

PROJECT MANUAL

HAYDEN SUBSTATION

for the

AMISTAD FIRE DISTRICT

in

UNION COUNTY, NEW MEXICO

May 17, 2021

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REQUEST FOR BIDS
HAYDEN SUBSTATION
UNION COUNTY, NEW MEXICO

May 17, 2021

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Sealed bids will be received from licensed General Contractors by the Union County Commission until June 3, 2021 at 2:00pm MDT for a contract to construct a manufactured steel parking building in Hayden NM. A bid security will be required as described in the project manual. Submit sealed bids to the Union County Manager's office, P.O. Box 430, 100 Court Street, Clayton, NM 88415 as described in the project manual. Bids submitted by fax, email, text, or other electronic means will not be considered.

Plans and specifications in digital format are available at no cost from the architect. Addenda will be issued to parties that received full printed or digital plan sets from the architect. Submit questions to the office of the architect, Alpha Design, P.O. Box 241, Raton, NM 87740, phone 575-445-4235, email alphadesign@bacavalley.com.

PROJECT SUMMARY

Construct a 2000 square foot manufactured steel building. The building will be insulated and heated. Contractor will provide all materials, accessories, tools, and labor, except where noted.

CONTRACTOR QUALIFICATIONS

The awarded prime contractor will be a licensed general contractor and will contract with other licensed trades as needed to complete the project. Bidding contractors will submit a copy of their license in the sealed envelope with the bid form.

BASIS OF AWARD

The contract will be awarded to the qualified bidder submitting the lowest base bid adjusted for the Contractor Preference described below. The Owner reserves the right to accept or reject any bid for any reason and to act in the best interest of the Owner.

SCHEDULE

The Fire Department, County Manager, and County Commission plan to review the bids submitted within seven days after bids are due, then could award the contract for construction. A Notice Of Award will be provided to the awarded bidder and a contract will be prepared and signed. The County Commission may deviate from this projected schedule up to the time of the Award at its option.

Due to funding requirements, after the contract is signed the owner will apply for a loan for the construction. After the loan is approved, or after other funding is arranged, then the Notice To Proceed will be issued to the awarded contractor. The Notice To Proceed is not planned be issued till September or October of 2021. If the Notice To Proceed is issued before September 2021 then the date of commencement will be at a date mutually agreed to by the owner and the contractor no later than October 31, 2021. If the Notice To Proceed is not issued till after October 2021 then the owner and the contractor will each have the option to terminate the agreement. The owner maintains the right to terminate the contract at any time before the Notice To Proceed is issued.

The date that the Notice To Proceed is issued will be the Date of Commencement. The contract time will be 150 calendar days beginning on the Date of Commencement. The contract time will include the time it takes for the general contractor's building shell manufacturer to provide shop drawings, for the architect to review the shop drawings, for the manufacturer to revise the drawings if needed, for the architect to revise the foundation design if needed, and for the State building permit to be applied for and received. Time extensions will not be issued due to the building shell manufacturer being slow to produce shop drawings or slow to provide manufactured products.

Liquidated damages of \$250 per calendar day will be deducted from the payments to the Contractor for each calendar day that work is not substantially complete after the allowed 150 days specified above. Time extensions will be allowed for poor weather conditions that make exterior work not reasonably feasible when agreed by both the contractor and the owner. The contractor will keep an ongoing log of days when weather conditions prohibit exterior work.

No additional or bonus payments will be made for early completion or for weather delays.

It is understood that material and other prices may fluctuate between the time that bids are submitted and the date of the Notice To Proceed. No additional payments will be made to the contractor due to fluctuating prices encountered by the contractor.

RESIDENT CONTRACTOR PREFERENCE and RESIDENT VETERAN CONTRACTOR PREFERENCE

As required by the New Mexico Administrative Code (NMAC) a preference will be given to resident contractors and veteran resident contractors that submit a Resident Contractor Certificate or a Resident Veteran Contractor Certificate issued by NM Taxation and Revenue Department with the sealed bid.

Certificates issued by NM Taxation and Revenue Dept. allow a 5 or 10% price preference against competing bids. See NMAC Article 1, Section 13-4-2 for additional information. Apply for certificates through the NM Taxation and Revenue Dept. Allow sufficient time for the bidder's Certified Public Accountant to prepare the documents required for submittal to the NM Taxation and Revenue Dept. and time for the Taxation and Revenue Department to process the application. Applicable certificates have an expiration date. Certificates issued by the State Procurement Office or other State agencies do not apply.

BID BOND

A bid bond will be submitted by the bidder inside the sealed bid envelope. The bid bond will be issued by a surety company licensed by the State of New Mexico and will be for at least 5% of the bid amount. A cashier's check from a State or Federal Bank for at least 5% of the bid amount is also an acceptable form of bid bond. Bid bonds from the bidders submitting the three lowest bids will be kept as insurance that the bids are genuine and binding. Bid bonds in the form of cashier's checks will be returned to the bidders after a contract is signed or after 30 days whichever comes first.

LABOR AND MATERIAL PAYMENT BONDS

A 100% Performance Bond and a 100% Payment Bond will be required from the awarded bidder after award notification. The two separate bonds will be issued by a surety company licensed in the State of New Mexico.

WAGE RATES and DEPT. OF WORKFORCE SOLUTIONS REGISTRATION

A State Wage Rate Decision is issued as part of this project manual.

Any bidder or subcontractor with a proposed contract or subcontract of \$60,000 or more is required by the NM Department of Workforce Solutions to be registered with the Department BEFORE submitting a bid. Work experience on prior projects with an applicable State wage rate does not qualify as being registered with the Department. Registration requires a fee paid to the Department of Workforce

Solutions every two years to keep registration active. Prospective bidders and subcontractors are urged to apply early for NM Dept. of Workforce Solutions registration. Further information is available online at <http://www.dws.state.nm.us/LaborRelations/LaborInformation/PublicWorks> .

SITE INSPECTION

Bidders will inspect the project site and existing facility prior to submitting a bid and be familiar with the existing conditions. Failure of the bidder to fully inspect the project site will not be grounds for a change order whether or not the existing conditions are identified in the plans and this project manual.

CONTRACT

The form of agreement between the Contractor and the Owner will be AIA Document A105. A copy is available for viewing at the office of the architect.

GENERAL INSURANCE

The Contractor will carry liability insurance, worker's compensation, and other insurance policies required by law. Coverage for each will be at least \$1 million aggregate. The awarded contractor will provide the County with a Certificate of Insurance issued by the insurance provider.

BUILDERS RISK INSURANCE

The builder will provide a Builder's Risk insurance policy for the construction project naming Union County as the beneficiary. A copy of the policy will be provided to the owner before construction begins.

WARRANTY

The Contractor will provide a 1 year labor warranty.

PERMITS

Contractor will obtain and pay for building permits through NM Construction Industries Division.

PLAN SET PRINTS

The Contractor will print the plan sets including project manuals as needed for bidding, permitting, construction, and other uses by the contractor. Prints will not be provided at no cost by the owner or architect.

INVOICE AND PAYMENT

The Contractor can submit an invoice at approximately 30 day intervals for work completed and materials securely stored on site. Payments will be made within the following 30 calendar days.

USE OF SITE

Construction and storage will be kept to the immediate area on site.

A water hydrant located a few hundred feet south of the project site with potable water is available for construction use. The hydrant is on private property so builders are asked to minimize vehicle traffic on the private property and minimize leaving behind residue from cleaning equipment near the hydrant.

Power for construction purposes will be provided by the contractor, not by the owner. The costs paid to Southwestern Electric Coop of transferring the electric meter responsibility from the contractor to the owner after substantial completion of the project will be paid by the owner.

Contractor to provide portable toilets on site.

Contractor to provide temporary barriers and take steps as needed to protect the public from construction hazards on and near the construction site.

The owner will not be responsible for the contractor's items that are lost or stolen from the site.

WASTE

Contractor will keep debris from accumulating and will dispose of waste legally. Do not allow construction waste to blow off site. Do not use public dumpsters to dispose of construction waste.

SUBMITTALS

Before purchasing materials the contractor is to submit material and product information to the architect for products where noted in this project manual and for any materials proposed for substitutions. Architect will review and comment.

Submittals will clearly indicate the product model or system proposed for use. Submit color charts when multiple colors are available for selection. Provide submittals on the following products:

- Manufactured buildings. Submit shop drawings.
- Hollow metal doors and hardware.
- Sectional doors.
- Sectional door openers.
- Paints and coatings with color fan.
- Heating unit.
- Light and power fixtures.
- Other products as requested for review by the contractor, owner, or architect.

CHANGE ORDERS

If there is one or more significant changes to the scope of work requiring a change order then the cost of the change order, whether positive or negative, will reflect the cost of materials, subcontractor's labor, direct salaries and wages of on-site hands-on labor, rental equipment if required, and a 20% markup. The general contractors administrative costs, superintendent hours, vehicles, per diem, travel, lodging, meals, permit, insurance, bonds, overhead, profit and any other costs will be paid from the 20% markup.

Documents to verify the cost of the change order will be provided by the general contractor if requested. The owner and architect will be given full access to interview the workers, subcontractors, and suppliers to discuss how costs are arrived at.

Adjustments to the contract time will only be made if additional work requires more time to complete the overall project. If added work can be accomplished without significantly affecting the schedule of the work already under contract then the contract time won't be extended.

Submitting a bid on this project indicates that the general contractor agrees to these terms for change orders.

OWNERS FORCES

The owner may choose to add work on site during construction through the owner's forces. If so then the contractor and subcontractors will cooperate with the owner's forces to coordinate access, schedule, cleanup, and related issues at no additional cost.

ALL MATERIALS

All labor, materials, and systems will be provided and installed by Contractor unless noted otherwise.

EARTHWORK

The owner has prepared the building pad so that no imported fill is required from the contractor. The contractor will excavate for the new foundation and compact the top 6 inches of fill under the foundation and building pad.

If the owner decides to test the existing soils on site or test the compaction during construction then the owner will contract and pay for the testing with scheduling cooperation from the contractor.

If excess fill is encountered then the contractor will dispose of the fill on site at the direction of County officials. No exporting of fill from the site is required.

CONCRETE

See technical specification in this project manual.

FOUNDATION DESIGN

The foundation design in the construction plans issued by the owner and architect are based on assumed structural steel designs. When the general contractor submits the structural steel shop drawings to the architect for review the architect will verify that the foundation design is appropriate for the structural steel design. If needed the architect will revise the foundation design then return the shop drawings and revised foundation plan to the general contractor. The contractor will not be entitled to additional payments resulting from a revised foundation design.

INSULATION

The building shell insulation system will include white vinyl faced batt insulation with a maximum U-value for the envelope (insulation combined with framing and sheathing) of U-0.35 at the roof and maximum U-.052 at walls. The batt insulation and liner system equal to Simple Saver shown on the plans meets these requirements. If other batt insulation and vinyl facing system options are to be considered then the contractor will submit to the architect valid literature indicating the U-values of the proposed systems determined by independent third party laboratory testing or recognized ASHRAE standards. The architect will send the submitter a written review of any alternative systems submitted if the submittal is received by the architect within three business days before bids are due. Failure of the insulation contractor or general contractor to gain approval of an insulation system equal to Simple Saver before the general contractor's bids are submitted doesn't necessarily mean that an alternative system will be considered equal by the owner and architect.

Insulation systems will not include thermal blocks between the roof frame and the roofing, and will not include greater than R-11 batt insulation between the building frame and the roofing or siding.

Sprayed polyurethane foam will not be used as the primary insulation material in walls and roof.

WALK-THRU DOORS and HARDWARE

New exterior door and frame will be hollow metal nominal sized 36" x 84" x 1-3/4" equal to Southwestern Hollow Metal or Rocky Mountain Hollow Metal. Paint.

Exterior door hardware will be wireless battery powered Schlage flex lock with camelot trim and accent lever. Commercial grade hinges, threshold, sweep, weatherstripping, 10 or 12" kick plate.

No door closers required. Provide commercial exterior grade floor or wall stop.

All hardware will have a brushed chrome or nickel finish.

Submit door & frame, and door hardware literature to architect for review and approval.

SECTIONAL DOORS

Sectional truck door will be insulated steel, minimum thickness 27 ga. interior and exterior panels, minimum R-value 14 (U.07) with thermal break between inside and outside steel skins. Manufacturer's standard white color. Products be by Wayne Dalton, Overhead Door, or equal.

Each sectional door will have a new wall mounted 1/2 horsepower medium duty hoist operator. Door operator will be hard wired to a 3 button operator (up, down, stop) at the interior. Provide at least two wireless remote operators for each door. Provide electric eyes and safety devices as required by building codes. No battery backup required. Install with emergency release and manual chain operation for use during power outages. Openers equal to Liftmaster MH model.

PAINTS AND COATINGS

Paint and coatings products will be Clark & Kensington, Sherwin Williams, or Benjamin Moore premium products. Products will be selected for each application and exposure. Prepare and applied as recommended by the product manufacturer. Apply as many coats as needed to achieve a uniform color and sheen. Colors to be identified by architect from color fan submitted. Sheen will be satin unless noted otherwise.

Submit coating literature to architect with each coating indicated.

Hollow metal door and frames, and sectional door trim/frame, 1 color.

Exterior bollard posts, 1 color.

Interior plywood, 1 color.

New concrete floor seal equal to Thompsons Water Seal, no grit. Clear, flat sheen.

CEILINGS

No ceiling required. Vinyl faced insulation and factory primed steel at the roof structure will be exposed to the interior.

METAL BUILDING SYSTEMS

See technical specification in this project manual.

PLUMBING

No water or sewer plumbing is required.

See HVAC plans for gas piping.

FIRE SUPPRESSION and FIRE ALARM

None required. Portable fire extinguishers provided and installed by owner.

HVAC

See plan set for new suspended propane heaters.

POWER AND LIGHTING

See power and lighting plan.

DATA AND SECURITY SYSTEMS

none



LABOR RELATIONS DIVISION

401 Broadway NE
Albuquerque, NM 87102
Phone: 505-841-4400
Fax: 505-841-4424

226 South Alameda Blvd
Las Cruces, NM 88005
Phone: 575-524-6195
Fax: 575-524-6194

WWW.DWS.STATE.NM.US

1596 Pacheco St, Suite 103
Santa Fe, NM 87505
Phone: 505-827-6817
Fax: 505-827-9676

Wage Decision Approval Summary

1) Project Title: Hayden Substation
Requested Date: 05/07/2021
Approved Date: 05/11/2021
Approved Wage Decision Number: UN-21-0975-B

Wage Decision Expiration Date for Bids: 09/08/2021

2) Physical Location of Jobsite for Project:
Job Site Address: 692 Heimann Road
Job Site City: Amistad
Job Site County: Union

3) Contracting Agency Name (Department or Bureau): County of Union
Contracting Agency Contact's Name: Angie Gonzales
Contracting Agency Contact's Phone: (575) 374-8896 Ext.

4) Estimated Contract Award Date: 06/08/2021

5) Estimated total project cost: \$260,000.00
a. Are any federal funds involved?: No
b. Does this project involve a building?: Yes - Manufactured insulated metal shell for parking two fire trucks. Concrete slab on grade floor. No interior partitions. General lighting and power. Heated by propane. No plumbing.
c. Is this part of a larger plan for construction on or appurtenant to the property that is subject to this project?: No
d. Are there any other Public Works Wage Decisions related to this project?: No
e. What is the ultimate purpose or functional use of the construction once it is completed?: parking structure

6) Classifications of Construction:

Classification Type and Cost Total	Description
General Building (B) Cost: \$260,000.00	Manufactured insulated metal shell for parking fire trucks. Concrete slab on grade floor. No interior partitions. General lighting and power. Heated by propane. No plumbing.



TYPE "B" – GENERAL BUILDING

Please refer to the base and fringe rate columns that pertain to the date your wage decision was approved. For instance, if your wage decision was approved on April 1, 2021, you will use the rates in the first two columns. If your wage decision was approved on May 10, 2021, use the third and fourth columns.

Trade Classification	Effective January 1, 2021 Through May 4, 2021		Effective May 5, 2021		Effective January 1, 2020 Through December 31, 2021
	Base Rate	Fringe Rate	Base Rate	Fringe Rate	Apprent iceship
Asbestos Workers/Heat and Frost insulators	33.01	12.06	32.26	12.06	0.60
Asbestos Workers/Heat and Frost insulators-Los Alamos County	35.44	12.06	34.69	12.06	0.60
Boilermaker/ blacksmith	34.97	28.85	34.97	28.85	0.60
Bricklayer/Block layer/Stonemason	24.97	9.50	24.46	8.81	0.60
Carpenter/Lather	25.63	11.74	24.63	11.24	0.60
Carpenter-Los Alamos County	28.37	13.44	27.80	13.19	0.60
Millwright/ pile driver	33.16	27.24	33.16	25.24	0.60
Cement Mason	21.07	10.33	21.07	10.33	0.60
Electricians-Outside Classifications- Zone 1					
Ground man	23.74	13.16	23.27	12.67	0.60
Equipment Operator	34.06	15.94	33.39	15.35	0.60
Lineman/Tech	40.07	17.57	39.28	16.91	0.60
Cable Splicer	44.08	18.65	43.21	17.95	0.60
Electricians-Outside Classification: Zone 2					
Ground man	23.74	13.16	23.27	12.67	0.60



Equipment Operator	34.06	15.94	33.39	15.35	0.60
Lineman/ technician	40.07	17.57	39.28	16.91	0.60
Cable Splicer	44.08	18.65	43.21	17.95	0.60
Electricians-Outside Classifications: Los Alamos					
Ground man	24.42	13.34	23.94	12.85	0.60
Equipment Operator	35.04	16.21	34.35	15.60	0.60
Lineman/ Technician	41.22	17.88	40.41	17.21	0.60
Cable Splicer	45.34	18.99	44.45	18.28	0.60
Electricians-Inside Classifications: Zone 1					
Wireman/ low voltage technician	33.65	12.01	32.70	11.18	0.60
Cable Splicer	37.02	12.11	35.97	11.28	0.60
Electricians-Inside Classification: Zone 2					
Wireman/ low voltage technician	36.68	12.10	35.64	11.27	0.60
Cable Splicer	40.04	12.20	38.91	11.37	0.60
Electricians-Inside Classification: Zone 3					
Wireman/ low voltage technician	38.70	12.16	37.61	11.33	0.60
Cable Splicer	42.06	12.26	40.88	11.43	0.60
Electricians-Inside Classification: Zone 4					
Wireman/ low voltage technician	42.40	12.27	41.20	11.44	0.60
Cable Splicer	45.75	12.37	44.47	11.53	0.60
Electricians-Inside Classification: Los Alamos					
Wireman/ low voltage technician	38.70	14.09	37.61	13.21	0.60
Cable Splicer	42.06	14.36	40.88	13.47	0.60
Elevator Constructor	43.25	36.37	43.80	35.25	0.60

Elevator Constructor Helper	36.19	36.37	35.04	35.25	0.60
Glazier					
Journeyman/ Fabricator	20.50	6.20	20.25	5.35	0.60
Delivery Driver	9.00	5.35	9.00	5.35	0.60
Ironworker	27.35	17.49	27.00	15.75	0.60
Painter (Brush/Roller/Spray)	17.25	7.75	17.00	6.88	0.60
Paper Hanger	17.25	7.75	17.00	6.88	0.60
Drywall- Light Commercial & Residential					
Ames tool operator	25.63	7.60	25.08	7.10	0.60
Hand finisher/machine texture	24.63	7.60	24.08	7.10	0.60
Plasterer	23.56	9.39	23.17	8.99	0.60
Plumber/Pipefitter	31.52	12.90	30.76	11.62	0.60
Roofer	25.74	7.97	25.23	7.97	0.60
Sheet metal worker					
Zone 1	33.38	17.64	31.03	17.26	.60
Zone 2 – Industrial	34.38	17.64	32.03	17.26	.60
Zone 3 – Los Alamos	35.38	17.64	33.03	17.26	.60
Soft Floor Layer	20.30	8.10	19.94	7.70	0.60
Sprinkler Fitter	31.57	23.46	30.90	22.29	0.60
Tile Setter	24.46	8.81	24.46	8.81	0.60
Tile Setter Helper/Finisher	16.53	8.81	16.53	8.81	0.60
Laborers					
Group I- Unskilled and semi-skilled	18.25	7.12	17.50	6.27	0.60
Group II- Skilled	19.25	7.12	18.50	6.27	0.60
Group III- Specialty	21.50	7.12	20.75	6.27	0.60
Masonry Laborers					
Group I- Unskilled and Semi-Skilled	18.75	7.34	18.00	6.27	0.60



Group II- Skilled	20.50	7.34	19.75	6.27	0.60
Group III- Specialty	21.00	7.34	20.25	6.27	0.60
Reinforcing iron workers and post tension	24.75	7.12	24.00	6.27	0.60
Operators					
Group I	21.96	7.47	20.95	7.27	0.60
Group II	24.12	7.47	23.11	7.27	0.60
Group III	24.58	7.47	23.57	7.27	0.60
Group IV	25.02	7.47	24.01	7.27	0.60
Group V	25.21	7.47	24.20	7.27	0.60
Group VI	25.42	7.47	24.41	7.27	0.60
Group VII	25.53	7.47	24.52	7.27	0.60
Group VIII	28.58	7.47	27.56	7.27	0.60
Group IX	30.96	7.47	29.95	7.27	0.60
Group X	34.36	7.47	33.35	7.27	0.60
Truck Drivers					
Group I-VII	16.65	8.27	16.45	7.87	0.60
Group VIII	16.71	8.27	16.51	7.87	0.60
Group IX	18.65	8.27	18.45	7.87	0.60

NOTE: All contractors are required to pay SUBSISTENCE, ZONE AND INCENTIVE according to the particular trade. Details are located in a PDF attachment at WWW.DWS.STATE.NM.US. Search Labor Relations/Labor Information/Public Works/Prevailing Wage Rates.

For more information about the Subsistence, Zone, and Incentive Pay rates, or to file a wage claim, contact the Labor Relations Division at (505) 841-4400 or visit us online at www.dws.state.nm.us.

SECTION 03300 - CAST IN PLACE CONCRETE

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide all concrete, forms, accessories, earthwork, and related preparations shown or implied on the Drawings and specified herein.

1.02 SUBMITTALS

- A. Submit to the architect the proposed design mix. The mix will include quantities and sources of all aggregates, cement, fly ash, and admixtures to be used. Mix designs are to be prepared by a State certified testing laboratory regularly engaged in designing and testing concrete. Test results for mix designs to be used shall be within the past 24 months.
- B. Submit additional product information if requested by the owner or architect.

1.03 QUALITY ASSURANCE

- A. Comply with the following codes and standards except where more stringent requirements are shown or specified:
 - 1. American Concrete Institute (ACI) 301, "Specifications for Structural Concrete for Buildings"
 - 2. ACI 318, "Building Code Requirements for Reinforced Concrete."
 - 3. Concrete Reinforcing Steel Institute (CRSI) "Manual of Standard Practice"
- B. Slump and cylinder tests, if performed, will be performed and paid by the owner.

PART 2 - PRODUCTS

2.01 FORM MATERIAL

- A. Panel type materials to provide continuous straight smooth exposed surfaces. Furnish in the largest practicable sizes to minimize the number of joints and to conform to the joint system shown.
 - 1. Use overlaid plywood complying with US Product Standard PS-1 "BB A-C or B-B High Density Overlaid Concrete Form" Class 1.
 - 2. Use plywood complying with US product Standard PS-1 "B-B (Concrete Form) Plywood" Class 1 exterior grade or better, mill-oiled and edge sealed, with each piece bearing legible inspection trademark.
- B. Forms for unexposed finish concrete: Plywood, lumber, metal, or other acceptable material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Form release agent: Provide commercial formulation form release agent with a maximum of 350 g/l volatile organic compounds (VOC) that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
- D. Form Ties: Factory fabricated adjustable length, removable or snap off metal form ties designed to prevent form deflection and to prevent spalling of concrete upon removal. Provide units that will leave no metal closer than 1.5 inches to the plane of the exposed concrete surface.
 - 1. Provide conical tie inserts that when removed will leave holes no larger than 1 inch in diameter on the concrete surface.

2.02 REINFORCING MATERIAL

- A. Reinforcing Bars: ASTM A615, Grade 40 for No. 3 and No. 4 deformed bars. Grade 60 for deformed bars larger in diameter than No. 4.
- B. Epoxy coated reinforcing bars: ASTM A775.

- C. Steel Wire: ASTM A82 plain cold drawn steel.
- D. Welded Wire Fabric: ASTM A185 welded steel wire fabric.
- E. Supports for Reinforcement: Bolsters, chairs, spacers, and other devices for spacing , supporting, and fastening reinforcing bars and welded wire fabric in place. Use wire bar type supports complying with CRSI specifications.
 1. For slab on grade, use supports with sand plates or horizontal runners where base material will not support chair legs.
 2. For all concrete surfaces where legs of supports are in contact with forms, provide supports with legs that are protected by plastic (CRSI class 1) or stainless steel (CRSI class 2).

2.03 CONCRETE MATERIAL

- A. Portland Cement: ASTM C150, Type 1. Use one brand of cement throughout project unless otherwise acceptable to the architect.
- B. Fly Ash: ASTM C618, Type F.
- C. Normal Weight Aggregates: ASTM C33 and as specified. Provide aggregates from a single source for exposed concrete. For exposed exterior surfaces do not use fine or coarse aggregates that contain substances that cause spalling. Local aggregates not complying with ASTM C33 that have been shown to produce concrete of adequate strength and durability by special tests or actual service may be used when acceptable to the architect.
- D. Water: potable.
- E. Admixtures: Provide concrete admixtures that contain not more than 0.1% chloride ions.
- F. Air Entraining Admixture: ASTM C260 certified by manufacturer to be compatible with other required admixtures.
- G. Water Reducing Admixture: ASTM C494, Type A.
- H. High Range Water Reducing Admixture: ASTM C494, type F or type G.
- I. Water Reducing Accelerating Admixture: ASTM C494, type C.
- J. Water Reducing Retarding Admixture: ASTM C494, type D.
- K. Corrosion Inhibitor Admixture: Calcium nitrate based corrosion inhibitor.

2.04 RELATED MATERIALS

- A. Reglets: Where sheet flashing or bituminous membranes are terminated in reglets provide reglets of not less than 0.0217 inch thick (26 ga) galvanized sheet steel. Fill reglet or cover face opening to prevent intrusion of concrete or debris.
- B. Waterstops: Provide centerbulb type, serrated waterstops at construction joints and other joints as indicated. Size to suit joints.
- C. Polyvinyl Chloride Waterstops: Corps of Engineers CRD-C 572.
- D. Vapor Retarder: Provide vapor retarder that is resistant to deterioration when tested in accordance to ASTM E154. Polyethylene sheet not less than 8 mils thick.

- E. Absorptive Cover: Burlap cloth made from jute or kenaf, weighing approximately 9 oz. per sq. yd. complying with MSHTa M182, class 2.
- F. Moisture retaining cover complying with ATM C171, polyethylene coated burlap.
- G. Liquid Membrane forming curing compound complying with ASTM C309 Type 1, class A. Moisture loss not more than 0.55 kg/sq meter when applied at 200 sq. ft. / gal.
- H. Water based acrylic membrane curing compound: ASTM C309, type 1, class B, material that has a maximum volatile organic compound (Va C) rating of 350 g/L.
- I. Bonding Agent: Polyvinyl acetate or acrylic base.
- J. Epoxy Adhesive: ASTM C881, two component material suitable for use on dry or damp surfaces. Provide material type grade and class to suit project requirements.
- K. Grout: An expansive grout shall be used in all areas where a grout or leveling course is required by construction. The grout shall be composed of selected silica sands, modified cements, pozzolanic, plasticizing and water reducing admixtures. The grout will be entirely non metallic and shall be suitable for both interior and exterior applications. The grout will be a one step product delivered to the job site in bags containing a premixed formulation requiring only the addition of water prior to use. Grout will be stored, handled, mixed, and placed as recommended by the manufacturer. The physical properties of the grout will be:
 1. Initial Set (ASTM C191) 45 minutes.
 2. Final Set (ASTM C191) 180 minutes.
 3. Compressive Strength (ASTM C109)
 - a. 24 hours: 5000 psi
 - b. 3 days: 6000 psi
 - c. 7 days: 8000 psi
 - d. 28 days: 10,000 psi
 4. Volume Change (ASTM C827)
 - a. 24 hours: + 0.032%
 - b. 3 days: + 0.033%
 - c. 7 days: + 0.035%
 - d. 28 days: + 0.035%
 5. Tensile Strength
 - a. 24 hours: 400 psi
 - b. 3 days: 460 psi
 - c. 7 days: 550 psi
 - d. 28 days: 600 psi

2.05 PROPORTIONING AND DESIGNING MIXES

- A. Design mixes to provide normal weight concrete with the following properties.

CLASS	28 DAY STRENGTH	W/C RATIO	AIR ENTRAINMENT	FLY ASH
A	4000 psi	0.43	6%	15%
B	3500 psi	0.50	optional	optional
C	3000 psi	0.56	optional at interior heated spaces	optional
D	1500 psi	0.60	optional	optional

- B. Unless noted otherwise elsewhere use class C concrete as noted above in all foundations including footing, grade beams, and cast in place piles, and use Class C concrete as noted above in all concrete slabs on grade.

- C. Slump Limits: Proportion and design mixes to result in concrete slump at point of placement as follows:
1. Ramps, slabs that are not poured with a perimeter foundation, and sloping surfaces: Not more than 4 inches.
 2. Reinforced foundation systems (including monolithic slabs that are poured with a thickened edge perimeter foundation): Not less than 1 inch and not more than 3 inches.
 3. Concrete containing high range water reducing admixture (superplasticizer) not more than 8 inches after adding admixture to site verified 2-3 inch slump concrete.
 4. Other concrete not more than 4 inches.

2.06 ADMIXTURES

- A. Use water reducing admixture or high range water reducing admixture (superplasticizer) in concrete as required for placement and workability.
- B. Use accelerating admixture in concrete slabs placed at ambient temperatures below 50 degrees.
- C. Use high range water reducing admixture in all Class A concrete. The admixture may be omitted in sidewalks.
- D. Use air entraining admixture in exterior exposed concrete unless otherwise noted. Add air entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having total air content with a tolerance of +/- 1.5% within the following limits:
1. Concrete structures and slabs exposed to freezing and thawing, deicer chemicals, or hydraulic pressure. 6% for severe exposure and 3/4" to 1 inch maximum aggregate, and 7% for severe exposure and 1/2" maximum aggregate.
- E. Use admixtures for water reduction and set accelerating or retarding in strict compliance with manufacturer's directions.

2.07 CONCRETE MIXING

- A. Job-site mixing will be done in appropriate drum type batch machine mixer. For mixers of 1 cu. yd. or smaller capacity continue mixing at least 1.5 minutes but not more than 5 minutes after ingredients are in mixer before any part of batch is released. For mixers of capacity larger than 1 cu. yd. increase minimum 1.5 minutes by 15 seconds for each additional cu. yd. Provide batch ticket for each batch discharged and used in the work indicating project identification name, date, mix type, mix time, quantity, and amount of water introduced.
- B. Ready Mixed Concrete will comply with the requirements of ASTM C94 and as specified. When air temperature is between 85 and 90 degrees reduce the mixing and delivery time from 1.5 hours to 75 minutes and when air temperature is 90 degrees or more reduce the mixing and delivery time to 1 hour. Provide a batch ticket for each batch discharged and used in the work indicating project name, date, mix type, mix time, quantity, and amount of water introduced.

PART 3 - EXECUTION

3.01 GENERAL

- A. Coordinate installation of joint materials, vapor barriers, and other related materials with placement of forms and reinforcing.

3.02 FORMS

- A. Fabricate forms for easy removal without hammering or prying against concrete surfaces.
- B. Provide openings in concrete formwork to accommodate work of other trades.
- C. Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris before placing concrete.

3.03 PLACING REINFORCEMENT

- A. Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars" for details and methods of reinforcement placement and supports as specified.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other materials that reduce bond with concrete.
- C. Install reinforcing as shown in the plans and noted elsewhere.
- D. Lap welded wire fabric at least one mesh space and lace splices with wire.

3.04 JOINTS

- A. Construction Joints: Locate and install construction joints so they do not impair the strength or appearance of the structure as acceptable to the architect.
- B. Provide keyways at least 1.5 inches deep into construction joints in walls and slabs and between walls and footings. Bulkheads designed and accepted for this purpose may be used for slabs.
- C. Place construction joints perpendicular to the main reinforcement. Continue reinforcement across construction joints except as indicated otherwise. Do not continue reinforcement through sides of
- D. Use bonding agent on existing concrete surfaces that will be joined with fresh concrete.
- E. Provide waterstops in construction joints as indicated. Install waterstops to form continuous diaphragm in each joint. All joints shall be heat welded with hot iron. Support and protect exposed waterstops during progress of work. Field fabricate joints in waterstops according to manufacturer's printed instructions.
- F. Construct contraction (control) joints in slab on grade to form panel patterns as shown. For saw cut joints use 1/8 inch wide x 1/4 of the slab depth. For inserts use inserts 1/4 inch wide x 1/4 of the slab depth. For keylock type joints use continuous galvanized keyed strips the same depth as the slab and leave in place.
- G. If joint pattern is not shown then place construction joints not more than 10' on center in either direction. Place 1/2 inch expansion joints not more than 45 feet apart in sidewalks.

3.05 CONCRETE PLACEMENT

- A. Inspect formwork, reinforcing steel, embedded items, and other details before placement. Notify other trades to permit installation of their work.
- B. Comply with ACI 304 "Guide for Measuring, Mixing, Transporting, and Placing Concrete" and as specified.
- C. Deposit concrete continuously in layers of such thickness that no new concrete will be placed on concrete that has hardened sufficiently to cause seams or planes of weakness. If a section cannot be placed continuously then provide construction joints as specified. Deposit concrete to avoid segregation at its final location.
- D. Deposit concrete in forms in horizontal layers no deeper than 24 inches and in a manner to avoid inclined construction joints. Where placement consists of several layers place each layer while preceding layer is still plastic to avoid cold joints.
 - 1. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping. Use equipment and procedures for consolidation of concrete complying with AIC 309.

2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniform spaced locations no farther than the visible effectiveness of the machine. Place vibrators to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix to segregate.
- E. Deposit and consolidate concrete slabs in a continuous operation within limits of the construction joints until completing placement of a panel or section.
1. Consolidate concrete during placement operations so that concrete is thoroughly worked around reinforcement, other embedded items, and into corners.
 2. Bring slab surface to correct level with a straightedge and strike off. Use bull floats or darbies to smooth surface free of humps or hollows. Do not disturb slab surfaces prior to beginning finishing operations.
 3. Maintain reinforcing in proper position on chairs during concrete placement.
- F. For cold weather placement comply with provisions of ACI 306. Protect concrete from freezing.
- G. When air temperature has fallen to or expected to fall below 40 degrees uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 degrees and not more than 80.
- H. When hot weather conditions exist that would impair quality and strength of concrete place concrete complying with ACI 305 and as specified.

3.06 HORIZONTAL SLAB FINISHES

- A. Apply a troweled finish to surfaced exposed to view and surfaces to be covered with resilient flooring, carpet, tile, paint, or similar finishing systems. After floating begin first trowel finish operation using a power driven trowel. Begin final troweling when surface produces a ringing sound as trowel is moved over the surface. Consolidate concrete surface by final hand troweling operation free of trowel marks. Leave finish in uniform texture and appearance. Tolerance of F(F)20 for floor flatness and f(L)17 for levelness per ASTM 1155.
- B. Apply a broom finish to exterior concrete and as indicated. Immediately after float finishing slightly roughen concrete surface by brooming with fiber bristle broom perpendicular to main traffic route.
- C. Exterior slabs may be imprinted with installer's stamp if first coordinated with architect.

3.07 CONCRETE CURING AND PROTECTION

- A. Protect freshly placed concrete from premature drying and from excessive cold or heat.
- B. Any markings, graffiti, footprints, animal tracks, and similar imprints in the surface will be removed and replaced by the builder at the builder's expense.

3.08 FORM REMOVAL

- A. Formwork not supporting weight of concrete may be removed after cumulatively curing at not less than 50 degrees for 24 hours after placement provided the concrete is sufficiently hard to not be damaged by form removal and provided curing and protection is maintained.
- B. Formwork supporting weight of concrete may not be removed in less than 14 days or until concrete has attained at least 75% of its design minimum 28 day strength.
- C. Form facing materials such as walls may be removed after 4 days cumulatively curing at not less than 50 degrees for 24 hours after placement provided the concrete is sufficiently hard to not be damaged by form removal and provided curing and protection is maintained.

END OF SECTION

03300-6

SECTION 13122 - METAL BUILDING SYSTEMS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide and erect a manufactured steel building system including but not limited to a rigid frame, roofing, siding, insulation, walk through doors, windows, and accessories.

1.02 SUBMITTALS

- A. Submit the following to the architect for review and selections:
 1. Shop drawings clearly indicating critical dimensions, anchor bolt locations, wall heights, roof slopes, siding, roofing, insulation, and other conformance to the project requirements. The shop drawings will bear the stamp of an engineer licensed in the State of New Mexico.
 2. Color samples for selecting the colors of the siding, roofing, and trim.
 3. Manufacturer's general literature.

1.03 QUALITY ASSURANCE

- A. Building will be designed in accordance with the latest edition of the AISC "Specifications For the Design, Fabrication, and Erection of Structural Steel for Buildings".
- B. Building will be designed in accordance with all applicable local, state, and national codes.
- C. The building will be designed by the manufacturer's engineer to withstand at least:
20 psf ground snow load and 93 mph nominal wind (120 mph ultimate wind speed in Risk Category 4 per IBC Chapter 16) with wind exposure C.

PART 2 - PRODUCTS

2.01 FRAME

- A. Frame will be fabricated by manufacturer and will be factory primed.
- B. End walls will be removable without the addition of supplemental framing to allow for future expansions.

2.02 ROOFING, SIDING, AND TRIM

- A. Roof panels, siding, trim, and gutters will be 26 ga or heavier. All will be factory primed and painted with a Signature 200 siliconized polyester or equal.
- B. Interior wall liner: none from building manufacturer

2.03 INSULATION

- A. See Insulation description in this project manual.

2.04 DOORS

- A. See Hollow Metal Door specification and Sectional Door specification in project manual.

2.05 BUILDING MANUFACTURER

- A. The structure will be engineered and manufactured by Mueller or equal.

PART 3 - EXECUTION

3.01 BUILDING ERECTION

- A. Erect building in strict compliance with the manufacturer's instructions.
- B. Protect materials to avoid damage to factory finish. Replace any damaged materials.

END OF SECTION

BID FORM

HAYDEN SUBSTATION
UNION COUNTY

TO: Union County Commission
100 Court Street
Clayton, NM 88415

FROM: _____

_____ business name and mailing address of bidder

The undersigned, (herein called "Bidder") in compliance with the Instructions to Bidders, having examined the Drawings and Specifications and related Documents as prepared by Alpha Design and having examined the sites of the proposed Work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials and supplies, and to construct the project in accordance with the Contract Documents, and at the prices stated below. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents of which this proposal is a part, except for gross receipts tax on the construction contract.

A. BASE BID AMOUNT

Bidder agrees to furnish all labor, materials, equipment and services required to construct and complete the Work as described and required by the herein above stated Documents, in accordance therewith for the sum of:

_____ DOLLARS
spelled

\$ _____
same amount in numbers

The bid amount indicated does NOT includes NM gross receipts tax to be added to the contract.

B. ADDENDA ACKNOWLEDGMENT

The undersigned acknowledges receipt of the following Addenda if any
:

ADDENDA NUMBER	ADDENDA DATE
_____	_____
_____	_____
_____	_____
_____	_____

C. SIGNATURE

Bidder understands that the Owner reserves the right to reject any or all Bids and to waive any formalities in the bidding.

The bidder agrees that this Bid shall be good and may not be withdrawn for a period of thirty (30) calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this Bid, Bidder will execute the formal Contract within ten (10) days and deliver the required Surety Bond or Bonds and Certificates of Insurance as required by the Contract Documents and post bid Submittals as required by the Instructions to Bidders.

The Bid Security attached, in the sum of at least five per cent of the bid amount, is to become the property of the Owner in the event the Contract, Bonds, and Insurance are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner.

DATE: _____

BY: _____
(Signature)

(Title)

(Business Address)

(Business Phone)

D. PROPOSED SUBCONTRACTOR LIST

New Mexico law requires that a list of all Subcontractors and Suppliers whose subcontract will be for a dollar amount total of \$5000 or more be supplied with the bid. It further requires that if costs or quotes are received for any portion(s) of the work for \$5000 or more per Subcontractor or Supplier, then the bid must include the name of the Subcontractor or Supplier to be used for those portion(s) of the work unless the work will be performed by the General Contractor. Include name, address, and phone number of Subcontracting companies to be used on this project.

If awarded the Contract the bidder proposes to use the following Subcontractor(s) and Supplier(s) when the total payment to each listed Subcontractor or Supplier is expected to exceed \$ 5,000. Write "none" if no subcontractors will perform any work.

Subcontractor, phone number, and license number	Description of Subcontracted Work

F. BID SUBMITTAL CHECK LIST

Submitted to the owner with the Bidder's sealed bid are:

- 1) This 3 page bid form.
- 2) Campaign Contribution Disclosure Form (3 page form found in this project manual)
- 3) Bid Bond
- 4) Copy of Bidder's New Mexico current active contractor's license
- 5) Copy of Resident Contractor or Resident Veteran Contractor's Preference Certificates (if either is applicable) (issued to contractor by NM Taxation and Revenue Dept.)
- 6) Copy of current Registration with New Mexico Dept. of Workforce Solutions.

CAMPAIGN CONTRIBUTION DISCLOSURE FORM

Pursuant to NMSA 1978, § 13-1-191.1 (2006), any person seeking to enter into a contract with any state agency or local public body **for professional services, a design and build project delivery system, or the design and installation of measures the primary purpose of which is to conserve natural resources** must file this form with that state agency or local public body. This form must be filed even if the contract qualifies as a small purchase or a sole source contract. The prospective contractor must disclose whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official of the state or a local public body during the two years prior to the date on which the contractor submits a proposal or, in the case of a sole source or small purchase contract, the two years prior to the date the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds two hundred and fifty dollars (\$250) over the two year period.

Furthermore, the state agency or local public body shall void an executed contract or cancel a solicitation or proposed award for a proposed contract if: 1) a prospective contractor, a family member of the prospective contractor, or a representative of the prospective contractor gives a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process or 2) a prospective contractor fails to submit a fully completed disclosure statement pursuant to the law.

THIS FORM MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT THEY, THEIR FAMILY MEMBER, OR THEIR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.

The following definitions apply:

“**Applicable public official**” means a person elected to an office or a person appointed to complete a term of an elected office, who has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed proposal or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive proposal.

“**Campaign Contribution**” means a gift, subscription, loan, advance or deposit of money or other thing of value, including the estimated value of an in-kind contribution, that is made to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official's behalf for the purpose of electing the official to either statewide or local office. “Campaign Contribution” includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

“**Family member**” means spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law or son-in-law.

“**Pendency of the procurement process**” means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

“**Person**” means any corporation, partnership, individual, joint venture, association or any other private legal entity.

“Prospective contractor” means a person who is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person qualifies for a sole source or a small purchase contract.

“Representative of a prospective contractor” means an officer or director of a corporation, a member or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

DISCLOSURE OF CONTRIBUTIONS:

Contribution Made By: _____

Relation to Prospective Contractor: _____

Name of Applicable Public Official: _____

Date Contribution(s) Made: _____

Amount(s) of Contribution(s) _____

Nature of Contribution(s) _____

Purpose of Contribution(s) _____

(Attach extra pages if necessary)

Signature

Date

Title (position)

--OR--

NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS (\$250) WERE MADE to an applicable public official by me, a family member or representative.

Signature

Date

Title (Position)