

SCHEDULE OF ONTARIO PROVINCIAL STANDARD DRAWINGS			
No.	TITLE	DATE	REV.
219.110	LIGHT DUTY SILT FENCE BARRIER	NOV. 2015	2
219.240	DEWATERING TRAP	NOV. 2015	2
405.010	MAINTENANCE HOLE STEPS, HOLLOW	NOV. 2013	3
509.010	PAVEMENT REINSTATEMENT FOR UTILITY CUTS	NOV. 2013	2
701.010	PRECAST CONCRETE MAINTENANCE HOLE, 1200MM DIAMETER	NOV. 2014	5
701.021	MAINTENANCE HOLE BENCHING AND PIPE OPENING DETAILS	NOV. 2014	4
701.030	PRECAST CONCRETE MAINTENANCE HOLE COMPONENTS, 1200MM DIAMETER TAPERED TOP AND FLAT CAP	NOV. 2014	4
701.031	PRECAST CONCRETE MAINTENANCE HOLE COMPONENTS, 1200MM DIAMETER TAPERED TOP AND FLAT CAP	NOV. 2014	2
704.010	PRECAST CONCRETE ADJUSTMENT UNITS FOR MAINTENANCE HOLES, CATCH BASINS, AND VALVE CHAMBERS	NOV. 2014	3
1006.020	SEWER SERVICE CONNECTIONS FOR RIGID MAIN PIPE SEWER	NOV. 2016	3

INDICATED.

DETAILS

INDICATING

AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THIS PLAN.

THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATEROURSE, DURING CONSTRUCTION ACTIVITIES THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, USING FILTER CLOTH UNDER THE GRATES OF CATCH BASINS AND MANHOLES AND INSTALLING SILT FENCES AND OTHER SEDIMENT TRAPS.

AT THE DISCRETION OF THE PROJECT MANAGER OR MUNICIPAL STAFF, ADDITIONAL SILT CONTROL DEVICES SHALL BE INSTALLED AT DESIGNATED LOCATIONS.

FOR SILT FENCE BARRIER USE OPSD 219.110 GEOTEXTILE FOR SILT FENCE SHALL BE ACCORDING TO OPSS 1860, TABLE 3.

EXCEPT AS PROVIDED IN PARAGRAPHS 4.(), -d () BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTTV T ES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THANDAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE (2. NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE BY THE 14TH

DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED. SEDIMENT THAT IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED IN A MANNER THAT AVOIDS ESCAPE OF THE SEDIMENT TO THE DOWNSTREAM SIDE OF THE CONTROL MEASURE AND AVOIDS DAMAGE TO THE CONTROL MEASURE SEDIMENT SHALL BE REMOVED TO THE LEVEL OF THE GRADE EXISTING AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOLLOWING:

5.1. FOR LIGHT DUTY SEDIMENT BARRIERS ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE FOLLOWING 5.1.1. A DEPTH OF ONE HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE. 5.1.2. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.

5.2. FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS.

PER OPSS 180.

6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MONITORED TO ENSURE THEY ARE IN EFFECTIVE WORKING ORDER. THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED PRIOR TO ANY FORECAST STORM EVENT AND FOLLOWING A STORM EVENT.

DUST CONTROL MEASURES SHOULD BE CONSIDERED PRIOR TO CLEARING AND GRADING. THE USE OF WATER, CALCIUM CHLORIDE FLAKES/SOLUTION OR MAGNESIUM CHLORIDE FLAKES/SOLUTION SHALL BE USED AS DUST SUPPRESSANTS AS PER OPSS 506. THIS IS TO LIMIT WIND EROSION OF SOILS WH CH MAY TRANSPORT SEDIMENTS OFFSITE, WHERE THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM.

8. ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL AND SOD AS SOON AS FEASIBLE, AS PER OPSS 570.

9. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.

10. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.

WATERCOURSE WITHOUT HARM.

13. ALL EROSON AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSS 577.

AND REPLACED AS REQUIRED. FOLLOWING: . 10 - 18 i- " X 8 i- " ABSORBENT PADS, . 5 LBS ZORBAL ABSORBING MATERIAL 1 PAIR GOGGLES, 1 PAIR PVC GLOVES

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 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROP OSED 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

8. ALL CURBS SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA STANDARDS (SC1.1).

9. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE

10. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN

EROSION AND SEDIMENT CONTROL NOTES:

WHERE THE INITIATION OF STABILIZATION MEASURES BY THE I4TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER,

WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITIES CEASED, (EG.THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO

5.3. ACCUMULATED SEDIMENT SHALL BE REMOVED IMMEDIATELY PRIOR TO THE REMOVAL OF THE CONTROL MEASURE. 5.4. ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS

11. STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS, MANHOLES), AND BE SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS TO BE LEFT IN PLACE IN EXCESS OF 14 DAYS.

12. IF REQUIRED, DEWATERING/SETTLING CATCHBASINS SHALL BE CONSTRUCTED AS PER OPSD 219.240 AND LOCATED ON FLAT GRADE UPSTREAM OF OTHER EXISTING MITIGATION MEASURES. WATERCOURSES SHALL NOT BE DIVERTED, OR BLOCKED, AND TEMPORARY WATERCOURSES CROSSINGS SHALL NOT BE CONSTRUCTED OR UTILIZED, UNLESS OTHERWISE SPERICIED IN THECONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY THE CONTRACTOR SHALL RELEASE ANY STRANDED FISH TO THE OPEN PORTION OF THE

14. WHERE DEWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSS 518.

15. ALLSETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 270R GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED

FOR POTEN JA SPILLS, THE CONTRACTOR SHALL HAVE ON SITE AT ALL TIMES AN EMERGENCY SPILL KIT THAT WILL INCLUDE AS A MINIMUM THE



LIST OF DRAWINGS

SG-01 (SITE GRADING, DRAINAGE AND EROSION CONTROL PLAN) SS-01 (SITE SERVICING PLAN)

SITE PLAN INFORMATION TEN 2 FOUR ARCHITECTURE INC.

55 EGLINTON AVE. EAST - SUITE 606, TORONTO, ONTARIO, M4P 1G8, T.416.440.1024, F.414.484.1024

SURVEY INFORMATION

ASSOCIATION OF ONTARIO LAND SURVEYORS. 1043 McNICOLL AVENUE, TORONTO, ONTARIO, M1W 3W6 T.416.491.9020, F.416-491-2576

BENCHMARK

ELEVATIONS SHOWN HERE ARE GEODETIC AND WERE ESTABLISHED USING LEICA SMARTNET AND ARE TRANSFORMED TO ORTHOMETRIC HEIGHTS USING HT2-0.





CITY OF OTTAWA

SITE GRADING, DRAINAGE & **EROSION CONTROL PLAN** OFFICE DEVELOPMENT

231 COBOURG STREET OTTAWA ONTARIO



CHECKED BY: ESIGNED BY: MS DATE: JULY, 2015 DRAWN BY: MS PROJECT No: PPROVED BY: NM SCALE: 1:100 DRAWING No: UD14-005 SG-01 COPYRIGHT 201 Lithos Group Ltd



GENERAL NOTES

DRAWING

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

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. 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.

6. 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.

7. ALL ELEVATIONS ARE GEODETIC.

8. REFER TO GEOTECHNICAL REPORT FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIRE MENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.

9. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.

10. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

11. PROVIDE LINE/PARKING PAINTING.

12. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS. STRUCTURE LOCATIONS. VALVE AND HYDRANT LOCATIONS. T/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

SEWER NOTES

1. CONSTRUCT ALL SEWER AND APPURTENANCES TO ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS, AS WELL AS THE CITY OF OTTAWA STANDARDS AS INDICATED.

2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.

3. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.

4. SUB-BEDDING, IF REQUIRED SHALL BE AS PER THE DIRECTION OF A GEOTECHNICAL ENGINEER

5. BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR SAND.

6. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.

7. SEWERS AND CONNECTIONS 150mm DIAMETER AND SMALLER TO BE PVC SDR 28 OR APPROVED EQUIVALENT. 8. SEWERS AND CONNECTIONS 200mm DIAMETER AND LARGER TO BE PVC

SDR 35 OR APPROVED EQUIVALENT. 9. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 1.5m OF COVER WITH THERMAL INSULATION.

10. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"x8' LONG MARKER.

WATERMAIN NOTES

1. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS AS WELL AS CITY STANDARDS AS INDICATED.

2. INDUSTRIAL/COMMERCIAL SERVICE CONNECTIONS TO BE 50mm COPPER PIPING AND SHALL CONFORM TO ASTM B88 TYPE 'K' SOFT.

3. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY DWG. No. W22

4. IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.

5. USE APPROVED SADDLE CONNECTION WITH MAIN (CORPORATION) STOP AS PER STD DWG W26.

6. CONNECTION TO EXISTING BY CITY, EXCAVATION, BACKFILLING AND REINSTATEMENT BY CONTRACTOR.

STD DWG W22. 8. THERMAL INSULATION OF WATERMAINS UNDER ROAD SIDE DITCHES AS

PER STD DWG W21

ISTING DWELLING AND SURROUNDING FEATUR DRIVEWAY, PATHWAYS, LANDSCAPING ETC.) SHA BE REMOVED PRIOR TO CONSTRUCTION.



