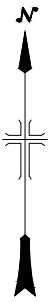




PROJECT LOCATION MAP



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BUREAU OF RECLAMATION
WEBER RIVER PROJECT

ECHO STATE PARK
RED ROCK MARINA

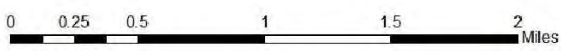
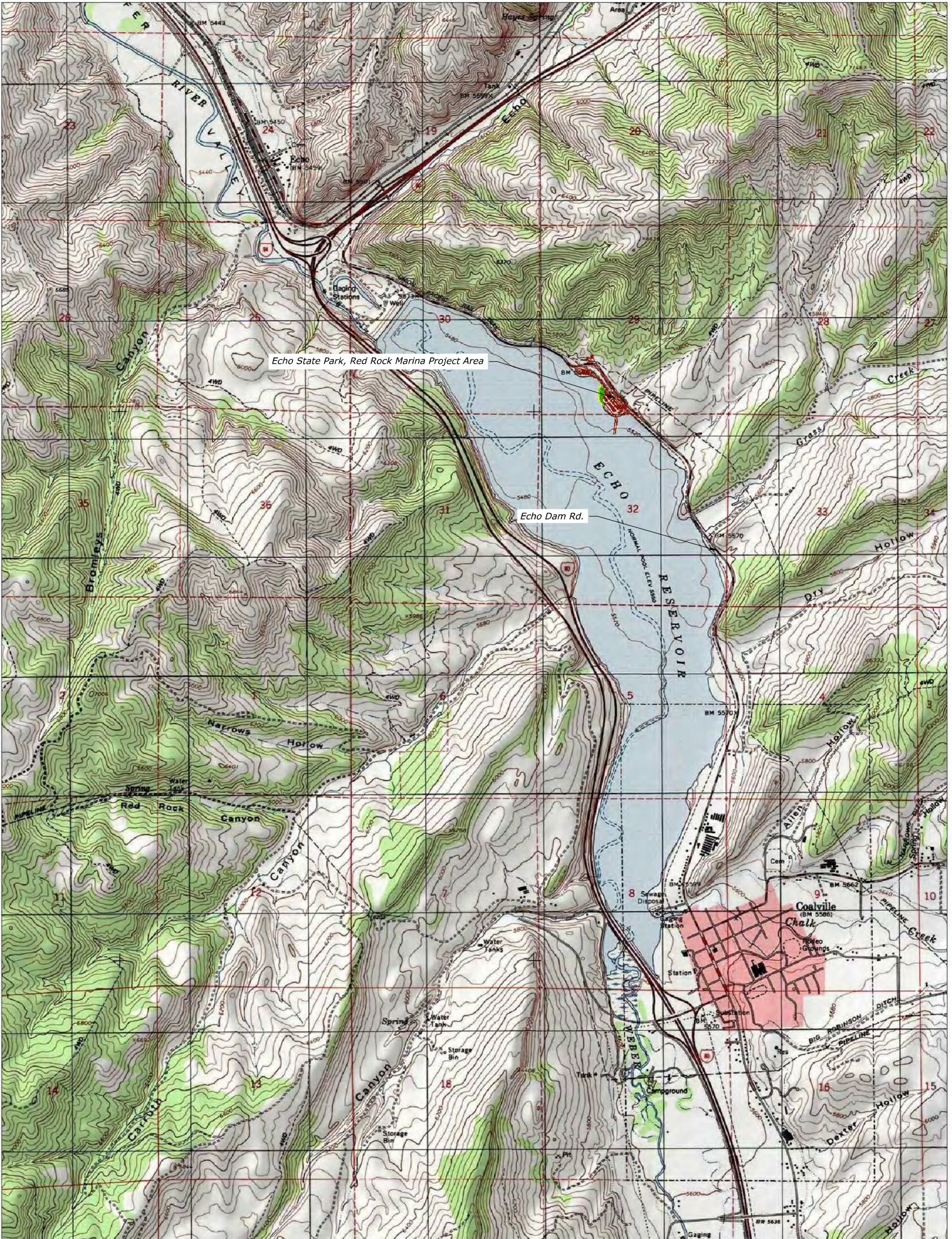
JEREMY FOWLER, P.E.
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JEREMY FOWLER, P.E.
DRAWN
JEREMY FOWLER, P.E.
CHECKED
SCOTT WINTERTON, P.E.
TECH. APPR.
SPENCER STRAND, P.E.
APPROVED
ADHOC APPROVAL - DIVISION MANAGER
PAO (PROVO,UT) 2021-06-29

PROJECT LOCATION MAP

Figure 1

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AutoCAD 23.15
CAD FILE NAME
ARWY_COPS_180418.DWG



Date: 6/30/2021
Time: 11:24:57 AM

Service Layer Credits: Copyright © 2013
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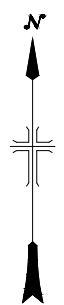
Coalville Quadrangle, Utah

Legend

- Riprap Main Area
- Main Fill Area
- Echo State Park Red Rock Marina
- USA Topo Maps

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
 Projection: Mercator Auxiliary Sphere
 Datum: WGS 1984
 False Easting: 0.0000
 False Northing: 0.0000
 Central Meridian: 0.0000
 Standard Parallel 1: 0.0000
 Auxiliary Sphere Type: 0.0000
 Units: Meter

VICINITY MAP



VICINITY MAP

DESIGNED BY
JEREMY FOWLER, P.E.
 CHECKED BY
JEREMY FOWLER, P.E.
 SCOTT WINTERLON, P.E.
 FECH: JSPR
 APPROVED BY
SPENCER STRAND, P.E.
 (PROJECT MANAGER)
 P/NO: (PROVOD/UT)
 2021-06-30



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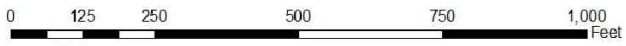
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ECHO STATE PARK
RED ROCK MARINA

Figure 2



Coalville Quadrangle, Utah



Date: 6/30/2021
 Time: 1:09:50 PM

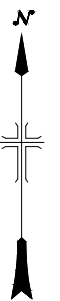
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics,

Legend

- ControlPoints_Project
- Riprap Main Area
- Main Fill Area
- Echo State Park Red Rock Marina

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
 Projection: Mercator Auxiliary Sphere
 Datum: WGS 1984
 False Easting: 0.0000
 False Northing: 0.0000
 Central Meridian: 0.0000
 Standard Parallel 1: 0.0000
 Auxiliary Sphere Type: 0.0000
 Units: Meter

AREA MAP



AREA MAP

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 JEREMY FOWLER, P.E.
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 SCOTT WINTERTON, P.E.
 TECH. ASSIST.
 SPENCER STRAND, P.E.
 APPROVED
 (PROVIDOR)
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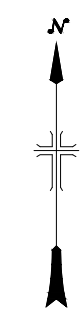
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**ECHO STATE PARK
 RED ROCK MARINA**

Figure 3

EXPLANATION

- Current High Water Mark
- Proposed High Water Mark
- Cabin with picnic pad and pedestal grill
- Dumpster Pad
- Vault Toilet
- Parcel boundary
- Proposed post and rail fencing
- Proposed 18-Foot shade sail
- Proposed Fill Area
- Proposed Riprap
- Fill Borrow
- Temporary Disturbance Area
- Project Area



Project Area below existing ordinary high-water mark (5560') = 11.5 acres.
Project Area above existing ordinary high-water mark (5560') = 9.8 acres.
Total Project Area = 21.3 ac

Borrow Area = 4.68 ac

Fill Area = 1.54 a
Volume = 14,280 CY

Riprap Area = 0.34 ac

Borrow Area = 1.2 ac

Temporary disturbance area for borrow area construction access

Current high water mark (5560')

Day use area which includes, sidewalks, picnic pads, comfort station, sand, other concrete, and utility infrastructure - permanent

- Notes:
1. Site plan for Echo State Park Red Rock Marina is permanent. This includes, but is not limited to, picnic pads, shade sails, concrete sidewalks, asphalt, fee station, comfort stations, water infrastructure, sewer infrastructure, power infrastructure, communications infrastructure, guardrail, concrete box culverts, culverts, storm drainage infrastructure, water tank and access road, and other constructed features.
 2. The area between the borrow pits will be temporarily disturbed while excavating material from the borrow pits and transporting material to the fill areas.

RED ROCK MARINA PROPOSED PERMANENT SITE PLAN



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ECHO STATE PARK
RED ROCK MARINA

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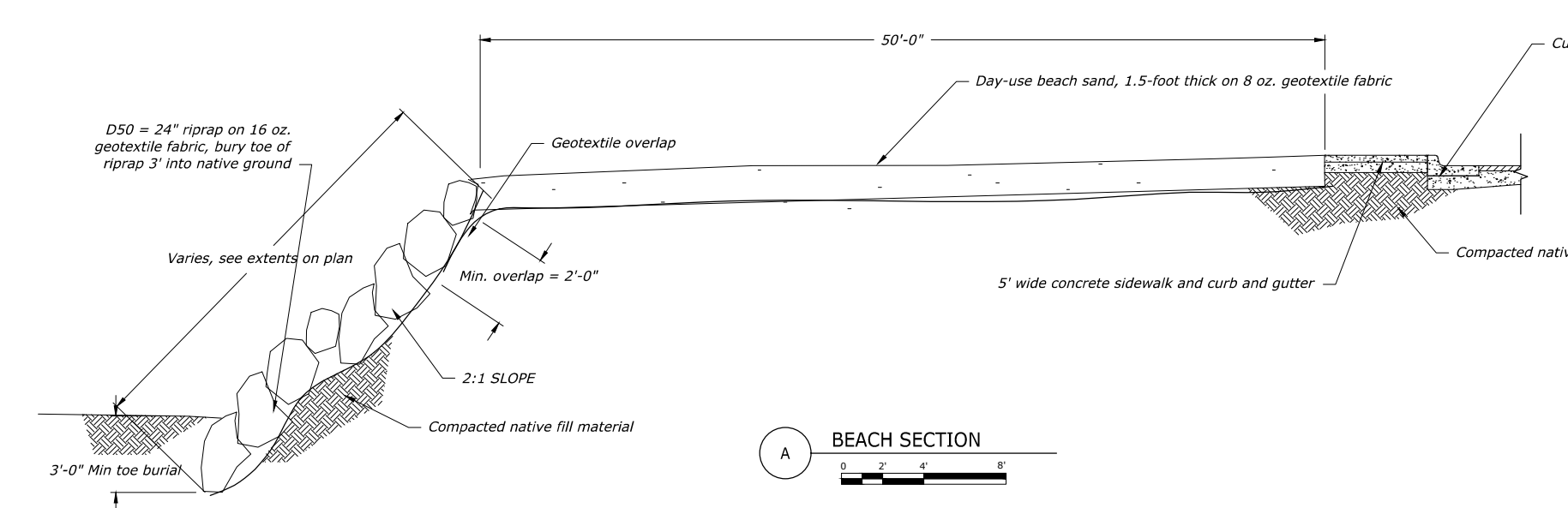
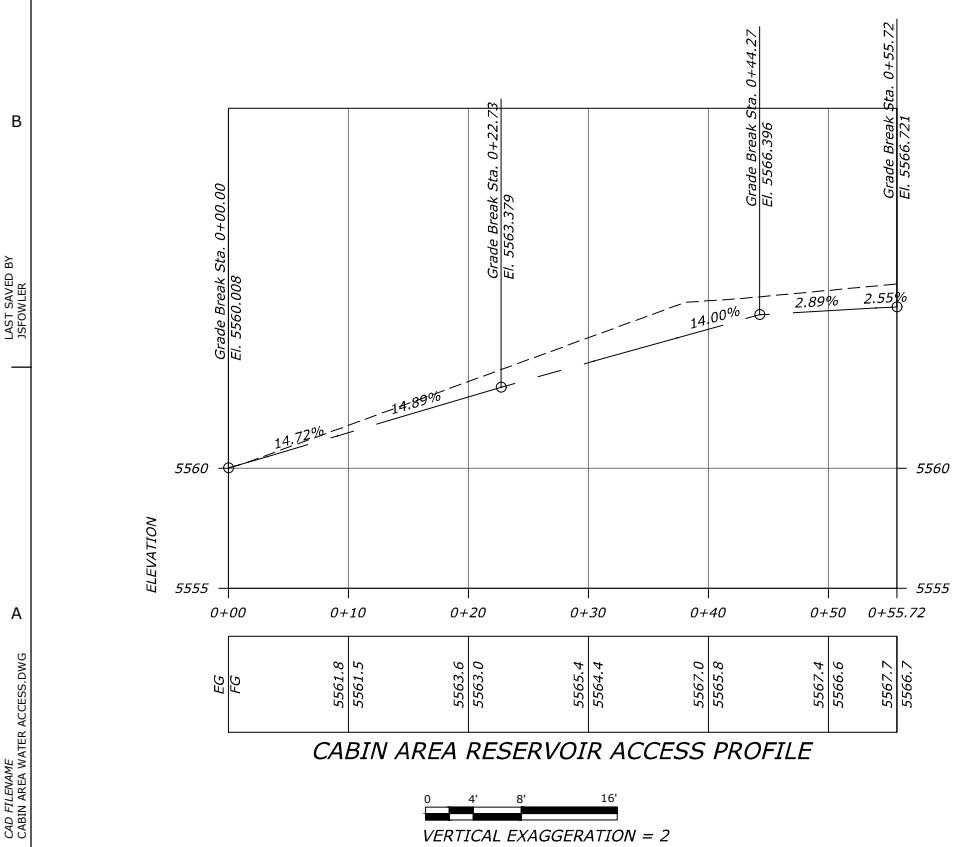
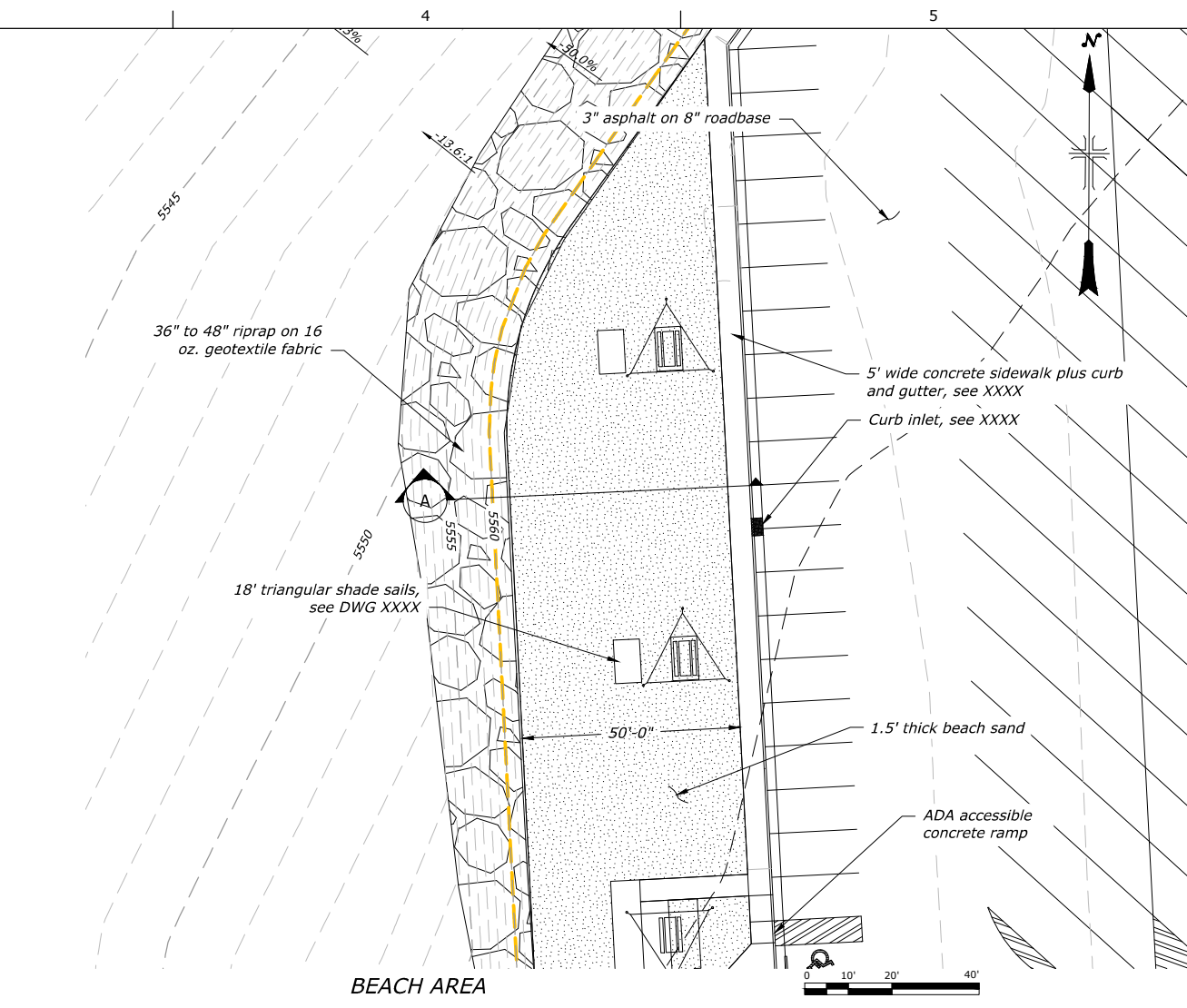
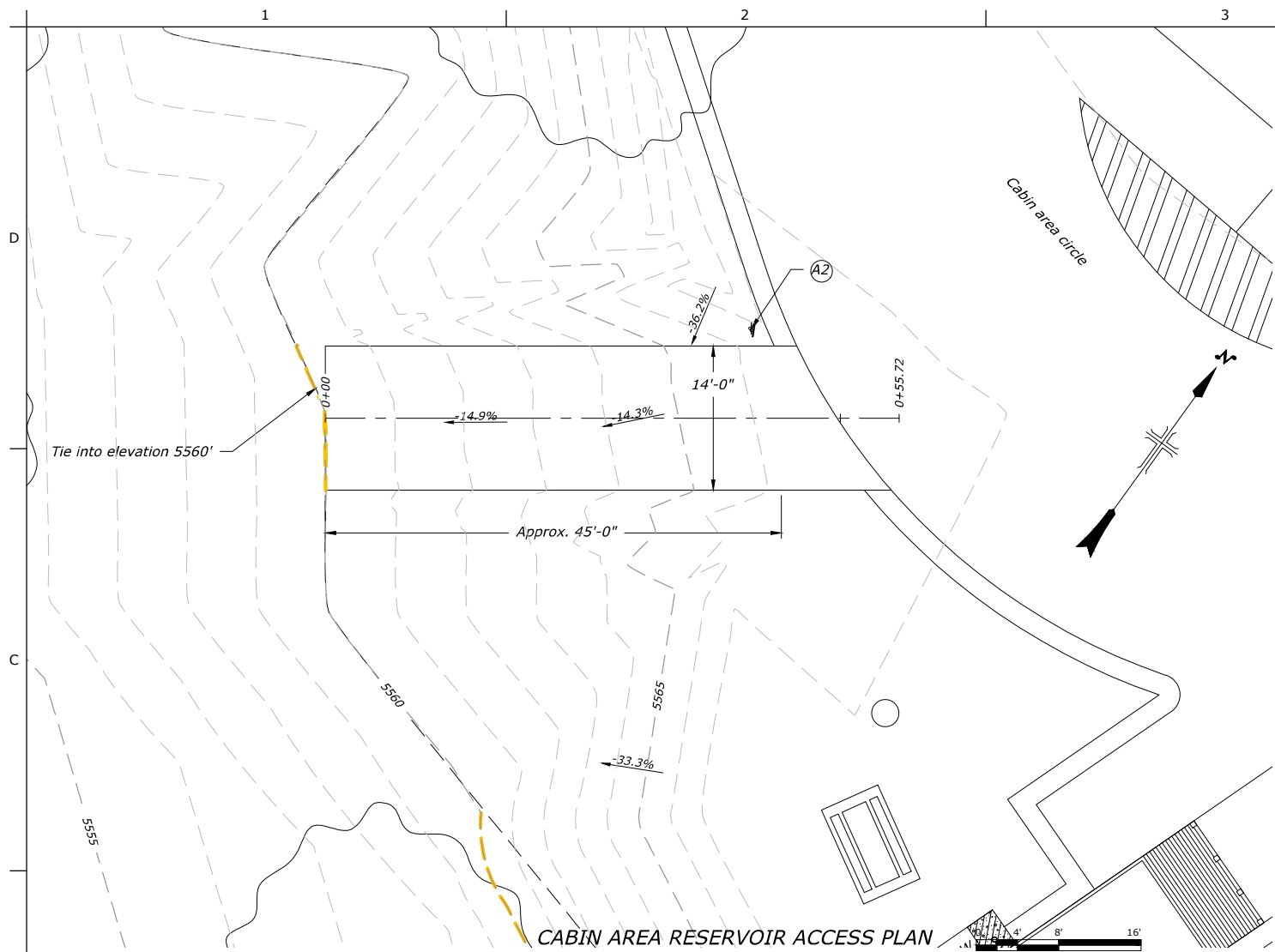
RED ROCK MARINA SITE PLAN

Figure 4

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WEBER RIVER PROJECT

ECHO STATE PARK
RED ROCK MARINA



REFERENCE DRAWINGS		
SHEET NUMBER	DRAWING NUMBER	DESCRIPTION
G4	762-418-60048	RED ROCK MARINA SITE PLAN
G5	762-418-60049	RED ROCK CABIN AREA LAYOUT
G6	762-418-60050	RED ROCK DAY USE AREA LAYOUT
C1	762-418-60057	FINISHED GRADE CUT/FILL
S11	762-418-60095	GATE AND ROAD SIGN DETAILS
S12	762-418-60096	MISCELLANEOUS DETAILS

- Notes**
- Reservoir access is constructed of native material. Shape and compact surface as shown.
 - (AX), See Table 3 on DWG 60095 for road sign information.

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TECH. APPR.
SPENCER STRAND, P.E.
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FIELD APPROVAL - FIELD ENGINEERING DIVISION MANAGER
PAO (PROVO, UT) 2021-01-29

RESERVOIR ACCESS ROADS
BEACH AREA ACCESS PLAN AND PROFILE

Figure 5

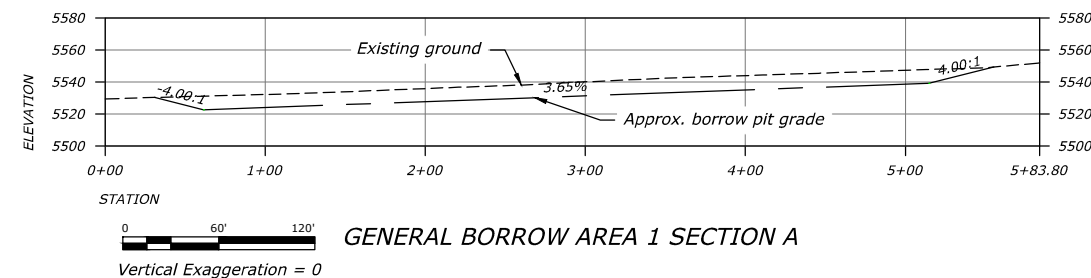
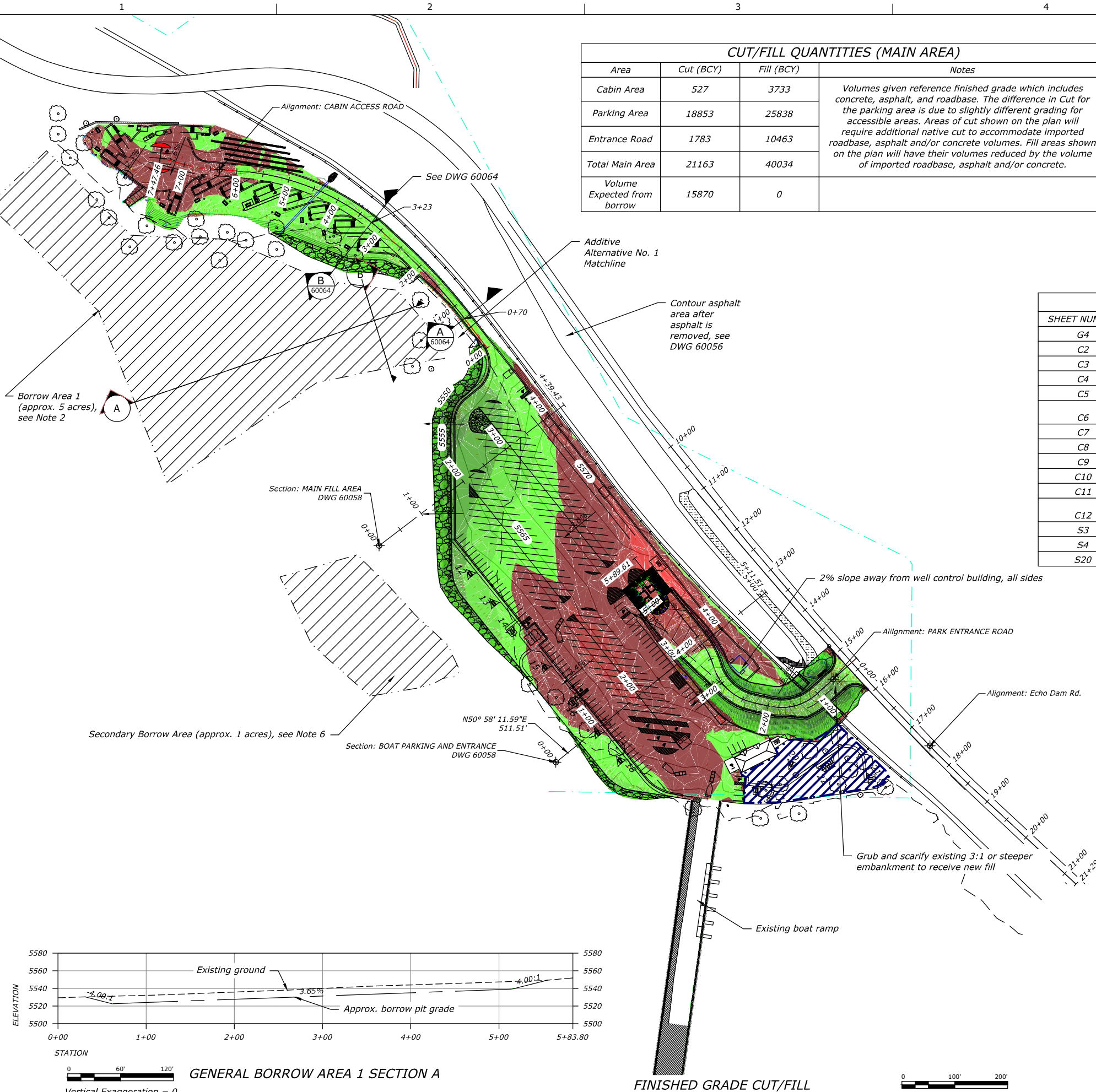
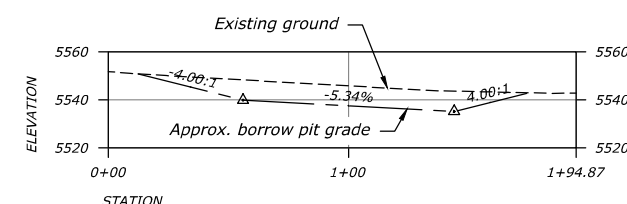
LAST SAVED DATE: 2021-03-04
LAST SAVED BY: JFOWLER
CAD SYSTEM: AutoCAD 2015
CAD FILENAME: CABIN AREA WATER ACCESS.DWG

CUT/FILL QUANTITIES (MAIN AREA)			
Area	Cut (BCY)	Fill (BCY)	Notes
Cabin Area	527	3733	Volumes given reference finished grade which includes concrete, asphalt, and roadbase. The difference in Cut for the parking area is due to slightly different grading for accessible areas. Areas of cut shown on the plan will require additional native cut to accommodate imported roadbase, asphalt and/or concrete volumes. Fill areas shown on the plan will have their volumes reduced by the volume of imported roadbase, asphalt and/or concrete.
Parking Area	18853	25838	
Entrance Road	1783	10463	
Total Main Area	21163	40034	
Volume Expected from borrow	15870	0	

Cut/Fill Table				
Number	Minimum Elevation	Maximum Elevation	Area	Color
1	-20.00	-15.00	960.44	Red
2	-15.00	-10.00	5263.61	Red
3	-10.00	-5.00	27033.52	Red
4	-5.00	0.00	165809.86	Red
5	0.00	5.00	126866.04	Green
6	5.00	10.00	48826.53	Green
7	10.00	15.00	33825.61	Green
8	15.00	20.00	5680.42	Green

REFERENCE DRAWINGS		
SHEET NUMBER	DRAWING NUMBER	DESCRIPTION
G4	762-418-60048	RED ROCK MARINA SITE PLAN
C2	762-418-60058	FINISHED GRADE SECTIONS
C3	762-418-60059	WATER TANK GRADING CUT/FILL
C4	762-418-60060	WATER TANK ACCESS ROAD PLAN AND PROFILE
C5	762-418-60061	ENTRANCE ROAD PLAN AND PROFILE
C6	762-418-60062	RAIL TRAIL PEDESTRIAN CULVERT PLAN AND PROFILE
C7	762-418-60063	CABIN ACCESS ROAD PLAN AND PROFILE
C8	762-418-60064	ROAD SECTIONS
C9	762-418-60065	SOUTH DRAINAGE SYSTEM PLAN AND PROFILE
C10	762-418-60066	CABIN AREA CULVERT PLAN AND PROFILE
C11	762-418-60067	RESERVOIR ACCESS ROADS
C12	762-418-60068	ENTRANCE ROAD SECTION, CABIN ROAD SECTIONS
S3	762-418-60086	BOAT RAMP PLAN AND SECTION
S4	762-418-60087	CABIN AREA RETAINING WALL
S20	762-418-60115	FEE STATION SIDEWALKS

- Notes**
- See DWGs 60058 and 60064 for section and profiles views
 - Borrow Area 1: Area shown is approximately 5 acres. It is anticipated that sufficient fill material required for the project may be removed from area shown. Anticipated depth of borrow area is 8.5 feet with side slopes no steeper than 4:1.
 - Excavated material above the OHWM shall not be placed below the OHWM
 - BCY = Bank Cubic Yards and does not account for material expansion when excavated.
 - Due to thickness of the fill material, extra care should be given to compaction to ensure work is within specifications. Placing fill as early as possible in this location is preferred to allow maximum settlement time before constructing concrete boat ramp.
 - Secondary Borrow Area: Area shown is approximately 1 acre. It is anticipated that sufficient fill material required for the project may be removed from the larger Borrow Area 1 shown. Secondary Borrow Area may be used if insufficient material is found in Borrow Area 1. Anticipated depth of borrow area is 5 feet with side slopes no steeper than 4:1.



FINISHED GRADE CUT/FILL

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BUREAU OF RECLAMATION
WEBER RIVER PROJECT

ECHO STATE PARK
RED ROCK MARINA

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APPROVED
APRIL APPROVAL - FIELD ENGINEERING DIVISION MANAGER
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FINISHED GRADE CUT/FILL

Figure 6

LAST SAVED DATE: 2021-03-22
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CAD SYSTEM: AutoCAD 2015
CAD FILENAME: FINISHED.GROUND.DWG

1

2

3

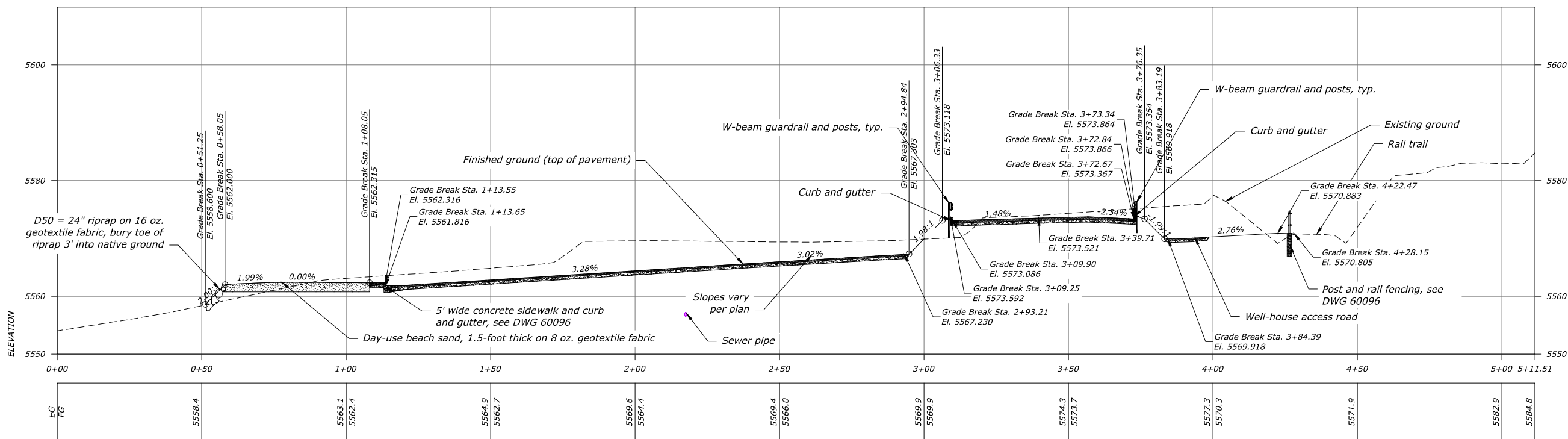
4

5

C2

D

C

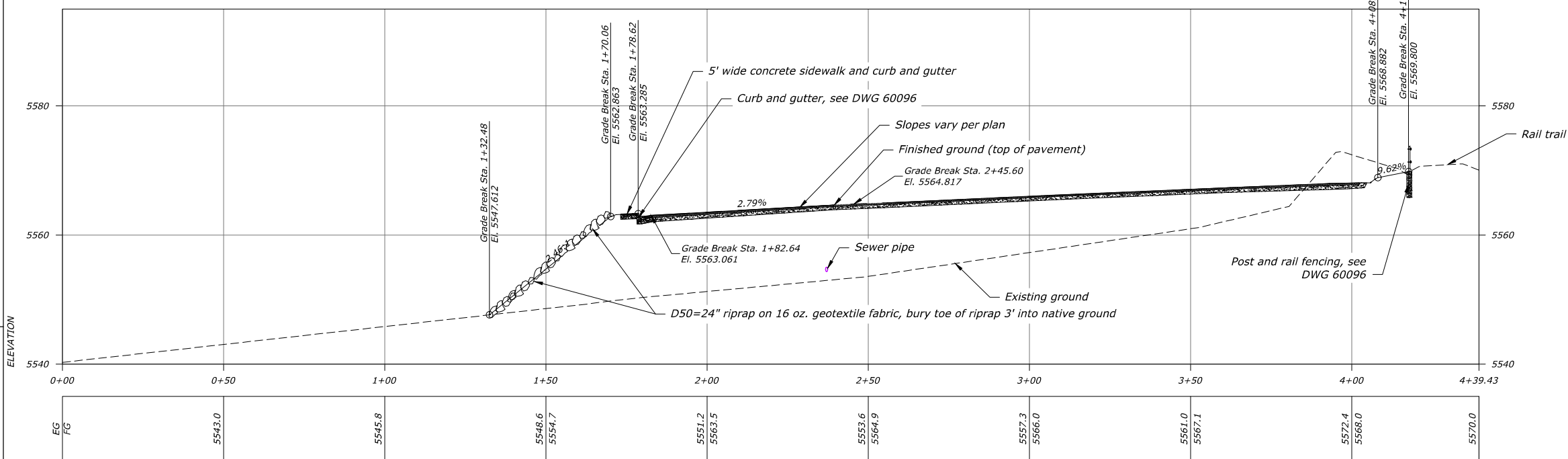


BOAT PARKING AND ENTRANCE SECTION



B

A



MAIN FILL AREA SECTION



DESIGN DRAWINGS	
SHEET NUMBER	DESCRIPTION
G4	762-418-60048 RED ROCK MARINA SITE PLAN
G7	762-418-60052 EXISTING UTILITIES
G8	762-418-60053 DEMOLITION PLAN
G9	762-418-60054 TREE DEMOLITION INFORMATION AND PHOTOS
C1	762-418-60057 FINISHED GRADE CUT/FILL
C3	762-418-60059 WATER TANK GRADING CUT/FILL
C8	762-418-60064 ROAD SECTIONS
C11	762-418-60067 RESERVOIR ACCESS ROADS
C12	762-418-60068 ENTRANCE ROAD SECTION, CABIN ROAD SECTIONS
S10	762-418-60094 TYPICAL PAVEMENT MARKINGS AND ASPHALT DETAILS
S12	762-418-60096 MISCELLANEOUS DETAILS

Notes

1. For locations of section views see DWG 60067
2. Where 8 oz. geotextile fabric and 16 oz. geotextile fabric are directly adjacent (Mainly along beach area), overlap 8 oz. geotextile fabric with the 16 oz fabric at least 2'.

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WEBER RIVER PROJECT

ECHO STATE PARK
RED ROCK MARINA

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PAO (PROVO, UT) 2021-02-02

FINISHED GROUND
SECTIONS

BOAT PARKING AND
ENTRANCE SECTION AND
MAIN FILL AREA SECTION

Figure 7

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CAD SYSTEM
AutoCAD 2013
CAD FILENAME
FILL AREA SECTIONS.DWG