
The public is invited to observe City Council Work Sessions. However, the agenda for Work Sessions does not include an opportunity for public interaction. Seating in the Council Chambers may be limited. All seating is available on a first-come, first-serve basis. The public also may view this meeting via livestream on the City's website at <https://www.idahofallsidaho.gov/429/Live-Stream>.

This meeting may be canceled or recessed to a later time in accordance with law. If you need communication aids or services or other physical accommodations to participate or access this meeting of the City of Idaho Falls, you may contact City Clerk Emily Geisler at (208) 612-8414 or the ADA Coordinator Lisa Farris at (208) 612-8323 not less than 48 hours prior to the meeting. They can help accommodate special needs.

CITY COUNCIL WORK SESSION

Times listed in parentheses are only estimates.

Call to Order and Roll Call

Public Works:

Presentation and Discussion: Draft Subdivision Surface Water Irrigation Agreement (30)
Action: Council Direction to Staff (or take other appropriate action)

Airport:

Presentation and Discussion: RFP for Parking Access and Revenue Control System Equipment (20)
Action: Council Direction to Staff (or take other appropriate action)

Legal:

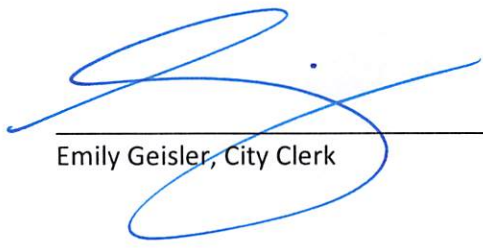
Consideration: U-Pick CUP Appeal Written Findings and Conclusions (30)
Action: Approve the written findings and conclusions (or give direction to staff, or take other action deemed appropriate)

Mayor and City Council:

Acceptance or Receipt of Minutes (5)
Action: To receive recommendations from the Planning and Zoning Commission

Mayor and Council Reports: Calendars, Announcements Events, Reports, Updates, Concerns, Questions, and Discussion (30).
Action: Council Direction to Staff (or take other appropriate action)

DATED this 7th day of February 2025



Emily Geisler, City Clerk

**DRAFT SUBDIVISION SURFACE WATER IRRIGATION
AGREEMENT**

PUBLIC WORKS DEPARTMENT

FEBRUARY 10, 2025

CITY OF IDAHO FALLS

SUBDIVISION IRRIGATION WATER AGREEMENT

THIS CITY OF IDAHO FALLS SUBDIVISION IRRIGATION WATER AGREEMENT (this “Agreement”), which is entered into as of the last date denoted on the signature lines below, is hereby made by and between the **Idaho Irrigation District**, an Idaho irrigation district organized pursuant to Title 43 of the Idaho Code, whose address is 496 E. 14th St., Idaho Falls, Idaho 83404 (hereinafter the “District”), and the **City of Idaho Falls**, a political subdivision of the State of Idaho, whose address is P.O. Box 50220, Idaho Falls, Idaho 83405 (hereinafter, the “City”). District and City may hereinafter be referred to individually as a “party” and collectively as the “parties.”

RECITALS:

- A. District is the owner of numerous natural flow water rights which, as of the date of this Agreement, allow District to divert up to 1,430 c.f.s. from the Snake River and 160 c.f.s. from Willow Creek for the irrigation of 35,995 adjudicated acres within its service area. District is also the holder of various contracts which entitle it to receive storage water that yields to storage space in the upper Snake River basin storage system of reservoirs operated by the United States Bureau of Reclamation.
- B. District is also the owner and operator of a water delivery system consisting of various canals, ditches, and other infrastructure which delivers water diverted pursuant to its water rights and storage water entitlements to its electors (hereafter, the “District System”). The District System is extensive and exists on various properties by virtue of express easements and prescriptive easements obtained through many years of use by District.
- C. City desires to utilize District surface water (historically provided to the property for agricultural irrigation purposes) for irrigation within residential and commercial properties as provided for in Idaho Code §§ 31-3805 and 67-6537 (generally approved through City’s subdivision and platting process) for plats approved after the effective date of this Agreement.
- D. The purpose of this Agreement is to memorialize an agreement between District and City concerning the delivery, assessment, system operation, and use of District surface and storage water within the properties subject to this Agreement.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties, the parties hereto, for themselves, their heirs, successors and assigns, do hereby agree as follows:

AGREEMENTS:

1. Irrigation System Diversion Design Approval.

- a. City and/or each property developer shall provide design drawings to District of the proposed diversion structure in District's canal where the property's point of delivery is located, specifically including pump size, pump design, peak design diversion rate based on District's current available water supply per acre (as of the date of this Agreement, the amount is equivalent to 8.97 gallons per minute (0.02 cfs) per assessed acre), features that will aid in the equalization of daytime and nighttime diversions from District's canal (as nearly as practicable), etc., for written approval of the design.
- b. City and/or each property developer shall install a lockable headgate in District's canal where the property's point of delivery is located with a measuring device downstream of the pump that measures diversion rate and diversion volume with real time diversion data at the main property water delivery location(s) recorded and available to District.
- c. City and/or each property developer shall install individual shut offs for each legal parcel located within the developer's property.
- d. District shall only be required to deliver irrigation water to its existing point(s) of delivery in District's canal where the developer's point(s) of delivery for the property is located for the entire property pursuant to the delivery policies of District, unless otherwise approved by District, which approval shall not be unreasonably withheld.

2. Irrigation System Construction, Operation, and Maintenance. It shall be the responsibility of City and/or the property developer to construct the irrigation water delivery system for the developer's property and to comply with the requirements of Idaho Code § 31-3805. Nothing herein shall limit City's ability to require the property developer to install, and pay for such installation, of the pump station and distribution system as part of City's plat approval process. District and/or its representatives, in its sole discretion, may inspect the delivery system while it is under construction. Once the irrigation system is constructed in accordance with the approved plans, City shall thereafter operate, repair, and maintain the irrigation system at City's sole cost and expense.

3. Irrigation Delivery. When properly ordered, water shall be delivered to the properties subject to this Agreement based on District's current available water supply per acre (as of the date of this Agreement, the amount is equivalent to 8.97 gallons per minute (0.02 cfs) per assessed acre). Provided, however, like all electors of District, delivery of water under this Agreement is subject to availability of water to District based on water that yields to District's natural flow water rights and storage water entitlements, and as a result, District makes no guarantees or warranties concerning such availability. Like all electors of

District, diversions to properties subject to this Agreement shall be subject to partial or full curtailment of water from District in times of drought or short supply. (*i.e.*, 25%, 50%, etc.). Delivery of water under this Agreement is further subject to the following policies, as may be amended by District from time to time:

- a. District must have the access it deems necessary to control the water delivery systems and/or disconnect a diversion device.
- b. Water must be ordered for delivery to the properties subject to this Agreement, in accordance with District policy.
- c. It shall be the responsibility of City or an authorized water system operator to manage and coordinate water delivery within the properties subject to this Agreement as District has no responsibility for delivery of water once it is delivered to the point of delivery.
- d. City shall utilize features in the irrigation delivery system and engage in other reasonable efforts, all in good faith, to equalize daytime and nighttime diversions from the District System, as nearly as practicable, to each property subject to this Agreement.
- e. A representative or representatives of City shall meet a minimum of two times each calendar year with District to assess delivery and utilization of water under this Agreement and adjustments that may be necessary in the future. The first meeting shall be held in July or August, and the second in November or December, at District's monthly board meeting or another meeting called by District for this purpose. District shall provide City adequate notice of such meetings.

4. **Irrigation Delivery Noncompliance Procedure.**

- a. **Initial Notice.** In the event District determines or believes there is noncompliance with the delivery and use of irrigation water to any property subject to this Agreement, District shall provide written notice (which may be satisfied by email) to the City's Public Works Director and Assistant Public Works Director of the alleged noncompliance.
- b. **City Response Period.** City shall respond in writing to the notice within seven (7) days. If the City does not respond within seven (7) days, the nonresponse shall be deemed agreement by the City of the contents of the notice.
- c. **City Agreement With Notice.** In the event City agrees with the contents of the notice, City shall bring the noncompliance into compliance with this Agreement within seven (7) days of the response (or expiration of the response period) unless additional time is necessary to remedy the noncompliance due to lack of available replacement equipment, location of leaks, etc.

- d. **City Disagreement with Notice.** In the event City disagrees with the contents of the notice, the following procedures shall govern:
- i. Each party shall—at their sole cost and expense—employ a licensed engineer, a representative from a pump repair company or other water expert (the “Contractor”) to analyze the applicable infrastructure and associated evidence of noncompliance at issue and provide an opinion of the situation and a recommended course of action.
 - ii. In the event the parties’ Contractors agree as to the recommended work that should be performed, then such recommended work shall be performed.
 - iii. In the event the parties’ Contractors disagree as to the work that should be performed, the parties’ Contractors shall agree to appoint another Contractor and such Contractor shall inspect the situation and the recommendation of the third Contractor shall dictate the course of action. Each Party shall share the cost of hiring the third Contractor.
5. **Assessment Amounts.** District shall assess each lot within the properties subject to this Agreement consistent with the assessment categories District’s board of directors establishes for the property sizes of each parcel. For example, as of the date of this Agreement, pursuant to Idaho Code § 43-701B, District has established a flat rate assessment of \$102.00 per year for tracts 7.06 acres or less in size for single-family dwellings, amounts which may be amended in the future in District’s sole discretion.¹ Nothing herein shall be deemed to be a waiver by the parties of the right to levy or challenge the levy of additional assessments under Idaho Code § 42-732.
6. **Inclusion of Roads.** As part of City’s platting process, City shall designate the roads within each developer’s properties as separate parcels subject to District’s assessments (to cover irrigation that may occur on park strips located within the road right-of-way). Any public road parcel shall remain owned by City or a successor-in-interest who shall be responsible to pay assessments on such road parcels. Notwithstanding the foregoing, the number of acres assessed within the road parcels shall be used to true up any discrepancies between the assessment(s) for the developer’s property prior to subdividing and the assessments for the developer’s property after subdividing.
7. **Assessment Notices and Collections of Assessments.** District shall transmit assessment notices to each individual lot owner within the properties subject to this Agreement consistent with District’s preferred method of transmitting such notices and shall be responsible for maintaining individual lot owner lists for the properties subject to this Agreement. District shall be responsible for collecting assessments against each lot within the Subdivision.

¹ Additionally, as of the date of this Agreement, District assesses parcels greater than 7.06 acres or greater in size at a rate of \$14.25 per acre.

8. **Delinquent Assessments.**

- a. In the event a District assessment, or any part thereof, is not paid by a parcel owner with the properties subject to this Agreement, District may withhold delivery of water until the assessment, penalties, and interest are paid in full.
- b. Because each parcel located with the properties subject to this Agreement will have individual shut offs, in the event it becomes necessary to withhold delivery of water, District shall notify City of the need to shut off water to the parcel, and City shall thereafter proceed to shut off the applicable parcel(s) consistent with applicable City policies for curtailment of utilities.
- c. In addition, District shall be entitled to all rights and remedies against the parcel owners of the properties subject to this Agreement as authorized by law for failure to pay an assessment.

9. **Water Right Disclosure.** City shall include the following Water Rights Disclosure on a plat for the properties subject to this Agreement, or a similar disclosure in substantially the same form:

Notice is hereby given that all lots or property included in this plat are within the Idaho Irrigation District and that a suitable system for such lots or property shall be installed for delivery of surface water for irrigation purposes and is subject to that certain *City of Idaho Falls Subdivision Irrigation Water Agreement* recorded as Instrument No. _____ in the records of Bonneville County, Idaho, (as the same may be amended from time to time). The system installed has been approved by the City of Idaho Falls and the Idaho Irrigation District in compliance with Idaho Code § 31-3805. All property within the plat, including streets, will remain subject to assessments levied by the Idaho Irrigation District which shall be paid by the owners and their successors-in-interest of any lots or property within this plat. The unpaid Idaho Irrigation District assessments are a lien on the land. All rights to vote in Idaho Irrigation District matters are held by owners and their successors-in-interest of any lots or property within this plat. A purchaser may at a future date petition the Idaho Irrigation District for exclusion from the Idaho Irrigation District, but such exclusion will result in loss of the ability to irrigate such purchaser's property. Consistent with Idaho Code §§ 42-108 and 42-222, any change in the nature of use of surface water provided by an irrigation delivery entity (such as District) must be authorized by the entity holding the water right(s) for the available surface water. As of the date of recording of this plat, the Idaho Irrigation District's address is 496 E. 14th St., Idaho Falls, Idaho 83404.

10. **Indemnification.** Subject to the limitations of Idaho law, including Article VIII section 4 of the Idaho Constitution and the Idaho Tort Claims Act (Idaho Code 6-901 *et seq.*), City agrees to defend, indemnify and hold harmless District, District's directors, officers, employees, agents, contractors, partners, and the heirs, personal representatives,

successors, and assigns of each of them (hereinafter collectively referred to as “District” for purposes of City’s covenants to indemnify in this Agreement) from and against all liabilities, penalties, costs, lost damages, expenses, causes of action, claims, demands, or judgments, including, without limitation, reasonable attorneys’ fees, arising from the terms and performance of this Agreement specific to City’s obligations to maintain the irrigation system within the Subdivision and deliver water within the Subdivision.

11. **Conflict Resolution.** In the event of any dispute relating to this Agreement or the breach thereof, excluding disputes related to irrigation delivery specifically addressed in paragraphs 3 and 4 herein, prior to filing a complaint to initiate litigation, the parties agree as follows:
 - a. The parties will initially engage in good faith negotiation in an attempt to resolve the conflict cooperatively.
 - b. If the conflict is not resolved to the satisfaction of either party through good faith negotiation, the parties agree to submit such dispute to non-binding mediation to resolve the same.
12. **Change in Nature of Use of District Water Prohibited Without Consent.** Consistent with Idaho Code §§ 42-108 and § 42-222, any change in the nature of use of surface water provided by an irrigation delivery entity (such as District) must be authorized by the entity holding the water right(s) for the available surface water.
13. **Use of Water Is Under Oversight of District.** Nothing in this Agreement shall alter the authority and discretion of District to apportion, allocate, and distribute surface water as provided in Idaho Code § 67-6537.
14. **Miscellaneous.**
 - a. **Attorney Fees.** If either party commences any legal action or proceeding to enforce any of the terms of this Agreement (or for damages by reason of an alleged breach hereof), the prevailing party therein shall be entitled to recover from the other, in addition to any other relief granted, its reasonable attorney’s fees, costs and expenses incidental to such legal action.
 - b. **Merger.** This Agreement supersedes any and all other written or verbal agreements between the parties hereto. None of the parties shall be bound by any understanding, agreement, promise, representation or stipulation, express or implied, not specifically contained herein.
 - c. **Remedies Cumulative.** Upon any breach, any and all rights and remedies which either party may have under this Agreement or by operation of law or equity, shall be distinct, separate and cumulative and shall not be deemed inconsistent with each other. No such right or remedy, whether exercised by said party or not, shall be

deemed to be in exclusion of any other right or remedy, any two or more of all such rights and remedies may be exercised at the same time or separately as desired.

- d. **Amendments.** This Agreement may be amended only by a written instrument signed by the parties. Provided, however, the parties hereto shall negotiate changes to this Agreement in good faith in response to issues identified through the exercise of the provisions of this Agreement.
- e. **Further Documents.** The parties hereby agree that they shall sign such other and further documents as may be required to carry into effect the terms and conditions of this Agreement.
- f. **Enforceability.** The validity or enforceability of any term, phrase, clause, paragraph, restriction, covenant, agreement or other provision hereof, shall in no way affect the validity or enforcement of the remaining provisions, or any part hereof.
- g. **Governing Law.** This Agreement shall be governed by the laws of the State of Idaho.
- h. **Successors.** This Agreement is for the benefit only of the parties hereto and shall inure to the benefit of and bind their respective heirs, agents, personal representatives, successors and assigns.
- i. **Recording.** Once the plat of the Subdivision is approved by City, this Agreement shall be recorded in the records of Bonneville County, Idaho, with City paying the cost of recording.

IN WITNESS WHEREOF, the parties have hereunto dated and subscribed their names.

“District”

IDAHO IRRIGATION DISTRICT

Dated: _____

By: _____

Its: _____

STATE OF IDAHO)
)ss.
County of BONNEVILLE)

This record was acknowledged before me on this _____ day of _____,
202____, by _____ in his capacity as the board chairman of the
Idaho Irrigation District.

NOTARY PUBLIC FOR IDAHO
My commission expires: _____

“City”

CITY OF IDAHO FALLS

Dated: _____

By: _____

Its: _____

Attest: _____

By: _____

STATE OF IDAHO)
)ss.
County of BONNEVILLE)

This record was acknowledged before me on this _____ day of _____,
202__, by _____ as the _____
of the City of Idaho Falls, a political subdivision of the State of Idaho.

NOTARY PUBLIC FOR IDAHO
My commission expires: _____

**DRAFT SUBDIVISION SURFACE WATER IRRIGATION
STANDARDS**

PUBLIC WORKS DEPARTMENT

FEBRUARY 10, 2025



City of Idaho Falls Pressurized Irrigation Standards

- The standard specifications for the construction of municipal pressurized irrigation systems in the City of Idaho Falls shall be the current edition of the "Idaho Standards for Public Works Construction (ISPWC) – Division 900 Pressure Irrigation", as modified by the current "City of Idaho Falls ISPWC Supplement – Division 900 Pressure Irrigation". The "City of Idaho Falls Pressurized Irrigation Standard Drawings" are included with the ISPWC supplement.
- Pressurized irrigation pump stations will be designed and installed per the current "City of Idaho Falls Pressurized Irrigation Pump Station Specifications" and "City of Idaho Falls Pressurized Irrigation Pump Station Design Guidelines." Skid mounted pump station shall be Precision Pumping Systems or equal (approved in advance by City Engineer).
- All work within Irrigation District property or easements must be approved by Irrigation District in writing prior to construction. Alterations, relocations, or additions of canal points of diversion shall be approved by the Irrigation District which provides annual water right assessments for the property being developed.
- PI pump stations will be designed to provide for a maximum flow of **8.97 gpm per gross subdivision acreage** while maintaining PI system working pressures within the distribution systems of 50 psi at peak hour demand and 85 psi at maximum working pressure. Developer will submit a hydraulic model to the City Engineer to confirm that PI system pressures and flows meet these requirements.
- Storage facilities may be needed on a case-by-case basis dependent upon the ability of the existing canal or ditch infrastructure to provide adequate water for the subdivision's peak flow conditions. Consult the City Engineer to determine whether storage will be required for a particular development.
- Air release valves are to be installed per standard drawing IF-903 at all high points in the system and at locations determined by the City Engineer so that air automatically vents during filling and draining of the PI system. Air release valves will be included at the end of dead-end lines where drains are not installed.
- Drains per standard drawing IF-904 are to be installed at all low points in the distribution system and at locations determined by the City Engineer. These drains will be sized to drain the system within 48 hours during winterization. The Developer will provide justification to the City Engineer for the sizing of these drains. All pressurized irrigation

mains will be able to drain by gravity into a storm drain structure, standard drain, storage/retention pond, or other approved location.

- All PI system main lines will be DR 11, ductile iron pipe size (DIPS) high-density polyethylene (HDPE) pipe, black in color with purple striping. Follow the material specification per ISPWC 901.2.5 (modified). Standard sizes for main lines are 4", 6", 8", and 12" for new developments. Main lines will be installed per ISPWC 901.
- Service lines and drain lines up to 2" in diameter will be 250 psi CTS polyethylene pipe, purple in color, and meet the material specifications per ISPWC 903.2.2.B (modified). Service lines will be installed per standard drawing IF-901. ISPWC 903
- When installing pressurized irrigation main lines via directional drilling, the Contractor will properly secure tracer wire on top of the pipe to ensure that the tracer wire remains in place and intact during installation.
- The Developer will follow ISPWC 405 (Non-Potable Water Line Separation) in providing adequate separation between potable water lines and pressurized irrigation lines.

□ Lot Size Service Requirements

Lot Size

Service Line

0-22,000 SF (0-0.5 acres)

One 1" Line

22,000-44,000 SF (0.5-1 acres)

One 1.5" Line

44,000 SF+ (1 acre+)

Determined by City Engineer

- There will be **no interconnection** between the potable water system and PI system. This applies both in the public right-of-way and on private property.
- PI system main lines will be centered at 18" behind the back of curb in the park strip between the back of curb and sidewalk on the opposite side of the street as the culinary water main, unless otherwise noted. PI system main lines will be the only utility mains located in the park strip and will be installed with a depth of cover between 24" and 30", following the slope of the back of curb where possible.
- For cases where valves and drains need to be located in the roadway, the Developer will have the design approved by the City Engineer for traffic rated applications.
- Pressure testing will be per ISPWC 901.3.6.B. Testing shall be observed by a City Representative.



City of Idaho Falls

Pressurized Irrigation Pump Station Specifications

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. PACKAGED PUMP STATION

The Packaged Pump Station supplier shall provide a variable speed VERTICAL TURBINE pump station complete with pumps, piping, valves, sensors, automatic suction scanning filter, variable frequency drives (VFDs), programmable logic controller (PLC), UL 508A listed control panel, and all appurtenances necessary for a complete and functioning pumping system. The station shall be mounted to a press brake formed steel base. The pump station, including the pump control panel, shall be designed and manufactured within the confines of a UL 508A, UL QCZJ, & ISO 9001:2015 certified facility. Electrical connection, by purchaser, shall consist of a single conduit from owners disconnect to the pump station main disconnect.

The pump station shall meet the performance requirements outlined in PART 2 - Technical Specifications.

ENCLOSURE

The pump station shall be enclosed in a powder-coated marine grade aluminum enclosure provided by the pump station manufacturer. The pump station and enclosure shall arrive onsite as a complete, packaged unit.

B. FACTORY TESTING

The pump station manufacturer shall conduct and document a complete factory dynamic test of the pump station prior to shipment. Pump station shall be tested throughout the entire operating range at the net discharge pressure called for in the technical specifications. Individual pump pressure, flow, RPMs, volts, amps, KW and power factor shall be documented for verification by the Owners' Representative prior to delivery upon request.

1. Hydrostatic Testing. The packaged pump station shall undergo hydrostatic testing that meets ANSI/HI specifications and standards.
2. Vibration Testing. The packaged pump station shall undergo vibration testing that meets ANSI/HI 9.6.4—Vibration Measurement and Allowable Values—specifications and standards.
3. Flow Testing. The packaged pump station shall undergo Hydraulic Performance Acceptance testing that meets ANSI/HI 14.6 specifications and standards.

C. ONSITE PUMP STATION START-UP

Technical start-up shall be furnished by the Packaged Pump Station Manufacturer or a qualified service agent. Location and mounting details shall be furnished by the Packaged Pump Station Manufacturer.

Electrical connection, by purchaser, shall consist of a single conduit from owners disconnect to the pump station main disconnect. Additional purchaser responsibility shall include confirming correct motor rotation and securing local inspection/approval.

Technical start-up procedures by the pump station technician shall include the following:

1. Station start-up and pressurization.
2. Pressure, flow, and programming adjustments.
3. Monitoring of complete operational cycle when possible.
4. Testing of all alarms and fault conditions.
5. Customer training and the presentation of the station operation and maintenance manual.

D. WARRANTY

The Manufacturer shall warrant the original buyer that the packaged pump station shall be free from defects in material and workmanship for a period of 12 MONTHS from the date of placing the Equipment in operation, or 16 MONTHS from the date of completion of manufacture of the Equipment, whichever shall occur first. If the pump station manufacturer performs the technical start-up, the motor control panel shall be covered under Warranty for an additional 3 YEARS.

E. SUBMITTALS

Submittals shall be well organized, labeled, and presented in a professional manner. Sloppy or poorly presented submittals shall be rejected. The pump station manufacturer shall submit the following items as part of a complete submittal package:

1. Shop Drawings
2. Electrical Schematics
3. Technical data sheets for all major system components, including:
 - a. Pump performance curves and datasheets
 - b. Control Panel Components: VFD, PLC, Touchscreen Interface, Panel Enclosure, & UL 508A Certification
 - c. Powder coating
 - d. Valves
 - e. Instrumentation

F. OPERATIONS AND MAINTENANCE MANUAL

An operation and maintenance manual shall be furnished at the time of start-up and initial training. The owner shall also receive training specific to the pump station. Operation and maintenance instructions shall contain the following as a minimum:

1. Approved shop drawings and submittal data.
2. Model, type, size and serial numbers of equipment furnished.
3. Equipment and driver nameplate data.
4. List of parts showing replacement numbers.
5. Recommended list of spare parts.
6. Complete operating instructions.
7. Electrical schematics.
8. Factory and start-up and test data, including pump curves.
9. Service and Maintenance instructions.

1.2 MANUFACTURER QUALIFICATIONS

A. Single Source Responsibility

The entire pump station and the control panel shall be designed, assembled, programmed, and tested by a single manufacturer.

B. Certifications

The Manufacturer shall be a UL QCZJ Listed Packaged Pump Station Manufacturer, a UL 508A Listed Control Panel Manufacturer, and an ISO 9001:2015 Certified Manufacturer. The Manufacturer shall provide a Certification signed by the owners providing for free phone technical support for the lifetime of the product.

C. Manufacturer Personnel

The Manufacturer shall employ service personnel who are trained and certified in every aspect of service that may be required on the pump station. It shall not be acceptable for the control panel to be designed, manufactured, programmed, or tested by any entity other than the Packaged Pump Manufacturer.

D. Approved Manufacturer

The pumping system shall be manufactured by Precision Pumping Systems of Boise, Idaho—or pre-approved equal. To be considered an equal manufacturer, proposed manufacturers shall meet the above conditions, shall receive approval no less than 10 days prior to bid date, and shall submit the following:

1. Shop Drawings of both mechanical and electrical systems.
2. Electrical Schematics
3. Technical data sheets for all major system components, including:

- a. UL QCZJ Certification, UL 508A Certification, and ISO 9001:2015 Certification
- b. Pump performance curves and datasheets
- c. Control Panel Components: VFD, PLC, Touchscreen Interface, Panel Enclosure
- d. Powder coating
- e. Valves
- f. Instrumentation

1.3 REFERENCE STANDARDS

- A. NEMA – National Electrical Manufacturers Association
- B. NEC – National Electrical Code
- C. UL – Underwriters Laboratories, Inc.
- D. AWWA – American Water Works Association
- E. ANSI – American National Standards Institute
- F. ANSI/HI – American National Standards Institute/Hydraulic Institute
- G. ASTM – American Society of Testing & Materials

PART 2 - TECHNICAL SPECIFICATIONS

System Type:	Non-Potable Irrigation System
SITE CONDITIONS	
Electrical Input (V/Ø/Hz):	___ V / ___ Phase / 60 Hz
PERFORMANCE @ STATION DISCHARGE	
Design Point:	___ GPM @ ___ PSI
PUMP DESIGN CRITERIA	
<i>DUTY PUMPS</i>	
Type:	Vertical Turbine
Motor Starting	Lead Pump: VFD Lag Pump(s): Contactor with Overload Protection The VFD shall be sequenced between equal horsepower pumps via alternation contactors.
Motor Nameplate (HP/Enclosure):	___ HP / WP1
Motor Nominal Speed	1750 RPM
Design Performance:	___ GPM @ ___' TDH
Minimum Efficiency @ Design:	___%
Quantity:	—
<i>JOCKEY PUMP</i>	
Type:	Submersible Turbine
Motor Starting	VFD
Motor Nameplate (HP/Enclosure):	___ HP / Submersible
Motor Nominal Speed	3600 RPM
Design Performance:	___ GPM @ ___' TDH
Minimum Efficiency @ Design:	___%
THEORY OF OPERATION	
Sequence of Operation: JOCKEY/LEAD/LAG	
The pumps shall be operated as needed to maintain setpoint pressure while providing a flow rate varying from ___ to ___ GPM. The pumps shall be started and stopped in a first on, last off cascading sequence, with the jockey pump starting first, followed by the lead pump, and ending with the lag pump. As demand drops, the pumps shall enter sleep mode in the reverse order, with two user adjustable sleep modes based on either system flow rate or pump speed. The system shall automatically alternate lead/lag designations of pumps of equal horsepower based on total operation time. Using the controller touchscreen, an operator shall be able to adjust the alternation time, as well as to manually alternate Lead/Lag designations.	

SYSTEM PROTECTIONS

Provide the following at a minimum:

Mechanical System Protections:

- Prime Loss
- Low Flow
- High Flow
- Low Level (Source Tank)
- Low Discharge Pressure
- High Discharge Pressure

Electrical System Protections:

- High or Low Voltage
- Phase Loss/Imbalance
- VFD Faults
- Motor Starter Failure
- Analog Transmitter Failure

PART 3 - PRODUCTS

3.1 PUMPS AND MOTORS

A. VERTICAL TURBINE PUMPS

1. Bowl Assembly. The bowl assembly—including suction case, intermediate bowls, and discharge bowls—shall be of Class 30 cast iron. The impellers shall be of stainless steel or bronze, statically balanced. Impellers shall be adjusted vertically by means of an adjusting nut located at the top of the driver. The pump shaft shall be supported by bearings above and below each impeller. The size of each shaft shall be appropriate to transmit the horsepower required by the pump.
2. Inlet Strainer. Each turbine pump inlet strainer shall be corrosion-resistant basket type with an area not less than four times the pump suction bell inlet area.
3. Discharge Column Pipe. The discharge column pipe shall be A53 Grade B Schedule 40 steel and furnished in interchangeable 10' sections with threaded couplings. The line shafts shall be ground and polished 416 stainless steel, and shall be coupled with steel couplings, have left hand threads, which tighten during operation. Drop-in type shaft centering spiders shall be provided at each column coupling at maximum 10' spacing. The section of shaft passing through the stuffing box shall be stainless steel having a chromium content of not less than 12%. Pumps shall be manufactured by Goulds or approved equal.
4. Discharge Heads. Each pump shall be supplied with a DUCTILE IRON discharge head having a flanged discharge opening. The top diameter of the discharge head shall match the motor base to distribute the load uniformly. The minimum operating pressure of each discharge head shall be no less than 30% higher than the maximum output pressure of the pump. The DUCTILE IRON discharge head will have a tensile strength of 65,000 PSI.
5. Column Pipe. Column pipe shall be A53, Grade B schedule 40 material, in interchangeable sections not more than 10 feet in length. Pump line shaft shall be AISI 416 SS. The size of the shaft shall be no less than determined by ANSI specification B58.1, Section 4.2, Table 4. Bearing retainers shall be bronze with rubber bearings.
6. Pumps shall be manufactured by Goulds or approved equal.
7. Vertical Turbine Pump Motor
 - a. Each pump driving motor shall be squirrel cage induction vertical hollow shaft type. The connection to the pump shaft shall be bolted-down type couplings in the motor. The temperature rise of the motor shall be to NEMA standard MG-1-12. Motors shall be Premium Efficient with Class F installation. A thrust bearing of ample capacity to carry the weight of all rotating parts plus the hydraulic thrust of the pump shall be incorporated into the motor. The bearings shall be B10 rating with average life no less than five years continuous operation. The motor shall be of proper size to drive the pump at any point on the operation curve without exceeding the

percent of the motor horsepower nameplate rating as called out in the Technical Specifications.

- b. Each VHS pump motor will be supplied with a 120-volt space heater in the motor windings to prevent condensation during non-use times. The heaters will be deactivated while the motors are running.
- c. Motors shall be manufactured by US Motors or approved equal.

B. SUBMERSIBLE TURBINE PUMP

1. Pump Construction

- a. Bowl assembly: The bowls shall be flanged type constructed of close-grained ASTM A48, Class 30 cast iron. The intermediate bowls shall have enamel or epoxy lined waterways for maximum efficiency and wear protection. All the bowls shall be fitted with sleeve type bearings of bronze alloy C89835. A discharge bowl shall be used to connect bowl assembly to the discharge pipe. An extra-long bronze bearing packed with non-soluble grease shall be provided in the top bowl and extended into the discharge bowl. The bearing shall have a threaded cast iron cap or plug at the top to protect the bearing from abrasives. The hub of the discharge bowl should be such that the bearing can be easily removed through the top of the hub. A thrust ring shall be above the top impeller to prevent excessive vertical up-thrust.
- b. Impellers: The impellers shall be constructed from ASTM B584 Silicon Bronze and shall be the enclosed type. They shall be free from defects and must be accurately cast, machined, balanced, and filed for optimum performance and minimum vibration. Impellers shall be balanced to grade G6.3 of ISO 1940 as minimum. They shall be securely fastened to the bowl shaft with taper locks of C1018.
- c. Motor Adapter: The inlet motor adapter shall be of ASTM A536 Gr. 60-4018 ductile iron and shall contain an extra-long bronze bearing. The inlet area shall have a net open area of at least four times the eye of the impeller and shall be protected with a 304 stainless steel screen. The openings on the screen shall not be more than 75% of the minimum opening of the water passage through the bowl or the impeller.
- d. Shaft: The pump shaft shall be of ASTM 582 type 416 stainless steel. It shall be precision ground and polished with surface finish better than 40 RMS.
- e. Coupling: The shaft coupling shall be of stainless steel and be capable of transmitting the total torque and total thrust of the bowl assembly in either direction of rotation.

2. Discharge Pipe

- a. The discharge pipe shall be ASTM A53 grade B standard weight steel pipe, connected by threaded sleeve type steel coupling. The ends of the pipes

shall have ANSI B1.20.1 standard tapered pipe threads. Inside diameter of the pipe shall be such that the head losses shall not be over 5 feet per 100 feet of pipe.

3. Submersible Electric Motor
 - a. The motor shall be a heavy duty canned (or wet wound) type of NEMA design 3600 RPM. The motor shall be capable of continuous operation under water at the specified conditions outlined above. A suitable thrust bearing shall be incorporated in the lower end of the motor adequate to receive the entire hydraulic thrust load of the pump unit plus the weight of the rotating parts regardless of the direction of rotation. The motor shall have a 1.15 service factor.
 - b. The motor leads shall be of sufficient length so that they may be spliced above the bowl assembly and the leads shall be protected by a type 304 stainless steel cable guard held in place with stainless steel banding. As the motor lead exit the top of the cable guard it shall be properly protected to prevent damaging or cutting the lead by the cable guard material.
4. Slotted Cooling Sleeve
 - a. The submersible pump and motor shall be encapsulated by slotted PVC casing to ensure adequate cooling of the pump motor.

3.2 STATION ENCLOSURE

- A. The pump station enclosure shall be constructed of marine grade aluminum, with all surfaces coated in thermosetting epoxy powder coating with a minimum thickness of 3 mils. The enclosure shall be suitable for outdoor use, providing protection from wind-blown rain and dust, as well as preventing ice formation.
- B. The enclosure shall consist of a frame built out of structural folded aluminum, built to readily accept foil faced insulation. The aluminum panels shall be mounted to the enclosure frame with pan head Torx tamper resistant stainless-steel screws.
- C. Enclosure shall consist of 2 hinged, lockable entry doors, with SCE-41 Grade Neoprene gasketing with aggressive rubber-based adhesive. The enclosure shall have a removable roof; it shall be sloped to prevent moisture build-up, and it shall include a brake-press formed drip-edge, aluminum flashing, and SCE-41 Grade Neoprene gasket with aggressive rubber-based adhesive.
- D. OPTIONAL Enclosure Accessories
 1. Insulation

The enclosure shall be insulated with rigid foam plastic thermal insulation board composed of polyisocyanurate foam core bonded to reinforced aluminum foil facers on each side. The insulation shall be 2" thick, with an R-Value of no less than 12.9.

2. Heater – 500 WATT

The enclosure shall be equipped with a 500 Watt radiant heater with stainless steel element, built-in snap-action thermostat, and steel housing with baked enamel protective coating. It shall come equipped with a capillary tube running the full length of the element to provide over-temperature protection, which shall automatically reset when temperature drops.

3.3 STATION BASE, PIPING, & VALVES

A. STATION BASE

The system base frame shall be constructed of 3/8" steel plate per ASTM A36. The steel plate shall be press brake formed with a minimum riser height of 5 inches. Sub-structure supports shall be added as necessary using 3/8" steel strap. Welded bases or open rail systems shall not be acceptable. The base frame shall be coated with thermosetting epoxy powder coating with a minimum thickness of 3 mils.

B. PIPING & FITTINGS

1. All piping, fittings, and pipe supports shall be constructed of ASTM A53-B STEEL, Schedule 40. Manifolds shall be grooved or cope welded per AWWA standards. Threaded connections in the piping network are not acceptable.
2. All process piping and fittings shall have a Class D pressure rating.
3. All process piping shall be coated both internally and externally with thermosetting epoxy powder coating with a thickness of no less than 3 mils.

C. VALVES

1. Butterfly Isolation Valves – Wafer Type
Provide with Cast Iron body, Ductile Iron disc, EPDM seat, stainless steel shaft, and rated 200 PSI operating pressure.¹
2. Butterfly Isolation Valves – Grooved Type
Valve body shall be ASTM A536 ductile iron. Valve disk shall be ASTM A536 ductile iron with NBR coating. Valve stem shall be 410 SS. Lever operators shall be provided for sizes 6" and smaller; gear operators shall be provided for valves 8" or larger; operators shall have a 10-position indicator.
3. Check Valves
A spring-loaded non-slam type check valve shall be installed on the discharge of each pump. The valve shall be wafer style typed fitted between two flanges. The head loss through the check valve shall not exceed 5 PSI at the pump design capacity. Check valves shall be Val-Matic 1400A series or approved equal.
4. Air Relief Valves
The pump station shall include continuous acting air relief valves located as shown on the technical drawing. The air relief valve shall continuously discharge

entrapped air in the system and shall be constructed of a cast iron body with stainless steel float and trim. The discharge shall be piped to the floor drain. Air relief valves shall be manufactured by Val-Matic or approved equal.

5. Pressure Relief Valve

The pressure relief valve shall be located as shown on the technical drawing. The valve shall protect the piping network by bypassing or relieving excess pressure and shall maintain close pressure limits without causing surges. If upstream pressure decreases below the spring setting, the valve shall close. The valve shall be a Cla-Val Co. Model No. 50-01/650-01 Pressure Relief and Pressure Sustaining Valve as manufactured by Cla-Val or approved equal.

3.4 FILTRATION

A. Automatic Water Filter

The pump station shall include a stainless steel, 300-micron automatic screen filter. The filter flush control logic shall be included as part of the main control panel PLC programming. The filter shall be by Amiad, VAF, or equal.

3.5 INSTRUMENTATION

A. Pressure Gauges

Pressure gauges shall be located as shown on the technical drawing. Pressure gauges shall have a 304 stainless steel case and bezel construction. Gauges shall be 2.5" diameter, liquid filled. Pressure sensing connection shall be 1/4" NPT lower gauge connection.

B. Pressure Transmitter

The station shall have pressure transmitters located as shown in the technical drawing. The pressure transmitters shall provide noise free, linear output that is proportional to pressure. Transmitter shall be solid-state, strain gauge type with integral voltage regulation and output accuracy not less than 0.4%. Transmitter shall be constructed of stainless steel and rated for the pump station discharge pressure called out in the technical specifications. The pressure transmitter shall be manufactured by IFM or approved equal.

C. High Pressure Switch

A high-pressure switch shall be located on the station discharge manifold. It shall signal a system fault if the discharge pressure reaches a user-adjustable setting, with the adjustment mechanism located on the switch. The high-pressure switch shall be manufactured by IFM or approved equal.

D. Electromagnetic Flow Meter

1. The pump station shall have a flow meter installed as shown on the technical drawing, installed according to manufacturer's recommendations.

2. The flow meter shall be electromagnetic design comprising of two major components, a primary head and a signal converter. The primary meter head shall incorporate a straight-thru flow design with no moving parts or pressure loss.
3. The flow meter signal converter shall produce two separate signals, pulse and 420ma, in linear proportion to flow rate. Flow data, including flow rates and flow totals, shall be accessible via the door-mounted PLC touchscreen interface.
4. Flow meter shall read flows from 0.10 - 39 FT/S, with an accuracy of +/- 0.25%. Flow meter shall be sized so that maximum system flow lies between 16 and 24 FT/S through the meter.
5. The meter shall be fully tested during the pump station full run performance testing while at the factory prior to shipment. The magnetic flow meter on the pump station shall be calibrated against a master meter.
6. The flow meter shall be Badger Meter M2000 series or equal.

E. Level Transmitter

A solid-state level transmitter shall provide a noise free, linear output proportional to reservoir level. Transmitter shall be solid-state, strain gauge type with integral voltage regulation and output accuracy not less than 0.25%. Transmitter shall be constructed of stainless steel and rated for pressures up to 600 PSI. The cable shall be polyurethane molded vented with Kevlar. The vent tube shall be protected in such a way as to prevent moisture from entering. The level transmitter shall be Keller America Levelgauge or equal.

F. Low Water Float Switch

The system shall have a float switch to be used to signal the pump station to shut-down if the intake source water level becomes too low. The switch shall work in conjunction with the PLC (programmable logic controller). In the event that the supply drops below a safe operating level, the PLC will shut down the pump system. The PLC shall be programmed to attempt to restart the pumping system two times. If after two attempts the water supply is still too low, the system will require a manual reset. The Low Water Float switch shall be 2900 Mercury series manufactured by Conery or equal.

3.6 MOTOR CONTROL PANEL

A. General

1. The Motor Control Panel shall incorporate all circuits and necessary protections required to operate the pump station, including motors, controls, and heating and ventilation circuits. All wiring shall conform to NEC and UL 508A standards.
2. The control panel shall be designed, built, tested, and UL 508A listed by the pump station manufacturer. The control panel shall be UL labeled as an "Enclosed Industrial Control Panel". The pump control panel shall be completely manufactured, tested and programmed prior to delivery to the job site.

3. Electrical connection, by purchaser, shall consist of a single conduit from owners disconnect to the pump station main disconnect.
4. The following shall be permanently affixed to the inside of the control panel enclosure:
 - a. A full-color, diagrammatic wiring schematic.
 - b. Pump and motor nameplate information.
 - c. Factory calibrated control setpoints.

B. Panel Construction

The pumping station electrical controls, including variable frequency drives and operator interface, shall be housed in a NEMA 12 enclosure.

1. The enclosure shall be fabricated from carbon steel, 12 gauge minimum, coated inside and out with ANSI-61 gray powder coating.
2. All internal components of the enclosure shall be mounted on a removable subpanel, which shall be powder coated white. Mounting screws for components shall not be tapped into the enclosure wall.
3. The electrical panel doors shall be removable and interchangeable, with concealed hinges and integral latches. Door gasket seals shall be oil-resistant and shall be sufficient to protect interior components from weather and dust.
4. All external operating devices shall be dustproof and weatherproof.
5. No pressure gauges, pressure switches, water activated devices, or water lines of any sort shall be installed in the control panel.

C. Temperature Regulation

The cooling system shall be sized for local maximum ambient conditions, plus component cooling requirements. Cooling should be designed such that the internal panel temperature does not exceed 104F.

D. Service Rated Main Disconnect

A three-pole, main station disconnect shall be contained within the control enclosure. The main disconnect shall be non-fused and isolate all power to the control enclosure. The main disconnect shall have an operating handle mounted in the enclosure door, mechanically interlocked to prevent entry while disconnect is in the ON position.

E. Control Transformer

The control transformer shall provide 120-volt power to the pump station controls. The control transformer shall be protected on primary side with appropriately sized fuses. Secondary side shall be protected by a group of supplementary miniature circuit breakers.

F. Voltage Monitor

The control panel shall include an industrial three phase line voltage monitor. It shall protect the system against voltage unbalance, high/low voltage, phase loss, faulty power, incorrect sequencing, and rapid short cycling. It shall include a fully programmable LED backlit display. It shall be ICM Controls model ICM455 or approved equal.

G. Surge Protection

The control panel shall include an industrial grade surge protective device.

H. Secondary Control Circuit Breakers

Single-pole secondary distribution breakers with appropriate ratings shall supply power to each pump starter coil circuit, and control system.

I. Variable Frequency Drives (VFDs)

1. The variable frequency drive shall be IGBT based with selectable carrier frequency up to 15 KHZ. The VFD shall include terminals for incoming power, motor output power and control terminals. All VFDs shall include an RS485 port built-in to the VFD for dedicated communication to the PLC.
2. VFD shall be isolated from main input power by use of a contactor to protect the VFD from power outside of tolerances.
3. The VFD shall generate a sine-coded, variable voltage/ frequency, three phase output for optimum speed control. The VFD shall incorporate power loss ride through for a minimum of 2 seconds. VFD protective features shall include current limit, auto restart, short circuit protection, electronic motor overload protection, and ground fault protection. The VFD shall have a push button programming display for easy access to operation parameters. The VFD shall be protected on the primary side by a breaker of the appropriate amperage.
 - a. Overload capacity: 120% rated output current for one minute.
 - b. Voltage fluctuation: +10%, -15%.
 - c. Sine wave, PWM, with full range, and automatic torque boost.
 - d. Frequency control range: 0.5 to 500 Hz.
 - e. Frequency accuracy: digital, 0.01 Hz, analog, .1%. Motor overload protection, instantaneous over current of 180% of rated output current.
 - f. Over voltage at 820vdc if 460v input.
 - g. Under voltage shall be user-adjustable.
 - h. Momentary power loss: up to 2 second ride through.
 - i. Electronic ground fault.
 - j. LED capacitor charge indicator.
 - k. Input phase loss alarm.
 - l. Ambient temperature range of 0 to 50 degrees c.

m. Humidity of 95% non- condensing.

4. Manufacturer: ABB ACS550 Series, ABB ACS580 Series, Mitsubishi F800 series, Schneider Altivar ATV630 series, or approved equal.

J. Pilot Devices

1. The control panel shall include the following pilot devices:
 - a. 3-Position Selector (HOA) Switches
 - b. Speed Potentiometer
 - c. Pilot Lights: A red light shall indicate system faults; a green light shall indicate pump is running.
2. VFD Status Indicator: Internal parameters of critical system operations must be viewable without opening the enclosure door.

3.7 PUMP SYSTEM CONTROLLER

A. General Requirements

1. Non-Proprietary, Open-Source Programming
To better facilitate owner access to system servicing, the control system shall be non-proprietary and open-source, with the complete system programming made available to the owner via USB drive. Proprietary control systems shall not be accepted.
2. Controller User Guide
The pump station manufacturer shall supply an owner's manual in digital form that includes graphic images of all touch screens, complete with explanations of all settings and modes.
3. Remote Monitoring and Control
The control system shall be equipped with an Ethernet switch and wireless 4G modem, enabling the owner to remotely monitor and control the system via the internet. **Fiber Control Box**

B. Programmable Logic Controller (PLC)

The PLC and modules shall be manufactured by Allen-Bradley, IDEC, or equal.

C. Operator Interface

The operator interface shall be an LCD color touchscreen, with a minimum diagonal length of 8.4". The touchscreen shall allow operator access to all system settings and monitoring data. The touchscreen shall be mounted to the motor control panel door. The operator interface shall be manufactured by Allen-Bradley, IDEC, or equal.

D. Monitoring Functions

1. System Overview Screen

- a. Pressure, flow, and level status.
 - b. Pump status, including lead pump designation, VFD frequency, and current draw.
 - c. Alarm conditions, with the ability to manually reset alarms.
 - d. Current values of all system sensors, including pressure and flow.
2. Fault Log

The controller shall have a system fault log that displays the precise times of fault occurrences and recoveries, as well as message indicating the fault type. The fault log shall include a fault diagnosis utility that provides possible causes of and solutions to all system faults and warnings.
3. Trend Log

Trend graphing screen capable of detailing pressure, flow, and current data. Graphing function shall give the option to graph and plot a point at user adjustable intervals. All data shall be capable of being downloaded to a USB drive, and allow an operator to upload the data to a spreadsheet type program.
- E. Control Functions
 1. Pressure Settings

Pressure transmitter calibration, discharge pressure setpoint, and high and low pressure alarm/fault conditions.
 2. Flow Settings

Low and high flow alarm conditions, flow meter sensor calibration settings, and total gallons pumped with user reset button and time/date stamp of last reset.
 3. Level Settings

Low and high level alarm conditions, level transmitter calibration settings, and optional level PID pressure setpoint manipulation.
 4. Pump Settings

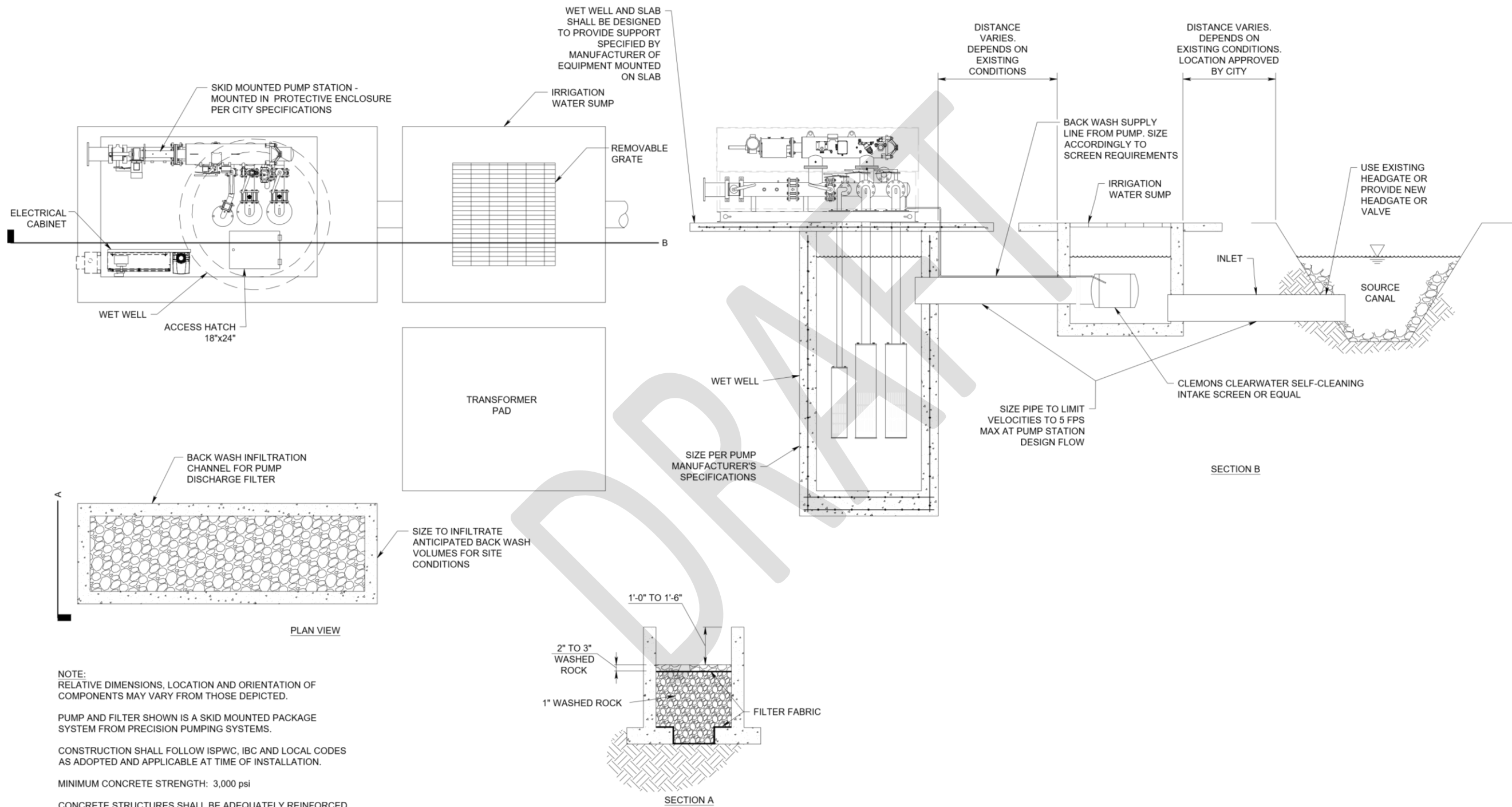
Pump detail screens showing total run hours of each pump since last reset and any modes, options, or functions specific to that pump.
 5. Pump Sleep Settings

The pump shall enter sleep mode via user adjustable settings based on either of two thresholds: VFD frequency or system flow. The user shall also be able to adjust the sleep delay mode. The pump shall enter operating mode when the system pressure reaches a user adjustable "Wake-Up" pressure setting.
 6. Remote Start/Stop Signal Relay

The PLC shall be able to start and stop the system based on a remote signal relay.
 7. Pre-programmed Start-Up Routines

- a. The PLC shall be programmed with various start-up routines that limit and/or delay the starting and acceleration of the pump—ensuring that excessive velocity and pressure do not damage the distribution system.
 - b. The program shall include individual routines for initial start-up, mainline fill, re-start after a power outage, and re-start after a system fault.
 - c. The operator shall be able to adjust the timing of the routines via the operator interface.
8. Password Protection
9. Loading and Saving System Default Settings
The system shall allow the operator to Load Factory Default PLC settings, Save New Operator settings, and Load previously saved Operator PLC settings.
10. System Data and Time
The PLC shall allow the operator to change the system date and time.
11. System Protections
 - a. Controls shall shut down the pump station in the event of the alarm conditions described in this section, as well as otherwise indicated. The system controls shall attempt to restart the system after alarm shutdown or loss of power. After a user-adjustable number of attempts to re-pressurize the system, the controls shall go into hard shut down and remain so until manually reset.
 - b. Low Flow Shutdown. The PLC shall automatically shut down the system if there is no, or too little flow, based on signals received from a flow switch. The low flow shutdown shall have a user adjustable time delay.
 - c. Low Level Shutdown. The controller shall automatically shut-down the system based on low level signals from a level transmitter.
 - d. High Pressure Shutdown. In addition to the pressure data received from the pressure transmitter, the PLC shall automatically shut-down the system based on signals from a high-pressure switch.
 - e. Electrical Fault Shutdowns. Incoming power high, low, and imbalance limits. Shut-down and restart time delays shall be user-adjustable.
 - f. Analog Transmitter Failure. Input levels of all connected transmitters and meters shall be monitored for failures.
 - g. Motor starter failure. Circuit breaker and/or motor overload contacts shall be monitored to indicate a motor failure.
 - h. VFD Faults

- END OF SECTION -



NOTE:
RELATIVE DIMENSIONS, LOCATION AND ORIENTATION OF COMPONENTS MAY VARY FROM THOSE DEPICTED.

PUMP AND FILTER SHOWN IS A SKID MOUNTED PACKAGE SYSTEM FROM PRECISION PUMPING SYSTEMS.

CONSTRUCTION SHALL FOLLOW ISPWC, IBC AND LOCAL CODES AS ADOPTED AND APPLICABLE AT TIME OF INSTALLATION.

MINIMUM CONCRETE STRENGTH: 3,000 psi

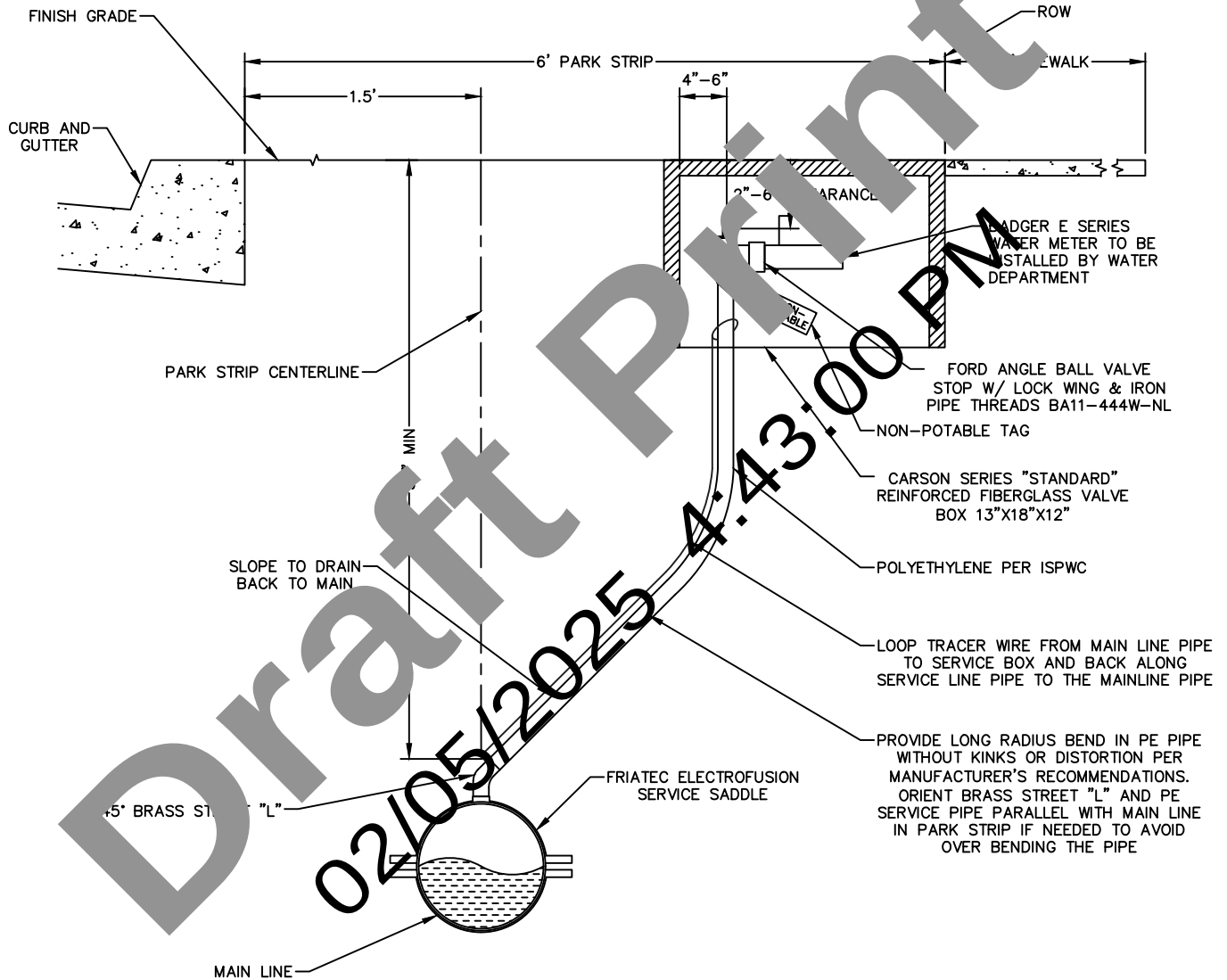
CONCRETE STRUCTURES SHALL BE ADEQUATELY REINFORCED.

SUBMIT DESIGN CALCULATIONS FOR CITY REVIEW.

INTAKE PIPING SHALL COMPLY WITH ISPWC 601.

IRRIGATION STRUCTURES SHALL COMPLY WITH ISPWC 602.

BACK WASH FOR PUMP DISCHARGE FILTER CAN BE PIPED BACK INTO THE CANAL INSTEAD OF USING A BACK WASH INFILTRATION CHANNEL IF FEASIBLE.

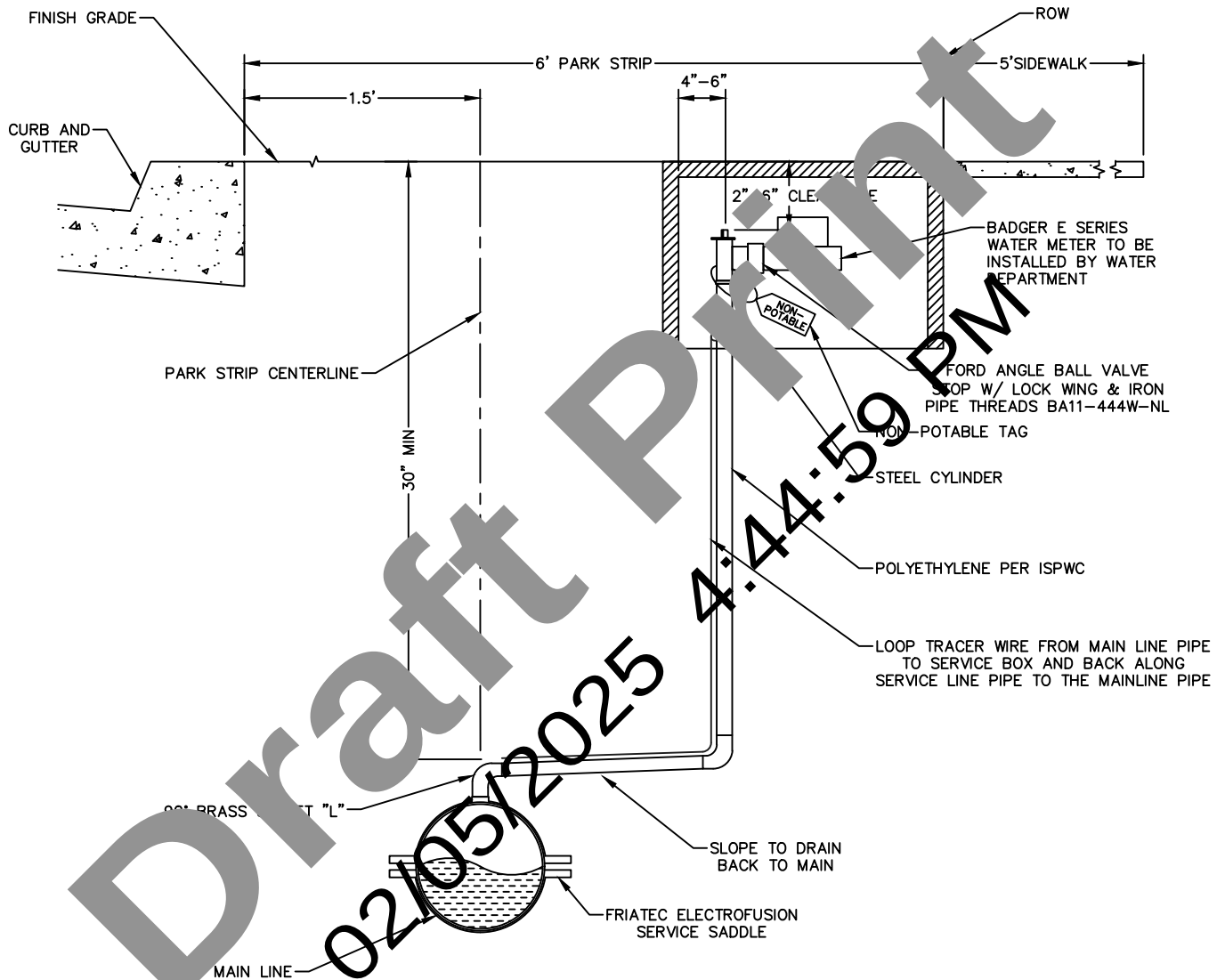


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STANDARD 24" DIA MANHOLE CAST
IRON RING AND COVER WITH
"IRRIGATION" CAST ON LID

FRESNO SERIES 3000 2" ALUMINUM AIR VENT
& VACUUM RELIEF VALVE NO MORE THAN 12"
BELOW GRADE

FINISH GRADE

30" DIA CORRUGATED
PIPE - SMOOTH INTERIOR
PLASTIC

6" MIN BELOW LID

12" MAX

2" BRASS GATE VALVE FACING AWAY FROM RELEASE

NON-POTABLE WATER TAG

2" GALVANIZED IRON PIPE RISER

IRRIGATION MAIN

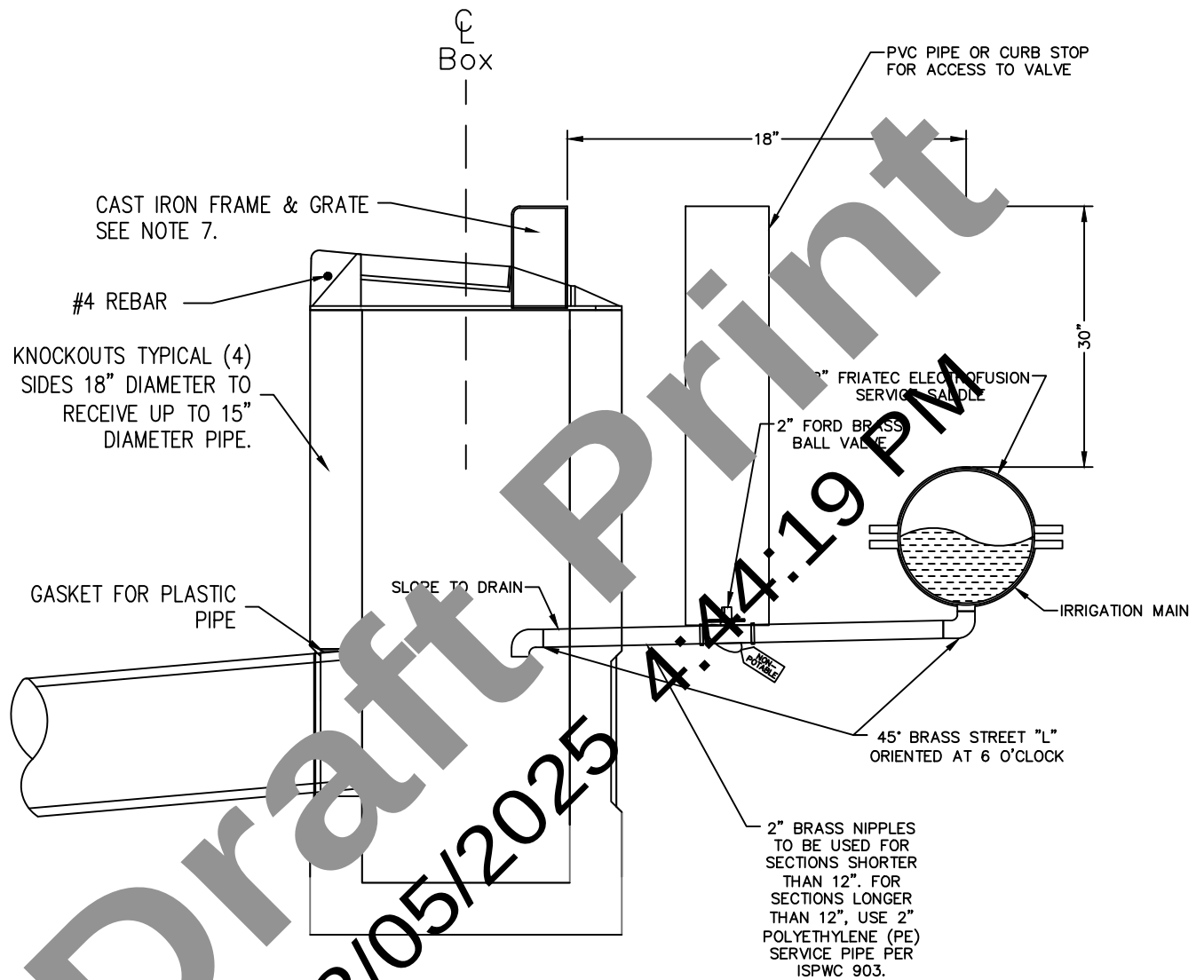
2" FRIATEC ELECTROFUSION SERVICE SADDLE

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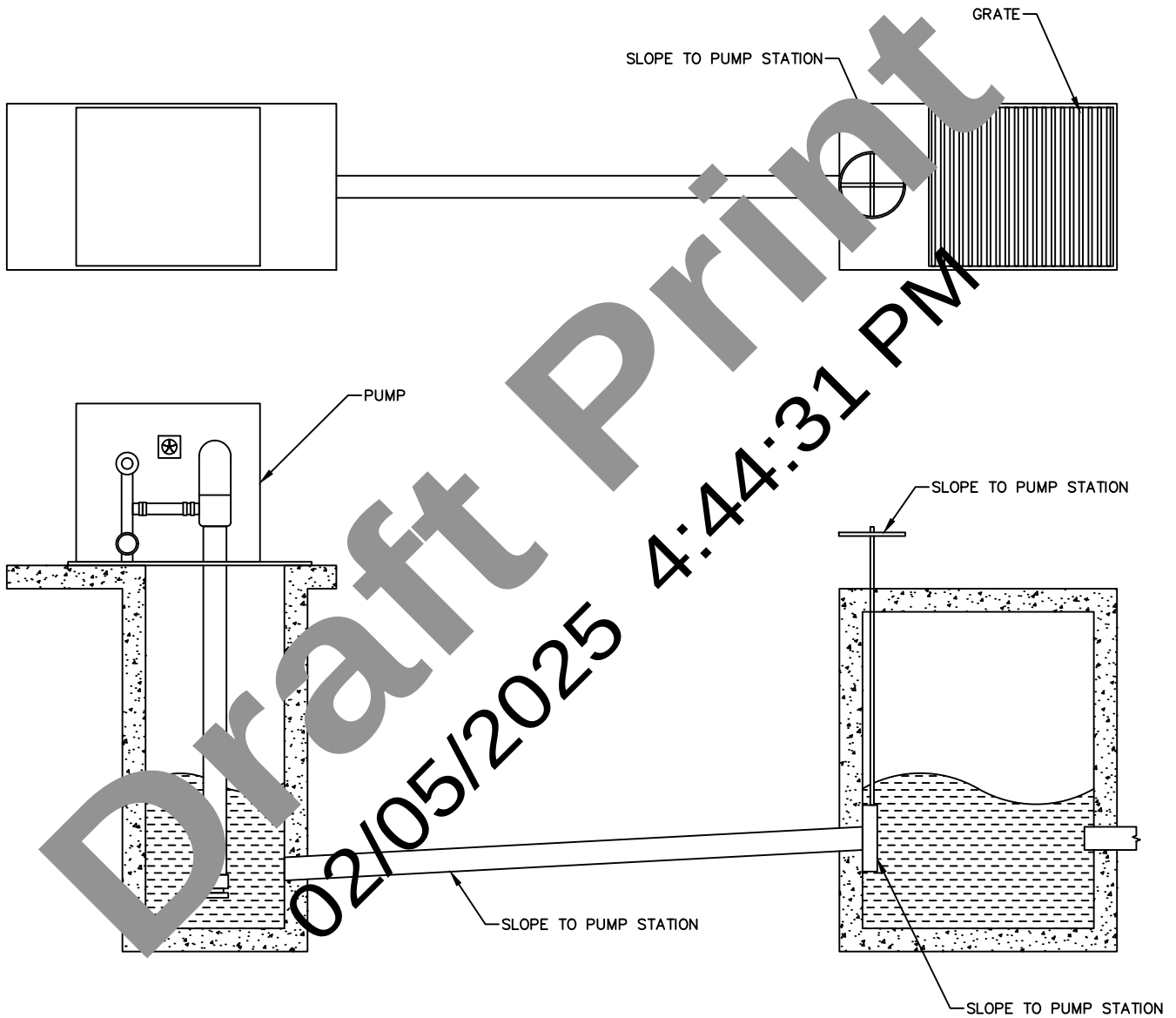


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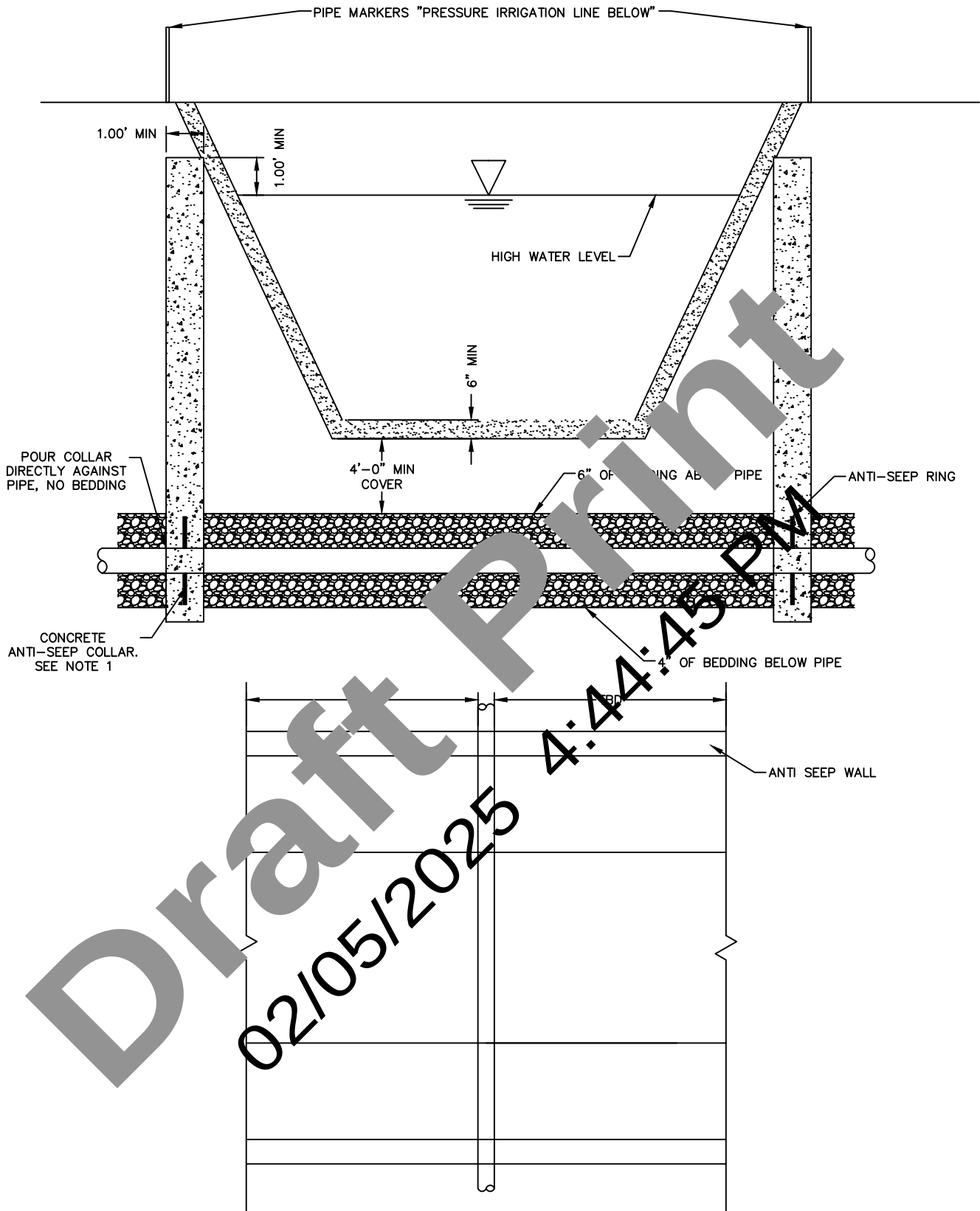


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MEMORANDUM

TO: Honorable Mayor and Council

FROM: Wade Sanner, Community Development Services Director

DATE: February 5, 2025

RE: February 4, 2025, Planning Commission Action

Planning Commission took the following action during the February 4, 2025, meeting.

1. **PLT24-058: FINAL PLAT for Stanger Farms Commercial Addition, First Amended, A portion of Lot 1, Block 1 of Stanger Farms Commercial Addition. Located north of E Anderson Street, east of N Holmes Avenue, south of Environmental Way, west of Hemmert Avenue.** On February 4, 2025, the Planning and Zoning Commission unanimously voted to recommend approval of the final plat to the Mayor and City Council as presented.
2. **PLT24-059: FINAL PLAT for Peterson Place Division No. 1, A portion of the SW ¼ of Section 15, Township 2 North, Range 37 East. Located north of Broadway, east of N 35th W, south of Stella Drive, west of Ernest Drive.** On February 4, 2025, the Planning and Zoning Commission unanimously voted to recommend approval of the final plat to the Mayor and City Council as presented.
3. **PLT24-060: FINAL PLAT for River Hollow at Sage Lakes Division No. 2, SW ¼ of Section 30, Township 3 North, Range 38 East. Located north of W 65th N, east of N 5th W, south of Commons Road, west of the Idaho Canal.** On February 4, 2025, the Planning and Zoning Commission unanimously voted to recommend approval of the final plat to the Mayor and City Council as presented.
4. **PLT24-062: FINAL PLAT for Broadway Commercial Plaza, Lot 17, Block 4 or Westland Heights Addition. Located north of Broadway, east of Hansen Avenue, south of Raymond Drive, west of N Skyline Drive.** On February 4, 2025, the Planning and Zoning Commission unanimously voted to recommend approval of the final plat to the Mayor and City Council as presented.
5. **ANX24-013: ANNEXATION/INITIAL ZONING. Annexation and Initial zoning of LC, Limited Commercial for approximately 7.9 acres in the SW ¼ of Section 26, Township 2 North, Range 37 East. Located north of Pioneer Drive, east of Interstate 15, south of the Porter Canal, and west of Pioneer Road.** On February 4, 2025, the Planning and Zoning Commission unanimously voted to recommend approval of the annexation and initial zoning of LC to the Mayor and City Council as presented.

6. **PUD24-005: Planned Unit Development. Donner Townhomes. Lots 9-12, Block 1, H-S Addition Division No. 1. Located north of Easy Street, east of the Idaho Canal, south of Garfield Street, west of N Woodruff Avenue.** On February 4, 2024, the Planning and Zoning Commission unanimously voted to recommend approval of the PUD to the Mayor and City Council as presented.

RECOMMENDED COUNCIL ACTION: To receive recommendation(s) from the Planning and Zoning Commission pursuant to the Local Land Use Planning Act (LLUPA).



Board of Directors Meeting Minutes

January 14, 2025 | 9:00 a.m. | Willard Arts Center

Attendees: Brandi Newton; Chip Langerak; Caitlyn Long; Lisa Farris, Idaho Falls Grant Manager; Michelle-Ziel-Dingman, Idaho Falls Councilwoman

IFDDC Staff: Bryan Chaffin, Executive Director and Kerry Hammon, Operations Manager

Note: No voting took place at this board meeting as there was not a quorum. Approval of the minutes and financials will take place next month.

Action Items:

- Kerry – Schedule a year’s worth of board meetings and send an invite to all board members.
- Kerry – Schedule a year’s worth of executive sessions and send an invite to Chip, Brandi, Bryan, Jill and Kevin. The meetings will be held the Thursday prior to the board meetings at 4:00 p.m. at Pachanga’s.
- Bryan/Kerry – Print event brochures.
- Bryan – Winter Brew volunteers, list, and rent heaters.
- Bryan - Schedule a meeting with the Bonneville County Commissioners (Casperson and Mallard) in Feb or March to discuss parking.
- Bryan – Schedule volunteers for wreath removal.

Topics Discussed:

- Brandi
 - Reviewed the balance sheet.
 - IFDDC received BID funds from the City of Idaho Falls.
 - There was a brief discussion about the cost differences of holding the Winter Brew at the same location this year while keeping the participants’ experience at the top of the priority list.
- Bryan
 - Introduction - Kerry Hammon who was hired as the Operations Manager following Mala’s retirement. Her first day was January 13, 2025, and she will work part-time at 30 to 32 hours per week.

- Bryan will interview a candidate today for the marketing/event coordinator position. There was a discussion about the options of that position being part-time vs. on a subcontract basis.
- Clark is no longer doing marketing for IFDDC.
- The 2025 event list is complete. We are adding one new summer event this year. We're eliminating the Dogs Dig Downtown event as it was not well received.
- Winter Brew is scheduled for Feb 22 at the Broadway Plaza, but we're evaluating the possibility of moving the event into the street, so it is warmer. We need to start getting commitments from volunteers now. Bryan will bring a volunteer list and start working on securing the heaters.
- The St. Patty's Day event is on March 15, 2025, on Park Avenue.
- Bryan is gathering volunteers to help take down wreaths. The board suggested using the Chamber of Commerce's Emerging Leaders or the Idaho Falls Civitans' Junior Civitans. Please remember to bring your own step stool if you are helping remove the wreaths.
- Lisa
 - Do we have enough pet-relief areas? We need to identify where they are and if we need to strategically add more. A marketing idea is to include a social media video with a dog walking down the sidewalk to promote pet-relief areas.
 - The horse drawn trolley rides went well.
 - The ice-skating rink did very well (nearly 250 participants in total). We did not have a sponsor. It was in a great location this year. Next year, we need to start the conversation about the ice-skating rink in September and really launch it with the Tree Lighting Ceremony. A marketing idea is to include signage on the ice rink that lists all the downtown winter activities, including the UTV Light Parade.
 - There is over \$76,000 available for facade projects.
- Caitlyn
 - There is an Open House tonight for Historic Preservation. The draft plan is online.
- Michelle
 - Mayor's State of the City address is January 15 from 11:30 a.m. to 1:00 p.m. at the new Holiday Inn Express at Jackson Hole Junction.
 - Recommend Bryan schedule a meeting with the Bonneville County Commissioners to discuss parking in Feb/March.
 - New Idaho Falls City Clerk, Emily Gysler. She previously worked for a title company and in commercial lending.

Meeting was adjourned at 10:00 a.m.

Our next board meeting will be February 11, 2025, at 9:00 a.m. at the Willard Arts Center

Reviewed & approved by Bryan Chaffin. Respectfully submitted by Kerry Hammon, IFDDC Operations Manager

12/12/24 SISTER CITIES ADVISORY COMMITTEE MEETING MINUTES

The December 12, 2024 Sister Cities Advisory Committee meeting was held in Room 310A of Building 3 at College of Eastern Idaho (1600 S 25th E, Idaho Falls, ID 83404) and via Zoom.

ACTION ITEMS

5:45 PM

- Roll Call and Confirmation of Quorum
 - In attendance: Amanda Logan, Catherine Smith (City representative), Laura Combs, Charlotte Combs (non-voting), Chloe Doucette, Lisa Armstrong, Cindy Ozaki
 - Absent: Jake Durtschi, Sunny Katseanes, Jeremy Crook (non-voting), Julie McMurtrey (non-voting)
- Approval of November 14, 2024 Meeting Minutes
 - Typos (Fuji and Catherine's name misspelled). Amanda will edit.
 - *Cindy moved to approve the amended November 14, 2024 minutes; Laura seconded the motion. Motion passed unanimously.*
- Approval of Reimbursements
 - \$10.55 to Clarke Kido for tote bags used to give gifts in Tokai-mura and \$135.14 to Sheri Hansen for expenses related hosting Tokai-mura, to be charged against hosting expenses for this fiscal year.
 - *Laura moved to approve a total of \$145.69 in reimbursements to the Adult Association for expenses related to hosting and visiting Tokai-mura (to come from the FY25 hosting budget line); Julie seconded the motion. Motion passed unanimously.*
 - \$810.00 annual dues to Sister Cities International
 - *Lisa moved to approve a \$810.00 reimbursement for the annual dues to Sister Cities International (to come from the FY25 administrative budget line); Laura seconded the motion. Motion passed unanimously.*
- Approval of CY 2025 Committee Meeting Schedule
 - Meeting schedule for 2025 would continue our current cadence of the second Tuesday of every month.
 - Our regular meeting room is booked at CEI for each of those dates.
 - We may need to pay particular attention to the October meeting date to account for the adult delegation visit.
 - *Lisa moved to approve the 2025 meeting schedule, with meetings to continue to be held at 5:30pm the second Thursday of every month Cindy seconded the motion. Motion passed unanimously.*

DISCUSSION ITEMS

5:57 PM

- Report on Visit to Tokai-mura

- Catherine shared her update from the visit since she wasn't in attendance at the last meeting.
 - She said Mayor Yamada and the whole village of Tokai was wonderful.
 - Shared the video shown at the meeting with the village of Tokai.
 - Visit to Ikaho- 365 steps- all represent a day of the year. Shrine and bridge at the top. Seeing the landscape was amazing.
 - Catherine wants us to step up our game in City Hall when they come here seeing what Tokai mura does for us. She also shared that their largest department in the City is one that supports elderly folks and young people. Their strategic plan was very thoughtful.
 - Exploration of their religion was also amazing. Highlighted Buddhism in particular with the temples. The shrines are Shinto. They are both Shinto and Buddhists. One represents life on earth and another in the after life.
 - Also highlighted the businesses they met with and discussed the Business Incubator program.
 - Highlighted Suzuki Laboratory - hires women specifically and encourages them to bring their kids to work; there is some real potential for that business to impact what we do here.
 - They also highlighted a coffee company and a company using AI in agriculture to determine the health of livestock and encourage efficiency in sorting vegetables.
 - There's no garbage anywhere- people are so respectful of their environment.
 - All took away the amount of respect for everyone, no matter what their job or role.
 - Cindy shared that their pay scales are very different. Their school teachers make what their engineers make.
- Now that committee members have been and have personal relationships with City staff, it would be wonderful for the advisory committee to be more engaged with the visit when they come here. The City wants to take a bigger role in the City day. Hopeful that we can play a more meaningful role in that work. We perhaps cannot do what they do for us because their culture places a very high value on generosity, but we can figure out how to do our best.
- They also spoke with Mayor Yamata about how they choose their delegates.
- They spend roughly \$21k US dollars on their efforts. So actually our budgets are very similar. One thing that Catherine thinks would be interesting is figuring out how to do an overnight Yellowstone trip.
 - Chloe shared that she has connections with an organization called WYEDC (West Yellowstone Economic Development Center) which might allow us to take on overnight to Yellowstone in a somewhat affordable way.
- Is there a way to leverage more of the information online? Tokai does a newsletter and booklet every year. Perhaps the City of Idaho Falls could produce their own version of that.
- Does the Committee have recommendations for which businesses we should highlight or what else we could do?

- The Idaho Potato Commission is low hanging fruit.
- The ordinance that created us should guide us so we should review what that ordinance says and make sure to re-center on that. So far, we have been learning our roles and now is a good time to leverage that.
- Updates from City
 - Our budget last year was \$15k and we spent almost \$18k because there was carryover from the prior year and so savings from the previous year covered it. The expenses that we have just started reimbursing will hit against the '25 budget. We can't plan on rollover funds in the future.
 - We did not leave money on the table, nor were we frivolous.
 - The City operates with "no spend September", so you can spend and submit reimbursements up to September 15th and nothing after. Since they aren't coming until October that will be an issue this year. We'll have to address that ahead of the visit. We should be strategic about the timing of our spending and be more proactive in our planning.
- Report from Sister Cities Adult Association
 - Had their meeting last Monday. They received the gift from the Tokai-mura to the City of Idaho Falls. Will hang that in the Mayor's office after accessioning into the collection. Cindy would like the details of our gift as well so that she can include it in the photo book that they put together for posterity and gift to Tokai.
 - Probably won't know how many will be visiting us until June. Tokai puts a notice out to the community to select folks to go on the visit. The adult delegation prioritizes new members of the organization. Normally, you have to join for one year and then you're eligible to go the next year.
 - Bylaws do not specify that people need to be residents of Idaho Falls in order to go on the delegation. That might matter to the City Council so we should look into that.
 - Cindy will send Amanda a copy of the bylaws so that we can add it to the Committee's resources folder.
- Report from Sister Cities Youth Association
 - Caroline Combs will replace Charlotte as student president of the Youth Association. A new slate of other officers have also been elected.
 - Thank you to Charlotte for her work as the Youth President and a member of this Committee!
 - Laura Coombs is President, Kendra is VP, Elise Mongillo is the new Secretary, Jesse Carrell is the new student advisor, and Mie is Treasurer.
 - The Youth Association's Winter Carnival flier was created and will be hung by committee members around town as well.
 - Reach out to Kendra if you can help. Julie McMurtrey is available to volunteer. Lisa will send Laura the link for approval of hanging fliers at the school district.
 - The Youth Association's New Year's Party with Tokai-mura will be on January 18th.

- Community Outreach
 - Social Media, Traditional Media, Websites
 - Let Amanda know if we have more changes that are requested to the City's website.
 - If Cindy can get Chloe the login credentials for the adult website she can begin to work on updating that.
 - Local Educator Grants
 - No applications. We will need to re-think this effort perhaps.
 - Booths at Community Events
 - Tabled until next meeting.
 - Friendship Garden Sign
 - PJ suggested some changes to the language on the signage. Catherine will work with him to understand those changes with Margaret.
 - The Adult Association would like to see the updated language.
 - Museum Exhibit(s)
 - Exhibit closes at the end of Feb. Will try to include a little info with the next exhibit about IF signage.
 - Potential Additional Library Signage
 - Chloe is behind here. She will follow up before the next meeting.
 - Sponsorships from and Involvement with Local Businesses
 - Tabled until next meeting.
- New Business
 - Date and Agenda Items for Next Meeting
 - January 9th at 5:30.
 - Amanda will add a note about reviewing the ordinance and then the rest of the agenda will be standing meeting items.

ADJOURNMENT

6:54 PM