- 1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND LANDSCAPE DRAWINGS.
- 2. ALL SERVICES, MATERIALS, CONSTRUCTION METHODS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND REGULATIONS OF THE: CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS. ONTARIO PROVINCIAL SPECIFICATION STANDARD SPECIFICATION (OPSS) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD), UNLESS OTHERWISE SPECIFIED, TO THE SATISFACTION OF THE CITY AND THE CONSULTANT.
- 3. THE POSITION OF EXISTING POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING THE COURSE OF CONSTRUCTION. ANY RELOCATION OF EXISTING UTILITIES REQUIRED BY THE DEVELOPMENT OF SUBJECT LANDS IS TO BE UNDERTAKEN AT CONTRACTOR'S EXPENSE.
- 4. THE CONTRACTOR MUST NOTIFY ALL EXISTING UTILITY COMPANY OFFICIALS FIVE (5) BUSINESS DAYS PRIOR TO START OF CONSTRUCTION AND HAVE ALL EXISTING UTILITIES AND SERVICES LOCATED IN THE FIELD OR EXPOSED PRIOR TO THE START OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO HYDRO, BELL, CABLE TV, AND CONSUMERS GAS LINES.
- 5. ALL TRENCHING AND EXCAVATIONS TO BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 6. REFER TO ARCHITECTS PLANS FOR BUILDING DIMENSIONS, ELEVATIONS, LAYOUT AND REMOVALS. REFER TO LANDSCAPE PLAN FOR LANDSCAPED DETAILS AND OTHER RELEVANT INFORMATION. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 7. TOPOGRAPHIC SURVEY COMPLETED AND PROVIDED BY STANTEC GEOMATICS LTD. DATED JUNE 18, 2024. CONTRACTOR TO VERIFY IN THE FIELD PRIOR TO CONSTRUCTION OF ANY WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 8. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. VERIFY THAT JOB BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED.
- 9. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR DRAIN OUTLETS ARE PROVIDED.
- 10. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE WITH STEP JOINTS OF 500mm WIDTH MINIMUM.
- 11. ALL DISTURBED AREAS OUTSIDE PROPOSED GRADING LIMITS TO BE RESTORED TO ORIGINAL ELEVATIONS AND CONDITIONS UNLESS OTHERWISE SPECIFIED. EXISTING PARKING LOT SHALL BE RE-ASPHALTED AT EXISTING GRADES EXCEPT AS NOTED TO EVEN OUT GRADES. ALL RESTORATION SHALL BE COMPLETED WITH THE GEOTECHNICAL REQUIREMENTS FOR BACKFILL AND COMPACTION.
- 12. ABUTTING PROPERTY GRADES TO BE MATCHED.
- 13. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION, INCLUDING WATER PERMIT AND ROAD CUT PERMIT
- MINIMIZE DISTURBANCE TO EXISTING VEGETATION DURING THE EXECUTION OF ALL WORKS.
- 15. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE PROPOSED BUILDING, PARKING AND ROADWAY LOCATIONS.
- 16. AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. STORM SEWER, SANITARY SEWER, WATER, ETC.) THE CONTRACTOR SHALL DETERMINE THE PRECISE LOCATION AND DEPTH OF EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
- 17. PRIOR TO CONSTRUCTION, A GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO IS TO INSPECT ALL SUB-SURFACES FOR FOOTINGS, SERVICES AND PAVEMENT STRUCTURES.
- 18. CONTRACTOR TO OBTAIN POST-CONSTRUCTION TOPOGRAPHIC SURVEY PERFORMED BY CERTIFIED OLS OR P.ENG. CONFIRMING COMPLIANCE WITH DESIGN GRADING AND SERVICING. SURVEY IS TO INCLUDE LOCATION AND INVERTS FOR BURIED UTILITIES.
- 19. PROVIDE CCTV INSPECTION REPORT FOR ALL SEWERS AND CATCHBASIN LEADS 200MM DIAMETER AND LARGER. REPEAT CCTV INSPECTION FOLLOWING RECTIFICATION OF ANY DEFICIENCIES.

20. REPORT REFERENCES

- 20.1. GEOTECHNICAL INVESTIGATION PROPOSED EVENT CENTRE LANSDOWNE PARK REDEVELOPMENT, REPORT NO. PG6655-1, MAY
- 20.2. FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT FOR LANSDOWNE LIVE OTTAWA SPORT AND ENTERTAINMENT GROUP, PROJECT NO. 09-378, JANUARY 2012, BY DSEL.
- FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT STUDY FOR LANSDOWNE PARK REDEVELOPMENT 2.0, PROJECT NO. CA0000286.1662, SEPTEMBER 2023, BY WSP.
- STORMWATER MANAGEMENT DESIGN REPORT FOR LANSDOWNE URBAN PARK, FEBRUARY 2012, BY STANTEC CONSULTING LTD. SERVICING REPORT FOR LANSDOWNE PARK EVENT CENTRE, REPORT NO.CA0033920.1056, FEBRUARY 2025, PREPARED BY WSP.
- SOTRMWATER MANAGEMENT DESIGN REPORT FOR LANSDOWNE PARK EVENT CENTRE, REPORT NO.CA0033920.1056 FEBRUARY 2025, PREPARED BY WSP. DRAFT ENVIRONMENTAL PROVISIONS - LANSDOWNE PARK 2.0 - EVENT CENTRE LANDS AND GREAT LAWN, JANUARY 20, 2024, BY

ROADWORKS AND WORK IN PUBLIC RIGHTS OF WAY

- 1. CONTRACTOR TO REINSTATE ROAD CUTS AS PER CITY OF OTTAWA DETAIL R10.
- 2. GEOTECHNICAL INVESTIGATION PROPOSED EVENT CENTRE LANSDOWNE PARK REDEVELOPMENT, REPORT NO. PG6655-1, MAY 2024, BY PATTERSON GROUP.
- 3. CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING, TO THE SATISFACTION OF THE GEOTECHNICAL CONSULTANT PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL.
- 4. FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS.
- 5. CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR B MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF GRANULAR B MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 6. GRANULAR A MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR B PLACEMENT.
- 7. CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR A MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF GRANULAR A MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 8. ASPHALT MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR
- 9. CONTRACTOR TO SUPPLY, PLACE AND COMPACT ASPHALT MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF ASPHALT MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 10. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS, AND FOR PROVIDING THE CONSULTANT WITH VERIFICATION PRIOR TO PLACEMENT.
- 11. ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY CONSULTANT. CONSULTANT TO DETERMINE APPROPRIATE DISPOSAL METHOD/LOCATION.
- 12. PAVEMENT STRUCTURE (MATERIAL TYPES AND THICKNESS) TO BE AS SPECIFIED IN THE GEOTECHNICAL REPORT.

STORM SEWERS AND STRUCTURES

- 1. ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW STORM SEWERS. SERVICES AND CB LEADS.
- STORM SEWERS 450mm DIAMETER AND SMALLER SHALL BE PVC SDR-35, WITH RUBBER GASKET PER CSA
- STORM SEWER LARGER THAN 450mm SHALL BE REINFORCED CONCRETE CLASS 100D. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE ACCORDANCE WITH CSA A257.2. PIPE SHALL BE JOINTED WITH STD. RUBBER GASKETS AS PER CSA A257.3.
- 4. SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
- 5. ALL STORM MANHOLES TO BE AS PER STORM STRUCTURE TABLE
- ANY NEW OR EXISTING STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
- 7. ALL CATCHBASIN LEADS TO BE MINIMUM 200mm DIAMETER AT MINIMUM 1.0% SLOPE UNLESS OTHERWISE
- 8. SAFETY PLATFORMS SHALL BE AS PER OPSD 404.02.
- DROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01.
- 10. STORM SEWER MANHOLES SERVICING LOCAL SEWERS LESS THAN 900mm SHALL BE CONSTRUCTED WITH A 300mm SUMP. FOR STORM SEWERS 900mm AND OVER USE BENCHING IN ACCORDANCE WITH OPSD 701.021.
- 11. STORM CATCHBASINS AS PER OPSD 705.010 AND FRAME/COVER AS PER CITY STANDARD DRAWINGS S19. STORM CBMH'S AS INDICATED IN TABLE WITH SUMP, ADJUSTMENT SECTIONS SHALL BE AS PER OPSD 704.010.
- 12. INSTALLATION OF FLOW CONTROL ICD'S TO BE VERIFIED BY QUALITY VERIFICATION ENGINEER RETAINED BY CONTRACTOR.
- 13. PROVIDE BACKWATER VALVE ON FOUNDATION DRAIN, STORM DISCHARGE, AND OVERFLOW DISCHARGE PER
- 14. ALL CATCHBASINS EXCLUDING LANDSCAPE CATCHBASINS TO HAVE 150 MMØ PERFORATED PIPE FOR 3.0M ON ALL AVAILABLE SIDES AT AN ELEVATION OF 300mm BELOW SUBGRADE LEVEL AS PER CITY OF OTTAWA

SANITARY SEWER AND STRUCTURES

STANDARD DRAWING 'R1'

- ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW SANITARY PIPING.
- SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR-35 (UNLESS SPECIFIED OTHERWISE) WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH CSA B-182.2,3,4.
- SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
- 4. ALL SANITARY MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSD 701.01. FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.
- MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES AS PER THE OPSD 701.021
- ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
- 7. SAFETY PLATFORMS SHALL BE AS PER OPSD 404.02.
- 8. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01.
- 9. PROVIDE BACKWATER VALVE FOR BUILDING SANITARY SERVICES PER \$14.1

WATERMAIN

- 1. ALL WATERMAIN AND WATERMAIN APPURTANANCES, MATERIALS, CONSTRUCTION AND TESTING METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA AND MINISTRY OF ENVIRONMENT STANDARDS AND
- 2. ALL WATERMAIN 300mm DIAMETER AND SMALLER TO BE POLY VINYL CHLORIDE (PVC) CLASS 150 DR 18 MEETING AWWA SPECIFICATION C900.
- 3. ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE. WHERE WATERMAINS CROSS OVER OTHER UTILITIES, A MINIMUM 0.30m CLEARANCE SHALL BE MAINTAINED; WHERE WATERMAINS CROSS UNDER OTHER UTILITIES, A MINIMUM 0.50m CLEARANCE SHALL BE MAINTAINED. WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED, THE WATERMAIN SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2. WHERE 2.4m MINIMUM DEPTH CANNOT BE ACHIEVED, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W22. WHERE A WATERMAIN IS IN CLOSE PROXIMITY TO AN OPEN STRUCTURE, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W23.
- CONCRETE THRUST BLOCKS AND MECHANICAL RESTRAINTS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, REDUCERS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W25.3 & W25.4.
- 5. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS AS PER CITY OF OTTAWA STANDARD W40 & W42.
- 6. ALL VALVES AND VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARD
- 7. FIRE HYDRANT LOCATION AND INSTALLATION AS PER CITY OF OTTAWA STANDARD W18 & W19. CONTRACTOR TO PROVIDE FLOW TEST AND PAINTING OF NEW HYDRANT IN ACCORDANCE WITH CITY STANDARDS.
- 8. IF WATER MAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

EROSION AND SEDIMENT CONTROL

** CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES. **

PRIOR TO START OF CONSTRUCTION:

1.1. INSTALL SILT FENCE IN LOCATION SHOWN.

DISTURBED AT THE PERIMETER.

- 1.2. INSTALL SILT SACK FILTERS IN ALL THE CATCHBASINS AND MANHOLES TO REMAIN DURING CONSTRUCTION WITHIN THE SITE.
- 1.3. INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
- 1.4. INSTALL MUD MAT AT CONSTRUCTION ENTRANCES.

DURING CONSTRUCTION:

- 2.1. MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE AND IMPACTS
- PERIMETER VEGETATION TO REMAIN IN PLACE UNTIL PERMANENT STORM WATER MANAGEMENT IS IN PLACE. OTHERWISE, IMMEDIATELY INSTALL SILT FENCE WHEN THE EXISTING SITE IS
- PROTECT DISTURBED AREAS FROM OVERLAND FLOW BY PROVIDING TEMPORARY SWALES TO THE SATISFACTION OF THE FIELD ENGINEER. TIE-IN TEMPORARY SWALE TO EXISTING CB'S AS
- 2.4. PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS.
- INSPECT SILT FENCES, FILTER FABRIC FILTERS AND CATCH BASIN SUMPS WEEKLY AND WITHIN 24 HOURS AFTER A STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY.
- DOWNSTREAM STORM INFRASTRUCTURE SHALL BE PROTECTED FROM UNFILTERED RUNOFF DURING ON-SITE STORM INFRASTRUCTURE DEMOLITION.
- 2.7. DRAWING TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
- 2.8. EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES 2.9. DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY
- PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS).
- 2.10. CONTROL WIND-BLOWN DUST OFF SITE BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED AND TO THE SATISFACTION OF THE ENGINEER).
- 2.11. NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE FIELD ENGINEER.
- 2.12. CITY ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING AS REQUIRED.
- 2.13. DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE
- 2.14. ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.
- 2.15. TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ABUTTING PROPERTIES OR PUBLIC STREETS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED. 2.16. ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND
- SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER. 2.17. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR

PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

STORM WATER MANAGEMENT STRUCTURE

1. CHAMBERS SHALL BE STORMTECH MC-3500, OR APPROVED EQUIVALENT AS APPROVED BY THE ENGINEER. REFER TO ADS CHAMBER DRAWINGS, PROJECT \$426399 FOR DETAILS, WHICH INCLUDE REQUIRED QA/QC, TESTING AND INSPECTION REQUIREMENTS WHICH SHALL BE FOLLOWED BY THE CONTRACTOR.

THERMOPLASTIC LINER

- 1. THERMOPLASTIC LINER UNDERLYING STORM WATER CHAMBERS SHALL BE TERRAFIX ENVIRONMENTAL TECHNOLOGY INC. 40 MIL LLDPE GEOMEMBRANE, OR APPROVED EQUIVALENT AS APPROVED BY THE ENGINEER.
- 2. LINER INSTALLATION, QA/QC, TESTING AND INSPECTIONS SHALL BE IN STRICT ACCORDANCE WITH ALL MANUFACTURER SPECIFICATIONS AND INCLUDE (BUT NOT BE LIMITED TO) SUBGRADE BASE PREPARATION, FUSION WELDING OF ALL SEAMS, VACUUM TESTING, PEEL TESTING, DOCUMENTATION (INCLUDE PHOTOGRAPHS). UNLESS OTHERWISE APPROVED BY THE GEOTECHNICAL ENGINEER. CONTRACTOR SHALL REFERRENCE AND FOLLOW TERRAFIX INSTALLATION & QUALITY CONTROL MANUAL. REVISED FEBRUARY 6, 2024, OR EQUIVALENT/BETTER AS APPROVED BY THE ENGINEER.
- 3. SUPPLIER SHALL INSPECT AND APPROVE IN WRITING ALL COMPONENTS OF TESTING.
- 4. SUBGRADE PREPARATION SHALL BE APPROVED IN WRITTING BY MANUFACTURER AND GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THERMOPLASTIC LINER.



MANAGER, DEVELOPMENT REVIEW CENTRAL PLANNING. DEVELOPMENT & BUILDING SERVICES DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

> **APPROVED** By Andrew McCreight at 10:04 am, Nov 18, 2025

RETAINING WALLS

- 1. PRE-CAST UNIT RETAINING WALL TYPE TO BE SPECIFIED BY PROJECT LANDSCAPE ARCHITECT AT LOCATIONS, AS SPECIFIED ON THE GRADING PLAN TO BE APPROVED BY AUTHORITYIES HAVING JURISDICTION PRIOR TO EARLY SERVICING.
- 2. ALL RETAINING WALL SHALL BE CONCRETE, CONCRETE PRODUCT WITH TIE-BACK SYSTEM OR HEAVY BLOCK
- 3. ALL TYPICAL RETAINING WALLS GREATER THAN 1.0m HEIGHT ARE TO BE DESIGNED, APPROVED AND STAMPED BY A CONSULTING ENGINEER SPECIALIZING IN STRUCTURAL ENGINEERING.
- 4. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS CERTIFIED BY A STRUCTURAL ENGINEER.
- 5. UPON COMPLETION OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE A CERTIFICATE FROM A STRUCTURAL ENGINEER CERTIFYING THAT THE WALL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE

APPROVED ENGINEERING DRAWINGS AND THE CERTIFIED SHOP DRAWINGS.

6. FENCES OR RAILINGS ARE REQUIRED FOR WALLS HIGHER THAN 0.6m. REFER TO LANDSCAPING PLAN FOR

Tickness (mm)	Material Description
50	Wear Course - HL-3 or Superpave 12.5 Asphaltic Concrete
150	Base - OPSS Granular A Crushed Stone
300	SUBBASE - OPSS Granular B Type II

Tickness (mm)	Material Description			
40	Wear Course - Superpave 12.5 Asphaltic Concrete			
50	Binder Course - Superpave 19.0 Asphaltic Concrete			
150	Base - OPSS Granular A Crushed Stone			
300	SUBBASE - OPSS Granular B Type II			

EXISTING LEGEND:

<u> </u>	<u> </u>
	EXISTING CURB
	EXISTING BOTTOM OF SLOPE
	EXISTING TOP OF SLOPE
	EXISTING WATERMAIN
ST	EXISTING STORM SEWER
——————————————————————————————————————	EXISTING SANITARY SEWER
s	EXISTING SWALE
	EXISTING PERFORATED DRAIN
xx	EXISTING FENCE
	SITE TEMPORARY CONTROL POIN
	EXISTING SANITARY MANHOLE
	EXISTING FIRE HYDRANT
×	EXISTING WATER VALVE
× 80.00	EXISTING ELEVATION
}•}(•)	EXISTING TREES TO REMAIN
	EXISTING CATCHBASIN
	EXISTING CATCHBASIN
0	MANHOLE EXISTING STORM MANHOLE

in-situ soil or fill

REMOVALS LEGEND:

CURB REMOVAL

ST ————————————————————————————————————	STORM REMOVAL STORM REMOVAL WATERMAIN REMOVAL RETAINING WALL REMOVAL RETAINING WALL REMOVAL SUB DRAIN REMOVAL
	FULL DEPTH ASPHALT REMOV
A 4 4	GREEN AREA/ INTERLOCK ARE REMOVAL CONCRETE SIDEWALK REMOV
	GRAVEL ROAD REMOVAL
	RAMP REMOVAL
+ +	CLEAN SOIL REMOVAL
xx	TREE PROTECTION FENCE
× ×	CATCH BASIN REMOVAL STORM MANHOLE REMOVAL SANITARY MANHOLE REMOVA
፟፠	FIRE HYDRANT REMOVAL
\times \times	EXISTING TREES REMOVAL
×	BOLLAR REMOVAL

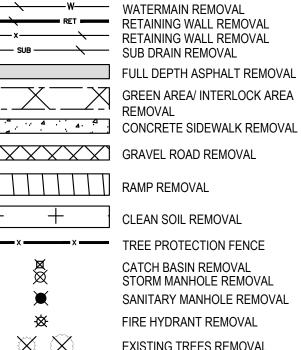
			\ <i>,</i>	
PROPOSED LEG	END:		(CIVIL ENGINEER
	EXISTING BOUNDARY		T	
VV	NEW WATERMAIN	13	REVISED AS PER CITY COMMENTS	2025-09-
•	NEW STORM SEWER	12	REVISED AS PER CITY COMMENTS	2025-06-
	NEW HDPE SUBDRAIN	12	ISSUED FOR PERMIT	2025-06-
SA	NEW SANITARY SEWER	11	ISSUED FOR 100% CDS FOR TENDER	2025-06-
	- HIGH POINT	10	ISSUED FOR CD UPDATE ISSUED FOR CD UPDATE - CLASS A ESTIMATE	2025-05- 2025-04-
100 1/0		8	ISSUED FOR CD UPDATE	2025-04-
100 YR	- 100 YEAR PONDING LIMIT	7	REVISED AS PER CITY COMMENTS	2025-03-
	NEW CTODM CATCH DACIN MANHOLE	6	ISSUED FOR CD UPDATE	2025-02-
	NEW STORM CATCH BASIN MANHOLE	5	ISSUED FOR CD UPDATE	2025-01-
0	NEW STORM MANHOLE	4	REVISED AS PER CITY COMMENTS	2025-01-
П	NEW CATCH BASIN/ DITCH INLET	3	ISSUED FOR 90% DD - CLASS B ESTIMATE	2024-11-
_		2	REVISED AS PER CITY COMMENTS	2024-09-
•	NEW SANITARY MANHOLE	NO.	ISSUED FOR SPA DESCRIPTION	2024-08- DATE
⊗	NEW WATERMAIN VALVE	NO.		
ᅭ	NEW WATERMAIN CONNECTION		REVISIONS/ ISSUES	;
4	NEW WATERMAIN 45° BEND	C	ONTRACTOR SHALL CHECK AND VERIFY ALL	DIMENSIONS
П	NEW SERVICING CAP	_	ND REPORT ANY OMISSIONS OR DISCREPAN	
★ (68.79)	PROPOSED ELEVATION		RCHITECT BEFORE PROCEEDING WITH THE	
••		D	O NOT SCALE THE DRAWINGS	
1.6%	PROPOSED SURFACE SLOPE			and d
	OVER FLOW DIRECTION			
	PROPOSED TRENCH DRAIN			

PROPOSED INTERLOCK

PROPOSED INSULATION

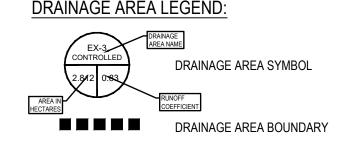
PROPOSED TREES

PROPOSED ASPHALT PAVEMENT



LIGHT STAND REMOVAL

ESC LEGEND: LIGHT DUTY SILT FENCE ____ SF ____ (OPSD 219.110) FILTER CLOTH PROTECTION MUD MAT





14 DUNCAN ST 4TH FLOOR TORONTO, ON M5H 3G8 (416) 591-8999

ENTUITIVE

135 LAURIER AVE WEST, SUITE 413 OTTAWA, ON K1P 5J2 (343) 308-9274



STRUCTURAL ENGINEER

90 SHEPPARD AVE EAST, SUITE 500 TORONTO, ON M2N 3A (416) 751-2520 ELEC. LIGHTING ENGINEER

> 530 N. WOOD STREET #C CHICAGO, IL 60622 (224) 717-1999

FOOD AND BEVERAGE 319 MCRAE AVENUE, SUITE 502 OTTAWA, ONTARIO K1Z 0B9

(613) 729-4536 LANDSCAPE ARCHITECT 2011 QUEENSVIEW DR. OTTAWA, ONTARIO K2B 8K2

(613) 829-2800



D. B. YANG 2025-09-24 NOT FOR CONSTRUCTION

> J.T 2025/09/24 CHECKED W.Y

LANSDOWNE EVENT **CENTRE**

945 & 1015 BANK STREET

NOTES AND DETAILS

DWG. NO.

DWG. TITLE

AS SHOWN CA0033920.1056

				STOF	RM STRUCT	URE TABLE				
STRUCTURE	TOP OF GRATE	STRUC							OUTLET	
		INLET	INLET	INLET	OUTLET	SIZE	OPSD	COVER	DIAMETER	TYPE
CB01	65.00				63.603	600X600mm	OPSD 705.010	S19.1	250	PVC SDR-35
CB02	65.58				64.014	K200 REFEF	TO ACO TREN	CH DRAIN DESIGN	250	PVC SDR-35
CB03	66.28				64.191	K200 REFEF	R TO ACO TREN	CH DRAIN DESIGN	250	PVC SDR-35
CB04	66.02				64.222	600X600mm	OPSD 705.010	S19.1	250	PVC SDR-35
CB05	64.91				63.745	K200 REFEF	TO ACO TREN	CH DRAIN DESIGN	250	PVC SDR-35
CB06	64.91				63.755	K200 REFEF	R TO ACO TREN	CH DRAIN DESIGN	250	PVC SDR-35
CB07	64.90				63.690	K200 REFER	R TO ACO TREN	CH DRAIN DESIGN	250	PVC SDR-35
CB08	64.90				63.188	K200 REFER	R TO ACO TREN	CH DRAIN DESIGN	250	PVC SDR-35
CB09	65.20				64.220	K300 REFER	R TO ACO TREN	CH DRAIN DESIGN	300	PVC SDR-35
CB10	65.30				63.620	600X600mm	OPSD 705.010	S19.1	250	PVC SDR-35
CB11	65.93				63.470	K300 REFER	R TO ACO TREN	CH DRAIN DESIGN	300	PVC SDR-35
CB12	66.36				65.100	600X600mm	OPSD 705.010	S19.1	250	PVC SDR-35
CB13	65.79				63.754	K200 REFEF	R TO ACO TREN	CH DRAIN DESIGN	250	PVC SDR-35
CB14	67.22				64.288	K200 REFER	R TO ACO TREN	CH DRAIN DESIGN	250	PVC SDR-35
CB15	65.15				63.835	600X600mm	OPSD 705.010	S19.1	250	PVC SDR-35
STMH201(OGS)	65.39			63.080	63.058	1800mm DIA.	OPSD 701.012	S24.1	900	PVC SDR-35
STMH202	65.38		63.380	63.167	63.060	1800mm DIA.	OPSD 701.012	S24.1	1050	CONC
STMH203	68.26			63.227	63.207	1800mm DIA.	OPSD 701.012	S24.1	1050	CONC
STMH204	71.50			63.277	63.257	1800mm DIA.	OPSD 701.012	S24.1	1050	CONC
STMH205	66.72			63.324	63.304	1800mm DIA.	OPSD 701.012	S24.1	1050	CONC
STMH206	67.09			63.368	63.348	1800mm DIA.	OPSD 701.012	S24.1	1050	CONC
STMH207	66.28			63.394	63.394	1800mm DIA.	OPSD 701.012	S24.1	1050	CONC
STMH208	66.30		63.928	63.490	63.415	1800mm DIA.	OPSD 701.012	S24.1	1050	CONC
STMH209	66.71		64.730	63.620	63.583	1800mm DIA.	OPSD 701.012	S24.1	900	CONC
CBMH210	64.90		63.525	63.205	63.175	1200mm DIA.	OPSD 701.010	S28.1	600	CONC
STMH211	65.75		63.243	63.223	63.223	1200mm DIA.	OPSD 701.010	S24.1	600	CONC
STMH212	65.37			63.365	63.287	1200mm DIA.	OPSD 701.010	S24.1	600	CONC
STMH213	65.05	63.380	63.380	63.108	63.060	1200mm DIA.	OPSD 701.010	S24.1	250	PVC SDR-35
STMH214	66.19		64.110	63.600	63.060	1200mm DIA.	OPSD 701.010	S24.1	250	PVC SDR-35
STMH215	66.13		64.110	63.380	63.060	1200mm DIA.	OPSD 701.010	S24.1	250	PVC SDR-35
STMH216	65.40			63.080	63.080	1200mm DIA.	OPSD 701.010	S24.1	250	PVC SDR-35
STMH218	66.43		64.288	63.560	63.550	1800mm DIA.	OPSD 701.012	S24.1	900	CONC
STMH219	66.90			64.680	62.999	2400mm DIA.	OPSD 701.013	S24.1	1200	CONC
STMH220	66.84			63.579	63.569	1800mm DIA.	OPSD 701.012	S24.1	1200	CONC
STMH221	66.19			63.406	63.406	1800mm DIA.	OPSD 701.012	S24.1	1050	CONC

			S	AN STR	UCTURE TA	ABLE		
STRUCTUR	TOP OF		IN	VERT		DESCRIPTION		
E ID	GRATE	INLET	INLET	INLET	OUTLET	SIZE	OPSD	COVER
SAMH201	65.34			62.396	62.386	1200mm DIA.	OPSD-701.010	S24
SAMH202	66.13			62.476	62.466	1200mm DIA.	OPSD-701.010	S24
SAMH202A	67.01		64.907	62.540	62.530	1200mm DIA.	OPSD-701.010	S24
SAMH203	71.50			62.645	62.635	1200mm DIA.	OPSD-701.010	S24
SAMH204	66.65			62.696	62.686	1200mm DIA.	OPSD-701.010	S24
SAMH205	66.22		63.022	62.757	62.747	1200mm DIA.	OPSD-701.010	S24
SAMH206	66.15			62.790	62.780	1200mm DIA.	OPSD-701.010	S24
SAMH207	66.29		63.334	62.841	62.831	1200mm DIA.	OPSD-701.010	S24
SAMH208	66.65		64.886	63.017	62.997	1200mm DIA.	OPSD-701.010	S24
SAMH208A	66.40		64.907	62.931	62.921	1200mm DIA.	OPSD-701.010	S24
SAMH209	65.67			62.679	62.659	1200mm DIA.	OPSD-701.010	S24
SAMH210	65.36			62.815	62.755	1200mm DIA.	OPSD-701.010	S24
SAMH211	66.47			63.127	63.117	1200mm DIA.	OPSD-701.010	S24
SAMH212	66.37		65.095	63.220	63.210	1200mm DIA.	OPSD-701.010	S24
SAMH213	66.43			63.238	63.228	1200mm DIA.	OPSD-701.010	S24
SAMH214	66.73			62.967	62.947	1200mm DIA.	OPSD-701.010	S24
SAMH215	66.56			62.993	62.973	1200mm DIA.	OPSD-701.010	S24
SAMH216	66.18			62.817	62.807	1200mm DIA.	OPSD-701.010	S24

		Obvert	Invert			Obvert	Invort	
1	1050mmø CONC STM	64.388	63.205	0.240	Clearance Above	62.965	62.590	375mmø PVC SAN
2	375mmØ PVC SAN	62.566	62.191	0.269	Clearance Under	64.344	62.835	EX. 1350mmøCONC STM
3	375mmØ PVC SAN	62.757	62.382	0.542	Clearance Above	61.840	61.640	200mmø PVC W/M
4	375mmø PVC SAN	62.775	62.400	0.283	Clearance Under	64.079	63.058	900mmø CONC STM
5	EX.200mmøPVC W/M	62.130	61.930	0.925	Clearance Under	64.076	63.055	900mmø CONC STM
6	375mmø PVC SAN	62.836	62.461	1.313	Clearance Under	64.399	64.149	250mmø PVC STM
7	375mmø PVC SAN	63.131	62.756	1.349	Clearance Under	64.680	64.480	200mmø PVC W/M
8	1050mmø CONC STM	64.561	63.378	0.568	Clearance Above	62.810	62.610	200mmø PVC W/M
9	375mmø PVC SAN	63.204	62.829	0.436	Clearance Under	63.840	63.640	200mmø PVC W/M
10	200mmø PVC W/M	64.330	64.130	0.482	Clearance Above	63.648	63.348	300mmø PVC SAN
11	200mmø PVC W/M	63.430	63.230	0.514	Clearance Under	64.639	63.944	600mmø CONC STM
12	200mmø PVC W/M	64.000	63.800	0.492	Clearance Above	63.308	62.933	375mmø PVC SAN
13	200mmø PVC SAN	65.121	64.921	0.338	Clearance Above	64.582	63.561	900mmø CONC STM
14	250mmø PVC STM	63.757	63.507	0.665	Clearance Above	62.842	62.592	EX.250mm@PVC SAN
15	250mmø PVC STM	64.443	64.193	1.358	Clearance Above	62.835	62.460	EX.375mm Ø PVC SAN
17	375mmø PVC SAN	63.218	62.843	0.713	Clearance Under	64.626	63.931	600mmø CONC STM
18	1050mmø CONC STM	64.471	63.288	0.588	Clearance Above	62.700	62.500	200mmø PVC W/M
19	1050mmø CONC STM	64.466	63.283	0.404	Clearance Under	65.070	64.870	200mmø PVC W/M
20	375mmø PVC SAN	63.052	62.677	1.748	Clearance Under	65.000	64.800	200mmø PVC W/M
21	375mmø PVC SAN	63.059	62.684	1.161	Clearance Under	64.420	64.220	200mmø PVC W/M
22	900mmø CONC STM	64.434	63.413	0.503	Clearance Above	62.910	62.710	200mmø PVC W/M
23	900mmø CONC STM	64.410	63.389	0.349	Clearance Above	63.040	62.840	200mmø PVC W/M
24	200mmø PVC W/M	62.120	61.920	0.530	Clearance Under	63.345	62.650	EX.600mmøCONCSTM
25	200mmø PVC W/M	63.420	63.220	0.375	Clearance Above	62.845	62.595	EX.250mm@PVC SAN
26	250mmø PVC STM	64.516	64.266	1.192	Clearance Above	63.073	62.698	375mmø PVC SAN
27	200mmø PVC W/M	61.800	61.600	0.550	Clearance Under	62.725	62.350	375mmø PVC SAN
28	EX.200mmøPVCW/M	62.710	62.510	0.521	Clearance Under	63.926	63.231	600mmø CONC STM
29	EX.200mmøPVC W/M	62.660	62.460	1.170	Clearance Under	64.080	63.830	250mmø PVC STM
30	EX.1200mm Ø CONC STM	64.330	62.984	0.320	Clearance Under	64.850	64.650	200mmø PVC W/M
31	100mmø PVC SAN	63.248	63.148	0.382	Clearance Under	63.830	63.630	200mmø PVC W/M
32	200mmø PVC W/M	63.090	62.890	0.537	Clearance Under	64.566	63.627	EX.825mmøCONC STM
33	375mmø PVC SAN	63.340	62.965	0.283	Clearance Under	64.562	63.623	EX.825mmøCONC STM
34	375mmø PVC SAN	63.558	63.183	0.198	Clearance Under	64.695	63.756	EX.825mmøCONCSTM

*Note: Provide Concrete Encased for crossing clearance less than 0.30m



ANDREW MCCREIGHT MANAGER, DEVELOPMENT REVIEW CENTRAL PLANNING, DEVELOPMENT & BUILDING SERVICES DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

> APPROVED By Andrew McCreight at 10:04 am, Nov 18, 2025

	WATERMAIN SCHEDUI	LE .								
STATION	DESCRIPTION	FINISHED	TOP OF	cov						
SIATION	DESCRIPTION	GRADE	WATERMAIN	COV						
	200mm W/M (FROM CONNECT TO EX.W/M TO BUILDING) - W1									
0+000	Connect to EX. W/M	71.27	68.870	2.						
0+003.36	Crossing with 100mm PVC SAN	66.50	64.100	2.						
0+006.99	200mm VB	67.11	64.710	2.						
0.009.55	Crossing with 1050mm CONC STM	67.12	62.800	4.						
0.009.55	Refer to crossing table #8	67.12	62.800	4.						
0+11.06	Connect to building	67.13	64.730	2.						

	WATERMAIN SCHI	DULE		
STATION	DESCRIPTION	FINISHED	TOP OF	COVER
	3200	GRADE	63.810 63.010 63.850 63.830 63.910 63.910 63.910 63.950 63.950 64.030 64.030	
	200mm W/M (FROM BUILDIN	NG TO END) - W2		
1+000	Connect to proposed building	66.21	63.810	2.40
1,001.27	Crossing with 900mm CONC STM	66.21	62.010	2 20
1+001.37	Refer to crossing table #22	00.21	63.010	3.20
1+002.33	Crossing with 375mm PVC SAN	66.25	63.850	2.40
1+002.91	45° Bend	66.23	63.830	2.40
1+004.09	45° Bend	66.31	63.910	2.40
1+005.02	Crossing with 300mm PVC SAN	66.31	63.910	2.40
1+006.59	Crossing with 600mm CONC STM	66.31	63.910	2.40
1+007.95	150X200mm Tee connection	66.33	63.930	2.40
1+008.79	200mm VB	66.35	63.950	2.40
1+009.52	45° Bend	66.37	63.970	2.40
1+063.64	150X200mm Tee connection	66.43	64.030	2.40
1+066.22	200mm VB	66.43	64.030	2.40
1+070.55	45° Bend	66.49	64.090	2.40
1+075.76	45° Bend	66.42	64.020	2.40
1+075.45	Crossing with EX.825mm CONC STM	66.39	62.890	3.50
1+078.76	Watermain cap	66.37	63.970	2.40

	WATERMAIN SCHEDULE							
STATION	DESCRIPTION	FINISHED TOP OF GRADE WATERMAIN		COVER				
200mm W/M (TEE CONNECTION TO BUILDING) -W3								
2+000	200x200mm TEE Connection	66.48	64.080	2.40				
2+000.41	200mm VB	66.43	64.030	2.40				
2+002.13	Crossing with 375mm PVC SAN	66.40	64.000	2.40				
	Crossing with 900mm CONC STM							
2+004.08	Refer to crossing table #23	66.37	63.040	3.33				
2+004.92	Connect to proposed building	66.37	63.970	2.40				

	WATERMAIN SCHEDUI	LE							
STATION	DESCRIPTION	FINISHED	TOP OF	COVER					
STATION	DESCRIPTION	GRADE	WATERMAIN						
	200mm W/M (FROM CONNECT TO EX.W/M TO BUILDING) - W4								
3+000	Connect to EX. W/M	64.91	62.510	2.40					
3+001.24	200mm VB	64.98	62.580	2.40					
3+018.61	Crossing with 375mm PVC SAN	66.82	64.420	2.40					
2.020.25	Crossing with 1050mm CONC STM	66.00	62.700	4.20					
3+020.35	Refer to crossing table #18	66.90	62.700	4.20					
3+024.84	22.5° Bend	67.12	64.720	2.40					
3+028.01	Connect to proposed building	67.29	64.890	2.40					

WATERMAIN SCHEDULE					
STATION	DESCRIPTION	FINISHED	TOP OF	COVER	
SIATION	DESCRIPTION	GRADE	WATERMAIN	COVER	
200mm W/M (FROM CONNECT TO EX.W/M TO BUILDING) - W5					
4+000	Connect to EX. W/M	64.94	62.540	2.40	
4+000.82	200mm VB	64.99	62.590	2.40	
4+019.58	Crossing with 375mm PVC SAN	67.40	65.000	2.40	
4+021.36	Crossing with 1050mm CONC STM	67.47	65.070	2.40	
4+024.32	22.5° Bend	67.40	65.000	2.40	
4+027.07	Connect to building	67.86	65,460	2.40	

	WATERMAIN SCHEDULE					
STATION	DESCRIPTION	FINISHED GRADE	TOP OF WATERMAIN	COVER		
	150mm FIRE HYDRANT (CLOSE TO EVENT CENTER) - W6					
5+000	150x200mm Tee connection	66.37	64.090	2.28		
5+004.22	Crossing with 600mm CONC STM Refer to crossing table #11	66.62	66.430	3.20		
5+006.02	45° Bend	66.59	64.190	2.40		
5+007.17	Crossing with 300mm PVC SAN with insulation Refer to crossing table #10	66.67	64.330	2.40		
5+008.43	150mm VB	66.76	64.360	2.40		
5+009.61	Conncet to Fire Hydrant	66.84	64.440	2.40		

WATERMAIN SCHEDULE				
STATION	DESCRIPTION	FINISHED	TOP OF	COVER
STATION	DESCRIPTION	GRADE	WATERMAIN	COVER
150mm FIRE HYDRANT (ON LANDSCAPE AREA) -W7				
6+000	Connect to EX.W/M with Tee Connection	65.17	62.770	2.40
6+002.61	Crossing with 1200mm CONC STM with			
	insulation	66.65	64.850	1.80
	Refer to crossing table #30			
6+010.95	45° Bend	66.81	64.410	2.40
6+016.07	150mm VB	66.86	64.460	2.40
6+019.92	Conncet to Fire Hydrant	67.00	64.600	2.40

WATERMAIN SCHEDULE				
STATION	DESCRIPTION	FINISHED GRADE	TOP OF WATERMAIN	COVER
	200mm W/M (FROM CONNECT TO EX.V	V/M TO END) -	W8	
7+000	Connect to EX. W/M	65.36	62.960	2.40
7+009.51	22.5° Bend	65.91	63.510	2.40
	Crossing with 600mm CONC STM			
7+012.50	Refer to crossing table#24	65.82	62.120	3.70
7+016.18	Crossing with 250mm PVC SAN with insulation Refer to crossisng table #25	65.72	63.420	2.30
7+051.88	45° Bend	65.37	62.970	2.40
7+053.12	22.5° Bend	65.37	62.970	2.40
7+060.79	200mm VB	65.32	62.920	2.40
7+065.36	Watermain cap	65.32	62.920	2.40





14 DUNCAN ST 4TH FLOOR TORONTO, ON M5H 3G8 (416) 591-8999

ENTUITIVE

135 LAURIER AVE WEST, SUITE 413 OTTAWA, ON K1P 5J2 (343) 308-9274

ARCHITECT



90 SHEPPARD AVE EAST, SUITE 500 TORONTO, ON M2N 3A

(416) 751-2520 ELEC, LIGHTING ENGINEER

530 N. WOOD STREET #C CHICAGO, IL 60622 (224) 717-1999

FOOD AND BEVERAGE

319 MCRAE AVENUE, SUITE 502 OTTAWA, ONTARIO K1Z 0B9 (613) 729-4536 LANDSCAPE ARCHITECT

115[) 2011 QUEENSVIEW DR.

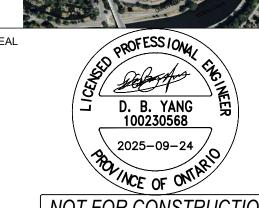
OTTAWA, ONTARIO K2B 8K2 (613) 829-2800 CIVIL ENGINEER

13 REVISED AS PER CITY COMMENTS 13 REVISED AS PER CITY COMMENTS
12 REVISED AS PER CITY COMMENTS
12 ISSUED FOR PERMIT
11 ISSUED FOR 100% CDS FOR TENDER
10 ISSUED FOR CD UPDATE
9 ISSUED FOR CD UPDATE - CLASS A ESTIMATE
8 ISSUED FOR CD UPDATE
7 REVISED AS PER CITY COMMENTS
6 ISSUED FOR CD UPDATE
5 ISSUED FOR CD UPDATE
4 REVISED AS PER CITY COMMENTS
3 ISSUED FOR 90% DD - CLASS B ESTIMATE
2 REVISED AS PER CITY COMMENTS
1 ISSUED FOR 90% DD - CLASS B ESTIMATE
2 REVISED AS PER CITY COMMENTS
1 ISSUED FOR SPA
NO. DESCRIPTION

REVISIONS/ ISSUES

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY OMISSIONS OR DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE THE DRAWINGS





NOT FOR CONSTRUCTION J.T DATE 2025/09/24

CHECKED

LANSDOWNE EVENT CENTRE

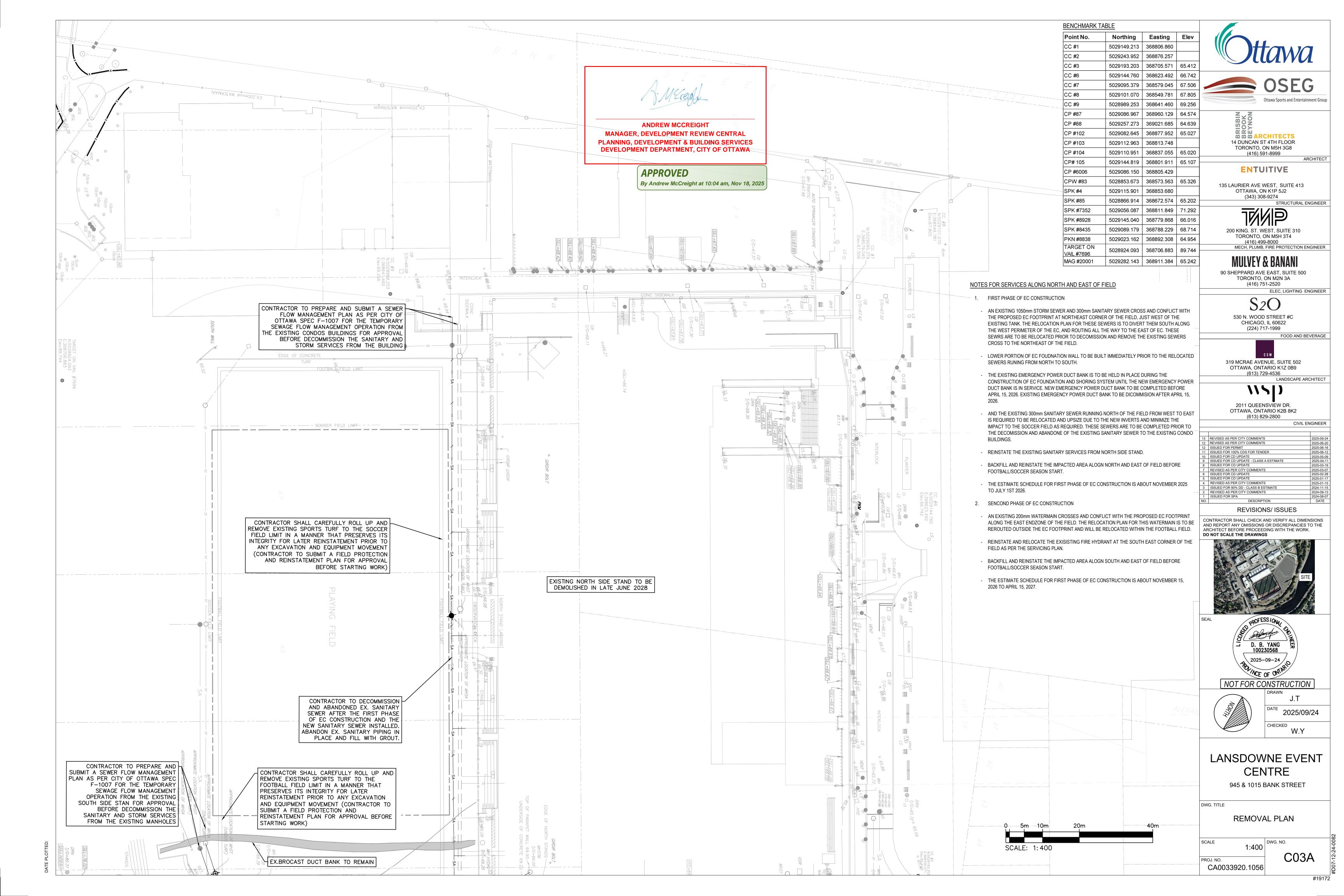
945 & 1015 BANK STREET

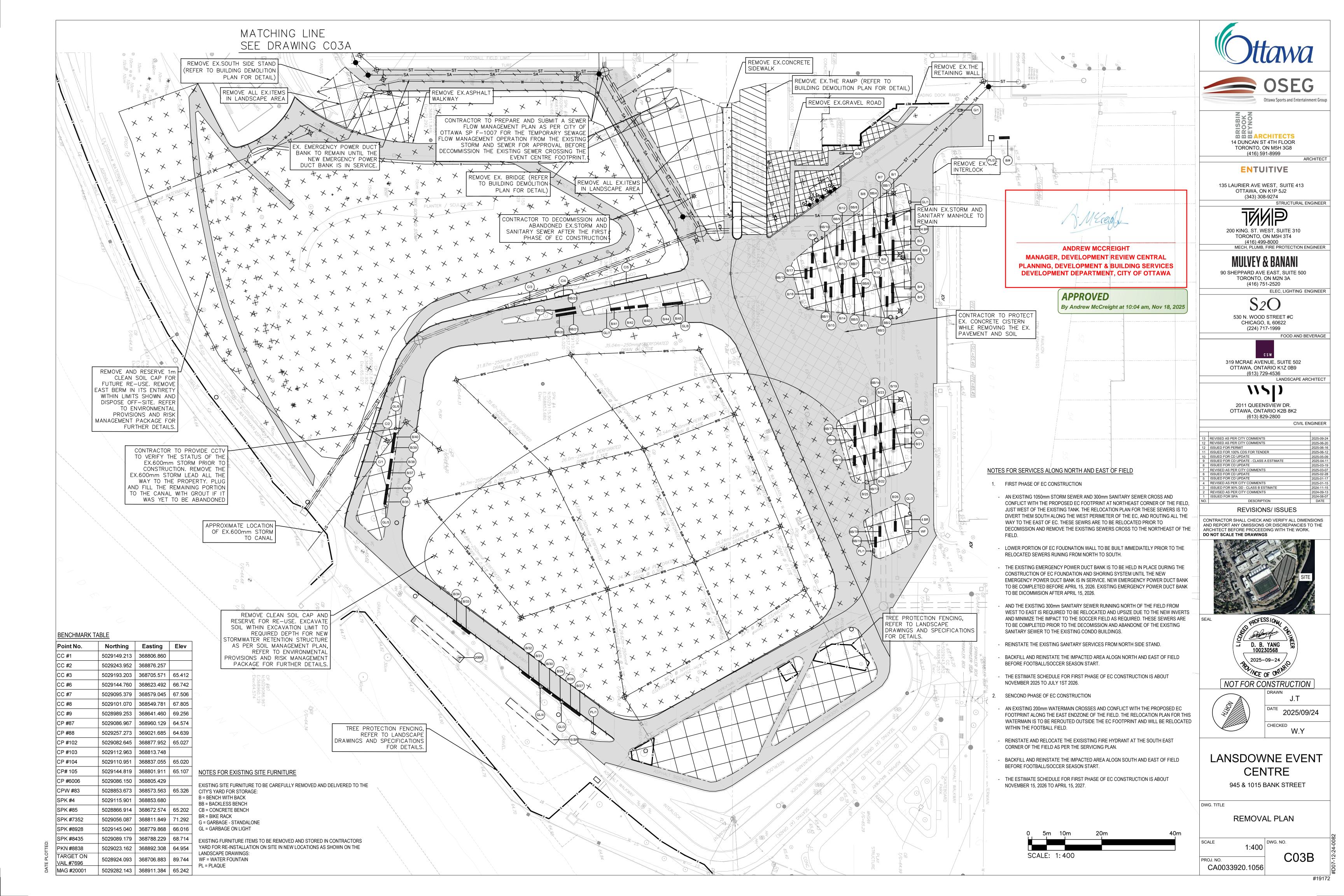
DWG. TITLE

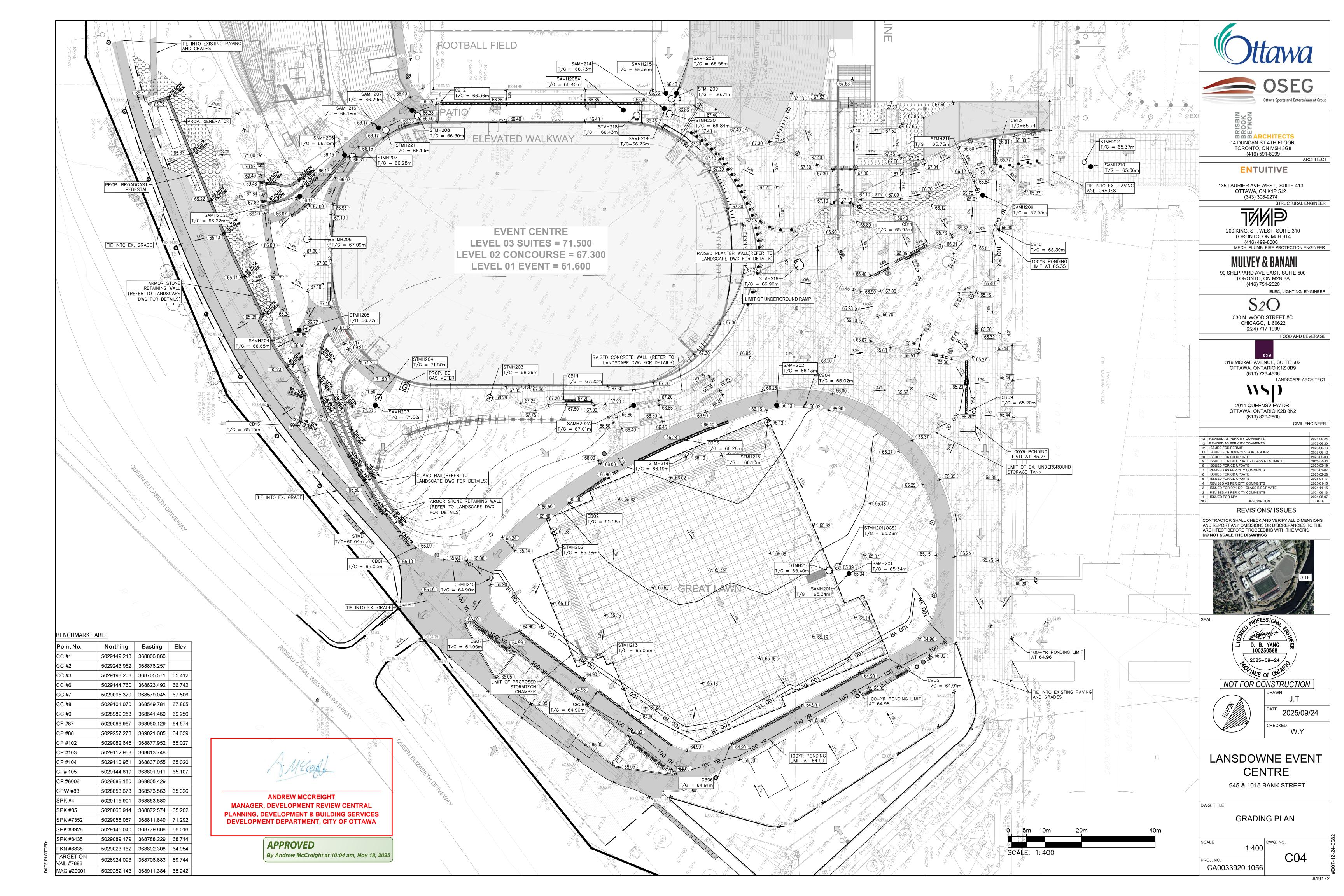
DATA TABLES

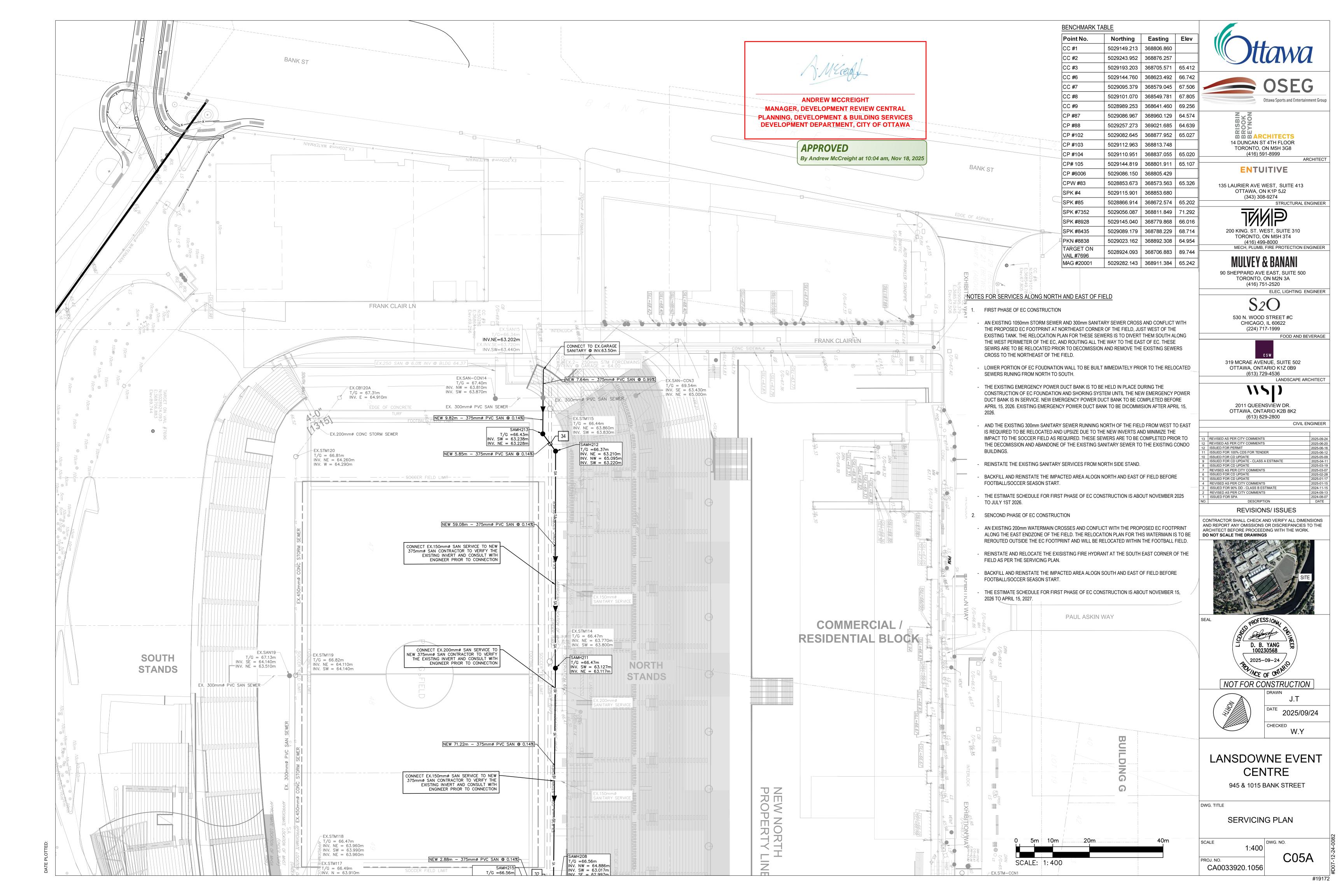
AS SHOWN

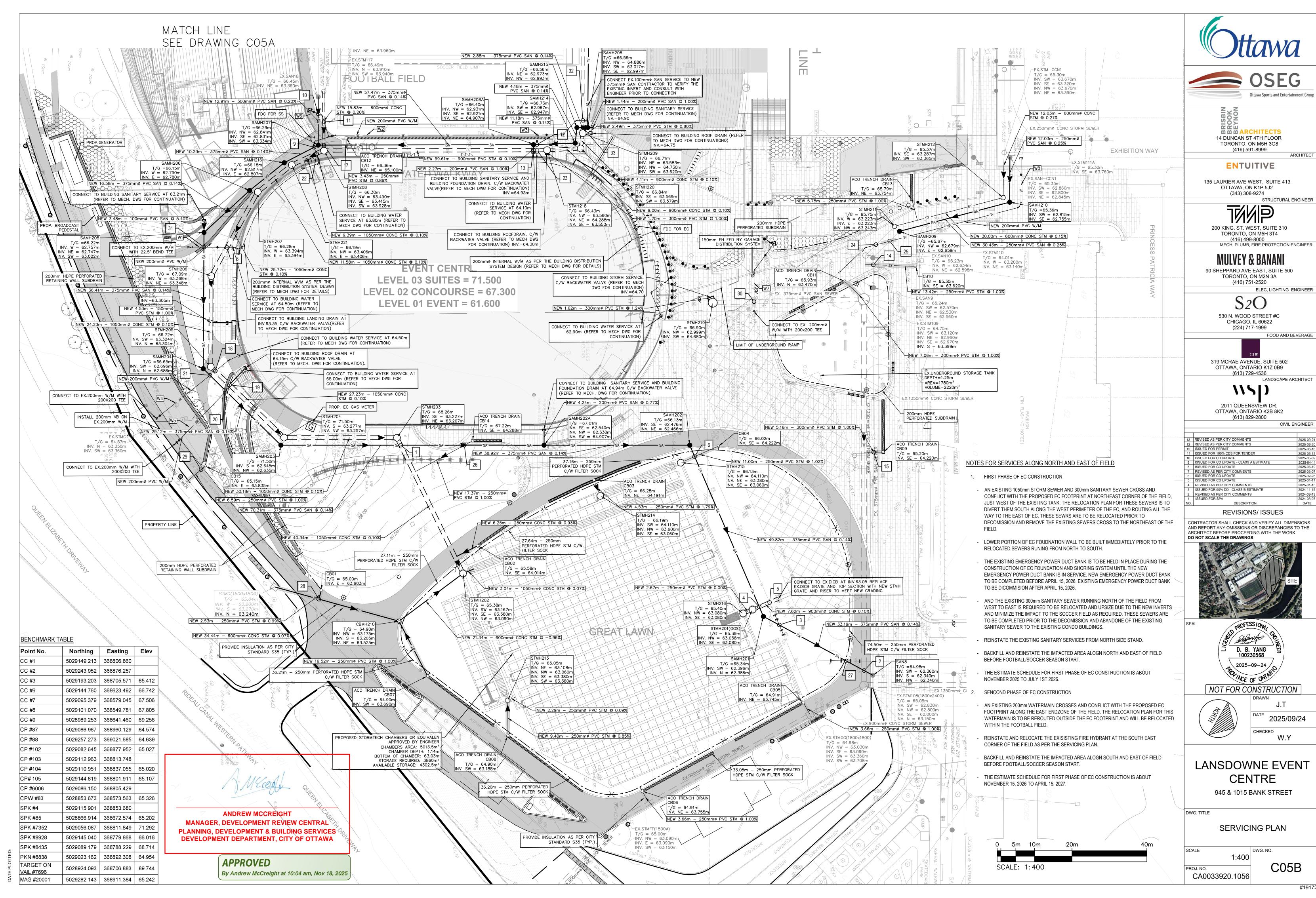
CA0033920.1056

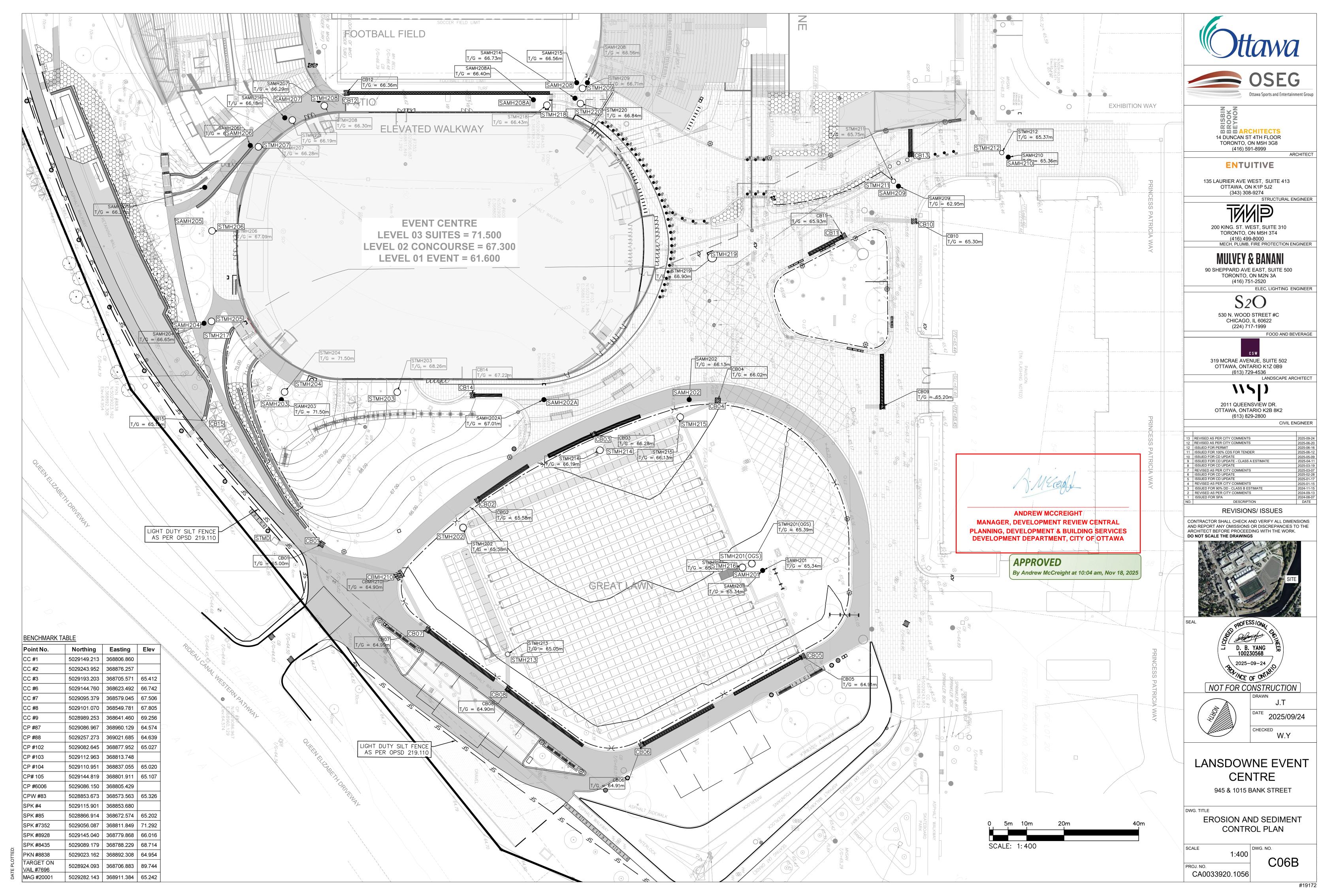


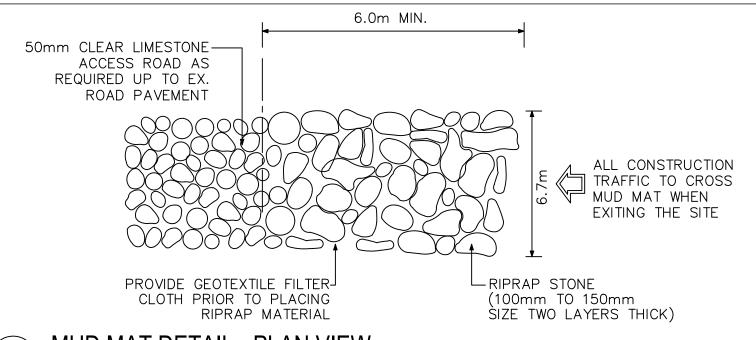




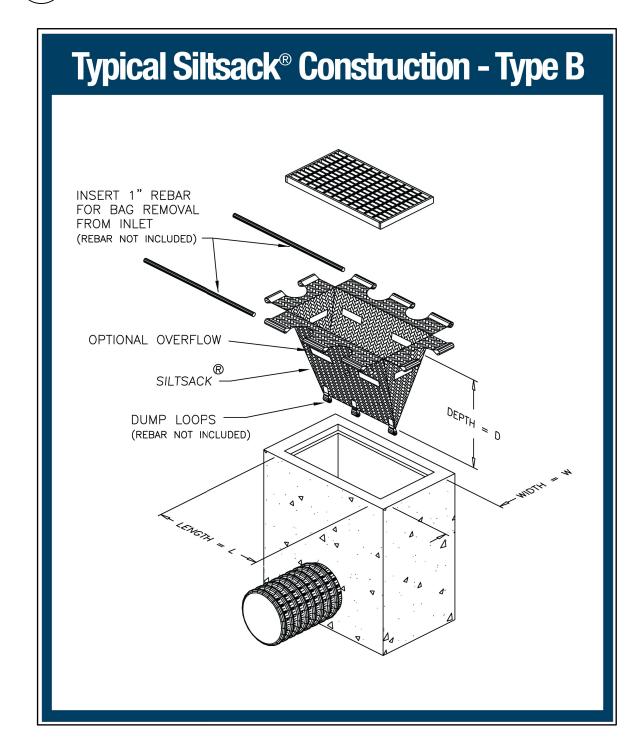








MUD MAT DETAIL - PLAN VIEW



BENCHMARK TABLE

Point No.	Northing	Easting	Elev
CC #1	5029149.213	368806.860	
CC #2	5029243.952	368876.257	
CC #3	5029193.203	368705.571	65.412
CC #6	5029144.760	368623.492	66.742
CC #7	5029095.379	368579.045	67.506
CC #8	5029101.070	368549.781	67.805
CC #9	5028989.253	368641.460	69.256
CP #87	5029086.967	368960.129	64.574
CP #88	5029257.273	369021.685	64.639
CP #102	5029082.645	368877.952	65.027
CP #103	5029112.963	368813.748	
CP #104	5029110.951	368837.055	65.020
CP# 105	5029144.819	368801.911	65.107
CP #6006	5029086.150	368805.429	
CPW #83	5028853.673	368573.563	65.326
SPK #4	5029115.901	368853.680	
SPK #85	5028866.914	368672.574	65.202
SPK #7352	5029056.087	368811.849	71.292
SPK #8928	5029145.040	368779.868	66.016
SPK #8435	5029089.179	368788.229	68.714
PKN #8838	5029023.162	368892.308	64.954
TARGET ON VAIL #7696	5028924.093	368706.883	89.744
MAG #20001	5029282.143	368911.384	65.242

MITIGATION MEASURES ON NCC LAND

- **EROSION AND SEDIMENT CONTROL**
- 1.1. ALL EFFORTS SHOULD BE MADE TO KEEP VEGETATION IN PLACE IN ORDER TO PREVENT EXPOSURE OF SOILS AND 1.2 . MATERIALS STORAGE SITES AND EQUIPMENT PARKING
- WILL BE LOCATED AT A MINIMUM DISTANCE OF 30 M FROM ANY WATERBODY, WATERCOURSE OR WETLAND. 1.3 .ANY ACTIVITY THAT TAKES PLACE WITHIN 30 M OF A
- WATERBODY, WATERCOURSE OR WETLAND (THIS INCLUDES PROJECT AREAS WITH CATCHBASINS ON-SITE OR NEARBY) AND MAY RELEASE SEDIMENT, SOIL, OR ANY OTHER POTENTIALLY POLLUTING CHEMICAL OR PRODUCT WILL REQUIRE THE DEVELOPMENT AND IMPLEMENTATION OF AN EROSION AND SEDIMENT CONTROL PLAN AND AN EMERGENCY RESPONSE PLAN.
- 1.4. THE EROSION AND SEDIMENT CONTROL PLAN MUST INCLUDE MEASURES RECOMMENDED FOR THE PREVENTION OF EROSION AND SEDIMENTATION FOR THE ENTIRE DURATION OF THE PROJECT WORKS, AND MUST BE APPROVED BY THE NCC PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- 1.5. EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE MAINTAINED UNTIL ALL DISTURBED GROUND HAS BEEN PERMANENTLY STABILIZED, SUSPENDED SEDIMENT HAS RESETTLED TO THE BED OF THE WATERBODY OR SETTLING BASIN AND RUNOFF WATER IS
- 1.6. THE EROSION AND SEDIMENT CONTROL PLAN MUST INCLUDE MEASURES RECOMMENDED FOR THE PREVENTION OF EROSION AND SEDIMENTATION FOR THE ENTIRE DURATION OF THE PROJECT WORKS, AND MUST BE APPROVED BY THE NCC PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- 1.7. A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE ON THE WORK SITE AT ALL TIMES. THE CONTRACTOR MUST ENSURE THAT ALL WORKERS UNDERSTAND THE IMPORTANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES AS WELL AS THE CONSEQUENCES OF REFRAINING TO RESPECT THE REQUIREMENTS.
- 1.8. THE EROSION AND SEDIMENT CONTROL PLAN SHOULD, WHERE APPLICABLE, INCLUDE THE FOLLOWING MITIGATION MEASURES:
- 1.8.1. LIMIT THE SURFACE AREA OF EXPOSED SOIL. 1.8.2. MINIMIZE MOVEMENT OF MACHINERY ON EXPOSED SOILS
- 1.8.3. REVEGETATE EXPOSED AREAS AS SOON AS POSSIBLE.
- 1.8.4. SLOPES SUSCEPTIBLE TO FAILURE, INCLUDING EXPOSED SLOPES 3H:1V OR STEEPER, OR OF 3 M AND HIGHER, SHOULD BE REINFORCED USING
- APPROPRIATE MEASURES APPROVED BY THE NCC. 1.8.5. INSTALL FILTRATING MATERIALS IN BETWEEN THE COVER AND FRAME OF ALL COLLECTOR BASINS AND MANHOLES THAT COULD BE IMPACTED BY
- SEDIMENT FROM THE WORK SITE. 1.8.6. INSTALL SILT FENCES OR SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN ALONG SHORELINES, DITCHES, AND WETLANDS TO
- PREVENT SEDIMENTS FROM BEING DEPOSITED. 1.8.7. INSTALL SUPPORT MECHANISMS IN ORDER TO ENSURE SOIL STABILITY AND TO AVOID ANY RISK OF LANDSLIDES.

- 1.8.8. INTERVENTIONS ON FRAGILE SURFACES, SLOPES OR AREAS SUSCEPTIBLE TO EROSION SHOULD BE
- 1.8.9. AN ANTI-EROSION FENCE SHOULD BE INSTALLED AROUND THE PERIMETER OF ALL EXCAVATED SOIL. ALL EXCAVATED SOIL SHOULD BE STORED OUTSIDE OF FLOODPLAINS IN AREAS APPROVED BY THE NCC.
- 1.8.10. EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED. MAINTAINED AND REPAIRED ON A WEEKLY BASIS AND AFTER ANY RAINFALL
- 1.8.11. ANY WATER FOUND IN EXCAVATED TRENCHES MUST BE PUMPED INTO AN APPROVED COLLECTION BASIN FOR DECANTATION BEFORE RETURNED TO A WATER BODY.
- 1.8.12. FOLLOWING PROJECT WORKS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE THE SITE TO ITS ORIGINAL CONDITIONS.

PROTECTION OF SURFACE WATER QUALITY

- 2.1. MACHINERY SHOULD NOT CROSS OR COME IN CLOSE CONTACT WITH ANY WATERBODY OR WATERCOURSE. 2.2. MACHINERY WILL BE CLEAN AND FREE OF FLUID LEAKS, INVASIVE SPECIES AND NOXIOUS WEEDS ON ARRIVAL AT
- THIS CONDITION THROUGH REGULAR INSPECTIONS. 2.3. REFUELLING, MAINTENANCE AND NECESSARY REPAIRS WILL BE CARRIED OUT ON A SITE DESIGNATED FOR THIS PURPOSE LOCATED AT LEAST 60 M AWAY FROM ANY
- WATERBODY, UP TO THE HIGH-WATER MARK. 2.4. A TARP WILL BE PLACED UNDER THE MACHINERY DURING REFUELLING.

THE CONSTRUCTION SITE AND WILL BE MAINTAINED IN

- 2.5. MACHINERY WILL NOT BE WASHED AT THE SITE. 2.6. LITTER OR DEBRIS MUST NEVER BE SWEPT OR PUSHED
- INTO A WATERBODY OR WATERCOURSE. 2.7. THE PROPONENT WILL ENSURE THAT ALL DEBRIS AND SOLID WASTE LEFT ON SITE, AS WELL AS TEMPORARY FENCING AND SIGNS ARE REMOVED AFTER COMPLETION
- 2.8. DO NOT USE TREATED WOOD IN OR WITHIN 15 M OF A WATERBODY OR WATERCOURSE.

OF THE WORKS.

- 2.9. CLEARING OF RIPARIAN VEGETATION SHOULD BE KEPT TO A MINIMUM: USE EXISTING TRAILS, ROADS OR CUT LINES WHEREVER POSSIBLE TO AVOID DISTURBANCE TO THE RIPARIAN VEGETATION AND PREVENT SOIL COMPACTION. WHEN PRACTICABLE, PRUNE OR TOP THE VEGETATION INSTEAD OF GRUBBING/UPROOTING.
- 2.10. MINIMIZE THE REMOVAL OF NATURAL WOODY DEBRIS, ROCKS, SAND OR OTHER MATERIALS FROM THE BANKS, THE SHORELINE OR THE BED OF THE WATERBODY BELOW THE ORDINARY HIGH WATER MARK.
- 2.11. IF MATERIAL IS REMOVED FROM THE WATERBODY, SET IT ASIDE AND RETURN IT TO THE ORIGINAL LOCATION ONCE CONSTRUCTION ACTIVITIES ARE COMPLETED. 2.12. LIMIT MACHINERY FORDING OF THE WATERCOURSE TO A

PRACTICES TO CROSS STREAMS OR WATERBODIES WITH

ONE-TIME EVENT (I.E., OVER AND BACK), AND ONLY IF NO ALTERNATIVE CROSSING METHOD IS AVAILABLE. IF REPEATED CROSSINGS OF THE WATERCOURSE ARE REQUIRED, CONSTRUCT A TEMPORARY CROSSING STRUCTURE. 2.13. USE TEMPORARY CROSSING STRUCTURES OR OTHER

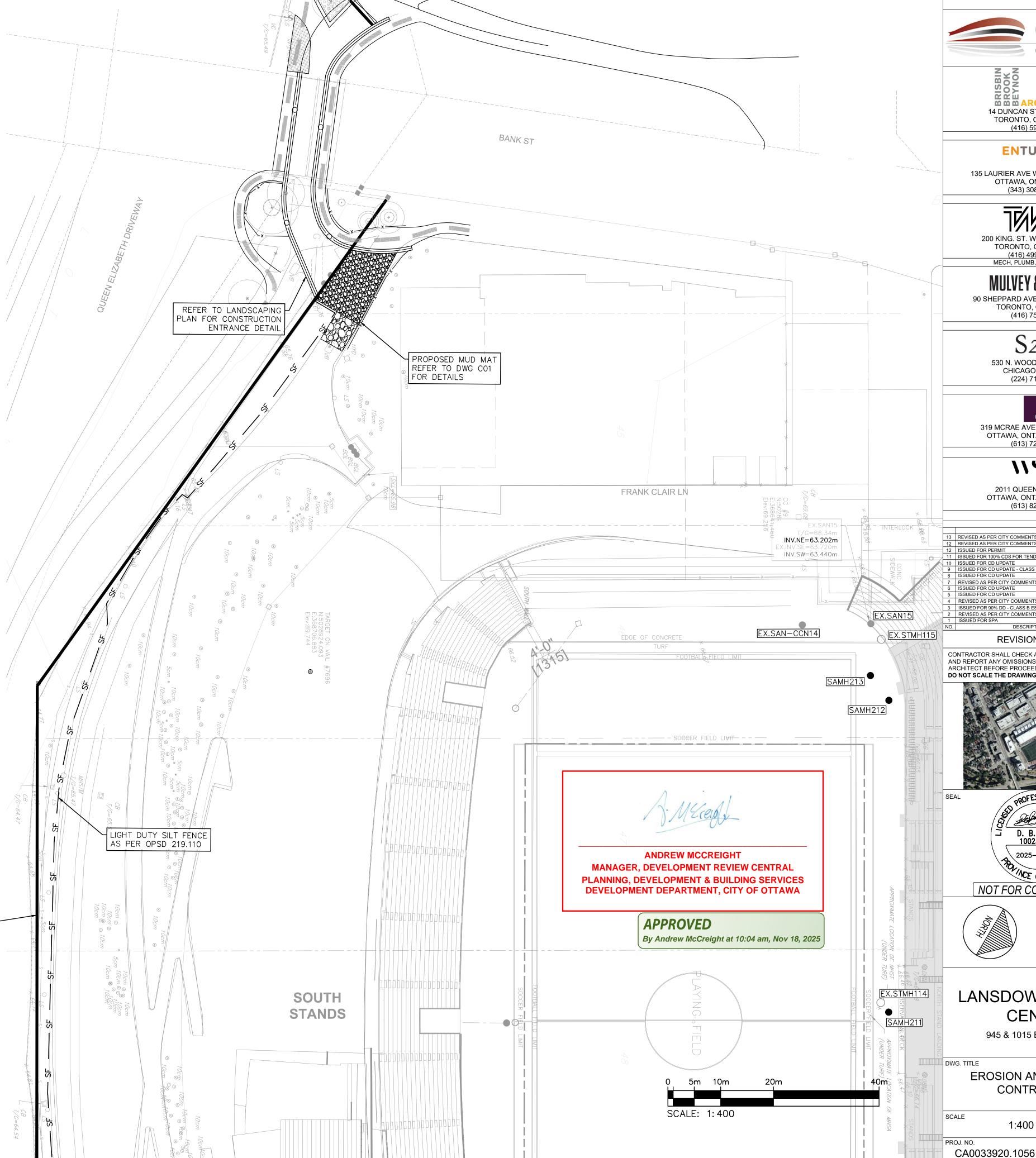
STEEP AND HIGHLY ERODIBLE (E.G., DOMINATED BY

- ORGANIC MATERIALS AND SILTS) BANKS AND BEDS. FOR FORDING EQUIPMENT WITHOUT A TEMPORARY CROSSING STRUCTURE, USE STREAM BANK AND BED PROTECTION METHODS (E.G., SWAMP MATS, PADS) IF MINOR RUTTING IS LIKELY TO OCCUR DURING FORDING. 2.14. WASH, REFUEL AND SERVICE MACHINERY AND STORE FUEL AND OTHER MATERIALS FOR THE MACHINERY IN
- SUBSTANCES FROM ENTERING THE WATER. 2.15. DO NOT APPLY FERTILIZERS OR OTHER PRODUCTS CONTAINING PHOSPHORUS OR NITROGEN WITHIN 15 M OF A WATERBODY OR WATERCOURSE.

SUCH A WAY AS TO PREVENT ANY DELETERIOUS

- PROTECTION OF SURFACE WATER FLOWS/ QUANTITY
- 3.1. MEASURES WILL BE TAKEN TO MAINTAIN OR REDUCE OVERLAND SURFACE WATER VELOCITIES (E.G. FILTER BERMS, HAY BALES, ETC.) AND THESE MEASURES WILL BE REMOVED ONCE THE PROJECT IS COMPLETE.
- 3.2. WEIGHT BEARING MATERIALS (E.G. SPREADING MULCH, WOOD FIBRE BLANKETS, GEOTEXTILE MEMBRANES, AND GRANULAR MATERIAL) MAY BE ADDED TO THE EXISTING GROUND SURFACE IN ORDER TO SUPPORT MACHINERY WEIGHT AND TO AVOID CREATING HOLES AND RUTS TO THE SOIL SURFACE.
- 3.3. WEIGHT BEARING MATERIALS SHOULD BE PROMPTLY REMOVED ONCE THE PROJECT HAS BEEN COMPLETED. 3.4. FOR WATER PUMPING OR EXTRACTION IN EXCESS OF
- THE PROVINCIAL THRESHOLD, A PERMIT AUTHORIZING THE TAKING OF WATER WILL BE OBTAINED FROM THE MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP ONTARIO) OR THE MINISTÈRE DE L'ENVIRONNEMENT, DE LA LUTTE CONTRE LES CHANGEMENTS CLIMATIQUES, DE LA FAUNE ET DES PARCS (MELCCFP QUÉBEC) PRIOR TO WATER TAKING.

PROPERTY LINE



14 DUNCAN ST 4TH FLOOR TORONTO, ON M5H 3G8 (416) 591-8999

ENTUITIVE

135 LAURIER AVE WEST, SUITE 413 OTTAWA, ON K1P 5J2

(343) 308-9274 STRUCTURAL ENGINEER

200 KING, ST. WEST, SUITE 310 TORONTO, ON M5H 3T4 (416) 499-8000

ELEC, LIGHTING ENGINEER

90 SHEPPARD AVE EAST, SUITE 500 TORONTO, ON M2N 3A (416) 751-2520

> 530 N. WOOD STREET #C CHICAGO, IL 60622

(224) 717-1999 FOOD AND BEVERAGE

319 MCRAE AVENUE, SUITE 502 OTTAWA, ONTARIO K1Z 0B9 (613) 729-4536 LANDSCAPE ARCHITECT

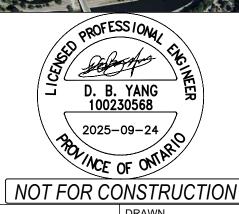
2011 QUEENSVIEW DR. OTTAWA, ONTARIO K2B 8K2

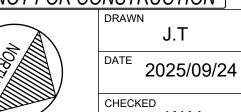
(613) 829-2800

REVISED AS PER CITY COMMENTS ISSUED FOR 100% CDS FOR TENDER ISSUED FOR CD UPDATE REVISED AS PER CITY COMMENTS ISSUED FOR 90% DD - CLASS B ESTIMATE REVISIONS/ ISSUES

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY OMISSIONS OR DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.





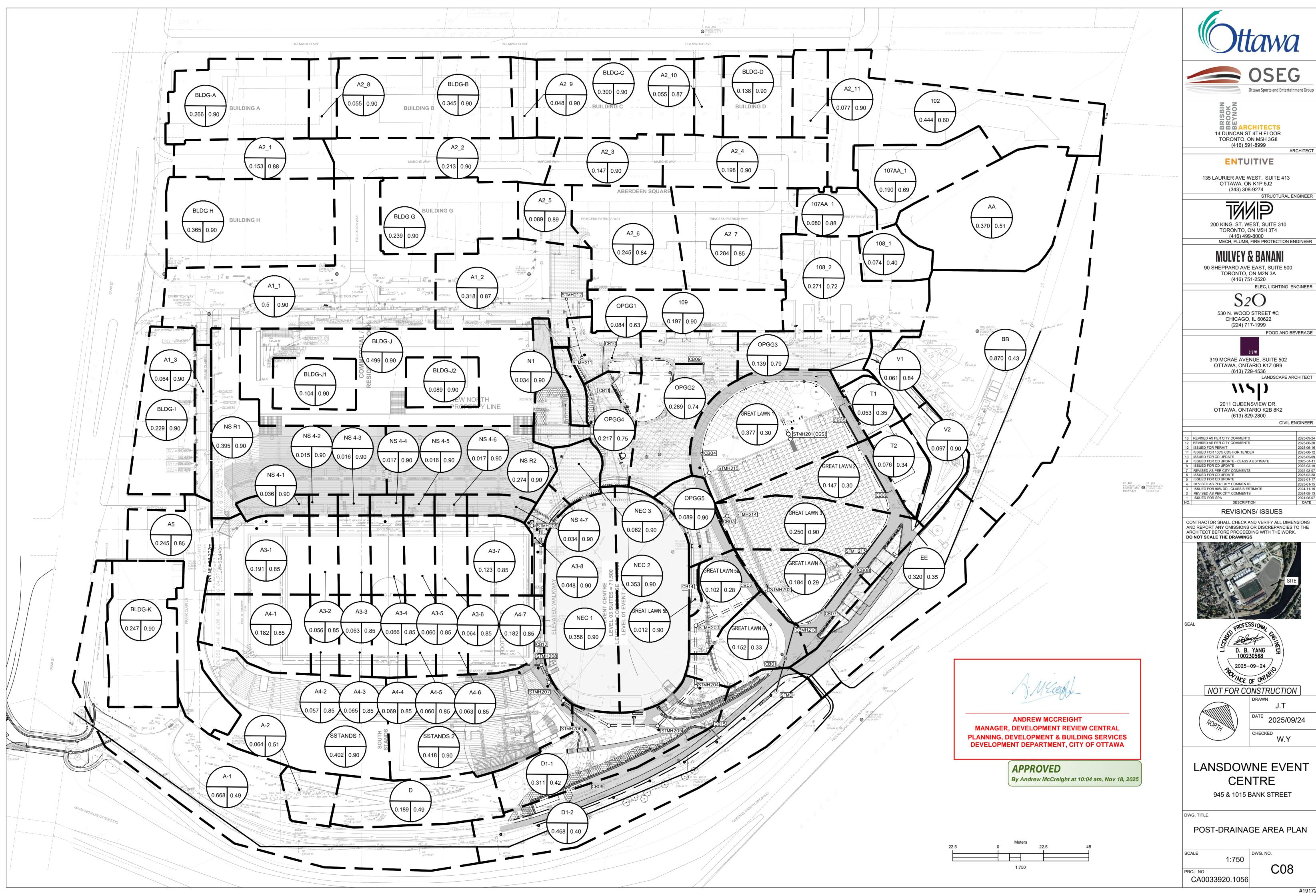


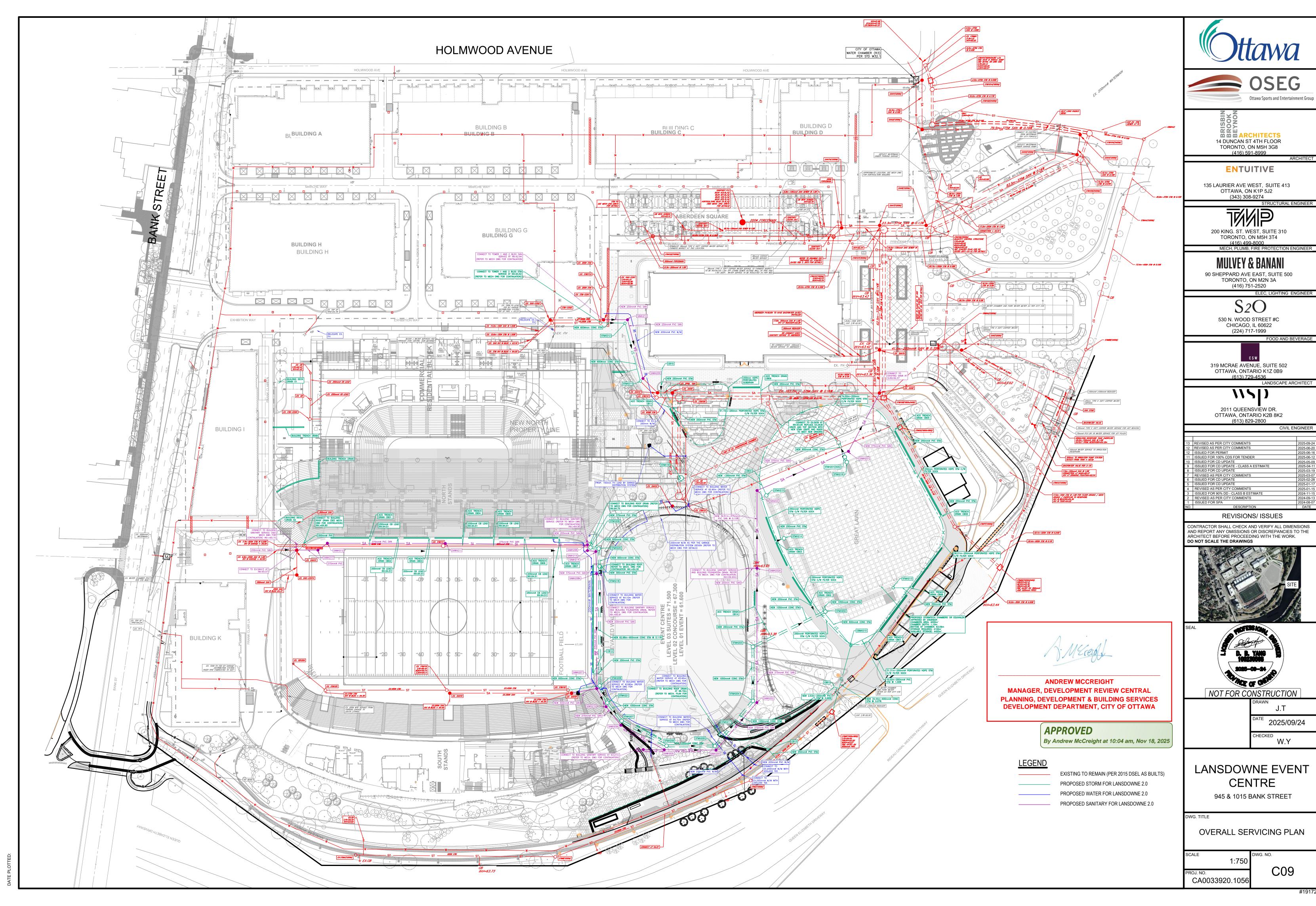
LANSDOWNE EVENT **CENTRE**

945 & 1015 BANK STREET

EROSION AND SEDIMENT CONTROL PLAN

1:400





- DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND LANDSCAPE DRAWINGS.
- 2. ALL SERVICES, MATERIALS, CONSTRUCTION METHODS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND REGULATIONS OF THE: CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS. ONTARIO PROVINCIAL SPECIFICATION STANDARD SPECIFICATION (OPSS) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD), UNLESS OTHERWISE SPECIFIED, TO THE SATISFACTION OF THE CITY AND THE CONSULTANT.
- 3. THE POSITION OF EXISTING POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING THE COURSE OF CONSTRUCTION. ANY RELOCATION OF EXISTING UTILITIES REQUIRED BY THE DEVELOPMENT OF SUBJECT LANDS IS TO BE UNDERTAKEN AT CONTRACTOR'S EXPENSE.
- 4. THE CONTRACTOR MUST NOTIFY ALL EXISTING UTILITY COMPANY OFFICIALS FIVE (5) BUSINESS DAYS PRIOR TO START OF CONSTRUCTION AND HAVE ALL EXISTING UTILITIES AND SERVICES LOCATED IN THE FIELD OR EXPOSED PRIOR TO THE START OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO HYDRO, BELL, CABLE TV, AND CONSUMERS GAS LINES.
- 5. ALL TRENCHING AND EXCAVATIONS TO BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF
- REFER TO ARCHITECTS PLANS FOR BUILDING DIMENSIONS, ELEVATIONS, LAYOUT AND REMOVALS. REFER TO LANDSCAPE PLAN FOR LANDSCAPED DETAILS AND OTHER RELEVANT INFORMATION. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF
- 7. TOPOGRAPHIC SURVEY COMPLETED AND PROVIDED BY STANTEC GEOMATICS LTD. DATED JANUARY 22, 2025. CONTRACTOR TO VERIFY IN THE FIELD PRIOR TO CONSTRUCTION OF ANY WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 8. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. VERIFY THAT JOB BENCHMARKS HAVE NOT BEEN ALTERED OR
- 9. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR DRAIN OUTLETS ARE PROVIDED.
- 10. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE WITH STEP JOINTS OF 500mm WIDTH MINIMUM.
- 11. ALL DISTURBED AREAS OUTSIDE PROPOSED GRADING LIMITS TO BE RESTORED TO ORIGINAL ELEVATIONS AND CONDITIONS UNLESS OTHERWISE SPECIFIED. EXISTING PARKING LOT SHALL BE RE-ASPHALTED AT EXISTING GRADES EXCEPT AS NOTED TO EVEN OUT GRADES. ALL RESTORATION SHALL BE COMPLETED WITH THE GEOTECHNICAL REQUIREMENTS FOR BACKFILL AND COMPACTION.
- 12. ABUTTING PROPERTY GRADES TO BE MATCHED.
- 13. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION, INCLUDING WATER PERMIT AND ROAD CUT PERMIT.
- MINIMIZE DISTURBANCE TO EXISTING VEGETATION DURING THE EXECUTION OF ALL WORKS.
- 15. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE PROPOSED BUILDING, PARKING AND ROADWAY LOCATIONS.
- 16. AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. STORM SEWER, SANITARY SEWER, WATER, ETC.) THE CONTRACTOR SHALL DETERMINE THE PRECISE LOCATION AND DEPTH OF EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
- 17. PRIOR TO CONSTRUCTION, A GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO IS TO INSPECT ALL SUB-SURFACES FOR FOOTINGS, SERVICES AND PAVEMENT STRUCTURES.
- 18. CONTRACTOR TO OBTAIN POST-CONSTRUCTION TOPOGRAPHIC SURVEY PERFORMED BY CERTIFIED OLS OR P.ENG. CONFIRMING COMPLIANCE WITH DESIGN GRADING AND SERVICING. SURVEY IS TO INCLUDE LOCATION AND INVERTS FOR BURIED UTILITIES.
- 19. PROVIDE CCTV INSPECTION REPORT FOR ALL SEWERS AND CATCHBASIN LEADS 200MM DIAMETER AND LARGER. REPEAT CCTV INSPECTION FOLLOWING RECTIFICATION OF ANY DEFICIENCIES.

20. REPORT REFERENCES

- 20.1. GEOTECHNICAL INVESTIGATION PROPOSED NORTH SIDE STANDS LANSDOWNE PARK REDEVELOPMENT, REPORT NO. PG6655-2,
- FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT FOR LANSDOWNE LIVE OTTAWA SPORT AND ENTERTAINMENT GROUP, PROJECT NO. 09-378, JANUARY 2012, BY DSEL.
- FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT STUDY FOR LANSDOWNE PARK REDEVELOPMENT 2.0, PROJECT NO. CA0000286.1662, SEPTEMBER 2023, BY WSP.
- STORMWATER MANAGEMENT DESIGN REPORT FOR LANSDOWNE URBAN PARK, FEBRUARY 2012, BY STANTEC CONSULTING LTD. SERVICING REPORT FOR LANSDOWNE PARK EVENT CENTRE, REPORT NO.CA0033920.1056, MARCH 07, 2025, PREPARED BY WSP. STORMWATER MANAGEMENT DESIGN REPORT FOR LANSDOWNE PARK EVENT CENTRE, REPORT NO.CA0033920.1056, MARCH 07.
- SERVICING REPORT FOR LANSDOWNE PARK NORTH SIDE STANDS NO.CA0043476.7969, DECEMBER 2024, PREPARED BY WSP.

PARKING LOT AND WORK IN PUBLIC RIGHTS OF WAY

- 1. CONTRACTOR TO REINSTATE ROAD CUTS AS PER CITY OF OTTAWA DETAIL R10.
- 2. GEOTECHNICAL INVESTIGATION PROPOSED NORTH SIDE STANDS LANSDOWNE PARK REDEVELOPMENT REPORT NO. PG6655-2, DECEMBER 2024, BY PATTERSON GROUP.
- 3. CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING, TO THE SATISFACTION OF THE GEOTECHNICAL CONSULTANT PRIOR TO THE COMMENCEMENT OF PLACEMENT OF GRANULAR B MATERIAL.
- 4. FILL TO BE PLACED AND COMPACTED PER THE GEOTECHNICAL REPORT REQUIREMENTS.
- 5. CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR B MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF GRANULAR B MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 6. GRANULAR A MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR B PLACEMENT.
- 7. CONTRACTOR TO SUPPLY, PLACE AND COMPACT GRANULAR A MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF GRANULAR A MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE GRADATION REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 8. ASPHALT MATERIAL TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL CONSULTANT OF GRANULAR A PLACEMENT.
- 9. CONTRACTOR TO SUPPLY, PLACE AND COMPACT ASPHALT MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. CONTRACTOR TO PROVIDE CONSULTANT WITH SAMPLES OF ASPHALT MATERIAL FOR TESTING AND CERTIFICATION FROM THE GEOTECHNICAL CONSULTANT THAT THE MATERIAL MEETS THE REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT.
- 10. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS, AND FOR PROVIDING THE CONSULTANT WITH VERIFICATION PRIOR TO PLACEMENT.
- 11. ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF AT AN APPROVED DUMP SITE. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIAL, CONTRACTOR IS TO NOTIFY CONSULTANT. CONSULTANT TO DETERMINE APPROPRIATE DISPOSAL METHOD/LOCATION.
- 12. PAVEMENT STRUCTURE (MATERIAL TYPES AND THICKNESS) TO BE AS SPECIFIED IN THE GEOTECHNICAL REPORT.

STORM SEWERS AND STRUCTURES

- 1. ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW STORM SEWERS, SERVICES AND CB LEADS.
- STORM SEWERS 450mm DIAMETER AND SMALLER SHALL BE PVC SDR-35, WITH RUBBER GASKET PER CSA
- STORM SEWER LARGER THAN 450mm SHALL BE REINFORCED CONCRETE CLASS 100D.
- 4. SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
- 5. ALL STORM MANHOLES TO BE AS PER STORM STRUCTURE TABLE.
- ANY NEW OR EXISTING STORM SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22. OR APPROVED BY THE ENGINEER.
- 7. ALL CATCHBASIN LEADS TO BE MINIMUM 200mm DIAMETER AT MINIMUM 1.0% SLOPE UNLESS OTHERWISE
- STORM CATCHBASINS AS PER OPSD 705.010 AND FRAME/COVER AS PER CITY STANDARD DRAWINGS S19. STORM

CBMH'S AS INDICATED IN TABLE WITH SUMP, ADJUSTMENT SECTIONS SHALL BE AS PER OPSD 704.010.

- 9. INSTALLATION OF FLOW CONTROL ICD'S TO BE VERIFIED BY QUALITY VERIFICATION ENGINEER RETAINED BY
- 10. PROVIDE BACKWATER VALVE ON FOUNDATION DRAIN, STORM DISCHARGE, AND OVERFLOW DISCHARGE PER
- 11. ALL CATCHBASINS EXCLUDING LANDSCAPE CATCHBASINS TO HAVE 150 MMØ PERFORATED PIPE FOR 3.0M ON ALL AVAILABLE SIDES AT AN ELEVATION OF 300mm BELOW SUBGRADE LEVEL AS PER CITY OF OTTAWA STANDARD DRAWING 'R1'

SANITARY SEWER AND STRUCTURES

- ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. PROVIDE CCTV INSPECTION REPORTS FOR ALL NEW SANITARY PIPING.
- SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR-35 (UNLESS SPECIFIED OTHERWISE) WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH CSA B-182.2,3,4.
- SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6.
- ALL SANITARY MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSD 701.01. FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.
- MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES AS PER THE OPSD 701.021
- 6. ANY SANITARY SEWER WITH LESS THAN 2.0m COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22, OR APPROVED BY THE ENGINEER.
- 7. PROVIDE BACKWATER VALVE FOR BUILDING SANITARY SERVICES PER \$14.1

in-situ soil or fill.

- ALL WATERMAIN AND WATERMAIN APPURTANANCES, MATERIALS, CONSTRUCTION AND TESTING METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA AND MINISTRY OF ENVIRONMENT STANDARDS AND SPECIFICATIONS.
- ALL WATERMAIN 300mm DIAMETER AND SMALLER TO BE POLY VINYL CHLORIDE (PVC) CLASS 150 DR 18 MEETING AWWA SPECIFICATION C900.
- ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE. WHERE WATERMAINS CROSS OVER OTHER UTILITIES. A MINIMUM 0.30m CLEARANCE SHALL BE MAINTAINED: WHERE WATERMAINS CROSS UNDER OTHER UTILITIES, A MINIMUM 0.50m CLEARANCE SHALL BE MAINTAINED. WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED, THE WATERMAIN SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25 AND W25.2. WHERE 2.4m MINIMUM DEPTH CANNOT BE ACHIEVED, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W22. WHERE A WATERMAIN IS IN CLOSE PROXIMITY TO AN OPEN STRUCTURE, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W23.
- 4. CONCRETE THRUST BLOCKS AND MECHANICAL RESTRAINTS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, REDUCERS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W25.3 & W25.4.
- 5. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS AS PER CITY OF OTTAWA STANDARD W40 & W42.
- 6. ALL VALVES AND VALVE BOXES AND CHAMBERS, HYDRANTS, AND HYDRANT VALVES AND ASSEMBLES SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARD
- 7. FIRE HYDRANT LOCATION AND INSTALLATION AS PER CITY OF OTTAWA STANDARD W18 & W19. CONTRACTOR TO
- PROVIDE FLOW TEST AND PAINTING OF NEW HYDRANT IN ACCORDANCE WITH CITY STANDARDS.
- 8. IF WATER MAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

Table 2 - Recommended Light Duty Asphalt Pavement Structure - Car Only Parking Tickness **Material Description** (mm) 50 **Wear Course** - HL-3 or Superpave 12.5 Asphaltic Concrete 150 Base - OPSS Granular A Crushed Stone 300 SUBBASE - OPSS Granular B Type II

SUBGRADE - Either approved fill, in-situ, or OPSS Granular B Type I or II material placed on

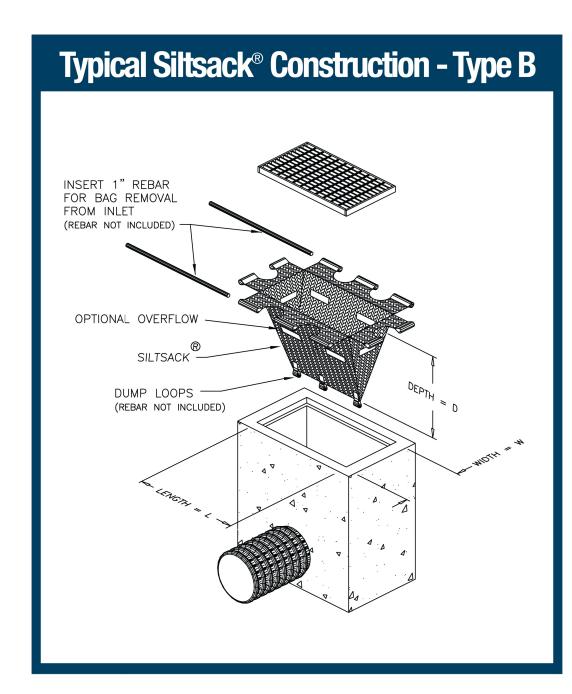
Tickness (mm)	Material Description
40	Wear Course - Superpave 12.5 Asphaltic Concrete
50	Binder Course - Superpave 19.0 Asphaltic Concrete
150	Base - OPSS Granular A Crushed Stone
300	SUBBASE - OPSS Granular B Type II

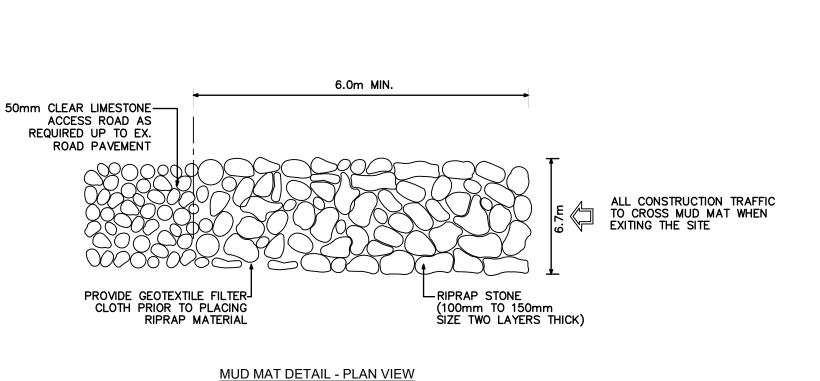
EROSION AND SEDIMENT CONTROL

- CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES. **
- PRIOR TO START OF CONSTRUCTION:
- 1.1. INSTALL SILT FENCE IN LOCATION SHOWN
- INSTALL SILT SACK FILTERS IN ALL THE CATCHBASINS AND MANHOLES TO REMAIN DURING CONSTRUCTION WITHIN THE SITE.
- 1.3. INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
- INSTALL MUD MAT AT CONSTRUCTION ENTRANCES

DURING CONSTRUCTION:

- 2.1. MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE AND IMPACTS
- PERIMETER VEGETATION TO REMAIN IN PLACE UNTIL PERMANENT STORM WATER MANAGEMENT IS IN PLACE. OTHERWISE, IMMEDIATELY INSTALL SILT FENCE WHEN THE EXISTING SITE IS DISTURBED AT THE PERIMETER.
- PROTECT DISTURBED AREAS FROM OVERLAND FLOW BY PROVIDING TEMPORARY SWALES TO THE SATISFACTION OF THE FIELD ENGINEER. TIE-IN TEMPORARY SWALE TO EXISTING CB'S AS
- 2.4. PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS. INSPECT SILT FENCES, FILTER FABRIC FILTERS AND CATCH BASIN SUMPS WEEKLY AND WITHIN
- 24 HOURS AFTER A STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY. DOWNSTREAM STORM INFRASTRUCTURE SHALL BE PROTECTED FROM UNFILTERED RUNOFF DURING ON-SITE STORM INFRASTRUCTURE DEMOLITION.
- DRAWING TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
- EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES. 2.9. DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS).
- CONTROL WIND-BLOWN DUST OFF SITE BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED AND TO THE SATISFACTION OF THE ENGINEER).
- 2.11. NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE FIELD ENGINEER. 2.12. CITY ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING
- 2.13. DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE
- ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR
- RUBBER TIRE LOADER. 2.15. TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ABUTTING PROPERTIES OR PUBLIC STREETS DURING
- CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED. ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND
- SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR
- PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.





BENCHMARK TABLE

Point No.	Northing	Easting	Elev
CC #1	5029149.213	368806.860	
CC #2	5029243.952	368876.257	
CC #3	5029193.203	368705.571	65.412
CC #6	5029144.760	368623.492	66.742
CC #7	5029095.379	368579.045	67.506
CC #8	5029101.070	368549.781	67.805
CC #9	5028989.253	368641.460	69.256
CP #87	5029086.967	368960.129	64.574
CP #88	5029257.273	369021.685	64.639
CP #102	5029082.645	368877.952	65.027
CP #103	5029112.963	368813.748	
CP #104	5029110.951	368837.055	65.020
CP# 105	5029144.819	368801.911	65.107
CP #6006	5029086.150	368805.429	
CPW #83	5028853.673	368573.563	65.326
SPK #4	5029115.901	368853.680	
SPK #85	5028866.914	368672.574	65.202
SPK #7352	5029056.087	368811.849	71.292
SPK #8928	5029145.040	368779.868	66.016
SPK #8435	5029089.179	368788.229	68.714
PKN #8838	5029023.162	368892.308	64.954
TARGET ON VAIL #7696	5028924.093	368706.883	89.744
MAG #20001	5029282.143	368911.384	65.242

EXISTING LEGEND:

EXISTING CATCHBASIN

EXISTING STORM MANHOLE

MANHOLE

LLGLIND.		FROFUSED LEGENI		
	EXISTING CURB		– E>	
· · — · · —	EXISTING BOTTOM OF SLOPE	——— w ———	– NE	
	EXISTING TOP OF SLOPE		- NE	
	EXISTING WATERMAIN		– NE	
	EXISTING STORM SEWER	——— SA ———	NE	
	EXISTING SANITARY SEWER		- н	
	EXISTING SWALE EXISTING PERFORATED DRAIN	•	NE	
x	EXISTING FENCE	0	NE	
	SITE TEMPORARY CONTROL POINT		NE	
	EXISTING SANITARY MANHOLE		NE	
	EXISTING FIRE HYDRANT	8	NE	
	EXISTING WATER VALVE	д	NE	
	EXISTING ELEVATION	4	NE	
. }	EXISTING TREES TO REMAIN	П	NE	
كو	EXISTING CATCHBASIN	★ [68.79]	PF	
	2,1011100,11011	4.00/		

REMOVALS LEGEN	ND:
ST — SA — W — x — x	CURB REMOVAL STORM REMOVAL STORM REMOVAL WATERMAIN REMOVAL FENCE REMOVAL FULL DEPTH ASPHALT REMOV
	GREEN AREA/ INTERLOCK AR REMOVAL CONCRETE SIDEWALK REMOV
	GRAVEL ROAD REMOVAL
	RETAINING WALL REMOVAL

CATCH BASIN REMOVAL STORM MANHOLE REMOVAL SANITARY MANHOLE REMOVAL FIRE HYDRANT REMOVAL **BOLLAR REMOVAL** LIGHT STAND REMOVAL

PROPOSED LEGEN	ND:
W	EXISTING BOUNDARY NEW WATERMAIN NEW STORM SEWER NEW HDPE SUBDRAIN NEW SANITARY SEWER HIGH POINT
© • •	NEW STORM CATCH BASIN MANHOLE NEW STORM MANHOLE NEW CATCH BASIN/ DITCH INLET NEW SANITARY MANHOLE
8	NEW WATERMAIN VALVE
선 건 -	NEW WATERMAIN CONNECTION NEW WATERMAIN 45° BEND NEW SERVICING CAP
★ 68.79	PROPOSED ELEVATION PROPOSED SURFACE SLOPE
	OVER FLOW DIRECTION
	PROPOSED TRENCH DRAIN

PROPOSED TREES PROPOSED GAS METER

PROPOSED INTERLOCK

PROPOSED ASPHALT PAVEMENT

ESC LEGEND:

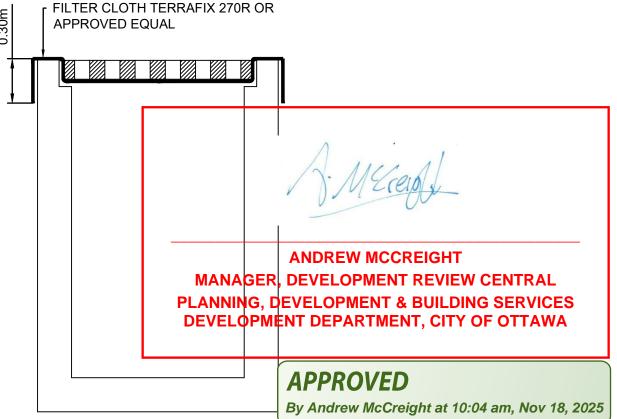
(OPSD 219.110) FILTER CLOTH PROTECTION MUD MAT

LIGHT DUTY SILT FENCE

DRAINAGE AREA LEGEND:

DRAINAGE AREA SYMBOL

■■■■ DRAINAGE AREA BOUNDARY



FILTER CLOTH CATCHBASIN OR MANHOLE SEDIMENT CONTROL DEVICE



14 DUNCAN ST 4TH FLOOR TORONTO, ON M5H 3G8 (416) 591-8999

ENTUITIVE

135 LAURIER AVE WEST, SUITE 413 OTTAWA, ON K1P 5J2 (343) 308-9274 STRUCTURAL ENGINEER

200 KING. ST. WEST, SUITE 310 TORONTO, ON M5H 3T4 (416) 499-8000 MECH, PLUMB, FIRE PROTECTION ENGINEER

90 SHEPPARD AVE EAST, SUITE 500

TORONTO, ON M2N 3A

(416) 751-2520 ELEC, LIGHTING ENGINEER

530 N. WOOD STREET #C CHICAGO, IL 60622 (224) 717-1999

FOOD AND BEVERAGE

319 MCRAE AVENUE, SUITE 502 OTTAWA, ONTARIO K1Z 0B9 (613) 729-4536 LANDSCAPE ARCHITECT

2011 QUEENSVIEW DR. OTTAWA, ONTARIO K2B 8K2 (613) 829-2800

CIVIL ENGINEER REVISED PER CITY COMMEN REVISED PER CITY COMMENTS ISSUED FOR PERMIT ISSUED FOR 100% CD FOR TENDER ISSUED FOR CD UPDATE ISSUED FOR CD UPDATE - CLASS A ESTIMATE ISSUED FOR CD UPDATE ISSUED FOR CD UPDATE REVISED PER CITY DEFICIENCY COMMENTS
ISSUED FOR CD UPDATE

ISSUED FOR SITE PLAN APPLICATION ISSUED FOR UDRP **REVISIONS/ISSUES**

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY OMISSIONS OR DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK

DO NOT SCALE THE DRAWINGS

D. B. YANG <u>100230568</u> 2025-09-24 NOT FOR CONSTRUCTION

> 2025/09/24 CHECKED W.Y

J.T

LANSDOWNE NSS

DWG. TITLE

NOTES AND DETAILS

DWG. NO. AS SHOWN

CA0043476.7969

