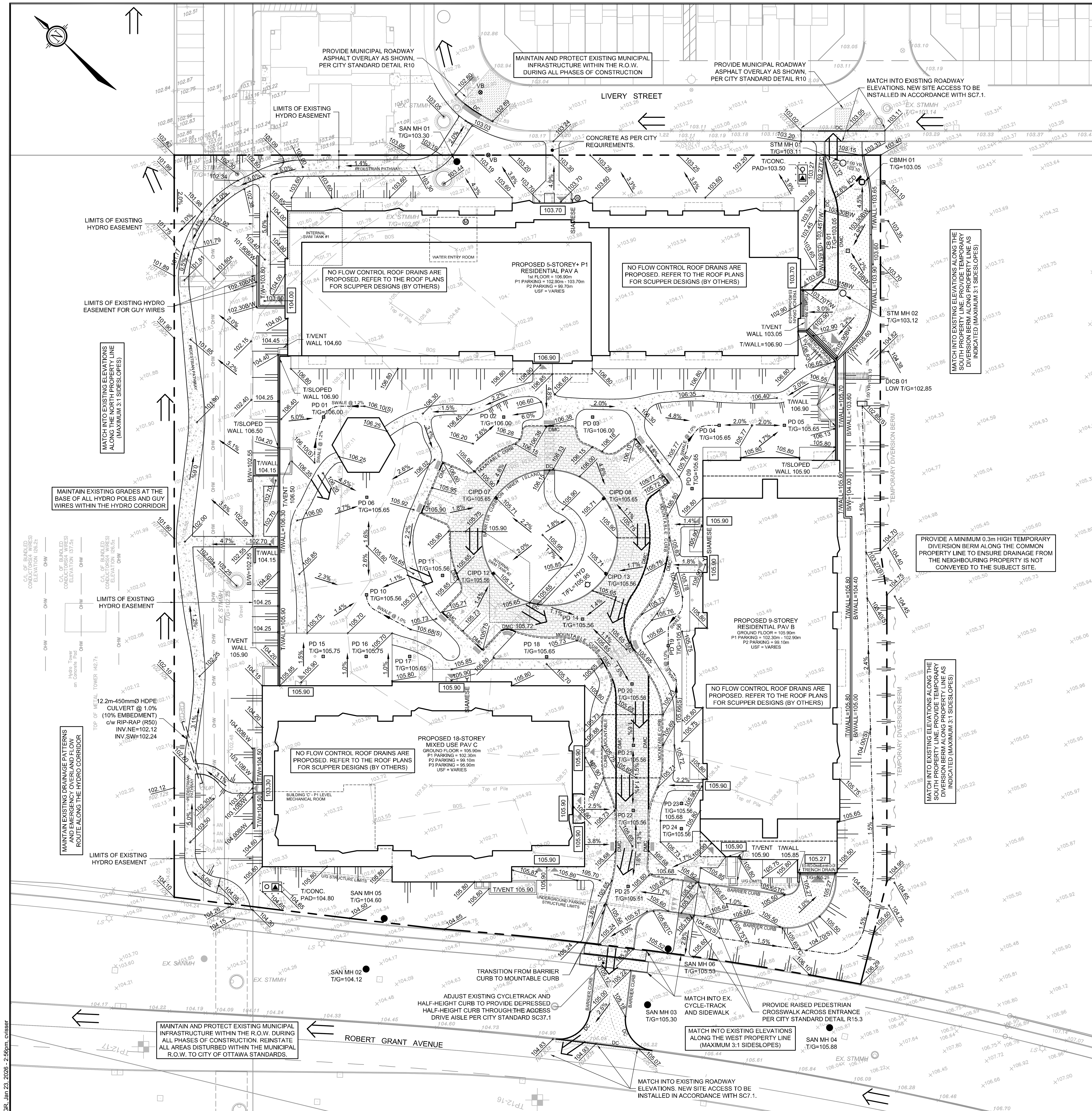


PAVEMENT STRUCTURES:

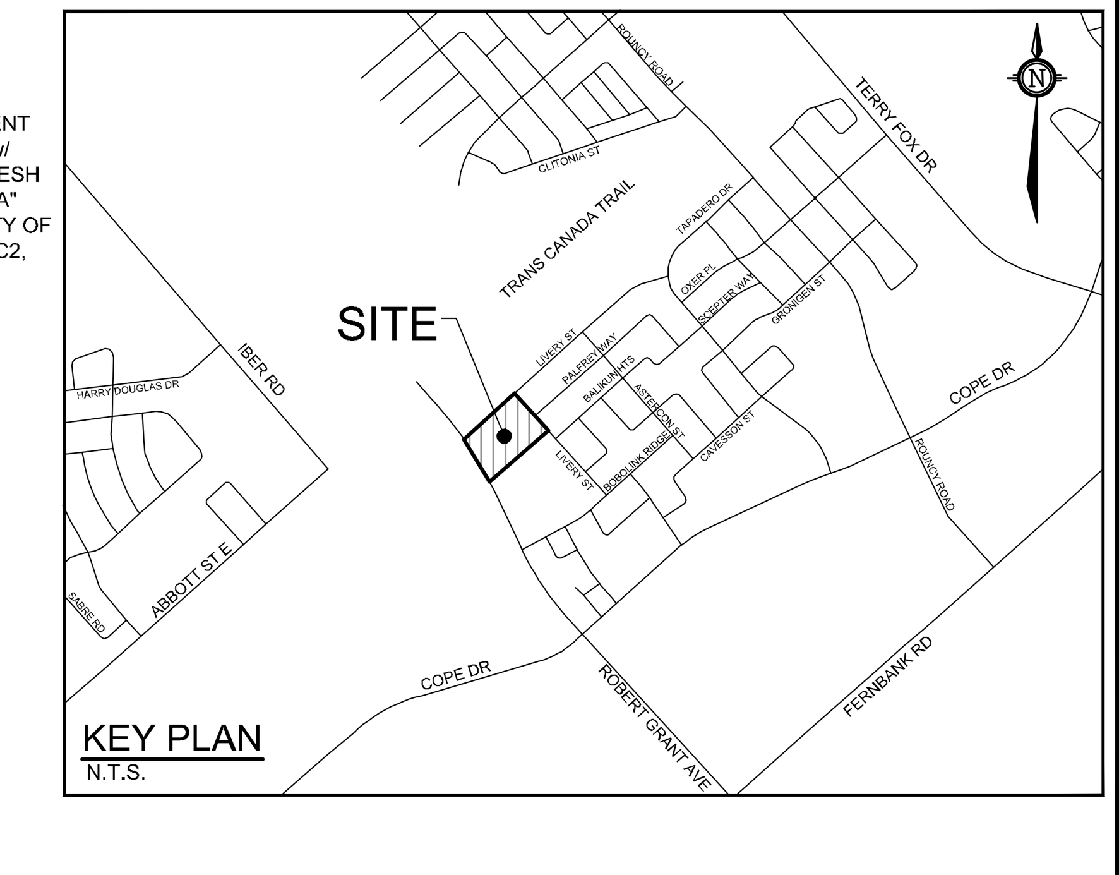
LIGHT DUTY ASPHALT PAVEMENT
50mm HL-3 or SUPERPAVE 12.5
150mm GRANULAR "A"
300mm GRANULAR "B" TYPE II
ASPHALT GRADE PG 58-34 - TRAFFIC LEVEL 'B'
*INSTALLED PER GEOTECHNICAL REPORT

HEAVY DUTY ASPHALT PAVEMENT
40mm HL-3 or SUPERPAVE 12.5
50mm HL-8 or SUPERPAVE 19.0
150mm GRANULAR "A"
400mm GRANULAR "B" TYPE II
ASPHALT GRADE PG 58-34 - TRAFFIC LEVEL 'B'
*INSTALLED PER GEOTECHNICAL REPORT

INTERLOCK ROADWAY ON BUILDING PODIUM
POLYMERIC SAND & SEALER
100mm HEAVY DUTY PAVING STONE
15mm LEVELING SAND
150mm GRANULAR "A"
GRANULAR "B" AS REQUIRED TO DECKING MEMBRANE
*ABOVE BRIDGE-RATED CONCRETE DECKING

HEAVY DUTY PAVEMENT - ROADWAY RE-INSTATEMENT
MATCH EXISTING GRANULAR STRUCTURE OF ROADWAY IN TRENCHES
MATCH EXISTING ASPHALT THICKNESSES IN TRENCHES
NEW ASPHALT GRADE: PG 58-34
PROVIDE MUNICIPAL ROADWAY ASPHALT OVERLAY AS SHOWN, PER CITY STANDARD DETAIL R10. REFER TO AMENDED ROAD ACTIVITY BY-LAW 2003-445.

CONCRETE PAVEMENT
150mm CONCRETE w/ REINFORCEMENT MESH
150mm GRANULAR "A"
*INSTALLED PER CITY OF OTTAWA DETAILS SC2, SC4 AND / OR SC7.1



KEY PLAN
N.T.S.

LEGEND

Symbol	Description
	SITE BOUNDARY
	PROPOSED FIRE ROUTE (SEE ARCHITECTURAL SITE PLAN)
	℄ SWALE AND DIRECTION OF FLOW
104.67 / 104.67±	PROPOSED ELEVATION / EXISTING ELEVATION
104.50(S)	PROPOSED SWALE ELEVATION
105.90	PROPOSED TERRACE ELEVATION
	MAJOR OVERLAND FLOW ROUTE
	MAXIMUM 3: 1 SIDESLOPE
2.0%	PARKING GRADE AND DIRECTION
FFE	PROPOSED FINISHED FLOOR ELEVATION
USF	PROPOSED UNDER SIDE OF FOOTING ELEVATION
	PROPOSED BUILDING ENTRANCE
	PROPOSED LIMITS OF UNDERGROUND PARKING STRUCTURE
	PROPOSED LIMITS OF BALCONY ABOVE
	PROPOSED LIMIT OF BUILDING OVERHANG
T/G=	TOP OF GRATE ELEVATION
MH 01	PROPOSED SANITARY MANHOLE
MH 02	PROPOSED STORM MANHOLE
CB1	PROPOSED CATCHBASIN
CB1	PROPOSED CATCHBASIN WITH TEMPORARY SILTSACK
CBT1	PROPOSED CATCHBASIN TEE
CBE1	PROPOSED CATCHBASIN ELBOW
PD 15	PROPOSED PODIUM DRAIN (WATTS FD-490-4 or equiv, PER MECH)
CIPD 02	PROPOSED CURB INLET PODIUM DRAIN (PER MECHANICAL)
	PROPOSED RIP-RAP
	PROPOSED HDPE CULVERT
	PROPOSED BARRIER CURB (per SC1.1)
DC	DEPRESSED BARRIER CURB
	PROPOSED MOUNTABLE CURB (per SC1.3)
DMC	DEPRESSED MOUNTABLE CURB
	PROPOSED TWSI (per SC7.3)

BENCHMARK INFO:

OLS JOB BENCHMARK ON THE TOP OF SPINDLE OF THE EXISTING MUNICIPAL FIRE HYDRANT LOCATED NEAR THE NORTH-EAST INSIDE CORNER WHERE JOURNEYMAN STREET TURNS 90 DEGREES IN FRONT OF THE SUBJECT SITE. GEODETIC ELEVATION = 103.82m. (AS SHOWN ON THE SURVEYOR'S PLAN Ref. No. 18413-17 Lepine Corp.Blks2028&203 4M-1503 T F; PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.)

ALL ELEVATIONS ARE REFERRED TO THE CGVD28 GEODETIC DATUM. THE EXISTING GRADES SHOWN ON THE PLANS ARE TAKEN DIRECTLY FROM TOPOGRAPHICAL SURVEY PLAN (Ref. No. 18413-17 Lepine Corp.Blks2028&203 4M-1503 T F), PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK SIGNED AND DATED NOVEMBER 17, 2017.

SURROUNDING BACKGROUND TOPO INFORMATION BEYOND THE LIMITS OF THE SITE SURVEY ARE SHOWN FROM CITY OF OTTAWA 1:2000 MAPPING FOR CONTEXT ONLY.

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 $5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
5. COMPLETE ALL WORKS IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS USING THE CURRENT GUIDELINES, BYLAWS AND STANDARDS INCLUDING MATERIALS OF CONSTRUCTION, DISINFECTION AND ALL RELEVANT REFERENCES TO OPSS, OPSD & AWWA GUIDELINES - ALL CURRENT VERSIONS AND 'AS AMENDED'.
6. 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.
7. 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 LANDFILL FACILITY.
8. ALL ELEVATIONS ARE GEODETIC.
9. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT (NO. PG4562-1, REV. 6, DATED JANUARY 29, 2024) 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 PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACED AREAS AND DIMENSIONS.
11. REFER TO THE 'SITE SERVICING AND STORMWATER MANAGEMENT REPORT' (R-2023-122) PREPARED BY NOVATECH.
12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
13. PROVIDE LINE / PARKING LOT PAINTING AS REQUIRED BY ARCHITECT.

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 SEWER SYSTEM DURING CONSTRUCTION, FILTER BAGS WILL BE PLACED UNDER GRATES OF NEARBY CATCHBASINS AND STRUCTURES. TERRAFIX 8" ULTRA SILT SOCK (FILTER SOCK) IS TO BE USED AT THE OPENING OF ALL CURB INLET CATACHBASINS. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE CONSTRUCTION AREA (WHERE APPLICABLE). IN AREAS WHERE SILT FENCING CANNOT BE INSTALLED PER OPSD 219.110 (i.e. HARD SURFACES), A FILTER SOCK SHALL BE SUBSTITUTED. 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 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.
9. ROADWAYS ARE TO BE SWEPT AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE MUNICIPALITY.
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.

GRADING NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
2. EXPOSED SUBGRADES 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. 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 COMPACTED TO AT LEAST 98% 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.
5. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
6. MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
7. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
8. PROPOSED CURBS ON TOP OF THE BUILDING PODIUM SHALL BE MOUNTABLE CURB (75mm) CONSTRUCTED PER CITY OF OTTAWA STANDARDS (SC1.3) WITH THE EXCEPTION OF THE CIRCULAR INNER CURBED ISLAND WHICH SHALL BE BARRIER CURB (SC1.1) TO ACCOMMODATE THE CURB INLET CATCHBASIN STRUCTURES OVER MECHANICAL DRAINS.
9. ALL CURBS OFF THE BUILDING STRUCTURE SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA STANDARDS (SC1.1).
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 THIS PLAN.

THIS PLAN IS TO BE READ IN CONJUNCTION WITH CIVIL PLANS 117151-DET AND 117151-GP

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, 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.

No.	REVISION	DATE	BY
1.F	REVISED PATHWAY LAYOUT IN NORTH CORNER	MAR 3/26	CJR
1.E	REVISED PER CITY COMMENTS	MAR 19/25	DDB
1.D	REVISED PER CITY COMMENTS: PHASE 3-2	MAY 15/24	DDB
1.C	REVISED PER CITY COMMENTS	MAR 1/24	DDB
1.B	ISSUED FOR PHASE 3 PRE-CONSULTATION	OCT 27/23	DDB

SCALE 1:400

DESIGN SM / BM / DDB
CHECKED DDB / CJR
DRAWN SM
CHECKED CJR / DDB
APPROVED DDB

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
C.J. RUDDLE
MAR 3/26
PROVINCE OF ONTARIO

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

LOCATION
CITY of OTTAWA
5000 ROBERT GRANT - RESIDENTIAL DEVELOPMENT

DRAWING NAME
GRADING PLAN

PROJECT No. 117151
REV REV # 1.F
DRAWING No. 117151-GR

D-07-12-21-0232

PLAN24x36.DWG - 914.4mmx609.6mm

PLAN #18690

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