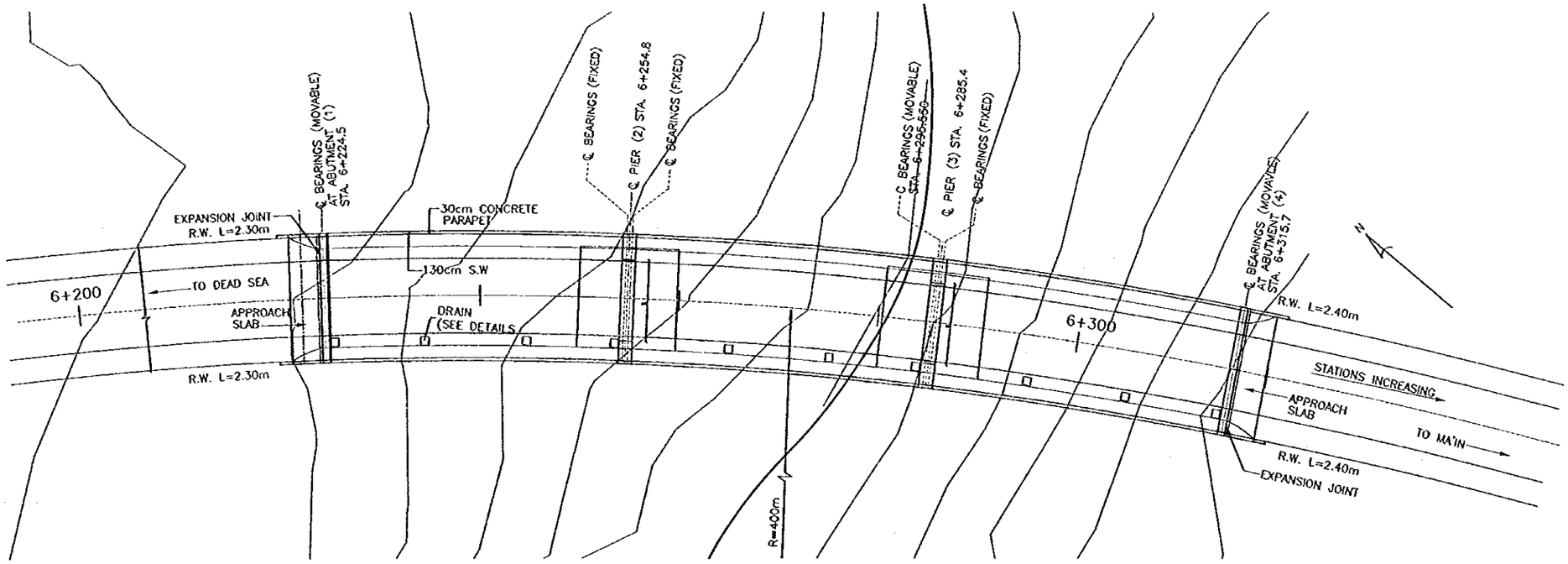
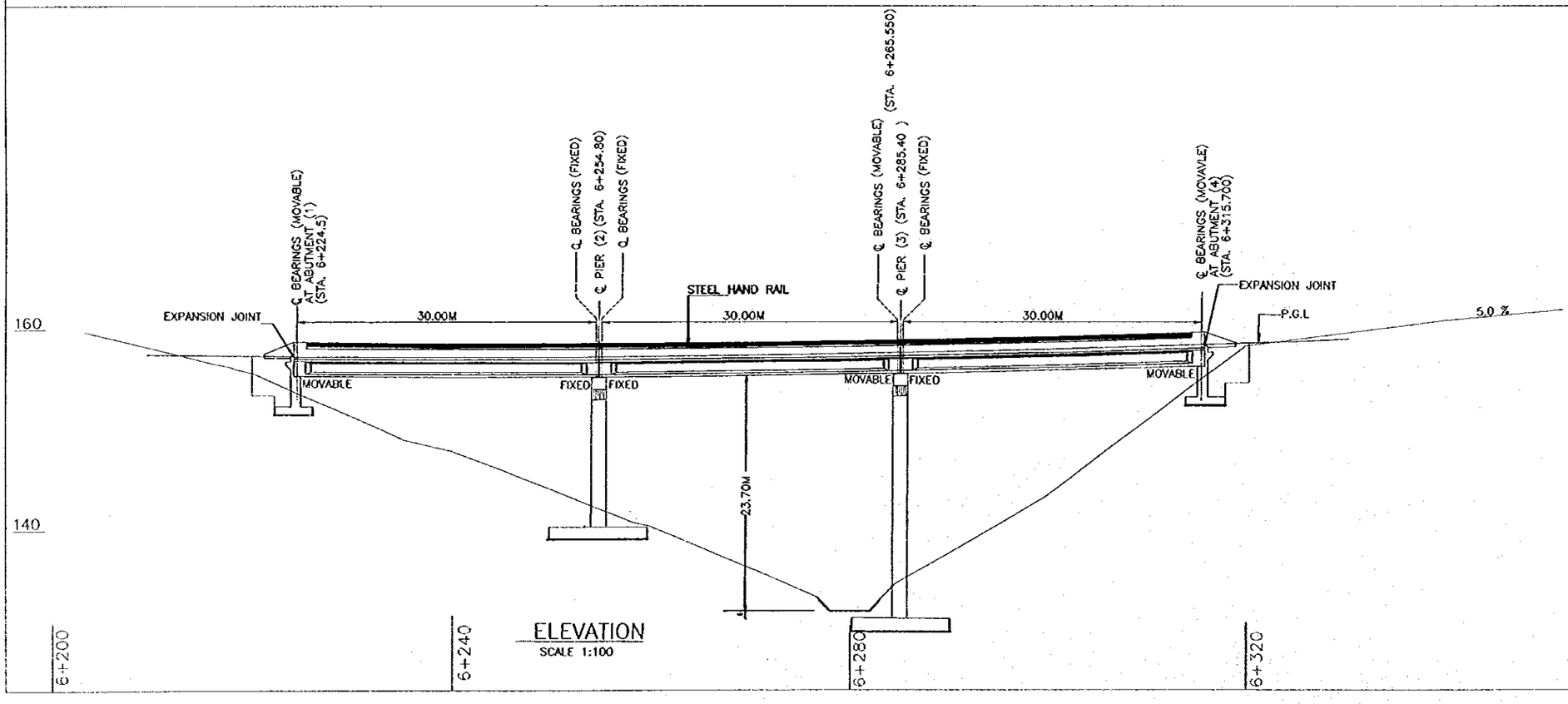


PLAN
SCALE 1:250



ELEVATION
SCALE 1:100

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

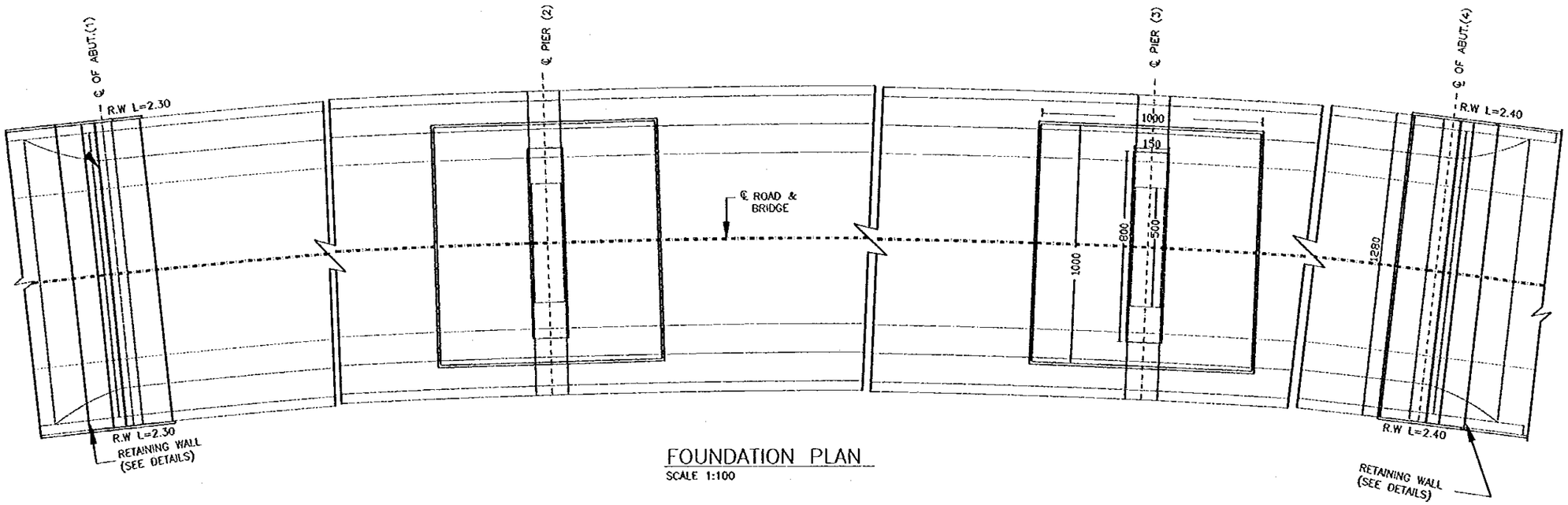
Designed by:
Japan International Cooperation Agency (JICA)

JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasito Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & surveying
Tel: 4913377 – Fax: 4913388 – Amman – Jordan

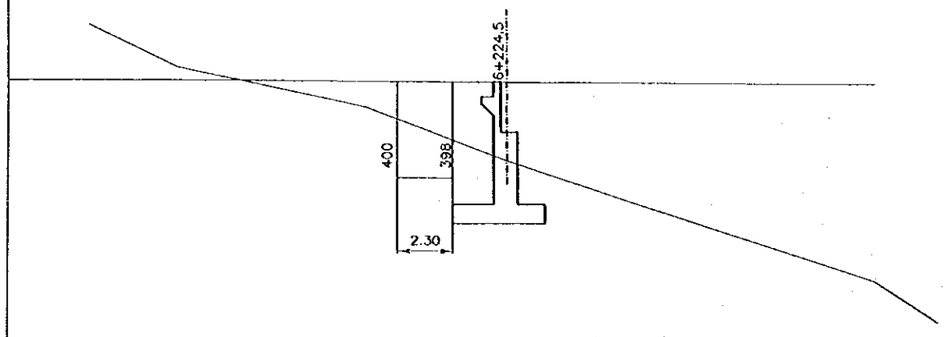
Drawing Title:
WADI ABU EL-ASAL BRIDGE
GENERAL PLAN & ELEVATION

Scale: 1:250
Drawing No.: DSPW-70



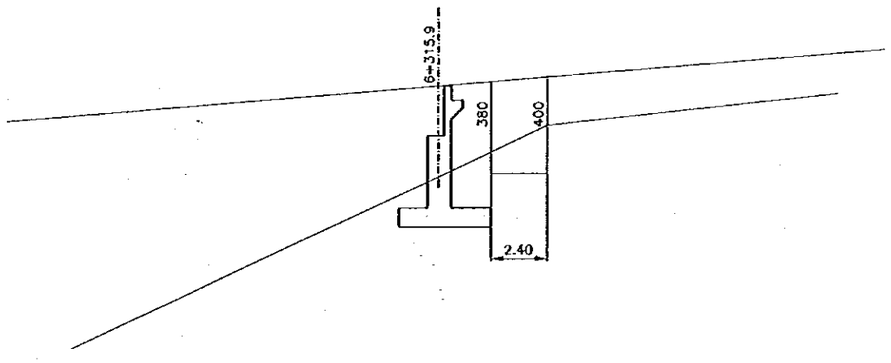
FOUNDATION PLAN

SCALE 1:100



R.W. BEHIND ABUTMENT (1)

SCALE 1:50



R.W. BEHIND ABUTMENT (4)

SCALE 1:50

NOTE:-

ALL DIM. ARE (CM) EXCEPT BAR REINF. DIAMETER ARE IN (MM)

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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JICA Study Team:
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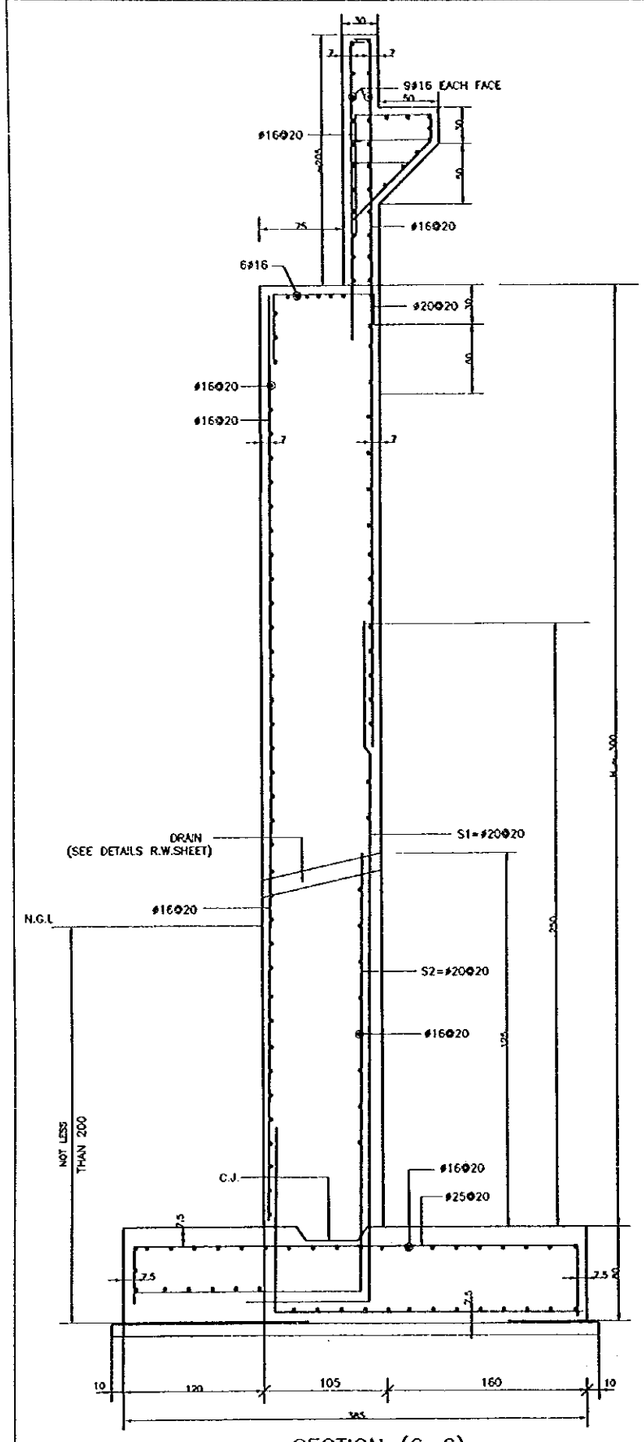
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 4913377 - Fax: 4913388 - AMMAN - JORDAN

Drawing Title:
WADI ABU EL-ASAL BRIDGE
FOUNDATION PLAN & R.W. HIGHTS BEHINDE ABUTMENTS

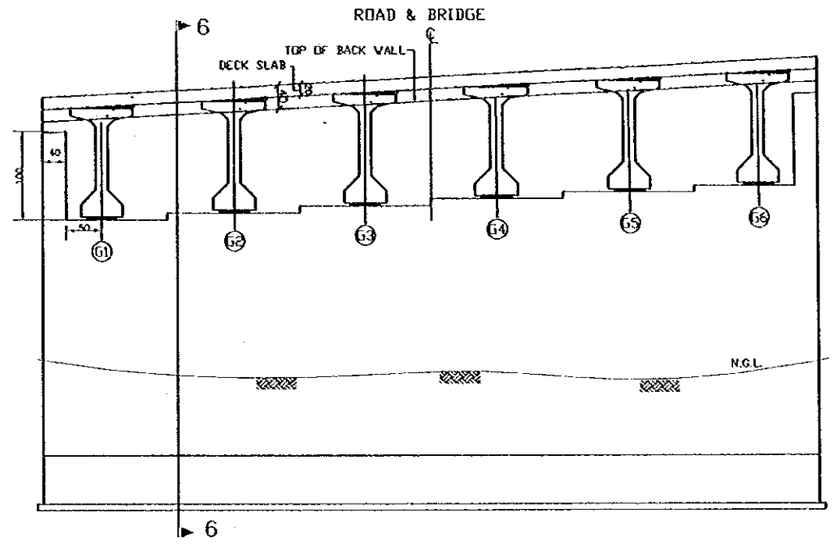
Scale: AS SHOWN

Drawing No.: **DSPW-71**



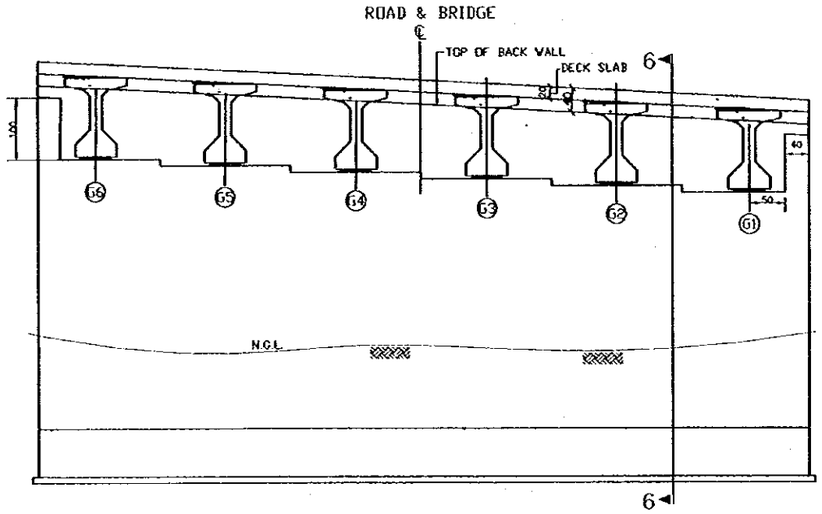
SECTION (6-6)

N.T.S



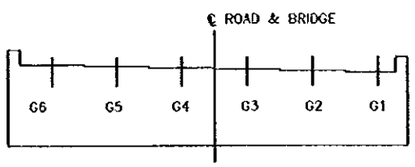
ELEVATION ON FRONT OF ABUTMENT 1

N.T.S



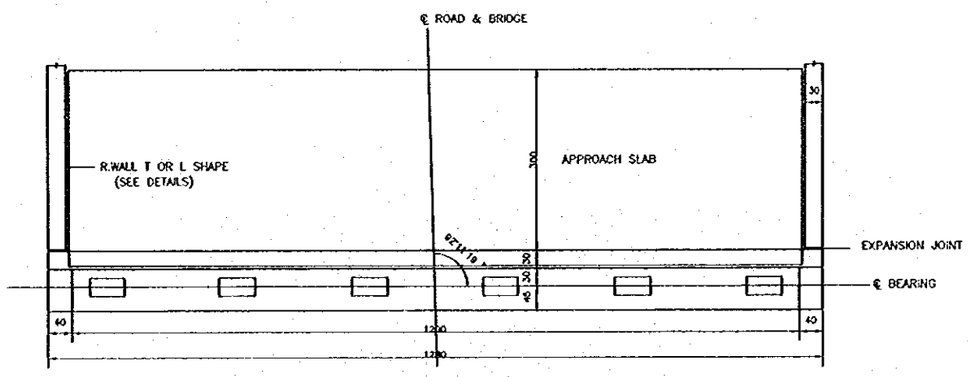
ELEVATION ON FRONT OF ABUTMENT 4

N.T.S



ABUTMENT ELEVATION

SCALE 1:100



PLAN ON TOP ABUTMENT

SCALE 1:50

ABUTMENT SEATS ELEVATIONS

ABUT. NO. & STATION	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	FOOTING LEVELS
1 6+224.50	155.02	155.09	155.17	155.25	155.32	155.40	
4 6+315.70	156.29	156.35	156.41	156.47	156.53	156.59	

NOTES:-

1-ALL D.M. ARE IN (CM) EXCEPT BAR REINFORCEMENT DIAMETER WHICH ARE IN (MM)

2-ALLOWABLE BEARING CAPACITY IS 5 KG/CM^2

3) EXPOSED SURFACES SHALL BE FAIR FACED,AND BURIED SURFACES SHALL BE COATED WITH BITUMINOUS DAMP PROOFING.

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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Japan International Cooperation Agency (JICA)

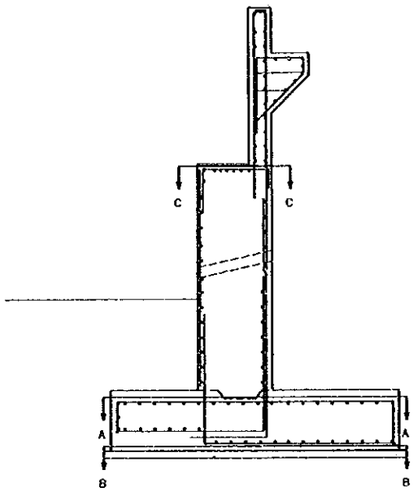
JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamashita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

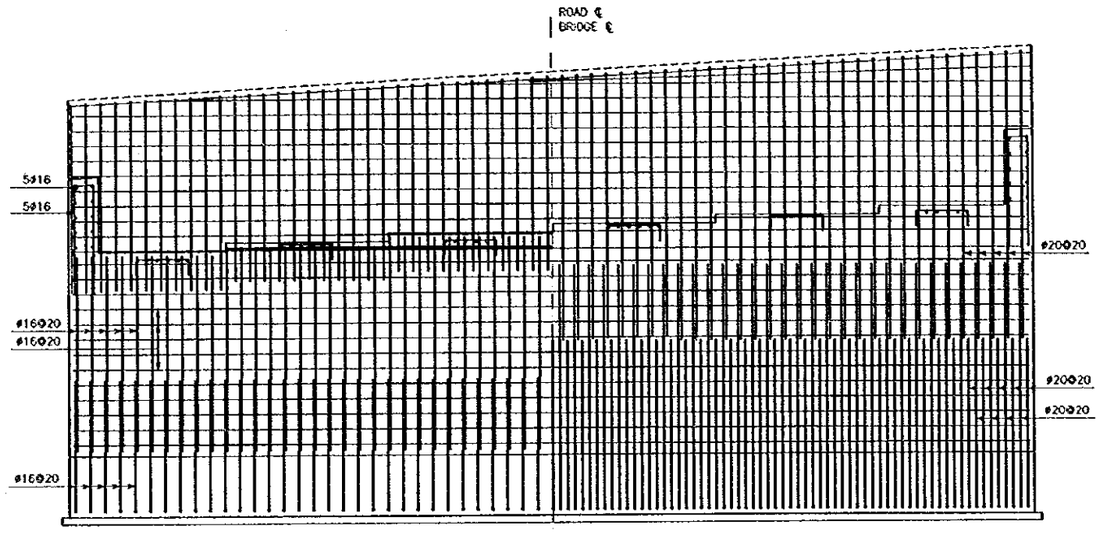
Drawing Title:
WADI ABU EL-ASAL BRIDGE
ABUTMENTS DETAILS

Scale: AS SHOWN

Drawing No.: DSPW-72



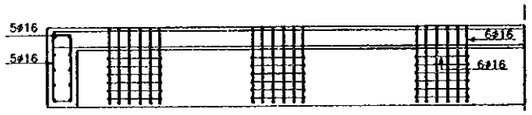
SECTION (6-6)
SCALE 1:40



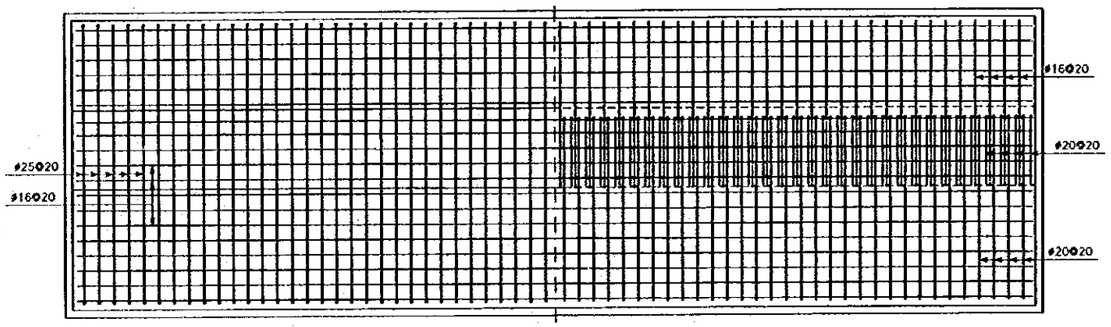
FRONT FACE

REAR FACE

ELEVATION
SCALE 1:40



SECTION C-C
SCALE 1:40



SECTION A-A
SCALE 1:40

SECTION B-B
SCALE 1:40

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

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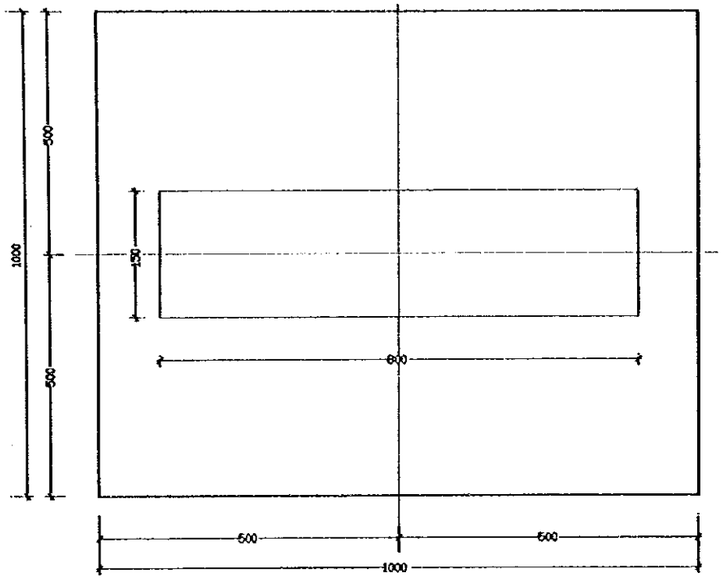
Yamashita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 6012377 - Fax: 6012380 - AMMAN - JORDAN

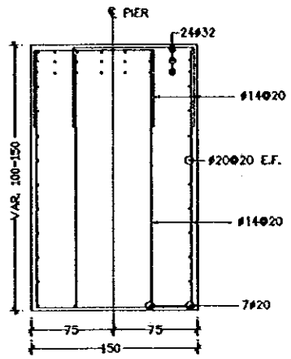
Drawing Title:
WADI ABU EL-ASAL BRIDGE
ABUTMENT REINFORCEMENT DETAILS

Scale: AS SHOWN

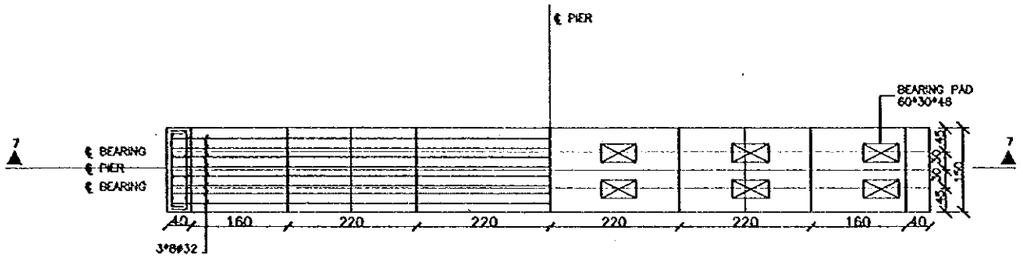
Drawing No.: DSPW-72'



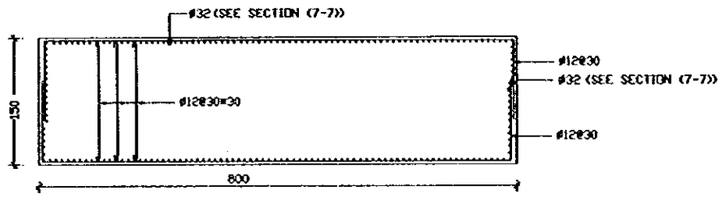
PLAN OF FOOTING
SCALE 1:50



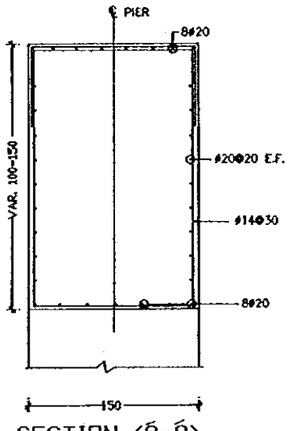
SECTION (9-9)
SCALE 1:25



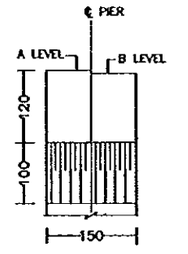
PIER PLAN
SCALE 1:50



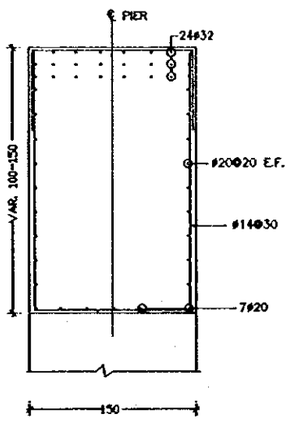
SECTION (10-10)
SCALE 1:50



SECTION (8-8)
SCALE 1:25



PIER SIDE VIEW
SCALE 1:50

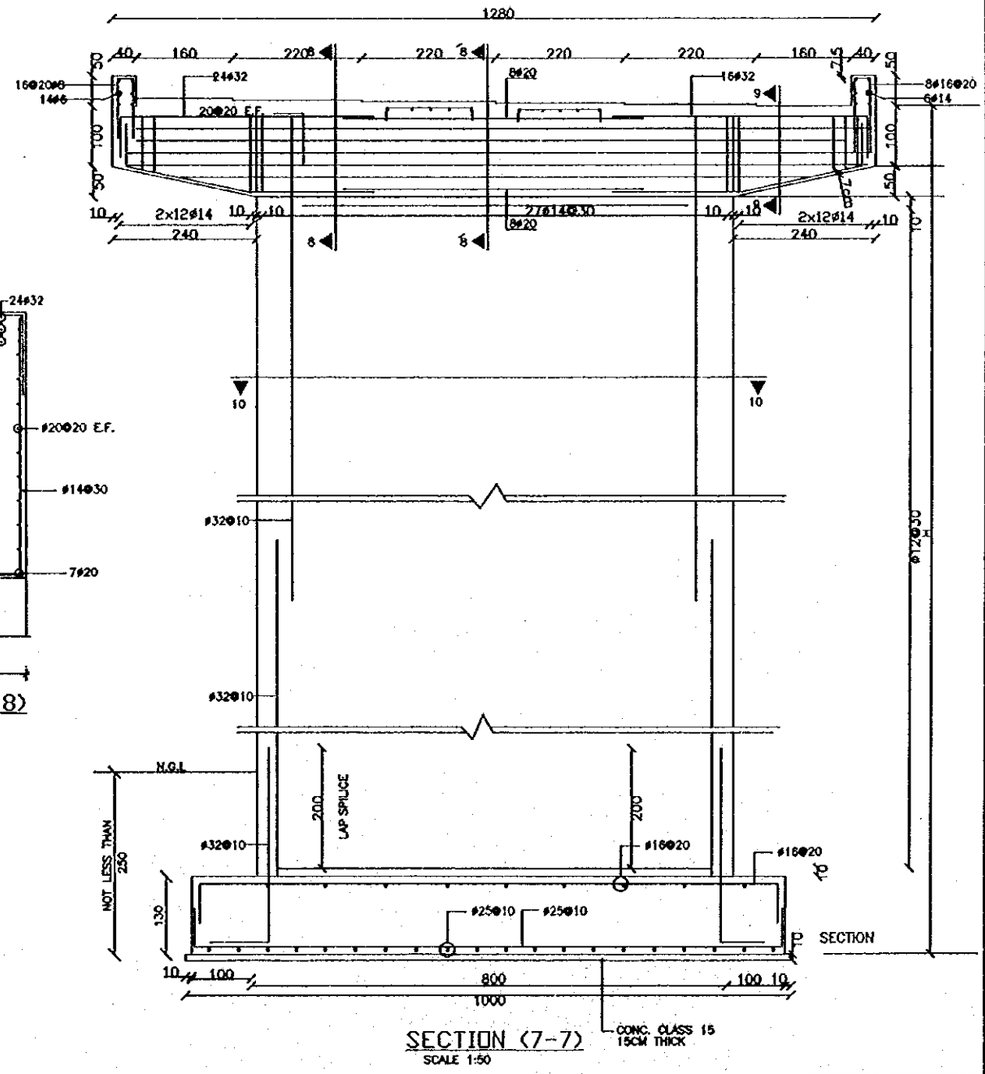


SECTION (8-8)
SCALE 1:25

PIER SEATS & FOOTING ELEVATIONS

PIER NO.	HEIGHT H (M)
2	16.25
3	25.70

PIER NO. & STATION	GIRDER 1		GIRDER 2		GIRDER 3		GIRDER 4		GIRDER 5		GIRDER 6		FOOTING LEVELS
	A	B	A	B	A	B	A	B	A	B	A	B	
2 6+254.8	155.00	155.00	155.07	155.07	155.15	155.15	155.23	155.23	155.30	155.30	155.38	155.38	
3 6+285.4	155.42	155.41	155.49	155.50	155.57	155.58	155.65	155.64	155.70	155.69	155.80	155.79	



SECTION (7-7)
SCALE 1:50

NOTE:-
1- ALL DIM. ARE (CM) EXCEPT BAR REINF. DIAMETER ARE IN (MM)
2- ALLOWABLE BEARING CAPACITY IS 5KG/CM^2
3- EXPOSED SURFACES SHALL BE FAIR FACED, AND BURIED SURFACES SHALL BE COATED WITH BITUMINOUS DAMP PROOFING.

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordon

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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JICA Study Team:
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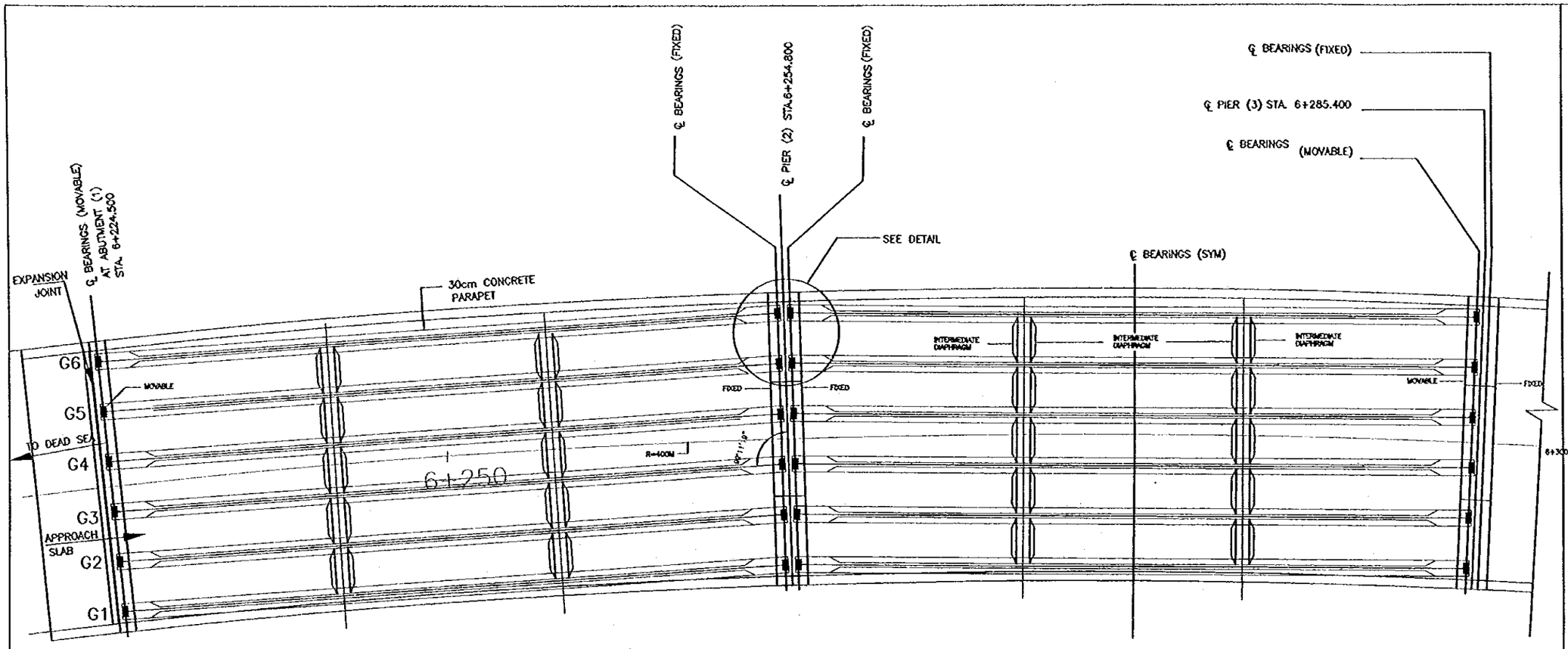
Yamashita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel. 4913377 - Fax. 4913380 - AMMAN - JORDAN

Drawing Title:
WADI ABU EL-ASAL BRIDGE
PIERS DETAILS

Scale: AS SHOWN

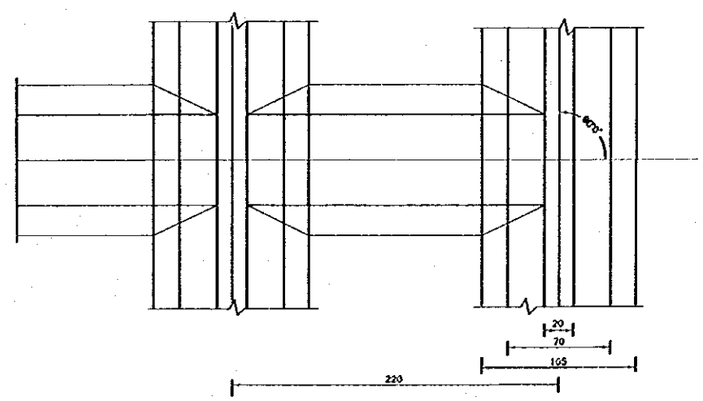
Drawing No.: DSPW-73



GIRDERS PLAN
SCALE 1:100

GIRDER NO	LENGTH M
G6	30.44
G5	30.28
G4	30.11
G3	29.95
G2	29.78
G1	29.60

APPROX.GIRDERS LENGTHS
(FIRST SPAN)



SECTION ON PLAN (INTERMEDIATE DIAPHRAGM)
SCALE 1:20

NOTES:-
1-ALL DIM. ARE IN (CM) EXCEPT BAR REINFORCEMENT DIAMETER WHICH ARE IN (MM)

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

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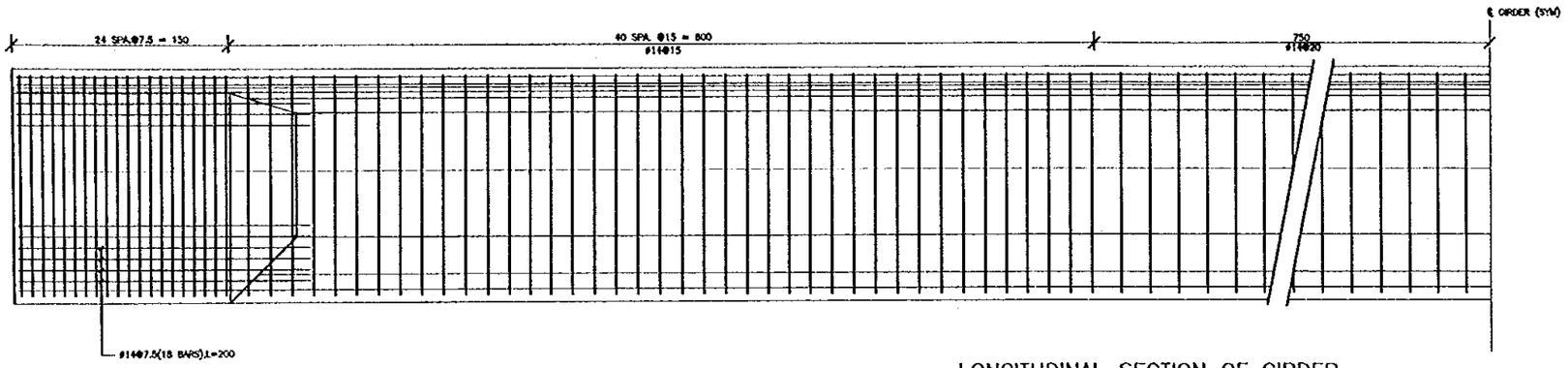
Subcontracted Local Consultant:
consolidated consultants
engineering & environment

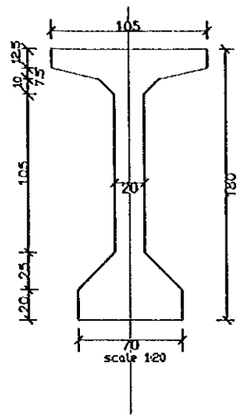
Date:	June	2000

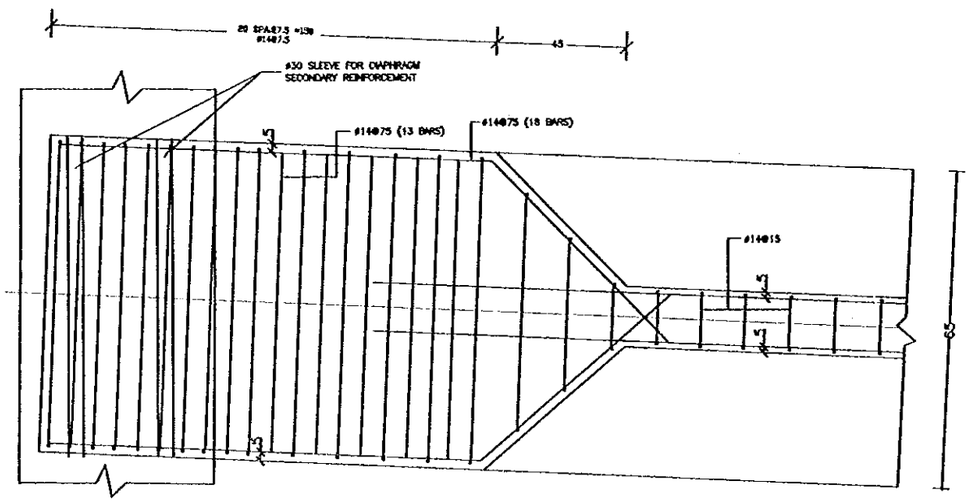
Drawing Title:
WADI ABU EL-ASAL BRIDGE
PRESTRESSED GIRDERS PLAN

Scale: AS SHOWN	Drawing No.: DSPW-74

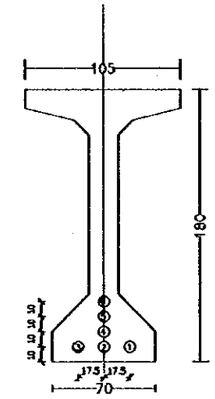


LONGITUDINAL SECTION OF GIRDER
SCALE 1:20

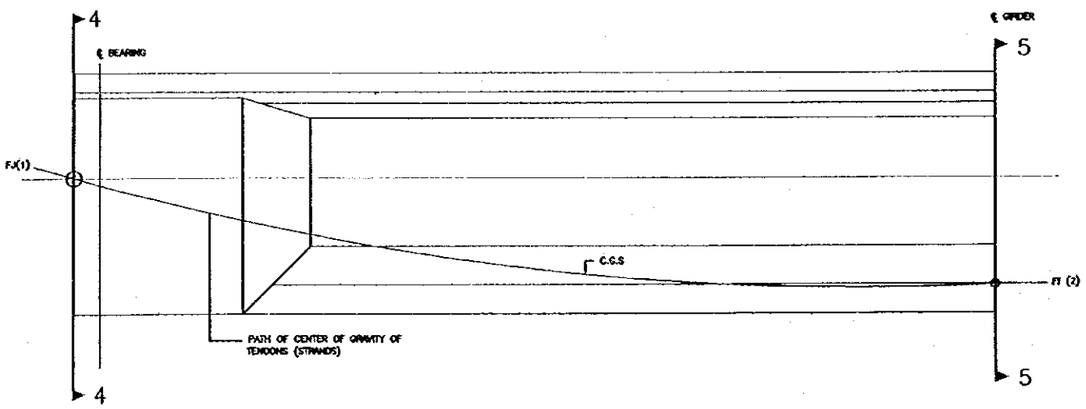




HALF SECTION PLAN
SCALE 1:10



SECTION IN (5-5)
SCALE 1:20



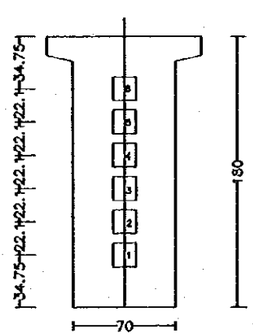
NO. OF STRANDS / TENDONS

CABLE NO.		
1-	9	STRANDS 0.5
2-	9	STRANDS 0.5
3-	9	STRANDS 0.5
4-	9	STRANDS 0.5
5-	9	STRANDS 0.5
6-	9	STRANDS 0.5

(1)- F) THE FORCE REQUIRED AT THE JACKING END OF THE GIRDER AFTER ANCHORAGE SLIP , IF ANY , F) < 677 TON. IT SHOULD BE ADJUSTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION FOR ANCHORAGE SLIP.

(2)- F1 IS THE FINAL NET PRESTRESSING FORCE AT MIDSPAN AFTER ALL LOSSES > 547 TON.

GIRDER HALF ELEVATION FOR PRESTRESSING ARRANGEMENT
1:50



SECTION IN (4-4)
SCALE 1:20

NOTES:

1- READ THIS DRAWING WITH DRAWING No.

2- ALL DIMENSIONS ARE IN cm. EXCEPT REINFORCEMENT BAR DIAMETER WHICH ARE IN mm.

3- MATERIAL SPECIFICATIONS:-

CONCRETE:

a) FOR PRECAST GIRDERS -CONCRETE CLASS C40-CHARACTERISTIC COMPRESSIVE CYLINDER STRENGTH OF 34.8 MPa AT 28 DAYS.
b) FOR PRECAST GIRDER-AT TIME OF PRESTRESSING-f'ci=32 MPa.(CYLINDER).
c) FOR CAST-IN SITU CONCRETE CLASS C30 (DECK SLAB & DIAPHRAGMS)-CHARACTERISTIC COMPRESSIVE CYLINDER STRENGTH OF 28.1 MPa AT 28 DAYS.

STEEL:

a) PRESTRESSING STEEL SHALL BE COLD DRAWN , LOW RELAXATION SEVEN-WIRE STRESS-RELIEVED STRANDS , DIAMETER 1/2 INCH.(MIN AREA=0.9871 cm^2) ,CONFORMING TO AASHTO M203 (A416) BARS OF HIGH TENSILE STRENGTH GRADE 270 K, OR EQUIVALENT , AND SHALL HAVE A MINIMUM BREAKING STRESS OF 1861 MPa.
b) REINFORCEMENT STEEL BARS SHALL BE DEFORMED BARS OF HIGH TENSILE STRENGTH, GRADE 60, CONFORMING TO JSS/441/1988 OR AASHTO M31M(ASTM A615M).

4- THE TENSIONING JACKS SHALL BE AS RECOMMENDED BY THE CABLE MANUFACTURER, SUBJECTED TO THE ENGINEERS APPROVAL , AND THE GIRDER ENDS SHALL BE ADDITIONALLY REINFORCED , AS REQUIRED,TO FIT MANUFACTURER'S ANCHORAGE SYSTEM.

5- THE CONTRACTOR SHOULD SUBMIT TO THE ENGINEER FOR APPROVAL , PRIOR TO THE COMMENCEMENT OF WORK , THE POST TENSIONING SYSTEM TO BE USED TOGETHER WITH DETAILED CALCULATION AND SHOP WORKING DRAWINGS FOR ALL NECESSARY DETAILS, INCLUDING THOSE FOR END ANCHORAGES , ELONGATIONS , JACKING , TENDON ARRANGEMENT AND PRESTRESSING SEQUENCE & PROCEDURE.

6- NEW ARRANGEMENT OF TENDONS CAN BE USED IF APPROVED BY THE ENGINEER , PROVIDED THAT THE FORCE AT MID SPAN AND TENDONS CENTER OF GRAVITY ARE EQUIVALENT TO THE PROPOSED ARRANGEMENT. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY CALCULATIONS AND DETAILS REQUIRED FOR HIS NEW ARRANGEMENT.

7- PRESTRESS LOSSES , EXCLUDING FRICTION, ASSUMED IN THE DESIGN k/m =227.53 MPa. FRICTION LOSSES USED IN THE DESIGN WAS CALCULATED BASED ON K=0.0049 & μ= 0.25. THE CONTRACTOR SHALL VERIFY ALL LOSSES INCLUDING FRICTION AND ANCHORAGE SLIP ASSUMED IN THE DESIGN , AND MODIFY IF NECESSARY THE ASSUMED LOSSES.

8- FOR LOCATION OF SLEEVES IN DIAPHRAGMS , SEE DIAPHRAGM DETAILS DRAWING . COST OF WHICH SHALL BE INCLUDED IN THE UNIT COST OF GIRDER.

9- REINFORCING BARS SHALL BE SPACED TO CLEAR PRESTRESSING ANCHORAGES.

10- GROUTING OF THE CABLES SHALL BE DONE AFTER THE CONCRETE COMPRESSIVE STRENGTH HAS REACHED 34.8 MPa. THE GROUTING PROCEDURE SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

11- GIRDERS SHALL BE HELD RIGIDLY IN PLACE WHEN DIAPHRAGMS ARE PLACED.

12- THE FINISHED PRESTRESSED GIRDERS SHALL BE TRANSPORTED , STORED AND HANDLED IN SUCH A WAY THAT EXCESSIVE STRESSES WILL NOT BE DEVELOPED IN THE GIRDERS , GIRDERS MUST BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES & MUST BE PICKED UP ONLY BY MEANS OF APPROVED DEVICES ANCHORED WITHIN THE END ZONES.

13- THE UPPER FACE OF THE PRECAST GRIDER SHALL BE INTENTIONALLY ROUGHENED BY MEANS SUBJECT TO THE ENGINEERS APPROVAL.

14- APPROVED DETAILS OF RECESS BOX & ANCHORAGE ADITIONAL REINFORCEMENT SHALL BE PROVIDED BY THE CONTRACTOR.

15- PRECAST CONCRETE TILES CAN BE USED BY THE CONTRACTOR , IF HE WISHES , BETWEEN GIRDERS TO CAST TOP SLAB CONCRETE THE CONTRACTOR SHOULD INSURE THE SAFTY OF THE STRUCTURE DUE TO THE EXTRA LOAD OF TILES NO ADDITIONAL PAYMENT IS GIVEN FOR THIS ITEM.

16- THE PRESTRESSING WIRES SHALL BE ENCLOSED IN MORTAR-TIGHT FLEXIBLE GALVANIZED METAL CONDUITS ,OF APPROVED SIZE & RIGIDITY , THE ANCHORS SHALL PROVIDE FOR GROUT PASSAGE THOUGH THE CONDUIT . ALL TENDONS SHALL BE FURNISHED IN CONTINUOUS LENGTH WITHOUT SPLICES OR COUPLINGS.

17- THE USE OF STEEL FORMS ON CONCRETE CASTING LEVEL BEDS IS RECOMMENDED.

18- THE RECESSES FOR THE ANCHORS SHALL BE FILLED WITH PORTLAND CEMENT CONCRETE.

19- THE FORMWORK OF THE PRECAST GIRDERS SHOULD ALLOW FREE MOVEMENT OF THESE GIRDERS AWAY FROM THE END AT WHICH THE PRESTRESS FORCE IS RELEAZED AT TRANSFER.

20- MIN . LAP LENGTH OF 60cm SHALL BE USED FOR THE SEGMENTS OF LONG PASSIVE REINFORCEMENT IN THE GIRDERS.

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:
Japan International Cooperation Agency (JICA)

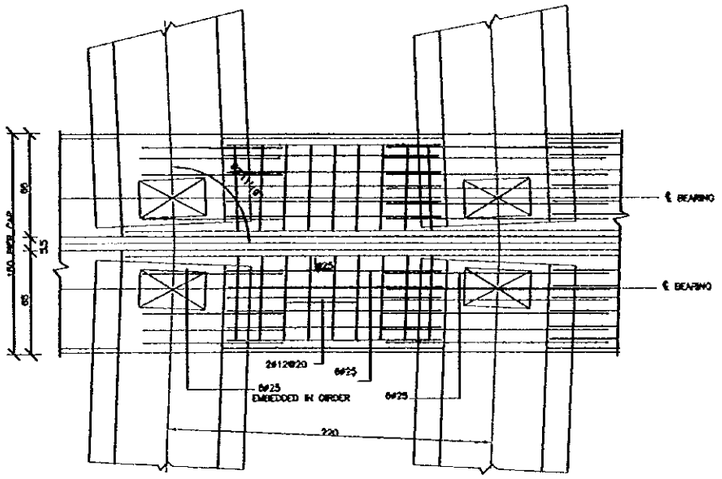
JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 4612377 - Fax: 4612380 - AMMAN - JORDAN

Drawing Title:
WADI ABU EL-ASAL BRIDGE
PRESTRESSED GIRDERS DETAILS

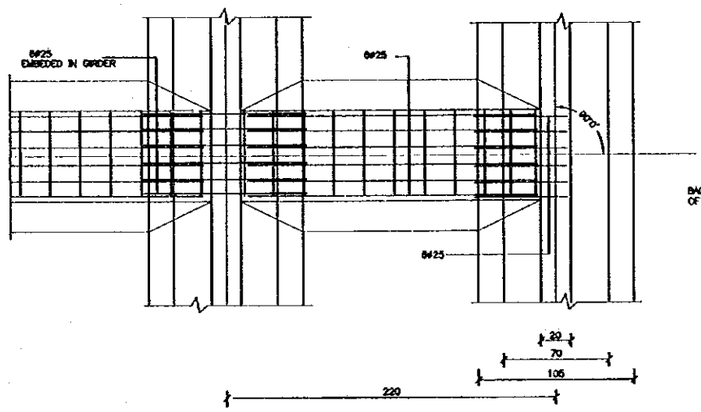
Scale: AS SHOWN

Drawing No.: DSPW-75



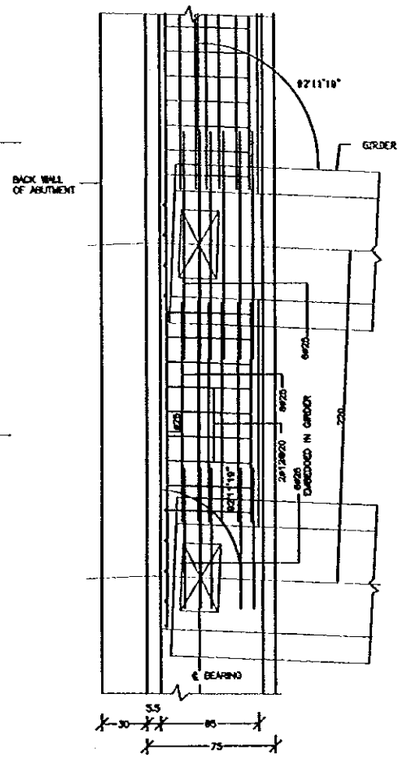
SECTION PLAN (END DIAPHRAGM AT PIER)
(BOTTOM REINF.) SHOWN ONLY

SCALE 1:20



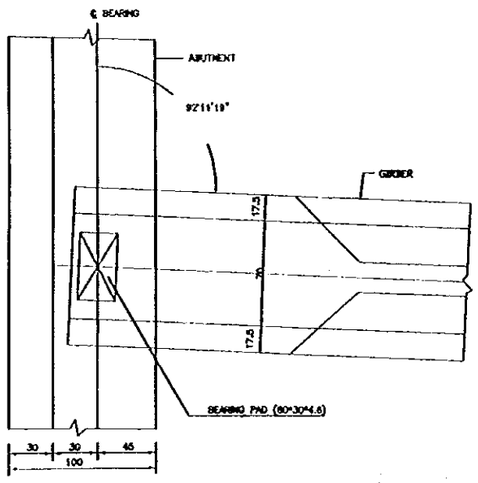
SECTION ON PLAN (INTERMEDIATE DIAPHRAGM)

SCALE 1:20



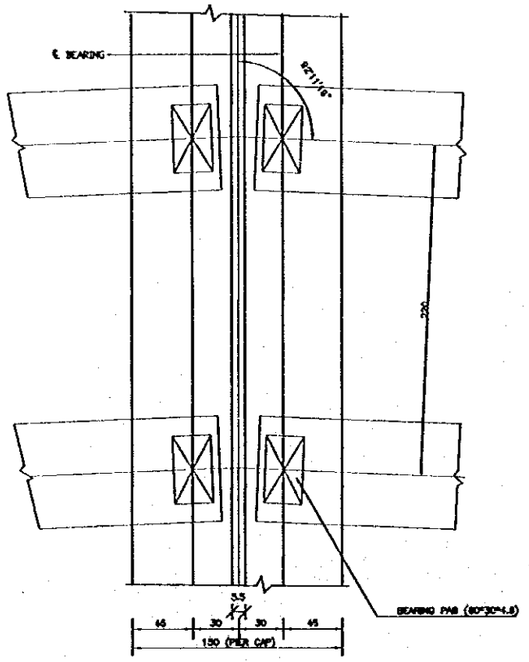
SECTION PLAN (END DIAPHRAGM AT ABUTMENT)
(BOTTOM REINF.) SHOWN ONLY

SCALE 1:20



BEARING PAD PLAN AT ABUTMENT

SCALE 1:20



BEARING PAD PLAN AT PIER CAP

SCALE 1:20

NOTES:-
1-ALL DIM. ARE IN (CM)
EXCEPT BAR REINFORCEMENT
DIAMETER WHICH ARE IN (MM)

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:
Japan International Cooperation Agency (JICA)

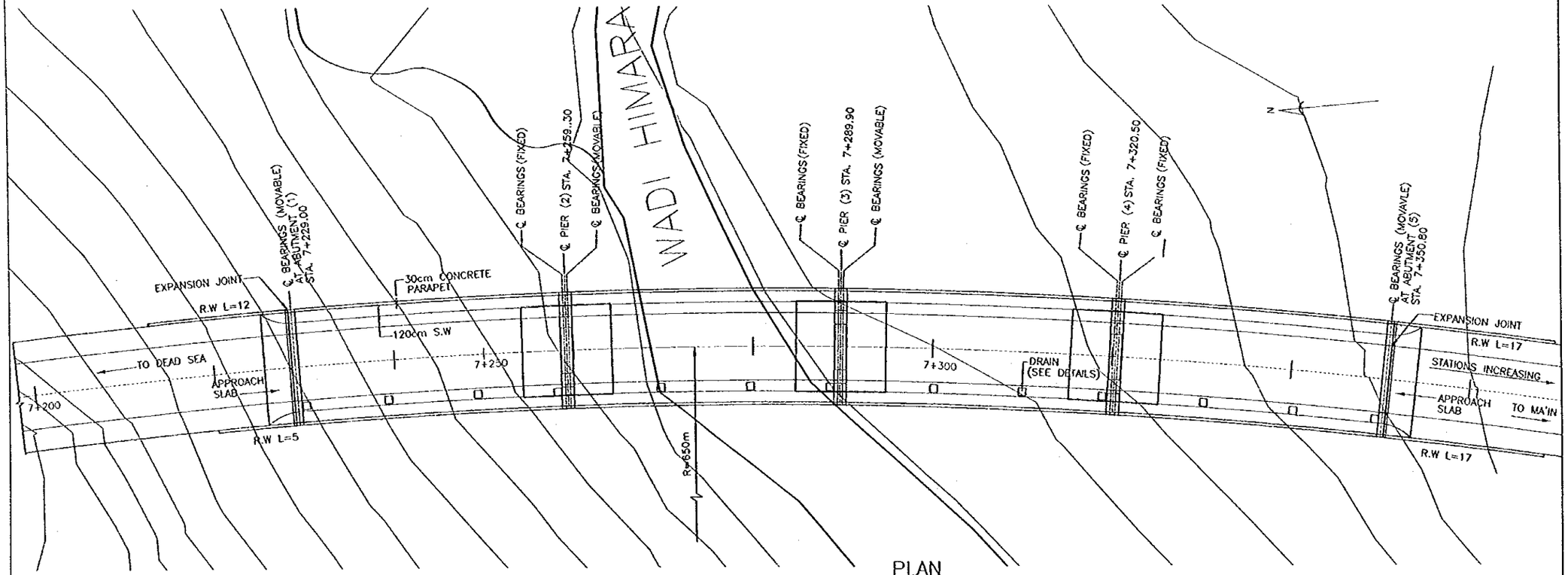
JICA Study Team:
Joint Venture of
Pacific Consultants International and
Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

Drawing Title:
WADI ABU EL-ASAL BRIDGE
DIAPHRAGMS SECTIONAL PLAN DETAILS

Scale: 1:20

Drawing No.: DSPW-76



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The Ministry of Planning

SUB-PROJECT:
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JICA Study Team:
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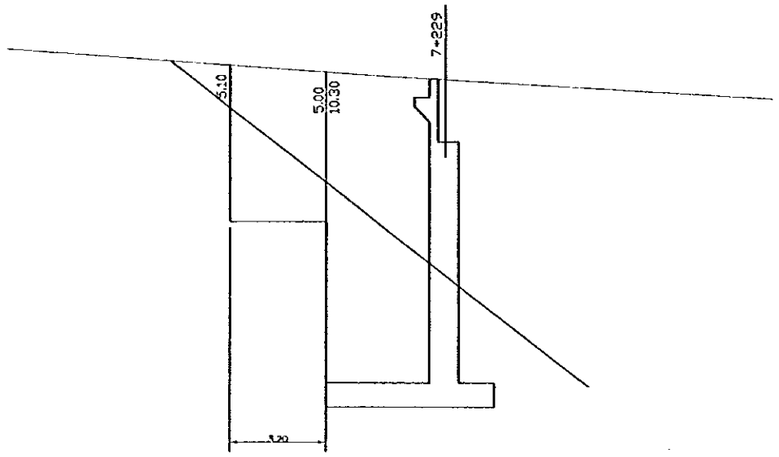
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

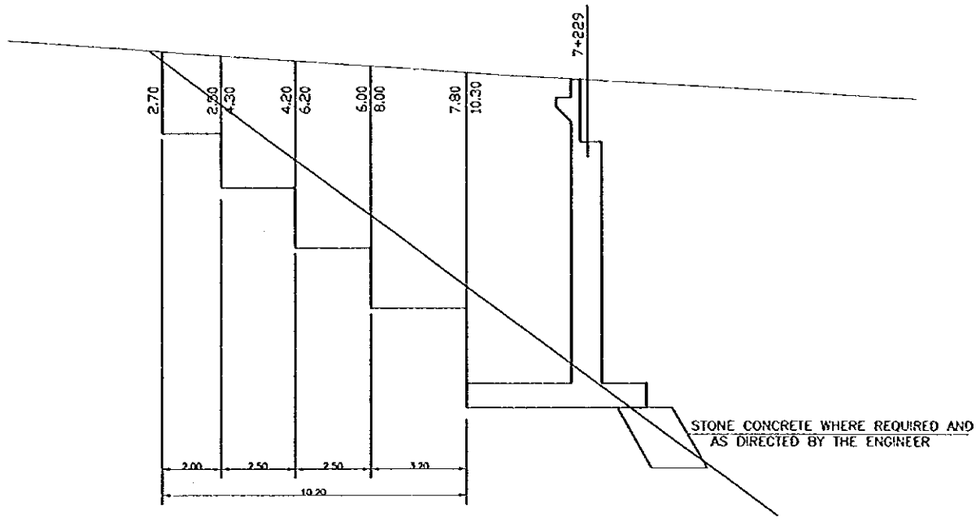
Drawing Title:
WADI HIMARA BRIDGE
GENERAL PLAN & ELEVATION

Scale: 1:250

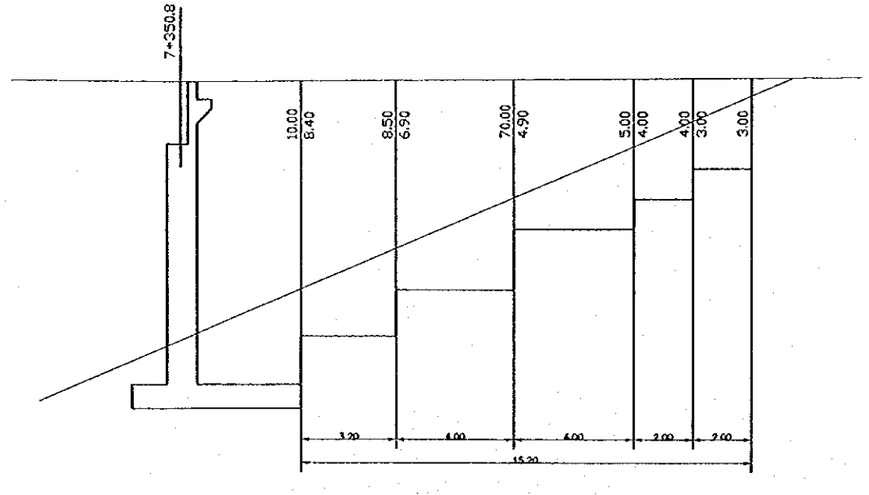
Drawing No.: DSPW-80



R.W. BEHIND ABUTMENT (1)
AT RIGHT SIDE
SCALE 1/100



R.W. BEHIND ABUTMENT (1)
AT LIFT SIDE
SCALE 1/100



R.W. BEHIND ABUTMENT (5)
AT LIFT & RIGHT SIDES
SCALE 1/100

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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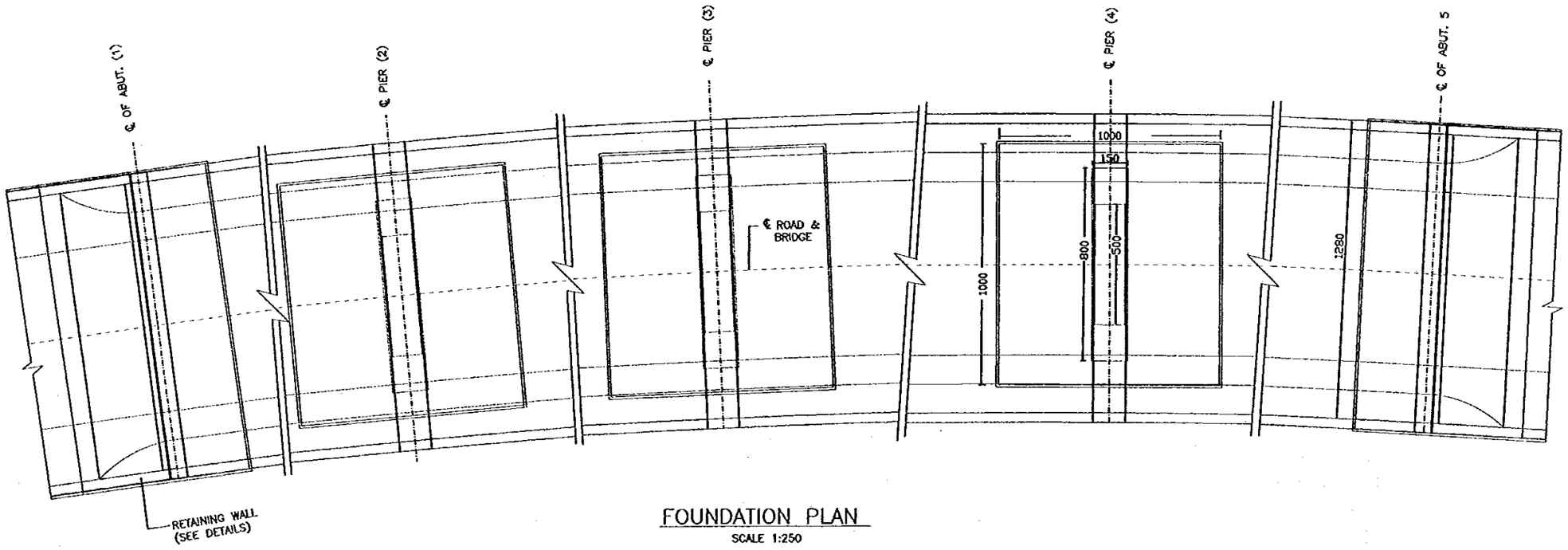
Japan International Cooperation Agency (JICA)

JICA Study Team:
Joint Venture of
Pacific Consultants International and
Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 4612377 - Fax: 4612380 - AMMAN - JORDAN

Drawing Title:
WADI HIMARA BRIDGE
R.W. HIGHTS BEHINDE
ABUTMENTS

Scale: 1/100
Drawing No.: DSPW-80'



FOUNDATION PLAN

SCALE 1:250

NOTE:-
ALL DIM. ARE (CM) EXCEPT BAR REINF. DIAMETER ARE IN (MM)

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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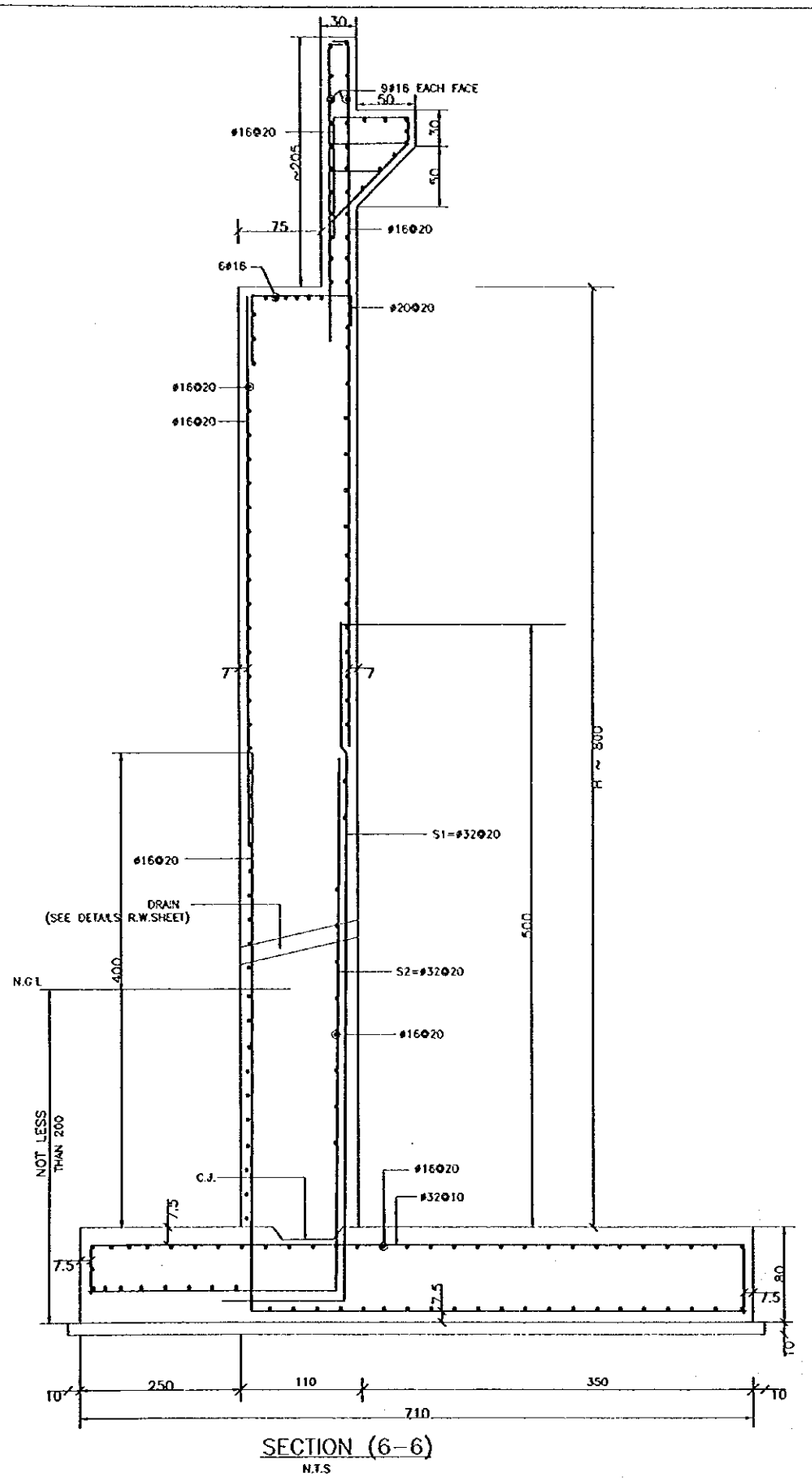
Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 5813377 - Fax: 5812580 - AMMAN - JORDAN

Drawing Title:
WADI HIMARA BRIDGE
FOUNDATION PLAN

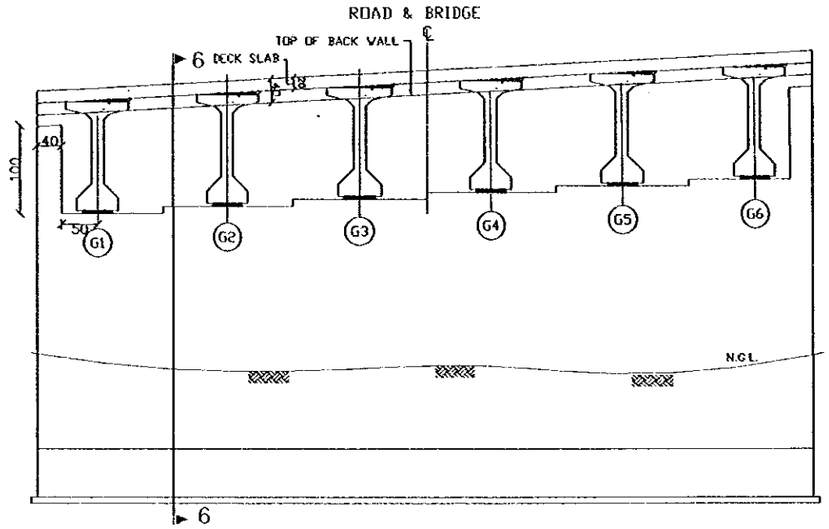
Scale: 1:250

Drawing No.: DSPW-81



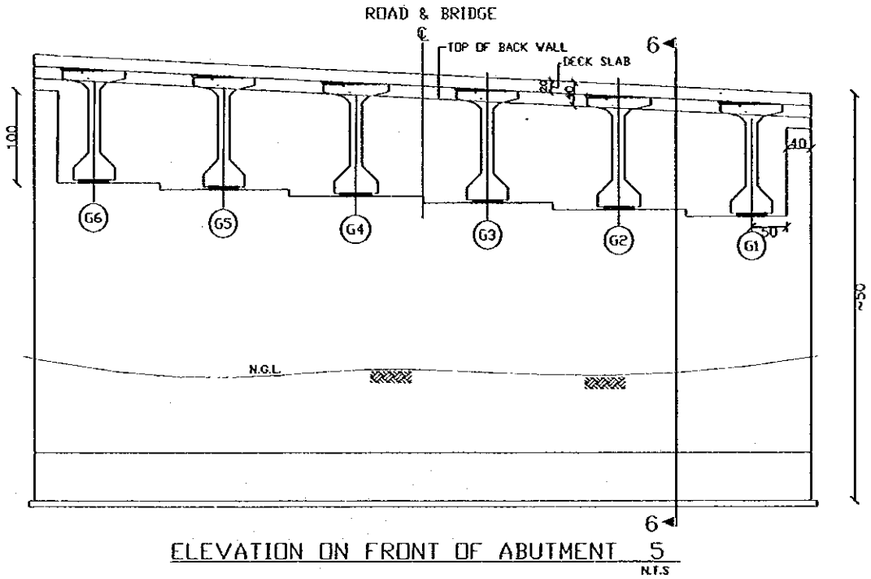
SECTION (6-6)

N.T.S



ELEVATION ON FRONT OF ABUTMENT 1

N.T.S

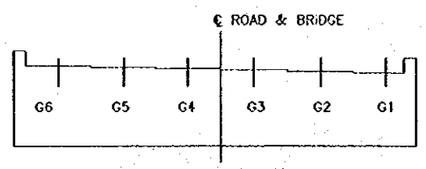


ELEVATION ON FRONT OF ABUTMENT 5

N.T.S

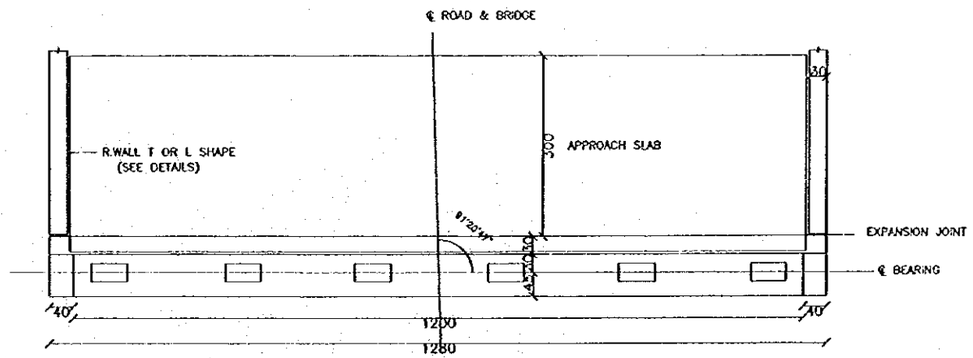
ABUTMENT SEATS ELEVATIONS

ABUT. NO & STATION	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	FOOTING LEVELS
1 7+229.00	135.67	135.72	135.72	135.78	135.83	135.89	
5 7+350.80	131.95	132.01	132.06	132.12	132.175	132.23	



ABUTMENT ELEVATION

SCALE 1:100



PLAN ON TOP ABUTMENT

SCALE 1:50

NOTES:-

1- ALL DIM. ARE IN (CM) EXCEPT BAR REINFORCEMENT DIAMETER WHICH ARE IN (MM)

2- ALLOWABLE BEARING CAPACITY IS 5 KG/CM²

3- EXPOSED SURFACES SHALL BE FAIR FACED, AND BURIED SURFACES SHALL BE COATED WITH BITUMINOUS DAMP PROOFING.

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
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The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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Designed by:
Japan International Cooperation Agency (JICA)

JICA Study Team:
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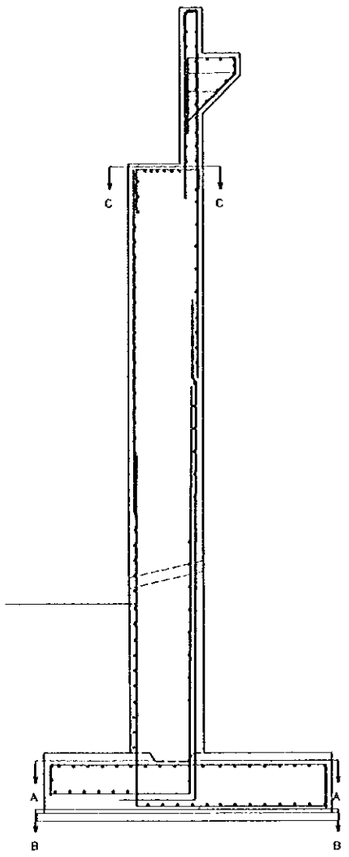
Pacific Consultants International and Yamashita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

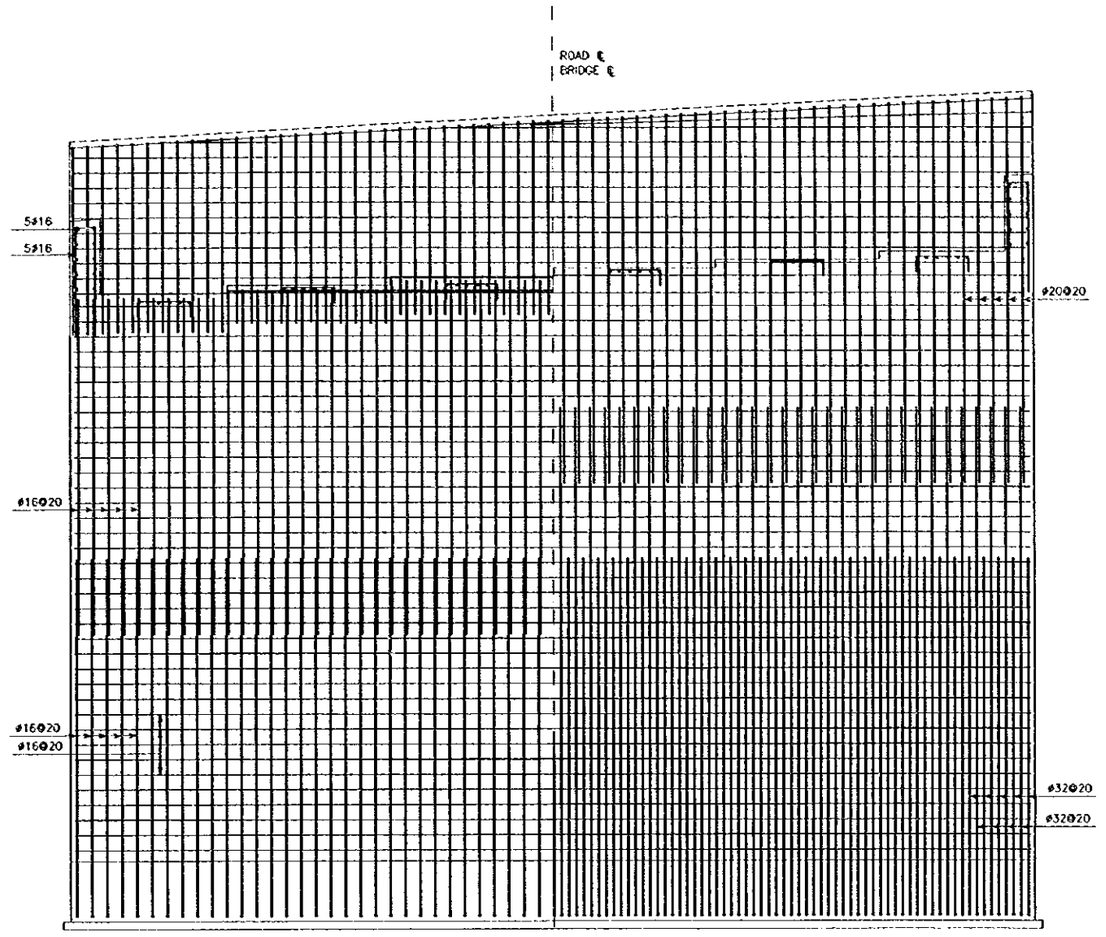
Drawing Title:
WADI HIMARA BRIDGE
ABUTMENTS DETAILS

Scale: AS SHOWN

Drawing No.: DSPW-82



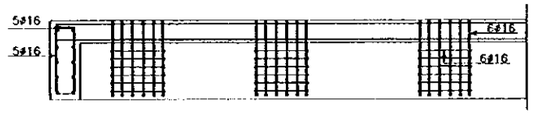
SECTION (6-6)
SCALE 1:40



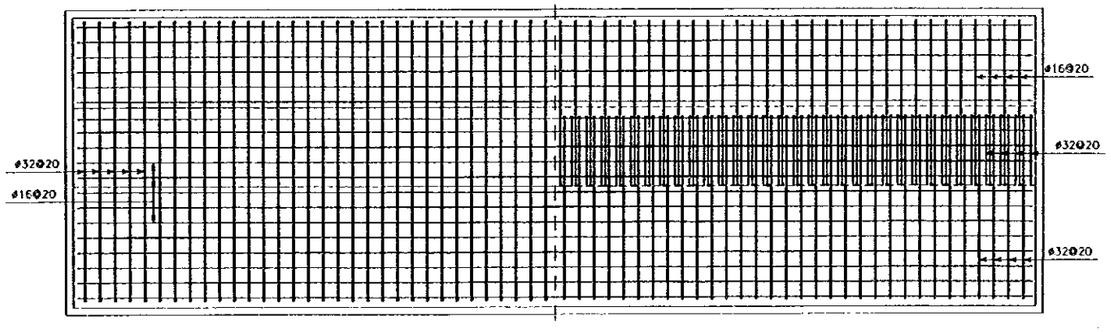
FRONT FACE

ELEVATION
SCALE 1:40

REAR FACE



SECTION C-C
SCALE 1:40



SECTION A-A
SCALE 1:40

SECTION B-B
SCALE 1:40

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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JICA Study Team:
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Pacific Consultants International and
Yamashita Sekkei Inc.

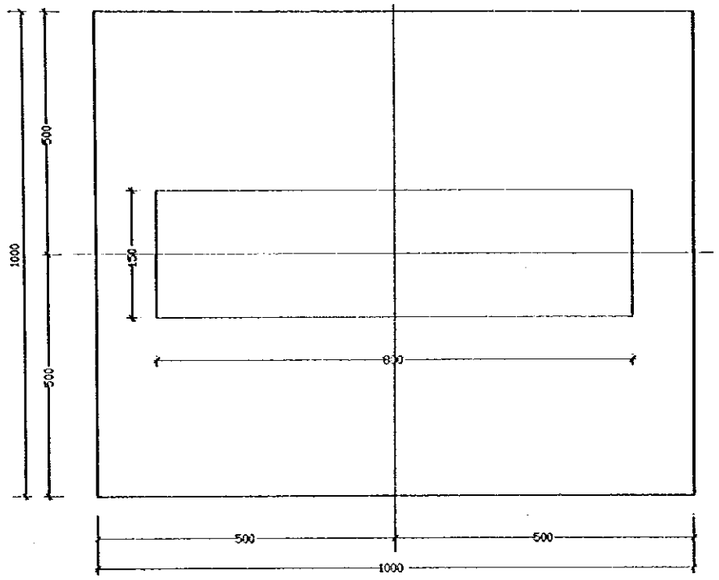
Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 5512377 – Fax: 4613380 – AMMAN – JORDAN

Drawing Title:
WADI HIMARA BRIDGE
ABUTMENT REINFORCEMENT
DETAILS

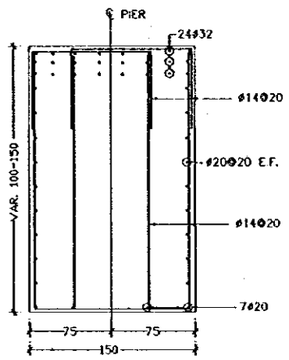
Scale: AS SHOWN

Drawing No.: DSPW-82

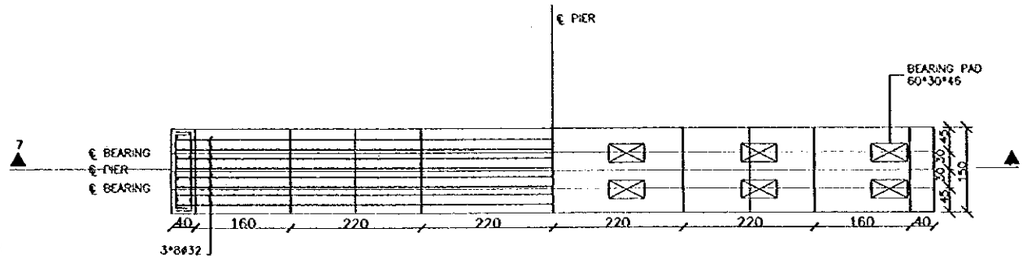
C1



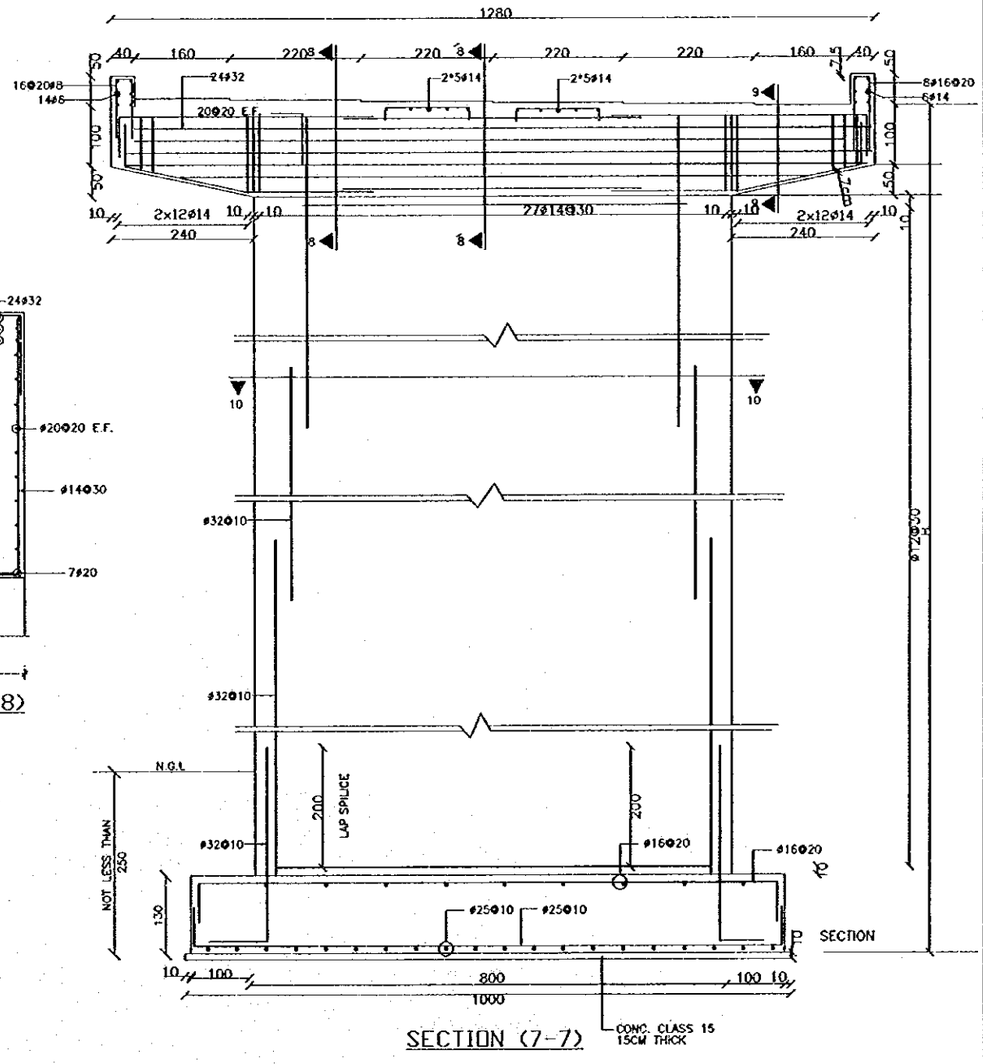
PLAN OF FOOTING
SCALE 1:50



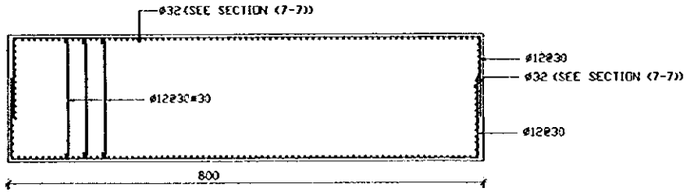
SECTION (9-9)
SCALE 1:25



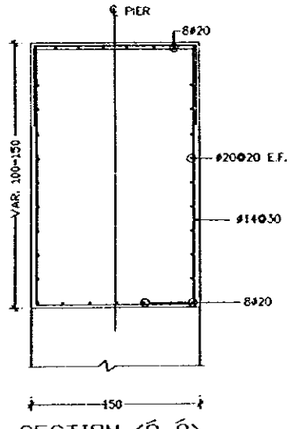
PIER PLAN
SCALE 1:50



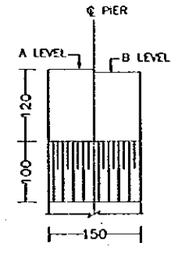
SECTION (7-7)



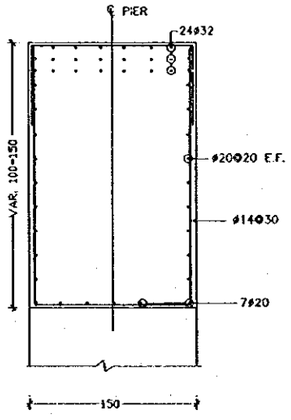
SECTION (10-10)
SCALE 1:50



SECTION (8-8)
SCALE 1:25



PIER SIDE VIEW
SCALE 1:50



SECTION (8-8)
SCALE 1:25

PIER SEATS & FOOTING ELEVATIONS

PIER NO.	HEIGHT H (M)
2	30.5
3	31.85
4	21.75

PIER NO & STATION	GIRDER 1		GIRDER 2		GIRDER 3		GIRDER 4		GIRDER 5		GIRDER 6		FOOTING LEVELS
	A	B	A	B	A	B	A	B	A	B	A	B	
2 7+259.3	134.00	134.03	134.05	134.08	134.11	134.14	134.16	134.19	134.22	134.25	134.27	134.30	
3 7+289.9	132.86	132.84	132.92	132.90	132.98	132.96	133.03	133.01	133.08	133.06	133.14	133.12	
4 7+320.5	132.18	132.17	132.23	132.22	132.28	132.27	132.34	132.33	132.40	132.39	132.45	132.44	

NOTE:-
1- ALL DIM. ARE (CM) EXCEPT BAR REINF. DIAMETER ARE IN (MM)
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Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordon

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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The copyright of this drawing rests with JICA.

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JICA Study Team:
Joint Venture of
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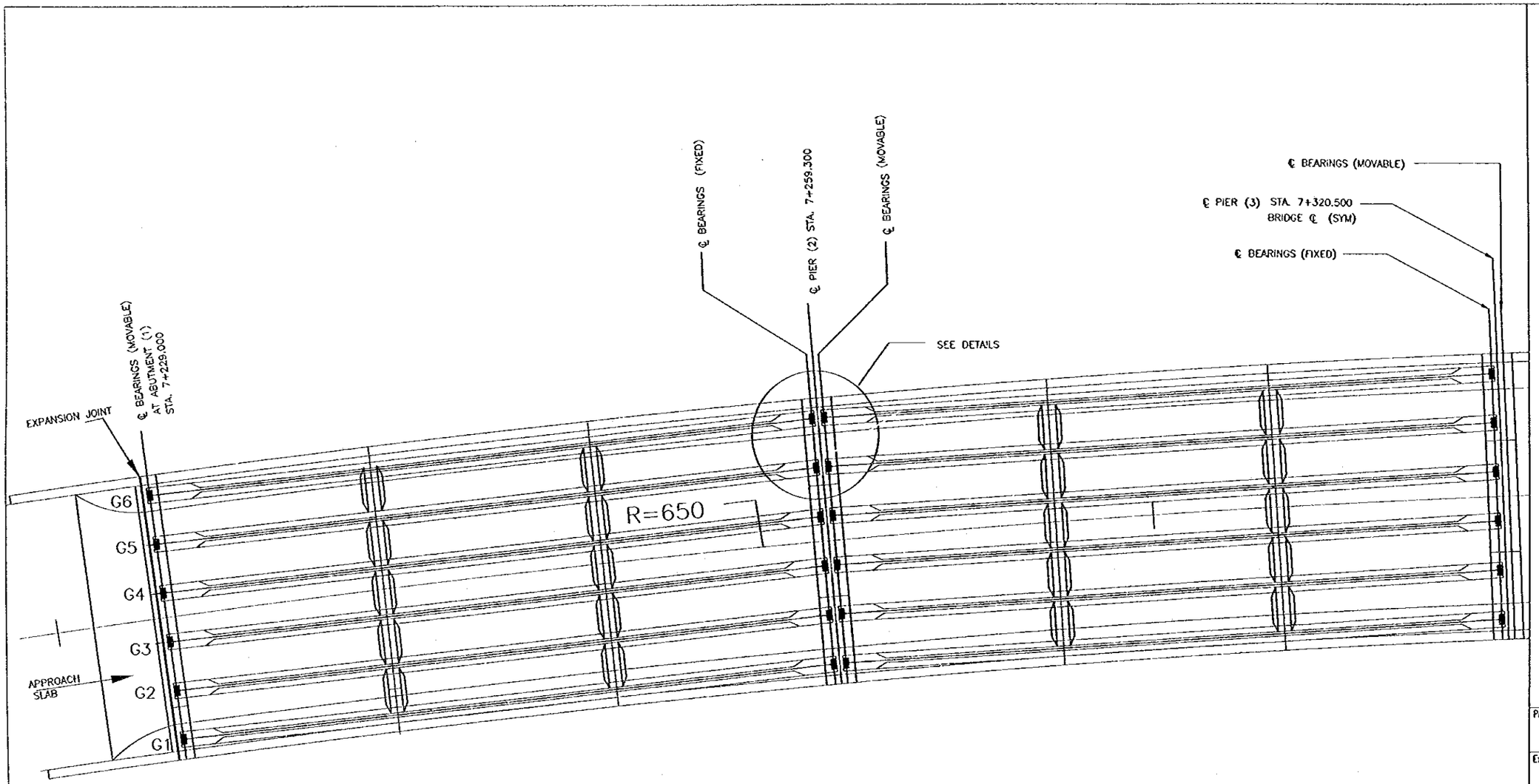
Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel. 6013377 – Fax. 6012380 – Amman – Jordan

Drawing Title:
WADI HIMARA BRIDGE
PIERS DETAILS

Scale: AS SHOWN
Drawing No.: DSPW-B3

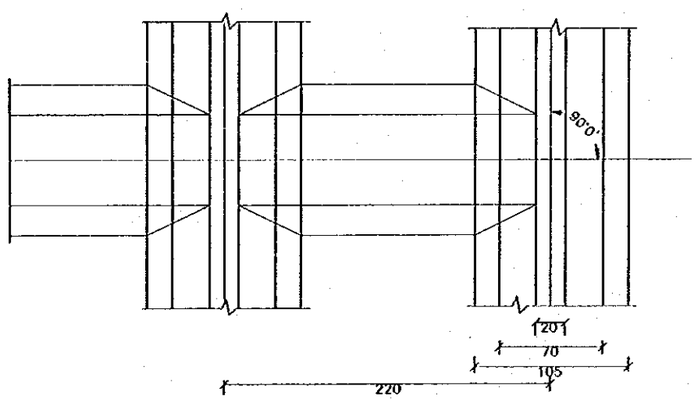


GIRDERS PLAN

SCALE 1:100

GIRDER NO	LENGTH M
G1	29.75
G2	29.85
G3	29.95
G4	30.05
G5	30.15
G6	30.25

APPROX. GIRDERS LENGTHS
(FIRST SPAN)



SECTION ON PLAN (INTERMEDIATE DIAPHRAGM)

SCALE 1:20

NOTES:-
1-ALL DIM. ARE IN (CM)
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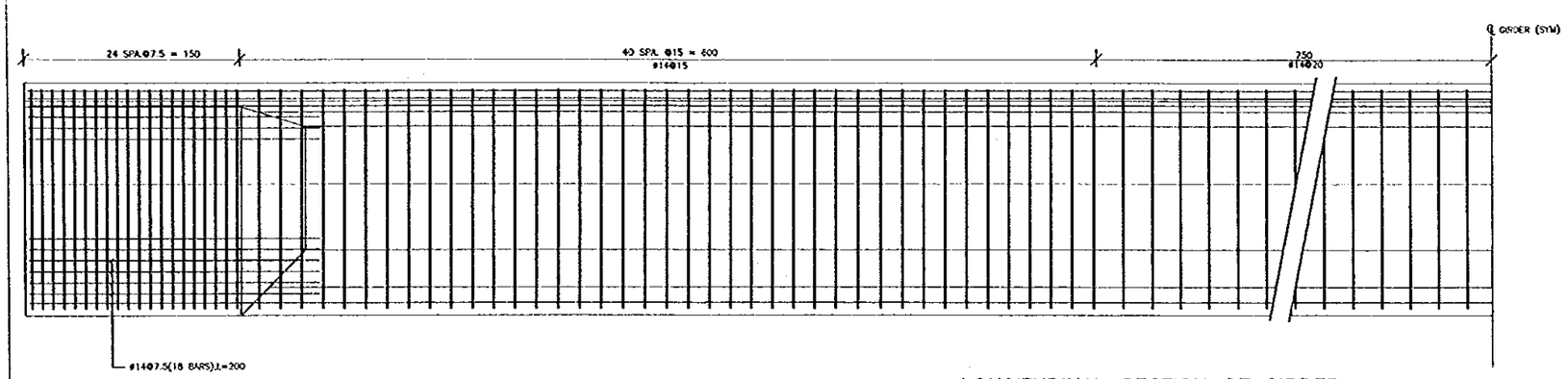
Subcontracted Local Consultant:
consolidated consultants
engineering & environment

Drawing Title:
WADI HIMARA BRIDGE
PRESTRESSED GIRDERS PLAN

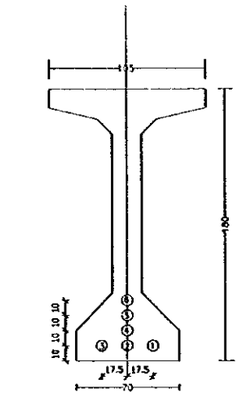
Scale: AS SHOWN

Drawing No.: DSPW-84



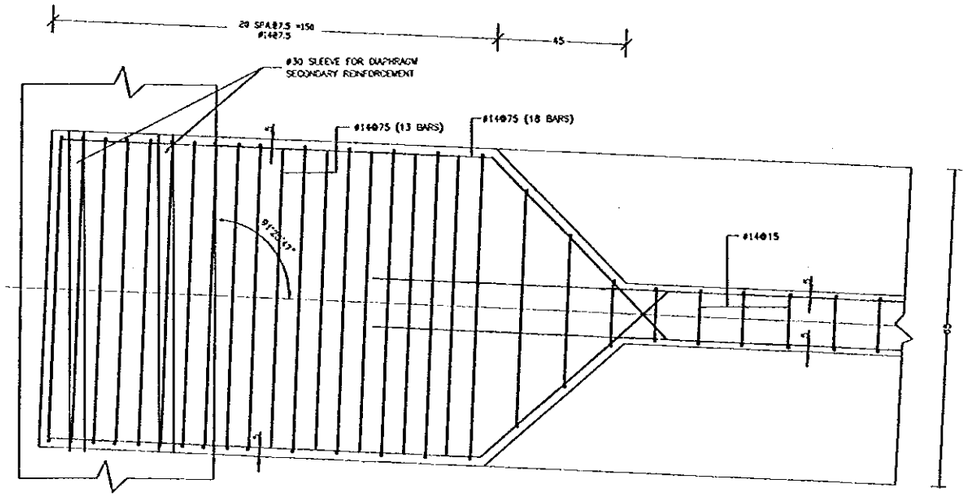
LONGITUDINAL SECTION OF GIRDER

SCALE 1:20



SECTION IN (5-5)

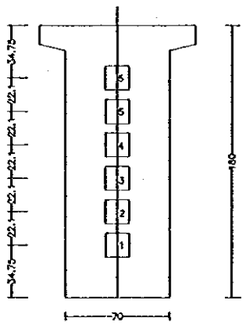
SCALE 1:20



HALF SECTION PLAN

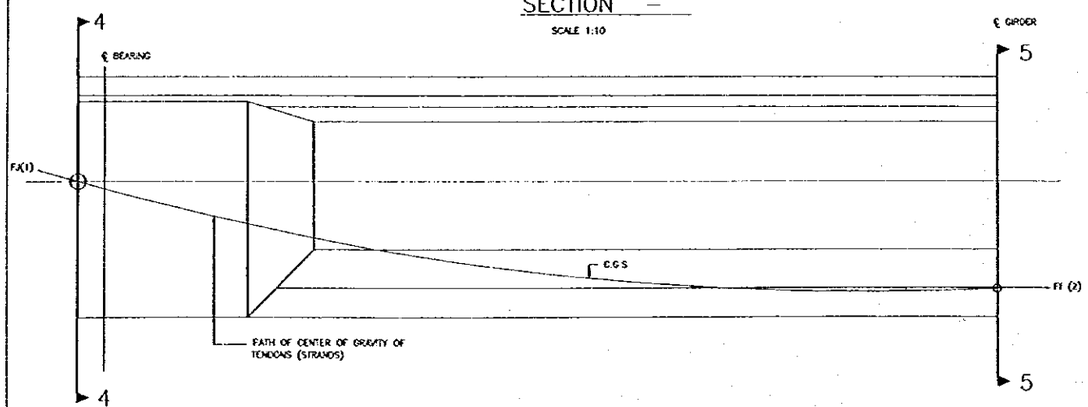
SECTION –

SCALE 1:10



SECTION IN (4-4)

SCALE 1:20



NO. OF STRANDS / TENDONS

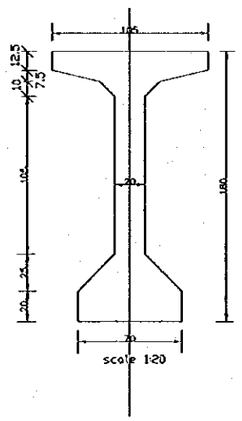
CABLE NO.	
1-	9 STRANDS Ø.5
2-	9 STRANDS Ø.5
3-	9 STRANDS Ø.5
4-	9 STRANDS Ø.5
5-	9 STRANDS Ø.5
6-	9 STRANDS Ø.5

(1)- Fj THE FORCE REQUIRED AT THE JACKING END OF THE GIRDER AFTER ANCHORAGE SLIP , IF ANY , Fj ≤ 677 TON. IT SHOULD BE ADJUSTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION FOR ANCHORAGE SLIP.

(2)- Fi IS THE FINAL NET PRESTRESSING FORCE AT MIDSPAN AFTER ALL LOSSES ≥ 547 TON.

GIRDER HALF ELEVATION FOR PRESTRESSING ARRANGEMENT

1:50



NOTES:

1- READ THIS DRAWING WITH DRAWING No.

2- ALL DIMENSIONS ARE IN cm. EXCEPT REINFORCEMENT BAR DIAMETER WHICH ARE IN mm.

3- MATERIAL SPECIFICATIONS:-

CONCRETE:

a) FOR PRECAST GIRDERS -CONCRETE CLASS C40-CHARACTERISTIC COMPRESSIVE CYLINDER STRENGTH OF 34.8 MPa AT 28 DAYS.
b) FOR PRECAST GIRDER-AT TIME OF PRESTRESSING-F'ci=32 MPa.(CYLINDER).
c) FOR CAST-IN SITU CONCRETE CLASS C30 (DECK SLAB & DIAPHRAGMS)-CHARACTERISTIC COMPRESSIVE CYLINDER STRENGTH OF 26.1 MPa AT 28 DAYS.

STEEL:

a) PRESTRESSING STEEL SHALL BE COLD DRAWN , LOW RELAXATION SEVEN-WIRE STRESS-RELIEVED STRANDS , DIAMETER 1/2 INCH.(MIN AREA=0.9871 cm^2) ,CONFORMING TO AASHTO M203 (A416) BARS OF HIGH TENSILE STRENGTH GRADE 270 K, OR EQUIVALENT , AND SHALL HAVE A MINIMUM BREAKING STRESS OF 1861 MPa.
b) REINFORCEMENT STEEL BARS SHALL BE DEFORMED BARS OF HIGH TENSILE STRENGTH, GRADE 60, CONFORMING TO JSS/441/1986 OR AASHTO M31M(ASTM A615M).

4- THE TENSIONING JACKS SHALL BE AS RECOMMENDED BY THE CABLE MANUFACTURER, SUBJECTED TO THE ENGINEERS APPROVAL , AND THE GIRDER ENDS SHALL BE ADDITIONALLY REINFORCED , AS REQUIRED,TO FIT MANUFACTURER'S ANCHORAGE SYSTEM.

5- THE CONTRACTOR SHOULD SUBMIT TO THE ENGINEER FOR APPROVAL , PRIOR TO THE COMMENCEMENT OF WORK , THE POST TENSIONING SYSTEM TO BE USED TOGETHER WITH DETAILED CALCULATION AND SHOP WORKING DRAWINGS FOR ALL NECESSARY DETAILS, INCLUDING THOSE FOR END ANCHORAGES , ELONGATIONS , JACKING , TENDON ARRANGEMENT AND PRESTRESSING SEQUENCE & PROCEDURE.

6- NEW ARRANGEMENT OF TENDONS CAN BE USED IF APPROVED BY THE ENGINEER , PROVIDED THAT THE FORCE AT MID SPAN AND TENDONS CENTER OF GRAVITY ARE EQUIVALENT TO THE PROPOSED ARRANGEMENT. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY CALCULATIONS AND DETAILS REQUIRED FOR HIS NEW ARRANGEMENT.

7- PRESTRESS LOSSES , EXCLUDING FRICTION, ASSUMED IN THE DESIGN k/m =227.53 MPa. FRICTION LOSSES USED IN THE DESIGN WAS CALCULATED BASED ON K=0.0049 &Λ= 0.25. THE CONTRACTOR SHALL VERIFY ALL LOSSES INCLUDING FRICTION AND ANCHORAGE SLIP ASSUMED IN THE DESIGN , AND MODIFY IF NECESSARY THE ASSUMED LOSSES.

8- FOR LOCATION OF SLEEVES IN DIAPHRAGMS , SEE DIAPHRAGM DETAILS DRAWING . COST OF WHICH SHALL BE INCLUDED IN THE UNIT COST OF GIRDER.

9- REINFORCING BARS SHALL BE SPACED TO CLEAR PRESTRESSING ANCHORAGES.

10- GROUTING OF THE CABLES SHALL BE DONE AFTER THE CONCRETE COMPRESSIVE STRENGTH HAS REACHED 34.8 MPa. THE GROUTING PROCEDURE SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

11- GIRDERS SHALL BE HELD RIGIDLY IN PLACE WHEN DIAPHRAGMS ARE PLACED.

12- THE FINISHED PRESTRESSED GIRDERS SHALL BE TRANSPORTED , STORED AND HANDLED IN SUCH A WAY THAT EXCESSIVE STRESSES WILL NOT BE DEVELOPED IN THE GIRDERS , GIRDERS MUST BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES & MUST BE PICKED UP ONLY BY MEANS OF APPROVED DEVICES ANCHORED WITHIN THE END ZONES.

13- THE UPPER FACE OF THE PRECAST GRIDER SHALL BE INTENTIONALLY ROUGHENED BY MEANS SUBJECT TO THE ENGINEERS APPROVAL.

14- APPROVED DETAILS OF RECESS BOX & ANCHORAGE ADITIONAL REINFORCEMENT SHALL BE PROVIDED BY THE CONTRACTOR.

15- PRECAST CONCRETE TILES CAN BE USED BY THE CONTRACTOR , IF HE WISHES , BETWEEN GIRDERS TO CAST TOP SLAB CONCRETE THE CONTRACTOR SHOULD INSURE THE SAFTY OF THE STRUCTURE DUE TO THE EXTRA LOAD OF TILES NO ADDITIONAL PAYMENT IS GIVEN FOR THIS ITEM.

16- THE PRESTRESSING WIRES SHALL BE ENCLOSED IN MORTAR-TIGHT FLEXIBLE GALVANIZED METAL CONDUITS ,OF APPROVED SIZE & RIGIDITY , THE ANCHORS SHALL PROVIDE FOR GROUT PASSAGE THOUGH THE CONDUIT . ALL TENDONS SHALL BE FURNISHED IN CONTINUOUS LENGTH WITHOUT SPLICES OR COUPLINGS.

17- THE USE OF STEEL FORMS ON CONCRETE CASTING LEVEL BEDS IS RECOMMENDED.

18- THE RECESSES FOR THE ANCHORS SHALL BE FILLED WITH PORTLAND CEMENT CONCRETE.

19- THE FORMWORK OF THE PRECAST GIRDERS SHOULD ALLOW FREE MOVEMENT OF THESE GIRDERS AWAY FROM THE END AT WHICH THE PRESTRESS FORCE IS RELEAZED AT TRANSFER.

20- MIN . LAP LENGTH OF 60cm SHALL BE USED FOR THE SEGMENTS OF LONG PASSIVE REINFORCEMENT IN THE GIRDERS.

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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Designed by:
Japan International Cooperation Agency (JICA)

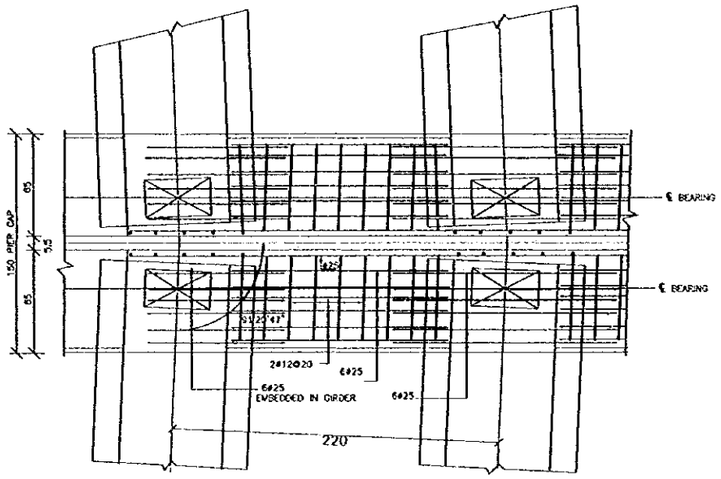
JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 811377 – Fax: 811388 – AMMAN – JORDAN

Drawing Title:
WADI HIMARA BRIDGE
PRESTRESSED GIRDERS DETAILS

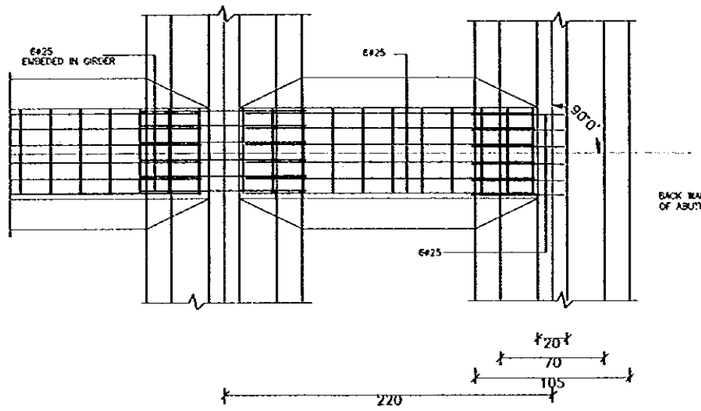
Scale: AS SHOWN

Drawing No.: DSPW-85



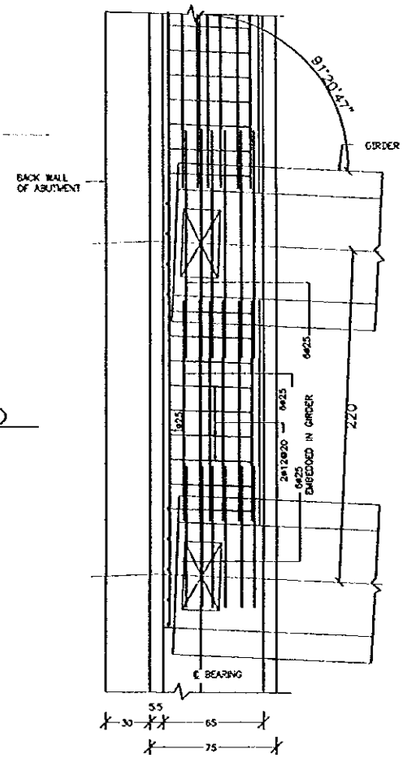
SECTION PLAN (END DIAPHRAGM AT PIER)
(BOTTOM REINF.) SHOWN ONLY

SCALE 1:20



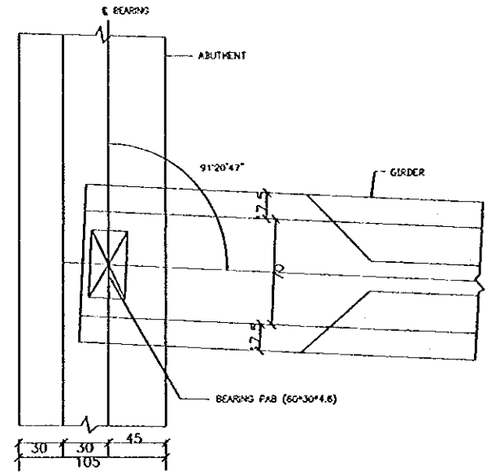
SECTION ON PLAN (INTERMEDIATE DIAPHRAGM)

SCALE 1:20



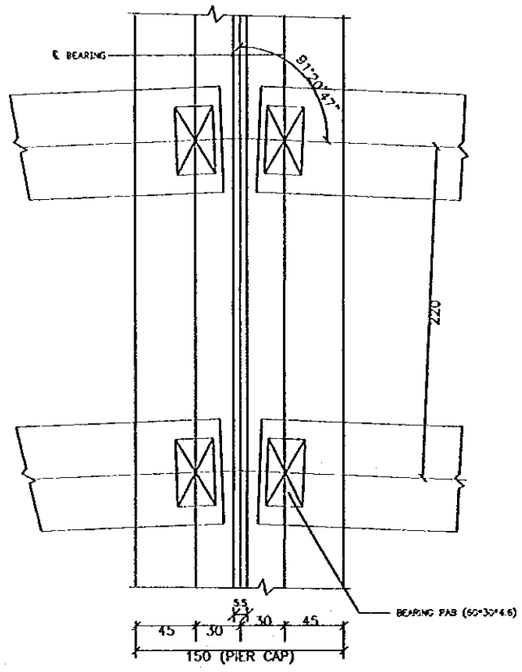
SECTION PLAN (END DIAPHRAGM AT ABUTMENT)
(BOTTOM REINF.) SHOWN ONLY

SCALE 1:20



BEARING PAD PLAN AT ABUTMENT

SCALE 1:20



BEARING PAD PLAN AT PIER CAP

SCALE 1:20

NOTES:-
1-ALL DIM. ARE IN (CM)
EXCEPT BAR REINFORCEMENT
DIAMETER WHICH ARE IN (MM)

Project:
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Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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JICA Study Team:
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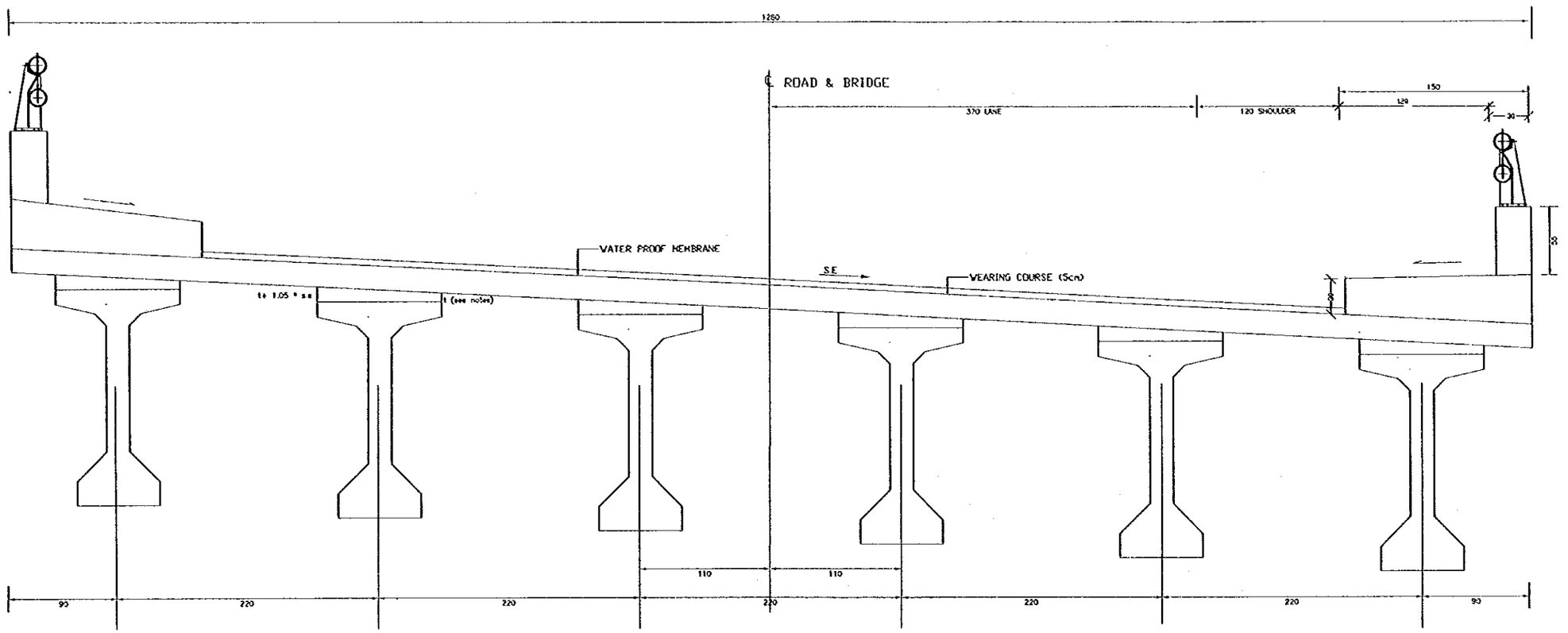
Pacific Consultants International and Yamashita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

Drawing Title:
WADI HIMARA BRIDGE
DIAPHRAGM SECTIONAL PLAN DETAILS

Scale: 1:20

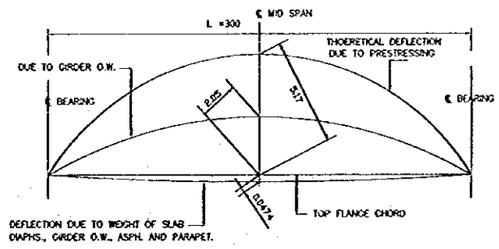
Drawing No.: DSPW-86



TYPICAL BRIDGE SECTION

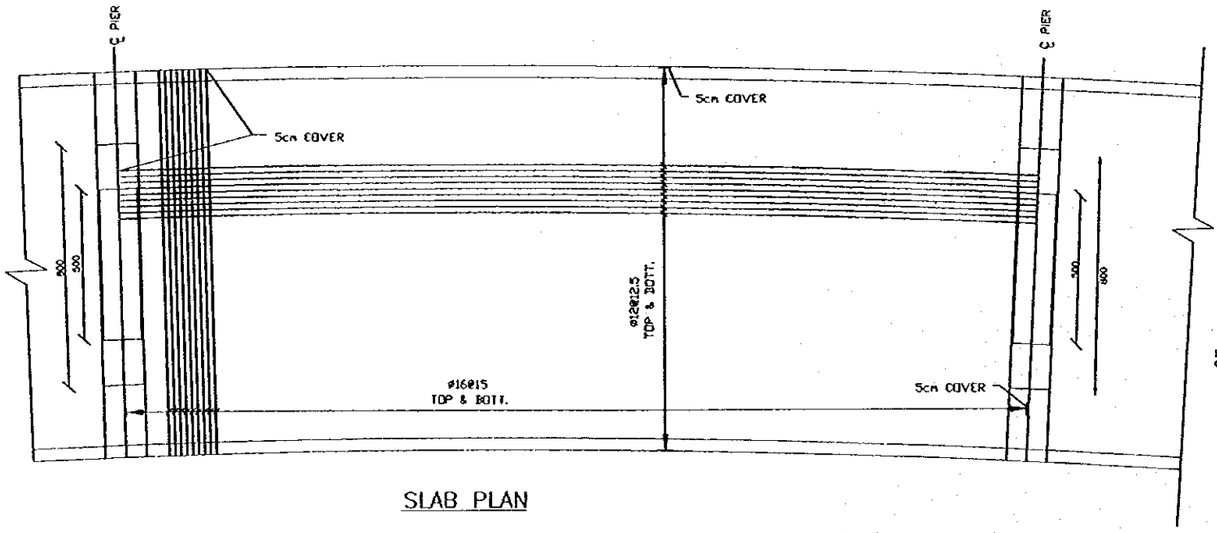
SCALE 1:20

NOTE : THE ESTIMATED DEFLECTION DUE TOPRESTRESSING AND GIRDER O.W. SHALL BE VERIFIED BY THE CONTRACTOR AT THE TIME GIRDER ARE ERECTED.

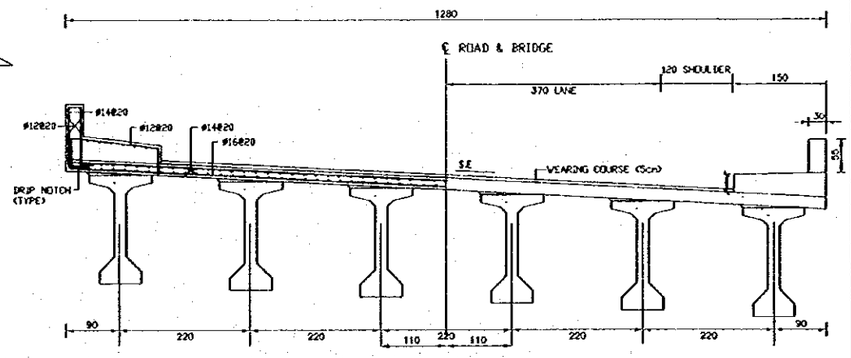


GIRDER DEFLECTION DIAGRAM

N.T.S



SLAB PLAN



SECTION IN INTERMEDIATE DIAPHRAGM

SCALE 1:50

NOTE:-

1-ALL DIM. ARE IN (CM) EXCEPT BAR REINFORCEMENT DIAMETER WHICH ARE IN (MM)

2-THE CONCRETE HUNCH THICKNESS (t) OVER THE GIRDERS VARIES ACCORDING TO THE DEFLECTION OF GIRDER AND ROAD PROFILE. THE HUNCH THICKNESS (t) WILL BE THE DIFFERENCE BETWEEN THE GRADE AND ELEVATIONS TAKEN AT TOP FLANGES & SLAB THICKNESS

3-WATER PROOF MEMBRANE SHALL NOT BE PAID FOR SEPARATELY. THE COAST SHALL BE DEEMED BY OTHER PAY ITEMS IN THE BILLS OF QUANTITIES.

Project:
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The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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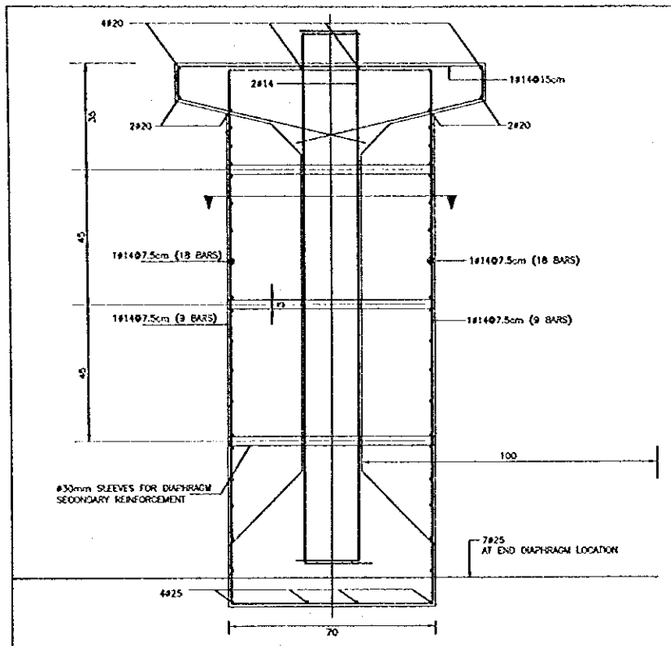
JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 6013377 - Fax: 6013380 - Amman - Jordan

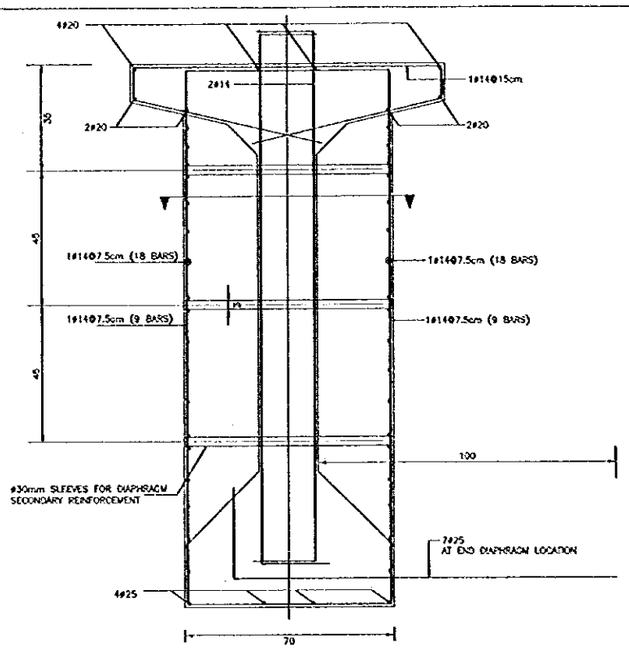
Drawing Title:
BRIDGES GENERAL DETAILS
DECK SLAB DETAILS

Scale: AS SHOWN

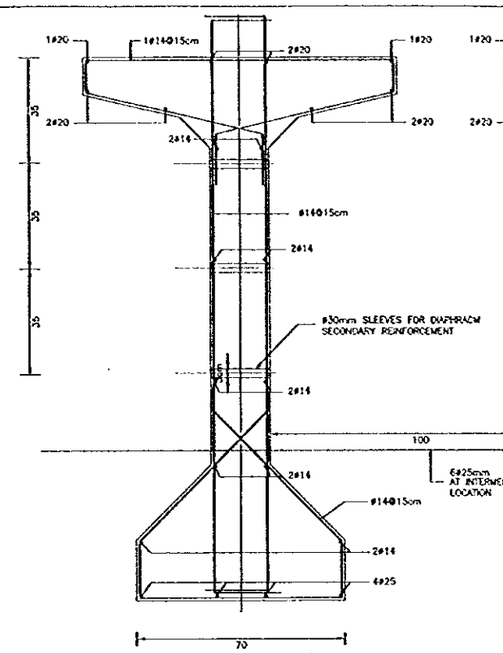
Drawing No.: DSPW-90



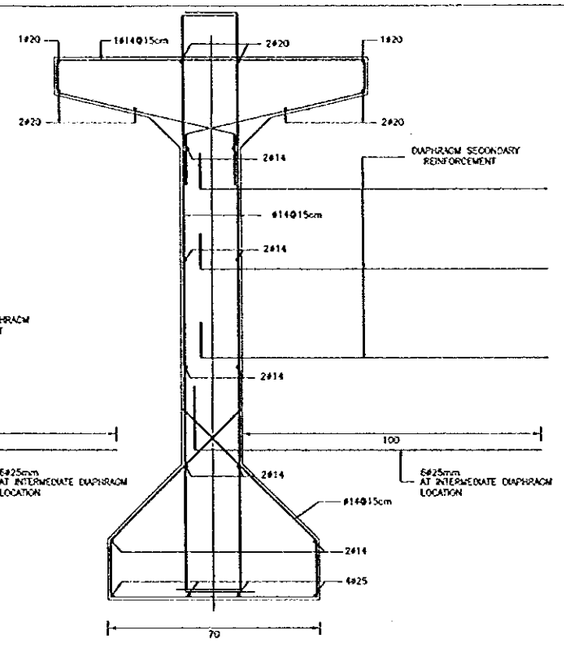
SECTION IN INTERMEDIATE GIRDER
END BLOCK REINFORCEMENT
SCALE 1:10



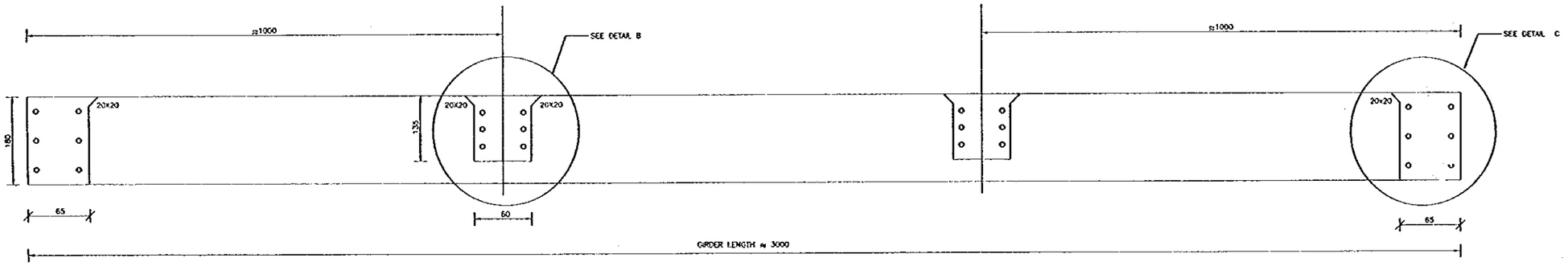
SECTION IN END GIRDER
END BLOCK REINFORCEMENT
SCALE 1:10



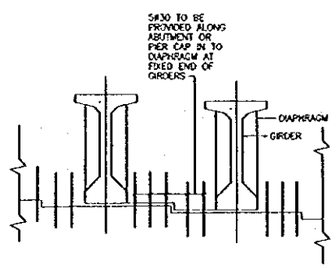
SECTION IN INTERMEDIATE GIRDER
SHEAR & NON PRESTRESSED
REINFORCEMENT
SCALE 1:10



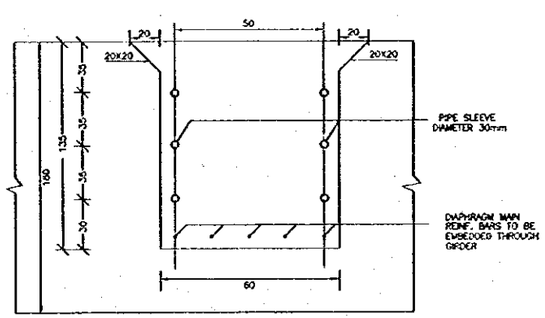
SECTION IN END GIRDER
SHEAR & NON PRESTRESSED
REINFORCEMENT
SCALE 1:10



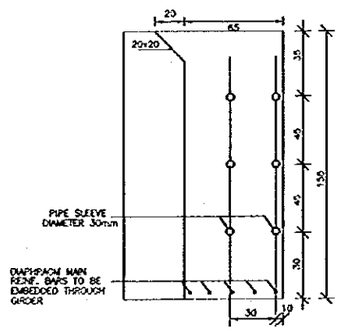
GIRDER - DIAPHRAGM OPENINGS
SCALE 1:50



TYPICAL FIXATION DETAIL FOR END
DIAPHRAGM AT FIXED GIRDER END
SCALE 1:50



DETAIL "B"
SCALE 1:20



DETAIL "C"
SCALE 1:20

NOTE:-
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The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

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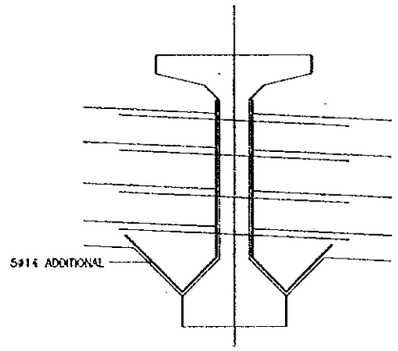
Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 4613377 - Fax: 4612380 - AMMAN - JORDAN

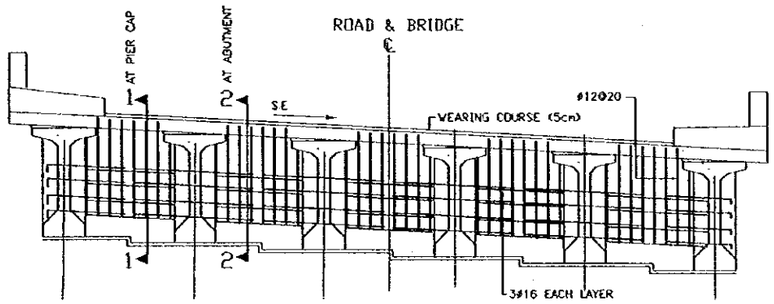
Drawing Title:
BRIDGES GENERAL DETAILS
PRESTRESSED GIRDERS DETAILS
&
GIRDER- DIAPHRAGM OPENINGS

Scale: AS SHOWN

Drawing No.: DSPW-91

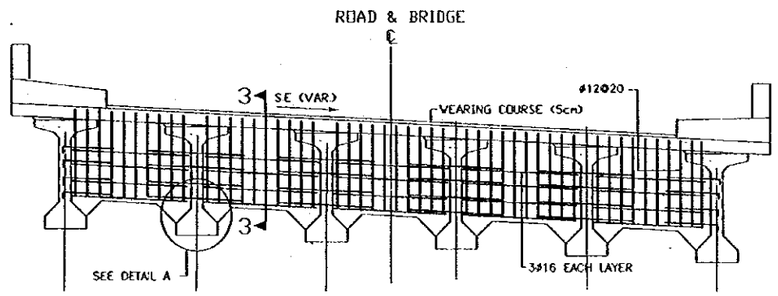


DETAIL (A)



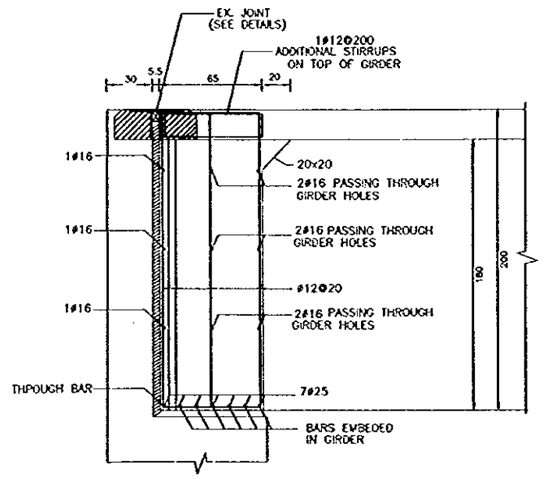
SECTION IN END DIAPHRAGM

SCALE 1:50



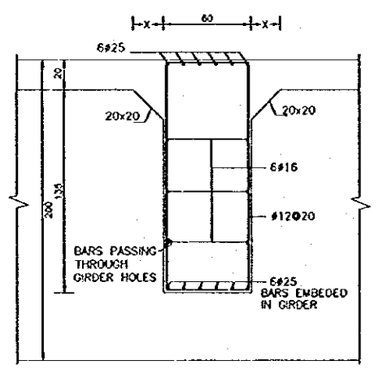
SECTION IN INTERMEDIATE DIAPHRAGM

SCALE 1:50



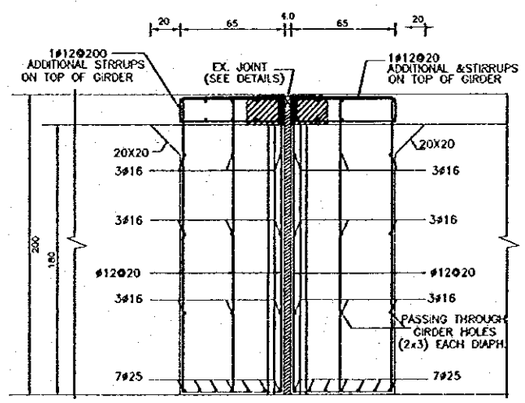
SECTION (2 – 2) :END DIAPHRAGM AT ABUTMENT

SCALE 1:20



SECTION (3 – 3) : INTERMEDIATE DIAPHRAGM

SCALE 1:20



SECTION (1 – 1) :END DIAPHRAGM AT PIER CAP

SCALE 1:20

NOTE:-

1- ALL DIM. ARE IN (CM) EXCEPT BAR REINFORCEMENT DIAMETER WHICH ARE IN (MM)

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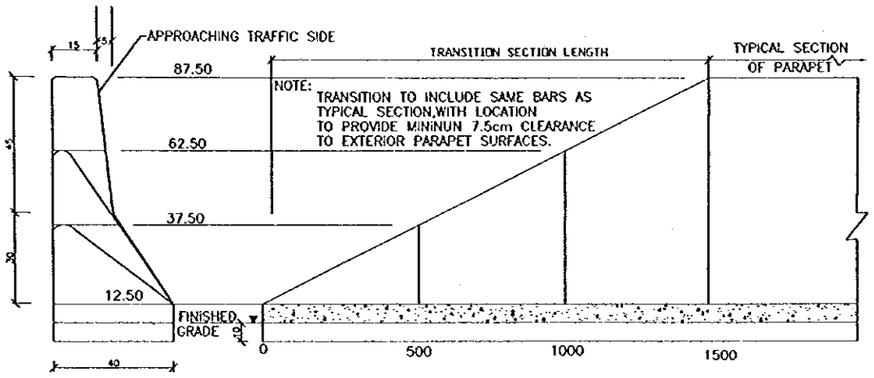
Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 4913377 – Fax: 4913388 – AMMAN – JORDAN

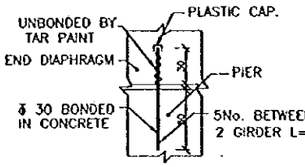
Drawing Title:
BRIDGES GENERAL DETAILS
DIAPHRAMS DETAILS

Scale: AS SHOWN

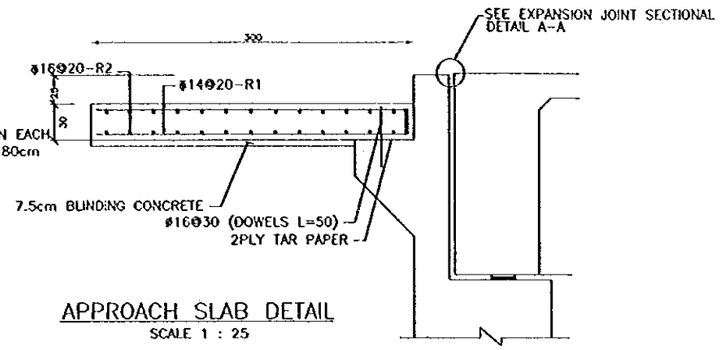
Drawing No.: DSPW-92



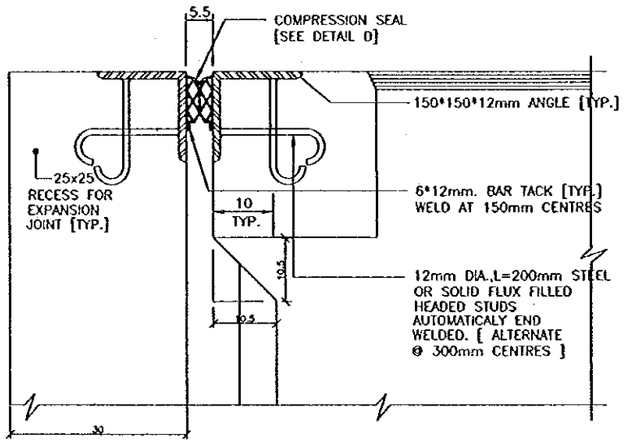
CONCRETE PARAPET TRANSITION SECTION
SCALE 1:10



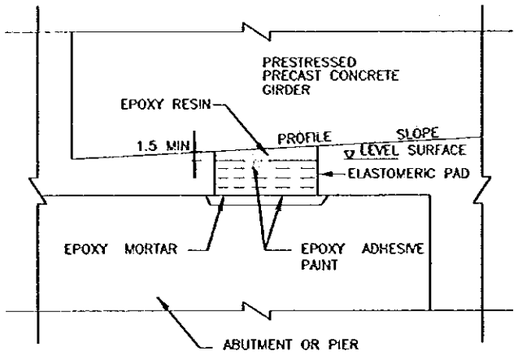
DETAIL OF SHEAR BAR
SCALE 1 : 25



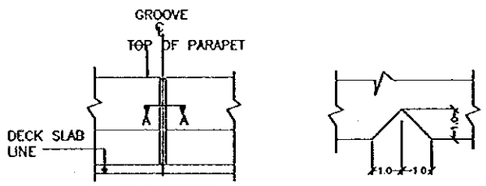
APPROACH SLAB DETAIL
SCALE 1 : 25



EXPANSION JOINT SECTIONAL DETAIL A-A
N.T.S



BEARING PAD FIXING DETAIL
N.T.S



CONTRACTION JOINT DETAILS
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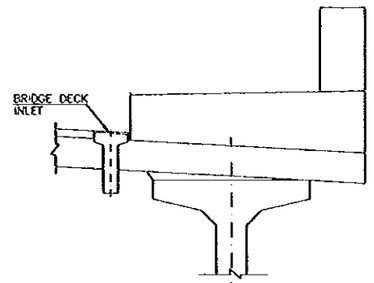
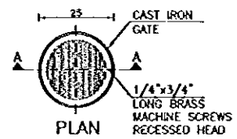
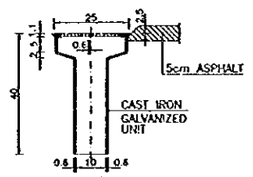


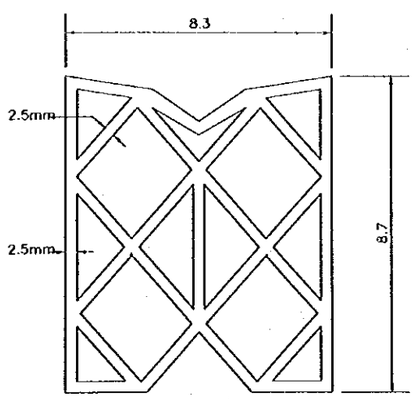
INLET LOCATION
N.T.S



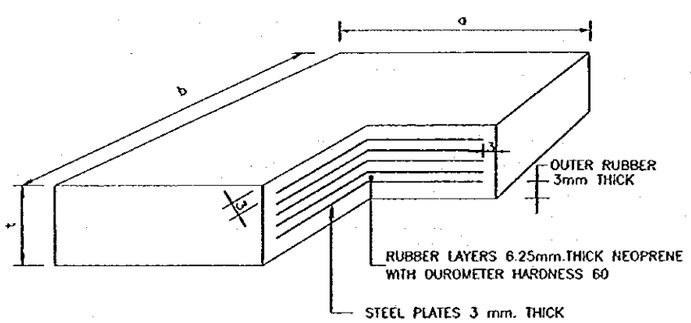
PLAN



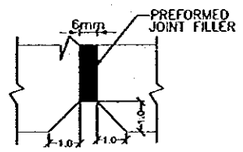
SECTION A-A
BRIDGE DECK DRAINAGE INLET DETAILS
SCALE 1:10



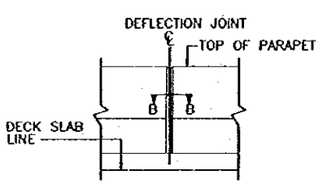
DETAIL D
COMPRESSION SEAL DETAIL
N.T.S



TYPICAL LAMINATED ELASTOMERIC BEARING PAD DETAILS
N.T.S



SECTION B-B
FOR BOTH SIDES OF PARAPET



ELEVATION
FOR SPACING SEE BRIDGE ELEVATION

DEFLECTION JOINT DETAILS
N.T.S

TYPE	DIMENSION cm.			No. OF S.PLATES IN LAMINATED PAD
	a	b	t	
T1	30	60	4.6	5

BEARING DESCRIPTION

NOTE:-
1) ALL DIMENSION ARE IN cms. EXCEPT WHERE OTHERWISE INDICATED AND REINFORCEMENT PAR DIAMETER WHICH ARE IN mm.

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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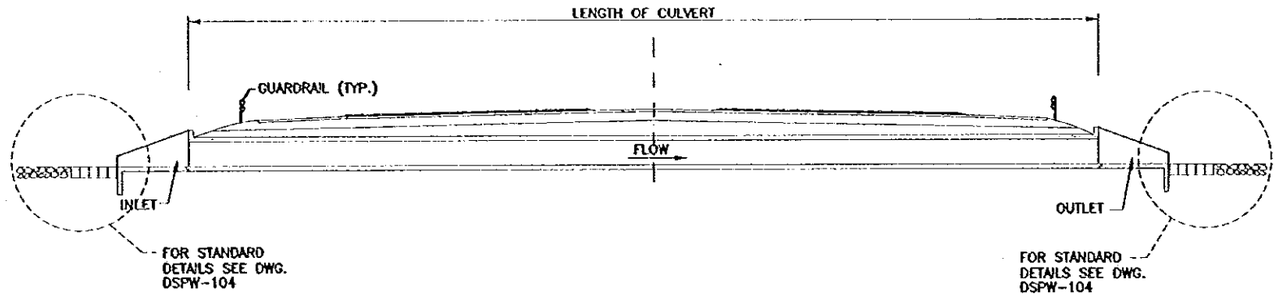
Designed by:
Japan International Cooperation Agency (JICA)

JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasita Sekkei Inc.

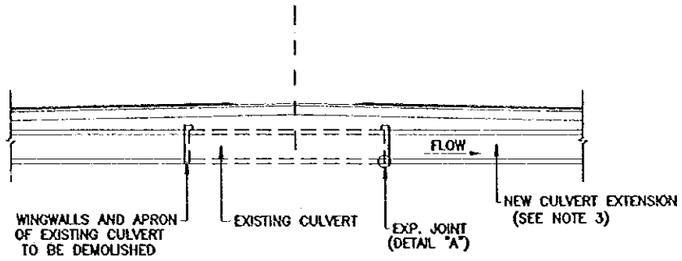
Subcontracted Local Consultant:
consolidated consultants
engineering & environment

Drawing Title:
BRIDGES GENERAL DETAILS
MISCELLANEOUS DETAILS

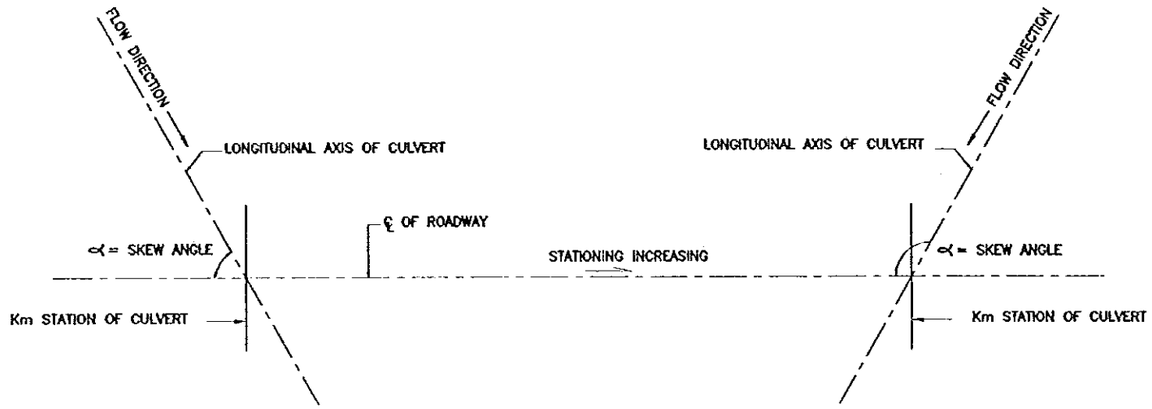
Scale: AS SHOWN
Drawing No.: DSPW-93



TYPICAL LONGITUDINAL SECTION OF CULVERT



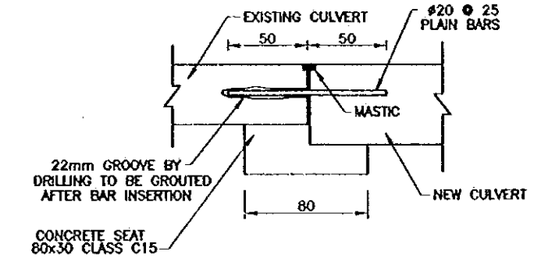
TYPICAL EXTENSION OF EXISTING CULVERT DETAIL



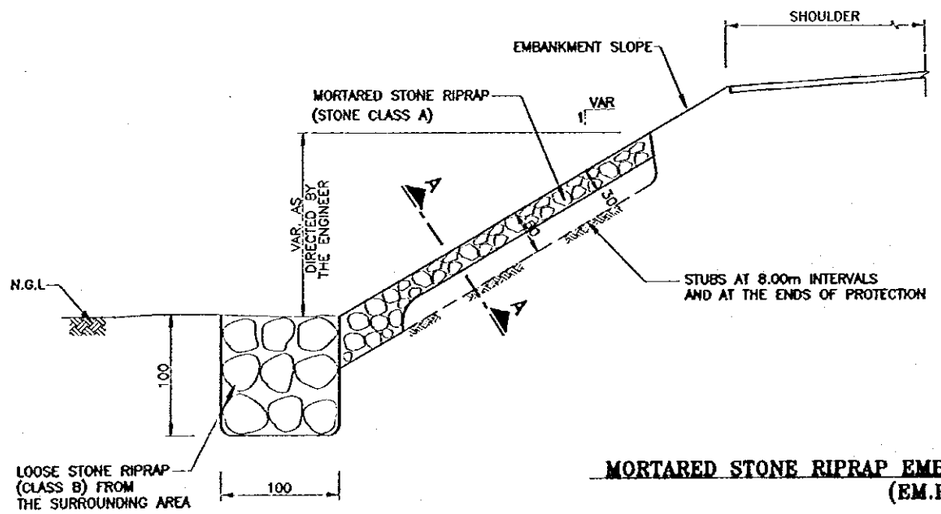
TYPICAL LEFT SKEW CULVERT (L)

TYPICAL RIGHT SKEW CULVERT (R)

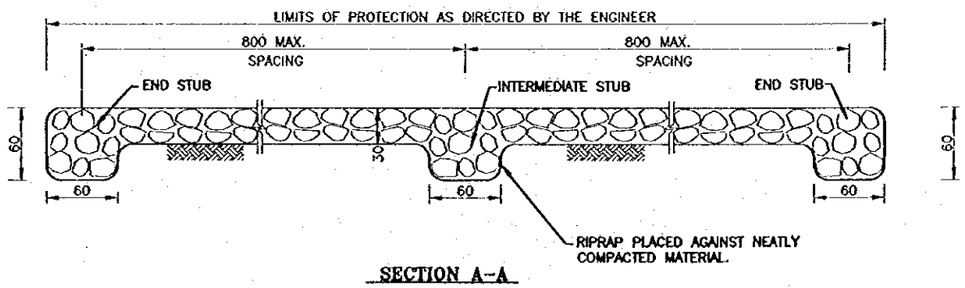
CULVERT SKEW ANGLE DEFINITION



EXPANSION JOINT (DETAIL "A")



MORTARED STONE RIPRAP EMBANKMENT PROTECTION DETAIL (EM.P.)



SECTION A-A

NOTES:-

1) ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED .

2) IF THE SOIL UNDER THE CULVERT OR APRON SLAB IS NOT SUITABLE, THE CONTRACTOR HAS TO REPLACE IT BY SELECTED COARSE MATERIAL AS APPROVED BY THE ENGINEER .

3) EXISTING CULVERTS CAN BE EXTENDED BOTH SIDES OR ONLY ONE SIDE. THE DETAILS SHOWN WILL APPLY TO EITHER CASE .

4) FOR CULVERT LOCATIONS, INVERT LEVELS AND LENGTHS SEE DRAINAGE SCHEDULE DRAWINGS. THESE ARE APPROXIMATE. THE CONTRACTOR SHOULD SUBMIT TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION DETAILED WORKING DRAWINGS FOR EVERY CULVERT SHOWING EXACT LOCATION, SKEW ANGLE, SLOPE, INVERT LEVEL, AND ALL OTHER NEEDED DETAILS .

5) FOR MORTARED RIPRAP SLOPE PROTECTION LOCATIONS AND LENGTHS SEE DRAINAGE SCHEDULE .EXACT LOCATIONS AND HEIGHTS SHALL BE DETERMINED ON SITE BY THE ENGINEER PRIOR TO CONSTRUCTION TO SUIT SITE CONDITIONS

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:
Japan International Cooperation Agency (JICA)

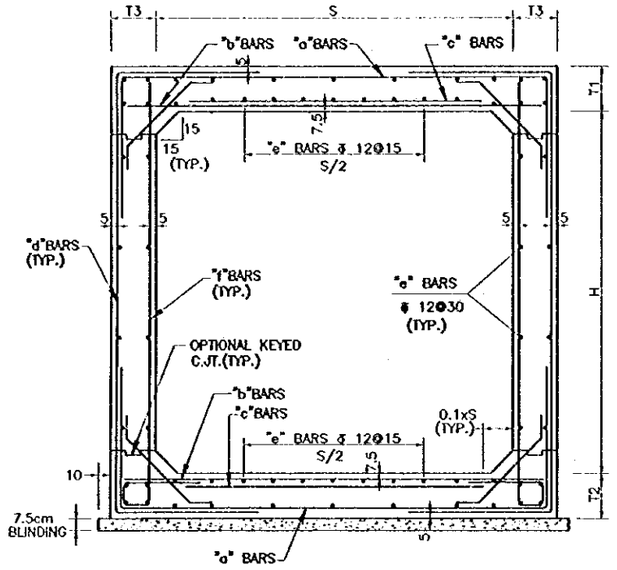
JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasito Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

Drawing Title:
GENERAL CULVERT AND EMBANKMENT PROTECTION DETAILS

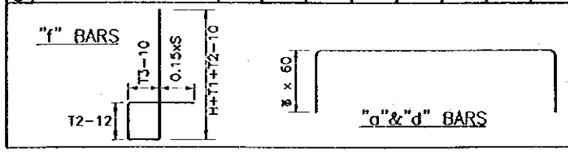
Scale: NOT TO SCALE

Drawing No.: DSPW-100

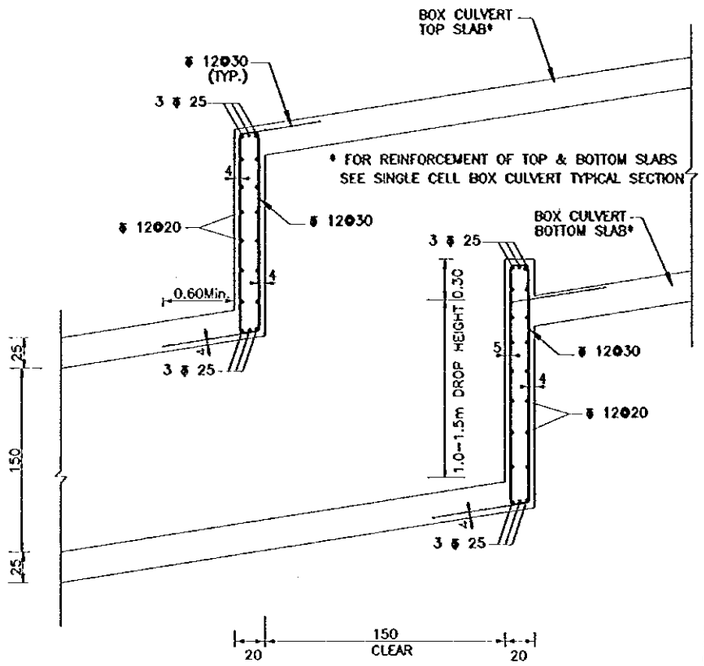


SINGLE CELL BOX CULVERT TYPICAL SECTION

SPAN S (m)			1.5				2.0				
HEIGHT H (m)			1.5				1.5				
MAX. FILL OVER TOP (m)			≤2.5	5.0	7.5	10	<20	≤2.5	5.0	7.5	<20
CONCRETE	TOP SLAB T1 (cm)		25	25	25	25	30	30	30	30	40
	BOTTOM SLAB T2 (cm)		30	30	30	30	30	30	30	35	40
	SIDE WALL T3 (cm)		25	25	30	30	30	25	25	30	35
REINFORCING STEEL	"a" BARS	SIZE ∅ (mm)	14	14	14	14	14	12	14	14	14
		LENGTH (m)	3.58	3.58	3.68	3.68	3.68	3.84	4.08	4.18	4.28
		SPACING (cm)	30	30	30	25	25	25	30	30	20
	"b" BARS STR.	SIZE ∅ (mm)	14	14	14	14	14	14	16	16	16
		LENGTH (m)	1.9	1.9	2.0	2.0	2.0	2.4	2.4	2.5	2.6
		SPACING (cm)	30	30	30	25	25	25	30	30	25
	"c" BARS STR.	SIZE ∅ (mm)	14	14	14	14	14	14	16	16	16
		LENGTH (m)	1.2	1.2	1.2	1.2	1.2	1.6	1.6	1.6	1.7
		SPACING (cm)	30	30	30	25	25	25	30	30	25
	"d" BARS	SIZE ∅ (mm)	12	14	14	14	14	12	14	14	14
		LENGTH (m)	3.39	3.63	3.63	3.63	3.68	3.44	3.68	3.73	3.93
		SPACING (cm)	30	30	30	25	25	25	30	30	20
	"e" BARS STR.	SIZE ∅ (mm)	12	12	12	12	12	12	12	12	12
		NUMBER	60	60	60	60	60	72	72	72	72
	"f" BARS	SIZE ∅ (mm)	14	14	14	12	14	12	14	14	14
		LENGTH (m)	2.66	2.66	2.76	2.76	2.76	2.78	2.78	2.98	3.23
		SPACING (cm)	30	30	30	25	25	25	30	30	25
QUANT.	CONCRETE (Cum/m.run)		1.9	1.9	2.1	2.1	2.1	2.33	2.33	2.64	3.33
	REINF. (Kg/m.run)		148.5	157.6	160.0	174.5	174.5	174.1	190.8	194.6	213.3

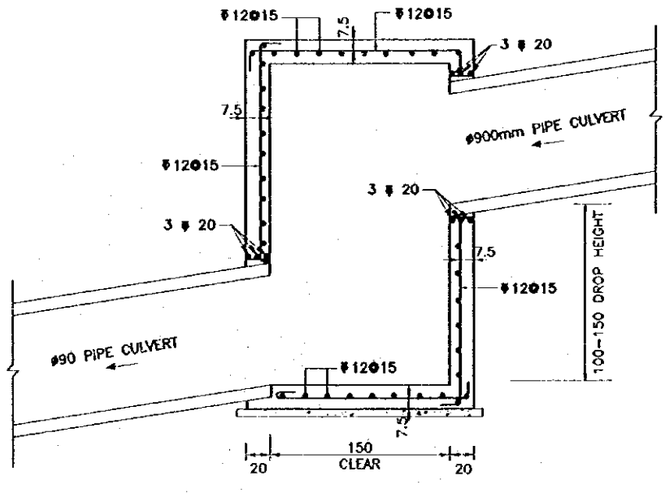


REINFORCEMENT DETAILS FOR SINGLE CELL BOX CULVERT



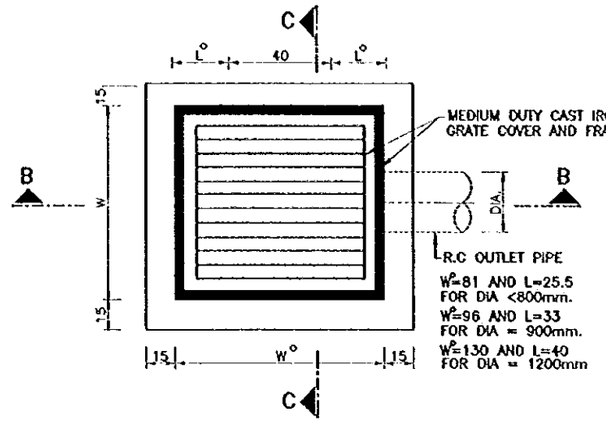
TYP. SECTION IN BOX CULVERT WITH DROPS

SCALE 1:25



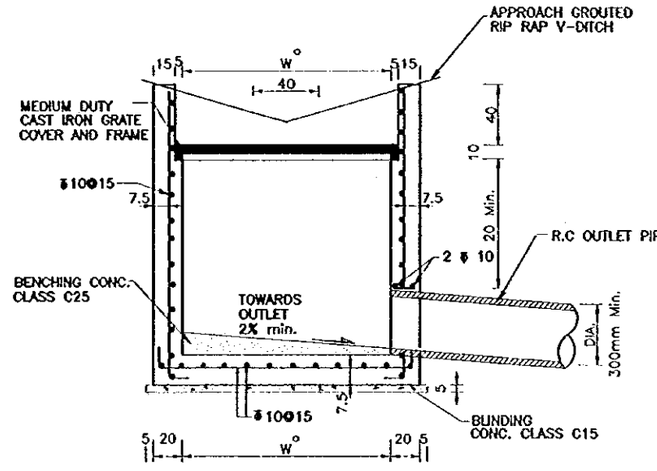
TYP. SECTION IN PIPE CULVERT WITH DROPS

SCALE 1:25



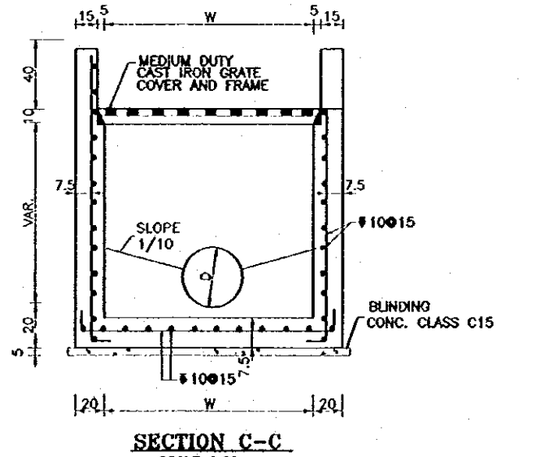
PLAN
TYPICAL DETAIL OF DROP INLET

SCALE 1:20



SECTION B-B

SCALE 1:20



SECTION C-C

SCALE 1:20

NOTES:-

1) REINFORCED CONCRETE SHALL BE CLASS C25, AND BLINDING CONCRETE SHALL BE CLASS C15.

2) STEEL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60 .

3) ALL DIMENSIONS ARE IN CENTIMETER UNLESS OTHERWISE INDICATED AND REINFORCEMENT BAR DIAMETER WHICH ARE IN mm .

4) PROVIDE 7.5cm THICK BLINDING CONCRETE CLASS C15 UNDER BOTTOM SLABS .

5) REINFORCEMENT BARS SHALL HAVE THE FOLLOWING CONCRETE COVER:-
   I) ALL OUTSIDE FACES 4cm.
   II) VERTICAL INSIDE FACES 5cm.
   III) TOP SLAB INSIDE FACES 7.5cm.
   IV) BOTTOM SLAB INSIDE FACES 7.5cm.

6) EXTEND ALL LONGITUDINAL BARS IN BOX CULVERT BOTTOM SLAB INTO APRON SLAB .

7) THE NUMBER OF TRANSVERSAL CONSTRUCTION JOINT PLACED PERPENDICULAR TO THE AXIS OF THE CULVERT SHALL BE WITHIN THE FOLLOWING LIMITS:-

CULVERT LENGTH (m)	No. OF JOINTS
20 TO 25	1
25 TO 35	2
35 TO 50	3

8) THE QUANTITIES SHOWN IN THE TABLES FOR ESTIMATION ONLY.THE CONTRACTOR MUST SUBMIT A DETAILED SHOP DWG, FOR EACH CULVERT TO THE ENGINEER FOR APPROVAL .

9) FOR REINFORCEMENT BENT, HOOK AND LAP SPLICES DETAILS SEE DRAWING DSPW- 60

10) THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRAWING DSPW- 103

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

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JICA Study Team:
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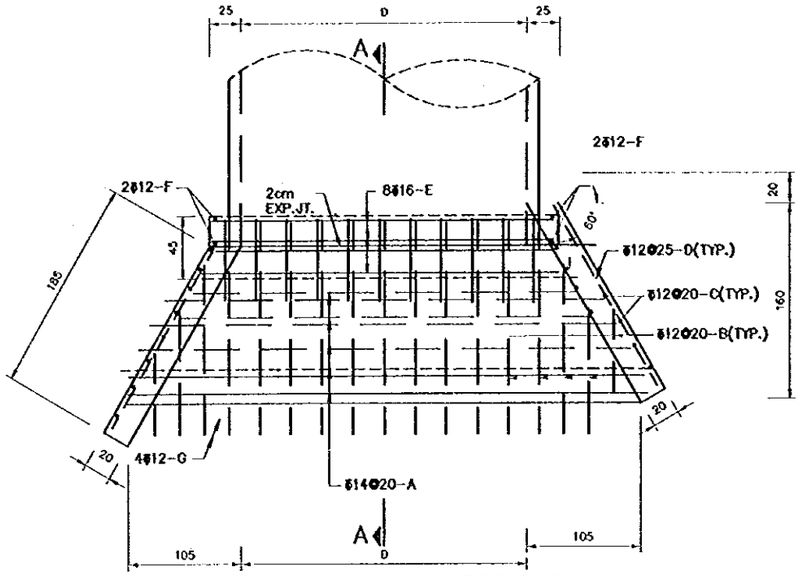
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 4913377 - Fax: 4913389 - AMMAN - JORDAN

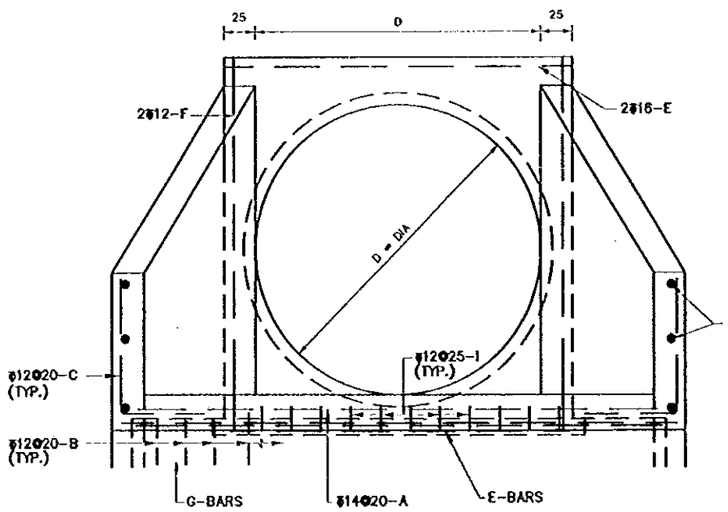
Drawing Title:
SINGLE CELL BOX CULVERT & MISCELLANEOUS DRAINAGE DETAILS

Scale: AS SHOWN

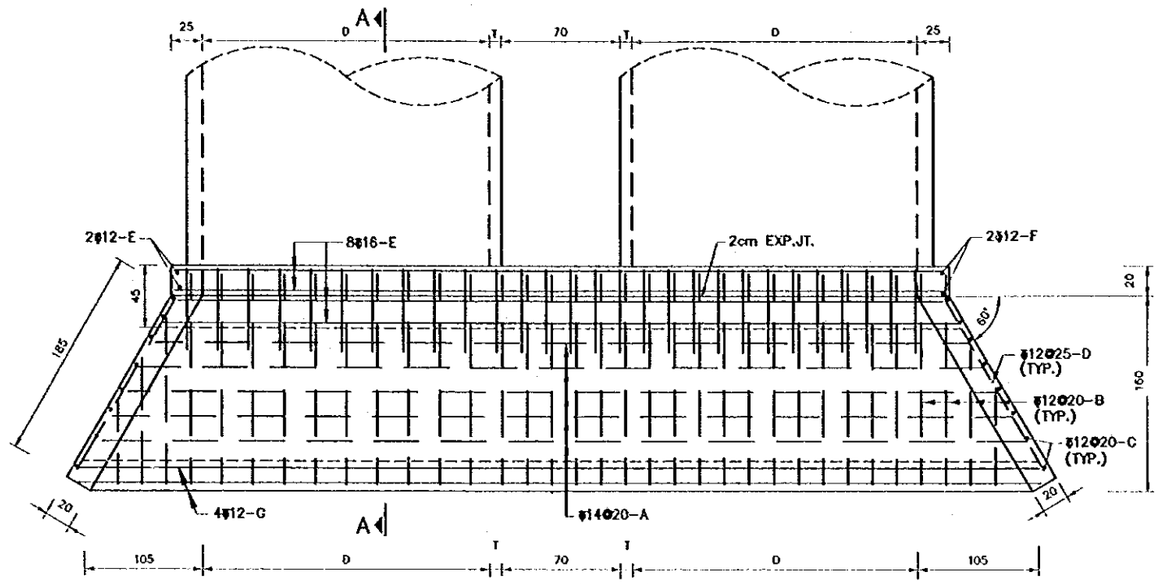
Drawing No.: DSPW-101



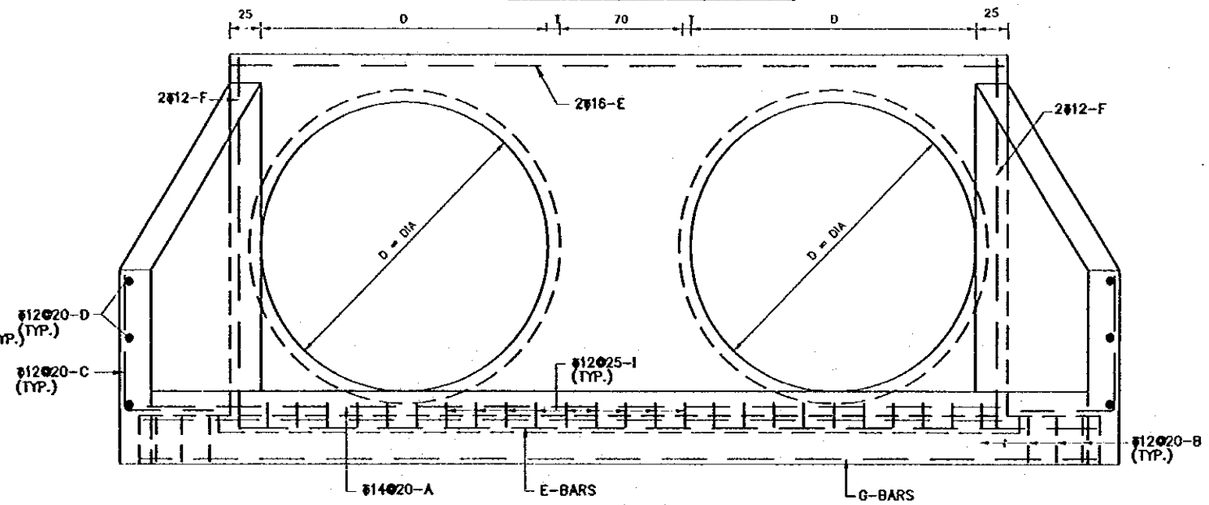
SINGLE PIPE CULVERT PLAN



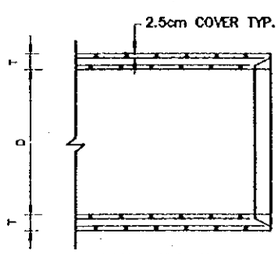
END ELEVATION



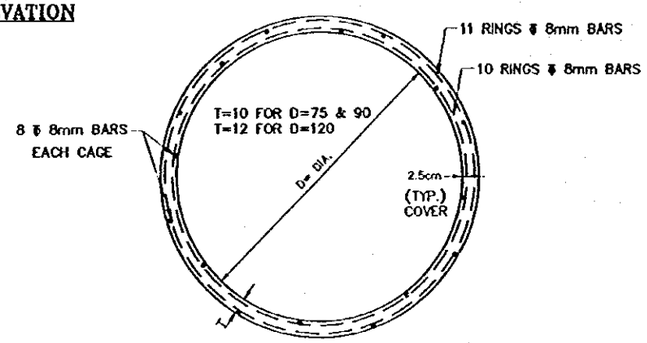
TWIN PIPE CULVERT PLAN



END ELEVATION

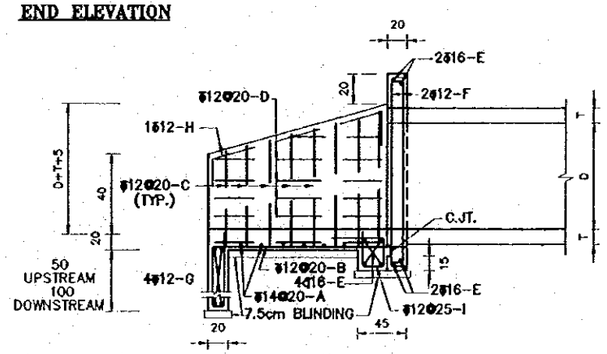


LONG. SECTION



CROSS-SECTION

TYPICAL PIPE CULVERT REINFORCEMENT DETAILS



WINGWALL SECTION A-A

NOTES:-

1) REINFORCED CONCRETE SHALL BE CLASS C25, AND BLINDING CONCRETE SHALL BE CLASS C15.
2) STEEL REINF. SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60
3) ALL DIMENSIONS ARE IN CENTIMETER UNLESS OTHERWISE INDICATED AND REIN. BAR DIAMETER WHICH ARE IN mm.
4) BACKFILL IMMEDIATELY ABOVE THE PIPES SHALL BE COMPACTED MANUALLY.
5) ALL EXPOSED FACES OF WINGWALLS & HEADWALLS SHALL BE FAIR-FACED CONCRETE.

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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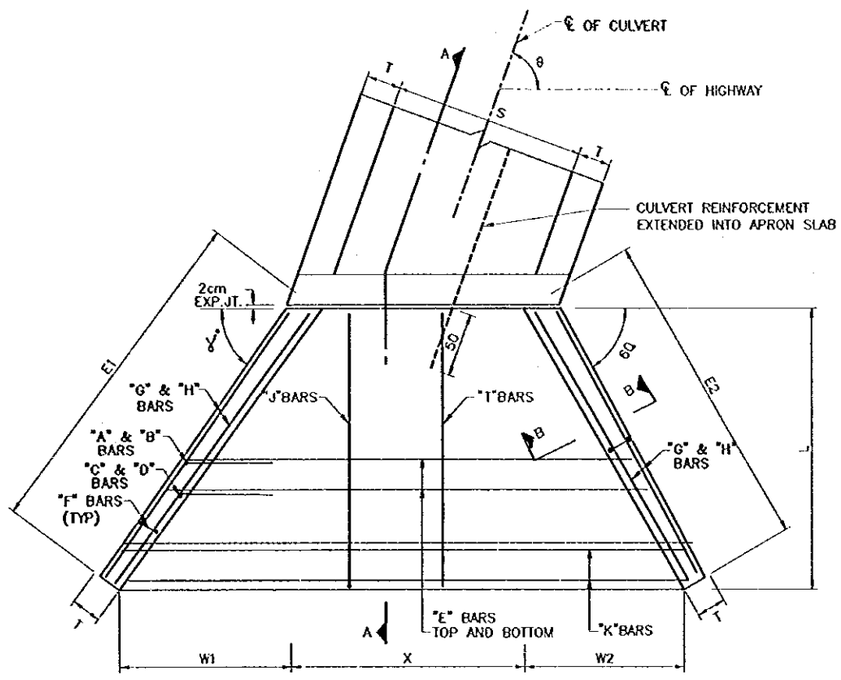
Subcontracted Local Consultant:
consolidated consultants
engineering & environment
Tel: 4613377 - Fax: 4613388 - AMMAN - JORDAN

Drawing Title:
PIPE CULVERT DETAILS

Scale: NOT TO SCALE

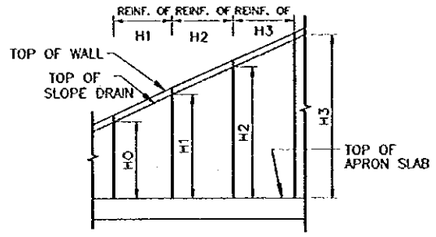
Drawing No.: DSPW-102



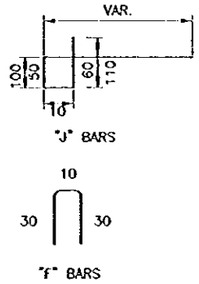
PLAN AT GROUND SLAB LEVEL

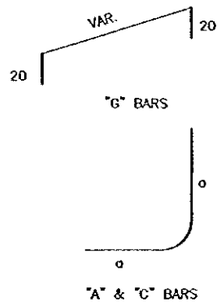
DIMENSIONS		REINFORCEMENT											
H	T	BAR A			BAR B		BAR C			BAR D		BAR E	
cm	cm	SIZE ϕ mm	SP cm	a cm	SIZE ϕ mm	SP cm	SIZE ϕ mm	SP cm	a cm	SIZE ϕ mm	SP cm	SIZE ϕ mm	SP cm
50	20	12	30	60	–	–	14	30	60	–	–	12	25
100	25	12	25	115	–	–	14	25	115	–	–	12	25
150	25	12	20	165	–	–	14	20	165	–	–	12	25
200	30	12	15	220	–	–	14	15	220	–	–	12	25
250	30	14	15	90	14	15	16	15	90	16	15	14	25
300	35	16	15	100	16	15	18	15	100.	18	15	14	25
350	40	16	15	110	16	15	18	15	110	18	15	14	25
400	45	18	15	120	18	15	20	15	120	20	15	14	25

REINFORCEMENT DETAIL FOR WING WALL



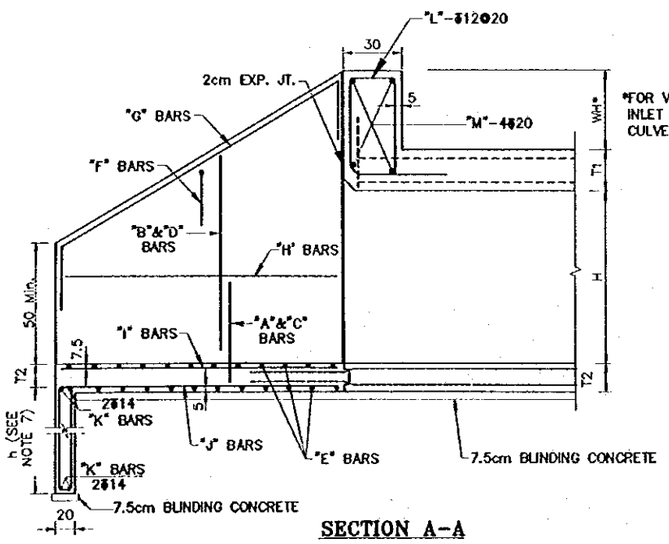
ELEVATION



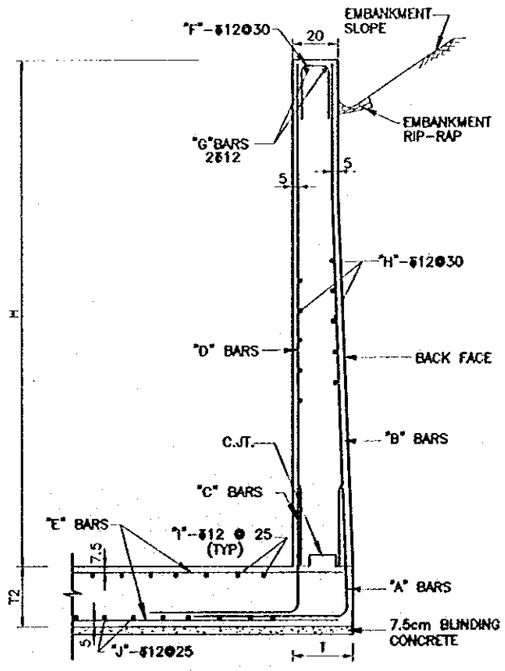


CULVERT DIMENSIONS		WINGWALL AND APRON DIMENSIONS																	
		θ = 90°				ϒ = 60°		θ = 60°				ϒ = 45°		θ = 45°				ϒ = 45°	
H	S	X	L	E1	E2	W1	W2	X	L	E1	E2	W1	W2	X	L	E1	E2	W1	W2
100	150	150	160	185	185	92	92	173	160	226	185	160	92	212	160	226	185	160	92
150	150	150	260	300	300	150	150	173	260	368	300	260	150	212	260	368	300	260	150
150	200	200	260	300	300	150	150	231	260	368	300	260	150	283	260	368	300	260	150
150	250	250	260	300	300	150	150	289	260	368	300	260	150	354	260	368	300	260	150

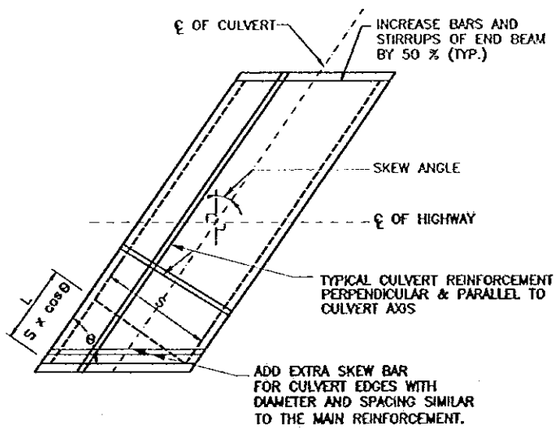
WING WALL AND APRON DIMENSIONS FOR SINGLE CELL BOX CULVERT



SECTION A-A



SECTION B-B



TYPICAL BAR LAYOUT FOR SKEWED CULVERT

NOTES:-

1)REINFORCED CONCRETE SHALL BE CLASS C25, AND BLINDING CONCRETE SHALL BE CLASS C15.

2)STEEL REINFORCEMENT SHALL CONFORM TO THE REQUIR. OF ASTM A615 GRADE 60 .

3)ALL DIM. ARE IN CENTIMETERS, EXCEPT REINFORCEMENT BAR DIAMETER WHICH ARE IN mm.

4)PROVIDE 7.5cm THICK BLINDING CONCRETE CLASS C15 UNDER APRON AND WING WALLS

5)REINFORCEMENT BARS SHALL HAVE THE FOLLOWING CONCRETE COVER:-
I)ALL OUTSIDE FACES 4cm.
II)VERTICAL INSIDE FACES 5cm.
III)BOTTOM SLAB TOP FACES 7.5cm.

6)EXTEND ALL LONG. BARS IN BOX CULVERT BOTTOM SLAB INTO APRON SLAB.

7)DIMENSIONS h=0.5m UP-STREAM AND 1.0m DOWN-STREAM.

8)FLARE ANGLES APRON AND WING WALLS LENGTH MAY BE MODIFIED BY THE ENGINEER TO SUIT SITE CONDITIONS . WING WALLS AND APRON DIMENSIONS SHOWN IN THE TABLE ARE USED AS A GUIDE LINE.

9)EXPOSED SURFACES SHALL BE FAIR-FACED, AND BURIED SURFACE SHALL BE COATED WITH BITUMINOUS DAMP PROOFING .

10)FOR CULVERTS WITH SKEW ANGLE>20° EXTRA REINF. ARE PROVIDED AS SHOWN THIS DRAWING .

11)FOR REINFORCEMENT BENT AND LAB LENGTH DETAILS SEE DRAWING NO. DSPW-60

12)FOR JOINTS DETAILS,SPACINGS AND BACK FILL DRAINS SEE DRAWING NO. DSPW-61

13)THE REINFORCEMENT SCHEDULES GIVEN IN THE TABLE ARE ONLY FOR THE CORRESPONDING HEIGHT LISTED. LENGTH OF REINFORCING BARS SHOULD BE ADJUSTED TO MATCH THE VARIABLE HEIGHTS .

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

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The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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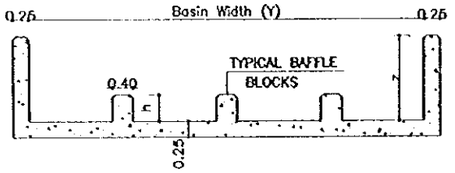
JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamashita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

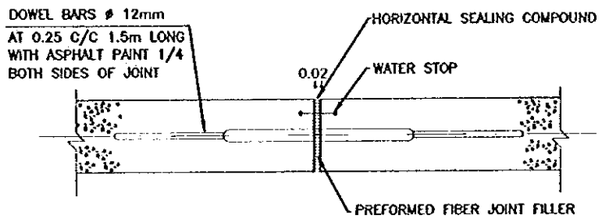
Drawing Title:
WING WALL DETAILS

Scale: NOT TO SCALE

Drawing No.: DSPW-103



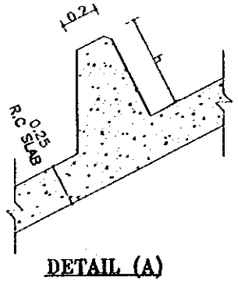
SECTION B-B



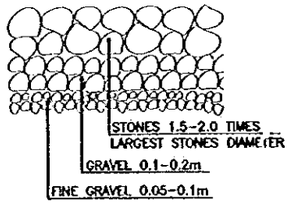
SECTION C-C
EXPANSION JOINT

SECTION A-A

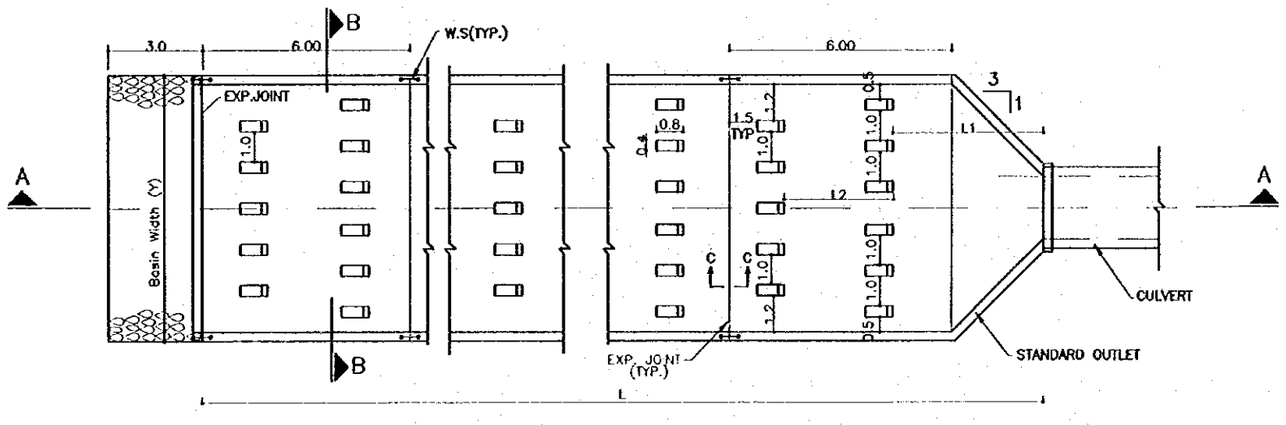
CULVERT INLET



DETAIL (A)
TYPICAL BAFFLE DETAIL



DETAIL (B)
TINVERTED FILTER



PLAN

NOTES:

1)ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED .

2)IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE DETAILED SHOP DRAWINGS SHOWING ALL VALUES (Z,h,L,L1. AND L2)TO BEST SUIT THE EMBANKMENT SLOPES, HEIGHTS AND THE SIZE OF THE CULVERTS .THOSE DRAWING MUST BE APPROVED BY THE ENGINEER .

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:
Japan International Cooperation Agency (JICA)

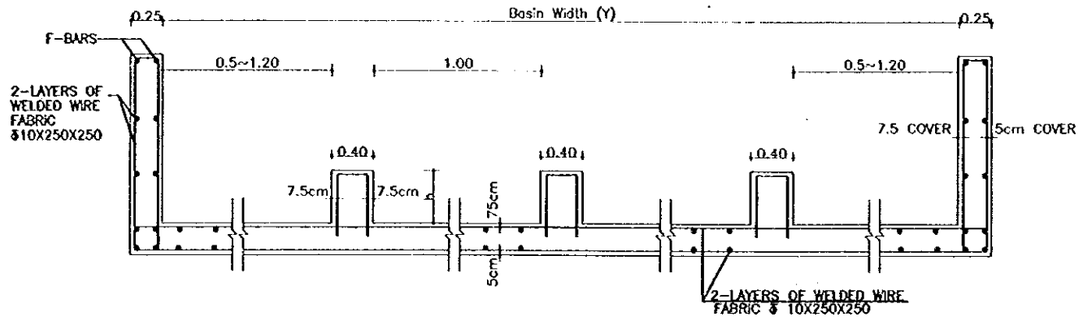
JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

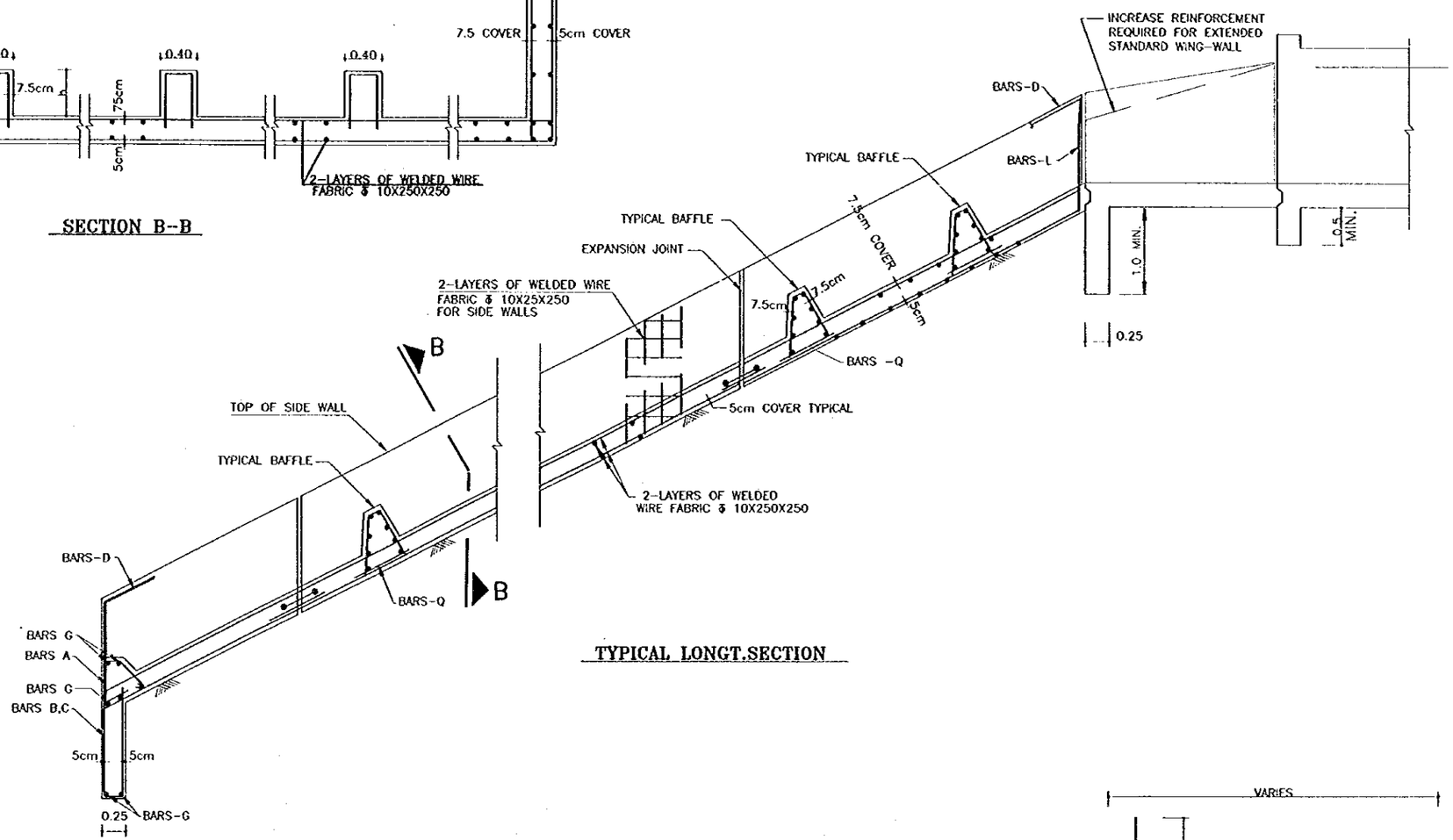
Drawing Title:
TYPICAL CULVERT
ENERGY DISSIPATER
(1 OF 2)

Scale: NOT TO SCALE

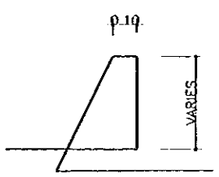
Drawing No.: DSPW-104



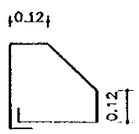
SECTION B--B



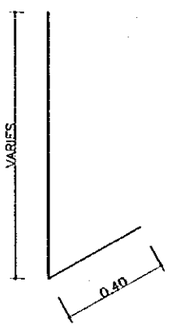
TYPICAL LONGT.SECTION



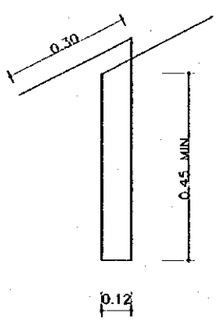
BARS-Q

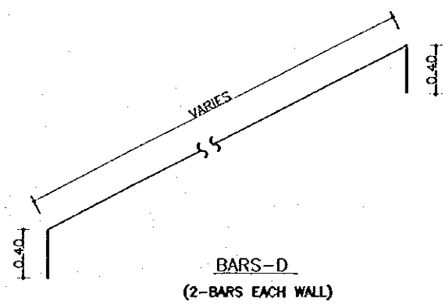


BARS--A

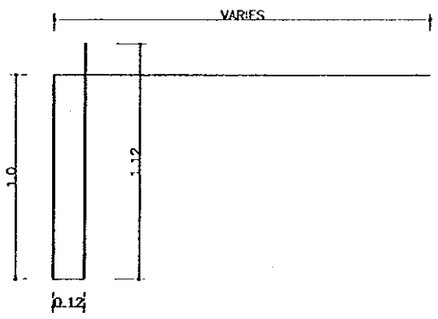


BARS-L





BARS-D
(2-BARS EACH WALL)



BARS-B,C

NOTES:

1)ALL DIMENSIONS ARE IN METERS EXCEPI WHERE OTHERWISE STATED. BAR REINF. DIAMETER AND SPACING ARE IN (mm) .

2)ALL REINF. BARS ARE ϕ12 @ 25cm SPACING UNLESS OTHER WISE INDICATED.

3)ALL EXPOSED CONC. EDGES SHALL BE CHAMFERED 2cm.X2cm

4)REINF. BARS SHALL HAVE 60mm COVER OF CONC. UNLESS OTHERWISE SHOWN .

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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Japan International Cooperation Agency (JICA)

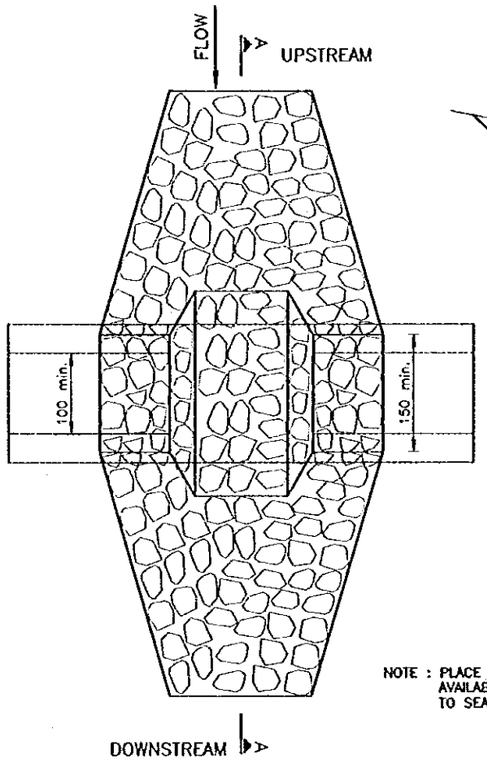
JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

Drawing Title:
TYPICAL CULVERT ENERGY DISSIPATER (2 OF 2)

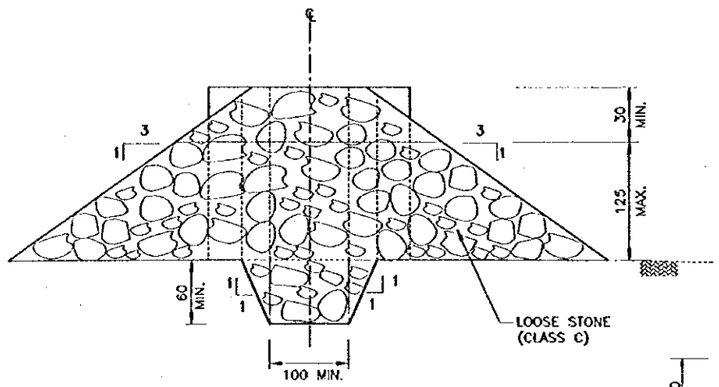
Scale: NOT TO SCALE

Drawing No.: DSPW-105



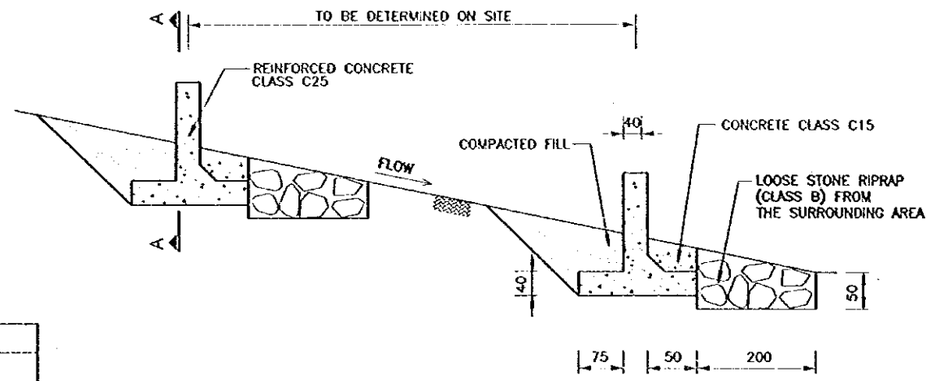
PLAN

UPSTREAM ELEVATION



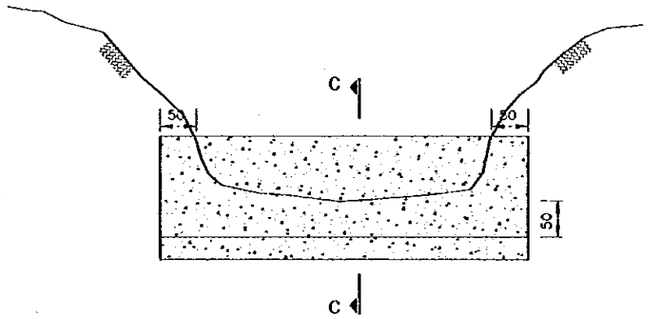
SECTION A-A

STONE CHECK DAM DETAILS

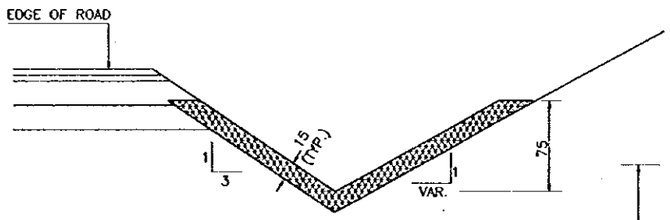


LONGITUDINAL SECTION IN WADI BED

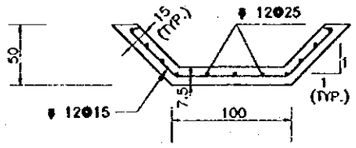
NOTE : PLACE MUD OR OTHER AVAILABLE FINE MATERIALS TO SEAL DAM CORE.



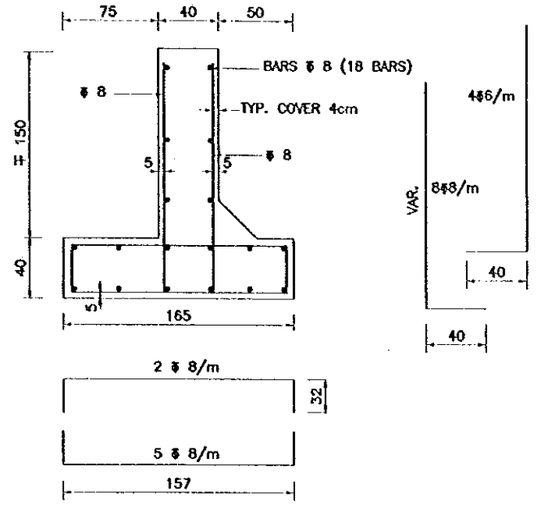
SECTION A-A



MORTAR GROUTED V-DITCH
(PAVED VDITCH)

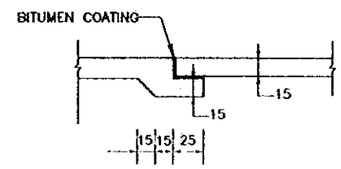


WADI 2D CHANNEL

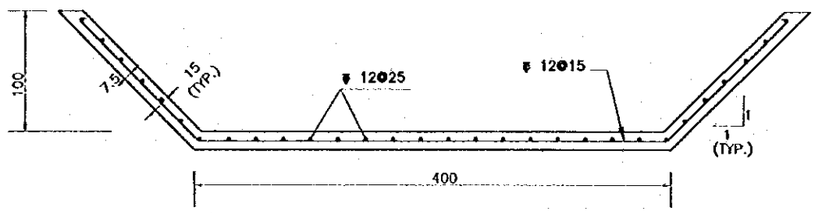


SECTION C-C

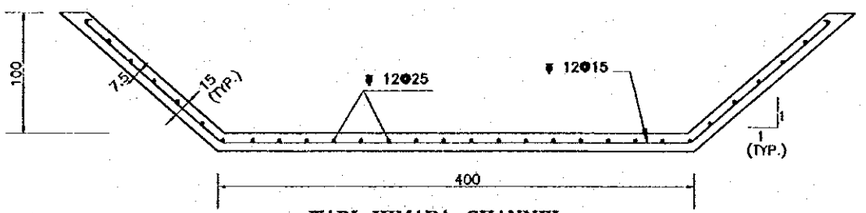
CONCRETE CHECK DAM DETAILS



CONCRETE LINED CHANNEL EXPANSION JOINT



WADI ABU EL-ASAL CHANNEL



WADI HIMARA CHANNEL

NOTES:-

1) ALL DIMENSIONS ARE IN CMS . UNLESS OTHERWISE INDICATED.

2) CHECK DAMS CAN BE REPLACED BY STEPS AND VICE VERSA . IN GENERAL, CHECK DAMS ARE TO BE USED FOR STEEP WADIS AND/OR AT LOCATIONS OF HEAVY SIDE WADI SEDIMENTS . THE ENGINEER SHOULD VERIFY THE USE OF CHECK DAMS AND/OR STEPS .

3) THE CONTRACTOR SHOULD SUBMIT DETAILED WORKING DRAWINGS FOR CHECK DAMS AND STEPS AT EACH LOCATION TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION .

4) CHECK DAMS SHALL BE PLACED AT NARROW WADI SECTIONS WITH SOLID ROCK BANKS FOR STABILITY ,THE MINIMUM HEIGHT OF CHECK DAM ABOVE WADI BED SHALL BE (1m). HIGHER CHECK DAMS MAY BE USED AT LARGER WADIS AND SPACING OF CHECK DAMS SHALL BE DEFINED DURING CONSTRUC-TION ALL TO THE APPROVAL OF THE ENGINEER.

5) TO STABILIZE SIDE WADIS CHECK DAMS, STEPS AND BENCHING METHODS CAN BE UTILIZED. THE ENGINEER HAS THE RIGHT TO ADD, DELETE AND MODIFY THE PROPOSED METHOD TO BEST FIT SITE CONDITIONS. COMBINATION METHODS CAN BE ADOPTED AND SUBJECTED TO THE ENGINEERS APPROVAL .

6) THE ENGINEER SHALL APPROVE THE TYPE OF CHECK DAM TO BE USED AT EACH LOCATION .

Project:
Tourism Sector Development Project
in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
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JICA Study Team:
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Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

Drawing Title:
CHECK DAMS AND CHANNELS DETAILS

Scale: NOT TO SCALE

Drawing No.: DSPW-106

DRAINAGE STRUCTURES

Wadi #	Station	Peak Flow (m^3/s)	Size & Description	Skew Angle (Degree)	Invert Elevation (m from sea level) Upstream	Road CL	Downstream	Approx. Length U/S (m)	U/S (m)	Slope%	Stream Training (m)	Drops' Height (m)	Max. Cover (m)	Outlet
1	1+856.50	10.267	1-2x1.50 DRCBC[1]	119.5	-184.50	-192.40	-196.00	31.5	22.0	12.150	22	5*1.0	8.65	ED[7]
2A	2+210.00	Small[2]	1ø900mm DRCPC	80.3	-163.85	-167.00	-192.35	10.2	85.0	15.756	-	9*1.5	8.12	-
2B	2+321.30	1.409	1ø900mm DRCPC	82.0	-151.40	-152.17	-155.50	9.8	16.8	7.925	-	2*1.0	3.60	ED
2C	2+402.75	3.756	1-1.50x1.50 DRCBC	104.0	-145.78	-148.95	-160.60	12.0	40.5	13.943	-	5*1.5	6.69	ED
2D	2+400.00	1.878	T0.5X1 RCLPD Channel[3]	Parallel	-143.00	-	-145.78	28.5		2.737	15	2*1.0	-	-
2E	2+730.70	1.409	1ø900mm DRCPC	63.0	-112.54	-113.35	-120.63	11.0	37.5	7.402	15	3*1.5	5.34	ED
2F	2+826.00	1.409	1ø900mm DRCPC	113.5	-107.25	-112.05	-115.20	31.5	29.0	5.702	30	3*1.5	12.04	ED
3	5+246.00	6.786	1-2x1.50 DRCBC	97.0	92.91	91.95	76.75	9.0	48.5	10.713	-	5*2.0	8.22	ED
4	5+870.80	2.103	2ø900mm RCPC[4]	118.5	147.47	144.45	140.47	40.3	53.2	7.483	-	-	4.25	ED
5	6+280.00	25.718	T1.0X4 RCL Channel[5]	-	132.60	131.90	130.63	15.0	25.0	4.925	-	-	-	-
6	6+864.00	1.652	2ø900mm RCPC	68.0	163.62	162.88	162.16	14.0	13.8	5.261	-	-	3.62	ED
7	7+278.00	47.905	T1.0X4 RCL Channel[5]	-	103.00	102.51	101.69	15.0	25.0	3.275	-	-	-	-
8	7+495.14	6.410	1-2x1.50 DRCBC	-	121.63	115.46	106.12	47.2	72.1	8.813	-	5*1.0	23.30	ED
9	8+107.50	2.745	1-1.50x1.50 RCBC[6]	33.0	148.00	147.08	146.19	25.5	24.8	3.598	-	-	3.94	ED
10A	8+514.30	4.276	1-1.50x1.50 DRCBC	113.0	128.76	126.84	124.83	17.0	18.5	5.437	-	2*1.0	5.80	ED
10B	8+267.80	Small	1ø900mm RCPC	41.0	141.22	140.67	140.00	15.5	18.8	3.557	15	-	2.05	-
11A	9+207.00	6.549	1-2x1.50 RCBC	98.0	120.00	117.05	113.00	44.5	61.2	6.623	-	-	18.54	ED
11B	8+976.50	Small	1ø900mm RCPC	61.5	126.07	124.82	123.43	28.0	31.3	4.452	-	-	9.14	-

[1] DRCPC or DRCBC = Reinforced Concrete Pipe or Box Culvert with Drops
[2] Small = Small Peak Flow to be estimated
[3] T0.5x4 RCL Channel = Parallel to the Road, Reinforced Concrete Lined Channel with Drops, Trapezoidal 1H:1V, Bottom Width 1m and 0.5m Depth
[4] RCPC= Reinforced Concrete Pipe Culvert
[5] T1.0x4RCL Channel= Trapezoidal Reinforced Concrete Lined Channel with Side Slopes 1H for wadi-7:1V, Bottom Width 4m and 1.0m Depth
[6] RCBC= Reinforced Concrete Box Culvert
[7] ED= Energy Dissipater

ENERGY DISSIPATION

Wadi #	Maximum Flow	Cell or Pipe #	Culvert Span	Flow Per unit Width	Outlet Velocity	Outlet Depth	Froude #	Sequent Depth	Stilling Basin Dimensions L1	L2	L	h	hs	d2
1	10.267	1C	2.0	5.134	12.021	0.427	5.87	3.340	5.396	1.244	13.359	0.498	0.249	2.839
2B	1.409	1P	0.9	1.566	5.738	0.387	2.94	1.430	2.145	0.596	5.719	0.238	0.119	1.215
2C	3.756	1C	1.5	2.504	9.613	0.260	6.02	2.087	3.400	0.770	8.348	0.308	0.154	1.774
2E	1.409	1P	0.9	1.566	5.486	0.382	2.83	1.352	2.028	0.563	5.407	0.225	0.113	1.149
2F	1.409	1P	0.9	1.566	4.998	0.410	2.49	1.254	1.882	0.523	5.018	0.209	0.105	1.066
3	6.786	1C	2.0	3.393	10.072	0.337	5.54	2.477	3.927	0.945	9.908	0.378	0.189	2.105
4	2.103	2P	0.9	1.168	5.102	0.324	2.86	1.159	1.739	0.483	4.637	0.193	0.097	0.985
6	1.652	2P	0.9	0.918	4.209	0.312	2.41	0.917	1.375	0.382	3.668	0.153	0.076	0.779
8	6.410	1C	2.0	3.205	8.816	0.364	4.67	2.226	3.353	0.918	8.906	0.367	0.184	1.893
9	2.745	1C	1.5	1.830	5.493	0.333	3.04	1.274	1.912	0.531	5.098	0.212	0.106	1.083
10A	4.276	1C	1.5	2.851	6.018	0.474	2.79	1.649	2.473	0.687	6.595	0.275	0.137	1.401
11A	6.549	1C	2.0	3.275	8.469	0.387	4.35	2.193	3.290	0.914	8.773	0.366	0.183	1.864

L1 Distance between Outlet and Row1 of Baffle Blocks
L2 Space between Row1 and Row2 of Baffle Blocks
L Stilling Basin Total Length
h Baffle Blocks Height
hs End Cell Height
d2 Downstream Water Depth

EMBANKMENT PROTECTION TABLE (EM.P.)

STATION	SIDE	LENGTH (m)	HEIGHT (m)
00+360 → 00+420	L.H.S	90.0	1.5
01+010 → 01+100	L.H.S	90.0	1.5
01+420 → 01+480	R.H.S	25.0	1.5
01+840 → 01+900	R.H.S	75.0	1.5
02+000 → 02+240	L.H.S	340.0	1.5
02+300 → 02+560	L.H.S	350.0	1.5
02+400 → 02+460	R.H.S	60.0	1.5
02+620 → 02+640	L.H.S	33.0	1.5
02+720 → 02+760	L.H.S	40.0	1.5
02+720 → 02+800	R.H.S	90.0	1.5
02+840 → 02+860	R.H.S	25.0	1.5
02+800 → 02+880	L.H.S	90.0	1.5
02+920 → 03+140	R.H.S	280.0	1.5
03+170 → 03+200	R.H.S	35.0	1.5
03+650 → 03+680	R.H.S	58.0	1.5
03+880 → 03+900	L.H.S	40.0	1.5

STATION	SIDE	LENGTH (m)	HEIGHT (m)
04+570 → 04+600	R.H.S	40.0	1.5
04+780 → 04+820	L.H.S	50.0	1.5
05+220 → 05+280	R.H.S	100.0	1.5
05+240 → 05+270	L.H.S	30.0	1.5
05+690 → 05+760	L.H.S	70.0	1.5
05+680 → 05+760	R.H.S	80.0	1.5
05+820 → 05+890	R.H.S	80.0	1.5
05+870 → 05+910	L.H.S	40.0	1.5
06+800 → 06+900	R.H.S	100.0	1.5
06+810 → 06+890	L.H.S	80.0	1.5
07+430 → 07+540	L.H.S	130.0	1.5
07+440 → 07+540	R.H.S	170.0	1.5
07+980 → 08+160	R.H.S	180.0	1.5
08+030 → 08+140	L.H.S	110.0	1.5
08+230 → 08+280	L.H.S	50.0	1.5
08+230 → 08+410	R.H.S	180.0	1.5

EMBANKMENT PROTECTION TABLE (EM.P.)

STATION	SIDE	LENGTH (m)	HEIGHT (m)
08+480 → 08+610	R.H.S	130.0	1.5
08+480 → 08+570	L.H.S	90.0	1.5
08+900 → 09+090	L.H.S	235.0	1.5
08+920 → 09+260	R.H.S	390.0	1.5
09+150 → 09+290	L.H.S	150.0	1.5
09+440 → 09+560	L.H.S	110.0	1.5
10+280 → 10+380	L.H.S	100.0	1.5
10+600 → 10+660	L.H.S	70.0	1.5

PAVED V-DITCHES

STATION	SIDE	LENGTH (m)	SLOPE (%)
DEAD SEA	KARAK	145.0	01.0
DEAD SEA	SUWEIMEN	210.0	01.0
00+000 → 00+340	L.H.S	340.0	10.5
00+020 → 01+400	R.H.S	1380.0	10.5
00+440 → 00+920	L.H.S	480.0	10.5
01+220 → 01+840	L.H.S	620.0	10.5
01+680 → 02+380	R.H.S	700.0	10.5
02+460 → 02+720	R.H.S	260.0	09.1
02+560 → 02+610	L.H.S	50.0	10.4
02+640 → 02+720	L.H.S	80.0	10.4
02+760 → 02+800	L.H.S	40.0	10.4
02+860 → 02+920	R.H.S	60.0	10.4
02+880 → 03+760	L.H.S	880.0	10.0
03+200 → 03+520	R.H.S	320.0	10.0
03+680 → 04+540	R.H.S	860.0	10.3
03+900 → 04+120	L.H.S	220.0	10.3
04+190 → 04+560	L.H.S	370.0	10.3
04+600 → 05+080	R.H.S	480.0	10.5
04+690 → 04+760	L.H.S	70.0	02.0
04+820 → 05+240	L.H.S	420.0	10.5
05+270 → 05+690	L.H.S	420.0	10.5
05+280 → 05+560	R.H.S	280.0	10.5
05+760 → 05+860	L.H.S	100.0	02.0
05+890 → 06+060	R.H.S	170.0	07.0
05+910 → 06+220	L.H.S	310.0	07.0
06+110 → 06+210	R.H.S	100.0	V.C.
06+330 → 06+580	R.H.S	250.0	05.0
06+330 → 06+810	L.H.S	480.0	05.0
06+680 → 06+800	R.H.S	120.0	01.3
06+890 → 07+210	L.H.S	320.0	10.0
06+910 → 07+220	R.H.S	310.0	10.0
07+370 → 07+420	L.H.S	50.0	01.0
07+370 → 07+400	R.H.S	30.0	01.0
07+540 → 08+030	L.H.S	490.0	10.0
07+550 → 07+980	R.H.S	430.0	10.0
08+140 → 08+230	L.H.S	90.0	05.5
08+160 → 08+230	R.H.S	70.0	05.5
08+280 → 08+480	L.H.S	200.0	05.5
08+410 → 08+480	R.H.S	70.0	05.5
08+570 → 08+900	L.H.S	330.0	05.4
08+610 → 08+910	R.H.S	300.0	05.4
09+090 → 09+150	L.H.S	60.0	06.1
09+270 → 09+420	R.H.S	150.0	06.1
09+290 → 09+440	L.H.S	150.0	06.1
09+560 → 09+900	L.H.S	340.0	05.0
09+560 → 09+800	R.H.S	240.0	05.0
09+960 → 10+100	L.H.S	140.0	08.0
09+960 → 10+190	R.H.S	230.0	08.0
10+160 → 10+210	L.H.S	50.0	08.0
10+360 → 11+100	R.H.S	740.0	14.0
10+380 → 10+600	L.H.S	220.0	14.0
10+770 → 11+635	L.H.S	865.0	14.0
11+160 → 11+240	R.H.S	80.0	12.0
11+310 → 11+380	R.H.S	85.0	02.0
11+380 → 11+635	R.H.S	260.0	13.0

NOTE:-

1) ALL INFORMATION IN THE TABLES ARE APPROXIMATE. THE CONTRACTOR SHALL PREPARE DETAILED SHOP DRAWINGS SHOWING ALL DETAILS AND EXACT LOCATIONS OF ALL STRUCTURES TO THE APPROVAL OF THE ENGINEER.

Project:
Tourism Sector Development Project in the Hashemite Kingdom of Jordan

Executing Agency:
The Ministry of Tourism and Antiquities
The Ministry of Planning

SUB-PROJECT:
Dead Sea Parkway

Note:
This detailed design has been executed by a team of consultants as shown below in accordance with the agreement between Japan International Cooperation Agency (JICA) and JICA Study Team.

Designed by:
Japan International Cooperation Agency (JICA)

JICA Study Team:
Joint Venture of
Pacific Consultants International and Yamasita Sekkei Inc.

Subcontracted Local Consultant:
consolidated consultants
engineering & environment

Drawing Title:
MISCELLANEOUS DRAINAGE TABLES

Scale: NOT TO SCALE
Drawing No.: DSPW-107