

FILE NAME: 201604910.dwg

DATE: 2018.04.30

SHEET TITLE:

PROJECT No: 2016-049

ADDRESS: 3001 NOTRE DAME AVENUE

**STRUCTURAL NOTES:**

**GENERAL NOTES**

1. CITY OF WINNIPEG STANDARDS AND SPECIFICATIONS APPLY TO ALL WORK.
2. DO NOT SCALE DRAWINGS.
3. LIVE LOAD = 20 PSF  
GROUND SNOW LOAD = 40 PSF

**REINFORCING STEEL**

1. REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CAN/CSA G30.18-M92, GRADE TO BE: 400 MPa - GALVANIZED
2. REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
3. TIE, SUPPORT AND SPACE ALL REINFORCING STEEL WITH PROPER APPROVED DEVICES DESIGNED FOR USE IN REINFORCED CONCRETE, TO PREVENT DISPLACEMENT OF REINFORCING AND ENSURE MINIMUM 1/2" OF CONCRETE COVER.

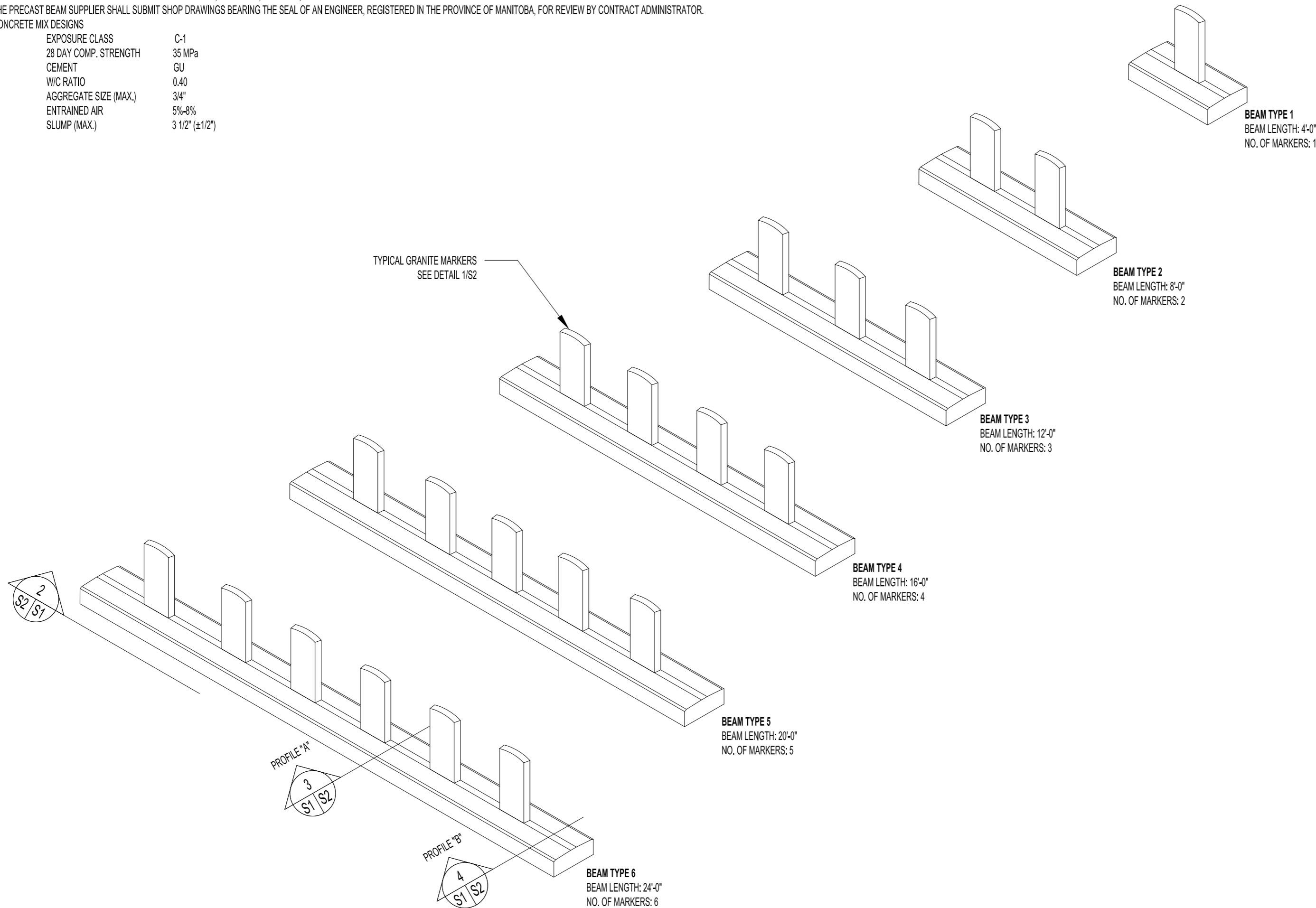
**CONCRETE**

1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CAN/CSA-A23.1 (LATEST EDITION), SEE BELOW FOR MIX REQUIREMENTS.
2. MIX WATER TO BE POTABLE. CALCIUM CHLORIDE SHALL NOT BE USED
3. ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE DESIGN ENGINEER. CALCIUM CHLORIDE SHALL NOT BE USED.
4. DESIGN, FABRICATE AND ERECT FORMWORK IN ACCORDANCE WITH CAN/CSA-S269.3-M92. ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO REMOVAL.
5. THE PRECAST BEAM SUPPLIER SHALL SUPPLY ALL ANCHORS, BRACKETS, HANGERS, BEARING PADS AND LIFTING HOOKS NECESSARY FOR INSTALLATION OF THE BEAMS
6. THE PRECAST BEAM SUPPLIER SHALL SUBMIT SHOP DRAWINGS BEARING THE SEAL OF AN ENGINEER, REGISTERED IN THE PROVINCE OF MANITOBA, FOR REVIEW BY CONTRACT ADMINISTRATOR.
7. CONCRETE MIX DESIGNS

EXPOSURE CLASS	C-1
28 DAY COMP. STRENGTH	35 MPa
CEMENT	GU
W/C RATIO	0.40
AGGREGATE SIZE (MAX.)	3/4"
ENTRAINED AIR	5%-8%
SLUMP (MAX.)	3 1/2" (±1/2")

**NOTES:**

1. REFER TO TENDER DOCUMENTS FOR QUANTITY, LOCATIONS AND TYPE OF BEAMS TO BE INCLUDED IN CONTRACT.
2. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED GRANITE MARKER LOCATION AND BEAM SUPPORT LOCATION SITE MEASUREMENTS IN ACCORDANCE WITH THE SPECIFICATION PROCEDURES.
3. THESE DRAWINGS SHOW THE COMPLETED DETAILS. THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR THE DESIGN, FABRICATION, TRANSPORT, ERECTION AND REMOVAL OF TEMPORARY SUPPORTS AND FACILITIES AND THE EXECUTION OF CONSTRUCTION METHODS REQUIRED IN THEIR USE.
4. THE BEAMS SHOWN ON THIS DRAWING INCLUDE THE GRANITE MARKERS FOR INFORMATION PURPOSES ONLY. ALL REPLACEMENT BEAMS TO BE FABRICATED AND DELIVERED TO SITE WITHOUT MARKERS INSTALLED. CORING FOR MARKER MOUNTING DOWELS INTO THE BEAMS WILL BE PERFORMED ON-SITE BY CITY OF WINNIPEG EMPLOYEES.



0	ISSUED FOR CONSTRUCTION	JKR	APR 30 2018
No.	REVISION/DESCRIPTION	BY	DATE

SEAL

DRAWN	JKR	CHECKED	BDN	DESIGNED	BDN	APPROVED	BDN
DATE	2018.04.30	USER APPROVAL					

THE CITY OF WINNIPEG  
 PLANNING, PROPERTY AND  
 DEVELOPMENT DEPARTMENT  
 MUNICIPAL ACCOMMODATIONS DIVISION  
 3-65 GARRY STREET, R3C 4K4

PROJECT  
**BROOKSIDE CEMETERY  
 FIELD OF HONOUR RESTORATION**  
 3001 NOTRE DAME AVENUE

SHEET TITLE  
**PRECAST BEAMS**

**ISOMETRIC VIEWS OF REINFORCED PRECAST CONCRETE BEAM LENGTHS**  
 SCALE: 1 1/2"=1'-0"

SCALE	PROJECT No:	SHEET No:
AS SHOWN	2016-049	<b>S1</b>