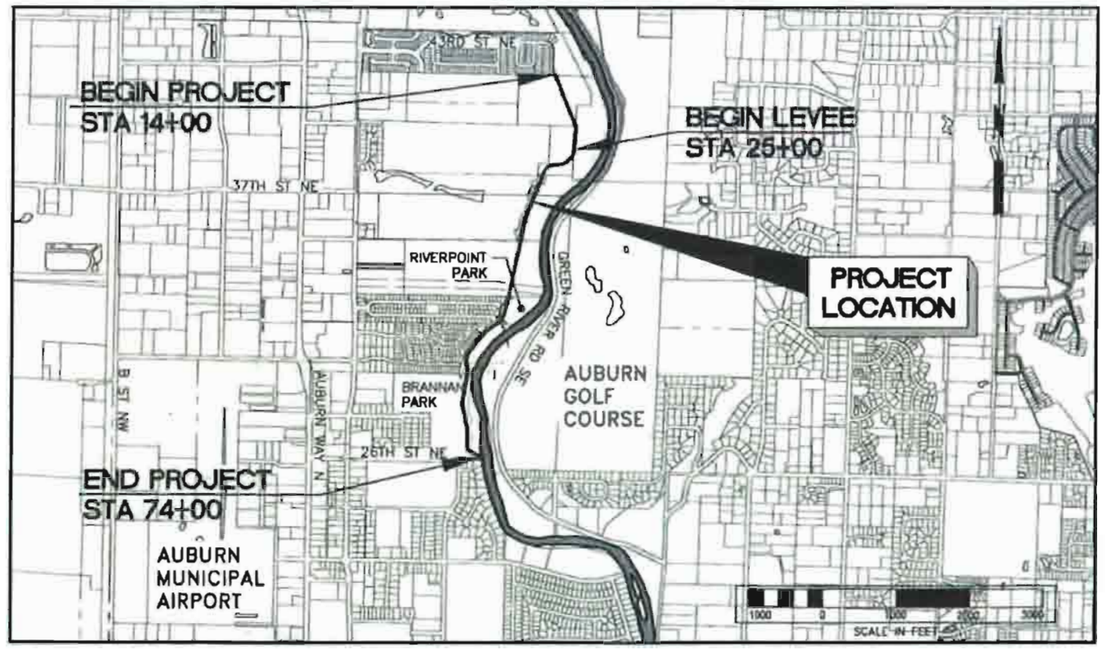
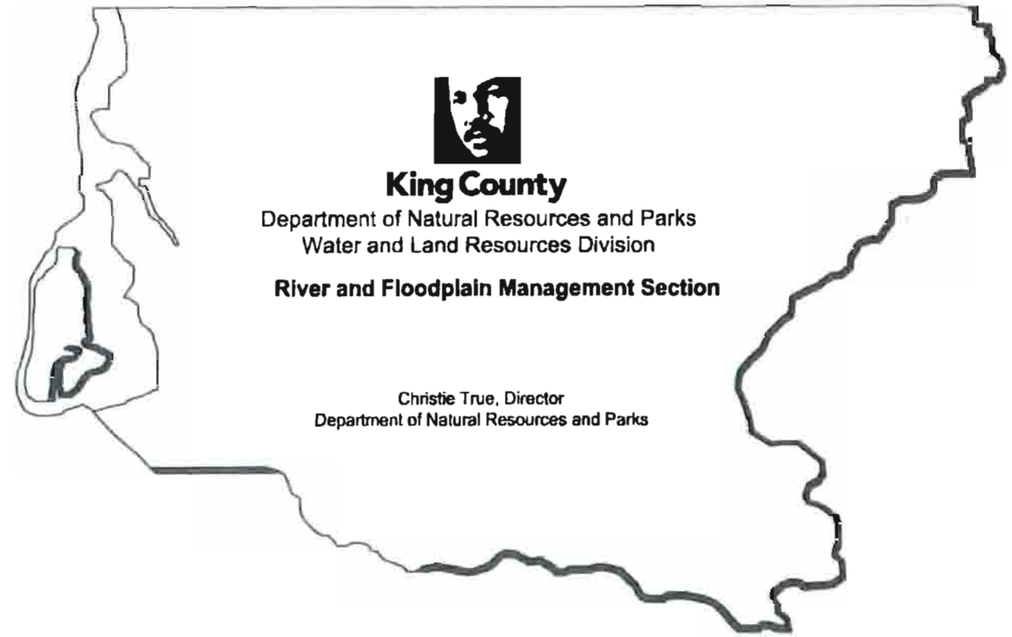
VICINITY MAP





King County
Department of Natural Resources and Parks
Water and Land Resources Division

River and Floodplain Management Section

Christie True, Director
Department of Natural Resources and Parks

REDDINGTON LEVEE SETBACK

CONTRACT NO. C00817C13

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G3	PROJECT OVERVIEW
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MERIDIAN
W.S.L.Q.N.Z.
KCAS

NAVD 88

APPROVED _____ DATE _____
CITY OF AUBURN ENGINEER

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. ___
PROJECT No. 1112035
CONTRACT No. C00817C13

4-5-2013 4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

COVER, VICINITY MAP AND INDEX

SHEET G1 OF 107 SHEETS

DESIGN LINETYPES

- W — WATER LINE
- SS — SEWER LINE
- SD — STORM LINE
- X — CHAIN LINK FENCE
- GRADING LIMITS
- CLR — CLEARING LIMITS
- PERMANENT EASEMENT
- TE — TEMPORARY EASEMENT
- PROPERTY LINE
- DECIDUOUS TREE
- CONIFER TREE
- 0017 PROPERTY NUMBER

EXISTING LINETYPES

- INDEX CONTOUR
- MINOR CONTOUR
- SD — OR STORM
- SS — SEWER
- W — WATER LINE
- UG-P — BURIED POWER
- OP — OVERHEAD POWER
- UT — BURIED TELECOMM
- BUILDING OUTLINE
- IRG — IRRIGATION
- EDGE OF VEGETATION
- CHAIN LINK FENCE
- CONCRETE SPLIT RAIL FENCE

SWPP LEGEND:

- HVF — PLASTIC CONST. FENCE (AKA. HIGH VISIBILITY FENCE)
- SF — SILT FENCE SEE DETAIL C ON SHEET SC5
- WB — WETLAND BOUNDARY
- OHW — ORDINARY HIGH WATER
- BALE — BALE BARRIER
- TC — TURBIDITY CURTAIN (TYPE 2)
- WS-BERM — WOOD SLASH MULCH BERM
- STORM DRAIN INLET PROTECTION, STREET
- STORM DRAIN INLET PROTECTION, NON STREET

ABBREVIATIONS

TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
CPEP	CORRUGATED POLYETHYLYNE PIPE
CONC	CONCRETE
PVC	PVC PIPE
CMP	CORRUGATED METAL PIPE
DIP	DUCTILE IRON PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
RCP	REINFORCED CONCRETE PIPE
FES	FLARED END SECTION

PROFILE LABELS:

XXX.XX / XXX.X — DESIGN ELEV. / EXIST. ELEV.

DESIGN UTILITY SYMBOLS

- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- GEOTECH EXPLORATION SITE (WITH FIELD IDENTIFIER)

EXISTING UTILITY SYMBOLS

- SANITARY SEWER MANHOLE
- CATCH BASIN (TYPE I)
- CATCH BASIN MANHOLE
- STORM DRAIN MANHOLE
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- SP — SPIGOT
- IRGX — WATER IRRIGATION BOX
- GRATE INLET
- GAS VALVE
- EL — ELECTRICAL JUNCTION BOX
- PM — POWER METER
- TC — TELECOMMUNICATION JUNCTION BOX
- CT — CABLE TV JUNCTION BOX
- JUNCTION BOX
- UTILITY POLE
- GUY ANCHOR
- YARD LIGHT OR LUMINAIRE W/ NO MAST

EXISTING SYMBOLS

- GATE POST
- TEST HOLE (WITH FIELD IDENTIFIER)
- METAL SIGN POST
- WOOD SIGN POST
- MONUMENT
- MONUMENT IN CASE

NUM.	REVISION	BY	DATE

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APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
PROJECT No. 1112035
CONTRACT No. C008176.13

4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

LEGEND AND ABBREVIATIONS

SHEET G2 OF 107 SHEETS

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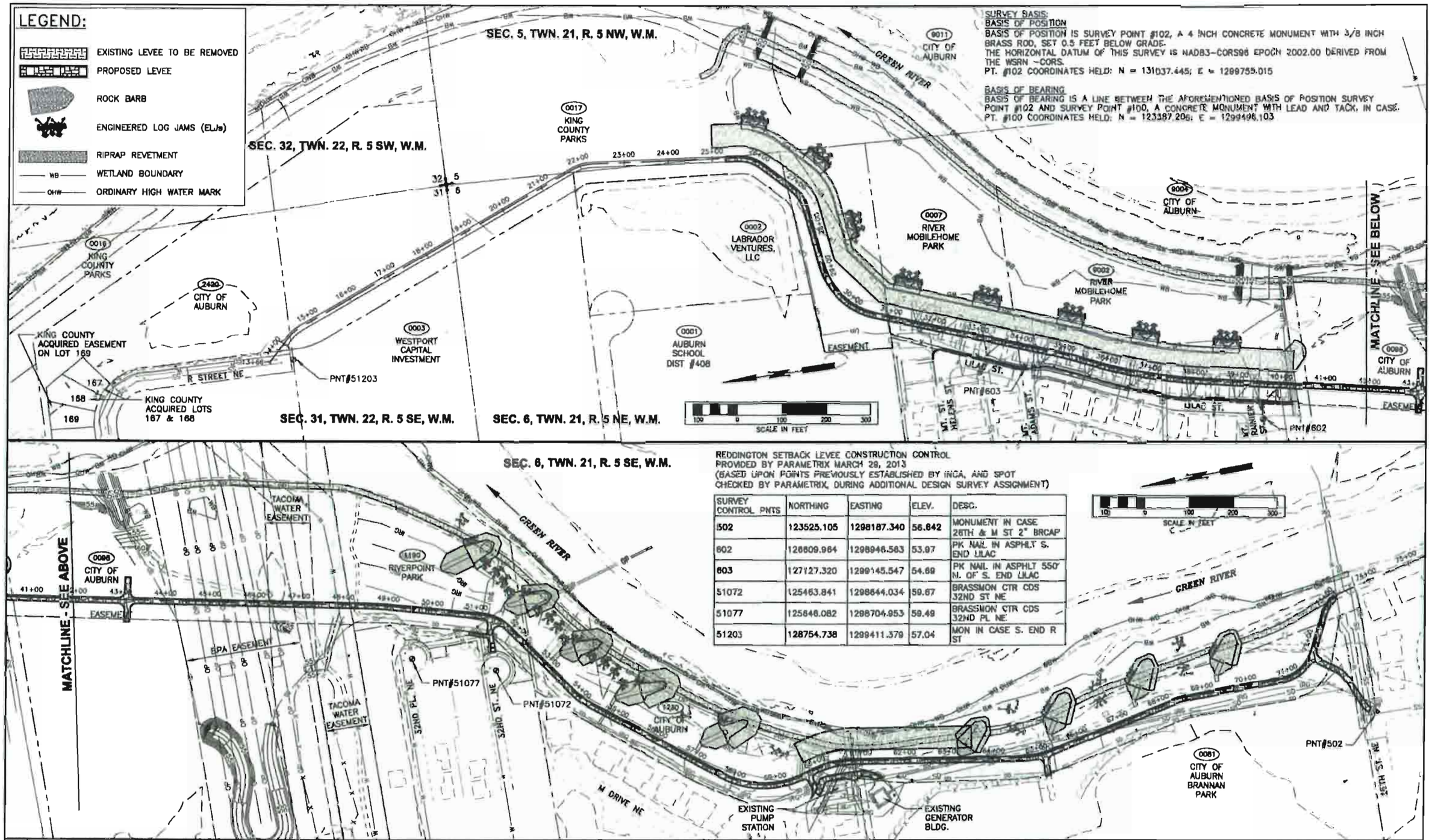


SURVEY BASIS:

BASIS OF POSITION

BASIS OF POSITION IS SURVEY POINT #102, A 4 INCH CONCRETE MONUMENT WITH 3/8 INCH BRASS ROD, SET 0.5 FEET BELOW GRADE.
THE HORIZONTAL DATUM OF THIS SURVEY IS NAD83-CORS96 EPOCH 2002.00 DERIVED FROM THE WSRN -CORS.
PT. #102 COORDINATES HELD: N = 131037.445; E = 1299755.015

BASIS OF BEARING

BASIS OF BEARING IS A LINE BETWEEN THE AFOREMENTIONED BASIS OF POSITION SURVEY POINT #102 AND SURVEY POINT #100, A CONCRETE MONUMENT WITH LEAD AND TACK, IN CASE.
PT. #100 COORDINATES HELD: N = 123387.206; E = 1299496.103

REDDINGTON SETBACK LEVEE CONSTRUCTION CONTROL
PROVIDED BY PARAMETRIX MARCH 28, 2013
(BASED UPON POINTS PREVIOUSLY ESTABLISHED BY INCA, AND SPOT CHECKED BY PARAMETRIX, DURING ADDITIONAL DESIGN SURVEY ASSIGNMENT)

SURVEY CONTROL PNTS	NORTHING	EASTING	ELEV.	DESC.
502	123525.105	1298187.340	56.642	MONUMENT IN CASE 26TH & M ST 2" BRCAP
602	126609.964	1298946.583	53.97	PK NAIL IN ASPHLT S. END LILAC
603	127127.320	1299145.547	54.69	PK NAIL IN ASPHLT 550' N. OF S. END LILAC
51072	125463.841	1298644.034	59.67	BRASSMON CTR CDS 32ND ST NE
51077	125646.082	1298704.953	59.49	BRASSMON CTR CDS 32ND PL NE
51203	128754.738	1299411.379	57.04	MON IN CASE S. END R ST

NUM.	REVISION	BY	DATE
	100% FINAL DRAFT MARCH 2013		

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

4-5-13

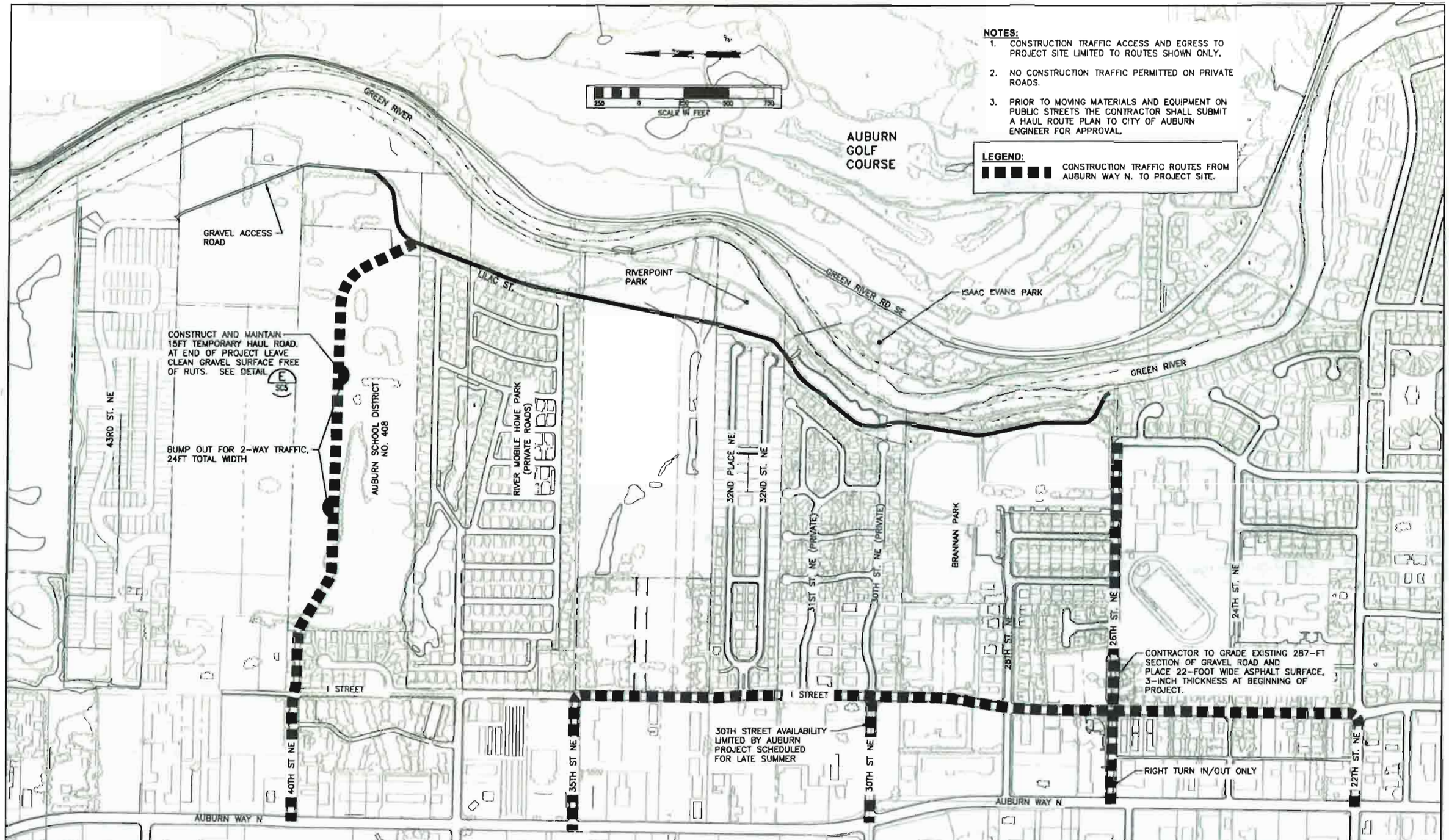
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PROJECT OVERVIEW

SHEET G3 OF 107 SHEETS

\\kcnp.kingcounty.lcl\wlrks-KCP\Shares\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_Vol\DWG SETBACK\RED-59_G3 OVERVIEW.dwg, G3, 3/29/2013 3:03:19 PM, kitamura, 1:2



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PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —

PROJECT No. 1112035

CONTRACT No. C00817C13

4-3-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

TRAFFIC CONTROL

SHEET G4 OF 107 SHEETS

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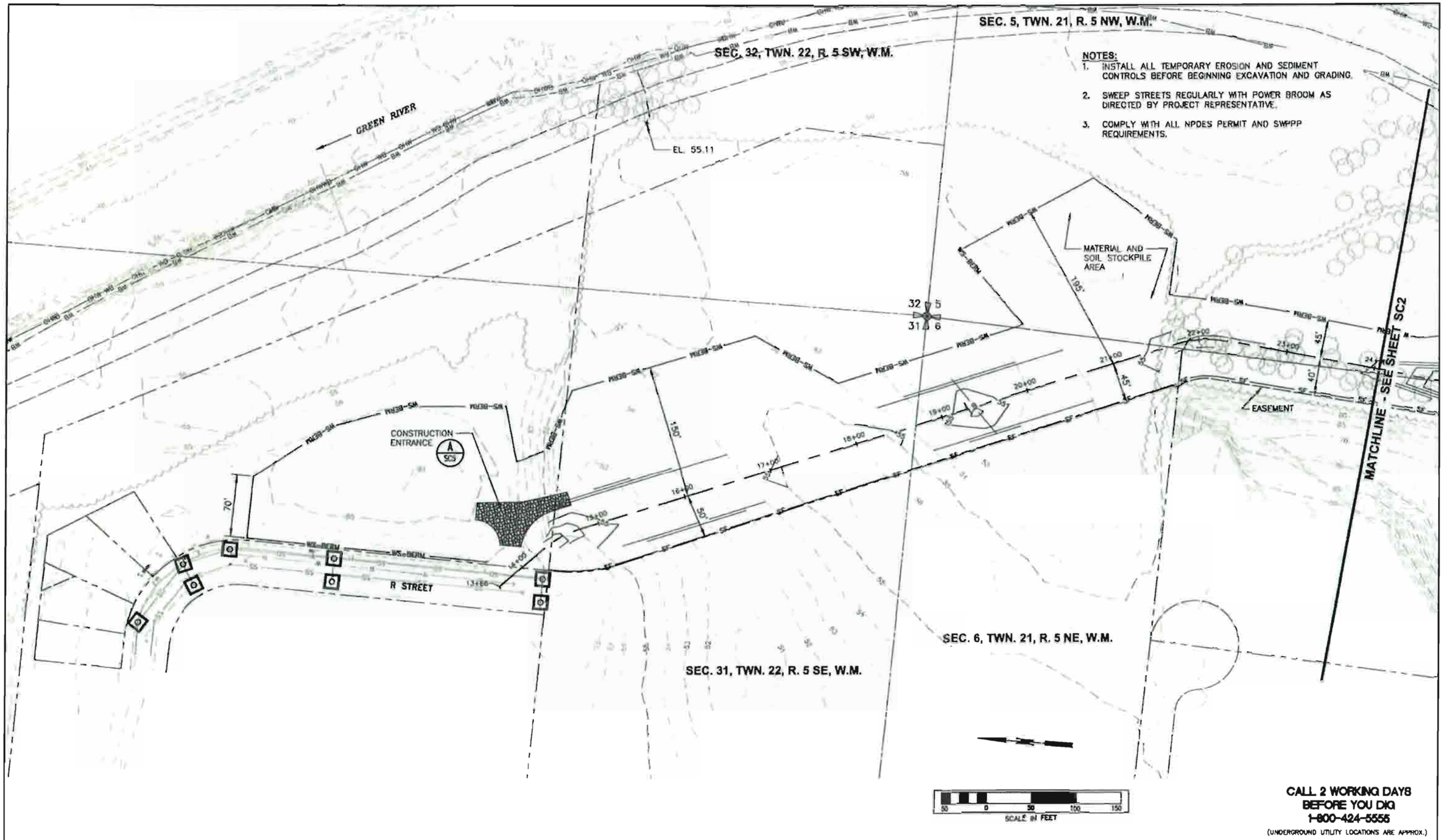

NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. SWEEP STREETS REGULARLY WITH POWER BROOM AS DIRECTED BY PROJECT REPRESENTATIVE.
3. COMPLY WITH ALL NPDES PERMIT AND SWPPP REQUIREMENTS.

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

SHEET **SC1** OF **107** SHEETS

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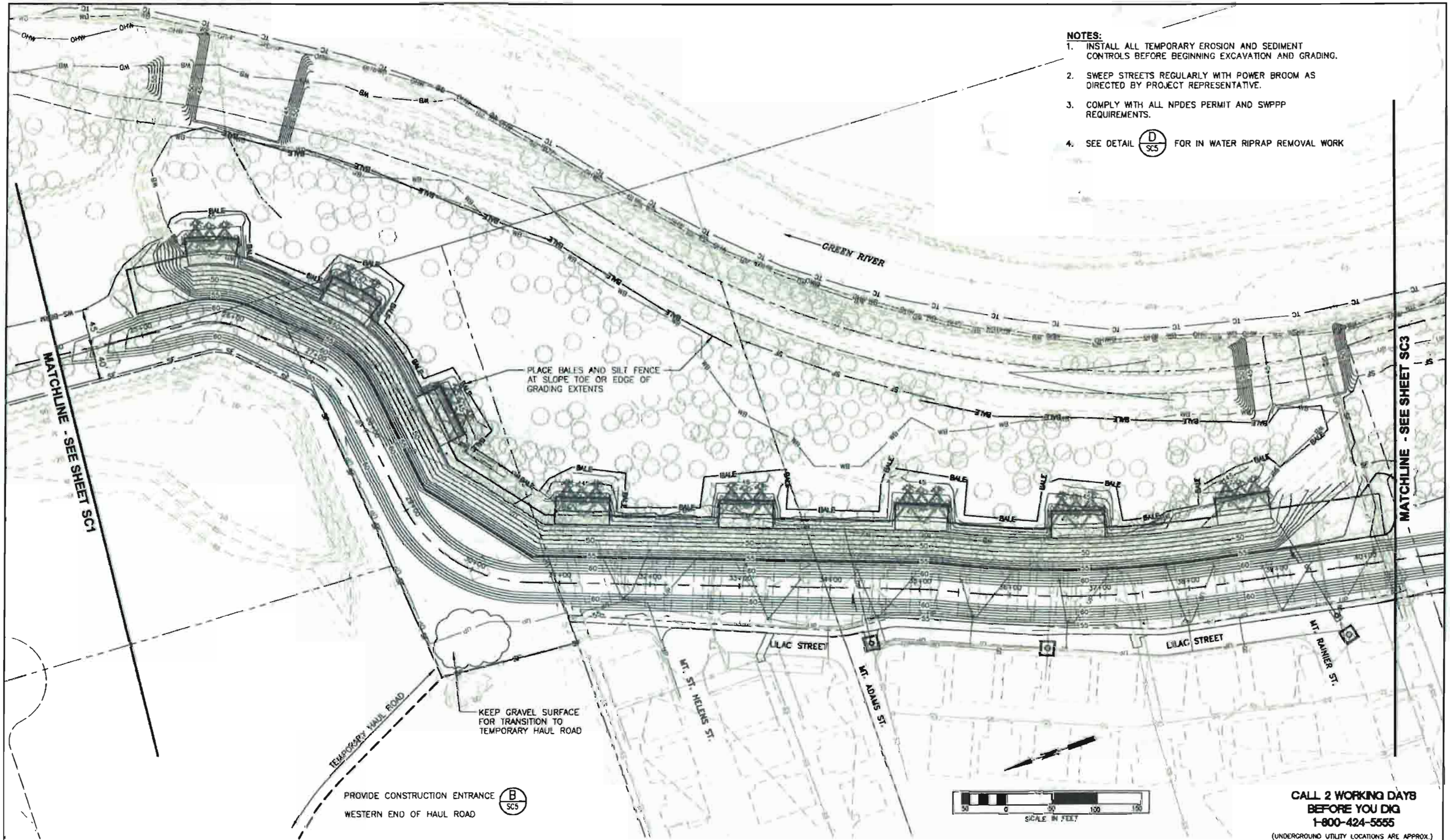

NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. SWEEP STREETS REGULARLY WITH POWER BROOM AS DIRECTED BY PROJECT REPRESENTATIVE.
3. COMPLY WITH ALL NPDES PERMIT AND SWPPP REQUIREMENTS.
4. SEE DETAIL D/SC5 FOR IN WATER RIPRAP REMOVAL WORK

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNER:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KIYAMURA	3/2013

FUNDING SOURCE No. —
PROJECT No. 111 2035
CONTRACT No. C00B1 7C13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

SHEET **SC2** OF **107** SHEETS

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NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. SWEEP STREETS REGULARLY WITH POWER BROOM AS DIRECTED BY PROJECT REPRESENTATIVE.
3. COMPLY WITH ALL NPDES PERMIT AND SWPPP REQUIREMENTS.
4. SEE DETAIL D/SC5 FOR IN WATER RIPRAP REMOVAL WORK ISOLATION WITH TURBIDITY CURTAIN.

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. ---
PROJECT No. 1112033
CONTRACT No. C00817C13

4-3-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

SHEET **SC3** OF **107** SHEETS

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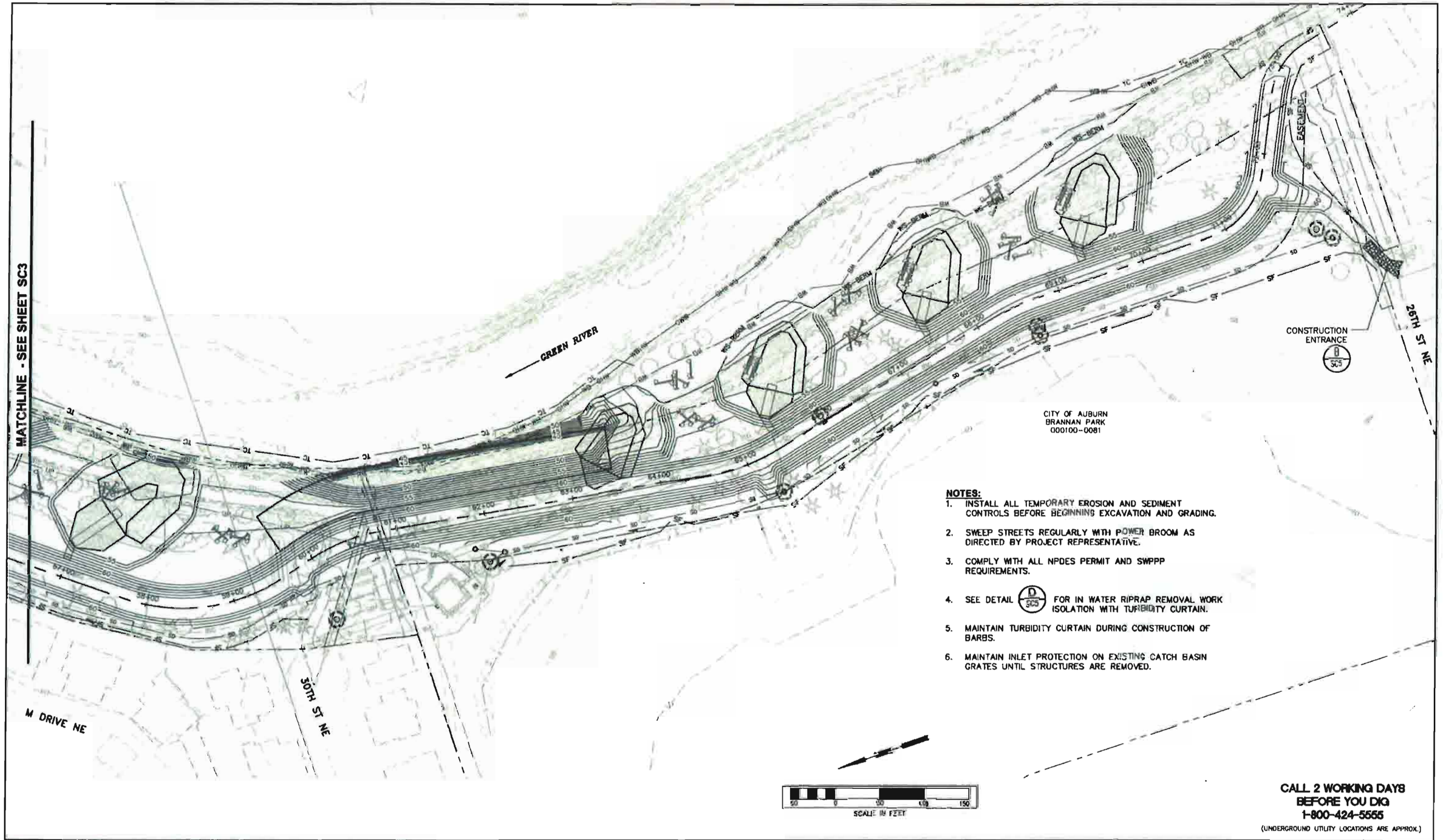

NOTES:

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2. SWEEP STREETS REGULARLY WITH POWER BROOM AS DIRECTED BY PROJECT REPRESENTATIVE.
3. COMPLY WITH ALL NPDES PERMIT AND SWPPP REQUIREMENTS.
4. SEE DETAIL D/SC5 FOR IN WATER RIPRAP REMOVAL WORK ISOLATION WITH TURBIDITY CURTAIN.
5. MAINTAIN TURBIDITY CURTAIN DURING CONSTRUCTION OF BARBS.
6. MAINTAIN INLET PROTECTION ON EXISTING CATCH BASIN GRATES UNTIL STRUCTURES ARE REMOVED.

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

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PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

4-3-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

SHEET **SC4** OF **107** SHEETS

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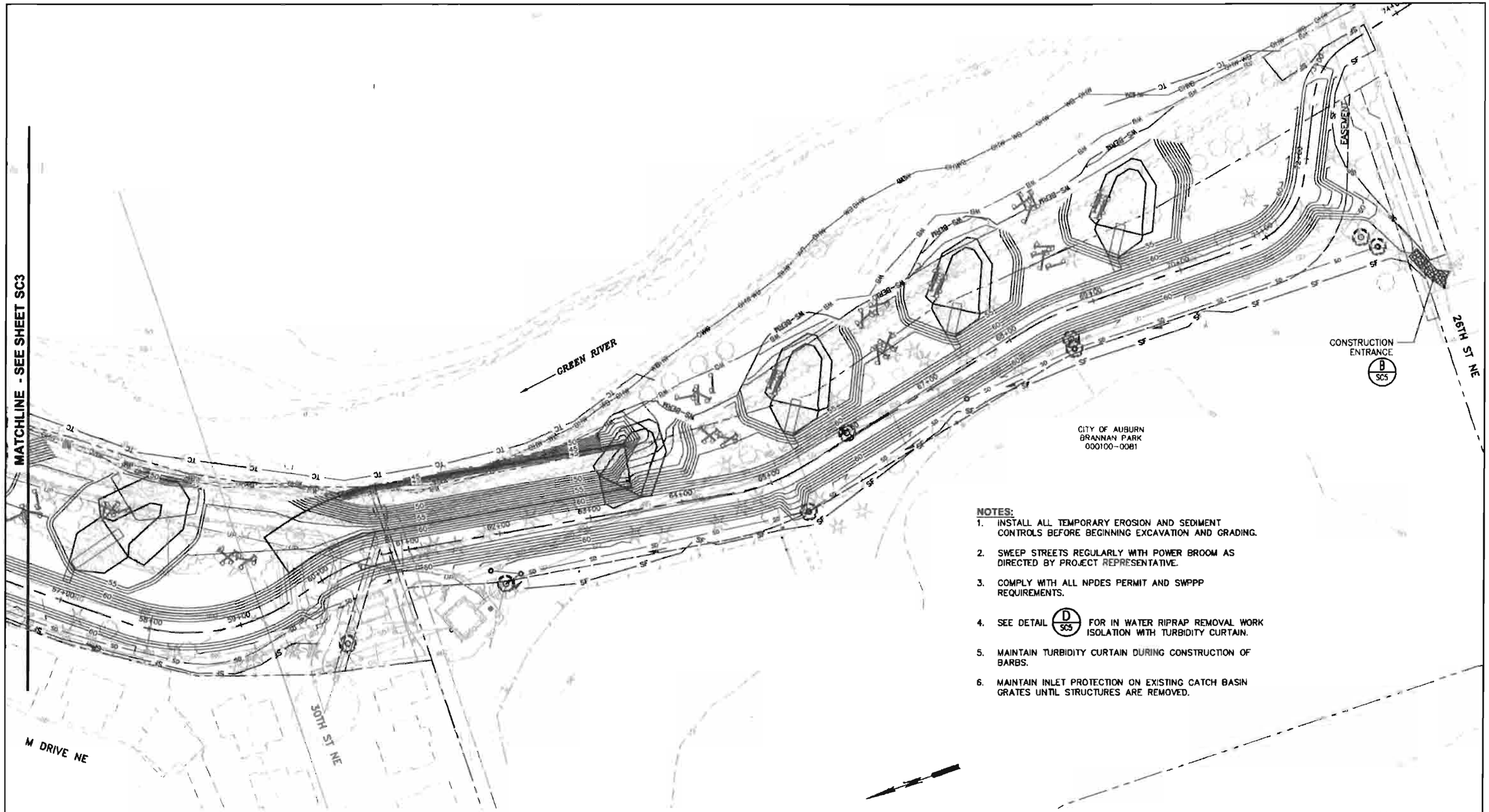

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DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. ---

PROJECT No. 1112035

CONTRACT No. C00817C13

ERIK G. PETERS — WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

SHEET SC4 OF 107 SHEETS

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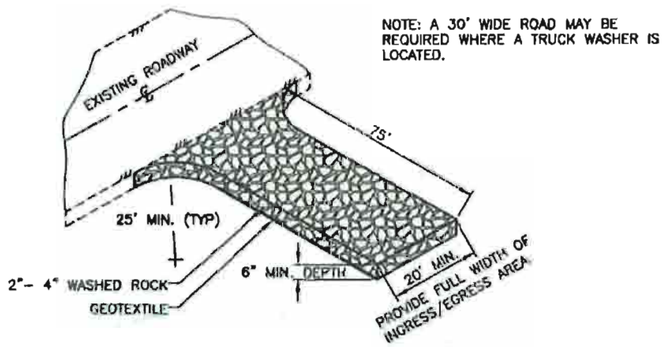
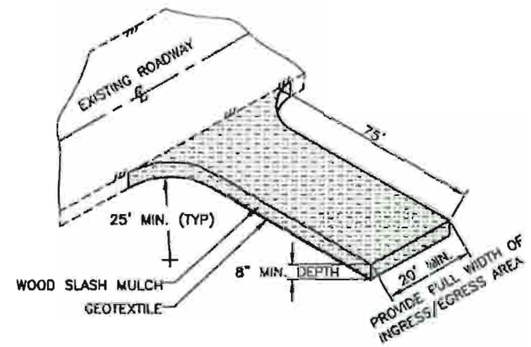


NOTE: A 30' WIDE ROAD MAY BE REQUIRED WHERE A TRUCK WASHER IS LOCATED.

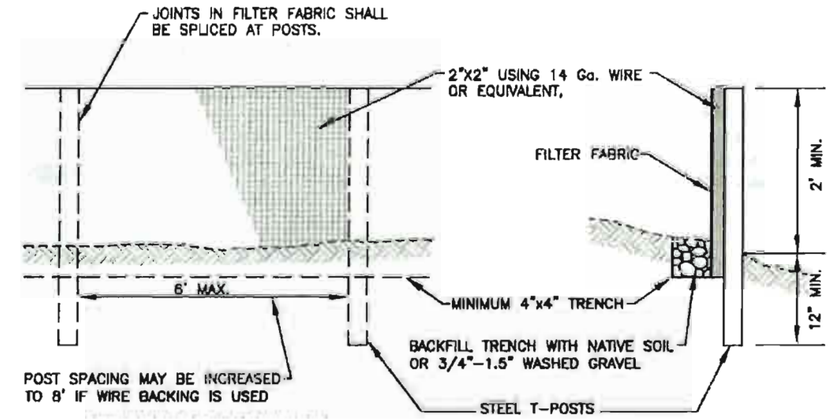
TEMPORARY ROCK CONSTRUCTION ENTRANCE (A)

NTS



WOOD SLASH MULCH CONSTRUCTION ENTRANCE (B)

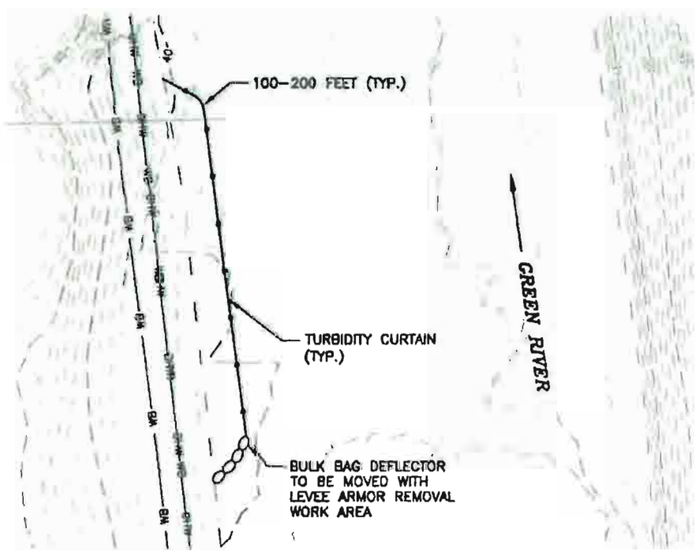
NTS



NOTE: FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE

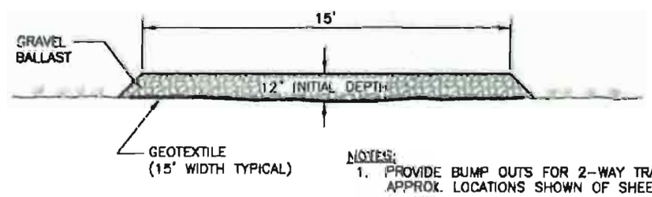
SILT FENCE AND WIRE BACKED SILT FENCE DETAIL (C)

NTS



APPLICATION OF TURBIDITY CURTAIN (D)

NTS



NOTES:
1. PROVIDE BUMP OUTS FOR 2–WAY TRAFFIC APPROX. LOCATIONS SHOWN OF SHEET G4.
2. MAINTAIN ROAD, ADD GRAVEL AND/OR BLADE AS DIRECTED BY PROJECT REPRESENTATIVE.

TEMPORARY CONSTRUCTION HAUL ROAD (E)

NTS

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00B173C13

4-5-13

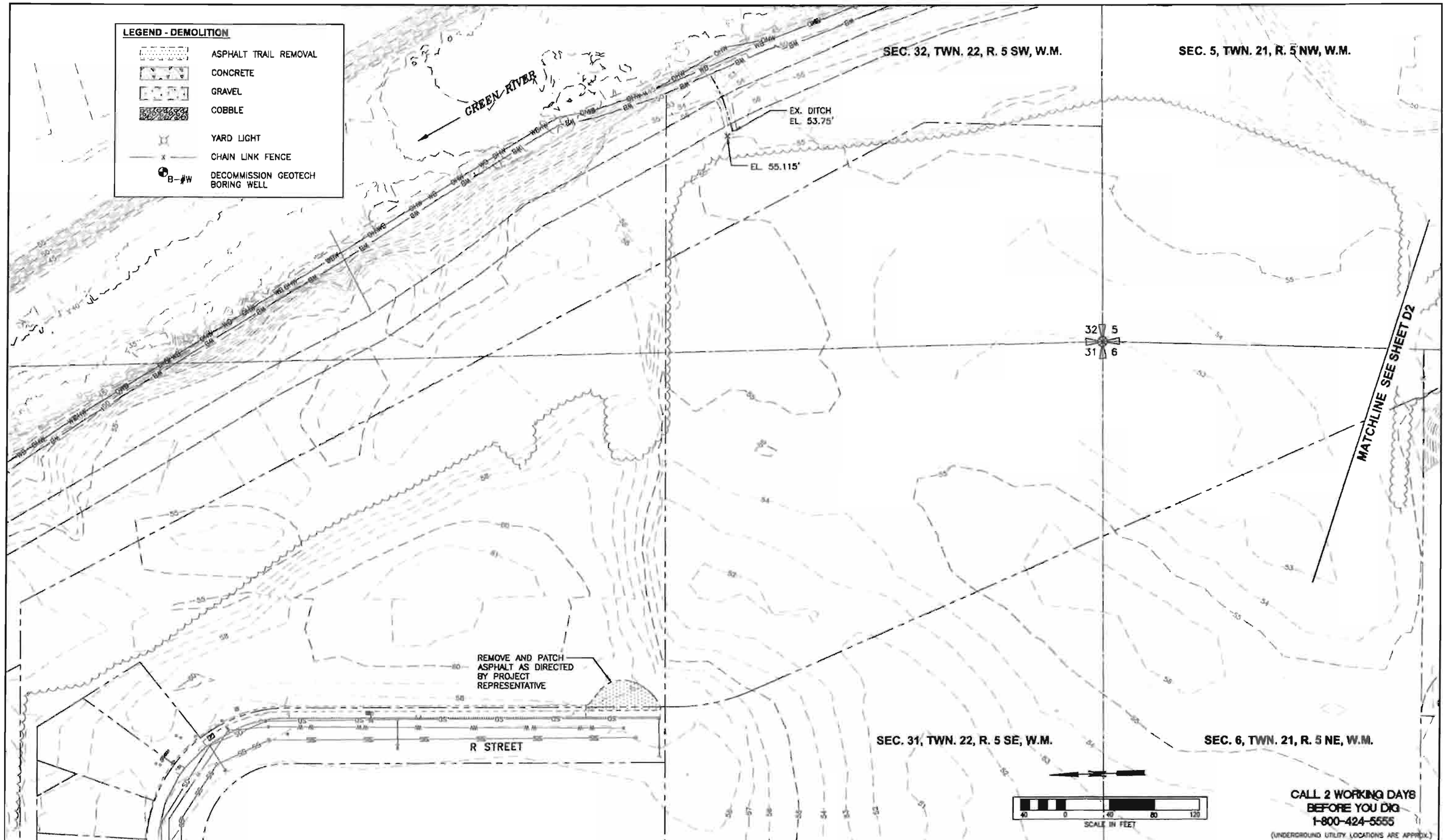
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS

SHEET **SC5** OF **107** SHEETS

\\dnrp.kingcounty.lcl\wrlrsc\CIP\Share\CADD\L-RIVERS CAD SUPPORT\Reddington Levee_RD_UNIT\DWG SETBACK\RED-SB_SC TESC.dwg, SC5, 3/28/2013 2:20:18 PM, kitamura, 1:2



NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. ---

PROJECT No. 1112035

CONTRACT No. C00817C13

ERIK G. PETERS STATE OF WASHINGTON 24436 PROFESSIONAL ENGINEER
4-5-13

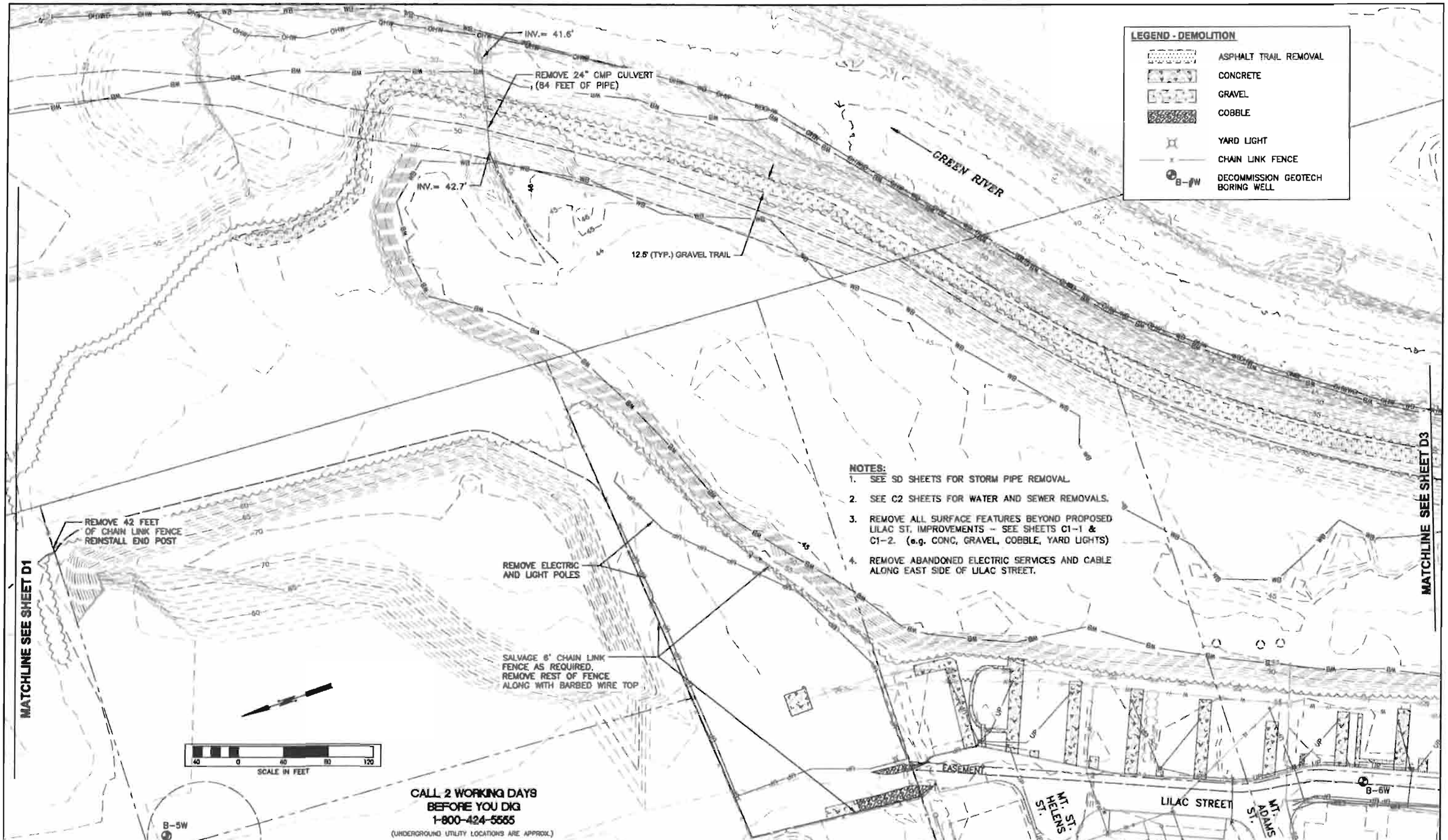
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SITE REMOVALS

SHEET **D1** OF **107** SHEETS

\\kcrp.kingcounty.lcl\wlrsc\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_Util\DWG SETBACK\RED-SB_D DEMO.dwg, D1, 4/3/2013 7:45:25 AM, kkitamura, 1:2



NOTES:

1. SEE SD SHEETS FOR STORM PIPE REMOVAL.
2. SEE C2 SHEETS FOR WATER AND SEWER REMOVALS.
3. REMOVE ALL SURFACE FEATURES BEYOND PROPOSED LILAC ST. IMPROVEMENTS – SEE SHEETS C1-1 & C1-2. (e.g. CONC, GRAVEL, COBBLE, YARD LIGHTS)
4. REMOVE ABANDONED ELECTRIC SERVICES AND CABLE ALONG EAST SIDE OF LILAC STREET.

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. ---

PROJECT No. 1112035

CONTRACT No. C00817C13

ERIK G. PETERS STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER

4-3-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SITE REMOVALS

SHEET **D2** OF **107** SHEETS

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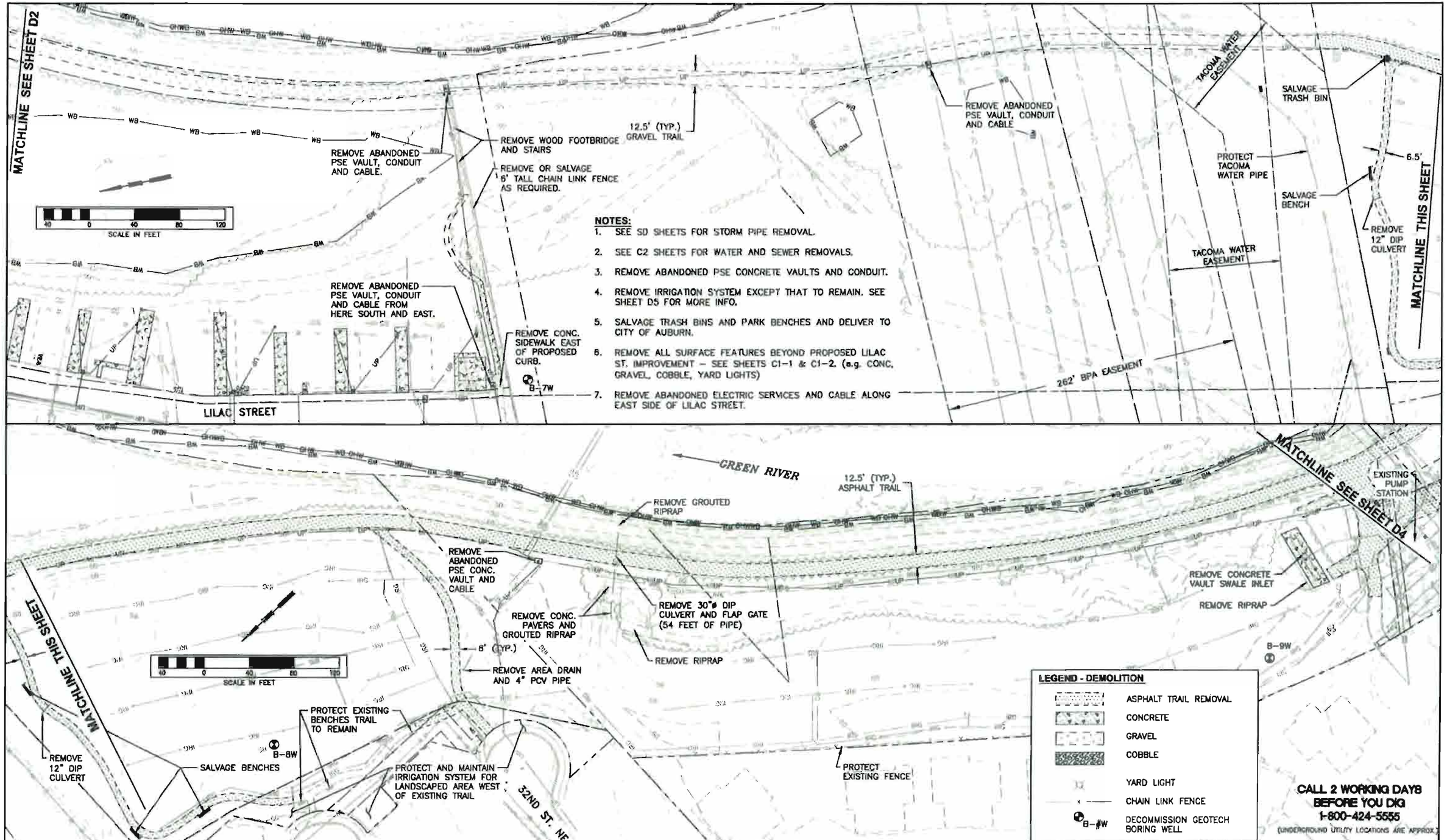


NOTES:

1. SEE SD SHEETS FOR STORM PIPE REMOVAL.
2. SEE C2 SHEETS FOR WATER AND SEWER REMOVALS.
3. REMOVE ABANDONED PSE CONCRETE VAULTS AND CONDUIT.
4. REMOVE IRRIGATION SYSTEM EXCEPT THAT TO REMAIN. SEE SHEET D5 FOR MORE INFO.
5. SALVAGE TRASH BINS AND PARK BENCHES AND DELIVER TO CITY OF AUBURN.
6. REMOVE ALL SURFACE FEATURES BEYOND PROPOSED LILAC ST. IMPROVEMENT – SEE SHEETS C1-1 & C1-2. (e.g. CONC, GRAVEL, COBBLE, YARD LIGHTS)
7. REMOVE ABANDONED ELECTRIC SERVICES AND CABLE ALONG EAST SIDE OF LILAC STREET.

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

4-3-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SITE REMOVALS

SHEET D3 OF 107 SHEETS

\\dnrp.kingcounty.lcl\wirksc\CIP\Share\CADD\J-RIVERS CAD SUPPORT\Reddington Levee_RD_Util\DWG SETBACK\RED-58_D DEMO.dwg, D3, 4/3/2013 7:45:02 AM, kidbamura, 1:2

NOTES:
1. SALVAGE ALL TRASH BINS, PICNIC TABLES, BARBECUE GRILL, AND PARK BENCHES AND DELIVER TO CITY OF AUBURN.
2. REMOVE ASPHALT TRAIL AS SHOWN.
3. SEE SD SHEETS FOR STORM PIPE REMOVALS.
4. REMOVE IRRIGATION SYSTEM EXCEPT THAT TO REMAIN. SEE SHEET D5 FOR MORE INFO.

GREEN RIVER

MATCHLINE SEE SHEET D3

TRASH BIN (TYP.)

REMOVE CONCRETE STAIRS

CONCRETE PAD w/METAL PICNIC TABLE (9.5'x13' TYP.)

12.5' (TYP.)

TRASH BIN (TYP.)

9' (TYP.)

EX. SDMH 137

EX. SDMH 136

EX. 8" PVC

EX. 6" CLAY

EX. 42" RCP

B-10W

8" PVC

EX. SDMH 138

10'

EXISTING ASPHALT TO REMAIN

EXISTING GENERATOR BUILDING

BALLFIELD

EX. SDMH 139

8" PVC

SEE BLOW UP THIS SHEET

26TH ST NE

REMOVE 3 BOLLARDS.

EXISTING CONCRETE SPLIT RAIL FENCE TO BE SALVAGED AND REINSTALLED

PROTECT CONCRETE SIDEWALKS

BLOW UP OF 26TH ST TRAIL ENTRANCE

SCALE: 1"=10'

LEGEND - DEMOLITION / SALVAGE

- ASPHALT TRAIL REMOVAL
- CONCRETE
- GRAVEL
- COBBLE
- YARD LIGHT
- CHAIN LINK FENCE
- B-#W DECOMMISSION GEOTECH BORING WELL

40 0 40 80 120

SCALE IN FEET

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —

PROJECT No. 1112035

CONTRACT No. C00817C13

4-5-13

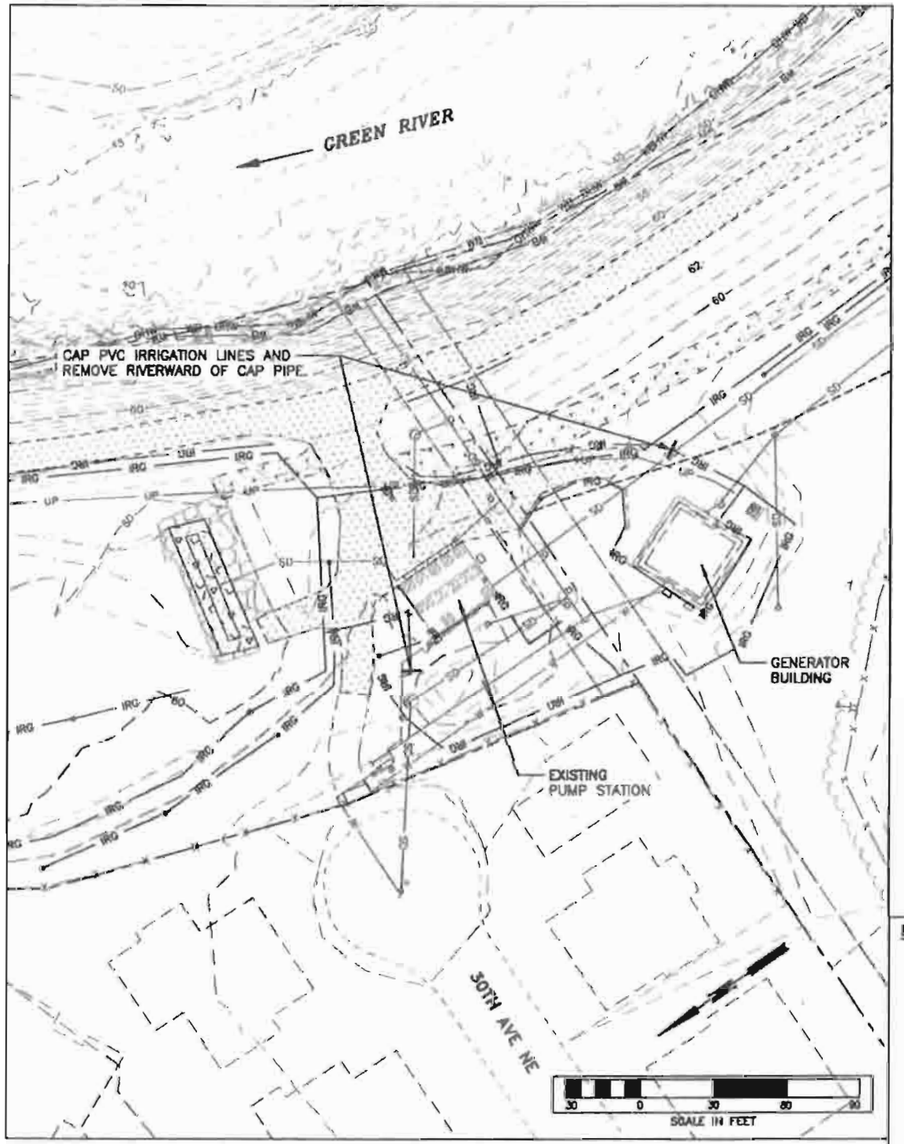
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

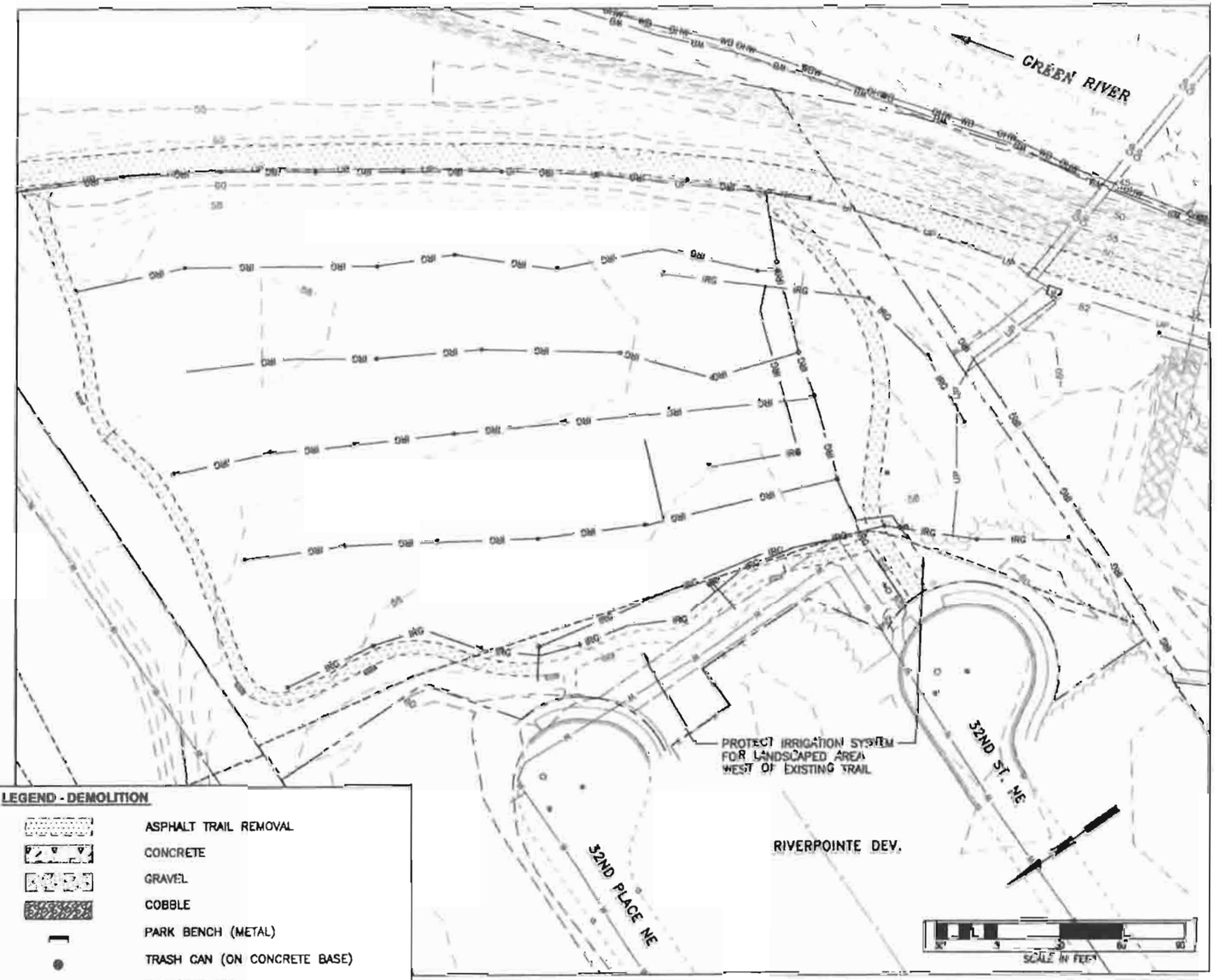
SITE REMOVALS

SHEET D4 OF 107 SHEETS

\\dnrp.kingcounty.lcl\wrks\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_Uni\DWG SET\MOD\WED-SB_D DEMO.dwg, D4, 4/3/2013 7:45:15 AM, kitamura, 1:2



BRANNAN PARK IRRIGATION REMOVALS



RIVERPOINTE IRRIGATION REMOVALS

LEGEND - DEMOLITION

- ASPHALT TRAIL REMOVAL
- CONCRETE
- GRAVEL
- COBBLE
- PARK BENCH (METAL)
- TRASH CAN (ON CONCRETE BASE)
- BARBECUE GRILL
- YARD LIGHT
- CHAIN LINK FENCE
- IRRIGATION LINE

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —

PROJECT No. 1112035

CONTRACT No. C608177C13

4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

BRANNAN PARK AND RIVERPOINTE IRRIGATION REMOVALS

SHEET **D5** OF **107** SHEETS

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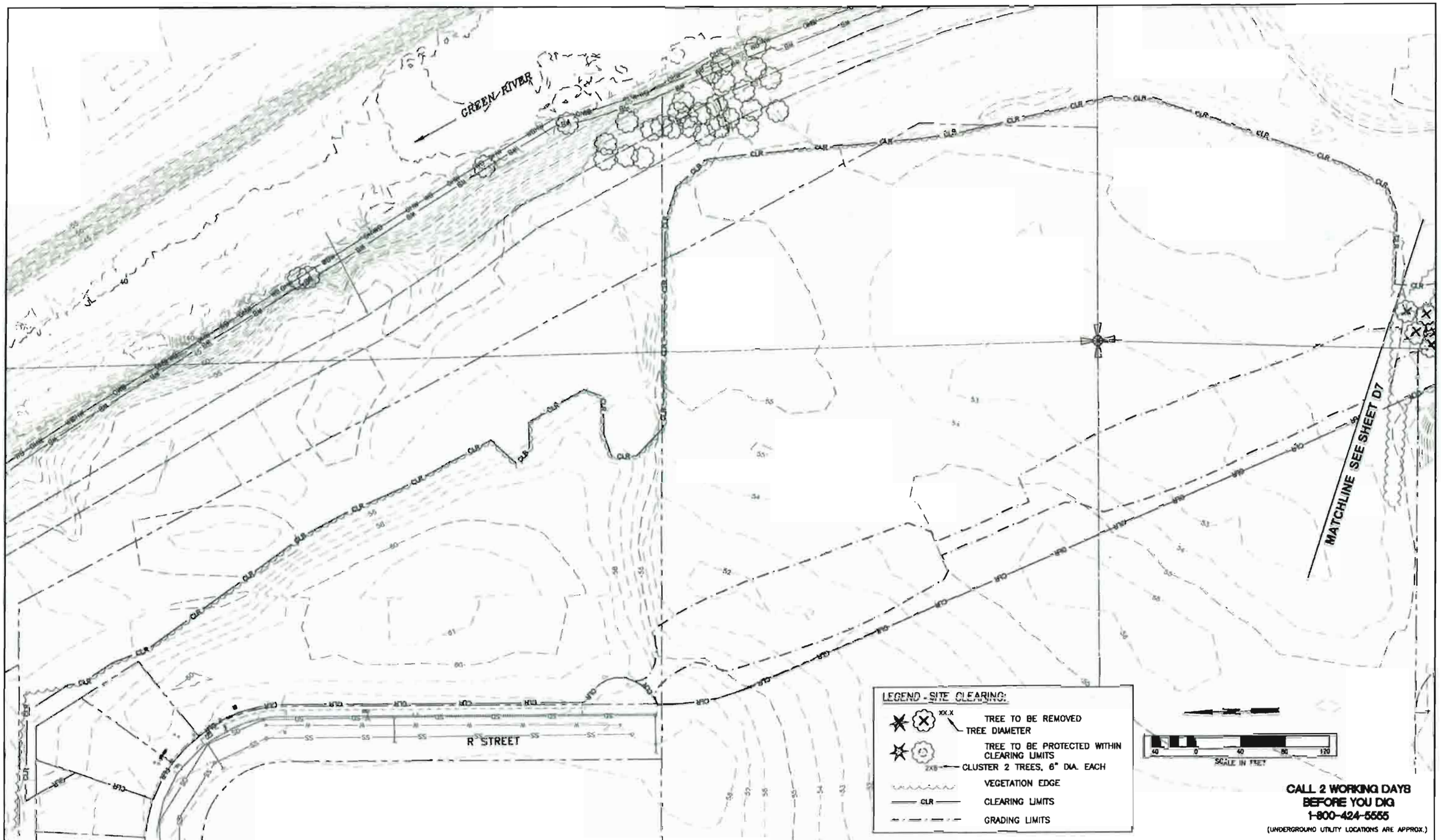

NUM.	REVISION	BY	DATE

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APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
PROJECT No. 1112035
CONTRACT No. C00817C13

4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SITE CLEARING

SHEET D6 OF 107 SHEETS

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# OF TREES REMOVED	
<12"ø	313
12"–24"ø	107
>24"ø	12

LEGEND - SITE CLEARING:

- TREE TO BE REMOVED — XX.X TREE DIAMETER
- TREE TO BE PROTECTED WITHIN CLEARING LIMITS — 2X6 CLUSTER 2 TREES, 6" DIA. EACH
- VEGETATION EDGE
- CLR — CLEARING LIMITS
- GRADING LIMITS

NOTE:

1. FOR CLARITY NOT ALL TREES TO BE REMOVED HAVE BEEN MARKED ON DRAWINGS WITH AN X. REMOVE ALL TREES WITHIN CLEARING LIMITS EXCEPT THOSE DESIGNATED TO PROTECT.
2. REVIEW TREES IN FIELD WITH PROJECT REPRESENTATIVE BEFORE REMOVING TREES.

AREA OF RIPRAP REMOVAL BETWEEN GRADING LIMITS AND CLEARING LIMITS.

GREEN RIVER

TRAIL THROUGH WOODS MAY BE USED AS HAUL ROUTE

PROTECT TREES, NO CLEARING THIS AREA

MATCHLINE SEE SHEET D6

MATCHLINE SEE SHEET D8

LILAC STREET

MT. ST. HELENS ST.

MT. ADAMS ST.

SCALE IN FEET

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —

PROJECT No. 1112035

CONTRACT No. C00817C13

4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SITE CLEARING

SHEET D7 OF 107 SHEETS

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NOTE:
1. REVIEW TREES IN FIELD WITH PROJECT REPRESENTATIVE BEFORE REMOVING TREES.
2. AREA OF RIPRAP REMOVAL BETWEEN GRADING AND CLEARING LIMITS.

# OF TREES REMOVED	
<12"ø	68
12"–24"ø	14
>24"ø	1

LEGEND - SITE CLEARING:

- XX.X — TREE DIAMETER — TREE TO BE REMOVED
- TREE TO BE PROTECTED WITHIN CLEARING LIMITS
- 2X6 — CLUSTER 2 TREES, 6" DIA. EACH
- VEGETATION EDGE
- CLR — CLEARING LIMITS
- GRADING LIMITS

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. FOLKINGER, X. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SITE CLEARING

SHEET D8 OF 107 SHEETS

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RIPRAP REMOVAL OUTSIDE GRADING LIMITS

GREEN RIVER

SEE NOTE 2

MATCHLINE SEE SHEET D10

MATCHLINE SEE SHEET D8

EXISTING PUMP STATION

RIVERPOINTE DEV.

32ND ST. NE

32ND PL. NE

SCALE IN FEET

NOTE:

1. REVIEW TREES IN FIELD WITH PROJECT REPRESENTATIVE BEFORE REMOVING TREES.
2. AREA OF RIPRAP REMOVAL BETWEEN GRADING AND CLEARING LIMITS.

LEGEND - SITE CLEARING:

- TREE TO BE REMOVED — TREE DIAMETER
- TREE TO BE PROTECTED WITHIN CLEARING LIMITS
- 2X6 — CLUSTER 2 TREES, 6" DIA. EACH
- VEGETATION EDGE
- CLR — CLEARING LIMITS
- GRADING LIMITS

# OF TREES REMOVED	
<12"ø	61
12"-24"ø	26
>24"ø	2

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. ---

PROJECT No. 1112035

CONTRACT No. C00817C13

4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SITE CLEARING

SHEET D9 OF 107 SHEETS

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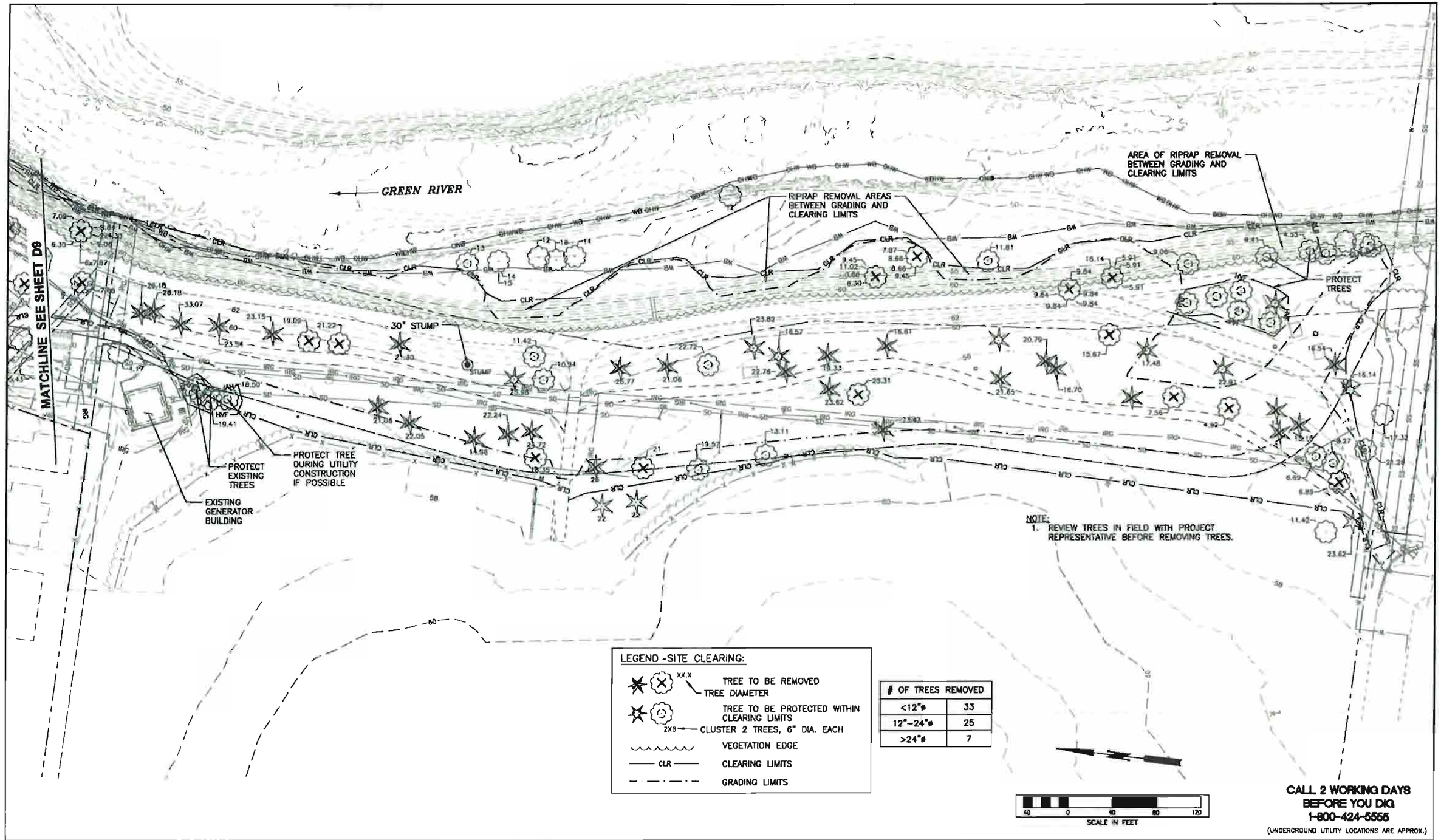

# OF TREES REMOVED	
<12"ø	33
12"–24"ø	25
>24"ø	7

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS — STATE OF WASHINGTON — 21436 — REGISTERED PROFESSIONAL ENGINEER
4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SITE CLEARING

SHEET D10 OF 107 SHEETS

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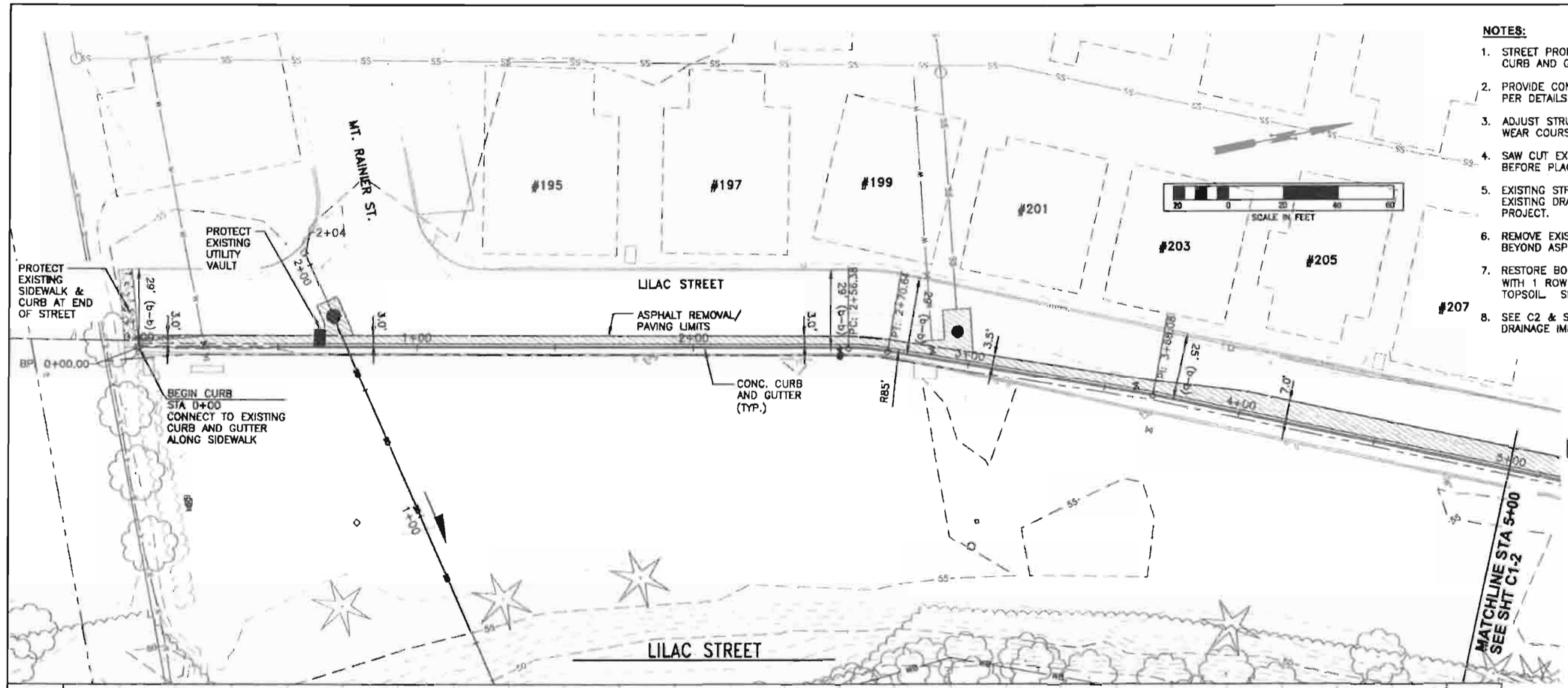


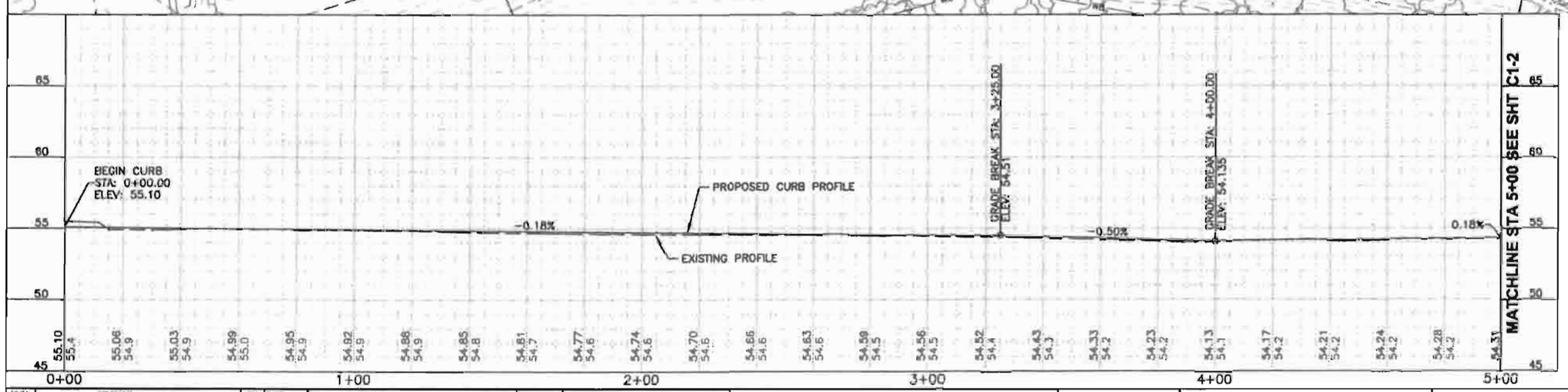
NOTES:

1. STREET PROFILE FOLLOWS FRONT EDGE OF CONC. CURB AND GUTTER.
2. PROVIDE CONCRETE CURB & PAVEMENT SECTION PER DETAILS ON SHEET C1-2.
3. ADJUST STRUCTURES BEFORE PLACEMENT OF WEAR COURSE.
4. SAW CUT EXISTING ASPHALT TO TRIM EDGE BEFORE PLACING NEW ASPHALT PATCH.
5. EXISTING STREET DRAINS TO WEST CURB LINE. EXISTING DRAINAGE TO BE MAINTAINED WITH PROJECT.
6. REMOVE EXISTING CURB & GUTTER AND ASPHALT BEYOND ASPHALT REMOVAL LIMITS.
7. RESTORE BOULEVARD ALONG NEW EAST CURB WITH 1 ROW OF SOD (18" WIDE), AND 4" OF TOPSOIL. SEE LANDSCAPE SHEETS.
8. SEE C2 & SD SHEETS FOR WATER, SEWER AND DRAINAGE IMPROVEMENTS.

LEGEND:

(b-b) BACK OF CURB, EACH SIDE OF STREET

PAVING LIMITS



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PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

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King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

LILAC STREET IMPROVEMENTS
STA 0+00 TO STA 5+00

SHEET C1-1 OF 107 SHEETS

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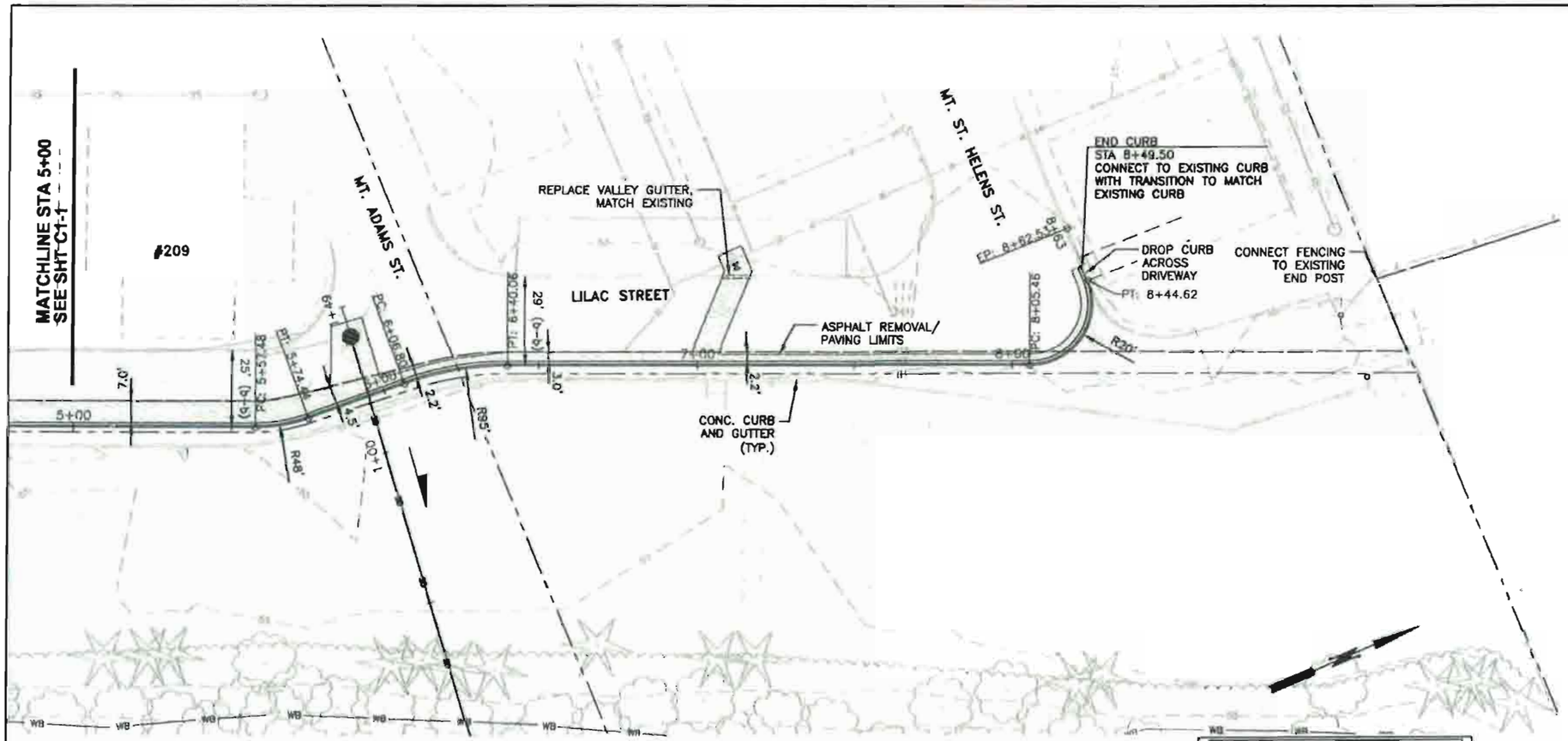
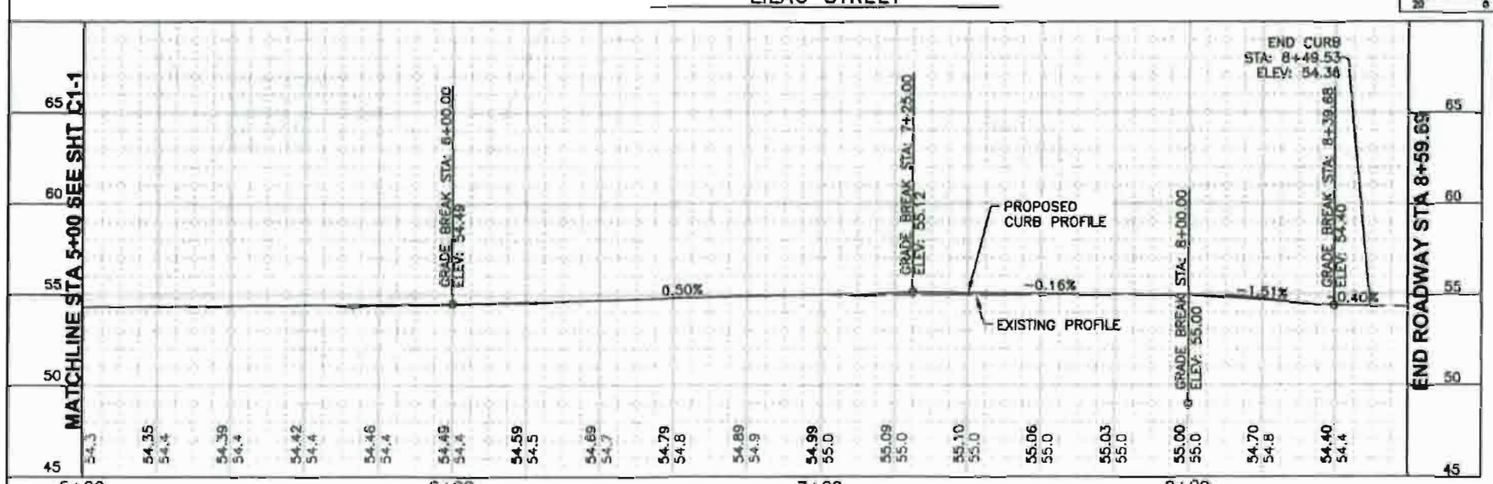




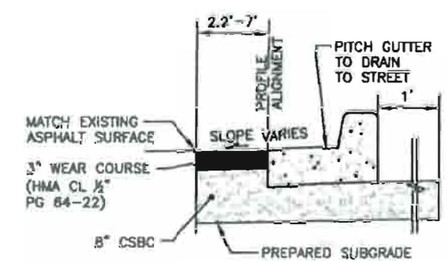
NOTES:

1. STREET PROFILE FOLLOWS FRONT EDGE OF CONC. CURB AND GUTTER.
2. PROVIDE CONCRETE CURB & PAVEMENT SECTION PER DETAILS ON SHEET C1-2.
3. ADJUST STRUCTURES BEFORE PLACEMENT OF WEAR COURSE.
4. SAW CUT EXISTING ASPHALT TO TRIM EDGE BEFORE PLACING NEW ASPHALT PATCH.
5. EXISTING STREET DRAINS TO WEST CURB LINE. EXISTING DRAINAGE TO BE MAINTAINED WITH PROJECT.
6. REMOVE EXISTING CURB & GUTTER AND ASPHALT BEYOND ASPHALT REMOVAL LIMITS.
7. RESTORE BOULEVARD ALONG NEW EAST CURB WITH 1 ROW OF SOD (18" WIDE), AND 4" OF TOPSOIL. SEE LANDSCAPE SHEETS.
8. SEE C2 & SD SHEETS FOR WATER, SEWER AND DRAINAGE IMPROVEMENTS.

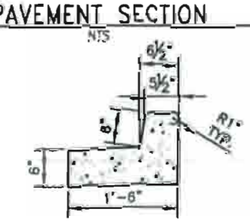
LEGEND:

(b-b) BACK OF CURB, EACH SIDE OF STREET

PAVING LIMITS



PAVEMENT SECTION
NTS



CEMENT CONCRETE CURB DETAIL
NTS

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

4-3-13

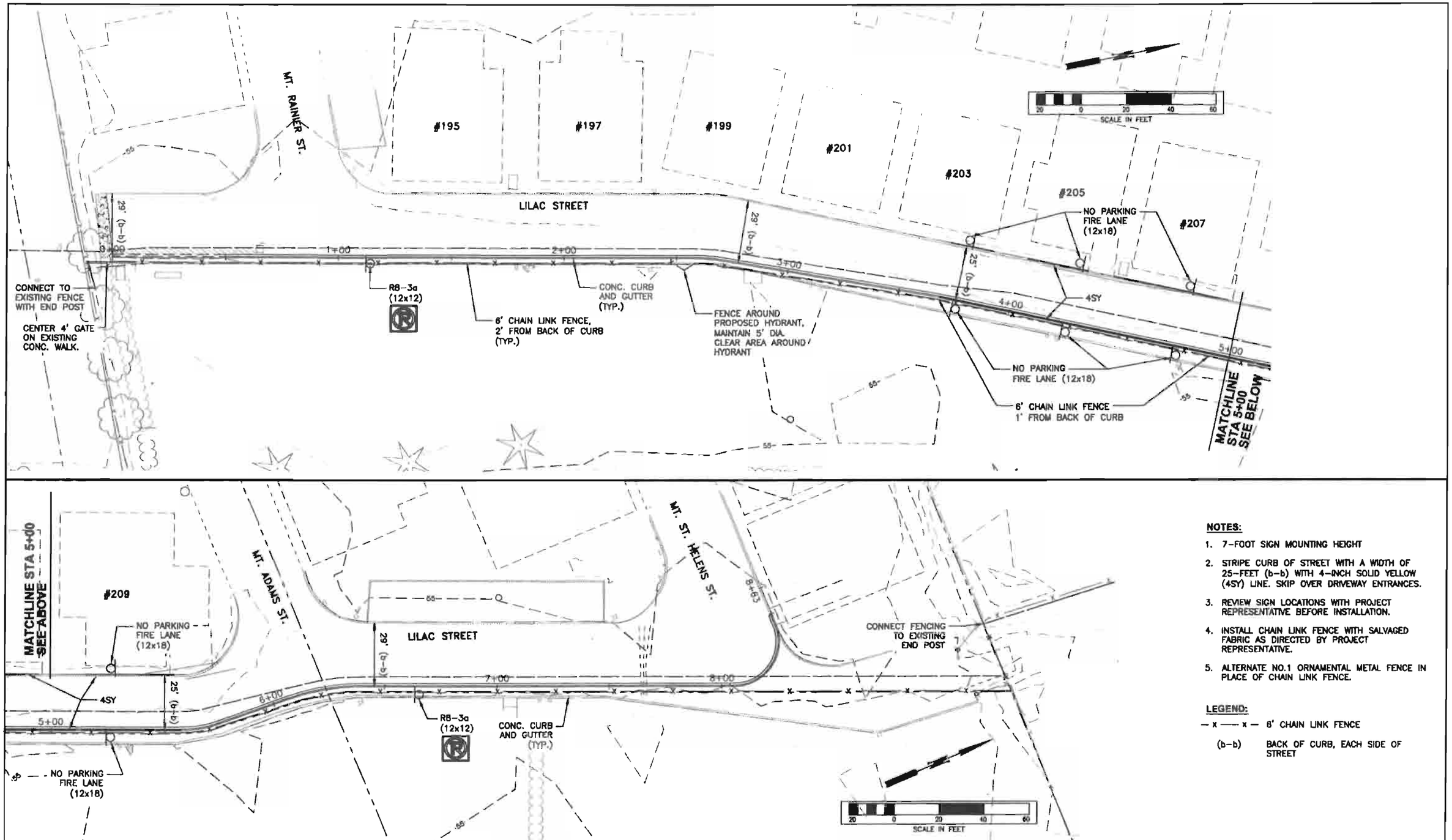
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

LILAC STREET IMPROVEMENTS
STA 5+00 TO END

SHEET C1-2 OF 107 SHEETS

\\dnrp.kingcounty.kl\wlfrck\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_UIR\DWG SETBACK\RED-SB_C1 RDPP.dwg, C1-2, 3/28/2013 4:20:21 PM, kkitamura, 1:2



NOTES:

1. 7-FOOT SIGN MOUNTING HEIGHT
2. STRIPE CURB OF STREET WITH A WIDTH OF 25-FEET (b-b) WITH 4-INCH SOLID YELLOW (4SY) LINE. SKIP OVER DRIVEWAY ENTRANCES.
3. REVIEW SIGN LOCATIONS WITH PROJECT REPRESENTATIVE BEFORE INSTALLATION.
4. INSTALL CHAIN LINK FENCE WITH SALVAGED FABRIC AS DIRECTED BY PROJECT REPRESENTATIVE.
5. ALTERNATE NO.1 ORNAMENTAL METAL FENCE IN PLACE OF CHAIN LINK FENCE.

LEGEND:

— x —— x — 6' CHAIN LINK FENCE

(b-b) BACK OF CURB, EACH SIDE OF STREET

NUM.	REVISION	BY	DATE
	100% FINAL DRAFT MARCH 2013		
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

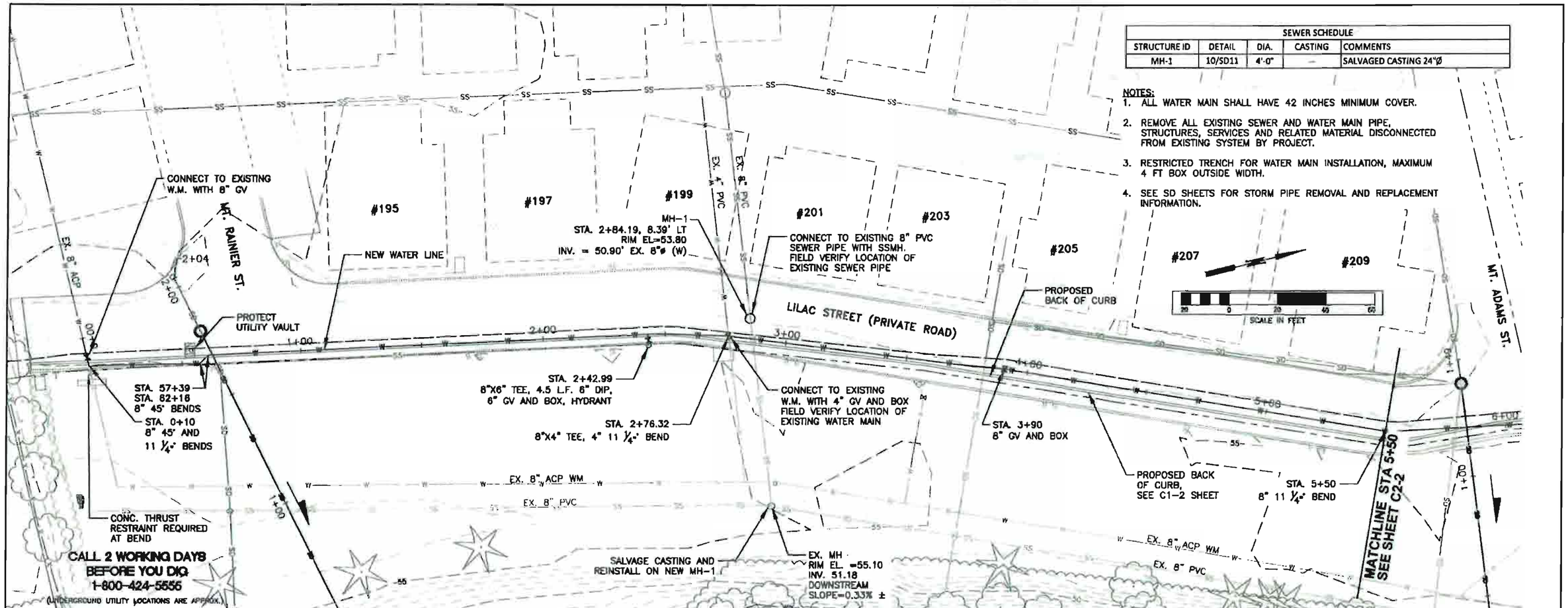
LILAC STREET SIGNING, STRIPING AND FENCE PLAN

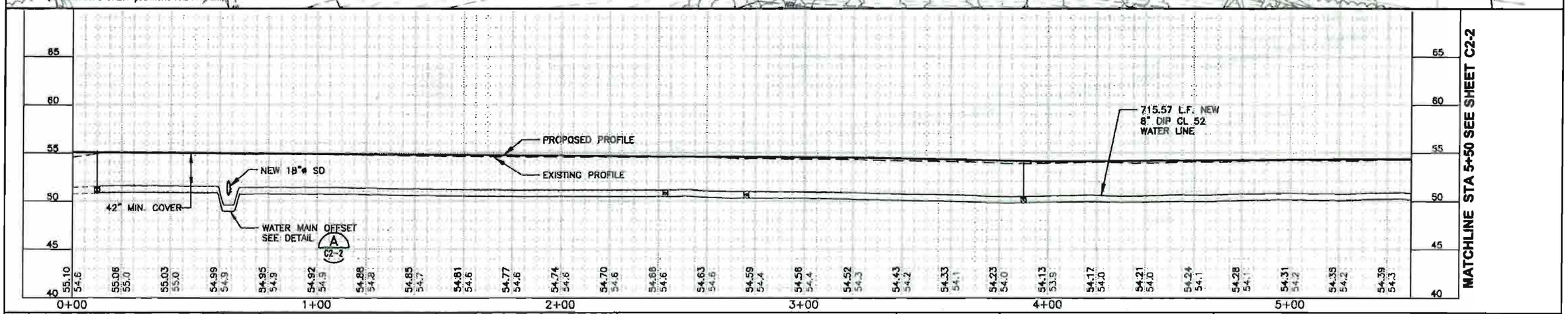
SHEET C1-3 OF 107 SHEETS

\\kcwp.kingcounty.lcl\wlrsca\CIP\Share\CA0013-RIVERS CAD SUPPORT\Reddington Levee_BO_LHI\DWG SETBACK\RED-SB_C1-3 SIGN PLAN.dwg, C1-3, 3/28/2013 4:16:14 PM, kitamura, 1:2

SEWER SCHEDULE				
STRUCTURE ID	DETAIL	DIA.	CASTING	COMMENTS
MH-1	10/SD11	4'-0"	–	SALVAGED CASTING 24"Ø

NOTES:
1. ALL WATER MAIN SHALL HAVE 42 INCHES MINIMUM COVER.
2. REMOVE ALL EXISTING SEWER AND WATER MAIN PIPE, STRUCTURES, SERVICES AND RELATED MATERIAL DISCONNECTED FROM EXISTING SYSTEM BY PROJECT.
3. RESTRICTED TRENCH FOR WATER MAIN INSTALLATION, MAXIMUM 4 FT BOX OUTSIDE WIDTH.
4. SEE SD SHEETS FOR STORM PIPE REMOVAL AND REPLACEMENT INFORMATION.





NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS — STATE OF WASHINGTON — 21169 — REGISTERED PROFESSIONAL ENGINEER
4-5-13

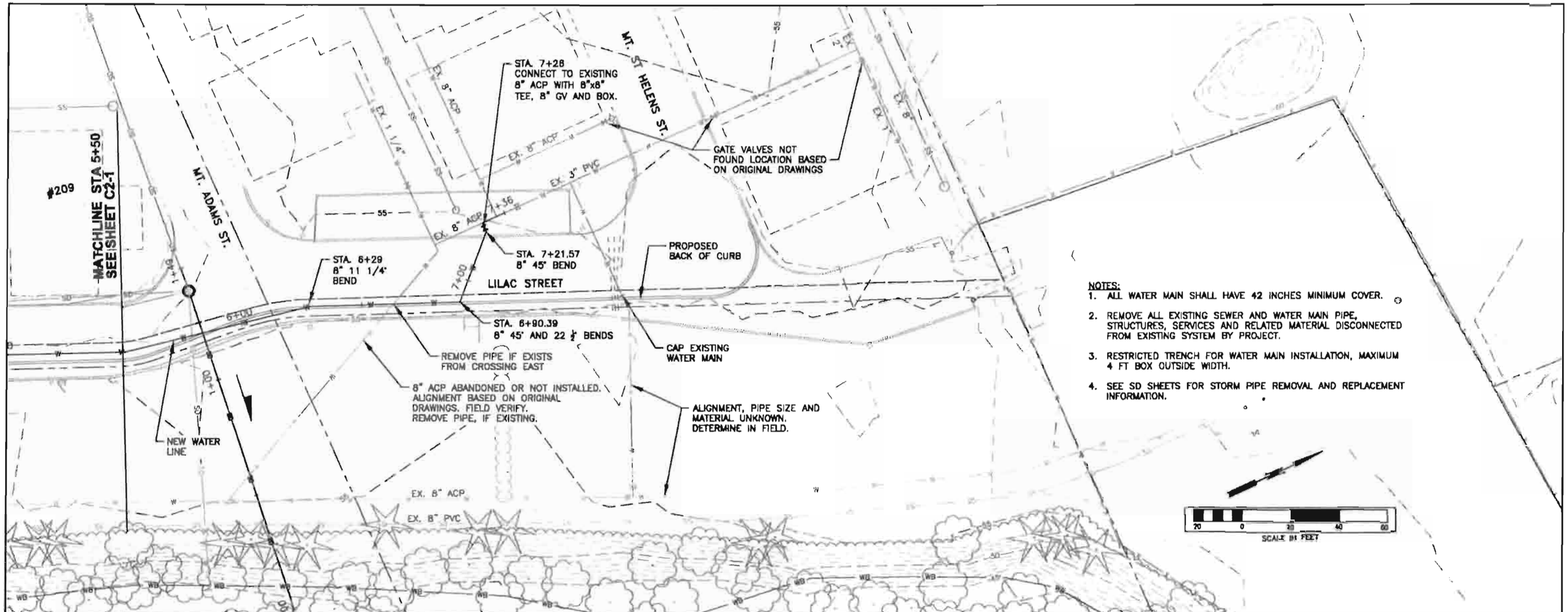
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

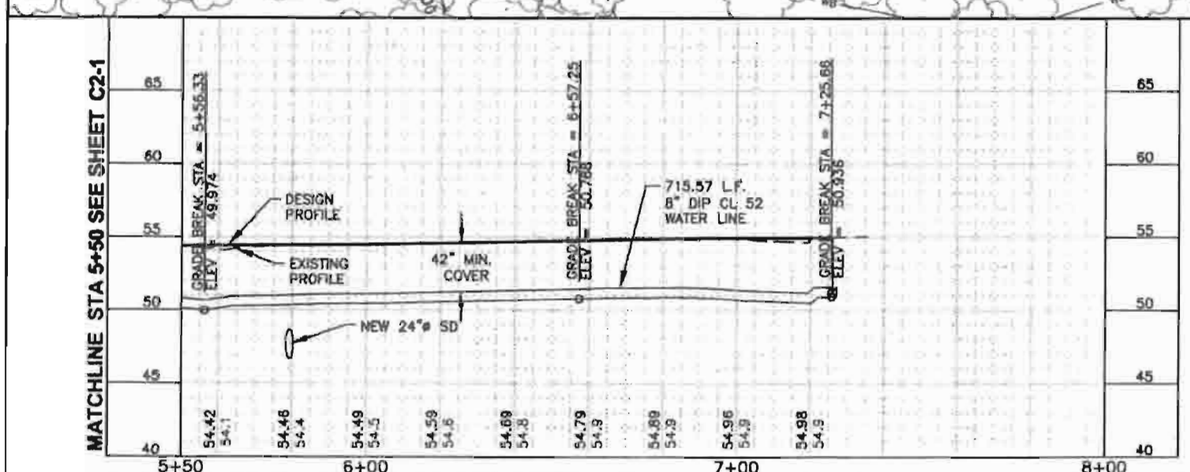
LILAC STREET WATER AND SEWER (1)

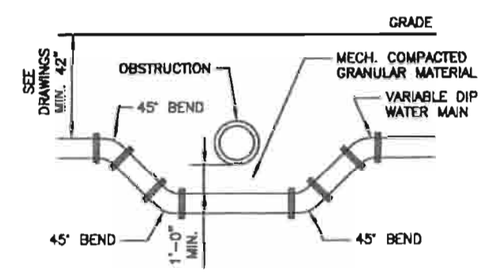
SHEET C2-1 OF 107 SHEETS

\\dnrp.kingcounty.lcl\wtrks\CP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_UMR\DWG SETBACK\RED-SB_C2 UPP.dwg, C2-1, 3/29/2013 1:38:27 PM, kitkamura, 1:2



NOTES:
1. ALL WATER MAIN SHALL HAVE 42 INCHES MINIMUM COVER.
2. REMOVE ALL EXISTING SEWER AND WATER MAIN PIPE, STRUCTURES, SERVICES AND RELATED MATERIAL DISCONNECTED FROM EXISTING SYSTEM BY PROJECT.
3. RESTRICTED TRENCH FOR WATER MAIN INSTALLATION, MAXIMUM 4 FT BOX OUTSIDE WIDTH.
4. SEE SD SHEETS FOR STORM PIPE REMOVAL AND REPLACEMENT INFORMATION.





WATER MAIN OFFSET DETAIL (A / C2-1)

NOTE:
1. RESTRAIN JOINTS OF EACH BEND. MEET REQUIREMENTS OF SPECIFICATIONS.
2. GRANULAR MATERIAL MEETING THE SPECIFIED REQUIREMENTS FOR FLEXIBLE PIPE EMBEDMENT REQUIRED BETWEEN WATER MAIN AND OBSTRUCTION.

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

4-3-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

LILAC STREET WATER AND SEWER (2)

SHEET C2-2 OF 107 SHEETS

\\dnrp.kingcounty.lcl\wrlcad\CIP\Shared\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_UW\DWG SETBACK\823-58_C2 UPP.dwg, C2-2, 3/28/2013 4:15:37 PM, kitamura, 1:2

ACCESS ROAD AND LEVEE COORDINATE GEOMETRY

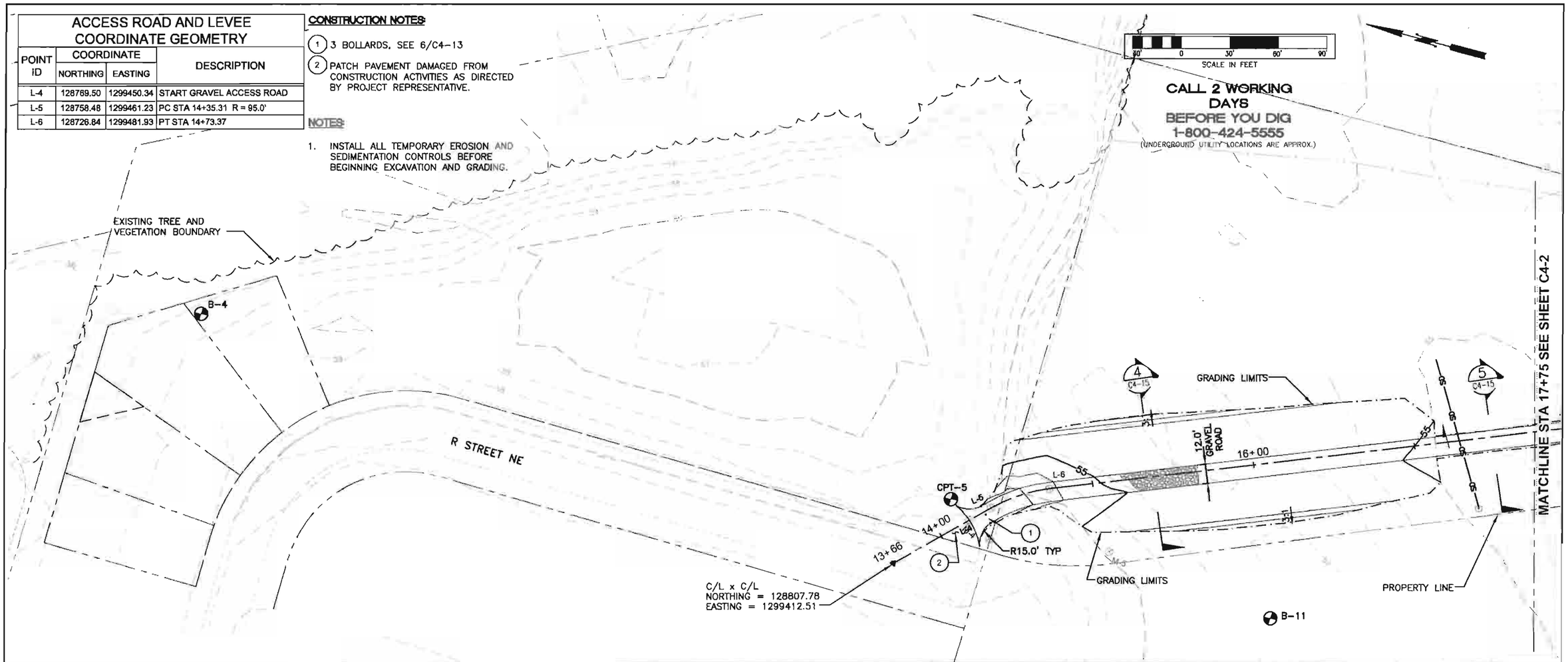
POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
L-4	128769.50	1299450.34	START GRAVEL ACCESS ROAD
L-5	128758.48	1299461.23	PC STA 14+35.31 R = 95.0'
L-6	128726.84	1299481.93	PT STA 14+73.37

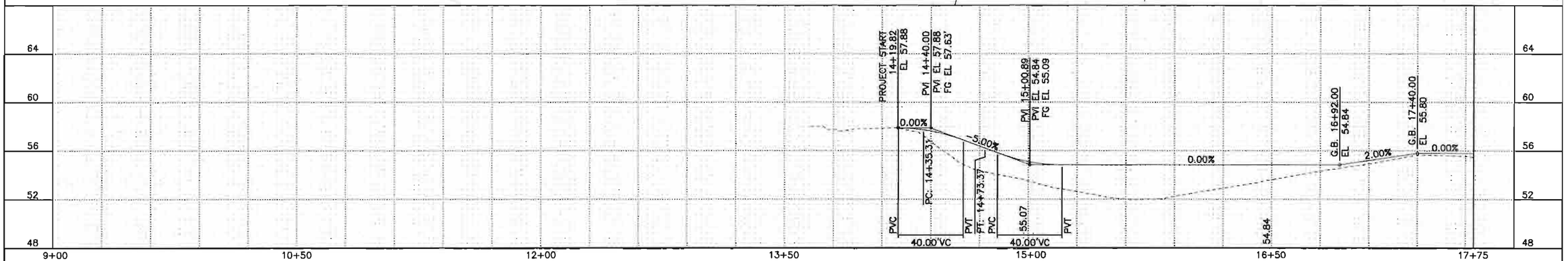
CONSTRUCTION NOTES:

1. 3 BOLLARDS, SEE 6/C4-13
2. PATCH PAVEMENT DAMAGED FROM CONSTRUCTION ACTIVITIES AS DIRECTED BY PROJECT REPRESENTATIVE.

NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.





NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, PE	3/2013
REVIEWED:		
CAD DESIGN:	E. NORDHOLM, R. MORRIS	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

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MARK HOPKINSON STATE OF WASHINGTON 27917 REGISTERED PROFESSIONAL ENGINEER 4-4-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

GRAVEL ACCESS ROAD
STA 14+19 TO STA 17+75

ACCESS ROAD AND LEVEE COORDINATE GEOMETRY

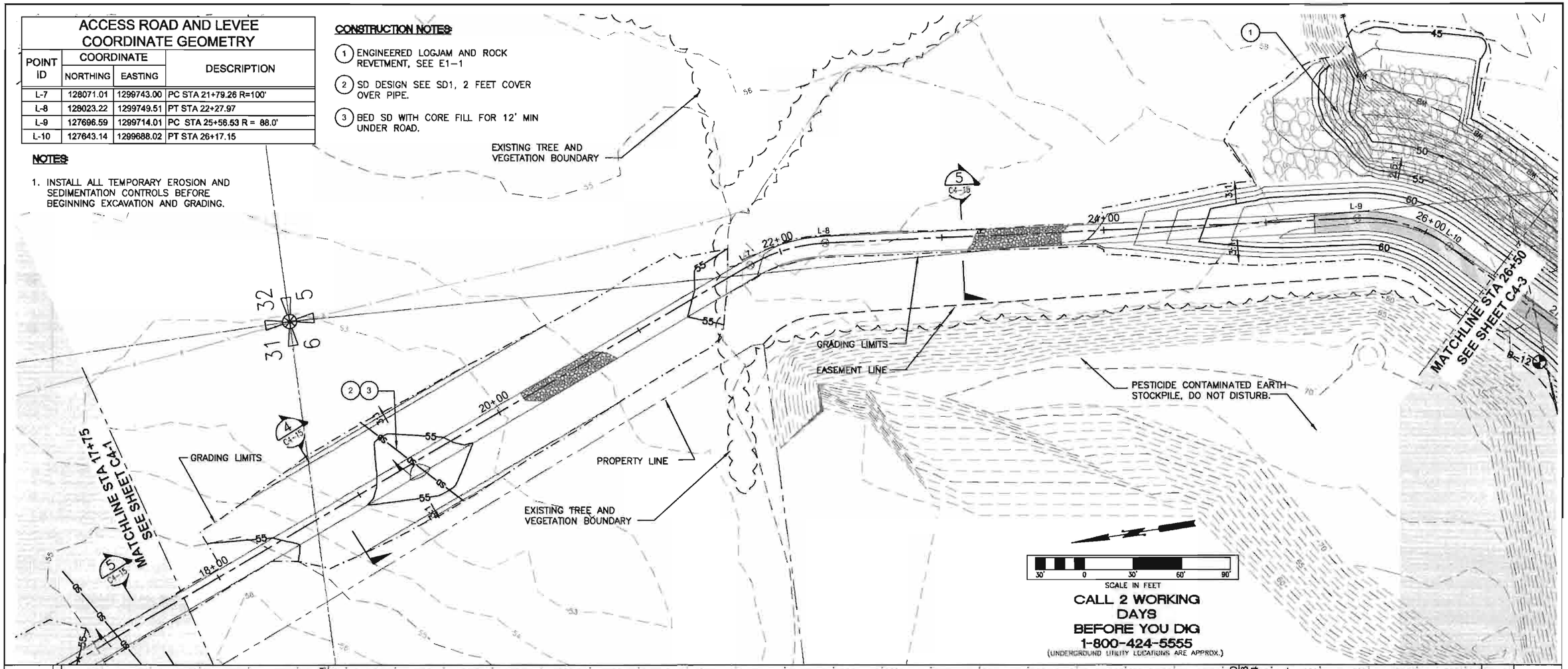
POINT ID	COORDINATE		DESCRIPTION
	NORTHING	EASTING	
L-7	128071.01	1299743.00	PC STA 21+79.26 R=100'
L-8	128023.22	1299749.51	PT STA 22+27.97
L-9	127696.59	1299714.01	PC STA 25+56.53 R = 88.0'
L-10	127643.14	1299688.02	PT STA 26+17.15

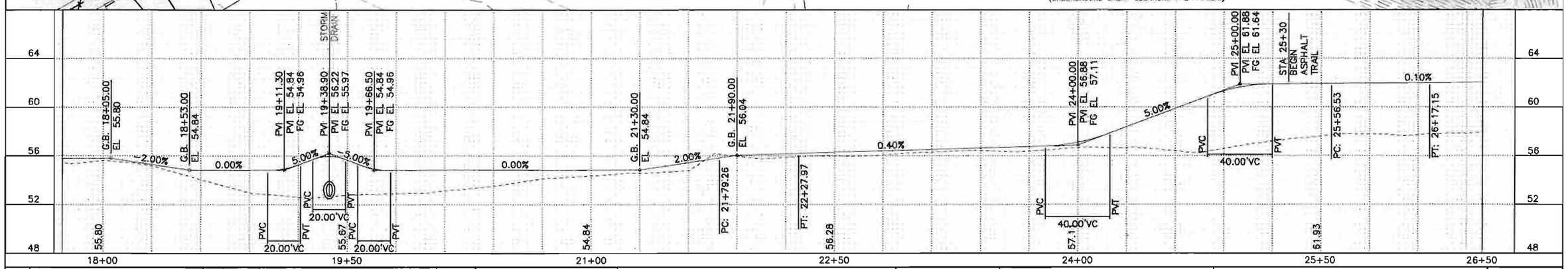
NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.

CONSTRUCTION NOTES:

1. ENGINEERED LOGJAM AND ROCK REVETMENT, SEE E1-1
2. SD DESIGN SEE SD1, 2 FEET COVER OVER PIPE.
3. BED SD WITH CORE FILL FOR 12' MIN UNDER ROAD.





NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, PE	3/2013
REVIEWED:		
CAD DESIGN:	E. NORDHOLM, R. MORRIS	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

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MARK HOPKINSON STATE OF WASHINGTON 22487 PROFESSIONAL ENGINEER 4-4-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

GRAVEL ACCESS ROAD AND PROPOSED LEVEE STA 17+75 TO STA 26+50

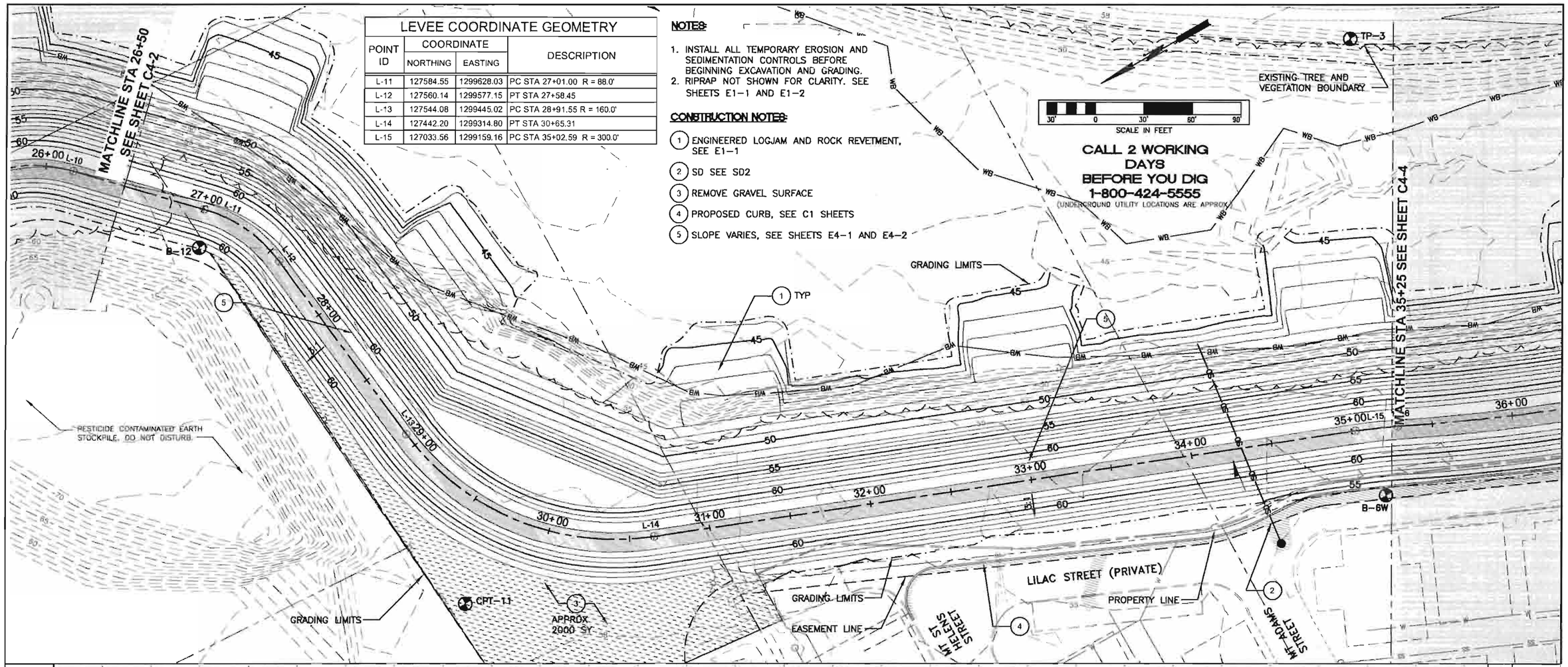
LEVEE COORDINATE GEOMETRY			
POINT ID	COORDINATE		DESCRIPTION
	NORTHING	EASTING	
L-11	127584.55	1299628.03	PC STA 27+01.00 R = 88.0'
L-12	127560.14	1299577.15	PT STA 27+58.45
L-13	127544.08	1299445.02	PC STA 28+91.55 R = 160.0'
L-14	127442.20	1299314.80	PT STA 30+65.31
L-15	127033.56	1299159.16	PC STA 35+02.59 R = 300.0'

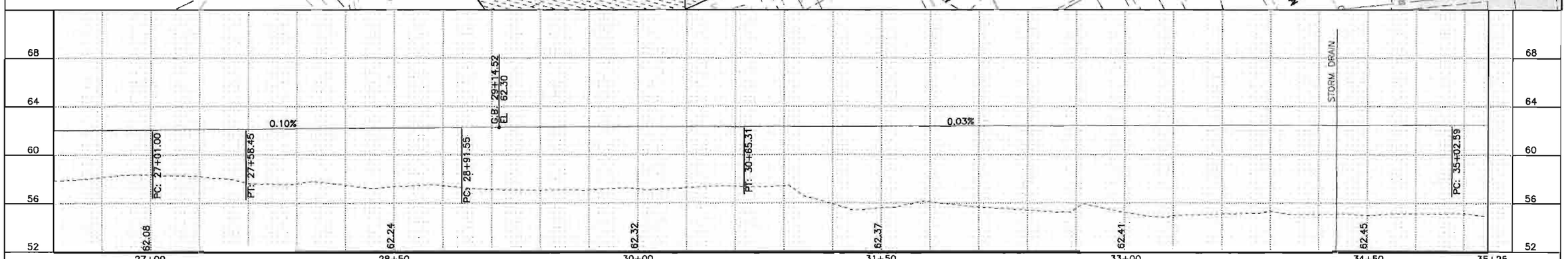
NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. RIPRAP NOT SHOWN FOR CLARITY. SEE SHEETS E1-1 AND E1-2

CONSTRUCTION NOTES:

1. ENGINEERED LOGJAM AND ROCK REVETMENT, SEE E1-1
2. SD SEE SD2
3. REMOVE GRAVEL SURFACE
4. PROPOSED CURB, SEE C1 SHEETS
5. SLOPE VARIES, SEE SHEETS E4-1 AND E4-2





NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED: _____

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED: _____

CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

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MARK HOPKINSON STATE OF WASHINGTON 23612 REGISTERED PROFESSIONAL ENGINEER 1-4-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PROPOSED LEVEE
STA 26+50 TO STA 35+25

SHEET **C4-3** OF **107** SHEETS

LEVEE COORDINATE GEOMETRY

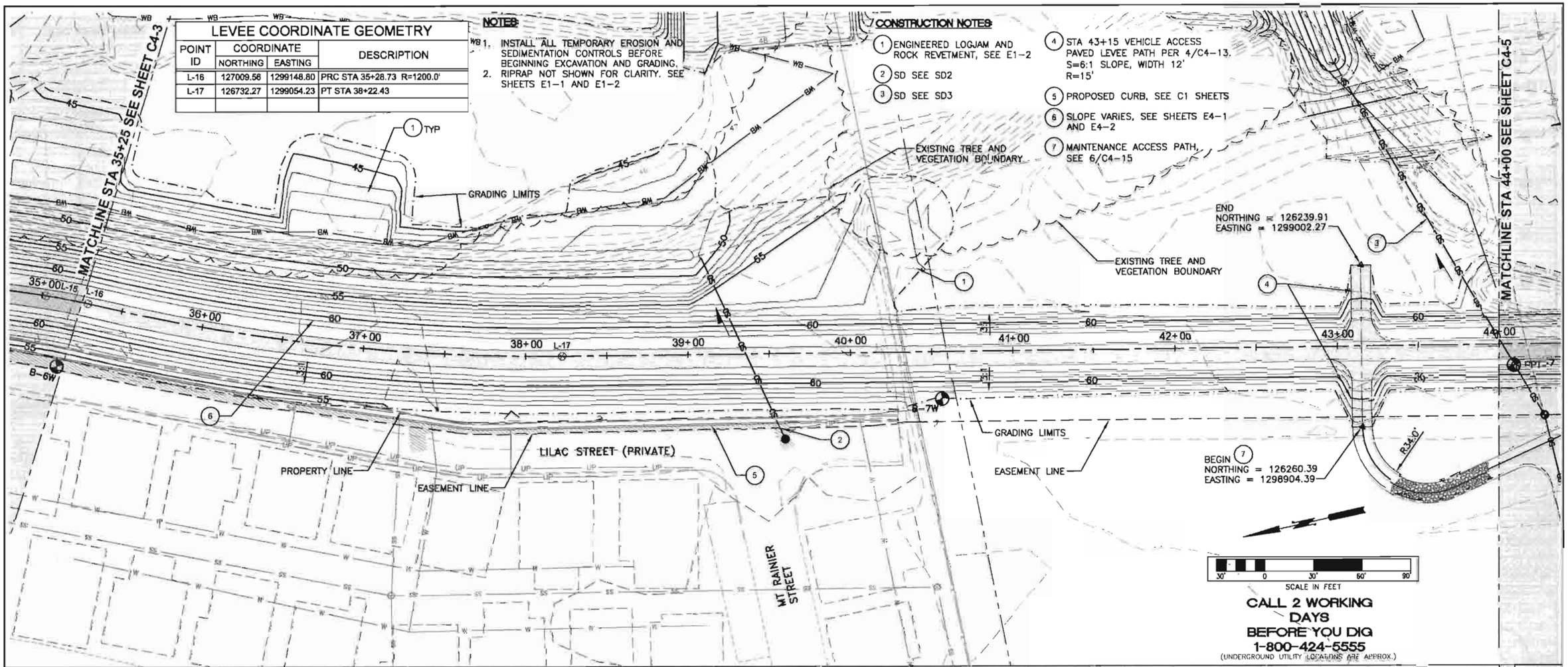
POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
L-16	127009.56	1299148.80	PRC STA 35+28.73 R=1200.0'
L-17	126732.27	1299054.23	PT STA 38+22.43

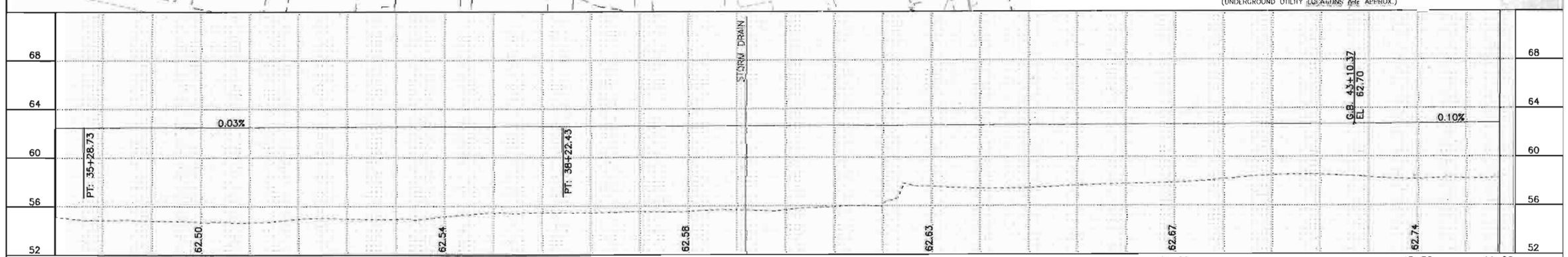
NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. RIPRAP NOT SHOWN FOR CLARITY. SEE SHEETS E1-1 AND E1-2

CONSTRUCTION NOTES:

1. ENGINEERED LOGJAM AND ROCK REVETMENT, SEE E1-2
2. SD SEE SD2
3. SD SEE SD3
4. STA 43+15 VEHICLE ACCESS PAVED LEVEE PATH PER 4/C4-13. S=6:1 SLOPE, WIDTH 12' R=15'
5. PROPOSED CURB, SEE C1 SHEETS
6. SLOPE VARIES, SEE SHEETS E4-1 AND E4-2
7. MAINTENANCE ACCESS PATH, SEE 6/C4-15





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APPROVED: _____

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED: _____

CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

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River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PROPOSED LEVEE
STA 35+25 TO STA 44+00

SHEET **C4-4** OF **107** SHEETS

LEVEE COORDINATE GEOMETRY

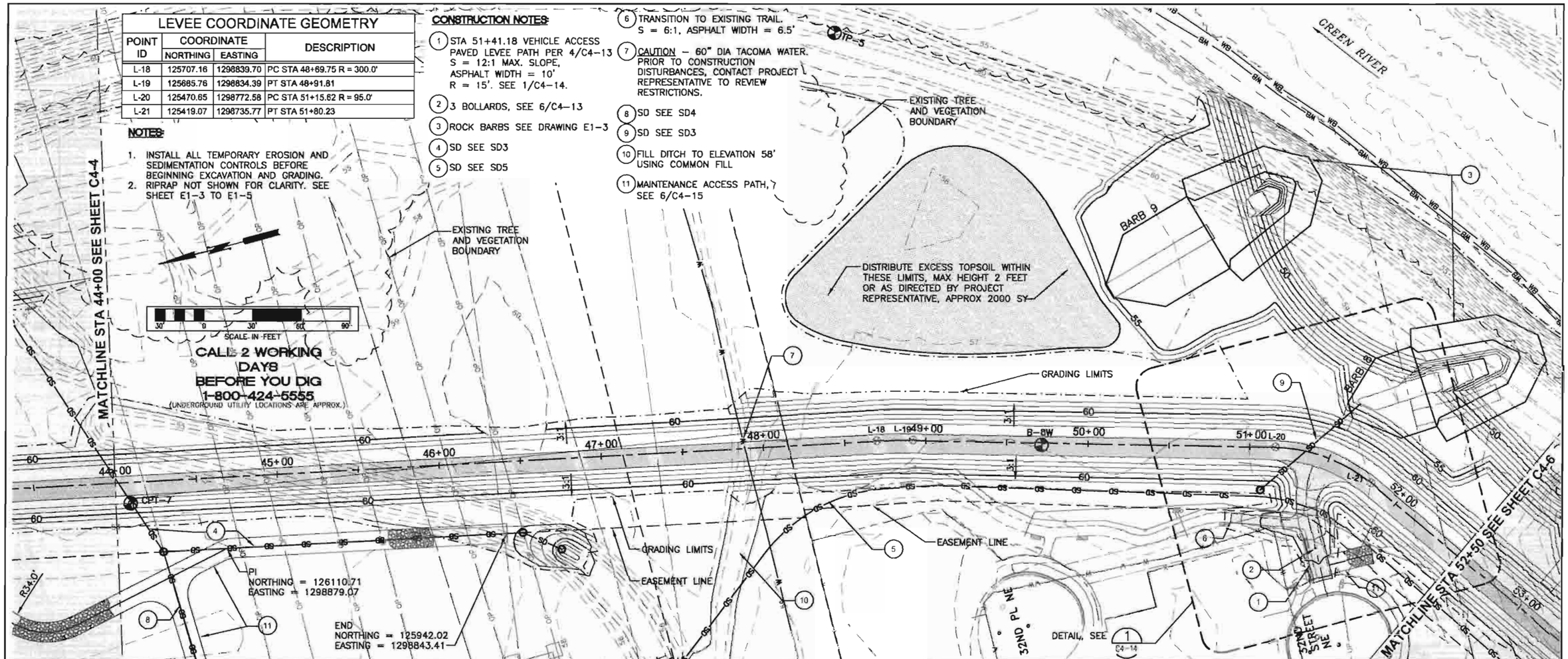
POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
L-18	125707.16	1298839.70	PC STA 48+69.75 R = 300.0'
L-19	125685.76	1298834.39	PT STA 48+91.81
L-20	125470.65	1298772.58	PC STA 51+15.62 R = 95.0'
L-21	125419.07	1298735.77	PT STA 51+80.23

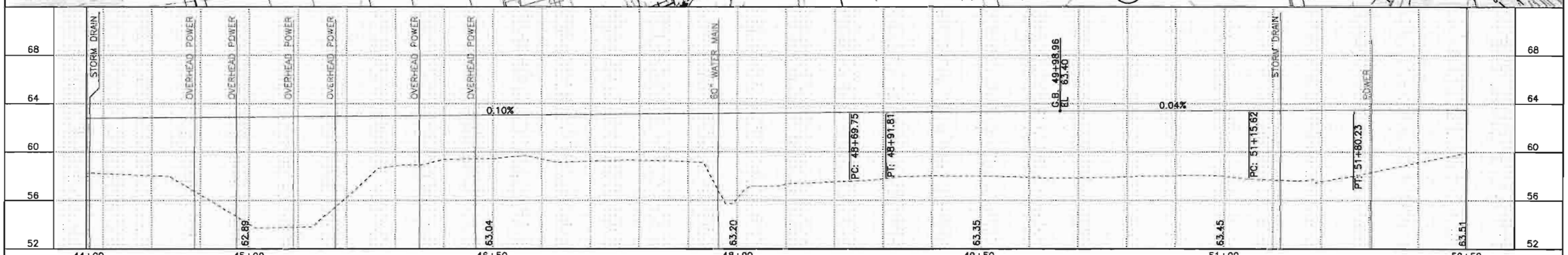
NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. RIPRAP NOT SHOWN FOR CLARITY. SEE SHEET E1-3 TO E1-5

CONSTRUCTION NOTES:

1. STA 51+41.18 VEHICLE ACCESS PAVED LEVEE PATH PER 4/C4-13 S = 12:1 MAX. SLOPE, ASPHALT WIDTH = 10' R = 15'. SEE 1/C4-14.
2. 3 BOLLARDS, SEE 6/C4-13
3. ROCK BARBS SEE DRAWING E1-3
4. SD SEE SD3
5. SD SEE SD5
6. TRANSITION TO EXISTING TRAIL. S = 6:1, ASPHALT WIDTH = 6.5'
7. CAUTION – 60" DIA TACOMA WATER. PRIOR TO CONSTRUCTION DISTURBANCES, CONTACT PROJECT REPRESENTATIVE TO REVIEW RESTRICTIONS.
8. SD SEE SD4
9. SD SEE SD3
10. FILL DITCH TO ELEVATION 58' USING COMMON FILL
11. MAINTENANCE ACCESS PATH, SEE 6/C4-15





NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

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MARK HOPKINSON STATE OF WASHINGTON 27802 REGISTERED PROFESSIONAL ENGINEER 4-4-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PROPOSED LEVEE
STA 44+00 TO STA 52+50

SHEET **C4-5** OF **107** SHEETS

CONSTRUCTION NOTES:

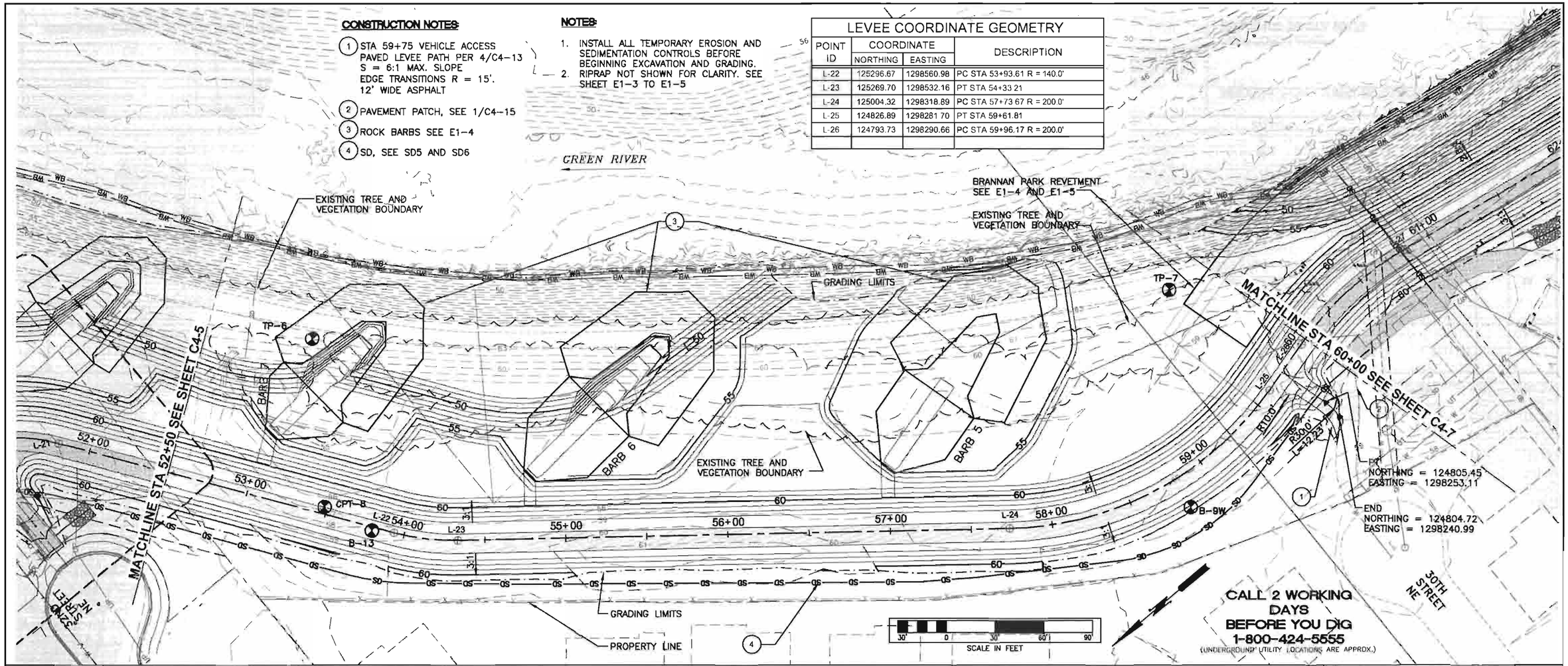
1. STA 59+75 VEHICLE ACCESS PAVED LEVEE PATH PER 4/C4-13 S = 6:1 MAX. SLOPE EDGE TRANSITIONS R = 15'. 12' WIDE ASPHALT
2. PAVEMENT PATCH, SEE 1/C4-15
3. ROCK BARBS SEE E1-4
4. SD, SEE SD5 AND SD6

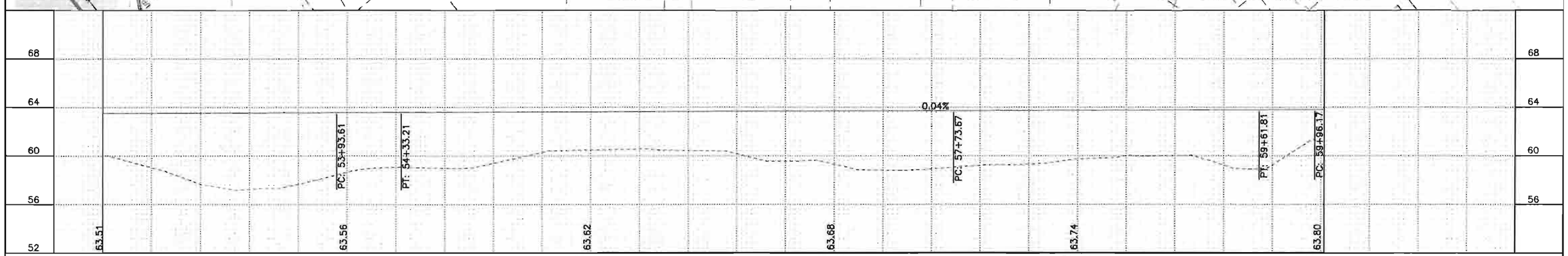
NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. RIPRAP NOT SHOWN FOR CLARITY. SEE SHEET E1-3 TO E1-5

LEVEE COORDINATE GEOMETRY

POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
L-22	125296.67	1298560.98	PC STA 53+93.61 R = 140.0'
L-23	125269.70	1298532.16	PT STA 54+33 21
L-24	125004.32	1298318.89	PC STA 57+73 67 R = 200.0'
L-25	124826.89	1298281 70	PT STA 59+61.81
L-26	124793.73	1298290.66	PC STA 59+96.17 R = 200.0'





NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:
PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013
DESIGNED: MARK HOPKINSON, PE 3/2013
REVIEWED:
CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

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MARK HOPKINSON STATE OF WASHINGTON PROFESSIONAL ENGINEER 4-4-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PROPOSED LEVEE
STA 52+50 TO STA 60+00

SHEET **C4-6** OF **107** SHEETS

NOTES:

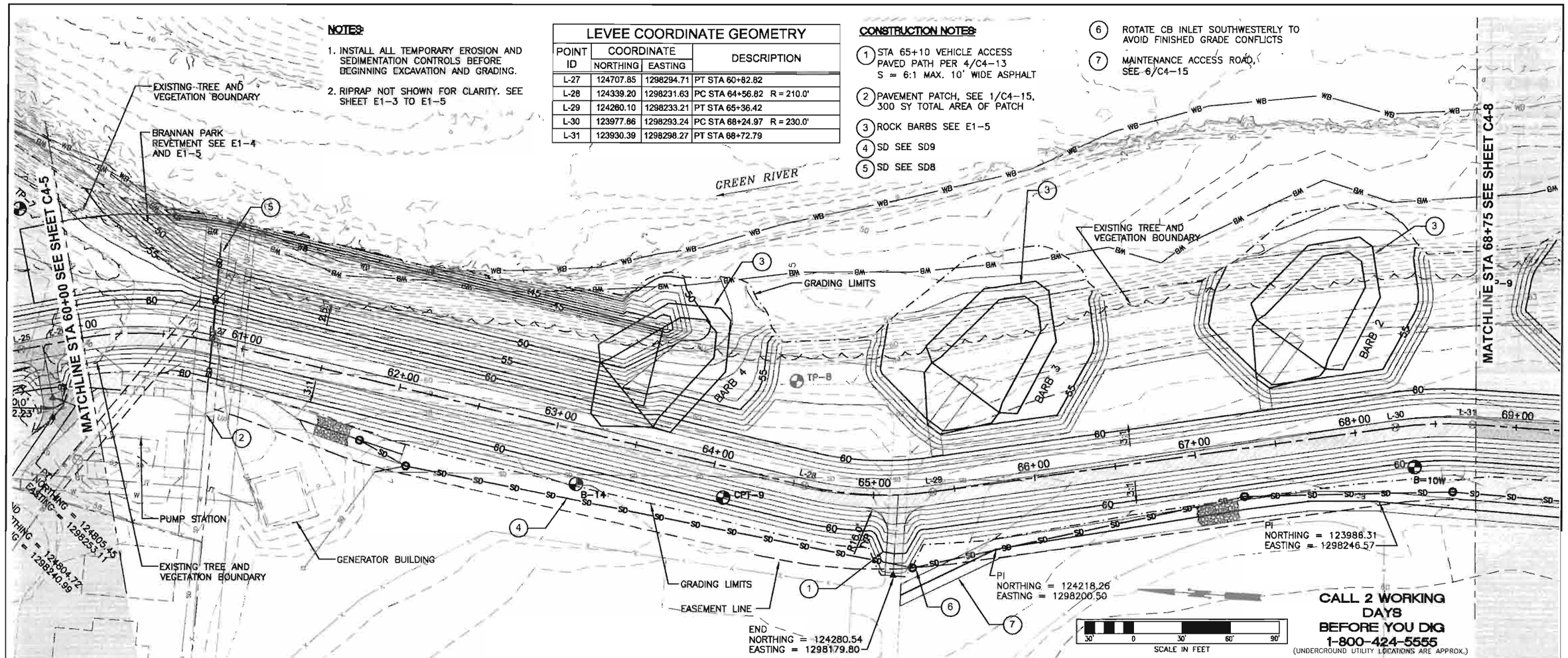
1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. RIPRAP NOT SHOWN FOR CLARITY. SEE SHEET E1-3 TO E1-5

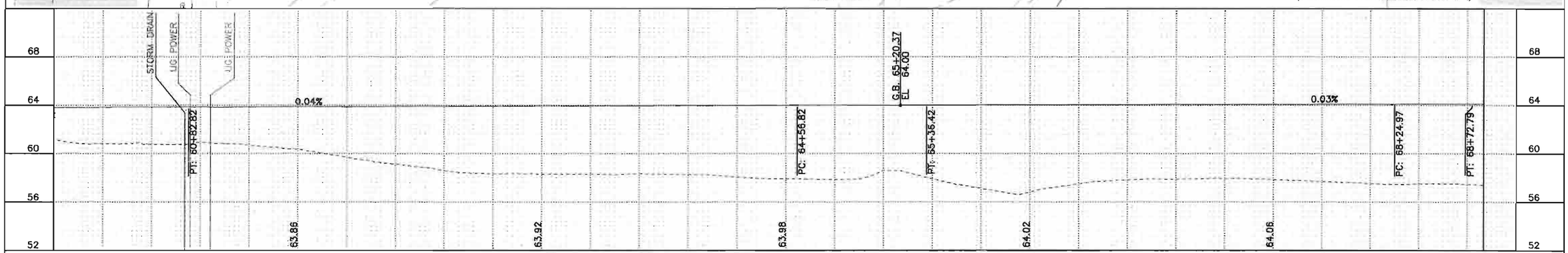
LEVEE COORDINATE GEOMETRY

POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
L-27	124707.85	1298294.71	PT STA 60+82.82
L-28	124339.20	1298231.63	PC STA 64+56.82 R = 210.0'
L-29	124260.10	1298233.21	PT STA 65+36.42
L-30	123977.86	1298293.24	PC STA 68+24.97 R = 230.0'
L-31	123930.39	1298298.27	PT STA 68+72.79

CONSTRUCTION NOTES:

1. STA 65+10 VEHICLE ACCESS PAVED PATH PER 4/C4-13 S = 6:1 MAX. 10' WIDE ASPHALT
2. PAVEMENT PATCH, SEE 1/C4-15, 300 SY TOTAL AREA OF PATCH
3. ROCK BARBS SEE E1-5
4. SD SEE SD9
5. SD SEE SD8
6. ROTATE CB INLET SOUTHWESTERLY TO AVOID FINISHED GRADE CONFLICTS
7. MAINTENANCE ACCESS ROAD, SEE 6/C4-15





NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:
PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013
DESIGNED: MARK HOPKINSON, PE 3/2013
REVIEWED:
CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

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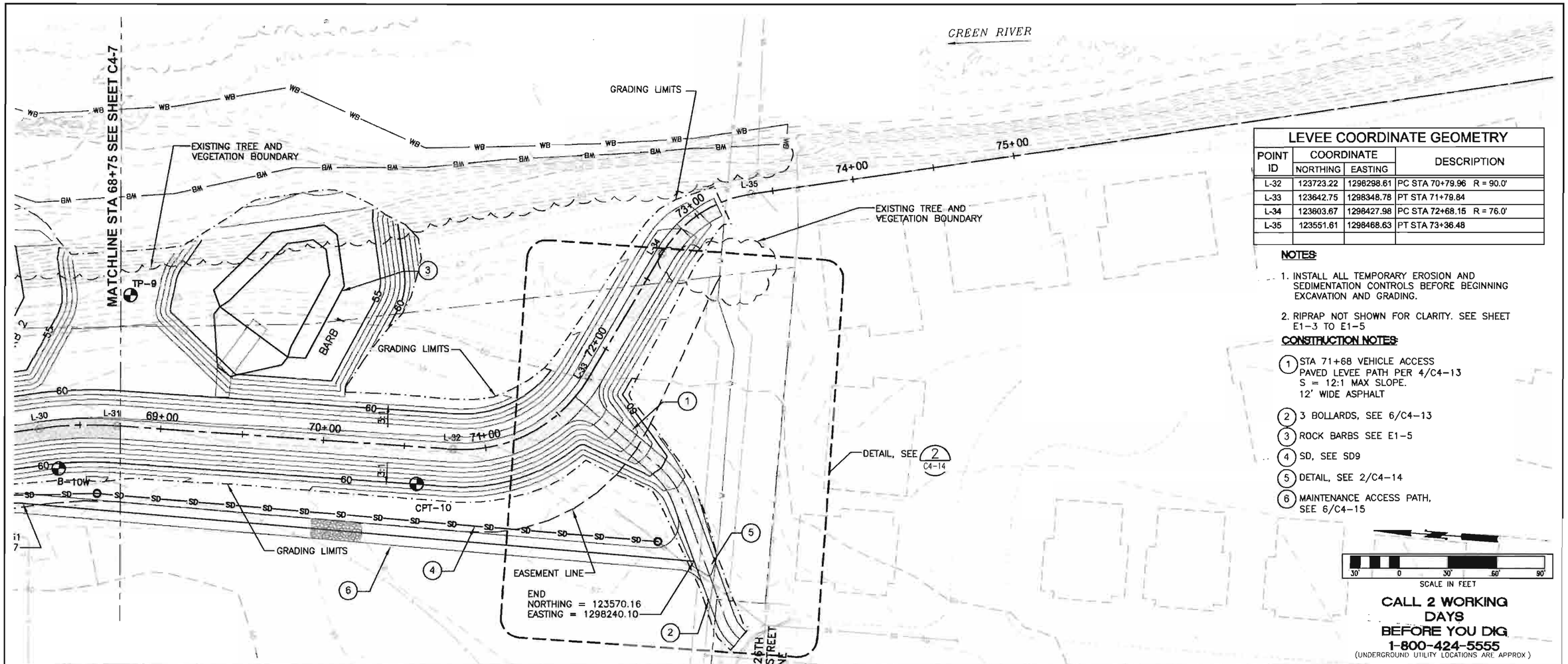
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PROPOSED LEVEE
STA 60+00 TO STA 68+75

SHEET **C4-7** OF **107** SHEETS



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

LEVEE COORDINATE GEOMETRY

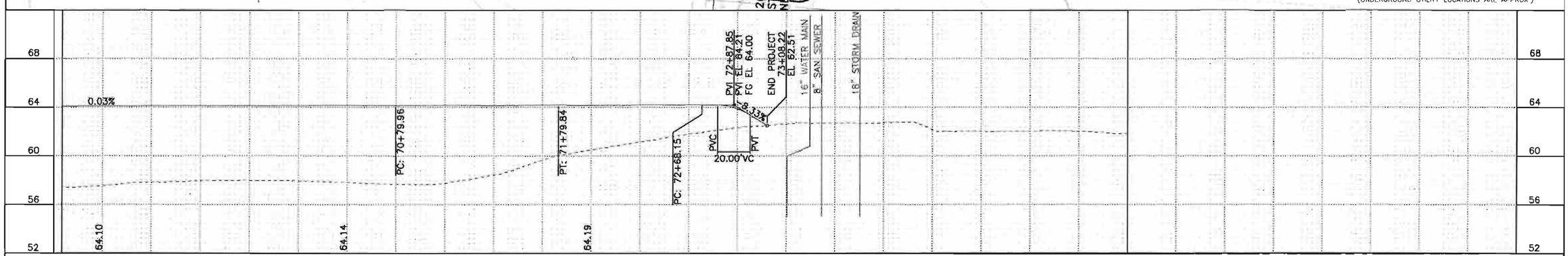
POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
L-32	123723.22	1298298.61	PC STA 70+79.96 R = 90.0'
L-33	123642.75	1298348.78	PT STA 71+79.84
L-34	123603.67	1298427.98	PC STA 72+68.15 R = 76.0'
L-35	123551.61	1298468.63	PT STA 73+36.48

NOTES:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.
2. RIPRAP NOT SHOWN FOR CLARITY. SEE SHEET E1-3 TO E1-5

CONSTRUCTION NOTES:

1. STA 71+68 VEHICLE ACCESS PAVED LEVEE PATH PER 4/C4-13 S = 12:1 MAX SLOPE. 12' WIDE ASPHALT
2. 3 BOLLARDS, SEE 6/C4-13
3. ROCK BARBS SEE E1-5
4. SD, SEE SD9
5. DETAIL, SEE 2/C4-14
6. MAINTENANCE ACCESS PATH, SEE 6/C4-15



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APPROVED:
PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013
DESIGNED: MARK HOPKINSON, PE 3/2013
REVIEWED:
CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --
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River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PROPOSED LEVEE
STA 68+75 TO STA 75+00

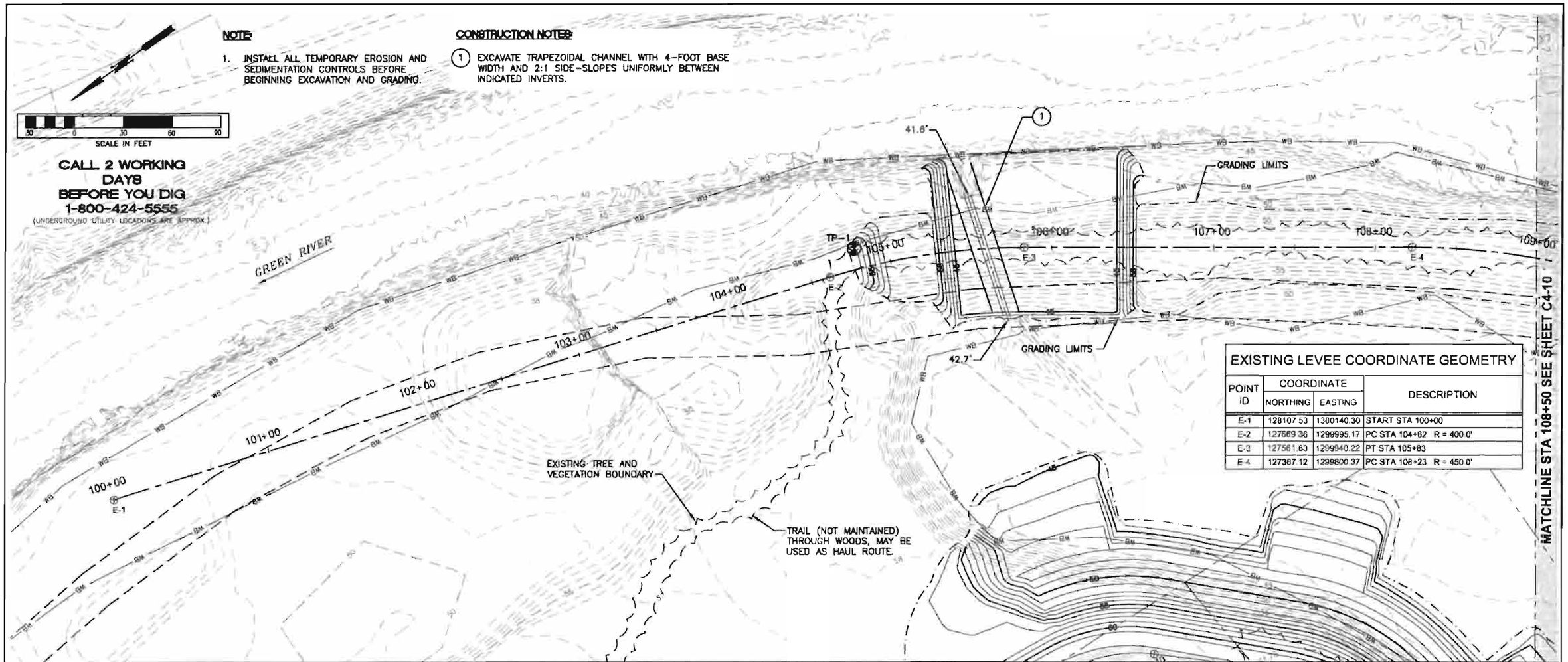
SHEET **C4-8** OF **107** SHEETS

NOTE:

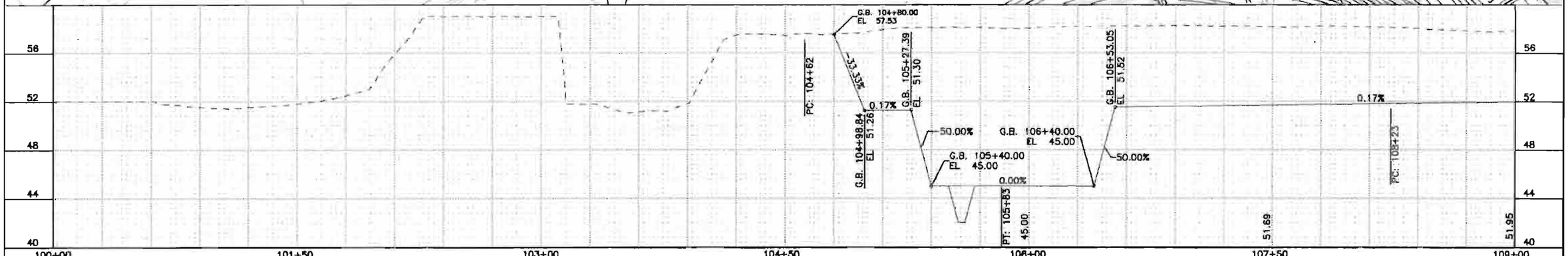
1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING.

CONSTRUCTION NOTES:

(1) EXCAVATE TRAPEZOIDAL CHANNEL WITH 4-FOOT BASE WIDTH AND 2:1 SIDE-SLOPES UNIFORMLY BETWEEN INDICATED INVERTS.



EXISTING LEVEE COORDINATE GEOMETRY			
POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
E-1	128107.53	1300140.30	START STA 100+00
E-2	127669.36	1299995.17	PC STA 104+62 R = 400.0'
E-3	127561.83	1299940.22	PT STA 105+83
E-4	127367.12	1299800.37	PC STA 108+23 R = 450.0'



NUM.	REVISION	BY	DATE

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APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	E. NORDHOLM, R. MORRIS	3/2013

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Christie True, Director

REDDINGTON LEVEE SETBACK

EXISTING LEVEE
STA 100+00 TO STA 109+00

SHEET C4-9 OF 107 SHEETS

EXISTING LEVEE COORDINATE GEOMETRY

POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
E-6	127291.19	1299731.38	PT 109+25
E-6	127175.57	1299589.28	PC STA 111+01 R = 1050.0'

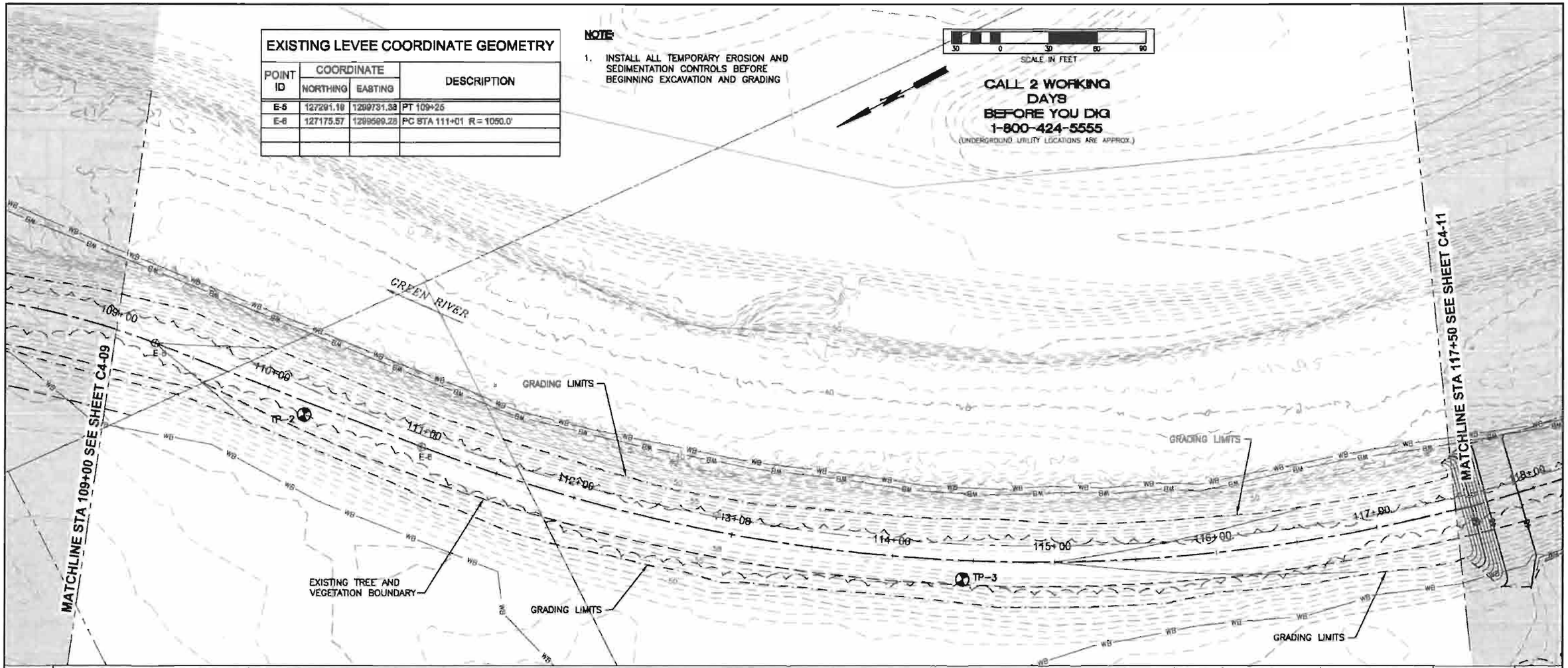
NOTE:

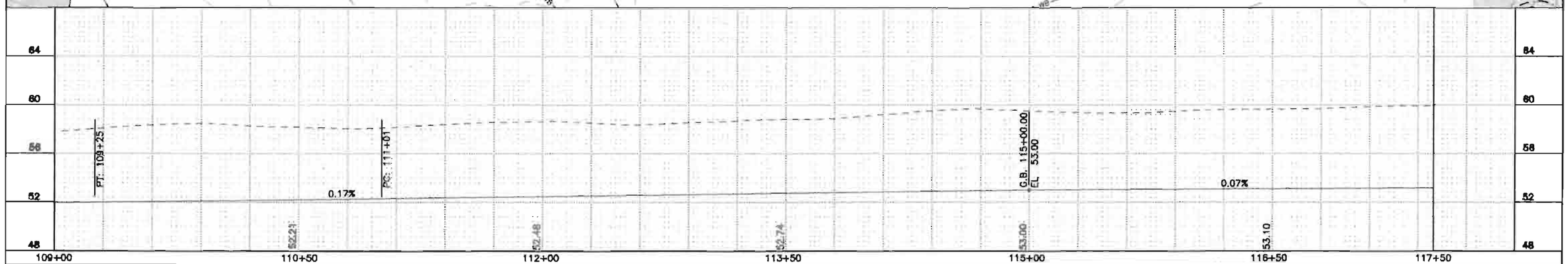
1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING

SCALE IN FEET (30 0 30 60 90)

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)





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NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, P.E. 3/2013

REVIEWED:

CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --

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CONTRACT No. C00817C13

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King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

EXISTING LEVEE
STA 109+00 TO STA 117+50

SHEET C4-10 OF 107 SHEETS

EXISTING LEVEE COORDINATE GEOMETRY

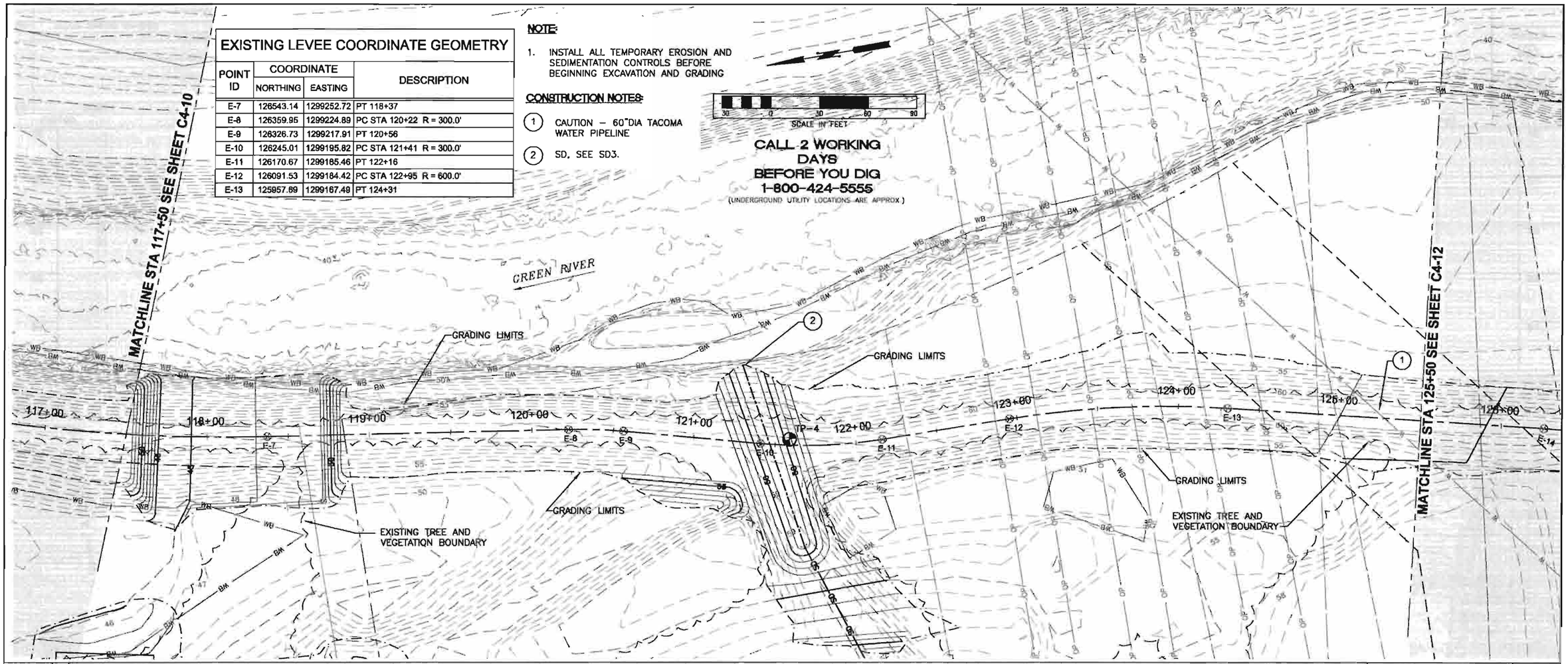
POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
E-7	126543.14	1299252.72	PT 118+37
E-8	126359.95	1299224.89	PC STA 120+22 R = 300.0'
E-9	126326.73	1299217.91	PT 120+56
E-10	126245.01	1299195.82	PC STA 121+41 R = 300.0'
E-11	126170.67	1299185.46	PT 122+16
E-12	126091.53	1299184.42	PC STA 122+95 R = 600.0'
E-13	125957.89	1299167.49	PT 124+31

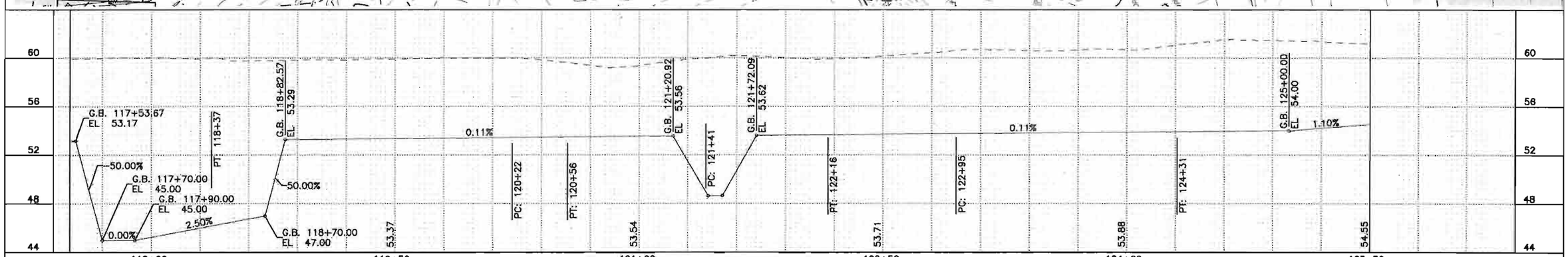
NOTE:

1. INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS BEFORE BEGINNING EXCAVATION AND GRADING

CONSTRUCTION NOTES:

1. CAUTION – 60"DIA TACOMA WATER PIPELINE
2. SD, SEE SD3.





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APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	E NORDHOLM, R. MORRIS	3/2013

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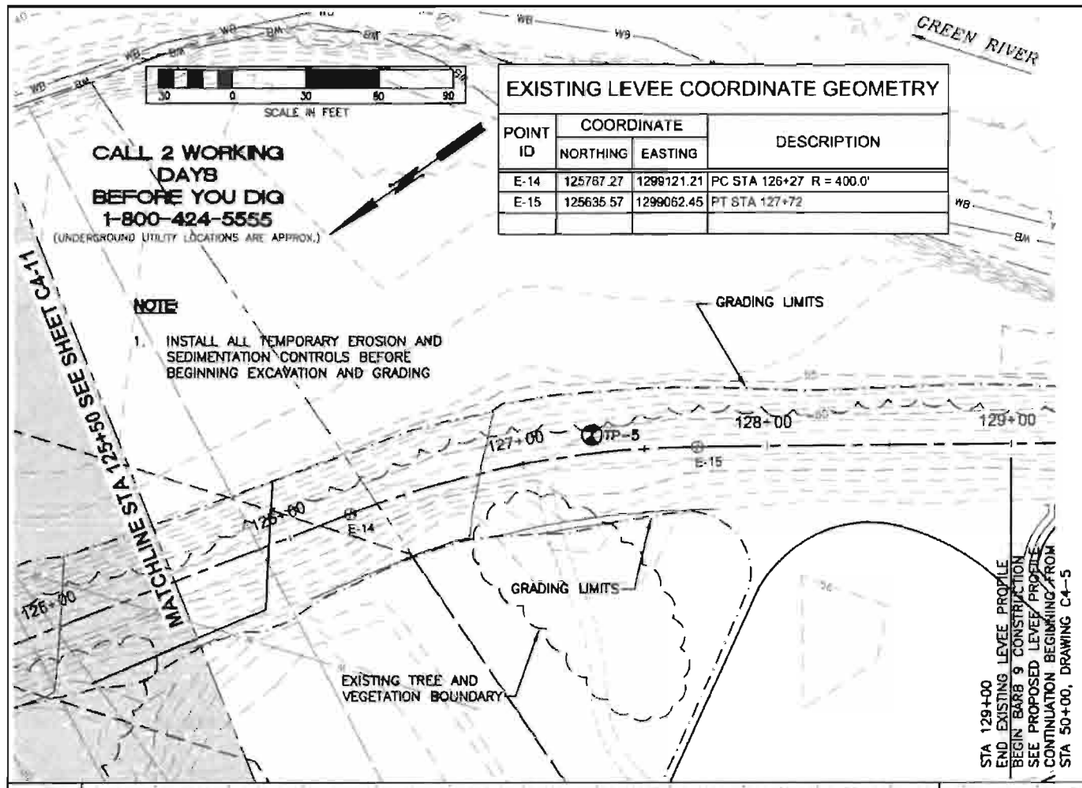
Christie True, Director

REDDINGTON LEVEE SETBACK

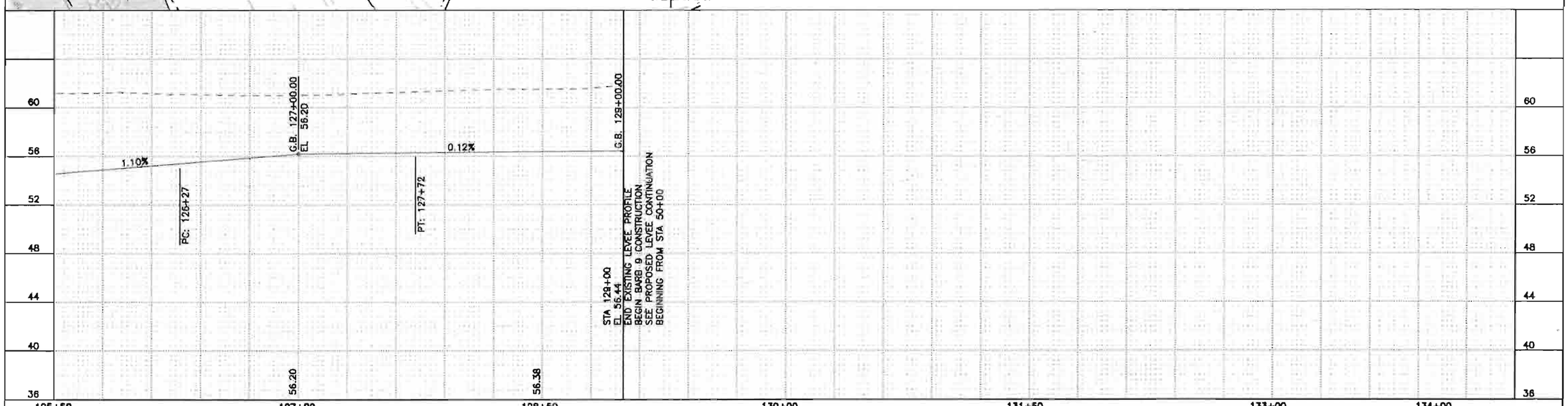
EXISTING LEVEE
STA 117+50 TO STA 125+50

SHEET **C4-11** OF **107** SHEETS



EXISTING LEVEE COORDINATE GEOMETRY

POINT ID	COORDINATE		DESCRIPTION
	NORTHING	EASTING	
E-14	125787.27	1299121.21	PC STA 126+27 R = 400.0'
E-15	125635.57	1299062.45	PT STA 127+72



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APPROVED: _____

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, P.E. 3/2013

REVIEWED: _____

CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

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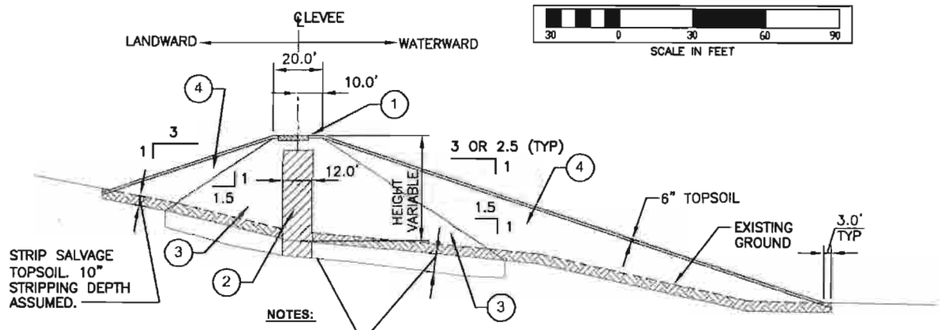
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

EXISTING LEVEE
STA 125+50 TO STA129+00

SHEET **C4-12** OF **107** SHEETS



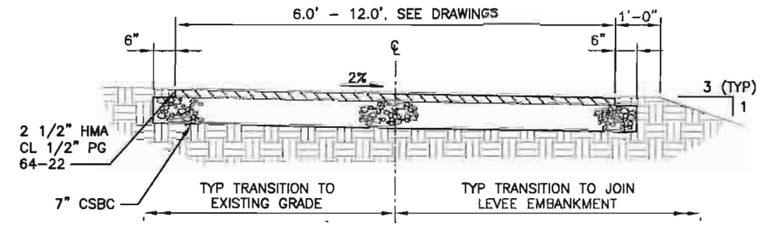
NOTES:

1. PAVED PATH, SEE DETAIL 2/–
2. CORE FILL
3. SELECT FILL
4. COMMON FILL

RIVERSIDE LEVEE SIDE SLOPE 3:1 STA 8+77 TO APPROX 27+50 SLOPE VARIES, SEE SHEETS E4–1 AND E4–2 STA 27+50 TO 39+00 SLOPE 3:1 STA 39+00 TO 73+00 SEE SECTIONS SHEET C5–1 TO C5–12

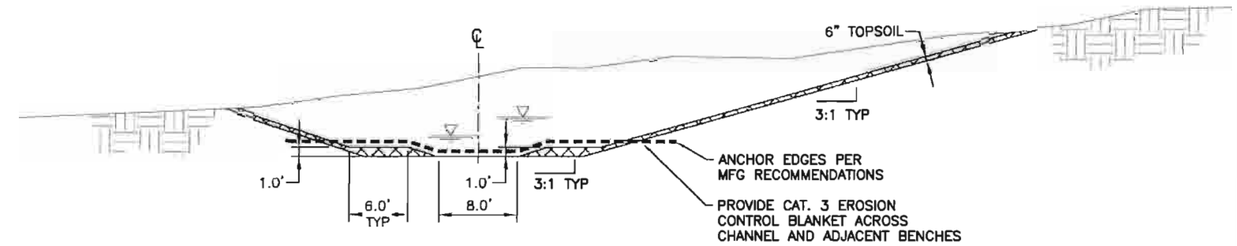
LEVEE TYPICAL SECTION (1 / C4–2)

SCALE: 1"=30'



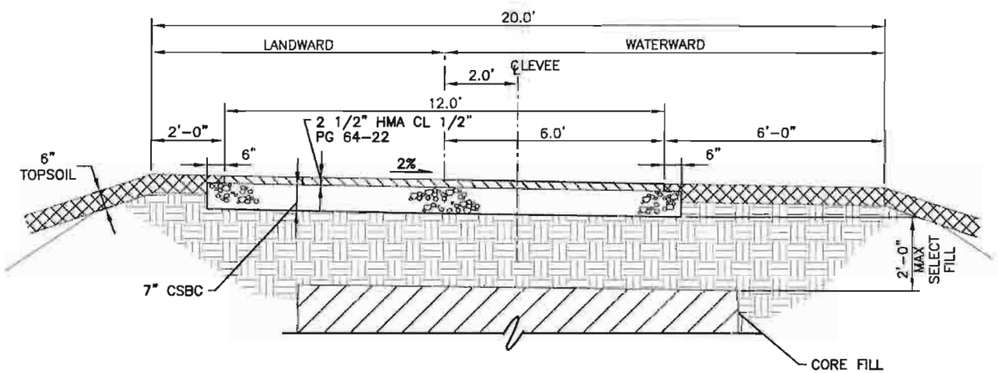
PAVED LEVEE ACCESS PATH SECTION (4 / VAR)

NOT TO SCALE



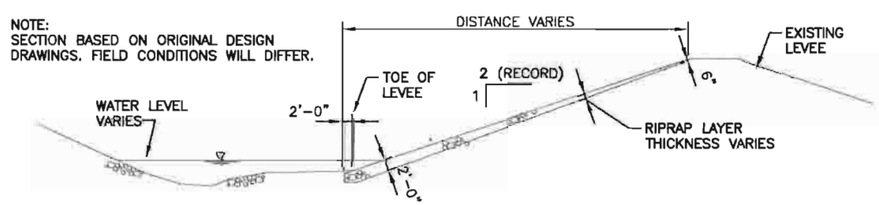
STORM WATER SWALE SECTION (5 / C4–16)

SCALE: NONE



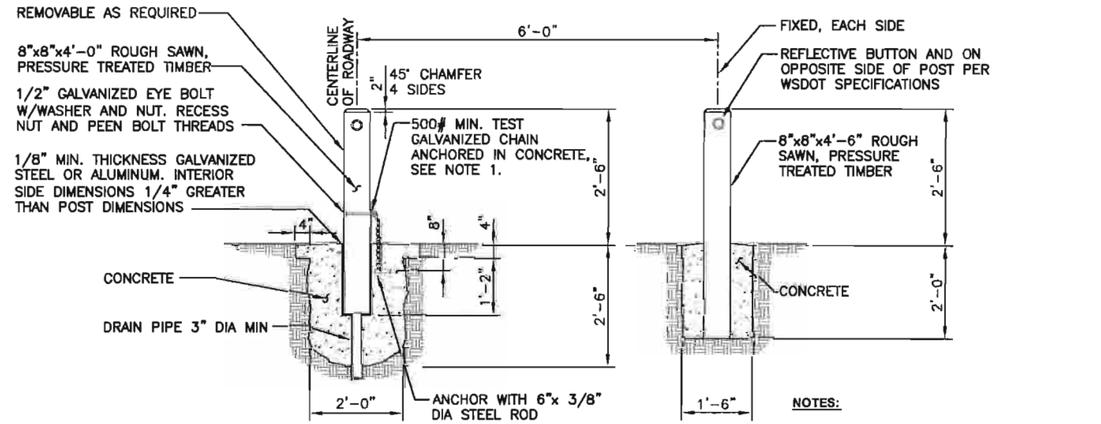
TOP OF LEVEE TRAIL ALIGNMENT AND PAVEMENT SECTION (2 / –)

NOT TO SCALE



EXISTING LEVEE RIPRAP SECTION (3 / VAR)

NOT TO SCALE



NOTES:

1. CHAIN LINK EYE SHALL BE GREATER THAN 3/8" DIA TO ACCEPT 3/8" DIA LOCK

BOLLARD DETAIL (6 / C4–1, C4–5, C4–8)

NOT TO SCALE

NUM.	REVISION	BY	DATE

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APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, PE	3/2013
REVIEWED:		
CAD DESIGN:	R. MORRIS	3/2013

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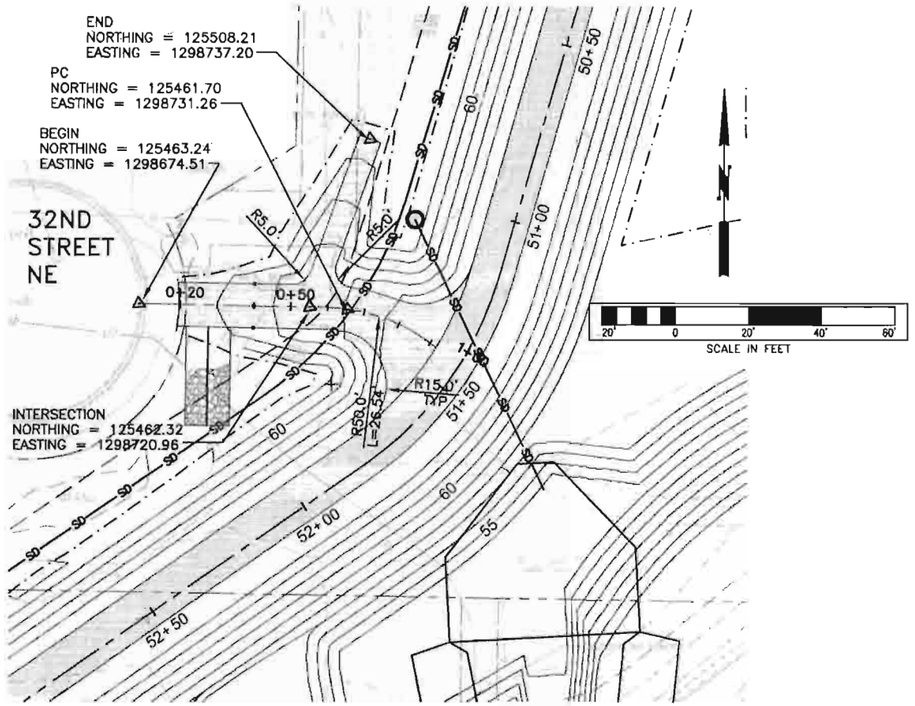
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

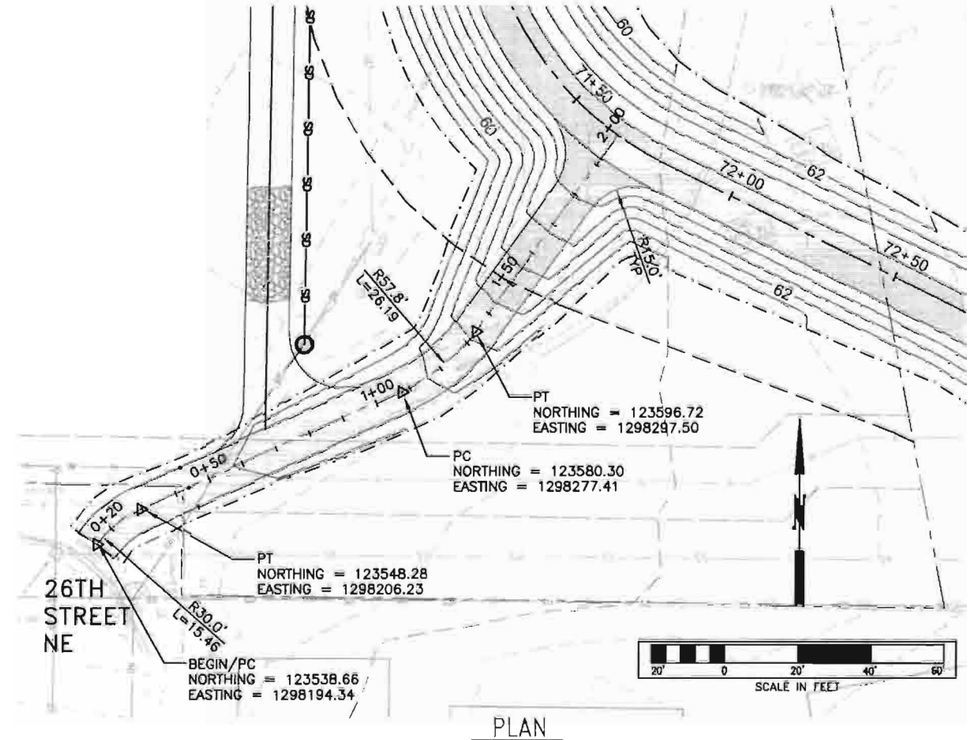
REDDINGTON LEVEE SETBACK

DETAILS AND SECTIONS - 1

SHEET **C4-13** OF **107** SHEETS

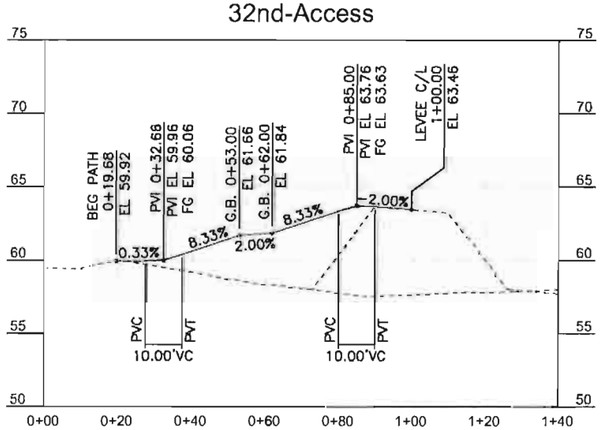


PLAN
SCALE: 1"=20'



PLAN
SCALE: 1"=20'

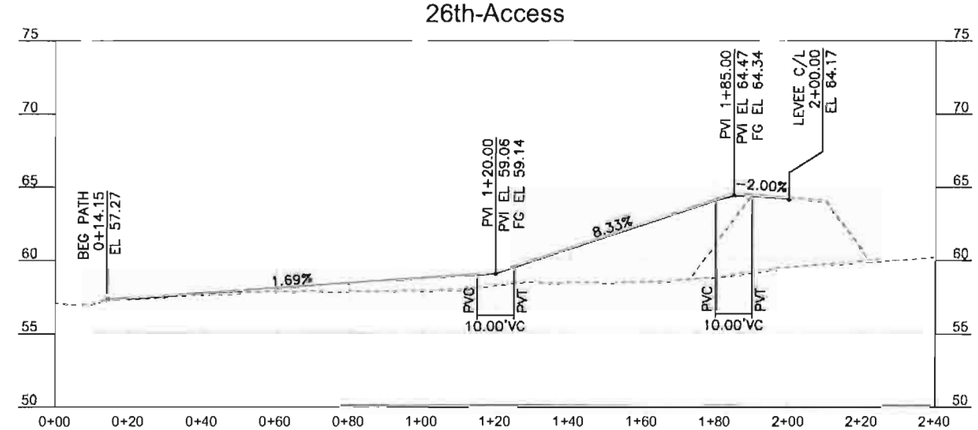
32nd-Access



PROFILE

DETAIL 1
SCALE: 1"=20'
C4-5

26th-Access



PROFILE

DETAIL 2
SCALE: 1"=20'
C4-8

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APPROVED:
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DESIGNED: MARK HOPKINSON, PE 3/2013
REVIEWED:
CAD DESIGN: R. MORRIS 3/2013

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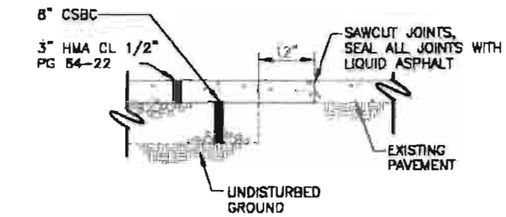
Christie True, Director

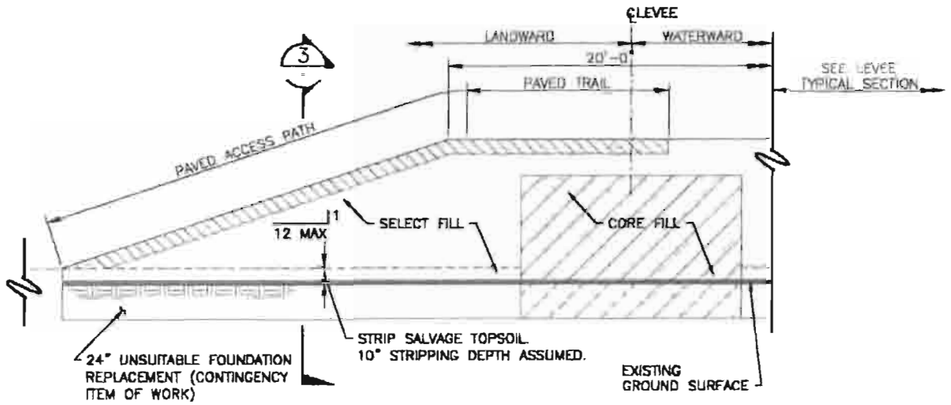
REDDINGTON LEVEE SETBACK

DETAILS AND SECTIONS - 2

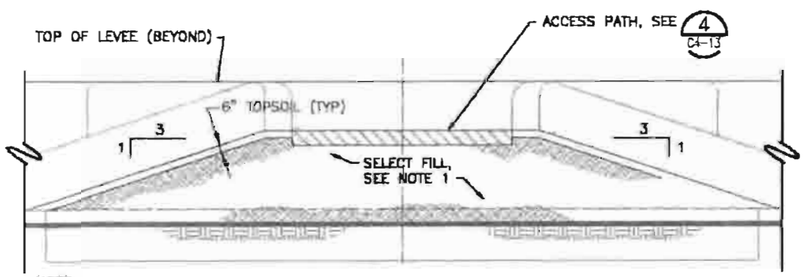
SHEET **C4-14** OF **107** SHEETS



PAVEMENT PATCH (1)
NOT TO SCALE — C4-1, C4-6, C4-7



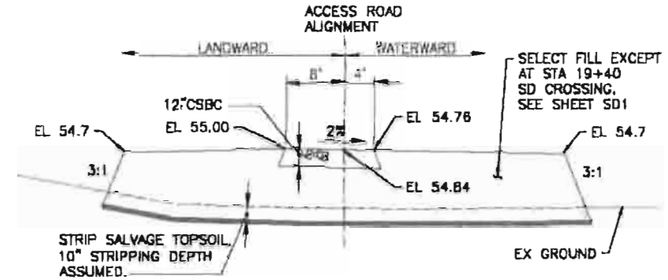
LEVEE SECTION WITH ACCESS PATH (2)
NOT TO SCALE



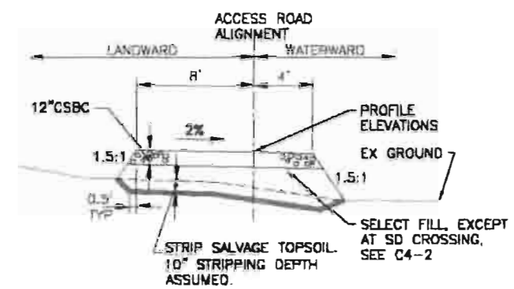
NOTE:

1. SELECT FILL PLACED BELOW THE FULL TRAPEZOIDAL PRISM WIDTH FROM EXISTING GROUND SURFACE TO TOP OF LEVEE

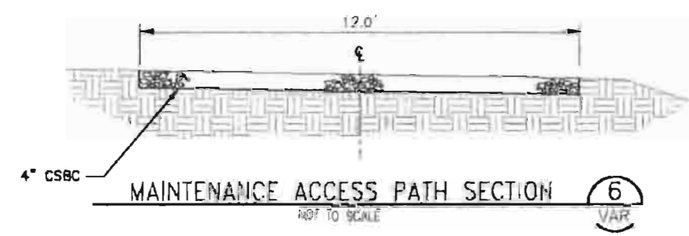
LEVEE ACCESS PATH SECTION (3)
NOT TO SCALE



GRAVEL ROAD AT DEPRESSIONS-SECTION (4)
NOT TO SCALE — C4-1, C4-2



GRAVEL ROAD SECTION (5)
NOT TO SCALE — C4-1, C4-2



MAINTENANCE ACCESS PATH SECTION (6)
NOT TO SCALE — VAR

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:
PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013
DESIGNED: MARK HOPKINSON, PE 3/2013
REVIEWED:
CAD DESIGN: R. MORRIS 3/2013

FUNDING SOURCE No. —
PROJECT No. 1M1203S
CONTRACT No. C00617C13

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River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

DETAILS AND SECTIONS - 3

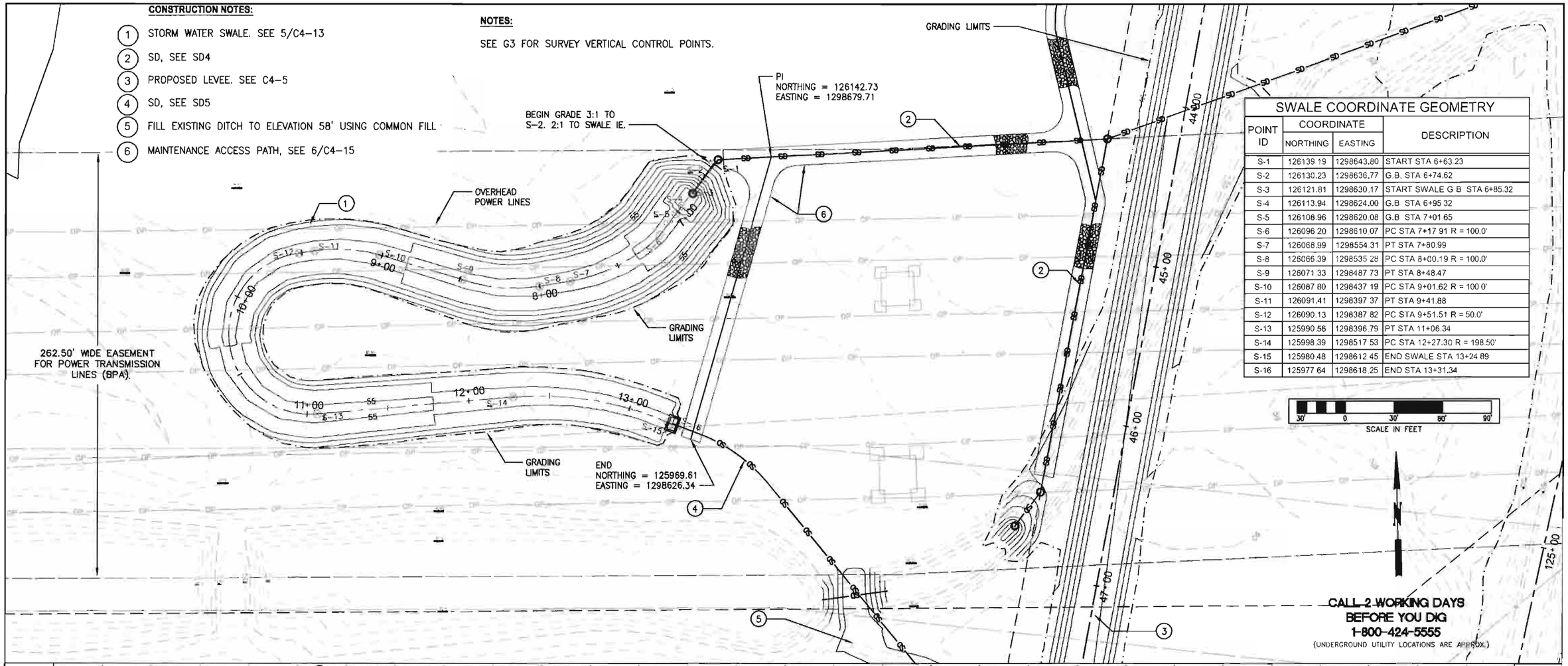
SHEET C4-15 OF 107 SHEETS

CONSTRUCTION NOTES:

1. STORM WATER SWALE. SEE 5/C4-13
2. SD, SEE SD4
3. PROPOSED LEVEE. SEE C4-5
4. SD, SEE SD5
5. FILL EXISTING DITCH TO ELEVATION 58' USING COMMON FILL
6. MAINTENANCE ACCESS PATH, SEE 6/C4-15

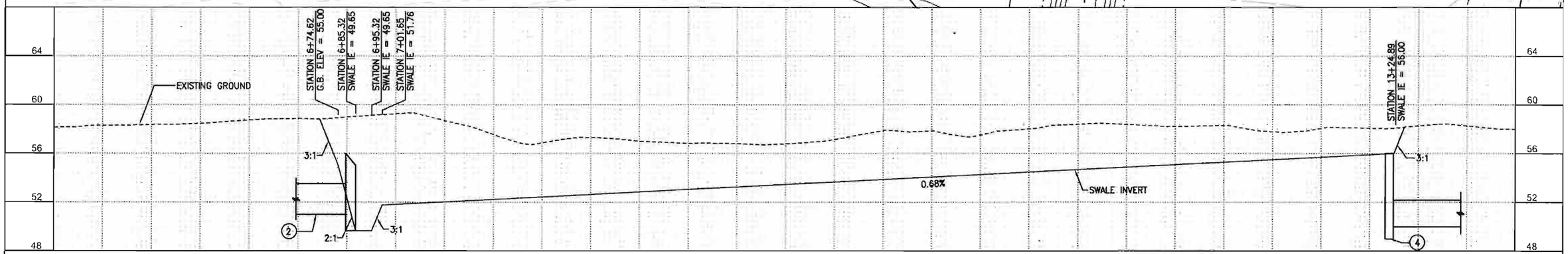
NOTES:

SEE G3 FOR SURVEY VERTICAL CONTROL POINTS.



SWALE COORDINATE GEOMETRY

POINT ID	COORDINATE NORTHING	COORDINATE EASTING	DESCRIPTION
S-1	126139.19	1298643.80	START STA 6+63.23
S-2	126130.23	1298636.77	G.B. STA 6+74.62
S-3	126121.81	1298630.17	START SWALE G.B. STA 6+85.32
S-4	126113.94	1298624.00	G.B. STA 6+95.32
S-5	126108.96	1298620.08	G.B. STA 7+01.65
S-6	126096.20	1298610.07	PC STA 7+17.91 R = 100.0'
S-7	126068.99	1298554.31	PT STA 7+80.99
S-8	126066.39	1298535.28	PC STA 8+00.19 R = 100.0'
S-9	126071.33	1298487.73	PT STA 8+48.47
S-10	126087.80	1298437.19	PC STA 9+01.62 R = 100.0'
S-11	126091.41	1298397.37	PT STA 9+41.88
S-12	126090.13	1298387.82	PC STA 9+51.51 R = 50.0'
S-13	125990.56	1298396.79	PT STA 11+06.34
S-14	125998.39	1298517.53	PC STA 12+27.30 R = 198.50'
S-15	125980.48	1298612.45	END SWALE STA 13+24.89
S-16	125977.64	1298618.25	END STA 13+31.34



NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	GREG GAASLAND, PE	3/2013
REVIEWED:		
CAD DESIGN:	G. WOLOVEKE	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

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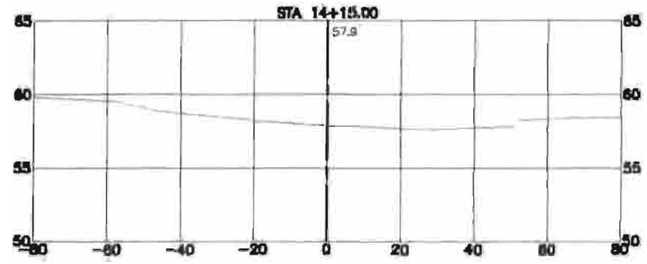
GREGORY L. GAASLAND
STATE OF WASHINGTON
28925
PROFESSIONAL ENGINEER
4/3/13

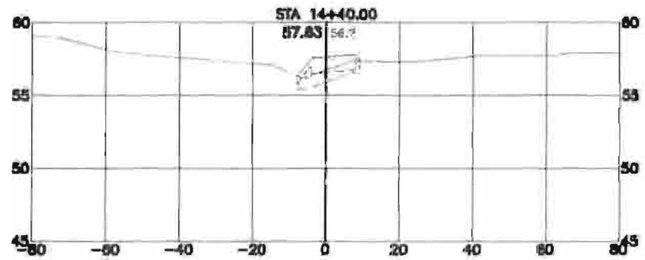
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

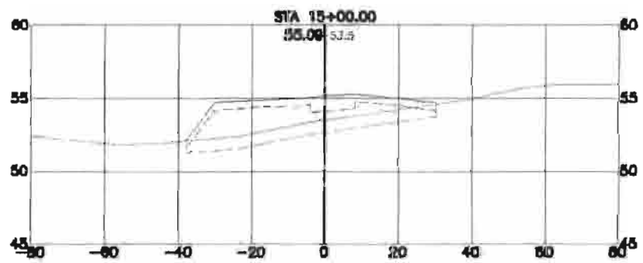
REDDINGTON LEVEE SETBACK

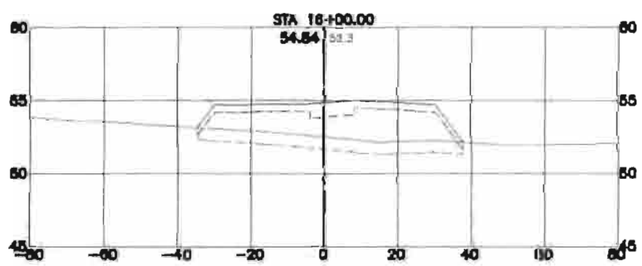
STORM WATER SWALE

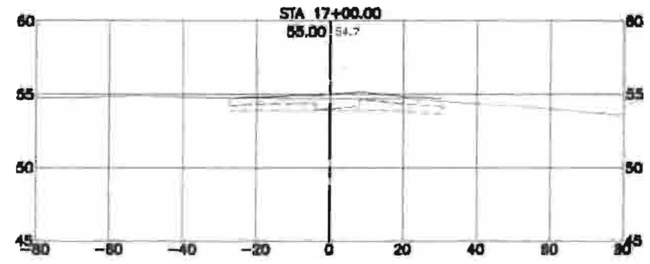
SHEET C4-16 OF 107 SHEETS

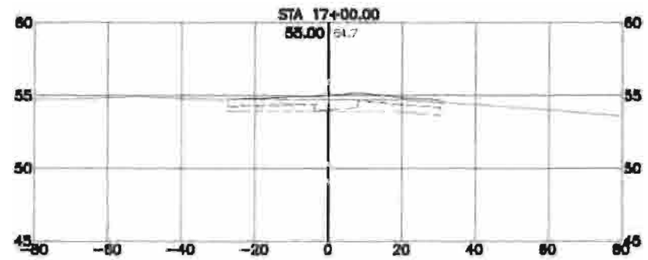


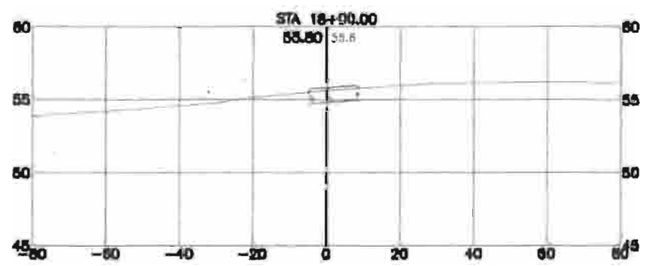


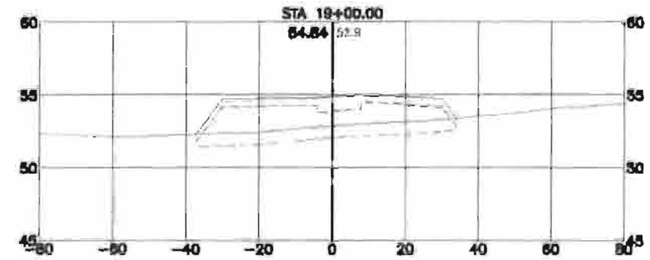


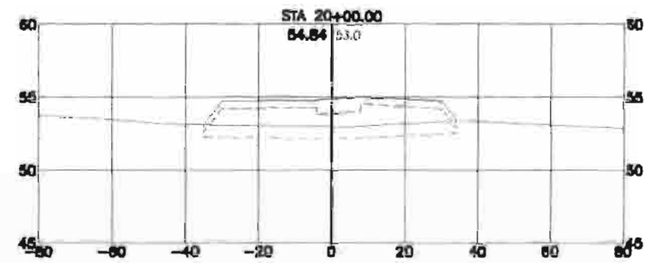


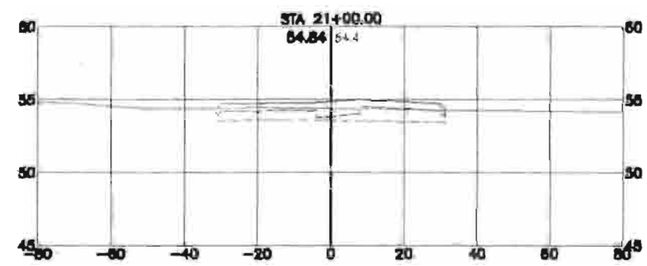












NUM.	REVISION	BY	DATE
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DESIGN: ERIK NORDHOLM 3/2013

FUNDING SOURCE No.

PROJECT No. 1112035

CONTRACT No. C0061701J

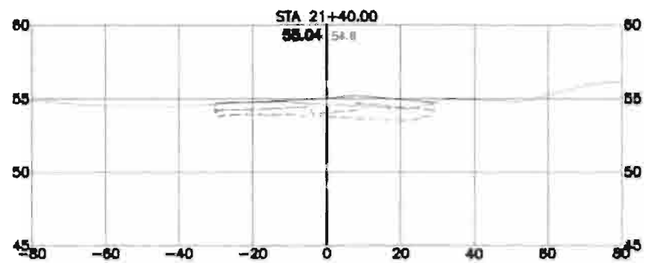
TETRA TECH

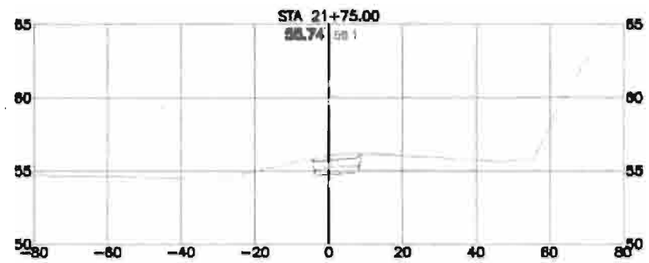
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

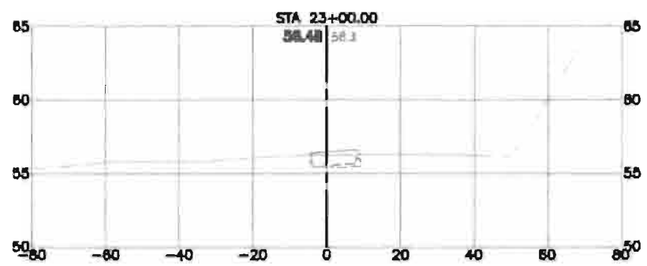
REDDINGTON LEVEE SETBACK

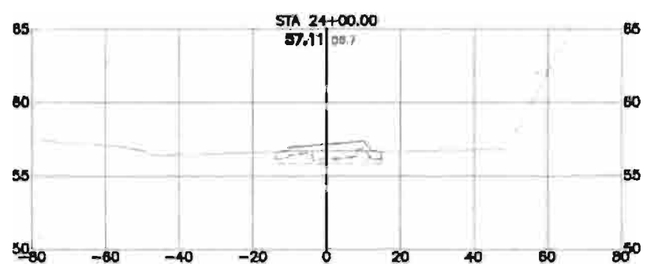
PROPOSED LEVEE SECTIONS
SECTIONS STA 14+15 TO STA 21+00

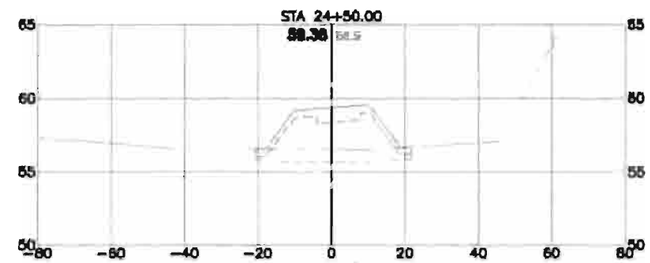
SHEET C5-1 OF 107 SHEETS

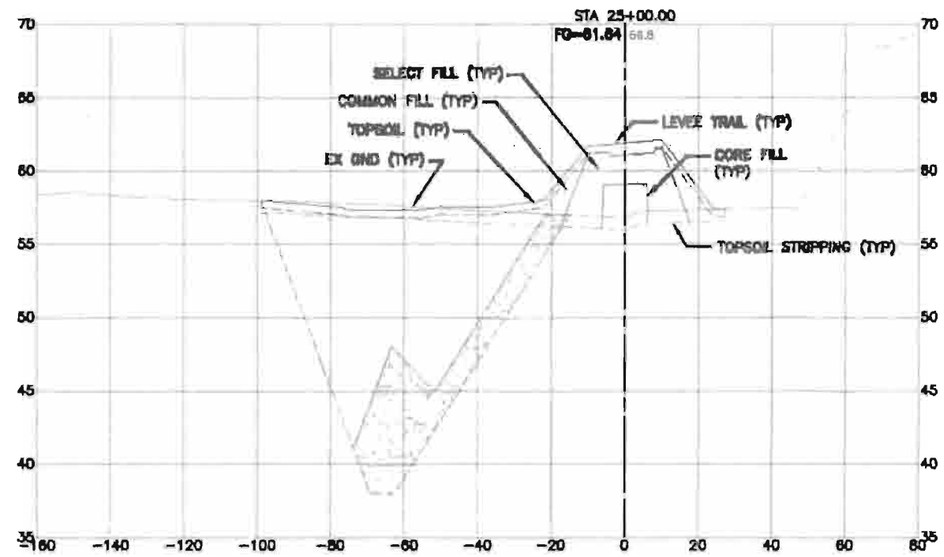












NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER: CYNTHIA CARLSTAD		3/2013
DESIGNED: MARK HOPKINSON, PE		3/2013
REVIEWED:		
CAD DESIGN: ERIK NORDHOLM		3/2013

FUNDING SOURCE No. ---

PROJECT No. LV12038

CONTRACT No. C00812C13

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King County
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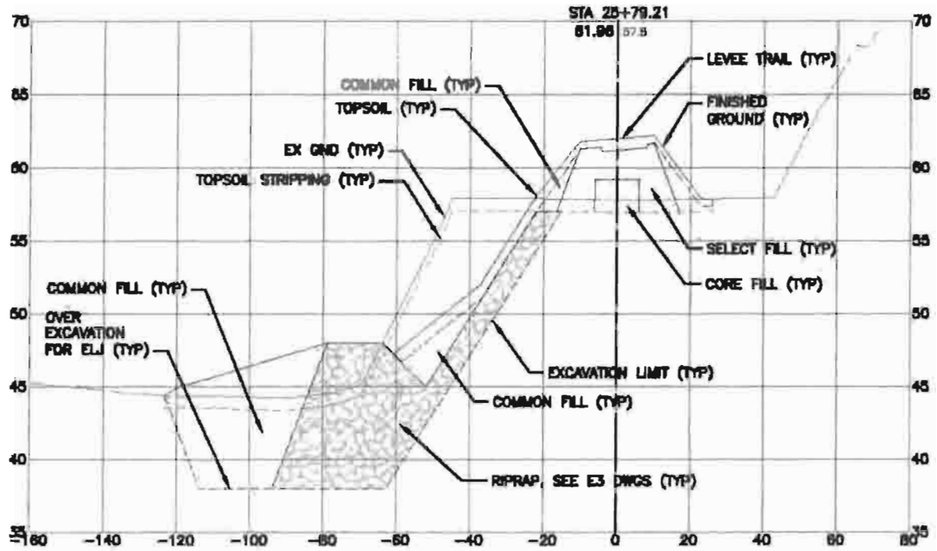
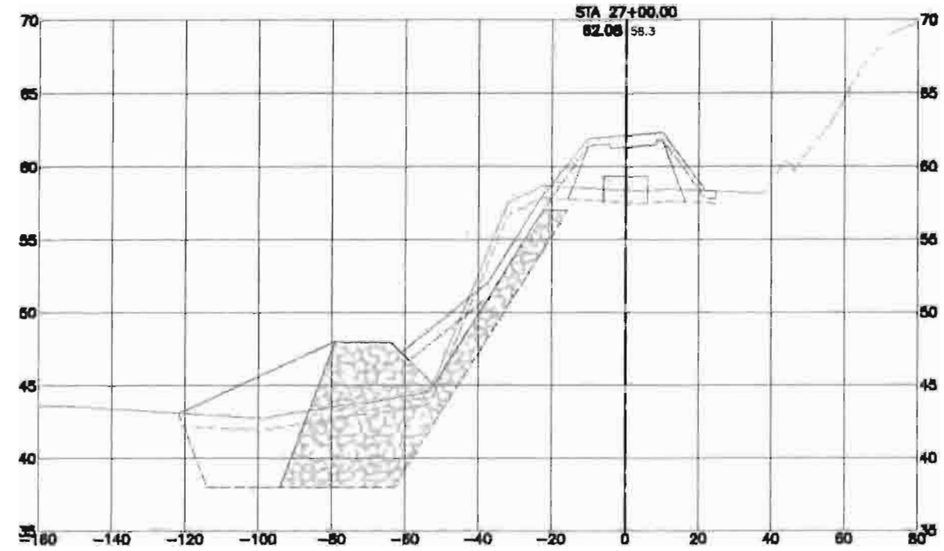
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

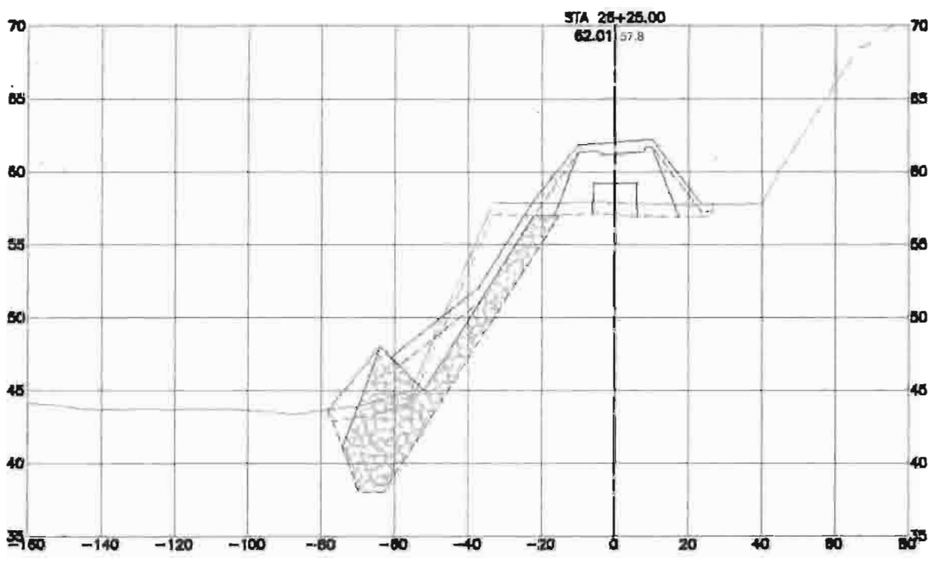
REDDINGTON LEVEE SETBACK

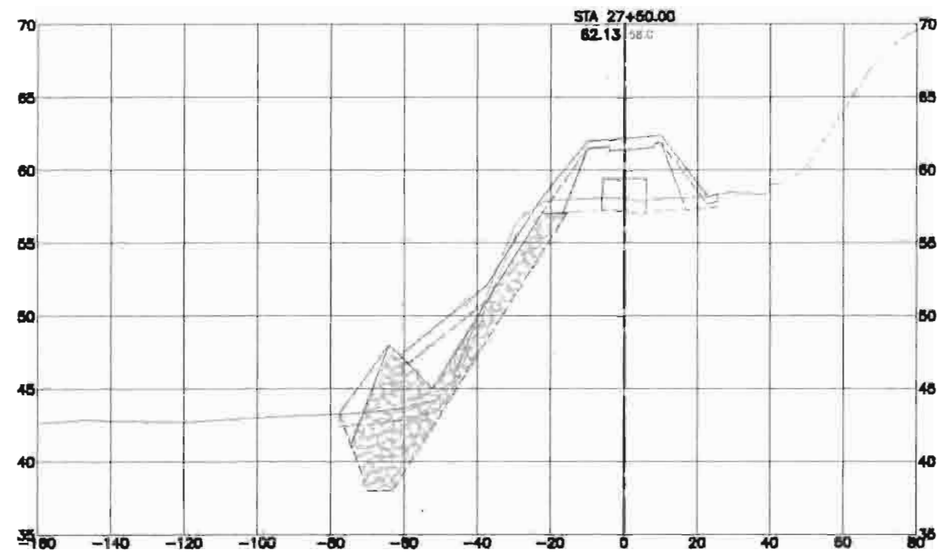
PROPOSED LEVEE SECTIONS
SECTIONS STA 21+40 TO STA 25+00

SHEET C5-2 OF 107 SHEETS









NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, PE	3/2013
REVIEWED:		
CAD DESIGN:	ERIK NORDHOLM	3/2013

FUNDING SOURCE No. —

PROJECT No. 1112035

CONTRACT No. C0081203J

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King County
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Water and Land Resources Division
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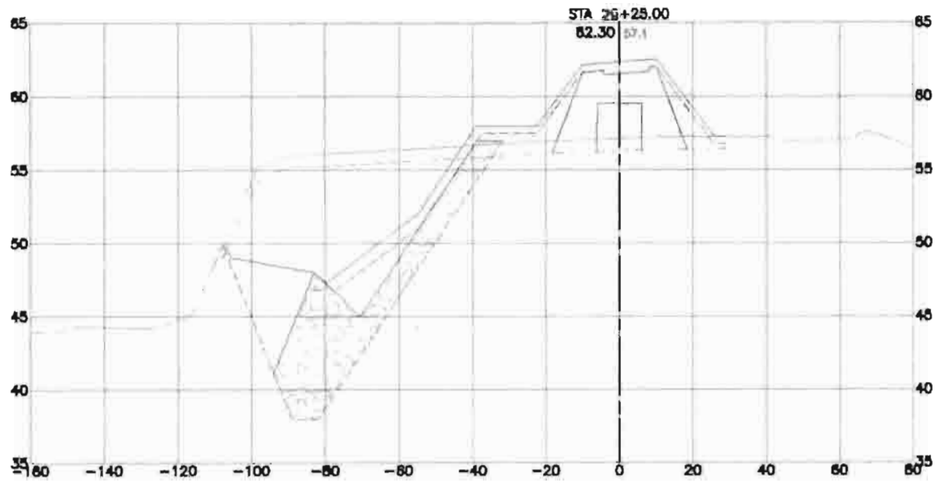
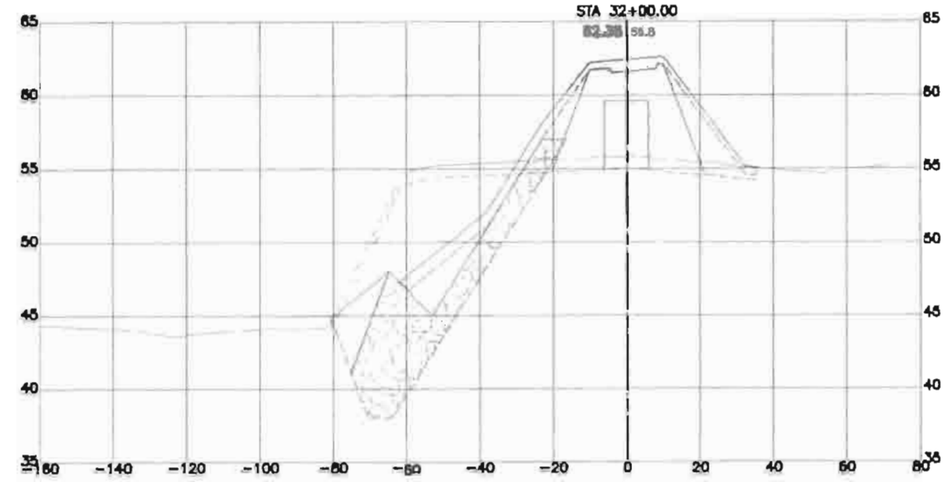
Christie True, Director

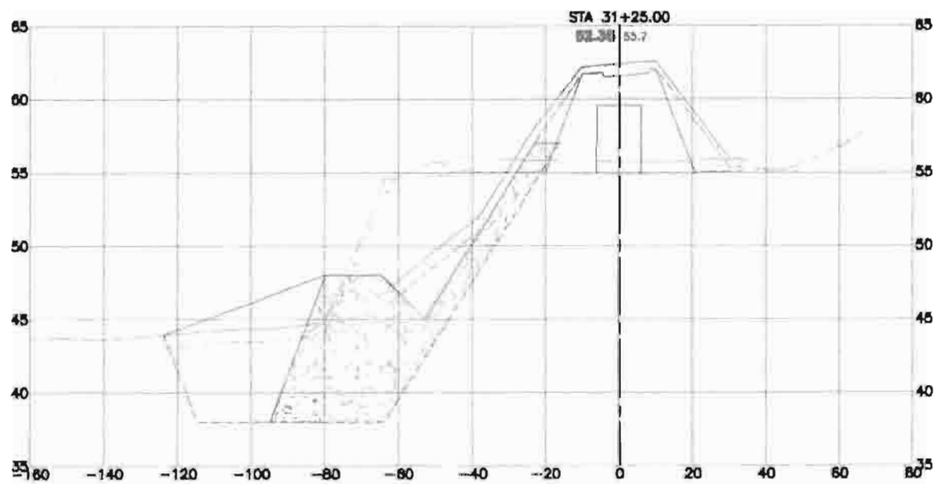
REDDINGTON LEVEE SETBACK

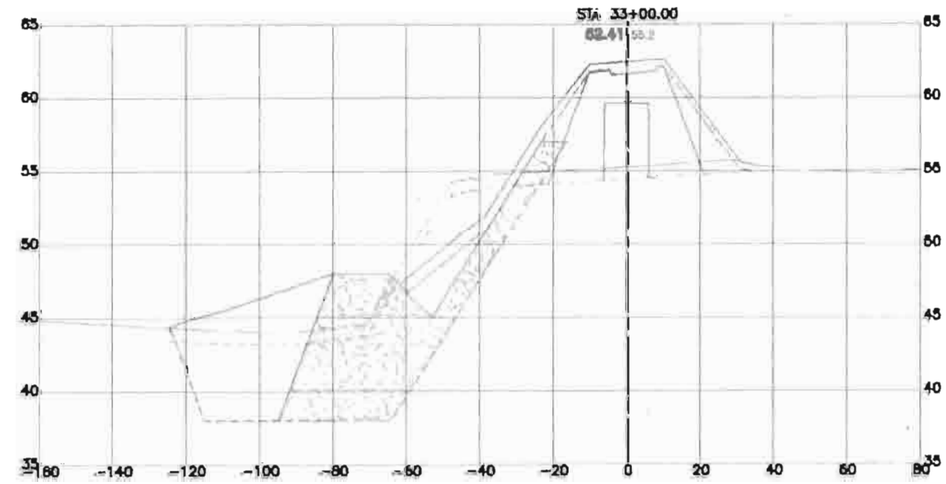
PROPOSED LEVEE SECTIONS
SECTIONS STA 25+79 TO STA 27+50

SHEET **C5-3** OF **107** SHEETS









NUM	REVISION	BY	DATE
NUM	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DRAWN: ERIK NORDHOLM 3/2013

FUNDING SOURCE No.

PROJECT No. 1112035

CONTRACT No. C00817C13

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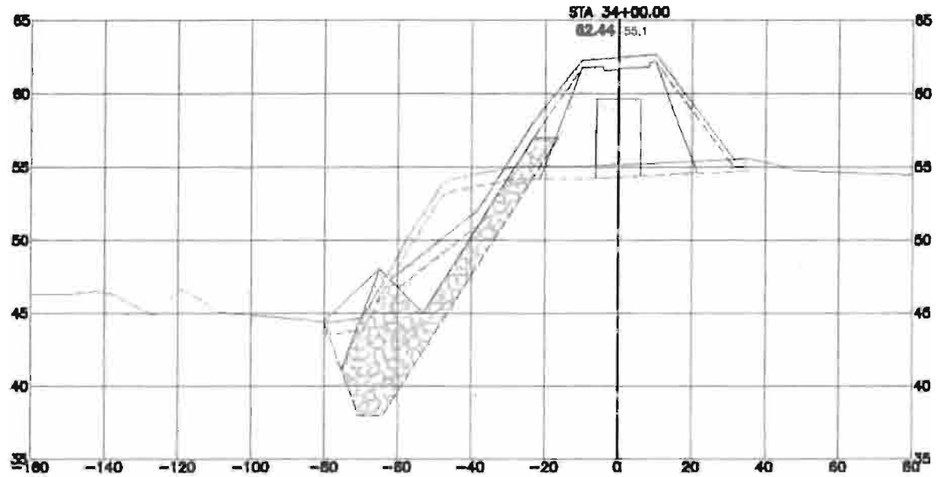
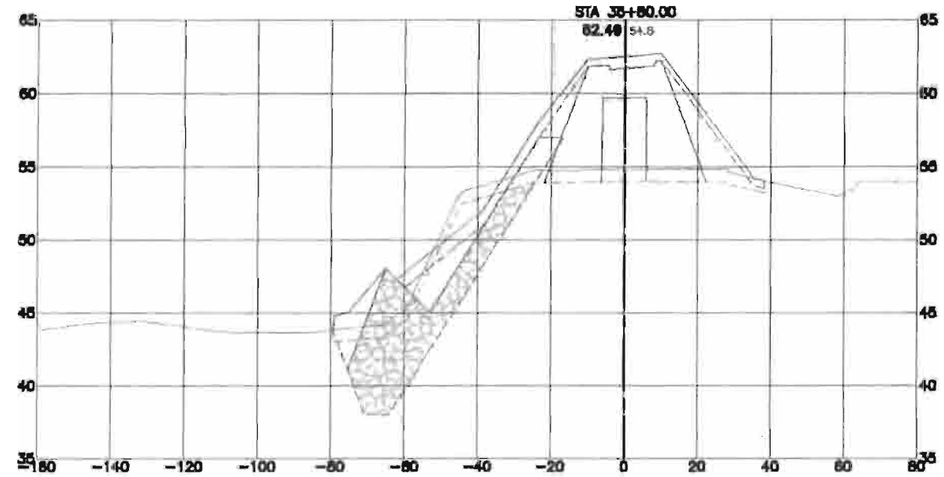
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

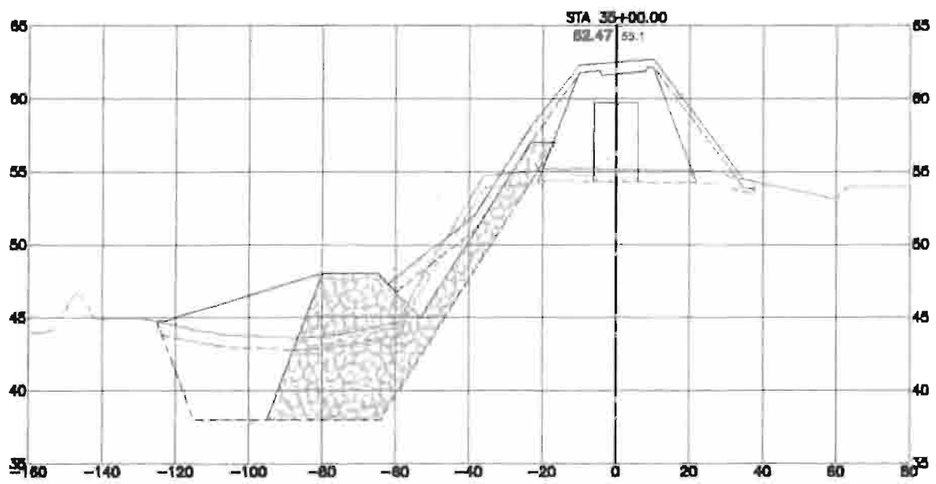
REDMONDTON LEVEE SETBACK

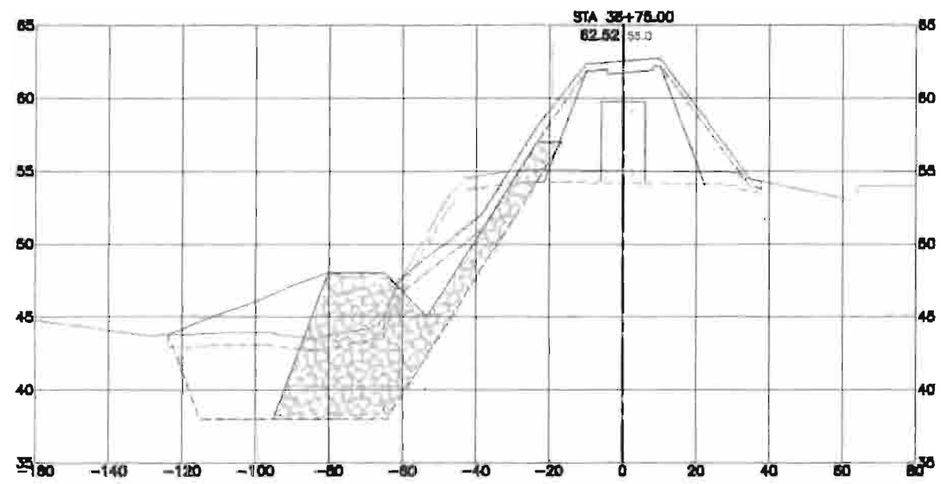
PROPOSED LEVEE SECTIONS
SECTIONS STA 29+25 TO STA 33+00

SHEET C5-4 OF 107 SHEETS









NUM.	REVISION	BY	DATE
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, PE	3/2013
REVIEWED:		
CAD DESIGN:	ERIK NORDHOLM	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

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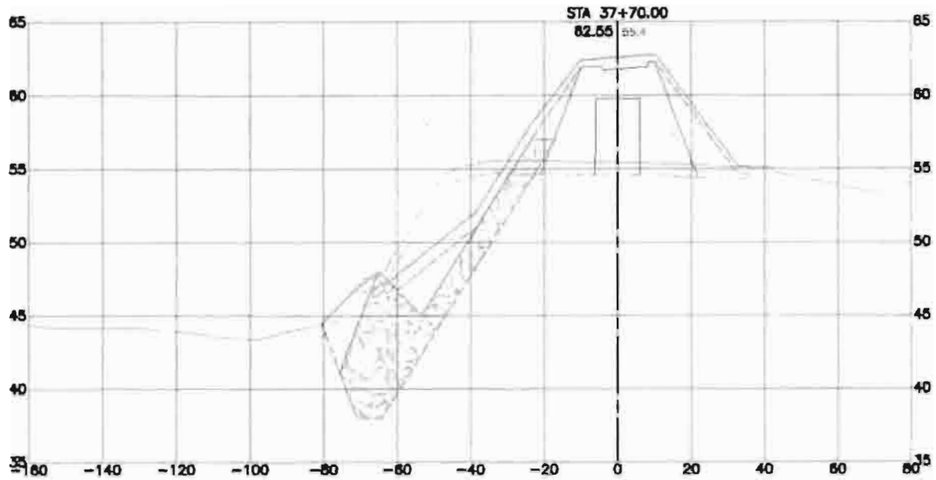
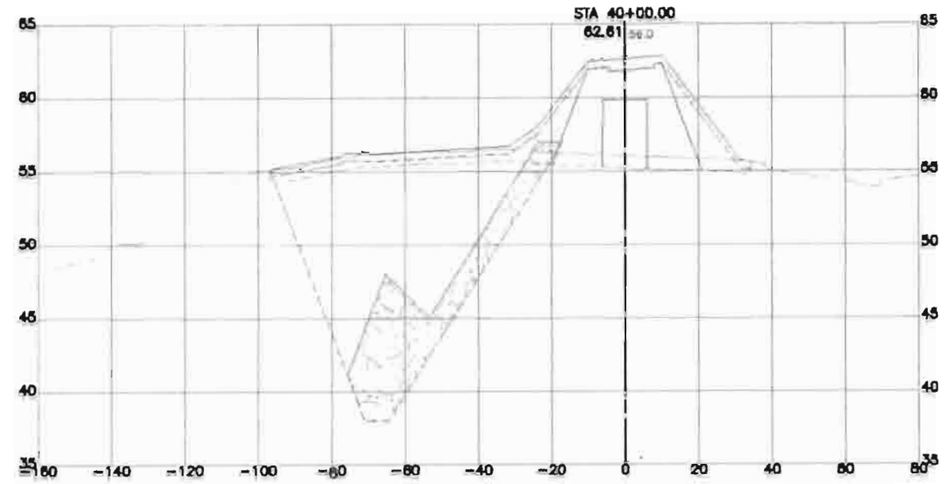
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

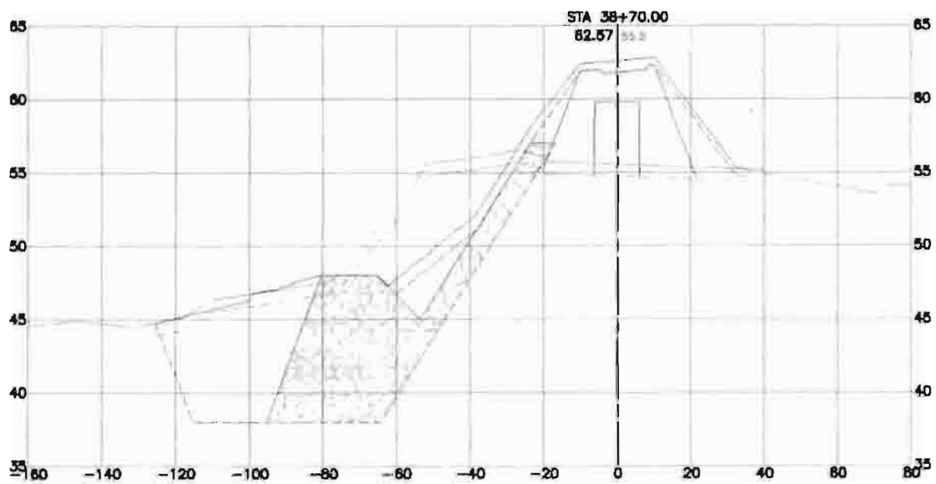
REDDINGITON LEVEE SETBACK

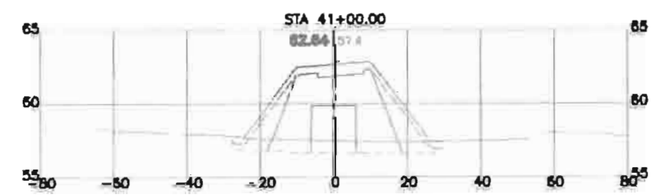
PROPOSED LEVEE SECTIONS
SECTIONS STA 34+00 TO STA 35+75

SHEET **C5-5** OF **107** SHEETS









NUM.	REVISION	BY	DATE
NUM	RECORD CHANGES APPROVED	BY	DATE

APPROVED:
PROJECT MANAGER: CYNTHIA CARLSTAD 1/2013
DESIGNER: MARK HOPKINSON, PE 1/2013
REVIEWED:
CAD DESIGN: ERIK NORDHOLM 1/2013

FUNDING SOURCE No.
PROJECT No. 111203.15
CONTRACT No. C008120C13

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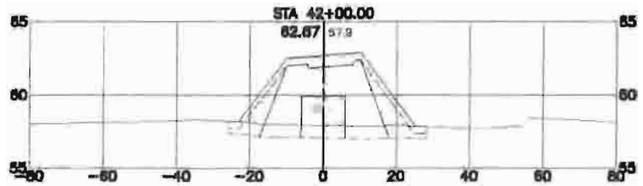
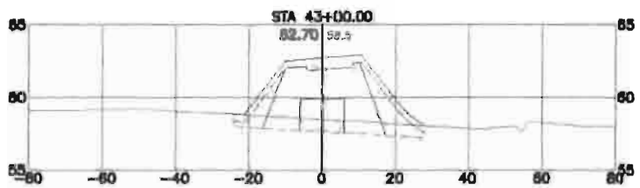
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

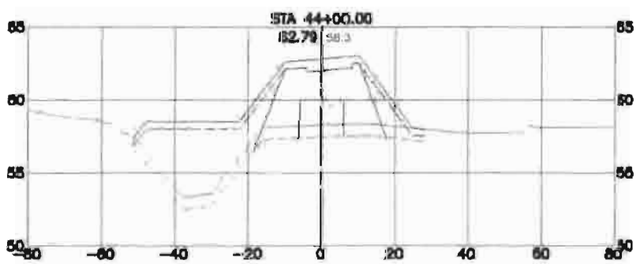
REDDINGTON LEVEE SETBACK

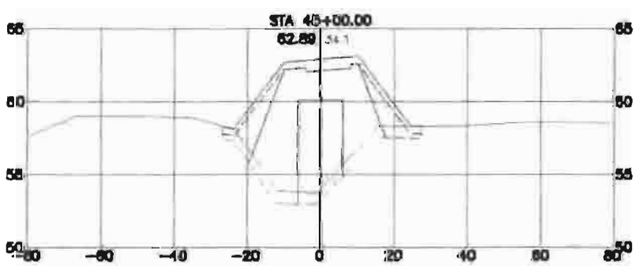
PROPOSED LEVEE SECTIONS
SECTIONS STA 37+70 TO STA 41+00

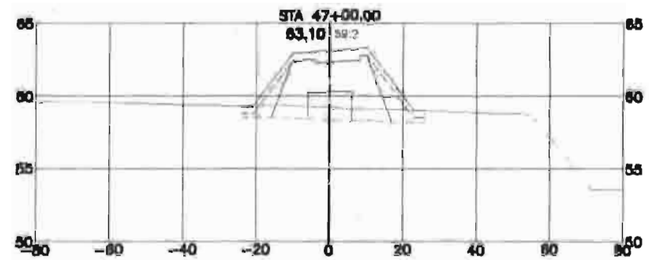
SHEET C5-6 OF 107 SHEETS

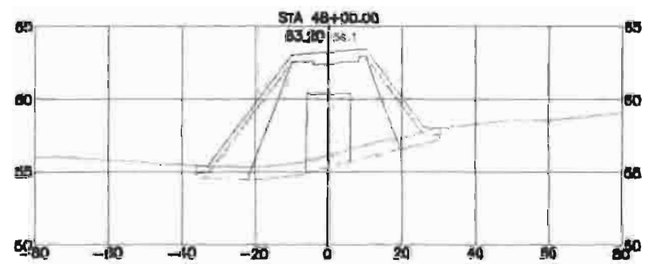


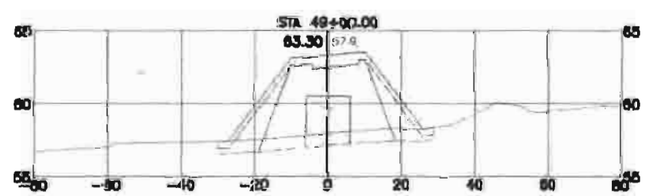












NUM.	REVISION	BY	DATE

NUM	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DESIGN: ERIK NORDHOLM 3/2013

FUNDING SOURCE No. —

PROJECT No. 111120.35

CONTRACT No. C00817C13

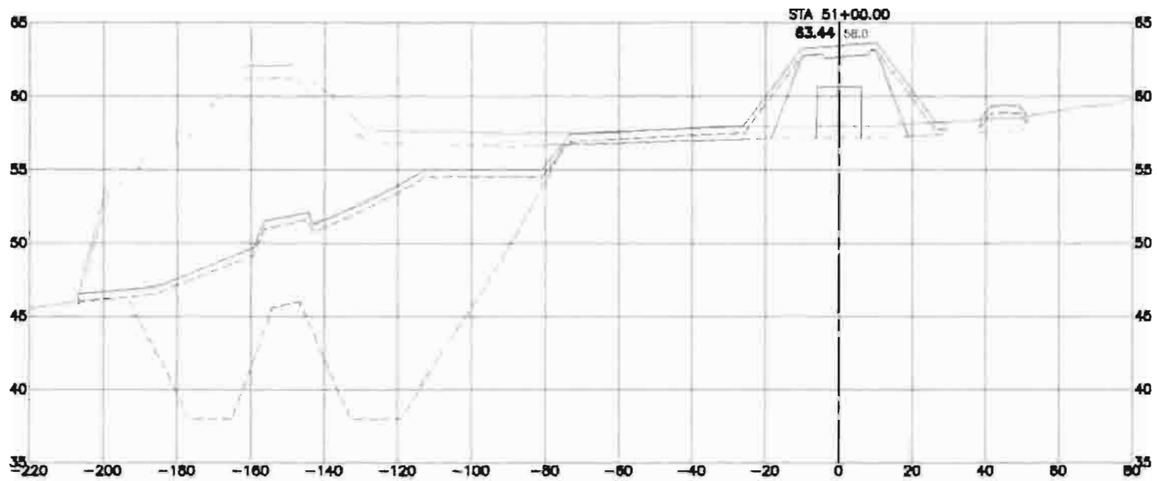
TETRA TECH

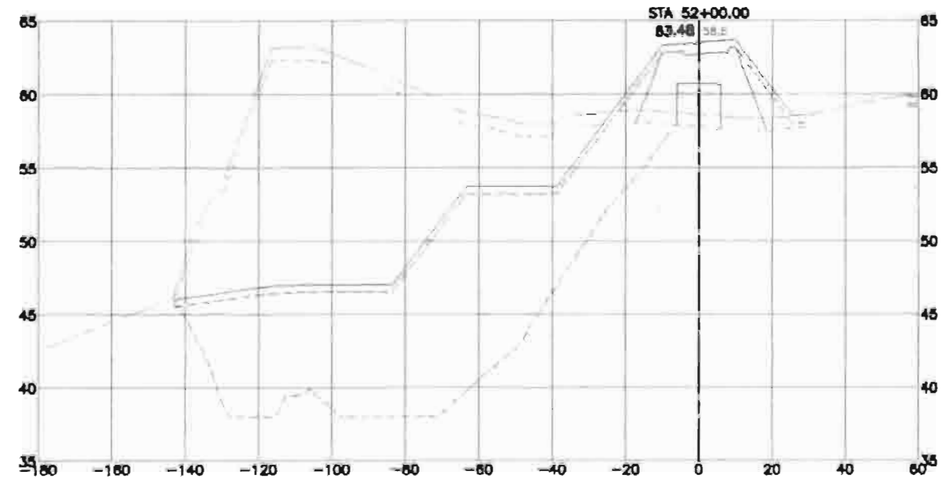
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

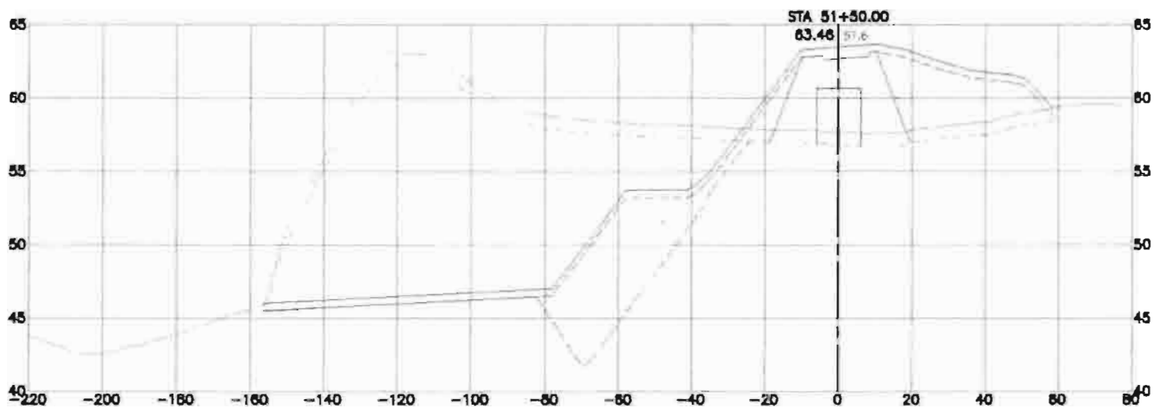
REDDINGTON LEVEE SETBACK

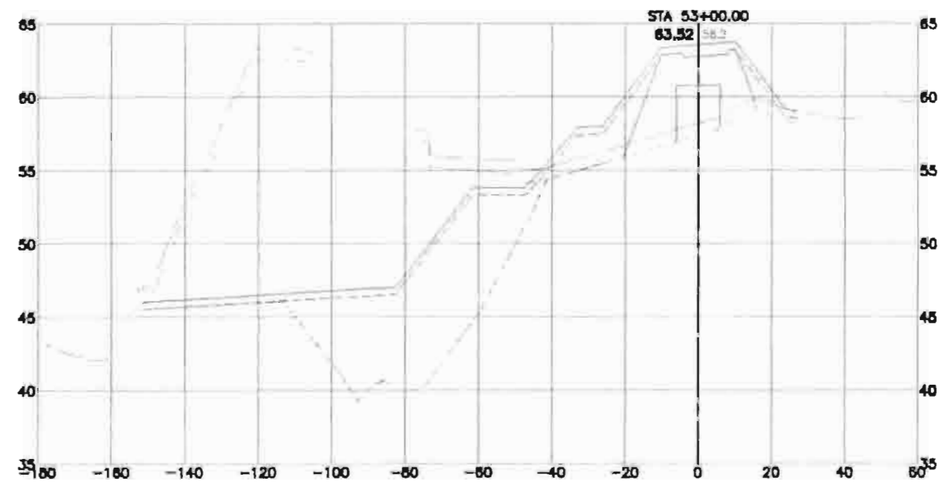
PROPOSED LEVEE SECTIONS
SECTIONS STA 42+00 TO STA 50+00

SHEET C5-7 OF 107 SHEETS









NUM.	REVISION	BY	DATE

NUM	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DESIGN: ERIK NORDHOLM 3/2013

FUNDING SOURCE No.

PROJECT No. 1112035

CONTRACT No. C00817C13

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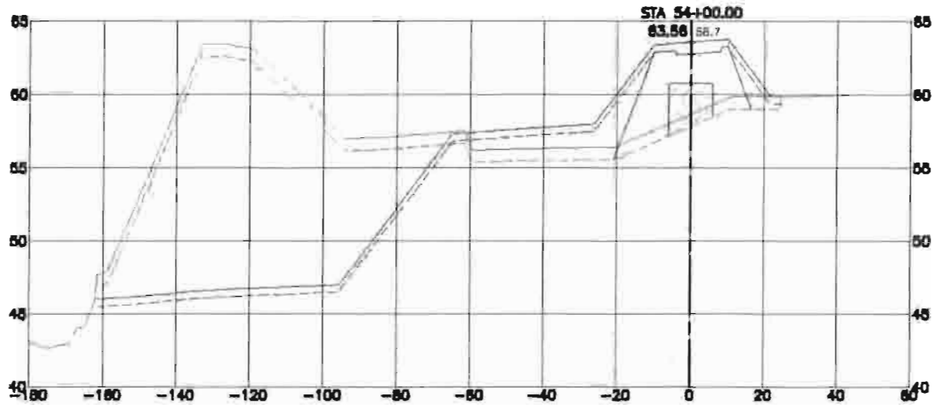
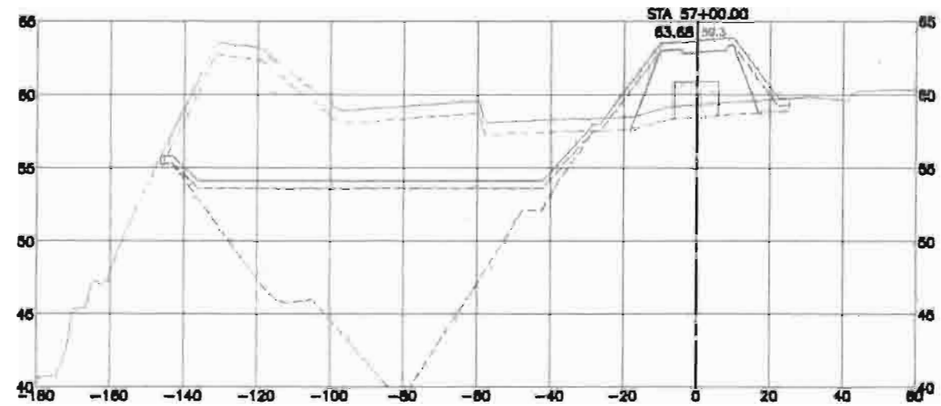
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

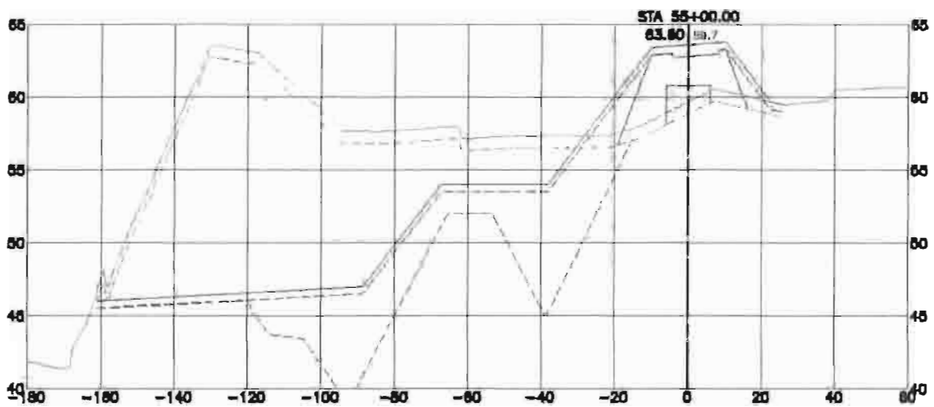
REDDINGTON LEVEE SETBACK

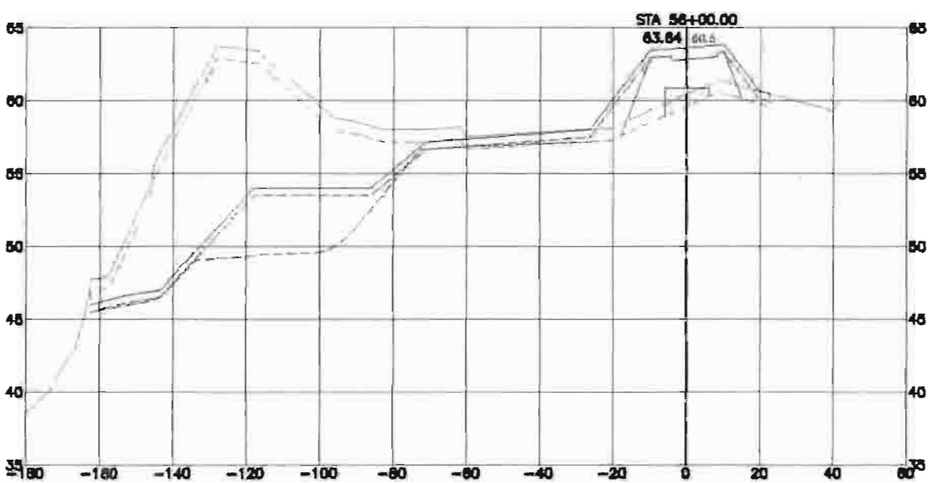
PROPOSED LEVEE SECTIONS
SECTIONS STA 51+00 TO STA 55+00

SHEET C5-8 OF 107 SHEETS









NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER: CYNTHIA CARLSTAD		3/2013
DESIGNED: MARK HOPKINSON, PE		3/2013
REVIEWED:		
CAD DESIGN: ERIK NORDHOLM		3/2013

FUNDING SOURCE No. —

PROJECT No. 1112035

CONTRACT No. C008170113

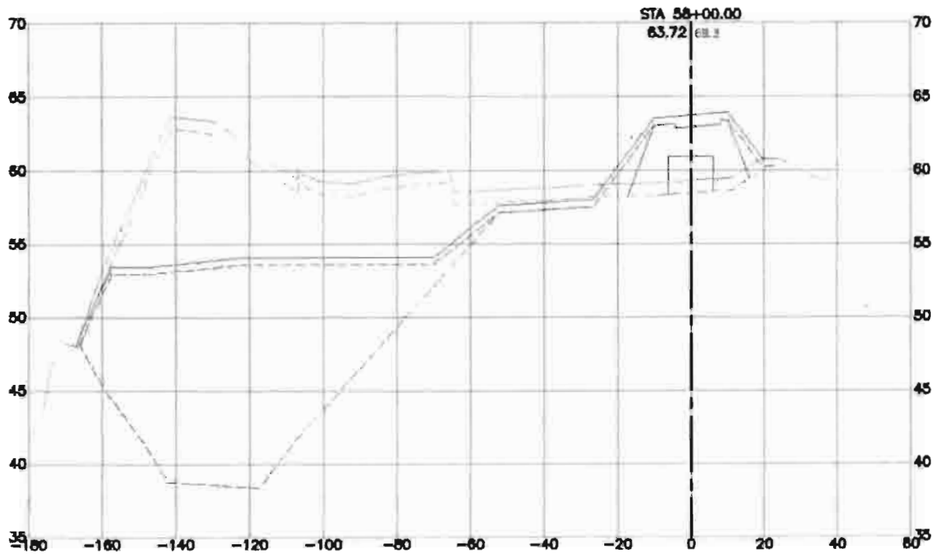
TETRA TECH

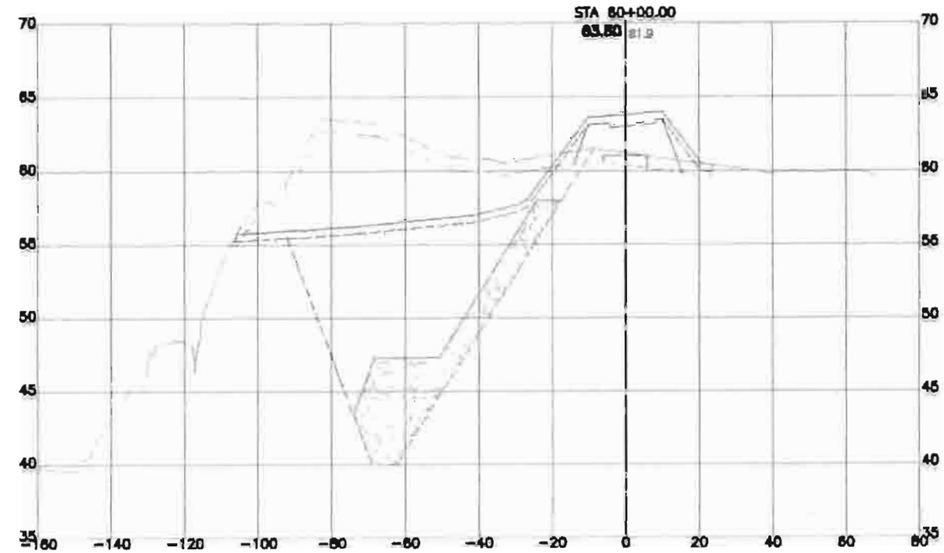
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

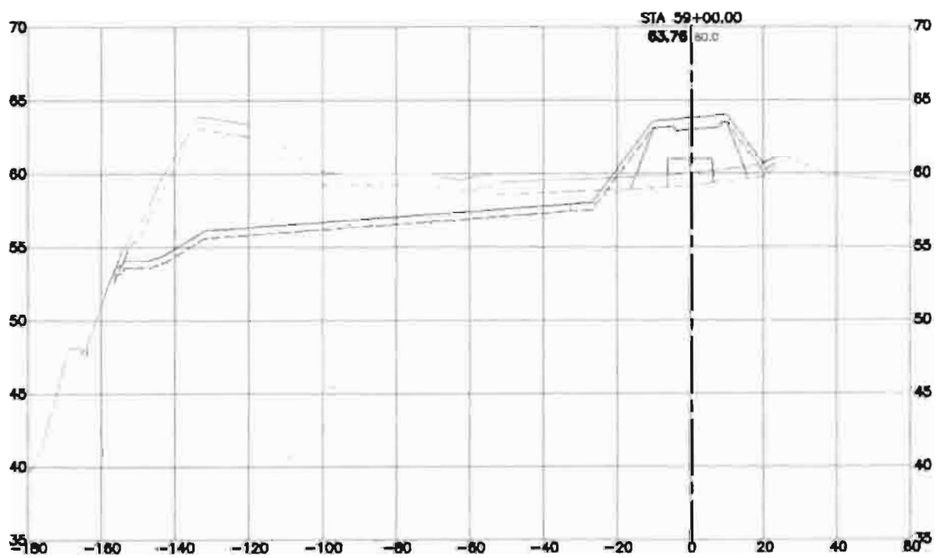
REDDINGTON LEVEE SETBACK

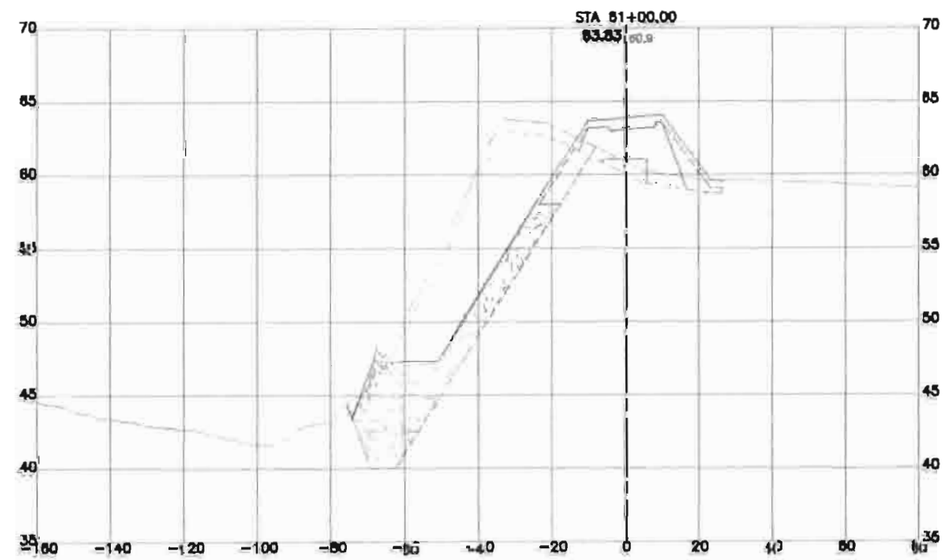
PROPOSED LEVEE SECTIONS
SECTIONS STA 54+00 TO STA 57+00

SHEET **C5-9** OF **107** SHEETS









NUM.	REVISION	BY	DATE
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED
PROJECT MANAGER CYNTHIA CARLSTAD 3/2013
DESIGNED MARK HOPKINSON, PE 3/2013
REVIEWED
CAD DESIGN ERIK ADROHOLM 3/2013

FUNDING SOURCE No.
PROJECT No. 1112039
CONTRACT No. C00812C13

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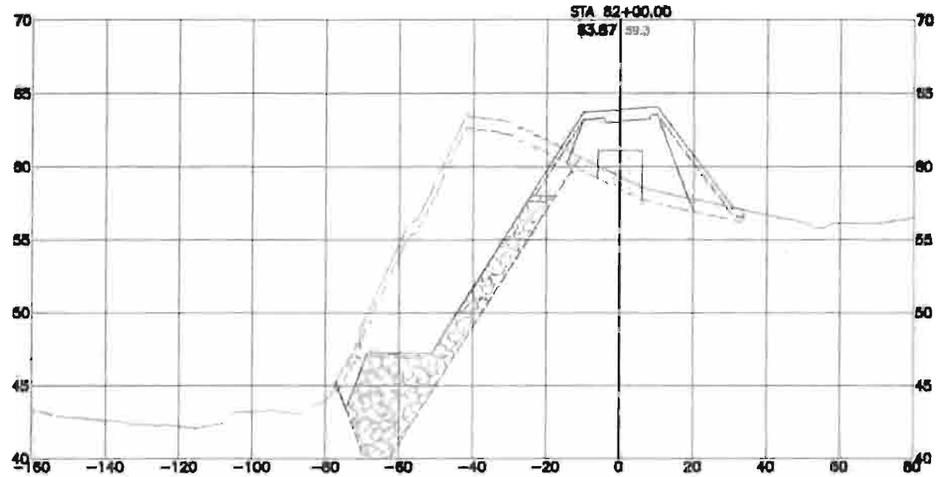
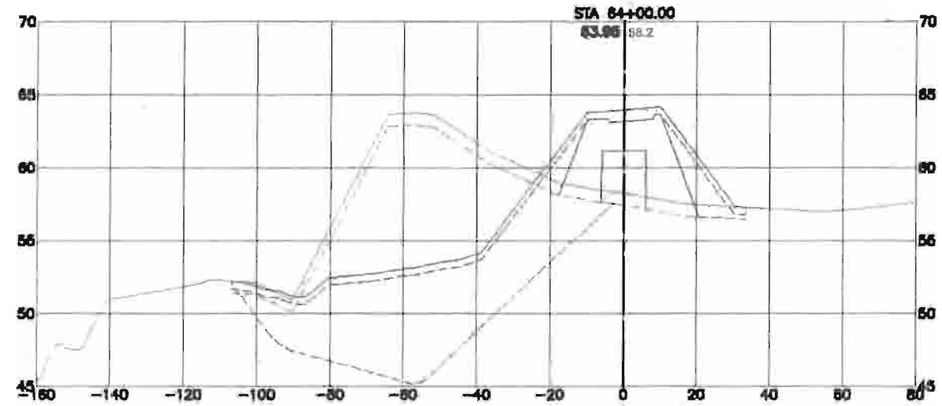
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

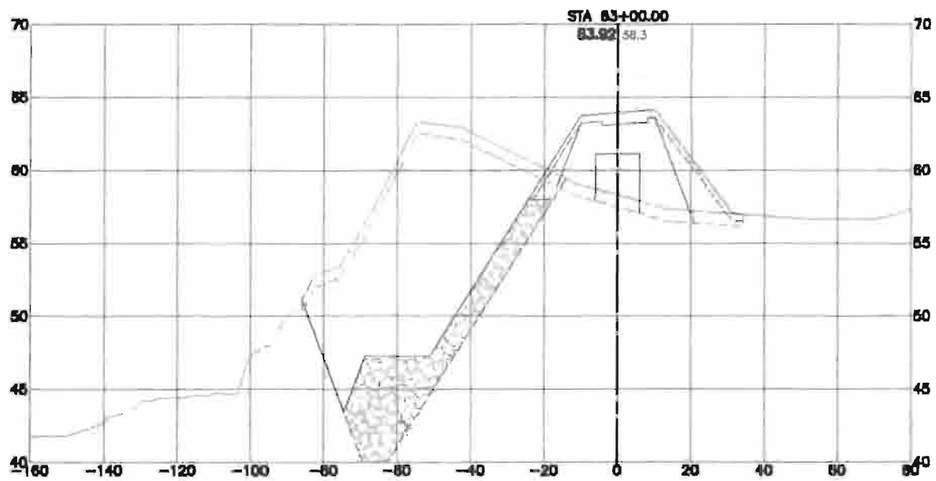
REDDINGTON LEVEE SETBACK

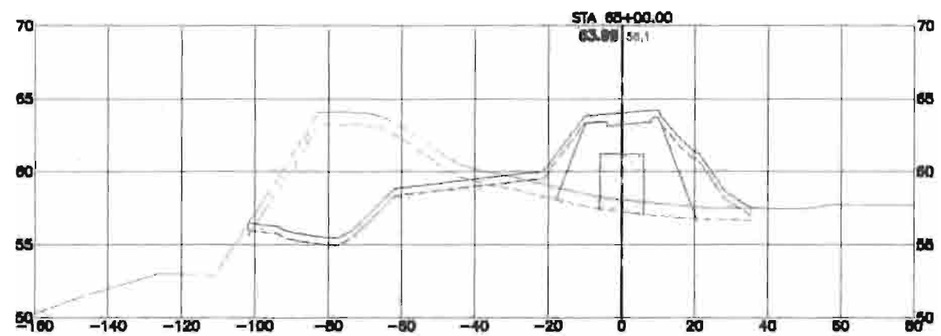
PROPOSED LEVEE SECTIONS
SECTIONS STA 58+00 TO STA 61+00

SHEET C5-10 OF 107 SHEETS









NUM.	REVISION	BY	DATE
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:
PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013
DESIGNED: MARK HOPKINSON, PE 3/2013
REVIEWED:
CAD DESIGN: ERIK NORDHOLM 3/2013

FUNDING SOURCE No.
PROJECT No. 1112035
CONTRACT No. C00817C13

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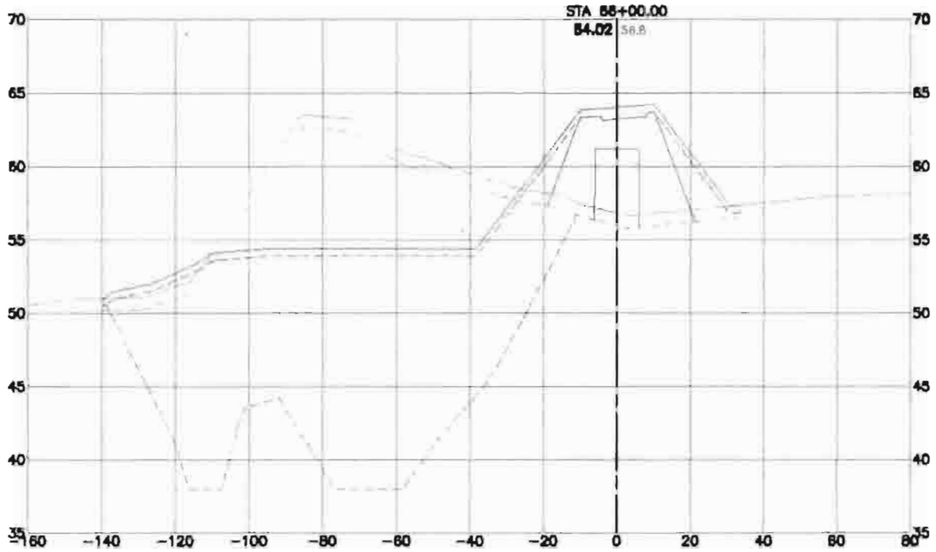
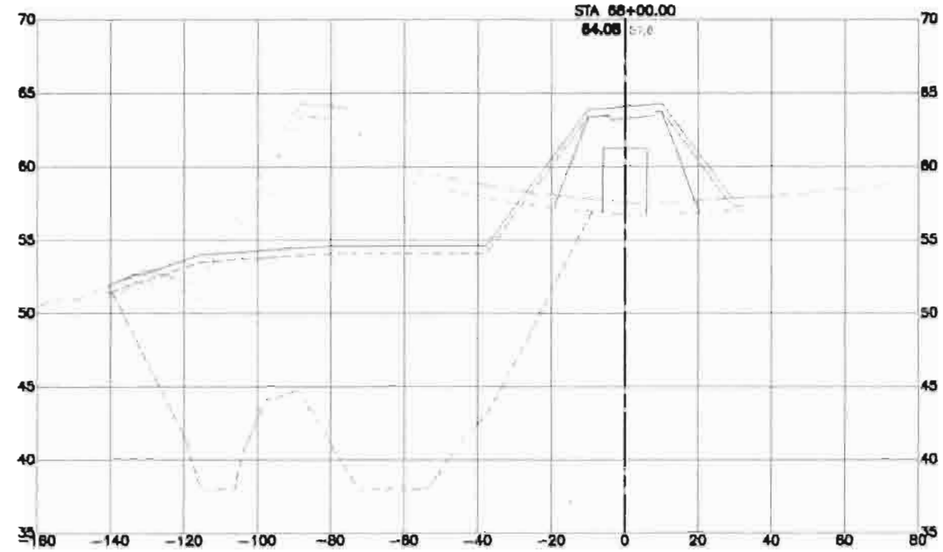
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

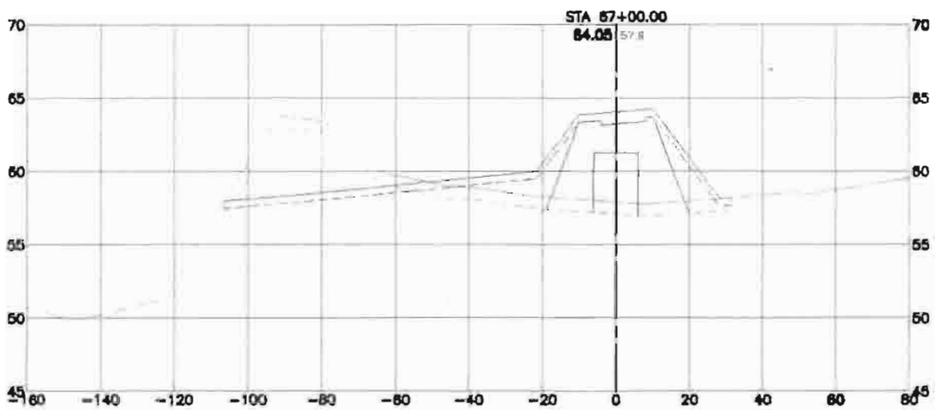
REDDINGTON LEVEE SETBACK

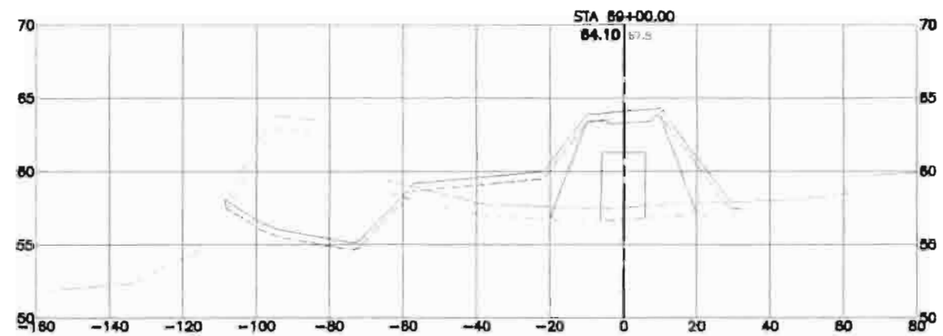
PROPOSED LEVEE SECTIONS
SECTIONS STA 62+00 TO STA 65+00

SHEET C5-11 OF 107 SHEETS









NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLETAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DESIGN: ERIK NORDHOLM 3/2013

FUNDING SOURCE No.

PROJECT No. 1112035

CONTRACT No. C00617C13

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King County
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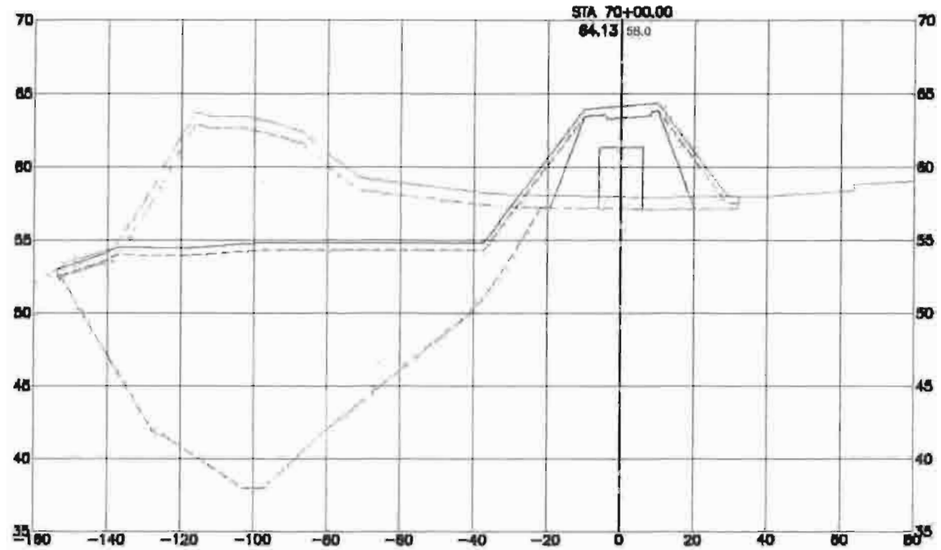
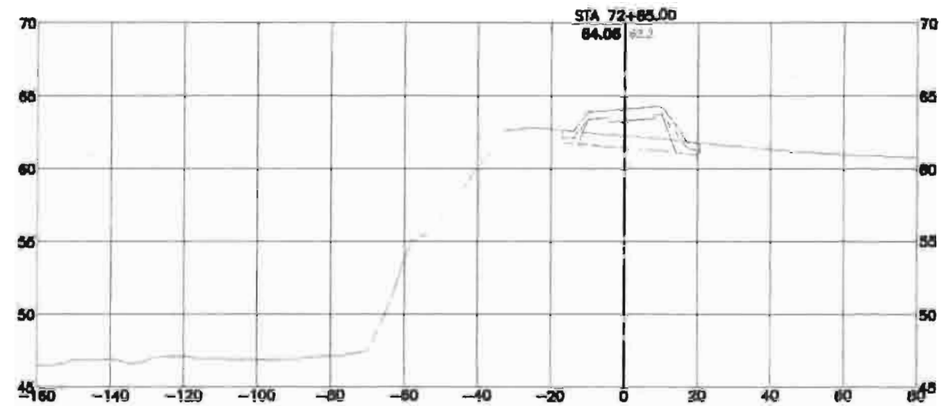
River and Floodplain Management Section
Christie True, Director

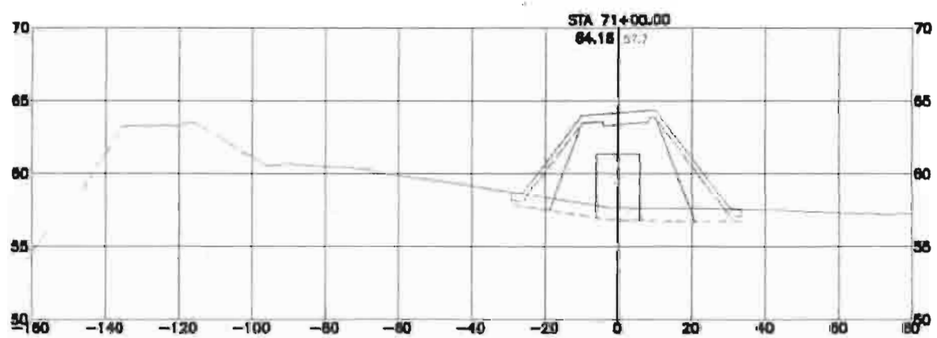
REDDINGTON LEVEE SETBACK

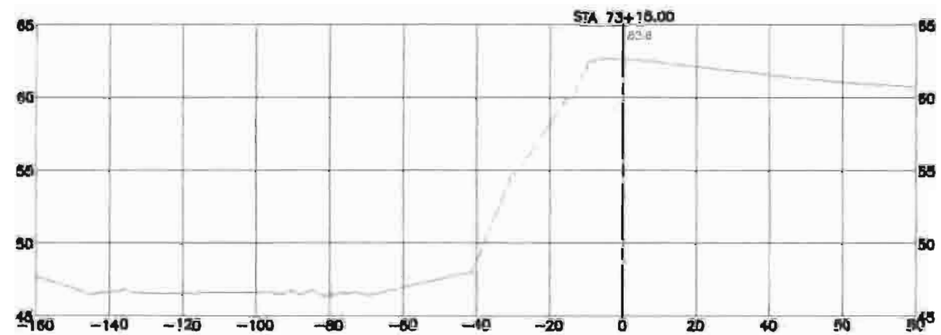
PROPOSED LEVEE SECTIONS
SECTIONS STA 66+00 TO STA 69+00

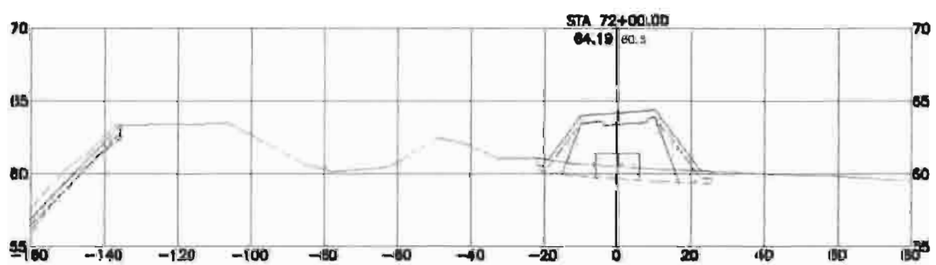
SHEET
C5-12
OF
107
SHEETS











NUM.	REVISION	BY	DATE

NUM	RECORD CHANGES APPROVED	BY	DATE

APPROVED:
PROJECT MANAGER: CYNTHIA CARLSTROM — 1/2013
DESIGNED: MARK HOPKINSON, PE — 1/2013
REVIEWED:
CAD DESIGN: ERIK NORDHOLM — 1/2013

FUNDING SOURCE No.
PROJECT No. 1110035
CONTRACT No. CCGS17C13

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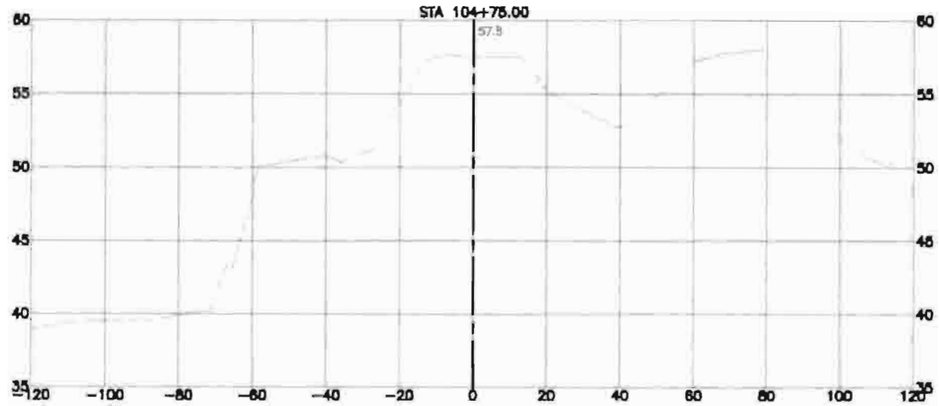
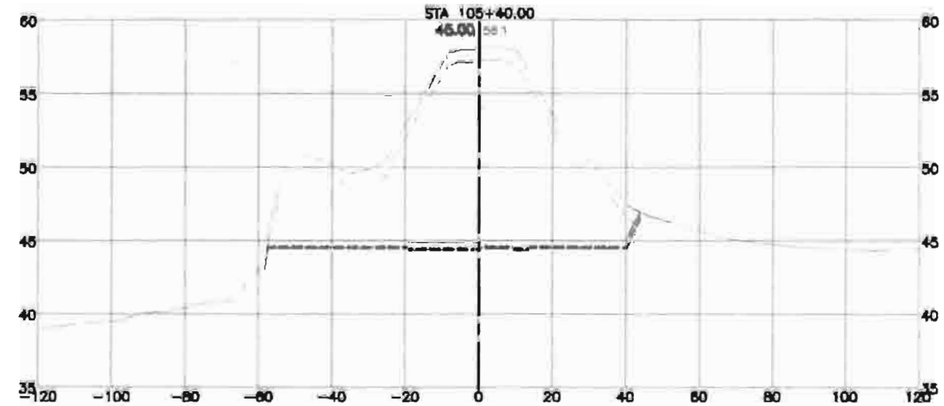
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

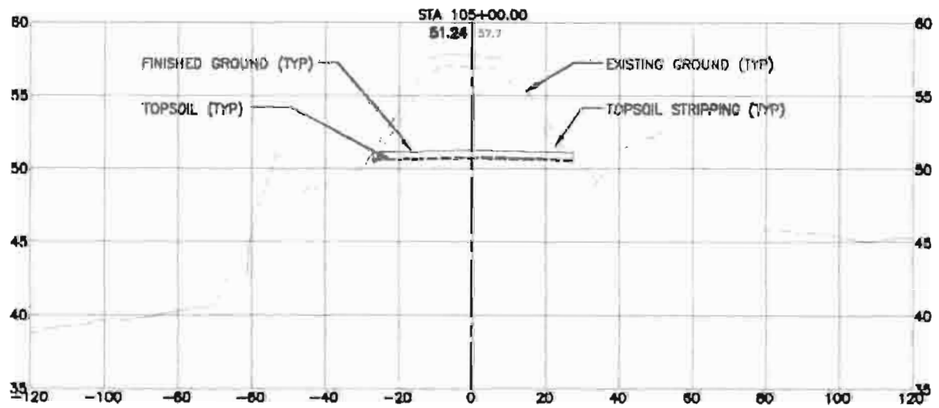
REDDINGTON LEVEE SETBACK

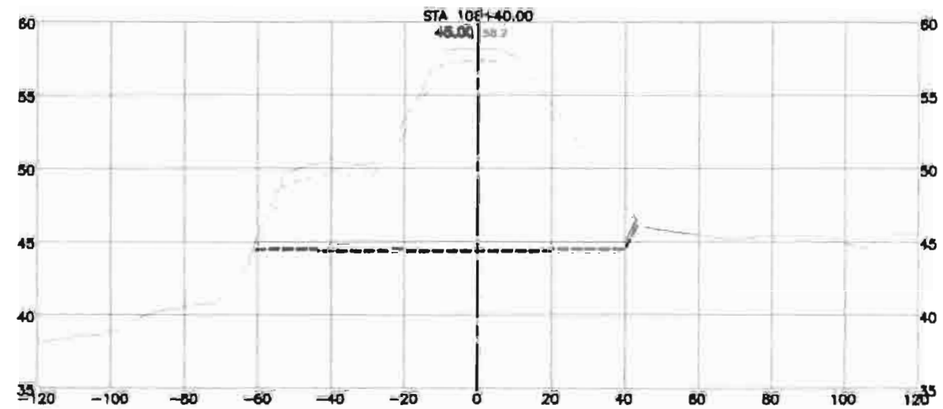
PROPOSED LEVEE SECTIONS
SECTIONS STA 70+00 TO STA 73+15

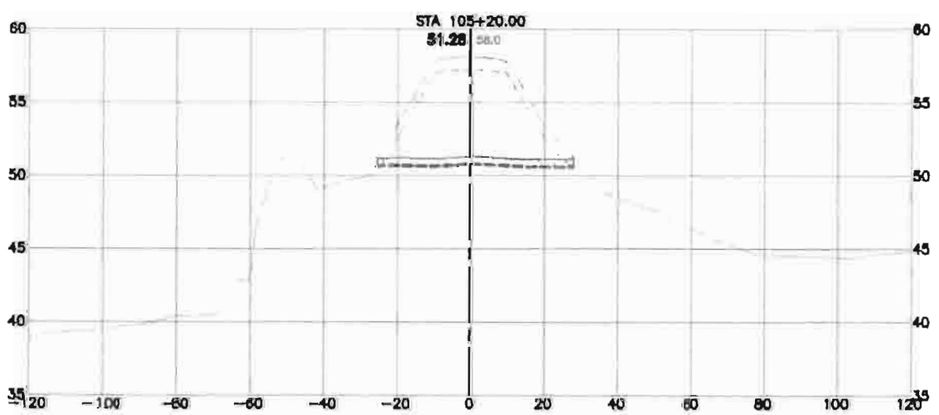
SHEET C5-13 OF 107 SHEETS

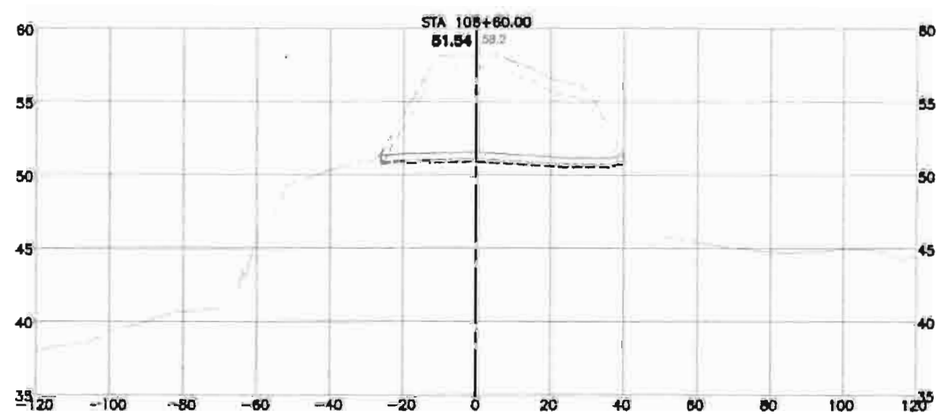












NUM.	REVISION	BY	DATE
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA OABLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DESIGN: ERIK NORDHOLM 3/2013

FUNDING SOURCE No.

PROJECT No. 1112035

CONTRACT No. C00817C13

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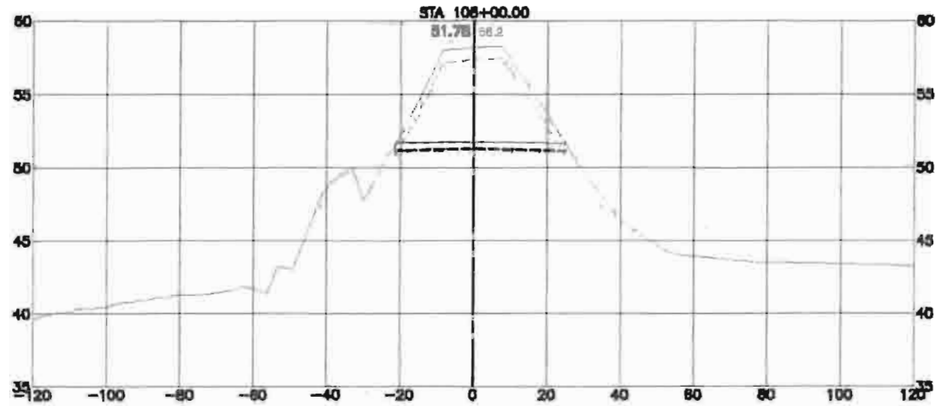
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

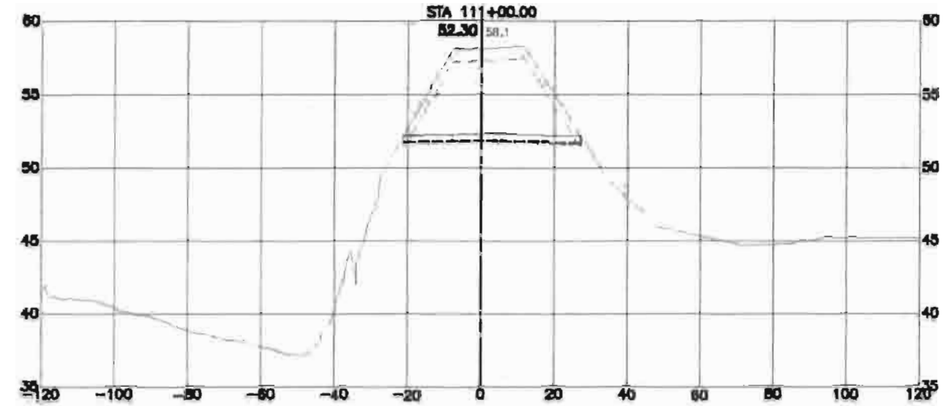
Christie True, Director

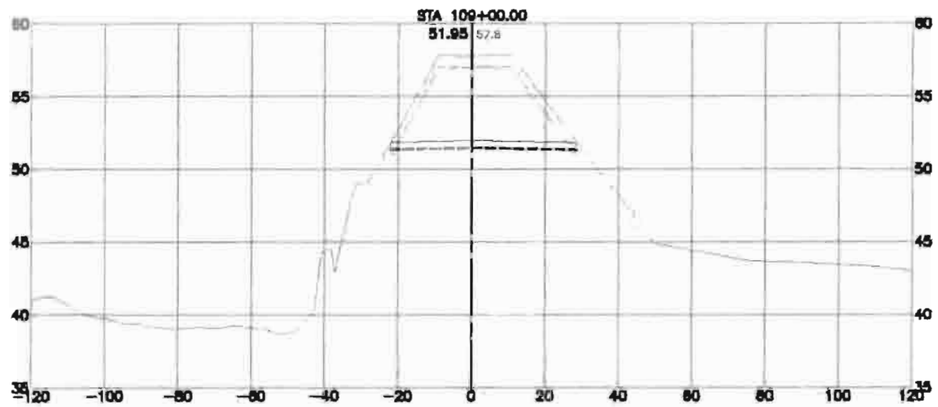
REDDINGTON LEVEE SETBACK

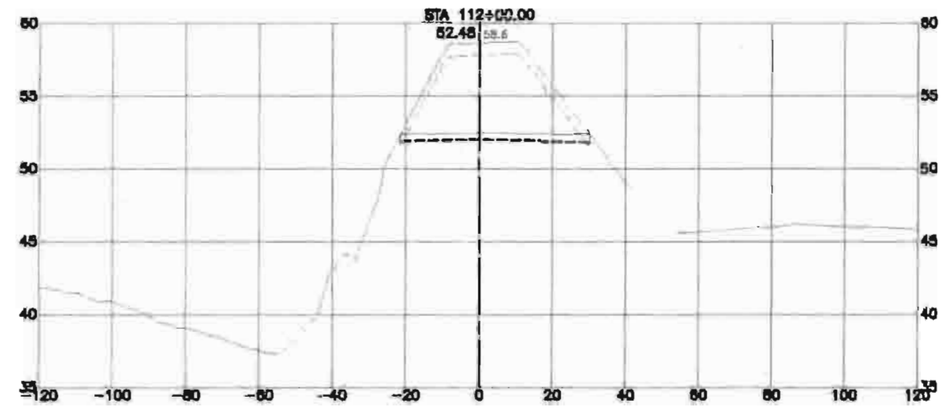
EXISTING LEVEE SECTIONS
SECTIONS STA 104+75 TO STA 106+60

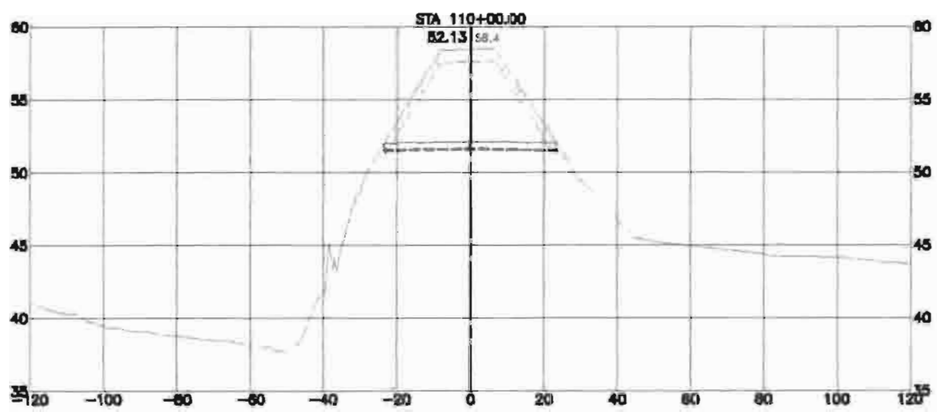
SHEET CS-14 OF 107 SHEETS

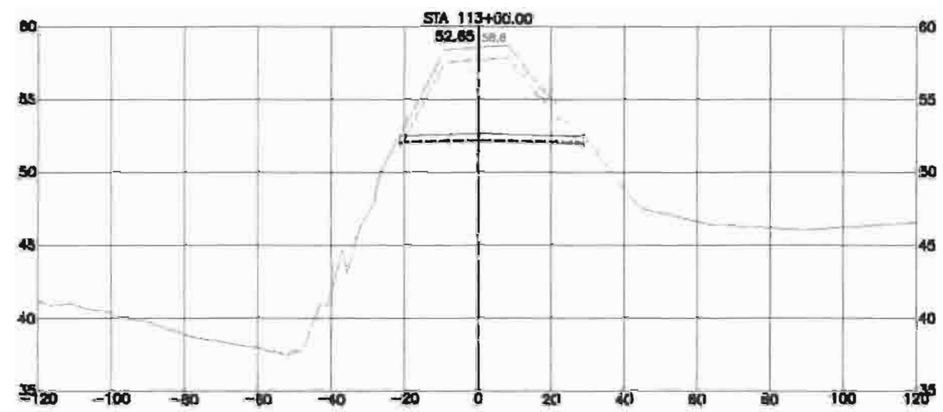












NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER: CYNTHIA CARLSTAD		3/2013
DESIGNED: MARK HOPKINSON, PE		3/2013
REVIEWED:		
CAD DESIGN: ERIK NORDHOLM		3/2013

FUNDING SOURCE No. —

PROJECT No. 1112035

CONTRACT No. C00617C13

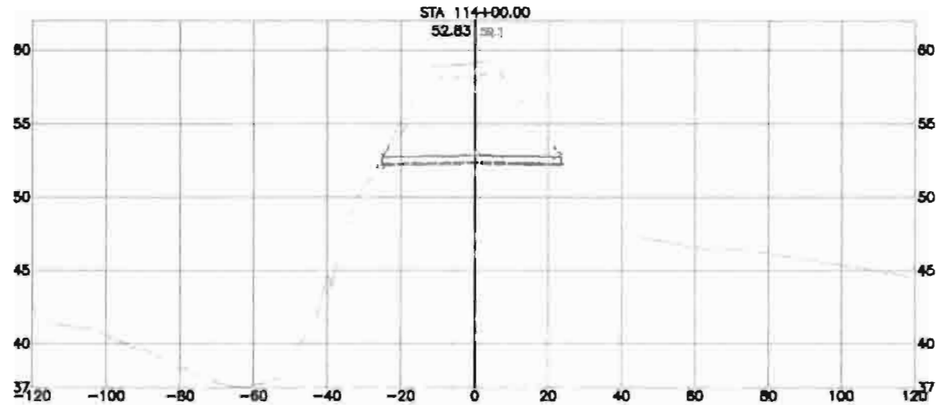
TETRA TECH

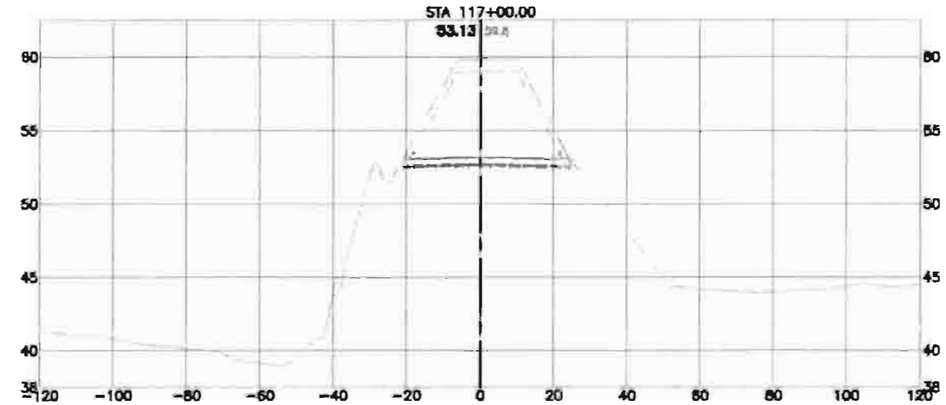
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

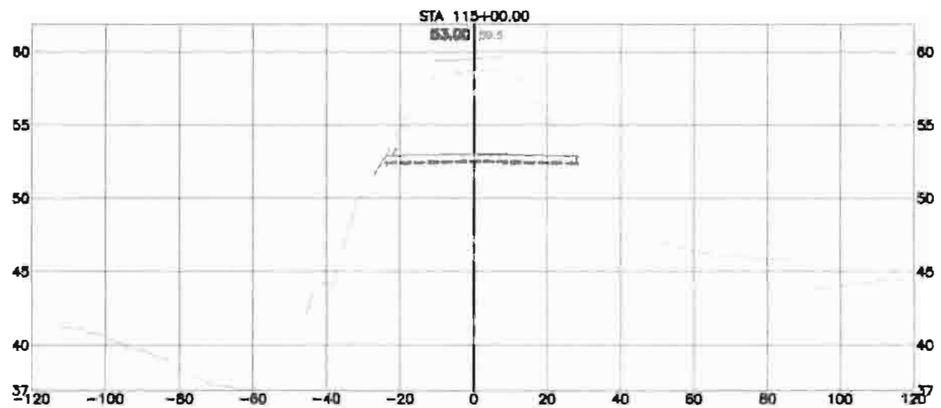
REDDINGTON LEVEE SETBACK

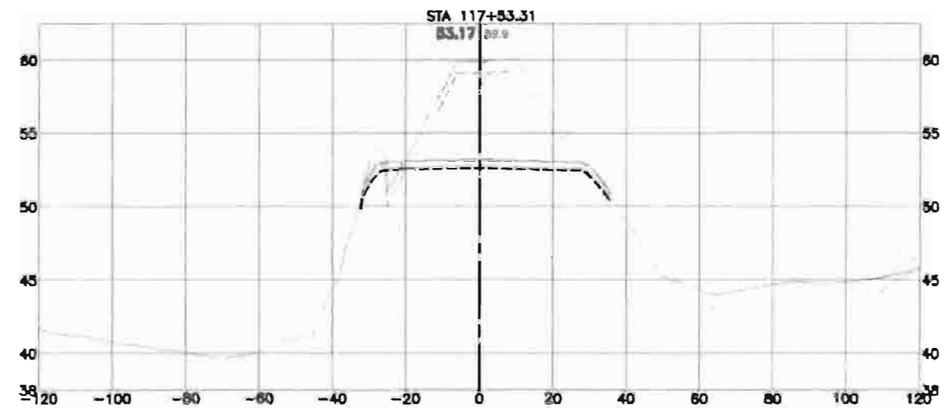
EXISTING LEVEE SECTIONS
SECTIONS STA 108+00 TO STA 113+00

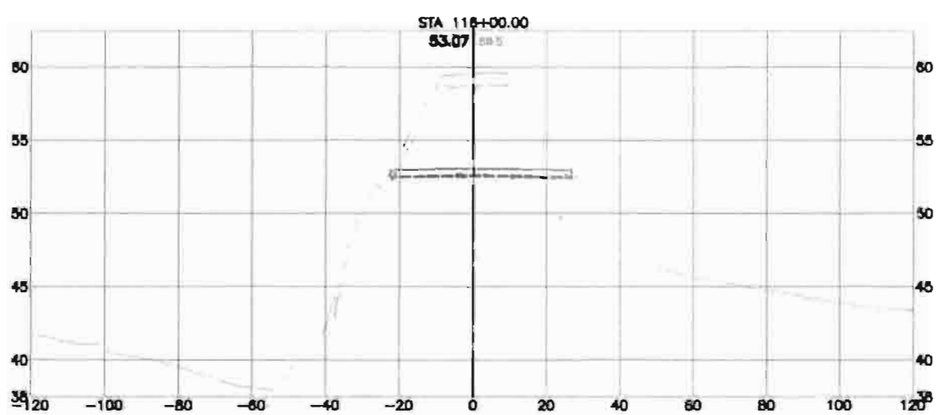
SHEET **C5-15** OF **107** SHEETS

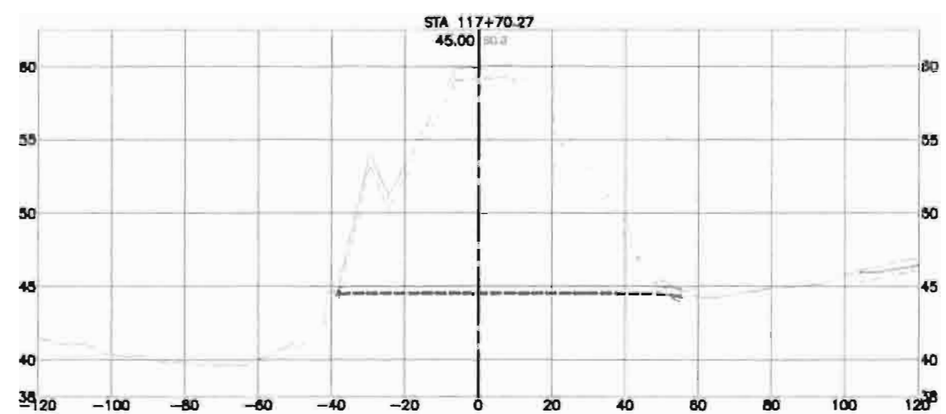












NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DESIGN: ERIK NORDHOLM 3/2013

FUNDING SOURCE No.

PROJECT No. 111203S

CONTRACT No. C00817C13

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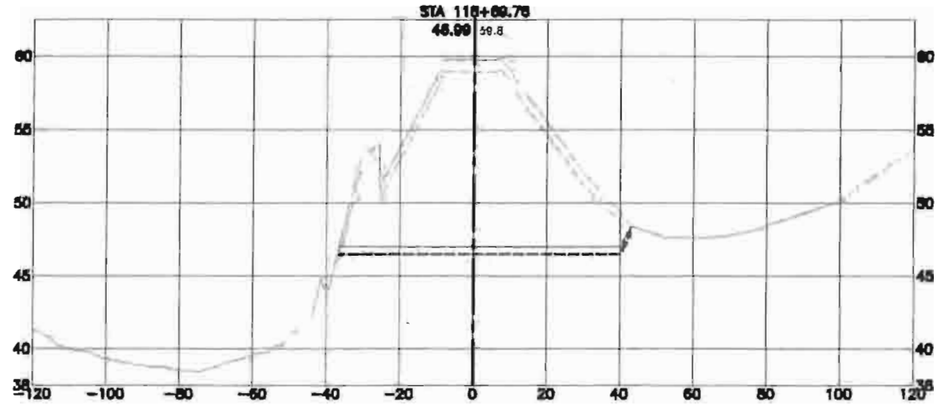
MARK HOPKINSON
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
5-27-15

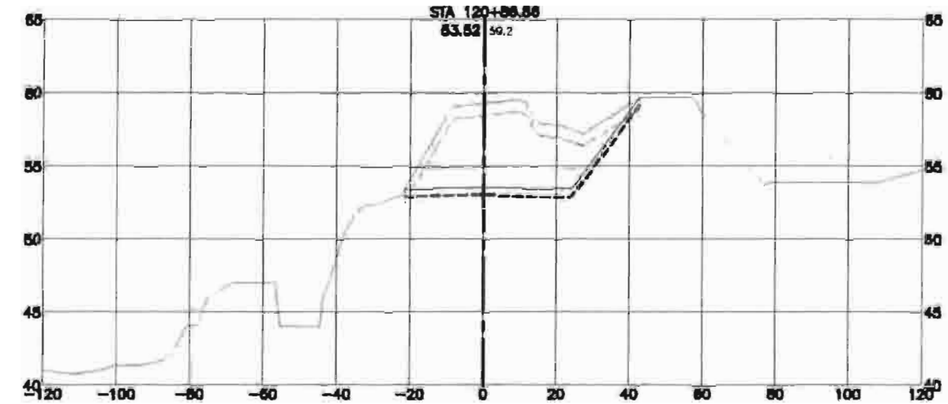
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

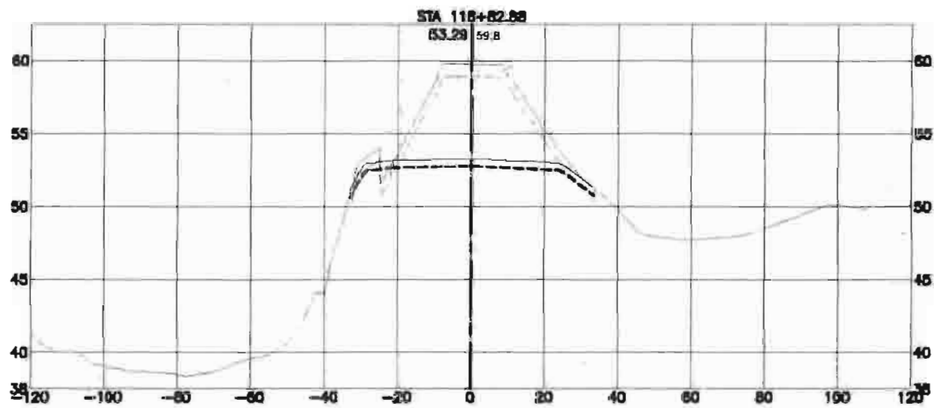
REDDINGTON LEVEE SETBACK

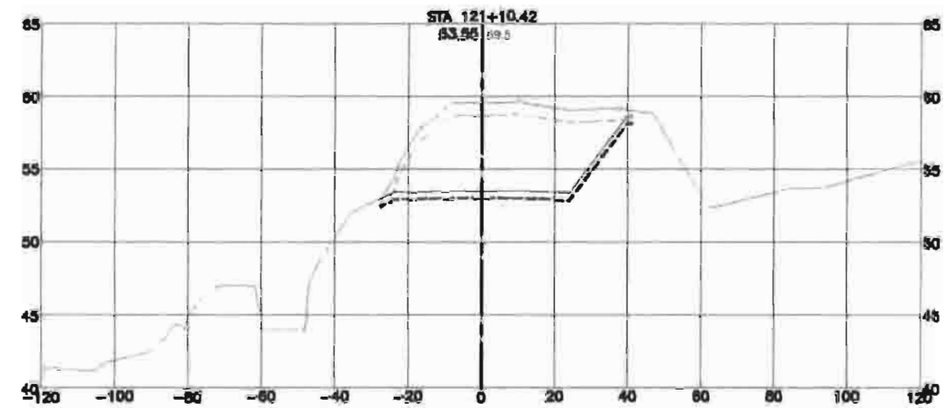
EXISTING LEVEE SECTIONS
SECTIONS STA 114+00 TO STA 117+70

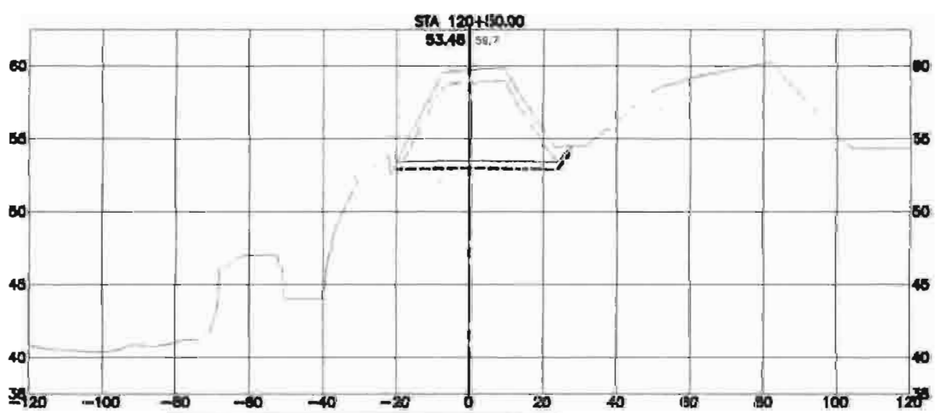
SHEET C5-16 OF 107 SHEETS

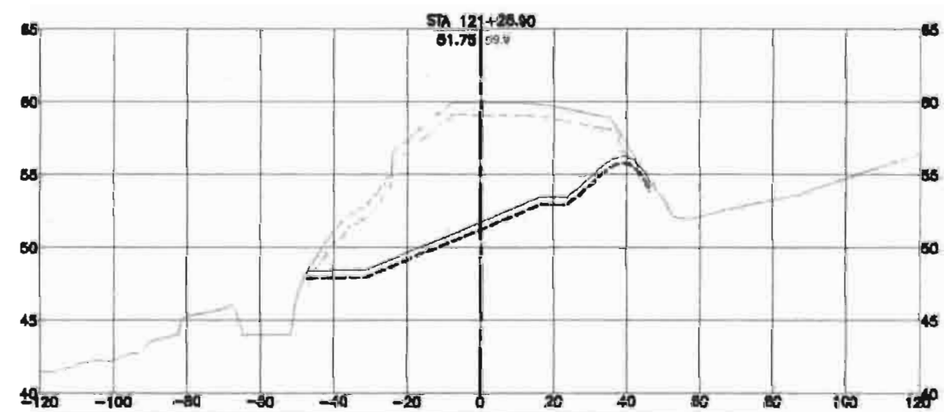












NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, PE	3/2013
REVIEWED:		
CAD DESIGN:	ERIK NORDHOLM	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00812C13

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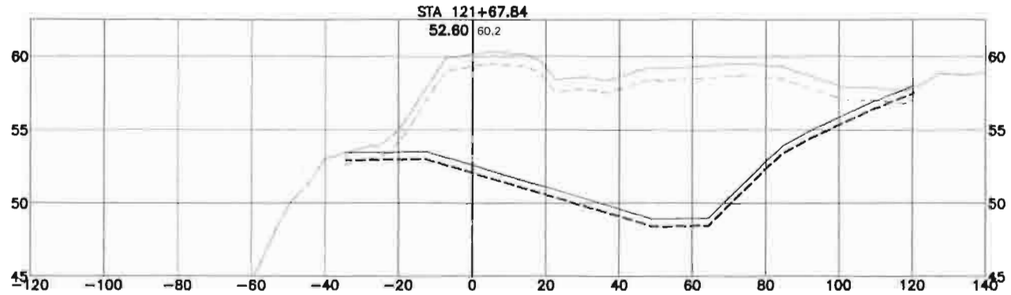
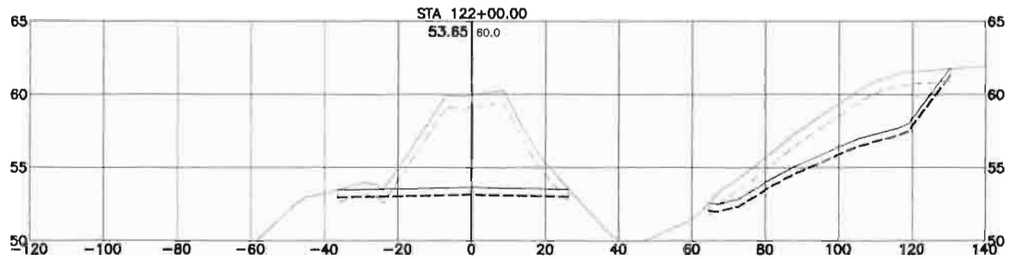
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

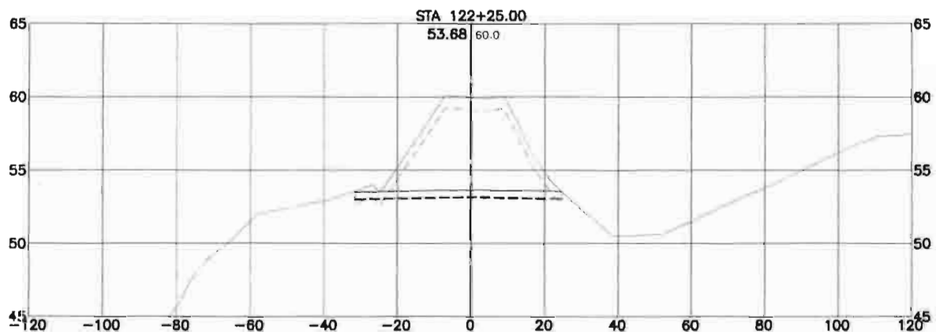
REDDINGTON LEVEE SETBACK

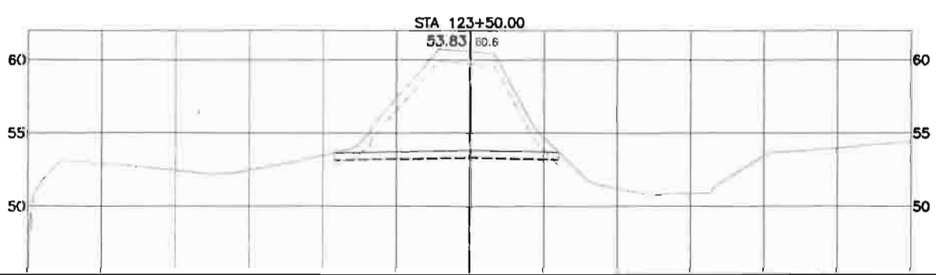
EXISTING LEVEE SECTIONS
SECTIONS STA 118+69 TO STA 121+26

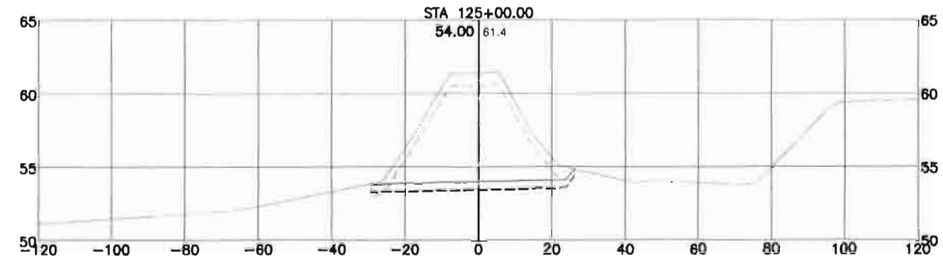
SHEET
C5-17
OF
107
SHEETS

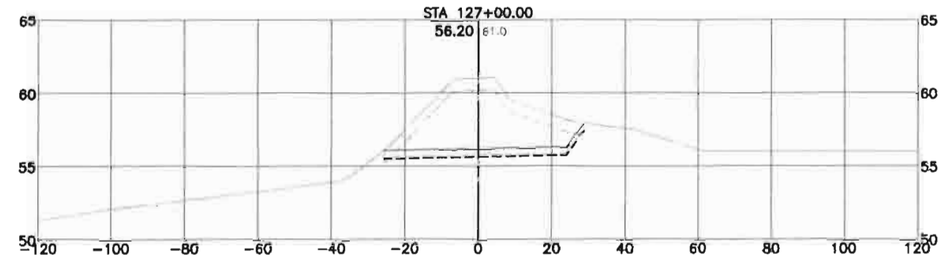


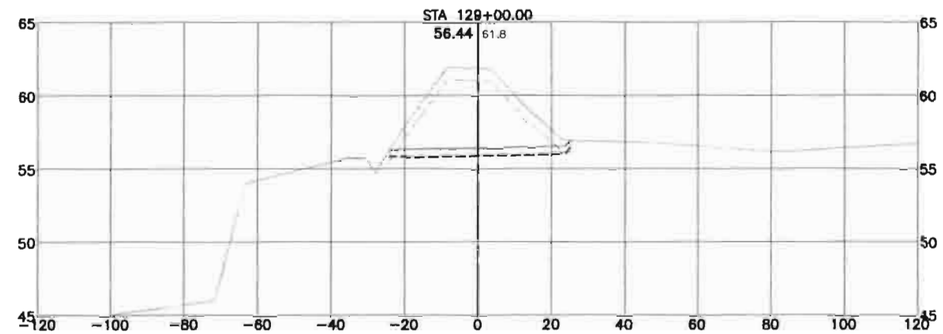












NOTE:

STA 129+00 – END EXISTING LEVEE SECTIONS. BEGIN BARB 9 CONSTRUCTION. SEE PROPOSED LEVEE SECTION CONTINUATION BEGINNING FROM STA 50+00

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:		
PROJECT MANAGER:	CYNTHIA CARLSTAD	3/2013
DESIGNED:	MARK HOPKINSON, PE	3/2013
REVIEWED:		
CAD DESIGN:	ERIK NORDHOLM	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

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King County
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Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

EXISTING LEVEE SECTIONS
SECTIONS STA 121+67 TO STA 129+00

SHEET **C5-18** OF **107** SHEETS

PROPOSED LEVEE

STATION	COMMON EXCAVATION				WET EXCAVATION		EMBANKMENT									
	TOPSOIL (1)		COMMON		COMMON (2)		CORE FILL		SELECT FILL		COMMON FILL		RIP RAP		TOPSOIL	
	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.
	SF	CY	SF	CY	SF	CY	SF	CY	SF	CY	SF	CY	SF	CY	SF	CY
14+15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14+40.00	14	7	0	0	0	0	0	0	11	5	0	0	0	0	15	1
15+00.00	57	79	0	0	0	0	0	0	118	143	0	0	0	0	40	34
16+00.00	60	217	0	0	0	0	0	0	168	530	0	0	0	0	42	107
17+00.00	48	201	0	0	0	0	0	0	25	356	0	0	0	0	35	99
17+15.00	11	17	0	0	0	0	0	0	0	7	0	0	0	0	13	7
18+00.00	11	35	0	0	0	0	0	0	0	0	0	0	0	0	13	2
18+65.00	55	79	0	0	0	0	0	0	77	92	0	0	0	0	39	33
19+00.00	59	74	0	0	0	0	0	0	149	146	0	0	0	0	42	36
20+00.00	57	216	0	0	0	0	0	0	127	509	0	0	0	0	40	107
21+00.00	52	203	0	0	0	0	0	0	41	310	0	0	0	0	37	99
21+40.00	49	75	0	0	0	0	0	0	33	55	0	0	0	0	36	36
21+75.00	11	39	6	4	0	0	0	0	0	21	0	0	0	0	13	16
23+00.00	11	52	0	13	0	0	0	0	0	0	0	0	0	0	13	3
24+00.00	24	65	0	0	0	0	0	0	13	25	0	0	0	0	20	17
24+50.00	37	56	0	0	0	0	12	11	101	95	0	0	0	0	28	23
24+90	100	101	430	319	13	10	28	30	105	153	480	356	0	0	54	61
25+10	104	76	655	402	181	72	35	23	98	75	640	415	228	84	56	41
25+50.00	103	186	645	1150	182	325	29	57	92	173	425	974	228	406	55	100
25+75.40	81	109	334	666	459	500	27	26	90	85	72	330	392	436	60	70
26+00.04	70	84	214	368	150	526	28	25	93	83	103	106	228	472	60	72
26+59.47	66	157	135	430	137	380	25	59	87	198	99	246	228	586	61	145
26+99.81	63	96	131	199	350	363	22	35	79	125	71	127	392	463	60	90
27+49.87	59	127	69	251	108	794	27	45	90	156	95	202	228	951	60	145
28+28.79	88	220	304	575	445	888	35	91	108	288	76	258	392	972	61	183
29+25.25	114	334	511	1253	192	933	39	133	114	396	192	431	241	967	69	216
30+50.00	109	391	473	1268	202	450	36	174	108	513	172	552	252	653	68	243
31+22.03	91	255	316	969	461	787	55	121	148	341	92	334	392	785	64	169
32+12.16	92	306	281	997	177	1064	58	188	156	507	136	381	228	1034	66	217
33+06.17	84	307	169	783	436	1067	65	213	172	571	102	415	392	1078	65	228
34+00.69	83	292	167	589	162	1047	65	227	171	601	138	420	228	1084	65	229
34+98.23	78	291	92	469	399	1013	65	235	173	622	110	449	392	1119	67	239
35+91.41	80	273	105	346	148	973	69	200	184	531	158	263	212	1065	67	202
36+82.93	84	275	160	433	394	858	67	265	179	703	125	676	379	949	67	255
37+31.55	85	150	167	283	159	465	66	160	175	424	153	496	214	507	66	156
38+16.21	100	285	240	613	182	506	62	163	166	434	170	276	228	661	66	165
38+70.00	118	217	296	532	525	698	61	123	164	328	105	274	392	613	66	132
39+22.47	103	215	414	690	182	687	60	118	160	314	351	443	228	602	56	118
40+00.00	109	305	530	1356	182	522	56	166	151	446	600	1365	228	653	59	165
40+59.46	48	173	0	584	0	200	38	104	112	289	58	724	0	251	22	89
42+00.00	45	241	0	0	0	0	34	188	104	561	50	280	0	0	21	111
43+73.53	45	290	0	0	0	0	31	210	98	648	50	320	0	0	21	132
43+93.37	70	42	0	0	0	0	31	23	99	72	154	75	0	0	34	20
45+00.00	45	227	0	0	0	0	80	220	160	511	54	412	0	0	21	108
46+70.17	76	382	0	0	0	0	18	309	81	759	81	425	0	0	38	183
47+00.00	41	65	0	0	0	0	24	23	85	91	39	66	0	0	18	31
48+00.00	55	179	0	0	0	0	62	159	163	458	88	237	0	0	27	83
49+00.00	49	193	0	0	0	0	41	191	118	521	62	280	0	0	23	92
50+00.00	49	182	0	0	0	0	44	157	122	445	63	231	0	0	23	85
51+00.00	62	206	0	0	0	0	42	159	120	447	73	252	0	0	28	94
52+00.00	50	194	0	0	0	0	35	144	106	416	52	221	0	0	22	86
53+00.00	44	175	0	0	0	0	41	142	116	411	61	208	0	0	20	77
54+00.00	42	160	0	0	0	0	36	142	113	423	59	220	0	0	19	72
55+00.00	43	158	0	0	0	0	24	109	95	382	54	205	0	0	19	70
56+00.00	41	155	0	0	0	0	15	71	77	318	44	180	0	0	18	69
57+00.00	43	155	0	0	0	0	29	82	97	322	48	170	0	0	19	69
58+51.83	41	237	0	0	0	0	25	151	86	515	36	237	0	0	18	105
59+49.48	43	152	0	0	0	0	35	107	104	343	47	150	0	0	20	67
59+80.93	140	100	833	421	182	93	20	32	79	106	526	302	204	107	75	51
60+30.11	90	236	642	1618	182	403	12	29	66	131	278	874	204	439	47	128
61+50.00	79	394	349	2416	160	863	19	68	78	318	52	816	204	1011	19	155

PROPOSED LEVEE

STATION	COMMON EXCAVATION				WET EXCAVATION		EMBANKMENT									
	TOPSOIL (1)		COMMON		COMMON (2)		CORE FILL		SELECT FILL		COMMON FILL		RIP RAP		TOPSOIL	
	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.	END AREA	VOL.
62+50.00	95	321	523	1616	182	633	42	111	116	361	67	220	204	757	22	77
63+28.65	108	295	588	1619	246	623	44	125	127	354	70	199	204	595	22	65
63+58.32	46	85	0	323	0	135	44	49	127	140	65	74	0	112	21	24
65+00.00	53	264	0	0	0	0	48	243	131	677	75	373	0	0	22	114
66+50.00	45	274	0	0	0	0	52	279	139	749	65	392	0	0	20	118
68+00.00	45	249	0	0	0	0	55	297	143	783	67	365	0	0	20	113
69+00.00	45	164	0	0	0	0	56	204	147	536	67	244	0	0	20	75
70+00.00	45	166	0	0	0	0	51	197	138	527	66	245	0	0	20	76
71+00.00	52	181	0	0	0	0	55	196	143	522	76	264	0	0	25	84
72+00.00	40	173	0	0	0	0	21	140	80	418	36	214	0	0	17	79
72+85.00	31	111	0	0	0	0	0	33	47	199	20	86	0	0	12	46
73+15.00	0	17	0	0	0	0	0	0	0	26	0	10	0	0	0	7
TOTAL (Ave End Area)		13063		23554		17879		7582		24139		19360		19415		7117

NOTES:

1. 10-INCH STRIPPING DEPTH ASSUMED
2. GROUNDWATER SURFACE ELEVATION (GWSE):

STA 25+00 TO STA 41+00: GWSE=46
STA 49+00 TO STA 63+00: GWSE=48
STA 63+00 TO STA 71+00: GWSE=49

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED: _____

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED: _____

CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

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MARK HOPKINSON STATE OF WASHINGTON 38152 PROFESSIONAL ENGINEER 4-4-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PROPOSED LEVEE EARTHWORK TABULATION

SHEET T-1 OF 107 SHEETS

EXISTING LEVEE

STATION	DRY EXCAVATION				WET EXCAVATION		EMBANKMENT									
	TOPSOIL (1)		COMMON		COMMON (2)		CORE FILL		SELECT FILL		COMMON FILL		RIP RAP		TOPSOIL	
	END AREA SF	VOL. CY	END AREA SF	VOL. CY	END AREA SF	VOL. CY	END AREA SF	VOL. CY	END AREA SF	VOL. CY	END AREA SF	VOL. CY	END AREA SF	VOL. CY	END AREA SF	VOL. CY
104+75.00	0	0	0	0	0	0									0	0
105+00.00	45	21	218	101	0	0									27	13
105+20.00	44	33	222	163	0	0									27	20
105+40.00	84	48	588	302	148	56									51	29
106+40.00	85	314	617	2240	153	564									52	192
106+60.00	55	52	300	339	0	57									33	32
107+30.01	39	122	196	643	0	0									23	73
108+25.00	37	134	173	649	0	0									22	80
110+00.00	39	246	179	1139	0	0									23	148
111+00.00	40	147	183	671	0	0									24	88
112+00.00	43	155	204	719	0	0									26	93
113+00.00	42	157	182	716	0	0									25	94
114+00.00	41	152	186	681	0	0									24	91
115+00.00	43	155	212	736	0	0									26	93
116+00.00	41	156	200	764	0	0									24	94
117+00.00	38	146	190	723	0	0									23	87
117+47.97	42	71	206	352	0	0									25	43
117+70.27	70	46	666	361	136	57									47	30
118+69.76	66	252	611	2357	0	253									40	160
118+87.56	38	35	184	262	0	0									23	21
120+50.00	39	234	179	1092	0	0									24	140
120+86.86	53	63	218	271	0	0									32	38
121+10.42	57	48	285	220	0	0									34	29
121+28.90	77	46	472	259	1	0									47	28
121+67.84	129	158	871	1025	0	1									77	95
122+00.00	107	162	317	804	0	0									64	97
122+25.00	47	76	184	246	0	0									28	46
123+50.00	51	226	216	927	0	0									30	135
125+00.00	46	270	215	1200	0	0									28	162
127+00.00	45	340	141	1321	0	0									27	204
129+00.00	41	320	148	1071	0	0									25	192
TOTAL (Ave End Area)		4383		22353		987										2644

NOTES

1. 10-INCH STRIPPING DEPTH ASSUMED
2. GROUNDWATER SURFACE ELEVATION (GWSE):

STA 105+00 TO STA 108+00: GWSE=46

PROPOSED BARB CONSTRUCTION

LOCATION	COMMON EXCAVATION				WET EXCAVATION		EMBANKMENT					
	TOPSOIL (1)		EXCAV		EXCAV-WET (2)		COMMON FILL		RIP RAP		TOPSOIL	
		VOL. CY		VOL. CY		VOL. CY		VOL CY		VOL. CY		VOL. CY
BARB 9		677		5795		2245		2899		1031		405
BARB 8		607		6351		2246		1236		936		361
BARB 7		540		5522		2217		1128		1150		368
BARB 6		765		6500		2377		1755		1435		490
BARB 5		919		6710		1968		3082		1415		551
BARB 4		277		2621		1478		979		793		153
BARB 3		615		4488		1921		3138		826		369
BARB 2		603		4350		1944		3241		815		363
BARB 1		557		4636		1917		3423		818		326
TOTAL		5560		46973		18313		20881		9219		3386

NOTES:

1. 10-INCH STRIPPING DEPTH ASSUMED
2. GROUNDWATER SURFACE ELEVATION (GWSE):

STA 49+00 TO STA 63+00 (BARBS 5 TO 9): GWSE=48

STA 63+00 TO STA 71+00 (BARBS 1 TO 4): GWSE=49

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:

PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013

DESIGNED: MARK HOPKINSON, PE 3/2013

REVIEWED:

CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --

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Christie True, Director

REDDINGTON LEVEE SETBACK

EXIST LEVEE/PROPOSED BARB EARTHWORK TABULATION

SHEET **T-2** OF **107** SHEETS

EARTHWORK VOLUME SUMMARY

DESCRIPTION	LOCATION	COMMON EXCAVATION		WET EXCAV	EMBANKMENT						
		TOPSOIL	EXCAV	EXCAV	CORE FILL	SELECT FILL	COMMON FILL	RIP RAP	TOPSOIL	CSBC	HMA CL 1/2" PG 64-22
		VOL.	VOL.	VOL.	VOL.	VOL.	VOL.	VOL.	VOL.	VOL.	VOL.
PROPOSED LEVEE CONSTRUCTION	STA 8+70 TO STA 73+15	13,063	23,554	17,879	7,582	24,139	19,360	19,415	7,117		
EXISTING LEVEE CONSTRUCTION	STA 104+75 TO STA 129+00	4,383	22,353	987					2,644		
PROPOSED BARB CONSTRUCTION	BARB 9 VICINITY	677	5795	2,245			2,899	1,031	405		
	BARB 8 VICINITY	607	6351	2,246			1,236	936	361		
	BARB 7 VICINITY	540	5522	2,217			1,128	1,150	368		
	BARB 6 VICINITY	765	6500	2,377			1,755	1,435	490		
	BARB 5 VICINITY	919	6710	1,968			3,082	1,415	551		
	BARB 4 VICINITY	277	2621	1,478			979	793	153		
	BARB 3 VICINITY	615	4488	1,921			3,138	826	369		
	BARB 2 VICINITY	603	4350	1,944			3,241	815	363		
	BARB 1 VICINITY	557	4636	1,917			3,423	818	326		
STORM WATER SWALE		926	1,955								
SELECT FILL, NOT COMMON FILL, UNDER ACCESS RAMPS (ALLOW)						1,200	-1,200				
LEVEE ROAD, ACCESS ROADS, PATH & PVMT PATCH		260				950				2,400	600
TOTAL (ROUNDED)		**24,200**	**94,800**	**37,200**	**7,600**	**26,300**	**39,000**	**28,600**	**13,100**	**2,400**	**600**

ESTIMATED EARTHWORK BALANCE BY EXCAVATED VOLUME (EV)

DESCRIPTION	UNITS	ESTIMATED CV:EV RATIO (SEE NOTE 1)	ESTIMATED % SUITABLE MATERIAL (SEE NOTE 2)	EXCAV MATERIAL AVAILABLE	EXCAV MATERIAL REQUIRED
CORE FILL					
CORE REQUIRED (EV)	CY	1.30	SEE NOTE 3	0	9,900
SELECT FILL					
SELECT REQUIRED (EV)	CY	1.15			30,200
SUITABLE PROPOSED LEVEE COMMON EXCAVATION (EV)	CY		30%	7,700	
SUITABLE PROPOSED LEVEE WET EXCAVATION (EV)	CY		60%	10,700	
SUITABLE EXISTING LEVEE COMMON EXCAVATION (EV)	CY		50%	11,200	
SUITABLE EXISTING LEVEE WET EXCAVATION (EV)	CY		60%	600	
SUITABLE BARB COMMON EXCAVATION (EV)	CY		40%	18,800	
SUITABLE BARB WET EXCAVATION (EV)	CY		60%	11,000	
SELECT BORROW OR (EXCESS EXCAVATION) (EV)	**CY**			**(29,800)**	
COMMON FILL					
COMMON REQUIRED (EV)	CY	1.10			42,900
EXCESS SUITABLE SELECT AS COMMON EXCAVATION (EV)	CY			29,800	
REMAINING SUITABLE PROPOSED LEVEE COMMON EXCAVATION (EV)	CY		50%	12,800	
REMAINING SUITABLE PROPOSED LEVEE WET EXCAVATION (EV)	CY		30%	5,400	
REMAINING SUITABLE EXISTING LEVEE COMMON EXCAVATION (EV)	CY		30%	6,700	
REMAINING SUITABLE EXISTING LEVEE WET EXCAVATION (EV)	CY		30%	300	
REMAINING SUITABLE BARB COMMON EXCAVATION (EV)	CY		40%	18,800	
REMAINING SUITABLE BARB WET EXCAVATION (EV)	CY		30%	5,500	
COMMON BORROW OR (EXCESS EXCAVATION) (EV)	**CY**			**(36,400)**	
TOPSOIL					
TOPSOIL REQUIRED (EV)	CY	1.20			15,700
SUITABLE PROPOSED LEVEE TOPSOIL EXCAVATION (EV)	CY		100%	14,000	
SUITABLE EXISTING LEVEE TOPSOIL EXCAVATION (EV)	CY		100%	4,400	
SUITABLE BARB TOPSOIL EXCAVATION (EV)	CY		100%	5,600	
TOPSOIL BORROW OR (EXCESS EXCAVATION) (EV)	CY			**(8,300)**	
EXCESS TOPSOIL					
STOCKPILE, SALVAGE, AND DISTRIBUTE EXCESS TOPSOIL ON SITE (EV)	CY		SEE NOTE 4	8,300	
ESTIMATED HAUL TO WASTE					
EXCESS SUITABLE COMMON EXCAVATION (EV)	CY			36,400	
REMAINING UNSUITABLE PROPOSED LEVEE COMMON EXCAVATION (EV)	CY		20%	5,100	
REMAINING UNSUITABLE PROPOSED LEVEE WET EXCAVATION (EV)	CY		10%	1,800	
REMAINING UNSUITABLE EXISTING LEVEE COMMON EXCAVATION (EV)	CY		20%	4,500	
REMAINING UNSUITABLE EXISTING LEVEE WET EXCAVATION (EV)	CY		10%	100	
REMAINING UNSUITABLE BARB COMMON EXCAVATION (EV)	CY		20%	9,400	
REMAINING UNSUITABLE BARB WET EXCAVATION (EV)	CY		10%	1,800	
ESTIMATED TOTAL HAUL TO WASTE	**CY**			**59,100**	

NOTES:

1. COMPACTED VOLUME TO EXCAVATED VOLUME RATIO (CV:EV) ESTIMATED BASED ON MATERIAL TYPE, IN SITU DENSITY, AND COMPACTION REQUIRED. CONSTRUCTION RESULTS MAY VARY BASED ON CONTRACTOR MEANS AND METHODS. CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF ALL CV:EV RATIOS AS THE BASIS OF THEIR CONTRACT BID.
2. ESTIMATED % SUITABLE MATERIAL BASED ON GEOTECHNICAL EXPLORATIONS AND MATERIAL PERFORMANCE REQUIREMENTS. CONTRACTOR SHALL INCLUDE IN THEIR CONTRACT BID THAT ALL EXCAVATED MATERIALS SHOWN AS SUITABLE FOR FILL PLACEMENT WILL REQUIRE MOISTURE CONDITIONING TO MEET SPECIFIED REQUIREMENTS PRIOR TO FILL PLACEMENT.
3. CORE MATERIAL IMPORT REQUIRED.
4. STOCKPILE EXCESS TOPSOIL PER PROPOSED LEVEE DRAWINGS AND AS DIRECTED BY PROJECT REPRESENTATIVE. SPREAD EXCESS TOPSOIL ON SITE PER LANDSCAPE DRAWINGS AND AS DIRECTED BY PROJECT REPRESENTATIVE.

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:
PROJECT MANAGER: CYNTHIA CARLSTAD 3/2013
DESIGNED: MARK HOPKINSON, PE 3/2013
REVIEWED:
CAD DESIGN: E. NORDHOLM, R. MORRIS 3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

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MARK HOPKINSON STATE OF WASHINGTON 38116 PROFESSIONAL ENGINEER 2-4-13

King County
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River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

EARTHWORK VOLUME SUMMARY AND BALANCE

SHEET **T-3** OF **107** SHEETS

GREEN RIVER

ORDINARY HIGH WATER LINE

WETLANDS EXTENT

SECTION SHOWN ON SHEET E3-3 25+25

TYPE 1 ELJ AND SPUR CENTERLINE 25+77

ROCK SPUR CENTERLINE IS LOCATED PERPENDICULAR TO THE NEW LEVEE CENTERLINE (TYP)

TYPE 1 ELJ AND SPUR CENTERLINE 27+04

PLACE TOPSOIL CAP OVER REVETMENT SEE SHEETS E3-3 AND E3-4

BACKFILL OVER REVETMENT LAUNCH TOE USING COMMON FILL SEE SHEETS E3-3 AND E3-4

TYPE 1 ELJ AND SPUR CENTERLINE 28+22

CONTINUE REVETMENT TO STA 25+00 BACKFILL TO FINISH GRADE AS SHOWN BEGINNING AT STA 25+70.

SECTION SHOWN ON SHEET E3-3 29+75

TYPE 1 ELJ AND SPUR CENTERLINE 31+22

CONSTRUCT ROCK SPUR BEHIND EACH TYPE 1 ELJ (TYP) SEE SHEET E3-3

TYPE 1 ELJ AND SPUR CENTERLINE 33+06

TYPE 1 ELJ AND SPUR CENTERLINE SECTION SHOWN ON SHEET E3-3 35+00

PROPOSED LEVEE CENTERLINE STATIONING

RIVER MOBILE ESTATES REVETMENT

PLACE REVETMENT ROCK TO ELEV. 56.4 FEET

25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

30 0 30 60 90
SCALE IN FEET

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	ERIK ROWLAND, P.E.	3/2013
PROJECT MANAGER:	VAUGHN COLLINS, P.E.	3/2013
DESIGNED:	VAUGHN COLLINS, P.E.	3/2013
	CHRIS LONG, P.E.	3/2013
REVIEWED:	BRUCE WALSH, P.ENG.	3/2013
CAD DESIGN:	CHRIS LONG, P.E.	3/2013

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MARCH 27, 2013

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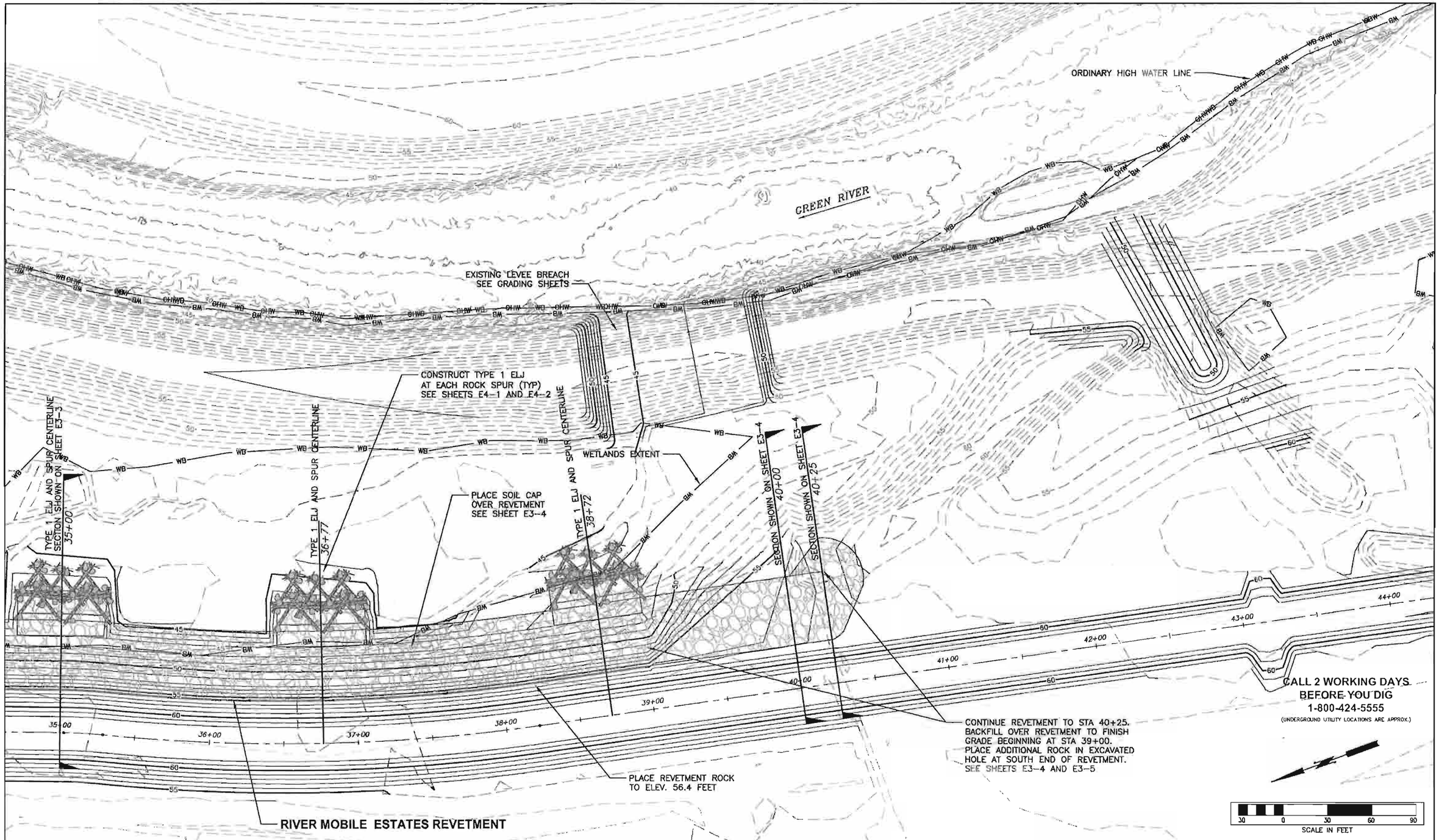
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

ENGINEERED LOGJAMS AND REVETMENT STA 25+00 TO 35+00

SHEET E1-1 OF 107 SHEETS



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REDDINGTON LEVEE SETBACK

ENGINEERED LOGJAMS AND REVETMENT STA 35+00 TO 44+00

SHEET E1-2 OF 107 SHEETS

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

GREEN RIVER

TYPE 2 LOG CLUSTER
SEE SHEET E4-4

FINISH GRADE MERGES
WITH EXISTING GRADE

TYPE 2 LOG CLUSTER
SEE SHEET E4-4

TYPE 2 ELJ
SEE SHEET E4-3

TYPE 2 LOG CLUSTER

TYPE 2 ELJ

TACOMA WATER PIPELINE

BARB SHANK (TYP)

BARB #9

BARB SECTIONS SHOWN ON
SHEETS E2-5, E2-6 AND E2-7

NO KEY ON BARB #9

TYPE 3 ELJ
SEE SHEET E4-3

BARB #8

PROPOSED LEVEE
CENTERLINE STATIONING

44+00
45+00
46+00
47+00
48+00
49+00
50+00
51+00
52+00
53+00
48+56
50+93.1

KEY BARB INTO LEVEE
SEE SHEETS E2-1 AND E2-2

LEVEE ACCESS RAMP

TYPE 3 ELJ
SEE SHEET E4-3

BARB #7

BARB LINES AND HATCHING REPRESENT LATERAL
EXTENT OF BARB ROCK. CONTRACTOR SHALL PLACE
FILL OVER CONSTRUCTED BARBS FOLLOWING GUIDANCE
FOR FINISH GRADE.

30 0 30 60 90
SCALE IN FEET

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	ERIK ROWLAND, P.E.	3/2013
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REDDINGTON LEVEE SETBACK

ROCK BARBS
STA 44+00 TO 53+00

SHEET
E1-3
OF
107
SHEETS

WETLANDS EXTENT

TYPE 2 ELJ
SEE SHEET E4-3

BARB SECTIONS SHOWN ON
SHEETS E2-5, E2-6 AND E2-7

TYPE 3 ELJ

TYPE 2 LOG CLUSTER

TYPE 2 ELJ

TYPE 1 LOG CLUSTER
SEE SHEET E4-4

BARB LAUNCH
ROCK (TYP)

FINISH GRADE MERGES
WITH EXISTING GRADE

ORDINARY HIGH WATER LINE

TYPE 1 LOG CLUSTER
SEE SHEET E4-4

BARB #7

BARB #6

BARB #5

TYPE 3 ELJ
SEE SHEET E4-3

TYPE 2 LOG CLUSTER

KEY BARB INTO LEVEE (TYP)
SEE SHEETS E2-1 AND E2-2

BARB SHANK (TYP)

TYPE 2 LOG CLUSTER
SEE SHEET E4-4

SECTION SHOWN ON SHEET E3-1
60+50

SECTION SHOWN ON SHEET E3-1
61+50

SECTION SHOWN ON SHEET E3-2
62+50

GREEN RIVER

BRANNAN PARK
REVETMENT

PLACE REVETMENT ROCK
TO ELEV. 58.0 FEET.

CONTINUE REVETMENT TO STA 59+75
BEGIN TO BACKFILL OVER REVETMENT
AT STA 60+80 TO FINISH GRADE.

50+93
52+82
54+38
56+71
60+00
54+00
55+00
56+00
57+00
58+00
59+00
61+00
62+00

30 0 30 60 90
SCALE IN FEET

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

BARB LINES AND HATCHING REPRESENT LATERAL EXTENT OF BARB ROCK. CONTRACTOR SHALL PLACE FILL OVER CONSTRUCTED BARBS FOLLOWING GUIDANCE FOR FINISH GRADE.

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REDDINGTON LEVEE SETBACK

ROCK BARBS AND ROCK REVETMENT
STA 53+00 TO 63+00

SHEET
E1-4
OF
107
SHEETS

GREEN RIVER

BRANNAN PARK REVETMENT

BARB SECTIONS SHOWN ON SHEETS E2-5, E2-6 AND E2-7

ORDINARY HIGH WATER LINE

WETLANDS EXTENT

TYPE 1 LOG CLUSTER

BARB #1

BARB LAUNCH ROCK (TYP)

TYPE 2 LOG CLUSTER SEE SHEET E4-4

TYPE 1 LOG CLUSTER SEE SHEET E4-4

BARB #2

BARB #3

TYPE 1 LOG CLUSTER

BARB #4

TYPE 2 LOG CLUSTER

TYPE 2 LOG CLUSTER

SECTION SHOWN ON SHEET E3-2 62+50

SECTION SHOWN ON SHEET E3-2 63+25

63+15

65+07

67+11

69+12

72+00

63+00

64+00

65+00

66+00

67+00

68+00

69+00

70+00

71+00

BARB SHANK (TYP)

PLACE REVETMENT ROCK TO ELEV. 58.0 FEET

TRANSITION BRANNAN PARK REVETMENT INTO DOWNSTREAM SIDE OF BARB #4. LEAVE DOWNSTREAM SIDE OF BARB #4 AND BRANNAN PARK REVETMENT AS EXPOSED ROCK. BACKFILL UPSTREAM SIDE OF BARB #4 TO FINISH GRADE.

KEY BARB INTO LEVEE (TYP) SEE SHEETS E2-1 AND E2-2

BARB LINES AND HATCHING REPRESENT LATERAL EXTENT OF BARB ROCK. CONTRACTOR SHALL PLACE FILL OVER CONSTRUCTED BARBS FOLLOWING GUIDANCE FOR FINISH GRADE.

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

30 0 30 60 90
SCALE IN FEET

NUM.	REVISION	BY	DATE

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REDDINGTON LEVEE SETBACK

ROCK BARBS AND ROCK REVETMENT STA 63+00 TO 72+00

SHEET E1-5 OF 107 SHEETS

APPROXIMATE LIMIT OF EXCAVATION

PLACE TOPSOIL CAP OVER REVETMENT SEE SHEETS E3-3 AND E3-4

BACKFILL OVER REVETMENT LAUNCH TOE USING COMMON FILL SEE SHEETS E3-3 AND E3-4

CONTINUE REVETMENT TO STA 25+00 BACKFILL TO FINISH GRADE AS SHOWN BEGINNING AT STA 25+70.

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

RIVER MOBILE ESTATES REVETMENT

PLACE REVETMENT ROCK TO ELEV. 56.4 FEET

CONTINUED ON INSET A

EXPOSED ROCK

BURIED ROCK

INSET A

SCALE IN FEET

NUM.	REVISION	BY	DATE
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MARCH 27, 2013

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REDDINGTON LEVEE SETBACK

EXTENT OF BURIED/EXPOSED ROCK AT FINISH GRADE STA 25+00 TO 41+00

SHEET E1-6 OF 107 SHEETS

BARB #9

APPROXIMATE LIMIT OF EXCAVATION

BARB #8

BARB #7

BARB #6

BARB #5

APPROXIMATE LIMIT OF EXCAVATION

BRANNAN PARK REVETMENT

EXPOSED ROCK

BURIED ROCK

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

BARB LINES AND HATCHING REPRESENT LATERAL EXTENT OF BARB ROCK. CONTRACTOR SHALL PLACE FILL OVER CONSTRUCTED BARBS FOLLOWING GUIDANCE FOR FINISH GRADE.

40 0 40 80 120
SCALE IN FEET

NUM.	REVISION	BY	DATE

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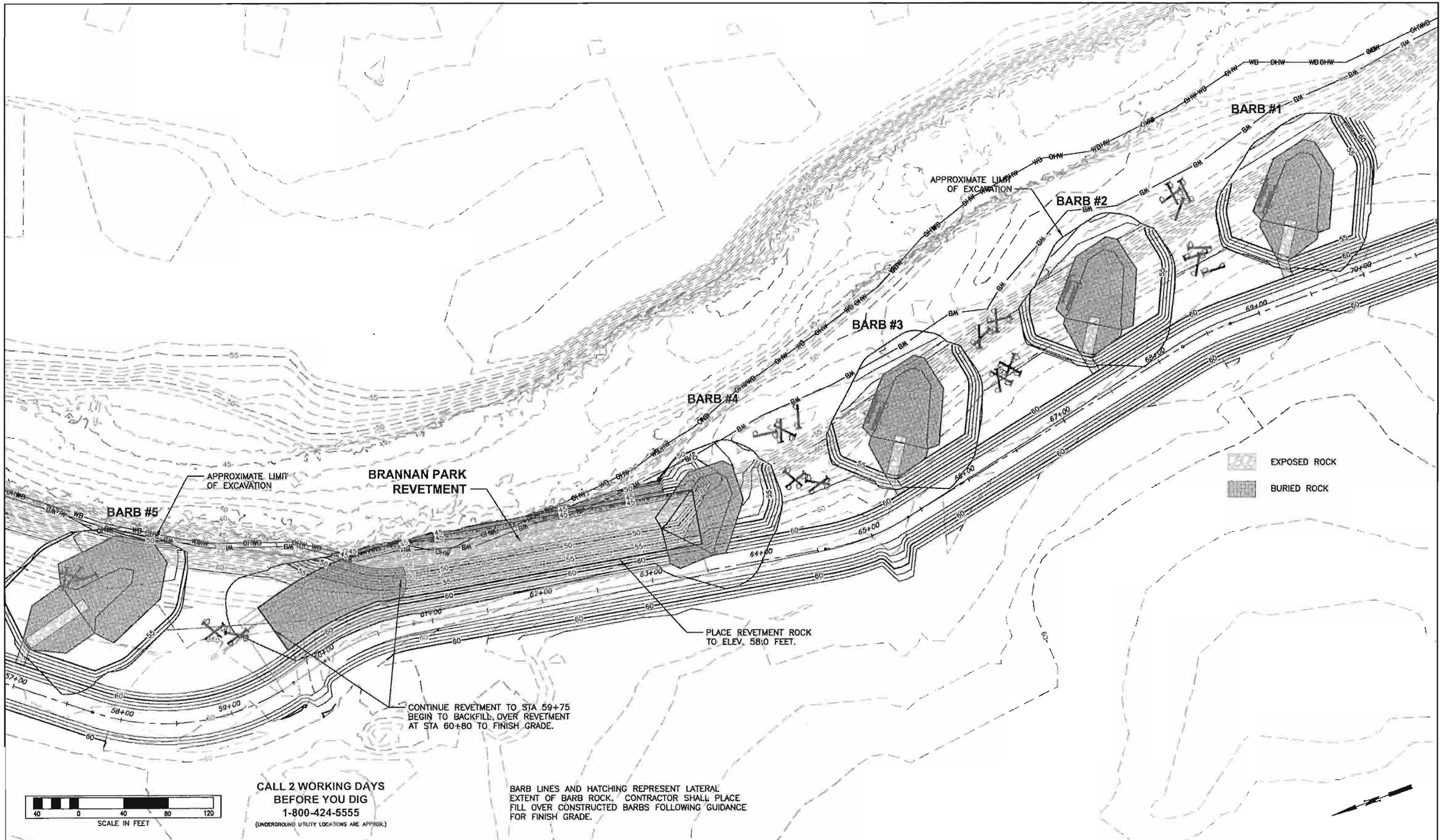
REDDINGTON LEVEE SETBACK

EXTENT OF BURIED/EXPOSED ROCK AT FINISH GRADE
STA 50+00 TO 62+00

SHEET E1-7 OF 107 SHEETS



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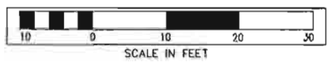
REDDINGTON LEVEE SETBACK

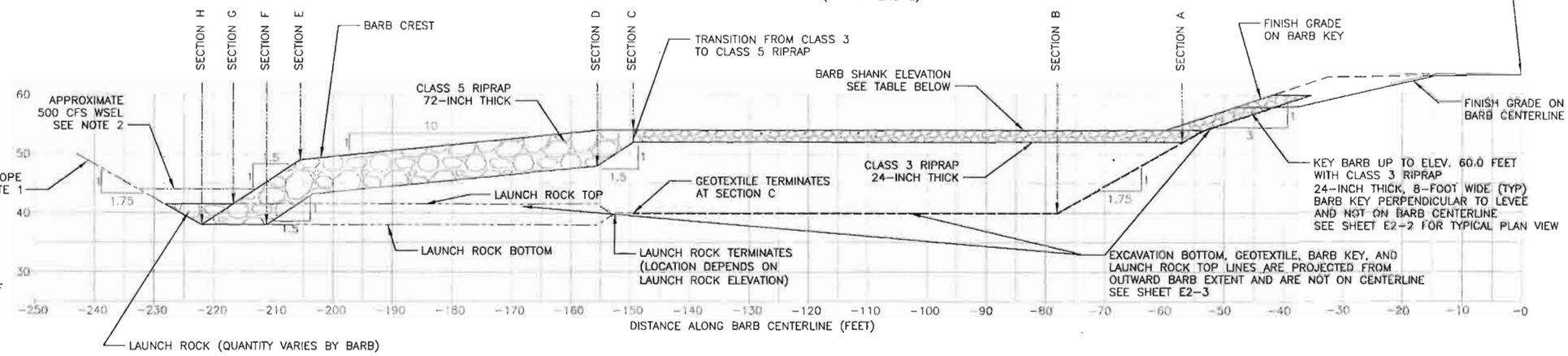
EXTENT OF BURIED/EXPOSED ROCK AT FINISH GRADE STA 58+00 TO 70+00

SHEET E1-8 OF 107 SHEETS



TYPICAL BARB PROFILE

(ON CENTERLINE)



NOTES:

1. TEMPORARY EXCAVATION SLOPE IS THE RESPONSIBILITY OF THE CONTRACTOR. SLOPE OF 1.75:1 ASSUMED FOR QUANTITY ESTIMATION. ACTUAL SLOPE MAY VARY.
2. RIVER WSEL AT 500 CFS (TYPICAL SUMMER FLOW) SHOWN FOR REFERENCE. GROUNDWATER LEVELS WITHIN EXCAVATION LIMITS MAY VARY SIGNIFICANTLY FROM RIVER WSEL, WHICH MAY ALSO VARY.
3. ELEVATIONS AND DISTANCES FROM CENTERLINE SHOWN ON TYPICAL BARB PROFILE AND PLAN ARE INTENDED FOR ILLUSTRATION PURPOSES. SEE TABLE ON SHEET E2-1 FOR SPECIFIC BARB ELEVATIONS AND DISTANCES.
4. ROCK WEIGHT ASSUMES 1.7 TONS PER CUBIC YARD.
5. BARB DISTANCE IS DISTANCE IN FEET FROM SECTION TO PROPOSED LEVEE CENTERLINE.

BARB DIMENSIONS TABLE

ELEMENT	LEVEE STATION AT BARB CENTERLINE	ORIENTATION (DEGREES FROM NORTH)	TOTAL BARB LENGTH - SECTION A TO H (NOT INCLUDING LAUNCH ROCK OR KEY)	BASE OF SHANK CREST ARMOR		TOE OF SHANK		SHANK CREST		BASE OF BARB CREST ARMOR		BARB CREST AT TIP		TOE OF BARB		LAUNCH ROCK TOP		BASE OF LAUNCH ROCK		TOTAL ROCK REQUIRED		TOTAL ROCK REQUIRED	
				SECTION A		SECTION B		SECTION C		SECTION D		SECTION E		SECTION F		SECTION G		SECTION H		CLASS 3 ROCK		CLASS 5 ROCK	
				ELEV.	DIST.	ELEV.	DIST.	ELEV.	DIST.	ELEV.	DIST.	ELEV.	DIST.	ELEV.	DIST.	ELEV.	DIST.	ELEV.	DIST.	YDS	TON	YDS	TON
BARB #1	69 + 12	123	103.1	52.8	48.6	40.0	71.0	54.8	74.5	48.8	80.5	49.8	130.5	38.0	137.4	41.5	142.9	38.0	148.2	92	157	737	1,253
BARB #2	67 + 11	122	102.3	52.6	56.6	40.0	78.7	54.6	81.9	48.6	87.9	49.6	137.9	38.0	144.5	41.5	150.0	38.0	155.3	89	151	737	1,253
BARB #3	65 + 07	123	105.0	52.4	54.1	40.0	75.8	54.4	82.5	48.4	88.5	49.4	138.5	38.0	144.8	41.5	150.3	38.0	155.6	101	171	737	1,253
BARB #4	63 + 15	137	97.0	52.2	14.9	40.0	38.8	54.2	35.6	48.2	41.6	49.2	91.6	38.0	97.6	41.5	103.1	38.0	108.4	56	95	737	1,253
BARB #5	56 + 71	165	131.0	52.1	51.5	40.0	72.7	54.1	106.3	48.1	112.3	49.1	162.3	38.0	168.1	45.9	167.1	38.0	178.9	210	357	1,217	2,069
BARB #6	54 + 38	175	135.9	52.0	59.6	40.0	80.6	54.0	119.5	48.0	125.5	49.0	175.5	38.0	181.2	45.9	180.2	38.0	192.0	231	393	1,217	2,069
BARB #7	52 + 82	176	110.1	51.8	49.0	40.0	69.7	53.8	83.4	47.8	89.4	48.8	139.4	38.0	144.8	44.6	145.7	38.0	155.6	123	209	1,039	1,767
BARB #8	50 + 93	177	117.1	51.7	75.8	40.0	96.3	53.7	117.3	47.7	123.3	48.7	173.3	38.0	178.5	42.3	182.8	38.0	189.3	149	254	796	1,354
BARB #9	48 + 56	164	140.0	53.0	187.2	40.0	210.0	55.0	249.7	49.0	255.7	50.0	305.7	38.0	312.9	42.3	317.2	38.0	323.7	235	400	796	1,354

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DESIGNED:	VAUGHN COLLINS, P.E.	3/2013
	CHRIS LONG, P.E.	3/2013
REVIEWED:	BRUCE WALSH, P.ENG.	3/2013
CAD DESIGN:	CHRIS LONG, P.E.	3/2013

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MARCH 27, 2013

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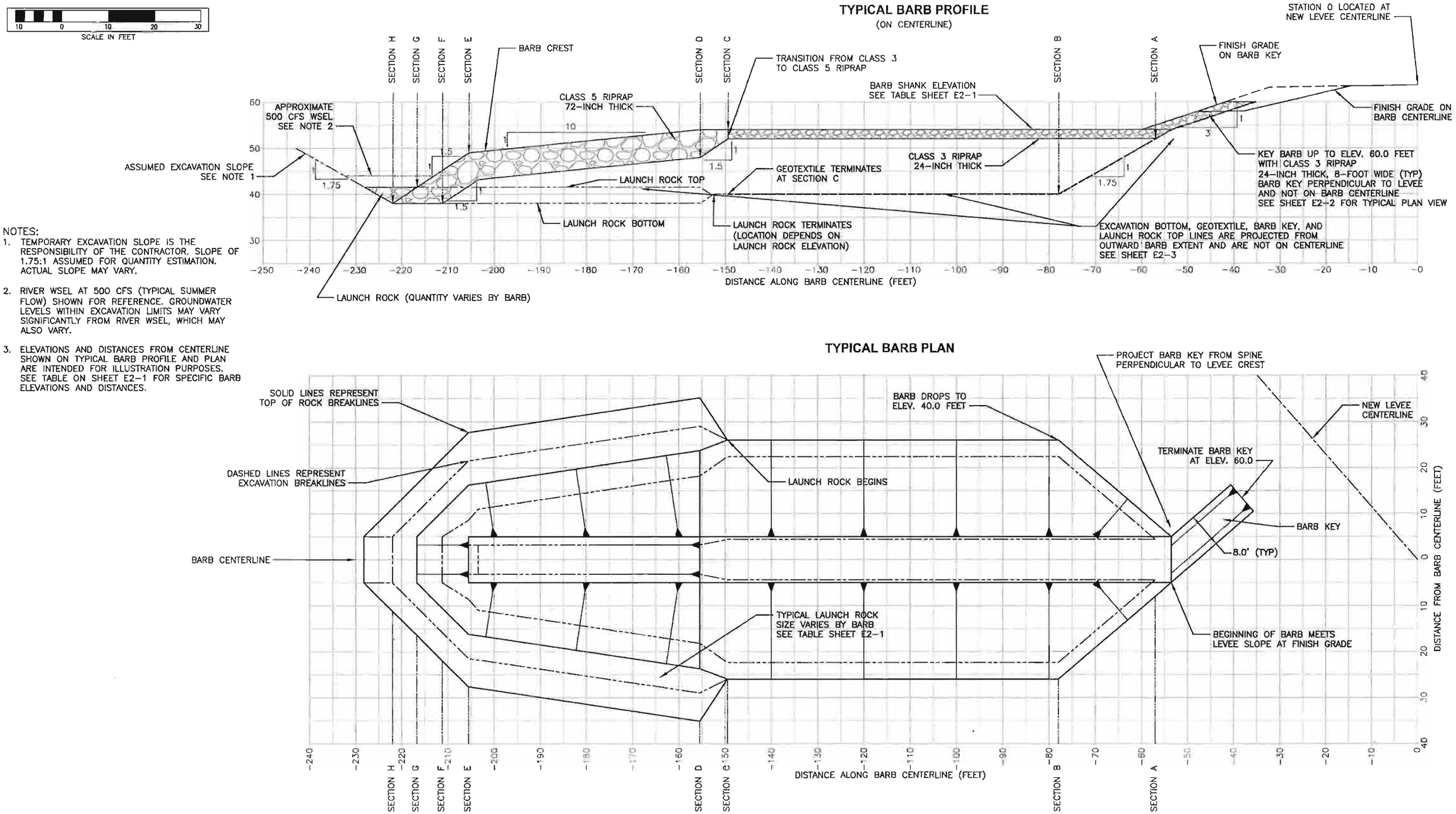
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

TYPICAL ROCK BARB PROFILE AND DIMENSIONS



NOTES:

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3. ELEVATIONS AND DISTANCES FROM CENTERLINE SHOWN ON TYPICAL BARB PROFILE AND PLAN ARE INTENDED FOR ILLUSTRATION PURPOSES. SEE TABLE ON SHEET E2-1 FOR SPECIFIC BARB ELEVATIONS AND DISTANCES.

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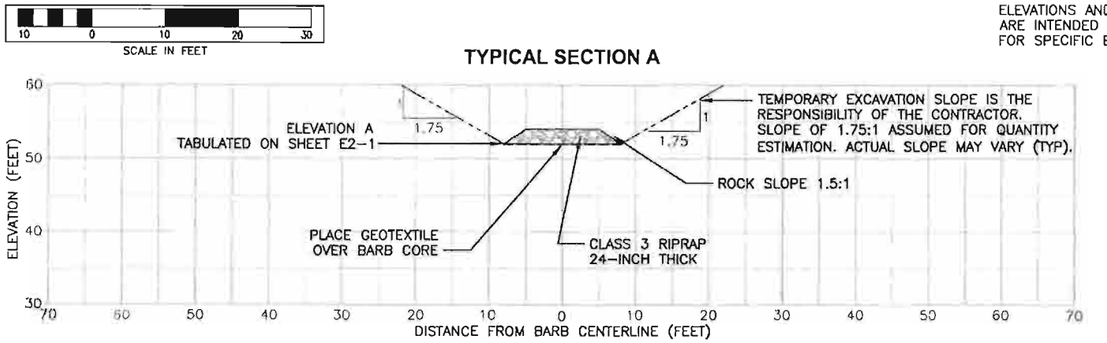
REDDINGTON LEVEE SETBACK

TYPICAL ROCK BARB PROFILE AND PLAN

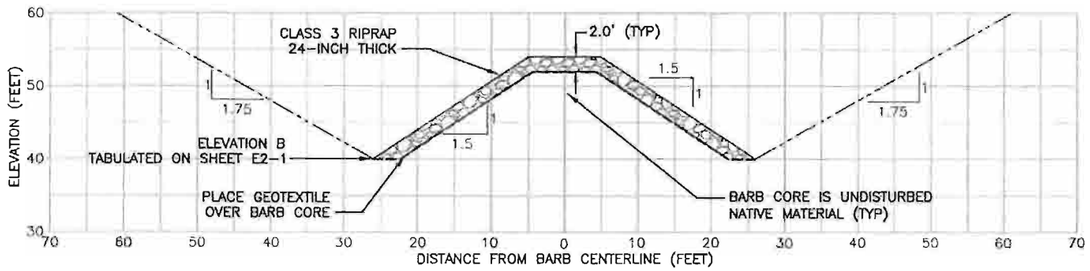
SHEET E2-2 OF 107 SHEETS

NOTE:
ELEVATIONS AND DISTANCES FROM BARB CENTERLINE ON TYPICAL SECTIONS ARE INTENDED FOR ILLUSTRATION PURPOSES. SEE TABLE ON SHEET E2-1 FOR SPECIFIC BARB ELEVATION AND DISTANCES FROM CENTERLINE.

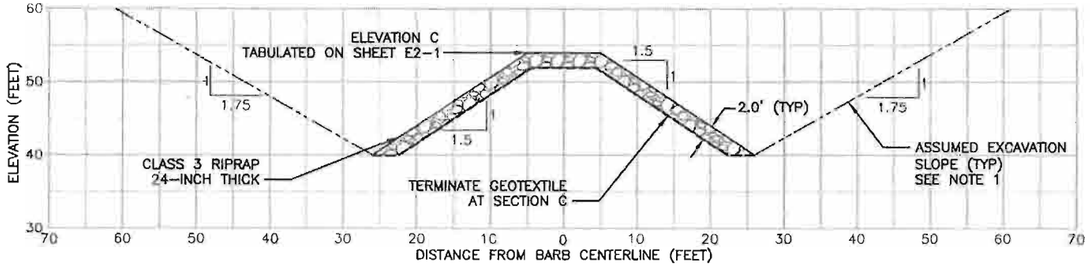


TYPICAL SECTION A

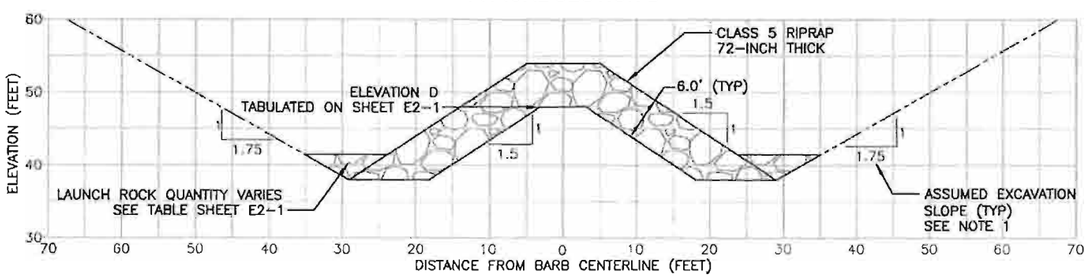
TYPICAL SECTION B



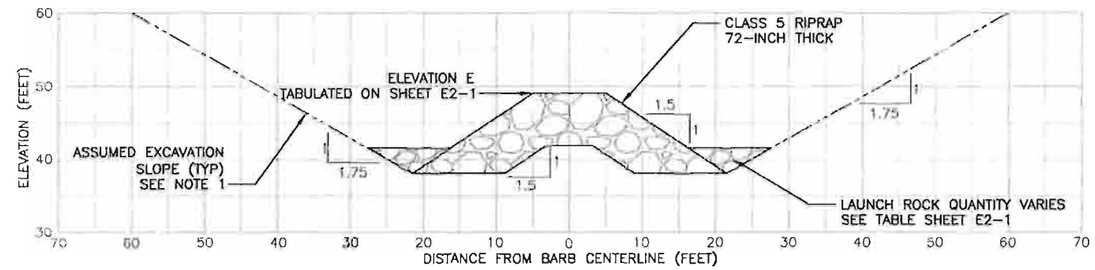
TYPICAL SECTION C



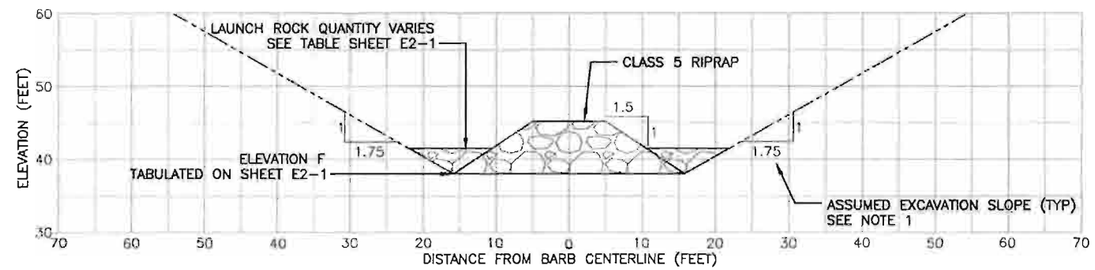
TYPICAL SECTION D



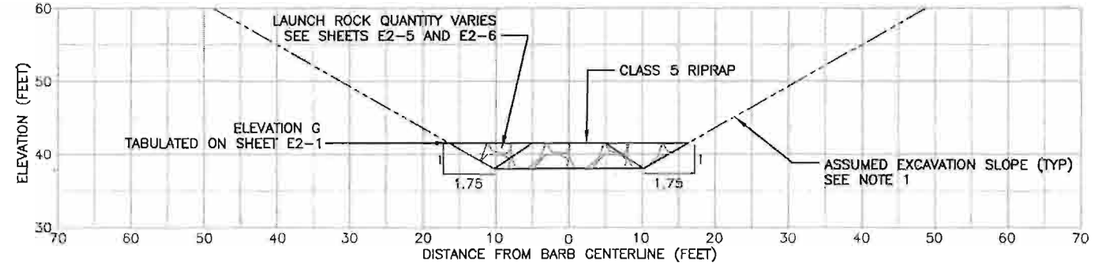
TYPICAL SECTION E



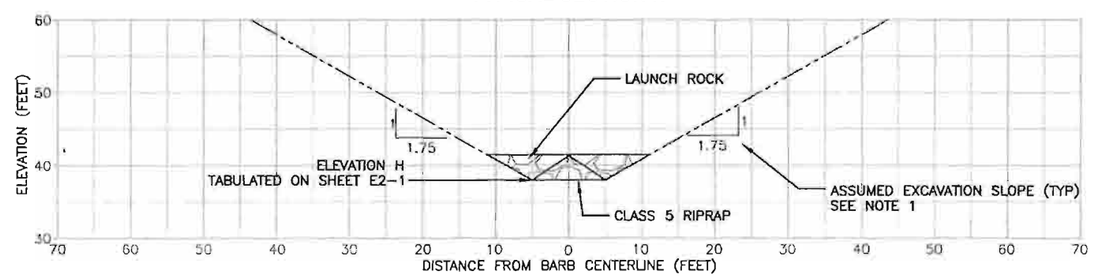
TYPICAL SECTION F



TYPICAL SECTION G



TYPICAL SECTION H



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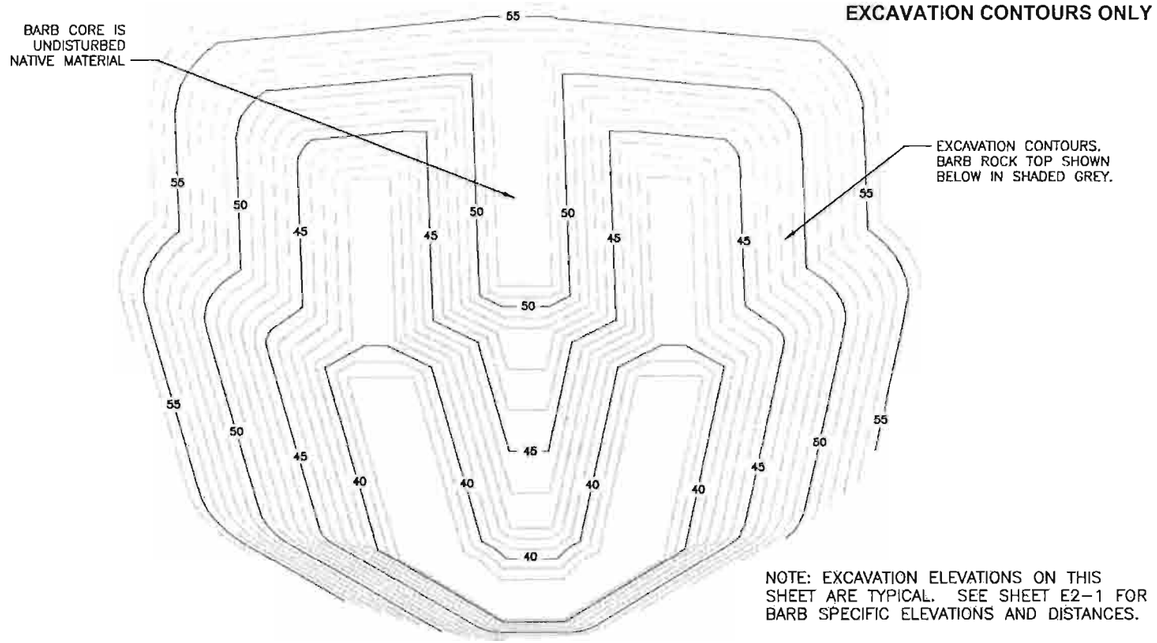
Christie True, Director

REDDINGTON LEVEE SETBACK

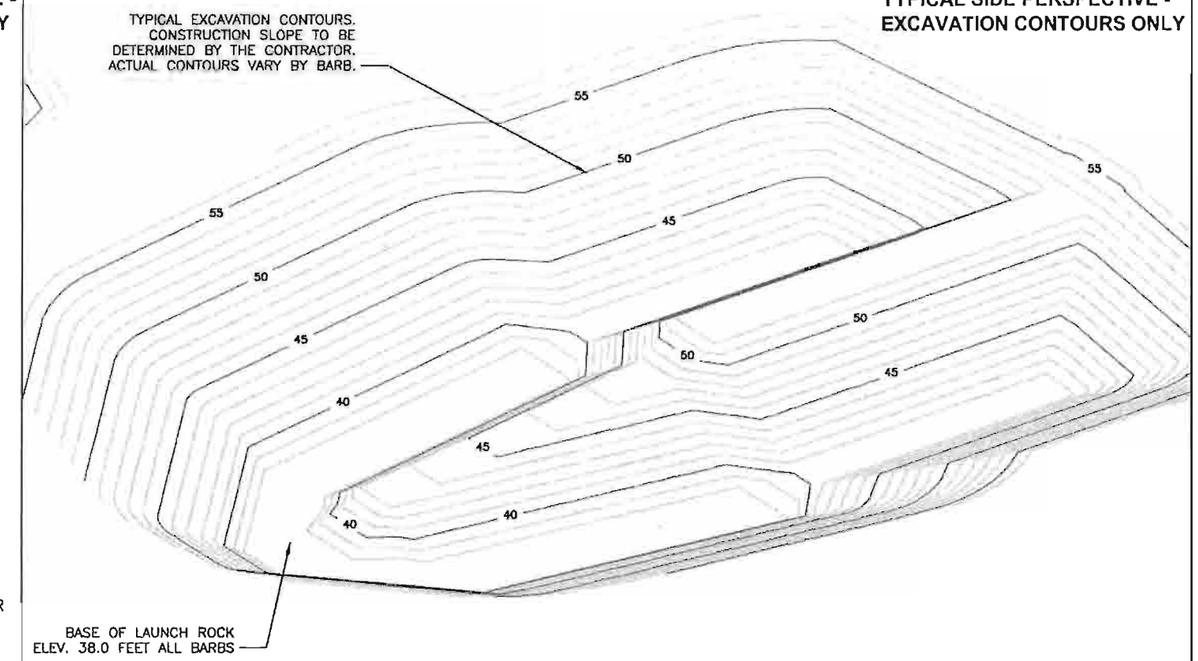
TYPICAL ROCK BARB SECTIONS

TYPICAL FRONT PERSPECTIVE - EXCAVATION CONTOURS ONLY

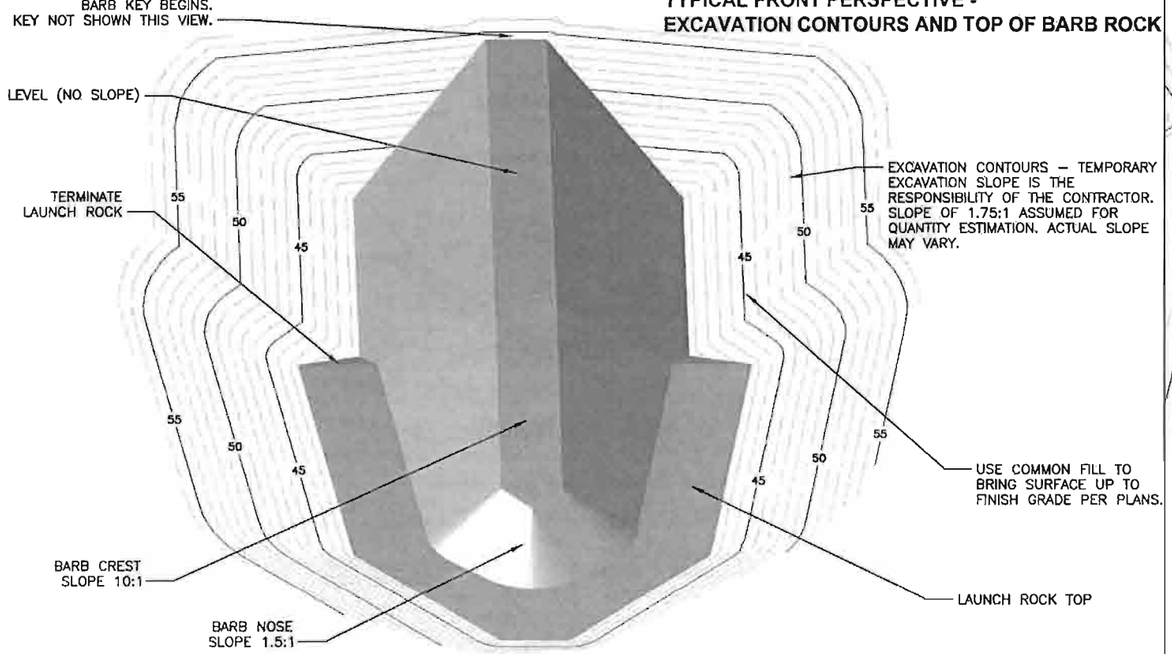


NOTE: EXCAVATION ELEVATIONS ON THIS SHEET ARE TYPICAL. SEE SHEET E2-1 FOR BARB SPECIFIC ELEVATIONS AND DISTANCES.

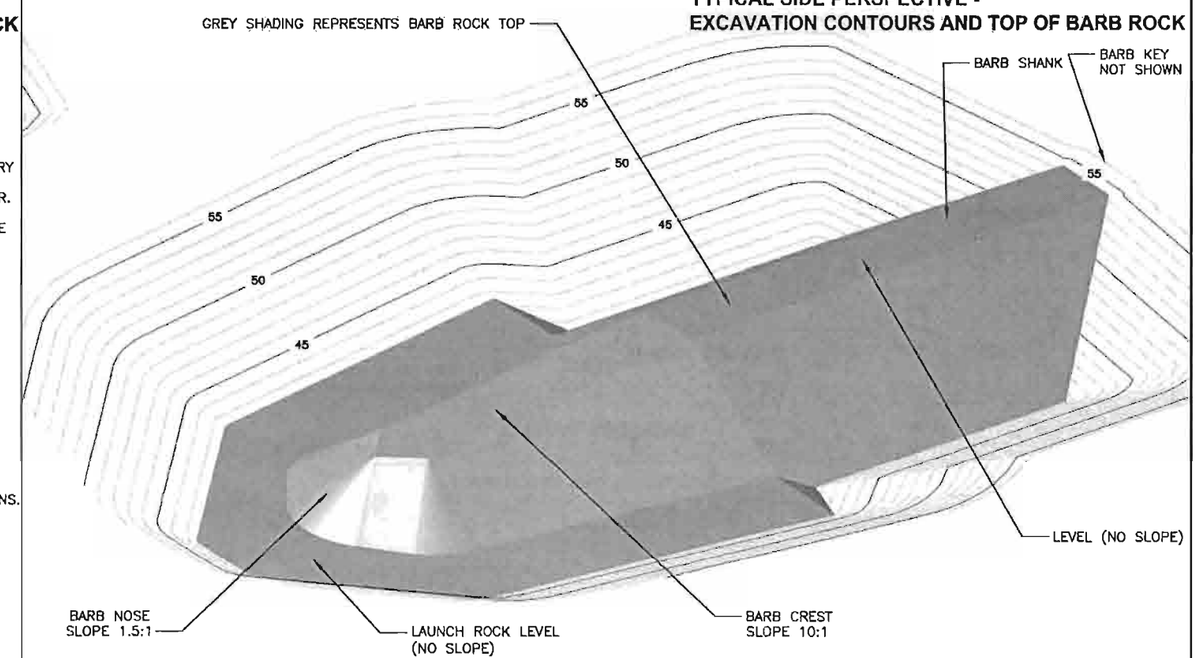
TYPICAL SIDE PERSPECTIVE - EXCAVATION CONTOURS ONLY



TYPICAL FRONT PERSPECTIVE - EXCAVATION CONTOURS AND TOP OF BARB ROCK



TYPICAL SIDE PERSPECTIVE - EXCAVATION CONTOURS AND TOP OF BARB ROCK



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Christie True, Director

REDDINGTON LEVEE SETBACK

TYPICAL ROCK BARB PERSPECTIVE VIEWS

15 0 15 30 45
SCALE IN FEET

NOTES:
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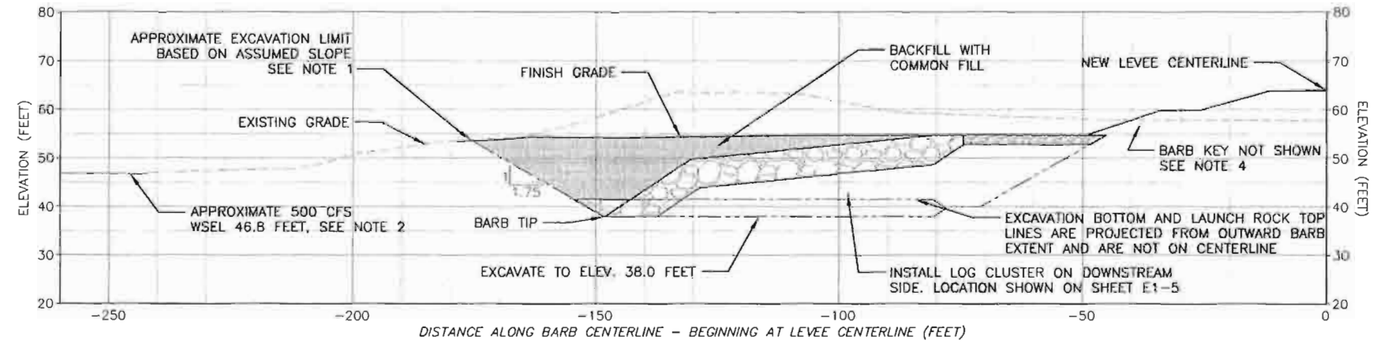
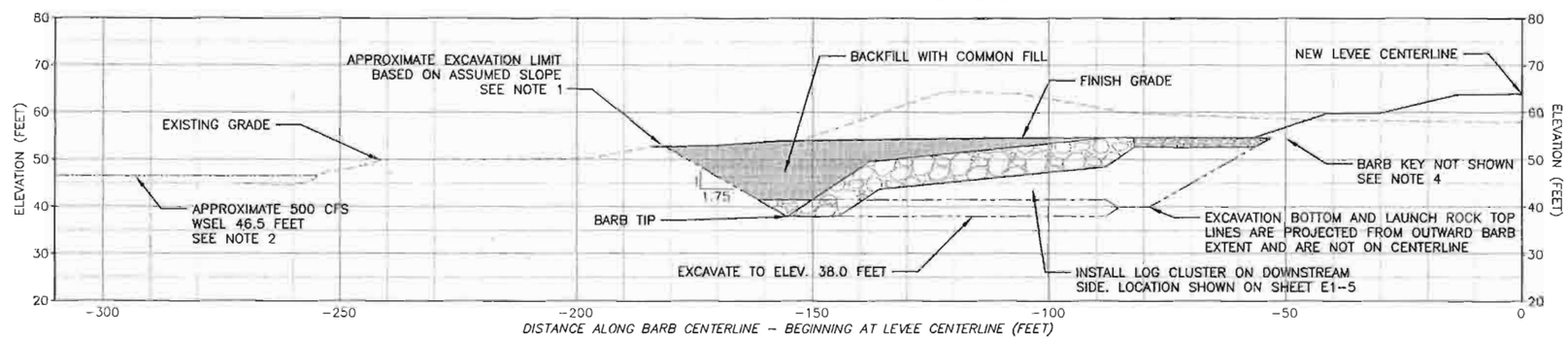
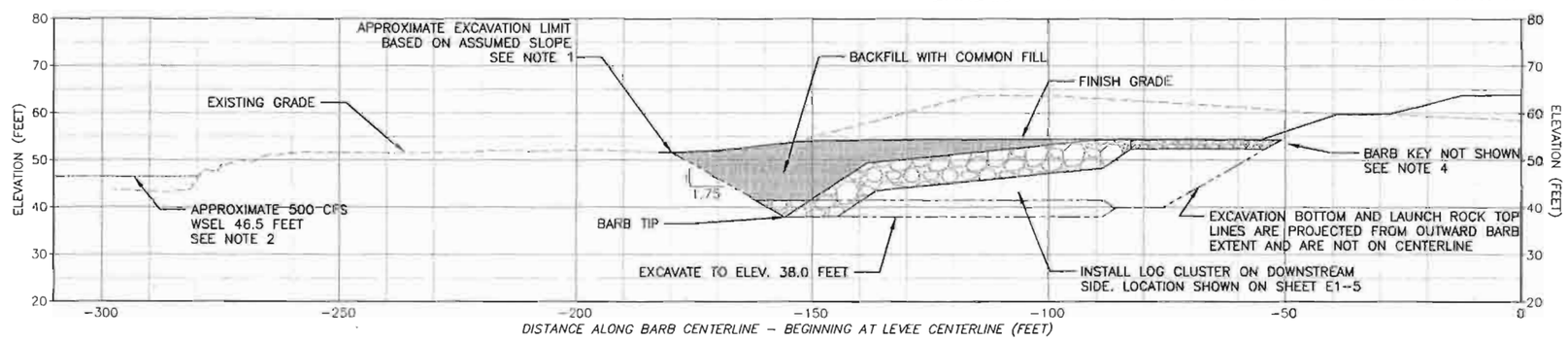
BARB #1 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 69+12



BARB #2 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 67+11



BARB #3 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 65+07



CALL 2 WORKING DAYS BEFORE YOU DIG
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PROJECT MANAGER:	VAUGHN COLLINS, P.E.	3/2013
DESIGNED:	VAUGHN COLLINS, P.E.	3/2013
	CHRIS LONG, P.E.	3/2013
REVIEWED:	BRUCE WALSH, P.ENG.	3/2013
CAD DESIGN:	CHRIS LONG, P.E.	3/2013

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Christie True, Director

REDDINGTON LEVEE SETBACK

PROFILES FOR ROCK BARBS 1 TO 3

15 0 15 30 45
SCALE IN FEET

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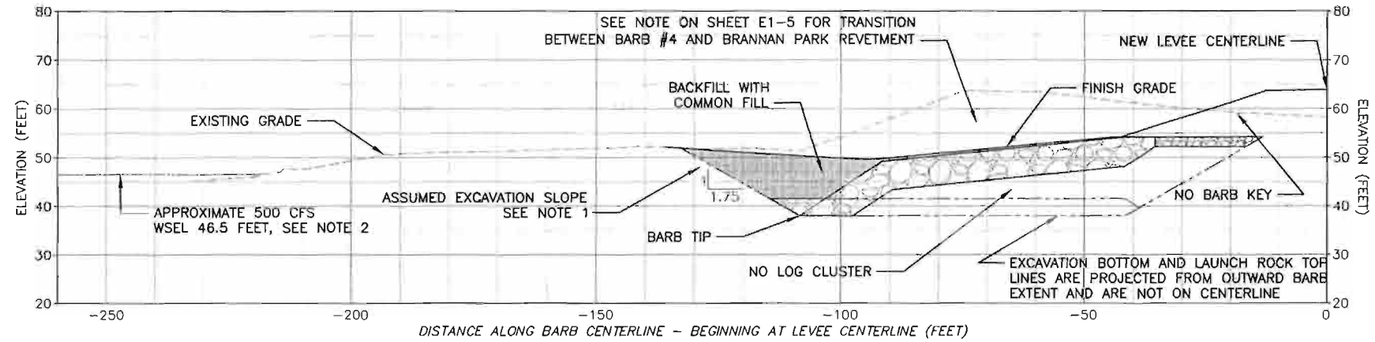
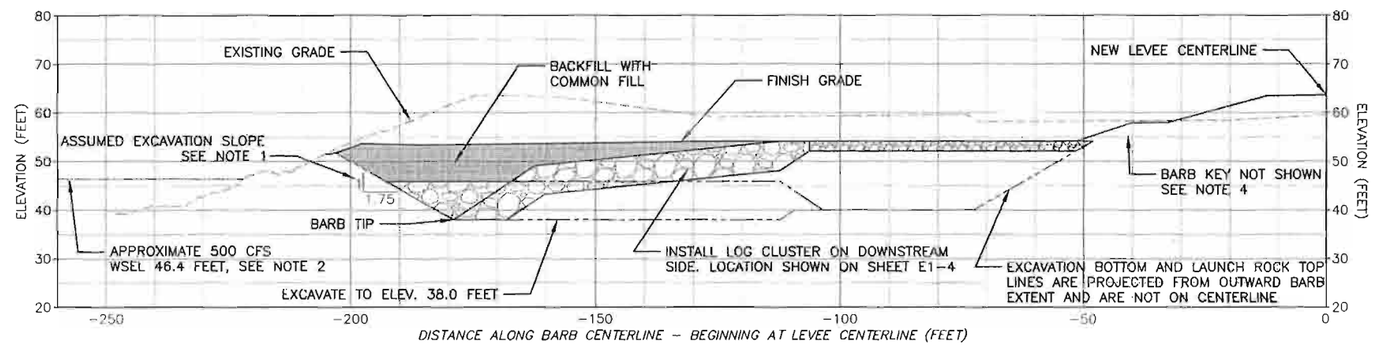
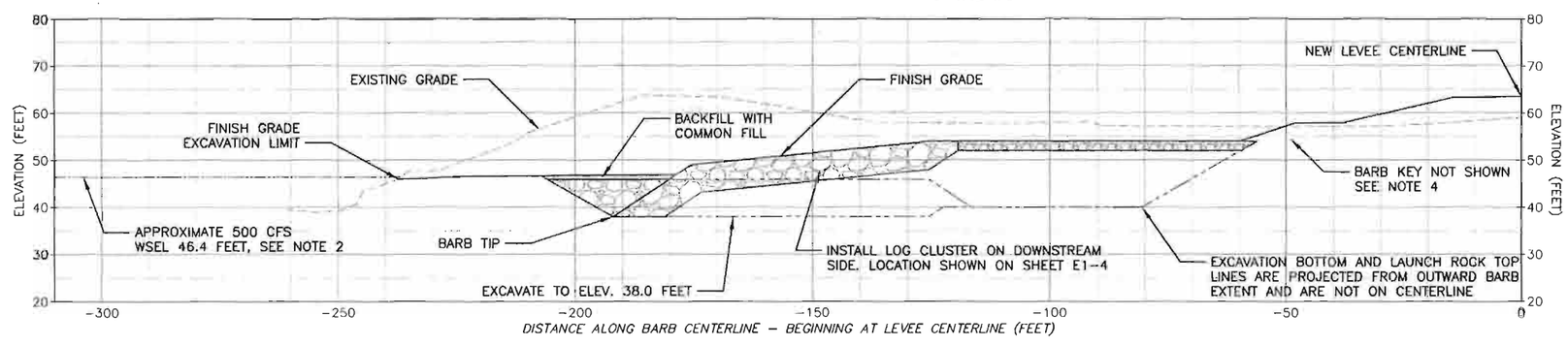
BARB #4 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 63+15



BARB #5 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 56+71



BARB #6 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 54+38



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PROFILES FOR ROCK BARBS 4 TO 6

15 0 15 30 45
SCALE IN FEET

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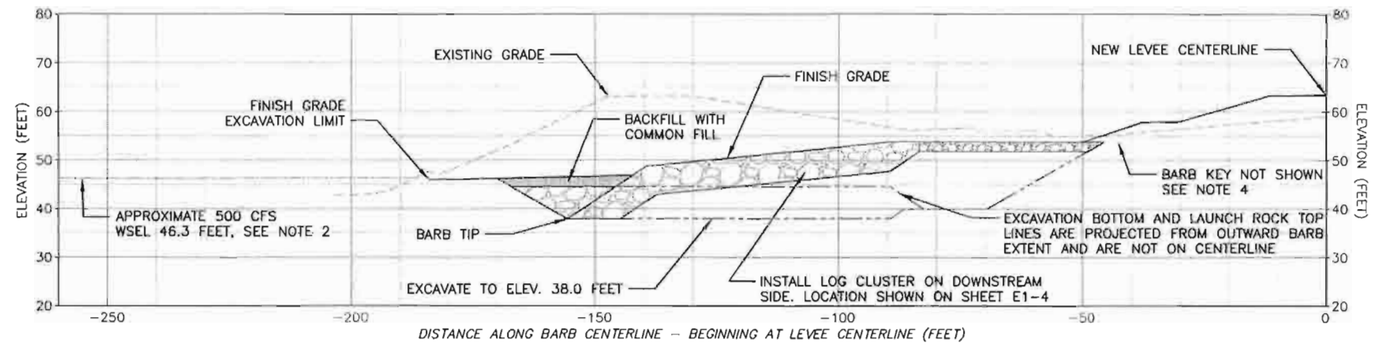
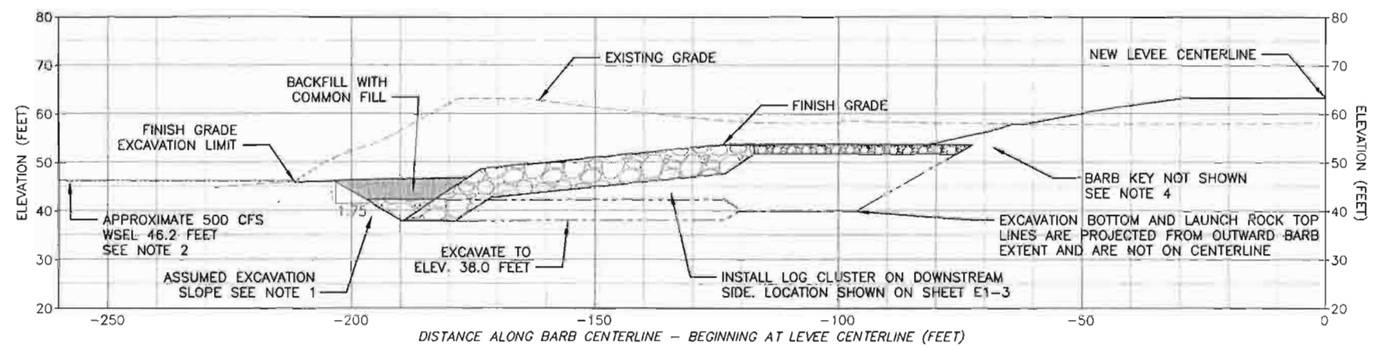
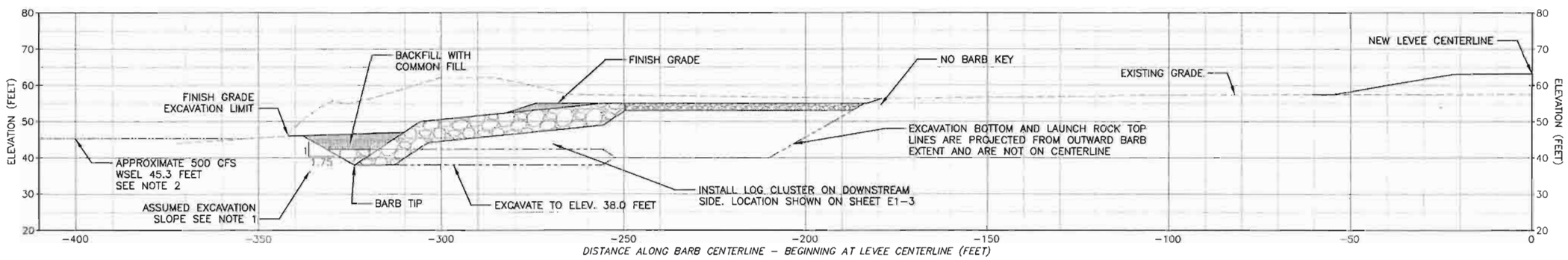
BARB #7 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 52+82



BARB #8 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 50+93



BARB #9 SECTION THROUGH BARB CENTERLINE AT LEVEE STATION 48+56



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PROFILES FOR ROCK BARBS 7 TO 9

SHEET **E2-7** OF **107** SHEETS

10 0 10 20 30
SCALE IN FEET

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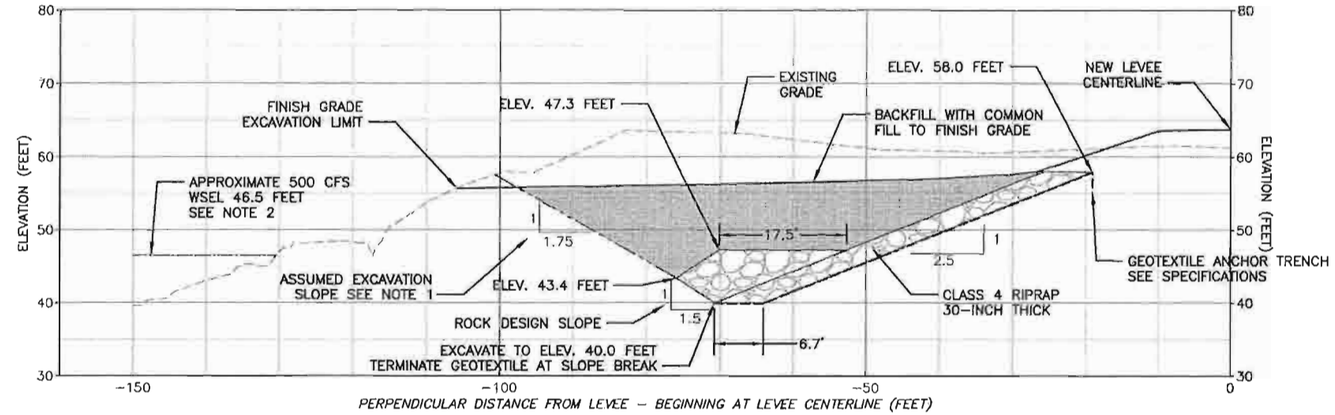
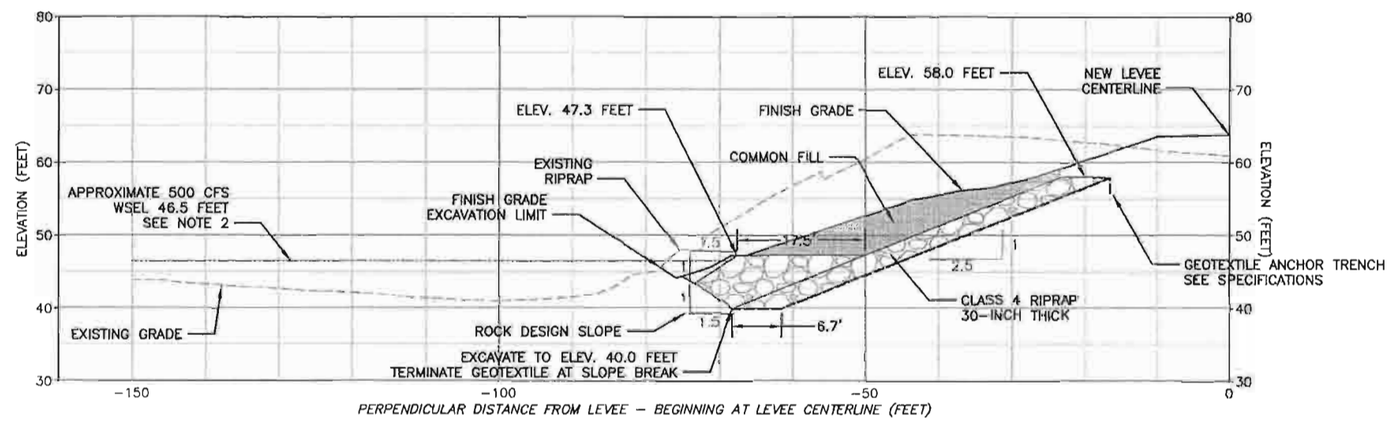
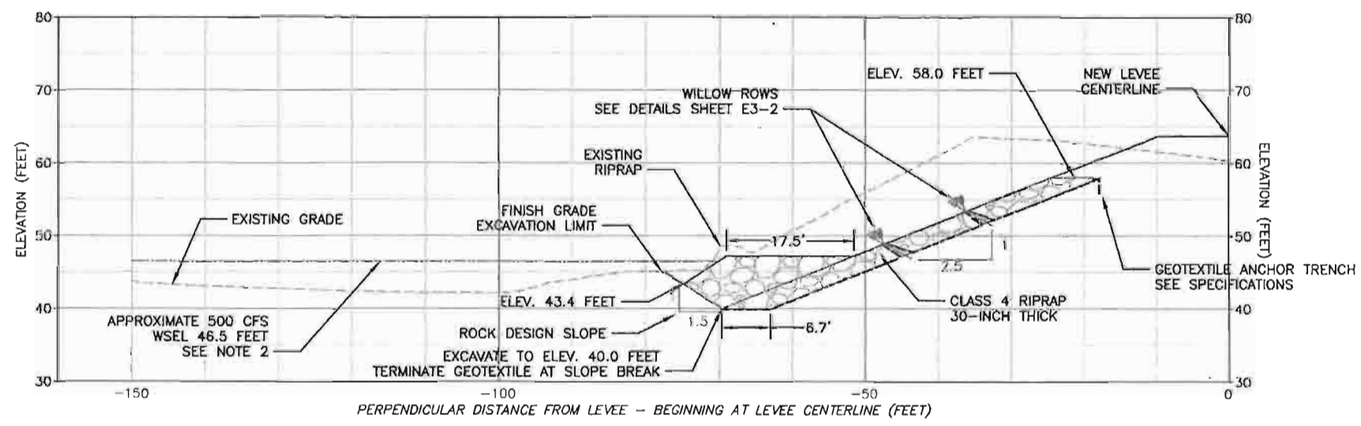
SECTION AT STATION 60+00



SECTION AT STATION 60+50



SECTION AT STATION 61+50



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PROJECT No. 1112035
CONTRACT No. C00817C13

nhc northwest hydraulic consultants
16300 christensen road, suite 350
seattle, washington 98188-3422
phone: (206) 241-6000
fax: (206) 439-2420
www.nhcweb.com

MARCH 27, 2013

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

BRANNAN PARK REVETMENT
STA 60+00 TO 61+50

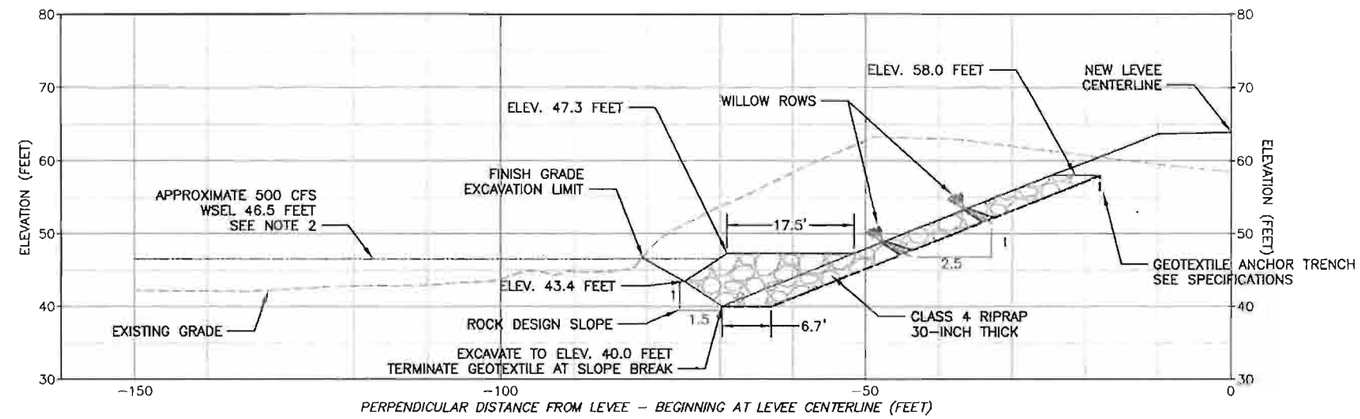
SHEET E3-1 OF 107 SHEETS

SCALE IN FEET

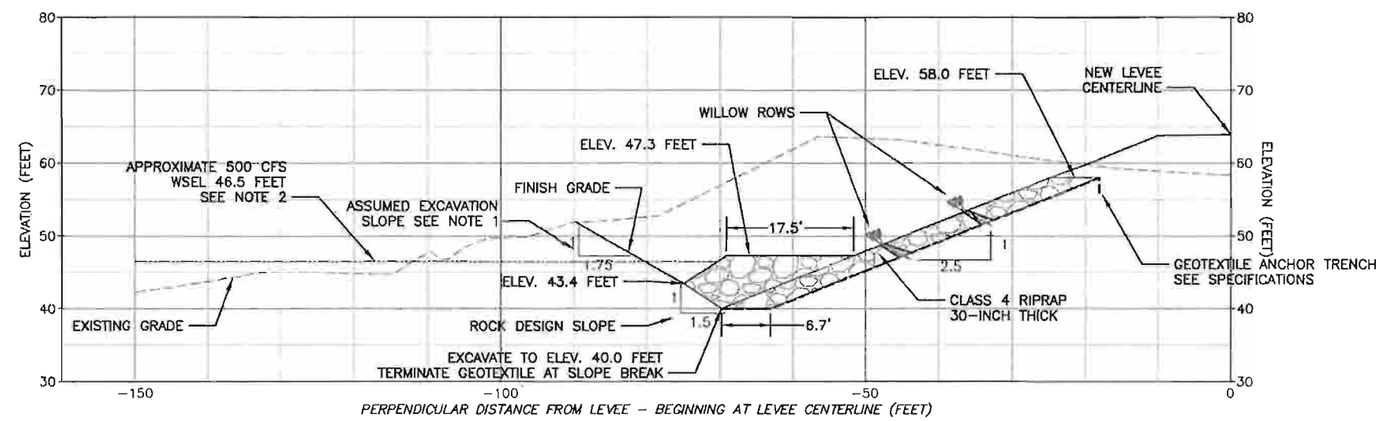
CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

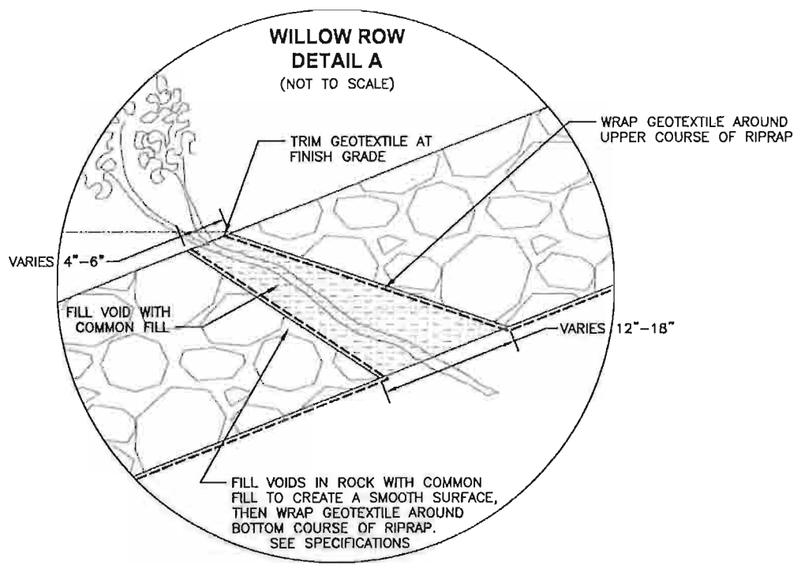
NOTES:
1. TEMPORARY EXCAVATION SLOPE IS THE RESPONSIBILITY OF THE CONTRACTOR. SLOPE OF 1.75:1 ASSUMED FOR QUANTITY ESTIMATION. ACTUAL SLOPE MAY VARY.
2. RIVER WSEL AT 500 CFS (TYPICAL SUMMER FLOW) SHOWN FOR REFERENCE. GROUNDWATER LEVELS WITHIN EXCAVATION LIMITS MAY VARY SIGNIFICANTLY FROM RIVER WSEL, WHICH MAY ALSO VARY.

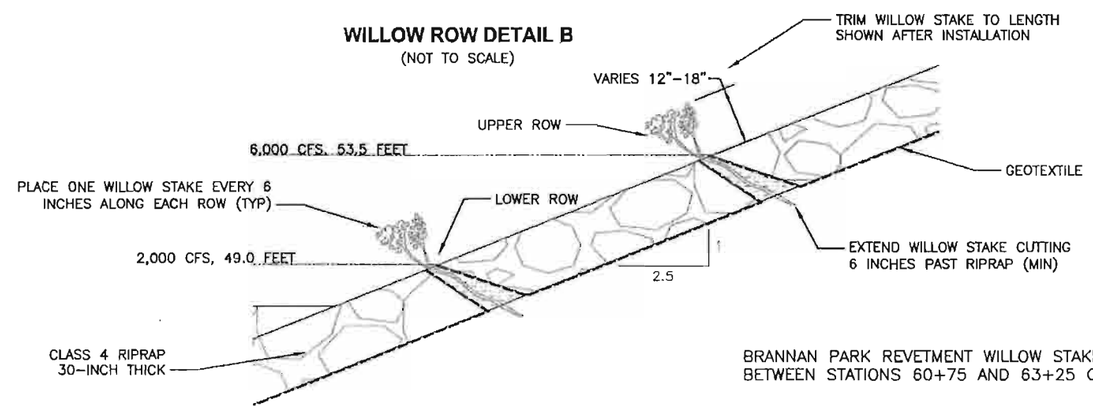
SECTION AT STATION 62+50



SECTION AT STATION 63+25







BRANNAN PARK REVETMENT WILLOW STAKES PLANTED BETWEEN STATIONS 60+75 AND 63+25 ONLY

BRANNAN PARK REVETMENT – WILLOW STAKE SCHEDULE

SPECIES	LENGTH (FT)	DIAMETER (IN)	TOTAL QUANTITY	PERCENT BY SPECIES	
				LOWER ROW	UPPER ROW
SITKA	5	½–2	500	80	20
SCOULER	5	½–2	500	20	80

NUM.	REVISION	BY	DATE
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	ERIK ROWLAND, P.E.	3/2013
PROJECT MANAGER:	VAUGHN COLLINS, P.E.	3/2013
DESIGNED:	VAUGHN COLLINS, P.E.	3/2013
	CHRIS LONG, P.E.	3/2013
REVIEWED:	BRUCE WALSH, P.ENG.	3/2013
CAD DESIGN:	CHRIS LONG, P.E.	3/2013

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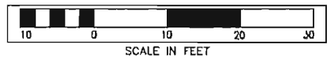
Christie True, Director

REDDINGTON LEVEE SETBACK

BRANNAN PARK REVETMENT
STA 62+50 TO 63+25 AND DETAILS

SHEET E3-2 OF 107 SHEETS



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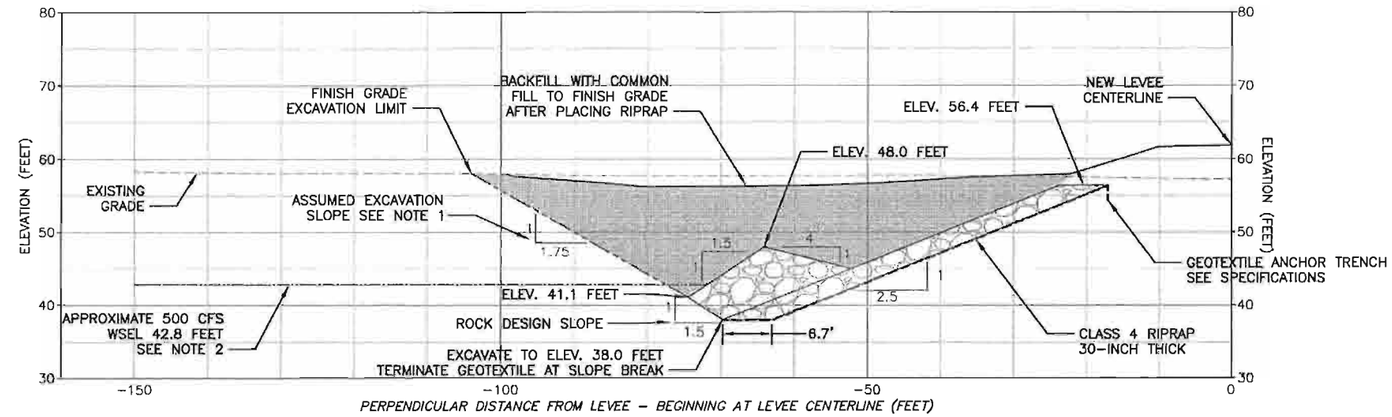
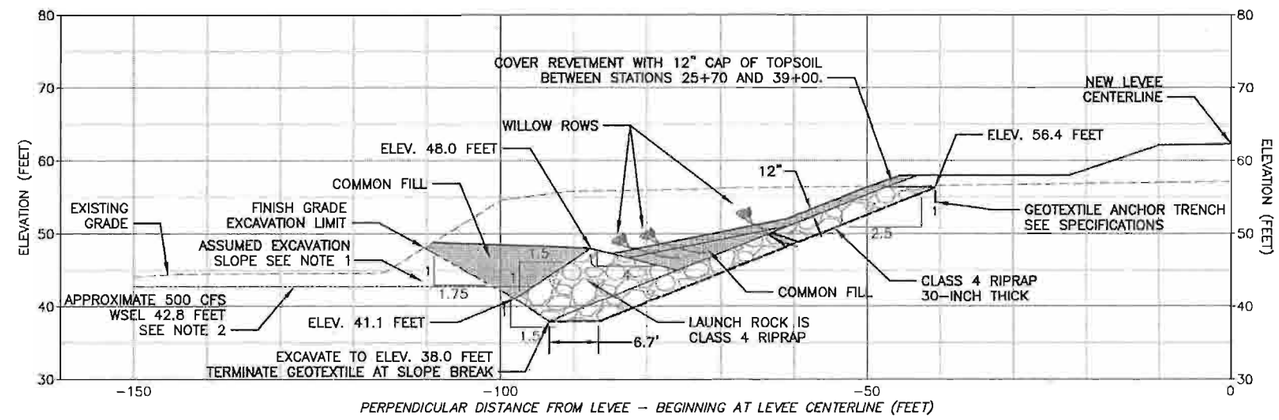
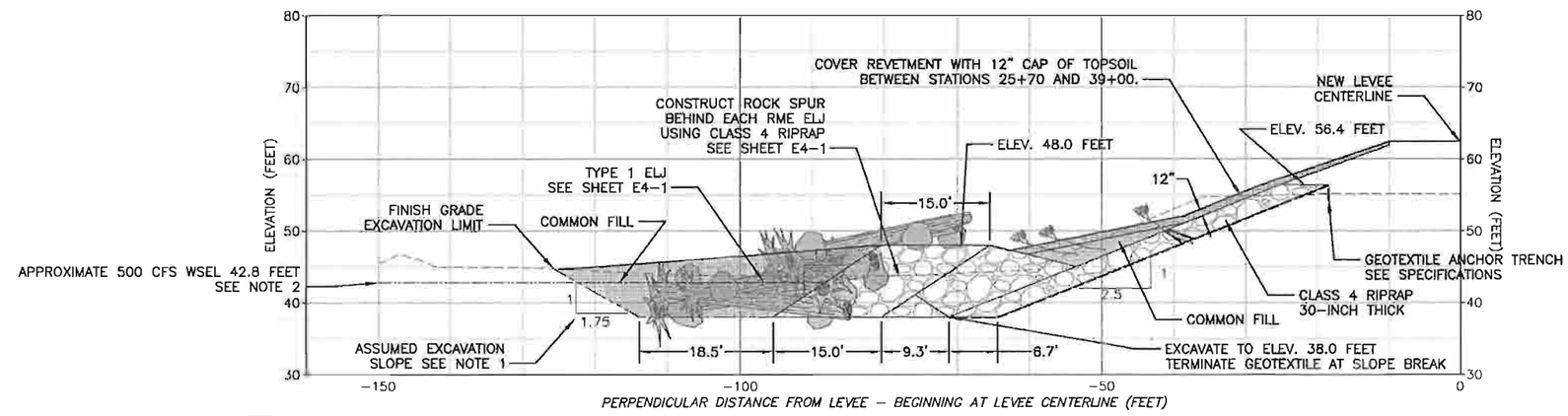
SECTION AT STATION 25+25



SECTION AT STATION 29+75



SECTION AT STATION 35+00



CALL 2 WORKING DAYS
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NUM.	REVISION	BY	DATE

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PROJECT MANAGER:	VAUGHN COLLINS, P.E.	3/2013
DESIGNED:	VAUGHN COLLINS, P.E.	3/2013
	CHRIS LONG, P.E.	3/2013
REVIEWED:	BRUCE WALSH, P.ENG.	3/2013
CAD DESIGN:	CHRIS LONG, P.E.	3/2013

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MARCH 27, 2013

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River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

RIVER MOBILE ESTATES REVETMENT
STA 25+25 TO 35+00

SHEET **E3-3** OF **107** SHEETS

SCALE IN FEET

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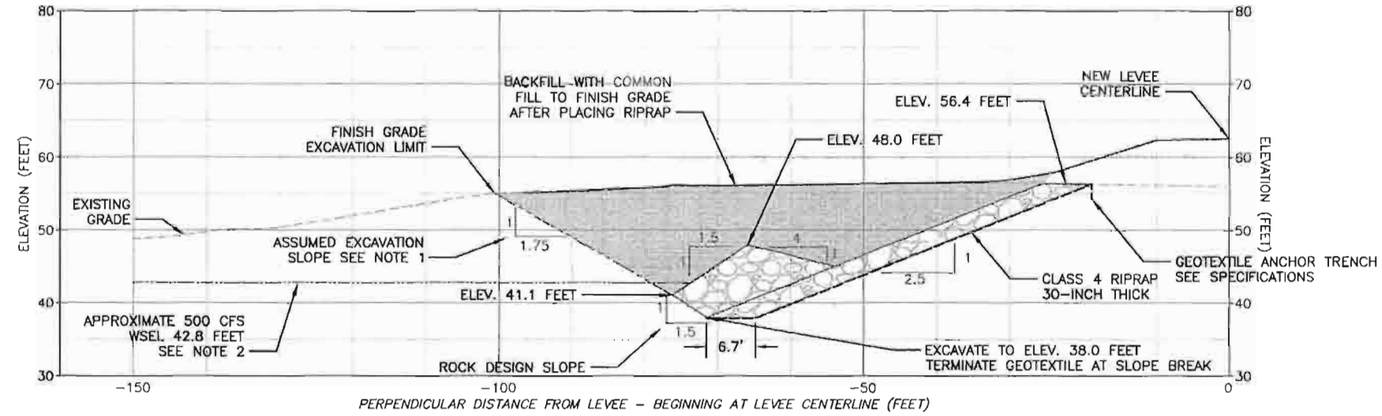
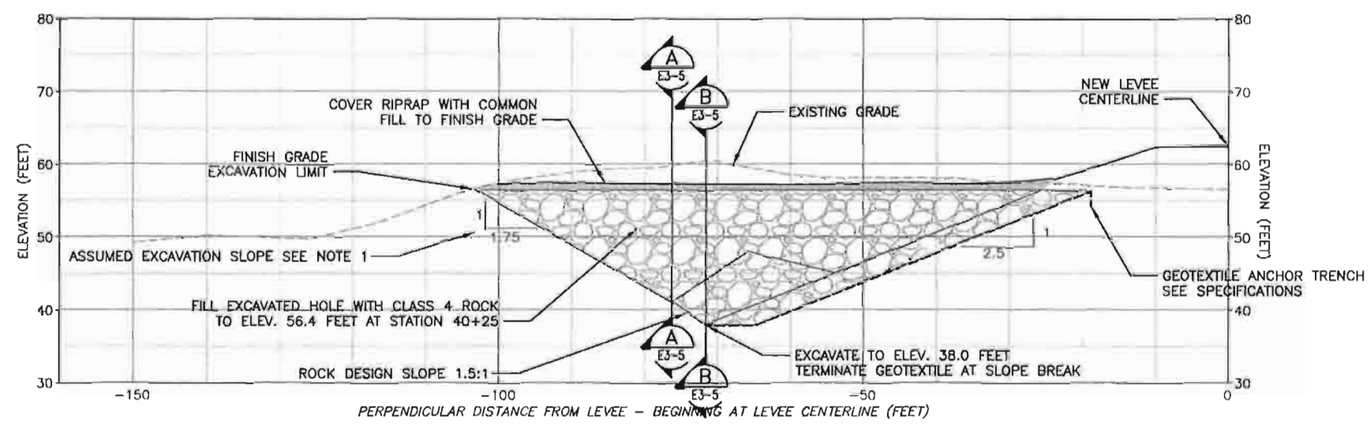
SECTION AT STATION 40+00

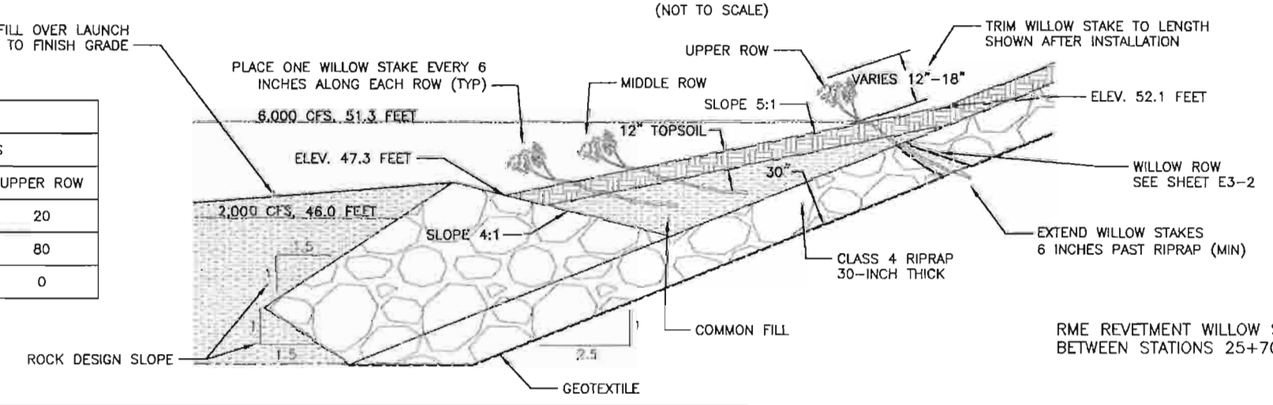


SECTION AT STATION 40+25



WILLOW ROW DETAIL C

(NOT TO SCALE)



RME REVETMENT WILLOW STAKES PLANTED BETWEEN STATIONS 25+70 AND 39+00 ONLY

RIVER MOBILE ESTATES REVETMENT – WILLOW STAKE SCHEDULE

SPECIES	LENGTH (FT)	DIAMETER (IN)	TOTAL QUANTITY	PERCENT BY SPECIES		
				LOWER ROW	MIDDLE ROW	UPPER ROW
SITKA	6	½–2	4,788	80	80	20
SCOULER	6	½–2	2,660	10	10	80
PACIFIC	6	½–2	532	10	10	0

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	ERIK ROWLAND, P.E.	3/2013
PROJECT MANAGER:	VAUGHN COLLINS, P.E.	3/2013
DESIGNED:	VAUGHN COLLINS, P.E	3/2013
	CHRIS LONG, P.E.	3/2013
REVIEWED:	BRUCE WALSH, P.ENG.	3/2013
CAD DESIGN:	CHRIS LONG, P.E.	3/2013

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Christie True, Director

REDDINGTON LEVEE SETBACK

RIVER MOBILE ESTATES REVETMENT
STA 40+00 TO 40+25 AND DETAIL

SCALE IN FEET

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NOTES:
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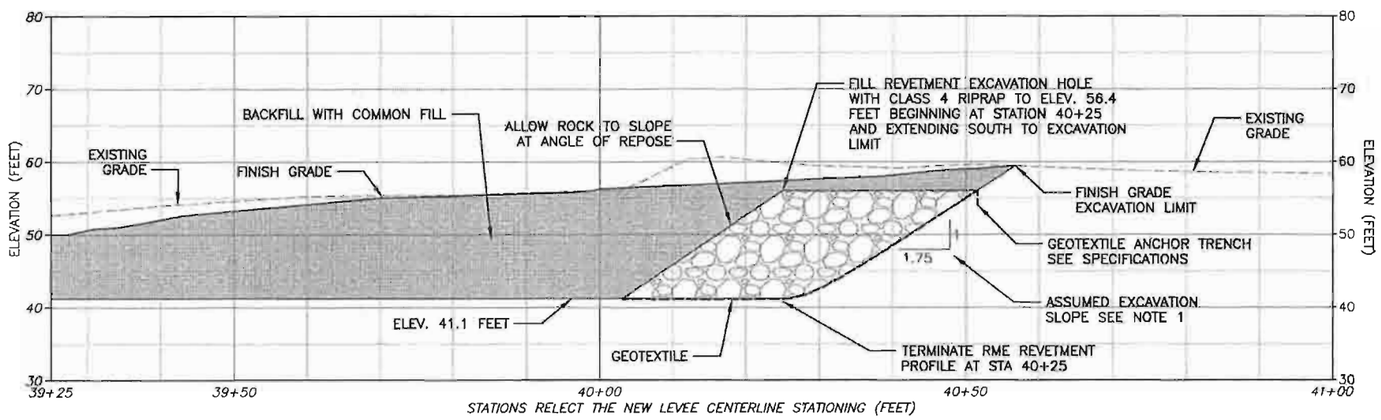
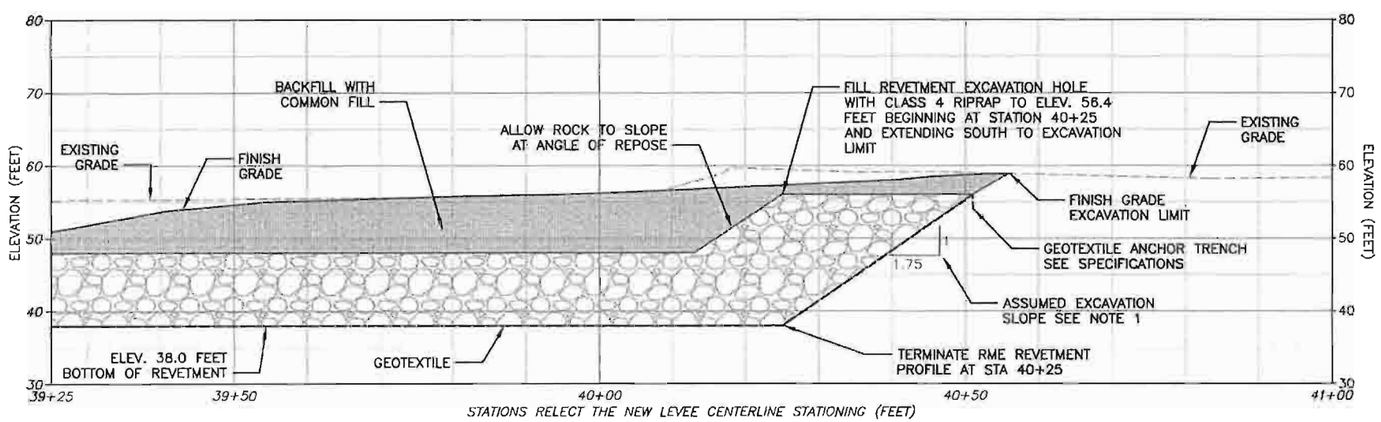
SECTION A-A

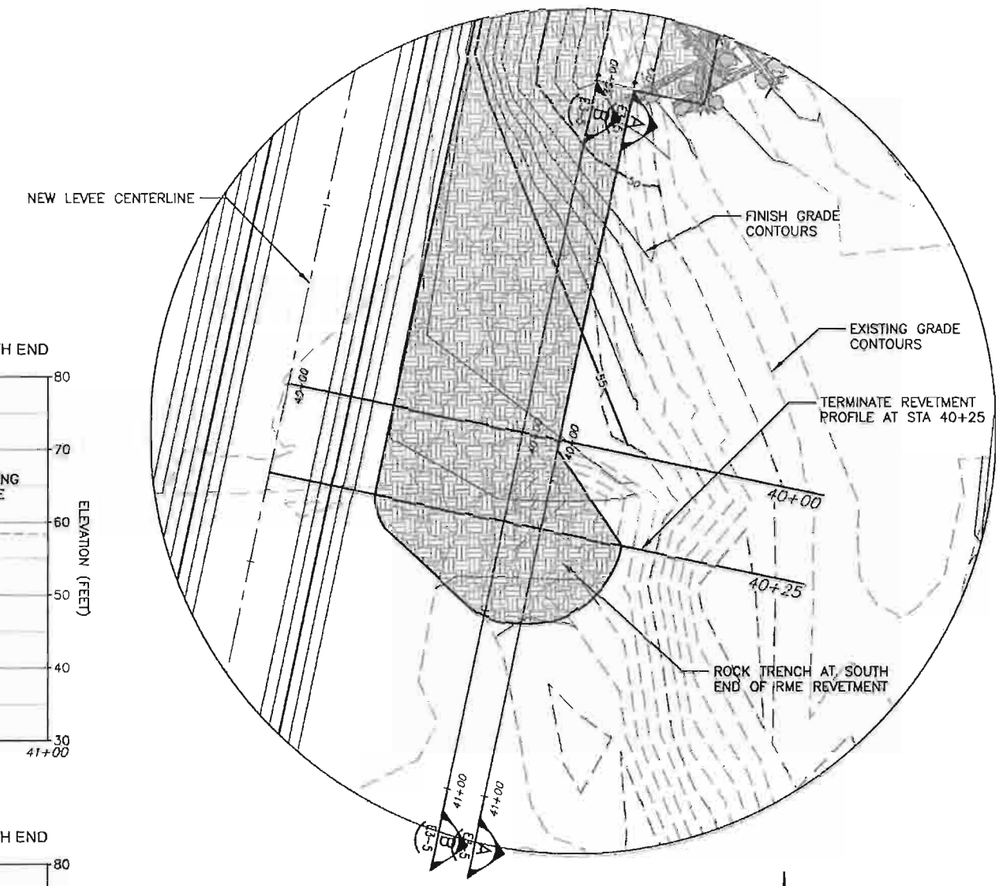
PROFILE THROUGH RIVER MOBILE ESTATES REVETMENT SOUTH END



SECTION B-B

PROFILE THROUGH RIVER MOBILE ESTATES REVETMENT SOUTH END





RIVER MOBILE ESTATES REVETMENT
SOUTH END TREATMENT

SCALE IN FEET

NUM.	REVISION	BY	DATE
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APPROVED:	ERIK ROWLAND, P.E.	3/2013
PROJECT MANAGER:	VAUGHN COLLINS, P.E.	3/2013
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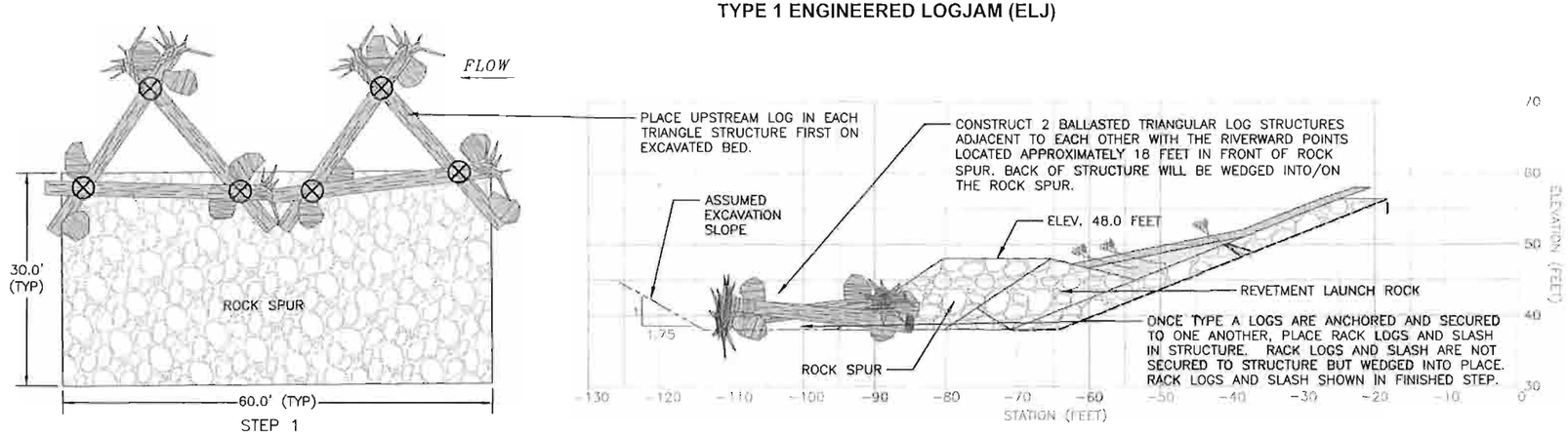
Christie True, Director

REDDINGTON LEVEE SETBACK

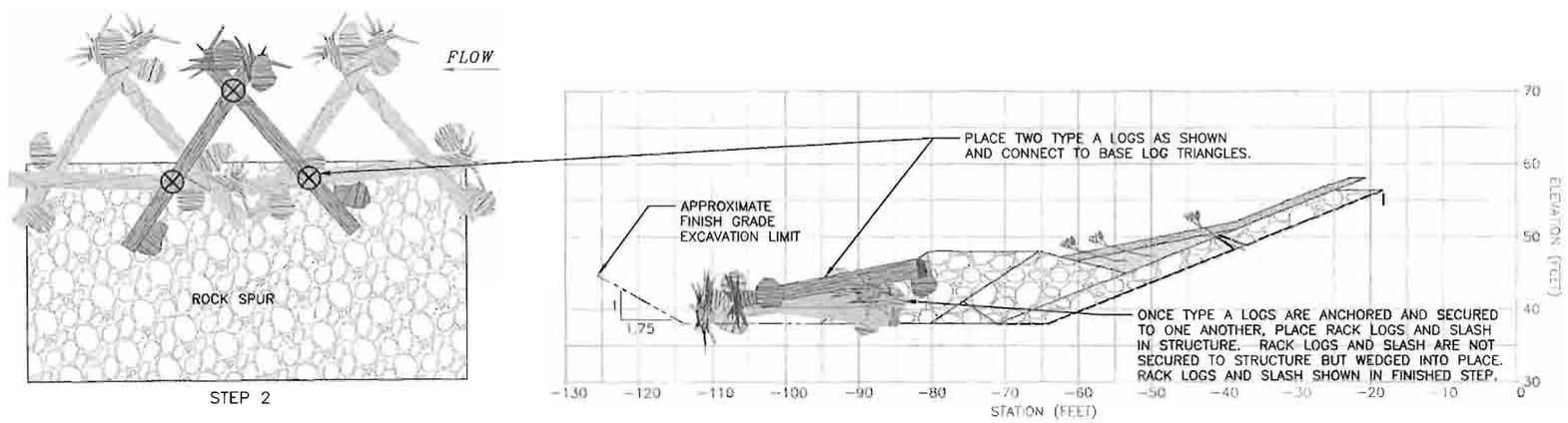
RIVER MOBILE ESTATES REVETMENT
SOUTH END TREATMENT DETAIL

SHEET E3-5 OF 107 SHEETS

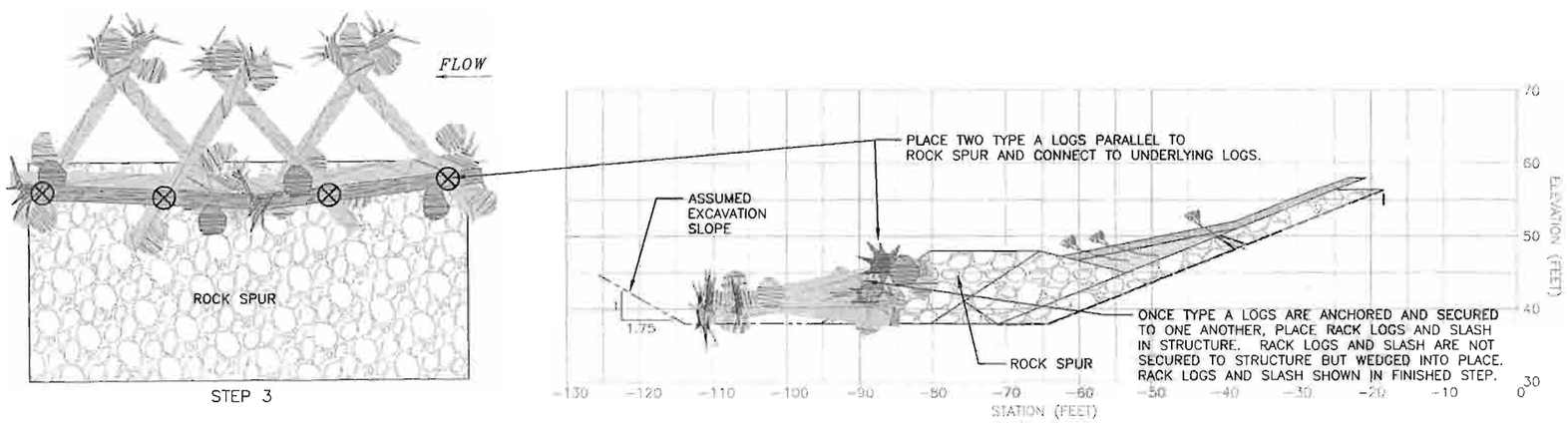
TYPE 1 ENGINEERED LOGJAM (ELJ)



STEP 1



STEP 2



STEP 3

⊗ LOG TO LOG CONNECTION
SEE SHEET E4-4 FOR METHOD

GENERAL NOTES ALL LOGJAMS:

- LOGJAM LOCATIONS, ELEVATIONS, AND ALIGNMENT TO BE STAKED BY CONTRACTOR AND APPROVED BY PROJECT REPRESENTATIVE PRIOR TO CONSTRUCTION.
- TRIM LOGS TO FIT AS REQUIRED OR DIRECTED BY PROJECT REPRESENTATIVE.
- ALL TYPE A, B, AND C LOGS TO BE CONNECTED TO EACH OTHER WHERE CROSSING AND IN CONTACT. SEE LOG TO LOG CONNECTION POINTS IN ELJ SCHEMATICS FOR APPROXIMATE LOCATIONS AND NUMBER. FOR CONNECTION METHOD SEE SHEET E4-4.

RACK LOGS:

- RACK LOGS ONLY SHOWN IN FINAL STEP OF EACH LOGJAM CONSTRUCTION SCHEMATIC FOR CLARITY.
- DO NOT CONNECT RACK LOGS TO BOULDERS OR KEY LOGS.
- PLACE RACK LOGS WITHIN LOGJAM IN CONJUNCTION WITH KEY LOG PLACEMENT DURING INTERMEDIATE STEPS AS DIRECTED BY PROJECT REPRESENTATIVE.

SLASH:

- SLASH ONLY SHOWN IN FINAL STEP OF EACH LOGJAM CONSTRUCTION SCHEMATIC FOR CLARITY.
- PLACE SLASH IN LOGJAM DURING PLACEMENT OF KEY AND RACK LOGS AS DIRECTED BY PROJECT REPRESENTATIVE.

10 0 10 20 30
SCALE IN FEET

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

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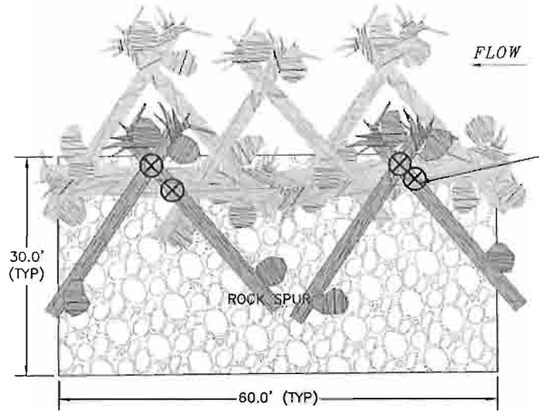
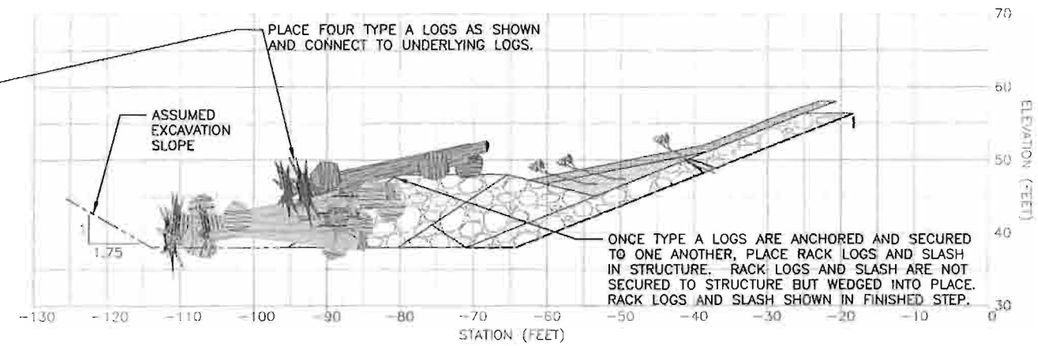
REDDINGTON LEVEE SETBACK

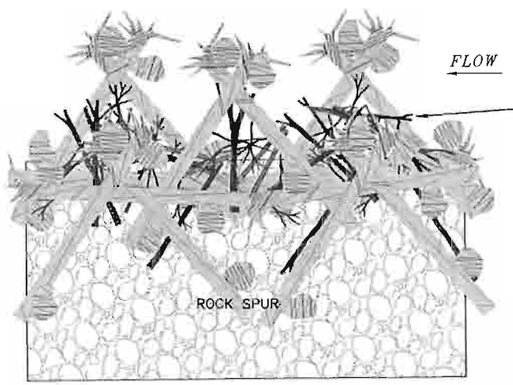
TYPE 1 ENGINEERED LOGJAM DETAILS AND GENERAL LOGJAM NOTES

TYPE 1 ENGINEERED LOGJAM (ELJ)

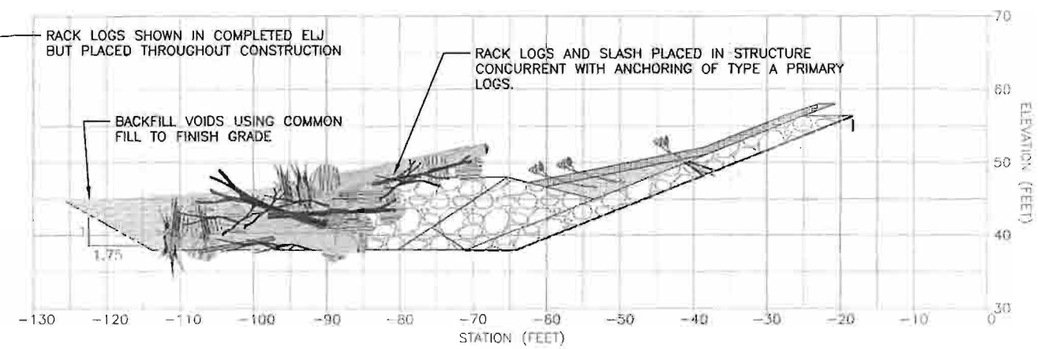


STEP 4





COMPLETE



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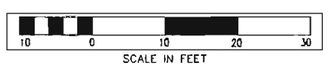
- PLACE RACK LOGS WITHIN LOGJAM IN CONJUNCTION WITH KEY LOG PLACEMENT DURING INTERMEDIATE STEPS AS DIRECTED BY PROJECT REPRESENTATIVE.

SLASH:

- SLASH ONLY SHOWN IN FINAL STEP OF EACH LOGJAM CONSTRUCTION SCHEMATIC FOR CLARITY.
- PLACE SLASH IN LOGJAM DURING PLACEMENT OF KEY AND RACK LOGS AS DIRECTED BY PROJECT REPRESENTATIVE.

TYPE 1 ELJ SCHEDULE (8 TOTAL)				
MEMBER	QUANTITY	DIAMETER (IN)	LENGTH (FT)	DESCRIPTION
TYPE A KEY LOG	14	24±3	30±3	ROOTWAD ATTACHED
RACK LOG	10	12±6	15±3	50% OF LOGS SALVAGED FROM ON SITE
BALLAST BOULDER	28	N/A	N/A	WEIGHT 4+ TON EACH
SLASH	N/A	<6	N/A	TOTAL VOLUME NOT MORE THAN 50 CY
GENERAL PLACEMENT: PLACE BASE LOGS AT ELEVATION 38.0 FEET AND COVER WITH COMMON FILL UP TO FINISH GRADE AS SHOWN IN PROFILE.				



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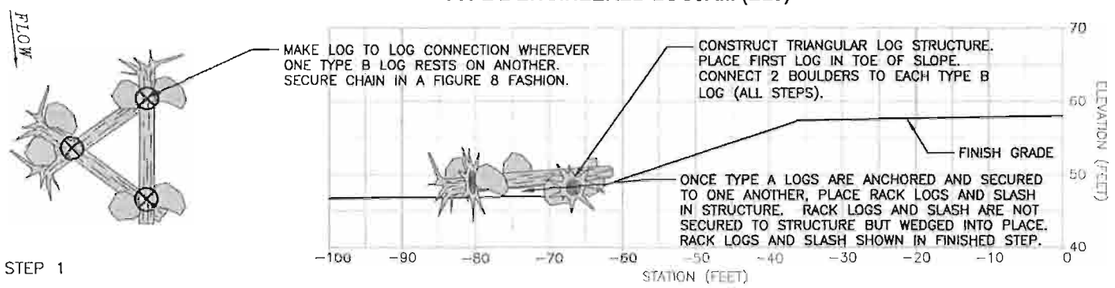
Christie True, Director

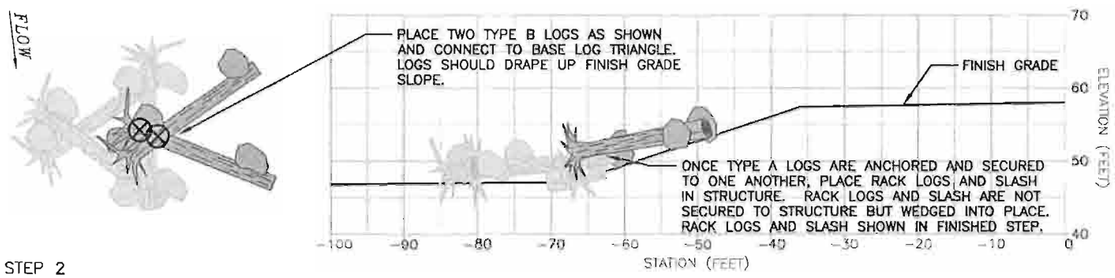
REDDINGTON LEVEE SETBACK

TYPE 1 ENGINEERED LOGJAM DETAILS AND GENERAL LOGJAM NOTES

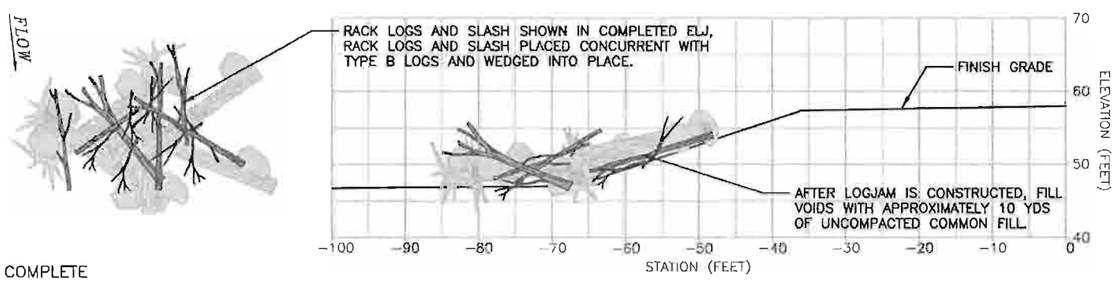
TYPE 2 ENGINEERED LOGJAM (ELJ)



STEP 1

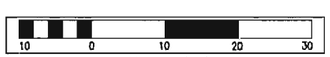


STEP 2



COMPLETE

⊗ LOG TO LOG CONNECTION
SEE SHEET E4-4 FOR METHOD



SCALE IN FEET

CALL 2 WORKING DAYS
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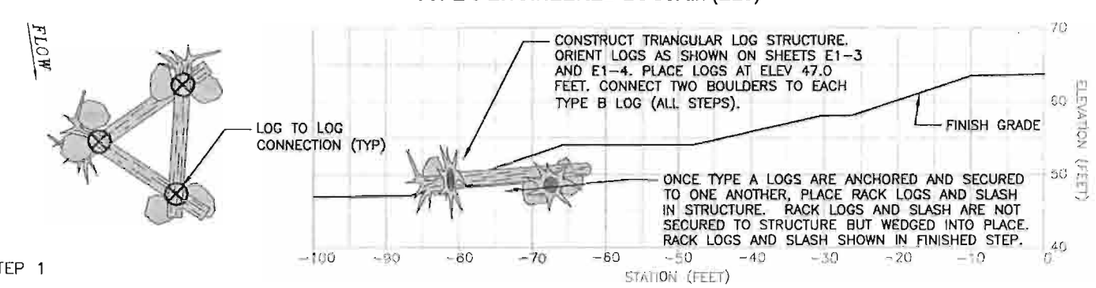
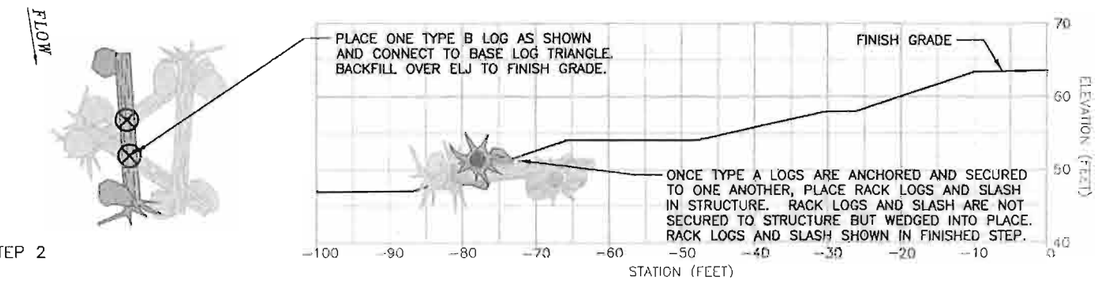
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

TYPE 2 ELJ SCHEDULE (6 TOTAL)				
MEMBER	QUANTITY	DIAMETER (IN)	LENGTH (FT)	DESCRIPTION
TYPE B KEY LOG	5	24±3	20±3	ROOTWAD ATTACHED
RACK LOG	3	12±6	15±3	50% OF LOGS SALVAGED FROM ON SITE
BALLAST BOULDER	10	N/A	N/A	WEIGHT 4+ TON EACH
SLASH	N/A	<6	N/A	TOTAL VOLUME NOT MORE THAN 10 CY
GENERAL PLACEMENT: PLACE ALL LOGS ON TOP OF FINISH GRADE. BACK LOG OF BASE TRIANGULAR STRUCTURE SHOULD BE AT TOE OF SLOPE.				

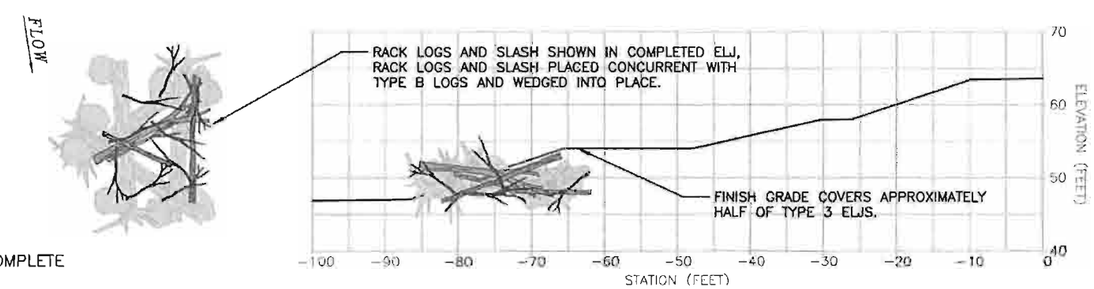
TYPE 3 ENGINEERED LOGJAM (ELJ)



STEP 1

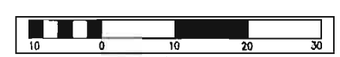


STEP 2



COMPLETE

⊗ LOG TO LOG CONNECTION
SEE SHEET E4-4 FOR METHOD



SCALE IN FEET

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

TYPE 3 ELJ SCHEDULE (6 TOTAL)				
MEMBER	QUANTITY	DIAMETER (IN)	LENGTH (FT)	DESCRIPTION
TYPE B KEY LOG	4	24±3	20±3	ROOTWAD ATTACHED
RACK LOG	2	12±6	15±3	50% OF LOGS SALVAGED FROM ON SITE
BALLAST BOULDER	8	N/A	N/A	WEIGHT 4+ TON EACH
SLASH	N/A	<6	N/A	TOTAL VOLUME NOT MORE THAN 5 CY
GENERAL PLACEMENT: PLACE BASE TRIANGULAR STRUCTURE AT ELEV 47.0 FEET. BACKFILL OVER LOGJAM WITH COMMON FILL ACCORDING TO FINISH GRADE.				

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	ERIK ROWLAND, P.E.	3/2013
PROJECT MANAGER:	VAUGHN COLLINS, P.E.	3/2013
DESIGNED:	VAUGHN COLLINS, P.E.	3/2013
	CHRIS LONG, P.E.	3/2013
REVIEWED:	BRUCE WALSH, P.ENG.	3/2013
CAD DESIGN:	CHRIS LONG, P.E.	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

nhc northwest hydraulic consultants
16300 christensen road, suite 350
seattle, washington 98188-3422
phone: (206) 241-6000
fax: (206) 439-2420
www.nhcweb.com

MARCH 27, 2013

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

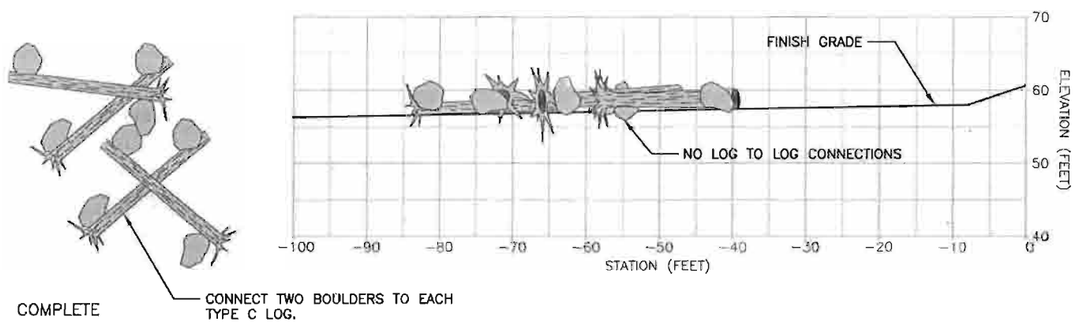
REDDINGTON LEVEE SETBACK

TYPE 2 AND TYPE 3 ENGINEERED LOGJAM DETAILS

SHEET E4-3 OF 107 SHEETS

TYPE 1 & TYPE 2 LOG CLUSTER

(INDEPENDENTLY BALLASTED LWD)

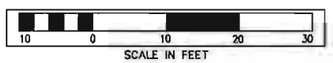


TYPE 1 & TYPE 2 LOG CLUSTER SCHEDULE (17 TOTAL)				
MEMBER	QUANTITY	DIAMETER (IN)	LENGTH (FT)	DESCRIPTION
TYPE C KEY LOG	4	18±3	20±3	ROOTWAD ATTACHED
RACK LOG	N/A	N/A	N/A	N/A
BALLAST BOULDER	8	N/A	N/A	WEIGHT 4+ TON EACH
SLASH	N/A.	N/A	N/A	N/A

GENERAL PLACEMENT: SEE SHEETS E1-3, E1-4, AND E1-5 FOR GENERAL LOCATION AND ELEVATION. PLACE LOGS ACCORDING TO CLUSTER TYPE (SPECIFIED BELOW) AS DIRECTED BY PROJECT REPRESENTATIVE. CLUSTER SHAPE MAY VARY FROM THAT SHOWN IN PLANS.

TYPE 1 LOG CLUSTER – PLACE CLUSTERS ON TOP OF BARB LAUNCH ROCK AT THE LOCATIONS SHOWN.

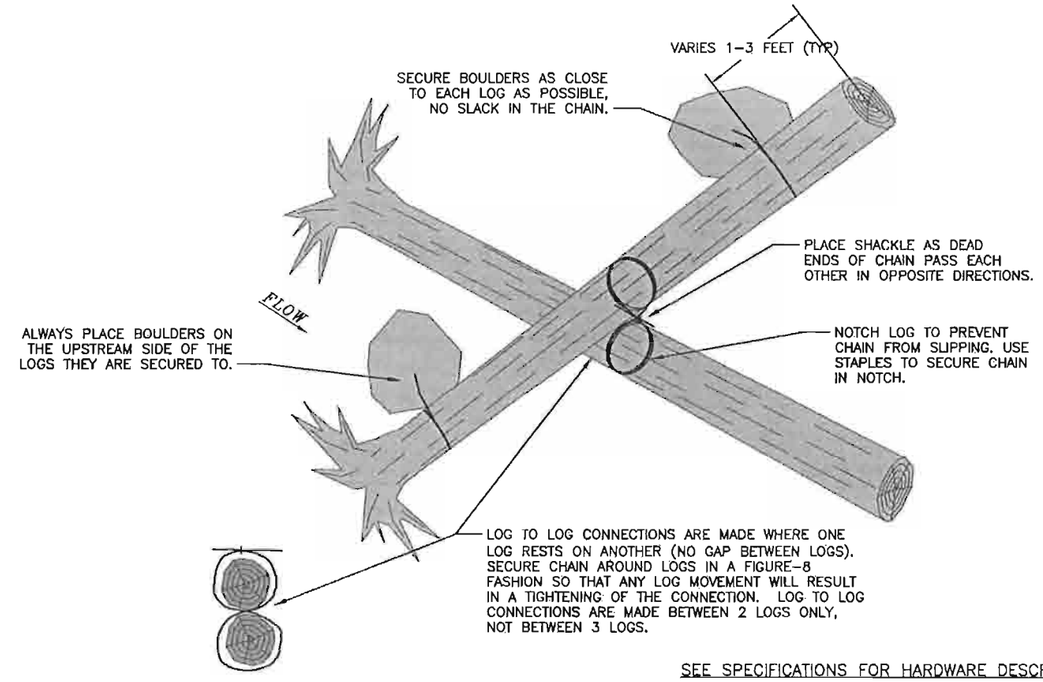
TYPE 2 LOG CLUSTER – PLACE CLUSTERS ON FINISH GRADE AT THE LOCATIONS SHOWN.



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

LOG TO LOG CONNECTION

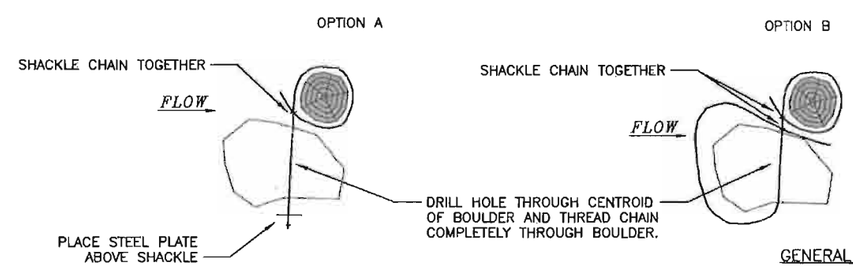
(TYPICAL ALL ELJS)
NOT TO SCALE



SEE SPECIFICATIONS FOR HARDWARE DESCRIPTION

LOG TO BOULDER CONNECTION

(TYPICAL ALL ELJS AND LOG CLUSTERS)
NOT TO SCALE



SEE SPECIFICATIONS FOR HARDWARE DESCRIPTION

GENERAL NOTES:

- SECURE BOULDERS AS CLOSE TO EACH LOG AS POSSIBLE, NO SLACK IN THE CHAIN.
- ALWAYS PLACE BOULDERS ON THE UPSTREAM SIDE OF THE LOGS THEY ARE SECURED TO.

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	ERIK ROWLAND, P.E.	3/2013
PROJECT MANAGER:	VAUGHN COLLINS, P.E.	3/2013
DESIGNED:	VAUGHN COLLINS, P.E.	3/2013
	CHRIS LONG, P.E.	3/2013
REVIEWED:	BRUCE WALSH, P.ENG.	3/2013
CAD DESIGN:	CHRIS LONG, P.E.	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

nhc northwest hydraulic consultants
16300 christensen road, suite 350
seattle, washington 98188-3422
phone: (206) 241-6000
fax: (206) 439-2420
www.nhcweb.com

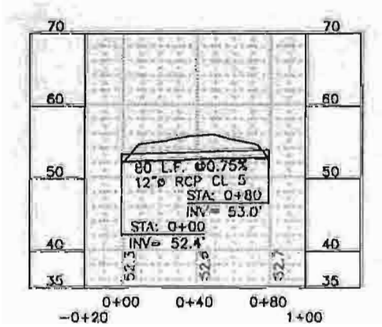
MARCH 27, 2013

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

LOG CLUSTER DETAILS AND CONNECTION DETAILS

NOTES:
1. TIE LAST 3 DOWNSTREAM RCP JOINTS.
SEE DETAIL 4/SD10



CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	YOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS, STATE OF WASHINGTON, 21434, REGISTERED PROFESSIONAL ENGINEER
4-5-13

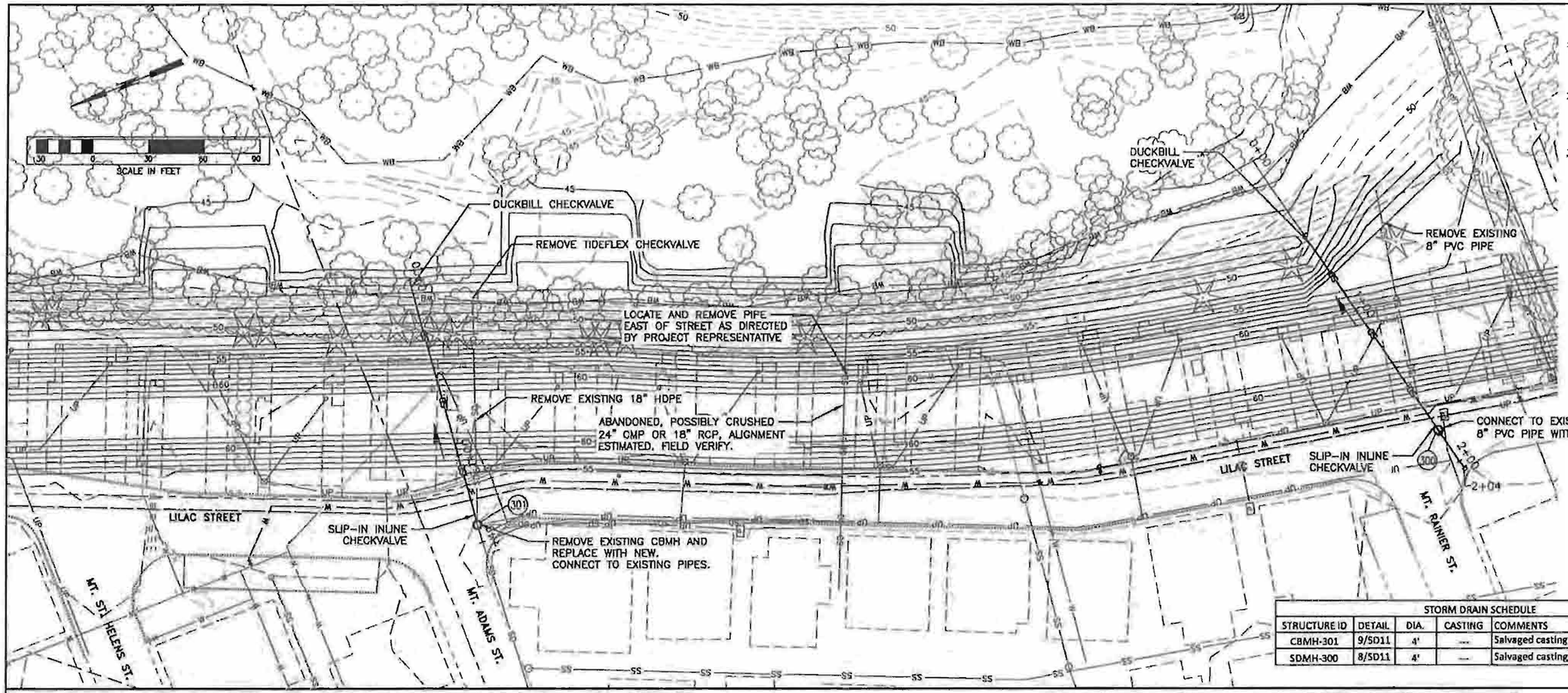
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

STORM DRAINAGE IMPROVEMENT STA 19+40
PLAN AND PROFILE

SHEET SD1 OF 107 SHEETS

\\dnrp.kingcounty.lcl\wtfksc\CIP\Share\CAD\11-RIVERS CAD SUPPORT\Reddington Levee_RD_MP\DWG SETBACK\RED-SB_SDPP.dwg, SD1, 4/3/2013 8:23:53 AM, kitamura, 1:2

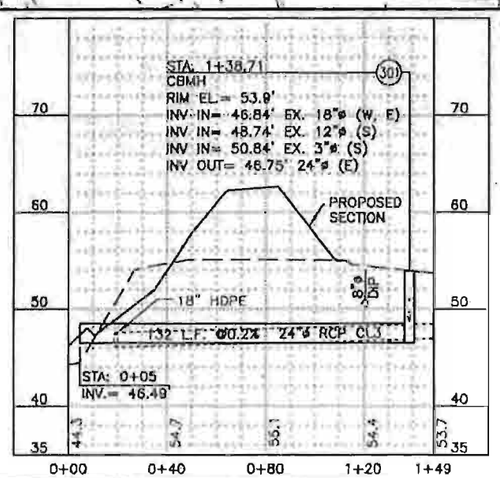


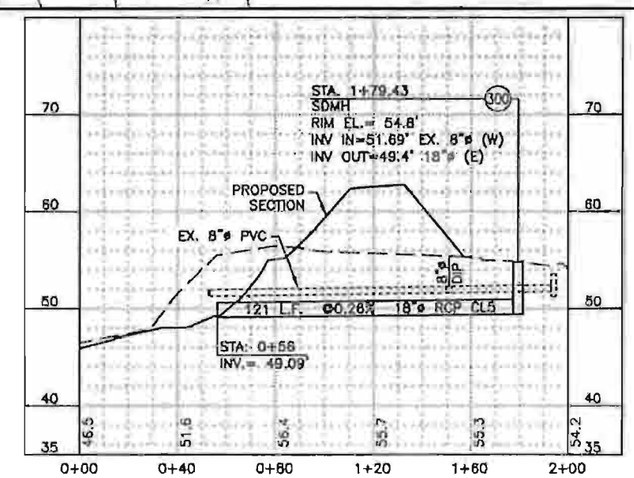
NOTES:

1. SEE C2 SHEETS FOR SEWER AND WATER MAIN REMOVAL AND REPLACMENT INFORMATION.
2. RESTRICTED TRENCH FOR STORM PIPE AND STRUCTURE INSTALLATION WITHIN EXISTING STREET, MAXIMUM 7 FT BOX OUTSIDE WIDTH.
3. TIE LAST 3 DOWNSTREAM RCP JOINTS.

SEE DETAIL 4/SD10

STORM DRAIN SCHEDULE				
STRUCTURE ID	DETAIL	DIA.	CASTING	COMMENTS
CBMH-301	9/SD11	4'	---	Salvaged casting, 18"x24"Grate
SDMH-300	8/SD11	4'	---	Salvaged casting, 24" Ø Lid





CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. ---

PROJECT No. 1112035

CONTRACT No. C00817C13

ERIK G. PETERS — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 4-5-13

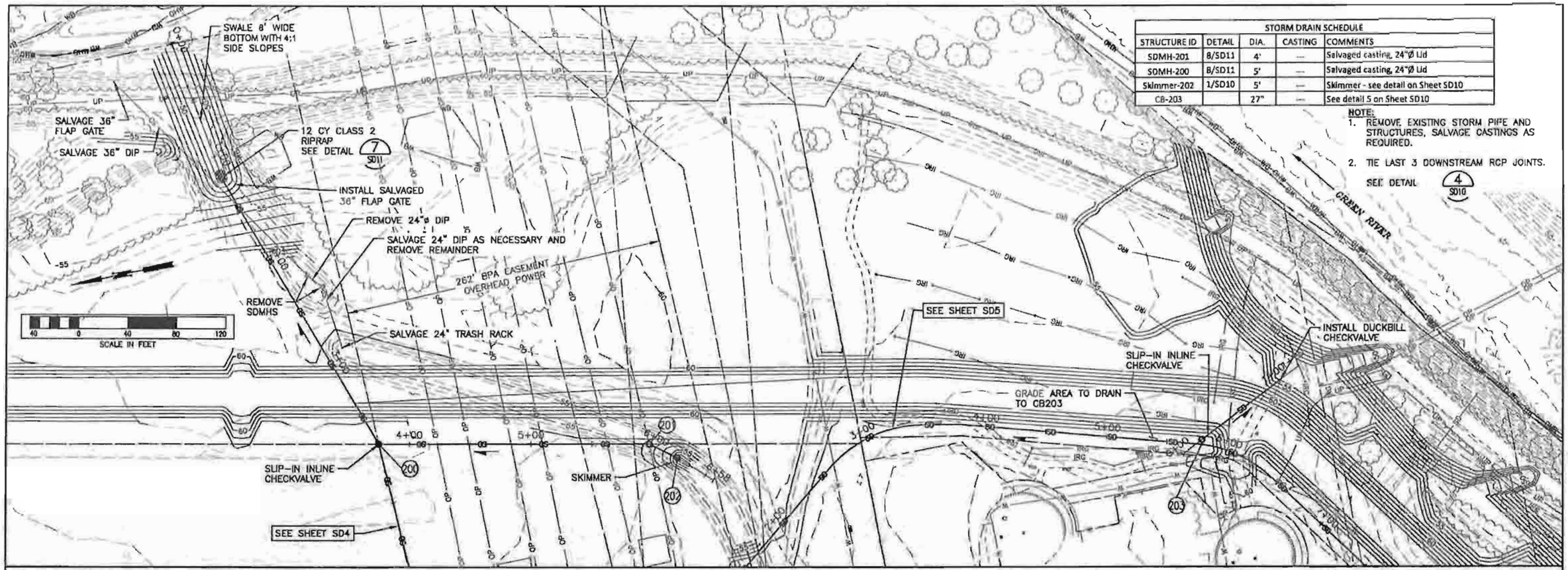
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

LILAC ST STORM DRAINAGE IMPROVEMENT PLAN AND PROFILE

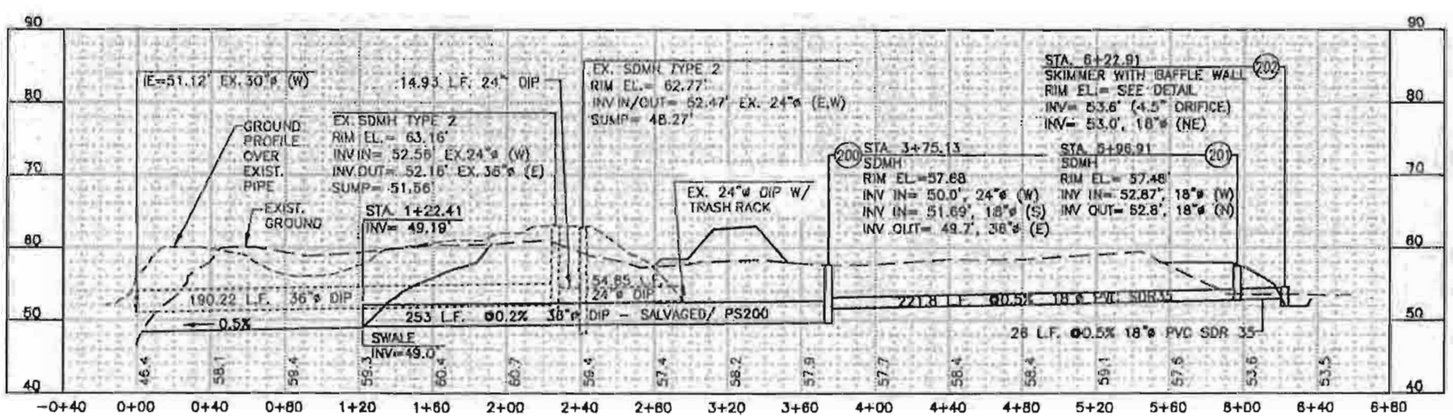
SHEET **SD2** OF **107** SHEETS

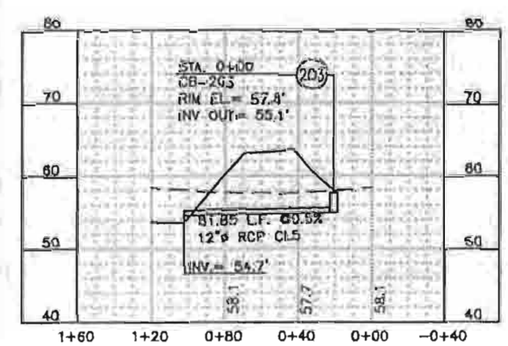
\\dnrp.kingcounty.lcl\wlrsc\CIP Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RO_Utils\DWG SETBACK\RED-SB_SDPP.dwg, SD2, 4/3/2013 8:24:29 AM, kitamura, 1:2



STORM DRAIN SCHEDULE				
STRUCTURE ID	DETAIL	DIA.	CASTING	COMMENTS
SDMH-201	8/SD11	4'	---	Salvaged casting, 24"Ø Lid
SDMH-200	8/SD11	5'	---	Salvaged casting, 24"Ø Lid
Skimmer-202	1/SD10	5'	---	Skimmer - see detail on Sheet SD10
CB-203		27"	---	See detail 5 on Sheet SD10

NOTE:
1. REMOVE EXISTING STORM PIPE AND STRUCTURES, SALVAGE CASTINGS AS REQUIRED.
2. TIE LAST 3 DOWNSTREAM RCP JOINTS. SEE DETAIL 4 SD10





CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS STATE OF WASHINGTON 37148 REGISTERED PROFESSIONAL ENGINEER
4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

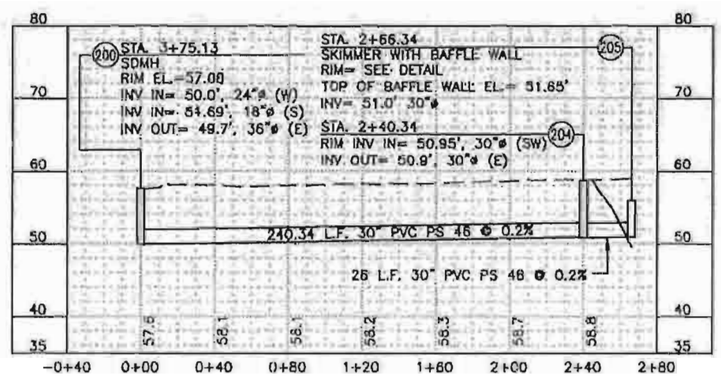
REDDINGTON LEVEE SETBACK

AUBURN STORM DRAINAGE IMPROVEMENT
PLAN AND PROFILE

SHEET SD3 OF 107 SHEETS

\\dnrp.kingcounty.lcl\wirkes\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_UR\DWG SETBACK\RED-SB_SDPP.dwg, SD3, 4/3/2013 8:21:00 AM, kitkamura, 1:2

STORM DRAIN SCHEDULE				
STRUCTURE ID	DETAIL	DIA.	CASTING	COMMENTS
SDMH-204	8/SD11	5'	—	Salvaged casting, 24"Ø Lid
Skimmer-205	6/SD11	6'	—	Skimmer - see detail on Sheet SD11



CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
4-5-13

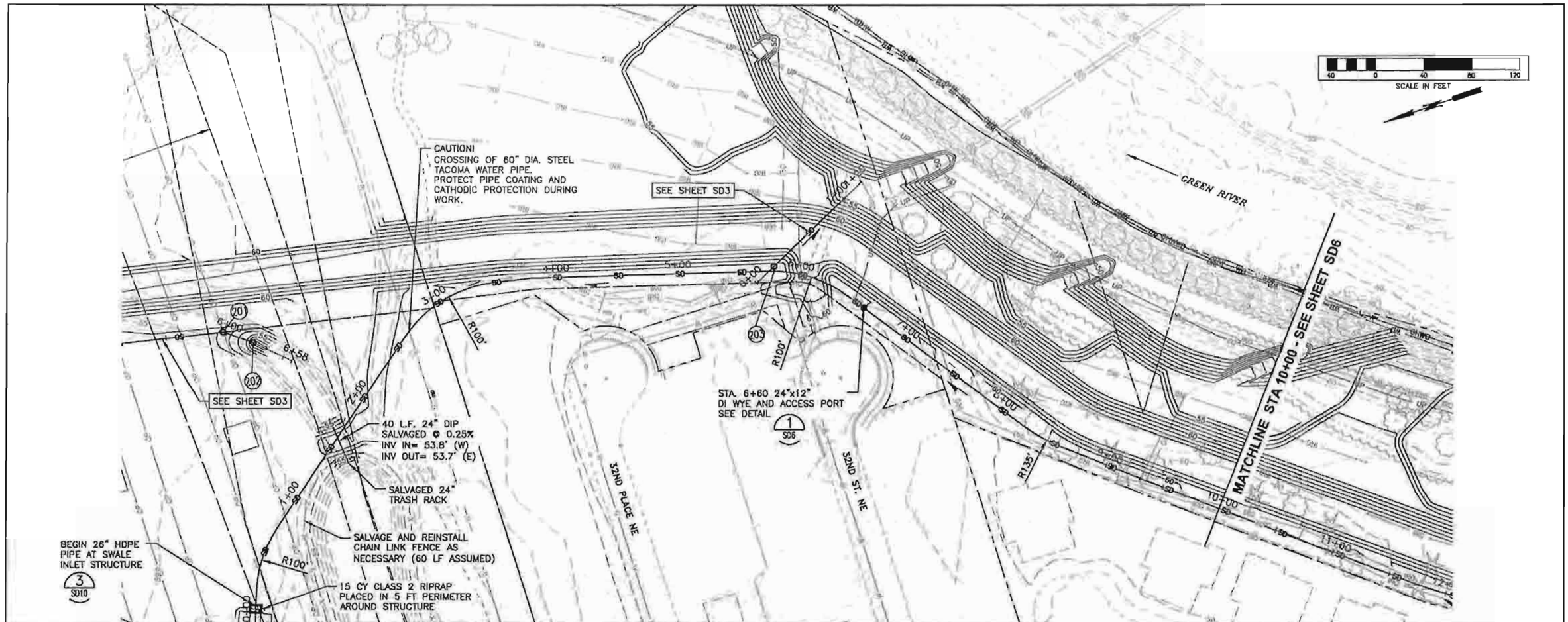
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

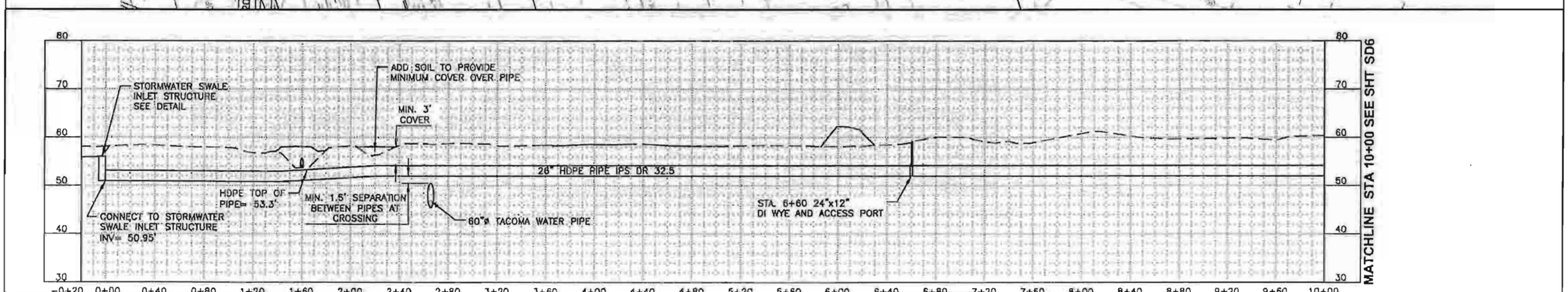
REDDINGTON LEVEE SETBACK

AUBURN STORM DRAINAGE IMPROVEMENT
PLAN AND PROFILE

SHEET SD4 OF 107 SHEETS

\\kcrp.kingcounty.lcl\wlrsc\CIPShare\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_LMV\DWG SETBACK\RED-SB_SDPP.dwg, SD4, 4/3/2013 8:21:27 AM, kitamura, 1:2





NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --

PROJECT No. 1112035

CONTRACT No. C00817C13

ERIK G. PETERS STATE OF WASHINGTON 37186 REGISTERED PROFESSIONAL ENGINEER
4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

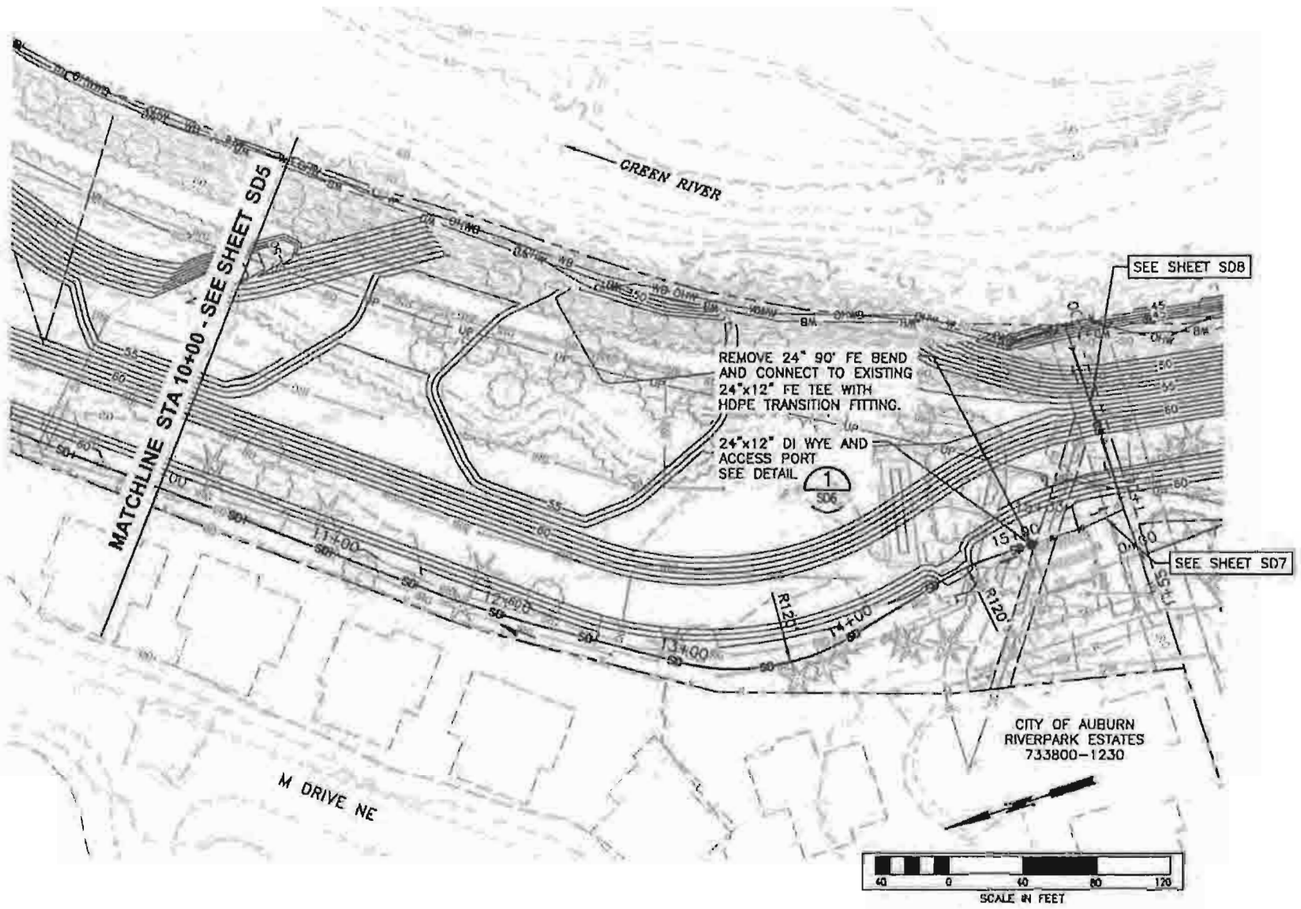
REDDINGTON LEVEE SETBACK

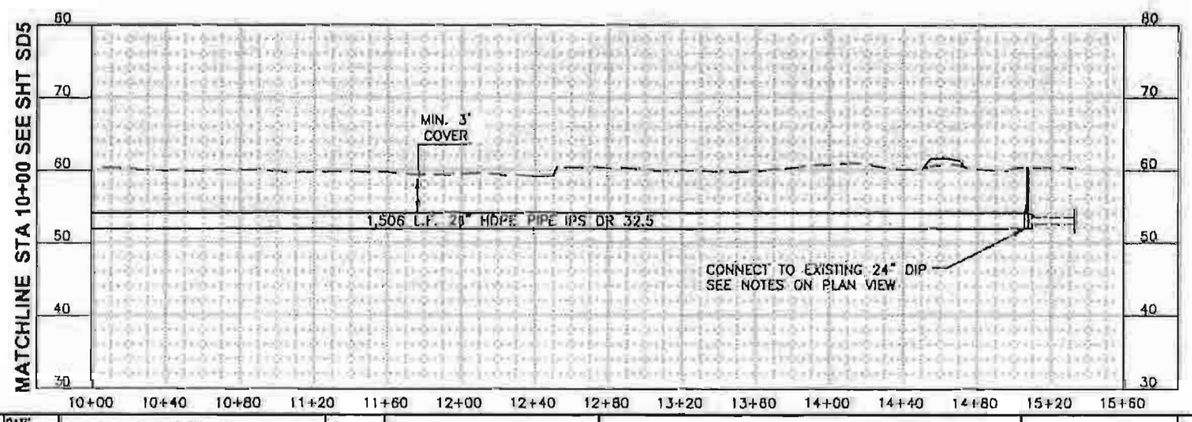
BRANNAN PARK PUMP STATION FORCE MAIN PLAN AND PROFILE (STA 0+00 THRU STA 10+00)

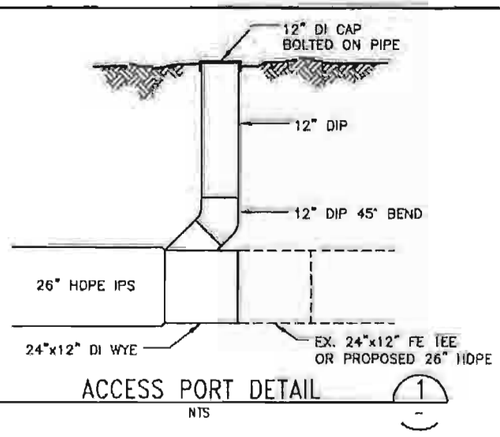
SHEET SD5 OF 107 SHEETS

\\dnrp.kingcounty.lcl\wifsc\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_LMI\DWG SETBACK\RED-SB_SDPP.dwg, SD5, 4/3/2013 8:31:04 AM, Kitamura, 1:2

NOTE:
1. SEE AUBURN'S PUMP STATION INSTRUCTION DRAWING FOR INFO. ON EXISTING PIPE. PUMP STATION PIPING LAYOUT BASED ON DESIGN DRAWINGS.







ACCESS PORT DETAIL 1
NTS

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

4-5-13

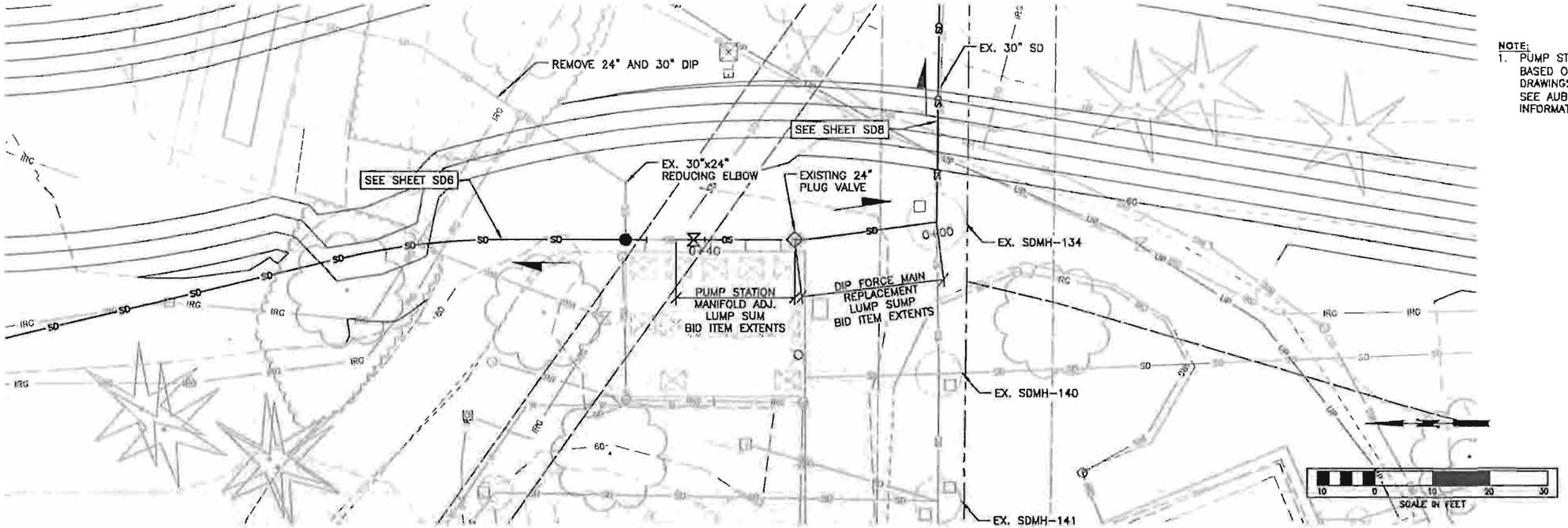
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

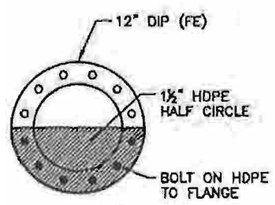
BRANNAN PARK PUMP STATION FORCE MAIN PLAN AND PROFILE (STA 10+00 THRU END)

SHEET SD6 OF 107 SHEETS

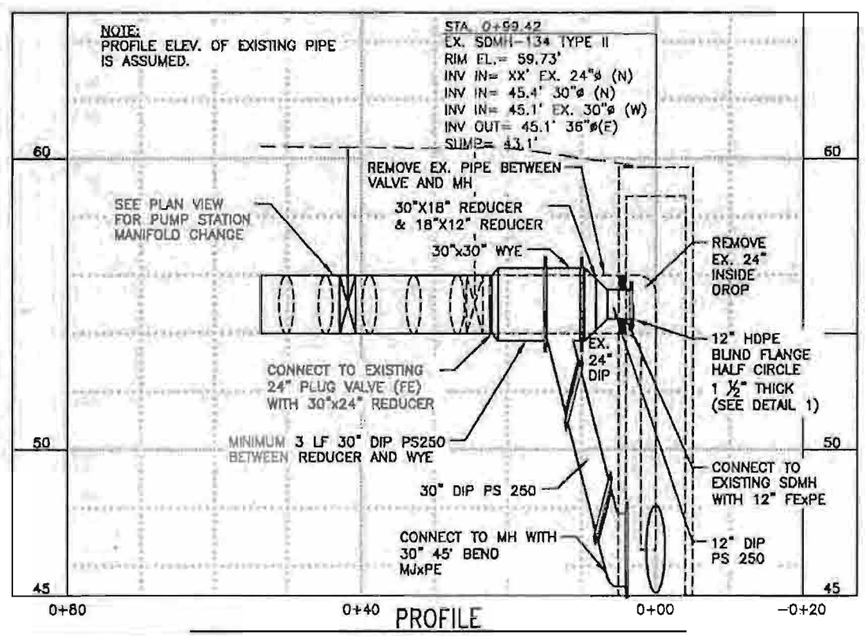
\\dnrp.kingcounty.lcl\wrksx\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_Util\DWG SETBACK\RED-SB_SDPP.dwg, SD6, 4/3/2013 8:22:15 AM, Kitamura, 1:2



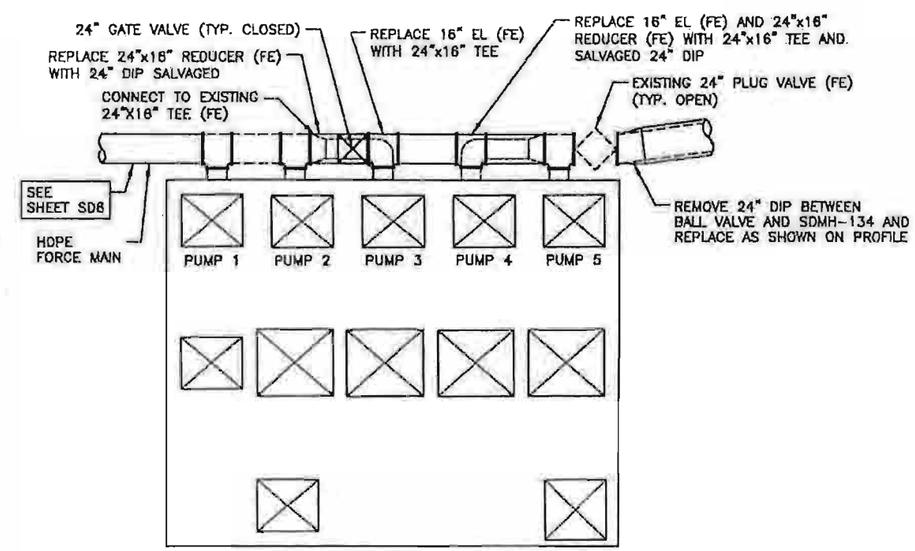
NOTE:
1. PUMP STATION EXISTING PIPING BASED ON AUBURN'S DESIGN DRAWINGS. VERIFY PIPE IN FIELD. SEE AUBURN'S DRAWINGS FOR INFORMATION ON EXISTING PIPE.



BLIND FLANGE HALF CIRCLE DETAIL 1
SCALE: 1"=10'



PROFILE



PUMP STATION MANIFOLD PLAN VIEW
1"=5'-0"

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER
4-5-13

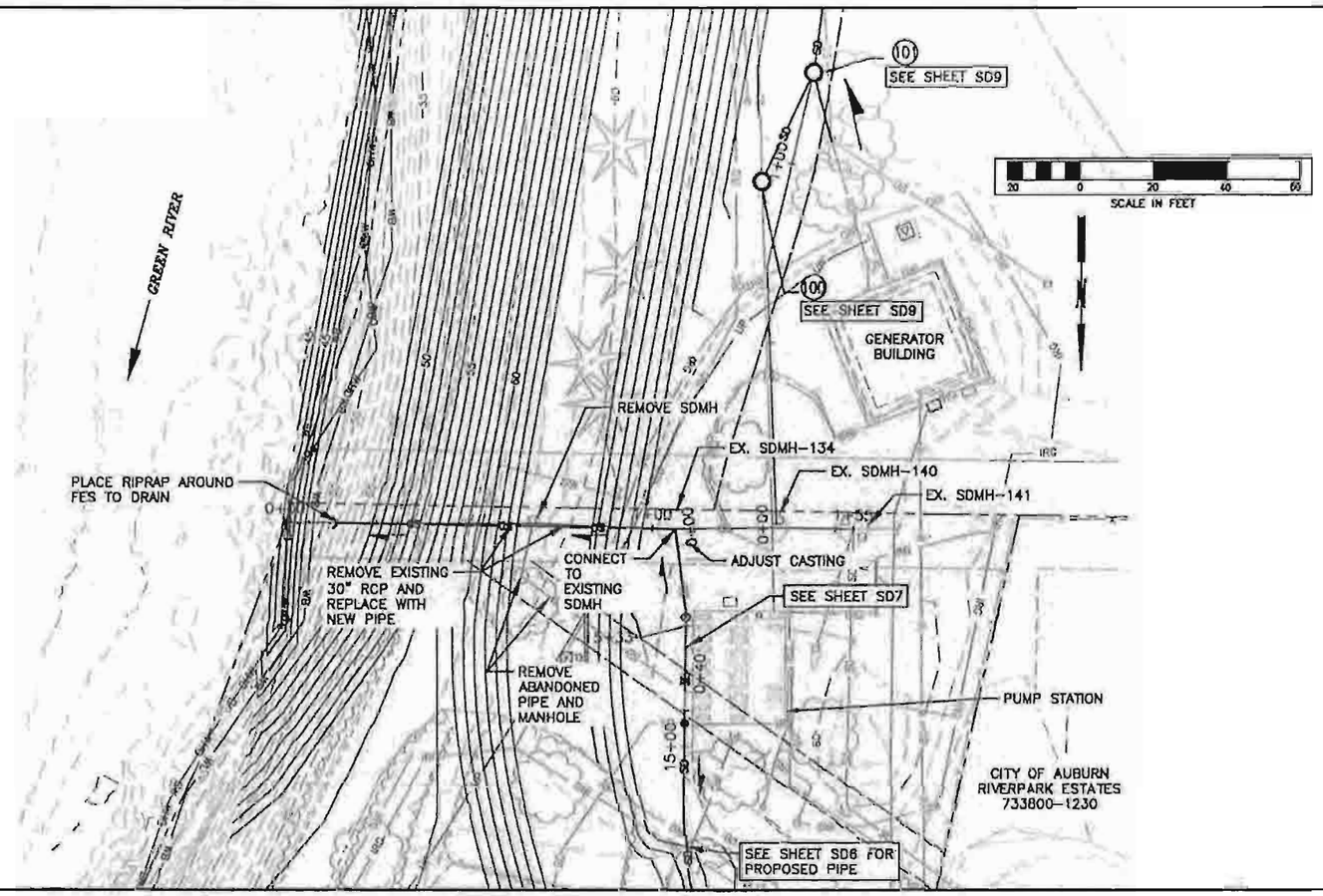
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

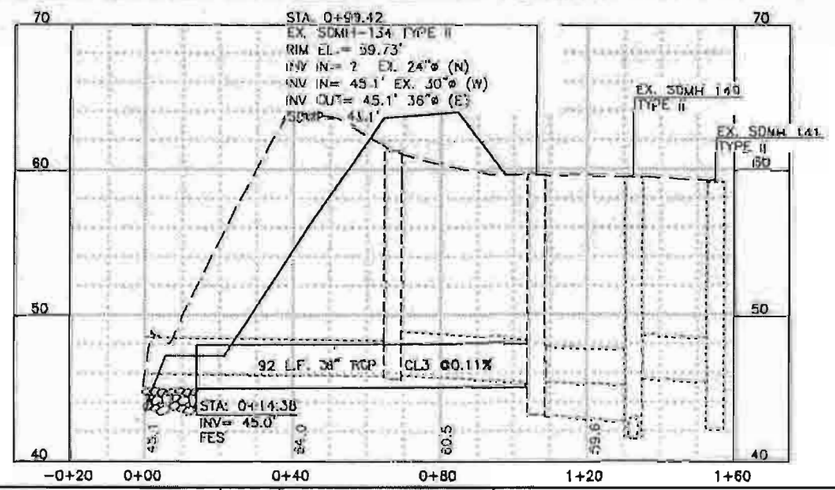
PUMP STATION MANIFOLD AND BYPASS FORCE MAIN PLAN AND PROFILE

SHEET SD7 OF 107 SHEETS

\\dnrp.kingcounty.lcl\wrfsc\CIP\Share\CADD\J-RIVERS CAD SUPPORT\Reddington Levee_RD_UNIDWG SETBACK\RED-SB_SDPP.dwg, SD7, 4/3/2013 8:31:41 AM, kkitamura, 1:2



NOTE:
1. TIE LAST 3 DOWNSTREAM RCP JOINTS. SEE DETAIL 4/SD10



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

4-5-13

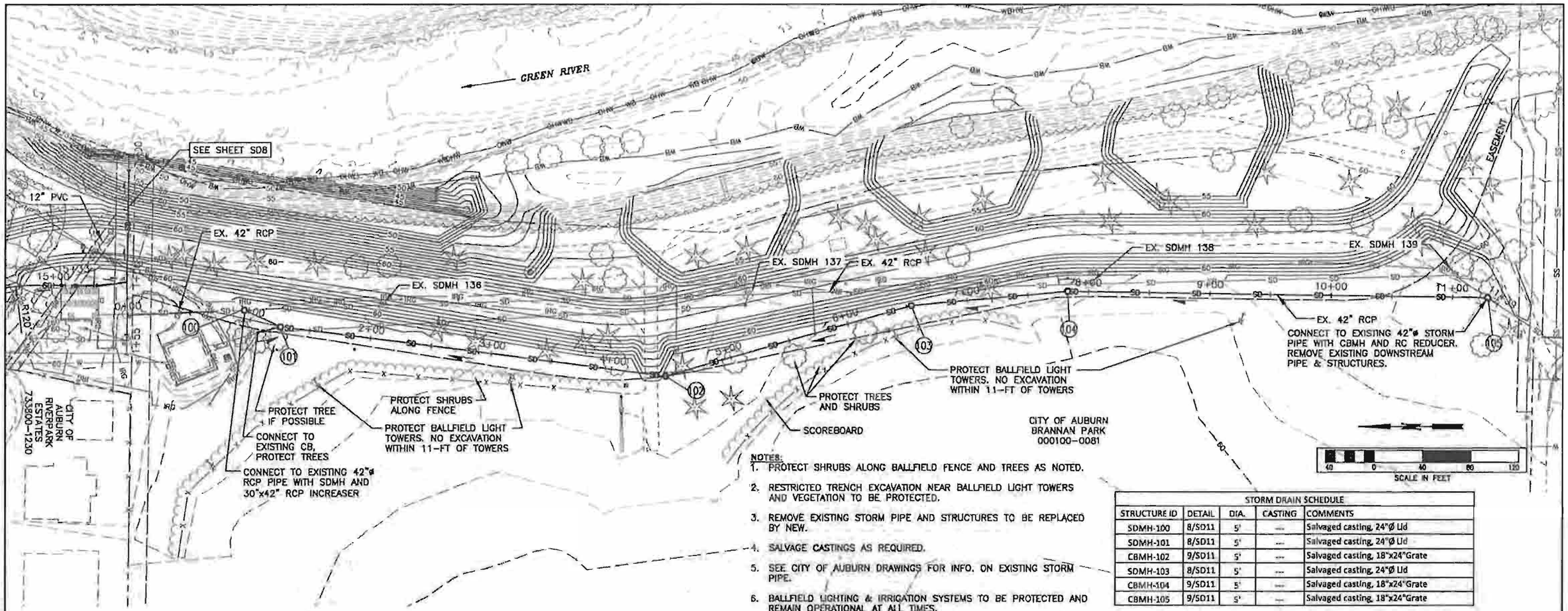
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

BRANNAN PARK PUMP STATION BYPASS PIPE
PLAN AND PROFILE

SHEET SD8 OF 107 SHEETS

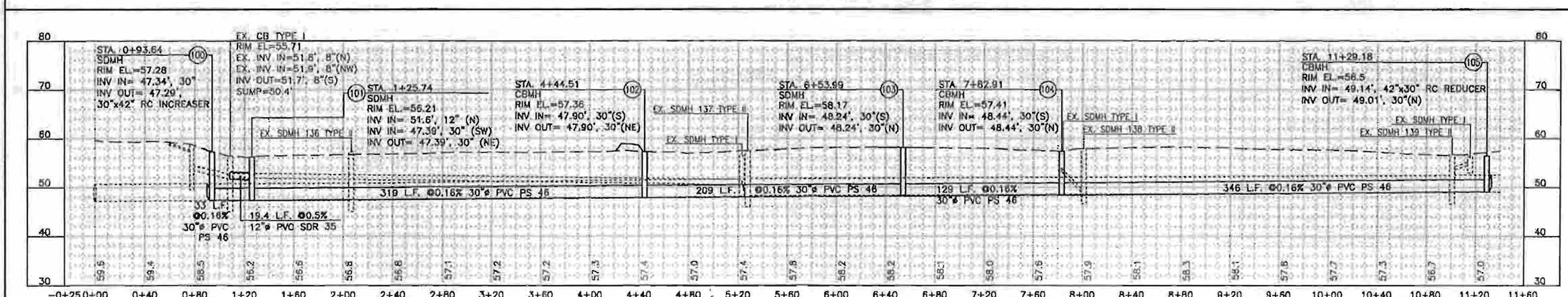
\\kcrp.kingcounty.lcl\wirksc\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_Util\DWG SETBACK\RED-S8_SDPP.dwg, SD8, 4/3/2013 8:23:05 AM, kktamura, 1:2



NOTES:
1. PROTECT SHRUBS ALONG BALLFIELD FENCE AND TREES AS NOTED.
2. RESTRICTED TRENCH EXCAVATION NEAR BALLFIELD LIGHT TOWERS AND VEGETATION TO BE PROTECTED.
3. REMOVE EXISTING STORM PIPE AND STRUCTURES TO BE REPLACED BY NEW.
4. SALVAGE CASTINGS AS REQUIRED.
5. SEE CITY OF AUBURN DRAWINGS FOR INFO. ON EXISTING STORM PIPE.
6. BALLFIELD LIGHTING & IRRIGATION SYSTEMS TO BE PROTECTED AND REMAIN OPERATIONAL AT ALL TIMES.

STORM DRAIN SCHEDULE

STRUCTURE ID	DETAIL	DIA.	CASTING	COMMENTS
SDMH-100	8/SD11	5'	---	Salvaged casting, 24"Ø Lid
SDMH-101	8/SD11	5'	---	Salvaged casting, 24"Ø Lid
CBMH-102	9/SD11	5'	---	Salvaged casting, 18"x24"Grate
SDMH-103	8/SD11	5'	---	Salvaged casting, 24"Ø Lid
CBMH-104	9/SD11	5'	---	Salvaged casting, 18"x24"Grate
CBMH-105	9/SD11	5'	---	Salvaged casting, 18"x24"Grate



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4-5-13

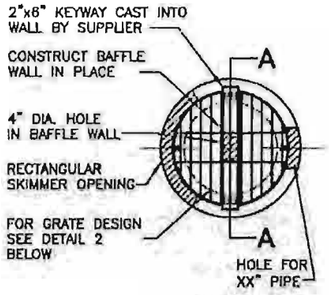
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

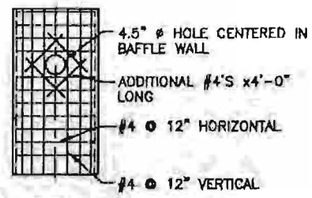
BRANNAN PARK STORM DRAINAGE IMPROVEMENT
PLAN AND PROFILE

SHEET SD9 OF 107 SHEETS

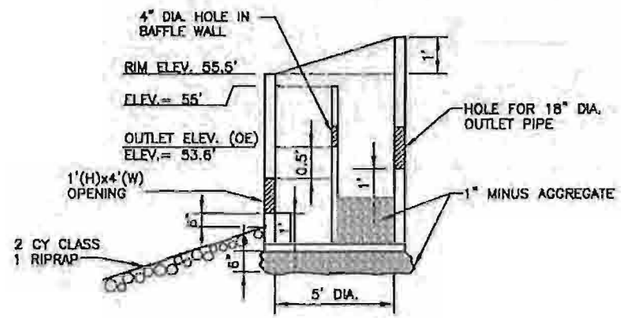
\\kinp.kingcounty.lcl\wfrsc\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_Lib\DWG SETBACK\RED-SB_SDPP.dwg, SD9, 4/3/2013 8:23:27 AM, kitamura, 1:2



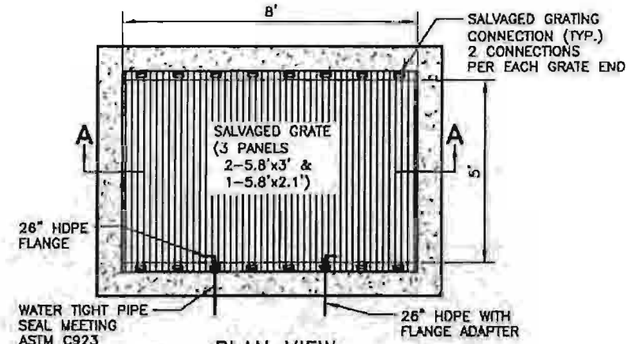
SKIMMER GRATE



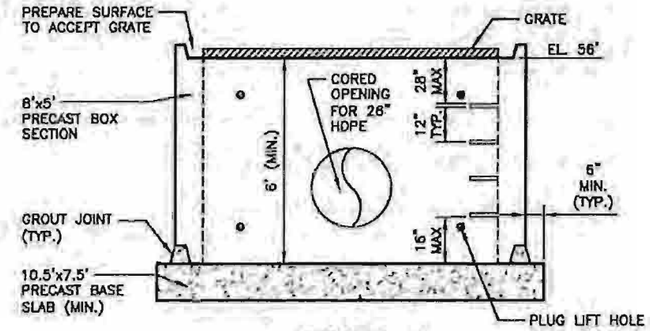
SECTION A–A
CONCRETE BAFFLE WALL



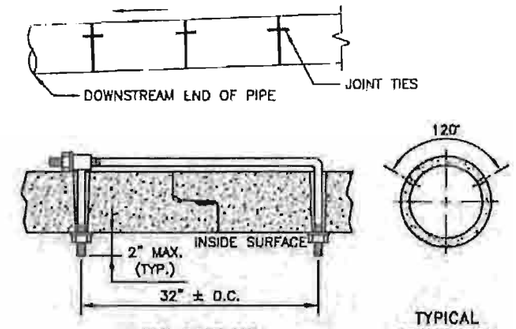
SKIMMER – 202
SKIMMER STRUCTURE
WITH CONCRETE BAFFLE WALL DETAIL (1)
NOT TO SCALE



PLAN VIEW



SECTION A



EYE BOLT TIE

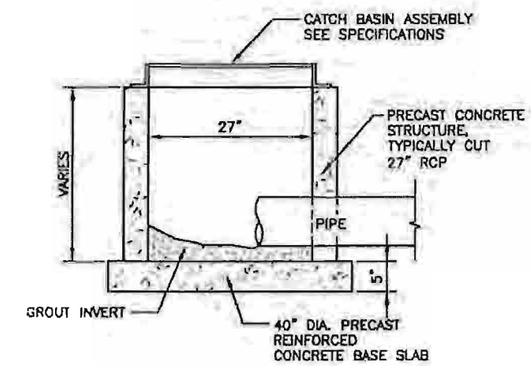
TYPICAL APPLICATION

NOTE:

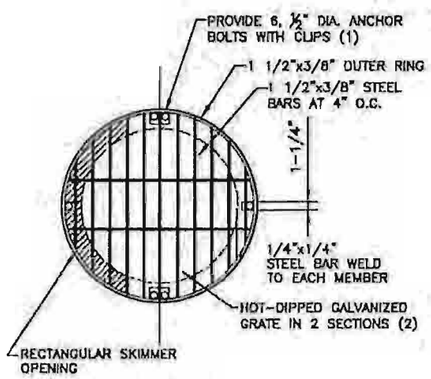
1. HOT DIPPED GALVANIZED HARDWARE

PIPE SIZE	BAR SIZE
12"–27"	5/8"
30"–60"	3/4"
>72"	1"

RCP JOINT TIES
DETAIL (4)



27" SHALLOW DEPTH CB
DETAIL (5)

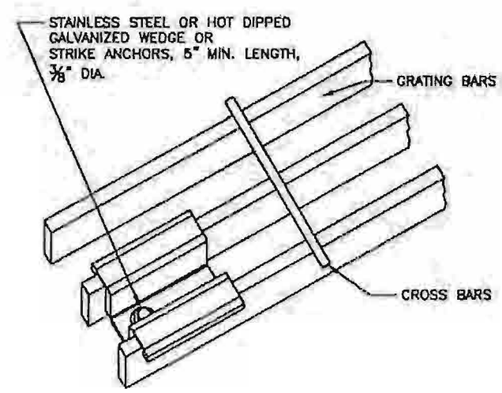


GRATE DETAIL

NOTES:

1. ANCHOR BOLTS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED WEDGE OR STRIKE ANCHORS.
2. PREFABRICATED GALVANIZED SKIMMER GRATE, PLATE STYLE BY HAALA INDUSTRIES IS AN APPROVED EQUAL. (SEE WWW.HAALAINDUSTRIES.COM)

SKIMMER GRATE
DETAIL (2)
NOT TO SCALE



TYPICAL GRATING CONNECTION

STORMWATER SWALE INLET STRUCTURE (3)
NOT TO SCALE

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

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DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER
4-5-13

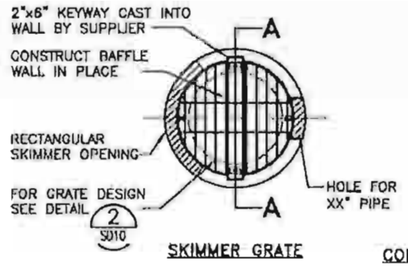
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

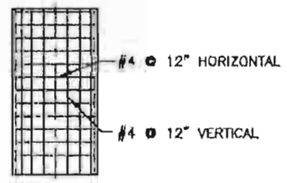
STORM DRAINAGE DETAILS

SHEET SD10 OF 107 SHEETS

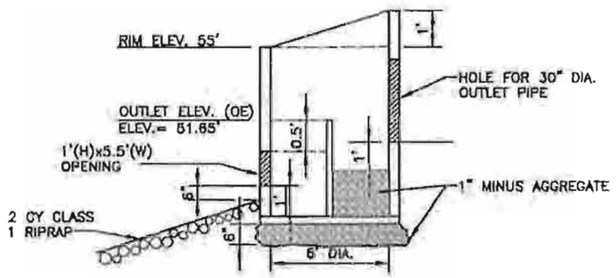
\\dnrp.kingcounty.lcl\wrlrcs\CIP\Share\CADD\1-RIVERS CAD SUPPORT\Reddington Levee_RD_LIB\DWG SETBACK\RED-SB_SDDET.dwg, SD10, 4/3/2013 8:25:18 AM, kitamura, 1:2



SKIMMER GRATE

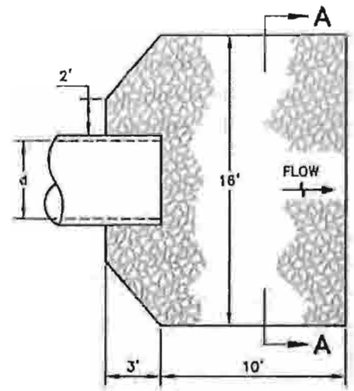


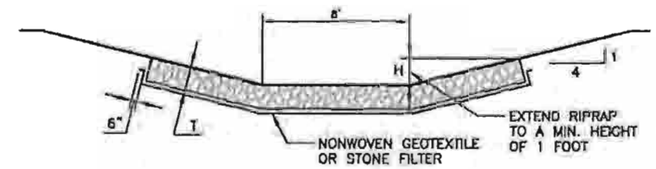
SECTION A-A
CONCRETE BAFFLE WALL



SKIMMER - 205
SKIMMER STRUCTURE
WITH CONCRETE BAFFLE WALL DETAIL (6)

NOT TO SCALE





SECTION A-A

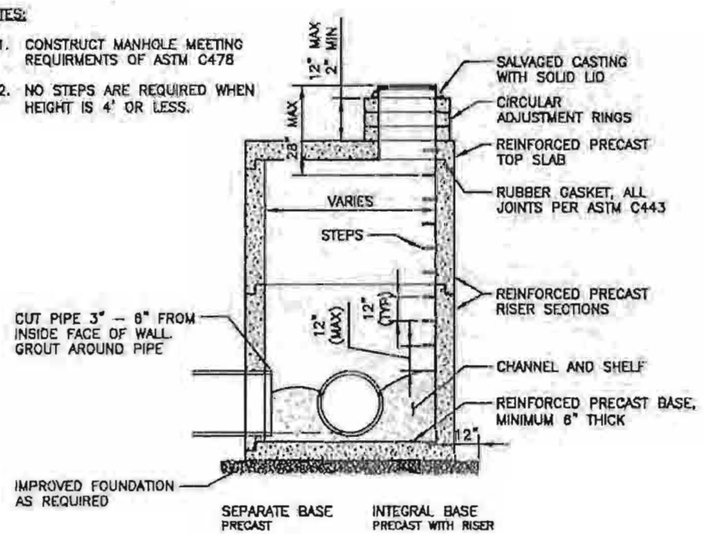
RIPRAP	
CLASS	THICKNESS (T)
1	12 IN
2	18 IN
3	24 IN

36" DIP ROCK OUTLET PROTECTION (7)

NOT TO SCALE

NOTES:

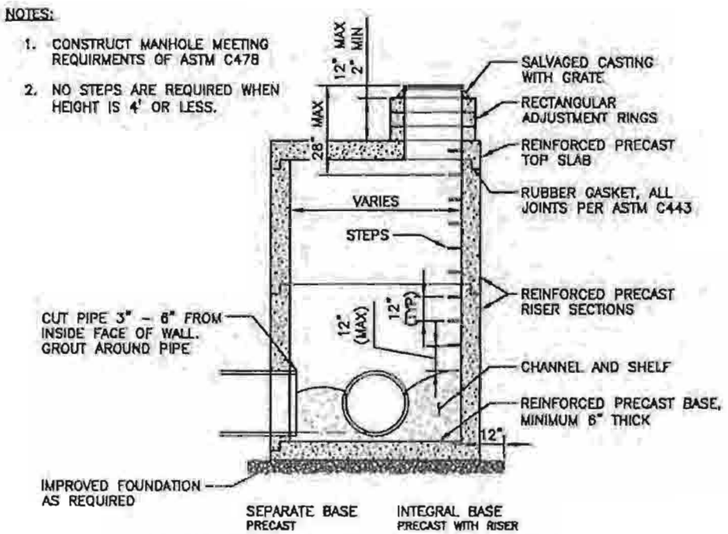
1. CONSTRUCT MANHOLE MEETING REQUIRMENTS OF ASTM C478
2. NO STEPS ARE REQUIRED WHEN HEIGHT IS 4' OR LESS.



STORM MANHOLE (SDMH) DETAIL (8)

NOTES:

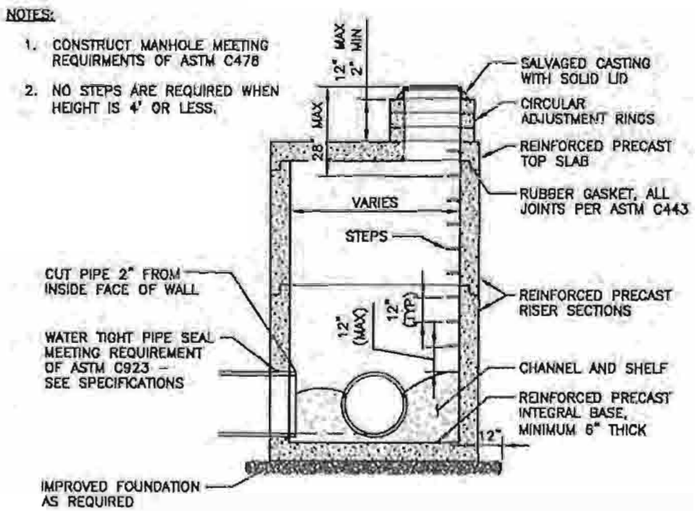
1. CONSTRUCT MANHOLE MEETING REQUIRMENTS OF ASTM C478
2. NO STEPS ARE REQUIRED WHEN HEIGHT IS 4' OR LESS.



CATCH BASIN MANHOLE (CBMH) DETAIL (9)

NOTES:

1. CONSTRUCT MANHOLE MEETING REQUIRMENTS OF ASTM C478
2. NO STEPS ARE REQUIRED WHEN HEIGHT IS 4' OR LESS.



SANITARY SEWER MANHOLE DETAIL (10)

NUM.	REVISION	BY	DATE
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PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS STATE OF WASHINGTON 22421 REGISTERED PROFESSIONAL ENGINEER
4-5-13

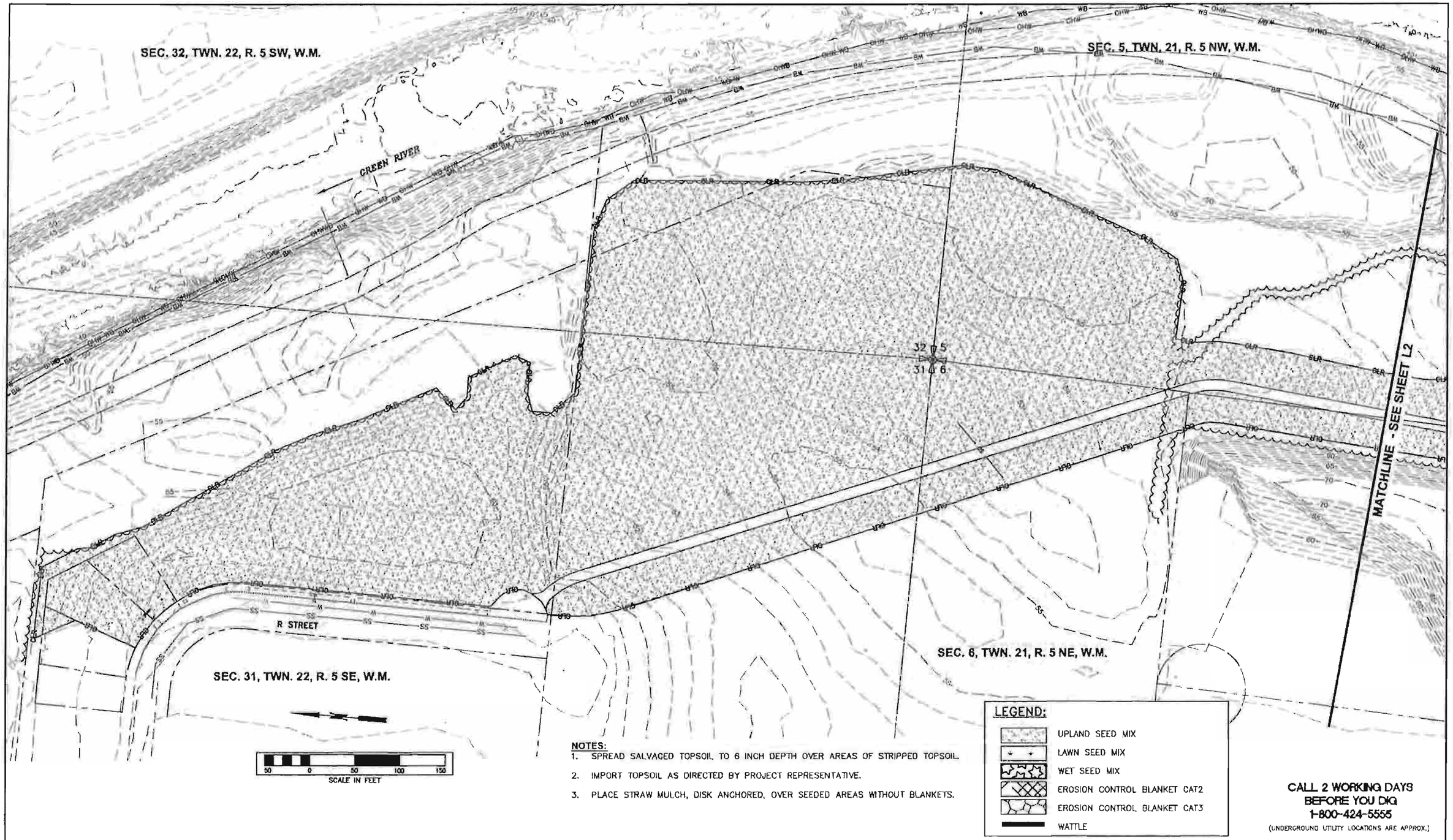
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

STORM DRAINAGE DETAILS

SHEET SD11 OF 107 SHEETS

\\kcnp.kingcounty.lcl\wirkcs\CIP\Share\CAD\01-RIVERS CAD SUPPORT\Reddington Levee_RD_Util\DWG SETBACK\RED-58_SDDET.dwg, SD11, 4/3/2013 8:25:37 AM, kkitamura, 1:2



NOTES:

1. SPREAD SALVAGED TOPSOIL TO 6 INCH DEPTH OVER AREAS OF STRIPPED TOPSOIL.
2. IMPORT TOPSOIL AS DIRECTED BY PROJECT REPRESENTATIVE.
3. PLACE STRAW MULCH, DISK ANCHORED, OVER SEEDED AREAS WITHOUT BLANKETS.

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

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DESIGNER:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
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CONTRACT No. C00817C13

ERIK G. PETERS — STATE OF WASHINGTON — 17494 — REGISTERED PROFESSIONAL ENGINEER
4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SEEDING AND PERMANENT EROSION CONTROL

SHEET L1 OF 107 SHEETS

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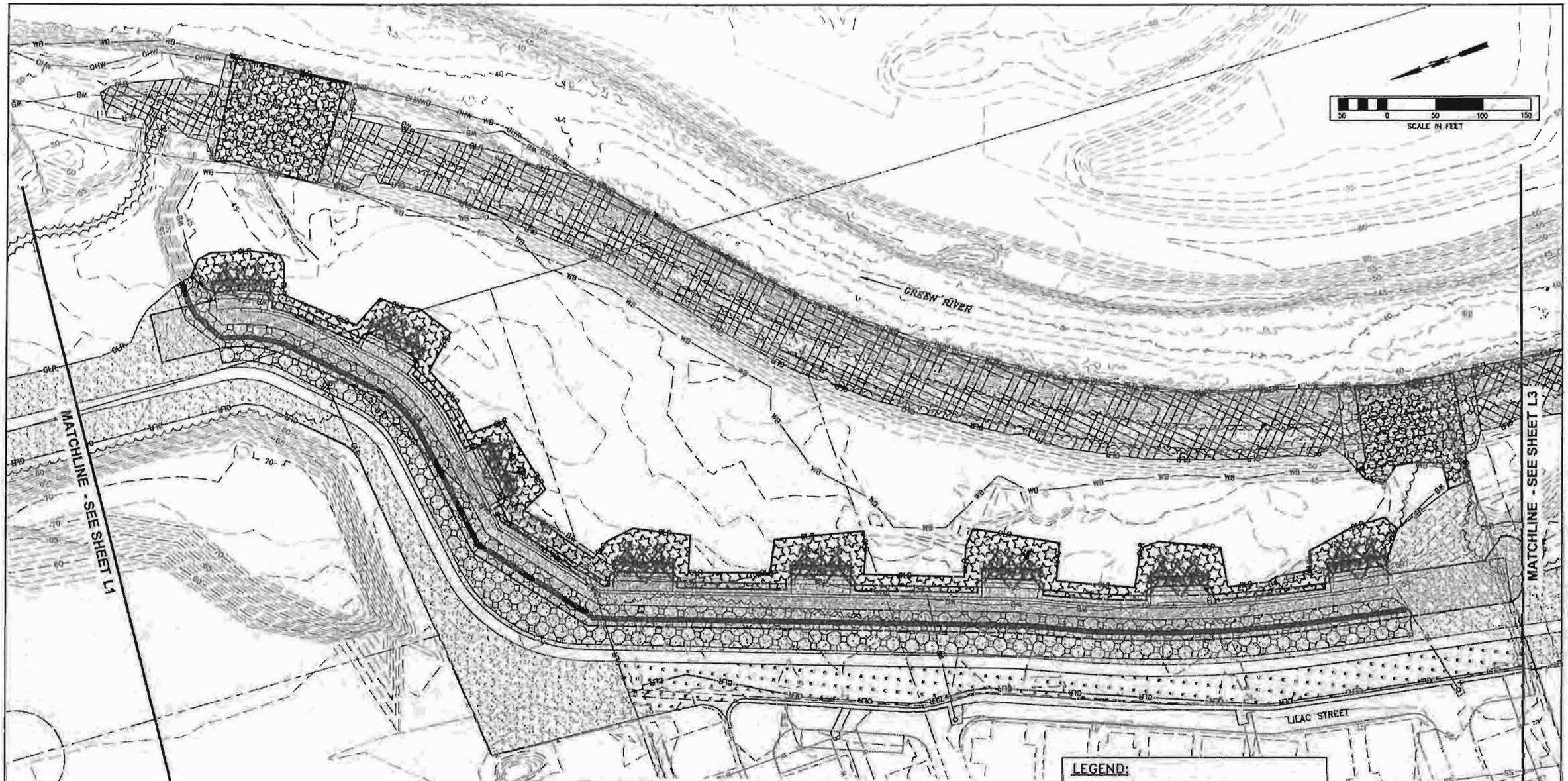

NOTES:

1. SPREAD SALVAGED TOPSOIL TO 6 INCH DEPTH OVER AREAS OF STRIPPED TOPSOIL, EXCEPT PLACE 1-FOOT TOPSOIL OVER RIPRAP ADJACENT TO WETLAND THIS SHEET. SEE SHEET E3-3.
2. IMPORT TOPSOIL AS DIRECTED BY PROJECT REPRESENTATIVE.
3. PLACE 1 ROW OF SOD (18" MIN. WIDE) ALONG CONSTRUCTED EAST CURB OF LILAC STREET.
4. PLACE STRAW MULCH, DISK ANCHORED, OVER SEEDED AREAS WITHOUT BLANKETS.

LEGEND:

- UPLAND SEED MIX
- LAWN SEED MIX
- WET SEED MIX
- EROSION CONTROL BLANKET CAT2
- EROSION CONTROL BLANKET CAT3
- WATTLE

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CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

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ERIK G. PETERS STATE OF WASHINGTON 44 REGISTERED PROFESSIONAL ENGINEER
4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SEEDING AND PERMANENT EROSION CONTROL

SHEET L2 OF 107 SHEETS

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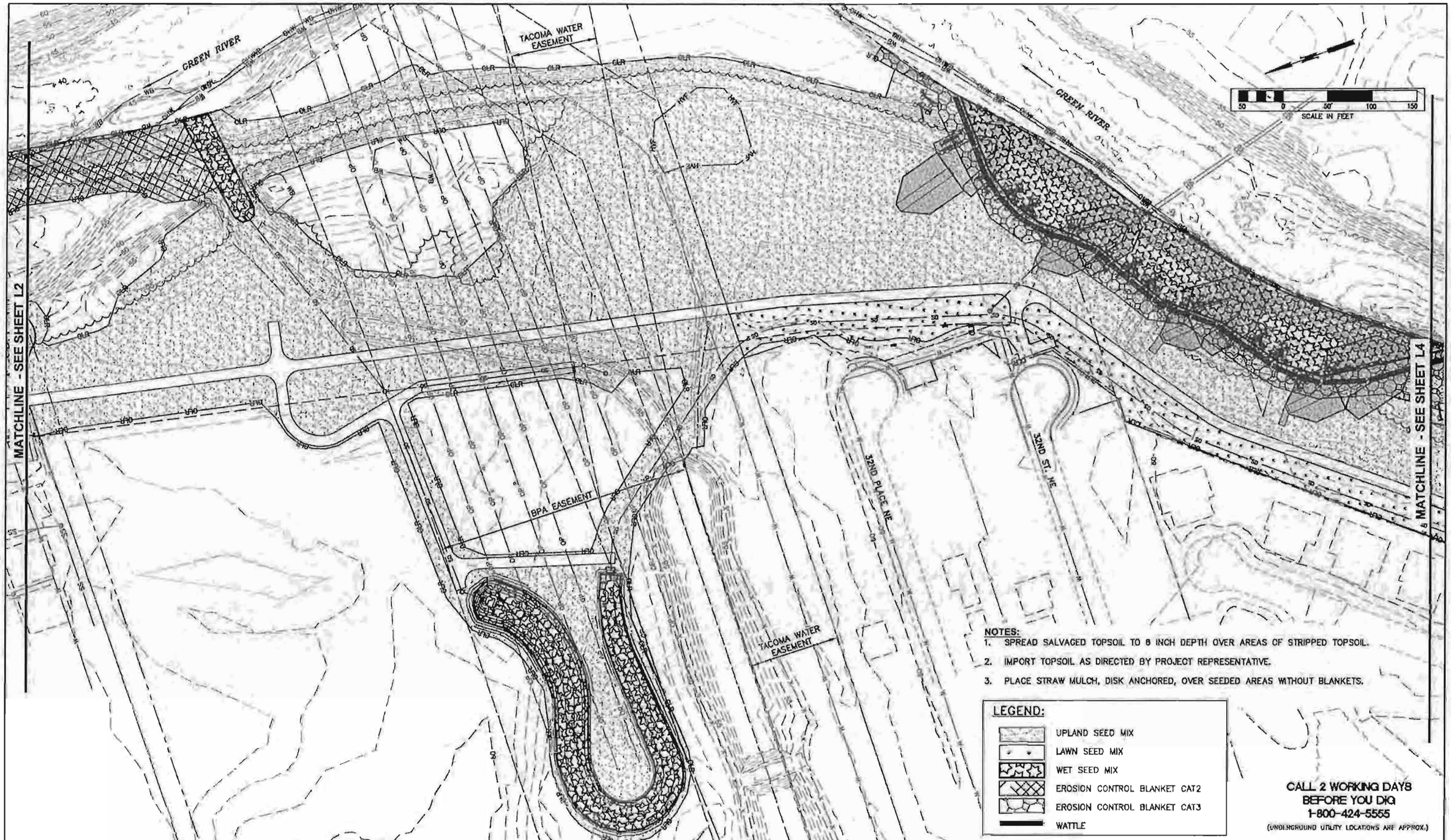

NOTES:
1. SPREAD SALVAGED TOPSOIL TO 6 INCH DEPTH OVER AREAS OF STRIPPED TOPSOIL.
2. IMPORT TOPSOIL AS DIRECTED BY PROJECT REPRESENTATIVE.
3. PLACE STRAW MULCH, DISK ANCHORED, OVER SEEDED AREAS WITHOUT BLANKETS.

LEGEND:
- UPLAND SEED MIX
- LAWN SEED MIX
- WET SEED MIX
- EROSION CONTROL BLANKET CAT2
- EROSION CONTROL BLANKET CAT3
- WATTLE

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REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

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CONTRACT No. C00817C13

ERIK G. PETERS — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER
4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SEEDING AND PERMANENT EROSION CONTROL

SHEET L3 OF 107 SHEETS

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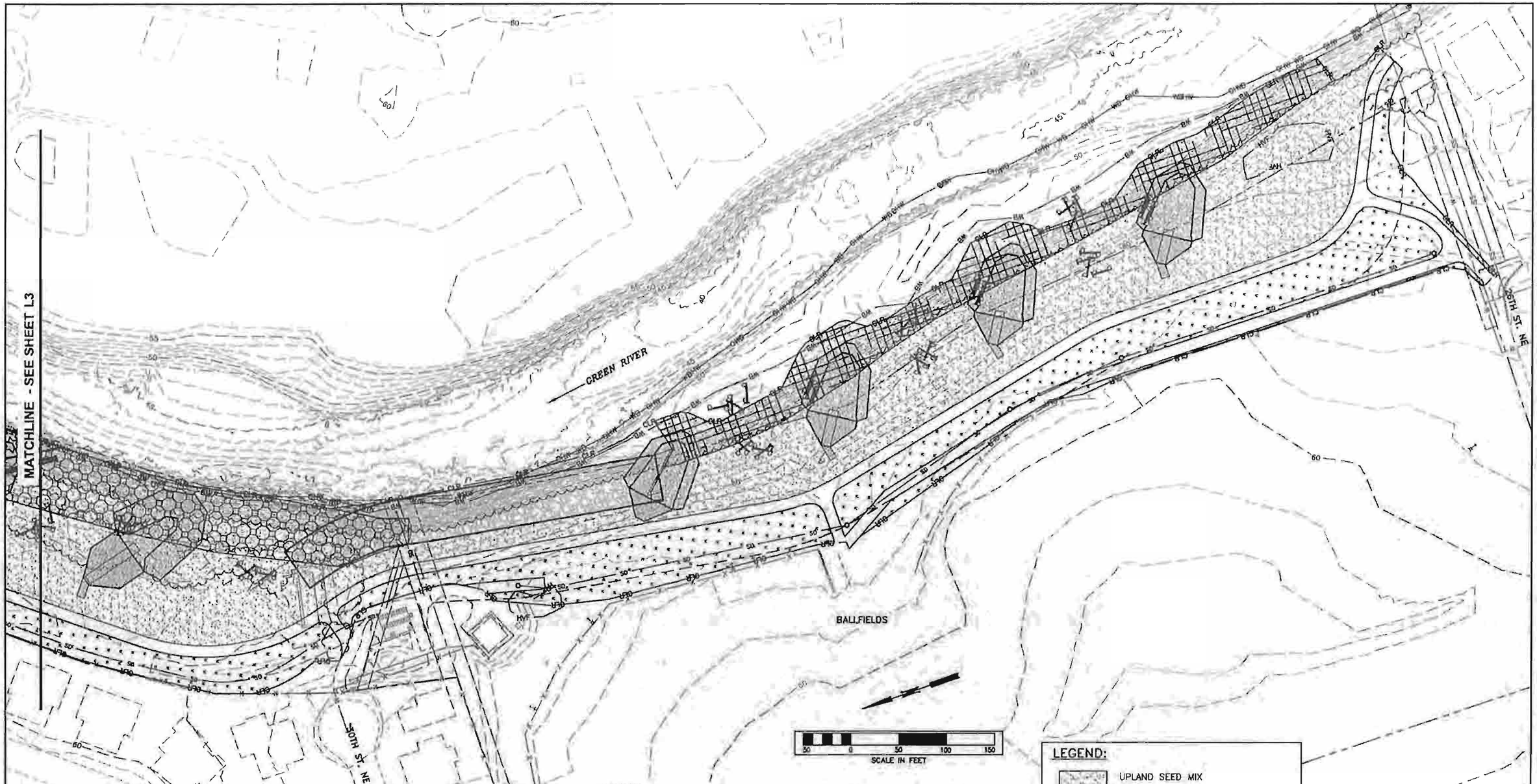

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2. IMPORT TOPSOIL AS DIRECTED BY PROJECT REPRESENTATIVE.
3. PLACE STRAW MULCH, DISK ANCHORED, OVER SEEDED AREAS WITHOUT BLANKETS.
4. BALLFIELD LIGHTING AND IRRIGATION SYSTEMS TO BE PROTECTED AND REMAIN OPERATIONAL AT ALL TIMES.

LEGEND:

- UPLAND SEED MIX
- LAWN SEED MIX
- WET SEED MIX
- EROSION CONTROL BLANKET CAT2
- EROSION CONTROL BLANKET CAT3
- WATTLE

CALL 2 WORKING DAYS BEFORE YOU DIG 1-800-424-5555

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CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. --

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CONTRACT No. C00817C13

ERIK G. PETERS — STATE OF WASHINGTON — 31494 — REGISTERED PROFESSIONAL ENGINEER

4-5-13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

SEEDING AND PERMANENT EROSION CONTROL

SHEET L4 OF 107 SHEETS

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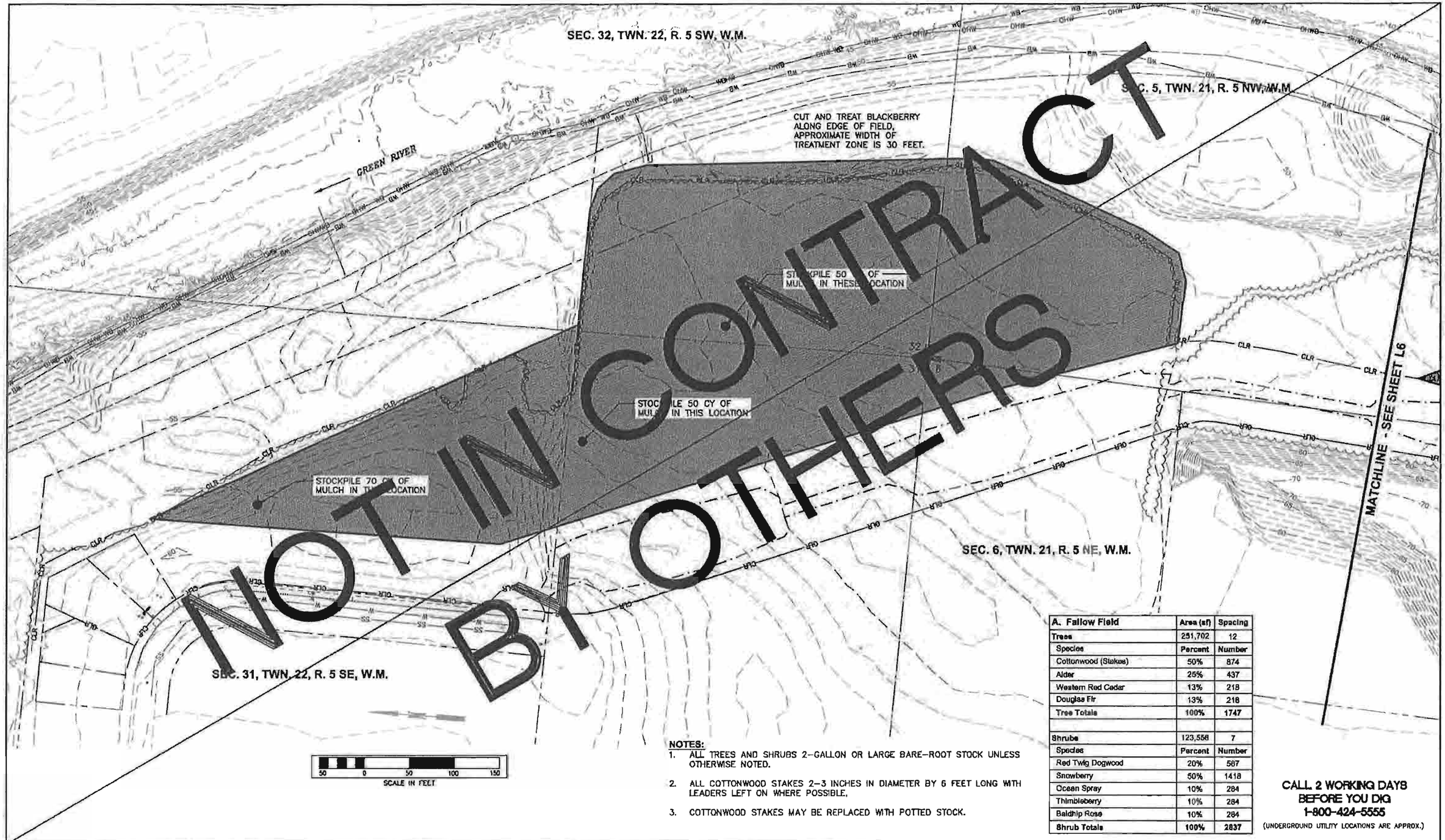

NOTES:

1. ALL TREES AND SHRUBS 2-GALLON OR LARGE BARE-ROOT STOCK UNLESS OTHERWISE NOTED.
2. ALL COTTONWOOD STAKES 2-3 INCHES IN DIAMETER BY 6 FEET LONG WITH LEADERS LEFT ON WHERE POSSIBLE.
3. COTTONWOOD STAKES MAY BE REPLACED WITH POTTED STOCK.

A. Fallow Field	Area (sf)	Spacing
Trees	251,702	12
Species	Percent	Number
Cottonwood (Stakes)	50%	874
Alder	25%	437
Western Red Cedar	13%	218
Douglas Fir	13%	218
Tree Totals	100%	1747
Shrubs	123,556	7
Species	Percent	Number
Red Twig Dogwood	20%	567
Snowberry	50%	1418
Ocean Spray	10%	284
Thimbleberry	10%	284
Baldhip Rose	10%	284
Shrub Totals	100%	2837

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DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
PROJECT No. 1112035
CONTRACT No. C00817C13

ERIK G. PETERS — STATE OF WASHINGTON — 37448 — REGISTERED PROFESSIONAL ENGINEER

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PLANTING PLAN

SHEET L5 OF 107 SHEETS

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B. Breached Levee	Area (sf)	Spacing
Trees	82,600	14
Species	Percent	Number
Cottonwood (Stakes)	100%	421
Tree Totals	100%	421

C. Setback with ELJs	Area (sf)	Spacing
Trees	11,000	12
Species	Percent	Number
Bigleaf Maple	50%	38
Douglas Fir	50%	38
Tree Totals	100%	76
	Area (sf)	Spacing
	29,000	7
Shrubs	Percent	Number
Dogwood	25%	166
Snowberry	40%	266
Baldhip Rose	10%	67
Black Twinberry	10%	67
Thimbleberry	15%	100
Shrub Totals	100%	666

NOTES:

1. ALL TREES AND SHRUBS 2-GALLON OR LARGE BARE-ROOT STOCK UNLESS OTHERWISE NOTED.
2. ALL COTTONWOOD STAKES 2-3 INCHES IN DIAMETER BY 6 FEET LONG WITH LEADERS LEFT ON WHERE POSSIBLE.
3. PLANTING AREA "B" MAY BE PLANTED AFTER FIRST SIGNIFICANT HIGH FLOWS.
4. START PLANTING AREA "C" 6 FEET VERTICAL BELOW TOP OF LEVEE.

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE

NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED:	TOM BEAN, P.E.	3/2013
PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN	L. TRAXINGER, K. KITAMURA	3/2013

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King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PLANTING PLAN

SHEET L6 OF 107 SHEETS

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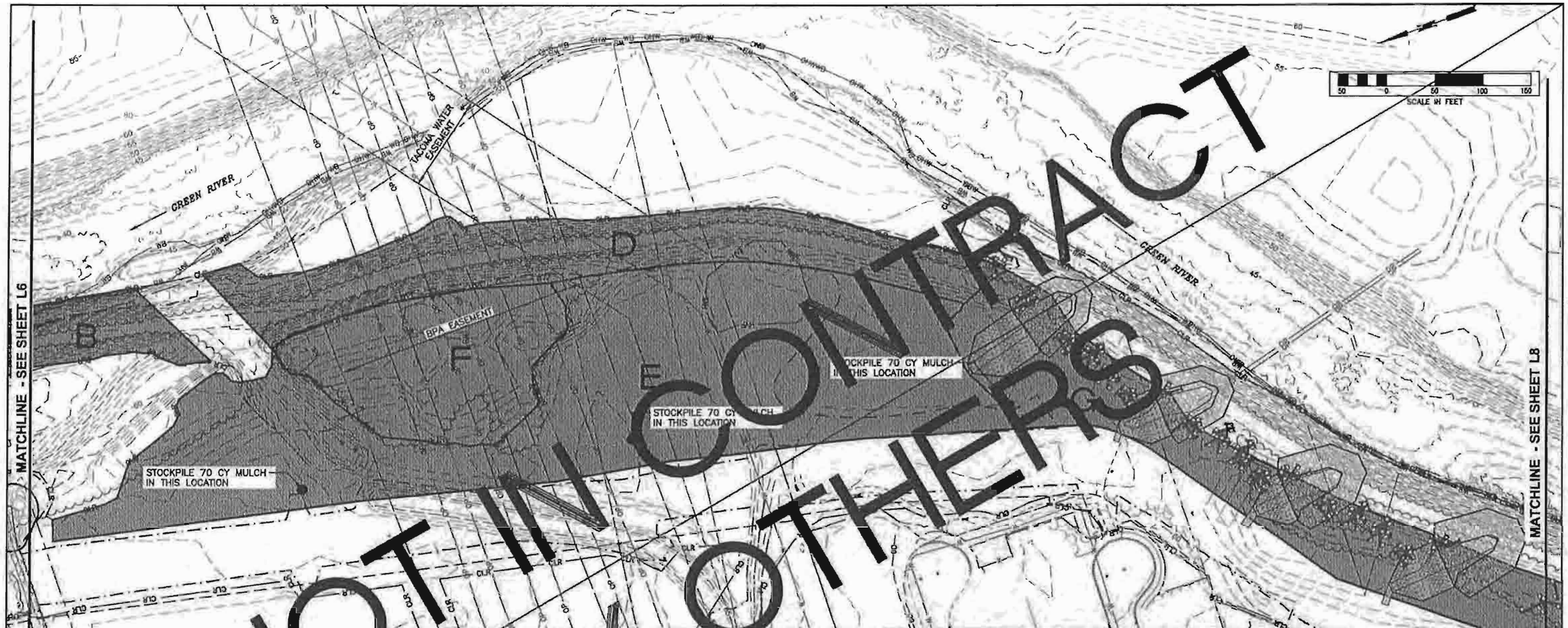

NOT IN CONTRACT
BY OTHERS

NOTES:

1. ALL TREES AND SHRUBS 2-GALLON OR LARGE BARE-ROOT STOCK UNLESS OTHERWISE NOTED.
2. WILLOW STAKES 1-2 INCHES DIAMETER BY 6 FEET LONG.
3. BLACKBERRY REMOVAL IN AREA "F" SUBJECT TO WETLAND RESTORATION REGULATIONS. PLANT ONLY SHRUBS UNDER POWERLINE ROW.
4. START PLANTING AREAS "G" AND "H" 6 FEET VERTICAL BELOW TOP OF LEVEE.
5. WILLOW AND OREGON ASH IN PLANTING AREAS "G" AND "H" WILL BE USED PRIMARILY BETWEEN BARBS.
6. PLANTING AREA "G" AND "H" TO BE PLANTED AFTER FIRST SIGNIFICANT HIGH FLOWS.
7. PLANT ONLY SHRUBS UNDER BPA EASEMENT, NO TREES.

D. Lowered Levee	Area (sf)	Spacing
Trees	29,024	12
Species	Percent	Number
Alder	40%	83
Bigleaf Maple	[illegible]	42
Douglas Fir	20%	42
Cottonwood	20%	42
Tree Totals	[illegible]	209
	Area (sf)	Spacing
Shrubs	47,088	7
Species	Percent	Number
Red Twig Dogwood	40%	432
Snowberry	25%	270
Black Twinberry	15%	162
Thimbleberry	10%	108
Baldhip Rose	10%	108
Shrub Totals	100%	1080

E. Powerline Area	Area (sf)	Spacing
Trees	99,840	12
Species	Percent	Number
Western Red Cedar	20%	139
Alder	30%	208
Cottonwood	30%	208
Bigleaf Maple	10%	69
Douglas Fir	10%	69
Tree Totals	100%	693
	Area (sf)	Spacing
Shrubs	123,556	7
Species	Percent	Number
Red Twig Dogwood	50%	1418
Snowberry	15%	425
Black Twinberry	15%	425
Thimbleberry	10%	284
Cluster Rose	10%	284
Shrub Totals	100%	2836

F. Blackberry Wetland	Area (sf)	Spacing
Trees	3,886	12
Species	Percent	Number
Oregon Ash	40%	11
Western Red Cedar	30%	8
Cottonwood	20%	5
Wester Red Cedar	10%	3
Tree Totals	100%	27
	Area (sf)	Spacing
Shrubs	34,007	7
Species	Percent	Number
Red Twig Dogwood	5%	40
Snowberry	15%	120
Black Twinberry	25%	201
Thimbleberry	30%	241
Cluster Rose	25%	201
Shrub Totals	100%	803

G. Downstream Barbs	Area (sf)	Spacing
Trees	71,402	12
Species	Percent	Number
Alder	20%	99
Cottonwood	30%	149
Bigleaf Maple	20%	99
Western Red Cedar	20%	99
Oregon Ash	10%	50
Tree Totals	100%	496
	Area (sf)	Spacing
Shrubs	71,402	7
Species	Percent	Number
Willow Stakes	20%	328
Red Twig Dogwood	20%	328
Snowberry	30%	492
Black Twinberry	10%	164
Thimbleberry	10%	164
Baldhip Rose	10%	164
Shrub Totals	100%	1640

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PROJECT MANAGER:	ERIK PETERS, P.E.	3/2013
DESIGNED:	ERIK PETERS, P.E.	3/2013
REVIEWED:		
CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
PROJECT No. 1112035
CONTRACT No. C00817C13

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PLANTING PLAN

SHEET L7 OF 107 SHEETS

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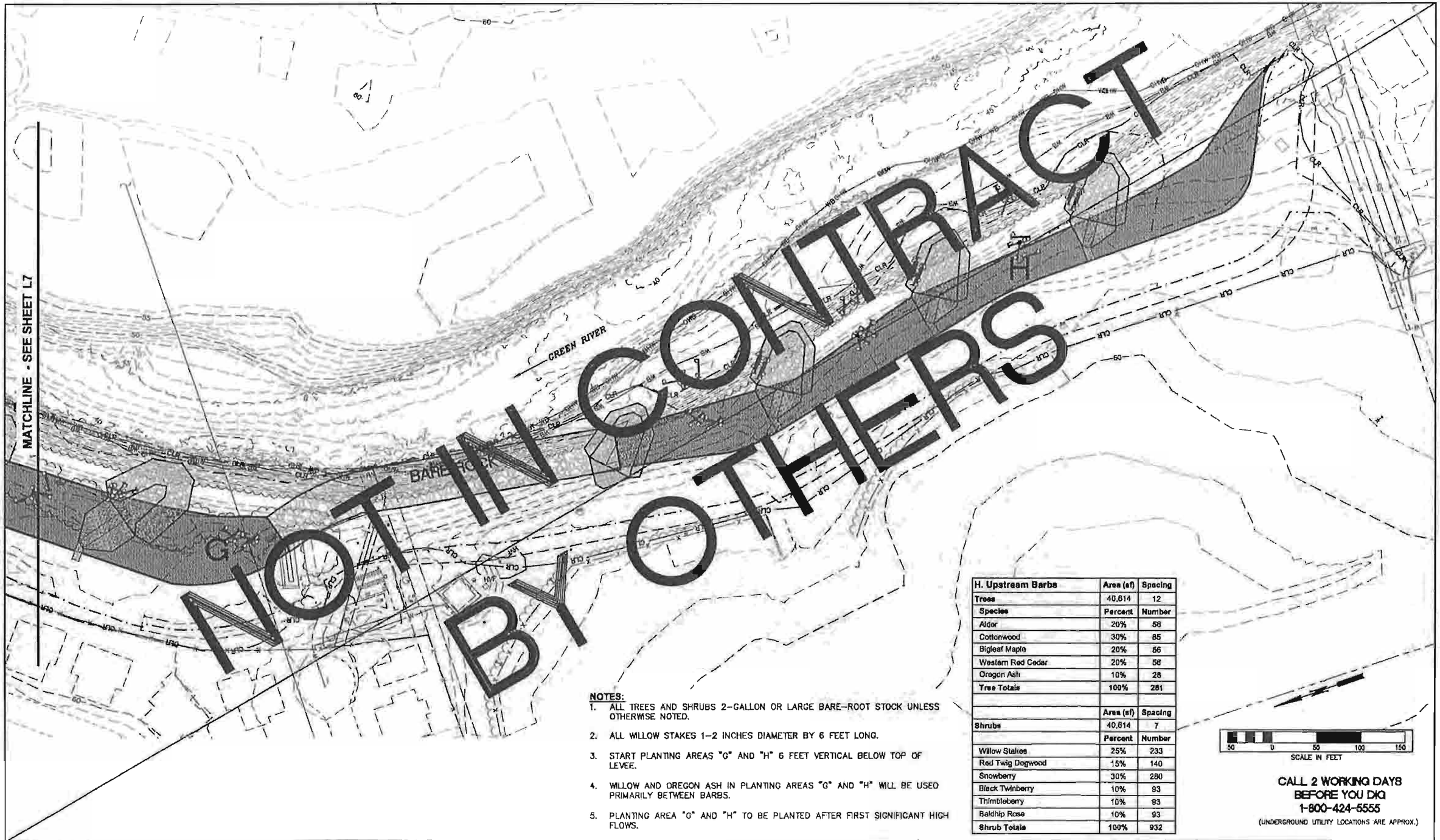

NOTES:

1. ALL TREES AND SHRUBS 2-GALLON OR LARGE BARE-ROOT STOCK UNLESS OTHERWISE NOTED.
2. ALL WILLOW STAKES 1-2 INCHES DIAMETER BY 6 FEET LONG.
3. START PLANTING AREAS "G" AND "H" 6 FEET VERTICAL BELOW TOP OF LEVEE.
4. WILLOW AND OREGON ASH IN PLANTING AREAS "G" AND "H" WILL BE USED PRIMARILY BETWEEN BARBS.
5. PLANTING AREA "G" AND "H" TO BE PLANTED AFTER FIRST SIGNIFICANT HIGH FLOWS.

H. Upstream Barbs	Area (sf)	Spacing
Trees	40,614	12
Species	Percent	Number
Alder	20%	56
Cottonwood	30%	85
Bigleaf Maple	20%	56
Western Red Cedar	20%	56
Oregon Ash	10%	28
Tree Totals	100%	281
	Area (sf)	Spacing
Shrubs	40,614	7
	Percent	Number
Willow Stakes	25%	233
Red Twig Dogwood	15%	140
Snowberry	30%	280
Black Twinberry	10%	93
Thimbleberry	10%	93
Baldhip Rose	10%	93
Shrub Totals	100%	932

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SCALE IN FEET

CALL 2 WORKING DAYS BEFORE YOU DIG
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CAD DESIGN:	L. TRAXINGER, K. KITAMURA	3/2013

FUNDING SOURCE No. —
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CONTRACT No. C00617C13

ERIK G. PETERS — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

PLANTING PLAN

SHEET **L8** OF **107** SHEETS

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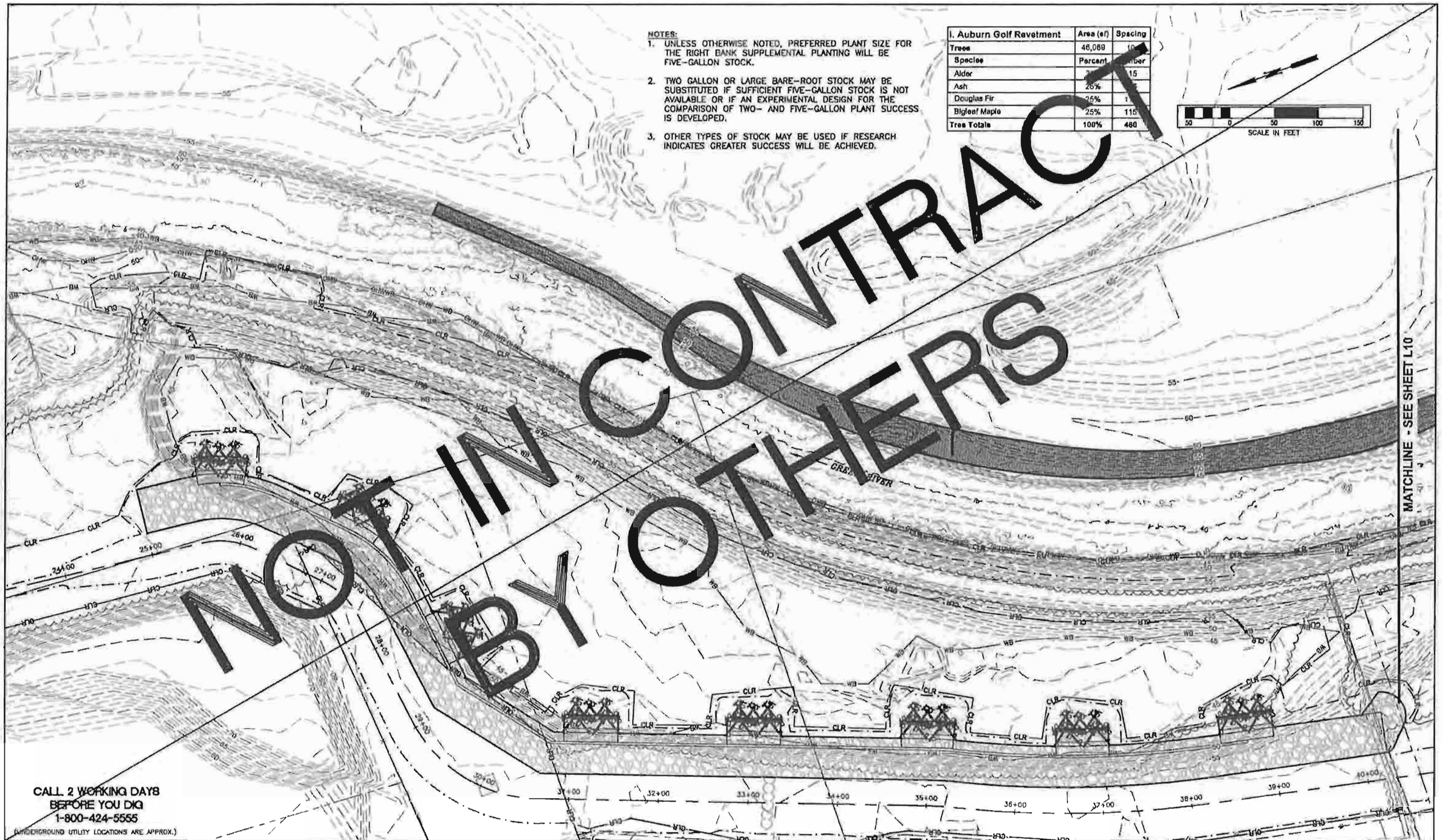
NOTES:

1. UNLESS OTHERWISE NOTED, PREFERRED PLANT SIZE FOR THE RIGHT BANK SUPPLEMENTAL PLANTING WILL BE FIVE-GALLON STOCK.
2. TWO GALLON OR LARGE BARE-ROOT STOCK MAY BE SUBSTITUTED IF SUFFICIENT FIVE-GALLON STOCK IS NOT AVAILABLE OR IF AN EXPERIMENTAL DESIGN FOR THE COMPARISON OF TWO- AND FIVE-GALLON PLANT SUCCESS IS DEVELOPED.
3. OTHER TYPES OF STOCK MAY BE USED IF RESEARCH INDICATES GREATER SUCCESS WILL BE ACHIEVED.

I. Auburn Golf Revetment	Area (sf)	Spacing
Trees	46,060	10
Species	Percent	Number
Alder	[illegible]	15
Ash	25%	[illegible]
Douglas Fir	25%	1[illegible]
Bigleaf Maple	25%	115
Tree Totals	100%	460



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FUNDING SOURCE No. --

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ERIK G. PETERS STATE OF WASHINGTON 21146 REGISTERED PROFESSIONAL ENGINEER

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christie True, Director

REDDINGTON LEVEE SETBACK

RIGHT BANK SUPPLEMENTAL PLANTING PLAN

SHEET L9 OF 107 SHEETS

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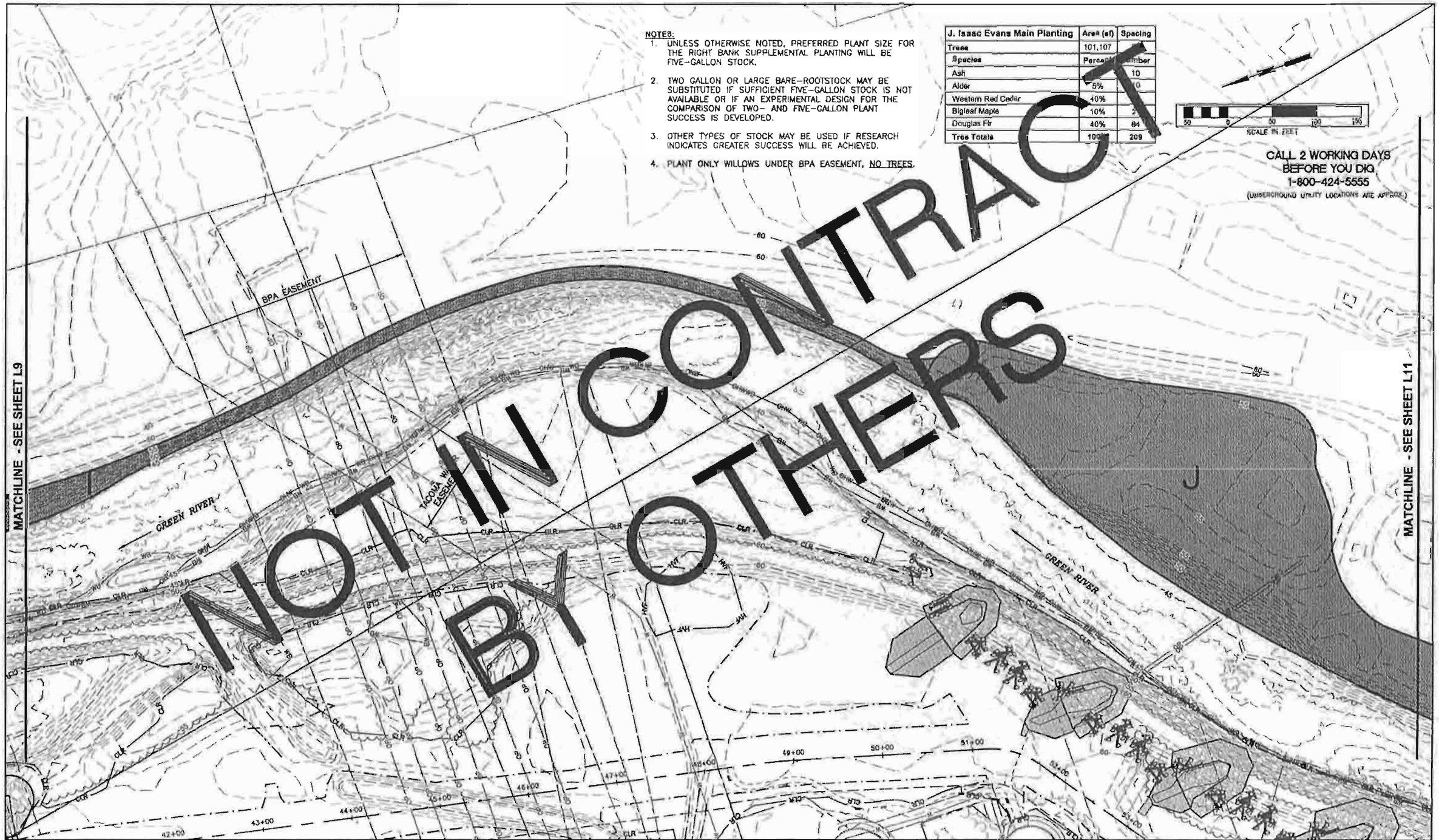
NOTES:

1. UNLESS OTHERWISE NOTED, PREFERRED PLANT SIZE FOR THE RIGHT BANK SUPPLEMENTAL PLANTING WILL BE FIVE-GALLON STOCK.
2. TWO GALLON OR LARGE BARE-ROOTSTOCK MAY BE SUBSTITUTED IF SUFFICIENT FIVE-GALLON STOCK IS NOT AVAILABLE OR IF AN EXPERIMENTAL DESIGN FOR THE COMPARISON OF TWO- AND FIVE-GALLON PLANT SUCCESS IS DEVELOPED.
3. OTHER TYPES OF STOCK MAY BE USED IF RESEARCH INDICATES GREATER SUCCESS WILL BE ACHIEVED.
4. PLANT ONLY WILLOWS UNDER BPA EASEMENT, NO TREES.

J. Isaac Evans Main Planting	Area (sf)	Spacing
Trees	101,107	
Species	Percent	Number
Ash	[illegible]	10
Alder	5%	[illegible]
Western Red Cedar	40%	[illegible]
Bigleaf Maple	10%	[illegible]
Douglas Fir	40%	84
Tree Totals	100%	209



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Christie True, Director

REDDINGTON LEVEE SETBACK

RIGHT BANK SUPPLEMENTAL PLANTING PLAN

SHEET L10 OF 107 SHEETS

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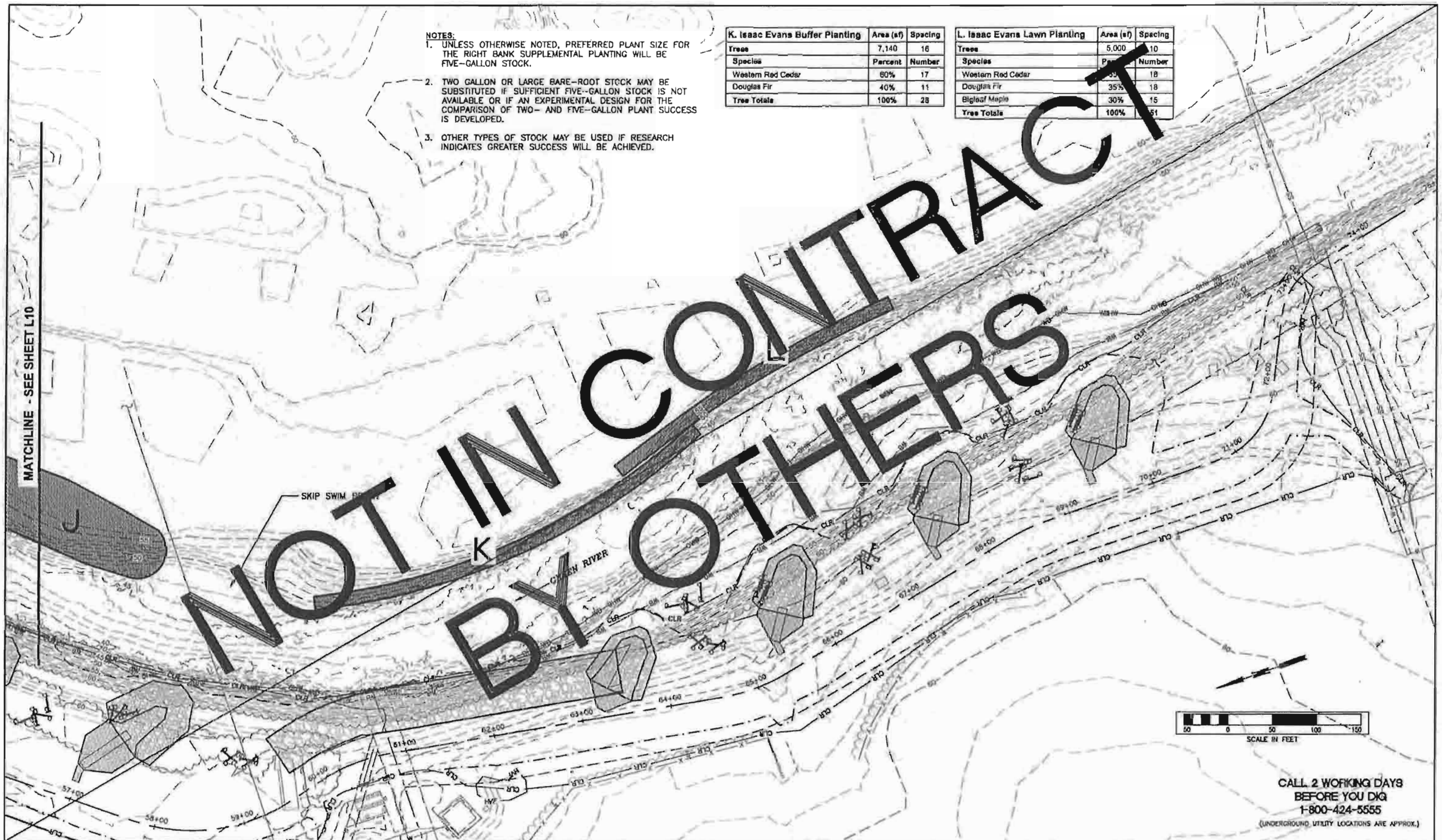
2. TWO GALLON OR LARGE BARE-ROOT STOCK MAY BE SUBSTITUTED IF SUFFICIENT FIVE--GALLON STOCK IS NOT AVAILABLE OR IF AN EXPERIMENTAL DESIGN FOR THE COMPARISON OF TWO- AND FIVE-GALLON PLANT SUCCESS IS DEVELOPED.
3. OTHER TYPES OF STOCK MAY BE USED IF RESEARCH INDICATES GREATER SUCCESS WILL BE ACHIEVED.

K. Isaac Evans Buffer Planting	Area (sf)	Spacing
Trees	7,140	16
Species	Percent	Number
Western Red Cedar	60%	17
Douglas Fir	40%	11
Tree Totals	100%	28

L. Isaac Evans Lawn Planting	Area (sf)	Spacing
Trees	5,000	10
Species	Percent	Number
Western Red Cedar	35%	18
Douglas Fir	35%	18
Bigleaf Maple	30%	15
Tree Totals	100%	51



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REDDINGTON LEVEE SETBACK

RIGHT BANK SUPPLEMENTAL PLANTING PLAN

SHEET L11 OF 107 SHEETS

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