



HAMILTON CONSERVATION AUTHORITY

SALTFLEET CONSERVATION AREA

BATTLEFIELD CREEK BC-1

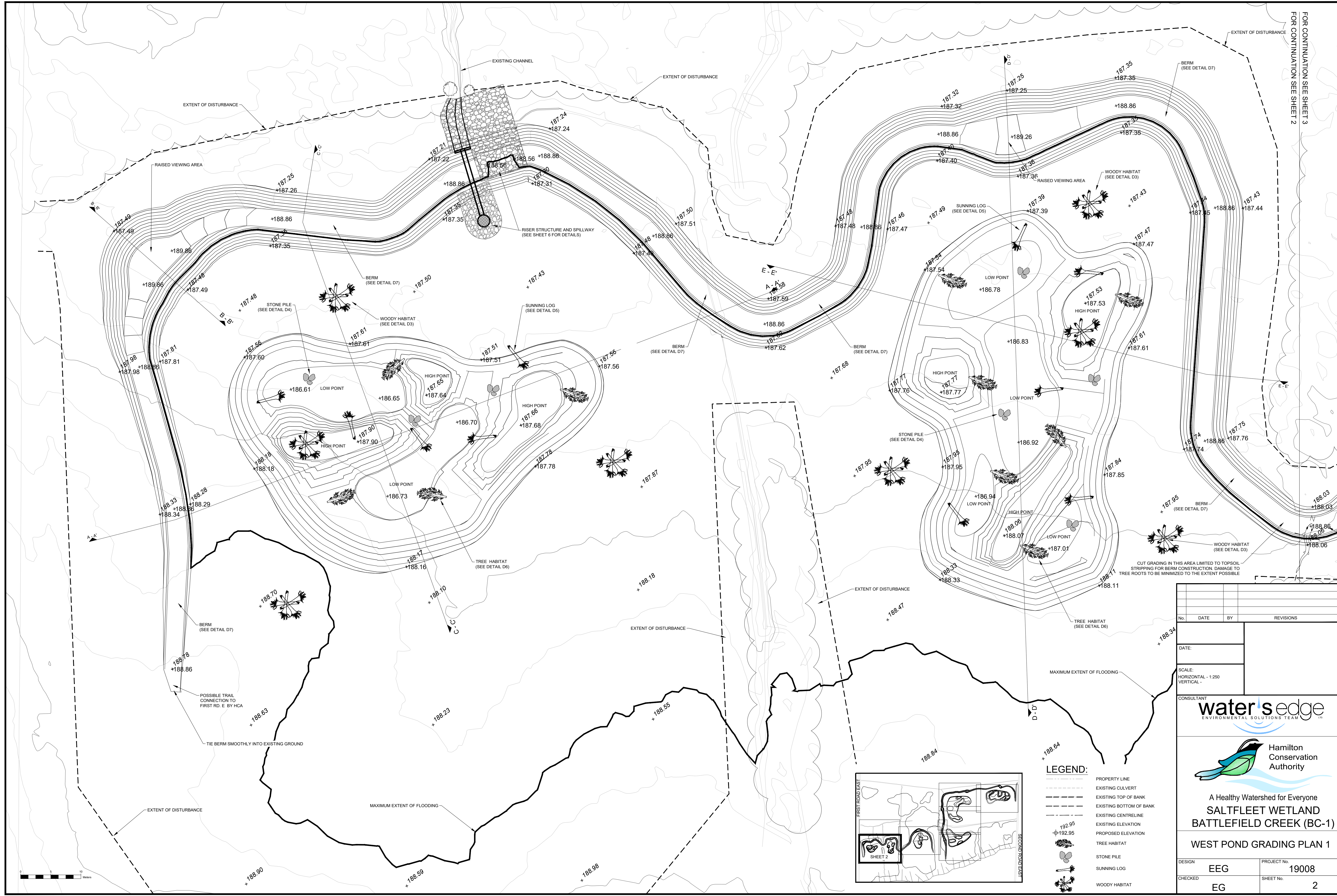
AUGUST 20, 2021



DRAWING LIST

Sheet Number	Sheet Title
1	GENERAL PLAN
2	WEST POND GRADING PLAN 1
3	WEST POND GRADING PLAN 2
4	WEST POND CROSS SECTIONS 1
5	WEST POND CROSS SECTIONS 2
6	WEST POND OUTLET
7	EAST POND GRADING PLAN 1
8	EAST POND GRADING PLAN 2
9	EAST POND GRADING PLAN 3
10	EAST POND GRADING PLAN 4
11	EAST POND CROSS SECTIONS 1
12	EAST POND CROSS SECTIONS 2
13	EAST POND OUTLET
14	DETAILS
15	EXISTING CHANNEL ENHANCEMENT PLAN
16	WEST POND EROSION & SEDIMENT CONTROL
17	EAST POND EROSION & SEDIMENT CONTROL 1
18	EAST POND EROSION & SEDIMENT CONTROL 2
19	EROSION & SEDIMENT CONTROL DETAILS
20	WEST POND PLANTING PLAN
21	EAST POND PLANTING PLAN 1
22	EAST POND PLANTING PLAN 2
23	PLANTING PLAN DETAILS

FOR CONTINUATION SEE SHEET 3
FOR CONTINUATION SEE SHEET 2



LEGEND:

- PROPERTY LINE
- EXISTING CULVERT
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- EXISTING CENTRELINE
- EXISTING ELEVATION
- PROPOSED ELEVATION
- TREE HABITAT
- STONE PILE
- SUNNING LOG
- WOODY HABITAT

No.	DATE	BY	REVISIONS

DATE:

SCALE:
HORIZONTAL - 1:250
VERTICAL -

CONSULTANT

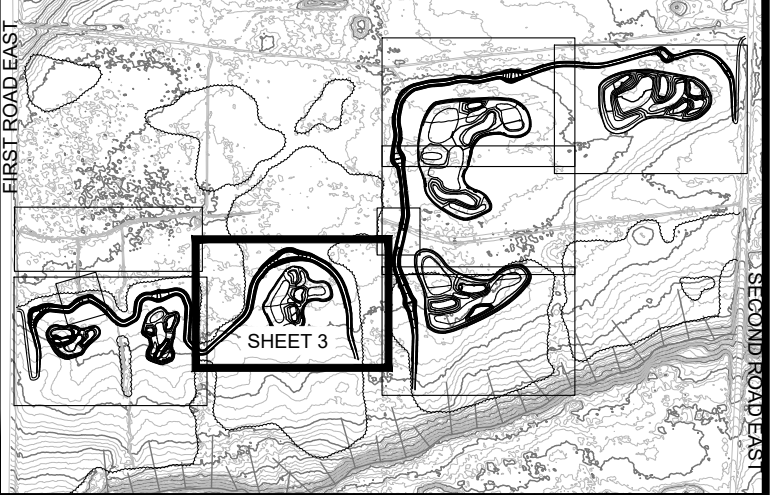
water's edge
ENVIRONMENTAL SOLUTIONS TEAM

 **Hamilton Conservation Authority**

A Healthy Watershed for Everyone
**SALTFLEET WETLAND
BATTLEFIELD CREEK (BC-1)**

WEST POND GRADING PLAN 1

DESIGN	EEG	PROJECT No.	19008
CHECKED	EG	SHEET No.	2



LEGEND:

- PROPERTY LINE
- EXISTING CULVERT
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- EXISTING CENTRELINE
- EXISTING ELEVATION
- PROPOSED ELEVATION
- TREE HABITAT
- STONE PILE
- SUNNING LOG
- WOODY HABITAT


No.	DATE	BY	REVISIONS

DATE:

SCALE:
HORIZONTAL - 1:250
VERTICAL -

CONSULTANT

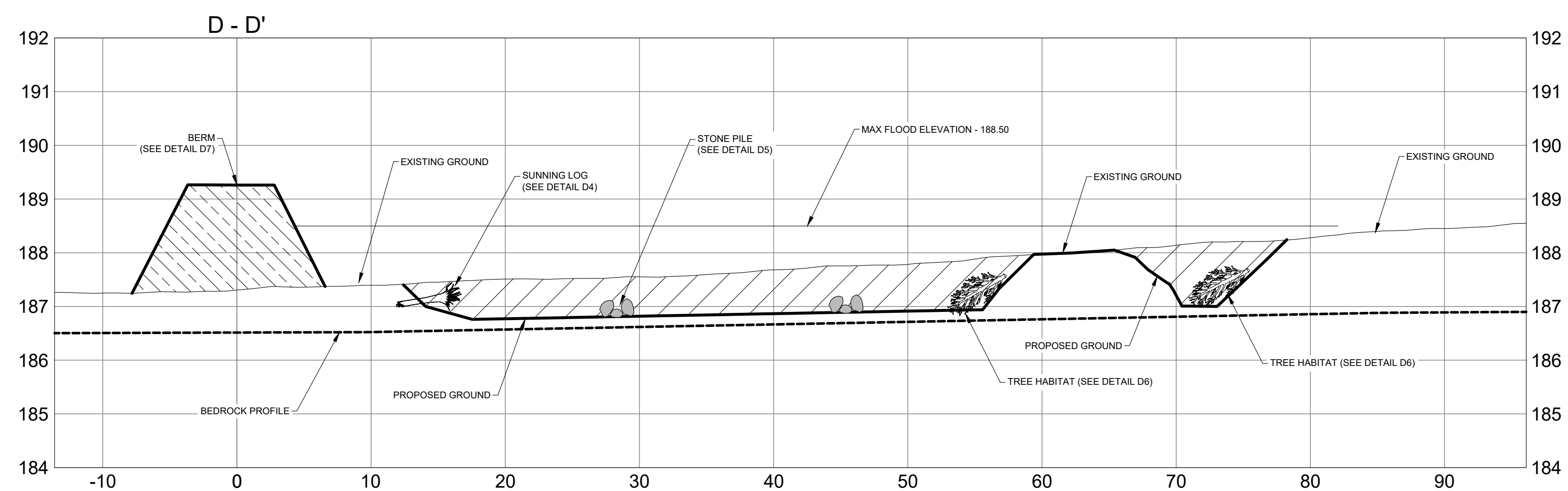
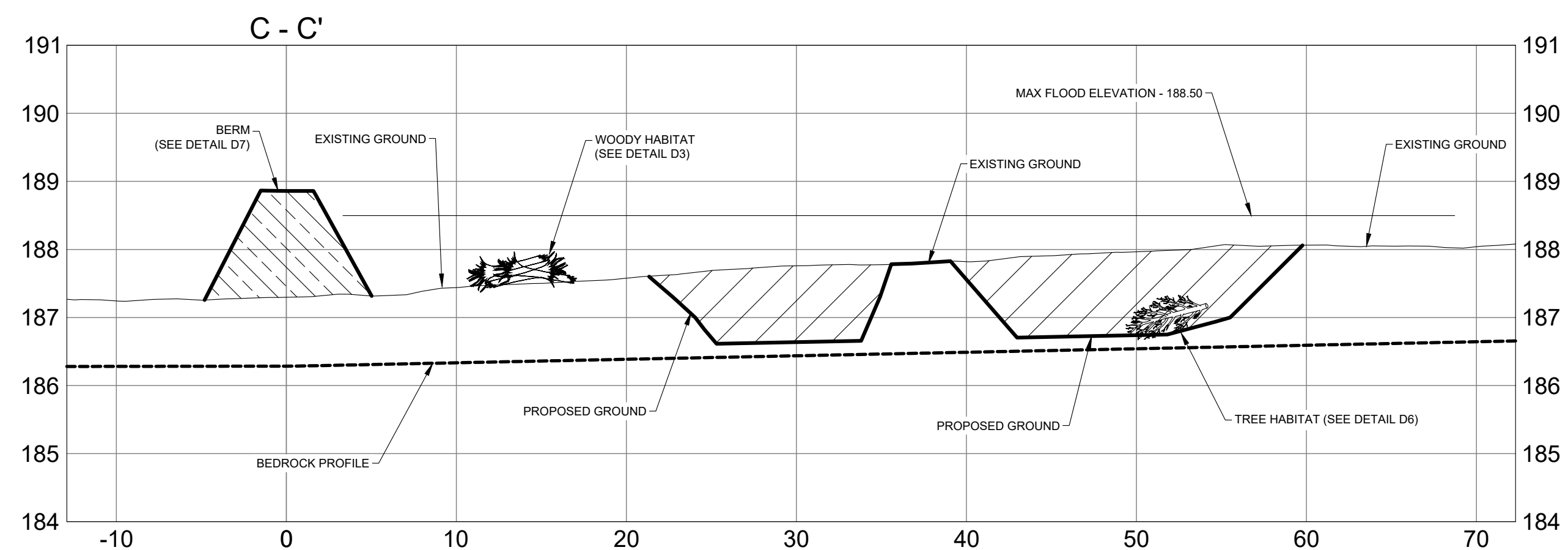
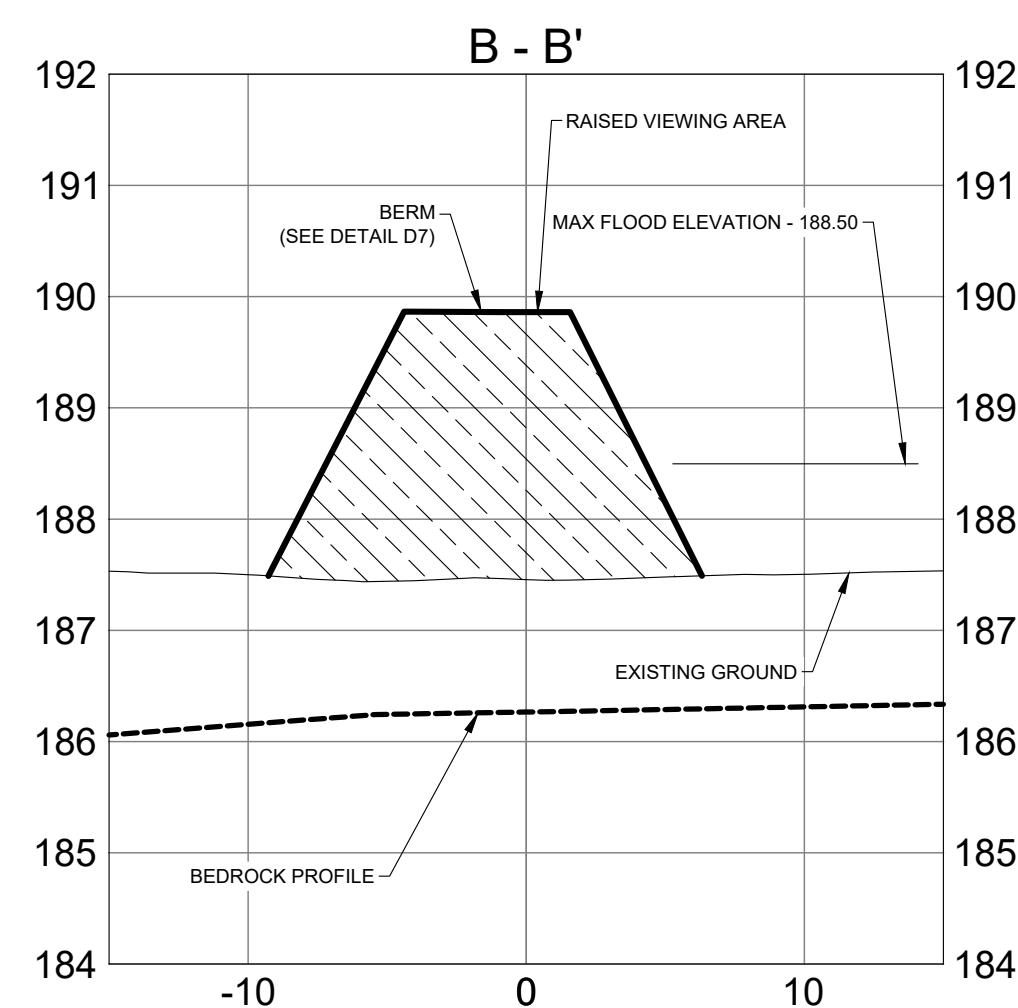
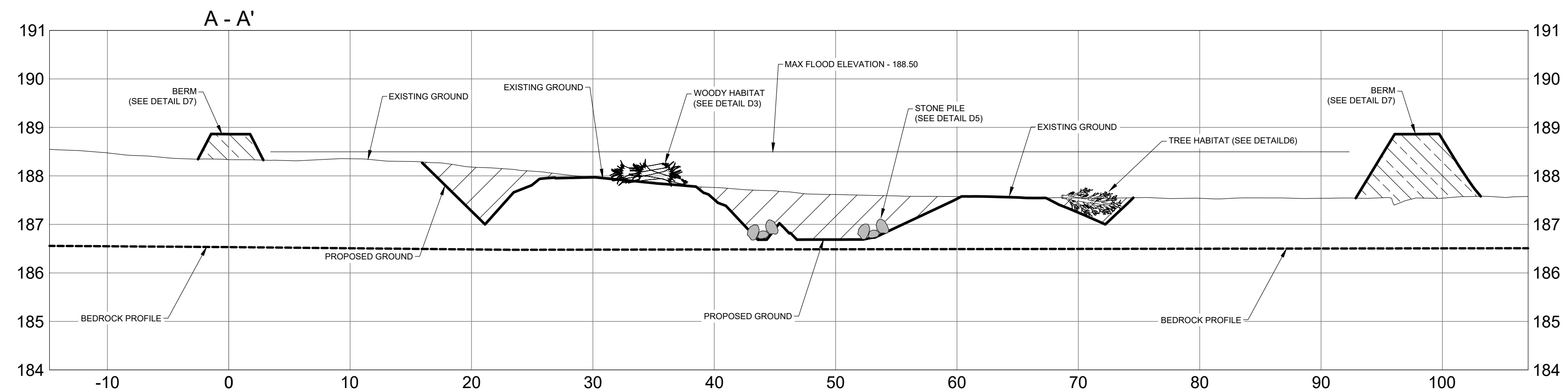
water's edge
ENVIRONMENTAL SOLUTIONS TEAM

 **Hamilton Conservation Authority**








A Healthy Watershed for Everyone
**SALTFLEET WETLAND
BATTLEFIELD CREEK (BC-1)**



WEST POND GRADING PLAN 2

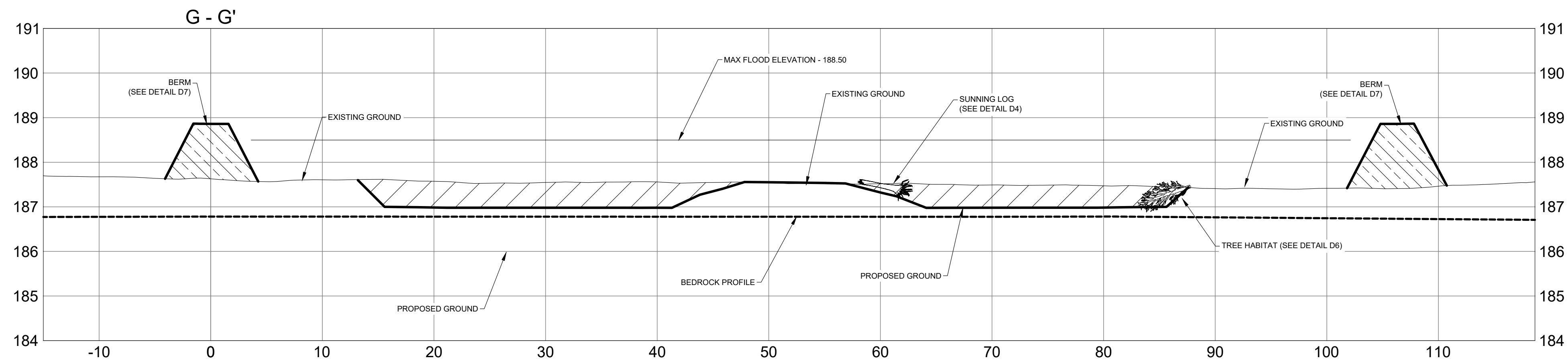
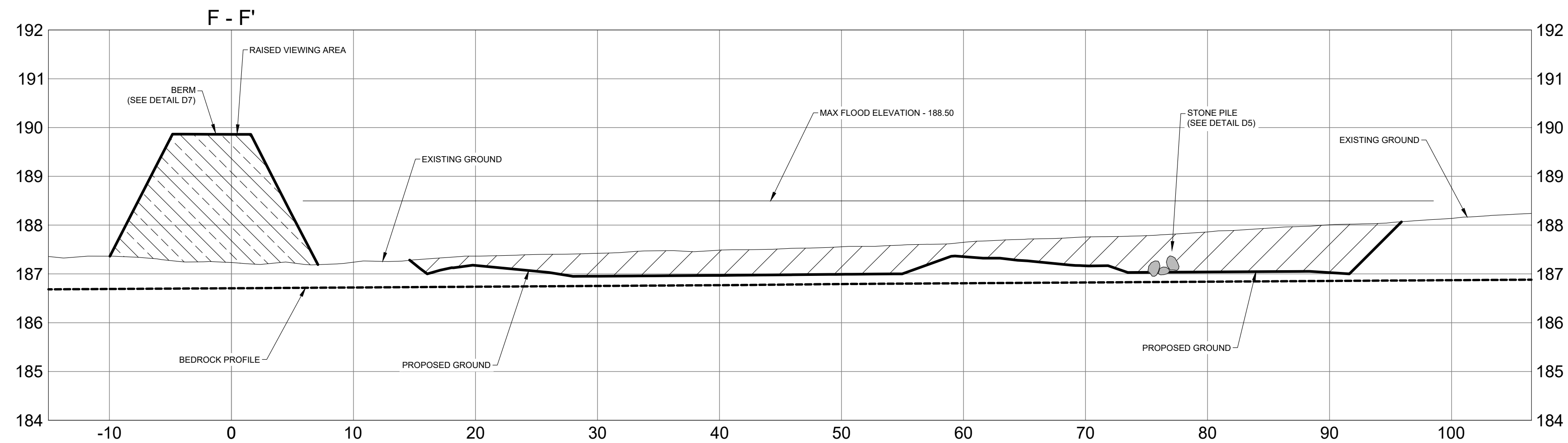
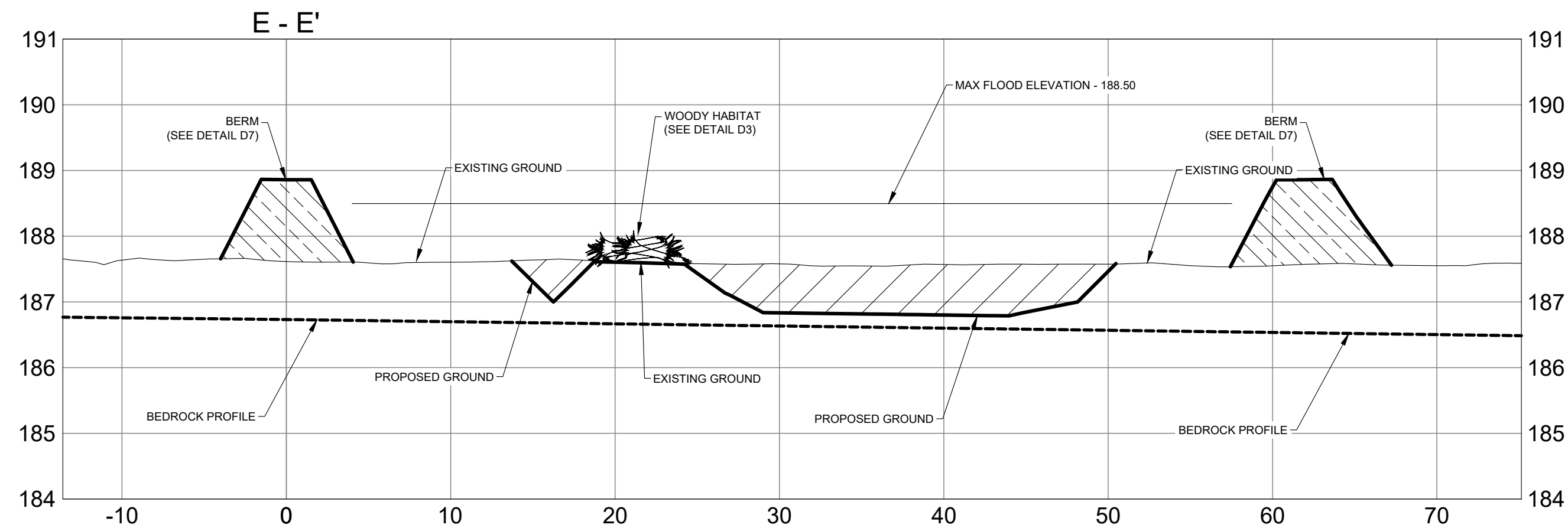
DESIGN	EEG	PROJECT No.	19008
CHECKED	EG	SHEET No.	3



LEGEND:

	EXISTING GROUND
	PROPOSED GROUND
	AREA OF CUT
	AREA OF FILL
	TREE HABITAT
	STONE PILE
	SUNNING LOG
	WOODY HABITAT

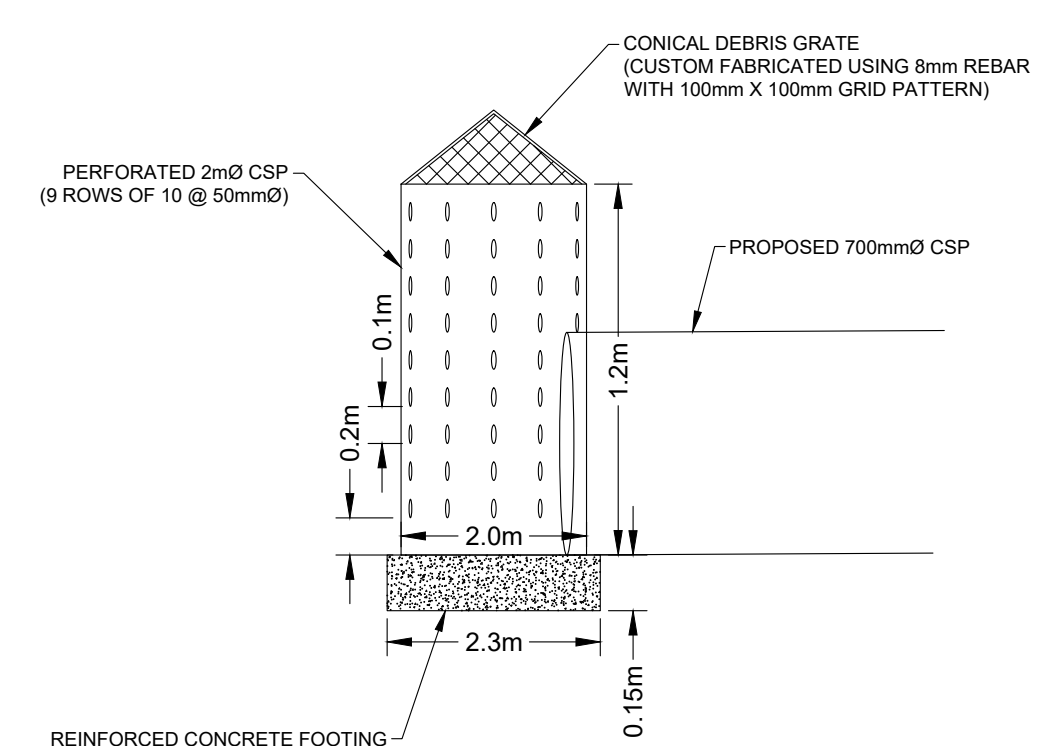
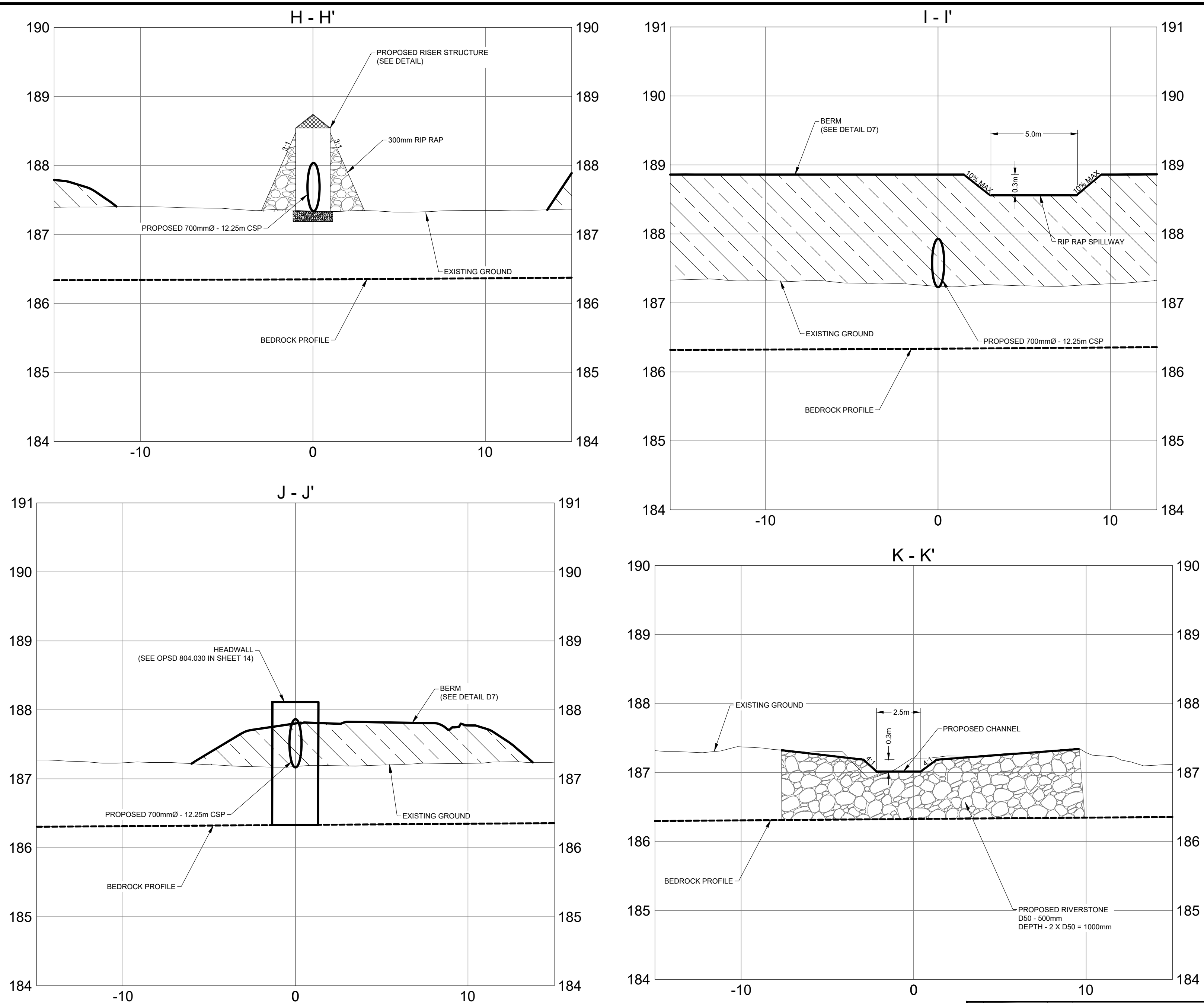
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VERTICAL - 1:82.5					
CONSULTANT					
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WIND POND CROSS SECTIONS 1					
DESIGN		PROJECT No.			
EEG		19008			
CHECKED		SHEET No.			
EG		4			





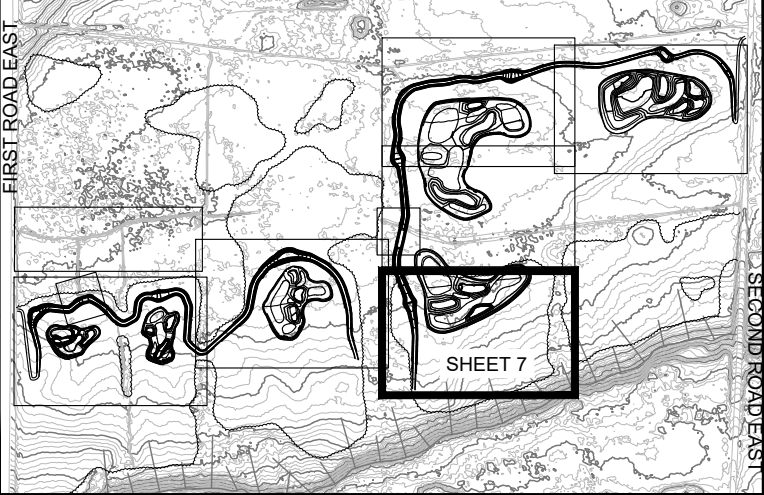
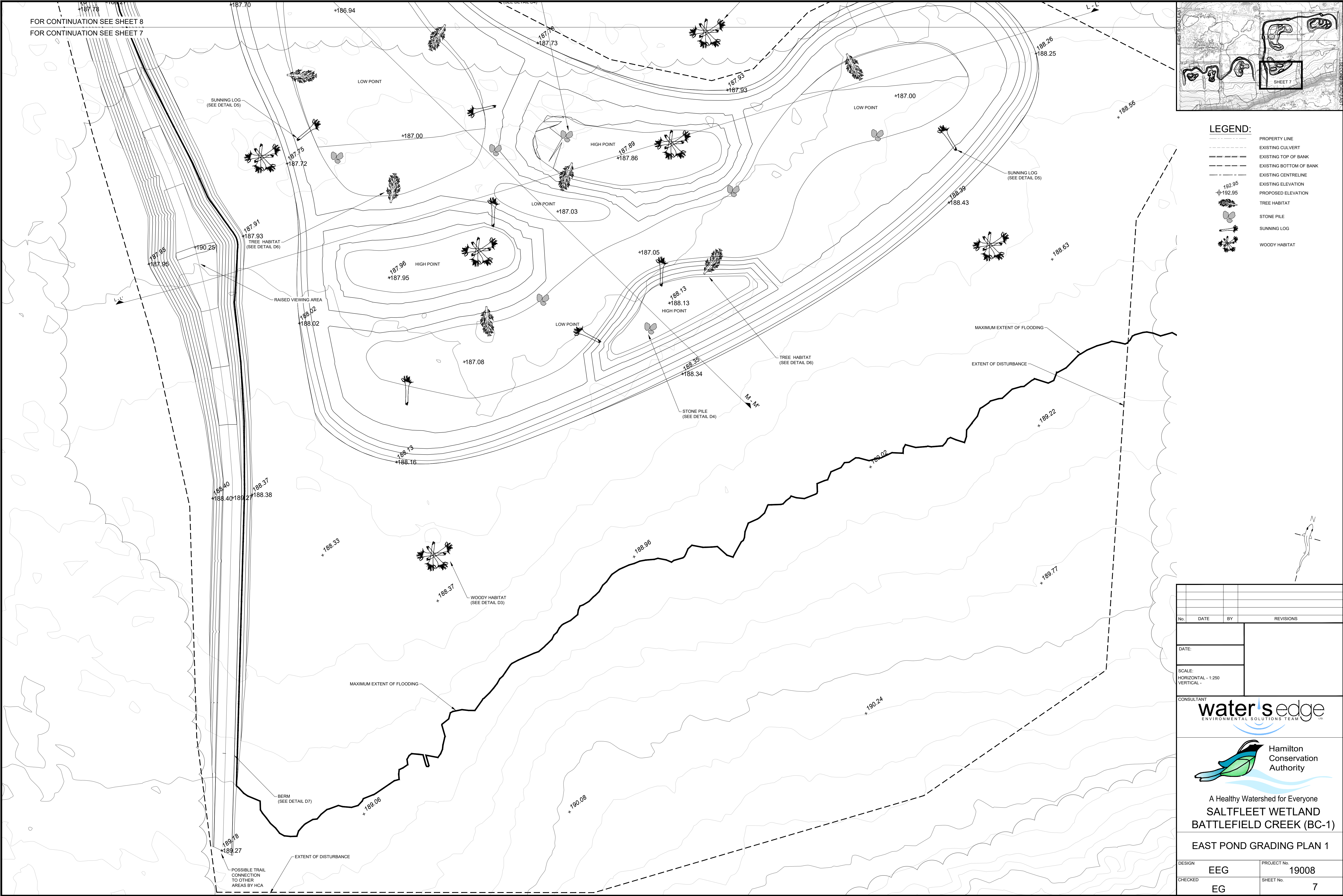
LEGEND:

	EXISTING GROUND
	PROPOSED GROUND
	AREA OF CUT
	AREA OF FILL
	TREE HABITAT
	STONE PILE
	SUNNING LOG
	WOODY HABITAT

No.	DATE	BY	REVISIONS
DATE:			
SCALE: HORIZONTAL - 1:250 VERTICAL - 1:62.5			
CONSULTANT			
A Healthy Watershed for Everyone SALTFLEET WETLAND BATTLEFIELD CREEK (BC-1)			
WEST POND CROSS SECTIONS 2			
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CHECKED	EG	SHEET No.	5

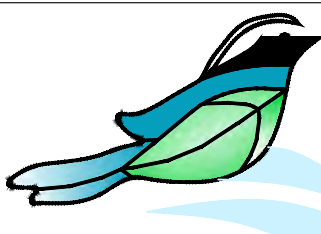


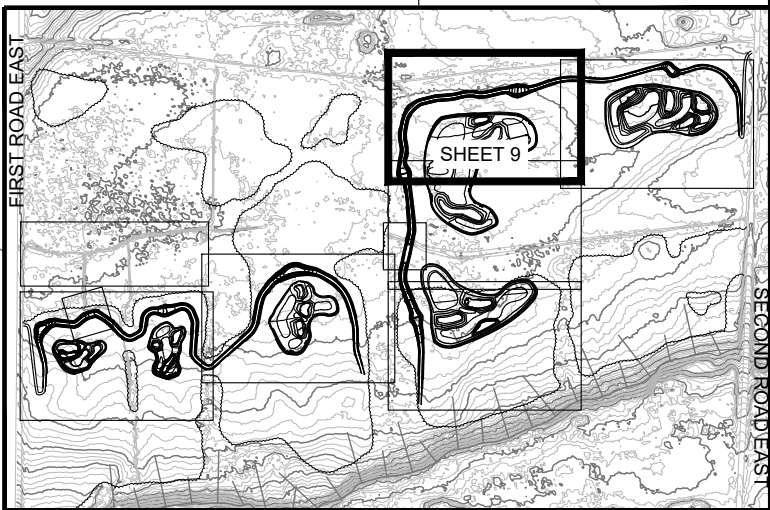
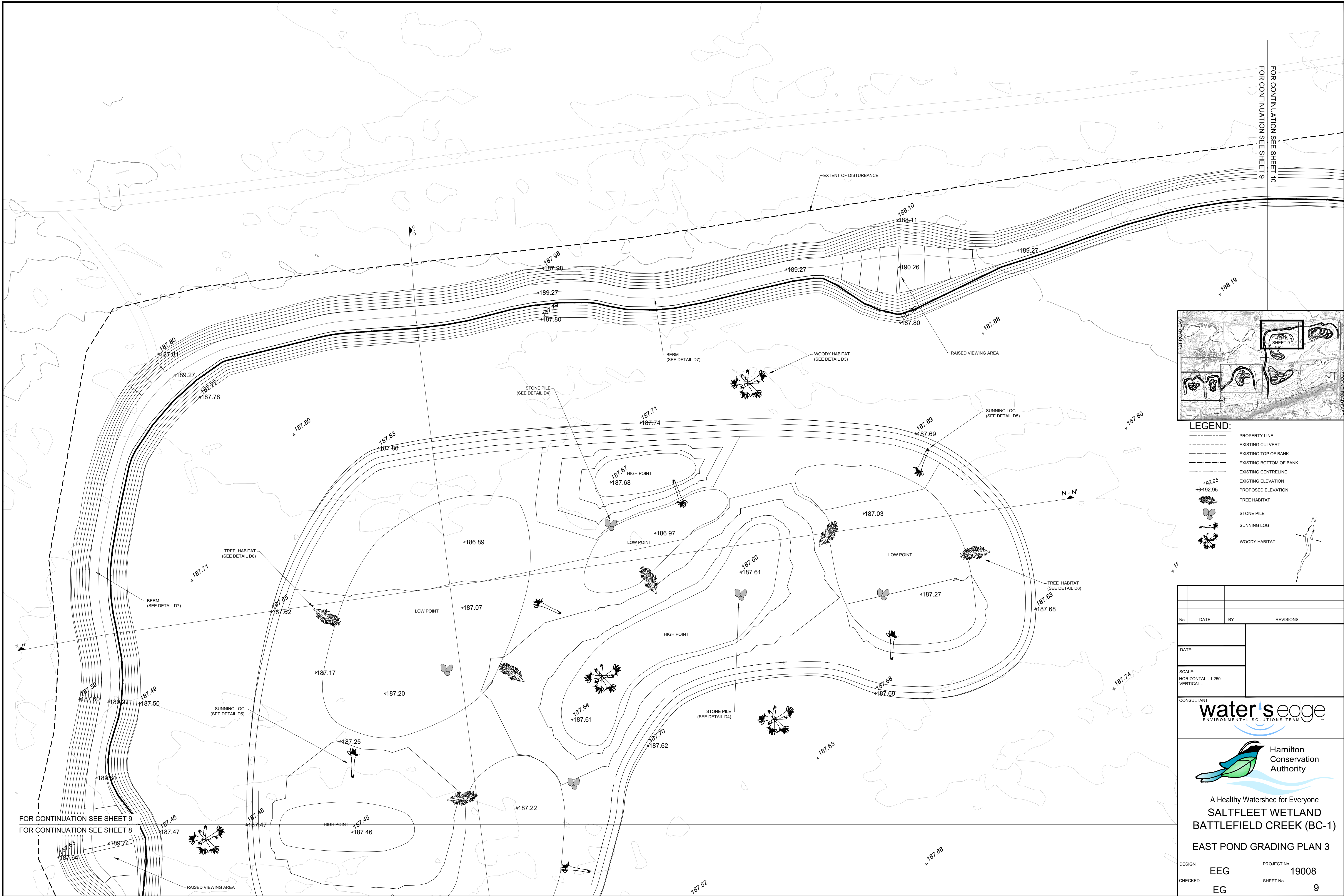
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<p>A Healthy Watershed for Everyone</p> <p>SALTFLEET WETLAND</p> <p>BATTLEFIELD CREEK (BC-1)</p>					
<p>WEST POND OUTLET</p>					
DESIGN			PROJECT No.		
EEG			19008		
CHECKED			SHEET No.		
EG			6		



LEGEND:



- PROPERTY LINE
- EXISTING CULVERT
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- EXISTING CENTRELINE
- EXISTING ELEVATION
- PROPOSED ELEVATION
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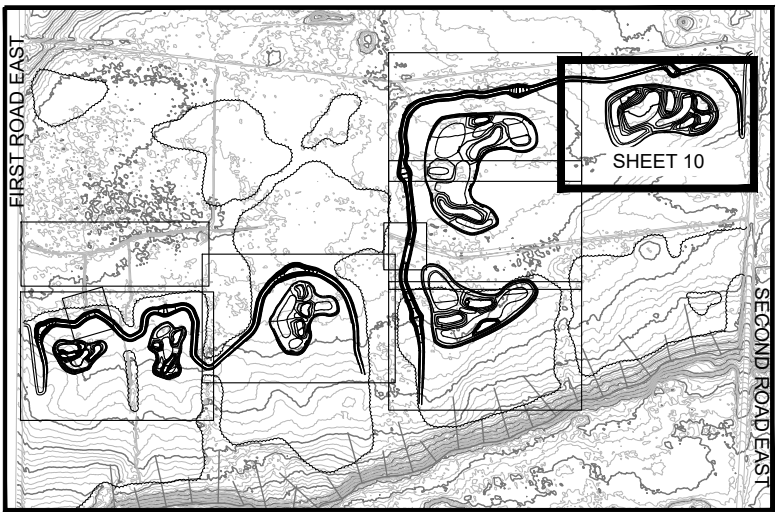
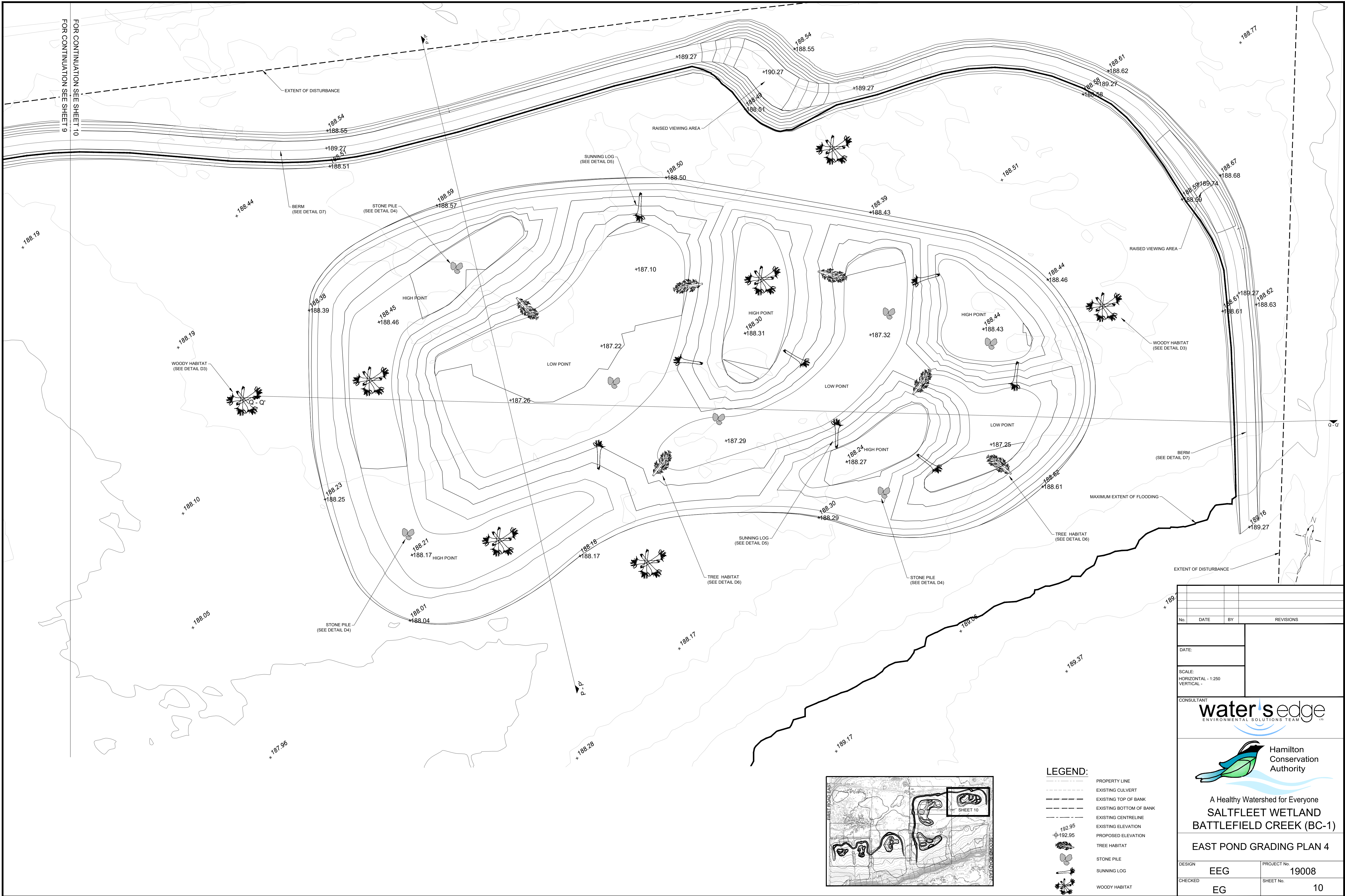
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CONSULTANT					
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<div>A Healthy Watershed for Everyone</div> <div>SALTFLEET WETLAND BATTLEFIELD CREEK (BC-1)</div>					
EAST POND GRADING PLAN 1					
DESIGN		EEG		PROJECT No. 19008	
CHECKED		EG		SHEET No. 7	



LEGEND:

- PROPERTY LINE
- EXISTING CULVERT
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- EXISTING CENTRELINE
- EXISTING ELEVATION
- PROPOSED ELEVATION
- TREE HABITAT
- STONE PILE
- SUNNING LOG
- WOODY HABITAT

No.	DATE	BY	REVISIONS
DATE:			
SCALE: HORIZONTAL - 1:250 VERTICAL -			
CONSULTANT			
 water's edge ENVIRONMENTAL SOLUTIONS TEAM			
 Hamilton Conservation Authority			
A Healthy Watershed for Everyone SALTFLEET WETLAND BATTLEFIELD CREEK (BC-1)			
EAST POND GRADING PLAN 3			
DESIGN	EEG	PROJECT No.	19008
CHECKED	EG	SHEET No.	9



- LEGEND:**
- PROPERTY LINE
 - EXISTING CULVERT
 - EXISTING TOP OF BANK
 - EXISTING BOTTOM OF BANK
 - EXISTING CENTRELINE
 - EXISTING ELEVATION
 - PROPOSED ELEVATION
 - TREE HABITAT
 - STONE PILE
 - SUNNING LOG
 - WOODY HABITAT


No.	DATE	BY	REVISIONS

DATE:

SCALE:
HORIZONTAL - 1:250
VERTICAL -

CONSULTANT

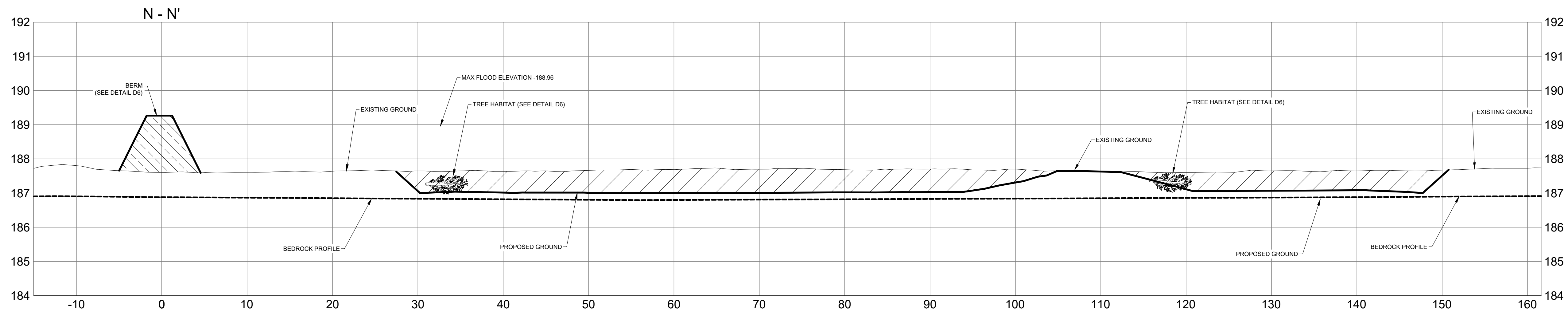
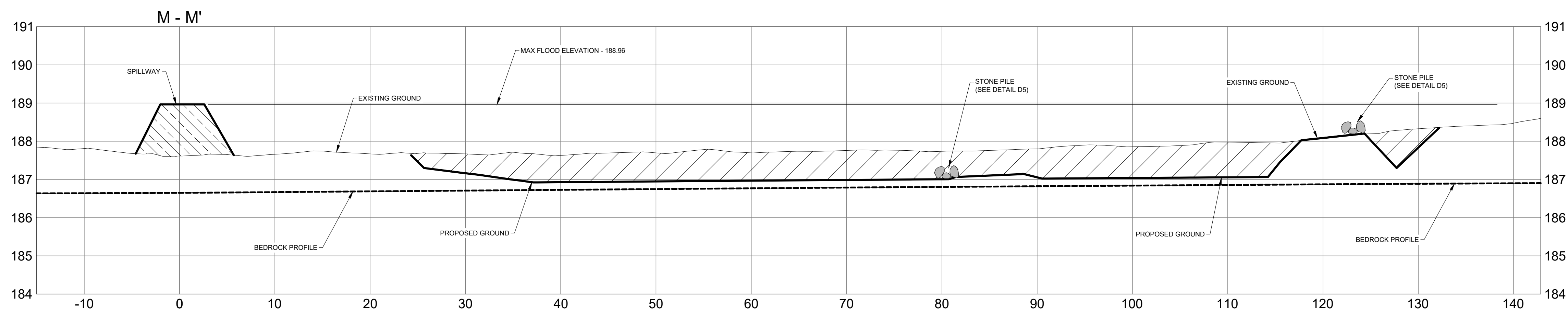
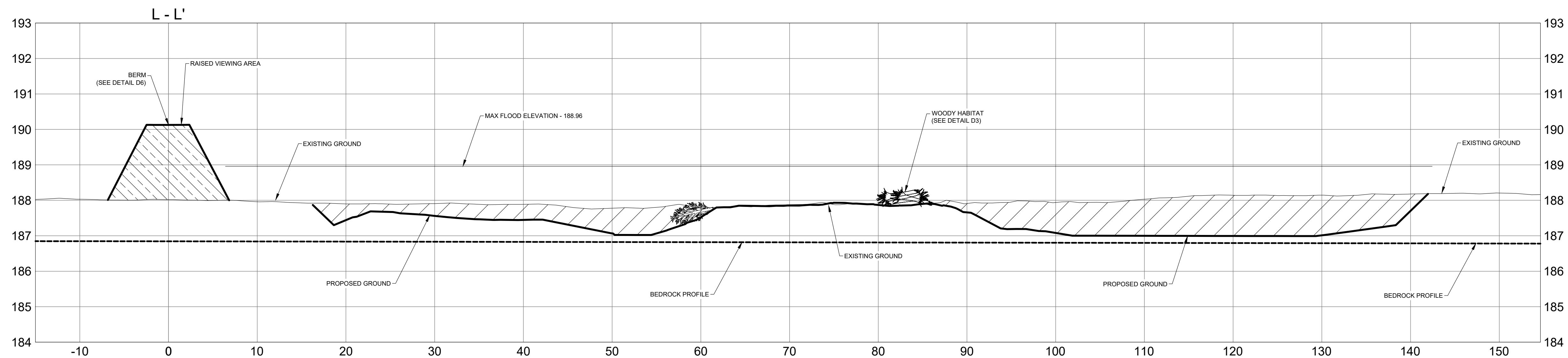
water's edge
ENVIRONMENTAL SOLUTIONS TEAM

 **Hamilton Conservation Authority**

A Healthy Watershed for Everyone
**SALTFLEET WETLAND
BATTLEFIELD CREEK (BC-1)**



EAST POND GRADING PLAN 4

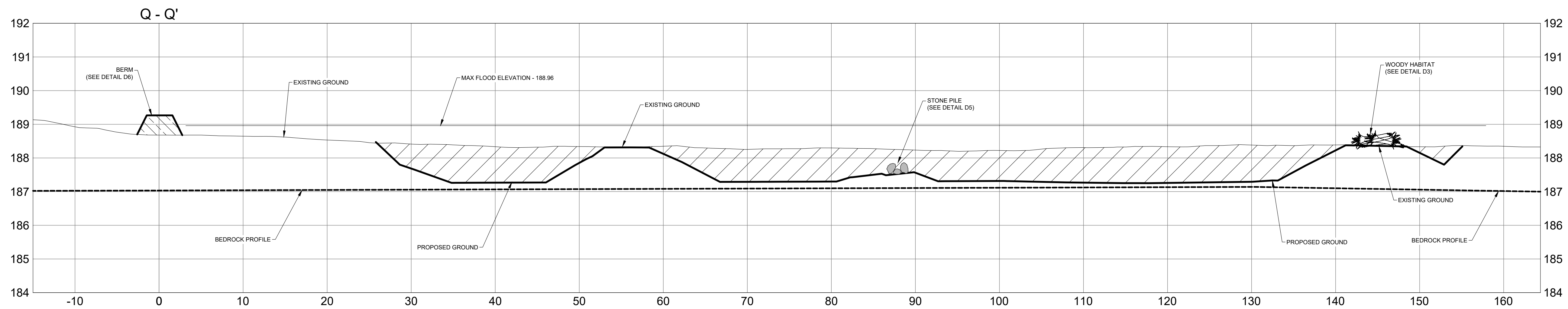
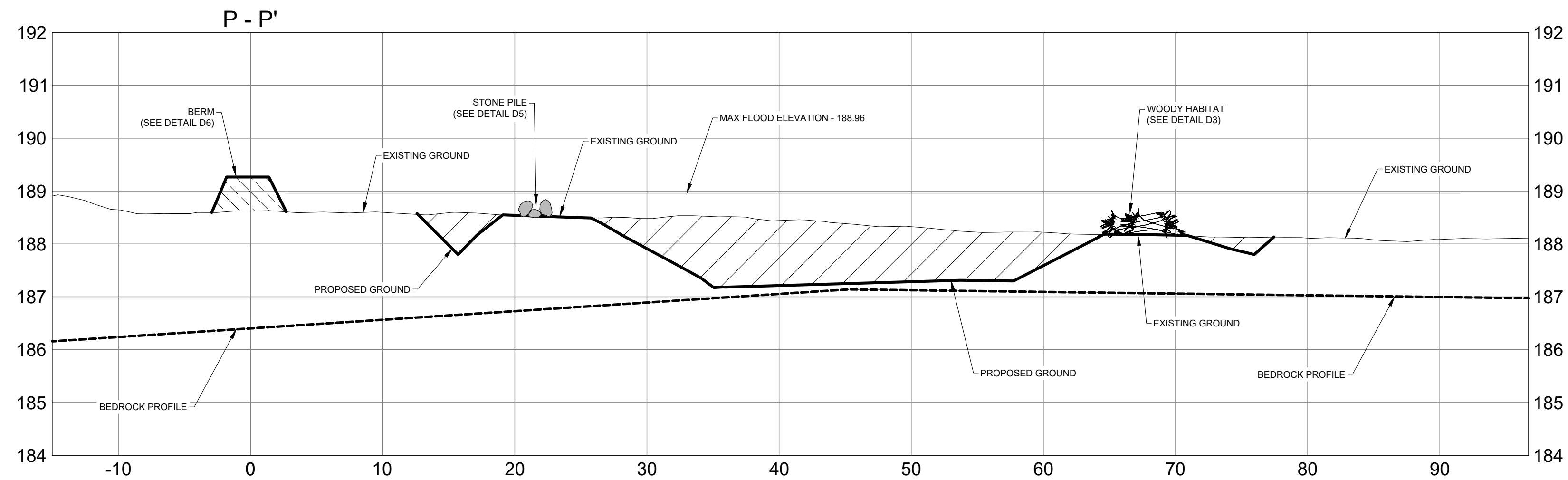
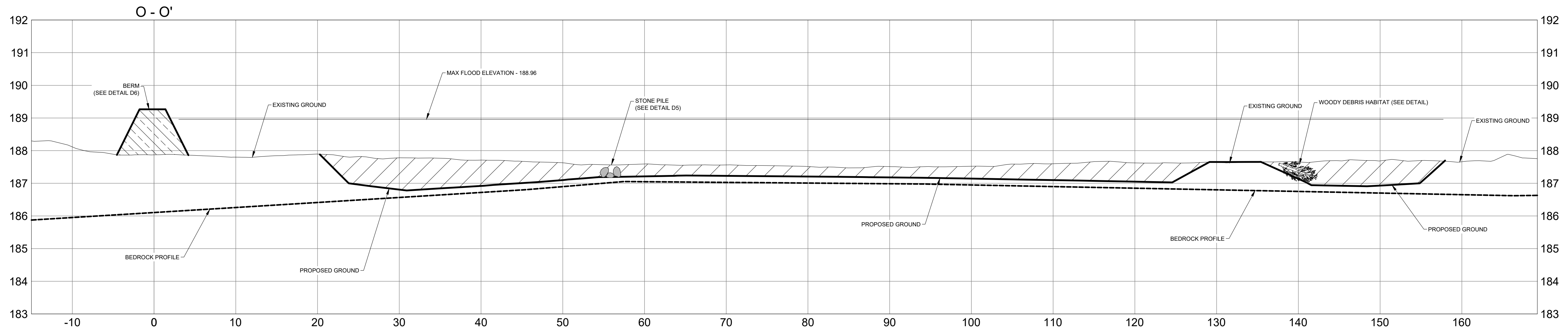
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CHECKED	EG	SHEET No.	10



LEGEND:


- EXISTING GROUND
- PROPOSED GROUND
- AREA OF CUT
- AREA OF FILL
- TREE HABITAT
- STONE PILE
- SUNNING LOG
- WOODY HABITAT

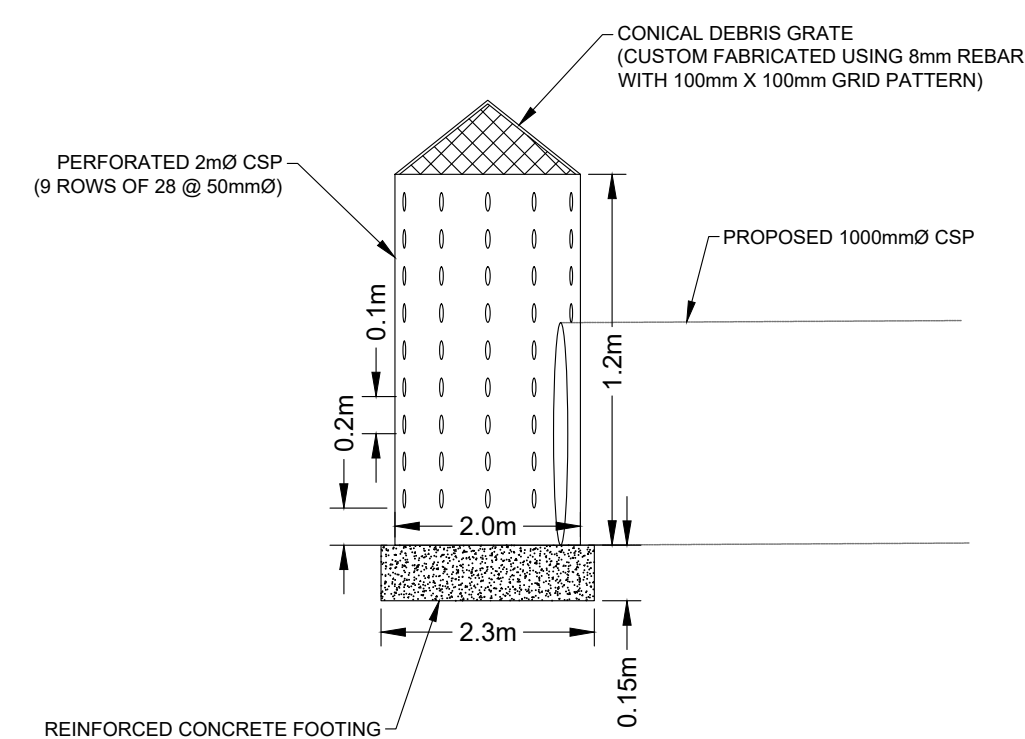
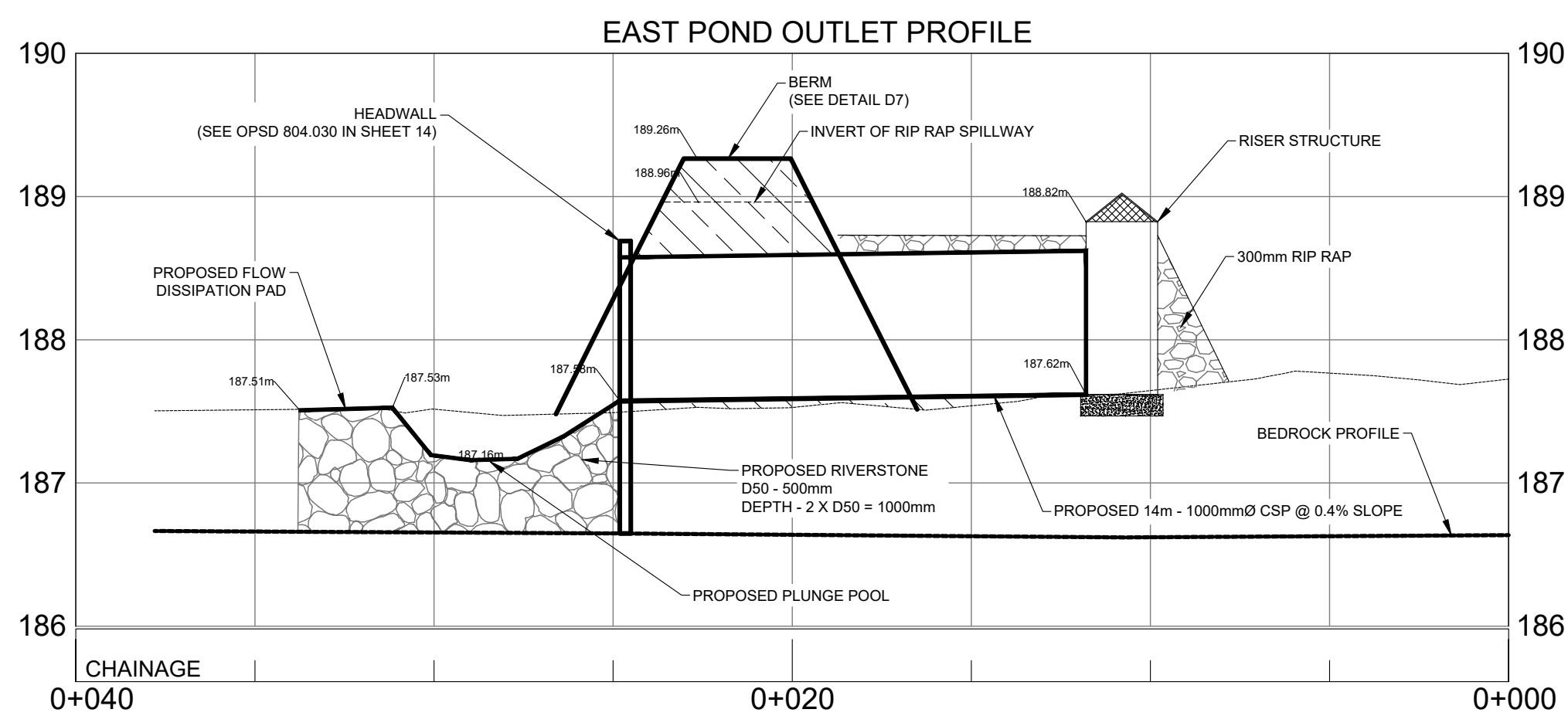
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SCALE: HORIZONTAL - 1:250 VERTICAL - 1:62.5			
CONSULTANT			
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<div><p>Hamilton Conservation Authority</p></div>			
<p>A Healthy Watershed for Everyone</p> <p>SALTFLEET WETLAND</p> <p>BATTLEFIELD CREEK (BC-1)</p>			
EAST POND CROSS SECTIONS 1			
DESIGN		PROJECT No.	
EEG		19008	
CHECKED		SHEET No.	
EG		11	





LEGEND:

- EXISTING GROUND
- PROPOSED GROUND
- AREA OF CUT
- AREA OF FILL
- TREE HABITAT
- STONE PILE
- SUNNING LOG
- WOODY HABITAT

No.	DATE	BY	REVISIONS
DATE: SCALE: HORIZONTAL - 1:250 VERTICAL - 1:62.5			
CONSULTANT			
<div> water's edge ENVIRONMENTAL SOLUTIONS TEAM</div>			
<div> Hamilton Conservation Authority</div>			
A Healthy Watershed for Everyone			
SALTFLEET WETLAND			
BATTLEFIELD CREEK (BC-1)			
EAST POND CROSS SECTIONS 2			
DESIGN	EEG	PROJECT No.	19008
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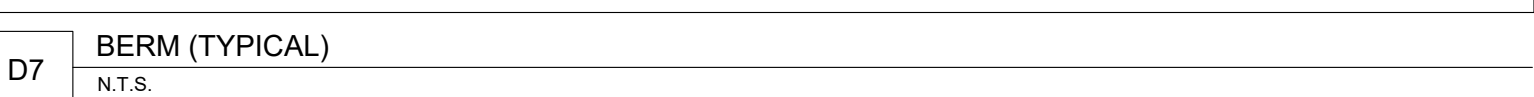
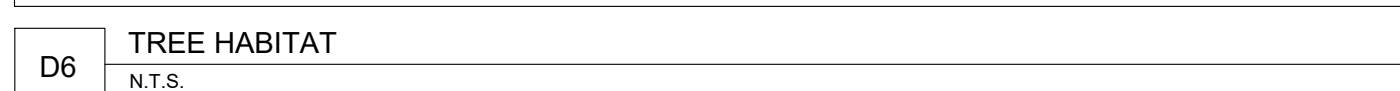
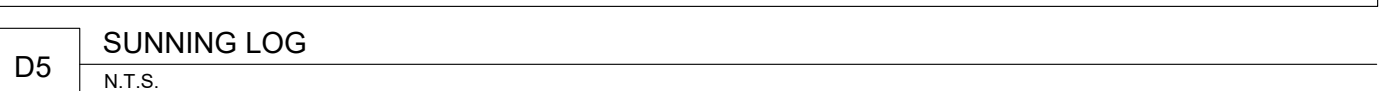
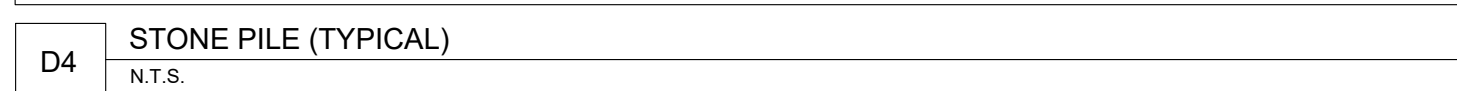


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<p>A Healthy Watershed for Everyone</p> <p>SALT FLEET WETLAND</p> <p>BATTLEFIELD CREEK (BC-1)</p>					
EAST POND OUTLET					
DESIGN		PROJECT No.			
E EG		19008			
CHECKED		SHEET No.			
EG		13			

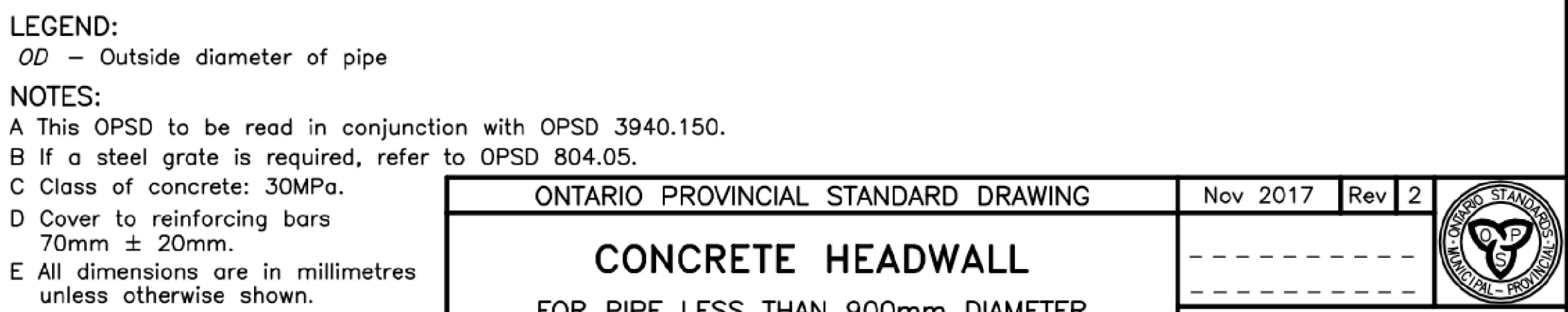
The diagram consists of two parts: a perspective view at the top and a cross-section view at the bottom.


Perspective View: Shows a top-down view of the log layer. It features a central layer of logs with root wads and full trees. Dimensions include a width of approximately 2.5m and a depth of approximately 1.5m. A callout points to the top layer of logs with the text: "PLACE SMALL DIAMETER DEBRIS AND BRANCHES BETWEEN LAYERS OF LARGER DIAMETER LOGS".

Cross-Section View: Shows a side view of the log layer within a trench. The logs are shown with root wads and full trees. Dimensions include a total length of approximately 2.5m, a trench depth of 1.0m to 1.5m, and a base layer thickness of 0.10m. A callout points to the top layer of logs with the text: "PLACE SMALL DIAMETER DEBRIS AND BRANCHES BETWEEN LAYERS OF LARGER DIAMETER LOGS". Another callout points to the base layer with the text: "EMBED BASE LAYER A MINIMUM OF 100mm INTO FINISHED GRADE".



1. THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO MINIMIZE SEDIMENTATION AND PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE. IN ADDITION, THE MEASURES ARE NOT EFFECTIVE IN PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE. IN ADDITION, SEDIMENT, THEN ALTERNATIVE MEASURES MUST BE IMPLEMENTED IMMEDIATELY TO MINIMIZE POTENTIAL ECOLOGICAL IMPACTS.
2. STAGING AND STOCKPILE AREA SHOULD BE MINIMUM 15 METRES AWAY FROM THE TOP OF BANK.
3. MATERIAL STORED IN THE STOCKPILE AREA SHOULD BE LESS THAN 2 METRES HIGH.
4. CONTRACTOR SHALL MONITOR THE WEATHER ON AN ONGOING BASIS. SHOULD AN UNEXPECTED STORM ARISE, CONTRACTOR SHALL REMOVE ALL UNFIXED ITEMS FROM THE REGIONAL STORM FLOOD PROTECTION AREA. ITEMS TO BE REMOVED INCLUDE: CONSTRUCTION MATERIALS, FUEL TANKS, FUEL TANKS, PORTA-POTTIES, MACHINERY, EQUIPMENT, CONSTRUCTION MATERIALS, ETC.



ONTARIO PROVINCIAL STANDARD DRAWING		Nov 2017	Rev 2	
CONCRETE HEADWALL FOR PIPE LESS THAN 900mm DIAMETER				
		OPSD 804.030		


FISHERIES MITIGATION NOTES

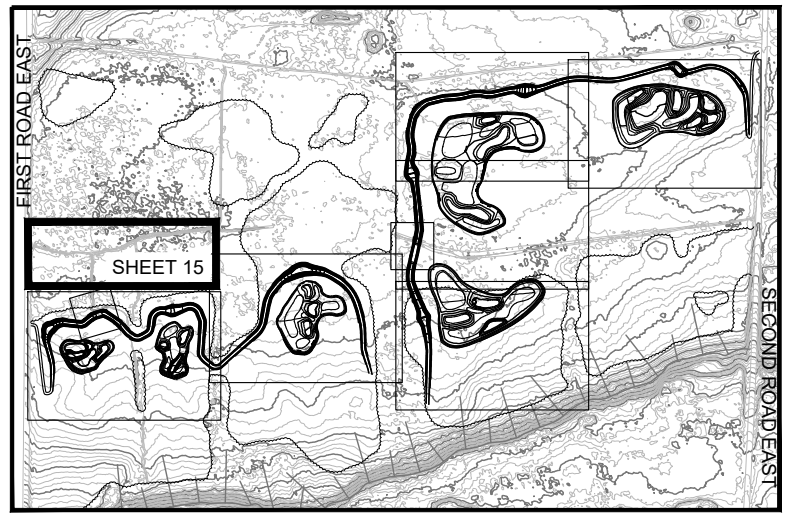
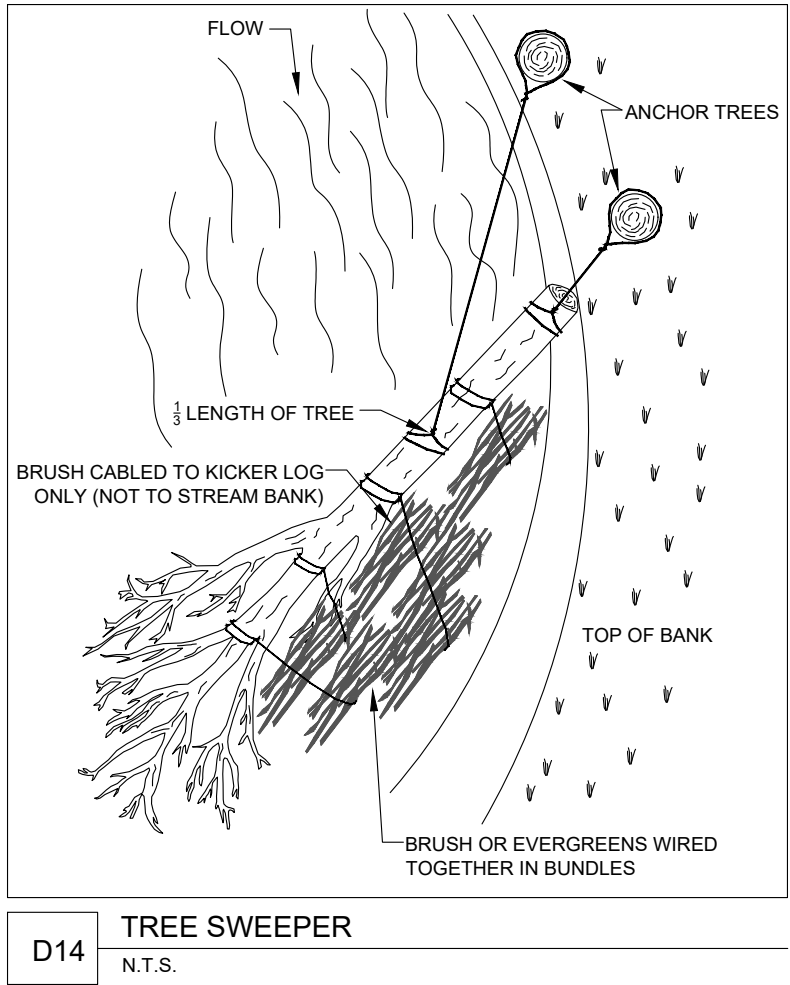
1. FISH ARE TO BE COLLECTED AND RELOCATED FROM THE CONSTRUCTION AREA PRIOR TO THE BYPASS PUMPING/DIVERSION PIPING AND SUBSEQUENT CHANNEL DOWATERING, AND THE RELOCATED FISH ARE TO BE RELEASED TO THE MAIN CHANNEL. FISH COLLECTION IS TO BE COMPLETED BY A QUALIFIED FISHERIES PROFESSIONAL UNDER A SCIENTIFIC COLLECTORS PERMIT, ISSUED BY THE MINISTRY OF NATURAL RESOURCES.

2. THE CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING THE CONTINUOUS OPERATION OF THE BYPASS PUMPING/DIVERSION PIPING AND THE WATER FLOW WILL BE MAINTAINED CONTINUOUSLY DOWNSTREAM OF THE WORK AREA (DURING ALL STAGES OF THE WORK), AND DISCHARGED BACK INTO THE CHANNEL USING A DIFFUSER/DISSIPATOR TO PREVENT THE FISH FROM BEING TRAPPED OR DAMAGED BY THE HIGH VELOCITY OF THE BANKS. BYPASS PUMPING/DIVERSION PIPING IS TO BE ADEQUATELY SIZED TO CONTROL THE WATER LEVELS IN THE CHANNEL TO PREVENT FISH FROM BEING TRAPPED IN THE CHANNEL DURING THE CONSTRUCTION TIMING WINDOW IS UNKNOWN AT THIS TIME.

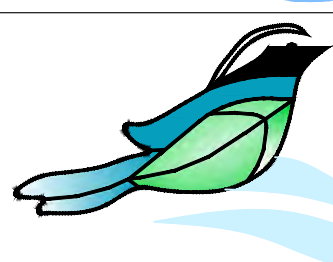
ENVIRONMENTAL NOTES

1. IN ORDER TO PREVENT THE SPREAD OF COMMON REED OR OTHER NON-NATIVE SPECIES, EQUIPMENT SHOULD ARRIVE ON SITE CLEAN AND FREE OF PLANT MATERIALS AND MUD.
2. REFUELING ACTIVITIES SHOULD BE CONDUCTED IN AN ENVIRONMENTALLY RESPONSIBLE MANNER. THIS INCLUDES KEEPING THE FUELING OPERATIONS 30 M SETBACK FROM THE WATER'S EDGE, DRAINAGE PATHWAY OR UNLESS OTHERWISE DIRECTED BY THE CONTRACT ADMINISTRATOR. SPILL KITS AND SUFFICIENT AMOUNT OF SORBANT MATERIAL SHOULD BE AVAILABLE ON THE FUEL OR SERVICE VEHICLES.
3. ANY PART OF EQUIPMENT ENTERING THE WATER SHOULD BE FREE OF FLUID LEAKS AND EXTERNALLY CLEANED AND DEGREASED TO PREVENT ANY DELETERIOUS SUBSTANCES FROM ENTERING THE WATER.
4. ANY SPILLS RESULTING FROM REFUELING OPERATIONS, HYDRAULIC LEAKS, MAINTENANCE ETC. MUST BE REPORTED IMMEDIATELY TO THE CONTRACT ADMINISTRATOR WHO WILL THEN NOTIFY THE SPILLS ACTION CENTER IF REQUIRED.
5. ALL MATERIALS AND EQUIPMENT USED FOR THE PURPOSE OF SITE PREPARATION AND PROJECT COMPLETION SHOULD BE OPERATED AND STORED IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCE (E.G. PETROLEUM PRODUCTS, SILT, DEBRIS, ETC) FROM ENTERING THE WATER.
6. THE AREA OF DISTURBANCE WITHIN THE CHANNEL AND ON THE STREAMBANKS MUST BE KEPT TO A MINIMUM. HEAVY EQUIPMENT TRAFFIC WILL BE RESTRICTED TO ESTABLISHED TRAVEL PATHWAYS.
7. STOCKPILE AND STAGING AREAS SHOULD BE WELL REMOVED FROM THE WATERCOURSE AND CONTAINED BY APPROPRIATE SEDIMENT AND EROSION CONTROLS.
8. SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE INSTALLED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. THE INSTALLED MEASURES SHOULD BE ROUTINELY INSPECTED TO ENSURE THAT THEY ARE FUNCTIONING AS INTENDED. DISTURBED SOILS SHOULD BE STABILIZED IMMEDIATELY WITH SUITABLE PLANTINGS/SEEDMATS.
9. MAINTENANCE SHOULD CONTINUE UNTIL SUCH TIME AS THE DISTURBED AREAS ARE SUFFICIENTLY STABILIZED THROUGH VEGETATIVE GROWTH.
10. TRAFFIC MANAGEMENT PLAN OR CROSSING CONSTRAINTS - SPAN STRUCTURE ONLY. (SPECIFIC DETAILS TO BE PROVIDED BY CONTRACTOR.
11. WEATHER CONDITIONS SHOULD BE MONITORED TO ADEQUATELY PREPARE THE SITE FOR RAIN EVENTS.
12. AS CONSTRUCTION ACTIVITIES IN AND AROUND WATER IS CHALLENGING, WITH A SIGNIFICANT POTENTIAL FOR ENVIRONMENTAL EFFECT, IT IS RECOMMENDED THAT THE CONTRACTOR ORGANIZE AN IN-WATER CONSTRUCTION TEAM WHICH WILL CONSIST OF AN ENVIRONMENTAL MONITOR, SUPERVISOR, SELECTED MACHINE OPERATORS AND GENERAL LABOURERS. THIS TEAM WILL BE RESPONSIBLE FOR THE CONSTRUCTION ACTIVITIES WITHIN THE WATER, INCLUDING THE CONSTRUCTION OF THE CHANNEL AND RE-GRADING OF THE STREAMBANKS AND FLOODPLAINS.

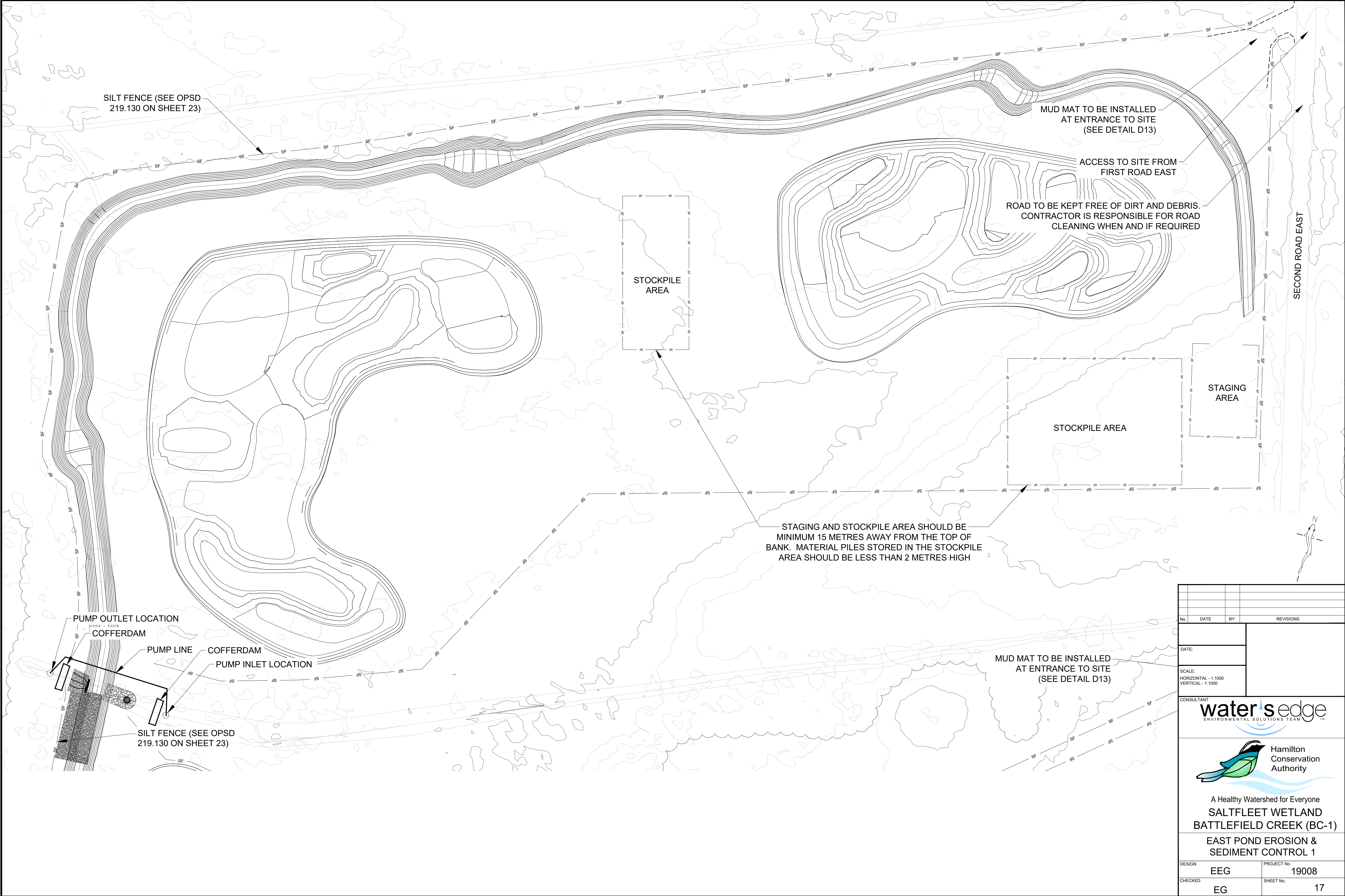
No.	DATE	BY	REVISIONS		
DATE: SCALE:					
CONSULTANT					
<div><div><div>water's edge</div><div>ENVIRONMENTAL SOLUTIONS TEAM LTD.</div></div><div></div><div><div>Hamilton Conservation Authority</div><div>A Healthy Watershed for Everyone</div><div>SALTFLEET WETLAND BATTLEFIELD CREEK (BC-1)</div></div></div>					
DETAILS					
DESIGN EEG			PROJECT No. 19008		
CHECKED EG			SHEET No. 14		




- LEGEND:**
- PROPERTY LINE
 - EXISTING CULVERT
 - EXISTING TOP OF BANK
 - EXISTING BOTTOM OF BANK
 - EXISTING CENTRELINE
 - EXISTING ELEVATION
 - PROPOSED ELEVATION
 - TREE HABITAT
 - STONE PILE
 - SUNNING LOG
 - WOODY HABITAT

No.	DATE	BY	REVISIONS		
DATE:					
SCALE: HORIZONTAL - 1:250 VERTICAL - 1:25					
CONSULTANT					
<div><div>water's edge</div><div>ENVIRONMENTAL SOLUTIONS TEAM LTD.</div><div></div></div>					
<div><div>A Healthy Watershed for Everyone</div><div>SALTFLEET WETLAND</div><div>BATTLEFIELD CREEK (BC-1)</div></div>					
EXISTING CHANNEL ENHANCEMENT PLAN					
DESIGN		EEG		PROJECT No. 19008	
CHECKED		EG		SHEET No. 15	






No.	DATE	BY	REVISIONS

DATE:	 ENVIRONMENTAL SOLUTIONS TEAM
SCALE: HORIZONTAL - 1:1000 VERTICAL - 1:1000	

CONSULTANT

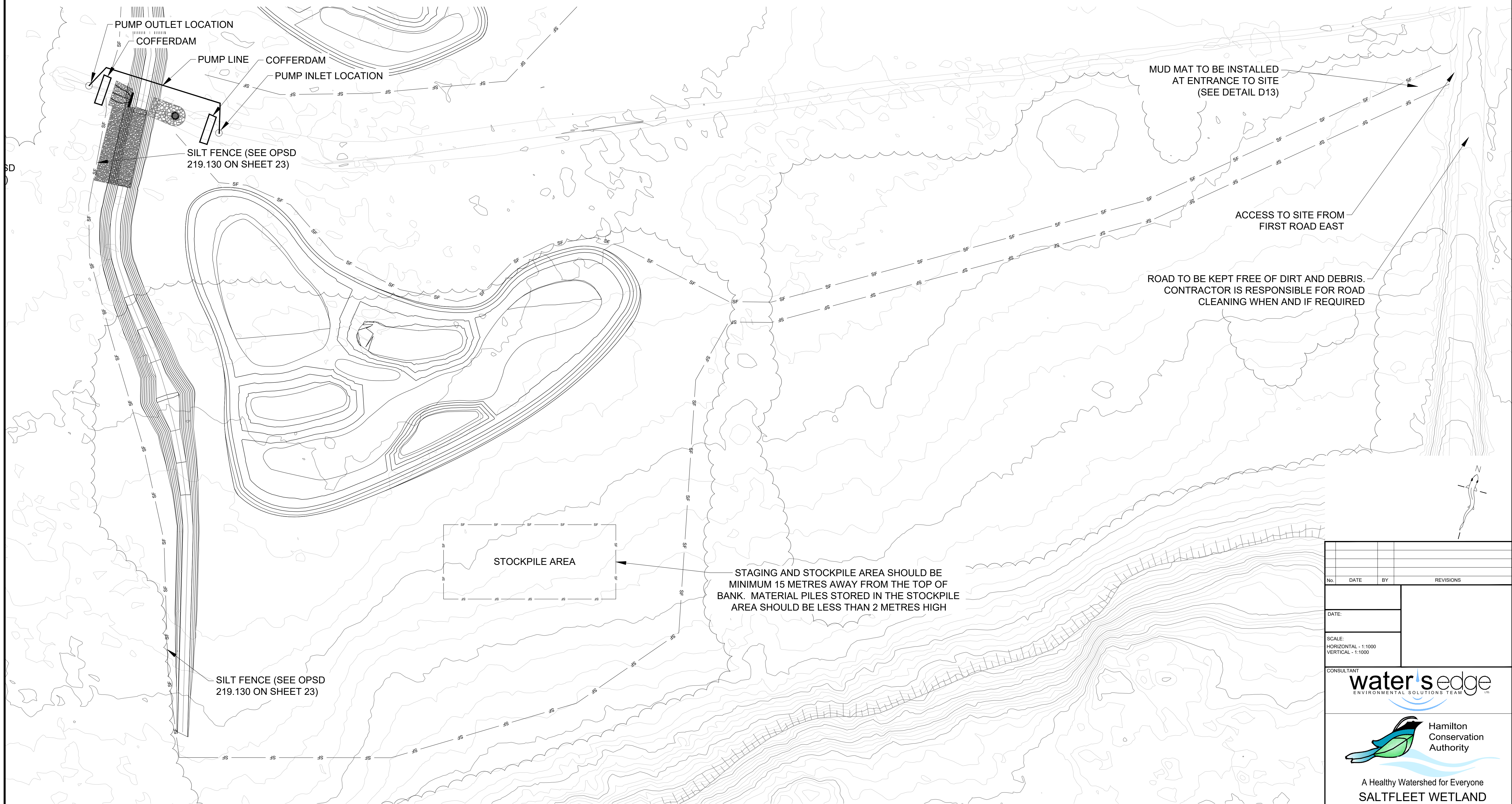




Hamilton
Conservation
Authority

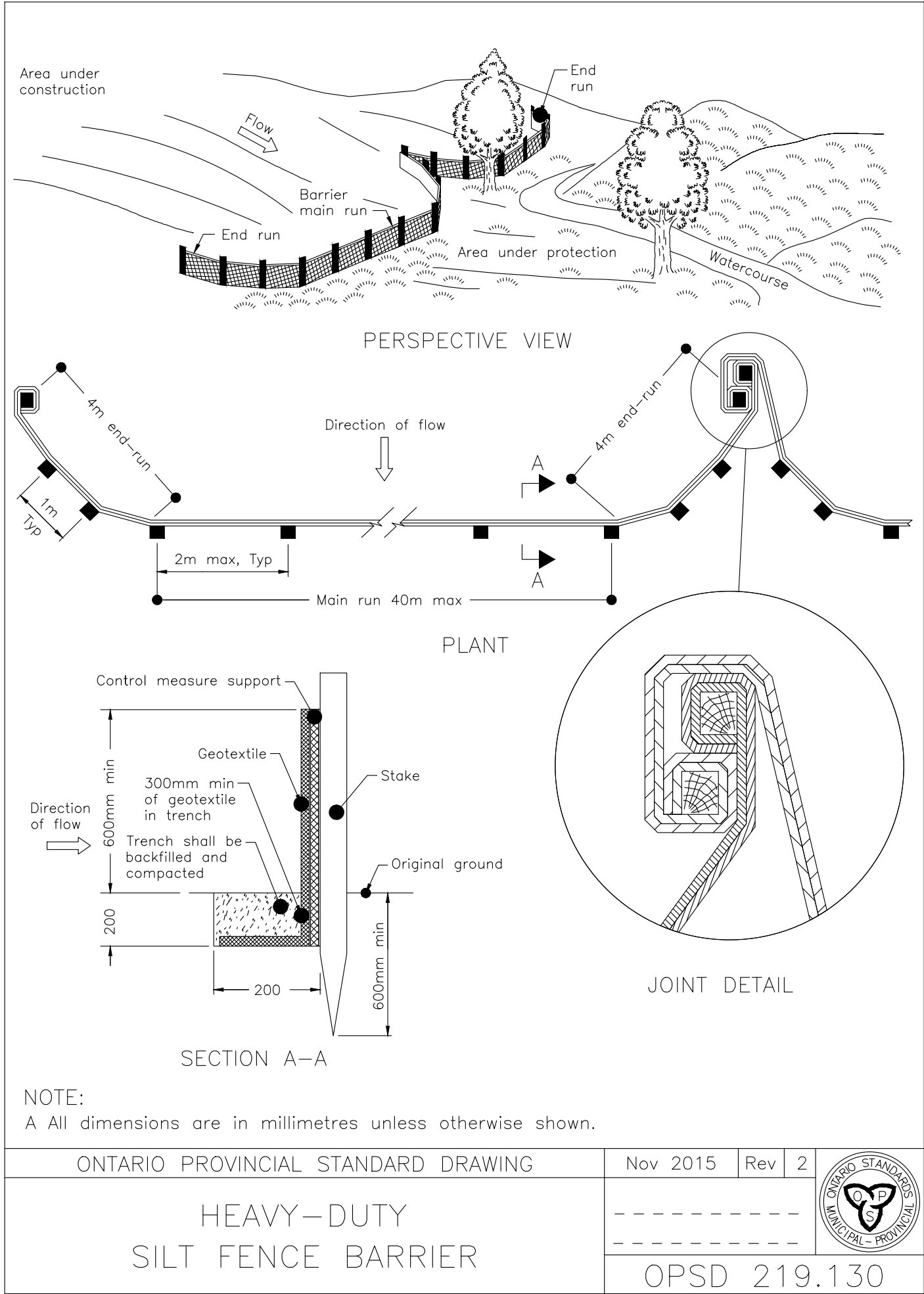
A Healthy Watershed for Everyone
**SALTFLEET WETLAND
BATTLEFIELD CREEK (BC-1)**

**EAST POND EROSION &
SEDIMENT CONTROL 1**

DESIGN	EEG	PROJECT No.	19008
CHECKED	EG	SHEET No.	17



REVISIONS			
No.	DATE	BY	
DATE:			
SCALE: HORIZONTAL - 1:1000 VERTICAL - 1:1000			
CONSULTANT			
<div><div> ENVIRONMENTAL SOLUTIONS TEAM</div><div> Hamilton Conservation Authority</div></div>			
A Healthy Watershed for Everyone SALTFLEET WETLAND BATTLEFIELD CREEK (BC-1)			
EAST POND EROSION & SEDIMENT CONTROL 2			
DESIGN	EEG	PROJECT No.	19008
CHECKED	EG	SHEET No.	18

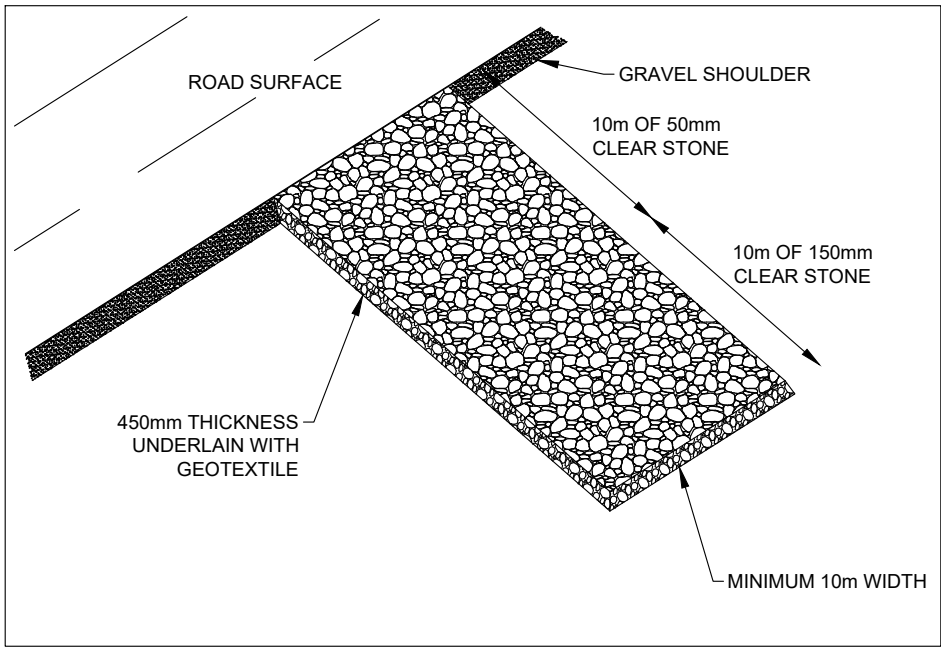


CONSTRUCTION ACCESS:

1. ACCESS TO THE CONSTRUCTION SITE WILL BE OFF FIRST ROAD EAST AND SECOND ROAD EAST.
2. SHRUBS TO BE TRIMMED OR REMOVED FROM ACCESS AS APPROVED BY CONTRACT ADMINISTRATOR AND MUNICIPALITY.
3. SAFETY FENCE TO BE ERECTED AS REQUIRED TO LIMIT PUBLIC ACCESS TO TEMPORARY CONSTRUCTION ACCESS ROAD AND CONSTRUCTION SITE.
4. SITE CONSTRUCTION ACTIVITY WILL INCLUDE THE REPAIR OF THE CREEK ACCESS AND EGRESS AREA AS PER DESIGN.
5. UPON COMPLETION OF THE CONSTRUCTION, THE ACCESS WAY IS TO BE REPAIRED TO EXISTING CONDITIONS OR BETTER.
6. CONTRACTOR TO MEET ON SITE WITH THE CONTRACT ADMINISTRATOR, CONSERVATION AUTHORITY STAFF AND MUNICIPAL STAFF PRIOR TO INITIATION OF CONSTRUCTION.
7. ROAD TO BE KEPT FREE OF DIRT AND DEBRIS, CONTRACTOR IS RESPONSIBLE FOR ROAD CLEANING WHEN AND IF REQUIRED.

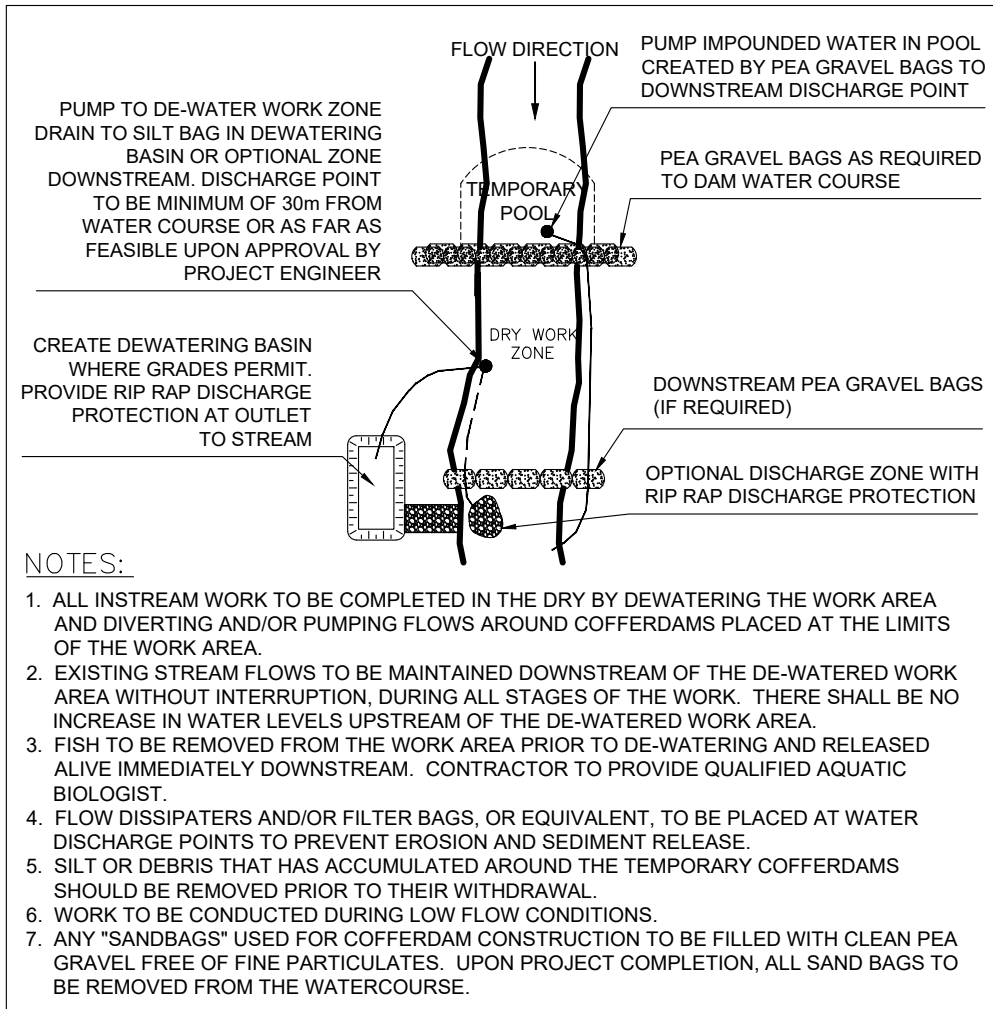
CONSTRUCTION SEQUENCING AND STAGING NOTES:

1. CONTRACTOR TO NOTIFY MUNICIPALITY, AGENCIES AND CONTRACT ADMINISTRATOR TWO (2) DAYS PRIOR TO ACTUAL CONSTRUCTION.
2. THE CONTRACTOR SHALL PROVIDE GENERAL ARRANGEMENT DRAWINGS AND A STAGING PLAN WITH THE PROPOSED BYPASS METHODOLOGY AND DEMONSTRATE THAT THE APPROACH CAN ADEQUATELY ADDRESS THE ENVIRONMENTAL AND EXISTING SITE CONDITIONS (VARYING FLOW CONDITIONS, CHANNEL CAPACITIES, WET WEATHER RESPONSE).
3. CONSTRUCTION STAGING MUST HAVE REGARD FOR THE ENVIRONMENTAL ASPECTS OF THE PROPOSED CONSTRUCTION. THIS WILL ENSURE THAT AMPLE TIME IS PROVIDED TO ENSURE THE TIMELY ARRIVAL OF REQUIRED EQUIPMENT AND MATERIALS AND THE APPROPRIATE ALLOCATION OF RESOURCES.
4. INSTALL CONSTRUCTION FENCING AND SILT FENCING AS PER SPECIFICATIONS. FENCE TO BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE THE LIMIT OF CONSTRUCTION ACTIVITY.
5. REMOVE AND DISPOSE OF EXISTING VEGETATION IN LOCATIONS AS DIRECTED BY HCA.
6. PLACE DAM & PUMP CONTROLS IN DESIGNATED AREA.
7. REMOVE AND DISPOSE OF BERMS AND EXCESS MATERIALS.
8. SUPPLY AND PLACE HEADWALL AND OUTFALL STONE.
9. CONSTRUCT PROPOSED CHANNEL AS PER THE DESIGN PLANS AND SPECIFICATIONS.
10. REMOVE ALL EXCESS MATERIAL STOCKPILED ON SITE.
11. COMPLETE SEEDING AND PLANTING AS PER APPROVED PLANS AND SPECIFICATIONS.
12. STABILIZE ALL SLOPES AS NOTED ON PLAN.
13. REMOVE DAM & PUMP CONTROLS
14. REMOVE ANY EROSION AND SEDIMENT CONTROLS ONCE ALL VEGETATION HAS BECOME SUFFICIENTLY ESTABLISHED.



D8 MUD MAT (TYPICAL) (AS REQUIRED)

N.T.S.





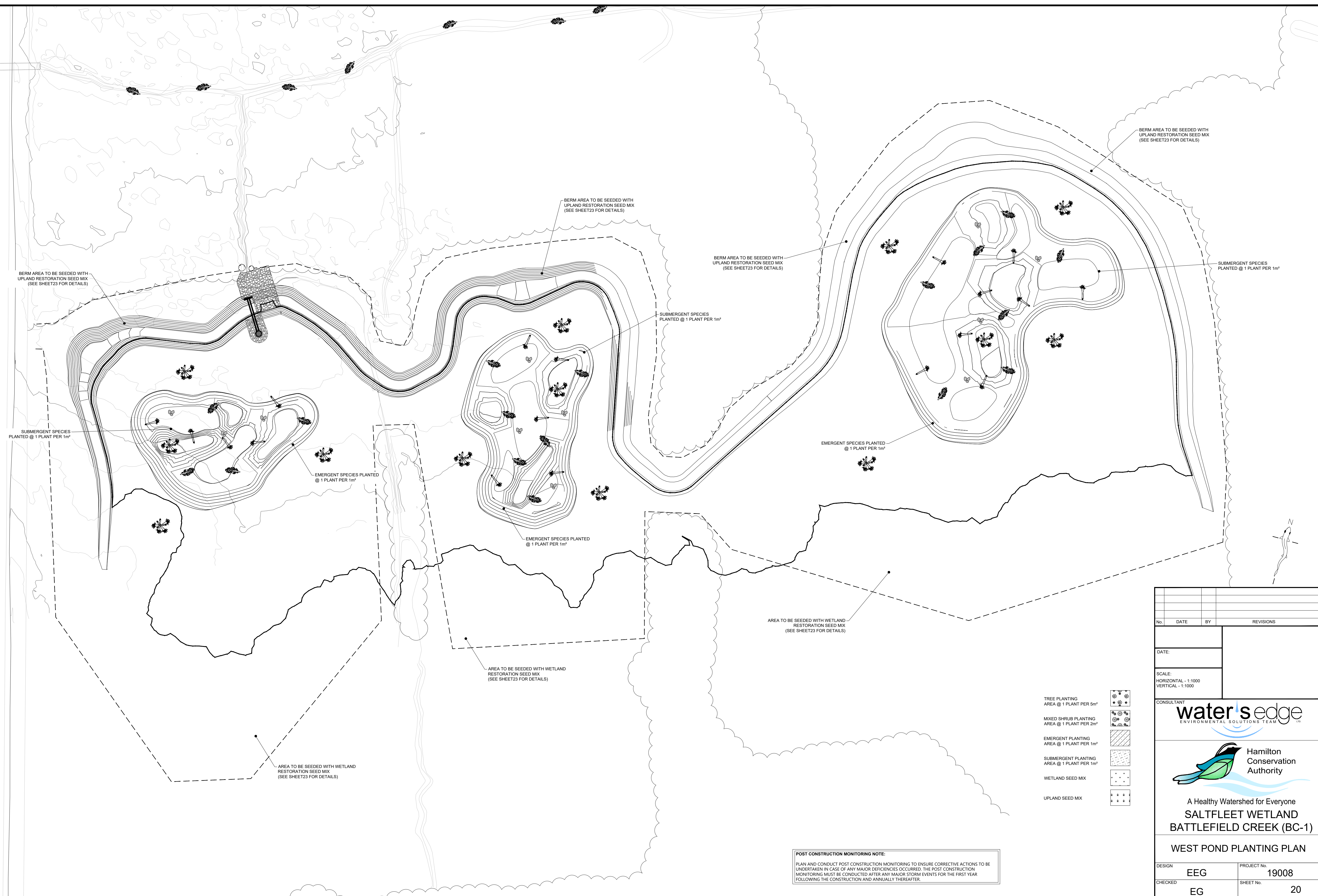
D9 DAM AND PUMP (TYPICAL)



N.T.S.

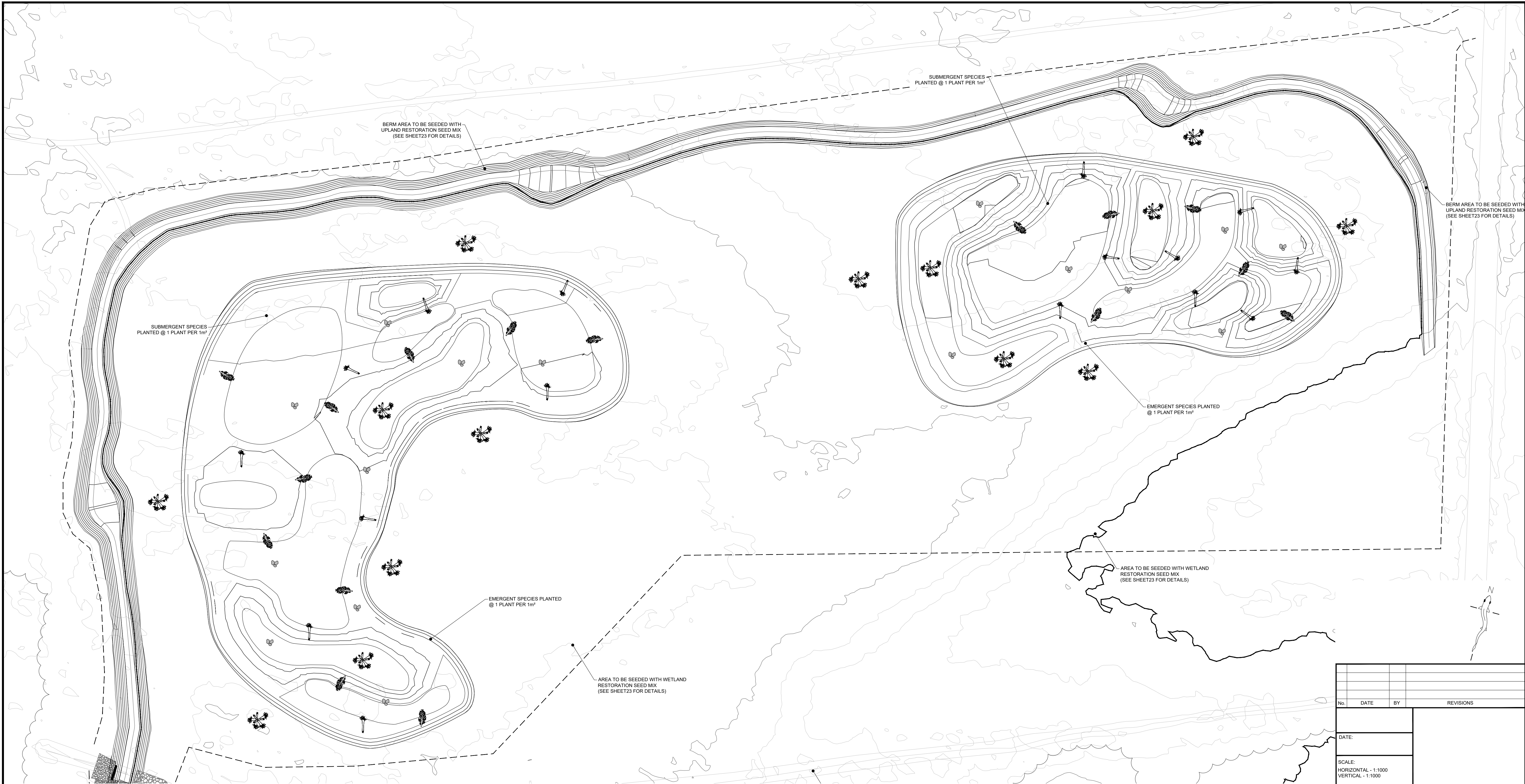
EROSION AND SEDIMENT CONTROL STRATEGY

1. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A DETAILED SCHEDULE AND WORK PLAN FOR REVIEW AND APPROVAL OF THE CONTRACT ADMINISTRATOR AND EXTERNAL AGENCIES AS REQUIRED, INDICATING HOW HE WILL IMPLEMENT SEDIMENT AND EROSION CONTROLS, AND HOW HE WILL CONTROL/DIVERT CREEK FLOWS AROUND OR THROUGH THE CONSTRUCTION AREA.
2. SEDIMENT AND EROSION CONTROL MEASURES MUST BE IMPLEMENTED PRIOR TO WORK, AND MAINTAINED DURING THE WORK PHASE, TO PREVENT ENTRY OF SEDIMENT INTO THE WATER OR RE-SUSPENDED SEDIMENT.
3. ANY STOCKPILED MATERIALS SHOULD BE STORED AND STABILIZED AWAY FROM THE WATER. EXCESS MATERIAL SHALL BE REMOVED IMMEDIATELY FROM THE CHANNEL AREA AND TEMPORARILY STOCKPILED IN SUITABLE LOCATIONS IDENTIFIED BY THE DESIGN DRAWINGS AND ON-SITE AREAS APPROVED BY THE CONTRACT ADMINISTRATOR.
4. ALL WORK IS TO BE PERFORMED DURING LOW FLOW CONDITIONS AND WORK IS NOT TO BE INITIATED WHEN WEATHER FORECASTS SUGGEST EXTENSIVE RAIN.
5. THE CONSTRUCTION ZONE IS TO BE ISOLATED FROM ADJACENT STREAM FLOWS USING A DAM & PUMP TECHNIQUE AND BY USING ADEQUATE SILT FENCING, STONE OR ANY OTHER METHOD AS APPROVED BY THE CONTRACT ADMINISTRATOR.
6. ALL WORK IS TO BE COMPLETED AS EXPEDITIOUSLY AS POSSIBLE AND ANY WORK THAT HAS BEEN INITIATED MUST BE COMPLETED WITHIN THE WORKING DAY. IF THIS IS NOT POSSIBLE, THEN THE CONTRACTOR MUST ENSURE, TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR, THAT THE WORK SITE IS ADEQUATELY STABILIZED.
7. ONCE EACH GRADING COMPONENT OF THE PROJECT HAS BEEN COMPLETED BY THE CONTRACTOR, THE SITE IS TO BE REVEGETATED AS PER THE PLANS AND STABILIZED.
8. ANY EROSION AND SEDIMENT CONTROLS ARE TO BE REMOVED AT THE COMPLETION OF THE PROJECT AFTER A JOINT INSPECTION BY THE CONTRACTOR AND CONTRACT ADMINISTRATOR.
9. ANY DEVIATIONS FROM THE APPROVED STRATEGY MUST BE APPROVED BY THE CONTRACT ADMINISTRATOR.
10. CONTRACTOR TO AVOID ANY UNNECESSARY DISRUPTION OF THE EXISTING CHANNEL.
11. SEDIMENT LADEN DEWATERING DISCHARGE SHOULD BE PUMPED TO A SETTLING BASIN OR FILTERING SYSTEM WELL AWAY FROM THE WATERCOURSE AND ALLOWED TO SETTLE AND/OR FILTER THROUGH THE RIPARIAN VEGETATION BEFORE RE-ENTERING THE WATERCOURSE DOWNSTREAM OF THE CONSTRUCTION AREA.



No.	DATE	BY	REVISIONS
DATE:			
SCALE: HORIZONTAL - 1:1000 VERTICAL - 1:1000			
CONSULTANT			
 ENVIRONMENTAL SOLUTIONS TEAM			
 Hamilton Conservation Authority			
A Healthy Watershed for Everyone SALTFLEET WETLAND BATTLEFIELD CREEK (BC-1)			
EROSION & SEDIMENT CONTROL DETAILS			
DESIGN	EEG	PROJECT No.	19008
CHECKED	EG	SHEET No.	19

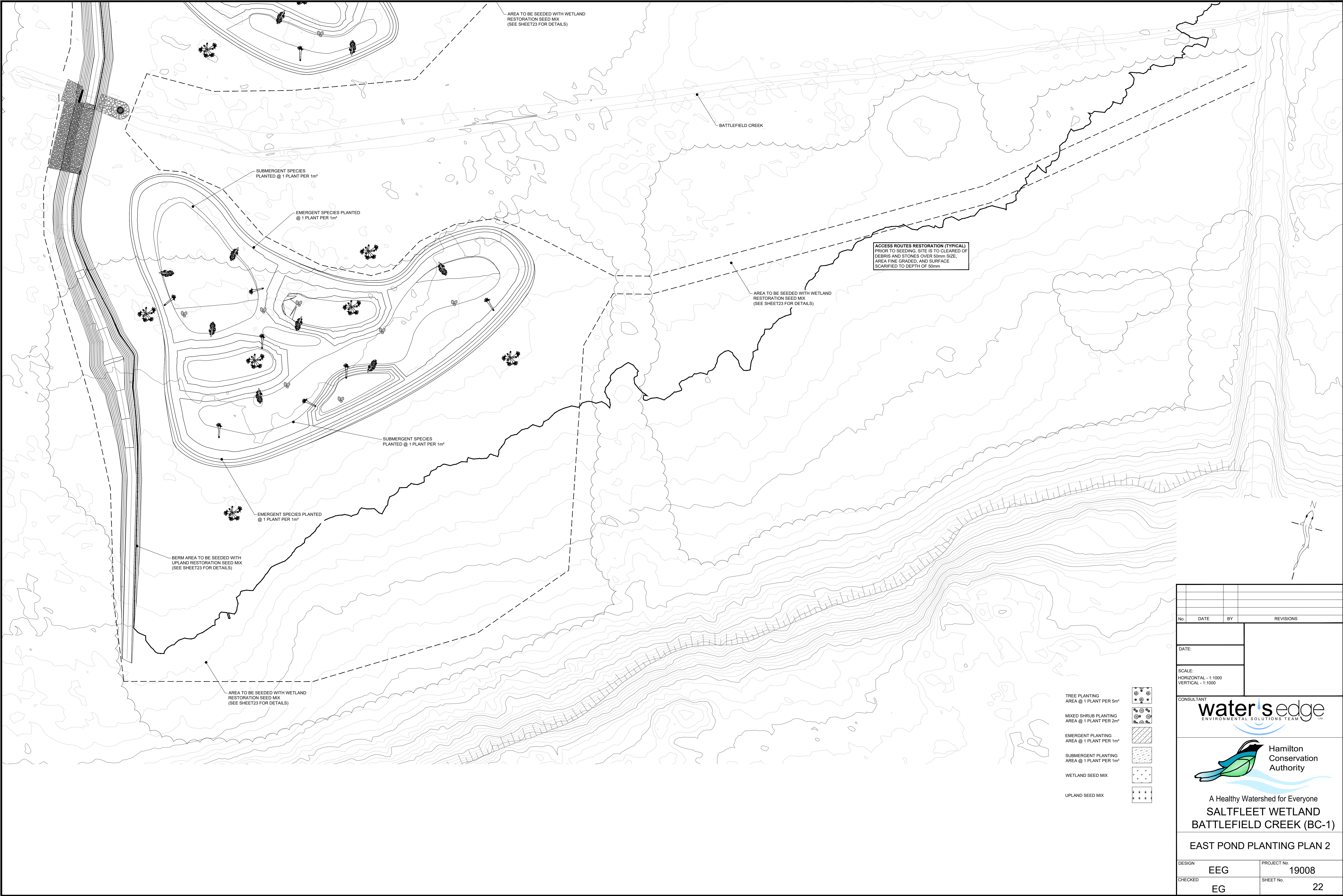


No.	DATE	BY	REVISIONS		
DATE:					
SCALE: HORIZONTAL - 1:1000 VERTICAL - 1:1000					
CONSULTANT					
 <div style="text-align: right;">Hamilton Conservation Authority</div>					
					
A Healthy Watershed for Everyone					
SALTFLEET WETLAND					
BATTLEFIELD CREEK (BC-1)					
WEST POND PLANTING PLAN					
DESIGN		PROJECT No.			
EEG		19008			
CHECKED		SHEET No.			
EG		20			





- TREE PLANTING
AREA @ 1 PLANT PER 5m²
- MIXED SHRUB PLANTING
AREA @ 1 PLANT PER 2m²
- EMERGENT PLANTING
AREA @ 1 PLANT PER 1m²
- SUBMERGENT PLANTING
AREA @ 1 PLANT PER 1m²
- WETLAND SEED MIX
- UPLAND SEED MIX

No.	DATE	BY	REVISIONS
DATE:			
SCALE: HORIZONTAL - 1:1000 VERTICAL - 1:1000			
CONSULTANT			
 ENVIRONMENTAL SOLUTIONS TEAM			
 Hamilton Conservation Authority			
A Healthy Watershed for Everyone SALTFLEET WETLAND BATTLEFIELD CREEK (BC-1)			
EAST POND PLANTING PLAN 1			
DESIGN	EEG	PROJECT No.	19008
CHECKED	EG	SHEET No.	21



- TREE PLANTING
AREA @ 1 PLANT PER 5m²
- MIXED SHRUB PLANTING
AREA @ 1 PLANT PER 2m²
- EMERGENT PLANTING
AREA @ 1 PLANT PER 1m²
- SUBMERGENT PLANTING
AREA @ 1 PLANT PER 1m²
- WETLAND SEED MIX
- UPLAND SEED MIX

No.	DATE	BY	REVISIONS
DATE:			
SCALE: HORIZONTAL - 1:1000 VERTICAL - 1:1000			
CONSULTANT			
 ENVIRONMENTAL SOLUTIONS TEAM			
 Hamilton Conservation Authority			
A Healthy Watershed for Everyone SALTFLEET WETLAND BATTLEFIELD CREEK (BC-1)			
EAST POND PLANTING PLAN 2			
DESIGN	EEG	PROJECT No.	19008
CHECKED	EG	SHEET No.	22



Botanical Name	Common Name	% of mix
<i>Asclepias incarnata</i> ssp. <i>incarnata</i>	Swamp Milkweed	1
<i>Symphoricarpon novae-angliae</i>	New England Aster	1
<i>Symphoricarpon punctum</i> var. <i>punctum</i>	Swamp Aster	1
<i>Carex vulpinoidea</i>	Fox Sedge	35
<i>Elymus virginicus</i> var. <i>virginicus</i>	Virginia Wildrye	35
<i>Eutrochium maculatum</i>	Spotted Joe-Pye-Weed	1
<i>Iris versicolor</i>	Harlequin Blue Flag	1
<i>Juncus effusus</i> ssp. <i>solutus</i>	Soft Rush	5
<i>Leskea oxyzoites</i>	Rose Cutgrass	1
<i>Mnium rigens</i>	Square-stemmed Monkeyflower	1
<i>Scirpus atrovirens</i>	Dark-green Bulrush	8
<i>Scirpus cyperinus</i>	Cottongrass Bulrush	1
<i>Verbena hastata</i>	Blue Vervain	9
TOTAL		100

Botanical Name	Common Name	% of mix
<i>Oenothera biennis</i>	Common Evening Primrose	25
<i>Anemone canadense</i>	Canada Anemone	1
<i>Asclepias syriaca</i>	Common Milkweed	2
<i>Symphoricarpos coriifolium</i>	Heart Leaved Aster	1
<i>Symphoricarpos novae-angliae</i>	New England Aster	1
<i>Carex granularis</i>	Granular Sedge	15
<i>Clematis virginiana</i>	Virginia Virgin's-bower	1
<i>Elymus virginicus</i> var. <i>virginicus</i>	Virginia Wildrye	40
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	1
<i>Monarda fistulosa</i>	Wild Bergamot	1
<i>Rudbeckia hirta</i>	Black-eyed Susan	10
<i>Solidago canadensis</i>	Canada Goldenrod	2
TOTAL		100



Key	Botanical Name	Common Name	Cal. (mm)	HL. (cm)	Root Condition	EAST POND	WEST POND
TREES							
qm	Quercus macrocarpa	Bur Oak	60		W.B.	75	57
qr	Quercus rubra	Red Oak	60		W.B.	65	65
pd	Populus deltoides	Eastern Cottonwood	60		W.B.	65	47
as	Acer saccharinum	Striped Maple	60		W.B.	85	52
ps	Prunus serotina	Black Cherry	40 - 50		W.B.	35	33
pst	Pinus strobus	White Pine	60		W.B.	65	54
co	Carya ovata	Shagbark Hickory	60		W.B.	57	60
ba	Betula alghenianensis	Yellow Birch	60		W.B.	48	30
ta	Tilia Americana	American Basswood	60		W.B.	40	67
pt	Populus tremuloides	Trembling Aspen	40 - 50		W.B.	50	65
rt	Rhus typhina	Staghorn Sumac	40 - 50		W.B.	30	45
cm	Crataegus mollis	Dowry Hawthorn	40 - 50		W.B.	37	38
cc	Crataegus crus-galli	Cockspur Hawthorn	40 - 50		W.B.	45	55
TOTAL						697	668
SHRUBS							
nm	Ilex verticillata	Winterberry	60	3 Gal. Pot		172	63
cs	Cornus sericea	Red Osier Dogwood	60	3 Gal. Pot		229	92
pv	Prunus virginia	Chokecherry	60	3 Gal. Pot		177	66
ro	Rubus odoratus	Flowering Raspberry	60	3 Gal. Pot		212	85
seq	Salix exiquia	Sandbar Willow	60	3 Gal. Pot		243	86
sl	Salix lucida	Shining Willow	60	3 Gal. Pot		162	75
sp	Salix petiolaris	Slender Willow	60	3 Gal. Pot		178	80
sc	Sambucus canadensis	Elderberry	60	3 Gal. Pot		242	86
sa	Spiraea alba	Meadowsweet	60	3 Gal. Pot		188	83
vi	Viburnum lentago	Nannyberry	60	3 Gal. Pot		173	63
co	Cephalanthus occidentalis	Butterbush	60	3 Gal. Pot		141	75
cf	Cornus foemina	Grey Dogwood	60	3 Gal. Pot		163	73
TOTAL						2280	920

KEY	BOTANICAL NAME	COMMON NAME	SIZE	CONT	FLOOD PLAIN ONTY.
EMERGENT SPECIES					
sl	<i>Sagittaria latifolia</i>	Common Arrowhead	250cm Ht.	#1cont	293
ap	<i>Alisma subcordatum</i>	Water Plantain	250cm Ht.	#1cont	293
os	<i>Sparganium eurycarpum</i>	Common Bur reed	250cm Ht.	#1cont	293
TOTAL					879
SUBMERGED SPECIES					
ec	<i>Elodea canadensis</i>	Common Waterweed	250cm Ht.	#1cont	394
cd	<i>Nymphaea alba</i>	White Water Lily	250cm Ht.	#1cont	394
TOTAL					788

COMMON CATTAIL (*Typha latifolia*) IS EXPECTED TO SEED IN ON ITS OWN.

18. ANY SITE PLAN OR GRADING AND SERVICING SHOWN IS FOR INFORMATION ONLY. REFER TO APPROVED DRAWINGS.