



डेडीकेटेड फ्रेट कोरीडोर

DESIGN AND CONSTRUCTION OF CIVIL, STRUCTURES AND TRACK WORKS FOR DOUBLE LINE RAILWAY INVOLVING FORMATION IN EMBANKMENTS/CUTTINGS, BALLAST ON FORMATION, TRACK WORKS, BRIDGES, STRUCTURES, BUILDINGS, YARDS, INTEGRATION WITH IR EXISTING RAILWAY SYSTEM AND TESTING & COMMISSIONING ON DESIGN-BUILD LUMP SUM BASIS FOR DADRI - KHURJA SECTION OF EASTERN DEDICATED FREIGHT CORRIDOR

Contract Package: 302

ICB No. HQ/EN/EC/D-B/DADRI - KHURJA

PART - 4 - REFERENCE DOCUMENT

DRAWINGS - VOLUME - 5.2

DADRI TO KHURJA

From Km. 1413.856 to Km. 1367.000

GAD BRIDGES

EMPLOYER
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
(A GOVERNMENT OF INDIA ENTERPRISES)
MINISTRY OF RAILWAYS
COUNTRY : INDIA

1 of 15

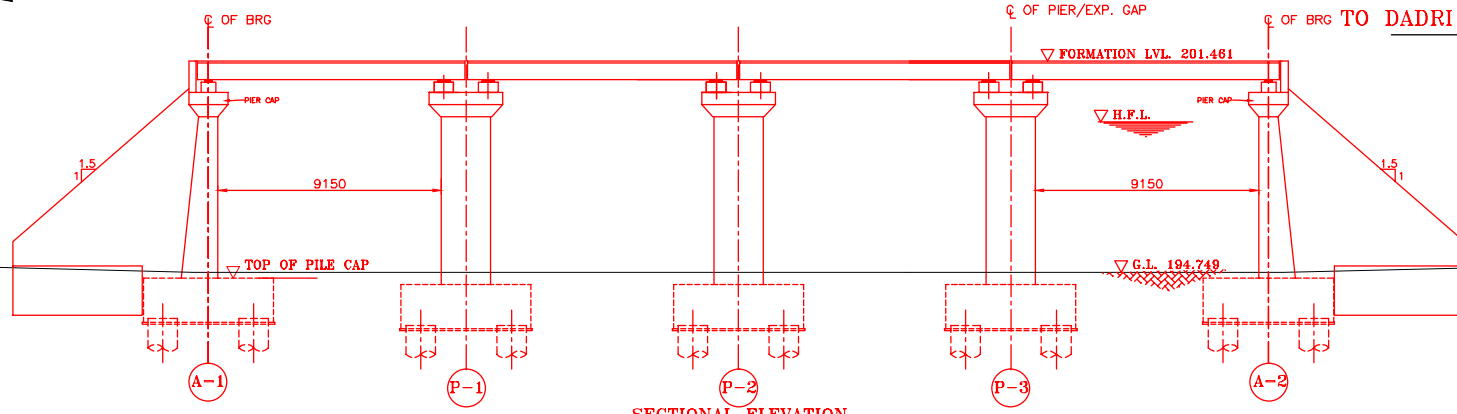
Contract Package: 302

DADRI TO KHURJA

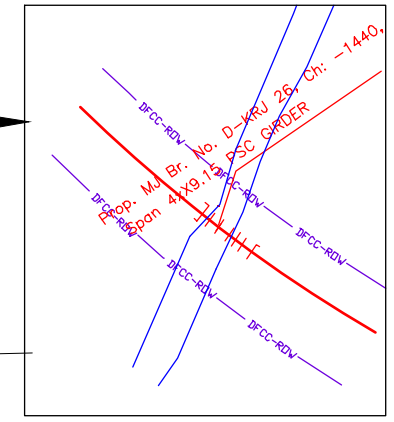
From Km 1413.856 to 1367.000

GAD OF MAJOR BRIDGES

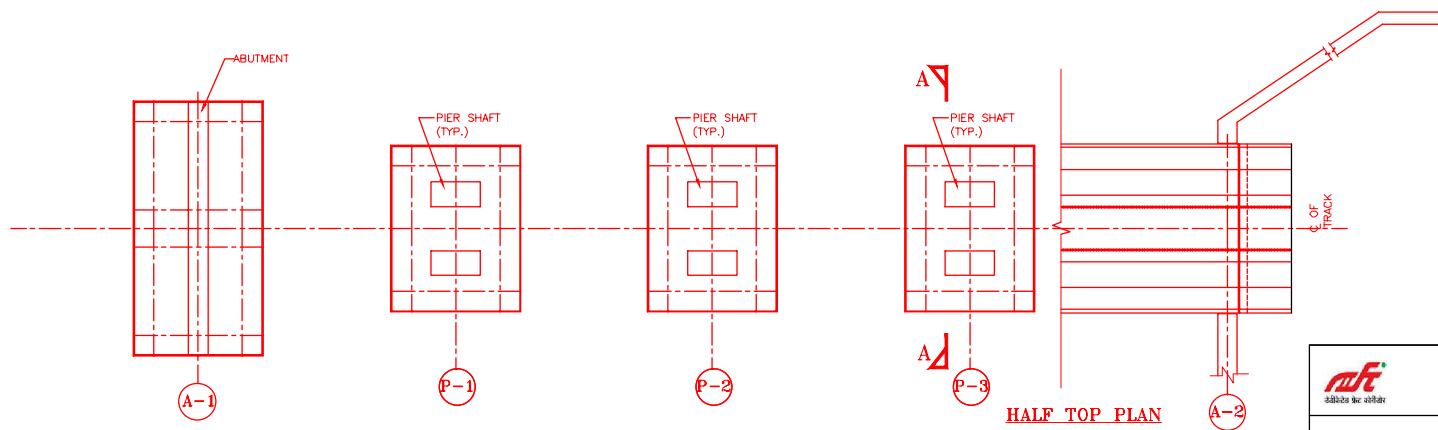
← TO NEW KRJ JN.



SECTIONAL ELEVATION





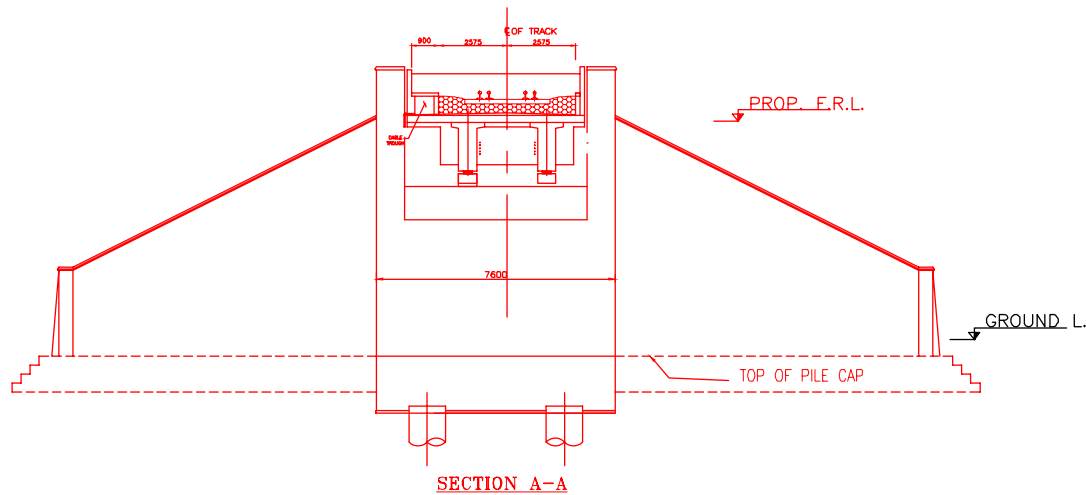
KEY PLAN



HALF TOP PLAN

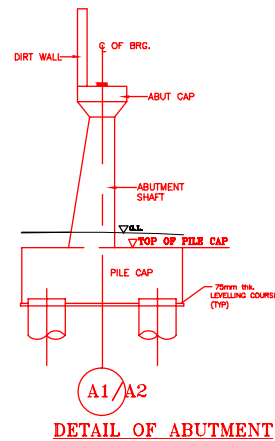
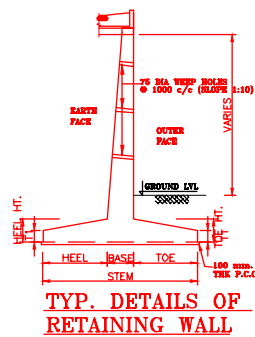
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		DADRI TO NEW KRJ JN. FROM CH: 1413.856 TO CH: 1367.000				
		CONTRACT PACKAGE - 302				
STRUCTURE		PROPOSED MAJOR BR. NO. D-KRJ 26 SPAN (4X9.15m) AT CH. -1440				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	May 2015				SHEET 1 OF 2 AECOM/302/MJR/D-KRJ 26	R0



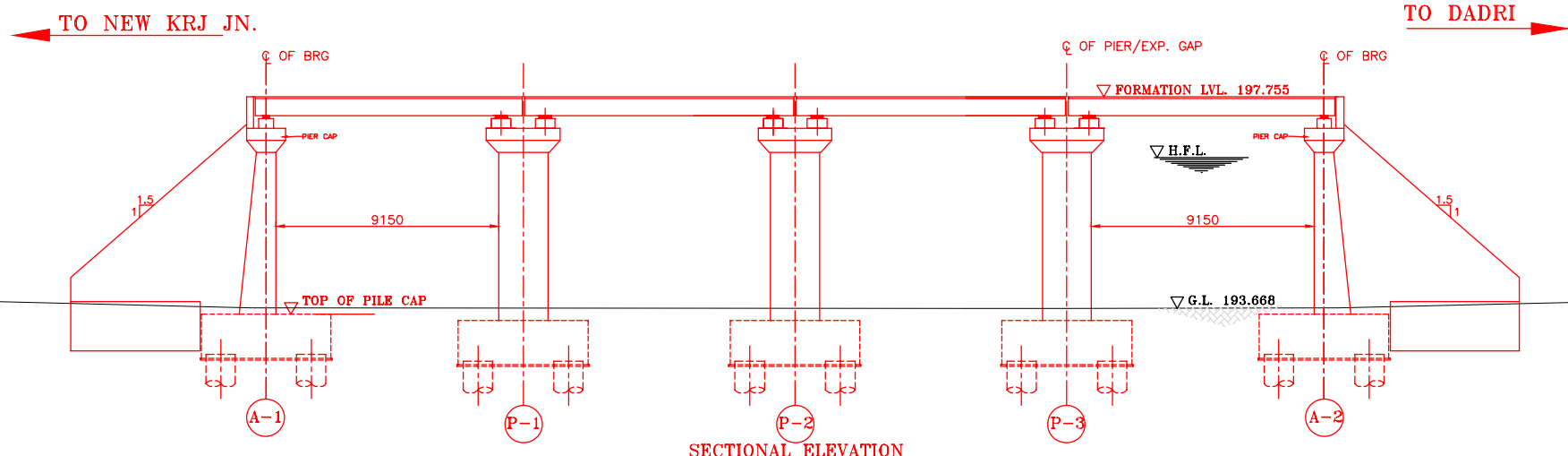
NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL. UNDER THE BEARING IN TWO LAYERS OF 8mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL ABUTMENT
15. STONE PITCHING SHALL BE SU 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK
18. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

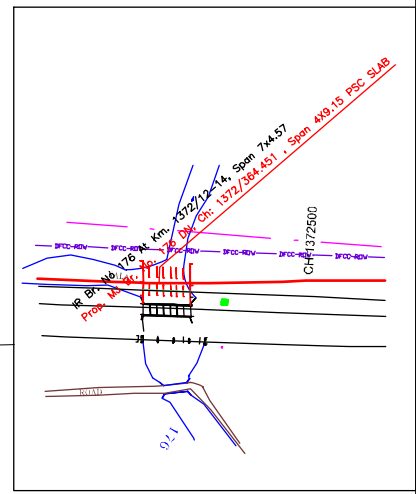


INDICATIVE DRAWING

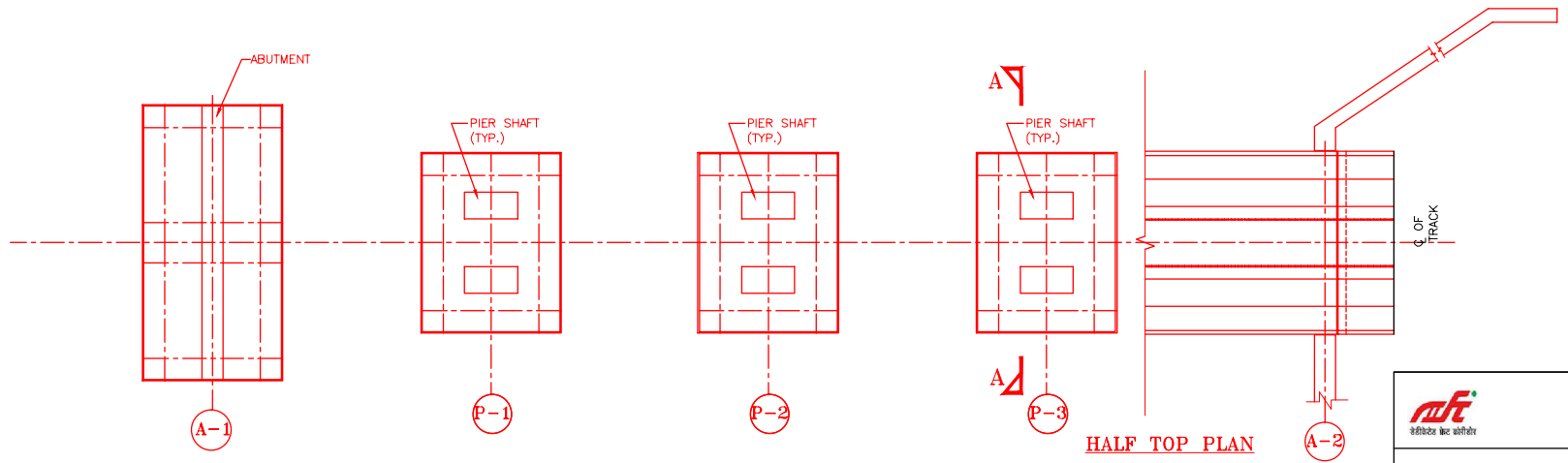
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		DADRI TO NEW KRJ JN. FROM CH: 1413.856 TO CH: 1367.000				
STRUCTURE		CONTRACT PACKAGE - 302 PROPOSED MAJOR BR. NO. D-KRJ 26 SPAN (4X9.15m) AT CH. -1440				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	May 2015				SHEET 2 OF 2 AECOM/302/MJR/D-KRJ 26	R0



SECTIONAL ELEVATION




KEY PLAN



HALF TOP PLAN

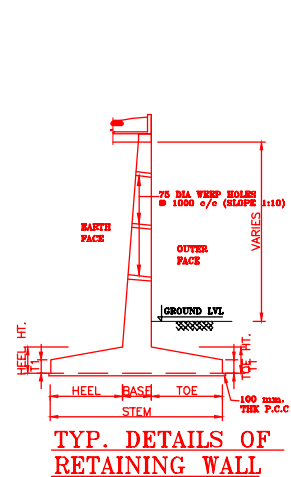
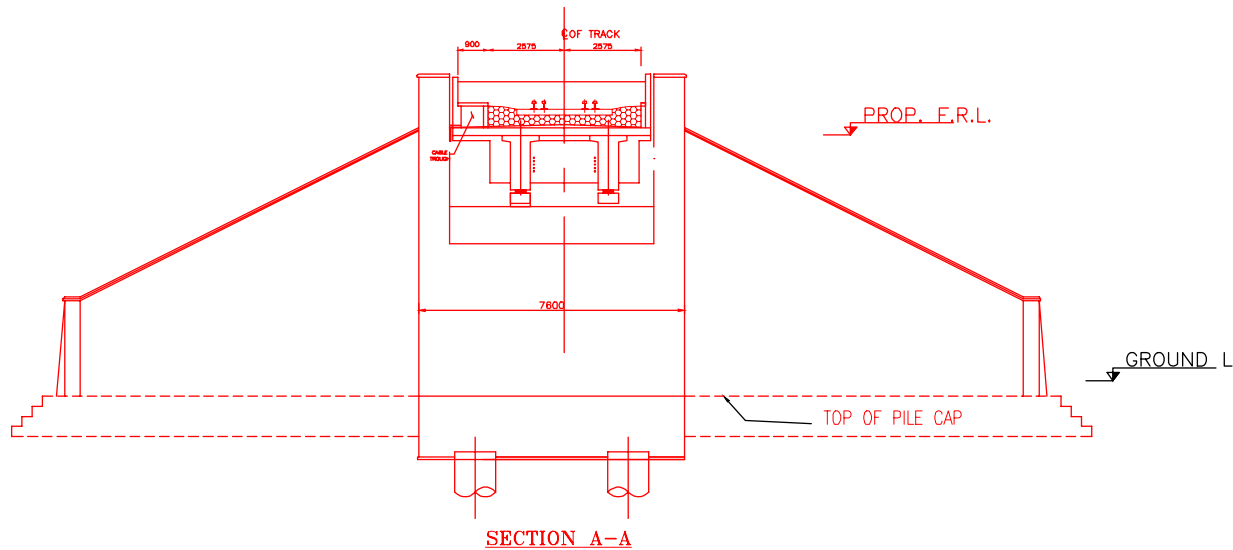
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.	
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA	
PROJECT		EASTERN CORRIDOR	
DADRI TO NEW KRJ JN. FROM CH: 1413.856 TO CH: 1367.000		CONTRACT PACKAGE - 302	
STRUCTURE		PROPOSED MAJOR BR. NO. 176 DN SPAN (4X9.15m) AT CH. 1372/364.451	
TITLE		GENERAL ARRANGEMENT DRAWING	

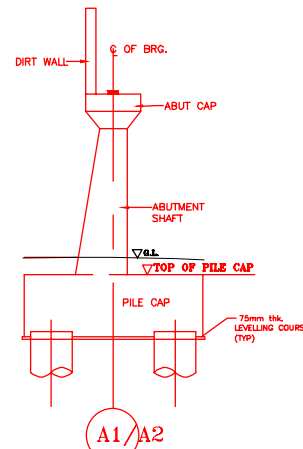
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	May 2015				SHEET 1 OF 2 AECOM/302/MJR/176 DN	R0

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF P.S.C.
 - v) RELEVANT BIS CODES.
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
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16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INEVITABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.



TYP. DETAILS OF RETAINING WALL



DETAIL OF ABUTMENT

INDICATIVE DRAWING



DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

GENERAL CONSULTANT **AECOM** Asia Co. Ltd.
9TH FLOOR, INFINITY TOWER C DLF CYBER CITY
DLF PHASE II GURGAON 122002, INDIA

EASTERN CORRIDOR

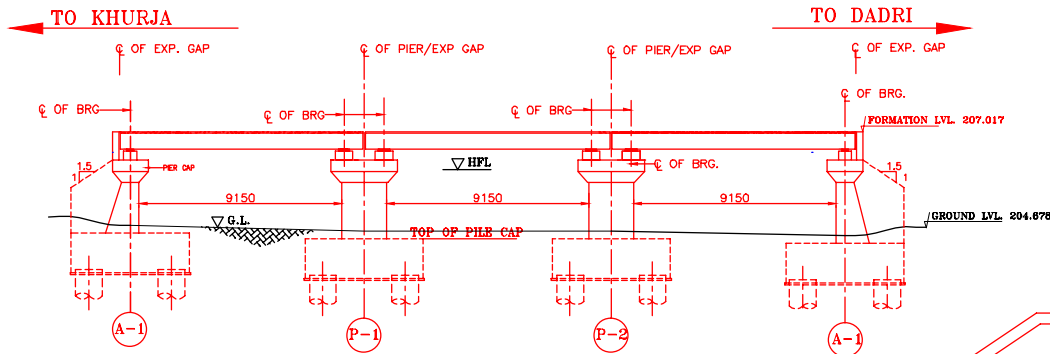
PROJECT **DADRI TO NEW KRJ JN.**
FROM CH: 1413.856 TO CH: 1367.000

CONTRACT PACKAGE - 302

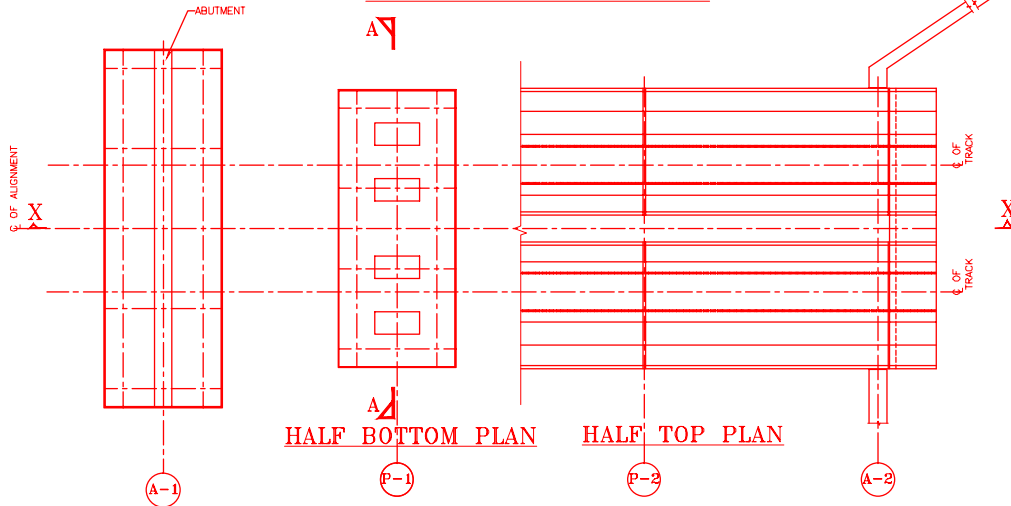
STRUCTURE **PROPOSED MAJOR BR. NO. 176 DN**
SPAN (4X9.15m) AT CH. 1372/364.451

TITLE **GENERAL ARRANGEMENT DRAWING**

SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	May 2015				SHEET 2 OF 2 AECOM/302/MJR/176 DN	R0

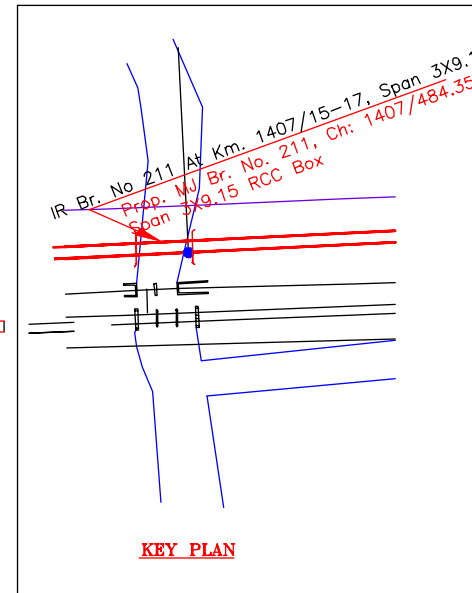


SECTIONAL ELEVATION X-X



HALF BOTTOM PLAN

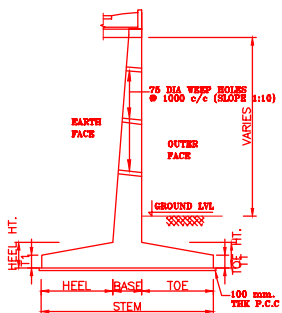
HALF TOP PLAN



KEY PLAN

NOTES:-

- ALL DIMENSIONS ARE IN MM AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
- LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
- MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
- THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
- IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
- IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
- IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
- WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
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TYP. DETAILS OF RETAINING WALL

INDICATIVE DRAWING



DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

GENERAL CONSULTANT AECOM Asia Co. Ltd.
 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY
 DLF PHASE II GURGAON 122002, INDIA

EASTERN CORRIDOR

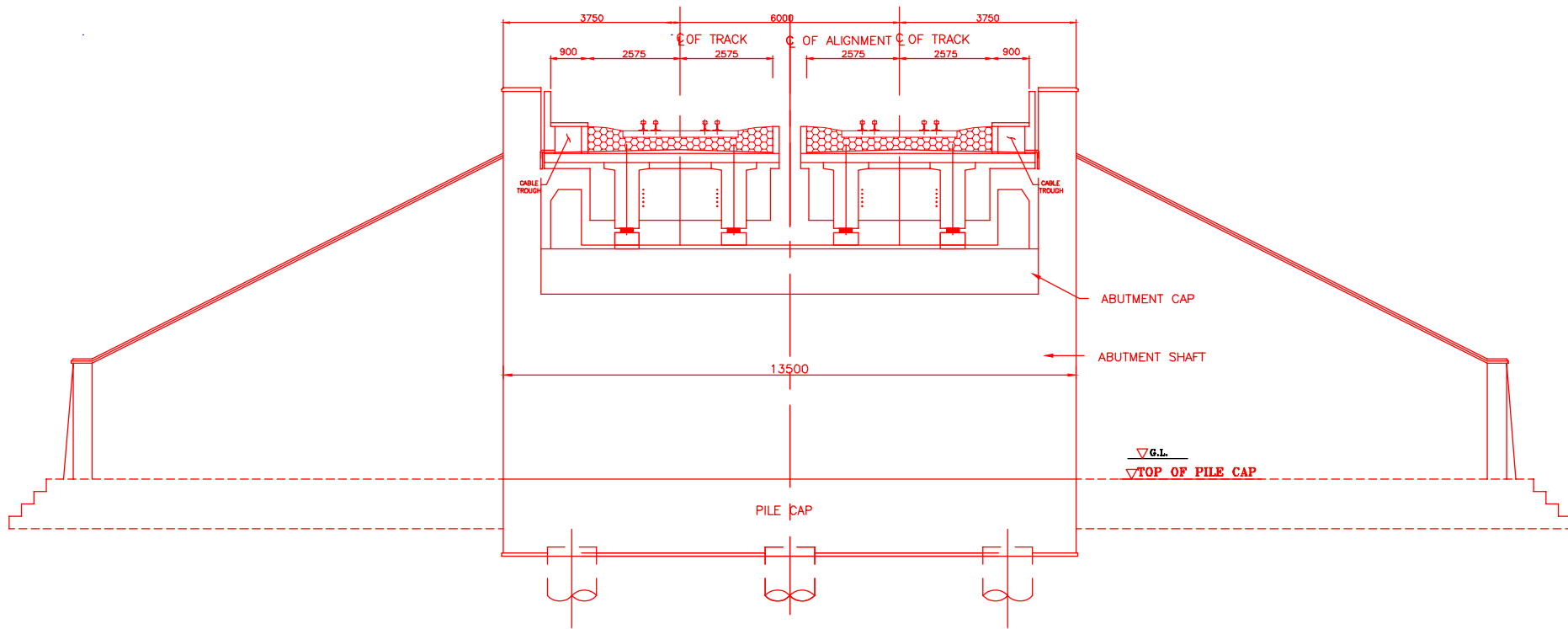
PROJECT DADRI TO KHURJA
 FROM CH: 1413.856 TO CH: 1367.000

CONTRACT PACKAGE - 302

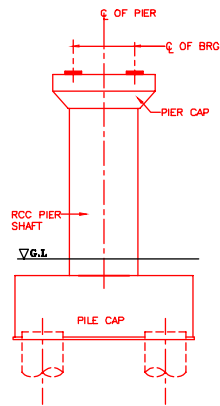
STRUCTURE PROPOSED MAJOR BR. NO. 211
 SPAN (3X9.15m) AT CH. 1407/484.357

TITLE GENERAL ARRANGEMENT DRAWING

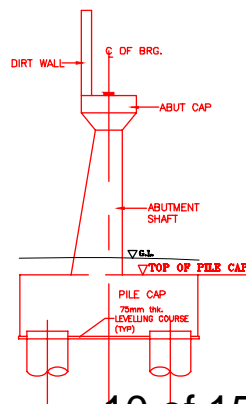
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	May 2015				SHEET 1 OF 2 AECOM/302/MJR/211	R0



SECTION A-A



DETAIL OF PIER



DETAIL OF ABUTMENT

10 of 15
A1/A2

INDICATIVE DRAWING



DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

GENERAL CONSULTANT AECOM Asia Co. Ltd.
AECOM 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY
 DLF PHASE II GURGAON 122002, INDIA

EASTERN CORRIDOR

PROJECT DADRI TO KHURJA
 FROM CH: 1413.856 TO CH: 1367.000

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TITLE GENERAL ARRANGEMENT DRAWING

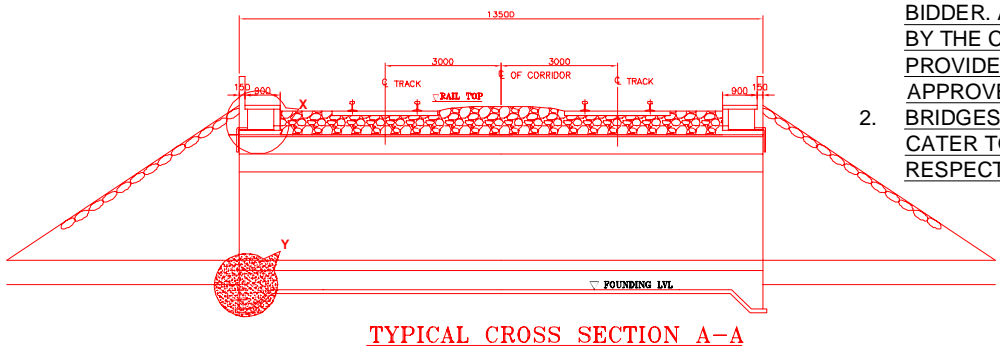
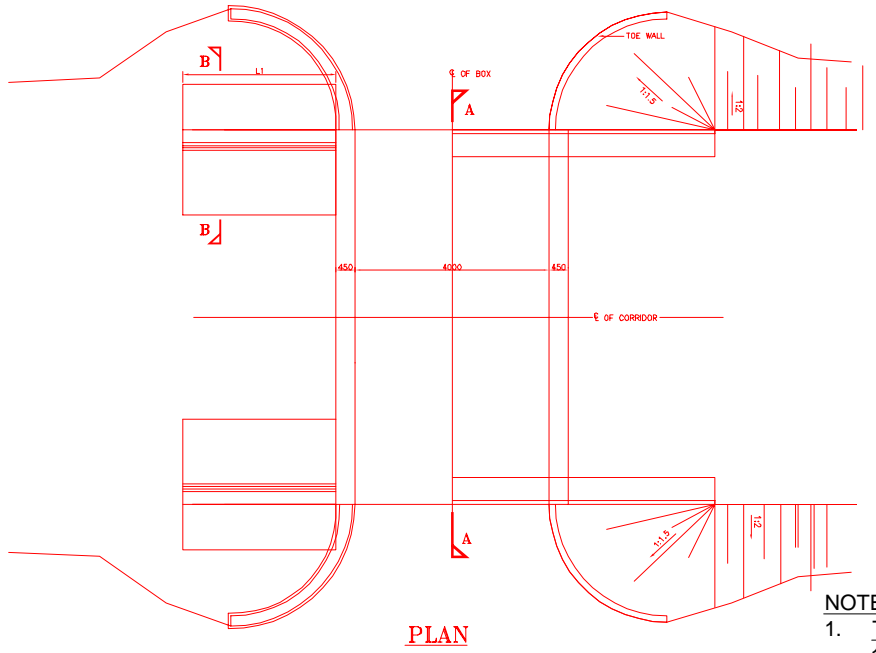
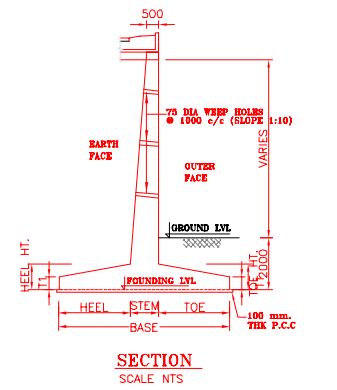
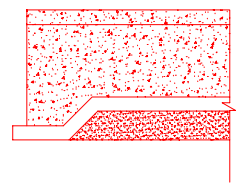
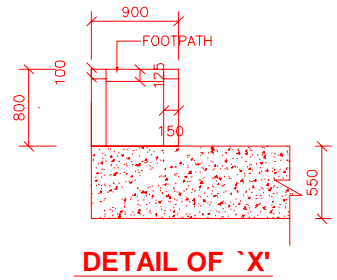
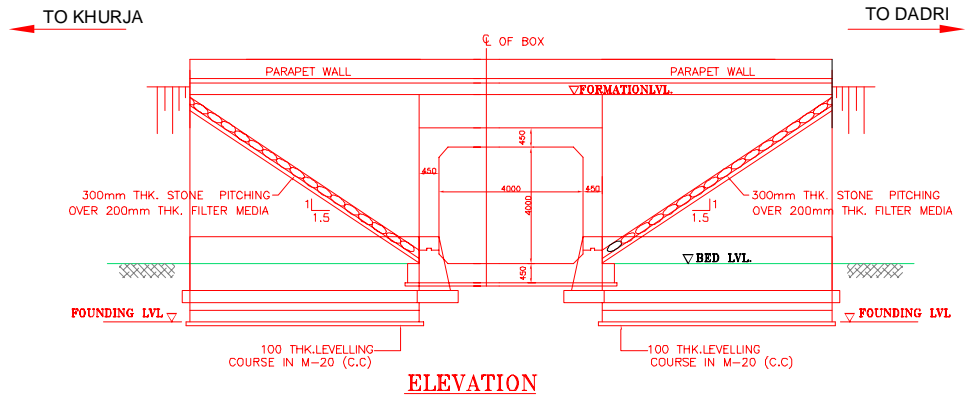
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	May 2015				SHEET 2 OF 2 AECOM/302/MJR/211	R0

Contract Package: 302

DADRI TO KHURJA

From Km 1413.856 to 1367.000

GAD OF MINOR BRIDGES



NOTE:-

- THIS DRAWING DEPICTS GA OF MINOR BRIDGE OF SPAN 1x4x4 AND IS MEANT ONLY FOR THE GUIDANCE OF THE BIDDER. ALL THE MINOR BRIDGES SHALL BE DESIGNED BY THE CONTRACTOR AS PER THE GUIDELINES PROVIDED IN BID DOCUMENT AND SHALL BE GOT APPROVED FROM THE ENGINEER.
- BRIDGES IN STATION YARDS SHALL BE DESIGNED TO CATER TO THE NUMBER OF TRACKS SHOWN IN RESPECTIVE STATION YARD.

- NOTES:-**
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
 - WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
 - DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
 - TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
 - SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

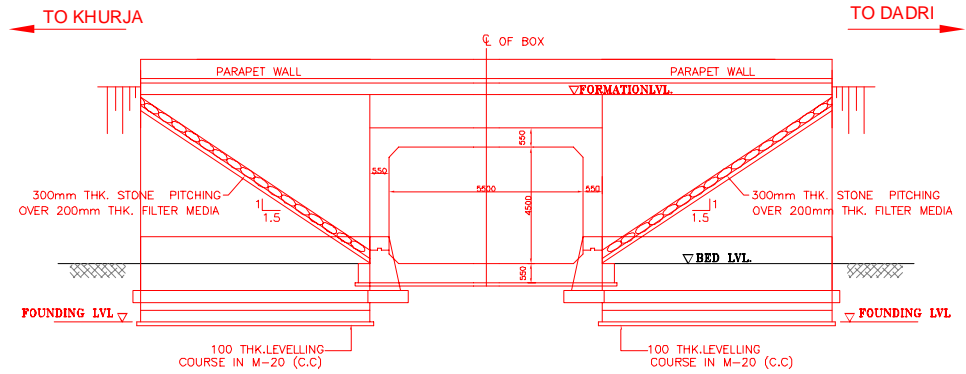
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.	
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA	
PROJECT		EASTERN CORRIDOR DADRI TO KHURJA FROM CH: 1413.856 TO CH: 1367.000	
STRUCTURE		CONTRACT PACKAGE - 302 TYPICAL DRAWING OF MINOR BRIDGE SPAN 1 X 4.00 X 4.00M	
TITLE		GENERAL ARRANGEMENT DRAWING	
SCALE	DATE	DRAWN BY	CHECKED BY
NTS			
APPROVED BY	DRG. NO.	REV.	
	AECOM/302/MNR/TYPICAL/1		

Contract Package: 302

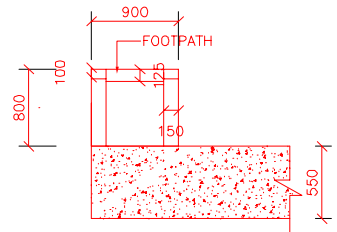
DADRI TO KHURJA

From Km 1413.856 to 1367.000

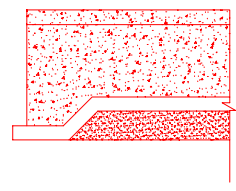
GAD OF MINOR RUB



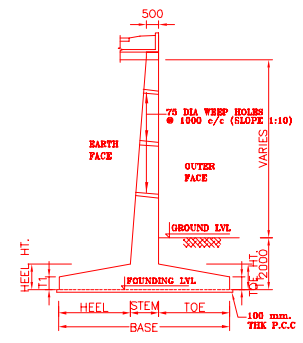
ELEVATION



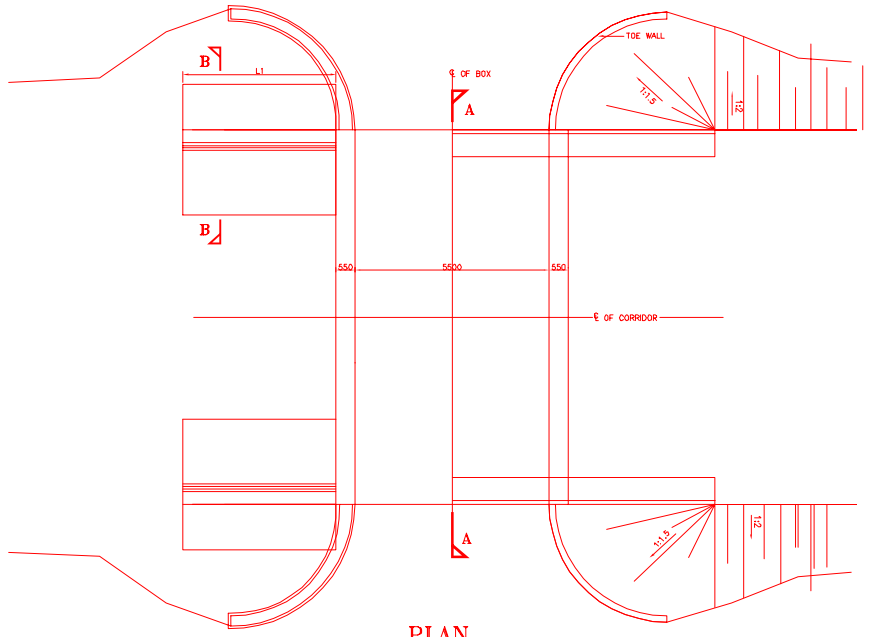
DETAIL OF 'X'



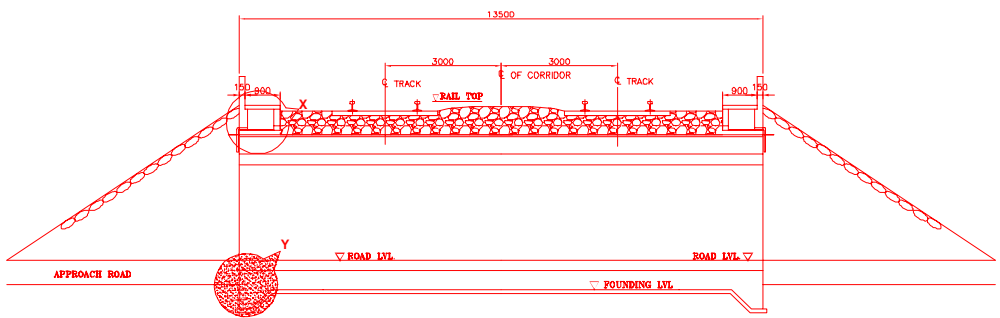
DETAIL OF 'Y'



SECTION
SCALE NTS



PLAN





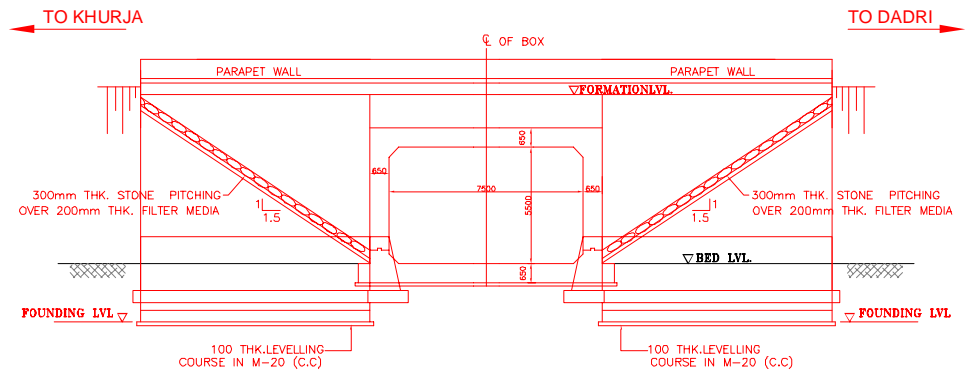
TYPICAL CROSS SECTION A-A

NOTES:-

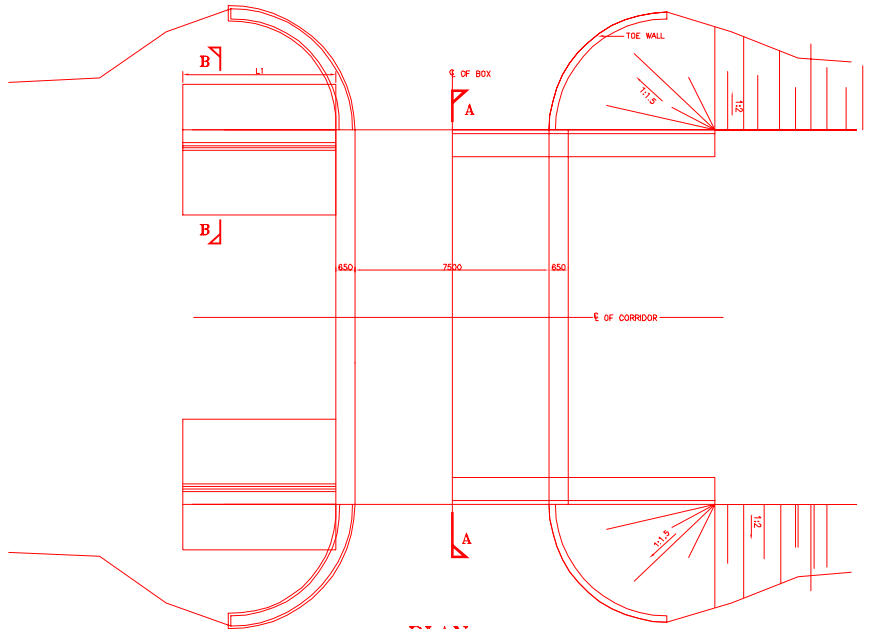
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
- TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
- WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/BALAST RETAINER.
- DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
- TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
- THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
- PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
- SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
- SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

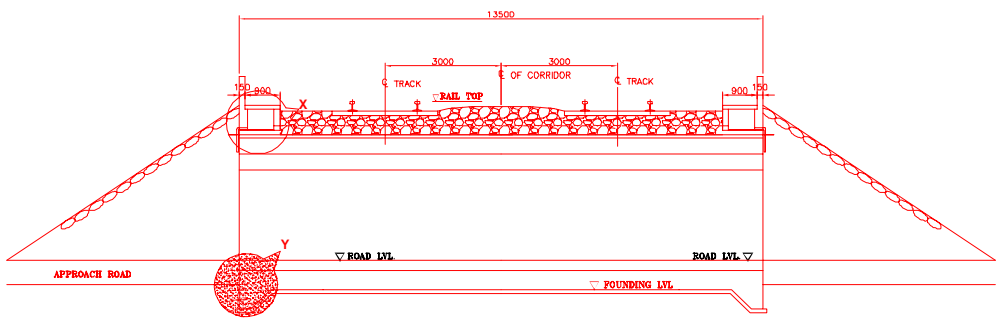
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		DADRI TO KHURJA FROM CH: 1413.856 TO CH: 1367.000				
		CONTRACT PACKAGE - 302				
STRUCTURE		TYPICAL DRAWING OF RUB SPAN 1 X 5.5 X 4.5M				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS					AECOM/302/MNR-RUB/TYPICAL/2	



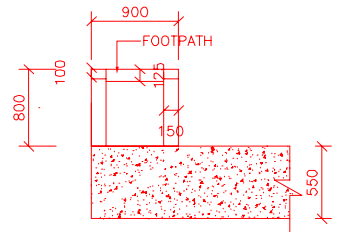
ELEVATION



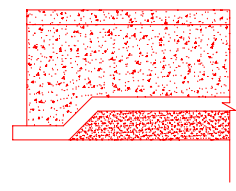
PLAN



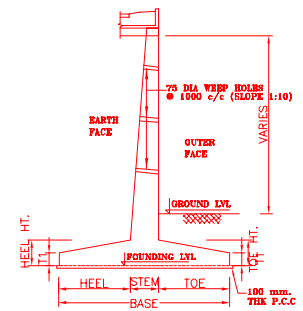
TYPICAL CROSS SECTION A-A



DETAIL OF 'X'



DETAIL OF 'Y'




SECTION
SCALE NTS

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
3. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
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INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
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SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS					AECOM/302/MNR-RUB/TYPICAL/1	