

**RECLAMATION DISTRICT NO. 1601
TWITCHELL ISLAND
BOARD OF TRUSTEES MEETING
TUESDAY, FEBRUARY 18, 2025
9:00 AM
ENGINEER'S REPORT**

**I. PROJECT FUNDING AGREEMENT TW – 24 - 1.0 SP – PHASE I –
SETBACK LEVEE SAN JOAQUIN RIVER**

- A. Received comments to SOW from CDFW on 1/17/2025 and from DWR on 2/10/2025. Responses to comments will be developed and submitted with a revised SOW shortly.
- B. Received the attached approval of request for advance funds on 2/4/2025 in the amount of \$1,090,000 for the District request made on 6/26/2024. The email from DWR states that “it may take up to six weeks for the State Controller’s Office to issue and mail the check.” A second request on behalf of the District will be submitted shortly.

EXHIBIT A: Notice of Advance from DWR dated 2/4/2025.

II. DISTRICT PUMP STATION SOLAR ARRAY

- A. The Sacramento County Building Permit has been acquired. These have been approved, but the permit card has not been issued. Worked with Daniel this week to satisfy the Counties’ need for Fire Department acknowledgment, special inspection acknowledgment and verification, and contractor acknowledgment. All items are submitted, and we expect the card to be issued this week.

Inspection card issued. First County inspection complete.

- B. **PGE Interconnection** - Awaiting approval on electrical plan updates in response to Sacramento County review.
- C. **PG&E Update per Barry Sgarrella email dated February 10, 2025.**

EXHIBIT B: Email correspondence from Barry Sgarrella regarding PG&E updated.

- D. Construction
 - a) Site work has resumed as of Monday 1/13/25.
 - 1. Clearing and grubbing completed at the south half and along the eastern boundary of the solar array pad.

- a. The NW corner of the pad continues to be a concern as clearing and grubbing efforts exposed a larger footprint of unstable areas than originally identified. - This area was successfully bridged using 700 TN of Riprap and is currently stable.
- b. 2nd unstable location was exposed during ¾-inch AB installation. A deeper section of AB was installed in order keep the project timeline intact and to stabilize the area enough to stabilize the pad for pile diving work.

- 2. Trenching and pipe installation started. – Duct bank installed and backfilled.
- 3. 18-inch Piles installed – no issues to report.
- 4. As-built survey of final pile location conducted and analyzed for final baseplate fabrication and installation. Installation is anticipated within 2 weeks.
- 5. Racking and Panel fabrication continues. Anticipated delivery in early May.

b) Scope Changes

- 1. WCD 01 – Domestic Content / Safe Harbor procurement. Board of Trustees Approved 11/19/24.
 - a. Total Product Cost \$390,566.00
 - b. Reduction in Bid Item <\$226,520.00>
 - c. Net adjustment ~~\$390,566.00~~ **164,046.00**
- 2. WCD 02 – Provide and Install 100 Ton Riprap to stabilize 3 subgrade locations identified during walkthrough.
 - a. Net adjustment **\$13,000.00**
- 3. WCD 03 – Expand drainage ditch crossing to install duct bank across drainage ditch withing easement.
 - a. Net adjustment **\$12,000**
 - b. Expected to come in around \$10,000.
- 4. WCD 04 – Provide additional 710 Ton Riprap for expanded un-stabilized sub-grade at unit rate. Removed WCD 02 lump sum directive.
 - a. Remove WCD 02 <\$13,000>
 - b. Add 710 Ton Riprap at an adjusted unit rate \$63,190.00.
 - c. Total net adjustment **\$50,190.00**
- 5. WCD 05 – Add additional 2,400 Ton Class II - ¾-inch Aggregate Base at adjusted unit rate to deepen AB section at un-stable areas exposed during AB placement activity along Western side of pad.

- a. Remove un-used Riprap from WCD 04 – 9.67 Ton <860.63>
- b. Adjust unit rate of Bid Item 3 AB -1,700 Ton @ \$58.00/TN <\$98,600.00>
- c. Add 3,932.92 Ton at an adjusted unit rate \$53.38/ton \$209,992.65.
- d. Total Net adjustment **\$110,532.02**

c) Forecasted Schedule

- 1. Anticipating the solar array pad to be completed by early next week. (pending changes) – Pad Complete
- 2. Pile alignment survey mid next week. - Complete
- 3. Pile installation – Complete.
- 4. Baseplate fabrication and Installation – 2-weeks
- 5. Panel, inverters, rough wiring – March
- 6. Carport racking installation – May.

E. Summary of additional costs:

a) CCO #1

- 1. WCD 01 - \$164,046

b) CCO #2

- 1. WCD 02 - \$13,000
- 2. WCD 03 - \$12,000
- 3. WCD 04 - \$50,190
- 4. WCD 05 - \$110,000
- TOTAL : \$185,722

III. DWR SYSTEMWIDE MULTI-BENEFIT PROJECT FUNDING SCOPE OF WORK

- A. This Public entity Agreement (PEA) has been approved by DWR. Initial design started in February.

IV. SINKHOLE/CRACK @ LEVEE STATION 243+00 EAST OF CENTER ILAND ROAD ON SEVENMILE SLOUGH

- A. Review repairs of sinkhole/crack in Sevenmile Slough Levee on Monday February 3, 2025

EXHIBIT C: Photos of sinkhole/crack by Ricky Carter on 2/3/24

V. USACE PERIODIC INSPECTION REPORT OF THREE MILE SLOUGH LEVEE

- A. Review outcome of the hearing before the Central Valley Flood Protection Board (CVFPB) on January 24th. Review the need to address slight depressions in levee

crowns and commencing the raising and remodel of the District's 3 siphons to comply with USACE standard installation.

VI. PROJECT FUNDING AGREEMENT TW – 21 - 1.2 TWERP PROJECT

A. Review Progress Pay Estimate No. 9-1 for partial release of retention.

EXHIBIT D: Progress Pay Estimate 9-1 partial retention release.

EXHIBIT A

DEPARTMENT OF WATER RESOURCES

DIVISION OF MULTIBENEFIT INITIATIVES
P.O. Box 942836
Sacramento, CA 94236-0001



2/4/2025

Ms. Linda Carter, Secretary
Reclamation District 1601 (Twitchell Island)
Post Office Box 2382
Stockton, California 95201

Project Funding Agreement TW-24-1.0-SP

Dear Ms. Carter:

This is in response to the letter from KSN Inc., dated June 26, 2024, regarding Project Funding Agreement TW-24-1.0-SP (PFA), executed between the Department of Water Resources (Department) and Reclamation District 1601 for Phase 2 of the District Multi-Benefit Project on Twitchell Island. The letter contains a request for advance funds in the amount of \$1,090,000 for project expenses covered under the PFA including project management, grant management, permitting, compensatory mitigation, utility relocation, and engineering and management of the toe berm.

We find the request for advance funds to be acceptable. Please note that any costs associated with completing the Delta Stewardship Council (DSC) Consistency Determination are ineligible for reimbursement under the PFA, as explained in a letter from the Department to the District dated October 2, 2024.

If you have any questions, please contact Project Engineer Saskia Donovan at (916) 460-0407 or Bobby Jafarnejad, Manager of Delta Levees Special Flood Control Projects, at (916) 820-8221.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrea L. Lobato".

Andrea L. Lobato, P.E., Manager
Delta Levees Program

cc: KSN, Inc.
711 North Pershing Avenue
Stockton, California 95203

EXHIBIT B

Christopher H. Neudeck

From: Barry Sgarrella <barry@solagra.com>
Sent: Monday, February 10, 2025 3:50 PM
To: Younus, Mohammad Aman
Cc: Winston Friedlander; Tim Phisterer; Jeff Mueller; Christopher H. Neudeck; Sean M. Pritchard
Subject: RE: Project Update - RECLAMATION DISTRICT 1601 - TWITCHELL ISL RD WS 1.3MI S/JACKSON - Notification #125547778
Attachments: Reclamation District 1601 1200A MSB & XFMR Location Plan - 2-5-25.pdf; PGE & 1200 MSB.png

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

To follow up on my email of December 6, 2024, the building permit has been issued, and the foundations for the subject solar array have been completed. We expect the erection of the steel frame for the elevated carport structure to begin in March 2025 with interconnection to be ready in May 2025. We are revising the SLD to show the location of the new transformer to a concrete pad located approximately 20 feet northwest of the pole that supports the current 300 KVA pole-mount transformer. Unless a 500 KVA pole mount transformer is available, the new transformer will be mounted below the Base Flood Elevation, so it will need to be a sealed transformer as required in PG&E UG-1 Transformers Greenbook 045292 dated 12-01-19, Paragraph 10.

I have attached a Location Plan and a .png file showing the location and position of the new switchgear and transformer. The solar system will produce 418 KW DCp. A 500 KVA transformer, either pole-mounted or sealed pad-mounted, will be adequate to handle the power produced at peak.

Please revise the preliminary interconnection cost estimate to reflect that revision and provide the size, mount type, and delivery schedule for the new transformer.

Please contact me if you have any questions.

Thank you,

Barry Sgarrella

President
Reclamation District 1601
C: 415-720-5060

From: Barry Sgarrella
Sent: Friday, December 6, 2024 4:48 PM
To: Younus, Mohammand Aman <MohammandAman.Younus@pge.com>
Cc: Winston Friedman <winston@solagra.com>; Tim Pfisterer <tim@panelized.com>; Jeff Mueller <jmueller@ksninc.com>; 'Christopher H. Neudeck' <cneudeck@ksninc.com>; Sean M. Pritchard <spritchard@ksninc.com>
Subject: RE: Project Update - RECLAMATION DISTRICT 1601 - TWITCHELL ISL RD WS 1.3MI S/JACKSON - Notification #125547778

Good afternoon,

RD-1601 is completing the design stage of the subject solar project. During the building permit plan check processing, Sacramento County had an issue with the solar panels being mounted below the base flood elevation of Twitchell Island. We have executed a waiver with the County. The permit has been approved, and we expect the building permit to be issued next week.

A possible issue with the new transformer placement has come into focus. In reviewing PG&E UG-1 Transformers Greenbook 045292 dated 12-01-19 Paragraph 10 states:

"An equipment pad SHALL NOT be placed on an elevated berm, mound or structure either earthen or otherwise when placed in a Flood Plain. If local knowledge of the area in which the equipment is to be placed identifies a high likelihood that uninsulated terminals of the equipment will come in contact with floodwater and the location cannot be moved to a location less likely to have flood levels come in contact with the exposed terminals, a Subsurface Fully Insulated Device should be installed in lieu of the pad

mount design. In some cases such as transformers, because of capacity limits of subsurface material coded equipment it may not be possible to provide a transformer of sufficient capacity to serve loads in excess of the capabilities of a 1000 kVA UCD."

The current transformer is a 300 KVA pole mount which is mounted above the Base Flood Elevation ("BFE"). If the transformer upgrade provides a 750 KVA pad mount transformer, the pad would be below the BFE and in the Flood Plain. Per Paragraph 10 hereinabove, the new replacement transformer would have to be a Subsurface Fully Insulated Device in lieu of a pad mount design. Alternatively, the 300 KVA pole mount transformer could be upgraded to a 500 KVA pole mount that is commercially available from several suppliers.

Please review and advise.

Thank you,

Barry Sgarrella

President
Reclamation District 1601
C: 415-720-5060

From: Younus, Mohammad Aman <[MohammadAman.Younus@pge.com](mailto:Younus@pge.com)>
Sent: Wednesday, October 9, 2024 9:31 AM
To: Barry Sgarrella <barry@solagra.com>
Cc: Winston Friedman <winston@solagra.com>; Tim Pfisterer <tim@panelized.com>; 'Perla Tzintzun-Garibay' <perla@butterfieldcpas.com>
Subject: RE: Project Update - RECLAMATION DISTRICT 1601 - TWITCHELL ISL RD WS 1.3MI S/JACKSON - Notification #125547778



Younus, Mohammad Aman ([MohammadAman.Younus@pge.com](mailto:Younus@pge.com)) has sent you a secure message.



[Read the message](#)

This is an encrypted email sent from PG&E.

This email and its content are confidential and intended solely for the use of the addressee. Please notify the sender if you received this email in error or simply delete it.

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Microsoft Corporation, One Microsoft Way, Redmond, WA 98052



ELECTRICAL LEDGEN
 1. (E) UTILITY POLE
 2. (N) XFMR
 3. (N) 1200A MSB



SCALE: - 1" = 16'-0"

1200A MSB & XFMR LOCATION PLAN

PANELIZED STRUCTURES INC.
 575 STEPHEN ST. WESTLYN, CA 94595
 (925) 832-4800 FAX (925) 832-4801
 WWW.PSSTRUCTURES.COM



Job: RECLAMATION DISTRICT 1601
 SOLAR SYSTEM
 Location: TWITCHELL ISL RD WS 1.3MI S/JACKSON SLU RD
 1200A MSB & XFMR LOCATION

NO.	DESCRIPTION	DATE
1		
2		
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APPROVED BY DATE: _____
 DRAWN BY: EBO _____
 CHECKED BY: TIF _____
 SCALE: NONE
 FROM PLANS DATE: _____
 JOB: _____
 SHEET: _____ OF _____



EXHIBIT C











EXHIBIT D



Progress Pay Estimate

No. 9-1
Partial Retention Release
Through September 2024

PROJECT: 1110-1010-10
 Twitchell Island
 Native Grass Seedings

DATE: 2/11/2025

CONTRACTOR: Hanford ARC

CONTRACT ID: 1601-10-24-23-02

CONTRACT TIME:

Original Time 320 days
 Notice to Proceed Date 11/15/2023
 Original Completion Date 9/30/2024
 Approved Time Extensions 365 days
 Revised Completion Date 9/30/2025
 Work Completed Through 12/31/2024
 Elapsed Time 412 days
 Percent Time Elapsed 60.1%

CONTRACT COST:

Original Contract Price \$968,556.00
 Approved Change Orders \$85,689.43
 Percent Change Orders 8.8%
 Revised Contract Price \$1,054,245.43
 Amount Complete to Date \$763,228.38
 Percent Complete 72.4%

CURRENT PAYMENT SUMMARY:

DESCRIPTION	TOTAL EARNINGS	LESS 5% RETENTION	LESS DEDUCTIONS	NET EARNINGS
To Date	\$763,228.38	(\$4,092.38)	\$0.00	\$759,136.00
Previous	\$763,228.38	(\$38,161.42)	\$0.00	\$725,066.96
Current	\$0.00	\$34,069.04	\$0.00	\$34,069.04
Net Payment Due This Invoice:				\$34,069.04

OVERALL PAYMENT SUMMARY:

NO.	WORK COMPLETED THROUGH	TOTAL EARNINGS	LESS 5% RETENTION	LESS DEDUCTIONS	NET EARNINGS
1	12/31/2023	\$355,065.88	(\$17,753.29)	\$0.00	\$337,312.59
2	4/30/2024	\$46,659.00	(\$2,332.95)	\$0.00	\$44,326.05
3	5/31/2024	\$46,659.00	(\$2,332.95)	\$0.00	\$44,326.05
4	6/30/2024	\$53,749.00	(\$2,687.45)	\$0.00	\$51,061.55
5	7/31/2024	\$59,648.80	(\$2,982.44)	\$0.00	\$56,666.36
6	8/31/2024	\$59,648.80	(\$2,982.44)	\$0.00	\$56,666.36
7	9/30/2024	\$59,950.40	(\$2,997.52)	\$0.00	\$56,952.88
8	10/31/2024	\$15,947.50	(\$797.38)	\$0.00	\$15,150.13
9	12/31/2024	\$65,900.00	(\$3,295.00)	\$0.00	\$62,605.00
9-1	PARTIAL RETENTION	\$0.00	\$34,069.04	\$0.00	\$34,069.04
TOTALS:		\$763,228.38	(\$4,092.38)	\$0.00	\$759,136.00

NOTES:



Progress Pay Estimate

No. 9-1
Partial Retention Release
Through September 2024

PROJECT: 1110-1010-10
Twitchell Island
Native Grass Seedings

DATE: 2/11/2025

CONTRACTOR: Hanford ARC

CONTRACT ID: 1601-10-24-23-02

SUPPORTING DOCUMENTATION
<ul style="list-style-type: none">Hanford ARC Invoice No. 231089PATRET dated 1/17/2025

RECOMMENDED FOR PAYMENT
KSN, Inc. 
BY: Erik Almaas, PE Project Manager



HANFORD

775 Baywood Drive, Suite 207
Petaluma, CA 04054
Phone: (707) 966-6633
Point of Contact: Asha Virlouvet
avirlouvet@hanfordarc.com / (707) 934-0750

INVOICE
Invoice Number
231089PATRET
Invoice Date
1/17/2025

Bill To: Reclamation District 1601
2360 West Twitchell Island Road
Rio Vista, CA 94571
ATTN: Erik Almas, KSN Inc.

Re: Twitchell Island Native Grass
Seeding

Job No	Client Project Number	Agreement No.	Terms	Due Date
231098	1110-1010-10	1601-10-24-23-02	Net 30 Days	2/16/2025
Completed this Invoice Period				

Item	Description	Amount	Billing Amount
RET	Total Retainage Held to Date	\$ 38,161.42	
RET	Retainage Release through 9/30/2024 Work Periods	\$ 34,069.04	\$ 34,069.04
RET	Total Remaining Retainage Held to Date	\$ 4,092.38	

TOTAL DUE THIS INVOICE \$ 34,069.04

PAYMENT APPLICATION (SOV)



PROJECT: Twitchell Island Native Grass
Seeding
CONTRACT NO: 1601-10-24-23-02
HANFORD JOB NO: 231098

To: Reclamation District 1601
2360 West Twitchell Island Road
Rio Vista, CA 94571
Attn: Erik Almes, KSN Inc.

From: Hanford ARC
775 Baywood Dr. Suite 207
Petaluma CA 94954
Contractor Rep: Asha Viriouvet

Progress PayAp #: 11
Work Period: YTD Sept 2024
INVOICE #: 231089PARTRE

Items	Schedule 1 Work Description	Units	Contract		Prior Periods		Current Period		Cumulative Period		Retention by Line Item	9/30/2024 Ret Released	Remaining Ret to Release	
			Unit Price	Amount	Units	Value	Units	Value	Units	Value				
SH 1-1	Mobilization	EA	1.00	\$ 21,335.00	\$ 21,335.00	100%	\$ 21,335.00	0%	\$ -	100%	\$ 21,335.00	\$ 1,066.75	\$ 1,066.75	\$ -
SH 1-2	Site Preparation	AC	81.20	\$ 681.00	\$ 55,297.20	81.20	\$ 55,297.20	0.00	\$ -	81.20	\$ 55,297.20	\$ 2,764.86	\$ 2,764.86	\$ -
SH 1-3	Seed Installation	AC	81.20	\$ 4,379.00	\$ 355,574.80	81.20	\$ 355,574.80	0.00	\$ -	81.20	\$ 355,574.80	\$ 17,778.74	\$ 17,778.74	\$ -
TOTAL SCHEDULE 1 CONTRACT					\$ 432,207.00		\$ 432,207.00				\$ 432,207.00	\$ 21,610.35	\$ 21,610.35	\$ -
Items	Schedule 2 Work Description	Units	Contract		Prior Periods		Current Period		Cumulative Period		Retention by Line Item	9/30/2024 Ret Released	Remaining Ret to Release	
			Unit Price	Amount	Units	Value	Units	Value	Units	Value				
SH 2-1	SITE IRRIGATION	EV	15.00	\$ 7,167.00	\$ 107,505.00	15.00	\$ 107,505.00	0.00	\$ -	15.00	\$ 107,505.00	\$ 5,375.25	\$ 5,375.25	\$ -
SH 2-2	SITE HERBICIDE APPLICATION FOR NON-NATIVE BROADLEAF PLANTS	EV	2.00	\$ 14,764.00	\$ 29,528.00	2.00	\$ 29,528.00	0.00	\$ -	2.00	\$ 29,528.00	\$ 1,476.40	\$ 1,476.40	\$ -
SH 2-3	SELECTIVE HERBICIDE APPLICATION FOR BERMUDA GRASS	AC	25.00	\$ 1,598.00	\$ 39,950.00	25.00	\$ 39,950.00	0.00	\$ -	25.00	\$ 39,950.00	\$ 1,997.50	\$ 1,997.50	\$ -
SH 2-4	MANUAL WEED REMOVAL - SITE MOWING	EV	6.00	\$ 31,895.00	\$ 191,370.00	5.50	\$ 175,422.50	0.00	\$ -	5.50	\$ 175,422.50	\$ 8,771.13	\$ 7,973.75	\$ 797.38
SH 2-5	MANUAL WEED REMOVAL - SELECTIVE HAND CREW	HRS	144.00	\$ 709.00	\$ 102,096.00	144.00	\$ 102,096.00	0.00	\$ -	144.00	\$ 102,096.00	\$ 5,104.80	\$ 5,104.80	\$ -
SH 2-6	SELECTIVE BROADCAST RESEEDING INSTALLATION	AC	25.00	\$ 2,636.00	\$ 65,900.00	25.00	\$ 65,900.00	0.00	\$ -	25.00	\$ 65,900.00	\$ 3,295.00	\$ -	\$ 3,295.00
TOTAL SCHEDULE 2 CONTRACT					\$ 536,349.00		\$ 520,401.50		\$ -		\$ 520,401.50	\$ 26,020.08	\$ 21,927.70	\$ 4,092.38
TOTAL SCHEDULE 1 & 2 CONTRACT					\$ 968,556.00		\$ 952,608.50		\$ -		\$ 952,608.50	\$ 47,630.43	\$ 43,538.05	\$ 4,092.38
CHANGE ORDERS														
CO1	BROADCAST SEED Credit	AC	64.20	\$ (1,201.58)	\$ (77,141.12)	64.20	\$ (77,141.12)	0.00	\$ -	64.20	\$ (77,141.12)	\$ (3,857.06)	\$ (3,857.06)	\$ -
CO2-A	Reduce Item 4 Site Mowing by 2 Events	EV	2.00	\$ (31,895.00)	\$ (63,790.00)	2.00	\$ (63,790.00)	0.00	\$ -	2.00	\$ (63,790.00)	\$ (3,189.50)	\$ (3,189.50)	\$ -
CO2-B	Increase Item 2 Herbicide Non-Native Broadleaf Plants	EV	4.00	\$ 14,764.00	\$ 59,056.00	4.00	\$ 59,056.00	0.00	\$ -	4.00	\$ 59,056.00	\$ 2,952.80	\$ 2,952.80	\$ -
CO3-01	SITE HERBICIDE APPLICATION FOR NON-NATIVE BROADLEAF PLANTS	EV	4.00	\$ 15,502.20	\$ 62,008.80	0.00	\$ -	0.00	\$ -	0.00	\$ -	\$ -	\$ -	\$ -
CO3-02	SELECTIVE HERBICIDE APPLICATION FOR BERMUDA GRASS	AC	5.00	\$ 1,677.90	\$ 8,389.50	0.00	\$ -	0.00	\$ -	0.00	\$ -	\$ -	\$ -	\$ -
CO3-03	MANUAL WEED REMOVAL - SITE MOWING	EV	5.00	\$ 33,489.75	\$ 167,448.75	0.00	\$ -	0.00	\$ -	0.00	\$ -	\$ -	\$ -	\$ -
CO3-04	MANUAL WEED REMOVAL - SELECTIVE HAND CREW	HR	50.00	\$ 744.45	\$ 37,222.50	0.00	\$ -	0.00	\$ -	0.00	\$ -	\$ -	\$ -	\$ -
CO3-05	Remove Sched 2 Item: Site Irrigation	EV	15.00	\$ (7,167.00)	\$ (107,505.00)	15.00	\$ (107,505.00)	\$ -	\$ -	15.00	\$ (107,505.00)	\$ (5,375.25)	\$ (5,375.25)	\$ -
TOTAL CHANGE ORDERS					\$ 85,689.43		\$ (189,380.12)		\$ -		\$ (189,380.12)	\$ (9,469.01)	\$ (9,469.01)	\$ -
TOTAL SCHEDULE 1 & 2 CONTRACT & CHANGE ORDERS					\$ 1,054,245.43		\$ 763,228.38		\$ -		\$ 763,228.38	\$ 38,161.42	\$ 34,069.04	\$ 4,092.38

CURRENT TOTAL \$34,069.04
RETAINAGE 5% \$0.00
CURRENT AMOUNT DUE \$34,069.04