

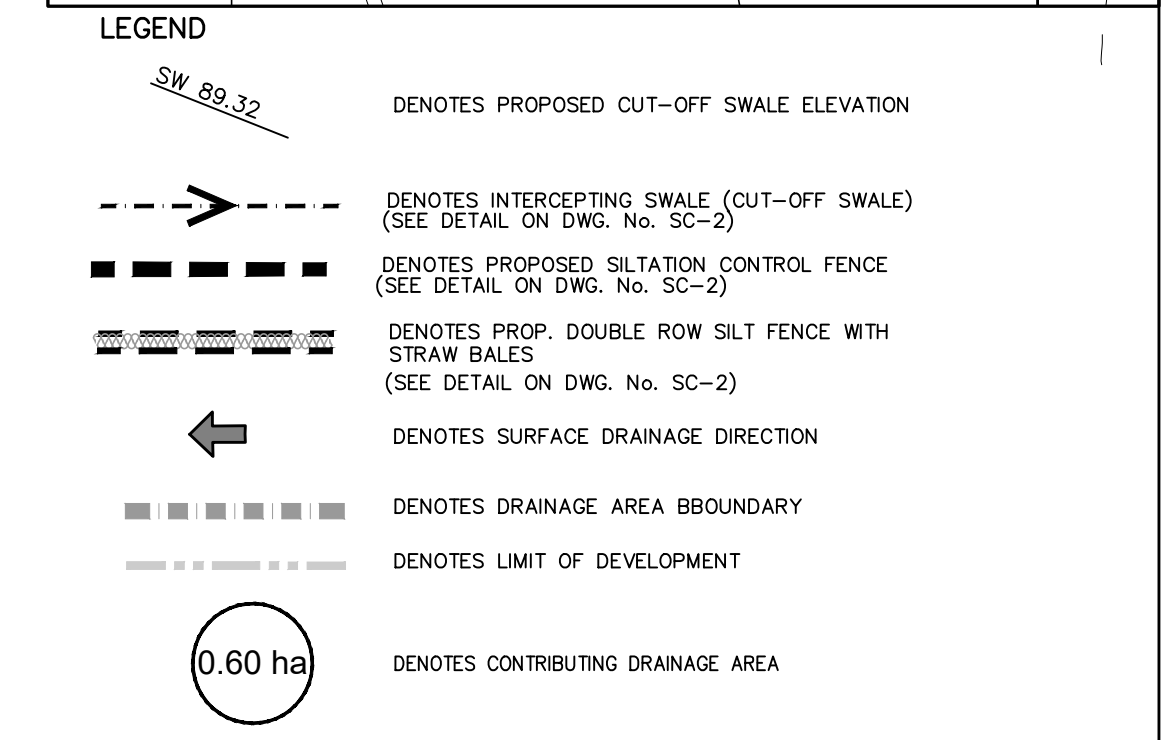
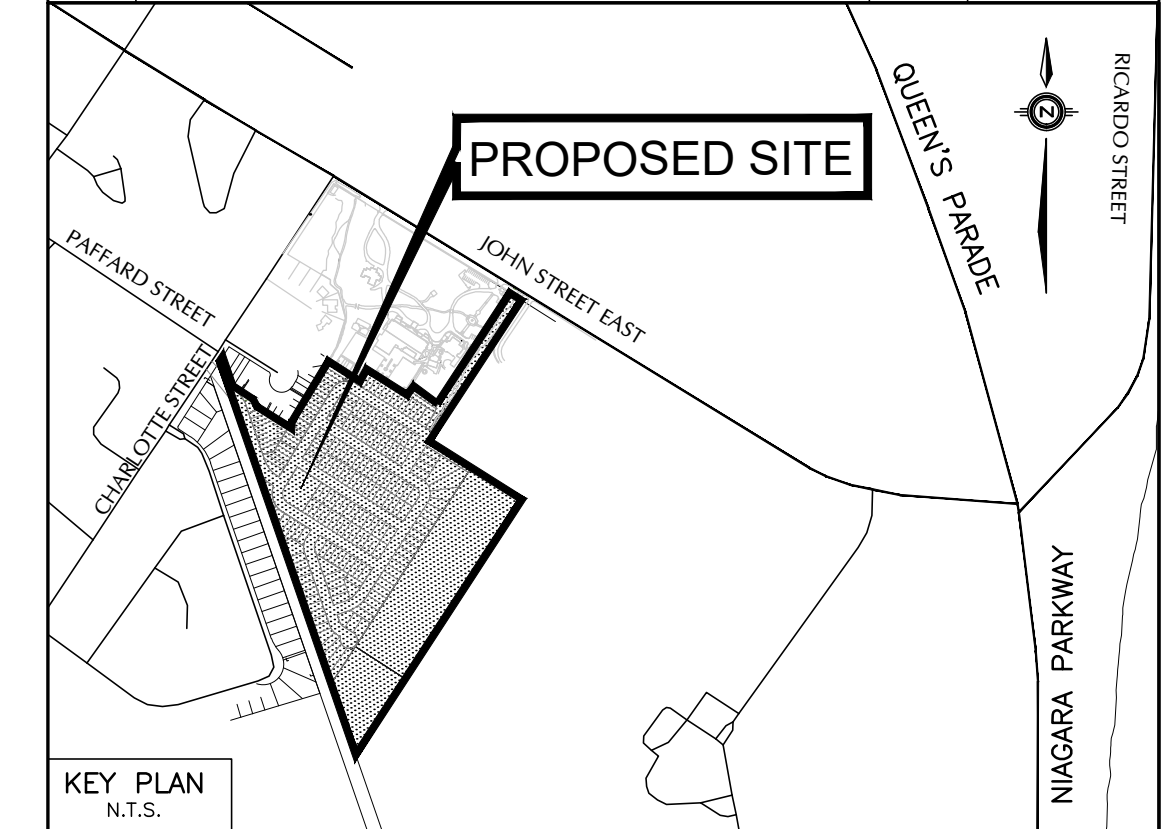
- POND CONSTRUCTION NOTES:**
1. EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED AT ALL NOTED LOCATIONS PRIOR TO CONSTRUCTION.
 2. SEDIMENT POND TO BE IMPLEMENTED PROPERLY PER DESIGN DRAWINGS.
 3. SEDIMENT POND EROSION & SEDIMENT CONTROLS TO BE MAINTAINED IN GOOD WORKING ORDER THROUGHOUT AND SUBSEQUENT TO CONSTRUCTION AND TO REMAIN UNTIL THE SITE HAS BEEN STABILIZED TO THE SATISFACTION OF THE CITY AND CITY.
 4. SEDIMENT POND SIDE SLOPES TO BE MAX. 4:1, BERM SIDE SLOPES TO BE MAX. 3:1, AND STABILIZED IMMEDIATELY AFTER CONSTRUCTION USING EROSION CONTROL BLANKET COR MAT 400 WITH SEEDS ABOVE NORMAL WATER LEVEL, AS INDICATED IN THE DWG. BERM FOR SEDIMENT POND TO BE ALSO STABILIZED IMMEDIATELY AFTER CONSTRUCTION WITH SEEDS.
 5. SEDIMENT POND TO BE SURVEYED MIN. EVERY 6 MONTHS AND CLEANED OF SEDIMENT ONCE 50% OF THE FOREBAY DESIGN VOLUME IS FILLED WITH SEDIMENTS.
 6. ALL AREAS DISTURBED DUE TO CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE CITY AND CITY. DISTURBED AREAS TO BE STABILIZED WITH SEEDING, BLANKETS, DIRT GLUE POLYMER, SILT STOP POLYMER, IF LEFT UNWORKED WITHIN 30 DAYS.
 7. EROSION AND SEDIMENT CONTROLS ASSOCIATED WITH SEDIMENT POND TO BE MONITORED/INSPECTED WEEKLY, MAINTAINED AND REPAIRED WITHIN 48 HOURS.
 8. UPON COMPLETION OF CONSTRUCTION WORKS SEDIMENT POND(S) SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
 9. CONSTRUCTION EQUIPMENT FUELING AND MAINTENANCE TO BE DONE AS FAR AS REASONABLY POSSIBLE FROM NATURAL FEATURES. (MINIMUM 15.0m FROM ANY DRAINAGE FEATURE.)
 10. CONTRACTOR SHOULD CARE AND CONTROL SPILLS, FLUIDS AND MATERIALS DURING CONSTRUCTION TO MINIMIZE RISK TO THE ENVIRONMENT.
 11. IF NEEDED, ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES WILL BE PROPERLY IMPLEMENTED TO ENSURE THAT SEDIMENTS ARE EFFECTIVELY ISOLATED AND NOT CONVEYED TO THE WATERCOURSE.
- POND DECOMMISSIONING NOTES:**
1. A DRY DAY SHOULD BE SELECTED, SUCH THAT POND CONTAINS ONLY PERMANENT VOLUMES.
 2. THE PERMANENT POOL SHOULD BE PUMPED TO A FILTER BAG/SOCK AND DIRECTED TO A MATTED (TERRAFOX SC-32 OR BETTER -COCONUT/STRAW MIXTURE) AND VEGETATED SURFACE CONVEYANCE SWALE TO THE POINT OF DISCHARGE TO A POINT OF FLOW DISPERSION AT THE DIRECTION OF THE ENGINEER.
 3. A BACKHOE OR SIMILAR MACHINERY SHOULD BE USED TO "SCOOP OUT" ACCUMULATED SEDIMENT WITHIN THE SEDIMENT POND.
 4. THESE SEDIMENTS SHOULD EITHER BE ALLOWED TO DRY (FOR FUTURE COLLECTION AND DISPOSAL) OR IMMEDIATELY TRUCKED OFF SITE TO A SUITABLE LOCATION.
 5. THE SILTATION POND SHALL BE FILLED WITH FILLING MATERIAL TO THE PROPOSED GRADING.

TEMP. SEDIMENT POND TOPSOIL STRIPPING ONLY		
TOTAL DRAINAGE AREA TO THE POND	2.82 ha	
REQUIRED STORAGE BELOW PERM. W.L. (185 cu.m/ha)	REQUIRED	PROVIDED
	521.7cu.m	568.50cu.m
REQUIRED STORAGE ABOVE PERM. W.L. (185 cu.m/ha)	521.7cu.m	629.0cu.m
HIGH WATER ELEVATION (WEIR ELEVATION)	EL. 89.00	
PERMANENT WATER ELEVATION	EL. 88.50	
BOTTOM OF POND	EL. 87.90	
PEAK RELEASE RATE (48 HR)	0.0098 m ³ /s	
ORIFICE SIZE (mm)	75	
N° OF PERFORATIONS IN HICKENBOTTOM PIPE/ PERFORATION SIZE (mm)	35/25	

GENERAL NOTES FOR EROSION AND SEDIMENT CONTROL

1. THIS DRAWING IS TO BE USED ONLY FOR EROSION AND SEDIMENT CONTROL.
 2. ALL SEDIMENTS AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND IN PROPER WORKING ORDER PRIOR TO THE REMOVAL OF ANY TOPSOIL. THE EXACT LOCATION TO BE DETERMINED IN THE FIELD AND IS TO BE APPROVED BY THE CITY.
 3. THE CONTRACTOR SHALL ENDEAVOUR TO PREVENT MUD TRUCKING ONTO EXISTING RIGHT-OF-WAY AND SHALL PROVIDE FOR CLEAN UP AT HIS OWN EXPENSE AS DIRECTED BY ENGINEER. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CONTROL DUST IN THE PROJECT SITE AND SHALL PROVIDE AT HIS EXPENSE, CONTROLLING MEASURES AS DIRECTED BY THE ENGINEER.
 4. ANY TREE SELECTED BY LANDSCAPE ARCHITECT FOR PRESERVATION TO BE PROTECTED BY SNOW FENCE. LANDSCAPE ARCHITECT TO INDICATE ANY TREES THAT ARE TO BE TRANSPLANTED.
 4. TOPSOIL STRIPPING TO BE PHASED WHERE POSSIBLE TO LIMIT SOIL EXPOSURE.
 5. CARRY OUT WEEKLY AND AFTER RAINFALL EVENTS INSPECTION OF EROSION AND SEDIMENT CONTROL MEASURES AND REPAIR OR MAINTAIN WITHIN 48 HOURS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER.
 6. SEDIMENT FENCE TO BE MAINTAINED IN GOOD WORKING ORDER THROUGHOUT AND SUBSEQUENT TO CONSTRUCTION AND TO REMAIN UNTIL THE SITE HAS BEEN STABILIZED TO THE SATISFACTION OF THE CITY AND CITY.
 7. SEDIMENT POND SIDE SLOPES TO BE MAX. 4:1 AND STABILIZED WITHIN 30 DAYS OF POND EXCAVATION USING BLANKETS (COR MATTING 400 OR COMPOST EROSION CONTROL BLANKET)
 8. SEDIMENT POND TO BE SURVEYED MIN. EVERY 6 MONTHS AND CLEANED OF SEDIMENT ONCE 50% OF THE FOREBAY DESIGN VOLUME IS FILLED WITH SEDIMENTS.
 9. ALL AREAS DISTURBED DUE TO CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE CITY AND CITY. DISTURBED AREAS TO BE STABILIZED WITH SEEDING, BLANKETS, DIRT GLUE POLYMER, SILT STOP POLYMER, IF LEFT UNWORKED WITHIN 30 DAYS.
 10. TOPSOIL AND/OR FILL MATERIAL NOT TO BE USED ON SITE, TO BE DISPOSED OFF SITE IMMEDIATELY.
 11. ALL TOPSOIL STOCKPILE SHALL BE SURROUNDED WITH SEDIMENT CONTROL FENCING. ALL PILES WHICH ARE STOCKED FOR MORE THAN 30 DAYS SHALL BE SEED.
 12. UPON COMPLETION OF CONSTRUCTION WORKS SEDIMENT TRAPS AND SEDIMENT FENCES SHALL BE REMOVED. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
 13. CONSTRUCTION EQUIPMENT FUELING AND MAINTENANCE TO BE DONE AS FAR AS REASONABLY POSSIBLE FROM NATURAL FEATURES.
 14. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SPILLS OF FLUIDS AND MATERIALS DURING CONSTRUCTION TO MINIMIZE RISK TO THE ENVIRONMENT.
 15. THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THIS PLAN ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO PREVENT AS MUCH AS POSSIBLE, SEDIMENT RELEASES TO THE NATURAL ENVIRONMENT.
- NOTE**
WHERE A GAP IN SILT FENCE IS PROVIDED FOR SILT/DIRT, THE SILT FENCE TO BE TIED INTO SILT/DIRT TO ENSURE THE FLOWS DO NOT BYPASS THOSE MEASURES THROUGH ANY GAPS IN PERIMETER CONTROLS.

REVISIONS			
No.	DESCRIPTION	By	Date



BENCHMARK No.
ELEVATIONS ARE BASED ON THE CANADIAN GEODETIC DATUM AND WERE DERIVED FROM BENCH MARK 63U3536, HAVING A PUBLISHED ELEVATION OF 87.59 metres.

No.	Date	ISSUED FOR
1.	20/07/10	ISSUED FOR DRAFT PLAN OF SUBDIVISION

PROFESSIONAL ENGINEER
F. TCHOURKINE
JULY 10, 2020
PROVINCE OF ONTARIO

SOLMAR (NIAGARA 2) INC.
RESIDENTIAL SUBDIVISION
200 JOHN STREET EAST, NIAGARA ON THE LAKE, ONTARIO

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PROJECT No. 2018-4696 DRAWING No. SC-1

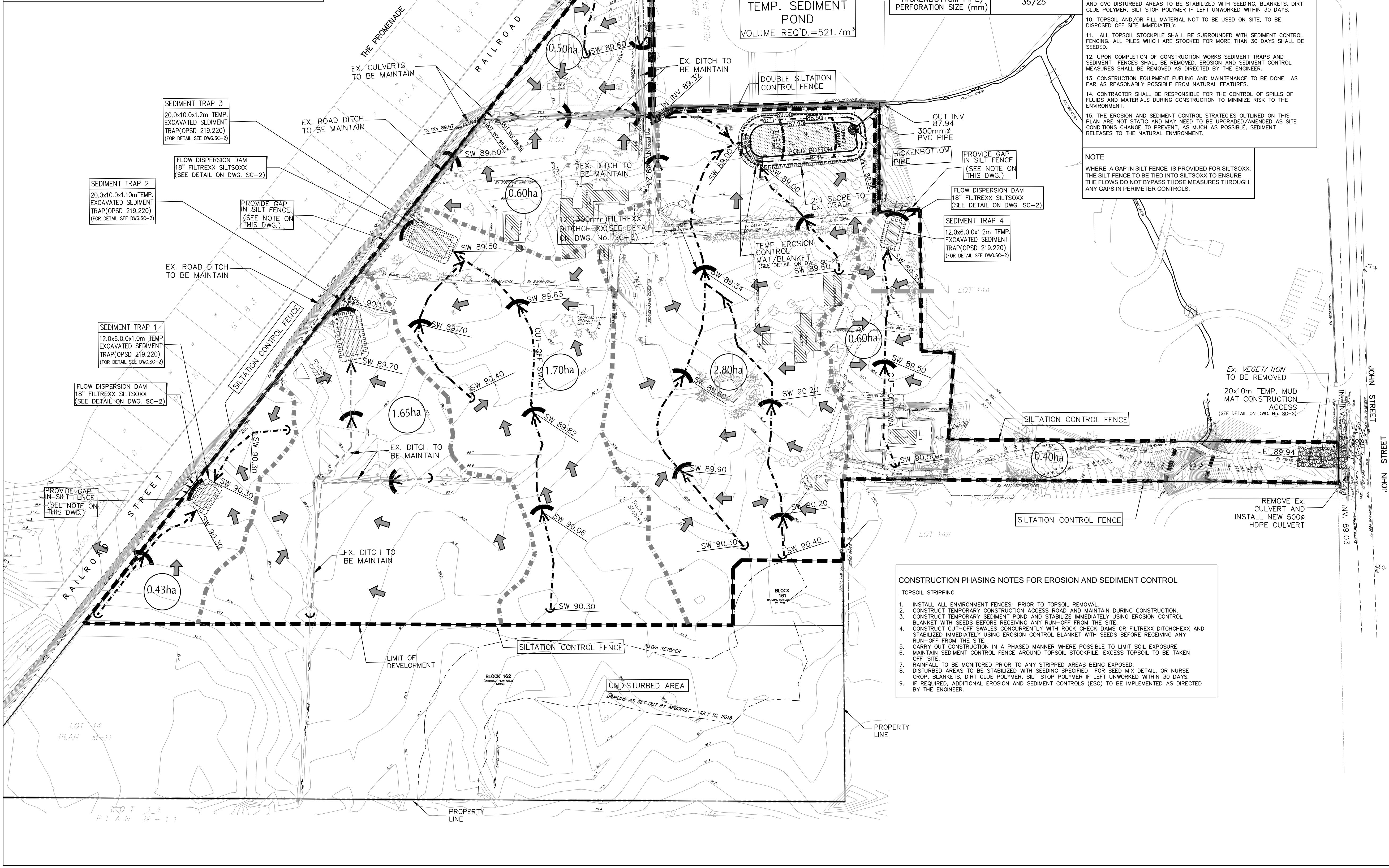
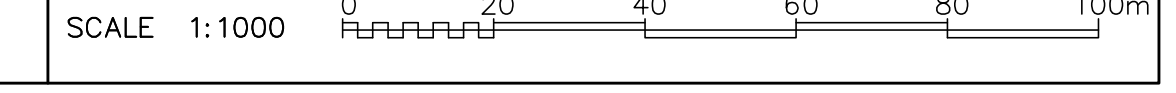


OPERATIONS DEPARTMENT APPROVAL
SIGNATURE: DOUG KERR DATE: _____
MANAGER OF PUBLIC WORKS

FIRE DEPARTMENT APPROVAL
SIGNATURE: ALEX BURBIDGE DATE: _____
FIRE CHIEF

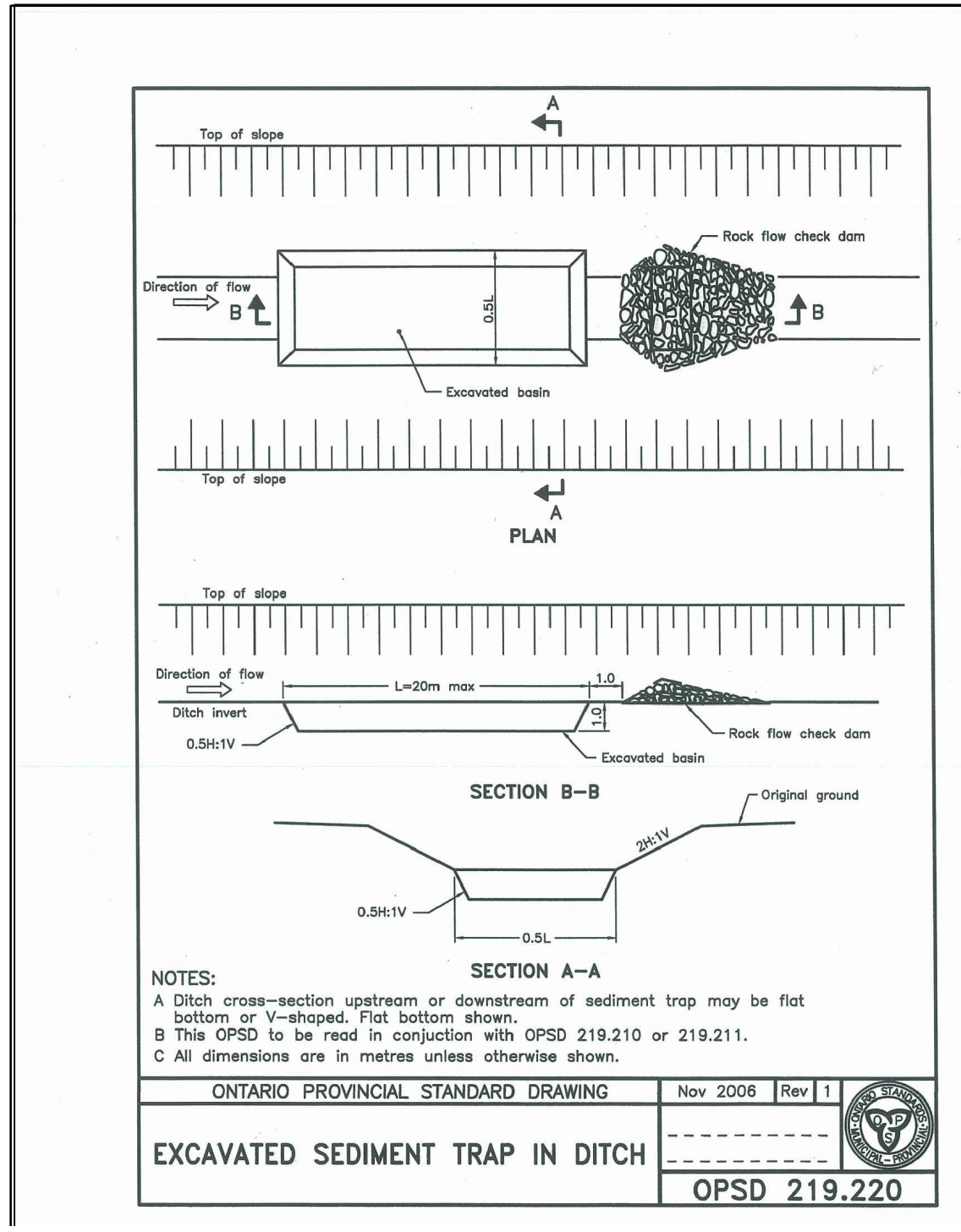
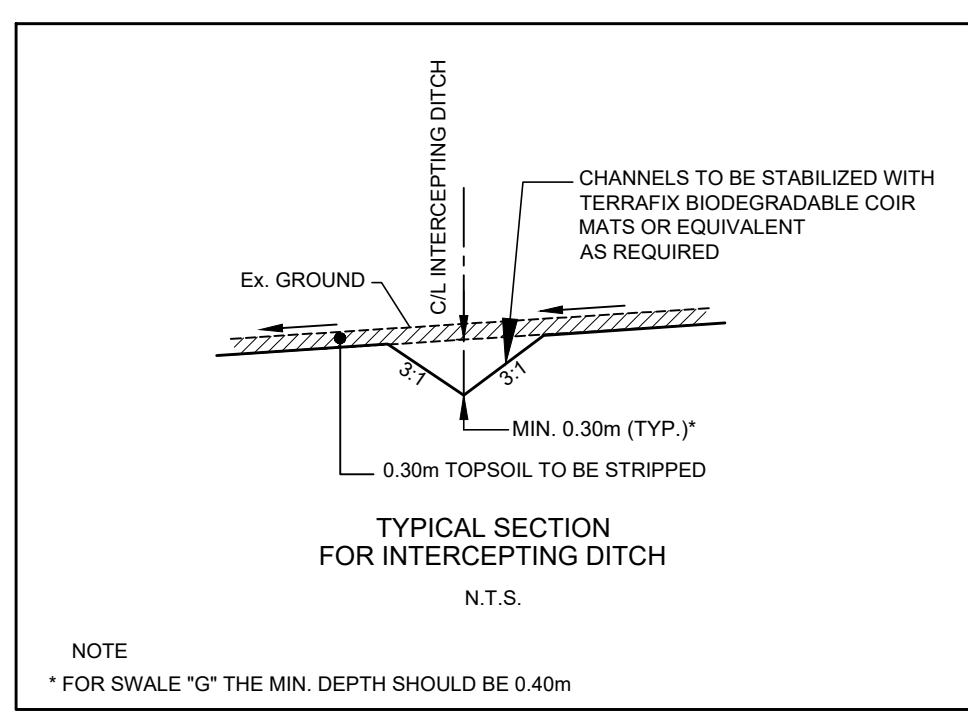
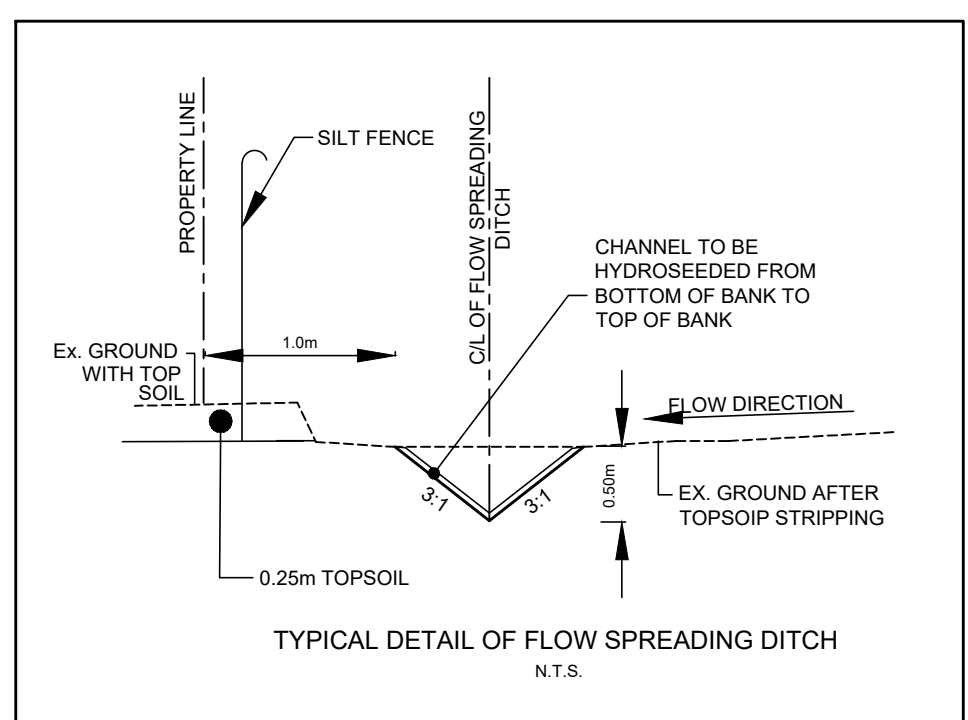
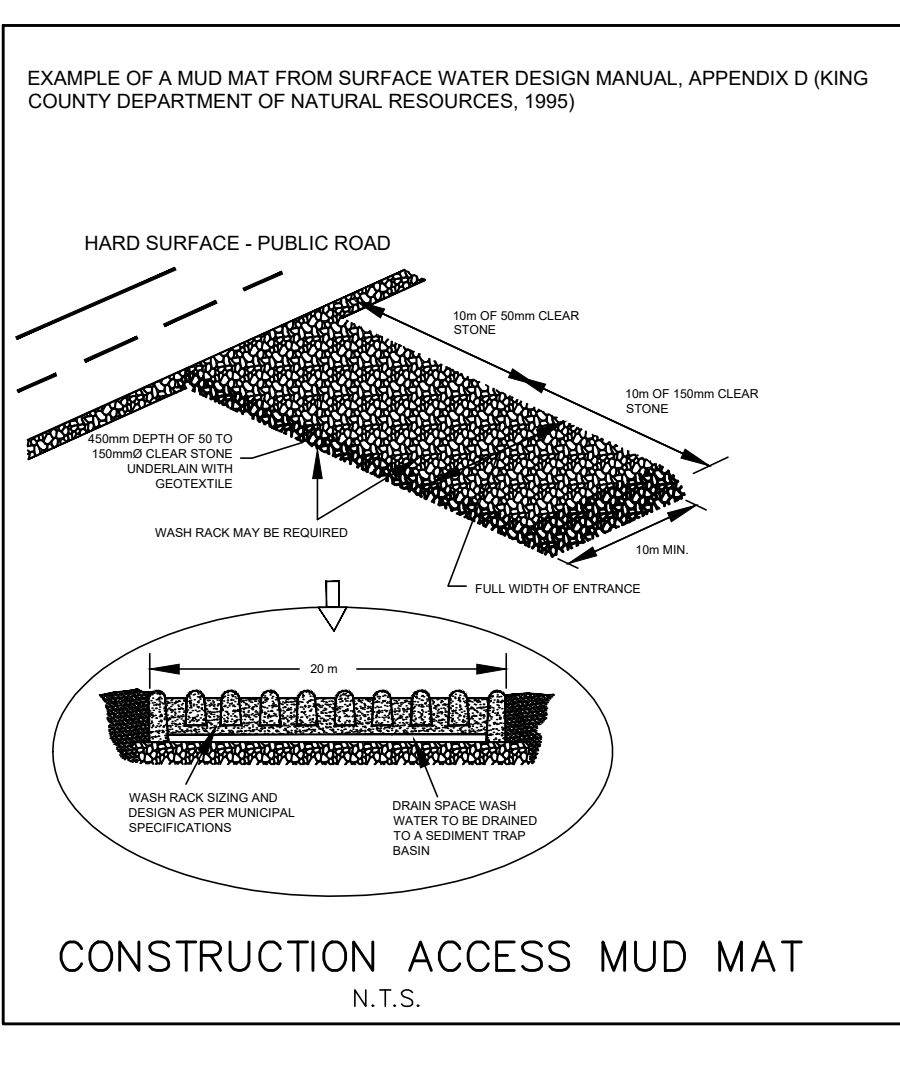
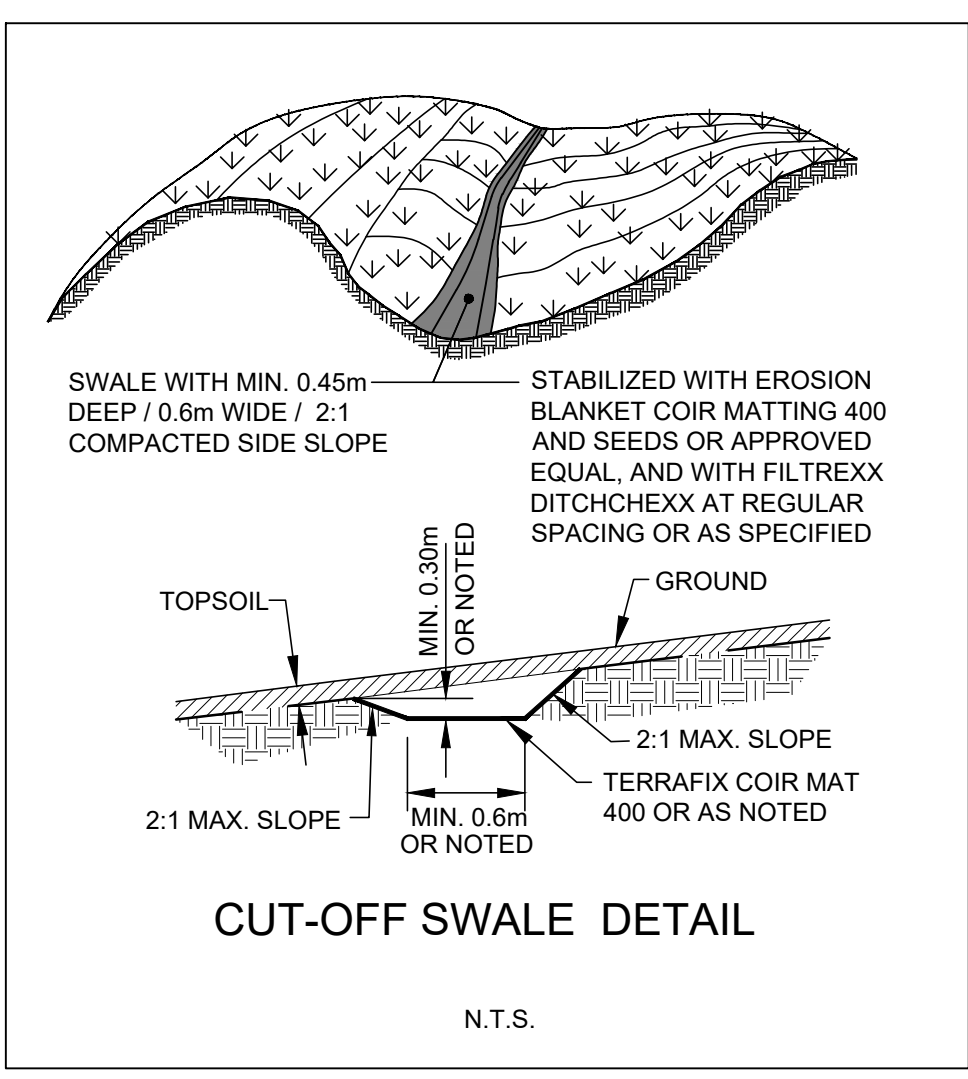
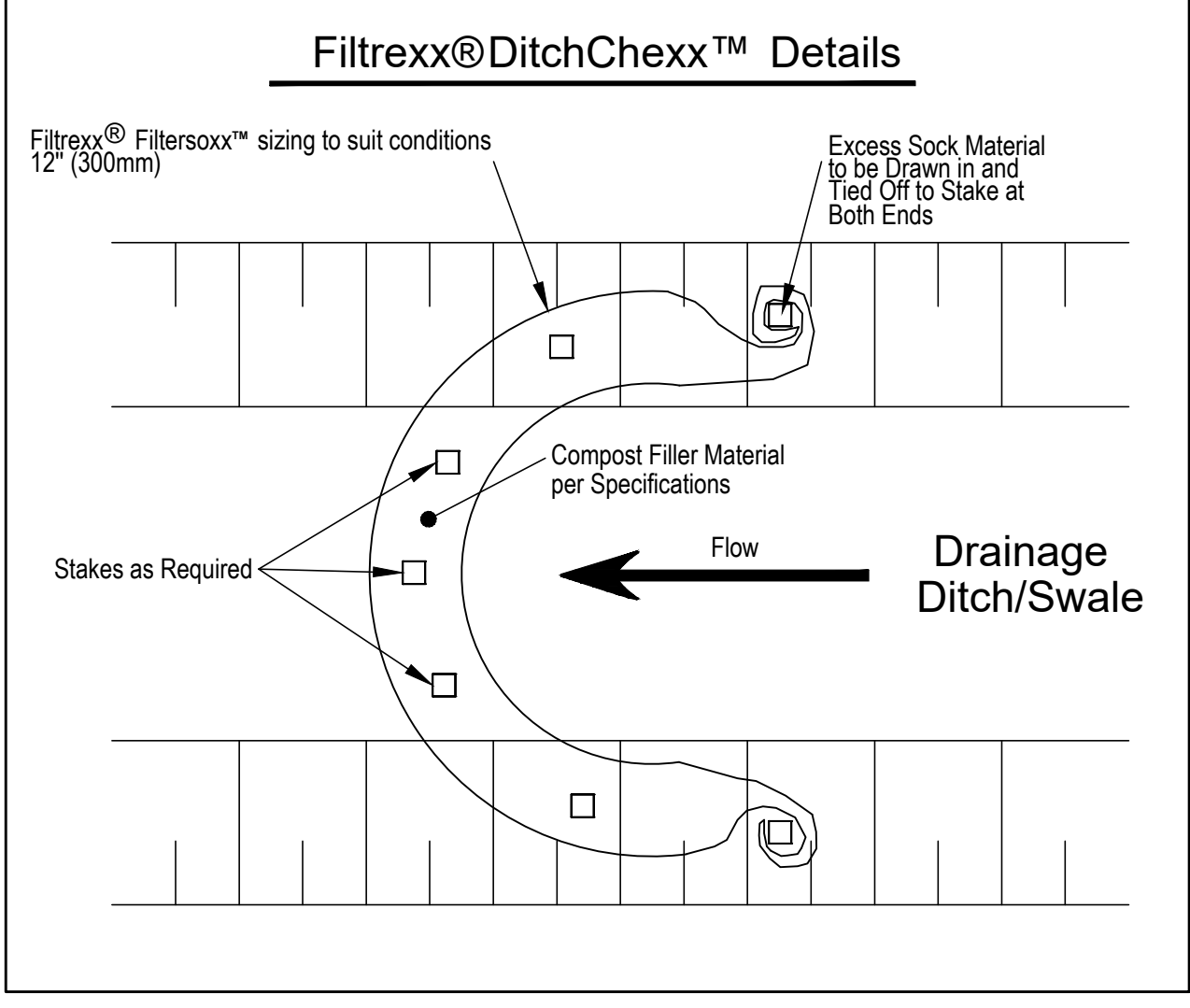
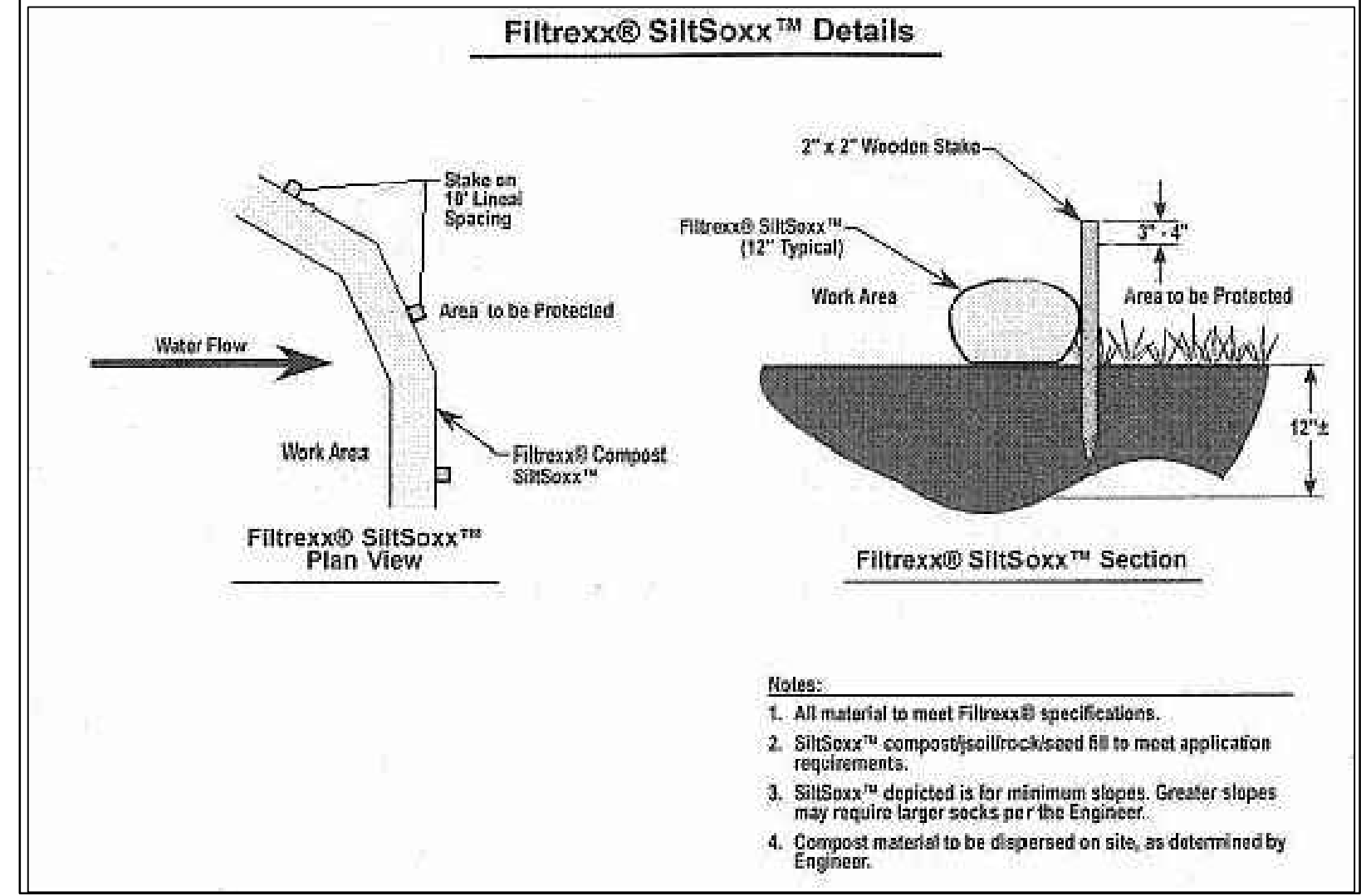
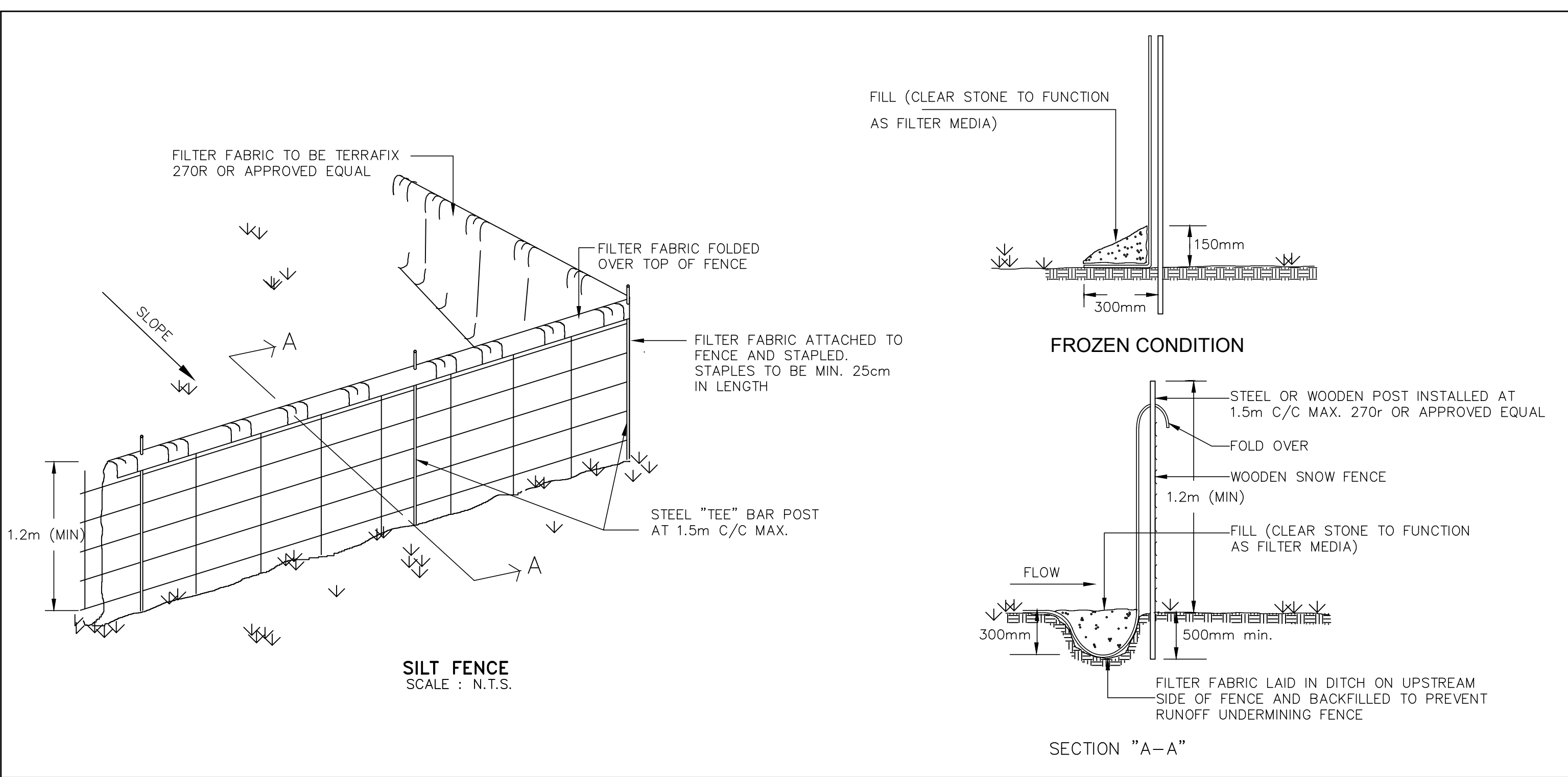
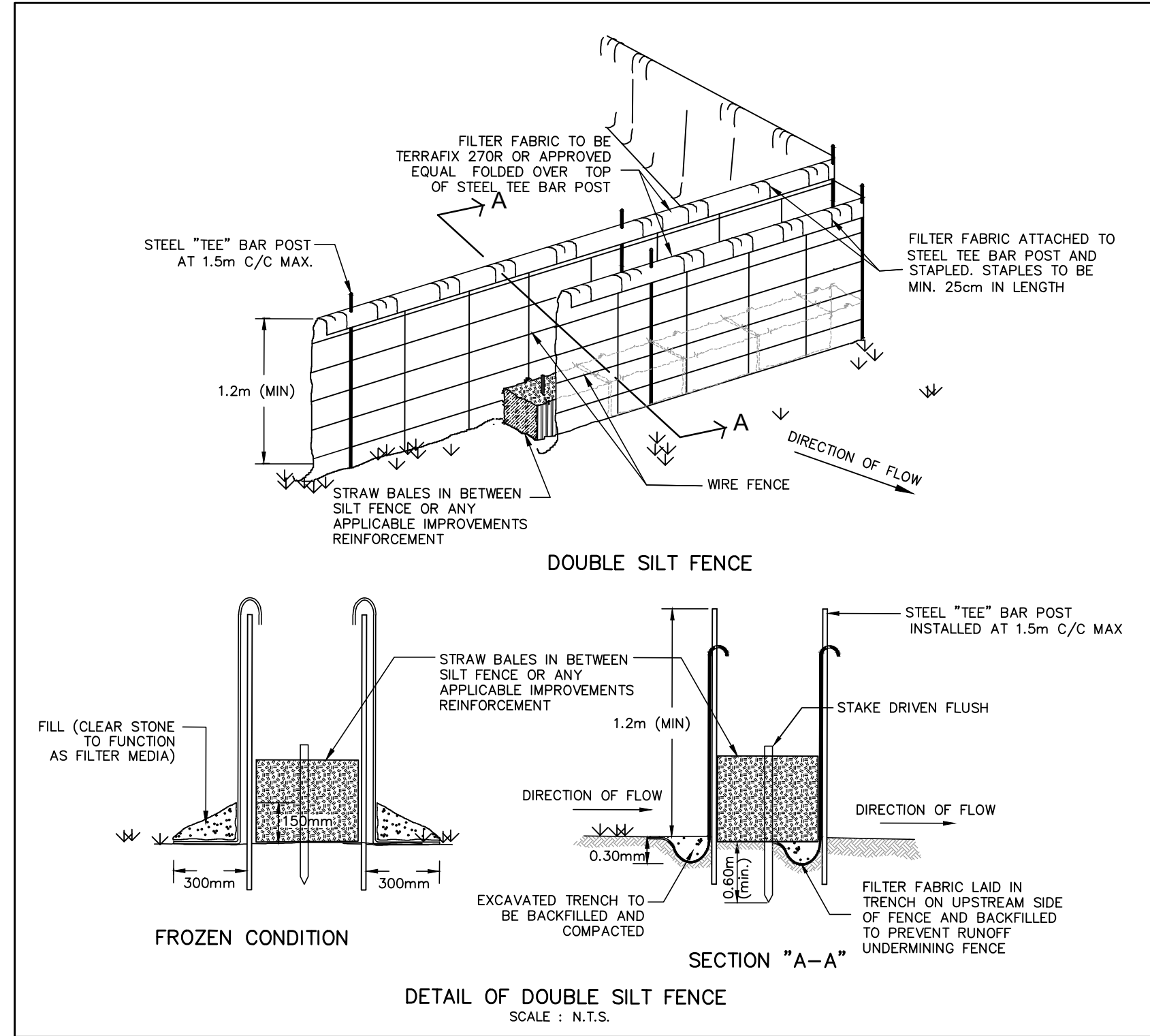
EROSION & SEDIMENT CONTROL PLAN
TOPSOIL STRIPPING OPERATION

DESIGNED BY: F.T. DATE: JULY 2020 CHECKED BY: F.T.
DRAWN BY: L.S. APPROVED BY: P.S.

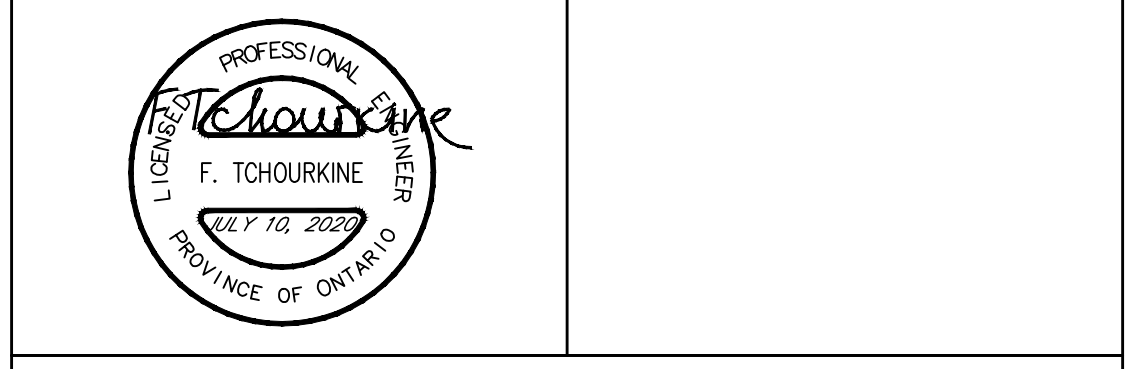


- CONSTRUCTION PHASING NOTES FOR EROSION AND SEDIMENT CONTROL**
- TOPSOIL STRIPPING**
1. INSTALL ALL ENVIRONMENT FENCES PRIOR TO TOPSOIL REMOVAL.
 2. CONSTRUCT TEMPORARY CONSTRUCTION ACCESS ROAD AND MAINTAIN DURING CONSTRUCTION.
 3. CONSTRUCT TEMPORARY SEDIMENT POND AND STABILIZE IMMEDIATELY USING EROSION CONTROL BLANKET WITH SEEDS BEFORE RECEIVING ANY RUN-OFF FROM THE SITE.
 4. CONSTRUCT CUT-OFF SWALES CONCURRENTLY WITH ROCK CHECK DAMS OR FILTREXX DITCH-CHEXX AND STABILIZED IMMEDIATELY USING EROSION CONTROL BLANKET WITH SEEDS BEFORE RECEIVING ANY RUN-OFF FROM THE SITE.
 5. CARRY OUT CONSTRUCTION IN A PHASED MANNER WHERE POSSIBLE TO LIMIT SOIL EXPOSURE.
 6. MAINTAIN SEDIMENT CONTROL FENCE AROUND TOPSOIL STOCKPILE. EXCESS TOPSOIL TO BE TAKEN OFF-SITE.
 7. RAINFALL TO BE MONITORED PRIOR TO ANY STRIPPED AREAS BEING EXPOSED.
 8. DISTURBED AREAS TO BE STABILIZED WITH SEEDING SPECIFIED FOR SEED MIX DETAIL, OR NURSE CROP, BLANKETS, DIRT GLUE POLYMER, SILT STOP POLYMER IF LEFT UNWORKED WITHIN 30 DAYS.
 9. IF REQUIRED, ADDITIONAL EROSION AND SEDIMENT CONTROLS (ESC) TO BE IMPLEMENTED AS DIRECTED BY THE ENGINEER.

REVISIONS			
No.	DESCRIPTION	By	Date



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RESIDENTIAL SUBDIVISION
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PROJECT No. 2018-4696 DRAWING No. SC-2

Niagara-on-the-Lake
EST. 1781

OPERATIONS DEPARTMENT APPROVAL

SIGNATURE: DOUG KERR DATE: POSITION: MANAGER OF PUBLIC WORKS

FIRE DEPARTMENT APPROVAL

SIGNATURE: ALEX BURBIDGE DATE: POSITION: FIRE CHIEF

EROSION & SEDIMENT CONTROL PLAN DETAILS

DESIGNED BY: F.T.	DATE: JULY 2020	CHECKED BY: F.T.
DRAWN BY: B.M.		APPROVED BY: P.S.

SCALE: N.T.S.