

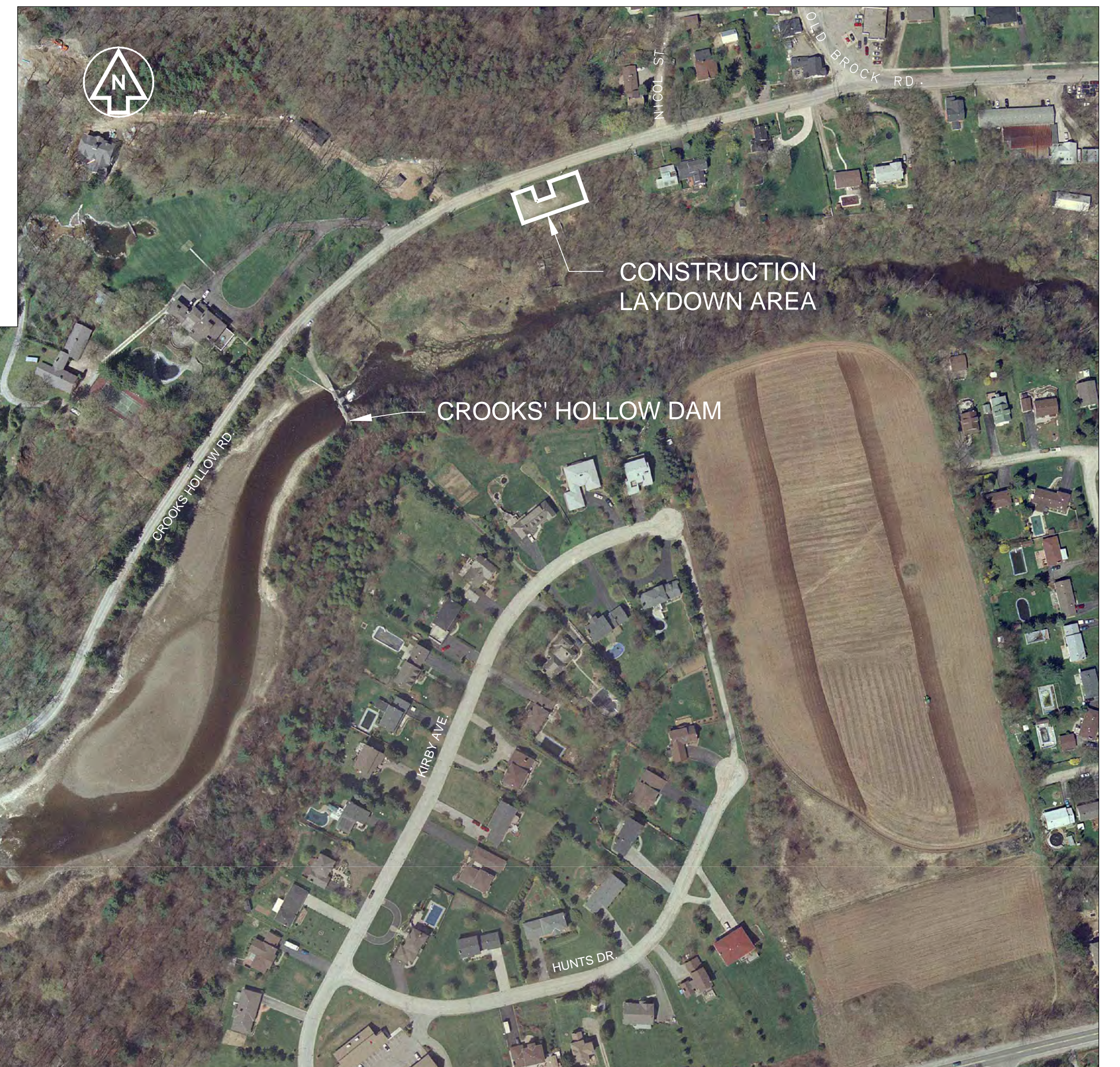
HAMILTON CONSERVATION AUTHORITY

WATER RESOURCES ENGINEERING

CROOKS' HOLLOW DAM REMOVAL AND RESTORATION OF SPENCER CREEK



EXISTING CROOKS' HOLLOW DAM - UPSTREAM VIEW

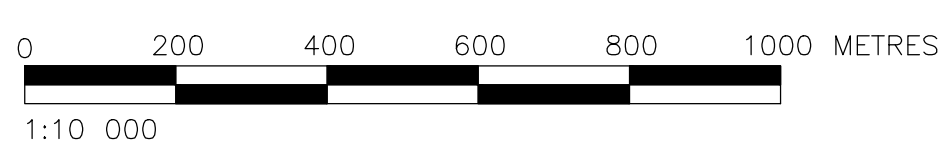


CONSTRUCTION LAYDOWN AREA

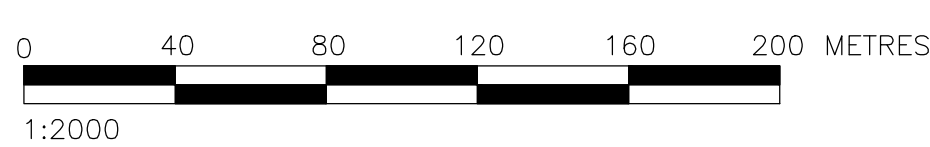
CROOKS' HOLLOW DAM



KEY PLAN



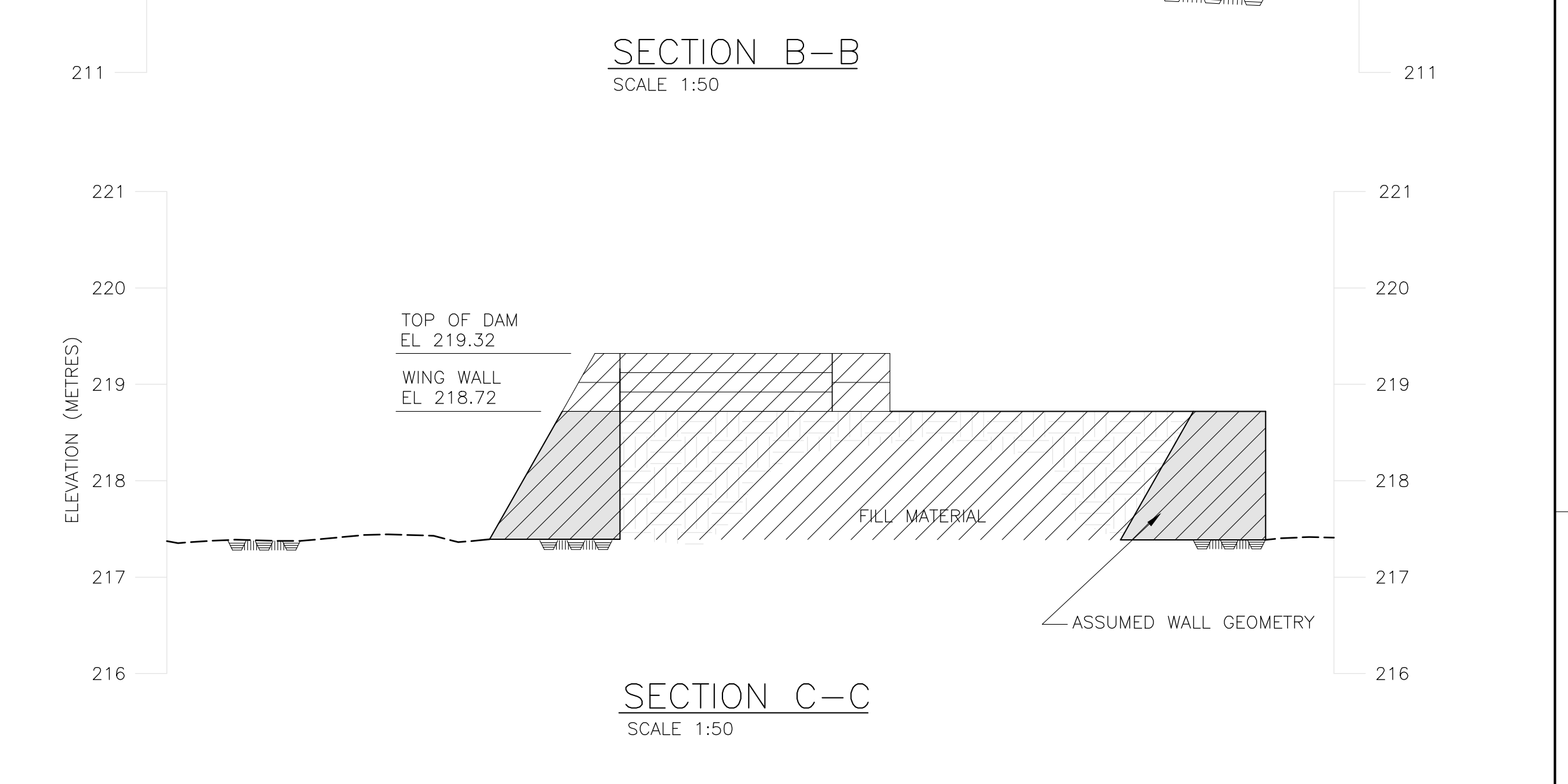
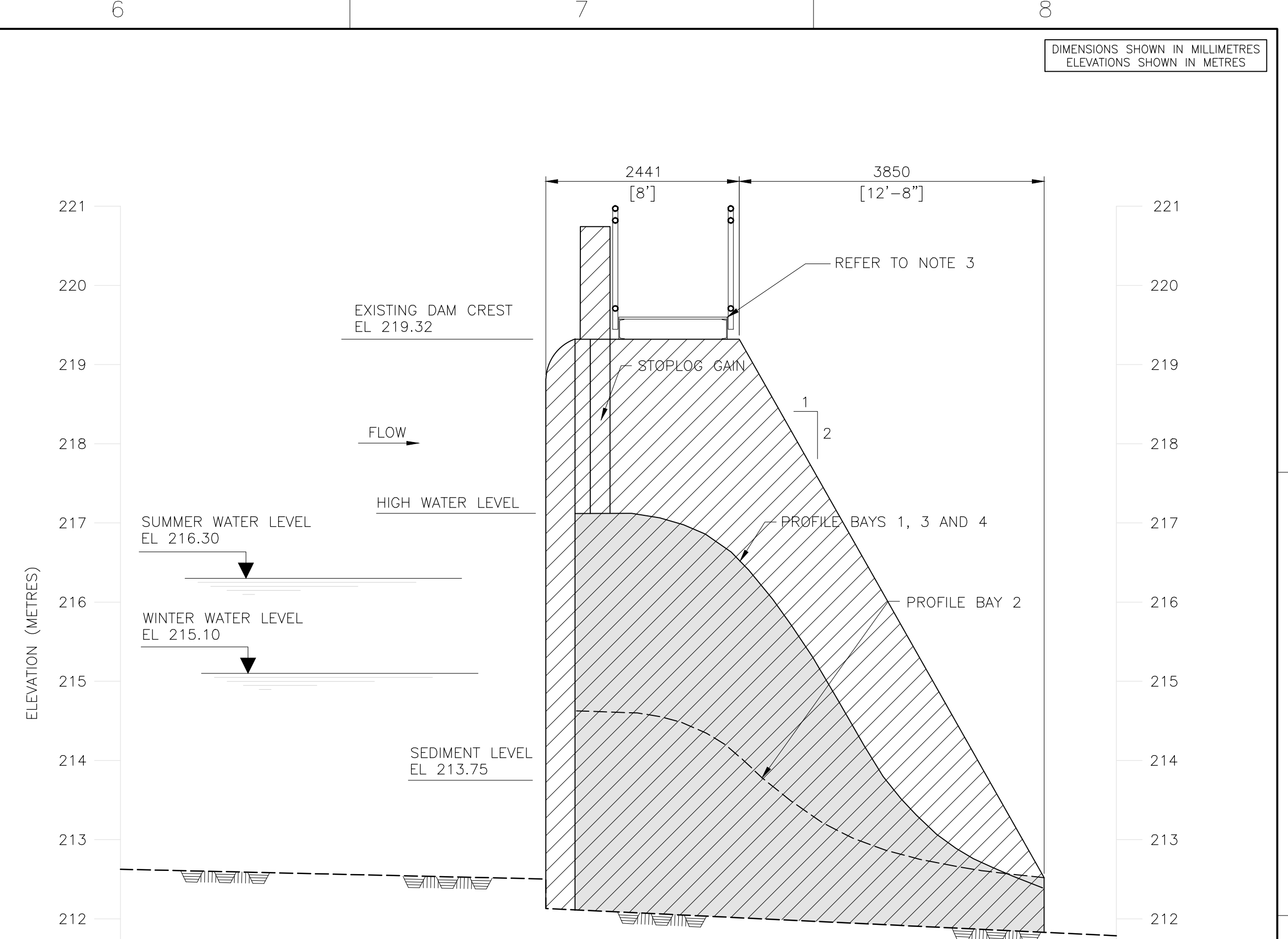
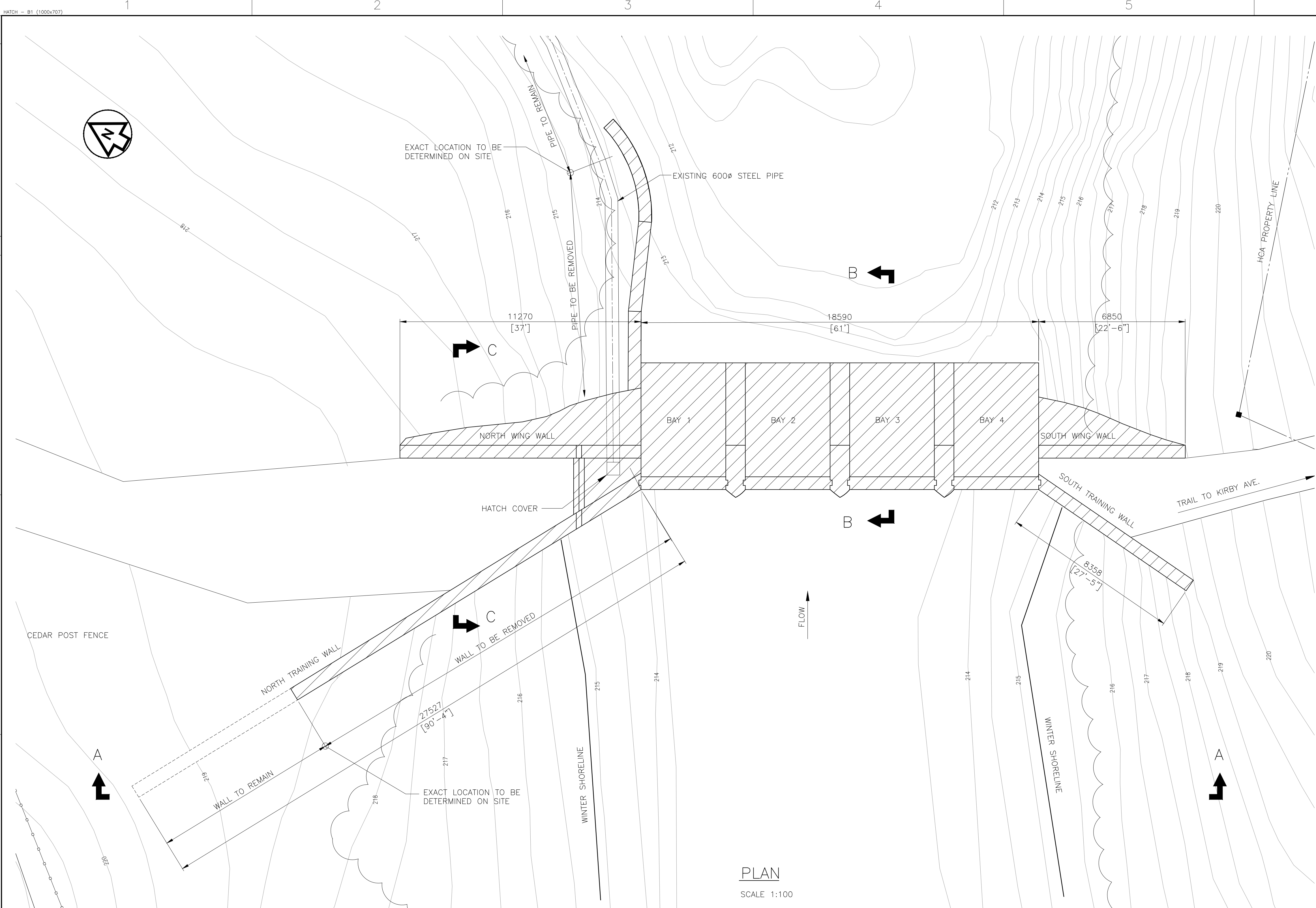
PROJECT GENERAL ARRANGEMENT



FILE NUMBER	DESCRIPTION
H337415-0000-10-041-0001	PROJECT GENERAL ARRANGEMENT AND DRAWING LIST
H337415-0000-10-041-0002	CROOKS' HOLLOW DAM EXISTING CONDITIONS AND DEMOLITION
H337415-0000-10-041-0003	WATER DIVERSION AND SEDIMENT CONTROL
H337415-0000-10-041-0004	SPENCER CREEK CHANNEL RESTORATION PLAN AND PROFILE
H337415-0000-10-041-0005	SPENCER CREEK CHANNEL RESTORATION CROSS SECTIONS A, B AND C
H337415-0000-10-041-0006	SPENCER CREEK CHANNEL RESTORATION CROSS SECTIONS D, E AND F
H337415-0000-10-041-0007	SPENCER CREEK CHANNEL RESTORATION DETAILS
H337415-0000-10-041-0008	SPENCER CREEK CHANNEL RESTORATION PLANTING PLAN
H337415-0000-10-041-0009	PEDESTRIAN BRIDGE CONCEPTUAL LAYOUT PLAN AND PROFILE

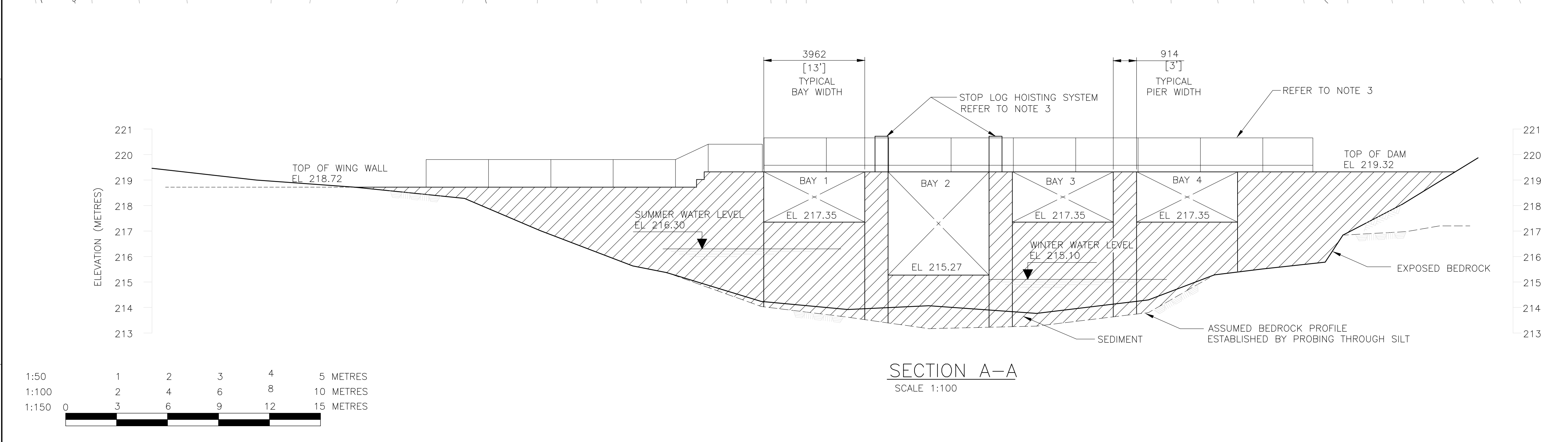
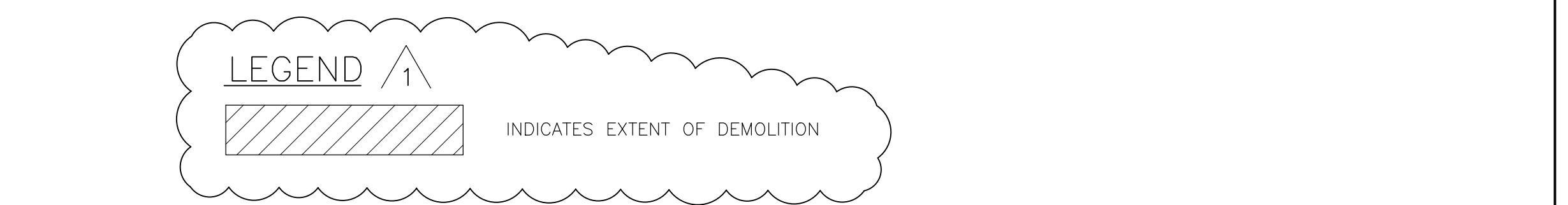
Feb. 19, 2012, 2:20pm
 Drawing Name: P:\HCA\337415\CAD\C\H337415-0000-10-041-0001.dwg
 Layout: 001
 Login name: p04110233

DRAWING NO. _____ DRAWING TITLE _____ REFERENCE DRAWINGS _____				WATER RESOURCES ENGINEERING ANCASTER, ONTARIO, CANADA 	
REVISIONS NO. DESCRIPTION CHK'D APP'D DATE 1 DRAWING NUMBERS REVISED W.H. 2012-02-21				PROJECT GENERAL ARRANGEMENT AND DRAWING LIST DESIGNED BY: G. COCHRANE CHECKED BY: _____ AUTH. BY: W. HOYLE PROJECT NUMBER: H-334715 SCALE: AS SHOWN DRAWING NO.: H337415-0000-10-042-0001 REVISION: 1	



- DAM REMOVAL NOTES:**
- ALL CONCRETE ELEMENTS ABOVE FINAL GRADE TO BE REMOVED. A POSSIBLE EXCEPTION MAY BE THE RETENTION OF THE SOUTH EAST ABUTMENT AFTER DETERMINING THE INTEGRITY OF THE STRUCTURE.
 - FOR FINAL GRADE AND CHANNEL IMPROVEMENTS SEE DRAWINGS H337415-0000-10-042-0004 AND 0006.
 - OTHER DAM ELEMENTS SUCH AS HOISTING SYSTEM, VALVES, AND RAILINGS SHALL BE CAREFULLY REMOVED AND RETAINED.
 - DIMENSIONS ARE APPROXIMATE.

- SOURCE**
- CROOKS' HOLLOW DAM INTEGRITY ASSESSMENT BY PETO MaccALLUM, 1993.
 - SITE SURVEY BY PARISH GEOMORPHIC LTD, 2011.



1:50	1	2	3	4	5
1:100	2	4	6	8	10
1:150	3	6	9	12	15

0 5 METRES
0 10 METRES
0 15 METRES

NO.	DESCRIPTION	CHK'D	APP'D	DATE
1	EXTENT OF DEMOLITION ADDED			W.H. 2012-02-21

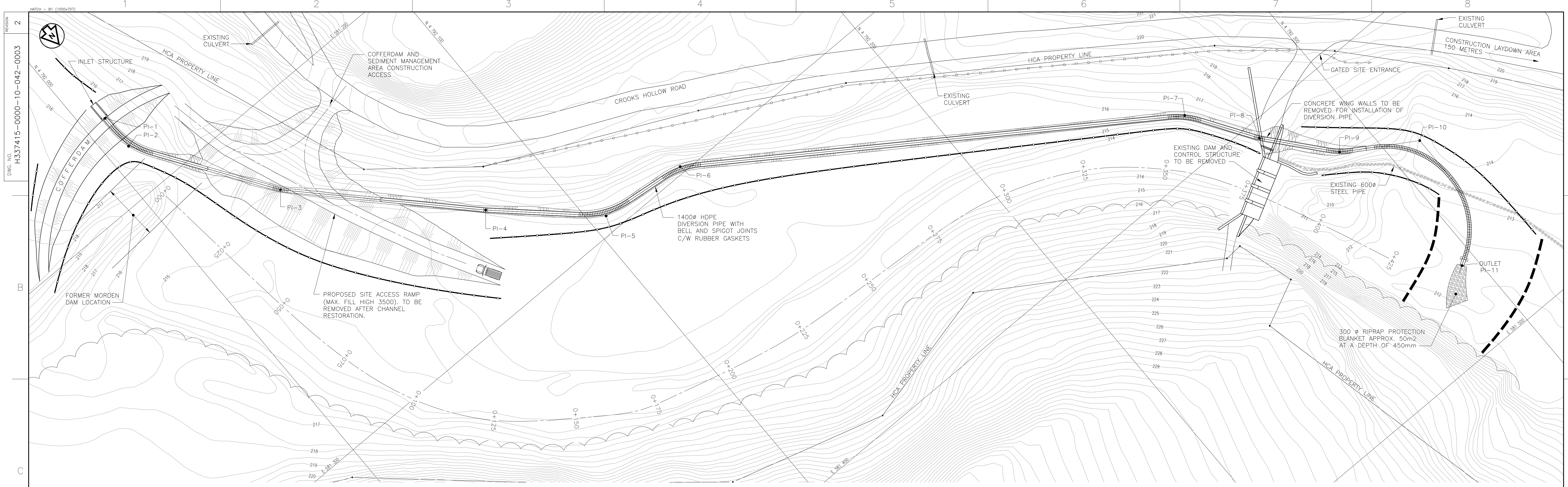
REVISIONS

HATCH WATER RESOURCES ENGINEERING
ANCASTER, ONTARIO, CANADA

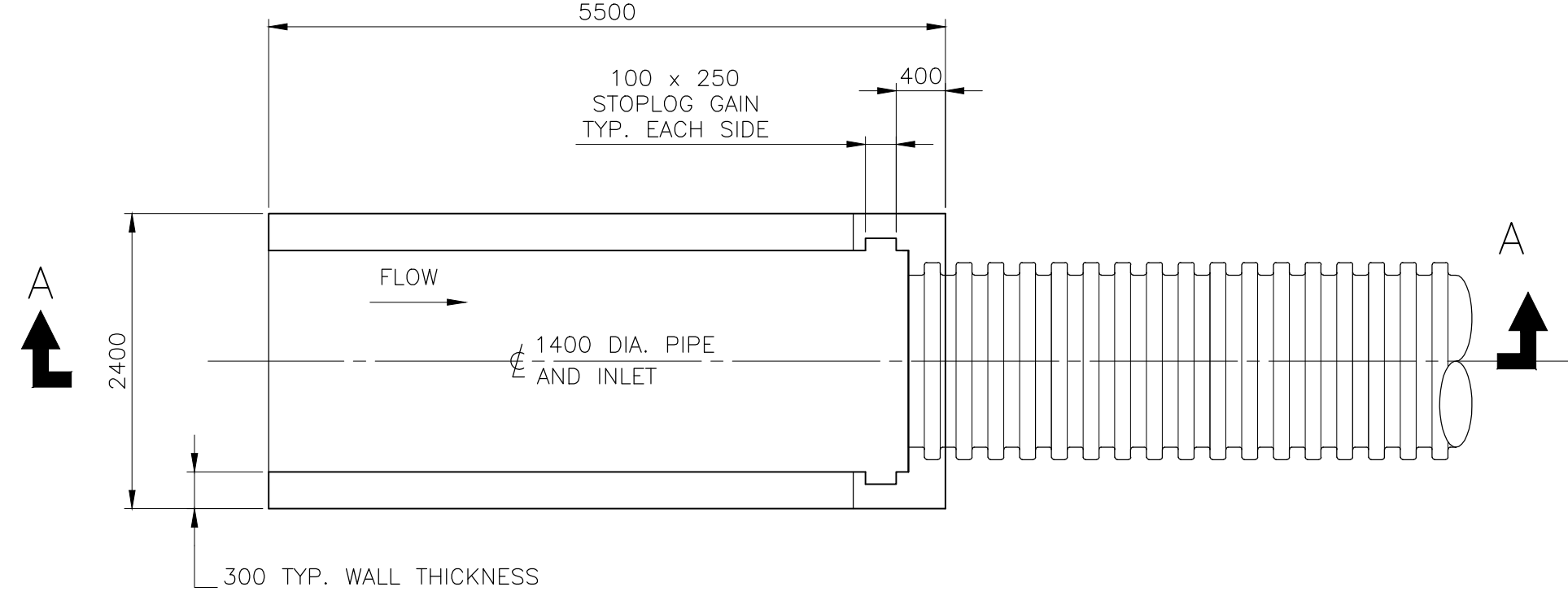
CROOKS' HOLLOW DAM REMOVAL AND RESTORATION OF SPENCER CREEK

CROOKS' HOLLOW DAM EXISTING CONDITIONS AND DEMOLITION

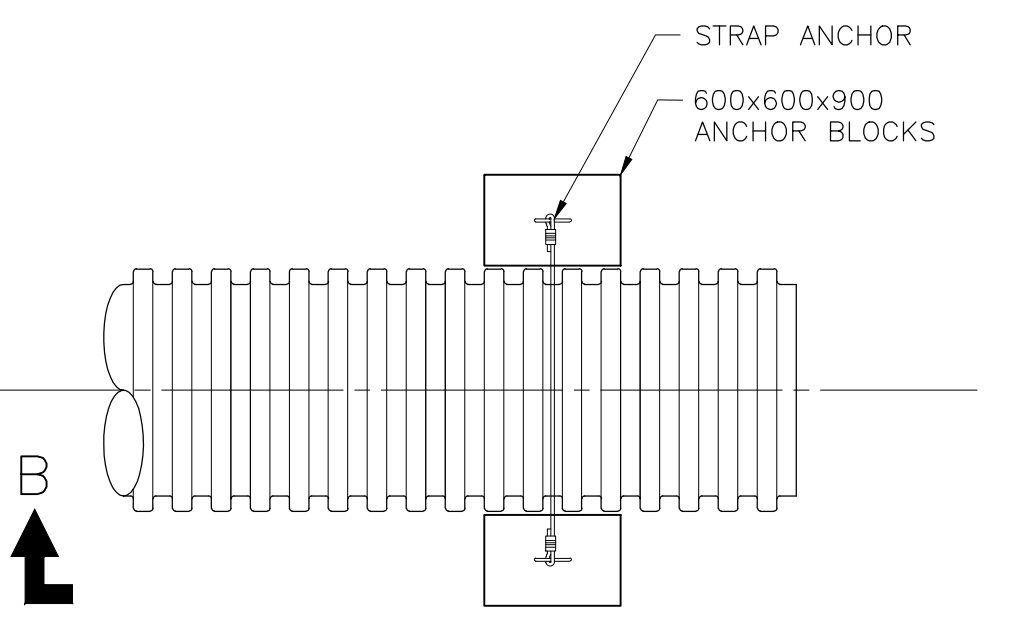
DESIGNED BY G. COCHRANE	DATE 2012-02-21
CHECKED BY W. HOYLE	DATE 2011-08-23
DATE 2011-06-10	DATE 2011-06-10
PROJ. MGR. A. BRELAND	PROJECT NUMBER H-337415
SCALE AS SHOWN	DRAWING NO. H337415-0000-10-042-0002
DATE	REVISION 1



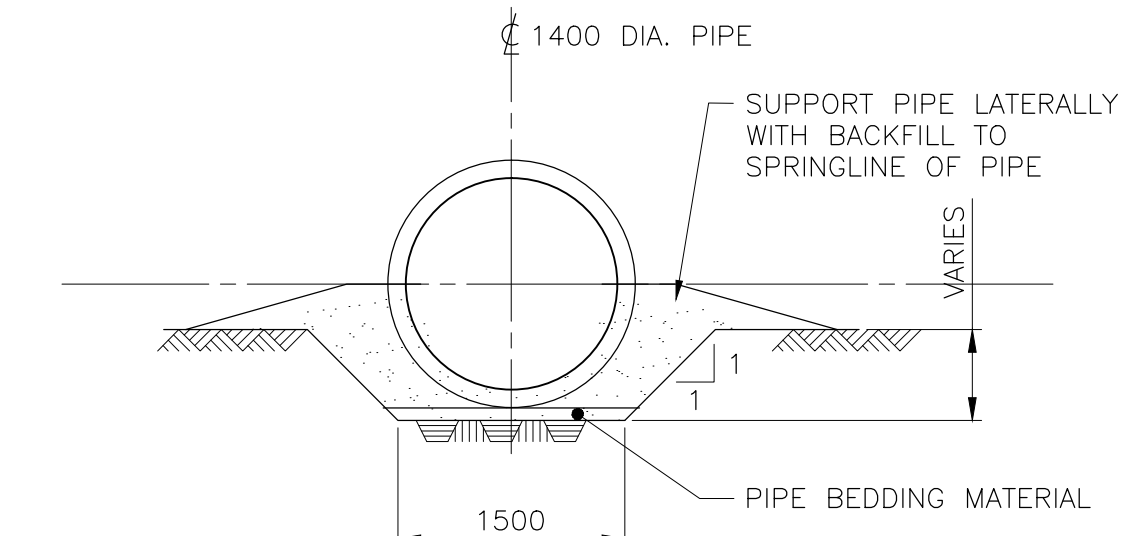
PLAN
SCALE 1:500



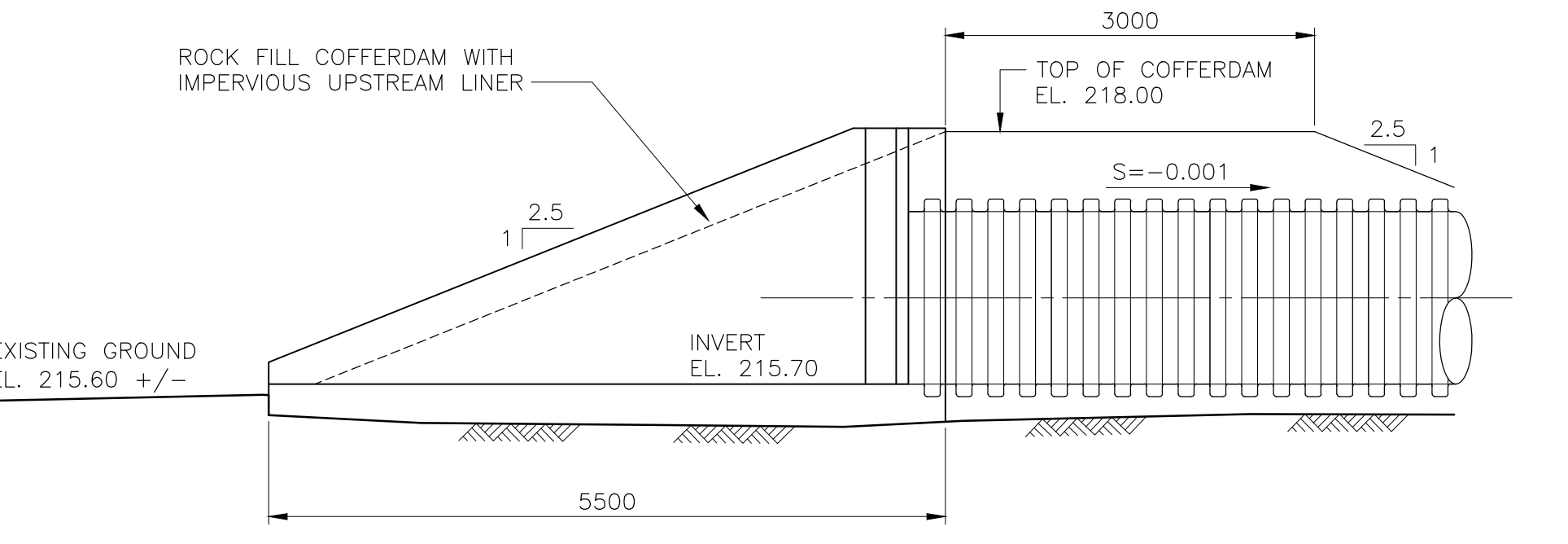
INLET STRUCTURE - PLAN
SCALE 1:50



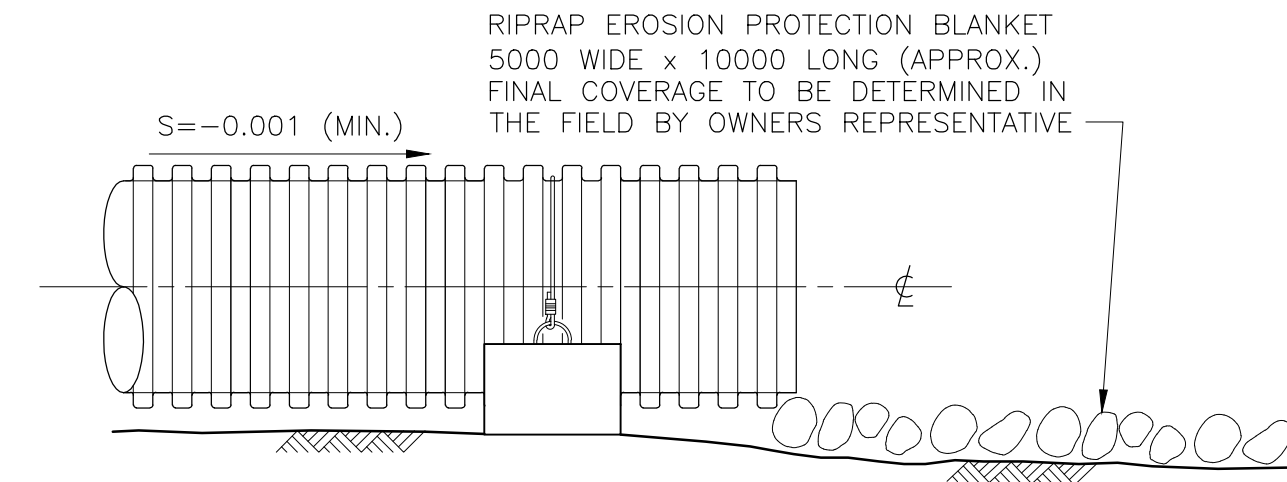
OUTLET - PLAN
SCALE 1:50



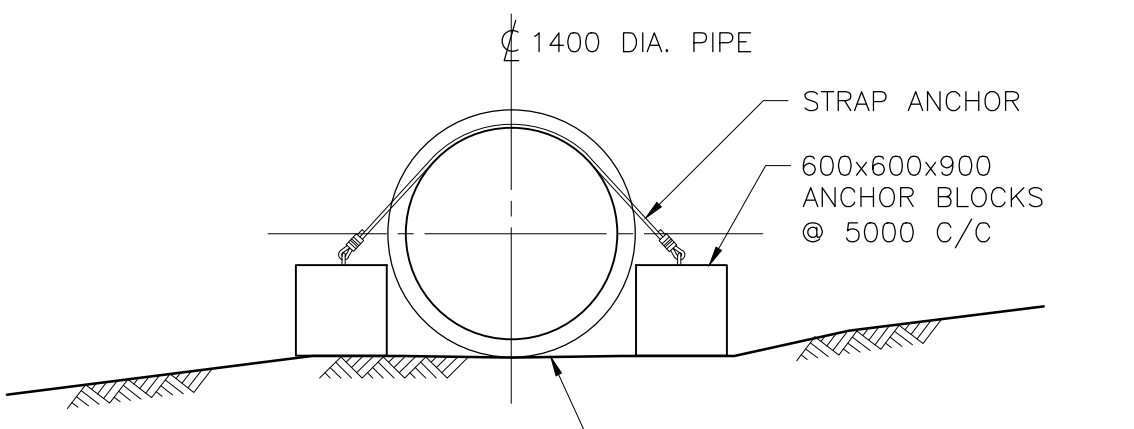
TYPICAL PIPE SUPPORT WITH PIPE IN TRENCH
SCALE 1:50



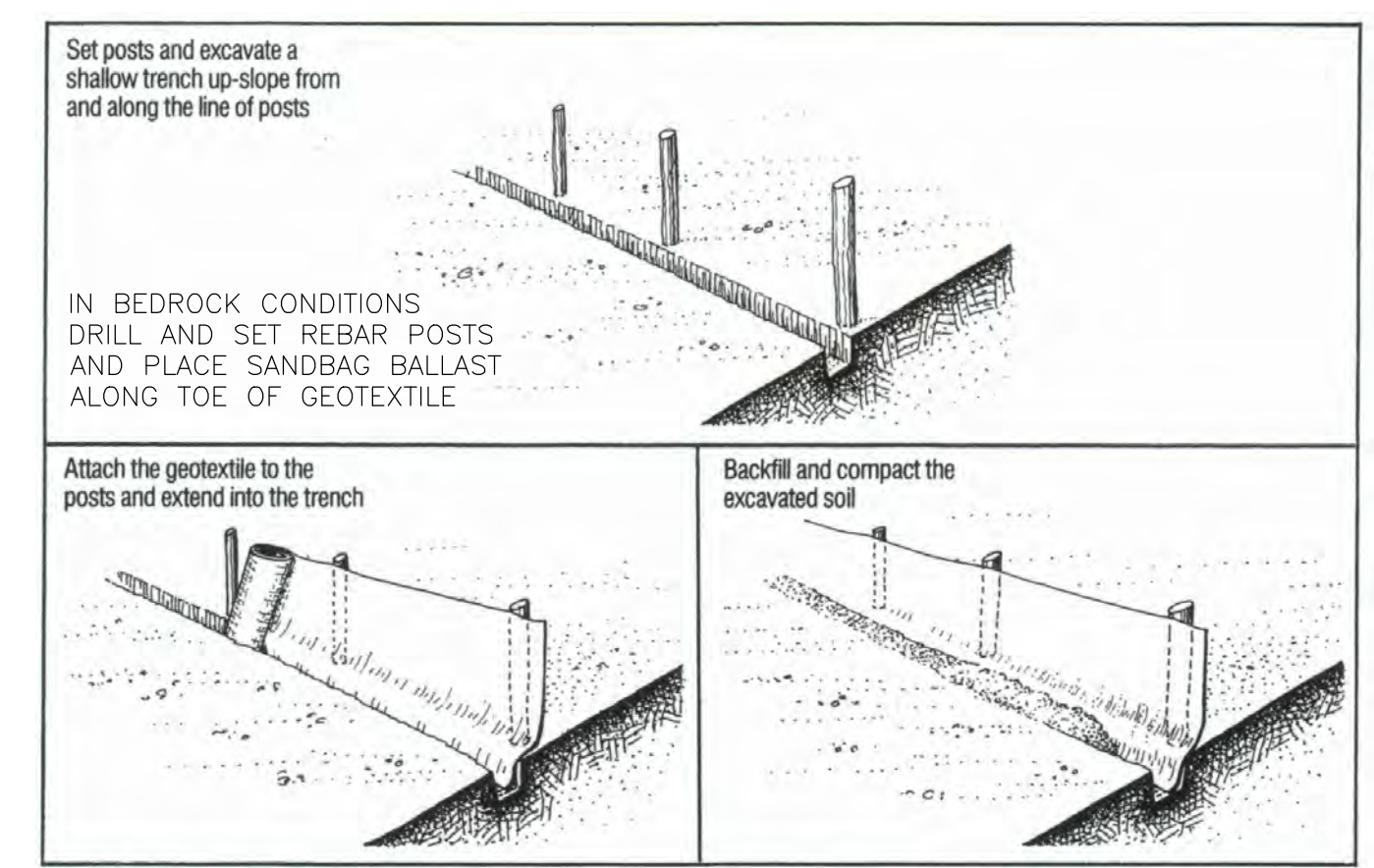
SECTION A-A
SCALE 1:50



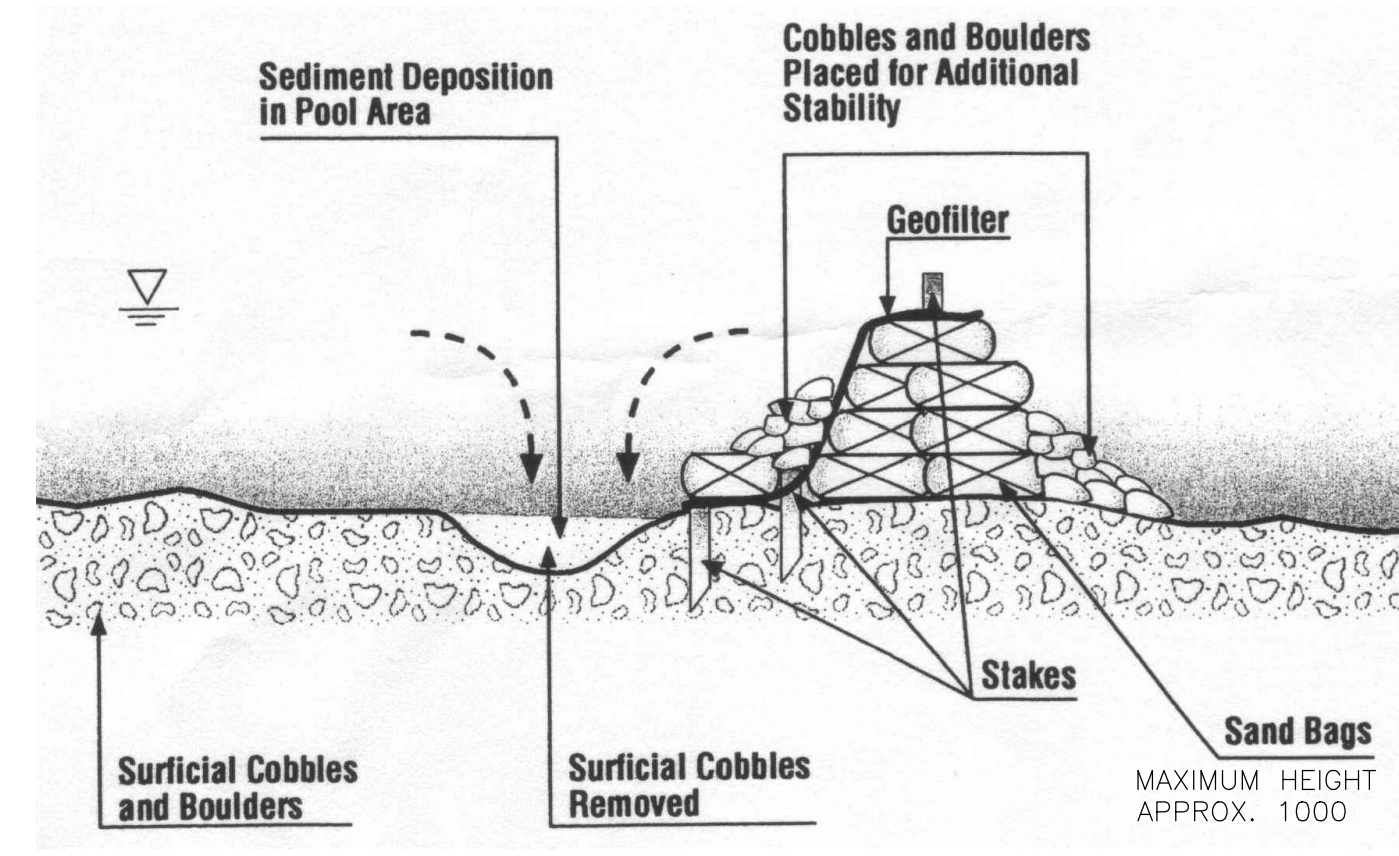
ELEVATION B-B
SCALE 1:50



TYPICAL PIPE SUPPORT WITH PIPE AT SURFACE
SCALE 1:50



TYPICAL CONSTRUCTION OF A SILT FENCE
LOCATIONS OF SILT FENCE TO BE DETERMINED ON SITE BY OWNERS REPRESENTATIVE AND SHALL BE ALTERED WITH CONSTRUCTION SEQUENCES.



TYPICAL SEDIMENT CONTAINMENT STRUCTURE
SOURCE: MNR, 1990 ENVIRONMENTAL GUIDELINES FOR ACCESS ROADS AND WATER CROSSINGS.

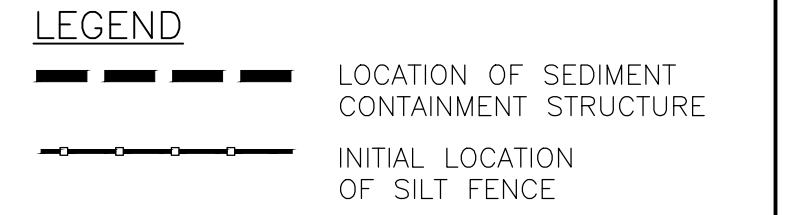
DIVERSION CONVEYANCE PIPE TURNING POINTS

PI	NORTHING	EASTING	INVERT ELEVATION
1	4792007	581174	215.70
2	4792007	581185	215.65
3	4792034	581225	215.60
4	4792078	581270	215.50
5	4792105	581295	215.45
6	4792132	581298	215.40
7	4792260	581385	215.15
8	4792273	581405	215.10
9	4792289	581424	215.05
10	4792310	581437	213.00
11	4792296	581475	212.30

NOTE 2
TEMPORARY WORKS, AS SHOWN, ARE CONCEPTUAL. CONTRACTOR SHALL SUBMIT CONSTRUCTION PLAN AND SEQUENCE TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.

CONSTRUCTION SEQUENCE

- SITE PREPARATION.
- CONSTRUCT ACCESS ROADS.
- INSTALLATION OF SILT BARRIERS.
- INSTALLATION OF DIVERSION PIPELINE.
- CONSTRUCT COFFERDAM.
- DEMOLITION OF DAM.
- RESTORE CHANNEL AND SHORELINE.
- REMOVE WATER DIVERSION SYSTEM.
- RESTORE SITE.



Feb. 19, 2012, 2:23pm
 Drawing Name: P:\HCA\337415\000-10-042-0003.dwg
 Layout: Layout1 (2)

DIMENSIONS SHOWN IN MILLIMETRES
ELEVATIONS SHOWN IN METRES

NO.	DESCRIPTION	CHK'D	APP'D	DATE
2	NOTE ADDED			W.H. 2012-02-21
1	DIVERSION PIPE DIAMETER REVISED			W.H. 2011-09-01

NO.	DESCRIPTION	CHK'D	APP'D	DATE
2	NOTE ADDED			W.H. 2012-02-21
1	DIVERSION PIPE DIAMETER REVISED			W.H. 2011-09-01

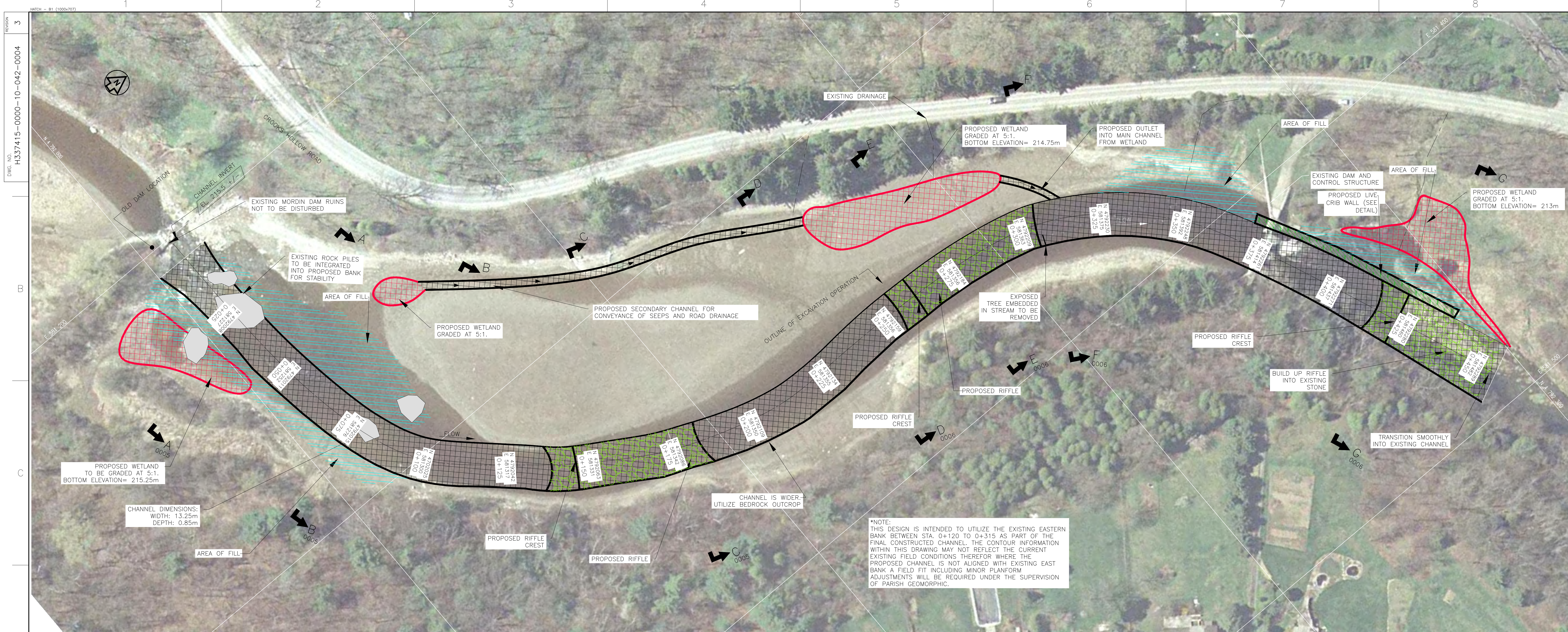
ISSUE AUTHORIZATION

REV.	ISSUE FOR	AUTH. BY	DATE
2	ISSUED FOR CONSTRUCTION	W.H.	2012-02-21
1	RE-ISSUED FOR TENDER	W.H.	2011-09-01
0	ISSUED FOR TENDER	W.H.	2011-08-23
B	REISSUED FOR PERMIT APPLICATION	W. HOYLE	2011-07-28
A	ISSUED FOR PERMIT APPLICATION		2011-06-10

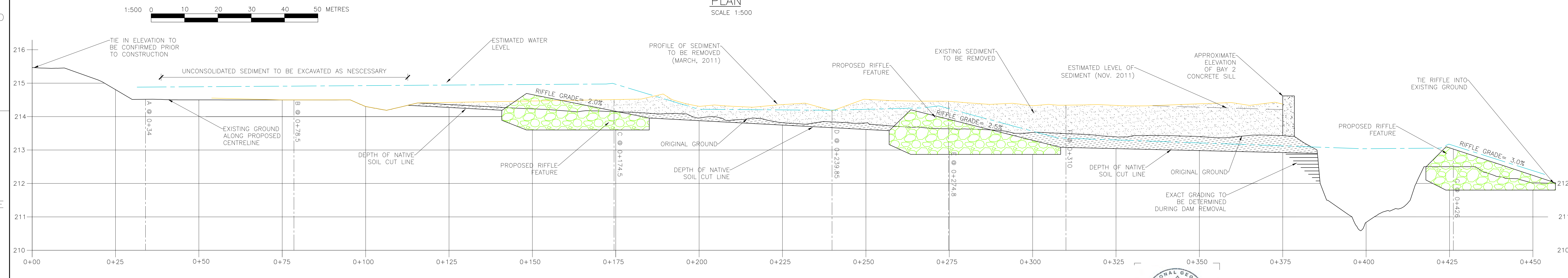
HATCH WATER RESOURCES ENGINEERING
 ANCASTER, ONTARIO, CANADA
 CROOKS' HOLLOW DAM REMOVAL AND RESTORATION OF SPENCER CREEK

DESIGNED BY: G. COCHRANE
 CHECKED BY: DATE: DISC. ENGR.
 DATE: PROJ. DES. COORD.
 W. HOYLE
 PROJ. ENGR.
 DATE: PROJECT NUMBER: H-337415
 SCALE: AS SHOWN
 DRAWING NO: H337415-0000-10-042-0003
 REVISION: 2

WATER DIVERSION AND SEDIMENT CONTROL



PLAN
SCALE 1:500



SPENCER CREEK AT CROOKS' HOLLOW DAM
CHANNEL BED PROFILE



PARISH geomorphic
CHANNEL AND SHORELINE RESTORATION DESIGN BY PARISH GEOMORPHIC LTD.

Feb. 19, 2012, 2:02pm
Drawing Name: P:\HCA\337415\CAD\C\H337415-0000-10-042-0004.dwg
Layout: Channel Works

DRAWING NO.	DRAWING TITLE

NO.	DESCRIPTION	CHK'D	APP'D	DATE

REV.	ISSUE FOR	AUTH. BY	DATE	PROJ. MGR.	PROJECT NUMBER	SCALE	DRAWING NO.	REVISION
3	ISSUED FOR CONSTRUCTION	J.P.	2012-02-21	A. BRELAND	H-337415	AS SHOWN	H337415-0000-10-042-0004	3
2	ISSUED FOR PERMITTING	J.P.	2011-12-05					
1	RE-ISSUED FOR TENDER	J.P.	2011-09-01					
0	ISSUED FOR TENDER	J.P.	2011-08-23					
A	ISSUED FOR PERMIT APPLICATION		2011.06.10					

HATCH WATER RESOURCES ENGINEERING
ANCASTER, ONTARIO, CANADA

Hamilton Conservation Authority

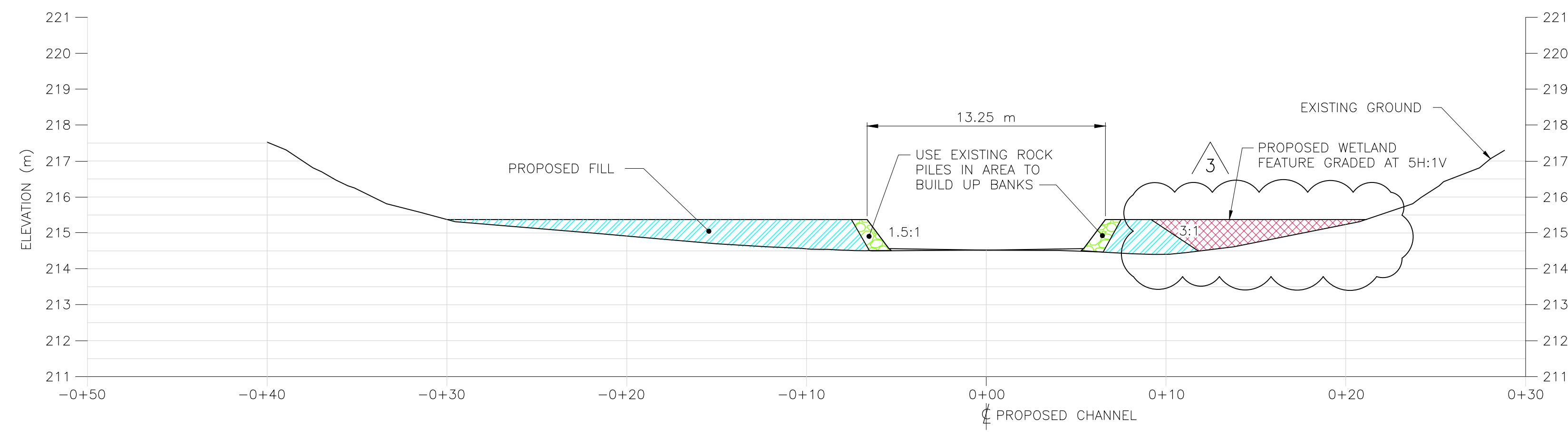
CROOKS' HOLLOW DAM REMOVAL AND RESTORATION OF SPENCER CREEK

SPENCER CREEK CHANNEL RESTORATION PLAN AND PROFILE

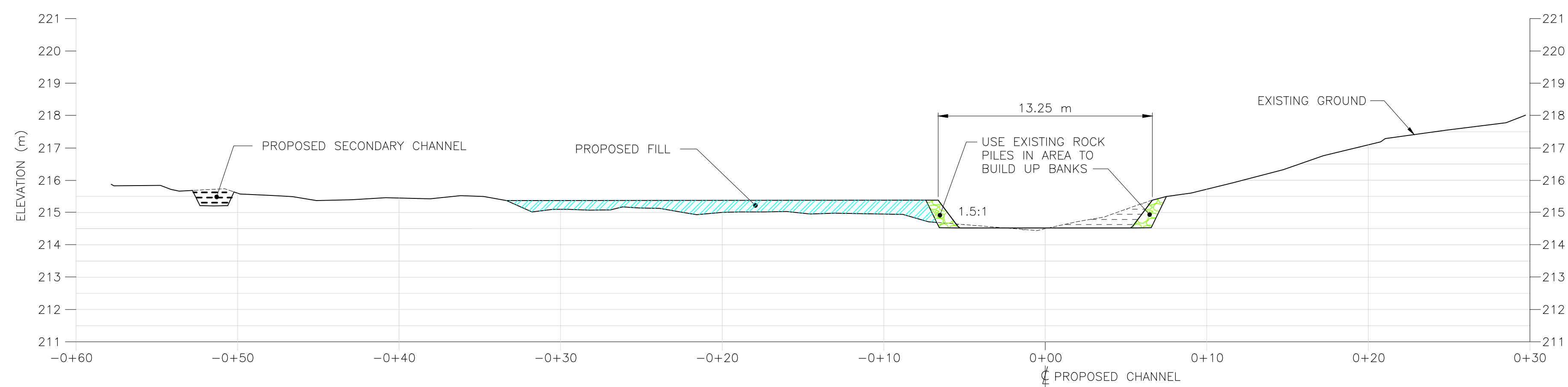
DESIGNED BY: J. CLARK
CHECKED BY: J. CLARK
DATE: 2012-02-21
DESCR. ENGR.

PROJ. DES. COORD.: W. HOYLE
DATE: 2011-08-23
PROJ. ENGR.

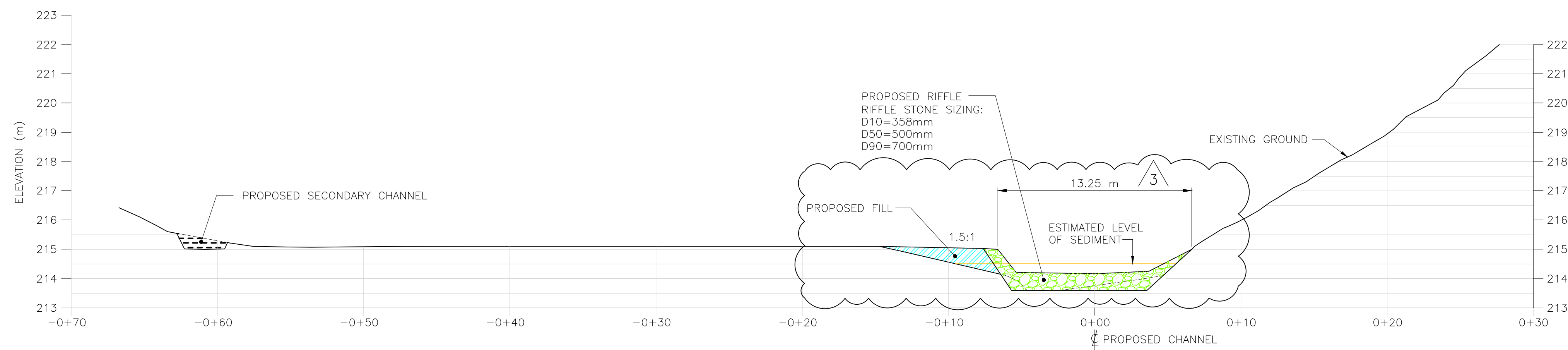
ISSUE AUTHORIZATION
A. BRELAND
DATE: 2012-02-21



CROSS SECTION A - 0+34



CROSS SECTION B - 0+78.5



CROSS SECTION C - 0+174.5

1:100 VERT. 0 2 4 6 8 10 METRES
 1:200 HOR. 0 4 8 12 15 20 METRES



CHANNEL AND SHORELINE
 RESTORATION DESIGN BY PARISH
 GEOMORPHIC LTD.

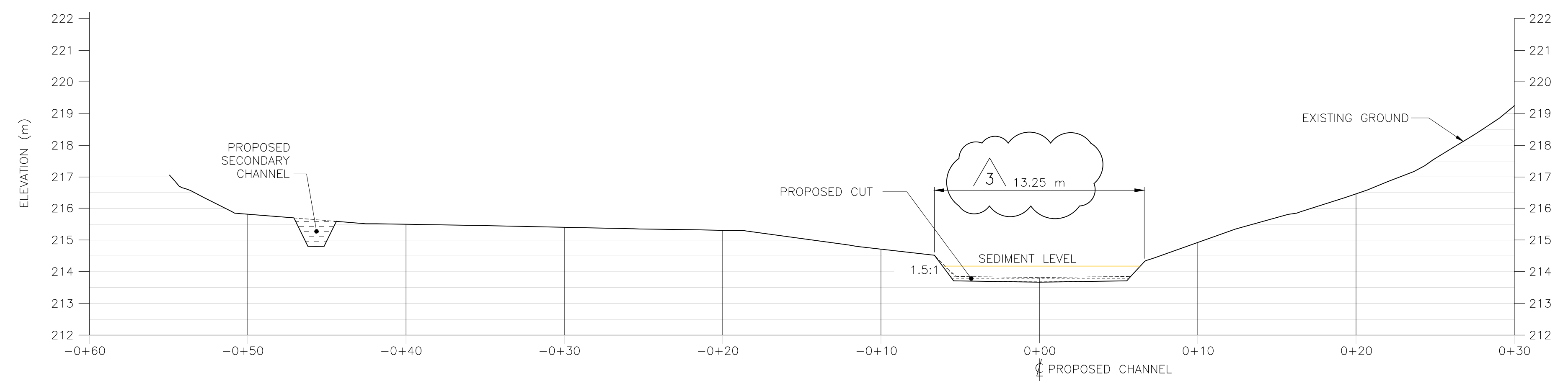


WATER RESOURCES ENGINEERING
 ANCASTER, ONTARIO, CANADA
 CROOKS' HOLLOW DAM REMOVAL AND RESTORATION OF SPENCER CREEK

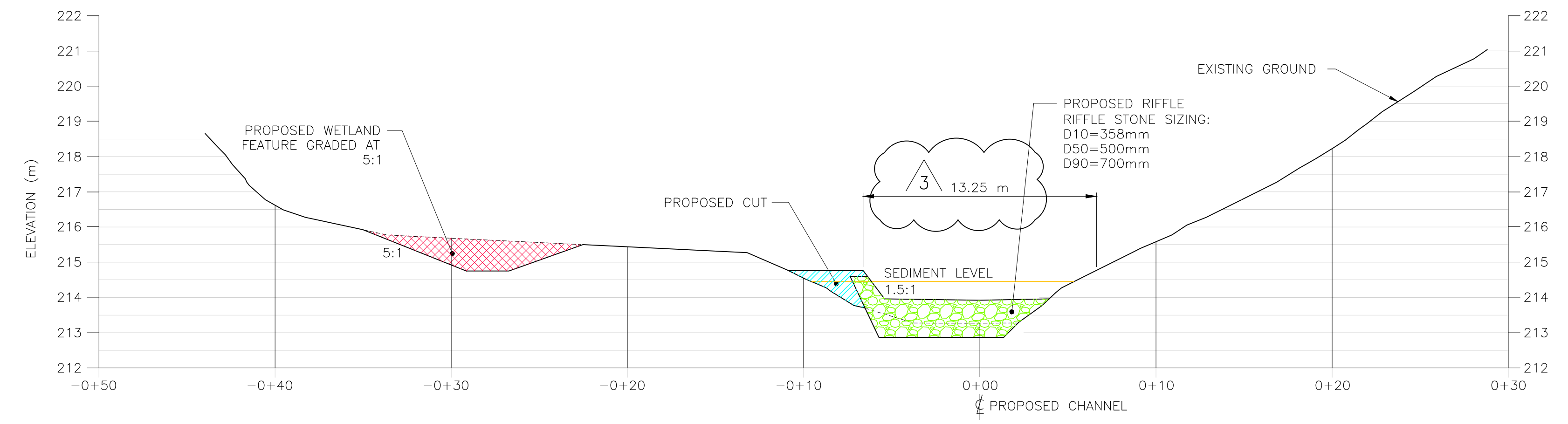
SPENCER CREEK
 CHANNEL RESTORATION
 CROSS SECTIONS A, B AND C

NO.	DESCRIPTION	CHK'D	APP'D	DATE
3	SECTIONS "A" AND "C" REVISED		J.P.	2012-03-02

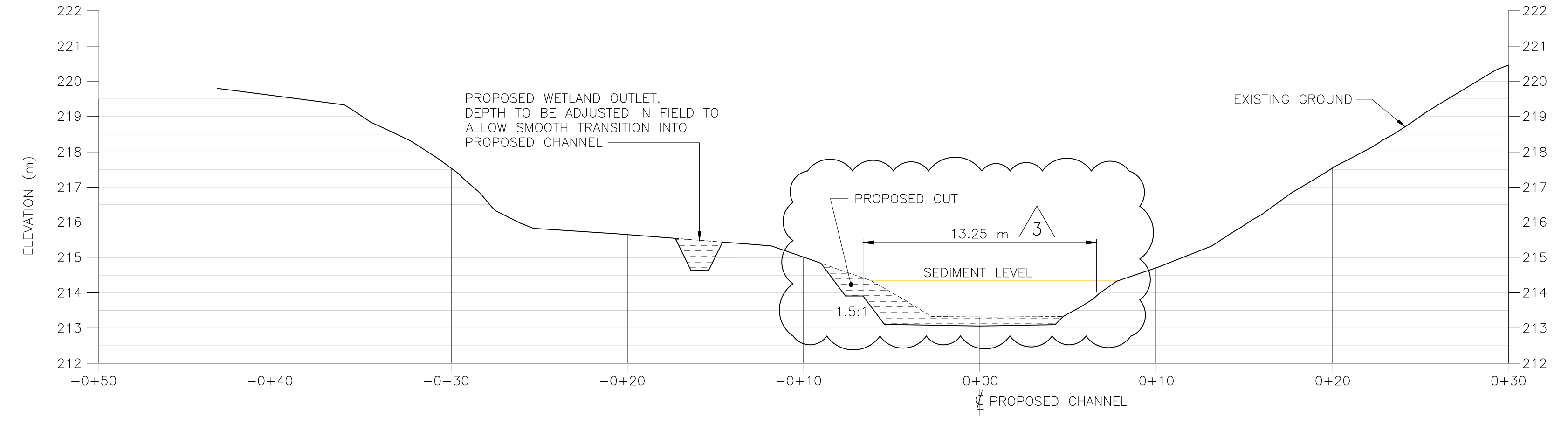
REV.	ISSUE FOR	AUTH. BY	DATE	PROJ. MGR.	PROJECT NUMBER	SCALE	DRAWING NO.	REVISION
3	ISSUED FOR CONSTRUCTION	J.P.	2012-03-02	A. BERLAND	H-337415	AS SHOWN	H337415-0000-10-042-0005	3
2	ISSUED FOR CONSTRUCTION	J.P.	2012-02-21					
1	ISSUED FOR PERMITTING	J.P.	2011-12-05					
0	ISSUED FOR TENDER	J.P.	2011-08-23					
A	ISSUED FOR PERMIT APPLICATION		2011-06-10					



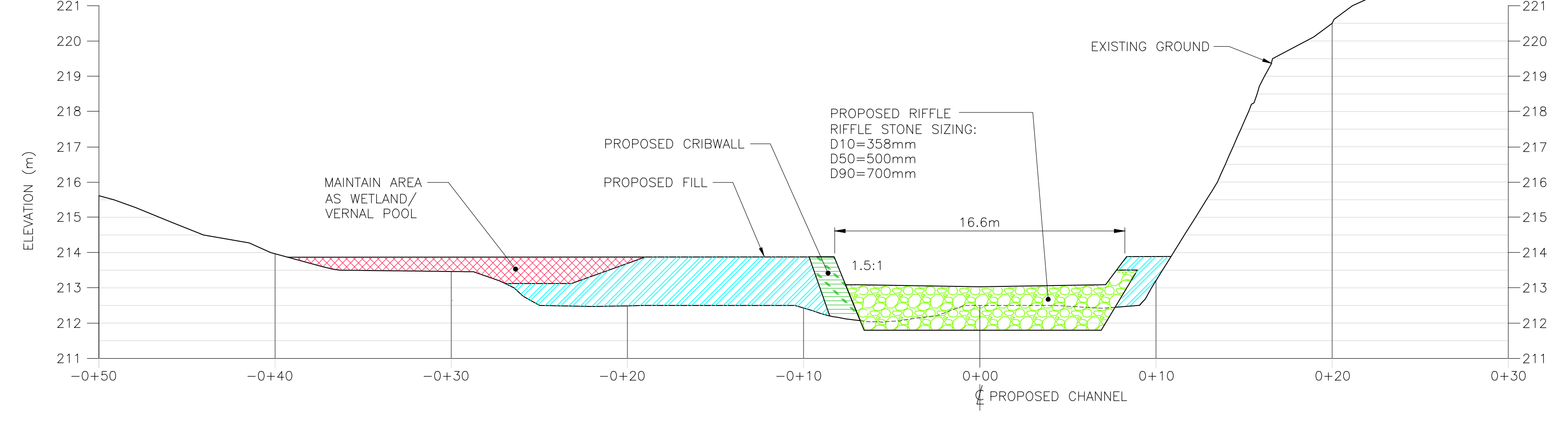
CROSS SECTION D - 0+239.85



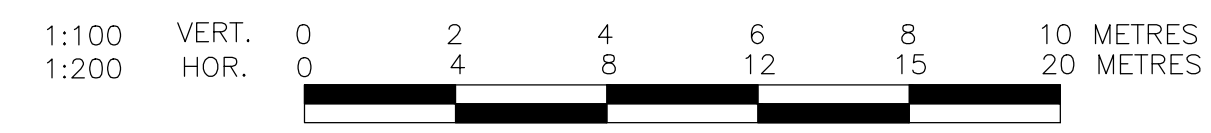
CROSS SECTION E - 0+274.8



CROSS SECTION F - 0+310



CROSS SECTION G - 0+425



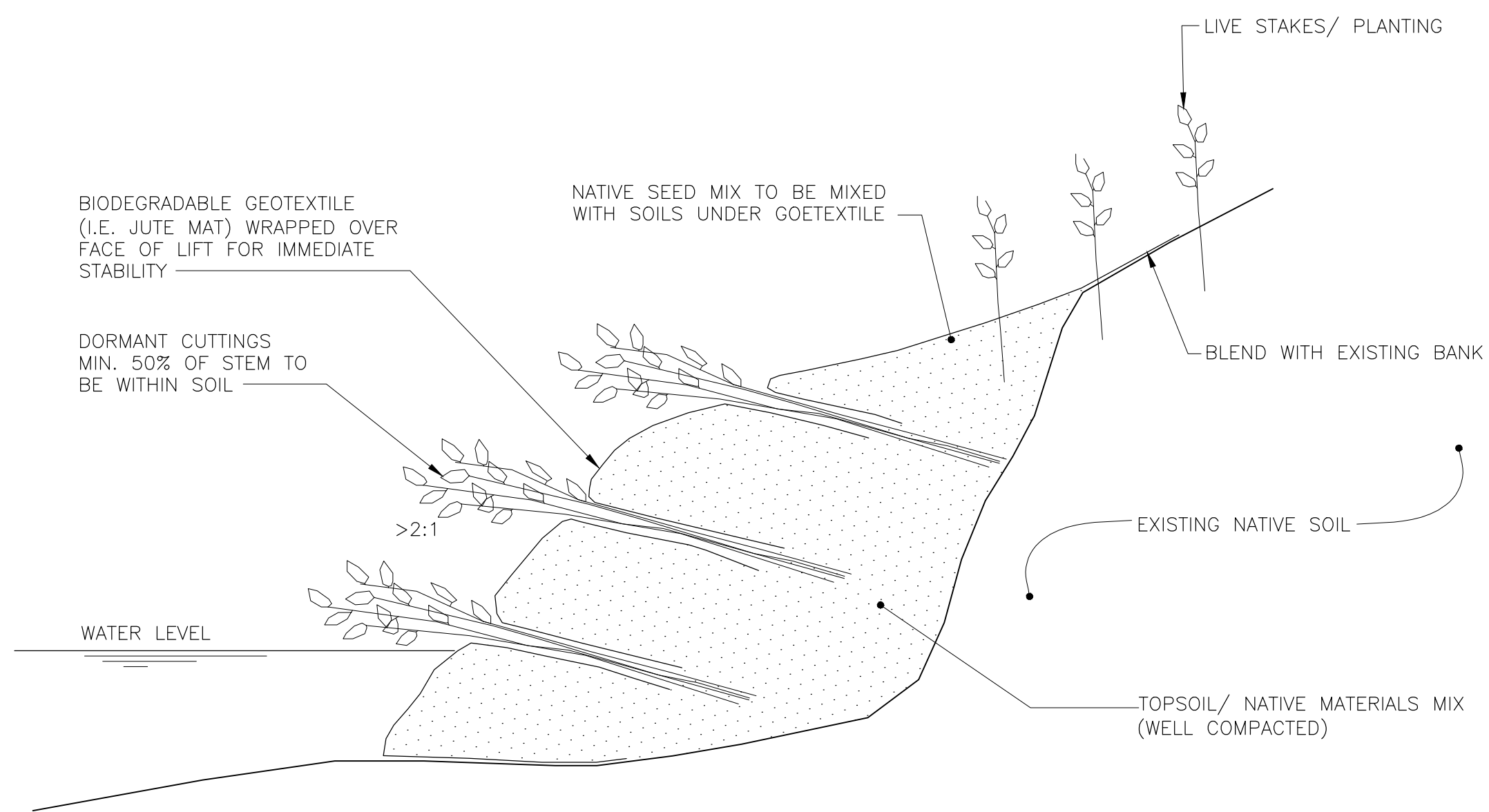
PARISH geomorphic CHANNEL AND SHORELINE RESTORATION DESIGN BY PARISH GEOMORPHIC LTD.

HATCH		WATER RESOURCES ENGINEERING ANCASTER, ONTARIO, CANADA	
DESIGNED BY J. CLARK		DRAWN BY J. CLARK	
CHECKED BY		DATE	
1 REISSUED FOR CONSTRUCTION		J.P. 2012-03-02	
2 ISSUED FOR CONSTRUCTION		J.P. 2012-02-21	
1 ISSUED FOR PERMITTING		J.P. 2011-12-05	
0 ISSUED FOR TENDER		J.P. 2011-08-23	
A ISSUED FOR PERMIT APPLICATION		J.P. 2011.06.10	
REV.	ISSUE FOR	AUTH. BY	DATE
	ISSUE AUTHORIZATION	A. BERLAND	

NO.	DESCRIPTION	CHK'D	APP'D	DATE
3	CHANNEL WIDTH REVISED, SECTIONS D, E AND F		J.P.	2012-03-02
1	SECTION ADDED AT CHAINAGE 0+274.8		J.P.	2011-12-05

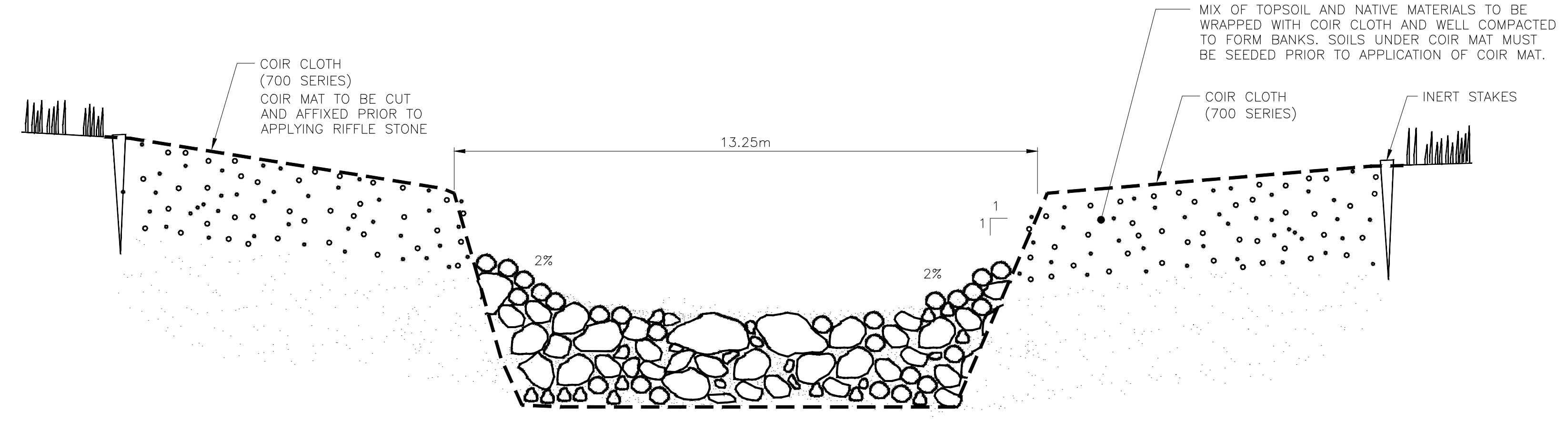
DRAWING NO.	DRAWING TITLE
REFERENCE DRAWINGS	

DWG. NO. H337415-0000-10-042-0007
 REVISION 3



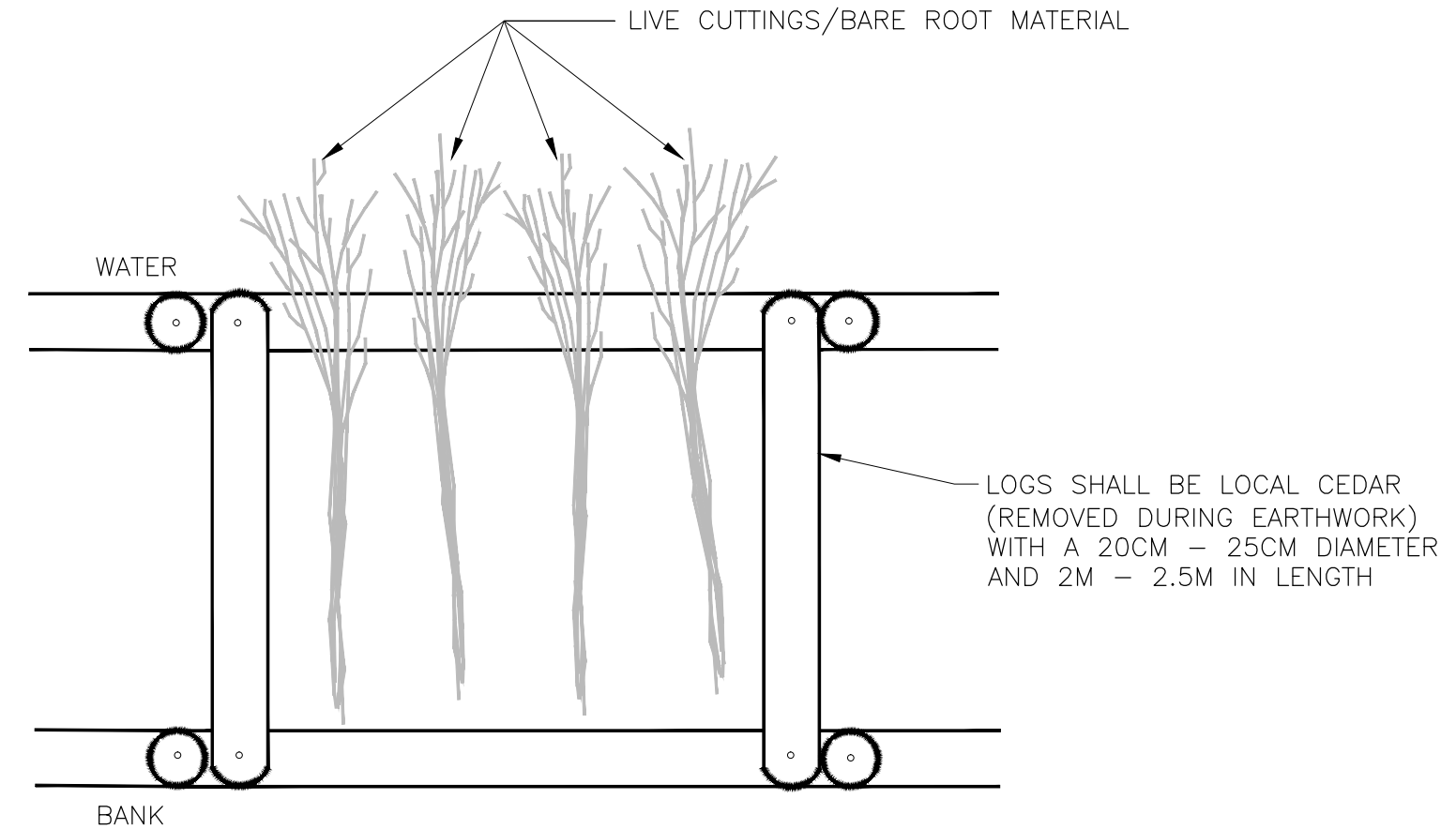
NOTES:
 1. BRUSH LAYERS TO BE INSTALLED IN LIFTS ~50CM HIGH.
 2. NUMBER OF LIFTS DEPENDANT ON BANK HEIGHT/ SLOPE

BRUSH LAYERING SCHEMATIC

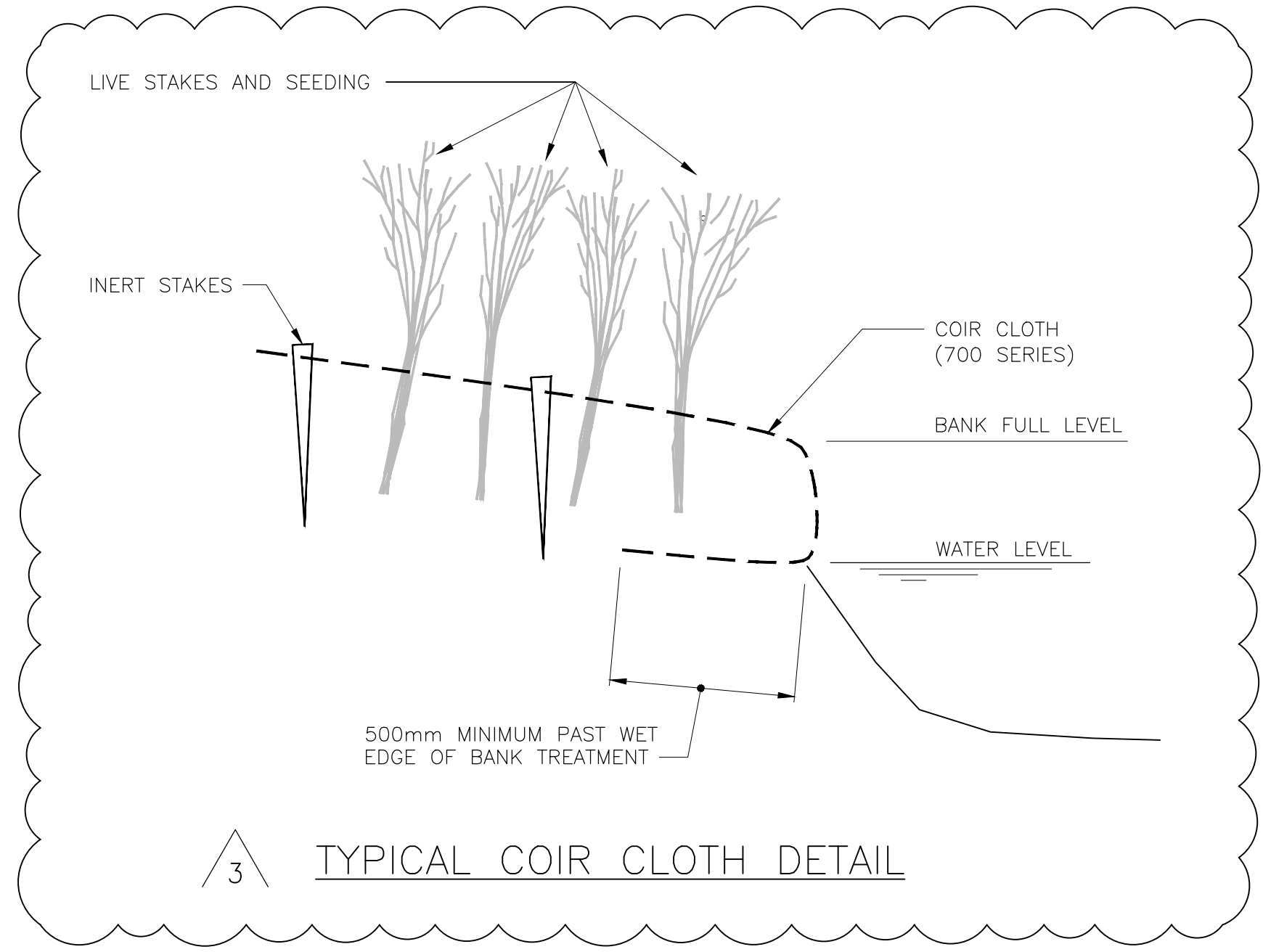


NOTES:
 1. THICKNESS OF RIFFLE CREST TO BE 2-3 TIMES THE DIAMETER OF MAXIMUM PARTICLE SIZE.
 2. RIFFLE MATERIALS TO BE WELL COMPACTED WITH INTERSTITIAL SPACES FILLED WITH 20% PIT RUN GRAVEL AND ROUND PEA GRAVEL TO PREVENT THROUGH FLOW.
 3. RIFFLE SUBSTRATE CONSISTS OF STONE SIZES D10= 358mm, D50=500mm, D90=700mm

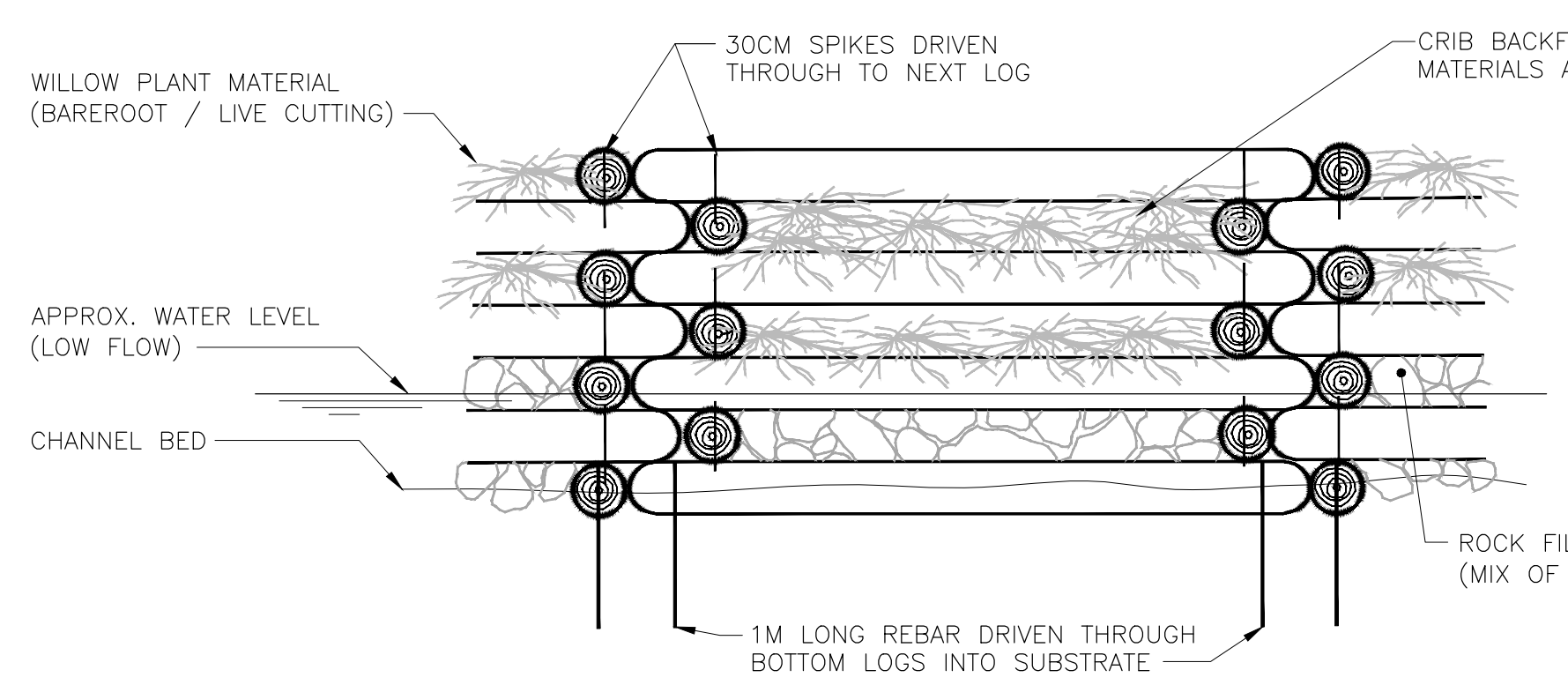
TYPICAL RIFFLE CROSS-SECTION



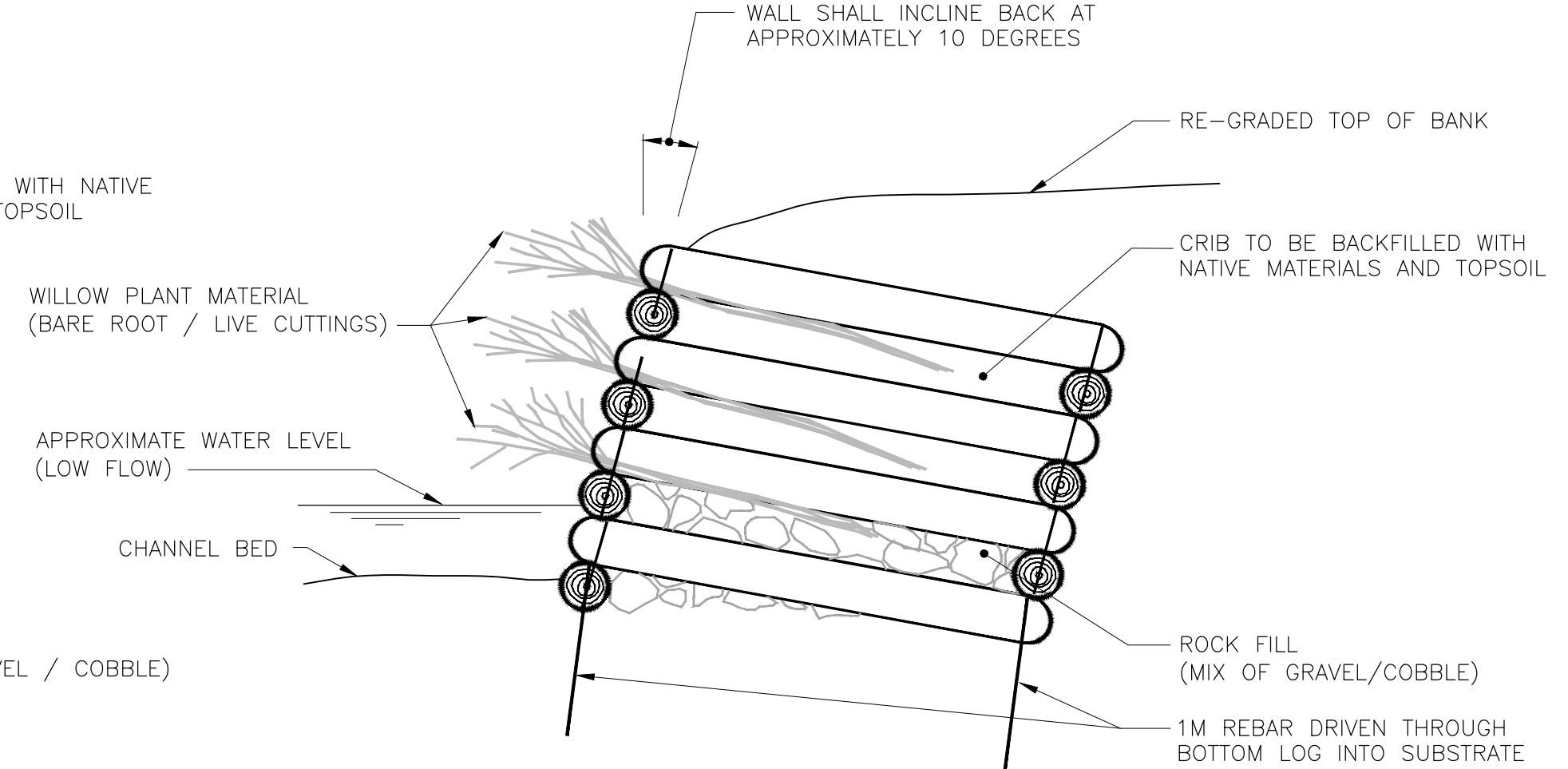
TOP VIEW



TYPICAL COIR CLOTH DETAIL



FRONT VIEW



SIDE VIEW

TYPICAL CRIB WALL DETAIL



CHANNEL AND SHORELINE RESTORATION DESIGN BY PARISH GEOMORPHIC LTD.



WATER RESOURCES ENGINEERING
 ANCASTER, ONTARIO, CANADA
 CROOKS' HOLLOW DAM REMOVAL AND RESTORATION OF SPENCER CREEK



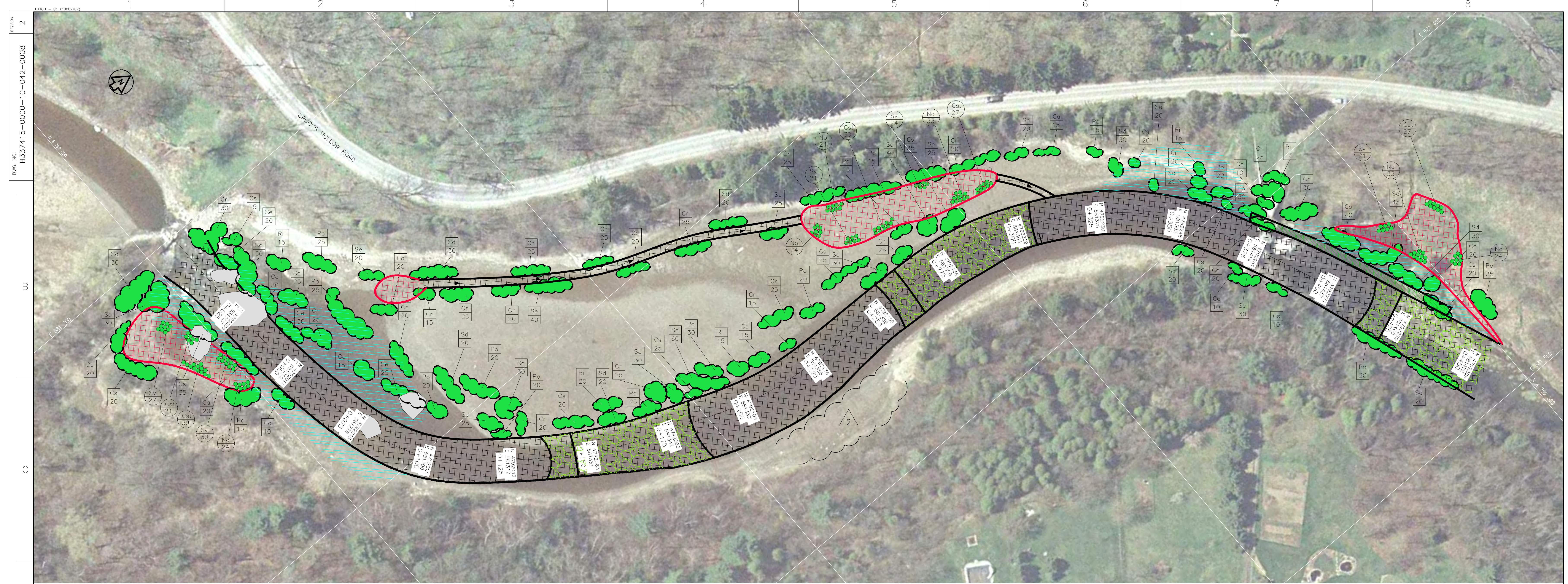
SPENCER CREEK
 CHANNEL RESTORATION
 DETAILS

DRAWING NO.	DRAWING TITLE
	REFERENCE DRAWINGS

NO.	DESCRIPTION	CHK'D	APP'D	DATE
3	COIR CLOTH DETAIL ADDED		J.P.	2012-02-21
2	BURIED STONE PROTECTION DETAIL REMOVED		J.P.	2011-12-05

REV.	ISSUE FOR	AUTH. BY	DATE	PROJ. MGR.	PROJECT NUMBER	SCALE	DRAWING NO.	REVISION
3	ISSUED FOR CONSTRUCTION	J.P.	2012-02-21	A. BERLAND	H-337415	AS SHOWN	H337415-0000-10-042-0007	3
2	ISSUED FOR PERMITTING	J.P.	2011-12-05					
1	RE-ISSUED FOR TENDER	J.P.	2011-09-01					
0	ISSUED FOR TENDER	J.P.	2011-08-23					
A	ISSUED FOR PERMIT APPLICATION		2011-06-10					

Feb. 19, 2012, 2:22pm
 Login name: p04110233
 Layout: TYPICALS
 Drawing Name: P:\HCA\337415\CAD\C\H337415-0000-10-041-0007.dwg



PLAN
SCALE 1:500

Crooks Hollow Restoration Plantings Species

Shrubs	ID	Common Name	Botanical Name	Size	Quantity
	Ca	Alternate-leaved Dogwood	<i>Cornus alternifolia</i>	1 gal Potted	210
	Cr	Grey Dogwood	<i>Cornus racemosa</i>	1 gal Potted	465
	Cs	Red-osier Dogwood	<i>Cornus stolonifera</i>	1 gal Potted	385
	Cst	Tussock Sedge	<i>Carex stricta</i>	10cm pots	144
	No	White Water Lily	<i>Nymphaea odorata</i>	15cm pots	159
	Po	Common Ninebark	<i>Physocarpus opulifolius</i>	1 gal Potted	375
	Ri	Wild Red Raspberry	<i>Rubus idaeus</i>	1 gal Potted	90
	Sd	Pussy Willow	<i>Salix discolor</i>	1 gal Potted	495
	Se	Sandbar Willow	<i>Salix exigua</i>	1 gal Potted	340
	Sv	Soft Stemmed Rush	<i>Scirpus validus</i>	10cm pots	122

Seed Mixture
Seed untreated banks, floodplain and disturbed areas with:
Pickseed NaturePro - Tall Growing

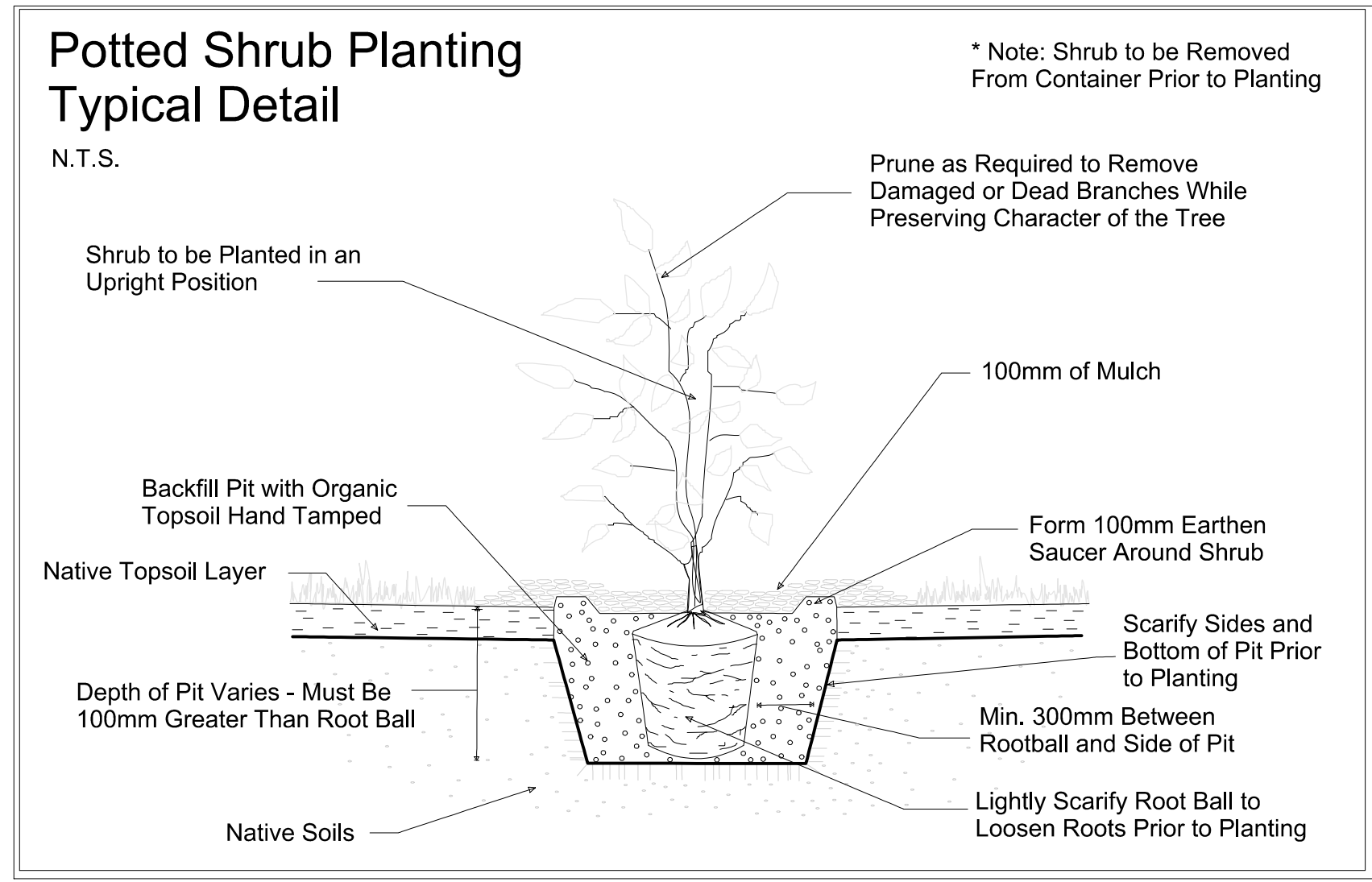
20% Big Bluestem
20% Switchgrass
20% Indiangrass
30% Canada Wild Rye
10% Prairie Brome

*Can also be applied with annual ryegrass nursecrop at 70 kg/acre (80 lbs)

Seed rate at 15kg/hectare applied with 45mm depth Filtrex GrowthMedia Erosion Control Blanket (GECB)

GENERAL NOTES

- LOCATION OF ALL PLANT MATERIAL TO BE STAKED/FLAGGED OUT BY CONTRACTOR AND APPROVED BY THE DESIGNER/CONSTRUCTION SUPERVISOR IN THE FIELD PRIOR TO PLANTING.
- DUE TO THE NEED TO ESTABLISH A NATIVE PLANT COMMUNITY, ALL PLANT MATERIAL MUST BE LOCALLY GROWN NATIVE NURSERY STOCK FREE OF DISEASE AND OF THE SPECIFIED SIZE AND SPECIES.
- THE CONTRACTOR SHALL SUBMIT A DETAILED LIST OF PLANT SOURCES/SUPPLIERS WITHIN 10 DAYS OF CONTRACT AWARD.
- NO SUBSTITUTION OF SPECIES, SIZE OR PLANT TYPE WILL BE PERMITTED WITHOUT PRIOR AUTHORIZATION FROM THE DESIGNER/CONSTRUCTION SUPERVISOR.
- PLANTING LOCATIONS AS SHOWN IN THE PLANS MUST BE ADHERED TO UNLESS DIRECTED OTHERWISE BY THE DESIGNER/CONSTRUCTION SUPERVISOR.
- ALL PLANT MATERIAL SHALL BE INSTALLED DURING APPROPRIATE SEASONAL CONDITIONS. PLANTS MAY NOT BE INSTALLED INTO FROZEN OR SATURATED GROUNDS.
- PLANTING PITS TO BE BACKFILLED WITH ORGANIC LOAM IN A FRIABLE CONDITION FREE OF LUMPS, STONES, DEBRIS, ETC. ALL BACKFILL MATERIAL SHALL BE HAND TAMPED SUFFICIENTLY TO ELIMINATE AIR POCKETS AND TO PREVENT SETTLING.
- THE CONTRACTOR SHALL ANTICIPATE DIFFICULT SITE CONDITIONS DUE TO THE PROXIMITY TO WATER AND SHALL ENSURE DISTURBANCE TO THE SITE THROUGH MACHINERY ACCESS IS LIMITED. ALL DISTURBANCE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- THE CONTRACT SHALL ENSURE THAT ALL EXISTING VEGETATION NOT DESIGNATED FOR REMOVAL IS PROTECTED THROUGH ALL STAGES OF CONSTRUCTION. ALL DAMAGED VEGETATION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE DESIGNER/CONSTRUCTION SUPERVISOR.
- THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO SEEDED OR MULCHED AREAS.
- THE CONTRACTOR SHALL ENSURE PLANTINGS ARE COMPLETED IN A MANNER WHERE NO DISTURBANCE TO COMPLETED PLANTINGS IS REQUIRED ONCE INSTALLED.
- THE CONTRACTOR SHALL ENSURE UPON THE COMPLETION OF THE RESTORATION PLANTING THAT ALL EXCESS MATERIALS AND CONSTRUCTION DEBRIS IS REMOVED FROM THE PROJECT SITE TO THE SATISFACTION OF THE DESIGNER/CONSTRUCTION SUPERVISOR.
- SEED AND MULCH SHOULD BE THROUGH APPLICATION OF TERRASEED. THE HYDRAULIC METHOD OF SEED APPLICATION SHALL NOT BE PERMITTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING INSTALLED PLANT MATERIAL SUFFICIENTLY TO ENSURE SURVIVAL. WATERING SHALL CONTINUE AS REQUIRED UNTIL PLANTS HAVE ESTABLISHED.
- THE CONTRACTOR SHALL WARRANTY ALL PLANT MATERIAL FOR A PERIOD OF NO LESS THAN 2 YEARS. ALL DEFICIENT OR DEAD PLANT MATERIAL SHALL BE REPLACED UNDER WARRANTY WITHIN THE 2 YEAR PERIOD ON AN AS-DIRECTED BASIS.
- THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED AREAS ARE SEEDED.
- REFER TO TYPICAL DETAILS FOR ADDITIONAL PLANTING INFORMATION SPECIFIC TO PLANT MATERIAL TYPE.

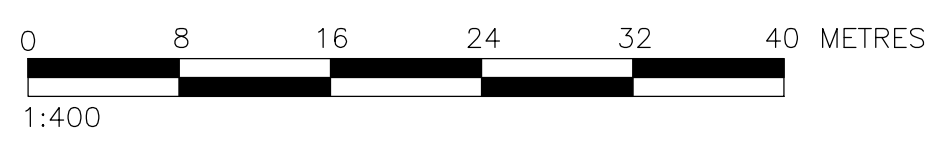
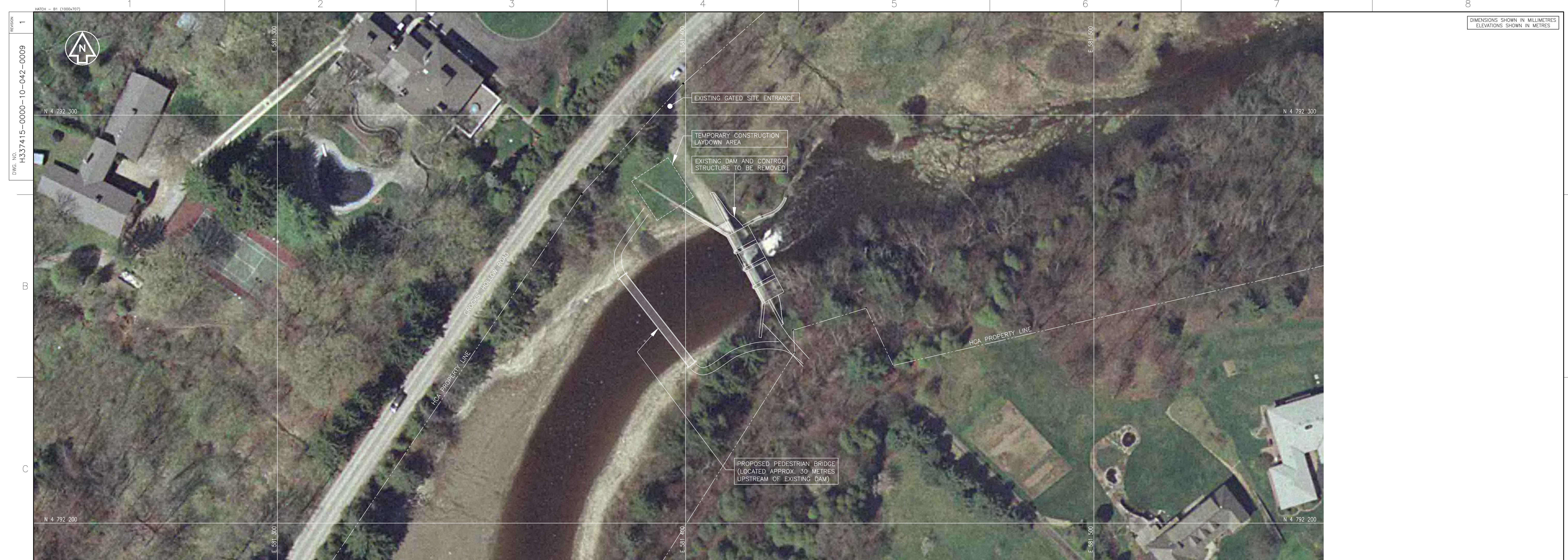


PARISH geomorphic CHANNEL AND SHORELINE RESTORATION DESIGN BY PARISH GEOMORPHIC LTD.

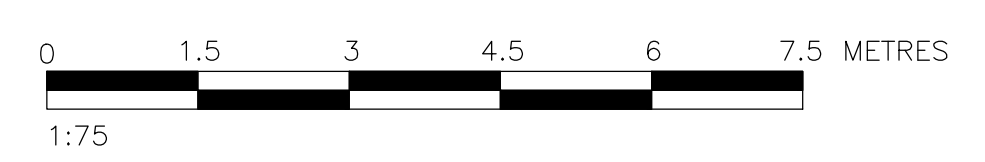
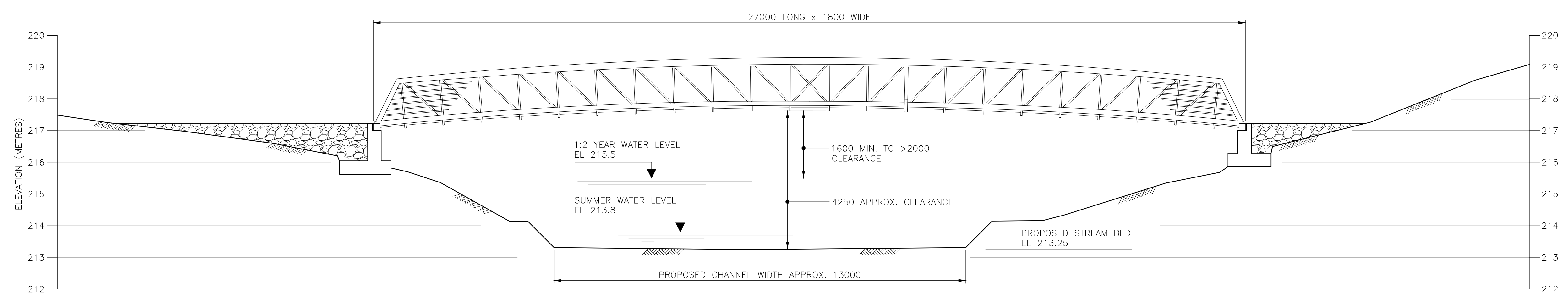
HATCH		WATER RESOURCES ENGINEERING ANCASTER, ONTARIO, CANADA	
DESIGNED BY J. PARISH	CHECKED BY C. CUMMINGS	DATE 2012-02-21	DATE 2011-09-01
PROJ. DES. COORD. W. HOYLE	DATE 2011-06-10	PROJ. ENGR.	DATE
ISSUE FOR PERMIT APPLICATION	DATE	PROJ. MGR. A. BRELAND	PROJECT NUMBER
ISSUE AUTHORIZATION	DATE	SCALE AS SHOWN	DRAWING NO. H337415-0000-10-042-0008

		WATER RESOURCES ENGINEERING ANCASTER, ONTARIO, CANADA CROOKS' HOLLOW DAM REMOVAL AND RESTORATION OF SPENCER CREEK		
SPENCER CREEK CHANNEL RESTORATION PLANTING PLAN				
NO.	DESCRIPTION	CHK'D	APP'D	DATE
2	SHRUBS DELETED ALONG EAST SHORELINE, QUANTITIES REVISED			J.P. 2012-02-21
1	DRAWING NUMBER REVISED (WAS H337415-0000-10-042-0010)			J.P. 2011-09-01
0	ISSUED FOR TENDER			J.P. 2011-08-23
A	ISSUE FOR PERMIT APPLICATION			2011-06-10

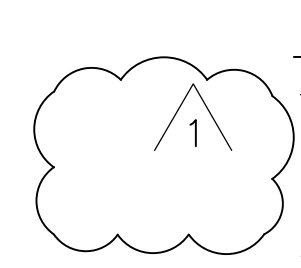
Feb. 19, 2012, 2:31pm
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 Layout: Planting Plan
 Login name: p04110233



PLAN
SCALE 1:400



PEDESTRIAN BRIDGE PROFILE
SCALE 1:75



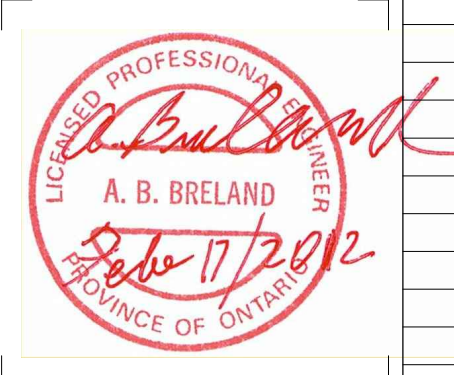
NOTES

- BRIDGE AND ABUTMENT STRUCTURES, AS SHOWN, ARE CONCEPTUAL. CONTRACTOR SHALL SUBMIT CONSTRUCTION DRAWINGS TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.
- BRIDGE SHALL BE CONSTRUCTED FROM SELF-WEATHERING STEEL.
- BRIDGE DECKING SHALL BE CONSTRUCTED OF PRESSURE TREATED WOOD PLANKS.
- ABUTMENTS SHALL BE STONE LIKE TEXTURED FORMED CONCRETE.

Feb. 19, 2012, 2:21pm
 Drawing Name: P:\HCA\337415\CAD\C\H337415-0000-10-042-0009.dwg
 Layout: Layout1 (2)
 Login name: p04110233

DRAWING NO.	DRAWING TITLE
REFERENCE DRAWINGS	
CIVIL	ELECTRICAL
MEDICAL	MECHANICAL
GEOTECHNICAL	HYDROTECHNICAL
ARCHITECTURAL	OTHER

NO.	DESCRIPTION	CHK'D	APP'D	DATE
1	NOTE ADDED			
0	DRAWING NUMBER REVISED (WAS H337415-0000-10-042-0008)			W.H. 2012-02-21



REV.	ISSUE FOR	AUTH. BY	DATE	PROJ. MGR.	PROJECT NUMBER	SCALE	DRAWING NO.	REVISION
1	ISSUED FOR CONSTRUCTION	W.H.	2012-02-21					
0	ISSUED FOR TENDER	W.H.	2011-08-23					
A	ISSUED FOR PERMIT APPLICATION	W.H.	2011-07-28					

DESIGNED BY	R. PELAEZ
CHECKED BY	
DATE	
PROJ. DES. COORD.	W. HOYLE
DATE	
PROJ. ENGR.	
DATE	
PROJ. MGR.	A. BRELAND
DATE	

HATCH WATER RESOURCES ENGINEERING
 ANCASTER, ONTARIO, CANADA

CROOKS' HOLLOW DAM REMOVAL AND RESTORATION OF SPENCER CREEK
PEDESTRIAN BRIDGE CONCEPTUAL LAYOUT PLAN AND PROFILE

SCALE: AS SHOWN
 DRAWING NO: H337415-0000-10-042-0009
 REVISION: 1