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**K.R. Swerdfeger  
Construction, Inc.**

**Project No. 12-008-03  
Arkansas River Levee  
Lowering & Wildhorse Creek  
Levee Reconstruction**

**To: Pueblo Conservancy District  
C/O NorthStar Engineering  
111 East 5<sup>th</sup> Street  
Pueblo, Colorado 81003**

**January 22, 2016**

**PROPOSAL RESPONSE COVER SHEET**

**PUEBLO CONSERVANCY DISTRICT**

**REQUEST FOR QUALIFICATIONS**

**Project No. 12-008-03**

**Arkansas River Levee Lowering  
and  
Wildhorse Creek Levee Reconstruction**

**Construction Services**

The undersigned, having carefully read and considered the Request for Qualifications (RFQ) for the above referenced Project, does hereby offer to perform such services on behalf of the Pueblo Conservancy District in the manner described and subject to the terms and conditions set forth in the attached RFQ.

In submitting this Statement of Qualifications (SOQ), it is understood that the Pueblo Conservancy District reserves the right to reject any and all SOQs, and to waive any informalities in SOQs as submitted. Firms submitting SOQs acknowledge that they are qualified in this area of work and have experienced personnel able to provide the required construction services. The District may request additional information substantiating the indicated requirements. Failure to provide this information may result in a prospective Contractor's SOQ being declared non-responsive. It is the prospective Contractor's responsibility to verify if any addenda were issued prior to submission of their proposal/SOQ.

Contractor acknowledges and accepts that all components of and responses to this RFQ will be included and become a part of the final Contract by reference.

The undersigned further states that this Statement of Qualifications is made in good faith and is not founded on, or in consequence of, any collusion, agreement, or understanding between themselves or any other interested party.

**(All contact information must be filled out and form submitted with SOQ)**

PROPOSER (full lawful name of firm):

K.R. Swerdfeger Construction, Inc.

Name of Person with Authority to Bind Proposer: Robert Neumeister

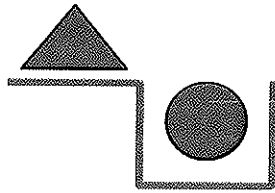
BY (Title of Person with Authority to Bind Proposer): Vice President

ADDRESS (Office & PO Box): 421 E Industrial Blvd

Pueblo West, CO 81007

OFFICE PHONE 719-547-0242 CELL PHONE 719-252-8824 FAX 719-547-9297

EMAIL Nuby@krswerd.com WEBSITE www.krswerd.com



## **K. R. SWERDFEGER CONSTRUCTION, INC.**

421 E Industrial Blvd. ● Pueblo West, CO 81007  
(719) 547-0242 ● (719) 547-9297 Fax

**Project No. 12-008-003**  
**Arkansas River Levee Lowering & Wildhorse Creek Levee**  
**Reconstruction**  
**1.0 Company Information**

Firm Name – K.R. Swerdfeger Construction, Inc.

Address – 421 E Industrial Blvd – Pueblo West, Colorado 81007

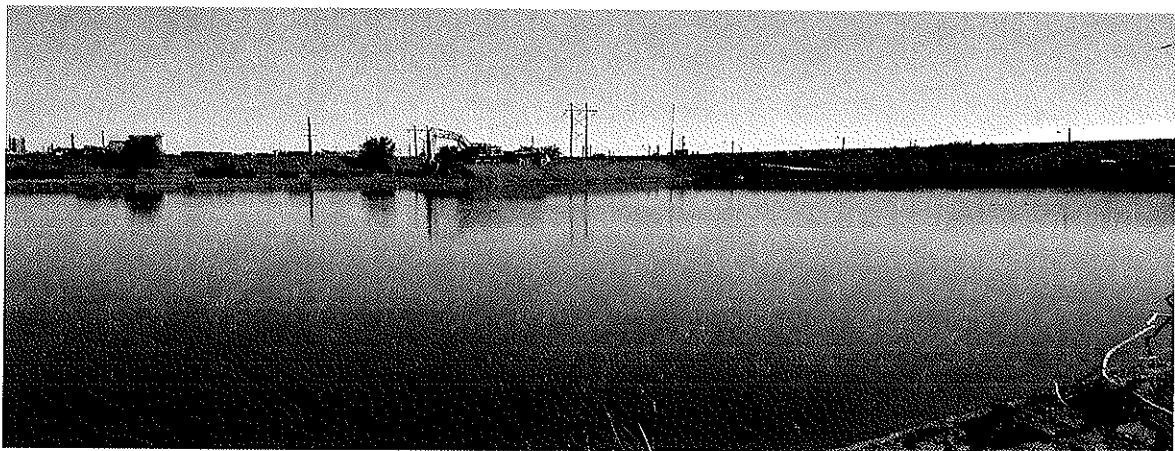
Phone – (719) 547-0242

Contact Person – Robert Neumeister – Vice President

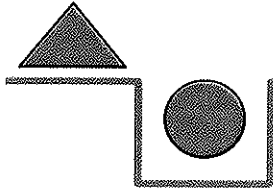
Year Formed – 1968

K.R. Swerdfeger Construction, Inc. is a full service Heavy / Civil General Contractor that specializes in fast track, design build, and infrastructure development projects. Specific construction services include underground utilities, site development, process piping, trenchless rehabilitation, pipe bursting, telecommunication infrastructure, fiber optics, heavy industrial projects and horizontal/directional drilling

We were incorporated in 1973. Our service areas include the entire states of Colorado, New Mexico and Arizona. We currently have over two hundred employees. Our corporate office is located in Pueblo West, Colorado. Branch offices are established in Denver & Colorado Springs, Colorado and Santa Fe, New Mexico. We own the largest tax paying fleet of equipment in Pueblo County.







## **K. R. SWERDFEGER CONSTRUCTION, INC.**

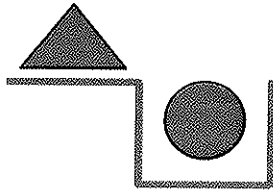
421 E Industrial Blvd. ● Pueblo West, CO 81007

(719) 547-0242 ● (719) 547-9297 Fax

**Project No. 12-008-003**  
**Arkansas River Levee Lowering & Wildhorse Creek Levee**  
**Reconstruction**  
**2.0 Subcontractor Information**

- 1.0 Gateway Trucking – Trucking Services
- 2.0 JA Concrete – Cast in Place Concrete
- 3.0 Colorado Backhoe Services – Crushing Operations
- 4.0 Dirt & Demo – Building Demolition





## **K. R. SWERDFEGER CONSTRUCTION, INC.**

421 E Industrial Blvd. ● Pueblo West, CO 81007  
(719) 547-0242 ● (719) 547-9297 Fax

### **Project No. 12-008-003**

### **Arkansas River Levee Lowering & Wildhorse Creek Levee Reconstruction**

### **3.0 Past Performance, Qualifications and Experience of the Project Team**

#### **a. Project Team and Experience**

**Prime Contractor** – K.R. Swerdfeger Construction, Inc.

**Task Responsibility** – General Contractor, Excavate Arkansas River Levee, Construct Wildhorse Creek Levee, Resurface Levee

**History** - Founded in 1968 by Keith and Sharon Swerdfeger, K.R. Swerdfeger Construction, Inc. (KRSC), is an established, full service, civil contractor specializing in underground utilities and related projects and has consistently been committed to providing the best service and value to their customers. KRSC is a leader in providing quality construction expertise for utility installations such as sewer, storm and water systems for commercial and development applications, natural gas and electrical distribution networks, extensive telecommunication construction, repair and renewal, as well as trenchless applications, highway and site work. With the corporate office established in Pueblo West, Colorado, KRSC has expanded to include other key offices in Colorado Springs, and Santa Fe, with many smaller regional offices throughout the territory.

We were incorporated in 1973. Our service areas include the entire states of Colorado, New Mexico, Arizona and other western states. We currently have over two hundred employees. Our corporate office is located in Pueblo West, Colorado. Branch offices are established in Denver & Colorado Springs, Colorado and Santa Fe, New Mexico.

Since being incorporated in 1973, KRSC has a proven track record for the successful completion of a wide range of difficult and complex projects. Our collective bargaining agreements provide a continual source of skilled, experienced, and safety orientated operators, pipe fitters / welders and laborers. When combined with our equipment fleet valued in excess of \$13,000,000.00 and bonding capacity of over \$100,000,000.00; there are very few projects that are beyond our proven scopes of work.

**Subcontractor** – Gateway Trucking

**Task & Responsibility** – Trucking

**History** – Gateway trucking is a past subcontractor used on the previous phase of this project.

**Subcontractor** – JA Concrete, Inc.

**Task & Responsibility** – Cast in Place Concrete Wild Horse Levee

**History** – JA Concrete, Inc. has been in the concrete construction for 18 years. Owner John Aragon has over 30 years of experience and the foreman for this project Shawn Aragon has over 12 years of experience. JA Concrete, Inc. has worked on the following projects – Bridge Expansion Hwy 50 Pueblo, Box Culverts Purcell Drainage Improvements and many projects for KRSC.

**Subcontractor** – Colorado Backhoe Services

**Task & Responsibility** – Concrete Crushing Operations

**History** – Currently operates a gravel pit in Pueblo County selling material to the project area. He will move crushing operation on site to crush concrete

**Subcontractor** – Dirt & Demo

**Task & Responsibility** – Building Demolitions

**History** – Dirt & Demo is a small excavation and demolition contractor located in Pueblo. They have performed as a demolition subcontractor to KRSC in the past.

**b. Similar Recent Projects**

**Cherokee Electrical Generating Station - Site Development Work**

Xcel Energy

Paula Warzon

303-571-7789

**Project Cost:** \$27,070,928.00

**Project Duration:** April 1, 2012 – May 30, 2013

**Prime Contractor:** K.R. Swerdfeger Construction, Inc.

**Subcontractors:** ICM, Inc., P&H Equipment

**Project Description:** The Cherokee Electrical

Generating Station, located on the north end of

Denver, is replacing three retiring coal-fired units by a natural gas-fired combined cycle plant as part of Xcel Energy's compliance with the Colorado Public Utilities Commission's emissions reduction plan under the Clean Air-Clean Jobs Act. K.R. Swerdfeger Construction was hired for the Site Development Work to allow for the construction of the plant to be erected where the current Raw Water ponds are located. In order to abandon the existing Raw Water Ponds, a new 625 CY Concrete Raw Water (RW) and Fire Water (FW) Intake Structure was constructed in the main site reservoir to feed two of the existing Electrical Generating Units which will remain in service during the Gas Fired Combine Cycle Unit construction. A Fire Water Pump building, two FW pumps and three RW pumps were installed along with 5,600 LF of new FW/RW pipelines from the intake structure to the existing Generating Units as well as 3,800 LF of new Electrical Duct Banks and an Electrical Building to power the pumps.

Once the new system was in place, work began on the dewatering and abandoning of the existing Raw Water Ponds that included the over excavation and subgrade preparation to fill the pond areas with 225,000 tons of structural fill to the elevation required to construct the new Gas Fired Combine Cycle Unit where the ponds once were located.

There were also multiple mechanical re-routes and terminations inside the existing Generating Station that were completed to isolate the Generating Units that will remain in service from the Generating Units being removed. Several underground mechanical



tie-ins and cut and caps were also completed to keep the existing Generating Units in service. Modifications to the plant's existing storm water management system include new detention ponds and storm water piping, the relocation of an existing rail spur, diesel fueling platform and gallery, a new 265,000 SF Construction Laydown area and 152,000 SF Craft Parking area with fencing, gates, turnstiles and elevated walkway were built to accommodate the upcoming construction of the new Gas Fired Combine Cycle Unit.

### **Mountain View Operations Facility – Site Preparation Work**

Hensel Phelps Construction Company

Kurt Seeman

720-343-3320

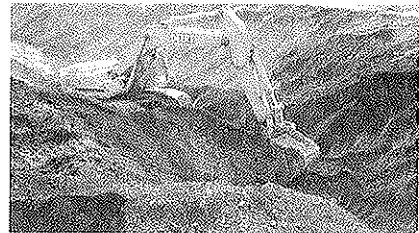
**Project Cost:** \$555,492.00

**Project Duration:** October 1, 2012 – December 31, 2015

**Prime Contractor:** K.R. Swerdfeger Construction, Inc.

**Subcontractors:** None

**Project Description:** In this project we furnished & Installed 1796 lf of 4" -12" PVC water lines (w/ valves, fitting & tie ins), 3311 LF of 6" - 12" DIP fire water lines (w/ Valves Fitting & Tie Ins), 3681 LF of 4" -18" PVC Sanitary Sewer (w/ Manholes and Tie Ins), 2977 LF of 15" – 48" RCP storm sewer (w/ manholes and Inlets, 3020 LF of 2"- 6" PE natural gas (w/ valves fitting & tie ins), 2420 LF of 12" insulated steel chilled water wine (w/ valves fittings & tie ins), 2702 LF of 4 way to 12 way 6" Concrete encased Communication Duct Bank (w/ hand holes and manholes), 4941 LF of 2 way to 26 way 4" concrete encased electrical duct bank (w/ hand holes and manholes) and 260 LF 48" Casing Bore for Comm & Electric in secure areas. This project was constructed in a very secures area of Buckley Air Force Base. Project was completed under Corp of Engineers Specifications.



### **Pueblo Reservoir EPC Substation – Site Work**

Overland Contracting

Zach Tatlock

303-483-8467

**Project Cost:** \$555,492.00

**Project Duration:** June 1, 2014 – July 11, 2014

**Prime Contractor:** K.R. Swerdfeger Construction, Inc.

**Subcontractors:** None

**Project Description:** Provided labor, equipment and material to perform various site work activities for the construction of a new substation pad. Relocated approximately 5,722 CY of existing on-site material, replaced moistened and compacted. Hauled in approximately 11,600 CY of fill material which was placed, moistened and compacted. Also hauled in approximately 2,819 SY of class 1 riprap what was placed on the cut and fill slopes and around inlets/outlets. Constructed a permanent 20' access road (1,841 LF) prepping and using existing on-site material with a 6" thick cap of compacted CDOT Class 6 road base.



## **Fountain Creek Improvements – Cimarron to Tejon**

City of Colorado Springs

Steve Jacobson – Senior Civil Engineer

719-385-5414

**Project Cost:** \$618,356.00

**Project Duration:** Jan 2010 to June 2010

**Prime Contractor:** K.R. Swerdfeger Construction, Inc.

**Subcontractors:** None

**Project Description:** The construction consisted of work at three separate locations between the Cimarron Street Bridge and the Tejon Street Bridge on Fountain Creek. The work included the removal of concrete debris and abandoned concrete piers, bank protection consisting of grouted boulders, un-grouted boulder toe, boulder spur structures and planted soil riprap, revegetation work including seeding, planting, bio-logs and erosion control mat, and test pits along the retaining wall south of the Tejon Street Bridge to assess foundation conditions.



### **c. Success Matrix**

**Project:** Cherokee Electrical Generating Station - Site Development Work

**Original Completion Date:** May 31, 2013

**Actual Completion Date:** May 31, 2013

**Production Rates:** N/A

**Original Contract Amount:** \$17,003,990.00

**Actual Contract Amount:** \$27,070,928.00

**Change Orders:** 70 Owner/Design Change Orders - \$10,006,935.00

**Project Safety:** None

**Compliance with Applicable Laws & Regulations:** None

**Liquidated Damages / Claims:** None

**Project:** Mountain View Operations Facility – Site Preparation Work

**Original Completion Date:** Dec 31, 2015

**Actual Completion Date:** Dec 31, 2015

**Production Rates:** N/A

**Original Contract Amount:** \$512,988.00

**Actual Contract Amount:** \$555,492.00

**Change Orders:** 3 Owner / Design Change Orders - \$42,504.00

**Project Safety:** None

**Compliance with Applicable Laws & Regulations:** None

**Liquidated Damages / Claims:** None

**Project:** Pueblo Reservoir EPC Substation – Site Work

**Original Completion Date:** July 11, 2014

**Actual Completion Date:** July 11, 2014

**Production Rates:** N/A

**Original Contract Amount:** \$4,415,303

**Actual Contract Amount:** \$4,820,012.00

**Change Orders:** 29 Owner / Design Change Orders - \$404,709.00

**Project Safety:** None

**Compliance with Applicable Laws & Regulations:** None

**Liquidated Damages / Claims:** None



**Project:** Fountain Creek Improvements – Cimarron to Tejon  
**Original Completion Date:** 4/10/2010  
**Actual Completion Date:** 6/15/2010  
**Production Rates:** N/A  
**Original Contract Amount:** \$553,986.00  
**Actual Contract Amount:** \$614,356.00  
**Change Orders:** 1 Owner / Design Change Order - \$64,460.00  
**Project Safety:** None  
**Compliance with Applicable Laws & Regulations:** None  
**Liquidated Damages / Claims:** None

**d. Working With Government Agencies.**

K.R. Swerdfeger Construction, Inc. has long working relationships with many government agencies and utility companies. KRSC has worked with City of Pueblo on many sewer and storm sewer projects, Pueblo Board of Water Works on many water projects. A few examples of work we have performed for utility companies and municipalities are:

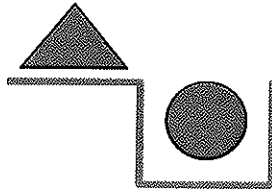
Customer Name, Address, Representative and Phone No.	Work Description	Value	Completion Date
Pueblo Board of Water Works 319 West 4 <sup>th</sup> Street Pueblo, Colorado 81002 Scott Burbidge (719) 584-0478	City Wide Main Renewals 2014 A & B Install 15,493 lf of 4" to 20" PVC Water Main, Fire Hydrants, Valves, Fittings, Tie- Ins, Services and Misc. Items. All Materials Furnished by Owner	\$1,579,512 (Owner Furnished Materials)	6/14 to 12/14
Pueblo Board of Water Works 319 West 4 <sup>th</sup> Street Pueblo, Colorado 81002 Scott Burbidge (719) 584-0478	City Wide Main Renewals 2015 Distribution Mains Install 3,881 lf of 4" to 8" PVC Water Main, Fire Hydrants, Valves, Fittings, Tie- Ins, Services and Misc. Items. All Materials Furnished by Owner	\$451,646 (Owner Furnished Materials)	5/15 to 9/15
City of Aurora 1470 S. Havana St Aurora, Colorado 80021 Joe Kleiner (720) 859-4302	FY 2014 Water Line Replacements Furnish & Install Water Line, New Water Services, Tie Ins, Valves Fittings Restoral and Paving	Contract \$3,448,868	5/14 to 11/14
Colorado Springs Utilities 1521 Hancock Expressway Colorado Springs, Colorado 80947 Kelly Valdez (719) 668-7359	Mears Osgood Kern Waterline Replacement Project Furnish & Install Water Line, New Water Services, Tie Ins, Valves Fittings Restoral and Paving	Contract \$653,103	2/14 to 5/14
City of Aurora 1470 S. Havana St Aurora, Colorado 80021 Joe Kleiner (720) 859-4302	FY 2012 Water Line Replacements Furnish & Install Water Line, New Water Services, Irrigation Ditch Crossing, Tie Ins, Valves Fittings Restoral and Paving	Contract \$1,050,011	10/12 to 6/13

City of Manitou Springs 606 Manitou Ave Manitou Springs, Co Bruno Pothier (719) 685-2605	MANITOU WATER AND SAN SYS IMP Furnish & Install 15,000 lf of 8" to 15" sanitary sewer, manholes and appurtenances 15,000 lf of 4" to 12" water pipe, valves, fittings and appurtenances CIPP and pipe bursting and directional boring in narrow city streets	Contract \$5,500,000	10/09 to 4/11
City of Lamar 102 E Parmenter St Lamar, Colorado 80127 Bruce Lancaster 719-336-2002	Furnish & Install 3500 lf of 24" PVC water pipe, valves, fittings and appurtenances, 5 MDG treatment plant w/ building, 1500 lf on new yard piping and rehabbing 6 million gallon water tank	Contract \$2,750,000	1/10 to 4/11
City of Pueblo Colorado 211 East D Street Pueblo, Colorado 81003 Gene Michael (719) 553-2298	FY 2014 South Prairie Ave Sewer Separation Project Separate Storm Sewer and Sanitary Sewer in Prairie Ave	\$2,881,429	12/14 to 6/15
City of Pueblo Colorado 211 East D Street Pueblo, Colorado 81003 Gene Michael (719) 553-2298	FY 2012 Sanitary Sewer Rehab Install New Sanitary Sewer in Various Location in the City of Pueblo	\$1,050,369	10/12 to 6/13
City of Pueblo Colorado 211 East D Street Pueblo, Colorado 81003 Gene Michael (719) 553-2298	FY 2014 Prairie Ave Sewer Separation CIPP Line 18" & 14" Sanitary Sewer With Trenchless Point Repairs and Manhole Rehab 42" RCP Storm Sewer with Laterals Inlets & Manholes	Contract \$2,881,429	12/14 to 5/15

KRSC also has extensive work working with the all the local rail road's when work on our open gas and electric contracts. KRSC currently has its own directional boring crews and perform all of the bores under any rail road tracks for these projects. KRSC also has a long working relationship with the Corp of Engineers. KRSC has performed work on all the major military installations in the area and some in Wyoming, New Mexico and Arizona. KRSC has worked in many of the secure areas of most bases. KRSC has worked on Mission sensitive projects on Buckley AFA, Cheyenne Mountain, Warren AFB, and Los Alamos National Lab. We are very familiar with work with Corp Specs and inspections.

**e. Challenges or difficulties:**

One of K.R. Swedfeger Construction, Inc.'s biggest challenges on the above listed project was working on the Cherokee Power Plant. The plant was built more than 50 years ago and the as-builts were very poor. We ran into many unforeseen situations while constructing the project. We were also under a very tight construction schedule to complete our project so a second contractor could start their project. KRSC will be using most of the same core office and field management personnel for this project we used on that project. There is a system in place in our QA/QC plan and management plan to foresee potential changes quickly and handle them in a timely manner. Main contact is listed in project description above.



## **K. R. SWERDFEGER CONSTRUCTION, INC.**

421 E Industrial Blvd. ● Pueblo West, CO 81007

(719) 547-0242 ● (719) 547-9297 Fax

### **Project No. 12-008-003 Arkansas River Levee Lowering & Wildhorse Creek Levee Reconstruction 4.0 Project Management Plan**

#### **a. Identify Key Individuals – Resumes**

**Corporate Executive in Charge, Raymond Swerdfeger, President – K.R. Swerdfeger Construction, Inc.**

##### **Current Position & Assignment**

K.R. Swerdfeger Construction, Inc.  
President

##### **KRSC Experience Summary**

2006-Present President  
2004-2006 Executive Vice President  
2003-2004 Vice President  
1996-2003 Estimator  
1994-1996 Foreman  
1990-1993 Welder  
1986-1989 Laborer

##### **Major Projects and Clients**

1996-2003 Trenchless Division, Manager and Estimator  
1995-1996 US West General Maintenance Project, New Mexico, Foreman  
1994-1995 Las Campanas Infrastructure Development, New Mexico, Foreman

##### **Education/Technical Qualifications Include**

Competent Person Training, First Aid/CPR, Confined Space  
OSHA 40- Hour Hazardous Waste Training  
Traffic Control Supervisor Training  
OSHA 10-Hour Training Course  
B.S. Construction Management, Colorado State University

##### **Employment Experience and History**

1986-Present K.R. Swerdfeger Construction, Inc.

##### **Awards/Honors/Publications/Community Service/Volunteer Activities**

2004-2014 Board of Directors, Colorado Contractors Association  
2013 President, Colorado Contractors Association  
2010 President, 30 Club, Inc.  
2008-Present Board of Directors, El Pueblo Adolescent Treatment Community  
2008- 2010 Board Member, Pueblo Step Up  
2002-Present Pueblo Association of Home Builders  
2002-Present Pueblo General Contractors Association

**Project Manager, Randy Hielt – K.R. Swerdfeger Construction, Inc.**

**Current Position & Assignment**

K.R. Swerdfeger Construction, Inc.

Project Manager and Estimator

**KRSC Experience Summary**

2006-Present Project Manager and Estimator

Major Projects and Clients

2015 Fish Creek Road Utilities Repair/Replacement, Larimer, Colorado, 6.5 Million, Estimator/Project Manager

2013 Cherokee Power Plant Site Development, Xcel Energy, Denver, Colorado, 27 Million, Estimator/ Project Manager

2009 Comanche Power Plant BOS Utilities PH-II, Pueblo, Colorado, 14 Million, Estimator

2007 PCAPP Plant Work-UG Utilities & NG Transmission Line, Pueblo, Colorado, 6 Million, Estimator

**Education/Technical Qualifications Include**

1985-1992 Engineering and Drafting Certifications, Mesa Community College, Mesa, Arizona

**Employment Experience and History**

2006-Present Estimator/Project Manager, K.R. Swerdfeger Construction, Inc., Pueblo, Colorado

1999-2006 Estimator/Project Manager, Sun Construction, Colorado Springs, Colorado

1987-1999 Department Supervisor/Project Manager/Estimator, APL, Phoenix, Arizona

**Awards/Honors/Publications/Community Service/Volunteer Activities**

2004 CDOT Project Management Award for Region 2

Certified Army Corps of Engineers Construction Quality Management for Contractors

**Project Superintendent, Justin Bell - K.R. Swerdfeger Construction, Inc.**

**Current Position & Assignment**

K.R. Swerdfeger Construction, Inc.

Superintendent

**KRSC Experience Summary**

Superintendent

Foreman

Heavy Equipment Operator

Laborer

**Major Projects and Clients**

2015 Fish Creek Road Utilities Repair/Replacement, Larimer, Colorado, 6.5 Million, Superintendent

2014 Redhill Forest Water Distribution System Improvements, Fairplay, Colorado, 3.9 Million, Superintendent

2013 Colorado Miscellaneous Water and Sewer, Superintendent

2012 Cherokee Power Plant Upgrade, Denver, Colorado, 27 Million, Superintendent

**Education/Technical Qualifications Include**

10-Year as Journeyman Operator – International Union of Operating Engineers Local 9

OSHA 10/OSHA 30

Competent Person

Confined Space Training

First Aid/CPR

8 Hour HAZMAT Refresher Training

Drug Free Workplace Training for Supervisors  
OSHA 40 Hour Hazardous Waste Training  
Flagger Certification  
Forklift Certification  
Fusion of HDPE Piping Certification  
Operator Safety Training Program for Manual Propelled, Self-Propelled, and Boom  
Supported Safety Power Saw Safety Training

**Employment Experience and History**

1996-Present K.R. Swerdfeger Construction, Inc.

**Project Superintendent, Jason Bitter - K.R. Swerdfeger Construction, Inc.**

**Current Position & Assignment**

K.R. Swerdfeger Construction, Inc.  
Superintendent

**KRSC Experience Summary**

2000-Present Superintendent  
1998 – 2000 Foreman  
1995 – 1998 Laborer

**Major Projects and Clients**

2015 Ventana Subdivision Sewer Filing, Pueblo, Colorado, .5 Million,  
Superintendent  
2014 City Wide Main Renewals, Pueblo, Colorado, Superintendent  
2013 Manhole Rehab, Aurora, Colorado, Superintendent  
2012 Colorado Springs Manholes, Colorado, Superintendent  
2008 Banning Lewis Ranch, Colorado Springs, Colorado, 19 Million,  
Superintendent

**Education/Technical Qualifications Include**

80-Hour Hazardous Waste Worker Training Course  
Work Site Traffic Control Supervisor  
AGC Supervisor Training Program for Heavy Highway Construction Supervisors  
OSHA Subpart P: Excavations Competent Person  
Confined Space Entry Training  
Construction Laser Line and Grade Training  
Trench and Excavation Safety  
Advanced Drainage Systems Installation Guidelines  
AGC Supervisor Training Program  
40 Hour HAZMAT Training/8 Hour HAZMAT Refresher Training  
OSHA 10 Hour  
RAVEN Certified Applicator  
T-101, T-360, 2" – 6" SHORTSTOPP II and SHORTSTOPP 60 Training  
Underground Facilities Damage Prevention Training

**Employment Experience and History**

1995-Present K.R. Swerdfeger Construction, Inc.

**Awards/Honors/Publications/Community Service/Volunteer Activities**

KRSC 5 Years of Service Award  
KRSC 15 Years of Service Award



**Project Construction Engineer, Jason Kendall - K.R. Swerdfeger Construction, Inc.**

**Current Position & Assignment**

K.R. Swerdfeger Construction, Inc.  
Assistant Estimator

**KRSC Experience Summary**

2001 Project Engineer  
2001 Project Administrator  
1998 Intern

**Major Projects and Clients**

2014 City Wide Main Renewals, Pueblo Board of Water Works, Pueblo, Colorado, 1.6 Million, Assistant Estimator  
2014 Mountainview Operations Facility, Buckley AFB, Greeley, Colorado, 4.7 Million, Assistant Estimator  
2014 Pipe Installation, City of Lamar, Lamar, Colorado, 2.75 Million, Assistant Estimator  
2014 Warren AFB Natural Gas, Colorado Springs, Colorado, .46 Million, Assistant Estimator  
2009 Walking Stick Vista Filing No. 1, Pueblo, Colorado, 1.2 Million, Assistant Estimator

**Education/Technical Qualifications Include**

B.S. in Civil Engineering Technology, University of Southern Colorado  
First Aid/CPR/EMT-I  
Stormwater Management During Construction  
Advanced Erosion Control Supervisor Training  
HAZMAT Awareness Training  
OSHA 10 Hour  
CDOT Transportation Erosion Control  
Drug and Alcohol Awareness

**Employment Experience and History**

2001 – Present Project Administrator, Project Engineer, Assistant Estimator,  
K.R. Swerdfeger Construction, Inc.  
1998 – 2001 Intern, K.R. Swerdfeger Construction, Inc.

**Awards/Honors/Publications/Community Service/Volunteer Activities**

Vice President, Associated General Contractors Student Chapter, University of Southern Colorado  
Volunteer Fireman, Florence, CO

**Safety Manager, Dianna Walker - K.R. Swerdfeger Construction, Inc.**

**Current Position & Assignment**

Safety Manager  
2015-Present Safety Manager

**Employment Experience History**

(2015)- Present, K. R. Swerdfeger Construction Inc.  
(1994-2014) Peabody Energy/Twentymile Mining LLC  
(2009-2014) Compliance Manager  
(1998-2009) Senior Safety Specialist

**Education/Technical Qualification Include:**

Kaplan University, Chicago IL  
Masters of Science, Law (Legal Studies) (2014)  
Columbia Southern University, Orange Beach FL

Bachelors of Science, Occupational Safety and Health (2003)  
OSHA Authorized Construction Trainer #C0103885  
Drug Free Workplace Training 12-10-2015  
Colorado Notary Public-Commission Expires: 12-12-2019  
Asbestos 16-HR O&M Awareness training  
OSHA Cert. Confined Space Awareness  
OSHA Cert. Trench and Shoring  
American Red Cross First Aid/CPR (2015-Two year Cert.)  
OSHA Cert. 510 Standards for the Construction Industry  
Certified Mine Safety Professional (CMSP)  
Certified Mine Safety Professional #USA 652  
Colorado Certified Underground Mine Foreman Papers  
Colorado Certified Underground Mine Examiner  
MSHA Certified Underground and Surface Instructor  
MSHA Certified Mine Rescue Instructor  
Colorado Certified Shot-Fire (Explosives)  
Certified Service & Maintenance Portable and Wheeled Fire Extinguishers  
MSHA Certified Noise Level Testing  
MSHA Certified Dust Sampling & Maintenance Underground/Surface  
MSHA Certified Methane/Oxygen Detection

**Processional Memberships/Affiliations Pro**

Colorado Construction Association  
Pueblo PCC Safety Council  
National Utility Contractors Association

**Foreman, Brad Weldon, - K.R. Swerdfeger Construction, Inc.**

**Current Position & Assignment**

K.R. Swerdfeger Construction, Inc.  
Foreman

**KRSC Experience Summary**

2001-Present Superintendent and Foreman  
Operator/Major Projects and Clients  
2015 Fish Creek Road Utility Repair/Replacement, Larimer, Colorado, 6.5 Million,  
Operator Foreman  
2014 City Wide Main Renewals, Pueblo Board of Water Works, Pueblo,  
Colorado, .6 Million, Foreman  
2013 Laramie Wyoming Main, Source Gas, Laramie, Wyoming, Operator  
Foreman  
2012 Cherokee Power Station Site Development, Xcel Energy, Denver, Colorado, 27  
Million, Operator Foreman  
2011 Lamar Water, Lamar, Colorado, 1.6 Million, Foreman  
2010 Hot/Chilled Return Waterline, New Mexico School for the Deaf, 1  
Million, Foreman

**Education/Technical Qualifications Include**

Current Commercial Driver's License  
Confined Space Training  
DOT Drug Free Workplace Training for Supervisors  
Work Zone Traffic Control Training  
Competent Person Training  
Stormwater Management and Erosion Control Training

First Aid/CPR  
Power Saw Safety Training  
Excavation Safety Training  
OSHA 30  
Worksite Traffic Supervisor

**Employment Experience and History**

2000-Present K.R. Swerdfeger Construction, Inc.  
1983-2000 Operator/Foreman, Beltramo and Sons, Pueblo, Colorado  
1981-1982 Operator, Sentry Excavating, Colorado Springs, Colorado  
1981 Operator, Dye Construction, Colorado Springs, Colorado  
1978-1981 Operator/Mechanic, Spanish Peaks Excavating, LaVeta, Colorado

**Awards/Honors/Publications/Community Service/Volunteer Activities:**

KRSC 10 Years of Service Award

**Foreman, Brian Spoden, - K.R. Swerdfeger Construction, Inc.**

**Current Position & Assignment**

K.R. Swerdfeger Construction, Inc.  
Foreman

**KRSC Experience Summary**

2011-Present Foreman  
2004-2011 Laborer

**Major Projects and Clients**

2014 Louisville Subdivision Sanitary Sewer Project, Pueblo, Colorado, .24 Million,  
Foreman  
2014 Redhill Forest Water Distribution System Improvements, Fairplay, Colorado, 3.9  
Million, Foreman  
2014 Waterline Replacement Project, City of Aurora, Aurora, Colorado, .34 Million,  
Foreman  
2013 Fort Carson 13<sup>th</sup> CAB Primary Roadway Utilities, Fort Carson, Colorado, 3  
Million, Foreman  
2012 Manitou Springs Water and Sanitary Improvements, Manitou Springs,  
Colorado, Foreman  
2011 Sewer and Waterline Repair, City of Westminster, Westminster, Colorado, .2  
Million, Foreman

**Education/Technical Qualifications Include**

Confined Space  
Competent Person Training  
First Aid/CPR  
Power Saw Certification  
CDL Permit  
OSHA 30

**Employment Experience and History**

2004-Present Laborer and Foreman, K.R. Swerdfeger Construction, Inc.  
1992-2004 Henley's Chainsaw Sculptures

**Foreman, Jason Hagerman, - K.R. Swerdfeger Construction, Inc.**

**Current Position & Assignment**

K.R. Swerdfeger Construction, Inc.  
Superintendent

**KRSC Experience Summary**

2011-Present Superintendent

2005-2011 Foreman  
2000-2005 Operator  
1997-2000 Laborer

**Major Projects and Clients**

2015 Greeley Main, Atmos Energy, Greeley, Colorado, Superintendent  
2014 Pagosa Main, Source Gas, Pagosa Springs, Colorado, Superintendent  
2013 Fort Carson 13<sup>th</sup> CAB Primary Roadway Utilities, Fort Carson, Colorado, 3 Million, Superintendent  
2012 COA Waterline Replacement, Aurora, Colorado, 3.3 Million, Superintendent

**Education/Technical Qualifications Include**

Colorado Journeyman and Apprentice Training for Operating Engineers  
80 Hour Hazardous Waste Training  
Hazardous Communication Training  
Confined Space Training  
Excavation and Trench Safety  
OSHA 10  
Drug and Alcohol Awareness Training for Supervisors  
Competent Person  
First Aid/CPR  
CMV Training  
Demo Power Saw Safety  
Stormwater Management During Construction  
Forklift Safety Training  
Fusion Safety Training  
Rigging Training

**Employment Experience and History**

1997-Present K.R. Swerdfeger Construction, Inc.  
1996-1997 Pate Construction

**Awards/Honors/Publications/Community Service/Volunteer Activities**

February 2010-2014 Fowler Colorado Utility Board  
March 2010-2014 Fowler Colorado Town Council

**b. Organizational Chart**

Organizational Chart Attached at End of This Section

**c. Project Time Schedule**

CMP Schedule Attached at End of This Section

**d. Safety Program**

**1) Safety Training or Incident Avoidance**

K.R. Swerdfeger Construction, Inc. has a near Miss Program in place which corrects problems or issues with the way we complete daily tasks. This program will educate our workforce to improve on the means and methods of our industry. KRSC requires employees to attend and complete OSHA 10 hour training and require several other employees to complete OSHA 30 hour training. KRSC is also a member of ISNetwork which is a national data base who maintains safety/ training records and provide training modules for the employees of companies who are pre-qualifying for certain customers and projects. KRSC follows all DOT requirements for their substance abuse testing program. KRSC has 3 different testing pools which consist of Federal Motor Carrier (FMCSA), Pipeline (PHMSA) and a Company testing pool for the employees who do not

fall into a safety sensitive DOT position. All employees working for KRSC are covered by this policy and subject to pre-employment testing as well as additional testing based on our program guidelines. This includes temporary or subcontracted employees performing work in a covered position. Our program testing categories consist of the following testing: Pre-employment, Random, Post-Accident, Reasonable Cause as well as Return to Duty and Follow up testing. All employees working for KRSC are subject to unannounced testing based on random selection of all 3 of our designated testing pools.

## **2) Safety Plan**

K.R. Swerdfeger Construction, Inc. has an established safety plan which is both comprehensive and innovative. This plan enables our growing company to focus not only upon the safety needs of our employees, but those of the customers and communities we serve as well. Please see Appendix A for our detailed Safety Site Program.

## **3) OSHA Violations for the past 10 years:**

Inspection Type: COMPLAINT

Inspection: # 110543279

Date: 4-6-06

Location: Jerry Murphy Rd. & Bonforte Blvd.  
Pueblo, CO

Current Citation: 1 "Other Than Serious

Penalty Assessed: \$1925.00

Standard: 1926.652 AO1

Note: This citation was settled at an informal conference. There was a personal dispute between a city employee (former KRSC employee) and the Project Superintendent. OSHA was called and issued this citation.

Corrective Action: Unpaid time off, along with mandatory training. Written warnings were submitted to the employees' personnel files.

Inspection Type: PLANNED

Inspection: # 312139645

Date: 4-7-09

Location: Pikes Peak Ave. & SH115  
Florence, CO

Current Citation: 2 "Other Than Serious

Penalty Assessed: \$2750.00

Standard: 1926.651 C02, 1926.652 E01II

Note: These citations were settled at an informal conference.

Corrective Action: Unpaid time off, along with mandatory training. Written warnings were submitted to the employees' personnel files.

Inspection Type: REFERRAL

Inspection: # 312143126

Date: 8-11-09

Location: Main & 2nd Street  
Durango CO

Current Citation: 1 "Other Than Serious

Penalty Assessed: \$800.00



Standard: 1926.651 B03

Note: Employee struck mislocated 4" PE Gas main causing evacuation of several blocks until it could be repaired. OSHA visited the site and issued this citation. This was settled at an informal conference.

Corrective Action: Written warnings were given, and additional training was required by the owners of the gas line.

Inspection Type: COMPLAINT

Inspection: # 1048029.015

Open Date: 3-10-15

Closed Date: 5-27-15

Location: Intersection South Prairie Ave. and Thatcher Ave., Pueblo, CO

Current Citation: 1 "Repeat" & 1 "Other Than Serious"

Penalty Assessed: \$35,000

Standard: 1926.0651 C02 & 1926.0652 A01

Note: Employees were working in an excavation that was 4ft or more without a ladder. Employees were in an excavation that was not protected from cave-ins by an adequate protective system. OSHA visited the site and issued a citation. This was settled at an informal conference.

Corrective Action: Speed Shoring was installed and all employees affiliated with the citation were given a Written Warning and required to attend an Excavation Standards Class.

Inspection Type: COMPLAINT

Inspection: # 1080352.015

Open Date: 7-15-15

Closed Date: 1-20-16

Location: 1885 Fish Creek Road. Estes Park, CO 80517

Current Citation: 1 "Repeat"

Penalty Assessed: \$9,900

Standard: 1926.0652 A01

Note: Employees were working in a shoring box without having the end of the shoring box protected from possible wall cave-ins. Shoring boxes that were positioned in a continuous manner had sections/gaps between boxes due to existing crossing utilities. This posed a potential cave-in hazard.

Corrective Action: Verbal warnings and Excavation Standards Classes were mandatory for all employees involved. KRSC has recently purchased Slide Rail Shoring to use for future similar excavations that have multiple existing utilities running in a perpendicular manner.

#### **4) Workers Compensation Claims**

Date of Injury	Type of Injury	Final Result
<b>2011</b>		
6/26/2011	Corneal Abrasion	Claim Closed
9/22/2011	Puncture; Hand	Claim Closed
11/10/2011	Hernia; Abdominal Muscle Strain	Claim Closed
<b>2012</b>		
1/4/2012	Strain to Left Forearm	Claim Closed
5/2/2012	Crush/Laceration to Finger	Claim Closed

7/31/2012	Fracture; Leg	Claim Closed
8/9/2012	Laceration; Finger	Claim Closed
8/14/2012	Laceration; Head	Claim Closed
10/29/2012	Laceration; Hand	Claim Closed
12/6/2012	Cartilage Tear; Shoulder	Claim Closed
<b>2013</b>		
7/24/2013	Strain; Back	Claim Closed
8/23/2013	Fracture; Toe	Claim Closed
11/6/2013	Sprain; Ankle	Claim Closed
<b>2014</b>		
6/19/2014	Strain; Lower Back	Claim Closed
6/26/2014	Fracture; Toes	Claim Closed
7/1/2014	Contusion; Finger	Claim Closed
7/31/2014	Fracture; Rib	Claim Closed
9/9/2014	Laceration; Thumb	Claim Closed
11/29/2014	Contusion/Laceration; Elbow, Head	Open Claim
<b>2015</b>		
1/30/2015	Laceration; Fingers	Claim Closed
2/4/2015	Laceration; Hand	Claim Closed
2/12/2015	Laceration; Fingers	Open Claim
6/15/2015	Laceration; Face	Claim Closed
8/18/2015	Laceration; Face	Claim Closed
10/1/2015	Contusion; Leg/Hip	Claim Closed
12/22/2015	Sprain; Lower Back	Open Claim

**e. Safety Record**

Year	EMR	Lost Time IR	Recordable IR
2015	0.72	1.31	3.07
2014	0.95	0.96	2.88
2013	0.90	1.62	1.62
2012	0.88	1.76	4.11
2011	0.91	0.70	2.11

1) KRSC **Has Not** Had Any Worksite Fatalities Since Its Inception

**f. Environmental Program**

K.R. Swerdfeger Construction, Inc. has a comprehensive Environmental Plan. This plan has been up dated and revised through work we have performed with CDOT, Corp of Engineers on Various Military Bases and Various General Contractors to be up to date will all regulations. KRSC has many of its employees trained as erosion control supervisors and our equipment is up to date with latest emission standards for air and water quality. KRSC has open ended subcontracts with environmental companies to take care of any hazardous waste items that might be encountered.

**g. QA/QC Plan**

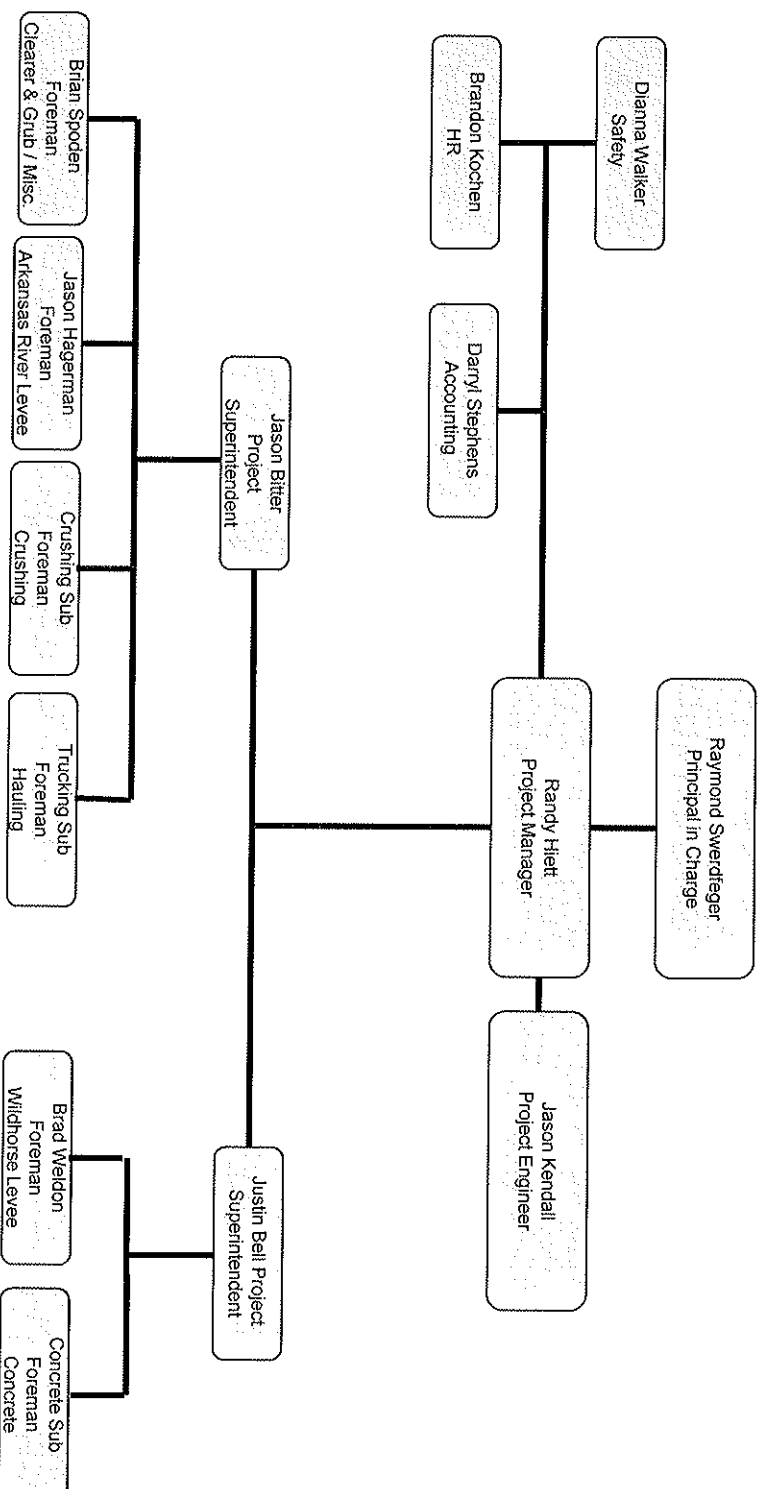
K.R. Swerdfeger Construction, Inc. has a very extensive QA/QC Plan. The plan was developed to meet the requirements of specific jobs but has since been implemented company wide. One part of the plan is specified to track all the paper work for the project. This section states how job files and paper work flow is to be implemented on projects. KRSC has just implemented the use of PROLOG project management software to manage all change orders, RFIs, progress reports and plan changes. KRSCs QA/QC plan also provides a template on how subcontractors are to be managed. It show clear lines of responsibility and who is responsible for the work they perform.

**h. Domestic Iron, Steel, Concrete and Manufactured Goods**

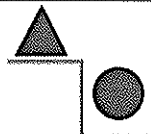
K.R. Swerdfeger Construction is planning on using domestically produced products for this project. KRSC has a provision in our QA/QC plan for using domestic materials from our extensive work we have performed on various military bases and American Iron and Steel Projects. KRSC does not foresee any problems accomplishing this with the insignificant amount of material being purchased for this project.



# KRSC Organizational Chart Arkansas River Levee Lowering & Wildhorse Creek Levee Reconstruction



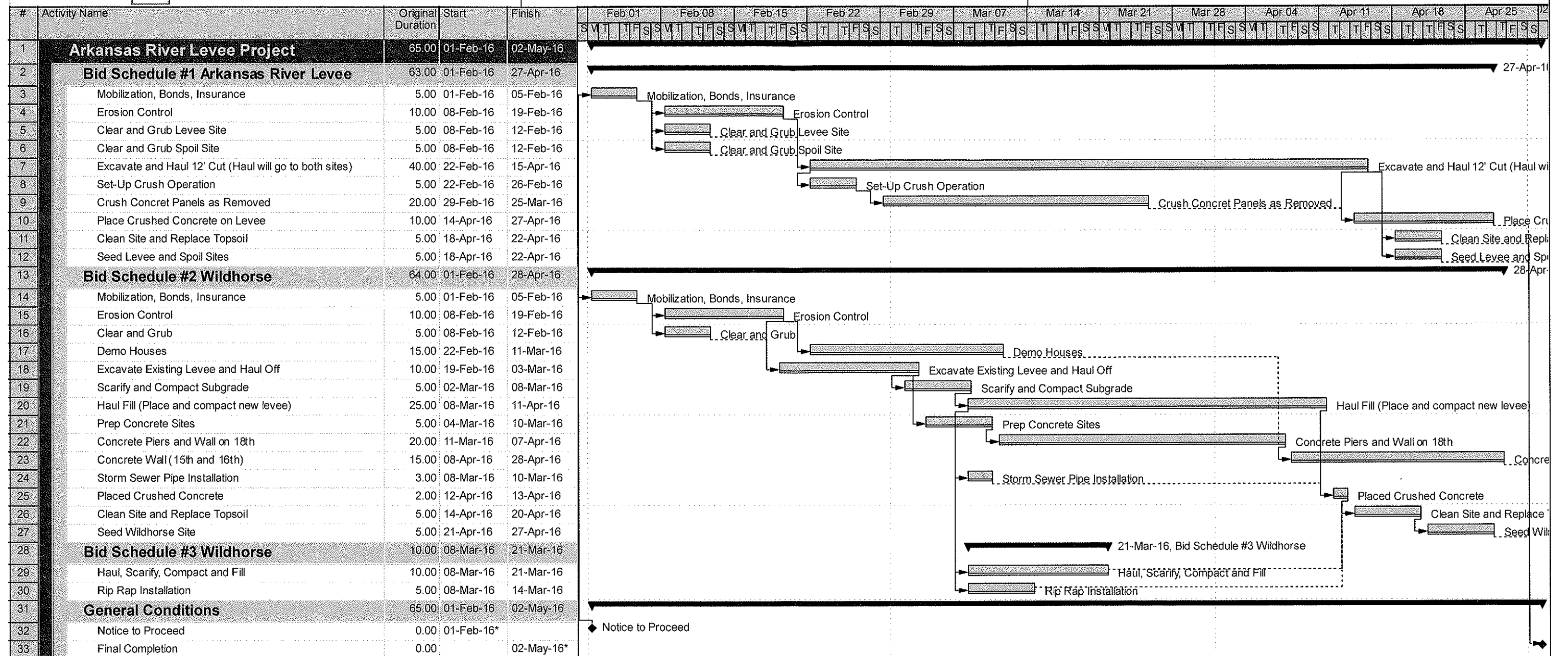
1/22/2016



**K.R. SWERDFEGER  
CONSTRUCTION, INC.**

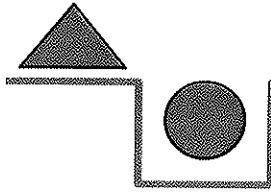
Arkansas River Levee Project

22-Jan-16



Primary Baseline    Critical Remaining Work  
Actual Work    Milestone  
Remaining Work    Summary





## **K. R. SWERDFEGER CONSTRUCTION, INC.**

421 E Industrial Blvd. ● Pueblo West, CO 81007

(719) 547-0242 ● (719) 547-9297 Fax

### **Project No. 12-008-003 Arkansas River Levee Lowering & Wildhorse Creek Levee Reconstruction 5.0 Project Staffing Plan**

**a. Sources for Obtaining Personnel**

K.R. Swerdfeger Construction, Inc. (KRSC) is a Union Signatory company. We hire our Laborers from the Laborers International Union of North America Local #720, Operators from the International Union of Operating Engineers Local # 9, Pipefitters from the United Association Local # 208 and our Lineman out of the International Union of Electrical Workers Local # 113.

**b. Ensure at least 80% Colorado Workforce**

K.R. Swerdfeger Construction, Inc. currently employs between 180 – 250 employees depending on the time of year. 98% of our workforces are Colorado residents. We will ensure that we meet the criteria of the 80% of assigned employees to this project by checking driver licenses and any other means such as payroll reports.

1. KRSC currently employs 105 employees who reside in Pueblo County. It would be from this group of employees that we would assign to this project. We could present records through our payroll system to prove that all assigned employees reside in Pueblo County.

**c. Apprentice Programs**

K.R. Swerdfeger Construction, Inc. pays hourly training contributions to the specific Unions our employees are members of. We are also affiliated with Associated General Contractors (AGC), Colorado Contractors Association (CCA), Distribution Contractors Association (DCA) and National Utility Contractors Association (NUCA) and Midwest Energy Association (MEA). All of the Associations above provide training in which our company participates.

**1. Types of Training and Provider:**

- a. Lock Out/Tag Out – Union Provides
- b. Erosion Control – CCA
- c. Competent Person – Union Provides
- d. 40 Hour Haz Mat – Union Provides
- e. 8 hour Haz Mat – Union Provides
- f. 1st Aid / CPR – Union & CCA Provides

- g. Drug & Alcohol Awareness – Henderson Consulting & EAP Services
  - h. OSHA 10 & OSHA 30 – Union & KRSC Safety Manager provides
  - i. Confined Space – Union provides
  - j. Flagger Certification – Union Provides
  - k. Fall Protection – Union Provides
  - l. Demo/Power Saw Certification – Union Provides
  - m. Commercial Motor Vehicle Training – KRSC Provides
  - n. Asbestos Awareness- Foothills Environmental, Inc.
  - o. Asbestos 16 Hour – Foothills Environmental, Inc.
  - p. Excavation Safety – NUCA & Union Provides
  - q. Rigging – Union Provides
  - r. Operator Qualification – MEA
  - s. Scaffold – Union provided
  - t. Waste Management – KRSC Provides
  - u. Spill Prevention – KRSC Provides
  - v. Respirator – CCOM
  - w. Lead Awareness – KRSC Provides
  - x. Hearing Conservation – KRSC Provides
  - y. Hydrogen Sulfide – KRSC Provides
  - z. Global Harmonized System – KRSC Provides
  - aa. Forklift – Union Provides
  - bb. Fire Prevention – Union Provides
  - cc. Electrical Safety – KRSC Provides
  - dd. Blood Borne Pathogens – KRSC Provides
  - ee. Ariel lift – Union Provides
  - ff. Abrasive Blasting – KRSC Provides
2. We will assign employees who have project related certifications to this project. Also, KRSC requires all employees to participate in all continuing education programs.
  3. The Apprenticeship Program requirements are as follows: The Laborer Apprentice must complete 300 hours of class room training and 4000 hours of on the job training. The Operator Apprentice must complete 432 hours of class room training and 4500 hours of on the job training. The Welder Apprentice must complete 1200 hours of class room training and 8500 hours of on the job training. The Lineman Apprentice must complete 432 hours of class room training and 7000 hours of on the job training. Upon completion of all of the apprenticeships listed above, the individual becomes a Journeyman and is issued a certification from the United States Department of Labor stating that he/she has completed the Apprenticeship program.
  4. The annual amount we paid for all of our training in 2015 was \$502,798.21. In the last five years our cost has been \$1,810,081.02. We do not require any KRSC employee or Union employee to pay any portion of the training costs.
  5. Participation and graduation rates averaged for all 4 crafts we are signatory to have a 63% graduation/completion rate over the last 5 years.

**d. Employee Health Care Coverage**

KRSC provides Healthcare coverage to all full time employees and their families through Union group plans.

1. The type of benefits include:
  - a. Life and Accidental Death and Dismemberment and Dependent Life Benefits
  - b. Weekly Dependent Life Benefits
  - c. Comprehensive Medical Benefits
  - d. Prescription Drug Benefits
  - e. Chiropractic Benefits
  - f. Dental Benefits
  - g. Vision Benefits
2. KRSC pays 100% for Health Insurance for all full time employees and their families at no cost to the employee. Below is the hourly cost per employee per Union:
  - a. Laborers =\$4.75 per/hour
  - b. Operators = \$5.75 per/hour
  - c. Welders = \$5.85 per/hour
  - d. Lineman = \$5.45 per/hour
  - e. Total Paid by KRSC for 2015 is \$2,388,594.66
3. 100% of KRSC employees are covered by this plan and it is available to all future fulltime employees. This plan automatically provides Healthcare coverage to all fulltime employees and their dependents.

**e. Wage Rate Range**

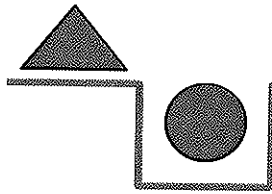
Wage rates per craft are as follows:

- a. Laborer - \$17.75 per/hour & \$25.54 total package
- b. Operator – \$25.85 per/hour & \$35.25 total package
- c. Welder – \$36.20 per/hour & \$61.85 total package ( includes \$13.00 per/hour for rig pay which we are required to pay).
- d. Lineman - \$42.14 per/hour & \$57.93 total package.

**f. Benefits**

In addition to healthcare benefits provided to all employees, KRSC also contributes to all bargaining employees' pension funds and vacation funds. For pension funds, the bargaining employee may select an option that is transferred to the spouse of the bargaining employee upon death of the bargaining employee.

KRSC currently has 34 non-bargaining employees. All 34 employees participate in the KRSC 401(k) Profit Sharing Plan & Trust. KRSC automatically contributes a percentage to all non-bargaining employees and in addition, our plan also offers a company match to all non-bargaining employees. All KRSC non-bargaining employees get paid vacation and paid personal time off.



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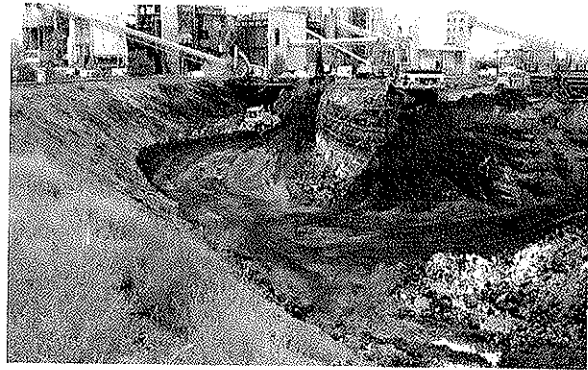
**Project No. 12-008-003**

### **Arkansas River Levee Lowering & Wildhorse Creek Levee Reconstruction**

#### **6.0 Specialized Expertise & Qualifications**

**a. Statement of Understanding**

K.R. Swerdfeger Construction, Inc.'s plan for accomplishing this project is as follows. KRSC plans to start the project by mobilizing all the necessary equipment to the two project sites – Arkansas River Levee and the Wildhorse Creek Levee. One crew will start operations by clearing and grubbing the Wildhorse Creek Levee during the mobilization phase. During clear and grub operations, KRSC's demo subcontractor will start the

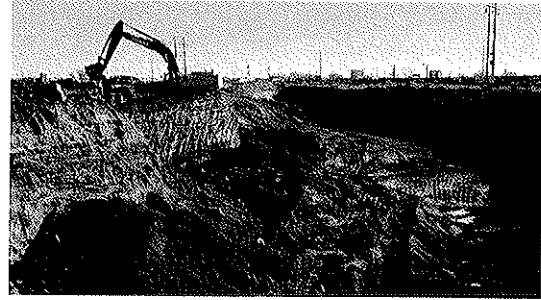


demo of the existing buildings. The clear & grub crew will then start with removing the dirt from the Wildhorse Levee and hauling it to the designated area provided by the district. The dirt will be loaded in the tandem dump trucks using a 45,000 lb excavator digging from the top of the levee down to the virgin ground. A wheel loader will also be used to clean up the area. The second crew will start to set up the crushing operation at the Arkansas River Levee. When the setup of the crushing operation is complete, the 2<sup>nd</sup> crew will start the Arkansas River Levee excavation. The Crew will start by using a dozer to pioneer the top of the levee wide enough for the excavator to safely work on top of the levee. Then that crew will use an 85,000 lb excavator to load tandem dump trucks to haul the material to the Wildhorse Creek Levee and the Districts designated stock pile area. This will ensure the best material will be placed in the new Wildhorse Creek Levee. The excavation plan is to start excavating the existing material in the middle of the levee first then to slough the outside material to the center to control any sluff off in either the river or rail yard side of the levee.

Concrete panels will be handled as per plan in section b. of this section. As the panels are removed they will be loaded in KRSC's haul truck to be

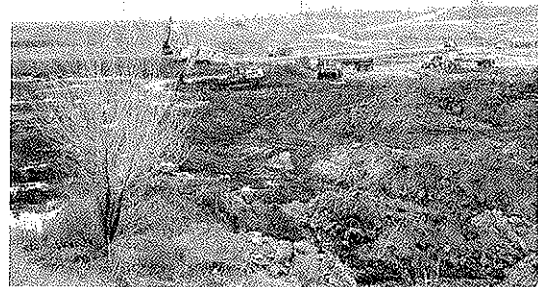


taken to crushing operation. When excavation operation begins at the Arkansas River Levee crew 3 will be used to place the excavated dirt from the Arkansas River Levee, in the Wildhorse Creek Levee. To begin construction of the new Wildhorse Creek Levee the crew will use a dozer with a ripper to scarify the existing ground at the Wildhorse Creek Levee to prep for dirt installation



and compaction. The crew will use loaders, medium size dozers, compaction equipment, and water trucks to place the new fill. Fill will start on the bottom lifts, compacting fill dirt it into the scarified and compacted material. With dirt working its way up to the top of the levee starting from 11<sup>th</sup> Street working north to 18<sup>th</sup> Street. Concrete operation with KRSC's subcontractor will start on the 18<sup>th</sup> Street culverts wall after the concrete demo is complete. The sub will start by drilling the piers and then construct the structure. Concrete work will next proceed to the Wildhorse Creek Levee concrete wall. After a sufficient amount of dirt is relocated to the Wildhorse Creek Levee, the remaining Arkansas River Levee dirt will be taken to the proposed stockpile site provided by the district. After all Arkansas River Levee excavation is complete, KRSC will use a loader to load dump trucks with the crushed concrete and a blade to spread the crushed concrete on top of the new levee surface and a blade to spread the top soil back on the Wildhorse Creek Levee. Seeding will be done to complete the project.

K.R. Swerdfeger Construction, Inc. sees one of the challenges for this project will be removing the dirt from Arkansas River levee under the existing bridges. The 4<sup>th</sup> Street bridge crossing will be accomplished by using a loader in that section to remove the dirt and stockpile it, so the excavator can load the trucks until we have enough room to start using the excavator again. The Union Ave. and Main St. bridges will be accomplished in the same manner. One other challenge on the project will be the work on the valve house for the River Walk. We plan on leaving the house in place during construction and building the road on the rail road yard side of it to maintain truck access. The final lowering of the valve house will be done in the final stages of the project using an excavator to remove the existing building and cut up concrete structure. After removal of the concrete the building will be set back using the same excavator.



**b. Proposed Methodology for Removal of 12' of Existing Concrete Panels**

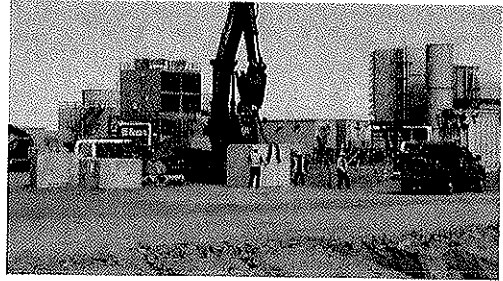
K.R. Swerdfeger Construction, Inc. plans to remove the existing concrete panels in the following manner. We plan on cutting the panels in 3' to 4' high by 10' to 12' in length sections. This will put the panels in a more manageable size for transport and crushing operations. We plan on excavating the center of the levee first in 3' to 4' lifts. This will allow all material from each side to be pushed into the middle of excavation; this will include the concrete panels and the small concrete wall at the top of the Levee. The excavation will be taken down below the newly established control joint. The excavator will then break off the concrete panel toward the center of the excavation



c. **Experience with 10'x10'x10" Concrete Panels**

K.R. Swerdfeger Construction, Inc. has placed 10'x10'x10" or larger precast concrete electrical manhole bases on many projects. These projects involved KRSC to use cranes and rigging to set the base in the excavations then construct the manholes on top of them using the same cranes. At the Black Hills Airport Generating Station Expansion Project, we installed 9 electrical vaults with bases ranging in size from 14'x14' ID x 12" Thick to 20'x20' ID x 18" Thick. The vaults were installed up to 25' in depth. On

Buckley AFB we installed 27 electric and communication vaults with bases ranging in size from 8'x12' ID x 10" Thick to 12'x14' ID x 12" Thick. The vaults were installed up to 15' in depth. All vault installation involved moving the vault bases, wall sections and lids around a congested construction site and setting them in excavations.



d. **Necessary Equipment Leased or Purchased**

K.R. Swerdfeger Construction, Inc. does not foresee the need to purchase or lease any equipment for this project. KRSC will perform the work on this project with equipment it currently owns. We do not see the need for the equipment listed in this section (dewatering equipment such as "aqua-dams", well points, etc.) due to the fact we are not working in the river. KRSC owns the largest tax paying fleet of heavy equipment in Pueblo County.



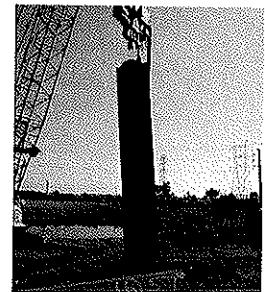
e. **Slope Remediation Experience**

K.R. Swerdfeger Construction, Inc. has performed slope remediation on many projects we have performed. Mostly it has been on small slopes for utility installation, stream bank stabilization, and to install utilities in the flood damaged areas. The largest project was a soil nail stabilization we performed at the Cherokee Power Plant in Denver Colorado. We installed 3200 SF of Soil Nail stabilization in order to construct a 625 CY concrete water intake structure. The project was scheduled to last 3 weeks and we were able to compress the schedule down to 6 days.



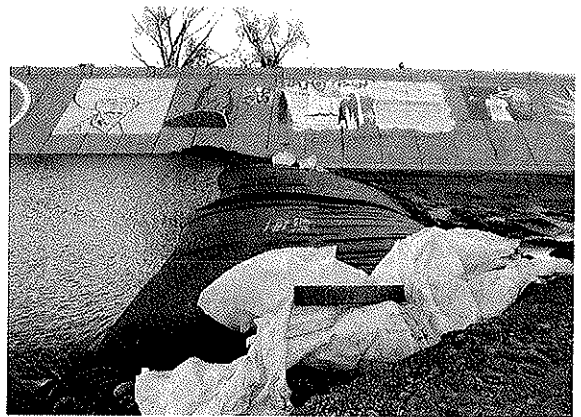
f. **Sheet Piling Experience**

K.R. Swerdfeger Construction, Inc. has had only minimal experience with sheet piling in the past five years. We have installed and removed a small amount of sheet piling during some stream stabilization projects and when we installed various utilities in flood damaged areas. Most projects were in the 20' to 50' in length and with minimal depth. KRSC also does not see where this is applicable to this project when we are not working in the river channel. KRSC has a close working relationship with Lawrence Construction, the largest sheet piling contractors in the state for any sheet piling needs for this project.



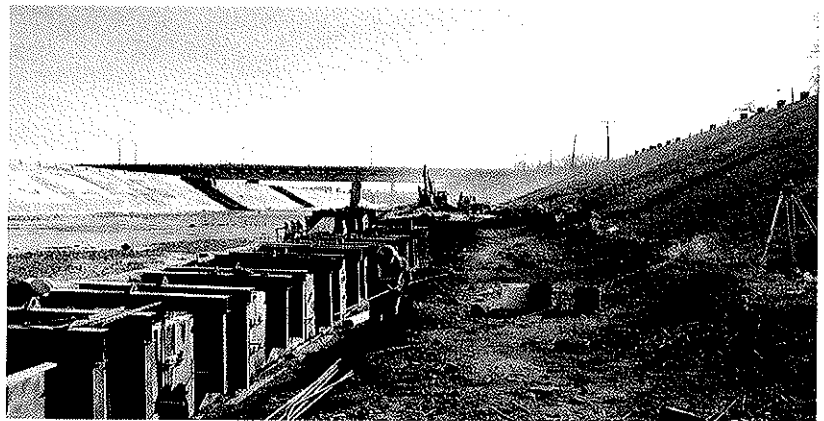
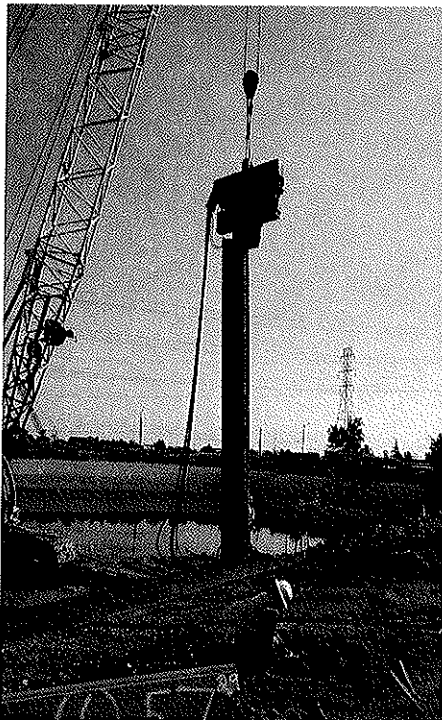
**g. Personnel for Monitoring Flows**

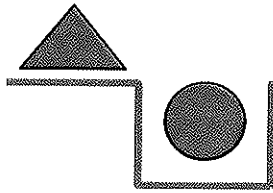
K.R. Swerdfefer Construction, Inc. has worked in the Arkansas River Channel in this exact same area in the past. Most of the employees who worked on that project still work for the company and some would be staffed for this project for their familiarity. KRSC has dammed and diverted flows in the river many times in the past and has not encountered any problems when doing so. If the flows were to become too large for KRSC to handle, we would subcontract out this portion of the project.



**h. Financial Stability and Resources**

K.R. Swerdfefer Construction, Inc. has working capital in excess of \$9,000,000 and a line of credit of \$2,000,000 with no outstanding balance. This should be sufficient financial stability to expedite the procurement of material and subcontractors for any change order that might come up on this project. KRSC also has in excess of 200 employees, most of which live in this area and our equipment fleet is valued in excess of \$13,000,000. This will provide sufficient staffing and equipment in order expedite any change order.





## **K. R. SWERDFEGER CONSTRUCTION, INC.**

421 E Industrial Blvd. ● Pueblo West, CO 81007

(719) 547-0242 ● (719) 547-9297 Fax

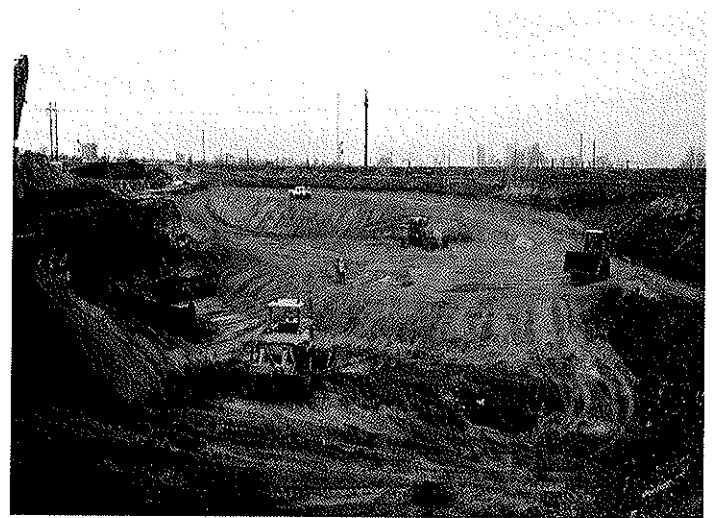
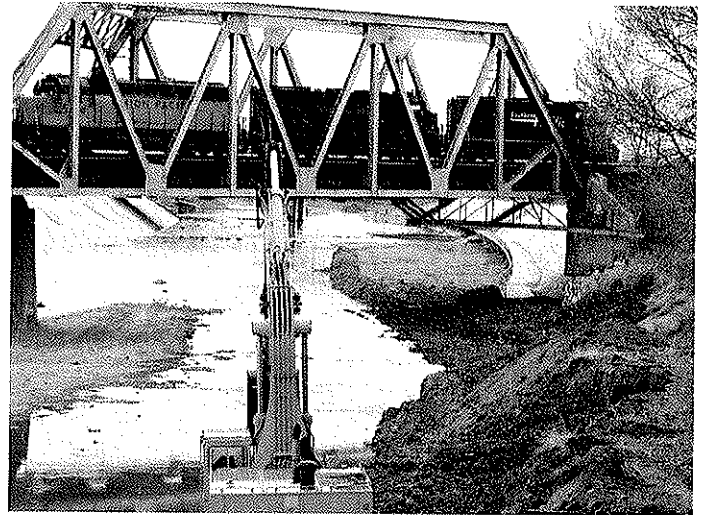
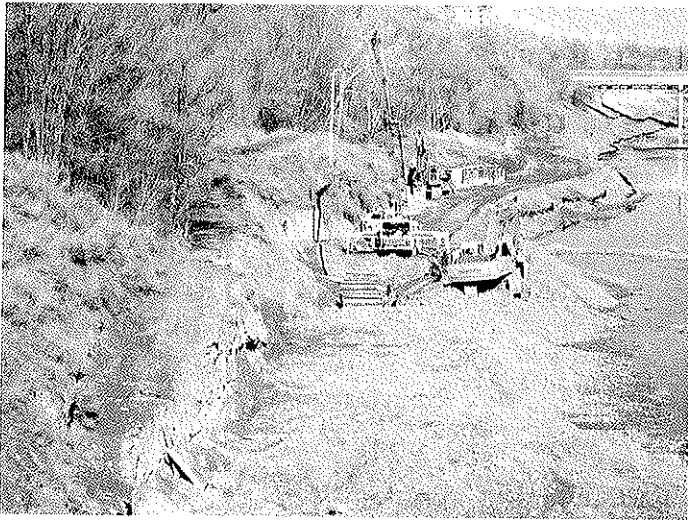
### **Project No. 12-008-003**

### **Arkansas River Levee Lowering & Wildhorse Creek Levee Reconstruction**

### **7.0 Additional Requirements & Considerations**

- a. Pricing Quotation in Attached Envelope Marked Cost Proposal
- b. Time & Material Rate Schedule In Attached Envelope Marked Cost Proposal
- c. Surety Company – See Attached Letter From Our Surety Company
- d. Insurance Certificate. K.R. Swerdfeger Construction Insurance Provider does not have any problem with the insurance requirements for this project. See Attached insurance certificate for coverages.
- e. K.R. Swerdfeger Construction, Inc. **Has Not** had any violation of the law and regulations, litigation, claims (including pending and anticipated) in the past three years.
- f. K.R. Swerdfeger Construction Annual Volume For the Past Three Years is as Follows  
2015 Audit Pending  
2014 \$39,376,000.00  
2013 \$41,533,000.00  
2012 \$39,802,000.00
- g. Additional Information – See Attached Page in This Section
- h. "Red Flag" Performance Disclosure Required
  - 1) K.R. Swerdfeger Construction, Inc. **Has Not** been disbarred/suspended/otherwise declared prohibited for doing business with governmental agency.
  - 2) K.R. Swerdfeger Construction, Inc. **Has Not** been denied prequalification/declared non-responsible/otherwise declared ineligible to bid on public or private jobs.
  - 3) K.R. Swerdfeger Construction, Inc. **Has Not** been defaulted/terminated for cause/failed to complete project or required to pay liquidated damages.
  - 4) K.R. Swerdfeger Construction, Inc. **Has Not** had business/professional license/certification suspended or revoked.
  - 5) K.R. Swerdfeger Construction, Inc. **Has Not** had any liens filed against the firm for failure to pay subcontractors, workers or suppliers.

- 6) K.R. Swerdfeger Construction, Inc. **Has Not** been denied bonding or insurance or had same discontinued.
- 7) K.R. Swerdfeger Construction, Inc. **Has Not** found in violation of any state laws, e.g., wage, tax, licensing, discrimination, environmental laws, etc. by final decision of court or government agency.
- 8) K.R. Swerdfeger Construction, Inc. **Has Not** had a case in which firm's owners/officers/directors/managers were subject of criminal indictment/criminal investigation in connection with firm's business.
- 9) K.R. Swerdfeger Construction, Inc. **Has Not** been subject to bankruptcy proceedings.
- 10) K.R. Swerdfeger Construction, Inc. **Has Not** had any serious or willful health/safety citations.





January 5, 2016

Re: K.R. Swerdfeger Construction, Inc.  
Bonding Prequalification

To Whom It May Concern,

HUB International Insurance Services of Colorado has the privilege of representing K.R. Swerdfeger Construction, Inc. on all matters regarding surety bonds and risk management. We consider them to be one of the premier contractors in the Rocky Mountain Region. Raymond Swerdfeger, President of K.R. Swerdfeger Construction, not only brings over 20 years of experience to the company, but has done an outstanding job in establishing a solid organization with an excellent work ethic that performs thoroughly and economically.

K.R. Swerdfeger enjoys an excellent reputation with their peers and the owners, engineers and suppliers with whom they have worked. K.R. Swerdfeger is well run and financially solid. Travelers Casualty and Surety Company of America, an A++ rated, U.S. Treasury listed Surety Company can issue bonds for K.R. Swerdfeger in the \$40,000,000 single range with a aggregate of \$100,000,000. K.R. Swerdfeger's bonding capabilities are structured by their needs. At the present time, there is ample bonding capacity available.

Our position is expressly conditioned upon our favorable review of the contract documents, plans, specifications, and normal underwriting requirements at the time of the request. The arrangement for Performance and Payment Bonds is a matter between K.R. Swerdfeger Construction, Inc. and Travelers Casualty and Surety Company of America, and neither the surety nor the agent assumes any liability to you or third parties if for any reason said bonds are not written.

We at HUB International are very pleased to count among our customers, K.R. Swerdfeger Construction, Inc. If you need any further information, please feel free to contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Blanchard".

Tim Blanchard  
Sr. Vice President  
Construction & Surety Practice Leader  
Phone: (970) 254-3316



KRSWERD-01

TMORRIS

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

12/18/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 0757776

HUB International Insurance Services (COL)  
1414 W 4th  
Pueblo, CO 81004

CONTACT

NAME:

PHONE

(A/C, No, Ext): (719) 544-2533

E-MAIL

ADDRESS:

FAX

(A/C, No): (866) 908-2103

INSURER(S) AFFORDING COVERAGE

NAIC #

INSURER A: The Phoenix Insurance Company

25623

INSURER B: Travelers Property Casualty Company of America

25674

INSURER C: The Travelers Indemnity Company

25658

INSURER D:

INSURER E:

INSURER F:

INSURED

K.R. Swerdfeger Construction, Inc.  
421 E Industrial Blvd  
Pueblo West, CO 81007

## COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	X COMMERCIAL GENERAL LIABILITY					
	CLAIMS-MADE X OCCUR	X	DTCO5643B507PHX16	01/01/2016	01/01/2017	EACH OCCURRENCE \$ 1,000,000
						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000
						MED EXP (Any one person) \$ 5,000
						PERSONAL & ADV INJURY \$ 1,000,000
						GENERAL AGGREGATE \$ 2,000,000
						PRODUCTS - COMP/OP AGG \$ 2,000,000
						\$
	GEN'L AGGREGATE LIMIT APPLIES PER:					
	POLICY X PRO-JECT	LOC				
	OTHER:					
B	X AUTOMOBILE LIABILITY		DT8105643B507TIL16	01/01/2016	01/01/2017	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	X ANY AUTO					BODILY INJURY (Per person) \$
	ALL OWNED AUTOS	SCHEDULED AUTOS				BODILY INJURY (Per accident) \$
	X HIRED AUTOS	X NON OWNED AUTOS				PROPERTY DAMAGE (Per accident) \$
						\$
B	X UMBRELLA LIAB	X OCCUR	DTSMCUP5643B507TIL16	01/01/2016	01/01/2017	EACH OCCURRENCE \$ 10,000,000
	EXCESS LIAB	CLAIMS-MADE				AGGREGATE \$ 10,000,000
	DED X RETENTION \$	10,000				\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Y/N	DTKUB5643B50716	01/01/2016	01/01/2017	X PER STATUTE OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A				E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
						E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

K.R. Swerdfeger Construction, Inc., added as an additional insured including completed operations on a primary & non-contributory basis under all policies except workers Compensation, waiver of subrogation applies to all policies.

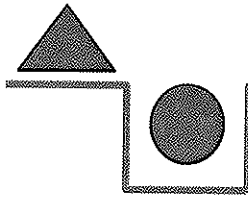
## CERTIFICATE HOLDER

K.R. SWERDFEGER CONSTRUCTION  
INC.  
421 E. INDUSTRIAL BLVD  
PUEBLO WEST, CO 81007-0000

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



**K. R. SWERDFEGER CONSTRUCTION, INC.**

421 E Industrial Blvd. ● Pueblo West, CO 81007

(719) 547-0242 ● (719) 547-9297 Fax

## **Appendix A**

### **HEALTH AND SAFETY PLAN**

***Project No. 12-008-03***

***Arkansas River Levee Lowering & Wildhorse  
Creek Levee Reconstruction***

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## **INTRODUCTION**

This site specific safety plan is being created for any and all work to be done at the Arkansas River Levee Lowing and Wildhorse Creek Levee Reconstruction project. This plan is intended to be specific to our scope of work and the safety requirements of Arkansas River Levee Lowing and Wildhorse Creek Levee Reconstruction project. Unexpected situations and conditions may present themselves, which may necessitate the need to deviate from the plan. Therefore, the K.R. Swerdfeger Construction (KRSC) management team together with the authorized personnel will generate a revised plan.

## **KRSC PRESIDENTS SAFETY STATEMENT**

The safety of our employees has always been a prime concern of this company. We have maintained a good safety record over the years. However, I want to take this opportunity to reaffirm my belief in a strong safety program, one, which will continue to provide a safe working environment for all employees.

Accidents cost time and money, but most of all, accidents often cost lives.

I hope you will share my concern for providing a safe work environment, because to make a safety program effective, all of us must work together. Help yourself and your co-employees to be aware of and practice safe work habits and to continue to make “zero” accidents our goal.

It is the policy of this company to provide a **healthy** and **safe** place of employment for all of our employees and for the public in all of this company’s operations, and to comply with all safety regulations as they pertain to our industry. Safety will take precedence over more expedient unsafe operations. Every attempt will be made to provide equipment and create conditions that will make for a safe workplace. Safety education is available for our employees. Any employee who willfully disregards known safety practices will be subjected to strong disciplinary action. Subcontractors will be expected to abide by the provisions of this policy. All employees are expected to read and understand these written **Rules of Safety** that’s available at all job-sites.

Raymond K. Swerdfeger, President

*\* This policy is not all-inclusive to all working conditions in the company. If you have questions concerning a particular aspect of safety on the job, ask your supervisor for assistance. The safety department is also always available to answer your questions.*

### **KRSC PERSONNEL**

<b>Name</b>	<b>Title</b>	<b>Mobile</b>	<b>Email</b>
<b>Jason Kendall</b>	<b>Project Manager</b>	<b>719-252-8836</b>	<b>jasonk@krswerd.co,</b>
<b>Justin Bell</b>	<b>Superintendent</b>	<b>719-252-8854</b>	<b>justinb@krswerd.com</b>
<b>Brad Weldon</b>	<b>Foreman</b>	<b>719-252-8811</b>	<b>bradw@krswerd.com</b>
<b>Dianna Walker</b>	<b>Safety Manager</b>	<b>719-252-3708</b>	<b>dianna@krswerd.com</b>

### **SAFETY RESPONSIBILITIES**

#### **Supervision**

Supervisory personnel (competent persons) are responsible for the safety on this job site. The competent personnel on the job site will be the Superintendent, the foreman, and or any person they deem necessary that is qualified for his project.

These responsibilities include:

- Take prompt action to correct any unsafe acts or behaviors that an employee or employees may be doing.
- Taking prompt action to correct the unsafe conditions of equipment or work areas, which may be hazardous to employees or to the plant personnel.
- Providing training, explanation, and demonstration of safe practices so those employees know how to work safely.
- Arranging safety meetings for all employees under their supervision.
- Supervisors must consider that accident prevention is an essential element of every order dealing with operations, service, maintenance, repair, construction, etc.
- Mentor new and inexperienced employees so they can learn good work habits.

In addition to the above, supervisors (competent person) will:

- Inspect tools and equipment continuously and have defective items repaired or removed from the job-site.
- Investigate thoroughly hazards observed or reported and see that action is taken to eliminate them.
- Be certain that each job is planned and that each employee understands the plan for doing the work. Conduct job briefings and walk downs.
- Be certain that weekly safety meetings are held, and make every effort to instill the proper attitudes for safety and accident prevention.
- Arrange for all necessary barricades and warning signs.
- Ensure that One Call or the applicable agency has been contacted to determine the existence and location of all underground obstructions (piping, cable, tanks, etc.) before ground is broken on any job.

- Be certain that each new employee is indoctrinated with the company safety policy, and at the beginning of each job insure that safety requirements and precautions are reviewed with all employees. Each new employee will be provided with a copy of the KRSC Safety Policy during the employment orientation.
- Have the necessary safety equipment available for each employee.
- Notify immediately KRSC claims manager, and KRSC safety manager, as to any accidents, injuries, incidents, or potential claims immediately and complete the proper documentation (Accident, Incident, Complaint Form, Damaged Utility Report, and Police Report) and submit to KRSC Pueblo West Office within 24 hours.
- Will attend all site safety meetings and report back to their crew what was discussed at these meetings. Documentation of this briefing is mandatory.

### **SAFETY RESPONSIBILITIES OF ALL EMPLOYEES**

The employee is the central figure in the safety program. Some of the responsibilities each employee has to ensure his own safety, as well as others, are:

- Learn the accepted and safe way to do each job. Continue to suggest possible improvements in the methods of doing the job.
- All accidents are to be reported immediately to the supervisor.
- Keep tools and equipment in good working order. Inspect tools often.
- Look over each job first for hazards. Use necessary protective equipment at all times. Avoid short cuts that involve “taking a chance”.
- Help less experienced employees to learn safe and acceptable work methods.
- If in doubt as to appropriate equipment or conditions, ask your supervisor for instructions.
- If conditions are hazardous and adequate safeguards have not been provided, immediately call the situation to the attention of your supervisor.
- As part of his or her job, every employee is expected to take an active part in the KRSC Safety Program and apply it to his or her work.
- If you cannot resolve a safety issue, utilize the **STOP** Program.
- Report any and all “near misses” to your supervisor.

### **GENERAL RULES OF CONDUCT**

The following general rules of conduct apply to all employees of KRSC, their sub-contractors and suppliers:

- Alcoholic beverages, illegal substances and persons under the influence of such products are not permitted on the job site or property. This includes legal drugs that are used illegally.
- Firearms, weapons, explosives and ammunition are strictly prohibited on the job site and property.
- Employees must wear appropriate attire at all times while on the job site.
- All posted instructional signs such as WARNING, CAUTION, DANGER, RESTRICTED AREA, etc. must be followed.
- KRSC company rules must be followed when representing KRSC and Arkansas River Levee Lowing and Wildhorse Creek Levee Reconstruction project on or off of the job site
- All motor vehicle rules, regulations and laws will be followed when operating KRSC equipment or vehicles on this site.
- Appropriate use of cell phones, e-mail and computers is required.
- It is and will remain the goal of KRSC to strive to achieve “zero accidents”.

### **MEDICAL EMERGENCIES**

#### **Emergency Telephone Numbers**

<b>Pueblo Police Department</b>	<b>Phone: 719-553-2538</b>
<b>Pueblo Fire Department</b>	<b>Phone: 719-553-2830</b>
<b>Parkview Medical Center</b>	<b>Phone: 719-584-4000</b>

#### **K. R. Swerdfeger Construction Authorized company representatives:**

<b>Claims Specialist</b>	<b>Jackie DeLima</b>	<b>719-647-5865</b>
<b>Director of Human Resources</b>	<b>Brandon Kochen</b>	<b>719-647-5885</b>
<b>Safety Manager</b>	<b>Dianna Walker</b>	<b>719-252-3708</b>

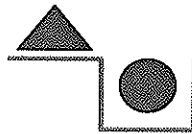
#### **The name and address of our insurer/third party administrator is:**

**Travelers Insurance Company**  
**P.O. Box 173762**  
**Denver, CO 80217-3762**  
**Phone: (800)227-1538**  
**Fax: (877)801-9674**

**If you have any questions, please contact one of our authorized company representatives or our insurer/third party administrator.**

## **INJURY/ACCIDENT REPORTING**

- All injuries and all cases of damage to property must be reported to KRSC claims manager and KRSC safety department immediately. Use company injury/ accident forms. Completed report forms must be sent to the Pueblo West Office within 24 hours.
- All injuries/accidents require a post accident UA within 24 hours.
- All animal bites must be immediately reported to the proper local authorities because of the potential danger of rabies.
- Do not assume responsibility for any non-employee injuries beyond first aid treatment.
- Do not discuss an injury or accident with anyone other than the claims manager, safety department or company insurers.
- Obtain names and addresses of non-employees involved in injury or accident—obtain names and addresses of witnesses.
- Take pictures if a camera is available.
- “Accident” is defined as an accident involving a fatality, hospitalization or medical treatment other than first-aid treated at worksite or KRSC facilities, third party injury or damages, or damages to KRSC property.



### **K. R. SWERDFEGER CONSTRUCTION, INC.**

421 E Industrial Blvd. • Pueblo West, CO 81007  
(719) 547-0242 • (719) 547-9297 Fax

## **EMPLOYEE STATEMENT OF INJURY OR ACCIDENT**

MY NAME IS:

\_\_\_\_\_

DATE OF INJURY: \_\_\_\_\_ TIME OF INJURY:

\_\_\_\_\_

THIS IS WHAT HAPPENED (INCLUDE WHAT, WHEN, WHERE, HOW AND WHY):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DO YOU RECALL ANYTHING UNUSUAL OR UNEXPECTED THAT HAPPENED?

---

---

---

---

---

ARE THERE WORK CONDITIONS THAT CONTRIBUTED TO THIS INJURY?

---

---

---

---

---

HOW WOULD YOU EXPLAIN WHY YOU WERE INJURED?

---

---

---

---

---

DID THE SUPERVISOR ASK YOU TO PERFORM AN UNSAFE ACT?

---

HOW WOULD YOU PREVENT THIS INJURY FROM OCCURRING AGAIN?

---

WHEN DID YOU FIRST NOTICE THE INJURY OR ILLNESS?

---

WHEN DID YOU TELL YOUR SUPERVISOR?

---

WHEN DID YOU FIRST NOTICE THE PAIN?

---

DID PAIN DEVELOP SUDDENLY OR GRADUALLY?

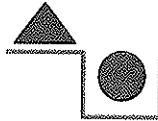
---

HAVE YOU EVER HAD THIS PAIN BEFORE? \_\_\_\_\_ IF YES, WHEN & HOW OFTEN?

---

EMPLOYEE SIGNATURE \_\_\_\_\_ DATE

---



**K. R. SWERDFEGER CONSTRUCTION, INC.**

421 E Industrial Blvd. • Pueblo West, CO 81007

(719) 547-0242 • (719) 547-9297 Fax

**FOREMAN'S ACCIDENT REPORT**

1. Location: \_\_\_\_\_

2. NAME: Injured Employee, Company Equipment Damaged, or 3rd Party Involved:

\_\_\_\_\_  
\_\_\_\_\_

ADDRESS: Injured Employee or 3rd Party (License No. if any)

\_\_\_\_\_  
\_\_\_\_\_

3. Craft: \_\_\_\_\_ SS# : \_\_\_\_\_

4. Date: \_\_\_\_\_ Time: \_\_\_\_\_ AM/PM

5. Doctor? Yes ☐ No ☐ First Aid? Yes ☐ No ☐

Doctor's Name: \_\_\_\_\_

Doctor's Address: \_\_\_\_\_

6. Will it be necessary for the employee to miss their next regular shift due to this injury per Doctor's opinion?  
Yes ☐ No ☐

7. Describe Accident and Nature of Injury or Property Damage:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Action Taken to Prevent Recurrence:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Witnesses: \_\_\_\_\_

\_\_\_\_\_

Date of Report: \_\_\_\_\_

**Name of Foreman:**

Print Name

Signature

**Name of Superintendent:**

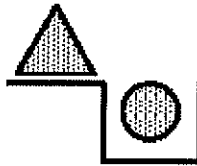
First Name

Signature

*Send Copy to Jackie DeLima, Pueblo West Office*

*Copy for Job File*





# K. R. SWERDFEGER CONSTRUCTION, INC.

421 E Industrial Blvd. • Pueblo West, CO 81007

(719) 547-0242 • (719) 547-9297 Fax

## NEAR MISS REPORT

A near miss is a potential hazard or incident that has not resulted in any personal injury. Unsafe working conditions, unsafe employee work habits, improper use of equipment or use of malfunctioning equipment have the potential to cause work related injuries. It is everyone's responsibility to report and /or correct these potential accidents/incidents immediately. Please complete this form as a means to report these near-miss situations.

Crew/Job Site Location: \_\_\_\_\_ Date: \_\_\_\_\_

Time: \_\_\_\_\_ ☐ am ☐ pm

Please check all appropriate conditions:

☐ Unsafe Act

☐ Unsafe equipment

☐ Unsafe Condition

☐ Unsafe use of equipment

Description of incident or potential hazard: \_\_\_\_\_

\_\_\_\_\_

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### NEAR MISS INVESTIGATION

Description of the near-miss condition: \_\_\_\_\_

\_\_\_\_\_

Causes ( primary & contributing): \_\_\_\_\_

\_\_\_\_\_

Corrective action taken (Remove the hazard, replace, repair, or retrain in the proper procedures for the task): \_\_\_\_\_

\_\_\_\_\_

Signed: \_\_\_\_\_ Date Completed: \_\_\_\_\_

Not completed for the following reason: \_\_\_\_\_

Management: \_\_\_\_\_ Date: \_\_\_\_\_

## **TRAINING**

### **Safety Orientation**

All KRSC employees and Subcontractor employees will be oriented on the safety and health policies of this project.

### **Tool Box Talks**

All KRSC employees and Subcontractor employees are required to conduct daily one of the following, an AHA or their individual company's equivalent form, for daily work activities and job related safety issues.

### **KRSC SITE SPECIFIC PLAN**

1. All KRSC employees will be required to read, understand and adhere to KRSC safety policy before reporting to the job site..
2. Daily AHA (or equivalent) will be utilized to review work plans and identify potential hazards that may exist in that days, scope of work.
3. The contractor shall be responsible for providing and ensuring the use of required personal protective equipment for its employees. The required equipment shall be identified, by task, and must meet the requirements of OSHA 1926, Subpart E.
4. All work-related illnesses and injuries will be reported to the appropriate Supervisor immediately.
5. Report any unsafe or potentially hazardous condition immediately to your Supervisor.
6. Personal protective equipment includes hard hat, safety glasses (which meet ANSI standards), safety toe work shoes, high visibility vest, and long pants. For special circumstances, NFPA 70E category correct, flash suits with face shields when working with live voltage, ear plugs in loud areas, face shield when cutting with torch, fire retardant cloths when welding or cutting with torch, welding helmet when welding/welding gloves. Face shield/goggle combination, ear plugs, and chaps, when using a demo saw. Long hair shall be contained.
7. Barricades and signage will be used to identify hazardous or dangerous work areas. Yellow "CAUTION" tape may be used to identify an area requiring caution, red "DANGER" tape and signage will be used to identify areas that may not be entered without permission from GECO.
8. If cutting/burning is necessary in the designated area, with an approved Hot Work Permit in place, a welding hood; safety glasses; ear plugs or Kevlar hood and/or dickey; hard hat; welding gloves over sleeves when welding over head; welding gloves inside sleeves when welding. A full-face shield will be used when burning, grinding chipping, etc. A fire extinguisher and fire watch is required for the duration of 30 minutes after the last cut or burn.

All burning and welding will be performed in accordance with applicable OSHA and other federal, state, and municipal regulations.

9. Tie-off is required for greater than four (4) feet of potential fall. The attach point must be able to withstand a 5000 lb force per person attached. Inspection of harness and lanyard will be conducted prior to each use. If there is a need for rescue, we would use whatever means necessary in a safe and timely manner to rescue the person by using a ladder, lift or aerial basket truck. At the time of rescue, the situation would be evaluated to determine the means of rescue.
10. Proper use of portable ladders as covered in the KRSC Safety Policy.
11. Aerial lift training will be required of all personnel, including both classroom and operational. Daily lift inspections will be done prior to the start of each shift. A tie-off is required for the operation of any man lift and "scissor" lift. The lanyard must be of the adjustable length not to allow the operator to fall out of the basket or platform.
12. Lockout/tag out policy will be in place.
13. If an evacuation is required, all KRSC and their subcontractor personnel will meet at a designated area. Employees will then move to a designated safe area within the job site.
14. All scaffolding will be erected, dismantled, and maintained by competent and qualified personnel. Only those employees required to utilize the scaffolding will be allowed to do so.
15. Stop Work Authority – as identified in the KRSC Safety Manual, all KRSC and subcontractor employees have the authority and responsibility to **STOP** work when there is a perceived danger of harm or imminent injury.

## AHA - ACTIVITY HAZARD ANALYSIS

*To be completed at the beginning of each shift prior to the start of work. AHA must be reviewed/revised if conditions change. All crew members **must** participate in the AHA briefing and crew signatures are required.*

Job #: \_\_\_\_\_

Date: \_\_\_\_\_

Foreman: \_\_\_\_\_

Competent Person: \_\_\_\_\_

Locate Expiration Date \_\_\_\_\_

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*Daily Scope of Work: (Discuss with all crew members)*

☐ Water/Mains

☐ Concrete Structures

☐ Site Work

- ☐ Water/Services      ☐ Storm Sewer      ☐ Other  
☐ Sewer/Mains      ☐ Telephone/CTV  
☐ Bore/Directional Bore  
☐ Sewer/Services

Identified Risks/Exposures/Hazards: (Discuss with all crew members)

- ☐ Trench/Excavation Failure      ☐ Material Handling  
☐ Vehicle Traffic      ☐ Welding/Grinding/Cutting  
  
☐ Falling/Flying Objects      ☐ Hot/Cold  
☐ Slips/Trips/Falls      ☐ Heavy Equipment  
☐ Buried/Aerial Utilities      ☐ Other

Control Measures:

Recommendations/Comments/Concerns:

Incidents/Injuries/Safety or Near Miss Activities from Previous Work Day:

: If excavations are part of your daily AHA, this portion **MUST** be completed.

**Current Site Conditions (Circle as appropriate):**

Dry   Wet   Muddy   Frozen   Snow Covered   Other(describe) \_\_\_\_\_

**Soil Classifications (Circle as appropriate):**

A      B      C      Rock      Other Combination describe \_\_\_\_\_

**Method used to determine soil classification (Circle as appropriate):**

Manual: ☐ Penetrometer ☐ Thumb Test ☐ Ribbon Test ☐ Other: \_\_\_\_\_

Visual: Yes or No

- ☐ Ladder (3' above excavation)    ☐ Fire Extinguishers    ☐ First-Aid Kit  
☐ Wheel Chocks      ☐ Site Safety/Emergency Response Plan  
☐ Spoils (Surface encumbrances) 2' from excavation

**Confined Space:**

- ☐ Permit   ☐ Non-Permit   ☐ Air Monitor   ☐ Tripod/Winch   ☐ Ventilation

**Traffic Control Plan/Devices:** ☐ Yes ☐ No   Entity Responsible: \_\_\_\_\_

**Trench/Excavation Inspections (2/day minimum):** ☐ Person: \_\_\_\_\_

**Protective System Required:** ☐ Yes ☐ No

**Method of Protection:**

☐ Sloping/Benching ☐ Shoring ☐ Trench box ☐ Manhole box

**Trench Dimension:**

Length: \_\_\_\_\_ Width: \_\_\_\_\_ Top: \_\_\_\_\_ Bottom: \_\_\_\_\_ Depth: \_\_\_\_\_

Foreman Signature: \_\_\_\_\_

Crew Signature(s): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**OSHA STANDARDS AND CONTROL MEASURES:**

**1910 (4 feet) Subpart D and 1926 (6 feet) Subpart M, E (RT)**

100% fall protection when working near a leading edge that poses a fall risk of 4ft. or greater. Provide anchorage point to employees that meets the 5k lbs. requirement, only approved personal fall arrest equipment allowed, PFAS equipment inspected before use, discuss fall risk with employees during daily activity hazard analysis discussion, audit compliance with fall protection program to ensure proper protocols are followed.

**1910 Subpart D and 1926 Subpart X**

Inspect all ladders prior to each use. Ensure ladder extends past landing 3 feet. Ladders to be used on stable base, tied off/anchored. Maintain three points of contact.

**1910 Subpart D and 1926 Subpart L (RT, Q)**

Ensure scaffold has been inspected by a competent person before allowing others to use the scaffold daily. Use the three tag system (Green, Yellow, and Red) to identify hazards.

**1910 Subpart S and 1926 Subpart K, V (RT, Q)**

Inspect extension cords before use. All extension cords must be connected to GFCI protection. Test de-energized lines before disconnection to ensure line is dead.

**1926 Subpart P (RT, C, Q)**

Use appropriate protection such as sloping, or trench boxes for anything greater than 4'. Monitor air if deeper than 4'.

**1926 Subpart P (RT, C, Q)**

Monitor air if deeper than 4', Identify all underground utilities before digging.

**1926 Subpart, Q**

Respiratory protections required if dry cutting/drilling

**1910 Subpart Q and 1926 Subpart J**

Wear appropriate PPE; all hot work activity will require a Hot Work Permit before any welding, cutting takes place

Use mechanical equipment for all lifting activities which pose a sprain/strain risk, employee discussion on safe lifting techniques, warm up and stretch prior to engaging in physical lifting, employees urged to assist each other with all manual lifting activity.

**1910 Subpart F& N and 1926 Subpart H**

Material handling activity reviewed during Activity Hazard Analysis discussion, only qualified operators allowed on equipment. Equipment and rigging inspected daily before use and throughout the work day, qualified person to perform all rigging activity, trained signal person to direct the lifting activity, all hand signals to be used will be reviewed by the signal person and equipment operator, all loads to be lifted will be verified to the capacity of the lift equipment prior to lifting, unstable loads will not be moved.

**1926 Subpart O**

Operators must be trained and qualified. Qualification certification must be available upon request. Equipment must be inspected daily or each shift before use.

Provide protection for workers exposed to vehicle traffic.

**1910 Subpart P and 1926 Subpart I**

Use appropriate tool for task. Use GFCI's, double insulated tools and assured grounding. Tools used for overhead work will be tethered or otherwise protected from falling to lower level.

**1910 Subpart N and 1926 Subpart CC (RT, Q)**

Operator's card required / Inspect before use daily or each shift. Verify forklift is rated for the load to be lifted.

**1910 Subpart L and 1926 Subpart F**

Hot work permit required for all hot work activity, employees trained in fire protection and use of fire extinguishers.

**1910 Subpart E and 1926 Subpart C**

Conduct site specific training to communicate emergency actions in the event of emergencies requiring support. Post emergency contact information in location which is readily accessible to employees.

**1910 Subpart K and 1926 Subpart C, D (RT)**

Conduct site specific training to communicate appropriate contact numbers in the event of emergencies requiring support. Post emergency contact information in location which is readily accessible to employees.

**1910 Subpart Z (RT) RTK MN 182.5206**

All chemicals on site shall have an SDS; all chemicals to be used will be reviewed for special requirement for use to include personal protective equipment, hazards of exposure. All chemicals stored in proper container with label to communicate contents, flammable chemicals stored in proper storage container, fire extinguisher readily available.

**1910 Subpart J and 1926 Subpart G**

Administrative controls used as needed to communicate hazards and designated areas which may pose a safety risk to anyone on site, use of barricades will also include an information tag to alert others of the hazard and a contact name and phone number of the person who placed the barrier, all barricades will be maintained to ensure proper containment of area is maintained, signs will be posted in locations which make identification easy.

**1910 Subpart D, J and 1926 Subpart C**

Housekeeping requires constant attention by all employees on site, containers provided to dispose of all types of debris in the proper manner, containers disposed of in timely manner as needed, rest room facilities provided near work area, adequate rest rooms for manpower on site, rest rooms cleaned regularly, clean up supplies provided to allow employee clean up prior to consumption of foods etc. All debris created from project work stored in safe manner and remove as project progresses.

**1926 Subpart C, D**

Adequate illumination must be provided

**1910 Subpart G and 1926 Subpart D**

Use appropriate engineering or mechanical methods.

**1910 Subpart G and 1926 Subpart D**

Ensure emergency action plan integrates site emergency procedures for contractor personnel.

**1910 Subpart Z and 1926 Subpart Z**

Monitor any trench or excavation prior to entry. Any other enclosed areas where potential for carbon monoxide is suspected must also be monitored.

**1910 Subpart G and 1926 Subpart D, E (RT)**

Wear hearing protection during high noise activities above 85 DBA and double hearing protection above 100 DBA. Periodically perform noise surveys.

**1910 Subpart Z and 1926 Subpart D (RT)**

Wear appropriate respiratory protection as required by task..

**1910 Subpart Z (HazCom) and 1926 Subpart D (HazCom), E (RT)**

Respirator use requires a respiratory protection program and respirator users must have medical authorization and fit test for respirators being used.

**1910 Subpart I and 1926 Subpart E (RT)**

ANSI Z89 rated non-conductive hard hats only.

**1910 Subpart I and 1926 Subpart E (RT)**

Wear appropriate protection for the task. Minimum is ANSI Z87+ rated safety glasses with side shields.

**1910 Subpart I and 1926 Subpart E (RT)**

ANSI Z87+ rated face protection whenever potential for flying debris, chemical splash, chips or sparks are present for task. I.e., handling of hazardous chemicals, cutting, grinding, and welding.

**1910 Subpart I and 1926 Subpart E (RT)**

ANSI S3.19-1974 rated hearing protection during high noise activities (above 85 dba)

**1910 Subpart D, R and 1926 Subpart M (RT)**

ANSI Z359 rated fall protection equipment for activities whenever there is a fall hazard exposure of 4 feet or more.

**1910 Subpart I and 1926 Subpart E (RT)**

ASTM F2412-11/F2413-11 Non conductive safety toe boots providing ankle support.

**1910 Subpart I and 1926 Subpart E (RT, Q)**

NIOSH-approved respirator as required for task as needed or required

**1926 Subpart G**

Class 2 high visibility vest will be worn while in construction areas.



## **EXCAVATION PROCEDURES**

All Equipment will be inspected daily and any defected will be addressed prior to operation.

Trench boxes will be used if necessary, with high clearance arches on both sides and stacked to achieve appropriate height. The boxes will be stacked according to manufacturers' recommendations to achieve the appropriate height (all of the pits are different depths, up to-19'.) High-visibility orange fence and earth berms will be employed around the excavations to ensure that the workers for this project as well as others not relating to the project are safe and do not "wander" too closely to the open excavations.

### **Excavating and Trenching**

When the job-site requires trenching or excavating the supervisor (competent person) is required to perform additional functions that include the following:

- Schedule utility locates for the dig area and confirm that ***all*** locates have been done and are ***current***.
- Verify that all safety equipment is on site prior to job start up, including ladders (refer to ladder safety in this policy), air monitoring equipment, trench boxes, lifting and rigging devices, first-aid kits, fire extinguishers and must be in proper working condition.
- Confirm that all crewmembers have received the proper training for working in trenches and excavations.
- Conduct soil tests (1 visual and 1 manual test) daily and record this information on the daily excavation permit.
- Complete the daily AHA including a walk down with entire crew.
- Confirm that if required trench protection is needed that it be the proper size, shape and strength and that the tabulated data in available.
- Attend any and all required safety meetings and briefings required for specific customers or clients.
- Confirm that all surface encumbrances (spoil pile, equipment, materials, etc.) is kept at least 2' (feet) from the edge of all trenches and excavations.
- Have available materials to contain and clean up any spills (fuels, lubricants, coolants, etc.) That may occur on the jobsite.

### **Atmospheric Hazards**

Individuals must not perform work in an excavation that contains, or potentially contains a hazardous atmosphere. A hazardous atmosphere is one in which any of the following conditions exist:

- The atmosphere contains less than 19.5% or more than 23% oxygen.
- A combustible gas concentration is present in excess of 10% lower explosive limit (LEL).
- Concentrations of hazardous substances are present in excess of their acceptable airborne exposure concentration – airborne concentrations cannot exceed ACGIH and/or OSHA limits.

- If the excavation to be entered meets the criteria for a confined space (not designed for continuous occupancy, has limited means for entry and egress, and is large enough to enter and perform work) and may contain a hazardous atmosphere then entry must be performed in accordance with KRSC's Confined Space Program. If the potential for a hazardous atmosphere exists then atmospheric testing must be performed prior to and throughout entry into the excavation.

### **Water**

Rainwater or other run-off water must be directed away from excavations. Individuals must not enter an excavation that has accumulated more than a few minor puddles of water. If water begins to significantly accumulate within an excavation, then all individuals must exit the excavation and take measures to eliminate or adequately control water accumulation must be implemented prior to subsequent entry.

### **Trench Box (Shield System) Safety**

KRSC policy regarding trench box (shield system) safety is covered in the Personnel and Field Operations Manual "The Book" in the section, under the heading "Excavating and Trenching. Please review this policy to refresh your understanding.

### **Installation and removal of support**

Members of support systems shall be securely connected together to prevent sliding, falling, kick outs, or other potential hazards. Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system.

Individual members of support systems shall not be subjected to loads exceeding those, which the members were designed to support. Before temporary removal of individual support members begins, additional precautions shall be taken as directed by the Foreman/Project Manager to ensure the safety of employees. These precautions could include, for example, the installation other structural members to carry the loads imposed on the support system.

Removal of support systems shall begin at, and progress from, the bottom of the excavation. Members shall be released slowly. If there is any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation the work shall be halted until the Foreman/Project Manager can examine it. Backfilling shall progress together with the removal of support systems from excavations. At no time shall the trench box be placed in a freestanding position on the surface except in its most stable position. The Foreman/Project Manager will determine that position. In most cases, this means that the box must be laid on its side. If the box is determined to be unstable and a possibility exists that it might tip over, then the box must be supported. This is to protect our employees, as well as others in the construction area, from injury should the box fall?

### **MAXIMUM ALLOWABLE SLOPES**

SOIL OR ROCK TYPE MAXIMUM ALLOWABLE SLOPES (H:V)(1) FOR EXCAVATIONS LESS THAN 20 FEET DEEP(3)

STABLE ROCK  
TYPE A (2)  
TYPE B  
TYPE C  
VERTICAL (90°)  
3/4:1 (53°)  
1:1 (45°)  
1 ½:1 (34°)

**Excavations Made in Type A Soil**

1. All simple slope excavation 20 feet or less in depth shall have a maximum allowable slope of ¾:1.

**SIMPLE SLOPE – GENERAL**

Exception: Simple slope excavations which are open 24 hours or less (short term) and which are 12 feet or less in depth shall have a maximum allowable slope of ½:1.

**SIMPLE SLOPE -- SHORT TERM**

2. All simple slope excavation 20 feet or less in depth shall have a maximum allowable slope of ¾:1. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of ¾ to 1 and maximum bench dimensions as follows:

**SIMPLE BENCH**

**MULTIPLE BENCH**

3. All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side of 3½ feet.

**UNSUPPORTED VERTICALLY SIDED LOWER PORTION -- MAXIMUM 8 FEET IN DEPTH**

All excavations more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions shall have a maximum allowable slope of 1:1 and a maximum vertical side of 3½ feet.

**UNSUPPORTED VERTICALLY SIDED LOWER PORTION -- MAXIMUM 12 FEET IN DEPTH**

All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of ¾:1. The support or shield system must extend at least 18 inches above the top of the vertical side.

**SUPPORTED OR SHIELDED VERTICALLY SIDED LOWER PORTION**

**Excavations Made in Type B Soil**

1. All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side of 3½ feet. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1.

**SIMPLE SLOPE**

2. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of

1:1 and maximum bench dimensions as follows:

3. All excavations 20 feet or less in depth which have vertically sided lower portions shall be

shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1:1.

VERTICALLY SIDED LOWER PORTION  
MULTIPLE BENCH  
SINGLE BENCH

**Excavations Made in Type C Soil**

1. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1½:1.

**SIMPLE SLOPE**

2. All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1½:1.

**VERTICAL SIDED LOWER PORTION**

**Ladders and Walkways**

- Excavations 4-feet or more in depth must be provided with a means for individuals to easily enter and exit the excavation, such as but not limited to a ladder or sloped edge.
- Spacing between ladders (or other means of egress) must be in such a manner that a worker does not have to travel more than 25-feet laterally to the nearest means of egress once inside the excavation.
- Ladders must extend 3 feet above the top of the excavation and must be secured when 10 feet or more in length.
- Ladders must be placed within trench protection while employees are working in excavations and shall only be used for the intended purpose.
- Ladder rungs, cleats, or steps must be parallel, level, and uniformly spaced when the ladder is in position for use. Rungs must be spaced between 10 and 14 inches apart.
- Self-supporting (foldout) and non-self-supporting (leaning) portable ladders must be able to support at least four times the maximum intended load, except extra-heavy-duty metal or plastic ladders, which must be able to sustain 3.3 times the maximum intended load.
- Non-self-supporting ladders, which must lean against a wall or other support, are to be positioned at such an angle that the horizontal distance from the top support to the foot of the ladder is about 1/4 the working length of the ladder.
- Ladders must be inspected prior to each use. Do not use weakened, broken, or otherwise defective ladders. Remove damaged or broken ladders from jobsite.
- Do not use metal ladders near electrical circuits or energized lines.
- Walkways used to cross trenches and excavations must be inspected prior to use. Walkways must have the proper handrails, mid rails and toe boards. Walkways must be secured to prevent any movement.

**Boring and Whole Hog Use**

- Be aware of shallow sewer laterals.
- Know the location of the hog at all times by marking the Hole Hog hose.

- Open a hole over an existing utility when: telephone duct, large telephone cable, duct, sewer, or any other facility is in line with the bore shot.
- Be alert as the Hole Hog approaches the utility that has been exposed.
- If the Hole Hog stops moving shut it off immediately.
- If the facility is, or should be, in the way of the Hole Hog, back out the Hole Hog and begin again at a different level or location.
- Also refer to Directional and Horizontal Bore Practices.

### **Fire Protection and Prevention**

- All field employees will be trained on the general principles of fire extinguisher use and the hazards involved in early stage fire fighting. Training will be conducted prior to initial assignment and at least annually thereafter
- Be aware of fire hazards in the work area. Know how to effectively protect against and control fires.
- Know location of fire fighting equipment and how to use this equipment.
- Be sure you have the proper extinguisher and it is charged and has a current inspection tag. Fire extinguishers will be visually inspected on a monthly basis as well as receive an annual maintenance check
- Return used, damaged or expired extinguishers to the safety department for recharging and inspection after every use.
- Do not permit accumulation of combustible materials in work areas.
- Store combustibles in safe containers and areas.
- Store flammable liquids in labeled and approved **METAL** containers.
- Notify local fire authorities about your construction activities.
- Discuss fire emergencies.

### **OUTSIDE CONTRACTORS**

Company personnel, other contractor personnel and operator personnel working at a common job site will inform each other of their respective lockout or tagout procedures. All affected employees of the company will be apprised of the other parties' energy control procedures, restrictions and prohibitions.

### **GROUP LOCKOUT OR TAGOUT**

When servicing or maintenance of equipment or machinery or performance of work on a job site is performed by more than one employee, a procedure must be utilized to afford each employee a level of protection equivalent to that provided by personal lockout or tagout. Group requirements shall include, but are not limited to, the following:

Primary responsibility shall be vested in one authorized employee for a number of employees under a group program with one employee having an operations lock.

The authorized employee must ascertain the exposure level of individual group members.