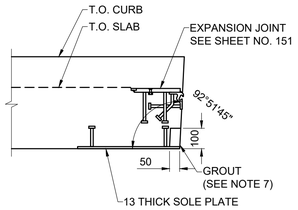
NOTES:

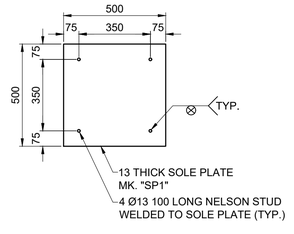
1. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 20 mm CHAMFER UNLESS NOTED OTHERWISE.
2. SLAB CONCRETE TOLERANCES: ±5 mm, CROSS SECTION ±2 mm.
3. SLAB DIMENSIONS ARE BASED ON A 20° C TEMPERATURE AT RELEASE.
4. MINIMUM 90 DAYS MUST HAVE ELAPSED SINCE TIME OF TRANSFER OF PRESTRESSING FORCES INTO SLABS AND SLABS ERECTION.
5. THE PRESTRESSING STRANDS SHALL CONFORM TO CSA G279-M1982. PRESTRESSING STRAND SHALL BE 15.2 mm DIAMETER , 7 WIRE LOW RELAXATION UNCOATED STRANDS.
   MINIMUM TENSILE STRENGTH Fpu = 1860MPa

PRESTRESSING FORCE TABLE		
	SLAB TYPE I	SLAB TYPE II
JACKING FORCE PER STRAND	195.5 kN	195.5 kN
PRESTRESSING FORCE AFTER ALL LOSSES	181.5 kN	176.3 kN

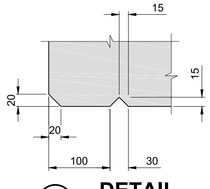
6. HALF OF STRANDS ARE EXTENDED 1000 BEYOND THE FACE OF GIRDER.
7. SLAB 2 AT THE EXPANSION JOINT SIDE RECESS CUT-OFF PRESTRESSING STRANDS 19mm SHY OF GIRDER END 50mm WIDE EXPANDED FOAM DOUGHNUT OR OTHER ACCEPTED MEANS. AFTER TRANSFER, CUT OFF STRAND AT FACE OF RECESS, CLEAN AND APPLY APPROVED EPOXY BONDING AGENT TO RECESS SURFACE , AND GROUT RECESS FLUSH WITH FINISHED END FACE OF GIRDER.
8. HANDRAIL ANCHOR INSERTS TO BE CAST INTO CURB AT THE REQUIRED LOCATIONS AS SHOWN IN THIS DRAWING. ALL DIMENSIONS OF THE HANDRAIL ANCHOR INSERTS ARE TO THE CENTRELINE OF THE HANDRAIL BASE PLATE. (△D)
9. THE SLAB CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AS FOLLOW:
   AT TIME OF TRANSFER OF PRE-TENSIONING FORCES f'ci = 32 MPa.
   AT 28 DAYS f'c = 40 MPa.



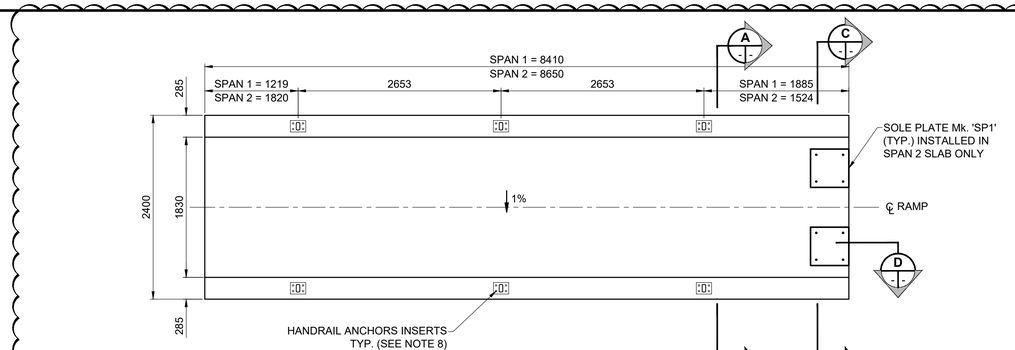
(D) SECTION
SPAN 2 AT EXPANSION JOINT
SCALE: 1:15



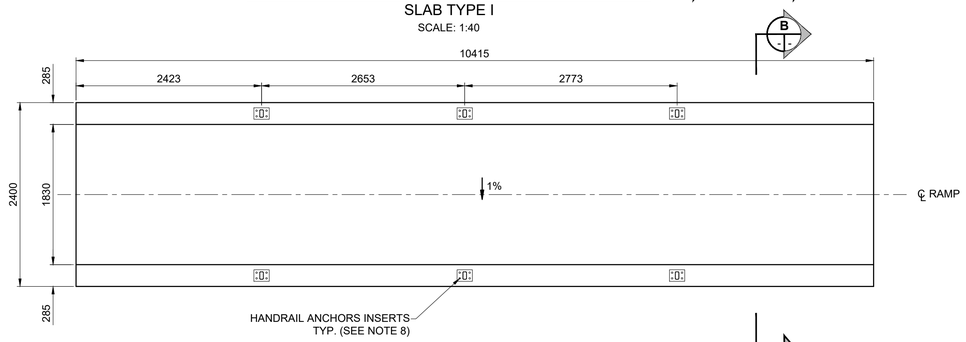
DETAIL - SOLE PLATE MK. "SP1"
SCALE 1:25



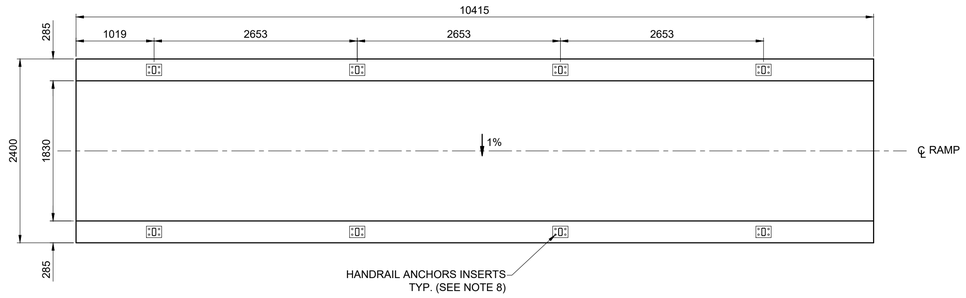
(1) DETAIL
DRIP GROVE
SCALE: 1:5



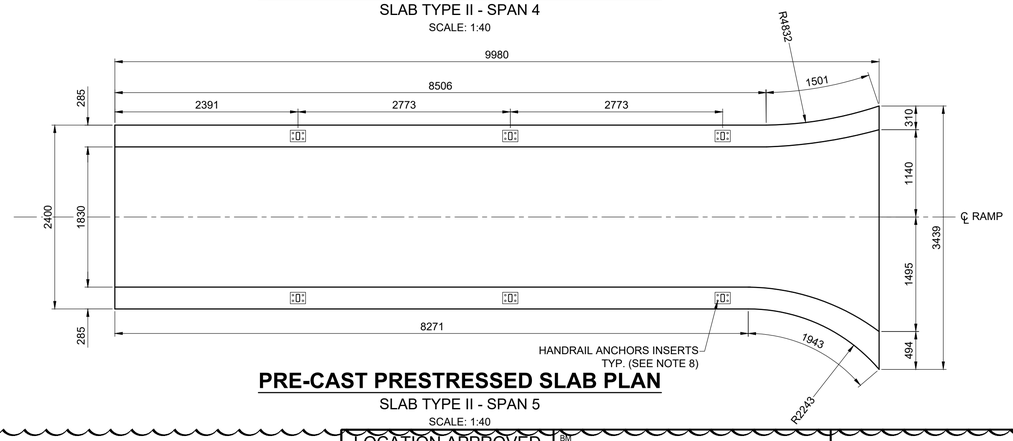
PRE-CAST PRESTRESSED SLAB PLAN
SLAB TYPE I
SCALE: 1:40



PRE-CAST PRESTRESSED SLAB PLAN
SLAB TYPE II - SPAN 3
SCALE: 1:40

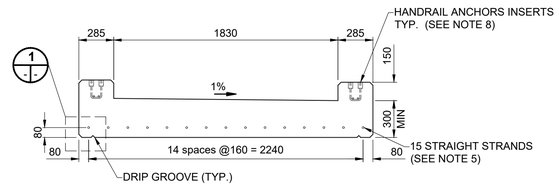


PRE-CAST PRESTRESSED SLAB PLAN
SLAB TYPE II - SPAN 4
SCALE: 1:40

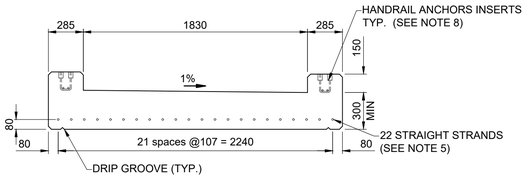


PRE-CAST PRESTRESSED SLAB PLAN
SLAB TYPE II - SPAN 5
SCALE: 1:40

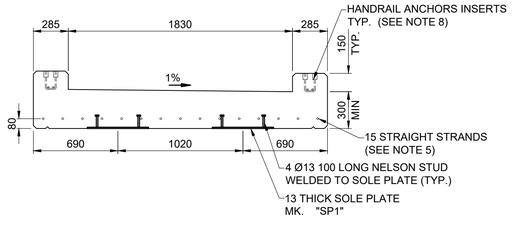
△D



(A) SECTION
SLAB TYPE I
SCALE: 1:25



(B) SECTION
SLAB TYPE II
SCALE: 1:25



(C) SECTION
SPAN 2
SCALE: 1:25

BID OPPORTUNITY No. 602-2018

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MORRISON HERSHFIELD
No. 1736

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED
UNDERGROUND STRUCTURES
SUPR. U/G STRUCTURES COMMITTEE — DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

BM ELEV			
D	ISSUED FOR ADDENDUM 1	18/10/05	BAP
C	ISSUED FOR TENDER	18/09/04	BAP
B	ISSUED FOR 95% DESIGN REVIEW	18/08/07	BAP
A	ISSUED FOR 50% DESIGN REVIEW	18/06/28	BAP
No.	REVISIONS	YY/MM/DD	BY

MORRISON HERSHFIELD

DESIGNED BY	YM	CHECKED BY	GQW
DRAWN BY	ALP	APPROVED BY	BAP
HOR SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
VERT SCALE	AS SHOWN		N/A
DATE		DATE	

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
G.Q. WEI
Member
38723
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT FILE NAME
W160034 - DD NR.DWG

Winnipeg

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

EMPRESS STREET PROJECT
PEDESTRIAN ACCESSIBILITY RAMPS
NORTH RAMP
PRESTRESSED SLAB DETAILS 1

CITY DRAWING NUMBER	
P-3494-147	
SHEET	OF
147	169
DRAWING No.	REV
147	D