150 Commerce Valley Drive West, Thornhill, ON, Canada L3T 7Z3
Tel: (905) 822-1100 Fax: (905) 822-0055 www.wsp.com

SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

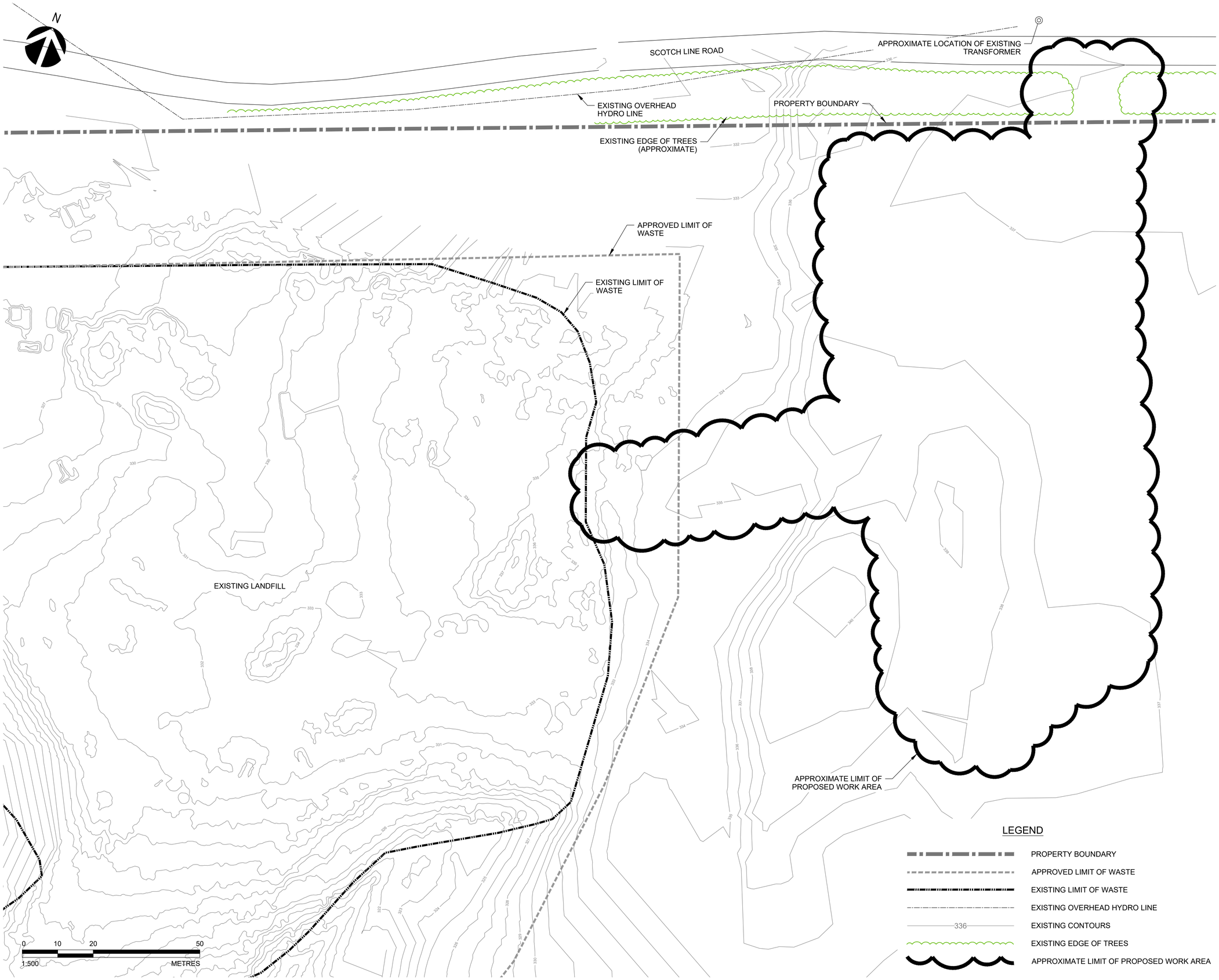
PROJECT NUMBER: 221-10889-00

ISSUED FOR TENDER
DECEMBER 2024

DRAWING INDEX	
DRAWINGS INDEX	DRAWING TITLE
C-1001	EXISTING CONDITION AND PROPOSED WORK AREA
C-1002	PROPOSED TRANSFER STATION
A-1001	SCALE KIOSK PLAN, ELEVATION AND SECTIONS
S-0001	GENERAL NOTES AND STANDARD DETAIL(1)
S-0002	STANDARD DETAILS (2)
S-1001	OVERALL PLAN
S-1002	WHEEL CHAIR RAMP PLAN AND SECTION
S-1003	WHEEL CHAIR RAMP SECTIONS AND DETAILS
S-2001	SECTIONS AND DETAILS
E-0001	LEGEND AND ABBREVIATIONS
E-1001	ELECTRICAL SITE PLAN
E-2001	PARTIAL SITE PLAN AND BANK DETAILS
E-3001	SINGLE LINE, SCHEMATIC DIAGRAMS, PANEL AND LUMINARE SCHEDULES
E-4001	SINGLE LINE, SCHEMATIC DIAGRAMS, PANEL AND LUMINARE SCHEDULES
M-1001	SCALE KIOSK - HVAC PLAN AND SECTION

2024-11-29 1:44:14 PM

DRAWING NUMBER: G-001



REVISION:			
4	2024-12-12	ISSUED FOR TENDER	IFH
3	2024-11-13	ISSUED FOR CLIENT REVIEW	IFH
2	2024-05-09	ISSUED FOR CLIENT REVIEW	IFH
1	2024-02-14	ISSUED FOR CLIENT REVIEW	JJO
REV	DATE	DESCRIPTION	BY

SEAL:

LICENSED PROFESSIONAL ENGINEER
I. F. HASAN
100194703
2024-12-12
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
APPROVED BY: I F H
CHECKED BY: J J O
DRAWN BY: I F H
DATE: 2024-12-12
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: CIVIL

WSP Canada Inc.
300 - 4 Hughson Street South, Hamilton, Ontario, L8N 3Z1
T 905-529-4414 | www.wsp.com

PROJECT NUMBER: 221-10889-00

CLIENT: TOWNSHIP OF MINDEN HILLS

CLIENT REF. #: --

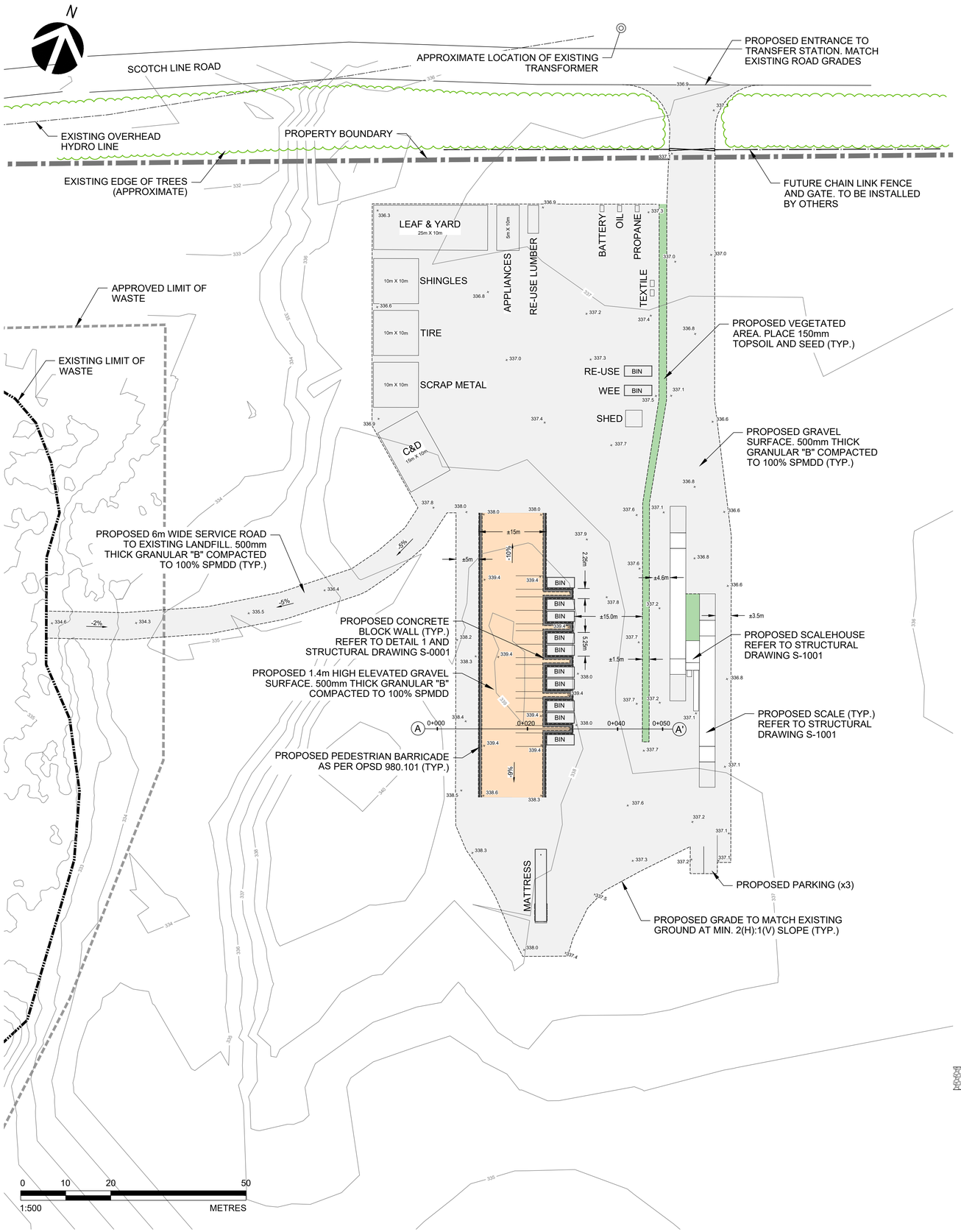
PROJECT:

SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE:

EXISTING CONDITION AND PROPOSED WORK AREA

DRAWING NUMBER: C-101
REV. 4

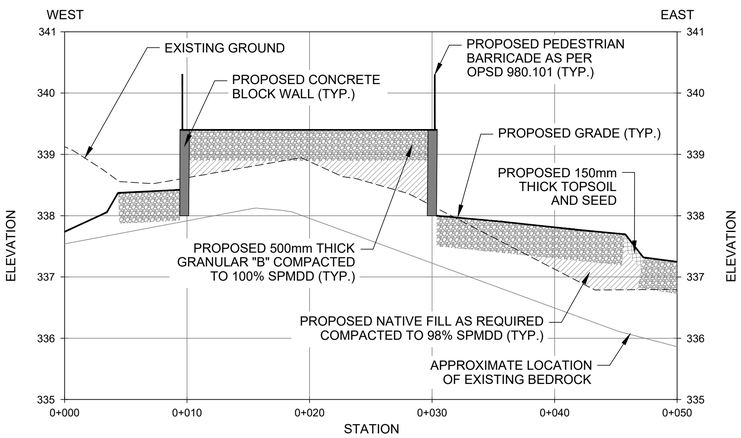


LEGEND

- PROPERTY BOUNDARY
- APPROVED LIMIT OF WASTE
- EXISTING LIMIT OF WASTE
- EXISTING OVERHEAD HYDRO LINE
- 336 — EXISTING CONTOURS
- EXISTING EDGE OF TREES
- 337.4 — PROPOSED FINISHED GRADE
- PROPOSED GRAVEL SURFACE
- PROPOSED ELEVATED GRAVEL SURFACE
- PROPOSED TOPSOIL SURFACE
- PROPOSED CONCRETE BLOCK WALL
- PROPOSED PEDESTRIAN BARRICADE
- FUTURE CHAIN LINK FENCE (BY OTHERS)

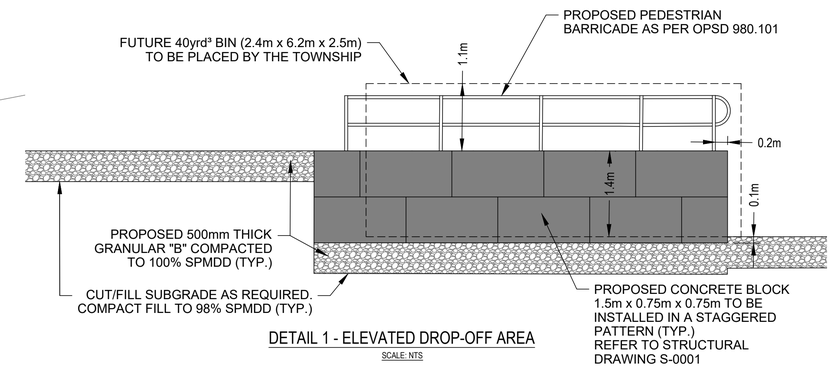
NOTES:

1. THE EXISTING UTILITY LOCATIONS ARE APPROXIMATE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION OF EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PUBLIC AND PRIVATE UTILITY LOCATES PRIOR TO EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND REINSTATEMENT OF EXISTING SERVICES AND UTILITIES.
2. ALL DISTURBED AREAS ARE TO BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION OF THE CITY AND ENGINEER.
3. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT" AND REGULATIONS FOR CONSTRUCTION PROJECTS. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.



CROSS SECTION A-A'

(VERTICAL EXAGGERATION = 5X)



DETAIL 1 - ELEVATED DROP-OFF AREA

SCALE: NTS

REV	DATE	DESCRIPTION	BY
4	2024-12-12	ISSUED FOR TENDER	IFH
3	2024-11-13	ISSUED FOR CLIENT REVIEW	IFH
2	2024-05-09	ISSUED FOR CLIENT REVIEW	IFH
1	2024-02-14	ISSUED FOR CLIENT REVIEW	JJO

REVISION:

SEAL:

LICENSED PROFESSIONAL ENGINEER
I. F. HASAN
100194703
2024-12-12
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 2024-12-12
APPROVED BY: I F H
CHECKED BY: J J O
DRAWN BY: I F H
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: CIVIL

WSP Canada Inc.
300 - 4 Hughson Street South, Hamilton, Ontario, L8N 3Z1
T 905-529-4414 | www.wsp.com

PROJECT NUMBER: 221-10889-00

CLIENT: TOWNSHIP OF MINDEN HILLS

CLIENT REF. #: --

PROJECT:

SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE:

PROPOSED TRANSFER STATION

DRAWING NUMBER: C-102

REV. 4

CTB: cws colour - fr edit.ctb
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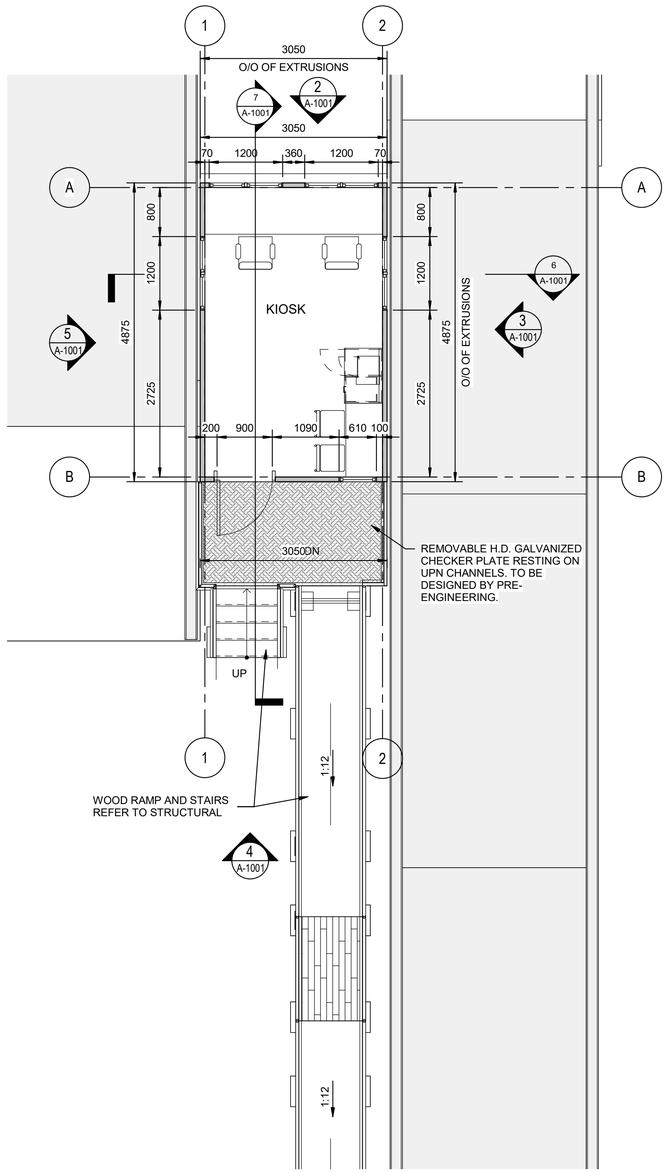
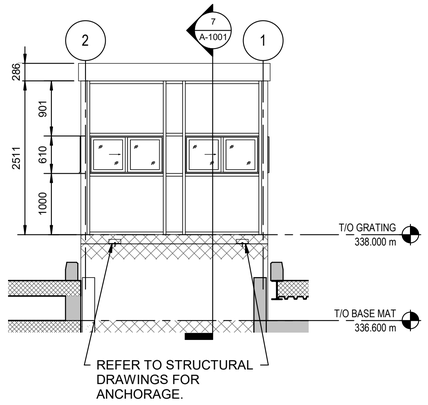


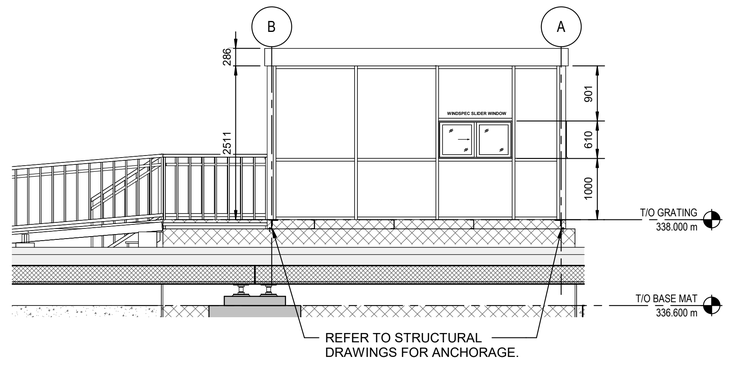
1 A-1001 SCALE KIOSK GROUND FLOOR

1 : 50



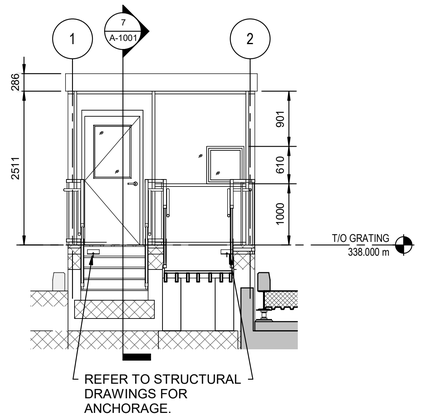
2 A-1001 NORTH ELEVATION

1 : 50



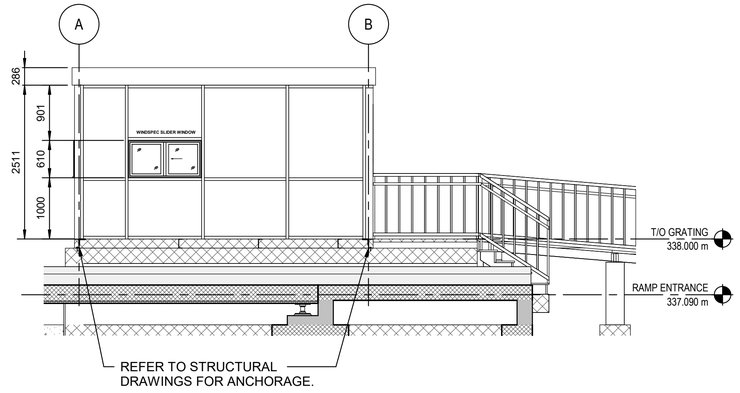
3 A-1001 EAST ELEVATION

1 : 50



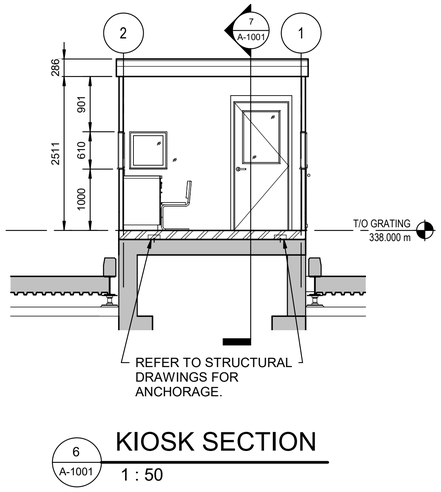
4 A-1001 SOUTH ELEVATION

1 : 50



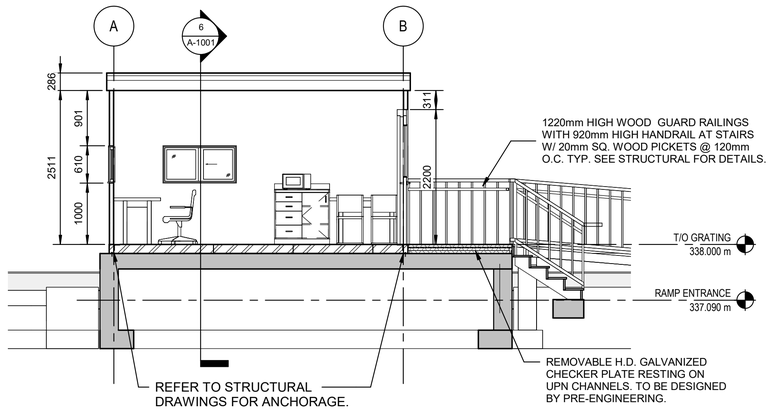
5 A-1001 WEST ELEVATION

1 : 50



6 A-1001 KIOSK SECTION

1 : 50



7 A-1001 KIOSK SECTION

1 : 50

NOTE:

A. KIOSK IS TO BE PRE-ENGINEERED. PLAN, ELEVATIONS AND SECTIONS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. SUBMIT P. ENG. STAMPED SHOP DRAWINGS FOR REVIEW AND APPROVAL.

B. PRE-ENGINEERED KIOSK IS TO BE PRE-ENGINEERED BY NRB MODULAR SOLUTIONS INC. OR APPROVED EQUAL.

C. KIOSK IS TO BE CONSTRUCTED WITH EXTRUDED ALUMINUM FRAMING WITH WALL PANEL. PANELS TO CONSIST OF MELAMINE COMPOSITE BOARD, RIGID INSULATION CORE, AND CLEAR ANODIZED ALUMINUM SHEET. ROOF IS TO BE METAL ROOFING ON ROOF RAFTERS WITH BATT INSULATION INFILL. FLOOR IS TO BE METAL DECK ON STEEL FRAME FINISHED WITH COMMERCIAL GRADE RUBBER FLOORING, RIGID INSULATION IS TO BE INSTALLED BENEATH THE FLOOR DECK. WINDOWS TO BE ALUMINUM INSULATED GLASS UNIT. DOORS TO BE COMMERCIAL ALUMINUM DOORS WITH GLAZING.

D. DOOR SIZE: - 900 x 2100
DOOR HARDWARE:
- 4.5" BUTT HINGES
- WEATHER STRIPPING
- THRESHOLD
- DOOR CLOSER
- PUSH BAR/PULL HANDLE
- KEYED DEADBOLT LOCK w/ INTERIOR THUMB TURN
- TRANSFER HINGE AND DOOR CONTANCT
- POWER DOOR OPERATORS

E. KIOSK IS TO BE ANCHORED TO FOOTINGS. REFER TO STRUCTURAL DRAWINGS.

F. SEE CIVIL DRAWINGS FOR FINAL KIOSK LOCATION.

G. PROVIDE ADDITIONAL WOOD BLOCKING FOR RAFTERS TO MOUNT CAMERA ON KIOSK, REFER TO CIVIL AND I&C DRAWINGS FOR DETAIL.

REVISION:

REV	DATE	DESCRIPTION	BY
5	DEC. 2024	ISSUED FOR TENDER	M.E.
4	NOV. 2024	ISSUED FOR 100% SUBMISSION	M.E.
3	SEPT. 2024	ISSUED FOR PERMIT	M.E.
2	AUG. 2024	ISSUED FOR 90% DETAILED DESIGN	M.E.
1	JUNE 2024	ISSUED FOR 30% PRELIMINARY DESIGN	M.E.

SEAL:

LICENSED PROFESSIONAL ENGINEER
MOSTAFA ELSAYED
100578705
Nov.29.2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 06/14/24
APPROVED BY: S.S.
CHECKED BY: P.R.
DRAWN BY: S.S.

IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: ARCHITECTURAL

wsp
150 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T7Z3
TEL: 1-905-882-1100|FAX: 1-905-822-0055|www.wsp.com

PROJECT NUMBER:

CLIENT: TOWNSHIP OF MINDEN HILLS
CLIENT REF. #: --

PROJECT: SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE: SCALE KIOSK PLAN, ELEVATIONS AND SECTIONS

DRAWING NUMBER: A-1001
REV. 3

PLOT DATE: 2024-11-29 1:58:20 PM
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1. GENERAL

1.1 STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND PROJECT SPECIFICATIONS.

1.2 THE GENERAL NOTES AND STRUCTURAL STANDARD DETAILS PROVIDED HERE ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.

1.3 CONSTRUCTION TO BE IN ACCORDANCE WITH ONTARIO BUILDING CODE (OBC) 2012 OR THE LATEST EDITION AT THE TIME OF TENDER. THE ABOVE WILL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE FOLLOWING NOTES ARE MORE RESTRICTIVE.

1.4 DO NOT SCALE DRAWINGS. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE. ELEVATIONS ARE IN METERS UNLESS NOTED OTHERWISE.

1.5 STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO ARCHITECTURAL, MECHANICAL, OR ELECTRICAL EQUIPMENT TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. ALL DIMENSIONS ON NEW STRUCTURES ARE GIVEN AS AN AID TO ITS LOCATION RELATIVE TO EXISTING STRUCTURES. THEY ARE NOT GUARANTEED TO BE ACCURATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION.

1.6 ALL DIMENSIONS AND SITE CONDITIONS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORKS. ACCURACY OF CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. BUILDING CONTROL LINES, REFERENCE LINES, GRID LINES, ELEVATIONS, AND TEMPORARY BENCHMARKS TO BE CLEARLY IDENTIFIED BY THE CONTRACTOR AND MAINTAINED DURING THE ENTIRE CONSTRUCTION PERIOD.

1.7 THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, SEQUENCE AND SAFETY.

1.8 ARCHITECTURAL, MECHANICAL, HVAC AND ELECTRICAL EQUIPMENT SUPPORTS, PADS, CURBS, ANCHORAGES, OPENINGS, RECESSES AND REVEALS REQUIRED BY OTHER CONTRACT DRAWINGS TO BE COORDINATED AND VERIFIED FOR SIZE, LOCATIONS, AND QUANTITIES PRIOR TO CASTING CONCRETE. THE REINFORCEMENT MAY ALSO BE SHOWN ON OTHER DISCIPLINE DRAWINGS AS WELL AS STRUCTURAL DRAWINGS.

1.9 REINFORCEMENT REQUIREMENTS ARE SHOWN ON DETAILED DRAWINGS. WHERE DETAILS OF BAR SIZE AND SPACING ARE NOT SHOWN, ALLOW FOR MINIMUM REINFORCEMENT IN ACCORDANCE WITH CAN/CSA A23.3. ALL REINFORCEMENT SHOWN SHALL BE CONTINUOUS UNLESS AS DETAILED OTHERWISE.

1.10 ALL WORKS SHALL CONFORM HEALTH AND SAFETY REGULATIONS, AS SPECIFIED IN OBC 2012 OR LATEST EDITION, AND IN OTHER LOCAL AND PROVINCIAL GAZETTES, BY-LAWS, AND LEGISLATIONS.

1.11 CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXITING UNDERGROUND, BURIED AND OVERHEAD SERVICES AND UTILITIES PRIOR TO CARRY OUT ANY EXCAVATION, DEMOLITION, AND CONSTRUCTION WORKS. THE CLIENT AND CONSULTANTS ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF UTILITIES INDICATED ON THE DRAWINGS.

1.12 ALL CONSTRUCTION SHALL BE IN DRY CONDITIONS. DEWATERING OPERATIONS SHALL BE ARRANGED AND CARRIED OUT BY THE CONTRACTOR TO MAINTAIN DRY CONDITIONS AND WITHOUT CAUSING ANY DAMAGE TO EXISTING STRUCTURES.

1.13 ENSURE THAT THE SOIL BELOW ANY FOUNDATION IS NOT ALLOWED TO FREEZE, EITHER DURING OR AFTER CONSTRUCTION. UNDER NO CIRCUMSTANCES CONCRETE BE PLACED ON FROZEN SOIL.

1.14 CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF THE FACILITY, ACCESS/EXIT ROAD FROM THE ENTRANCE TO THE WORK AREA. CONTRACTOR SHALL REMOVE AND DISPOSE OF THE DEBRIS FROM SITE ON A DAILY BASIS TO MAIN CLEANLINESS OF THE CONSTRUCTION.

1.15 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY MEASURES DURING THE WORK.

2. DESIGN LOAD

2.1. FOUNDATIONS

2.1.1. GEOTECHNICAL INFORMATION IS BASED ON GEOTECHNICAL STUDIES, GEOTECHNICAL CONSULTING SERVICES - SCOTCH LINE TRANSFER STATION, DATED JUNE 2023, PREPARED, AND ASSEMBLED BY WSP CANADA. BEARING CAPACITIES TO BE FIELD VERIFIED BY A GEOTECHNICAL ENGINEER.

- NATIVE SOIL IS BEDROCK
- SOIL BEARING CAPACITY = 750 kPa (ULS)
- UNHEATED FOOTINGS ADJACENT TO SURFACES THAT ARE CLEARED OF SNOW COVER SHOULD BE PROVIDED WITH A MINIMUM OF 1.8 M OF EARTH COVER.
- GIVEN THAT THE NATIVE SOIL IS SITUATED ABOVE THE GROUNDWATER TABLE, THE NEED FOR DEWATERING PROCEDURES IS NOT ANTICIPATED.

2.2. SNOW LOAD DATA FOR MINDEN, ON:

- (1/50 YEAR) GROUND SNOW LOADING, S_s = 2.7 kPa
- ASSOCIATED RAIN LOADING, S_r = 0.4 kPa
- IMPORTANCE FACTOR (HIGH), I_s = 1.15 (ULS) AND 0.9 (SLS)

2.3. WIND LOAD DATA FOR MINDEN, ON:

- (1/50 year) HOURLY WIND PRESSURE, q = 0.35 kPa
- IMPORTANCE FACTOR (HIGH), I_w = 1.15 (ULS) AND 0.75 (SLS)

2.4. SEISMIC DATA FOR MINDEN, ON:

- $S_a(0.2)$ = 0.124
- $S_a(0.5)$ = 0.089
- $S_a(1.0)$ = 0.054
- $S_a(2.0)$ = 0.028
- $S_a(5.0)$ = 0.0071
- $S_a(10.0)$ = 0.0031
- PGV = 0.073
- PGA = 0.071

SITE CLASS = B
IMPORTANCE FACTOR (HIGH), I_E = 1.30 (ULS)

2.5. SCALE LOADS:

- LIVE LOAD = CL-625-ON TRUCK
- SUPERIMPOSED DEAD LOAD INCLUDING ALL DECK ELEMENTS AND WEARING SURFACES (FOR WEIGH SCALE ONLY) = TBD BY SUPPLIER

2.5.1. **SITE PREPARATION, EXCAVATION AND SHORING**

2.5.1.1. EXPOSED SUBGRADE SHALL BE INSPECTED AND APPROVED BY A GEOTECHNICAL ENGINEER OR THE ENGINEER'S REPRESENTATIVES BEFORE PLACEMENT OF ANY FILL MATERIALS.

2.5.1.2. THE FOUNDATION SHOULD BE ESTABLISHED ON NATIVE BEDROCK. UTILIZE A 15.0 MPa (MUD CONCRETE) TO ENSURE A LEVEL BASE FOR CONSTRUCTION ACTIVITIES.

2.5.1.3. ALL EXCAVATIONS AND DISPOSALS MUST COMPLY WITH HEALTH AND SAFETY REGULATIONS AND ALL APPLICABLE AS PER THE ONTARIO OCCUPATIONAL HEALTH AND SAFETY REGULATORY REQUIREMENTS, ONTARIO BUILDING CODE (OBC) AND RELEVANT PROVINCIAL BYLAWS AND LEGISLATIONS.

2.5.2. **BACKFILL AND ENGINEERED FILL**

2.5.2.1. EXISTING EXCAVATED SOIL ARE NOT TO BE RE-USED. ALL UNSUITABLE EXCAVATED SOIL SHALL BE REMOVED FROM SITE.

2.5.2.2. ENGINEERED FILL SHOULD BE PLACED IN A MAXIMUM OF 300 mm THICK LOOSE LIFTS AND COMPACTED TO AT LEAST 98% SPMDD.

2.5.2.3. UPPER SURFACE OF THE ENGINEERED FILL SHOULD EXTEND TO A MINIMUM OF 1 M OUTSIDE OF THE OUTER EDGE OF ANY STRUCTURAL FOOTPRINT AREAS IN ALL DIRECTIONS AND SHOULD BE SLOPED DOWNWARD AND OUTWARD AT NO STEEPER THAN 1:1 SLOPE.

3. MATERIALS

3.1. ENGINEERED BACKFIL

- UNIT WEIGHT = 21 kN/m^3
- COEFFICIENT OF LATERAL EARTH PRESSURE (AT REST) = 0.5

3.2. CONCRETE

SPECIFIED 28 – DAY MINIMUM COMPRESSIVE STRENGTH:

- STRUCTURAL CONCRETE (FOUNDATIONS AND WALLS) = 35 MPa (CLASS C-1)
- SLAB ON GRADE = 35 MPa (C-1)
- MASS CONCRETE, FILL AND LEAN CONCRETE, MUD SLAB = 15 MPa (Class N)
- UNSHRINKABLE FILL (U-Fill) = 0.7 MPa

3.2.1. CONCRETE EXPOSURE CLASS, CONCRETE STRENGTH AND MIX DESIGN, ACCESSORIES AND PLACEMENT TO CONFORM TO SPECIFICATIONS.

3.2.2. CAST-IN-PLACE CONSTRUCTION AGAINST THE GROUND. EXTEND 300MM MINIMUM BEYOND FOUNDATIONS UNO.

3.2.3. ALL EXPOSED EDGES TO HAVE 25MM CHAMFER UNO.

3.2.4. **HOT WEATHER AND COLD WEATHER CONCRETE, AND CONSTRUCTION JOINTS AND CONCRETE POUR PLAN**

3.3.4.1. DO NOT PLACE CONCRETE AGAINST ANY SURFACE WHICH IS LESS THAN 5°C.

3.3.4.2. CONCRETE IN COLD WEATHER SHALL FOLLOW CSA A23.1-14, CLAUSE 7.1.2 – COLD WEATHER CONCRETING. MAINTAIN TEMPERATURE OF CONCRETE WHEN DEPOSITED IN FORMS NOT LESS THAN 15°C OR HIGHER THAN 25°C.

3.3.4.3. CONCRETE IN HOT WEATHER SHALL FOLLOW CSA A23.1-14, CLAUSE 7.1.1 – HOT WEATHER CONCRETING. DO NOT PLACE CONCRETE WITH TEMPERATURE HIGHER THAN 27°C. CONCRETE WITH TEMPERATURE IN EXCESS 27°CON ARRIVAL AT THE SITE SHALL BE REJECTED. REMOVE REJECTED CONCRETE FROM THE SITE.

3.3.REINFORCING BARS

3.3.1. ALL REINFORCEMENT BAR TO CONFORM TO CSA G.30.18M GRADE 400 UNO.

3.3.2. FABRICATE AND PLACE REINFORCEMENT BAR IN ACCORDANCE WITH RISC MANUAL FOR STANDARD PRACTICES, UNO.

3.3.3. MINIMUM CLEAR COVER FOR CAST-IN-PLACE CONCRETE REINFORCEMENT TO BE 50 mm, UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCLUDES FORMED SURFACES AND CONCRETE BEARING ON A MUD SLAB. CONCRETE COVER FOR UNFORMED SURFACES AGAINST EARTH TO BE 75 MM.

3.3.4. REINFORCEMENT BAR FABRICATION AND PLACING TOLERANCES SHALL NOT REDUCE THE CLEAR COVER TO LESS THAN THE SPECIFIED MINIMUM CLEAR CONCRETE COVER SPECIFIED.

3.3.5. CONSTRUCTION JOINTS INDICATED ON THE DRAWINGS ARE SUGGESTED LOCATIONS. CONTRACTOR MAY REVISE LOCATION OF JOINTS SUBJECT TO SPECIFIED REQUIREMENTS. ADDITIONAL CONSTRUCTION JOINT LOCATIONS, INCLUDING ADDITIONAL REQUIRED FOR CONSTRUCTION, SHALL EB SUBMITTED FOR THE ENGINEER'S REVIEW.

3.3.6. COORDINATE PLACEMENT OF OPENINGS, PIPE PENETRATIONS, CURBS, DOWELS, SLEEVES, SUPPORTS, ANCHOR BOLTS, INSERTS, ETC., PRIOR TO PLACEMENT OF CONCRETE.

3.3.7. PROVIDE DOWELS FROM FOOTINGS, SLABS, WALLS SIMILAR IN NUMBER, SIZE AND SPACING TO THE VERTICAL AND HORIZONTAL REINFORCING BAR IN THE WALLS ABOVE UNLESS NOTED OTHERWISE.

3.3.8. ALL HOOKS SHOWN ON DRAWINGS TO BE STANDARD HOOKS CONFORMING TO CAN/CSA A23.3 (UNO).

3.3.9. UNLESS NOTED OTHERWISE, PROVIDE THE FOLLOWING TABLE FOR MINIMUM LAP LENGTHS.

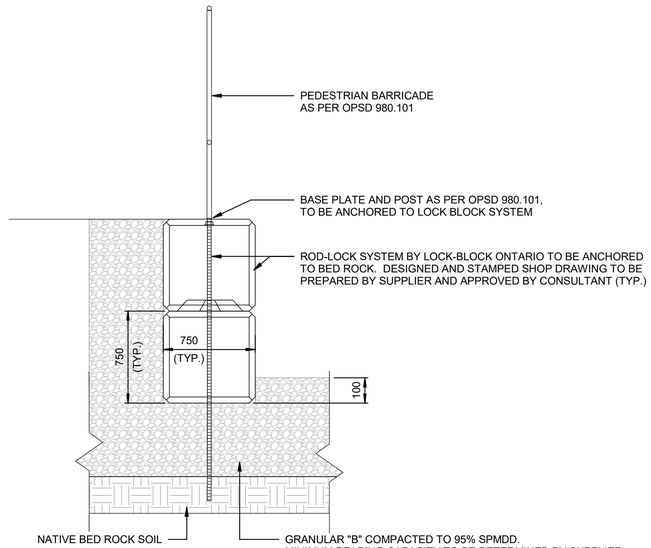
REINFORCEMENT SPLICES
35 MPa CONCRETE, NORMAL WEIGHT, 400 MPa REINFORCING BARS

BAR SIZE	LAP LENGTH (mm)					
	TOP BARS (mm)		ALL OTHER BARS(mm)		DOWELS	
	CLASS A	CLASS B	CLASS A	CLASS B	A	B
10M	360	470	300	360	300	360
15M	510	670	400	510	400	510
20M	620	810	480	620	480	620
25M	1000	1300	770	1000	770	1000
30M	1190	1550	920	1190	920	1190
35M	1390	1810	1070	1390	1070	1390

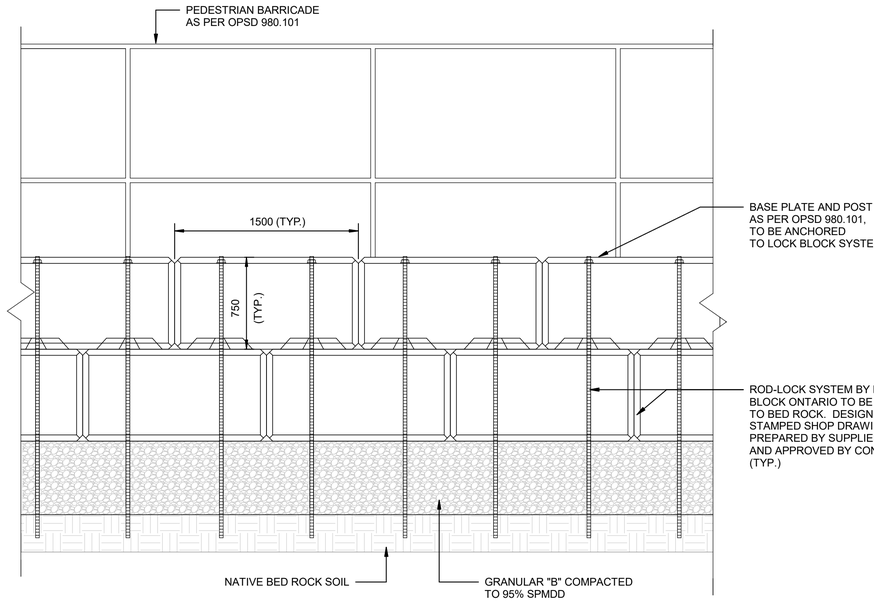
NOTE 1: DOWELS ARE TO MATCH WALL REINFORCEMENT UNLESS NOTED OTHERWISE. USE CLASS A LENGTH FOR ANCHORAGE.
NOTE 2: TOP BARS ARE:
A) ALL BARS IN CONCRETE WITH MORE THAN 300mm CONCRETE BELOW.
B) ALL HORIZONTAL BARS IN WALLS.
NOTE 3: PROVIDE CLASS B LAP UNLESS NOTED OTHERWISE
NOTE 4: LAP SPLICE LENGTHS SHOWN IN THE TABLE ARE BASED ON HEAVIER CONFINED BARS.
NOTE 5: TABLE APPLIES UNLESS SHOWN OTHERWISE.
NOTE 6: DEVELOPMENT LENGTHS ARE EQUAL TO CLASS 'A' LAP SPLICES.
NOTE 7: DEVELOPMENT LENGTHS ARE FOR UNCOATED REINFORCEMENT.
NOTE 8: ALL HOOKS SHOWN ON DRAWINGS TO BE STANDARD HOOKS CONFORMING TO CAN/CSA A23.3 (UNO). WHERE HOOKS NOT SHOWN, FOLLOW CAN/CSA A23.3 (UNO)..

4.0 WEIGH SCALE:

- REFER TO ACTIVE SCALE'S SHOP DRAWINGS FOR DETAILS



SECTION



ELEVATION

RETAINIG BLOCK WALL DETAIL

N.T.S.

REV	DATE	DESCRIPTION	BY
4	DEC. 2024	ISSUED FOR TENDER	M.E.
3	NOV. 2024	ISSUED FOR 100% DRAFT SUBMISSION	M.E.
2	SEPT. 2024	ISSUED FOR PERMIT	M.E.
1	AUG. 2024	ISSUED FOR 90% DESIGN	M.E.

REVISION:

SEAL:

LICENSED PROFESSIONAL ENGINEER
MOSTAFA ELSAYED
100578705
Nov.29.2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 07/06/23
APPROVED BY: R.L
CHECKED BY: R.L.
DRAWN BY: A.Z.
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: STTRUCTURAL

wsp
150 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T723
TEL: 1-905-882-1100|FAX: 1-905-822-0556|www.wsp.com

PROJECT NUMBER:

CLIENT: TOWNSHIP OF MINDEN HILLS

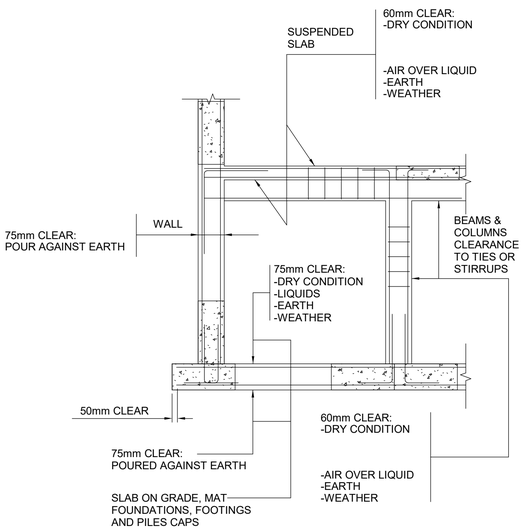
CLIENT REF. #: --

PROJECT: SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE: GENERAL NOTES AND STANDARD DETAILS (1)

DRAWING NUMBER: S-0001
REV. 1

PLOT DATE: 2024-11-29 1:44:15 PM
Autodesk Docs://221-10889-00 - Scotch Line LF Transfer Station - R22/221-10889-00_G20.rvt

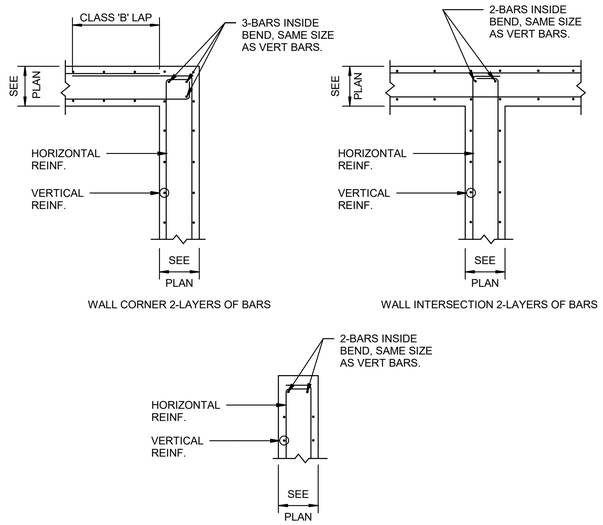


NOTE:

1. PROVIDE 50mm CLEARANCE ON FACE EXPOSED TO DRY CONDITION

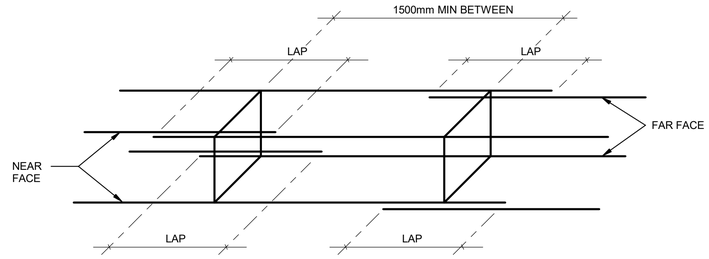
CONCRETE COVER TO REINFORCEMENT

NTS



CONC. WALL CORNER & INTERSECTION REINFORCING

NTS



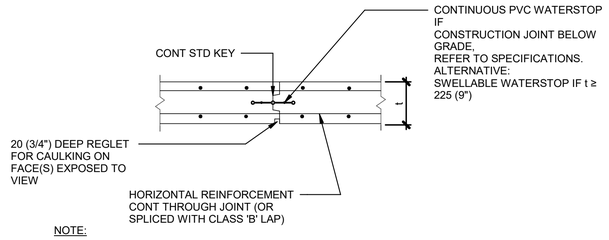
NOTE:

ISOMETRIC VIEW

LAP LENGTH CLASS B CSA A23.3 UNLESS NOTED OTHERWISE

ARRANGEMENT FOR HORIZONTAL REINFORCING BARS

NTS

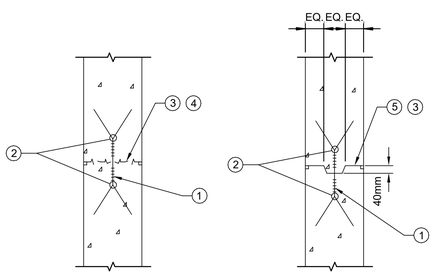


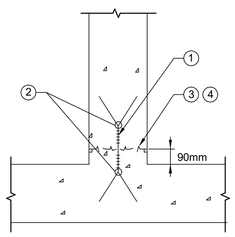
NOTE:

DO NOT PLACE CONSTRUCTION JOINTS IN ANY SHEAR WALLS.

CONSTRUCTION JOINT IN WALL

NTS

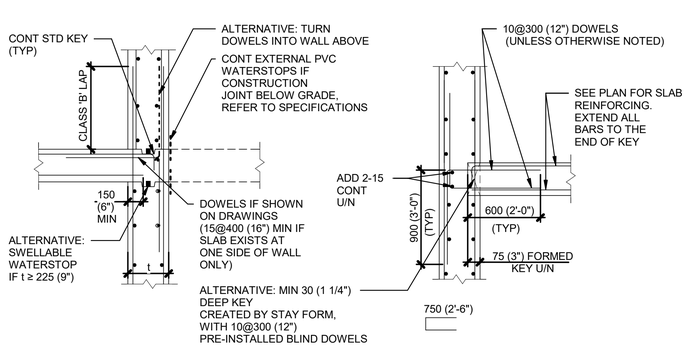


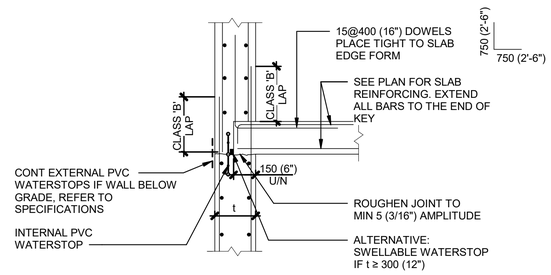


1. 150mmx10mm P.V.C. WATERSTOP.
2. 2 CONTINUOUS 10M REINF. BARS TIED TO WATERSTOP AT 300mm C/C AND TIED TO MAIN REINF. AT 600mm C/C.
3. CLEAN FIRST POUR SURFACE THOROUGHLY OF ALL CONTAMINANTS LAITANCE OR INFERIOR CONCRETE BEFORE SECOND POUR AND ROUGHEN TO FULL 5mm AMPLITUDE.
4. LEAVE SURFACE ROUGH BETWEEN POUR AT HORIZONTAL JOINTS.
5. FORM JOINTS AT VERTICAL AND SLOPING JOINTS.
7. ITEMS (1) AND (2) MAY BE OMITTED WHERE SPECIFIED.

CONSTRUCTION JOINT DETAIL

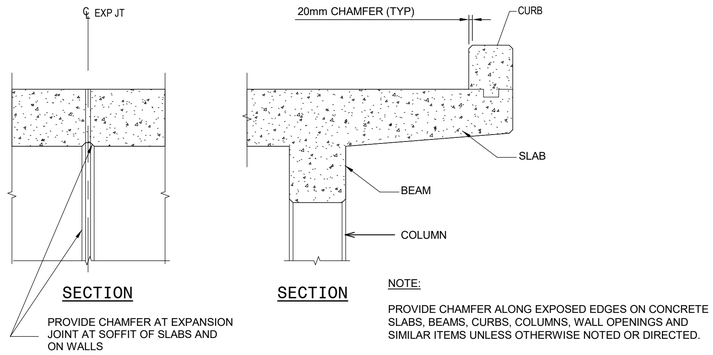
NTS





CONCRETE WALL AT SLAB SUPPORT

NTS

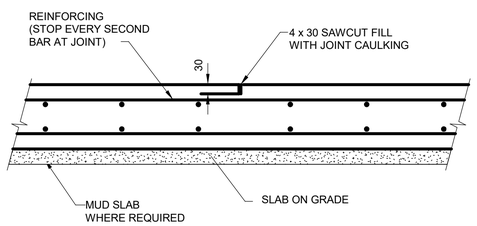


NOTE:

PROVIDE CHAMFER ALONG EXPOSED EDGES ON CONCRETE SLABS, BEAMS, CURBS, COLUMNS, WALL OPENINGS AND SIMILAR ITEMS UNLESS OTHERWISE NOTED OR DIRECTED.

CHAMFERS

NTS



NOTE:
SPACE SLAB CONTROL JOINTS @5000± MAX (UNO).
FORM SQUARE PANELS WHEREVER POSSIBLE.

CONTROL JOINTS FOR SLAB ON GRADE

NTS

REVISION:

REV	DATE	DESCRIPTION	BY
4	DEC. 2024	ISSUED FOR TENDER	M.E.
3	NOV. 2024	ISSUED FOR 100% DRAFT SUBMISSION	M.E.
2	SEPT. 2024	ISSUED FOR PERMIT	M.E.
1	AUG. 2024	ISSUED FOR 90% DESIGN	M.E.

SEAL:

LICENSED PROFESSIONAL ENGINEER
MOSTAFA ELSAYED
100578705
Nov.29.2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
APPROVED BY: R.L.
CHECKED BY: R.L.
DRAWN BY: A.Z.
DATE: APRIL 2023

IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: STRUCTURAL

wsp
150 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T7Z3
TEL: 1-905-882-1100|FAX: 1-905-822-0050|www.wsp.com

PROJECT NUMBER:

CLIENT: TOWNSHIP OF MINDEN HILLS

CLIENT REF. #: --

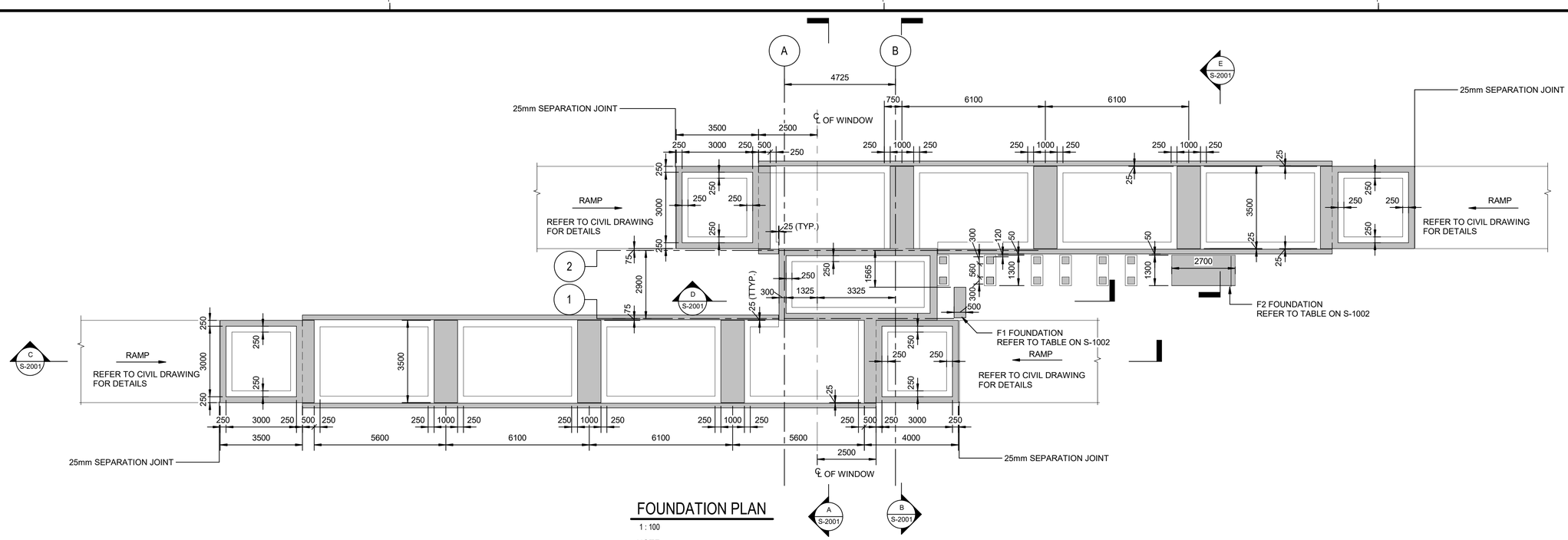
PROJECT: SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE: STANDARD DETAILS (2)

DRAWING NUMBER: S-0002

REV. 1

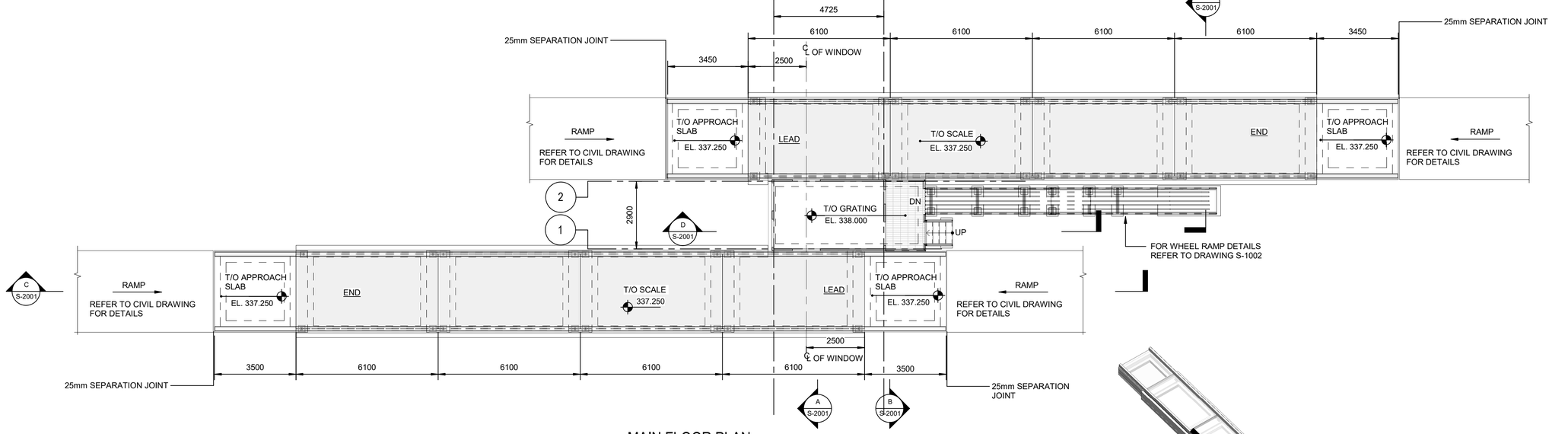
PLOT DATE: 2024-11-29 1:44:16 PM
Autodesk Docs://221-10889-00 - Scotch Line LF Transfer Station - R22/221-10889-00_G20.rvt



FOUNDATION PLAN

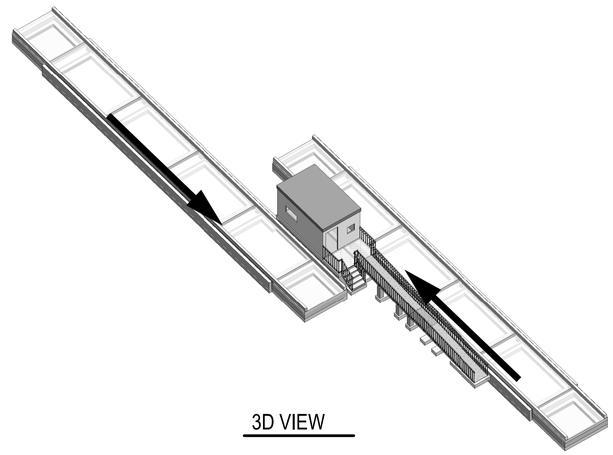
1 : 100

NOTE:
TOP OF FOUNDATION IS 336.600, UNLESS OTHERWISE NOTED.



MAIN FLOOR PLAN

1 : 100



3D VIEW

REVISION:

REV	DATE	DESCRIPTION	BY
5	DEC. 2024	ISSUED FOR TENDER	M.E.
4	NOV. 2024	ISSUED FOR 100% SUBMISSION	M.E.
3	SEPT. 2024	ISSUED FOR PERMIT	M.E.
2	AUG. 2024	ISSUED FOR 90% DETAILED DESIGN	M.E.
1	JUNE 2024	ISSUED FOR 30% PRELIMINARY DESIGN	M.E.

SEAL:

LICENSED PROFESSIONAL ENGINEER
MOSTAFA ELSAYED
100578705
Nov.29.2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 2024-06-12
APPROVED BY: R.L.
CHECKED BY: R.L.
DRAWN BY: ML
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE:

wsp
150 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T7Z3
TEL: 1-905-882-1100|FAX: 1-905-822-0055|www.wsp.com

PROJECT NUMBER:

CLIENT:
TOWNSHIP OF MINDEN HILLS
CLIENT REF. #: --

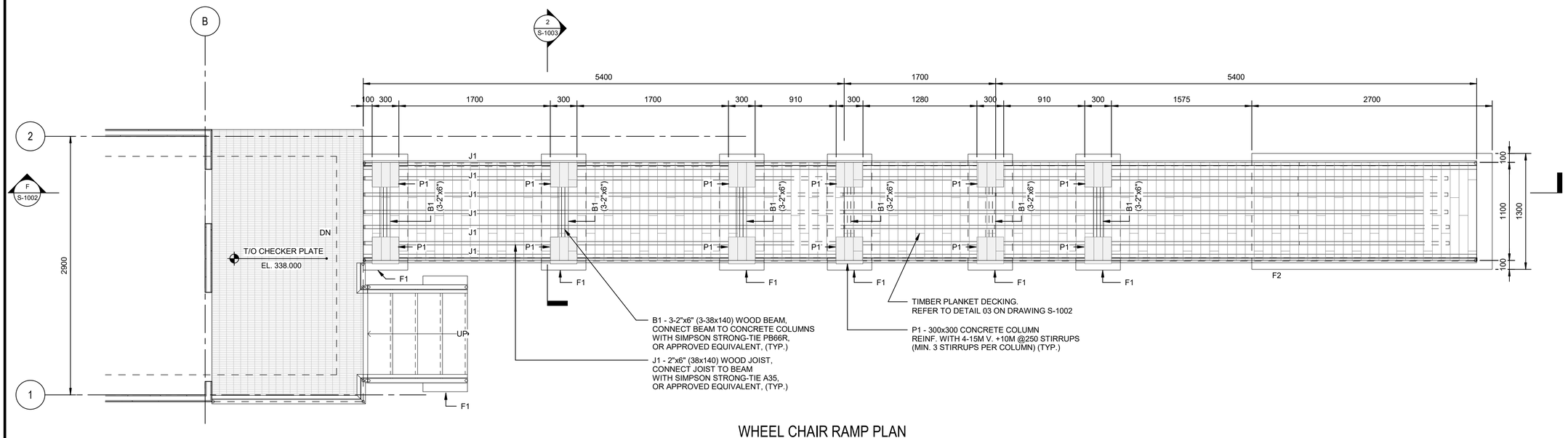
PROJECT:
SCOTCH LINE LANDFILL
PROPOSED TRANSFER STATION

TITLE:
OVERALL PLAN

DRAWING NUMBER: S-1001
REV. 3

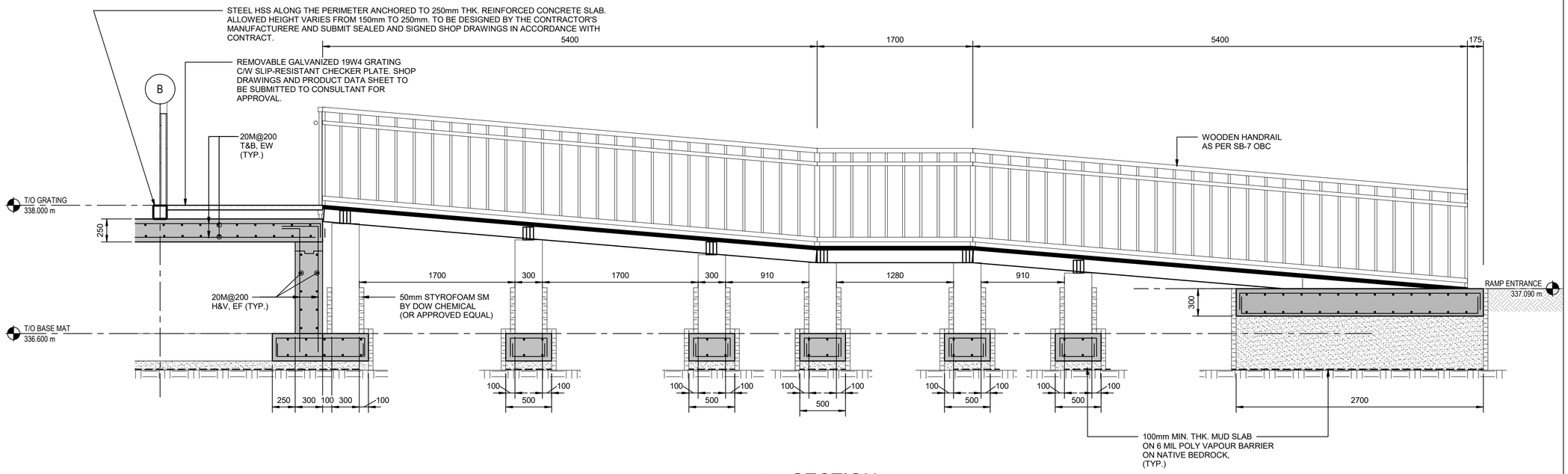
PLOT DATE: 2024-11-29 1:47:03 PM
Autodesk Docs://221-10889-00 - Scotch Line LF Transfer Station - R22/221-10889-00_STR.rvt

FOUNDATION SCHEDULE										
MARK	MUD SLAB			REINFORCED CONCRETE			LOWER LAYER REINFORCEMENT		UPPER LAYER REINFORCEMENT	
	LENGTH (mm)	WIDTH (mm)	THICKNESS(mm)	LENGTH (mm)	WIDTH (mm)	THICKNESS(mm)	SHORT DIRECTION	LONG DIRECTION	SHORT DIRECTION	LONG DIRECTION
F1	1300	500	100 (MIN.)	1300	500	300	6-15M	3-15M	6-15M	3-15M
F2	1300	2700	200 (MIN.)	1300	2700	300	6-15M	5-15M	6-15M	5-15M



WHEEL CHAIR RAMP PLAN

1 : 25



F S-1002

SECTION

1 : 25

REVISION:

REV	DATE	DESCRIPTION	BY
4	DEC. 2024	ISSUED FOR TENDER	M.E.
3	NOV. 2024	ISSUED FOR 100% SUBMISSION	M.E.
2	SEPT. 2024	ISSUED FOR PERMIT	M.E.
1	AUG. 2024	ISSUED FOR 90% DETAILED DESIGN	M.E.

SEAL:

LICENSED PROFESSIONAL ENGINEER
MOSTAFA ELSAYED
100578705
Nov. 29.2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 08/16/24
APPROVED BY: R.L.
CHECKED BY: R.L.
DRAWN BY: A.Z.
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE:

wsp
150 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T7Z3
TEL: 1-905-882-1100|FAX: 1-905-822-0055|www.wsp.com

PROJECT NUMBER:

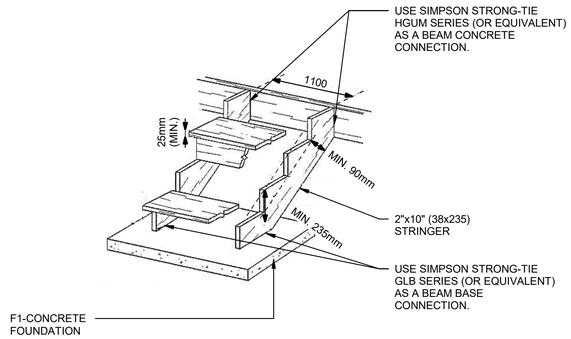
CLIENT:
TOWNSHIP OF MINDEN HILLS
CLIENT REF. #: --

PROJECT:
SCOTCH LINE LANDFILL
PROPOSED TRANSFER STATION

TITLE:
WHEEL CHAIR RAMP PLAN AND SECTION

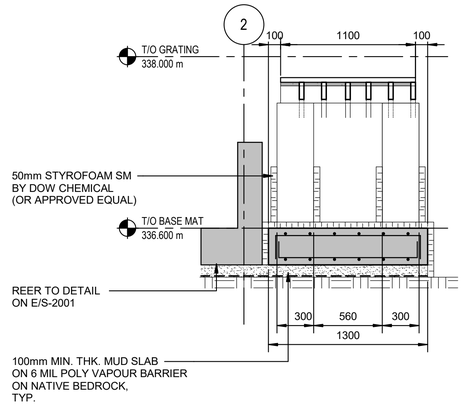
DRAWING NUMBER: S-1002
REV. 3

PLOT DATE:2024-11-29 1:47:04 PM
Autodesk Docs://221-10889-00 - Scotch Line LF Transfer Station - R22/221-10889-00_STR.rvt



1 STAIRS DETAIL

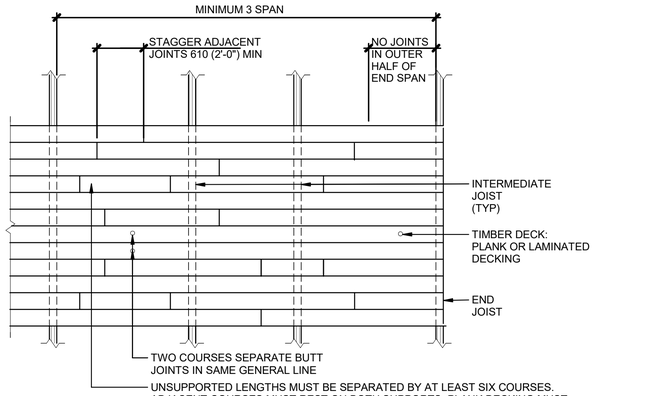
NTS



2 SECTION

2 / S-1002

1 : 25

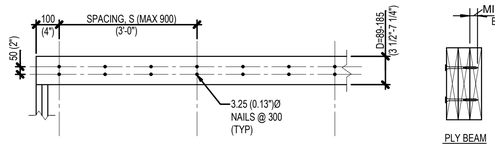


NOTES

1. OTHER LAYOUT PATTERNS (SIMPLE SPAN AND TWO SPAN CONTINUOUS INSTALLATION) REQUIRE THAT ALL BUTT JOISTS OCCUR OVER A SUPPORT.
2. RANDOM PATTERN IS NOT PERMITTED FOR RAMP.

3 LAYOUT PATTERN FOR TIMBER PLANK DECKING

1 : 100

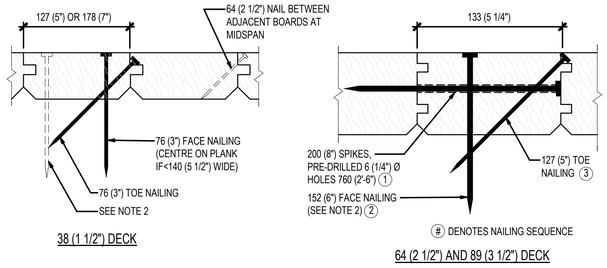


NOTES:

1. THIS DETAIL INDICATES MINIMUM FASTENING REQUIREMENTS FOR ALL DROPPED BEAMS. PROVIDE FASTENING AS PER DETAIL UNLESS NOTED OTHERWISE ON PLAN NOTES,BEAM SCHEDULE, OR BY FLOOR/ROOF SYSTEM ENGINEER.
2. SDW SCREWS BY SIMPSON STRONG-TIE OR APPROVED EQUIVALENT, LENGTH TO SUIT. NAILS MAY BE SUBSTITUTED FOR SCREWS SPACED AT 1/3S, U/N.

4 BUILT-UP BEAM FASTENING

1 : 100



NOTES:

1. NAILING IS AT EACH SUPPORT UNLESS NOTED.
2. PLANKS GREATER THAN 140 (5 1/2") IN WIDTH SHALL BE NAILED WITH 3 NAILS TO EACH SUPPORT.

5 NAILING PATTERN FOR TIMBER PLANK DECKING

1 : 100

REVISION:

REV	DATE	DESCRIPTION	BY
2	DEC. 2024	ISSUED FOR TENDER	M.E.
1	NOV. 2024	ISSUED FOR 100% SUBMISSION	M.E.

SEAL:

LICENSED PROFESSIONAL ENGINEER
MOSTAFA ELSAYED
100578705
Nov.29.2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
APPROVED BY: R.L.
CHECKED BY: R.L.
DRAWN BY: A.Z.
DATE: 11/01/24
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE
25mm

DISCIPLINE: STRUCTURAL

wsp
150 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T7Z3
TEL: 1-905-882-1100|FAX: 1-905-822-0055|www.wsp.com

PROJECT NUMBER:

CLIENT: TOWNSHIP OF MINDEN HILLS

CLIENT REF. #: --

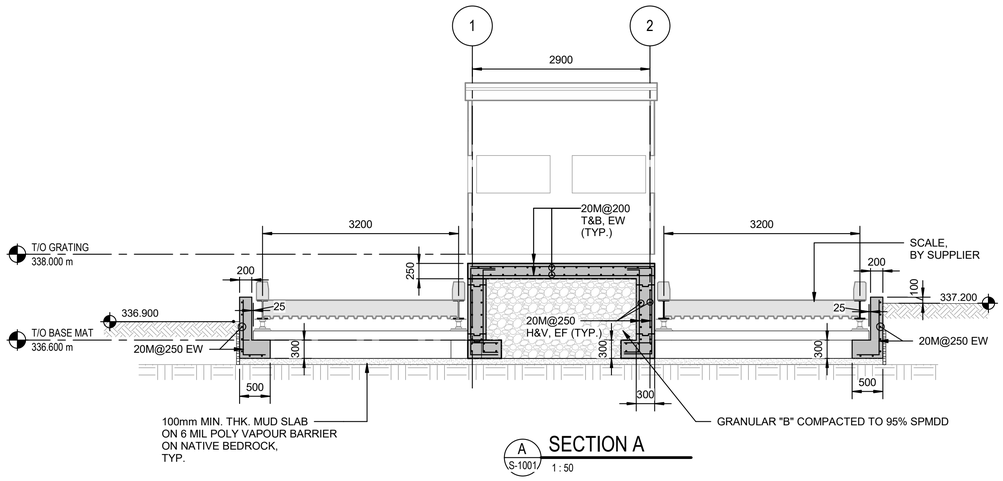
PROJECT: SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE: WHEEL CHAIR RAMP SECTIONS AND DETAILS

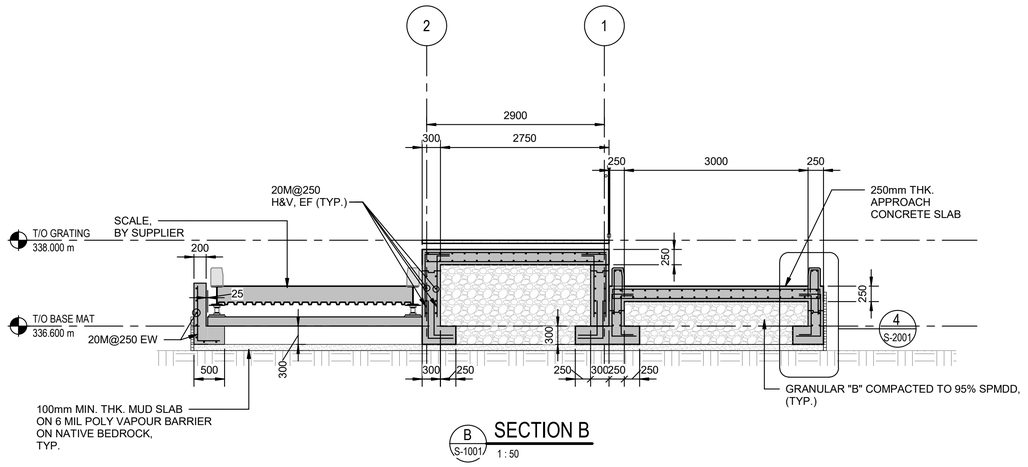
DRAWING NUMBER: S-1003

REV. 3

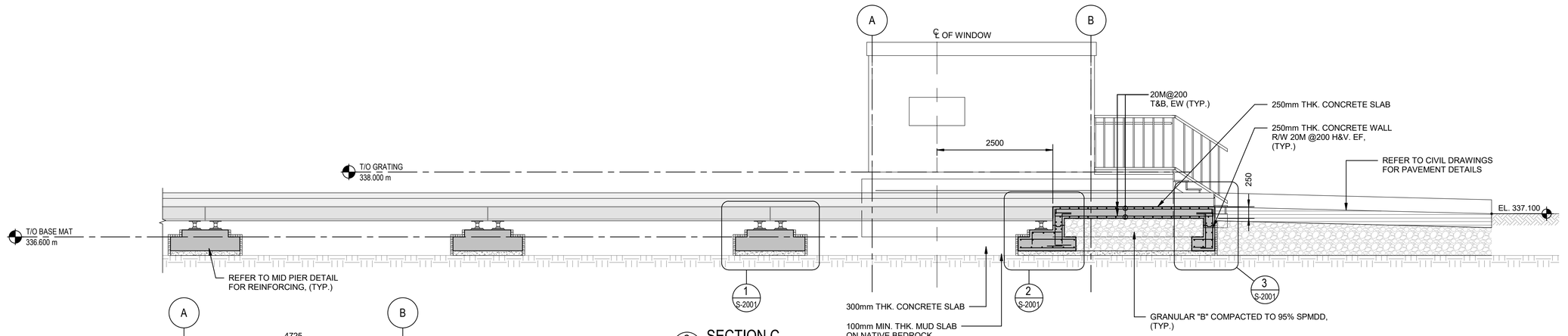
PLOT DATE: 2024-11-29 1:47:05 PM
Autodesk Docs://221-10889-00 - Scotch Line LF Transfer Station - R22/221-10889-00_STR.rvt



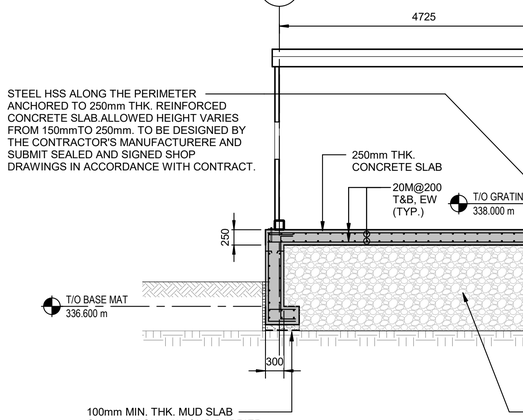
A S-1001 **SECTION A**
1 : 50



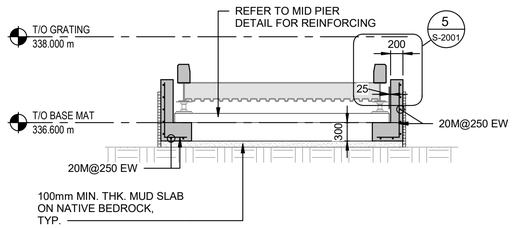
B S-1001 **SECTION B**
1 : 50



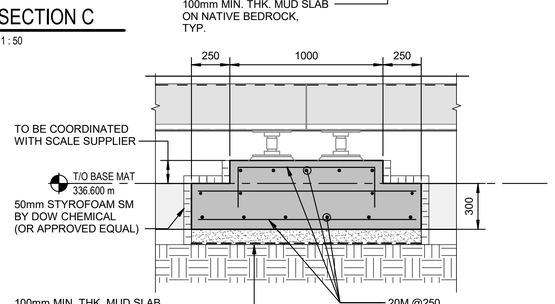
C S-1001 **SECTION C**
1 : 50



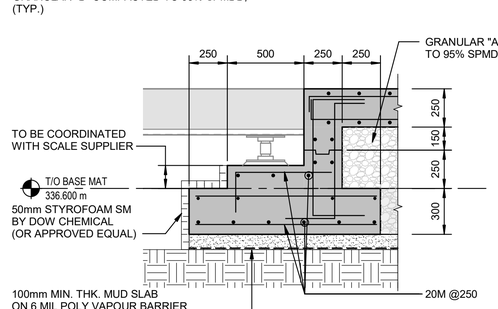
D S-1001 **SECTION D**
1 : 50



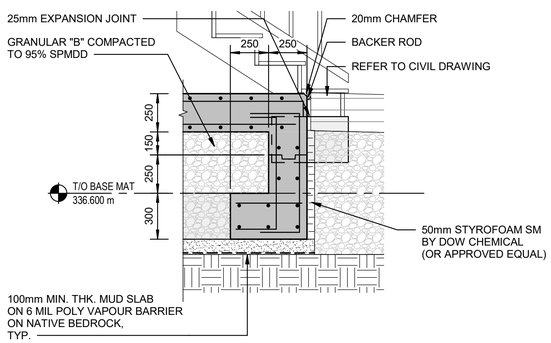
E S-1001 **SECTION E**
1 : 50



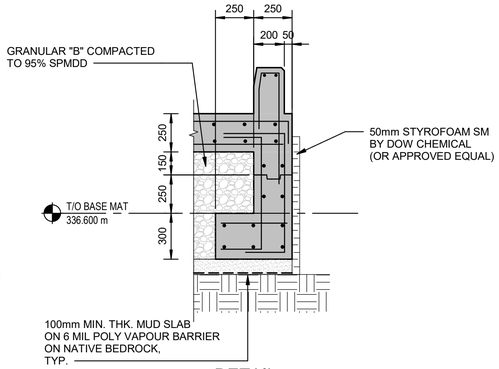
1 S-2001 **MID PIER DETAIL**
1 : 20



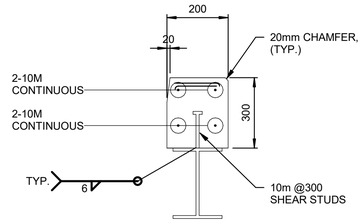
2 S-2001 **END PIER DETAIL**
1 : 20



3 S-2001 **EXPANSION JOINT DETAIL**
1 : 20



4 S-2001 **DETAIL**
1 : 20



5 S-2001 **CONC. CURB DETAIL**
NTS

REVISION:

REV	DATE	DESCRIPTION	BY
5	DEC. 2024	ISSUED FOR TENDER	M.E.
4	NOV. 2024	ISSUED FOR 100% SUBMISSION	M.E.
3	SEPT. 2024	ISSUED FOR PERMIT	M.E.
2	AUG. 2024	ISSUED FOR 90% DETAILED DESIGN	M.E.
1	JUNE 2024	ISSUED FOR 30% PRELIMINARY DESIGN	M.E.

SEAL:

LICENSED PROFESSIONAL ENGINEER
MOSTAFA ELSAYED
100578705
Nov.29.2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 03/31/23
APPROVED BY: R.L.
CHECKED BY: R.L.
DRAWN BY: A.Z.
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE:

wsp
150 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T723
TEL: 1-905-882-1100/FAX: 1-905-822-0055/www.wsp.com

PROJECT NUMBER:

CLIENT:
TOWNSHIP OF MINDEN HILLS
CLIENT REF. #: --

PROJECT:
SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE:
SECTIONS AND DETAILS

DRAWING NUMBER: S-2001
REV. 3

PLOT DATE: 2024-11-29 1:47:07 PM
Autodesk Docs://221-10889-00 - Scotch Line LF Transfer Station - R22/221-10889-00_STR.rvt

STANDARD ABBREVIATIONS

A	AMPERES (CONTINUOUS)	L/S	LITRE PER SECOND
AC	ALTERNATING CURRENT	LS	LIMIT/LEVEL SWITCH
AF	AMPERE FRAME	MAN	MANUAL
ANF	DRY TYPE TRANSFORMER - FAN COOLED	MCC	MOTOR CONTROL CENTRE
		MCP	MOTOR CIRCUIT PROTECTOR
ANN	DRY TYPE TRANSFORMER - NATURALLY COOLED OR ANNUNCIATOR	mm	MILLIMETER
		M.O.	MANUALLY OPERATED
AS	AIR SUPPLY	M/O/A	MANUAL-OFF-AUTOMATIC
ASYM	ASYMMETRICAL	MOT	MOTOR
AT	AMPERE TRIP	MTD	MOUNTED
ATS	AUTOTRANSFORMER REDUCED VOLTAGE STARTING OR AUTO TRANSFER SWITCH	MTG	MOUNTING
		MTS	MANUAL TRANSFER SWITCH
AUTO	AUTOMATIC	N	NORTH OR NEUTRAL
AWG	AMERICAN WIRE GAUGE	N/A	NON AUTOMATIC
BLDG	BUILDING	N.O.	NORMALLY OPEN/NUMBER
BKR	BREAKER	N.C.	NORMALLY CLOSED
°C	DEGREE CELSIUS	NP	NAMEPLATE
C	CONDUCTOR	NPT	NATIONAL PIPE THREAD
CCT	CIRCUIT	NTS	NOT TO SCALE
℄	CENTERLINE	OC	OVERCURRENT
C/W	COMPLETE WITH	OH	ONTARIO HYDRO OR OVERHEAT
CPT	CONTROL POWER TRANSFORMER		
CR	CONTROL RELAY/CORROSION RESISTANT	OL	OVERLOAD
CS	CONTROL SWITCH	O/O/A	ON/OFF/AUTO
CSA	CANADIAN STANDARDS ASSOCIATION	P	POLE
		PB	PUSHBUTTON
CT	CURRENT TRANSFORMER	PC	PHOTOCELL CONTROL
CTL	CONTROL	PCV	PRESSURE/PUMP CONTROL VALVE
CTD	CURRENT TEST DEVICE		
CU	COPPER	PH OR 0 /	PHASE OR DIAMETER
DC	DIRECT CURRENT	P/I	PNEUMATIC-TO-CURRENT
D.O.	DRAW OUT	PID	PROPORTIONAL-INTEGRAL-(RESET) DERIVATIVE (RATE)
DISC	DISCONNECT		
DPDT	DOUBLE POLE DOUBLE THROW	P & ID	PROCESS AND INSTRUMENTATION DIAGRAM
DPST	DOUBLE POLE SINGLE THROW		
EEMAC	ELECTRICAL AND ELECTRONIC MANUFACTURERS ASSOCIATION OF CANADA	PLC	PROGRAMMABLE LOGIC CONTROLLER
		REM	REMOTE
ELEC	ELECTRIC, ELECTRICAL	PNL	PANEL
ELR	END OF LINE RESISTOR	RES	RESISTOR
ELU	EMERGENCY LIGHTING UNIT	RTD	RESISTANCE TEMPERATURE DETECTOR
EM	ENCLOSURE		
ENCL	EARLY MAKE (CONTACTS)	RTU	REMOTE TERMINAL UNIT(PLC)
EO	ELECTRICALLY OPERATED	SEL	SELECTOR
EP	EXPLOSION PROOF	SV	SOLENOID VALVE
ESTOP	EMERGENCY STOP	S/C	SHORT CIRCUIT
ETM	ELAPSED TIME METER	SHLD	SHIELDED
FRE	FIBREGLASS REINF.EPOXY	SN	SOLID NEUTRAL
FVR	FULL VOLTAGE REVERSING	SPDT	SINGLE POLE DOUBLE THROW
FVNR	FULL VOLTAGE, NON-REVERSING	SPST	SINGLE POLE SINGLE THROW
GFI	GROUND FAULT INTERRUPTER	SS	SELECTOR SWITCH
GFR	GROUND FAULT CCT INTERRUPTING RECEPTACLE	SV	SOLENOID OPERATED VALVE (DIRECT OPERATED)
GND	GROUND	SW	SWITCH
H/O/A	HAND-OFF-AUTOMATIC	SYM	SYMMETRICAL
HP	HORSEPOWER	TC	SHUNT TRIP COIL or THERMOCOUPLE
HTR	HEATER	TDC	TIME DELAY ON CLOSING
Hz	HERTZ	TDDO	TIME DELAY ON DROP-OUT
IEEE	INSTITUTE OF ELECTRICAL & ELECTRONIC ENGINEERS	TDO	TIME DELAY ON OPENING
		TDPU	TIME DELAY ON PICK-UP
IND	INDICATION	TEMP	TEMPERATURE
INST	INSTANTANEOUS	TERM	TERMINAL
I/O	INPUT/OUTPUT	TR	TIME RELAY
I/P	CURRENT TO PNEUMATIC	TYP	TYPICAL
ISA	INSTRUMENT SOCIETY OF AMERICA	V	VOLT
		VA	VOLT-AMPERE
JB	JUNCTION BOX	VAC	VOLTS ALTERNATING CURRENT
KAIC	KILO-AMP INTERRUPTING CAPACITY	VDC	VOLTS DIRECT CURRENT
		VFD	VARIABLE FREQUENCY DRIVE
kVA	KILOVOLTAMPERE	VT	VOLTAGE TRANSFORMER (FORMER PT)
kHz	KILOHERTZ	VTD	VOLTAGE TEST DEVICE
kW	KILOWATT	W	WIRE OR WATT
kWh	KILOWATT HOUR	WP	WEATHERPROOF
LA	LIGHTNING ARRESTOR	2S1W	TWO SPEED-ONE WINDING
LB	LATE BREAK (CONTACTS)		
LOS	LOCK OUT STOP	2S2W	TWO SPEED-TWO WINDING
L/R	LOCAL-REMOTE	XFMR	TRANSFORMER

ELECTRICAL SYMBOLS LIGHTING & POWER LAYOUTS

- FIRE ALARM PULL STATION
- H — HUMIDISTAT
- T — THERMOSTAT
- ASC — ADJUSTABLE SPEED CONTROLLER
- SINGLE PHASE MOTOR STARTER WITH OVERLOAD
- P — SINGLE PHASE MOTOR STARTER WITH OVERLOAD AND PILOT LIGHT
- SELECTOR SWITCH
- X — DISCONNECT SWITCH ('X' DENOTES No. OF POLES)
- CP — CONTROL PANEL (OR 'LP'-LOCAL PANEL)
- $A-10 — SINGLE POLE SWITCH (LETTER + NUMBER DENOTES CONNECTED TO PNL 'A' + CCT NUMBER '10')
- $3 — 3 WAY SWITCH (3 WIRE)
- $4 — INTERMEDIATE SWITCH (4 WIRE)
- OS — OCCUPANCY SENSOR (INFRARED MOTION)
- PC — PHOTOCELL CONTROL
- SINGLE RECEPTACLE
- DUPLEX RECEPTACLE
- WP — DUPLEX RECEPTACLE WEATHER PROTECTED
- WCP — DUPLEX RECEPTACLE (WEATHER AND CORROSION PROTECTED)
- THREE PHASE RECEPTACLE (FEMALE CONFIGURATION)
- DIRECT CONNECTION TO PACKAGE EQUIPMENT OR DEVICE
- CONDUIT STUB UP
- CLOCK OUTLET
- 20A-1P DUPLEX RECEPTACLE
- SPECIAL OUTLET AS NOTED
- COUNTER-TOP OR WORKBENCH HEIGHT DUPLEX RECEPTACLE
- COUNTER-TOP OR WORKBENCH HEIGHT SPLIT DUPLEX RECEPTACLE
- GFCI — DUPLEX RECEPTACLE GROUND FAULT CIRCUIT INTERRUPTER
- COUNTER-TOP 20A T-SLOT DUPLEX RECEPTACLE
- 20A T-SLOT DUPLEX RECEPTACLE
- ISOLATED GROUND DUPLEX RECEPTACLE
- COUNTER-TOP ISOLATED GROUND DUPLEX RECEPTACLE
- JB — JUNCTION BOX (OR 'PB'-PULL BOX)
- HEAT DETECTOR ('X' DENOTES TAG No.)
- SMOKE DETECTOR ('X' DENOTES TAG No.)
- M — ELECTRICAL MOTOR
- S — SOLENOID
- MV — MOTORIZED (EO) VALVE
- G — DIESEL-GENERATOR
- FIRE ALARM BELL
- PAGING LOUDSPEAKER
- CEILING MTD PAGING LOUDSPEAKER
- TELEPHONE OUTLET
- EMERGENCY LIGHTING UNIT,
- REMOTE ELU LAMPS (TWO LAMPS)
- REMOTE ELU LAMP (1 LAMP)
- CEILING OR WALL MOUNTED EXIT SIGN
- 'F1' / A-10 — LIGHT FIXTURE TYPE 'F1' (TYPICAL) CONNECTED TO PNL 'A', CCT '10'
- H1 A10 — LIGHT FIXTURE TYPE H1 (TYPICAL) CONNECTED TO PNL 'A', CCT '10'
- UNIT HEATER

ELECTRICAL SYMBOLS SINGLE LINE/ELEMENTARY CONTROL DIAGRAMS

- LCP — LIGHTING CONTROL PANEL
- TSP — TIME SURFACE PRIMER
- P/M — POWER MONITOR
- AS — AMMETER SWITCH
- VS — VOLTMETER SWITCH
- K — KEY INTERLOCK
- 600V DRAWOUT AIR CIRCUIT BREAKER
- CIRCUIT BREAKER,MOULDED CASE WITH THERMAL & MAGNETIC TRIPS
- CIRCUIT BREAKER, MCP,MOULDED CASE WITH ADJUSTABLE 'MAGNETIC ONLY' TRIPS
- DRAWOUT CONNECTION
- CAPACITOR
- RESISTOR OR HEATER
- FUSE
- FUSED DISCONNECT SWITCH
- DISCONNECTING (ISOLATING) SWITCH
- LIGHTNING ARRESTER
- SOLENOID
- THERMAL OVERLOAD TRIP
- BATTERY
- CURRENT TRANSFORMER
- ZERO SEQUENCE (GROUND) CURRENT TRANSFORMER
- VOLTAGE TRANSFORMER
- AUTOTRANSFORMER WITH TAPS
- POWER OR DISTRIBUTION TRANSFORMER
- CONTROL POWER TRANSFORMER
- REACTOR
- DA / IA — DUAL AMMETER, THERMAL DEMAND & INSTANTANEOUS
- V — VOLTMETER
- PF — POWER FACTOR METER
- kW — KILOWATT METER
- W — WATTMETER
- PG — POWER GENERATOR, OR DG-DIESEL GENERATOR, OR MG-MOBILE GENERATOR
- DELTA CONNECTION
- STAR CONNECTED, GROUNDED
- S — SOLENOID
- M — MOTOR
- 52 A / MVA — POWER CIRCUIT BREAKER:
  - A - CONTINUOUS CURRENT RATING
  - MVA - INTERRUPTING RATING
- NEW SUPPLY AND EQUIPMENT
- EXISTING SUPPLY AND EQUIPMENT OR REFERENCED EQUIPMENT

- TERMINAL BLOCK TO PLC
- HVAC TERMINAL
- TERMINAL BLOCK TO FIELD
- TERMINAL BLOCK INSIDE MCC OR CONTROL PANEL
- DI — PLC INPUT/OUTPUT, 'DI' DENOTES DISCRETE INPUT
- H O A — CONTROL/SELECTOR SWITCH, 3 POSITION, TOP
- L R — CONTROL/SELECTOR SWITCH, 2 POSITION, TOP
- CONTROL/SELECTOR SWITCH, 2 OR 3 POSITION, BOTTOM
- PUSHBUTTON, N.O., MOMENTARY CONTACT
- PUSHBUTTON, N.C., MOMENTARY CONTACT
- PUSHBUTTON, MOMENTARY CONTACT, WITH N.O. & N.C. CONTACTS
- ↑ 22°C — THERMOSTAT, NORMALLY OPENED, CLOSES ABOVE 22°C
- ↑ 22°C — THERMOSTAT, NORMALLY CLOSED, OPENS ABOVE 22°C
- LEVEL SWITCH, CLOSES ON HIGH LEVEL
- LEVEL SWITCH, OPENS ON HIGH LEVEL
- PRESSURE SWITCH, OPENS ON HIGH PRESSURE
- PRESSURE SWITCH, CLOSES ON HIGH PRESSURE
- FLOW SWITCH, CLOSES ON HIGH FLOW
- FLOW SWITCH, OPENS ON HIGH FLOW
- TIME DELAY ENABLE (TDE) CONTACT NORMALLY OPEN
- TIME DELAY ENABLE (TDE) CONTACT NORMALLY CLOSE
- TIME DELAY DISENABLE (TDDE) CONTACT NORMALLY OPEN
- TIME DELAY DISENABLE (TDDE) CONTACT NORMALLY CLOSE
- LIMIT/POSITION SWITCH, NORMALLY CLOSE
- LIMIT/POSITION SWITCH, NORMALLY OPEN
- CONTACT NORMALLY OPENED
- CONTACT NORMALLY CLOSED
- A — INDICATING LIGHT, LETTER DENOTES LENS COLOUR
- R — PUSH TO TEST (P.T.T.) INDICATING LIGHT, LETTER DENOTES LENS COLOUR
- MS-* — CONTACTOR, CONTROL OR TIMING RELAY:
  - MS - MOTOR STARTER/CONTACTOR
  - CR - CONTROL RELAY
  - TR - TIME DELAY RELAY (ON OR OFF TYPE AS INDICATED)
  - No. - SEE 'DEVICE FUNCTION NUMBERS' FOR DESCRIPTION
  - * - RELAY NUMBER
- SS — SURGE SUPPRESSOR

ELECTRICAL GROUNDING SYMBOLS

- GROUNDING ROD DIRECT BURIED
- GROUND ROD WITH INSPECTION BOX OR WELL
- GROUNDING CONDUCTOR CONCEALED, EMBEDED OR DIRECT BURIED
- SPLICE TO TAP CONNECTION
- GRADIENT CONTROL MAT
- 4 #12-21mmC
  - CONDIUT TRADE SIZE
  - CONDUCTOR SIZE AWG OR MCM
  - NUMBER OF CONDUCTORS

GENERAL NOTES

1. THIS IS A GENERAL ELECTRICAL LEGEND SHEET. SOME DEVICES, SYMBOLS OR ABBREVIATIONS MAY NOT BE USED ON THIS PROJECT.

REVISION:

REV	DATE	DESCRIPTION	BY
1	02/12/2024	ISSUED FOR TENDER	B.A.

SEAL:

LICENSED PROFESSIONAL ENGINEER
B. ABEDASHTIANY
100500360
02-12-2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 02/12/2024
APPROVED BY: K.L.
CHECKED BY: B.A.
DRAWN BY: A.Z.
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: ELECTRICAL

wsp
100 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T0A1
TEL: 1-905-882-4211|FAX: 1-905-822-0055|WWW.WSPGROUP.CA

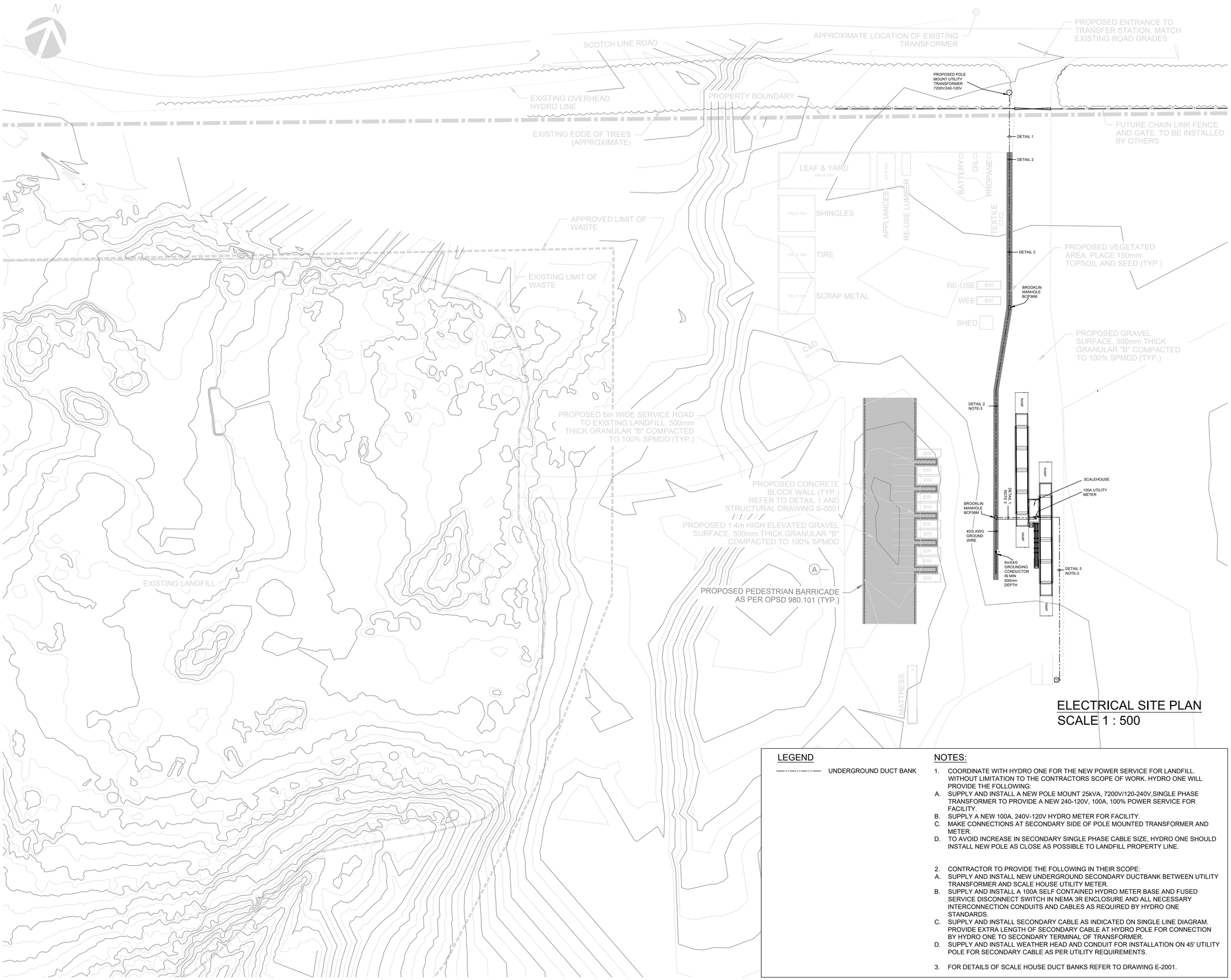
PROJECT NUMBER: 221-10889-00

CLIENT: TOWNSHIP OF MINDEN HILLS
CLIENT REF. #: --

PROJECT:
SCOTCH LINE LANDFILL
PROPOSED TRANSFER STATION

TITLE:
LEGEND AND ABBREVIATIONS

DRAWING NUMBER: E-0001
REV. 1



ELECTRICAL SITE PLAN
SCALE 1 : 500

LEGEND

UNDERGROUND DUCT BANK

NOTES:

1. COORDINATE WITH HYDRO ONE FOR THE NEW POWER SERVICE FOR LANDFILL. WITHOUT LIMITATION TO THE CONTRACTORS SCOPE OF WORK. HYDRO ONE WILL PROVIDE THE FOLLOWING:
   A. SUPPLY AND INSTALL A NEW POLE MOUNT 25kVA, 7200V/120-240V,SINGLE PHASE TRANSFORMER TO PROVIDE A NEW 240-120V, 100A, 100% POWER SERVICE FOR FACILITY.
   B. SUPPLY A NEW 100A, 240V-120V HYDRO METER FOR FACILITY.
   C. MAKE CONNECTIONS AT SECONDARY SIDE OF POLE MOUNTED TRANSFORMER AND METER.
   D. TO AVOID INCREASE IN SECONDARY SINGLE PHASE CABLE SIZE, HYDRO ONE SHOULD INSTALL NEW POLE AS CLOSE AS POSSIBLE TO LANDFILL PROPERTY LINE.
2. CONTRACTOR TO PROVIDE THE FOLLOWING IN THEIR SCOPE:
   A. SUPPLY AND INSTALL NEW UNDERGROUND SECONDARY DUCTBANK BETWEEN UTILITY TRANSFORMER AND SCALE HOUSE UTILITY METER.
   B. SUPPLY AND INSTALL A 100A SELF CONTAINED HYDRO METER BASE AND FUSED SERVICE DISCONNECT SWITCH IN NEMA 3R ENCLOSURE AND ALL NECESSARY INTERCONNECTION CONDUITS AND CABLES AS REQUIRED BY HYDRO ONE STANDARDS.
   C. SUPPLY AND INSTALL SECONDARY CABLE AS INDICATED ON SINGLE LINE DIAGRAM. PROVIDE EXTRA LENGTH OF SECONDARY CABLE AT HYDRO POLE FOR CONNECTION BY HYDRO ONE TO SECONDARY TERMINAL OF TRANSFORMER.
   D. SUPPLY AND INSTALL WEATHER HEAD AND CONDUIT FOR INSTALLATION ON 45' UTILITY POLE FOR SECONDARY CABLE AS PER UTILITY REQUIREMENTS.
3. FOR DETAILS OF SCALE HOUSE DUCT BANKS REFER TO DRAWING E-2001.

REV	DATE	DESCRIPTION	BY
1	13/12/2024	ISSUED FOR TENDER	B.A.

REVISION:

SEAL:

LICENSED PROFESSIONAL ENGINEER
B. ABEDASHTIANY
100500360
13-12-2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
APPROVED BY: K.L.
CHECKED BY: B.A.
DRAWN BY: A.Z.
DATE: 13/12/2024

IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: ELECTRICAL

100 COMMERCE VALLEY DR. W.
THORNHILL, ONTARIO CANADA L3TOA1
TEL: 1-905-882-4211|FAX: 1-905-822-0055|WWW.WSPGROUP.CA

PROJECT NUMBER: 221-10889-00

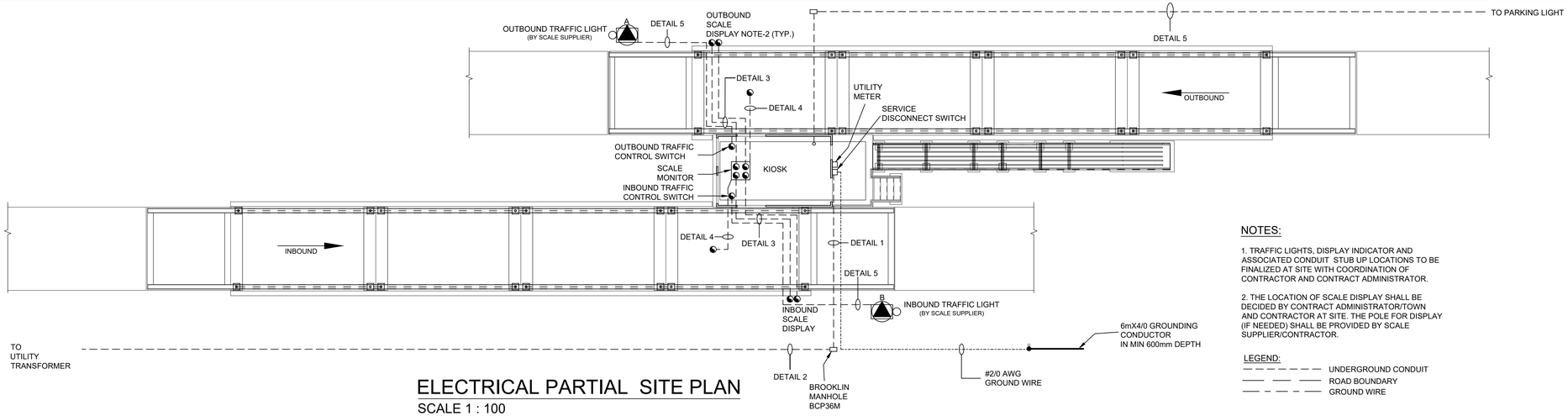
CLIENT: TOWNSHIP OF MINDEN HILLS

CLIENT REF. #: --

PROJECT: SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE: ELECTRICAL SITE PLAN

DRAWING NUMBER: E-1001
REV. 1



ELECTRICAL PARTIAL SITE PLAN

SCALE 1 : 100

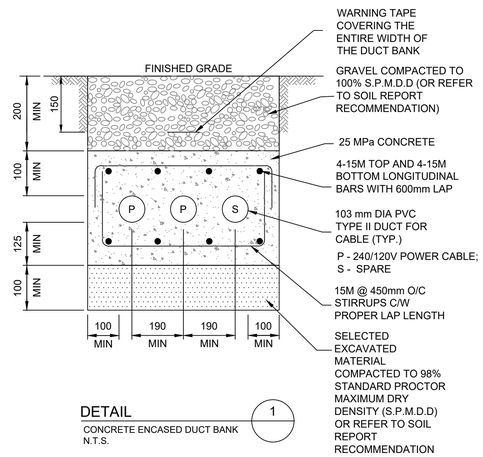
NOTES:

1. TRAFFIC LIGHTS, DISPLAY INDICATOR AND ASSOCIATED CONDUIT STUB UP LOCATIONS TO BE FINALIZED AT SITE WITH COORDINATION OF CONTRACTOR AND CONTRACT ADMINISTRATOR.

2. THE LOCATION OF SCALE DISPLAY SHALL BE DECIDED BY CONTRACT ADMINISTRATOR/TOWN AND CONTRACTOR AT SITE. THE POLE FOR DISPLAY (IF NEEDED) SHALL BE PROVIDED BY SCALE SUPPLIER/CONTRACTOR.

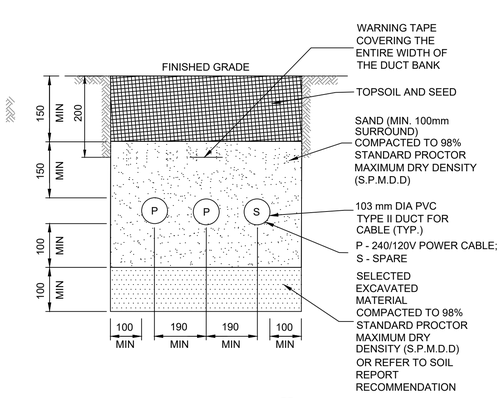
LEGEND:

- UNDERGROUND CONDUIT
- ROAD BOUNDARY
- GROUND WIRE



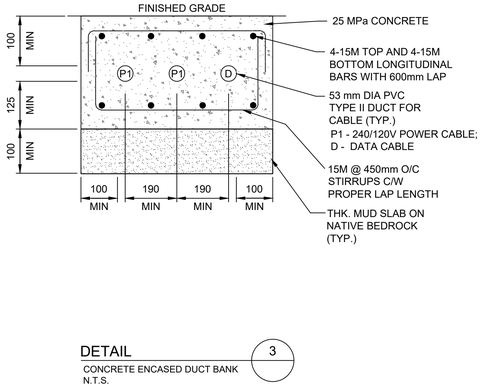
DETAIL 1

CONCRETE ENCASED DUCT BANK
N.T.S.



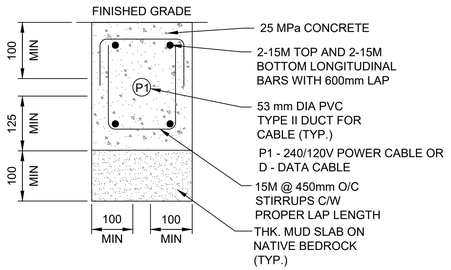
DETAIL 2

DIRECT BURIED DUCT BANK
N.T.S.



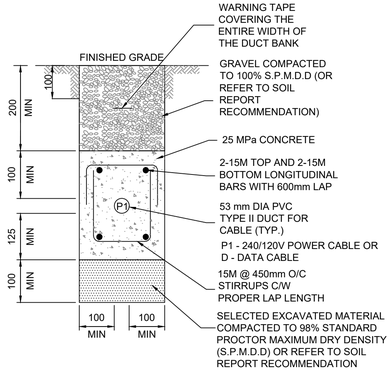
DETAIL 3

CONCRETE ENCASED DUCT BANK
N.T.S.



DETAIL 4

CONCRETE ENCASED DUCT BANK
N.T.S.



DETAIL 5

CONCRETE ENCASED DUCT BANK
N.T.S.

REV	DATE	DESCRIPTION	BY
1	02/12/2024	ISSUED FOR TENDER	B.A.

SEAL:

LICENSED PROFESSIONAL ENGINEER
B. ABEDASHTIANY
1005003600
02-12-2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
APPROVED BY: K.L.
CHECKED BY: B.A.
DRAWN BY: A.Z.
DATE: 02/12/2024

IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: ELECTRICAL

wsp
100 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T0A1
TEL: 1-905-882-4211|FAX: 1-905-822-0355|WWW.WSPGROUP.CA

PROJECT NUMBER: 221-10889-00

CLIENT: TOWNSHIP OF MINDEN HILLS

CLIENT REF. #: --

PROJECT:
SCOTCH LINE LANDFILL
PROPOSED TRANSFER
STATION

TITLE:
PARTIAL SITE PLAN AND
DUCT BANK DETAILS

DRAWING NUMBER: E-2001
REV. 1

LUMINAIRE SCHEDULE

SYMBOL	TYPE	VOLTS	INPUT WATTS	DESCRIPTION	LAMPS TYPE	BALLAST	MANUFACTURERS CATALOG NUMBER	MOUNTING
L01	LED	120	37	1220mm (4') LED LIGHT FIXTURE, COLD ROLLED STEEL WITH EXTRUDED ALUMINUM HOUSING. POLYESTER_POWDER COAT PAINTED FINISHING. PRECISION-FORMED STEEL; HIGH REFLECTANCE MATTE WHITE POWDER COAT REFLECTOR.	37W LED 5000K	LED DRIVER HIGH EFFICIENCY	1. MARK ARCHITECTURAL LIGHTING, FCLED 4FT FLP 80CRI 50K 900LMF 2. APPROVED EQUAL	RECESSED CEILING
L02	LED	120	46	OUTDOOR WALL MOUNTED LED LIGHTING FIXTURE, CAST-ALUMINUM HOUSING . PRISMATIC POLYCARBONATE SHIELD, SEALED AND CASKETED REFLECTOR, BLACK, SUITABLE FOR BUILDING EXTERIOR APPLICATION	46W LED 5000K	LED DRIVER HIGH EFFICIENCY	1. EATON LUMARK WP Wal-Pak LED 2. HOLOPHANE WL2K SERIES 3. HUBBEL, WGH SERIES 4. APPROVED EQUAL	WALL
LS	LED	120	21	FIXTURE: POLE MOUNTED, DIE-CAST ALUMINUM HOSUING WITH INTEGRAL HEAT SINK, BLACK CORROSION RESISTANT POLYESTER POWDER PAINT, 5000K, 3000 LUMENS, -40°C TO 50°C OPERATING TEMPERATURE , WITH PHOTOCELL. POLE: E200-APR-G-E11, ROUND, 20' 0" POLE. FIXTURE TO BE MOUNTED AT 4.57m.	21W LED 5000K	LED DRIVER HIGH EFFICIENCY	1. EVOLVE EACL01_A2AN750 SERIES 2. APPROVED EQUAL	POLE MOUNT
X1 BU-1	LED	120VAC IN / 12VDC OUT.	16	BATTERY UNIT EMERGENCY LIGHT AND PICTOGRAM EXIT COMBINATION UNIT. SUITABLE FOR WET AND CORROSIVE LOCATION. LIGHT SOURCE 1. HIGH-EFFICIENCY LED. 2. FULLY FIELD ADJUSTABLE EMERGENCY LIGHTING HEADS ARE MR16 WHITE 12V 4W LED LAMPS. CHARGER FULLY AUTOMATIC ADVANCED DIAGNOSTIC MICRO-CONTROLLER. TESTS, DETECTS AND INDICATES BATTERY, CHARGER CIRCUITRY, LAMPS OR LED STRIP FAILURES. ELECTRICAL SEALED, MAINTENANCE-FREE NICKEL-CADMIUM BATTERY, 12V 20W FOR 30 MINUTES OF EMERGENCY OPERATION. SUITABLE FOR WET AND DAMP LOCATION (10°C TO 40°C) HOUSING NEMA-4X RATED HOUSING. FACEPLATES ARE MOLDED OF HEAVY-DUTY VANDAL-RESISTANT POLYCARBONATE, RUGGED UV-STABILIZED THERMOPLASTIC BODY, STAINLESS STEEL TAMPER-PROOF SCREWS. WHITE COLOR	4W MR16 LED LAMP, BATTERY UNIT 12 VDC, 60W		1. EMERGI-LITE, ENC SERIES 2. STANPRO, SLBIFSERIES 3. AIMLITE, CRPN SERIES 4. APPROVED EQUAL	WALL

PANEL IDENTIFICATION : LP-1 — LOCATION : SCALE KIOSK

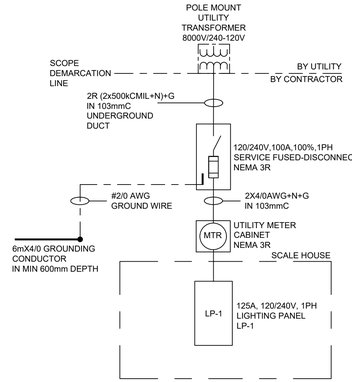
120/240V 1PH 3W 150A MAIN BUS — 225A MAIN BREAKER 150A — WITH SURGE PROTECTION DEVICE (SEE NOTE-1)

DESCRIPTION	LOAD W	BKR A	CCT No	SN A	SN B	CCT No	BKR A	LOAD W	DESCRIPTION
FFH-01	4000	50	1			2	15	600	RECEPTACLES CONVENIENCE - 1
FFH-02	4000	50	3			4	15	800	FRIDGE RECEPTACLE
AC-01	2400	25	5			6	15	100	TRAFFIC LIGHT CONTROL
RECEPTACLES DESK	1600	20	7			8	15	127	SCALE HOUSE LIGHTING
RECEPTACLES SERVICE WINDOW	800	15	9			10	15	500	SCALE MONITOR
OUTDOOR & PARKING LIGHTING (LCP-1)	205	15	11			12	15	400	RECEPTACLES CONVENIENCE - 2
SPARE		15	13			14	15		SPARE
SPARE		15	15			16	15		SPARE
SPARE		15	17			18	15		SPARE
SPACE			19			20			SPACE
SPACE			21			22			SPACE
SPACE			23			24			SPACE
TOTAL				15532 W					

LIGHTING PANEL LP-1
N.T.S.

NOTES:

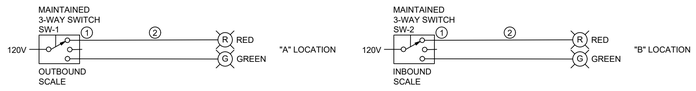
1. FOR SPECIFICATION OF SURGE PROTECTION DEVICE (SPD) FOR LP-1 LIGHTING PANEL REFER TO SECTION 16612. THE SPD SHALL MEET THE REQUIREMENTS FOR HIGH EXPOSURE LEVELS.
2. CONTRACTOR SHALL FINALIZE THE LIGHTING PANEL FEEDER SIZES AFTER ALL EQUIPMENT SHOP DRAWING REVIEW.
3. CONTRACTOR IS RESPONSIBLE TO DISTRIBUTE LOAD EQUALLY BETWEEN PHASES OF LIGHTING PANELS. THE BRANCH CIRCUIT CONNECTONS SHALL BE ADJUSTED AS REQUIRED TO OBTAIN THE BEST BALANCE OF CURRENT BETWEEN PHASES. THE MAXIMUM IMBALANCE SHALL NOT EXCEED 5% OF TOTAL CONNECTION LOAD.
4. CONTRACTOR TO PROVIDE NEW GROUNDING SYSTEM FOR THE STATION AND VERIFY THE LOCATION OF UTILITY SOURCE GROUNDING FOR CONNECTION. PROVIDE BONDING CONDUCTOR (MIN. #4/0 BARE COPPER) BETWEEN THE NEW SERVICE DISCONNECT SWITCH GROUNDING BUS AND UTILITY SOURCE GROUNDING SYSTEM.



SINGLE LINE DIAGRAM

NOTES:

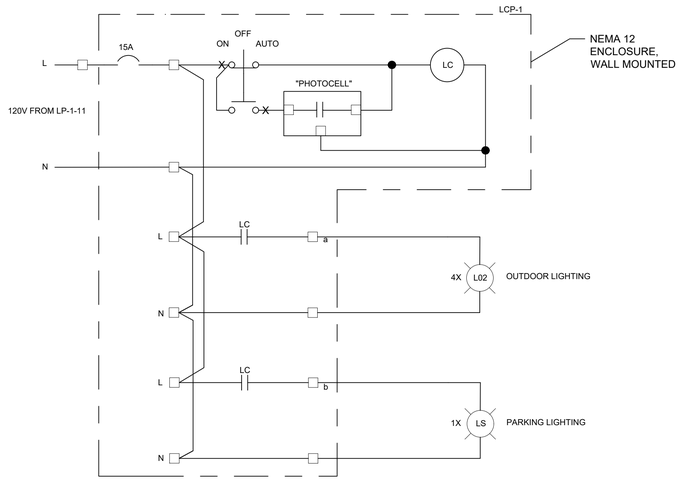
1. PROVIDE A 120V MAINTAINED 3 WAY SWITCH (LEVER) EQUAL TO EATON CUTLER HAMMER CATALOGUE #E22VBG10. SWITCH SHALL BE INSTALLED IN SUITABLE NEMA 3R ENCLOSURE IN SCALE HOUSE AS SHOWN ON DRAWING. CO-ORDINATE WITH THE CONTRACT ADMINISTRATOR AND CLIENT FOR LOCATION AND MOUNTING HEIGHT.
2. PROVIDE WIRING AND CONDUIT FROM SWITCH TO TRAFFIC LIGHTS AS SHOWN IN E-1001.



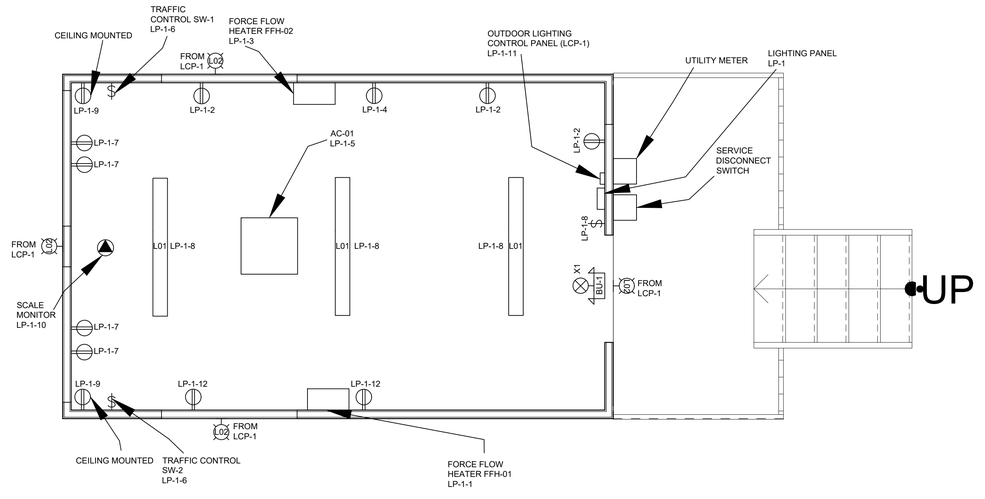
OUTBOUND SCALE TRAFFIC CONTROL

INBOUND SCALE TRAFFIC CONTROL

SCALE HOUSE TRAFFIC LIGHTS SCHEMATICS DETAIL
N.T.S.



OUTDOOR & PARKING LIGHTING CONTROL PANEL WIRING DIAGRAM
LCP-1



POWER & LIGHTING LAYOUT
SCALE 1:25

REV	DATE	DESCRIPTION	BY
1	02/12/2024	ISSUED FOR TENDER	B.A.

SEAL:

LICENSED PROFESSIONAL ENGINEER
B. ABEDASHTIANY
100500360
02-12-2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 02/12/2024
APPROVED BY: K.L.
CHECKED BY: B.A.
DRAWN BY: A.Z.
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: ELECTRICAL

100 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T0A1
TEL: 1-905-882-4211|FAX: 1-905-822-0055|WWW.WSPGROUP.CA

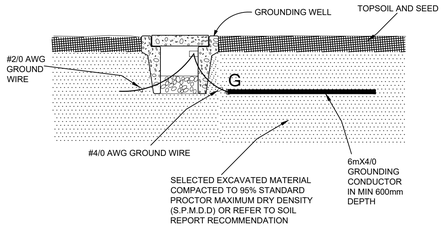
PROJECT NUMBER: 221-10889-00

CLIENT: TOWNSHIP OF MINDEN HILLS
CLIENT REF. #: --

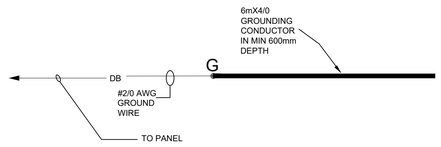
PROJECT:
SCOTCH LINE LANDFILL
PROPOSED TRANSFER
STATION

TITLE:
SINGLE LINE, SCHEMATIC DIAGRAMS, PANEL AND LUMINARE SCHEDULES

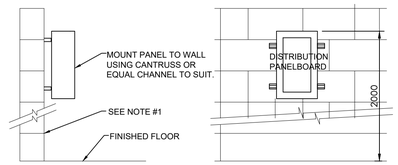
DRAWING NUMBER: E-3001
REV. 1



GROUND TEST WELL 1
N.T.S.



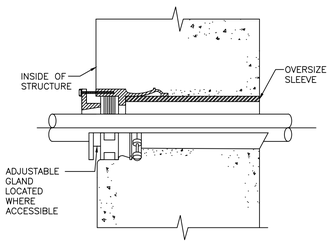
GROUND GRID 2
N.T.S.



NOTES:

1. WALL MUST BE MASONRY TYPE. FOR DRYWALL PARTITIONS PROVIDE ADDITIONAL SUPPORT FRAME INDEPENDENT OF WALL.

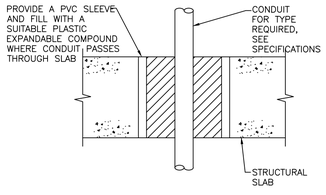
WALL MOUNTED PANELBOARD 3
N.T.S.



NOTES:

1. USE WATER TIGHT CONDUIT SEAL WHERE CONDUIT PENETRATIONS OF BUILDING EXTERIOR WALLS ARE BELOW GRADE

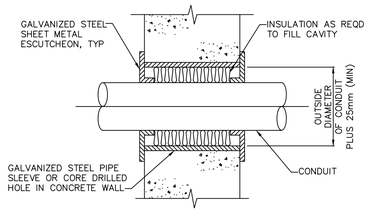
WATERTIGHT CONDUIT SEAL 4
N.T.S.



NOTE:

1. ALL CONDUITS THROUGH CONCRETE FLOOR SLABS AND EQUIPMENT PADS SHALL BE INSTALLED IN ACCORDANCE WITH THIS DETAIL.

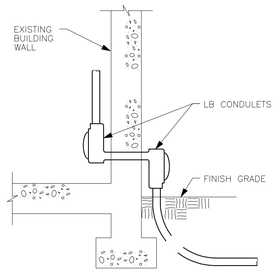
SLAB PENETRATION 5
N.T.S.



NOTES:

1. CONDUITS WHICH INDIVIDUALLY PASS THRU AN INTERIOR WALL SHALL BE INSTALLED IN ACCORDANCE WITH THIS DETAIL. IF WALL IA A FIRE WALL, FILL CAVITY WITH FIRE STOP SEALANT SPECIFIED IN SECTION.
2. INFORM STRUCTURAL DESIGNERS IF CONDUITS ARE MULTIPLE (>2'–0" LONG GROUPING) FOR STRUCTURAL REQUIREMENTS. STACKING VERTICALLY IS USUALLY PREFERABLE TO HORIZONTAL PLACEMENT.
3. ALL THE MATERIALS, CLIPS, HANGERS, STRUT, FASTENERS, ANCHORS, SCREWS AND ASSORTED HARDWARE RELATED TO THE INSTALLATION MUST BE SS 316.

WALL PENTRATION 6
N.T.S.



NOTES:

1. INSTALL CONDUITS THROUGH EXISTING WALLS IN ACCORDANCE WITH THIS DETAIL IF NOT OTHERWISE INDICATED.
2. DRILL HOLE USING METHODS THAT LEAVE A SMOOTH OPENING. SEAL OPENING AROUND CONDUIT, INSIDE, AND OUTSIDE, WITH ONE PART POLYURETHANE IMMERSIBLE SEALANT.

CONDUIT ENTRANCE 7
N.T.S.

REVISION:

REV	DATE	DESCRIPTION	BY
1	02/12/2024	ISSUED FOR TENDER	B.A.

SEAL:

LICENSED PROFESSIONAL ENGINEER
B. ABEDASHTIANY
100500360
02-12-2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
DATE: 02/12/2024
APPROVED BY: K.L.
CHECKED BY: B.A.
DRAWN BY: A.Z.
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE: ELECTRICAL

100 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T0A1
TEL: 1-905-882-4211|FAX: 1-905-822-0355|WWW.WSPGROUP.CA

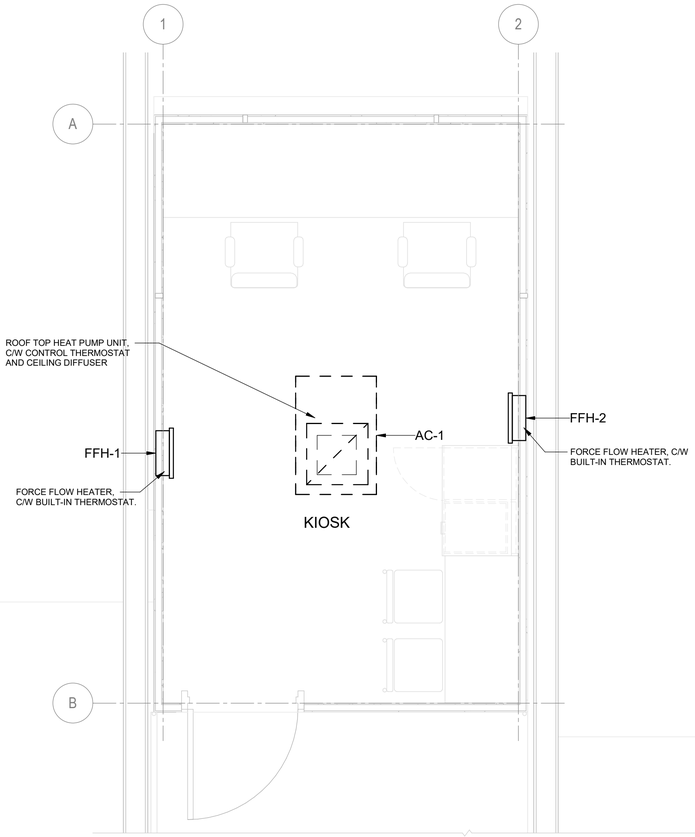
PROJECT NUMBER: 221-10889-00

CLIENT: TOWNSHIP OF MINDEN HILLS
CLIENT REF. #: --

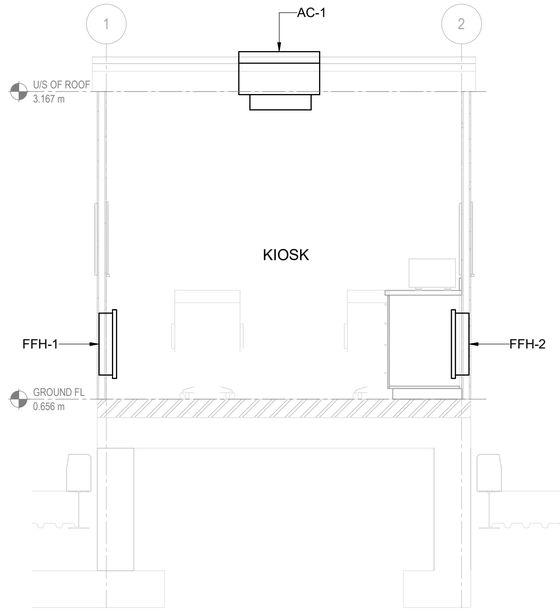
PROJECT:
SCOTCH LINE LANDFILL
PROPOSED TRANSFER STATION

TITLE:
SINGLE LINE, SCHEMATIC DIAGRAMS, PANEL AND LUMINARE SCHEDULES

DRAWING NUMBER: E-4001
REV. 1



1 M-1001 MAIN HVAC FLOOR PLAN
1 : 25



2 M-1001 SECTION
1 : 25

ROOFTOP HEATPUMP UNIT SCHEDULE											
TAG No.	DESCRIPTION	LOCATION	TOTAL AIR FLOW (L/S)	COOLING CAPACITY (KW)	HEATING CAPACITY (KW)	ELECTRICAL DATA				WEIGHT (KG)	REMARKS
						V/PH/Hz	FLA (A)	HEATING AMPS (A)	COMPRESSOR LOCK ROTOR (A)		
AC-1	HEAT PUMP UNIT	ROOF	151	3.95	1.64	115/1/60	13.1	16.0	20.0	50.0	C/W DISCONNECT SWITCH, CONTROL THERMOSTAT AND CEILING ASSEMBLIES
NOTE: THE HEATPUMP UNIT IS SUPPLY BY PRE-FAB MANUFACTURER AND INSTALL BY THE CONTRACTOR											

ELECTRIC UNIT HEATER SCHEDULE								
TAG No.	DESCRIPTION	LOCATION	TOTAL AIR FLOW (L/S)	HEATING CAPACITY (KW)	ELECTRICAL DATA		WEIGHT (KG)	REMARKS
					V/PH/Hz	POWER (KW)		
FFH-1	FORCE FLOW HEATER	KIOSK	-	4.0	120/1/60	4.0	-	C/W DISCONNECT SWITCH, BUILT-IN CONTROL THERMOSTAT
NOTE: THE FORCE FLOW HEATER IS SUPPLY BY PRE-FAB MANUFACTURER AND INSTALL BY THE CONTRACTOR								

NOTES:
1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE OBC, ASHRAE, AND BEST PRACTICES.
2. ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE NOTED.
3. COORDINATE ALL WORK WITH OUT TRADES PRIOR TO ORDERING MATERIALS AND EQUIPMENT, AND PRIOR TO INSTALLATION.
4. REPORT ANY CONFLICTS / OMISSIONS TO THE ENGINEER IMMEDIATELY UPON RECOGNITION OF ISSUE.
5. LOCATE ALL EQUIPMENT IN SUCH A MANNER SO AS TO MAXIMAIZE AVAILABLE HEADSPACE BELOW.

REVISION:

REV	DATE	DESCRIPTION	BY
1	11.29.24	ISSUED FOR TENDER	PP

SEAL:

LICENSED PROFESSIONAL ENGINEER
P. A. PEREZ
100192136
NOV. 2024
PROVINCE OF ONTARIO

ORIGINAL SCALE: SEE SCALE BAR
APPROVED BY: P.P.
CHECKED BY: J.H.
DRAWN BY: P.P.
DATE: 06/07/24
IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
25mm

DISCIPLINE:

100 COMMERCE VALLEY Dr. W.
THORNHILL ONTARIO CANADA L3T0A1
TEL: 1-905-882-4211/FAX: 1-905-822-0055/WWW.WSPGROUP.CA

PROJECT NUMBER:

CLIENT: TOWNSHIP OF MINDEN HILLS
CLIENT REF. #: --

PROJECT:
SCOTCH LINE LANDFILL PROPOSED TRANSFER STATION

TITLE:
SCALE KIOSK - HVAC PLAN AND SECTION

DRAWING NUMBER: M-1001
REV. 1

PLOT DATE: 2024-11-29 11:13:53 AM
Autodesk Docs://221-10889-00 - Scotch Line LF Transfer Station - R22/221-10889-00-MECHANICAL.rvt