

Rosedale-Rio Bravo Water Storage District
McCaslin / Bowling Well Drilling & Equipping

Addendum #1/ Pre-bid Tour

July 14th, 2023

Bid Date August 3rd, 2023 2:00 PM

849 Allen Road Bakersfield, CA

Q: Can multiple rigs be mobilized for this project to drill multiple wells at once?

A: Yes. McCaslin Well 2 and the Bowling Well can be drilled simultaneously, but McCaslin Well 1 cannot be drilled until zone testing on McCaslin Well 2 is completed.

Q: Will there be a different spec. for the gravel if the slot sizes go from .080 to .090?

A: see Section H in the specs

<u>Rosedale-Rio Bravo Water Storage District</u>	<small>Replace with</small> <u>Section H</u>
<p>2. Materials</p> <p>a) Gravel Pack</p> <ol style="list-style-type: none">1) For bidding purposes, assume 1/4 x 16 gradation, TACNA, SRI or District Representative approved equal. The final gravel gradation will be specified in the final well design for each site, as provided by the District Representative after evaluation of the formation sieve analysis, as applicable.2) Gravel shall be delivered to and contained on-site in 3,000 lb. bags (“super sacks”).3) At the request of the District Representative, the Contractor shall complete up to three (3) sieve analyses of gravel pack materials delivered on-site. Gravel re-delivered or re-mixed to replace any rejected material shall be sampled and tested at the District Representative’s request and Contractor’s expense.	

Q: Will the well sites be secure? How bad is vandalism/theft in the area?

A: Sites are NOT secure. The area is not generally known for bad theft and/or vandalism, but contractors are responsible for their own security. Bowling site is more secure with barbed wire surrounding the property.

Q: Will there be a threshold for Turbidity before discharging water into ponds during the development stage?

A: Less than 100 NTU turbidity will be required.

Q: Has PG&E been applied for?

A: Yes; 600 amp services have been applied for at each location.

Q: Will zone testing have PFOS or other technical analysis? Will this slow down or stop construction?

A: Not likely, the primary concern is Arsenic. Any changes/additions made by the district will be turned quickly.

Q: Is there any data on existing wells within close proximity to the well sites?

A: Yes; Well completion reports are included in the attachments. WB-3 and Enns 2 are close to the McCaslin Wells. Sup – 6 is close to the Bowling Well

Attachments

1. Example picture of most recently completed well and equipping layout
2. Well Completion Reports for (WB-3, Enns 2, and Sup – 6)
3. USBR – Rosedale-Rio Bravo Water Storage District Agreement for funding

Attachment 1 Example Picture of Equipping Layout



Attachment 2 Well Completion Reports

State of California
Well Completion Report
WCR Form Submitted 12/14/2015
WCR2015-003807

Owner's Well Number WB-3 Date Work Began 05/07/2015 Date Work Ended 06/28/2015
Local Permit Agency Department of Public Health Services - Environmental Health Department
Secondary Permit Agency _____ Permit Number WP-16043 Permit Date 04/06/2015

Well Owner (must remain confidential pursuant to Water Code 13752)

Name Rosedale Rio Bravo Water Storage District
Mailing Address 849 Allen Road
City Bakersfield State CA Zip 93314

Planned Use and Activity

Activity New Well
Planned Use Water Supply Irrigation - Agriculture

Well Location

Address _____ APN 104-250-16
City _____ Zip _____ County Kern Township 28 S
Latitude _____ N Longitude _____ W Range 29 E
Dec. Lat. _____ Dec. Long. _____ Section 25
Vertical Datum _____ Horizontal Datum WGS84 Baseline Meridian _____
Location Accuracy _____ Location Determination Method _____ Ground Surface Elevation _____
Elevation Accuracy _____ Elevation Determination Method _____

Borehole Information

Orientation Vertical Specify _____
Drilling Method Reverse Circulation Drilling Fluid Bentonite
Total Depth of Boring 840 Feet
Total Depth of Completed Well 770 Feet

Water Level and Yield of Completed Well

Depth to first water _____ (Feet below surface)
Depth to Static _____
Water Level 270 (Feet) Date Measured 07/27/2015
Estimated Yield* 2500 Test Type Pump
Test Length 24 Total Drawdown 64 (Feet)
*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet	Description
0 840	See Attachment

Casings

Casing #	Depth from Surface Feet to Feet	Casing Type	Material	Casings Specifications	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size If any (inches)	Description
1	0 50	Conductor or Fill Pipe	Low Carbon Steel	Grade: ASTM A53	0.375	36			
2	0 380	Blank	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625			
2	380 515	Screen	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625	Louver	0.08	
2	515 540	Blank	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625			
2	540 750	Screen	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625	Louver	0.08	
2	750 770	Blank	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625			
3	0 538	Blank	Low Carbon Steel	Grade: ASTM A53	0.25	3.5			Sounding Tube
4	0 115	Blank	Low Carbon Steel	Grade: ASTM A53	0.25	3.5			Gravel Feed Tube

Borehole Lithologic Log

Client: RRBWSD
 Project: DROUGHT RELIEF PROJECT
 Borehole/Well No: WB-3
 Project No:
 Drilling Contractor: BEST
 Drilling Method:

Pilot Borehole Diameter: 17.5
 Start Date: 6/15/15
 Finish Date:
 X:
 Y:
 Logged By: MH

Depth	H2O Discharge rate (gpm) / Drilling Rate (ft/hr)	Soil Color	Soil Type	Sample Description/ Notes:
50- 60		10YR 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 20% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MATES.
60- 70		10YR 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 20% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MATES.
70- 80		10YR 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 20% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MATES.
80- 90		10YR 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 25% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MATES.
90- 100		10YR 5/4	SM	SILTY SAND: YELLOWISH BROWN FINE-GRAINED SAND, SOME TRACE MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 20-25% SILT. QZ, FELDSPAR, TRACE MATES.
100- 110		10YR 5/4	SM / ML	SILTY SAND/SANDY SILT: YELLOWISH BROWN FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND. 25-35% SILT. QUARTZ, FELDSPAR, TRACE MATES.
110- 120		10YR 5/4	SM / ML	SILTY SAND/SANDY SILT: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 25% 30% SILT. QZ, FELDSPAR, TRACE MATES.
120- 130		10YR 5/4	SP- SM	POORLY GRADED SAND WITH SILT: YELLOWISH BROWN FINE-GRAINED SAND, WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 10-12% SILT. QUARTZ, FELDSPAR.
130- 140		10YR 5/4	SM	SILTY SAND: YELLOWISH BROWN FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 20% SILT. QUARTZ, FELDSPAR, MICA, TRACE MATES.



Borehole Lithologic Log

Borehole/Well No. WB-3
 Client: RRBWSB
 Project No. _____ Date 6/15/15

Depth	H2O Discharge rate (gpm) / Drilling Rate (ft/hr)	Soil Color	Soil Type	Sample Description
140-150		10yR 5/4	SM	Silty sand: yellowish brown fine-grained sand with medium-grained sand. Sub-rounded to sub-angular. 20% silt. Quartz, feldspar, trace mica.
150-160		10yR 5/4	SM	Silty sand: yellowish brown fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 15-20% silt. Quartz, feldspar, mica, trace mica.
160-170		10yR 5/4	SM	Silty sand: yellowish brown fine-grained sand with medium-grained sand sub-rounded to sub-angular. 20-25% silt. Quartz, feldspar, mica, trace mica.
170-180		10yR 5/4	SM	Silty sand: yellowish brown fine-grained sand with medium-grained sand, sub-rounded to sub-angular. 15-20% silt. Quartz, feldspar, mica, trace mica.
180-190		10yR 5/4	SM	Silty sand: yellowish brown fine-grained sand with medium-grained sand, trace coarse-grained sand sub-rounded to sub-angular. 20% silt. Quartz, feldspar, mica, trace mica.
190-200		10yR 5/4	SM	Silty sand: yellowish brown fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 20% silt. Quartz, feldspar, mica, trace mica.
200-210		10yR 5/4	SC	Clayey sand: yellowish brown fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-angular to sub-rounded. 25-30% clay. Quartz, feldspar, mica, trace mica.
210-220		10yR 5/4	SC	Clayey sand: yellowish brown fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 20% clay. Quartz, feldspar, mica, trace mica.
220-230		10yR 5/4	SP-SC	Poorly graded sand with clay: yellowish brown fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 10% clay. Quartz, feldspar, mica, trace mica.
230-240		10yR 5/4	CL	Sandy lean clay: yellowish brown fine-grained sand, some medium-grained sand. 35-40% clay. High dry strength, slow dilatancy, low plasticity. Quartz, feldspar, mica.
240-250		10yR 5/4	CL	Sandy lean clay: yellowish brown fine-grained sand. Trace medium-grained sand. 35-45% clay. High dry strength, slow dilatancy, medium plasticity.



Borehole Lithologic Log

Borehole/ Well No.	WB-3
Client:	RRLWSD
Project No.	Date 6/15/15

Depth	H2O Discharge rate (gpm) / Drilling Rate (ft/hr)	Soil Color	Soil Type	Sample Description
250-		10yR	SC	CLAYEY SAND / SANDY CLAY: DARK YELLOWISH BROWN FINE - GRAINED SAND. TRACE MEDIUM - GRAINED SAND.
260		4/4	CL	SAND - SUB-ROUNDED 25-35% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MATES.
260-		10yR	SP-	POORLY GRAINED SAND WITH CLAY: YELLOWISH BROWN FINE - GRAINED SAND, WITH MEDIUM - GRAINED SAND, TRACE COARSE - GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 10% CLAY. QUARTZ, FELDSPAR, TRACE MATES.
270		5/4	SC	
270-		10yR	SP-	POORLY GRAINED SAND WITH CLAY: YELLOWISH BROWN FINE - GRAINED SAND, WITH MEDIUM - GRAINED SAND, SOME COARSE - GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 10% CLAY. QUARTZ, FELDSPAR, TRACE MATES.
280		5/4	SC	
280-		10yR	CL	SANDY LEAN CLAY: DARK YELLOWISH BROWN FINE - GRAINED SAND, TRACE MEDIUM - GRAINED SAND. 45-50% CLAY. HIGH DRY STRENGTH, SLOW/DILATANCY. MEDIUM PLASTICITY.
290		4/4	CL	
290-		10yR	CL	SANDY LEAN CLAY: DARK YELLOWISH BROWN FINE - GRAINED SAND, TRACE MEDIUM - GRAINED SAND. 40-45% CLAY. HIGH DRY STRENGTH, NO DILATANCY, MEDIUM-PLASTICITY.
300		4/4	CL	
300-		10yR	SC	SANDY LEAN CLAY / CLAYEY SAND: DARK YELLOWISH BROWN FINE - GRAINED SAND, SOME MEDIUM - GRAINED SAND. 30-35% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MATES.
310		4/4	CL	
310-		10yR	CL	SANDY LEAN CLAY: DARK YELLOWISH BROWN FINE - GRAINED SAND, TRACE MEDIUM - GRAINED SAND. 40-45% CLAY. HIGH DRY STRENGTH, SLOW DILATANCY, MEDIUM PLASTICITY.
320		4/4	CL	
320-		10yR	SC	CLAYEY SAND: DARK YELLOWISH BROWN FINE - GRAINED SAND, SOME MEDIUM - GRAINED SAND, TRACE COARSE - GRAINED SAND. 15-20% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MATES.
330		4/4	SC	
330-		10yR	SM	JILTY SAND: YELLOWISH BROWN FINE - GRAINED SAND, WITH MEDIUM - GRAINED SAND, TRACE COARSE - GRAINED SAND, TRACE GRAVEL. 15-20% SILT. SUB-ROUNDED TO SUB-ANGULAR. QUARTZ, FELDSPAR, MICA, TRACE MATES.
340		5/4	SM	
340-		10yR	SC	CLAYEY SAND: YELLOWISH BROWN FINE - GRAINED SAND, SOME MEDIUM - GRAINED SAND, TRACE COARSE - GRAINED SAND. 20% CLAY. SUB-ANGULAR, TO SUB-ROUNDED. QUARTZ, FELDSPAR, MICA, TRACE MATES.
350		5/4	SC	
350-		10yR	SC	CLAYEY SAND: DARK YELLOWISH BROWN FINE - GRAINED SAND, SOME MEDIUM - GRAINED SAND, TRACE COARSE - GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. QUARTZ, FELDSPAR, MICA, TRACE MATES.
360		4/4	SC	



Borehole Lithologic Log

Borehole/ Well No. WB-3

Client: RRBIWSD

Project No.

Date 6/15/15

Depth	H2O Discharge rate (gpm) / Drilling Rate (ft/hr)	Soil Color	Soil Type	Sample Description
360- 370		10yR 4/4	CL	SANDY LEAN CLAY: DARK YELLOWISH BROWN FINE-GRAINED SAND, TRACE COARSE-GRAINED SAND. 50-60% CLAY. HIGH DRY STRENGTH, NO DILATANCY, MEDIUM PLASTICITY. QUARTZ TRACE MINERAL
370- 380		10yR 4/4	SP- SC	POORLY GRADED SAND WITH CLAY: OTRAL YELLOWISH BROWN FINE-GRAINED SAND, WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. 10% CLAY. SUB-ROUNDED TO SUB-ANGULAR. QUARTZ, FELDSPAR, MICA, TRACE MINERAL
380- 390		10yR 4/4	SW- SM	WELL GRADED SAND WITH SILT: DARK YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND, SOME COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 5-10% SILT. QUARTZ, FELDSPAR, MICA, TRACE MINERAL
390- 400		10yR 4/4	SP- SC	POORLY GRADED SAND WITH CLAY: DARK YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 5-10% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MINERAL
400- 410		10yR 4/4	SP- SC	POORLY GRADED SAND WITH CLAY: DARK YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 10% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MINERAL
410- 420		10yR 4/4	SC	CLAYEY SAND: DARK YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND. TRACE COARSE-SUB-ROUNDED TO SUB-ANGULAR. 15-20% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MINERAL
420- 430		10yR 4/4	SC CL	CLAYEY SAND/ SANDY CLAY: DARK YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND. 25-35% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MINERAL
430- 440		10yR 4/4	SP- SC	POORLY GRADED SAND WITH CLAY: DARK YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 5-10% CLAY. QUARTZ, FELDSPAR, MICA, MINERAL
440- 450		10yR 5/4	SP- SM	POORLY GRADED SAND WITH SILT: YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 5-10% SILT. QUARTZ, FELDSPAR, TRACE MINERAL
450- 460		10yR 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 15% CLAY. QUARTZ, FELDSPAR, MICA, TRACE MINERAL
460- 470		10yR 5/4	SM ML	SILTY SAND/ SANDY SILT: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 25-35% SILT. QUARTZ, FELDSPAR, TRACE MINERAL

Borehole Lithologic Log

Borehole/ Well No. WB-3
 Client: RRBSJD
 Project No. _____ Date 6/15/15

Depth	H2O Discharge rate (gpm) / Drilling Rate (ft/hr)	Soil Color	Soil Type	Sample Description
470- 480		10yr 5/4	SM ML	Silty SAND/SANDY SILT: YELLOWISH BROWN FINE-GRAINED SAND. SOME MEDIUM-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 25-35% SILT. QUARTZ, FELDSPAR, MICA, TRACE MATRICES, TRACE CLAY
480- 490		10yr 5/4	SM	Silty SAND: YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND SUB-ROUNDED TO SUB-ANGULAR. 15-20% SILT. QUARTZ, FELDSPAR, MICA, TRACE MATRICES
490- 500		10yr 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 15% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATRICES.
500- 510		10yr 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND, WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 15% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATRICES
510- 520		10yr 5/4	SM	Silty SAND: YELLOWISH BROWN FINE-GRAINED SAND, WITH MEDIUM-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 15-20% SILT. QUARTZ, FELDSPAR, TRACE MATRICES
520- 530		10yr 5/4	CL	SANDY LEAN CLAY: YELLOWISH BROWN, FINE-GRAINED SAND WITH TRACE COARSE-GRAINED SAND. 35-40% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATRICES
530- 540		10yr 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND. 20% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATRICES
540- 550		10yr 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND. 15% CLAY QUARTZ, FELDSPAR, MATRICES, TRACE MICA.
550- 560		10yr 5/4	CL	SANDY LEAN CLAY: YELLOWISH BROWN FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND. 30-40% CLAY - HIGH DRY STRENGTH QUARTZ, FELDSPAR, MICA, MATRICES.
560- 570		10yr 5/4	CL	SANDY LEAN CLAY: YELLOWISH BROWN FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND. 40-45% CLAY. HIGH DRY STRENGTH; NO DILATANCY, MEDIUM PLASTICITY.
570- 580		10yr 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 15% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATRICES



Borehole Lithologic Log

Borehole/ Well No. W8-3

Client: REBWOOD

Project No.

Date 6/15/15

Depth	H2O Discharge rate (gpm) / Drilling Rate (ft/hr)	Soil Color	Soil Type	Sample Description
580- 590		10YR 5/4	CL	SANDY LEAN CLAY: YELLOWISH BROWN FINE-GRAINED SANDS. TRACE MEDIUM-GRAINED SAND. SAND 40-45% CLAY HIGH DRY STRENGTH; MEDIUM PLASTICITY, NO DILATANCY
590- 600		10YR 5/4	CL	SANDY LEAN CLAY: YELLOWISH BROWN FINE-GRAINED SANDS. TRACE MEDIUM-GRAINED SAND. 40-50% CLAY HIGH DRY STRENGTH, MEDIUM PLASTICITY, NO DILATANCY
600- 610		10YR 5/4	SC CL	CLAYEY SAND/SANDY CLAY: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SANDS 20-25% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATES
610- 620		10YR 5/1	CL	SANDY LEAN CLAY: GRAY: FINE-GRAINED SANDS, TRACE MEDIUM-GRAINED SAND. 60-70% CLAY. HIGH DRY STRENGTH, NO DILATANCY, MEDIUM-PLASTICITY.
620- 630		6.5YR 6/5B	CL	SANDY CLAY: BLUISH GRAY: FINE-GRAINED SANDS, TRACE MEDIUM-GRAINED SANDS 70-80% CLAY HIGH DRY STRENGTH, NO DILATANCY, MEDIUM-PLASTICITY
630- 640		10YR 5/4	SC	CLAYEY SAND: FINE-GRAINED SANDS WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. 15% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATES
640- 650		10YR 5/4	SC	CLAYEY SAND: FINE-GRAINED SANDS, SOME MEDIUM-GRAINED SAND. SUB-ANGULAR 20-25% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATES
650- 660		10YR 5/1	CL	CLAY: GREY FINE-GRAINED SANDS, SOME MEDIUM-GRAINED SANDS. 65-75% CLAY HIGH DRY STRENGTH, NO DILATANCY, MEDIUM PLASTICITY.
660- 670		6.5YR 6/5B	CL	SANDY LEAN CLAY: BLUISH GRAY FINE-GRAINED SANDS, TRACE MEDIUM-GRAINED SANDS 80-90% CLAY HIGH DRY STRENGTH, NO DILATANCY, MEDIUM PLASTICITY
670- 680		6.5YR 6/5B	CL	SANDY LEAN CLAY: BLUISH GRAY FINE-GRAINED SANDS TRACE MEDIUM-GRAINED SANDS. 70-80% CLAY HIGH DRY STRENGTH, NO DILATANCY, MEDIUM PLASTICITY
680- 690		10YR 5/4	SC	CLAYEY SAND: YELLOWISH BROWN FINE-GRAINED SANDS WITH MEDIUM-GRAINED SAND 15-20% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATES

Thomas Harder & Co.

Groundwater Consulting

* COLOR CHANGE

Borehole Lithologic Log

Borehole/ Well No. **WB-3**
 Client: **RRBUSD**
 Project No. _____ Date **6/15/15**

Depth	H2O Discharge rate (gpm) / Drilling Rate (ft/hr)	Soil Color	Soil Type	Sample Description
690-700		10yr 5/2	SC	CLAYEY SAND GRAYISH BROWN. FINE-GRAINED SAND, SAND MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR. 15-20% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATRICES
700-710		10yr 5/3	SC	CLAYEY SAND BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND. SUB-ROUNDED TO SUB-ANGULAR 15-20% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATRICES
710-720		10y 5/3	SM/ ML	SILTY SAND BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND, 25%-30% SILT QUARTZ, FELDSPAR, TRACE MATRICES
720-730		10yr 5/3	SC	CLAYEY SAND BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND 20-25% CLAY QUARTZ, FELDSPAR, TRACE MATRICES
730-740		10yr 5/4	CL	LEAN CLAY WITH SAND: YELLOWISH BROWN FINE-GRAINED SAND, SAND MEDIUM-GRAINED SAND 25-30% CLAY QUARTZ, FELDSPAR, TRACE MATRICES
740-750		10yr 5/4	CL	LEAN CLAY WITH SAND: YELLOWISH BROWN FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND 30% CLAY QUARTZ, FELDSPAR, MICA, TRACE MATRICES
* 750-760		Gley2 6/5B	CL	LEAN CLAY WITH SAND: YELLOW BLuish GREY FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND 40% CLAY
760-770		10yr 5/4	SM	SILTY SAND: YELLOWISH BROWN FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND 15-20% SILT QUARTZ, FELDSPAR, TRACE MATRICES
* 770-780		Gley2 6/5B	CL	LEAN CLAY WITH SAND: BLuish GREY FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND 30-35% CLAY QUARTZ HIGH DRY STRENGTH
780-790		Gley2 6/5B	CL	LEAN CLAY WITH SAND: BLuish GREY FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND 45-55% CLAY HIGH DRY STRENGTH, NO DILATANCY, MOD. PLASTICITY
790-800		Gley 6/5B	SL CL	SANDY CLAYEY SAND/SANDY CLAY: BLuish GREY FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND 25% CLAY QUARTZ, FELDSPAR,

Borehole Lithologic Log

Borehole/ Well No. <u>WB-3</u>
Client: <u>RRBWD</u>
Project No. _____ Date <u>6/15/15</u>

Depth	H2O Discharge rate (gpm) / Drilling Rate (ft/hr)	Soil Color	Soil Type	Sample Description
800-810		10YR 6/1	CL	SANDY LEAN CLAY: GRAY FINE-GRAINED SAND, TRACE MEDIUM-GRAINED SAND, 50-60% CLAY. HIGH ORY JEWELRY NO PLUKANEY, MED-HIGH PLUKANEY
810-820		5Y 6/5B	SC/CL	SANDY LEAN CLAY/SANDY CLAY. DULCH GRAY FINE-GRAINED SAND, SOME MEDIUM-GRAINED SAND 25-35% CLAY. QUARTZ, FELDSPAR, TRACE MAFICS
820-830		5Y 6/5B	CL	LEAN CLAY WITH SAND. DULCH GRAY FINE-GRAINED SAND TRACE MEDIUM-GRAINED SAND 40-45% CLAY. HIGH ORY JEWELRY, SUN PLUKANEY, MED-HIGH PLUKANEY
830-840		10YR 6/1	SP-SE	POORLY GRAINED SANDS WITH CLAY: GRAY FINE-GRAINED SAND WITH MEDIUM-GRAINED SAND, TRACE COARSE-GRAINED SAND. SUB-ROUND TO SUB-ANGULAR 8-10% CLAY. QUARTZ, FELDSPAR, TRACE MAFICS



*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet
No. e0102922

Page 1 of 1

Owner's Well Number ENNS # 2

Work Began 10/13/2009 Date Work Ended 11/5/2009

Local Permit Agency Kern County Environmental Health Services

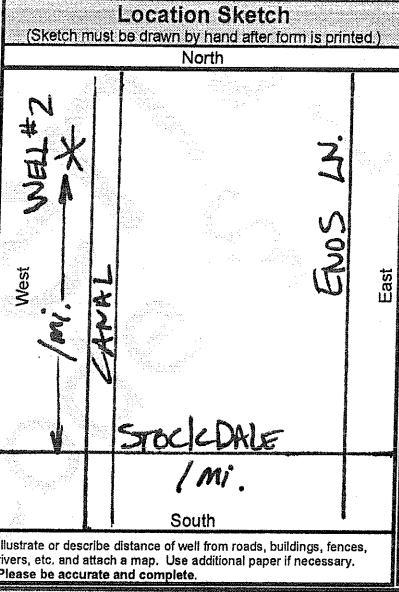
Permit Number WP 11929 Permit Date 7/28/09

DWR Use Only -- Do Not Fill In			
State, Well Number/Site Number			
Latitude		Longitude	
APN/TRS/Other			

Geologic Log		
Orientation <input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal <input type="radio"/> Angle Specify _____		
Drilling Method <u>Reverse Circulation Rotary</u> Drilling Fluid <u>Fresh Water</u>		
Depth from Surface	Description	
Feet to Feet	Describe material, grain size, color, etc	
50	180	Sand
180	210	Sand little Clay
210	250	Sand
250	265	Sand Gravel
265	275	Sand
275	285	Sand Gravel
285	300	Sand
300	325	Sand Clay
325	335	Sand
335	350	Sand Clay
350	380	Sand
380	460	Sand Clay
460	530	Sand
530	545	Sand Clay
545	550	Sand Gravel Clay
550	580	Sand Clay
580	630	Sand
630	640	Clay Sand
640	675	Sand
675	710	Sand Clay
710	720	Sand
720	725	Sand Clay
725	740	Sand
740	775	Sand Clay
775	795	Sand
795	800	Sand Clay
Total Depth of Boring <u>800</u> Feet		
Total Depth of Completed Well <u>750</u> Feet		

Well Owner	
Name	<u>Rosedale-Rio Bravo Water Storage District</u>
Mailing Address	<u>849 Allen Road</u>
City	<u>Bakersfield</u> State <u>Ca</u> Zip <u>93302</u>

Well Location	
Address	<u>1 Mi. West of Enos Ln. North on West side of canal 1 Mi</u>
City	<u>Bakersfield</u> County <u>Kern</u>
Latitude	Dec. Min. Sec. N Longitude Dec. Min. Sec. W
Datum	Decimal Lat. Decimal Long.
APN Book	<u>104</u> Page <u>280</u> Parcel <u>10</u>
Township	<u>29S</u> Range <u>25E</u> Section <u>23</u>



Activity	
<input checked="" type="radio"/> New Well	
<input type="radio"/> Modification/Repair	
<input type="radio"/> Deepen	
<input type="radio"/> Other	
<input type="radio"/> Destroy	Describe procedures and materials under "GEOLOGIC LOG"
Planned Uses	
<input checked="" type="radio"/> Water Supply	
<input type="checkbox"/> Domestic	<input type="checkbox"/> Public
<input checked="" type="checkbox"/> Irrigation	<input type="checkbox"/> Industrial
<input type="radio"/> Cathodic Protection	
<input type="radio"/> Dewatering	
<input type="radio"/> Heat Exchange	
<input type="radio"/> Injection	
<input type="radio"/> Monitoring	
<input type="radio"/> Remediation	
<input type="radio"/> Sparging	
<input type="radio"/> Test Well	
<input type="radio"/> Vapor Extraction	
<input type="radio"/> Other	

Water Level and Yield of Completed Well	
Depth to first water	<u>216</u> (Feet below surface)
Depth to Static	
Water Level	<u>216</u> (Feet) Date Measured <u>11/23/2009</u>
Estimated Yield *	<u>3,000</u> (GPM) Test Type <u>Constant Rate</u>
Test Length	<u>24.0</u> (Hours) Total Drawdown <u>93</u> (Feet)
*May not be representative of a well's long term yield.	

Casings							
Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size
Feet to Feet	(Inches)			(Inches)	(Inches)		(Inches)
0	50	42	Conductor	A 53 Grade B	.375	32	
0	460	30	Blank	Low Carbon Steel	.3125	20	
460	740	30	Perf	Ful Flo	.3125	20	Louver 0.090
740	750	30	Blank	Low Carbon Steel	.3125	20	

Annular Material			
Depth from Surface	Fill	Description	
Feet to Feet			
0	440	Cement	Annular Seal
440	445	Fill	Fine Sand
445	750	Filter Pack	# 6 Path SRI
750	760	Bentonite	Seal
760	800	Fill	Backfill

Attachments	
<input type="checkbox"/> Geologic Log	
<input type="checkbox"/> Well Construction Diagram	
<input type="checkbox"/> Geophysical Log(s)	
<input type="checkbox"/> Soil/Water Chemical Analyses	
<input type="checkbox"/> Other	
Attach additional information, if it exists.	

Certification Statement			
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief			
Name	<u>Bakersfield Well & Pump Co.</u>		
Address	<u>7212 Fruitvale Ave.</u>	City	<u>Bakersfield</u>
		State	<u>CA</u>
		Zip	<u>93308</u>
Signed		Date Signed	<u>12/18/2009</u>
		C-57 License Number	<u>440537</u>

State of California
Well Completion Report
 WCR Form Submitted 12/11/2015
 WCR2015-003794

Owner's Well Number SUP-6 Date Work Began 06/18/2015 Date Work Ended 10/06/2015
 Local Permit Agency Department of Public Health Services - Environmental Health Department
 Secondary Permit Agency _____ Permit Number WP16045 Permit Date 04/06/2015

Well Owner (must remain confidential pursuant to Water Code 13752)

Name Rosedale Rio Bravo Water Storage District
 Mailing Address 849 Allen Road
 City Bakersfield State CA Zip 93314

Planned Use and Activity

Activity New Well
 Planned Use Water Supply Irrigation - Agriculture

Well Location

Address _____ APN 407-320-07
 City _____ Zip _____ County Kern Township 29 S
 Latitude _____ N Longitude _____ W Range 26 E
 Deg. Min. Sec. Deg. Min. Sec. Section 30
 Dec. Lat. _____ Dec. Long. _____ Baseline Meridian _____
 Vertical Datum _____ Horizontal Datum WGS84 Ground Surface Elevation _____
 Location Accuracy _____ Location Determination Method _____ Elevation Accuracy _____
 Elevation Determination Method _____

Borehole Information

Orientation Vertical Specify _____
 Drilling Method Reverse Circulation Drilling Fluid Bentonite
 Total Depth of Boring 1400 Feet
 Total Depth of Completed Well 960 Feet

Water Level and Yield of Completed Well

Depth to first water _____ (Feet below surface)
 Depth to Static _____
 Water Level 307 (Feet) Date Measured 10/15/2015
 Estimated Yield* 3000 Test Type Pump
 Test Length 24 Total Drawdown 45 (Feet)
 *May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet	Description
0 1400	See Attachment

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specifications	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	50	Conductor or Fill Pipe	Low Carbon Steel	Grade: ASTM A53	0.375	36			
2	0	410	Blank	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625			
2	410	610	Screen	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625	Louver	0.08	
2	610	700	Blank	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625			
2	700	920	Screen	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625	Louver	0.08	
2	920	960	Blank	Corrosion-Resistant High Strength Low-Alloy Steel	Nominal Size: 20 in. Thickness: 5/16 in. OD: 20-5/8 in.	0.3125	20.625			
3	0	690	Blank	Low Carbon Steel	Grade: ASTM A53	0.25	3.5			Sounding Tube
4	0	315	Blank	Low Carbon Steel	Grade: ASTM A53	0.25	3.5			Gravel Feed Tube

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	300	Cement	10.3 Sack Mix		
300	310	Other Fill	See description.		Fine Sand
310	960	Filter Pack	Other Gravel Pack	1/4 x 16	
960	1400	Other Fill	See description.		pea gravel

Other Observations:

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	50	42
50	960	32
960	1400	17.5

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name BEST DRILLING AND PUMP INC
Person, Firm or Corporation
 1640 W PELLISIER ROAD COLTON CA 92324
Address City State Zip

Signed _____ 12/11/2015 826672
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

Attachments

Sup-6_Lith_Log.pdf - Geologic Log

DWR Use Only

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Site Number / State Well Number

												N
												W

Latitude Deg/Min/Sec

Longitude Deg/Min/Sec

TRS:

APN:

Lithologic Log

Client: RRBWSD	Drilling Contractor: Best Drilling
Borehole/ Well No: SUP-6	Drilling Method: Fluid Reverse Circulation
Project Number: 15-054-110	Borehole Diameter: 17.5 inches
Project: Drought Relief Project	Location of boring/ Well (State Plane, NAD 83): X: 6196360.447 Y: 2324228.711
Start Date: 7/14/2015	
Finish Date: 7/17/2015	
Logged By: MH	

Depth	Graphic Log	Color	Sample Description
0	SP	10 YR 4/3 Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand. Sub-rounded to rounded. Quartz, feldspar, mica, trace mafics.
-10		10 YR 4/3 Brown	POORLY GRADED SAND: Fine-grained Sand, with medium-grained sand. Sub-rounded to Rounded. Quartz, feldspar, mica, trace mafics.
-20		10 YR 4/3 Brown	POORLY GRADED SAND: Fine-grained Sand, with medium-grained sand. Sub-rounded to Rounded. Quartz, feldspar, mica, trace mafics.
-30		10 YR 4/3 Brown	POORLY GRADED SAND: Fine-grained Sand, with medium-grained sand. Sub-rounded to Rounded. Quartz, feldspar, mica, trace mafics.
-40	SC/GL	10 YR 6/3 Pale Brown	CLAYEY SAND/SANDY CLAY: dried sand with clay balls. Fine-grained sand, some medium-grained sand. 30-40% Clay. Quartz and feldspar.
-50	SP	10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained Sand, with medium-grained sand. Sub-rounded to Rounded. Quartz, feldspar, mica, trace mafics.
-60		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained Sand, with medium-grained sand. Sub-rounded to Rounded. Quartz, feldspar, mica, trace mafics.
-70		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained Sand, with medium-grained sand. Sub-rounded to Rounded. Quartz, feldspar, mica, trace mafics.
-80		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained Sand, with medium-grained sand. Sub-rounded to Rounded. Trace Clay. Quartz, feldspar, mica, trace mafics.
-90			

Borehole Lithologic Log

Borehole/ Well No.:	SUP-6
Client:	RRBWSD
Project No.:	15-054-110

Depth	Graphic Log	Color	Sample Description
-90		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-100	SP-SC	10 YR 3/3 Dark Brown	POORLY GRADED SAND WITH CLAY: Fine-grained sand, with medium-grained sand. Sub-rounded to rounded. 5-10% clay. Quartz, feldspar, mica, trace mafics.
-110		10 YR 3/3 Dark Brown	POORLY GRADED SAND WITH CLAY: Fine-grained sand, some medium-grained sand. Sub-rounded to rounded. 10% clay. Quartz, feldspar, mica, trace mafics.
-120	SP	10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-130	SC	10 YR 3/3 Dark Brown	CLAYEY SAND: Fine-grained sand, trace medium to coarse-grained sand, trace gravel up to 3.5 cm. Sub-rounded to angular. >15% clay. Quartz, feldspar, mica, trace mafics.
-140	SP	10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained sand with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-150		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained sand with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-160		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained sand with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Trace silt. Quartz, feldspar, mica, trace mafics.
-170		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained sand with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-180	SP-SC	10 YR 3/3 Dark Brown	POORLY GRADED SAND WITH CLAY: Fine-grained sand, some medium-grained sand. Sub-rounded to rounded. 10-12% clay. Quartz, feldspar, mica, trace mafics.
-190	SP	10 YR 4/3 Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-200		10 YR 4/3 Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Trace clay and silt. Quartz, feldspar, mica, trace mafics.
-210			

Borehole Lithologic Log

Borehole/ Well No.:	SUP-6
Client:	RRBWSD
Project No.:	15-054-110

Depth	Graphic Log	Color	Sample Description
-220		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand, trace gravel up to 2 cm. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-230		10 YR 5/3 Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-240		10 YR 5/2 Grayish Brown	POORLY GRADED SAND: Fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Trace Clay. Quartz, feldspar, mica, trace mafics.
-250		10 YR 5/2 Grayish Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-260		10 YR 3/3 Dark Brown	CLAYEY SAND: Fine-grained sand, some medium-grained sand. Sub-rounded to rounded. 15-20% clay. Quartz, feldspar, mica, trace mafics.
-270		10 YR 5/2 Grayish Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, mica, trace mafics.
-280		10 YR 4/3 Brown	POORLY GRADED SAND WITH CLAY: Fine-grained sand, some medium-grained sand. Sub-rounded to rounded. 10-12% clay. Quartz, feldspar, trace mafics and mica.
-290		10 YR 4/3 Brown	POORLY GRADED SAND WITH CLAY: Fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 10-12% clay. Quartz, feldspar, trace mafics and mica.
-300		10 YR 4/3 Brown	SANDY CLAY: 10% fine-grained sand, trace medium- to coarse-grained sand. 50-60% clay. High dry strength, slow/no dilatancy, medium plasticity.
-310		10 YR 4/3 Brown	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace medium to coarse-grained sand. 40-50% clay. Quartz, feldspar, mica
-320		10 YR 4/3 Brown	CLAYEY SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 15% clay. Quartz, feldspar, mica, trace mafics.
-330		10 YR 4/3	POORLY GRADED SAND: Fine-grained sand, with medium grained sand, trace coarse-grained

Borehole Lithologic Log	Borehole/ Well No.: SUP-6
	Client: RRBWSD
	Project No.: 15-054-110

Depth	Graphic Log	Color	Sample Description
		Brown	sand. Sub-rounded to sub-angular. Trace clay and silt. Quartz, feldspar, mica, trace mafics.
-340	CL	10 YR 4/3 Brown	SANDY CLAY: 15% fine-grained sand, trace medium-grained sand. 50-60% clay. High dry strength, medium-plasticity, no/slow dilatancy.
-350		10 YR 4/3 Brown	CLAY: 20% fine-grained sand, 10% medium-grained sand, trace silt. 50% clay. Medium to high dry strength, slow dilatancy, medium plasticity.
-360		10 YR 4/3 Brown	SANDY CLAY: 10% fine-grained sand, trace medium to coarse-grained sand, trace gravel up to 3 cm. 50-60% clay. High dry strength, slow dilatancy, medium plasticity.
-370		10 YR 4/3 Brown	CLAY: 20% fine-grained sand, 10% medium-grained sand, trace silt. 50% clay. Medium to high dry strength, slow dilatancy, medium plasticity.
-380		10 YR 4/3 Brown	CLAY: 15-20% fine-grained sand, some medium-grained sand. 60-65% clay. Medium to high dry strength, slow/no dilatancy, medium plasticity.
-390		10 YR 4/3 Brown	CLAY: 15-20% fine-grained sand, some medium-grained sand. 60-65% clay. Medium to high dry strength, slow/no dilatancy, medium plasticity.
-400	CL	10 YR 4/3 Brown	SANDY CLAY: 20% Fine-grained sand, 10% medium-grained sand. 60-70% clay. High dry strength, slow dilatancy, medium plasticity
-410	SC/GL	10 YR 4/3 Brown	CLAYEY SAND/SANDY CLAY: cemented fine-grained sand with clay, trace medium-grained sand. 30-40% clay. Medium to high dry strength. Quartz, feldspar, trace mafics.
-420	CL	10 YR 4/3 Brown	SANDY CLAY: 10-15% fine-grained sand, trace medium to coarse-grained sand. 60-70% clay. High dry strength, medium plasticity, slow dilatancy.
-430		10 YR 4/3 Brown	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 70-80% clay. High dry strength, medium plasticity, slow/no dilatancy.
-440		10 YR 4/3 Brown	CLAY: 20% fine-grained sand, some medium-grained sand. 60-65% clay. High dry strength, slow/no dilatancy, medium plasticity.
-450		10 YR 4/3 Brown	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, no dilatancy, medium plasticity.

Borehole Lithologic Log

Borehole/ Well No.:	SUP-6
Client:	RRBWSD
Project No.:	15-054-110

Depth	Graphic Log	Color	Sample Description
-460	SC/CL	10 YR 4/3 Brown	CLAYEY SAND/SANDY CLAY: Fine-grained sand, some medium-grained sand. 40-50% clay. Quartz, feldspar, mica, trace mafics.
-470	SC	10 YR 5/2 Grayish Brown	CLAYEY SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 15% clay. Quartz, feldspar, trace mafics and mica
-480	SC/CL	10 YR 6/3 Pale Brown	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace medium to coarse-grained sand. 35-45% clay. Quartz, feldspar, mica, trace mafics.
-490	CL	10 YR 4/1 Dark Gray	SANDY CLAY: 10% Fine-grained sand, trace medium-grained sand. 55-65% clay. High dry strength, slow dilatancy, medium plasticity.
-500	SP-SC	10 YR 5/2 Grayish Brown	POORLY GRADED SAND WITH CLAY: Fine-grained sand, some medium-grained sand, trace coarse-grained sand (iron-oxidized). Sub-rounded to rounded. 5-10% clay. Quartz, feldspar, trace mafics.
-510	SP	10 YR 7/2 Light Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, trace mafics.
-520	SW	10 YR 7/2 Light Gray	WELL GRADED SAND: Fine-grained sand, with medium-grained sand, some coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, trace mafics.
-530	CL	10 YR 4/3 Brown	SANDY CLAY: 10% Fine-grained sand, trace medium-grained sand. 50-60% clay. High dry strength, slow/no dilatancy, medium plasticity.
-540	SM	10 YR 6/3 Pale Brown	SILTY SAND: Fine-grained sand, some medium to coarse-grained sand. Sub-rounded to rounded. 15% silt. Quartz, feldspar, mica, trace mafics.
-550	SM	10 YR 6/3 Pale Brown	SILTY SAND: Fine-grained sand, some medium to coarse-grained sand. Sub-rounded to rounded. 15% silt. Quartz, feldspar, mica, trace mafics.
-560	CL	GLE Y 2 5/10B Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 70-80% clay. High dry strength, no dilatancy, medium plasticity.
-570	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. Quartz, feldspar, trace mafics.

Borehole Lithologic Log

Borehole/ Well No.: SUP-6
 Client: RRBWSD
 Project No.: 15-054-110

Depth	Graphic Log	Color	Sample Description
-580	SP-SC	10 YR 5/2 Grayish Brown	POORLY GRADED SAND WITH CLAY: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 10-12% clay. Quartz, feldspar, trace mafics cemented.
-590	SC/CL	10 YR 4/1 Dark Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace medium-grained sand. 40-50% clay. High dry strength. Quartz, feldspar, trace mafics.
-600		10 YR 4/2 Dark Grayish Brown	CLAYEY SAND/SANDY CLAY: Cemented fine-grained sand, trace medium-grained sand. 40-50% clay. High dry strength. Quartz, feldspar, trace mafics.
-610	CL	GLEY 2 4/10G Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium- to coarse-grained sand. 50-60% clay. High dry strength, medium plasticity, slow/no dilatancy.
-620	SC/CL	GLEY 2 4/10G Bluish Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, some medium-grained sand, trace coarse-grained sand. 40-50% clay. Quartz, feldspar, trace mica and mafics.
-630	CL	GLEY 2 4/10G Bluish Gray	SANDY CLAY: <10% fine-grained sand, trace medium-grained sand. 70-80% clay. High dry strength, no dilatancy, medium plasticity.
-640	SC/CL	10 YR 4/1 Dark Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, some medium-grained sand. 40-50% clay. High dry strength. Quartz, feldspar.
-650	CL	GLEY 2 7/10B Light Bluish Gray	SANDY CLAY: Cemented clay and sand. <10% fine-grained sand. 60-70% clay as balls. High dry strength, low/medium plasticity, no dilatancy.
-660		GLEY 2 4/10G Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 70-80% clay. High dry strength, no dilatancy, medium plasticity.
-670	SC/CL	GLEY 2 4/10G Bluish Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace medium to coarse-grained sand. 45-55% clay. High dry strength, slow dilatancy, medium plasticity. Quartz, feldspar, trace mafics.
-680	CL	GLEY 2 4/10G Bluish Gray	SANDY CLAY: Cemented clay and sand. 10% fine-grained sand. 70-80% clay. High dry strength, medium plasticity, no dilatancy.
-690	SC/CL	GLEY 2 5/5B Bluish Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, some medium-grained sand. 30-40% clay. Quartz, feldspar, mica, trace mafics.
-700			



Borehole Lithologic Log

Borehole/ Well No.:	SUP-6
Client:	RRBWS
Project No.:	15-054-110

Depth	Graphic Log	Color	Sample Description
-700	SP	10 YR 5/2 Grayish Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-710	CL	GLEY 2 5/5B Bluish Gray	SANDY CLAY: 20-25% fine-grained sand, trace medium-grained sand. 50-60% clay. High dry strength, slow dilatancy, medium plasticity.
-720	CL	GLEY 2 5/5B Bluish Gray	SANDY CLAY: 30% fine-grained sand, trace medium to coarse-grained sand. 50-60% clay. High dry strength, slow dilatancy, medium plasticity.
-730	SC/CL	GLEY 2 5/5B Bluish Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace medium-grained sand. 40-50% clay. High dry strength. Quartz, feldspar, trace mafics.
-740	CL	GLEY 2 5/5B Bluish Gray	SANDY CLAY: 10% fine-grained sand (cemented), trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, no dilatancy.
-750	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-760	CL	GLEY 2 5/5B Bluish Gray	SANDY CLAY: 10% Fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, no dilatancy.
-770	CL	10 YR 5/2 Grayish Brown	SANDY CLAY: 10-15% Fine-grained sand, trace medium-grained sand. 50-60% clay. High dry strength, medium plasticity, slow/no dilatancy.
-780	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-790	CL	GLEY 2 5/5B Bluish Gray	SANDY CLAY: 10-15% Fine-grained sand, trace medium-grained sand. 50-60% clay. High dry strength, medium plasticity, slow/no dilatancy.
-800	CL	GLEY 2 5/5B Bluish Gray	SANDY CLAY: 10% Fine-grained sand, 70-80% clay. High dry strength, medium plasticity, no dilatancy.
-810	SC	GLEY 2 5/5B Bluish Gray	CLAYEY SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 15% clay. Quartz, feldspar, trace mafics
-820	SC		

Borehole Lithologic Log

Borehole/ Well No.:	SUP-6
Client:	RRBWSD
Project No.:	15-054-110

Depth	Graphic Log	Color	Sample Description
-830	SP=SC	10 YR 5/1 Gray	POORLY GRADED SAND WITH CLAY: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 5-10% clay. Quartz, feldspar, trace mafics
-840		10 YR 5/1 Gray	POORLY GRADED SAND WITH CLAY: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 10% clay. Quartz, feldspar, trace mafics
-850	CL	10 YR 4/1 Dark Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, slow/no dilatancy.
-860		10 YR 4/1 Dark Gray	SANDY CLAY: 15-20% fine to medium-grained sand. 50-60% clay. High dry strength, medium plasticity, slow dilatancy.
-870		10 YR 5/2 Brownish Gray	SANDY CLAY: 15-20% cemented fine-grained sand, trace medium-grained sand, 60-70% clay. Very high dry strength, low plasticity, no dilatancy.
-880		10 YR 4/1 Dark Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, slow dilatancy, medium plasticity.
-890	SP=SC	10 YR 5/1 Gray	POORLY GRADED SAND WITH CLAY: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. 5-10% clay. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-900	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-910		10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-920	CL	GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, no dilatancy, medium plasticity.
-930		GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, no dilatancy, medium plasticity.
-940	CL/SC	GLE Y 2 5/5B Bluish Gray	CLAYEY SAND/SANDY CLAY: 30% fine-grained sand, trace medium-grained sand. 45-55% clay. High dry strength, slow dilatancy. Quartz, feldspar, trace mafics.
-940	CL	GLE Y 2 5/5B	CLAY: 20% fine-grained sand, some medium-grained sand. 60% clay. High dry strength,



Borehole Lithologic Log

Borehole/ Well No.: SUP-6
 Client: RRBWSD
 Project No.: 15-054-110

Depth	Graphic Log	Color	Sample Description
		Bluish Gray	medium plasticity, slow dilatancy.
-950		GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 10% Fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, no dilatancy.
-960		GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 70-80% clay. High dry strength, no dilatancy, medium plasticity.
-970	SC/CL	GLE Y 2 5/5B Bluish Gray	CLAYEY SAND/SANDY CLAY: 30% fine-grained sand, trace medium-grained sand. 40-50% clay. High/medium dry strength. Quartz, feldspar, trace mafics.
-980	CL	10 YR 5/1 Gray	SANDY CLAY: Cemented sand and clay, 10% fine-grained sand, trace medium-grained sand. 70-80% clay. High dry strength, low plasticity, no dilatancy.
-990		10 YR 4/1 Dark Gray	SANDY CLAY: 10% Fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, no dilatancy.
-1000		10 YR 4/1 Dark Gray	SANDY CLAY: 15-20% fine to medium-grained sand. 50-60% clay. High dry strength, medium plasticity, slow/no dilatancy.
-1010		10 YR 4/2 Dark Grayish Brown	SANDY CLAY: 10% Fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, no dilatancy.
-1020		10 YR 5/1 Gray	SANDY CLAY: Cemented sand with clay, 10% fine-grained sand. 70-80% clay. Very high dry strength, low plasticity, medium plasticity.
-1030		10 YR 4/1 Dark Gray	SANDY CLAY: 15-20% Fine to medium-grained sand. 50-60% clay. High dry strength, slow dilatancy, medium plasticity.
-1040	SP	10 YR 5/2 Grayish Brown	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-1050	SC/CL	10 YR 4/1 Dark Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, some medium-grained sand. Sub-rounded to rounded. 40-50% clay. Quartz, feldspar, trace mafics.
-1060	CL	10 YR 4/2 Dark Grayish	SANDY CLAY: 20-30% fine to medium-grained sand. 50-60% clay. High dry strength, medium plasticity, slow/no dilatancy



Borehole Lithologic Log

Borehole/ Well No.:	SUP-6
Client:	RRBWS
Project No.:	15-054-110

Depth	Graphic Log	Color	Sample Description
-1070	SP	Brown 10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-1080	SC	10 YR 4/1 Dark Gray	CLAYEY SAND: Fine-grained sand, some medium-grained sand. Sub-rounded to rounded. 20-25% clay. Quartz, feldspar, trace mafics.
-1090	CL	GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, slow/no dilatancy, medium plasticity.
-1100		GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, slow/no dilatancy, medium plasticity.
-1110		10 YR 5/2 Grayish Brown	SANDY CLAY: 10-15% Fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, slow/no dilatancy.
-1120	SC	10 YR 4/1 Dark Gray	CLAYEY SAND: Fine-grained sand, some medium-grained sand, trace coarse-grained sand. 20-25% clay. Sub-rounded to sub-angular. Quartz, feldspar, trace mafics.
-1130	SC/CL	10 YR 4/1 Dark Gray	CLAYEY SAND/SANDY CLAY: 30% fine to medium-grained sand. 40-50% clay. High dry strength, medium plasticity. Quartz, feldspar, trace mafics.
-1140	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand, trace coarse-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-1150	SC	10 YR 4/1 Dark Gray	CLAYEY SAND: Fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 20-25% clay. Quartz, feldspar, trace mafics.
-1160	SC/CL	GLE Y 2 5/5B Bluish Gray	CLAYEY SAND/SANDY CLAY: 30% fine-grained sand, trace medium-grained sand. 40-50% clay. High dry strength. Quartz, feldspar, trace mafics.
-1170	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-1180		10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand. Sub-rounded to rounded. Trace silt. Quartz, feldspar, trace mafics.



Borehole Lithologic Log

Borehole/ Well No.:	SUP-6
Client:	RRBWSD
Project No.:	15-054-110

Depth	Graphic Log	Color	Sample Description
-1190	SC	10 YR 5/1 Gray	CLAYEY SAND: Fine-grained sand, some medium-grained sand, trace coarse-grained sand. Sub-rounded to sub-angular. 15-20% clay. Quartz, feldspar, trace mafics
-1200	CL	10 YR 4/1 Dark Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, slow/no dilatancy.
-1210	SC/CL	10 YR 4/1 Dark Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, some medium to coarse-grained sand. Sub-rounded to sub-angular. 30-40% clay. Quartz, feldspar, trace mafics.
-1220	SC/CL	10 YR 4/1 Dark Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace gravel. Sub-rounded to sub-angular. 30-40% clay. Quartz, feldspar, trace mafics.
-1230	CL	GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, slow dilatancy
-1240	SC	GLE Y 2 5/5B Bluish Gray	CLAYEY SAND: Fine-grained sand, some medium to coarse-grained sand. 20-25% clay. Quartz, feldspar, trace mafics.
-1250	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand. Sub-rounded to rounded. Trace clay. Quartz, feldspar, trace mafics.
-1260	CL	10 YR 4/1 Dark Gray	SANDY CLAY: 20-30% fine-grained sand, trace medium-grained. 50-60% clay. High dry strength, medium plasticity, slow dilatancy.
-1270	SC/CL	10 YR 4/1 Dark Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace medium-grained sand. 40-50% clay. High dry strength. Quartz, feldspar, trace mafics.
-1280	CL	GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 20% fine-grained sand, trace medium-grained sand. 50-60% clay. High dry strength, medium plasticity, slow dilatancy.
-1290	CL	GLE Y 2 5/5B Bluish Gray	SANDY CLAY: 10% fine-grained sand, trace medium-grained sand. 70-80% clay. High dry strength, medium plasticity, slow/no dilatancy.
-1300	CL	10 YR 4/1 Dark Gray	SANDY CLAY: 10% Fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, no dilatancy.
-1310			

Borehole Lithologic Log

Borehole/ Well No.: SUP-6
Client: RRBWSD
Project No.: 15-054-110

Depth	Graphic Log	Color	Sample Description
-1310	SC/CL	10 YR 5/1 Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace medium-grained sand. 40-50% clay. High dry strength. Quartz, feldspar, trace mafics.
-1320	CL	GLEYS 2 5/5B Bluish Gray	SANDY CLAY: 10-15% Fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium plasticity, slow/no dilatancy.
-1330	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-1340	CL	10 YR 5/1 Gray	SANDY CLAY: 15% Fine-grained sand, trace medium-grained sand. 60-70% clay. High dry strength, medium/low plasticity, no dilatancy.
-1350		10 YR 4/1 Dark Gray	SANDY CLAY: 15% Fine-grained sand, trace medium-grained sand. 50-60% clay. High dry strength, medium plasticity, slow dilatancy.
-1360		10 YR 4/1 Dark Gray	SANDY CLAY: 10-15% Fine-grained sand. 60-70% clay. High dry strength, medium plasticity, slow/no dilatancy.
-1370	SC/CL	10 YR 4/1 Dark Gray	CLAYEY SAND/SANDY CLAY: Fine-grained sand, trace medium-grained sand. 40-50% clay. High dry strength. Quartz, feldspar, trace mafics.
-1380	SP-SC	10 YR 5/1 Gray	POORLY GRADED SAND WITH CLAY: Fine-grained sand, with medium-grained sand. 10-15% clay. Quartz, feldspar, trace mafics.
-1390	SP	10 YR 5/1 Gray	POORLY GRADED SAND: Fine-grained sand, with medium-grained sand. Sub-rounded to rounded. Quartz, feldspar, trace mafics.
-1400			

Notes:
 Grain size distribution and percentages are approximate based on visual inspection of samples.
 Soil types classified based on Unified Soil Classification System.
 Soil color based on Munsell Soil Color Charts.

Attachment 3 USBR – RRBWSD Agreement

UNITED STATES DEPARTMENT OF THE INTERIOR

ASSISTANCE AGREEMENT

R22AP00342

Between

Bureau of Reclamation

And

Rosedale-Rio Bravo Water Storage District

For

Groundwater Banking Recovery Project

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**Financial Assistance Agreement
Between
Bureau of Reclamation
And
Rosedale-Rio Bravo Water Storage District
For
Groundwater Banking Recovery Project**

I. OVERVIEW AND SCHEDULE

1. AUTHORITY

This Financial Assistance Agreement (Agreement) is entered into between the United States of America, acting through the Department of the Interior, Bureau of Reclamation (Reclamation) and *Rosedale-Rio Bravo Water Storage District* (Recipient), pursuant to Section 9504(a) of the SECURE WATER ACT, Subtitle F of Title IX of the OMNIBUS PUBLIC LAND MANAGEMENT ACT OF 2009, Public Law 111-11 (42 U.S.C. 10364) (the “Act”). The following section, provided in full text, authorizes Reclamation to award this Agreement:

SEC. 9504. WATER MANAGEMENT IMPROVEMENT.

(a) AUTHORIZATION OF GRANTS AND COOPERATIVE AGREEMENTS.—

(1) AUTHORITY OF SECRETARY.—The Secretary may provide any grant to, or enter into an agreement with, any eligible applicant to assist the eligible applicant in planning, designing, or constructing any improvement—

(A) to conserve water;

(B) to increase water use efficiency;

(C) to facilitate water markets;

(D) to enhance water management, including increasing the use of renewable energy in the management and delivery of water;

(E) to accelerate the adoption and use of advanced water treatment technologies to increase water supply;

(F) to prevent the decline of species that the United States Fish and Wildlife Service and National Marine Fisheries Service have proposed for listing under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (or candidate species that are being considered by those agencies for such listing but are not yet the subject of a proposed rule);

- (G) *to accelerate the recovery of threatened species, endangered species, and designated critical habitats that are adversely affected by Federal reclamation projects or are subject to a recovery plan or conservation plan under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) under which the Commissioner of Reclamation has implementation responsibilities; or*
- (H) *to carry out any other activity—*
- (i) *to address any climate-related impact to the water supply of the United States that increases ecological resiliency to the impacts of climate change; or*
 - (ii) *to prevent any water-related crisis or conflict at any watershed that has a nexus to a Federal reclamation project located in a service area.*

2. PUBLIC PURPOSE OF SUPPORT OR STIMULATION

The proposed *Groundwater Banking Recovery Project* (Project) will *increase the reliability of water supplies; improve water management; and provide drought resiliency.*

3. BACKGROUND AND OBJECTIVES

Through WaterSMART (Sustain and Manage America’s Resources for Tomorrow), Reclamation leverages Federal and non-Federal funding to work cooperatively with states, tribes, and local entities as they plan for and implement actions to increase water supply reliability through investments and attention to local water conflicts.

Reclamation’s WaterSMART Drought Response Program supports a proactive approach to drought by providing financial assistance to water managers to develop and update comprehensive drought plans (Drought Contingency Planning) and implement projects that will build long-term resiliency to drought (Drought Resiliency Projects).

Through the Drought Response Program, Reclamation invites states, tribes, irrigation districts, water districts, organizations with water or power delivery authority, and non-profit conservation groups to leverage their money and resources by cost sharing with Reclamation on Drought Resiliency Projects that will increase the reliability of water supplies; improve water management; and provide drought resiliency.

The Rosedale-Rio Bravo Water Storage District (District), located in the southern San Joaquin Valley of Kern County, California, operates an expansive groundwater recharge and banking program that utilizes over 2,000 acres of recharge basins for direct recharge or surface water supplies and in-lieu banking activities. This project will expand the District’s groundwater banking and recovery efforts by constructing three extraction wells and necessary conveyance facilities at existing recharge basins for the recovery and distribution of previously stored water. With continued severe drought conditions in the area, the District and its groundwater banking

partners increasingly face surface water reductions. This groundwater banking recovery project will provide an average annual water supply of 3,258 acre-feet, providing drought resiliency for the District and its banking partners. The project is supported by the District's Comprehensive Groundwater Sustainability Plan.

4. PERIOD OF PERFORMANCE AND FUNDS AVAILABILITY

This Agreement becomes effective on the date shown in block 1 of the United States of America, Department of the Interior, Notice of Award (NOA). The Agreement shall remain in effect through the date shown in block 6 of the NOA. The project period for this Agreement may only be changed through written amendment of the Agreement by a Reclamation Grants Officer (GO).

No legal liability on the part of the Government for any payment may arise until funds are made available, in writing, to the Recipient by a Reclamation GO. The total estimated project cost for this Agreement is \$4,152,863.00 and the total estimated amount of federal funding is \$2,000,000.00. The initial amount of federal funds available is limited to \$2,000,000.00 as indicated by "Amount of Financial Assistance This Action" within block 12 of the NOA. Subject to the availability of Congressional appropriations, subsequent funds will be made available for payment through written amendments to this Agreement by a Reclamation GO.

5. SCOPE OF WORK AND MILESTONES

Under this Agreement, the Recipient shall drill three production wells to increase the District's ability to recover groundwater from storage within the Kern Fan area of the groundwater basin. The project shall consist of three new extraction wells and a new pipeline into existing conveyance lines. The project is located southern San Joaquin Valley in Kern County, California, immediately west of the City of Bakersfield.

The approximate well locations are as follows:

- **McCaslin Well 1**
Latitude: 35°22'21.58"N
Longitude: 119°17'10.64"W
- **McCaslin Well 2**
Latitude: 35°22'21.76"N
Longitude: 119°16'27.96"W
- **Bowling Well 1**
Latitude: 35°22'32.51"N
Longitude: 119°13'35.06"

The major components of the project include but are not limited to:

- Planning & engineering design
- Site survey and inspection
- Environmental compliance
- Bid preparation and contract documentation
- Construction activities including inspections
- Project closeout

The milestones for completing the scope of work are:

Milestone / Task / Activity	Planned Start Date	Planned Completion Date
Complete environmental and reports	01/2022	12/2023
Well design	10/2022	02/2023
Conveyance facility design	02/2023	05/2023
Well drilling, equipping, and pump testing	05/2023	12/2023
Conveyance facility installation and testing	08/2023	12/2023
Project end date	05/2022	12/2023

6. RESPONSIBILITY OF THE PARTIES

6.1 Recipient Responsibilities

6.1.1 The Recipient shall carry out the Scope of Work (SOW) in accordance with the terms and conditions stated herein. The Recipient shall adhere to Federal, state, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. If the SOW contains construction activities, the Recipient is responsible for construction inspection, oversight, and acceptance. If applicable, the Recipient shall also coordinate and obtain approvals from site owners and operators.

6.1.2 Interim Performance Reports. The Recipient shall prepare and submit to Reclamation interim Project performance reports (Interim Performance Reports) as required by Section I.10 of this Agreement. Each Interim Performance Report will include (but is not limited to) the information identified in paragraph I.10.3 and will discuss the following:

- A comparison of actual accomplishments to the milestones established by the financial assistance agreement for the reporting period
- The reasons why established milestones were not met, if applicable
- The status of milestones from the previous reporting period that were not met, if applicable
- Whether the Project is on schedule and within the original cost estimate
- Any additional pertinent information or issues related to the status of the Project

6.1.3 Final Project Report. The Recipient shall prepare and submit to Reclamation a final Project performance report (Final Project Report) as required by Section I.10 of this Agreement. The Final Project Report will include (but is not limited to) the information identified in paragraph I.10.3 and will discuss the following:

- Whether the Project objectives and goals were met
- Discussion of the benefits achieved by the Project, including information and/or calculations supporting the benefits
- How the Project improves long-term resiliency to drought
- How the Project demonstrates collaboration, if applicable

Photographs documenting the project are also appreciated. Recipient understands that Reclamation may print photos with appropriate credit to Recipient. Recipient also understands that the Final Project Report is a public document and may be made available on Reclamation's website, www.usbr.gov/drought.

6.2 Reclamation Responsibilities

6.2.1 Reclamation will monitor and provide Federal oversight of activities performed under this Agreement. Monitoring and oversight includes review and approval of financial status and performance reports, payment requests, and any other deliverables identified as part of the SOW. Additional monitoring activities may include site visits, conference calls, and other on-site and off-site monitoring activities. At the Recipient's request, Reclamation may also provide technical assistance to the Recipient in support of the SOW and objectives of this Agreement.

7. BUDGET

7.1 Budget Estimate. The following is the estimated budget for this Agreement. As Federal financial assistance agreements are cost-reimbursable, the budget provided is for estimation purposes only. Final costs incurred under the budget categories listed may be either higher or lower than the estimated costs. All costs incurred by the Recipient under this Agreement must be in accordance with any pre-award clarifications conducted between the Recipient and Reclamation, as well as with the terms and conditions of this Agreement. Final determination of the allowability, allocability, or reasonableness of costs incurred under this Agreement is the responsibility of the GO. Recipients are encouraged to direct any questions regarding allowability, allocability or reasonableness of costs to the GO for review prior to incurrence of the costs in question.

Summary			
Category	Total Cost	Federal Estimated Amount	Non-Federal Estimated Amount
a. Personnel	\$0		
b. Fringe Benefits	\$0		
c. Travel	\$0		
d. Equipment	\$0		
e. Supplies	\$0		
f. Contractual	\$0		
g. Construction	\$4,152,863		
h. Other Direct Costs	\$0		
i. Total Direct Costs	\$4,152,863		
i. Indirect Charges	\$0		
Total Costs	\$4,152,863	\$2,000,000	\$2,152,863
Cost Share Percentage		48%	52%

7.2 Cost Sharing Requirement

At least 50% non-Federal cost-share is required for costs incurred under this Agreement. Based on the budget estimate reflected in Section 7.1 above, the estimated Federal share of allowable costs is **48% (\$2,000,000.00)** and the Recipient's estimated non-Federal cost share is **52% (\$2,152,863.00)**. The Federal share of allowable costs shall not be expended in advance of the Recipient's non-Federal share. It is expected that expenditure of Federal and non-Federal funds based upon the estimated cost share percentages shall occur concurrently. At the end of the period of performance, if the final costs are lower than the original estimate and the 50% non-Federal cost share is met, the final payment and financial report can reflect a lower Recipient cost share than the original budget estimate.

If a bona fide need arises which requires the expenditure of Federal funds in advance of the Recipient share, then the Recipient must request written approval from the Reclamation GO prior to the expenditure. Recipient may not expend their agreed upon share of costs in advance of the expenditure of Federal funds without prior written approval.

7.3 Pre-Award Incurrence of Costs

The Recipient is not authorized to incur costs prior to the award of this Agreement. Costs incurred prior to the award of this Agreement are not allowable.

7.4 Allowable Costs

Costs incurred for the performance of this Agreement must be allowable, allocable to the project, and reasonable. The following regulations, codified within the Code of Federal Regulations (CFR), governs the allowability of costs for Federal financial assistance:

2 CFR 200 Subpart E, “Cost Principles”

Expenditures for the performance of this Agreement must conform to the requirements within this CFR. The Recipient must maintain sufficient documentation to support these expenditures. Questions on the allowability of costs should be directed to the GO responsible for this Agreement.

The Recipient shall not incur costs or obligate funds for any purpose pertaining to operation of the program or activities beyond the expiration date stated in the Agreement. The only costs which are authorized for a period of up to 120 days following the project period are those strictly associated with closeout activities for preparation of the final reports.

7.5 Revision of Budget and Program Plans

In accordance with 2 CFR 200.308(h) the recipient must request prior written approval for any of the following changes:

- (a) A change in the approved scope of work or associated tasks, even if there is no associated budget revisions.
- (b) Revisions which require additional Federal funds to complete the project.
- (c) Revisions which involve specific costs for which prior written approval requirements may be imposed consistent with OMB cost principles listed in 2 CFR 200 Subpart E “Cost Principles”.

7.6 Amendments

Any changes to this Agreement shall be made by means of a written amendment. Reclamation may make changes to the Agreement by means of a unilateral amendment to address changes in address, no-cost time extensions, changes to Key Personnel, the addition of previously agreed upon funding, or administrative corrections which do not impact the terms and conditions of this agreement. Additionally, a unilateral amendment may be utilized by Reclamation if it should become necessary to suspend or terminate the Agreement in accordance with 2 CFR 200.340.

All other changes shall be made by means of a bilateral amendment to the Agreement. No oral statement made by any person, or written statement by any person other than the GO, shall be allowed in any manner or degree to amend, modify or otherwise effect the terms of the Agreement.

All requests for amendment of the Agreement shall be made in writing, provide a full description of the reason for the request, and be sent to the attention of the GO. Any request for project

period extension shall be made at least 45 days prior to the end of the project period of the Agreement or the project period date of any extension that may have been previously granted. Any determination to extend the project period or to provide follow-on funding for continuation of a project is solely at the discretion of Reclamation.

8. KEY PERSONNEL

8.1 Recipient's Key Personnel.

The Recipient's Project Manager for this Agreement shall be:

Dan Bartel
Engineer-Manager
849 Allen Road
Bakersfield, CA 93390-0820
661-589-6045
dbartel@rrbwsd.com

9. LIMITATION OF AUTHORITIES

9.1 Grants Officer (GO).

The Reclamation GO is the only official with legal delegated authority to represent Reclamation. The Reclamation GO's responsibilities include, but are not limited to, the following:

- (a) Formally obligate Reclamation to expend funds or change the funding level of the Agreement;
- (b) Approve through formal amendment changes in the scope of work and/or budget;
- (c) Approve through formal amendment any increase or decrease in the period of performance of the Agreement;
- (d) Approve through formal amendment changes in any of the expressed terms, conditions, or specifications of the Agreement;
- (e) Be responsible for the overall administration, management, and other non-programmatic aspects of the Agreement including, but not limited to, interpretation of financial assistance statutes, regulations, circulars, policies, and terms of the Agreement; Where applicable, ensures that Reclamation complies with the administrative requirements required by statutes, regulations, circulars, policies, and terms of the Agreement.

9.2 Grants Management Specialist (GMS).

The Reclamation Grants Management Specialist (GMS) is the primary administrative point of contact for this agreement and should be contacted regarding issues related to the day-to-day management of the agreement. Requests for approval regarding the terms and conditions of the agreement, including but not limited to amendments and prior approval, may only be granted, in writing, by a Reclamation GO. Please note that for some agreements, the Reclamation GO and the Reclamation GMS may be the same individual.

10. REPORTING REQUIREMENTS AND DISTRIBUTION

10.1 Noncompliance. Failure to comply with the reporting requirements contained in this Agreement may be considered a material noncompliance with the terms and conditions of the award. Noncompliance may result in withholding of payments pending receipt of required reports, denying both the use of funds and matching credit for all or part of the cost of the activity or action not in compliance, whole or partial suspension or termination of the Agreement, recovery of funds paid under the Agreement, withholding of future awards, or other legal remedies in accordance with 2 CFR 200.340.

10.2 Financial Reports. Federal Financial Reports shall be submitted by means of the SF-425 and shall be submitted according to the Report Frequency and Distribution schedule below. All financial reports shall be signed by an Authorized Certifying Official for the Recipient's organization.

10.3 Monitoring and Reporting Program Performance.

- (a) Monitoring by the non-Federal entity. The non-Federal entity is responsible for oversight of the operations of the Federal award supported activities. The non-Federal entity must monitor its activities under Federal awards to assure compliance with applicable Federal requirements and performance expectations are being achieved. Monitoring by the non-Federal entity must cover each program, function or activity. See also 2 CFR 200.332 Requirements for pass-through entities.
- (b) Non-construction performance reports. The Federal awarding agency must use standard, OMB-approved data elements for collection of performance information (including performance progress reports, Research Performance Progress Report, or such future collections as may be approved by OMB and listed on the OMB Web site).
 - (1) The non-Federal entity must submit performance reports at the interval required by the Federal awarding agency or pass-through entity to best inform improvements in program outcomes and productivity. Intervals must be no less frequent than annually nor more frequent than quarterly except in unusual circumstances, for example where more frequent reporting is necessary for the effective monitoring of the Federal award or could significantly affect program outcomes. Annual reports must be due **90 calendar days** after the reporting period; quarterly or semiannual reports must be due **30 calendar days after the reporting period. Alternatively, the Federal**

- awarding agency or pass-through** entity may require annual reports before the anniversary dates of multiple year Federal awards. The final performance report will be due **120 calendar days** after the period of performance end date. If a justified request is submitted by a non-Federal entity, the Federal agency may extend the due date for any performance report.
- (2) The non-Federal entity must submit performance reports using OMB-approved governmentwide standard information collections when providing performance information. As appropriate in accordance with above mentioned information collections, these reports will contain, for each Federal award, brief information on the following unless other collections are approved by OMB:
- (i) A comparison of actual accomplishments to the objectives of the Federal award established for the period. Where the accomplishments of the Federal award can be quantified, a computation of the cost (for example, related to units of accomplishment) may be required if that information will be useful. Where performance trend data and analysis would be informative to the Federal awarding agency program, the Federal awarding agency should include this as a performance reporting requirement.
 - (ii) The reasons why established goals were not met, if appropriate.
 - (iii) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.
- (c) Construction performance reports. For the most part, onsite technical inspections and certified percentage of completion data are relied on heavily by Federal awarding agencies and pass-through entities to monitor progress under Federal awards and subawards for construction. The Federal awarding agency may require additional performance reports only when considered necessary.
- (d) Significant developments. Events may occur between the scheduled performance reporting dates that have significant impact upon the supported activity. In such cases, the non-Federal entity must inform the Federal awarding agency or pass-through entity as soon as the following types of conditions become known:
- (1) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.
 - (2) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

Reclamation requires Performance reporting for all financial assistance awards, both Construction and non-Construction. Performance reports for Construction agreements shall meet the same minimum requirements outlined in paragraph (b)(2) above.

10.4 Report Frequency and Distribution. The following table sets forth the reporting requirements for this Agreement. Please note the first report due date listed for each type of report.

Required Reports	Interim Reports	Final Report
Performance Report		
Format	No specific format required. See content requirements within Section 10.3 and any program specific reporting requirements identified in Section 6.1 of this Agreement.	Summary of activities completed during the entire period of performance is required. See content requirements within Section 10.3 and any program specific reporting requirements identified in Section 6.1 of this Agreement.
Reporting Frequency	Semi-Annual	Final Report due within 120 days after the end of the period of performance.
Reporting Period	October 1 through March 31 and April 1 through September 30.	Entire period of performance
Due Date	Within 30 days after the end of the Reporting Period.	Final Report due within 120 days after the end of the period of performance or completion of the project.
First Report Due Date	The first performance report is due for reporting period ending 09/30/2022 .	N/A
Submit to:	sha-dro-faoperations@usbr.gov or GrantSolutions	sha-dro-faoperations@usbr.gov or GrantSolutions
Federal Financial Report		
Format	SF-425 (all sections must be completed)	SF-425(all sections must be completed)
Reporting Frequency	Quarterly, Semi-Annual, Annual	Final Report due within 120 days after the end of the period of performance or completion of the project.
Reporting Period	October 1 through March 31 and April 1 through September 30.	Entire period of performance
Due Date	Within 30 days after the end of the Reporting Period.	Final Report due within 120 days after the end of the period of performance or completion of project.
First Report Due Date	The first Federal financial report is due for reporting period ending 09/30/2022 .	N/A
Submit to:	sha-dro-faoperations@usbr.gov or GrantSolutions	sha-dro-faoperations@usbr.gov or GrantSolutions

11. REGULATORY COMPLIANCE

The Recipient agrees to comply or assist Reclamation with all regulatory compliance requirements and all applicable state, Federal, and local environmental and cultural and paleontological resource protection laws and regulations as applicable to this project. These may include, but are not limited to, the National Environmental Policy Act (NEPA), including the Council on Environmental Quality and Department of the Interior regulations implementing NEPA, the Clean Water Act, the Endangered Species Act, consultation with potentially affected Tribes, and consultation with the State Historic Preservation Office. If the Recipient begins project activities that require environmental or other regulatory compliance approval prior to receipt of written notice from a Reclamation GO that all such clearances have been obtained, then Reclamation reserves the right to initiate remedies for non-compliance as defined by 2 CFR 200.340 up to and including unilateral termination of this agreement.

II. RECLAMATION STANDARD TERMS AND CONDITIONS

1. REGULATIONS

The regulations at [2 CFR Subtitle A, Chapter II, Part 200](#) “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards”, are hereby incorporated by reference as though set forth in full text. Failure of a Recipient to comply with any applicable regulation or circular may be the basis for withholding payments for proper charges made by the Recipient and/or for termination of support.

2. PAYMENT

2.1 Payment (2 CFR 200.305).

(a) For states, payments are governed by Treasury-State Cash Management Improvement Act (CMIA) agreements and default procedures codified at 31 CFR part 205 and Treasury Financial Manual (TFM) 4A-2000, “Overall Disbursing Rules for All Federal Agencies”.

(b) For non-Federal entities other than states, payments methods must minimize the time elapsing between the transfer of funds from the United States Treasury or the pass-through entity and the disbursement by the non-Federal entity whether the payment is made by electronic funds transfer, or issuance or redemption of checks, warrants, or payment by other means. See also §200.302(b)(6). Except as noted elsewhere in this part, Federal agencies must require recipients to use only OMB-approved, governmentwide information collection requests to request payment.

- (1) The non-Federal entity must be paid in advance, provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the non-Federal entity, and financial management systems that meet the standards for fund control and accountability as established in this part. Advance payments to a non-Federal entity must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the non-Federal entity in carrying out the purpose of the approved program or project. The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the non-Federal entity for direct program or project costs and the proportionate share of any allowable indirect costs. The non-Federal entity must make timely payment to contractors in accordance with the contract provisions.
- (2) Whenever possible, advance payments must be consolidated to cover anticipated cash needs for all Federal awards made by the Federal awarding agency to the recipient.
 - (i) Advance payment mechanisms include, but are not limited to, Treasury check and electronic funds transfer and must comply with applicable guidance in 31 CFR part 208.
 - (ii) Non-Federal entities must be authorized to submit requests for advance payments and reimbursements at least monthly when electronic fund transfers are not used,

and as often as they like when electronic transfers are used, in accordance with the provisions of the Electronic Fund Transfer Act (15 U.S.C. 1693-1693r).

- (3) Reimbursement is the preferred method when the requirements in this paragraph (b) cannot be met, when the Federal awarding agency sets a specific condition per §200.208, or when the non-Federal entity requests payment by reimbursement. This method may be used on any Federal award for construction, or if the major portion of the construction project is accomplished through private market financing or Federal loans, and the Federal award constitutes a minor portion of the project. When the reimbursement method is used, the Federal awarding agency or pass-through entity must make payment within 30 calendar days after receipt of the billing, unless the Federal awarding agency or pass-through entity reasonably believes the request to be improper.
- (4) If the non-Federal entity cannot meet the criteria for advance payments and the Federal awarding agency or pass-through entity has determined that reimbursement is not feasible because the non-Federal entity lacks sufficient working capital, the Federal awarding agency or pass-through entity may provide cash on a working capital advance basis. Under this procedure, the Federal awarding agency or pass-through entity must advance cash payments to the non-Federal entity to cover its estimated disbursement needs for an initial period generally geared to the non-Federal entity's disbursing cycle. Thereafter, the Federal awarding agency or pass-through entity must reimburse the non-Federal entity for its actual cash disbursements. Use of the working capital advance method of payment requires that the pass-through entity provide timely advance payments to any subrecipients in order to meet the subrecipient's actual cash disbursements. The working capital advance method of payment must not be used by the pass-through entity if the reason for using this method is the unwillingness or inability of the pass-through entity to provide timely advance payments to the subrecipient to meet the subrecipient's actual cash disbursements.
- (5) To the extent available, the non-Federal entity must disburse funds available from program income (including repayments to a revolving fund), rebates, refunds, contract settlements, audit recoveries, and interest earned on such funds before requesting additional cash payments.
- (6) Unless otherwise required by Federal statutes, payments for allowable costs by non-Federal entities must not be withheld at any time during the period of performance unless the conditions of §200.208, subpart D of this part, including §200.339, or one or more of the following applies:
 - (i) The non-Federal entity has failed to comply with the project objectives, Federal statutes, regulations, or the terms and conditions of the Federal award.
 - (ii) The non-Federal entity is delinquent in a debt to the United States as defined in OMB Circular A-129, "Policies for Federal Credit Programs and Non-Tax Receivables." Under such conditions, the Federal awarding agency or pass-through entity may, upon reasonable notice, inform the non-Federal entity that payments must not be made for financial obligations incurred after a specified

date until the conditions are corrected or the indebtedness to the Federal Government is liquidated.

- (iii) A payment withheld for failure to comply with Federal award conditions, but without suspension of the Federal award, must be released to the non-Federal entity upon subsequent compliance. When a Federal award is suspended, payment adjustments will be made in accordance with §200.343.
 - (iv) A payment must not be made to a non-Federal entity for amounts that are withheld by the non-Federal entity from payment to contractors to assure satisfactory completion of work. A payment must be made when the non-Federal entity actually disburses the withheld funds to the contractors or to escrow accounts established to assure satisfactory completion of work.
- (7) Standards governing the use of banks and other institutions as depositories of advance payments under Federal awards are as follows.
- (i) The Federal awarding agency and pass-through entity must not require separate depository accounts for funds provided to a non-Federal entity or establish any eligibility requirements for depositories for funds provided to the non-Federal entity. However, the non-Federal entity must be able to account for funds received, obligated, and expended.
 - (ii) Advance payments of Federal funds must be deposited and maintained in insured accounts whenever possible.
- (8) The non-Federal entity must maintain advance payments of Federal awards in interest-bearing accounts, unless the following apply:
- (i) The non-Federal entity receives less than \$250,000 in Federal awards per year.
 - (ii) The best reasonably available interest-bearing account would not be expected to earn interest in excess of \$500 per year on Federal cash balances.
 - (iii) The depository would require an average or minimum balance so high that it would not be feasible within the expected Federal and non-Federal cash resources.
 - (iv) A foreign government or banking system prohibits or precludes interest-bearing accounts.
- (9) Interest earned amounts up to \$500 per year may be retained by the non-Federal entity for administrative expense. Any additional interest earned on Federal advance payments deposited in interest-bearing accounts must be remitted annually to the Department of Health and Human Services Payment Management System (PMS) through an electronic medium using either Automated Clearing House (ACH) network or a Fedwire Funds Service payment.
- (i) For returning interest on Federal awards paid through PMS, the refund should:
 - (A) Provide an explanation stating that the refund is for interest;
 - (B) List the PMS Payee Account Number(s) (PANs);

- (C) List the Federal award number(s) for which the interest was earned; and
 - (D) Make returns payable to: Department of Health and Human Services.
- (ii) For returning interest on Federal awards not paid through PMS, the refund should:
- (A) Provide an explanation stating that the refund is for interest;
 - (B) Include the name of the awarding agency;
 - (C) List the Federal award number(s) for which the interest was earned; and
 - (D) Make returns payable to: Department of Health and Human Services.
- (10) Funds, principal, and excess cash returns must be directed to the original Federal agency payment system. The non-Federal entity should review instructions from the original Federal agency payment system. Returns should include the following information:
- (i) Payee Account Number (PAN), if the payment originated from PMS, or Agency information to indicate whom to credit the funding if the payment originated from ASAP, NSF, or another Federal agency payment system.
 - (ii) PMS document number and subaccount(s), if the payment originated from PMS, or relevant account numbers if the payment originated from another Federal agency payment system.
 - (iii) The reason for the return (e.g., excess cash, funds not spent, interest, part interest part other, etc.)
- (11) When returning funds or interest to PMS you must include the following as applicable:
- (i) For ACH Returns:
 Routing Number: 051036706
 Account number: 303000
 Bank Name and Location: Credit Gateway—ACH Receiver St. Paul, MN
 - (ii) For Fedwire Returns¹:
 Routing Number: 021030004
 Account number: 75010501
 Bank Name and Location: Federal Reserve Bank Treas NYC/Funds Transfer Division New York, NY
- ¹Please note that the organization initiating payment is likely to incur a charge from their Financial Institution for this type of payment.
- (iii) For International ACH Returns:
 Beneficiary Account: Federal Reserve Bank of New York/ITS (FRBNY/ITS)
 Bank: Citibank N.A. (New York)
 Swift Code: CITIUS33
 Account Number: 36838868
 Bank Address: 388 Greenwich Street, New York, NY 10013 USA
 Payment Details (Line 70): Agency Locator Code (ALC): 75010501
 Name (abbreviated when possible) and ALC Agency POC

- (iv) For recipients that do not have electronic remittance capability, please make check² payable to: “The Department of Health and Human Services.”
Mail Check to Treasury approved lockbox:
HHS Program Support Center, P.O. Box 530231, Atlanta, GA 30353-0231
²Please allow 4-6 weeks for processing of a payment by check to be applied to the appropriate PMS account.
- (v) Questions can be directed to PMS at 877-614-5533 or PMSSupport@psc.hhs.gov.

2.2 Payment Method.

Recipients must utilize the Department of Treasury Automated Standard Application for Payments (ASAP) payment system to request advance or reimbursement payments. ASAP is a Recipient-initiated payment and information system designed to provide a single point of contact for the request and delivery of Federal funds. ASAP is the only allowable method for request and receipt of payment. Recipient procedures must minimize the time elapsing between the drawdown of Federal funds and the disbursement for agreement purposes.

In accordance with 2 CFR 25.200(b)(2) the Recipient shall “Maintain an active SAM registration with current information, including information on a recipient's immediate and highest level owner and subsidiaries, as well as on all predecessors that have been awarded a Federal contract or grant within the last three years, if applicable, at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency. If the Recipient allows their SAM registration to lapse, the Recipient’s accounts within ASAP will be automatically suspended by Reclamation until such time as the Recipient renews their SAM registration.

3. PROCUREMENT STANDARDS (2 CFR 200.317 through 200.327)

§200.317 Procurements by States.

When procuring property and services under a Federal award, a State must follow the same policies and procedures it uses for procurements from its non-Federal funds. The State will comply with §§200.321, 200.322, and 200.323 and ensure that every purchase order or other contract includes any clauses required by §200.327. All other non-Federal entities, including subrecipients of a State, must follow the procurement standards in §§200.318 through 200.327.

§200.318 General procurement standards.

- (a) The non-Federal entity must use its own documented procurement procedures which reflect applicable State, local, and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this part.
- (b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

- (c)
- (1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.
 - (2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.
- (d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.
- (e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services.
- (f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.
- (g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

- (h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also 200.212 Suspension and debarment.
- (i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.
- (j)
 - (1) The non-Federal entity may use a time and materials type contract only after a determination that no other contract is suitable and if the contract includes a ceiling price that the contractor exceeds at its own risk. Time and materials type contract means a contract whose cost to a non-Federal entity is the sum of:
 - (i) The actual cost of materials; and
 - (ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.
 - (2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.
- (k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, state, or Federal authority having proper jurisdiction.

§200.319 Competition.

- (a) All procurement transactions for the acquisition of property or services required under a Federal award must be conducted in a manner providing full and open competition consistent with the standards of this section and §200.320.
- (b) In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing

for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:

- (1) Placing unreasonable requirements on firms in order for them to qualify to do business;
 - (2) Requiring unnecessary experience and excessive bonding;
 - (3) Noncompetitive pricing practices between firms or between affiliated companies;
 - (4) Noncompetitive contracts to consultants that are on retainer contracts;
 - (5) Organizational conflicts of interest;
 - (6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and
 - (7) Any arbitrary action in the procurement process.
- (c) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.
- (d) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:
- (1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equivalent” description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and
 - (2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.
- (e) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.

(f) Noncompetitive procurements can only be awarded in accordance with §200.320(c).

§200.320 Methods of procurement to be followed.

The non-Federal entity must have and use documented procurement procedures, consistent with the standards of this section and §§200.317, 200.318, and 200.319 for any of the following methods of procurement used for the acquisition of property or services required under a Federal award or sub-award.

(a) Informal procurement methods. When the value of the procurement for property or services under a Federal award does not exceed the simplified acquisition threshold (SAT), as defined in §200.1, or a lower threshold established by a non-Federal entity, formal procurement methods are not required. The non-Federal entity may use informal procurement methods to expedite the completion of its transactions and minimize the associated administrative burden and cost. The informal methods used for procurement of property or services at or below the SAT include:

- (1) Micro-purchases—(i) Distribution. The acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (See the definition of micro-purchase in §200.1). To the maximum extent practicable, the non-Federal entity should distribute micro-purchases equitably among qualified suppliers.
- (ii) Micro-purchase awards. Micro-purchases may be awarded without soliciting competitive price or rate quotations if the non-Federal entity considers the price to be reasonable based on research, experience, purchase history or other information and documents it files accordingly. Purchase cards can be used for micro-purchases if procedures are documented and approved by the non-Federal entity.
- (iii) Micro-purchase thresholds. The non-Federal entity is responsible for determining and documenting an appropriate micro-purchase threshold based on internal controls, an evaluation of risk, and its documented procurement procedures. The micro-purchase threshold used by the non-Federal entity must be authorized or not prohibited under State, local, or tribal laws or regulations. Non-Federal entities may establish a threshold higher than the Federal threshold established in the Federal Acquisition Regulations (FAR) in accordance with paragraphs (a)(1)(iv) and (v) of this section.
- (iv) Non-Federal entity increase to the micro-purchase threshold up to \$50,000. Non-Federal entities may establish a threshold higher than the micro-purchase threshold identified in the FAR in accordance with the requirements of this section. The non-Federal entity may self-certify a threshold up to \$50,000 on an annual basis and must maintain documentation to be made available to the Federal awarding agency and auditors in accordance with §200.334. The self-

certification must include a justification, clear identification of the threshold, and supporting documentation of any of the following:

- (A) A qualification as a low-risk auditee, in accordance with the criteria in §200.520 for the most recent audit;
 - (B) An annual internal institutional risk assessment to identify, mitigate, and manage financial risks; or,
 - (C) For public institutions, a higher threshold consistent with State law.
- (v) Non-Federal entity increase to the micro-purchase threshold over \$50,000. Micro-purchase thresholds higher than \$50,000 must be approved by the cognizant agency for indirect costs. The non-federal entity must submit a request with the requirements included in paragraph (a)(1)(iv) of this section. The increased threshold is valid until there is a change in status in which the justification was approved.
- (2) Small purchases—(i) Small purchase procedures. The acquisition of property or services, the aggregate dollar amount of which is higher than the micro-purchase threshold but does not exceed the simplified acquisition threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources as determined appropriate by the non-Federal entity.
- (ii) Simplified acquisition thresholds. The non-Federal entity is responsible for determining an appropriate simplified acquisition threshold based on internal controls, an evaluation of risk and its documented procurement procedures which must not exceed the threshold established in the FAR. When applicable, a lower simplified acquisition threshold used by the non-Federal entity must be authorized or not prohibited under State, local, or tribal laws or regulations.
- (b) Formal procurement methods. When the value of the procurement for property or services under a Federal financial assistance award exceeds the SAT, or a lower threshold established by a non-Federal entity, formal procurement methods are required. Formal procurement methods require following documented procedures. Formal procurement methods also require public advertising unless a non-competitive procurement can be used in accordance with §200.319 or paragraph (c) of this section. The following formal methods of procurement are used for procurement of property or services above the simplified acquisition threshold or a value below the simplified acquisition threshold the non-Federal entity determines to be appropriate:
- (1) Sealed bids. A procurement method in which bids are publicly solicited and a firm fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bids method is the preferred method for procuring construction, if the conditions.

- (i) In order for sealed bidding to be feasible, the following conditions should be present:
 - (A) A complete, adequate, and realistic specification or purchase description is available;
 - (B) Two or more responsible bidders are willing and able to compete effectively for the business; and
 - (C) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.
- (ii) If sealed bids are used, the following requirements apply:
 - (A) Bids must be solicited from an adequate number of qualified sources, providing them sufficient response time prior to the date set for opening the bids, for local, and tribal governments, the invitation for bids must be publicly advertised;
 - (B) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;
 - (C) All bids will be opened at the time and place prescribed in the invitation for bids, and for local and tribal governments, the bids must be opened publicly;
 - (D) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and
 - (E) Any or all bids may be rejected if there is a sound documented reason.
- (2) Proposals. A procurement method in which either a fixed price or cost-reimbursement type contract is awarded. Proposals are generally used when conditions are not appropriate for the use of sealed bids. They are awarded in accordance with the following requirements:
 - (i) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Proposals must be solicited from an adequate number of qualified offerors. Any response to publicized requests for proposals must be considered to the maximum extent practical;
 - (ii) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and making selections;
 - (iii) Contracts must be awarded to the responsible offeror whose proposal is most advantageous to the non-Federal entity, with price and other factors considered; and

- (iv) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby offeror's qualifications are evaluated and the most qualified offeror is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms that are a potential source to perform the proposed effort.
- (c) Noncompetitive procurement. There are specific circumstances in which noncompetitive procurement can be used. Noncompetitive procurement can only be awarded if one or more of the following circumstances apply:
 - (1) The acquisition of property or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (see paragraph (a)(1) of this section);
 - (2) The item is available only from a single source;
 - (3) The public exigency or emergency for the requirement will not permit a delay resulting from publicizing a competitive solicitation;
 - (4) The Federal awarding agency or pass-through entity expressly authorizes a noncompetitive procurement in response to a written request from the non-Federal entity; or
 - (5) After solicitation of a number of sources, competition is determined inadequate.

§200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

- (a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.
- (b) Affirmative steps must include:
 - (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
 - (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;

- (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
- (6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (b)(1) through (5) of this section.

§200.322 Domestic preferences for procurements.

- (a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.
- (b) For purposes of this section:
 - (1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
 - (2) “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

§200.323 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

§200.324 Contract cost and price.

- (a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract amendments. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.

- (b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.
- (c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under subpart E of this part. The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.
- (d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used.

§200.325 Federal awarding agency or pass-through entity review.

- (a) The non-Federal entity must make available, upon request of the Federal awarding agency or pass-through entity, technical specifications on proposed procurements where the Federal awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been developed, the Federal awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.
- (b) The non-Federal entity must make available upon request, for the Federal awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:
 - (1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;
 - (2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;
 - (3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a "brand name" product;
 - (4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or
 - (5) A proposed contract amendment changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.

- (c) The non-Federal entity is exempt from the pre-procurement review in paragraph (b) of this section if the Federal awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.
- (1) The non-Federal entity may request that its procurement system be reviewed by the Federal awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third-party contracts are awarded on a regular basis;
 - (2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the Federal awarding agency's right to survey the system. Under a self-certification procedure, the Federal awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

§200.326 Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

- (a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “bid guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.
- (b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's requirements under such contract.
- (c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

§200.327 Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in [appendix II](#) to this part.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014, and 85 FR 49506]

4. EQUIPMENT (2 CFR 200.313)

See also 200.439 Equipment and other capital expenditures.

- (a) Title. Subject to the obligations and conditions set forth in this section, title to equipment acquired under a Federal award will vest upon acquisition in the non-Federal entity. Unless a statute specifically authorizes the Federal agency to vest title in the non-Federal entity without further obligation to the Federal Government, and the Federal agency elects to do so, the title must be a conditional title. Title must vest in the non-Federal entity subject to the following conditions:
- (1) Use the equipment for the authorized purposes of the project during the period of performance, or until the property is no longer needed for the purposes of the project.
 - (2) Not encumber the property without approval of the Federal awarding agency or pass-through entity.
 - (3) Use and dispose of the property in accordance with paragraphs (b), (c) and (e) of this section.
- (b) A state must use, manage and dispose of equipment acquired under a Federal award by the state in accordance with state laws and procedures. Other non-Federal entities must follow paragraphs (c) through (e) of this section.
- (c) Use.
- (1) Equipment must be used by the non-Federal entity in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by the Federal award, and the non-Federal entity must not encumber the property without prior approval of the Federal awarding agency. When no longer needed for the original program or project, the equipment may be used in other activities supported by the Federal awarding agency, in the following order of priority:
 - (i) Activities under a Federal award from the Federal awarding agency which funded the original program or project, then
 - (ii) Activities under Federal awards from other Federal awarding agencies. This includes consolidated equipment for information technology systems.
 - (2) During the time that equipment is used on the project or program for which it was acquired, the non-Federal entity must also make equipment available for use on other projects or programs currently or previously supported by the Federal Government, provided that such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use must be given to other programs or projects supported by Federal awarding agency that financed the equipment and second preference must be given to programs or projects under Federal awards from other Federal awarding agencies. Use for non-federally-funded programs or projects is also permissible. User fees should be considered if appropriate.
 - (3) Notwithstanding the encouragement in 200.307 Program income to earn program income, the non-Federal entity must not use equipment acquired with the Federal award to

provide services for a fee that is less than private companies charge for equivalent services unless specifically authorized by Federal statute for as long as the Federal Government retains an interest in the equipment.

- (4) When acquiring replacement equipment, the non-Federal entity may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property.
- (d) Management requirements. Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a Federal award, until disposition takes place will, as a minimum, meet the following requirements:
- (1) Property records must be maintained that include a description of the property, a serial number or other identification number, the source of funding for the property (including the FAIN), who holds title, the acquisition date, and cost of the property, percentage of Federal participation in the project costs for the Federal award under which the property was acquired, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the property.
 - (2) A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.
 - (3) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft must be investigated.
 - (4) Adequate maintenance procedures must be developed to keep the property in good condition.
 - (5) If the non-Federal entity is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.
- (e) Disposition. When original or replacement equipment acquired under a Federal award is no longer needed for the original project or program or for other activities currently or previously supported by a Federal awarding agency, except as otherwise provided in Federal statutes, regulations, or Federal awarding agency disposition instructions, the non-Federal entity must request disposition instructions from the Federal awarding agency if required by the terms and conditions of the Federal award. Disposition of the equipment will be made as follows, in accordance with Federal awarding agency disposition instructions:
- (1) Items of equipment with a current per unit fair market value of \$5,000 or less may be retained, sold or otherwise disposed of with no further obligation to the Federal awarding agency.
 - (2) Except as provided in 200.312 Federally-owned and exempt property, paragraph (b), or if the Federal awarding agency fails to provide requested disposition instructions within 120 days, items of equipment with a current per-unit fair-market value in excess of \$5,000 may be retained by the non-Federal entity or sold. The Federal awarding agency is entitled to an amount calculated by multiplying the current market value or proceeds from sale by the Federal awarding agency's percentage of participation in the cost of the original purchase. If the equipment is sold, the Federal awarding agency may permit the

non-Federal entity to deduct and retain from the Federal share \$500 or ten percent of the proceeds, whichever is less, for its selling and handling expenses.

- (3) The non-Federal entity may transfer title to the property to the Federal Government or to an eligible third party provided that, in such cases, the non-Federal entity must be entitled to compensation for its attributable percentage of the current fair market value of the property.
- (4) In cases where a non-Federal entity fails to take appropriate disposition actions, the Federal awarding agency may direct the non-Federal entity to take disposition actions.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75884, Dec. 19, 2014]

5. SUPPLIES (2 CFR 200.314)

See also 200.453 Materials and supplies costs, including costs of computing devices.

- (a) Title to supplies will vest in the non-Federal entity upon acquisition. If there is a residual inventory of unused supplies exceeding \$5,000 in total aggregate value upon termination or completion of the project or program and the supplies are not needed for any other Federal award, the non-Federal entity must retain the supplies for use on other activities or sell them, but must, in either case, compensate the Federal Government for its share. The amount of compensation must be computed in the same manner as for equipment. See 200.313 Equipment, paragraph (e)(2) for the calculation methodology.
- (b) As long as the Federal Government retains an interest in the supplies, the non-Federal entity must not use supplies acquired under a Federal award to provide services to other organizations for a fee that is less than private companies charge for equivalent services, unless specifically authorized by Federal statute.

6. INSPECTION

Reclamation has the right to inspect and evaluate the work performed or being performed under this Agreement, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If Reclamation performs inspection or evaluation on the premises of the Recipient or a sub-Recipient, the Recipient shall furnish and shall require sub-recipients to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

7. AUDIT REQUIREMENTS (2 CFR 200.501)

- (a) Audit required. A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year in accordance with the provisions of this part.
- (b) Single audit. A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single audit conducted in accordance with

200.514 Scope of audit except when it elects to have a program-specific audit conducted in accordance with paragraph (c) of this section.

- (c) Program-specific audit election. When an auditee expends Federal awards under only one Federal program (excluding R&D) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of the auditee, the auditee may elect to have a program-specific audit conducted in accordance with 200.507 Program-specific audits. A program-specific audit may not be elected for R&D unless all of the Federal awards expended were received from the same Federal agency, or the same Federal agency and the same pass-through entity, and that Federal agency, or pass-through entity in the case of a subrecipient, approves in advance a program-specific audit.
- (d) Exemption when Federal awards expended are less than \$750,000. A non-Federal entity that expends less than \$750,000 during the non-Federal entity's fiscal year in Federal awards is exempt from Federal audit requirements for that year, except as noted in 200.503 Relation to other audit requirements, but records must be available for review or audit by appropriate officials of the Federal agency, pass-through entity, and Government Accountability Office (GAO).
- (e) Federally Funded Research and Development Centers (FFRDC). Management of an auditee that owns or operates a FFRDC may elect to treat the FFRDC as a separate entity for purposes of this part.
- (f) Subrecipients and Contractors. An auditee may simultaneously be a recipient, a subrecipient, and a contractor. Federal awards expended as a recipient or a subrecipient are subject to audit under this part. The payments received for goods or services provided as a contractor are not Federal awards. Section 200.331 Subrecipient and contractor determinations sets forth the considerations in determining whether payments constitute a Federal award or a payment for goods or services provided as a contractor.
- (g) Compliance responsibility for contractors. In most cases, the auditee's compliance responsibility for contractors is only to ensure that the procurement, receipt, and payment for goods and services comply with Federal statutes, regulations, and the terms and conditions of Federal awards. Federal award compliance requirements normally do not pass through to contractors. However, the auditee is responsible for ensuring compliance for procurement transactions which are structured such that the contractor is responsible for program compliance or the contractor's records must be reviewed to determine program compliance. Also, when these procurement transactions relate to a major program, the scope of the audit must include determining whether these transactions are in compliance with Federal statutes, regulations, and the terms and conditions of Federal awards.
- (h) For-profit subrecipient. Since this part does not apply to for-profit subrecipients, the pass-through entity is responsible for establishing requirements, as necessary, to ensure compliance by for-profit subrecipients. The agreement with the for-profit subrecipient must describe applicable compliance requirements and the for-profit subrecipient's compliance responsibility. Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the agreement, and post-award audits. See also 200.332 Requirements for pass-through entities.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75887, Dec. 19, 2014; 85 FR 49571, Aug. 13, 2020]

8. REMEDIES FOR NONCOMPLIANCE (2 CFR 200.339)

200.339 Remedies for noncompliance.

If a non-Federal entity fails to comply with Federal statutes, regulations or the terms and conditions of a Federal award, the Federal awarding agency or pass-through entity may impose additional conditions, as described in 200.207 Specific conditions. If the Federal awarding agency or pass-through entity determines that noncompliance cannot be remedied by imposing additional conditions, the Federal awarding agency or pass-through entity may take one or more of the following actions, as appropriate in the circumstances.

- (a) Temporarily withhold cash payments pending correction of the deficiency by the non-Federal entity or more severe enforcement action by the Federal awarding agency or pass-through entity.
- (b) Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.
- (c) Wholly or partly suspend or terminate the Federal award.
- (d) Initiate suspension or debarment proceedings as authorized under 2 CFR part 180 and Federal awarding agency regulations (or in the case of a pass-through entity, recommend such a proceeding be initiated by a Federal awarding agency).
- (e) Withhold further Federal awards for the project or program.
- (f) Take other remedies that may be legally available.

9. TERMINATION (2 CFR 200.340)

- (a) The Federal award may be terminated in whole or in part as follows:
 - (1) By the Federal awarding agency or pass-through entity, if a non-Federal entity fails to comply with the terms and conditions of a Federal award;
 - (2) By the Federal awarding agency or pass-through entity, to the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities;
 - (3) By the Federal awarding agency or pass-through entity with the consent of the non-Federal entity, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated;
 - (4) By the non-Federal entity upon sending to the Federal awarding agency or pass-through entity written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the Federal awarding agency or pass-through entity determines in the case of partial termination that the reduced or modified portion of the Federal award or subaward will not accomplish the purposes for which the Federal award was made,

- the Federal awarding agency or pass-through entity may terminate the Federal award in its entirety; or
- (5) By the Federal awarding agency or pass-through entity pursuant to termination provisions included in the Federal award.
- (b) When a Federal award is terminated or partially terminated, both the Federal awarding agency or pass-through entity and the non-Federal entity remain responsible for compliance with the requirements in 200.344 Closeout and 200.345 Post-closeout adjustments and continuing responsibilities.

10. DEBARMENT AND SUSPENSION (2 CFR 1400)

The Department of the Interior regulations at 2 CFR 1400—Governmentwide Debarment and Suspension (Nonprocurement), which adopt the common rule for the governmentwide system of debarment and suspension for nonprocurement activities, are hereby incorporated by reference and made a part of this Agreement. By entering into this grant or cooperative Agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 1400, Subpart C, and agrees to include a similar term or condition in all lower-tier covered transactions. These regulations are available at <http://www.gpoaccess.gov/ecfr/>.

11. DRUG-FREE WORKPLACE (2 CFR 182 and 1401)

The Department of the Interior regulations at 2 CFR 1401—Governmentwide Requirements for Drug-Free Workplace (Financial Assistance), which adopt the portion of the Drug-Free Workplace Act of 1988 (41 U.S.C. 701 et seq, as amended) applicable to grants and cooperative agreements, are hereby incorporated by reference and made a part of this agreement. By entering into this grant or cooperative agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 182.

12. ASSURANCES AND CERTIFICATIONS INCORPORATED BY REFERENCE

The provisions of the Assurances, SF 424B or SF 424D as applicable, executed by the Recipient in connection with this Agreement shall apply with full force and effect to this Agreement. All anti-discrimination and equal opportunity statutes, regulations, and Executive Orders that apply to the expenditure of funds under Federal contracts, grants, and cooperative Agreements, loans, and other forms of Federal assistance. The Recipient shall comply with Title VI or the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and any program-specific statutes with anti-discrimination requirements. The Recipient shall comply with civil rights laws including, but not limited to, the Fair Housing Act, the Fair Credit Reporting Act, the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Equal Educational Opportunities Act, the Age Discrimination in Employment Act, and the Uniform Relocation Act.

Such Assurances also include, but are not limited to, the promise to comply with all applicable Federal statutes and orders relating to nondiscrimination in employment, assistance, and housing;

the Hatch Act; Federal wage and hour laws and regulations and workplace safety standards; Federal environmental laws and regulations and the Endangered Species Act; and Federal protection of rivers and waterways and historic and archeological preservation.

13. COVENANT AGAINST CONTINGENT FEES

The Recipient warrants that no person or agency has been employed or retained to solicit or secure this Agreement upon an Agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide offices established and maintained by the Recipient for the purpose of securing Agreements or business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the Agreement amount, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

14. TRAFFICKING VICTIMS PROTECTION ACT OF 2000 (2 CFR 175.15)

Trafficking in persons.

- (a) *Provisions applicable to a recipient that is a private entity.* You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not
- (1) Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
 - (2) Procure a commercial sex act during the period of time that the award is in effect; or
 - (3) Use forced labor in the performance of the award or subawards under the award.
- (b) We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —
- (1) Is determined to have violated a prohibition in paragraph a.1 of this award term; or
 - (2) Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either:
 - (i) Associated with performance under this award; or
 - (ii) Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by our agency at 2 CFR part 1400.
- (c) *Provision applicable to a recipient other than a private entity.* We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—
- (1) Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or

- (2) Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either:
 - (i) Associated with performance under this award; or
 - (ii) Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by our agency at 2 CFR part 1400.

(d) *Provisions applicable to any recipient.*

- (1) You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.
- (2) Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:
 - (i) Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and
 - (ii) Is in addition to all other remedies for noncompliance that are available to us under this award.
- (3) You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

(e) *Definitions.* For purposes of this award term:

- (1) “Employee” means either:
 - (i) An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
 - (ii) Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.
- (2) “Forced labor” means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.
- (3) “Private entity”:
 - (i) Means any entity other than a state, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.
 - (ii) Includes:
 - (A) A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).
 - (B) A for-profit organization.

- (4) “Severe forms of trafficking in persons,” “commercial sex act,” and “coercion” have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

15. NEW RESTRICTIONS ON LOBBYING (43 CFR 18)

The Recipient agrees to comply with 43 CFR 18, New Restrictions on Lobbying, including the following certification:

- (a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Recipient, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or amendment of any Federal contract, grant, loan, or cooperative agreement.
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying” in accordance with its instructions.
- (c) The Recipient shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

16. UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT OF 1970 (URA) (42 USC 4601 *et seq.*)

- (a) The Uniform Relocation Assistance Act (URA), 42 U.S.C. 4601 *et seq.*, as amended, requires certain assurances for Reclamation funded land acquisition projects conducted by a Recipient that cause the displacement of persons, businesses, or farm operations. Because Reclamation funds only support acquisition of property or interests in property from willing sellers, it is not anticipated that Reclamation funds will result in any “displaced persons,” as defined under the URA.
- (b) However, if Reclamation funds are used for the acquisition of real property that results in displacement, the URA requires Recipients to ensure that reasonable relocation payments and other remedies will be provided to any displaced person. Further, when acquiring real

property, Recipients must be guided, to the greatest extent practicable, by the land acquisition policies in 42 U.S.C. 4651.

(c) Exemptions to the URA and 49 CFR Part 24

(1) The URA provides for an exemption to the appraisal, review and certification rules for those land acquisitions classified as “voluntary transactions.” Such “voluntary transactions” are classified as those that do not involve an exercise of eminent domain authority on behalf of a Recipient, and must meet the conditions specified at 49 CFR Part 24.101(b)(1)(i)-(iv).

(2) For any land acquisition undertaken by a Recipient that receives Reclamation funds, but does not have authority to acquire the real property by eminent domain, to be exempt from the requirements of 49 CFR Part 24 the Recipient must:

- (i) provide written notification to the owner that it will not acquire the property in the event negotiations fail to result in an amicable agreement, and;
- (ii) inform the owner in writing of what it believes to be the market value of the property

(d) Review of Land Acquisition Appraisals. Reclamation reserves the right to review any land appraisal whether or not such review is required under the URA or 49 CFR 24.104. Such reviews may be conducted by the Department of the Interior’s Appraisal Services Directorate or a Reclamation authorized designee. When Reclamation determines that a review of the original appraisal is necessary, Reclamation will notify the Recipient and provide an estimated completion date of the initial appraisal review.

17. SYSTEM FOR AWARD MANAGEMENT AND UNIVERSAL IDENTIFIER REQUIREMENTS (2 CFR 25, APPENDIX A)

A. Requirement for System for Award Management

Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain current information in the SAM. This includes information on your immediate and highest level owner and subsidiaries, as well as on all of your predecessors that have been awarded a Federal contract or Federal financial assistance within the last three years, if applicable, until you submit the final financial report required under this Federal award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another Federal award term.

B. Requirement for unique entity identifier

If you are authorized to make subawards under this award, you:

1. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its unique entity identifier to you.
2. May not make a subaward to an entity unless the entity has provided its Unique Entity Identifier to you. Subrecipients are not required to obtain an active SAM registration, but must obtain a Unique Entity Identifier.

C. Definitions

For purposes of this award term:

1. System for Award Management (SAM) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at <http://www.sam.gov>).
2. Unique entity identifier means the identifier required for SAM registration to uniquely identify business entities.
3. Entity, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:
 - a. A Governmental organization, which is a State, local government, or Indian Tribe;
 - b. A foreign public entity;
 - c. A domestic or foreign nonprofit organization;
 - d. A domestic or foreign for-profit organization; and
 - e. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
4. Subaward has the meaning given in 2 CFR 200.1.
5. Subrecipient has the meaning given in 2 CFR 200.1.

18. PROHIBITION ON TEXT MESSAGING AND USING ELECTRONIC EQUIPMENT SUPPLIED BY THE GOVERNMENT WHILE DRIVING

Executive Order 13513, *Federal Leadership On Reducing Text Messaging While Driving*, was signed by President Barack Obama on October 1, 2009 (ref: <http://edocket.access.gpo.gov/2009/pdf/E9-24203.pdf>). This Executive Order introduces a Federal Government-wide prohibition on the use of text messaging while driving on official business or while using Government-supplied equipment. Additional guidance enforcing the ban will be issued at a later date. In the meantime, please adopt and enforce policies that immediately ban text messaging while driving company-owned or rented vehicles, government-

owned or leased vehicles, or while driving privately owned vehicles when on official government business or when performing any work for or on behalf of the government.

19. REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION (2 CFR 170 APPENDIX A)

I. Reporting Subawards and Executive Compensation.

a. Reporting of first-tier subawards.

1. **Applicability.** Unless you are exempt as provided in paragraph d. of this award term, you must report each action that equals or exceeds \$30,000 in Federal funds for a subaward to a non-Federal entity or Federal agency (see definitions in paragraph e. of this award term).
2. **Where and when to report.**
 - i. The non-Federal entity or Federal agency must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrs.gov>.
 - ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)
3. **What to report.** You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

b. Reporting total compensation of recipient executives for non-Federal entities.

1. **Applicability and what to report.** You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—
 - i. The total Federal funding authorized to date under this Federal award equals or exceeds \$30,000 as defined in 2 CFR 170.320;
 - ii. in the preceding fiscal year, you received—
 - (A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards), and
 - (B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and,
 - iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2. Where and when to report. You must report executive total compensation described in paragraph b.1. of this award term:
 - i. As part of your registration profile at <https://www.sam.gov>.
 - ii. By the end of the month following the month in which this award is made, and annually thereafter.
- c. Reporting of Total Compensation of Subrecipient Executives.
1. Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier non-Federal entity subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—
 - i. in the subrecipient's preceding fiscal year, the subrecipient received—
 - (A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards) and,
 - (B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and
 - ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)
 2. Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:
 - i. To the recipient.
 - ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.
- d. Exemptions.
- If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:
- i. Subawards, and
 - ii. The total compensation of the five most highly compensated executives of any subrecipient.

- e. Definitions. For purposes of this award term:
1. Federal Agency means a Federal agency as defined at 5 U.S.C. 551(1) and further clarified by 5 U.S.C. 552(f).
 2. Non-Federal entity means all of the following, as defined in 2 CFR part 25:
 - i. A Governmental organization, which is a State, local government, or Indian tribe;
 - ii. A foreign public entity;
 - iii. A domestic or foreign nonprofit organization; and,
 - iv. A domestic or foreign for-profit organization
 3. Executive means officers, managing partners, or any other employees in management positions.
 4. Subaward:
 - i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR 200.331).
 - iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
 5. Subrecipient means a non-Federal entity or Federal agency that:
 - i. Receives a subaward from you (the recipient) under this award; and
 - ii. Is accountable to you for the use of the Federal funds provided by the subaward.
 6. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)).

[85 FR 49526, Aug. 13, 2020]

20. RECIPIENT EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (SEP 2013)

- (a) This award and employees working on this financial assistance agreement will be subject to the whistleblower rights and remedies in the pilot program on Award Recipient employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub.L. 112-239).
- (b) The Award Recipient shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C 4712.

- (c) The Award Recipient shall insert the substance of this clause, including this paragraph (c), in all subawards or subcontracts over the simplified acquisition threshold. 48 CFR 52.203-17 (as referenced in 48 CFR 3.908-9).

21. REPORTING OF MATTERS RELATED TO RECIPIENT INTEGRITY AND PERFORMANCE (APPENDIX XII TO 2 CFR PART 200)

1. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

2. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

- a. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- b. Reached its final disposition during the most recent five-year period; and
- c. Is one of the following:
 - (1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
 - (2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - (3) An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
 - (4) Any other criminal, civil, or administrative proceeding if:
 - (i) It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;
 - (ii) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and

- (iii) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

3. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

4. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five-year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

5. Definitions

For purposes of this award term and condition:

- a. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.
- b. Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
- c. Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - (1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - (2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

[80 FR 43310, July 22, 2015, as amended at 85 FR 49582, Aug. 13, 2020]

22. CONFLICTS OF INTEREST

(a) Applicability.

- (1) This section intends to ensure that non-Federal entities and their employees take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements.
- (2) In the procurement of supplies, equipment, construction, and services by recipients and by subrecipients, the conflict of interest provisions in 2 CFR 200.318 apply.

(b) Requirements.

- (1) Non-Federal entities must avoid prohibited conflicts of interest, including any significant financial interests that could cause a reasonable person to question the recipient's ability to provide impartial, technically sound, and objective performance under or with respect to a Federal financial assistance agreement.
- (2) In addition to any other prohibitions that may apply with respect to conflicts of interest, no key official of an actual or proposed recipient or subrecipient, who is substantially involved in the proposal or project, may have been a former Federal employee who, within the last one (1) year, participated personally and substantially in the evaluation, award, or administration of an award with respect to that recipient or subrecipient or in development of the requirement leading to the funding announcement.
- (3) No actual or prospective recipient or subrecipient may solicit, obtain, or use non-public information regarding the evaluation, award, or administration of an award to that recipient or subrecipient or the development of a Federal financial assistance opportunity that may be of competitive interest to that recipient or subrecipient.

(c) Notification.

- (1) Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the DOI awarding agency or pass-through entity in accordance with 2 CFR 200.112, Conflicts of Interest.
- (2) Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The recipient is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by subrecipients.

(d) Restrictions on Lobbying. Non-Federal entities are strictly prohibited from using funds under this grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43 CFR Part 18 and 31 USC 1352.

(e) Review Procedures. The Financial Assistance Officer will examine each conflict of interest disclosure on the basis of its particular facts and the nature of the proposed grant or cooperative agreement, and will determine whether a significant potential conflict exists and, if it does, develop an appropriate means for resolving it.

- (f) Enforcement. Failure to resolve conflicts of interest in a manner that satisfies the Government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR 200.338, Remedies for Noncompliance, including suspension or debarment (see also 2 CFR Part 180).

23. DATA AVAILABILITY

- (a) Applicability. The Department of the Interior is committed to basing its decisions on the best available science and providing the American people with enough information to thoughtfully and substantively evaluate the data, methodology, and analysis used by the Department to inform its decisions.
- (b) Use of Data. The regulations at 2 CFR 200.315 apply to data produced under a Federal award, including the provision that the Federal Government has the right to obtain, reproduce, publish, or otherwise use the data produced under a Federal award as well as authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.
- (c) Availability of Data. The recipient shall make the data produced under this award and any subaward(s) available to the Government for public release, consistent with applicable law, to allow meaningful third-party evaluation and reproduction of the following:
- (i) The scientific data relied upon;
 - (ii) The analysis relied upon; and
 - (iii) The methodology, including models, used to gather and analyze data.

24. PROHIBITION ON PROVIDING FUNDS TO THE ENEMY

- (a) The recipient must—
- (1) Exercise due diligence to ensure that none of the funds, including supplies and services, received under this grant or cooperative agreement are provided directly or indirectly (including through subawards or contracts) to a person or entity who is actively opposing the United States or coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities, which must be completed through [2 CFR 180.300](#) prior to issuing a subaward or contract and;
 - (2) Terminate or void in whole or in part any subaward or contract with a person or entity listed in SAM as a prohibited or restricted source pursuant to subtitle E of Title VIII of the NDAA for FY 2015, unless the Federal awarding agency provides written approval to continue the subaward or contract.
- (b) The recipient may include the substance of this clause, including paragraph (a) of this clause, in subawards under this grant or cooperative agreement that have an estimated value over \$50,000 and will be performed outside the United States, including its outlying areas.

- (c) The Federal awarding agency has the authority to terminate or void this grant or cooperative agreement, in whole or in part, if the Federal awarding agency becomes aware that the recipient failed to exercise due diligence as required by paragraph (a) of this clause or if the Federal awarding agency becomes aware that any funds received under this grant or cooperative agreement have been provided directly or indirectly to a person or entity who is actively opposing coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities.

25. ADDITIONAL ACCESS TO RECIPIENT RECORDS

- (a) In addition to any other existing examination-of-records authority, the Federal Government is authorized to examine any records of the recipient and its subawards or contracts to the extent necessary to ensure that funds, including supplies and services, available under this grant or cooperative agreement are not provided, directly or indirectly, to a person or entity that is actively opposing United States or coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities, except for awards awarded by the Department of Defense on or before Dec 19, 2017 that will be performed in the United States Central Command (USCENTCOM) theater of operations.
- (b) The substance of this clause, including this paragraph (b), is required to be included in subawards or contracts under this grant or cooperative agreement that have an estimated value over \$50,000 and will be performed outside the United States, including its outlying areas.

26. PROHIBITION ON CERTAIN TELECOMMUNICATION AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

Federal award recipients are prohibited from using government funds to enter contracts (or extend or renew contracts) with entities that use covered telecommunications equipment or services as described in section 889 of the 2019 National Defense Authorization Act. This prohibition applies even if the contract is not intended to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services.

III. DEPARTMENT OF THE INTERIOR STANDARD AWARD TERMS AND CONDITIONS

The Department of the Interior (DOI) Standard Award Terms and Conditions found at <https://www.doi.gov/sites/doi.gov/files/uploads/doi-standard-award-terms-and-conditions-effective-december-2-2019-revised-june-19-2020.pdf> are hereby incorporated by reference as though set forth in full text. These terms and conditions are in addition to the assurances and certifications made as part of the award and terms, conditions or restrictions reflected on this Agreement. Recipient acceptance of this Agreement carries with it the responsibility to be aware of and comply with all DOI terms and conditions applicable to this Agreement. The Recipient is responsible for ensuring their subrecipients and contractors are aware of and comply with applicable statutes, regulations, and agency requirements.

Recipient and subrecipient failure to comply with the general terms and conditions outlined below and those directly reflected in this Agreement can result in the DOI taking one or more of remedies described in 2 Code of Federal Regulations parts 200.338 and 200.339. The DOI will notify the recipient whenever terms and conditions are updated to accommodate instances in the passage of a regulation or statute that requires compliance. Also, DOI will inform the Recipient of revised terms and conditions in the action of an Agreement amendment adding additional Federal funds. Reclamation will make such changes by issuing a Notice of Award amendment that describes the change and provides the effective date. Revised terms and conditions do not apply to the Recipient's expenditures of funds or activities the Recipient carries out before the effective date of the revised DOI terms and conditions.