

NOTE: \* DIMENSION TO CONFIRM SITE CONDITION

PLAN AT ENTRY LEVEL

# NOTES:

### GENERAL

- 1. THE CONTRACTOR SHALL READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL DRAWINGS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS.
- 2. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCING WITH CONSTRUCTION WORK.
- 3. TEMPORARY SUPPORT AND BRACING FOR CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR U.N.O.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFEGUARDING AND PROTECTION OF THE EXISTING FACILITIES
- AND UTILITIES WHICH MAY BE AFFECTED BY THE WORK OF THIS CONTRACT.

  5. ALL WORK SHALL CONFORM TO THE MOST RECENT MANITOBA BUILDING CODE AND THE ASSOCIATING NATIONAL
- BUILDING CODE.

  6. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION".
- 7. DO NOT SCALE FROM THE DRAWINGS.

#### STRUCTURAL STEEL

- 1. STRUCTURAL STEEL WORK SHALL CONFORM TO CSA S16-14.
- ALL FABRICATION, ERECTION, AND WELDINGS SHALL BE IN ACCORDANCE WITH THE LATEST CODES AND STANDARDS.
- 3. ALL STRUCTURAL SHAPES SHALL CONFORM TO CSA G40.21-13 GRADE 350W.
- 4. ALL STRUCTURAL PLATES SHALL CONFORM TO CSA G40.21-13 GRADE 300W.
- 5. CONNECTION DETAILS NOT SHOWN ON DRAWINGS SHALL BE DESIGNED UNDER THE SUPERVISION OF AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE WHERE THE PROJECT IS LOCATED.
- 6. UNLESS NOTED OTHERWISE, DESIGN ALL CONNECTIONS FOR NON-COMPOSITE BEAMS FOR 50% OF THE SHEAR RESISTANCE OF THE BEAM AND USE A MINIMUM OF 3-19 mm DIA BOLTS IN EACH BOLTED CONNECTION.
- 7. ALL STRUCTURAL STEEL AND CONNECTIONS, INCLUDING ANCHOR BOLTS EXPOSED TO ENVIRONMENT TO BE
- 8. THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS PRIOR FOR ENGINEER IN RECORD TO REVIEW PRIOR TO FABRICATION.
- 9. THE CONTRACTOR SHALL ARRANGE FOR MATERIALS AND WORKMANSHIP TESTING BY AN INDEPENDENT
- INSPECTION FIRM.

  10. WELDERS' CERTIFICATES; ORGANIZATION CERTIFIED BY THE CANADIAN WELDING BUREAU IN ACCORDANCE WITH
- CSA W47.1-09 (R2014).

  11. ALL STRUCTURAL STEEL TO BE GALVANIZED TO CSA G164.2 ASTM A123/A123M-17.
- 12. SHOP GALVANIZING: HOT DIPPED GALVANIZING WITH A MINIMUM COATING OF 700 g/m².
- 13. TOUCH UP DAMAGED GALVANIZED COMPONENTS WITH COLD GALVANIZING SPRAY.

## ALUMINUM CHECKER PLATE HATCH OPENING COVERS

- 1. ALUMINUM TO BE 6061-T6 FOR STRUCTURAL APPLICATION
- 2. PANEL TO BE DESIGNED FOR UNIFORM DISTRIBUTED LOAD OF 4.8 KPA WITH MAXIMUM DEFLECTION OF 1 mm
- 3. PANEL TO BE DESIGNED FOR CONCENTRATED LOAD OF 10 kN APPLIED OVER AREA OF 25X25 mm AT ANY LOCATION WITH MAXIMUM DEFLECTION OF 2.54 mm.
- 4. LIFTING HANDLE TO BE RECESSED.

### CONCRETE SLAB CUT

1. NO OVER SAW-CUT IS ALLOWED

## CONCRETE BEAM CORING

1. NO CORING THROUGH CONCRETE BEAM MAIN REINFORCING IS ALLOWED.

## CAST-IN-PLACE CONCRETE

- CONC. MATERIAL, QUALITY, MIXING, PLACING, FORMWORK, AND OTHER CONSTRUCTION PRACTICES TO CONFORM TO CSA A23.1/A29.2.
- 2. ALL CONC. SHALL BE NORMAL WEIGHT CONC.
- 3. ADMIXTURES CONTAINING CALCIUM CHLORIDE ARE NOT PERMITTED.
- 4. CONC. STRENGTH AND MIX SPECIFICATIONS ARE AS FOLLOWS:

EXP. CLASS	SUPPLY AND USE	W/C RATIO	STRENGTH	CEMENT TYPE	SLUMP	MAX. AGG. SIZE	AIR ENTRAINMENT	MAX. FLY ASH CONTENT
N	CONC. TOPPING FOR INTERIOR FLOOR DECK	0.55	25 MPa @ 28 DAYS	GU	100 mm ± 20 mm	10 mm	NONE REQ.	20%
C1	EXT. CONC STEP	0.4	35 MPa @ 28 DAYS	GU	100 mm ± 20 mm	19 mm	5-8%	20%

- 5. DO NOT ADD WATER TO CONC. ON SITE UNLESS AUTHORIZED BY SUPPLIER.
- 6. PROTECT CONC. FROM ADVERSE WEATHER CONDITIONS.
- 7. WHEN THE AMBIENT TEMPERATURE IS AT OR ABOVE 25°C OR WHEN THERE IS A PROBABILITY OF THE AMBIENT TEMP. RISING TO OR ABOVE 25°C, HOT WEATHER REQUIREMENTS APPLY. MOIST CURE CONC. ONLY. CURING CONPOUND IS NOT PERMITTED.

Γ	<b>ZAPEGI</b>
	Certificate of Authorization  Dillon Consulting Limited (MB)
	No. 1789 Date:

					'I'Manage			ENGINEER'S SEAL		
							LON			
					DESIGNED BY	NR	CHECKED BY	MBL		
					DRAWN BY	DJB	APPROVED BY	МН		
					HOR. SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION			
	0	ISSUED FOR TENDER	06/29/18	NR	VERTICAL AS SHOWN			CONSULTANT PROJECT NUMBER		
J	NO.	REVISIONS	DATE	BY	DATE	JUNE 2018	DATE		18-6936	

Winnipeg

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

HAWTHORNE WASTEWATER PUMPING	CITY DRAWING NUMBER 1-0145L- S0002-001		
STATION UPGRADES	SHEET 05	of 21	
STRUCTURAL - ENTRY LEVEL PLAN	CONSULTANT	DRAWING NUMBER	
AND STRUCTURAL NOTES		S-01	

36-01-S-CON-S01.d

NOT FOR CONSTRUCTION