

KEY PLAN
(NOT TO SCALE)

NOTES

- EXISTING SERVICES AND UTILITIES SHOWN ON THIS DRAWING WERE TAKEN FROM THE BEST AVAILABLE RECORDS BUT ARE NOT COMPLETE. CONTRACTOR IS REQUESTED TO CHECK IN THE FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING.
- CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS AS DEEMED NECESSARY. REFER TO THE AVAILABLE SITE SUBSURFACE INVESTIGATION REPORT PREPARED BY THE OWNER'S SOILS ENGINEER.
- EXISTING HORIZONTAL AND VERTICAL SURVEY DATA SHOWN ON THIS PLAN INCLUDING GEODETIC SITE BENCHMARK, ROAD ELEVATIONS, SEWER INVERT ELEVATIONS AND THE TOPOGRAPHICAL INFORMATION OF THE LOT WERE PROVIDED BY FARLEY, SMITH & DENIS SURVEYING LTD. AS DEPICTED ON THEIR TOPOGRAPHICAL SURVEY PLAN JOB NO. 315-13 DATED AUGUST 14, 2013 AND UPDATED ON OCTOBER 17, 2013. T.L. MAK ENGINEERING CONSULTANTS LTD. DOES NOT TAKE ANY RESPONSIBILITY FOR THE SURVEY INFORMATION SHOWN HERE.
- SITE LAYOUT AND DETAILS FOR GRADING AND SWM DESIGN WERE PROVIDED BY THE OWNER'S ARCHITECT - SUSAN D. SMITH ARCHITECT AS DETAILED ON THEIR SITE PLAN (DWG. No. A1 JOB No. 1309 DATED JUNE 11, 2013 REV. 2).
- ALL GRADES SHOWN ARE GEODETIC AND METRIC (SEE FARLEY, SMITH & DENIS SURVEYING LTD.'S TOPOGRAPHICAL PLAN).
- PIPE SIZES SHOWN ON THIS PLAN ARE METRIC.
- ALL GRADING SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA.
- CONSTRUCT ALL SANITARY AND STORM SEWER SYSTEMS IN ACCORDANCE WITH CITY OF OTTAWA'S LATEST REVISED STANDARD OTHERWISE AS PER OPSS REQUIREMENT AND DONE TO THE SATISFACTION OF THE CITY.
- BEDDING AND HAUNCHING MATERIAL FOR SEWER INSTALLATIONS TO BE GRANULAR "A" INSTALLED AND COMPACTED AS PER CITY STANDARD DETAIL DWG. No. S6 AND S7.
- STORM AND SANITARY LATERALS (125mm and 150mm) SHALL BE PVC DR-28 OR EQUIVALENT.
- MANHOLES AND CATCH BASIN MANHOLES SHALL BE PRE-CAST TYPE (1200mm) AS PER CITY'S LATEST REVISED ENGINEERING STANDARDS. STORM MANHOLE/CATCH BASINS AS PER OPSS 701.01 C/W FRAME AND COVER PER OPSS 401.010.
- THE CATCH BASIN SHALL BE 600mm x 600mm PRECAST TYPE PER OPSS 705.010 C/W FRAME AND COVER PER OPSS 400.020 INCLUDING ADJUSTMENT RINGS.
- ALL PROPOSED SANITARY AND STORM SERVICES SHALL TERMINATE ±1.0m OUTSIDE THE FOUNDATION WALL, CONNECTION TO PLUMBING BY OTHERS.
- SANITARY BUILDING DRAIN TO BE EQUIPPED WITH A FULL PORT BACKWATER VALVE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS. STORMWATER DRAIN TO BE EQUIPPED WITH A BACKWATER VALVE AND INSTALLED AS PER CITY'S REQUIREMENTS.
- TWO FLAT ROOF DRAINS ARE REQUIRED FOR THE NEW BUILDING ADDITION. EACH DRAIN SHALL BE SIZED BY THE OWNER'S MECHANICAL ENGINEER FOR A FLOW RELEASE RATE OF 0.63 L/S. FLAT ROOFS WILL REQUIRE AT LEAST ONE SCUPPER TO BE INSTALLED FOR EMERGENCY OVERFLOW ONTO THE LANDSCAPED AREA.
- PRIOR TO CONCRETE FOOTING AND FOUNDATION POURING, THE OWNER AND/OR CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SUBGRADE ON THIS LOT IS SUFFICIENT TO SUPPORT THE PROPOSED BUILDING ADDITION.
- FOR DEVELOPMENT OF THIS LOT, THE CONTRACTOR MUST FIRST CONSTRUCT THE UNDERGROUND SANITARY AND STORM SERVICES FROM THE SEWER MAIN TO SERVICE THE NEW BUILDING ADDITION PRIOR TO BUILDING CONCRETE FOUNDATION POURING. THE CONTRACTOR SHALL VERIFY SEWER DEPTHS TO ENSURE THAT SEWER LATERALS CAN ACHIEVE A SLOPE OF 1% (MIN.) AND STILL BE BELOW PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION. IF THIS IS FOUND NOT POSSIBLE, THE CONTRACTOR SHALL CONTACT THE OWNER TO REPORT THE FINDINGS IN ORDER TO ADJUST THE BUILDING FOUNDATION GRADES PRIOR TO CONCRETE POURING.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY EQUIPMENT, LABOUR AND MATERIALS RELATING TO THE CIVIL WORKS REQUIRED FOR INSTALLATION OF NEW SITE SERVICES. PROVINCIAL HEALTH AND SAFETY REGULATIONS MUST BE FOLLOWED DURING CONSTRUCTION.
- IT IS THE RESPONSIBILITY OF THE SITE SERVICES CONTRACTOR TO OBTAIN AND CONSTRUCT THE WORKS TO MEET THE LATEST REVISION IN CURRENT CIRCULATION OF THE CITY OF OTTAWA'S ENGINEERING STANDARDS, OPSS & OPSS STANDARDS, AND ONTARIO BUILDING/PLUMBING CODES, WHERE THE LATEST REVISION DIFFERS FROM THE REQUIREMENTS SET OUT IN THIS PLAN. THE CONTRACTOR SHALL PRICE THE WORKS TO MEET LATEST REVISED STANDARDS IN HIS PRICE BID FOR THIS PROJECT. THE CONTRACTOR SHALL INFORM THE ENGINEERS OF ANY CHANGES PRIOR TO COMMENCEMENT OF THE WORKS.
- PROPOSED UNDERSIDE OF FOOTING ELEVATION SHALL BE REVIEWED AND APPROVED BY SUSAN D. SMITH ARCHITECT PRIOR TO CONSTRUCTION.
- IF EXISTING GRADES ALONG ANY EXISTING ADJUTING PROPERTY LIMITS EXCEED THE PROPOSED GRADES ON THIS PROPERTY BY A HEIGHT DIFFERENTIAL THAT EXCEEDS TERRACING OF 3H TO 1V, THEN INSTALL A RETAINING WALL AS PER OWNER'S REQUIREMENTS.
- SITE SERVICING BEDDING, BACKFILL REQUIREMENTS ALONG WITH ROADWAY AND PARKING LOT PAVEMENT STRUCTURES SHALL MEET RECOMMENDATIONS AND REQUIREMENTS SET OUT IN THE OWNER'S SOILS ENGINEER'S REPORT. ALL WORKS TO BE CARRIED OUT BY THE CONTRACTOR ON THE PROPOSED ASPHALT ACCESS LANEWAY AND PRIVATE DRIVEWAY STRUCTURE SHALL BE APPROVED BY THE SOILS ENGINEER ON SITE PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONSTRUCT THE DESIGNED FIRE ROUTE AT THE LOCATION AS SHOWN ON THE APPROVED SITE PLAN PREPARED BY SUSAN D. SMITH ARCHITECT.
- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION OF THE RECEIVING STORM SEWER DURING CONSTRUCTION ACTIVITIES. THESE PRACTICES ARE REQUIRED TO ENSURE NO SEDIMENT AND/OR ASSOCIATED POLLUTANTS ARE RELEASED TO THE RECEIVING WATERCOURSE. THESE PRACTICES INCLUDE INSTALLATION OF SEDIMENT BARRIERS ON ALL CATCH BASIN AND MAINTENANCE HOLES AND A SILT FENCE BARRIER (AS PER OPSS 219.110 AND ASSOCIATED SPECIFICATIONS) ALONG THE PROPERTY LIMITS OF THE PROPOSED DEVELOPMENT AND ALL OTHER AREAS THAT SHEET DRAIN OFF SITE. MAINTENANCE HOLE SEDIMENT BARRIERS TO BE AMOCO 4555 NONWOVEN GEOTEXTILE OR APPROVED EQUIVALENT.
- STORMWATER MANAGEMENT NOTES
- SEE STORM DRAINAGE REPORT No. R-813-35 FOR DETAILS.
- CONTROLLED ROOF DRAIN FLOW RATE SHALL BE 0.70L/S OR 11.1 U.S. GAL/MIN.

CONNECT NEW SANITARY PIPE TO EXISTING SANITARY SEWER WITH APPROVED MANUFACTURED TEE AT INV.=88.17. EXISTING SANITARY SEWER SPRINGLINE ELEVATION=88.17. ALL WORKS SHALL BE CARRIED OUT TO CITY OF OTTAWA'S SATISFACTION.

CONNECT NEW STORM PIPE TO EXISTING STORM SEWER WITH APPROVED MANUFACTURED TEE AT INV.=88.21. EXISTING STORM SEWER SPRINGLINE ELEVATION=88.21. ALL WORKS SHALL BE CARRIED OUT TO CITY OF OTTAWA'S SATISFACTION.

PROP. CB/MH #1
T/G=90.26
S. INV.=88.77
E. INV.=88.80
W. INV.=88.77

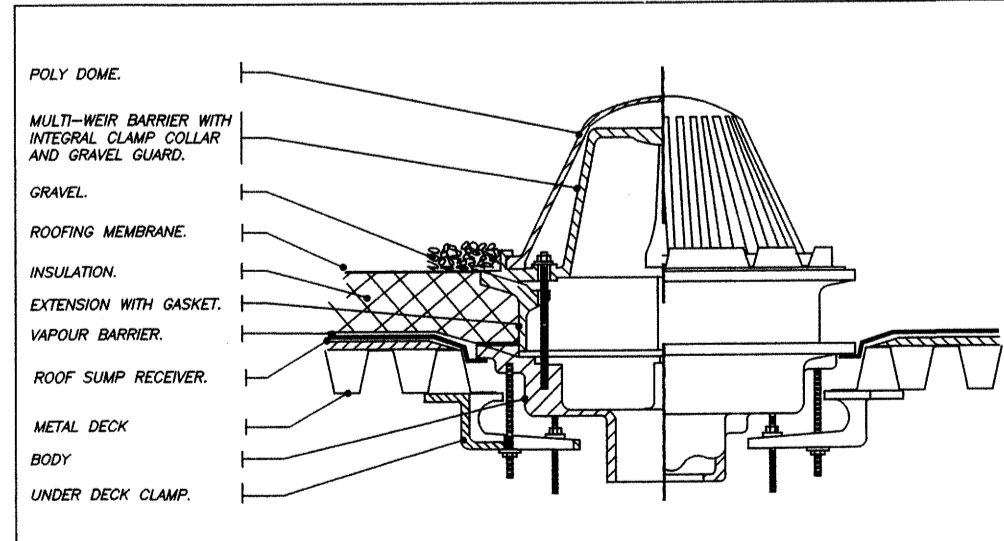
PROP. CB #2
T/G=90.12
INV.=88.98

PROP. 7.5m-125mm PVC STORM LATERAL @ 1% (MIN.)

PROP. 125mm STORM LATERAL @ 1% (MIN.)

EASEMENT PER HIST. No. H452942

TYPICAL:
2" ROOF DRAIN ABOVE "WATS" MODEL RD-100 WITH ACCURATE CONTROL WEIR, ONE SLOT DRAWN TO BE 1/4" WEIR BARRIER, INTERNAL CLAMP COLLAR AND GRAVEL GUARD. BOTTOM OF WEIR TO BE FLUSH WITH ROOF CAST-IRON FOOT, ALUMINUM WEIR, STAINLESS STEEL GRID AND POLYDOME. COORDINATE INSTALLATION ON SITE.

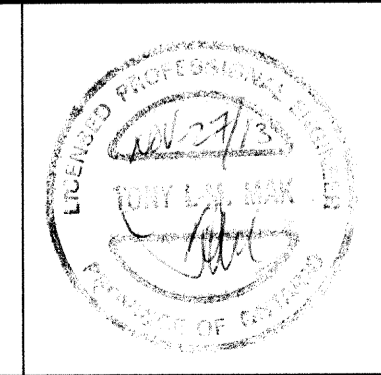


TYPICAL ROOF DRAIN DETAIL
N.T.S.

LEGEND

- 90.52 PROPOSED ELEVATION
- 90.24 EXISTING ELEVATION
- F.F. PROPOSED TOP OF FINISHED FLOOR ELEVATION
- U.S.F. PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATERMAIN/WATER SERVICE CORRIDOR
- PROPOSED 150mm SANITARY LATERAL @ 1% (MIN.) SLOPE
- PROPOSED 125mm STORM LATERAL/150mm STORM PIPE @ 1% (MIN.) SLOPE
- SANMH EXISTING SANITARY MANHOLE
- STMH EXISTING STORM MANHOLE
- WVC EXISTING WATER VALVE CHAMBER
- CB EXISTING CATCH BASIN
- FH EXISTING FIRE HYDRANT
- WSOV EXISTING WATER SHUT OFF VALVE
- PROPOSED GENERAL DIRECTION OF LOT GRADING AND SURFACE WATER FLOW
- PROPOSED GRASS SWALE
- ▨ PROPOSED DESIGNATED FIRE ROUTE
- PROPOSED 5 YEAR FLOOD LIMIT ELEVATION
- PROPOSED 100 YEAR FLOOD LIMIT ELEVATION
- RD PROPOSED ROOF DRAIN LOCATION
- (600mm X 600mm) PRECAST CONCRETE CATCH BASIN
- (1200mm) PRECAST CONCRETE CATCH BASIN
- PROPOSED ROOF SCUPPER LOCATION
- ▨ PROPOSED 75mm THICK RIGID STYROFOAM INSULATION

NO.	REVISION	DATE	BY



SCALE	DESIGN	T.L.M.
1:300 HORIZONTAL	CHECKED	T.L.M.
	DRAWN BY	J.M.
VERTICAL	CHECKED	T.L.M.
	APPROVED	T.L.M.

PROJECT
10 CORAL AVENUE
PART OF BLOCK A
(BEING PARTS 2, 3 & 4, PLAN 5R-11666)
REGISTERED PLAN 310509
CITY OF OTTAWA

DRAWING TITLE
PROPOSED GRADING AND SERVICING PLAN
FOR BUILDING ADDITION

T.L. MAK ENGINEERING CONSULTANTS LTD. CONSULTING ENGINEERS		
PROJECT No.	DATE	DRAWING No.
813-35	NOVEMBER 2013	G-1