### D01) GENERAL

### **D01-1 GENERAL INFORMATION**

- 1. THE INFORMATION PRESENTED ON THESE DRAWINGS HAS BEEN DESIGNED AND ANALYZED IN ACCORDANCE WITH THE 2012 ONTARIO BUILDING CODE. CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH THIS AND ALL OTHER APPLICABLE CODES.
- 2. CONFIRM ALL DIMENSIONS, ELEVATIONS, GRADES AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. REPORT INCONSISTENCIES BEFORE PROCEEDING WITH THE WORK.
- 3. GUARDRAILS/HANDRAILS SHALL BE DESIGNED AND CERTIFIED BY THE FABRICATOR'S PROFESSIONAL ENGINEER LICENSED IN ONTARIO IN ACCORDANCE WITH LOADS PROVIDED IN (4.1.5.15, 3.4.6.4 AND 3.4.6.5 OF THE 2012 ONTARIO BUILDING CODE. STAMPED SHOP DRAWINGS TO BE SUBMITTED. IN ADDITION, GLASS IN GUARDS SHALL COMPLY WITH "SUPPLEMENTARY STANDARD SB-13".
- 4. CONTRACTOR TO PROVIDE PRE-ENGINEERED SHORING AS REQUIRED TO ACCOMMODATE THE CONTRACTOR'S CONSTRUCTION ACTIVITIES TO RETAIN THE SOIL AND PREVENT DAMAGE TO ANY ADJACENT PROPERTY. ALL SHORING SHOP DRAWINGS ARE TO BE STAMPED BY A ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
- 5. CONTRACTOR IS RESPONSIBLE FOR CO-ORDINATING & TIMING OF THE CONSTRUCTION WITH RESPECT TO THE VARIOUS TRADES.
- 6. PROPRIETARY SYSTEMS ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 7. DO NOT SCALE THESE DRAWINGS.
- 8. DETAILS OF CONSTRUCTION ARE SHOWN BASED ON INFORMATION AVAILABLE AT THE TIME OF PREPARING DESIGN DRAWINGS. IF, DURING CONSTRUCTION, CONDITIONS ARE REVEALED THAT DIFFER FROM THE ASSUMED CONDITIONS, ADVISE THE CONSULTANT BEFORE PROCEEDING.
- 9. NO FOUNDATION ELEMENTS ARE TO BE CONSTRUCTED UNTIL WRITTEN APPROVAL OF THE BEARING SURFACES AND PRESSURES IS PROVIDED BY A GEOTECHNICAL ENGINEER THROUGH ON SITE INVESTIGATION. FAILURE TO COMPLETE THIS WORK COULD RESULT IN THE REMOVAL/REINSTATEMENTOF ANY/ALL ELEMENTS AT THE CONTRACTOR'S OWN COST.

D02-0 EXCAVATION, FOUNDATIONS, AND BACKFILL

D02-1 EXCAVATION AND BACKFILL:

- 1. PRIOR TO ANY EXCAVATION. VERIFY LOCATION OF EXISTING SERVICES AND TAKE ALL NECESSARY MEASURES TO MAINTAIN SERVICES WHERE REQUIRED. NOTIFY OWNER AND CONSULTANT IF ANY SERVICES NOT SHOWN ON PLAN OR OTHERWISE EXPECTED ARE ENCOUNTERED. DO NOT PROCEED FURTHER UNTIL DIRECTED.
- 2. CARE MUST BE TAKEN TO AVOID UNDERMINING EXISTING BUILDING FOUNDATIONS OR UNDERGROUND SERVICES.
- 3. PROTECT SUB-GRADE FROM FREEZING AND FROST ACTION AT ALL TIMES DURING CONSTRUCTION.
- 4. FOOTINGS MUST BEAR ON APPROVED BEARING SURFACES.
- 5. RE-USE OF EXCAVATED GRANULAR MATERIAL IS NOT ACCEPTABLE
- 6. CONTRACTOR TO RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFORMATION OF THE BEARING CAPACITY OF THE SUBSTRATE BELOW NEW FENCE FOOTINGS. MINIMUM 75kPa BEARING CAPACITY REQUIRED.
- 7. CONTRACTOR TO REINSTATE NEW TOP SOIL, SOD, ETC. TO MATCH REQUIRED GRADE AND LANDSCAPE FEATURES.
- 8. CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY EARTH SHORING AS REQUIRED DURING THE EXCAVATION WORK. CONTRACTOR SHALL PROVIDE EARTH SHORING SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO FOR REVIEW PRIOR TO EXCAVATION.
- 9. EXCAVATIONS ARE TO REMAIN WITHIN PROPERTY LINES. CONTRACTOR IS RESPONSIBLE FOR SURVEY TO IDENTIFY LOCATION OF PROPERTY LINE ADJACENT TO AREA OF WORK.

D02-2 PROTECT LATERAL STABILITY OF BEARING STRATA UNLESS NOTED: UNLESS OTHERWISE OUTLINED IN GEOTECTNICAL REPORT DO NOT EXCAVATE BELOW A LINE EXTENDING DOWNWARD FROM ANY BEARING STRATA AT A SLOPE OF 1 VERTICAL TO 2 HORIZONTAL. ADJUST FOOTING AND TRENCH ELEVATIONS TO MEET THIS REQUIREMENT (SEE DIAGRAM).



D03-0 CHAIN LINK FENCE

- 1. POST, BRACES AND RAIL: CSA G40.20 HSS GALVANIZED MEMBERS, DIMENSIONS AS NOTED
- 2. TOP AND BOTTOM TENSION WIRE: TO CAN/CGSB-138.2, SINGLE STRAND, GALVANIZED STEEL WIRE
- 3. TIE WIRE FASTENERS: STEEL WIRE
- 4. TENSION BAR: TO ASTM A653/A653M, 5 X 20 MM MINIMUM GALVANIZED STEEL
- 5. FITTINGS AND HARDWARE: TO CAN/CGSB-138.2, GALVANIZED STEEL. POST CAPS TO PROVIDE WATERPROOF FIT, TO FASTEN SECURELY OVER POSTS AND TO CARRY TOP RAIL
- 6. SPACE LINE POSTS 3M APART, MEASURED PARALLEL TO GROUND SURFACE. 7. SPACE STRAINING POSTS AT EQUAL INTERVALS NOT TO EXCEED 150M IF DISTANCE BETWEEN END OR CORNER POSTS ON STRAIGHT CONTINUOUS LENGTHS OF FENCE OVER REASONABLY SMOOTH GRADE, IS GREATER THAN 150M.
- 8. INSTALL ADDITIONAL STRAINING POSTS AT SHARP CHANGES IN GRADE AND WHERE DIRECTED BY CONSULTANT.
- 9. INSTALL TERMINAL POST WHERE CHANGE IN ALIGNMENT EXCEEDS 10 DEGREES.
- 10. INSTALL TERMINAL POSTS AT END OF FENCE AND AT BUILDINGS.
- 11. INSTALL BRACE BETWEEN END POSTS AND NEAREST LINE POST, PLACED IN CENTRE OF PANEL AND PARALLEL TO GROUND SURFACE. INSTALL BRACES ON BOTH SIDES OF CORNER AND STRAINING POSTS IN SIMILAR MANNER.
- 12. INSTALL TOP RAIL BETWEEN POSTS AND FASTEN SECURELY TO POSTS AND SECURE WATERPROOF CAPS.
- 13. INSTALL BOTTOM TENSION WIRE, STRETCH TIGHTLY AND FASTEN SECURELY TO END, CORNER, AND STRAINING POSTS WITH TURNBUCKLES AND TENSION BAR BANDS. 14. LAY OUT FENCE FABRIC. STRETCH TIGHTLY TO TENSION RECOMMENDED BY MANUFACTURER
- AND FASTEN TO END, CORNER, AND STRAINING POSTS WITH TENSION BAR SECURED TO POST WITH TENSION BAR BANDS SPACED AT 3M INTERVALS. .1 KNUCKLED SELVEDGE AT BOTTOM. .2 TWISTED SELVEDGE AT TOP.
- 15. SECURE FABRIC TO TOP RAILS, LINE POSTS AND BOTTOM RAIL WITH TIE WIRES AT 300MM INTERVALS. .1 GIVE TIE WIRES MINIMUM TWO TWISTS.
- 16. REPLACE DEFECTIVE OR DAMAGED MATERIALS WITH NEW.
- 17. CONTRACTOR TO LAY OUT LOCATION OF FENCE AND GATES WITH PICKETS + STRING-LINE FOR
- 18. MAKE GOOD ANY DAMAGE TO LANDSCAPING. USE SOD NOT SEED FOR GRASSY AREAS.

APPROVAL BY CONSULTANT PRIOR TO BEGINNING THE INSTALLATION OF POSTS.

## D04-0 SHOP DRAWINGS

### 1. SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL WORK AND ANY WORK AFFECTING THE STRUCTURE TO THE CONSTRUCTION MANAGER. OBTAIN ARCHITECT'S & ENGINEER'S APPROVAL BEFORE PROCEEDING WITH THE FABRICATION.

- 2. EACH OF THE FOLLOWING SHOP DRAWINGS MUST BEAR THE SIGNATURE AND STAMP OF A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE (PLUS OTHER DRAWINGS AS NOTED).
- a) DRAWINGS FOR ANY TEMPORARY WORK. b) DRAWINGS FOR ANY STRUCTURAL PARTS DESIGNED BY THE CONTRACTOR'S FORCES c) CHAINLINK FENCE
- 3. SHOP DRAWINGS MUST BE REVIEWED AND STAMPED REVIEWED BY THE CONTRACTOR BEFORE ISSUING TO THE ARCHITECT/ENGINEER. SHOP DRAWINGS NOT STAMPED BY THE CONTRACTOR WILL BE REJECTED. ANY DELAYS IN THE CONSTRUCTION SCHEDULE DUE TO NONCOMPLIANCE WITH THIS REQUIREMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. SHOP DRAWINGS ARE REVIEWED FOR CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THIS REVIEW DOES NOT IMPLY APPROVAL OF THE DETAILED DESIGN OR QUANTITIES DESCRIBED IN THE SHOP DRAWINGS. THE RESPONSIBILITY FOR THE QUANTITIES AND DETAILED DESIGN OF THE MATERIALS AND COMPONENTS AS REQUIRED TO PROVIDE THE COMPLETE AND SATISFACTORY JOB DESCRIBED IN THE DESIGN DOCUMENTS REMAINS WITH THE CONTRACTOR.

75mm

50mm

D05) CONCRETE

- D05-1 CONCRETE REINFORCING STEEL:
- 1. REINFORCING TO BE GRADE 400R DEFORMED BARS TO CSA-G30.18 AND GRADE 400W WHERE BARS ARE TO BE WELDED.

D05-2 CONCRETE COVER (CLEAR TO REINFORCING):

U/S FOOTINGS (AGAINST SOIL) FOOTINGS (SIDES & TOP)

# D05-3 CONCRETE MIXES

PROPORTION NORMAL DENSITY CONCRETE IN ACCORDANCE WITH CAN/CSA-A23.1, TO GIVE THE FOLLOWING QUALITY FOR ALL CONCRETE AS INDICATED. 

1 00 171011			CLASS OF	
LOCATION	STRENGTH	SLUMP	EXPOSUR	
FOOTINGS	25 MPa	75mm	F-2	
REFER TO CAN/CSA	A23.1 FOR THE MAXIMUM WAT	ER/CEMENT RATIO, MIT		
COMPRESSIVE STR	FINGTH AIR CONTENT CURING	REQUIREMENTS CHI (	ORIDE ION	

PERMEABILITY AND ALTERNATE CEMENT TYPE TO MEET THE REQUIREMENTS FOR THE NOTED EXPOSURE CLASS.

READY-MIXED CONCRETE AND CONCRETE PROPORTIONS SHALL BE IN ACCORDANCE WITH CSA A23.1, CLAUSE 12 AND AS FOLLOWS:

- 1. PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF SPECIFIED QUALITY AND YIELD AND THAT STRENGTH WILL COMPLY WITH CAN/CSA-A23.1-M06.
- 2. USE OF CALCIUM CHLORIDE NOT PERMITTED.
- 3. DO NOT CHANGE CONCRETE MIX WITHOUT PRIOR APPROVAL OF CONSULTANT. SHOULD CHANGE IN MATERIAL SOURCE BE PROPOSED, NEW MIX DESIGN TO BE APPROVED BY CONSULTANT.
- 4. ALL CONCRETE EXPOSED TO EXTERIOR CONDITIONS TO BE AIR ENTRAINED AS PER CSA A23.1.

# D05-4 CONCRETE COLD WEATHER PROTECTION

- 1. CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY HEAT, IN OTHER MEANS AS REQUIRE TO PROTECT THE MASONRY BLOCKS, GRANULAR MATERIALS FROM FREEZING DURING THE WORK, IN ACC
- PROTECT SUB-GRADE FROM FREEZING AND FROST ACTION AT ALL 2. CONSTRUCTION. DO NOT PLACE CONCRETE ON FROZEN GROUND.
- 3. CONTRACTOR TO PROVIDE PROPOSED METHOD OF PROTECTION F COMMENCING THE WORK.

### 4. CURE CONCRETE TO CSA A23.1/A23.2. TAKE APPROPRIATE PRECAU WORK AS PER CSA A23.1/A23.2.

# D05-5 CONCRETE WARM WEATHER PROTECTION

- 1. CARRY OUT HOT WEATHER CONCRETING IN ACCORDANCE WITH C PROTECT CONCRETE FROM EFFECT OF HOT OR DRYING WEATHER FORMS AND REINFORCING FROM THE DIRECT RAYS OF THE SUN,
- EVAPORATION. 4. CURE CONCRETE TO CSA A23.1/A23.2. TAKE APPROPRIATE PRECAU WEATHER WORK AS PER CSA A23.1/A23.2.

	not to be used for construction unless stamped and signed by the Engineer. Do not scale drawings. Copyright reserved. This drawing is the exclusive property of Cleland Jardine Engineering Ltd.			
NSULATION MATERIALS OR GROUT, CONCRETE AND CORDANCE WITH CSA-423.1				
L TIMES DURING				
FOR OUR REVIEW PRIOR TO				
AUTIONS FOR COLD WEATHER				
CSA A23.1. R CONDITIONS. PROTECT OR COOL BY FOGGING AND				
AUTIONS FOR WARM				
				Ι
				Ι
				╢
	2 DEC 02/2 1 NOV 21/	24 APPLICATION 24 ISSUED FOR	REVIEW ME	: 
	No. DATE	E	REVISIONS BY	
			ANT PROFESSIONAL SH	
			S. J. B. A. LADHANI 100225530	
			2024-12-02 BOLINO	
			ICE OF OL	╢
				ļ
	DYN	MECH WA	REHOUSE	
		ADDIT	ION (ER ST	
		1303 CUP		
			RAI	][
	NOTE			
	DRAWN:	S.L.	DRAWING No.	ij
	DESIGNED: DATE:	S.L. 2024 11 21		
	SCALE: PROJECT No:	AS INDICATED	- 3400	

The Contractor shall check and verify all dimensions on site. This drawing is

