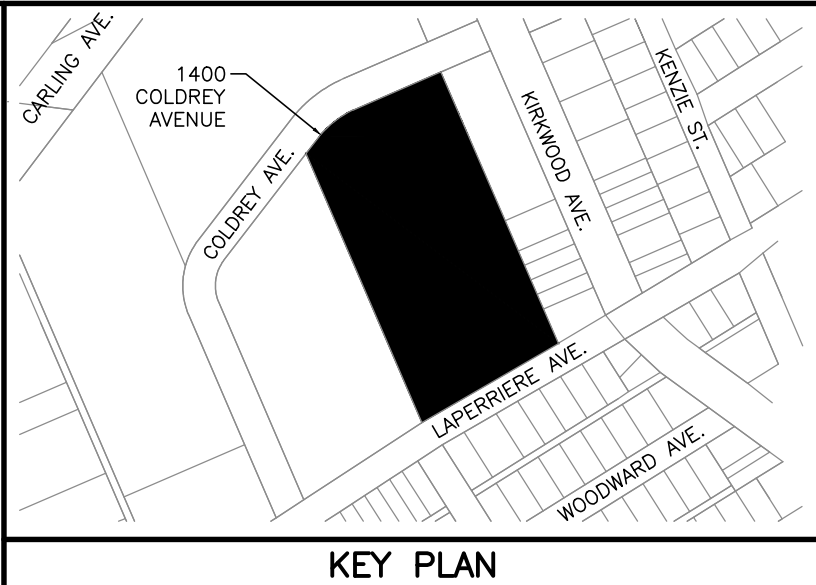


NOT FOR CONSTRUCTION

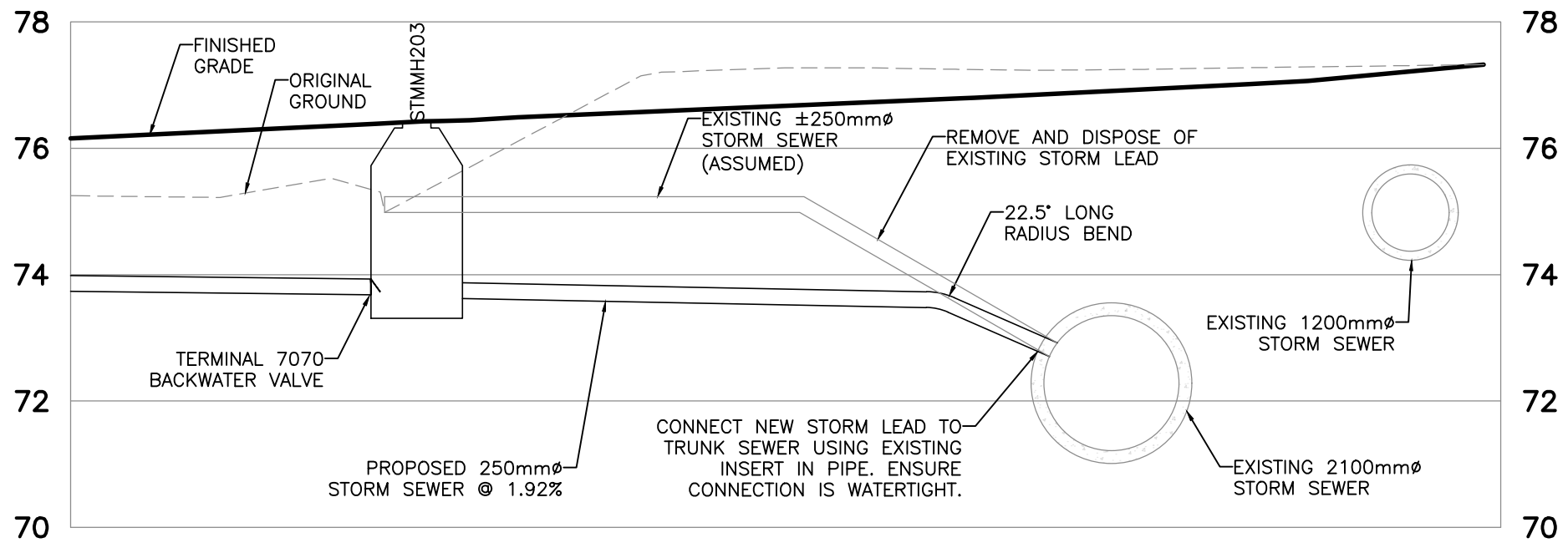


LEGEND

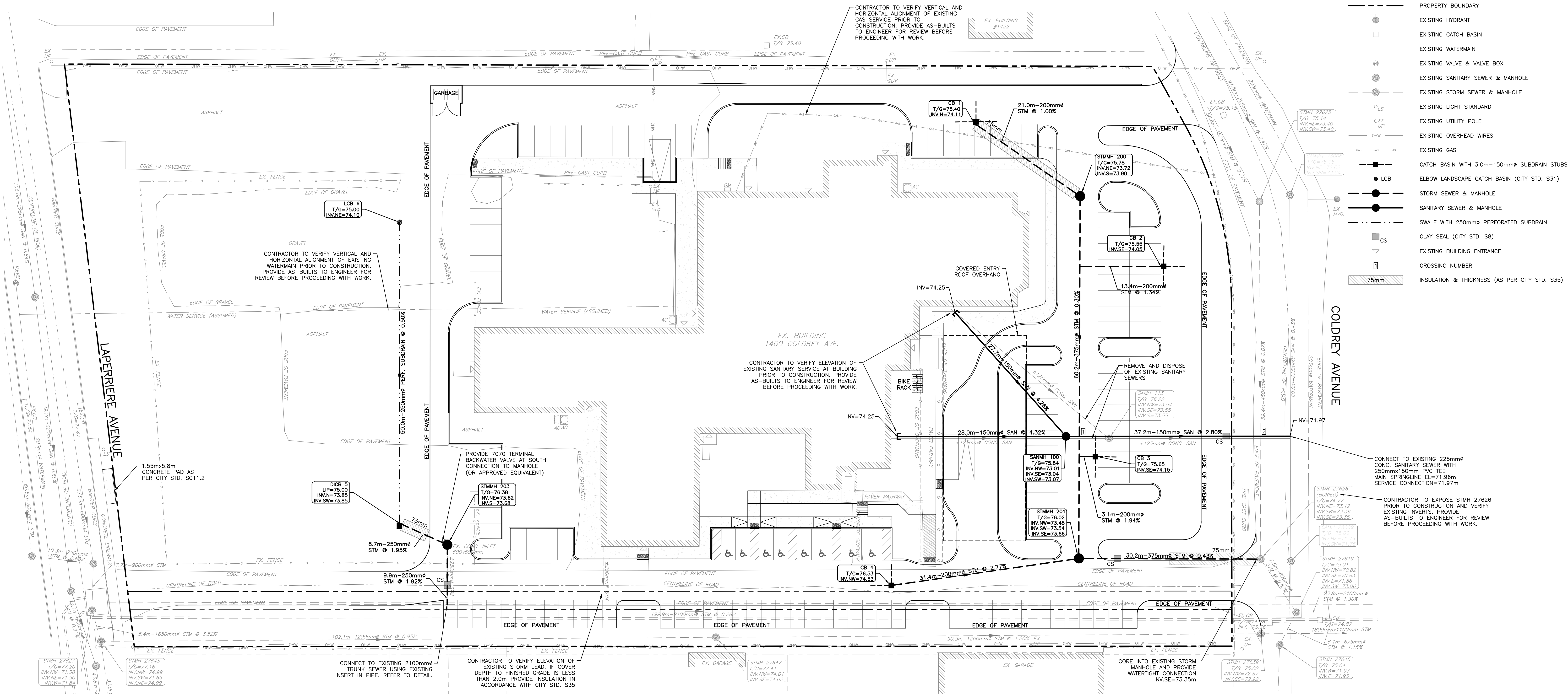
- PROPERTY BOUNDARY
- EXISTING HYDRANT
- EXISTING CATCH BASIN
- EXISTING WATERMAIN
- EXISTING VALVE & VALVE BOX
- EXISTING SANITARY SEWER & MANHOLE
- EXISTING STORM SEWER & MANHOLE
- EXISTING LIGHT STANDARD
- EXISTING UTILITY POLE
- EXISTING OVERHEAD WIRES
- EXISTING GAS
- CATCH BASIN WITH 3.0m-150mm \varnothing SUBDRAIN STUBS
- ELBOW LANDSCAPE CATCH BASIN (CITY STD. S31)
- STORM SEWER & MANHOLE
- SANITARY SEWER & MANHOLE
- SWALE WITH 250mm \varnothing PERFORATED SUBDRAIN
- CLAY SEAL (CITY STD. S8)
- EXISTING BUILDING ENTRANCE
- CROSSING NUMBER
- INSULATION & THICKNESS (AS PER CITY STD. S35)

INLET CONTROL DEVICE (ICD) TABLE				
STRUCTURE	2-YR HEAD (m)	2-YR OUTFLOW (L/s)	ORIFICE DIAMETER (mm)	ORIFICE TYPE
CB 1	1.19	21.0	95	CUSTOM TEMPEST HF, CIRCULAR, SLIDE
CB 2	1.40	23.0	96	CUSTOM TEMPEST HF, CIRCULAR, SLIDE
CB 3	1.40	35.0	117	CUSTOM TEMPEST HF, CIRCULAR, SLIDE
CB 4	1.90	20.0	83	CUSTOM TEMPEST HF, CIRCULAR, SLIDE
DICB 5	1.02	69.6	180	CUSTOM TEMPEST HF, CIRCULAR, SLIDE

CROSSING TABLE			
CROSSING No.	SERVICE	INVERT/OBVERT	SEPARATION (m)
1	STORM	73.60	0.50
	SANITARY	73.10	
2	EX STORM	73.29	1.03
	SANITARY	72.26	



STORM SEWER CONNECTION DETAIL
N.T.S.



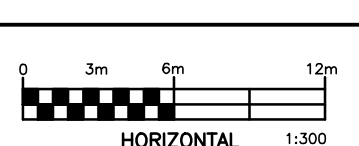
NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PROPERTY BOUNDARIES ARE DERIVED FROM PLAN OF SURVEY OF PART OF LOT 1 CONCESSION A RIDEAU FRONT, GEOGRAPHIC TOWNSHIP OF NEPEAN, CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN, VOLLEBERG LTD. BEARINGS ARE GRID, ARE REFERRED TO THE CENTRAL MERIDIAN OF MTM ZONE 9, NAD-83 (ORIGINAL).

NO.	REVISION	DESCRIPTION	DATE	BY
2	REVISED PER COMMENTS		21/08/25	BLM
1	ISSUED FOR REVIEW		09/06/25	BLM

SCALE



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

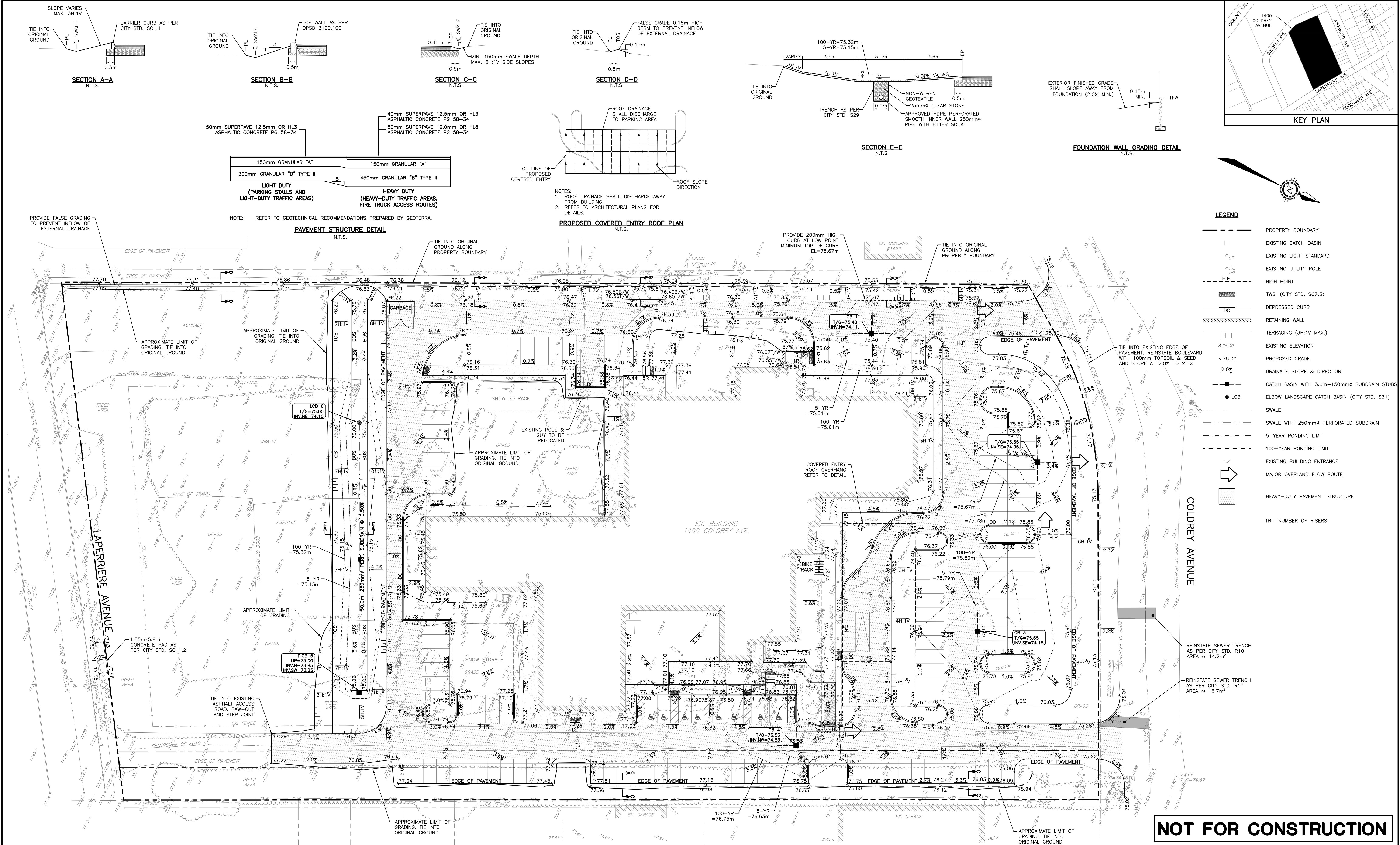
DESIGN	BLM
CHECKED	CC
DRAWN	BLM
CHECKED	CC
APPROVED	BLM

KEHILLAT BETH ISRAEL

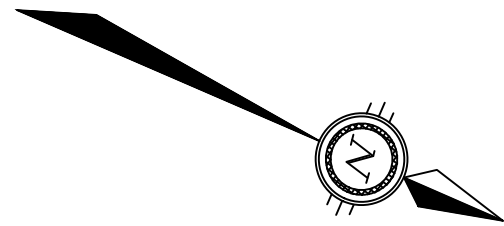
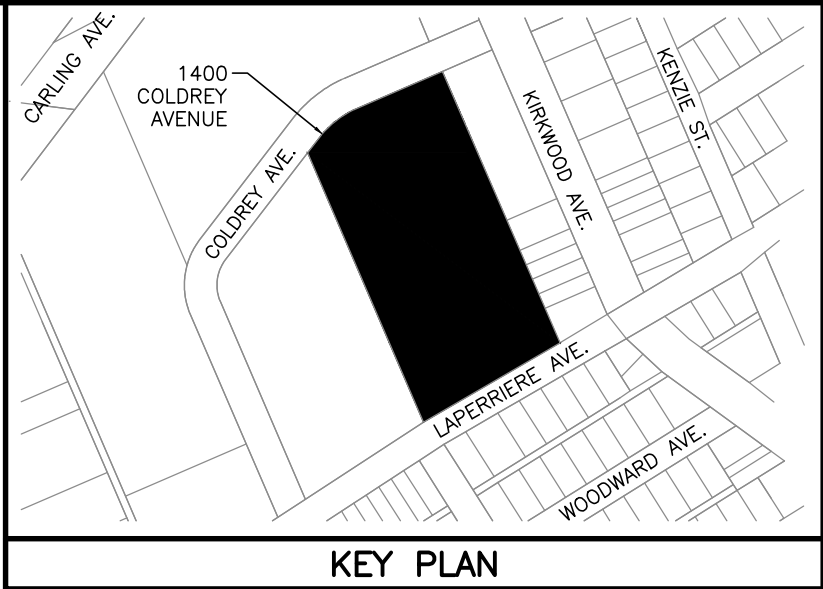
1400 COLDREY AVENUE
CITY OF OTTAWA

SERVICING PLAN

PROJECT No.	24060
SURVEY	RCI
DATED	AUGUST 2025
DWG. No.	24060-S1



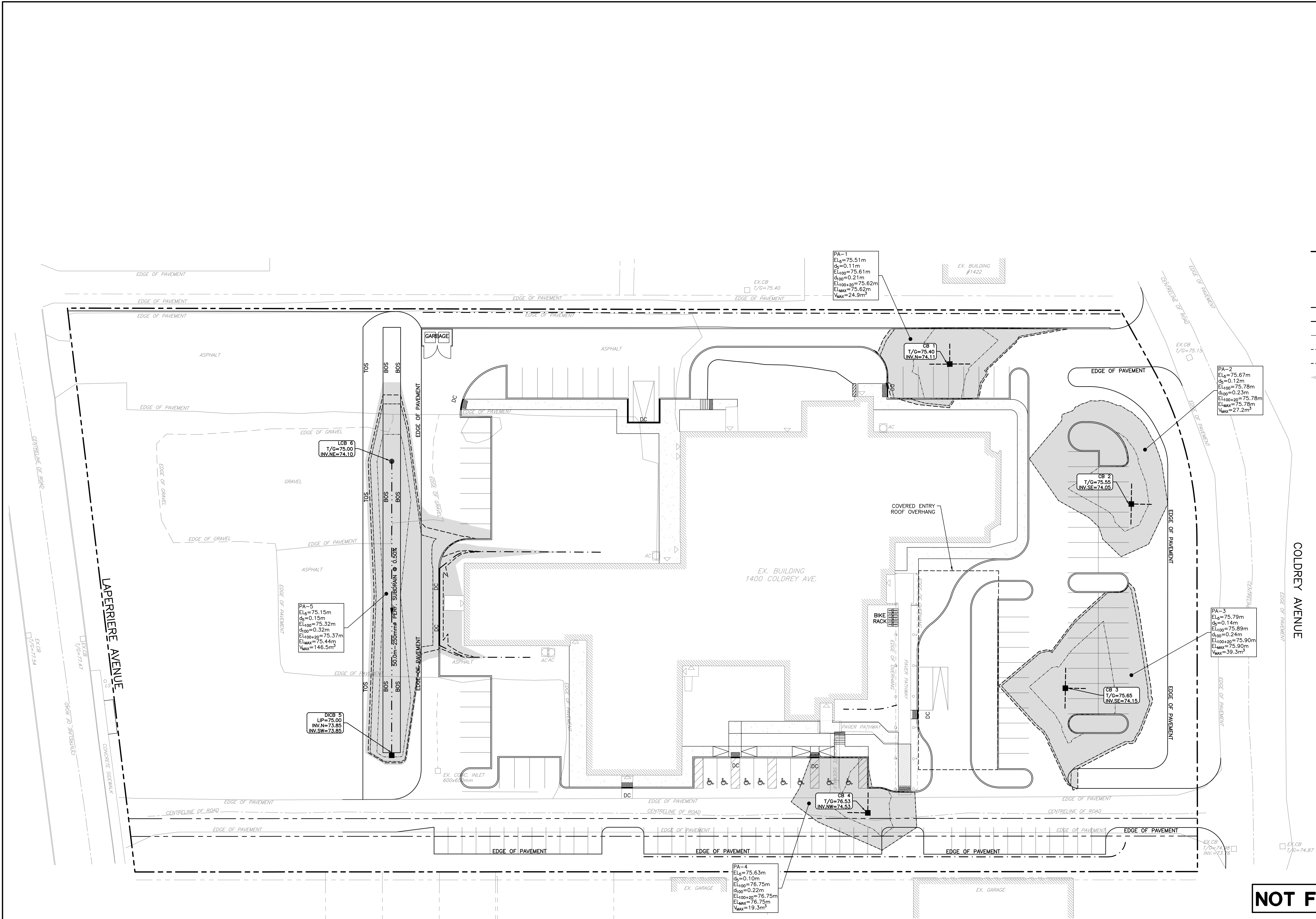
NOTES						<div>SCALE</div> <div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><</div></div>	
-------	--	--	--	--	--	--	--



LEGEND

- PROPERTY BOUNDARY
 - EXISTING CATCH BASIN
 - CATCH BASIN WITH 3.0m-150mm ϕ SUBDRAIN STUBS
 - ELBOW LANDSCAPE CATCH BASIN (CITY STD. S31)
 - SWALE
 - SWALE WITH 250mm ϕ PERFORATED SUBDRAIN
 - 5-YEAR PONDING LIMIT
 - 100-YEAR PONDING LIMIT
 - 100-YEAR + 20% PONDING LIMIT
 - MAXIMUM STATIC PONDING LIMIT
 - EXISTING BUILDING ENTRANCE
- PA-1 EL_s EL₁₀₀ d₁₀₀ EL₁₀₀₊₂₀ EL_{max} V_{max}
- PONDING AREA ID
5-YEAR PONDING ELEVATION
5-YEAR PONDING DEPTH
100-YEAR PONDING ELEVATION
100-YEAR PONDING DEPTH
100-YEAR + 20% PONDING ELEVATION
MAXIMUM STATIC PONDING ELEVATION
MAXIMUM AVAILABLE SURFACE STORAGE

NOTE: NO SURFACE PONDING OCCURS DURING THE 2-YEAR DESIGN EVENT.



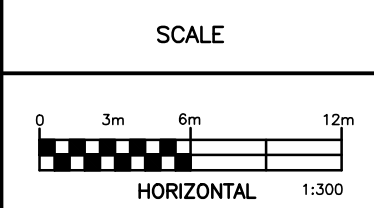
NOT FOR CONSTRUCTION

NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PROPERTY BOUNDARIES ARE DERIVED FROM PLAN OF SURVEY OF PART OF LOT 1 CONCESSION A RIDEAU FRONT, GEOGRAPHIC TOWNSHIP OF NEPEAN, CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. BEARINGS ARE GRID, ARE REFERRED TO THE CENTRAL MERIDIAN OF MTM ZONE 9, NAD-83 (ORIGINAL).

NO.	REVISION DESCRIPTION	DATE	BY
2	REVISED PER COMMENTS	21/08/25	BLM
1	ISSUED FOR REVIEW	09/06/25	BLM



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 roil.com

DESIGN	BLM
CHECKED	CC
DRAWN	BLM
CHECKED	CC
APPROVED	BLM

KEHILLAT BETH ISRAEL

1400 COLDREY AVENUE
CITY OF OTTAWA

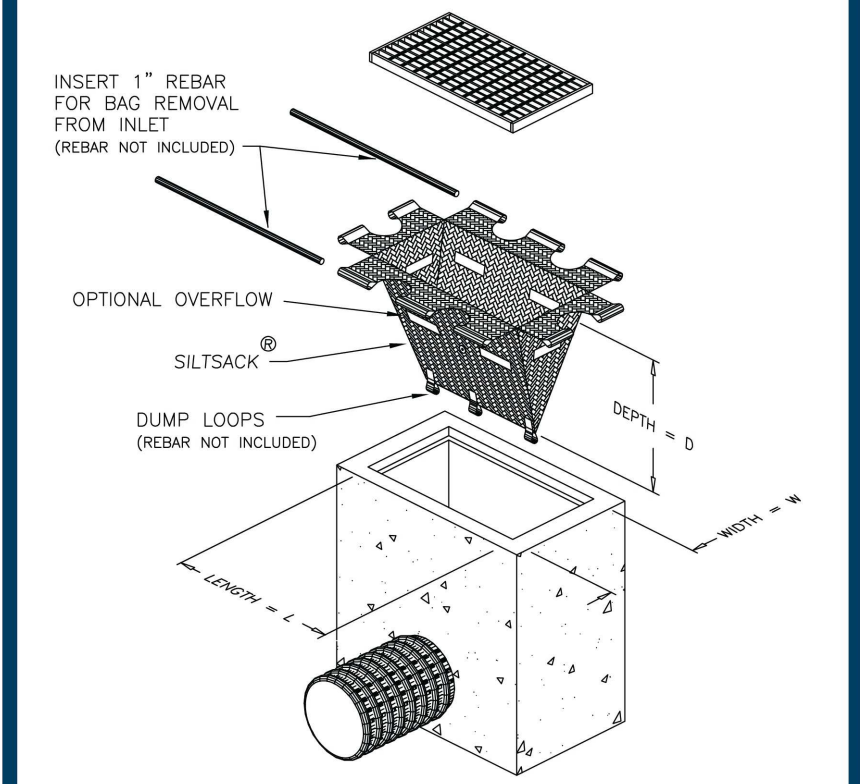
PONDING AREA PLAN

PROJECT No.	24060
SURVEY	RCI
DATED	AUGUST 2025
DWG. No.	24060-PA1

PLAN No. 19336

FILE No. D07-12-25-0083

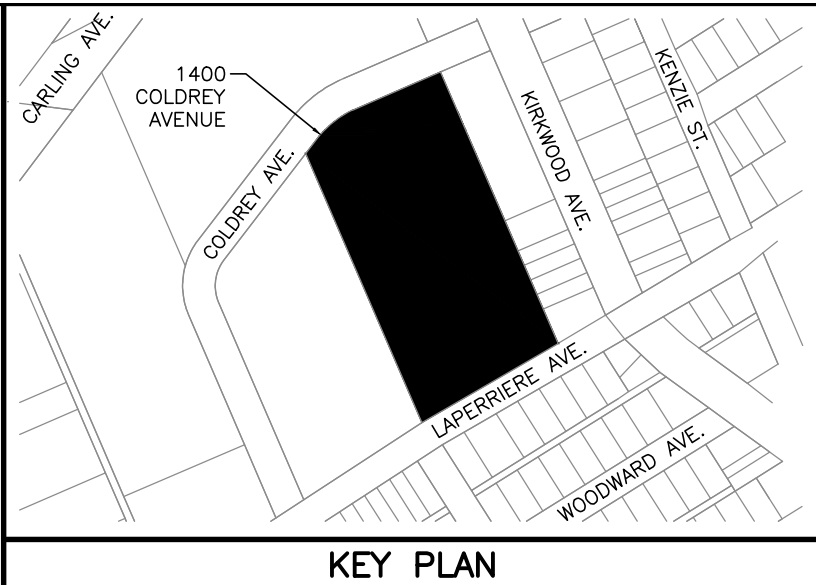
Typical Silt sack® Construction - Type B



NOTES:
1. SEDIMENT SHALL BE CLEANED FROM ROADWAYS AS REQUIRED.

MUD MAT DETAIL
N.T.S.

NOT FOR CONSTRUCTION



LEGEND

- PROPERTY BOUNDARY
- EXISTING CATCH BASIN
- EXISTING STORM SEWER & MANHOLE
- CATCH BASIN
- LCB
- ELBOW LANDSCAPE CATCH BASIN (CITY STD. S31)
- STORM SEWER & MANHOLE
- SWALE
- SWALE WITH 250mmØ PERFORATED SUBDRAIN
- SILT FENCE
- SILT SACK (OR APPROVED EQUIVALENT)
- MUD MAT

NOTES:

- THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE ULTIMATE 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.
- LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION HAS BEEN RE-ESTABLISHED IN ALL DISTURBED AREAS. RE-VEGETATE DISTURBED AREAS AS SOON AS POSSIBLE.
- CONTRACTOR SHALL MINIMIZE THE AMOUNT OF STOCKPILED MATERIAL. ALL STOCKPILE SOIL SHALL BE AWAY (15 METRES OR GREATER) FROM WATERCOURSES, DRAINAGE FEATURES AND TOP OF STEEP SLOPES. THE DOWNSTREAM SIDE OF ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCE, FIBRE ROLLS OR EQUIVALENT MEASURES PRIOR TO A RAINFALL EVENT.
- SILT SACKS ARE TO BE PLACED UNDERNEATH THE FRAME AND COVER OF ALL PROPOSED AND EXISTING CATCH BASIN AND OPEN COVER STORM MANHOLES UNTIL CONSTRUCTION IS COMPLETED.
- LIGHT DUTY SILT FENCE BARRIERS SHALL BE INSTALLED AS PER OPSD 219.110 WHERE INDICATED AND MAINTAINED AS REQUIRED.
- DURING ACTIVE CONSTRUCTION PERIODS, VISUAL INSPECTIONS SHALL BE UNDERTAKEN ON A WEEKLY BASIS AND AFTER MAJOR STORM EVENTS (>25mm RAIN IN 24 HOUR PERIOD) ON SEDIMENT CONTROL BARRIERS AND ANY DAMAGE REPAIRED IMMEDIATELY.
- EROSION AND SEDIMENT CONTROL BARRIERS SHALL ALSO BE ASSESSED (AND REPAIRED AS REQUIRED) FOLLOWING SIGNIFICANT SNOWMELT EVENTS.
- VISUAL INSPECTIONS SHALL ALSO BE UNDERTAKEN IN ANTICIPATION OF LARGE STORM EVENTS (OR A SERIES OF RAINFALL AND/OR SNOWMELT DAYS) THAT COULD POTENTIALLY YIELD SIGNIFICANT RUNOFF VOLUMES.
- CARE SHALL BE TAKEN TO PREVENT DAMAGE TO EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION OPERATIONS.
- IN SOME CASES, BARRIERS MAY BE REMOVED TEMPORARILY TO ACCOMMODATE THE CONSTRUCTION OPERATIONS. THE AFFECTED BARRIERS SHALL BE REINSTATED IMMEDIATELY AFTER CONSTRUCTION OPERATIONS ARE COMPLETED.
- SEDIMENT CONTROL DEVICES SHALL BE CLEANED OF ACCUMULATED SEDIMENTATION AS REQUIRED AND REPLACED AS NECESSARY.
- DURING THE COURSE OF CONSTRUCTION, IF THE ENGINEER BELIEVES THAT ADDITIONAL PREVENTION METHODS ARE REQUIRED TO CONTROL EROSION AND SEDIMENTATION, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES, AS REQUIRED, TO THE SATISFACTION OF THE ENGINEER.
- CONSTRUCTION AND MAINTENANCE REQUIREMENTS FOR EROSION AND SEDIMENT CONTROLS ARE TO COMPLY WITH OPSD 805.
- MUD MATS SHALL BE INSTALLED AT ALL CONSTRUCTION ENTRANCES.
- INSPECTION AND MAINTENANCE OF TEMPORARY ESC MEASURES SHALL CONTINUE UNTIL THEY ARE NO LONGER REQUIRED.
- THE CONTRACTOR SHALL ENSURE THAT RECORDS OF INSPECTION ARE TAKEN, INCLUDING INSPECTOR'S NAME, DATE OF INSPECTION, VISUAL OBSERVATIONS, AND ANY NECESSARY REMEDIAL MEASURES TAKEN TO MAINTAIN INTERIM ESC MEASURES.

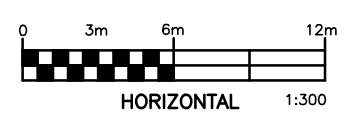
NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PROPERTY BOUNDARIES ARE DERIVED FROM PLAN OF SURVEY OF PART OF LOT 1 CONCESSION A RIDEAU FRONT, GEOGRAPHIC TOWNSHIP OF NEPEAN, CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN, VOLLERBACH LTD. BEARINGS ARE GRID, ARE REFERRED TO THE CENTRAL MERIDIAN OF MTM ZONE 9, NAD-83 (ORIGINAL).

NO.	REVISION	DESCRIPTION	DATE	BY
2	REVISED PER COMMENTS		21/08/25	BLM
1	ISSUED FOR REVIEW		09/06/25	BLM

SCALE



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	CC
DRAWN	BLM
CHECKED	CC
APPROVED	BLM

KEHILLAT BETH ISRAEL

1400 COLDREY AVENUE
CITY OF OTTAWA

EROSION AND SEDIMENT
CONTROL PLAN

PROJECT No.	24060
SURVEY	RCI
DATED	AUGUST 2025
DWG. No.	24060-ESC1

- GENERAL NOTES:**
1. ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), AS AMENDED BY THE CITY OF OTTAWA.
 2. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
 3. ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
 4. DESIGN ELEVATIONS GIVEN ARE TO BE ADHERED TO WITH NO CHANGES WITHOUT PRIOR WRITTEN APPROVAL BY ROBINSON LAND DEVELOPMENT.
 5. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
 6. RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
 7. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE OCCUPANCIAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
 8. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST AMENDMENT).
 9. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
 10. THE SUPPORT OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
 11. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH, AS SPECIFIED BY OPSD, IS EXCEEDED.
 12. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR, REVIEW WITH THE CITY OF OTTAWA PRIOR TO AND TREE CUTTING.
 13. PRIOR TO GEOTECHNICAL INVESTIGATION BY GEOTERRA, DATED MARCH 2025.
 14. THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE FOR DEWATERING, SUPPORT AND PROTECTION OF EXCAVATIONS AND TRENCHING AS WELL AS RELEASE OF ANY PUMPED GROUNDWATER IN A CONTROLLED MANNER.
 15. DO NOT CONSTRUCT USING DRAWINGS THAT ARE NOT MARKED "ISSUED FOR CONSTRUCTION".
 16. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.
 17. CLAY SEALS SHALL BE INSTALLED WITHIN A NEWER TRENCHING IN ACCORDANCE WITH CITY STANDARD S8.
 18. MOVEMENT OF MATERIAL ON AND/OR OFF SITE SHALL BE IN ACCORDANCE WITH ONTARIO EXCESS SOIL REGULATION O.R.G. 406/19.
 19. THE CONTRACTOR SHALL COMPLETE A CCTV INSPECTION OF ALL NEW SANITARY AND STORM SEWERS PRIOR TO PLACEMENT OF TOP LIFT AT MANHOLE. A COPY OF THE VIDEO INSPECTION SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW.
 20. THE CONTRACTOR SHALL COMPLETE CCTV INSPECTION OF EXISTING MUNICIPAL SEWERS IMMEDIATELY UPSTREAM AND DOWNSTREAM OF ANY PROPOSED CONNECTIONS, INCLUDING SEWER STUBS. THE CCTV INSPECTION IS REQUIRED PRE AND POST CONSTRUCTION.

STORM SEWERS:

1. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.2 (LATEST AMENDMENT). ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.1 (LATEST AMENDMENT). PIPE SHALL BE JOINTED WITH STD. RUBBER GASKETS AS PER CSA A257.3 (LATEST AMENDMENT).
2. ALL STORM SEWER TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. S6 AND S7 CLASS 'B' UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
3. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
4. PIPE MATERIAL FOR ALL STORM SEWERS 375mm IN DIAMETER AND SMALLER SHALL BE PVC SDR 35. STORM MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24.1.
5. CATCH BASIN MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S28.1.
6. STORM SEWER MANHOLES SERVING 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.
7. THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED ABOVE. WHERE THE SPECIFIED TRENCH WIDTH IS EXCEEDED, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADDITIONAL BEDDING, A DIFFERENT TYPE OF BEDDING OR A HIGHER PIPE STRENGTH AT HIS OWN EXPENSE AND SHALL ALSO BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.
8. ALL STORM MANHOLES SHALL BE 1200mm DIAMETER AS PER OPSD 701.010 UNLESS OTHERWISE NOTED.
9. ALL CATCH BASINS SHALL BE 600mm x 600mm AS PER OPSD 705.010 UNLESS OTHERWISE NOTED.

SANITARY SEWERS:

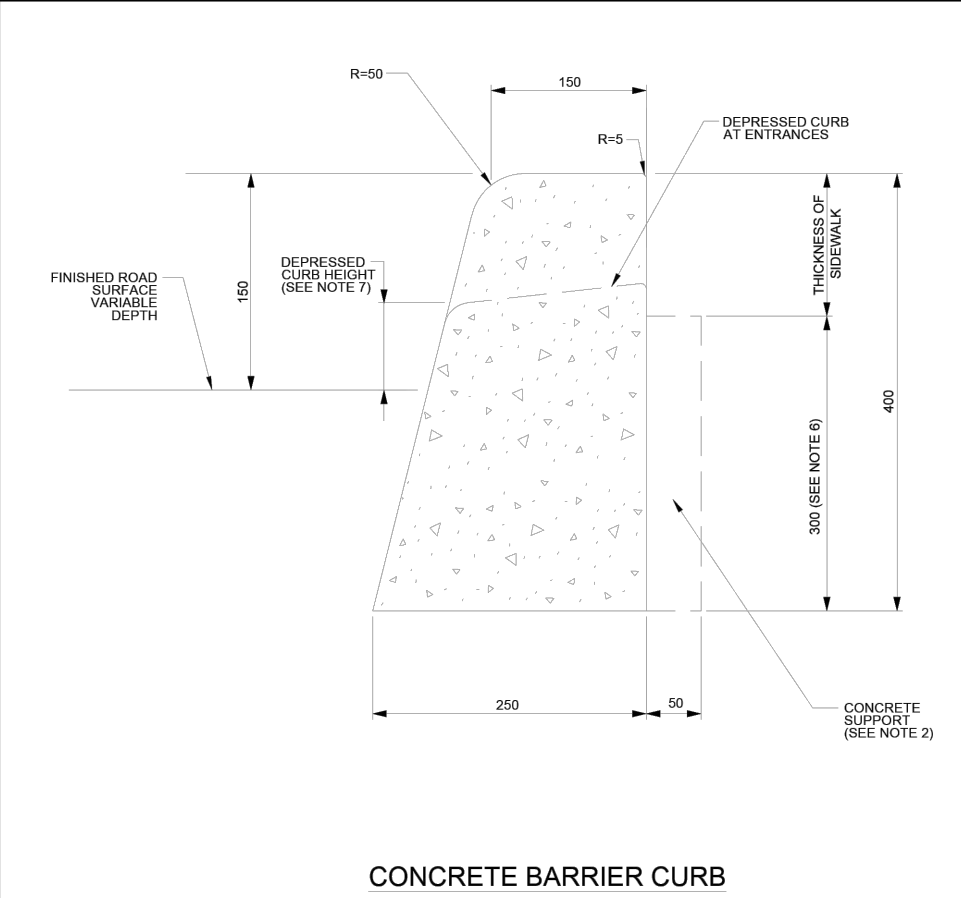
1. ALL SANITARY SEWERS 200mm IN DIAMETER AND LARGER SHALL BE PVC SDR 35, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
2. ALL SANITARY SERVICES 150mm IN DIAMETER AND SMALLER SHALL BE PVC SDR 28, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
3. SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B' BEDDING UNLESS OTHERWISE NOTED.
4. ALL SANITARY SERVICES ARE TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
5. SANITARY MANHOLE FRAME AND COVERS SHALL BE WATERTIGHT AS PER CITY OF OTTAWA STD. S24.
6. SANITARY SEWER MANHOLES SHALL BE BENCHING AS PER OPSD 701.021.
7. SANITARY PRE-CAST MANHOLE SHALL BE CONSTRUCTED WITH A HIGHER PERCENTAGE OF SILICA FUME IN THE CONCRETE TO MAKE IT MORE DENSE AND LESS SUSCEPTIBLE TO CORROSION OR PINHOLE LEAKS.
8. FOR SANITARY MANHOLES, DEPENDENT ON THE ELEVATION OF THE GROUNDWATER TABLE AND BASED ON THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL CONSULTANT, CRETEX SEALS, OR A SIMILAR PRODUCT, SHALL BE INSTALLED IN THE PRE-CAST MANHOLE SECTION TO JUST BELOW THE MANHOLE FRAM TO PREVENT INFILTRATION.
9. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSF 410 AND OPSS 407. CONTRACTOR SHALL PERFORM VIDEO INSPECTION OF ALL STORM AND SANITARY SEWERS. A COPY OF THE VIDEO AND INSPECTION REPORT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

WATER SUPPLY:

1. ALL PVC WATERMAINS SHALL BE EQUAL TO AWWA C-900 CLASS 150, SDR 18, OR APPROVED EQUAL.
2. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS OTHERWISE NOTED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
3. ALL PVC WATERMAINS SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWU OR RWU TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W36.
4. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
5. CONTRACTOR TO SUPPLY HYDRANT EXTENSION TO ADJUST THE LENGTH OF HYDRANT BARREL IF REQUIRED.
6. FIRE HYDRANTS SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W19, AND LOCATED AS PER CITY STD. W18.
7. VALVE IN BOXES SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W25.3 AND W25.4.
8. WATERMAIN IN FILL AREAS TO BE INSTALLED WITH RESTRAINED JOINTS AS PER CITY OF OTTAWA STD. W25.5 AND W25.6.
9. THRUST BLOCKING OF WATERMAIN TO BE INSTALLED AS PER CITY OF OTTAWA STD. W25.3 AND W25.4.
10. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS AND BLOW-OFFS AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAIN.
11. INSULATION FOR WATERMAIN CROSSING OVER AND BELOW SEWER SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25.2, RESPECTIVELY, WHERE WATERMAIN COVER IS LESS THAN 2.4m.
12. AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER / UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY STD. W25.2. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER AS PER CITY STD. W25.
13. CONNECTION TO EXISTING WATERMAIN TO BE PERFORMED BY CITY FORCES. CONTRACTOR TO PROVIDE LABOUR, EQUIPMENT AND MATERIAL REQUIRED FOR EXCAVATION, BEDDING AND REINSTATEMENT.
14. SWABBING, DISINFECTION, AND HYDROSTATIC TESTING TO BE CONDUCTED AS PER CITY OF OTTAWA STANDARDS IN THE PRESENCE OF A CITY INSPECTOR AND/OR CONSULTANT.

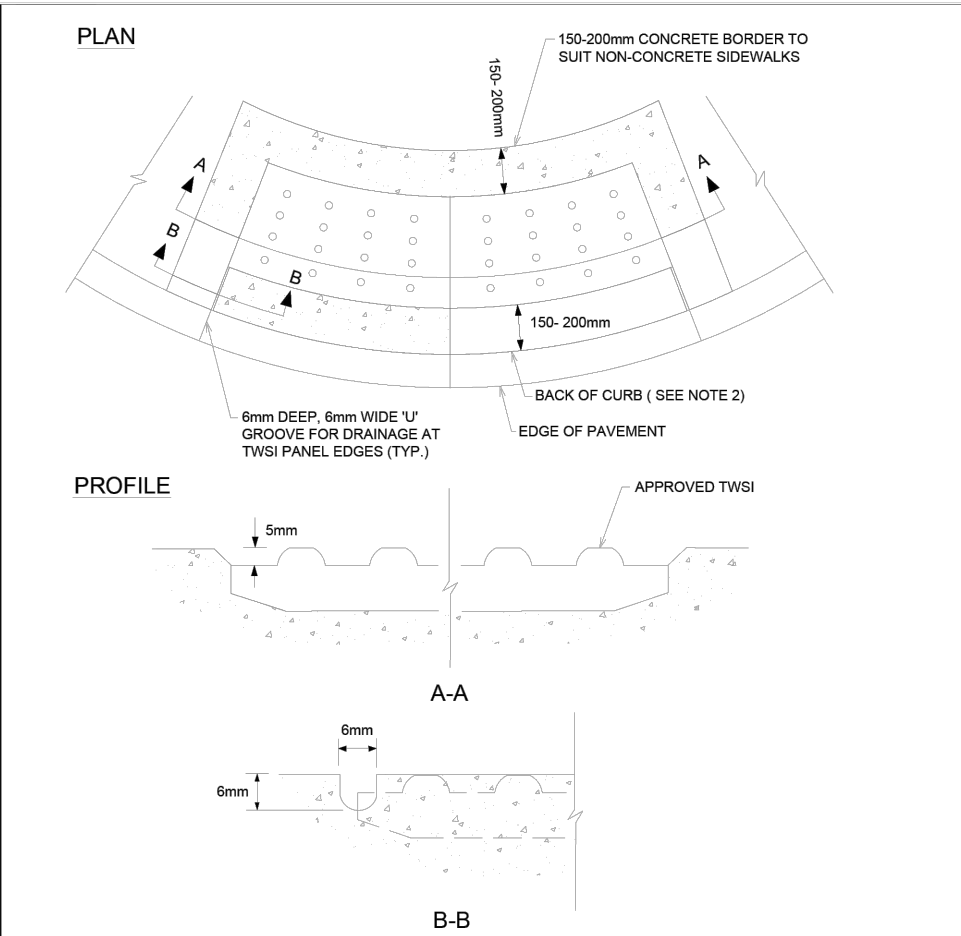
ROADWORK SPECIFICATIONS:

1. CONCRETE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.1 (BARRIER CURB). PROVISION SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS AND DRIVEWAYS.
2. ALL BARRIER CURB TO BE 150mm ABOVE FINISHED ASPHALT GRADE UNLESS OTHERWISE NOTED.
3. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.4.
4. TWSIS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF OTTAWA STD. SC7.3.
5. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R10.
6. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
7. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
8. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
9. SUB-EXCAVATE "B" FLOOT AREAS AND FILL WITH GRANULAR "B" COMPACTED IN MAXIMUM 300mm LIFTS.
10. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW-CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW ASPHALT.
11. PAVEMENT DESIGN AS PER GEOTECHNICAL RECOMMENDATIONS.



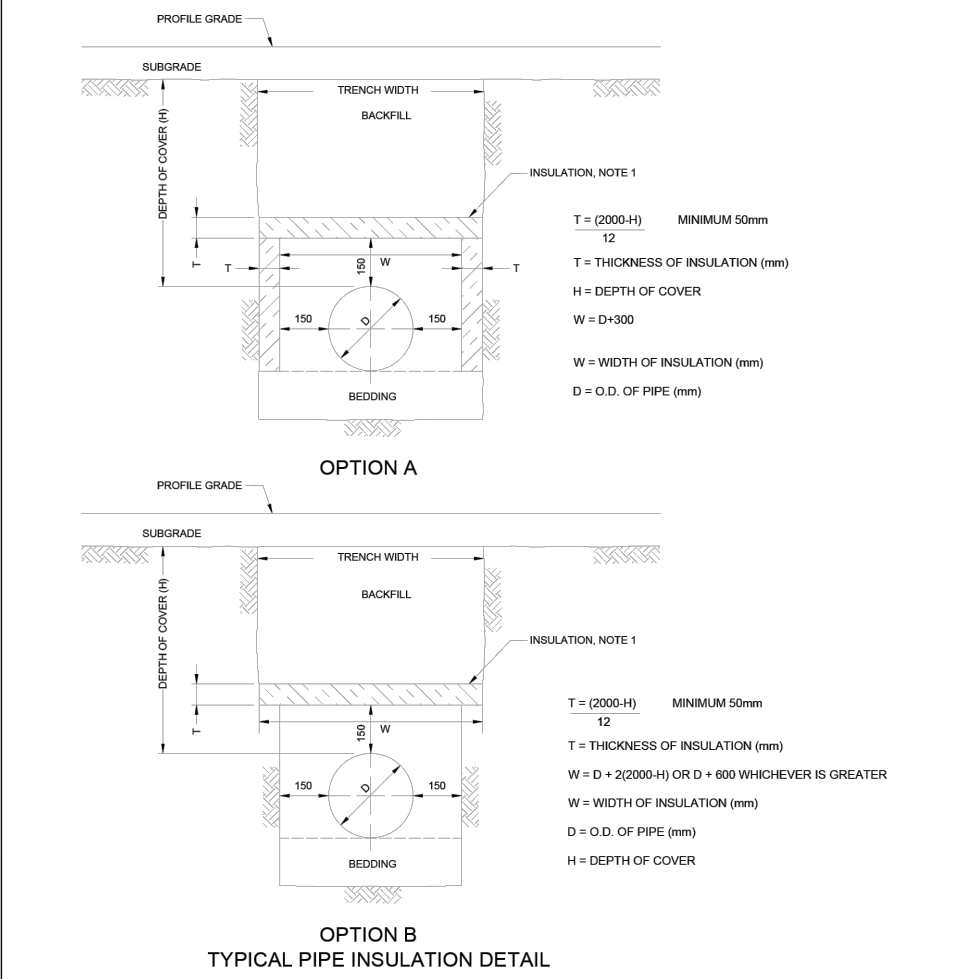
- NOTES:**
1. THE FULL CURB DEPTH SHALL BE CARRIED THROUGH THE DEPRESSED ACCESS CROSSING
 2. A CONCRETE SUPPORT IS REQUIRED WHEN BUILT ADJACENT TO THE SIDEWALK
 3. IF AN EXTRUSION CURBING MACHINE IS USED, THE EXPANSION BITUMINOUS MATERIAL AND THE #15 DOWNELS ARE TO BE PLACED AT THE END OF THE EXTRUSION
 4. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED
 5. EXPANSION AND DUMMY JOINTS AS PER SCS
 6. FOR DEPRESSED CURB AT ENTRANCES SEE 250
 7. DEPRESSED CURB HEIGHT - FOR PEDESTRIAN CURB RAMP'S 0 TO 6 mm AND FOR PRIVATE ENTRANCES 0 TO 13mm

CONCRETE BARRIER CURB FOR GRANULAR BASE PAVEMENT (MODIFIED OPSD-600.110)



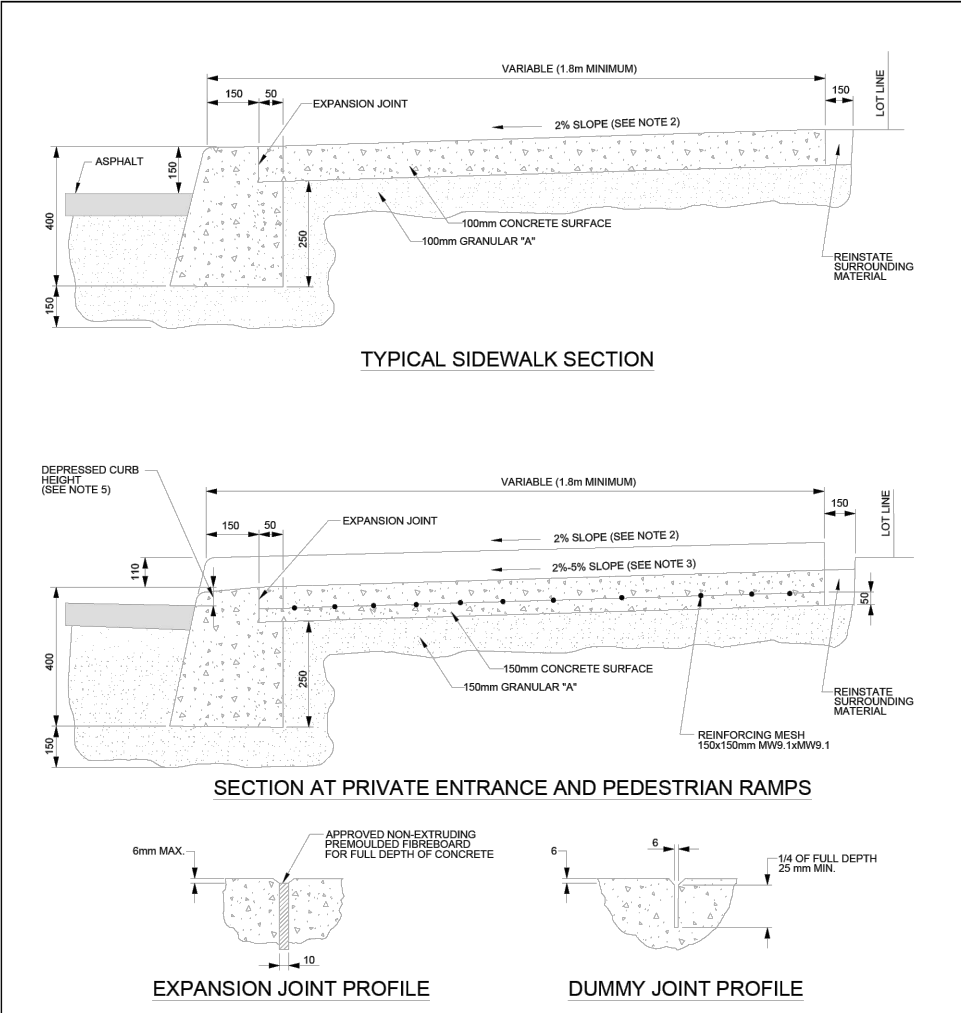
- NOTES:**
1. TOPS OF TWSIS (TACTILE WALKING SURFACE) SHALL BE ALIGNED & LEVEL WITH THE ADJACENT CONCRETE SIDEWALK INSTALLATION IN ORDER TO BE EFFECTIVE IN PERMANENTLY SECURING THE TWSIS IN PLACE ONCE DRY
 2. FOR MONOLITHIC SIDEWALKS, TWSIS SHALL BE 300 TO 250mm BACK FROM THE CURB FACE
 3. JOINTS SHALL BE CONSTRUCTED TRANSVERSELY ACROSS THE SIDEWALK, PERPENDICULAR TO THE FACE OF CURB FOR SIDEWALK
 4. WHEN JOINTS ARE CONSTRUCTED ADJACENT TO TWSIS, THE JOINTS SHALL EXTEND FROM THE BACK COVER TO THE OUTSIDE TWSIS TO THE BACK OF SIDEWALK OR TERMINATE AT AN ADJACENT JOINT
 5. THE TERMINATION OF THE JOINTS SHALL BE AT THE FRONT AND BACK OF SIDEWALK SHALL BE NO LESS THAN 600mm APART
 6. JOINTS ALL CONCRETE ELEMENTS SHALL BE LAID OUT TO ENSURE THAT NO INDIVIDUAL RESULTING CONCRETE PANEL IS LESS THAN 0.5m OR GREATER THAN 0.8m

TWSI DETAIL



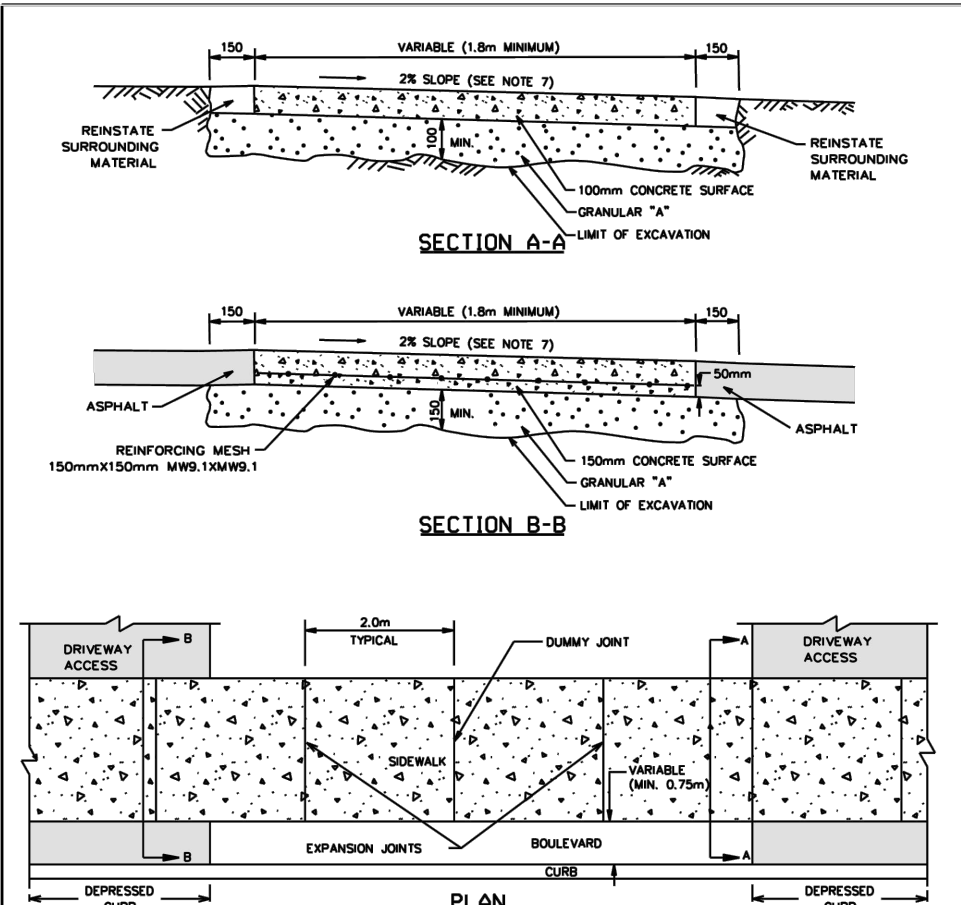
- NOTES:**
1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
 2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
 3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
 4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

INSULATION FOR SHALLOW SEWERS



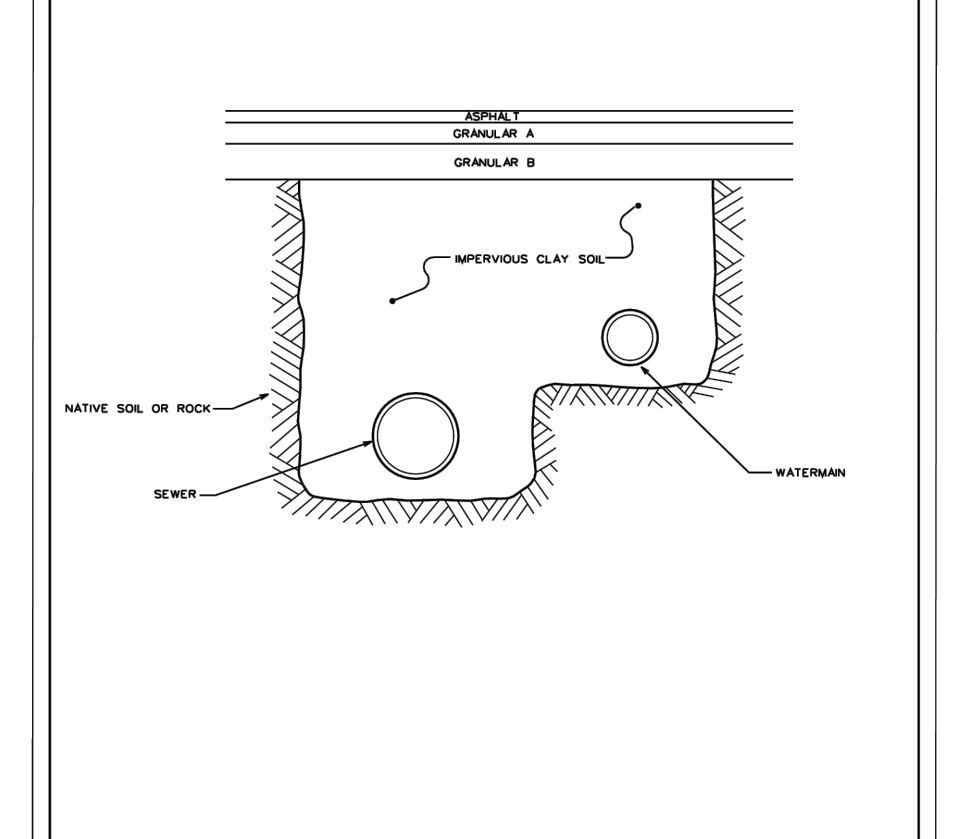
- NOTES:**
1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED
 2. THE MAXIMUM SLOPE IS NOT TO EXCEED 2%
 3. FOR CURB RAMP, SLOPE OF 2% TO 1% MAXIMUM IN
 4. EXPANSION AND DUMMY JOINTS AS PER SCS
 5. DEPRESSED CURB HEIGHT - FOR PEDESTRIAN CURB RAMP'S 0 TO 6 mm AND FOR PRIVATE ENTRANCES 0 TO 13mm

CONCRETE BARRIER CURB WITH SIDEWALK



- NOTES:**
1. CONCRETE AND GRANULAR "A" IS TO BE INCREASED TO 150mm AT THE ENTRANCE AND 150/150mm MIN 1 x 150mm 1
 2. REINFORCING MESH IS TO BE PLACED 50 TO 100mm FROM DRIVEWAY ACCESS
 3. TRANSVERSE EXPANSION JOINTS ARE REQUIRED AT THE ENDS, THE MIDPOINT, AT INTERVALS OF 4m MAXIMUM, AND ALSO TO SOLID OBSTRUCTIONS FROM SIDEWALK, HYDRANTS, POLES, SIGNING ETC.
 4. THE JOINTS SHALL BE CONSTRUCTED TRANSVERSELY ACROSS THE SIDEWALK, PERPENDICULAR TO THE FACE OF CURB FOR SIDEWALK
 5. EDGES AND JOINTS ARE TO BE FINISHED WITH A 15mm EDGING TOOL
 6. ALL CONCRETE SIDEWALKS ARE TO HAVE A BROAD FINISH UNLESS OTHERWISE SPECIFIED
 7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE
 8. THE MAXIMUM SLOPE IS NOT TO EXCEED 2%
 9. METAL JOINT TRANSVERSE JOINTS AS REQUIRED SO THERE IS A MAXIMUM SPACING OF 3m BETWEEN ALL JOINTS
 10. SIDEWALK NOT TO BE DEPRESSED ABOVE DRIVEWAY ACCESS
 11. EXPANSION AND DUMMY JOINTS AS PER SCS

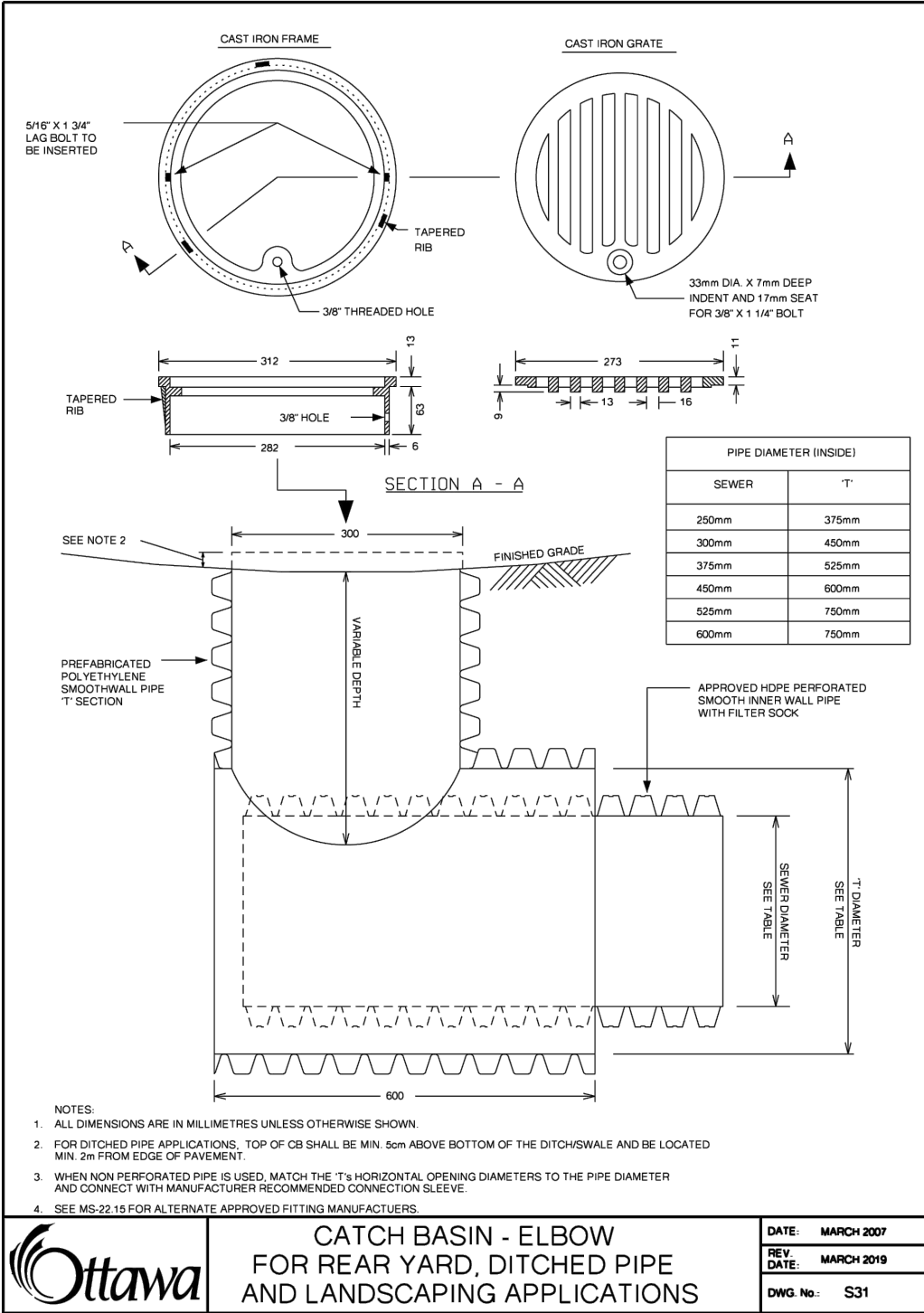
TYPICAL CONCRETE SIDEWALK IN BOULEVARD



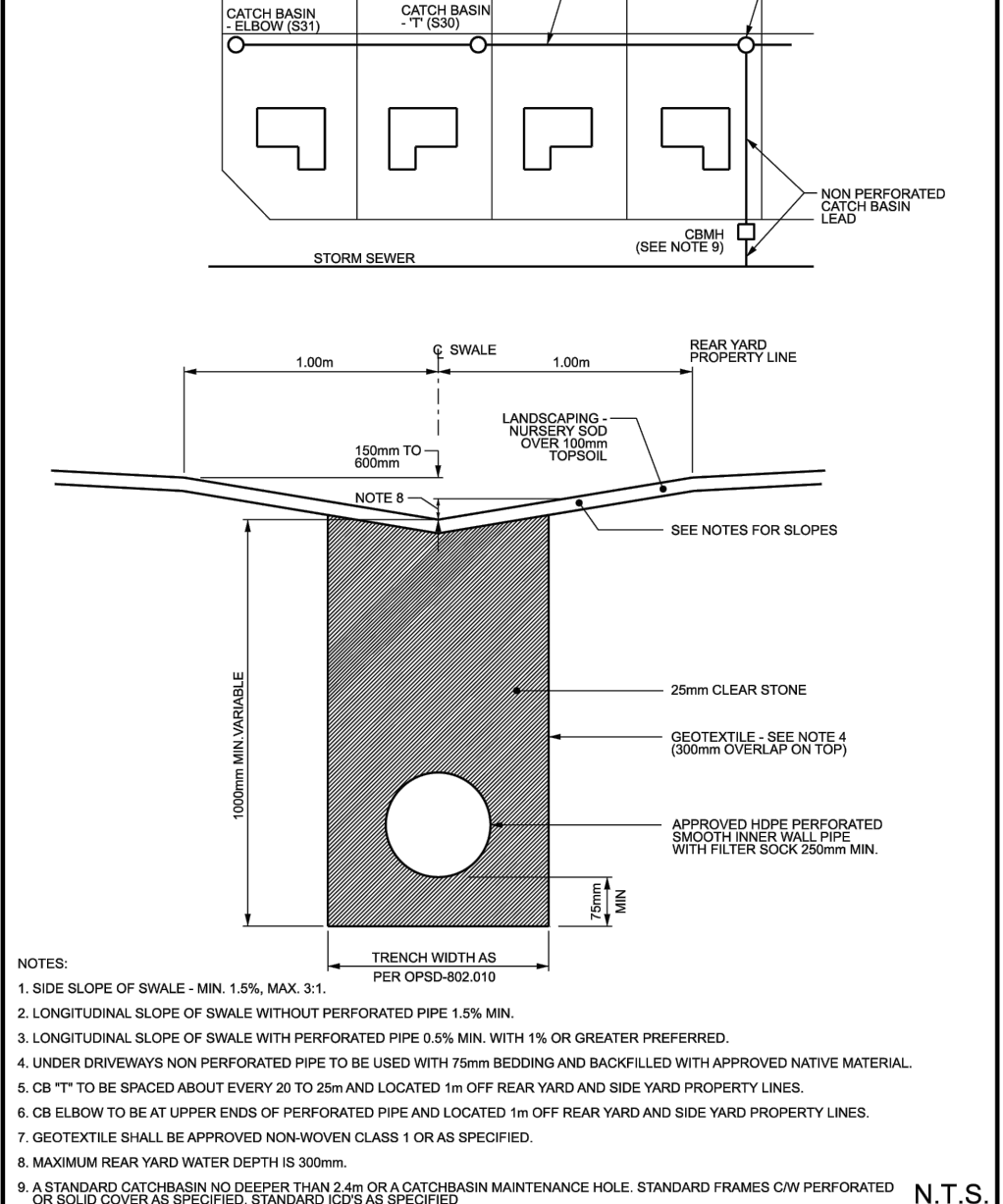
- NOTES:**
1. CLAY SEAL TO EXTEND FROM BOTTOM OF TRENCH EXCAVATION TO UNDERSIDE OF ROAD STRUCTURE
 2. CLAY SEAL TO EXTEND FULL TRENCH WIDTH TO EXISTING NATIVE SOILS WITH A MINIMUM THICKNESS OF 10mm ALONG JOINTS
 3. CLAY SEAL TO BE LOCATED SO THAT NO JOINTS ARE WITHIN THE CLAY SEAL AREAS

- NOTES:**
1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
 2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
 3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
 4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

CLAY SEAL FOR PIPE TRENCHES



CATCH BASIN - ELBOW FOR REAR YARD, DITCHED PIPE AND LANDSCAPING APPLICATIONS



PERFORATED PIPE INSTALLATION FOR REAR YARD AND LANDSCAPING APPLICATIONS

NOTES:

1. SIDE SLOPE OF SWALE - MIN. 1:3% MAX. 3:1
2. LONGITUDINAL SLOPE OF SWALE WITHOUT PERFORATED PIPE 0.5% MIN.
3. LONGITUDINAL SLOPE OF SWALE WITH PERFORATED PIPE 0.5% MIN. WITH 1% OR GREATER PREFERRED.
4. UNDER DRIVEWAYS NON PERFORATED PIPE TO BE USED WITH 75mm BEDDING AND BACKFILL WITH APPROVED NATIVE MATERIAL.
5. OR 11" TO BE SPACED ABOUT EVERY 20 TO 25m AND LOCATED IN OFF REAR YARD AND SIDE YARD PROPERTY LINES.
6. OR ELBOW TO BE AT UPPER ENDS OF PERFORATED PIPE AND LOCATED IN OFF REAR YARD AND SIDE YARD PROPERTY LINES.
7. GEOTEXTILE SHALL BE APPROVED NON WOVEN CLASS 1 OR AS SPECIFIED.
8. MAXIMUM REAR YARD WATER DEPTH IS 300mm.
9. A STANDARD CATCH BASIN NO DEEPER THAN 1.4m OR A CATCH BASIN MAINTENANCE HOLE, STANDARD FRAMES OR PERFORATED OR SOLID COVER AS SPECIFIED STANDARD COTS AS SPECIFIED

PERFORATED PIPE INSTALLATION FOR REAR YARD AND LANDSCAPING APPLICATIONS

NOTES:

1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

INSULATION FOR SHALLOW SEWERS

NOTES:

1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

INSULATION FOR SHALLOW SEWERS

NOTES:

1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

INSULATION FOR SHALLOW SEWERS

NOTES:

1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

INSULATION FOR SHALLOW SEWERS

NOTES:

1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

INSULATION FOR SHALLOW SEWERS

NOTES:

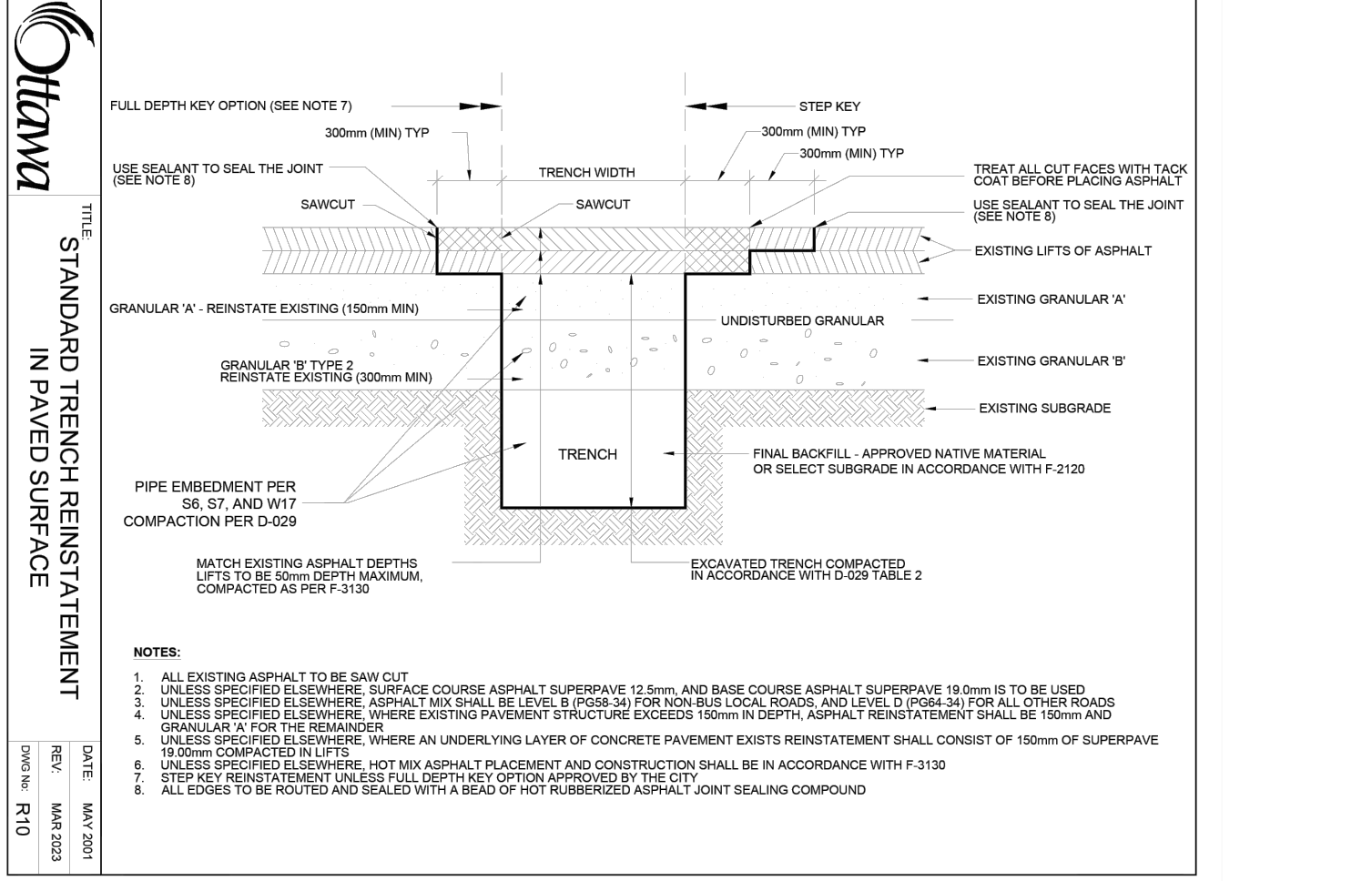
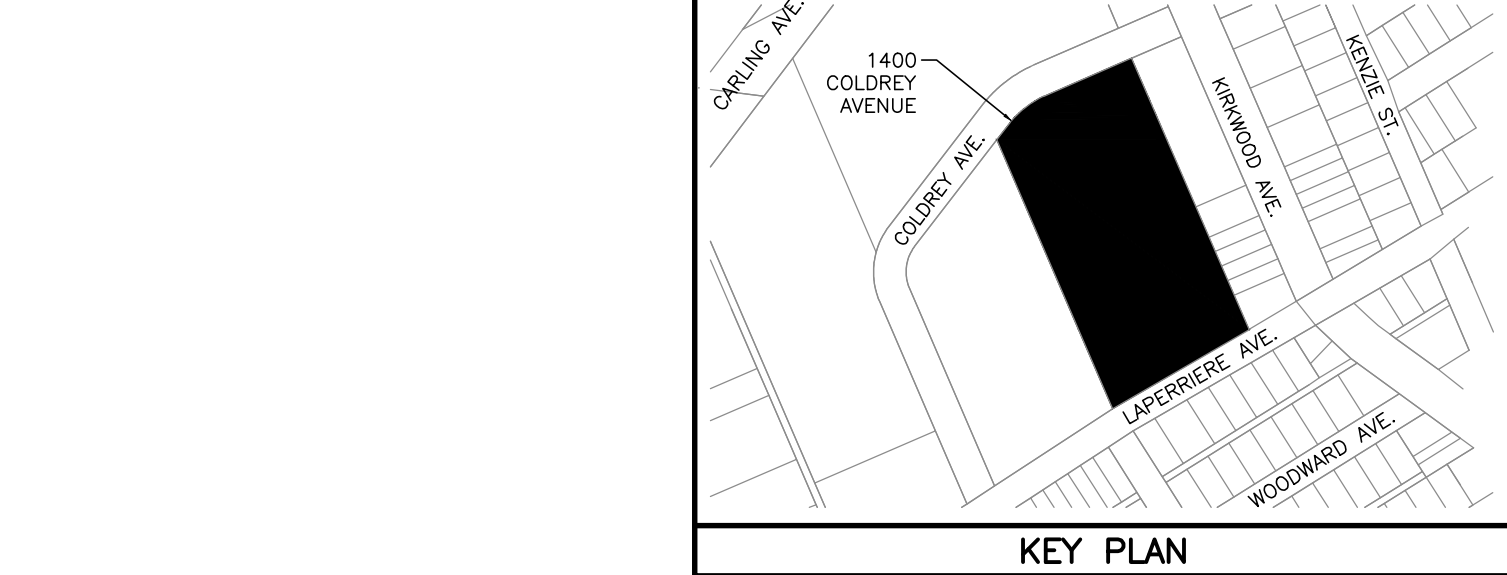
1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

INSULATION FOR SHALLOW SEWERS

NOTES:

1. THE INSULATION MATERIAL SHALL BE EXTRUDED POLYSTYRENE ACCORDING TO M18 IS WITH A MINIMUM COMPRESSIVE STRENGTH OF 20 kPa
2. MINIMUM INSULATION THICKNESS SHALL BE 50mm
3. JOINTS SHALL BE STAGGERED FOR MULTIPLE INSULATION SHEETS
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

INSULATION FOR SHALLOW SEWERS



STANDARD TRENCH REINSTATEMENT IN PAVED SURFACE

NOTES:

1. ALL EXISTING ASPHALT TO BE SAW CUT
2. UNLESS SPECIFIED ELSEWHERE, SURFACE COURSE ASPHALT SUPERPAVE 12.5mm, AND BASE COURSE ASPHALT SUPERPAVE 19.0mm IS TO BE USED
3. UNLESS SPECIFIED ELSEWHERE, WHERE EXISTING PAVEMENT STRUCTURE EXCEEDS 150mm IN DEPTH ASPHALT REINSTATEMENT SHALL BE 150mm AND GRANULAR "A" FOR THE REMAINING
4. 150mm COMPACTED IN LIFTS
5. UNLESS SPECIFIED ELSEWHERE, NOTED ASPHALT TREATMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH F-3105
6. STEP AS REINSTATEMENT UNLESS FULL DEPTH KEY OPTION APPROVED BY THE CITY
7. ALL EDGES TO BE RAMPED AND SEALED WITH A BED OF HOT RUBBERIZED ASPHALT JOINT SEALING COMPOUND

NOTES:

1. HEIGHT OF FILL IS MEASURED FROM THE FINISHED SURFACE TO TOP OF PIPE
2. THE PIPE BED SHALL BE COMPACTED AND SHAPED TO RECEIVE THE BASED
3. PIPE CULVERT FROST TREATMENT SHALL BE ACCORDING TO OPSD 803.030 AND 803.031
4. CONDITION OF EXCAVATION IS SYMMETRICAL ABOUT CENTRELINE OF PIPE
5. SOIL TYPES ARE TO BE IDENTIFIED AND CLASSIFIED ACCORDING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS
6. MATERIALS TO BE USED IN THE EXCAVATION SHALL BE COMPACTED PRIOR TO PLACING AND COMPACTING THE REMAINDER OF THE EMBEDEDMENT
7. FOR CONSTRUCTION PROJECTS
8. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN

LEGEND:

Ø - Inside diameter

TYPE 1 OR 2 SOIL

TYPE 3 SOIL

TYPE 4 SOIL

CLARIFICATION TABLE

PIPE Diameter mm	Clearance mm
100	100
150	150
200	200
250	250
300	300
350	350
400	400
450	450
500	500
550	550
600	600
650	650
700	700
750	750
800	800
850	850
900	900
950	950
1000	1000

ONTARIO PROVINCIAL STANDARD DRAWING

FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION

OPSD 802.010

NOTES:

1. Walle shall be founded on undisturbed soil having a minimum bearing capacity of ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III
2. Excavation for toe walls shall be backfilled with free draining granular material
3. 10mm preformed joint filler, Type A, non-extending and resilient bituminous type as specified
4. Cold applied rubber asphalt joint sealing compound
5. Where specified, wall drains shall be installed as per OPSD 3190.100
6. 150mm dia perforated pipe subdrain wrapped in geotextile
7. A Maximum height of slope above wall is 4m
8. C Concrete for toe walls shall be 30MPa
9. C All dimensions are in millimetres unless otherwise shown

ONTARIO PROVINCIAL STANDARD DRAWING

WALL RETAINING CONCRETE TOE WALL

OPSD 3120.100

NOTES:

1. Walle shall be founded on undisturbed soil having a minimum bearing capacity of ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III
2. Excavation for toe walls shall be backfilled with free draining granular material
3. 10mm preformed joint filler, Type A, non-extending and resilient bituminous type as specified
4. Cold applied rubber asphalt joint sealing compound
5. Where specified, wall drains shall be installed as per OPSD 3190.100
6. 150mm dia perforated pipe subdrain wrapped in geotextile
7. A Maximum height of slope above wall is 4m
8. C Concrete for toe walls shall be 30MPa
9. C All dimensions are in millimetres unless otherwise shown

ONTARIO PROVINCIAL STANDARD DRAWING

WALL RETAINING CONCRETE TOE WALL

OPSD 3120.100

NOTES:

1. Walle shall be founded on undisturbed soil having a minimum bearing capacity of ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III
2. Excavation for toe walls shall be backfilled with free draining granular material
3. 10mm preformed joint filler, Type A, non-extending and resilient bituminous type as specified
4. Cold applied rubber asphalt joint sealing compound
5. Where specified, wall drains shall be installed as per OPSD 3190.100
6. 150mm dia perforated pipe subdrain wrapped in geotextile
7. A Maximum height of slope above wall is 4m
8. C Concrete for toe walls shall be 30MPa
9. C All dimensions are in millimetres unless otherwise shown

ONTARIO PROVINCIAL STANDARD DRAWING

WALL RETAINING CONCRETE TOE WALL

OPSD 3120.100

NOTES:

1. Walle shall be founded on undisturbed soil having a minimum bearing capacity of ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III
2. Excavation for toe walls shall be backfilled with free draining granular material
3. 10mm preformed joint filler, Type A, non-extending and resilient bituminous type as specified
4. Cold applied rubber asphalt joint sealing compound
5. Where specified, wall drains shall be installed as per OPSD 3190.100
6. 150mm dia perforated pipe subdrain wrapped in geotextile
7. A Maximum height of slope above wall is 4m
8. C Concrete for toe walls shall be 30MPa
9. C All dimensions are in millimetres unless otherwise shown

ONTARIO PROVINCIAL STANDARD DRAWING

WALL RETAINING CONCRETE TOE WALL

OPSD 3120.100

NOTES:

1. Walle shall be founded on undisturbed soil having a minimum bearing capacity of ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III
2. Excavation for toe walls shall be backfilled with free draining granular material
3. 10mm preformed joint filler, Type A, non-extending and resilient bituminous type as specified
4. Cold applied rubber asphalt joint sealing compound
5. Where specified, wall drains shall be installed as per OPSD 3190.100
6. 150mm dia perforated pipe subdrain wrapped in geotextile
7. A Maximum height of slope above wall is 4m
8. C Concrete for toe walls shall be 30MPa
9. C All dimensions are in millimetres unless otherwise shown

ONTARIO PROVINCIAL STANDARD DRAWING

WALL RETAINING CONCRETE TOE WALL

OPSD 3120.100

NOTES:

1. Walle shall be founded on undisturbed soil having a minimum bearing capacity of ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III
2. Excavation for toe walls shall be backfilled with free draining granular material
3. 10mm preformed joint filler, Type A, non-extending and resilient bituminous type as specified
4. Cold applied rubber asphalt joint sealing compound
5. Where specified, wall drains shall be installed as per OPSD 3190.100
6. 150mm dia perforated pipe subdrain wrapped in geotextile
7. A Maximum height of slope above wall is 4m
8. C Concrete for toe walls shall be 30MPa
9. C All dimensions are in millimetres unless otherwise shown

ONTARIO PROVINCIAL STANDARD DRAWING

WALL RETAINING CONCRETE TOE WALL

OPSD 3120.100

NOTES:

1. Walle shall be founded on undisturbed soil having a minimum bearing capacity of ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III
2. Excavation for toe walls shall be backfilled with free draining granular material
3. 10mm preformed joint filler, Type A, non-extending and resilient bituminous type as specified
4. Cold applied rubber asphalt joint sealing compound
5. Where specified, wall drains shall be installed as per OPSD 3190.100
6. 150mm dia perforated pipe subdrain wrapped in geotextile
7. A Maximum height of slope above wall is 4m
8. C Concrete for toe walls shall be 30MPa
9. C All dimensions are in millimetres unless otherwise shown

ONTARIO PROVINCIAL STANDARD DRAWING

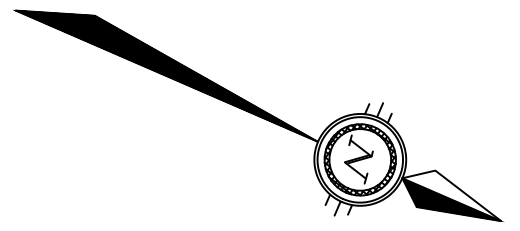
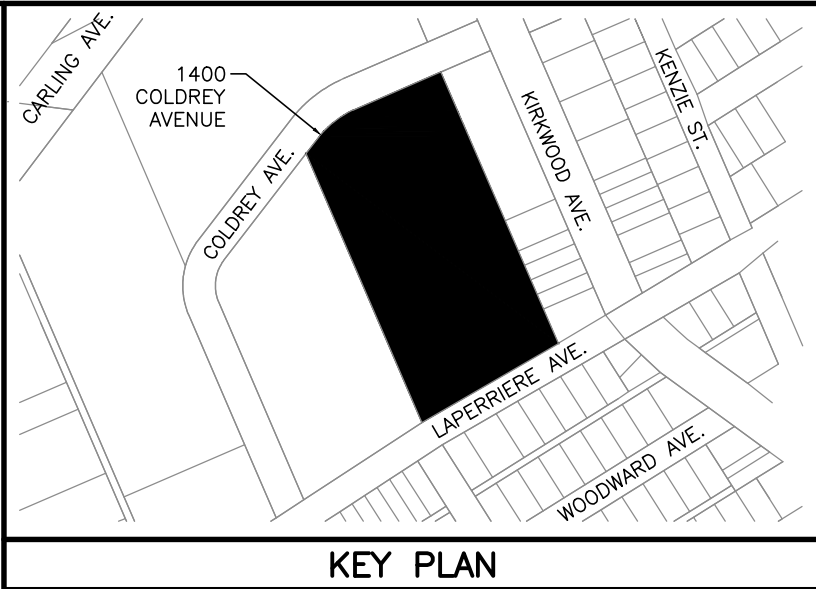
WALL RETAINING CONCRETE TOE WALL

OPSD 3120.100

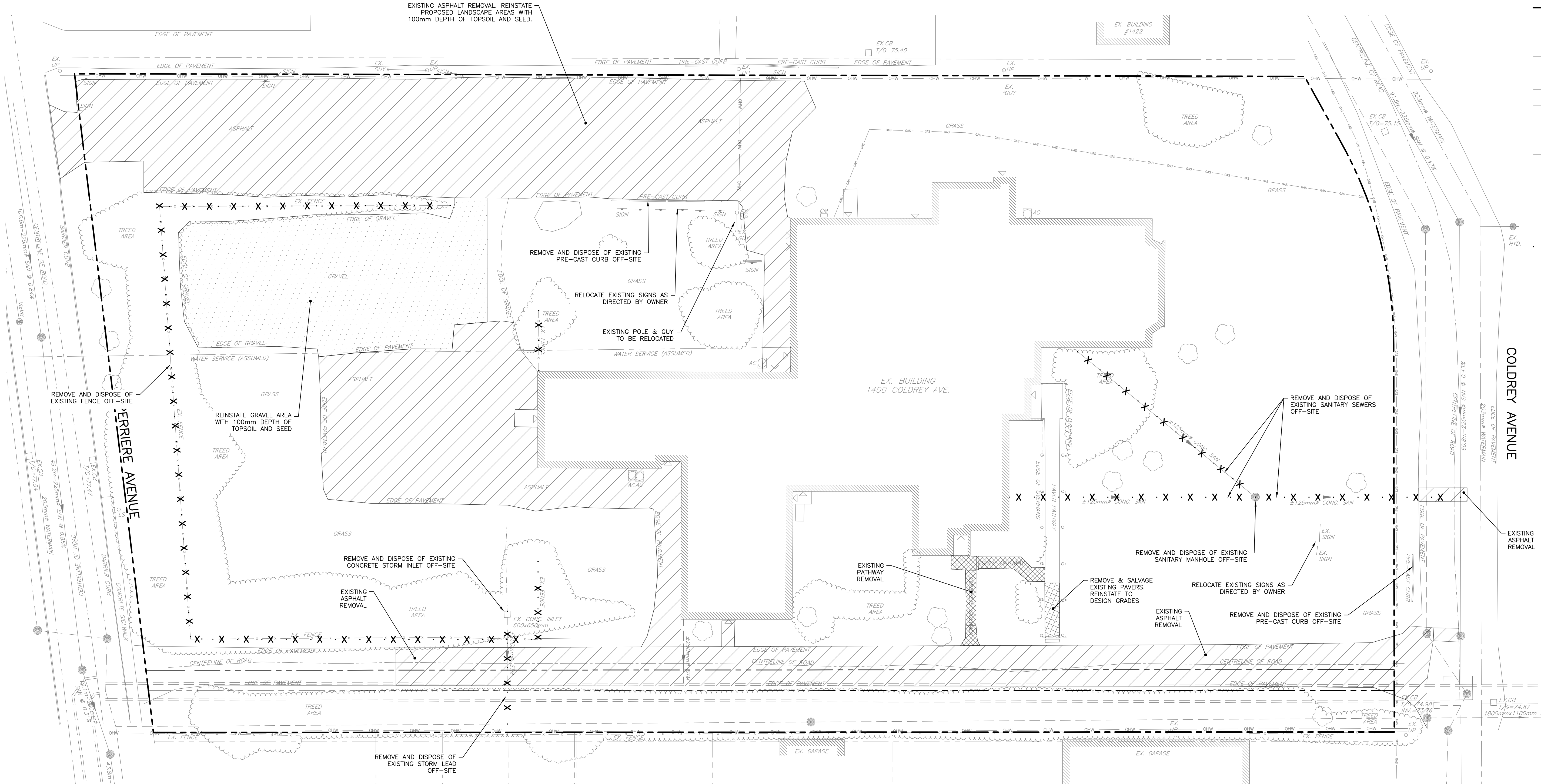
NOTES:

1. Walle shall be founded on undisturbed soil having a minimum bearing capacity of ultimate limit states of 200kPa for Type I and 300kPa for Type II and Type III
2. Excavation for toe walls shall be backfilled with free draining granular material
3. 10mm preformed joint filler, Type A, non-extending and resilient bituminous type as specified
4. Cold applied rubber asphalt joint sealing compound
5. Where specified, wall drains shall be installed as per OPSD 3190.100
6. 150mm dia perforated pipe subdrain wrapped in geotextile
7. A Maximum height of slope above wall is 4m
8. C

NOT FOR CONSTRUCTION



- LEGEND**
- PROPERTY BOUNDARY
 - EXISTING HYDRANT
 - EXISTING CATCH BASIN
 - EXISTING WATERMAIN
 - EXISTING VALVE & VALVE BOX
 - EXISTING SANITARY SEWER & MANHOLE
 - EXISTING STORM SEWER & MANHOLE
 - EXISTING LIGHT STANDARD
 - EXISTING UTILITY POLE
 - EXISTING OVERHEAD WIRES
 - EXISTING GAS
 - ▽ EXISTING BUILDING ENTRANCE
 - ▨ FULL DEPTH ASPHALT REMOVAL
 - ▩ CONCRETE/PAVERS REMOVAL
 - · · · · REMOVALS

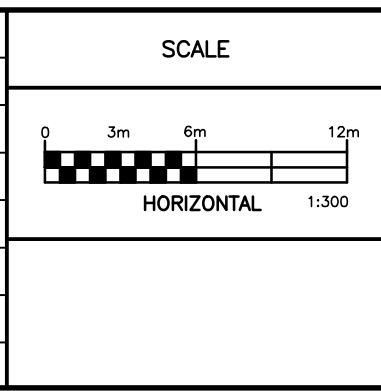


NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PROPERTY BOUNDARIES ARE DERIVED FROM PLAN OF SURVEY OF PART OF LOT 1 CONCESSION A RIDEAU FRONT, GEOGRAPHIC TOWNSHIP OF NEPEAN, CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN, VOLLEBKOP LTD. BEARINGS ARE GRID, ARE REFERRED TO THE CENTRAL MERIDIAN OF MTM ZONE 9, NAD-83 (ORIGINAL).

NO.	REVISION	DESCRIPTION	DATE	BY
2	REVISED PER COMMENTS		21/08/25	BLM
1	ISSUED FOR REVIEW		09/06/25	BLM



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	CC
DRAWN	BLM
CHECKED	CC
APPROVED	BLM

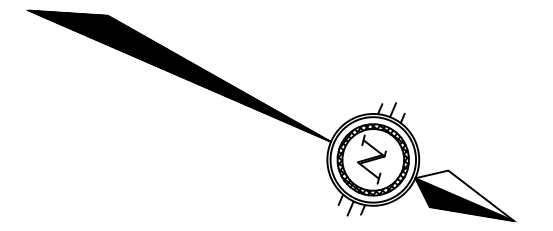
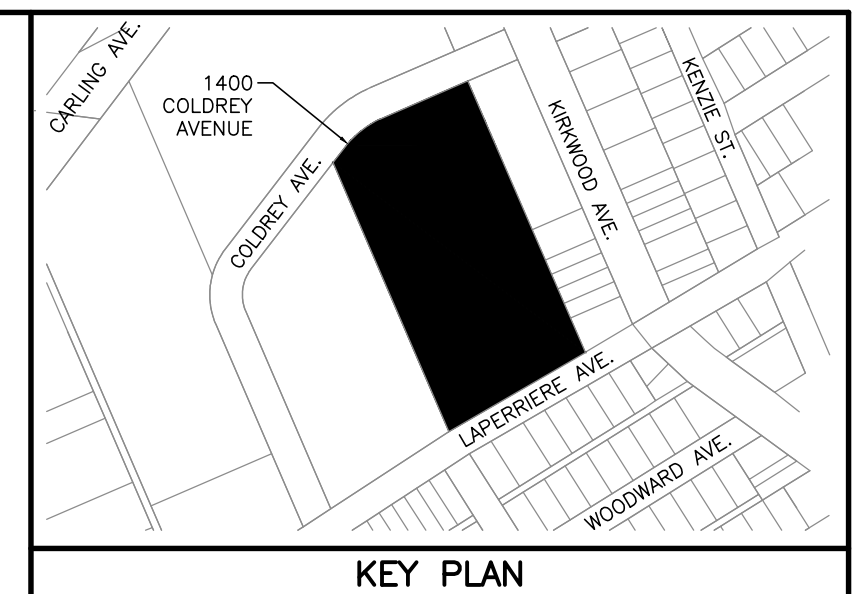
KEHILLAT BETH ISRAEL

1400 COLDREY AVENUE
CITY OF OTTAWA






EXISTING CONDITIONS
AND REMOVALS PLAN

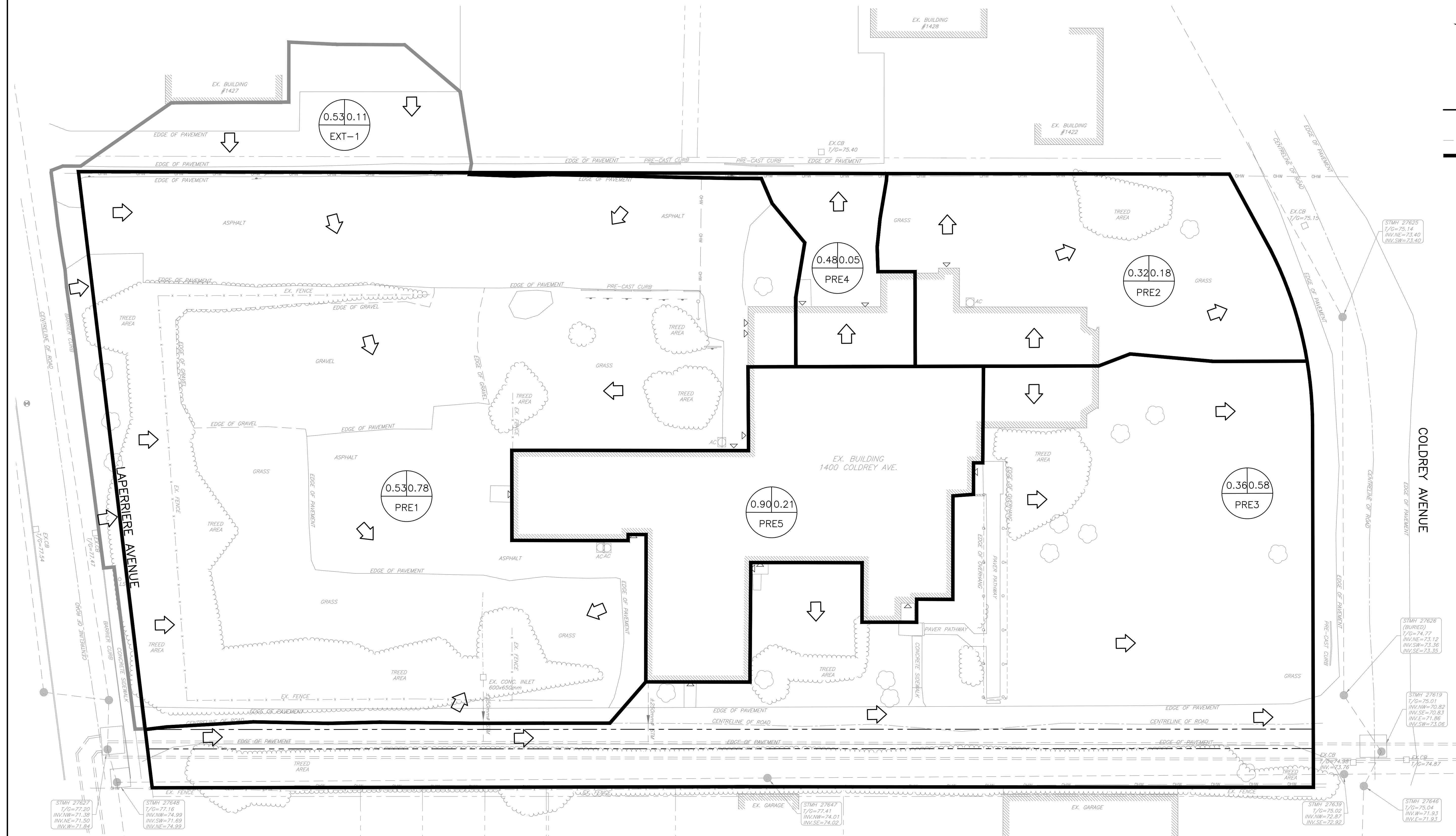
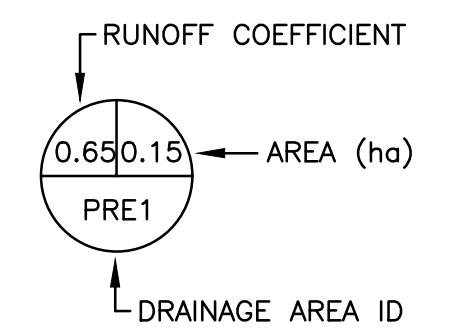
PROJECT No.	24060
SURVEY	RCI
DATED	AUGUST 2025
DWG. No.	24060-R1

NOT FOR CONSTRUCTION



LEGEND

- | | |
|---|--|
|  | PROPERTY BOUNDARY |
|  | EXISTING CATCH BASIN |
|  | EXISTING STORM SEWER & MANHOLE |
|  | PRE-DEVELOPMENT DRAINAGE AREA BOUNDARY |
|  | PRE-DEVELOPMENT OVERLAND FLOW ROUTE |



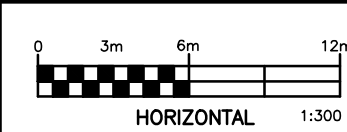
NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PROPERTY BOUNDARIES ARE DERIVED FROM PLAN OF SURVEY OF PART OF LOT 1 CONCESSION A
RIDEAU FRONT, GEOGRAPHIC TOWNSHIP OF NEPEAN, CITY OF OTTAWA, SURVEYED BY ANNIS,
O'SULLIVAN, VOLLEBEKK LTD. BEARINGS ARE GRID, ARE REFERRED TO THE CENTRAL MERIDIAN OF
MTM ZONE 9, NAD-83 (ORIGINAL).

2	REVISED PER COMMENTS	21/08/25	BLM
1	ISSUED FOR REVIEW	09/06/25	BLM
NO.	REVISION DESCRIPTION	DATE	BY

SCALE



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

DESIGN	BL
CHECKED	C
DRAWN	BL
CHECKED	C
APPROVED	BL

KEHILLAT BETH ISRAEL

1400 COLDREY AVENUE
CITY OF OTTAWA

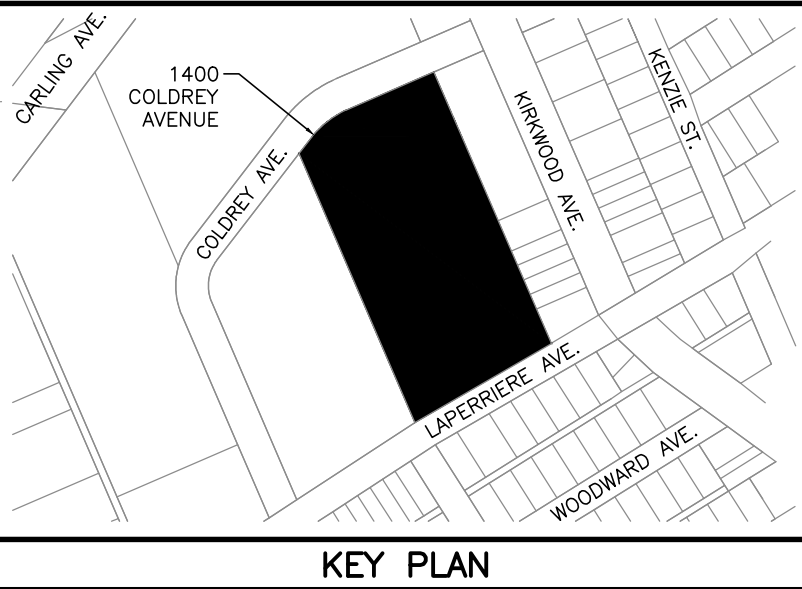
PRE-DEVELOPMENT DRAINAGE AREA PLAN

PROJECT No.	24060
SURVEY	RCI
DATED	AUGUST 2025
DWG. No:	24060-PRE1

PLAN No. 19336

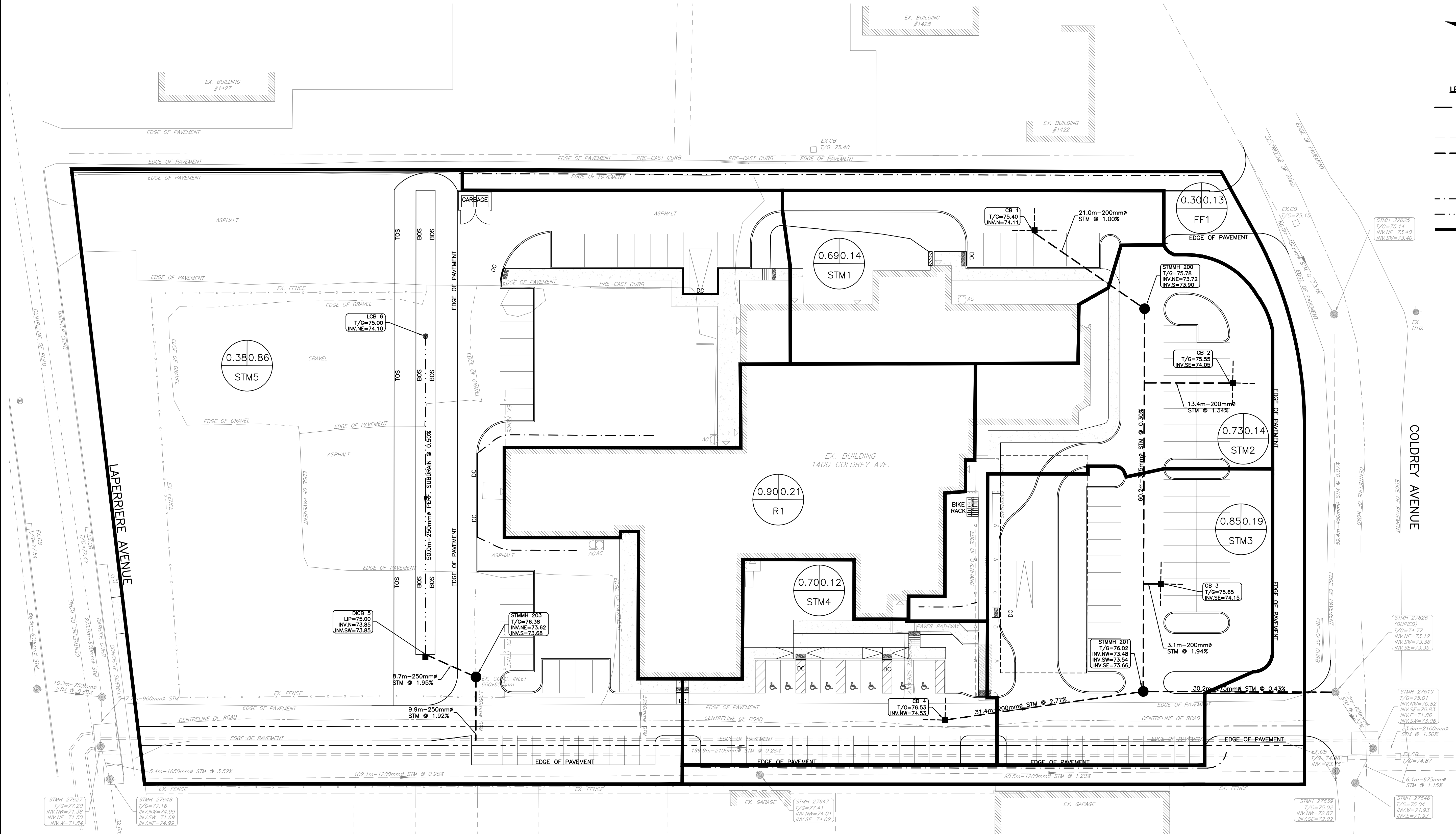
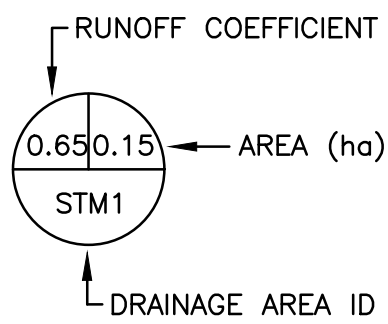
FILE No. D07-12-25-0083

NOT FOR CONSTRUCTION



LEGEND

- PROPERTY BOUNDARY
- EXISTING CATCH BASIN
- EXISTING STORM SEWER & MANHOLE
- STORM SEWER & MANHOLE
- CATCH BASIN
- LCB
- ELBOW LANDSCAPE CATCH BASIN (CITY STD. S31)
- SWALE
- SWALE WITH 250mm ϕ PERFORATED SUBDRAIN
- STORM DRAINAGE AREA BOUNDARY

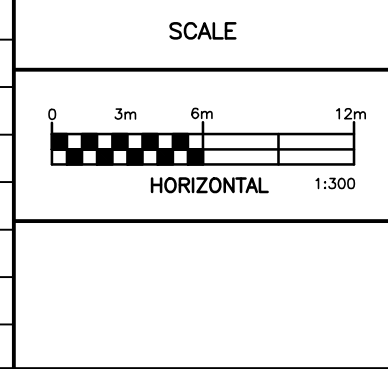


NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PROPERTY BOUNDARIES ARE DERIVED FROM PLAN OF SURVEY OF PART OF LOT 1 CONCESSION A RIDEAU FRONT, GEOGRAPHIC TOWNSHIP OF NEPEAN, CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN, VOLLEBKOK LTD. BEARINGS ARE GRID, ARE REFERRED TO THE CENTRAL MERIDIAN OF MTM ZONE 9, NAD-83 (ORIGINAL).

NO.	REVISION	DESCRIPTION	DATE	BY
2	REVISED PER COMMENTS		21/08/25	BLM
1	ISSUED FOR REVIEW		09/06/25	BLM



Robinson
Land Development

350 Palladium Drive
Ottawa, ON K2V 1A8
(613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	CC
DRAWN	BLM
CHECKED	CC
APPROVED	BLM

KEHILLAT BETH ISRAEL

1400 COLDREY AVENUE
CITY OF OTTAWA

STORM DRAINAGE AREA PLAN

PROJECT No.	24060
SURVEY	RCI
DATED	AUGUST 2025
DWG. No.	24060-STM1

PLAN No. 19336

FILE No. D07-12-25-0083