#### **GENERAL NOTES:**

- 1. DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2. THE ORIGINAL TOPOGRAPHY AND GROUND ELEVATIONS, SERVICING AND SURVEY INFORMATION SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF ALL INFORMATION OBTAINED FROM THIS PLAN.
- 3. CO-ORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- 4. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE
- 5. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION. 6. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
- 7. CONNECT TO EXISTING SYSTEMS AS DETAILED, INCLUDING ALL RESTORATION WORK NECESSARY TO REINSTATE SURFACES TO EXISTING CONDITIONS OR BETTER
- 8. RESTORE ALL TRENCHES AND SURFACE FEATURES TO EXISTING CONDITIONS OR BETTER AND TO THE SATISFACTION OF
- MUNICIPAL AUTHORITIES. 9. ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DETAIL R-10. THICKNESS OF GRANULAR MATERIAL
- 10. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDEILL FACILITY

AND ASPHALT LAYERS TO MATCH EXISTING. BOULEVARDS SHALL BE REINSTATED WITH 100mm OF TOPSOIL, SEED AND MULCH.

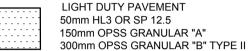
- 11. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.
- 12. ALL FENCING TO BE LOCATED 0.15m INSIDE PROPERTY LINE. REFER TO LANDSCAPING PLAN FOR DETAILS.
- 13. PERFORATED PIPE SUB-DRAINS TO BE PROVIDED AT SUBGRADE LEVEL EXTENDING FROM THE ROADSIDE CATCHBASIN FOR A DISTANCE OF 3.0m, PARALLEL TO THE CURB IN TWO DIRECTIONS.
- 14. REFER TO GEOTECHNICAL REPORT (File 267991.001, DATED MARCH 2, 2020), PREPARED BY PINCHIN FOR SUBSURFACE SOIL AND GROUNDWATER CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- 15. REFER TO THE STORMWATER MANAGEMENT REPORT No. R-2024-090 DATED MAY 15, 2025 PREPARED BY NOVATECH.
- 16. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- 17. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, T/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

#### **GRADING AND PAVEMENT NOTES:**

- 1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED HARD SURFACE (ie. PAVEMENT, CURB, SIDEWALK, ETC.) AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
- 2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE HEAVILY PROOF ROLLED WITH A LARGE (10 TON) VIBRATORY STEEL DRUM ROLLER UNDER DRY CONDITIONS AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT
- 3. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- 4. THE GRANULAR BASE SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY
- 5. GRADE AND/OR FILL BETWEEN BUILDINGS AND CURBS, WHERE REQUIRED, TO PROVIDE POSITIVE DRAINAGE.
- 6. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
- MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
- 8. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
- 9. ALL CURBS SHALL BE BARRIER CURB, UNLESS OTHERWISE NOTED, AND CONSTRUCTED PER CITY OF OTTAWA STANDARD
- 10. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
- 11. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THE PLAN.

## PAVEMENT STRUCTURE

VALUE.



### **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 INSTALL 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.

#### WATERMAIN NOTES

GENERAL:

<u>TEM</u>	DETAIL. No.	<u>REFERENCE</u>
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER / OVER SEWER	W25 / W25.2	CITY OF OTTAWA
WATERMAIN	PVC DR18	CITY OF OTTAWA
VALVE BOX	W24	CITY OF OTTAWA

- 2. THE WATERMAIN SHALL BE PVC DR 18 IN ACCORDANCE WITH MATERIAL SPECIFICATION MW-18.1, UNLESS OTHERWISE INDICATED.
- 3. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY
- 4. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
- 5. INSULATE ALL WATERMAIN / WATER SERVICES THAT HAVE LESS THAN 2.4m OF COVER PER CITY OF OTTAWA DETAIL W22, PROVIDE 150mm OR CLEARANCE BETWEEN PIPE AND INSULATION.
- 6. PROVIDE MINIMUM 0.50m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
- 7. WATER SERVICE SHALL BE CONSTRUCTED TO WITHIN 1.0mOF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

#### **SEWER NOTES**

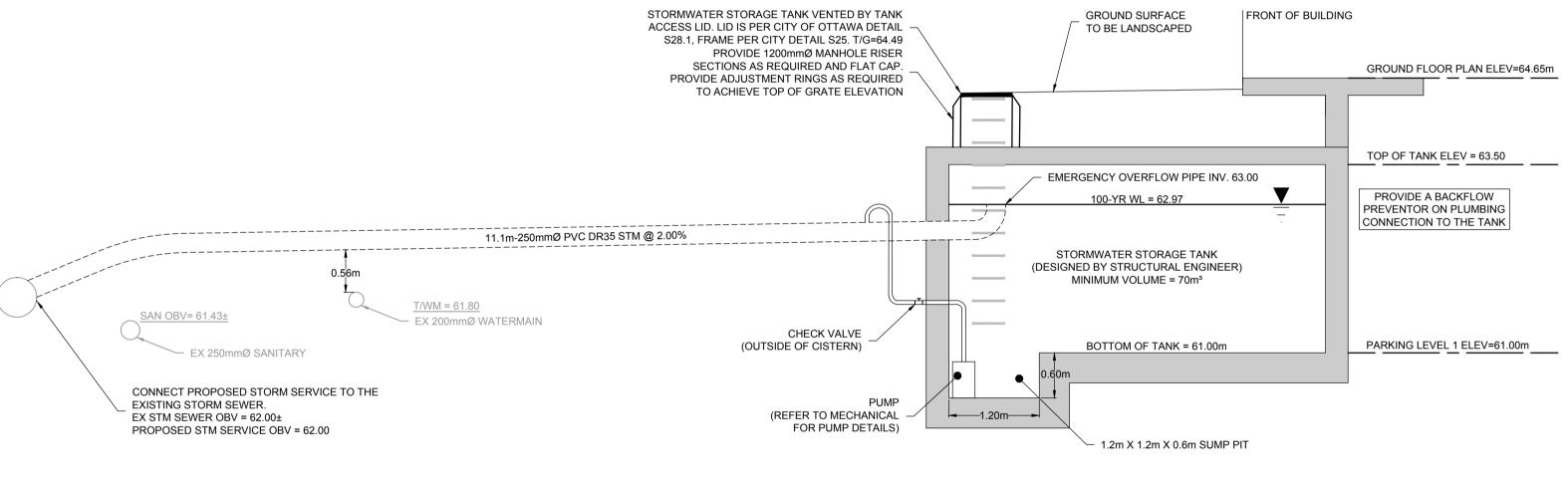
SPECIFICATION

SPECIFICATIONS:		
<u>ITEM</u>	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200Ø)	701.010	OPSD
STORM/SANITARY MH FRAME	S25	CITY OF OTTAWA
SANITARY COVER	S24	CITY OF OTTAWA
STORM COVER (CLOSED)	S24.1	CITY OF OTTAWA
STORM COVER (OPEN)	S28.1	CITY OF OTTAWA
STORM SEWER < 450mmØ	PVC DR 35(UNLE	SS SPECIFIED OTHERWISE)
STORM SEWER >= 450mmØ	CONC 65D (UNLE	SS SPECIFIED OTHERWISE
SANITARY SEWER	PVC DR 35	

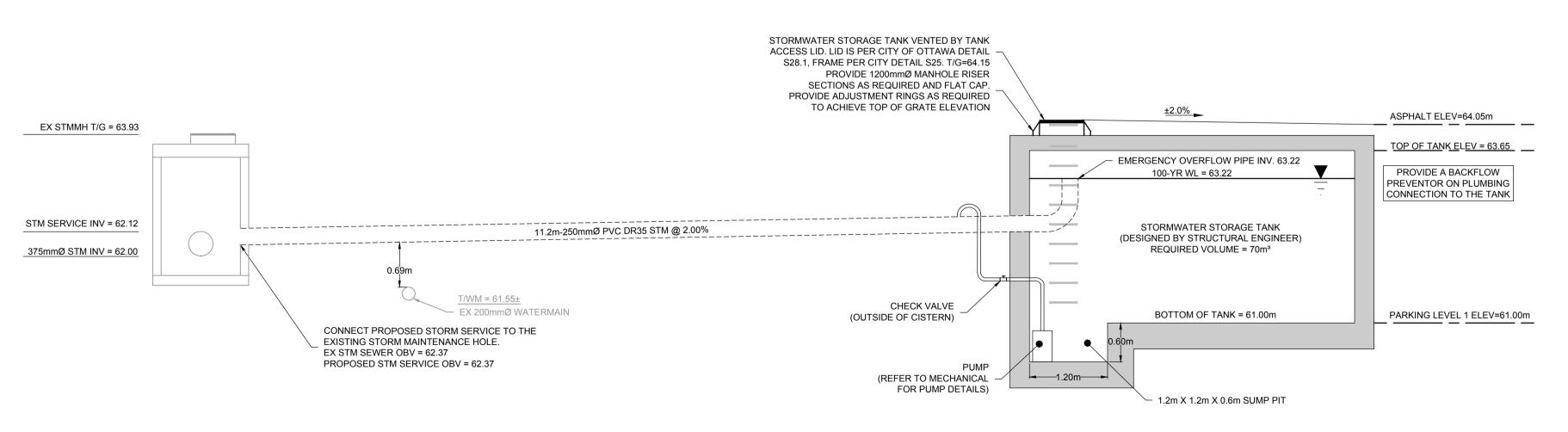
- INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 2.0m COVER PER CITY OF OTTAWA DETAIL S35, PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
- SERVICES ARE TO BE CONSTRUCTED TO PROPERTY LINE AT MINIMUM SLOPE OF 1.0% (2.0% IS
- PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL
- 5. SEWER SERVICE CONNECTIONS PER CITY OF OTTAWA DETAILS S11 AND S11.1.
- 6. 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
- 7. THE OWNER SHALL REQUIRE THAT THE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF TEST RESULTS.
- 8. STORM MANHOLES AND CBMHS SHALL HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED.
- 9. ENSURE MANHOLE CHIMNEY IS ROTATED TO BEST AVOID STANDARD WHEEL PATHING.
- 10. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

#### SWM TANK NOTES:

- 1. THE MINIMUM INTERNAL SIZE OF THE BLOCK 1 STORMWATER MANAGEMENT TANK IS TO BE 70m<sup>3</sup>. REFER TO THE CROSS SECTION DETAIL AND THE ARCHITECT'S DRAWINGS FOR TANK DIMENSIONS, CONFIGURATION, MATERIALS AND WATERPROOFING DETAILS.
- 2. THE MINIMUM INTERNAL SIZE OF THE BLOCK 2 STORMWATER MANAGEMENT TANK IS TO BE 50m<sup>3</sup>. REFER TO THE CROSS SECTION DETAIL AND THE ARCHITECT'S DRAWINGS FOR TANK DIMENSIONS, CONFIGURATION, MATERIALS AND WATERPROOFING DETAILS.
- 3. THE ACCESS HATCHES ARE TO OPERATE AS THE EMERGENCY OVERFLOW FOR THE SWM TANK. PROVIDE THE FRAME AND COVERS PER S25 & S28.1 RESPECTIVELY.
- 4. PROVIDE CIRCULAR HOLLOW ALUMINIUM MAINTENANCE HOLE STEPS ALONG TANK WALLS AT THE ACCESS HATCHES PER OPSD 405.010.



# **BLOCK 1 STORMWATER STORAGE TANK CROSS SECTION**



Stakes equally spaced . . FLAT BOTTOM DITCH of downstream row shall be higher than the low point of flow check. Downstream bale position Direction of flow Note 1 . . - - | 1 -PLAN V-DITCH Number of bales varies and shall suit ditch. Straw bales shall be butted tightly against adjoining bales and shaped to conform to the sides of the ditch to prevent water flow compacted through barrier. Fill and compact gaps with loose straw. SECTION C-C All dimensions are in millimetres unless otherwise shown. ONTARIO PROVINCIAL STANDARD DRAWING STRAW BALE FLOW CHECK DAM OPSD 219.180

## **BLOCK 2 STORMWATER STORAGE TANK CROSS SECTION SCALE 1:50**

SCALE THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND **AS SHOWN** STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS. AND WHERE SHOWN. THE ACCURACY OF THE POSITION OF SUCH RE-ISSUED FOR SITE PLAN APPLICATION MAY 15/25 UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT ISSUED FOR SITE PLAN APPLICATION AUG 1/24 LOCATION OF ALL SUCH UTILITIES AND ISSUED FOR SITE PLAN PHASE 2 MAY 10/24 STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM. DATE REVISION

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CITY OF OTTAWA 22 PICKERING PLACE - BLOCK 1 & BLOCK 2 DRAWING NAME

**NOTES & DETAILS** 119240 REV#3 **○** 

> 19240-SPND PLAN# 18865

