

GENERAL NOTES AND SPECIFICATIONS

1. GENERAL

- 1.1. CHECK DIMENSIONS ON STRUCTURAL DRAWINGS AGAINST ARCHITECTURAL AND MECHANICAL DRAWINGS AND EXISTING SITE CONDITIONS. REPORT INCONSISTENCIES TO CONSULTANT BEFORE PROCEEDING WITH THE WORK.
- 1.2. READ DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS ON THESE DRAWINGS.
- 1.3. DO NOT EXCEED DURING CONSTRUCTION, DESIGN LIVE LOADS SHOWN ON PLANS, REDUCE AS NECESSARY UNTIL MATERIALS REACH DESIGN STRENGTH.
- 1.4. DO NOT SCALE DRAWINGS.
- 1.5. PROVIDE NECESSARY SHORING FOR SAFE COMPLETION OF WORK.
- 1.6. WHERE NEW WORK CONNECTS TO EXISTING CONSTRUCTION, DETERMINE EXISTING CONDITIONS AND ALL DIMENSIONS ON SITE INCLUDING VERIFICATION OF ALL DIMENSIONS ON DRAWINGS. REPORT ANY NECESSARY ADJUSTMENT TO CONSULTANT
- 1.7. CLEAN UP:
- 1.7.1. CLEAR AWAY FROM BUILDING SITE, EXCESS AND WASTE MATERIALS AND DEBRIS RESULTING FROM WORK. LEAVE PREMISES IN CONDITION ACCEPTABLE TO OWNER.

2. DESIGN, CONSTRUCTION SAFETY, AND REVIEW

- 2.1. DESIGN IS IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, LATEST EDITION.
- 2.2. CONCRETE IS DESIGNED IN ACCORDANCE WITH CSA STANDARD CAN/CSA-A23.3.
- 2.3. STRUCTURAL STEEL IS DESIGNED IN ACCORDANCE WITH CSA STANDARD CAN/CSA-S16.
- 2.4. UNIT FLOOR LOADINGS GIVEN ON DRAWINGS ARE UNFACTORED.
- 2.5. MEMBER FORCES GIVEN ON DRAWINGS ARE FACTORED.
- 2.6. CONSTRUCTION PROCEDURES AND SAFETY:
- 2.7.1 MILMAN & ASSOCIATES LIMITED SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION SAFETY, MEANS, TECHNIQUES, AND CONSTRUCTION PROCEDURES OR ANY TEMPORARY WORK AS MAY BE REQUIRED BY THE CONTRACTOR TO BUILD AND COMPLETE THE STRUCTURE IN CONFORMITY WITH CONTRACT DOCUMENTS.
- 2.7.2 CONTRACTOR IS RESPONSIBLE FOR SAFE COMPLETION OF WORK.
- 2.7.3 THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR SUFFICIENT TEMPORARY BRACING TO KEEP THE STRUCTURE PLUMB AND IN TRUE ALIGNMENT AT ALL PHASES OF THE CONSTRUCTION, UNTIL COMPLETION.
- 2.7.4 THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR SAFE SAW CUTTING/JACK HAMMERING/REMOVAL OF THE EXISTING CONCRETE.
- 2.7. REVIEW OF CONSTRUCTION:
- 2.7.4. CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR SUPERVISION OF CONSTRUCTION.
- 2.7.5. SITE VISITS AND REVIEW BY CONSULTANT OR HIS REPRESENTATIVE ARE INTENDED FOR THE SOLE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT.
- 2.7.6. CONSULTANT'S REVIEW SHALL NOT MEAN THAT MILMAN & ASSOCIATES LIMITED HAS SEEN AND SUPERVISED ALL CONSTRUCTION PROCEDURES. RESPONSIBILITY FOR CONSTRUCTION PROCEDURES SHALL REMAIN WITH THE CONTRACTOR PERFORMING THE WORK.
- 2.7.7. REVIEW BY THE CONSULTANT WILL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR ERRORS AND OMISSIONS AND FOR MEETING ALL REQUIREMENTS LISTED IN CONTRACT DOCUMENTS.

3. CONCRETE AND REINFORCING STEEL

- 3.1. PROPORTION OF CONCRETE IN ACCORDANCE WITH CSA STANDARD CAN/CSA-A23.1/A23.2. "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION/METHODS OF TEST FOR CONCRETE".
- 3.1.1. CONCRETE PROPERTIES:

ELEMENT	MIN. 28-DAY COMPRESSIVE STRENGTH (MPa)	MAX. SLUMP (mm)	MAX. AGG. (mm)	EXPOSURE CLASS	RAPID CHLORIDE ION PERMEABILITY (COULOMBS)
FOUNDATION	35	75	20	C-1	≤ 1500

- 3.1.2. PORTLAND CEMENT: TYPE 10, NORMAL.
- 3.1.3. COARSE AGGREGATE: NORMAL WEIGHT, MAXIMUM SIZE 20mm [3/4"]
- 3.1.4. MAXIMUM SLUMP AT POINT OF DISCHARGE, PRIOR TO THE ADDITION OF SUPERPLASTICIZER, AS SHOWN IN TABLE ABOVE
- 3.1.5. AIR ENTRAINMENT: TOTAL AIR CONTENT AS RECOMMENDED BY THE REFERENCE STANDARD FOR THE CLASS OF EXPOSURE.
- 3.1.6. CONCRETE MIXES:
- 3.1.6.1. READY MIX WITH 28 DAY COMPRESSIVE STRENGTH AS INDICATED ON DRAWINGS, AND IN SPECIFICATIONS.
- 3.1.6.2. AIR DRY UNIT WEIGHT: MAXIMUM 2300kg/m<sup>3</sup> [145lb/ft<sup>3</sup>] ADJUSTED PROPORTIONALLY FOR MAXIMUM AIR CONTENT LISTED IN CSA STANDARD A23.1.
- 3.1.6.3. DESIGN CONCRETE MIX IN CONFORMANCE WITH CSA STANDARD A23.1

3.2. REINFORCING STEEL:

- 3.2.1. DEFORMED BARS TO CSA STANDARD CAN/CSA-G30.18-09, GRADE 400R, WELDED WIRE FABRIC: TO CSA G30.5.

3.3. JOB CONDITIONS:

- 3.3.1. PLACING, FINISHING, AND CURING OF CONCRETE SHOULD CONFORM WITH CSA STANDARD A23.1
- 3.3.2. IN ADDITION TO COLD WEATHER AND HOT WEATHER REQUIREMENTS OF CSA STANDARD A23.1, THE FOLLOWING SHALL APPLY TO WORK OF THIS SECTION:
- 3.3.2.1. PROVIDE PROTECTION OR HEAT, OR BOTH, SO THAT TEMPERATURE OF CONCRETE AT SURFACES IS MAINTAINED AT NOT LESS THAN 21 °C [70 °C] FOR THE NEXT SEVEN (7) DAYS AND ABOVE FREEZING FOR THE NEXT SEVEN (7) DAYS.
- 3.3.2.2. DO NOT PERMIT ALTERNATE FREEZING AND THAWING FOR FOURTEEN DAYS AFTER PLACING.
- 3.3.2.3. FOR FIELD CURED CYLINDERS REPRESENTING STRENGTH DEVELOPMENT OF IN-SITU CONCRETE, PROVIDE SAME SPECIFIED NOT COLD WEATHER PROTECTION FOR STORAGE OF EACH CONCRETE COMPRESSION SPECIMEN AS FOR CONCRETE FROM WHICH IT WAS TAKEN UNTIL IT IS SENT TO A TESTING LABORATORY.
- 3.3.2.4. DO NOT PLACE CONCRETE WHEN IT IS RAINING. SHOULD RAIN COMMENCE DURING PLACING, COVER FRESHLY PLACED CONCRETE.

3.4. PLACING CONCRETE:

CONCRETE ITEM	MIN. CONC. COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3" (75mm)
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER BAR SIZE <15M	1 1/2" (40mm)
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER BAR SIZE 15M TO 55M	2" (50mm)

- 3.4.1. NOTIFY ENGINEER AT LEAST 24 HOURS BEFORE COMMENCING CONCRETE PLACEMENT, AND 24 HOURS BEFORE WALL FORMS ARE CLOSED IN, REGARDLESS OF ANY REQUIREMENT OF REFERENCE STANDARDS TO INSPECT ALL OF THE WORK PRIOR TO PLACING CONCRETE.
- 3.4.2. NO CONSTRUCTION JOINTS OR "COLD" JOINTS SHALL BE PERMITTED DURING CONCRETE PLACEMENT OF MAT FOUNDATION OR CAISSONS
- 3.5. CURING:
- 3.5.1. CURE CONCRETE IN ACCORDANCE WITH CSA STANDARD A23.1, AND AS SPECIFIED HEREIN.
- 3.5.2. BE AWARE THAT PROPER CURING IS ESSENTIAL FOR CONCRETE, AND FAILURE TO CURE PROPERLY CAUSES SCALING, DUSTING, AND LACK OF DURABILITY.
- 3.5.3. CURING MAT FOUNDATION; EQUIPMENT AND TANK FOUNDATIONS: CURING TYPE 3 WITH MOIST CURE CONCRETE SURFACES A MINIMUM OF 7 CONSECUTIVE DAYS AT A MINIMUM TEMPERATURE OF 10°C OR 70% OF THE SPECIFIED COMPRESSIVE STRENGTH. APPLICATION OF SEAL WATER BASED COMPOUNDS IN LIEU MOIST CURING IS NOT ACCEPTABLE.
- 3.5.4. FORMS LEFT IN PLACE MAY BE USED AS PROTECTION AGAINST LOSS OF MOISTURE PROVIDED THAT EXPOSED CONCRETE SURFACES AND WOOD FORMS ARE KEPT WET FOR A DURATION OF 7 CONSECUTIVE DAYS. WHEN MOIST CURING IS NOT SUITED, CURING SHALL BE ACHIEVED BY APPLYING TWO COATS OF CPD ACRYLIC CURE AND SEAL WATER BASED COMPOUND AT A RATE OF 200 SQUARE FEET PER U.S. GALLON (5 SQUARE METER PER LITER) EXCEPT FOR MAT FOUNDATION, EQUIPMENT AND TANK FOUNDATIONS.
- 3.5.5. CONCRETE PROTECTION DURING CURING ALL FRESHLY PLACED AND CONSOLIDATED CONCRETE SHALL BE SUITABLY PROTECTED DURING THE CURING PERIOD AGAINST ADVERSE WEATHER CONDITIONS IN ACCORDANCE WITH METHODS AND PROCEDURES AS NOTED IN CSA STANDARD A23.1.
- 3.5.6. WHEN THE AIR TEMPERATURE IS AT OR ABOVE 27°C(81°F) PROTECTION OF THE FRESHLY PLACED CONCRETE FROM THE EFFECTS OF HOT AND OR DRYING WEATHER CONDITIONS SHALL BE IN PLACE IN ACCORDANCE WITH METHODS AND PROCEDURES AS NOTED IN CSA STANDARD A23.1.
- 3.5.7. WHEN THE AIR TEMPERATURE IS AT OR BELOW 5 DEG. C (41 DEG. F) ALL MATERIALS AND EQUIPMENT NEEDED FOR ADEQUATE PROTECTION AND CURING SHALL BE IN PLACE BEFORE CONCRETE PLACEMENT IS STARTED IN ACCORDANCE WITH METHODS AND PROCEDURES AS NOTED IN CSA STANDARD A23.1

3.6. INSPECTION:

- 3.6.1. CONTRACTOR IS TO ENGAGE AT HIS/HER OWN EXPENSE, AN INDEPENDENT TESTING AND INSPECTION COMPANY FOR INSPECTION OF COMPACTION, REBAR PLACEMENT, AND CONCRETE TESTING.

3.7. SHOP DRAWINGS

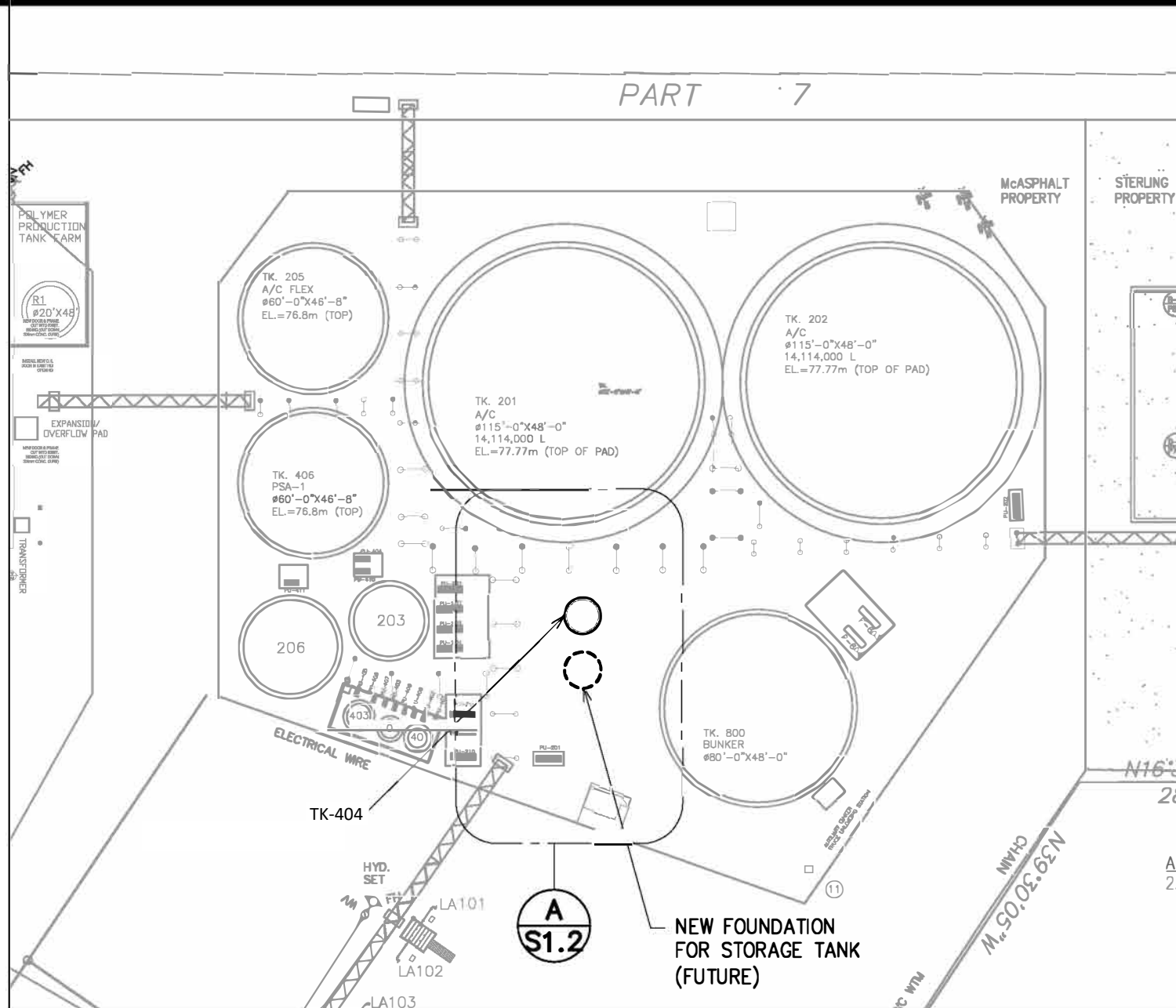
- 3.7.1. REFER TO "REINFORCING STEEL MANUAL OF STANDARD PRACTICE", LATEST EDITION.
- 3.7.2. SUBMIT FOR REVIEW SHOP DRAWINGS OF REINFORCEMENT, ANCHOR BOLTS, EMBEDDED ELEMENTS, AND TEMPLATES, INCLUDING LAYOUT DETAILS, SPLICES, AND SUPPORT, DO NOT COMMENCE FABRICATION UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED BY THE CONSULTANT.
- 3.7.3. STAGGER SPLICES UNLESS NOTED OTHERWISE.
- 3.7.4. PRIOR TO SUBMISSION TO CONSULTANT, CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS. BY THIS REVIEW CONTRACTOR REPRESENTS TO HAVE DETERMINED AND VERIFIED ALL FIELD MEASUREMENTS, SITE CONDITIONS, MATERIALS, CATALOGUE NUMBER AND SIMILAR DATA, AND TO HAVE CHECKED AND COORDINATED EACH SHOP DRAWING WITH THE REQUIREMENTS OF WORK AND OF CONTRACT DOCUMENTS. CONTRACTOR'S REVIEW OF EACH SHOP DRAWING SHALL BE INDICATED BY STAMP, DATE AND SIGNATURE OF A RESPONSIBLE PERSON.
- 3.7.5. CONSULTANT SHALL REVIEW AND RETURN SHOP DRAWINGS IN ACCORDANCE WITH AN AGREED SCHEDULE. CONSULTANT'S REVIEW SHALL BE FOR CONFORMITY TO DESIGN CONCEPT AND FOR GENERAL ARRANGEMENT, AND SHALL NOT RELIEVE CONTRACTOR OF RESPONSIBILITY OF MEETING ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 3.7.6. CONTRACTOR SHALL MAKE CHANGES TO SHOP DRAWINGS AS SPECIFIED BY CONSULTANT, CONSISTENT WITH CONTRACT DOCUMENTS, AND RESUBMIT UNLESS OTHERWISE DIRECTED BY CONSULTANT. WHEN RESUBMITTING, CONTRACTOR SHALL NOTIFY CONSULTANT IN WRITING OF REVISIONS OTHER THAN THOSE REQUESTED BY CONSULTANT.

3.8. FINISHING

- 3.8.1. CONCRETE SURFACES SHALL BE BROOM FINISHED, UNO SEE MECH.

3.9. DEFECTIVE WORK:

- 3.9.1. VARIATIONS IN EXCESS OF SPECIFIED TOLERANCES AND MARKED AND DISFIGURED SURFACES THAT CANNOT BE REPAIRED BY APPROVED METHODS WILL BE CONSIDERED DEFECTIVE WORK PERFORMED BY THIS SECTION.
- 3.9.2. REPLACE OR REPAIR DEFECTIVELY PLACED OR FINISHED CONCRETE AS DIRECTED BY CONSULTANT AT NO COST TO OWNER.
- 3.9.1. CONTRACTOR SHALL PAY FOR ADDITIONAL TESTING, DESIGN, AND RELATED EXPENSES IF CONCRETE PROVES TO BE DEFICIENT.



KEY PLAN

LIST OF DRAWINGS

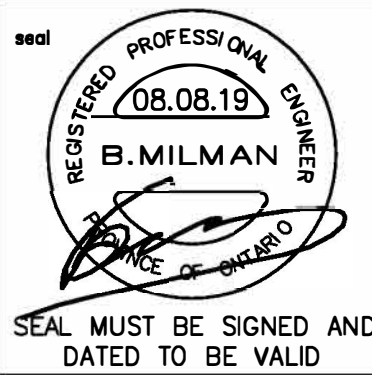
- S1.1 GENERAL NOTES AND SPECIFICATIONS
- S1.2 PARTIAL SITE & HELICAL PILE PLAN
- S1.3 REINF. PLAN & SECTIONS

**MILMAN & ASSOCIATES**  
STRUCTURAL CONSULTING ENGINEERS / PROJECT MANAGERS  
225-1750 Steeles Ave. W., Vaughan, Ontario L4K 2L7  
[T] 905-760-1020 | [F] 905-760-1029 | [E] info@me-eng.ca

DRAWINGS MUST NOT BE SCALED. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AGAINST ARCHITECTURAL DRAWINGS AND MUST REPORT ANY INCONSISTENCY TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, AND COMPLYING WITH ALL APPLICABLE CONSTRUCTION CODES AND REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION OVER THIS WORK

APPROVED	DATE	NO.	REVISIONS
B.M.	08.08.2019	3	ISSUED FOR CONSTRUCTION
B.M.	08.06.2019	2	ISSUED FOR CLIENT REVIEW
B.M.	07.26.2019	1	ISSUED FOR CLIENT REVIEW

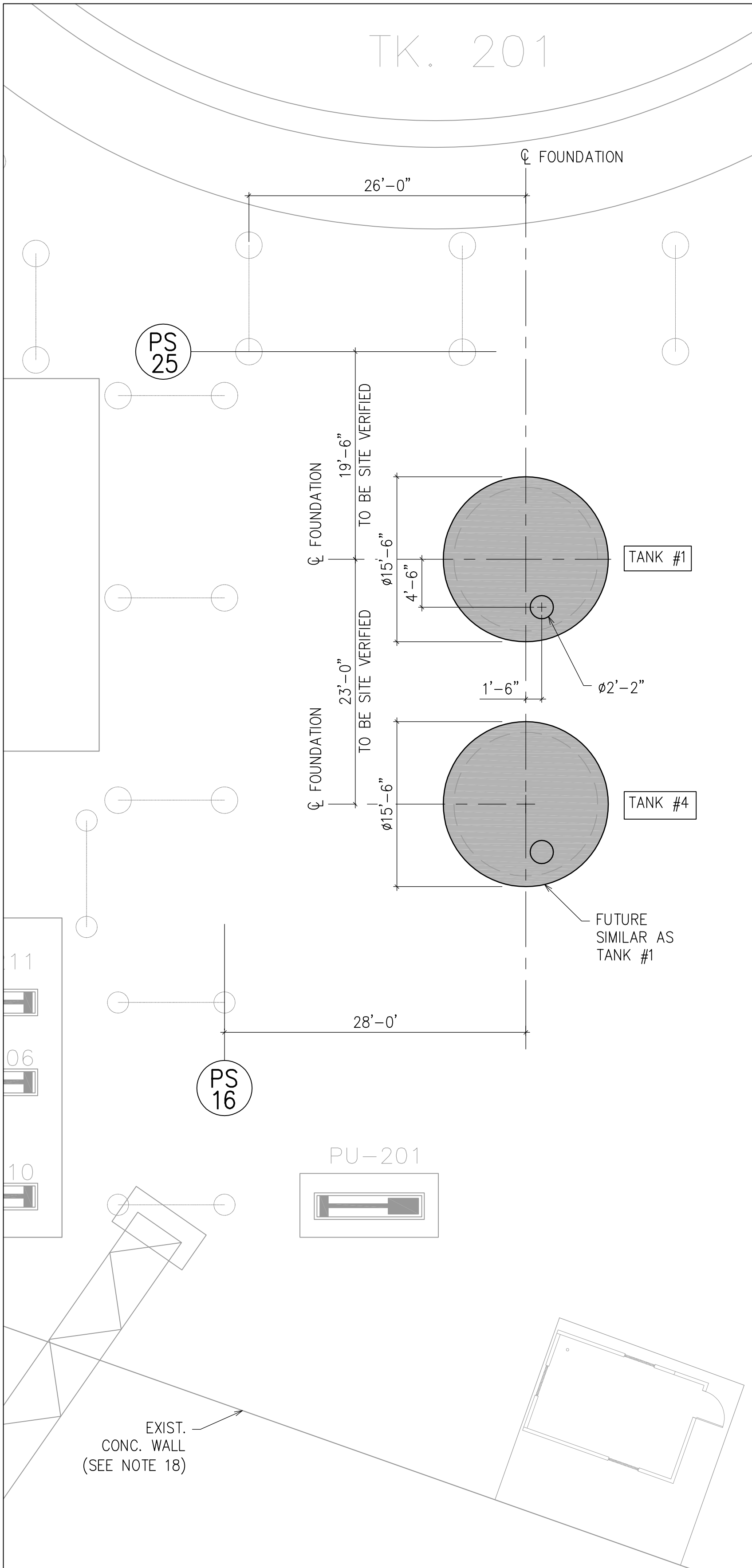


project  
**STORAGE TANK FOUNDATION**

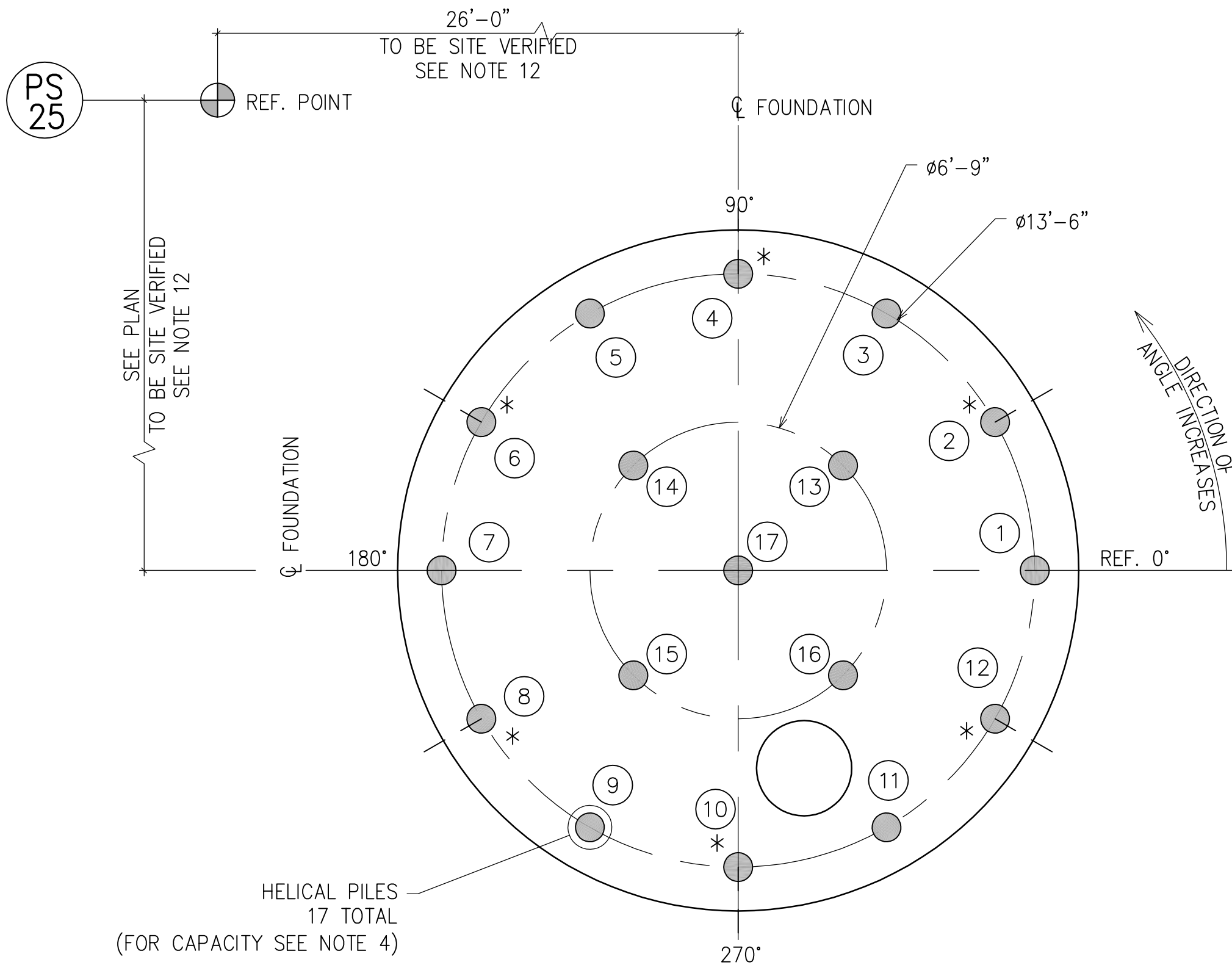
file  
**GENERAL NOTES AND SPECIFICATIONS**

SCALE	AS NOTED	DRAWING NO.
DRAWN BY	U.S.	<b>S1.1</b>
DATE	JULY 15, 2019	
PROJECT #	219069	
CAD FILE	219069 Storage Slab	





**FOUNDATIONS  
PART PLAN**  
SCALE: 1/8"=1'-0"

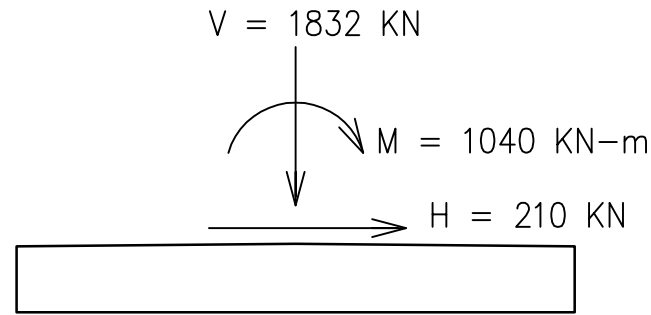


**TYPICAL HELICAL PILE PLAN**  
SCALE: 3/8"=1'-0"

( \* ) BATTERED HELICAL PILES

**FOUNDATION NOTES:**

1. REFER TO GENERAL NOTES AND SPECIFICATIONS. SEE DWG S1.1
2. FOUNDATION HAVE BEEN DESIGNED FROM INFORMATION IN THE SOIL REPORT: "PRELIMINARY GEOTECHNICAL INVESTIGATION PROPOSED BULK STORAGE TERMINAL HEAVY INDUSTRIAL PROPERTY PIER 24 HAMILTON, ONTARIO" BY AMEC EARTH & ENVIRONMENTAL DATED 11 JUNE 2010.
3. DESIGN OF HELICAL PILES BY "EBS GEOSTRUCTURAL".
4. USE CHANGE SS175 HELICAL PIPE SYSTEM BY "EBS GEOSTRUCTURAL".  
FOR PILES, MINIMUM AXIAL UNFACTORED LOAD CAPACITY = 210 KN (EBS GEOSTRUCTURAL TO CONFIRM)  
TOTAL OF 17 HELICAL PILES ARE REQUIRED.
5. TOTAL UNFACTORED LOAD OF TANK INCLUDING CONTENT IS 1832 KN. LATERAL UNFACTORED LOAD IS 210 KN.
6. UNFACTORED LATERAL FORCE = 212 KN.
7. PERIMETER PILES WILL BE BATTER PILES TO RESIST HORIZONTAL APPLIED FORCE.
8. DESIGN AND INSTALLATION OF HELICAL PILES SHOULD BE DONE BY A QUALIFIED CONTRACTOR (EBS GEOSTRUCTURAL) EXPERIENCED IN THIS TYPE OF CONSTRUCTION.
9. CONTRACTOR TO FOLLOW MANUFACTURER'S HELICAL PILE DESIGN, RECOMMENDED SITE PREPARATION, PRODUCT INSTALLATION AND APPLICATION PROCEDURES.
10. DEPTH OF HELICAL PILES ARE BY EBS GEOSTRUCTURAL. FINAL DEPTH OF OF EACH HELICAL PILE IS TERMINATED WHEN THE REQUIRED TORQUE BASED ON THEIR DESIGN IS ACHIEVED.
11. ALL DIMENSIONS TO BE VERIFIED ON SITE WITH MECHANICAL AND EQUIPMENT DRAWINGS.
12. FOR EXACT LOCATION OF THE TANK FOUNDATION #1 AND #4 REFER TO MCASPHALT RFQ.
13. DO NOT UNDERMINE OR DAMAGE ADJACENT EXIST. STRUCTURE FOUNDATION.
14. BOTTOM OF TANK WILL HAVE 1:120 SLOPE FROM THE CENTRE RADIALLY OUT THE PERIMETER.
15. STEEL TANK WILL BE SUPPLIED BY MCASPHALT.
16. MATERIAL INSIDE TANK IS HYDROLENE. REFER TO MCASPHALT SPECIFICATIONS.
17. EBS GEOSTRUCTURAL TO SUBMIT SHOP DRAWINGS OF HELICAL PILES LAYOUT, LENGTH, DIAMETER, CONNECTION AND EMBEDDED DETAILS FOR CONSULTANT'S REVIEW AND APPROVAL.
18. CONTRACTOR TO BRING DRILLING EQUIPMENT OVER THE EXIST. WALL NOT TO DAMAGE COVER OF EXIST. WALL.
19. REFER TO SOIL REPORT FOR OTHER SPECIFIC DESIGN REQUIREMENTS FOR SOIL, SLOPE, FROST PROTECTION, MINIMUM COVER, ETC.
20. FOR GROUND ELEVATIONS AND DRAINAGE SLOPES, REFER TO MCASPHALT EXIST. DRAWINGS.
21. BEARING SURFACES MUST BE PROTECTED FROM FREEZING BEFORE AND AFTER FOUNDATION IS POURED.

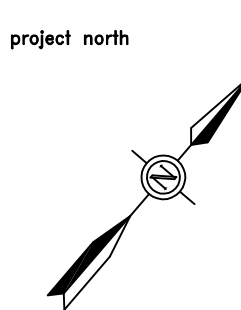
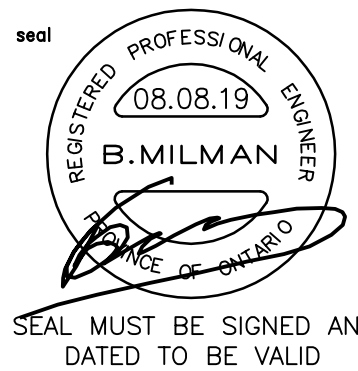


HELICAL PILE LOCATION SCHEDULE			
PILE NUMBER	RADIUS RELATIVELY @ CENTRE OF FOUNDATION	ANGLE RELATIVELY TO CENTRE LINE 0° OF FOUNDATION	BATTERED
1	6'-9"	0°	
2	6'-9"	30°	*
3	6'-9"	60°	
4	6'-9"	90°	*
5	6'-9"	120°	
6	6'-9"	150°	*
7	6'-9"	180°	
8	6'-9"	210°	*
9	6'-9"	240°	
10	6'-9"	270°	*
11	6'-9"	300°	
12	6'-9"	330°	*
13	3'-4½"	45°	
14	3'-4½"	135°	
15	3'-4½"	225°	
16	3'-4½"	315°	
17	0'-0"	0°	

DRAWINGS MUST NOT BE SCALED. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AGAINST ARCHITECTURAL DRAWINGS AND MUST REPORT ANY INCONSISTENCY TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, AND COMPLYING WITH ALL APPLICABLE CONSTRUCTION CODES AND REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION OVER THIS WORK.

APPROVED	DATE	NO.	REVISIONS
B.M.	08.08.2019	3	ISSUED FOR CONSTRUCTION
B.M.	08.06.2019	2	ISSUED FOR CLIENT REVIEW
B.M.	07.26.2019	1	ISSUED FOR CLIENT REVIEW



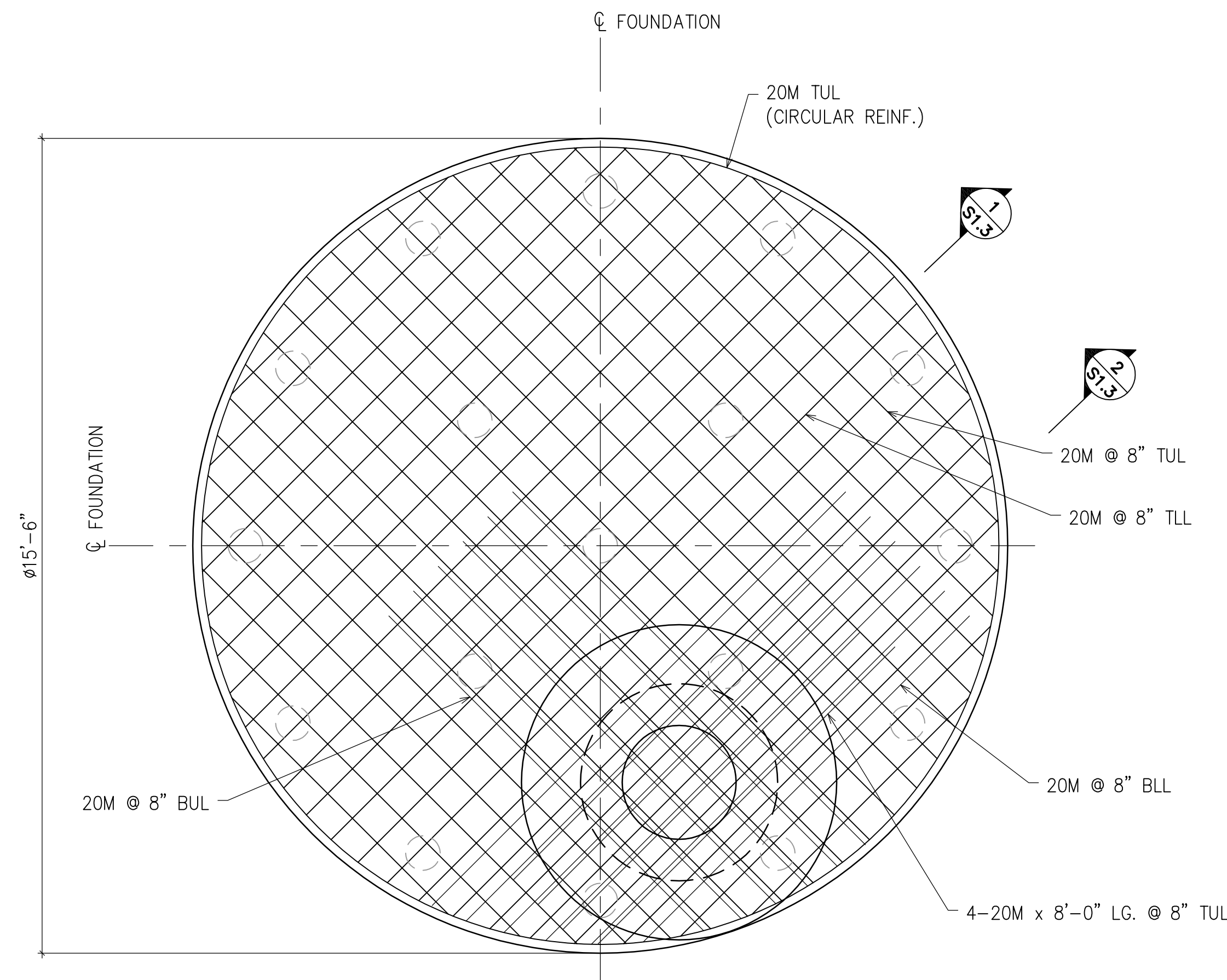
**project**  
**STORAGE TANK FOUNDATION**

**title**  
**PARTIAL SITE & HELICAL PILE PLAN**

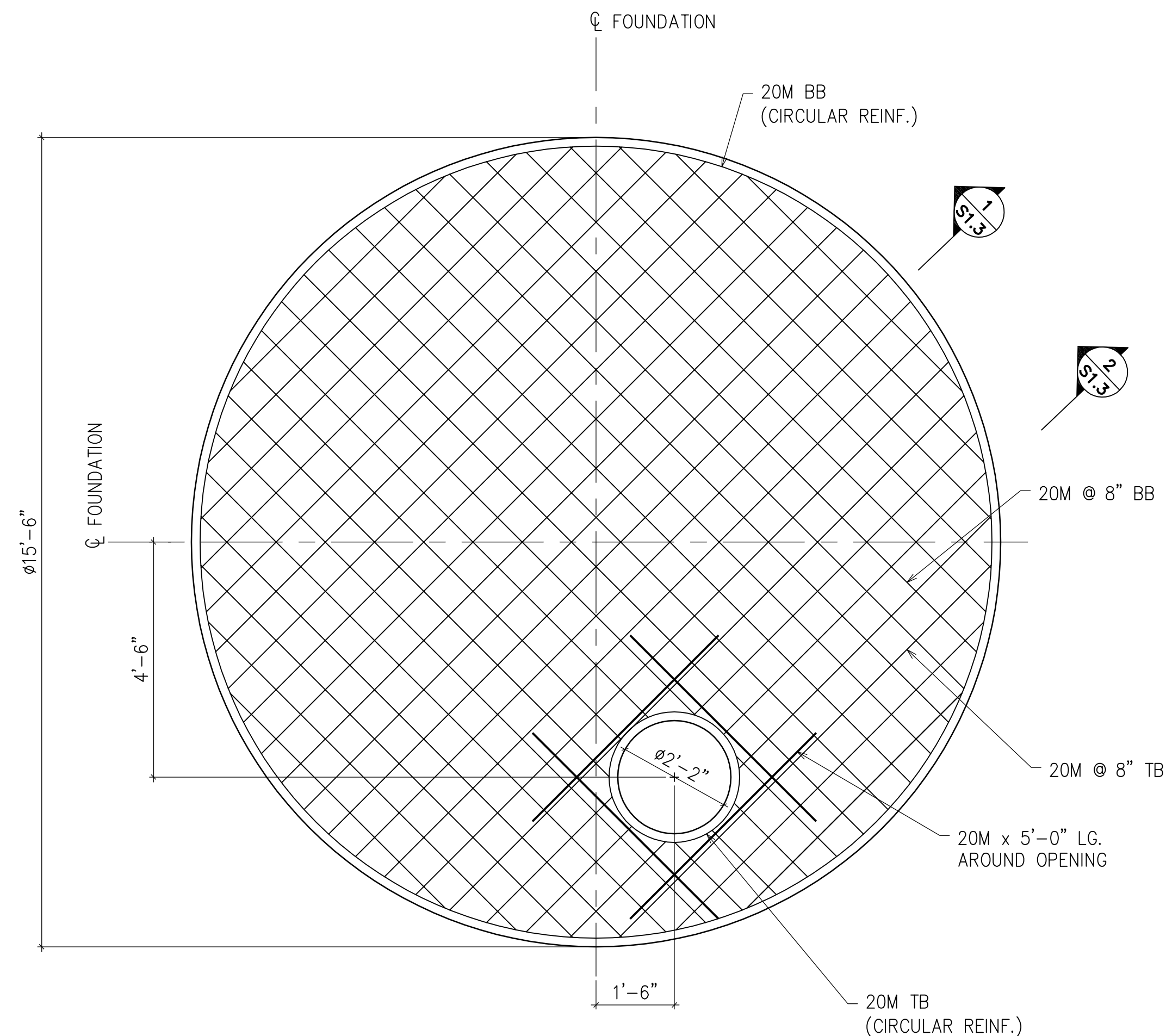
SCALE	AS NOTED	DRAWING NO.
DRAWN BY	U.S.	<b>S1.2</b>
DATE	JULY 15, 2019	
PROJECT #:	219069	
CAD FILE	219069 Storage Slab	

DRAWINGS MUST NOT BE SCALED. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AGAINST ARCHITECTURAL DRAWINGS AND MUST REPORT ANY INCONSISTENCY TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

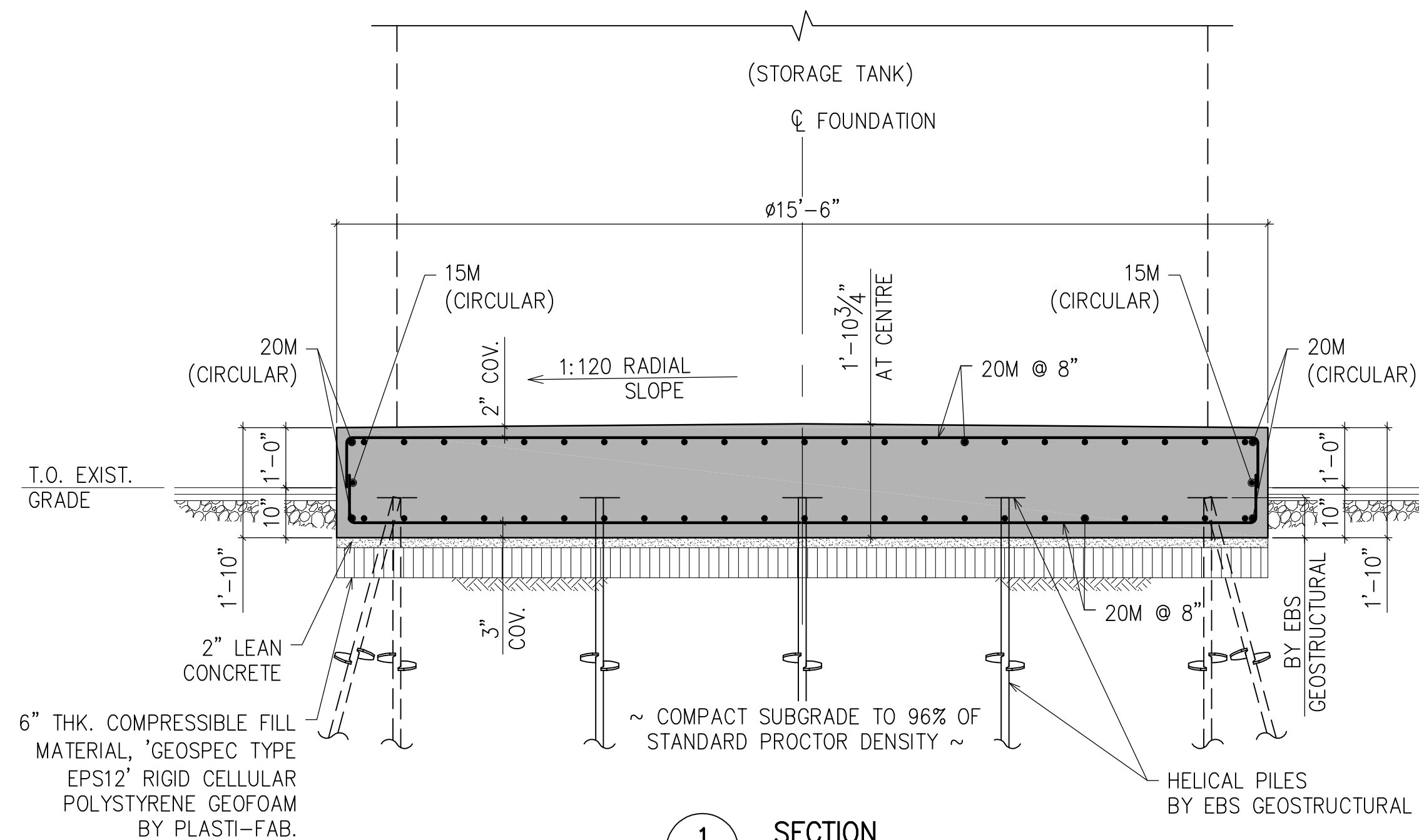
THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, AND COMPLYING WITH ALL APPLICABLE CONSTRUCTION CODES AND REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION OVER THIS WORK.



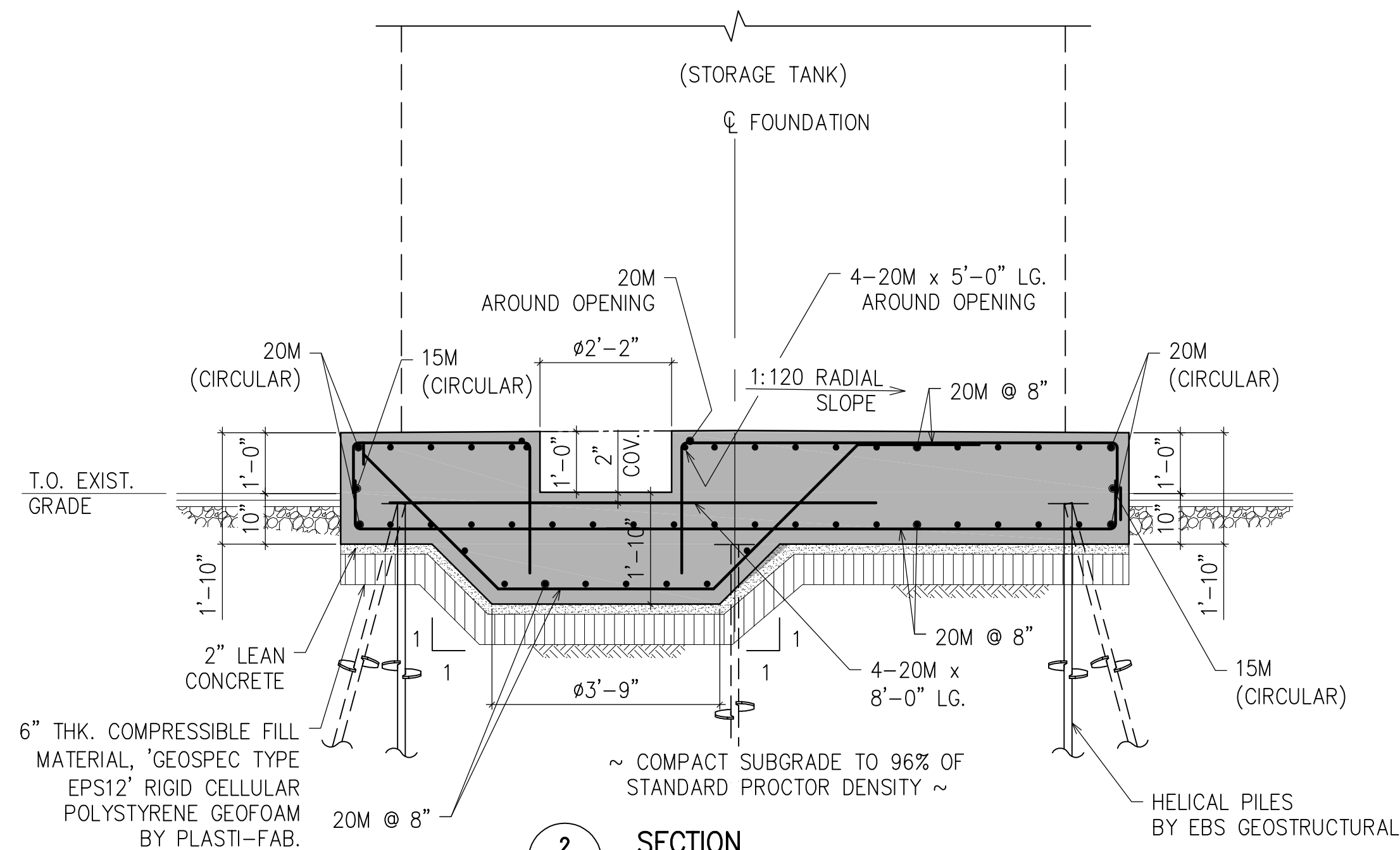
**BOTTOM REINFORCEMENT PLAN**  
SCALE: 1/2"=1'-0"



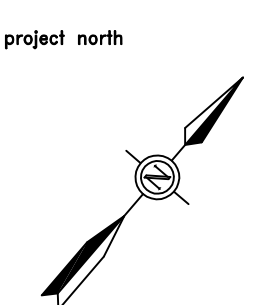
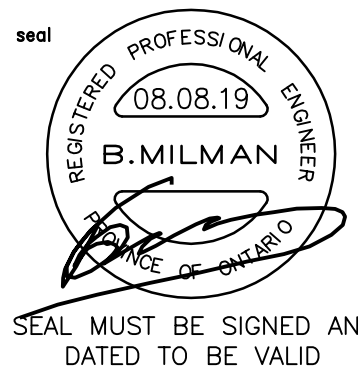
**TOP REINFORCEMENT PLAN**  
SCALE: 1/2"=1'-0"



**1 SECTION**  
SCALE: 1/2"=1'-0"



**2 SECTION**  
SCALE: 1/2"=1'-0"



project  
**STORAGE TANK FOUNDATION**

title  
**REINF. PLAN & SECTIONS**

SCALE	AS NOTED	DRAWING NO. <b>S1.3</b>
DRAWN BY	U.S.	
DATE	JULY 15, 2019	
PROJECT #	219069	
CAD FILE	219069 Storage Slab	