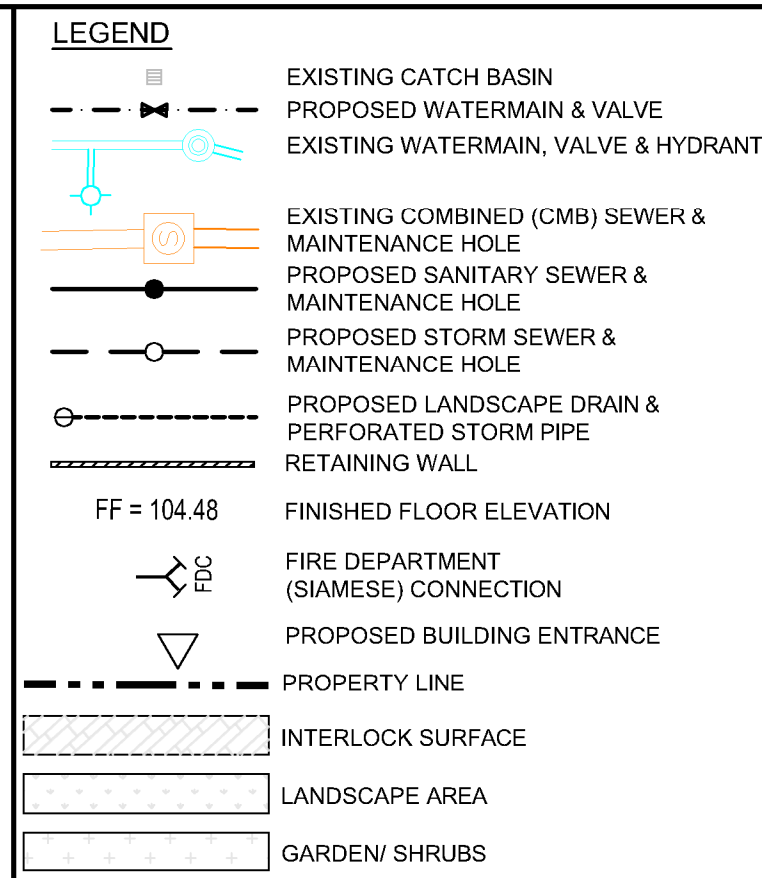


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- GENERAL CONSTRUCTION NOTES:**
- ALL MATERIALS AND CONSTRUCTION TO BE IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARDS AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS & OPSD); SEWER AND WATERMAIN MATERIAL TYPES AND DISINFECTION.
 - VALVES TO BE OPERATED BY CITY OF OTTAWA STAFF ONLY.
 - NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY OF OTTAWA. CITY FORCES TO COMPLETE WATERMAIN CONNECTIONS, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.
 - NO WORK TO BE CARRIED OUT ON NATIONAL CAPITAL COMMISSION (NCC) PROPERTY UNTIL ACCESS PERMIT IS OBTAINED FROM NCC.
 - UNLESS OTHERWISE NOTED, DIMENSIONS FROM STREET LINE ARE TO THE CENTRELINE OF SEWER OR MAINTENANCE HOLE.
 - THE INSIDE DIAMETER OF PIPES ARE REFERRED TO IN PLAN VIEW.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE (HORIZONTALLY AND VERTICALLY) EXISTING UTILITIES PRIOR TO EXCAVATION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL, REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ALL ASSOCIATED WORKS TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA.
 - THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE, VIA EXCAVATION, THE EXACT LOCATION AND ELEVATION OF THE EXISTING WATERMANS, SEWERS AND UNDERGROUND STRUCTURES AS REQUIRED FOR ALL CONNECTIONS, RELOCATIONS AND BLANKINGS.
 - ALL DESIGN DRAWINGS TO BE READ IN CONJUNCTION WITH THE LATEST SERVICING REPORT PREPARED BY J.L. RICHARDS & ASSOCIATES LIMITED.
 - ALL WATERMANS AND WATER SERVICES LESS THAN 2.4m FROM A STORM SEWER, CATCH BASIN OR MANHOLE SHALL BE INSULATED IN ACCORDANCE WITH THE CITY OF OTTAWA'S REQUIREMENTS AS SET OUT IN CITY OF OTTAWA SPECIFICATION F-7014.
 - WATER SERVICES WITH LESS THAN 2.4M DEPTH OF COVER SHALL BE INSULATED IN ACCORDANCE WITH CITY DETAILS W22 AND W23.
 - AT ALL CONNECTION POINTS, REINSTATE SURFACES TO EXISTING CONDITION OR BETTER. ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING No. R10.
-THICKNESS OF GRANULARS AND ASPHALT LAYERS SHALL MATCH EXISTING
 - REFER TO ARCHITECTURAL DRAWINGS FOR SITE LAYOUT.
 - JOB BENCHMARK: TOP OF SPINDLE ON FIRE HYDRANT LOCATED WEST SIDE OF THE DRIVEWAY AND LEVIS INTERSECTION. ELEV = 69.74. PROVIDED BY ADV LTD ON JUNE 29TH 2021.
 - PROPOSED INTERNAL STORM SEWER SIZE AND SLOPE TO BE DESIGNED BY MECHANICAL ENGINEER.



WATERMAIN TABLE - Sta. 1+000 to 1+015.5
PVC DR-18 CL 150

STATION	DETAIL	FINISHED GRADE	TOP OF WM
1+000	TAPPING VALVE & SLEEVE	67.78	EX 65.38
1+009.6	VALVE & VB	68.21	66.81
1+014.9	CAP 0.3m FROM BUILDING	68.32	65.92
1+015.5	CAP 0.3m FROM BUILDING	68.32	65.92

1	ISSUED FOR SITE PLAN SUBMISSION	14/06/22
No.	ISSUE / REVISION	DD/MM/YY



CLIENT: MAIN + MAIN

CONSULTANT: www.jrichards.ca

J.L. Richards
ENGINEERS - ARCHITECTS - PLANNERS

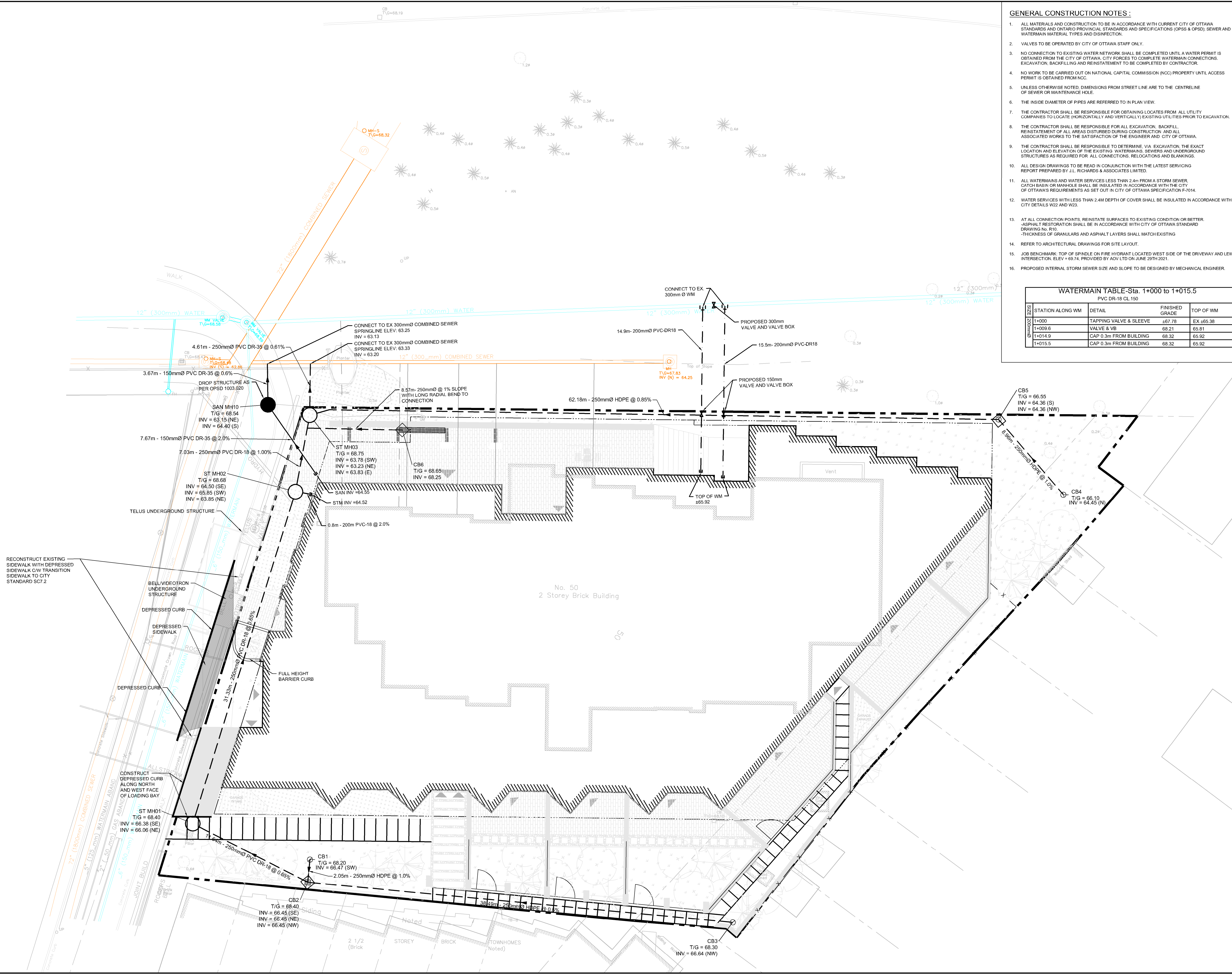
PROFESSIONAL STAMP

PROJECT NORTH

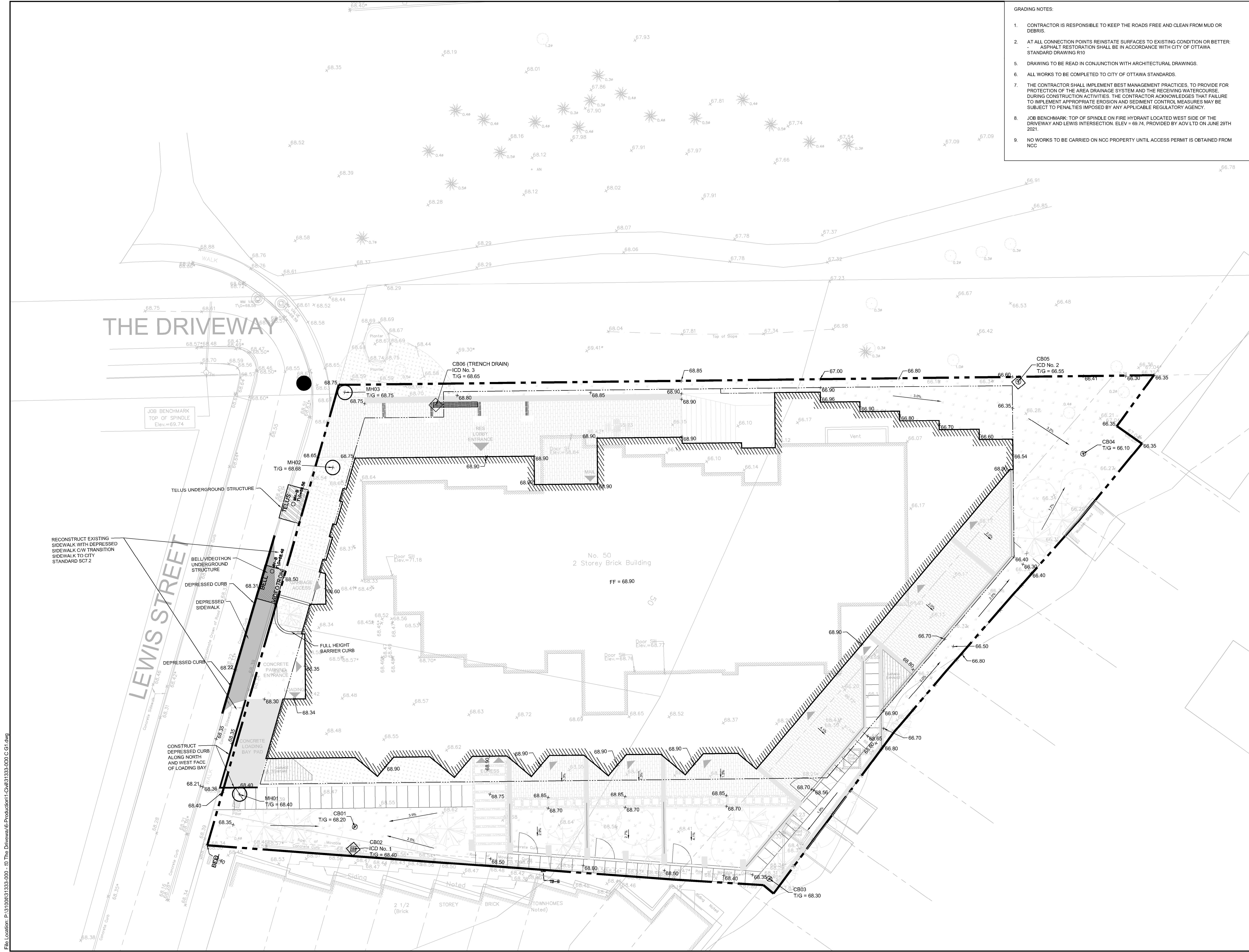
PROJECT: 50 THE DRIVEWAY

DRAWING: SERVICING PLAN

DESIGN: LD	DRAWING #:
DRAWN: KT	S1
CHECKED: GF	
JLR #: 31333-000	



PLOT DATE: Monday, June 13, 2022 5:08:11 PM



- GRADING NOTES:
1. CONTRACTOR IS RESPONSIBLE TO KEEP THE ROADS FREE AND CLEAN FROM MUD OR DEBRIS.
 2. AT ALL CONNECTION POINTS REINSTATE SURFACES TO EXISTING CONDITION OR BETTER. ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING R10
 5. DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS.
 6. ALL WORKS TO BE COMPLETED TO CITY OF OTTAWA STANDARDS.
 7. 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.
 8. JOB BENCHMARK: TOP OF SPINDLE ON FIRE HYDRANT LOCATED WEST SIDE OF THE DRIVEWAY AND LEWIS INTERSECTION. ELEV = 69.74, PROVIDED BY AOV LTD ON JUNE 29TH 2021.
 9. NO WORKS TO BE CARRIED ON NCC PROPERTY UNTIL ACCESS PERMIT IS OBTAINED FROM NCC

LEGEND

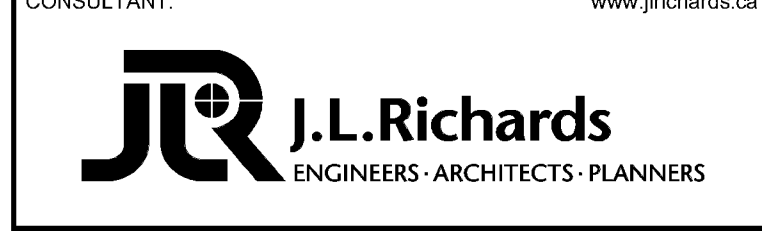
	EXISTING CATCH BASIN
	PROPOSED ELEVATION
	EXISTING ELEVATION
	SURFACE SLOPE
	RETAINING WALL
	FINISHED FLOOR ELEVATION
	FIRE DEPARTMENT (SIAMESE) CONNECTION
	PROPOSED BUILDING ENTRANCE
	PROPERTY LINE
	INTERLOCK SURFACE
	LANDSCAPE AREA
	GARDEN/ SHRUBS
	PROPOSED BUILDING OUTLINE
	EXISTING BUILDING OUTLINE
	UNDERGROUND PARKING OUTLINE
	CATCHBASIN
	LANDSCAPE POT
	CATCHBASIN WITH ICD
	LANDSCAPE POT WITH ICD
	TRENCH DRAIN WITH ICD

1	ISSUED FOR SITE PLAN SUBMISSION	14/06/22
No.	ISSUE / REVISION	DDMMYY

SCALE: 1:150	
CLIENT:	

MAIN + MAIN

CONSULTANT: www.jlrichards.ca



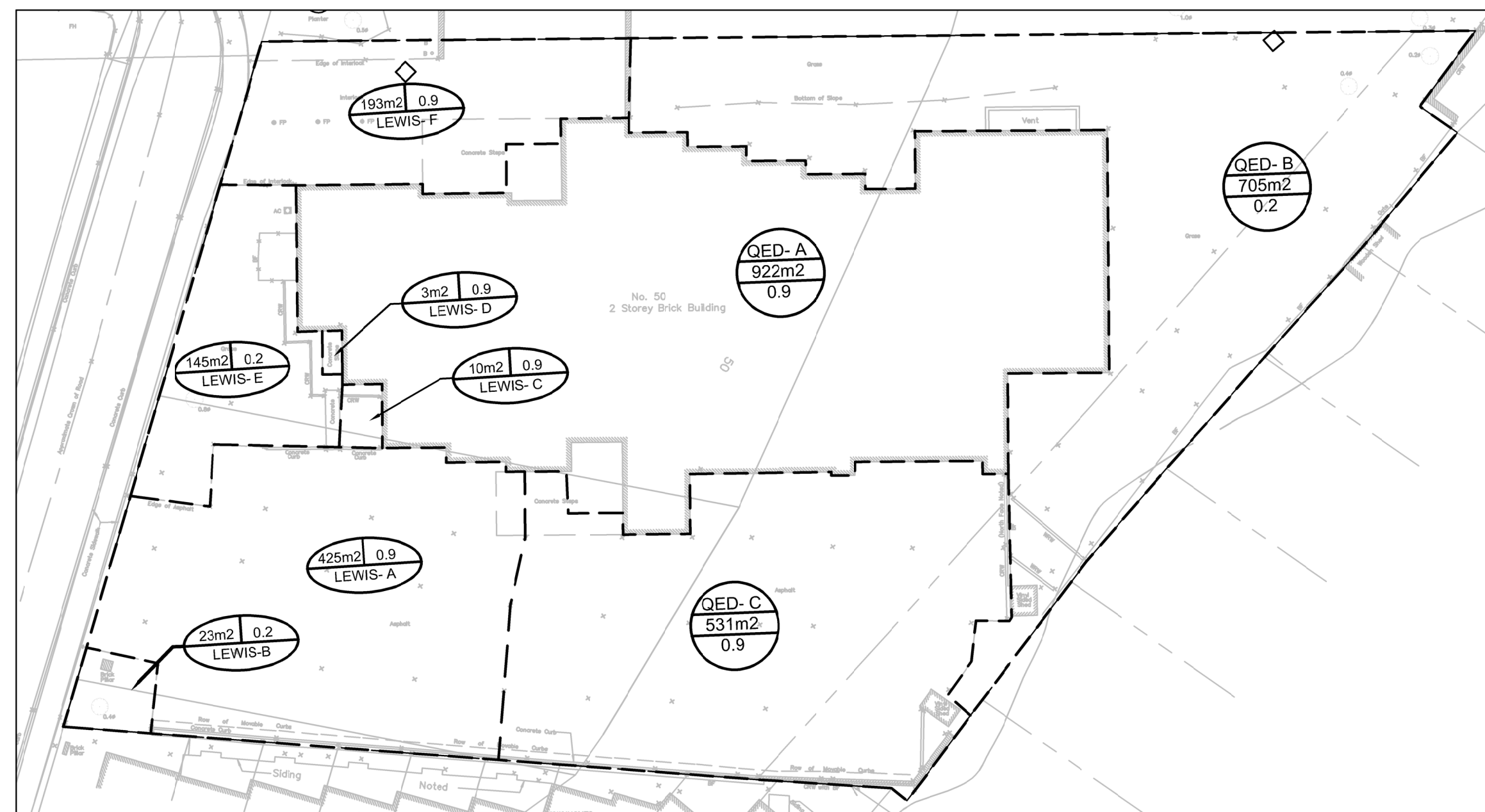
CONSULTANT:

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PROJECT: 50 THE DRIVEWAY

DRAWING: GRADING PLAN

DESIGN: LD	DRAWING #:
DRAWN: KT	G1
CHECKED: GF	
JLR #: 31333-000	



PONDING AREA TABLE										
AREA ID.	OUTLET	ICD FLOW (L/s)	UNCONTROLLED FLOW (L/s)	MAXIMUM STATIC PONDING DEPTH (m)	MAXIMUM STATIC PONDING ELEVATION (m)	MAXIMUM STATIC PONDING VOLUME (m³)	MAXIMUM STATIC PONDING AREA (m²)	MAX. 100 YR PONDING DEPTH (ABOVE CB T/G)	100 YR HGL (m) OR 1:100 YR FLOW DEPTH (m)	CLIMATE CHANGE EVENT ELEVATION (m)
QED. 5				0.20 (LP1)	68.40	4.69 (LP1)	73.91 (LP1)			
LP1 (CB02/ICD1) & LP2 (CB03)	GED	5.7	N/A	0.10 (LP2)	68.40	0.27 (LP2)	7.68 (LP2)		68.35	68.41
QED. 4				0.20	66.30	2.81	73.29	0.17		
LP3 (CB05/ICD2)	GED	3.0	N/A			1.26			68.27	68.31
QED. 7				0.10 (LP4)	68.75	1.75 (LP4)	52.44 (LP4)	0.02		
LP4 (CB06/ICD3)	GED	2				0.64			68.67	68.73
QED. 6			0.52	0.01	0.01	N/A	N/A	0.01	0.01	0.01
PENTHOUSE (PART QED.1)	GED	0.63		0.15	N/A	20.7	N/A	0.15	N/A	N/A
CISTERN										
QED.1 (PART), QED. 2 & QED.3	GED	7.05		N/A	N/A	59.65	N/A	N/A	N/A	N/A
L1	LEWIS	5.99		0.01	0.01	N/A	N/A	0.01	0.01	0.01

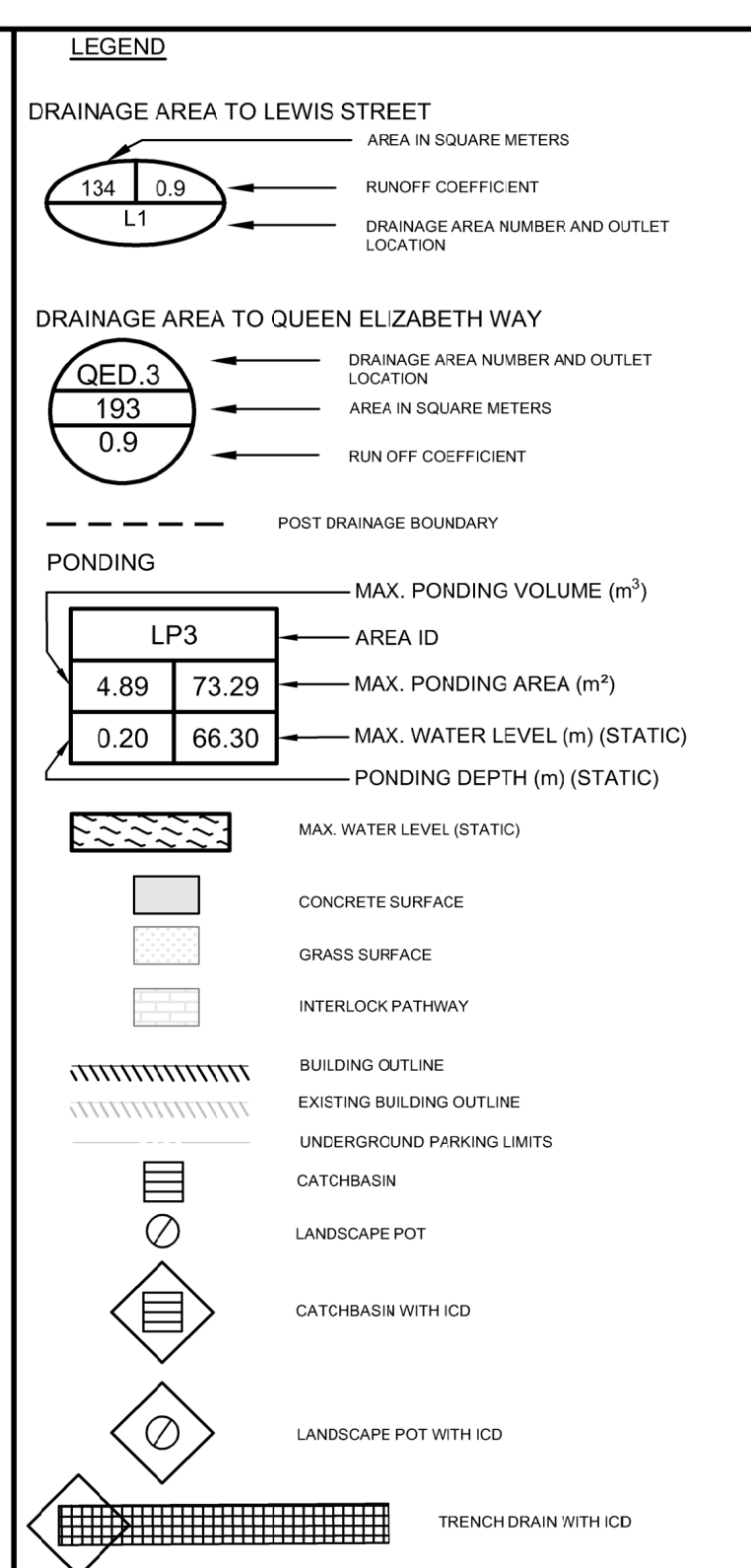
ICD TABLE						
ICD ID.	SEWER INVERT (m)	T/G ELEV (m)	PONDING ELEV (m)	HEAD (m)	100-YEAR RESTRICTED FLOW (L/s)	ICD TYPE
CB02/ICD1	66.45	68.40	68.40	1.45	5.7	HYDROVEX 75-VH-1
CB05/ICD2	64.36	66.55	66.30	1.20	3.0	HYDROVEX 50-VH-1
CB06/ICD3	68.25	68.65	68.75	0.5	2.0	HYDROVEX 50-VH-2

STORMWATER MANAGEMENT REQUIREMENTS:

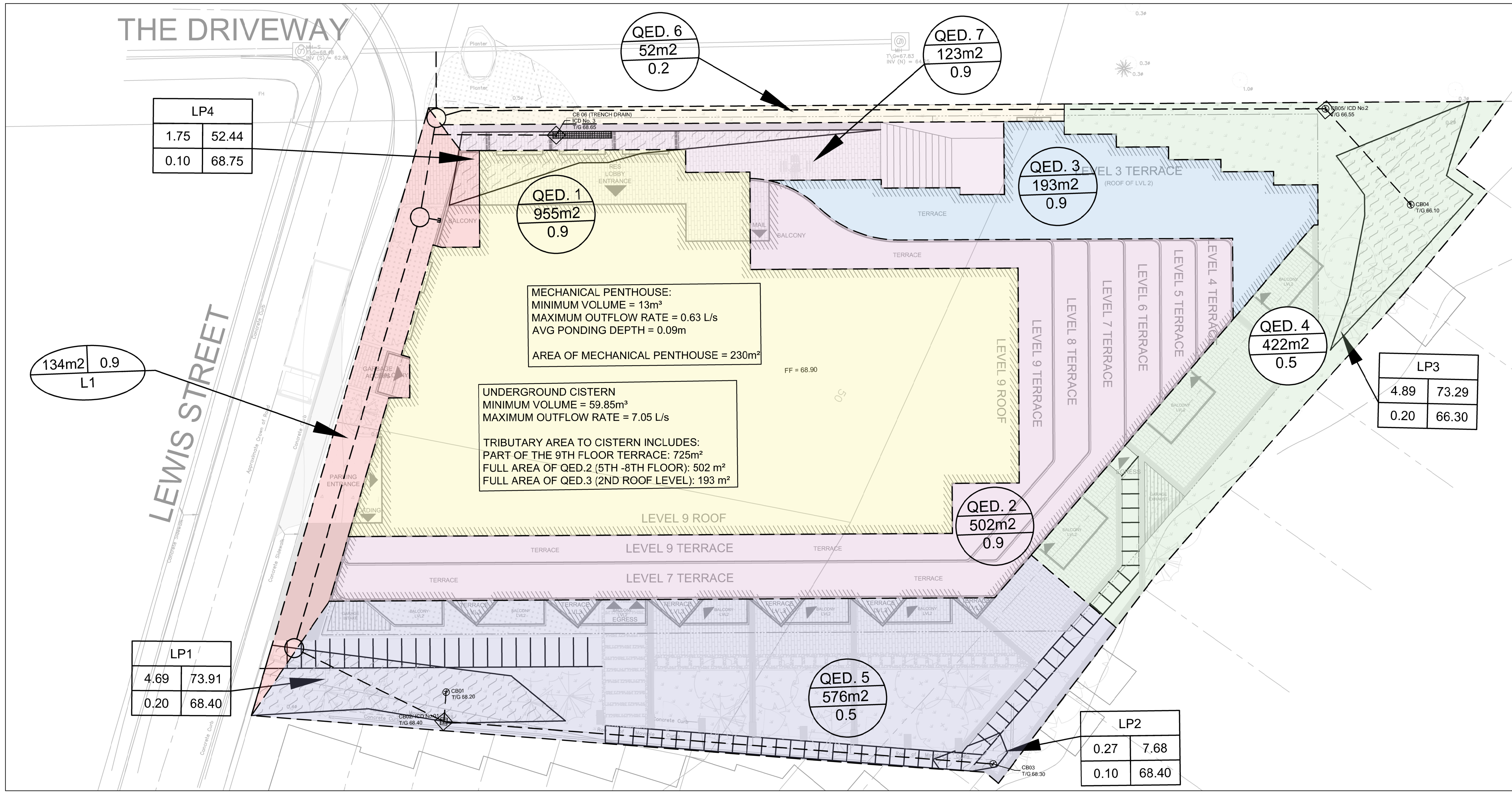
PRE-DEVELOPMENT PEAK FLOWS (ALLOWABLE) TO BE SET BASED ON THE EXISTING RUNOFF COEFFICIENTS AND NOT TO EXCEED A C=0.40. THE ALLOWABLE PEAK FLOWS TO BE CALCULATED BASED ON THE 1.5-YEAR INTENSITY IN ACCORDANCE WITH AN EMAIL FROM THE CITY AND THE CALCULATED TIME OF CONCENTRATION.

TO LIMIT POST-DEVELOPMENT FLOWS TO THE ALLOWABLE PEAK FLOWS, THE FOLLOWING IS PROPOSED:

- THREE (3) OF THE CATCH BASINS TO BE EQUIPPED WITH INLET CONTROL DEVICES (ICD), WHICH IS COMBINED WITH ON-SITE STORAGE AT FOUR (4) LOCATIONS REFER TO DRAWING BELOW AND PONDING AREA TABLE FOR MORE INFORMATION.
- ROOFTOP RESTRICTION AND STORAGE IS PROPOSED ON TOP OF THE MECHANICAL PENTHOUSE AS PER DRAWING AND PONDING AREA TABLE. PRELIMINARY PONDING DEPTH IS PROVIDED, TO BE REVISED BASED ON ROOFTOP DESIGN.
- UNDERGROUND CISTERN IS PROPOSED AS PER THE DETAILS SHOWN IN THE DRAWING AND THE PONDING AREA TABLE. THE CISTERN TO BE SIZED TO ACCOMMODATE PART OF QED. 1 (LOWER TERRACE), AS WELL AS AREAS QED. 2 AND QED. 3.



PRE-DEVELOPMENT DRAINAGE PLAN - SCALE 1:300



POST-DEVELOPMENT DRAINAGE PLAN - SCALE 1:150

No.	ISSUE / REVISION	DDMMYY
1	ISSUED FOR SITE PLAN SUBMISSION	14/06/22

SCALE: 1:150

CLIENT: Main + Main

CONSULTANT: J.L.Richards ENGINEERS - ARCHITECTS - PLANNERS

PROFESSIONAL STAMP: M. N. L. DALRYMPLE, 2022-06-13, PROVINCE OF ONTARIO

PROJECT NORTH

PROJECT: 50 THE DRIVEWAY

DRAWING: DRAINAGE AND STORMWATER MANAGEMENT PLAN

DESIGN: LD
 DRAWN: KT
 CHECKED: GF
 JLR #: 31333-000

DRAWING #: DST

File Location: P:\1000\31333-000-50 The Driveway\Production\1-Chin\31333-000-C.DST.dwg

PLOT DATE: Monday, June 13, 2022 4:05:51 PM

GENERAL CONSTRUCTION NOTES :

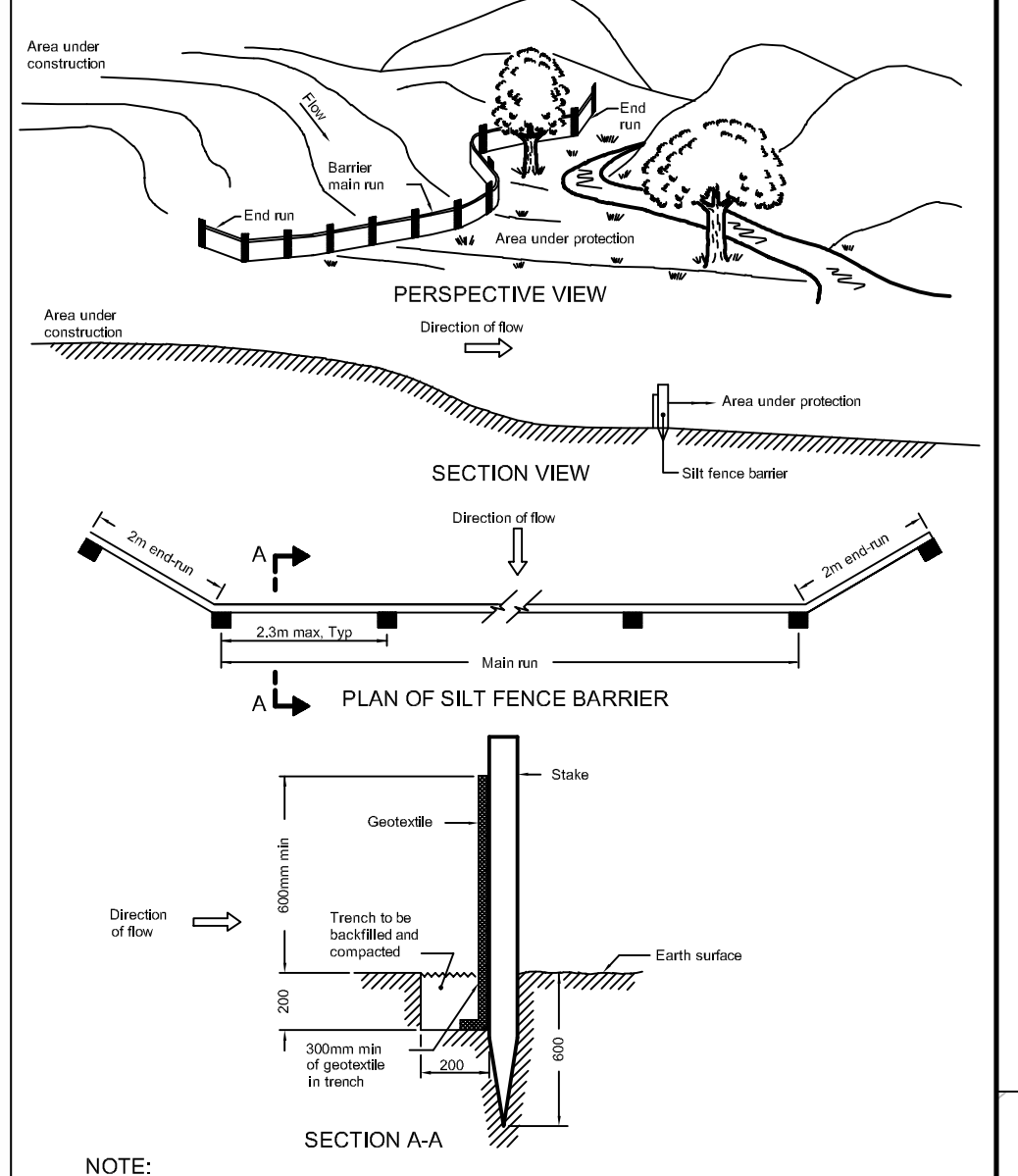
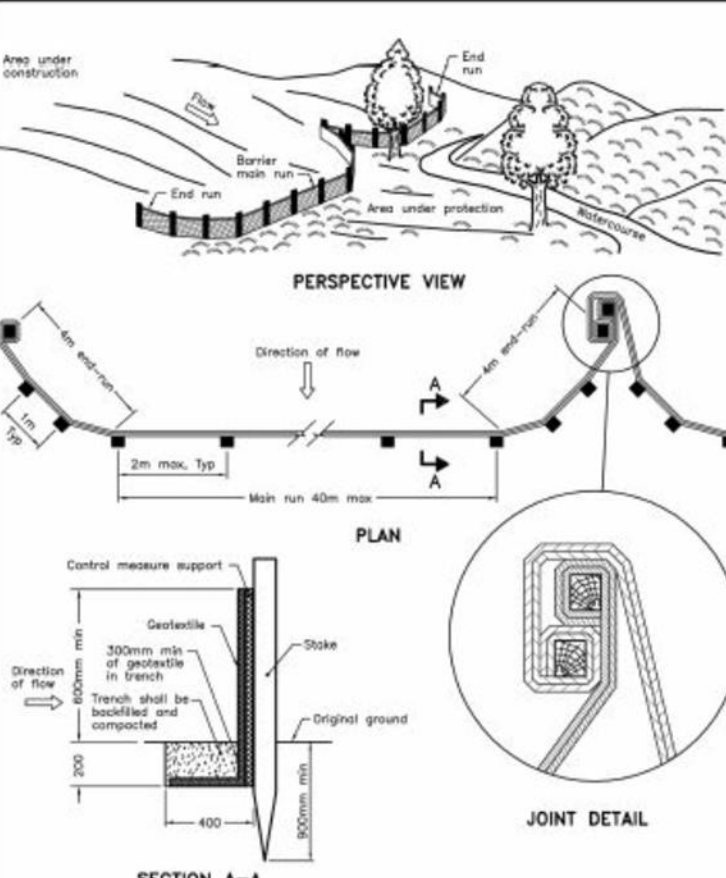
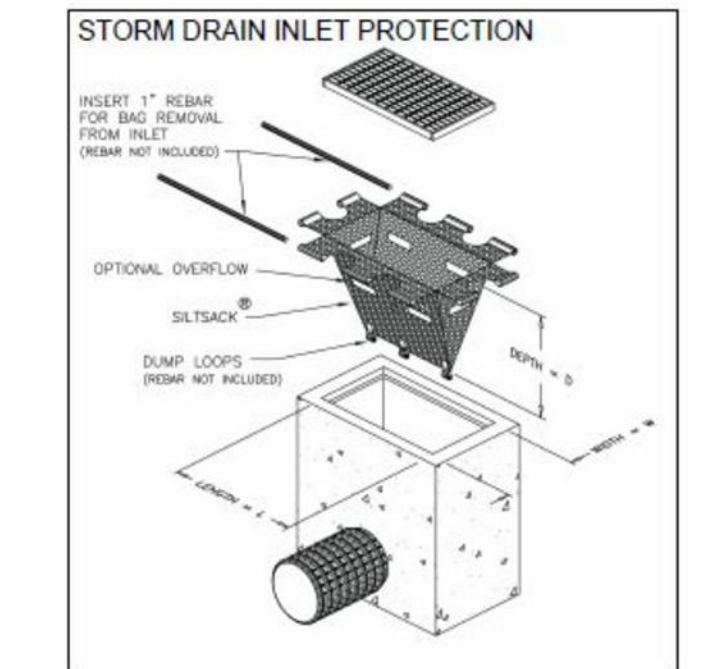
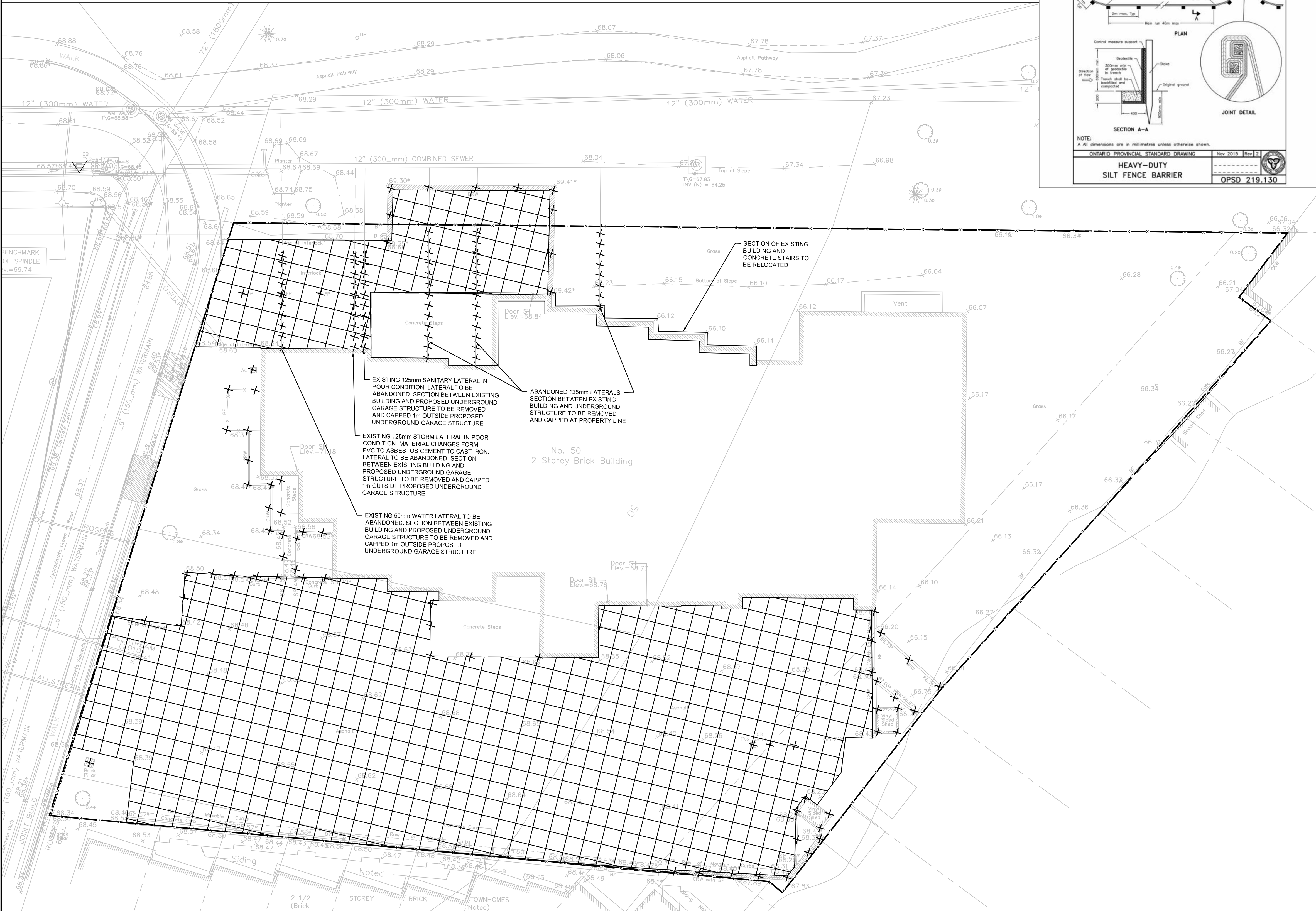
EROSION AND SEDIMENTATION CONTROL SYSTEM (ESCS) REQUIREMENTS

PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR IS REQUIRED TO CONSTRUCT AN EROSION AND SEDIMENTATION CONTROL SYSTEM (ESCS) ON-SITE (IN ADDITION TO THE PROPOSED MEASURES DEPICTED ON THIS DRAWING) TO CONVEY RAINWATER AND/OR PUMPED WATER PRIOR TO ITS DISCHARGE TO THE SURFACE AND/OR TO ANY NATURAL WATER COURSE AND/OR TO ANY EXISTING SEWER SYSTEM. THE CONTRACTOR SHALL CONSTRUCT THE ESCS IN SUCH A WAY AS TO ENSURE THAT THE QUALITY OF THE DISCHARGED PUMP WATER DOES NOT EXCEED THE MORE STRINGENT CRITERIA OF EITHER THE ALLOWABLE TSS CONCENTRATION LIMITS SPECIFIED IN THE PTTW OR 25 MG/L AT ANY TIME.

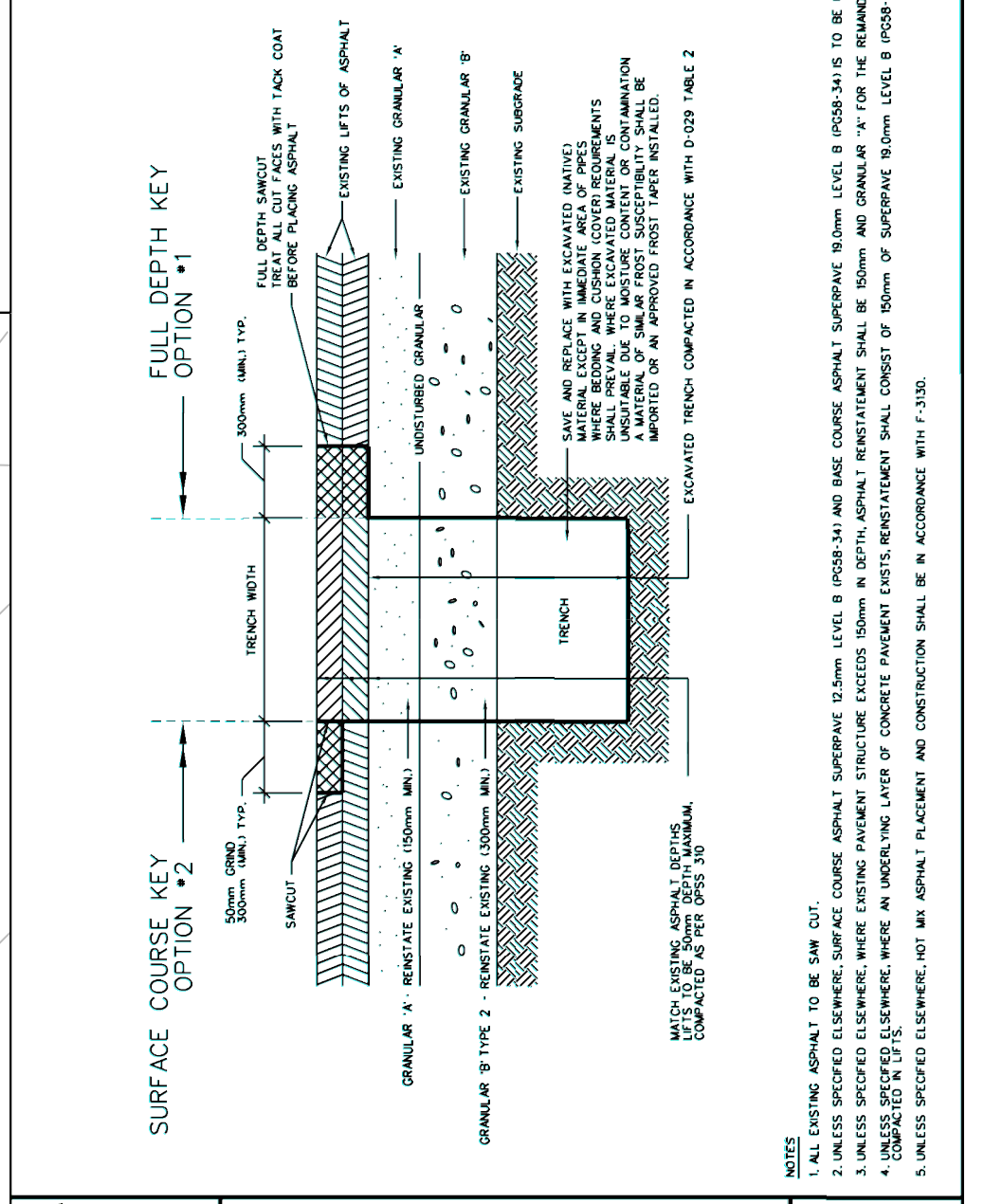
THE CONTRACTOR SHALL CONSTRUCT AN ESCS TO ACHIEVE THE TURBIDITY AND TSS REMOVAL CRITERIA, REGULARLY MONITOR AND MAINTAIN IT TO ENSURE ONGOING COMPLIANCE. THE CONTRACTOR SHALL TAKE WATER SAMPLES AT THE OUTLET OF THE ESCS TO ENSURE THAT THE TURBIDITY AND TSS REMOVAL CRITERIA ARE MET IN ACCORDANCE WITH CITY OF OTTAWA S.P. NO. F. 1094 AND MEET THE REQUIREMENTS OF SEWER USE BYLAW. IF THE ANALYTICAL RESULTS ARE LESS THAN PRESCRIBED CRITERIA, THEN THE CONTRACTOR MAY BEGIN DEWATERING PROVIDED THAT THE QUALITY OF THE WATER REMAINS SUBSTANTIALLY THE SAME AS THE INITIAL MEASURED SAMPLE. SUBSEQUENT WATER SAMPLES SHALL ALSO BE COLLECTED IN ACCORDANCE WITH CITY OF OTTAWA S.P. NO. F. 1094.

NOTES:

1. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO WORK AND MAINTAINED DURING THE WORK PHASE BY THE GENERAL CONTRACTOR TO PREVENT ENTRY OF SEDIMENT INTO THE RECEIVING STREAM. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY BY THE GENERAL CONTRACTOR TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY AND ARE BEING MAINTAINED AND/OR UPGRADED AS REQUIRED. IF THE SEDIMENT AND EROSION CONTROL MEASURES ARE NOT FUNCTIONING PROPERLY, NO FURTHER WORK SHALL OCCUR UNTIL THE PROBLEM HAS BEEN ADDRESSED AND RECTIFIED.
2. ALL MATERIALS AND EQUIPMENT USED FOR THE PURPOSE OF SITE PREPARATION AND PROJECT COMPLETION SHALL BE OPERATED AND STORED IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCES (I.E. PETROLEUM PRODUCTS, SILT, ETC.) FROM ENTERING THE RECEIVING STREAM.
3. SEDIMENT AND EROSION CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY SITE INSPECTOR, ENGINEER AND/OR THE LOCAL CONSERVATION AUTHORITY.
4. INSPECTIONS AND REPAIR OF SEDIMENT AND EROSION CONTROLS WILL BE CONDUCTED AS SOON AS POSSIBLE FOLLOWING ANY RAIN EVENTS.
5. WORKS WILL NOT BE CONSIDERED COMPLETE UNTIL ALL SEDIMENT CONTROLS ARE REMOVED.
6. ALL SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED AND CONSTRUCTED PER OPSS AND OPSD. SILT FENCE SHALL BE TO OPSD 219.110.
7. CONTRACTOR IS RESPONSIBLE TO KEEP THE ROADS FREE AND CLEAN FROM MUD OR DEBRIS.
8. A MUD MAT IS TO BE BUILT AT THE DRIVE SITE ENTRANCE TO PREVENT THE TRANSPORT OF SEDIMENT ONTO PAVED SURFACES.
9. FILTER FABRIC TO BE PLACED UNDER GRATE OF EXISTING STREET CATCH BASINS. THE FILTER FABRIC SHALL BE INSPECTED DAILY TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY AND ARE MAINTAINED AS REQUIRED.
10. CB SLUMP TO BE PERIODICALLY CLEANED TO ENSURE ACCUMULATED SEDIMENTS DO NOT INTERFERE WITH STORMWATER CONVEYANCE OR CONTRIBUTE TO INCREASED BUILD-UP OF CONTAMINANTS (HEAVY METALS, NUTRIENTS, TOTAL SUSPENDED SOLIDS, PCB'S, PAH'S ETC.) IN THE SLUMP, THAT MAY ENTER THE SEWER SYSTEM.
11. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEMS 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.
12. AT ALL CONNECTION POINTS, REINSTATE SURFACES TO EXISTING CONDITION OR BETTER.
 - ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING No. R10
 - THICKNESS OF GRANULARS AND ASPHALT LAYERS SHALL MATCH EXISTING. ASPHALT SHALL BE A MINIMUM OF 150mm (50mm BASE AND 50mm INTERMEDIATE COURSE, 50mm WEAR COURSE).
 - AN ASPHALT OVERLAY CONSISTING OF 50mm ASPHALT FOR 300mm MINIMUM IS REQUIRED OUTSIDE OF TRENCHES PER CITY OF OTTAWA STANDARD DRAWING No. R10.
 - BOULEVARDS / GRASSED AREAS SHALL BE REINSTATED WITH MINIMUM 100mm TOPSOIL AND SOG.



ONTARIO PROVINCIAL STANDARD DRAWING		1996 02 01	Rev
LIGHT DUTY SILT FENCE BARRIER		Date	
		OPSD - 219.110	



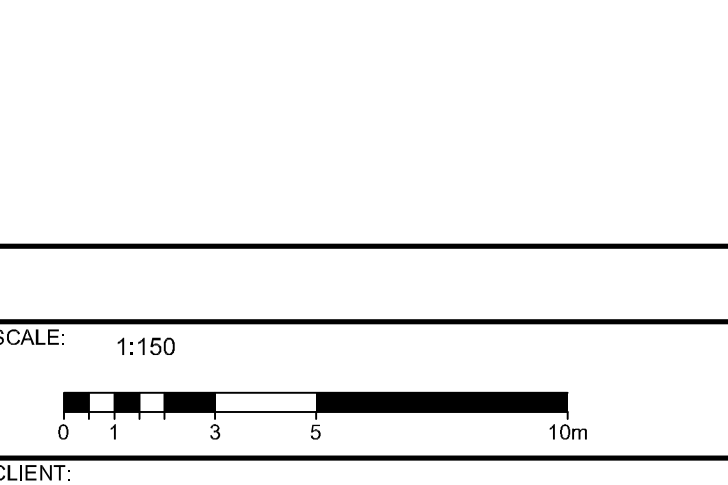
Ottawa	STANDARD TRENCH REINSTATEMENT IN PAVED SURFACE	DATE: MAY 2009
		REV: MARCH 2017
		ENG. NO.: R10

- SEDIMENT CONTROL MEASURES**
1. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE FOR PROTECTION OF RECEIVING STORM SEWER OR DRAINAGE DURING CONSTRUCTION ACTIVITIES.
 2. ANY STOCK PILE MATERIAL TO BE KEPT ON FLAT AREAS DURING CONSTRUCTION AWAY FROM DRAINAGE PATHS. IF STOCK PILE MATERIAL IS PLACED ON SLOPE AREA, SILT FENCE TO BE INSTALLED.
 3. FILTER CLOTH TO BE PLACED UNDER ALL CATCH BASIN AND MANHOLE COVERS ON SITE, FOR TEMPORARY SEDIMENT CONTROL DURING CONSTRUCTION.

LEGEND

X	PROPOSED SILT FENCE BARRIER TO OPSD 219.110
△	EXISTING OFFSITE CATCH BASIN c/w FILTER CLOTH
***	UNDERGROUND SERVICE TO BE REMOVED
X	CONCRETE SIDEWALK / CURB AND RETAINING WALL REMOVAL
- - -	PROPERTY LINE
---	BUILDING OUTLINE
▨	SURFACE REMOVAL

1	ISSUED FOR SITE PLAN SUBMISSION	14/06/22
No.	ISSUE / REVISION	DDMMYY



CLIENT: MAIN + MAIN

CONSULTANT: **JLR J.L.Richards**
ENGINEERS - ARCHITECTS - PLANNERS

PROFESSIONAL STAMP: **M. N. L. DALRYMPLE**
LICENSED PROFESSIONAL ENGINEER
2022-06-13
PROVINCE OF ONTARIO

PROJECT NORTH

PROJECT: 50 THE DRIVEWAY

DRAWING: REMOVALS, REINSTATEMENTS, EROSION & SEDIMENT CONTROL

DESIGN: LD	DRAWING #:
DRAWN: KT	RESC
CHECKED: GF	
JLR #: 31333-000	