

GENERAL NOTES

1. SUBCONTRACTOR TO VERIFY ALL SERVICES AND LOCATIONS PRIOR TO WORK. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN CONTRACT DRAWINGS AND ACTUAL CONDITIONS.
2. SUBCONTRACTOR SHALL PAY ALL FEES, PERMITS, LICENCES, ETC., NECESSARY FOR PROPER COMPLETION OF THE WORK.
3. ALL GEOTHERMAL CONSTRUCTION IN ACCORDANCE WITH CAN/CSA-C448.1-13, AND IN COMPLIANCE WITH PROVINCIAL AND LOCAL CODES. THE SUBCONTRACTOR SHALL PERFORM WORK IN A SKILLED AND PROFESSIONAL MANNER, AND COORDINATE WORK WITH THE OTHER TRADES.
4. SUBCONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE PUBLIC AND ADJACENT PROPERTIES FROM DAMAGE THROUGHOUT CONSTRUCTION.
5. CONTRACTOR AND SUBCONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF TWO (2) YEARS FROM READY-FOR-TAKEOVER, OR AS OTHERWISE REQUIRED IN THE SPECIFICATIONS.
6. CONTRACTOR AND SUBCONTRACTOR ARE RESPONSIBLE TO FIELD COORDINATE WORK SCHEDULE WITH OWNER'S REPRESENTATIVE.
7. UPON PROJECT COMPLETION, RECORD (AS-BUILT) DRAWINGS SHALL BE PROVIDED BY THE SUBCONTRACTOR TO THE OWNER AND ENGINEER. ALL CHANGES IN PIPING ARRANGEMENTS SHALL BE NOTED ON THE RECORD DRAWINGS.
8. ALL BOREHOLE PIPES ARE 38mm (1.5") Ø HDPE PE 4710 SDR 11.
9. ALL HEADER CIRCUIT PIPING AND FITTINGS WITH 38mm (1.5") Ø PIPING TO BE HDPE PE 4710 SDR 11.
10. ALL 50mm (2") Ø PIPING AND FITTINGS TO BE HDPE PE 4710 SDR 13.5.
11. ALL GEOTHERMAL MANIFOLDS ARE 100mm (4") Ø HDPE PE 4710 SDR 11. ENSURE MINIMUM CLEARANCE OF 0.9m (3 ft) IN FRONT OF MANIFOLDS.
12. ALL PIPE AND FITTINGS TO HAVE SAME RESIN MIXTURE FOR HDPE. ANY ALTERATIONS TO THE PIPE TYPE, DIAMETER, OR THICKNESS MUST BE APPROVED BY ENGINEER IN WRITING.
13. ALL HDPE PIPING TO AVOID SHARP BENDS. MINIMUM BENDING RADIUS IS 25 TIMES THE OUTER DIAMETER FOR ANY PIPE CURVATURE.
14. THE ACCEPTABLE METHODS FOR JOINING HDPE PIPE ARE SOCKET FUSION, BUTT-FUSION, OR ELECTRO-FUSION, AS PER MANUFACTURER'S INSTRUCTIONS. BUTT-FUSION IS ONLY RECOMMENDED FOR PIPING 50mm (2") AND LARGER.
15. FUSIONS ARE TO BE PERFORMED BY ACCREDITED FUSION TECHNICIANS OR NATURAL GAS FITTERS.
16. ALL BURIED HDPE ELECTRO-FUSION WELDS MUST BE RECORDED BY A DIGITAL WELDING MACHINE. WELDS TO BE LABELED ON THE FITTING AND RECORDS OF EACH WELD MAINTAINED IN THE OPERATION & MAINTENANCE (O&M) MANUAL. COPIES OF WELD REPORTS TO BE SUBMITTED TO OWNER'S REPRESENTATIVE AND ENGINEER-OF-RECORD FOR REVIEW.
17. NO OPEN PIPE ENDS ARE TO BE LEFT UNATTENDED AT ANY TIME.
18. NO PETROLEUM BASED PRODUCTS ARE TO BE IN CONTACT WITH HDPE PIPE.
19. SAND MUST BE USED TO SURROUND THE PIPES WITHIN A 150mm (6") RADIUS.
20. TRENCHES TO BE BACKFILLED USING EXCAVATED MATERIALS APPROVED BY GEOTECHNICAL. ENSURE MATERIALS ARE FREE OF ANY ROCKS [DEFINED AS COBBLES AND LARGER; MAXIMUM 75mm (3")] AND ABRASIVE MATERIAL.
21. ALL BURIED HORIZONTAL PIPING TO HAVE TRACER WIRE FOR EASE OF LOCATION.
22. A WARNING STRIP 38mm (1.5") WIDE, INDICATING "CAUTION: GEOTHERMAL PIPING" TO BE BURIED - 600mm (24") BELOW GRADE OVER ALL FLUID PIPES.
23. MINIMUM DEPTH FOR GEOTHERMAL PIPING IS 1.8m (~6 FEET) TO TOP OF PIPE, EXCEPT WHERE NOTED.
24. REFER TO SPECIFICATIONS FOR MINIMUM INSULATION REQUIREMENTS, WHEN DISTRIBUTION PIPING IS 1.5m (~5 FEET) OR LESS (INCLUDING DEPTH) FROM SITE SERVICES AND STRUCTURAL COMPONENTS.
25. SUPPLY AND RETURN DISTRIBUTION PIPING TO BE SEPARATED BY 0.6m (~2 FEET) MINIMUM. RIGID INSULATION REQUIRED AS PER SPECIFICATIONS IF SEPARATION DISTANCE IS LESS THAN 0.6m (~2 FEET).
26. PIPE TEES ARE TO AVOID FLOW ARRANGEMENTS WHERE 2 FLOW PATHS FROM OPPOSITE DIRECTIONS BANG TOGETHER INTO THE MIDDLE BRANCH CONNECTION, OR THE FLOW THROUGH THE MIDDLE BRANCH CONNECTION HAS TO FLOW IN TWO OPPOSITE (180 DEGREE) DIRECTIONS INSIDE THE TEE.
27. NO FUSION JOINTS ARE TO OCCUR IN SLEEVES.
28. COORDINATE WITH STRUCTURAL ALL SLEEVING LOCATIONS REQUIRED TO PASS THROUGH FOUNDATION WALLS. (STRUCTURAL TO PROVIDE SLEEVES).
29. LINK-SEALS AT INLET AND OUTLET OF EACH SLEEVE PENETRATION AT FOUNDATION WALL PENETRATION INTO BUILDING.
30. GEOTHERMAL SYSTEM FILLED WITH 25% PROPYLENE GLYCOL BY VOLUME. COORDINATE WITH MECHANICAL AS PROPYLENE GLYCOL MUST BE FROM THE SAME MANUFACTURER.
31. BH-B1 IS THE TEST BOREHOLE LOCATION. THE DRILLING, U-LOOP PIPING, AND GROUT FOR THIS BOREHOLE IS NOT IN SCOPE. HOWEVER, CONNECTING BH-D2 AS PART OF THE GEOTHERMAL SYSTEM IS IN SCOPE.
32. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH THE PROJECT DRAWINGS, SPECIFICATIONS, AND ALL GOVERNMENT REGULATIONS PERTAINING TO WORK BEING DONE.

DESIGN CRITERIA

1. SYSTEM DESIGN PARAMETERS (FROM MECHANICAL CONSULTANT):
 - 1.1. PEAK COOLING LOAD: 58 kW (196 kBtu/hr)
 - 1.2. ANNUAL COOLING: 39.1 MWh (133.4 MBTU)
 - 1.3. PEAK HEATING LOAD: 31 kW (104 kBtu/hr)
 - 1.4. ANNUAL HEATING: 47.7 MWh (162.9 MBTU)
2. SYSTEM DESIGN PARAMETERS WITH HYDRONIC EQUIPMENT CONSIDERED:
 - 2.1. PEAK COOLING LOAD WITH HYDRONIC (EMERGENCIES ONLY): 119.3 kW (407 kBtu/hr)
 - 2.2. NO FLUID COOLER REQUIRED WHEN EMERGENCY COOLING CONSIDERED.
 - 2.3. PEAK HEATING LOAD WITH HYDRONIC: 198.1 kW (676 kBtu/hr)
 - 2.4. DUE TO THE AMOUNT OF CONNECTED EQUIPMENT LOAD, A BOILER IS NECESSARY TO MEET THE HIGH HEATING DEMANDS.
3. GEOTHERMAL SYSTEM DESIGN CRITERIA INTO THE HEAT PUMPS BASED ON ENTERING WATER TEMPERATURE (EWT) OF 0°C (32°F) IN HEATING MODE AND ENTERING WATER TEMPERATURE (EWT) OF 29.4°C (85°F) IN COOLING MODE. THESE CONDITIONS ARE BASED ON WATER-TO-AIR HEAT PUMPS AND WATER-TO-WATER HEAT PUMPS OPERATING. GEOTHERMAL ENTERING WATER TEMPERATURES WILL FLUCTUATE WITHIN THESE VALUES THROUGHOUT THE YEAR. DUE TO THE AMOUNT OF CONNECTED EQUIPMENT LOAD, A BOILER IS NECESSARY TO MEET THE HIGH HEATING DEMANDS.

GEOTHERMAL BOREHOLE FIELD

BOREHOLE FIELD DESCRIPTION	
OVERALL BOREHOLE LENGTH	2,073 m (~6,800 ft)
BOREHOLE QUANTITY	8 total (with one for test hole)
NUMBER OF CIRCUITS	4
BOREHOLE DEPTH	259 m (~850 ft)
BOREHOLE DIAMETER	5"Ø
BOREHOLE SPACING	6.1 m (~20 ft) MINIMUM
FLUID DESCRIPTION	
TYPE	25% propylene glycol by volume
FLOW RATE	7.0 l/s (110 US GPM)
SOIL DESCRIPTION (BASED ON TEST BORE DATA NEAR SITE)	
THERMAL CONDUCTIVITY	2.42 W/(m-K) [1.40 BTU/(hr-ft-°F)]
THERMAL DIFFUSIVITY	0.09 m ² /day [0.97 ft ² /day]
GROUND TEMPERATURE	12.9°C (55.3°F)
PIPING DESCRIPTION	
PIPE TYPE - VERTICAL BOREHOLES	HDPE SDR 11 (4710 RESIN)
PIPE TYPE - HORIZONTAL CIRCUITS	HDPE SDR 13.5 (4710 RESIN)
BOREHOLE PIPE DIAMETER	38 mm (1-1/2")
PIPE RESISTANCE FOR HDPE SDR 11	0.066 (m-K)/W [0.115 (hr-ft-°F)/BTU]
GROUT THERMAL CONDUCTIVITY	2.08 W/(m-K) [1.20 BTU/(hr-ft-°F)]

GEOTHERMAL SHEET INDEX

G001	GEOTHERMAL NOTES, CRITERIA, AND INDEX
G100	GEOTHERMAL BOREHOLE LAYOUT PLAN
G101	GEOTHERMAL SECTIONS AND DETAILS
G102	GEOTHERMAL DETAILS - SLEEVING THROUGH BUILDING
G103	GEOTHERMAL MANIFOLD PLAN AND DETAILS

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ISSUED FOR ADDENDUM NO. 1	05 DEC 2024
ISSUED FOR PERMIT AND TENDER	13 NOV 2024
ISSUED FOR SPA AND COSTING	08 NOV 2024
ISSUED FOR REVIEW	02 OCT 2024
ISSUED FOR COORDINATION	20 SEPT 2024
revision	date

FIFA - EAST VSTS CENTENNIAL PARK

Address: 56 Centennial Park Rd, Toronto, ON

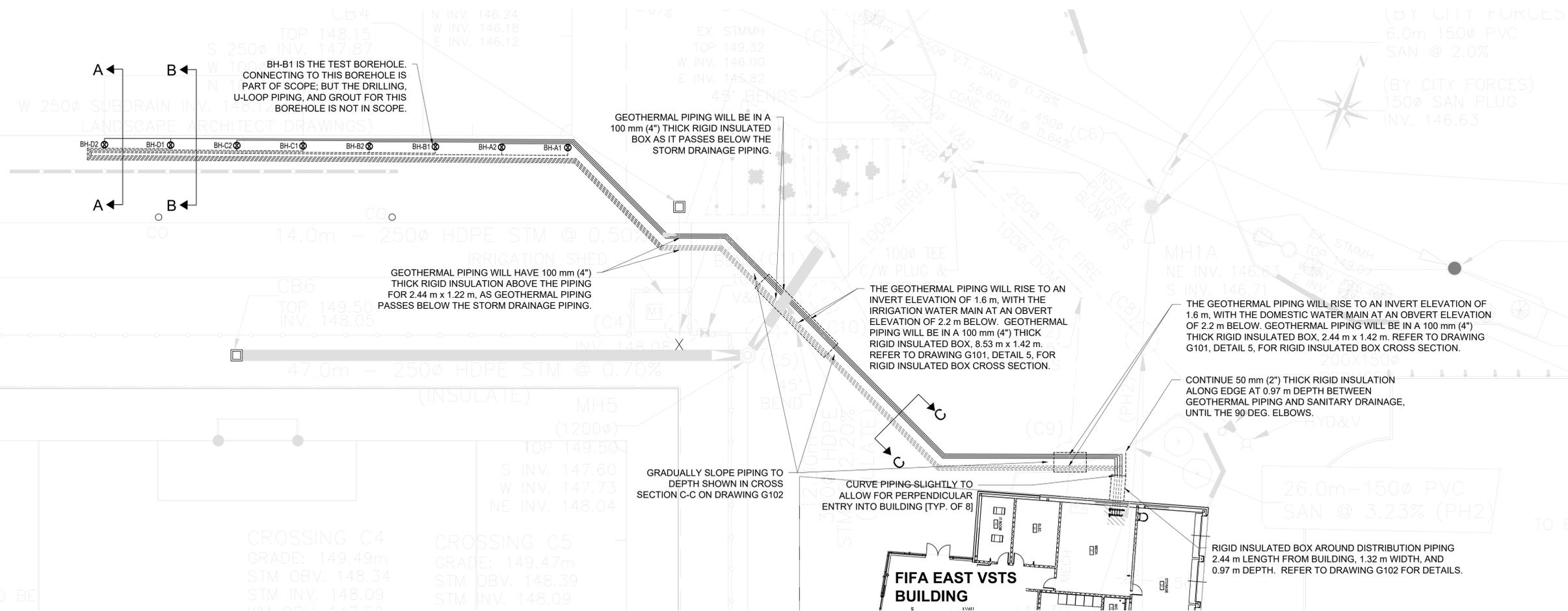
**GEOTHERMAL NOTES,
CRITERIA, AND INDEX**

project no. : 2461-66228-00
 scale : N/A
 date : NOVEMBER 12, 2024

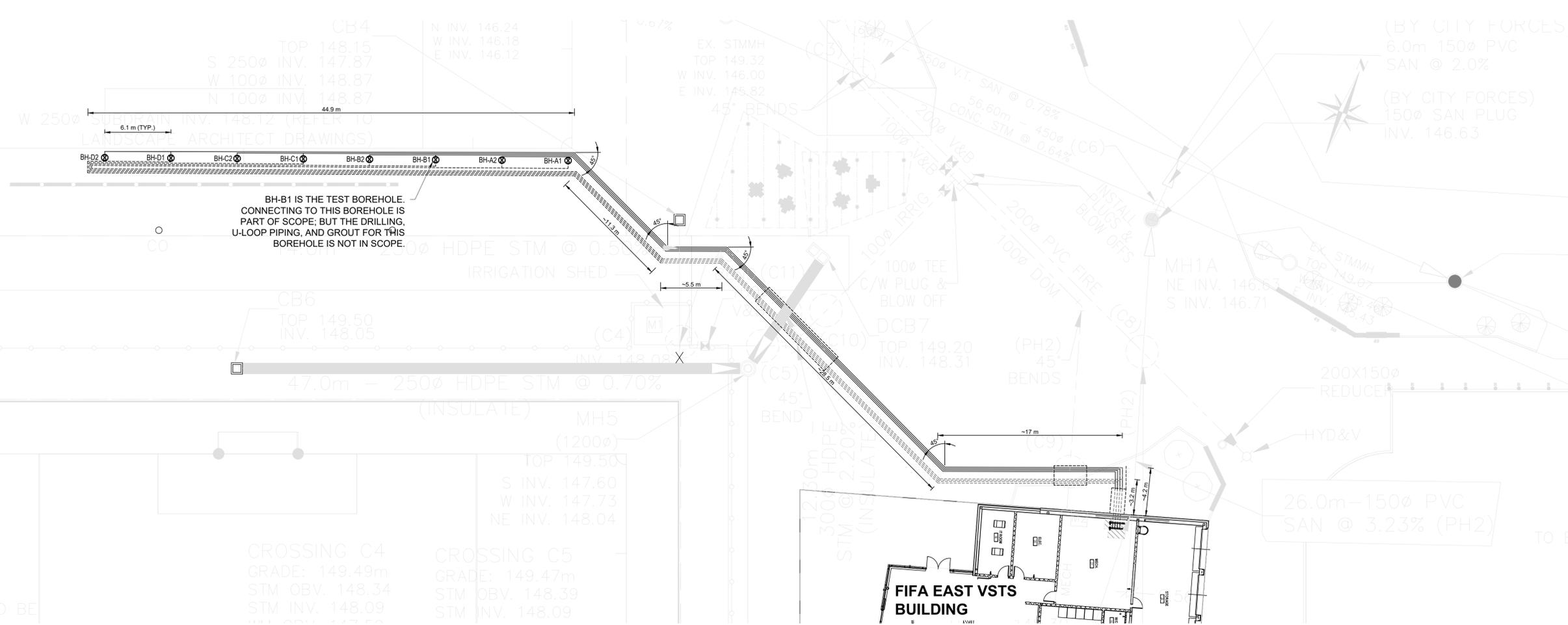
drawing no. :

G001

LEGEND
 ● BOREHOLE LOCATION
 BH-A1 BOREHOLE IDENTIFICATION NUMBER
 — SUPPLY DISTRIBUTION PIPING
 - - - - - RETURN DISTRIBUTION PIPING
 NOTE: BOREHOLE SYMBOLS AND DISTRIBUTION PIPING ARE NOT TO SCALE.



1. BOREHOLE LAYOUT AND CROSS SECTION LOCATIONS

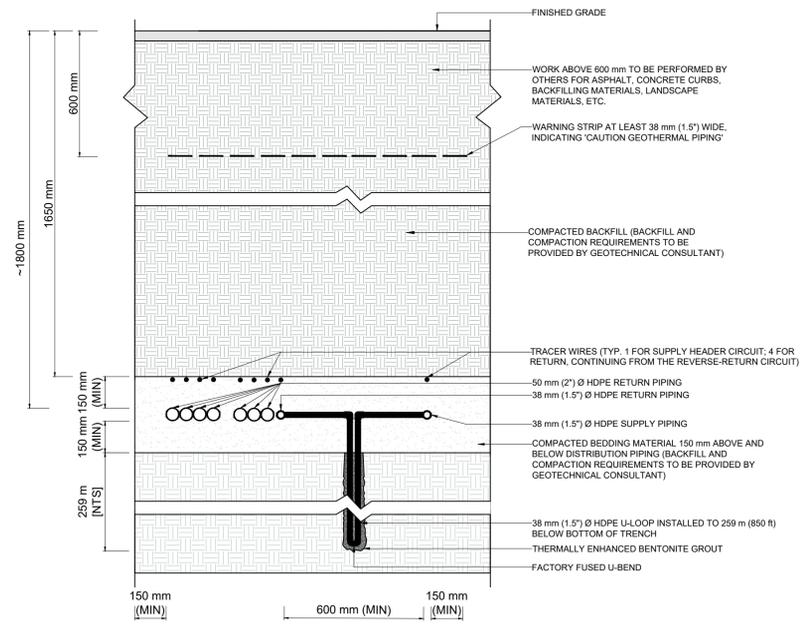


2. BOREHOLE LAYOUT WITH DIMENSIONS

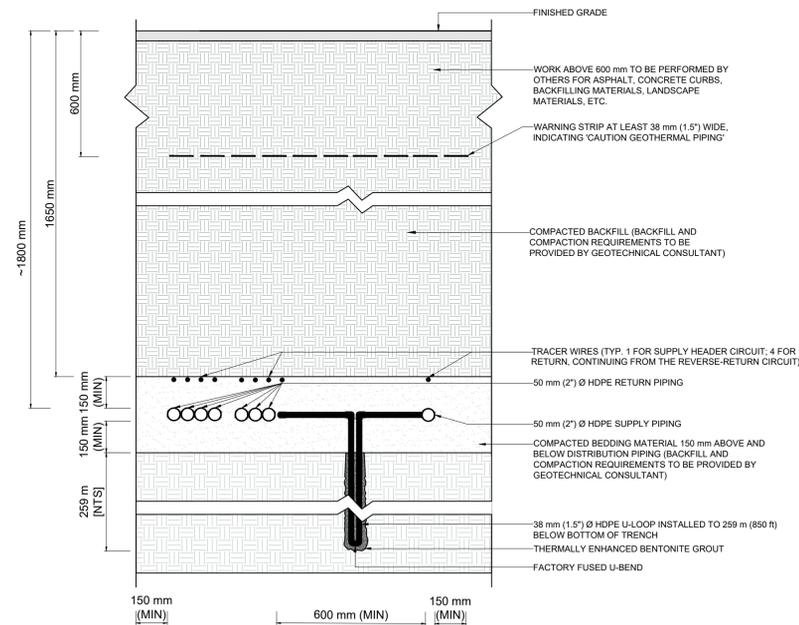


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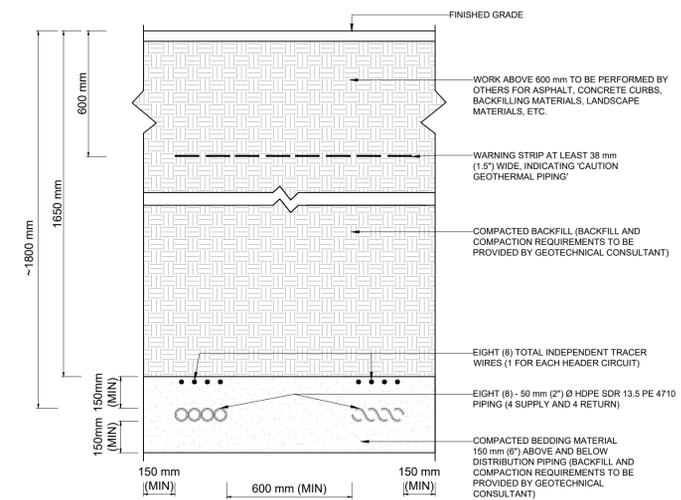
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ISSUED FOR PERMIT AND TENDER	12 NOV 2024
ISSUED FOR SPA AND COSTING	08 NOV 2024
ISSUED FOR REVIEW	02 OCT 2024
ISSUED FOR COORDINATION	20 SEPT 2024
revision	date



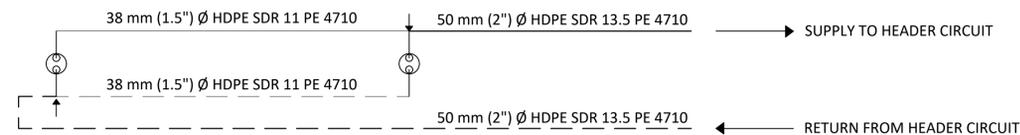
1. CONCEPTUAL TRENCH CROSS SECTION A-A DETAIL (TYPICAL) (NTS)
(Direction of view SOUTHWEST)



2. CONCEPTUAL TRENCH CROSS SECTION B-B DETAIL (TYPICAL) (NTS)
(Direction of view SOUTHWEST)

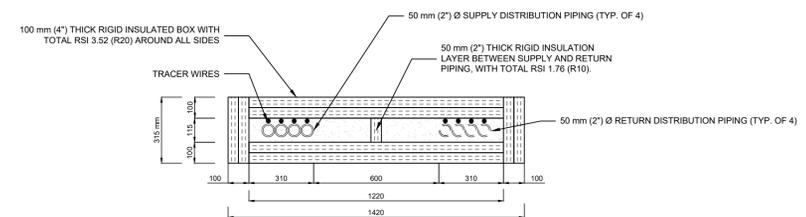


3. CONCEPTUAL TRENCH CROSS SECTION C-C DETAIL (TYPICAL) (NTS)
(Direction of view SOUTHEAST)



- NOTES:
- ↑ LOCATION OF REDUCING TEE OR BUSHING
 - REFER TO BOREFIELD LAYOUT DRAWING FOR LOCATION OF 90 DEGREE ELBOWS

4. HEADER CIRCUIT DETAIL (TYPICAL) (NTS)



5. TYPICAL RIGID INSULATED TRENCH CROSS SECTION (NTS)



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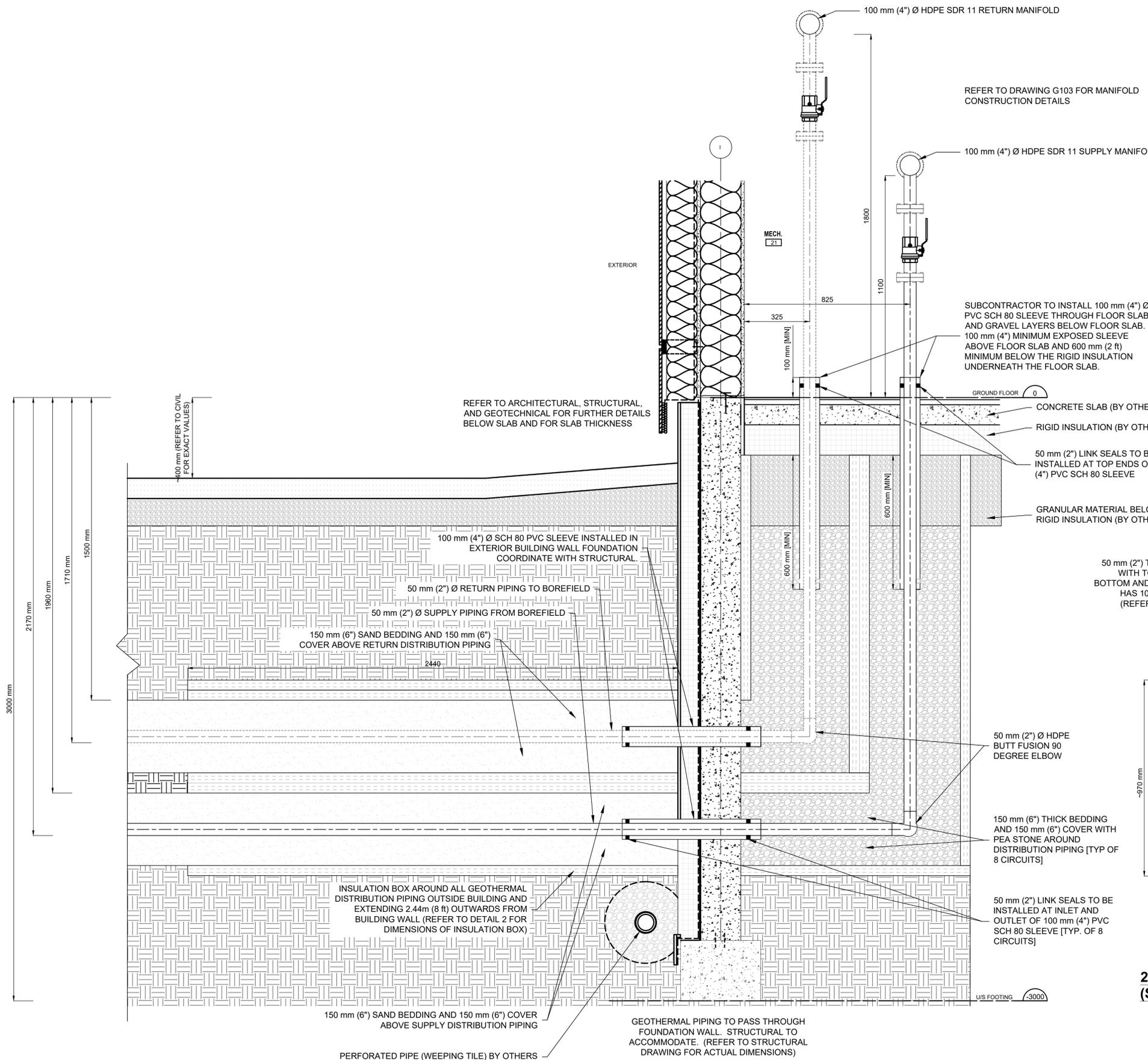
ISSUED FOR AGENDUM NO. 1	16 DEC 2024
ISSUED FOR PERMIT AND TENDER	13 NOV 2024
ISSUED FOR SPA AND COSTING	08 NOV 2024
ISSUED FOR REVIEW	02 OCT 2024
ISSUED FOR COORDINATION	20 SEPT 2024
revision	date

FIFA - EAST VSTS
CENTENNIAL PARK
Address: 56 Centennial Park Rd, Toronto, ON
GEOTHERMAL SECTIONS
& DETAILS

project no. : 2461-66228-00
scale : NTS
date : NOVEMBER 12, 2024

drawing no. : **G101**

GENERAL NOTES:



1. GEOTHERMAL DISTRIBUTION PIPING THROUGH FOUNDATION WALL WITH SLEEVING AND INSULATION DETAILS (SCALE 1:10)

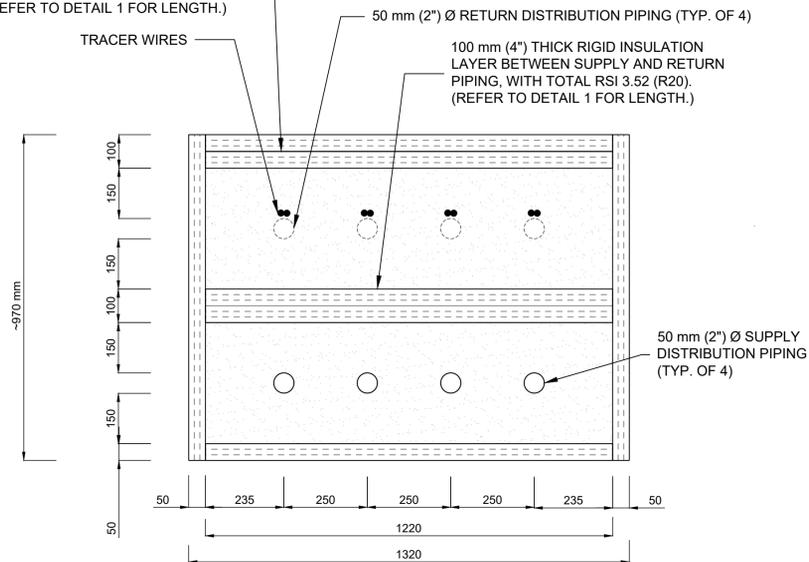
REFER TO DRAWING G103 FOR MANIFOLD CONSTRUCTION DETAILS

SUBCONTRACTOR TO INSTALL 100 mm (4") Ø PVC SCH 80 SLEEVE THROUGH FLOOR SLAB AND GRAVEL LAYERS BELOW FLOOR SLAB. 100 mm (4") MINIMUM EXPOSED SLEEVE ABOVE FLOOR SLAB AND 600 mm (2 ft) MINIMUM BELOW THE RIGID INSULATION UNDERNEATH THE FLOOR SLAB.

REFER TO ARCHITECTURAL, STRUCTURAL AND GEOTECHNICAL FOR FURTHER DETAILS BELOW SLAB AND FOR SLAB THICKNESS

CONCRETE SLAB (BY OTHERS)
RIGID INSULATION (BY OTHERS)
50 mm (2") LINK SEALS TO BE INSTALLED AT TOP ENDS OF 100 mm (4") PVC SCH 80 SLEEVE
GRANULAR MATERIAL BELOW RIGID INSULATION (BY OTHERS)

50 mm (2") THICK RIGID INSULATED BOX WITH TOTAL RSI 1.76 (R10) AROUND BOTTOM AND SIDE EDGES; TOP PORTION HAS 100 mm (4") FOR RSI 3.52 (R20). (REFER TO DETAIL 1 FOR LENGTH.)



2. GEOTHERMAL DISTRIBUTION PIPING INSULATION DETAILS (SCALE 1:10) (Direction of view northwest)



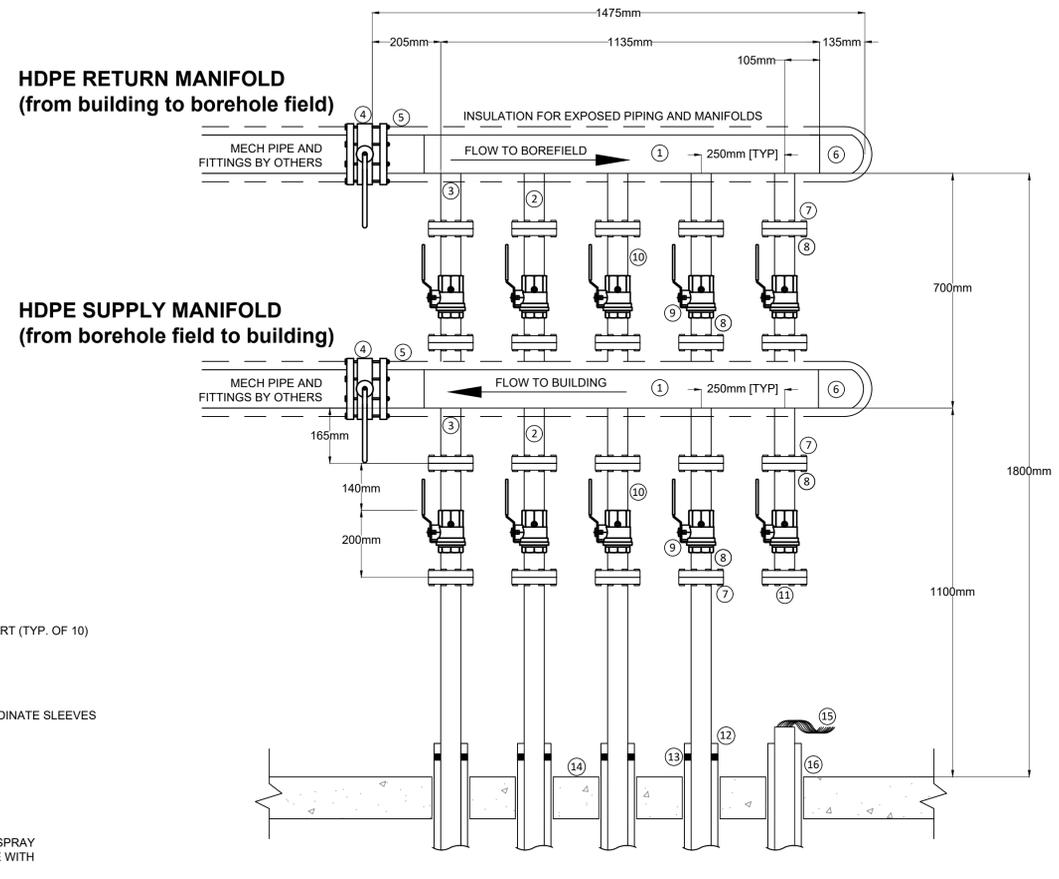
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ISSUED FOR PERMIT AND TENDER	13 NOV 2024
ISSUED FOR SPA AND COSTING	08 NOV 2024
ISSUED FOR REVIEW	02 OCT 2024
ISSUED FOR COORDINATION	20 SEPT 2024
revision	date

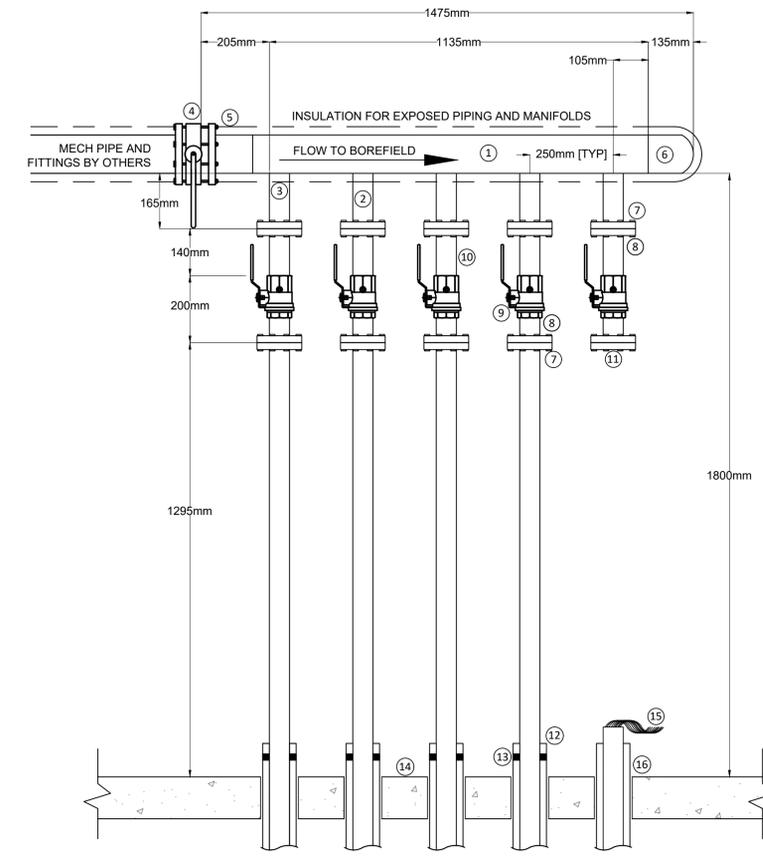
FIFA - EAST VSTS CENTENNIAL PARK
Address: 56 Centennial Park Rd, Toronto, ON
GEOTHERMAL DETAILS - SLEEVING THROUGH BUILDING

project no.: 2461-66228-00
scale: 1:10
date: NOVEMBER 12, 2024

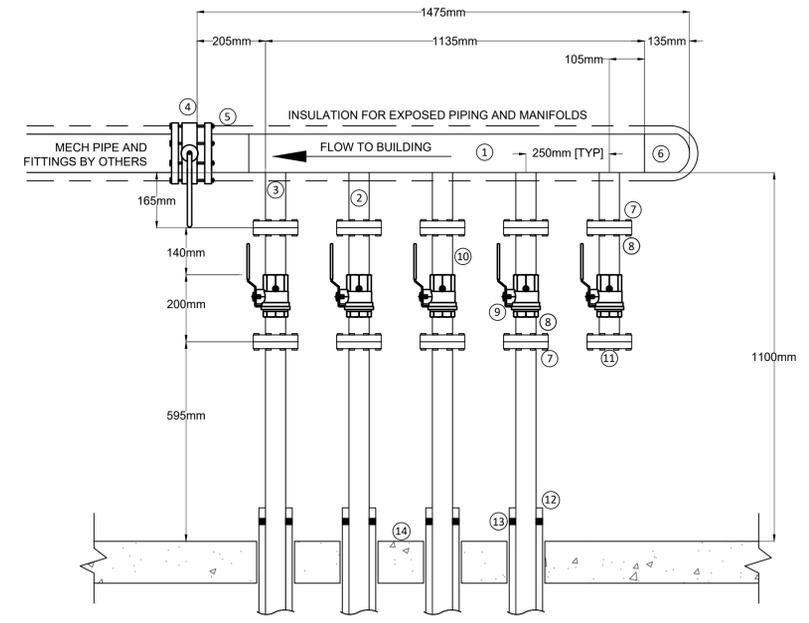
drawing no.: **G102**



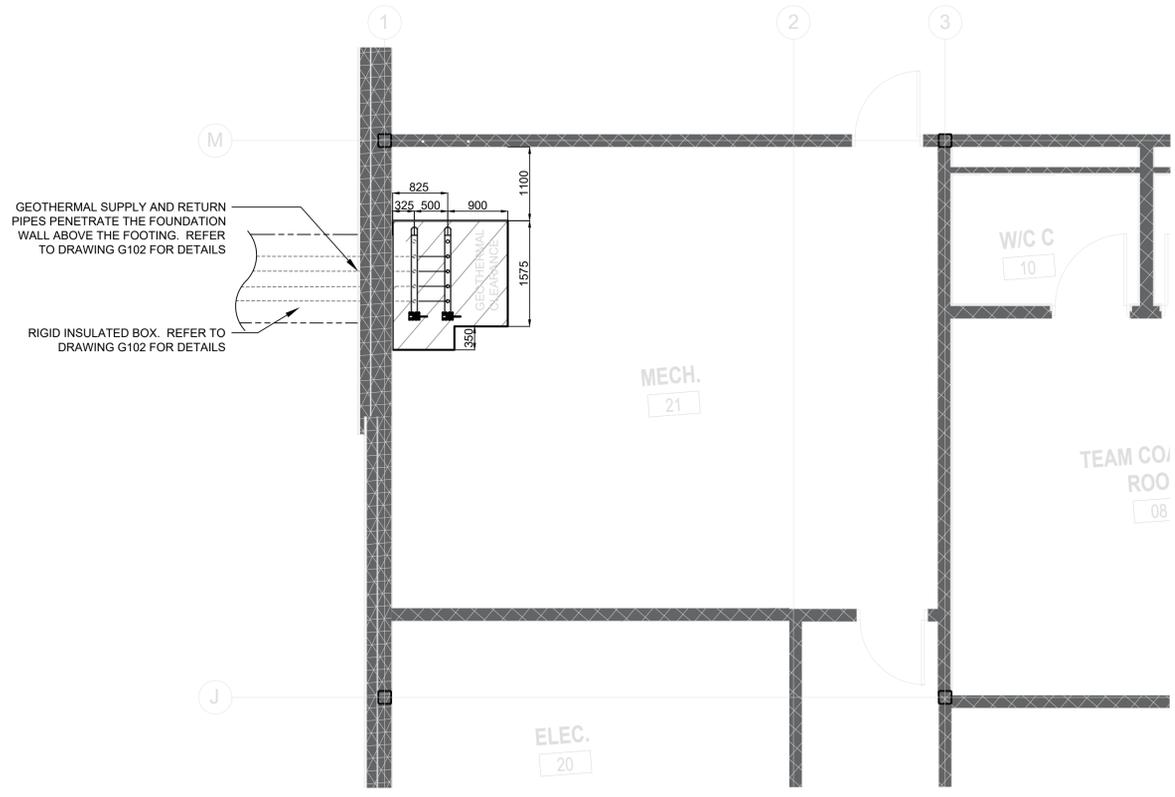
1. SUPPLY & RETURN HDPE MANIFOLD DETAILS (direction viewing northwest) [SCALE 1:10]



2. RETURN HDPE MANIFOLD DETAILS (direction viewing northwest) [SCALE 1:10]



3. SUPPLY HDPE MANIFOLD DETAILS (direction viewing northwest) [SCALE 1:10]



4. GEOTHERMAL MANIFOLD PLAN VIEW [SCALE 1:50]

- ① 100 mm HDPE PE 4710 DR 11 PIPE
- ② 50 mm HDPE PE 4710 DR 13.5 PIPE
- ③ 100 mm x 50 mm SADDLE FITTING BY MANUFACTURER (TYP. OF 10)
- ④ 100 mm BUTTERFLY VALVE (TYP. OF 2)
- ⑤ 100 mm HDPE FLANGE ADAPTOR WITH BACKUP RING (TYP. OF 2)
- ⑥ 100 mm HDPE PE 4710 DR 11 FUSED END CAP (TYP. OF 2)
- ⑦ 50 mm HDPE FLANGE ADAPTOR WITH BACKUP RING (TYP. OF 18)
- ⑧ 50 mm STEEL FLANGE FOR THREADED NIPPLES (TYP. OF 20)
- ⑨ 50 mm BRASS BODY THREADED FULL PORT BALL VALVE WITH 6.4 mm GAUGE PORT (TYP. OF 10)
- ⑩ 50 mm CARBON STEEL SCH. 40 THREADED NIPPLES VARYING LENGTHS
- ⑪ 50 mm BLIND FLANGE (TYP. OF 2)
- ⑫ 100 mm PVC SCH. 80 SLEEVE PENETRATION THROUGH FLOOR (TYP. OF 8; COORDINATE SLEEVES WITH STRUCTURAL)
- ⑬ LINK SEALS (TYP. OF 8 AT SLEEVED PENETRATION, WITH LINKS SEALS AT INLET)
- ⑭ BASEMENT FLOOR SLAB (BY OTHERS)
- ⑮ TRACER WIRES (8 TOTAL - ONE FOR EACH SUPPLY AND RETURN CIRCUIT)
- ⑯ 50 mm PVC SCH. 80 SLEEVE PENETRATION THROUGH FLOOR SLAB, SEALED BY SPRAY POLYURETHANE FOAM AT INLET AND OUTLET OF SLEEVE; COORDINATE SLEEVE WITH STRUCTURAL



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ISSUED FOR	DATE
ISSUED FOR AGENDUM NO. 1	16 DEC 2021
ISSUED FOR PERMIT AND TENDER	13 NOV 2021
ISSUED FOR SPA AND COSTING	08 NOV 2021
ISSUED FOR REVIEW	02 OCT 2021
ISSUED FOR COORDINATION	20 SEPT 2021
revision	date

FIFA - EAST VSTS CENTENNIAL PARK
Address: 56 Centennial Park Rd, Toronto, ON
GEOTHERMAL MANIFOLD PLAN & DETAILS

project no.: 2461-66228-00
scale: AS NOTED
date: NOVEMBER 12, 2024

drawing no.: **G103**

CENTENNIAL PARK

FIFA - EAST VSTS Landscape Drawings

Toronto Parks, Forestry & Recreation

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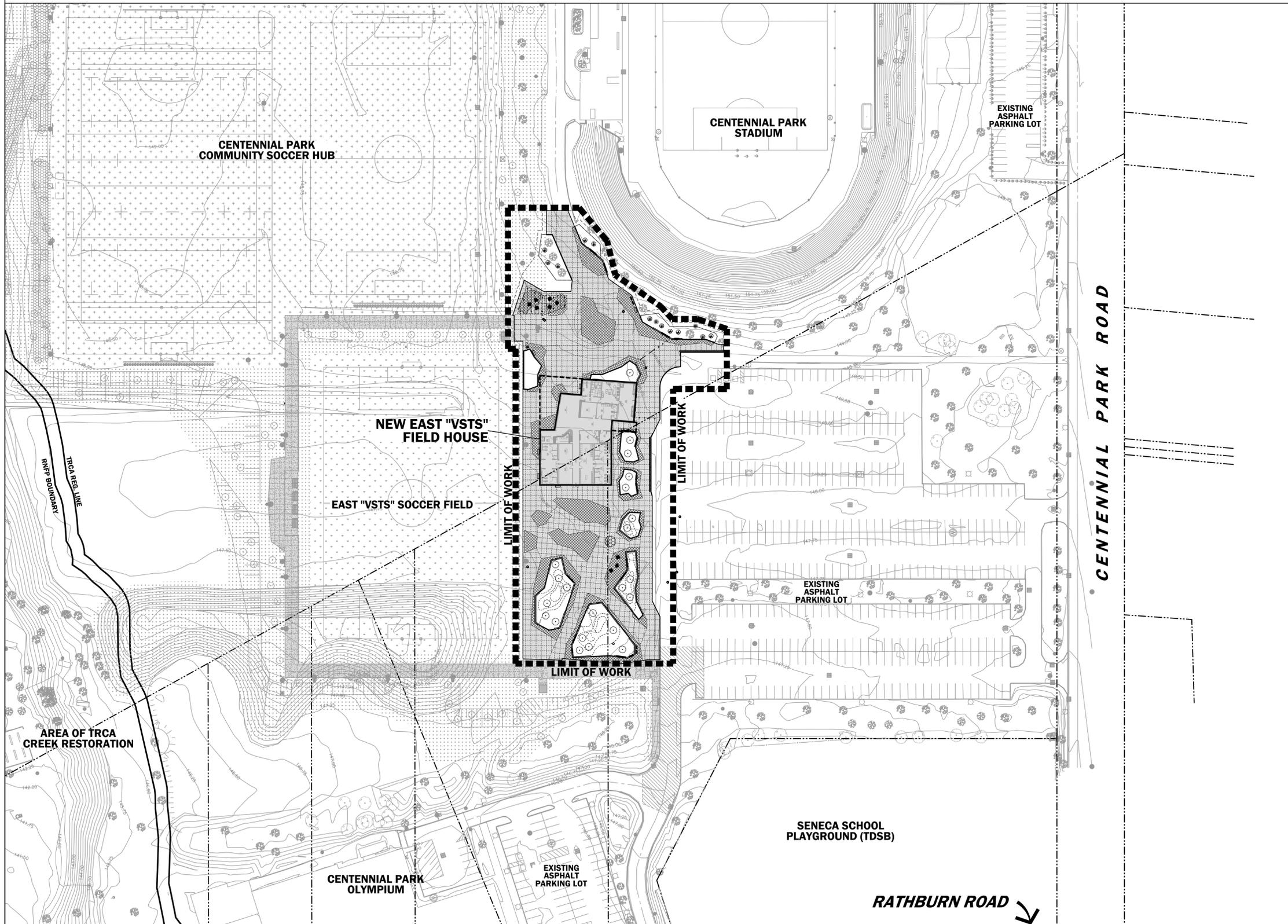
GENERAL NOTES

- ALL WORKS SHALL CONFORM TO THE REQUIREMENTS, STANDARDS AND DIRECTION OF THE CITY OF TORONTO.
- THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT TO OBTAIN THE CITY'S APPROVAL ON ANY PROPOSED SUBSTITUTIONS IN MATERIALS, OR DEVIATIONS FROM CONSTRUCTION METHODS, AS DESCRIBED ON THE DRAWINGS AND SPECIFICATIONS. THE CITY MAY NOT APPROVE SUBSTITUTIONS OR ALTERNATE METHODS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS WHICH MAY INCLUDE REMOVAL OF ANY WORK NOT APPROVED BY THE CITY.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CONDITIONS ENCOUNTERED ON-SITE.
- THE CONTRACTOR SHALL STAKE OR SPRAY PAINT ALIGNMENT OR LOCATION OF ALL NEW FACILITIES FOR VERIFICATION BY THE CITY AND THE LANDSCAPE ARCHITECT PRIOR TO CARRYING OUT ANY EXCAVATIONS OR INSTALLATIONS.
- THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL TREES OR FACILITIES WITHIN THE PARK OR ON ADJACENT PROPERTIES, NOT INDICATED TO BE REMOVED. ANY DAMAGE SHALL BE IMMEDIATELY REPAIRED TO THE CITY'S SATISFACTION.
- THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION RELATED ACCESS AND ACTIVITIES WITHIN THE DESIGNATED LIMIT OF WORK AREA.
- ALL PORTIONS OF THE WORK MUST BE AVAILABLE AT ALL TIMES WHILE WORK IS BEING PERFORMED. FOR INSPECTION BY DESIGNATED REPRESENTATIVES OF THE CITY OR THE LANDSCAPE ARCHITECT.
- ALL QUESTIONS, ALTERNATE PROPOSALS, REQUESTS FOR INFORMATION OR INSPECTION, ETC. SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT.

DRAWING INDEX

DWG: SHEET TITLE:

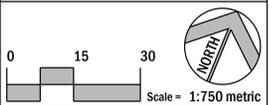
L1	Landscape Drawings Cover Sheet
L2	Tree Protection Plan
L3	Demolition Plan
L4	Landscape Plan
L5	Layout + Grading Plan
L6	Soil Provision Plan
L7	Planting Plan
L7A	Planting Plan-Enlargement Plan
L7B	Planting Legend
L8	Landscape Details 1
L9	Landscape Details 2
L10	Landscape Details 3
L11	Landscape Details 4
L12	Landscape Details 5
L13	Landscape Details 6



04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
03	2024-11-18	ISSUED FOR PERMIT AND TENDER	EKA	JC
02	2024-11-13	PRELIMINARY	EKA	JC
01	2024-11-08	PRELIMINARY	JC	--
NO	YYYY-MM-DD	REVISION	DN	CH



**CENTENNIAL PARK
FIFA - EAST VSTS**
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3

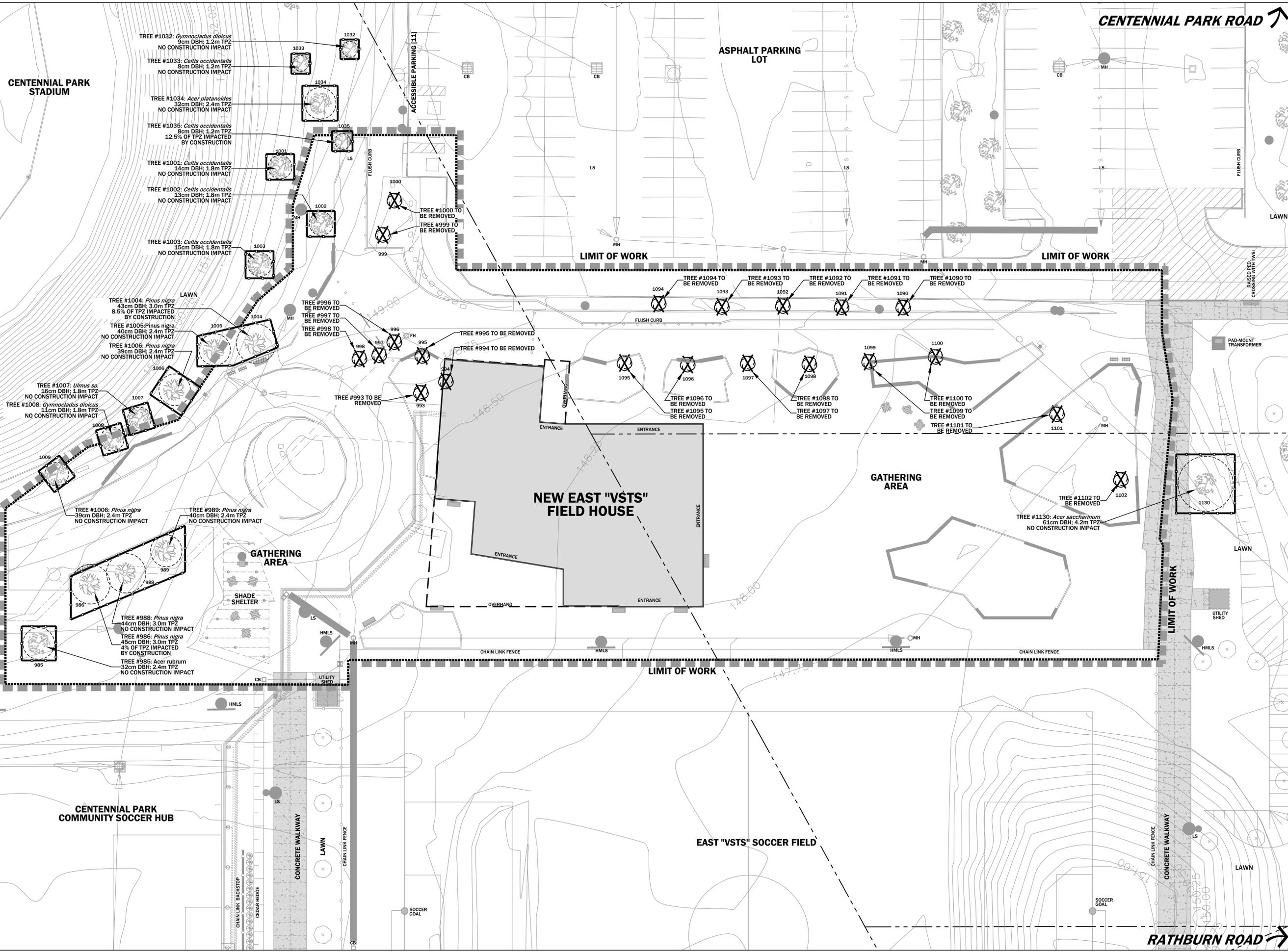


VFA Project: 2309

L1

LANDSCAPE DRAWINGS
COVER SHEET

sheet date: (06/24 13:16:50)



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- LEGEND**
- LIMIT OF WORK AREA
 - PROPERTY BOUNDARY OR EASEMENT
 - SITE SECURITY HOARDING
 - EXISTING TREES AS SURVEYED (left = conifer, right=deciduous)
 - EXISTING TREES AS ESTIMATED BY ARBORIST [various types]
 - EXISTING TREES TO BE REMOVED
 - TREE PROTECTION BARRIER. INSTALL BARRIER WITH SIGNAGE IN ACCORDANCE WITH CITY DETAILS [DETAILS 5/L13 AND 7/L13]
 - REQUIRED TREE PROTECTION ZONE (TPZ)
 - TREE SYMBOL, AS NOTED ABOVE
 - TREE NUMBER ACCORDING TO ARBORIST INVENTORY ("NOT INVENTORIED" IS UNDERSTOOD TO MEAN THAT TREE HAD BEEN PREVIOUSLY REMOVED BY OTHERS OR WAS OF INSIGNIFICANT SIZE)
 - NEW TREE PLANTING REFER TO PLANTING PLANS

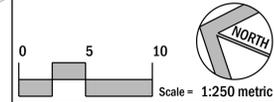
TREE PROTECTION PLAN NOTES:

- ALL REQUIREMENTS OF STANDARD CITY TREE PROTECTION NOTES (IDEAL 6/L13) APPLY TO THE WORK OF THIS PROJECT.
1. The Contractor is responsible for maintaining a safe and secure work environment for the duration of the work.
 2. Install 2-meter high portable, sectional metal fence at perimeter of work area for duration of work until acceptance. Where site fencing is used for tree protection, it shall be staked securely to the ground.
 3. Location and extent of fencing shall be verified on-site with Owner and Consultant representatives.
 4. The Contractor shall provide adequate signage at main access points and to caution pedestrians regarding construction activities. The Owner will provide informational signs to the Contractor for posting on site fencing at various locations. Contractor's responsibilities shall include maintaining all signage in good condition.
 5. Tree protection fencing shall be installed for areas shown on this plan, at a minimum.
 6. Tree protection zones (TPZ) have been identified for all trees to be preserved within the vicinity of proposed works for the Contractor's information. The Contractor is responsible to ensure that no works occur or materials are stockpiled within the TPZ of any tree within or outside of the indicated work area.
 7. City of Toronto's Tree Protection Policy and Specifications for Construction Near Trees shall govern the work of this project.
 8. For new tree plantings, refer to Planting Plan.

04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
03	2024-11-18	ISSUED FOR PERMIT AND TENDER	EKA	JC
02	2024-11-13	PRELIMINARY	EKA	JC
01	2024-11-08	PRELIMINARY	JC	CH
NO	YYYY-MM-DD	REVISION		



CENTENNIAL PARK FIFA - EAST VSTS
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3

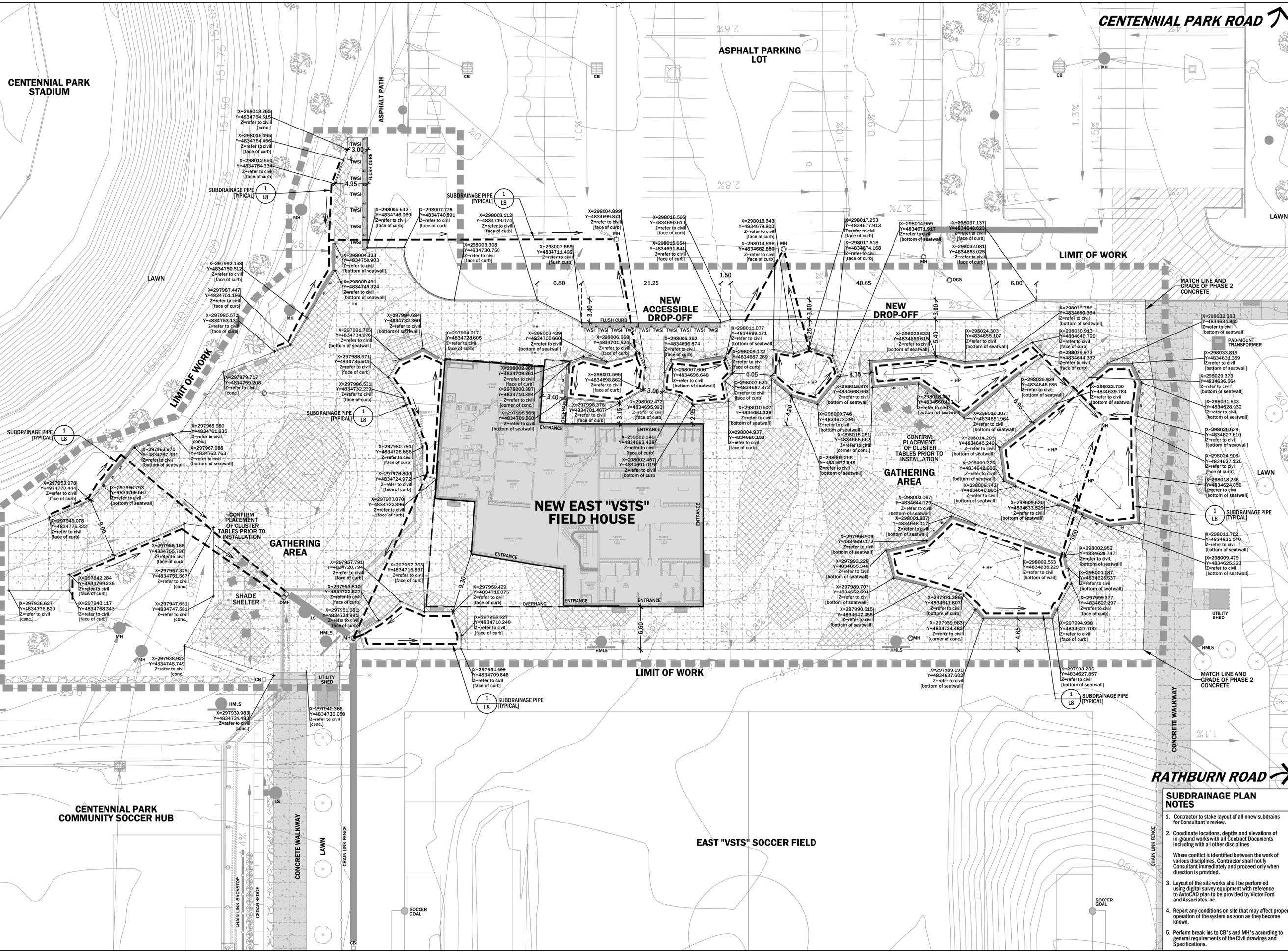


VFA Project: 2309

TREE PROTECTION PLAN

L2

sheet data (06/24 13:46:50)



LEGEND

- LIMIT OF WORK AREA
- PROPERTY BOUNDARY OR EASEMENT
- EXISTING TREES AS SURVEYED (left = conifer, right = deciduous)
- EXISTING TREES AS ESTIMATED BY ARBORIST (various types)
- PROPOSED SLOPES
- PROPOSED CONTOURS (SCHEMATIC)
- PROPOSED SUBDRAINAGE PIPE: SET DEPTH BELOW BOTTOM OF PLANTING SOIL AND FOLLOW SURFACE GRADE OR GRADE 1% TO DRAIN, IF CONNECTION RESTRICTS DEPTH, NOTIFY CONSULTANT.
- SUBDRAINAGE FLOW DIRECTION
- 1 L5
DETAIL NUMBER(S)
(ITEM DESCRIPTION)
DRAWING SHEET NUMBER WHERE DETAIL IS FOUND

ABBREVIATIONS:

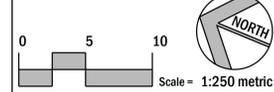
CB	CATCH BASIN
CBMH	COMBINED CATCH BASIN + MAINT. HOLE
DCB	DOUBLE CATCH BASIN
HMLS	HIGH MAST LIGHT STANDARD [sport field]
HW	HANDWALL
LS	LIGHT STANDARD [GENERAL - sport VARY]
LS	MAINTENANCE HOLE
OGS	OIL-GRIT SEPARATOR
SI	SIGN
SL	STREETLIGHT [EXISTING]
WV	WATER VALVE

- LAYOUT AND GRADING NOTES**
- Contractor to stake layout of all new facilities for Consultant's review.
 - Coordinate locations, depths and elevations of in-ground works with all Contract Documents including with all other disciplines.
Where conflict is identified between the work of various disciplines, Contractor shall notify Consultant immediately and proceed only when direction is provided.
 - Layout of the site works shall be performed using digital survey equipment with reference to AutoCAD plan to be provided by Victor Ford and Associates Inc.
 - Stockpile all suitable excavated materials and any materials indicated to be salvaged for use on-site if applicable. Dispose of all unsuitable or excess materials.
 - Soil or granular materials stockpiled on site shall be protected from contamination by tarps or other means until they are installed elsewhere on site.
 - CONTRACTOR IS RESPONSIBLE TO RE-SET ALL FRAMES AND GRATES FOR CB's, MH's, CBMH's and DCB's INSTALLED BY OTHERS TO THE FINISHED GRADES INDICATED ON THE CIVIL DRAWINGS.**

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02	2024-11-13	PRELIMINARY	EKA	JC
01	2024-11-08	PRELIMINARY	JC	--
NO	YYYY-MM-DD	REVISION	DN	CH



CENTENNIAL PARK FIFA - EAST VSTS
256 Centennial Park Road,
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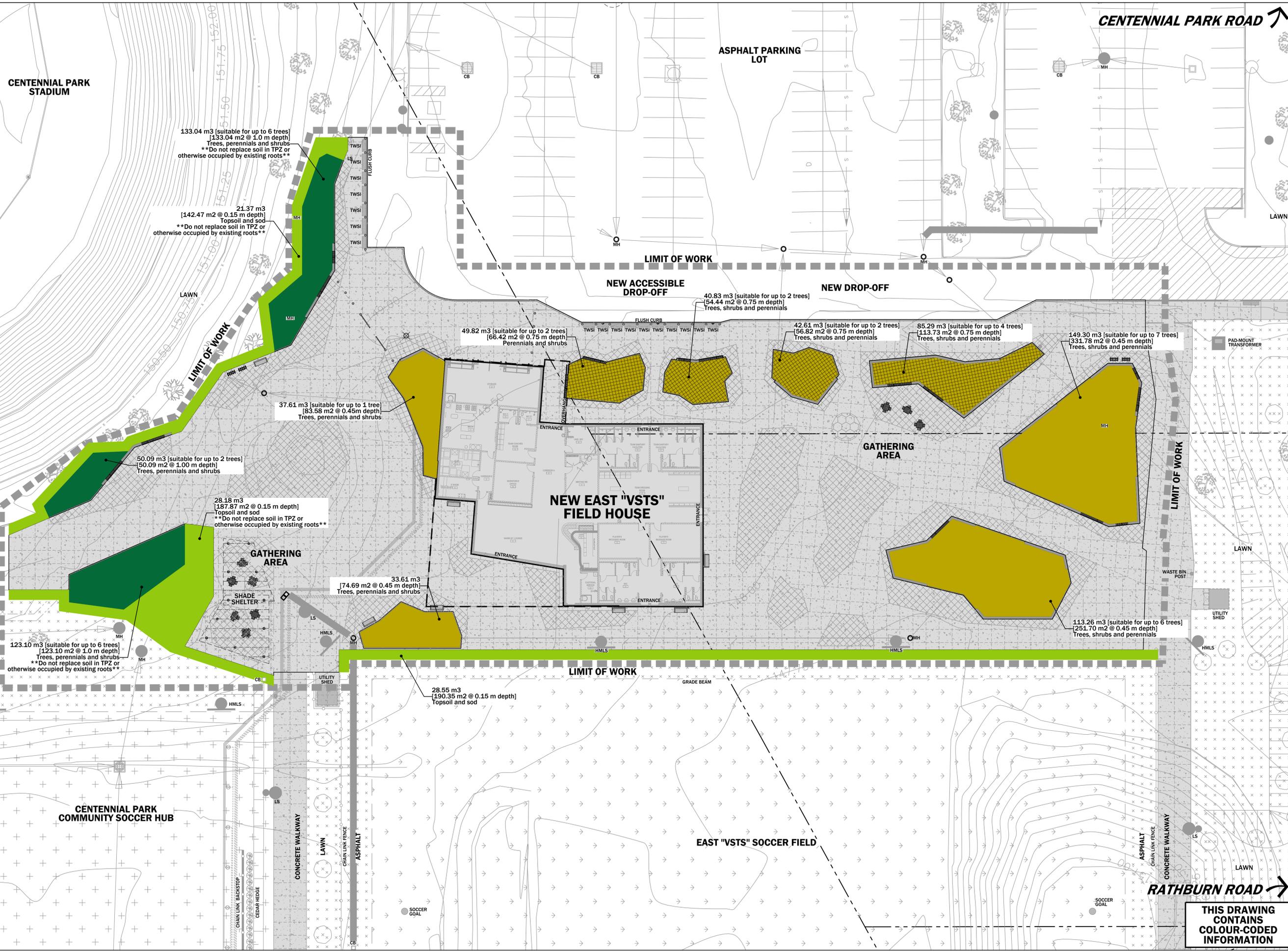


VFA Project: 2309

L5
LAYOUT + GRADING PLAN

SUBDRAINAGE PLAN NOTES

- Contractor to stake layout of all new subdrains for Consultant's review.
- Coordinate locations, depths and elevations of in-ground works with all Contract Documents including with all other disciplines.
Where conflict is identified between the work of various disciplines, Contractor shall notify Consultant immediately and proceed only when direction is provided.
- Layout of the site works shall be performed using digital survey equipment with reference to AutoCAD plan to be provided by Victor Ford and Associates Inc.
- Report any conditions on site that may affect proper operation of the system as soon as they become known.
- Perform break-ins to CB's and MH's according to general requirements of the Civil drawings and Specifications.



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LEGEND

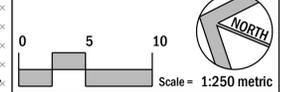
GROWING MEDIUM MIXES PER CITY OF TORONTO STANDARD SPECIFICATION TS 5.10

- TOPSOIL AND SOD AREAS
TYPE 1 STANDARD MIX TO 0.15 m DEPTH
- "POLLINATOR MEADOW" PLANTING AREAS
TYPE 2 PLANTING BED MIX TO 0.45 m DEPTH
- "POLLINATOR MEADOW" PLANTING AREAS WITH DEEP SOIL
TYPE 2 PLANTING BED MIX TO 0.75 m DEPTH
- "DECORATIVE SCREENING" PLANTING AREAS
TYPE 2 PLANTING BED MIX TO 1.00 m DEPTH

04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
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02	2024-11-13	PRELIMINARY	EKA	JC
01	2024-11-08	PRELIMINARY	JC	--
NO	YYYY-MM-DD	REVISION	DN	CH



CENTENNIAL PARK FIFA - EAST VSTS
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3

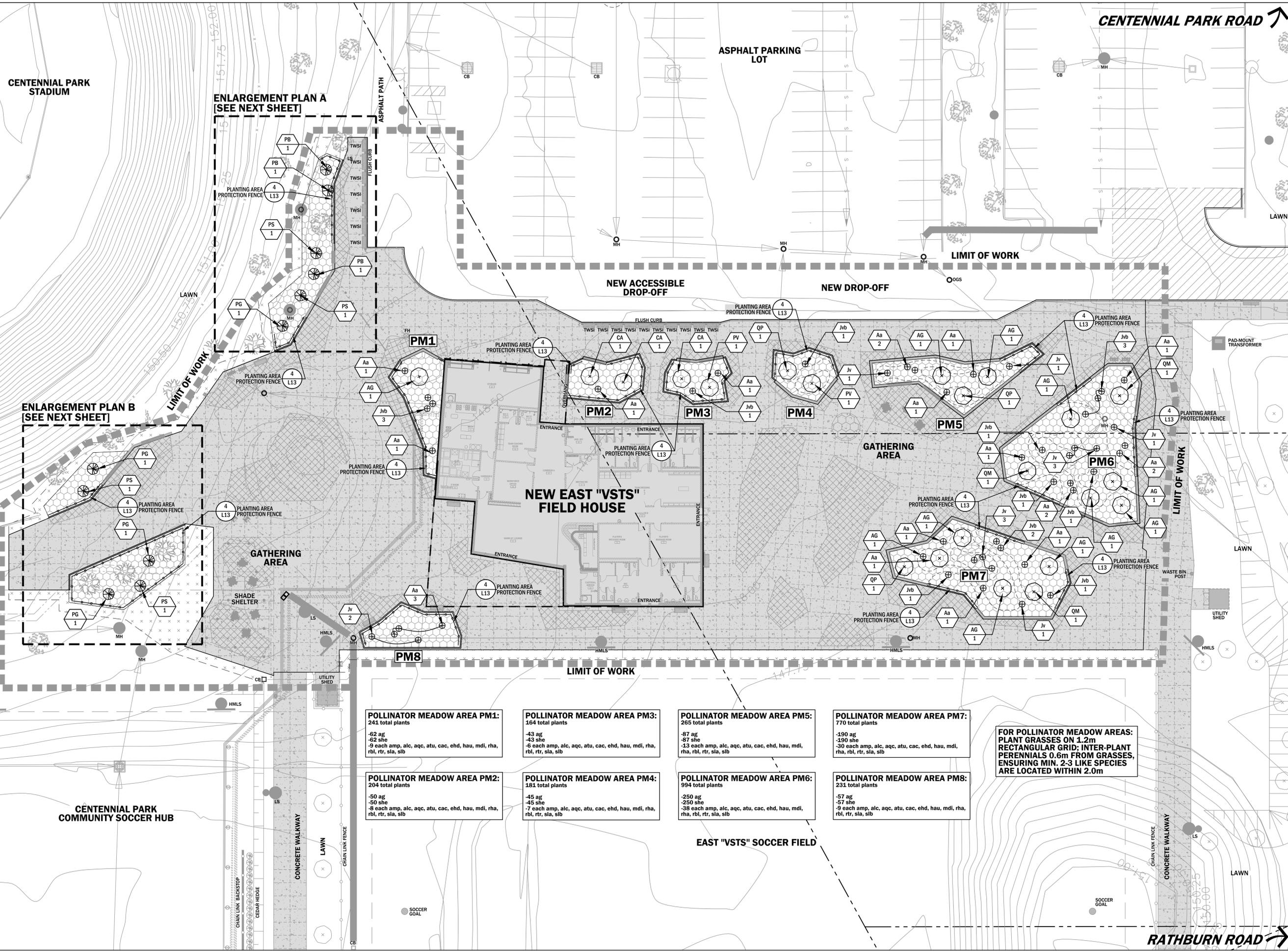


VFA Project: 2309

**THIS DRAWING
CONTAINS
COLOUR-CODED
INFORMATION**

L6
SOIL PROVISION PLAN

and date (06/24 13:16:00)



CENTENNIAL PARK STADIUM

ASPHALT PARKING LOT

CENTENNIAL PARK ROAD

ENLARGEMENT PLAN B [SEE NEXT SHEET]

ENLARGEMENT PLAN A [SEE NEXT SHEET]

NEW EAST "VSTS" FIELD HOUSE

GATHERING AREA

EAST "VSTS" SOCCER FIELD

CENTENNIAL PARK COMMUNITY SOCCER HUB

RATHBURN ROAD

CHERIE NG ARCHITECT INC.

VFA VICTOR FORD & ASSOCIATES INC. LANDSCAPE ARCHITECTS

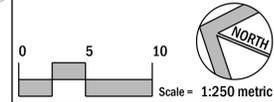
LEGEND

- LIMIT OF WORK AREA
- PLANTING AREA PROTECTION FENCE
- EXISTING TREES AS SURVEYED (left = conifer, right = deciduous)
- EXISTING TREES AS ESTIMATED BY ARBORIST (various types)
- NEW DECIDUOUS TREES
 - CA Cercis canadensis
 - AG Acer grandidentatum x saccharum "Highland Park"
 - QM Quercus macrocarpa
 - PV Pinus virginiana
 - QP Quercus palustris
- NEW CONIFEROUS TREES
 - PG Picea glauca
 - PS Pinus strobus
 - PB Pinus banksiana
- NEW LAWN AREAS
- NEW SHRUBS, PERENNIALS AND GRASSES IN "DECORATIVE SCREENING" PLANTING BEDS
 - Am Aronia melanocarpa
 - Cs Cornus sericea
 - Ec Equisetum commutatum
 - amc Achillea millefolium "Cerise Queen"
 - atf Agastache foeniculum "Blue Fortune"
 - alc Allium cernuum
 - ah Allium hollandicum "Purple Sensation"
 - ahu Anemone huibrichtii
 - ag Andropogon gerardii
 - cs Camassia scilloides
 - nca Neracissus "Carlton"
 - pru Philomis rosediana
 - amp Salvia nemorosa "Blaukoenig"
 - sib Symphyotrichum lateriflorum "Lady in Black"
 - sng Symphyotrichum novae-angliae "Grape Crush"
- NEW SHRUBS, PERENNIALS AND GRASSES IN "POLLINATOR MEADOW" PLANTING BEDS
 - Aa Amelanchier arborea
 - Jv Juniperus virginiana
 - Jvb Juniperus virginiana "Blue Arrow"
 - amp Achillea millefolium "Paprika"
 - alc Allium cernuum
 - ag Andropogon gerardii "Red October"
 - atu Asclepias tuberosa
 - cac Castilleja coccinea
 - cgj Chelone glabra
 - ehd Echinacea pallida "Halo Dancer"
 - hau Helianthus annuus
 - mdi Monarda didyma
 - rha Rosa blanda
 - rbl Rubus strigosus
 - sla Siphium laciniatum
 - she Sporobolus heterolepis
 - sib Symphyotrichum lateriflorum "Lady in Black"

NO	YYYY-MM-DD	REVISION	BY	CHK
04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
03	2024-11-18	ISSUED FOR PERMIT AND TENDER	EKA	JC
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01	2024-11-08	PRELIMINARY	JC	...
NO	YYYY-MM-DD	REVISION	DN	...



CENTENNIAL PARK FIFA - EAST VSTS
256 Centennial Park Road, Toronto, Ontario, M9C 5N3



VFA Project: 2309

PLANTING PLAN

POLLINATOR MEADOW AREA PM1:
241 total plants
-62 ag
-62 she
-9 each amp, alc, aqc, atu, cac, ehd, hau, mdi, rha, rbl, rtr, sla, slb

POLLINATOR MEADOW AREA PM3:
264 total plants
-43 ag
-43 she
-6 each amp, alc, aqc, atu, cac, ehd, hau, mdi, rha, rbl, rtr, sla, slb

POLLINATOR MEADOW AREA PM5:
265 total plants
-87 ag
-87 she
-13 each amp, alc, aqc, atu, cac, ehd, hau, mdi, rha, rbl, rtr, sla, slb

POLLINATOR MEADOW AREA PM7:
770 total plants
-190 ag
-190 she
-30 each amp, alc, aqc, atu, cac, ehd, hau, mdi, rha, rbl, rtr, sla, slb

FOR POLLINATOR MEADOW AREAS:
PLANT GRASSES ON 1.2m RECTANGULAR GRID; INTER-PLANT PERENNIALS 0.6m FROM GRASSES, ENSURING MIN. 2-3 LIKE SPECIES ARE LOCATED WITHIN 2.0m

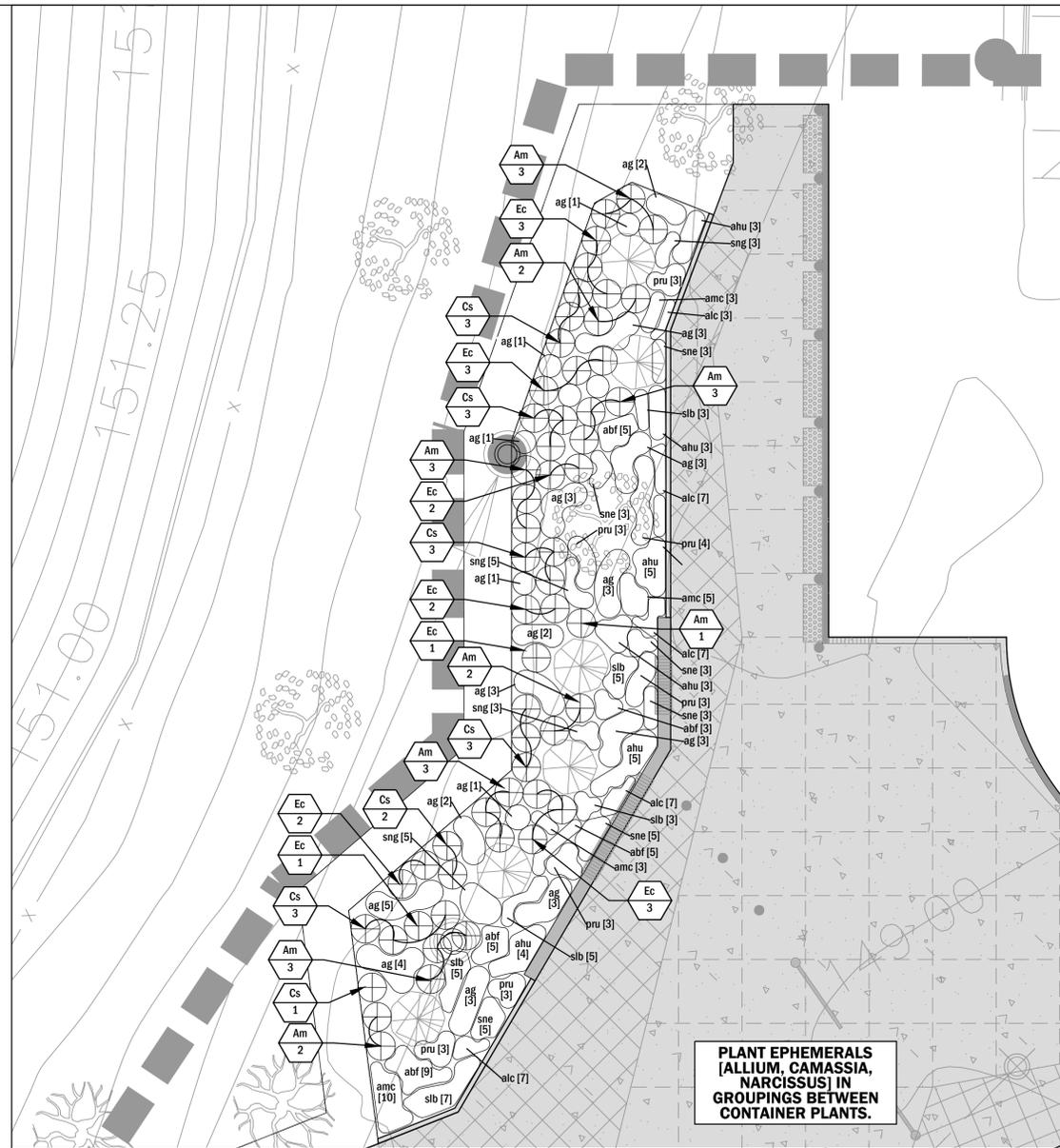
POLLINATOR MEADOW AREA PM2:
204 total plants
-50 ag
-50 she
-8 each amp, alc, aqc, atu, cac, ehd, hau, mdi, rha, rbl, rtr, sla, slb

POLLINATOR MEADOW AREA PM4:
181 total plants
-45 ag
-45 she
-7 each amp, alc, aqc, atu, cac, ehd, hau, mdi, rha, rbl, rtr, sla, slb

POLLINATOR MEADOW AREA PM6:
181 total plants
-250 ag
-250 she
-38 each amp, alc, aqc, atu, cac, ehd, hau, mdi, rha, rbl, rtr, sla, slb

POLLINATOR MEADOW AREA PM8:
994 total plants
-57 ag
-57 she
-9 each amp, alc, aqc, atu, cac, ehd, hau, mdi, rha, rbl, rtr, sla, slb

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ENLARGEMENT PLAN A



ENLARGEMENT PLAN B

LEGEND

--- LIMIT OF WORK AREA

○ EXISTING TREES AS SURVEYED (left = conifer, right = deciduous)

○ EXISTING TREES AS ESTIMATED BY ARBORIST (various types)

NEW SHRUBS, PERENNIALS AND GRASSES IN "DECORATIVE SCREENING" PLANTING BEDS

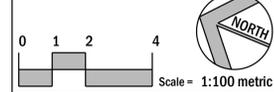
Am *Aronia melanocarpa*
Cs *Cornus sericea*
Ec *Elaeagnus commutata*
amc *Acacia millefolium* "Crisse Queen"
alc *Allium cernuum*
abf *Agastache foeniculum* "Blue Fortune"
ah *Allium hollandicum* "Purple Sensation"
ahu *Amsonia hubrichtii*
ag *Andropogon gerardii*
cs *Camassia scilloides*
nca *Narcissus 'Carlton'*
pru *Phloxis russelliana*
sne *Salvia nemorosa* "Blaukoenigin"
slb *Symphoricarum lateriflorum* "Lady in Black"
sng *Symphoricarum novae-angliae* "Grape Crush"

CA	PLANT ABBREV.	1	DETAIL NUMBER(S)
52	QUANTITY	L5	(ITEM DESCRIPTION) DRAWING SHEET NUMBER WHERE DETAIL IS FOUND

04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
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01	2024-11-08	PRELIMINARY	JC	--
NO	YYYY-MM-DD	REVISION	DN	CH



CENTENNIAL PARK FIFA - EAST VSTS
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3



VFA Project: 2309

L7A
PLANTING PLAN
ENLARGEMENT PLAN

amr date (06/24 13:16:50)

EVERGREEN GROVES AND DECORATIVE SCREENING AREAS

POLLINATOR MEADOW AREAS

CONIFEROUS TREES

PB	<i>Pinus banksiana</i>	Jack Pine	3	250 cm HT.	wire basket	3/L13	
PG	<i>Picea glauca</i>	White Spruce	4	250 cm HT.	wire basket	3/L13	
PS	<i>Pinus strobus</i>	Eastern White Pine	4	250 cm HT.	wire basket	3/L13	

SHRUBS

Am	<i>Aronia melanocarpa</i>	Black Chokeberry	35	3-gallon	potted	2/L13	
Cs	<i>Cornus sericea</i>	Red Osier Dogwood	34	3-gallon	potted	2/L13	
Ec	<i>Eleagnus commutata</i>	Wolf Willow / Silverberry	33	3-gallon	potted	2/L13	

GRASSES

ag	<i>Andropogon gerardii</i>	Big Bluestem	88	3-gallon	potted	1/L13	Space at 75 cm on-center or as indicated.
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PERENNIALS

amc	<i>Achillea millefolium 'Cerise Queen'</i>	Cerise Queen Yarrow	86	1-gallon	potted	1/L13	Space at 45 cm on-center or as indicated.
abf	<i>Agastache foeniculum 'Blue Fortune'</i>	Blue Fortune Anise Hyssop	74	1-gallon	potted	1/L13	Space at 45 cm on-center or as indicated.
alc	<i>Allium cernuum</i>	Nodding Onion	107	1-gallon	potted	1/L13	Space at 30 cm on-center or as indicated.
ahu	<i>Amsonia hubrichtii</i>	Arkansas Bluestar	76	1-gallon	potted	1/L13	Space at 60 cm on-center or as indicated.
pru	<i>Phlomis russelliana</i>	Turkish Sage	70	1-gallon	potted	1/L13	Space at 60 cm on-center or as indicated.
sne	<i>Salvia nemorosa 'Blaukoenigin'</i>	Blue Queen Meadow Sage	80	1-gallon	potted	1/L13	Space at 45 cm on-center or as indicated.
slb	<i>Symphotrichum lateriflorum 'Lady in Black'</i>	Lady in Black Calico Aster	74	1-gallon	potted	1/L13	Space at 45 cm on-center or as indicated.
sng	<i>Symphotrichum novae-angliae 'Grape Crush'</i>	Grape Crush Aster	65	1-gallon	potted	1/L13	Space at 45 cm on-center or as indicated.

EPHEMERALS

ah	<i>Allium hollandicum 'Purple Sensation'</i>	Purple Sensation Ornamental Onion	150	n/a	bulb	n/a	See plans.
cs	<i>Camassia scilloides</i>	Wild Hyacinth, Atlantic Camas	150	n/a	bulb	n/a	See plans.
nca	<i>Narcissus 'Carlton'</i>	Carlton Daffodil	150	n/a	bulb	n/a	See plans.

DECIDUOUS TREES

AG	<i>Acer grandidentatum x saccharum 'Highland Park' (HIPZAM)</i>	Highland Park Maple	12	70 mm CAL.	wire basket	3/L13	
CA	<i>Cercis canadensis</i>	Redbud	3	70 mm CAL.	wire basket	3/L13	Straight species only Multi-stem min 3 stems
PV	<i>Prunus virginiana</i>	Chokecherry	2	70 mm CAL.	wire basket	3/L13	Straight species only Multi-stem min 3 stems
QM	<i>Quercus macrocarpa</i>	Bur Oak	3	70 mm CAL.	wire basket	3/L13	
QP	<i>Quercus palustris</i>	Pin Oak	3	70 mm CAL.	wire basket	3/L13	

CONIFEROUS SHRUBS

Jv	<i>Juniperus virginiana</i>	Eastern Red Cedar	7	200 cm HT.	wire basket	2/L13	
Jvb	<i>Juniperus virginiana 'Blue Arrow'</i>	Blue Arrow Eastern Red Cedar	10	150 cm HT.	potted	2/L13	

SHRUBS

Aa	<i>Amelanchier arborea</i>	Downy Serviceberry	16	5-gallon	potted	2/L13	Multi-stem minimum 3 stems
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GRASSES

ag	<i>Andropogon gerardii</i>	Big Bluestem	784	1-gallon	potted	1/L13	
she	<i>Sporobolus heterolepis</i>	Prairie Dropseed	784	1-gallon	potted	1/L13	

PERENNIALS

amp	<i>Achillea millefolium 'Paprika'</i>	Paprika Yarrow	120	1-gallon	potted	1/L13	
alc	<i>Allium cernuum</i>	Nodding Onion	120	1-gallon	potted	1/L13	
aqc	<i>Aquilegia canadensis</i>	Wild Columbine	120	1-gallon	potted	1/L13	
atu	<i>Asclepias tuberosa</i>	Butterfly Milkweed	120	1-gallon	potted	1/L13	
cac	<i>Castilleja coccinea</i>	Indian Paintbrush	120	1-gallon	potted	1/L13	
ehd	<i>Echinacea pallida 'Hula Dancer'</i>	Hula Dancer Pale Purple Coneflower	120	1-gallon	potted	1/L13	
hau	<i>Helenium autumnale</i>	Marsh Sneezeweed	120	1-gallon	potted	1/L13	
mdi	<i>Monarda didyma</i>	Red Bee Balm	120	1-gallon	potted	1/L13	
rha	<i>Rhus aromatica</i>	Fragrant Sumac	120	1-gallon	potted	1/L13	shrub to be planted/spaced as perennial
rbl	<i>Rosa blanda</i>	Early Wild Rose	120	1-gallon	potted	1/L13	shrub to be planted/spaced as perennial
rtr	<i>Rudbeckia triloba</i>	Three Lobed Coneflower	120	1-gallon	potted	1/L13	
sla	<i>Silphium laciniatum</i>	Compassplant	120	1-gallon	potted	1/L13	
slb	<i>Symphotrichum lateriflorum 'Lady in Black'</i>	Lady in Black Calico Aster	120	1-gallon	potted	1/L13	

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NO	YYYY-MM-DD	REVISION	DN	CH



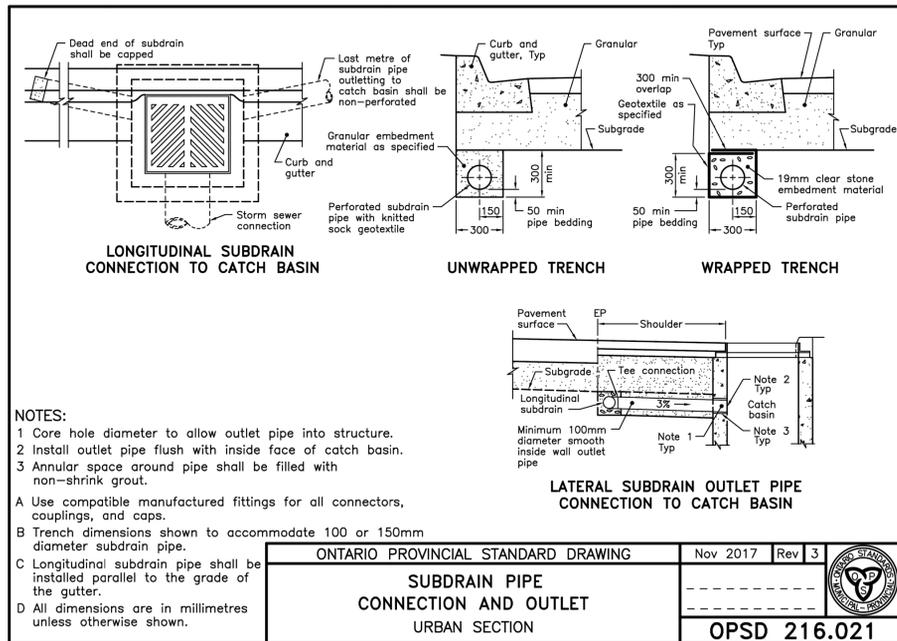
CENTENNIAL PARK FIFA - EAST VSTS
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3



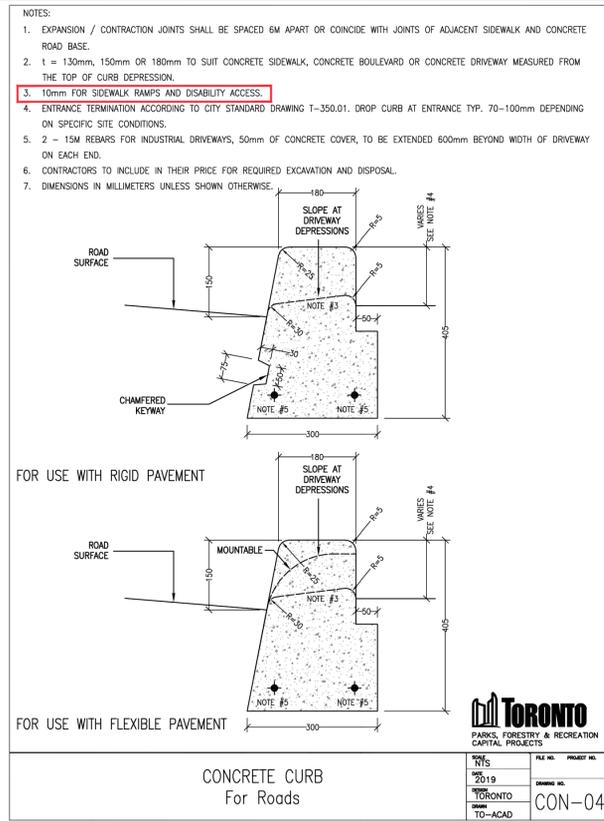
VFA Project: 2309 **L7B**
PLANTING LEGEND

THIS DRAWING CONTAINS COLOUR-CODED INFORMATION

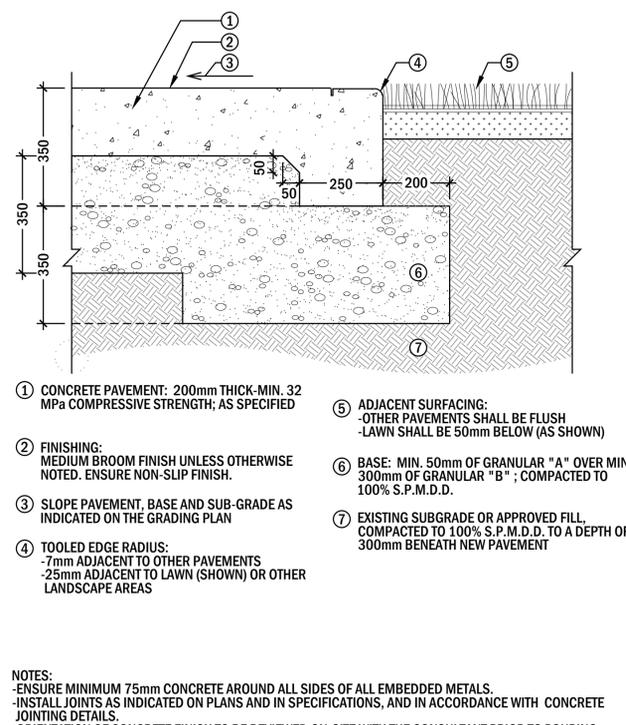
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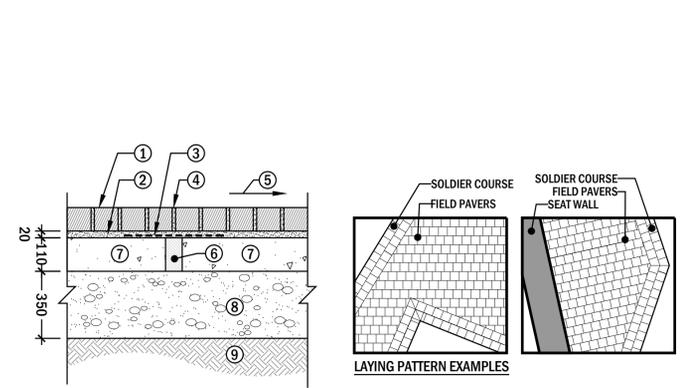
1 SUBDRAIN PIPE CONNECTION AND OUTLET
OPSD 216.021



2 CONCRETE CURB
DETAIL CON-04

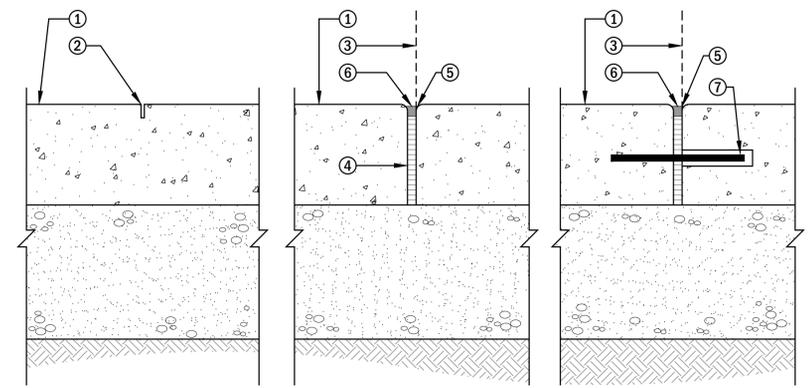


5 CONCRETE PAVEMENT
HEAVY DUTY



- INTERLOCKING PAVERS: SERIES 70mm BY UNILOCK WITH "SERIES" FINISH-COLOUR TO BE 70% BLACK GRANITE AND 30% MOUNTAIN MIST MIXED RANDOMLY; PATTERN TO BE STAGGERED BOND WITH 2 ROWS OF SOLDIER COURSE ON ALL EDGES EXCEPT WHERE PAVERS ABUT A RAISED EDGE OR WALL.
 - SETTING BED: MIN 20mm DEPTH BEDDING SAND; AS SPECIFIED
 - COVER WEEP HOLE WITH 300mm X 300mm FILTER FABRIC
 - SWEEP POLYMERIC JOINTING SAND INTO JOINTS; AS SPECIFIED
 - SLOPE PAVEMENT, SUB-BASE AND SUB-GRADE AS INDICATED ON THE GRADING PLAN
 - 50mm WEEP HOLE: MIN. 2000mm SPACING THROUGHOUT PLUS EVERY 1000mm AT 400mm FROM LOW EDGE
 - CAST-IN PLACE CONCRETE BASE; 200mm DEPTH; COMPLETE WITH FIBER REINFORCING JOINTING; MIN. 32 MPa COMPRESSIVE STRENGTH; AS SPECIFIED
 - BASE: MIN. 50mm OF GRANULAR "A" OVER MIN. 300mm OF GRANULAR "B"; COMPACTED TO 100% S.P.M.D.D.
 - EXISTING SUBGRADE OR APPROVED FILL, COMPACTED TO 100% S.P.M.D.D. TO A DEPTH OF 300mm BENEATH NEW PAVEMENT
- NOTES:**
- COMPLETE PRODUCT SUBMITTALS AND REVIEW OF LAYOUT ARE REQUIRED.
 - ANY PROPOSED SUBSTITUTIONS MUST BE APPROVED BY CONSULTANT PRIOR TO ORDERING.

1 DECORATIVE PAVEMENT
UNIT PAVERS ON CONCRETE BASE [HEAVY DUTY]

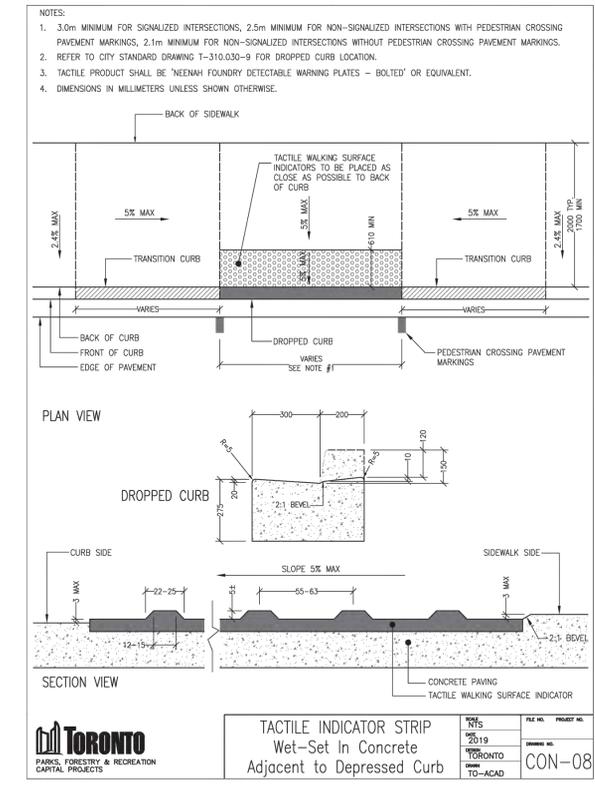


- CONCRETE PAVEMENT, AS SPECIFIED
- WEAKENED PLANE JOINT: -LAY-OUT AS PER PLANS & SPECIFICATIONS; -40 mm DEPTH x APPROX. 5 mm WIDTH; -SHALL BE HAND-TOOLED WHERE ACCESS FOR SAW IS OBSTRUCTED OR WHERE DESIGN CALLS FOR CURVATURES THAT CANNOT BE CUT BY SAW
- FACE OF WALL OR CURB, WHERE APPLICABLE
- SPECIFIED BITUMINOUS FIBRE EXPANSION JOINT MATERIAL; FULL-DEPTH, AS SHOWN
- 7 mm RADIUS (TYPICAL)
- COLOUR-MATCHED EPOXY-BASED JOINT SEALANT; AS SPECIFIED - PROVIDE OPTIONS FOR CONSULTANT'S APPROVAL
- SLEEVED DOWEL: USE PURPOSE-MADE PRODUCT SUCH AS SPEE-D DOWEL BY SIKA; SPACE @ 750 UNLESS INDICATES OTHERWISE

NOTES:

- FULL-DEPTH SAW CUT JOINTS ARE NOT AN ACCEPTABLE SUBSTITUTION FOR EXPANSION JOINTS.
- INSTALL JOINTS AS INDICATED ON PLANS AND SPECIFICATIONS AND IN ACCORDANCE WITH TYPICAL DETAILS.
- PROPOSED SUBSTITUTIONS IN JOINTING MATERIALS OR METHODS MUST BE SUBMITTED FOR REVIEW AND MAY NOT BE ACCEPTED.

5 CONCRETE JOINTING
FOR ALL CONCRETE PAVEMENTS



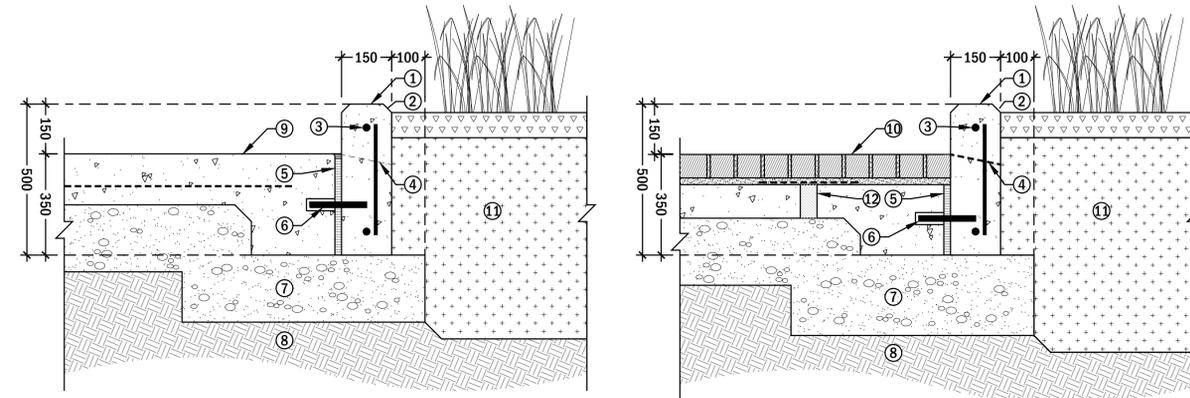
6 TACTILE WALKING SURFACE INDICATOR (TWSI)
DETAIL CON-08

04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
03	2024-11-18	ISSUED FOR PERMIT AND TENDER	EKA	JC
02	2024-11-13	PRELIMINARY	EKA	JC
01	2024-11-08	PRELIMINARY	JC	--
NO	YYYY-MM-DD	REVISION	DN	CH



CENTENNIAL PARK FIFA - EAST VSTS
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3





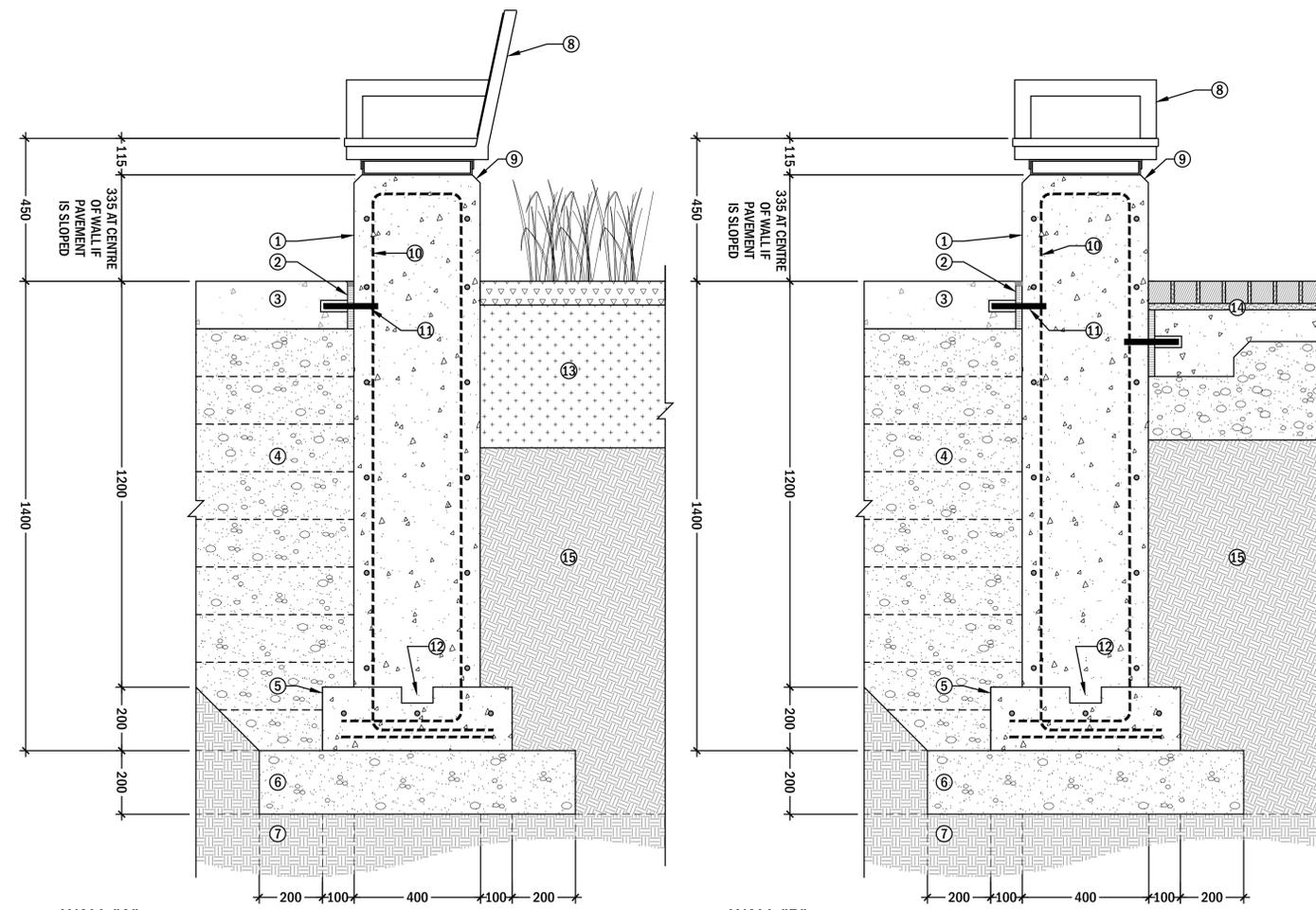
BETWEEN CONCRETE AND PLANTING BED

BETWEEN UNIT PAVERS AND PLANTING BED

- ① CONCRETE PLANTER EDGE: TROWEL FINISH TOP, FORM FINISH VERTICAL FACES
- ② 25 mm CHAMFER
- ③ REINFORCING: TWO 10m REINFORCING BARS CONTINUOUS C/W 600mm LAP; VERTICAL 10m BARS EVERY 300mm
- ④ CURB DEPRESSION, WHERE INDICATED; 30mm FALL, FRONT-TO-BACK
- ⑤ EXPANSION JOINT
- ⑥ SLEEVED DOWEL- USE PURPOSE-MADE PRODUCT SUCH AS SPEE-D DOWEL BY SIKA; SPACE @ 750 UNLESS INDICATES OTHERWISE
- ⑦ 200mm DEPTH GRANULAR 'A' BASE COMPACTED TO 100% S.P.M.D.-TYPICAL
- ⑧ COMPACTED SUB-GRADE
- ⑨ ADJACENT CONCRETE PAVEMENT
- ⑩ ADJACENT UNIT PAVERS ON CONCRETE BASE
- ⑪ ADJACENT PLANTING BED- REFER TO SOIL PROVISION PLAN AND LAYOUT AND GRADING PLAN
- ⑫ 50mm WEEP HOLE; MIN. 2000mm SPACING THROUGHOUT PLUS EVERY 1000mm at 400mm FROM LOW EDGE

1 RAISED CONCRETE EDGING AT GARDEN BEDS

SCALE 1:10 (METRIC)



2 CONCRETE SEAT WALL WITH SEAT TOPPER

- ① REINFORCED CONCRETE WALL: TROWEL FINISH EXPOSED TOP, FORM FINISH OTHER EXPOSED FACES-MIN. 32 MPa COMPRESSIVE STRENGTH; AS SPECIFIED
- ② DOWELLED EXPANSION JOINT DETAILED ELSEWHERE
- ③ PAVEMENT DETAILED ELSEWHERE; THICKENED EDGE MAY BE OMITTED
- ④ BACKFILL EXCAVATION WITH GRANULAR 'A'; COMPACT TO 100% SPMDD IN MAX. 150 LIFTS
- ⑤ CONCRETE FOOTING- MIN. 32 MPa COMPRESSIVE STRENGTH; AS SPECIFIED
- ⑥ 200 THICK GRANULAR 'A' BASE COMPACTED TO 100% SPMDD
- ⑦ COMPACTED SUBGRADE- COMPACTED TO 100% S.P.M.D. TO A DEPTH OF 300mm BENEATH NEW PAVEMENT
- ⑧ SEAT WALL TOPPER AS SPECIFIED; INSTALL WHERE INDICATED PER MANUFACTURER'S INSTRUCTIONS
- ⑨ 10 mm CHAMFER ON EXPOSED VERTICAL AND HORIZONTAL EDGES
- ⑩ 10 m REINFORCING BARS AT 300MM SPACING BOTH WAYS; ALTERNATE BENDS INTO FOOTING; 600MM MINIMUM GAP
- ⑪ DOWELLED JOINT USE SPEE-D DOWEL OR SIMILAR, 200mm MINIMUM- DOWELED JOINT DETAILED ELSEWHERE
- ⑫ 100x50 (NOMINAL) KEY
- ⑬ ADJACENT PLANTING BED
- ⑭ ADJACENT UNIT PAVERS ON CONCRETE BASE
- ⑮ UNDISTURBED SUBGRADE- IF EXCAVATED, BACKFILL AS IN NOTE #4

SCALE = 1:10 (METRIC)

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NO	YYYY-MM-DD	REVISION	DNJ	CH



CENTENNIAL PARK FIFA - EAST VSTS
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3



VFA Project: 2309

L9

LANDSCAPE
DETAILS 2

and date (06/24 13:16:50)

<p>OGM1900-SS6-WFB</p> <table border="1"> <thead> <tr><th>NAME</th><th>DIMENSION</th></tr> </thead> <tbody> <tr><td>A</td><td>N/A</td></tr> <tr><td>B</td><td>N/A</td></tr> <tr><td>R-1</td><td>N/A</td></tr> <tr><td>R-2</td><td>N/A</td></tr> </tbody> </table>	NAME	DIMENSION	A	N/A	B	N/A	R-1	N/A	R-2	N/A	<p>OGM1900-MS4</p> <table border="1"> <thead> <tr><th>NAME</th><th>DIMENSION</th></tr> </thead> <tbody> <tr><td>A</td><td>N/A</td></tr> <tr><td>B</td><td>N/A</td></tr> <tr><td>R-1</td><td>N/A</td></tr> <tr><td>R-2</td><td>N/A</td></tr> </tbody> </table>	NAME	DIMENSION	A	N/A	B	N/A	R-1	N/A	R-2	N/A	<p>OGM1900-SS6-WFB</p> <table border="1"> <thead> <tr><th>NAME</th><th>DIMENSION</th></tr> </thead> <tbody> <tr><td>A</td><td>N/A</td></tr> <tr><td>B</td><td>N/A</td></tr> <tr><td>R-1</td><td>N/A</td></tr> <tr><td>R-2</td><td>N/A</td></tr> </tbody> </table>	NAME	DIMENSION	A	N/A	B	N/A	R-1	N/A	R-2	N/A	<p>OGM1900-MS4</p> <table border="1"> <thead> <tr><th>NAME</th><th>DIMENSION</th></tr> </thead> <tbody> <tr><td>A</td><td>N/A</td></tr> <tr><td>B</td><td>N/A</td></tr> <tr><td>R-1</td><td>N/A</td></tr> <tr><td>R-2</td><td>N/A</td></tr> </tbody> </table>	NAME	DIMENSION	A	N/A	B	N/A	R-1	N/A	R-2	N/A
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MODEL: OGM 1900-196746- BACKLESS C/W CENTER- ARMREST

MODEL: OGM 1900-196748- BACKLESS W/ NO ARMREST

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MODEL: OGM 1900-196749- WITH RAISED BACK AND CENTER ARMREST

MODEL: OGM 1900-196750- WITH RAISED BACK AND NO ARM REST

NOTES:
- "STANDARD" COLOUR TO BE MANUFACTURERS STANDARD "GUNMETAL" COLOUR
- "CUSTOM" COLOUR TO BE CUSTOM RAL COLOUR TO BE CONFIRMED- SLATS TO BE THERMALLY MODIFIED ASH WOOD.
- EMBED ANCHORS TO DEPTH REQUIRED TO ENSURE NO MORE THAN 2 THREADS EXPOSED ABOVE NUT.
- CUTTING ANCHOR IS NOT ACCEPTABLE

NOTES:
- INSTALL VARIOUS CONFIGURATIONS AS /WHERE NOTED ON PLANS.
- FRAME TO BE MANUFACTURERS STANDARD "GUNMETAL" COLOUR.
- SLATS TO BE THERMALLY MODIFIED ASH WOOD.

1 DECORATIVE PARK BENCH
WITH SEAT BACK AND 1 MIDDLE & 1 END ARMRESTS

2 SEAT WALL TOPPER
4 CONFIGURATIONS WITH VARYING SEAT BACKS AND ARMRESTS

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NO	YYYY-MM-DD	REVISION	DN	CH



**CENTENNIAL PARK
FIFA - EAST VSTS**
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3



VFA Project: 2309

L10

LANDSCAPE
DETAILS 3

and date (06/24/19) (6/10)

300 SERIES

MBR-0350-00002
Legacy # MBR350-5-S



Sustainability Facts

Unit Size: One (1) MBR-0350-00002 Bike Rack

Carbon footprint (GWP): 212 kg CO2-Eq
Measured in kilograms of carbon dioxide equivalent

Total energy use (TPE): 3300 MJ-Eq
Measured in megajoules of energy equivalent

Water use (WUP): 1.61 m3 water
Measured in cubic metres of water

Material recyclability: 100%

LEED v4.1 Credits

Type III Environmental Product Declaration

Material Inventory

Low VOC Finishes

Free of Red List substances

*Full EPD can be referenced for more information: <https://www.maglin.com/epd/>

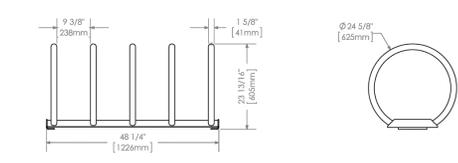
DESCRIPTION: 300 Series - 350 Bike Rack; H.S. Steel Tube, Formed Steel and Solid Steel Angle, Surface Mount, 5 Loops, 4 Bike Configuration

FINISH: All steel components are protected with E-Coat rust proofing. The Maglin Powdercoat System provides a durable finish on all metal surfaces.

INSTALLATION: The bike rack is delivered pre-assembled. It is available with a surface mount installation.

TO SPECIFY: Select MBR-0350-00002
Choose:
- Powdercoat Color

HEIGHT: 23.81" (60.48cm) LENGTH: 48.25" (122.56cm) DIAMETER: 24.63" (62.56cm) WEIGHT: 79.8lbs (35.65kg)



MAGLIN
Site Furniture

1 800 716 8000
1 877 380 3333
www.maglin.com
sales@maglin.com

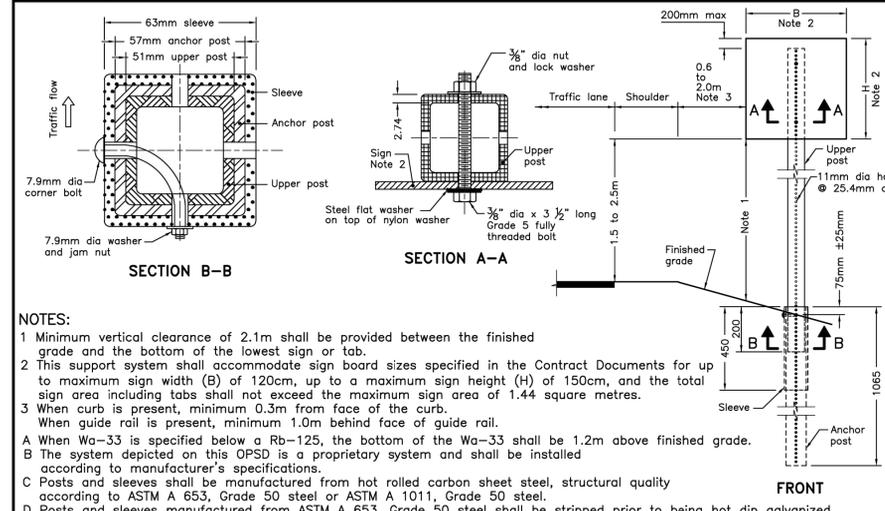
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Details and specifications may vary due to continuing improvements of our products.

NOTES:

- FRAME TO BE MANUFACTURERS STANDARD "GUN METAL" COLOUR.
- EMBED ANCHORS TO DEPTH REQUIRED TO ENSURE NO MORE THAN 2 THREADS EXPOSED ABOVE NUT.
- WHERE RACKS ARE POSITIONED NEXT TO EACH OTHER, SPACE SUCH THAT DISTANCE BETWEEN END RINGS MATCHES DISTANCE BETWEEN RINGS WITHIN UNIT.

1 BICYCLE RACK

300 SERIES



NOTES:

- Minimum vertical clearance of 2.1m shall be provided between the finished grade and the bottom of the lowest sign or tab.
- This support system shall accommodate sign board sizes specified in the Contract Documents for up to maximum sign width (B) of 120cm, up to a maximum sign height (H) of 150cm, and the total sign area including tabs shall not exceed the maximum sign area of 1.44 square metres.
- When curb is present, minimum 0.3m from face of the curb. When guide rail is present, minimum 1.0m behind face of guide rail.

A When Wa-33 is specified below a Rb-125, the bottom of the Wa-33 shall be 1.2m above finished grade.

B The system depicted on this OPSD is a proprietary system and shall be installed according to manufacturer's specifications.

C Posts and sleeves shall be manufactured from hot rolled carbon sheet steel, structural quality according to ASTM A 653, Grade 50 steel or ASTM A 1011, Grade 50 steel.

D Posts and sleeves manufactured from ASTM A 653, Grade 50 steel shall be stripped prior to being hot dip galvanized.

E Posts and sleeves shall be hot dip galvanized after fabrication. Excess zinc shall be removed to ensure telescoping of posts and sleeves.

F System configuration meets NCHRP Report 350 TL-3.

G All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Apr 2019	Rev 1	
SMALL SIGN SUPPORT SYSTEM SQR-LOC PERFORATED STEEL SQUARE POST SYSTEM INSTALLATION-SINGLE POST ASSEMBLY	OPSD 989.110		

NOTES:

- CONFIRM LOCATION IN THE FIELD.
- INSTALL OWNER-SUPPLIED SIGNS AS SPECIFIED, UP TO 2 PER POST LOCATION.

2 WASTE BIN POST [BINS BY OTHERS]

400 SERIES

MTB-0400-00024
Legacy #MLPT400-S-W



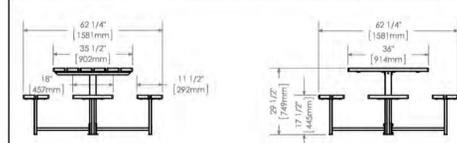
MATERIALS: The frame is H.S. steel tube and flat bar. Table top and seats manufactured using ~~perforated steel~~ see notes

FINISH: All steel components are protected with E-Coat rust proofing. The Maglin Powdercoat System provides a durable finish on all metal surfaces. Wood seats are finished with penetrating sealer.

INSTALLATION: The table is delivered pre-assembled or knocked down.

TO SPECIFY: Select MTB-0400-00024
Choose:
- Powdercoat Color

TABLE HEIGHT: 29.5" (74.8cm) TOTAL WIDTH: 62.25" (158.1cm) SEAT HEIGHT: 17.5" (44.3cm) WEIGHT: 231.34lbs (104.9kg)



MAGLIN
Site Furniture

1 800 716 8000
1 877 380 3333
www.maglin.com
sales@maglin.com

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Details and specifications may vary due to continuing improvements of our products.

NOTES:

- FRAME TO BE AS NOTED ON PLAN;
- "STANDARD" COLOUR TO BE MANUFACTURERS STANDARD "GUNMETAL" COLOUR
- "CUSTOM" COLOUR TO BE CUSTOM RAL COLOUR TO BE CONFIRMED
- WHERE 3 SEAT UNIT IS CALLED OUT, REMOVE ONE SEAT AND FRAME AND TURN OVER TO PARKS STAFF.
- EMBED ANCHORS TO DEPTH REQUIRED TO ENSURE NO MORE THAN 2 THREADS EXPOSED ABOVE NUT. CUTTING OF ANCHORS IS NOT ACCEPTABLE

3 DECORATIVE CLUSTER SEATING UNIT

500 SERIES

MBO-0500-00001
Heritage # MTB500-B1



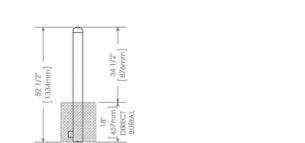
MATERIALS: The bollard is constructed of H.S. steel tube.

FINISH: The bollard is protected with E-Coat rust proofing and finished with the Maglin Powdercoat System.

INSTALLATION: Base Type - B1 bollard is supplied with additional 18" of tubing to be set in concrete. Bollard is permanently fixed in place.

TO SPECIFY: Select MBO-0500-00001
Choose:
- Powdercoat Color

HEIGHT: 34.5" (87.6cm) DIAMETER: 4.5" (11.4cm) WEIGHT: 47.44lbs (21.52kg)



MAGLIN
Site Furniture

1 800 716 8000
1 877 380 3333
www.maglin.com
sales@maglin.com

All drawings, specifications, design and details on this page remain the property of Maglin Site Furniture Inc. and may not be used without Maglin authorization.
Details and specifications may vary due to continuing improvements of our products.

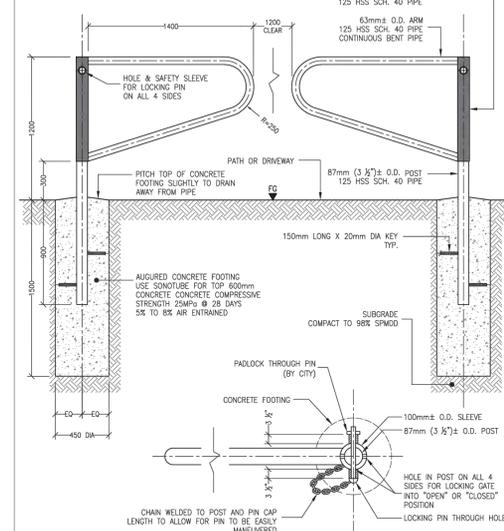
NOTES:

- BOLLARD TO BE MANUFACTURERS STANDARD "GUN METAL" COLOUR.

4 BOLLARD

NOTES:

- CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL.
- ALL METAL SHALL BE NEW, HOT DIPPED GALVANIZED STEEL AFTER WELDING. REMOVE ALL SPATTER AND MAKE SMOOTH PRIOR TO GALVANIZING.
- PROVIDE 10mm DIA WEEP HOLES ON ARMS FOR VENTILATION AS REQUIRED.
- CONTRACTORS TO INCLUDE IN THEIR PRICE FOR REQUIRED EXCAVATIONS AND DISPOSAL.
- DIMENSIONS IN MILLIMETERS UNLESS SHOWN OTHERWISE.



P-GATES (1 PAIR)
Galvanized Steel

DATE	REVISED BY
2019	
DATE	ISSUED BY
2019	
DATE	ISSUED BY
2019	
DATE	ISSUED BY
2019	

5 P-GATES [1 PAIR] GALVANIZED STEEL

04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
03	2024-11-18	ISSUED FOR PERMIT AND TENDER	EKA	JC
02	2024-11-13	PRELIMINARY	EKA	JC
01	2024-11-08	PRELIMINARY	JC	--
NO	YYYY-MM-DD	REVISION	DN	JC



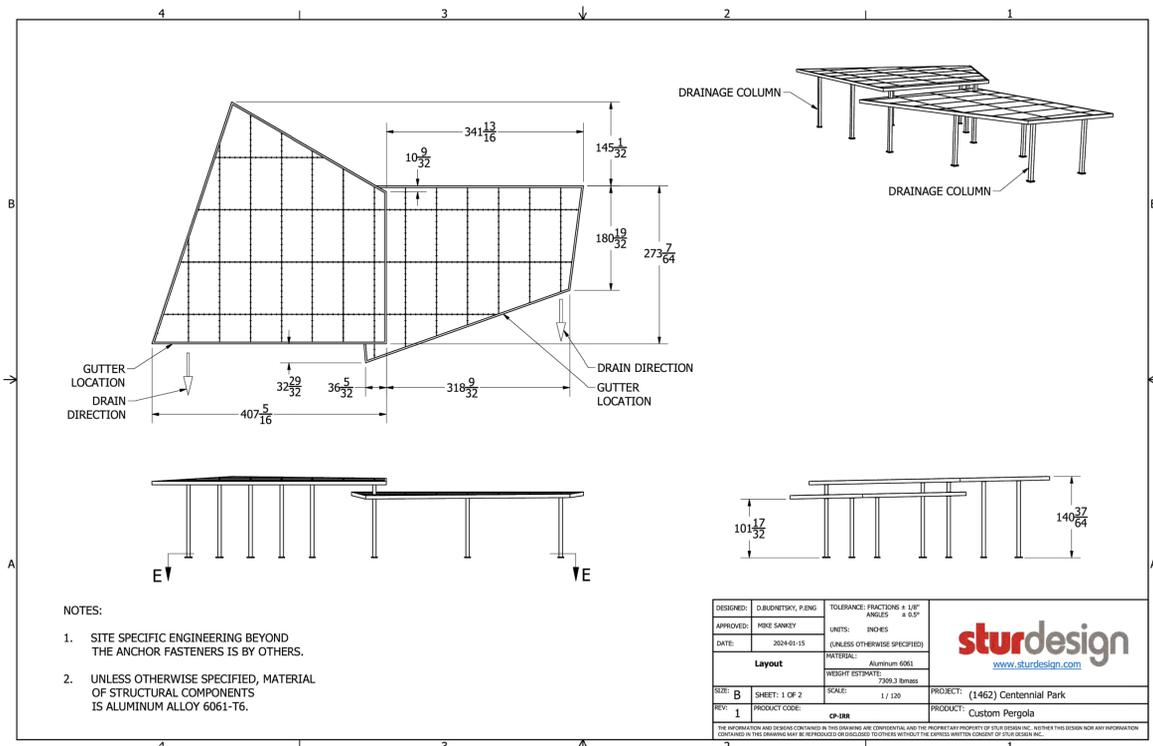
CENTENNIAL PARK FIFA - EAST VSTS
250 Centennial Park Road,
Toronto, Ontario, M9C 5N3



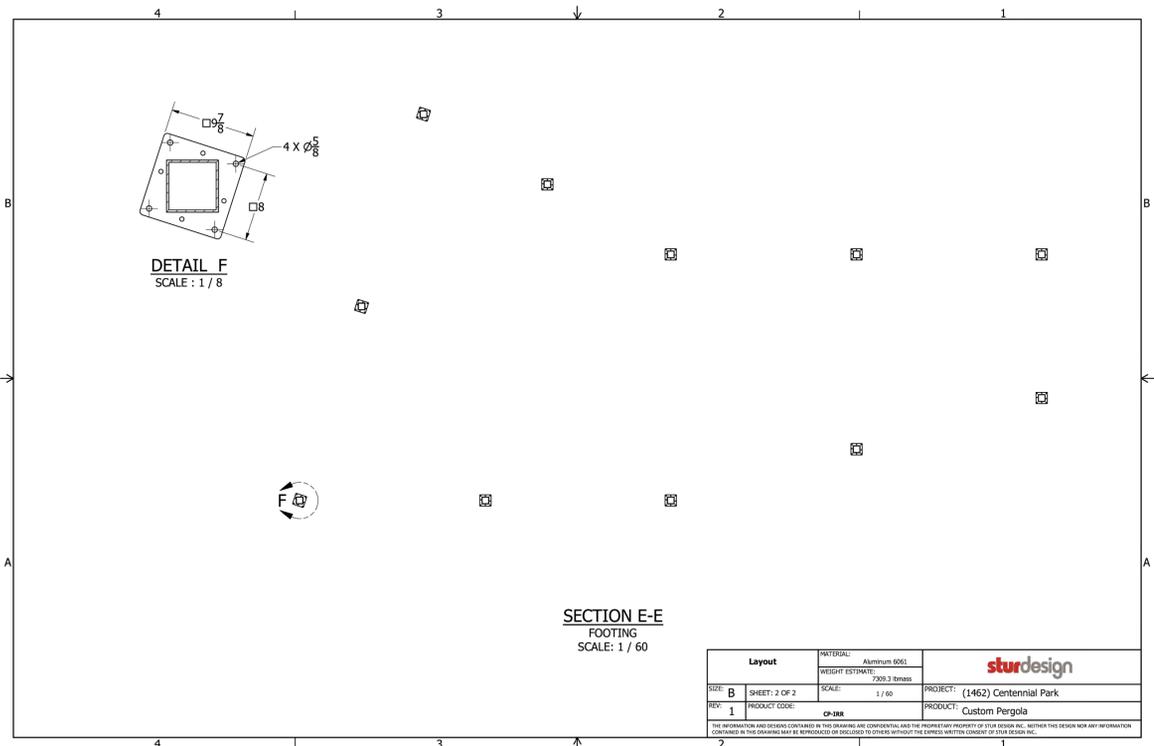
VFA Project: 2309

L11

LANDSCAPE
DETAILS 4



- NOTES:
- SITE SPECIFIC ENGINEERING BEYOND THE ANCHOR FASTENERS IS BY OTHERS.
 - UNLESS OTHERWISE SPECIFIED, MATERIAL OF STRUCTURAL COMPONENTS IS ALUMINUM ALLOY 6061-T6.



1 SHADE SHELTER "A"
CUSTOM DESIGN

04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
03	2024-11-18	ISSUED FOR PERMIT AND TENDER	EKA	JC
02	2024-11-13	PRELIMINARY	EKA	JC
01	2024-11-08	PRELIMINARY	JC	--
NO	YYYY-MM-DD	REVISION	DN	CH



**CENTENNIAL PARK
FIFA - EAST VSTS**
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3

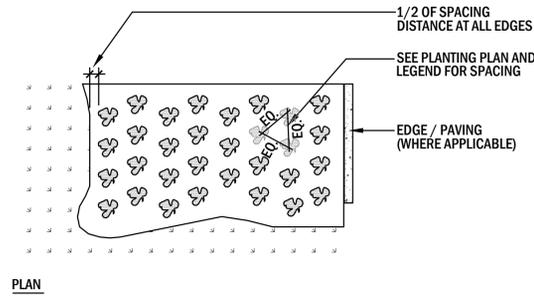


VFA Project: 2309

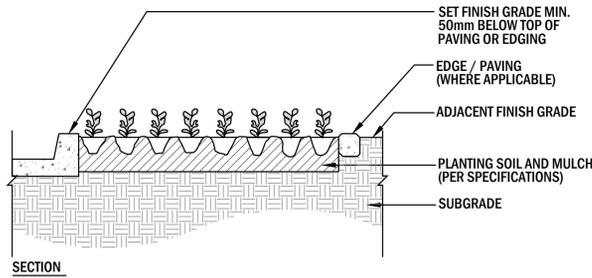
L12

LANDSCAPE
DETAILS 5

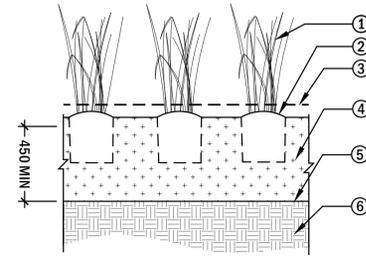
and date (06/24 13:16:50)



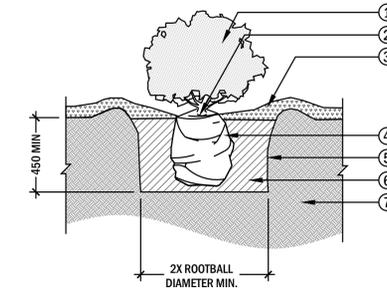
PLAN



SECTION

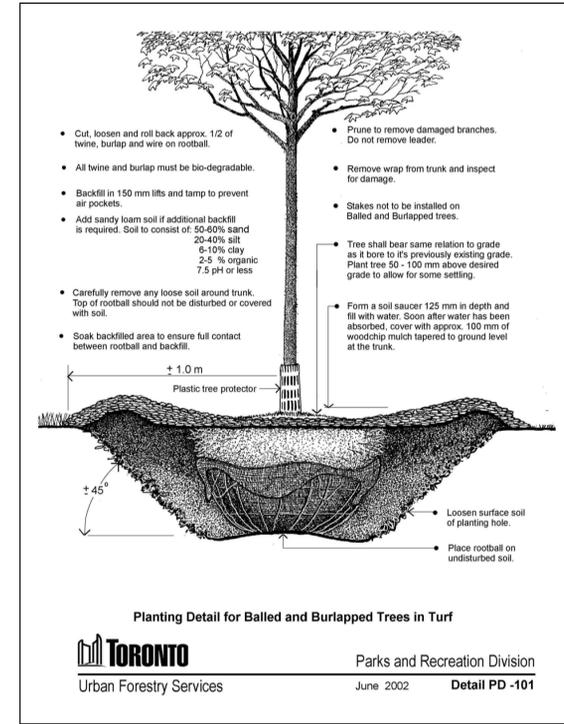


- 1 PERENNIAL
- 2 PLANT CROWN TO SIT SLIGHTLY ABOVE FINISH GRADE
- 3 75mm SETTLED DEPTH SHREDDED PINE BARK MULCH - KEEP 30mm AWAY FROM STEMS
- 4 PLANTING SOIL AS PER SPECIFICATIONS TO 450mm DEPTH MIN
- 5 SCARIFY PIT BOTTOM AND SIDES TO A DEPTH OF 15mm PRIOR TO PLANTING
- 6 EXISTING UNDISTURBED SUB-GRADE



- 1 SHRUB
- 2 SHRUB CROWN TO SIT 25mm ABOVE FINISH GRADE
- 3 75mm SETTLED DEPTH OF MULCH SAUCER - SHAPE SOIL BELOW TO MATCH SAUCER PROFILE
- 4 ROOT BALL CUT AND REMOVE TOP 1/3 OF BURLAP OR REMOVE ENTIRE PLASTIC OR FIBRE POT, AS APPLICABLE
- 5 SCARIFY SIDES AND BOTTOM OF PIT AS PER SPECIFICATIONS PRIOR TO PLANTING
- 6 PLANTING SOIL AS PER SPECIFICATIONS TO 450mm DEPTH MIN
- 7 UNDISTURBED SUBGRADE

NOTE:
 - THIS DETAIL DOES NOT REPRESENT ANY PARTICULAR SPECIES.
 - ALL TWINE AND BURLAP SHALL BE BIO-DEGRADABLE.
 - BACKFILL IN 150mm LIFTS AND TAMP TO ELIMINATE AIR POCKETS.
 - CAREFULLY REMOVE ANY LOOSE SOIL AROUND COLLAR. TOP OF ROOT BALL SHOULD NOT BE DISTURBED OR COVERED WITH SOIL.
 - SOAK BACKFILLED AREA TO ENSURE FULL CONTACT BETWEEN ROOT BALL AND BACKFILL.
 - FILL SOIL SAUCER WITH WATER. SOON AFTER WATER HAS BEEN ABSORBED, COVER WITH SPECIFIED MULCH, TAPERED TO GROUND LEVEL AT THE TRUNK.
 - PRUNE TO REMOVE ANY DAMAGED OR OBJECTIONABLE BRANCHES IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICE. DO NOT PRUNE LEADERS.
 - REMOVE ALL PLANT TAGS FROM PLANT MATERIALS AFTER ACCEPTANCE.



Planting Detail for Balled and Burlapped Trees in Turf
 TORONTO Parks and Recreation Division
 Urban Forestry Services June 2002 Detail PD -101

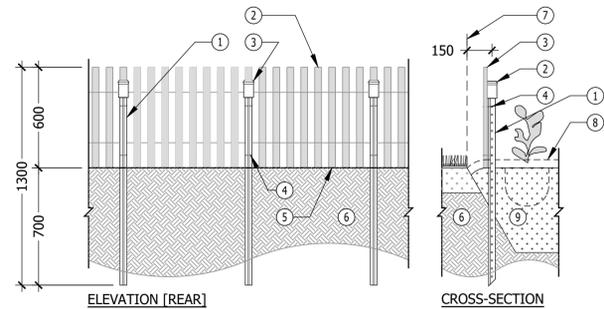
1 PERENNIAL PLANTING/ SPACING

SCALE = 1:10 (METRIC)

2 SHRUB PLANTING TYPICAL

SCALE = 1:20 (METRIC)

3 TREE PLANTING CITY OF TORONTO DETAIL PD-101

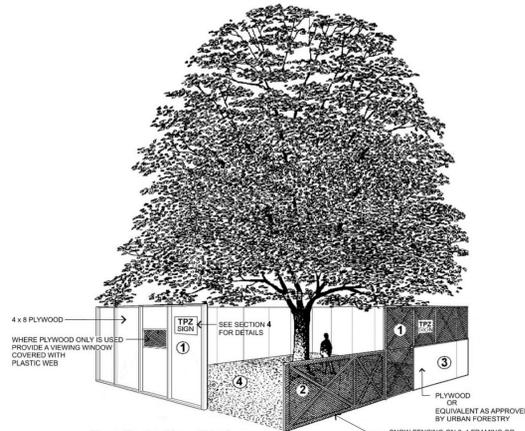


- 1 1200 LONG T-BAR FENCE POST; LIGHT-DUTY (GREEN) WITH PERFORATIONS; ENSURE POST IS FIRMLY BEDDED INTO SUB-GRADE BELOW PLANTING SOIL OR TOPSOIL
- 2 "STAKESAFE" STAKE PROTECTOR
- 3 600 HIGH WOOD SLAT SNOW FENCE; UNTREATED CEDAR WOOD; MIN. 2 ROWS OF 13 GAUGE WIRE
- 4 FASTEN FENCING TIGHTLY TO POST WITH NYLON CABLE TIES (BLACK, UV STABLE, 50 LB STRENGTH); FEED TIE THROUGH PERFORATIONS; MIN. 2 PER POST; CUT OFF EXCESS
- 5 BOTTOM OF SNOW FENCE TO SIT DIRECTLY ON FINISH GRADE OF FIRM SURFACE (ie SOIL) WITH NO GAP
- 6 EXISTING SUBGRADE
- 7 EDGE OF LAWN/PLANTING BED AS ILLUSTRATED ON PLAN (OR HARDSCAPE EDGE IF APPLICABLE)
- 8 MULCH LAYER
- 9 PLANTING BED

NOTES:
 -COORDINATE WITH IRRIGATION AND SUB-DRAINAGE INSTALLATION TO ENSURE NO CONFLICTS.

4 PLANTING AREA PROTECTION FENCE NON-PERMANENT

SCALE = 1:20 (METRIC)



Tree Protection Barriers

- 1 Tree protection barriers must be constructed with a solid wood frame clad with plywood or approved equivalent. Height of hoarding may be less than 8 ft. to accommodate any branches that may be lower.
- 2 Tree protection barriers for trees situated on the City road allowance where visibility must be maintained can be 1.2m (4ft.) high and consist of orange plastic web snow fencing on a wood frame made of 2 x 4s.
- 3 Where some excavate or fill has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the Tree Protection Zone.
- 4 No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.

Note:
 Sediment control fencing shall be installed in locations indicated in an Urban Forestry approved Tree Protection Plan. The sediment control fencing must be installed to Ontario Provincial Standards (OPSD-219.130) heavy duty silt fence barrier and to the satisfaction of Urban Forestry. See Detail TP-2

TORONTO Parks, Forestry and Recreation
 Urban Forestry February 2016 Detail TP-1

5 TREE PROTECTION FENCE from "Tree Protection Policy and Specifications for Construction Near Trees," published by Toronto Parks, Forestry and Recreation, July 2016

6 TREE PROTECTION PLAN NOTES from "Tree Protection Policy and Specifications for Construction Near Trees," published by Toronto Parks, Forestry and Recreation, July 2016

1. It is the applicants' responsibility to discuss potential impacts to trees located near or wholly on adjacent properties or on shared boundary lines with their neighbours. Should such trees be injured to the point of instability or death the applicant may be held responsible through civil action. The applicant would also be required to replace such trees to the satisfaction of Urban Forestry.
2. Tree protection barriers shall be installed to standards as detailed in this document and to the satisfaction of Urban Forestry.
3. Tree protection barriers must be installed using plywood clad hoarding (minimum 19mm or 3/4" thick) or an equivalent approved by Urban Forestry.
4. Where required, signs as specified in Section 4, Tree Protection Signage (and included below) must be attached to all sides of the barrier.
5. Prior to the commencement of any site activity such as site alteration, demolition or construction, the tree protection measures specified on this plan must be installed to the satisfaction of Urban Forestry.
6. Once all tree/site protection measures have been installed, Urban Forestry staff must be contacted to arrange for an inspection of the site and approval of the tree/site protection requirements. Photographs that clearly show the installed tree/site protection shall be provided for Urban Forestry review.
7. Where changes to the location of the approved TPZ or sediment control or where temporary access to the TPZ is proposed, Urban Forestry must be contacted to obtain approval prior to alteration.
8. Tree protection barriers must remain in place and in good condition during demolition, construction and/or site disturbance, including landscaping, and must not be altered, moved or removed until authorized by Urban Forestry.
9. No construction activities including grade changes, surface treatments or excavation of any kind are permitted within the area identified on the Tree Protection Plan or Site Plan as a minimum tree protection zone (TPZ). No root cutting is permitted. No storage of materials or fill is permitted within the TPZ. No movement or storage of vehicles or equipment is permitted within the TPZ. The area(s) identified as a TPZ must be protected and remain undisturbed at all times.
10. All additional tree protection or preservation requirements, above and beyond the installation of tree protection barriers, must be undertaken or implemented as detailed in the Urban Forestry approved arborist report and/or the approved tree protection plan and to the satisfaction of Urban Forestry.
11. If the minimum tree protection zone (TPZ) must be reduced to facilitate construction access, the tree protection barriers must be maintained at a lesser distance and the exposed portion of TPZ must be protected using a horizontal root protection method approved by Urban Forestry.
12. Any roots or branches indicated on this plan which require pruning, as approved by Urban Forestry, must be pruned by an arborist. All pruning of tree roots and branches must be in accordance with good arboricultural practice. Roots that have received approval from Urban Forestry to be pruned must first be exposed using pneumatic (air) excavation, by hand digging or by a using low pressure hydraulic (water) excavation. The water pressure for hydraulic excavation must be low enough that root bark is not damaged or removed. This will allow a proper pruning cut and minimize tearing of the roots. The arborist retained to carry out crown or root pruning must contact Urban Forestry no less than three working days prior to conducting any specified work.
13. The applicant/owner shall protect all by-law regulated trees in the area of consideration that have not been approved for removal throughout development works to the satisfaction of Urban Forestry.
14. Convictions of offences respecting the regulations in the Street Tree By-law and Private Tree By-law are subject to fines. A person convicted of an offence under these by-laws is liable to a minimum fine of \$500 and a maximum fine of \$100,000 per tree, and/or a Special Fine of \$100,000. The landowner may be ordered by the City to stop the contravening activity or ordered to undertake work to correct the contravention.
15. Prior to site disturbance the owner must confirm that no migratory birds are making use of the site for nesting. The owner must ensure that the works are in conformance with the Migratory Bird Convention Act and that no migratory bird nests will be impacted by the proposed work.



Tree Protection Zone (TPZ)

All construction related activities, including grade alteration, excavation, soil compaction, any materials or equipment storage, disposal of liquid and vehicular traffic are NOT permitted within this TPZ.

This tree protection barrier must remain in good condition and must not be removed or altered without authorization of City of Toronto, Urban Forestry.

Concerns or inquiries regarding this TPZ can be directed to: 311 or 311@toronto.ca

Sign must be mounted on all sides of a tree protection barrier for trees protected by the Street Tree By-law and the Private Tree By-law. The sign should be a minimum of 40cm x 60cm and made of white corrugated plastic board or equivalent material. The sign may also be acquired from Urban Forestry Tree Protection and Plan Review (TPPR) district service counters.

7 TREE PROTECTION SIGN from "Tree Protection Policy and Specifications for Construction Near Trees," published by Toronto Parks, Forestry and Recreation, July 2016

04	2024-12-18	ISSUED FOR ADDENDUM #1	ED	JC
03	2024-11-18	ISSUED FOR PERMIT AND TENDER	EKA	JC
02	2024-11-13	PRELIMINARY	EKA	JC
01	2024-11-08	PRELIMINARY	JC	--
NO	YYYY-MM-DD	REVISION	DN	CH



CENTENNIAL PARK FIFA - EAST VSTS
 256 Centennial Park Road,
 Toronto, Ontario, M5C 5N3

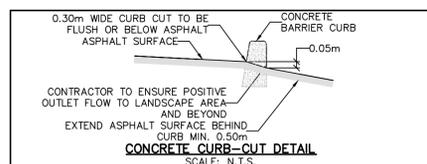
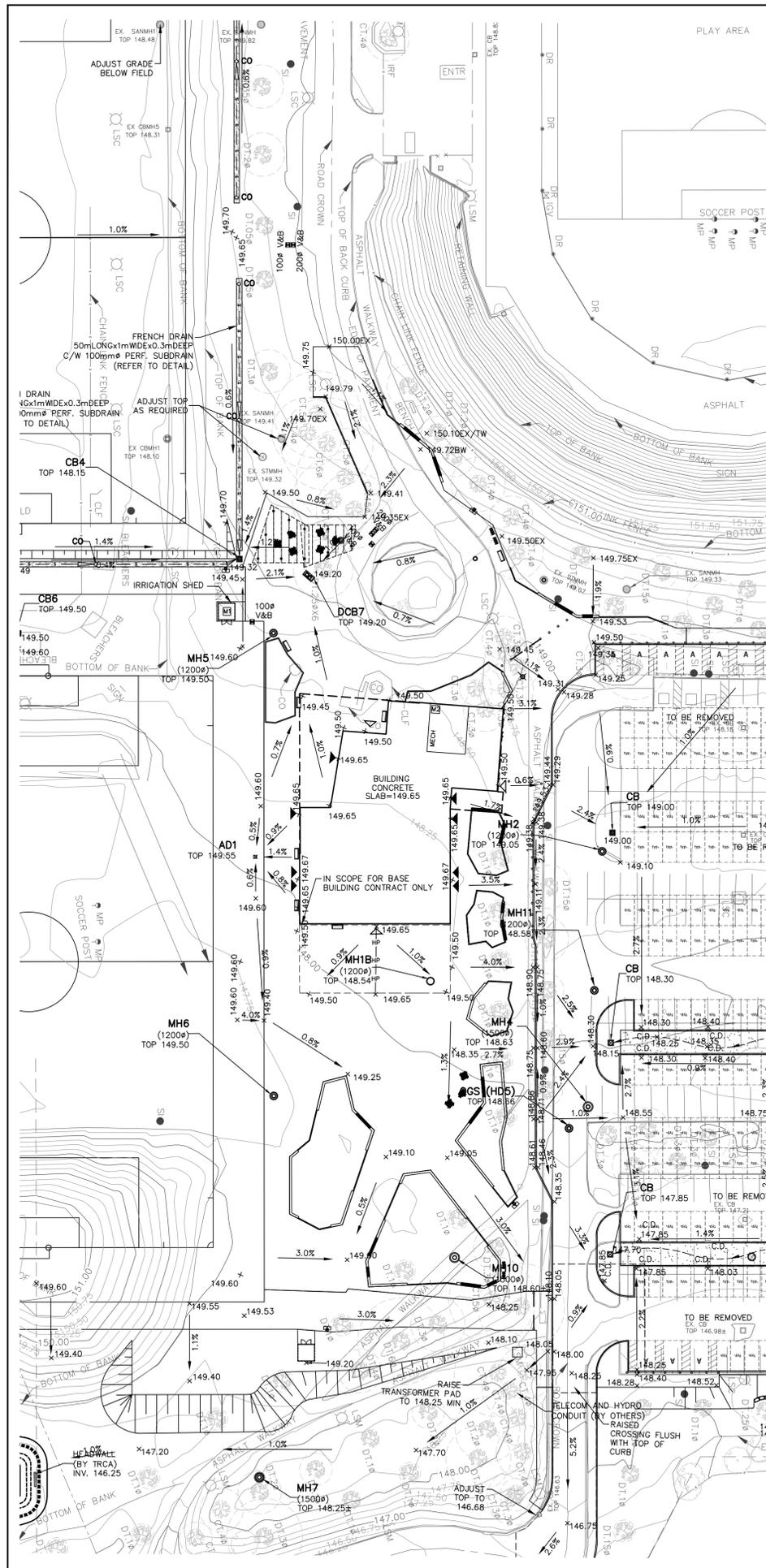


VFA Project: 2309

L13

LANDSCAPE DETAILS 6

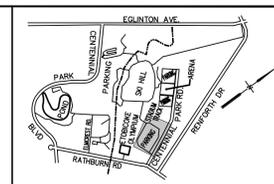
and date (8/24/19) (6/20)



- GENERAL NOTES:**
1. ALL DIMENSIONS ARE IN METRES AND DIAMETERS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
 2. THE LATEST CITY OF TORONTO STANDARD DRAWINGS, GENERAL CONDITIONS & SPECIFICATIONS CONSTITUTE PART OF THE DRAWINGS.
 3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 'OCCUPATIONAL HEALTH AND SAFETY ACT'; THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
 4. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION, PERMANENT SIGNS AND LANE MARKINGS SHALL BE IN ACCORDANCE WITH ONTARIO TRAFFIC MANUAL FOR TEMPORARY CONDITIONS AND MTO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 5. ALL UNDERGROUND SERVICE CONNECTIONS AND TRENCHES WITHIN PAVED PORTION OF AN EXISTING ROAD ARE TO BE BACKFILLED WITH UN-SHRINKABLE FILL MATERIAL.
 6. ALTERNATIVE CONSTRUCTION MATERIALS MAY BE ACCEPTABLE, PROVIDED THAT APPROVAL HAS BEEN OBTAINED FROM CITY ENGINEER.

- GRADING & ROAD CONSTRUCTION:**
1. BACKFILL LIFT THICKNESS SHALL BE NO GREATER THAN 300mm.
 2. PRIOR TO THE PLACEMENT OF ANY GRANULAR MATERIALS, THE SOIL CONSULTANT MUST ISSUE A COMPACTION CERTIFICATE AND OBTAIN APPROVAL FROM THE CITY.
 3. MUNICIPAL CURB AND GUTTER SHALL BE AS PER CITY OF TORONTO T-600.05-1 AND T-600.07-1 WITH SUBDRAINS AS PER T-216.02-8.
 4. MUNICIPAL CURB & SIDEWALK SHALL BE CONSTRUCTED AS PER CITY OF TORONTO T-310.010-4 AND T-310.050-1
 5. ALL ASPHALT PAVEMENT WITHIN THE PARKING, DRIVE AISLES AND SITE ENTRANCES SHALL BE HEAVY DUTY IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AS PROVIDED BY THE CONTRACT ADMINISTRATOR.
 6. UNLESS OTHERWISE SPECIFIED BY GEOTECHNICAL CONSULTANT, SUB-GRADE, TRENCH BACKFILL AND GRANULAR SUB-BASE MATERIAL IS TO BE COMPACTED TO 98% SPMD. ASPHALT IS TO BE COMPACTED WHILE GRANULAR BASE IS TO BE COMPACTED TO 100% SPMD AND ASPHALT PAVEMENT IS TO BE COMPACTED IN ACCORDANCE WITH OPSS 310.
 7. WHERE NEW ASPHALT MATCHES EXISTING ASPHALT, EXISTING ASPHALT SHALL BE GRINDED A MINIMUM OF 300mm WIDE AND 40mm DEEP FOR KEYING. HOT RUBBER SEALING COMPOUND IN ACCORDANCE WITH OPSS 1212 AND EMULSIFIED ASPHALT AT ALL JOINTS WILL BE APPLIED.
 8. BOULEVARDS RESTORATION SHALL BE A MINIMUM OF 150MM TOPSOIL AND NO. 1 GRADE NURSERY SO.
 9. ALL FIRE ACCESS ROUTES SHALL BE CONSTRUCTED OF HARD SURFACE MATERIAL AND DESIGNED TO SUPPORT A LOAD OF NOT LESS THAN 11 363 KG. PER AXLE AND HAVE A CHANGE IN GRADIENT OF NOT MORE THAN 1 IN 12.5 OVER A MINIMUM DISTANCE OF 15M.
 10. THE CONTRACTOR SHALL CHECK AND VERIFY ALL GRADES AND DRAINAGE SYSTEMS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 11. ALL SURFACE DRAINAGE WILL BE SELF-CONTAINED, COLLECTED AND DISCHARGED AT A LOCATION TO BE APPROVED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
 12. GRADES AT SLOPES AT PROPERTY LINES AND WITHIN THE SITE TO BE MET WITHIN 3:1 (33% MAXIMUM).
 13. DRIVEWAY ENTRANCE SHALL BE TO TORONTO STD. T-310.050-1
 14. WHERE MUNICIPAL SIDEWALKS AND CURBS OCCUR AT ENTRANCES THEY SHALL BE CONTINUOUS THROUGH THE DRIVEWAYS. THE SIDEWALK SHALL REMAIN AT ITS ORIGINAL GRADE AND A CURB DEPRESSION WILL BE PROVIDED AT EACH ENTRANCE. ELEVATIONS OF DRIVEWAYS SHALL BE COMPATIBLE WITH EXISTING AND FUTURE SIDEWALK GRADES.
 15. SIDEWALK TO BE 32MPA CONCRETE WITH 5 TO 8% AIR ENTRAINMENT WITH MIN. OF 150MM GRANULAR 'A' BEDDING COMPACTED TO 100% SPMD.

- GRADING NOTES:**
1. GRADES ARE TO MATCH THE ADJACENT PROPERTIES AT THE LIMITS OF THE SITE
 2. DRAINAGE SWALES TO BE MINIMUM DEPTH OF 0.15m TO A MAXIMUM DEPTH OF 0.30m. SWALE GRADES SHALL BE A MINIMUM OF 2.0% AND A MAXIMUM OF 5.0% UNLESS OTHERWISE NOTED.
 3. MINIMUM PAVEMENT GRADE OF 0.70% TO A MAXIMUM GRADE OF 8.0%
 4. SLOPES IN LANDSCAPED AREAS AND ON BERMS SHALL NOT EXCEED 3:1.
 5. THE MAXIMUM ALLOWABLE HEIGHT OF A BERM WITHOUT A BREAK IN GRADE IS 1.2m. LANDSCAPE BERMS SHALL NOT ENCRUCH ONTO THE BOULEVARD OR ADJACENT PROPERTIES UNLESS WRITTEN AUTHORIZATION FROM THE ADJACENT LANDOWNER(S) IS PROVIDED.
 6. ROOF DOWNSPOUT LOCATIONS AND DIRECTION OF DRAINAGE ARE TO BE IDENTIFIED.
 7. FOOTINGS TO BE FOUND IN UNDISTURBED NATIVE SOIL OR, IF LOCATED IN ENGINEERED FILL, FOUNDATIONS SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF, AND CERTIFIED IN THE FIELD BY, A GEOTECHNICAL ENGINEER.
 8. A MINIMUM 1.50m FLAT AREA SHALL BE PROVIDED AT THE BOTTOM OF SLOPES LOCATED ADJACENT TO FENCES.
 9. A MINIMUM 150mm TOPSOIL SHALL BE PROVIDED IN ALL LANDSCAPED AREAS.
 10. ALL GRADING MUST COMPLY WITH THE CITY OF TORONTO AND APPROPRIATE CONSERVATION AUTHORITY AND THERE STANDARDS.



- NOTES:**
1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
 2. SURVEY COMPLETED BY: [Name]
 3. DO NOT SCALE DRAWINGS.
 4. REPORT ALL ERRORS, OMISSIONS OR DISCREPANCIES TO URBAN WATERSHED GROUP LIMITED IMMEDIATELY UPON DISCOVERY.
 5. USE ONLY LATEST REVISION DRAWINGS OF THOSE THAT ARE MARKED "ISSUED FOR CONSTRUCTION".
 6. THE DRAWINGS ARE THE PROPERTY OF URBAN WATERSHED GROUP LIMITED AND MUST BE RETURNED ON COMPLETION OF THE PROJECT. ANY UNAUTHORIZED USE OF THIS PLAN IS PROHIBITED.
 7. URBAN WATERSHED GROUP LIMITED SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES WHICH MAY ARISE FROM THE USE OF THIS DRAWING FOR OTHER THAN THE INTENDED PURPOSE PRIOR TO THE APPROVAL AND PRIOR TO PERMITS BEING GRANTED FROM ALL AUTHORITIES HAVING JURISDICTION.

- BENCHMARK NOTE:**
- ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF TORONTO BENCHMARKS:
1. CITY OF TORONTO BENCHMARK NO. 060003 (1202000000), HAVING AN ELEVATION 150.408 METRES BENCHMARK LOCATED AT CENTENNIAL PARK STONE/BRICK WASHROOM BUILDING SOUTH AND WEST OF THE SO WILL EAST OF CENTENNIAL PARK BUILDINGS AND EAST OF THE PARK BASKETBALL FACILITIES. BENCHMARK IN SOUTH FACE OF BUILDING 3.2 METRES WEST OF THE SOUTH/EAST CORNER AND 0.16 METRES ABOVE GROUND LEVEL.
 2. CITY OF TORONTO BENCHMARK NO. E1143 (1251967143), HAVING AN ELEVATION 151.501 METRES BENCHMARK 450 METRES SOUTH OF EGLINTON AVENUE, 0.16 METRES ABOVE GROUND LEVEL.

- LEGEND:**
- PROPERTY LINE
 - EXISTING ELEVATION
 - PROPOSED ELEVATION
 - EXISTING MAIN GUTTER WITH ELEVATION
 - EXISTING SHEET FLOW
 - PROPOSED SHEET FLOW
 - EXISTING STORM MANHOLE
 - PROPOSED STORM MANHOLE
 - EXISTING SINGLE/DOUBLE CATCHBASIN
 - PROPOSED SINGLE/DOUBLE CATCHBASIN
 - ALL AREA DRAIN TOPS ON LANDSCAPED AREAS AND PLANTING BEDS SHALL HAVE WYOPLAST SOME GRATE SUPPLIED BY AGS OR APPROVED EQUIVALENT PER DETAIL ON DWG NO. 23038-011
 - EXISTING SANITARY MANHOLE
 - PROPOSED SANITARY MANHOLE
 - EXISTING VALVE & BOX
 - PROPOSED VALVE & BOX
 - EXISTING CURB STOP
 - MAJOR SYSTEM OVERLAND FLOW ROUTE
 - T.B.R. TO BE REMOVED
 - C.C. CURB CUT REFER TO DETAIL
 - ACCESSIBLE (FLUSH WITH GRADE)
 - ONE RISER (150mm ABOVE GRADE)

CONTRACTOR'S NOTES AND PRIOR TO CONSTRUCTION:

1. THE CONTRACTOR SHALL INVESTIGATE ALL EXISTING SERVICES, WATERMANS, UTILITIES AND SERVICES AT POINTS OF CROSSING TO THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INVESTIGATION OF ALL UTILITIES.

2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES OF THE SITE BEFOREHAND. THE CONTRACTOR SHALL REPORT IMMEDIATELY TO THE ARCHITECT AND URBAN WATERSHED GROUP LTD. ANY DISCREPANCIES FOUND ON THIS DRAWING.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING UTILITIES AND SERVICES THROUGHOUT THE CONSTRUCTION OF THE SITE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING UTILITIES AND SERVICES THROUGHOUT THE CONSTRUCTION OF THE SITE.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING UTILITIES AND SERVICES THROUGHOUT THE CONSTRUCTION OF THE SITE.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING UTILITIES AND SERVICES THROUGHOUT THE CONSTRUCTION OF THE SITE.

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9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING UTILITIES AND SERVICES THROUGHOUT THE CONSTRUCTION OF THE SITE.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL EXISTING UTILITIES AND SERVICES THROUGHOUT THE CONSTRUCTION OF THE SITE.

NO	DATE	DESCRIPTION	BY	CHK
4	2024-12-18	ISSUED FOR ADDENDUM No.1	CC	PE
3	2024-11-22	RE-ISSUED FOR PERMIT AND SPA	CC	PE
2	2024-11-18	ISSUED FOR PERMIT AND TENDER	CC	PE
1	2024-11-08	ISSUED FOR SPA	CC	PE
NO	YYYY-MM-DD	REVISION	DN	CH

CHERIE NG ARCHITECT INC.

1580 AIRPORT ROAD, SUITE 504
GALEON EAST, ONTARIO, L7C 1H9
PHONE: (905) 884-1481 FAX: (905) 884-1481
urbanwater@urbanwater.com
urbanwater.com

Urban Watershed Group Ltd.

1580 AIRPORT ROAD, SUITE 504
GALEON EAST, ONTARIO, L7C 1H9
PHONE: (905) 884-1481 FAX: (905) 884-1481
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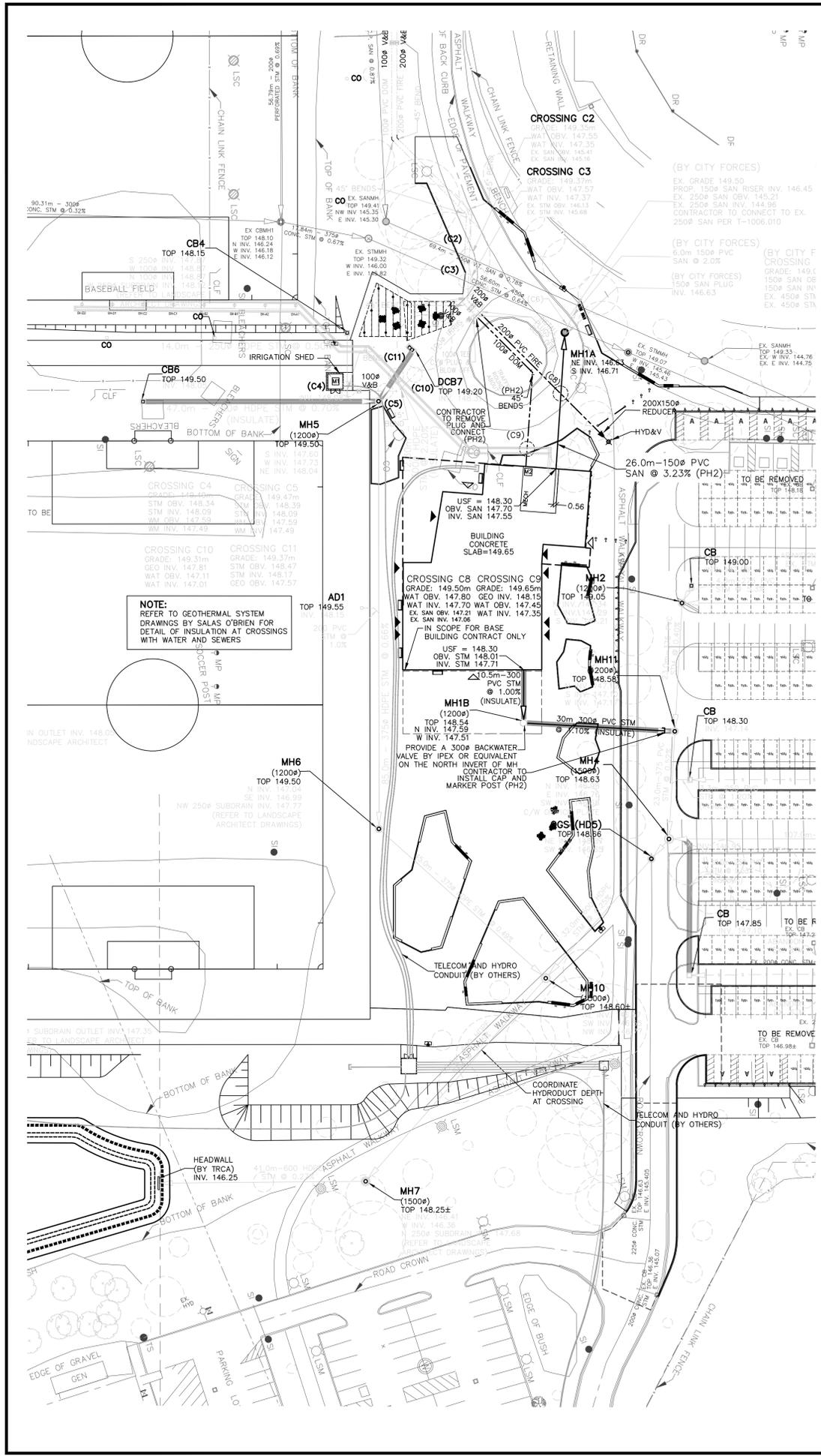
PROFESSIONAL ENGINEER
A.W. MCEWEN
100505981
December 18, 2024
PROVINCE OF ONTARIO

FIFA - EAST VSTS - CENTENNIAL PARK
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3

Toronto
Toronto Parks, Forestry and Recreation

0 5 10 20
Scale = 1:500 metric

PROJECT No: 23038
CGR-1
GRADING PLAN - EAST VSTS
SHEET: 2 OF 8



GENERAL NOTES:

1. ALL DIMENSIONS ARE IN METRES AND ALL DIAMETERS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
2. THE LATEST CITY OF TORONTO STANDARD DRAWINGS, GENERAL CONDITIONS & SPECIFICATIONS CONSTITUTE PART OF THE DRAWINGS.
3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 'OCCUPATIONAL HEALTH AND SAFETY ACT'. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
4. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION, PERMANENT SIGNS AND LANE MARKINGS SHALL BE IN ACCORDANCE WITH ONTARIO TRAFFIC MANUAL FOR TEMPORARY CONDITIONS AND MTO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
5. ALL UNDERGROUND SERVICE CONNECTIONS AND TRENCHES WITHIN PAVED PORTION OF AN EXISTING ROAD ARE TO BE BACKFILLED WITH UN-SHRINKABLE FILL MATERIAL.
6. ALTERNATIVE CONSTRUCTION MATERIALS MAY BE ACCEPTABLE, PROVIDED THAT APPROVAL HAS BEEN OBTAINED FROM CITY ENGINEER.

LOCATES AND LIABILITY:

1. THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO THE ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF THE CITY.
2. THE LOCATION OF ALL UNDER/ABOVE GROUND UTILITIES AND STRUCTURES ARE APPROXIMATE ONLY, AND WHERE SHOWN ON THE DRAWING(S) THE ACCURACY OF THE LOCATION OF SUCH UTILITIES ARE NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL SUCH UTILITIES AND STRUCTURES BY CONSULTING THE APPROPRIATE AUTHORITIES OR UTILITY COMPANIES CONCERNED. THE CONTRACTORS SHALL PROVE THE LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE OR RESTORATION TO SAME.
3. THE OWNER SHALL BE NOTIFIED IMMEDIATELY OF ANY CONFLICTS WITH EXISTING SERVICES.
4. AT THE TIME OF TENDER, THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND INVESTIGATE ALL EXISTING SERVICES, WATERMANS, UTILITIES AND SEWERS AT POINTS OF CROSSING TO THEIR SATISFACTION AND MODIFY THEIR PROPOSAL ACCORDINGLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE ADJUSTMENT OF ALL UTILITIES, SEWERS AND WATERMANS AS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE SITE SERVING.

WATERMAIN:

1. ALL WATERMAIN SERVICE CONNECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF TORONTO T-1104.01, T-1104.02-1, T-1104.02-2, T-1105.02-1, AND T-1105.02-2.
2. TRACER WIRE SHALL CONFORM TO CITY OF TORONTO & CONSTRUCTION SPECIFICATION FOR WATERMAIN AND WATER SERVICE TRACER WIRE TS 7.40.07.01, ITEMS TO IV INCLUSIVE.
3. PROVISIONS FOR WATERMAIN FLUSHING PRIOR TO TESTING MUST BE PROVIDED WITH AT LEAST A 50MM (2") Ø OUTLET ON 100MM (4") Ø AND LARGER LINES AS PER CITY OF TORONTO T-1104.03-1. ALL PROPOSED WATERMANS AND APPURTENANCES SHALL BE DISINFECTED AS PER STANDARD SPECIFICATION TS 7.30. AFTER PRESSURE TESTING AND CHLORINATION OF THE PROPOSED WATERMAIN, CUT TEE FITTING INTO EXISTING WATERMAIN AND MAKE CONNECTION. ISOLATION VALVE TO BE OPENED, EXTENSION STIM REMOVED, AND VALVE BURIED WITH GRANULAR FILL AS PER CITY OF TORONTO T-1104.03-1 AND T-1104.03-2.
4. WATERMANS ARE TO BE INSTALLED AT GRADES AS SHOWN ON APPROVED PLANS; COPY OF GRADE SHEET MUST BE SUPPLIED TO INSPECTOR PRIOR TO COMMENCEMENT OF WORK, WHERE REQUESTED BY INSPECTOR AS PER CITY OF TORONTO T-1104.03-1 AND T-1104.03-2.
5. UN-FLANGE SERIES 1300-C, EBBA SERIES 200PV OR ROMAC CIRIP-RING SHALL BE INSTALLED AT ALL JOINTS BETWEEN CAST IRON MECHANICAL JOINT FITTINGS, BENDS, TEES, CROSSES, VALVES AND PVC PIPE. RESTRAINTS MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
6. ALL TEES, BENDS, AND REDUCERS SHALL BE INSTALLED WITH THRUST BLOCKING AS PER CITY OF TORONTO T-1103.01 AND T-1103.020.
7. WATERMANS SHALL HAVE MINIMUM COVER OF 1.80m.
8. WATERMAIN MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.30m (12") OVER, 0.5m (20") UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING.
9. SACRIFICIAL ANODES WILL BE INSTALLED FOR ALL METAL PIPES AND FITTINGS AS PER CITY OF TORONTO T-1106.04, T-1106.05 AND T1106.06.
10. PIPE JOINT DETAIL NOT ALLOWED TO BE USED ON WATERMANS.
11. ALL EXISTING WATER SERVICES THAT ARE TO BE ABANDONED ARE TO BE DISCONNECTED AT THE MAINLINE IN ACCORDANCE WITH CITY REQUIREMENTS.
12. ALL WATERMAIN APPURTENANCES (VALVES, FITTINGS, ETC.) SHALL CONFORM TO CITY STANDARDS.

SANITARY SEWERS:

1. 150mm TO 450mm Ø SANITARY SEWER PIPES SHALL BE PVC CLASS DR-28 PIPE AND HAVE SMOOTH INTERIOR AND EXTERIOR WALLS. PIPES TO CONFORM TO OPSS 1841 MATERIAL SPECIFICATION.
2. ALL SANITARY/COMBINED SEWER PIPES LARGER THAN 450mm Ø SHALL BE COMPOSED OF REINFORCED CONCRETE AND COMPLY WITH OPSS 1820 MATERIAL SPECIFICATION.
3. RIGID PIPE BEDDING SHALL BE AS PER OPSS 802.030, 802.031, 802.032, 802.033 AND 802.034. FLEXIBLE PIPE BEDDING TO BE AS PER OPSS 802.010, 802.013 AND 802.014. SEE CITY OF TORONTO GRANULAR BEDDING DETAIL - CLASS 'B' TO BE 19mm CRLC.
4. MAINTENANCE HOLES SHALL BE SURROUNDED WITH A MINIMUM OF 1.0m COMPACTED GRANULAR BACKFILL.
5. ALL SANITARY SEWERS SHALL HAVE PREMIUM RUBBER GASKET JOINTS.
6. SANITARY MAINTENANCE HOLES TO BE AS PER CITY OF TORONTO T-701.010 AND T-701.011, AND FRAME AND GRATE AS PER OPSS 401.010, TYPE 'A'.
7. TOP OF MANHOLE COVER SHALL BE AT FINISHED GRADE AND THEN ADJUSTED TO FINAL GRADE WITH MAXIMUM OF 3 MODULOC RINGS AS PER OPSS 704.010 WHEN TOP LIFT OF ASPHALT IS PLACED. MAXIMUM 450MM TO FIRST STEP AS PER OPSS 704.010.
8. BENCHING SHALL BE AS PER CITY OF TORONTO T-701.021.
9. 150mm SERVICE CONNECTIONS OF PVC CLASS DR 28 PIPE, SANITARY SERVICE CONNECTIONS SHALL BE INSTALLED AT A MINIMUM 2% GRADE AND SHALL BE ANY COLOUR BUT WHITE.
10. FOR SERVICE CONNECTIONS ON EXISTING SEWERS, THE SEWER FLOW MUST BE MAINTAINED AT ALL TIMES. SEWER CONNECTIONS MUST BE CONNECTED TO A SADDLE, WHERE APPLICABLE. THE CONNECTION WILL TERMINATE AT THE PROPERTY LINE AND MUST BE PROPERLY PLUMBED. THE OPENING FOR THE SADDLE ON THE MAIN SEWER MUST BE MADE BY A CORE DRILL ONLY. THE DIAMETER OF THE CORE MUST NOT EXCEED THE OUTSIDE DIAMETER OF THE SADDLE BRANCH INSERT BY 25mm. WHERE CORE DRILLING IS NOT POSSIBLE, THE CONTRACTOR MUST CONNECT TO THE MAIN SEWER BY APPROPRIATE MEANS, APPROVED BY THE CITY. SEWER CONNECTIONS MUST BE LAID ON SOLID GROUND AND MUST HAVE A MINIMUM OF 75mm OF CLASS B BEDDING.
11. TOP OF MANHOLE COVER TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WITH MAXIMUM OF 3 MODULOC RINGS AS PER OPSS 704.010 WHEN TOP LIFT OF ASPHALT IS PLACED. MAXIMUM 450MM TO FIRST STEP AS PER OPSS 704.010.
12. PERFORATED C/W SOCK SUB-DRAIN TO BE INSTALLED ON ALL CATCHBASINS AND CATCHBASIN MANHOLES. SUB-DRAINS TO EXTEND A MINIMUM 5.0m UPSTREAM ON EITHER SIDE OF THE CATCHBASIN / CATCHBASIN MANHOLE. SUB-DRAIN INSTALLATION TO BE CARRIED OUT IN ACCORDANCE WITH CITY STANDARDS.

STORM SEWERS:

1. STORM SEWER PIPES SHALL BE PVC CLASS DR-28 PIPE OR ULTRA-RIB PIPE PER CSA 182.6 (320 KPA)
2. RIGID PIPE BEDDING SHALL BE AS PER OPSS 802.030, 802.031, 802.032, 802.033 AND 802.034.
3. FLEXIBLE AND RIGID PIPE BEDDING TO BE AS PER OPSS 802.010, 802.013 AND 802.014. SEE CITY OF TORONTO GRANULAR BEDDING DETAIL - CLASS 'B' TO BE 19mm CRLC.
4. ALL CATCHBASINS SHALL BE AS PER CITY OF TORONTO T-705.010 WITH GOSS TRAP, FRAME AND GRATE AS PER OPSS 400.070.
5. MAINTENANCE HOLES SHALL BE SURROUNDED WITH A MINIMUM OF 1.0m COMPACTED GRANULAR BACKFILL.
6. CATCHBASIN LEADS TO BE 250mmØ PVC DR-35 FOR SINGLE CATCHBASINS AND 300mmØ PVC DR-35 FOR DOUBLE CATCHBASINS UNLESS OTHERWISE NOTED.
7. ALL STORM SEWERS SHALL HAVE PREMIUM RUBBER GASKET JOINTS.
8. STORM MAINTENANCE HOLES AND CATCHBASIN MAINTENANCE HOLES TO BE CONSTRUCTED AS PER CITY OF TORONTO T-701.010, T-701.011, T-701.012-1, AND T-701.013. MAINTENANCE HOLES TO HAVE FRAME AND COVERS AS PER OPSS 401.010 TYPE 'A'.
9. BENCHING SHALL BE AS PER CITY OF TORONTO T-701.021.
10. FOR SERVICE CONNECTIONS ON EXISTING SEWERS, THE SEWER FLOW MUST BE MAINTAINED AT ALL TIMES. SEWER CONNECTIONS MUST BE CONNECTED TO THE MAIN SEWER BY MEANS OF A SADDLE, WHERE APPLICABLE. THE CONNECTION WILL TERMINATE AT THE PROPERTY LINE AND MUST BE PROPERLY PLUMBED. THE OPENING FOR THE SADDLE ON THE MAIN SEWER MUST BE MADE BY A CORE DRILL ONLY. THE DIAMETER OF THE CORE MUST NOT EXCEED THE OUTSIDE DIAMETER OF THE SADDLE BRANCH INSERT BY 25mm. WHERE CORE DRILLING IS NOT POSSIBLE, THE CONTRACTOR MUST CONNECT TO THE MAIN SEWER BY APPROPRIATE MEANS, APPROVED BY THE CITY. SEWER CONNECTIONS MUST BE LAID ON SOLID GROUND AND MUST HAVE A MINIMUM OF 75mm OF CLASS B BEDDING.
11. TOP OF MANHOLE COVER TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WITH MAXIMUM OF 3 MODULOC RINGS AS PER OPSS 704.010 WHEN TOP LIFT OF ASPHALT IS PLACED. MAXIMUM 450MM TO FIRST STEP AS PER OPSS 704.010.
12. PERFORATED C/W SOCK SUB-DRAIN TO BE INSTALLED ON ALL CATCHBASINS AND CATCHBASIN MANHOLES. SUB-DRAINS TO EXTEND A MINIMUM 5.0m UPSTREAM ON EITHER SIDE OF THE CATCHBASIN / CATCHBASIN MANHOLE. SUB-DRAIN INSTALLATION TO BE CARRIED OUT IN ACCORDANCE WITH CITY STANDARDS.

GENERAL PARK NOTES:

1. ANY DIVERGENCE FROM THESE STANDARDS ARE TO BE APPROVED IN WRITING BY PPAR.
2. ALL NEW PARKS REQUIRE THE FOLLOWING:
 - a. WATER SERVICE - MINIMUM 50 MM
 - b. STORM SEWER SERVICE - MINIMUM 150 MM DIA. PVC
 - c. SANITARY SEWER SERVICE - MINIMUM 150 MM DIA. PVC
 - d. ELECTRICAL SERVICE - 200 AMPS (REFER TO ELECTRICAL PANEL BOX LOCKING BAR DETAIL - OCT 2018)
 - e. ELECTRICAL PANEL - FEDERAL SOLUTIONS OR APPROVED EQUAL (REFER TO ELECTRICAL PANEL BOX LOCKING BAR DETAIL - OCT 2018)
 - f. CATCH BASINS TO BE PROVIDED BASED ON THE OVERALL SIZE OF THE PARK. 1 CATCH BASIN FOR EVERY 250 SQ M OR AS DEEMED NECESSARY.
 - g. FOR ALL FLASH PAD PROJECTS, DEVELOPER/CONSULTANT TO OBTAIN FORMAL WRITTEN APPROVAL FROM TORONTO WATER FOR STORM SEWER CONNECTION EXEMPTIONS PROJECT SUBMISSION SHALL INCLUDE DETAIL DESIGN DRAWINGS AND A SANITARY SEWER ANALYSIS (MEAD TO CONFIRM SEWER CAPACITY).
3. DEVELOPER/CONSULTING ENGINEER TO CONTACT THE FOLLOWING FOR WATER METER DESIGN APPROVAL AND METER ACQUISITION FORM: FRED LAVARATO@FREDLAVARATO.COM SUPERVISOR CUSTOMER FIELD SERVICES, TORONTO WATER - LARGE METER DEPARTMENT (OVER 25MM) 1000 PICCO T000.PICCO@TORONTO.CA SUPERVISOR CUSTOMER FIELD SERVICES, TORONTO WATER - SMALL METER DEPARTMENT (25MM AND BELOW)
4. BOUND METER ACQUISITION THROUGH USE #1 TO BE SUBMITTED TO BOTH PPAR LANDSCAPE ARCHITECT AND TORONTO WATER REVENUE CLERK KIMBERLY.WILSON@TORONTO.CA TO INITIATE WATER METER APPROVALS.
5. DEVELOPER/CONSULTANT TO OBTAIN APPLICABLE PERMITS FROM TORONTO BUILDING DEPARTMENT FOR ANY STRUCTURE INCLUDING PERMANENT PLUMBING LOCATED OUTSIDE OF A STRUCTURE.
6. WATER TREATMENT STATION / DRINKING FOUNTAIN COMBINATIONS REQUIRE A DRANT TO THE SANITARY SEWER. PPAR PREFERRED MODEL SHALL BE APPROVED WITH PARKS DISTRICT STAFF AND OPTIONS INCLUDE ELKAY OR MOST DISPENSIBLE.
 - a. ELKAY - MODEL: LK4420BFLUBLU OR MDF 10135 SM (WATER BOTTLE AND DRINKING FOUNTAIN)
 - b. ELKAY - MODEL: LK4420BFLUBLU OR MDF 10155 SM (WATER BOTTLE WITH DRINKING FOUNTAIN AND DOG BOWL)
 - c. ELKAY - MODEL: LK4420BFLUBLU OR MDF 10155 SM (WATER BOTTLE WITH DRINKING FOUNTAIN AND DOG BOWL)

STANDARD WATERMAIN AND WATER SERVICE NOTES:

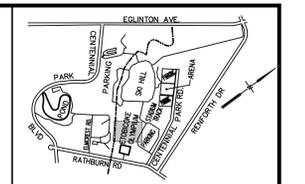
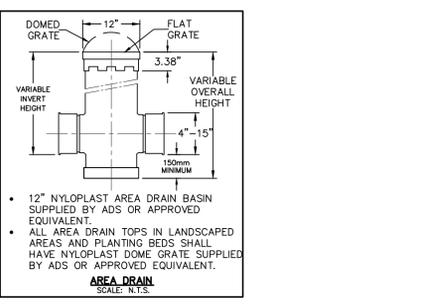
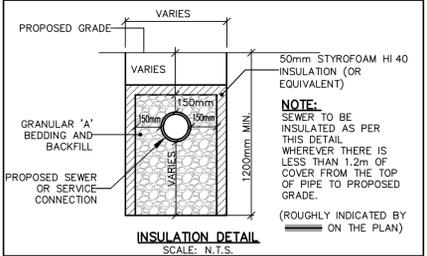
1. 150MM DIA. TO 400MM DIA. WATERMAIN SHALL BE EQUAL TO AWMA C-900 CLASS 190, DR 18 50MM DIAM. WATERMAIN OR SMALLER TO BE TYPE 'K' COFFER COPPER TUBING
2. ALL WATERMAIN BEDDING SHALL BE AS PER DETAIL WITH GRANULAR 'B' BEDDING MATERIAL AND COMPACTED TO 90% S.P.
3. ALL PVC WATERMANS TO BE INSTALLED WITH TRACER WIRE IN ACCORDANCE WITH CITY STANDARD DWG. T-1108.01. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY STANDARD DWG. T-1108.04.
4. ALL WATERMANS SHALL MAINTAIN A MINIMUM 1.5M CLEARANCE FROM ALL MANHOLES AND CATCHBASINS.
5. THE CONTRACTOR SHALL COMPLETE THE NECESSARY WATER TESTING (I.E. PRESSURE TEST, FLUSHING, ETC.) AS PER CITY STANDARDS.
6. WATERMANS TO BE DISINFECTED IN ACCORDANCE WITH CITY STANDARD CONSTRUCTION SPECIFICATION TS 7.30.
7. THE OPERATION OF EXISTING WATERMAIN VALVES SHALL BE CONDUCTED AS REQUIRED BY THE CITY.
8. WATERMANS SHALL HAVE A MINIMUM COVER OF 1.8M FROM FINISHED GRADE.
9. DEFLECTION OF WATERMAIN TO BE WITHIN TOLERANCES SPECIFIED BY MANUFACTURER.
10. WHERE PIPE BEDDING FALLS BELOW THE ANTICIPATED WATER TABLE, THE BEDDING STONE MUST BE SURROUNDED WITH A GEOTEXTILE FILTER CLOTH.
11. WATER SERVICE VALVE IN BOX DETAILS TO BE AS PER CITY STANDARD DWG. T-1101.02-2.
12. ALL PIPING TO BE THREADED INSTEAD OF SOLDERED.
13. PREFERENCE FOR ALL VALVES TO BE BALL VALVE INSTEAD OF GATE VALVE.

STANDARD SEWER NOTES:

1. MAINTENANCE HOLES (MHs) TO BE PRECAST AS PER CITY STANDARD DWG. T-701.010, T-701.011, FRAME AND GRATE PER OPSS 401.010 AND BENCHING IN ACCORDANCE WITH CITY STANDARD DWG. T-701.021 UNLESS OTHERWISE NOTED.
2. SANITARY SEWERS TO BE POLYVINYL CHLORIDE (PVC) AS PER CSA SPECIFICATION B137-3-4-1981 AND B182-4-1983 LATEST AMENDMENTS) AND BE MINIMUM CLASS SDR 35 OR AS SPECIFIED ON DRAWINGS. PIPES SHALL BE JOINED WITH STANDARD RUBBER GASKETS AS PER CSA 257.3 SPECIFICATIONS. SANITARY SEWER BEDDING TO BE AS PER OPSS 802.010.
3. STORM SEWERS UP TO AND INCLUDING 450MM DIAMETER SHALL BE PVC SDR 35 WITH BEDDING AS PER OPSS 802.010, OR CONCRETE PIPE WITH CLASS 'B' BEDDING AS PER OPSS 802.030 AS SPECIFIED ON DRAWINGS. PIPES LARGER THAN 450MM DIAMETER TO BE CONCRETE PIPE CLASS 100-0 WITH CLASS 'B' BEDDING AS PER OPSS 802.030. ALL SEWER PIPE SHALL HAVE RUBBER GASKET JOINT.
4. CONTRACTOR TO PROVIDE CONCRETE ENCASUREMENT FOR THE STORM AND SANITARY SEWER LINES AT THE BUILDING FOUNDATION WALL CROSSING LOCATIONS PER CITY STANDARD DWG. T-1104.03-1 AND T-1104.03-2.
5. ALL PROPOSED CATCHBASINS SHALL BE SINGLE PRE-CAST CONCRETE CATCHBASINS PER OPSS 705.010, AND FRAME AND GRATE PER OPSS 400.010 GOSS TRAP MUST BE INSTALLED IN CATCHBASIN.
6. ALL SEWER PIPE SHALL HAVE RUBBER GASKET JOINTS.
7. STORM SEWER TO BE INFILTRATED ON SITE, SO AS TO MINIMIZE THE VOLUME DISCHARGED TO THE STORM SEWERS.
8. ALL PROPOSED PLASTIC PIPE TO CONTAIN TRACER WIRE.
9. ALL PIPING TO BE THREADED INSTEAD OF SOLDERED.
10. PREFERENCE FOR ALL VALVES TO BE BALL VALVE INSTEAD OF GATE VALVE.

IRRIGATION NOTES:

1. IRRIGATION SYSTEMS WILL BE REVIEWED AND CONSIDERED ON A SITE-BY-SITE BASIS.
2. PPAR STANDARD IS POP-UP STYLE IRRIGATION SYSTEM.
3. THE IRRIGATION CONTROLLER SHOULD BE A RAINBIRD LOME (OR APPROVED EQUAL) WITH A FLOW MODULE AND A NCC 30 COMMUNICATION CARD.
4. AUTOMATIC IRRIGATION SYSTEM WILL NEED A MASTER VALVE AND A RAINBIRD FLOW SENSOR FOR LOME CONTROLLER (OR APPROVED EQUAL) INSTALLED DOWNSTREAM OF THE BACKFLOW PREVENTER.
5. IRRIGATION CONTROLLER TO BE INSTALLED IN THE ABOVE GRADE ELECTRICAL PANEL AND COORDINATED WITH THE ELECTRICAL CONSULTANT.
6. QUICK COUPLERS ARE REQUIRED ON THE IRRIGATION LINES, AND SHALL BE LOCATED AS DIRECTED BY PPAR.
7. ALL PROPOSED PLASTIC PIPE TO CONTAIN TRACER WIRE.
8. ALL PIPING TO BE THREADED INSTEAD OF SOLDERED.
9. PREFERENCE FOR ALL VALVES TO BE BALL VALVE INSTEAD OF GATE VALVE.



- KEY PLAN (N.T.S.)**
1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
 2. SURVEY COMPLETED BY: PPAR SURVEYING LIMITED, O.L.S.
 3. DO NOT SCALE DRAWINGS.
 4. ALL EXISTING UNDERGROUND SERVICES OR DISCREPANCIES TO URBAN WATERFED GROUP LIMITED IMMEDIATELY UPON DISCOVERY.
 5. ONLY LATEST REVISIONS OF DRAWINGS TO BE USED. ALL CHANGES TO BE MARKED "ISSUED FOR CONSTRUCTION".
 6. THE DRAWINGS ARE THE PROPERTY OF URBAN WATERFED GROUP LIMITED AND MUST BE RETURNED UPON COMPLETION OF THE PROJECT. ANY UNAUTHORIZED USE OF THESE PLANS IS PROHIBITED.
 7. URBAN WATERFED GROUP LIMITED SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES WHICH MAY ARISE FROM THE USE OF THESE DRAWINGS FOR OTHER THAN THE INTENDED PURPOSE OR OTHER THAN THE PROJECT FOR WHICH APPROVAL AND PRIOR TO PERMITS BEING GRANTED FROM ALL AUTHORITIES HAVE BEEN OBTAINED.

- BENCHMARK NOTE:**
1. CITY OF TORONTO BENCHMARK NO. 060003 (12202000003), HAVING AN ELEVATION 150.00 METRES ABOVE MEAN SEA LEVEL, IS LOCATED AT THE CORNER OF STONE/BRICK WAREHOUSE BUILDING, SOUTH AND WEST OF THE 96th WELL, EAST OF CENTRAL PARK, BETWEEN BLOOR AND EAST OF THE PARKS BUILDING. BENCHMARK IN SOUTH FACE OF BUILDING 3.2 METRES WEST OF THE SOUTHWEST CORNER AND 0.16 METRES ABOVE GROUND LEVEL.
 2. CITY OF TORONTO BENCHMARK NO. E1143 (1219871143), HAVING AN ELEVATION 149.37 METRES ABOVE MEAN SEA LEVEL, IS LOCATED AT THE CORNER OF CONCRETE BASE OF MOST NORTHERLY HYDRO TOWER, 43 METRES WEST OF CENTRAL PARK, BETWEEN BLOOR AND EAST OF THE PARKS BUILDING. BENCHMARK IN SOUTH FACE OF BUILDING 4.0 METRES SOUTH OF EGLINTON AVENUE, 0.16 METRES ABOVE GROUND LEVEL.

- LEGEND:**
- EXISTING STORM MANHOLE
 - PROPOSED STORM MANHOLE
 - EXISTING SINGLE/DOUBLE CATCHBASIN
 - PROPOSED SINGLE/DOUBLE CATCHBASIN
 - ALL AREA DRAIN MANHOLES AND PLANTING BEDS SHALL HAVE NYLOPLAST DOME GRATE SUPPLIED BY ADS OR APPROVED EQUIVALENT PER CITY STANDARD DWG. T-1108.01
 - EXISTING SANITARY MANHOLE
 - PROPOSED SANITARY MANHOLE
 - EXISTING VALVE & BOX
 - PROPOSED VALVE & BOX
 - WATER METER ASSEMBLY TO BE INSTALLED IN IRRIGATION CHAMBER PER TOR. STD. T-1108-1-1.
 - WATER METER ASSEMBLY TO BE INSTALLED IN BUILDING (REFER TO MECHANICAL DRAWINGS)
 - INSULATION REFER TO DETAIL
 - ACCESSIBLE (FLOOR WITH GRATE) ONE RISE (150mm ABOVE GRADE)

- NOTE:**
1. CONTRACTOR SHALL ENSURE A MINIMUM OF 1.2m OF COVER OVER ALL PIPES EXCEPTING THE PIPE SHALL BE INSULATED PER THE DETAIL ON NOTES AND DETAILS PLAN DWG NO. 23038-CD1.
 2. ALL SUB-DRAINS SHALL BE MINIMUM 100mmØ PERFORATED PVC WITH GEOTEXTILE SOCK AS PER OPSS 802.010. ALL CATCHBASINS SHALL BE CARRIED OUT IN ACCORDANCE WITH CITY STANDARD DWG. T-705.010 WITH GOSS TRAP AND/OR CATCHBASIN MANHOLES.
 3. SUBDRAINS TO EXTEND A MINIMUM 5.0m UPSTREAM ON EITHER SIDE OF THE CATCHBASIN AND/OR CATCHBASIN MANHOLE TO BE CARRIED OUT IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND ONTARIO BUILDING CODES. REFER TO SUBMITTAL DETAIL ON NOTES AND DETAILS PLAN DWG NO. 23038-CD1.
 4. SUBDRAIN INSTALLATION UNDER PAVEMENT/CONCRETE SURFACES TO BE CARRIED OUT IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND ONTARIO BUILDING CODES. REFER TO SUBMITTAL DETAIL ON NOTES AND DETAILS PLAN DWG NO. 23038-CD1.

CONTRACTOR NOTES AND PRIOR TO CONSTRUCTION:

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SERVICES, WATERMANS, UTILITIES AND SEWERS AT POINTS OF CROSSING TO THEIR SATISFACTION AND MODIFY THEIR PROPOSAL ACCORDINGLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE ADJUSTMENT OF ALL UTILITIES, SEWERS AND WATERMANS AS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE SITE SERVING. THE CONTRACTOR SHALL REPORT IMMEDIATELY UPON DISCOVERY OF ANY CONFLICTS WITH EXISTING SERVICES, WATERMANS, UTILITIES AND SEWERS TO THE CITY ENGINEER AND THEIR SUPPLIERS SHALL BE ADVISED IMMEDIATELY UPON DISCOVERY OF ANY CONFLICTS WITH EXISTING SERVICES, WATERMANS, UTILITIES AND SEWERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND MODIFICATION OF CONCRETE BOUNDARY WALLS AND FOUNDATIONS PRIOR TO ANY WORK WITHIN THE MUNICIPAL BOUNDARY PERMITS FROM ANY STRUCTURE INCLUDING PERMANENT PLUMBING LOCATED OUTSIDE OF A STRUCTURE.

2. THE CONTRACTOR SHALL SECURE A ROAD OCCUPANCY PERMIT FROM THE MUNICIPAL BOUNDARY PERMITS PRIOR TO ANY WORK WITHIN THE MUNICIPAL BOUNDARY PERMITS FROM ANY STRUCTURE INCLUDING PERMANENT PLUMBING LOCATED OUTSIDE OF A STRUCTURE.

3. THE CONTRACTOR SHALL SECURE A ROAD OCCUPANCY PERMIT FROM THE MUNICIPAL BOUNDARY PERMITS PRIOR TO ANY WORK WITHIN THE MUNICIPAL BOUNDARY PERMITS FROM ANY STRUCTURE INCLUDING PERMANENT PLUMBING LOCATED OUTSIDE OF A STRUCTURE.

CHANGES			
4.	2024-12-18	ISSUED FOR ADDENDUM No 1	CC PE
3.	2024-11-22	RE-ISSUED FOR PERMIT AND SPA	CC PE
2.	2024-11-18	ISSUED FOR PERMIT AND TENDER	CC PE
1.	2024-11-08	ISSUED FOR SPA	CC PE
NO YYYY-MM-DD REVISION			DN/CH

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FIFA - EAST VSTS - CENTENNIAL PARK
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Toronto
Toronto Parks, Forestry and Recreation

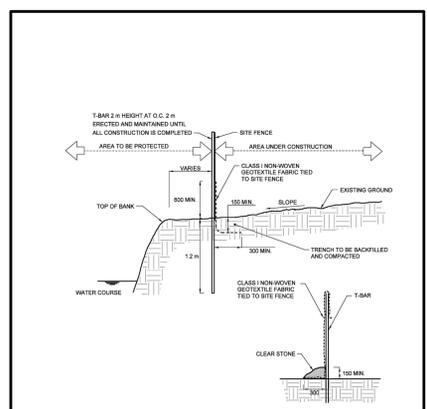
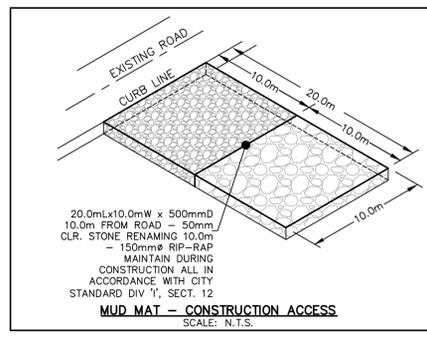
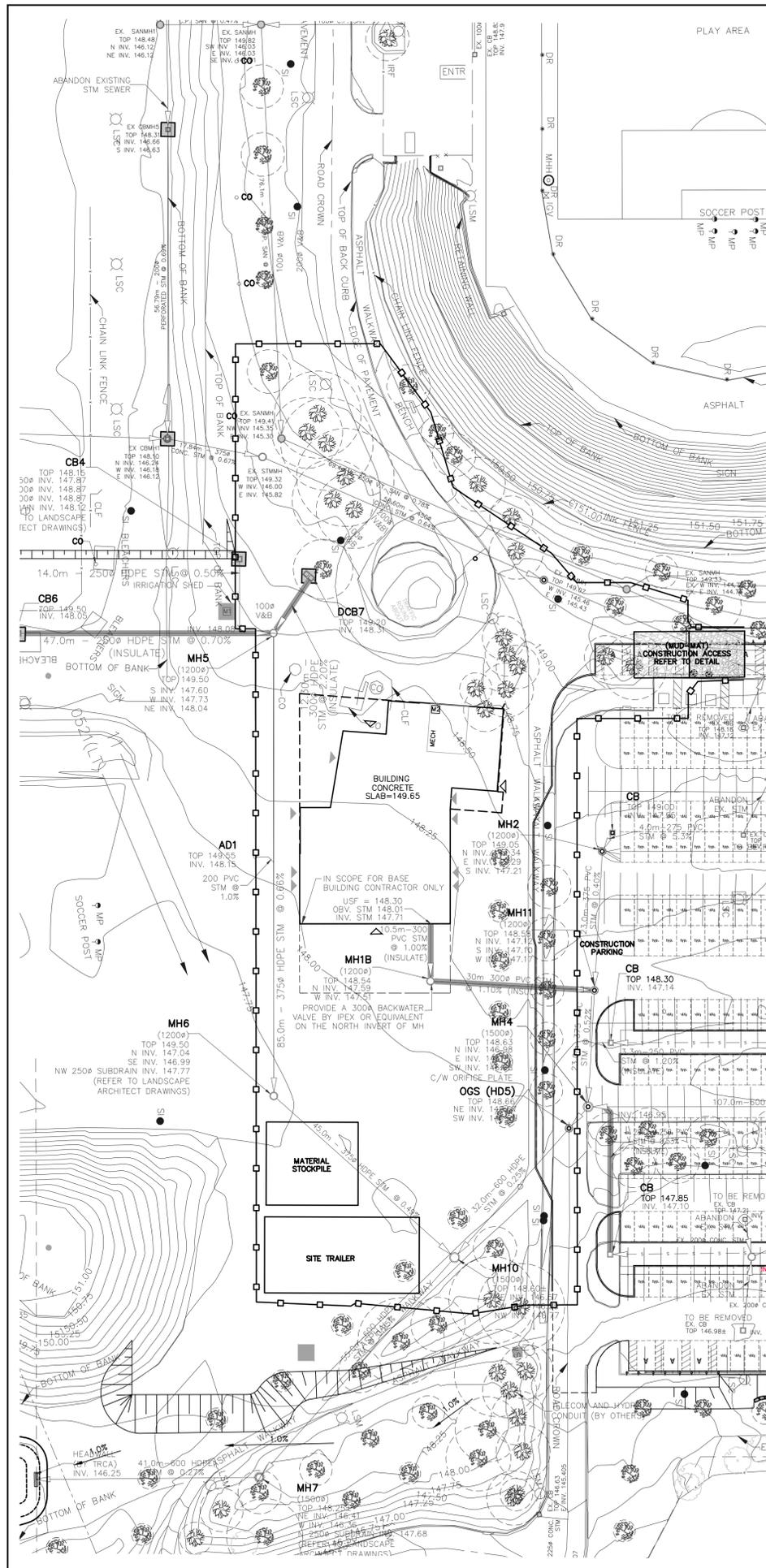
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PROJECT No: 23038

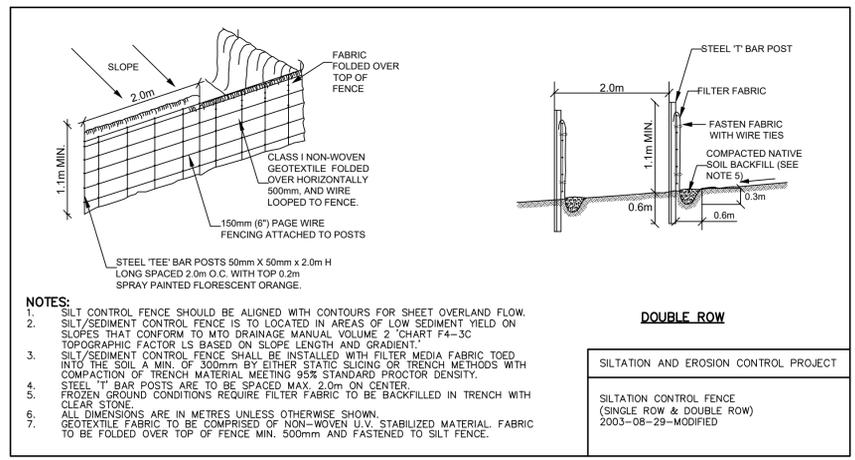
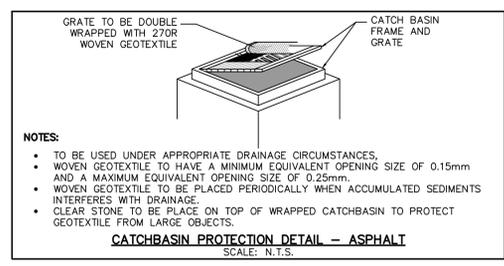
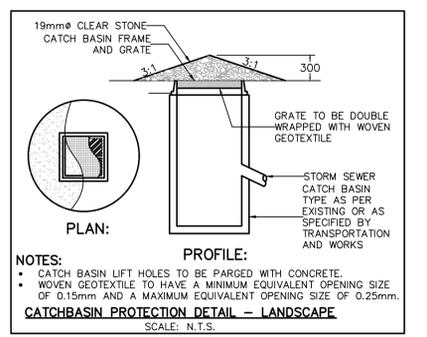
CSS-1

SERVICING PLAN / PUBLIC UTILITY PLAN - EAST VSTS
SHEET: 1 OF 8

PARKS, FORESTRY & RECREATION STANDARD DRAWING		REV 0	MAR 2021
GENERAL PARK SERVICE NOTES		T-1130.011	
		NTS	SHEET 1



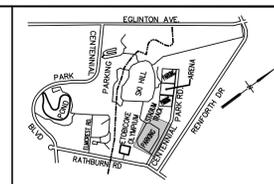
ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING	REV 1	NOV 2014
TORONTO	SEDIMENT CONTROL FENCE	T-219.130-1
		NTS SHEET 1



- EROSION AND SEDIMENT CONTROL NOTES:**
1. SEDIMENT BARRIERS, CHECK DAMS, AND TEMPORARY CONSTRUCTION ACCESS TO BE INSTALLED PRIOR TO THE BEGINNING OF CONSTRUCTION.
 2. ALL SEDIMENT CONTROL DEVICES TO BE ROUTINELY INSPECTED AND MAINTAINED IN PROPER WORKING ORDER UNTIL AREA IS STABILIZED.
 3. IF NECESSARY, TRUCKS WILL BE WASHED DOWN BEFORE LEAVING THE SITE.
 4. THE SITE WILL BE WET DOWN IF NECESSARY TO CONTROL DUST.
 5. ALL CONSTRUCTION EQUIPMENT MUST BE PARKED ONSITE.
 6. ALL CONSTRUCTION ACTIVITY WILL COMPLY WITH CITY OF TORONTO NOISE BYLAW.
 7. SEDIMENT CONTROL FENCE TO BE AS PER CITY OF TORONTO STANDARD T-219.130-1.
 8. ALL CONSTRUCTION VEHICLES TO ENTER AND EXIT SITE FROM TEMPORARY CONSTRUCTION ACCESS.
 9. ALL TOPSOIL STOCKPILES TO BE SURROUNDED WITH SEDIMENT CONTROL FENCING.
 10. FILTER FABRIC TO BE PLACED UNDER GRATES ON ALL CATCHBASINS TO TRAP SEDIMENT. SILT TRAPS ARE TO BE CLEANED REGULARLY AND ARE NOT TO BE REMOVED UNTIL SUCH TIME AS THE CURBS ARE CONSTRUCTED AND THE BOULEVARDS TO HAVE SOD.
 11. FILTER FABRIC FOR SILT CONTROL TO BE TERRA FIX 270R OR APPROVED EQUIVALENT.
 12. FILTER CLOTH WILL BE PLACED ON THE CATCHBASINS ON PUBLIC STREET ACROSS THE PROPERTY'S FRONTAGE.
 13. IN THE CASE OF ANY CONFLICT WITH ANOTHER PLAN, THIS PLAN PREVAILS ONLY IN RESPECT TO CONSTRUCTION MEASURES AND ACTIVITIES SUCH AS CONSTRUCTION ACCESS, SILT FENCE, SECURITY FENCING, SEDIMENT CONTROL, AND MUD MATS.
 14. STREET SWEEPING, CATCH BASIN CLEANING AND DUST CONTROL ARE THE RESPONSIBILITY OF THE DEVELOPER AND MUST BE KEPT UNDER CONTROL ON ALL ROADWAYS TO THE SATISFACTION OF THE CITY.

- ADDITIONAL EROSION AND SEDIMENT CONTROL NOTES:**
1. NO CONSTRUCTION ACTIVITY OR MACHINERY TO OPERATE OUTSIDE THE SILT FENCING.
 2. PROVISION OF A MUD MAT CONSTRUCTION ENTRANCE IN ORDER TO CONTROL THE TRACKING OF SEDIMENT AND DEBRIS MUST BE CONTROLLED ON ALL ROADWAYS TO THE SATISFACTION OF THE CITY.
 3. INSTALLATION AND MAINTENANCE OF CATCHBASIN SEDIMENT BARRIERS THROUGHOUT THE SITE AND ON PUBLIC STREET ACROSS THE PROPERTY'S FRONTAGE DURING ALL CONSTRUCTION ACTIVITIES IN ORDER TO REDUCE AND TRAP SEDIMENT ON SITE. CONSTANT ATTENTION WILL BE PAID TO MAINTAINING THEM SILT FREE.
 4. EROSION AND SEDIMENT CONTROL DEVICES WILL BE REMOVED ONLY AFTER SITE HAS BEEN STABILIZED AND PAVING OPERATIONS ARE COMPLETE.
 5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES IN WORKING CONDITIONS AT ALL TIMES TO THE SATISFACTION OF THE CITY OF TORONTO.
 6. THE ESC STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO PREVENT EROSION AND SEDIMENT CONTROL FROM THE NATURAL ENVIRONMENT. THE TRCA ENFORCEMENT OFFICE WILL BE CONTACTED IMMEDIATELY SHOULD THE EROSION AND SEDIMENT CONTROL PLANS CHANGE FROM THE APPROVED PLANS. FAILED ESC MEASURES WILL BE REPAIRED IMMEDIATELY.
 7. INSPECTION OF THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES WILL OCCUR:
 - ON A WEEKLY BASIS
 - AFTER EVERY SIGNIFICANT RAINFALL EVENT
 - AFTER SIGNIFICANT SNOW MELT EVENTS, AND
 - DAILY DURING EXTENDED RAIN OR SNOWMELT PERIODS.
 8. ALL DAMAGED ESC MEASURES SHOULD BE REPAIRED AND/OR REPLACED WITHIN 48 HOURS OF THE INSPECTION.

CONTRACTOR TO REFER TO CURRENT EROSION & SEDIMENT CONTROL GUIDELINES FOR URBAN CONSTRUCTION DECEMBER 2006, FOR ADDITIONAL ESC MEASURES TO BE IMPLEMENTED AS REQUIRED BY SITE CONDITIONS AND WEATHER.



- KEY PLAN (N.T.S.)**
- NOTES:**
1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
 2. SURVEY COMPLETED BY TEAM SURVEYING LIMITED, O.L.S.
 3. DO NOT SCALE DRAWINGS.
 4. REPORT ALL ERRORS, OMISSIONS OR DISCREPANCIES TO URBAN WATERSHED GROUP LIMITED IMMEDIATELY UPON DISCOVERY.
 5. USE ONLY LATEST REVISION DRAWINGS OF THOSE THAT ARE MARKED "SIGNED FOR CONSTRUCTION".
 6. THE DRAWINGS ARE THE PROPERTY OF URBAN WATERSHED GROUP LIMITED AND MUST BE RETURNED ON COMPLETION OF THE PROJECT. ANY UNAUTHORIZED USE OF THIS PLAN IS PROHIBITED.
 7. URBAN WATERSHED GROUP SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES WHICH MAY ARISE FROM THE USE OF THIS DRAWING FOR TRENCH, STORMING, CONSTRUCTION OR OTHER PURPOSES PRIOR TO FINAL APPROVAL AND PRIOR TO PERMITS BEING GRANTED FROM ALL AUTHORITIES HAVING JURISDICTION.
- BENCHMARK NOTE:**
- ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF TORONTO BENCHMARKS:
1. CITY OF TORONTO BENCHMARK NO. 020003 (1202000003), HAVING AN ELEVATION 150.00 METRES BENCHMARK LOCATED AT CENTENNIAL PARK STONE/BRICK WAREHOUSE BUILDING, SOUTH AND WEST OF THE SO W.L. EAST OF CENTENNIAL PARK BOULEVARD AND EAST OF THE PARK BARRIERS FACILITIES. BENCHMARK IN SOUTH FACE OF BUILDING 3.2 METRES WEST OF THE SOUTH FACE OF BOULEVARD AND 0.16 METRES ABOVE GROUND LEVEL.
 2. CITY OF TORONTO BENCHMARK NO. E1143 (1251967143), HAVING AN ELEVATION 151.25 METRES BENCHMARK LOCATED AT 400 METRES SOUTH OF EGLINTON AVENUE, 0.16 METRES ABOVE GROUND LEVEL.

- LEGEND:**
- PROPERTY LINE
 - EXISTING ELEVATION
 - PROPOSED ELEVATION
 - EXISTING WATER CONTROL WITH ELEVATION
 - EXISTING SHEET FLOW
 - PROPOSED SHEET FLOW
 - EXISTING STORM MANHOLE
 - PROPOSED STORM MANHOLE
 - EXISTING SINGLE/DOUBLE CATCHBASIN
 - PROPOSED SINGLE/DOUBLE CATCHBASIN
 - ALL AREAS DESIGNATED AS LANDSCAPED AREAS AND PLANTING BEDS SHALL HAVE NOT LEAST SOME GRASS SUPPLIED BY AGRICULTURAL EQUIPMENT
 - PROPOSED CLEANOUT
 - EXISTING SANITARY MANHOLE
 - PROPOSED SANITARY MANHOLE
 - EXISTING VALVE & BOX
 - PROPOSED VALVE & BOX
 - EXISTING CURB STOP
 - PROPOSED SILT FENCE AS PER T-219.130 TO BE INSTALLED AS SHOWN. INDICATED ON THIS PLAN REFER TO DETAIL.
 - (MUD-MAT) CONSTRUCTION ACCESS REFER TO DETAIL.
 - PROPOSED CATCHBASIN SEDIMENT CONTROLS REFER TO DETAIL.

CONTRACTOR'S NOTES AND PRIOR TO CONSTRUCTION:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AUTHORITIES AND FOR THE PROTECTION OF ALL UTILITIES AND ADJACENT PROPERTIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE PROTECTION OF ALL UTILITIES, SERVICES AND MAINTENANCE AS REQUIRED BY THE CITY OF TORONTO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES, SERVICES AND MAINTENANCE AS REQUIRED BY THE CITY OF TORONTO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES, SERVICES AND MAINTENANCE AS REQUIRED BY THE CITY OF TORONTO.
2. AT THE TIME OF TENDER THE CONTRACTOR AND THEIR SUPPLIERS SHALL REVIEW THE TECHNICAL INFORMATION FOR THE PROJECT AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE MUNICIPAL WORKS DEPARTMENT PRIOR TO ANY WORK WITHIN THE MUNICIPAL RIGHT-OF-WAY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE MUNICIPAL WORKS DEPARTMENT PRIOR TO ANY WORK WITHIN THE MUNICIPAL RIGHT-OF-WAY.
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5. ALL EARTH MOVING OPERATIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE TRCA ENFORCEMENT OFFICE'S STANDARD PROCTOR DENSITY. ALL MATERIAL SHALL BE HELD RESPONSIBLE TO PROPERLY DISPOSE OF UNDESIRABLE OR HAZARDOUS MATERIAL.

CHERIE NG ARCHITECT INC.

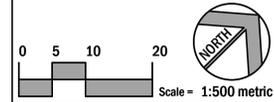
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3/2024-11-22	RE-ISSUED FOR PERMIT AND SPA	CC/PE
2/2024-11-18	ISSUED FOR PERMIT AND TENDER	CC/PE
1/2024-11-08	ISSUED FOR SPA	CC/PE
NO YYYY-MM-DD	REVISION	DN/CH

1590 AIRPORT ROAD, SUITE 304
GALEON EAST, ONTARIO, L7C 1H9
PHONE: (905) 881-1481 FAX: (905) 881-1481
Urban Watershed Group Ltd.
A TORONTO CITY PARTNER
urbanwatershed.com

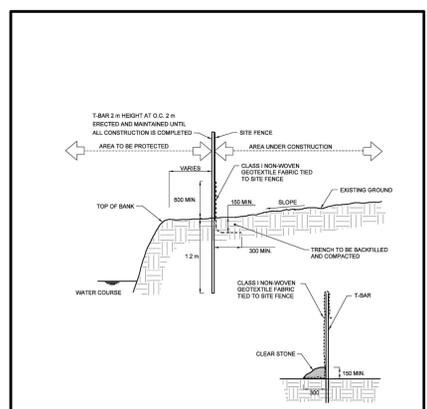
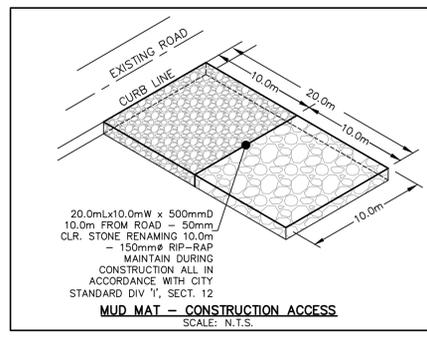
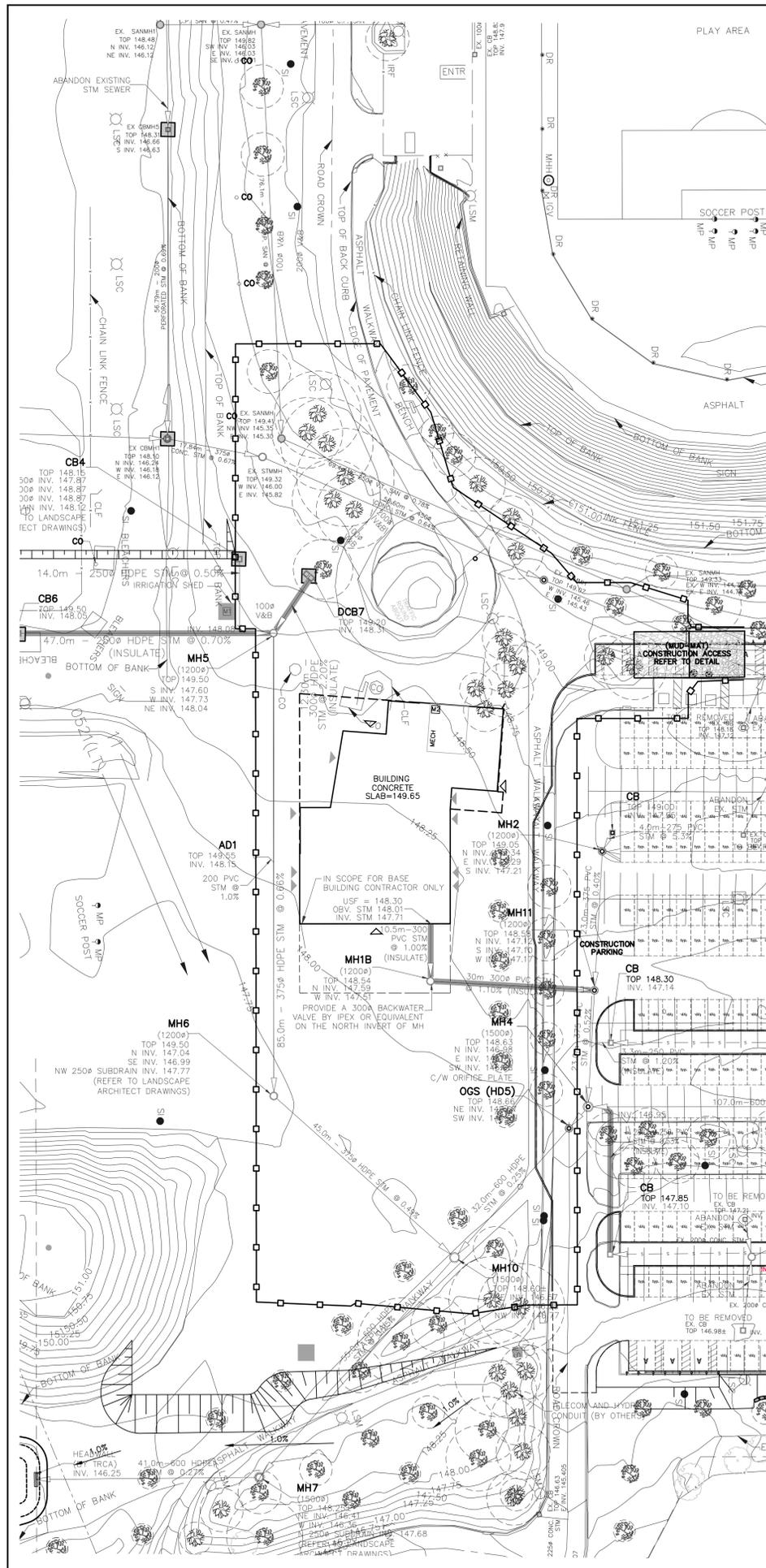
DESIGNED BY:
ALAN MCEWEN
LICENSED PROFESSIONAL ENGINEER
A. W. MCEWEN
100530591
December 18, 2024
PROVINCE OF ONTARIO

FIFA - EAST VSTS - CENTENNIAL PARK
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3

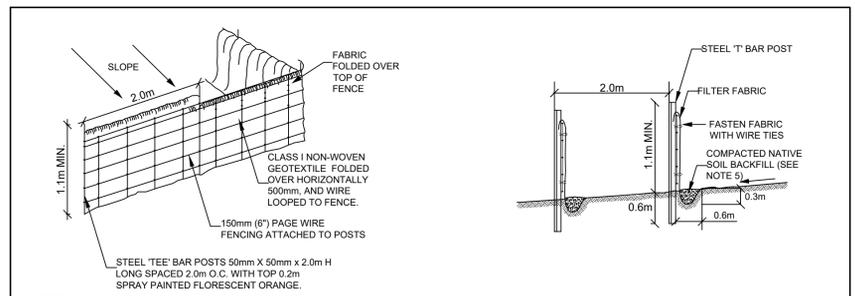
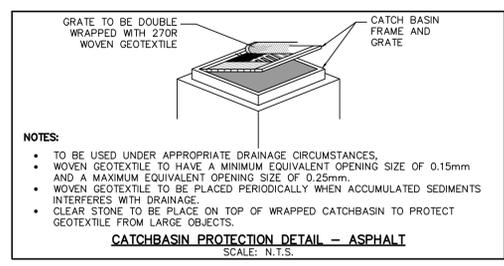
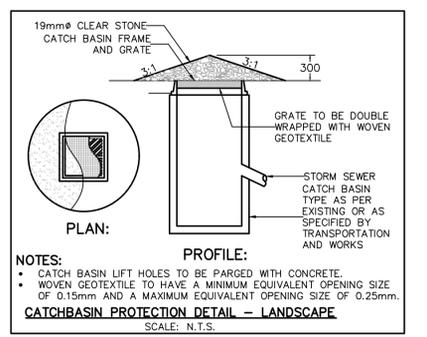
TORONTO
Toronto Parks, Forestry and Recreation



PROJECT No: 23038
CMP-1
CONSTRUCTION MANAGEMENT
PLAN - EAST VSTS
SHEET: 4 OF 8



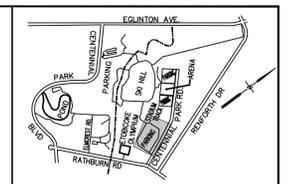
ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING	REV 1	NOV 2014
SEDIMENT CONTROL FENCE	T-219.130-1	
	NTS	SHEET 1



- EROSION AND SEDIMENT CONTROL NOTES:**
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 - DAILY DURING EXTENDED RAIN OR SNOWMELT PERIODS.
 8. ALL DAMAGED ESC MEASURES SHOULD BE REPAIRED AND/OR REPLACED WITHIN 48 HOURS OF THE INSPECTION.

CONTRACTOR TO REFER TO CURRENT EROSION & SEDIMENT CONTROL GUIDELINES FOR URBAN CONSTRUCTION DECEMBER 2006, FOR ADDITIONAL ESC MEASURES TO BE IMPLEMENTED AS REQUIRED BY SITE CONDITIONS AND WEATHER.



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- NOTES:**
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 2. SURVEY COMPLETED BY TBM SURVEYING LIMITED, O.L.S.
 3. DO NOT SCALE DRAWINGS.
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 7. URBAN WATERSHED GROUP SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES WHICH MAY ARISE FROM THE USE OF THIS DRAWING FOR TENDER, STATING, CONSTRUCTION OR OTHER PURPOSES PRIOR TO FINAL APPROVAL AND PRIOR TO PERMITS BEING GRANTED FROM ALL AUTHORITIES HAVING JURISDICTION.
- BENCHMARK NOTE:**
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 2. CITY OF TORONTO BENCHMARK NO. E1143 (1251967143), HAVING AN ELEVATION 151.50 METRES BENCHMARK LOCATED AT 40 METRES WEST OF CENTENNIAL PARK BOULEVARD AND 0.16 METRES SOUTH OF EGLINTON AVENUE, 0.16 METRES ABOVE GROUND LEVEL.

- LEGEND:**
- PROPERTY LINE
 - EXISTING ELEVATION
 - PROPOSED ELEVATION
 - EXISTING WATER CONTROL WITH ELEVATION
 - EXISTING SHEET FLOW
 - PROPOSED SHEET FLOW
 - EXISTING STORM MANHOLE
 - PROPOSED STORM MANHOLE
 - EXISTING SINGLE/DOUBLE CATCHBASIN
 - PROPOSED SINGLE/DOUBLE CATCHBASIN
 - AREA OPEN FROM LANDSCAPED AREA AND PLANTING BEDS SHALL HAVE NOT LEAST 50% GRADE SUPPLIED BY ADS OR APPROVED EQUIVALENT
 - PROPOSED CLEANOUT
 - EXISTING SANITARY MANHOLE
 - PROPOSED SANITARY MANHOLE
 - EXISTING VALVE & BOX
 - PROPOSED VALVE & BOX
 - EXISTING CURB STOP
 - PROPOSED SILT FENCE AS PER T-219.130 TO BE INSTALLED AS SHOWN INDICATED ON THIS PLAN REFER TO DETAIL
 - (MUD-MAT) CONSTRUCTION ACCESS REFER TO DETAIL
 - PROPOSED CATCHBASIN SEDIMENT CONTROLS REFER TO DETAIL

CONTRACTOR'S NOTES AND PRIOR TO CONSTRUCTION:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TORONTO AND THE TRCA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE OBTAINMENT OF ALL UTILITIES, PERMITS AND APPROVALS AS REQUIRED BY THE CITY OF TORONTO AND THE TRCA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OBTAINMENT OF ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TORONTO AND THE TRCA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OBTAINMENT OF ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TORONTO AND THE TRCA.
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3. ALL EARTH MOVING OPERATIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE TRCA ENFORCEMENT OFFICE'S STANDARD PROCTOR DENSITY. ALL MATERIAL SHALL BE HELD RESPONSIBLE TO PROPERLY DISPOSE OF UNDESIRABLE OR EXCESS SOIL.

CHERIE NG ARCHITECT INC.		
4/2024-12-18	ISSUED FOR ADDENDUM No.1	CC/PE
3/2024-11-22	RE-ISSUED FOR PERMIT AND SPA	CC/PE
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1/2024-11-08	ISSUED FOR SPA	CC/PE
NO YYYY-MM-DD	REVISION	DN/CH

1590 AIRPORT ROAD, SUITE 504
GALEON EAST, ONTARIO, L7C 4H6
PHONE: (416) 491-1800 FAX: (416) 491-1801
urbanwatershed.com
urbanwatershed@gmail.com

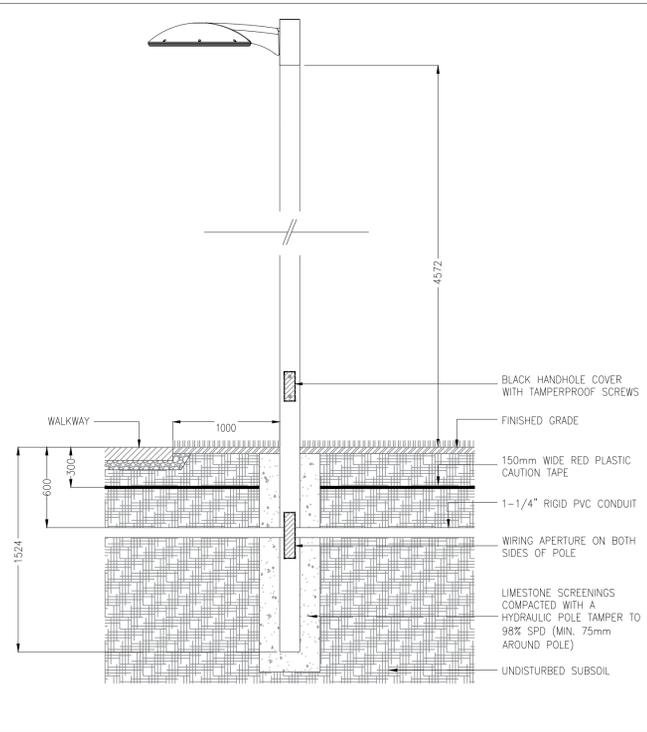
DESIGNED BY
A.W. MCEWEN
100530591
December 18, 2024
PROVINCE OF ONTARIO

FIFA - EAST VSTS - CENTENNIAL PARK
256 Centennial Park Road,
Toronto, Ontario, M9C 5N3

Toronto
Toronto Parks, Forestry and Recreation

0 5 10 20
Scale = 1:500 metric

PROJECT No: 23038
CES-1
EROSION & SEDIMENT CONTROL PLAN - EAST VSTS
SHEET: 3 OF 8



MJS CONSULTANTS INC.
420 MAIN STREET EAST, SUITE 473
MILTON, ONTARIO L9T 5G3

CENTENNIAL PARK FIFA EAST VSTS

DATE: DECEMBER, 2024

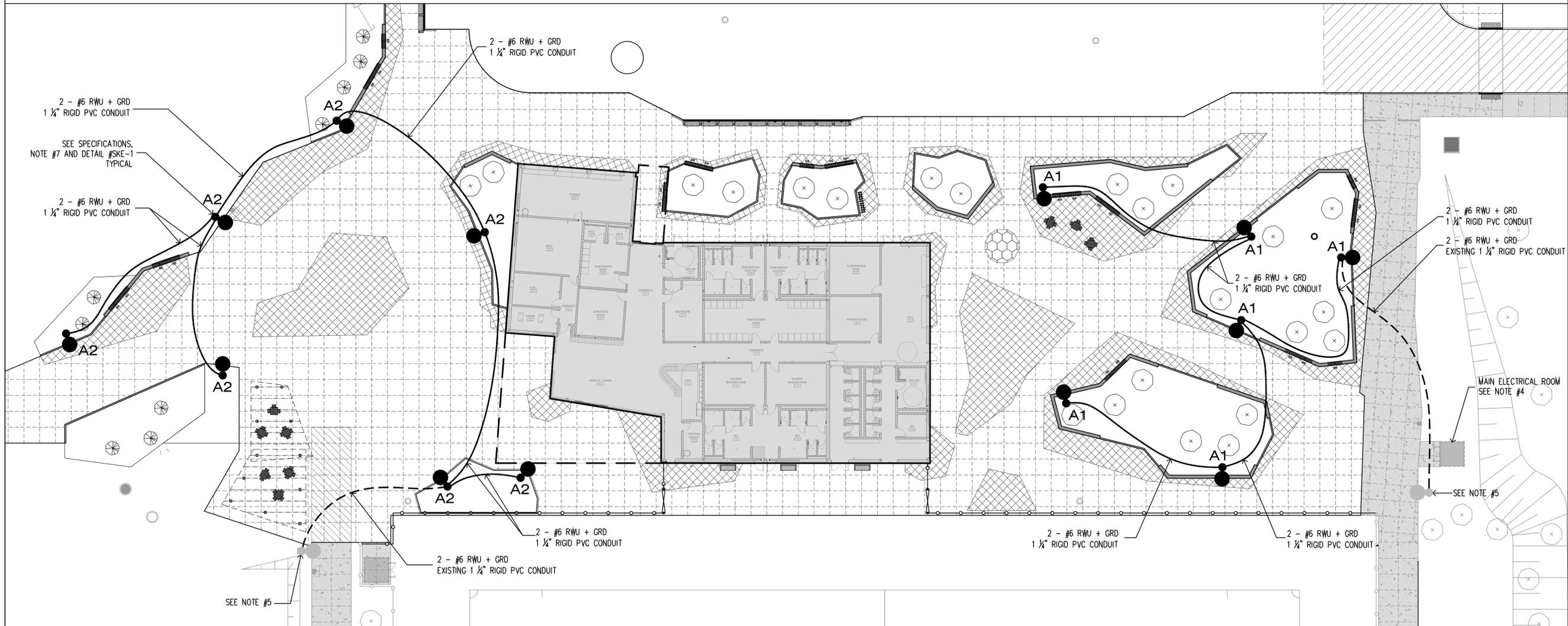
SCALE: NOT TO SCALE

SKE-1

TYPE 'A', 'A1' & 'A2' LIGHTING ASSEMBLY

ELECTRICAL NOTES

1. Electrical contractors quoting on this project must visit the FIFA East VSTS site located in Centennial Park at 56 Centennial Park Road prior to the submission of their quotation to familiarize themselves with the existing conditions. No allowance will be made later for any expense incurred through failure to make this examination.
2. Arrange and pay for locates for all buried services before starting any work in accordance with TSSA requirements. Any damaged services, trees or other plant materials will be replaced or repaired to the satisfaction of the contract inspector. All costs for this work will be the responsibility of the electrical contractor.
3. The conduit routing indicated on the drawing is to be considered schematic only. Do not route any conduits under the bases of any structures, under play areas or proposed fence posts. Generally, where possible route all conduits 2000mm offset of all existing and proposed services. Keep all of the trenches as far away as possible from the drip lines of all existing and proposed trees to avoid damaging their root systems. All costs for this work will be the responsibility of the electrical contractor.
4. The existing walkway lighting system in the park is supplied from Panel 'DP-8' located within the precast concrete Main Electrical Room where noted on the drawings. Contact the City of Toronto Parks, Forestry and Recreation department to arrange for access.
5. Hand excavate to locate and expose the below grade apertures of the existing walkway lighting assemblies and the ends of the 1-1/4" rigid PVC conduits where noted on the drawings. Extend the new branch circuit wiring as detailed through the below grade apertures up to the pole hand holes and connect to the existing 347 volt site lighting circuit. Test the entire site lighting system for correct operation upon project completion.
6. After all of the service locates have been completed, stake out the proposed lighting pole locations to confirm that there are no conflicts with any proposed or existing plant materials and services. If conflicts occur, notify the consultant, prior to excavating for the pole base holes or the underground conduits.
7. Each pole and luminaire is to be positioned level and squarely at 90 degrees to the lines of the walkways (the optical pattern of the LED array within the luminaire is to be parallel with the walkway) unless otherwise indicated on the drawing. The electrical contractor will verify the position of the pole and luminaire to ensure that the optical pattern is distributing the light onto the hard surfaces as intended. See detail #SKE-1.
8. All conduits will be 1-1/4" rigid, heavywall, PVC with solvent weld fittings buried with a minimum cover of 600mm. All conduits will have a #8 stranded, TW green ground wire installed with the conductors. All conduits will have a 150mm wide red plastic "Caution" tape buried 300 mm above the conduit, for the full length of the conduit. Polypipe, ENT and Type II PVC duct will not be acceptable. All wire will be #6 RWJ stranded copper, 1000 volt, 90 degree C rated. Use black and white insulated wire to properly identify the phase and neutral. The use of phasing tape will not be acceptable.
9. The electrical contractor will complete a night time site visit to verify the operation of the entire lighting system including all luminaires prior to their request for final site verification by the consultant.
10. All work must be in accordance with the Ontario Electrical Safety Code, 28TH Edition (2021). The electrical contractor will be required to submit a copy of the Electrical Safety Authority Certificate of Acceptance, issued to the ECRA licensed electrical contractor, at the completion of the project. Final acceptance and certification of this project by the electrical consultant will not be provided prior to the receipt of the ESA Certificate of Acceptance. Provide the "As-built" drawings, warranty letter and all other required final documentation upon the completion of this project.



CHERIE NG ARCHITECT INC.
www.cherienng.com
t. 416.898.1979

VFA
VICTOR FORD & ASSOCIATES INC.
LANDSCAPE ARCHITECTS
322-192 Spadina Avenue, Toronto, Ontario M5T 2C2
www.victorford.ca

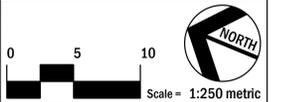


Electrical Consultant

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VFA Project: 2309

E1

ELECTRICAL PLAN, DETAIL AND NOTES

and date (06/24 13:06:00)