GRADING NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE METRIC, UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS AND DESIGN ELEVATIONS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER OR ARCHITECT WHERE APPLICABLE.
3. THE CONTRACTOR SHALL RESTORE TO ORIGINAL OR BETTER CONDITION FOR ANY EXISTING CONDITION DISTURBED DURING THE CONSTRUCTION AT CONTRACTOR'S EXPENSE.
4. CONTROL MANHOLES ARE TO BE BENCHED TO THE OBVERTS.
5. LANDSCAPING SHALL NOT ENCROACH ON BOULEVARD NOR SHALL BOULEVARD GRADES BE ALTERED.
6. ANY CONFLICT WITH EXISTING SERVICES SHALL BE RECTIFIED AS PER TOWNSHIP'S REQUIREMENTS.
7. MINIMUM VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE INVERTS OF THE SEWER AND A CROWN OF A WATER MAIN SHALL COMPLY WITH THE MUNICIPAL AND LOCAL BY-LAWS AT ALL CROSSINGS.
8. CONSTRUCT PAVEMENT AS PER GEOTECHNICAL REPORT.
9. ALL CONCRETE CURBS FROM EXISTING ROAD CURB TO STREET LINE SHALL BE BARRIER CURB TO TOWN STANDARDS. ALL CONCRETE CURB HEIGHTS SHALL BE 150mm ABOVE FINISHED GRADE (A.F.G.) UNLESS OTHERWISE NOTED. DRIVEWAY CURBS ARE TO BE DISCONTINUOUS AT SIDEWALKS AND TAPERED BACK MINIMUM OF 300mm OR TO THE APPROVAL OF DESIGN ENGINEER.
10. ALL REQUIRED CURB CUTTING AT ENTRANCES AND CURB DEPRESSIONS AT SIDEWALK CROSSINGS SHALL BE INSTALLED TO THE APPROVAL OF THE DESIGN ENGINEER.
11. A MINIMUM CLEARANCE OF 1000mm FROM ALL ABOVE GROUND SERVICES AND UTILITIES IS REQUIRED.
12. INSTALLATION OF WATER MAIN IN PRIVATE PROPERTY SHALL COMPLY WITH THE MUNICIPAL AND LOCAL BY-LAWS.
13. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. BELL, HYDRO, GAS, OR ANY OTHER UTILITIES THAT MAY EXIST ON THE SITE OR WITHIN THE STREET LINE MUST BE LOCATED AND VERIFIED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO CONSTRUCTION.
14. ALL SANITARY SEWER, STORM SEWER, AND WATERMAIN ON PRIVATE PROPERTY ARE TO BE INSTALLED IN ACCORDANCE WITH THE PROVINCIAL BUILDING CODE.
15. ALL WATERMAIN AND HYDRANT INSTALLATIONS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE LATEST PLANS, STANDARDS, AND SPECIFICATIONS OF THE LOCAL UTILITIES COMMISSION.
16. NO BLASTING IS PERMITTED ON THE TOWNSHIP'S RIGHT-OF-WAY AND NEAR ANY ADJACENT BUILDING.
17. THE PROPERTY IS TO BE GRADED AND SELF-CONTAINED SO THAT SURFACE DRAINAGE IS DIRECTED AWAY FROM THE BUILDINGS.
18. THE OWNER AND/OR CONTRACTOR IS REQUIRED TO OBTAIN A "ROAD CUT PERMIT" FROM THE MTO/TOWNSHIP BEFORE COMMENCING ANY WORK ON THE CITY'S ROAD

EROSION AND SEDIMENT CONTROL NOTES:

1. ESC MEASURES ARE TO CONFORM TO MTO GUIDELINES.
2. ALL EXPOSED SOIL SHALL BE STABILIZED AS SOON AS POSSIBLE WITH A SEED AND MULCH APPLICATION AS DIRECTED BY THE ENGINEER.
3. NO CONSTRUCTION ACTIVITY OR MACHINERY SHALL INTRUDE BEYOND THE SILT/SNOW FENCE OR LIMIT OF CONSTRUCTION AREA.
4. ALL CONSTRUCTION VEHICLES SHALL LEAVE THE SITE AT DESIGNATED LOCATIONS AS SHOWN ON THE PLANS.
5. STOCKPILES OF SOIL SHALL BE SET BACK FROM ANY WATERCOURSE AND STABILIZED AGAINST EROSION AS SOON AS POSSIBLE. A SET BACK OF AT LEAST 15M FROM ANY TOP-OF-BANK, WATERCOURSE OR POND IS REQUIRED.
6. CLEANING AND REPAIRS OF MUD-MATS AND ANY OTHER TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE COMPLETED AS DEEMED NECESSARY THROUGH REGULAR INSPECTION.
7. SEDIMENT/SILT SHALL BE REMOVED FROM THE SEDIMENT CONTROL DEVICES AFTER STORM EVENTS AND DEPOSITED IN AREAS AS APPROVED BY THE ENGINEER.
8. ALL RE-GRADED AREAS WITHIN THE DEVELOPMENT WHICH ARE NOT OCCUPIED BY BUILDINGS, ROADWAYS, SIDEWALKS, OR DRIVEWAYS SHALL BE TOP-SOILED AND SODDED/SEEDED IMMEDIATELY AFTER COMPLETION OF FINAL GRADING OPERATIONS AS DIRECTED BY THE ENGINEER.
9. PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION.
10. ALL EROSION CONTROL MEASURES ARE TO BE IN PLACE BEFORE STARTING CONSTRUCTION AND REMAIN IN PLACE UNTIL RESTORATION IS COMPLETE.
11. MAINTAIN EROSION CONTROL MEASURES DURING CONSTRUCTION.
12. ALL COLLECTED SEDIMENT MUST BE DISPOSED OFF AT AN APPROVED LOCATION.
13. MINIMIZE AREA DISTURBED DURING CONSTRUCTION. ALL DEWATERING MUST BE DISPOSED OF IN AN APPROVED SEDIMENTATION BASIN.
14. PROTECT ALL CATCH BASINS, MAINTENANCE HOLES AND PIPE ENDS FROM SEDIMENT INTRUSION WITH GEOTEXTILE (TERRAFIX 270R).
15. KEEP ALL SUMPS CLEAN DURING CONSTRUCTION.
16. PREVENT WIND-BLOWN DUST.
17. ALL SILT FENCING AND DETAILS ARE AT THE MINIMUM TO BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
18. ALL OF THE ABOVE NOTES AND ANY SEDIMENT & EROSION CONTROL MEASURES ARE AT THE MINIMUM TO BE IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
19. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ESC MEASURES IN WORKING CONDITION AT ALL TIMES TO THE SATISFACTION OF THE TOWN/CONSERVATION AUTHORITY. THE CONTRACTOR SHALL ROUTINELY INSPECT ALL ESC DEVICES AS FOLLOW:
FREQUENCY OF INSPECTIONS SCHEDULE DURING EARTHWORKS ACTIVITIES INCLUDES:
   - ON A WEEKLY BASIS;
   - PRIOR TO PREDICTED RAINFALL EVENTS;
   - AFTER EVERY RAINFALL EVENT;
   - AFTER SIGNIFICANT SNOWMELT EVENT; AND
   - DAILY DURING EXTENDED RAIN OR SNOWMELT PERIODS

SPECIFICATIONS FOR C.B'S AND M.H.'S

STORM:

1. DROP STRUCTURE IF REQUIRED AS PER OPSD 1003.010.
2. 600x600 PRECAST CB AS PER OPSD 705.010 c/w RELATED GRATING AS PER OPSD 400.020. GOSS TRAP AND SUBDRAINS AS PER MUNICIPALITY OF POWASSAN AND PARRY SOUND DISTRICT STANDARDS.
3. 1200ø PRECAST MH AS PER OPSD 701.010 c/w RELATED GRATING AS PER OPSD 401.020 U.N.O.
4. 1500ø PRECAST MH AS PER OPSD 701.011 c/w RELATED GRATING AS PER OPSD 401.020 U.N.O.
5. BENCHING AS PER OPSD 701.021.
6. ADJUSTMENT UNITS AND CAPS AS PER OPSD
7. SEWER COVER-GRANULAR 'A' CONFORMING TO OPSD 802.03.
8. CB CONNECTIONS AS PER OPSD 708.030
9. ALL EX. STORM AND SANITARY ABANDONED SHOWN ON THE PLAN OR ENCOUNTERED DURING CONSTRUCTION ARE TO BE EXCAVATED AT THE STREET LINE AND SEALED AS PER TOWNSHIP STD
10. WHEN THE DEPTH OF THE COVER OVER THE PROP. SANITARY OR STORM SEWERS IS LESS THAN THE FROST DEPTH, INSULATION TO BE CARRIED OUT AS PER CITY STANDARDS. THE INSULATION TO BE STYROFOAM BRAND H.I. TYPE IV OR EQUAL.

SANITARY:

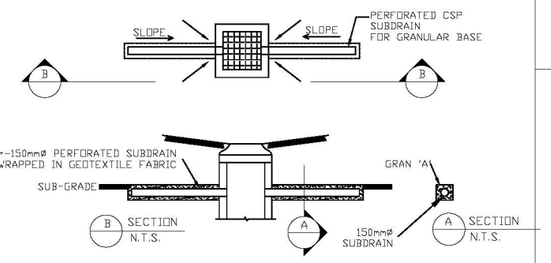
1. 1200ø PRECAST M.H'S AS PER OPSD 701.01 C/W RELATED GRATING AS PER OPSD 401.030.
2. DROP STRUCTURE IF REQUIRED AS PER OPSD 1003.010.
3. BENCHING AS PER OPSD 701.021.

WATERMAINS:

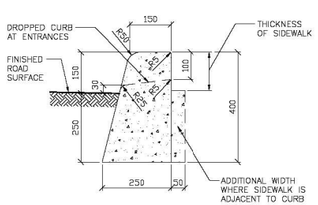
4. ALL NEW WATERMAIN CONNECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST MUNICIPAL AND MTO STANDARDS
5. WATERMAIN AND/OR WATER SERVICES TO HAVE A MINIMUM OF 2.5m HORIZONTAL SEPARATION FROM OTHER UTILITIES.
6. WHERE WATERMAIN AND/OR WATER SERVICES CROSSES UNDER SANITARY OR STORM SEWER A CLEARANCE OF 0.5m SHOULD BE PROVIDED, AS PER MOE PROCEDURE F-6-1.
7. BEDDING AND COVER MATERIAL TO BE INSTALLED AS PER TOWNSHIP'S STANDARD WITH GRANULAR "A" FOR BOTH BEDDING AND COVER.
8. WATER SERVICE TO HAVE MIN. 1.7m-1.9m COVER AS PER TOWNSHIP'S REQUIREMENT.
9. WATER SERVICE CONNECTIONS SHALL BE A MINIMUM OF 19mmø AND CONFORM TO ASTM B88-03 (ASTM B88M-05 FOR METRIC SIZES) TYPE PEX-A "MUNICIPEX" BY REHAU AS PER TOWNSHIP'S REQUIREMENTS

SERVICES NOTES

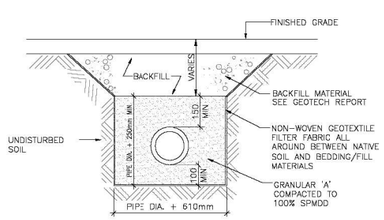
1. CONTACT LOCAL UTILITY AGENCIES (GAS, HYDRO & TELEPHONE) TO LOCATE THE EXISTING INCOMING SERVICES, AND USE THE SAME TO SERVE NEW INSTALLATIONS (IF APPLICABLE).
2. ALL STORM/SANITARY, AND WATERMAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MTO/TOWNSHIP'S STANDARDS AND SPECIFICATIONS AND THE LATEST EDITION OF THE ONTARIO BUILDING CODE.
3. WATER SERVICE TO BE PEX-A "MUNICIPEX" BY REHAU AND TO BE INSTALLED AT DEPTH OF 1.7-1.9m COVER FROM FINISHED GROUND.
4. THE MINIMUM UNINSULATED DEPTH FOR SEWER TO BE 1.2m AND THE MINIMUM UNINSULATED DEPTH FOR WATERMAINS TO BE 1.7m. SHOULD THE LATTER BECOME SHALLOWER THAN THE STANDARD DEPTHS, INSULATION WILL BE REQUIRED AS PER DETAIL SHOWN ON THIS DRAWING. ALL SEWER AND WATERMAIN MATERIAL CONFORM TO THE CURRENT MTO/TOWNSHIP'S STANDARDS AND SPECIFICATIONS.
5. WATERMAIN CROSSINGS TO BE IN ACCORDANCE WITH MOE PROCEDURE F-6-1 LOCAL GAS COMPANY TO DETERMINE THE SIZE OF NEW INCOMING GAS SERVICE.
6. WATER LINE MUST HAVE NITRILE GASKETS INSTALLED (NEOPRENE GASKETS ARE NOT ACCEPTABLE).




2 CB SUBDRAIN DETAILS
Scale: NTS

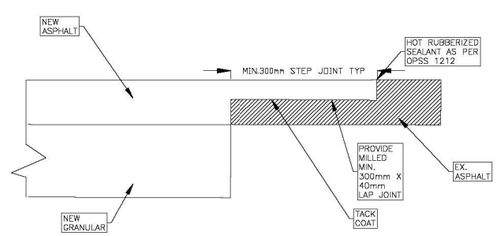



STANDARD CONCRETE BARRIER CURB.
OPSD 600.1'0




REFER TO GEOTECH REPORT FOR BACKFILL REQUIREMENTS

1 PIPE BEDDING DETAIL
Scale: NTS




ASPHALT LAP JOINT DETAIL
N.T.S.

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|---|---|
| Drawn By | RM |
| Reviewed By | SK |
| DWG Scale | N.T.S |
| File No. | 2107-335-00 |
| Date | 2022-10-15 |
| Date | 2022-10-15 |

C04

blueprint2build

LICENSED PROFESSIONAL ENGINEER
R. VELIRAGAN
100528939
9 JAN 2024
PROVINCE OF ONTARIO

NOTES

815 KING ST EAST
LEEDS AND THE THOUSAND ISLANDS, ON

REVISIONS

| REV | Date | Description | APRVD |
|---|---|---|---|
| 01 | 24.01.09 | ISSUED FOR SPA | RM |

File No. 2107-335-00

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