

US Army Corps  
of Engineers®  
Seattle District

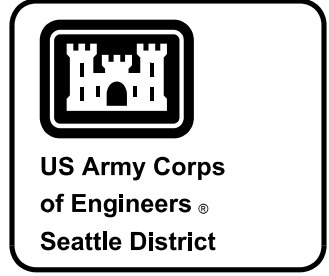
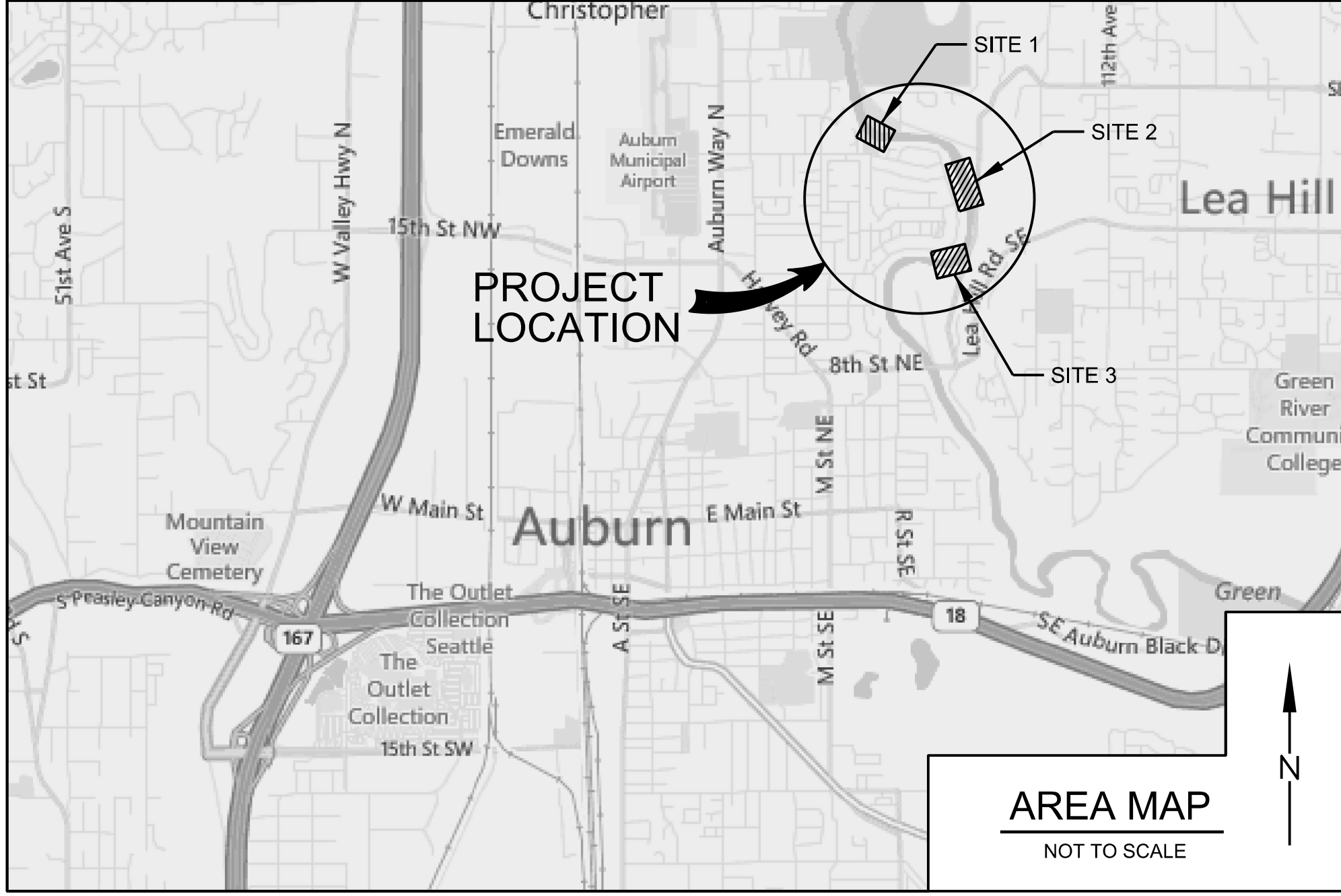
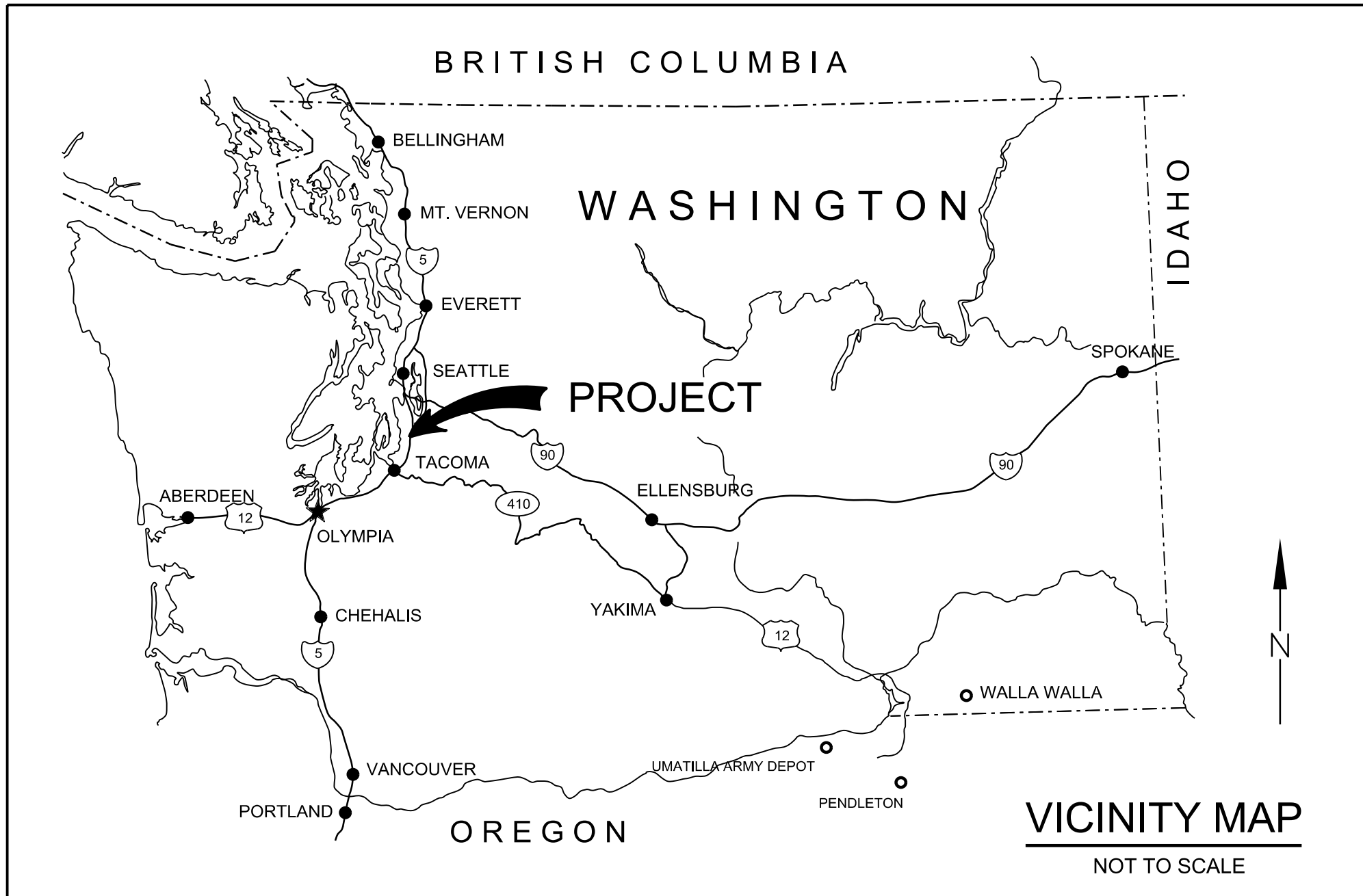
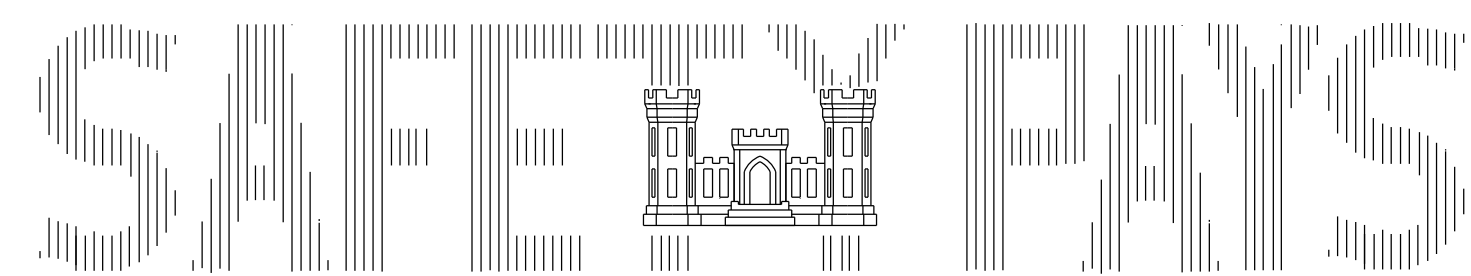
# PL 84-99 LEVEE REHABILITATION DYKSTRA, GREEN RIVER

AUBURN, WASHINGTON

DRAWING INDEX

SHEET NUMBER	SHEET IDEN.	TITLE
1	G-001	TITLE, MAPS, AND DRAWING INDEX
2	C-001	LEGEND, ABBREVIATIONS, AND GENERAL NOTES
3	C-002	HAUL ROUTE
4	C-003	GENERAL SITE PLAN
5	C-101	EXISTING CONDITIONS SITE 1
6	C-102	EXISTING CONDITIONS SITE 2(A)
7	C-103	EXISTING CONDITIONS SITE 2(B)
8	C-104	EXISTING CONDITIONS SITE 3
9	C-105	SITE PLAN SITE 1
10	C-106	SITE PLAN SITE 2(A)
11	C-107	SITE PLAN SITE 2(B)
12	C-108	SITE PLAN SITE 3
13	C-301	CROSS SECTIONS 1
14	C-302	CROSS SECTIONS 2
15	C-303	CROSS SECTIONS 3
16	C-501	TYPICAL SECTIONS
17	C-502	SITE DETAILS
18	L-101	LANDSCAPE PLAN SITE 1
19	L-102	LANDSCAPE PLAN SITE 3

FY15 GRN-01-14



US Army Corps  
of Engineers®  
Seattle District

Date: 17 APRIL 2014

File No.: E-12-7-236

Submitted by: GUY L. GREEN, P.E.  
Chief, Design Branch

Reviewed by: JOANN T. WALLS, P.E.  
Chief, Engineering Division

Submitted by: LEAH WICKSTROM, P.E.  
Project Manager

Reviewed by: ANIL L. NISARGAND, P.E.  
Specs and Tech Review

U.S. ARMY CORPS OF ENGINEERS  
SEATTLE DISTRICT  
SEATTLE, WASHINGTON

Prepared by: JENNIFER L. WEST, P.E.  
Chief, Civil Section

PL 84-99 LEVEE REHABILITATION, DYKSTRA  
TUKWILA, WASHINGTON

TITLE, LOCATION  
AND DRAWING INDEX

SHEET  
IDENTIFICATION  
G-001

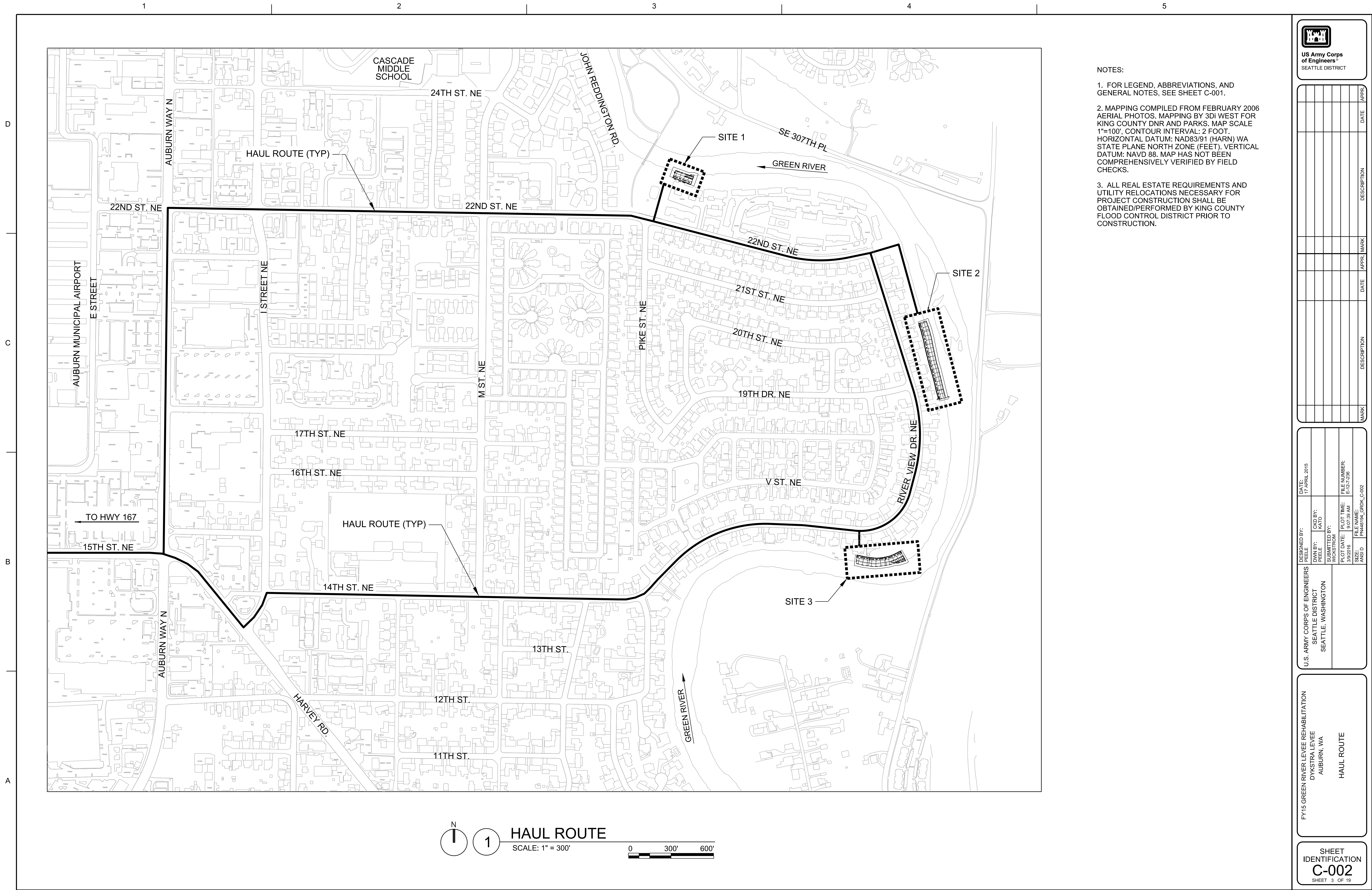
SHEET 1 OF 19

IF SHEET MEASURES LESS THAN 22" X 34" IT IS  
A REDUCED PRINT. REDUCE SCALE ACCORDINGLY.

DESIGN FILE: I:\AEC\Designs\FY15\_PN448194\_GRDK\Con\_Docs\CAD\_Sheets\General\PN448192\_GRDK-G-001\CVR.dgn

DATE AND TIME PLOTTED: 3/9/2016









NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND  
GENERAL NOTES, SEE SHEET C-001.

2. MAPPING COMPILED FROM FEBRUARY 2006 AERIAL PHOTOS. MAPPING BY 3DI WEST FOR KING COUNTY DNR AND PARKS. MAP SCALE 1"=100'. CONTOUR INTERVAL: 2 FOOT. HORIZONTAL DATUM: NAD83/91 (HARN) WA STATE PLANE NORTH ZONE (FEET). VERTICAL DATUM: NAVD 88. MAP HAS NOT BEEN COMPREHENSIVELY VERIFIED BY FIELD CHECKS.



**US Army Corps  
of Engineers®**  
SEATTLE DISTRICT

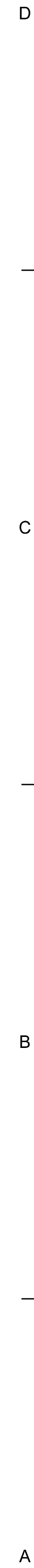
[illegible]

U.S. ARMY CORPS OF ENGINEERS SEATTLE DISTRICT SEATTLE, WASHINGTON	DESIGNED BY:	DATE:
	FEELE	17 APRIL 2015
	DRAWN BY:	CKD BY:
	TO	TO
	SUBMITTED BY:	
	WICKS FROM	
	PLOT DATE:	FILE NUMBER:
	3/30/16	8:07:44 AM
	ANSI D	E-12-72-58
	PN449194	GRDK_C-003

LEY15 GREEN RIVER LEVEE REHABILITATION  
DYKSTRA LEVEE  
AUBURN, WA

## GENERAL SITE PLAN

SHEET  
IDENTIFICATION  
**C-003**  
SHEET 4 OF 19



HISTORICAL RIVER FLOW DATA:				
FLOW (CFS)	JUNE	JULY	AUG	SEPT
MINIMUM FLOW	560	250	250	250
MAXIMUM FLOW	3600	1500	600	2100
MEAN FLOW	1200	480	320	570
WATER SURFACE ELEVATION (FEET NAVD 88)	SITE 1	SITE 2	SITE 3	
SUMMER LOW	47.7'	53'	53.3'	
SUMMER AVERAGE (600 CFS)	49'	54'	54'	
2000 CFS	51.1'	55'	56'	
FLOW DATA BASED ON USGS GAGE 12113000 GREEN RIVER NEAR AUBURN, WA				

DATE AND TIME PLOTTED: 3/9/2016  
DESIGN FILE: I:\AEC\Designs\FY15\_PN448194\_GRDK\Con\_Docs\CAD\_Sheets\Civil\PN448194\_GRDK\_C-101 EXISTING 1.dgn



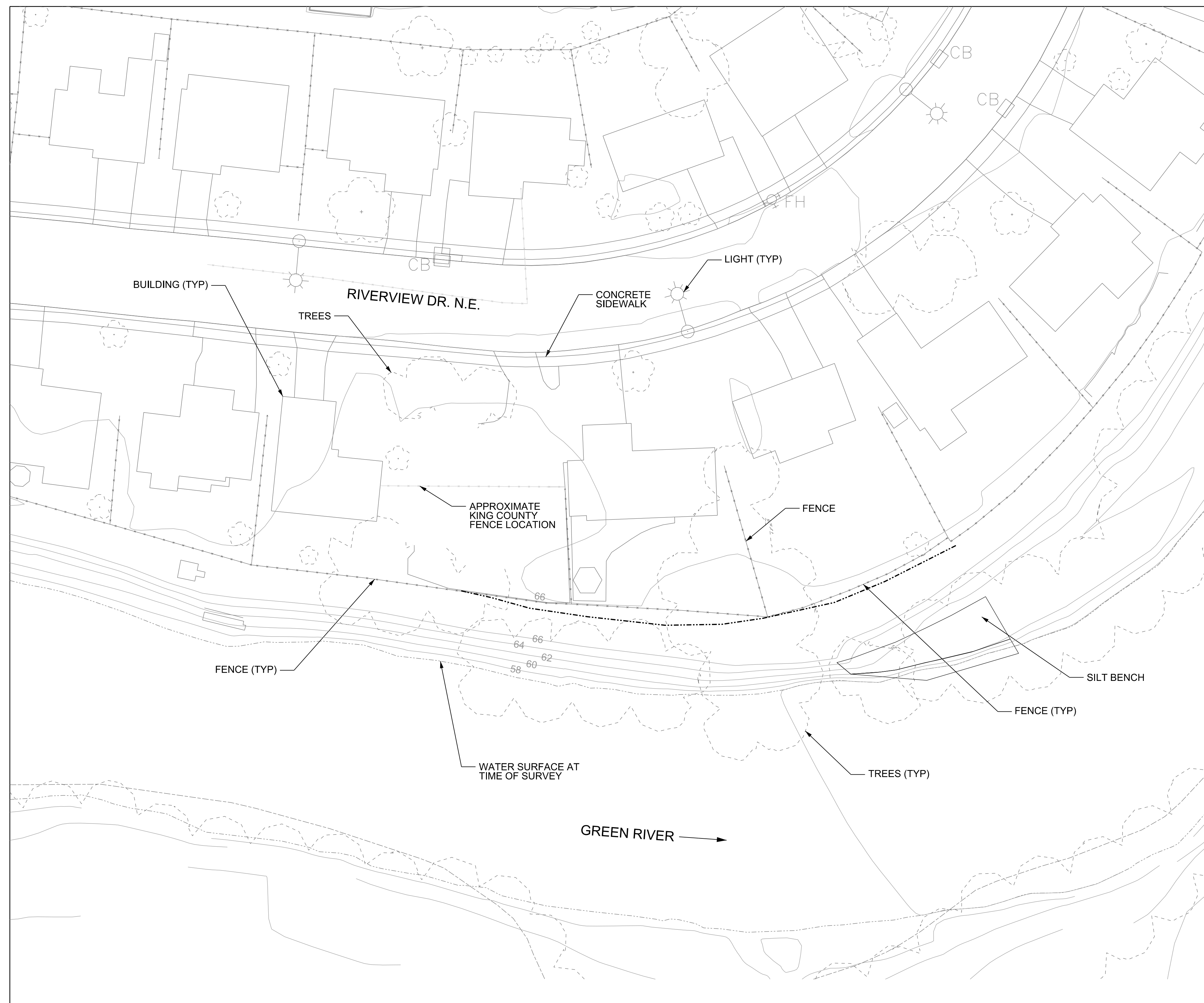
A horizontal timeline with three points labeled 0, 30', and 60. Below the labels are two horizontal bars: a white bar from 0 to 30' and a black bar from 30' to 60'.

3. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, TREES, BUILDINGS, AND PAVEMENT. ALL DAMAGE SHALL BE REPLACED BY CONTRACTOR AT CONTRACTOR'S EXPENSE.





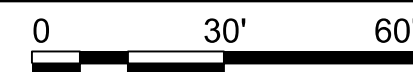




1

### DYKSTRA LEVEE EXISTING CONDITIONS SITE 3

SCALE: 1" = 30'



NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.

2. MAPPING COMPILED FROM FEBRUARY 2006  
AERIAL PHOTOS. MAPPING BY 3DI WEST FOR  
KING COUNTY DNR AND PARKS. MAP SCALE  
1"=100'. CONTOUR INTERVAL: 2 FOOT.  
HORIZONTAL DATUM: NAD83/91 (HARN) WA STATE  
PLANE NORTH ZONE (FEET). VERTICAL DATUM:  
NAVD 88. MAP HAS NOT BEEN  
COMPREHENSIVELY VERIFIED BY FIELD CHECKS.

3. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, TREES, BUILDINGS, AND PAVEMENT. ALL DAMAGE SHALL BE REPLACED BY CONTRACTOR AT CONTRACTOR'S EXPENSE.



**US Army Corps  
of Engineers®**  
SEATTLE DISTRICT

[illegible]

U.S. ARMY CORPS OF ENGINEERS		DESIGNED BY:	DATE:
SEATTLE DISTRICT	PEELE	CHKD BY:	17 APRIL 2015
SEATTLE, WASHINGTON	PEELE	KATO	
		W/CDT'D BY:	
		FILE NUMBER:	
		PLOT DATE:	3/9/52 AM
		FILE NAME:	E-127-258
		SIZE:	C-104

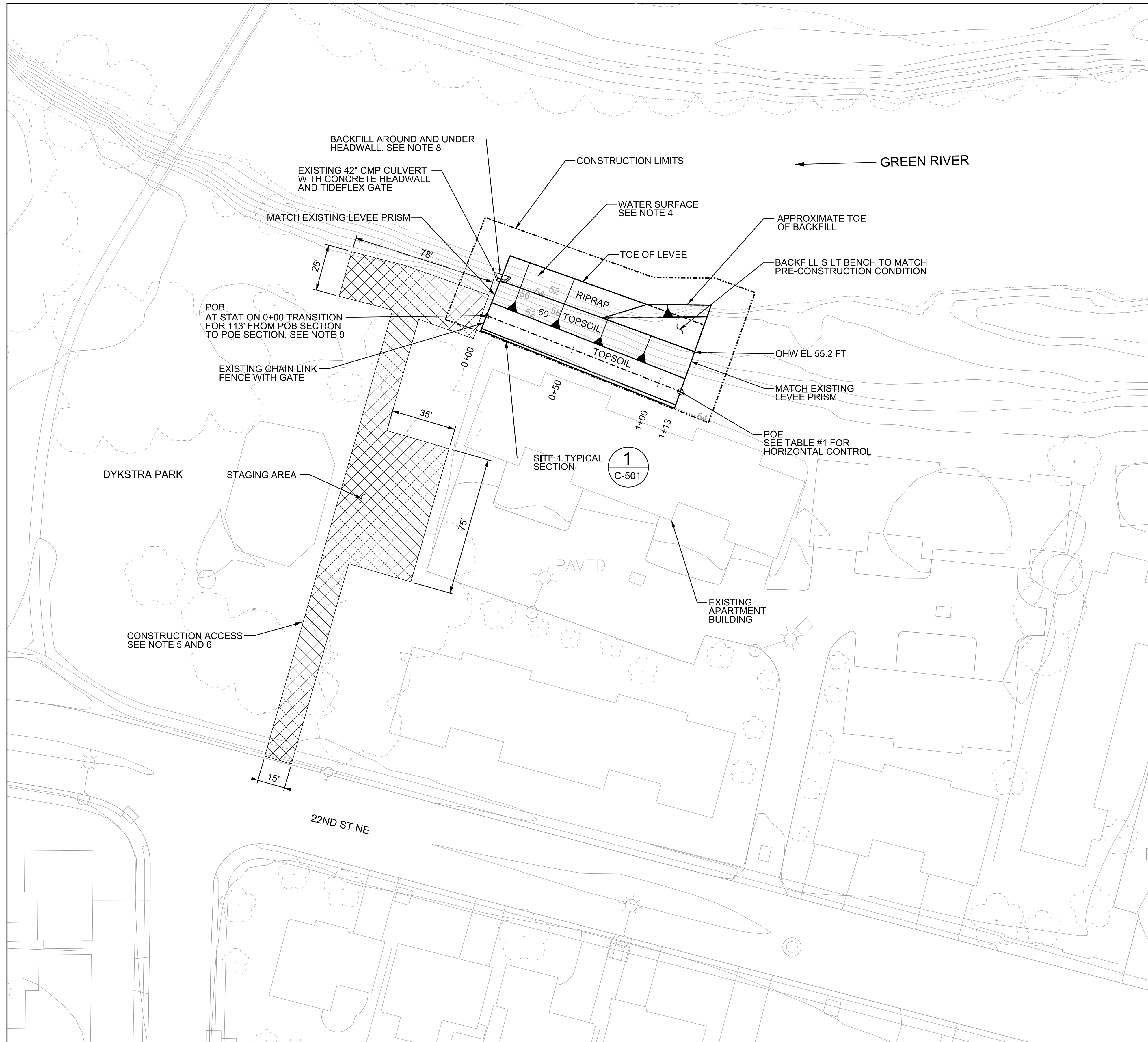
FY15 GREEN RIVER LEVEE REHABILITATION  
DYKSTRA LEVEE  
AUBURN, WA

SHEET  
IDENTIFICATION  
**C-104**  
SHEET 8 OF 19

DATE AND TIME PLOTTED: 3/9/2016

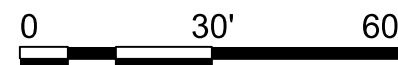
DESIGN FILE: I:\AEC\Designs\FY15 PN448194 GRDK\Con Sheets\Civil\PN448194 GRDK\_C-104 EXISTING 3.dgn





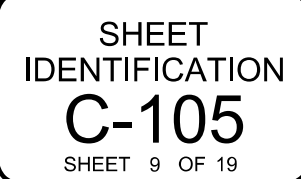
1

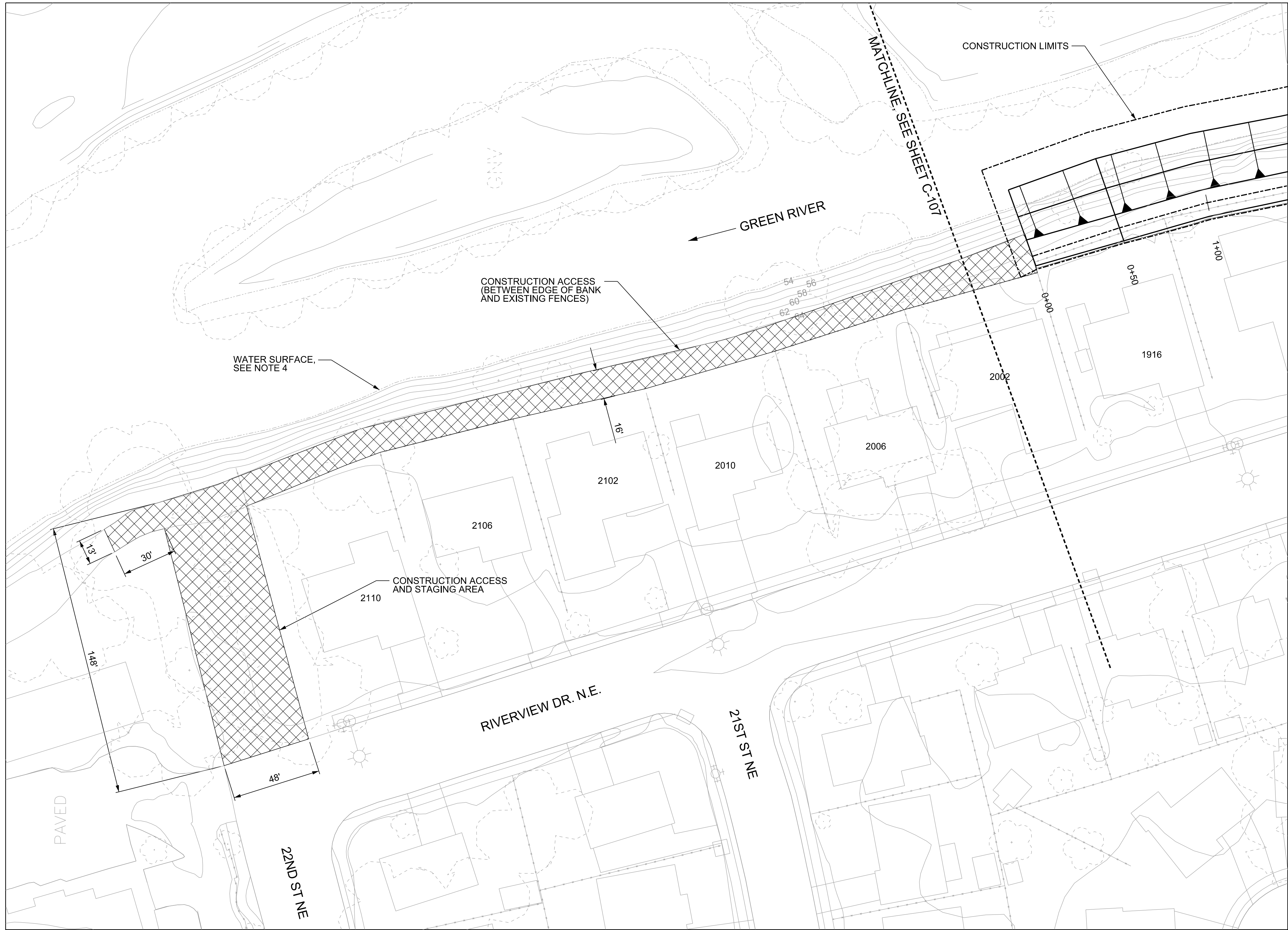
SCALE: 1" = 30'



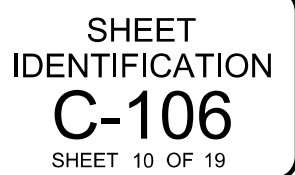
11. TRANSITIONS SHALL BE CONTINUOUS AND SMOOTH OVER THE LENGTH INDICATED ON THE PLAN.

POINT/ TYPE	STATION/ DISTANCE	DIRECTION	NORTHING	EASTING
POB	0+00.00 112.64	S 68°34'35.4" E	122,367.290	1,299,106.020
POE	1+12.64		122,326.150	1,299,210.880





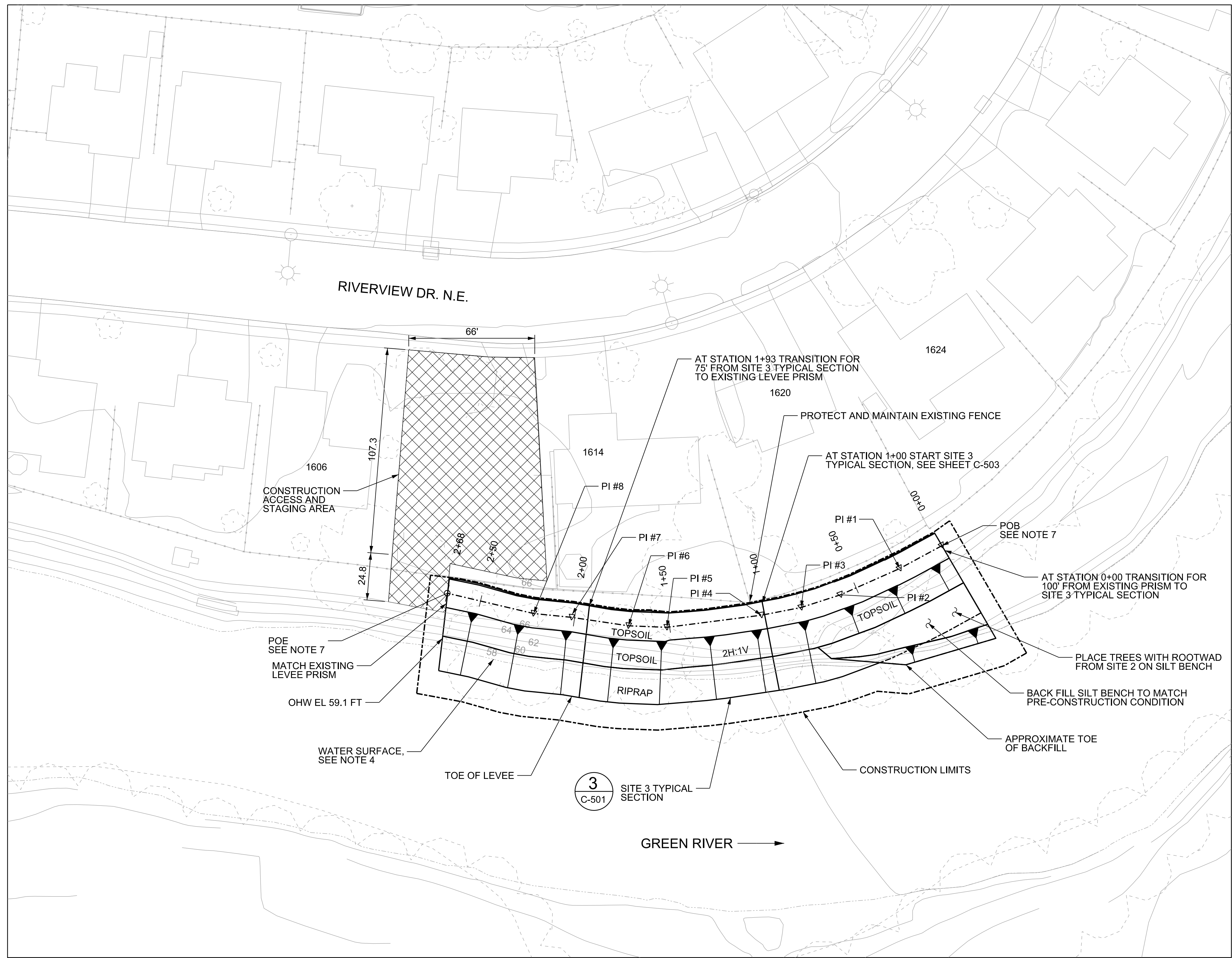
9. STORM WATER LINES NOT SHOWN ON DRAWINGS. DO NOT BLOCK STORM WATER LINES. EXTEND ALL STORM WATER LINES THROUGH LEVEE TO NEW LEVEE FACE. SEE SHEET C-502 FOR DETAIL.











 **DYKSTRA LEVEE SITE PLAN SITE 3**  
SCALE: 1" = 30'



9. TRANSITIONS SHALL BE CONTINUOUS AND SMOOTH OVER THE LENGTH INDICATED ON THE PLAN.

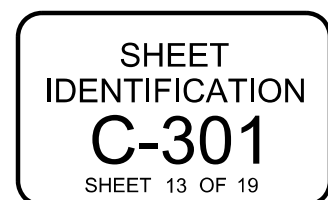
POINT/ TYPE	STATION/ DISTANCE	DIRECTION	NORTHING	EASTING
POB	0+00.00 25.01	S 61°33'37" W	120,164.740	1,300,438.810
PI #1	0+25.01 33.93	S 66°07'04" W	120,152.830	1,300,416.810
PI #2	0+58.94 21.54	S 72°06'21" W	120,139.090	1,300,385.790
PI #3	0+80.48 21.16	S 79°00'18" W	120,132.470	1,300,365.290
PI #4	1+01.64 49.81	S 82°41'44" W	120,128.440	1,300,344.520
PI #5	1+51.46 20.06	N 87°43'51" W	120,122.100	1,300,295.110
PI #6	1+71.52 30.01	N 81°33'05" W	120,122.900	1,300,275.060
PI #7	2+01.54 19.98	N 84°16'09" W	120,127.310	1,300,245.370
PI #8	2+21.51 46.35	N 76°44'24" W	120,129.300	1,300,225.490
POE	2+67.86		120,139.930	1,300,180.380



A

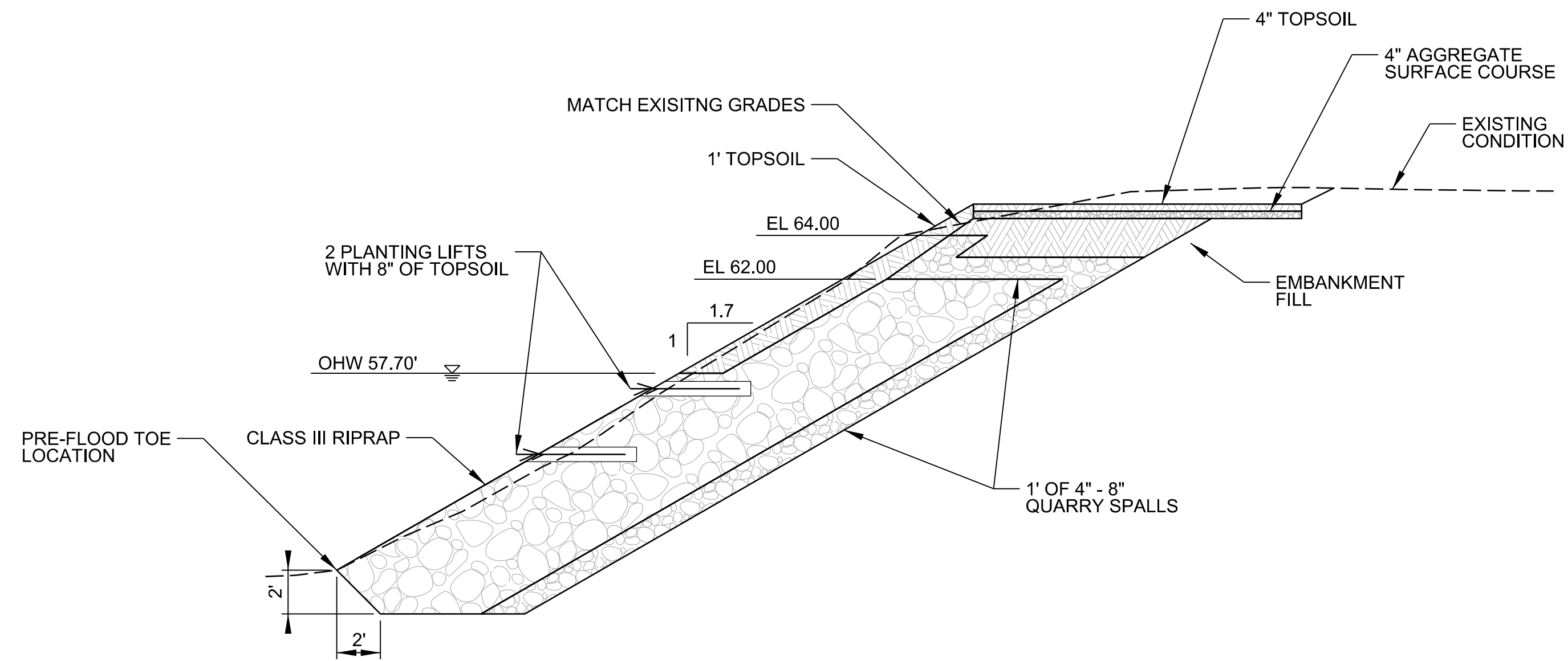


1. FINAL GRADES AT START AND END OF EACH SITE SHALL MATCH SMOOTHLY WITH EXISTING GRADES.

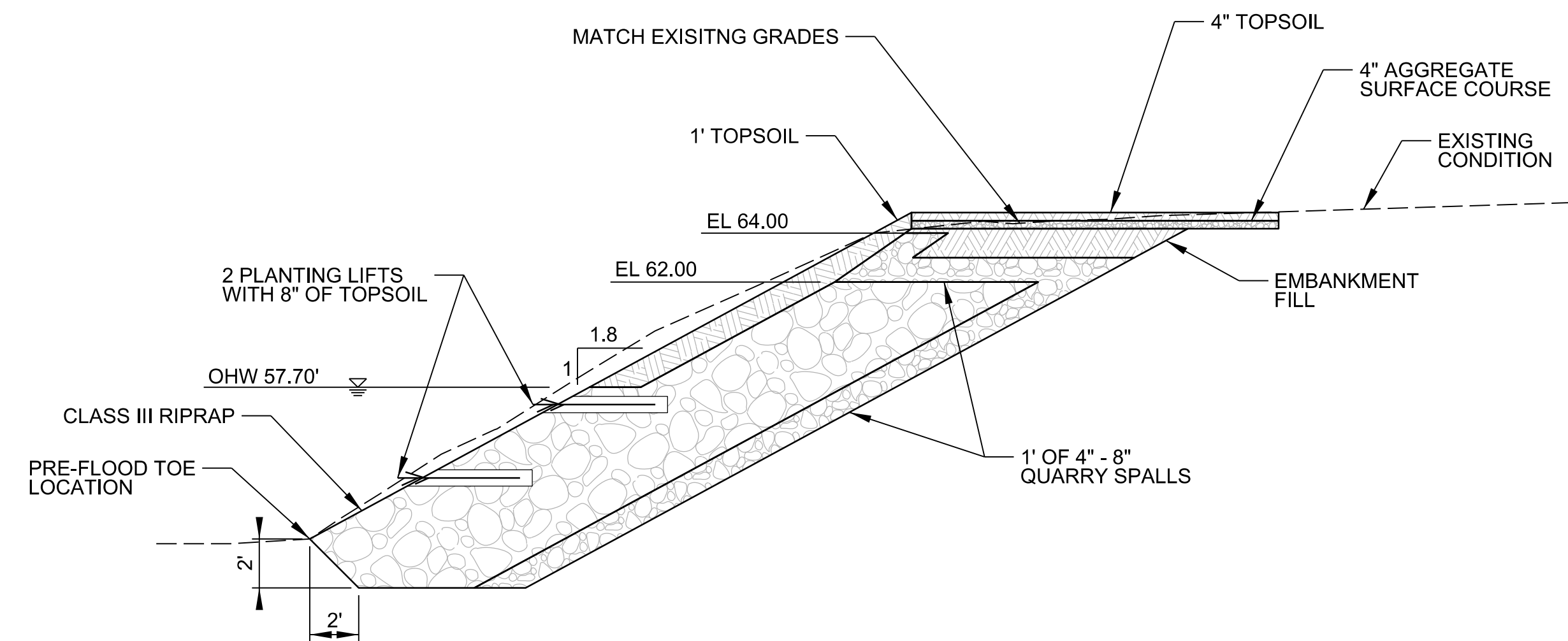


[illegible][illegible]

FY15 GREEN RIVER LEVEE REHABILITATION  
 DYKSTRA LEVEE  
 AUBURN, WA  
 CROSS SECTIONS 2  
 SHEET IDENTIFICATION  
**C-302**  
 SHEET 14 OF 19



1 SITE 2 CROSS SECTION AT POB



2 SITE 2 CROSS SECTION AT POE  
1" = 5' 0 5' 10'

NOTES:

1. FINAL GRADES AT START AND END OF EACH SITE SHALL MATCH SMOOTHLY WITH EXISTING GRADES.

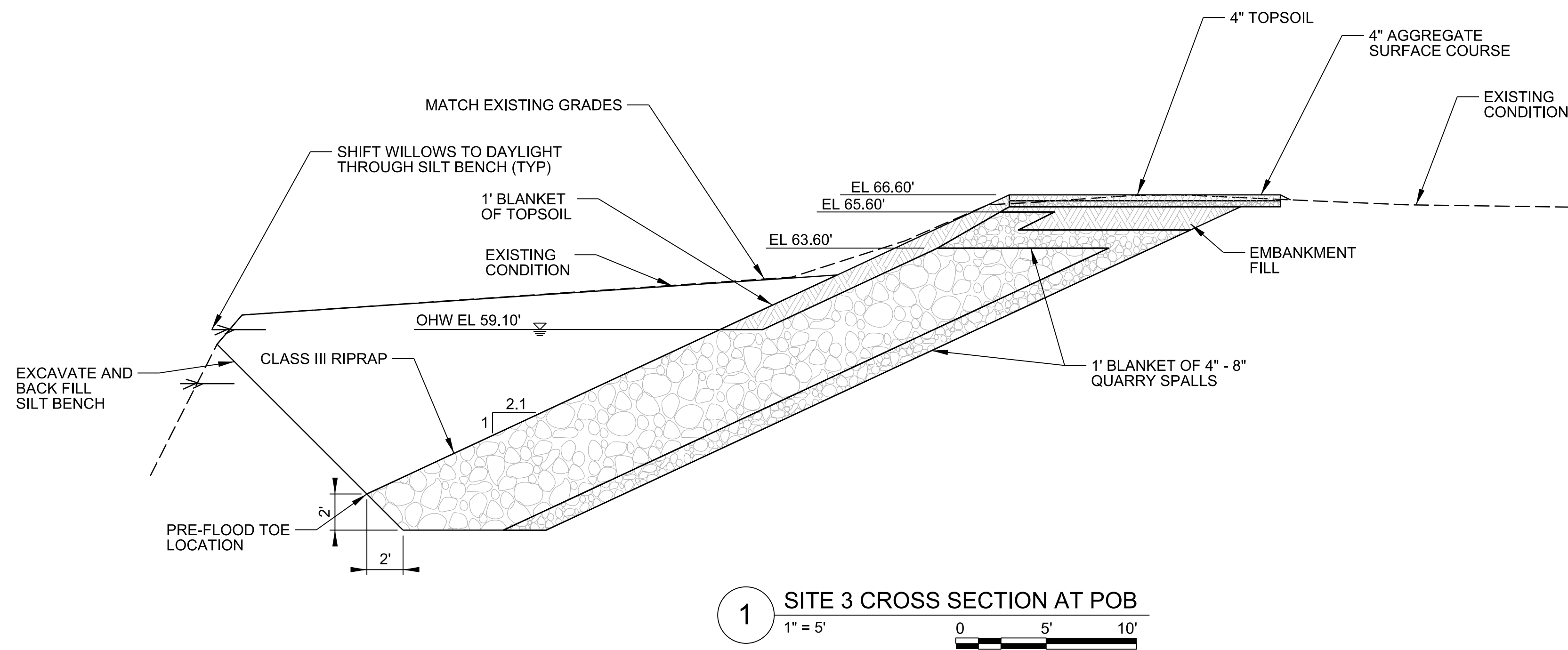


[illegible]

U.S. ARMY CORPS OF ENGINEERS SEATTLE DISTRICT SEATTLE, WASHINGTON	DWN BY:	OCD BY:
	PEELE	
	WIKASTROM	
	SUBMITTED BY:	
	PLOT DATE:	PLOT TIME: 8:09 AM
	FILE NAME:	FILE NUMBER: ELOC-236
	SIZE:	ANSI: P144B48H_GROK_C-303

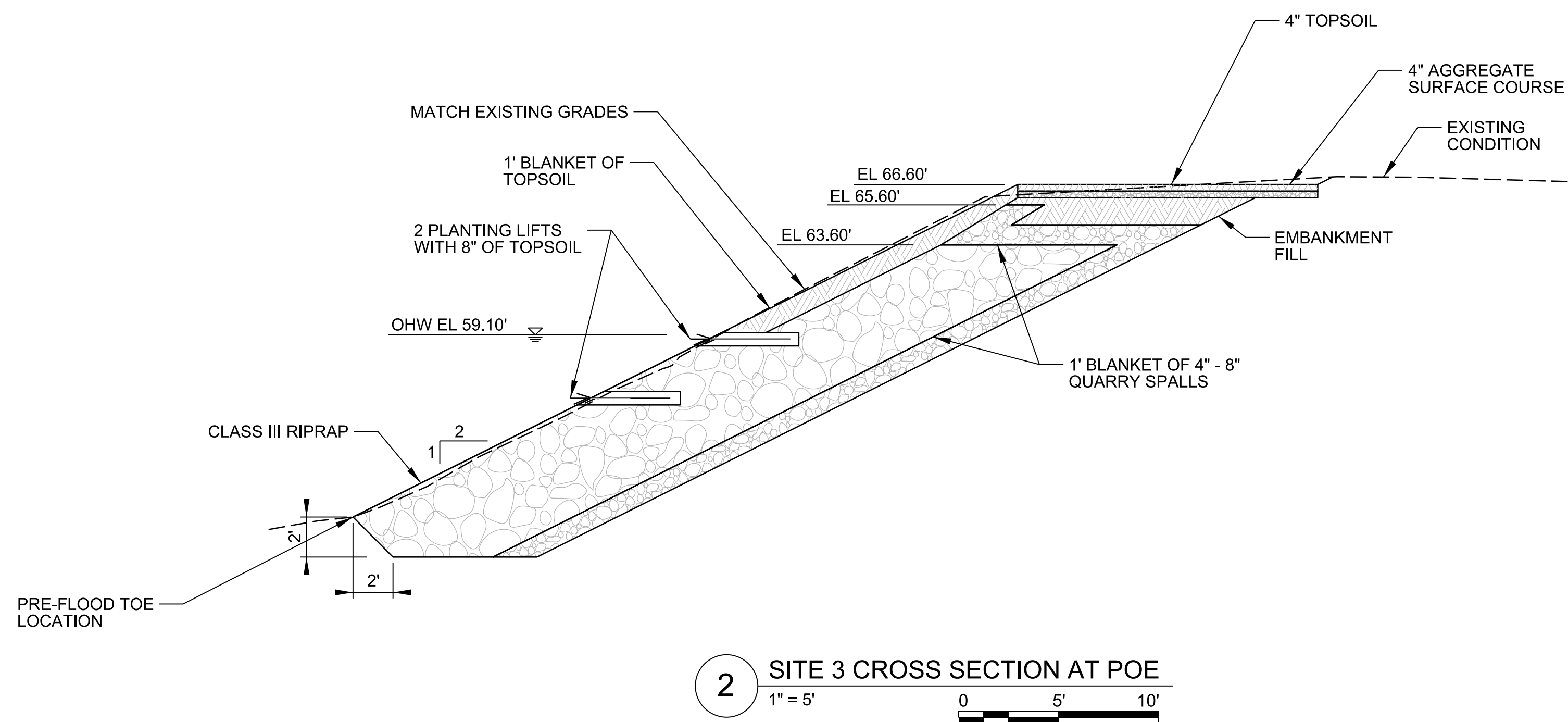
FY15 GREEN RIVER LEVEE REHABILITATION  
DYKSTRA LEVEE  
AUBURN, WA  
CROSS SECTIONS 3

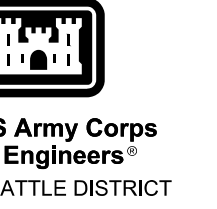
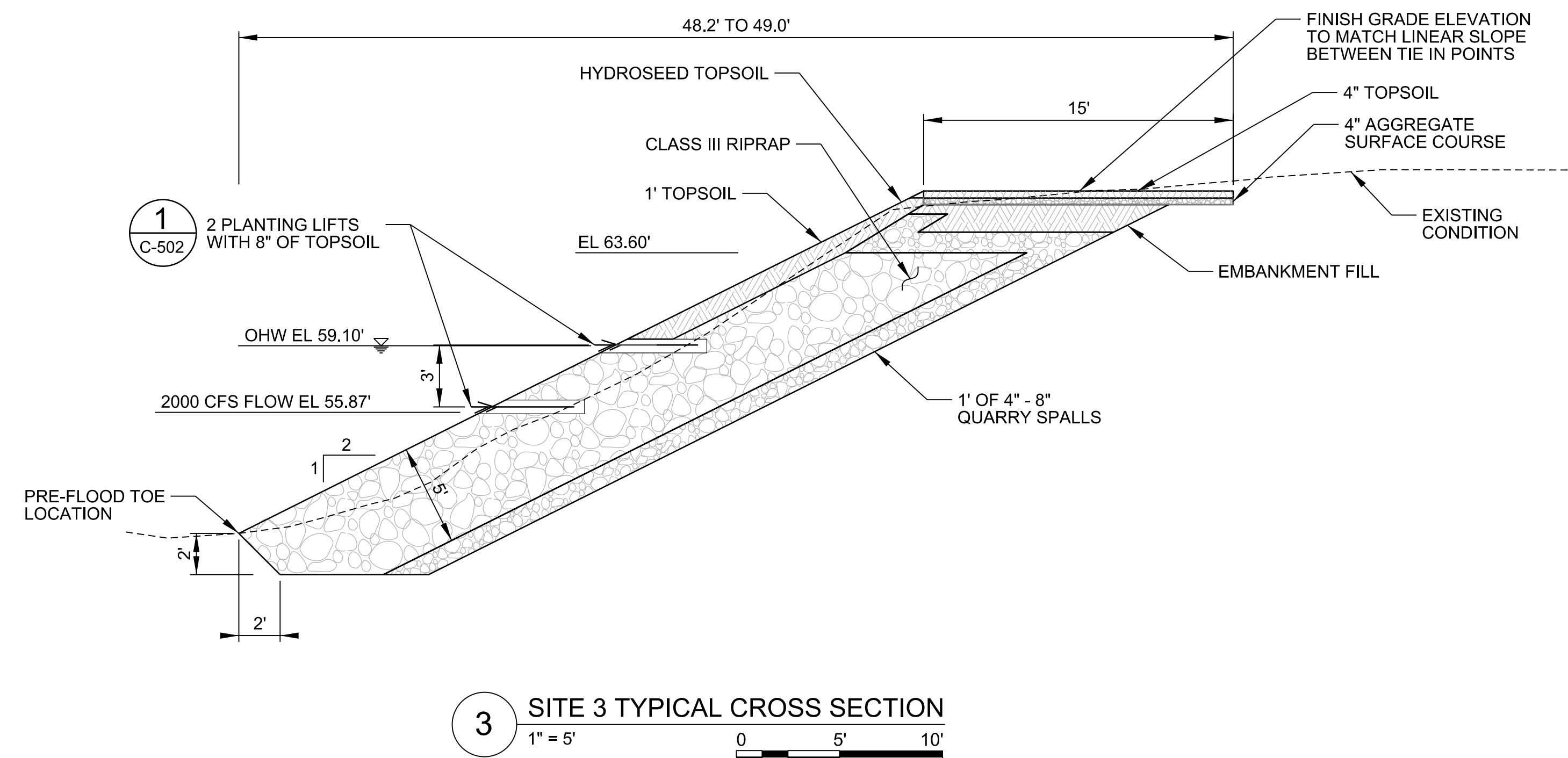
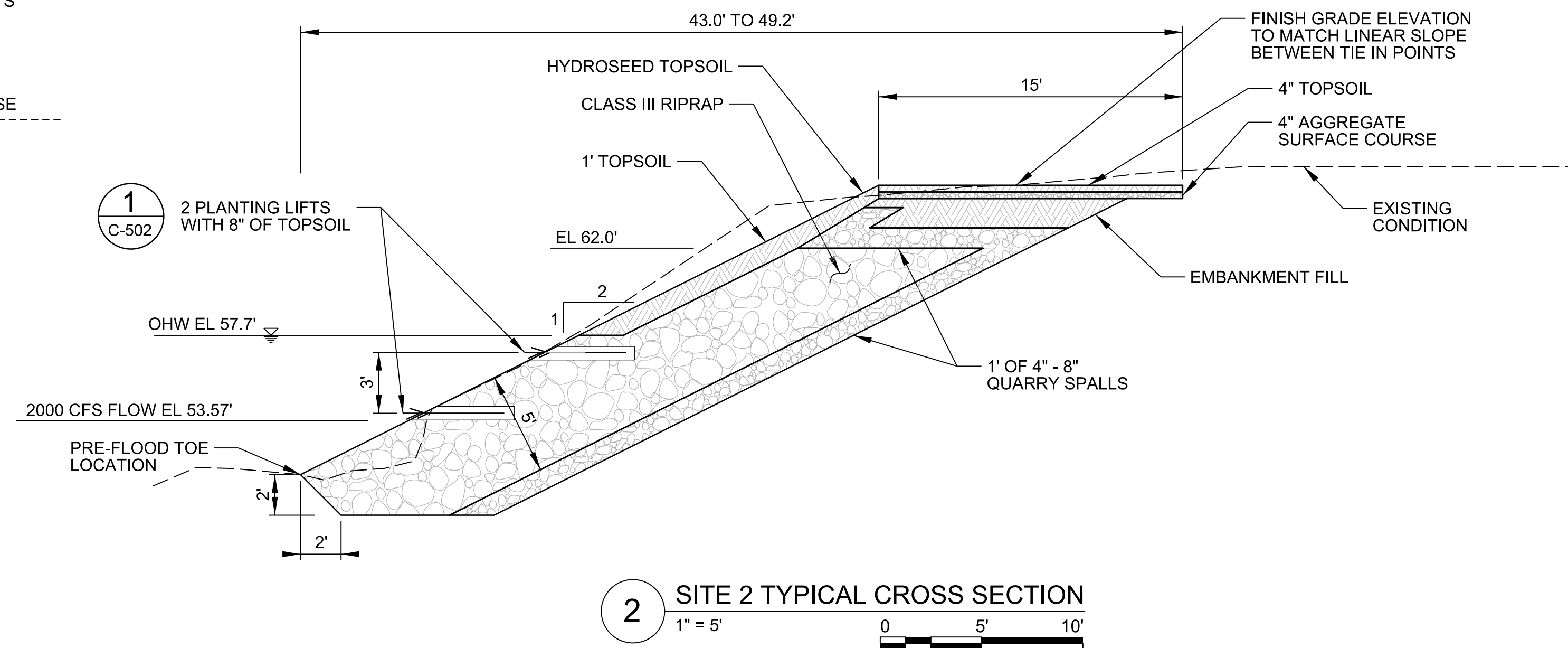
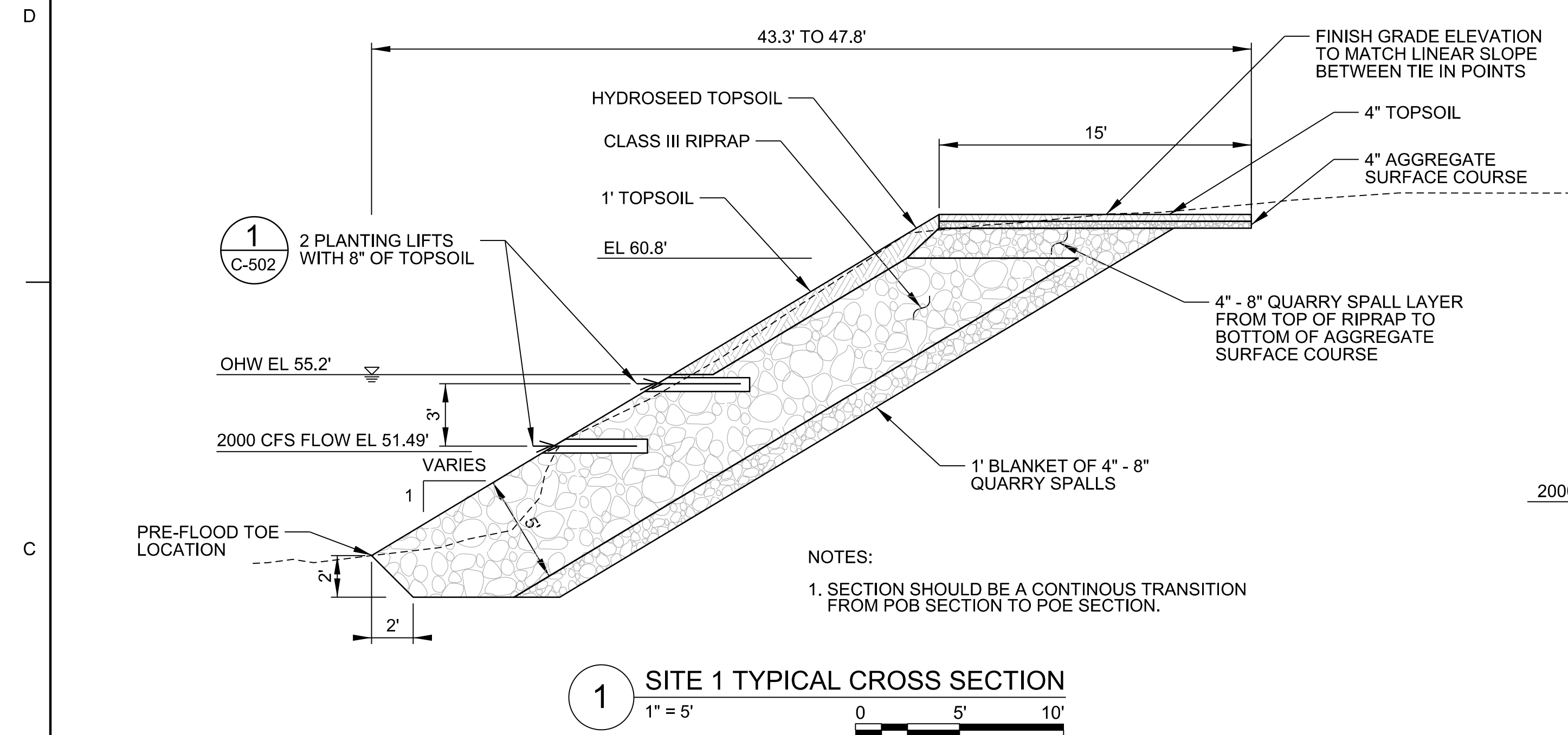
SHEET  
IDENTIFICATION  
**C-303**  
SHEET 15 OF 19



NOTES:

1. FINAL GRADES AT START AND END OF EACH SITE SHALL MATCH SMOOTHLY WITH EXISTING GRADES.



[illegible]

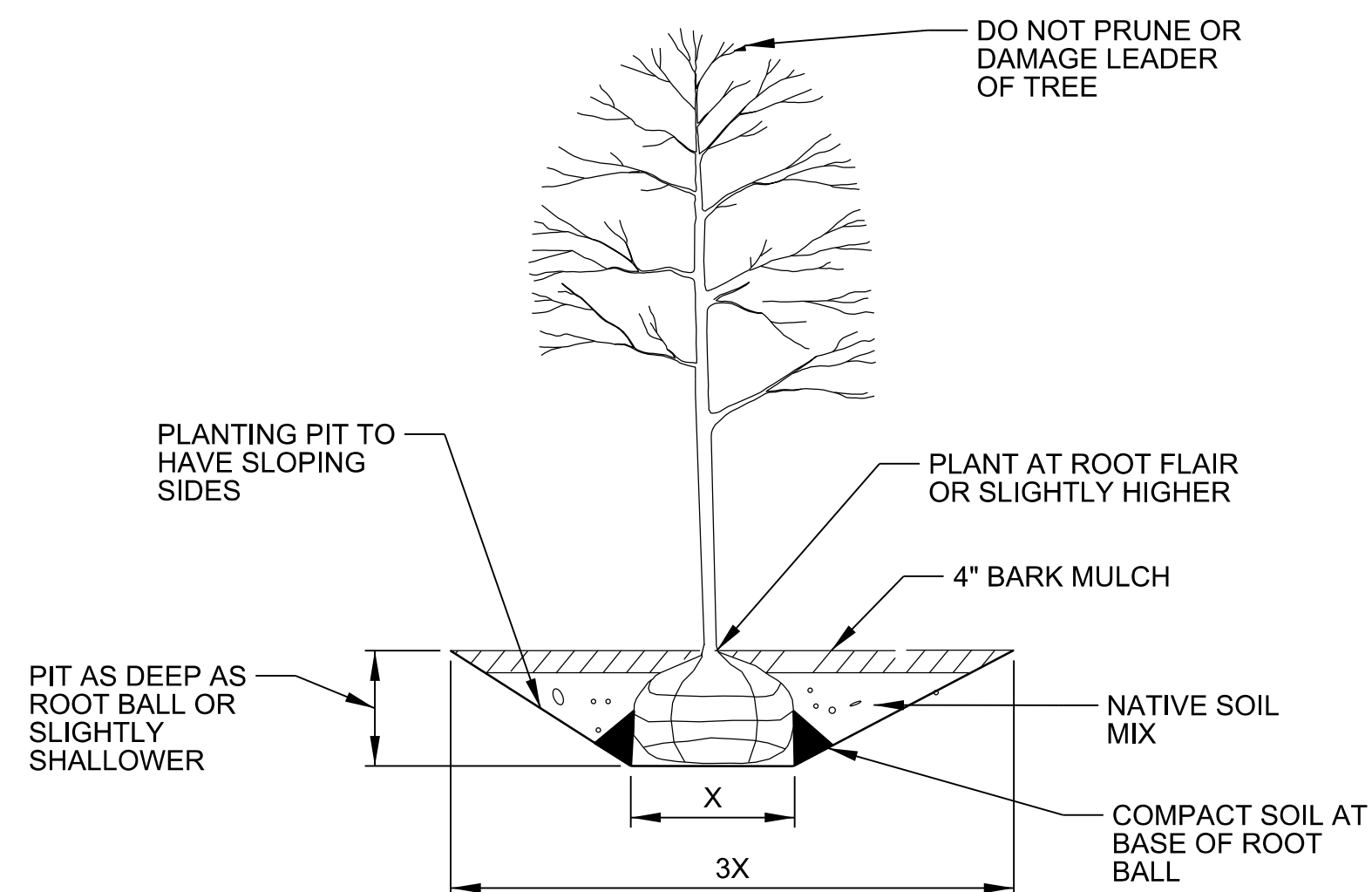
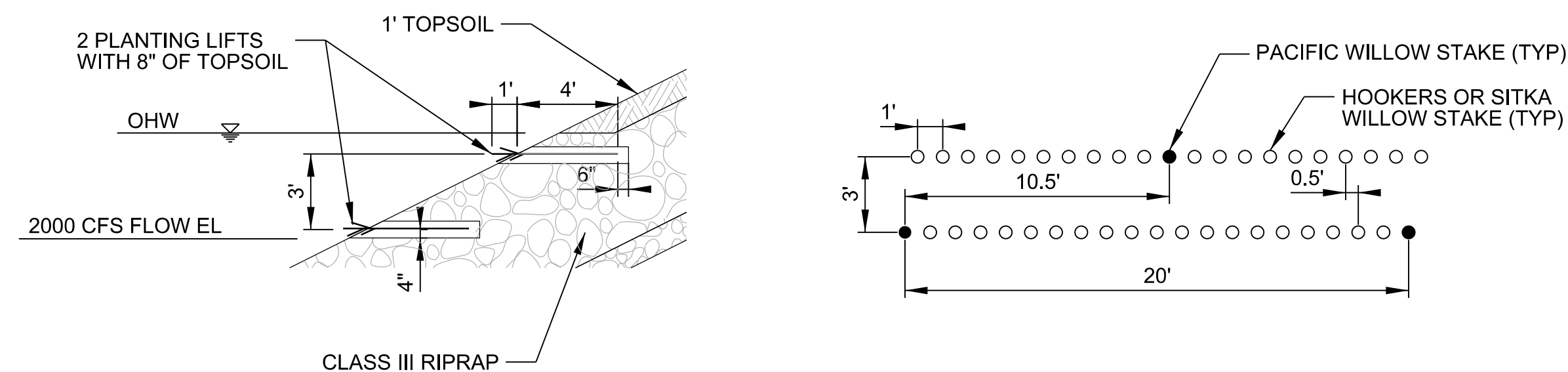
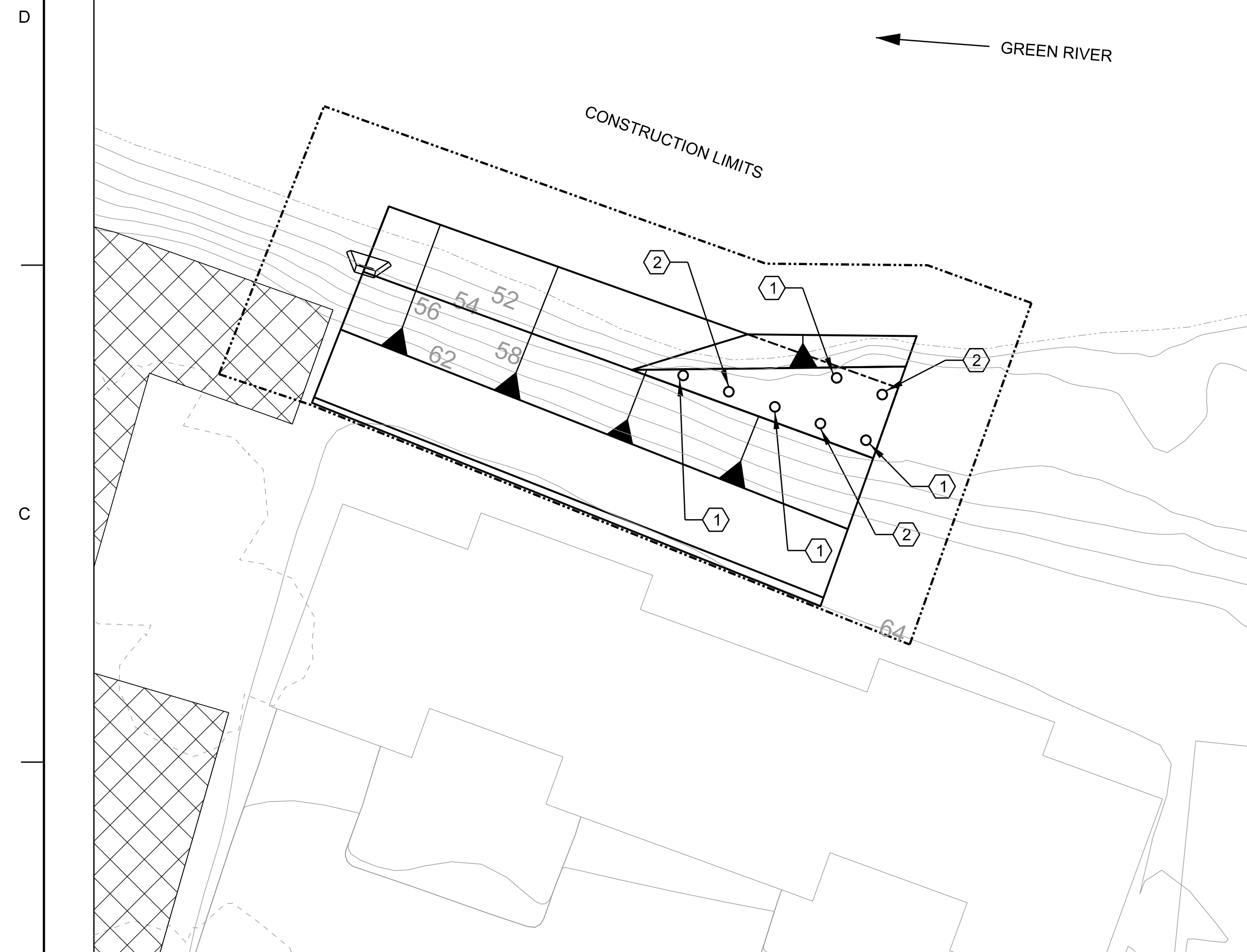
U.S. ARMY CORPS OF ENGINEERS SEATTLE DISTRICT SEATTLE, WASHINGTON	DATA BY: KLEIN	CKD BY:	FILE NUMBER: E-12-7-238
	SUBMITTED BY: WICKSTROM		
	PLOT DATE: 3/9/2016	PLOT TIME: 9:08:11 AM	
	SIZE: ANSI D	FILE NAME: PN448194_7_GDOK_C-501	

DYKSTRA LEVEE  
 AUBURN, WA  
 TYPICAL SECTIONS  
 FY15 GREEN RIVER LEVEE REHABILITATION

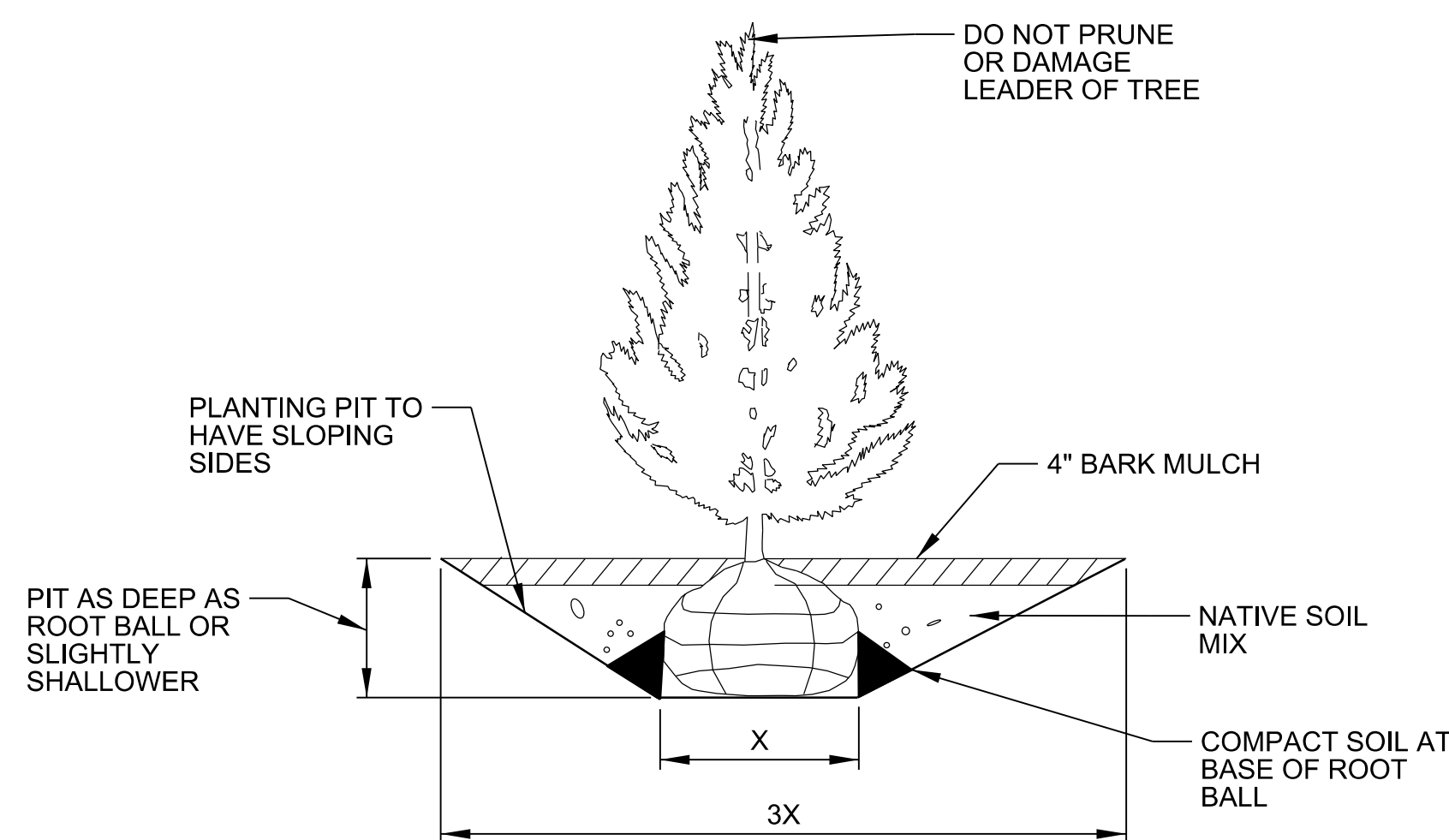
SHEET  
IDENTIFICATION  
**C-501**  
SHEET 16 OF 19







2 DECIDUOUS TREE PLANTING  
L-101 NOT TO SCALE



3 EVERGREEN TREE PLANTING  
L-101 NOT TO SCALE

PLANTING NOTES.

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.

2. PLANT MATERIAL SHALL BE HEALTHY, DISEASE FREE AND IN A VIGOROUS GROWING STATE UPON DELIVERY TO SITE. PLANT MATERIAL FAILING TO MEET THESE CRITERIA SHALL BE REJECTED.

3. CONTAINER PLANTS SHALL HAVE GROWN THEREIN A MINIMUM OF 6 MONTHS AND A MAXIMUM OF 2 YEARS, WITH ROOTS FILLING THE CONTAINERS, BUT NOT SHOWING EVIDENCE OF BEING OR HAVING ROOT BOUND.

4. 4" OF BARK MULCH WILL BE PLACED AFTER PLANTING.

5. TREES SHALL BE WATERED-IN AT THE TIME OF PLANTING.

6. CONTRACTOR SHALL ENSURE 100% SURVIVAL OF ALL TREES DURING THE FIRST YEAR AND AT THE POINT OF ONE YEAR AFTER INITIAL PLANTING.

7. PLANTING OF CONTAINER STOCK SHALL BE ACCOMPLISHED DURING THE PERIOD 1 SEPTEMBER THROUGH 30 MARCH.

8. STAKES SHALL BE CUT WHILE DORMANT AND 5' IN LENGTH WITH AN ANGLE CUT (45 DEGREES) BASAL END OF 0.5" TO 1.5" IN DIAMETER AND PERPENDICULAR CUT JUST ABOVE A NODE (BUD) AT THE TOP.

9. STAKES WILL BE STRIPPED OF ALL STEMS AND LEAVES TAKING CARE TO MINIMIZE SCARRING OR BRUISING.

10. STAKES WILL BE INSTALLED ALONG THE LEVEE SLOPE WITH 1' OF EACH STAKE EMBEDDED INTO THE SLOPE WITH AT LEAST TWO LATERAL BUDS ABOVE GROUND AFTER PLANTING.

11. PLANT STAKES ALONG 12" CENTERS USING TRANGULAR SPACING TO FORM TWO ROWS ALONG THE BANK .

12. LIGHTLY SCARIFY ROOTBALL TO LOOSEN ROOTS PRIOR TO PLANTING.

13. FEATHER MULCH TO MAINTAIN 6" CLEARANCE BETWEEN MULCH AND STEM OF SHRUB.

14. NO RECYCLED ORGANIC MULCH IN BIORRETENTION AREAS. KEEP MULCH AWAY FROM FOLIAGE.

IRRIGATION NOTES.

1. THE CONTRACTOR SHALL DESIGN AND PROVIDE AN IRRIGATION SYSTEM ABLE TO PROVIDE SUPPLEMENTAL WATER WEEKLY TO ALL INSTALLED SHRUBS AND TREES WHENEVER THE PRECEDING WEEKS RAINFALL TOTAL DOES NOT EXCEED 1" BETWEEN MAY 1 AND SEPTEMBER 30, AND AT OTHER TIMES AS CLIMATIC CONDITIONS REQUIRE. IRRIGATION SYSTEM SHALL CONSIST OF GRAVITY-FED CISTERNS AND A BUBBLER-IRRIGATION SYSTEM THAT CAN BE REFILLED QUICKLY TO MINIMIZE IMPACTS TO TRAIL USERS. CISTERN SIZE SHALL BE OPTIMIZED FOR THE SUPPLY TRUCK, SECURED TO PREVENT MOVEMENT BY WIND OR VANDALS, AND SHALL DELIVER A MINIMUM OF 1-GALLON OF WATER TO EACH PLANT PER FILLING. THE CISTERN MAY BE FILLED AS MANY TIMES DURING EACH WATERING AS NECESSARY TO PROVIDE ALL PLANTS WITH SUFFICIENT WATER TO MAINTAIN A HEALTHY, VIGOROUS CONDITION. CISTERN AND IRRIGATION LINES SHALL BE LOCATED ON THE WATERWARD SIDE OF THE ASPHALT TRAIL AND SHOULD NOT ENCRATCH ON THE TRAIL. IRRIGATION SYSTEM SHOULD BE DESIGN FOR A LIFE SPAN OF 5 YEARS.

2. THE CONTRACTOR SHALL SUBMIT AN IRRIGATION PLAN FOR GOVERNMENT APPROVAL PRIOR TO INSTALLATION OF THE SYSTEM.

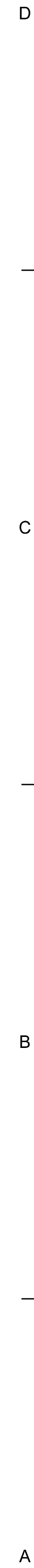
TREE / SHRUB TABLE					
NO.	NAME	NAME	MAX. HEIGHT	TYPE	NO. OF TREES/SHRUB
①	COTTON WOOD	POPULUS BALSAMIFERA	100'	1 GALLON	4
②	SPRUCE	PICEA SITCHENSIS	200'	1 GALLON	3

[illegible]

U.S. ARMY CORPS OF ENGINEERS SEATTLE DISTRICT SEATTLE, WASHINGTON	DOWNLBY: CVD BY: PRELE KATO SUBMITTED BY: WICKSTROM PLOT DATE: PLOT TIME: 3/9/2016 9:08:36 AM SIZE: FILE NAME: ANSID PN48194_GRDK_C-105	PRELE 17 APRIL 2015 FILE NUMBER: E-12-7-236
---	--	--

FY15 GREEN RIVER LEVEE REHABILITATION  
DYKSTRA LEVEE  
AUBURN, WA  
LANDSCAPE PLAN  
SITE 1

SHEET  
IDENTIFICATION  
**L-101**  
SHEET 18 OF 19



1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. FOR LANDSCAPE DETAILS AND NOTES, SEE SHEET L-101.

NO.	NAME	NAME	MAX. HEIGHT	TYPE	NO. OF TREES/SHRUB
①	COTTON WOOD	POPULUS BALSAMIFERA	100'	1 GALLON	8
②	SPRUCE	PICEA SITCHENSIS	200'	1 GALLON	7

[illegible]

U.S. ARMY CORPS OF ENGINEERS	DESIGNED BY:	DATE:
SEATTLE DISTRICT	DRAWN BY:	17 APRIL 2015
SEATTLE, WASHINGTON	PREPARED BY:	
	CHECKED BY:	
	SUBMITTED BY:	
	WICKSTROM	
	PLOT DATE:	FILE NUMBER:
	3/26/2016	9-0833 AM
	PROJECT:	15-7425-00
	ANSI D	
	FILE NAME:	
	PM448194.GRDK	C-108

FY15 GREEN RIVER LEVEE REHABILITATION  
DYKSTRA LEVEE  
AUBURN, WA  
LANDSCAPE PLAN  
SITE 3

SHEET  
IDENTIFICATION  
**L-102**  
SHEET 19 OF 19