COLUMBIA BASIN PROJECT

BANKS LAKE

FINAL DRAWINGS

FOR

STEAMBOAT ROCK STATE PARK SHORELINE STABILIZATION

SITE SUMMARY

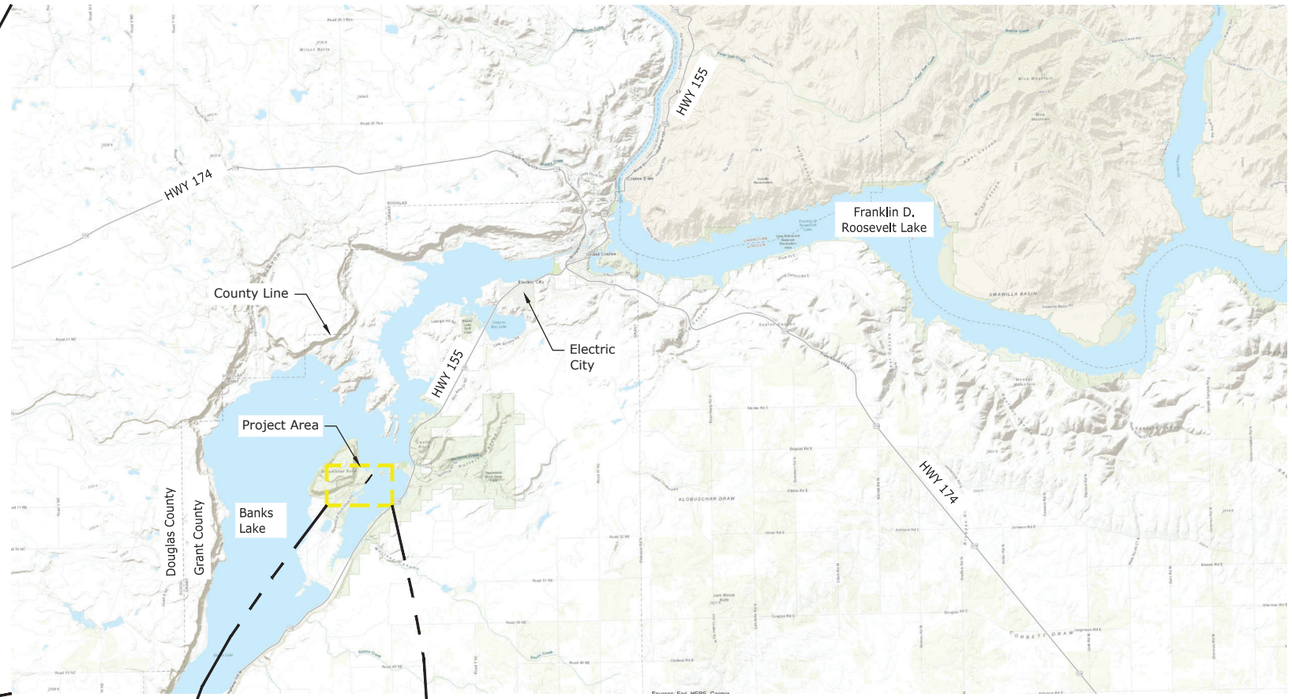
GRANT COUNTY, WASHINGTON

STEAMBOAT ROCK: T27N, R29E, SEC. 01

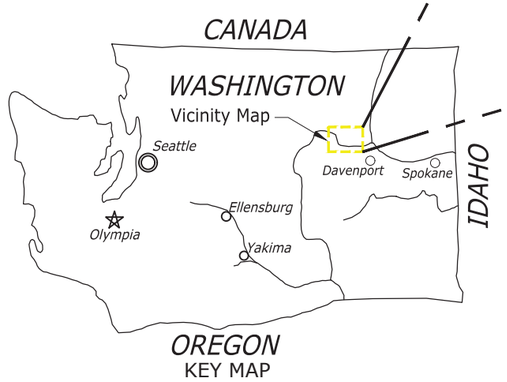
Generally 47°51'50.14"N, 119°07'4.75"W

ABBREVIATIONS

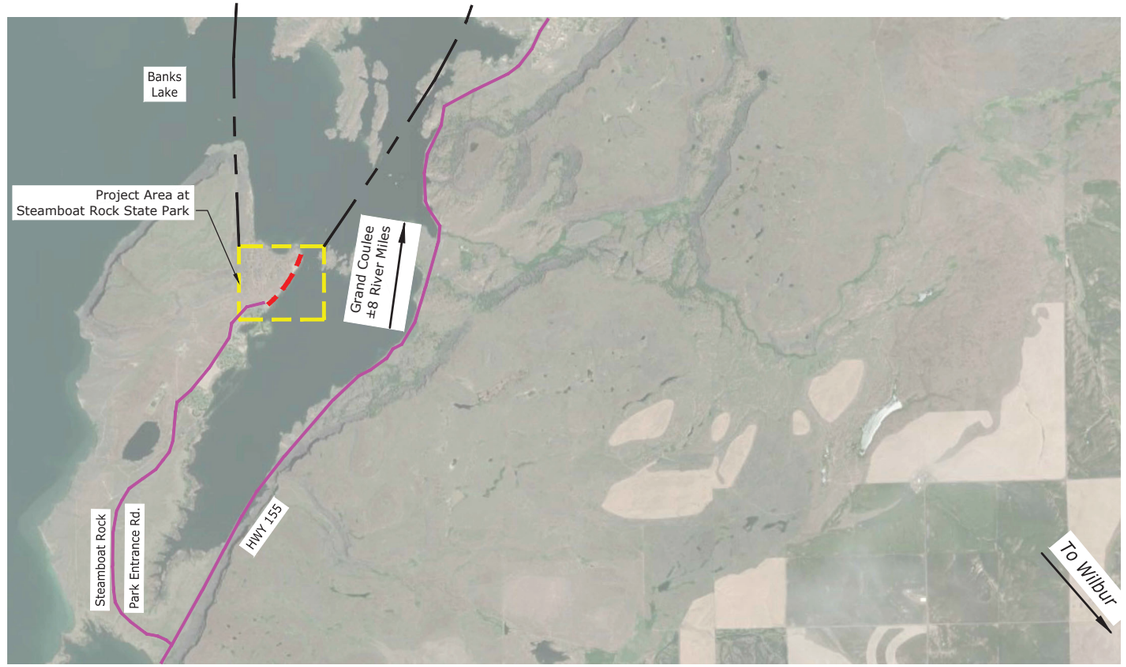
'	Feet
"	Inches
(typ.)	Typical
#	Number
El.	Elevation
lbs.	Pounds
±	Plus or Minus
N:	Northing
E:	Easting
N.T.S.	Not to Scale
OHW	Ordinary High Water Level
HWY	Highway



VICINITY MAP



KEY MAP



PROJECT AREA

SHEET INDEX	
DRAWING NUMBER	SHEET TITLE
222-100-61352	VICINITY MAP, PROJECT MAP, & SHEET INDEX
222-100-61353	SITE MAP & EXISTING FEATURES
222-100-61354	CONTRACTOR USE & STAGING AREA
222-100-61355	COMPACTED FILL PLACEMENT - PLAN
222-100-61356	VOID-FILLED RIPRAP PLACEMENT - PLAN
222-100-61357	CROSS-SECTIONS
222-100-61358	CROSS-SECTIONS
222-100-61359	CROSS-SECTIONS
222-100-61360	TYPICAL SECTION - SECTION AND DETAILS
222-100-61361	REVEGETATION - PLAN
222-100-61362	REVEGETATION DETAILS - SECTION

BUREAU OF RECLAMATION

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U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
COLUMBIA BASIN PROJECT
GRAVITY DIVISION

BANKS LAKE

STEAMBOAT ROCK STATE PARK SHORELINE STABILIZATION

A. Hatch
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A. Hatch
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D. Baconguis
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JANICE BACONGUIS P.E.
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JAY HOVDE
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ADMIN APPROVAL - Design Program Manager
Boise, Idaho 2025-06-27

VICINITY MAP, PROJECT MAP, & SHEET INDEX

222-100-61352

SHEET 1

LAST SAVED DATE
2025-06-13
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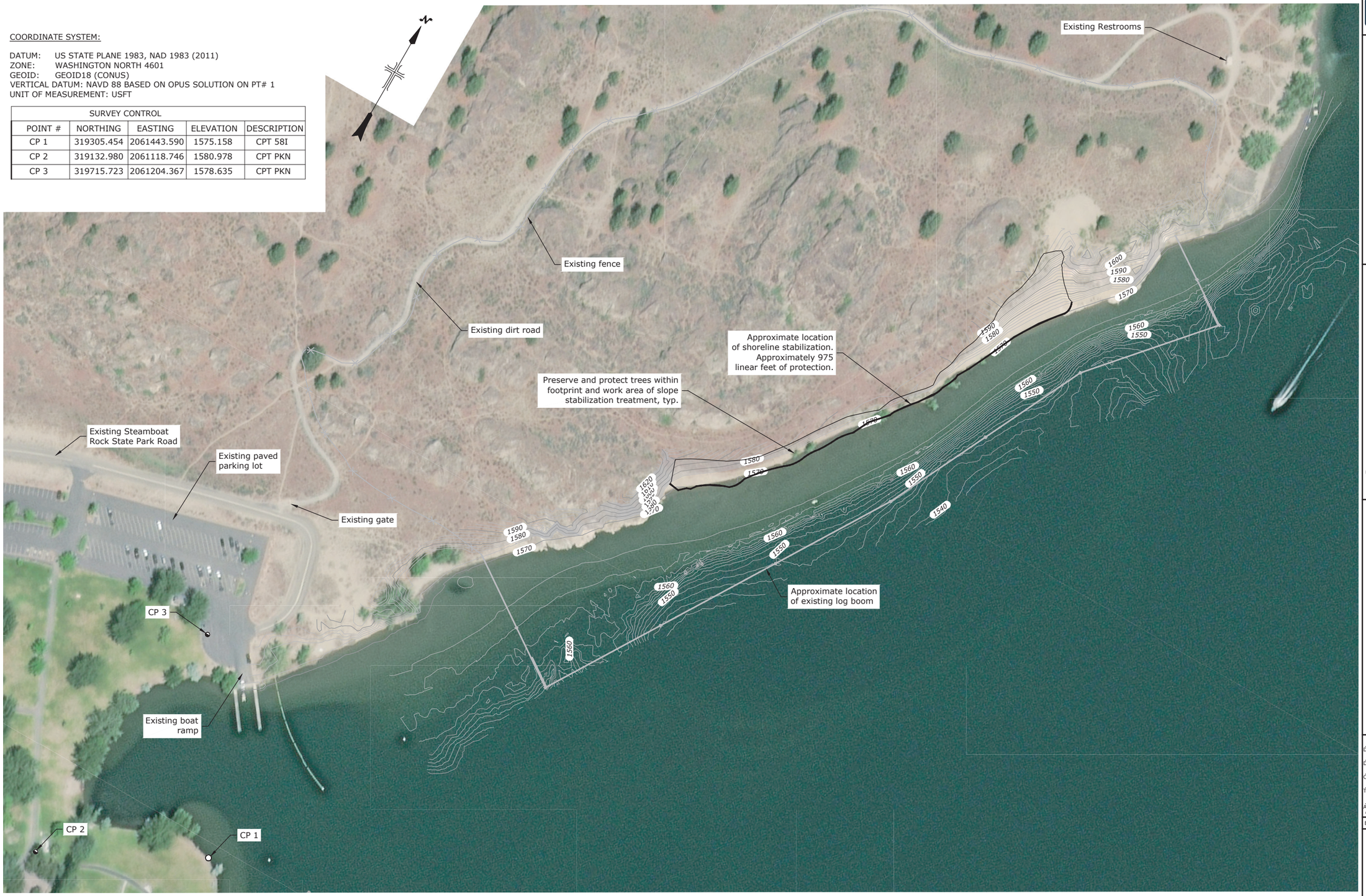
CAD SYSTEM
AutoCAD Civil 3D (LMS TECH)
CAD FILENAME
222-100-61352.DWG

COORDINATE SYSTEM:

DATUM: US STATE PLANE 1983, NAD 1983 (2011)
ZONE: WASHINGTON NORTH 4601
GEOID: GEOID18 (CONUS)
VERTICAL DATUM: NAVD 88 BASED ON OPUS SOLUTION ON PT# 1
UNIT OF MEASUREMENT: USFT

SURVEY CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP 1	319305.454	2061443.590	1575.158	CPT 58I
CP 2	319132.980	2061118.746	1580.978	CPT PKN
CP 3	319715.723	2061204.367	1578.635	CPT PKN



SITE MAP

0 100' 200'

NOTES:

1. Contractor to survey site for differing site conditions.

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SITE MAP & EXISTING FEATURES

222-100-61353

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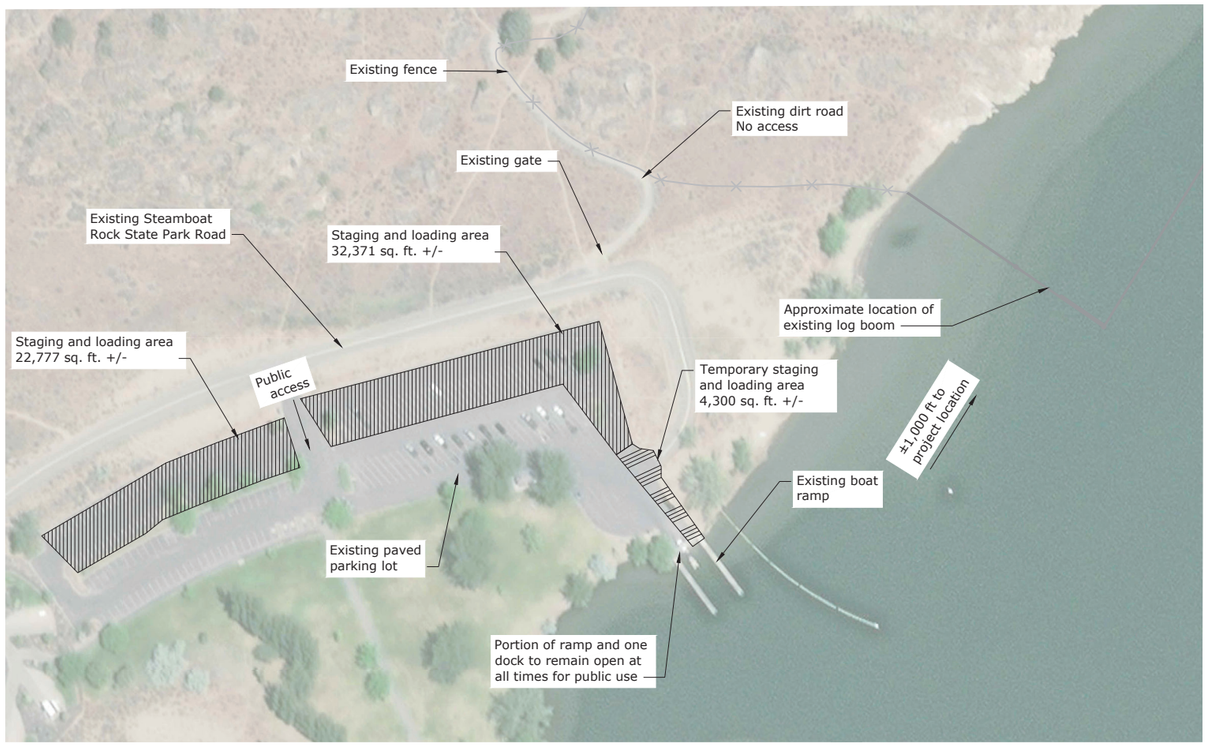
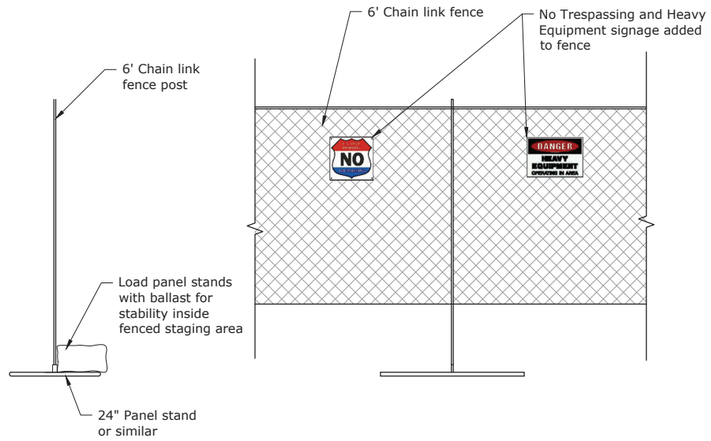
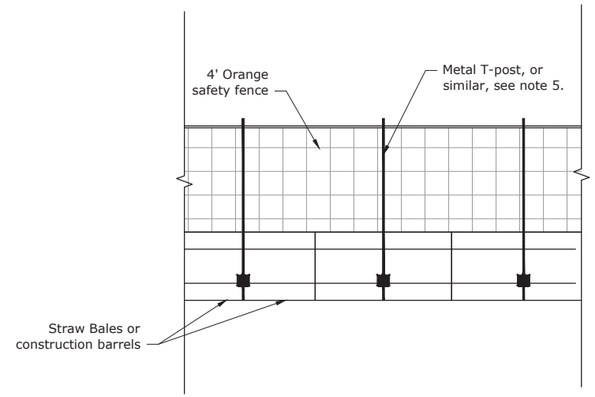


ONSITE STAGING AND LOADING AREA

0 100' 200'



6' CHAIN LINK FENCE AND
SILT PROTECTION FOR
STAGING & LOADING AREAS DETAIL
N.T.S



4' ORANGE SAFETY FENCE AND SILT PROTECTION FOR
TEMPORARY STAGING AREAS DETAIL
N.T.S

NOTES:

1. Existing ground of loading area, landing area, and staging area shall be protected.
2. Staging and Loading areas to have 6 foot high chain link fence and 6 foot high chain link gates.
3. Protect and retain existing conditions as authorized by COR.
4. Install 4 foot high orange safety fence around Temporary Staging and Loading Area to protect the public when ramp and dock are in use. Remove when not in use.
5. Do not penetrate existing ground unless authorized by COR.
6. Place suitable ballast for chainlink fence for stability.
7. Contractor to determine how much staging space will be required to perform work and fence off accordingly, not to exceed the allowable space shown.

LEGEND

Staging and Loading Areas

Temporary Staging and Loading Areas

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CONTRACTOR USE &
STAGING AREA

222-100-61354

SHEET 1

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CAD SYSTEM
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CAD FILENAME
222-100-61354.DWG

Start of project alignment
N 320517.05
E 2061861.56

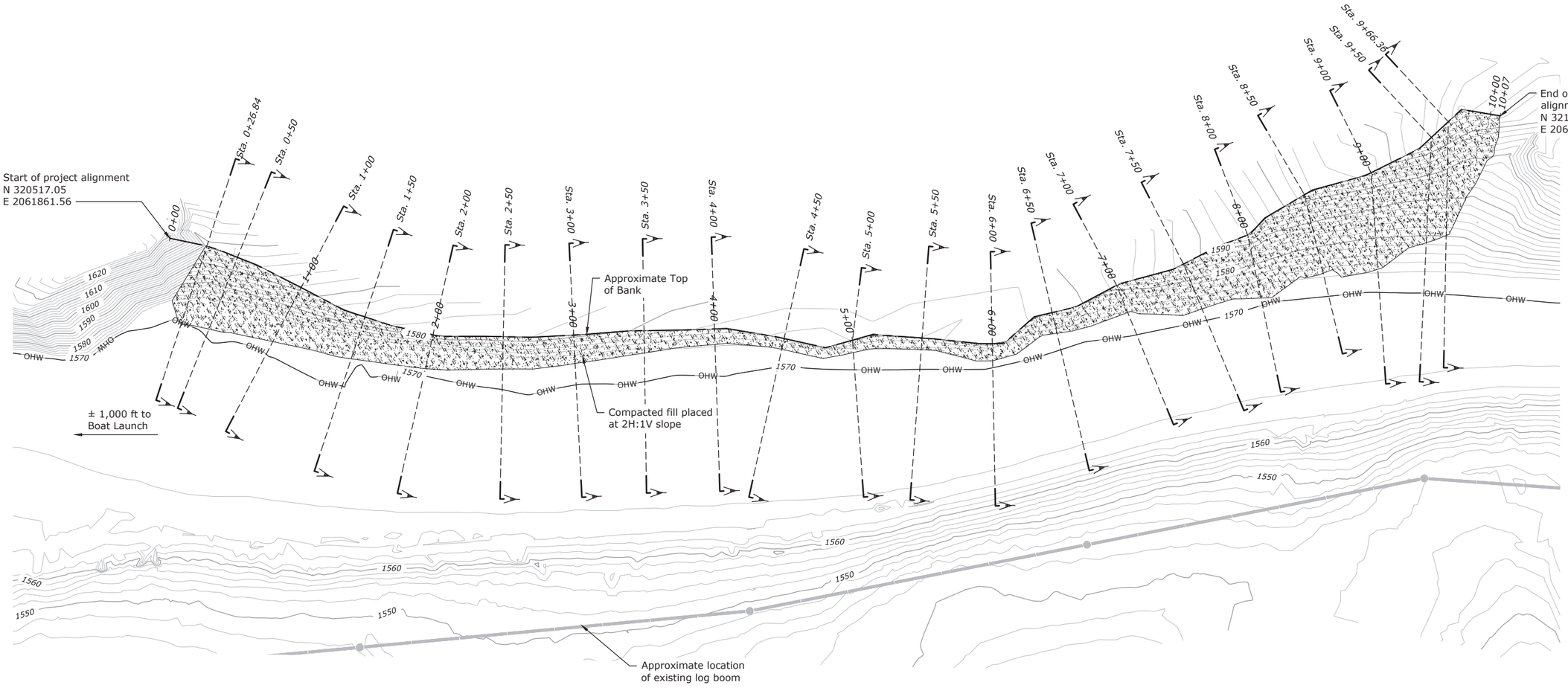
End of project alignment
N 321323.08
E 2062360.15

Approximate Top of Bank

Compacted fill placed at 2H:1V slope

± 1,000 ft to Boat Launch

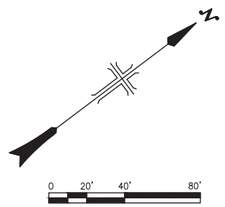
Approximate location of existing log boom



LEGEND

Compacted fill

— OHW — Ordinary high water (OHW) at El. 1570'



COMPACTED FILL PLACEMENT
PLAN VIEW

Notes:

1. Alignment follows existing top of bank.
2. See sheet (-61357 thru -61359) for cross sections.
3. See sheet (-61360) for typical section details.

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BOISE, ID	2025-06-27

COMPACTED FILL PLACEMENT

PLAN

222-100-61355

SHEET 1

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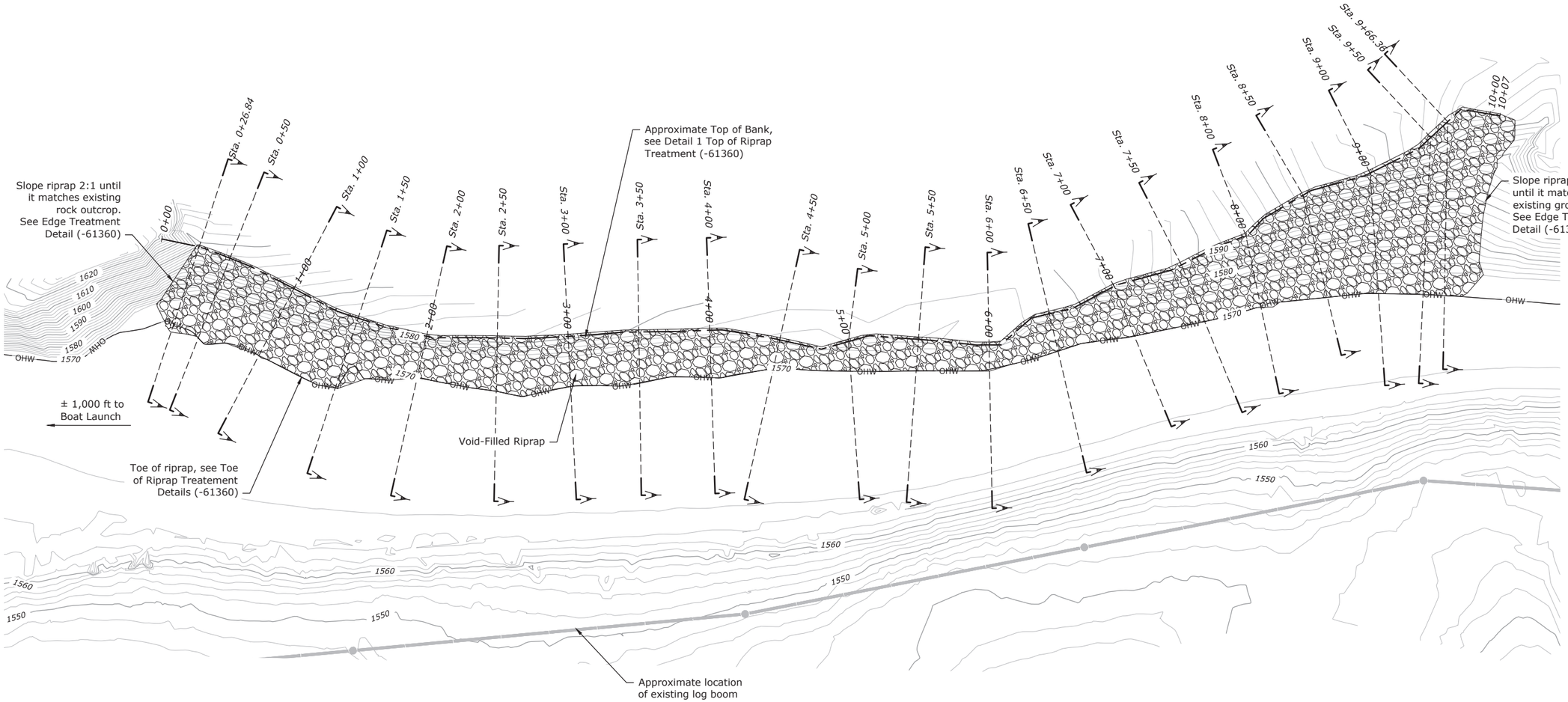
222-100-61355.DWG



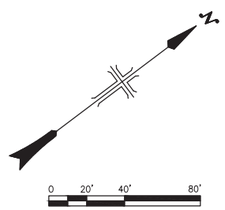
LEGEND

Void-Filled Riprap

— OHW — Ordinary high water (OHW) at El. 1570'

Notes:

1. See sheets (-61357 thru -61359) for cross sections.
2. See sheet (-61360) for typical section details and for Top of Riprap, Toe of Riprap, and Edge Treatment Details.
3. See Sheets (-61361 and -61362) for Revegetation Plan and Revegetation Details.



VOID-FILLED RIPRAP PLACEMENT PLAN

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BANKS LAKE

STEAMBOAT ROCK STATE PARK SHORELINE STABILIZATION

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CHECKED	D. Baconguis
	JANICE BACONGUIS P.E.
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BOISE, ID	2025-06-27

VOID-FILLED RIPRAP PLACEMENT

PLAN

222-100-61356

SHEET 1

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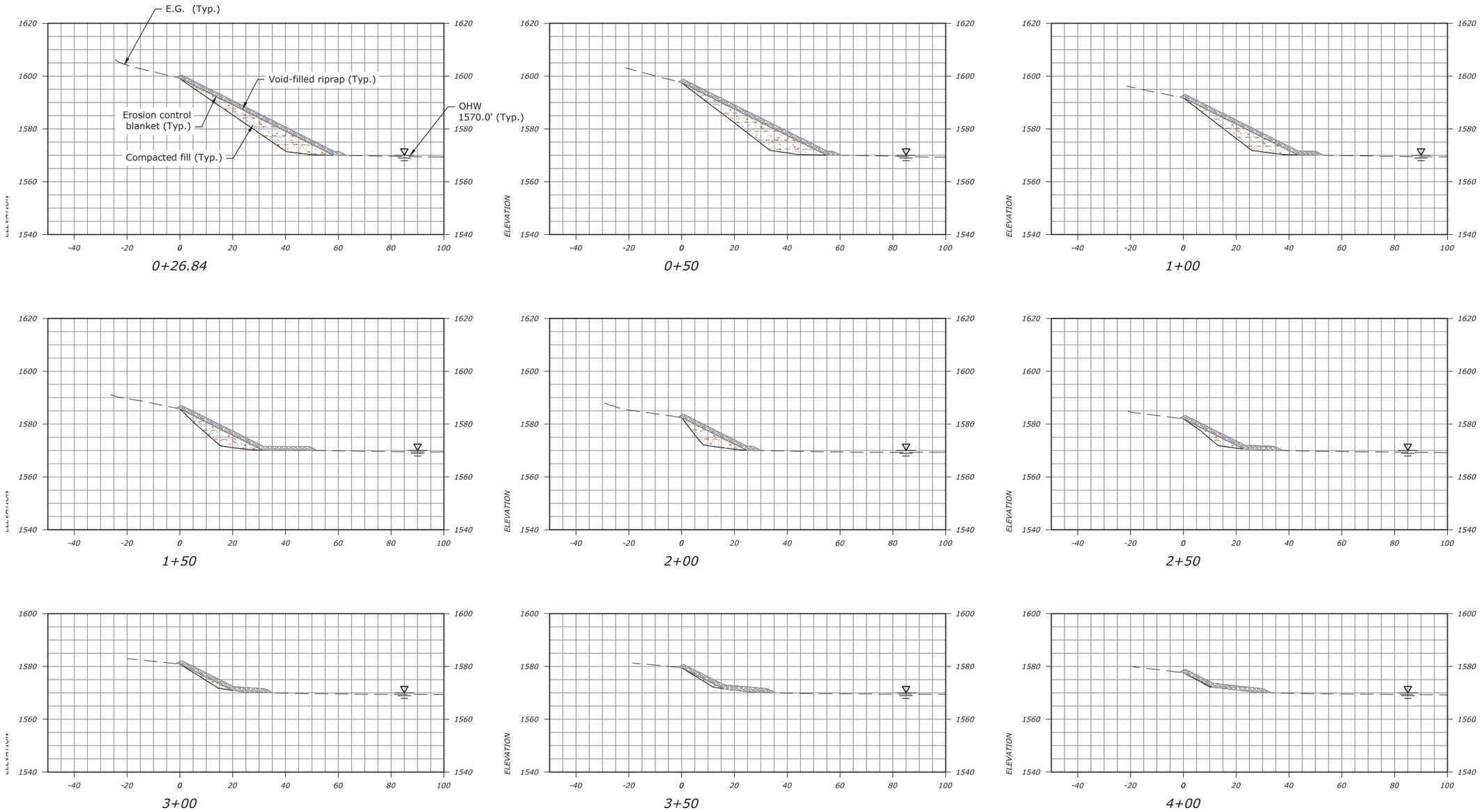
CAD SYSTEM
AutoCAD Civil 3D (LMS TECH)
CAD FILENAME
222-100-61356.DWG



CROSS-SECTIONS
Sta. 0+00 to Sta. 4+00

0 10' 20' 40'

Notes:

1. Construction equipment is not allowed on top of bare native ground.
2. Equipment may be on top of placed compacted fill and riprap, as approved by COR.
3. See sheet (-61360) for Typical Section and for Top of Riprap, Toe of Riprap, and Edge Treatment Details.
4. See sheets (-61361 and -61362) for Revegetation Plan and Revegetation Details.

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CROSS-SECTIONS

222-100-61357

SHEET 1

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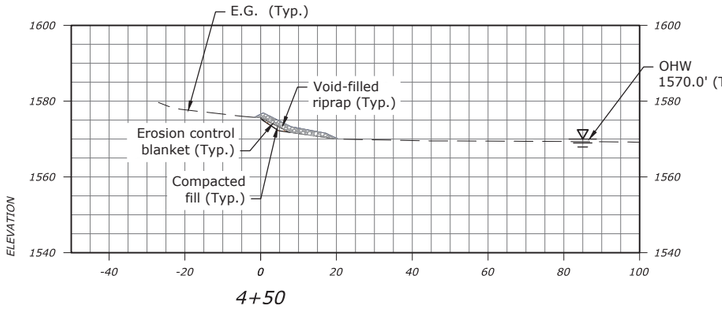
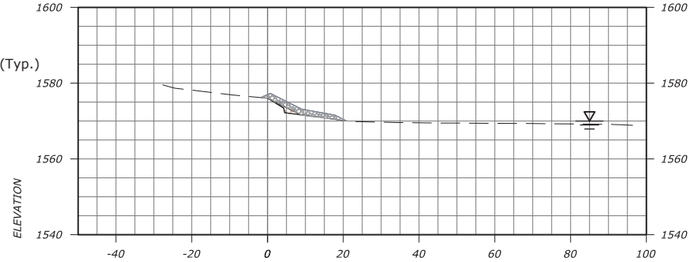
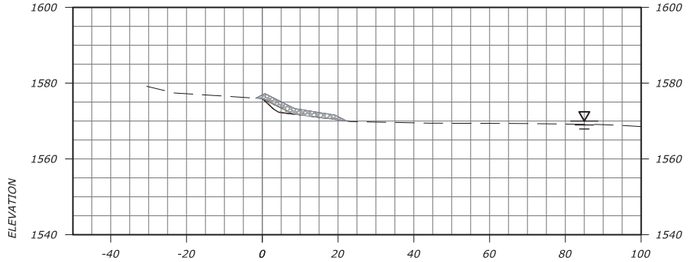


4+50



5+00



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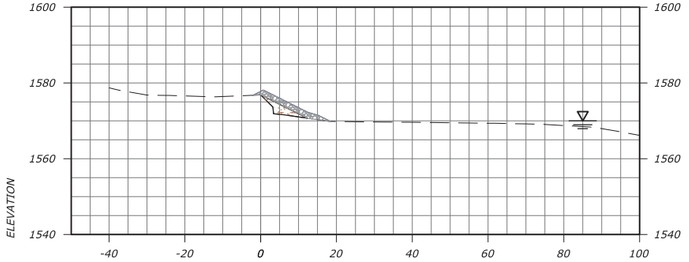
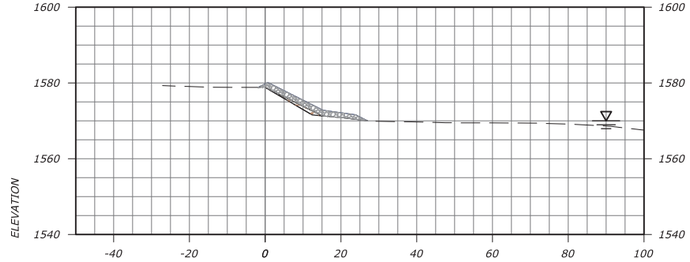


6+00



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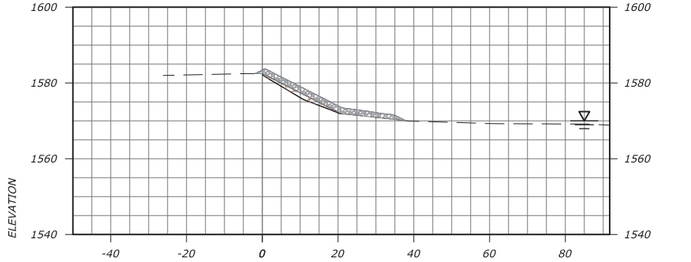
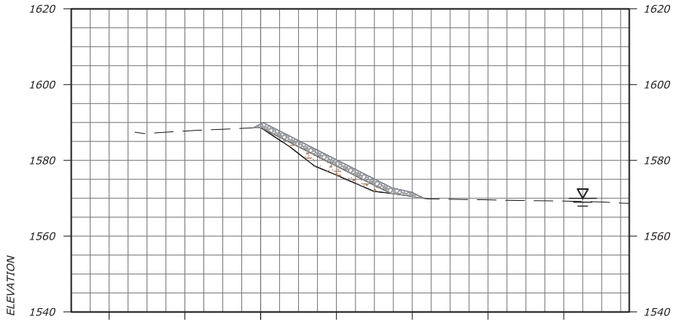


7+00



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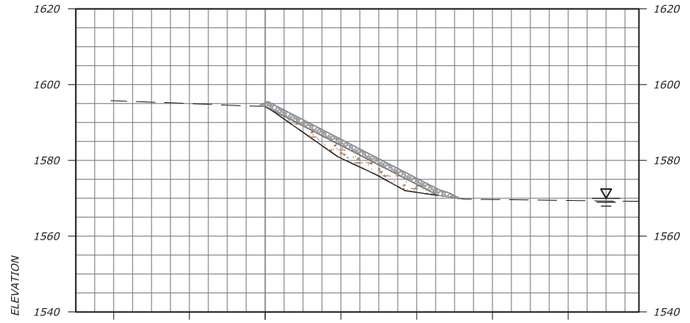

8+00

CROSS-SECTIONS
Sta. 4+50 to Sta. 8+00

0 10' 20' 40'

Notes:

1. Construction equipment is not allowed on top of bare native ground.
2. Equipment may be on top of placed compacted fill and riprap, as approved by COR.
3. See sheet (-61360) for Typical Section and for Top of Riprap, Toe of Riprap, and Edge Treatment Details.
4. See sheets (-61361 and -61362) for Revegetation Plan and Revegetation Details.

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CROSS-SECTIONS

222-100-61358

SHEET 1

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CAD SYSTEM
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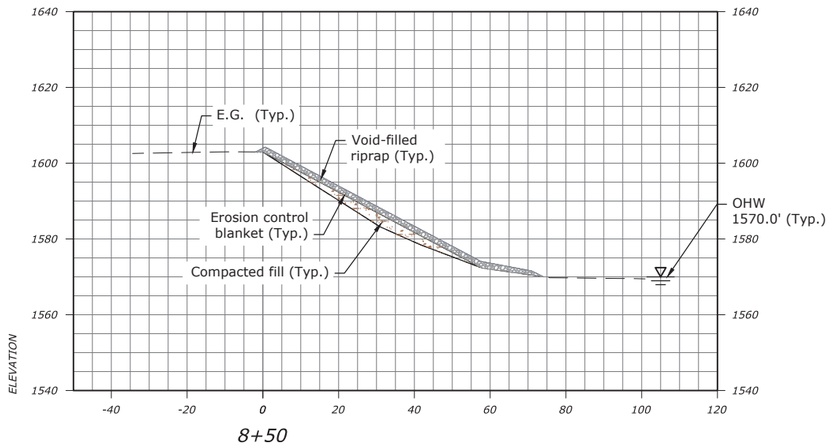
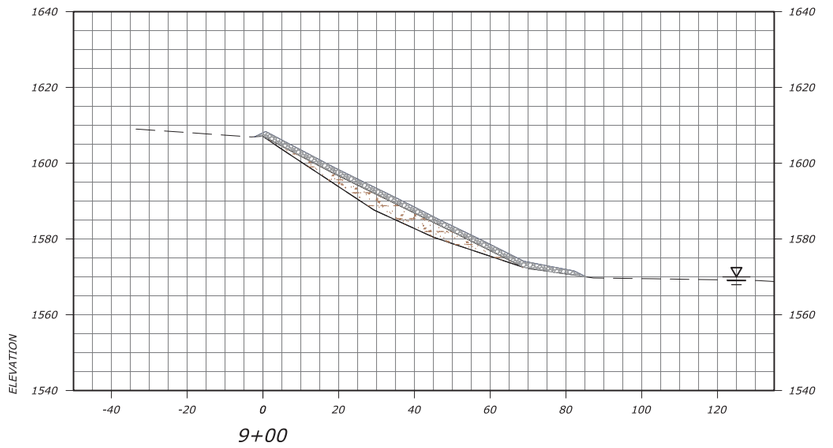
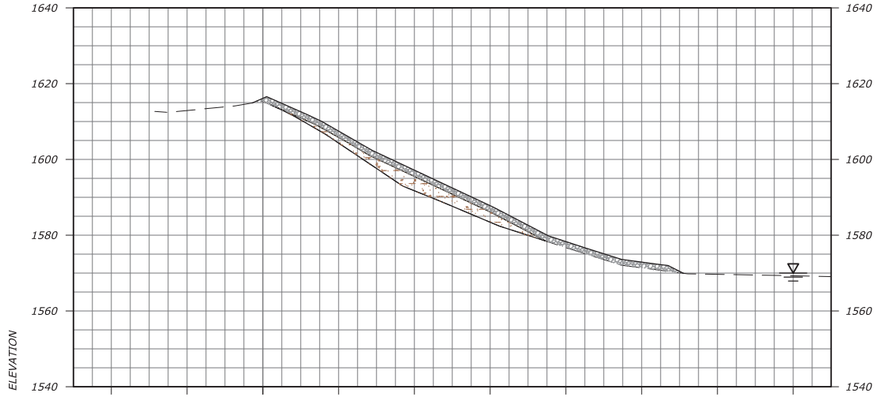
CAD FILENAME
222-100-61357 THRU 61360.DWG



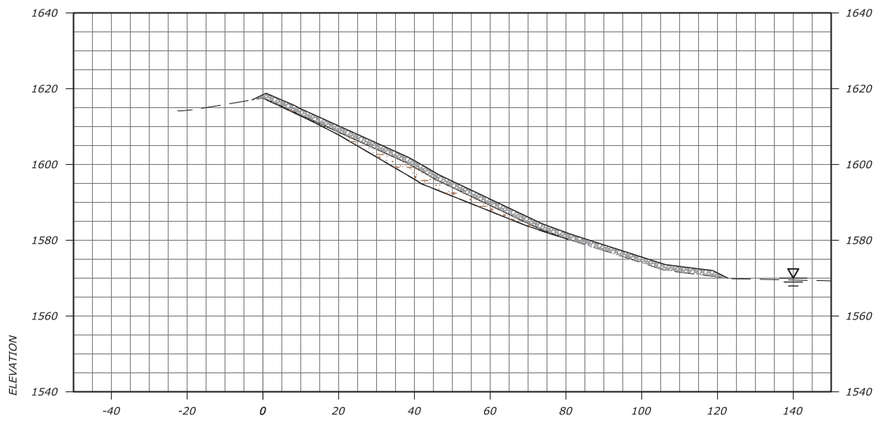
8+50



9+00



9+50



9+66.36

CROSS-SECTIONS
Sta. 8+50 to Sta. 9+66.36

0 10' 20' 40'

Notes:

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CROSS-SECTIONS

222-100-61359

SHEET 1

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CAD FILENAME
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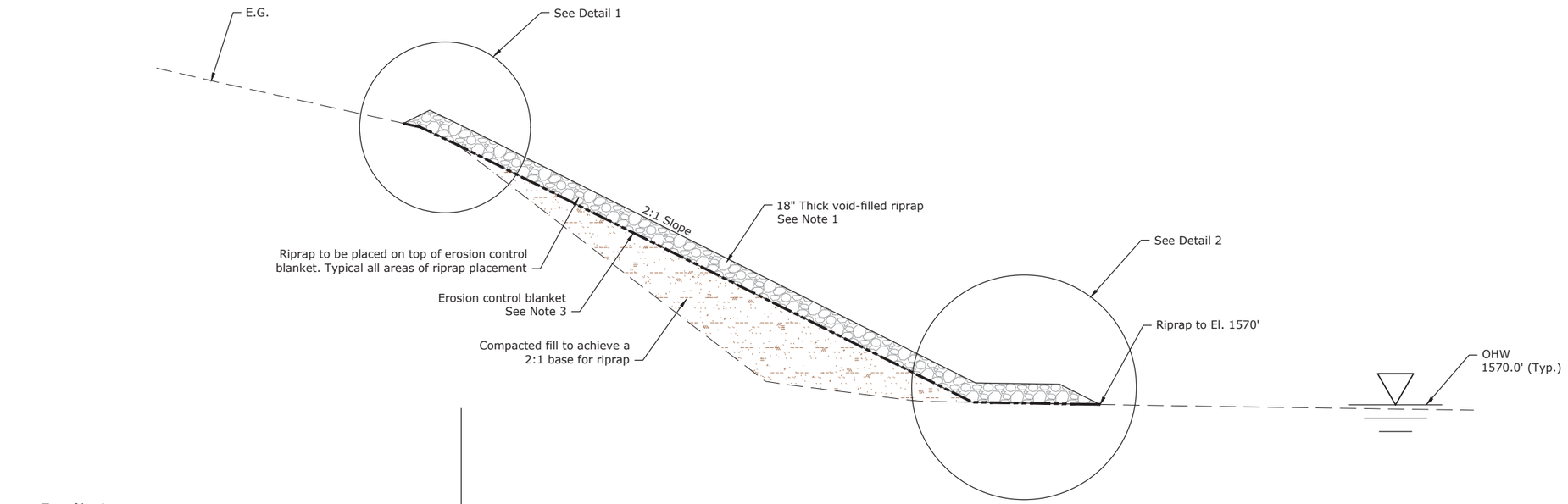
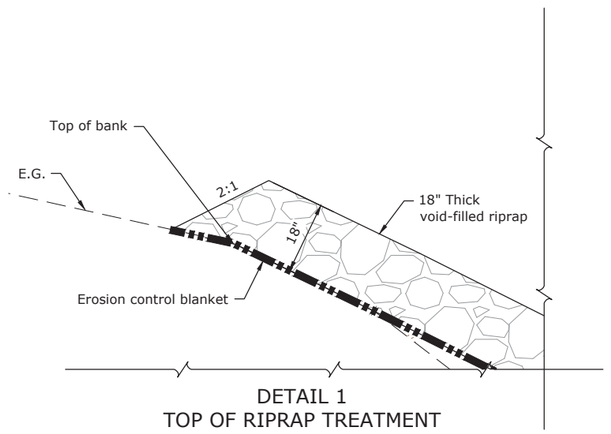
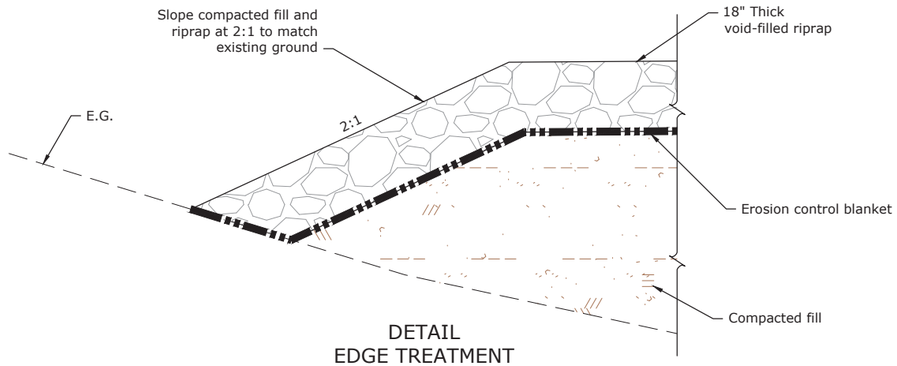


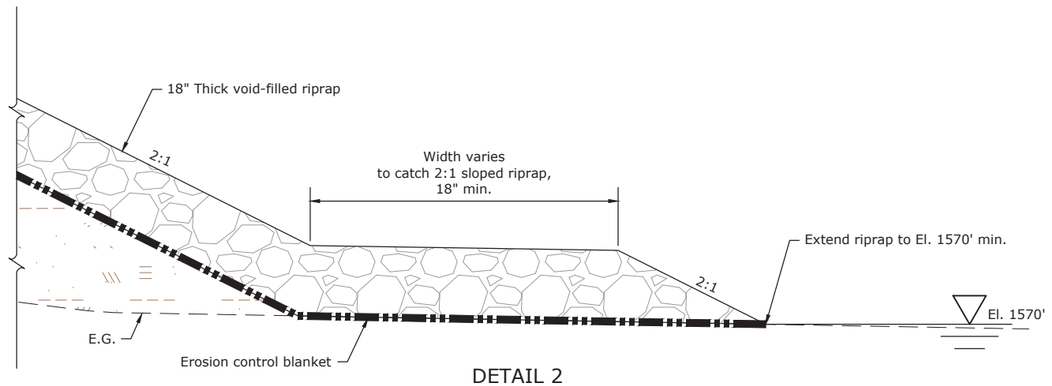
TYPICAL SECTION
N.T.S.



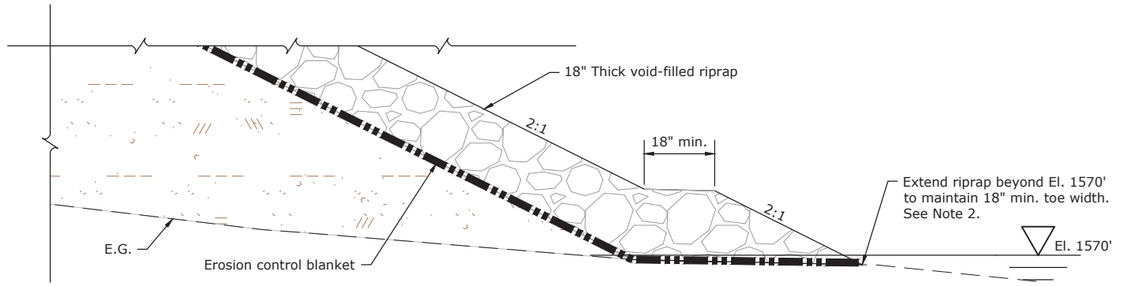
DETAIL 1
TOP OF RIPRAP TREATMENT
N.T.S.



DETAIL
EDGE TREATMENT
N.T.S.



DETAIL 2
TOE OF RIPRAP TREATMENT
N.T.S.



DETAIL
TOE OF RIPRAP TREATMENT
When elevation 1570' is encountered before toe width reaches 18" min.
N.T.S.

Notes:
1. Fill riprap voids with topsoil.
2. In areas where El. 1570' is encountered before the toe of riprap reaches 18" minimum width, toe of riprap will extend beyond El. 1570' to achieve a toe width of 18" minimum.
3. No staking allowed into natural ground. Staking is only allowed into imported fill areas that are deep enough to accommodate full length of stake and does not reach natural ground.
4. See sheets (-61361 and -61362) for Revegetation Plan and Revegetation Details.

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U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
COLUMBIA BASIN PROJECT
GRAVITY DIVISION

BANKS LAKE
STEAMBOAT ROCK STATE PARK SHORELINE STABILIZATION

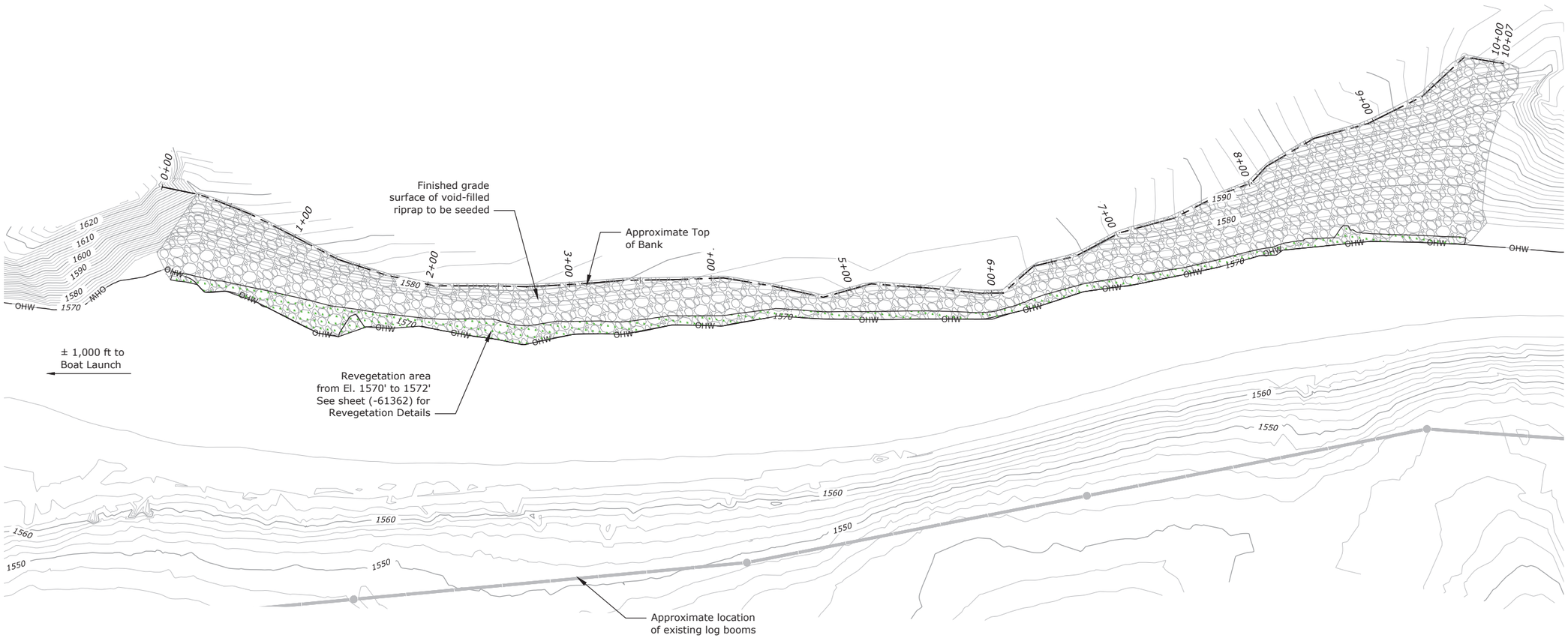
DESIGNED	A. Hatch
DRAWN	A. Hatch
CHECKED	D. Baconguis
	JANICE BACONGUIS P.E.
TECH. APPR.	JAY HOVDE
APPROVED	ADMIN APPROVAL - Design Program Manager
BOISE, ID	2025-06-27

TYPICAL SECTION

SECTION AND DETAILS

222-100-61360

SHEET 1



LEGEND

- Void-Filled Riprap (slope to be seeded)
- Revegetation Area
- — OHW — Ordinary high water (OHW) at El. 1570'

N

0 20' 40' 80'

REVEGETATION PLAN

NOTES:

1. Void-filled riprap to have voids filled with topsoil.

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BOISE, ID	2025-06-27

REVEGETATION

PLAN

222-100-61361

SHEET 1

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2025-06-13
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AHATCH

CAD SYSTEM
AutoCAD Civil 3D (LMS TECH)
CAD FILENAME
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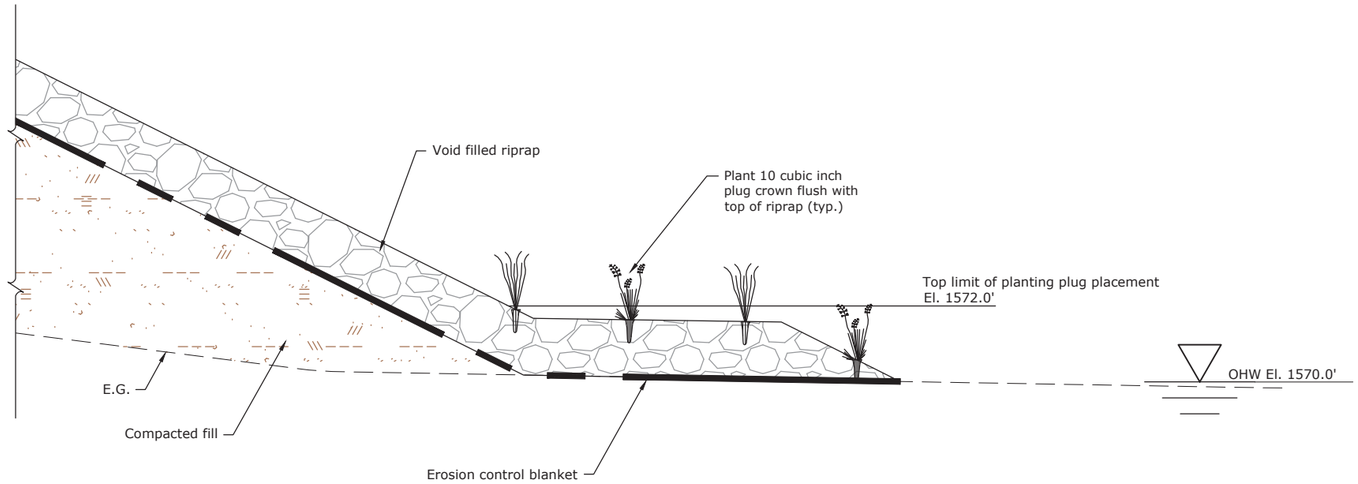
Plant List			
Common Name	Scientific Name	Size	Estimated Quantity (Each)
Woods rose	*Rosa woodsii*	10 cu. in. plug	393
Serviceberry	*Amelanchier alnifolia*	10 cu. in. plug	98
Chokecherry	*Prunus virginiana*	10 cu. in. plug	98
Black hawthorn	*Cratageus douglasii*	10 cu. in. plug	98
Blue elderberry	*Sambucus cerulea*	10 cu. in. plug	98



PLANTING PLUG PLACEMENT SECTION
N.T.S.

NOTES:

1. Leaves and root crown to remain undamaged during planting.
2. Spacing for plants are 3' on center.

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2025-06-27
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CAD SYSTEM
AutoCAD 2015 (LMS TECH)
CAD FILENAME
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BANKS LAKE

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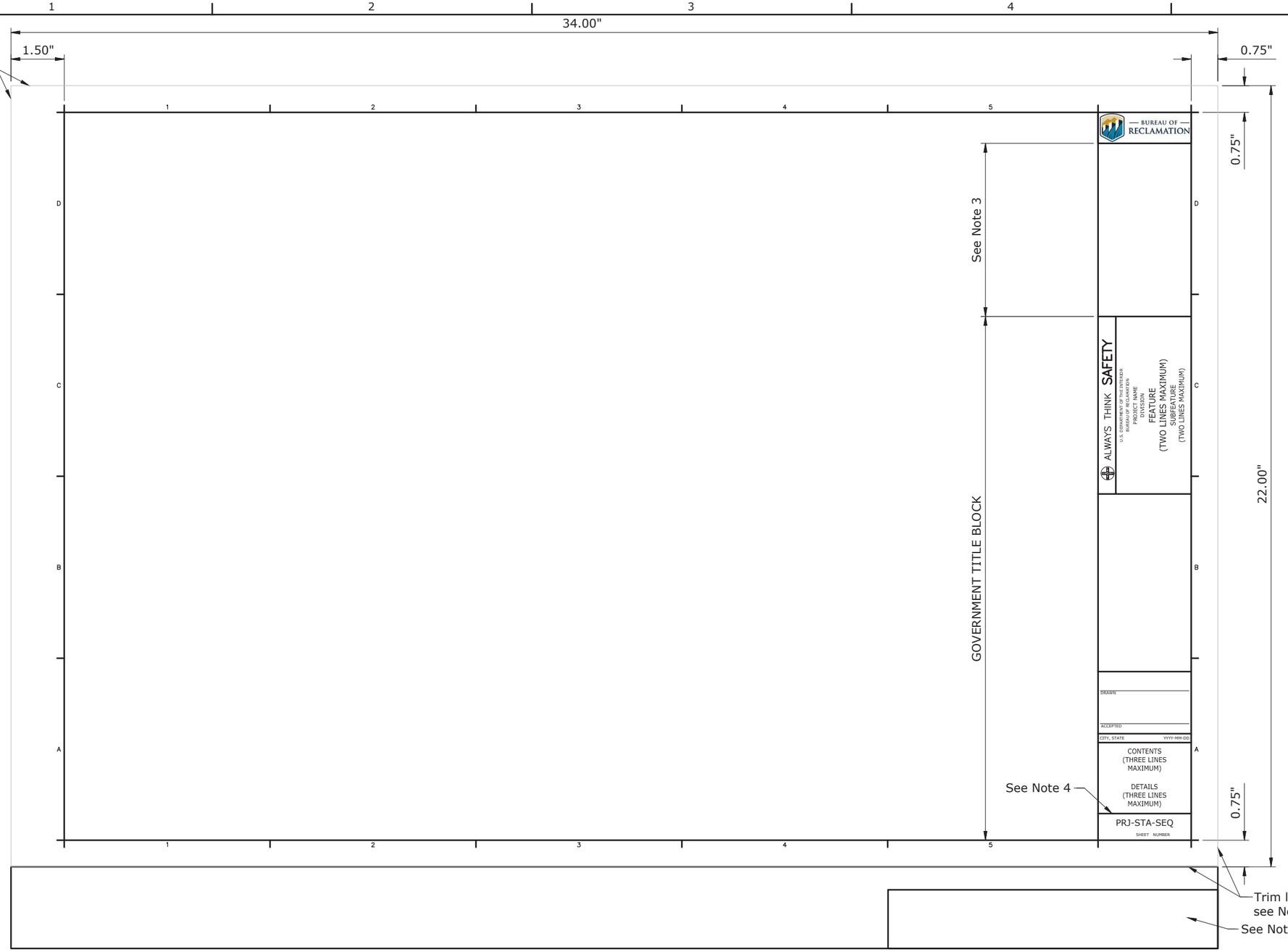
REVEGETATION DETAILS

SECTION

222-100-61362

SHEET 1

Released



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BUREAU OF RECLAMATION
YAKIMA PROJECT
KENNEWICK DIVISION

CHANDLER PUMPING PLANT

SWITCHYARD - STEEL STRUCTURES

SAMPLE TITLE

DRAWING BORDER

MANUFACTURER OR CONTRACTOR
DRAWN

ACCEPTED
TITLE

SAMPLE SIGNATURE LINES

REFERENCE

1. Information Management Handbook (IMH - 2020), Chapter 2, Section 9.A.4 - "Sheet Border" and Figures G2, G3, and G4.

NOTES

1. Government will provide contractor with an electronic AutoCAD template to be used by manufacturer for submittal of manufacturer's/contractors drawing in Government format.
2. The manufacturer's title block and drawing revisions as a result of the submittal process, may be located anywhere outside of the trim lines. The location shown on this drawing is the Government's preferred area.
3. The manufacturer shall show the Government solicitation/specification number, the manufacturer's name, drawing and sheet number in this area.
4. Government drawing number(s) will be issued at the end of the submittal process and drawing will be entered into the Government's electronic drawing system by the Government.
5. Trim lines shall be shown on all submitted drawings.

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U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
STANDARD DRAWINGS

STANDARD AND TYPICAL DESIGNS

GOVERNMENT DRAWING FORMAT

REV NO		
3	2023-04-20 Barthel, Rodney J P.E.	D UPDATED DRAWING TO CURRENT DRAWING RECORDS SYSTEM. MINOR REVISIONS.
2	2015-03-25 Barthel, Rodney J P.E.	D UPDATED TITLE BLOCK AND SIGNATURE LINES.
1	2014-12-17 E. Meridin	D UPDATED TITLE BLOCK AND SIGNATURE LINES.

S. NITTA
DESIGNED
S. NITTA
DRAWN
D. CRAWFORD
CHECKED
R. BARTHEL, P.E.
TECH. APPR.
R.W. LAFOND, P.E.
APPROVED
ADMIN APPROVAL -

DENVER, CO

DRAWING BORDER, SAMPLE TITLE BLOCK, AND SIGNATURE LINES

40-D-7102

SHEET 1