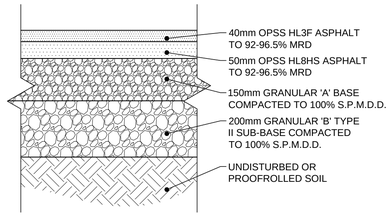
GEODETIC BENCHMARK INFORMATION

ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928:1978) AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA ELEVATION=95.230.

GENERAL NOTES:

1. READ ALL CIVIL DRAWINGS IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS, INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL, LANDSCAPE AND VENDOR DRAWINGS AS APPLICABLE.
2. THE CONTRACTOR FOR ANY PORTION OF WORK SHALL VISIT THE SITE AND SHALL BE THOROUGHLY FAMILIAR WITH ALL THE PHYSICAL FEATURES THAT MAY AFFECT THE WORK IN ANY WAY.
3. THE CONTRACTOR MUST FIELD CHECK AND VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE CONSULTANT PRIOR TO COMMENCEMENT OF ANY WORK.
4. THE CONTRACTOR SHALL KEEP WORK SITES CLEAN AND FREE OF ALL CONSTRUCTION DEBRIS DURING THE PROCESS OF CONSTRUCTION AND LEAVE THE SITE CLEAN UPON COMPLETION OF WORK OR PORTIONS OF THE WORK.
5. THE CONTRACTOR SHALL OBTAIN APPROVED SERVICE CONNECTION PERMITS FROM THE CITY OF OTTAWA PUBLIC WORKS BEFORE CONNECTING TO EXISTING SEWER, OR WATER MAIN.
6. THE CONTRACTOR SHALL NOT OPERATE EXISTING MUNICIPAL WATER SYSTEM VALVES. WATER MAIN FLUSHING, DISINFECTING AND TESTING PLAN TO BE SUBMITTED TO, AND APPROVED BY THE CITY OF OTTAWA PRIOR TO THE PERFORMANCE OF WORK. VALVES CAN ONLY BE OPERATED BY THE CITY OF OTTAWA OPERATIONAL STAFF. THE CITY REQUIRES A MINIMUM OF 48 HOURS WRITTEN NOTICE PRIOR TO ALL WORKS.
7. CONSULTANT MUST APPROVE ALL DEVIATIONS FROM THE WORKING DRAWINGS. THE CONTRACTOR MUST KEEP AN ACCURATE RECORD OF ALL CHANGES FROM THE ORIGINAL INFORMATION SHOWN ON THE CONSTRUCTION DRAWINGS.
8. FEATURES OF CONSTRUCTION NOT FULLY SHOWN ARE OF THE SAME CHARACTER AS THOSE NOTED FOR SIMILAR CONDITIONS.
9. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING:
   - OCCUPATIONAL HEALTH AND SAFETY ACT
   - ONTARIO REGULATION 213/91 - CONSTRUCTION PROJECTS
   - THE ONTARIO BUILDING CODE AND THE NATIONAL BUILDING CODE
   - THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS / DRAWINGS
10. ALL ELEVATIONS AND DIMENSIONS SHOWN ARE IN METERS, UNLESS NOTED OTHERWISE.
11. ALL BUILDING ELEVATIONS (MAIN FINISHED FLOOR, TOP OF FOUNDATION, BASEMENT FINISHED FLOOR) TO BE COORDINATED WITH ARCHITECTURAL DRAWINGS.
12. ALL NEW GRADING AFFECTING EXISTING SITE FEATURES (TREES, FENCES, LANDSCAPING, FOUNDATION WALLS, RETAINING WALLS, SLABS, BELL PEDESTALS, UTILITY POLES ETC.) TO BE COORDINATED WITH ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL, LANDSCAPE AND VENDOR DRAWINGS AS APPLICABLE.
13. PROVIDE APPROPRIATE SHORING FOR TRENCH EXCAVATION IN ACCORDANCE WITH THE LATEST REVISION OF THE OHSA GUIDELINE FOR CONSTRUCTION PROJECTS.
14. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SEWERS SHALL BE 2.5m. MINIMUM VERTICAL CLEARANCE BETWEEN SEWERS AND WATER MAINS WHICH CROSS IS 500mm.
15. RIGID PIPE TRENCH EXCAVATION AS PER OPSD 802.030 FOR EARTH EXCAVATION AND OPSD 802.033 FOR ROCK EXCAVATION, AS APPLICABLE.
16. FLEXIBLE PIPE TRENCH EXCAVATION AS PER OPSD 802.010 FOR EARTH EXCAVATION AND OPSD 802.013 FOR ROCK EXCAVATION, AS APPLICABLE
17. ALL SANITARY SEWER CONNECTIONS SHALL BE WITH PRE-MANUFACTURED TEES AND SHALL BE INSTALLED AT A MINIMUM GRADE OF 2% UNLESS NOTED OTHERWISE.
18. ALL WATER SERVICES TO BE INSTALLED WITH TRACER WIRE.
19. ALL WATER SERVICES TO BE INSTALLED WITH A MINIMUM OF 1.8m COVER. SEWERS TO BE INSTALLED WITH A MINIMUM COVER OF 2.20m AT THE PROPERTY LINE BELOW THE FINAL ROAD GRADE OR AT SUCH HIGHER ELEVATION ONLY AS MAY BE NECESSITATED BY THE LEVEL OF THE MAIN SEWER. ON PRIVATE PROPERTY THE MINIMUM SANITARY SEWER COVER IS TO BE NO LESS THAN 1.2m.
20. ALL WATER MAIN FITTINGS SHALL BE MECHANICALLY RESTRAINED. ALL FITTINGS SHALL BE INSTALLED WITH CORROSION RESISTANT COR-BLUE TEE BOLTS AND NUTS, OR APPROVED EQUAL.
21. ALL WATER MAIN FITTINGS SHALL BE CATHODICALLY PROTECTED AS PER OPSD 1109.011.
22. BUILDING SERVICES SHALL TERMINATE AT 1.5m FROM THE FACE OF THE BUILDING. SITE SERVICES CONTRACTOR TO COORDINATE, WITH THE MECHANICAL CONTRACTOR, THE CONNECTION OF SITE SERVICES, INCLUDING SANITARY STORM AND WATER, TO THE INTERNAL SERVICES.
23. GRADING IS NOT TO ADVERSELY AFFECT ADJACENT PROPERTIES.
24. ALL WORK WITHIN MUNICIPAL RIGHT-OF-WAYS REQUIRES ROAD OCCUP. PERMIT.
25. THE CONTRACTOR SHALL ENSURE ALL NEW AND EXISTING MANHOLES / CATCHBASINS / VALVES AND ANY OTHER APPURTENANCE WITHIN THE CONSTRUCTION AREA, TO MATCH FINISHED GRADE, AS REQUIRED.
26. NEW MAINTENANCE HOLES TO CONFORM TO OPSD 701.010 - 701.015 AS APPROPRIATE, WITH TYPICAL MAINTENANCE HOLE BENCHING AS PER OPSD 701.021.
27. NEW CATCH BASINS TO BE PER OPSD 705.010 WITH GRATES TO OPSD 400.020.
28. PRIOR TO THE INSTALLATION OF THE NEW SERVICE LINES, THE PIPE SUBGRADE SHOULD BE INSPECTED BY A GEOTECHNICAL ENGINEER.
29. PIPE BEDDING FOR WATER AND SEWER SERVICES SHOULD BE CONVENTIONAL CLASS 'B' PIPE BEDDING COMPRISING A MINIMUM 150mm THICK LAYER OF OPSS GRANULAR 'A' AGGREGATE BELOW THE PIPE INVERT.
30. GRANULAR 'A' TYPE AGGREGATE SHOULD BE PROVIDED AROUND THE PIPE TO AT LEAST 300mm ABOVE THE PIPE.
31. TRENCH BACKFILL SHOULD BE PLACED IN LIFTS WITH A MAXIMUM THICKNESS OF 300mm AND COMPACTED TO A MINIMUM 95% SPMDD.
32. REMOVAL OF EXISTING FEATURES OF THE SITE ARE TO BE CARRIED OUT IN ACCORDANCE WITH OPSS 510 AS APPLICABLE.
33. ROAD, PAVED AREAS AND GRASSED AREAS TO BE RESTORED TO THEIR ORIGINAL CONDITION OR AS PER THE CITY OF OTTAWA STANDARDS FOR ROAD RESTORATION IF EXISTS. TRENCH BACKFILLS WITHIN MUNICIPAL ROADWAYS TO BE WITH FULL DEPTH GRANULAR 'A'.
34. ALL BARRIER CURBS AS PER OPSD 600.110.
35. SIDEWALKS AS PER OPSD 310.010. IN LOCATIONS WHERE SIDEWALK IS ADJACENT TO CURB AND GUTTER, SIDEWALK TO BE AS PER OPSD 310.020. SIDEWALKS TO BE 125mm THICK, 30MPa CONCRETE COMPLETE WITH 100mmTHICK GRANULAR 'A' BASE COMPACTED TO 100% SPMDD. SIDEWALKS ARE TO MEET THE LATEST CITY OF NIAGARA FALLS STANDARDS AS WELL AS THE LATEST NPSCD FOR TACTILE SURFACES AND ACCESSIBLE SIDEWALK.
36. COMPACTION TESTS TO BE PROVIDED BY THE CONTRACTOR THROUGH A THIRD PARTY TESTING AGENCY.
37. PROVIDE SILT FENCE PROTECTION ON ALL NEW AND EXISTING CATCH BASIN COVERS AND AROUND PERIMETER OF AREA OF WORK DURING CONSTRUCTION AND REMOVE UPON COMPLETION.
38. ALL EXISTING AND PROPOSED DOWNSPOUTS SHALL DISCHARGE ONTO SPLASH PADS AT GRADE LEVEL WITH FLOWS DIRECTED AWAY FROM THE BUILDING FOUNDATIONS WITHOUT EROSION OR INCONVENIENCE TO OTHERS.



STANDARD DUTY ASPHALT DETAIL

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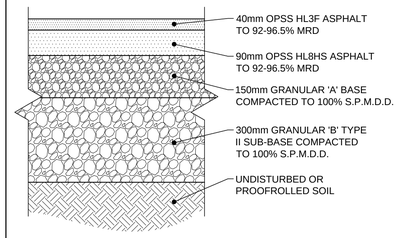
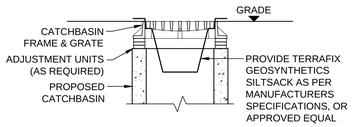


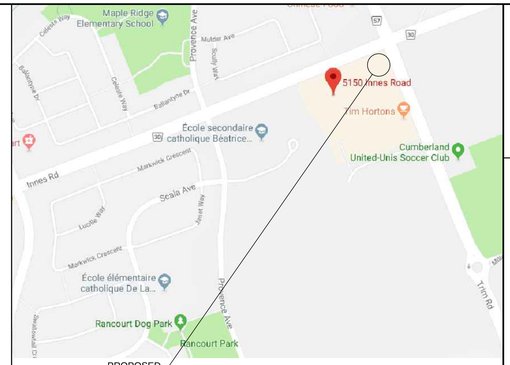
HEAVY DUTY ASPHALT DETAIL

SCALE: 1:10



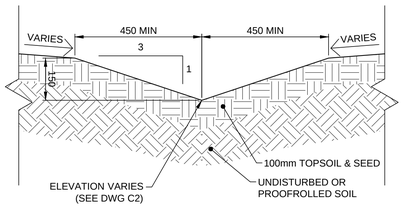
TYP. SEDIMENT TRAP

SCALE: 1:25



KEY PLAN

SCALE: NTS



TYP. SWALE DETAIL

SCALE: 1:10

LICENSED PROFESSIONAL ENGINEER
J. M. HALUCHA
Dec 06, 2019
PROVINCE OF ONTARIO

HALLEX ENGINEERING LTD.
745 South Service Rd. Unit 205, Stoney Creek, ON L8E 5Z2 Tel: 905-561-6016 Fax: 905-561-1105
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N

DATE	DRAWING REVISION	REV.
MAR. 13, 2019	ISSUED FOR SITE PLAN APPROVAL	0
DEC. 06, 2019	ISSUED FOR SITE PLAN APPROVAL	1

CLIENT:
ACK ARCHITECTS
443 EASTCHESTER AVENUE
ST. CATHARINES, ON
L2M 6S2

PROJECT:
PROPOSED FREESTANDING PAD BUILDING
5150 INNES ROAD,
ORLÉANS, ON

SHEET TITLE:
GENERAL NOTES
TYPICAL DETAILS
& KEYPLAN

DATE:	JAN./2019
SCALE:	AS SHOWN
DR. BY:	LB
CH. BY:	JS/JH
JOB No.:	190105
DWG.	**REV.**
C0	1

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