

GENERAL NOTES AND SPECIFICATIONS

- ALL MATERIALS AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH OPS AND CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS AND OPSD DRAWING, ONTARIO PROVINCIAL STANDARDS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND BEAR COST OF SAME INCLUDING WATER PERMIT AND ASSOCIATED COSTS.
- SERVICE AND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REINSTATEMENT.
- CONTRACTOR TO CONFIRM TIE-IN ELEVATIONS TO EXISTING INFRASTRUCTURE PRIOR TO INITIATING CONSTRUCTION AND INFORM THE ENGINEER OF ANY DISCREPANCY FROM THE AS-BUILT INFORMATION REFERENCED ON THE DRAWINGS.
- ALL DISTURBED AREAS SHALL BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION OF THE ENGINEER & THE CITY. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH OPSD 508.010 AND OPSD 510.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATION FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENTATION CONTROL PLAN THAT WILL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION FOR RECEIVING STORM SEWERS OR DRAINAGE DURING CONSTRUCTION ACTIVITIES. THIS PLAN SHALL INCLUDE BUT NOT BE LIMITED TO CATCH BASINS, STRAW BALE CHECK DAMS AND SEDIMENT CONTROLS AROUND ALL DISTURBED AREAS. DEWATERING SHALL BE PUMPED INTO SEDIMENT TRAPS.
- SITE PLAN PREPARED BY PETROFF PARTNERSHIP ARCHITECTS. DRAWING SA-0048, REV 11, PROJECT NAME: COMMERCIAL DEVELOPMENT, INNES ROAD & MER BLEUE, ORELANDS, ONTARIO.
- TOPOGRAPHIC SURVEY SUPPLIED BY STANTEC GEOMATICS LTD. PROJECT NO. 161814849-111. TOPOGRAPHICAL SKETCH OF PART OF LOT 1 CONCESSION 1, GEORGIAN TOWNSHIP OF CUMBERLAND, CITY OF OTTAWA.
- REFER TO LANDSCAPE ARCHITECTURE PLAN FOR ALL LANDSCAPING FEATURES (i.e. TREES, WALKWAYS, PARK DETAILS, NOISE BARRIERS, FENCES etc.)
- GEOTECHNICAL INVESTIGATION: GEOTECHNICAL INVESTIGATION PROPOSED COMMERCIAL DEVELOPMENT, 2025 MER BLEUE ROAD - PHASE 2, OTTAWA, ONTARIO. PREPARED BY PATERSON GROUP. DATED SEPTEMBER 6, 2024. REPORT NO. PG7042-1. GEOTECHNICAL INFORMATION PRESENTED ON THESE DRAWINGS MAY BE INTERPOLATED FROM THE ORIGINAL REPORT. REFER TO ORIGINAL GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS AND TO VERIFY ASSUMPTIONS MADE HEREIN.
- STREET LIGHTING TO CITY OF OTTAWA STANDARDS.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED. DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO ENGINEER.
- THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL BY THE CONTRACT ADMINISTRATOR AND DIRECTOR OF ENGINEERING HAS BEEN OBTAINED.
- HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE TO BE NOTIFIED IF DEEPLY BURIED ARCHAEOLOGICAL REMAINS ARE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES.

ROADWORKS

- ALL TOPSOIL AND ORGANIC MATERIAL TO BE STRIPPED FROM WITHIN THE FULL RIGHT OF WAY PRIOR TO CONSTRUCTION.
- SUB-EXCAVATE SOFT AREAS & FILL WITH GRANULAR 'B' COMPACTED IN 0.30m LAYERS.
- ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
- ROAD SUBDRAINS SHALL BE CONSTRUCTED AS PER CITY OF OTTAWA STANDARD R1.
- ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE CONSULTANT.
- CONTRACTOR TO OBTAIN A ROAD OCCUPANCY PERMIT 48 HOURS PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL ROAD ALLOWANCE IF REQUIRED BY THE MUNICIPALITY. ALL WORK ON THE MUNICIPAL RIGHT OF WAY AND EASEMENTS TO BE INSPECTED BY THE MUNICIPALITY PRIOR TO BACKFILLING.
- PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD R10, AND OPSD 508.010, AND OPSD 310.
- CONCRETE CURBS SHALL BE CONSTRUCTED AS PER CITY STANDARD SC1.1 AND SC1.3 (BARRIER OR MOUNTABLE CURB AS SHOWN ON DRAWINGS).
- CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PER CITY STANDARDS SC3 AND SC1.4.
- PAVEMENT CONSTRUCTION
 PAVEMENT STRUCTURE - CAR PARKING ONLY
 75mm HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
 150mm OPSD GRANULAR 'A' BASE
 300mm OPSD GRANULAR 'B' TYPE II SUB BASE
 PAVEMENT STRUCTURE - ACCESS LANES AND HEAVY TRUCKS
 50mm HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
 50mm HL-8 OR SUPERPAVE 19.0 ASPHALTIC CONCRETE
 150mm OPSD GRANULAR 'A' BASE
 450mm OPSD GRANULAR 'B' TYPE II SUB BASE
- WHERE PROPOSED ASPHALT SURFACE RECOMMENDED ABOVE MEETS THE EXISTING ASPHALT SURFACE, THE FOLLOWING JOINT TRANSITION DETAIL SHOULD BE EMPLOYED.
 - A 300mm WIDE SECTION OF THE EXISTING ASPHALT SHOULD BE SAW CUT FROM THE EXISTING PAVEMENT EDGE TO PROVIDE A SOUND SURFACE TO ABUT THE PROPOSED PAVEMENT STRUCTURE.
 - IT IS RECOMMENDED TO MILL A 300mm WIDE AND 40mm DEEP SECTION OF THE EXISTING ASPHALT AT THE SAW CUT EDGE.

WATER SUPPLY SERVICING

- THE CONTRACTOR SHALL CONSTRUCT WATERMAIN, WATER SERVICES, CONNECTIONS & APPURTENANCES AS PER CITY OF OTTAWA SPECIFICATIONS & SHALL CO-ORDINATE AND PAY ALL RELATED COSTS INCLUDING THE COST OF CONNECTION, INSPECTION & INSPECTION BY CITY PERSONNEL.
- WATERMAIN PIPE MATERIAL SHALL BE PVC CL150 DR18. DEFLECTION OF WATERMAIN PIPE IS NOT TO EXCEED 1/2 OF THAT SPECIFIED BY THE MANUFACTURER. PVC WATERMANS TO BE INSTALLED WITH

TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W36.

- WATER SERVICES ARE TO BE TYPE K SOFT COPPER AS PER CITY OF OTTAWA STANDARD W26 (UNLESS OTHERWISE NOTED). WATER SERVICE TO EXTEND 1.0M BEYOND PROPERTY LINE. STAND POST TO BE INSTALLED AT PROPERTY LINE.
- FIRE HYDRANTS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W18 AND W19.
- WATER VALVES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W24.
- WATERMAIN TRENCH SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W17 UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL AS PER SECTION 6.4 OF THE GEOTECH REPORT.
- SERVICE CONNECTIONS SHALL BE INSTALLED A MINIMUM OF 2400mm FROM ANY CATCHBASIN, MANHOLE, OR OBJECT THAT MAY CONTRIBUTE TO FREEZING. THERMAL INSULATION SHALL BE INSTALLED ON ALL PROPOSED CBS ON THE WM STREET SIDE WHERE 2400mm SEPARATION CANNOT BE ACHIEVED. (AS PER CITY OF OTTAWA W22 & W23)
- CATHODIC PROTECTION TO BE SUPPLIED ON METALLIC FITTINGS AS PER CITY OF OTTAWA W40 AND W42.
- THRUST BLOCKS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25.3 AND W25.4.
- WATERMAIN TO HAVE MIN. 2.4m COVER. WHERE WATERMAIN COVER IS LESS THAN 2.4m, INSULATION TO BE SUPPLIED IN ACCORDANCE WITH CITY STANDARD W22.
- WATERMAIN CROSSINGS ABOVE AND BELOW SEWERS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W25 AND W25.2.
- PRESSURE REDUCING VALVES (PRVS) IF REQUIRED, TO BE INSTALLED AS PER ONTARIO PLUMBING CODE.

STORM AND SANITARY SEWERS

- SANITARY SEWERS 375mm DIA. OR SMALLER SHALL BE PVC DR35. SANITARY SEWERS LARGER THAN 375mm SHALL BE CONCRETE CSA A 257.2 CLASS 1000 AS PER OPSD 807.010.
- STORM SEWERS 375mm DIA. OR SMALLER SHALL BE PVC DR35. STORM SEWERS LARGER THAN 375mm DIA. SHALL BE CONCRETE CSA A 257.2 CLASS 1000 AS PER OPSD 807.010
- ALL STORM AND SANITARY SEWER BEDDING SHALL BE INSTALLED AS PER SECTION 6.4 OF THE GEOTECH REPORT.
- STORM AND SANITARY MANHOLES SHALL BE 1200mm DIAMETER IN ACCORDANCE WITH OPSD-701.01 (UNLESS OTHERWISE NOTED) c/w FRAME AND COVER AS PER CITY OF OTTAWA S24, S24.1, AND S25 WHERE APPLICABLE. CATCH BASIN MANHOLE FRAME AND COVERS PER S25 AND S28.1. ALL STORM MANHOLES WITH SEWERS 600mm DIA SEWERS AND OVER IN SIZE SHALL BE BENCHED. ALL OTHER STORM MANHOLES SHALL BE COMPLETED WITH 300mm SUMPS AS PER CITY STANDARDS. SANITARY MANHOLES SHALL NOT HAVE SUMPS.
- ALL SEWERS CONSTRUCTED WITH GRADES 0.50% OR LESS, TO BE INSTALLED WITH LASER AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
- FOR STORM SEWER INSTALLATION (EXCLUDING CB LEADS) THE MINIMUM DEPTH OF COVER OVER THE CROWN OF THE SEWER IS 2.0m. FOR SANITARY SEWERS THE MINIMUM DEPTH OF COVER IS 2.5m OVER PIPE OBVERT.
- ALL STORM AND SANITARY SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
- STORM AND SANITARY SERVICE LATERALS TO BE SDR 28 INSTALLED AT MIN. 1.0% SLOPE.
- CATCH BASINS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARDS S1, S2, S3 c/w FRAME AND GRATE AS PER S19. CURB INLET FRAME AND GRATE PER S22 AND S23. CATCH BASIN MANHOLES FRAME AND GRATE AS PER S25 FRAME AND S28.1 COVER. PROVIDE 150mm ADJUSTED SPACERS. ALL CATCH BASINS SHALL HAVE SUMPS (600mm DEEP). STREET CATCH BASIN LEADS SHALL BE 200mm DIA. (MIN) PVC DR 35 AT 1.0% GRADE WHERE NOT OTHERWISE SHOWN ON PLAN. CATCH BASINS WILL BE INSTALLED WITH INLET CONTROL DEVICES (ICD) AS PER ICD SCHEDULE ON STORM DRAINAGE PLAN.
- STREET CATCH BASINS TO BE INSTALLED c/w SUBDRAINS 3m LONG IN FOUR ORTHOGONAL DIRECTIONS OR LONGITUDINALLY WHEN SUBGRADE LEVEL.
- REAR LOT PERFORATED PIPE TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS S28. REAR LOT STRUCTURES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD X30 AND W31.
- CLAY SEALS TO BE INSTALLED AS PER CITY STANDARD DRAWING S8. THE SEALS SHOULD BE AT LEAST 1.5m LONG (IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. GENERALLY, THE SEALS SHOULD EXTEND FROM THE FROST LINE AND FULLY PENETRATE THE BEDDING, SUBBEDDING AND COVER MATERIAL. THE BARRIERS SHOULD CONSIST OF RELATIVELY DRY AND COMPACTABLE BROWN SILTY CLAY PLACED IN MAXIMUM 225mm THICK LOOSE LAYERS COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S SPMDD. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT STRATEGIC LOCATIONS AT NO MORE THAN 60m INTERVALS IN THE SERVICE TRENCHES. FOR DETAILS REFER TO GEOTECHNICAL INVESTIGATION.
- GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300 mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA AND COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
- CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSD 410 AND OPSD 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 CONSULTANT FOR REVIEW.
- ANY SEWER ABANDONMENT TO BE CONDUCTED ACCORDING TO CITY OF OTTAWA STANDARD S11.4
- STORM SEWERS WITH LESS THAN 2.0m COVER AND SANITARY SEWERS WITH LESS THAN 2.5m COVER TO BE INSULATED IN ACCORDANCE WITH CITY STANDARD S35.

GRADING

- ALL GRANULAR BASE & SUB BASE COURSE MATERIALS SHALL BE COMPACTED TO 98% STANDARD PROCTOR MAX. DRY DENSITY.
- SUB-EXCAVATE SOFT AREAS & FILL WITH GRANULAR 'B' COMPACTED IN 0.15m LAYERS.
- ALL DISTURBED GRASSSED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, WITH SOD ON MIN. 100mm TOPSOIL. THE RELOCATION OF TREES AND SHRUBS SHALL BE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT OR ENGINEER.
- 100 YEAR PONDING DEPTH TO BE 0.30m (MAXIMUM).
- EMBANKMENTS TO BE SLOPED AT MAX 3:1, UNLESS OTHERWISE SPECIFIED.
- ALL SWALES TO BE MIN. 0.15m DEEP WITH MIN. 3:1 SIDE SLOPES UNLESS OTHERWISE NOTED. THE MINIMUM LONGITUDINAL SLOPE TO BE 1.5% OR 1.0% WHEN PERFORATED SUBDRAIN IS INSTALLED.
- ALL ROOF DOWNSPOUTS TO DISCHARGE TO THE GROUND ONTO

SPLASH PADS AND SHALL NOT BE DIRECTED TO THE STORM SEWER, OR THE BUILDING FOUNDATION DRAIN.

- TOP OF GRATE (T/G) ELEVATIONS FOR ALL STREET CATCHBASINS SHOWN ON PLANS. REFER TO THE ELEVATION AT EDGE OF PAVEMENT, OR GUTTERLINE WHERE APPLICABLE.
- ALL RETAINING WALLS GREATER THAN 1.0m IN HEIGHT ARE TO BE DESIGNED, APPROVED, AND STAMPED BY STRUCTURAL ENGINEER.
- FENCES OR RAILINGS ARE REQUIRED FOR RETAINING WALLS GREATER THAN 0.60m IN HEIGHT.
- EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.
- ALL CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR, REVIEW WITH CONTRACT ADMINISTRATOR AND THE CITY OF OTTAWA PRIOR TO TREE CUTTING.
- REFER TO DRAWING EC DS-1 FOR EROSION AND SEDIMENT CONTROL DETAILS.

BEST MANAGEMENT PRACTICES

EROSION AND SEDIMENT CONTROLS (BEST MANAGEMENT PRACTICES) SHALL BE PROVIDED DURING CONSTRUCTION OF THIS PROJECT.

EROSION MUST BE MINIMIZED AND SEDIMENTS MUST BE REMOVED FROM CONSTRUCTION SITE RUN-OFF IN ORDER TO PROTECT DOWNSTREAM AREAS. DURING ALL CONSTRUCTION, EROSION AND SEDIMENTATION SHOULD BE CONTROLLED BY THE FOLLOWING TECHNIQUES:

- LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME.
- REVEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE.
- MINIMIZE AREA TO BE CLEARED AND GRUBBED.
- PROTECT EXPOSED SLOPES WITH PLASTIC OR SYNTHETIC MULCHES.
- INSTALL FILTER CLOTH BETWEEN FRAME AND COVER ON ALL PROPOSED CATCH BASINS AND CATCH BASIN MANHOLES AND ON ALL EXISTING CATCH BASINS THAT WILL RECEIVE RUN-OFF FROM THE SITE.
- A SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF ALL AND ANY STOCKPILES OF MATERIAL TO BE USED OR REMOVED FROM SITE. (LOCATION TO BE DETERMINED)
- A VISUAL INSPECTION SHALL BE DONE DAILY ON SEDIMENT CONTROL MEASURES AND CLEANED OF ANY ACCUMULATED SILT AS REQUIRED. THE DEPOSITS WILL BE DISPOSED OFF SITE AS PER THE REQUIREMENTS OF THE CONTRACT.
- SEDIMENT CONTROL BARRIERS MAY ONLY BE REMOVED TEMPORARILY WITH APPROVAL OF CONTRACT ADMINISTRATOR TO ACCOMMODATE CONSTRUCTION OPERATIONS. ALL AFFECTED BARRIERS MUST BE REINSTITATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED. NO REMOVAL WILL OCCUR IF THERE IS A SIGNIFICANT RAINFALL EVENT ANTICIPATED (10mm) UNLESS A NEW DEVICE HAS BEEN INSTALLED TO PROTECT THE EXISTING STORM AND SANITARY SEWER SYSTEMS.
- NO REFUELING OR CLEANING OF EQUIPMENT IS PERMITTED NEAR ANY EXISTING WATERWAY.
- SEDIMENT CONTROL MEASURES SHALL BE REMOVED WHEN, IN THE OPINION OF THE CONTRACT ADMINISTRATOR, THE MEASURE IS NO LONGER REQUIRED. NO CONTROL MEASURES SHALL BE PERMANENTLY REMOVED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CONTRACT ADMINISTRATOR.
- THE CONTRACTOR SHALL PERIODICALLY, OR WHEN REQUESTED BY THE CONTRACT ADMINISTRATOR, CLEAN OUT ACCUMULATED SEDIMENTS AS REQUIRED.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO THE WATERCOURSE. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.

SEDIMENT CONTROL MEASURES

- PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION.
- ALL EROSION CONTROL MEASURES TO BE IN PLACE BEFORE STARTING CONSTRUCTION AND REMAIN IN PLACE UNTIL RESTORATION IS COMPLETE.
- MAINTAIN EROSION CONTROL MEASURES DURING CONSTRUCTION.
- ALL COLLECTED SEDIMENT TO BE DISPOSED OF AT AN APPROVED LOCATION.
- MINIMIZE AREA DISTURBED DURING CONSTRUCTION.
- ALL DEWATERING TO BE DISPOSED OF IN AN APPROVED SEDIMENTATION BASIN.
- PROTECT ALL CATCHBASINS, MANHOLES AND PIPE ENDS FROM SEDIMENT INFUSION WITH GEOTEXTILE (TERRAFIX 270R OR APPROVED EQUIVALENT), UNLESS OTHERWISE SPECIFIED.
- KEEP ALL SUMPS CLEAN DURING CONSTRUCTION.
- PREVENT WIND-BLOWN DUST.
- STRAW BALES TO BE USED IN LOCALIZED AREAS AS SHOWN AND AS DIRECTED BY THE CONTRACT ADMINISTRATOR DURING CONSTRUCTION.
- STRAW BALES TO BE TERMINATED BY ROUNDING BALES TO CONTAIN AND FILTER RUNOFF.
- CONSTRUCT TEMPORARY MEASURES TO CONTROL SILT ENTERING THE STORM DRAINAGE SYSTEM TO THE SPECIFICATIONS OUTLINED IN THE GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES PREPARED BY THE MINISTRY OF NATURAL RESOURCES. THESE MEASURES ARE TO BE INSTALLED PRIOR TO COMMENCING ANY CONSTRUCTION AND ARE TO REMAIN IN PLACE UNTIL CONSTRUCTION HAS BEEN COMPLETED TO THE SPECIFICATIONS OF THE CITY ENGINEER.
- ALL SILT FENCING AND DETAILS ARE AT THE MINIMUM TO BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
- ALL OF THE ABOVE NOTES AND ANY SEDIMENT AND EROSION CONTROL MEASURES ARE AT THE MINIMUM TO BE IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.

CONTINGENCY SEDIMENT CONTROL MEASURES

- INITIAL SEDIMENT AND EROSION CONTROL MEASURES (I.E. HEAVY DUTY SILT FENCE, ROBUST SILT FENCE) TO BE INSTALLED IN LOCATIONS AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN DRAWINGS.
- IF DEEMED NECESSARY BY THE CONTRACT ADMINISTRATOR, INSTALL ENHANCED EROSION AND SEDIMENT CONTROL MEASURES TO DEAL WITH ABNORMAL CONDITIONS AS DIRECTED BY THE CONTRACT ADMINISTRATOR (STANTEC).
- IF DEEMED NECESSARY BY THE CONTRACT ADMINISTRATOR THAT ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES ARE REQUIRED, INSTALL AN ADDITIONAL ROW OF HEAVY DUTY SILT FENCE AS SHOWN ON THE DETAIL DRAWING.
- IF THE CONTRACT ADMINISTRATOR REQUIRES FURTHER SEDIMENT AND EROSION CONTROL MEASURES, INSTALL A STRAW BALE FILTER IN FRONT OF THE SECOND ROW OF HEAVY DUTY SILT FENCE.

INSPECTION AND REPORTING

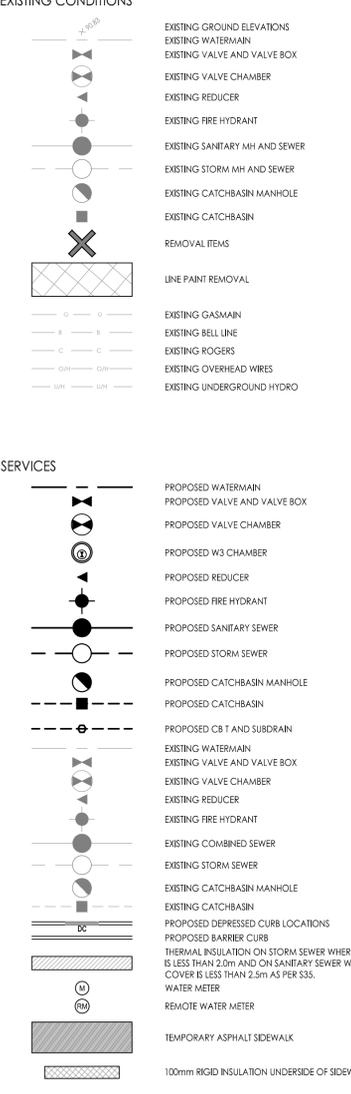
- IN ORDER TO MONITOR THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION, FREQUENT INSPECTIONS WILL BE REQUIRED. THE INSPECTION ACTIVITIES WILL BE PERFORMED BY THE CONTRACT ADMINISTRATOR AND WILL INCLUDE:
 - INSPECTING THE EROSION AND SEDIMENT CONTROL WORKS ON ALL DAYS WHEN CONSTRUCTION IS ACTIVE.
 - INSPECTING THE EROSION CONTROL WORKS WITHIN THE 24 HOURS IMMEDIATELY FOLLOWING ALL RAINFALL EVENTS.
 - DOCUMENTING ALL INSPECTION ACTIVITIES IN A LOGBOOK THAT WILL BE SUBMITTED TO THE CITY OF OTTAWA AT THE COMPLETION OF CONSTRUCTION.
- THE CONTRACT ADMINISTRATOR WILL PERFORM REGULAR INSPECTIONS TO VERIFY:
 - THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE ROUTINELY MAINTAINED, AND
 - THE SUBDIVISION CONSTRUCTION DOES NOT NEGATIVELY IMPACT OF THE ECOLOGICAL HEALTH OF THE RECEIVING WATERCOURSE.
- THE FOLLOWING REPORTING SYSTEM FOR PROPOSED INSPECTION ACTIVITIES WILL BE PERFORMED BY THE CONTRACT ADMINISTRATOR AND WILL INCLUDE:
 - PREPARING INSPECTION REPORTS FOR THE DURATION OF CONSTRUCTION, AND SUBMITTING THEM TO THE CITY OF OTTAWA. THE INSPECTION REPORTS SHOULD DOCUMENT ANY REPAIRS, RAINFALL OR PUMPINGS THAT HAS OCCURRED SINCE THE LAST REPORT, OR IS ANTICIPATED TO OCCUR PRIOR TO THE NEXT REPORT.
 - PRIOR TO REMOVAL OF THE EROSION AND SEDIMENT CONTROLS, THE CITY OF OTTAWA, THE OWNER, AND THE CONTRACT ADMINISTRATOR SHOULD CONDUCT A JOINT INSPECTION OF THE SITE.

ANY FAILURE OF THE PROPOSED TEMPORARY EROSION & SEDIMENT CONTROL MEASURES SHALL BE REPORTED TO THE CITY OF OTTAWA AS SOON AS POSSIBLE. UNDER THE SUPERVISION OF THE CITY OF OTTAWA AND THE CONTRACT ADMINISTRATOR, THE CONTRACTOR WILL BE DIRECTED TO REMOVE ANY SEDIMENT THAT HAS ENCRONCHED BEYOND THE CONSTRUCTION LIMITS.

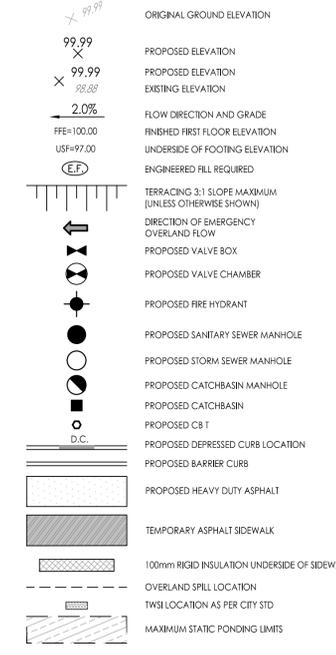
SEVERE WEATHER ANTICIPATED

- WHEN THE LOCAL WEATHER FORECAST INDICATES THAT SIGNIFICANT RAINFALL IS EXPECTED WITHIN A 24-HOUR PERIOD, THE CONTRACTOR SHALL IMMEDIATELY COMPLETE THE FOLLOWING:
 - ENSURE THAT ALL EROSION & SEDIMENT CONTROL MEASURES ARE SECURE AND THAT THERE IS NO EXPOSED SOIL THAT COULD BROKE AND BE DEPOSITED IN THE PHINCOMBE DRAIN.
 - MONITOR ALL MEASURES DURING THE FLOOD EVENT, AND WHERE A POTENTIAL FOR FAILURE IS IDENTIFIED, TAKE CORRECTIVE MEASURES.

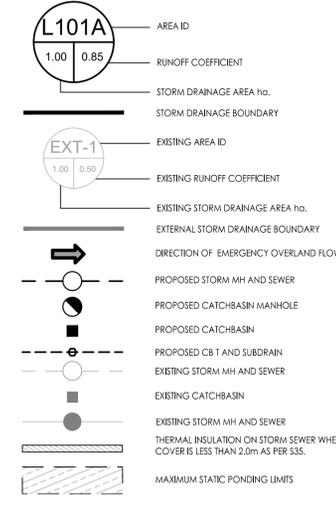
LEGEND



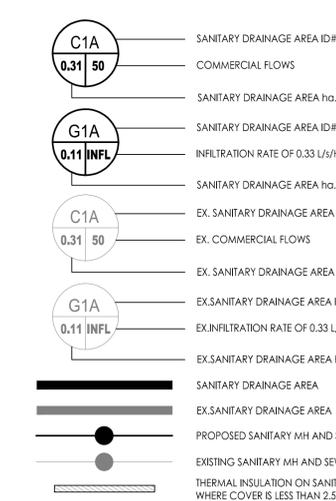
LEGEND GRADING



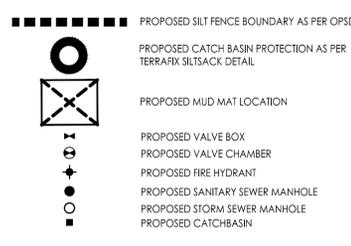
STORM DRAINAGE



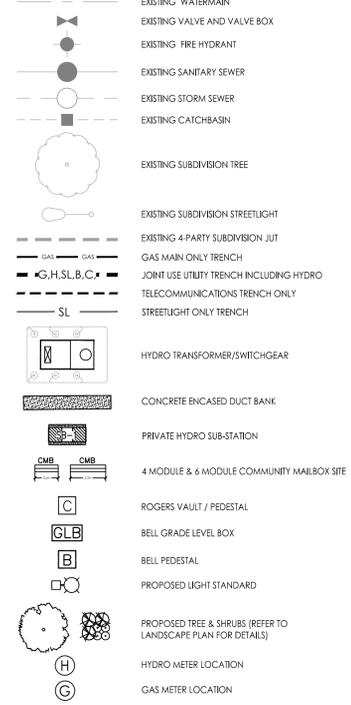
SANITARY DRAINAGE



EROSION CONTROL



COMPOSITE UTILITY PLAN



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Legend

Notes

Rev	Description	By	App'd	Date	
2	REVISED PER CITY COMMENTS	MJS	KS	25.07.22	
1	ISSUED FOR TENDER	MJS	GR	25.06.24	
0	ISSUED FOR SPA	MJS	KS	25.04.17	
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File Name: 160402122 D8.dwg		MJS	DT	MJS	25.03.31
		Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project
 SmartREIT (Orleans II) Inc. & Mer Bleue Shopping Centres Limited
 3200 HIGHWAY 7, VAUGHAN, ON, L4K 5Z5
 Orleans II Frontage Phase 3
 2025 MER BLEUE ROAD
 OTTAWA, ON, CANADA

NOTES AND LEGENDS PLAN

Project No. 160402122	Scale 1:500	Sheet 1	Revision
Drawing No.	Sheet	Revision	

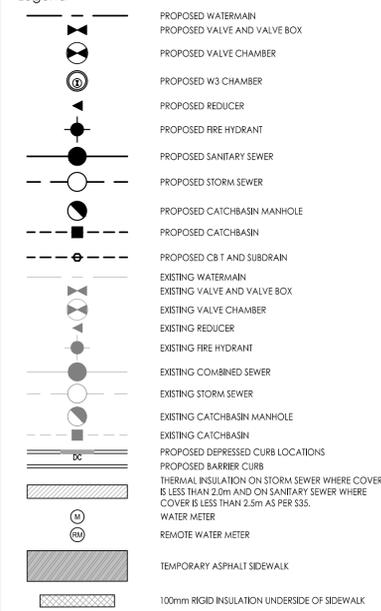
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Legend



Notes

- FINAL METER AND REMOTE METER LOCATIONS TO BE CONFIRMED BY MECHANICAL CONSULTANT.
- WATER SERVICE SIZE TO BE CONFIRMED BY MECHANICAL CONSULTANT.
- THE LOCATION AND ELEVATION OF SEWERS, WATERMAIN AND UTILITIES IS APPROXIMATE ONLY AND THE EXACT LOCATION AND ELEVATIONS SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVIDE THE LOCATION AND ELEVATION OF SEWERS, WATERMANS AND UTILITIES AND SHALL BE RESPONSIBLE FOR THEIR PROTECTION AND THE IMPLEMENTATION OF ANY NECESSARY PROCEDURES CALLED FOR IN THE APPROPRIATE STANDARD AND REGULATIONS. ANY DISCREPANCY WITH THE INFORMATION SHOWN ON THESE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WITH CONSTRUCTION.
- INTERNAL PLUMBING AND SUMP PUMPS TO BE DESIGNED BY THE MECHANICAL CONSULTANT.
- USF TO BE CONFIRMED BY THE STRUCTURAL CONSULTANT.
- MAINTENANCE HOLES LOCATED IN STORM WATER PONDING AREAS TO HAVE WATERTIGHT FRAME AND COVERS.



200mmØ W/M TABLE BLDG S1

STATION	FINISHED GRADE	TOP W/M	ITEM
0+000	88.67	86.270	200mmØ X 300mmØ TEE
0+009.1	88.87	86.470	W3 WATER CHAMBER AND GATE VALVE
0+011.3	88.92	86.520	200mmØ X 200mmØ TEE
0+016.9	89.09	87.410	45° HORIZONTAL BEND
0+026.7	89.24	86.840	45° HORIZONTAL BEND
0+028.7	89.30	86.900	200mmØ VALVE AND BOX
0+029.7	89.32	86.920	200mmØ CAP AND THRUST BLOCK

200mmØ W/M TABLE FARMBOY

STATION	FINISHED GRADE	TOP W/M	ITEM
1+000	88.92	86.520	200mmØ x 200mmØ TEE
1+012	89.17	86.770	22+° HORIZONTAL BEND
1+017	89.08	86.680	22+° HORIZONTAL BEND
1+020	89.06	86.640	TOP OF PIPE
1+040	88.94	86.540	TOP OF PIPE
1+060	88.81	86.410	TOP OF PIPE
1+065.6	88.78	86.380	45° HORIZONTAL BEND
1+068.3	88.83	86.430	45° HORIZONTAL BEND
1+069.8	88.88	86.480	200mmØ VALVE AND VALVE BOX
1+070.8	88.92	86.520	200mmØ CAP AND THRUST BLOCK

150mmØ HYDRANT LEAD

STATION	FINISHED GRADE	TOP W/M	ITEM
2+000	89.38	86.890	150mmØ x 200mmØ TEE
2+020	89.51	87.110	TOP OF PIPE
2+040	89.48	87.080	TOP OF PIPE
2+052.3	89.53	87.130	22+° HORIZONTAL BEND
2+058	89.65	87.250	FIRE HYDRANT

SEWER AND WATERMAIN CROSSING TABLE

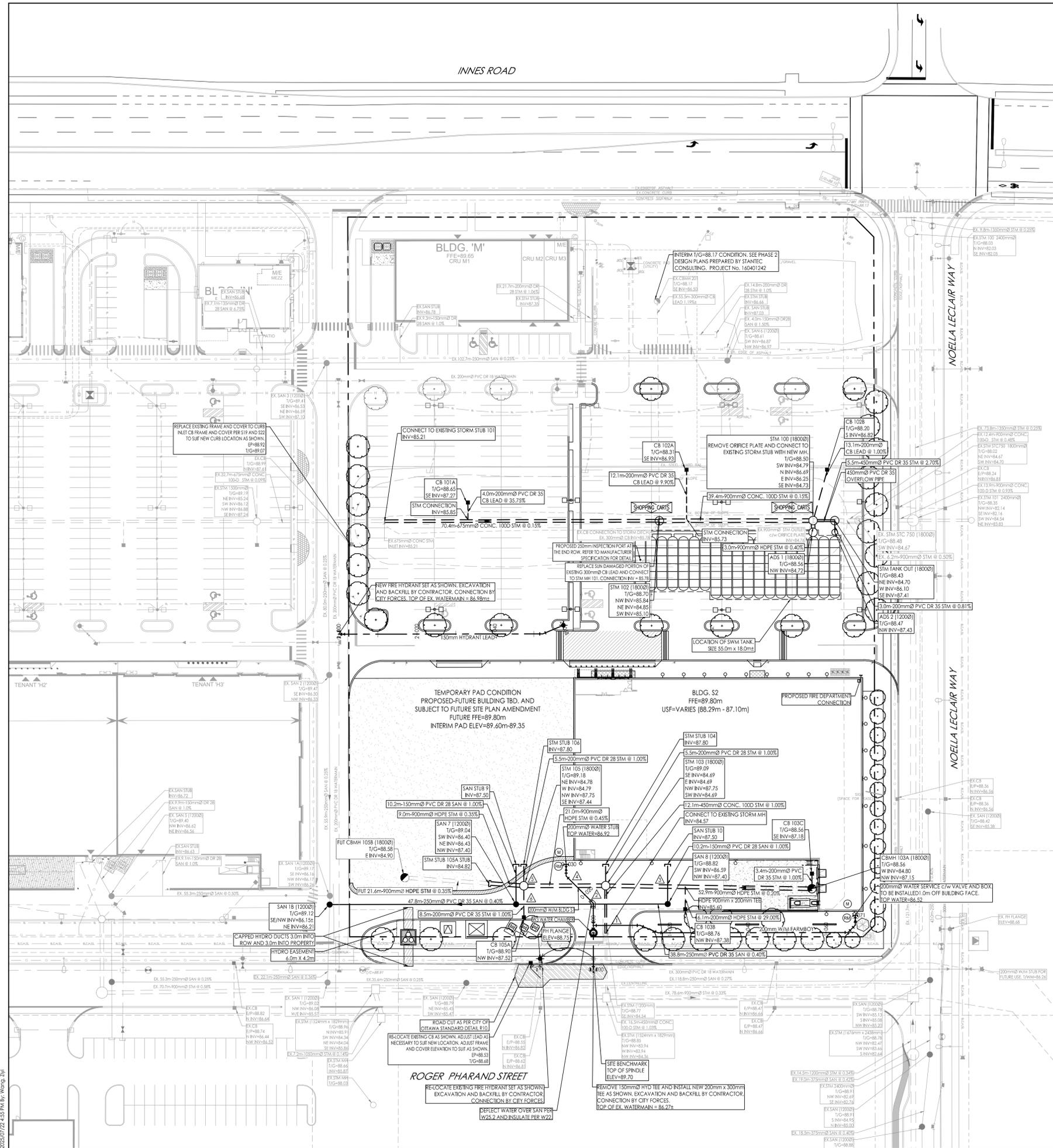
CROSSING	STM INV	STM OBV	SAN INV	SAN OBV	WTR TOP	WTR BTM
▲	84.59(84.51)	85.04(85.12)			86.56	86.36
▲	84.64(84.56)	85.09(85.17)	86.52	86.76	87.46	87.26
▲	84.73	85.63	87.45	87.60		
▲	84.79	85.69	87.45	87.60	86.78	86.58
▲	87.49	87.69	86.44	86.69		

ICD Table

CBID	Tributary Area	ICD Type	2 Yr Head	100 Year Head	2YR Flow	100 YR Flow
TANK OUT		200 mm ORIFICE	0.7	1.5	58.14	89.44
CB101A	C101A	200 mm ORIFICE	1.5	1.54	93.18	95.58
CB102A	C102A	178 mm ORIFICE	1.5	1.61	74.43	77.89
CB102B	C102B	152 mm ORIFICE	1.28	1.68	50.48	58.33
CB103B	C103B	127 mm ORIFICE	0.1	0.57	5.54	12.94
CB105A	C105A	127 mm ORIFICE	0.16	0.61	10.2	23.82
MH 103		127 mm ORIFICE	0.66	1.36	25.4	36.5

Roof Table

Drain	Tributary	Drains	100YR Head	100YR Release	100 Ponding
Watts Accuflow (100% Open)	R104A	10	0.15	18.6	138.8
Watts Accuflow (50% Open)	R106A	10	0.15	12.5	102.3



Client/Project
SmartREIT (Orleans II) Inc. & Mer Bleue Shopping Centres Limited
3200 HIGHWAY 7, VAUGHAN, ON, L4K 5Z5
Orleans II Frontage Phase 3
2025 MER BLEUE ROAD
OTTAWA, ON, CANADA

Title
SITE SERVICING PLAN

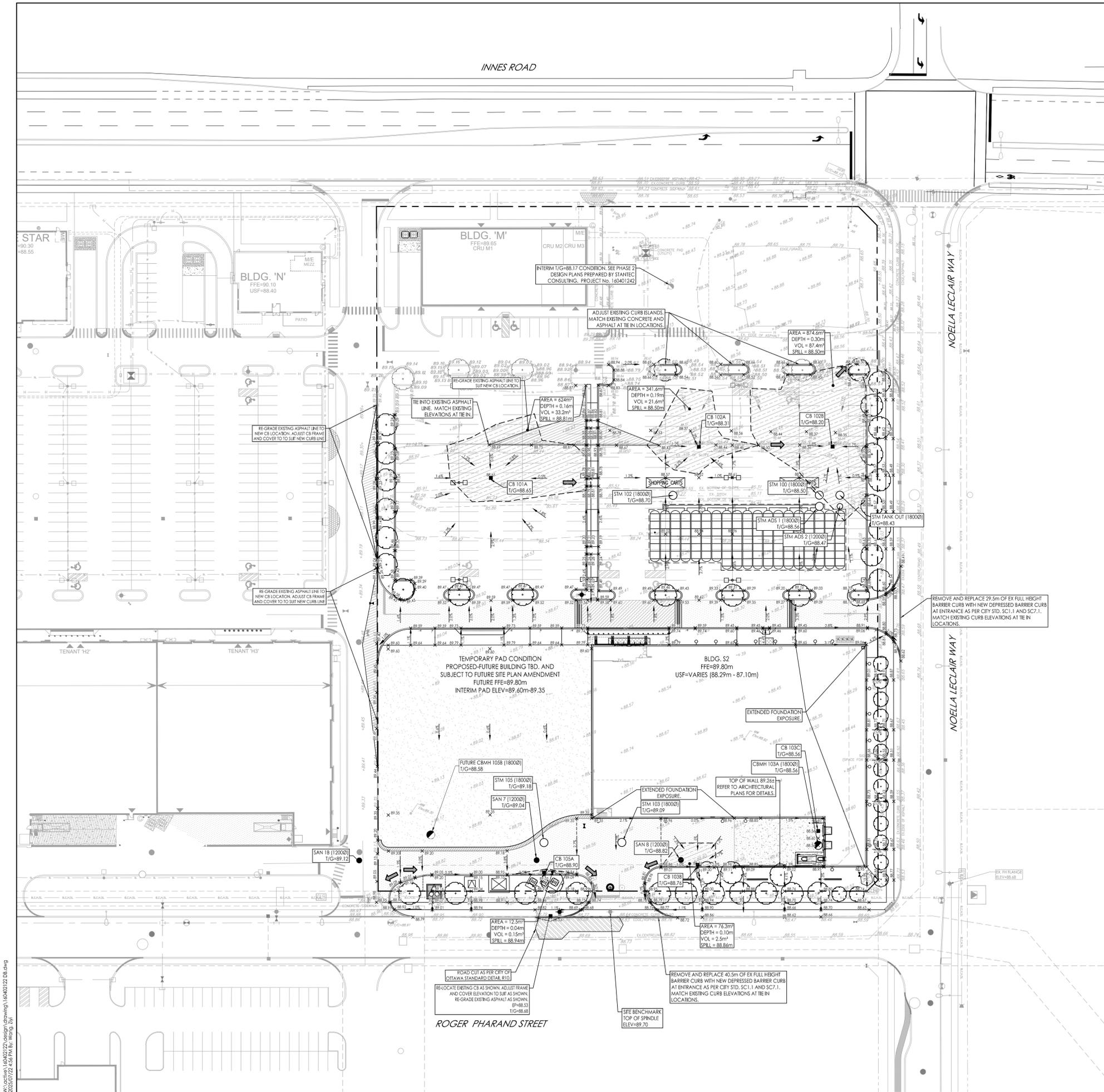
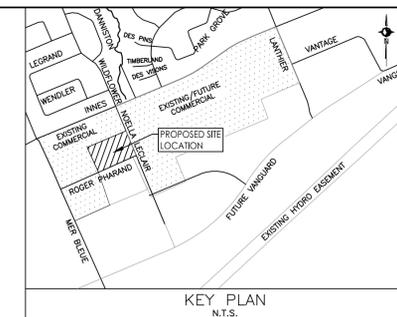
Project No. 160402122
Drawing No. SSP-1
Scale 1:500
Sheet 3 of 7
Revision 2
Date 25.03.21
Permit/Seal

160402122.dwg
25.03.21
160402122.dwg
ARCH-D

D07-12-25-0039
PLAN # 19289

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Legend

- ORIGINAL GROUND ELEVATION
- PROPOSED ELEVATION
- EXISTING ELEVATION
- FLOW DIRECTION AND GRADE
- FINISHED FIRST FLOOR ELEVATION
- UNDERSIDE OF FOOTING ELEVATION
- ENGINEERED FILL REQUIRED
- TERRACING 3:1 SLOPE MAXIMUM (UNLESS OTHERWISE SHOWN)
- DIRECTION OF EMERGENCY OVERLAND FLOW
- PROPOSED VALVE BOX
- PROPOSED VALVE CHAMBER
- PROPOSED FIRE HYDRANT
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED STORM SEWER MANHOLE
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED CB T
- PROPOSED DEPRESSED CURB LOCATION
- PROPOSED HEAVY DUTY ASPHALT
- TEMPORARY ASPHALT SIDEWALK
- 100mm RIGID INSULATION UNDERSIDE OF SIDEWALK
- OVERLAND SPILL LOCATION
- TWSI LOCATION AS PER CITY STD
- MAXIMUM STATIC PONDING LIMITS

Notes

- PAVEMENT STRUCTURE - CAR PARKING AREAS**
75mm HL-3 or SUPERPAVE 12.5 ASPHALTIC CONCRETE
150mm OPSS GRANULAR 'A' BASE
300mm OPSS GRANULAR 'B' TYPE II SUB BASE
- PAVEMENT STRUCTURE - ACCESS LANES AND HEAVY TRUCK**
50mm HL-3 or SUPERPAVE 12.5 ASPHALTIC CONCRETE
50mm HL-8 or SUPERPAVE 18.0 ASPHALTIC CONCRETE
150mm OPSS GRANULAR 'A' BASE
450mm OPSS GRANULAR 'B' TYPE II SUB BASE

2	REVISED PER CITY COMMENTS	MJS	KS	25.07.22
1	ISSUED FOR TENDER	MJS	GR	25.04.24
0	ISSUED FOR SPA	MJS	KS	23.04.17

Revision	By	Appd.	YY.MM.DD
File Name: 160402122 D8.dwg	MJS	DT	MJS 25.03.31
	Dwn.	Chkd.	Dgn.

Permit-Seal

Client/Project

SmartREIT (Orleans II) Inc. &
Mer Bleue Shopping Centres Limited
3200 HIGHWAY 7, VAUGHAN, ON, L4K 5Z5
Orleans II Frontage Phase 3
2025 MER BLEUE ROAD
OTTAWA, ON, CANADA

Title

GRADING PLAN

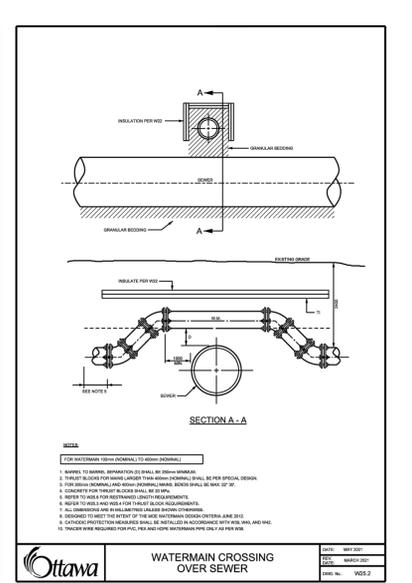
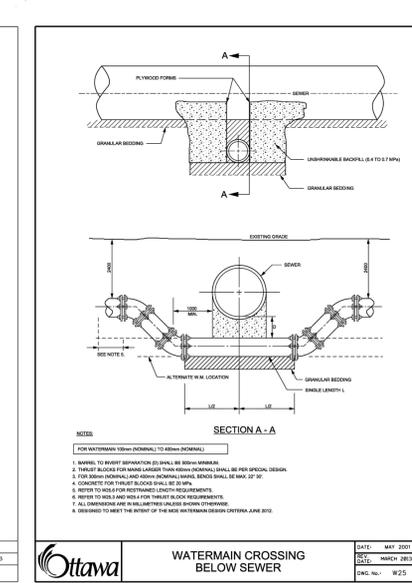
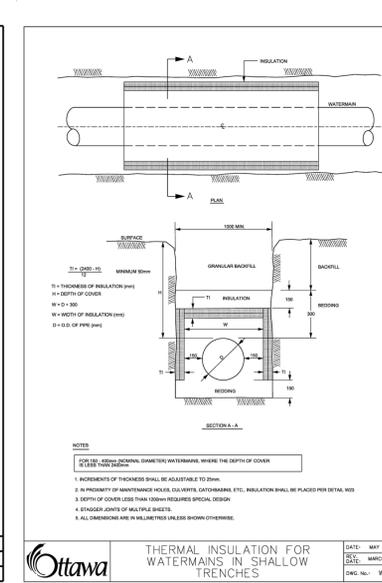
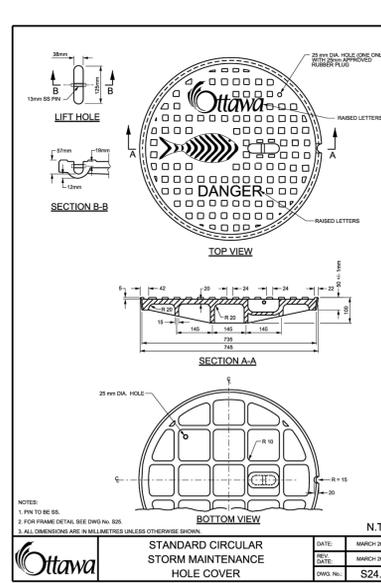
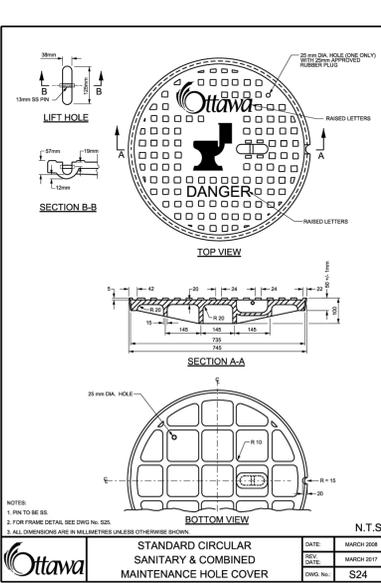
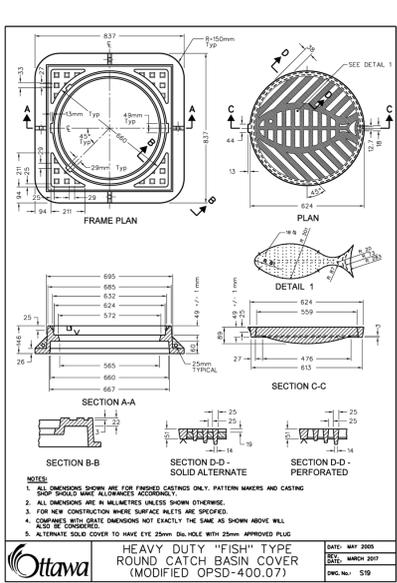
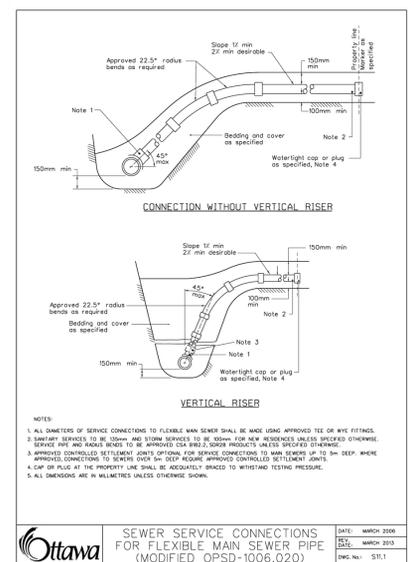
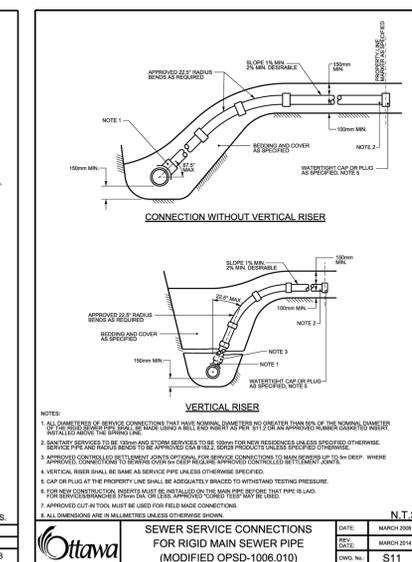
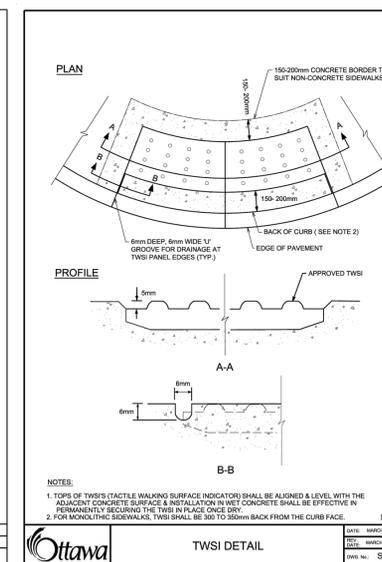
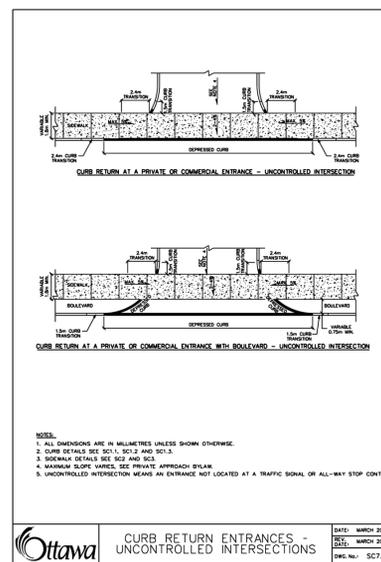
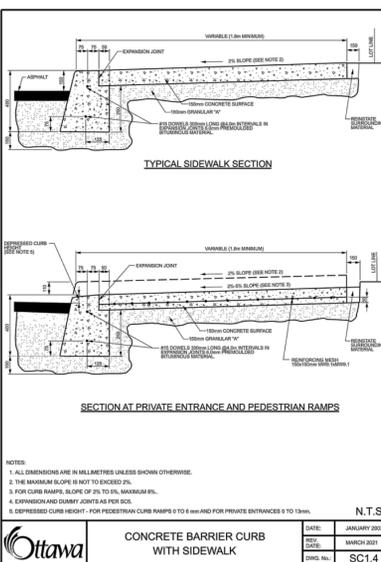
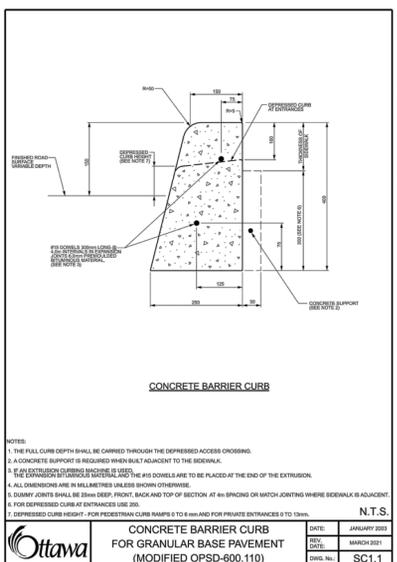
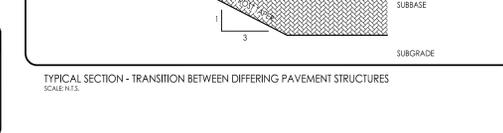
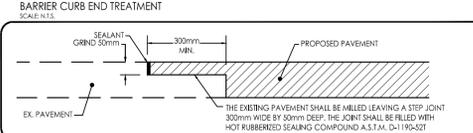
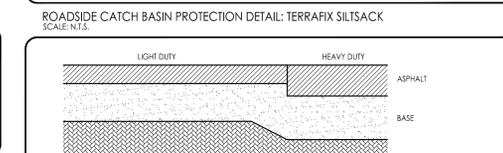
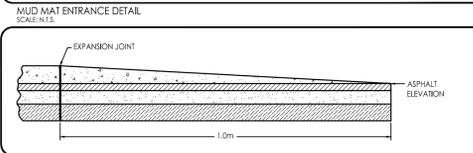
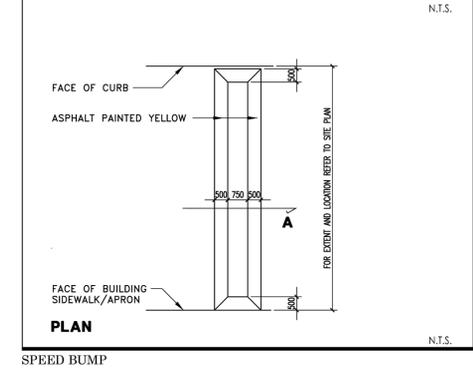
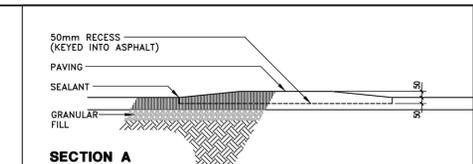
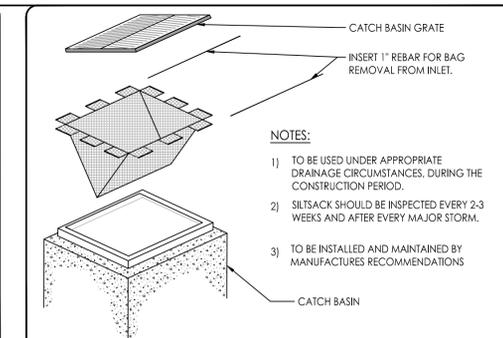
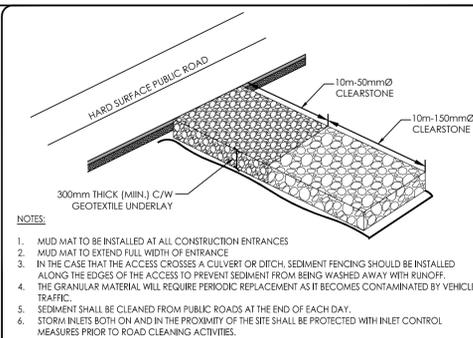
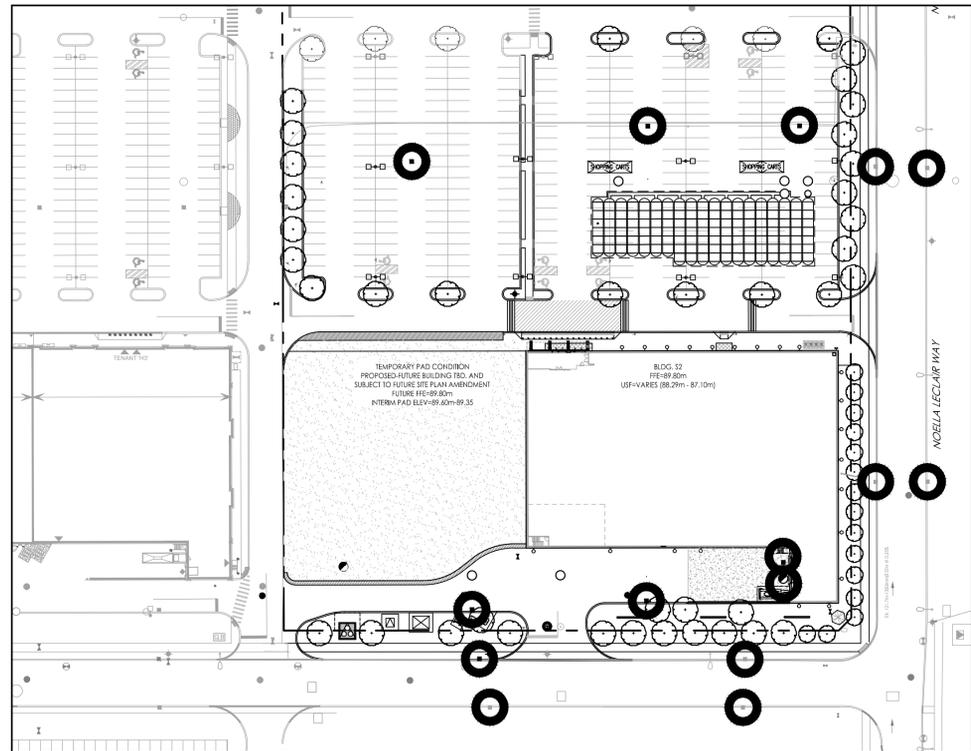
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160402122	1:500	
Drawing No.	Sheet	Revision
GP-1	4 of 7	2

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Legend

- PROPOSED SILT FENCE BOUNDARY AS PER OPSD 219.110
- PROPOSED CATCH BASIN PROTECTION AS PER TERRAFIX SILTSACK DETAIL
- PROPOSED MUD MAT LOCATION
- PROPOSED VALVE BOX
- PROPOSED VALVE CHAMBER
- PROPOSED FIRE HYDRANT
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED STORM SEWER MANHOLE
- PROPOSED CATCH BASIN



NO.	REVISION	DATE	BY	CHKD.	DT	
2	REVISED PER CITY COMMENTS	MARCH 2008	MJS	KS	25.07.22	
1	ISSUED FOR TENDER	MARCH 2008	MJS	GR	25.04.24	
0	ISSUED FOR SPA	MARCH 2008	MJS	KS	25.04.17	
	Revision		By	Appd.	YY.MM.DD	
	File Name: 160402122 D8.dwg		MJS	DT	MJS 25.03.31	
			Dwn.	Chkd.	Dgn.	YY.MM.DD

Permit-Seal

Client/Project
SmartREIT (Orleans II) Inc. & Mer Bleue Shopping Centres Limited
3200 HIGHWAY 7, VAUGHAN, ON, L4K 5Z5
Orleans II Frontage Phase 3
2025 MER BLEUE ROAD
OTTAWA, ON, CANADA

Title
EROSION CONTROL PLAN AND DETAIL SHEET

Project No. 160402122
Drawing No. 160402122

Scale 1:500

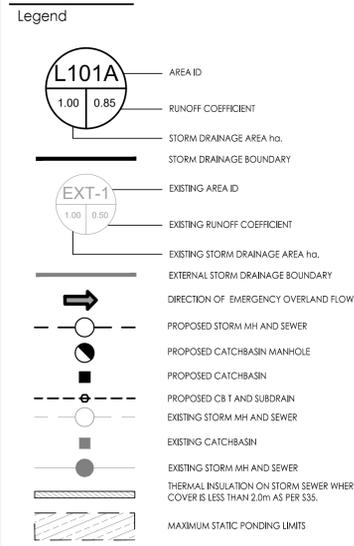
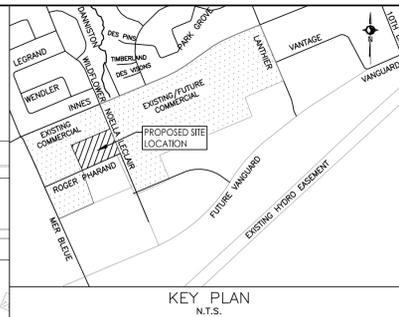
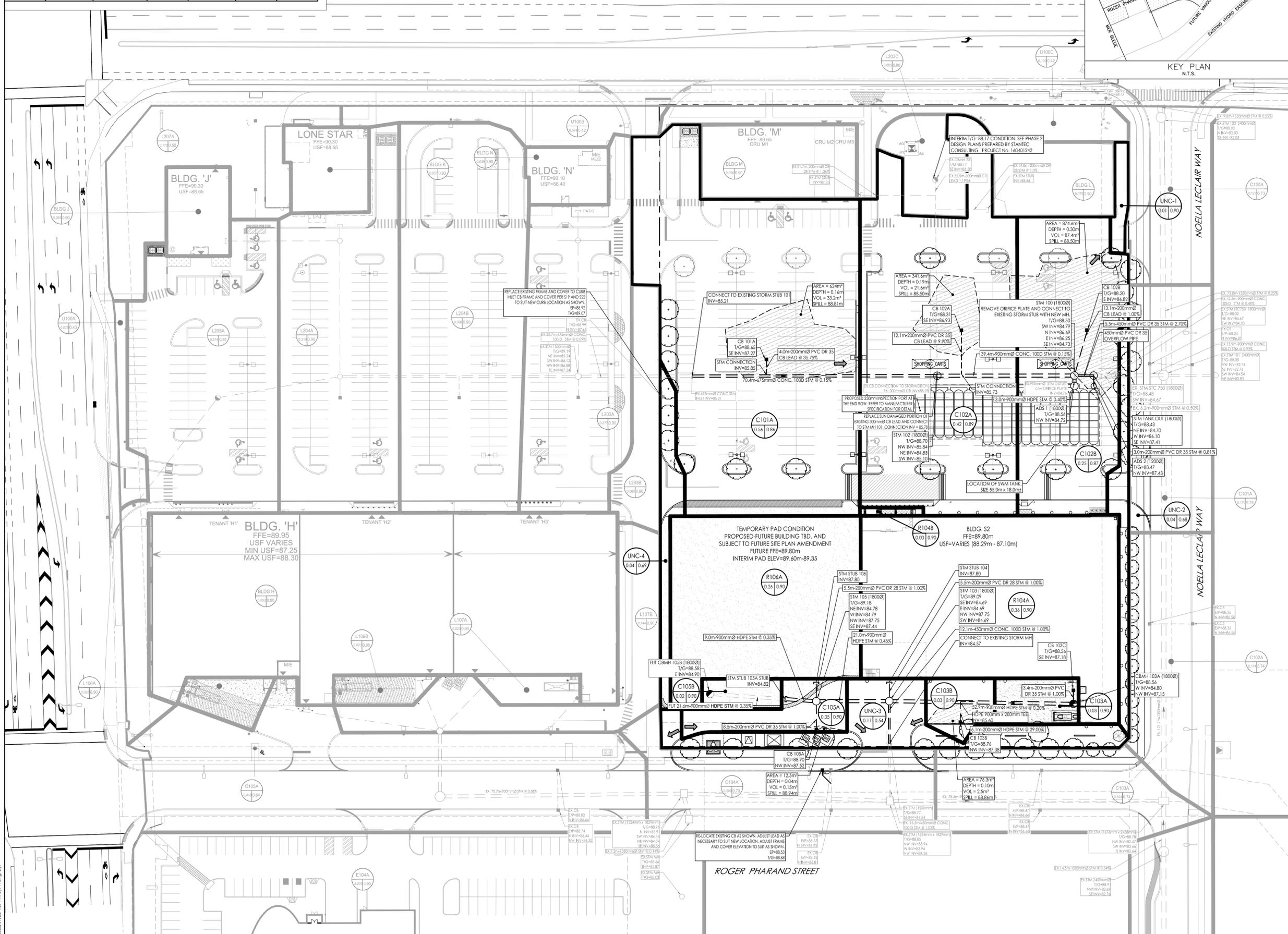
Sheet 5 of 7

Revision 2

PLN # 19289

ICD Table						
CBID	Tributary Area	ICD Type	2 Yr Head	100 Year Head	2YR Flow	100 YR Flow
TANK OUT						
CB101A	C101A	200 mm ORFICE	0.7	1.5	58.14	89.44
CB102A	C102A	178 mm ORFICE	1.5	1.61	74.43	77.89
CB102B	C102B	152 mm ORFICE	1.28	1.68	50.48	58.33
CB103B	C103B	127 mm ORFICE	0.1	0.57	5.54	12.94
CB105A	C105A	127 mm ORFICE	0.16	0.61	10.2	23.82
MH 103			0.66	1.36	25.4	36.5

Roof Table					
Drain	Tributary	Drains	100YR Head	100YR Release	100 Ponding
Watts Accuflow (100% Open)	R104A	10	0.15	18.6	138.8
Watts Accuflow (50% Open)	R106A	10	0.15	12.5	102.3



Notes

2	REVISED PER CITY COMMENTS	MJS	KS	25.07.22
1	ISSUED FOR TENDER	MJS	GR	25.04.24
0	ISSUED FOR SPA	MJS	KS	25.04.17

Revision

By	Appd.	YYMMDD
MJS	DT	MJS
Dwn.	Chkd.	Dgn.
		YYMMDD

File Name: 160402122 D8.dwg

Permit-Seal

2	REVISED PER CITY COMMENTS	MJS	KS	25.07.22
1	ISSUED FOR TENDER	MJS	GR	25.04.24
0	ISSUED FOR SPA	MJS	KS	25.04.17

Revision

By	Appd.	YYMMDD
MJS	DT	MJS
Dwn.	Chkd.	Dgn.
		YYMMDD

File Name: 160402122 D8.dwg

Client/Project
SmartREIT (Orleans II) Inc. & Mer Bleue Shopping Centres Limited
3200 HIGHWAY 7, VAUGHAN, ON, L4K 5Z5
Orleans II Frontage Phase 3
2025 MER BLEUE ROAD
OTTAWA, ON, CANADA

Title
STORM DRAINAGE PLAN

Project No. 160402122
Scale 1:500
Drawing No. SD-1
Sheet 6 of 7
Revision 2

PLN # 19289

2025/07/22 15:57:19 Design Drawing 160402122 D8.dwg
 ORIGINAL SHEET - ARCH D

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Legend

- SANITARY DRAINAGE AREA ID#
- COMMERCIAL FLOWS
- SANITARY DRAINAGE AREA ID#
- INFILTRATION RATE OF 0.33 L/s/Ha APPLIED
- SANITARY DRAINAGE AREA ha.
- EX. SANITARY DRAINAGE AREA ID#
- EX. COMMERCIAL FLOWS
- EX. SANITARY DRAINAGE AREA ha.
- EX. SANITARY DRAINAGE AREA ID#
- EX. INFILTRATION RATE OF 0.33 L/s/Ha APPLIED
- EX. SANITARY DRAINAGE AREA ha.
- SANITARY DRAINAGE AREA
- EX. SANITARY DRAINAGE AREA
- PROPOSED SANITARY MH AND SEWER
- EXISTING SANITARY MH AND SEWER
- THERMAL INSULATION ON SANITARY SEWER WHERE COVER IS LESS THAN 2.5m AS PER S35.

Notes

2	REVISED PER CITY COMMENTS	MJS	KS	25.07.22	
1	ISSUED FOR TENDER	MJS	GR	25.04.24	
0	ISSUED FOR SPA	MJS	KS	25.04.17	
Revision		By	Appd.	YY.MM.DD	
File Name: 160402122 D8.dwg		MJS	DT	MJS	25.03.31
		Dwn.	Chkd.	Dgn.	YY.MM.DD

Permit-Seal

Client/Project

SmartREIT (Orleans II) Inc. &
Mer Bleue Shopping Centres Limited
3200 HIGHWAY 7, VAUGHAN, ON, L4K 5Z5
Orleans II Frontage Phase 3
2025 MER BLEUE ROAD
OTTAWA, ON, CANADA

Title

SANITARY DRAINAGE PLAN

Project No.
160402122

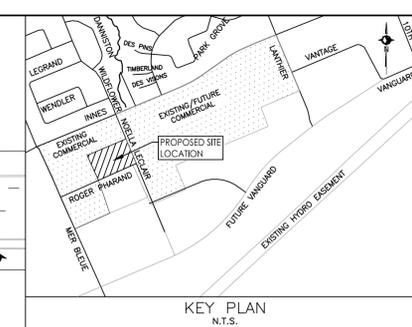
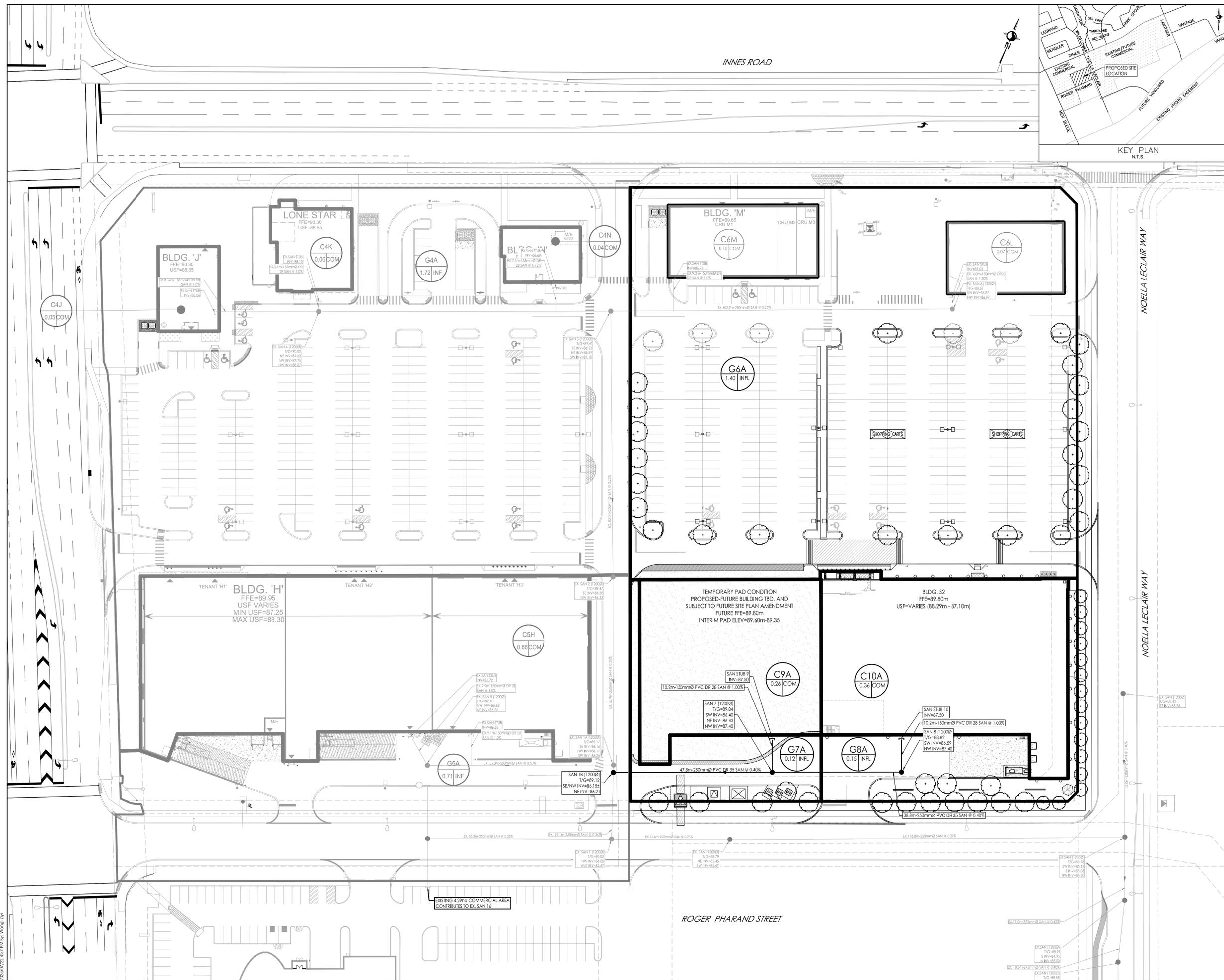
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1:500

Drawing No.
SA-1

Sheet
7 of 7

Revision
2

PLN # 19289



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