— BUREAU OF —
RECLAMATION

NOTICE OF FUNDING OPPROTUNITY NO. R22AS00195

WaterSMART

SMALL-SCALE WATER EFFICIENCY PROJECTS

PIDD GILA BEND MAIN CANAL
3 NEW RUBICON SLIPMETER GATES PROJECT

PREPARED FOR:

DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WATER RESOURCES & PLANNING OFFICE

PREPARED BY:

PALOMA IRRIGATION & DRAINAGE DISTRICT
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1. Technical Proposal and Evaluation Criteria

1.1 Executive Summary

This application is being submitted on 04/28/2022 — If NTP January 2023
Paloma Irrigation and Drainage District – Category A Applicant — Start January 2023
38401 W. I-8 # 175 Gila Bend, AZ 85337, Maricopa County — End December 2023

The Paloma Irrigation and Drainage District (PIDD) located in Gila Bend, Arizona has operated for over 100 years using manual controls to deliver water to their water users. This system is inefficient and prone to uncontrolled releases, spills, overflows, and requires constant overwatch and maintenance. Especially because we rely on 84 wells (65%) and surface water from the Gila River (25%) for our source of water. PIDD proposes to slowly upgrade our irrigation system and bring it into the 20th century. We plan to modernize a segment of our system by **installing three new automated Rubicon SlipMeter turnout gates for water delivery to producers off the 34-mile long Gila Bend Main Canal**. This is our **fifth Rubicon Gate installation project** and part of our overall strategy to slowly upgrade our irrigation system with State-of-the-Art real-time SCADA technology, new automated gates, and associated components. We plan to replace the three manual canal gates, which are inefficient, badly deteriorated, poorly functioning, leaking, and requires constant on-site monitoring and maintenance, with three new automated "Rubicon SlipMeter Gates."

In May of 2018, PIDD contracted with Rubicon Systems Australia Pty Ltd to conduct a Scoping Study of our water delivery system to help us develop a plan to modernize our aging infrastructure with state-of-the-art technology and their "tried and tested" Rubicon gates. Because of the high costs to upgrade and network our entire system, we plan to implement these improvements in phases, carefully leveraging funding and internal resources. In 2021, we submitted our first grant (Small-Scale Water Efficiency) to the BOR for one new Rubicon gate and was successful. Then another one for 3 Rubicon SlipMeter Gates and was also successful. PIDD wants to build on this initial upgrade to our system, and the associated benefits.

We will accomplish the goals established for the WaterSMART program and President Biden's Executive Orders by leveraging funding to conserve and better manage our water resources and increase efficiency of our system by slowly creating improved operations via an integrated network of automated Rubicon gates. We plan to construct the project in a **3-month period** and installation can begin in the late winter anytime between **April 2023 and December 2023**, depending upon NTP. Since the primary use of the water is agricultural, this is the best time because there is less demand, thus minimal impact to our producers/growers. We would schedule our work to accommodate them.

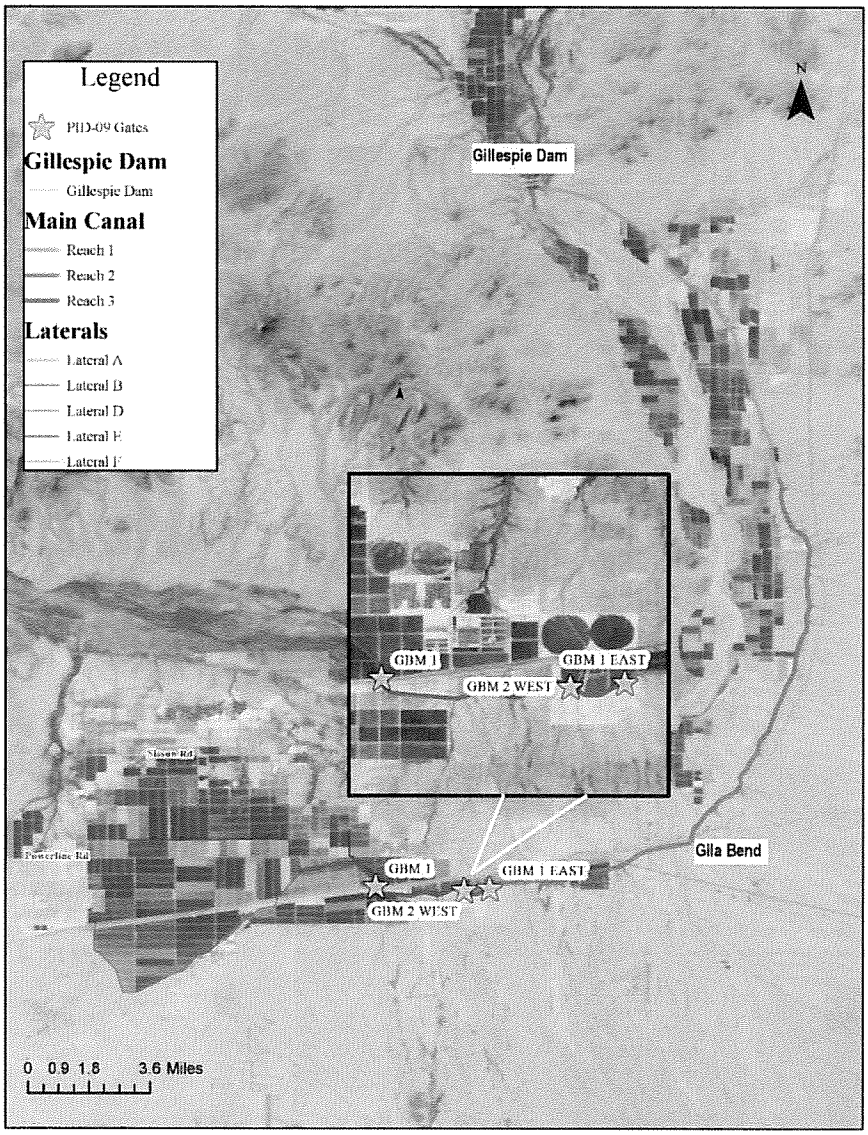
This project **is not located on a Federal facility**. The Paloma Irrigation and Drainage District canal system is the largest privately funded irrigation project in Arizona history, costing private owners about $2 million in 1919. Later in 1920, Frank Gillespie, a local rancher built the 1,700 LF Gillespie Dam to help provide water for irrigation. This community has practiced self-reliance for many decades, but now with the high costs of improvements, water shortfalls, and drought impacts, and increased operating costs, we must seek ways to leverage funding from grants or develop creative strategies to continue to provide our much needed services for this area.

1.2 Project Location

The project site is located within the historical boundaries of the towns of Gila Bend and Buckeye, in Maricopa County, Arizona, it is about 25 miles south of the confluence of the Gila River and Hassayampa River. It is downstream of the Aqua Fria River and the Salt River, west of the Arizona State Route 85 Corridor. It is located in Reach 3 of the Gila Bend Main Canal.

Gate GBM1 East:	Latitude: 32° 55' 40.97" N	Longitude: 112° 47' 14.51" W
Gate GBM2 West:	Latitude: 32° 55' 37.34" N	Longitude: 112° 47' 53.10" W
Gate GBM1:	Latitude: 32° 55' 43.29" N	Longitude: 112° 50' 08.89" W

Figure 1 – Location Map



GEORGE CAIRO ENGINEERING, INC.

PALOMA IRRIGATION AND DRAINAGE DISTRICT
OVERALL MAP

1.3 Technical Project Description

The Paloma Irrigation and Drainage District (PIDD) has operated for over 100 years using manual controls to deliver water to their water users. This system is inefficient and prone to uncontrolled releases, spills, overflows, and requires constant overwatch and maintenance. Especially because we rely on well water (65%) and surface water (25%) for our water supply. PIDD proposes to slowly upgrade their irrigation system and bring it into the 20th century. We plan to modernize our system, a **few gate/structures** at a time in addition to SCADA implementation. This project is for installation of three 2-foot wide Rubicon SlipMeter Turnout Gates, located within the 34-mile long Gila Bend Main Canal.

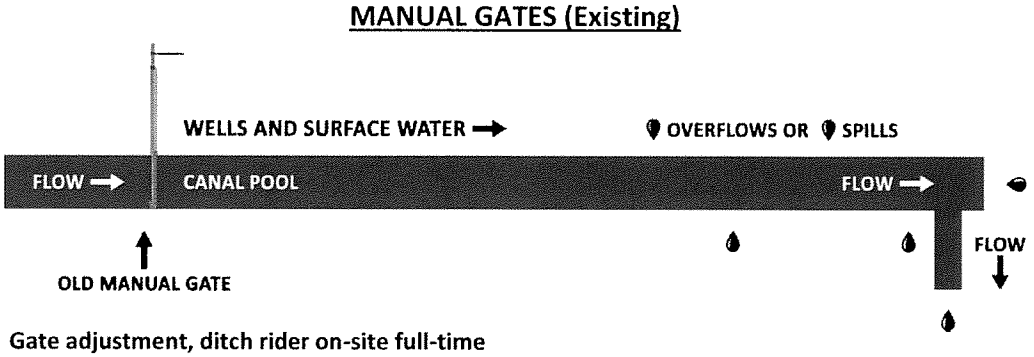
In May of 2018, PIDD selected Rubicon Systems Australia Pty Ltd to conduct a Scoping Study for our water delivery system to help us develop a plan to modernize our aging infrastructure with state-of-the-art technology and their "tried and tested" Rubicon Gates. The base cost estimate for upgrading just our main canal delivery system is around $2.8 million; not including turnout gates, installation or commissioning and design costs. We also had George Cairo Engineering, Inc. (GCE, Cairo), a local canal system modernization expert firm review our plan and provide validation and input. Because of the high costs of irrigation modernization projects, we have carefully identified and prioritized canals/laterals/structures and their ancillary components, so we can create an integrated network of automated check and turnout gates. In 2020, we submitted our first grant (Small-Scale Water Efficiency) to the BOR for one new Rubicon gate, then for another three Rubicon gates in 2021, both were successful. This year we were awarded a WEEG for 10 Rubicon Gates and a WCFS grant to complete the District's SOR.

This proposed project is our **fifth Rubicon Gate installation project** and part of our overall strategy to slowly upgrade our irrigation system with real-time technology, new automated gates, and associated components. We plan to replace the three manual canal turnout gates, which are badly deteriorated, leaking, poorly functioning, and require constant on-site monitoring and maintenance with three new "Rubicon SlipMeter gates" with Network controls in the 34-mile long Gila Bend Main Canal. The three canal turnout gates are located in Reach 3 of the Gila Bend Main Canal.

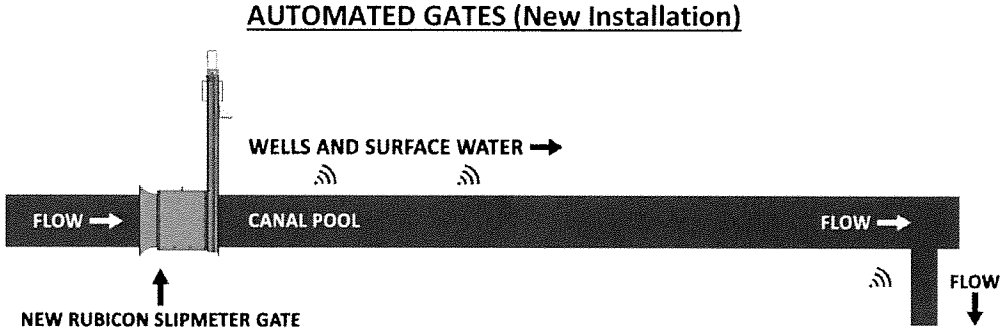
The Rubicon Data sheets for the SlipMeter Gate System (in the Appendix Section) have been provided for reference in Section 1.4 Criteria C: Project Implementation and the complete information package from Rubicon has been provided in the Appendix. A schematic (Figure 2) has also been provided on the following page that illustrates the conditions "Before and After" for the installation of the new automated SlipMeter gate system.

This Small-Scale Water Efficiency project is a priority to PIDD and is in the final design stage after receiving input from Rubicon Systems Australia Pty Ltd and George Cairo Engineering. It has been discussed and approved by our Board, and also with our local BOR contact. We hope to leverage funding from the WaterSMART program to help us complete this project, meeting both PIDD's and BOR's goals to conserve and better manage our water resources and increase efficiency of our system. In order to better understand the needs of our district, we have provided a summary of PIDD's background, history and description in the Appendix.

Figure 2 – Schematic Design of Automated System Before and After New Installation



- **Gate adjustment, ditch rider on-site full-time**
- **Try to maintain constant flow/elevation – fluctuation +/- 2FT, yields variable, inefficient deliveries**
- **Must anticipate when to stop pumps and adjust gates to match flows and provide water needed**
- **Close to soon → inadequate delivery**
- **Close too late → excess flows carry downstream can cause overflow/flooding or loss (downstream gates open to prevent flooding and system overflow)**



- **Adjusts automatically, ditch rider uses integrated network controls**
- **Maintains delivery ditch pool constant delivery flow**
- **Gate adjusts precisely when needed to varying water levels on canal pool**
- **Yields steady deliveries**

List of Materials:

Appurtenances and structures for three new Rubicon SlipMeter Gates: Concrete repair, structural repair, anchor bolts for new gate frame, epoxy for old bolt anchors, new trash rack, new handrail, walkway, electrical wiring, safety features and appurtenances.

Safety Supplies: Shade, Coolers, Water/Electrolytes, Gloves, Safety Glasses, Reflective Vests, Hard Hats, Steel-Toed Boots, Signage, Cones, Barricades, COVID 19 Plan and PPE

List of Equipment:

Construction Equipment to be used for this project would include: Front End Loader John Deere 624K, Dump Truck Kenworth, Rubber Tired Excavator Gradall XL5100, Water Truck GMC, Service Truck 1 Ton 2000 Ford, Project Manager Truck, GPS Survey Equipment, Laser Level

Automation, Measurement Devices and Controls:

The SlipMeter includes the following items:

- The SlipMeter is a precision flow control and flow measurement gate that measures fully submerged flows (and partial-full flow in partial-full models) and mounts directly to a turnout headwall with no straight pipe requirements.
- The SlipMeter comes equipped with an internal and external frame complete with stainless steel anchor's, epoxy capsules, and polyurethane sealant.
- Each SlipMeter comes equipped with a separate standalone control pedestal which includes a display and keypad, solar panel power system and a 16 ft mast for mounting of communication antenna, RTUs, radio and antenna by others.
- The SlipMeter comes complete with an integrated power supply comprising an 85W solar panel, a charge controller, and a 48Ah 12-volt deep cycling battery pack.
- Standard Rubicon local controller software, including automatic local/remote flow control mode, local/remote gate position mode and local manual mode.

Rubicon data sheets for the SlipMeter have been provided in the Appendix.

1.4 Evaluation Criteria

A. Project Benefits

Description of Expected Benefits to Category A: PIDD Water Systems:

- **Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.**

PIDD's existing water delivery system faces many challenges due to its distance from traditional surface water sources, almost 65% of its water must come from 84 ground water wells. Another 25% is pumped from the Gillespie Dam storage pool (Gila River, 25 miles South) and additional pump stations, and it includes irrigation tailwater from upstream. Without automation and integrated controls, it is difficult to precisely match water supply with demand to prevent mismatched flows and minimize operational spills. In the proposed improvement reach of the Gila Bend Main Canal, there is no nearby flow regulation check structure making the 3 turnouts susceptible to varying water levels. This results in unsteady deliveries and flow mis-matches carried downstream in the Gila Bend Main Canal. This project will help improve our **overall water management of our irrigation system by:**

1) Reducing Pumping and Energy Costs (Allowing more funding available for improvements)
2) Reducing operational losses from spills and overflows (est. 150-250-acre feet/year)
3) Reducing risk of crop damage from flooding, uncontrolled releases, or overtopping
4) Reducing manual operating costs and use of resources (Allowing more funding for improvements)
5) Reducing delivery level fluctuations (Less water needed with optimum delivery/flow)
6) Enhancing the capability to provide on-demand water delivery to customers (Efficiency)
7) Enhancing the capability to provide remote monitoring and operation to PIDD staff (Better resource/staff management)
8) Providing the ability to identify leaks and seepage and unauthorized usage by utilizing the precise flow rate measurement provided by the upgraded gate regulator (Timely preventative actions)

9) Providing full integration between flow regulation gate structure and groundwater pumps (Accurate water quantity delivery – no excess)
10) Improving on-farm water use efficiency and improving yields with reduction in fertilizer, protecting the groundwater.
11) Providing constant supply levels to maintain more constant flow rates through turnouts to improve levels of service to water users (Less water needed with optimum elevation/flow)
12) Reducing "Order On" Lead Times to allow water delivery to be more precisely timed to crop needs (Less water needed)
13) Reducing "Order Off" Lead Times to allow precise volumes to be applied to farm (Less water)
14) Providing improved collaboration between multiple users and PIDD with automated water ordering (More efficient use of delivery system, less water needed)
15) Providing irrigation decision support tools, such as on-line scheduling applications and digital monitoring of water usage and flow levels for water users (Efficient, timely and convenient)
16) Providing the ability to precisely match water supply to crop demand in order to irrigate each crop with the required amount of water (More accurate matching of need/demand with actual water quantity needed).
17) Reducing costs from reduction in water quantity delivered and person-hours (From items 1-16).

o ***Are customers not currently getting their full water right at certain times of year?***

YES, PIDD currently had an annual shortfall of 31,000 acre feet with more shortfalls anticipated to continue due to drought. Shortage impacts usually occur during periods of above normal temperatures in the growing season when there is high demand, or at the end of the year when we have used our mandated reduced allotment (affected by climate change and drought). We try to schedule water deliveries to offset this problem and minimize the economic impact to our growers. Unfortunately, PIDD has to proportionally reduce the water delivery allocation for each farmer moving forward due to the water shortage the District is facing and the District is coordinating with farmers on crop rotation.

o ***Does this project have the potential to prevent lawsuits or water calls?***

YES, from incidents such as overflows/spills or incomplete insufficient delivery that could cause catastrophic crop damage or bacterial contamination on produce causing serious illness or death *(compounded by Climate Change).* In case of severe drought and state imposed mandates, this project's water savings could prevent an inability to provide for a water call (delivery request).

o ***What are the consequences of not making the improvement?***

Without these improvements we would not be able to implement improvements we have identified to **better manage and** improve water delivery efficiency and improve our groundwater management for drought resiliency. As described above consequences could include catastrophic crop damage, serious illness or death, economic loss, lawsuits, increased costs to growers in our district, as well as a lack of water during severe drought conditions. Economic losses to growers from shortfalls range from $30K to $120K per year.

- ***Are customer water restrictions currently required?***

YES, due to drought, mandatory water restrictions have been imposed on PIDD. PIDD handles these 31,000 acre-feet shortfalls by proportionally reduce the water delivery allocation for each farmer and to work with the farmers to fairly rotate drought resistant crops between the fields.

- ***Other significant concerns that support the need for the project.***

Potential Shortfalls are a primary concern: If drought continues, water supply quantities could be reduced because of increased demand from old as well as new users. Most droughts occur after several years of little rainfall and produce a cumulative effect. Our strategy is to prioritize and complete step-wise yearly improvement projects to address these effects, but that still may not be enough.

Broader Benefits: Description of Broader Benefits:

- **Will the project improve broader water supply reliability at sub-basin or basin scale?**

PIDD is located in the Gila River Basin. along the Gila River which flows west from New Mexico ending at the Colorado River near Yuma. The Gila River's waters support a 60,000 square mile basin/watershed. It also supports the Lower Colorado River Basin. Any water conservation measures that support the western Gila River Basin and Lower Colorado River basin and other small tributaries in this network system (Hassayampa River, Aqua Fria River and the Salt River) also help protect groundwater and sustain wetland and riparian ecosystems as well as the Salt River and Gila River (Pima-Maricopa) Indian Tribes. In addition to the Tohono O'dham Nation located one mile north of Gila Bend, Arizona. This project will provide a small buffer against frequent state or federal mandated water quantity reduction improving reliability and sustainability of our system. It will allow us to save water through better management (automation) and reduction of ground water removal by less pumping, thus improving drought resiliency and contributing to the overall health of these two basins and surrounding fragile desert ecosystem. It will improve the integrity of delivery system with better controls to produce constant/reliable water flow, improve quantity (water elevation) and water quality, prevent leakage/seepage, overflows/flooding/spills, due to the multi-source of water supply (wells and water from Gillespie dam – 34 miles away). This will help address any shortfalls, as well as helping with future adverse conditions caused by drought and climate changes. These improvements also will result in improved on-farm efficiency and crop production. PIDD currently had an annual shortfall of 31,000-acre feet.

- **Will the proposed project increase collaboration and information sharing among water managers in the region?**

YES, this project demonstrates collaboration between our water district, the BOR, and our agricultural users. It can be used as an example to other water managers reflecting how assessment, planning, usage, need, coupled with automation and new technology can be used to benefit a district, especially on districts relying on multiple sources of water under various conditions (distance from source, seasonal fluctuations in supply, drought and climate change).

- **Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area?**

The specific problem PIDD faces regarding water supply are:

1) Costs from running the pumps and excess water loss from mismatch overflows and spillage.
2) Lack of effective water conservation measures: volume/flow controls (automation) and structures (gates) to precisely match supply and demand.
3) Water remaining in Gillespie Dam benefits recreation and provides wildlife environment.

Expected Geographic Scope Benefit: Locally – include benefits described in the previous two paragraphs. Sub-basin/Basin - positive impact to entire system by reducing significant water loss ranging from 150 to 250 acre-ft/yr (Based on type of crop and growth cycle, irrigation distribution method, and frequency and length of water delivery). Also, reduction of ground water removal by less pumping, contributes to the overall health of the surrounding fragile desert ecosystem that will improve sustainability and help address drought and climate change issues. Any water conservation measures that support the lower Colorado River basin and other small tributaries in this network system (Hassayampa River, Aqua Fria River and the Salt River) also help sustain wetland and riparian ecosystems as well as the Salt River and Pima-Maricopa Indian Tribes.

Specific Topics (Sectors and Areas) Positive Impacts/Benefits: Economic Positive Impacts/ Benefits:

The specific problems PIDD faces are:

Agricultural – economic (less water needed, less restriction on crop types, less danger of crop damage from overflows/flooding, reduce shortfalls, less energy needed for pumps, less danger or lawsuits or losses from bacterial contamination or flooding). Reduce O&M cost to PIDD so funding can be used for other deteriorating structures and sites. Enable growers off Gila Bend Main Canal to implement On-Farm improvements.

Environmental – Less noxious/invasive weeds, less erosion, conservation support healthier ecosystem (Native plants, habitat, native species and migratory birds). More viable washes/ springs.

Recreational/Tourism – Gila River/Watershed, Gillespie Dam, desert washes – Improved off-roading/ camping/ hiking/photography/bird watching.

Cultural – Protection and preservation of native gathering sites (plants and clay), ancient trails, village, or ceremonial site.

Food Safety – Less danger of catastrophic crop failure due to better water elevation controls to prevent overflows/flooding of fields with food crops.

Public Safety – Less residual flooding from overflow and spillage resulting in unsafe driving conditions and erosion of road and ditch banks.

- **Will the project complement work being done in coordination with NRCS in the area?**

YES, this project would greatly enhance our farmers ability to make "On-Farm water efficiency improvements through the NRCS EQIP program, however, until PIDD can provide better controlled water delivery systems (flow rate and elevation), it is difficult for them to make these improvements. As District Manager at PIDD and a 3rd generation farmer, I have an excellent relationship with NRCS and have received funding from them. I am working with NRCS to help develop a strategy to match our improvements to specific canals with "On-Farm" projects. Also, to facilitate collaboration between our farmers with USDA programs from NRCS, Rural Development, the Farm Service Agency, as well as new stand-alone programs. These partnerships between PIDD, Federal Ag Agencies, BOR and producers are critical to our future.

They will help us plan and develop projects that complement each other, improving the overall system from diversions to the farm. Especially in the Western states where drought, climate change and aging infrastructure greatly affect our daily operations.

- **Will the project help address drought conditions at the sub-basin or basin scale?**

1) Preventing possible water-related crisis (shortfalls or flooding) – creating resiliency
2) Leveraging funding to conserve and better manage our water resources and increase efficiency of our system, thus reducing quantities delivered during drought.
3) Improving water conservation, efficiency and effectiveness of water delivery system to reduce water quantities.
4) By reducing water quantities allowing water to be used by lower priority users that have shortfalls and mandatory water reductions during drought conditions.
5) Reduce groundwater pumping and improve drought resiliency and basin dependence.

B. Planning Efforts and Supporting the Project

- **Is the project identified specifically in the planning effort?**

This Small-Scale Water Efficiency project is a priority to PIDD and is in the final design stage after receiving input from Rubicon Systems Australia Pty Ltd and George Cairo Engineering who specialize in irrigation district modernization improvements. In May of 2018, PIDD selected Rubicon Systems Australia Pty Ltd to conduct a Scoping Study for our water delivery system to help us develop a plan to modernize our aging infrastructure with state-of-the-art technology and their "tried and tested" Rubicon Gates. Our plan was further reviewed and updated by George Cairo Engineering. This project has been discussed and approved by our Board as well as with our local BOR contact. Our "Water Conservation Plan" mandates that we periodically access our water delivery system and identify problems or needs as we continue to mature and adapt to meet changing conditions as well as identifying new technologies and strategies. We have already installed five of these structures/automated systems Gates and also placed 28 Wells on remote control and monitoring (Crop Link by Agsense).

- **Explain whether the proposed project implement a goal or address a need or problem identified in the existing planning effort?**

Each year, we identify and prioritize our system needs and problems and projects not addressed in the previous year are added. Our criteria include:

1) Is the project (components) listed as a priority on our Capital Improvement Plan and Water Conservation Plan. **YES**
2) Can the problem or need be remedied with existing resources and funds? **NO, Need BOR Match**
3) What benefits will occur from the corrective action taken (water/monetary savings, efficiency, sustainability, annual maintenance, crop losses, shortfalls, acre foot savings). **ALL**
4) Are additional resources and funds available if the existing funds are not available? **NO**
5) Recommendations from SOR. **IN PROGRESS**

- **Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.**

This Small-Scale Water Efficiency project has been approved by our Board and discussed with the Phoenix BOR Field Office. Our General Manager and the board actively support new infrastructure projects. The board and the PIDD Users **are 100% supportive of this project** to

slowly improve our irrigation system as shown by the number of grants we have begun submitting. See letters of support in the Appendix.

C. Implementation and Results

- **Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.**

Once the Categorical Exclusion or Environmental Review is completed and we receive the NTP, we will begin initial planning. An Action Plan will be developed that lists each task, scheduled interval, responsible party, comments/notes and when the activity or task is completed and by whom. A work plan will also be completed. Major phases will include:

Engineering/Design Work Required for Project (3 months) *Allows for plenty of time for review.*
This technical support will be performed by George Cairo Engineering, Inc. (GCE) with input from Rubicon Systems Australia Pty Ltd – both have provided professional services for installation of 2 PIDD automated Rubicon gates and the 4th gate with funding just received from a Reclamation Small-Scale Grant.

- Design and Fabrication of Rubicon SlipMeter Gate, Controls and Framework - Rubicon
- Design of Civil Work, Concrete and Structures Modifications and Appurtenances - GCE
- Order Gates – PIDD (Long Lead Item, may need 16 weeks lead time for fabrication)

Pre-Construction/Site Preparation for Project (1-2 Weeks) *One site or more, may be done concurrently, grouped by operational phasing and proximity*
Time is of the essence for water outage work, try to complete all activities to reduce Dry-Up time.

- On-site support/final planning and safety/COVID 19 meetings – GCE, and Rubicon, concrete and civil works Contractor.
- Begin Safe Dry-down to prevent canal liner damage, include notification to producers/ growers – PIDD
- Mobilization of Employees and Equipment
- Begin pre-casting or ready to cast in place concrete structures (Sidewalls, Aprons, Sills, miscellaneous metals, and Appurtenances) – Concrete and Civil Works Contractor (Innova)
- Order Additional Concrete

Construction and Installation (2-3 Weeks) *One site or more, may be done concurrently, grouped by operational phasing and proximity.*

- Implementation of all safety measures and COVID 19 requirements
- Installation of dirt plugs and any safety measures
- Removal of each Manual Gate and Demolition/Removal of any required structure elements - PIDD
- Continue to Coordinate/schedule with affected water user(s) - PIDD
- Final Site Preparation - PIDD Equipment Operator
- Concrete Foundation (Sidewalls and aprons) - PIDD, GCE (Oversee)
- Material Testing – GCE
- Installation of each of the three SlipMeter Gates (Attach to concrete structures) – Contractor's work, PIDD, GCE and Rubicon (Oversee)

- Electrical Wiring - Contractor
- Installation of metals such as safety walkway and handrails - PIDD

Post-Construction:

- Installation/testing of automation systems/controls (All activities not requiring Dry-out) – Rubicon and GCE
- Commission gates and certify accurate measurement and operation – Rubicon and GCE
- Postmortem to discuss lessons learned – Rubicon, Contractor, and GCE
- Training on gate control – Rubicon and PIDD

Closeout/Reports:

As required (Progress Reports - Quarterly or Semi-Annual).
As-build final installation
Final report with documentation

SlipMeter Gate Specifications are provided in the Appendix, a Schematic was provided on page 4.

Table 1, the **Tentative Milestone/Task Schedule** is provided below.

- **Describe any permits that will be required, along with the process for obtaining such permits. NONE.**

- **Identify and describe any engineering or design work performed specifically in support of the proposed project.**

This will be performed by Rubicon and George Cairo Engineering for Design and Fabrication of SlipMeter Gates, Controls and Framework. Design of Concrete Sidewalls, Aprons, Walkway, Safety Handrails, Electrical Wiring, Lighting and Appurtenances by George Cairo Engineering.

- **Describe any new policies or administrative actions required to implement the project.**

None. No new policies or actions, PIDD always gets prior approval from their board and coordinates improvement projects with the water users to minimize impact to their agricultural operations.

- **Describe the timeline for completion of environmental and cultural resource compliance. Was the timeline for completion of environmental and cultural resource compliance discussed with the local Reclamation office?**

YES, all work will comply with Federal environmental and cultural resource laws and other required regulations. We just recently completed a Class III Cultural study for upgrading 10 and 3 gates in the Gila Bend Main Canal, located upstream this three gates project. See responses to Environmental Compliance Questions Page 20 for additional information. All work and staging will stay within the already disturbance area and there will be no new ground disturbance.

Table 1 – Tentative Milestone/Task Schedule

Milestone/Task	Planned Start Date	Planned Completion Date
USBR Notice of Award	01/01/23	01/01/23
USBR Notice to Proceed and Contract Execution	01/01/23	01/31/23

Can take up to 6 months for Rubicon to fabricate gates and ship gates from Australia. May order with USBR approval before contract execution.		
USBR Categorical Exclusion/Environmental Compliance Review PIDD & GCE to work closely with USBR Environmental & Cultural Resources	02/01/23	03/31/23
Pre-Construction Contractor/Vendor Procurement: Engineering/Design, Concrete and Gates with associated structures, Concrete Subcontractor	02/01/23	10/15/23
Construction/Installation Coordinate/schedule with affected water user(s), Site Preparation, Concrete Structures/Foundations, Installation of three SlipMeter Gates, Cleanup and Debris removal	10/15/23[1]	12/15/23[1]
Completion Closeout/Final Report	12/15/23	12/31/23

[1] Construction and Installation will take about 6 weeks but will take place in the late winter between these two dates. There is less demand (quantity and time), thus minimal impact to our producers/growers. We would schedule our work to accommodate them.

Ideally, we would like to start construction as soon as possible for design and procurement late 2022 or early 2023, but unless we receive the Award and NTP December 2022 or January 2023 from USBR, this is unlikely.

D. Nexus to Reclamation

- **Is the proposed project connected to a Reclamation project or activity? If so, how?**

YES, this project is connected to the Reclamation vision and goals by improving efficiency and conservation of our water systems for our district and supporting lower basin drought water management.

- ***Does the applicant receive Reclamation project water?***

YES, Via the Gillespie Dam Lift Station.

- ***Is the project on Reclamation project lands or involving Reclamation facilities?***

NO, PIDD utilizes Gila River water and ground water (wells) for the irrigation systems.

- ***Is the project in the same basin as a Reclamation project or activity?***

YES, Gila River (Provides 25% water supply)
Aqua Fria River and the Salt River (Upstream Tributaries)
Lower Colorado River (Downstream – confluence in Yuma)

- ***Will the proposed work contribute water to a basin where a Reclamation project is located?***

YES, Gila River Basin and Lower Colorado River Basin (Confluence of Colorado River in Yuma).

E. Presidential and Department of the Interior Priorities

Sub-criterion No. E1. Climate Change

Combating the Climate Crisis

- **Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.**

We are using a "Best Practices" model by **conserving, protecting, and restoring** our natural resources (water and subsequent watersheds and habitats) by a variety of water conservation activities as previously discussed. Our partnership with farmers/producers enables us to work together to develop strategies to address the climate crisis through new and innovative agricultural conservation activities. We are also identifying system components that can utilize solar energy. Regarding the 30 by 30 initiative, with NCRS and USDA we are identifying On-Farm projects to reduce carbon emissions and promote biodiversity, especially in the riparian and watersheds that border our district.

Reducing climate pollution: Agricultural Greenhouse Gas Emissions (10% of total released in US)

1) Reduce carbon emissions through use of solar powered SCADA units and reduced O & M time requiring on-site vehicles.

Protecting public health: According to the CDC effects from Climate Change include increased incidence of respiratory and cardiovascular disease, injury and death due to extreme weather events, heat wave, droughts and floods causing losses to property and crops and change in food distribution, water-borne illnesses and mental health (CDC). This is especially true in rural, underserved, low-income populations such as ours. This project would:

1) Improve air quality by reducing carbon emissions through use of solar powered SCADA units and reduced O & M time requiring on-site vehicles and dust generated from dirt roads.
2) Reduce risk of biological contamination by automated controls to reduce incidence of spills, overflows and flooding.
3) Reduce cumulative effects from poor health (Type 2 Diabetes, Respiratory and Cardiovascular diseases).

Conserving our lands, waters, oceans, and biodiversity:

By conserving water, we promote biodiversity, endangered species in this desert habitat rely on the Lower Colorado River and its backwaters, riparian areas and natural lakes and the marshy habitat it supports for nesting, spawning and daily life. It also is part of the migration pathway for many bird species. Their habitat was greatly affected by the dams constructed along the Colorado River and then by the increased demand for water from towns and farming. During drought conditions this is intensified, and their critical habitat threatened. Especially during the summer when water demands are increased. Numerous riparian and marshy areas form a perimeter between the agricultural fields and the Gila Bend Main Canal and its Laterals, the Gila River (North) as well as the Mesas (North and West) that divert runoff from rainfall into natural riparian areas.

- **Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?**

YES, it improves integrity of delivery system to prevent leakage/seepage, overflows/flooding/ spills, constant/reliable water flow, improve quantity (water elevation) and water quality. This could help address any shortfalls, as well as helping with future adverse conditions caused by drought and climate changes. These improvements also will result in improved on-farm efficiency and crop production.

Any activity that helps conserve our natural resources, especially water contribute to the overall resiliency of communities that share these limited resources to survive and thrive. Contributing to the overall well-being of their ecosystem. Project is in-line with President Biden and DOI objectives and drought mitigation for the Lower Colorado River Basin.

Sub-criterion No. E2. Disadvantaged or Underserved Communities

- **Will the proposed project serve or benefit a disadvantaged or historically underserved community?**

YES, Western Maricopa County is an historically underserved, rural, low-income, disadvantaged community (town of Gila Bend, Winterhaven, and Gila River and Salt River Indian Reservations, Tohono O'odham Nation) because of its ethnic minorities, poverty level and rural location.

Public Health and Safety as related to:

Water Quality: Improve due to more efficient ground water use since community relies on wells.

See page 13, under Protecting Public Health.

Economic Growth Opportunities – reduced farming costs allow for more employment and help create 2nd tier producers (value added products).

- **Please describe in detail how the community is disadvantaged based on a combination of variables.**

Without these improvements we would not be able to **better manage and improve water delivery efficiency.** Consequences could include: Shortfalls during severe drought conditions adversely effecting Tribal income from farming and land leases as well as tourism and recreation, additional groundwater pumping and energy consumption, and loss or riparian or watershed areas for traditional gathering and as habitat for native species.

Table 2 – PIDD Disadvantaged Community Variables

Paloma Irrigation and Drainage District Disadvantaged Community Variables			
Variable	**Gila Bend**	**Gila River Indian Tribe**	**Salt River Indian Tribe**
Population	2,139	14,260	7,386
Low income, high and/or persistent poverty	MHI[1] $48,009 43.23% Live in Poverty	MHI[1] $9,283 52% Live in Poverty	MHI[1] $31,852 22% Live in Poverty
High unemployment and underemployment	6.1%	22.6%	5.9%
Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities	5.5% Native American 55.4% Hispanic	100% Native American or Family Members	100% Native American or Family Members
Linguistic isolation	Spanish Speaking	Spanish Speaking	Spanish Speaking
High housing cost burden and substandard housing	70% Substandard	90% Substandard	70% Substandard
High transportation cost burden and/or low transportation access	Limited Public Transportation	Limited Public/Tribal Transportation	Limited Public/Tribal Transportation

Disproportionate environmental stressor burden and high cumulative impacts	Poverty Level Magnify	Poverty Level Magnify 50% Type 2 Diabetes	Poverty Level Magnify 50% Type 2 Diabetes
Limited water and sanitation access and affordability	Archaic System	Archaic System	Archaic System
Disproportionate impacts from climate change	Poverty Level Magnify	Poverty Level Magnify	Poverty Level Magnify
High energy cost burden and low energy access	Utility Rates High	Utility Rates High	Utility Rates High
Access to healthcare	Limited, small clinic	IHS for BIA registered	IHS for BIA registered

[1]MHI = Median Household Income

- **If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985.**

See Table 2. Population includes majority of 55% Hispanics, they reside in a sparsely populated rural area, with little or no tax base to support their infrastructure. They are isolated by historically being considered less than equal as agricultural workers. The nearby Indian Reservations are also an underserved community and share Paloma's water resources from the Gila River.

Sub-criterion No. E3. Tribal Benefits

- **Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for a Tribe?**

YES, This project will help Reclamation meet their trust responsibilities to the three local Indian Tribes. Any water conservation measures that support the Gila River basin and other small tributaries in this network system (Hassayampa River, Aqua Fria River and the Salt River) will help conserve water that the Salt River and Pima-Maricopa Indian Tribes need for their native wetland and riparian areas and water resources for residential, municipal and agricultural use.

- **Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?**

Since these three Tribes reside in a similar area the answers to these questions are the same as on pages 14 and 15. This project will provide a small buffer against possible state or federal mandated water quantity reduction because of drought or climate change by saving water through better management (automation). It will improve integrity of delivery system to prevent leakage/seepage, overflows/flooding/spills, constant/reliable water flow, improve quantity (water elevation) and water quality. This could help address any shortfalls, as well as helping with future adverse conditions caused by drought and climate changes. These improvements also will result in improved on-farm efficiency and crop production.

2. Project Budget

2.1 Funding Plan and Letters of Funding Commitment

The **Federal share** is **46.34%** and the **Non-Federal** share is **53.66%**.

PIDD Staff will be utilized for specific tasks during the approximately one-year project duration (including 6 weeks construction phase (Mid-October – January)). For In-Kind, PIDD will utilize our staff and equipment/vehicles. The installation and commissioning will be overseen by a Rubicon representative, but PIDD's responsibilities will include project management, site preparation, some demolition, fill/compaction, concrete work, gate installation, dust control, cleanup and removal of debris and material at completion. By using our own staff costs will be greatly reduced because less hours will be required, and we will utilize our own equipment.

PIDD Staff will include 8 personnel to assist with the project, preconstruction, construction, and close out activities. Their responsibilities and duties are provided on the following page.

Costs incurred before start date: None (May need to place order for Rubicon Slip Meter Gates since they take 6 months of lead time to fabricate and are shipped from Australia).

2.2 Budget Proposal

Total Project Cost Table

FUNDING SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal Funding	$100,000.00
Costs to be paid by the Applicant	$115,796.56
Value of third-party contributions	$0.00
TOTAL PROJECT COSTS	**$215,796.56**

Project Costs Breakdown:

Federal Funding

BUDGET ITEM DESCRIPTION	AMOUNT
Materials: 3 Rubicon SlipMeter Gates @ $19,690 Each	$59,070.00
Construction: Rubicon Installation & Commissioning 3 Gates @ $ 1,700 Each	$5,100.00
Construction: Contractor Civil Work & Gate Installation (Partial)	$35,830.00
TOTAL FEDERAL FUNDING	**$100,000.00**

Non-Federal Funding (PIDD) – In Kind and Cash

BUDGET ITEM DESCRIPTION	AMOUNT
Salaries and Wages: *In Kind*	$44,988.88*
Fringe: *In Kind*	$10,729.96*
Equipment: *In Kind or Cash* if rented	$12,609.72*
Contractual: Engineering GCE	$25,698.00
Construction: Contractor Civil Work & Gate Installation (Partial)	$11,770.00
Environmental Compliance	$10,000.00
In Direct Costs – De Minimis *In-Kind*	$0.00*
TOTAL NON-FEDERAL FUNDING	**$115,796.56**

BUDGET ITEM DESCRIPTION	COMPUTATION		UNIT	TOTAL COST
	Rates	Quantity		
Salaries and Wages (PIDD)				
Project Manager	$66.35	272	HR	$18,047.20
Water Master/Foreman	$38.74	132	HR	$5,113.68
Project Assistant	$19.00	192	HR	$3,648.00
Accountant	$65.00	92	HR	$5,980.00
Equipment Operator	$20.00	216	HR	$4,320.00
Gate Fabricator	$28.20	136	HR	$3,835.20
Laborer	$16.00	140	HR	$2,240.00
Concrete Fabricator	$28.20	64	HR	$1,804.80
Total		**1244**	**HR**	**$44,988.88***
Fringe Benefits (PIDD)				
Project Manager	$12.46	272	HR	$3,389.12
Water Master/Foreman	$6.53	132	HR	$ 861.96
Project Assistant	$7.24	192	HR	$1,390.08
Accountant	$0.00	92	HR	$ 0.00
Equipment Operator	$7.62	216	HR	$1,645.92
Gate Fabricator	$5.08	136	HR	$ 690.88
Laborer	$16.00	140	HR	$2,240.00
Concrete Fabricator	$8.00	64	HR	$ 512.00
Total		**1244**	**HR**	**$10,729.96***
Equipment (PIDD)				
Front End Loader John Deere 624K	$120.15	32	HR	$3,844.80
Rubber Tired Excavator Gradall XL5100	$143.19	8	HR	$1,145.52
Dump Body Rear – Kenworth	$130.03	16	HR	$2,080.48
Water Tanker Trailer 5,000 Gal	$160.19	20	HR	$3,203.80
Crew Truck 1/2 Ton 2000 Ford 4x4	$48.94	8	HR	$ 391.52
Project Manager Pickup Truck 4x4	$48.59	40	HR	$1,943.60
Total		**124**	**HR**	**$12,609.72***
Materials and Supplies				
Rubicon SlipMeter Gates	$59,070.00	1	LS	$59,070.00
Total				**$59,070.00**
Contractual				
Engineering and Design Concrete	$25,698.00	1	LS	$25,698.00
Total				**$25,698.00**
Construction				
Contractor	$47,600.00	1	LS	$47,600.00
Installation Supervision & Commissioning	$5,100.00	1	LS	$5,100.00
Total				**$52,700.00**
Environmental and Regulatory Compliance				
Environmental Compliance	$10,000.00	1	LS	$10,000.00
Total				**$10,000.00**
TOTAL DIRECT COSTS				**$215,796.56**
Indirect Costs – De-Minimis Fixed	$0.00	0	%	**$0.00**
TOTAL ESTIMATED PROJECT COSTS				**$215,796.56**

2.3 Budget Narrative

Salaries and Wages:

PIDD Employee Hours Explanation

PIDD Employee	Grant Compliance & Bid Procurement Process & Reporting (~ 12 months)	Pre-constr. Activities: Environmental Compliance, Contractor/Vendor, Procurement, Engineering/Design, Concrete & Gate, Concrete Work, etc. (~ 9.5 Months)	Constr./ Installation: Coord. & Sched. w/ affected Water Users, Site Prep., Concrete Struct. & Foundation Work, Gate Installation, Cleanup & Debris Removal (~ 2.5 Months)	Post-Construction: Installation & Testing of Automation & Controls, Commissioning Work, Grant Close-Out Work (~ 2-3 Weeks)	Sub-Total
General Manager/ Project Manager: Overall project management, coordination with Engineers, Manufacturer, and Contractor Installation of Rubicon Gate/Associated Controls/Structures, Scheduling of Staff and Equipment, etc.	Assume 12 months, Approx. 4 hr/month = 48 hrs	Assume 9.5 months, Approx. 8 hr/month = 76 hrs	Assume 2.5 months, Approx. 40 hr/month = 100 hrs	Assume 3 wks, Approx. 16 hr/wk = 48 hrs	= 272 hrs
Water Master/Foreman: Assist Project Manager – supervise PIDD field staff, etc.	0 hr	Assume 2 months, Approx. 8 hr/month = 16 hrs	Assume 2.5 months, Approx. 40 hr/month = 100 hrs	Assume 1 wk, Approx. 16 hr/wk = 16 hrs	= 132 hrs
Project Assistant: Assist Project Manager with project coordination & reporting	Assume 8 months, Approx. 8 hr/month = 64 hrs	Assume 6 months, Approx. 8 hr/month = 48 hrs	Assume 2.5 months, Approx. 8 hr/month = 20 hrs	Assume 3 wks, Approx. 40 hr/wk = 60 hrs	= 192 hrs
Accountant: helped management	Assume 4 months,	Assume 6 months, Approx. 4 hr/month	Assume 2.5 months,	Assume 2 wks, Approx. 8	= 92 hrs

project financials	Approx. 8 hr/month = 32 hrs	= 24 hrs	Approx. 8 hr/month = 20 hrs	hr/wk = 16 hrs	
Equipment Operator (2 Staff): Site initiation work, manage and handle all equipment during construction activities, etc.	0 hr	Assume 2 months, Approx. 4 hr/month * 2 Staff = 16 hrs	Assume 2.5 months, Approx. 40 hr/month * 2 Staff= 200 hrs	0 hr	= 216 hrs
Gate Fabricator: Site initiation work, construction activities, etc.	0 hr	Assume 2 months, Approx. 40 hr/month = 80 hrs	Assume 2.5 months, Approx. 16 hr/month = 40 hrs	Assume 1 wk, Approx. 16 hr/wk = 16 hrs	= 136 hrs
Laborer: Site initiation work, construction activities, etc.	0 hr	Assume 2 months, Approx. 8 hr/month = 16 hrs	Assume 2.5 months, Approx. 40 hr/month = 100 hrs	Assume 1 wk, Approx. 24 hr/wk = 24 hrs	= 140 hrs
Concrete Fabricator: Site initiation work, construction activities, etc.	0 hr	Assume 2 months, Approx. 8 hr/month = 16 hrs	Assume 2.5 months, Approx. 16 hr/month = 40 hrs	Assume 1 wk, Approx. 8 hr/wk = 8 hrs	= 64 hrs

PIDD certifies that the labor rates included in the budget proposal represent the actual labor rates of the identified personnel.

Equipment: Will use USACDOE equipment (EP 1110-1-8 30 November 2018)
Rate = (Average Hourly Rate + Fuel) * 10% → Multiple by 10% since USACE rates are from 2018

Front End Loader – Site preparation and final cleanup, installation (L40CA024)
Rubber Tired Excavator – Site preparation and final cleanup, installation (H30GA011)
Dump Truck – Haul away construction debris and material (T50XX026 and(T45XX030)
Water Truck – Dust Control (T50XX029 and T40OX002)
Service Truck – Used in support of PIDD Crew on-site (T50XX010)
Project Manager Truck – project management at site (T500XX006)

Materials and Supplies:
Safety (Level D) and Construction:
Shade, Coolers, Water/Electrolytes, Gloves, Safety Glasses, Reflective Vests, Hard Hats, Steel-Toed Boots, Signage, Cones, Barricades
Concrete support structure
Three Rubicon SlipMeter Gate Systems - the costs for each gate were quoted and provided by Rubicon System America, Inc., which includes furnishes and installation. Gate commissioning costs will be under Construction.

Gate No.	Gate Location ID	Rubicon Gate Model	Sub-Total
Gate 1	GBM 1 East	SMB-600-3000-C	$19,690.00
Gate 2	GBM 2 West	SMB-600-3000-C	$19,690.00
Gate 3	GBM1	SMB-600-3000-C	$19,690.00
		Total	**$59,070.00**

Contractual:
Engineering and Design of Concrete support structures. Refer to GCE's Quote.
The engineering cost quote was provided by George Cairo Engineering, Inc. for the design and survey of the 3 gates. The scope of work includes the following:

- Periodic project coordination meetings with PIDD and Contractor, inclusive of project kick-off meeting
- Data collection and field design and hydraulic survey work
- Design site plan and structural sheets for each of the 3 gates
- 60% submittal and Final submittal for construction
- Post design, services during construction activities, and gate installation and commissioning supervision
- USBR Environmental Compliance and support services

Construction:
Refer to Innova's Quote and Rubicon's Quote.
Gate Installation: This work will be performed by Contractor and Rubicon staff and augmented by PIDD Personnel & Equipment inclusive of mobilization, dirt plugs to seal work areas, remove existing gate, prepared for concrete work, form and place concrete mounted headwall, install new gate, commission gate support, clean-up, and demobilization. Include Safety (Level D) and Construction: Shade, Coolers, Water/Electrolytes, Gloves, Safety Glasses, Reflective Vests, Hard Hats, Steel-Toed Boots, Signage, Cones, Barricade, concrete support structure, etc.

Other:
Environmental Regulatory Compliance Costs: Potentially an assessment affect will be needed for the new gates and an addendum will need to be done to the **PIDD Class III Cultural Report completed in April 2022.** No earth disturbing activities and no demolition of existing structures. New gate structures to be installed on elevated "borrow" material used to construct canal.

See responses to Environmental Compliance Questions on page 20 to determine what may be needed and preparation of Environmental compliance documents as required.

3. Environmental and Cultural Compliance

3.1 Impact to Surrounding Environment *NONE*

No significant impact, all earth-disturbing work will occur within existing canal and sidewalls and existing easement. Canal is at higher elevation and was created with imported fill.

3.2 Threatened or Endangered Species, or Designated Critical Habitat ***NONE***
This area is greatly disturbed and in constant agricultural use. There are no threatened or endangered species present or critical habitat. *See page 13 last paragraph for description of surrounding biomes.*

3.3 Wetlands or Other Surface Waters (CWA) – Waters of the United States ***NONE***
There are no wetlands within the project boundary.

3.4 Water Deliver System Date of Construction
The Gila Bend Main Canal was constructed in 1919.

3.5 Modifications or Effects to Individual Features of a Delivery System (i.e., head gates, canals, or flumes) ***YES - ONE***
Three manual canal gates will be replaced by three Rubicon SlipMeter gates.

3.6 Features in the Paloma Water and Drainage District Listed or Eligible for Listed on the National Register of Historic Places ***SEVERAL***
Gila Bend Main Canal and some Laterals (Described in Class III Cultural Report completed in April 2022). Others are 5 to 30 miles away: Stout Hotel, Old Hwy 80, Gila Bend Overpass, Gila Bend Steam Locomotive Water Stop, Gillespie Dam, Gillespie Dam Hwy Bridge, Painted Rock Petroglyph Site, Fortaleza Site (Ancient Hohokam Fort on Hill) and Gatlin Site (Ancient Hohokam Village with homes and irrigation canals).

3.7 Archaeological Sites in Proposed Project Area ***NONE***
There are no archaeological sites in the project area, but 10-20 miles away: Painted Rock Petroglyph Site, Fortaleza Site (Ancient Hohokam Fort on Hill) and Gatlin Site (Ancient Hohokam Village with homes and irrigation canals).

3.8 Disproportionately High or Adverse Effects on Low Income or Minority Populations ***NONE*** No disproportionally high or adverse effects on low income or minority populations. If anything, this will have the opposite effect economically.

3.9 Limit Access to and Ceremonial Use of Indian Sacred Sites or Impact on Tribal Lands ***NO*** Not limit access to and ceremonial use of sacred sites or impact Tribal lands.

3.10 Contribution to Introduction, Continued Existence, or Spread of Noxious Weeds or Non-Native Invasive Species ***NO***
If anything, this project will have the opposite effect, reducing noxious weeds and non-native invasive species, including aquatic vegetation.

4. Required Permits or Approvals

There are no permits or approval required for this project.

5. Letters of Support or Approvals

See attachment for Letters of Support on this project.

FLYING R
farms

4225 S. Dean Rd
Buckeye, Az. 85326
623-386-3140

April 8, 2022

SUBJECT: United States Bureau of Reclamation Funding No. R22AS00195
WaterSMART Small-Scale Water Efficiency Projects
Paloma Irrigation and Drainage District – Gila Bend Main Canal
Installation of 3 New Rubicon SlipMeter Gates Project

To Whom It May Concern,

I am pleased to provide this letter of support for the Paloma Irrigation and Drainage District (PIDD) of their application to the Reclamation for the Funding Opportunity No. R22AS00195 WaterSMART Small-Scale Water Efficiency Projects. This project will allow the PIDD to replace deteriorated existing manually operated and leaking gates with 3 new Rubicon SlipMeter gates in Reach 3 of the Gila Bend Main Canal. Replacement of these gates will allow PIDD to provide better water supply and conserve more water long term, they will be able to provide more reliable water supplies for our farm operation. With more reliable flows, I am able to farm efficiently and improve crop production.

Thank you for accepting this letter of support.

Sincerely,

Jerry Rovey

Jerry Rovey
Flying R Farms

LETTER HEAD HERE

PRP Farms
Tate Accomazzo
19312 South Tuthill Rd.
Buckeye, AZ 85326

April 8, 2022

SUBJECT: United States Bureau of Reclamation Funding No. R22AS00195
WaterSMART Small-Scale Water Efficiency Projects
Paloma Irrigation and Drainage District – Gila Bend Main Canal
Installation of 3 New Rubicon SlipMeter Gates Project

To Whom It May Concern,

I am pleased to provide this letter of support for the Paloma Irrigation and Drainage District (PIDD) of their application to the Reclamation for the Funding Opportunity No. R22AS00195 WaterSMART Small-Scale Water Efficiency Projects. This project will allow the PIDD to replace deteriorated existing manually operated and leaking gates with 3 new Rubicon SlipMeter gates in Reach 3 of the Gila Bend Main Canal. Replacement of these gates will allow PIDD to provide better water supply and conserve more water long term, they will be able to provide more reliable water supplies for our farm operation. With more reliable flows, I am able to farm efficiently and improve crop production.

Thank you for accepting this letter of support.

Sincerely,

Tate Accomazzo

Letter of Support

LETTER HEAD HERE

Sunset Farms
Kyle VanHofwegen
55310 S. Citrus Valley Rd.
Gila Bend, AZ 85337

April 8, 2022

SUBJECT: **United States Bureau of Reclamation Funding No. R22AS00195**
WaterSMART Small-Scale Water Efficiency Projects
Paloma Irrigation and Drainage District – Gila Bend Main Canal
Installation of 3 New Rubicon SlipMeter Gates Project

To Whom It May Concern,

I am pleased to provide this letter of support for the Paloma Irrigation and Drainage District (PIDD) of their application to the Reclamation for the Funding Opportunity No. R22AS00195 WaterSMART Small-Scale Water Efficiency Projects. This project will allow the PIDD to replace deteriorated existing manually operated and leaking gates with 3 new Rubicon SlipMeter gates in Reach 3 of the Gila Bend Main Canal. Replacement of these gates will allow PIDD to provide better water supply and conserve more water long term, they will be able to provide more reliable water supplies for our farm operation. With more reliable flows, I am able to farm efficiently and improve crop production.

Thank you for accepting this letter of support.

Sincerely,

Kyle VanHofwegen

Letter of Support

RESOLUTION 2022-1
OF
THE BOARD OF DIRECTORS OF
PALOMA IRRIGATION AND DRAINAGE DISTRICT
(Adopted April 26, 2022)

BE IT RESOLVED by the Board of Directors (the "Board") of Paloma Irrigation and Drainage District (the "District") as follows:

1. That the application for a United States Department of the Interior Bureau of Reclamation Funding No. R22AS00195 WaterSMART grant for Small-Scale Water Efficiency Projects (the "Grant") by the District Manager for the District to install three Rubicon SlipMeter turnout gates in the District canal for water deliveries to producers (the "Project") is hereby approved.

2. That District Manager Robert L. VanHofwegen is hereby authorized to submit the application for the Grant and to execute any and all documents, instruments and reports necessary or appropriate to apply for, obtain and use the Grant.

3. That District Manager is hereby authorized to expend the matching monies and provide such additional District time, labor and equipment as is necessary for the Project and to meet the terms of the Grant, which monies and resources the Board finds are available for this purpose, and to apply the Grant to the costs of the Project.

4. That the District will work with the United States Bureau of Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

I hereby certify that the foregoing is a true and correct copy of Resolution No. 2022-1 duly adopted by the Board of Directors of the Paloma Irrigation and Drainage District on April 26, 2022.

Sharon Mills

Sharon Mills, District Secretary