

Y/NY/NY/N Y/NY/NY/N

TI INSULATION

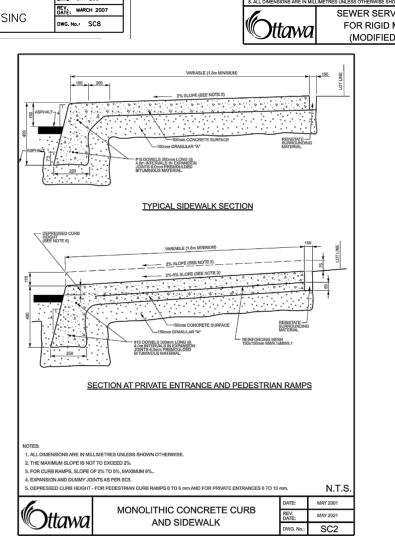
FOR 150 - 400mm (NOMINAL DIAMETER) WATERMAINS, WHERE THE DEPTH OF COVER IS LESS THAN 2400mm

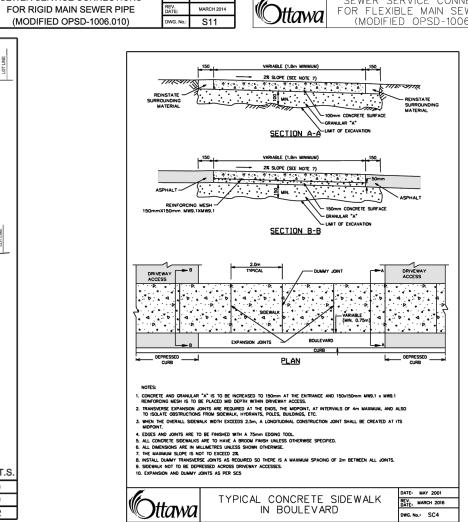
2. IN PROXIMITY OF MAINTENANCE HOLES, CULVERTS, CATCHBASINS, ETC., INSULATION SHALL BE PLACED PER DETAIL W2: 3. DEPTH OF COVER LESS THAN 1200mm REQUIRES SPECIAL DESIGN

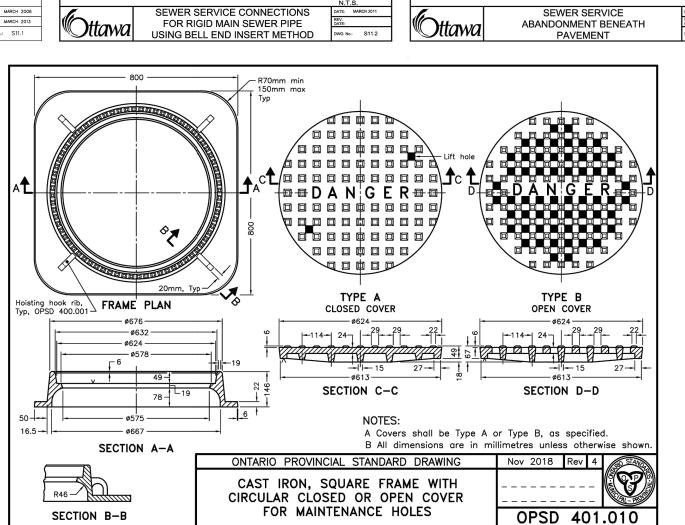
UNITERMAL INSULATION FOR WATERMAINS IN SHALLOW
TRENCHES

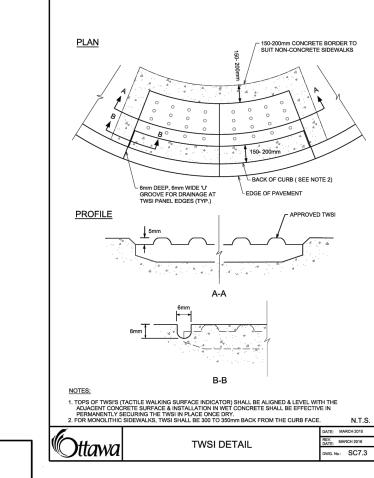
DATE: MAY 2001
REY. MARCH 2013
DWG. No.1 W22

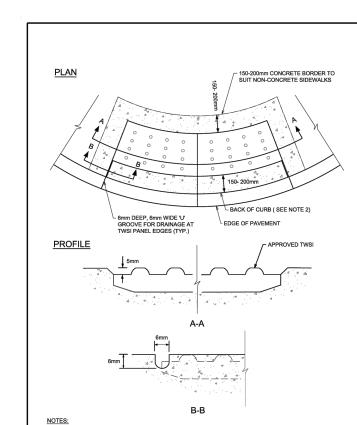
TI = THICKNESS OF INSULATION (mm)
H = DEPTH OF COVER
W = D + 300
W = WIDTH OF INSULATION (mm)











Stantec Consulting Ltd. 400 - 1331 Clyde Avenue

Ottawa ON

Tel. 613.722.4420 www.stantec.com

Copyright Reserved

Stantec without delay

authorized by Stantec is forbidden.

Best Management Practices

CONSTRUCTION ACTIVITIES.

REGULATORY AGENCY

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that

PROPOSED SILT FENCE AS PER OPSD 219.110

PROPOSED MUD MAT LOCATION

THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR

PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING

THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE

EROSION MUST BE MINIMIZED AND SEDIMENTS MUST BE REMOVED FROM CONSTRUCTION SITE

AND SEDIMENTATION SHOULD BE CONTROLLED BY THE FOLLOWING TECHNIQUES:

REVEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE.

PROTECT EXPOSED SLOPES WITH PLASTIC OR SYNTHETIC MULCHES.

LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME.

OFF SITE AS PER THE REQUIREMENTS OF THE CONTRACT.

AUTHORIZATION FROM THE CONTRACT ADMINISTRATOR.

THE CONTRACTOR WITHOUT DELAY.

SEDIMENT IS TO BE REMOVED.

ALL ROADWAYS AFFECTED BY SITE.

MINIMIZE AREA TO BE CLEARED AND GRUBBED.

RUN-OFF FROM THE SITE.

RUN-OFF IN ORDER TO PROTECT DOWNSTREAM AREAS. DURING ALL CONSTRUCTION, EROSION

INSTALL CATCH BASIN INSERTS OR EQUIVALENT IN ALL PROPOSED CATCH BASINS AND CATCH BASIN MANHOLES AND IN ALL EXISTING CATCH BASINS THAT WILL RECEIVE

A VISUAL INSPECTION SHALL BE DONE DAILY ON SEDIMENT CONTROL MEASURES AND

CLEANED OF ANY ACCUMULATED SILT AS REQUIRED. THE DEPOSITS WILL BE DISPOSED

SEDIMENT CONTROL BARRIERS MAY ONLY BE REMOVED TEMPORARILY WITH APPROVAL OF CONTRACT ADMINISTRATOR TO ACCOMMODATE CONSTRUCTION OPERATIONS. ALL AFFECTED BARRIERS MUST BE REINSTATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED. NO REMOVAL WILL OCCUR IF THERE IS A SIGNIFICANT RAINFALL EVENT ANTICIPATED (>10mm) UNLESS A NEW DEVICE HAS BEEN INSTALLED TO PROTECT EXISTING STORM AND SANITARY SEWER SYSTEMS, OR DOWNSTREAM WATERCOURSES

CONTRACTOR SHALL REMOVE SEDIMENT CONTROL MEASURES WHEN, IN THE OPINION OF

NO REFUELING OR CLEANING OF EQUIPMENT IS PERMITTED NEAR ANY EXISTING

THE CONTRACT ADMINISTRATOR, THE MEASURE(S) IS NO LONGER REQUIRED. NO CONTROL MEASURES SHALL BE PERMANENTLEY REMOVED WITHOUT PRIOR WRITTEN

THE CONTRACTOR SHALL PERIODICALLY, OR WHEN REQUESTED BY THE CONTRACT

12. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL

DISCHARGES OF SEDIMENT MATERIAL INTO THE WATERCOLIRSE APPROPRIATE

15. CB'S ARE TO BE INSPECTED FOLLOWING RAINFALL EVENTS AND ACCUMULATED

CONTRACTOR IS REQUIRED TO REGULARLY CLEAN DEBRIS AND KEEP DUST DOWN ON

RESPONSE MEASURES. INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR

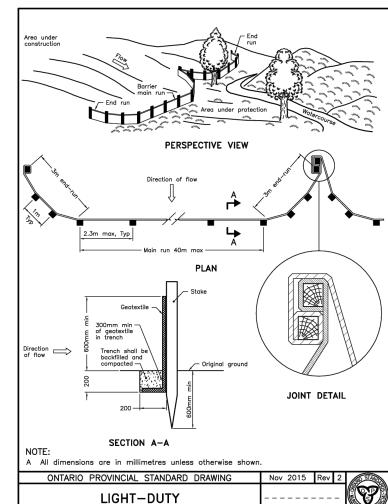
THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY

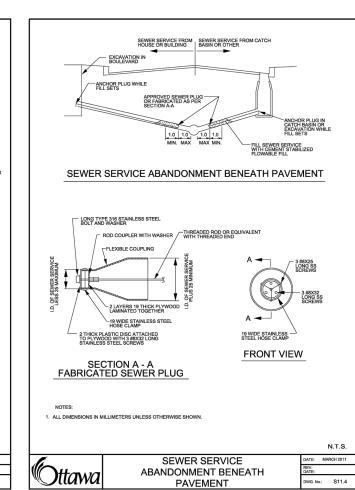
ADMINISTRATOR, CLEAN OUT ACCUMULATED SEDIMENTS AS REQUIRED.

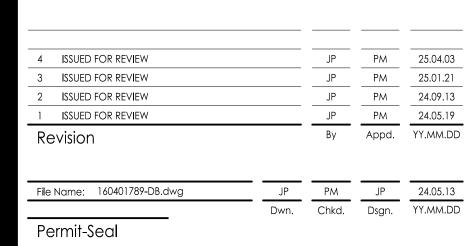
13. CONTRACTOR SHALL INSTALL MUD MATS AT ENTRANCE TO THE SITE. 14. STORMWATER SWALES TO BE COVERED WITH HYDRO-SEED AND MULCH.

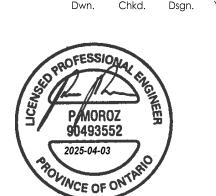
A SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF ALL AND ANY STOCKPILES OF MATERIAL TO BE USED OR REMOVED FROM SITE. (LOCATION TO BE

PROPOSED CATCH BASIN PROTECTION AS PER DETAIL.











Client/Project WINDMILL DEVELOPMENT GROUP LTD.

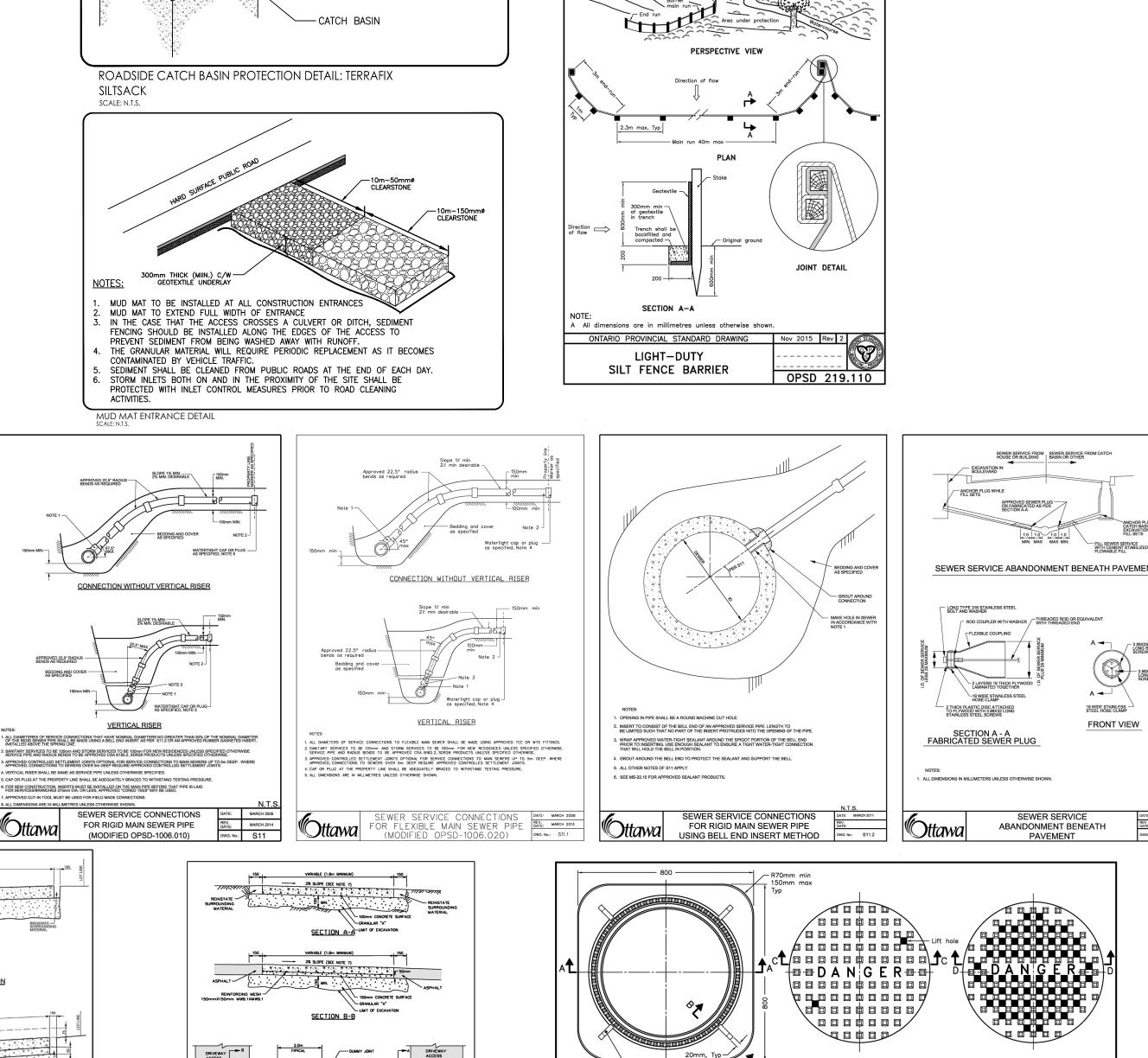
THE EVERGREEN ON BLACKBURN

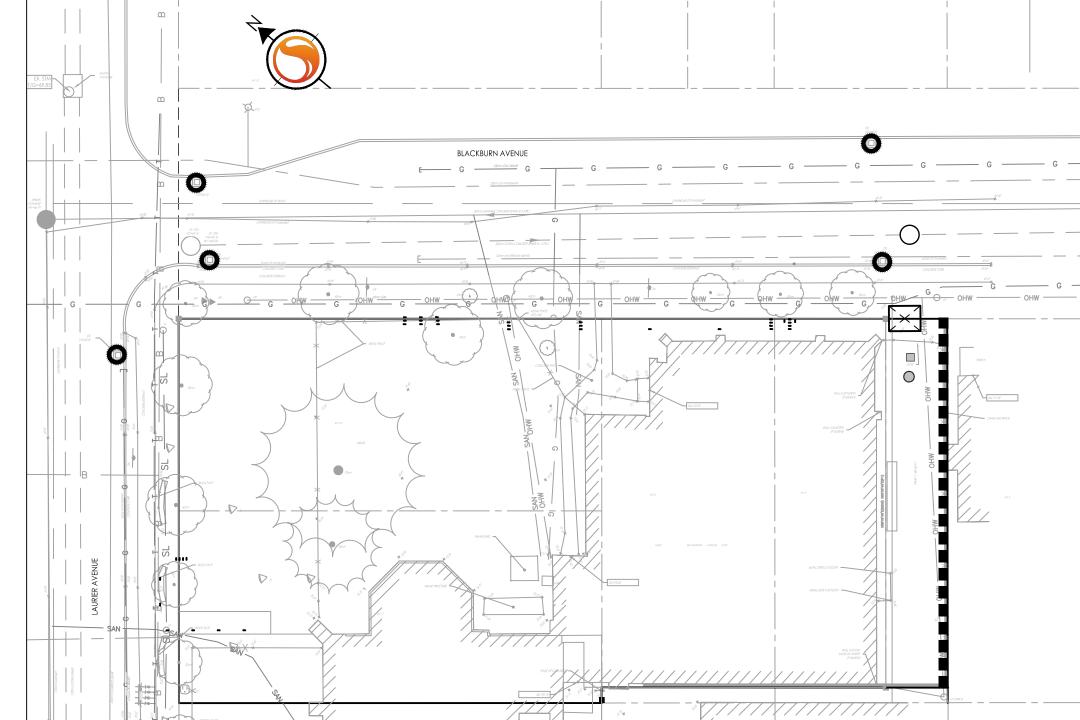
Ottawa, ON

EROSION CONTROL & DETAILS SHEET

Project No. Scale 160401789 Sheet Drawing No. Revision

DWG# 19193





CURB RETURN AT A PRIVATE OR COMMERCIAL ENTRANCE - UNCONTROLLED INTERSECTION

CURB RETURN AT A PRIVATE OR COMMERCIAL ENTRANCE WITH BOULEVARD - UNCONTROLLED INTERSECTION

5. UNCONTROLLED INTERSECTION MEANS AN ENTRANCE NOT LOCATED AT A TRAFFIC SIGNAL OR ALL-WAY STOP CONTROL.

UNCONTROLLED INTERSECTIONS

FULL DEPTH KEY

FULL DEPTH SAWCUT
TREAT ALL CUT FACES WITH TACK COAT
BEFORE PLACING ASPHALT

. EXISTING GRANULAR 'A

O EXISTING GRANULAR 'B'

EXISTING LIFTS OF ASPHALT

- OPTION *1

EXCAVATED TRENCH COMPACTED IN ACCORDANCE WITH D-029 TABLE 2

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

2. UNLESS SPECIFIED ELSEWHERE, SURFACE COURSE ASPHALT SUPERPAVE 12.5mm LEVEL B (PG58-34) AND BASE COURSE ASPHALT SUPERPAVE 19.0mm LEVEL B (PG58-34) IS TO BE USED.

3. UNLESS SPECIFIED ELSEWHERE, WHERE EXISTING PAVEMENT STRUCTURE EXCEEDS 150mm IN DEPTH, ASPHALT REINSTATEMENT SHALL BE 150mm AND GRANULAR "A" FOR THE REMANDER.

4. UNLESS SPECIFED ELSEWHERE, WHERE AN UNDERLYING LAYER OF CONCRETE PAVEMENT EXISTS, REINSTATEMENT SHALL CONSIST OF 150mm OF SUPERPAVE 19.0mm LEVEL B (PG58-34) COMPACTED IN LIFTS.

4. MAXIMUM SLOPE VARIES, SEE PRIVATE APPROACH BYLAW.

2. CURB DETAILS SEE SC1.1, SC1.2 AND SC1.3.

SURFACE COURSE KEY

GRANULAR 'B TYPE 2 - REINSTATE EXISTING (300mm MIN.) -

MATCH EXISTING ASPHALT DEPTHS LIFTS TO BE 50mm DEPTH MAXIMUM, COMPACTED AS PER OPSS 310

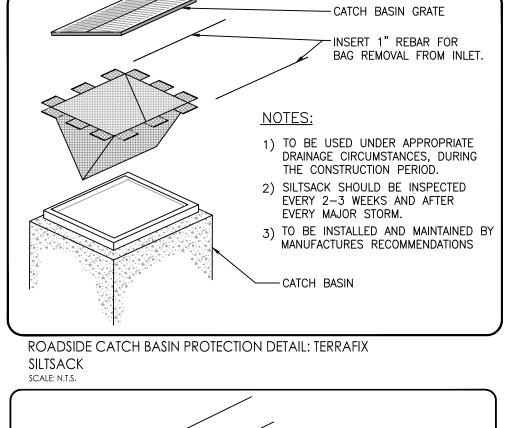
5. UNLESS SPECIFIED ELSEWHERE, HOT MIX ASPHALT PLACEMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH F-3130.

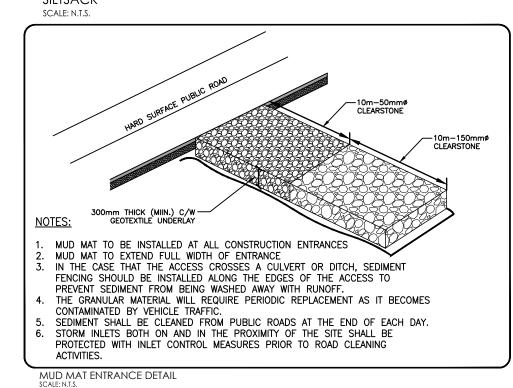
1. ALL EXISTING ASPHALT TO BE SAW CUT.

OPTION *2 ---

1.5m CURB — TRANSITION

DATE: MARCH 2007





APPROVED 22.5° RADIUS — BENDS AS REQUIRED

SLOPE 1% MIN. 2% MIN. DESIRABLE

VERTICAL RISER

150mm MIN.—

APPROVED 22.5° RADIUS BENDS AS REQUIRED

BEDDING AND COVER -AS SPECIFIED