

**AGENDA FOR  
RECLAMATION DISTRICT NO. 1608  
BOARD OF TRUSTEES SPECIAL MEETING  
8:30 A.M. SEPTEMBER 20, 2016  
NEUMILLER & BEARDSLEE  
509 WEST WEBER AVENUE, FIFTH FLOOR  
STOCKTON, CALIFORNIA**

Call to Order.

Roll Call.

Agenda Items.

1. Public Comment. Under Government Code Section 54954.3, members of the public may address the Board on any agenda item on the agenda.
2. Encroachment Permit. Discuss, ratify and approve Encroachment Permit For City Of Stockton Municipal Utilites North Lake Pump Station Discharge Pipe Repairs
3. Staff Reports.
  - (a) Attorney. The Agenda for this meeting was posted on the window outside the meeting room at 509 West Weber Avenue, Stockton, California, at least twenty-four (24) hours preceding the meeting.
4. Adjournment.

*This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the Americans with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code §54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact Jean Knight at 209/948-8200 during regular business hours, at least forty-eight hours prior to the time of the meeting.*

*Materials related to an item on this Agenda submitted to the Trustees after distribution of the agenda packet are available for public inspection in the office of the District Secretary at Neumiller & Beardslee, 509 W. Weber Avenue, 5th Floor, Stockton, California during normal business hours.*

**AGENDA PACKET  
RECLAMATION DISTRICT 1608  
September 20, 2016**

---

<u>ITEM</u>	<u>COMMENTARY</u>
1.	Self-explanatory.
2.	Please see attached.
3.	Self-explanatory.
4.	Self-explanatory.

# ITEM 2

**RECLAMATION DISTRICT NO. 1608 ENCROACHMENT PERMIT**  
**FOR CITY OF STOCKTON MUNICIPAL UTILITIES NORTH LAKE PUMP STATION**  
**DISCHARGE PIPE REPAIRS**

This Encroachment Permit (“Permit”) is issued by RECLAMATION DISTRICT 1608 – LINCOLN VILLAGE WEST (“RD 1608”) to the CITY OF STOCKTON MUNICIPAL UTILITIES (“Permittee”). The real property affected by this Permit is a portion of RD 1608 levee, approximate station 90+00 adjacent to Fourteen Mile Slough, San Joaquin County, State of California, as referenced in the attached Base Map.

**RECITALS**

WHEREAS Permittee desires to encroach upon a portion of the levee maintained by RD 1608 for the purpose of making certain repairs to the North Lake Pump Station Discharge Pipe (“Project”); and

WHEREAS, said repairs shall comport with the specifications and requirements set forth in Section 5 of this Permit; and

WHEREAS, RD 1608, pursuant to its jurisdiction over levee maintenance, repair, and flood control matters conferred by California Water Code section 50900 *et seq.*, has adopted Levee Encroachment Standards; and

WHEREAS, RD 1608 has determined that Permittee’s desired levee encroachment, as specified in Exhibit “A,” is in conformance with RD 1608’s Levee Encroachment Standards; and

WHEREAS, RD 1608 desires to grant this Permit upon the terms and conditions herein specified and by acceptance of this Permit, Permittee agrees to observe and perform.

**AGREEMENT**

NOW, THEREFORE, Permittee and RD 1608 agree as follows:

1. Permit Description.

- A. RD 1608 does hereby grant to Permittee permission to encroach upon that portion of RD 1608 levee, approximate station 90+00 adjacent to Fourteen Mile Slough, San Joaquin County, State of California for the sole purpose of making certain repairs to the North Lake Pump Station Discharge Pipe. Reference attached Base Map to repair discharge pipes for North Lake Pump Station in the RD 1608 levee.
- B. Permittee shall obtain the necessary easements and rights of way from the landowners upon whose land the work and improvements will be located. Fee title to the real property at the above locations is not vested in RD 1608 but is vested in other parties.

- C. This Permit shall not be valid until a fully executed copy of this Permit, signed by all named parties, is returned to RD 1608, in care of Daniel J Schroeder, Attorney for RD 1608, via email at dschroeder@neumiller.com or via fax or mail at the number and address set forth below.

2. Permit Terms and Conditions.

- A. Permittee shall cause such repairs to that portion of RD 1608 levee, approximate station 90+00 adjacent to Fourteen Mile Slough, San Joaquin County, State of California to be performed only in accordance with the terms and conditions required in this Permit and with plans and specifications approved by RD 1608's Engineer.
- B. Permittee shall retain at Permittee's sole cost and expense a supervisor capable of providing oversight of all work in the waterway or on or near RD 1608's levee and any and all water seepage, soil stability problems and changes in levee crown elevation shall be immediately reported to RD 1608's District Engineer. The supervisor with control over the work shall be onsite continuously during the course of the operations permitted herein.
- C. RD 1608's District Engineer shall have the right to inspect the construction related to the repairs performed by the Permittee at any time, and, in the event RD 1608's District Engineer deems the safety of RD 1608's levee is being jeopardized, he may order all or any portion of the work stopped, in which case Permittee agrees to immediately comply with the order. Any such order to stop work shall be in writing and shall be given to the Permittee's on-site representative and to its contractor, if a contractor is used. If a written order to shut down any portion of the construction is issued by the District Engineer, then a meeting will be held on-site within twenty-four (24) hours to agree on the conditions under which construction can be restarted. If a disagreement arises between RD 1608 and Permittee at such meeting, then a third-party engineer, designated by RD 1608 and Permittee by mutual consent prior to the commencement of construction activities related to repair performed by Permittee will be called in within twenty-four (24) hours of the conclusion of the meeting to arbitrate the dispute, and will render a decision which shall be binding on the parties within forty-eight (48) hours after conducting the arbitration. All costs of the work by the third-party engineer shall be born entirely by Permittee.
- D. Permittee shall notify RD 1608's District Engineer, Christopher H. Neudeck, via email at cneudeck@ksninc.com, at least twenty-four (24) hours prior to the commencement of the operations permitted herein, and when there is no activity for a period of five (5) working days, said notice shall once again be given at least twenty-four (24) hours prior to resumption of such operations.
- E. Permittee's operations permitted herein shall not interfere with access along the levee crown road when Permittee's crews are not on site.
- F. All covenants of Permittee herein shall also be deemed conditions of this Permit.
- G. The terms and conditions herein shall bind the heirs, successors and assigns, *executors*, administrators and transferees of Permittee. Permittee agrees as a condition of any

transfer to obtain from the transferee its written agreement to comply with the terms of this Permit. Permittee shall notify RD 1608 of the name and address of any transferee and provide to RD 1608 a copy of said transferee's agreement within ten (10) days of the transfer.

- H. If requested by RD 1608, Permittee agrees to execute any and all additional documents reasonably necessary to secure the recordation of this Permit or a memorandum thereof in the County of San Joaquin, State of California.
- I. Permittee shall within thirty (30) days of invoice reimburse RD 1608 for its reasonable out of pocket engineering and legal costs incurred (1) in evaluating, reviewing and processing plans, designs, specifications, environmental analysis and other documents and data for the facilities, operations and repairs permitted herein; (2) preparing and reviewing this Permit; and (3) monitoring, reviewing and inspecting Permittee's construction operations permitted herein.
- J. Permittee shall, upon completion of the Project, properly restore the Levee to the condition prior to the Project including, but not limited to, riprap and Levee crown surfacing to preconstruction dimensions and conditions, including elevation, in a manner satisfactory to the RD 1608 District Engineer.
- K. Permittee shall, within thirty (30) days of completion of the improvements, supply RD 1608 with "as-built" drawings of the completed repairs to the North Lake Pump Station Discharge Pipe.
- L. Neither RD 1608 nor any officer, agent, consultant, contractor, servant, or employee thereof is responsible for any damage or liability to the extent that such damage or liability occurs by reason of anything done or omitted to be done by Permittee under or in connection with its activities under this Permit. It is understood and agreed that the Permittee shall fully defend, indemnify and save harmless RD 1608 and its officers, agents, contractors, servants, and employees from any and all claims, damages, suits, costs, expenses or actions of every name, kind and description brought for or on account of damage claim or injury as defined in Government Code section 810.8 to the extent that such claims, suits or actions result from anything done or omitted to be done by Permittee under, arising out of, or in connection with its activities under this Permit, including, without limitation, the Project. Additionally, Permittee hereby waives, as to RD 1608's Trustees, engineer, attorney, consultants, employees or agents, any and all claims, damages, liability or losses arising from or related to, review, or approval of the plans, designs, specifications and other documents and data related to the Project and this Permit.

### 3. Permit Termination.

- A. This Permit shall be subject to termination by the Board of Trustees of RD 1608 upon failure of Permittee to adhere to the terms and conditions provided herein and shall otherwise terminate on October 1, 2016.

- B. Upon the termination of this Permit, RD 1608's remedies against Permittee set forth herein including, but not limited to, Permittee's obligations (1) to fully indemnify, defend and save harmless RD 1608; (2) to assume the risk of damages to its facilities and operations permitted herein from flooding; (3) to repair damage caused by its facilities or operations permitted herein, reasonable wear and tear excepted; (4) to remove its facilities permitted herein; and (5) to reimburse RD 1608 for various costs; shall survive the termination of this Permit.

4. Notice.

- A. Unless changed by written notice to the parties at the addresses herein provided, the mailing address for all notices required herein shall be:

City of Stockton Municipal Utilities Department  
2500 Navy Drive  
Stockton, CA 95206  
Telephone (209) 937-8700

Reclamation District No. 1608 – Lincoln Village West  
P.O. Box 4857  
Stockton, CA 95204  
Telephone (209) 948-8200  
Fax (209) 948-4910

5. Repair Specifications.

- A. Permittee shall excavate to expose all three discharge pipes to a width as necessary to allow repair and for a minimum distance 4'-0" past land side angle point, 2'-0" past water side angle point and a point below pipes to allow repairs and inspection to the satisfaction of RD 1608.
- B. At north pipe, a section of pipe shall be removed and replaced from angle point to angle point and replaced to the same lines and grades as existing pipe. The intent is to remove the compromised pipe at land side angle point to a location where competent pipe is found. At water side angle point, remove the angle point and minimum 1'-0" pipe water side slope and to where competent pipe is found. Competent pipe is defined per this Permit as pipe that has uninterrupted interior and exterior coatings and is free of corrosion and other abnormalities. Remove compromised pipe section and replace with 3/8" wall thickness Grade B straight seam welded steel pipe with epoxy coating. Specification attached. Field applied epoxy coating at field welds per item C and D below. Removal and replacement of existing concrete bulkhead will be required to replace this section of pipe.
- C. At center and south pipes remove existing exterior pipe coating minimum 1'-0" each way of angle points for inspection by RD 1608. Following inspection to determine non corroded pipe, field apply epoxy coating. Field applied epoxy coating preparation shall be

to remove all visible coatings and contaminants to bare metal substrate using power tool cleaning methods. Inspect all areas of existing coatings exposed to view and repair any damaged areas to the satisfaction of the RD 1608. Field applied epoxy coated per pipe manufactures coating material recommendations.

- D. Backfill with clean on-site material free of lumps and rocks to encapsulate piping following cure of field applied coatings. Permittee shall employ a geotechnical engineering firm to provide compaction testing services. Compaction test results shall be provided to RD 1608's District Engineer, KSN, attention David Carr, dcarr@ksninc.com (209) 946-0268.
- E. Trench and roadway restoration shall be to provide minimum 4" hot mix asphalt over 8" aggregate base. Aggregate Base shall be compacted to a minimum compaction of 95% based on ASTM D-1557 criteria. HMA shall be compacted to a minimum of 92% based on maximum theoretical specific gravity per Caltrans test methods. Limits of restoration shall be roadway width and a distance delineated by saw cut and removal of existing asphalt minimum 2'-0" each way of existing asphalt that has been damaged or removed by previous or planned excavations.
- F. Replace bollard removed during initial investigations.
- G. Repair displaced gravel on land side slope and restore to provide uniform slope and appearance.
- H. Additional conditions may be required to suit field conditions and will be presented to Permittee for application.

6. Indemnification and Insurance.

- A. Permittee agrees to fully indemnify, defend and hold harmless RD 1608, including its governing board, trustees, officers, consultants, agents, employees and contractors, herein collectively referred to as RD 1608 Indemnitees, against any and all loss, damage, liability, claim, demand, litigation, expense, including reasonable attorney's fees, resulting from any actual or threatened injury or harm to any person or property or to the environment arising out of Permittee's facilities and operations permitted herein regardless of the active or passive negligence of RD 1608 excepting only such injury or harm caused by the sole negligence or willful misconduct of RD 1608.
- B. Permittee shall secure the naming of "RD 1608, its board of trustees and officers thereof" as additional insureds as to claims arising out of Permittee's facilities and operations permitted herein on the liability policies and to the limits as required by Permittee of its contractors during the period of the contractors' work permitted herein. Additionally, Permittee shall at all times during the time this Permit remains in effect maintain comprehensive general liability insurance including coverage for all damages arising out of Permittee's facilities and operations permitted herein with limits of a minimum of \$2,000,000.00 per occurrence to insure Permittee's obligations for personal, property and environmental injury or harm as provided herein. All liability insurance shall be provided by California admitted carriers with an A- or better rating. Certificates of said insurance



shall be provided to RD 1608 prior to commencement of the operations authorized herein. Said certificates shall provide for thirty (30) days prior notice to RD 1608 of termination of the insurance.

7. Flood Risk Acknowledgment. Permittee acknowledges that the premises could be flooded from many causes, including without limitation, the following:
  - A. Levee overtopping and levee failure due to natural causes such as winds, tides, barometric pressure changes, rainfall, rainfall runoff, earthquakes, levee settlement and rodents.
  - B. Levee overtopping and levee failure due to man-related causes including negligence of the landowner, any Reclamation District and any other governmental agency such as inadequate or improper levee maintenance, flood fighting and/or patrol, dredging, water releases, obstructing water flows and water diversions.
  - C. Failure of the drainage system due to natural or man-related causes, including negligence of an owner, any Reclamation District, and any governmental agency.
  - D. Failures to construct, repair, maintain or operate levees, drainage or irrigation facilities or other facilities whether due to limited funding or otherwise.
  - E. Permittee hereby expressly assumes the risk of direct and indirect loss and damage to Permittee and its contractors, employees and agents arising out of the above and hereby waives the right, including the right on the part of any insurer through subrogation, to make any claim pertaining to the same as against RD 1608 and the landowners within RD 1608. Permittee agrees to hold RD 1608 and the landowners within RD 1608 free and harmless from and indemnify them for inverse condemnation of and for damages to property belonging to Permittee, or to Permittee's contractors, employees or agents, used in connection with Permittee's operations permitted herein that results from or is caused by flooding due to the causes set forth above including, without limitation, damage to equipment, improvements, site preparation, pipelines, valves and appurtenances. The parties intend that this indemnity shall extend as broadly as legally permitted and shall apply regardless of whether the loss results from the active or passive negligence of RD 1608 excepting only such loss caused by the willful misconduct of RD 1608.
8. Permittee Duty to Repair. Permittee does hereby agree that at all times during and after the completion of the work that Permittee shall, upon written demand by RD 1608, perform at Permittee's own cost and expense, and within the time limits set by RD 1608 to the extent those time limits are feasible, all reasonable rehabilitation, maintenance or repair work ordered to be performed by RD 1608 which arises as a result of Permittee's work, reasonable wear and tear excepted.
9. RD 1608 Right to Remove Works and Appurtenances.
  - A. Permittee does hereby agree that this Permit is subject to the paramount rights of RD 1608 for reclamation and flood control purposes and the rights of RD 1608 to control, maintain, repair, construct, supervise, inspect, relocate, operate, and reconstruct its levees

and reclamation works. If and in the event that in the sole discretion of the Board of Trustees of RD 1608 an emergency exists or may arise which requires that work be performed on the levee, banks, slopes or other RD 1608 facilities in the immediate area of Permittee's works permitted herein, or in the immediate area of Permittee or its contractors, employees or agents' temporary works or appurtenances thereto used in connection with the operations permitted herein, then and in that event Permittee hereby gives to RD 1608, its agents, employees or contractors, the right and permission to remove any and all of said works and appurtenances reasonably necessary to the performance of such work, provided that RD 1608 first provides Permittee with facsimile or telephone notice at the numbers set forth above. Having given notice by one of the two methods, RD 1608 may then proceed. RD 1608 will, however, if time permits, and in the sole discretion of the Board of Trustees of RD 1608, request that Permittee, rather than RD 1608, conduct said removal.

- B. In the event RD 1608 conducts said removal, Permittee hereby agrees to hold RD 1608, including its governing board, trustees, officers, consultants, agents, employees and contractors, herein collectively referred to as RD 1608, harmless from any and all injury or harm to said works and appurtenances resulting from said removal regardless of the active or passive negligence of RD 1608 excepting only such injury or harm caused by the willful misconduct of RD 1608. Permittee shall within thirty (30) days from the date of written demand by RD 1608 reimburse RD 1608 for (1) all costs and expenses incurred by RD 1608 in said removal of said works and appurtenances, including reasonable attorney's fees and interest; and for (2) all costs and expenses incurred by RD 1608 in performing any portion of said emergency work which is reasonably necessary and caused by the presence of said works and appurtenances.

10. Time is of the Essence. Time is of the essence of this Permit.

11. Miscellaneous.

- A. In the event any party to this Permit brings an action or arbitration to enforce any provision of this Permit, or is required to defend any action or arbitration brought by any party to this Permit the defense to which is any provision of this Permit, the prevailing party shall be entitled to reasonable attorney's fees and costs.
- B. The undersigned represent that they are authorized to enter into this permit agreement on behalf of the party for which they sign. Each party represents that it has legal authority to enter into this permit agreement and to perform all obligations under this permit agreement.

12. Entire Agreement. This Permit is intended to reflect the entire understanding between the parties, and no alteration or modification shall be valid unless made in writing and signed by the parties. The parties agree to cooperate with each other and coordinate their respective activities in a good faith effort to accomplish the objectives recited above.

Attachments: Original Pump Station Plans Dated December 1976 – RD 1608 Base Map  
Coated Welded Steel Pipe Specification – AWWA Coating Repair Specification

ACCEPTANCE BY PERMITTEE

PERMITTEE HEREBY ACCEPTS THE ABOVE PERMIT AND AGREES TO COMPLY WITH ALL OF THE REQUIREMENTS THEREOF. THIS PERMIT DOES NOT RELIEVE THE PERMITTEE FROM OBTAINING ANY AND ALL OTHER APPROPRIATE PERMITS REQUIRED BY OTHER PUBLIC AGENCIES.

Dated: 9/12/, 2016.

CITY OF STOCKTON MUNICIPAL UTILITES DEPARTMENT

for By: [Signature]  
Printed name: Kurt O. Wilson  
Title: City manager

APPROVED BY RD 1608

Dated: September 13, 2016.

RECLAMATION DISTRICT NO. 1608 – LINCOLN VILLAGE WEST

By: [Signature]  
Dr. Michael Panzer, Trustee

APPROVED AS TO FORM AND CONTENT

By [Signature]  
Deputy City Attorney

ADJEST. [Signature]  
CITY CLERK

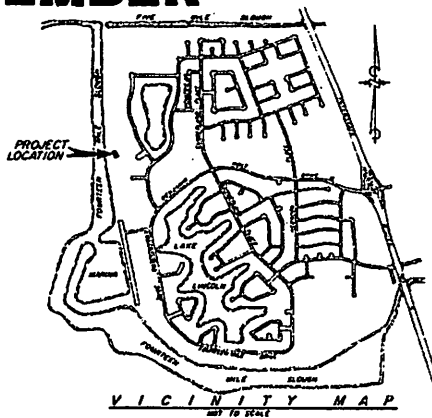


# MAIN PUMPING STATION RECLAMATION DISTRICT 1608

STOCKTON, CALIFORNIA  
DECEMBER 1976

ABBREVIATIONS

- A.C. Asphalt Concrete
- C.B. Catch Basin
- Surface Drainage
- φ Diameter
- Flowline
- Property Line
- T.O.G. Top of Gate
- F.O.C. Face of Curb
- B.O.S.W. Back of Sidewalk
- S.D. Storm Drain



LEGEND

- Top of Paving Elevation
- Fence
- ⊕ Section Identification Sheet Number
- ▭ A.C. Paving (4" Thick)

INDEX TO SHEETS

- 1.... Vicinity Map-Index to Sheets-Abbreviations & Legend
- 2.... Site Plan, Grading Plan & Profile
- 3.... Levee Plan & Profile, Details & Notes
- 4.... Storm Water Sump & Details
- 5.... Electrical Plan

*Fr. Dowling Jr.  
CHAIRMAN*

APPROVED BY RECLAMATION DISTRICT 1608  
BOARD OF TRUSTEES BY

0265X

R. W. SIEGFRIED & ASSOCIATES

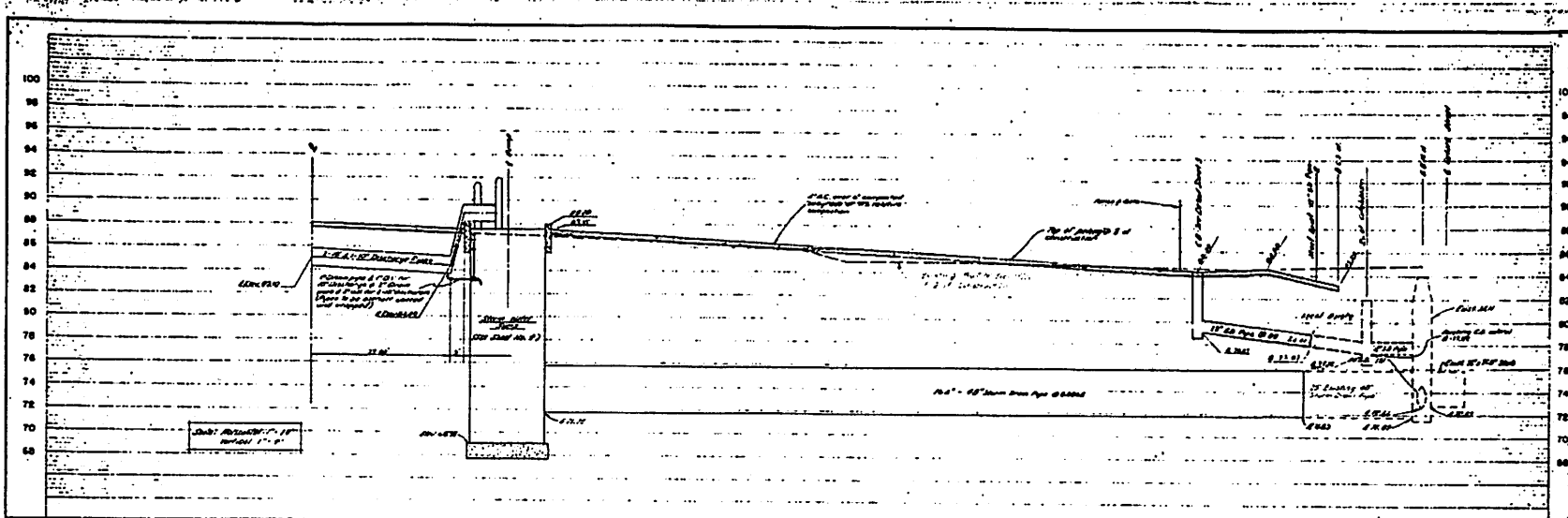
CONSULTING CIVIL ENGINEERS  
1839 EDWARDS AVENUE, STOCKTON, CALIFORNIA 95210

DEC 10 1976

*Sheet 4*

MAIN PUMPING STATION  
RECLAMATION DISTRICT 1608  
VICINITY MAP-INDEX TO SHEETS  
ABBREVIATIONS & LEGEND

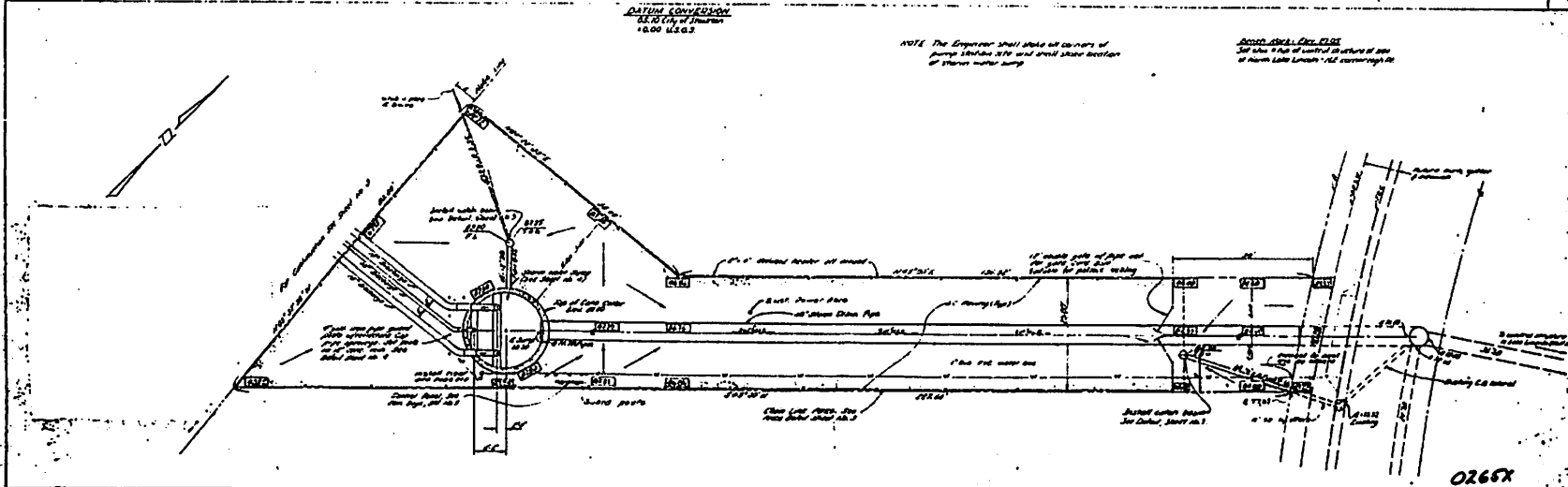
REDUCED PLAN  
SEE SCALE BELOW



**DATE CONVERSION**  
 68.00 City of Thurston  
 10.00 USGS

**NOTE:** The Engineer shall check all corners of pump structure and shall show location of storm water pump.

**NOTE:** The Engineer shall check all corners of pump structure and shall show location of storm water pump.



0266X

NO.	REVISIONS	DATE

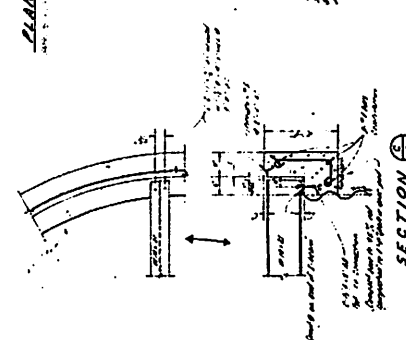
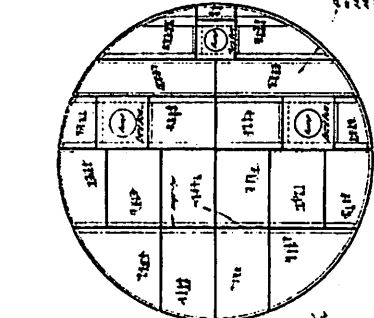
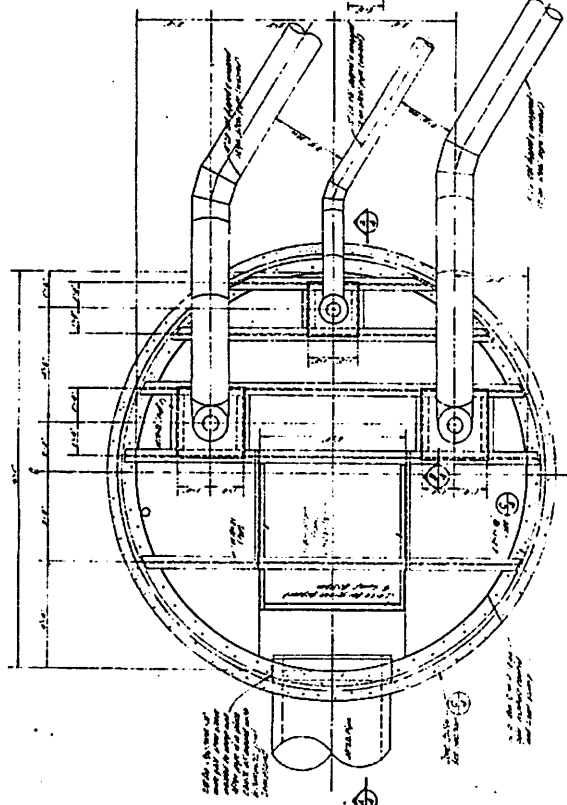
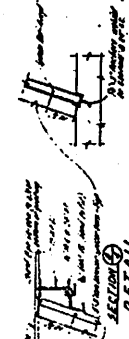
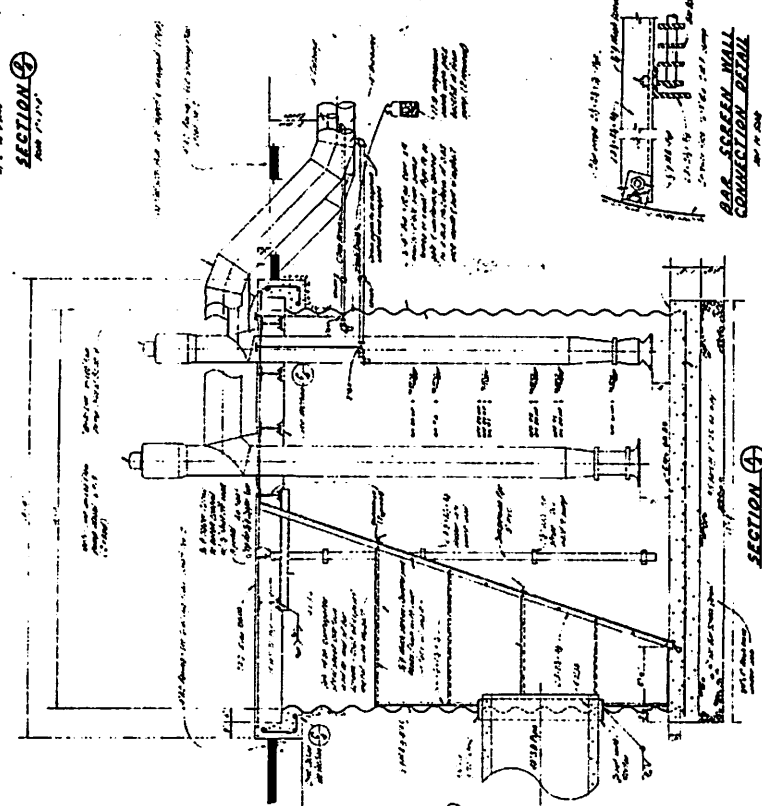
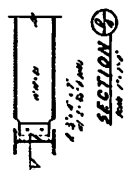
**R. W. SIEGFRIED & ASSOCIATES**  
 CONSULTING CIVIL ENGINEERS  
 4011 GOODBORN AVENUE, STOCKTON, CALIFORNIA 95210

DATE	10/10/20
SCALE	AS SHOWN
PROJECT	RECLAMATION DISTRICT 1608
CLIENT	CITY OF THURSTON
DESIGNER	R. W. SIEGFRIED & ASSOCIATES

**MAIN PUMPING STATION  
 RECLAMATION DISTRICT 1608  
 SITE PLAN, GRADING PLAN & PROFILE**

REDUCED PLAN  
 ONE INCH EQUAL TO  
 ONE HUNDRED FEET





SECTION 1  
1/2" x 1/2" x 1/2"  
SECTION 2  
SECTION 3  
SECTION 4

SECTION 5  
SECTION 6  
SECTION 7  
SECTION 8

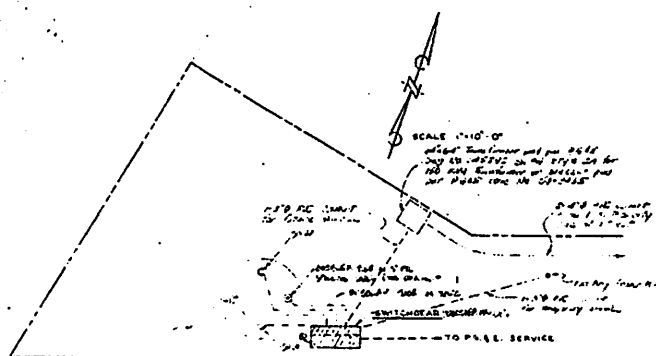
SECTION 9  
SECTION 10  
SECTION 11  
SECTION 12

SECTION 13  
SECTION 14  
SECTION 15  
SECTION 16

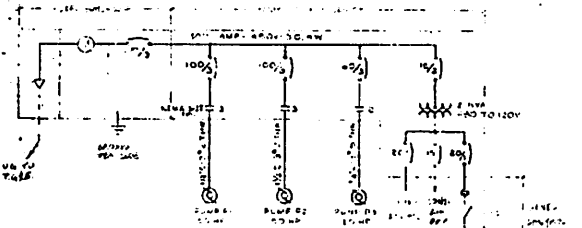
MAIN PUMPING STATION  
RECLAMATION DISTRICT 1808  
STORM WATER SUMP B. DETAILS

R. W. SIEGFRIED & ASSOCIATES  
CIVIL ENGINEERS

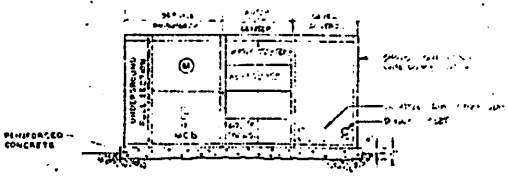
REDUCED PLAN



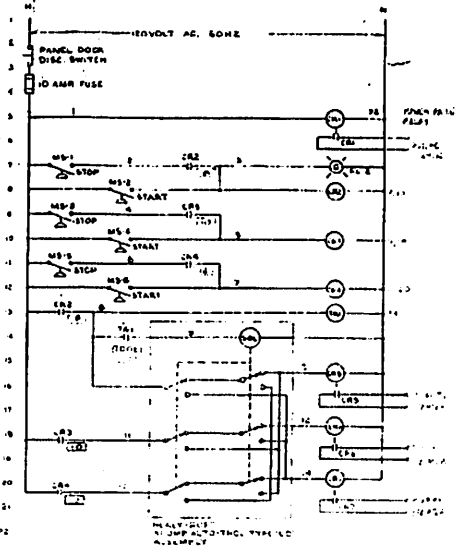
**ELECTRICAL PLOT PLAN**



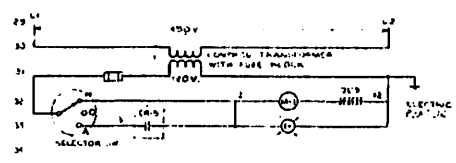
**SCHEMATIC - SINGLE LINE DIAGRAM**



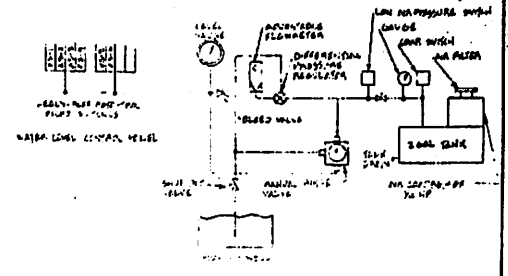
**GENERAL ARRANGEMENT - SWITCHGEAR**



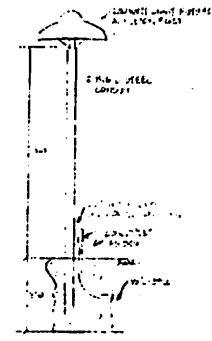
**WATER LEVEL CONTROL WIRING DIAGRAM**



**ELECTRICAL PUMP CONTROL PANEL**



**PUMPS AIR DIAGRAM**



ITEM NO.	DESCRIPTION	QUANTITY
100	100V MCB	1
101	100V MCB	1
102	100V MCB	1
103	100V MCB	1
104	100V MCB	1
105	100V MCB	1
106	100V MCB	1
107	100V MCB	1
108	100V MCB	1
109	100V MCB	1
110	100V MCB	1

**PUMP OPERATION SEQUENCE**

- LEGEND**
- 100V MCB
  - 100V MCB
  - 100V MCB
  - 100V MCB
  - 100V MCB
  - 100V MCB
  - 100V MCB
  - 100V MCB
  - 100V MCB
  - 100V MCB

- NOTES**
1. ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. MATERIALS CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
  2. ELECTRICAL CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AT SITE PRIOR TO START. DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT IMMEDIATELY UPON DISCOVERY. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.

0265X

<p><i>Handwritten signature</i></p> <p>DESIGNED BY CHECKED BY DATE</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	DATE				<p><b>R. W. SIEGFRIED &amp; ASSOCIATES</b> CONSULTING CIVIL ENGINEERS 400 GORDON AVENUE, STOCKTON, CALIFORNIA 95210</p>	<p>MAIN PUMP STATION RECLAMATION DISTRICT NO. 160R</p> <p style="text-align: center;"><b>ELECTRICAL PLAN</b></p>
NO.	DESCRIPTION	DATE							

REDUCED PLAN  
SEE SCALE ABOVE





**SECTION 05525  
COATED WELDED STEEL PIPE**

**TABLE OF CONTENTS**

<b>PART 1 - GENERAL REQUIREMENTS</b>	<b>2</b>
<b>PART 2 - MATERIALS</b>	<b>2</b>
<b>PART 3 - CONSTRUCTION</b>	<b>3</b>
<b>PART 4 - MEASUREMENT AND PAYMENT</b>	<b>4</b>

**SECTION 05525  
COATED WELDED STEEL PIPE**

**PART 1 - GENERAL REQUIREMENTS**

**1.01 SCOPE OF WORK**

- A. All materials furnished or used for the work covered in these specifications shall conform to the following requirements. Where the specification of materials or equipment is not specifically called out, they shall be of the highest quality normally available.

**1.01 REFERENCES**

- A. Caltrans Standard Specifications.
- B. Occupational Safety and Health Administration (OSHA).
- C. American National Standards/ Institute (ANSI).
- D. American Society of Testing and Material requirements (ASTM).
- E. American Water Works Association (AWWA).
- F. American Welding Society (AWS).

**PART 2 - MATERIALS**

**2.01** Welded steel pipe shall conform to the specifications of ANSI/AWWA Designation: C200-05; ASTM Designation: A 53, Grade B; API Specification 5L, Grade B; or API Specification 5LX, Grade X42. Pipe Wall Thickness is 0.375-inches for all installed pipe.

- A. All steel used for the manufacture of the pipe shall be made by either the open-hearth or electric-furnace process.
- B. All pipe shall be new, used pipe will not be accepted.
- C. Field welding pipe joints shall be performed in accordance with the specifications of ANSI/AWWA Designation: C206-03 Standards for "Field Welding of water Pipe" and with AWS D1.1.
- D. All pipe joints shall be welded and continuous.
- E. Shop and field welding procedures shall be performed by certified welders in accordance with AWS D1.1 – 2000.
- F. After the pipe has been fabricated and welded into lengths, it shall be thoroughly cleaned of dirt, oil, grease, loose scale, and other foreign material.
- G. Welded steel pipe shall be installed in such a manner that it is not electrically connected to, or in direct physical contact with other metal pipe. When welded steel pipe is mechanically connected to public utility lines or to another metal pipeline, electrically insulated connections will not be required. Electrically insulated connections shall be placed in welded steel pipe with 5 feet of its ingress into or egress from any building or structure.

- H. Prior to backfilling at the welded joints, the pipe shall be *tested and placed under operating head for a period of 2 hours*. The Contractor shall correct any leaks or other defects noted. The Contractor shall provide all test equipment, gauges, plugs and caps required for testing.
  - I. All new epoxy coated pipes shall have a shop-applied liquid-epoxy coating outside prior to delivery at the project site in accordance with ANSI/AWWA C210-92 standards.
    - 1. The exterior shall be a two-part, chemically cured epoxy primer and one coat of a different two-part, chemically cured epoxy topcoat. The two-part materials used in both the primer and finished topcoat shall be a product of one manufacturer.
    - 2. The dry film coating thickness (DFT) shall be based upon the manufacturer's recommendations. The minimum DFT shall be no less than 16 mils (406µm).
  - J. Welded field joints and damaged pipe coatings repairs shall be made in accordance with Section 3.4 "Coating Repair" and Section 3.5 "Welded Field Joints" of ANSI/AWWA C210-07 Standards and AWWA C206-03 Standards for "Field Welding of Water Pipe".
  - K. A "Certificate of Compliance" will be required and furnished to the Engineer that all material and coatings furnished complies with the applicable requirements set forth in ANSI/AWWA Standards.
- 2.02 The Contractor shall furnish any miscellaneous materials, equipment, and devices not shown on the plans or herein specified but required for completion of work.
- 2.03 Coated pipe and other articles shall be packaged, handled, and stored in a manner that will minimize damage. Pipe or coating damaged in handling or other operations shall be repaired at no additional cost to the owner. Damage to internal or external coating shall be repaired in accordance with ANSI/AWWA C210-07, Section 3.4 Standards.

### **PART 3 - CONSTRUCTION**

- 3.01 Location of pipelines shown on the drawings are approximate, Contractor is responsible for providing pipe fittings (whether or not shown on the drawings) and to place alignment of the pipeline as close as practicable to that shown on the drawings.
- 3.02 Pipe trenches, where required, shall be excavated on an even grade and to a uniform depth to permit the cover between the top of the pipe and normal ground or completed surfaces as shown on the plans. The width of the trench shall be equal to the outside diameter of the pipe plus 24 inches, unless otherwise specified on the plans.
- 3.03 At all times during construction of the pipeline, the Contractor shall take precautions to minimize damage to the protective coating. No metal tools or heavy objects shall be permitted to come into contact with the finished coating. Workers shall be permitted to walk on the coating only when necessary, in which case only shoes with rubber or composition soles and heels shall be worn. Coating damage during installation before final acceptance by the Engineer shall be repaired as specified by and at the expense of the Contractor.
- 3.04 Coated pipe shall be hoisted from the trench side to the trench by means of wide belt slings. Chains, cables, tongs, or other equipment that causes damage to the coating will not be permitted, nor will dragging or skidding of the pipe. The Contractor shall allow for inspection of the coating on the underside of coated articles while the articles are suspended. Any coating damage shall be repaired as specified.
- 3.05 An 18-in. (450-mm) wide strip of heat resistant material shall be draped over the top half of the coated article on each side of the weld area during welding to avoid damage to the coating by hot weld spatters. No welding ground shall be made on the coated part of the article.

- 3.06** After the pipe has been properly assembled and installed, backfilling shall be performed at all times in a manner that avoids abrasion or other damage to both factory and field-applied coatings.
- 3.07** If the trench traverses rocky ground containing hard objects that could penetrate the protective coating, a layer of screened material shall be placed into the bottom of the trench prior to installation of the coated pipe.
- 3.08** Backfill shall be placed around the exterior of the coated pipe only after the Engineer has made the final inspection and has accepted the exterior coating. If rocks or other hard objects are present in the backfill material along any section of the pipeline, screened backfill shall be placed around the coated pipe to a minimum depth of 6 inch (150mm) above the coated pipe before backfilling the remainder of the trench.
- 3.09** After the pipe has been properly assembled and installed, the trench shall be carefully filled with initial backfill material placed on both sides of the pipe up to the midpoint on the pipe installed. This backfill shall be carefully hand-tamped under and around the pipe before additional backfill material is added. Hand tamping shall be done with an approved "T" tamping device. The trench shall then be carefully backfilled with initial backfill material to a depth of 6 inches above the pipe. This material shall be hand-tamped or otherwise thoroughly compacted to 85% relative compaction in accordance with ASTM D 1557-07 procedure before any additional backfill material is added. Care shall be taken not to disturb the alignment or grade of the pipe.
- 3.10** After the initial backfilling has been made and approved by the Engineer, the final backfilling shall be made pursuant to Section 02205 - "Trenching".
- 3.11** The type of backfill material must also meet the minimum embankment fill requirements as set forth in of Section 02220 - "Embankment Fill". If rocks or other hard objects are present in the backfill along any section of the pipeline, such backfill shall be screened before being placed about the pipe.

#### **PART 4 - MEASUREMENT AND PAYMENT**

- 4.01** Full compensation for all costs incurred and the work covered in this Section shall be considered as included in the unit prices paid for the various items as set forth in the Contractor's Bid, and no additional or separate compensation will be made therefor.

**END OF SECTION 05525**

cure in accordance with Sec. 5.1.3.

## **Sec. 4.5 Coating Repair**

**4.5.1 Defective coating.** Coating shall be repaired in accordance with the following subsections.

**4.5.1.1 Surface preparation.** Accessible areas of pipe requiring coating repairs shall be cleaned to remove debris and damaged coating using surface grinders or other means acceptable to the purchaser. The adjacent coating shall be feathered by sanding, grinding, or other methods approved by the purchaser. Accumulated debris shall be removed by vacuum, blowing with contaminant-free air, or wiping with clean rags.

**4.5.1.2 Access.** Areas not accessible for coating repair, such as interior surfaces of small-diameter pipe, shall be reprocessed and recoated as described in Sec. 4.4.3.

**4.5.1.3 Coating application.** The coating system shall be applied to the prepared areas in accordance with the procedures stated in Sec. 4.4.3.

**4.5.1.4 Repair inspection.** Repairs shall be electrically inspected using a holiday detector in accordance with Sec. 5.1.5. The coated pipe shipped from the plant shall be holiday-free.

## **Sec. 4.6 Welded Field Joints**

**4.6.1 Preparation.** The weld joint shall be cleaned so that all surfaces are free of mud, oil, grease, welding flux, weld splatter, and other foreign contaminants. The cleaned metal surfaces of the weld joint shall then be abrasive blast cleaned, vacuum blasted, or abraded using rotary abrading pads to provide a surface that complies with SSPC-SP 10/NACE No. 2, as defined in Sec. 4.4.2.3. The adjacent liquid-epoxy coating shall be feathered by abrading the coating surface for a distance of 1 in. (25 mm) minimum.

**4.6.2 Coating application.** The coating system shall be applied to the weld joint in accordance with Sec. 4.3 and Sec. 4.4. At the option of the purchaser, external weld areas may be protected with materials and methods conforming to ANSI/AWWA C203, ANSI/AWWA C209, ANSI/AWWA C216, ANSI/AWWA C217, or ANSI/AWWA C222.

**4.6.3 Electrical inspection.** After curing, the coating system applied to the welded joints shall be holiday tested in accordance with Sec. 5.1.5. Any holidays indicated by the detector shall be marked with chalk or felt-tip marker to identify the area for repair. When alternate materials are used, as in Sec. 4.4.3.3, holiday

cure in accordance with Sec. 5.1.3.

## **Sec. 4.5 Coating Repair**

**4.5.1 Defective coating.** Coating shall be repaired in accordance with the following subsections.

**4.5.1.1 Surface preparation.** Accessible areas of pipe requiring coating repairs shall be cleaned to remove debris and damaged coating using surface grinders or other means acceptable to the purchaser. The adjacent coating shall be feathered by sanding, grinding, or other methods approved by the purchaser. Accumulated debris shall be removed by vacuum, blowing with contaminant-free air, or wiping with clean rags.

**4.5.1.2 Access.** Areas not accessible for coating repair, such as interior surfaces of small-diameter pipe, shall be reprocessed and recoated as described in Sec. 4.4.3.

**4.5.1.3 Coating application.** The coating system shall be applied to the prepared areas in accordance with the procedures stated in Sec. 4.4.3.

**4.5.1.4 Repair inspection.** Repairs shall be electrically inspected using a holiday detector in accordance with Sec. 5.1.5. The coated pipe shipped from the plant shall be holiday-free.

## **Sec. 4.6 Welded Field Joints**

**4.6.1 Preparation.** The weld joint shall be cleaned so that all surfaces are free of mud, oil, grease, welding flux, weld splatter, and other foreign contaminants. The cleaned metal surfaces of the weld joint shall then be abrasive blast cleaned, vacuum blasted, or abraded using rotary abrading pads to provide a surface that complies with SSPC-SP 10/NACE No. 2, as defined in Sec. 4.4.2.3. The adjacent liquid-epoxy coating shall be feathered by abrading the coating surface for a distance of 1 in. (25 mm) minimum.

**4.6.2 Coating application.** The coating system shall be applied to the weld joint in accordance with Sec. 4.3 and Sec. 4.4. At the option of the purchaser, external weld areas may be protected with materials and methods conforming to ANSI/AWWA C203, ANSI/AWWA C209, ANSI/AWWA C216, ANSI/AWWA C217, or ANSI/AWWA C222.

**4.6.3 Electrical inspection.** After curing, the coating system applied to the welded joints shall be holiday tested in accordance with Sec. 5.1.5. Any holidays indicated by the detector shall be marked with chalk or felt-tip marker to identify the area for repair. When alternate materials are used, as in Sec. 4.4.3.3, holiday

detection should conform to those standards.

#### **Sec. 4.7 Coating Special Pipe Connections and Appurtenances**

**4.7.1 General.** This section describes the application of liquid-epoxy coatings to mechanical couplings, flanges, and similar appurtenances for steel pipe fittings, as well as to nuts, bolts, and other items used in conjunction with connections and attachments.

**4.7.2 Surface preparation.** Surfaces of pipe connections and appurtenances to be coated shall be prepared in accordance with Sec. 4.4.2.

**4.7.3 Coating application.**

**4.7.3.1 Application.** Unless otherwise required by the purchaser, coatings shall be applied in accordance with Sec. 4.3 and Sec. 4.4.

**4.7.3.2 Coating threaded connections.** Prior to shipping, threaded connections and appurtenances that must be assembled and operated in the field shall be left uncoated and shipped with rust-preventing compounds or strippable protective coatings applied to the threads only. After final field assembly, the compound shall be completely removed. The exposed threads shall be coated as provided in Sec. 4.4.3. The purchaser should specify the coating requirements for flange faces and other mating surfaces of other types of mechanical connections.

**4.7.3.3 Cure.** The coating manufacturer shall be consulted to ascertain the proper cure time and methods. After application, the coating shall be tested for cure in accordance with Sec. 5.1.3.

**4.7.3.4 Electrical inspection for continuity.** After the coating has cured, but prior to installation, the coated pipe, fittings, and specials shall be tested for holidays in accordance with Sec. 5.1.5. Holidays indicated by the detector shall be marked with chalk or felt-tip marker to identify the area to be repaired.

**4.7.3.5 Coating repair.** Coating repair shall be performed in accordance with Sec. 4.5.

#### **Sec. 4.8 Field Procedures**

During construction of the pipeline, the constructor shall take precautions to minimize damage to the protective coating. No metal tools or heavy objects shall be permitted to come into contact with the finished coating. Workers shall be permitted to walk on the coating only when necessary, in which case only shoes with rubber or composition soles and heels shall be worn. Coating damaged during installation shall be repaired in accordance with Sec. 4.5.

**4.8.1 Hoisting.** Coated articles shall be hoisted using wide-belt slings.





**CALIFORNIA JOINT POWERS  
RISK MANAGEMENT AUTHORITY**

*Accredited with Excellence from the California Association of Joint Powers Authorities*

**CERTIFICATE OF COVERAGE**

**Certificate Holder and  
Additional Covered Party:** RD 1608, its board of trustees and officers thereof  
Lincoln Village West P.O. Box 4857  
Stockton, CA 95204  
Reclamation District No. 1608

This certifies that the coverage  
Described herein has been issued to: City of Stockton

**Description of Activity:** Encroachment permit for City of Stockton Municipal Utilities North Lake Pump Station  
Discharge Pipe Repairs: approximate station 90+00 adjacent to Fourteen Mile Slough, San Joaquin County

**Date(s) of Activity:** August 10, 2016 to October 01, 2016

**Location of Activity:** approximate station 90+00 adjacent to 14 mile Slough  
Stockton, CA

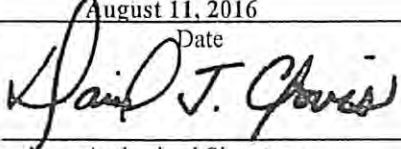
Entity Providing Coverage	Excess Coverage	Certificate Expiration Date
California Joint Powers Risk Management Authority	\$1,000,000 excess of \$1,000,000	October 02, 2016

The following coverage is in effect and is provided through participation in a risk sharing joint powers authority: general liability and automobile liability pooled self-insurance, as defined in the Memorandum of Coverage on file with the entity and which will be made available upon request.

The coverage being provided is limited to the activity and the time period indicated herein and is subject to all the terms, conditions and exclusions of the Memorandum of Coverage of the California Joint Powers Risk Management Authority.

Pursuant to Section II, subsection 8, relating to the definition of a covered party, the certificate holder named herein is only an additional covered party for covered claims arising out of the activity described herein and is subject to the limits stated herein.

Coverage is in effect at this time and will not be cancelled, limited or allowed to expire at a date other than that indicated herein except upon 30 days written notice to the certificate holder.

August 11, 2016  
Date  
  
Authorized Signature

David J. Clovis, ARM, General Manager  
Name and Title (Print or type)

Certificate Number: 2016-2017-COC1341

Form C