

CONTEXT MAP



ROCKY MOUNTAIN HOUSE BANK  
RE-VEGETATION PROJECT


SITE 127 COMP 6 RR4, ROCKY MOUNTAIN HOUSE, ALBERTA

ISSUED FOR:  
TENDER

DATE;  
APRIL 1, 2019

PREPARED FOR:  
PARKS CANADA AGENCY

PREPARED BY:  
  
Tannas Conservation Services Ltd  
PRIME CONSULTANT

CARSON • McCULLOCH ASSOCIATES LTD  
  
CONSULTANTS IN LANDSCAPE ARCHITECTURE, URBAN DESIGN AND SITE PLANNING  
SUB-CONSULTANT

DRAWING INDEX

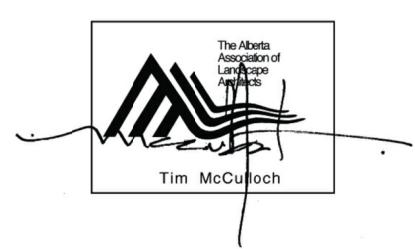
LANDSCAPE


- L0.0 COVER PAGE
- L1.0 OVERALL SITE PLAN AND CONSTRUCTION ACCESS
- L1.1 SOIL PLACEMENT AND SEEDING PLAN
- L1.2 PLANTING PLANS - LOWER & MID-RIPARIAN, BRUSH LAYER AND EMBANKMENT AREAS
- L1.3 PLANTING PLAN - UPLAND
- L2.0 SECTIONS AND DETAILS

NOTES:  
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3. DO NOT SCALE DRAWINGS.  
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No.	Date	Revision	By	App.
2	2019-04-01	TENDER		
1	2019-03-11	66% REVIEW		
No.	Date	Issued for		

PARKS CANADA  
AGENCY

  
Tim McCulloch

  
Tannas Conservation Services Ltd

Project  
ROCKY MOUNTAIN  
HOUSE BANK  
RE-VEGETATION

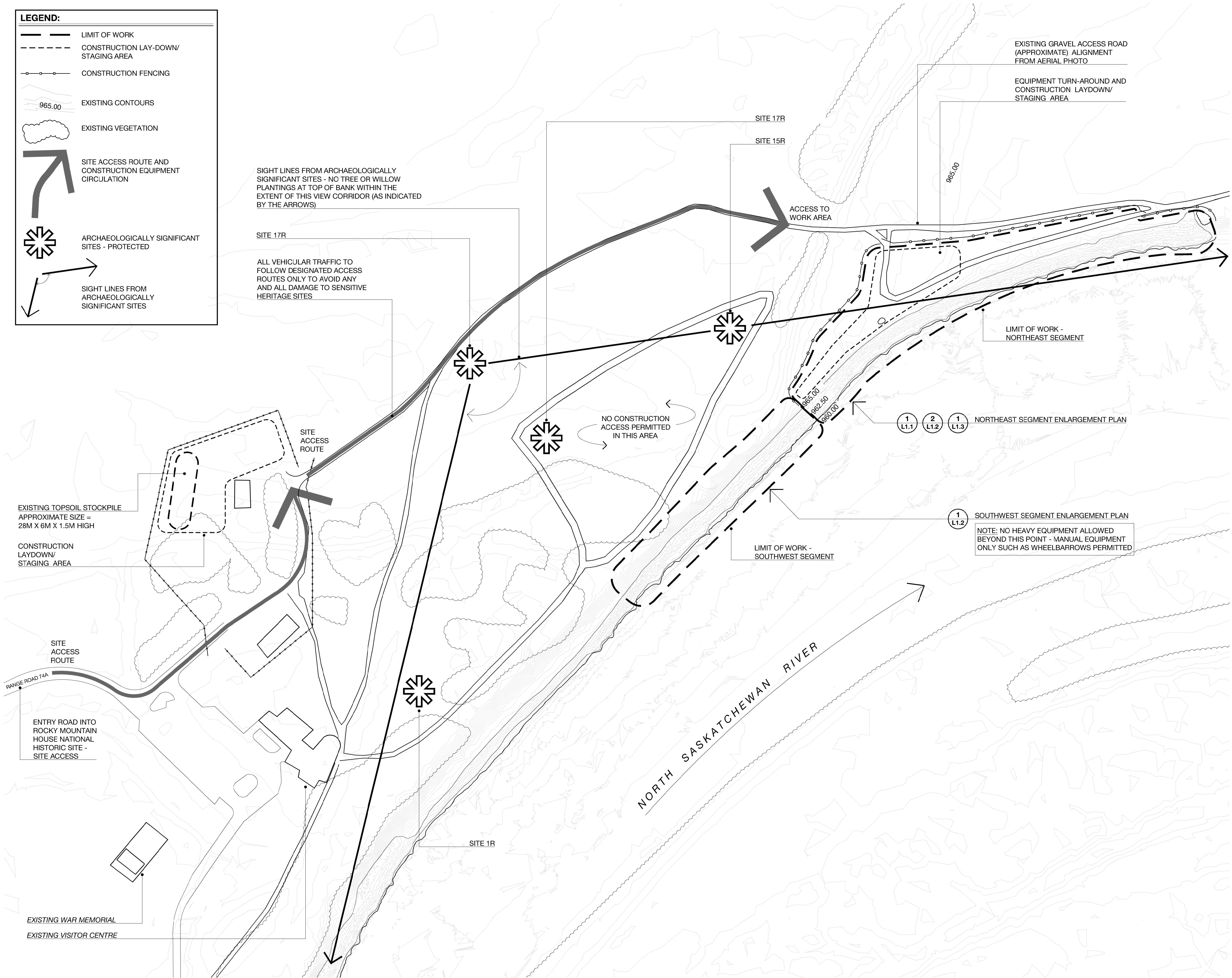
Drawing  
TITLE SHEET

Drawn	AL	Approved	TMC
Checked	AL	Job Number	5001
Date	FEBRUARY 28, 2019	Sheet	
Scale	NA		L0.0



**LEGEND:**

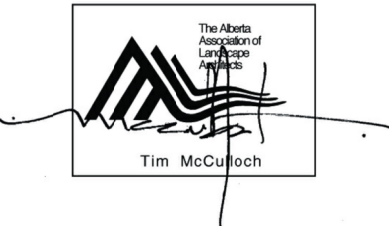
- LIMIT OF WORK
- - - CONSTRUCTION LAY-DOWN/ STAGING AREA
- CONSTRUCTION FENCING
- 965.00 EXISTING CONTOURS
- EXISTING VEGETATION
- SITE ACCESS ROUTE AND CONSTRUCTION EQUIPMENT CIRCULATION
- ARCHAEOLOGICALLY SIGNIFICANT SITES - PROTECTED
- SIGHT LINES FROM ARCHAEOLOGICALLY SIGNIFICANT SITES



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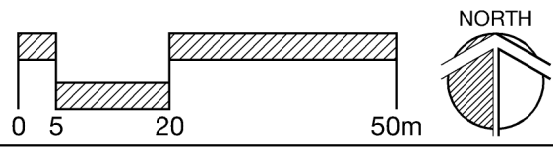
**PARKS CANADA  
AGENCY**



Project  
**ROCKY MOUNTAIN  
HOUSE BANK  
RE-VEGETATION**

Drawing  
**OVERALL SITE PLAN  
AND CONSTRUCTION  
ACCESS**

Drawn	AL	Approved	TMC
Checked	AL	Job Number	5001
Date	FEBRUARY 28, 2019	Sheet	L1.0
Scale	1:1000		





NATIVE GRASS SEED MIX - TYPICAL

GRASS SEED MIX TO BE BROADCAST OVER ALL TOPSOIL AREAS AND REMEDIATION AREA WHERE NECESSARY - TYPICAL REFER TO SPECIFICATIONS FOR SEEDING RATE

SEED MIX COMPOSITION:

- 17% CANADA WILD RYE
- 10% SLENDER WHEATGRASS
- 12% MOUNTAIN BROME
- 24% NORTHERN WHEATGRASS
- 33% WESTERN WHEATGRASS
- 1% BLUE GRAMA
- 3% JUNEGRASS

PLANTING AREA DESCRIPTIONS:

**LOWER RIPARIAN AREA:**  
THIS IS THE PLANTING AREA BETWEEN THE 1:2 YEAR FLOOD LEVEL AND THE AVERAGE WINTER ICE LEVEL. THIS IS THE ICE SCOUR ZONE

**MID-RIPARIAN AREA:**  
THIS IS THE PLANTING AREA BETWEEN THE AVERAGE WINTER ICE LEVEL AND THE TOP OF THE RIP-RAP

**BRUSH LAYER AREA:**  
THIS IS THE LINEAR PLANTING ZONE DIRECTLY ABOVE THE TOP OF RIP-RAP

**EMBANKMENT AREA:**  
THIS IS THE PLANTING ZONE BETWEEN THE TOP OF RIP-RAP AND THE TOP OF THE BANK. LIVE PLANTINGS WILL BE INSTALLED INTO THIS BANK AREA

**TOP OF BANK AREA:**  
THIS IS THE PLANTING ZONE THAT RUNS ALONG THE TOP OF THE RIVER BANK

GENERAL NOTES:

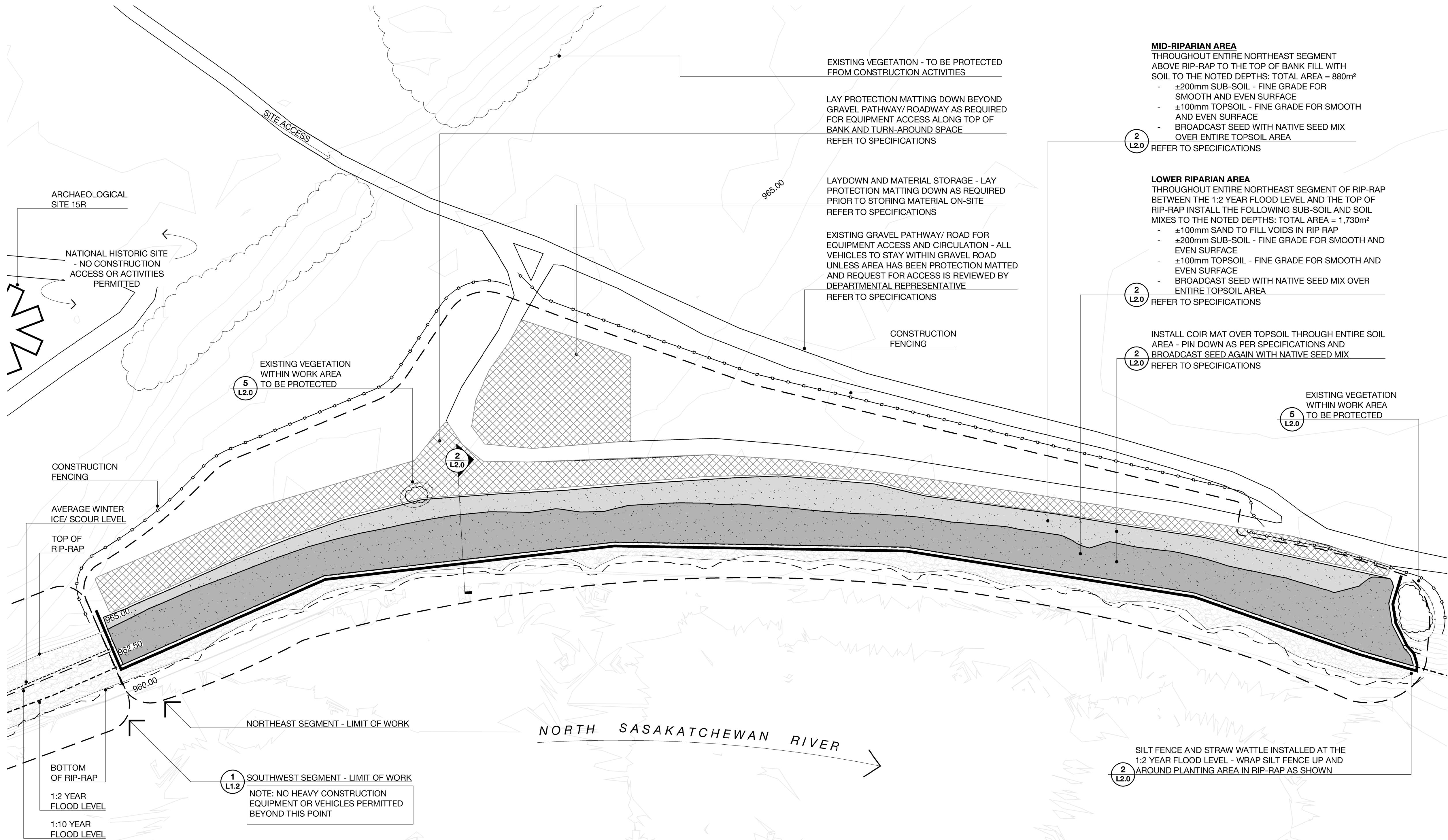
1. CONTRACTOR IS RESPONSIBLE FOR LOCATING UTILITIES AND PROTECTING SAME FROM DAMAGE DURING CONSTRUCTION. CONTACT ALBERTA ONE-CALL AT 1-800-242-3447.
2. COMMENCEMENT OF WORK INDICATES ACCEPTANCE OF SITE CONDITIONS.
3. ALL DIMENSIONS TO BE CONFIRMED AND VERIFIED ON SITE PRIOR TO CONSTRUCTION. CONTRACTOR TO REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.
4. SITE CLEAN-UP IS INCIDENTAL TO THE WORK.
5. CONTRACTOR TO COORDINATE AND ATTEND ALL INSPECTIONS AND APPROVALS REQUIRED BY THE OWNER AND OTHERS.
6. LANDSCAPE PLANS PREPARED USING SURVEY PROVIDED BY PARKS CANADA - SURVEY WAS CONDUCTED BETWEEN AUGUST 13 -26, 2018.

LEGEND:

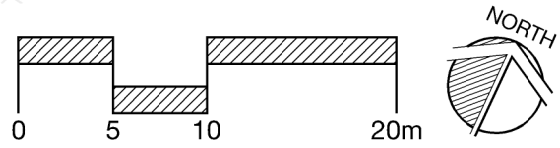
- LIMIT OF WORK
- - - - - TREE PROTECTION FENCING
- [Cross-hatched] PROTECTION MATTING
- [Stippled] EXISTING CLASS 2 RIP-RAP
- 965.00 EXISTING CONTOURS
- [Cloud shape] EXISTING VEGETATION
- [Thick line] SILT FENCE, STRAW WATTLE AND BEAVER FENCING
- [Light grey] MID-RIPARIAN AREA
- [Dark grey] LOWER RIPARIAN AREA

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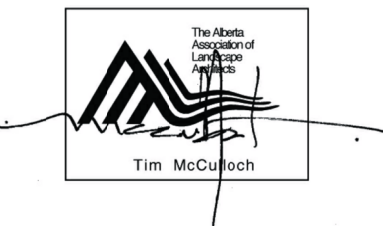


1 L1.1 NORTHEAST SEGMENT ENLARGEMENT PLAN - SOIL PLACEMENT AND SEEDING 1:400




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Tim McCulloch



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Tamas Conservation Services Ltd.

Project  
ROCKY MOUNTAIN HOUSE BANK RE-VEGETATION

Drawing  
SOIL PLACEMENT AND SEEDING PLAN

Drawn	AL	Approved	TMC
Checked	AL	Job Number	5001
Date	FEB.28, 2019	Sheet	
Scale	1:1000		L1.1





TOTAL = 1,180

TOTAL QTY	% PER GROUP	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
<b>LOWER RIPARIAN AREA (RIP-RAP ICE SCOUR ZONE) - 994 TOTAL PLANTS</b>					
110	11.1%	<i>Salix exigua</i>	Sandbar Willow	1 gal.	Container
276	27.8%	<i>Salix exigua</i>	Sandbar Willow	1.5m Stake	Live Cutting
166	16.7%	<i>Salix petiolaris</i>	Basket Willow	1.5m Stake	Container
110	11.1%	<i>Salix maccelinan</i>	Willow Sp.	1.5m Stake	Container
166	16.7%	<i>Scirpus microcarpus</i>	Small-fruited Bulrush	250 cc	Container
166	16.7%	<i>Glyceria grandis</i>	Tall Manna Grass	250 cc	Container
<b>MID-RIPARIAN AREA (ABOVE RIP-RAP ICE SCOUR ZONE) - 1,180 TOTAL PLANTS</b>					
59	5%	<i>Salix exigua</i>	Sandbar Willow	1 gal.	Container
59	5%	<i>Salix maccelinan</i>	Willow Sp.	1 gal.	Container
118	10%	<i>Salix petiolaris</i>	Basket Willow	1 gal.	Container
118	10%	<i>Cornus stolonifera</i>	Dogwood	1 gal.	Container
118	10%	<i>Elaeagnus commutata</i>	Wolf Willow	1 gal.	Container
177	15%	<i>Betula occidentalis</i>	River Birch	1 gal.	Container
118	10%	<i>Populus balsamifera</i>	Balsam Poplar	1 gal.	Container
236	20%	<i>Symphoricarpos occidentalis</i>	Buckbrush	1 gal.	Container
177	15%	<i>Salix bebbiana</i>	Bebb's Willow	1 gal.	Container
<b>BRUSH LAYER AREA - 2,640 TOTAL PLANTS</b>					
1056	40%	<i>Salix exigua</i>	Sandbar Willow	1.5m Stake	Container
264	10%	<i>Salix maccelinan</i>	Willow Sp.	1.5m Stake	Container
528	20%	<i>Salix petiolaris</i>	Basket Willow	1.5m Stake	Container
528	20%	<i>Salix bebbiana</i>	Bebb's Willow	1.5m Stake	Container
264	10%	<i>Populus balsamifera</i>	Balsam Poplar	1.5m Stake	Container
<b>EMBANKMENT AREA - 142 TOTAL PLANTS</b>					
43	30%	<i>Elaeagnus commutata</i>	Wolf Willow	1 gal.	Container
14	10%	<i>Rosa woodsii</i>	Wild Rose	1 gal.	Container
7	5%	<i>Symphoricarpos occidentalis</i>	Buckbrush	1 gal.	Container
14	10%	<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	1 gal.	Container
14	10%	<i>Prunus virginiana</i>	Western Chokecherry	1 gal.	Container
29	20%	<i>Salix bebbiana</i>	Bebb's Willow	1 gal.	Container
21	15%	<i>Amelanchier alnifolia</i>	Saskatoon	1 gal.	Container

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AGENCY



Project

# ROCKY MOUNTAIN HOUSE BANK RE-VEGETATION

Drawing

## PLANTING PLANS - LOWER & MID-RIPARIAN, BRUSH LAYER & EMBANKMENT AREAS

Drawn	AL	Approved	TMC
Checked	AL	Job Number	5001
Date	FEB.28, 2019	Sheet	L1.2
Scale	1:1000		

## L1.2



PLANT GROUP QUANTITIES:

EMBANKMENT AREA:

GROUP AF - 40 SHRUBS  
GROUP AG - 40 SHRUBS  
GROUP AH - 40 SHRUBS  
GROUP AJ - 20 SHRUBS  
GROUP AK - 20 SHRUBS  
GROUP AL - 20 SHRUBS  
GROUP AM - 40 SHRUBS  
GROUP AN - 40 SHRUBS  
GROUP AP - 40 SHRUBS  
GROUP AQ - 20 SHRUBS  
GROUP AR - 20 SHRUBS  
GROUP AS - 60 SHRUBS  
GROUP AT - 40 SHRUBS  
GROUP AU - 20 SHRUBS  
GROUP AV - 40 SHRUBS  
GROUP AW - 40 SHRUBS  
GROUP AX - 20 SHRUBS  
GROUP AY - 20 SHRUBS  
GROUP AZ - 20 SHRUBS

TOTAL = 600

TOP OF BANK AREA:

NO TREES + WILLOWS  
GROUP BB - 20 SHRUBS  
GROUP BC - 40 SHRUBS  
GROUP BD - 60 SHRUBS  
GROUP BE - 30 SHRUBS  
GROUP BF - 20 SHRUBS  
GROUP BG - 50 SHRUBS  
GROUP BH - 30 SHRUBS  
GROUP BJ - 60 SHRUBS

TOTAL = 310

TOP OF BANK AREA:

WITH TREES + WILLOWS  
GROUP BK - 40 SHRUBS  
GROUP BL - 20 SHRUBS  
GROUP BM - 20 SHRUBS  
GROUP BN - 40 SHRUBS  
GROUP BP - 20 SHRUBS  
GROUP BQ - 20 SHRUBS  
GROUP BR - 40 SHRUBS  
GROUP BS - 20 SHRUBS  
GROUP BT - 20 SHRUBS  
GROUP BU - 20 SHRUBS  
GROUP BV - 40 SHRUBS  
GROUP BW - 20 SHRUBS  
GROUP BX - 40 SHRUBS  
GROUP BY - 20 SHRUBS  
GROUP BZ - 20 SHRUBS  
GROUP CC - 20 SHRUBS  
GROUP CD - 40 SHRUBS

TOTAL = 460

PLANTING AREA DESCRIPTIONS:

LOWER RIPARIAN AREA:

THIS IS THE PLANTING AREA BETWEEN THE 1:2 YEAR FLOOD LEVEL AND THE AVERAGE WINTER ICE LEVEL. THIS IS THE ICE SCOUR ZONE

MID-RIPARIAN AREA:

THIS IS THE PLANTING AREA BETWEEN THE AVERAGE WINTER ICE LEVEL AND THE TOP OF THE RIP-RAP

BRUSH LAYER AREA:

THIS IS THE LINEAR PLANTING ZONE DIRECTLY ABOVE THE TOP OF RIP-RAP

EMBANKMENT AREA:

THIS IS THE PLANTING ZONE BETWEEN THE TOP OF RIP-RAP AND THE TOP OF THE BANK. LIVE PLANTINGS WILL BE INSTALLED INTO THIS BANK AREA

TOP OF BANK AREA:

THIS IS THE PLANTING ZONE THAT RUNS ALONG THE TOP OF THE RIVER BANK

PLANTING NOTES:

- ALL PLANTING LAYOUT SHALL BE APPROVED ON-SITE BY DEPARTMENTAL REPRESENTATIVE PRIOR TO INSTALLATION. CONTRACTOR TO NOTIFY REPRESENTATIVE MINIMUM 2 WORKING DAYS PRIOR.
- CONTRACTOR TO CONFIRM QUANTITIES AND SHALL REPORT PROMPTLY ANY DISCREPANCIES.
- DISTURBANCES TO ADJACENT AREAS SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE.
- REFER TO SPECIFICATIONS FOR MATERIALS, TECHNIQUES AND PROCEDURES.
- FOR QUANTITIES OF EACH SHRUB SPECIES IN THE PLANTING GROUPS NOTED IN THE NORTHEAST SEGMENT - CALCULATE THE NUMBER REQUIRED BASED ON THE PERCENTAGE REQUIRED PER GROUP. EACH GROUP WILL HAVE ALL THE SHRUB SPECIES REPRESENTED.

LEGEND:

- — — LIMIT OF WORK
- o — CONSTRUCTION FENCING
- — — TREE PROTECTION FENCING
- x — x — x — x — BEAVER FENCING, SILT FENCE AND STRAW WATTLE
- EXISTING CLASS 2 RIP-RAP
- 965.00 EXISTING CONTOURS
- EMBANKMENT SHRUB PLANTING
- TOP OF BANK PLANTING ZONE WITH NO TREES OR WILLOWS
- TOP OF BANK PLANTING ZONE TREES AND WILLOWS
- EXISTING VEGETATION

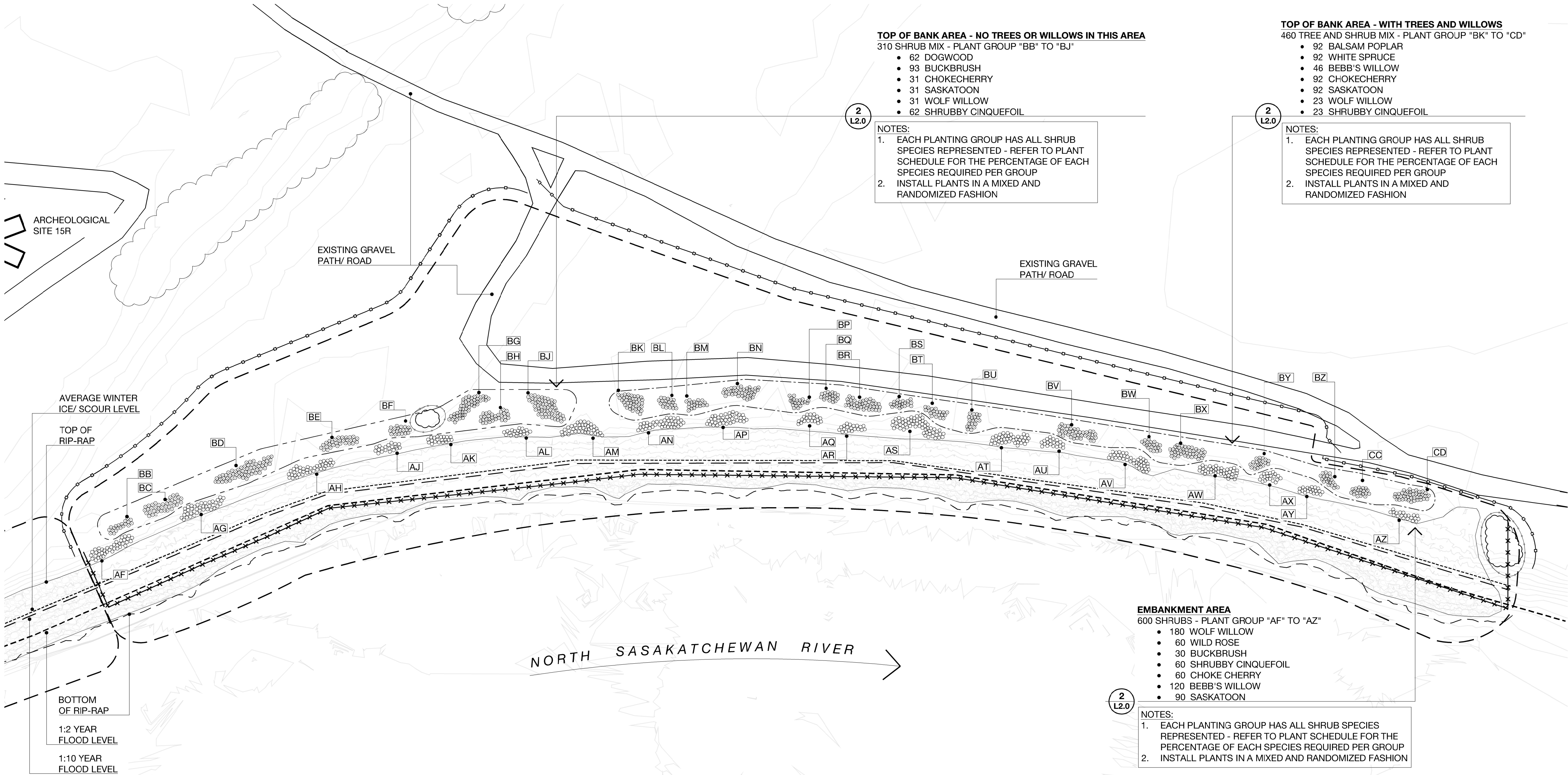
PLANT SCHEDULE (FOR L1.3)

TREES, SHRUBS, PERENNIALS AND LIVE STAKES

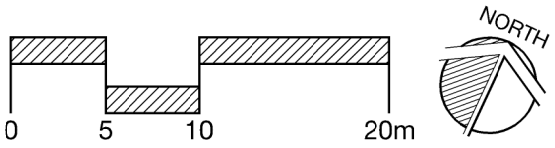
TOTAL QTY	% PER GROUP	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
EMBANKMENT AREA: 600 TOTAL PLANTS					
180	30%	<i>Elaeagnus commutata</i>	Wolf Willow	1 gal.	Container
60	10%	<i>Rosa woodsii</i>	Wild Rose	1 gal.	Container
30	5%	<i>Symphoricarpos occidentalis</i>	Buckbrush	1 gal.	Container
60	10%	<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	1 gal.	Container
60	10%	<i>Prunus virginiana</i>	Western Chokecherry	1 gal.	Container
120	20%	<i>Salix bebbiana</i>	Bebb's Willow	1 gal.	Container
90	15%	<i>Amelanchier alnifolia</i>	Saskatoon	1 gal.	Container
TOP OF BANK AREA - WITH TREES AND WILLOWS: 460 TOTAL PLANTS					
92	20%	<i>Populus balsamifera</i>	Balsam Poplar	2 gal.	Container
92	20%	<i>Picea glauca</i>	White Spruce	2 gal.	Container
46	10%	<i>Salix bebbiana</i>	Bebb's Willow	1 gal.	Container
92	20%	<i>Prunus virginiana</i>	Western Chokecherry	1 gal.	Container
92	20%	<i>Amelanchier alnifolia</i>	Saskatoon	2 gal.	Container
23	5%	<i>Elaeagnus commutata</i>	Wolf Willow	1 gal.	Container
23	5%	<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	1 gal.	Container
TOP OF BANK AREA - NO TREES OR WILLOWS: 310 TOTAL PLANTS					
62	20%	<i>Cornus stolonifera</i>	Dogwood	1 gal.	Container
93	30%	<i>Symphoricarpos occidentalis</i>	Buckbrush	1 gal.	Container
31	10%	<i>Prunus virginiana</i>	Western Chokecherry	1 gal.	Container
31	10%	<i>Amelanchier alnifolia</i>	Saskatoon	2 gal.	Container
31	10%	<i>Elaeagnus commutata</i>	Wolf Willow	1 gal.	Container
62	20%	<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	1 gal.	Container

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1 L1.3 1:400 NORTHEAST SEGMENT ENLARGEMENT PLAN - EMBANKMENT AND TOP OF BANK PLANTING



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Tim McCreesh

CARSON + McCULLOCH ASSOCIATES, L.P.

Tamas Conservation Services Ltd

Project

ROCKY MOUNTAIN HOUSE BANK RE-VEGETATION

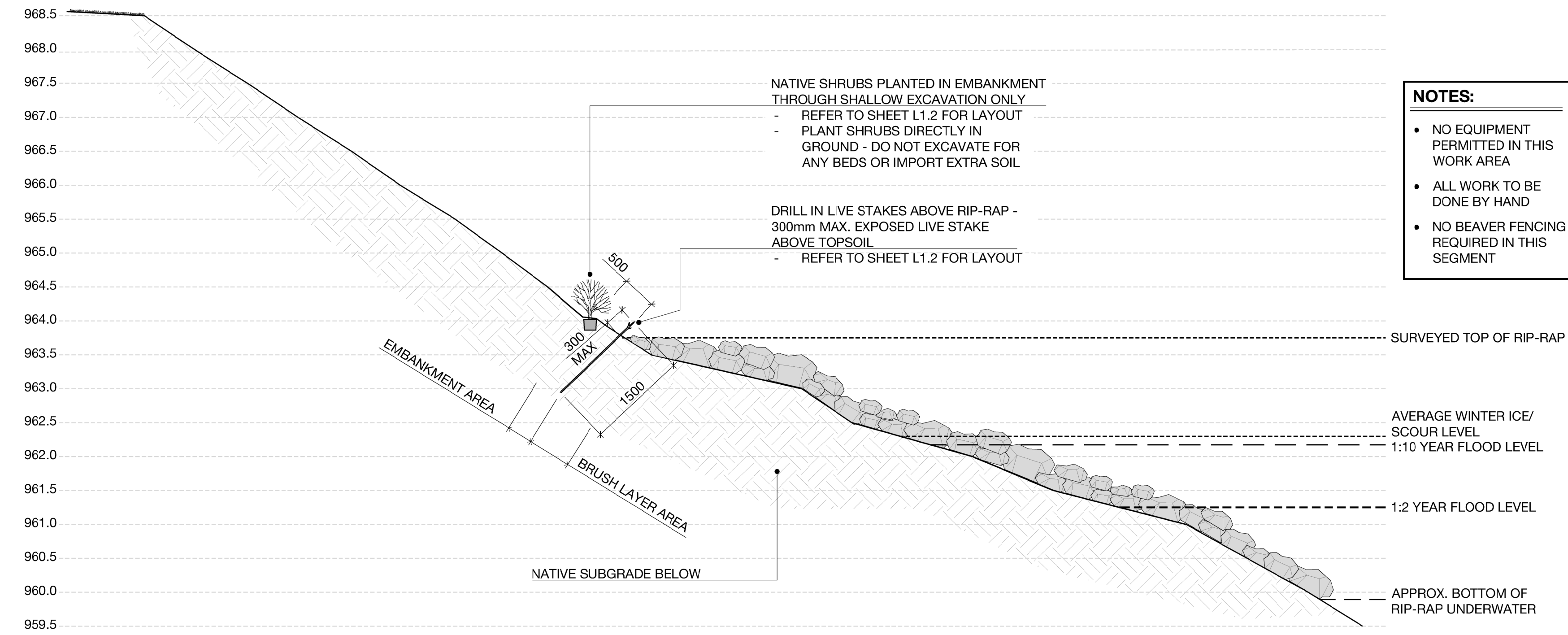
Drawing

PLANTING PLAN EMBANKMENT AND TOP OF BANK AREAS

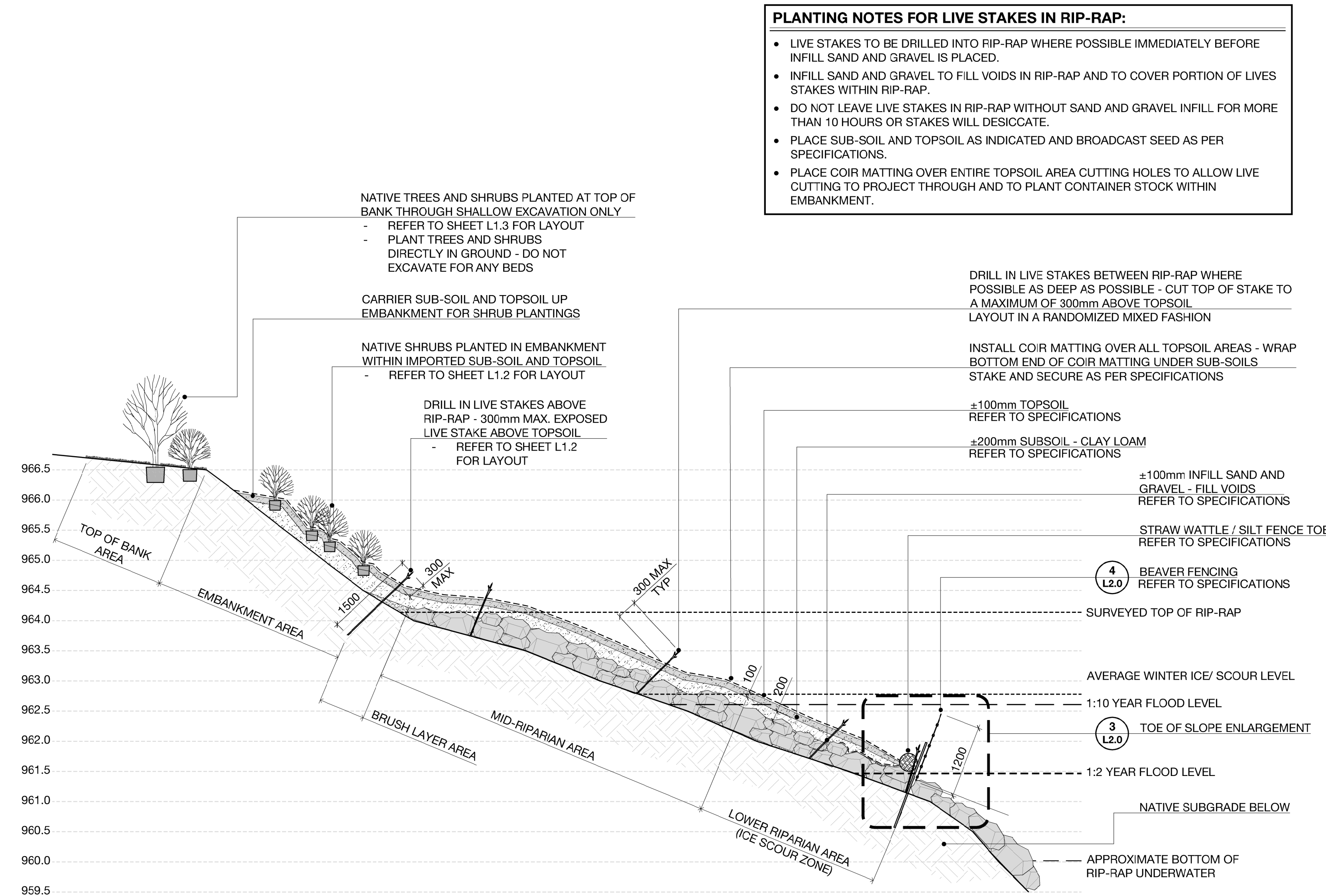
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L1.3

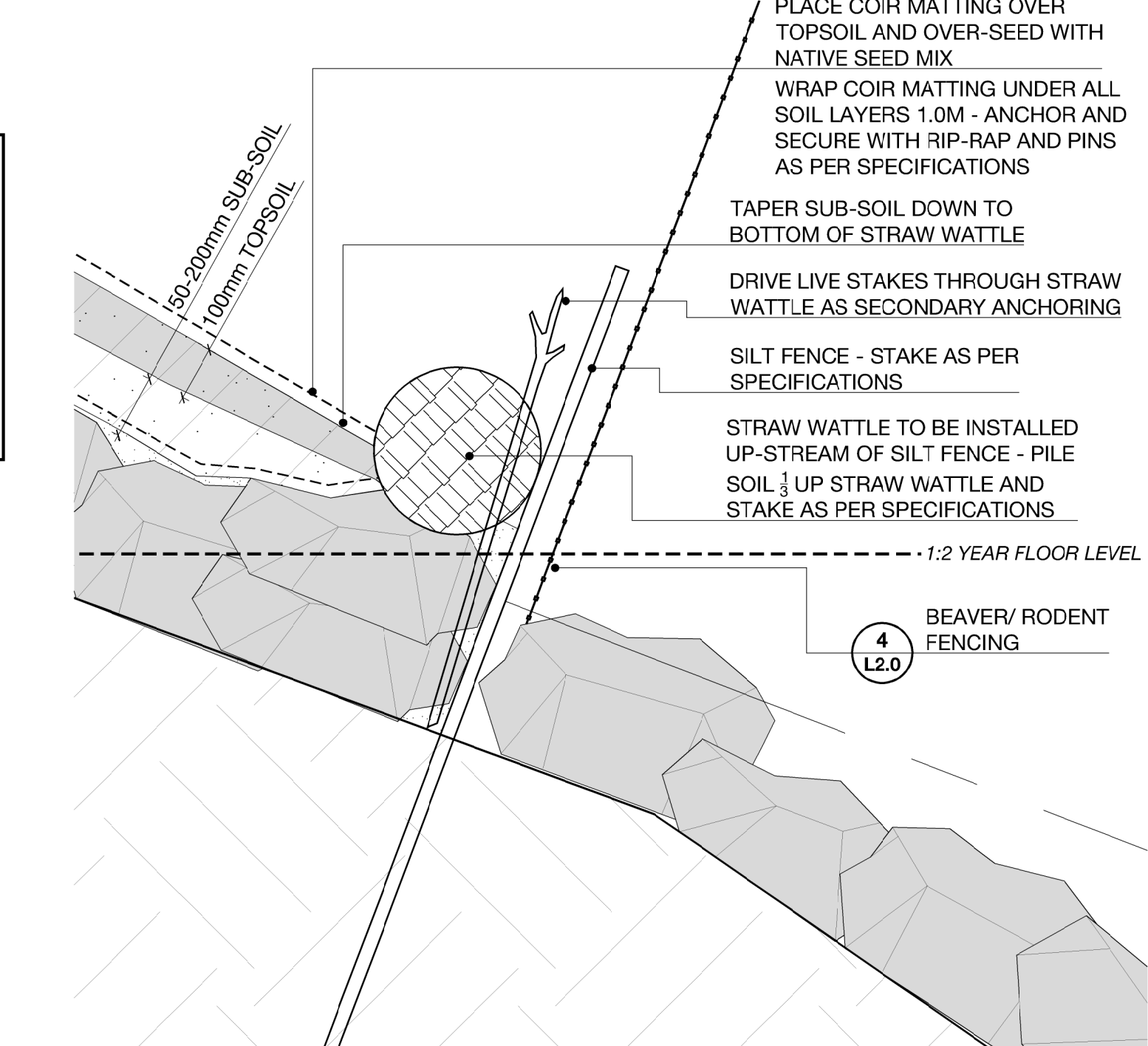




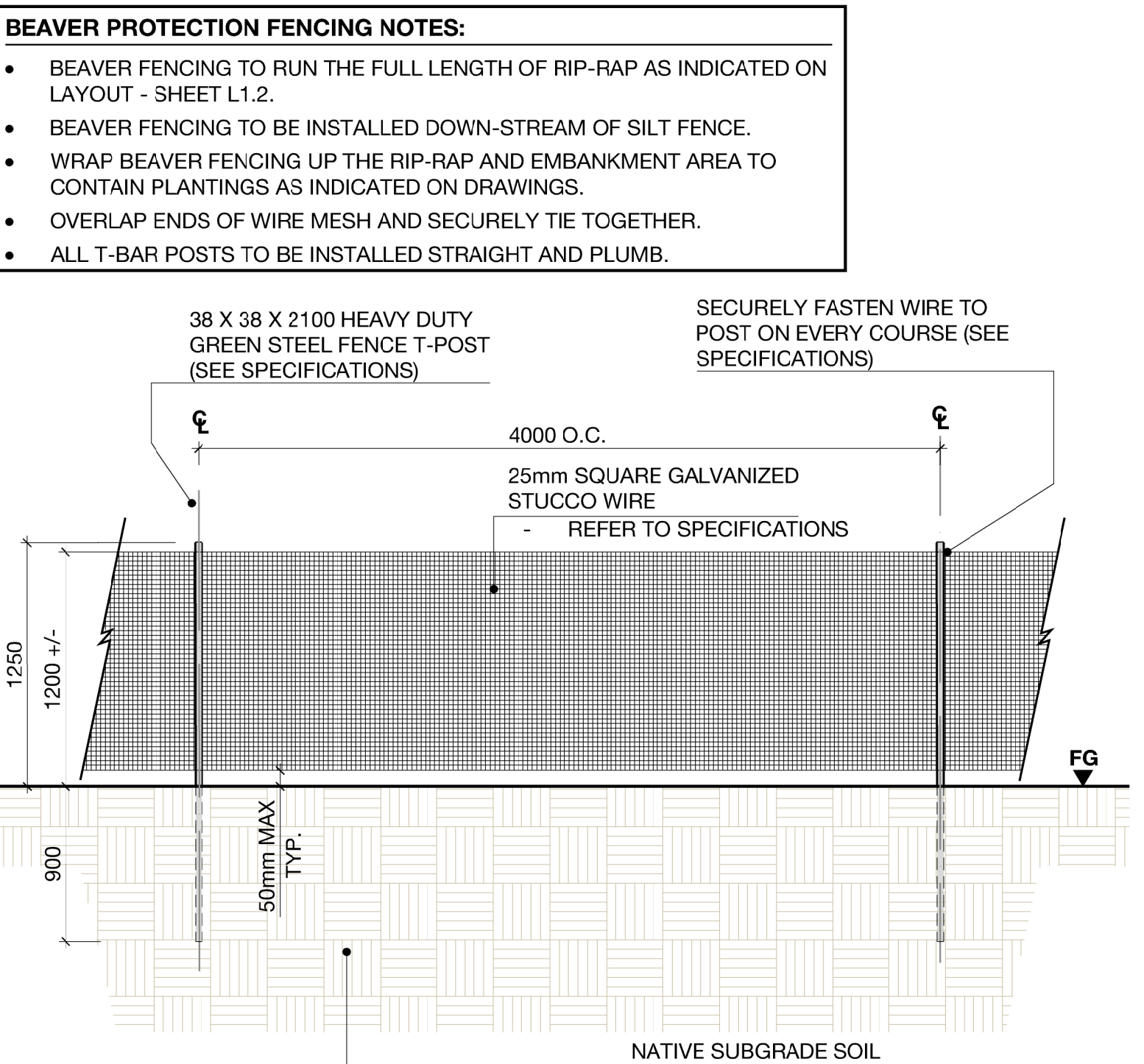
**1** **SOUTHWEST SEGMENT - SECTION**  
**L2.0 1:50**



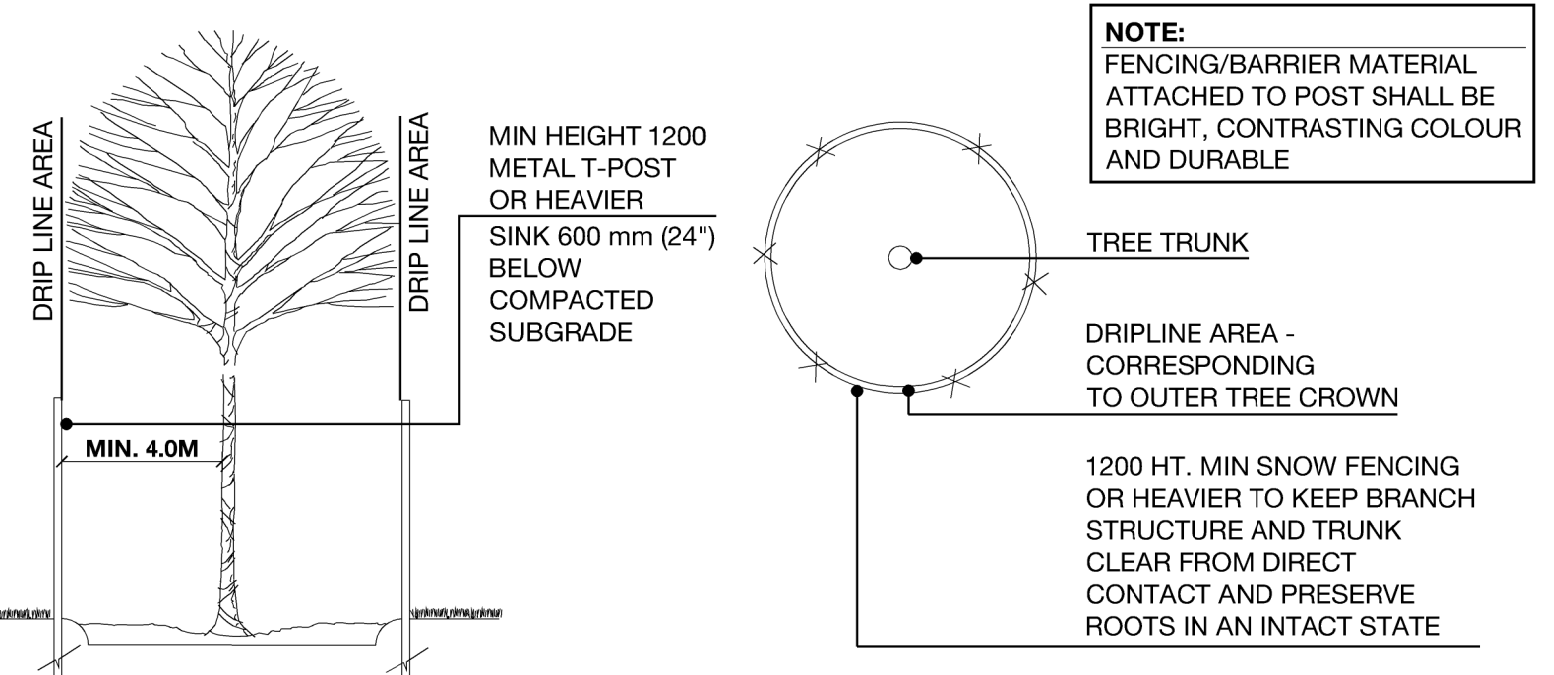
**2** **NORTHEAST SEGMENT - SECTION**  
**L2.0 1:50**



**3** **TOE OF SLOPE ENLARGEMENT**  
**L2.0 1:10** (NORTH SEGMENT ONLY)



**4** **BEAVER PROTECTION FENCING**  
**L2.0 1:30** (NORTH SEGMENT ONLY)



**5** **TREE PROTECTION FENCING**  
**L2.0 1:25**

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**SECTIONS AND DETAILS**

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**L2.0**