16	250	02	6308	500	–	–	–	32	16	1.579	6776	42	284.592	449.371	6776	48	325.248	513.567
	5.88				A5(IA)	Y12	150	05	300	5110	300	–	–	24	12	0.888	5662	66	373.692	331.838	–	–	–	–
					A5(IIA)	Y12	150	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	66	417.912	371.106
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	80	451.680	713.203	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	80	505.280	797.837
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	70	274.843	244.061	3926	80	314.107	278.927
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	70	342.080	540.144	4887	80	390.948	617.307
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	40	217.840	343.969	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	40	244.640	386.287
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	40	218.480	194.010	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	40	245.280	217.809
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5450	500	–	–	–	32	16	1.579	5918	124	733.832	1158.721	5918	124	733.832	1158.721
					W1(W/F)	Y12	300	02	5450	500	–	–	–	24	12	0.888	5926	104	616.304	547.278	5926	104	616.304	547.278
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	9500	500	–	–	32	16	1.579	10086	116	1169.976	1847.392	10086	116	1169.976	1847.392
					W3(W/F)	Y12	300	05	150	9500	500	–	–	24	12	0.888	10102	100	1010.200	897.058	10102	100	1010.200	897.058
					W3(AV)E/F	Y12	200	05	150	2100	150	–	–	24	12	0.888	2352	60	141.120	125.315	2352	80	188.160	167.086
					W3(AV)W/F	Y12	300	05	150	2100	150	–	–	24	12	0.888	2352	40	94.080	83.543	2352	80	188.160	167.086
					W4(E/F)	Y16	125	05	150	10225	300	–	–	32	16	1.579	10611	44	466.884	737.210	10611	44	466.884	737.210
					W4(W/F)	Y16	150	05	150	10225	300	–	–	32	16	1.579	10611	36	381.996	603.172	10611	36	381.996	603.172
					W4a(AV)E/F	Y16	150	05	150	8800	300	–	–	32	16	1.579	9186	52	477.672	754.244	9186	52	477.672	754.244
					W4a(AV)W/F	Y12	175	05	150	8800	300	–	–	24	12	0.888	9202	44	404.888	359.541	9202	44	404.888	359.541
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	828	1399.320	861.981	1690	828	1399.320	861.981
					F2(AV)	Y16	–	01	8100	–	–	–	–	32	16	1.579	8100	16	129.600	204.638	8100	16	129.600	204.638
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	225	05	500	5110	500	–	–	32	16	1.579	6046	296	1789.616	2825.804	–	–	–	–
	NO. OF TIE–WALL:	2			C1(IIA)	Y16	225	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	296	1987.936	3138.951
					C2	Y12	300	05	150	8100	150	–	–	24	12	0.888	8352	120	1002.240	889.989	8352	136	1135.872	1008.654
																	TOTAL WEIGHT (IA):			19055.186	TOTAL WEIGHT (IIA):			20116.633

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: I BAR BENDING SCHEDULE DWG. NO.: A–9.5I–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	250	02	4829	500	–	–	–	24	12	0.888	5305	36	190.980	169.590	5305	42	222.810	197.855
					A2	Y12	250	02	8008	500	–	–	–	24	12	0.888	8484	36	305.424	271.217	8484	42	356.328	316.419
10.00	4.41	10.20	2.00	1.40	A3	Y16	250	02	4829	500	–	–	–	32	16	1.579	5297	36	190.692	301.103	5297	42	222.474	351.286
	DECK TYPE IIB				A4	Y16	250	02	8008	500	–	–	–	32	16	1.579	8476	36	305.136	481.810	8476	42	355.992	562.111
	5.08				A5(IB)	Y12	125	05	300	4310	300	–	–	24	12	0.888	4862	106	515.372	457.650	–	–	–	–
					A5(IIB)	Y12	125	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	106	586.392	520.716
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	106	513.676	811.094	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	106	584.696	923.235
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	52	141.769	125.891	2726	58	158.127	140.417
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	52	191.716	302.720	3687	58	213.837	337.649
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	22	102.212	161.393	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	22	116.952	184.667
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	22	102.564	91.077	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	22	117.304	104.166
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	844	1426.360	878.638	1690	844	1426.360	878.638
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	175	05	500	4310	500	–	–	32	16	1.579	5246	400	2098.400	3313.374	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	175	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	400	2366.400	3736.546
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	96	849.792	754.615	8852	112	991.424	880.385
																	TOTAL WEIGHT (IB):			19796.774	TOTAL WEIGHT (IIB):			21026.954

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: G
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–10G–01
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	250	02	4729	500	–	–	–	24	12	0.888	5205	36	187.380	166.393	5205	42	218.610	194.126
					A2	Y12	250	02	7808	500	–	–	–	24	12	0.888	8284	36	298.224	264.823	8284	42	347.928	308.960
10.00	4.41	10.20	2.00	1.60	A3	Y16	250	02	4729	500	–	–	–	32	16	1.579	5197	36	187.092	295.418	5197	42	218.274	344.655
	DECK TYPE IIB				A4	Y16	250	02	7808	500	–	–	–	32	16	1.579	8276	36	297.936	470.441	8276	42	347.592	548.848
	5.08				A5(IB)	Y12	125	05	300	4310	300	–	–	24	12	0.888	4862	104	505.648	449.015	–	–	–	–
					A5(IIB)	Y12	125	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	104	575.328	510.891
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	104	503.984	795.791	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	104	573.664	905.815
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	52	152.169	135.126	2926	58	169.727	150.718
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	52	202.116	319.142	3887	58	225.437	355.966
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	24	111.504	176.065	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	24	127.584	201.455
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	24	111.888	99.357	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	24	127.968	113.636
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	848	1433.120	882.802	1690	848	1433.120	882.802
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	175	05	500	4310	500	–	–	32	16	1.579	5246	400	2098.400	3313.374	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	175	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	400	2366.400	3736.546
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	96	849.792	754.615	8852	112	991.424	880.385
																	TOTAL WEIGHT (IB):			19798.965	TOTAL WEIGHT (IIB):			21027.664

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: G
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–10G–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	250	02	4629	500	–	–	–	24	12	0.888	5105	36	183.780	163.197	5105	42	214.410	190.396
					A2	Y12	250	02	7608	500	–	–	–	24	12	0.888	8084	36	291.024	258.429	8084	42	339.528	301.501
10.00	4.41	10.20	2.00	1.80	A3	Y16	250	02	4629	500	–	–	–	32	16	1.579	5097	36	183.492	289.734	5097	42	214.074	338.023
	DECK TYPE IIB				A4	Y16	250	02	7608	500	–	–	–	32	16	1.579	8076	36	290.736	459.072	8076	42	339.192	535.584
	5.08				A5(IB)	Y12	125	05	300	4310	300	–	–	24	12	0.888	4862	100	486.200	431.746	–	–	–	–
					A5(IIB)	Y12	125	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	100	553.200	491.242
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	100	484.600	765.183	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	100	551.600	870.976
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	52	162.569	144.362	3126	58	181.327	161.019
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	52	212.516	335.563	4087	58	237.037	374.282
					B3(E/F)(IB)	Y16	175	05	200	4310	200	–	–	32	16	1.579	4646	26	120.796	190.737	–	–	–	–
					B3(E/F)(IIB)	Y16	175	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	26	138.216	218.243
					B3(W/F)(IB)	Y12	175	05	200	4310	200	–	–	24	12	0.888	4662	26	121.212	107.636	–	–	–	–
					B3(W/F)(IIB)	Y12	175	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	26	138.632	123.105
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	852	1439.880	886.966	1690	852	1439.880	886.966
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.613	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	175	05	500	4310	500	–	–	32	16	1.579	5246	400	2098.400	3313.374	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	175	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	400	2366.400	3736.546
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	96	849.792	754.615	8852	112	991.424	880.385
																	TOTAL WEIGHT (IB):			19777.217	TOTAL WEIGHT (IIB):			21001.130

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: G BAR BENDING SCHEDULE DWG. NO.: A–10G–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	250	02	4429	500	–	–	–	24	12	0.888	4905	36	176.580	156.803	4905	42	206.010	182.937
					A2	Y12	250	02	7208	500	–	–	–	24	12	0.888	7684	36	276.624	245.642	7684	42	322.728	286.582
10.00	4.41	10.20	2.00	2.20	A3	Y16	250	02	4429	500	–	–	–	32	16	1.579	4897	36	176.292	278.365	4897	42	205.674	324.759
	DECK TYPE IIB				A4	Y16	250	02	7208	500	–	–	–	32	16	1.579	7676	36	276.336	436.335	7676	42	322.392	509.057
	5.08				A5(IB)	Y12	125	05	300	4310	300	–	–	24	12	0.888	4862	94	457.028	405.841	–	–	–	–
					A5(IIB)	Y12	125	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	94	520.008	461.767
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	94	455.524	719.272	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	94	518.504	818.718
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	60	211.580	187.883	3526	68	239.791	212.934
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	60	269.211	425.084	4487	68	305.106	481.762
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	36	167.256	264.097	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	36	191.376	302.183
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	36	167.832	149.035	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	36	191.952	170.453
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	864	1460.160	899.459	1690	864	1460.160	899.459
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	175	05	500	4310	500	–	–	32	16	1.579	5246	400	2098.400	3313.374	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	175	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	400	2366.400	3736.546
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	96	849.792	754.615	8852	112	991.424	880.385
																	TOTAL WEIGHT (IB):			19912.408	TOTAL WEIGHT (IIB):			21160.405

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: G BAR BENDING SCHEDULE DWG. NO.: A–10G–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIB CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	250	02	4329	500	–	–	–	24	12	0.888	4805	36	172.980	153.606	4805	42	201.810	179.207
					A2	Y12	250	02	7008	500	–	–	–	24	12	0.888	7484	36	269.424	239.249	7484	42	314.328	279.123
10.00	4.41	10.20	2.00	2.40	A3	Y16	250	02	4329	500	–	–	–	32	16	1.579	4797	36	172.692	272.681	4797	42	201.474	318.127
	DECK TYPE IIB				A4	Y16	250	02	7008	500	–	–	–	32	16	1.579	7476	36	269.136	424.966	7476	42	313.992	495.793
	5.08				A5(IB)	Y12	125	05	300	4310	300	–	–	24	12	0.888	4862	90	437.580	388.571	–	–	–	–
					A5(IIB)	Y12	125	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	90	497.880	442.117
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	90	436.140	688.665	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	90	496.440	783.879
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	60	223.580	198.539	3726	68	253.391	225.011
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	60	281.211	444.032	4687	68	318.706	503.237
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	38	176.548	278.769	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	38	202.008	318.971
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	38	177.156	157.315	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	38	202.616	179.923
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	868	1466.920	903.623	1690	868	1466.920	903.623
					F2(AV)	Y16	–	01	8500	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	175	05	500	4310	500	–	–	32	16	1.579	5246	400	2098.400	3313.374	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIB)	Y16	175	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	400	2366.400	3736.546
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	96	849.792	754.615	8852	112	991.424	880.385
																	TOTAL WEIGHT (IB):			19894.607	TOTAL WEIGHT (IIB):			21138.805

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: G
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–10G–05 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm							UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS)							
									A	B	C	D	E	r	d		DECK TYPE IB				DECK TYPE IIB			
																	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IB				A1	Y12	250	02	4229	500	–	–	–	24	12	0.888	4705	36	169.380	150.409	4705	42	197.610	175.478
					A2	Y12	250	02	6808	500	–	–	–	24	12	0.888	7284	36	262.224	232.855	7284	42	305.928	271.664
10.00	4.41	10.20	2.00	2.60	A3	Y16	250	02	4229	500	–	–	–	32	16	1.579	4697	36	169.092	266.996	4697	42	197.274	311.496
					A4	Y16	250	02	6808	500	–	–	–	32	16	1.579	7276	36	261.936	413.597	7276	42	305.592	482.530
	DECK TYPE IIB				A5(IB)	Y12	125	05	300	4310	300	–	–	24	12	0.888	4862	88	427.856	379.936	–	–	–	–
	5.08				A5(IIB)	Y12	125	05	300	4980	300	–	–	24	12	0.888	–	–	–	–	5532	88	486.816	432.293
					A6(IB)	Y16	125	05	300	4310	300	–	–	32	16	1.579	4846	88	426.448	673.361	–	–	–	–
					A6(IIB)	Y16	125	05	300	4980	300	–	–	32	16	1.579	–	–	–	–	5516	88	485.408	766.459
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	60	206.998	183.814	3450	68	234.598	208.323
					A8(IB)	Y16	–	01	4310	–	–	–	–	32	16	1.579	4310	24	103.440	163.332	–	–	–	–
					A8(IIB)	Y16	–	01	4980	–	–	–	–	32	16	1.579	–	–	–	–	4980	24	119.520	188.722
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	60	235.580	209.195	3926	68	266.991	237.088
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	60	293.211	462.980	4887	68	332.306	524.711
					B3(E/F)(IB)	Y16	150	05	200	4310	200	–	–	32	16	1.579	4646	40	185.840	293.441	–	–	–	–
					B3(E/F)(IIB)	Y16	150	05	200	4980	200	–	–	32	16	1.579	–	–	–	–	5316	40	212.640	335.759
					B3(W/F)(IB)	Y12	150	05	200	4310	200	–	–	24	12	0.888	4662	40	186.480	165.594	–	–	–	–
					B3(W/F)(IIB)	Y12	150	05	200	4980	200	–	–	24	12	0.888	–	–	–	–	5332	40	213.280	189.393
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	876	1480.440	911.951	1690	876	1480.440	911.951
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IB)	Y16	175	05	500	4310	500	–	–	32	16	1.579	5246	400	2098.400	3313.374	–	–	–	–
	NO. OF TIE–WALL: 2				C1(IIB)	Y16	175	05	500	4980	500	–	–	32	16	1.579	–	–	–	–	5916	400	2366.400	3736.546
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	96	849.792	754.615	8852	112	991.424	880.385
																	TOTAL WEIGHT (IB):			19904.909	TOTAL WEIGHT (IIB):			21148.613

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IB) AND (IIB), INDICATE DECK TYPE IB AND IIB RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IB & IIB ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: G
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–10G–06 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	250	02	4829	500	–	–	–	24	12	0.888	5305	42	222.810	197.855	5305	48	254.640	226.120
					A2	Y12	250	02	8008	500	–	–	–	24	12	0.888	8484	42	356.328	316.419	8484	48	407.232	361.622
10.00	5.21	10.20	2.00	1.40	A3	Y16	250	02	4829	500	–	–	–	32	16	1.579	5297	42	222.474	351.286	5297	48	254.256	401.470
	DECK TYPE IIA				A4	Y16	250	02	8008	500	–	–	–	32	16	1.579	8476	42	355.992	562.111	8476	48	406.848	642.413
	5.88				A5(IA)	Y12	125	05	300	5110	300	–	–	24	12	0.888	5662	106	600.172	532.953	–	–	–	–
					A5(IIA)	Y12	125	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	106	671.192	596.018
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	106	598.476	944.994	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	106	669.496	1057.134
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2450	300	–	–	–	24	12	0.888	2726	60	163.580	145.259	2726	68	185.391	164.627
					B2	Y16	175	03	2217	300	1202	–	–	32	16	1.579	3687	60	221.211	349.292	3687	68	250.706	395.865
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	22	119.812	189.183	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	22	134.552	212.458
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	22	120.164	106.706	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	22	134.904	119.795
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	844	1426.360	878.638	1690	844	1426.360	878.638
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	175	05	500	5110	500	–	–	32	16	1.579	6046	400	2418.400	3818.654	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	175	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	400	2686.400	4241.826
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	120	1062.240	943.259	8852	136	1203.872	1069.038
																	TOTAL WEIGHT (IA):			21074.175	TOTAL WEIGHT (IIA):			22326.967

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.40 m FOUNDATION TYPE: I
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–101–01 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	250	02	4729	500	–	–	–	24	12	0.888	5205	42	218.610	194.126	5205	48	249.840	221.858
					A2	Y12	250	02	7808	500	–	–	–	24	12	0.888	8284	42	347.928	308.960	8284	48	397.632	353.097
10.00	5.21	10.20	2.00	1.60	A3	Y16	250	02	4729	500	–	–	–	32	16	1.579	5197	42	218.274	344.655	5197	48	249.456	393.891
	DECK TYPE IIA				A4	Y16	250	02	7808	500	–	–	–	32	16	1.579	8276	42	347.592	548.848	8276	48	397.248	627.255
	5.88				A5(IA)	Y12	125	05	300	5110	300	–	–	24	12	0.888	5662	104	588.848	522.897	–	–	–	–
					A5(IIA)	Y12	125	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	104	658.528	584.773
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	104	587.184	927.164	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	104	656.864	1037.188
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2650	300	–	–	–	24	12	0.888	2926	60	175.580	155.915	2926	68	198.991	176.704
					B2	Y16	175	03	2417	300	1202	–	–	32	16	1.579	3887	60	233.211	368.240	3887	68	264.306	417.339
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	24	130.704	206.382	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	24	146.784	231.772
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	24	131.088	116.406	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	24	147.168	130.685
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	848	1433.120	882.802	1690	848	1433.120	882.802
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	175	05	500	5110	500	–	–	32	16	1.579	6046	400	2418.400	3818.654	–	–	–	–
	NO. OF TIE–WALL:		2		C1(IIA)	Y16	175	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	400	2686.400	4241.826
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	120	1062.240	943.269	8852	136	1203.872	1069.038
																	TOTAL WEIGHT (IA):			21075.872	TOTAL WEIGHT (IIA):			22328.170

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.60 m FOUNDATION TYPE: I
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–101–02 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	250	02	4629	500	–	–	–	24	12	0.888	5105	42	214.410	190.396	5105	48	245.040	217.596
					A2	Y12	250	02	7608	500	–	–	–	24	12	0.888	8084	42	339.528	301.501	8084	48	388.032	344.572
10.00	5.21	10.20	2.00	1.80	A3	Y16	250	02	4629	500	–	–	–	32	16	1.579	5097	42	214.074	338.023	5097	48	244.656	386.312
	DECK TYPE IIA				A4	Y16	250	02	7608	500	–	–	–	32	16	1.579	8076	42	339.192	535.584	8076	48	387.648	612.096
	5.88				A5(IA)	Y12	125	05	300	5110	300	–	–	24	12	0.888	5662	100	566.200	502.786	–	–	–	–
					A5(IIA)	Y12	125	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	100	633.200	562.282
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	100	564.600	891.503	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	100	631.600	997.296
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	175	02	2850	300	–	–	–	24	12	0.888	3126	60	187.580	166.571	3126	68	212.591	188.781
					B2	Y16	175	03	2617	300	1202	–	–	32	16	1.579	4087	60	245.211	387.188	4087	68	277.906	438.813
					B3(E/F)(IA)	Y16	175	05	200	5110	200	–	–	32	16	1.579	5446	26	141.596	223.580	–	–	–	–
					B3(E/F)(IIA)	Y16	175	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	26	159.016	251.086
					B3(W/F)(IA)	Y12	175	05	200	5110	200	–	–	24	12	0.888	5462	26	142.012	126.107	–	–	–	–
					B3(W/F)(IIA)	Y12	175	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	26	159.432	141.576
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	852	1439.880	886.966	1690	852	1439.880	886.966
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
TIE–WALL					C1(IA)	Y16	175	05	500	5110	500	–	–	32	16	1.579	6046	400	2418.400	3818.654	–	–	–	–
NO. OF TIE–WALL:		2			C1(IIA)	Y16	175	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	400	2686.400	4241.826
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	120	1062.240	943.269	8852	136	1203.872	1069.038
																	TOTAL WEIGHT (IA):			21049.683	TOTAL WEIGHT (IIA):			22298.183

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 1.80 m FOUNDATION TYPE: I
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–101–03 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	250	02	4429	500	–	–	–	24	12	0.888	4905	42	206.010	182.937	4905	48	235.440	209.071
					A2	Y12	250	02	7208	500	–	–	–	24	12	0.888	7684	42	322.728	286.582	7684	48	368.832	327.523
10.00	5.21	10.20	2.00	2.20	A3	Y16	250	02	4429	500	–	–	–	32	16	1.579	4897	42	205.674	324.759	4897	48	235.056	371.153
	DECK TYPE IIA				A4	Y16	250	02	7208	500	–	–	–	32	16	1.579	7676	42	322.392	509.057	7676	48	368.448	581.779
	5.88				A5(IA)	Y12	125	05	300	5110	300	–	–	24	12	0.888	5662	94	532.228	472.618	–	–	–	–
					A5(IIA)	Y12	125	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	94	595.208	528.545
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	94	530.724	838.013	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	94	593.704	937.459
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3250	300	–	–	–	24	12	0.888	3526	70	246.843	219.197	3526	80	282.107	250.511
					B2	Y16	150	03	3017	300	1202	–	–	32	16	1.579	4487	70	314.080	495.932	4487	80	358.948	566.779
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	36	196.056	309.572	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	36	220.176	347.658
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	36	196.632	174.609	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	36	220.752	196.028
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	864	1460.160	899.459	1690	864	1460.160	899.459
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
TIE–WALL					C1(IA)	Y16	175	05	500	5110	500	–	–	32	16	1.579	6046	400	2418.400	3818.654	–	–	–	–
NO. OF TIE–WALL:		2			C1(IIA)	Y16	175	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	400	2686.400	4241.826
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	120	1062.240	943.269	8852	136	1203.872	1069.038
																	TOTAL WEIGHT (IA):			21212.214	TOTAL WEIGHT (IIA):			22486.770

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY: DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT: LOCATION: THANA: ZILA:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.20 m FOUNDATION TYPE: I BAR BENDING SCHEDULE DWG. NO.: A–101–04 DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	250	02	4329	500	–	–	–	24	12	0.888	4805	42	201.810	179.207	4805	48	230.640	204.808
					A2	Y12	250	02	7008	500	–	–	–	24	12	0.888	7484	42	314.328	279.123	7484	48	359.232	318.998
10.00	5.21	10.20	2.00	2.40	A3	Y16	250	02	4329	500	–	–	–	32	16	1.579	4797	42	201.474	318.127	4797	48	230.256	363.574
	DECK TYPE IIA				A4	Y16	250	02	7008	500	–	–	–	32	16	1.579	7476	42	313.992	495.793	7476	48	358.848	566.621
	5.88				A5(IA)	Y12	125	05	300	5110	300	–	–	24	12	0.888	5662	90	509.580	452.507	–	–	–	–
					A5(IIA)	Y12	125	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	90	569.880	506.053
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	90	508.140	802.353	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	90	568.440	897.567
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3450	300	–	–	–	24	12	0.888	3726	70	260.843	231.629	3726	80	298.107	264.719
					B2	Y16	150	03	3217	300	1202	–	–	32	16	1.579	4687	70	328.080	518.038	4687	80	374.948	592.043
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	38	206.948	326.771	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	38	232.408	366.972
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	38	207.556	184.310	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	38	233.016	206.918
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	868	1466.920	903.623	1690	868	1466.920	903.623
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
TIE–WALL NO. OF TIE–WALL:			2		C1(IA)	Y16	175	05	500	5110	500	–	–	32	16	1.579	6046	400	2418.400	3818.654	–	–	–	–
					C1(IIA)	Y16	175	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	400	2686.400	4241.826
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	120	1062.240	943.269	8852	136	1203.872	1069.038
																	TOTAL WEIGHT (IA):			21190.959	TOTAL WEIGHT (IIA):			22462.703

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.40 m FOUNDATION TYPE: I
			BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–101–05
			DATE: JUNE 1996

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BAR BENDING SCHEDULE OF ABUTMENT FOR HEIGHT H = 10.0 m (TWO ABUTMENTS)

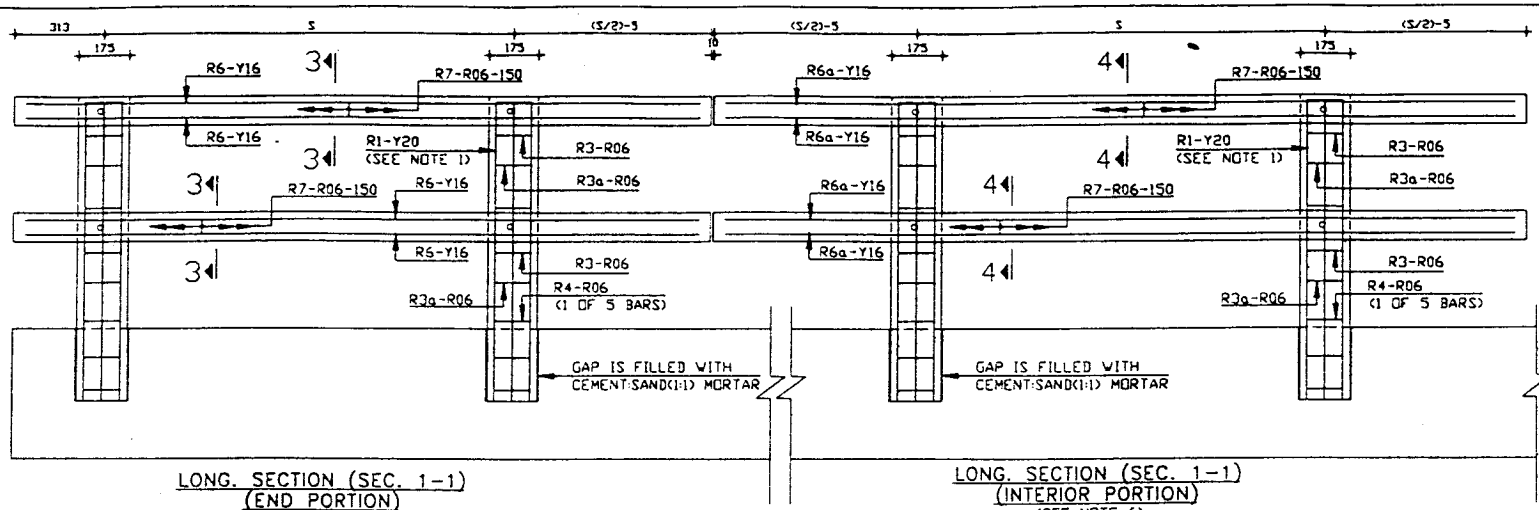
HEIGHT OF ABUT. m	LENGTH OF ABUT. m	WIDTH OF FOUND. m	TOE DIST. FROM ABUT. m	DEPTH OF GIRDER m	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS mm A	B	C	D	E	r	d	UNIT WT. OF BAR Kg/m	QUANTITY PER BRIDGE (TWO ABUTMENTS) DECK TYPE IA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg	DECK TYPE IIA: CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	TOTAL WEIGHT Kg
	DECK TYPE IA				A1	Y12	250	02	4229	500	–	–	–	24	12	0.888	4705	42	197.610	175.478	4705	48	225.840	200.546
					A2	Y12	250	02	6808	500	–	–	–	24	12	0.888	7284	42	305.928	271.664	7284	48	349.632	310.473
10.00	5.21	10.20	2.00	2.60	A3	Y16	250	02	4229	500	–	–	–	32	16	1.579	4697	42	197.274	311.496	4697	48	225.456	355.995
	DECK TYPE IIA				A4	Y16	250	02	6808	500	–	–	–	32	16	1.579	7276	42	305.592	482.530	7276	48	349.248	551.463
	5.88				A5(IA)	Y12	125	05	300	5110	300	–	–	24	12	0.888	5662	88	498.256	442.451	–	–	–	–
					A5(IIA)	Y12	125	05	300	5780	300	–	–	24	12	0.888	–	–	–	–	6332	88	557.216	494.808
					A6(IA)	Y16	125	05	300	5110	300	–	–	32	16	1.579	5646	88	496.848	784.523	–	–	–	–
					A6(IIA)	Y16	125	05	300	5780	300	–	–	32	16	1.579	–	–	–	–	6316	88	555.808	877.621
					A7	Y12	150	04	425	631	475	775	1000	24	12	0.888	3450	70	241.498	214.450	3450	80	275.998	245.086
					A8(IA)	Y16	–	01	5110	–	–	–	–	32	16	1.579	5110	24	122.640	193.649	–	–	–	–
					A8(IIA)	Y16	–	01	5780	–	–	–	–	32	16	1.579	–	–	–	–	5780	24	138.720	219.039
					B1	Y12	150	02	3650	300	–	–	–	24	12	0.888	3926	70	274.843	244.061	3926	80	314.107	278.927
					B2	Y16	150	03	3417	300	1202	–	–	32	16	1.579	4887	70	342.080	540.144	4887	80	390.948	617.307
					B3(E/F)(IA)	Y16	150	05	200	5110	200	–	–	32	16	1.579	5446	40	217.840	343.969	–	–	–	–
					B3(E/F)(IIA)	Y16	150	05	200	5780	200	–	–	32	16	1.579	–	–	–	–	6116	40	244.640	386.287
					B3(W/F)(IA)	Y12	150	05	200	5110	200	–	–	24	12	0.888	5462	40	218.480	194.010	–	–	–	–
					B3(W/F)(IIA)	Y12	150	05	200	5780	200	–	–	24	12	0.888	–	–	–	–	6132	40	245.280	217.809
					B4	Y12	–	06	500	300	–	–	–	24	12	0.888	1252	8	10.016	8.894	1252	8	10.016	8.894
					B5	Y12	–	06	500	150	–	–	–	24	12	0.888	1102	8	8.816	7.829	1102	8	8.816	7.829
					W1(E/F)	Y16	250	02	5700	500	–	–	–	32	16	1.579	6168	124	764.832	1207.670	6168	124	764.832	1207.670
					W1(W/F)	Y12	300	02	5700	500	–	–	–	24	12	0.888	6176	104	642.304	570.366	6176	104	642.304	570.366
					W2(E/F)	Y16	150	05	300	8100	300	–	–	32	16	1.579	8636	160	1381.760	2181.799	8636	160	1381.760	2181.799
					W2(W/F)	Y12	175	05	300	8100	300	–	–	24	12	0.888	8652	136	1176.672	1044.885	8652	136	1176.672	1044.885
					W3(E/F)	Y16	250	05	150	10000	500	–	–	32	16	1.579	10586	116	1227.976	1938.974	10586	116	1227.976	1938.974
					W3(W/F)	Y12	300	05	150	10000	500	–	–	24	12	0.888	10602	100	1060.200	941.458	10602	100	1060.200	941.458
					W3(AV)E/F	Y12	200	05	150	2350	150	–	–	24	12	0.888	2602	76	197.752	175.604	2602	100	260.200	231.058
					W3(AV)W/F	Y12	300	05	150	2350	150	–	–	24	12	0.888	2602	52	135.304	120.150	2602	100	260.200	231.058
					W4(E/F)	Y16	125	05	150	10975	300	–	–	32	16	1.579	11361	44	499.884	789.317	11361	44	499.884	789.317
					W4(W/F)	Y16	150	05	150	10975	300	–	–	32	16	1.579	11361	36	408.996	645.805	11361	36	408.996	645.805
					W4a(AV)E/F	Y16	150	05	150	9175	300	–	–	32	16	1.579	9561	64	611.904	966.196	9561	64	611.904	966.196
					W4a(AV)W/F	Y12	175	05	150	9175	300	–	–	24	12	0.888	9577	56	536.312	476.245	9577	56	536.312	476.245
					F1(AV)	Y10	150	07	300	1090	–	–	–	20	10	0.616	1690	876	1480.440	911.951	1690	876	1480.440	911.951
					F2(AV)	Y16	–	01	8600	–	–	–	–	32	16	1.579	8600	16	137.600	217.270	8600	16	137.600	217.270
					G1	Y16	–	06	600	220	–	–	–	32	16	1.579	1356	8	10.848	17.129	1356	8	10.848	17.129
					G2	Y16	–	06	600	70	–	–	–	32	16	1.579	1206	8	9.648	15.234	1206	8	9.648	15.234
					G3	Y10	–	06	220	70	–	–	–	20	10	0.616	470	16	7.520	4.632	470	16	7.520	4.632
	TIE–WALL				C1(IA)	Y16	175	05	500	5110	500	–	–	32	16	1.579	6046	400	2418.400	3818.654	–	–	–	–
	NO. OF TIE–WALL: 2				C1(IIA)	Y16	175	05	500	5780	500	–	–	32	16	1.579	–	–	–	–	6716	400	2686.400	4241.826
					C2	Y12	300	05	150	8600	150	–	–	24	12	0.888	8852	120	1062.240	943.269	8852	136	1203.872	1069.038
																	TOTAL WEIGHT (IA):			21201.755	TOTAL WEIGHT (IIA):			22473.992

NOTES:

1. FOR FOUNDATION TYPE, REFER TO DWG. NO. A–PF–01 TO A–PF–03
2. FOR SHAPE CODE, REFER TO DWG. NO. PC–SHC–01
3. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. AF–0–02 AND AF–0–02A
4. IN BAR MARK, (IA) AND (IIA), INDICATE DECK TYPE IA AND IIA RESPECTIVELY

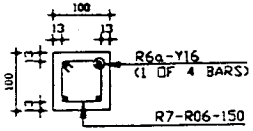
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	ABUTMENT–WING WALL DECK TYPE: IA & IIA ; GIRDER DEPTH: 2.60 m FOUNDATION TYPE: I
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: A–101–06 DATE: JUNE 1996

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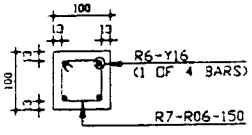


LONG. SECTION (SEC. 1–1)
(END PORTION)
(SCALE 1:20)

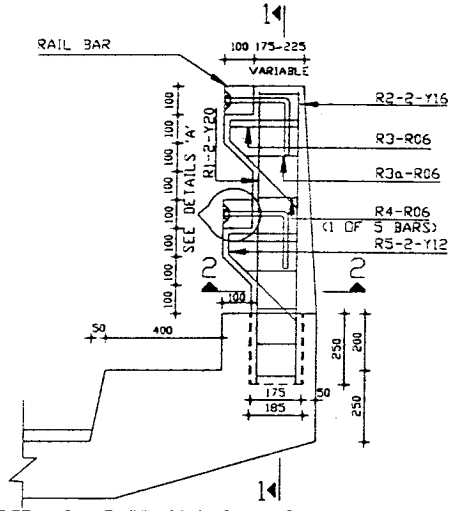
LONG. SECTION (SEC. 1–1)
(INTERIOR PORTION)
(SEE NOTE 6)
(SCALE 1:20)



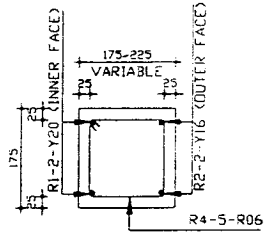
SECTION 4–4
RAILING
(SCALE 1:10)



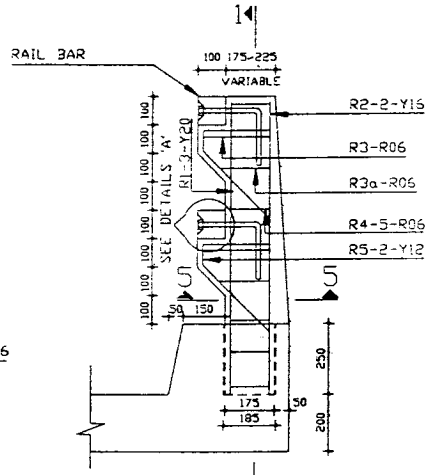
SECTION 3–3
RAILING
(SCALE 1:10)



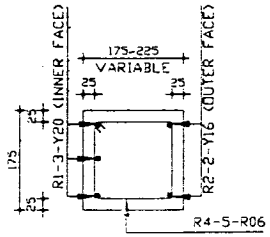
DETAILS OF TRAFFIC RAILING AND POST
(DECK TYPE IA & IIA)
(SCALE 1:20)



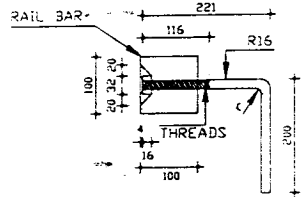
SECTION 2–2
(DECK TYPE IA & IIA)
(SCALE 1:10)



DETAILS OF TRAFFIC RAILING AND POST
(DECK TYPE IB & IIB)
(SCALE 1:20)



SECTION 5–5
(DECK TYPE IB & IIB)
(SCALE 1:10)



DETAILS 'A'
(SCALE 1:10)

NOTES:

1. FOR DECK TYPE IA & IIA NO. OF R1 BARS = 2.
   FOR DECK TYPE IB & IIB NO. OF R1 BARS = 3.
2. FOR THE SPACING 'S' OF RAIL POSTS REFER TO RESPECTIVE GAD(DWG. NOS. GA-20-01/02 TO GA-40-01/02) AS APPLICABLE.
3. FOR BAR BENDING SCHEDULE, REFER TO DWG. NO. RA-00-02.
4. FOR ODD NUMBER OF RAIL POST, RAIL BARS IN CENTRE OF THE BRIDGE SHOULD BE SUPPORTED ON 3 RAIL POSTS.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD	NAME OF PROJECT : LOCATION : THANA ZILA :	PRECAST RAILING AND RAIL POST NONPRESTRESSED REINF. DETAILS (TYPICAL) SCALE : AS SHOWN DWG. NO. : RA-00-01 DATE : JUNE 1996

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EXAMPLE 1:

BAR BENDING SCHEDULE FOR RAILING (OVERALL DECK LENGTH L = 20.80 m)

MEMBER & NUMBER	BAR MARK	BAR TYPE & DIA. mm	BAR SPACING mm	SHAPE CODE	BENDING DIMENSIONS (mm) A	B	C	r	d	CUT LENGTH mm	TOTAL NO. OF BARS	TOTAL LENGTH m	UNIT WT. OF BAR Kg/m	TOTAL WEIGHT Kg
RAIL POST NO. 28	R1	Y20		01	1010				20	1010	56	57	2.466	139.477
	R2	Y16		01	1010				16	1010	56	57	1.579	89.308
	R3	R06		02	135	235			6	812	56	45	0.222	10.095
	R3a	R06		02	135	185			6	712	56	40	0.222	8.852
	R4	R06		02	135	135			6	612	140	86	0.222	19.021
	R5	Y12		03	80	229	324	24	12	641	112	72	0.888	63.737
RAIL BAR	R6	Y16		01	2595				16	2595	32	83	1.579	131.095
	R6a	Y16		01	3052				16	3052	80	244	1.579	385.529
	* R6a	Y16		01	4603				16	4603	0	0	1.579	0.000
	R7	R06	150	02	60	60			6	312	573	179	0.222	39.711
												TOTAL WEIGHT =		886.824 Kg

TABLE 1:

SHOWING GROSS WEIGHT OF REINFORCEMENT OF RAIL POSTS AND RAIL BARS(SPANWISE)

SPAN m	NO. OF RAIL POST	TOTAL WEIGHT Kg DECK TYPE IA & IIA	DECK TYPE IB & IIB
20	28	886.824	956.563
21	30	937.760	1012.480
22	30	964.720	1039.440
23	32	1014.216	1093.917
24	34	1065.026	1149.708
25	34	1092.339	1177.021
26	36	1141.759	1231.423
27	38	1192.544	1287.189
28	38	1219.857	1314.502
29	40	1269.277	1368.903
30	42	1319.960	1424.568

SPAN m	NO. OF RAIL POST	TOTAL WEIGHT Kg DECK TYPE IA & IIA	DECK TYPE IB & IIB
31	42	1347.071	1451.679
32	44	1396.921	1506.510
33	46	1447.276	1561.847
34	46	1474.690	1589.261
35	48	1524.262	1643.814
36	50	1575.097	1699.630
37	50	1601.804	1726.337
38	52	1651.300	1780.815
39	54	1702.262	1836.757
40	54	1729.726	1864.222

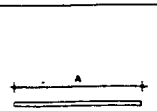
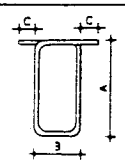
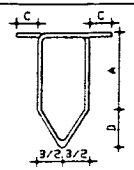
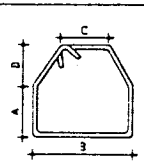
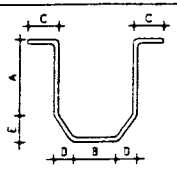
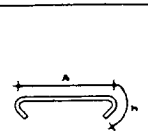
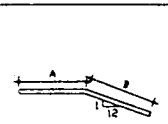
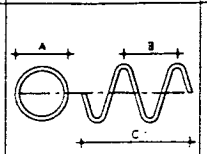
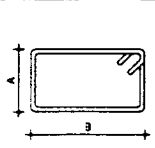
NOTES:

* 1. IN CASE OF ODD NUMBER OF RAIL POSTS ALONG EITHER EDGE OF DECK PER SPAN, PROVIDE 3 POSTS AS SUPPORTS FOR THE PAIR OF RAILS. BAR MARK *R6a WILL THEN BE USED IN ADDITION TO BAR MARK R6a.

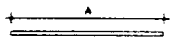
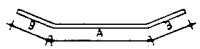
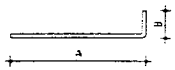
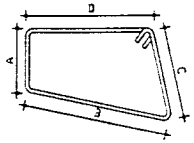
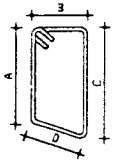
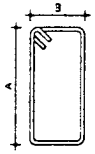
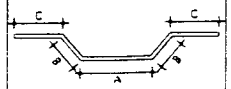
2. FOR REINFORCEMENT DETAILS, REFER TO DWG. NO. RA-00-01
3. FOR SHAPE CODE, REFER TO DWG. NO. PC-SHC-01

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH	DESIGNED, DRAWN & CHECKED BY:	NAME OF PROJECT:	PRECAST RAILING AND RAIL POST
	DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.		BAR BENDING SCHEDULE
LOCAL GOVERNMENT ENGINEERING DEPARTMENT	IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	LOCATION: THANA: ZILA:	DWG. NO.: RA-00-02
			DATE: JUNE 1996

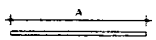
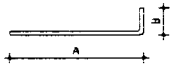
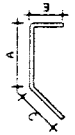
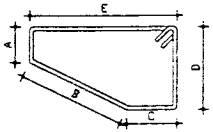
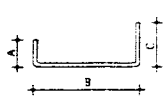
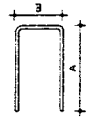
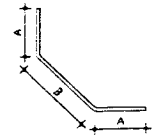
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SHAPE CODE	01	02	03	04	05	06	07	08	09
SHAPE OF BAR									
CUT LENGTH	A	2(A+B+C)-2r-4d	$2(A+B+C+\sqrt{(B/2)^2+(D)^2})$ -1.5r-3d	$((2A+B+C)+$ $2\sqrt{(B-C)^2/4+D^2})-2r+9d$	$(2A+B+2C)+$ $2\sqrt{D^2+E^2})-2r-3d$	A+2h	A+B	$\frac{C}{B}\widehat{\ }(A-d)$	2A+2B+12d

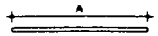
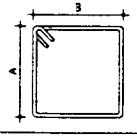
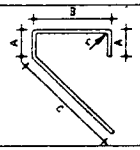
SHAPE OF BARS FOR PC GIRDER

SHAPE CODE	01	02	03	04	05	06	07
SHAPE OF BAR							
CUT LENGTH	A	A+2B	A+B-0.5r-d	A+B+C+D+12d	A+B+C+D+12d	2(A+B)+12d	A+2(B+C)

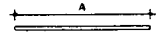
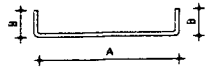
SHAPE CODE OF BARS FOR DECK SLAB AND CROSS-GIRDER

SHAPE CODE	01	02	03	04	05	06	07
SHAPE OF BAR							
CUT LENGTH	A	A+B-0.5r-d	A+B+C-2d	A+B+C+D+E+12d	A+B+C-4d	2A+B-4d	2A+B

SHAPE OF BARS FOR ABUTMENT-WING WALL

SHAPE CODE	01	02	03
SHAPE OF BAR			
CUT LENGTH	A	2(A+B)+12d	2A+B+C-1.5r-3d

SHAPE OF BARS FOR RAIL AND RAIL POST

SHAPE CODE	01	02
SHAPE OF BAR		
CUT LENGTH	A	A+2B-4d

SHAPE OF BARS FOR PILE CAP

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

DESIGNED, DRAWN & CHECKED BY :

DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD.

IN ASSOCIATION WITH

ALLIED ENGINEERS ENTERPRISE LTD.

NAME OF PROJECT :

LOCATION :

THANA :

ZILA :

GIRDER, DECK, ABUTMENT-WING WALL, PILE CAP, RAIL AND RAIL POST

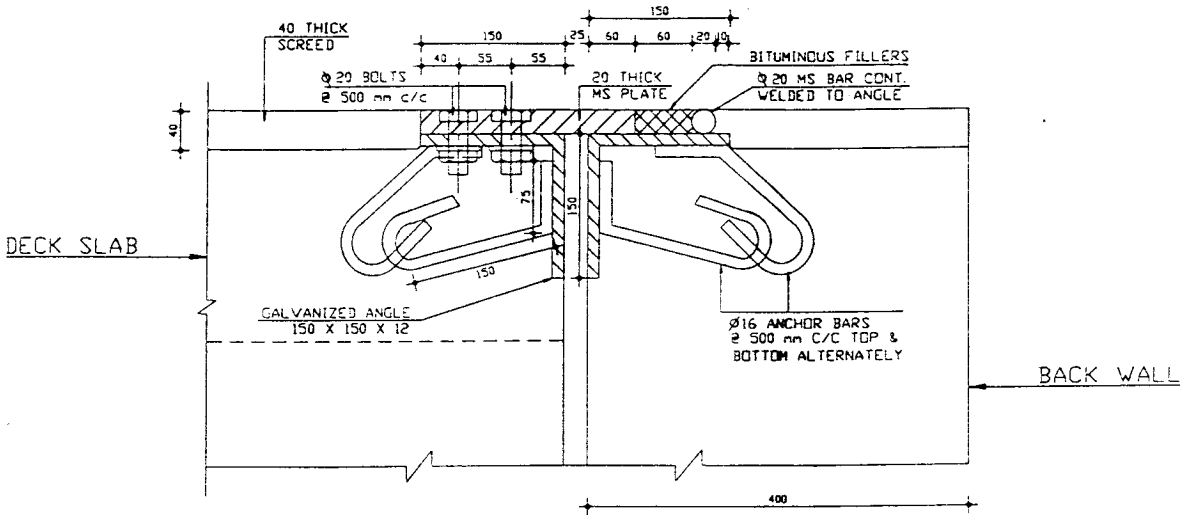
SHAPE CODE DETAILS

DWG. NO. : PC-SHC-01

SCALE : NTS

DATE : JUNE 1996

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TYPICAL EXPANSION JOINT DETAILS
(SCALE 1:6)

NOTES:

1. THE STEEL PLATES AND ANGLES SHALL CONFORM TO BS449 GRADE ST43 OR EQUIVALENT WITH MIN. YIELD STRENGTH fy = 250 N/mm2.
2. THE MS STEEL ANCHOR BARS SHALL CONFORM TO ASTM A615 GRADE 40 OR EQUIVALENT WITH fy = 276 N/mm2.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH LOCAL GOVERNMENT ENGINEERING DEPARTMENT	DESIGNED, DRAWN & CHECKED BY : DESIGN PLANNING & MANAGEMENT CONSULTANTS LTD. IN ASSOCIATION WITH ALLIED ENGINEERS ENTERPRISE LTD.	NAME OF PROJECT : LOCATION : THANA : ZILA :	PC GIRDER BRIDGE EXPANSION JOINT DETAILS — DWG NO MS-00-01 SCALE : AS SHOWN — DATE JUNE 1996