

Landscape Architecture Annex Raingarden Design

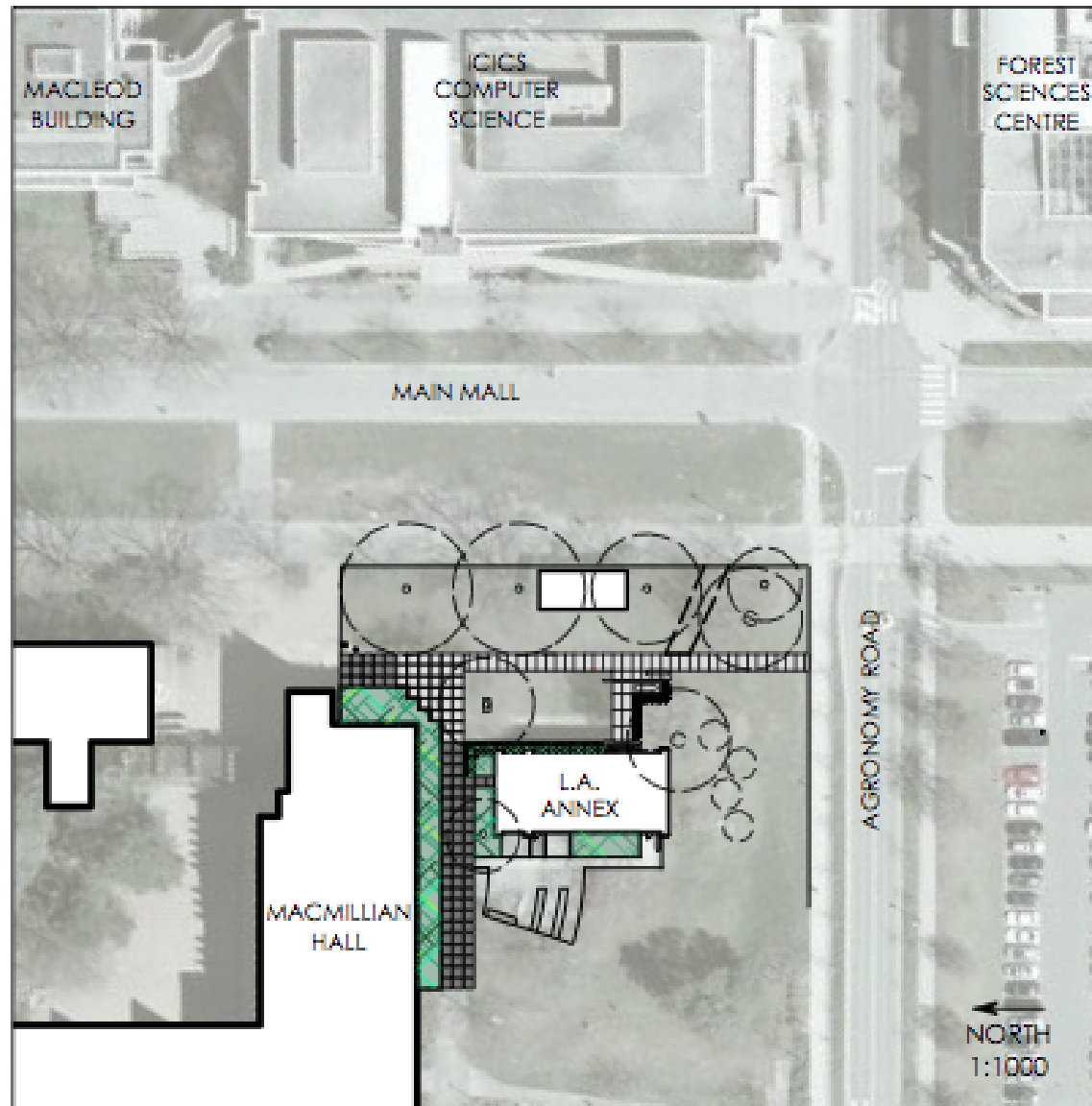
Emily Nixon, Christine Wilson

University of British Columbia

LARC 581B

June 17, 2011

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UNIVERSITY OF BRITISH COLUMBIA
LANDSCAPE ARCHITECTURE ANNEX
RAINGARDEN DESIGN

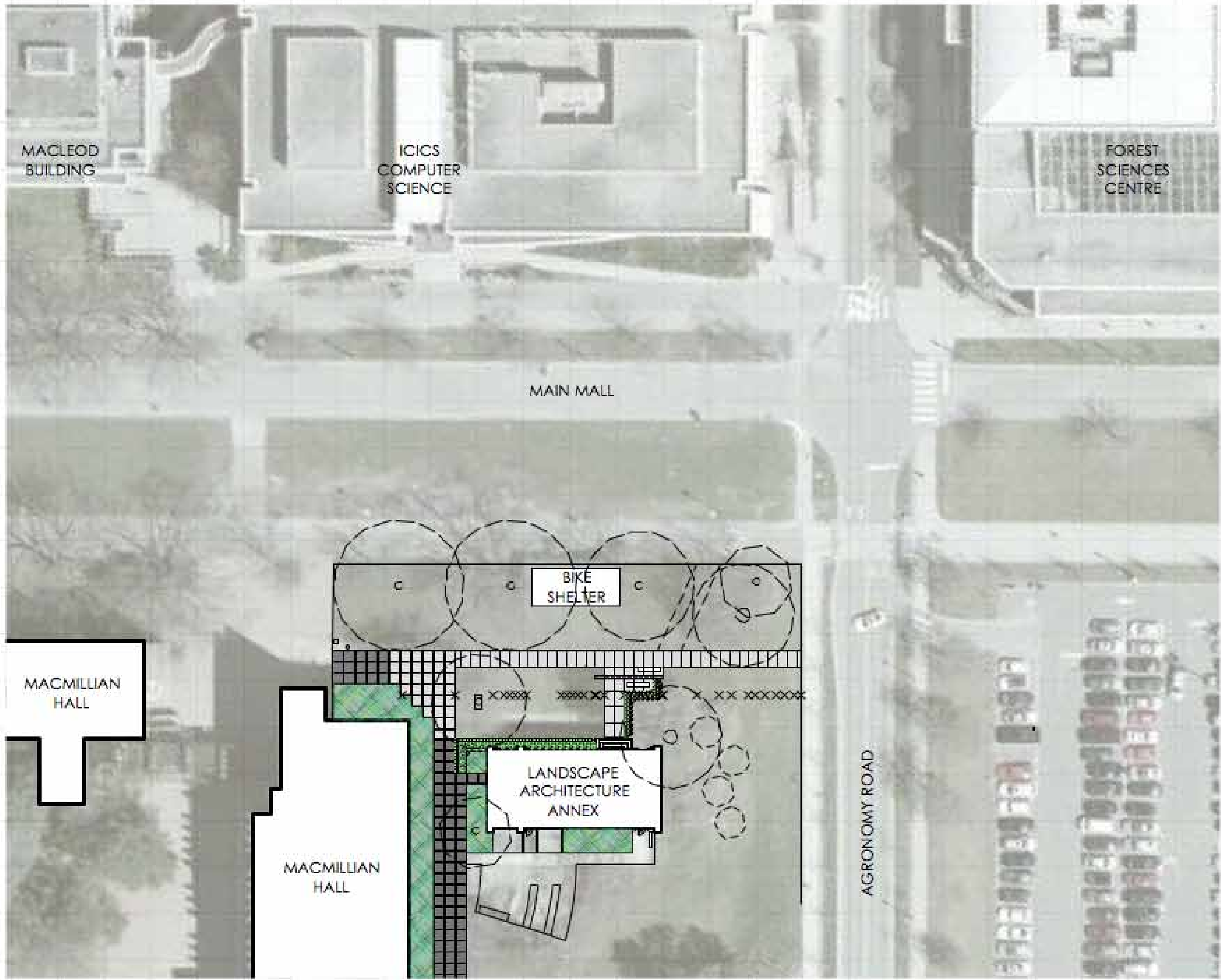
2357 MAIN MALL VANCOUVER, BC

DRAWN BY:
 EMILY NIXON
 CHRISTINE WILSON

DATE:
 17 JUNE 2011

SCHEDULE OF DRAWINGS

- | | | | |
|----|------------------------|-----|-------------------|
| L1 | SITE PLAN | L9 | CUSTOM DETAILS |
| L2 | LIMIT OF WORK PLAN | L10 | PLANTING DETAILS |
| L3 | DEMOLITION PLAN | L11 | SECTIONS |
| L4 | GRADING PLAN | L12 | PERSPECTIVES |
| L5 | MATERIALS PLAN | L13 | PRECEDENT IMAGES |
| L6 | PLANTING PLAN | L14 | BUDGET & SCHEDULE |
| L7 | C.I.P CONCRETE DETAILS | | |
| L8 | BENCH DETAILS | | |



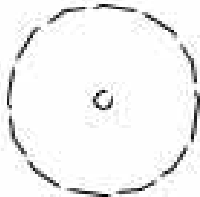
LEGEND



C.I.P. CONCRETE



EXISTING PAVERS



EXISTING TREE



PLANTED AREA

PROJECT:
LANDSCAPE ARCHITECTURE ANNEX
RAINGARDEN DESIGN

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PROJECT ADVISORS:
DANIEL ROEHR
KRIS FOX

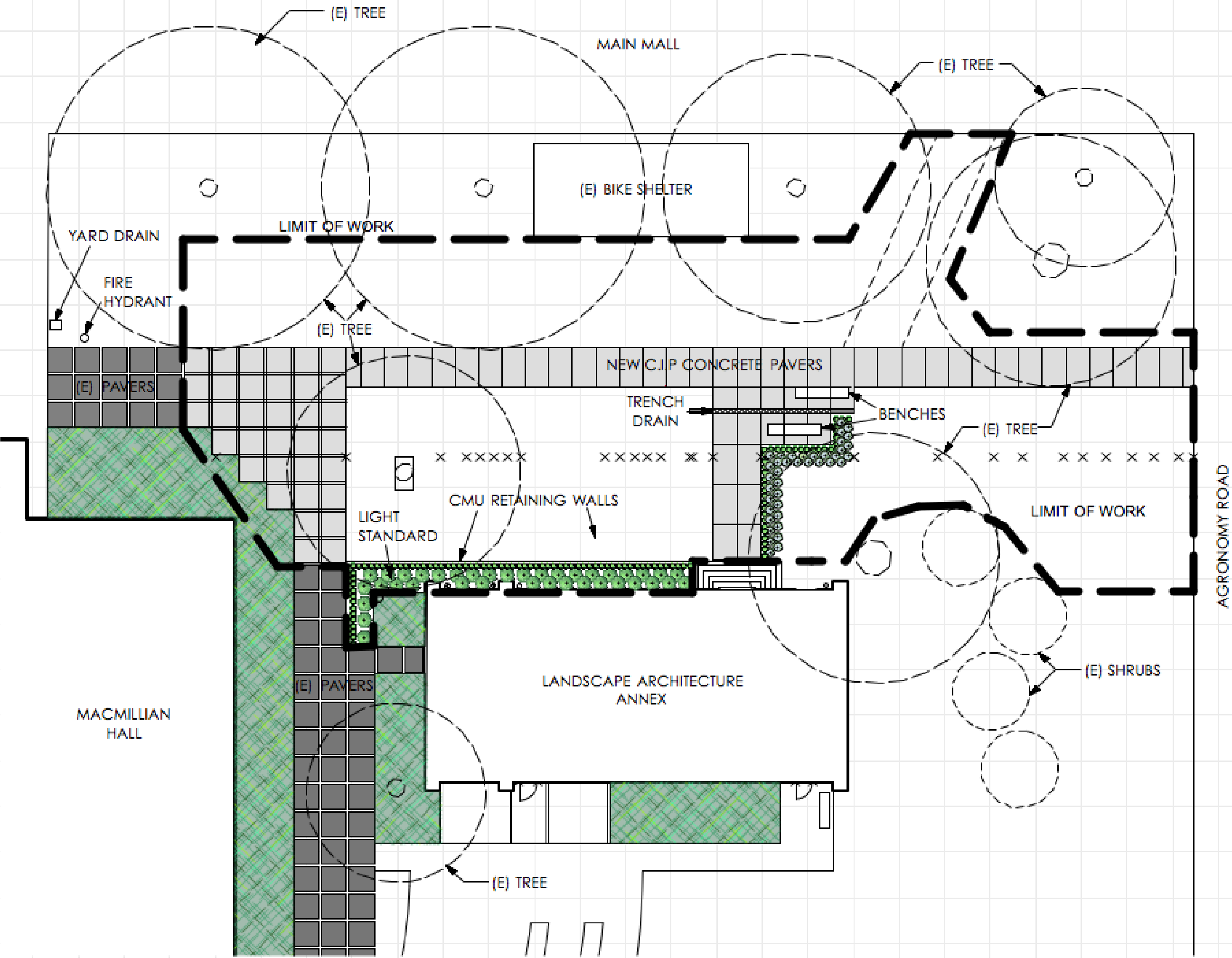
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DEAN GREGORY

UBC SEEDS MANAGER:
BRENDA SAWADA




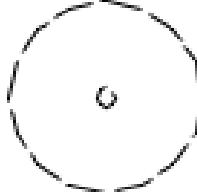
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L1
SITE PLAN



LEGEND

-  LIMIT OF WORK
-  PROPOSED C.I.P. CONCRETE
-  EXISTING PAVERS
-  EXISTING TREE

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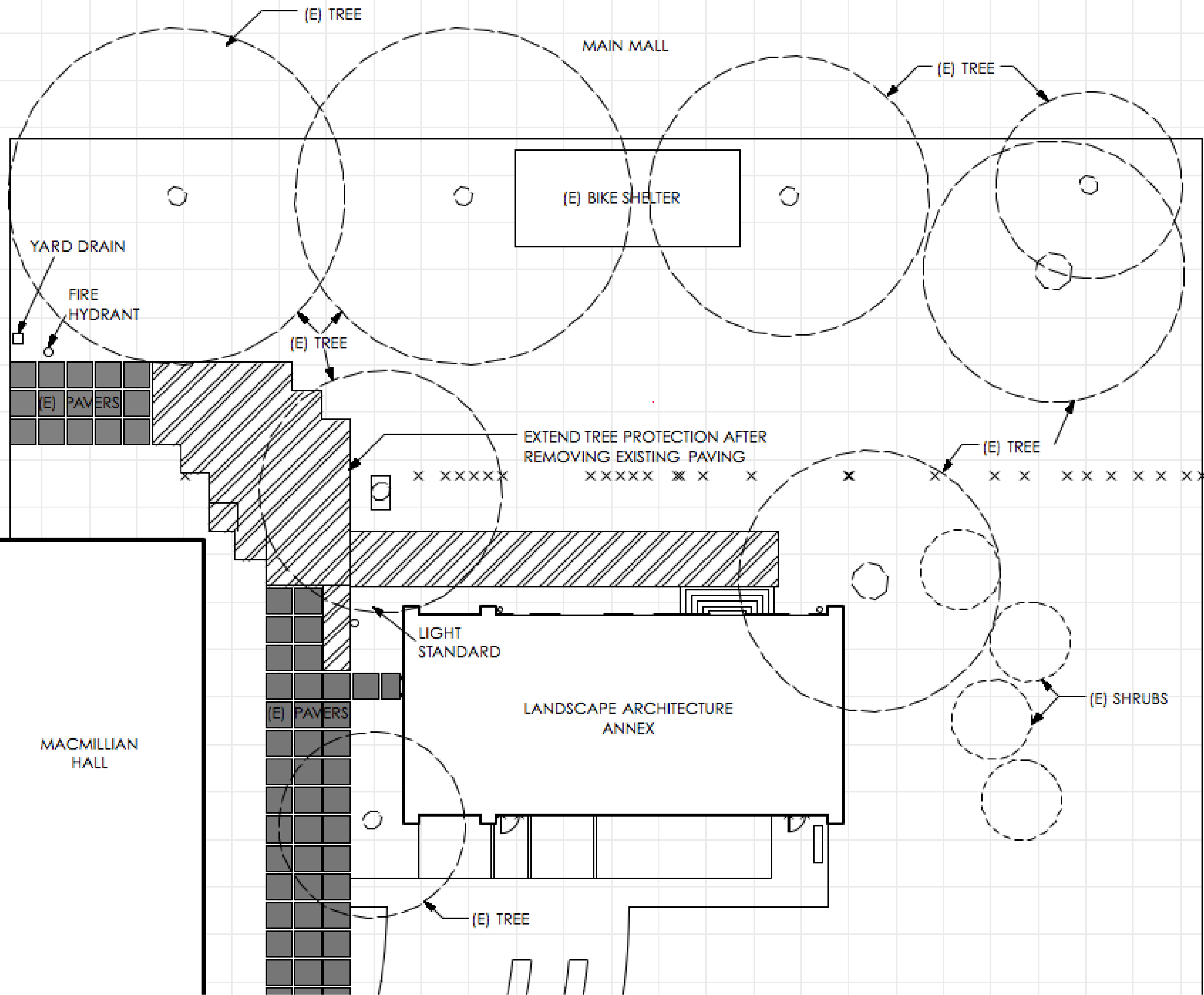
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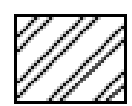


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 NORTH
 1:200


L2
 LIMIT OF WORK
 PLAN



LEGEND

-  TREE PAVING TO BE REMOVED
-  EXISTING TREE
-  TREE PROTECTION (SEE L10)

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RAINGARDEN DESIGN

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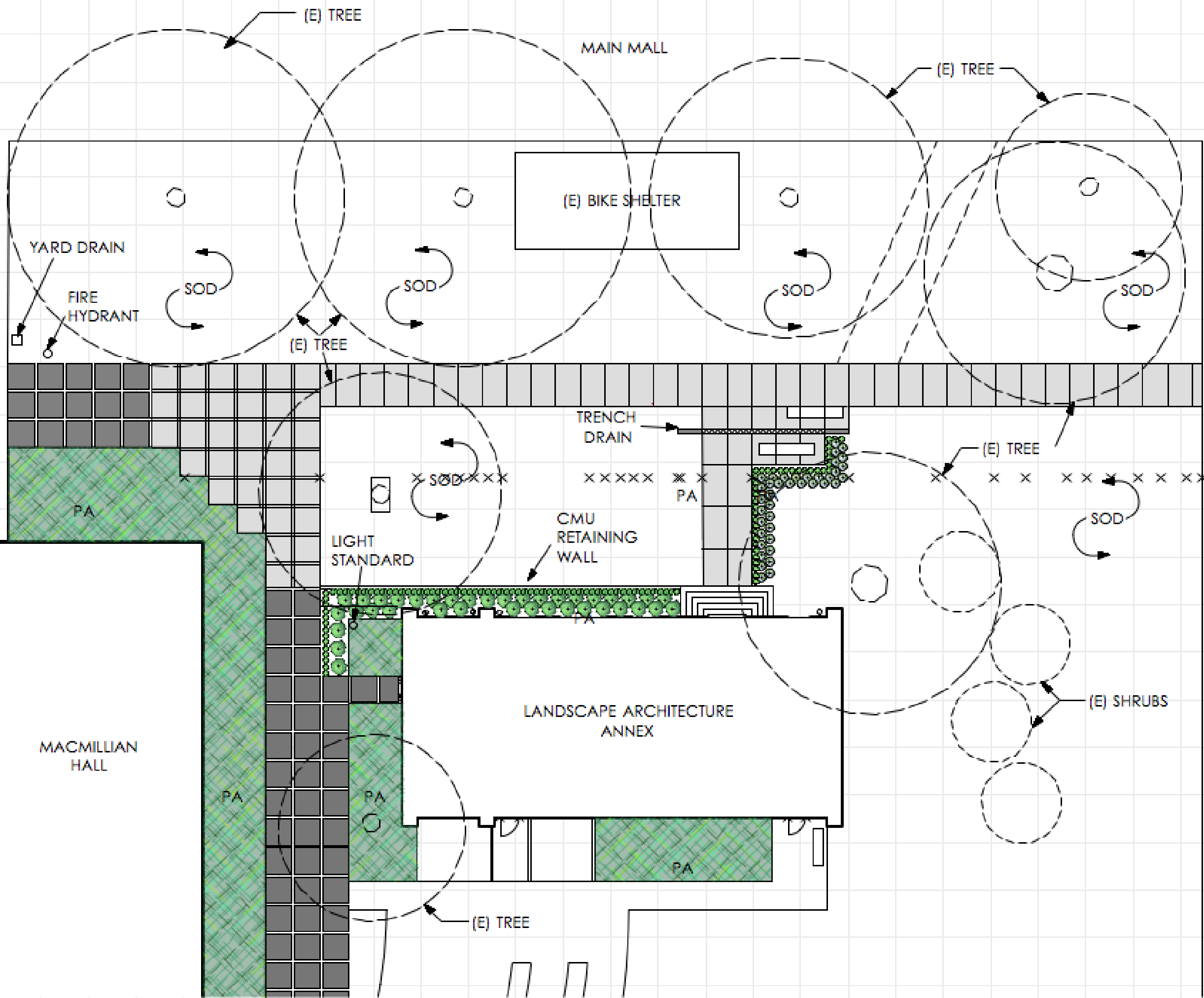
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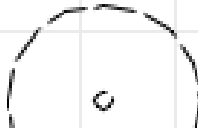




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L3
DEMOLITION
PLAN



- LEGEND**
-  PROPOSED C.I.P. CONCRETE
 -  EXISTING PAVERS
 -  EXISTING TREE
 -  PA PLANTED AREA
 -  RECLAIMED WOOD BENCH
 -  TRENCH DRAIN
 -  TRENCH GRATE

PROJECT:
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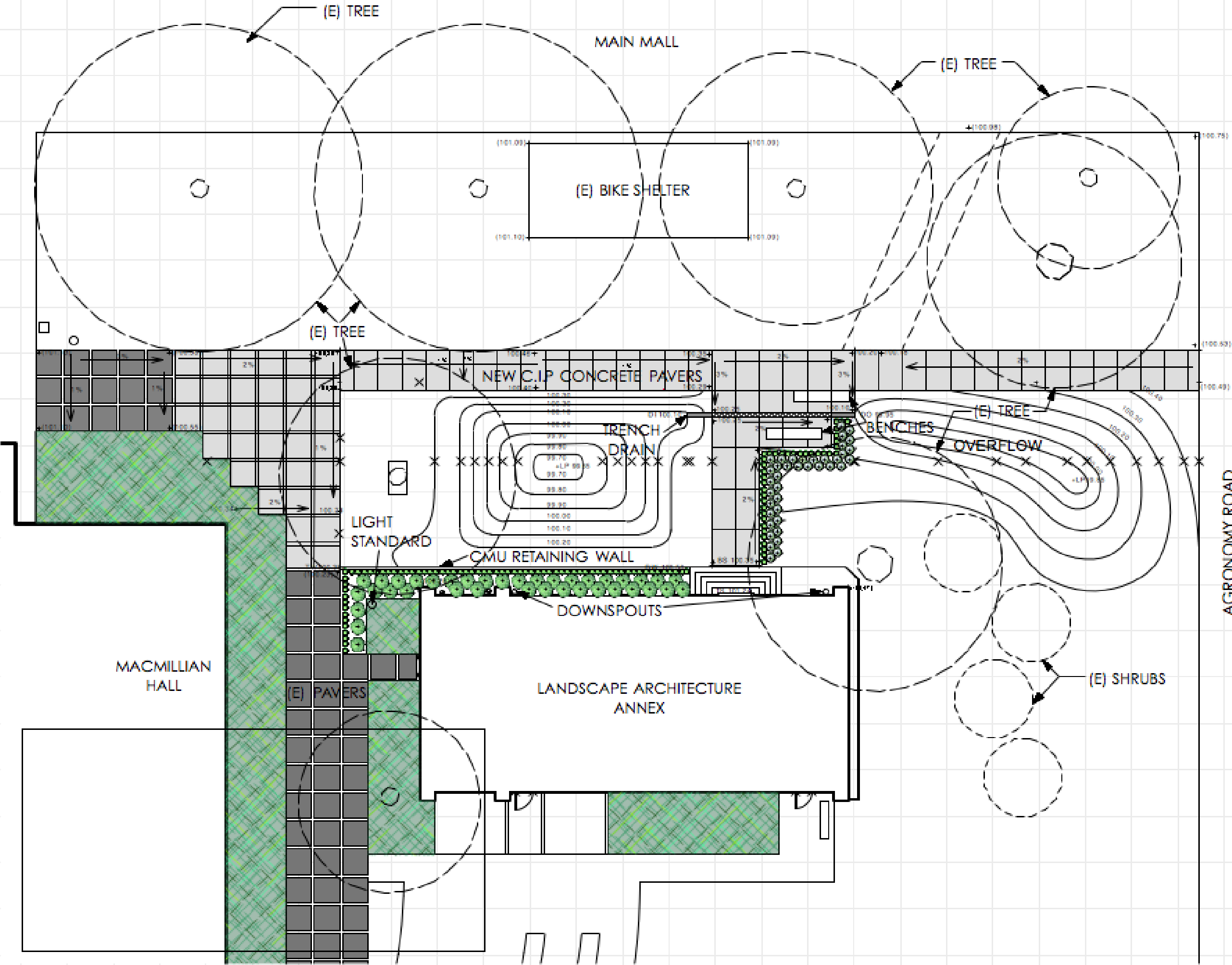
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 NORTH
 1:200

 0 5m

L5
 MATERIALS
 PLAN



LEGEND	
SYM.	DESCRIPTION
	SARCOCOCCA HUMILIS #2 POT
	VIBURNUM DAVIDII #3 POT
	HYDRANGEA ANOMALA SUBSP. PETIOLARIS #3 POT
	SKIMMIA JAPONICA DWARF FEMALE (1 OUT OF 6 MALE) #2 POT
	EXISTING TREE
	EXISTING SHRUB

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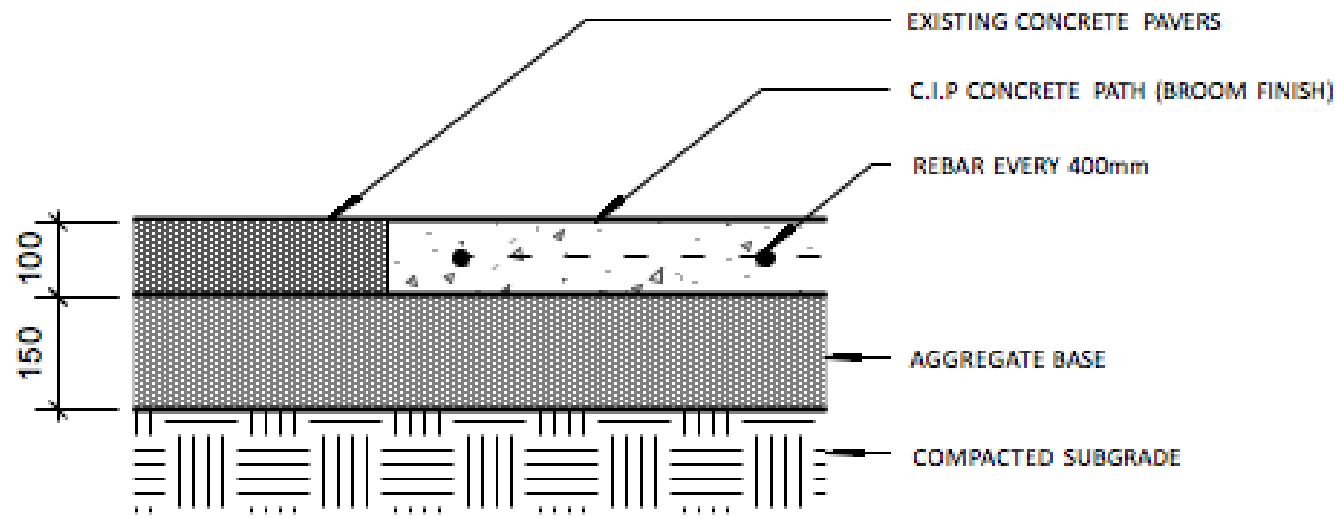
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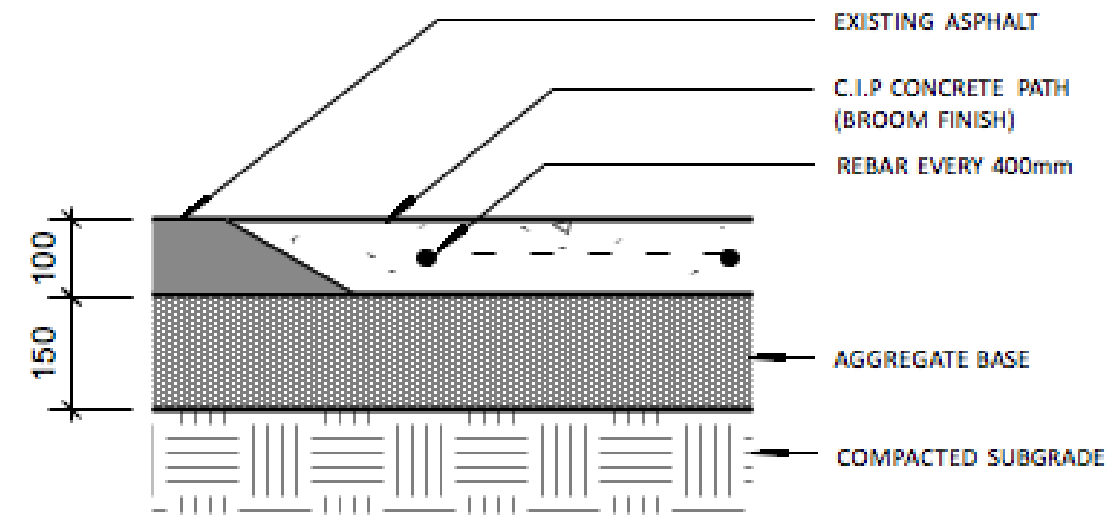
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NORTH
 1:200
 3m

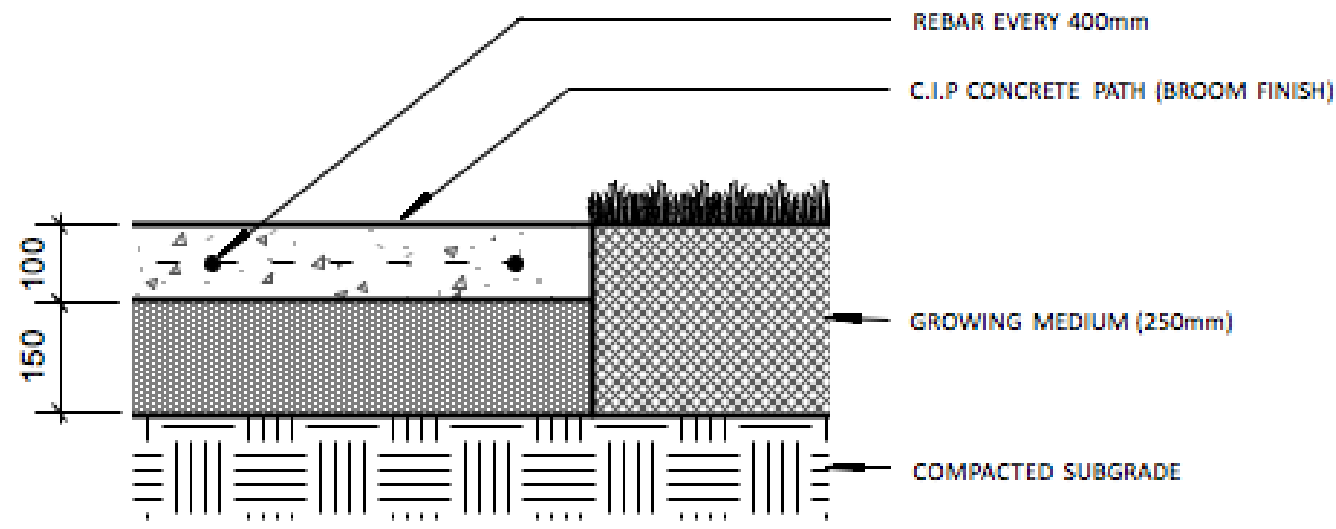
L6
PLANTING PLAN



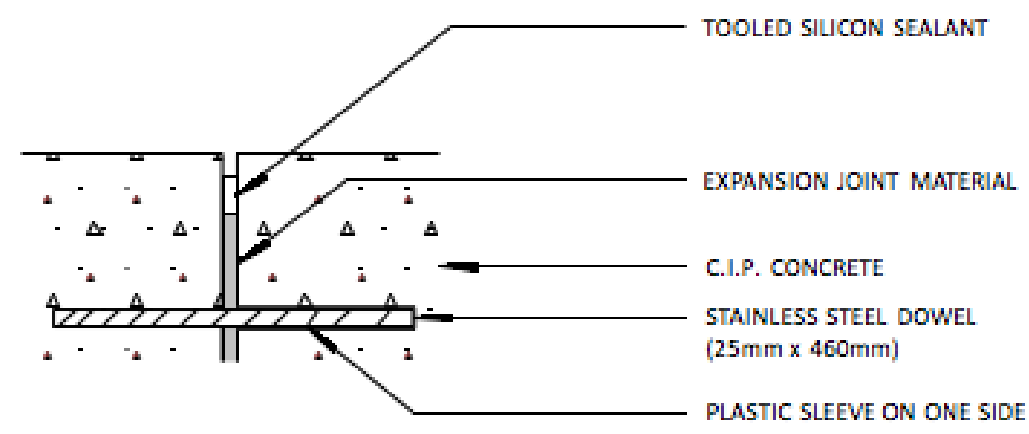
1 C.I.P. CONCRETE PATH AT EXISTING PAVERS
1:10



2 C.I.P. CONCRETE PATH AT EXISTING ASPHALT
1:10



3 C.I.P. CONCRETE PATH AT SOD
1:10



4 C.I.P. CONCRETE EXPANSION JOINT
1:5

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LANDSCAPE ARCHITECTURE ANNEX
RAINGARDEN DESIGN

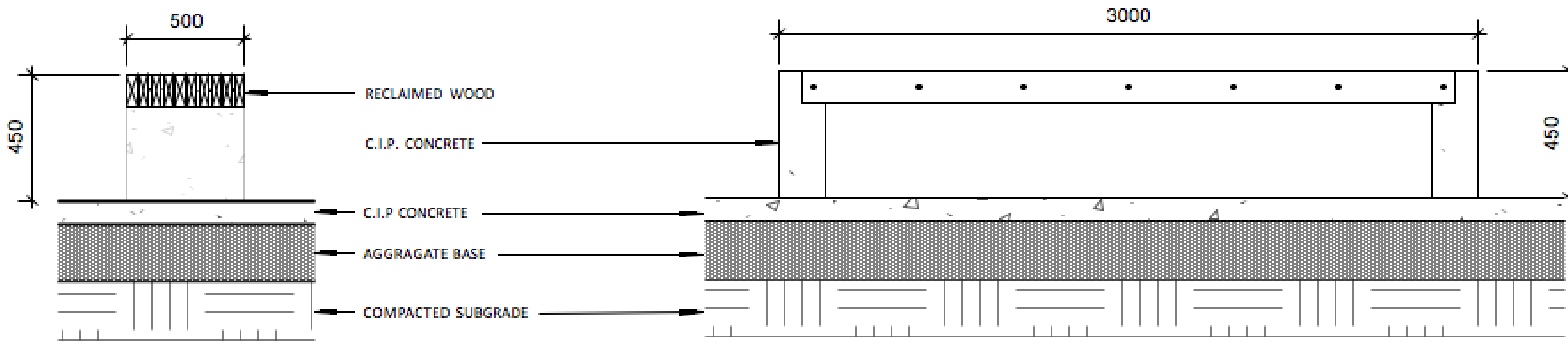
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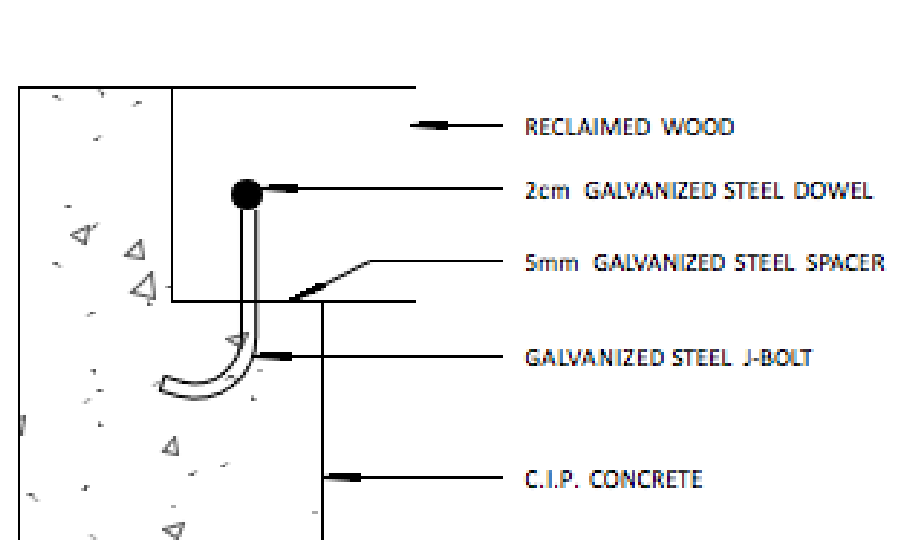
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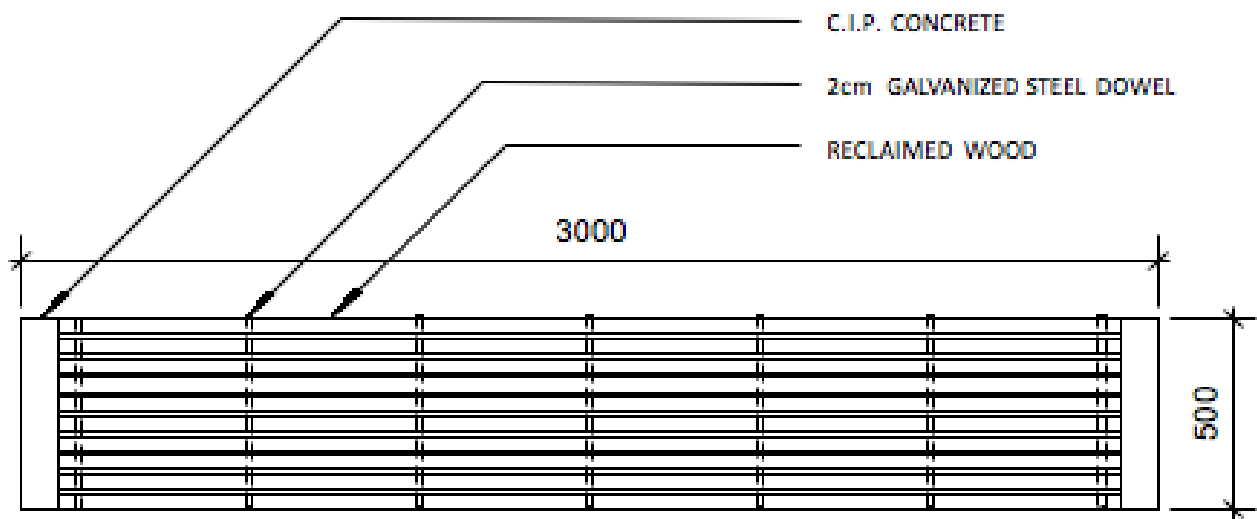


1 RECLAIMED WOOD BENCH
1:20 CROSS-SECTION

2 RECLAIMED WOOD BENCH
1:20 LONG SECTION



3 RECLAIMED WOOD BENCH
1:5 DETAIL



4 RECLAIMED WOOD BENCH
1:20 PLAN

PROJECT:
LANDSCAPE ARCHITECTURE ANNEX
RAINGARDEN DESIGN

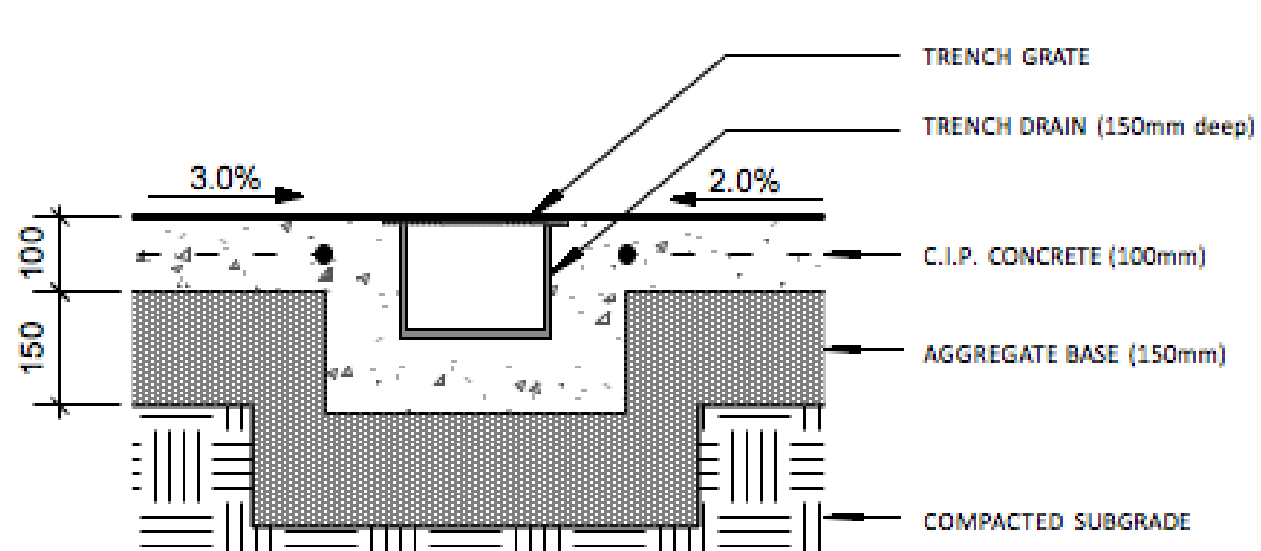
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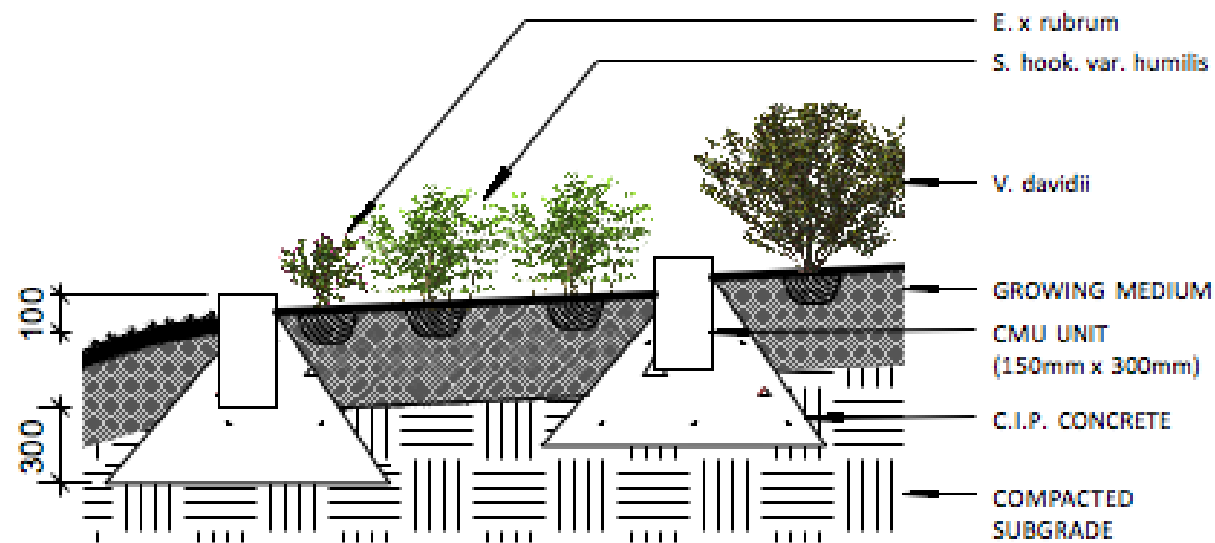
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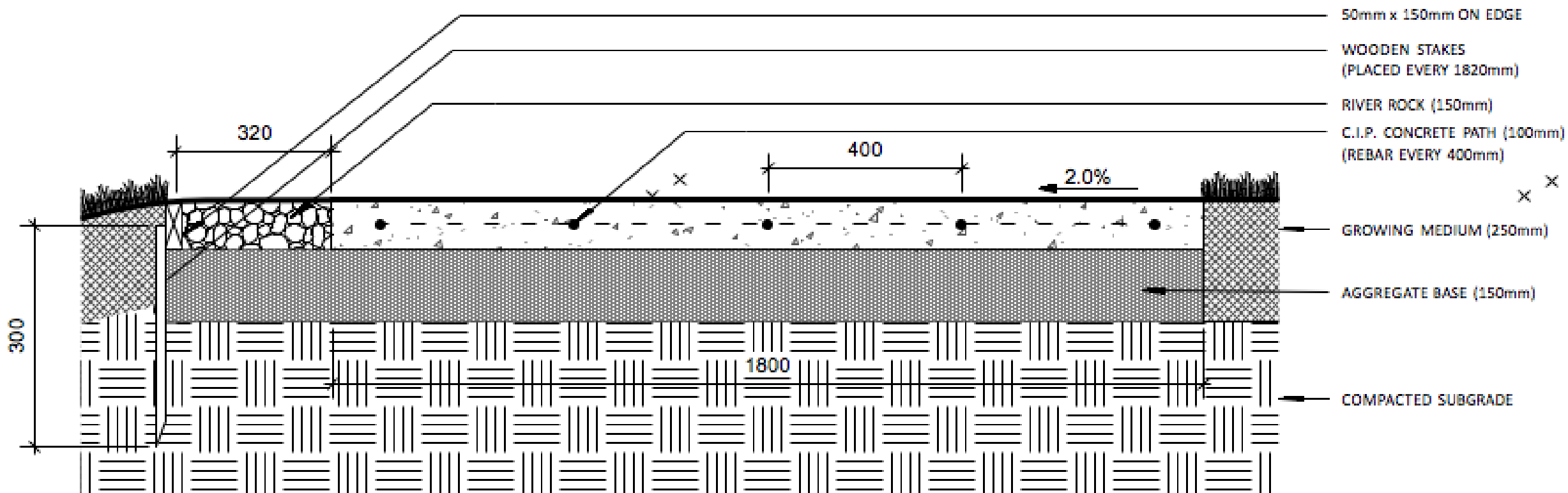
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1 DRAINAGE TRENCH THROUGH C.I.P. CONCRETE PATH
 1:10



2 CMU RETAINING WALL
 1:20



3 C.I.P. CONCRETE PATH AT DRAINAGE ROCK AT SOD
 1:10

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TREE PROTECTION

Protective barriers
 Rooting depth of trees when projects are developed is important in maintaining the established natural character associated with many of Vancouver's early plantings. Their continued healthy growth is greatly enhanced by the by-law requirement of providing special protective barriers. Barriers are required to protect the roots, trunk and branches of trees on private property as well as on City property prior to and during on-site construction (Figure 2).

(For a complete description of tree forms on private property, refer to Schedule 2 of the Protection of Trees By-law. For a complete description, refer to Section 4.2 of the Tree Protection Regulations and By-law (see Guidelines).

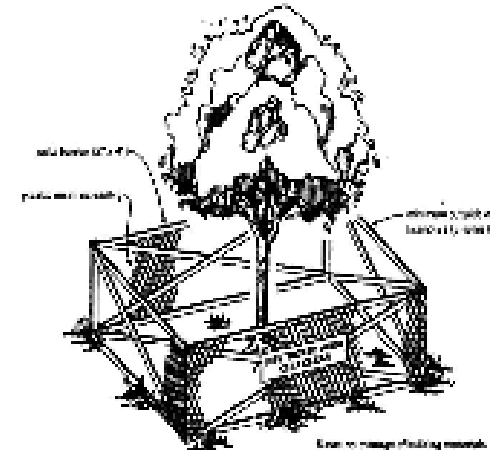


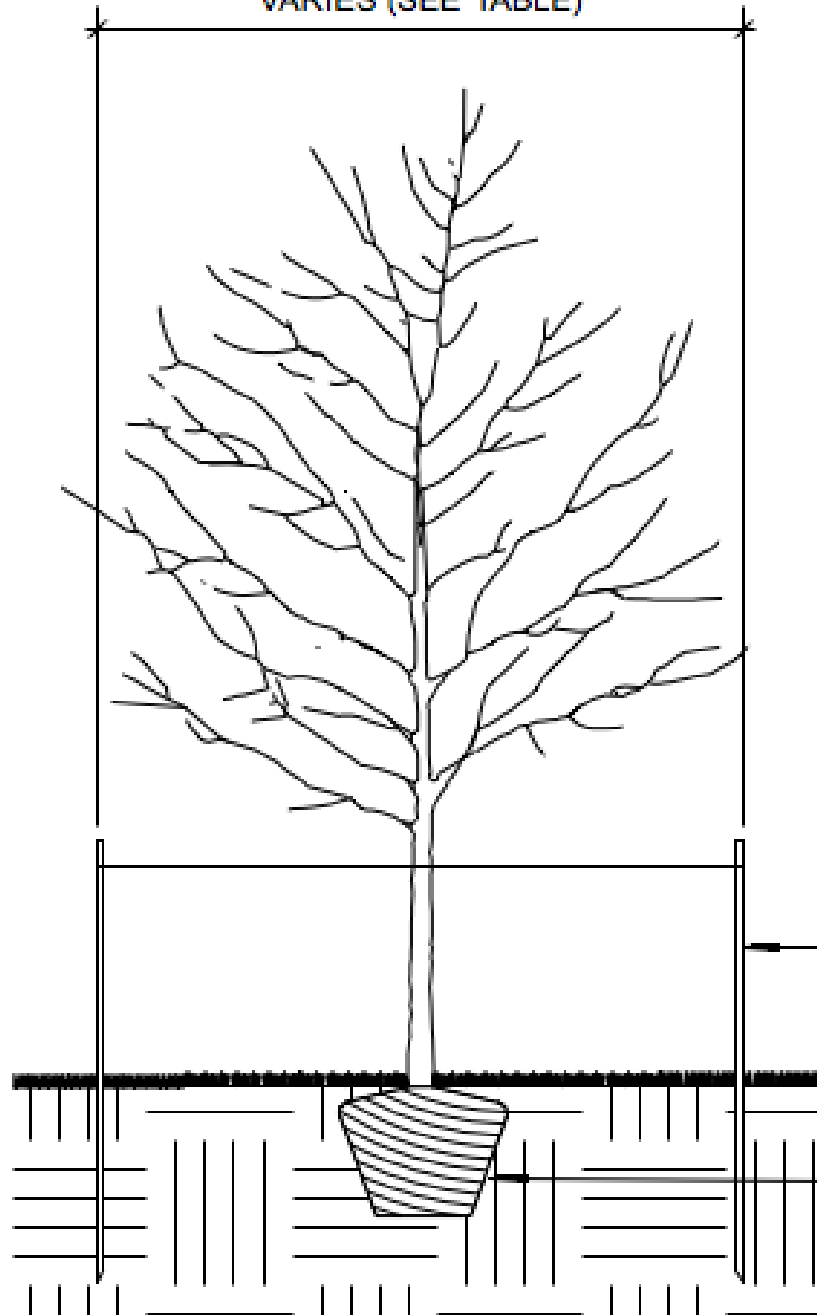
Figure 2 - Tree Protection Barrier

Schedule D*
 Tree Protection Distance Table

Trunk Diameter (cm)	Minimum Protection Radius (distance from trunk to barrier)
20	1.2
25	1.5
30	1.8
35	2.0
40	2.2
45	2.4
50	2.6
55	2.8
60	3.0
75	3.5
90	4.0
100	4.5

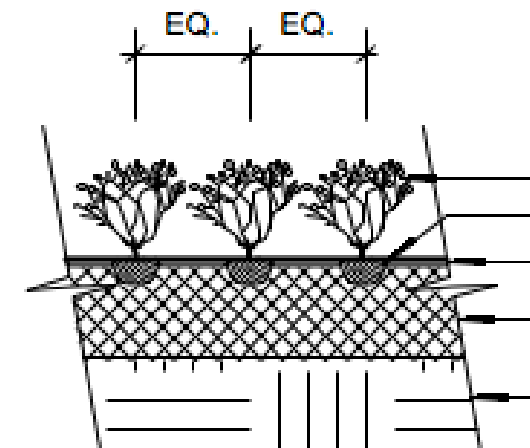
* Table operates as a minimum. By-law

VARIABLES (SEE TABLE)



TREE STAKE

NOTE: ROOTBALL SIZE NOT ACCURATE BECAUSE TREES ARE EXISTING



TYPICAL SHRUB
 ROOTBALL
 2" MULCH

HORTICULTURE SOIL

CLEAN FILL AS REQUIRED TO MEET PROPOSED GRADES

1

TREE PROTECTION
 1:50

2

TYPICAL SHRUB PLANTING
 1:50

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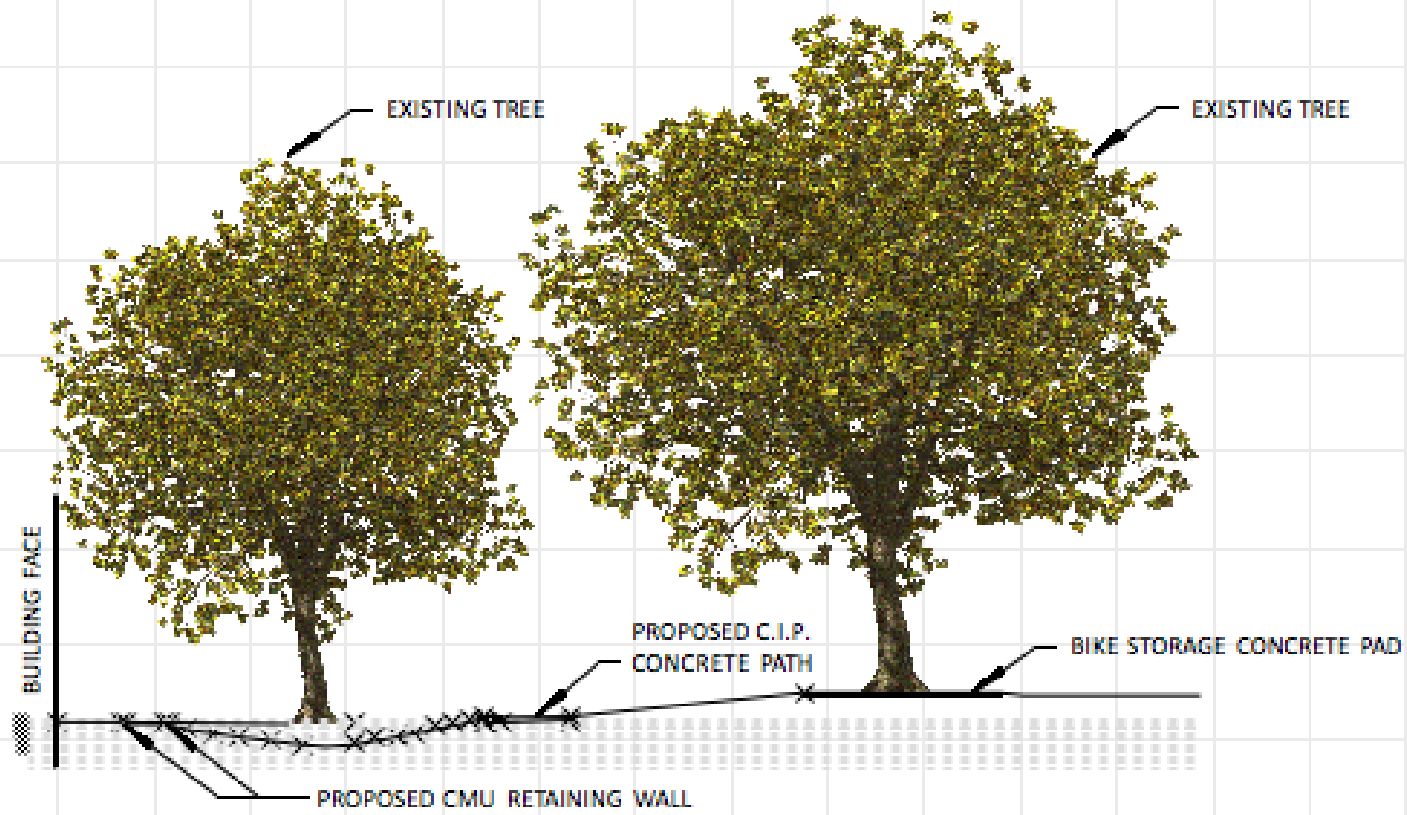
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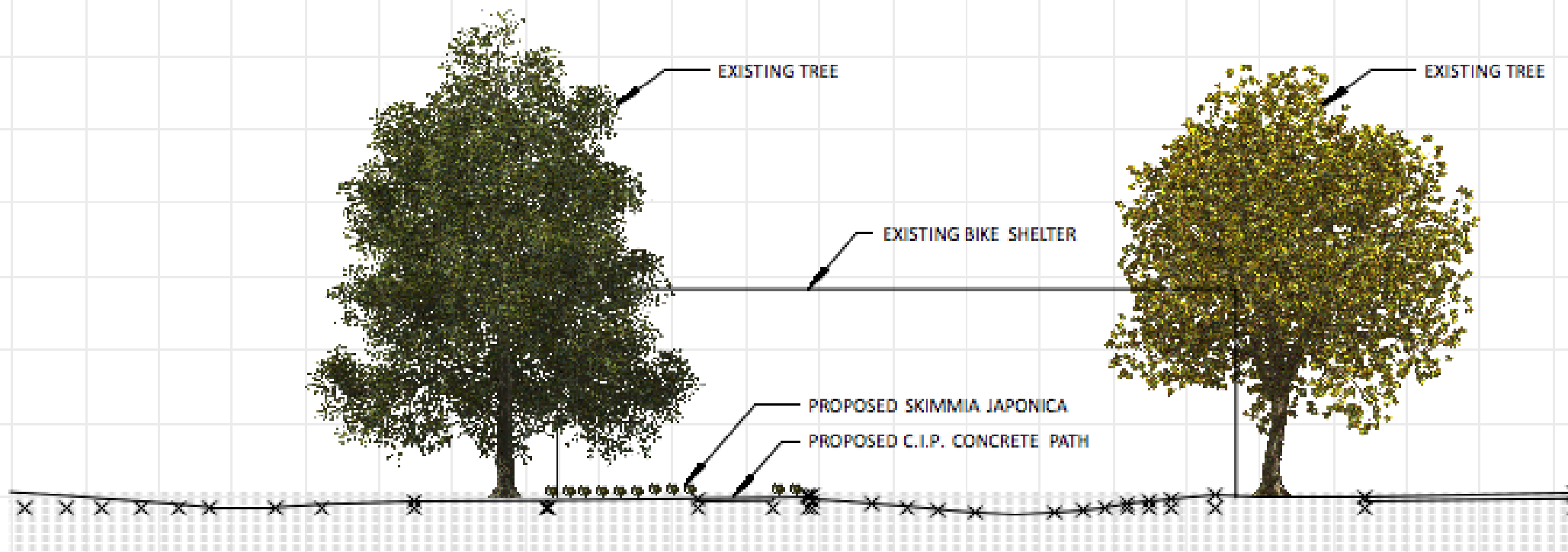
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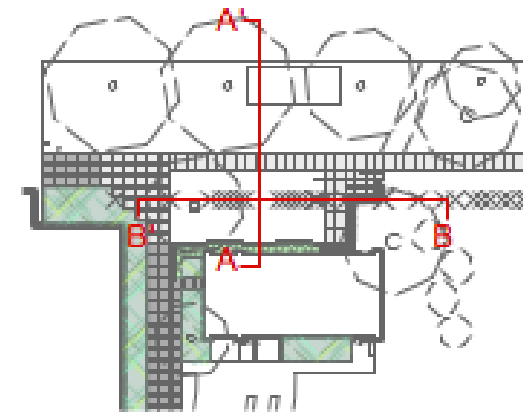
L10
 PLANTING
 DETAILS



A-A'
1:200 SECTION



B-B'
1:200 SECTION



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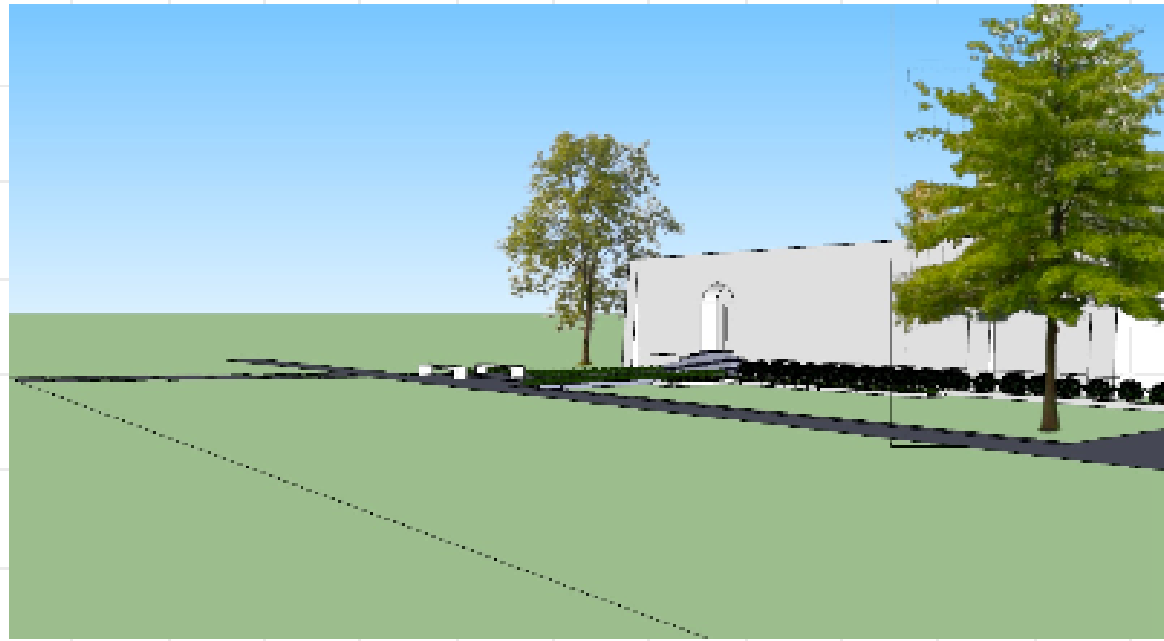
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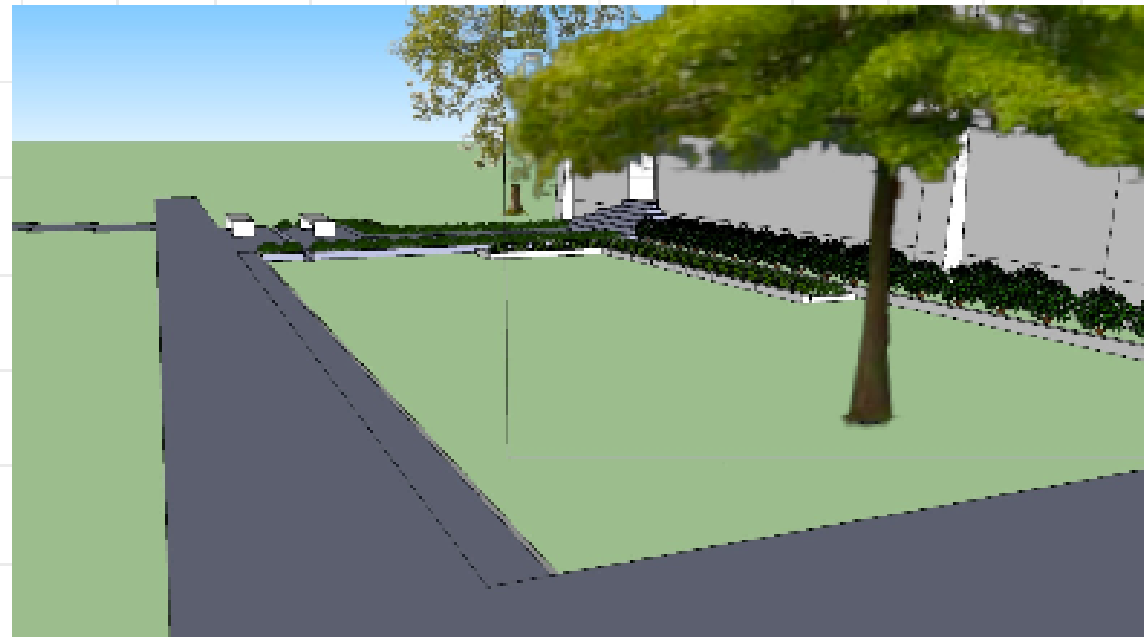
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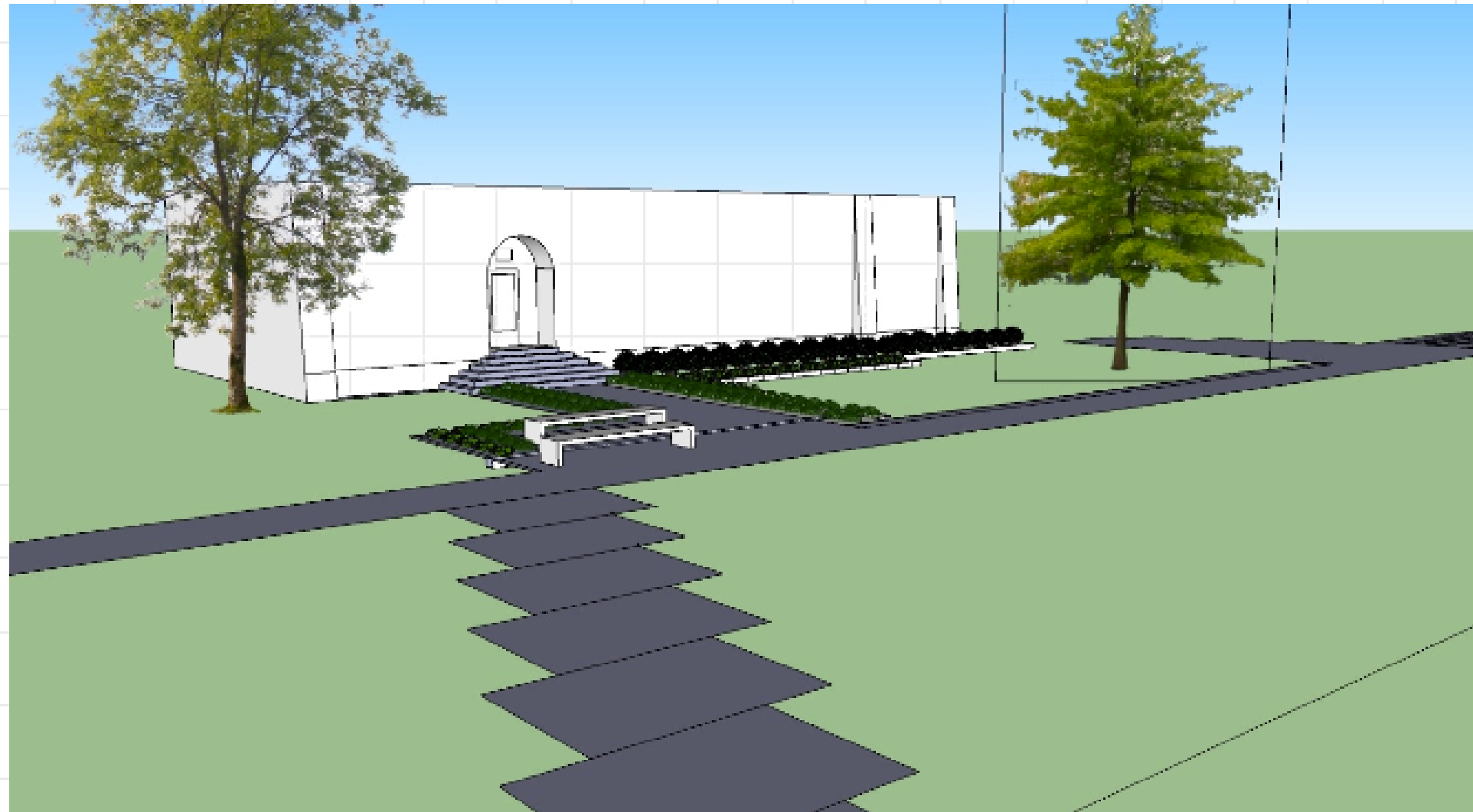
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VIEW OF SITE FROM MAIN MALL



VIEW OF SITE FROM MACMILLIAN ENTRANCE



VIEW TO THE ENTRANCE OF THE LANDSCAPE ARCHITECTURE ANNEX

PROJECT:
LANDSCAPE ARCHITECTURE ANNEX
RAINGARDEN DESIGN

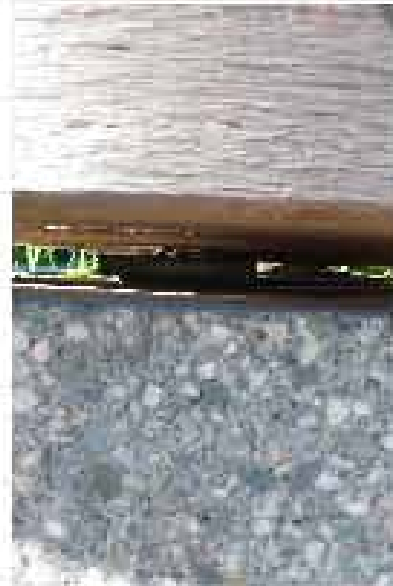
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BENCH OUTSIDE BEATY BIODIVERSITY MUSEUM



WALKWAY AND BENCH OUTSIDE LIBRARY PROCESSING CENTRE

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SEEDS Project: Landscape Architecture Annex Raingarden Design
University of British Columbia, Vancouver, BC

BUDGET

Update: 17 June 2011

Item/Description	Quantity	Rate	Amount
Softscape			
Viburnum davidii (Pot #3)	38	\$15/ea	\$570
Sarcococca hook. Var. humilis	114	\$15/ea	\$1,710
Skimmia japonica	40	\$20/ea	\$800
Hydrangea anomala subsp. petiolaris (Pot #3)	2	\$30/ea	\$60
Growing Medium	35	\$15/m2	\$525
Sod	400 m2	\$5/m2	\$2,000
Subtotal			\$5,665
Hardscape			
C.I.P. Concrete Walkway	60 m3	\$120/m3	\$7,200
Custom Benches	2	\$2000/ea	\$4,000
CMU Wall	20m	\$30/m	\$600
Trench Drain Channel (bent into C-shape)	7 m2	\$25/m2	\$175
Trench Drain Grate	6.5m	\$50/m	\$325
Subtotal			\$12,300
Other			
Site Demolition/Preperation/Regrading			\$3,000
Subtotal			\$3,000

Subtotal	\$20,965
HST	\$2,516
Total	\$23,481

SEEDS Project: Landscape Architecture Annex Raingarden Design
University of British Columbia, Vancouver, BC

SCHEDULE

Update: 17 June 2011

Task Name	Duration	Students	Plant Ops
Site Verification	1 day	X	
Site Fencing	1/2 day	X	
Clearing and Grubbing	1/2 day	X	
Protective Tree Hoarding	1/2 day	X	
Shrub and Plant removals	1/2 day	X	
Concrete Removals	2 days		X
Walkway Subbase Preparation	1/2 day	X	X
Trench Drain Installation	1 day		X
Sand Bedding Installation	1 day	X	
CMU Wall Installation	2 days		X
Formwork Creation	3 days		X
Formwork Assembly	1 day		X
Concrete Reinforcing Bars Installation	1 day		X
Concrete Pour	1 day		X
Furniture Carpentry	2 days		X
Furniture Installation	1 day		X
Fine Grading	1 day	X	
Planting	1 day	X	
Sod/Seed	1 day	X	