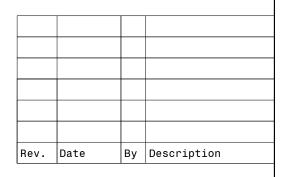
## **GENERAL NOTES**

- 1. THESE NOTES FORM PART OF ALL DRAWINGS TO WHICH THEY RELATE TO. WHERE DISCREPANCIES EXIST BETWEEN 23. REINFORCING STEEL FOR ALL REINFORCEMENTS MUST BE DEFORMED BARS OF GRADE 400 (400 MPa / 60,000psi). DRAWINGS, NOTES OR THE CODES, THE MOST RESTRICTIVE SHALL APPLY.
- DRAWINGS MUST NOT BE SCALED.
- 3. ALL STRUCTURAL DRAWINGS SHALL BE IN ACCORDANCE WITH RELEVANT ARCHITECTURAL, SERVICES AND LANDSCAPING DRAWINGS.
- 4. ALL DISCREPANCIES NOTED IN THE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE
- 5. ALL WORK MUST STRICTLY ADHERE TO THE PROVINCIAL OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS, AS WELL AS ALL APPLICABLE CODES, ORDINANCES, AND ACCEPTED INDUSTRY STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND ENSURING ALL NEW WORK COMPATIBILITY WITH THE EXISTING CONDITIONS.
- THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THE EXISTING STRUCTURE. DELCOR ENGINEERING INC. WILL NOT BE LIABLE FOR CONTRACTORS' DAMAGE TO EXISTING STRUCTURES.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL ELECTRICAL, PLUMBING, CABLE, AND OTHER SERVICES WITHIN THE WORK AREA PRIOR TO BEGINNING WORK. IN THE EVENT OF ANY NECESSARY SERVICE INTERRUPTION, THE CONTRACTOR MUST PROVIDE A MINIMUM OF 48 HOURS NOTIFICATION TO THE OWNERS REPRESENTATIVE.
- FOR ANY SITE REVIEWS OR TESTING SERVICES SUCH AS COMPRESSIVE STRENGTH, AIR CONTENT, SLUMP TEST, ETC., THE CONTRACTOR MUST PROVIDE A MINIMUM OF 48 HOURS ADVANCE NOTICE TO THE ENGINEER.
- 10. THESE PLANS, SPECIFICATIONS, ENGINEERING, AND DESIGN WORK THEY PERTAIN TO ARE INTENDED SOLELY FOR THE PROJECT SPECIFIED HEREIN. DELCOR ENGINEERING DISCLAIMS ALL LIABILITY IF THESE PLANS AND SPECIFICATIONS OR THE DESIGN. ADVICE. AND INSTRUCTIONS PERTAINING THERETO ARE USED ON ANY PROJECT. OR AT ANY LOCATION OTHER THAN THE PROJECT AND LOCATION SPECIFIED HEREIN.
- 11. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE AND REPORT ANY ERRORS, OMISSIONS, OR POSSIBLE DISCREPANCIES BETWEEN FIELD CONDITIONS AND DRAWINGS TO THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. SPECIAL CARE SHALL BE GIVEN TO SITE AND BUILDING LAYOUT 34. ALL FOOTING LOCATIONS WITH DIMENSIONS MUST BE VERIFIED USING ARCHITECTURAL DRAWINGS.
- 12. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL CONSTRUCTION DRAWINGS AND SPECIFICATION DOCUMENTS INCLUDING: ARCHITECTURAL ELECTRICAL, MECHANICAL, CIVIL, ETC.
- 13. PROVIDE A MINIMUM OF 200mm (6") GRANULAR MATERIAL UNDER ALL SLABS COMPACTED TO 98% S.P.M.D.D.
- 14. THE FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED MIN. NET BEARING CAPACITY OF SLS 100kPa (2000 psf) /ULS (FACTORED)200kPa (4000 psf) AND AN ASSUMED FACTORED SLIDING COEFFICIENT OF 0.55 FOUND ON NATURAL UNDISTURBED INORGANIC SOIL
- 15. A SOIL CONSULTANT SHALL APPROVE ON SITE THE ASSIGNED SAFE NET BEARING PRESSURE FOR EACH FOOTING AS WELL AS THE MINIMUM SITE CLASS 'D' AS PER OBC 4.1.8.4. IF THE SAFE NET BEARING PRESSURE OR SITE CLASSIFICATION USED FOR DESIGN IS NOT APPROVED, THE FOUNDATION DETAILS WILL BE ADJUSTED BY THE ENGINEER IN ACCORDANCE WITH THE ACTUAL SITE CONDITIONS. ALL FOOTINGS SHALL BEAR ON SUITABLE BEARING MATERIAL
- 16. REPLACE ANY SOFT OR FROZEN SOIL MATERIAL FOUND UNDER FOUNDATIONS WITH MASS CONCRETE OF 2000psi MINIMUM 28 DAY STRENGTH TO UNDERSIDE OF FOOTING.
- 17. IF SOIL SOFTENING OCCURS BEFORE POURING CONCRETE FOUNDATIONS, OR AS REQUIRED BY THE SOILS REPORT, THE CONTRACTOR SHALL CONSTRUCT THE FOOTING ON A LEVEL SKIM SLAB OF 2" THICK AND 2000psi MINIMUM 28 DAY STRENGTH PLACED IMMEDIATELY AFTER FINALIZING EXCAVATION.
- 18. INSTALL EXTERIOR WALLS AND COLUMN FOOTINGS AT LEAST 4'-0" (ASSUMED FROST DEPTH) BELOW THE FINISHED GRADE. PRIOR TO CONSTRUCTION, THE ASSUMED FROST DEPTH WILL BE CONFIRMED BY A GEOTECHNICAL ENGINEER. ALWAYS PROTECT ALL FOOTINGS, WALLS, SLABS ON-GRADE, AND ADJACENT SOIL FROM FREEZING AND FROST ACTION DURING CONSTRUCTION. (DOES NOT APPLY TO FLOATING SLABS)
- 19. STEP FOOTINGS ARE REQUIRED AS THE UNDERSIDE ELEVATION OF THE FOOTINGS CHANGES IN ACCORDANCE WITH THE TYPICAL STEP FOOTING DETAILS PROVIDED AND AS SPECIFIED IN THE FOUNDATION PLAN.
- 20. TO ACCOMMODATE BURIED ELECTRICAL OR MECHANICAL SERVICE, LOCATE FOOTING ELEVATIONS AS NEEDED PREVENT UNDERMINING AND OVERLOADING OF ADJACENT AND EXISTING FOOTINGS BY LIMITING THE SLOPE OF THE LINE BETWEEN ADJACENT FOOTING ELEVATIONS TO 7 IN 10 MAXIMUM WITH A MAXIMUM RISE OF 2'-0".
- 21. STEEL FIBRE REINFORCEMENT TO CONFORM WITH ASTM 820 TYPE 1 FIBRES FIBRE REINF. CONCRETE TO BE PREPARED AND PLACED TO ASTM C1116 REQUIREMENTS.
- 22. NON-METALIC REINF. TO COMPLY WITH EUROPEAN STANDARD EN 14889-22006 FIBRES FOR CONCRETE PART 2: CLASS 1A AND CARRIES CE MARKING. FIBRE-REINF. CONCRETE TO BE PREPARED AND PLACED IN ACCORDANCE WITH ASTM C1116.

- COMPLY WITH CSA STANDARD CSA-G30.18 FOR ALL REINFORCEMENT.
- 24. COMPLY WITH ASTM STANDARD A1064/A1064M FOR WELDED WIRE FABRIC. THE MINIMUM YIELD STREGTH IS 450MPa (65,000 psi).
- 25. DETAIL AND BEND ALL REINFORCING STEEL AS DETAILED IN THE MOST RECENT ISSUE OF THE REINFORCING STEEL MANUAL OF STANDARD PRACTICE PUBLISHED BY THE REINFORCING STEEL INSTITUTE OF CANADA
- 26. UNLESS OTHERWISE NOTED, LAP CONTINUOUS REINF. STEEL 30 BAR DIAMETERS AT SPLICES AND CORNERS EXCEPT IN FOOTINGS AND AS NOTED OTHERWISE, SPLICE TOP STEEL AT MIDSPAN AND BOTTOM STEEL AT
- 27. EXCAVATED MATERIAL SHOULD ONLY BE USED AS BACKFILL IF APPROVED BY THE SOILS CONSULTANT.
- 28. ALL STRUCTUAL STEEL EXPOSED TO THE EARTH SHOULD BE PROTECTED WITH AT LEAST 3" OF CONCRETE COVER.
- 29. BACKFILL UNDERSIDE OF SLAB-ON-GRADE WITH OPSS GRANULAR 'B'COMPACTED IN 6" MAXIMUM LIFTS TO 98% STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT.
- 30. SLAB-ON-GRADE MAY BE PLACED ON NON-ORGANIC MATERIAL FILL SOIL. ALL FILL MATERIAL MUST BE INSPECTED. BY THE SOILS ENGINEER. IF THE FILL IS UNACCEPTABLE, REMOVE IT TO UNDISTURBED SOIL AND REPLACE IT WITH
- 31. WHEN PLACING BACKFILL ON BOTH SIDES OF THE WALL, DO SO SIMULTANEOUSLY, WITH THE DIFFERENCE IN HEIGHT BETWEEN THE TWO SIDE NOT EXCEEDING 2'-0" AT ANY GIVEN INSTANT.
- 32. DO NOT PLACE BACKFILL AGAINST CANTILEVERED RETAINING WALLS UNTIL THE CONCRETE HAS ACHIEVED THE DESIGN 28 DAY STRENGTH.
- 33. IF THE PERIMETER RIGID INSULATION IS OMITTED AND THE NATURAL SOIL BASE IS NOT FREE DRAINING GRANULAR MATERIAL, AND/OR THE WATER TABLE IS NOT BELOW FROST DEPTH, THE SLAB-ON-GRADE MAY HEAVE, RESULTING IN ADDITIONAL SLAB CRACKING DUE TO THERMAL EFFECTS, WHICH WILL NOT BE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER.
- HORIZONTAL CONSTRUCTION OR "COLD JOINTS" IN CONCRETE RETAINING WALLS ARE NOT ALLOWED UNLESS OTHERWISE SPECIFIED ON THE STRUCTURAL DRAWINGS.
- 35. DO NOT PLACE BACKFILL AGAINST THE BASEMENT RETAINING WALLS UNTIL THE FIRST FLOOR SLAB HAS BEEN CONSTRUCTED AND THE CONCRETE 28 DAY DESIGN STRENGTH FOR BOTH THE WALLS AND THE FLOOR HAS BEEN ATTAINED
- WALLS RETAINING EARTH HAVE BEEN DESIGNED ASSUMING A SURCHARGE OF 250psf
- 37. THE LATERAL PRESSURE OF SOIL AGAINST RETAINING WALLS HAS BEEN ASSUMED TO BE 38pcf EQUIVALENT FLUID PRESSURE (ASSUMED DRAINED MATERIAL).
- 38. EXCEPT WHERE SPECIFIED OTHERWISE, BEAR 4" AND 6" MASONRY PARTITION WALLS ON SLAB-ON-GRADE. BEAR ALL MASONRY WALLS ON FOOTINGS AS DETAILED.
- 39. THE PERFORMANCE OF CAST-IN-PLACE CONCRETE IS DEFINED IN CSA A23.1. CONTRACTOR AND SUPPLIER MUST COMPLY WITH CSA STANDARDS CAN-A23.1 AND A23.2 FOR CONCRETE MIX COMPONENTS, PLACING, CURING, AND
- 40. UNLESS OTHERWISE NOTED, ALL STRUCTURAL CONCRETE MUST HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 25MPA FOR UNEXPOSED ELEMENTS AND 30MPA FOR EXPOSED ELEMENTS.
- CONCRETE SUPPLIER AND CONTRACTOR RESPONSIBLE FOR CONCRETE MUST PROVIDE CONCRETE THAT MEETS THE CSA A23.1 EXPOSURE CLASSES BELOW.
  - CLASS C1: CONCRETE EXPOSED TO CHLORIDES INCLUDING EXPOSURE TO DE-ICING SALTS DURING WINTER MONTHS. THIS INCLUDES BUT IS NOT LIMITED TO REINF. FOOTINGS, WALLS AND PIERS IN THE VICINITY OF PARKING LOTS OR PATHWAYS WHERE USE OF DEICING SALTS CAN BE REASONABLY EXPECTED OVER A 50 YR. SERVICE LIFE; IF C-1 APPLIES, COMBINE IT WITH ONE OF THE FOLLOWING EXPOSURE CLASSES AS PER SENTENCE 2C AS NECESSARY.
  - CLASS N: FOOTINGS WITH MIN. FROST COVER TO TOP OF FOOTINGS (SEE DETAILS/SECTIONS), INTERIOR SLABS, WALLS, PIERS, PEDESTALS AND COLUMNS (HEATED BUILDING ONLY, FOR UNHEATED BUILDINGS SEE NOTE "c".
  - CLASS F-2: EXTERIOR FOUNDATION WALLS, FOOTINGS WITH INADEQUATE FROST COVER, RETAINING WALLS, EXTERIOR PIERS/COLUMNS.
  - CLASS C-2 SIDEWALKS AND CURBS.
- 42. CONCRETE READY-MIX SUPPLIER HAVE TO BE A MEMBER OF THEIR PROVINCIAL READY-MIX CONCRETE ASSOCIATION.



CLIENT:

ANDREW CRONE

PROJECT NAME

ANDREW CRONE

PROJECT LOCATION

8 EASY STREET, PORT PERRY, ON - L9L 1B2

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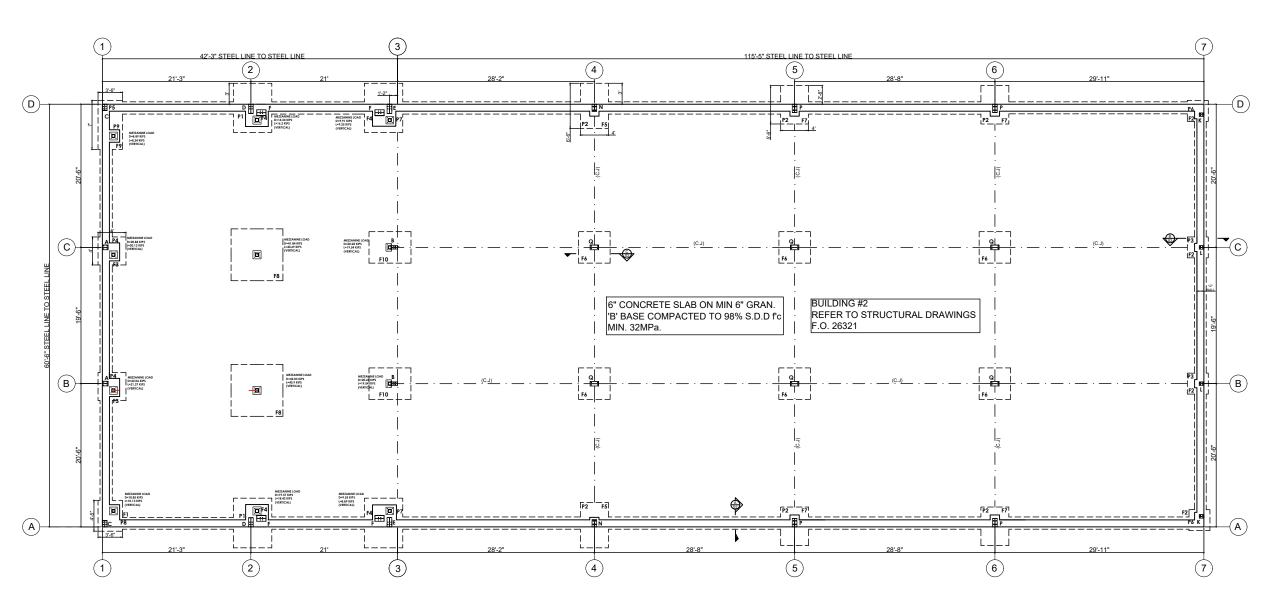
GENERAL NOTES

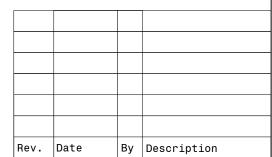
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## FOUNDATION PLAN

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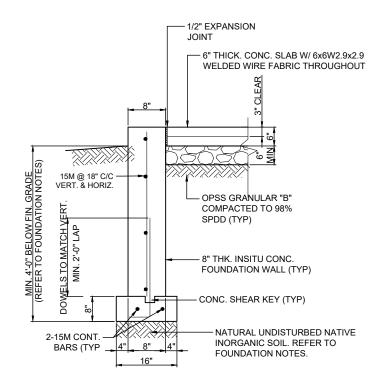
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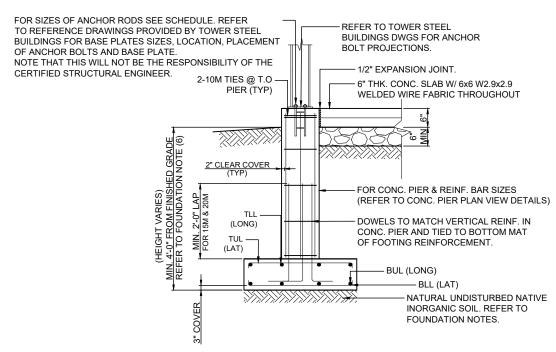
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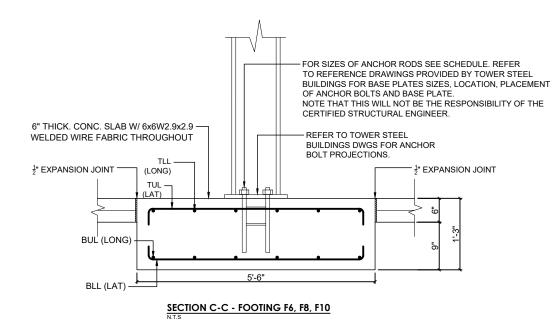


## **SECTION A-A - TYPICAL EXTERIOR FOUNDATION WALL**

N.T.S



SECTION B-B - EXTERIOR REINF. CONCRETE PIER/FOOTING DETAIL



FOUNDATION SCHEDULE					
FOOTING TYPE MARK	LENGTH	WIDTH	THICKNESS	REINF.LONG (TLL & BUL)	REINF.TRANS. (TUL & BLL)
F1	4'-5"	3'-6"	1'-3"	4-15M & 4-20M	5-15M & 5-20M
F2	3'-0" 3'-0"		1'-0"	4-15M & 4-20M	4-15M & 4-20M
F3	4'-0"	4'-0"	1'-3"	4-15M & 4-20M	4-15M & 4-20M
F4 7'-0" 5		5'-6"	1'-3"	7-15M & 7-20M	7-15M & 7-20M
F5	6'-6"	4'	1'-3"	4-15M & 4-20M	7-15M & 7-20M
F6	4'-6"	4'-6"	1'-3"	5-15M & 5-20M	5-15M & 5-20M
F7	4'-0"	5'-6"	1'-3"	4-15M & 4-20M	7-15M & 7-20M
F8	7'-5"	7'-5"	1'-3"	7-15M & 7-20M	7-15M & 7-20M
F9	7'-6"	3'-6"	1'-3"	4-15M & 4-20M	8-15M & 8-20M
F10	6'-0"	4'-6"	1'-3"	6-15M & 7-20M	5-15M & 5-20M
TUL= TOP UPPER LAYER			TLL= TOP LOWER LAYER		
BUL= BOTTOM UPPER LAYER			BLL= BOTTOM LOWER LAYER		

Rev.	Date	Ву	Description

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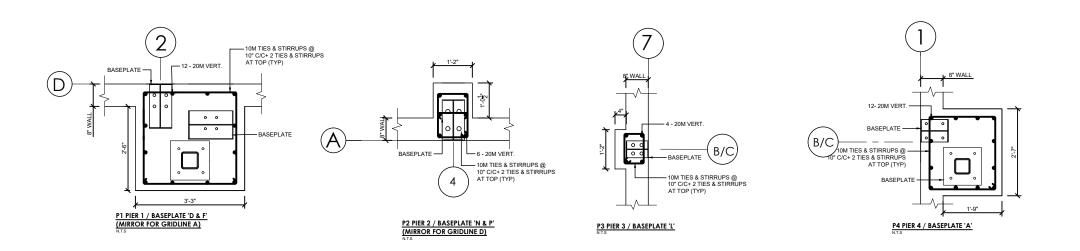
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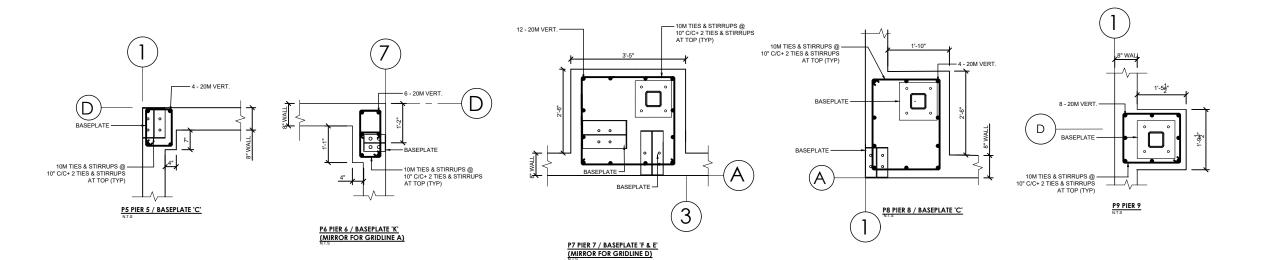
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8 EASY STREET, PORT PERRY, ON - L9L 1B2

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PIER DETAILS

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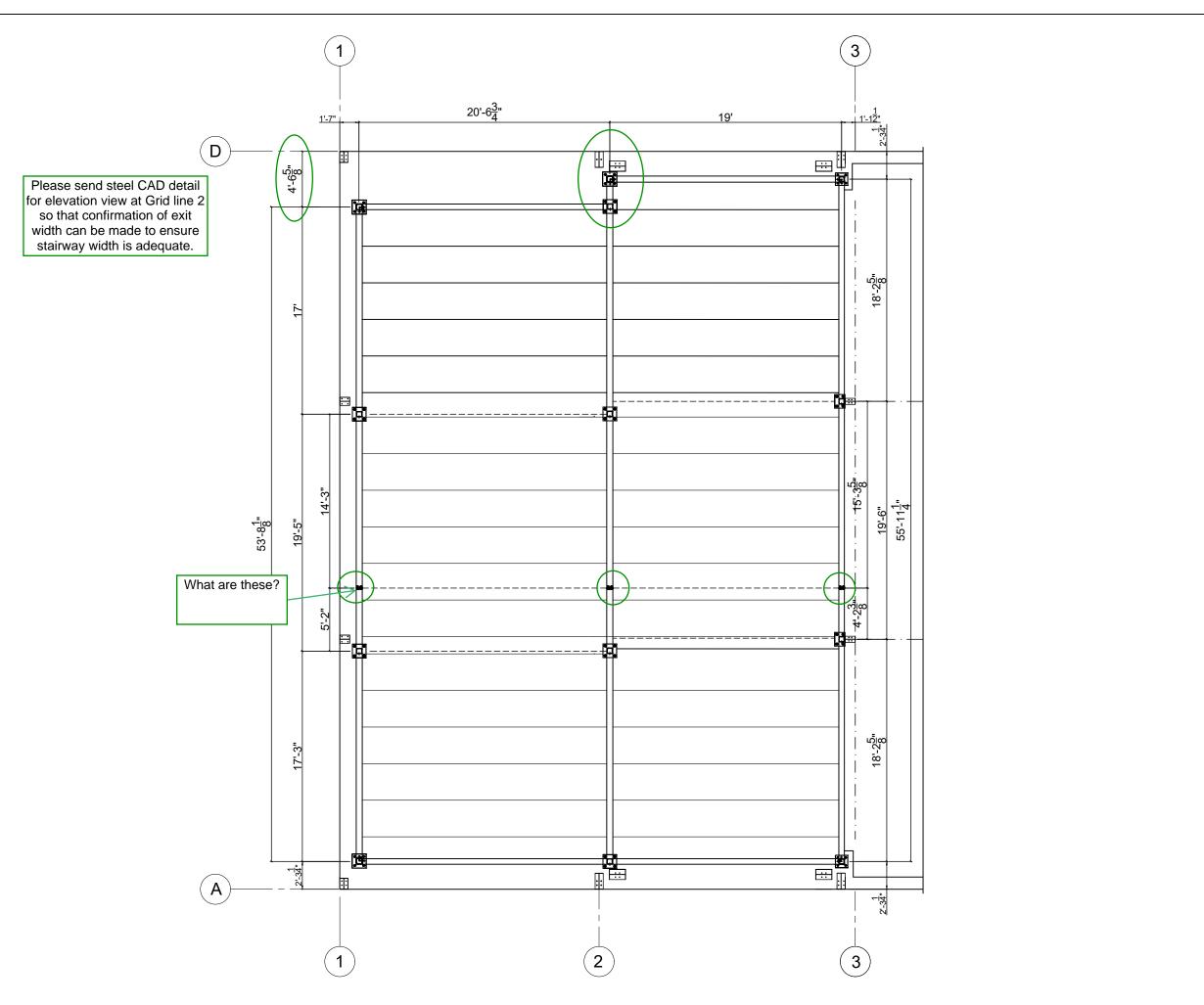
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PROJECT LOCATION

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## MEZZANINE PLAN

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LP-S1.5

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