# Specifications for
# 115 kV Pole Inspection
# And Preservation Services

Bid Opening – 2:00, December 15, 2021

City of Grand Island
100 East 1st St.
P.O. Box 1968
Grand Island, NE 68801

Contact
City of Grand Island – Utilities Department
Travis Burdett, Assistant Utilities Director

Date Issued: November 16, 2021

# SECTION A

# ADVERTISEMENT FOR BIDS

**ADVERTISEMENT TO BIDDERS**
**FOR**
**115 KV POLE INSPECTION AND PRESERVATION SERVICES**
**FOR**
**CITY OF GRAND ISLAND, NEBRASKA**

**Sealed bids will be received at the office of the City Clerk, 100 E. First Street, P.O. Box 1968, Grand Island, Nebraska 68802, until Wednesday, December 15, 2021 at 2:00 p.m. local time for 115 kV Pole Inspection and Preservation Services. Bids will be publicly opened at this time in the Grand Island City Hall Council Conference Room #1 located on 1st floor of City Hall. Submit an original and three copies if submitting by mail. Bid proposal package and any Addendas are also available on-line at www.grand-island.com/business/bids-and-request-for-proposals/bid-calendar and through www.questcdn.com. Bids received after the specified time will be returned unopened to sender.**

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Successful bidder shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Each bidder shall submit with the bid a certified check, a cashiers check, or bid bond payable to the City Treasurer in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. **Your certified check, cashier's check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered.** Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The Purchaser reserves the right to reject any or all bids, to waive irregularities therein, and to accept whichever bid that may be in the best interest of the City, at its sole discretion.

No bidder may withdraw his/her bid for a period of thirty (30) days after date of bid opening.

RaNae Edwards, City Clerk

# SECTION B

# INSTRUCTIONS TO BIDDERS

**CITY OF GRAND ISLAND, NEBRASKA**
**INSTRUCTIONS TO BIDDERS**

EXCEPTIONS TO SPECIFICATIONS: Each bidder shall carefully check all requirements herein set forth and shall offer items which fully comply with these requirements or shall plainly set forth all points, features, conditions, specifications, etc., wherein their items offered do not meet these specifications. Such exceptions as are made shall be listed by page number in the blanks provided in the Contractor's Bid Form and shall be marked in ink on the pages of these specifications. If additional space is required for exception explanation, please reference and attach a letter to bid. Reference shall not be made to other attachments for exceptions and supplementary terms. Failure to outline such exceptions as specifically stated herein will require the successful bidder to comply with these specifications. In case of conflict between the bid and these specifications, these specifications shall govern unless specific exceptions are listed by the bidder. Exceptions must be noted on the bid form.

SUBMISSION OF BIDS: All bids shall be submitted using the City's bid form. Bids shall **be addressed to the City Clerk** and plainly marked, **"115kV Pole Inspection and Preservation Services"**.

INSURANCE COVERAGE: The Contractor shall purchase and maintain at their expense as a minimum insurance coverage of such types and in such amounts as are specified herein to protect Contractor and the interest of Owner and others from claims which may arise out of or result from Contractor's operations under the Contract Documents, whether such operations be by Contractor or by any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. Failure of Contractor to maintain proper insurance coverage shall not relieve them of any contractual responsibility or obligation.

BASE BID: The bidder is expected to base their bids on materials and items complying fully with these specifications. In the event they name in their bid materials or items which do not conform, they will be responsible for furnishing materials and items which fully conform at no change in the bid price.

ALTERNATE BIDS: It is the desire of the Owner that the bidder base their bid price for this project on the written specifications. If an alternate bid or bids are submitted by a bidder, it is desired that they first submit a bid price as above described and then describe the alternate bid. Failure to do so may be reason for not extending any consideration to alternate bids.

BIDDER QUALIFICATION: Bids will be received only from qualified bidders. A bidder will be considered qualified if they are a recognized electric utility contractor and have experience in the construction of projects of equal or greater size than that specified herein. If requested, the bidder shall supply experience data. Such data will be used to assist in determining the qualifications of the bidder. Bidder must comply with all applicable Federal, State and Local rules and regulations.

CHECKS OR BID BONDS: Checks or bid bonds of the unsuccessful bidders will be returned when their bids have been rejected and not to exceed sixty (60) days from the date bids are opened. All bids shall remain in force for this 60-day period. The check or bid bond of the successful bidder will be returned when the Contracts are signed by both parties and necessary bonds supplied. Should the Purchaser make an award to a bidder who refuses to enter into Contract and furnish the required bonds within twenty (20) days after notification of acceptance, then the bid security which has been deposited with the Purchaser will be forfeited to the Purchaser as liquidated damages.

PERFORMANCE BOND: On award of the Contract, the successful Contractor shall furnish a Performance Bond which shall be in an amount equal to the full Contract price, guaranteeing faithful compliance with all requirements of the Contract Documents and complete fulfillment of the Contract, and payment of all labor, material and other bills incurred in carrying out this Contract. According to Nebraska Law, the surety company executing the Performance Bond must be authorized to do business in the State of Nebraska.

PAYMENT BOND: On award of the Contract, the successful Contractor shall furnish a Payment Bond which shall be in an amount equal to the full Contract price, guaranteeing protection of all persons supplying labor and materials to the Contractor or its subcontractors for the performance of the work provided for in the Contract. In accordance with Nebraska Law, the surety company executing the Payment Bond must be authorized to do business in the State of Nebraska.

TAXES: The City Utilities Department pays sales tax amounting to 5.5% State and 2.0% City; payment of 7.5% sales tax must be in the Contractor's bid. Contractor must pay any other tax which might be applicable.

REQUESTS FOR PAYMENT: The City of Grand Island will make payments only after approval at regularly scheduled City Council meetings. These meetings typically occur the second and fourth Tuesday each month. Requests for payment must be received no less than ten (10) working days prior to the designated meeting to allow time for proper review and consideration. Payments will only be made after final completion of the project to City's satisfaction unless otherwise stated in bidding documents.

REQUEST FOR INTERPRETATION: If any person contemplating submitting a bid for this Contract is in doubt as to the true meaning of any part of the specifications or other proposed Contract documents, they may submit to the Purchasing Department a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addendum duly issued and/or delivered to each person receiving a set of such documents. The addenda upon closing shall become a part of the Contract. The City will not be responsible for any other explanation or interpretation of the proposed documents.

ADDENDA: Any addendum to the specifications issued during the time allowed for preparation of bids shall be covered in the bid and shall become a part of the specifications. One copy of each addendum issued before the date of the letting will be sent to all bidders. One signed copy is to be returned immediately to the sender as acknowledgment of receipt.

TIME OF COMPLETION: Time of completion is the essence of this Contract, and all work shall be completed no later than May 15, 2022.

MODIFICATION OF BIDS: Bids may be modified or withdrawn by an appropriate document duly executed in the manner that a bid must be executed and delivered to the place where bids are to be submitted at any time prior to the final time set for receiving bids. Bidders may modify or withdraw bids by Fax communication at any time prior to the time set for receiving bids provided this instruction is positively identified. Any Fax modification should not reveal the amended bid price but should provide only the addition, subtraction or other modifications. A duly-executed document confirming the Fax modification shall be submitted within three (3) days after bids are opened.

BID DATA: Bidders shall submit bid documents and data by filling in the document and data sheets supplied by the Purchasing Department. The bid sheets shall be filled out legibly in ink to permit reproduction.

BIDDER SECURITY: Bidder security shall be enclosed in a separate envelope marked, **"BIDDER SECURITY / BID FOR 115kV Pole Inspection and Preservation Services "** the envelope shall contain only a cashier's check, certified check or bidder's bond.

This separate envelope shall be attached to a sealed envelope containing the bid and any other bid materials. This second envelope shall be marked **"BID FOR 115kV Pole Inspection and Preservation Services " and be addressed to the "City Clerk**." Bids of an incomplete nature or subject to multiple interpretations may, at the option of the Purchaser, be rejected as being irregular.

FINANCIAL STATEMENT: The bidder shall furnish upon request a complete financial statement signed by the bidder, if an individual, by all partners if the bidder is a partnership or, by the President or Secretary, if the bidder is a corporation.

EQUAL EMPLOYMENT OPPORTUNITY: The Contractor agrees that during the performance of this Contract not to discriminate in hiring or any other employment practice on the basis of race, color, religion, sex, disability, age or national origin, and to comply with Executive Order 11,246 of September 24, 1965, and the rules, regulations and relevant orders of the Secretary of Labor, and Chapter 20 of the Reissue Revised Statutes of the State of Nebraska.

GRATUTITIES AND KICKBACKS: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in

any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated there within, as an inducement for the award of a subcontract or order.

LOCAL CONDITIONS: Each bidder shall have an authorized representative visit the site of the work and thoroughly inform themselves of all conditions and factors which would affect the work and the cost thereof, including the arrangement and conditions of existing or proposed structures affecting or affected by the proposed work; the procedure necessary for maintenance of uninterrupted operation; the availability and cost of labor and facilities for transportation, handling, and storage of materials and equipment.

It must be understood and agreed that all such factors have been investigated and considered in the preparation of every bid submitted. No claims for financial adjustment to any Contract awarded for the work under these Specifications and documents will be permitted by the City, which are based on lack of such prior information or its effect on the cost of the work.

CORRESPONDENCE: Correspondence regarding drawings, instruction manuals, and other engineering data shall be sent to:

Attn: Travis Burdett
City of Grand Island
Utility Department
P.O. Box 1968
Grand Island, NE 68802-1968
(308) 385-5466

LOCAL BIDDER PREFERENCE: In case of tied low bids, all other things being equal, preference shall be given in the following order:

1. To those bidders who manufacture their products within the limits of the City of Grand Island.

2. To those bidders who manufacture their products within the limits of the County of Hall.

3. To those bidders who package, process, or through some other substantial operation have employees and facilities for these purposes in the City of Grand Island.

4. To those bidders who package, process, or through some other substantial operation have employees and facilities for these purposes in the County of Hall.

5. To those bidders who maintain a bona fide business office in the City of Grand Island, whose products may be made outside the confines of the City of Grand Island.

6. To those bidders who maintain a bona fide business office in the County of Hall, whose products may be made outside the confines of the County of Hall.

7. To those bidders whose commodities are manufactured, mined, produced, or grown within the state of Nebraska and to all firms, corporations, or individuals doing business as Nebraska firms, corporations or individuals, when quality is equal or better and delivered price is the same or less than the other bids received.

8. To those bidders whose commodities are manufactured, mined, produced, or grown within the United States of America and to all firms, corporations, or individuals doing business as firms registered in states other than Nebraska when quality is equal or better and delivered price is the same or less than the other bids received.

# SECTION C

# CONTRACTOR'S BID FORM

**CONTRACTOR'S BID**

# 115 KV POLE INSPECTION AND PRESERVATION SERVICES FOR CITY OF GRAND ISLAND, NEBRASKA

TO THE MEMBERS OF THE COUNCIL
CITY OF GRAND ISLAND
GRAND ISLAND, NEBRASKA

THE UNDERSIGNED BIDDER, having examined the plans, specifications, general and special conditions, other proposed Contract documents, all addenda thereto and being acquainted with and fully understanding (a) the extent and character of the work covered by this bid, (b) the location, arrangement and specified requirements for the proposed work, (c) the location, character and condition of existing streets, roads, highways, railroads, pavements, surfacing, walks, driveways, curbs, gutters, trees, sewers, utilities, drainage courses and structures and other installations, both surface and underground, which may affect or be affected by the proposed work, (d) the nature and extent of the excavations to be made and the handling and rehandling requirements, including the possible constraints of dewatering due to ground water, (f) the difficulties and hazards to the work which might be caused by storm and flood water, delivery facilities, and (h) all other factors and conditions affecting or which may be affected by the work,

HEREBY PROPOSES to furnish all required materials, supplies, equipment, tools and plant, to perform all necessary labor and supervision, and to construct, install, erect, equip and complete all work stipulated in, required by and in accordance with the Contract documents and the plans, specifications and other documents referred to therein (as altered, amended or modified by all addenda thereto) for;

IN CONSIDERATION OF THE FOLLOWING UNIT PRICES. These prices shall be used to adjust the bid price in the event the specifications or plans and drawings are altered or changed by the City due to unforeseen conditions. These prices will be used as the established price for any additions or deductions to the contract work. Unit prices shall include all materials, supplies, equipment, labor, and taxes necessary to furnish and install the unit complete. **The contractor will be paid on the basis of actual quantity times unit price:**

**********

**TOTAL BID FOR 115 KV POLE INSPECTION AND PRESERVATION SERVICES**
(must equal total sum of items 1 through 9)

_____ $ _____
(Words) (Figures)

| ITEM | DESCRIPTION | ESTIMATED QUANTITY | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|
| 1 | Above Ground Inspection, Sounding, Boring, Attachment Inspection, Information Verification, and Collection per Wood Pole | | $_____ | $_____ |
| 2 | Above Ground Inspection, Attachment Inspection, Information Verification, and Collection per Steel (Metal) Pole/Structure | | $_____ | $_____ |
| 3 | Treatment of Interior Wood Voids per Pole | | $_____ | $_____ |

| | | | |
|---|---|---|---|
| 4 | Interior Wood Fumigation per Pole | $_____ | $_____ |
| 5 | Treatment of Wood Exterior and Wrapping per Pole | $_____ | $_____ |
| 6 | Coating application per Steel (Metal) Pole/Structure | $_____ | $_____ |
| 7 | Purchase and Disposal of Fill Dirt per Pole | $_____ | $_____ |
| 8 | Miscellaneous Cost per Pole with Details | $_____ | $_____ |
| 9 | Repair of grounding per Pole (80 total) | $_____ | $_____ |

**COMPLETION DATE:** If awarded under the terms of these Contract documents, the undersigned Bidder agrees to complete all work, including restoration, by _____.

**EXCEPTIONS TO SPECIFICATIONS**: Each Bidder shall carefully check all requirements herein set forth and shall offer items which fully comply with these requirements or shall plainly set forth all points, features, conditions, specifications, etc., wherein the Bidder's items offered do not meet these specifications. Such exceptions as are made shall be listed by page number in the following blanks and shall be marked in ink on the pages of these specifications. Exceptions shall be explained in detail in a letter accompanying the bid. Reference shall not be made to other attachments for exceptions and supplementary terms. Failure to outline such exceptions as specifically stated herein will require the successful Bidder to comply with these specifications. In case of conflict between the bid and these specifications, these specifications shall govern unless specific exceptions are listed by the Bidder.

Exceptions to specifications, pages: _____

_____

**SALES TAX:** The Grand Island Utilities Department is a non-exempt body and, as such, is required to pay City sales tax (which at present is 2.0%) and State sales tax (which at present is 5.5%). Therefore, all sales taxes relative to the water main shall be paid by the Contractor as part of the Contract price. If Bidder fails to include all applicable sales tax in their bid price, the City will add a 7.5 % figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

According to Nebraska Sales and Use Tax Requirements, Section 1-017, Contractors, check which option you have selected to file with the Nebraska Department of Revenue;

Option 1 (Section 1-017.05) _____
Option 2 (Section 1-017.06) _____
Option 3 (Section 1.017.07) _____

The choice of option is made by completing and mailing to the Department of Revenue, a Nebraska Sales and Use Tax Election for Contractors. This form must be filed within three (3) months after beginning to operate as a Contractor. If this form is not filed, the Contractor will be treated as a retailer under Option 1 for sales and use tax purposes.

The bidder shall provide the following breakdown of the water main bid information for use by the Grand Island Finance Department:

Sub-total for Sales Tax: $ _____

Sub-total for Materials Cost: $ _____

Sub-total for Services Cost $ _____
(Labor and Incidental Services Rendered)
**TOTAL** $ _____
**Total of above items must equal Total Bid above**

**EXPERIENCE DATA:** Each Bidder shall supply the following data on their experience:

| Project Owner/Contact/Phone No. | Project Location | Completion Date |
|---|---|---|
| 1. | | |
| 2. | | |
| 3. | | |

Additional Data: _____

_____

**INSURANCE:** Bidder acknowledges that bid includes compliance with the attached insurance requirements.

**SITE VISIT:** Authorized Representative _____ Date: _____

**ADDENDA**: Bidder acknowledges that Addenda Number(s) _____ were received and considered in bid preparation.

The undersigned Bidder agrees to furnish the required bond and to enter into a contract within twenty (20) days after acceptance of this bid, and further agrees to complete all work covered by the foregoing bid in accordance with specified requirements. **No work shall commence until the Certificate of Insurance and bonds (when required) are approved by the City, the contract is executed, and the Notice to Proceed is issued.**

Enclosed herewith is the required bid guarantee in the amount of

_____ Dollars ( _____)
which the undersigned Bidder agrees is to be forfeited to and become the property of the City of Grand Island, Nebraska, as liquidated damages should this bid be accepted and a contract be awarded to them and fail to enter into a contract in the form prescribed and to furnish the required bond within twenty 20 days, but otherwise the aforesaid bid guarantee will be returned upon their signing the contract and delivering the approved bond.

It is understood and agreed that time is the essence of the Contract.

In submitting this bid, it is understood that the right is reserved by the City to reject any and all bids; to waive irregularities therein and to accept whichever bid that may be in the best interest of the City. It is understood that this bid may not be withdrawn until after sixty (60) days from bid opening.

In submitting this bid, the Bidder states that Bidder fully complies with, and will continue to comply with, applicable State fair labor standards as required by section 73-102 RRS, 1943 and also complies with, and will continue to comply with, section 48-657 RRS, 1943 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska.

The undersigned Bidder hereby certifies (a) that this bid is genuine and is not made in the interest of or in the behalf of any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation, (b) that Bidder has not directly or indirectly induced or solicited any person, firm or corporation to refrain from bidding, (c) that Bidder has not sought, by collusion or otherwise, to obtain for themselves an advantage over any other Bidder or over the City of Grand Island, and (d) that Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid.

DATED _____

SIGNATURE OF BIDDER:

If an Individual:_____doing business

as _____

If a Partnership _____

by _____, member of firm.

If a Corporation: _____

by _____ (Seal)

Title _____

BUSINESS ADDRESS OF BIDDER _____

_____

TELEPHONE NUMBER OF BIDDER _____

FAX NUMBER OF BIDDER _____

E-MAIL ADDRESS OF BIDDER _____

# SECTION D

# MINIMUM INSURANCE REQUIREMENTS

## MINIMUM INSURANCE REQUIREMENTS

## CITY OF GRAND ISLAND, NEBRASKA

The Contractor shall purchase and maintain at their expense as a minimum insurance coverage of such types and in such amounts as are specified herein to protect Contractor and the interest of Owner and others from claims which may arise out of or result from Contractor's operations under the Contract Documents, whether such operations be by Contractor or by any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. Failure of Contractor to maintain proper insurance coverage shall not relieve him of any contractual responsibility or obligation.

### 1. WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

This insurance shall protect the Bidder against all claims under applicable State workers compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The liability limits shall not be less than the following:

| | |
|---|---|
| Workers Compensation | Statutory Limits |
| Employers Liability | $100,000 each accident |
| $100,000 each employee | |
| $500,000 policy limit | |

### 2. BUSINESS AUTOMOBILE LIABILITY

This insurance shall be written in comprehensive form and shall protect the Bidder, Bidder's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall be not less than the following:

| | |
|---|---|
| Bodily Injury & Property Damage | $ 500,000 Combined Single Limit |

### 3. COMPREHENSIVE GENERAL LIABILITY

The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall be not less than the following:

| | |
|---|---|
| Bodily Injury & Property Damage | $ 500,000 each occurrence |
| $1,000,000 aggregate | |

### 4. UMBRELLA LIABILITY INSURANCE

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

| | |
|---|---|
| Bodily Injury & Property Damage | $1,000,000 each occurrence<br>$1,000,000 general aggregate |

**5. ADDITIONAL REQUIREMENTS**

The City may require insurance covering a Bidder or subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

**6. CERTIFICATE OF INSURANCE**

Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this Contract**. The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the bidder cannot have the "endeavor to" language stricken, the bidder may elect to provide a new certificate of insurance every 30 days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.**

# SECTION E

# CONTRACT AGREEMENT

# CONTRACT AGREEMENT

THIS AGREEMENT made and entered into by and between _____ hereinafter called the Contractor, and the City of Grand Island, Nebraska, hereinafter called the City.

WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published, for 115kV Pole Inspection and Preservation Services; and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to the said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself, or themselves, and its, his, or their successors, as follows:

ARTICLE I. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the contract documents as listed in the attached General Specifications, said documents forming the contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

ARTICLE II. That the City shall pay to the contractor for the performance of the work embraced in this contract and the contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the contract) of _____ Dollars
$ _____
for all services, materials, and work covered by and included in the contract award and designated in the foregoing Article I; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

ARTICLE III. The contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the contractor. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of 115kV Pole Inspection and Preservation Services.

ARTICLE IV. That the contractor shall start work as soon as possible after the contract is signed and the required bonds and insurance are approved, and that the Contractor shall complete the work on or before May 15, 2022. It is understood and agreed that time is the essence of the contract.

CONTRACT AGREEMENT (Continued)

ARTICLE V. The Contractor agrees to comply with all applicable State fair labor standards in the execution of this contract as required by Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of this contract, the contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis of race, color, religion, sex, national origin, age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations.

IN WITNESS WHEREOF, the parties hereto have executed this Contract Agreement.

Contractor _____

By _____ Date _____

Title _____

CITY OF GRAND ISLAND, NEBRASKA,
By _____ Date _____
Mayor

Attest: _____
City Clerk

The contract, insurance, and any required bonds are in due form according to law and are hereby approved.

_____ Date _____
Attorney for the City

# SECTION F

# DETAILED SPECIFICATIONS

## Contents

# DETAILED SPECIFICATIONS

## 1.0 INTRODUCTION

The City of Grand Island is requesting bids to perform inspection of all poles, testing and repair of pole grounds, and preservation treatment of wood poles, on the 115 kV transmission lines of the City electric system. This encompasses the 1093 tie line extending from Substation E to Nebraska Public Power District's (NPPD) Grand Island Substation, the 1145A and 1145B NPPD tie lines to the south property line of the Platte Generating Station, the 1369 tie line extending from Substation F to NPPD's St. Libory Substation and the City transmission loop around the City. The work is contained within an eight-mile radius of Grand Island as depicted on the area map attached as Appendix A. Three hundred eighty-six (386) wood poles, three hundred ninety-three (393) metal (steel) poles, two (2) ductile iron poles and eleven (11) lattice structures exist on the 115 kV transmission lines. Approximately 7.2 miles of the lines are "H" frame construction, while 22.4 miles of the lines are single pole construction, and 2.5 miles of dual-circuit single pole structures.

Below is a brief outline of the major work to be performed under this contract. Full requirements and specifications are found in the body of these Detailed Specifications.

A. Visual inspection of pole
B. Testing & observation of pole condition before excavation
C. Excavation of pole
D. Excavation inspection of pole and grounds
E. Testing of pole
F. Preservation/fumigation/wrapping of pole
G. Testing of pole ground
H. Repair of pole ground if needed
I. Site restoration
J. Reporting

## 2.0 WORK AREA

The work areas are to be considered City easements, and/or public right of ways, containing City owned 115 kV transmission line and other areas owned and/or used by the City Utilities Department. Many of the transmission poles are not readily accessible from public roads. The successful contractor shall use restricted easement access to some work sites. The successful contractor shall provide adequate notice to landowners prior to access.

All work, and work access shall be contained to City easements, and/or public right of ways. If a question exists, at the time of the work, concerning easements or public right of ways the City's representative may be contacted for clarification. In any event, no trespassing on private property will be permitted.

Damage to property (public or private,) crops, fences, trees, and other items is the exclusive responsibility of the successful contractor.

The successful bidder shall provide for water, toilet, and other facilities as necessary for the work, and the bidder's personnel. No electrical power, materials, or facilities are available from the City Utilities Department.

The bidder shall provide appropriate rain tight disconnects, fusing, and ground fault protection for all equipment and power outlets used in the work of this contract. The ground leg of the ground fault protectors shall be attached by a single conductor, of the appropriate size, to the pole ground at a point close to the soil. Ground fault protection is required for all equipment and power outlets.

**The bidder is ultimately responsible for providing all equipment and materials necessary to fulfill the work of this contract, including computers, tools, vehicles, and materials.**

## 3.0 WORK COORDINATION

Work activities will be coordinated through the Electric Dispatch Center at (308) 385-5465. The 115 kV transmission lines will not be taken out of service. To increase safety and avoid unexpected delays and work interruptions, the Contractor shall closely coordinate activities with the Dispatch Center.

The Dispatch Center shall be notified directly by a phone call each time workers are present in or around work areas and when all workers have left work areas. This will allow the Dispatchers to make timely decisions for safety and security reasons.

Utility working hours are Monday through Friday from 7:30 a.m. to 4:00 p.m., the dispatch center is manned twenty-four hours a day. Normally, no contracted work shall be performed on nationally recognized holidays, or Sundays. Saturday work is permissible with coordination in advance with the Electric Department.

## 4.0 SAFETY

High voltage pole lines are inherently dangerous. All persons working in the area of the City's electrical system shall be completely aware of the dangers and the appropriate working methods to always maintain safety. All persons working in or around the City electrical system must tour each work area before any work commences. Danger points such as exposed electrical equipment, tunnels, channels, foundations, and any projections from the ground, structures, or equipment shall be noted to avoid personal injury or damage to equipment or structures.

The safety of the successful contractor’s personnel, the public, and all property, under this contract is the exclusive responsibility of the successful bidder. The City's representative shall have the authority to stop the work in progress and cause changes in safety practices of the work to increase safety. However, neither the

City, nor City employees, nor City representatives, shall be held responsible for safety or safety practices or lack of the same, under this contract. The successful bidder is to maintain adequate safety precautions to protect workers, City personnel, public property, private property, and City property, at all times. The bidder, and bidder's employees must fully comply with all Federal, State, and Local safety regulations.

The successful Bidder's vehicles and equipment (whether owned by the bidder, rented, loaned, or borrowed) shall be moved and placed carefully to avoid damage to fences, crops, roadways, property, tunnels, structures, and equipment. Persons operating vehicles and/or equipment in and around the City's electrical system shall maintain adequate clearance from high voltage structures or bus for safety and damage prevention. Said vehicles shall be controlled by qualified and licensed individuals at all times.

## 5.0 COMMUNICATIONS

Contractor shall have at each work location a cellular telephone with number supplied to the Utilities Department dispatchers for safety and work coordination. The cellular telephone **shall be monitored** during any work or the presence of any workers in or around City lines, substations, property, or equipment.

## 6.0 POLE INFORMATION

The City is supplying pole information in two forms; in a printed form as Appendix B, and in electronic form as Appendix C. Appendix C of this document is a Microsoft Excel spreadsheet showing all pole information. Also included with Appendix C are detailed maps of each line with pole information included. Appendix C can be obtained by emailing travis.burdett@giud.com.

The pole information provided by the City is as accurate and complete as known to the City. The information provided is to be verified and updated to reflect the actual findings of the inspectors during the course of the work.

A portable or hand-held personal computer shall be used to verify information and make remarks in the field for the work. Notes, remarks, and information verification shall be made directly into the field computer, not transcribed later. Field notes shall be downloaded to a USB drive, provided by the City, and furnished to the Utilities Department representative daily or other previously arrange time interval.

## 7.0 WOOD POLE INSPECTION

All wood poles, on the 115 kV transmission line surrounding the City of Grand Island and the City owned poles on the Nebraska Public Power District (NPPD) interconnection tie lines, are to be inspected. Wood poles will be inspected for defects, in the pole structure, arms, attachments, and grounding equipment from at least 18 inches below ground level to pole top. The findings of the inspections shall be utilized for decisions about wood pole treatment requirements, and other

applicable maintenance.

Inspection shall be split into four separate parts.

A. Inspection and verification of pole information.
B. Inspection of pole hardware, attachments, and grounding.
C. Inspection of soil condition, pole condition at ground line, and the advisability of sub-soil inspection.
D. Inspection of the sub-soil pole condition.

Visual inspection shall include an inspection of surrounding soil and environment for indications of pole depth changes from initial placement, such as re-landscaping, or soil removal from within 10 feet of the pole. Indications of depth changes that may compromise safety or ability to perform sub-soil inspections shall be brought to the immediate attention of the City representative. Other, less severe, pole depth changes are to be properly noted in the reports without City representative notification.

Visual inspection shall also include observations of loose, defective, or missing hardware from a pole or pole structure. If vandalism is suspected (i.e. indication of a rifle shot, or other damage) to a pole or to a pole structure, the suspicions are to be noted as such in the reports.

Inspection above and below grade will include sounding, and/or the use of automated test equipment (i.e. PoleTest pole strength analyzer) to determine the quality of the internal wood to the pole. Sounding, and/or automated testing shall extend from below ground level to a point at least eight feet above grade.

Coring or drilling of the appropriate size and frequency shall be performed, as required, to assure an accurate assessment of each wood pole's internal integrity both above and below grade. Additionally, an assessment of the internal wood moisture content shall be performed to determine if moisture is or will exceed 30%, the level decay can start.

Wood poles that are not serviceable due to wood defects, obvious decay, or internal voids or wood poles with an estimated service life less than ten years, even after treatment, shall be marked with a blue line two feet above grade. This colored line will indicate the pole is in need of replacement. The pole shall be noted for replacement in the daily and final reports, as well as verbally informing the City's representative.

The City of Grand Island Utilities Department reserves the right to decide the actual treatment action or procedure, within reason, including the determination not to do any treatment, to be taken by the successful bidder based upon the findings of the inspections, and the successful bidder's recommendations.

## 8.0 EXCAVATION OF WOOD POLES

Wood poles subject to excavation shall have adequate strength, and depth, for a minimum excavation of 18 inches below ground level. Ground conductors, down guys, and support wires shall be handled carefully to prevent breakage.

The excavated soil shall be inspected for undecomposed organic material and other debris which shall be removed and destroyed. The cleaned soil and additional sandy loam fill, as required, shall be used to refill around the treated pole. New sandy loam fill dirt shall be purchased from a reputable supplier, not scooped up from the nearest open spot. The City's representative shall have the right to inspect and approve or reject the fill soil prior to project use. Flowers, landscaping, or other growing ground cover shall be replaced with new similar cover, after backfill and compaction.

Replacement fill shall be mechanically tamped with weighted hydraulic tamper in approximately 6 to 8 inch intervals. Soil compaction shall meet or exceed the original soil compaction. A four-inch buildup around base of each treated pole sloping to two inches of compacted fill at 12" from the pole shell.

Broken ground wires shall be repaired and tested per section 14.0. No backfilling will be done until the repair is performed.

Only every other pole or pole structure in a section of line shall be excavated at a time. No more poles may be excavated than can be refilled in a day. No poles will be left excavated overnight.

## 9.0 TREATMENT OF WOOD POLES

All wood poles shall be treated for preservation. Defective poles marked with a blue line shall be treated the same as other wood poles. Poles with internal voids or infestations shall have voids filled. Then the interior wood fumigated to prevent additional decay or wood loss. Bore holes shall be tightly capped with solid treated wood plugs. The shell will be treated, then wrapped from 18 inches below grade to one inch, minimum, above the compacted fill and replacement vegetation.

Treatment of the wood shall prevent future damage from insect infestation and fungal growth and decay for a period of at least ten years from date of application. Complete information regarding treatment and fumigation abilities and life are to be submitted with the bid. Said information shall be used in the bid evaluation process.

## 10.0 STEEL STRUCTURE INSPECTION

All steel structures including steel poles and steel lattice towers, on the 115 kV transmission line surrounding the City of Grand Island and the City owned poles on the Nebraska Public Power District (NPPD) interconnection tie lines, are to be inspected. This specification defines the inspection and assessment of steel transmission line steel structures to determine the extent of corrosion and/or other

damage. Structures found to be in serviceable condition will have a protective coating applied.

## 10.1 Definitions for General Corrosion Inspection

Corrosion inspection, terminologies are defined as follows:

**Soil Resistivity:** Is a significant indicator in determining how corrosive a soil environment is. Soils with low resistivity allow for the easy flow of current between an anode and cathode creating a higher level of corrosion activity. Soils with a resistivity of 1000 ohm-cm or less tend to be very corrosive, while soils with a resistivity of 10,000 ohm-cm are considered much less of an influence to corrosion. Soil resistivity measurements are taken with a Collins rod and bridge or other comparable device to sample soil resistivity at various depths and points of the structure site.

**Soil pH:** The pH measurement of soil surrounding a structure determines how acidic the soil is and helps to define its potential influence in the corrosion process. Measurements of a pH around 7 show a relatively neutral environment while measurements of 5.5 or less are considered to be acidic. Soil pH measurements are taken near the first leg or at a location deemed appropriate by the inspector.

**Redox:** Otherwise known as the measurement of oxygen reduction, redox measures the dissolved oxygen content in the soil. Redox measurements collected in close proximity to the structure can help to determine whether a structure is at risk from microbial influence corrosion (MIC). Measurements are taken from the partial excavation at the first leg or at a location deemed appropriate by the inspector.

**Structure to soil potential measurements:** Measure the structure to soil potential within the environment. Typically, this is done utilizing a digital or analog potential meter. The more negative the measurement is (< -.850 mV), the more likely it is that the structure will have a reduced potential for corrosion. The less negative the measurement (> -.400 mV), the more likely it is to corrode. Half Cells Voltage Measurements are taken from a distance of approximately (2) two feet from each structure. Readings are taken and recorded in the inspection log.

**Very Low Corrosion:** A reported structure that demonstrates a low potential for corrosion and no indicators for active corrosion. A partial excavation on each leg of the structure confirms possible existing damage. This structure is reported as having “Very Low” activity or insignificant levels of corrosion. Place in a 10 year Reinspect cycle for monitoring.

**Active Corrosion:** A reported structure that demonstrates the potential for mild to severe corrosion or the existence of corrosion in process. Again, a partial excavation on each leg of the structure confirms possible existing damage. This category of structure can be broken into smaller more manageable groups based upon the potential for corrosion and the level of present activity.

- Mild Corrosion Cell - Re-Inspect and monitor corrosion in a 10-year cycle.
- Moderate Corrosion Cell - Re-Inspect and monitor corrosion in a 10-year cycle.
- Severe Corrosion Cell - Excavate and evaluate as soon as possible.

**Priority Structure:** A reported structure that reveals that there has been structural damage due to corrosion, mechanical damage, or Acts of God, which may exceed the Customer's threshold of allowable corrosion. The allowable thinning, edge loss pitting or structural damage is determined by the Customer policy of structure loading and applicable NESC factors of safety.

# 11.0 STEEL STRUCTURE EVALUATION

## 11.1 Visual Inspection

A visual inspection of all structures shall be made from ground line to the top of the structure for clearly visible defects. Items listed by Contractor requiring maintenance shall be noted on report sheet.

A visual inspection is for safety purposes only. The Contractor does not guarantee that the visual inspection will reveal all potential safety problems.

## 11.2 Corrosion Assessment

Weighted Decision Method shall be used to determine the overall corrosion cell ranking. This method is based upon instrument readings for specific site conditions effecting corrosion activity combined with a partial excavation. Each factor has a conformance level that is summed to achieve an overall ranking score which has a direct correlation to corrosion within that cell.

## 11.3 Concrete Foundation Assessment

Where applicable, and in addition to the corrosion assessment, concrete foundations will be evaluated by means of a rudimentary hammer impact test. Foundations that show negligible effects from the hammer impact points will require no further testing unless otherwise indicated. Impact points that reveal flaking concrete and/or exposes coarse aggregate will require further investigation into the condition and strength of the concrete.

## 11.4 Structural Assessment

The overall evaluation of corrosion severity will be determined through the visual assessment and direct physical measurement of steel members to determine actual section loss. Structures will be inspected and categorized according to the following information.

## 11.5 General Inspection

Thickness measurements to determine the extent of corrosion damage are taken with an Ultrasonic meter or other suitable device. Pit depths are measured with a pit gauge when excavation reveals that there is existing damage present. Edge loss and thinning are measured using a pit gauge or other suitable device.

Based on the structural measurements, structures will be categorized under four distinct levels of corrosion/mechanical damage. Conditions A, B, C, or D categories are defined as follows:

- **Condition A** – Good Condition- Steel and galvanizing is in near original condition. Only minor surface rust is evident in a few small areas. *Structures in this condition category will have a protective coating applied.*

- **Condition B** – From surface corrosion to pitted rust corrosion - steel condition may range from surface rust in several areas to all buried surfaces showing rust and some minor pitting. For a Condition B rating, no loss of steel thickness shall exceed 1/16 inch. In addition, no steel member shall have a loss of total cross section greater than 10%. *Structures in this condition category will have a protective coating applied.*

- **Condition C** – Corroded and Bent Steel Members- Leg/grillage has at least one steel member that has lost between 10% and 25% of cross section. Condition C will also includes steel members which are bent and in need of repair. *Structures in this condition category will have a protective coating applied only by direction from the customer.*

- **Condition D** – Heavily Corroded - Members exceed the loss of steel limits defined in Condition C (greater than 25% loss of section). The Structure will typically have large loss of section, with areas of it completely rusted away or perforated due to corrosion. *Structures in this condition category will be reported to the customer for further attention.*

### 11.6 Priority Structure

A priority structure is a structure that reveals more than a 50% loss of cross section in either one or more tower legs or pole flats. These structures will be communicated directly to the customer for their immediate attention.

## 12.0 EXCAVATION OF STEEL STRUCTURES

All structures passing the above ground visual inspection shall be partially excavated to a depth of 18" below ground line. If damage is noted at 18”, then excavation to 24” is completed and recorded.

## 13.0 PREVENTATIVE COATING APPLICATION TO STEEL POLES/TOWERS

### 13.1 General

Conditions

The terms and requirements of the Contract Documents apply to all the work of this section.

Description

Provide all labor, supervision, materials, testing, equipment, accessories and services necessary to prepare all surfaces and apply coatings to structures.

Submittals

Submit two (2) copies of product data sheets, planned surface preparation methods, materials safety data sheets (MSDS) and application information for approval by the Customer.

Safety Precautions

Please note the following:

- Meet all OSHA, Federal and State requirements, local regulations and the Customer Safety Standards.

- Lead based paint is the responsibility of the Customer; Contractor will advise as to the safest, most cost-effective method of remediation and will perform the work in compliance with all local, state, and federal codes including 29CFR1926.
- Precaution will be taken for protection against fire, dust, fumes and skin contact. Suitable ventilation should be provided if painting in enclosed locations.
- Examine the components to which this work shall be applied and report any deficiencies or apparent conflict with this specification to the Customer in writing. Work shall not proceed until such conditions have been remedied. Starting of painting work shall indicate the Contractor's acceptance of the surface.
- Sufficient time shall be allowed to the Contractor to permit proper application and curing of the special finishing materials.
- Before the start of coating work a pre-construction site meeting shall be held between the Contractor and Customer. At this meeting, a review shall be conducted on the interpretation of standard of acceptance or rejection of coating work. Each phase of the work such as receipt and storage of coating materials, equipment to be used, preparation of substrate, application of each coat and the degree and extent of Contractor inspection requirements shall be specifically reviewed. Also at the meeting, a field demonstration of surface preparation and coating application shall be conducted and an agreement shall be reached regarding conformance with this specification.
- Contractor shall not paint exteriors in rain, snow, fog, or mist unless using moisture-cured coating. Paint shall not be applied when the steel surface temperatures exceed limits specified by the paint manufacturer.
- Where concrete foundation repair is done, structure painting shall not be done until concrete work is complete and concrete has set sufficiently to prevent damage.
- When possible, the Contractor will advise Customer on methods and materials for increasing production efficiencies. Modifications of surface preparation, coating application method, curing times, number of coats, final dry thickness, or any other suggestions that may result in cost savings or increased quality.

<u>Material Delivery, Storage and Handling</u>

All coating materials shall be stored in enclosed structures to protect them from the weather and maintained at temperatures between 45 and 95 degrees F. Storage area shall be kept neat, clean and all damage thereto or to its surroundings shall be made good by the Contractor. Shelf life shall not exceed manufacturer's recommendations, or one year, whichever is less.

Inventory shall be kept of all materials including number of gallons, product code, batch number and date of manufacture.

During the progress of the work, all discarded coating materials, containers, rags, etc., will be removed from the project in order to avoid danger of fire.

Codes and Standards

Unless otherwise required in this specification, the following publications shall govern the work:

- Steel Structures Painting Council ("SSPC") Surface Preparation Specifications as found in the Steel Structures Painting Manual, Volume No. 2, Latest revisions.
- SSPC - SP2 Hand Tool Cleaning or SSPC – SP3 Power Tool Cleaning.
- Steel Structures Painting Council Paint Application Specification as found in the Steel Structures Painting Manual, Volume No. 2, latest revision.

Quality Assurance

Notify the Customers' representative in writing of any problems using the coating systems as specified herein.

## 13.2 Materials

Approved materials for coating are as follows:

- Thinner – Induron Industrial Thinner K – 1012 (Xylene) or Equivalent.
- Primer Coat - Induron Induratar or Equivalent.
- Finish Coat - Induron Induratar or Equivalent.

## 13.3 Execution

Structure Inspection

Steel members, which are missing, damaged, or deteriorated to the point where they are weakened, shall be immediately reported to the Customers' representative for repair/replacement procedure.

Before preparation and painting, inspect all connections for loose bolts/nuts. If there is any question as to the adequacy of bolt/nut, replace

with approved equivalent of same size. Replacement of bolts/nuts shall occur before surface preparation.

Surface Preparation: General

The surface preparation procedures are as follows:

- Perform all preparation and cleaning procedures in strict accordance with the manufacturer's instructions and as herein specified for each particular substrate condition as applicable. The Contractor is not liable for damages due to existing lead based paints. Treatment of such coatings that are loose and would interfere with proper remediation of the structure will be negotiated on an individual basis.
- All surfaces to be prepared for painting shall, at a minimum, meet the requirements of the Steel Structures Painting Council's specification SSPC-SP2 "Hand Tool Cleaning" or SSPC-SP3 "Power Tool Cleaning". That is, cleaning shall remove all loose mill scale, loose rust, dirt and other loose detrimental foreign matter. It is not intended that adherent mill scale, rust and paint be removed by this process. Mill scale, rust and paint are considered adherent if they cannot be removed by lifting with a dull putty knife.
- In preparing a previously painted surface, it is necessary to remove all corrosion and all paint, which shows evidence of corrosion, peeling, excessive thickness, brittleness, blistering, checking, scaling, or general disintegration. It is essential that the removal of the old paint be carried back around the edges of the spot or area until an area of completely intact and adhering paint film, with no rust or blisters underneath is attained.
- Special attention must be given to cleaning around rivets, bolts, nuts, previously welded surfaces, edges, angles and corners of members. The areas beneath and around replacement bolts and nuts shall be cleared before they are replaced.
- A sample area to be used as a reference standard shall be prepared for each region by the Contractor on a representative structure. Prior to work start, the Contractor inspector and the Customer shall mutually agree to the acceptable degree of cleaning for this reference standard.
- Cleaned surfaces shall be inspected and approved by the Contractor inspector before coating application.
- All rivets, welds, corners, joints and openings shall be cleaned. Tools shall be operated in such a manner that no burrs or sharp edges are left on metal surfaces and no sharp cuts are made into the steel.

- The media waste generated during the surface preparation may contain lead. The Contractor must follow OSHA 29 CFR Part 126 dated May 4, 1993.

Preparation of Materials

Immediately after opening the coating material container, the applicator shall check the material for evidence of any skimming, curdling or otherwise degraded material. If any of these conditions exist, the coating shall not be used.

Before any coating material is applied; it must be well mixed consistent with manufacturer guidelines. Excessive mixing such as with a power mixer should be avoided since it could introduce moisture, which can accelerate curing and make application more difficult.

Induron MCU-62 and Induratar products are single component moisture cured urethane coatings that do not require mixing of multiple components. Some moderate mixing may be required initially after opening to reincorporate any material that has separated or settled in transit or storage.

E-Bond is a two-component epoxy penetrating sealer that requires mixing of both components in a 1:1 One part by volume of E-Bond 100 Part A to one part by volume of E-Bond 100 Part B. Agitate until components are thoroughly mixed.

Under certain conditions thinning of Induratar with Induron Industrial Thinner K – 1012 (Xylene) will help to provide a more even, consistent coverage. Adhere to mixing and application restrictions as identified in the coating Manufactures data sheets. As there is no maximum limit of thinner to add in the PDS/TDS, test by adding small amounts and apply to test application areas to ensure proper consistency. Do not exceed more than 10% addition of thinner. Do not thin E-Bond or MCU 62 Penetrating Sealer.

Application Conditions

No coating shall be applied when air and substrate temperatures exceed the manufacturer’s recommendations.

Coating Schedule

After the proper surface preparation, components shall be coated as follows:

- Apply two coats of Induratar to achieve an average wet film thickness of 8.0 – 11.0 mils and 5.0 - 7.0 mils (DFT).

- Total average dry film thickness (DFT) applied per this specification shall be between 10.0 mils and 14.0 mils.

The tolerance on average dry film thickness readings shall be + or - 20%.

Note that variation in the applied dry film thicknesses of new coatings may occur due to variation in the thickness of remaining galvanization and/or previously applied coatings. These existing thickness values should be considered as part of the total dry film thickness. Coating thickness may also vary from manufacturer recommendations due to the specific application requirements for below-grade applications on transmission Structures.

The products listed shall be applied according to manufacturer specified requirements. Refer to the Product Data Sheet/Technical Data Sheet (PDS/TDS) for additional requirements. PDS/TDS should be available on the job site for review during the application process.

Due to the geometry of some Structures, the access necessary for coating application may be severely limited. Every effort will be made to coat inaccessible areas, but finished coatings may not meet all the above requirements.

Application

Copies of coating manufacturer's instructions, materials safety data sheets (MSDS) and this specification shall be available at the work site for workmen's use.

Animals may be attracted to these coatings. Digestion of these materials by animals may lead to their sickness. Consequently, when a structure will be exposed to domestic farm animals Contractor will take reasonable action to prevent contact of any farm animals which may reasonably be anticipated to have access to the painted surfaces or to unused paint in containers. Previously opened paint cans shall be removed from work areas after each workday.

The paint application procedure is as follows:

- Coatings shall be applied only to thoroughly cleaned and properly prepared surfaces.

- All work shall be done under competent supervision by skilled labor, and Customer safety requirements.
- Unless otherwise specified, all coating systems shall be applied by brush.
- Film shall not be stirred if it forms on the surfaces of paint in the containers. Remove the film, and if necessary. Strain the material before using.
- All coatings shall be applied in a competent skillful manner to achieve the specified film thickness.
- The application shall leave no holes or other defects.
- Care shall be taken to protect adjacent equipment, surfaces and property from coatings during coating operations. Protective mats and drop cloths shall be provided where necessary.
- Paint shall be well worked into all joints, connections, rivets, bolts and welds with a brush.
- Unless otherwise specified, coatings shall be applied to a minimum height of 12” above ground line.
- Unless otherwise specified, coatings shall be applied to a minimum depth of 24” below ground line.

Curing Time

Cure times to touch and recoat are affected by humidity, and to a somewhat lesser extent, by temperature. Manufacturers will typically recommend different curing times for different humidity and temperature ranges; the applicator will strictly adhere to these recommendations.

Finish coats shall be applied as quickly as possible after the primer has thoroughly dried. If the primer surfaces are contaminated before top coating, they should be adequately repaired, prepped, and recoated.

Repair of Defects

All damage to previous coats shall be repaired before application of any further coat of material.

Areas with inadequate wet film coating thickness shall have additional compatible coatings applied until they meet this specification.

Damaged or contaminated areas shall be cleaned as originally specified and the full coating system reapplied in accordance with this specification.

Coating Inspection

Prior to start of work, the Contractor shall coat a representative area. The application method as well as coating appearance, coverage and film build

shall be mutually agreed to by the Contractor inspector/Foreman and the Customer.

The Customer has the right to inspect work at any time to assure contract compliance.

The Contractor Inspector/Foreman shall record inspection and painting work on the inspection detail report. Prior to the start of work, the Contractor shall ensure that personnel are adequately informed in the use and recording of this report.

The Contractor's Foreman shall acquaint him or herself with the requirements of this specification, the Manufacturer's Standards, and the scope of work. The Contractor's Coating Foreman shall provide him or herself with wet film thickness gage and other equipment as necessary to inspect and monitor the work of painters under his direction. The Contractor's Coating Foreman shall also provide him or herself with temperature gages to determine surface temperatures of substrates to be coated.

Paint thickness measurements can be made with dry or wet film thickness gages. Dry thickness measurements shall be made with a properly calibrated Mikrotest or similar dry film thickness gage in accordance with the Steel Structures Painting Council Method, SSPC-PA2, "Measurement of Dry Paint Thickness with Magnetic Gages". Wet paint thickness measurements will be made using specific manufacturer approved gages.

Where the Customer representative's spot check reveals inadequate film build up, the Contractor shall provide an additional coat at Contractor's expense over the entire area where the inadequacy occurs.

Cleanup

After painting and inspection have been completed, all equipment, scaffolding, surplus materials and wastes resulting from painting shall be collected and removed from the work area. Proper disposal of these materials shall be in compliance with the direction contained within this document. All local, state and federal requirements concerning the disposal of solid waste and hazardous waste shall be complied with.

Final Inspection

The responsible Customer representative shall verify that all aspects of the work have been completed before final acceptance. Field inspection reports, including any discovered problems, shall be documented and kept by both the Contractor and the Customer representatives. Work not

inspected by Customer within ten (10) days of completion shall be deemed acceptable.

## 14.0 TESTING AND REPAIR OF POLE GROUND

The bidder is responsible for inspection and electrical testing of each pole ground. If the ground resistance is found to be greater than 50 ohms, new or additional ground rods shall be driven and connected until the ground resistance tests below 50 ohms. All grounding materials will be provided by the City. Pre and post inspection resistance readings shall be recorded and provided to the City.

## 15.0 DISPOSAL OF DEBRIS

The bidder is responsible for the proper disposal of all debris from the work and cleanup performed under this contract. Disposal shall include items such as wet and dried residues, fumigants, pole wrap materials, mineral oil, spent solvent, hazardous material wastes, and any other waste from the work.

The bidder shall include a short description of the disposal method to be used for each of the several waste streams of the project. The proposed disposal methods shall be the only means used for disposal under this contract. The proposed disposal methods shall also be used in the evaluation of the bid. Not providing complete disposal methods and anticipated waste streams will be considered non-responsive and said bid will not be considered for award.

The bidder is responsible to comply with the most current of all Federal, State, and Local disposal requirements for all waste materials. Copies of all records relevant to disposal shall be given to the City, including manifests, disposal certificates and other pertinent documentation. Where applicable, original documents shall be given to the Utilities Department, copies being retained by the bidder.

The bidder shall hold harmless, and indemnify, the City of Grand Island, City Council members, and all other City employees from liability due to the improper handling, transporting or disposal of any hazardous wastes, discovered or generated by the work covered by this contract.

The City, since 1979, has tested all known oil filled equipment for Polychlorinated Biphenyls (PCB's.) All known PCB or PCB Contaminated items and equipment have been removed from service and properly destroyed. Any items found to be PCB or PCB contaminated during the work shall be reported to the City's representative. The City will properly dispose of the items.

## 16.0 COMPLETION DATE

The project shall not extend past the completion date proposed in the bid with one exception. To prevent or reduce damage to crops, poles located in fields shall be inspected first.

## 17.0 BIDDER REQUIREMENTS

All work, work coordination, oversight, and work quality are the successful bidder's responsibility.

The bidder, and the on-site supervisor, shall provide four references of wood pole inspection and treatment work completed in the last five years. Submitted references must be for work similar to that required by this contract, covering equipment rated to at least 115kV.

A list of the bidder's key personnel shall be submitted with the bid. The list is to include a short resume of pertinent work information. The list is to include on-site supervisor.

The bidder shall submit a list of equipment, other than hand tools or other common tools, to be used to fulfill the requirements of this contract. The list is to include any heavy equipment or vehicles to be used inside or around the substations.

## 18.0 SUBCONTRACTING

Subcontracting will not be allowed.

## 19.0 DOCUMENTATION

The City expects the bidder to be familiar with the work to be performed, the proper documentation, and the correct display of documents. The City may not be held liable or responsible for the failure of the contractor to acquire or display required documentation or licenses.

Ten copies of the final report, both printed and on Compact Disc, shall be given to the
Utility in the format specified in the bid. The documentation shall be comprehensive and complete.

Reports are to include:

A. Initial Equipment Inspection Findings (As Found Report)
B. Pole information
C. Pole above soil condition
D. Depth of Pole
E. Pole attachments loose, damaged, or missing
F. Pole below soil condition
G. Coring, sounding, and/or other interior condition locator findings
H. Performed treatment and fumigation
I. Expected result of treatment
J. Pre and post inspection ground resistance

These reports are to be complete, but concise. Test reports are to cover all tests

performed.

The Final Comprehensive Report is to include recommendations the bidder would have concerning the poles or future pole maintenance.

## 20.0 WARRANTY

All work performed, products, and treatments shall be warranted to be free from defect and to perform to the level specified by the original manufacturer, and to the current standards, whichever is the more stringent. All maintenance work and items used shall be warranted for at least one year from the date of City approval of final payment for all the work performed under this contract.

## 21.0 BID AND UNIT PRICING

The bidder shall submit a total bid price that includes all costs to perform the work as required by this specification, including taxes, fees, permitting or other such costs. The bidder shall include pricing for eighty (80) pole grounding repairs and include that cost in the total bid price. Final payment will be based upon actual work completed per the unit pricing below.

The bidder shall supply unit pricing under the following categories:

A. Above Ground Inspection, Sounding, Boring, Attachment Inspection, Information Verification, and Collection per Wood Pole
B. Above Ground Inspection, Attachment Inspection, Information Verification, and Collection per Steel (Metal) Pole and lattice structure
C. Treatment of Interior Wood Voids per Pole
D. Interior Wood Fumigation per Pole
E. Treatment of Wood Exterior and Wrapping per Pole
F. Coating application per Steel (Metal) Pole/Structure
G. Purchase and Disposal of Fill Dirt per Pole
H. Miscellaneous Cost per Pole with details
I. Repair of grounding per Pole.

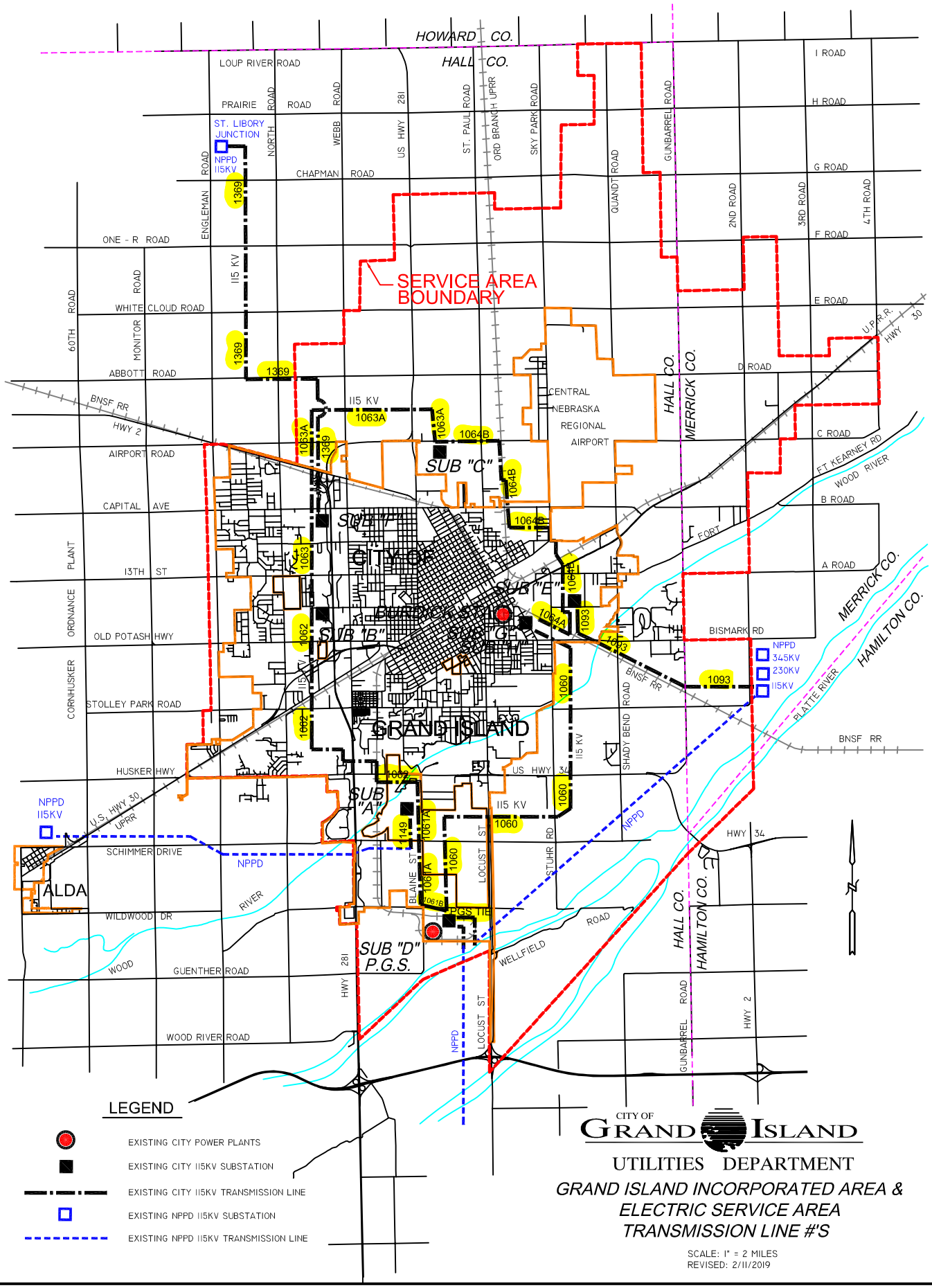
## 22.0 PAYMENT

Bidder is to invoice per the unit pricing. Invoices may be submitted for work completed on a monthly basis. There will be no pre-payment on materials or labor.

Ten percent (10%) of each invoice shall be retained until the completion of the entire work and final acceptance. Full payment will be made upon satisfactory completion of the entire project, including proof of payment of all obligations or encumbrances, and all disposal manifests, and certificates.

The Bidder should allow at least three weeks for payment as the City Council usually meets twice monthly to approve payments.

# APPENDIX A


HOWARD CO.
HALL CO.
LOUP RIVER ROAD
PRAIRIE ROAD
ST. LIBORY JUNCTION
NPPD 115KV
CHAPMAN ROAD
ENGLEMAN ROAD
NORTH ROAD
WEBB ROAD
US HWY 281
ST. PAUL ROAD
ORD BRANCH UPRR
SKY PARK ROAD
GUANDT ROAD
GUNBARREL ROAD
I ROAD
H ROAD
G ROAD
2ND ROAD
3RD ROAD
4TH ROAD
F ROAD
ONE - R ROAD
115 KV
SERVICE AREA BOUNDARY
E ROAD
WHITE CLOUD ROAD
60TH ROAD
MONITOR ROAD
ABBOTT ROAD
U.P.R.R.
HWY 30
D ROAD
BNSF RR
HWY 2
AIRPORT ROAD
CENTRAL NEBRASKA REGIONAL AIRPORT
HALL CO.
MERRICK CO.
C ROAD
FT KEARNEY RD
WOOD RIVER
CAPITAL AVE
SUB "C"
SUB "F"
CITY OF
B ROAD
PLANT
13TH ST
SUB "E"
FORT
A ROAD
ORDNANCE
OLD POTASH HWY
SUB "B"
SUB "G"
MERRICK CO.
HAMILTON CO.
BISMARK RD
NPPD 345KV 230KV 115KV
CORNHUSKER
STOLLEY PARK ROAD
GRAND ISLAND
BNSF RR
SHADY BEND ROAD
PLATTE RIVER
HUSKER HWY
US HWY 34
SUB "A"
NPPD 115KV
U.S. HWY 30
UPRR
SCHIMMER DRIVE
NPPD
ALDA
WILDWOOD DR
RIVER
BLAINE ST
LOCUST ST
STUHR RD
HWY 34
PGS TIE
WOOD
GUENTHER ROAD
SUB "D" P.G.S.
WELLFIELD ROAD
HALL CO.
HAMILTON CO.
WOOD RIVER ROAD
GUNBARREL ROAD
HWY 2
LEGEND
EXISTING CITY POWER PLANTS
EXISTING CITY 115KV SUBSTATION
EXISTING CITY 115KV TRANSMISSION LINE
EXISTING NPPD 115KV SUBSTATION
EXISTING NPPD 115KV TRANSMISSION LINE
CITY OF GRAND ISLAND
UTILITIES DEPARTMENT
GRAND ISLAND INCORPORATED AREA &
ELECTRIC SERVICE AREA
TRANSMISSION LINE #'S
SCALE: 1" = 2 MILES
REVISED: 2/11/2019

# APPENDIX B

| OBJECTID | UniqueID | Name | Owner | Class | Material | Foundation | Grounded | Hframe | CrossArmCo | Transmissi | X_Coord | Y_Coord | Latitude | Longitude | Structure |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 10 | P-10 | GIUD | 89 Type C | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 131216.63251800 | 100850.52749874 | 40.91828245 | -98.31469423 | 10 |
| 110 | 110 | P-110 | GIUD | 105 TS | Steel | Earth | Yes | No | Parallel | 1060 | 131065.19450066 | 100935.41774891 | 40.91851598 | -98.31524171 | 10A |
| 17 | 17 | P-17 | GIUD | 90 HP | Steel | Earth | Yes | No | Vertical | 1060 | 128005.07922983 | 101923.61295099 | 40.92123881 | -98.32630876 | 1A |
| 6 | 6 | P-6 | GIUD | 82 Type C | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 128254.68535791 | 101869.93720532 | 40.92109066 | -98.32540589 | 2 |
| 16 | 16 | P-16 | GIUD | 80 TS | Steel | Earth | Yes | No | Parallel | 1060 | 128153.55629508 | 101879.84630624 | 40.92111819 | -98.32577174 | 2A |
| 5 | 5 | P-5 | GIUD | 82 Type A | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 128538.32685100 | 101842.14493807 | 40.92101342 | -98.32437977 | 3 |
| 15 | 15 | P-15 | GIUD | 90 TS | Steel | Earth | Yes | No | Parallel | 1060 | 128397.21919358 | 101855.97135399 | 40.92105185 | -98.32489025 | 3A |
| 14 | 14 | P-14 | GIUD | 100 TS | Steel | Earth | Yes | No | Parallel | 1060 | 128718.11159641 | 101824.52850349 | 40.92096446 | -98.32372937 | 4A |
| 4 | 4 | P-4 | GIUD | 105 Type B | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 129640.03855833 | 101734.29771283 | 40.92071361 | -98.32039416 | 6 |
| 3 | 3 | P-3 | GIUD | 103 Type A | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 130051.60827325 | 101503.58984090 | 40.92007898 | -98.31890615 | 7 |
| 13 | 13 | P-13 | GIUD | 120 TS | Steel | Earth | Yes | No | Parallel | 1060 | 129851.29633791 | 101615.87603366 | 40.92038786 | -98.31963036 | 7A |
| 2 | 2 | P-2 | GIUD | 98 Type A | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 130482.04277983 | 101262.30685890 | 40.91941524 | -98.31734997 | 8 |
| 12 | 12 | P-12 | GIUD | 115 TS | Steel | Earth | Yes | No | Parallel | 1060 | 130262.43790408 | 101385.40799066 | 40.91975388 | -98.31814392 | 8A |
| 1 | 1 | P-1 | GIUD | 94 Type A | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 130911.66068700 | 101021.48188124 | 40.91875275 | -98.31579677 | 9 |
| 11 | 11 | P-11 | GIUD | 110 TS | Steel | Earth | Yes | No | Parallel | 1060 | 130693.44786883 | 101143.80250274 | 40.91908925 | -98.31658567 | 9A |
| 2265 | 2265 | P-2265 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131240.75517316 | 97376.54494540 | 40.90874831 | -98.31462401 | D-10E |
| 2264 | 2264 | P-2264 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131226.25520216 | 97376.55249132 | 40.90874838 | -98.31467646 | D-10W |
| 2263 | 2263 | P-2263 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131240.34802175 | 96987.06869024 | 40.90767942 | -98.31462739 | D-11E |
| 2262 | 2262 | P-2262 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131225.84837883 | 96987.08411016 | 40.90767952 | -98.31467984 | D-11W |
| 2261 | 2261 | P-2261 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131239.94251075 | 96598.78862690 | 40.90661382 | -98.31463076 | D-12E |
| 2260 | 2260 | P-2260 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131225.44221166 | 96598.83652707 | 40.90661401 | -98.31468322 | D-12W |
| 2258 | 2258 | P-2258 | GIUD | 80/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131230.52487866 | 96208.03579949 | 40.90554147 | -98.31466675 | D-13C |
| 2259 | 2259 | P-2259 | GIUD | 80/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131247.02451758 | 96207.94459232 | 40.90554115 | -98.31460706 | D-13E |
| 2257 | 2257 | P-2257 | GIUD | 80/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131214.02523975 | 96208.12733474 | 40.90554178 | -98.31472643 | D-13W |
| 2256 | 2256 | P-2256 | GIUD | 80/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131235.58261133 | 95812.73114391 | 40.90445657 | -98.31465039 | D-14E |
| 2255 | 2255 | P-2255 | GIUD | 80/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131221.08296841 | 95812.84892582 | 40.90445694 | -98.31470284 | D-14W |
| 2254 | 2254 | P-2254 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131231.34115000 | 95416.14729141 | 40.90336819 | -98.31466768 | D-15E |
| 2253 | 2253 | P-2253 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131216.84249133 | 95416.33298657 | 40.90336875 | -98.31472012 | D-15W |
| 2252 | 2252 | P-2252 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131225.47337958 | 95022.45516541 | 40.90228775 | -98.31469083 | D-16E |
| 2251 | 2251 | P-2251 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131210.97406475 | 95022.62051941 | 40.90228826 | -98.31474328 | D-16W |
| 2250 | 2250 | P-2250 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131222.34477691 | 94625.59473865 | 40.90119861 | -98.31470410 | D-17E |
| 2249 | 2249 | P-2249 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131207.84513399 | 94625.70923974 | 40.90119898 | -98.31475654 | D-17W |
| 2248 | 2248 | P-2248 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131220.81394008 | 94224.87539574 | 40.90009888 | -98.31471160 | D-18E |
| 2247 | 2247 | P-2247 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131206.31396908 | 94224.93051374 | 40.90009908 | -98.31476404 | D-18W |
| 2246 | 2246 | P-2246 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131219.29721083 | 93827.86962807 | 40.89900933 | -98.31471903 | D-19E |
| 1013 | 1013 | P-1013 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131204.79756791 | 93827.92474607 | 40.89900953 | -98.31477148 | D-19W |
| 1012 | 1012 | P-1012 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131217.77195141 | 93428.56137157 | 40.89791346 | -98.31472651 | D-20E |
| 1011 | 1011 | P-1011 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131203.27198041 | 93428.61681765 | 40.89791367 | -98.31477895 | D-20W |
| 1010 | 1010 | P-1010 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131216.24702008 | 93029.53297015 | 40.89681837 | -98.31473398 | D-21E |
| 1009 | 1009 | P-1009 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131201.74737716 | 93029.58808815 | 40.89681857 | -98.31478642 | D-21W |
| 1008 | 1008 | P-1008 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131214.72176066 | 92630.22471365 | 40.89572250 | -98.31474145 | D-22E |
| 1007 | 1007 | P-1007 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131200.22178966 | 92630.27983166 | 40.89572271 | -98.31479389 | D-22W |
| 1006 | 1006 | P-1006 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131213.19387658 | 92230.33673391 | 40.89462505 | -98.31474894 | D-23E |
| 2238 | 2238 | P-2238 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131198.69423366 | 92230.39185190 | 40.89462525 | -98.31480138 | D-23W |
| 2237 | 2237 | P-2237 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131211.67255416 | 91832.17611291 | 40.89353233 | -98.31475639 | D-24E |
| 2236 | 2236 | P-2236 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131197.17291125 | 91832.23123091 | 40.89353253 | -98.31480883 | D-24W |
| 2235 | 2235 | P-2235 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131210.23751766 | 91456.47049949 | 40.89250124 | -98.31476342 | D-25E |
| 2234 | 2234 | P-2234 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131195.73754666 | 91456.52594557 | 40.89250144 | -98.31481586 | D-25W |
| 2233 | 2233 | P-2233 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131208.79296675 | 91078.46272532 | 40.89146383 | -98.31477050 | D-26E |
| 2232 | 2232 | P-2232 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131194.29332383 | 91078.51817141 | 40.89146404 | -98.31482293 | D-26W |
| 2230 | 2230 | P-2230 | GIUD | 70/1 MASA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131204.04560091 | 90719.72820657 | 40.89047933 | -98.31478942 | D-27C |
| 2231 | 2231 | P-2231 | GIUD | 70/1 MASA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131220.42844216 | 90717.76331549 | 40.89047387 | -98.31473018 | D-27E |
| 2229 | 2229 | P-2229 | GIUD | 70/1 MASA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131187.66341583 | 90721.69309766 | 40.89048478 | -98.31484866 | D-27W |
| 2228 | 2228 | P-2228 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131110.86402874 | 90371.98382332 | 40.88952531 | -98.31512811 | D-28E |
| 2227 | 2227 | P-2227 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131096.86208824 | 90375.75153232 | 40.88953571 | -98.31517873 | D-28W |
| 2226 | 2226 | P-2226 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131016.68508324 | 90021.97041574 | 40.88856508 | -98.31547040 | D-29E |
| 2225 | 2225 | P-2225 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131002.68314274 | 90025.73812474 | 40.88857547 | -98.31552102 | D-29W |
| 2123 | 2123 | P-2123 | GIUD | 90/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131230.74108558 | 100474.85666215 | 40.91725140 | -98.31464503 | D-2E |
| 2122 | 2122 | P-2122 | GIUD | 90/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131216.24341116 | 100474.58304065 | 40.91725070 | -98.31469748 | D-2W |
| 2224 | 2224 | P-2224 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130923.42575533 | 89675.37629265 | 40.88761422 | -98.31580934 | D-30E |
| 2223 | 2223 | P-2223 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130909.42414291 | 89679.14400166 | 40.88762461 | -98.31585996 | D-30W |
| 2221 | 2221 | P-2221 | GIUD | 70/1 MASA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130816.02570766 | 89327.75986191 | 40.88666060 | -98.31619941 | D-31C |
| 2222 | 2222 | P-2222 | GIUD | 70/1 MASA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130832.40034683 | 89325.73132265 | 40.88665498 | -98.31614021 | D-31E |
| 2220 | 2220 | P-2220 | GIUD | 70/1 MASA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130799.65074041 | 89329.78840116 | 40.88666623 | -98.31625862 | D-31W |
| 752 | 752 | P-752 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130832.06504566 | 88981.79598691 | 40.88571107 | -98.31614309 | D-32E |
| 751 | 751 | P-751 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130817.56638699 | 88981.61390065 | 40.88571062 | -98.31619552 | D-32W |
| 750 | 750 | P-750 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130836.42035191 | 88634.67004074 | 40.88475839 | -98.31612902 | D-33E |
| 749 | 749 | P-749 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130821.92169325 | 88634.48795449 | 40.88475795 | -98.31618145 | D-33W |
| 748 | 748 | P-748 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130840.76614375 | 88288.34002474 | 40.88380790 | -98.31611498 | D-34E |
| 747 | 747 | P-747 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130826.26682891 | 88288.15826657 | 40.88380745 | -98.31616741 | D-34W |
| 746 | 746 | P-746 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130845.10931091 | 87942.15961474 | 40.88285781 | -98.31610095 | D-35E |
| 745 | 745 | P-745 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130830.61065225 | 87941.97752849 | 40.88285737 | -98.31615338 | D-35W |
| 744 | 744 | P-744 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130849.46297675 | 87595.18688349 | 40.88190556 | -98.31608689 | D-36E |
| 743 | 743 | P-743 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130834.96399000 | 87595.00512532 | 40.88190511 | -98.31613932 | D-36W |
| 742 | 742 | P-742 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130853.80844050 | 87248.84046333 | 40.88095502 | -98.31607285 | D-37E |
| 741 | 741 | P-741 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130839.30945374 | 87248.65837707 | 40.88095457 | -98.31612528 | D-37W |
| 739 | 739 | P-739 | GIUD | 70/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130853.81926725 | 86902.47534241 | 40.88000444 | -98.31607449 | D-38C |
| 740 | 740 | P-740 | GIUD | 70/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130868.95309525 | 86895.90120857 | 40.87998634 | -98.31601980 | D-38E |
| 738 | 738 | P-738 | GIUD | 70/1 DESA | FibWood | Earth | Yes | Yes | Horizontal | 1060 | 130838.68543924 | 86909.04947624 | 40.88002254 | -98.31612918 | D-38W |
| 736 | 736 | P-736 | GIUD | 70/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130653.41185966 | 86699.83664007 | 40.87944905 | -98.31680011 | D-39C |
| 735 | 735 | P-735 | GIUD | 70/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130647.29015275 | 86715.15878791 | 40.87949112 | -98.31682218 | D-39N |
| 737 | 737 | P-737 | GIUD | 70/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130659.53356658 | 86684.51416416 | 40.87940697 | -98.31677805 | D-39S |
| 2121 | 2121 | P-2121 | GIUD | 85/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131243.51435399 | 100102.37643599 | 40.91622911 | -98.31460064 | D-3E |
| 2120 | 2120 | P-2120 | GIUD | 85/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131229.01438300 | 100102.44336499 | 40.91622935 | -98.31465310 | D-3W |
| 733 | 733 | P-733 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130301.58743208 | 86704.30841590 | 40.87946260 | -98.31807224 | D-40N |
| 734 | 734 | P-734 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 130301.72686750 | 86689.80877299 | 40.87942280 | -98.31807180 | D-40S |
| 2219 | 2219 | P-2219 | GIUD | 80/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 129952.57172591 | 86700.94917066 | 40.87945463 | -98.31933424 | D-41N |
| 732 | 732 | P-732 | GIUD | 80/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 129952.71148941 | 86686.44952774 | 40.87941484 | -98.31933380 | D-41S |
| 2217 | 2217 | P-2217 | GIUD | 85/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 129603.30437983 | 86697.58730074 | 40.87944665 | -98.32059715 | D-42N |
| 2218 | 2218 | P-2218 | GIUD | 85/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 129602.99991849 | 86683.08372082 | 40.87940684 | -98.32059832 | D-42S |
| 2215 | 2215 | P-2215 | GIUD | 85/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 129251.57148749 | 86715.75918040 | 40.87949775 | -98.32186888 | D-43N |
| 2216 | 2216 | P-2216 | GIUD | 85/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 129250.99931016 | 86701.26970807 | 40.87945799 | -98.32187102 | D-43S |
| 2213 | 2213 | P-2213 | GIUD | 80/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 128900.92717566 | 86725.33298016 | 40.87952525 | -98.32313671 | D-44N |
| 2214 | 2214 | P-2214 | GIUD | 80/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 128900.53150716 | 86710.83858657 | 40.87948547 | -98.32313821 | D-44S |
| 2211 | 2211 | P-2211 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 128540.28288383 | 86735.17974524 | 40.87955351 | -98.32444071 | D-45N |
| 2212 | 2212 | P-2212 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 128539.88721533 | 86720.68535165 | 40.87951373 | -98.32444220 | D-45S |
| 2209 | 2209 | P-2209 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 128187.27735624 | 86744.81817740 | 40.87958116 | -98.32571708 | D-46N |
| 2210 | 2210 | P-2210 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 128186.88168775 | 86730.32345574 | 40.87954138 | -98.32571857 | D-46S |
| 2207 | 2207 | P-2207 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 127819.34764591 | 86754.86343291 | 40.87960996 | -98.32704742 | D-47N |
| 2208 | 2208 | P-2208 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 127818.95164933 | 86740.36903932 | 40.87957018 | -98.32704891 | D-47S |
| 2205 | 2205 | P-2205 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 127461.13904475 | 86764.64359707 | 40.87963799 | -98.32834260 | D-48N |
| 2206 | 2206 | P-2206 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 127460.74337624 | 86750.14887541 | 40.87959821 | -98.32834410 | D-48S |
| 2046 | 2046 | P-2046 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 127103.96226566 | 86774.39554607 | 40.87966592 | -98.32963406 | D-49N |
| 2204 | 2204 | P-2204 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 127103.56626908 | 86759.90115249 | 40.87962614 | -98.32963556 | D-49S |
| 2119 | 2119 | P-2119 | GIUD | 80/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131241.71120800 | 99711.78272898 | 40.91515717 | -98.31460909 | D-4E |
| 2118 | 2118 | P-2118 | GIUD | 80/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131227.21123699 | 99711.81980240 | 40.91515732 | -98.31466154 | D-4W |
| 730 | 730 | P-730 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 126738.10866666 | 86784.38404316 | 40.87969452 | -98.33095690 | D-50N |
| 731 | 731 | P-731 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 126737.71299816 | 86769.88964957 | 40.87965474 | -98.33095839 | D-50S |
| 728 | 728 | P-728 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 126372.60841341 | 86794.36302582 | 40.87972307 | -98.33227845 | D-51N |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 729 | 729 | P-729 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 126372.21274491 | 86779.86863224 | 40.87968329 | -98.33227994 | D-51S |
| 726 | 726 | P-726 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 126009.19050508 | 86804.28525008 | 40.87975144 | -98.33359248 | D-52N |
| 727 | 727 | P-727 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 126008.79450849 | 86789.79085649 | 40.87971166 | -98.33359397 | D-52S |
| 724 | 724 | P-724 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 125643.68729908 | 86814.26423274 | 40.87977996 | -98.33491405 | D-53N |
| 725 | 725 | P-725 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 125643.29130249 | 86799.76951107 | 40.87974019 | -98.33491554 | D-53S |
| 722 | 722 | P-722 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 125280.96033425 | 86824.16710007 | 40.87980825 | -98.33622558 | D-54N |
| 723 | 723 | P-723 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 125280.56466575 | 86809.67270649 | 40.87976848 | -98.33622707 | D-54S |
| 720 | 720 | P-720 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 124914.30686808 | 86834.17725065 | 40.87983683 | -98.33755132 | D-55N |
| 721 | 721 | P-721 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 124913.91119958 | 86819.68285707 | 40.87979706 | -98.33755280 | D-55S |
| 718 | 718 | P-718 | GIUD | 70/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 124547.55530500 | 86837.36982957 | 40.87984669 | -98.33887743 | D-56C |
| 717 | 717 | P-717 | GIUD | 70/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 124548.02479225 | 86853.86290682 | 40.87989195 | -98.33887567 | D-56N |
| 719 | 719 | P-719 | GIUD | 70/1 DESA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 124547.08548966 | 86820.87675232 | 40.87980143 | -98.33887919 | D-56S |
| 715 | 715 | P-715 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 124182.25190175 | 86855.81008141 | 40.87989837 | -98.34019825 | D-57N |
| 716 | 716 | P-716 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 124181.80209950 | 86841.31732824 | 40.87985860 | -98.34019993 | D-57S |
| 713 | 713 | P-713 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 123782.77566658 | 86868.21458416 | 40.87993357 | -98.34164266 | D-58N |
| 714 | 714 | P-714 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 123782.32553625 | 86853.72183099 | 40.87989380 | -98.34164434 | D-58S |
| 2203 | 2203 | P-2203 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 123382.35028633 | 86880.64894249 | 40.87996884 | -98.34309050 | D-59N |
| 712 | 712 | P-712 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 123381.90048408 | 86866.15586124 | 40.87992907 | -98.34309218 | D-59S |
| 2117 | 2117 | P-2117 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131241.51927925 | 99323.03481882 | 40.91409028 | -98.31461169 | D-5E |
| 2116 | 2116 | P-2116 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131227.01930825 | 99323.04170857 | 40.91409036 | -98.31466415 | D-5W |
| 2201 | 2201 | P-2201 | GIUD | 60/1 Dead End | Wood | Earth | Yes | Yes | Horizontal | 1060 | 123023.39037433 | 86884.54197932 | 40.87998053 | -98.34438844 | D-60C |
| 2200 | 2200 | P-2200 | GIUD | 70/1 Dead End | Wood | Earth | Yes | Yes | Horizontal | 1060 | 123023.84017658 | 86899.03473249 | 40.88002031 | -98.34438676 | D-60N |
| 2202 | 2202 | P-2202 | GIUD | 70/1 Dead End | Wood | Earth | Yes | Yes | Horizontal | 1060 | 123022.94057208 | 86870.04889807 | 40.87994076 | -98.34439012 | D-60S |
| 2239 | 2239 | P-2239 | GIUD | 60/1 Dead End | Wood | Earth | Yes | Yes | Horizontal | 1060 | 122394.15016299 | 86906.46778849 | 40.88004244 | -98.34666362 | D-61C |
| 691 | 691 | P-691 | GIUD | 70/1 Dead End | Wood | Earth | Yes | Yes | Horizontal | 1060 | 122394.50318066 | 86920.96316632 | 40.88008222 | -98.34666229 | D-61N |
| 2240 | 2240 | P-2240 | GIUD | 70/1 Dead End | Wood | Earth | Yes | Yes | Horizontal | 1060 | 122393.79714533 | 86891.97208257 | 40.88000266 | -98.34666495 | D-61S |
| 1024 | 1024 | P-1024 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 122183.70701433 | 86918.84768499 | 40.88007698 | -98.34742451 | D-62N |
| 690 | 690 | P-690 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 122183.24966616 | 86904.35493182 | 40.88003721 | -98.34742622 | D-62S |
| 1022 | 1022 | P-1022 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 121834.37208308 | 86929.87095691 | 40.88010817 | -98.34868763 | D-63N |
| 1023 | 1023 | P-1023 | GIUD | 75/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 121833.91473491 | 86915.37820374 | 40.88006840 | -98.34868933 | D-63S |
| 2115 | 2115 | P-2115 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131241.32735050 | 98934.60088441 | 40.91302426 | -98.31461429 | D-6E |
| 1107 | 1107 | P-1107 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131226.82737949 | 98934.60810224 | 40.91302433 | -98.31466675 | D-6W |
| 1106 | 1106 | P-1106 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131241.13574983 | 98545.47928732 | 40.91195635 | -98.31461689 | D-7E |
| 1105 | 1105 | P-1105 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131226.63545075 | 98545.48617707 | 40.91195642 | -98.31466935 | D-7W |
| 1104 | 1104 | P-1104 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131240.94349299 | 98156.35112857 | 40.91088842 | -98.31461950 | D-8E |
| 1103 | 1103 | P-1103 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131226.44352200 | 98156.35801832 | 40.91088849 | -98.31467195 | D-8W |
| 1102 | 1102 | P-1102 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131240.75090808 | 97766.53005783 | 40.90981859 | -98.31462211 | D-9E |
| 1101 | 1101 | P-1101 | GIUD | 70/1 TSA | Wood | Earth | Yes | Yes | Horizontal | 1060 | 131226.25093708 | 97766.53366674 | 40.90981865 | -98.31467456 | D-9W |
| 1100 | 1100 | P-1100 | GIUD | 65 SPDE-1 | Steel | Concrete Foundation | Yes | No | Vertical | 1060 | 121656.61653308 | 86928.06485815 | 40.88010368 | -98.34933038 | DD-1 |
| 1021 | 1021 | P-1021 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121666.88226058 | 84903.87632124 | 40.87454840 | -98.34930028 | DD-10 |
| 1020 | 1020 | P-1020 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121668.02235016 | 84679.06049790 | 40.87393140 | -98.34929694 | DD-11 |
| 1019 | 1019 | P-1019 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121669.15292533 | 84456.13705924 | 40.87331960 | -98.34929363 | DD-12 |
| 1018 | 1018 | P-1018 | GIUD | 95/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121669.35010341 | 84232.80384449 | 40.87270668 | -98.34929369 | DD-13 |
| 1017 | 1017 | P-1017 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121667.56598625 | 84010.35415816 | 40.87209618 | -98.34930091 | DD-14 |
| 1016 | 1016 | P-1016 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121665.77169850 | 83786.67547166 | 40.87148232 | -98.34930817 | DD-15 |
| 1015 | 1015 | P-1015 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121663.97642650 | 83562.80321599 | 40.87086792 | -98.34931544 | DD-16 |
| 1014 | 1014 | P-1014 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121662.19526208 | 83340.78069416 | 40.87025859 | -98.34932265 | DD-17 |
| 2199 | 2199 | P-2199 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121660.39966200 | 83116.92024949 | 40.86964423 | -98.34932992 | DD-18 |
| 2198 | 2198 | P-2198 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121658.61587291 | 82894.52141608 | 40.86903387 | -98.34933714 | DD-19 |
| 1099 | 1099 | P-1099 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121657.75629458 | 86703.30874599 | 40.87948685 | -98.34932704 | DD-2 |
| 2197 | 2197 | P-2197 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121656.81896050 | 82670.47560433 | 40.86841900 | -98.34934441 | DD-20 |
| 2196 | 2196 | P-2196 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121655.02467275 | 82446.79101232 | 40.86780511 | -98.34935168 | DD-21 |
| 2194 | 2194 | P-2194 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121651.45118908 | 82001.26598474 | 40.86658240 | -98.34936614 | DD-23 |
| 2193 | 2193 | P-2193 | GIUD | 70/1 ST1 | Wood | Earth | Yes | No | Vertical | 1060 | 121649.65854175 | 81777.78053932 | 40.86596907 | -98.34937339 | DD-24 |
| 2192 | 2192 | P-2192 | GIUD | 50 SPHD | Wood | Earth | Yes | No | Horizontal | 1060 | 121647.85933274 | 81553.48177532 | 40.86535350 | -98.34938068 | DD-25 |
| 2191 | 2191 | P-2191 | GIUD | 50 SPHD | Wood | Earth | Yes | No | Horizontal | 1060 | 121646.47318066 | 81378.15338583 | 40.86487232 | -98.34938629 | DD-26 |
| 2190 | 2190 | P-2190 | GIUD | 70/1 ST1 | Wood | Earth | Yes | No | Vertical | 1060 | 121644.65100583 | 81147.68599899 | 40.86423982 | -98.34939368 | DD-27 |
| 2189 | 2189 | P-2189 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121642.79503841 | 80912.96862066 | 40.86359566 | -98.34940120 | DD-28 |
| 2188 | 2188 | P-2188 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121640.94235183 | 80678.64297383 | 40.86295257 | -98.34940871 | DD-29 |
| 1098 | 1098 | P-1098 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121658.89835266 | 86478.09200482 | 40.87886876 | -98.34932369 | DD-3 |
| 2187 | 2187 | P-2187 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121639.07818233 | 80442.84324857 | 40.86230544 | -98.34941627 | DD-30 |
| 2186 | 2186 | P-2186 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121637.22254299 | 80208.14161824 | 40.86166132 | -98.34942379 | DD-31 |
| 2185 | 2185 | P-2185 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121635.36395091 | 79973.07614349 | 40.86101620 | -98.34943132 | DD-32 |
| 2184 | 2184 | P-2184 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121633.50831158 | 79738.37779399 | 40.86037208 | -98.34943884 | DD-33 |
| 2183 | 2183 | P-2183 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121631.68613674 | 79507.90679824 | 40.85973957 | -98.34944623 | DD-34 |
| 2267 | 2267 | P-2267 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121629.95254441 | 79288.63722365 | 40.85913781 | -98.34945325 | DD-35 |
| 2266 | 2266 | P-2266 | GIUD | 95/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121628.28719341 | 79077.97589957 | 40.85855966 | -98.34946000 | DD-36 |
| 2245 | 2245 | P-2245 | GIUD | 70 SPDE-2 | Steel | Concrete Foundation | Yes | No | Vertical | 1060 | 121626.48700016 | 78868.03078140 | 40.85798348 | -98.34946724 | DD-37 |
| 2244 | 2244 | P-2244 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121850.52526600 | 78860.77128149 | 40.85796297 | -98.34865743 | DD-38 |
| 2243 | 2243 | P-2243 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121996.41933116 | 78856.04392873 | 40.85794961 | -98.34813009 | DD-39 |
| 1097 | 1097 | P-1097 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121660.04073883 | 86252.88182532 | 40.87825068 | -98.34932034 | DD-4 |
| 2242 | 2242 | P-2242 | GIUD | 70 SPDE-2 | Steel | Concrete Foundation | Yes | No | Vertical | 1060 | 122133.34097333 | 78851.60758591 | 40.85793706 | -98.34763518 | DD-40 |
| 2241 | 2241 | P-2241 | GIUD | 80/1 ST1 | Wood | Earth | Yes | No | Vertical | 1060 | 122126.50470091 | 78643.97479907 | 40.85736725 | -98.34766062 | DD-41 |
| 1096 | 1096 | P-1096 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121661.17951608 | 86028.38030582 | 40.87763455 | -98.34931700 | DD-5 |
| 1095 | 1095 | P-1095 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121662.32288650 | 85802.86172799 | 40.87701562 | -98.34931365 | DD-6 |
| 1094 | 1094 | P-1094 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121663.46264800 | 85578.15548449 | 40.87639893 | -98.34931031 | DD-7 |
| 1093 | 1093 | P-1093 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121664.59617591 | 85354.60868749 | 40.87578541 | -98.34930698 | DD-8 |
| 1092 | 1092 | P-1092 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1060 | 121665.73987441 | 85129.18787849 | 40.87516676 | -98.34930363 | DD-9 |
| 2195 | 2195 | P-2195 | GIUD | 80/1 ST | Fiber Wood | Earth | Yes | No | Vertical | 1060 | 121653.23793091 | 82224.03981741 | 40.86719379 | -98.34935891 | |
| 18574 | 18574 | P-18574 | GIUD | 105 Type A | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 129261.47566716 | 101771.28746824 | 40.92081645 | -98.32176366 | |
| 18575 | 18575 | P-18575 | GIUD | 89 Type A | Steel Lattice Structure | Concrete Foundation | Yes | No | Parallel | 1060 | 128898.51740358 | 101806.85202966 | 40.92091532 | -98.32307672 | |
| 18576 | 18576 | P-18576 | GIUD | 115 TS | Steel | Earth | Yes | No | Parallel | 1060 | 129451.38572041 | 101752.14839891 | 40.92076326 | -98.32107664 | |
| 18577 | 18577 | P-18577 | GIUD | 105 TS | Steel | Earth | Yes | No | Parallel | 1060 | 129081.01572625 | 101788.96951949 | 40.92086561 | -98.32241650 | |
| 119 | 119 | P-119 | GIUD | 80 SDTA | Steel | Concrete Foundation | Yes | No | Parallel | 1061A | 118983.16256241 | 87943.14878599 | 40.88289615 | -98.35899417 | A-1 |
| 118 | 118 | P-118 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118987.91025633 | 87744.55272648 | 40.88235111 | -98.35897761 | A-10 |
| 1090 | 1090 | P-1090 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118980.32693816 | 85746.23552891 | 40.87686687 | -98.35901116 | A-11 |
| 117 | 117 | P-117 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118992.68682158 | 87544.73619699 | 40.88180271 | -98.35896095 | A-12 |
| 1088 | 1088 | P-1088 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118971.84007850 | 85285.20561107 | 40.87560162 | -98.35904326 | A-13 |
| 2136 | 2136 | P-2136 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118967.49428666 | 85049.13587324 | 40.87495375 | -98.35905970 | A-14 |
| 2134 | 2134 | P-2134 | GIUD | 99 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118958.83157433 | 84578.55741807 | 40.87366230 | -98.35909246 | A-15 |
| 2133 | 2133 | P-2133 | GIUD | 85 SDTD | Fibe Steel | Concrete Foundation | Yes | No | Parallel | 1061A | 118950.27942608 | 84345.68485232 | 40.87302322 | -98.35912410 | A-16 |
| 2132 | 2132 | P-2132 | GIUD | 70 SVDN | Steel | Concrete Foundation | Yes | No | Vertical | 1061A | 118961.51693641 | 84098.83199957 | 40.87234572 | -98.35908423 | A-17 |
| 112 | 112 | P-112 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118989.11432216 | 86223.58234324 | 40.87817690 | -98.35897793 | A-2 |
| 2131 | 2131 | P-2131 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118963.06417741 | 83879.97154491 | 40.87174506 | -98.35907930 | A-23 |
| 2130 | 2130 | P-2130 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118958.57862208 | 83637.21776532 | 40.87107885 | -98.35909627 | A-24 |
| 2129 | 2129 | P-2129 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118957.07632850 | 83401.14277816 | 40.87043096 | -98.35910242 | A-25 |
| 2128 | 2128 | P-2128 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118955.57042599 | 83164.52317265 | 40.86978158 | -98.35910859 | A-26 |
| 2127 | 2127 | P-2127 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118954.07567833 | 82929.69358982 | 40.86913710 | -98.35911471 | A-27 |
| 2126 | 2126 | P-2126 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118952.57961833 | 82694.60055608 | 40.86849191 | -98.35912084 | A-28 |
| 2125 | 2125 | P-2125 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118951.08060558 | 82459.07970165 | 40.86784554 | -98.35912698 | A-29 |
| 1089 | 1089 | P-1089 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118976.13797016 | 85518.67167957 | 40.87624235 | -98.35902701 | A-3 |
| 2124 | 2124 | P-2124 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118949.57371883 | 82222.31475524 | 40.86719576 | -98.35913316 | A-30 |
| 2114 | 2114 | P-2114 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118948.07470608 | 81986.79422890 | 40.86654939 | -98.35913930 | A-31 |
| 2113 | 2113 | P-2113 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118946.57503716 | 81751.15067132 | 40.86590268 | -98.35914544 | A-32 |
| 2112 | 2112 | P-2112 | GIUD | 60/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118946.65148058 | 81562.46108807 | 40.86538483 | -98.35914574 | A-33 |
| 2111 | 2111 | P-2111 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118946.77155908 | 81266.18805857 | 40.86457173 | -98.35914621 | A-34 |
| 2110 | 2110 | P-2110 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118946.87260875 | 81017.60555049 | 40.86388951 | -98.35914661 | A-35 |
| 2109 | 2109 | P-2109 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118946.97267416 | 80769.99318482 | 40.86320995 | -98.35914701 | A-36 |
| 2108 | 2108 | P-2108 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118947.07405191 | 80521.00779040 | 40.86252662 | -98.35914740 | A-37 |
| 2107 | 2107 | P-2107 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118947.17411733 | 80274.23466191 | 40.86184937 | -98.35914780 | A-38 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2106 | 2106 | P-2106 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118947.27483891 | 80025.37492341 | 40.86116639 | -98.35914820 | A-39 |
| 111 | 111 | P-111 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118984.79116808 | 85988.72815415 | 40.87753237 | -98.35899428 | A-4 |
| 2105 | 2105 | P-2105 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118947.37523241 | 79778.18119207 | 40.86048798 | -98.35914859 | A-40 |
| 2104 | 2104 | P-2104 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118947.47595400 | 79529.32637482 | 40.85980501 | -98.35914899 | A-41 |
| 2103 | 2103 | P-2103 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061A | 118947.57667558 | 79280.90561182 | 40.85912323 | -98.35914938 | A-42 |
| 2102 | 2102 | P-2102 | GIUD | 85/1 VD | Wood | Earth | Yes | No | Vertical | 1061A | 118947.72956241 | 79040.55996390 | 40.85846361 | -98.35914957 | A-43 |
| 2101 | 2101 | P-2101 | GIUD | 75 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1061A | 118945.69577383 | 78697.97665957 | 40.85752342 | -98.35915797 | A-44 |
| 1091 | 1091 | P-1091 | GIUD | 70 SDTF | Steel | Concrete Foundation | Yes | No | Parallel | 1061A | 119000.04704308 | 87117.86959665 | 40.88063119 | -98.35893565 | A-4A |
| 2135 | 2135 | P-2135 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118963.16489900 | 84813.93391582 | 40.87430827 | -98.35907608 | A-5 |
| 116 | 116 | P-116 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118997.47880675 | 87344.26875015 | 40.88125253 | -98.35894424 | A-6 |
| 115 | 115 | P-115 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 119002.15497850 | 86931.99267182 | 40.88012105 | -98.35892860 | A-7 |
| 113 | 113 | P-113 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118993.46962841 | 86460.17307740 | 40.87882620 | -98.35896145 | A-8 |
| 114 | 114 | P-114 | GIUD | 93 SDT | Steel | Concrete | Yes | No | Parallel | 1061A | 118997.80557774 | 86695.72214699 | 40.87947263 | -98.35894505 | A-9 |
| 16410 | 16410 | P-16410 | GIUD | 80-1 SPT | Steel | Concrete | Yes | No | Vertical | 1061A | 119046.22050716 | 78696.44975974 | 40.85751899 | -98.35879461 | |
| 2100 | 2100 | P-2100 | GIUD | 70 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1061B | 119424.50059050 | 78940.51127949 | 40.85818791 | -98.35742649 | A-45 |
| 2099 | 2099 | P-2099 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 119680.10309766 | 78887.38244874 | 40.85804149 | -98.35650274 | A-46 |
| 2098 | 2098 | P-2098 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 119925.87852475 | 78836.29626482 | 40.85790070 | -98.35561450 | A-47 |
| 870 | 870 | P-870 | GIUD | 80/1 ST | Steel | White Rock | Yes | No | Vertical | 1061B | 120170.71760200 | 78785.40496241 | 40.85776043 | -98.35472965 | A-48 |
| 869 | 869 | P-869 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 120414.42183900 | 78734.74955191 | 40.85762080 | -98.35384890 | A-49 |
| 868 | 868 | P-868 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 120658.93020825 | 78683.92681891 | 40.85748071 | -98.35296526 | A-50 |
| 867 | 867 | P-867 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 120895.58130975 | 78634.73695666 | 40.85734511 | -98.35211001 | A-51 |
| 866 | 866 | P-866 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 121132.19960291 | 78585.55431224 | 40.85720953 | -98.35125488 | A-52 |
| 865 | 865 | P-865 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 121369.26408941 | 78536.27849215 | 40.85707368 | -98.35039815 | A-53 |
| 864 | 864 | P-864 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 121605.44635983 | 78487.18639874 | 40.85693833 | -98.34954461 | A-54 |
| 863 | 863 | P-863 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1061B | 121816.09882566 | 78443.40072516 | 40.85681761 | -98.34878333 | A-55 |
| 16411 | 16411 | P-16411 | GIUD | 65 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1061B | 119412.16564141 | 78691.90219665 | 40.85750565 | -98.35747186 | |
| 862 | 862 | P-862 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 118904.48128933 | 89269.46470290 | 40.88653632 | -98.35927462 | B-10 |
| 861 | 861 | P-861 | GIUD | 80/1 VD | Wood | Earth | Yes | No | Vertical | 1062 | 118895.06693808 | 89516.41729299 | 40.88721408 | -98.35930791 | B-11 |
| 860 | 860 | P-860 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 118694.27895383 | 89527.87068216 | 40.88724598 | -98.36003398 | B-12 |
| 859 | 859 | P-859 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 118493.46537908 | 89539.32571174 | 40.88727788 | -98.36076014 | B-13 |
| 858 | 858 | P-858 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 118294.76400483 | 89548.94577124 | 40.88730473 | -98.36147868 | B-14 |
| 857 | 857 | P-857 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 118096.33297125 | 89559.69771824 | 40.88733468 | -98.36219623 | B-15 |
| 856 | 856 | P-856 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 117844.75309383 | 89573.32990883 | 40.88737265 | -98.36310597 | B-16 |
| 855 | 855 | P-855 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 117623.89231508 | 89585.29740457 | 40.88740598 | -98.36390463 | B-17 |
| 711 | 711 | P-711 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 117402.85896450 | 89597.27441474 | 40.88743933 | -98.36470392 | B-18 |
| 2045 | 2045 | P-2045 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 117181.99818575 | 89609.24191049 | 40.88747265 | -98.36550258 | B-19 |
| 1314 | 1314 | P-1314 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 116960.46778891 | 89621.24549541 | 40.88750606 | -98.36630366 | B-20 |
| 965 | 965 | P-965 | GIUD | 90/1 VDP | Wood | Earth | Yes | No | Vertical | 1062 | 116728.91936750 | 89632.00170749 | 40.88753606 | -98.36714098 | B-21 |
| 964 | 964 | P-964 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 116496.94837474 | 89848.10396557 | 40.88812962 | -98.36797927 | B-22 |
| 409 | 409 | P-409 | GIUD | 85/1 VDP | Wood | Earth | Yes | No | Vertical | 1062 | 116267.17258758 | 90059.35419924 | 40.88870985 | -98.36880965 | B-23 |
| 408 | 408 | P-408 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 116267.86779616 | 90283.86982632 | 40.88932601 | -98.36880654 | B-24 |
| 407 | 407 | P-407 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 116267.84187758 | 90508.36511224 | 40.88994212 | -98.36880603 | B-25 |
| 406 | 406 | P-406 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 116267.50395175 | 90733.59432057 | 40.89056025 | -98.36880666 | B-26 |
| 405 | 405 | P-405 | GIUD | 70 SPDE | Steel | Concrete Foundation | Yes | No | Vertical | 1062 | 116268.32416008 | 91184.20660833 | 40.89179692 | -98.36880249 | B-27 |
| 227 | 227 | P-227 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 116267.65093308 | 90957.93770391 | 40.89117595 | -98.36880553 | B-27A |
| 404 | 404 | P-404 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 116042.03163366 | 91180.15838807 | 40.89178627 | -98.36962089 | B-28 |
| 403 | 403 | P-403 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 115815.15807166 | 91177.46351157 | 40.89177932 | -98.37044139 | B-29 |
| 402 | 402 | P-402 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 115588.42558550 | 91174.77027549 | 40.89177238 | -98.37126138 | B-30 |
| 401 | 401 | P-401 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 115361.67767941 | 91172.07671132 | 40.89176542 | -98.37208143 | B-31 |
| 400 | 400 | P-400 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 115134.40680850 | 91169.37724166 | 40.89175845 | -98.37290336 | B-32 |
| 399 | 399 | P-399 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 114907.51552999 | 91166.68170899 | 40.89175148 | -98.37372393 | B-33 |
| 398 | 398 | P-398 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 114681.09111408 | 91163.99208182 | 40.89174451 | -98.37454280 | B-34 |
| 397 | 397 | P-397 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 114454.01479658 | 91161.29458065 | 40.89173753 | -98.37536404 | B-35 |
| 396 | 396 | P-396 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 114228.80625749 | 91158.61938915 | 40.89173059 | -98.37617851 | B-36 |
| 395 | 395 | P-395 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 114000.85297325 | 91155.91138932 | 40.89172357 | -98.37700292 | B-37 |
| 394 | 394 | P-394 | GIUD | 80 SVDP | Steel | Concrete Foundation | Yes | No | Vertical | 1062 | 113773.55716800 | 91153.21126349 | 40.89171655 | -98.37782494 | B-38 |
| 393 | 393 | P-393 | GIUD | 75 SPDE | Steel | Concrete Foundation | Yes | No | Vertical | 1062 | 113498.96060433 | 91449.32254791 | 40.89252968 | -98.37881736 | B-39 |
| 392 | 392 | P-392 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 113495.89302516 | 91692.03859790 | 40.89319581 | -98.37882791 | B-40 |
| 391 | 391 | P-391 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 113492.84709949 | 91933.03844399 | 40.89385722 | -98.37883838 | B-41 |
| 390 | 390 | P-390 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 113489.80609508 | 92173.60751665 | 40.89451745 | -98.37884884 | B-42 |
| 389 | 389 | P-389 | GIUD | 70 SPDE | Steel | Concrete Foundation | Yes | No | Vertical | 1062 | 113486.75885708 | 92414.72284807 | 40.89517918 | -98.37885932 | B-43 |
| 388 | 388 | P-388 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 113260.23437575 | 92411.63591199 | 40.89517109 | -98.37967860 | B-44 |
| 387 | 387 | P-387 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 113036.01369558 | 92408.58014382 | 40.89516308 | -98.38048954 | B-45 |
| 386 | 386 | P-386 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 112807.35011091 | 92405.46433640 | 40.89515490 | -98.38131656 | B-46 |
| 385 | 385 | P-385 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 112580.13665458 | 92402.36755782 | 40.89514677 | -98.38213833 | B-47 |
| 384 | 384 | P-384 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 112353.82772399 | 92399.28357449 | 40.89513867 | -98.38295683 | B-48 |
| 383 | 383 | P-383 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 112125.51125149 | 92396.17203216 | 40.89513049 | -98.38378259 | B-49 |
| 382 | 382 | P-382 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111899.89654525 | 92393.09690707 | 40.89512240 | -98.38459858 | B-50 |
| 381 | 381 | P-381 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111672.83696000 | 92390.00242507 | 40.89511425 | -98.38541979 | B-51 |
| 380 | 380 | P-380 | GIUD | 80/1 ST | Fiber Wood | Earth | Yes | No | Vertical | 1062 | 111446.32363350 | 92386.91516090 | 40.89510611 | -98.38623903 | B-52 |
| 379 | 379 | P-379 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111219.97566099 | 92383.83052140 | 40.89509798 | -98.38705767 | B-53 |
| 378 | 378 | P-378 | GIUD | 80/1 VD | Wood | Earth | Yes | No | Vertical | 1062 | 110990.13524141 | 92380.69798174 | 40.89508971 | -98.38788894 | B-54 |
| 377 | 377 | P-377 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110988.97513875 | 92610.05316607 | 40.89571916 | -98.38789271 | B-55 |
| 376 | 376 | P-376 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110987.85243758 | 92832.01958565 | 40.89632833 | -98.38789635 | B-56 |
| 375 | 375 | P-375 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110986.71464458 | 93056.94433265 | 40.89694563 | -98.38790004 | B-57 |
| 374 | 374 | P-374 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110985.58866258 | 93279.60300807 | 40.89755670 | -98.38790370 | B-58 |
| 373 | 373 | P-373 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110984.43184074 | 93508.19769524 | 40.89818406 | -98.38790745 | B-59 |
| 372 | 372 | P-372 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110983.32980883 | 93726.14378165 | 40.89878220 | -98.38791103 | B-60 |
| 371 | 371 | P-371 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110984.33243150 | 93936.08201008 | 40.89935836 | -98.38790701 | B-61 |
| 370 | 370 | P-370 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110985.37015908 | 94153.29023707 | 40.89995447 | -98.38790285 | B-62 |
| 369 | 369 | P-369 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110986.38163999 | 94365.12183440 | 40.90053583 | -98.38789879 | B-63 |
| 368 | 368 | P-368 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110987.41182166 | 94580.77560257 | 40.90112767 | -98.38789466 | B-64 |
| 367 | 367 | P-367 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110988.66870891 | 94794.89754965 | 40.90171531 | -98.38788971 | B-65 |
| 366 | 366 | P-366 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110989.39311691 | 94995.59563907 | 40.90226611 | -98.38788671 | B-66 |
| 365 | 365 | P-365 | GIUD | 80/1 H1 SSTM | Steel | Concrete | Yes | No | Vertical | 1062 | 110988.86785550 | 95234.78544941 | 40.90292255 | -98.38788816 | B-67 |
| 364 | 364 | P-364 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110989.30715908 | 95473.91128349 | 40.90357881 | -98.38788613 | B-68 |
| 363 | 363 | P-363 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110989.74843116 | 95714.30319116 | 40.90423855 | -98.38788408 | B-69 |
| 109 | 109 | P-109 | GIUD | 80 SST | Steel | White Rock | Yes | No | Vertical | 1062 | 118931.77421375 | 88553.55767015 | 40.88457150 | -98.35917812 | B-7 |
| 362 | 362 | P-362 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110990.19101558 | 95955.64325965 | 40.90490089 | -98.38788202 | B-70 |
| 361 | 361 | P-361 | GIUD | 85/1 VF | Wood | Earth | Yes | No | Vertical | 1062 | 110990.62146091 | 96189.98957574 | 40.90554403 | -98.38788003 | B-71 |
| 360 | 360 | P-360 | GIUD | 90/1 VF | Wood | Earth | Yes | No | Vertical | 1062 | 111027.14665033 | 96445.47561332 | 40.90624514 | -98.38774742 | B-72 |
| 359 | 359 | P-359 | GIUD | 85 H1 SSTM | Steel | Concrete | Yes | No | Vertical | 1062 | 111026.30544466 | 96775.90802332 | 40.90715199 | -98.38774984 | B-73 |
| 358 | 358 | P-358 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111027.03083691 | 97004.06012607 | 40.90777814 | -98.38774679 | B-74 |
| 357 | 357 | P-357 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111027.75786958 | 97232.65415707 | 40.90840549 | -98.38774373 | B-75 |
| 356 | 356 | P-356 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111028.48063716 | 97460.03756057 | 40.90902953 | -98.38774069 | B-76 |
| 355 | 355 | P-355 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111029.30576675 | 97719.57575540 | 40.90974181 | -98.38773721 | B-77 |
| 226 | 226 | P-226 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111027.30216183 | 97951.45357249 | 40.91037818 | -98.38774402 | B-78 |
| 354 | 354 | P-354 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111025.27263833 | 98186.32449383 | 40.91102277 | -98.38775092 | B-79 |
| 108 | 108 | P-108 | GIUD | 80 SST | Steel | White Rock | Yes | No | Vertical | 1062 | 118922.53145008 | 88796.00206716 | 40.88523689 | -98.35921080 | B-8 |
| 353 | 353 | P-353 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111023.28051633 | 98416.82272049 | 40.91165536 | -98.38775769 | B-80 |
| 352 | 352 | P-352 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111021.06234491 | 98638.88362807 | 40.91226479 | -98.38776530 | B-81 |
| 351 | 351 | P-351 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111018.94227041 | 98890.21284982 | 40.91295455 | -98.38777250 | B-82 |
| 350 | 350 | P-350 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111016.87370500 | 99135.37180832 | 40.91362737 | -98.38777952 | B-83 |
| 349 | 349 | P-349 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111014.81990333 | 99378.79323748 | 40.91429542 | -98.38778649 | B-84 |
| 348 | 348 | P-348 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111012.76938250 | 99621.86164899 | 40.91496251 | -98.38779345 | B-85 |
| 347 | 347 | P-347 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111010.71558083 | 99865.26962674 | 40.91563052 | -98.38780042 | B-86 |
| 346 | 346 | P-346 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111008.66473191 | 100108.35641091 | 40.91629766 | -98.38780738 | B-87 |
| 345 | 345 | P-345 | GIUD | 80 SST | Steel | White Rock | Yes | No | Vertical | 1062 | 111007.13914441 | 100289.18314899 | 40.91679393 | -98.38781256 | B-88 |
| 344 | 344 | P-344 | GIUD | 80 SST | Steel | White Rock | Yes | No | Vertical | 1062 | 111003.68114608 | 100565.32465708 | 40.91755178 | -98.38782455 | B-89 |
| 107 | 107 | P-107 | GIUD | 80 SST | Steel | White Rock | Yes | No | Vertical | 1062 | 118913.28638983 | 89038.51076849 | 40.88590246 | -98.35924349 | B-9 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 343 | 343 | P-343 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111002.93114758 | 100842.06786999 | 40.91831128 | -98.38782675 | B-90 |
| 342 | 342 | P-342 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 111000.89768708 | 101091.68613715 | 40.91899634 | -98.38783363 | B-91 |
| 341 | 341 | P-341 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110998.92098499 | 101334.31360465 | 40.91966221 | -98.38784033 | B-92 |
| 340 | 340 | P-340 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110996.92262941 | 101579.61199857 | 40.92033542 | -98.38784710 | B-93 |
| 339 | 339 | P-339 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110994.90097991 | 101827.74896949 | 40.92101641 | -98.38785394 | B-94 |
| 338 | 338 | P-338 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110992.89967158 | 102073.40694274 | 40.92169060 | -98.38786072 | B-95 |
| 337 | 337 | P-337 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110990.89442625 | 102319.54687040 | 40.92236612 | -98.38786752 | B-96 |
| 336 | 336 | P-336 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1062 | 110988.88918091 | 102565.68417341 | 40.92304162 | -98.38787431 | B-97 |
| 106 | 106 | P-106 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 111070.97399050 | 117519.59389807 | 40.96408111 | -98.38754897 | C-1 |
| 335 | 335 | P-335 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 113145.02430433 | 117518.49481890 | 40.96407487 | -98.38003994 | C-10 |
| 334 | 334 | P-334 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 113374.76662700 | 117518.37309999 | 40.96407414 | -98.37920817 | C-11 |
| 333 | 333 | P-333 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 113608.41839066 | 117517.81962340 | 40.96407223 | -98.37836224 | C-12 |
| 332 | 332 | P-332 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 113838.93170916 | 117515.87671390 | 40.96406649 | -98.37752768 | C-13 |
| 331 | 331 | P-331 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 114064.89549608 | 117513.97219016 | 40.96406087 | -98.37670959 | C-14 |
| 206 | 206 | P-206 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 114297.93374391 | 117512.00762715 | 40.96405506 | -98.37586589 | C-15 |
| 205 | 205 | P-205 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 114528.70263933 | 117510.06242107 | 40.96404930 | -98.37503040 | C-16 |
| 204 | 204 | P-204 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 114759.22514416 | 117508.11951157 | 40.96404354 | -98.37419581 | C-17 |
| 203 | 203 | P-203 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 114990.48780499 | 117506.17004041 | 40.96403776 | -98.37335853 | C-18 |
| 202 | 202 | P-202 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 115218.98144250 | 117503.63887749 | 40.96403038 | -98.37253129 | C-19 |
| 105 | 105 | P-105 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 111301.68908025 | 117519.47152299 | 40.96408044 | -98.38671368 | C-2 |
| 201 | 201 | P-201 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 115450.24705608 | 117500.93350232 | 40.96402251 | -98.37169401 | C-20 |
| 200 | 200 | P-200 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 115680.51299975 | 117498.23961007 | 40.96401467 | -98.37086034 | C-21 |
| 199 | 199 | P-199 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 115911.25761700 | 117497.03423191 | 40.96401091 | -98.37002494 | C-22 |
| 198 | 198 | P-198 | GIUD | 80/1 VD | Wood | Earth | Yes | No | Vertical | 1063A | 116141.54390183 | 117495.83082224 | 40.96400714 | -98.36919120 | C-23 |
| 197 | 197 | P-197 | GIUD | 80/1 VD | Wood | Earth | Yes | No | Vertical | 1063A | 116372.24127508 | 117434.55601040 | 40.96383851 | -98.36835614 | C-24 |
| 196 | 196 | P-196 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 116603.45997275 | 117432.22136941 | 40.96383163 | -98.36751903 | C-25 |
| 195 | 195 | P-195 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 116833.45262299 | 117429.89952365 | 40.96382478 | -98.36668636 | C-26 |
| 194 | 194 | P-194 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 117064.06108566 | 117427.57078815 | 40.96381790 | -98.36585146 | C-27 |
| 193 | 193 | P-193 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 117294.66692366 | 117425.24270882 | 40.96381102 | -98.36501657 | C-28 |
| 192 | 192 | P-192 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 117524.45878691 | 117422.92217541 | 40.96380416 | -98.36418462 | C-29 |
| 104 | 104 | P-104 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 111533.04262016 | 117519.34914791 | 40.96407976 | -98.38587607 | C-3 |
| 191 | 191 | P-191 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 117756.48456958 | 117420.57966041 | 40.96379722 | -98.36334459 | C-30 |
| 190 | 190 | P-190 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 117985.66193274 | 117418.26568866 | 40.96379037 | -98.36251487 | C-31 |
| 189 | 189 | P-189 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 118215.85897891 | 117415.94121824 | 40.96378347 | -98.36168146 | C-32 |
| 188 | 188 | P-188 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 118446.25943675 | 117413.61477932 | 40.96377657 | -98.36084732 | C-33 |
| 187 | 187 | P-187 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 118676.04834725 | 117411.29457399 | 40.96376967 | -98.36001538 | C-34 |
| 186 | 186 | P-186 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 118905.98095825 | 117409.41137566 | 40.96376397 | -98.35918293 | C-35 |
| 185 | 185 | P-185 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 119156.99325150 | 117407.36249524 | 40.96375776 | -98.35827416 | C-36 |
| 184 | 184 | P-184 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 119382.91438758 | 117405.51801074 | 40.96375216 | -98.35745623 | C-37 |
| 183 | 183 | P-183 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 119620.47723266 | 117403.57871015 | 40.96374627 | -98.35659615 | C-38 |
| 182 | 182 | P-182 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 119856.64309891 | 117401.65056440 | 40.96374041 | -98.35574113 | C-39 |
| 103 | 103 | P-103 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 111763.06512599 | 117519.22742899 | 40.96407908 | -98.38504328 | C-4 |
| 181 | 181 | P-181 | GIUD | 90/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 120091.98547599 | 117399.72930840 | 40.96373456 | -98.35488909 | C-40 |
| 180 | 180 | P-180 | GIUD | 90/1 VD | Wood | Earth | Yes | No | Vertical | 1063A | 120325.10640083 | 117397.82609699 | 40.96372876 | -98.35404510 | C-41 |
| 179 | 179 | P-179 | GIUD | 85/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 120327.81013558 | 117181.23893174 | 40.96313435 | -98.35403602 | C-42 |
| 178 | 178 | P-178 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 120328.05226108 | 116967.29874282 | 40.96254721 | -98.35403585 | C-43 |
| 177 | 177 | P-177 | GIUD | 80 H1 SSTM | Steel | Concrete | Yes | No | Vertical | 1063A | 120328.29405849 | 116753.81163699 | 40.96196132 | -98.35403567 | C-44 |
| 176 | 176 | P-176 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 120328.53651208 | 116540.05845557 | 40.96137470 | -98.35403550 | C-45 |
| 175 | 175 | P-175 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 120328.77830949 | 116326.29936866 | 40.96078805 | -98.35403532 | C-46 |
| 174 | 174 | P-174 | GIUD | 70 Dead End | Steel | Concrete Foundation | Yes | No | Vertical | 1063A | 120329.04963441 | 116086.93993924 | 40.96013116 | -98.35403513 | C-47 |
| 102 | 102 | P-102 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 111994.41505700 | 117519.10472582 | 40.96407839 | -98.38420569 | C-5 |
| 101 | 101 | P-101 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 112222.67772383 | 117518.98366307 | 40.96407770 | -98.38337927 | C-6 |
| 100 | 100 | P-100 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 112453.81833766 | 117518.86128799 | 40.96407700 | -98.38254243 | C-7 |
| 99 | 99 | P-99 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 112683.86052850 | 117518.73924099 | 40.96407630 | -98.38170957 | C-8 |
| 98 | 98 | P-98 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063A | 112914.54084141 | 117518.61686590 | 40.96407558 | -98.38087440 | C-9 |
| 1471 | 1471 | P-1471 | GIUD | 80-H10 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110902.72432699 | 110862.94973107 | 40.94581285 | -98.38817057 | F-1 |
| 1462 | 1462 | P-1462 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110884.32836641 | 112906.06473932 | 40.95142001 | -98.38823334 | F-10 |
| 1461 | 1461 | P-1461 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110882.21649399 | 113139.42549307 | 40.95206045 | -98.38824055 | F-11 |
| 1460 | 1460 | P-1460 | GIUD | 85-H3 SDBPA | Steel | Concrete | Yes | No | Vertical | 1063A | 110874.33560425 | 113347.22363391 | 40.95263074 | -98.38826869 | F-12 |
| 1459 | 1459 | P-1459 | GIUD | 85-H3 SDBPA | Steel | Concrete | Yes | No | Vertical | 1063A | 110846.52463625 | 113582.76942266 | 40.95327721 | -98.38836892 | F-13 |
| 1458 | 1458 | P-1458 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110851.07219933 | 113786.08069582 | 40.95383517 | -98.38835208 | F-14 |
| 1457 | 1457 | P-1457 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110849.99116474 | 113937.34122007 | 40.95425029 | -98.38835571 | F-15 |
| 1456 | 1456 | P-1456 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110848.13322883 | 114195.11596699 | 40.95495773 | -98.38836195 | F-16 |
| 1455 | 1455 | P-1455 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110846.34484658 | 114429.86812215 | 40.95560199 | -98.38836799 | F-17 |
| 1454 | 1454 | P-1454 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110844.51250116 | 114670.31580399 | 40.95626188 | -98.38837418 | F-18 |
| 1453 | 1453 | P-1453 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110842.70312158 | 114907.85174624 | 40.95691377 | -98.38838028 | F-19 |
| 1470 | 1470 | P-1470 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110900.86704725 | 111078.39254165 | 40.94640411 | -98.38817689 | F-2 |
| 2171 | 2171 | P-2171 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110840.87897824 | 115147.25021757 | 40.95757078 | -98.38838644 | F-20 |
| 2170 | 2170 | P-2170 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110839.14965099 | 115374.27502599 | 40.95819383 | -98.38839228 | F-21 |
| 2169 | 2169 | P-2169 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110837.24020600 | 115624.92478716 | 40.95888172 | -98.38839873 | F-22 |
| 2168 | 2168 | P-2168 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110835.43115450 | 115862.34458791 | 40.95953329 | -98.38840483 | F-23 |
| 2167 | 2167 | P-2167 | GIUD | 85-H6 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110833.62604000 | 116099.25815607 | 40.96018348 | -98.38841093 | F-24 |
| 2166 | 2166 | P-2166 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110834.83896408 | 116339.59953891 | 40.96084307 | -98.38840609 | F-25 |
| 2165 | 2165 | P-2165 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110835.85044499 | 116575.67747882 | 40.96149096 | -98.38840199 | F-26 |
| 2164 | 2164 | P-2164 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110836.87537733 | 116814.91847015 | 40.96214753 | -98.38839783 | F-27 |
| 2163 | 2163 | P-2163 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110837.89013908 | 117051.71031941 | 40.96279738 | -98.38839372 | F-28 |
| 2162 | 2162 | P-2162 | GIUD | 95-H6 SDBPT | Steel | Concrete | Yes | No | Parallel | 1063A | 110836.23889566 | 117275.15869141 | 40.96341062 | -98.38839928 | F-29 |
| 1469 | 1469 | P-1469 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110898.76337691 | 111310.86976699 | 40.94704213 | -98.38818407 | F-3 |
| 2161 | 2161 | P-2161 | GIUD | 95 SDTD | Steel | Concrete Foundation | Yes | No | Vertical | 1063A | 110834.39998858 | 117524.03352174 | 40.96409363 | -98.38840547 | F-30 |
| 1468 | 1468 | P-1468 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110896.68792174 | 111540.22495132 | 40.94767157 | -98.38819115 | F-4 |
| 1467 | 1467 | P-1467 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110894.67513049 | 111762.65232799 | 40.94828201 | -98.38819802 | F-5 |
| 1466 | 1466 | P-1466 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110892.58786433 | 111993.30016065 | 40.94891500 | -98.38820514 | F-6 |
| 1465 | 1465 | P-1465 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110890.53537500 | 112220.14583557 | 40.94953756 | -98.38821215 | F-7 |
| 1464 | 1464 | P-1464 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110888.45237391 | 112450.34681874 | 40.95016933 | -98.38821926 | F-8 |
| 1463 | 1463 | P-1463 | GIUD | 85-H5 SDBPT | Steel | Concrete | Yes | No | Vertical | 1063A | 110886.38938591 | 112678.31355441 | 40.95079496 | -98.38822630 | F-9 |
| 225 | 225 | P-225 | GIUD | 80 H2 | Ductile Iron | White Rock | Yes | No | Vertical | 1063B | 110981.32587583 | 103216.86397341 | 40.92482874 | -98.38790045 | B-100 |
| 224 | 224 | P-224 | GIUD | 80 H2 | Ductile Iron | White Rock | Yes | No | Vertical | 1063B | 110975.92004675 | 103540.88793165 | 40.92571800 | -98.38791940 | B-101 |
| 223 | 223 | P-223 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110978.35573741 | 103662.68001091 | 40.92605225 | -98.38791036 | B-102 |
| 222 | 222 | P-222 | GIUD | 80 SST | Steel | White Rock | Yes | No | Vertical | 1063B | 110976.06046641 | 103898.11293899 | 40.92669838 | -98.38791822 | B-103 |
| 221 | 221 | P-221 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110973.93054941 | 104116.57674091 | 40.92729794 | -98.38792552 | B-104 |
| 220 | 220 | P-220 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110971.71040950 | 104344.26952699 | 40.92792282 | -98.38793313 | B-105 |
| 219 | 219 | P-219 | GIUD | 80 SST | Steel | White Rock | Yes | No | Vertical | 1063B | 110969.42727758 | 104578.47312682 | 40.92856558 | -98.38794095 | B-106 |
| 218 | 218 | P-218 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110967.27636325 | 104799.09637324 | 40.92917106 | -98.38794832 | B-107 |
| 217 | 217 | P-217 | GIUD | 80 SST | Steel | White Rock | Yes | No | Vertical | 1063B | 110965.00208958 | 105032.37051299 | 40.92981127 | -98.38795611 | B-108 |
| 216 | 216 | P-216 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110962.85806499 | 105252.26935141 | 40.93041476 | -98.38796345 | B-109 |
| 215 | 215 | P-215 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110960.64448674 | 105479.31646949 | 40.93103788 | -98.38797104 | B-110 |
| 214 | 214 | P-214 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110958.00079124 | 105704.74154357 | 40.93165654 | -98.38798018 | B-111 |
| 213 | 213 | P-213 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110955.58675408 | 105928.64824799 | 40.93227103 | -98.38798850 | B-112 |
| 212 | 212 | P-212 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110953.18091900 | 106151.77050515 | 40.93288338 | -98.38799678 | B-113 |
| 211 | 211 | P-211 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110950.77869283 | 106374.63423266 | 40.93349501 | -98.38800506 | B-114 |
| 210 | 210 | P-210 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110948.43420933 | 106592.05636999 | 40.93409171 | -98.38801313 | B-115 |
| 209 | 209 | P-209 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110945.97817750 | 106819.87185924 | 40.93471693 | -98.38802160 | B-116 |
| 208 | 208 | P-208 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110943.57496708 | 107042.74510115 | 40.93532859 | -98.38802987 | B-117 |
| 207 | 207 | P-207 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110941.17634983 | 107265.24006299 | 40.93593921 | -98.38803814 | B-118 |
| 2182 | 2182 | P-2182 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110938.76624966 | 107488.75503591 | 40.93655263 | -98.38804644 | B-119 |
| 2181 | 2181 | P-2181 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110936.34991591 | 107712.86974516 | 40.93716770 | -98.38805477 | B-120 |
| 2180 | 2180 | P-2180 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110933.95556375 | 107934.96871041 | 40.93777723 | -98.38806301 | B-121 |
| 2179 | 2179 | P-2179 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110932.33155125 | 108085.60259549 | 40.93819064 | -98.38806861 | B-122 |
| 2295 | 2295 | P-2295 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110931.51101483 | 108230.65283033 | 40.93858871 | -98.38807131 | B-122A |
| 2178 | 2178 | P-2178 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110929.86370841 | 108381.16598074 | 40.93900179 | -98.38807699 | B-123 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2177 | 2177 | P-2177 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110927.46246650 | 108600.56514824 | 40.93960391 | -98.38808527 | B-124 |
| 2176 | 2176 | P-2176 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110924.94836391 | 108830.28680166 | 40.94023436 | -98.38809394 | B-125 |
| 2175 | 2175 | P-2175 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110922.48052108 | 109055.76699374 | 40.94085318 | -98.38810245 | B-126 |
| 2174 | 2174 | P-2174 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110920.02973858 | 109279.67566665 | 40.94146768 | -98.38811090 | B-127 |
| 2173 | 2173 | P-2173 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110917.55861491 | 109505.46819407 | 40.94208735 | -98.38811942 | B-128 |
| 2172 | 2172 | P-2172 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110915.09831800 | 109730.29681265 | 40.94270437 | -98.38812790 | B-129 |
| 1473 | 1473 | P-1473 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110912.63014708 | 109955.79439315 | 40.94332323 | -98.38813641 | B-130 |
| 1472 | 1472 | P-1472 | GIUD | 80/1 ST | Wood | Earth | Yes | No | Vertical | 1063B | 110910.18527008 | 110179.14926141 | 40.94393621 | -98.38814484 | B-131 |
| 67 | 67 | P-67 | GIUD | 85 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064A | 132160.04270466 | 102952.25951574 | 40.92404690 | -98.31127039 | E-1 |
| 122 | 122 | P-122 | GIUD | 91 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 131970.29045950 | 100899.05266415 | 40.91841278 | -98.31196728 | E-10 |
| 121 | 121 | P-121 | GIUD | 91 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 131773.96276816 | 101002.92942490 | 40.91869861 | -98.31267707 | E-11 |
| 120 | 120 | P-120 | GIUD | 80 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064A | 131576.82799183 | 101107.23367824 | 40.91898561 | -98.31338978 | E-12 |
| 2148 | 2148 | P-2148 | GIUD | 95 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 131577.01565550 | 100909.09693541 | 40.91844184 | -98.31339008 | E-162 |
| 2147 | 2147 | P-2147 | GIUD | 75 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064A | 131576.21480408 | 100766.42169582 | 40.91805028 | -98.31339369 | E-163 |
| 2146 | 2146 | P-2146 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 131361.25591641 | 100885.76233640 | 40.91837861 | -98.31417081 | E-164 |
| 2145 | 2145 | P-2145 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 131149.65463358 | 101003.23913557 | 40.91870180 | -98.31493580 | E-165 |
| 2144 | 2144 | P-2144 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 130932.20362491 | 101123.96330357 | 40.91903392 | -98.31572195 | E-166 |
| 2143 | 2143 | P-2143 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 130711.64074583 | 101246.41515841 | 40.91937079 | -98.31651936 | E-167 |
| 2142 | 2142 | P-2142 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 130498.81111899 | 101364.57371474 | 40.91969585 | -98.31728881 | E-168 |
| 2141 | 2141 | P-2141 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 130286.41456216 | 101482.49178599 | 40.92002023 | -98.31805671 | E-169 |
| 2140 | 2140 | P-2140 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 130071.19091124 | 101601.97907982 | 40.92034893 | -98.31883483 | E-170 |
| 2139 | 2139 | P-2139 | GIUD | 90 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 129859.28516708 | 101719.62451382 | 40.92067256 | -98.31960097 | E-171 |
| 2138 | 2138 | P-2138 | GIUD | 85 SDVN | Steel | Concrete Foundation | Yes | No | Vertical | 1064A | 129642.28658533 | 101840.09736999 | 40.92100396 | -98.32038553 | E-172 |
| 2137 | 2137 | P-2137 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 128518.18712750 | 101955.79366091 | 40.92132539 | -98.32445212 | E-177 |
| 1108 | 1108 | P-1108 | GIUD | 70 SVDN | Steel | Concrete Foundation | Yes | No | Vertical | 1064A | 128250.32939550 | 101983.53081015 | 40.92140242 | -98.32542114 | E-178 |
| 66 | 66 | P-66 | GIUD | 109 SDT | Steel | Concrete | Yes | No | Parallel | 1064A | 132172.96361058 | 102682.33059365 | 40.92330606 | -98.31122501 | E-2 |
| 65 | 65 | P-65 | GIUD | 96 SDT | Steel | Concrete | Yes | No | Parallel | 1064A | 132172.13749675 | 102412.96794341 | 40.92256682 | -98.31122936 | E-3 |
| 64 | 64 | P-64 | GIUD | 96 SDT | Steel | Concrete | Yes | No | Parallel | 1064A | 132171.30777400 | 102142.55378607 | 40.92182470 | -98.31123372 | E-4 |
| 63 | 63 | P-63 | GIUD | 96 SDT | Steel | Concrete | Yes | No | Parallel | 1064A | 132170.47509849 | 101871.29087716 | 40.92108024 | -98.31123811 | E-5 |
| 62 | 62 | P-62 | GIUD | 96 SDT | Steel | Concrete | Yes | No | Parallel | 1064A | 132169.63717366 | 101598.08046557 | 40.92033044 | -98.31124252 | E-6 |
| 61 | 61 | P-61 | GIUD | 96 SDT | Steel | Concrete | Yes | No | Parallel | 1064A | 132168.80843516 | 101327.99242307 | 40.91958921 | -98.31124688 | E-7 |
| 60 | 60 | P-60 | GIUD | 96 SDT | Steel | Concrete | Yes | No | Parallel | 1064A | 132167.97346308 | 101055.82039524 | 40.91884226 | -98.31125128 | E-8 |
| 59 | 59 | P-59 | GIUD | 80 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064A | 132139.82325691 | 100809.35271232 | 40.91816596 | -98.31135437 | E-9 |
| 18582 | 18582 | P-18582 | GIUD | 95 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 129500.04343149 | 101854.12260441 | 40.92104295 | -98.32090011 | |
| 18587 | 18587 | P-18587 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 128764.19188483 | 101930.31963049 | 40.92125463 | -98.32356216 | |
| 18588 | 18588 | P-18588 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 129009.40628941 | 101904.92729282 | 40.92118410 | -98.32267506 | |
| 18589 | 18589 | P-18589 | GIUD | 85 SST | Steel | Concrete | Yes | No | Vertical | 1064A | 129255.72010124 | 101879.42111024 | 40.92111324 | -98.32178399 | |
| 2160 | 2160 | P-2160 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 127026.40270950 | 110268.76817665 | 40.94414455 | -98.32981399 | C-100 |
| 2159 | 2159 | P-2159 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 127245.85994774 | 110265.94141065 | 40.94413608 | -98.32901970 | C-101 |
| 2158 | 2158 | P-2158 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 127464.94940458 | 110263.44239990 | 40.94412850 | -98.32822675 | C-102 |
| 2157 | 2157 | P-2157 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 127685.02737650 | 110260.81773324 | 40.94412057 | -98.32743021 | C-103 |
| 629 | 629 | P-629 | GIUD | 70 SVDP | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 127892.82420500 | 110257.75605957 | 40.94411147 | -98.32667813 | C-104 |
| 628 | 628 | P-628 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 128080.61844883 | 110374.11343841 | 40.94443017 | -98.32599792 | C-105 |
| 627 | 627 | P-627 | GIUD | 75 SVMA | Steel | Concrete | Yes | No | Vertical | 1064B | 128262.12530366 | 110490.63354657 | 40.94474933 | -98.32534045 | C-106 |
| 626 | 626 | P-626 | GIUD | 85-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 128488.83055891 | 110484.15619732 | 40.94473079 | -98.32451995 | C-107 |
| 625 | 625 | P-625 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 128724.36847366 | 110483.03448041 | 40.94472690 | -98.32366744 | C-108 |
| 624 | 624 | P-624 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 128938.31784891 | 110481.53021833 | 40.94472203 | -98.32289308 | C-109 |
| 623 | 623 | P-623 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129163.50539066 | 110479.92917165 | 40.94471686 | -98.32207804 | C-110 |
| 622 | 622 | P-622 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129388.17456074 | 110478.14505449 | 40.94471117 | -98.32126488 | C-111 |
| 621 | 621 | P-621 | GIUD | 75 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 129615.11308325 | 110472.66999982 | 40.94469535 | -98.32044353 | C-112 |
| 620 | 620 | P-620 | GIUD | 80-H2 SBPT | F Steel | Concrete | Yes | No | Vertical | 1064B | 129618.17738158 | 110236.25413407 | 40.94404651 | -98.32043354 | C-113 |
| 619 | 619 | P-619 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129617.53597866 | 110012.22046141 | 40.94343168 | -98.32043691 | C-114 |
| 618 | 618 | P-618 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129616.66393316 | 109778.61594174 | 40.94279058 | -98.32044116 | C-115 |
| 617 | 617 | P-617 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129615.38112733 | 109543.88248732 | 40.94214638 | -98.32044690 | C-116 |
| 616 | 616 | P-616 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129614.80927808 | 109309.20546324 | 40.94150233 | -98.32045006 | C-117 |
| 615 | 615 | P-615 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129613.62916233 | 109074.59799282 | 40.94085848 | -98.32045543 | C-118 |
| 614 | 614 | P-614 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129612.38014908 | 108838.10273091 | 40.94020944 | -98.32046105 | C-119 |
| 613 | 613 | P-613 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129611.44675200 | 108604.75346007 | 40.93956904 | -98.32046552 | C-120 |
| 612 | 612 | P-612 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129610.38343391 | 108370.29690799 | 40.93892560 | -98.32047047 | C-121 |
| 611 | 611 | P-611 | GIUD | 70 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 129614.57305808 | 108135.93976516 | 40.93828242 | -98.32045640 | C-122 |
| 610 | 610 | P-610 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 129819.61956400 | 108127.15106882 | 40.93825757 | -98.31971437 | C-123 |
| 609 | 609 | P-609 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 130024.09815766 | 108123.77312282 | 40.93824757 | -98.31897436 | C-124 |
| 608 | 608 | P-608 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 130229.14630400 | 108120.53165949 | 40.93823793 | -98.31823230 | C-125 |
| 607 | 607 | P-607 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 130434.45593274 | 108117.43783365 | 40.93822870 | -98.31748929 | C-126 |
| 606 | 606 | P-606 | GIUD | 70 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 130637.19732516 | 108117.82136307 | 40.93822901 | -98.31675556 | C-127 |
| 605 | 605 | P-605 | GIUD | 85 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130633.25081075 | 107864.22180466 | 40.93753305 | -98.31677106 | C-128 |
| 604 | 604 | P-604 | GIUD | 85 SVDN | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 130629.13566149 | 107599.77482699 | 40.93680731 | -98.31678723 | C-129 |
| 603 | 603 | P-603 | GIUD | 105 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130672.55289749 | 107515.43116365 | 40.93657568 | -98.31663051 | C-130 |
| 602 | 602 | P-602 | GIUD | 115 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130796.42896208 | 107264.22005191 | 40.93588580 | -98.31618343 | C-131 |
| 601 | 601 | P-601 | GIUD | 100 SVDN | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 130902.95762041 | 107060.77984199 | 40.93532709 | -98.31579890 | C-132 |
| 600 | 600 | P-600 | GIUD | 105 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130902.26077141 | 106849.21136749 | 40.93474646 | -98.31580245 | C-133 |
| 599 | 599 | P-599 | GIUD | 95 SST | Fiber S Steel | Concrete | Yes | No | Vertical | 1064B | 130901.54620591 | 106632.18949182 | 40.93415086 | -98.31580609 | C-134 |
| 598 | 598 | P-598 | GIUD | 90 SST | Fiber S Steel | Concrete | Yes | No | Vertical | 1064B | 130900.82442258 | 106413.00718740 | 40.93354934 | -98.31580977 | C-135 |
| 597 | 597 | P-597 | GIUD | 85 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130900.12298041 | 106200.03615665 | 40.93296487 | -98.31581334 | C-136 |
| 596 | 596 | P-596 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130902.02094249 | 105954.38474507 | 40.93229069 | -98.31580767 | C-137 |
| 595 | 595 | P-595 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130902.54095458 | 105712.05747382 | 40.93162564 | -98.31580696 | C-138 |
| 594 | 594 | P-594 | GIUD | 90 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130903.05801391 | 105471.25513390 | 40.93096478 | -98.31580626 | C-139 |
| 593 | 593 | P-593 | GIUD | 90 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130903.55932524 | 105234.64865174 | 40.93031544 | -98.31580560 | C-140 |
| 592 | 592 | P-592 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130902.94121625 | 105000.62746624 | 40.92967319 | -98.31580898 | C-141 |
| 591 | 591 | P-591 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130902.13741208 | 104767.60759107 | 40.92903369 | -98.31581302 | C-142 |
| 590 | 590 | P-590 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130900.92022291 | 104532.86921541 | 40.92838948 | -98.31581856 | C-143 |
| 589 | 589 | P-589 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130899.92383383 | 104298.18103649 | 40.92774540 | -98.31582331 | C-144 |
| 588 | 588 | P-588 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130898.81688066 | 104063.07520749 | 40.92710018 | -98.31582846 | C-145 |
| 2156 | 2156 | P-2156 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130897.64070191 | 103828.54319624 | 40.92645653 | -98.31583385 | C-146 |
| 2155 | 2155 | P-2155 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130897.41596483 | 103593.59779999 | 40.92581174 | -98.31583581 | C-147 |
| 2154 | 2154 | P-2154 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130895.50323899 | 103359.49032857 | 40.92516927 | -98.31584387 | C-148 |
| 2153 | 2153 | P-2153 | GIUD | 80 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 130894.70927733 | 103125.20208324 | 40.92452628 | -98.31584788 | C-149 |
| 2152 | 2152 | P-2152 | GIUD | 70 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 130894.32509175 | 102965.78311074 | 40.92408878 | -98.31585004 | C-150 |
| 2151 | 2151 | P-2151 | GIUD | 91 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 131094.41819550 | 102963.94814066 | 40.92408300 | -98.31512606 | C-151 |
| 2150 | 2150 | P-2150 | GIUD | 91 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 131334.02992100 | 102961.53344733 | 40.92407548 | -98.31425909 | C-152 |
| 2149 | 2149 | P-2149 | GIUD | 91 SST | Steel | Concrete | Yes | No | Vertical | 1064B | 131580.80370566 | 102959.02689066 | 40.92406768 | -98.31336621 | C-153 |
| 173 | 173 | P-173 | GIUD | 80-H7 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 120774.71540974 | 116087.37530582 | 40.96013123 | -98.35242170 | C-49 |
| 172 | 172 | P-172 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 121002.67361525 | 116089.77097032 | 40.96013722 | -98.35159643 | C-50 |
| 171 | 171 | P-171 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 121231.35885341 | 116091.32444490 | 40.96014090 | -98.35076853 | C-51 |
| 170 | 170 | P-170 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 121457.48012033 | 116093.88907232 | 40.96014735 | -98.34994990 | C-52 |
| 169 | 169 | P-169 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 121684.28806566 | 116096.15481582 | 40.96015297 | -98.34912879 | C-53 |
| 168 | 168 | P-168 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 121910.04909708 | 116093.83953174 | 40.96014601 | -98.34831149 | C-54 |
| 167 | 167 | P-167 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 122136.73269883 | 116091.20797532 | 40.96013818 | -98.34749085 | C-55 |
| 166 | 166 | P-166 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 122365.80737191 | 116088.28704941 | 40.96012955 | -98.34666155 | C-56 |
| 165 | 165 | P-165 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 122592.65370300 | 116086.02491482 | 40.96012272 | -98.34584032 | C-57 |
| 164 | 164 | P-164 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 122818.74642666 | 116083.89598207 | 40.96011625 | -98.34502181 | C-58 |
| 163 | 163 | P-163 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 123057.27383675 | 116081.10071207 | 40.96010792 | -98.34415830 | C-59 |
| 162 | 162 | P-162 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 123271.62708258 | 116078.77033616 | 40.96010092 | -98.34338229 | C-60 |
| 161 | 161 | P-161 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 123498.65714033 | 116076.38812307 | 40.96009374 | -98.34256040 | C-61 |
| 160 | 160 | P-160 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 123726.95491208 | 116073.86155332 | 40.96008615 | -98.34173391 | C-62 |
| 159 | 159 | P-159 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 123953.98070475 | 116070.91831774 | 40.96007741 | -98.34091203 | C-63 |
| 158 | 158 | P-158 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 124181.42217899 | 116067.81563365 | 40.96006824 | -98.34008865 | C-64 |
| 157 | 157 | P-157 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 124410.40433258 | 116065.08663649 | 40.96006007 | -98.33925969 | C-65 |
| 156 | 156 | P-156 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 124637.75656816 | 116062.49543432 | 40.96005229 | -98.33843663 | C-66 |
| 155 | 155 | P-155 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 124865.78137458 | 116059.29334099 | 40.96004282 | -98.33761114 | C-67 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 154 | 154 | P-154 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125091.08702633 | 116056.52661424 | 40.96003455 | -98.33679549 | C-68 |
| 153 | 153 | P-153 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125328.65905774 | 116053.24840557 | 40.96002482 | -98.33593543 | C-69 |
| 152 | 152 | P-152 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125544.88270666 | 116050.55877841 | 40.96001678 | -98.33515266 | C-70 |
| 8261 | 8261 | P-8261 | GIUD | 70 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 125771.35272616 | 116046.11882666 | 40.96000389 | -98.33433280 | C-71 |
| 151 | 151 | P-151 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125787.13944000 | 115819.14913624 | 40.95938095 | -98.33427658 | C-72 |
| 150 | 150 | P-150 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125797.51015416 | 115591.39959174 | 40.95875588 | -98.33423997 | C-73 |
| 149 | 149 | P-149 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125807.74504183 | 115363.46664865 | 40.95813031 | -98.33420386 | C-74 |
| 148 | 148 | P-148 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125817.55965475 | 115148.82403332 | 40.95754122 | -98.33416921 | C-75 |
| 147 | 147 | P-147 | GIUD | 70 SVMA | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 125825.56980933 | 114910.59911607 | 40.95688741 | -98.33414119 | C-76 |
| 146 | 146 | P-146 | GIUD | 70 SVMA | Steel | Concrete Foundation | Yes | No | Vertical | 1064B | 125938.55416341 | 114812.64852457 | 40.95661824 | -98.33373258 | C-77 |
| 145 | 145 | P-145 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125947.44620600 | 114568.00170416 | 40.95594681 | -98.33370140 | C-78 |
| 144 | 144 | P-144 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125958.19618450 | 114330.47265165 | 40.95529490 | -98.33366347 | C-79 |
| 143 | 143 | P-143 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125968.55443149 | 114091.78480882 | 40.95463981 | -98.33362696 | C-80 |
| 142 | 142 | P-142 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125979.21057816 | 113853.28462966 | 40.95398524 | -98.33358937 | C-81 |
| 141 | 141 | P-141 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 125989.83490074 | 113614.48392615 | 40.95332984 | -98.33355189 | C-82 |
| 140 | 140 | P-140 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126000.84406508 | 113375.74719890 | 40.95267462 | -98.33351303 | C-83 |
| 139 | 139 | P-139 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126012.12488241 | 113136.79393665 | 40.95201880 | -98.33347318 | C-84 |
| 138 | 138 | P-138 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126023.91094808 | 112902.97222582 | 40.95137706 | -98.33343149 | C-85 |
| 137 | 137 | P-137 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126034.93520425 | 112659.75059941 | 40.95070953 | -98.33339259 | C-86 |
| 136 | 136 | P-136 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126046.07986699 | 112422.38690090 | 40.95005807 | -98.33335323 | C-87 |
| 135 | 135 | P-135 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126057.20025158 | 112182.89426965 | 40.94940078 | -98.33331397 | C-88 |
| 134 | 134 | P-134 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126068.61755158 | 111944.36653149 | 40.94874612 | -98.33327363 | C-89 |
| 133 | 133 | P-133 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126078.99515549 | 111708.70952249 | 40.94809935 | -98.33323704 | C-90 |
| 132 | 132 | P-132 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126089.81731233 | 111478.40584924 | 40.94746727 | -98.33319883 | C-91 |
| 131 | 131 | P-131 | GIUD | 85-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126101.03973083 | 111242.51983807 | 40.94681987 | -98.33315919 | C-92 |
| 130 | 130 | P-130 | GIUD | 90-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126112.27756925 | 111001.89958441 | 40.94615948 | -98.33311951 | C-93 |
| 129 | 129 | P-129 | GIUD | 90-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126124.08791308 | 110751.61924507 | 40.94547257 | -98.33307780 | C-94 |
| 128 | 128 | P-128 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126133.83658125 | 110523.11970207 | 40.94484545 | -98.33304346 | C-95 |
| 127 | 127 | P-127 | GIUD | 70 SVD | Steel | Concrete | Yes | No | Vertical | 1064B | 126151.19022108 | 110282.54505199 | 40.94418516 | -98.33298165 | C-96 |
| 126 | 126 | P-126 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126366.53198200 | 110276.53554957 | 40.94416799 | -98.33220228 | C-97 |
| 125 | 125 | P-125 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126586.73692216 | 110273.58115915 | 40.94415918 | -98.33140528 | C-98 |
| 124 | 124 | P-124 | GIUD | 80-H2 SBPT | Steel | Concrete | Yes | No | Vertical | 1064B | 126806.32703416 | 110271.06640041 | 40.94415157 | -98.33061052 | C-99 |
| 9 | 9 | P-9 | GIUD | 76 TYPE E | Steel Lattice Structure | Concrete Foundation | Yes | No | Horizontal | 1093 | 131574.79387516 | 100649.75788715 | 40.91773011 | -98.31339941 | 11 |
| 8 | 8 | P-8 | GIUD | 71 TYPE F | Steel Lattice Structure | Concrete Foundation | Yes | No | Horizontal | 1093 | 131876.44123774 | 100480.66701799 | 40.91726492 | -98.31230892 | 12 |
| 58 | 58 | P-58 | GIUD | 48 SDEUB | Steel | Concrete Foundation | Yes | No | N/A | 1093 | 132442.33741566 | 100679.63053082 | 40.91780879 | -98.31026054 | 14C |
| 7 | 7 | P-7 | GIUD | 60 SDEUB | Steel | Concrete Foundation | Yes | No | N/A | 1093 | 132450.39186149 | 100696.99663782 | 40.91785642 | -98.31023132 | 14N |
| 57 | 57 | P-57 | GIUD | 60 SDEUB | Steel | Concrete Foundation | Yes | No | N/A | 1093 | 132434.31380966 | 100662.51212674 | 40.91776184 | -98.31028966 | 14S |
| 56 | 56 | P-56 | GIUD | 70 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 132740.90145108 | 100529.50583107 | 40.91739563 | -98.30918113 | 15N |
| 55 | 55 | P-55 | GIUD | 70 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 132734.10848566 | 100516.69581732 | 40.91736050 | -98.30920577 | 15S |
| 54 | 54 | P-54 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 133065.99102399 | 100357.10722574 | 40.91692122 | -98.30800588 | 16N |
| 53 | 53 | P-53 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 133059.19773050 | 100344.29622774 | 40.91688609 | -98.30803052 | 16S |
| 52 | 52 | P-52 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 133380.29879433 | 100190.42612866 | 40.91646254 | -98.30686962 | 17N |
| 51 | 51 | P-51 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 133373.50517274 | 100177.61611491 | 40.91642741 | -98.30689427 | 17S |
| 50 | 50 | P-50 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 133751.42502058 | 99993.61418632 | 40.91592092 | -98.30552798 | 18N |
| 49 | 49 | P-49 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 133744.63139899 | 99980.80318832 | 40.91588579 | -98.30555262 | 18S |
| 48 | 48 | P-48 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 134111.24123008 | 99802.79862307 | 40.91539580 | -98.30422724 | 19N |
| 47 | 47 | P-47 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 134104.44760850 | 99789.98860932 | 40.91536067 | -98.30425189 | 19S |
| 46 | 46 | P-46 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 134480.13517733 | 99607.17040540 | 40.91485741 | -98.30289371 | 20N |
| 45 | 45 | P-45 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 134473.34188383 | 99594.35940740 | 40.91482228 | -98.30291836 | 20S |
| 44 | 44 | P-44 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 134857.59078725 | 99407.00085824 | 40.91430651 | -98.30152925 | 21N |
| 43 | 43 | P-43 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 134850.79749374 | 99394.19084449 | 40.91427138 | -98.30155390 | 21S |
| 42 | 42 | P-42 | GIUD | 85 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 135260.74811741 | 99193.20108899 | 40.91371808 | -98.30007191 | 22N |
| 41 | 41 | P-41 | GIUD | 85 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 135253.95482391 | 99180.39140332 | 40.91368295 | -98.30009656 | 22S |
| 40 | 40 | P-40 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 135693.10223958 | 98963.91939532 | 40.91308702 | -98.29850906 | 23N |
| 39 | 39 | P-39 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 135686.30894608 | 98951.10839732 | 40.91305189 | -98.29853371 | 23S |
| 37 | 37 | P-37 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 136059.58969558 | 98753.15275649 | 40.91250703 | -98.29718441 | 24N |
| 38 | 38 | P-38 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 136066.38298908 | 98765.96277024 | 40.91254216 | -98.29715976 | 24S |
| 35 | 35 | P-35 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 136462.09873308 | 98539.69649049 | 40.91191949 | -98.29572949 | 25N |
| 36 | 36 | P-36 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 136468.89333891 | 98552.56752774 | 40.91195478 | -98.29570484 | 25S |
| 33 | 33 | P-33 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 136864.36794166 | 98326.36784890 | 40.91133228 | -98.29427547 | 26N |
| 34 | 34 | P-34 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 136871.16156324 | 98339.17851882 | 40.91136741 | -98.29425082 | 26S |
| 31 | 31 | P-31 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 137268.48983683 | 98112.05725390 | 40.91074235 | -98.29281477 | 27N |
| 32 | 32 | P-32 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 137275.28345841 | 98124.86693957 | 40.91077748 | -98.29279012 | 27S |
| 29 | 29 | P-29 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 137671.72328233 | 97898.21647424 | 40.91015370 | -98.29135731 | 28N |
| 30 | 30 | P-30 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 137678.51657583 | 97911.02615990 | 40.91018882 | -98.29133266 | 28S |
| 27 | 27 | P-27 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 138083.86386225 | 97679.65227882 | 40.90955202 | -98.28986768 | 29N |
| 28 | 28 | P-28 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 138090.65748383 | 97692.46229257 | 40.90958715 | -98.28984303 | 29S |
| 25 | 25 | P-25 | GIUD | 85 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 138460.89296383 | 97479.70812491 | 40.90900159 | -98.28850498 | 30N |
| 26 | 26 | P-26 | GIUD | 85 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 138467.68625733 | 97492.51813865 | 40.90903671 | -98.28848033 | 30S |
| 24 | 24 | P-24 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 138888.89013933 | 97269.14752240 | 40.90842177 | -98.28695800 | 31N |
| 23 | 23 | P-23 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 138882.09684583 | 97256.33783673 | 40.90838664 | -98.28698265 | 31S |
| 22 | 22 | P-22 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 139292.89490874 | 97054.89795090 | 40.90783191 | -98.28549785 | 32N |
| 21 | 21 | P-21 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 139286.10128716 | 97042.08498441 | 40.90779678 | -98.28552250 | 32S |
| 20 | 20 | P-20 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 139695.25499641 | 96841.52042490 | 40.90724444 | -98.28404368 | 33N |
| 19 | 19 | P-19 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 139688.46137483 | 96828.70975499 | 40.90720931 | -98.28406833 | 33S |
| 18 | 18 | P-18 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 140060.98622033 | 96647.56740074 | 40.90671043 | -98.28272190 | 34N |
| 97 | 97 | P-97 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 140054.19259875 | 96634.75738699 | 40.90667531 | -98.28274656 | 34S |
| 96 | 96 | P-96 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 140468.69734716 | 96431.35162582 | 40.90611511 | -98.28124844 | 35N |
| 95 | 95 | P-95 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 140461.90372558 | 96418.54062782 | 40.90607999 | -98.28127309 | 35S |
| 94 | 94 | P-94 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 140860.86257333 | 96223.37992890 | 40.90554247 | -98.27983118 | 36N |
| 93 | 93 | P-93 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 140854.06927983 | 96210.56893090 | 40.90550735 | -98.27985584 | 36S |
| 91 | 91 | P-91 | GIUD | 65 SDEMA | Steel | Concrete | Yes | No | N/A | 1093 | 141246.81062033 | 96010.49813682 | 40.90495637 | -98.27843647 | 37C |
| 92 | 92 | P-92 | GIUD | 75 SDEMA | Steel | Concrete | Yes | No | N/A | 1093 | 141250.47104608 | 96025.04502374 | 40.90499627 | -98.27842314 | 37N |
| 90 | 90 | P-90 | GIUD | 75 SDEMA | Steel | Concrete | Yes | No | N/A | 1093 | 141243.15019458 | 95995.95256224 | 40.90491647 | -98.27844980 | 37S |
| 89 | 89 | P-89 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 141688.08171941 | 96015.35311399 | 40.90496754 | -98.27684026 | 38N |
| 88 | 88 | P-88 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 141688.06662758 | 96000.85281491 | 40.90492774 | -98.27684041 | 38S |
| 87 | 87 | P-87 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 142122.77671616 | 96016.84031574 | 40.90496948 | -98.27526786 | 39N |
| 86 | 86 | P-86 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 142122.82658483 | 96002.34034474 | 40.90492968 | -98.27526777 | 39S |
| 85 | 85 | P-85 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 142556.06128266 | 96018.32259624 | 40.90497138 | -98.27370056 | 40N |
| 84 | 84 | P-84 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 142556.11115133 | 96003.82196907 | 40.90493159 | -98.27370047 | 40S |
| 83 | 83 | P-83 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 142989.01579733 | 96019.80225207 | 40.90497327 | -98.27213445 | 41N |
| 82 | 82 | P-82 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 142989.06468175 | 96005.30293724 | 40.90493347 | -98.27213437 | 41S |
| 80 | 80 | P-80 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 143415.34466908 | 96021.25992632 | 40.90497510 | -98.27059231 | 42N |
| 79 | 79 | P-79 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 143415.39486583 | 96006.76061149 | 40.90493531 | -98.27059223 | 42S |
| 78 | 78 | P-78 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 143848.74242433 | 96022.74286299 | 40.90497695 | -98.26902460 | 43N |
| 77 | 77 | P-77 | GIUD | 75 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 143848.79130875 | 96008.24223582 | 40.90493715 | -98.26902453 | 43S |
| 76 | 76 | P-76 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 144284.36458458 | 96024.23170515 | 40.90497878 | -98.26744885 | 44N |
| 75 | 75 | P-75 | GIUD | 80 SHFT | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 144284.41478133 | 96009.73140607 | 40.90493898 | -98.26744877 | 44S |
| 74 | 74 | P-74 | GIUD | 75 SHFSA | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 144735.29117616 | 96025.76319815 | 40.90498062 | -98.26581773 | 45N |
| 73 | 73 | P-73 | GIUD | 75 SHFSA | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 144736.10679133 | 96011.28586490 | 40.90494089 | -98.26581488 | 45S |
| 72 | 72 | P-72 | GIUD | 80 SHFSA | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 145154.28476075 | 96071.68305382 | 40.90510444 | -98.26430182 | 46N |
| 71 | 71 | P-71 | GIUD | 80 SHFSA | Steel | Concrete | Yes | Yes | Horizontal | 1093 | 145156.27655466 | 96057.32054974 | 40.90506501 | -98.26429471 | 46S |
| 69 | 69 | P-69 | GIUD | 70 SDELA | Steel | Concrete | Yes | No | N/A | 1093 | 145618.79793933 | 96142.62221640 | 40.90529665 | -98.26262106 | 47C |
| 70 | 70 | P-70 | GIUD | 80 SDELA | Steel | Concrete | Yes | No | N/A | 1093 | 145604.16575075 | 96154.82658833 | 40.90533022 | -98.26267391 | 47N |
| 68 | 68 | P-68 | GIUD | 80 SDELA | Steel | Concrete | Yes | No | N/A | 1093 | 145633.34712283 | 96130.48641390 | 40.90526326 | -98.26256852 | 47S |
| 15281 | 15281 | P-15281 | GIUD | 85 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1093 | 132190.09316950 | 102982.62854949 | 40.92413013 | -98.31116151 | E-1A |
| 123 | 123 | P-123 | GIUD | 80 SVDN | Steel | Concrete Foundation | Yes | No | Vertical | 1093 | 132192.78017199 | 100780.98301841 | 40.91808790 | -98.31116291 | E-9A |
| 3245 | 3245 | P-3245 | GIUD | 40/2 | Wood | Earth | Yes | No | Horizontal | 1145A | 122364.17220458 | 78405.66720482 | 40.85671258 | -98.34680239 | DD-55DC |
| 3246 | 3246 | P-3246 | GIUD | 40/2 | Wood | Earth | Yes | No | Horizontal | 1145A | 122364.22863491 | 78416.76692016 | 40.85674305 | -98.34680215 | DD-55DN |
| 3244 | 3244 | P-3244 | GIUD | 40/2 | Wood | Earth | Yes | No | Horizontal | 1145A | 122364.11610233 | 78394.56748949 | 40.85668212 | -98.34680263 | DD-55DS |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2293 | 2293 | P-2293 | GIUD | 85/1 H2 | Wood | Earth | Yes | Yes | Horizontal | 1145A | 122588.92503591 | 78404.52908374 | 40.85670885 | -98.34599000 | DD-56C | |
| 2294 | 2294 | P-2294 | GIUD | 85/1 H2 | Wood | Earth | Yes | Yes | Horizontal | 1145A | 122589.45193775 | 78421.02052058 | 40.85675411 | -98.34598803 | DD-56N | |
| 2292 | 2292 | P-2292 | GIUD | 85/1 H2 | Wood | Earth | Yes | Yes | Horizontal | 1145A | 122588.39780600 | 78388.03764690 | 40.85666359 | -98.34599196 | DD-56S | |
| 2291 | 2291 | P-2291 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 122984.73526791 | 78399.13211291 | 40.85669294 | -98.34455932 | DD-57N | |
| 2290 | 2290 | P-2290 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 122984.27201425 | 78384.64001591 | 40.85665317 | -98.34456104 | DD-57S | |
| 2289 | 2289 | P-2289 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 123380.67607708 | 78386.47793874 | 40.85665710 | -98.34312819 | DD-58N | |
| 2288 | 2288 | P-2288 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 123380.21282341 | 78371.98518557 | 40.85661733 | -98.34312992 | DD-58S | |
| 2287 | 2287 | P-2287 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 123776.91872291 | 78373.81293782 | 40.85662122 | -98.34169598 | DD-59N | |
| 2286 | 2286 | P-2286 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 123776.45579733 | 78359.32084082 | 40.85658145 | -98.34169771 | DD-59S | |
| 15282 | 15282 | P-15282 | GIUD | 85/1 H2 AS | Wood | Earth | Yes | No | Horizontal | 1145A | 124120.22118591 | 78355.58725249 | 40.85657021 | -98.34045514 | DD-60C | |
| 2285 | 2285 | P-2285 | GIUD | 85/1 H2 AS | Wood | Earth | Yes | No | Horizontal | 1145A | 124140.90257500 | 78375.19580907 | 40.85662396 | -98.34038031 | DD-60N | |
| 2284 | 2284 | P-2284 | GIUD | 85/1 H2 AS | Wood | Earth | Yes | No | Horizontal | 1145A | 124099.53946875 | 78335.97836782 | 40.85651645 | -98.34052997 | DD-60S | |
| 2283 | 2283 | P-2283 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124129.29072158 | 77963.71533282 | 40.85549471 | -98.34042386 | DD-61E | |
| 2282 | 2282 | P-2282 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124114.79107866 | 77963.64807574 | 40.85549457 | -98.34047627 | DD-61W | |
| 2281 | 2281 | P-2281 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124131.10928750 | 77572.01532882 | 40.85441970 | -98.34041879 | DD-62E | |
| 2280 | 2280 | P-2280 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124116.60964458 | 77571.94807174 | 40.85441956 | -98.34047120 | DD-62W | |
| 2279 | 2279 | P-2279 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124132.92686916 | 77180.58271274 | 40.85334543 | -98.34041372 | DD-63E | |
| 2278 | 2278 | P-2278 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124118.42722625 | 77180.51512757 | 40.85334529 | -98.34046613 | DD-63W | |
| 2277 | 2277 | P-2277 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124134.75002825 | 76787.90502041 | 40.85226774 | -98.34040864 | DD-64E | |
| 2276 | 2276 | P-2276 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124120.25071341 | 76787.83743524 | 40.85226760 | -98.34046105 | DD-64W | |
| 2275 | 2275 | P-2275 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124136.56137633 | 76397.84346457 | 40.85119723 | -98.34040359 | DD-65E | |
| 2274 | 2274 | P-2274 | GIUD | 85/1 DCTS | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124122.06140533 | 76397.77587941 | 40.85119709 | -98.34045600 | DD-65W | |
| 2272 | 2272 | P-2272 | GIUD | 85/1 H2 | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124132.50757866 | 75945.51890991 | 40.84995587 | -98.34041997 | DD-66C | |
| 2273 | 2273 | P-2273 | GIUD | 85/1 H2 | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124150.67913025 | 75936.04780024 | 40.84992982 | -98.34035433 | DD-66E | |
| 2271 | 2271 | P-2271 | GIUD | 85/1 H2 | Wood | Earth | Yes | Yes | Horizontal | 1145A | 124114.33537091 | 75954.99001957 | 40.84998191 | -98.34048562 | DD-66W | |
| 3192 | 3192 | P-3192 | GIUD | 75 SVD Fiber | Steel | Concrete Foundation | Yes | No | Vertical | 1369 | 110853.02199858 | 121465.15752923 | 40.97490960 | -98.38833071 | F-44 | |
| 16179 | 16179 | P-16179 | GIUD | 85-H3 SDBPA | Steel | Concrete | Yes | No | Vertical | 1369 | 110886.33558024 | 113347.33222949 | 40.95263102 | -98.38822525 | | |
| 16180 | 16180 | P-16180 | GIUD | 85-H3 SDBPA | Steel | Concrete | Yes | No | Vertical | 1369 | 110858.52428416 | 113582.85505240 | 40.95327743 | -98.38832548 | | |
| 16181 | 16181 | P-16181 | GIUD | 95-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110837.53449675 | 117769.06485582 | 40.96476609 | -98.38839367 | | |
| 16182 | 16182 | P-16182 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110841.18540808 | 118054.47078107 | 40.96554935 | -98.38837992 | | |
| 16183 | 16183 | P-16183 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110842.43507750 | 118346.07256007 | 40.96634962 | -98.38837485 | | |
| 16184 | 16184 | P-16184 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110843.65882833 | 118631.76358974 | 40.96713367 | -98.38836989 | | |
| 16185 | 16185 | P-16185 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110844.89537441 | 118920.35454798 | 40.96792567 | -98.38836487 | | |
| 16186 | 16186 | P-16186 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110846.16210416 | 119207.75718840 | 40.96871442 | -98.38835975 | | |
| 16187 | 16187 | P-16187 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110847.42883391 | 119495.12898899 | 40.96950308 | -98.38835463 | | |
| 16188 | 16188 | P-16188 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110848.69950066 | 119783.27965941 | 40.97029387 | -98.38834949 | | |
| 16189 | 16189 | P-16189 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110849.96951124 | 120071.46805941 | 40.97108477 | -98.38834436 | | |
| 16190 | 16190 | P-16190 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110851.23263208 | 120358.00160708 | 40.97187113 | -98.38833925 | | |
| 16191 | 16191 | P-16191 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110852.50198650 | 120645.91113624 | 40.97266127 | -98.38833412 | | |
| 16192 | 16192 | P-16192 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110853.77002858 | 120933.55426174 | 40.97345067 | -98.38832899 | | |
| 16193 | 16193 | P-16193 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110854.96129916 | 121203.85916732 | 40.97419249 | -98.38832417 | | |
| 16194 | 16194 | P-16194 | GIUD | 90-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110564.49632891 | 121464.04631099 | 40.97490695 | -98.38937548 | | |
| 16195 | 16195 | P-16195 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 110274.87256433 | 121464.41638899 | 40.97490837 | -98.39042422 | | |
| 16196 | 16196 | P-16196 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 109985.28062383 | 121464.78581082 | 40.97490976 | -98.39147285 | | |
| 16197 | 16197 | P-16197 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 109697.59255091 | 121465.15293607 | 40.97491115 | -98.39251459 | | |
| 16198 | 16198 | P-16198 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 109409.09378408 | 121465.52071749 | 40.97491252 | -98.39355926 | | |
| 16199 | 16199 | P-16199 | GIUD | 85-H6 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 109121.75708841 | 121465.88751466 | 40.97491388 | -98.39459972 | | |
| 16200 | 16200 | P-16200 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 108832.90005458 | 121466.25562415 | 40.97491524 | -98.39564569 | | |
| 16201 | 16201 | P-16201 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 108544.82221866 | 121466.62307749 | 40.97491658 | -98.39668883 | | |
| 16202 | 16202 | P-16202 | GIUD | 90-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 108257.85658525 | 121466.98889040 | 40.97491791 | -98.39772795 | | |
| 16203 | 16203 | P-16203 | GIUD | 90-H6 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 107960.74628708 | 121467.44328582 | 40.97491949 | -98.39880381 | | |
| 16204 | 16204 | P-16204 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 107663.14976941 | 121467.90883607 | 40.97492108 | -98.39988142 | | |
| 16205 | 16205 | P-16205 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 107366.72713391 | 121468.37176166 | 40.97492266 | -98.40095479 | | |
| 16206 | 16206 | P-16206 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 107068.60797950 | 121468.83731191 | 40.97492423 | -98.40203429 | | |
| 16207 | 16207 | P-16207 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 106772.73225891 | 121469.29958132 | 40.97492579 | -98.40310568 | | |
| 16208 | 16208 | P-16208 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 106474.29453558 | 121469.76611582 | 40.97492735 | -98.40418634 | | |
| 16209 | 16209 | P-16209 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 106177.58187441 | 121470.22936949 | 40.97492889 | -98.40526075 | | |
| 16210 | 16210 | P-16210 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105880.59887258 | 121470.69327932 | 40.97493042 | -98.40633615 | | |
| 16211 | 16211 | P-16211 | GIUD | 75 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1369 | 105583.91573891 | 121472.89471849 | 40.97493670 | -98.40741045 | | |
| 16212 | 16212 | P-16212 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105588.21067783 | 121771.15593299 | 40.97575525 | -98.40739458 | | |
| 16213 | 16213 | P-16213 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105591.00529166 | 122069.44339415 | 40.97657386 | -98.40738414 | | |
| 16214 | 16214 | P-16214 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105593.77759583 | 122365.32141132 | 40.97738586 | -98.40737378 | | |
| 16215 | 16215 | P-16215 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105596.57975558 | 122664.41858216 | 40.97820670 | -98.40736331 | | |
| 16216 | 16216 | P-16216 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105599.35698099 | 122960.84056149 | 40.97902020 | -98.40735294 | | |
| 16217 | 16217 | P-16217 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105602.15881266 | 123259.92887408 | 40.97984101 | -98.40734247 | | |
| 16218 | 16218 | P-16218 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105604.94850525 | 123557.68877724 | 40.98065818 | -98.40733204 | | |
| 16219 | 16219 | P-16219 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105607.76116366 | 123857.86501416 | 40.98148197 | -98.40732153 | | |
| 16220 | 16220 | P-16220 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105612.74179675 | 124175.99593958 | 40.98235504 | -98.40730315 | | |
| 16221 | 16221 | P-16221 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105615.28739533 | 124447.71422815 | 40.98310074 | -98.40729364 | | |
| 16222 | 16222 | P-16222 | GIUD | 85-H6 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105618.26573583 | 124765.60696507 | 40.98397316 | -98.40728251 | | |
| 16223 | 16223 | P-16223 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105621.08298741 | 125066.31108807 | 40.98479841 | -98.40727198 | | |
| 16224 | 16224 | P-16224 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105624.11185275 | 125389.57815807 | 40.98568558 | -98.40726067 | | |
| 16225 | 16225 | P-16225 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105627.08724049 | 125707.19103990 | 40.98655723 | -98.40724955 | | |
| 16226 | 16226 | P-16226 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105629.83165758 | 126000.11663516 | 40.98736112 | -98.40723929 | | |
| 16227 | 16227 | P-16227 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105632.59379116 | 126294.92575682 | 40.98817019 | -98.40722897 | | |
| 16228 | 16228 | P-16228 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105635.34050483 | 126588.11742765 | 40.98897482 | -98.40721870 | | |
| 16229 | 16229 | P-16229 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105636.91989800 | 126883.06007924 | 40.98978426 | -98.40721266 | | |
| 16230 | 16230 | P-16230 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105638.29489525 | 127184.84294024 | 40.99061246 | -98.40720736 | | |
| 16231 | 16231 | P-16231 | GIUD | 85-H7 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105639.70565358 | 127494.46928949 | 40.99146220 | -98.40720191 | | |
| 16232 | 16232 | P-16232 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105640.92513933 | 127762.09900357 | 40.99219667 | -98.40719720 | | |
| 16233 | 16233 | P-16233 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105642.28176391 | 128059.90779115 | 40.99301397 | -98.40719197 | | |
| 16234 | 16234 | P-16234 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105643.58687941 | 128346.32290073 | 40.99380001 | -98.40718693 | | |
| 16235 | 16235 | P-16235 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105644.93267725 | 128641.70091891 | 40.99461063 | -98.40718173 | | |
| 16236 | 16236 | P-16236 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105646.26338325 | 128933.78793316 | 40.99541223 | -98.40717660 | | |
| 16237 | 16237 | P-16237 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105647.60754066 | 129228.77454790 | 40.99622179 | -98.40717141 | | |
| 16238 | 16238 | P-16238 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105648.92906033 | 129518.82810166 | 40.99701780 | -98.40716631 | | |
| 16239 | 16239 | P-16239 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105650.27649858 | 129814.60277257 | 40.99782952 | -98.40716110 | | |
| 16240 | 16240 | P-16240 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105651.60359566 | 130105.89648132 | 40.99862894 | -98.40715598 | | |
| 16241 | 16241 | P-16241 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105652.94775308 | 130400.84995966 | 40.99943840 | -98.40715079 | | |
| 16242 | 16242 | P-16242 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105654.27681866 | 130692.55705340 | 41.00023896 | -98.40714566 | | |
| 16243 | 16243 | P-16243 | GIUD | 85-H6 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105655.60752466 | 130984.66112799 | 41.00104060 | -98.40714052 | | |
| 16244 | 16244 | P-16244 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105656.94774508 | 131278.81539533 | 41.00184787 | -98.40713535 | | |
| 16245 | 16245 | P-16245 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105658.27845108 | 131570.89191090 | 41.00264944 | -98.40713021 | | |
| 16246 | 16246 | P-16246 | GIUD | 75 SVDN Fibe | Steel | Concrete Foundation | Yes | No | Vertical | 1369 | 105659.57667683 | 131855.83753524 | 41.00343144 | -98.40712520 | | |
| 16247 | 16247 | P-16247 | GIUD | 85-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105668.03991450 | 132160.33134882 | 41.00426708 | -98.40709421 | | |
| 16248 | 16248 | P-16248 | GIUD | 85-H6 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105673.36831591 | 132455.91934032 | 41.00507828 | -98.40707458 | | |
| 16249 | 16249 | P-16249 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105678.72591675 | 132753.12675115 | 41.00589392 | -98.40705485 | | |
| 16250 | 16250 | P-16250 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105684.05563049 | 133048.78692099 | 41.00670532 | -98.40703522 | | |
| 16251 | 16251 | P-16251 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105689.52510775 | 133352.18657666 | 41.00753796 | -98.40701507 | | |
| 16252 | 16252 | P-16252 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105694.80790558 | 133645.26637107 | 41.00834227 | -98.40699561 | | |
| 16253 | 16253 | P-16253 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105700.09135958 | 133938.34649357 | 41.00914659 | -98.40697615 | | |
| 16254 | 16254 | P-16254 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105705.39351433 | 134232.45876624 | 41.00995374 | -98.40695662 | | |
| 16255 | 16255 | P-16255 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105710.69501291 | 134526.57071082 | 41.01076089 | -98.40693709 | | |
| 16256 | 16256 | P-16256 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105716.17334841 | 134812.70301257 | 41.01154614 | -98.40691693 | | |
| 16257 | 16257 | P-16257 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105721.69039775 | 135100.85335491 | 41.01233693 | -98.40689662 | | |
| 16258 | 16258 | P-16258 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105727.15364141 | 135386.18841416 | 41.01311999 | -98.40687652 | | |
| 16259 | 16259 | P-16259 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105732.65625508 | 135673.58908607 | 41.01390872 | -98.40685626 | | |
| 16260 | 16260 | P-16260 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105738.48432741 | 135978.01301791 | 41.01474417 | -98.40683481 | | |
| 16261 | 16261 | P-16261 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105744.15491975 | 136274.18270116 | 41.01555696 | -98.40681394 | | |
| 16262 | 16262 | P-16262 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105749.86488208 | 136572.41734090 | 41.01637543 | -98.40679292 | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16263 | 16263 | P-16263 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105755.60338766 | 136872.14213516 | 41.01719798 | -98.40677180 |
| 16264 | 16264 | P-16264 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105761.13684116 | 137170.92926724 | 41.01801796 | -98.40675142 |
| 16265 | 16265 | P-16265 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105763.54595708 | 137457.79844415 | 41.01880523 | -98.40674238 |
| 16266 | 16266 | P-16266 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105765.95212024 | 137744.37103374 | 41.01959169 | -98.40673334 |
| 16267 | 16267 | P-16267 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105768.41307333 | 138037.39275741 | 41.02039585 | -98.40672410 |
| 16268 | 16268 | P-16268 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105770.88124425 | 138331.32261574 | 41.02120250 | -98.40671483 |
| 16269 | 16269 | P-16269 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105773.48885058 | 138641.85020991 | 41.02205470 | -98.40670504 |
| 16270 | 16270 | P-16270 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105775.96095850 | 138936.25841374 | 41.02286266 | -98.40669576 |
| 16271 | 16271 | P-16271 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105778.34809283 | 139220.51867199 | 41.02364277 | -98.40668679 |
| 16272 | 16272 | P-16272 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105780.72341616 | 139503.38752882 | 41.02441907 | -98.40667787 |
| 16273 | 16273 | P-16273 | GIUD | 75 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1369 | 105778.55445725 | 139785.45881508 | 41.02519318 | -98.40668542 |
| 16274 | 16274 | P-16274 | GIUD | 95-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105491.07307683 | 139788.82888708 | 41.02520266 | -98.40772719 |
| 16275 | 16275 | P-16275 | GIUD | 95-H4 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 105167.78336908 | 139793.55459940 | 41.02521589 | -98.40889873 |
| 16276 | 16276 | P-16276 | GIUD | 80-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 104847.87390391 | 139798.23077115 | 41.02522896 | -98.41005802 |
| 16277 | 16277 | P-16277 | GIUD | 90-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 104551.73210775 | 139802.55950265 | 41.02524105 | -98.41113118 |
| 16278 | 16278 | P-16278 | GIUD | 95-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 104284.86879633 | 139806.46041349 | 41.02525194 | -98.41209824 |
| 16279 | 16279 | P-16279 | GIUD | 85-H3 SBPT | Steel | Concrete | Yes | No | Vertical | 1369 | 104056.08546124 | 139809.80423882 | 41.02526126 | -98.41292731 |
| 16280 | 16280 | P-16280 | GIUD | 75 SVD | Steel | Concrete Foundation | Yes | No | Vertical | 1369 | 103812.77492424 | 139819.24746141 | 41.02528733 | -98.41380901 |
| 16129 | 16129 | P-16129 | GIUD | 60/1 TSA | Wood | Earth | Yes | Yes | Horizontal | Tie To PGS | 122024.81264708 | 77975.91806432 | 40.85553407 | -98.34803056 |
| 16130 | 16130 | P-16130 | GIUD | 60/1 TSA | Wood | Earth | Yes | Yes | Horizontal | Tie To PGS | 122037.30606041 | 77975.52370816 | 40.85553296 | -98.34798540 |
| 16131 | 16131 | P-16131 | GIUD | 60/1 TSA | Wood | Earth | Yes | Yes | Horizontal | Tie To PGS | 122075.42507866 | 77974.75107191 | 40.85553074 | -98.34784762 |
| 16132 | 16132 | P-16132 | GIUD | 60/1 TSA | Wood | Earth | Yes | Yes | Horizontal | Tie To PGS | 122087.91422691 | 77974.24090232 | 40.85552930 | -98.34780248 |