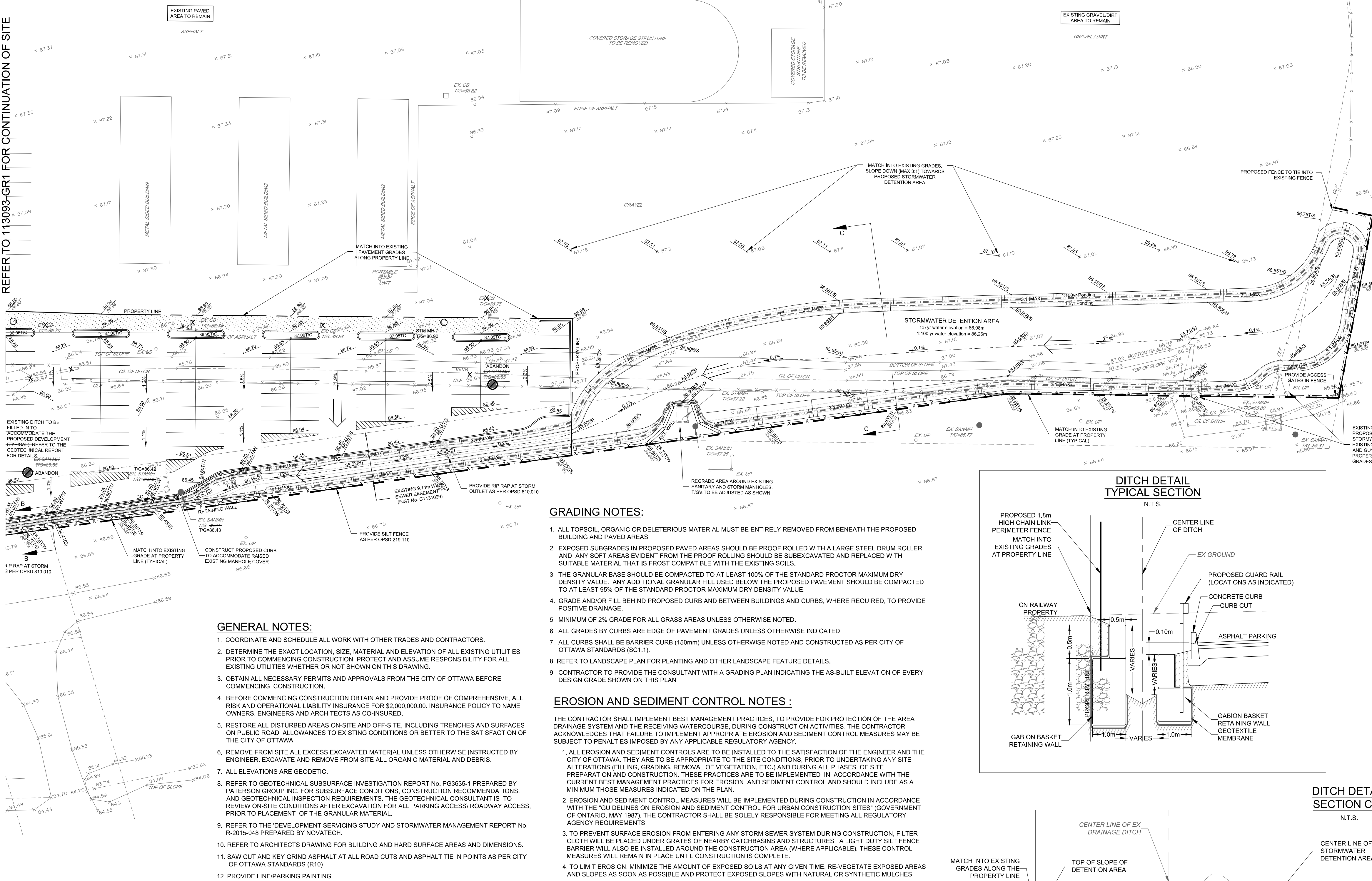


Erosion and Sediment Control Responsibilities:

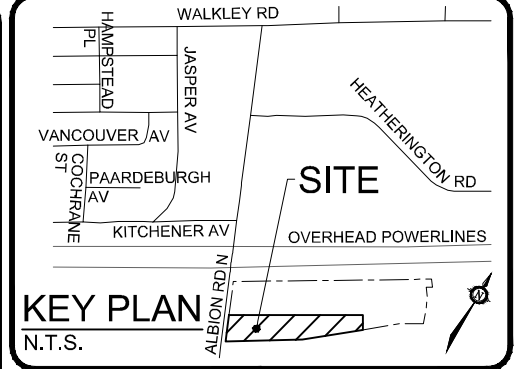
ESC Measure	Symbol	Specification	Installation Responsibility	Inspection/Maintenance Responsibility	Inspection Frequency	Approval to Remove	Removal Responsibility	Inspection/Maintenance Responsibility
Silt Fence	---	OPSD 219.110	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
Filter Fabric	---	Erosion and Sediment Control Plans	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
Rip-Rap	---	OPSD 810.010	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
Straw Bale Check Dam	---	OPSD 219.180	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
Mud Mat	---	Drawing Details	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
Dust Control	---	Erosion and Sediment Control Plans	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
Stabilized Material Stockpiling	---	Erosion and Sediment Control Plans	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
Sediment Basin (for silt being pumped out of excavations)	---	---	Developer's Contractor	Developer's Contractor	After Every Rainstorm	Developer's Contractor	Developer's Contractor	N/A

REFER TO 113093-GR1 FOR CONTINUATION OF SITE



LEGEND

- 88.80 PROPOSED ELEVATION
- 85.28(S) PROPOSED SWALE ELEVATION
- 86.56(T/W) PROPOSED TOP OF WALL ELEVATION
- 86.75(T/S) PROPOSED TOP OF SLOPE ELEVATION
- 85.60(B/S) PROPOSED BOTTOM OF SLOPE ELEVATION
- 88.92(T/C) PROPOSED TOP OF CURB ELEVATION
- 88.40 PROPOSED ELEVATION
- 86.68 EXISTING ELEVATION
- 2.0% GRADE AND DIRECTION
- MAXIMUM 3:1 SIDESLOPE
- DIRECTION OF MAJOR OVERLAND FLOW
- SWALE AND DIRECTION OF FLOW
- PROPOSED SILT FENCE
- PROPOSED CURB
- RIP-RAP PER OPSD 810.010
- PROPOSED DEPRESSED CURB
- PROPOSED 1.0m WIDE CURB CUT
- PROPOSED VALVE & VALVE BOX
- SAN MH 1 PROPOSED SANITARY MH
- CBMH 1 PROPOSED CATCHBASIN MH
- STM MH 1 PROPOSED STORM MH
- AD 1 PROPOSED AREA DRAIN
- PROPOSED BUILDING ENTRANCE
- PROPOSED GABION BASKET RETAINING WALL
- PROPOSED GUARD RAIL
- PROPOSED 1.8m HIGH CHAIN LINK FENCE
- BENCHMARK LOCATION
- EXISTING CURB
- EXISTING VALVE & VALVE BOX
- HYD EXISTING HYDRAULIC C/W VALVE
- SAN MH EXISTING SANITARY MH
- STM MH EXISTING STORM MH
- CB EXISTING CATCHBASIN
- CBMH EXISTING CATCHBASIN MH
- LS EXISTING LIGHT STANDARD
- EXISTING TREES
- REMOVALS
- MANHOLE TO BE ABANDONED AS PER SEWER NOTE #8
- APPROXIMATE PONDING LIMITS



The position of all pole lines, conduits, watermains, sewers and other underground and above ground 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.

SITE BENCHMARK
REFERENCED TO LOCAL GEODETIC DATUM AS INDICATED ON DRAWING. SEE EXISTING VERTICAL CONTROL MONUMENT NO. 3453 (TABLE ON FOUNDATION ON SOUTHWEST CORNER OF BUILDING LOCATED AT 309 ALBION ROAD NORTH).

OWNER INFORMATION
AHLUL-BAYT CENTRE
OTTAWA (ABC)
200 BARBEAU STREET
OTTAWA, ONTARIO, K1L 7R6

AKRAM FARHAT
PHONE: (613) 526-0774
E-MAIL: akromi@gmail.com



NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone: (613) 254-9643
Facsimile: (613) 254-5867
Website: www.novatech-eng.com

GRADING NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED BUILDING AND PAVED AREAS.
2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUBEXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS.
3. THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
4. GRADE AND/OR FILL BEHIND PROPOSED CURB AND BETWEEN BUILDINGS AND CURBS, WHERE REQUIRED, TO PROVIDE POSITIVE DRAINAGE.
5. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
6. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
7. ALL CURBS SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA STANDARDS (S21.1).
8. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
9. 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 :

- 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. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA. THEY ARE TO BE 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. THESE PRACTICES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AND SHOULD INCLUDE AS A MINIMUM THOSE MEASURES INDICATED ON THE PLAN.
 2. EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED DURING CONSTRUCTION IN ACCORDANCE WITH THE "GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES" (GOVERNMENT OF ONTARIO, MAY 1987), THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEETING ALL REGULATORY AGENCY REQUIREMENTS.
 3. TO PREVENT SURFACE EROSION FROM ENTERING ANY STORM SEWER SYSTEM DURING CONSTRUCTION, FILTER CLOTH WILL BE PLACED UNDER GRATES OF NEARBY CATCHBASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE CONSTRUCTION AREA (WHERE APPLICABLE). THESE CONTROL MEASURES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
 4. TO LIMIT EROSION, MINIMIZE THE AMOUNT OF EXPOSED SOILS AT ANY GIVEN TIME, RE-VEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE AND PROTECT EXPOSED SLOPES WITH NATURAL OR SYNTHETIC MULCHES.
 5. FOR MATERIAL STOCKPILING, MINIMIZE THE AMOUNT OF EXPOSED MATERIALS AT ANY GIVEN TIME, APPLY TEMPORARY SEEDING, TARPS, COMPACTION AND/OR SURFACE ROUGHENING AS REQUIRED TO STABILIZE STOCKPILED MATERIALS THAT WILL NOT BE USED WITHIN 14 DAYS.
 6. THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER.
 7. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO ANY STORM SEWER SYSTEM. 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.
 8. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
 9. ROADWAYS ARE TO BE SWEEP AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE MUNICIPALITY / UNIVERSITY REPRESENTATIVE.
 10. THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS. MONITOR DUST LEVELS DURING SITE PREPARATION/EXCAVATION, AND CONSTRUCTION ACTIVITIES, AND WHEN DUST LEVELS BECOME VISUALLY APPARENT SPRAY WATER TO MINIMIZE THE RELEASE OF DUST FROM GRAVEL, PAVED AREAS AND EXPOSED SOILS. USE CHEMICAL DUST SUPPRESSANTS ONLY WHERE NECESSARY ON PROBLEM AREAS.

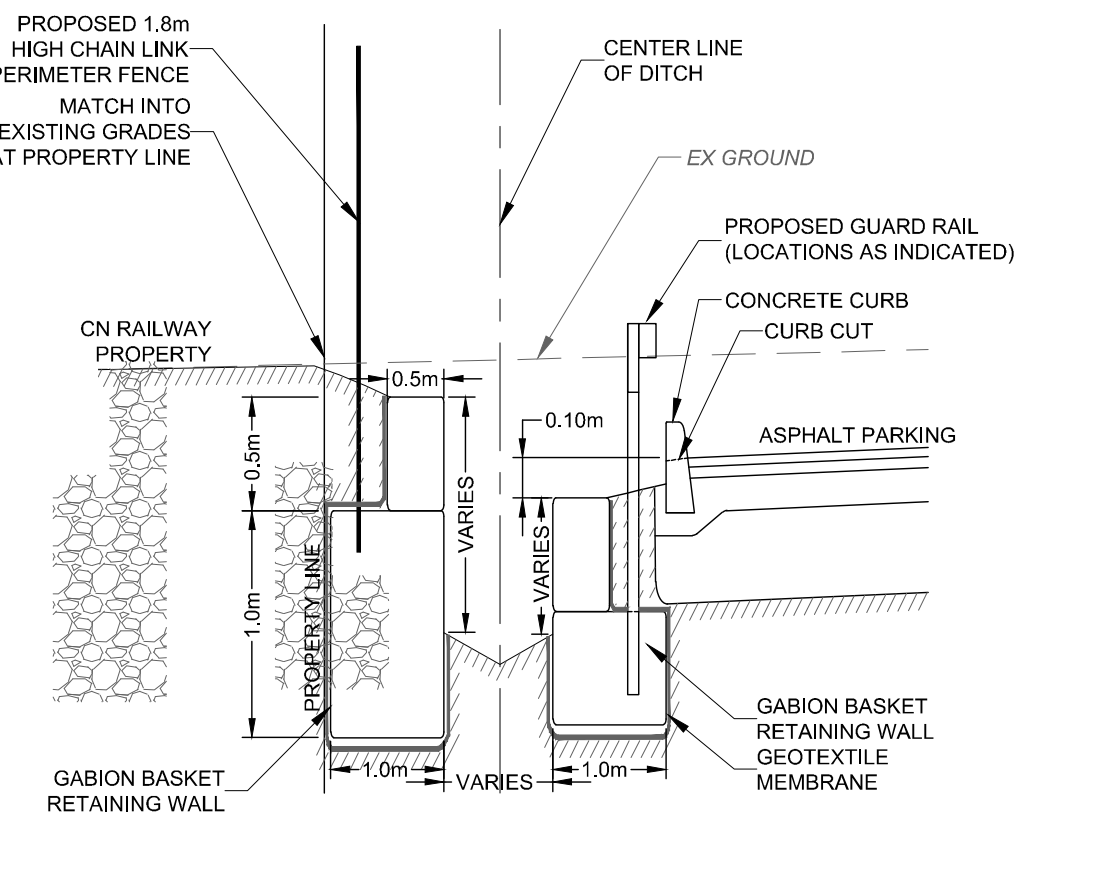
GENERAL NOTES:

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. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
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 \$2,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
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.
6. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ALL ORGANIC MATERIAL AND DEBRIS.
7. ALL ELEVATIONS ARE GEODETIC.
8. REFER TO GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT No. PG3635-1 PREPARED BY PATERSON GROUP INC. FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION FOR ALL PARKING ACCESS, ROADWAY ACCESS, PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
9. REFER TO THE "DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT No. R-2015-048 PREPARED BY NOVATECH.
10. REFER TO ARCHITECTS DRAWING FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
11. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10)
12. PROVIDE LINE/PARKING PAINTING.

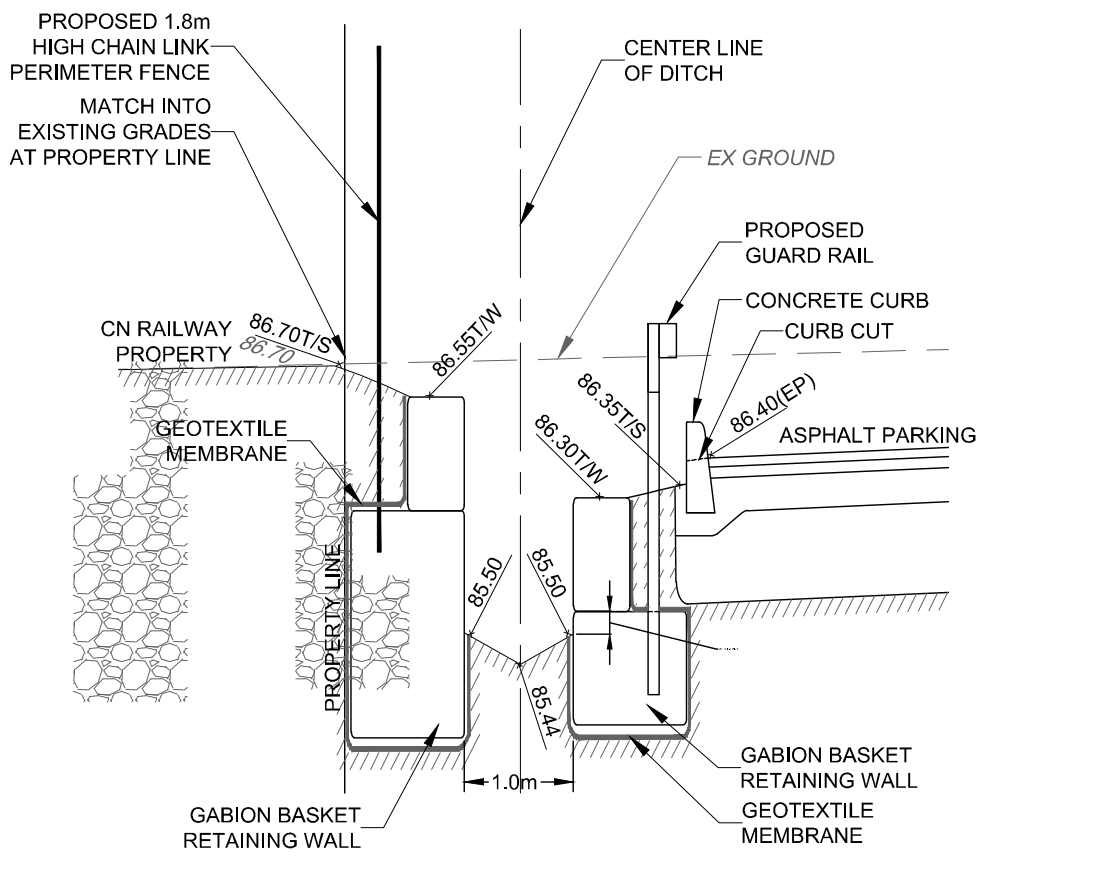
PAVEMENT STRUCTURES:

- LIGHT DUTY PAVEMENT
 - 50mm SUPERPAVE 12.5 (TRAFFIC LEVEL B)
 - 150mm GRAN 'A'
 - 300mm GRAN 'B' TYPE II
 - ASPHALT GRADE PG 58-34
- HEAVY DUTY NEW PAVEMENT
 - 40mm SUPERPAVE 12.5 (TRAFFIC LEVEL B)
 - 50mm SUPERPAVE 19.0 (TRAFFIC LEVEL B)
 - 150mm GRAN 'A'
 - 450mm GRAN 'B' TYPE II
 - ASPHALT GRADE PG 58-34

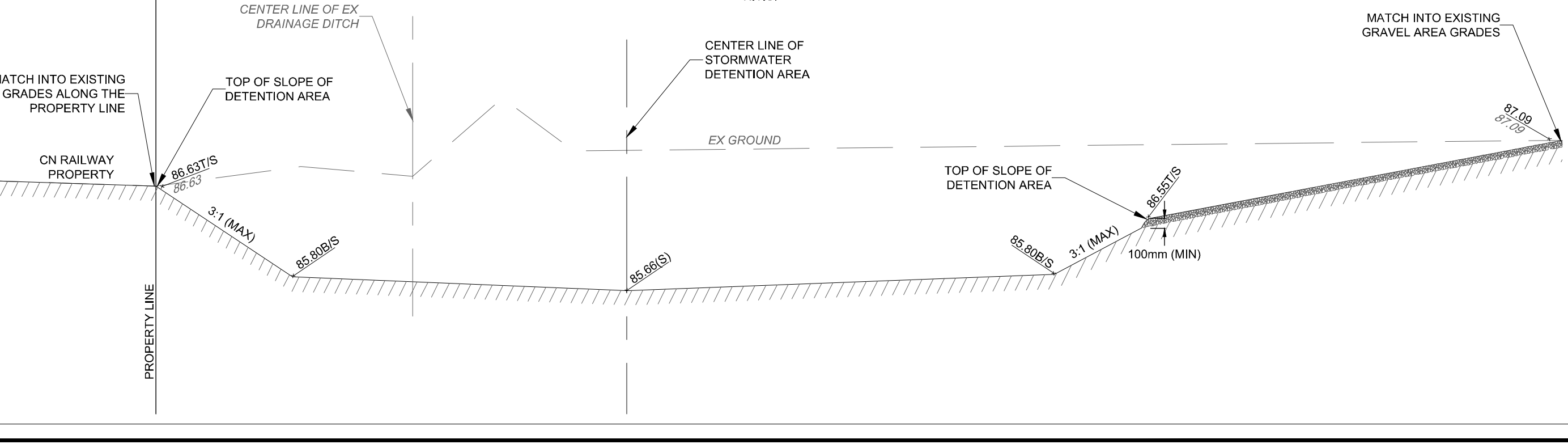
DITCH DETAIL TYPICAL SECTION
N.T.S.



DITCH DETAIL SECTION B-B
N.T.S.



DITCH DETAIL SECTION C-C
N.T.S.



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Email: sjl@sjlarchitect.com

DESIGNED BY: SM	DESIGNED BY: SM / FST
DATE: JANUARY 2016	CHECKED BY: FST
SCALE: 1:400	PLotted DATE: JAN 27, 2016

PROJECT:
AHLUL-BAYT CENTRE OTTAWA
3095 ALBION ROAD NORTH
OTTAWA, ONTARIO

NOVATECH JOB NO.: 113093-00

DRAWING NAME:
GRADING AND EROSION & SEDIMENT CONTROL PLAN

113093-GR2