

GENERAL NOTES:

- 1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00.
5. RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
6. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER.
7. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION.
8. ALL ELEVATIONS ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM.
9. REFER TO GEOTECHNICAL INVESTIGATION REPORT TITLED PROPOSED MULTI-BUILDING DEVELOPMENT, 4200 INNES ROAD, OTTAWA ONTARIO, PG6528-1, (DATED MARCH 22, 2023), PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS.
10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
11. REFER TO THE STORMWATER MANAGEMENT REPORT No. R-2023-090, DATED SEPTEMBER 15, 2023 PREPARED BY NOVATECH.
12. SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10 AND R25).
13. PROVIDE LINE/PARKING PAINTING.
14. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN.
15. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.

SEWER NOTES:

- 1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
2. SPECIFICATIONS: ITEM, SPEC. No., REFERENCE. SANITARY/STORM/CATCHBASIN MANHOLE (12000) 701.010 OPSD.
3. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0% (2.0% PREFERRED)
4. ALL STORM AND SANITARY LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
5. THE PIPE BEDDING FOR THE SEWER AND WATER PIPES SHOULD CONSIST OF AT LEAST 150 MM OF OPSS GRANULAR.
6. WHERE HARD SURFACE AREAS ARE CONSIDERED ABOVE THE TRENCH BACKFILL, THE TRENCH BACKFILL MATERIAL WITHIN THE FROST ZONE (ABOUT 1.8 M BELOW FINISHED GRADE) SHOULD MATCH THE SOILS EXPOSED AT THE TRENCH WALLS TO MINIMIZE DIFFERENTIAL FROST HEAVING.
7. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX, POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
8. ALL STORM MANHOLES MANHOLES WITH PIPE SIZES LESS THAN 900mm ARE TO HAVE 300mm SUMP/UNLESS OTHERWISE INDICATED. ALL STORM MANHOLES WITH PIPE SIZES 900mm AND LARGER ARE TO BE BENCHED.
9. CONTRACTOR TO TELEWISE (CCTV) ALL PROPOSED SEWERS 200mm OR GREATER IN DIAMETER PRIOR TO BASE COURSE ASPHALT TO ENSURE THAT THEY ARE CLEAN AND OPERATIONAL.
10. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL APPLICABLE SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN.
11. THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS.
12. ALL CATCHBASINS AND CATCHBASIN MANHOLES TO BE PROVIDED WITH MINIMUM 3 METER LONG PERFORATED SUBDRAINS EXTENDING IN TWO DIRECTIONS 300mm BELOW THE SUBGRADE LEVEL.
13. ALL WORKS SHALL BE PERFORMED AS APPLICABLE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SPECIFICATIONS, AND IN PARTICULAR O.P.S.S. 407 AND 410.

PAVEMENT STRUCTURE:

- HEAVY-TRUCK TRAFFIC AND LOADING AREAS
40mm HL3 OR SUPERPAVE 12.5
50mm HLB OR SUPERPAVE 10.0
150mm OPSS GRAN "A" CRUSHED STONE
450mm OPSS GRANULAR B TYPE II
- CAR ONLY PARKING AREAS
50mm HL3 OR SUPERPAVE 12.5
150mm OPSS GRAN "A" CRUSHED STONE
300mm OPSS GRAN "B" TYPE II

- NOTE:
- MINIMUM PERFORMANCE GRADED (PG) 58-34 ASPHALT CEMENT
- SUBGRADE - EITHER IN SITU SOIL, BEDROCK OR OPSS GRANULAR TYPE I OR II MATERIAL PLACED OVER IN SITU SOIL OR BEDROCK

WATERMAIN NOTES:

- 1. SUPPLY AND CONSTRUCT ALL WATERMAIN AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
2. SPECIFICATIONS: ITEM, SPEC. No., REFERENCE. WATERMAIN TRENCHING W17, CITY OF OTTAWA. THERMAL INSULATION IN SHALLOW TRENCHES W22, CITY OF OTTAWA. THERMAL INSULATION BY OPEN STRUCTURES W23, CITY OF OTTAWA. WATERMAIN CROSSING BELOW SEWER W25, CITY OF OTTAWA. WATERMAIN CROSSING ABOVE SEWER W25.2, CITY OF OTTAWA. HYDRANT WSD-24, CITY OF OTTAWA. VALVE AND VALVE BOX WSD-19, CITY OF OTTAWA. WATERMAIN PVC DR 18.
3. SUPPLY AND CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARD AND SPECIFICATIONS.
4. PROVIDE MINIMUM CLEARANCE, BETWEEN OUTSIDE OF PIPES, AT ALL CROSSINGS AS PER CITY DETAILS W25 AND W25.2. WATERMAIN MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.25m OVER AND 0.50m UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING.
5. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.
6. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS CITY OF OTTAWA STANDARD DETAILS WSD-39, 40, 41, 42, 43 AND 44.
8. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.

GRADING NOTES:

- 1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED BUILDING AND PAVED AREAS.
2. EXPOSED SUB-GRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
3. NON-SPECIFIED EXISTING FILL ALONG WITH SITE-EXCAVATED SOIL COULD BE PLACED AS GENERAL LANDSCAPING FILL AND BENEATH EXTERIOR PARKING AREAS WHERE SETTLEMENT OF THE GROUND SURFACE IS OF MINOR CONCERN.
4. THE PAVEMENT GRANULAR BASE AND SUBBASE SHOULD BE PLACED IN MAXIMUM 300 mm THICK LIFTS AND COMPACTED TO A MINIMUM OF 100% OF THE MATERIAL'S SPMD USING SUITABLE COMPACTION EQUIPMENT.
5. BACKFILL MATERIAL BELOW SIDEWALK AND WALKWAY SUBGRADE AREAS OR OTHER SETTLEMENT SENSITIVE STRUCTURES WHICH ARE NOT ADJACENT TO THE BUILDINGS SHOULD CONSIST OF FREE-DRAINING, NON-FROST SUSCEPTIBLE MATERIAL.
6. IF SOFT SPOTS DEVELOP IN THE SUBGRADE DURING COMPACTION OR DUE TO CONSTRUCTION TRAFFIC, THE AFFECTED AREAS SHOULD BE EXCAVATED AND REPLACED WITH OPSS GRANULAR B TYPE II MATERIAL.
7. ALL CURBS SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED.
8. GRADE AND/OR FILL BEHIND PROPOSED CURB AND BETWEEN BUILDINGS AND CURBS, WHERE REQUIRED TO PROVIDE POSITIVE DRAINAGE.
9. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
10. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
11. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.1
12. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING THE AS-BUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.

EROSION AND SEDIMENT CONTROL NOTES:

- 1. THE OWNER AGREES TO PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA, APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL SUCH AS BUT NOT LIMITED TO INSTALLING FILTER CLOTHS ACROSS MANHOLE/CATCHBASIN LIDS TO PREVENT SEDIMENTS FROM ENTERING STRUCTURES AND INSTALL AND MAINTAIN A LIGHT DUTY SILT FENCE BARRIER AS REQUIRED.
2. THE CONTRACTOR SHALL PLACE FILTER CLOTH UNDER THE CATCHBASIN AND MANHOLE GRATES FOR THE DURATION OF CONSTRUCTION AND WILL REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION.
3. SILT FENCING FOR ENTIRE PERIMETER OF SITE, SHALL BE UTILIZED TO CONTROL EROSION FROM THE SITE DURING CONSTRUCTION.
4. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

SEWER & WATERMAIN INSULATION NOTES:

1. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 2.0m COVER AND ALL WATERMAIN WITH LESS THAN 2.4m OF COVER WITH EXPANDED POLYSTYRENE INSULATION AS PER OPSD 1109.030.
2. THE THICKNESS OF INSULATION SHALL BE THE EQUIVALENT OF 25mm FOR EVERY 300mm REDUCTION IN THE REQUIRED DEPTH OF COVER WITH 50mm MINIMUM (SEE TABLE)
T = THICKNESS OF INSULATION (mm)
W = WIDTH OF INSULATION (mm)
W = D + 300 (1000 min.)
D = O.D OF PIPE (mm)
INSULATION DETAIL FOR SHALLOW SEWERS & WATERMAIN N.T.S.

PIPE CROSSING TABLE with columns: CROSSING, LOWER PIPE, HIGHER PIPE, CLEARANCE. Lists various pipe diameters and depths with their respective clearances.

\* INV/OBV INDICATED FOR CONCRETE PIPES ARE OUTER DIAMETER

ICD SIZING AND FLOWS table with columns: STRUCTURE, TEMPEST LMF ICD SIZE, ICD INVERT (m), T/G (m), 100-yr HGL (m), 100-yr HEAD (m), 100-yr RELEASE RATE (L/s). Lists structures like CB01, CB02, CB12, etc.

PROPOSED WATERMAIN (1+000.0) table with columns: STATION, SURFACE ELEVATION, TWMM ELEVATION, COMMENTS. Lists watermain stations and elevations.

PROPOSED WATERMAIN (2+000.0) table with columns: STATION, SURFACE ELEVATION, TWMM ELEVATION, COMMENTS. Lists watermain stations and elevations.

PROPOSED WATERMAIN (3+000.0) table with columns: STATION, SURFACE ELEVATION, TWMM ELEVATION, COMMENTS. Lists watermain stations and elevations.

PROPOSED WATERMAIN (4+000.0) table with columns: STATION, SURFACE ELEVATION, TWMM ELEVATION, COMMENTS. Lists watermain stations and elevations.

PROPOSED WATERMAIN (5+000.0) table with columns: STATION, SURFACE ELEVATION, TWMM ELEVATION, COMMENTS. Lists watermain stations and elevations.

PROPOSED WATERMAIN (6+000.0) table with columns: STATION, SURFACE ELEVATION, TWMM ELEVATION, COMMENTS. Lists watermain stations and elevations.

NOTE: 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.



SCALE table with columns: No., REVISION, DATE, BY. Lists revision details.

FOR REVIEW ONLY section containing design, checked, drawn, and approved stamps, along with professional engineer seals for A.R. Mestwarp and G.J. Macdonald.

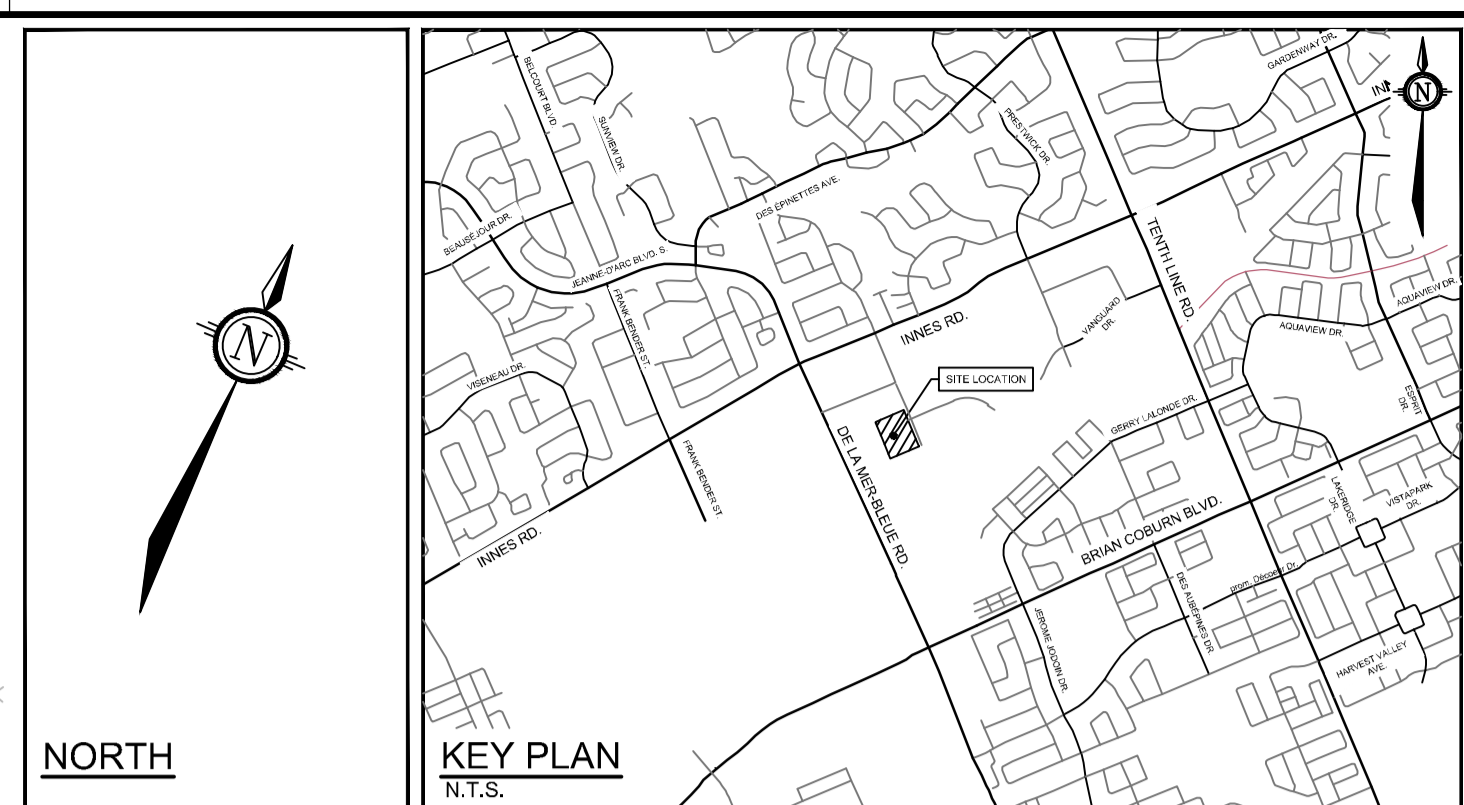
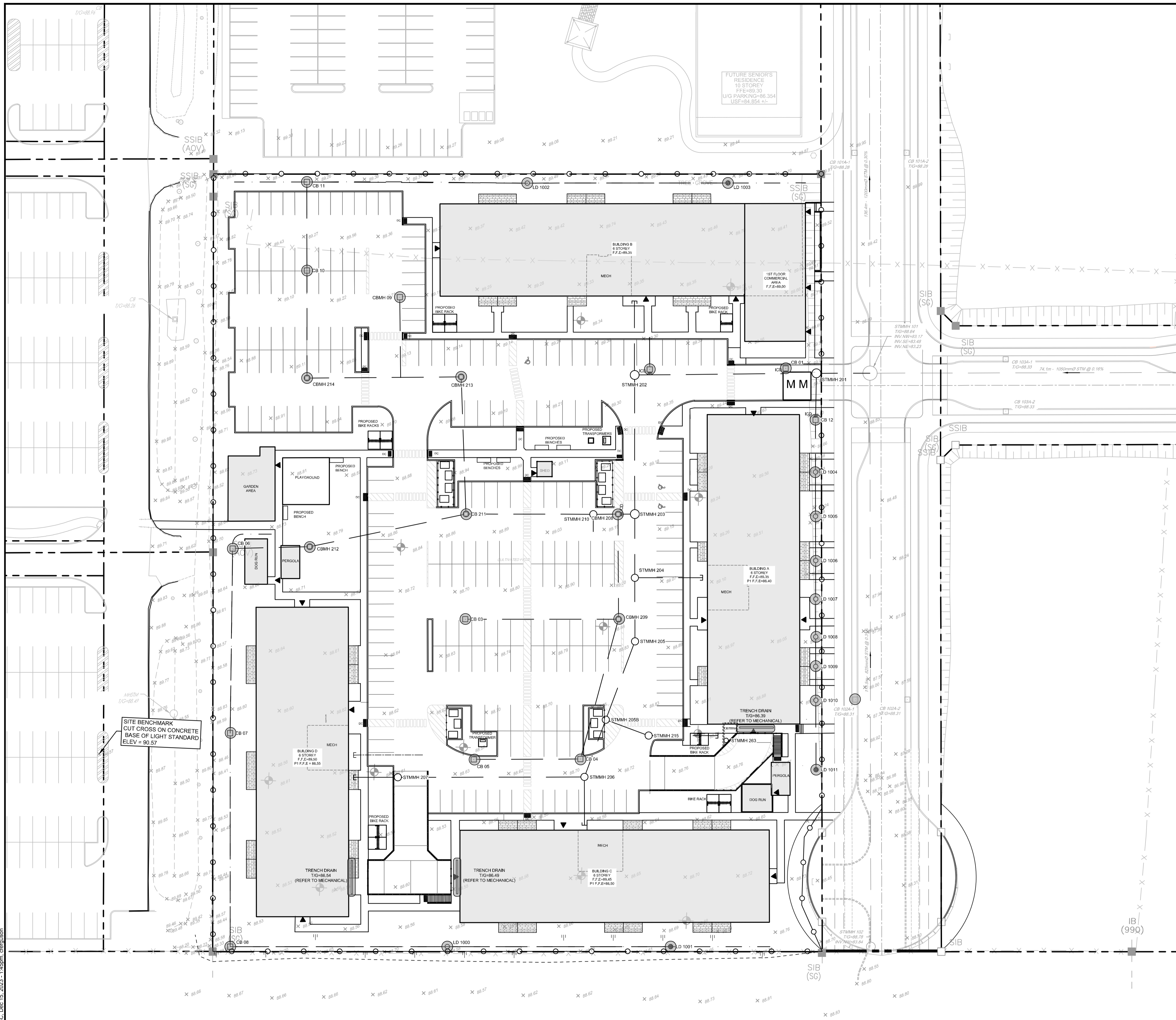
NOVATECH logo and contact information, including address, phone, and website details.

PROJECT No., REV, DRAWING No. table with project details.

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CITY FILE No. D07-12-23-0068

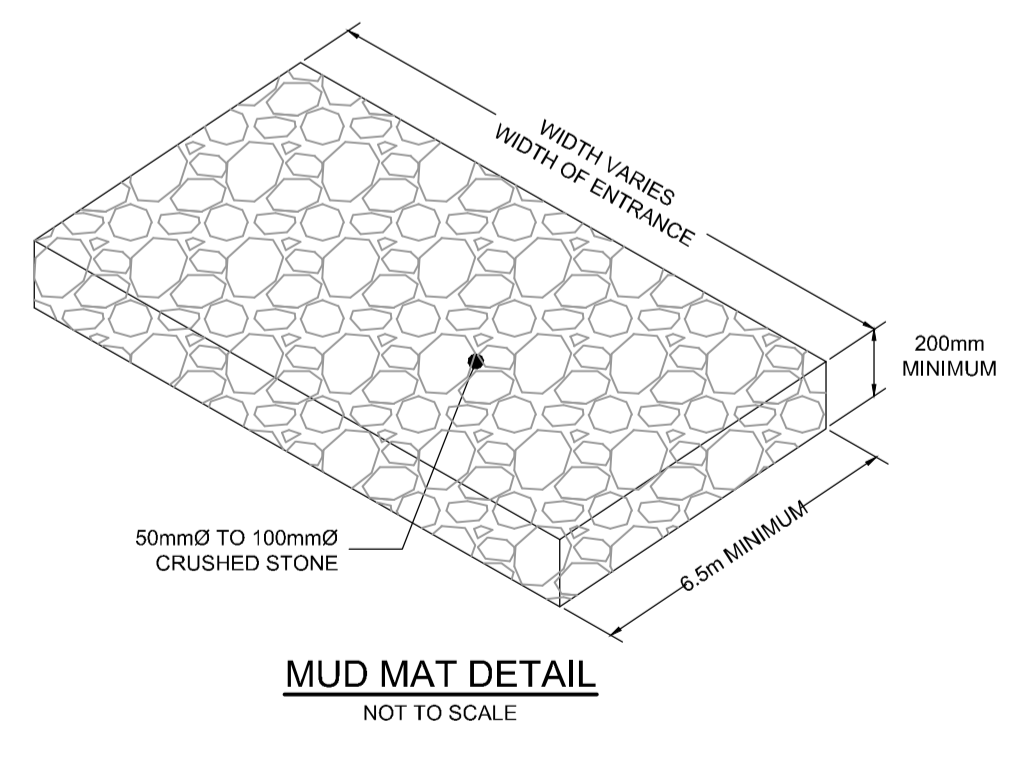




- LEGEND**
- PROPERTY LINE
  - PROPOSED CURB
  - DC PROPOSED DEPRESSED CURB
  - PROPOSED RETAINING WALL C/W GUARD RAIL
  - C PROPOSED CAP
  - PROPOSED STORM SEWER AND MANHOLE
  - PROPOSED CATCHBASIN MANHOLE
  - PROPOSED CATCHBASIN
  - ⊕ PROPOSED LANDSCAPE DRAIN
  - PROPOSED TRENCH DRAIN
  - ▼ PROPOSED BUILDING ENTRANCE
  - SWALE c/w SUBDRAIN AND DIRECTION OF FLOW
  - TERRACING 3:1 SLOPE MAX (UNLESS OTHERWISE INDICATED)
  - PROPOSED FILTER BAGS AT CATCHBASINS, CATCHBASIN MANHOLES AND TRENCHDRAINS
  - MM PROPOSED MUD MAT
  - STM MH ○ EXISTING STORM MANHOLE
  - CB / □ EXISTING CATCHBASIN
  - LS ○ EXISTING LIGHT STANDARD
  - X EXISTING FENCE

**EROSION AND SEDIMENT CONTROL NOTES:**

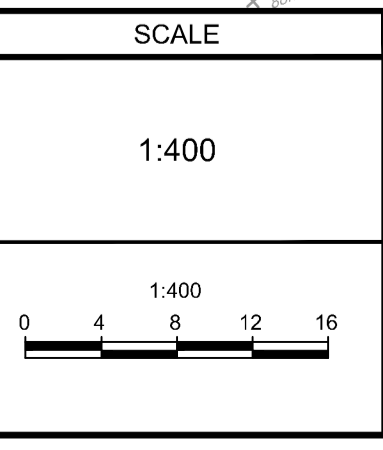
- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
- 1) THE OWNER AGREES TO PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA, APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL. SUCH AS BUT NOT LIMITED TO INSTALLING FILTER CLOTHS ACROSS MANHOLE/CATCHBASIN LIDS TO PREVENT SEDIMENTS FROM ENTERING STRUCTURES AND INSTALS AND MAINTAIN A LIGHT DUTY SILT FENCE BARRIER AS REQUIRED.
  - 2) THE CONTRACTOR SHALL PLACE FILTER BAGS UNDER THE CATCHBASIN AND MANHOLE GRATES FOR THE DURATION OF CONSTRUCTION AND WILL REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION.
  - 3) SILT FENCING FOR ENTIRE PERIMETER OF SITE, SHALL BE UTILIZED TO CONTROL EROSION FROM THE SITE DURING CONSTRUCTION.
  - 4) THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
  - 5) PROVIDE MUD MATS AT ALL CONSTRUCTION ACCESS POINTS TO MINIMIZE SEDIMENT TRANSPORT OFFSITE.
  - 6) EROSION AND SEDIMENT CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY OF OTTAWA SITE INSPECTOR OR CONSERVATION AUTHORITY.



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**NOT FOR CONSTRUCTION**

No.	REVISION	DATE	BY
4.	REVISED PER SITE PLAN UPDATE	DEC 18/2023	GJM
3.	REVISED PER CITY COMMENTS	NOV 8/2023	GJM
2.	REVISED PER CITY COMMENTS	SEPT 15/2023	GJM
1	ISSUED FOR SITE PLAN APPLICATION	MAY 24/2023	GJM



DESIGN: ARM/CJF  
CHECKED: ARM  
DRAWN: ARM/CJF  
CHECKED: ARM  
APPROVED: GJM

**FOR REVIEW ONLY**

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LICENSED PROFESSIONAL ENGINEER  
G.J. MACDONALD  
Dec 18, 2023  
PROVINCE OF ONTARIO

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REFER TO 122179-ND FOR ADDITIONAL NOTES & DETAILS

LOCATION  
4200 INNES ROAD, CITY OF OTTAWA  
TRINITY APARTMENTS

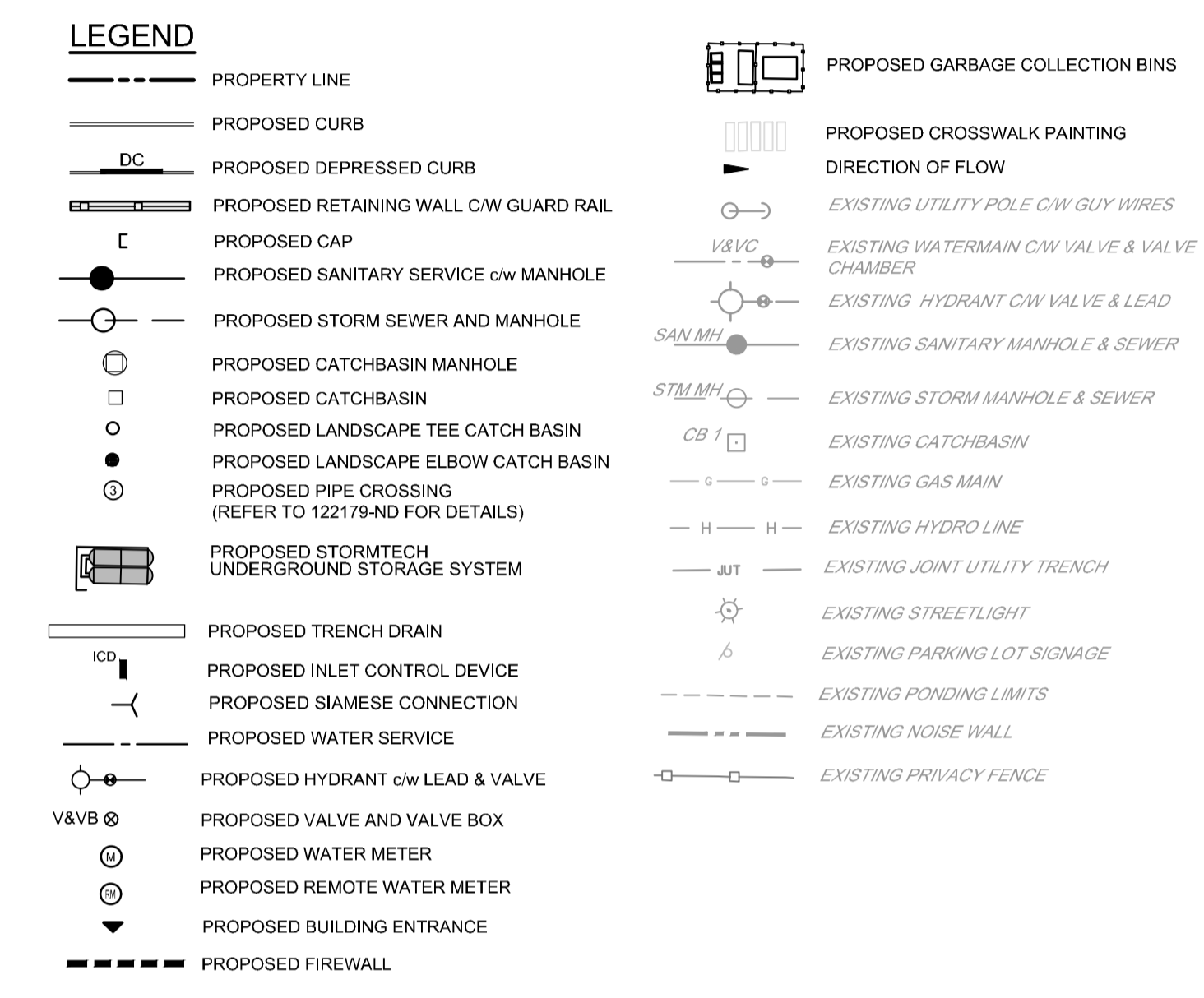
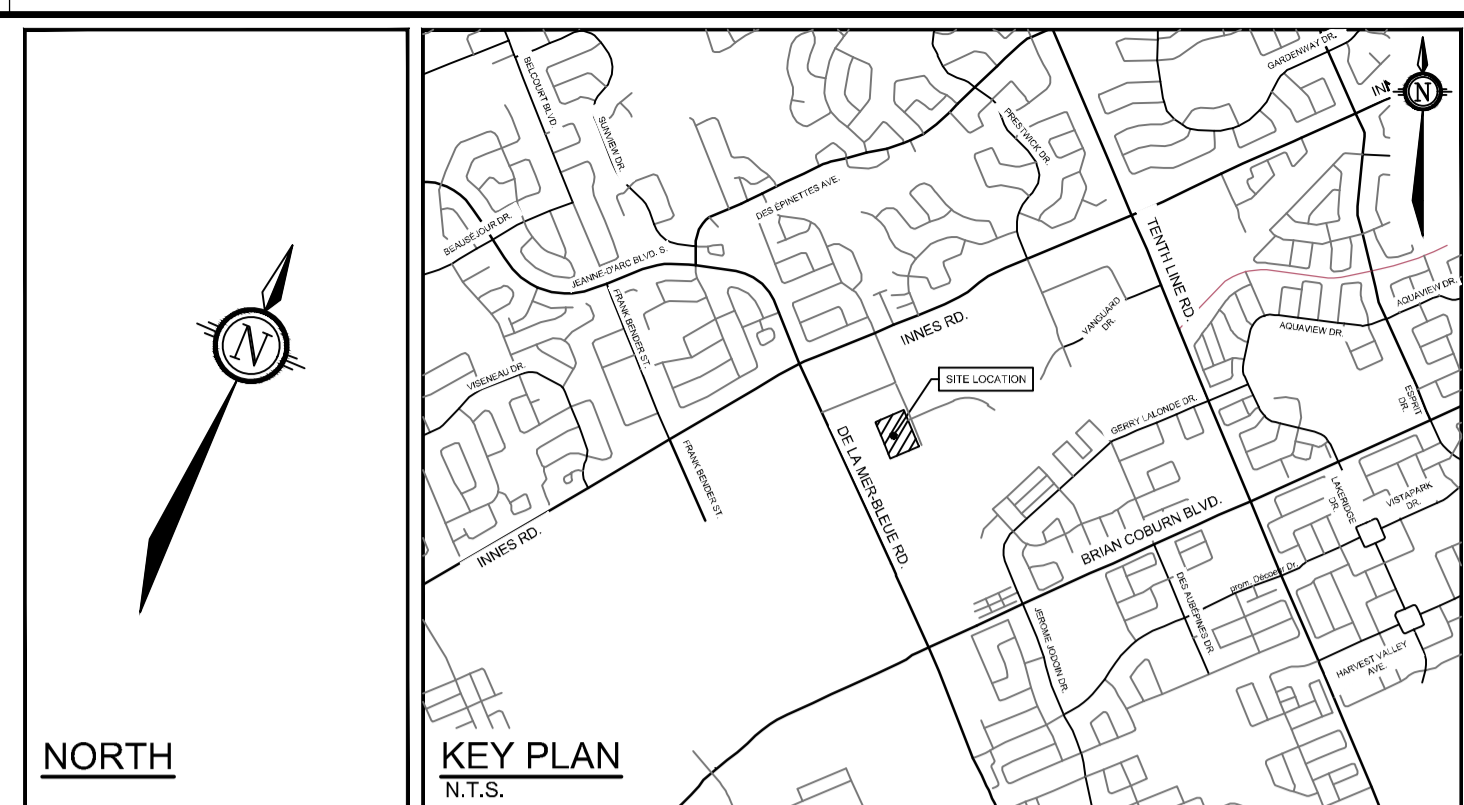
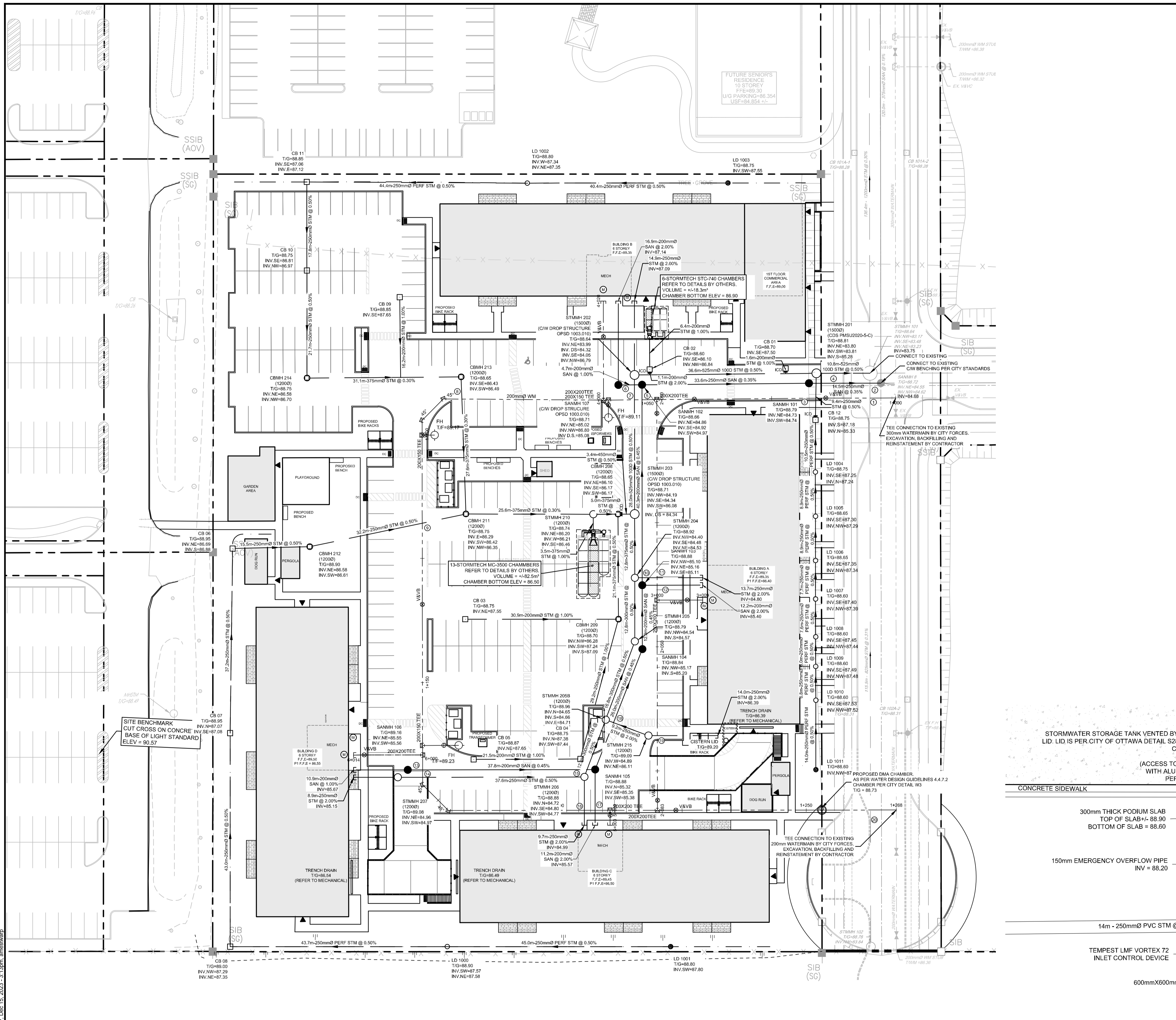
DRAWING NAME  
**EROSION AND SEDIMENT CONTROL PLAN**

PROJECT No. 122179  
REV. REV#4  
DRAWING No. 122179-ESC

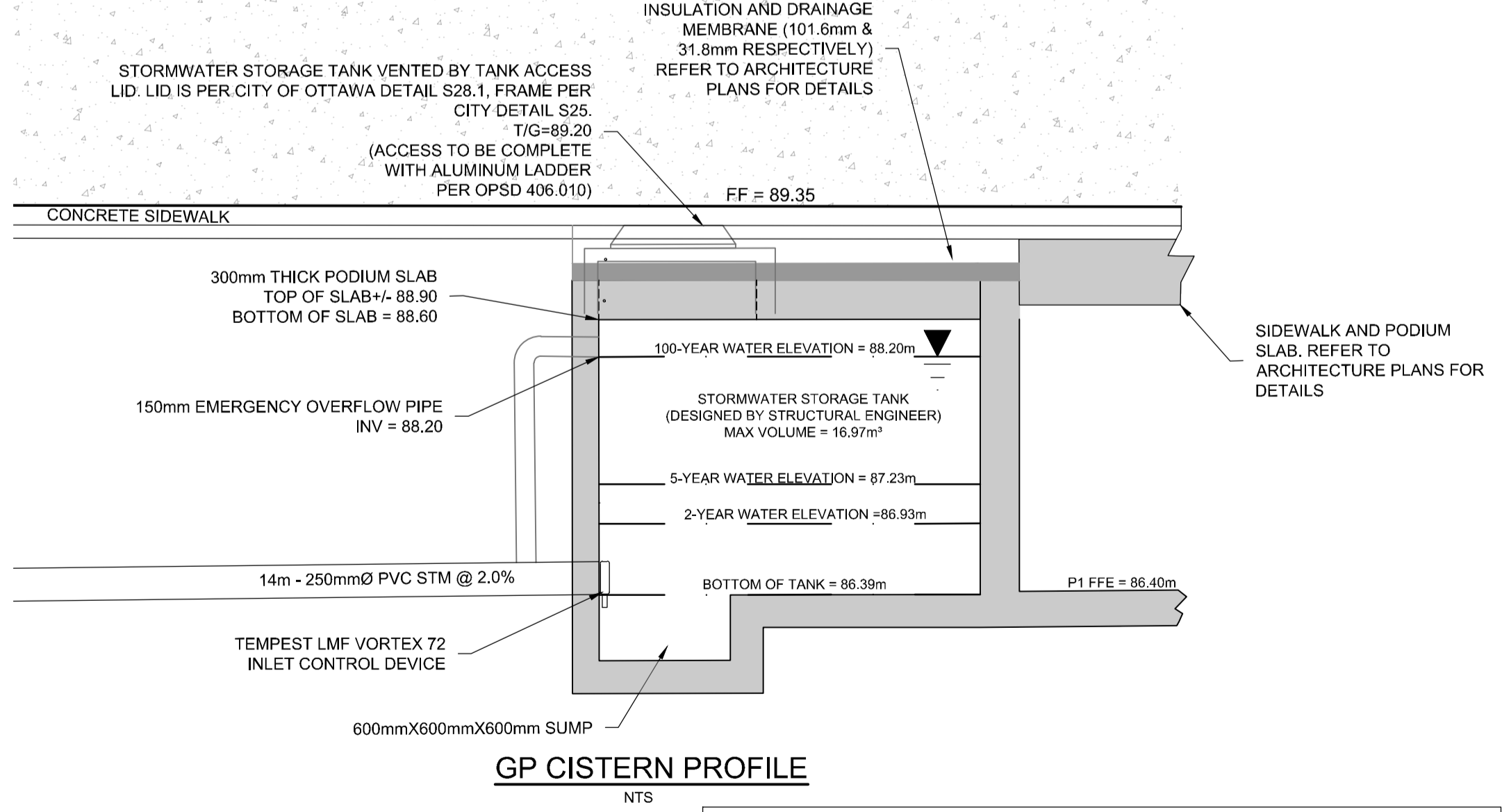
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CITY FILE No. D07-12-23-0068  
PLAN No. 18993





- NOTE:**
- ALL SERVICE CONNECTIONS AND CATCHBASIN CONNECTIONS TO BE MADE PER CITY OF OTTAWA DETAIL S11 AND S11.2
  - BACKWATER VALVES TO BE PROVIDED ON ALL STORM AND SANITARY LATERALS AS PER CITY OF OTTAWA DETAILS S14, S14.1, AND S14.2. DOWNSTREAM OF ANY GRAVITY OUTLET FROM THE BUILDING. REFER TO MECHANICAL PLANS FOR DETAILS
  - ALL FLOWS FROM THE UNDERGROUND PARKING GARAGE ARE TO BE CONVEYED TO THE SANITARY SERVICE. FLOWS ARE TO BE PUMPED TO THE PROPOSED SANITARY SERVICE (TYP)
  - PROPOSED SERVICES TO BE SLEEVED THROUGH FOUNDATION WALL WHERE INVERT IS ABOVE THE UNDERSIDE OF FOOTING. FOUNDATION DRAINS TO BE PUMPED TO STORM SERVICE WHEN GRAVITY FEED IS NOT FEASIBLE.
  - FLOWS FROM TRENCHDRAINS ARE TO BE CONVEYED DIRECTLY TO THE STORM SERVICE WHEN A CISTERN IS NOT PRESENT. IN BUILDINGS WHERE A CISTERN IS PROPOSED, TRENCH DRAIN FLOWS ARE TO BE CONVEYED TO THE CISTERN. REFER TO MECHANICAL PLANS FOR DETAILS.
  - REFER TO MECHANICAL DRAWINGS FOR FURTHER DETAILS ON INTERNAL PLUMBING (TYP).



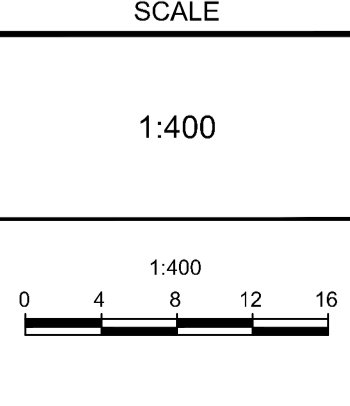
**GP CISTERN PROFILE**  
NTS

REFER TO 122179-ND FOR ADDITIONAL NOTES & DETAILS

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DESIGN	ARM/CJF
CHECKED	ARM
DRAWN	ARM/CJF
CHECKED	ARM
APPROVED	GJM

**FOR REVIEW ONLY**

**PROFESSIONAL ENGINEER**  
A.R. MESTWARP  
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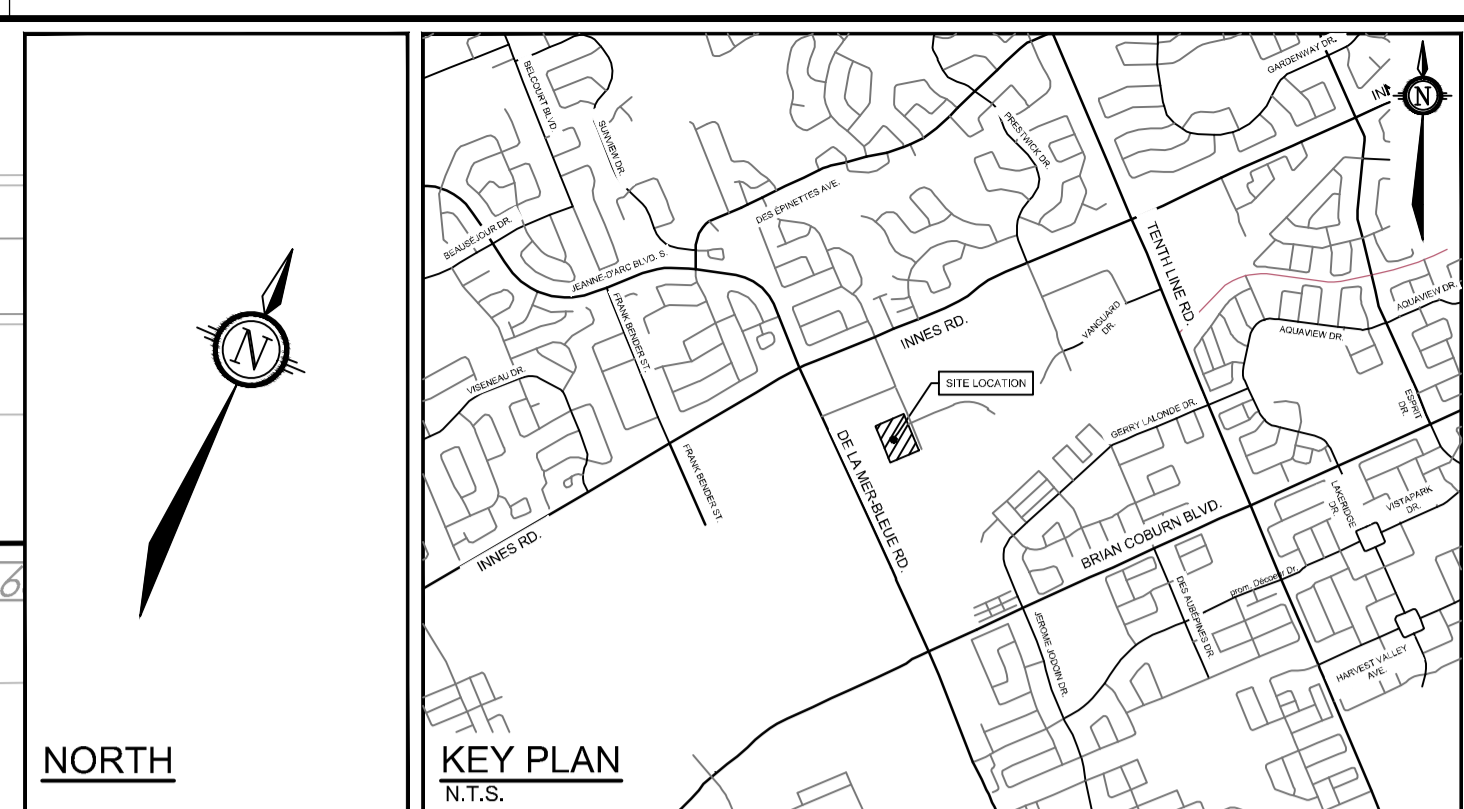
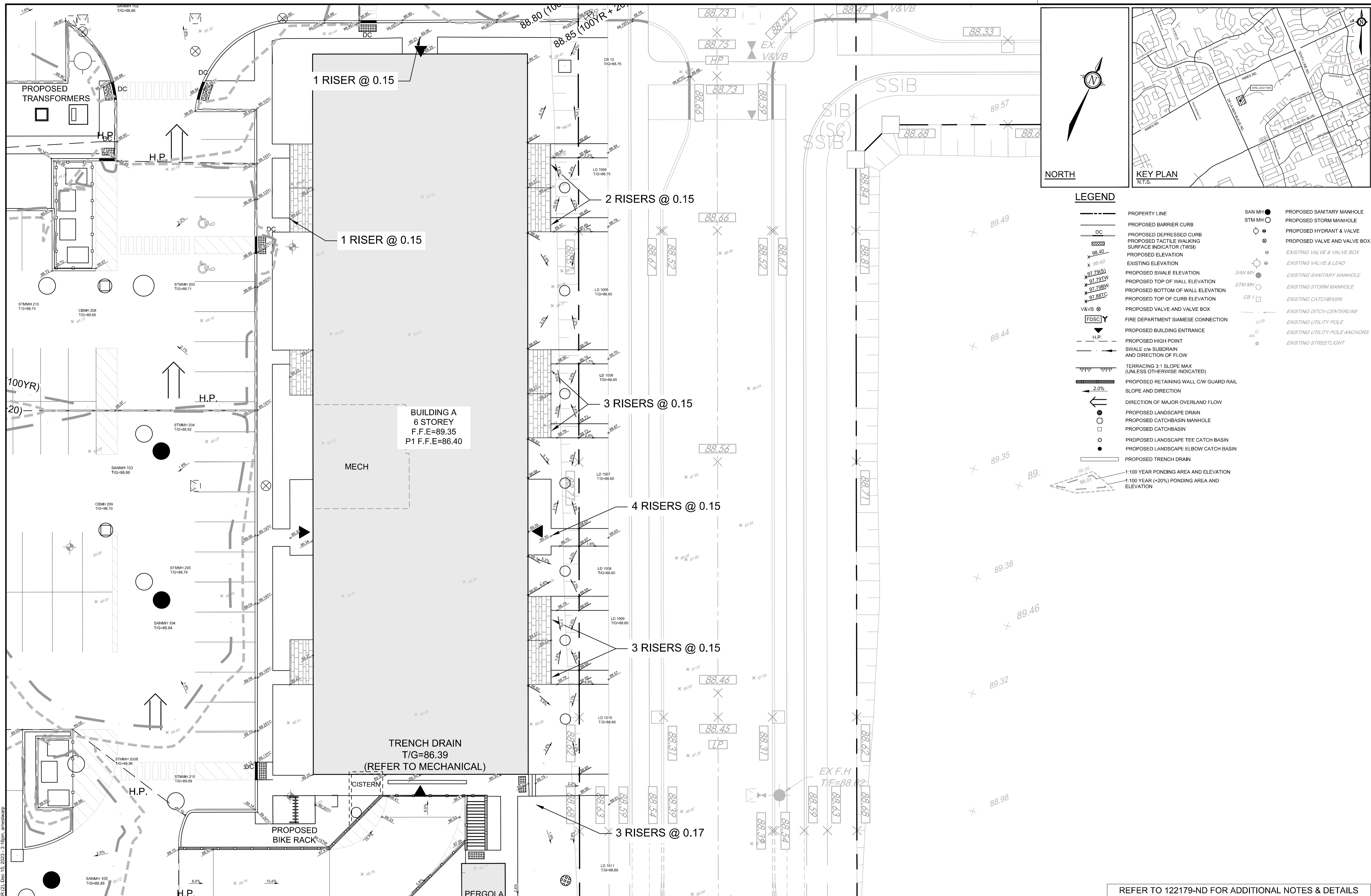
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Facsimile: (613) 254-5867  
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LOCATION 4200 INNES ROAD, CITY OF OTTAWA TRINTIY APARTMENTS	
DRAWING NAME GENERAL PLAN OF SERVICES	
PROJECT No.	122179
REV	REV#4
DRAWING No.	122179 - GP

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CITY FILE No. D07-12-23-0068  
PLAN No. 18993





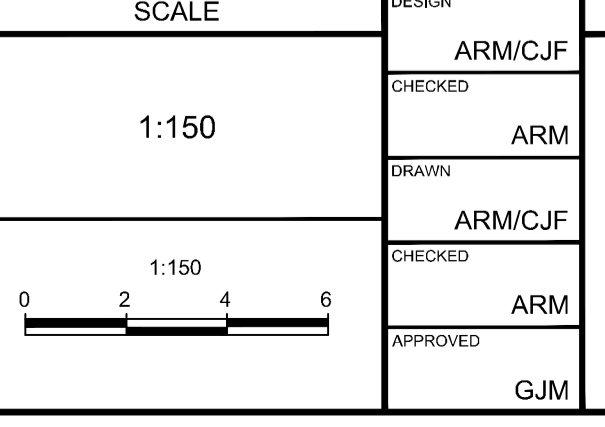
**LEGEND**

---	PROPERTY LINE	SAN MH ●	PROPOSED SANITARY MANHOLE
DC	PROPOSED BARRIER CURB	STM MH ○	PROPOSED STORM MANHOLE
XXXXXX	PROPOSED DEPRESSED CURB	⊗	PROPOSED HYDRANT & VALVE
XXXXXX	PROPOSED TACTILE WALKING SURFACE INDICATOR (TWSI)	⊗	PROPOSED VALVE AND VALVE BOX
X 88.40	PROPOSED ELEVATION	⊗	EXISTING VALVE & VALVE BOX
X 88.40	EXISTING ELEVATION	⊗	EXISTING VALVE & LEAD
X 97.79(S)	PROPOSED SWALE ELEVATION	SAN MH ●	EXISTING SANITARY MANHOLE
X 97.79(TW)	PROPOSED TOP OF WALL ELEVATION	STM MH ○	EXISTING STORM MANHOLE
X 97.79(BW)	PROPOSED BOTTOM OF WALL ELEVATION	CB /	EXISTING CATCHBASIN
X 97.88(TC)	PROPOSED TOP OF CURB ELEVATION	---	EXISTING DITCH CENTERLINE
V&VB ⊗	PROPOSED VALVE AND VALVE BOX	---	EXISTING UTILITY POLE
FDSC Y	FIRE DEPARTMENT SIAMSE CONNECTION	---	EXISTING UTILITY POLE ANCHORS
H.P.	PROPOSED BUILDING ENTRANCE	○	EXISTING STREETLIGHT
H.P.	PROPOSED HIGH POINT		
---	SWALE c/w SUBDRAIN AND DIRECTION OF FLOW		
---	TERRACING 3:1 SLOPE MAX (UNLESS OTHERWISE INDICATED)		
---	PROPOSED RETAINING WALL C/W GUARD RAIL		
2.0%	SLOPE AND DIRECTION		
←	DIRECTION OF MAJOR OVERLAND FLOW		
○	PROPOSED LANDSCAPE DRAIN		
○	PROPOSED CATCHBASIN MANHOLE		
□	PROPOSED CATCHBASIN		
○	PROPOSED LANDSCAPE TEE CATCH BASIN		
○	PROPOSED LANDSCAPE ELBOW CATCH BASIN		
---	PROPOSED TRENCH DRAIN		
---	1:100 YEAR PONDING AREA AND ELEVATION		
---	1:100 YEAR (+20%) PONDING AREA AND ELEVATION		

**NOTE:**  
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No.	REVISION	DATE	BY
4.	REVISED PER SITE PLAN UPDATE	DEC 18/2023	GJM
3.	REVISED PER CITY COMMENTS	NOV 8/2023	GJM
2.	REVISED PER CITY COMMENTS	SEPT 15/2023	GJM
1	ISSUED FOR SITE PLAN APPLICATION	MAY 24/2023	GJM



**FOR REVIEW ONLY**

DESIGN: ARM/CJF  
 CHECKED: ARM  
 DRAWN: ARM/CJF  
 CHECKED: ARM  
 APPROVED: GJM

**PROFESSIONAL ENGINEER**  
 A. R. MESTWARP  
 100201604  
 DECEMBER 18, 2021  
 PROVINCE OF ONTARIO

**PROFESSIONAL ENGINEER**  
 G. J. MacDONALD  
 DEC 18, 2023  
 PROVINCE OF ONTARIO

**NOVATECH**  
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 Ottawa, Ontario, Canada K2M 1P6

Telephone: (613) 254-9643  
 Facsimile: (613) 254-5867  
 Website: www.novatech-eng.com

REFER TO 122179-ND FOR ADDITIONAL NOTES & DETAILS

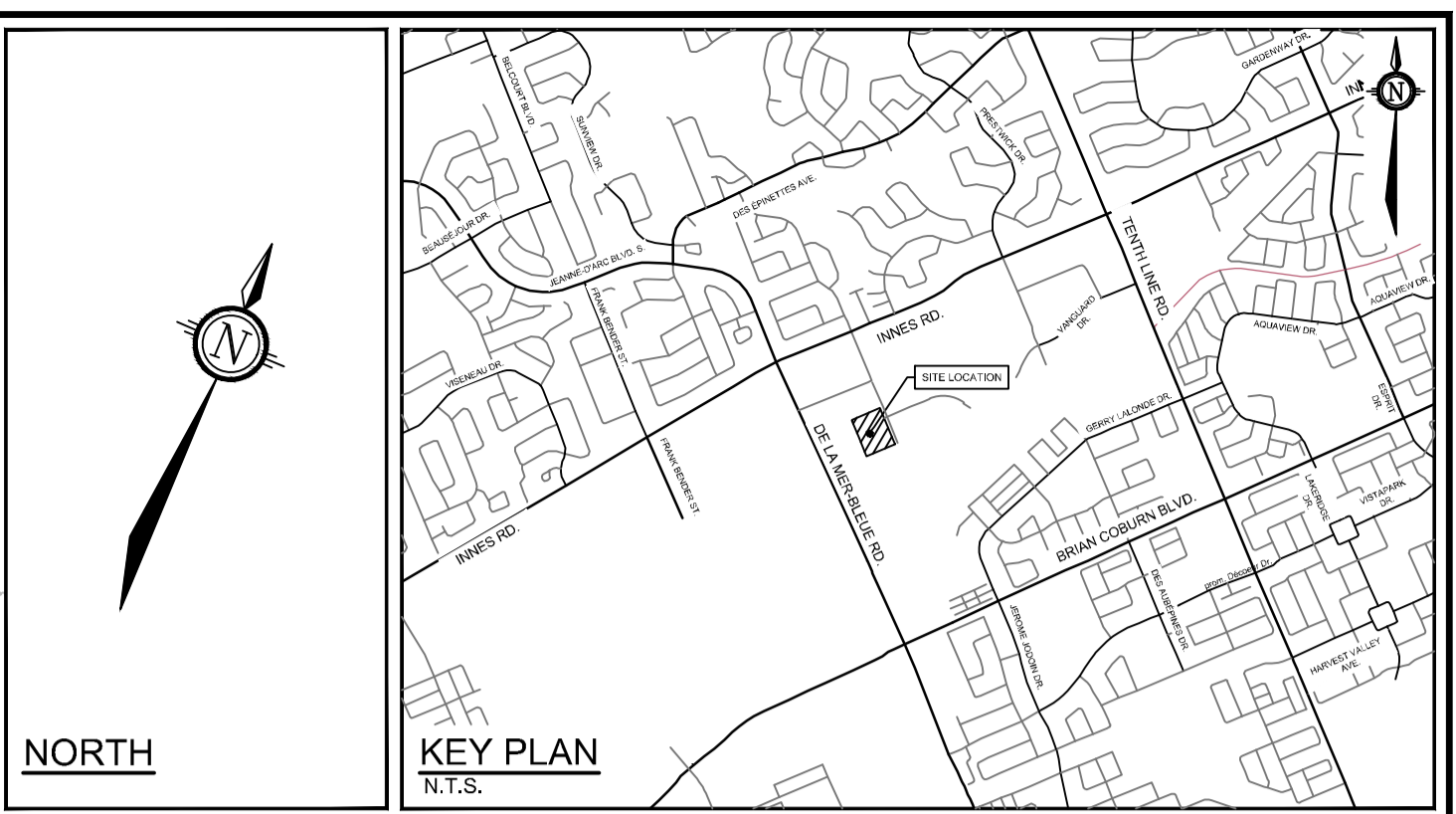
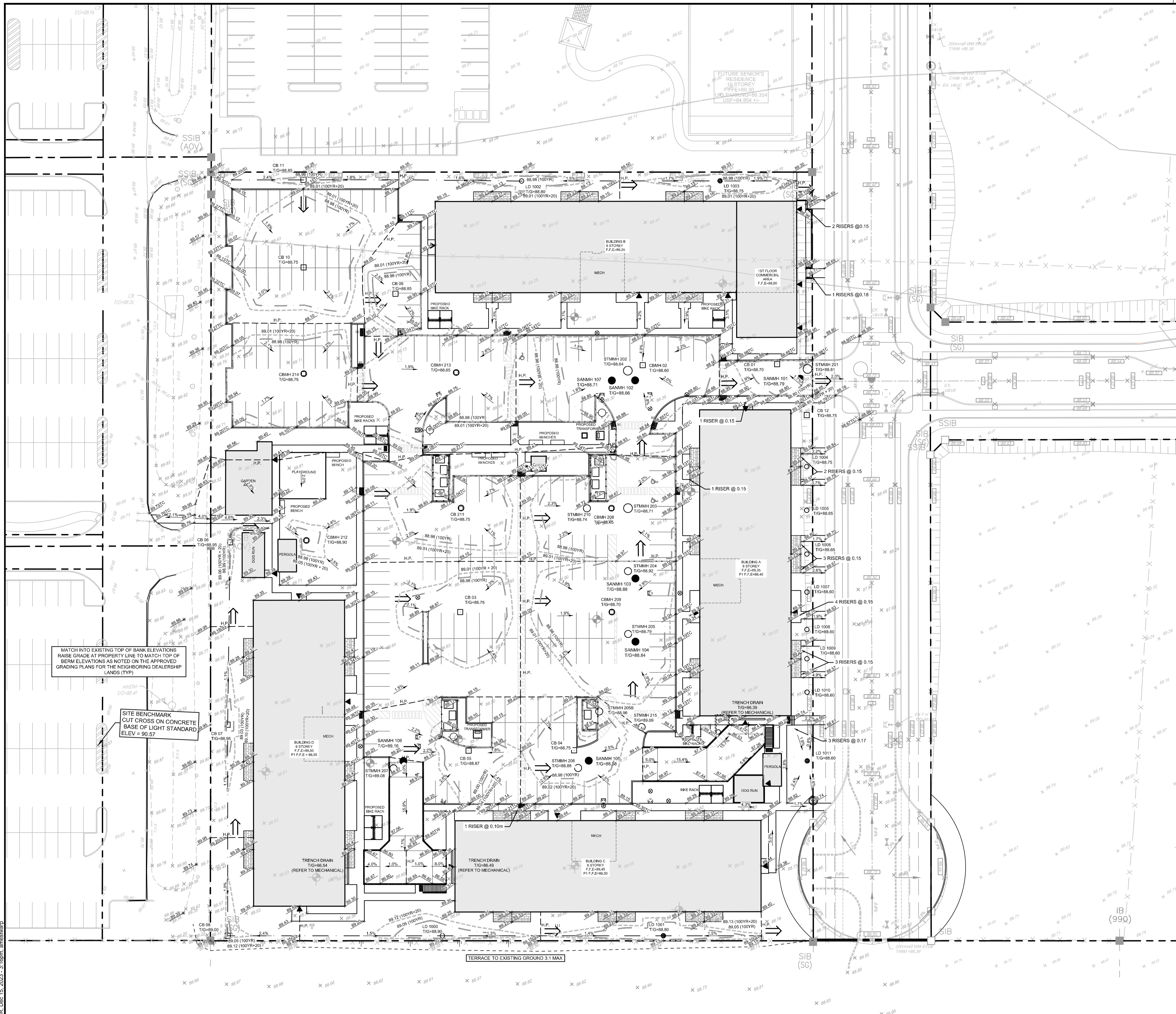
LOCATION  
 4200 INNES ROAD, CITY OF OTTAWA  
 TRINITY APARTMENTS

DRAWING NAME  
**GRADING PLAN - BUILDING A  
 REAR GRADING**

PROJECT No. 122179  
 REV. REV#4  
 DRAWING No. 122179-GR2

PLAN No. 18993





**LEGEND**

- PROPERTY LINE
- DC PROPOSED BARRIER CURB
- PROPOSED DEPRESSED CURB
- PROPOSED TACTILE WALKING SURFACE INDICATOR (TWSI)
- PROPOSED ELEVATION
- EXISTING ELEVATION
- PROPOSED SWALE ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- PROPOSED BOTTOM OF WALL ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED VALVE AND VALVE BOX
- FIRE DEPARTMENT SIAMSE CONNECTION
- PROPOSED BUILDING ENTRANCE
- PROPOSED HIGH POINT
- SWALE c/w SUBDRAIN AND DIRECTION OF FLOW
- TERRACING 3:1 SLOPE MAX (UNLESS OTHERWISE INDICATED)
- PROPOSED RETAINING WALL C/W GUARD RAIL
- SLOPE AND DIRECTION
- DIRECTION OF MAJOR OVERLAND FLOW
- PROPOSED LANDSCAPE DRAIN
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED LANDSCAPE TEE CATCH BASIN
- PROPOSED LANDSCAPE ELBOW CATCH BASIN
- PROPOSED TRENCH DRAIN
- 1:100 YEAR PONDING AREA AND ELEVATION
- 1:100 YEAR (+20%) PONDING AREA AND ELEVATION
- SAN MH ● PROPOSED SANITARY MANHOLE
- STM MH ○ PROPOSED STORM MANHOLE
- ⊗ PROPOSED HYDRANT & VALVE
- ⊕ PROPOSED VALVE AND VALVE BOX
- ⊖ EXISTING VALVE & VALVE BOX
- ⊘ EXISTING VALVE & LEAD
- SAN MH ● EXISTING SANITARY MANHOLE
- STM MH ○ EXISTING STORM MANHOLE
- CB □ EXISTING CATCHBASIN
- EXISTING DITCH CENTERLINE
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE ANCHORS
- EXISTING STREETLIGHT

MATCH INTO EXISTING TOP OF BANK ELEVATIONS  
RAISE GRADE AT PROPERTY LINE TO MATCH TOP OF  
SERM ELEVATIONS AS NOTED ON THE APPROVED  
GRADING PLANS FOR THE NEIGHBORING DEALERSHIP  
LANDS (TYP)

SITE BENCHMARK  
CUT CROSS ON CONCRETE  
BASE OF LIGHT STANDARD  
ELEV = 90.57

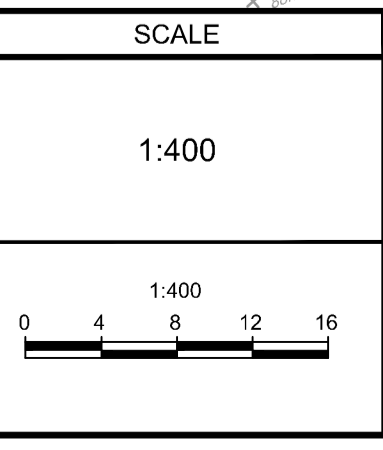
TERRACE TO EXISTING GROUND 3:1 MAX

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**GRADING PLAN**

PROJECT No.	122179
REV	REV#4
DRAWING No.	122179-GR

M:\2023\122179\CAD\Civil\122179-GR.dwg, GR, Dec 15, 2023, 3:16pm, amestwarp

CITY FILE No. D07-12-23-0068  
PLAN No. 18993