GENERAL NOTES

1. READ THE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER PERTINENT CONTRACT DOCUMENTS.
2. ALL DIMENSIONS ARE IN METRIC UNITS UNLESS NOTED. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS AGAINST THE BUILDING, AND EXISTING SITE CONDITIONS BEFORE BEGINNING CONSTRUCTION AND REPORT DISCREPANCIES TO THE CONTRACT ADMINISTRATOR BEFORE PROCEEDING WITH THE WORK.
   DO NOT SCALE DRAWINGS.
3. THE DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH NBCC 2010 AND THE MANITOBA BUILDING CODE SUPPLEMENTS 2011 AND THE LATEST EDITIONS OF REFERENCED CODES AND STANDARDS THEREIN, UNLESS NOTED OTHERWISE. BUILDING IMPORTANCE CATEGORY: POST DISASTER.
4. CONTRACTOR TO CONFIRM WITH EQUIPMENT SUPPLIERS DIMENSIONS AND ALL OTHER CRITICAL DETAILS PRIOR TO CONSTRUCTION AND INSTALLATION. REPORT DISCREPANCIES AND OBTAIN APPROVAL FROM THE CONTRACT ADMINISTRATOR PRIOR TO CONSTRUCTION.
5. NOTIFY THE CONTRACT ADMINISTRATOR 48 HOURS IN ADVANCE FOR SITE REVIEW.
6. DRAWINGS SHOW COMPLETED STRUCTURES ONLY. PROVIDE TEMPORARY BRACING FOR CONSTRUCTION LOADING CONDITIONS AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LOADS SHOWN ON DRAWINGS.
7. CONSTRUCTION METHODS REQUIRING TEMPORARY SHORING, OR BRACING, SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR REVIEW. THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER, REGISTERED IN THE PROVINCE OF MANITOBA, TO PROVIDE ENGINEERING DESIGN AND TAKE RESPONSIBILITY FOR ANY SHORING AND BRACING OR OTHER WORK REQUIRING ENGINEERING CONSTRUCTION.
8. VERIFY LOCATION OF UNDERGROUND SERVICES AND BE RESPONSIBLE FOR DISRUPTIONS.

DESIGN LOADS

1. WIND LOADS - THE BUILDING STRUCTURE IS DESIGNED TO RESIST THE HORIZONTAL LOADS RESULTING FROM A 1/50 AVERAGE HOURLY WIND PRESSURE BASED ON A q=0.45 kPa WITH AN IMPORTANCE CATEGORY OF "POST DISASTER".
2. SNOW LOADS: THE ROOF AREA ARE DESIGNED BASED ON:
   GROUND SNOW LOAD = 1.9 kPa
   RAIN LOAD = 0.20 kPa
3. ROOF LOADS - REFER TO STRUCTURAL DRAWINGS SHEET 1-0660R-S0003-001.

CONCRETE

1. PROVIDE CONCRETE AND PERFORM WORK TO CSA A23.1. SUPPLY CONCRETE TO ALTERNATIVE (1) PERFORMANCE. THE CONTRACTOR SHALL HAVE A COPY OF THIS STANDARD ON SITE AT ALL TIMES.
2. TEST CONCRETE IN ACCORDANCE WITH CSA A23.2.

MASONRY

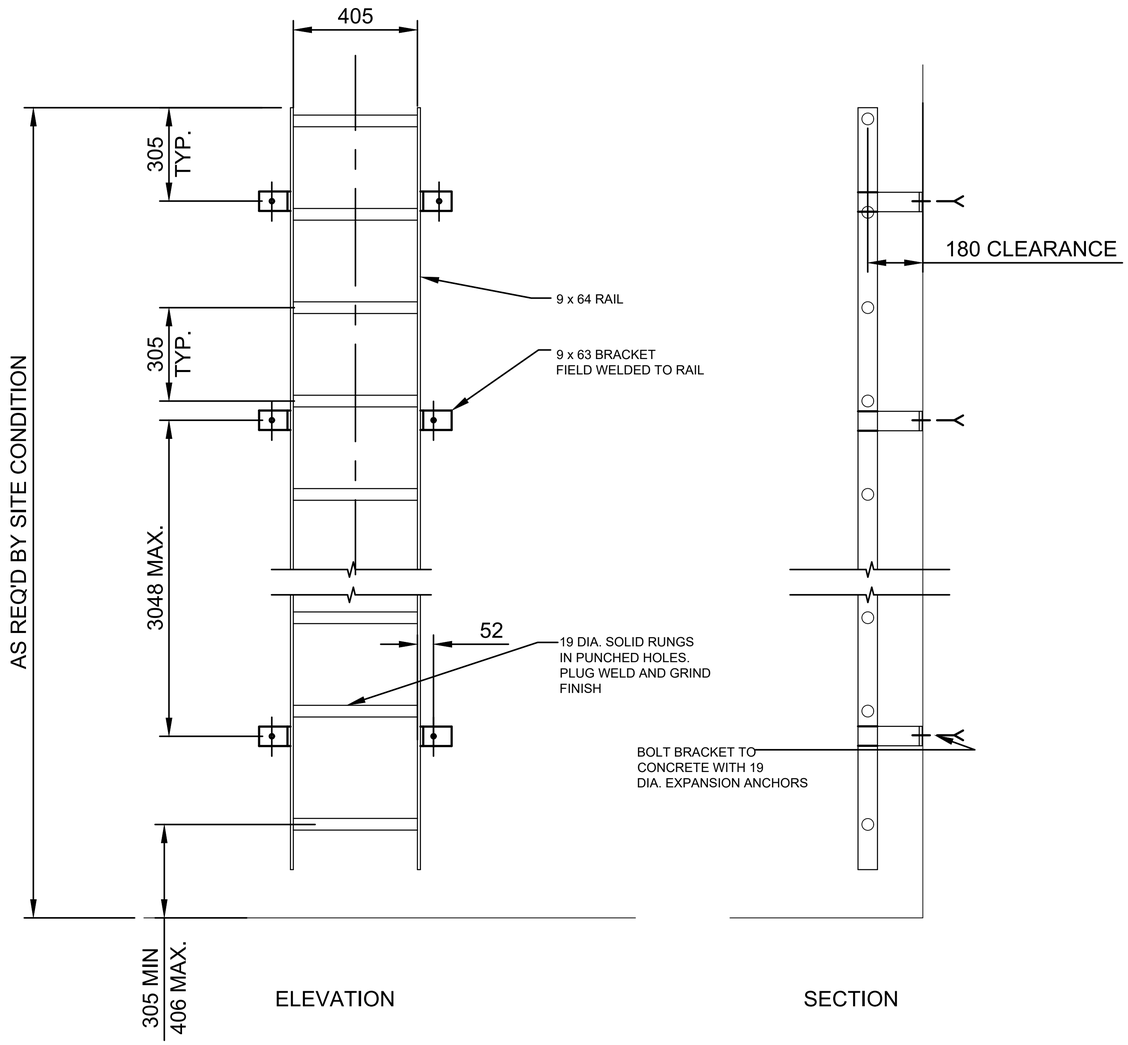
1. ALL MASONRY WORK SHALL CONFORM TO CSA S304.1, A371 AND TO DETAILS SHOWN ON DRAWINGS.
2. MASONRY BRICK THAT ARE BEING REPLACED TO MATCH EXISTING ON PUMP STATION AND SURGE TOWER
3. FOR PUMP STATION, MORTAR SHALL CONFORM TO CSA A179 AND SHALL BE TYPE 'S'. FOR THE SURGE TOWER, THE MORTAR SHALL BE TYPE 'N'. MORTAR TO MATCH EXISTING IN COLOR

STEEL FABRICATIONS

1. CHANNEL, ANGLE, STEEL PLATES, AND MISCELLANEOUS STEEL: CONFORMING TO CSA G40.21; TYPE W WITH A MINIMUM YIELD STRENGTH OF 300 MPa.
2. HOLLOW STRUCTURAL SHAPES (HSS): CONFORMING TO CSA G40.21, GRADE 350W CLASS-C; MINIMUM YIELD STRENGTH OF 350 MPa.
3. STRUCTURAL STEEL WIDE FLANGE: CONFORMING TO CSA G40.21, GRADE 350W WITH MINIMUM YIELD STRENGTH OF 350 MPa OR TO ASTM A992 OR ASTM A572 GRADE 50 WITH MINIMUM YIELD STRENGTH OF 345 MPa.
4. ANCHOR RODS: CONFORMING TO ASTM F1554.
5. WELDING MATERIALS: CONFORMING TO CSA W59.
6. WELDING OF ALL LOAD CARRYING ASSEMBLIES IS TO BE PERFORMED BY A FIRM CERTIFIED BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF CSA W47.1 IN DIVISION 2.
7. SUPPLY ALL COMPONENTS REQUIRED FOR PROPER ANCHORAGE OF STEEL FABRICATIONS. FABRICATE ANCHORAGE AND RELATED COMPONENTS OF SAME MATERIAL AND FINISH AS STEEL FABRICATIONS, UNLESS OTHERWISE SPECIFIED OR SHOWN.
8. NELSON STUDS: H4L HEADED STUDS BY NELSON STUD, OR EQUAL.
9. THE STEEL ERECTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND ERECTING ALL TEMPORARY WORKS REQUIRED FOR STRUCTURE DURING ERECTION.
10. ISOLATE MISC. METALS FROM FOLLOWING COMPONENTS BY MEANS OF 2 COATS OF ALKALI RESISTANT BITUMINOUS PAINT:
    .1 DISSIMILAR METALS EXCEPT STAINLESS STEEL, GALVANIZED STEEL, ZINC, OR WHITE BRONZE OF SMALL AREA.
    .2 CONCRETE, MORTAR AND MASONRY.

PRECAST TEE ROOF SLAB

1. DESIGN PRECAST ELEMENTS TO CSA A23.3 AND CSA A23.4.
2. THE PRECAST SINGLE TEE SUPPLIER SHALL COORDINATE ALL ROOF OPENINGS WITH ARCHITECTURAL DRAWINGS AND COORDINATE WITH THE GENERAL CONTRACTOR FOR REQUIRED SITE MEASUREMENTS. OPENINGS SHALL BE SHOWN ON PRECAST CONCRETE SHOP DRAWING.
3. THE PRECAST SINGLE TEE SHALL BE DESIGNED FOR THE LOADS (MIN) IN ROOF PLAN.
4. SUBMIT SHOP DRAWING INDICATING SINGLE TEE DESIGN AND DETAILS, LAYOUT AND ALL NECESSARY CONNECTION INSERT DETAILS FOR ERECTION. SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA.
5. PATCH AND MAKE GOOD ALL CONCRETE POCKETS AFTER INSTALLATION.



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SCALE: 1:10

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: 2022-10-11

NO.	REVISIONS	DATE	DESIGN	CHECK
0	ISSUED FOR CONSTRUCTION	2022-10-11	GGP	MH

AECOM

DESIGNED BY: G. PROFETA	CHECKED BY: M. HOQUE
DRAWN BY: J. SANGREO	APPROVED BY:
SCALE:	RELEASED FOR CONSTRUCTION BY:
DATE: 2022-10-11	DATE:
CONSULTANT NO.: 60661011	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
M. M. HOQUE
Member 30114
REGISTERED PROFESSIONAL ENGINEER
2022-10-11

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

TACHE BOOSTER PUMPING STATION
AND SURGE TOWER UPGRADES
STRUCTURAL
TACHE SURGE TOWER ROOF RECONSTRUCTION
GENERAL NOTES, ACCESS LADDER

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0660R-S0001-001	11 of 13	0	A1

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