

**NOTES: EROSION AND SEDIMENT CONTROL**

- PRIOR TO START OF CONSTRUCTION:
  - INSTALL SILT FENCE ALONG THE PERIMETER OF THE PROPERTY LINE (SEE PLAN FOR LOCATION).
  - INSTALL SILT SACK FILTERS IN ALL THE STRUCTURES NOTED ON THE DRAWING.
  - INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
- DURING CONSTRUCTION:
  - INSTALL SILT SACK FILTERS IN ALL NEWLY INSTALLED STRUCTURES.
  - PERIMETER VEGETATION TO REMAIN IN PLACE UNTIL PERMANENT STORM WATER MANAGEMENT IS IN PLACE. OTHERWISE, IMMEDIATELY INSTALL SILT FENCE WHEN THE EXISTING SITE IS DISTURBED AT THE PERIMETER.
  - PROTECT DISTURBED AREAS FROM OVERLAND FLOW BY PROVIDING TEMPORARY SWALES TO THE SATISFACTION OF THE FIELD ENGINEER. TIE-IN TEMPORARY SWALE TO EXISTING CRB AS REQUIRED.
  - PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS.
  - INSPECT SILT FENCES, SILT SACK FILTERS AND CATCH BASIN SUMPS WEEKLY AND WITHIN 24 HOURS AFTER A STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY.
  - DRAWING TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION. EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES AS SHOWN.
  - DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS).
  - CONTROL WIND-BLOWN DUST OFF SITE BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED AND TO THE SATISFACTION OF THE ENGINEER).
  - NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE FIELD ENGINEER.
  - CITY ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING AS REQUIRED.
  - ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED.
  - DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPPED.
  - ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.
  - TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ADJUTING PROPERTIES OR PUBLIC STREETS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED.
  - ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
  - 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.

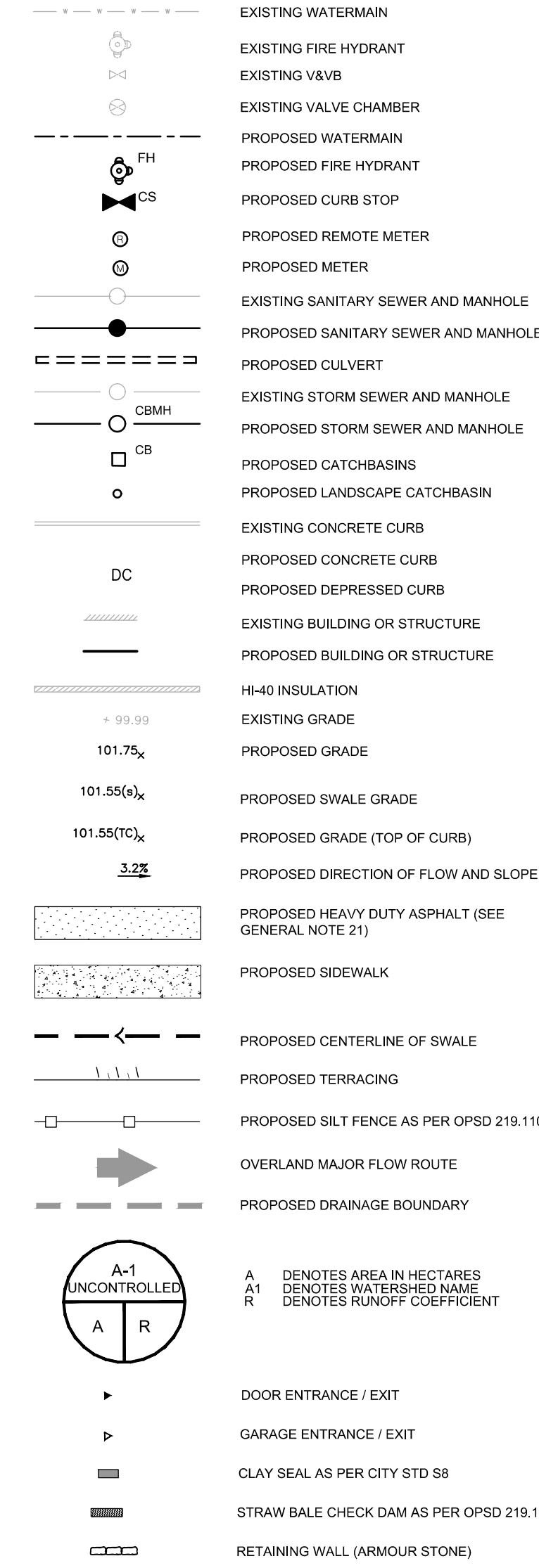
**NOTES: GENERAL**

- ALL SERVICES, MATERIALS, CONSTRUCTION METHODS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND REGULATIONS OF THE CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS, ONTARIO PROVINCIAL SPECIFICATION STANDARD SPECIFICATION (OPSS) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD), UNLESS OTHERWISE SPECIFIED, TO THE SATISFACTION OF THE CITY AND THE CONSULTANT.
- THE POSITION OF EXISTING POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES, STRUCTURES AND APPURTENANCES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SATISFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM DURING THE COURSE OF CONSTRUCTION. ANY RELOCATION OF EXISTING UTILITIES REQUIRED BY THE DEVELOPMENT OF SUBJECT LANDS IS TO BE UNDERTAKEN AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR MUST NOTIFY ALL EXISTING UTILITY COMPANY OFFICIALS FIVE (5) BUSINESS DAYS PRIOR TO START OF CONSTRUCTION AND HAVE ALL EXISTING UTILITIES AND SERVICES LOCATED IN THE FIELD OR EXPOSED PRIOR TO THE START OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO HYDRO, BELL, CABLE TV, AND CONSUMERS GAS LINES.
- ALL TRENCHING AND EXCAVATIONS TO BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- REFER TO ARCHITECT'S PLANS FOR BUILDING DIMENSIONS AND LAYOUT. REFER TO LANDSCAPE PLAN FOR LANDSCAPE DETAILS AND OTHER RELEVANT INFORMATION. ALL INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- TOPOGRAPHIC SURVEY COMPLETED AND PROVIDED BY ANNS, O'SULLIVAN, VOLSEBCK LTD (A/C) DATED SEPTEMBER 10, 2015. CONTRACTOR TO VERIFY IN THE FIELD PRIOR TO CONSTRUCTION OF ANY WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE LOCATION OF UNDERGROUND SERVICES ARE BASED ON THE SURVEY PROVIDED BY ADV LTD TOGETHER WITH THE INFORMATION FROM THE CITY OF OTTAWA ASBUILT DWG. NO 2 BY J.L. RICHARDS AND SERVICING AND GRADING PLAN BY TROW ASSOCIATES INC. HOWEVER, CONTRACTOR MUST ENSURE THAT THIS INFORMATION IS VERIFIED PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.
- ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED.
- ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE WITH STEP JOINTS OF 500mm WIDTH MINIMUM.
- ALL DISTURBED AREAS OUTSIDE PROPOSED GRADING LIMITS TO BE HYDROSEED TO STABILIZE THE EXPOSED SOIL SURFACE. ESTABLISH VEGETATION AND MINIMIZE EROSION UNLESS OTHERWISE SPECIFIED. ALL RESTORATION SHALL BE COMPLETED WITH THE GEOTECHNICAL REQUIREMENTS FOR BACKFILL AND COMPACTION.
- ALL MATERIAL SUPPLIED AND PLACED FOR PARKING LOT AND ACCESS ROAD CONSTRUCTION SHALL BE TO OPSS STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED. CONSTRUCTION TO OPSS 310, MATERIALS TO OPSS MUNI 1010.
- ABUTTING PROPERTY GRADES TO BE MATCHED.
- MINIMIZE DISTURBANCE TO EXISTING VEGETATION DURING THE EXECUTION OF ALL WORKS.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE PROPOSED BUILDING, PARKING AND ROADWAY LOCATIONS.
- AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. STORM SEWER, SANITARY SEWER, WATER, ETC.) THE CONTRACTOR SHALL DETERMINE THE PRECISE LOCATION AND DEPTH OF EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
- SERVICE TRENCHES ON MUNICIPAL RIGHT OF WAY TO BE REINSTATED AS PER CITY OF OTTAWA DETAIL 810.
- PRIOR TO CONSTRUCTION, A GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO IS TO INSPECT ALL SUB-SURFACES FOR FOOTINGS, SERVICES AND PAVEMENT STRUCTURES.
- FOR MATERIAL AND COMPACTION RELATED INFORMATION, REFER TO THE GEOTECHNICAL INVESTIGATION REPORT BY DST CONSULTING ENGINEERS DATED APRIL 2016.
- LIGHT DUTY PAVEMENT STRUCTURE SHALL CONSIST OF:
  - 300 mm GRANULAR B TYPE I COMPACTED TO 98% SPMD.
  - 150 mm GRANULAR A COMPACTED TO 98% SPMD.
  - 50mm SUPER PAVE 12.5 LEVEL C (PG 58-34)
- HEAVY DUTY PAVEMENT STRUCTURE SHALL CONSIST OF:
  - 300 mm GRANULAR B TYPE I COMPACTED TO 98% SPMD.
  - 150 mm GRANULAR A COMPACTED TO 98% SPMD.
  - 90mm SUPER PAVE 12.5 LEVEL C (PG 58-34)

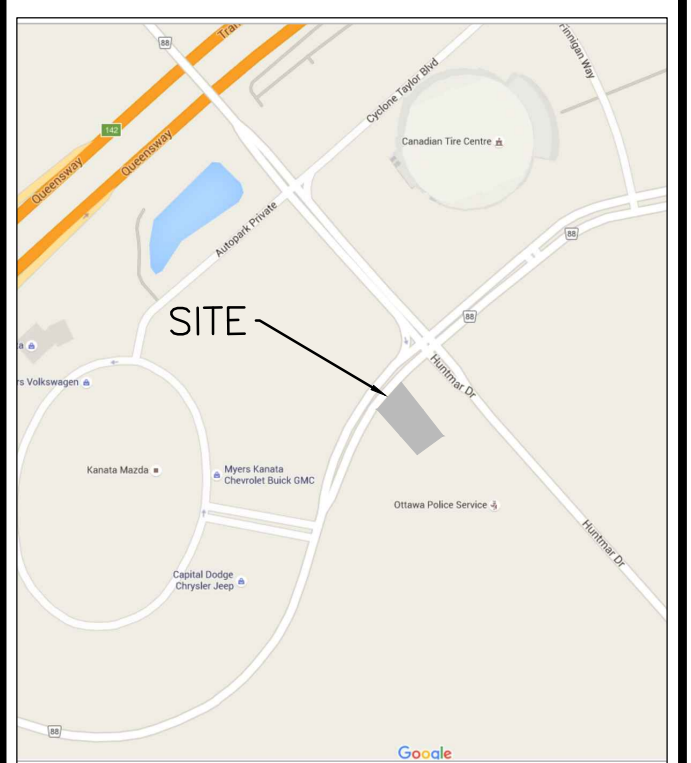
**NOTES: WATERMAIN**

- ALL WATERMAIN AND WATERMAIN APPURTENANCES, MATERIALS, CONSTRUCTION AND TESTING METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA AND MINISTRY OF ENVIRONMENT STANDARDS AND SPECIFICATIONS.
  - THE WATERMAIN 50 mm DIAMETER SHALL BE OF COPPER TYPE K.
  - ALL WATER MAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE. WHERE WATERMANS CROSS OVER OTHER UTILITIES, A MINIMUM 0.30m CLEARANCE SHALL BE MAINTAINED. WHERE WATERMANS CROSS UNDER OTHER UTILITIES, A MINIMUM 0.50m CLEARANCE SHALL BE MAINTAINED. WHERE THE MINIMUM SEPARATION CANNOT BE ACHIEVED, THE WATERMAIN SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W26 AND W25.2. WHERE 2.4m MINIMUM DEPTH CANNOT BE ACHIEVED, THERMAL INSULATION SHALL BE PROVIDED AS PER CITY OF OTTAWA STANDARD W22.
  - WATER MAIN BEDDING TO BE AS PER CITY OF OTTAWA STANDARD W17. THE BEDDING MATERIAL OVER THE SILTY CLAY SHOULD BE PLACED ON A LAYER OF NON-WOVEN GEOTEXTILE. THE GEOTEXTILE SHOULD EXTEND ACROSS THE TRENCH BOTTOM AND UP THE SIDES OF THE PIPE INVERT LEVEL AS PER THE GEOTECHNICAL INVESTIGATION REPORT.
  - CURB STOP TO BE AS PER CITY OF OTTAWA STANDARD W35.
  - CATHODIC PROTECTION SHALL BE PROVIDED WITH 32 POUNDS MAGNESIUM ANODES PACKAGING AT LOCATIONS INDICATED IN THE PLAN.
  - ALL CONNECTIONS OF NEW WATERMAIN TO EXISTING WATERMAIN & ALL BLANKINGS OF EXISTING MAINS AND SERVICES SHALL BE PERFORMED BY CITY OF OTTAWA FORCES. THE CONTRACTOR SHALL PROVIDE EXCAVATION, BACKFILL AND REINSTATEMENT.
- NOTES: SANITARY SEWER AND MANHOLES**
- ALL SANITARY SEWER, SANITARY SEWER APPURTENANCES AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
  - SANITARY SEWER PIPE SIZE 150mm DIAMETER AND GREATER TO BE PVC SDR-35 UNLESS SPECIFIED OTHERWISE, WITH RUBBER GASKET TYPE JOINTS IN CONFORMANCE WITH CSA B-182.2,3,4.
  - SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6. THE BEDDING MATERIAL OVER THE SILTY CLAY SHOULD BE PLACED ON A LAYER OF NON-WOVEN GEOTEXTILE. THE GEOTEXTILE SHOULD EXTEND ACROSS THE TRENCH BOTTOM AND UP THE SIDES OF THE PIPE INVERT LEVEL AS PER THE GEOTECHNICAL INVESTIGATION REPORT.
  - ALL WORK SHALL BE PERFORMED, AS APPLICABLE IN ACCORDANCE WITH OPSS 407 AND 410.
  - ALL SANITARY MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSS 701.01. FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.
  - BENCHING IN THE SANITARY MANHOLE SHALL BE AS PER OPSS 701.021.
  - SANITARY MANHOLE SMH2 SHALL BE PROVIDED WITH A WATERTIGHT COVER AS PER OPSS 401.030.
- NOTES: STORM SEWERS AND STRUCTURES**
- ALL STORM SEWER MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
  - STORM SEWERS 450mm DIAMETER AND SMALLER SHALL BE PVC SDR-35, WITH RUBBER GASKET PER CSA A-267.3. STORM SEWERS 525mm DIAMETER AND LARGER SHALL BE CONCRETE CLASS C100.
  - SEWER BEDDING AS PER CITY OF OTTAWA DETAIL S6. THE BEDDING MATERIAL OVER THE SILTY CLAY SHOULD BE PLACED ON A LAYER OF NON-WOVEN GEOTEXTILE. THE GEOTEXTILE SHOULD EXTEND ACROSS THE TRENCH BOTTOM AND UP THE SIDES OF THE PIPE INVERT LEVEL AS PER THE GEOTECHNICAL INVESTIGATION REPORT.
  - ALL STORM MANHOLES 1200mm IN DIAMETER TO BE AS PER OPSS 701.01. FRAME AND COVER TO BE AS PER CITY OF OTTAWA STANDARD S25 AND S24.1.
  - CATCH BASINS TO BE AS PER OPSS 705.010 WITH FRAME AND COVERS TO OPSS 400.010. ALL CATCH BASIN MANHOLES TO BE OPSS 701.010 WITH FRAME AND COVER TO CITY OF OTTAWA STANDARD S25 AND S28.1.
  - ALL CATCHBASIN LEADS TO BE MINIMUM 200mm DIAMETER AT MINIMUM 1.0% SLOPE UNLESS OTHERWISE SPECIFIED.

**LEGEND:**



**GENERAL NOTES:**  
 THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEERS GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.  
 CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.



**REVISIONS**

No.	REVISIONS	BY	DATE
07	ISSUED FOR CONSTRUCTION	I.J.	FEB 12, 2020
06	ISSUED FOR TENDER	I.J.	NOV 04, 2019
05	ISSUED AS PER CITY COMMENTS	I.J.	APRIL 20, 2017
04	ISSUED AS PER CITY COMMENTS	I.J.	MARCH 10, 2017
03	ISSUED AS PER CITY COMMENTS	I.J.	JAN 18, 2017
02	ISSUED AS PER CITY COMMENTS	I.J.	SEPT 30, 2016
01	ISSUED FOR SPA	I.J.	APRIL 22, 2016

N.T.S

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.



NOT VALID UNLESS SIGNED AND DATED



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CLIENT  
**ENTERPRISE HOLDINGS**  
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 T: (613) 274-6945

DESIGNED BY: I.J. DRAWN BY: D.G. APPROVED BY: I.J.

PROJECT  
**ENTERPRISE**  
 225 HUNTMAR DRIVE  
 OTTAWA, ON K2S 1B9

DRAWING TITLE  
**GENERAL NOTES AND LEGEND**

PROJECT NO. 1015105 DWG. NO. C.01

**Hydrovex® SVHV Vertical Vortex Flow Regulator**

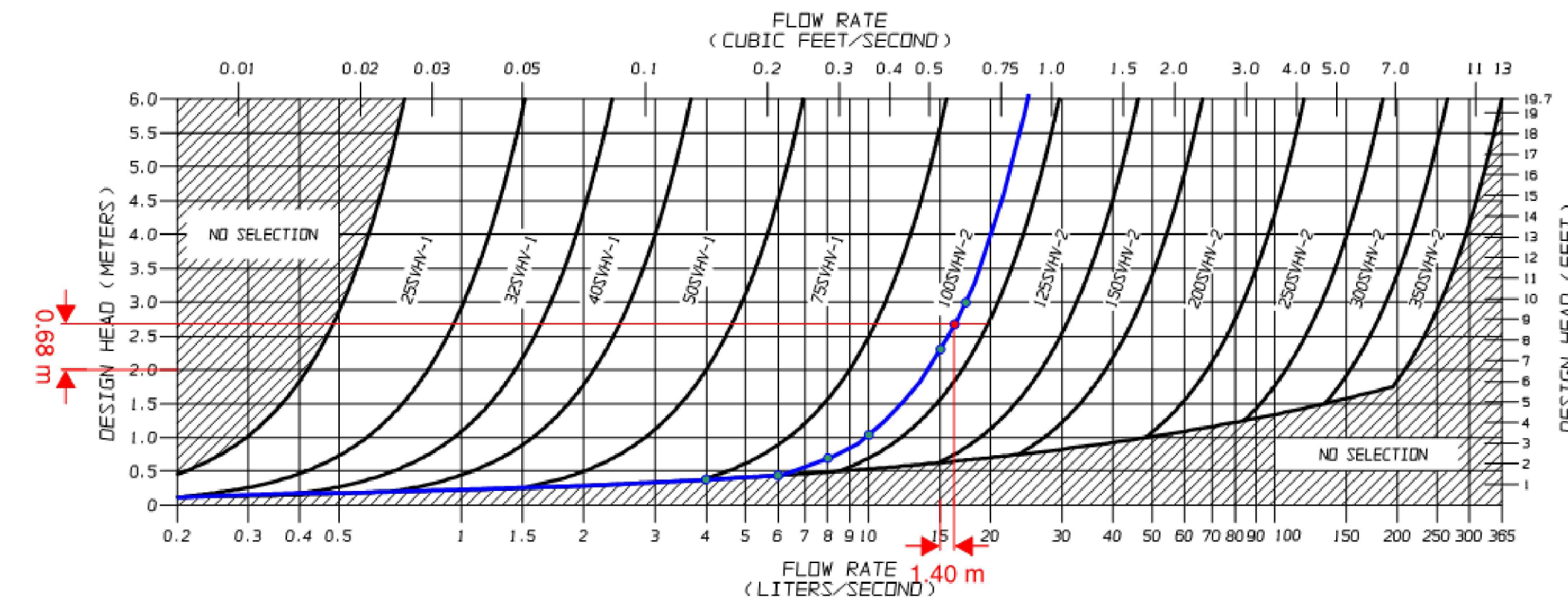


FIGURE 2 - SVHV

JOHN MEUNIER INC.