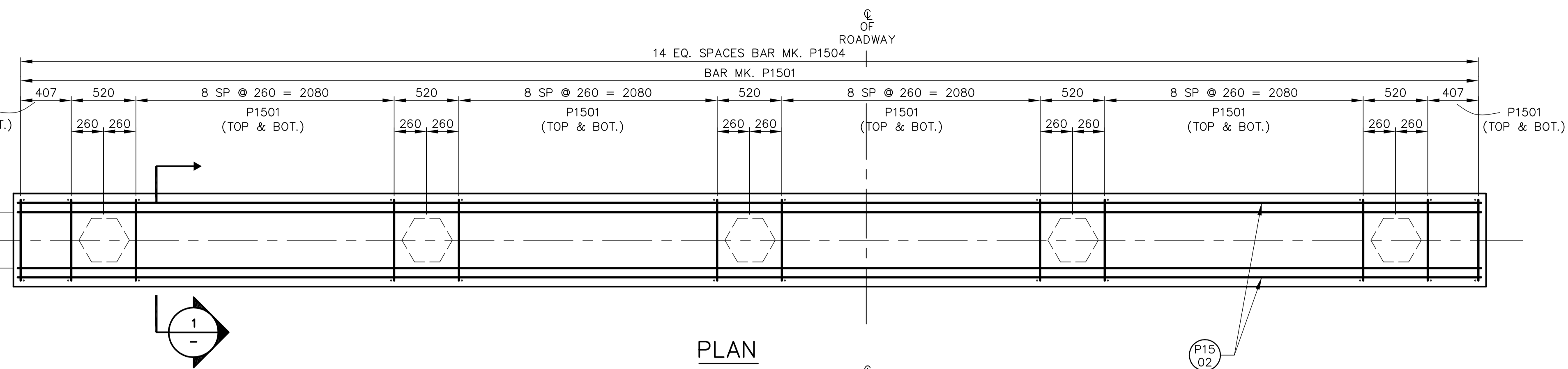
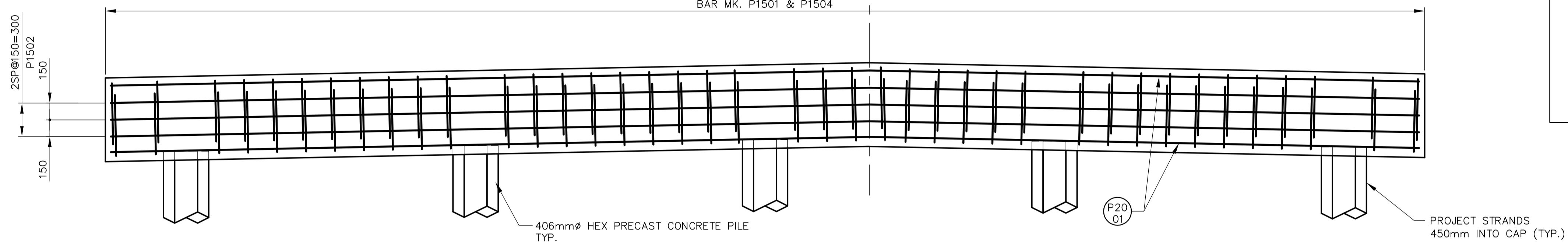


5SP@90=450
P2001



PLAN

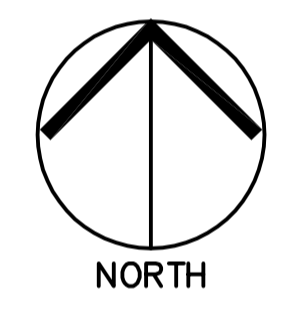
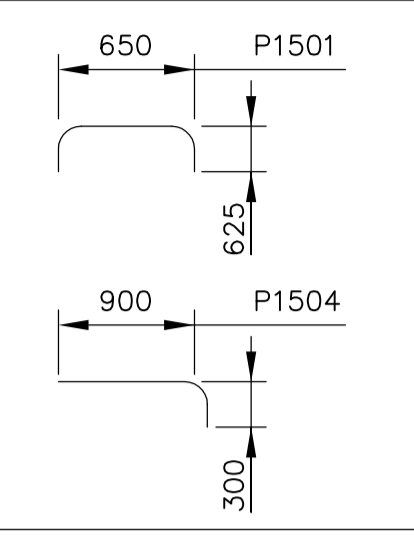


ELEVATION
SCALE 1:25

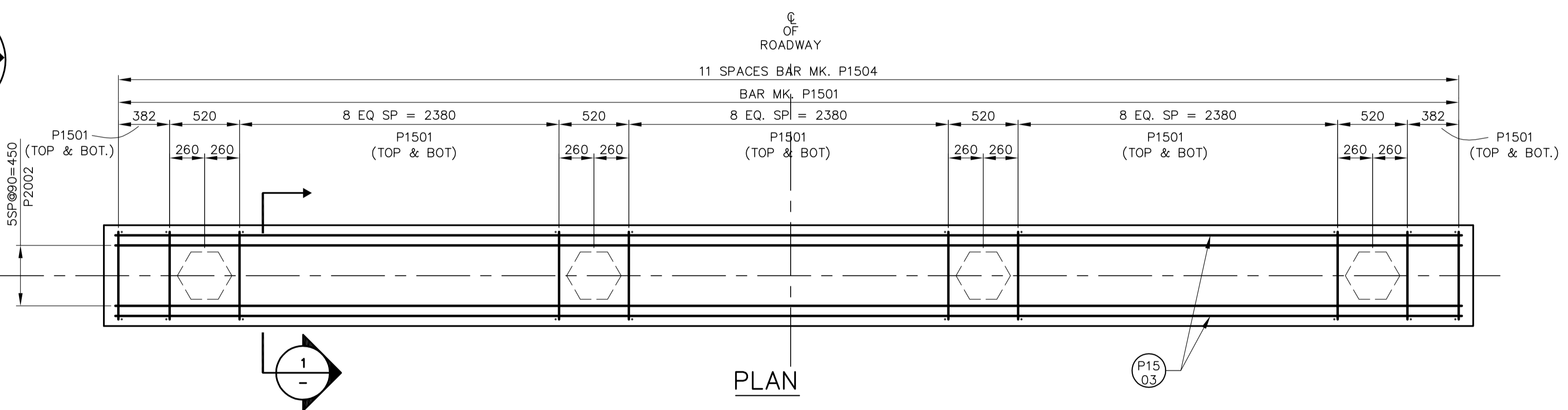
STRAIGHT BARS				BENT BARS			BENDING DIAGRAM
MK.	No.	LENGTH	MASS	MK.	No.	LENGTH	
P1502	6	11750	111	P1501	142	1900	423
P1503	6	10100	95	P1504	27	1200	51
P2001	12	11750	332				
P2002	12	10100	285				
TOTAL MASS OF REINFORCING STEEL							1296 kg.
TOTAL VOLUME OF STRUCTURAL CONCRETE (ABUTMENTS)							12.41 m ³
TOTAL NUMBER OF HEX. PRECAST PILE							9

NOTES:

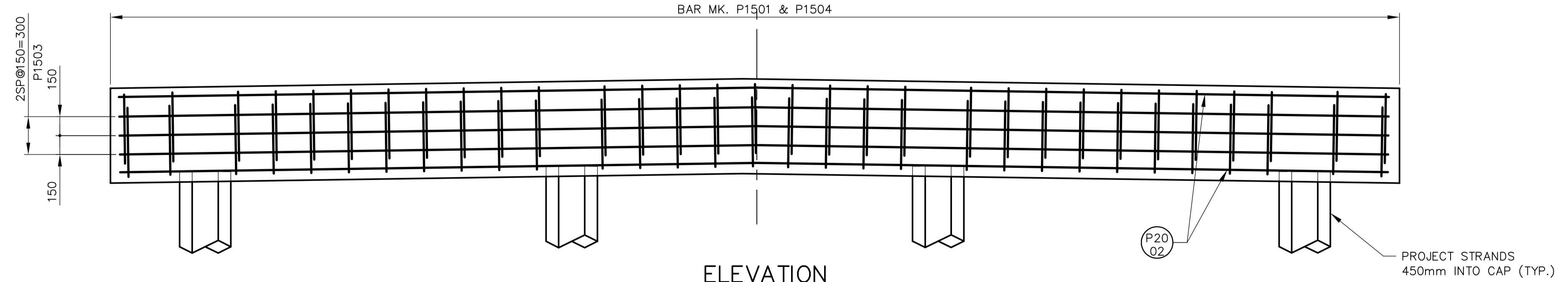
- ALL DIMENSIONS GIVEN ARE OUT TO OUT, EXCEPT RADII ARE INSIDE DIMENSIONS.
- ALL REINFORCING STEEL SHALL BE DEFORMED REINFORCING, UNLESS NOTED OTHERWISE IN THE ABOVE BILL OF REINFORCING STEEL.
- ALL REINFORCING STEEL SHALL CONFORM TO CAN/CSA G30.16-M92 GRADE 400W UNLESS NOTED OTHERWISE IN THE ABOVE BILL OF REINFORCING STEEL.
- LIKE BARS SHALL BE BUNDLED, SECURELY TIED AND IDENTIFIED AS TO MARK AND SITE No. BY APPROPRIATE MEANS. ALL OTHER ITEMS SHALL BE IDENTIFIED IN A SIMILAR FASHION.



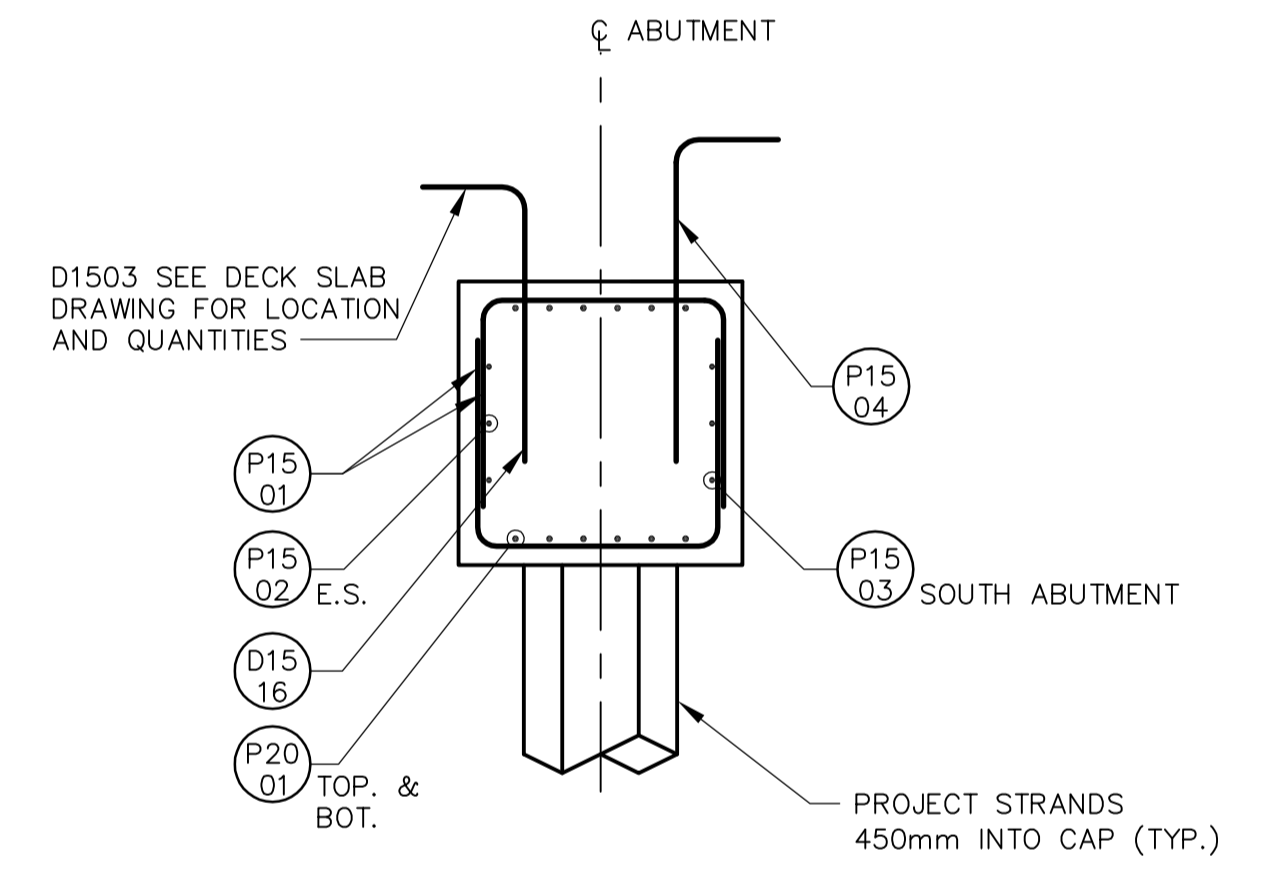
5SP@90=450
P2002



PLAN



ELEVATION
SCALE 1:25



1 SECTION
SCALE 1:20

APEGN
Certificate of Authorization
Earth Tech Canada Inc.
No. 730 Expiry: April 30, 2006

B.M. ELEV.	NO.	REVISIONS	DATE	BY	DATE
	00	ISSUED FOR TENDER	06/02/03	KC	

Frederickson Cooper
ARCHITECTS

DESIGNED BY: AP
DRAWN BY: KC
SCALE: AS NOTED

ENGINEER'S SEAL
PROVINCE OF MANITOBA
ORIGINAL SIGNED BY
E. B. LOEWEN
Member 8325
06/02/06
REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: EBL
APPROVED BY: D.J. TANIGUCHI
RELEASED FOR CONSTRUCTION BY: R. SOROKOWSKI

CONSULTANT DRAWING NO.
WN-S0481

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WATER TREATMENT PLANT
AQUEDUCT BRIDGES
FOUNDATIONS & CONCRETE STRUCTURES

STRUCTURAL
MIDDLE BRIDGE
ABUTMENT REINFORCING DETAILS

CITY FILE NUMBER

SHEET 3 OF 7

CITY DRAWING NUMBER

1-060IN-A-S0481-001-00D