



DELAWARE DEPARTMENT OF TRANSPORTATION

State of Delaware

Invitation to Bid

Title: **STEEL POLES**

Contract ID: **DOT1712-STEEL_POLES**

- Deadline to Respond -

Tuesday, October 24, 2017

2:00 P.M. Local Time

Bids shall be submitted to:



State of Delaware
DEPARTMENT OF TRANSPORTATION
Administration Building
Contract Administration
800 Bay Road, Dover, DE 19901



QUESTIONS are to be submitted via e-mail to dot-ask@state.de.us.

Responses to Questions will be posted to this project at <http://www.bids.delaware.gov>.

STATE OF DELAWARE
Department of Transportation
Contract No. DOT1712-STEEL_POLES

ALL BIDDERS:

The enclosed packet contains an "INVITATION TO BID". The invitation consists of the following documents:

INVITATION TO BID -

I. DEFINITIONS AND GENERAL PROVISIONS

I.A – GENERAL PROVISIONS

I.B – AWARD AND EXECUTION OF CONTRACT

I.C – GENERAL AUTHORITY

I.D – EQUAL OPPORTUNITY

II. SPECIAL PROVISIONS

III. TECHNICAL SPECIFICATIONS

IV. BID QUOTATION REPLY SECTION

INFORMATIONAL DOCUMENTS: *(not required to be returned with bid)*

1 – SAMPLE MONTHLY USAGE REPORT (Sample Report 1)

2 – SAMPLE SUBCONTRACTING (2ND TIER) QUARTERLY REPORTING (Sample Report 2)

3 – OFFICE OF SUPPLIER DIVERSITY (OSD) APPLICATION INFORMATION

4 – NO BID REPLY FORM

5 – PROPOSAL REPLY REQUIREMENTS

REQUIRED BID DOCUMENTS: *(MUST be completed and returned with your bid)*

ATTACHMENT A – NON-COLLUSION STATEMENT AND ACCEPTANCE

ATTACHMENT B – SUBCONTRACTOR INFORMATION FORM

ATTACHMENT C – BUSINESS REFERENCES

ATTACHMENT D – CONFIDENTIAL AND PROPRIETARY INFORMATION

ATTACHMENT E – Bid Forms – (Paper)

INFORMATIONAL DOCUMENTS and REQUIRED BID DOCUMENTS are made part of this solicitation and are contained within the ITB pdf file, or available for download at the following site: <http://bids.delaware.gov/>

In order for your bid to be considered, the REQUIRED BID DOCUMENTS shall be executed completely and correctly and received in a sealed envelope clearly displaying the contract number, by the date and time listed on the previous page.

I. DEFINITIONS AND GENERAL PROVISIONS

The attached Definitions and General Provisions apply to all contracts and are part of each invitation to bid. The requirement to furnish a bid bond and performance bond is applicable unless waived in the Special Provisions. Should the General Provisions conflict with the Special Provisions, the Special Provisions shall prevail. Bidders or their authorized representatives are required to fully acquaint themselves as to State procurement laws and regulations prior to submitting bid.

DEFINITIONS

Whenever the following terms are used, their intent and meaning shall be interpreted as follows:

STATE: The State of Delaware

AGENCY: Delaware Department of Transportation.

BIDDER OR VENDOR: Any individual, firm, or corporation formally submitting a proposal for the material or work contemplated, acting directly or through a duly authorized representative.

BIDDER'S DEPOSIT: The security designated in the proposal to be furnished by the bidder as a guaranty of good faith to enter into a contract with the Agency if the work to be performed or the material or equipment to be furnished is awarded to the bidder.

BID INVITATION: The "bid invitation" or "invitation to bid" is a packet of material sent to vendors and consists of General Provisions, Special Provisions, specifications, and enclosures.

BOND: The approved form of security furnished by the Vendors and its surety as a guaranty of good faith on the part of the Vendor to execute the work in accordance with the terms of the contract.

CONTRACT: The written agreement covering the furnishing and delivery of material or work to be performed.

CONTRACTOR: Any individual, firm, or corporation with whom a contract is made by the Agency.

DESIGNATED OFFICIAL: The agent authorized to act for the Agency.

GENERAL PROVISIONS: General Provisions are instructions pertaining to contracts in general. They contain, in summary, requirements of laws of the State, policies of the Agency, and instructions to vendors.

ITB: Invitation to Bid.

LOCAL TIME: Eastern Standard Time/Eastern Daylight Time

PROPOSAL: The offer of the bidder submitted on the approved form and setting forth the bidder's prices for performing the work or supplying the material or equipment described in the specifications.

SPECIAL PROVISIONS: Special Provisions are specific conditions or requirements peculiar to the contract under consideration and are supplemental to the General Provisions. Should the Special Provisions conflict with the General Provisions, the Special Provisions shall prevail.

SURETY: The corporate body which is bound with and for the contract, or which is liable, and which engages to be responsible for the contractor's payments of all debts pertaining to and for its acceptable performance of the work for which it has contracted.

SECTION I.A - GENERAL PROVISIONS

1. BID INVITATION

See "Definitions".

2. PROPOSAL FORMS

The invitation to bid shall contain pre-printed forms for use by the vendor in submitting its bid. The forms shall contain basic information such as description of the item and the estimated quantities and shall have blank spaces for use by the vendor for entering information such as unit bid price, total bid price, etc.

3. INTERPRETATION OF ESTIMATES

The attention of bidders is called to the fact that, unless stated otherwise, any quantities given in the proposal form are to be considered to be approximate only and are given as a basis for the comparison of bids. The Agency may increase or decrease the amount of any item as may be deemed necessary or expedient, during the period of the contract.

An increase or decrease in the quantity for any item is not sufficient ground for an increase or decrease in the unit price.

4. SILENCE OF SPECIFICATIONS

The apparent silence of the specifications as to any detail, or the apparent omission from it of detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and only material and workmanship of the first quality are to be used. Proof of specifications compliance will be the responsibility of the vendor.

5. EXAMINATION OF SPECIFICATIONS AND PROVISIONS

The bidder shall examine carefully the proposal and the contract forms for the material contemplated. The bidder shall investigate and satisfy itself as to the conditions to be encountered, quality and quantities of the material to be furnished, and the requirements of the Special Provisions and the contract. The submission of a proposal shall be conclusive evidence that the bidder has made examination of the aforementioned conditions.

6. PREPARATION OF PROPOSAL

- a. **The bidder's proposal shall be written in ink or typewritten** on the form provided.
- b. The proposal shall show a total bid price for each item bid and the total bid price of the proposal.

7. PRICES QUOTED

The prices quoted are those for which the material will be furnished F.O.B. Ordering Agency and include all charges that may be imposed during the period of the contract. **All prices must be quoted in U.S. Dollars.**

8. DISCOUNT

No qualifying letter or statements in or attached to the proposal, or separate discounts will be considered in determining the low bid except as may be otherwise herein noted. Cash or separate discounts should be computed and incorporated into unit bid price(s).

9. SAMPLES OR BROCHURES

Samples or brochures may be required by the agency for evaluation purposes. They shall be such as to permit the Agency to compare and determine if the item offered complies with the intent of the specifications.

10. PROPOSAL GUARANTY; BID BOND

Waived.

11. DELIVERY OF PROPOSALS

Proposals shall be delivered in sealed envelopes, and shall bear on the outside the name and address of the bidder as well as the designation of the contract. Proposals must be delivered to the address listed below. All bids must clearly display the bid number on the envelope.



State of Delaware
DEPARTMENT OF TRANSPORTATION
Administration Building
Contract Administration
800 Bay Road, Dover, DE 19901

All proposals will be accepted at the time and place set in the advertisement. Bidder bears the risk of delays in delivery. Proposals received after the time set for public opening will be returned unopened.

12. WITHDRAWAL OF PROPOSALS

A bidder may withdraw its proposal unopened after it has been deposited, if such a request is made prior to the time set for the opening of the proposal.

13. PUBLIC OPENING OF PROPOSALS

The bids shall be publicly opened at the time and place specified by the Agency. Bidders or their authorized representatives are invited to be present.

14. PUBLIC INSPECTION OF PROPOSALS

If the bidder designates a portion of its bid as confidential, it shall isolate and identify in writing the confidential portions. The bidder shall include with this designation a statement that explains and supports the firm's claim that the bid items identified as confidential contain trade secrets or other proprietary data.

15. DISQUALIFICATION OF BIDDERS

Any one or more of the following causes may be considered as sufficient for the disqualification of a bidder and the rejection of its proposal or proposals:

- a. More than one proposal for the same contract from an individual, firm, or corporation under the same or different names.
- b. Evidence of collusion among bidders.

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- c. Unsatisfactory performance record as evidenced by past experience.
- d. Any suspension or debarment of the parent company, subsidiary or individual involved with the vendor by federal, any state or any local governments within the last five (5) years.
- e. If the unit prices are obviously unbalanced either in excess or below reasonable cost analysis values.
- f. If there are any unauthorized additions, interlineations, conditional or alternate bids or irregularities of any kind which may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.
- g. Non-attendance of mandatory pre-bid meetings may be cause of disqualification.

16. ADDENDA TO THE INVITATION TO BID (ITB)

If it becomes necessary to revise any part of this ITB, revisions will be posted at <http://bids.delaware.gov/> . By submitting an offer to the State, vendors have acknowledged receipt, understanding and commitment to comply with all materials, revisions, and addenda related to the Invitation to Bid.

17. LOBBYING AND GRATUITIES

Lobbying or providing gratuities shall be strictly prohibited. Vendors found to be lobbying, providing gratuities to, or in any way attempting to influence a State of Delaware employee or agent of the State of Delaware concerning this ITB or the award of a contract resulting from this ITB shall have their proposal immediately rejected and shall be barred from further participation in this ITB.

The selected vendor will warrant that no person or selling agency has been employed or retained to solicit or secure a contract resulting from this ITB upon agreement or understanding for a commission, or a percentage, brokerage or contingent fee. For breach or violation of this warranty, the State of Delaware shall have the right to annul any contract resulting from this ITB without liability or at its discretion deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

All contact with State of Delaware employees, contractors or agents of the State of Delaware concerning this ITB shall be conducted in strict accordance with the manner, forum and conditions set forth in this ITB.

18. SOLICITATION OF STATE EMPLOYEES

Until contract award, vendors shall not, directly or indirectly, solicit any employee of the State of Delaware to leave the State of Delaware's employ in order to accept employment with the vendor, its affiliates, actual or prospective contractors, or any person acting in concert with vendor, without prior written approval of the State of Delaware's contracting officer. Solicitation of State of Delaware employees by a vendor may result in rejection of the vendor's proposal.

This paragraph does not prevent the employment by a vendor of a State of Delaware employee who has initiated contact with the vendor. However, State of Delaware employees may be legally prohibited from accepting employment with the contractor or subcontractor under certain circumstances. Vendors may not knowingly employ a person who cannot legally accept employment under state or federal law. If a vendor discovers that they have done so, they must terminate that employment immediately.

19. INDEPENDENT CONTRACTORS

The parties to the contract shall be independent contractors to one another, and nothing herein shall be deemed to cause this agreement to create an agency, partnership, joint venture or employment relationship between parties. Each party shall be responsible for compliance with all applicable workers compensation, unemployment, disability insurance, social security withholding and all other similar matters. Neither party shall be liable for any debts, accounts, obligations or other liability whatsoever of the other party or any other obligation of the other party to pay on the behalf of its employees or to withhold from any compensation paid to such employees any social benefits, workers compensation insurance premiums or any income or other similar taxes.

It may be at the State of Delaware's discretion as to the location of work for the contractual support personnel during the project period.

SECTION I.B - AWARD AND EXECUTION OF CONTRACT

1. CONSIDERATION OF BIDS

- a. After the proposals have been opened, the bids will be tabulated and the results will be made available to the public. Tabulations of the bids will be based on the correct summation of items at the unit price bid.
- b. The right is reserved to waive technicalities, to reject any or all bids, or any portion thereof, to advertise for new proposals, to proceed to do the work otherwise, or to abandon the work, if in the judgment of the Agency or its agent, the best interest of the State will be promoted thereby.

2. MATERIAL GUARANTY

Before any contract is awarded, the successful bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all of the material to be used in the contract together with such samples as may be requested for the purpose of testing.

3. CONTRACT AWARD

Within thirty days from the date of opening proposals, the contract will be awarded or the proposals rejected.

4. EXECUTION OF CONTRACT

The bidder to whom the award is made shall execute a formal contract and bond within twenty days after date of official notice of the award of the contract.

If the successful bidder fails to execute the required contract and bond, as aforesaid, within twenty days after the date of official notice of the award of the contract, its proposal guaranty shall immediately become forfeited as liquidated damages. Award will then be made to the next lowest qualified bidder of the work or re-advertised, as the Agency may decide.

5. REQUIREMENT OF CONTRACT BOND

Successful bidders shall furnish bond, unless bond(s) have been waived as noted in the Special Provisions, simultaneously with the execution of the formal contract, to the State of Delaware for the benefit of the Agency with surety in the amount of 100% of the total contract award or as otherwise provided in the Special Provisions. Said bonds shall be conditioned upon the faithful performance of the contract.

The bond forms shall be provided by the Agency and the surety shall be acceptable to the Agency.

6. WARRANTY

The successful bidder(s) shall be required to extend any policy guarantee usually offered to the general public, FEDERAL, STATE, COUNTY, or MUNICIPAL governments, on material in this contract against defective material, workmanship, and performance.

7. THE CONTRACT(S)

The contract(s) with the successful bidder(s) will be executed with the Department of Transportation.

8. RETURN OF BIDDER'S DEPOSIT

The deposits shall be returned to the successful bidder upon the execution of the formal contract. The deposits of unsuccessful bidders shall be returned to them immediately upon the awarding of the contract or rejection of their bids. Bidders are made aware that Certified Checks submitted in lieu of Bond will be deposited, and unsuccessful bidders will receive payment of the value of the check from the state.

9. INFORMATION REQUIREMENT

The successful bidder's shall be required to advise the state's Government Support Services the gross amount of purchases made as a result of the contract.

10. CONTRACT EXTENSION

The State reserves the right to extend this contract on a month-to-month basis for a period of up to three months.

SECTION I.C – GENERAL AUTHORITY

1. AUTHORITY OF AGENCY

On all questions concerning the interpretation of specifications, the acceptability and quality of material furnished and/or work performed, the classification of material, the execution of the work, and the determination of payment due or to become due, the decision of the Agency shall be final and binding.

2. LAWS TO BE OBSERVED

The contractor is presumed to know and shall strictly comply with all National, State, or County laws, and City or Town ordinances and regulations in any manner affecting the conduct of the work. The contractor shall indemnify and save harmless the State of Delaware, the Agency, and all Officers, Agency and Servants thereof against any claim or liability arising from or based upon the violation of any such laws, ordinances, regulations, orders, or decrees whether by itself or by its employees.

3. PERMITS AND LICENSES

All necessary permits, licenses, insurance policies, etc. required by local, State or Federal laws, shall be provided by the contractor at its own expense.

4. PATENTED DEVICES, MATERIAL AND PROCESSES

- a. The contractor shall provide for the use of any patented design, device, material, or process to be used or furnished under this contract by suitable legal agreement with the patentee or owner, and shall file a copy of this agreement with the Agency.
- b. The contractor and the surety shall hold and save harmless the State of Delaware, the Agency, the Director, their Officers or Agents from any and all claims because of the use of such patented design, device, material, or process in connection with the work agreed to be performed under this contract.

5. EMERGENCY TERMINATION OF CONTRACT

- a. Due to restrictions which may be established by the United States Government on material, or work, a contract may be terminated by the cancellation of all or portions of the contract.
- b. In the event the contractor is unable to obtain the material required to complete the items of work included in the contract because of restrictions established by the United States Government and if, in the opinion of the Agency, it is impractical to substitute other available material, or the work cannot be completed within a reasonable time, the incomplete portions of the work may be cancelled, or the contract may be terminated.

6. TAX EXEMPTION

- a. Material covered by this proposal is exempt from all FEDERAL and STATE TAXES. Such taxes shall not be included in prices quoted.
- b. Any material which is to be incorporated in the work or any equipment required for the work contemplated in the proposal may be consigned to the Agency. If the shipping papers show clearly that any such material is so consigned, the shipment will be exempt from the tax on the transportation of property under provisions of Section 3475 (b) of the Internal Revenue Code, as amended by Public Law 180

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(78th Congress). All transportation charges shall be paid by the contractor. Each bidder shall take its exemption into account in calculating its bid for its work.

7. OR EQUAL (PRODUCTS BY NAME)

Specifications of products by name are intended to be descriptive of quality or workmanship, finish and performance. Desirable characteristics are not intended to be restrictive. Substitutions of products for those named will be considered provided the vendor certifies that the function, characteristics, performance and endurance qualities of the material offered is equal or superior to that specified. Final determination of equal status shall reside with the Agency.

8. BID EVALUATION AND AWARD

The Department of Transportation will award this contract to the lowest responsible bidder(s) which in their judgment best serves the interest of the State of Delaware in accordance with Delaware Code Title 29, Section 6923(k). Personnel with experience and technical background may be utilized by the Agency in making judgment. In case of error in price extension, the unit price(s) shall prevail.

9. INVOICING

After the awards are made, the agencies participating in the bid may forward their purchase orders to the successful bidder(s) in accordance with State Purchasing Procedures. The State will generate a payment voucher upon receipt of an invoice from the vendor.

10. SEVERABILITY

If any term or provision of this Agreement is found by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, the same shall not affect the other terms or provisions hereof or the whole of this Agreement, but such term or provision shall be deemed modified to the extent necessary in the court's opinion to render such term or provision enforceable, and the rights and obligations of the parties shall be construed and enforced accordingly, preserving to the fullest permissible extent the intent and agreements of the parties herein set forth.

SECTION I.D - EQUAL OPPORTUNITY

1. EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS

During the performance of any contract for public works financed in whole or in part by appropriation of the State of Delaware, the contractor agrees as follows:

- a. The contractor, as set forth in Title 19 Delaware Code Chapter 7 section 711, will not discriminate against any employee or applicant for employment with respect to compensation, terms, conditions or privileges of employment because of such individual's race, marital status, genetic information, color, age, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed and that employees are treated equally during employment without regard to their race, marital status, genetic information, color, age, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: advertising, lay-off or termination, rates of pay or other forms of compensation, and selection for training including apprenticeships. The contractor agrees to post in conspicuous places, notices to be provided by the contracting agency setting forth the provisions of this non-discrimination clause.
- b. During the performance of this contract, the contractor agrees as follows:
 1. The contractor, as set forth in Title 19 Delaware Code Chapter 7 section 711, will not discriminate against any individual with respect to compensation, terms, conditions or privileges of employment because of such individual's race, marital status, genetic information, color, age, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take positive steps to ensure that applicants are employed and that employees are treated during employment without regard to their race, marital status, genetic information, color, age, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided by the contracting agency setting forth this nondiscrimination clause.
 2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, marital status, genetic information, color, age, religion, sex, sexual orientation, gender identity, or national origin."
- c. The term "contractor for public works" means construction, reconstruction, demolition, alteration, and/or repair work, maintenance work, and paid for in whole or in part out of the funds of a public body except work performed under a vocational rehabilitation program. The manufacture or furnishing of materials, articles, supplies or equipment is not a public work within the meaning of this subsection unless conducted in connection with and at the site of the public work.

II. SPECIAL PROVISIONS

1. CONTRACT REQUIREMENTS

This contract will be issued to cover the requirements for the Delaware Department of Transportation.

2. AGENCY USE CONTRACT

Pursuant to 29 Del. C. §6904(e) respectively, if no state contract exists for a certain good or service, covered agencies may procure that certain good or service under another agency's contract so long as the arrangement is agreeable to all parties. Agencies, other than covered agencies, may also procure such goods or services under another agency's contract when the arrangement is agreeable to all parties.

3. CONTRACT TERM

Each vendor's contract shall be valid for three (3) years from contract execution. The contract may be extended for two (2) additional, one-year term(s) through negotiation between the contractor and the Department of Transportation. Negotiation should be initiated no later than ninety (90) days prior to the termination of the current agreement.

4. PRICES

Prices shall remain firm for the initial term of the contract. All prices shall be quoted in U.S. Dollars.

5. PRICE ADJUSTMENT

Upon expiration of the initial Contract term, each one-year Contract extension may adjust pricing by mutual written agreement. The pricing must cover the full term of the Contract extension period. If the price difference for any extension period exceeds the previous one year period, approval of the price adjustment shall be at the discretion of the Department. The Department retains the right to reject a request for future year extensions at any time.

The Vendor is not prohibited from offering price reductions, nor is the State prohibited from requesting price reductions, and the contract may be amended at any time upon agreement of both parties for such reductions.

6. SHIPPING TERMS

F.O.B. destination; freight pre-paid.

7. QUANTITIES

The attention of bidders is called to the fact that, unless stated otherwise, the quantities given in the proposal are best estimates and are given as a basis for the comparison of bids. Quantities ordered may be increased or decreased by any eligible agency as deemed necessary during the period of the contract.

Prior contract utilization may be viewed at the following site, if available: <http://contracts.delaware.gov/>.

8. FUNDING OUT

The continuation of this contract is contingent upon funding appropriated by the legislature.

9. BID BOND REQUIREMENT

The Bid Bond requirement has been waived.

10. PERFORMANCE BOND REQUIREMENT

The Performance Bond requirement has been waived.

11. MANDATORY INSURANCE REQUIREMENTS

As a part of the contract requirements, the contractor must obtain at its own cost and expense and keep in force and effect during the term of this contract, including all extensions, the minimum coverage limits specified below with a carrier satisfactory to the State. All contractors must carry the following coverage depending on the type of service or product being delivered.

- a. Commercial General Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence.
and
- b. Miscellaneous Errors and Omissions - \$1,000,000.00 per person/\$3,000,000 per occurrence.
and
- c. Product Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence.
and
- d. Automotive Liability Insurance covering all automotive units used in the work with limits of not less than \$100,000 each person and \$300,000 each accident as to bodily injury and \$25,000 as to property damage to others.
and
- e. The vendor shall maintain such insurance as will protect against claims under Worker's Compensation Act and from any other claims for damages for personal injury, including death, which may arise from operations under this contract. The vendor is an independent contractor and is not an employee of the State of Delaware.

Before any work is done with the State, a Certificate of Insurance referencing the name and contract number stated herein, shall be filed with the State. The certificate holder is as follows:

Delaware Department of Transportation
Contract No. DOT1712-STEELPOLES
Send to Attention of:
Contract Administration
800 Bay Road, Dover, DE 19901

Note: The State of Delaware shall not be named as an additional insured.

Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

12. BASIS OF AWARD

The Delaware Department of Transportation shall award this contract to the lowest responsible and responsive bidder(s) who best meets the terms and conditions of the bid. The award will be made on basis of price, product evaluation, and prior history of service and capability.

The Delaware Department of Transportation reserves the right to reject any or all bids in whole or in part, to make multiple awards, partial awards, award by types, item by item, or lump sum total, whichever may be most advantageous to the State of Delaware.

13. STATE OF DELAWARE BUSINESS LICENSE

Prior to receiving an award, the successful vendor shall either furnish proof of State of Delaware Business Licensure or initiate the process of application where required. An application may be requested in writing to: Division of Revenue, Carvel State Building, P.O. Box 8750, 820 N. French Street, Wilmington, DE 19899-8750 or by telephone to one of the following numbers: (302) 577-8201 - Public Service, (302) 577-8205 - Licensing Department.

Information regarding the award of this contract will be given to the Division of Revenue. Failure to comply with the State of Delaware licensing requirements may subject your organization to applicable fines and/or interest penalties.

14. HOLD HARMLESS

The successful bidder agrees that it shall indemnify and hold the State of Delaware and all its agencies harmless from and against any and all claims for injury, loss of life, or damage to or loss of use of property caused or alleged to be caused, by acts or omissions of the successful bidder, its employees, and invitees on or about the premises and which arise out of the successful bidder's performance, or failure to perform as specified in the Agreement.

15. OWNERSHIP OF INTELLECTUAL PROPERTY

All copyright and patent rights to all papers, reports, forms, materials, creations, or inventions created or developed in the performance of this contract shall become the sole property of the State of Delaware. On request, the contractor shall promptly provide an acknowledgment or assignment in a tangible form satisfactory to the State to evidence the State's sole ownership of specifically identified intellectual property created or developed in the performance of the contract.

16. NON-PERFORMANCE

In the event the vendor does not fulfill its obligations under the terms and conditions of this contract, the ordering agency may purchase equivalent product on the open market. Any difference in cost between the contract prices herein and the price of open market product shall be the responsibility of the vendor. Under no circumstances shall monies be due the vendor in the event open market products can be obtained below contract cost. Any monies charged to the vendor may be deducted from an open invoice.

17. FORCE MAJEURE

Neither the vendor nor the ordering agency shall be held liable for non-performance under the terms and conditions of this contract due, but not limited to, government restriction, strike, flood, fire, or unforeseen catastrophe beyond either party's control. Each party shall notify the other in writing of any situation that may prevent performance under the terms and conditions of this contract.

18. CONTRACTOR NON-ENTITLEMENT

State of Delaware Contractors for Materiel and for Services shall not have legal entitlement to, nor seek business from another Contractors' Central Contract. Additionally, they shall not utilize other Central Contracts to fulfill the requirements of their respective contract as they are not a "Covered Agency" as defined by Title 29 Chapter 69 of the State Procurement Code.

19. MANDATORY USAGE REPORTING

One of the primary goals in administering this contract is to keep accurate records regarding its actual value/usage. This information is essential in order to update the contents of the contract and to establish proper bonding levels, if they are required. The integrity of future contracts revolves around our ability to convey accurate and realistic information to all interested parties.

A complete and accurate Usage Report (Sample Report 1) shall be furnished in an Excel format and submitted electronically, no later than the 15th (or next business day after the 15th day) of each month, detailing the purchasing of all items on this contract. The reports shall be submitted and sent as an attachment to vendorusage@state.de.us. Submitted reports shall contain accurate descriptions of the products, goods or services procured, purchasing agency information, including the six-digit department and organization code, quantities procured and prices paid. Any exception to this mandatory requirement or failure to submit complete reports, or in the format required, may result in corrective action, up to and including the possible cancellation of the award. Failure to provide the report with the minimum required information may also negate any contract extension clauses. Additionally, Vendors who are determined to be in default of this mandatory report requirement may have such conduct considered against them, in assessment of responsibility, in the evaluation of future proposals.

In accordance with Executive Order 44, the State of Delaware is committed to supporting its diverse business industry and population. The successful Vendor will be required to accurately report on the participation by Diversity Suppliers which includes: minority (MBE), woman (WBE), veteran owned business (VOBE), or service disabled veteran owned business (SDVOBE) under this awarded contract. The reported data elements shall include but not be limited to; name of state contract/project, the name of the Diversity Supplier, Diversity Supplier contact information (phone, email), type of product or service provided by the Diversity Supplier and any minority, women, veteran, or service disabled veteran certifications for the subcontractor (State OSD certification, Minority Supplier Development Council, Women's Business Enterprise Council, VetBiz.gov). The format used for Subcontracting 2nd Tier reporting is shown as Sample Report 2.

Accurate 2nd Tier reports shall be submitted to the Office of Supplier Diversity at vendorusage@state.de.us on the 15th (or next business day) of the month following each quarterly period. For consistency quarters shall be considered to end the last day of March, June, September and December of each calendar year. Contract spend during the covered periods shall result in a report even if the contract has expired by the report due date.

20. BUSINESS REFERENCES

In order to have your bid considered, please supply three (3) business references consisting of current or previous customers with your reply. Please include name, address, telephone number, and a contact person.

PLEASE DO NOT UTILIZE STATE OF DELAWARE PERSONNEL AS REFERENCES.

21. ORDERING PROCEDURE

Successful contractors are required to have either a local telephone number within the (302) area code, a toll free (800) number, or agree to accept collect calls. Each agency is responsible for placing their orders and may be accomplished by written purchase order, telephone, fax or computer on-line systems. The contractor or vendor must accept full payment by procurement (credit) card and/or conventional check and/or other electronic means at the State's option, without imposing any additional fees, costs or conditions.

22. BILLING

The successful vendor is required to "Bill as Shipped" to the respective ordering agency(s). Ordering agencies shall provide contract number, ship to and bill to address, contact name and phone number.

23. PAYMENT

The agencies or school districts involved will authorize and process for payment each invoice within thirty (30) days after the date of receipt of a correct invoice. The contractor or vendor must accept full payment by procurement (credit) card and/or conventional check and/or other electronic means at the State's option, without imposing any additional fees, costs or conditions.

24. PRODUCT SUBSTITUTION

All items delivered during the life of the contract shall be of the same type and manufacture as specified or accepted as part of the bid proposal unless specific approval is given by the Delaware Department of Transportation to do otherwise. However, awarded vendors are highly encouraged to offer any like substitute product (s); either generic or brand name, at any time during the subsequent contract term, especially if an opportunity for cost savings to the state exists. In such cases, the state may require the submission of written specifications and/or product samples for evaluation prior to any approvals being granted.

25. BID/CONTRACT EXECUTION

Both the non-collusion statement that is enclosed with this Invitation to Bid and the contract form delivered to the successful bidder for signature **shall** be executed by a representative who has the legal capacity to enter the organization into a formal contract with the State of Delaware, Department of Transportation.

The State of Delaware requires completion of the Delaware Substitute Form W-9 to make payments to vendors. Successful completion of this form enables the creation of a State of Delaware vendor record. The Taxpayer ID (SSN or EIN) and Applicant (vendor) name are submitted to the Internal Revenue Service for "matching." If the Taxpayer ID and name do not match, the vendor record cannot be approved.

It is the applicant's responsibility to select the appropriate 1099 Withholding Type and Class. If incorporated, a business is not subject to 1099 reporting unless the business is providing legal or medical services.

Any questions about completing this form or specific comments about a form that you have submitted, please contact vendor services by phone at 302-672-5000.

26. VENDOR RESPONSIBILITY

The State will enter into a contract with the successful Vendor(s). The successful Vendor(s) shall be responsible for all products and services as required by this ITB whether or not the Vendor or its subcontractor provided final fulfillment of the order. Subcontractors, if any, shall be clearly identified in the Vendor's proposal by completing Attachment B, and are subject to State approval and acceptance.

27. PERSONNEL, EQUIPMENT AND SERVICES

- a. The Vendor represents that it has, or will secure at its own expense, all personnel required to perform the services required under this contract.
- b. All of the equipment and services required hereunder shall be provided by or performed by the Vendor or under its direct supervision, and all personnel, including subcontractors, engaged in the work shall be fully qualified and shall be authorized under State and local law to perform such services.
- c. None of the equipment and/or services covered by this contract shall be subcontracted without the prior written approval of the State. Only those subcontractors identified in Attachment B are considered approved upon award. Changes to those subcontractor(s) listed in Attachment B must be approved in writing by the State.

28. FAIR BACKGROUND CHECK PRACTICES

Pursuant to 29 Del. C. [§6909B](#) and effective November 4, 2014 the State does not consider the criminal record, criminal history, credit history or credit score of an applicant for state employment during the initial application process unless otherwise required by state and/or federal law. Vendors doing business with the State are encouraged to adopt fair background check practices. Vendors can refer to 19 Del. C. [§711\(g\)](#) for applicable established provisions.

29. LIFE CYCLE COSTING

If applicable, the specifications contained within this ITB have been developed through Life Cycle Cost Analysis that will allow the State to realize the lowest total cost of ownership and operation over the useful life of the equipment

30. ENVIRONMENTAL PROCUREMENT PRODUCTS

- a. Energy Star - If applicable, the Contractor must provide products that earn the ENERGY STAR rating and meet the ENERGY STAR specifications for energy efficiency in order to keep overall event costs to a minimum. The Contractor is encouraged to visit www.energystar.gov for complete product specifications and updated lists of qualifying products.
- b. Green Products – third party certification of green products accepted from GSS w/approved green certification shall be offered wherever available in addition to or as a substitute for non-green products.
- c. Contractors shall report all green items procured during the monthly reporting period using the Usage Report that will be provided to the awarded Vendor(s).
- d. Environmental Procurement Policies of the State shall determine acceptable consideration and credit for environmentally preferred products and services in the performance of this award. The State Environmental Procurement Policies may be found:
<http://gss.omb.delaware.gov/contracting/documents/agencyboilers/espp.pdf>.

31. TERMINATION OF INDIVIDUAL ORDERS OR PURCHASE ORDERS

The individual orders may be terminated as follows:

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a. Termination for Cause: If, for any reasons, or through any cause, the Vendor fails to fulfill in timely and proper manner his obligations, or if the Vendor violates any of the covenants, agreements, or stipulations of this contract, the Agency shall have the right to terminate the P.O. by giving written notice to the Vendor of such termination and specifying the effective date thereof, at least five (5) days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports or other material prepared by the Vendor in the performance of the P.O. shall, at the option of the Agency, become its property, and the Vendor shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents and other materials which is usable to the Agency.

b. Termination for Convenience: The Agency may terminate the P.O. at any time by giving written notice of such termination and specifying the effective date thereof, at least sixty (60) days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, models, photographs, reports, supplies, and other materials shall, at the option of the department, become its property and the Vendor shall be entitled to receive compensation for any satisfactory work completed on such documents and other materials which are usable to the Agency.

c. Termination for Non-Appropriations: In the event the General Assembly fails to appropriate the specific funds necessary to enter into or continue the contractual agreement, in whole or part, the agreement shall be terminated as to any obligation of the State requiring the expenditure of money for which no specific appropriation is available at the end of the last fiscal year for which no appropriation is available or upon the exhaustion of funds. This is not a termination for convenience and will not be converted to such.

32. TERMINATION OF CONTRACT

The contract resulting from this ITB may be terminated as follows by the Agency:

a. Termination for Cause: If, for any reasons, or through any cause, the Vendor fails to fulfill in timely and proper manner its obligations under this Contract, or if the Vendor violates any of the covenants, agreements, or stipulations of this Contract, the State shall thereupon have the right to terminate this contract by giving written notice to the Vendor of such termination and specifying the effective date thereof, at least thirty (30) days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports or other material prepared by the Vendor under this Contract shall, at the option of the State, become its property, and the Vendor shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents and other materials which is usable to the State.

On receipt of the contract cancellation notice from the State, the Vendor shall have not less than five (5) days to provide a written response and may identify a method(s) to resolve the violation(s). A vendor response shall not effect or prevent the contract cancellation unless the State provides a written acceptance of the Vendor response. If the State does accept the Vendor's method and/or action plan to correct the identified deficiencies, the State will define the time by which the Vendor must fulfill its corrective obligations. Final retraction of the State's termination for cause will only occur after the Vendor successfully rectifies the original violation(s). At its discretion the State may reject in writing the Vendor's proposed action plan and proceed with the original contract cancellation timeline.

b. Termination for Convenience: The State may terminate this Contract at any time by giving written notice of such termination and specifying the effective date thereof, at least sixty (60) days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, models, photographs, reports, supplies, and other materials shall, at the option of the State, become its property and the Vendor shall be entitled to receive compensation for any satisfactory work completed on such documents and other materials, and which is usable to the State.

c. Termination for Non-Appropriations: In the event the General Assembly fails to appropriate the specific funds necessary to enter into or continue the contractual agreement, in whole or part, the agreement shall be terminated as to any obligation of the State requiring the expenditure of money for which no specific appropriation is available at the end of the last fiscal year for which no appropriation is available or upon the exhaustion of funds. This is not a termination for convenience and will not be converted to such.

33. CHANGES

Both parties may, from time to time, require changes in the services to be provided by the Vendor under the Scope of Work. Such changes, including any increase or decrease in the amount of the Vendor's compensation, which are mutually agreed upon by and between the Agency and the Vendor shall be incorporated in written amendments to the Purchase Order or contract.

34. AUDIT ACCESS TO RECORDS

The Vendor shall maintain books, records, documents, and other evidence pertaining to this Contract to the extent and in such detail as shall adequately reflect performance hereunder. The Vendor agrees to preserve and make available to the State, upon request, such records for a period of five (5) years from the date services were rendered by the Vendor. Records involving matters in litigation shall be retained for one (1) year following the termination of such litigation. The Vendor agrees to make such records available for inspection, audit, or reproduction to any official State representative in the performance of their duties under the Contract. Upon notice given to the Vendor, representatives of the State or other duly authorized State or Federal agency may inspect, monitor, and/or evaluate the cost and billing records or other material relative to this Contract. The cost of any Contract audit disallowances resulting from the examination of the Vendor's financial records will be borne by the Vendor. Reimbursement to the State for disallowances shall be drawn from the Vendor's own resources and not charged to Contract cost or cost pools indirectly charging Contract costs.

35. VENDOR EMERGENCY RESPONSE POINT OF CONTACT

The awarded vendor(s) shall provide the name(s), telephone, or cell phone number(s) of those individuals who can be contacted twenty four (24) hours a day, seven (7) days a week to meet a critical need for commodities or services when the Governor of the State of Delaware declares a state of emergency under the current Delaware Emergency Operations Plan. Failure to provide this information could render the bid as non-responsive.

36. SUBCONTRACTS

Subcontracting is permitted under this ITB and contract. However, every subcontractor shall be identified in the Proposal (Attachment B) and agreed to in writing by the State or as are specifically authorized in writing by the Agency during the performance of the contract. Any substitutions in or additions to such subcontractors, associates, or consultants will be subject to the prior written approval of the State.

The Vendor(s) shall be responsible for compliance by the subcontractor with all terms, conditions and requirements of the ITB and with all local, State and Federal Laws. The Vendor shall be liable for any noncompliance by any subcontractor. Further, nothing contained herein or in any subcontractor agreement shall be construed as creating any contractual relationship between the subcontractor and the State.

If a company elects to be a subcontractor for another vendor, the subcontractor may not independently bid on this solicitation.

37. AGENCY'S RESPONSIBILITIES

The Agency shall:

- a. Examine and review in detail all letters, reports, drawings and other documents presented by the Vendor to the Agency and render to the Vendor in writing, findings and decisions pertaining thereto within a reasonable time so as not to delay the services of Vendor.
- b. Give prompt written notice to the Contractor whenever the Agency observes or otherwise becomes aware of any development that affects the scope or timing of the Contractor's services.
- c. When an ordering agency first experiences a relatively minor problem or difficulty with a vendor, the agency will contact the vendor directly and attempt to informally resolve the problem. This includes failure to perform by the date specified and any unacceptable difference(s) between the purchase order and the merchandise received. Ordering agencies should stress to vendors that they should expedite correction of the differences because failure to reply may result in an unfavorable rating in the execution of the awarded contract.
- d. The state has several remedies available to resolve non-performance issues with the contractor. The Agency should refer to the Contract Terms and Conditions to view these remedies. When a default occurs, the Agency should first review the contract to confirm that the issue is a part of the contract. If the issue is not covered by the contract, the state cannot expect the contractor to perform outside the agreement. If the issue is a part of the contract, the Agency or GSS - Contracting must then contact the contractor, discuss the reasons surrounding the default and establish a date when the contractor will resolve the non-performance issue.
- e. If there is a performance deficiency, a Corrective Action Report (CAR) may be used. Complete this form to report concerns with vendors or commodities. Be sure to furnish as much detail as possible. <http://gss.omb.delaware.gov/divisionwide/forms.shtml>.

38. CONFIDENTIALITY

All documents submitted as part of the vendor's proposal will be deemed confidential during the evaluation process. Vendor proposals will not be available for review by anyone other than the State of Delaware/Proposal Evaluation Committee or its designated agents. There shall be no disclosure of any vendor's information to a competing vendor prior to award of the contract.

The State of Delaware is a public agency as defined by state law, and as such, it is subject to the Delaware Freedom of Information Act, 29 *Del. C.* Ch. 100. Under the law, all the State of Delaware's records are public records (unless otherwise declared by law to be confidential) and are subject to inspection and copying by any person. Vendor(s) are advised that once a proposal is received by the State of Delaware and a decision on contract award is made, its contents will become public record and nothing contained in the proposal will be deemed to be confidential except proprietary information.

Vendor(s) shall not include any information in their proposal that is proprietary in nature or that they would not want to be released to the public. Proposals must contain sufficient information to be evaluated and a contract written without reference to any proprietary information. If a Vendor feels that they cannot submit their proposal without including proprietary information, they must adhere to the following procedure or their proposal may be deemed unresponsive and will not be recommended for selection. Vendor(s) must submit such information in a separate, sealed envelope labeled "Proprietary Information" with the ITB number. The envelope must contain Attachment H describing the documents in the envelope, representing in good

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faith that the information in each document is not “public record” as defined by 29 *Del. C.* § 10002, and briefly stating the reasons that each document meets the said definitions.

Upon receipt of a proposal accompanied by such a separate, sealed envelope, the State of Delaware will open the envelope to determine whether the procedure described above has been followed.

If the Vendor does not have any documents it declares confidential or proprietary, Attachment H should be completed by checking the appropriate box found at the top of the attachment.

39. NUMBER OF COPIES WITH MAILING OF PROPOSAL

To be considered, all proposals must be submitted in writing and respond to the items outlined in this ITB. The State reserves the right to reject any non-responsive or non-conforming proposals. Each proposal must be submitted with one (1) paper copy of the Bid Form. Paper copies must contain original signatures in all locations requiring signatures.

40. NO PRESS RELEASES OR PUBLIC DISCLOSURE

The State of Delaware reserves the right to pre-approve any news or broadcast advertising releases concerning this solicitation, the resulting contract, the work performed, or any reference to the State of Delaware with regard to any project or contract performance. Any such news or advertising releases pertaining to this solicitation or resulting contract shall require the prior express written permission of the State of Delaware.

The State will not prohibit or otherwise prevent the awarded vendor(s) from direct marketing to the State of Delaware agencies, departments, municipalities, and/or any other political subdivisions, however, the Vendor shall not use the State’s seal or imply preference for the solution or goods provided.

Title: **STEEL POLES**

III. TECHNICAL SPECIFICATIONS

By reference, the following specifications are incorporated herein:

The specifications entitled "Delaware Standard Specifications, for Road and Bridge Construction, August 2016, hereinafter referred to as the Standard Specifications, the Special Provisions, notes on the Plans, Contract Detail Sheets, and any applicable Standard Construction Details, this Bid Proposal, and any addenda thereto shall govern the work to be performed under this contract.

The full Website Link is:

http://www.deldot.gov/Publications/manuals/standard_specifications/index.shtml

DESCRIPTION:

This contract provides for the preparation and delivery of steel round and 16-flute ornamental strain poles, steel round and 16-flute ornamental mast arm poles, steel round and 16-flute ornamental mast arms, steel round and 16-flute ornamental pedestal poles, steel round vehicle detector poles, cast aluminum ornamental strain, mast arm, and pedestal pole split bases, cast aluminum vehicle detector pole transformer bases for the installation of traffic control devices, and camera poles for the installation of closed circuit television cameras to the Division of Transportation Solutions, Traffic Section as designated in the proposal and as ordered by the Chief Engineer or authorized representative. These poles, mast arms, and bases will be used to replace existing structures and/or for installation of new structures.

DOCUMENTS:

Except as noted below, all documents, plans, specifications, contract correspondence or the like required to be submitted for review, approval, or information after the bids are opened shall be submitted to the Chief Traffic Engineer, Department of Transportation, 169 Brick Store Landing Road, Smyrna, DE 19977.

Proposed Material Sources for all contract items shall be submitted to DeIDOT Materials and Research Section, P.O. Box 778, Dover, DE 19903, attention Mr. Gregory Hainsworth with a copy to the Chief Traffic Engineer.

Shop drawings are required for all fabricated items including, but not limited to Steel Round and Ornamental Strain Poles, Steel Round and Ornamental Mast Arms and Poles, Steel Round and Ornamental Pedestal Poles, Steel Round Vehicle Detector Poles, Cast Aluminum Transformer Bases, Cast Aluminum Split Bases, and CCTV Camera Poles.

SPECIAL NOTE:

Upon notification of being the apparent low bidder, the bidder shall submit shop drawings to DeIDOT for review and approval, no later than fifteen (15) calendar days after notification.

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DELIVERY:

All items shall be ordered by purchase order. Each purchase order shall be promptly acknowledged in writing stating the estimated date of delivery. Delivery must be made within seventy-five (75) calendar days after receipt of a purchase order to the location noted on the purchase order.

Traffic Section
14 Sign Shop Road
Dover, DE 19901

Notification must be given at least three (3) days prior to delivery to the above address. If this notification is not given, any and all expenses incurred because of any unloading delay shall be the responsibility of the contractor. Deliveries will not be accepted on Saturdays, Sundays, and State legal holidays.

EXTENSION OF DELIVERY TIME:

The Department will only consider an extension of the delivery time specified under the terms of this contract in cases where labor strikes shall prevent the required fulfillment of the contract. Evidence of such delays must be submitted for consideration. Knowledge of existing or pending strikes will be taken into consideration in awarding the contract.

INSPECTION AND ACCEPTANCE TESTING:

Upon delivery, the article(s) will be inspected by an authorized representative of the Division of Transportation Solutions, and if found damaged from any cause, including but not limited to transportation, or manufacturing or material defects, or if it fails in any way to meet these specifications, it shall be rejected. Rejected material shall be replaced by the supplier within the delivery time limit specified at no cost to the Department.

The Department may require independent testing to show compliance with these specifications. The contractor shall supply such test reports without cost. The Department reserves the right to inspect fabrication of any contract items in the shop at the discretion of the Engineer. The Contractor is directed to pay particular attention to the "Buy American" requirements of this contract listed in the Federal Language Section of this ITB.

DESIGN STANDARDS:

All poles and mast arms have been designed and shall be manufactured in accordance with the American Association of State Highway and Transportation Officials (AASHTO) LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 1st Edition, with 2017 Interim Revisions (AASHTO LRFD LTS-1). All arms, poles, connection bolts, and anchor bolts for the mast arm structures have been designed for an infinite design life and shall be classified as Fatigue Category I. The fatigue design loads considered for mast arms and poles are galloping, natural wind gusts, and truck-induced gusts. The fatigue design loads considered for mast arm connection and anchor bolts are natural wind gusts and truck-induced gusts. All mast arms and poles have been designed to adequately resist fatigue design loads without the use of vibration mitigation devices. Per AASHTO LRFD LTS-1 Sec 5.6.2, "fluted" cross-sections are not covered under the provisions for multi-sided cross-sections, but have been requested by the Department. With respect to this, the 16-flute ornamental structures have been designed with the provisions for 16-sided multi-sided sections from AASHTO LRFD LTS-1.

Alternate designs, if necessary, shall match the design standards specified in the paragraph above.

Safety performance of the products shall be evaluated in accordance with the requirements of the AASHTO Manual for Assessing Safety Hardware (MASH), 2009 or National Cooperative Highway Research Program

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(NCHRP) Report 350, Recommended Procedures for the Safety Performance Evaluation of Highway Features, 1993 if the hardware was accepted prior to the adoption of MASH. The bidder must furnish, with his proposal, all required testing documentation.

All materials and workmanship shall conform to the current standards of the American Society for Testing Materials (ASTM) and the current standards of the American National Standards Institute (ANSI). All welding shall be in accordance with Sections 1 through 8 of the American Welding Society (AWS) D1.1/D1.1M: 2010 Structural Welding Code. For those items not specifically defined herein, good practice and/or "state of the art" as shown in previous equipment supplied by the contractor, and/or as used by the industry in general, shall apply. A representative of the Department will be available to discuss good practice and "state of the art". The bidder is notified that neither claims for additional costs nor extensions of delivery times will be honored on the basis of good practice and/or "state of the art" problems. The bidder must show by field review, if necessary, and by the various documents that are required as part of the bid that the materials proposed will perform as required.

FEDERAL LANGUAGE:

BUY AMERICA:

References:

23 U.S.C.

United States Code, 2014 Edition

Title 23 - HIGHWAYS

CHAPTER 3 - GENERAL PROVISIONS

Sec. 313 - Buy America

From the U.S. Government Publishing Office, www.gpo.gov

§313. Buy America

(a) Notwithstanding any other provision of law, the Secretary of Transportation shall not obligate any funds authorized to be appropriated to carry out the Surface Transportation Assistance Act of 1982 (96 Stat. 2097) or this title and administered by the Department of Transportation, unless steel, iron, and manufactured products used in such project are produced in the United States.

(b) The provisions of subsection (a) of this section shall not apply where the Secretary finds—

(1) that their application would be inconsistent with the public interest;

(2) that such materials and products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(3) that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

(c) For purposes of this section, in calculating components' costs, labor costs involved in final assembly shall not be included in the calculation.

(d) The Secretary of Transportation shall not impose any limitation or condition on assistance provided under the Surface Transportation Assistance Act of 1982 (96 Stat. 2097) or this title that restricts any State from imposing more stringent requirements than this section on the use of articles, materials, and supplies mined, produced, or manufactured in foreign countries in projects carried out with such assistance or restricts any recipient of such assistance from complying with such State imposed requirements.

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(e) Intentional Violations.—If it has been determined by a court or Federal agency that any person intentionally—

- (1) affixed a label bearing a "Made in America" inscription, or any inscription with the same meaning, to any product used in projects to which this section applies, sold in or shipped to the United States that was not made in the United States; or
- (2) represented that any product used in projects to which this section applies, sold in or shipped to the United States that was not produced in the United States, was produced in the United States; that person shall be ineligible to receive any contract or subcontract made with funds authorized under the Intermodal Surface Transportation Efficiency Act of 1991 pursuant to the debarment, suspension, and ineligibility procedures in subpart 9.4 of chapter 1 of title 48, Code of Federal Regulations.

(f) Limitation on Applicability of Waivers to Products Produced in Certain Foreign Countries.—If the Secretary, in consultation with the United States Trade Representative, determines that—

- (1) a foreign country is a party to an agreement with the United States and pursuant to that agreement the head of an agency of the United States has waived the requirements of this section, and
- (2) the foreign country has violated the terms of the agreement by discriminating against products covered by this section that are produced in the United States and are covered by the agreement, the provisions of subsection (b) shall not apply to products produced in that foreign country.

(g) Application to Highway Programs.—The requirements under this section shall apply to all contracts eligible for assistance under this chapter for a project carried out within the scope of the applicable finding, determination, or decision under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), regardless of the funding source of such contracts, if at least 1 contract for the project is funded with amounts made available to carry out this title.

For additional information, refer to the following website:

<https://www.gpo.gov/fdsys/pkg/USCODE-2014-title23/html/USCODE-2014-title23-chap3-sec313.htm>

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND
VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

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g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

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- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

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CARGO PREFERENCE ACT (NEW)

Requirements in the Federal-aid Highway Program

(a) Agreement Clauses. "Use of United States-flag vessels:

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees—

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

NOTE:

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

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BUY AMERICA (NEW)

Requirements in the Federal-aid Highway Program

By signing and submitting this proposal, the bidder certifies that:

In accordance with 23 U.S.C, 313 and 23 CFR 635.410, all iron and steel materials permanently incorporated into this project will be produced in the United States and that all manufacturing processes involving these materials will occur in the U.S, except that a minimal amount of foreign steel or iron materials may be used, provided the cost of the foreign materials does not exceed 0.1 percent of the total Contract cost or \$2,500.00, whichever is greater. If such minimal amount of foreign steel is used, the Contractor shall maintain a record of the costs to ensure that the allowable limit is not exceeded. This documentation shall be presented to the Department upon request.

At the Department's request, I/we will provide manufacturer's/supplier's documentation verifying domestic origin as defined in the Specifications. All Materials accepted on the basis of such Certificate of Compliance may be sampled by the Department and tested at any time. Use of Material on the basis of Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating Material in the Project conforming to the requirements of the Contract. Any Material not conforming to such requirements will be subject to rejection whether in place or not. The Department reserves the right to refuse to permit the use of Material on the basis of Certificate of Compliance.

* * * * *

SPECIAL PROVISIONS

PURPOSE:

These Special Provisions include the preparation and delivery of steel round and 16-flute ornamental strain poles, steel round and 16-flute ornamental mast arm poles, steel round and 16-flute ornamental mast arms, steel round and 16-flute ornamental pedestal poles, steel round vehicle detector poles, cast aluminum ornamental strain, mast arm, and pedestal pole split bases, cast aluminum vehicle detector pole transformer bases for the installation of traffic control devices, and camera poles for the installation of closed circuit television cameras to the Division of Transportation Solutions, Traffic Section as designated in the proposal and as ordered by the Chief Engineer or authorized representative. These poles, mast arms, and bases will be used to replace existing structures and/or for installation of new structures.

All specifications must be met even if a particular location may not require all of the specified elements.

GENERAL:

The Steel Strain Poles supplied under this contract shall be one of two types:

1. A round shaft pole.
2. A 16-flute ornamental shaft pole.

For this contract, the strain pole shaft lengths 25' (7.6 m), 28' (8.5 m), 30' (9.1 m), 32' (9.8 m), and 37' (11.3 m) shall be considered standard.

The Steel Mast Arm Poles supplied under this contract shall be one of two types:

1. A round shaft pole.
2. A 16-flute ornamental shaft pole.

The Steel Mast Arms supplied under this contract shall be one of two types:

1. A round shaft mast arm.
2. A 16-flute ornamental shaft mast arm.

For this contract, the mast arm shaft lengths 20' (6.1 m), 25' (7.6 m), 30' (9.1 m), 35' (10.7 m), 40' (12.2 m), 45' (13.7 m), 50' (15.2 m), 55' (16.8 m), 60' (18.3 m), 70' (21.3 m), 80' (24.4 m), and 90' (27.4 m) shall be considered standard.

The Steel Pedestal Poles supplied under this contract shall be one of two types:

1. A round shaft pole.
2. A 16-flute ornamental shaft pole.

For this contract, the pedestal pole shaft lengths 6' (1.8 m), 10' (3.0 m) and 14' (4.3 m) shall be considered standard.

The Steel Vehicle Detector Poles supplied under this contract shall be round shaft poles. For this contract, the vehicle detector pole shaft length 40' (12.2 m) shall be considered standard.

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The Cast Aluminum Transformer Bases supplied under this contract shall be used with steel vehicle detector poles when breakaway support is required.

The Cast Aluminum Ornamental Strain, Mast Arm, and Pedestal Pole Split Bases (Skirts) supplied under this contract shall be used with ornamental strain poles, ornamental mast arm poles, and ornamental pedestal poles when design conditions permit.

The CCTV camera poles shall be available in varying lengths, including but not limited to 50' (15.2 m) and 75' (22.9 m). The CCTV camera poles shall be used with the camera lowering devices manufactured by Camera Lowering Systems (CLS) or similar. The camera lowering devices shall not be supplied under this contract. The CCTV camera poles shall be designed to ensure maximum horizontal deflection of 1" (25 mm) at the top of the pole completely assembled and all fixtures attached when subjected to a 30 MPH non gust wind load. Appendix C shall not be used to determine wind loading.

The standard colors for round strain, mast arm, pedestal, and vehicle detector poles shall be silver-grey galvanized and black (Coal Black, FS: 27038). The standard color for ornamental poles, ornamental mast arms and split bases shall be black (Coal Black, FS: 17038). The standard color for camera poles shall be silver-grey. Any other color will be considered a special order. The steel poles, mast arms, and camera poles shall be galvanized per ASTM A123. Accessories and hardware shall be galvanized according to ASTM A153.

The black steel poles and mast arms shall be galvanized and powder coated over galvanization. After galvanizing all galvanized surfaces shall be air cooled and prepared for painting according to ASTM D6386. Powder coating material shall be a thermosetting, durable, polyester powder of a degassing grade. Such coating powder must be recommended by its manufacturer for use over hot dipped galvanizing. The coating will be electrostatically applied and cured by heating to a temperature and duration specified by the powder coat material manufacturer. The exterior surface will be coated to dry film thickness 5 - 10 mils (127 - 254 microns).

All non-ornamental poles and arms shall be "true round." Multi-sided poles or arms, including 8, 12, 16, or 18 sided members, or any other press break pole or arms, shall not be permitted.

Each pole, mast arm, and camera pole supplied under this contract shall have a metallic identification plate mechanically attached 6" (152 mm) above the hand-hole and oriented so that the identification plate may be read from a ground observation position. The following information shall be provided and stamped in the plate: name of the manufacturer, current DeIDOT Steel Pole contract number, outside shaft diameter (O.D.) at the base in inches, shaft length in feet, wall thickness in GA or schedule, and bolt circle (B.C.) in inches. In addition, anchor bolt diameter and bent length in inches shall be provided for strain and mast arm poles; breakaway coupling dimensions in inches shall be provided for pedestal and vehicle detector poles. Industry common abbreviations are acceptable. Sample identification plate for strain, mast arm, or camera pole is shown below.

Manufacturer_____		Contract #:_____	
Pole O.D.:_____	Height:_____	GA:_____	
Anchor Bolt Dia.:_____	Length:_____	B.C.:_____	

25' STEEL ROUND STRAIN POLE
28' STEEL ROUND STRAIN POLE
30' STEEL ROUND STRAIN POLE
32' STEEL ROUND STRAIN POLE
37' STEEL ROUND STRAIN POLE
25' STEEL 16-FLUTE ORNAMENTAL STRAIN POLE
28' STEEL 16-FLUTE ORNAMENTAL STRAIN POLE
30' STEEL 16-FLUTE ORNAMENTAL STRAIN POLE
32' STEEL 16-FLUTE ORNAMENTAL STRAIN POLE
37' STEEL 16-FLUTE ORNAMENTAL STRAIN POLE

Each strain pole shall include a shaft, complete with pole base plate, handhole with handhole cover, top cap, anchor bolts with nuts and washers, and nut covers. A span wire clamp assembly shall be supplied with each ornamental strain pole. Ornamental split bases for ornamental strain poles shall be supplied separately. See Contract Detail Sheets 1 and 2 for strain pole fabrication details.

Shaft:

The round tapered shaft shall be formed from structural quality steel conforming to the requirements of ASTM A595 Grade A and having minimum yield strength of 55,000 PSI (380 MPa) after fabrication. The shaft shall have only one longitudinal welded joint with no intermediate horizontal joints. The submerged with 60 percent penetration arc weld process shall be used.

The fluted shaft shall be formed from a round tapered shaft cold-rolled over a precision steel fluted mandrel. Sixteen (16) uniform and equally spaced Doric flutes shall be free from marring and longitudinal rolling marks throughout the entire length of the shaft.

The walls of round tapered strain pole shafts shall be 0.625" (15.9 mm) in thickness throughout, including welded areas. All shafts shall have a 14" (356 mm) outside diameter at the pole base end. All shafts shall taper 0.14 inches per linear foot (11.7 millimeters per linear meter), measured as a change in O.D. These values are absolute and may not vary more than normal tolerances.

Each shaft shall be provided with a 3" (76 mm) coupling located 24" (610 mm) below the top end of the shaft.

Each shaft shall be provided with a wire support hook welded inside at the top end. A pole base plate shall telescope the lower end of the shaft.

Pole Base Plate:

The pole base plate shall be one-piece hot-rolled steel conforming to ASTM A36 or ASTM A572 with minimum yield strength of 36,000 PSI (250 MPa) or 42,000 PSI (290 MPa), respectively. The pole base plate shall be 21" x 21" x 2 1/2" (533 mm x 533 mm x 64 mm). The plate shall have provision for four (4) 2 1/4" (57 mm)-diameter anchor bolts. The plate shall have a 20" (508 mm)-diameter anchor bolt circle. These values are absolute and may not vary more than normal tolerances. The plate shall be secured to the shaft using continuous welds. The welded connection shall develop the full strength of the adjacent shaft section to resist bending action.

Anchor bolts shall secure the pole base plate to the pole base.

Anchor Bolts:

Anchor bolts shall be fabricated conforming to ASTM F1554, Grade 105 with minimum yield strength of 105,000 PSI (724 MPa), minimum ultimate tensile strength of 125,000 PSI (860 MPa), and maximum elongation between minimum yield and minimum ultimate of 18 percent. Each 2 1/4" (57 mm)-diameter bolt shall have 8" (203 mm) of threads at the top, 6" (152 mm) "L" bend at the bottom, and a bent length of 90" (2286 mm). The threaded ends shall be hot dip galvanized a minimum of 18" (457 mm) in accordance with ASTM A153. Four (4) anchor bolts shall be supplied with each pole. Each anchor bolt shall be furnished with two (2) galvanized hexagon nuts, two (2) flat washers, and a cast aluminum nut cover.

Nut Covers:

Nut covers shall be fastened to the shaft with self-threading stainless steel hexagon head screws. The shafts shall be pre-drilled to accept attachment screws. All shafts shall be provided with a handhole typically located 18" (457 mm) from the base plate.

Handhole:

The minimum nominal inside opening of the handhole shall be 26 sq. in (16,774 sq. mm). The handhole shall be reinforced with a welded-in frame to meet the minimum guaranteed yield strength of the shaft. The handhole frame shall be aligned so that the anchor bolt holes along one set of opposite sides of the pole base plate are at right angles to the frame. A grounding nut holder shall be welded to the frame and include a 1/2" (13 mm) – 13UNC hexagon head bolt and two (2) flat washers. The handhole shall be complete with a steel cover. The cover shall be supplied with two (2) stainless steel hexagon head attachment screws.

The top end of the shaft shall be protected with a top cap.

Top Cap:

The cast aluminum top cap shall be removable, secured to the shaft with three (3) stainless steel machine screws spaced at 120 degrees. Span wire clamp assemblies shall be provided with ornamental strain poles.

Span Wire Clamp Assembly (Steel 16-Flute Ornamental Strain Poles)

A span wire clamp assembly shall include heavy duty steel clamp and U-bolt with two (2) hexagon head nuts and two (2) flat washers.

STEEL ROUND MAST ARM POLE, TYPE A
STEEL ROUND MAST ARM POLE, TYPE B
STEEL ROUND MAST ARM POLE, TYPE C
STEEL 16-FLUTE ORNAMENTAL MAST ARM POLE, TYPE A
STEEL 16-FLUTE ORNAMENTAL MAST ARM POLE, TYPE B

Each mast arm pole shall include a 21.5' (6.6 m) tall shaft, complete with pole base plate, handhole with handhole cover, top cap, clamp assemblies for mast arm mounting, anchor bolts with nuts and washers, and nut covers. Ornamental split bases for ornamental mast arm poles shall be supplied separately. See Contract Detail Sheets 3 and 4 for mast arm pole fabrication details.

Three mast arm poles shall be considered standard for this contract:

1. Mast arm pole, Type A, designed to support two (2) – 40' (12.2 m) mast arms. This pole shall also support mast arms ranging from 20' (6.1 m) to 40' (12.2 m) in length.
2. Mast arm pole, Type B, designed to support two (2) – 60' (18.3 m) mast arms. This pole shall also support mast arms ranging from 45' (13.7 m) to 60' (18.3 m) in length.
3. Mast arm pole, Type C, designed to support one (1) – 90' (27.4 m) mast arm. This pole shall also support 70' (21.3 m) and 80' (24.4 m) mast arms. This pole shall only support one arm per pole.

The design is based on a wind speed of 115 MPH. See Contract Detail Sheet 6 for lateral spacing of mast arm attachments.

Shaft:

The round shaft shall be formed from structural quality steel conforming to the requirements of ASTM A595 Grade A and having minimum yield strength of 55,000 PSI (380 MPa) after fabrication. The shaft shall have only one longitudinal welded joint with no intermediate horizontal joints. The submerged with 60 percent penetration arc weld process shall be used.

The fluted shaft shall be formed from a round shaft cold-rolled over a precision steel fluted mandrel. Sixteen (16) uniform and equally spaced Doric flutes shall be free from marring and longitudinal rolling marks throughout the entire length of the shaft.

The wall thickness of the shaft shall be uniform in thickness throughout, including welded areas. Shafts shall taper 0.14 inches per linear foot (11.7 millimeters per linear meter), measured as a change in O.D.

For round mast arm pole Type A, the wall thickness of the shaft shall be 0.429" (11 mm). For round mast arm pole Type B, the wall thickness of the shaft shall be 0.626" (16 mm). For round mast arm pole Type C, the wall thickness of the shaft shall be 0.500" (13 mm). For round mast arm pole Type A and B, the pole base diameter shall be 15.5" (394 mm). For round mast arm pole Type C, the pole base diameter shall be 24" (610 mm).

For ornamental mast arm pole Type A, the wall thickness of the shaft shall be 0.429" (11 mm). For ornamental mast arm pole Type B, the wall thickness of the shaft shall be 0.626" (16 mm). For ornamental mast arm pole Type A and B, the pole base diameter shall be 15.75" (400 mm). Each pole shall be provided with a 4" (102 mm)-diameter hole and cover for wiring at the top end of the shaft. A wire support hook shall be welded inside the shaft 1" (25 mm) above the arm mounting height. A pole base plate shall be attached to the lower end of the shaft. Each shaft shall display a permanent, clearly visible identification label to designate the type of mast arm pole.

Pole Base Plate:

The pole base plate shall be one-piece hot rolled steel conforming to ASTM A36 or ASTM A572 with minimum yield strength of 36,000 PSI (250 MPa) or 42,000 PSI (290 MPa), respectively. For mast arm pole Type A and B, the pole base plate shall be 21" x 21" x 2" (533 mm x 533 mm x 51 mm). For mast arm pole Type A, the plate shall have provision for four (4) 2" (51 mm)-diameter anchor bolts. For mast arm pole Type B, the plate shall have provision for four (4) 2 1/2" (64 mm)-diameter anchor bolts. Both Type A and Type B plates shall have a 20" (508 mm)-diameter bolt circle. For mast arm pole Type C, the pole base plate shall be 30" x 30" x 2 1/2" (762 mm x 762 mm x 64 mm). For mast arm pole Type C, the plate shall have provision for four (4) 2 1/2" (64 mm)-diameter anchor bolts. The Type C plate shall have a 30" (762 mm)-diameter bolt circle. These values are absolute and may not vary more than normal tolerances.

The pole base plate shall be secured to the shaft by a continuous full penetration groove weld. The welded connection shall develop the full strength of the adjacent shaft section to resist bending action.

Anchor bolts shall secure the pole base plate to the pole base.

Anchor Bolts:

Anchor bolts shall be fabricated conforming to ASTM F1554, Grade 105 with minimum yield strength of 105,000 PSI (724 MPa), minimum ultimate tensile strength of 125,000 PSI (860 MPa), and maximum elongation between minimum yield and minimum ultimate of 18 percent. Each 2" (51 mm)-diameter bolt shall have 8" (203 mm) of threads at the top, 6" (152 mm) "L" bend at the bottom, and a bent length of 90" (2286 mm). Each 2 1/2" (64 mm)-diameter bolt shall have 8" (203 mm) of threads at the top, 6" (152 mm) "L" bend at the bottom, and a bent length of 114" (2896 mm). The threaded ends shall be hot dip galvanized a minimum of 18" (457 mm) in accordance with ASTM A153. Each anchor bolt shall be furnished with two (2) galvanized hexagon nuts, two (2) flat washers, and a cast aluminum nut cover.

A set of anchor bolts shall be supplied with each pole.

Nut Covers:

Nut covers shall be fastened to the shaft with self-threading stainless steel hexagon head screws. The shafts shall be pre-drilled to accept attachment screws.

All shafts shall be provided with a handhole typically located 18" (457 mm) from the pole base plate.

Handhole:

The minimum nominal inside opening of the handhole shall be 26 sq. in (16,774 sq. mm). The handhole shall be reinforced with a welded-in frame to meet the minimum guaranteed yield strength of the shaft. The handhole frame shall be aligned so that the anchor bolt holes along one set of opposite sides of the pole base plate are at right angles to the frame. A grounding nut holder shall be welded to the frame and include 1/2" (13 mm) – 13UNC hexagon head bolt and two (2) flat washers. The handhole shall be complete with a steel cover. The cover shall be supplied with two (2) stainless steel hexagon head attachment screws.

The top end of the shaft shall be protected with a top cap.

Top Cap:

The cast aluminum top cap shall be removable, secured to the shaft with three (3) stainless steel machine screws spaced at 120 degrees.

Clamp Assembly:

A clamp-type assembly shall be used to attach all mast arms to mast arm poles. The clamp assembly shall be a two-plate assembly secured around the pole shaft. Each plate shall be fabricated of one-piece hot rolled steel conforming to ASTM A36 with minimum yield strength of 36,000 PSI (250 MPa). The front plate of the clamp shall be welded to the mast arm utilizing a continuous full penetration groove weld. The front plate shall have a deburred hole in the middle of the plate for wiring. For mast arm pole Type A and Type B, the clamp assemblies shall have provision for four (4) 1 1/2" (38 mm)-diameter studs. For mast arm pole Type C, the clamp assembly shall have provision for four (4) 2" (51 mm)-diameter studs.

The mast arm and the clamp shall be designed to provide a 1 to 3 degree rake angle between horizontal and arm center line when installed and loaded.

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20' STEEL ROUND MAST ARM
25' STEEL ROUND MAST ARM
30' STEEL ROUND MAST ARM
35' STEEL ROUND MAST ARM
40' STEEL ROUND MAST ARM
45' STEEL ROUND MAST ARM
50' STEEL ROUND MAST ARM
55' STEEL ROUND MAST ARM
60' STEEL ROUND MAST ARM
70' STEEL ROUND MAST ARM
80' STEEL ROUND MAST ARM
90' STEEL ROUND MAST ARM
20' STEEL 16-FLUTE ORNAMENTAL MAST ARM
25' STEEL 16-FLUTE ORNAMENTAL MAST ARM
30' STEEL 16-FLUTE ORNAMENTAL MAST ARM
35' STEEL 16-FLUTE ORNAMENTAL MAST ARM
40' STEEL 16-FLUTE ORNAMENTAL MAST ARM
45' STEEL 16-FLUTE ORNAMENTAL MAST ARM
50' STEEL 16-FLUTE ORNAMENTAL MAST ARM
55' STEEL 16-FLUTE ORNAMENTAL MAST ARM
60' STEEL 16-FLUTE ORNAMENTAL MAST ARM

Each mast arm shall include a shaft, complete with arm cap, and clamp with bolts, nuts and washers for a pole connection. See Contract Detail Sheets 3, 4, and 5 for mast arm fabrication details.

Shaft:

The mast arm shaft shall be formed from structural quality steel conforming to the requirements of ASTM A595 Grade A and having minimum yield strength of 55,000 PSI (380 MPa) after fabrication. The shaft shall have only one longitudinal welded joint with no intermediate horizontal joints. The submerged with 60 percent penetration arc weld process shall be used.

The round shaft shall be formed, welded longitudinally, and cold-rolled under sufficient pressure to flatten the weld to form a round tube and to provide the physical characteristics of the metal as required.

The fluted shaft shall be formed from a round shaft cold-rolled over a precision steel fluted mandrel. Sixteen (16) uniform and equally spaced Doric flutes shall be free from marring and longitudinal rolling marks throughout the entire length of the shaft.

All shafts shall be tapered 0.14 inches per linear foot (11.7 millimeters per linear meter), measured as a change in O.D. Mast arm shafts will be one-, two-, or three-section structures depending on the required arm length. Two- and three-section arms shall be field-assembled by telescoping to a firm tapered fit and secured with a galvanized ASTM A325 through bolt. To achieve a snug tight joint a hole for the through bolt shall be shop drilled in the end section of the arm and field drilled in the base section. The minimum overlap between two sections shall be 1.5 times the inside diameter (I.D.) of the end section.

The end of each mast arm shaft shall be protected with an arm cap.

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The round mast arm dimensions are listed below:

<u>Mast Arm Length</u>	<u>Mast Arm O.D. @ Base End</u>	<u>Mast Arm Sections</u>	<u>Mast Arm Wall Thickness @ Base End</u>
20' (6.1 m)	12.50" (318 mm)	one	0.250" (6.4 mm)
25' (7.6 m)	12.75" (324 mm)	one	0.313" (7.9 mm)
30' (9.1 m)	14.00" (356 mm)	one	0.358" (9.1 mm)
35' (10.7 m)	15.00" (381 mm)	one	0.429" (10.9 mm)
40' (12.2 m)	14.50" (368 mm)	one	0.429" (10.9 mm)
45' (13.7 m)	15.00" (381 mm)	two	0.563" (14.3 mm)
50' (15.2 m)	14.50" (368 mm)	two	0.500" (12.7 mm)
55' (16.8 m)	14.75" (375 mm)	two	0.626" (15.9 mm)
60' (18.3 m)	15.75" (400 mm)	two	0.563" (14.3 mm)
70' (21.3 m)	19.00" (483 mm)	three	0.500" (12.7 mm)
80' (24.4 m)	20.00" (508 mm)	three	0.563" (14.3 mm)
90' (27.4 m)	23.00" (584 mm)	three	0.563" (14.3 mm)

The ornamental mast arm dimensions are listed below:

<u>Mast Arm Length</u>	<u>Mast Arm O.D. @ Base End</u>	<u>Mast Arm Sections</u>	<u>Mast Arm Wall Thickness @ Base End</u>
20' (6.1 m)	13.50" (342 mm)	one	0.250" (6.4 mm)
25' (7.6 m)	14.00" (356 mm)	one	0.313" (7.9 mm)
30' (9.1 m)	14.50" (368 mm)	one	0.358" (9.1 mm)
35' (10.7 m)	14.35" (365 mm)	one	0.429" (10.9 mm)
40' (12.2 m)	14.35" (365 mm)	one	0.429" (10.9 mm)
45' (13.7 m)	15.50" (394 mm)	two	0.563" (14.3 mm)
50' (15.2 m)	14.50" (368 mm)	two	0.563" (14.3 mm)
55' (16.8 m)	15.50" (394 mm)	two	0.626" (15.9 mm)
60' (18.3 m)	16.50" (406 mm)	two	0.563" (14.3 mm)

Arm Cap:

The end arm cap shall be removable, secured in place with a set of three (3) stainless steel screws spaced at 120 degrees.

The manufacturer shall furnish rubber grommets for field drilled wiring holes, typically one grommet per piece of electrical equipment.

6' STEEL ROUND PEDESTAL POLE
10' STEEL ROUND PEDESTAL POLE
14' STEEL ROUND PEDESTAL POLE
6' STEEL 16-FLUTE ORNAMENTAL PEDESTAL POLE
10' STEEL 16-FLUTE ORNAMENTAL PEDESTAL POLE
14' STEEL 16-FLUTE ORNAMENTAL PEDESTAL POLE

Each steel pedestal pole shall include a shaft, complete with handhole with handhole cover, pole base plate, top cap, breakaway couplings with nuts, washers and shims, skirt, and anchor inserts. Ornamental split bases for ornamental pedestal poles shall be supplied separately. See Contract Detail Sheet 7 for pedestal pole fabrication details.

Pedestal poles are designed based on the maximum typical loading. A 6' (1.8 m) design pole shall be loaded with two (2) Accessible Pedestrian Signal (APS) pushbutton assemblies and one (1) 9" x 15" (229 mm x 381 mm) pushbutton sign. A 10' (3.0 m) design pole shall be loaded with two (2) 18.5" x 18.7" x 9.1" (470 x 475 x 231) aluminum pedestrian signal heads, two (2) APS pushbutton assemblies, and one (1) 9" x 15" (229 mm x 381 mm) pushbutton sign. Pedestrian signal heads will be top-mounted on 10' (3.0 m) round pedestal poles and side-mounted on 10' (3.0 m) ornamental pedestal poles. A 14' (4.3 m) design pole shall be loaded with two (2) top-mounted single-section 12" (305 mm) cast aluminum vehicular signal heads and two (2) 0.08" (2 mm) thick aluminum signs. Sizes of the signs shall be 48" x 48" (1219 mm x 1219 mm) and 24" x 48" (610 mm x 1219 mm). Weights of all associated mounting hardware shall be considered. Weight of wiring shall be neglected. The design is based on a wind speed of 115 MPH.

Shaft:

The pedestal pole shaft shall be fabricated of one length and shall have one longitudinal weld, parallel to the long axis of the pedestal pole shaft, with no transverse welds. The longitudinal weld shall be finished to form a smooth outside surface and the wall of the pedestal pole shaft shall be uniform in thickness including the welded area.

The fluted shaft shall be formed from a round shaft cold-rolled over a precision steel fluted mandrel. Sixteen (16) uniform and equally spaced Doric flutes shall be free from marring and longitudinal rolling marks throughout the entire length of the shaft.

For the 10' and 6' pedestal poles, the outer diameter (O.D.) of the shaft shall be 4.5" (114 mm). Steel round shafts shall be un-tapered. Fluted shafts will be tapered or un-tapered. If tapered the taper shall be 0.14 inches per linear foot (11.7 millimeters per linear meter), measured as a change in O.D. The wall thickness of the shaft shall be 0.237" (6 mm).

For the 14' pedestal pole, the outer diameter (O.D.) of the shaft shall be 5.56" (141 mm). Steel round shafts shall be un-tapered. Fluted shafts will be tapered or un-tapered. If tapered the taper shall be 0.14 inches per linear foot (11.7 millimeters per linear meter), measured as a change in O.D. The wall thickness of the shaft shall be 0.258" (7 mm).

All shafts shall be provided with a handhole typically located 18" (457 mm) from the base plate.

Handhole:

The minimum nominal inside opening of the handhole shall be 15 sq. in (9,677 sq. mm). The handhole shall be reinforced with a welded-in frame to meet the minimum guaranteed yield strength of the shaft. A grounding nut holder shall be welded to the frame and include a 1/2" (13 mm) – 13UNC hexagon head bolt and two (2) flat washers. The handhole shall be complete with a steel cover. The cover shall be supplied with two (2) stainless steel hexagon head attachment screws.

The top end of the shaft shall be protected with a cast aluminum top cap.

Top Cap:

The cast aluminum top cap shall be removable, secured to the shaft with three (3) stainless steel machine screws spaced at 120 degrees.

A pole base plate shall telescope the lower end of the shaft.

Pole Base Plate:

The anchor plate shall be one-piece hot rolled steel conforming to ASTM A36 with minimum yield strength of 36,000 PSI. The plate shall be welded to the shaft. The plate shall have provision for four (4) breakaway couplings.

For the 10' and 6' pedestal poles, the pole base plate shall be 8" x 8" x 1" (203 mm x 203 mm x 25 mm). For the 14' pedestal poles, the pole base plate shall be 12" x 12" x 1" (305 mm x 305 mm x 25 mm). For the 10' and 6' pedestal poles, the bolt circle shall be 8" (203 mm). For the 14' pedestal pole, the bolt circle shall be 12" (305 mm). For all pedestal poles, the plates shall have provision for four (4) 3/4" (19 mm)-diameter anchor bolts. These values are absolute and may not vary more than normal tolerances.

The pole base plate shall be secured to the shaft by a continuous full penetration groove weld. The welded connection shall develop the full strength of the adjacent shaft section to resist bending action.

Anchor bolts shall secure the pole base plate to the pole base.

Breakaway Couplings:

The breakaway couplings for pedestal poles shall be vehicle crash-tested in accordance with MASH or NCHRP Report 350. The couplings shall withstand 2 million loading cycles with no reduction in structural capacity.

Each breakaway coupling shall be threaded at the top to be secured to a pole plate with a nut, and at the bottom for connection with an anchor insert. Thread lengths shall be determined by the manufacturer. Each coupling shall be furnished with a hexagon nut, two (2) flat washers, and two (2) steel shims for leveling. The couplings and hardware shall be galvanized after fabrication in accordance with ASTM A153. Breakaway couplings of the same type and size shall be used for all lengths of pedestal poles.

Anchor Inserts:

The anchor inserts shall be designed to support maximum typical loading described above for pedestal poles. The inserts shall be compatible with the breakaway couplings and fit DeIDOT standard Pole base, Type 4.

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Skirt:

The breakaway couplings shall be protected with a skirt. The skirt shall consist of four (4) overlapping aluminum panels secured with stainless steel screws. Minimum lap shall be 2" (51 mm). The skirt is designed to cover the pole base plate and not to allow any gap at concrete foundation. The skirt shall fit tight with the pole base plate after installation. Corners of the skirt shall have same radius as the base plate corners.

40' STEEL ROUND VEHICLE DETECTOR POLE

Each vehicle detector pole shall include a shaft, complete with pole base plate, handhole with handhole cover, and top cap. Anchor bolts with nuts, washers, and nut covers will be supplied with each pole. Transformer bases with connection bolts shall be supplied separately. See Contract Detail Sheet 8 for vehicle detector pole fabrication details.

Vehicle detector poles are designed based on the loading configuration shown on the Contract Detail Sheet 8 and listed in this paragraph: pole mounted controller cabinet, four (4) solar panels on single mounting bracket, and two (2) vehicle detector units. Weights of all associated mounting hardware shall be considered. Weight of wiring shall be neglected. The design is based on a wind speed of 115 MPH.

Shaft:

The shaft shall be round, formed from structural quality steel conforming to the requirements of ASTM A595 Grade A and having minimum yield strength of 55,000 PSI (380 MPa) after fabrication. The shaft shall have only one longitudinal welded joint with no intermediate horizontal joints. The submerged with 60 percent penetration arc weld process shall be used.

The wall thickness of the shaft shall be uniform in thickness throughout, including welded areas, and shall be 0.250" (6 mm).

The shaft shall have a 11.25" (229 mm) outside diameter (O.D.) at the pole base end. The shaft shall taper 0.14 inches per linear foot (11.7 millimeters per linear meter), measured as a change in O.D.

Each shaft shall be provided with a wire support hook welded inside at the top end. Each shaft shall include 2" (51 mm) blind half couplings. The position of wire support hook and couplings on the shaft shall be specified per order.

A pole base plate shall telescope the lower end of the shaft.

Pole Base Plate:

The pole base plate shall be one-piece hot rolled steel conforming to ASTM A36 or ASTM A572 with minimum yield strength of 36,000 PSI (250 MPa) or 42,000 PSI (290 MPa), respectively. The pole base plate shall be secured to the shaft by a continuous weld. The welded connection shall develop the full strength of the adjacent shaft section to resist bending action. The pole base plate shall be 16" x 16" x 1 3/4" (406 mm x 406 mm x 44 mm). The plate shall have provision for four (4) 1 1/2" (38 mm)-diameter anchor bolts or (4) connection bolts if mounted on a transformer base (t-base). The plate shall have a 16" (406 mm)-diameter bolt circle. The connection bolts will be supplied with a transformer base as a separate item under this contract.

A set of four (4) anchor bolts shall be supplied with this item.

Anchor Bolts:

Anchor bolts shall be fabricated conforming to ASTM F1554, Grade 55 with minimum yield strength of 55,000 PSI (380 MPa). The threaded ends shall be hot dip galvanized in accordance with ASTM A153. Dimensions of the anchor bolts shall be determined by the manufacturer. Each anchor bolt shall be furnished with two (2) galvanized hexagon nuts, two (2) flat washers, and a cast aluminum nut cover.

Nut Covers:

Nut covers shall be fastened to the shaft with self-threading stainless steel hexagon head screws. The shafts shall be pre-drilled to accept attachment screws.

All shafts shall be provided with a handhole typically located 18" (457 mm) from the pole base plate.

Handhole:

The minimum nominal inside opening of the handhole shall be 26 sq. in (16,774 sq. mm). The handhole shall be reinforced with a welded-in frame to meet the minimum guaranteed yield strength of the shaft. The handhole frame shall be aligned so that the anchor bolt holes along one set of opposite sides of the pole base plate are at right angles to the frame. A grounding nut holder shall be welded to the frame and include 1/2" (13 mm) – 13UNC hexagon head bolt and two (2) flat washers. The handhole shall be complete with a steel cover. The cover shall be supplied with two (2) stainless steel hexagon head attachment screws.

The top end of the shaft shall be protected with a top cap.

Top Cap:

The cast aluminum top cap shall be removable, secured to the shaft with three (3) stainless steel machine screws spaced at 120 degrees.

17" CAST ALUMINUM TRANSFORMER BASE FOR STEEL VEHICLE DETECTOR POLE

Each Cast Aluminum Transformer Base shall include a base, complete with door cover, and connection bolts with nuts and washers for connection with a vehicle detector pole. See Contract Detail Sheet 8 for transformer base fabrication details.

Base:

Each aluminum transformer base shall be one-piece casting 17" (432 mm) in height with a door opening. The material of the base shall conform to the requirements of AA356 T6. The base shall be designed to fit the steel vehicle detector pole. The top flange of the base shall have provision for four (4) connection bolts on a 13" (330) thru 15" (381 mm)-diameter bolt circle. The bottom flange shall be arranged for four (4) anchor bolts supplied with a vehicle detector pole as a separate item under this contract. The bottom flange shall have 15" (381 mm) thru 17 1/4" (438) bolt circle. A grounding nut holder shall be welded to the bottom flange.

Each base shall be complete with a door cover.

Cover:

The transformer base cover shall be waterproof, durable, rigid and non-metallic. The cover shall be easily removed and re-installed by means of metal corrosion-proof latch mechanism mounted at top of the cover. The latch mechanism shall be easily operated from the exterior by use of hex head tool. The bottom inside portion of the cover shall include factory molded protrusions allowing for easy seating of the cover in the bottom of the transformer base opening. The cover shall be aligned so that the anchor bolt holes along one set of opposite sides of the bottom flange are at right angles to the cover. Color of the transformer base and the cover shall match color of the vehicle detection steel pole.

Connection Bolts:

The material of the connection bolts shall conform to the requirements of ASTM A325. Dimensions of the connection bolts shall be determined by the manufacturer. Each connection bolt shall be furnished with one (1) galvanized hexagon nut, one (1) lock washer, one (1) hardened washer and one (1) flat washer.

CAST ALUMINUM ORNAMENTAL STRAIN AND MAST ARM POLE SPLIT BASE CAST ALUMINUM ORNAMENTAL PEDESTAL POLE SPLIT BASE

Each cast aluminum ornamental split base shall be a two-piece split casting with a removable door. The split base shall be designed to fit at the base of the steel 16-flute ornamental pole. The material of the split base shall conform to the requirements of AA319.0F aluminum. The cast aluminum split bases shall be black, powder coated.

The cast aluminum split base shall be prepared for powder coating by solvent cleaning and brush blasting as specified in SSPC Surface Preparation Specifications 1 and 7, and a phosphate treatment. The phosphoric acid can be applied by immersion, spray, or soft bristle brush and stay on surfaces for 3 to 6 min. Surfaces should be thoroughly washed with clean water before and after the phosphate treatment. Powder coating should take place soon after the base surfaces are completely dried after the phosphate treatment to avoid pick up of surface contaminants. The exterior surface will be coated to dry film thickness 4 - 10 mils (102 - 254 microns). Powder coating materials shall be specified by the manufacturer to be compatible as an overcoat to an aluminum substrate.

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The ornamental split base maximum O.D. shall not exceed 36" (914 mm) for strain and mast arm poles, and 24 ½" for pedestal poles. The split base shall sit securely around the outer diameter of the fluted pole shaft, and breakaway couplings (pedestal poles). The split base will be connected to the shaft by two (2) interlocking stainless steel pins and two (2) bolts, nuts and washers. Pins, bolts, nuts, and washers shall be provided with each ornamental split base.

The split base halves shall be factory assembled before shipment. Internal lugs shall be cast into the split base bottom and the top drilled to accept connecting pins. External connection hardware is not acceptable.

**50' CCTV CAMERA POLE
75' CCTV CAMERA POLE**

Each CCTV camera pole shall include the shaft, complete with pole base plate and pole top plate, handhole with handhole cover, anchor bolts with nuts and washers, anchor nut covers, and pole top tenon with top cap. Pole top mounting brackets for camera lowering devices shall be supplied separately.

The design shall be based on a wind speed of 115 MPH. See Contract Detail Sheets 9 and 10 for CCTV camera pole fabrication details.

Shaft:

The shaft shall be formed from structural quality steel conforming to the requirements of ASTM A595 Grade A and having minimum yield strength of 55,000 PSI (380 MPa) after fabrication.

The shafts for 50' CCTV camera poles may be made of one or two interlocking sections, and the shafts for 75' camera poles may be made of two or three interlocking sections. The number of sections depends upon the pole manufacturer's specification. Only one (1) longitudinal weld, and no transverse welds, shall be permitted per section. Two- and three-section shafts shall be field-assembled by telescoping to a firm tapered fit with 0.06" (1.6 mm) maximum deviation. The minimum overlap between two sections shall be 1.5 times the inside diameter (I.D.) of the female section.

After being formed and welded, the shafts shall then be longitudinally cold-rolled under sufficient pressure to flatten the weld, and form a round tapered tube. All shafts shall be "true round." Multi-sided poles, including 8, 12, 16, or 18 sided members, or any other press break poles, shall not be permitted.

Each shaft shall have a uniform taper in diameter from base to top. The shafts shall taper 0.14 inches per linear foot (11.7 millimeters per linear meter), measured as a change in outer diameter. Each shaft length shall not vary more than +/- 1" (25 mm) from the length specified. These values are absolute and may not vary more than normal tolerances.

For the 50' camera pole, the wall thickness of the shaft at the base shall be 0.250" (6 mm). For the 75' camera pole, the wall thickness of the shaft at the base shall be 0.313" (8 mm). For the 50' camera pole, the pole base diameter shall be 14" (356 mm). For the 75' camera pole, the pole base diameter shall be 23.5" (597 mm).

Each CCTV camera pole shall be provided with a 3" (76 mm) blind half-coupling circumferentially welded in the shaft approximately 3' (1 m) above the base of the pole.

Each shaft shall have electrical cable guides fastened inside the pole. The guides shall be positioned one at the top of the pole and one at the bottom of the pole directly in line with one another. The cable guides should be appropriate size to accommodate a conduit/raceway used for the CLS or similar camera lowering device power/signal/control cable.

A pole base plate shall telescope the lower end of the shaft.

Pole Base Plate:

The pole base plate shall be made of one-piece hot-rolled steel conforming to ASTM A36 with minimum yield strength of 36,000 PSI (248 MPa) after fabrication. For the 50' camera pole, the pole base plate shall be hexagonal and measure 18" (457 mm) across the flats. The 18" base plate thickness shall be 1 1/4" (32 mm). The 18" base plate shall have provision for six (6) 1 1/4" (32 mm)-diameter anchor bolts. The 18" base plate

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shall have a 17" (432 mm)-diameter bolt circle. For the 75' camera pole, the pole base plate shall be hexagonal and measure 28" (711 mm) across the flats. The 28" base plate thickness shall be 1 1/2" (38 mm). The 28" base plate shall have provision for six (6) 1 1/2" (38 mm)-diameter anchor bolts. The 28" base plate shall have a 28" (711 mm)-diameter bolt circle. These values are absolute and may not vary more than normal tolerances.

The base plate shall be secured to the shaft using continuous welds. The welded connection shall develop the full strength of the adjacent shaft section to resist bending action.

Anchor bolts shall secure the pole base plate to the pole base.

Anchor Bolts:

Each CCTV camera pole shall be supplied with six (6) anchor bolts fabricated from carbon steel bar conforming to ASTM-F1554 Grade 105 with minimum yield strength of 105,000 PSI (724 MPa), minimum ultimate tensile strength of 125,000 PSI (862 MPa), and maximum elongation between minimum yield and minimum ultimate of 18 percent. Each 1 1/4" (32 mm)-diameter bolt shall have 5 1/4" (133 mm) of threads at the top, 4" (102 mm) "L" bend at the bottom, and a bent length of 39" (991 mm). Each 1 1/2" (38 mm)-diameter bolt shall have 6 1/4" (159 mm) of threads at the top, 6" (152 mm) "L" bend at the bottom, and a bent length of 48" (1219 mm). One end of each anchor bolt shall be threaded; the other end shall have an L-bend or "hook". The threaded ends shall be hot dip galvanized a minimum of 18" (457 mm) in accordance with ASTM A153. Each anchor bolt shall be furnished with two (2) galvanized hexagon nuts and two (2) flat washers per bolt.

One (1) anchor nut cover shall be provided for each anchor bolt supplied.

Nut Covers:

Nut covers shall be fastened to the shaft with self-threading stainless steel hexagon head screws. The shafts shall be pre-drilled to accept attachment screws.

All shafts shall be provided with a handhole.

Handhole:

The minimum nominal inside opening of the handhole shall be 6" x 27" (152 mm x 686 mm). The handhole shall be reinforced with a welded-in frame to meet the minimum guaranteed yield strength of the shaft. The center of the handhole shall be located approximately 45" (1143 mm) above the base of the pole. The handhole shall be complete with a steel weatherproof cover and stainless steel single jack chain. The cover shall be supplied with two (2) stainless steel hexagon head attachment screws. A grounding nut holder shall be welded inside the shaft at 180 degrees from the handhole and include a 0.5" (13 mm) – 13 UNC hexagon head bolt and two (2) flat washers.

A pole top plate shall be welded to the top end of the shaft.

Pole Top Plate:

The pole top plate shall be made of one-piece hot-rolled steel conforming to ASTM A36 with minimum yield strength of 36,000 PSI (248 MPa) after fabrication. The top plate shall be secured to the shaft using continuous welds. The pole top plate shall have a center opening equal to the diameter of the pole at the top plus an additional 0.06" (1.5 mm). The pole top plate shall have eight (8) 0.88" (22 mm) diameter bolt holes that shall match corresponding slots in the tenon plate.

Pole Top Tenon:

The pole top tenon shall conform to the requirements of ASTM A53 Grade B and have minimum yield strength of 35,000 PSI (241 MPa). It shall have an outside diameter of 6" (152 mm) and a nominal length of 12" (305 mm). A tenon plate shall be circumferentially welded to the tenon tube. The tenon plate shall be bolted to the pole top plate. The tenon plate shall have eight (8) slots that correspond to the bolt holes of the pole top plate. A minimum of four (4) bolts are required to provide 360 degree rotational adjustment. One (1) flat washer, one (1) lockwasher and one (1) hexagon nut shall be supplied with each tenon bolt.

The top end of the tenon shall be protected with a top cap.

Top Cap:

The cast aluminum top cap shall be removable, secured to the tenon with three (3) stainless steel machine screws spaced at 120 degrees.

Title: **STEEL POLES**

IV. BID QUOTATION REPLY SECTION

Please fill out the attached forms fully and completely and return with your bid in a sealed envelope clearly displaying the contract number, by the date and time bids will be opened.

Bids shall be submitted to:



State of Delaware
DEPARTMENT OF TRANSPORTATION
Administration Building
Contract Administration
800 Bay Road, Dover, DE 19901



PUBLIC BID OPENINGS

The public bid opening insures the citizens of Delaware that contracts are being bid fairly on a competitive basis and comply with Delaware procurement laws. The agency conducting the opening is required by law to publicly open the bids at the time and place specified and the contract shall be awarded within thirty (30) days thereafter. The main purpose of the bid opening is to reveal the name(s) of the bidders(s), not to serve as a forum for determining the apparent low bidders. The disclosure of additional information, including prices, shall be at the discretion of the contracting agency until such time that the responsiveness of each bid has been determined.

After receipt of a fully executed contract(s), the Delaware public and all bidders are invited to make an appointment with the contracting officer in order to review pricing and other non-confidential information.

NOTE: ONLY THE BIDDER'S NAME MAY BE READ AT THE BID OPENING

STATE OF DELAWARE
Department of Transportation

Informational Document- Sample Report 1.

STATE OF DELAWARE
MONTHLY USAGE REPORT

FOR ILLUSTRATION PURPOSES ONLY

State of Delaware									
Monthly Usage Report									
Supplier Name:				Insert Contract No.	Report Start Date:				
Contact Name:					Report End Date:				
Contact Phone:					Today's Date:				
Agency Name or School District	Division or Name of School	Budget Code	UNSPSC	Item Description	Contract Item Number	Unit of Measure	Qty	Contract Proposal Price/Rate	Total Spend
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00

Note: A copy of the Usage Report will be sent by electronic mail to the Awarded Vendor. The report shall be submitted electronically in **EXCEL** and sent as an attachment to vendusage@state.de.us. It shall contain the six-digit department and organization code for each agency and school district.

STATE OF DELAWARE
Department of Transportation

Informational Document- Sample Report 2.

FOR ILLUSTRATION PURPOSES ONLY

State of Delaware																	
Subcontracting (2nd tier) Quarterly Report																	
Prime Name:							Report Start Date:										
Contract Name/Number							Report End Date:										
Contact Name:							Today's Date:										
Contact Phone:							*Minimum Required		Requested detail								
Vendor Name*	Vendor TaxID*	Contract Name/Number*	Vendor Contact Name*	Vendor Contact Phone*	Report Start Date*	Report End Date*	Amount Paid to Subcontractor*	Work Performed by Subcontractor UNSPSC	M/WBE Certifying Agency	Veteran/Service Disabled Veteran Certifying Agency	2nd tier Supplier Name	2nd tier Supplier Address	2nd tier Supplier Phone Number	2nd tier Supplier email	Description of Work Performed	2nd tier Supplier Tax Id	Date Paid

Note: A copy of the Subcontracting Quarterly Report will be sent by electronic mail to the Awarded Vendor.

Completed reports shall be saved in an Excel format, and submitted to the following email address: vendorousage@state.de.us

Informational Document- 3.

State of Delaware

Office of Supplier Diversity

Certification Application

The most recent application can be downloaded from the following site:

<http://gss.omb.delaware.gov/osd/certify.shtml>

Submission of a completed Office of Supplier Diversity (OSD) application is optional and does not influence the outcome of any award decision.

The minimum criteria for certification require the entity must be at least 51% owned and actively managed by a person or persons who are eligible: minorities, women, veterans, and/or service disabled veterans. Any one or all of these categories may apply to a 51% owner.



Complete application and mail, email or fax to:

Office of Supplier Diversity (OSD)
100 Enterprise Place, Suite 4
Dover, DE 19904-8202
Telephone: (302) 857-4554 Fax: (302) 677-7086
Email: osd@state.de.us
Web site: <http://gss.omb.delaware.gov/osd/index.shtml>

**THE OSD ADDRESS IS FOR OSD APPLICATIONS ONLY.
NO BID RESPONSE PACKAGES WILL BE ACCEPTED BY THE OSD.**

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Contract Title: STEEL POLES

Informational Document- 4.

NO BID REPLY FORM

To assist us in obtaining good competition on our Request for Bids, we ask that each firm that has received an invitation, but does not wish to bid, state their reason(s) below and return in a clearly marked envelope displaying the contract number. This information will not preclude receipt of future invitations unless you request removal from the Bidder's List by so indicating below, or do not return this form or bona fide bid.

Unfortunately, we must offer a "No Bid" at this time because:

- _____ 1. We do not wish to participate in the bid process.
- _____ 2. We do not wish to bid under the terms and conditions of the Request for Bid document. Our objections are: _____

- _____ 3. We do not feel we can be competitive.
- _____ 4. We cannot submit a Bid because of the marketing or franchising policies of the manufacturing company.
- _____ 5. We do not wish to sell to the State. Our objections are: _____

- _____ 6. We do not sell the items/services on which Bids are requested.
- _____ 7. Other: _____

FIRM NAME

SIGNATURE

Informational Document- 5.

PROPOSAL REPLY REQUIREMENTS

The response should contain at a minimum the following information:

1. One (1) complete, signed and notarized copy of the non-collusion agreement (See Attachment A).
MUST HAVE ORIGINAL SIGNATURES AND NOTARY MARK
2. One (1) complete and signed copy of the Subcontractor Information Form (See Attachment B) for each subcontractor – only provide if applicable
3. One (1) completed Business Reference form (See Attachment C) – please provide references other than State of Delaware contacts. Form must be included.
4. One (1) completed Confidential Information form (See Attachment D) – please check box if no information provided will be considered confidential or proprietary. Form must be included.
5. One (1) paper copy of the properly completed **Bid Forms**. (See Attachments E-1 to E-9)

6. NUMBER OF COPIES WITH MAILING OF PROPOSAL:

To be considered, all proposals must be submitted in writing and respond to the items outlined in this ITB. The State reserves the right to reject any non-responsive or non-conforming proposals. Each proposal must be submitted with the above required forms and submittals. Paper copies must contain original signatures.

The items listed above provide the basis for evaluating each vendor's proposal. **Failure to provide all appropriate information may deem the submitting vendor as “non-responsive” and exclude the vendor from further consideration.** If an item listed above is not applicable to your company or proposal, please make note in your submission package.

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Attachment: A

NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this bid submitted this date to the Department of Transportation.

It is agreed by the undersigned bidder that the signed delivery of this bid represents the bidder's acceptance of the terms and conditions of this solicitation including all specifications and special provisions.

NOTE: Signature of the authorized representative **MUST** be of an individual who legally may enter his/her organization into a formal contract with the State of Delaware, Department of Transportation.

<input type="checkbox"/>	Corporation
<input type="checkbox"/>	Partnership
<input type="checkbox"/>	Individual

COMPANY NAME _____ (Check one)

NAME OF AUTHORIZED REPRESENTATIVE _____

SIGNATURE _____ **TITLE** _____

COMPANY ADDRESS _____

PHONE NUMBER _____ FAX NUMBER _____

EMAIL ADDRESS _____

FEDERAL E.I. NUMBER _____ STATE OF DELAWARE
LICENSE NUMBER _____

COMPANY CLASSIFICATIONS: CERT. NO.: _____	Certification type(s)	Circle all that apply	
	Minority Business Enterprise (MBE)	Yes	No
	Woman Business Enterprise (WBE)	Yes	No
	Disadvantaged Business Enterprise (DBE)	Yes	No
	Veteran Owned Business Enterprise (VOBE)	Yes	No
	Service Disabled Veteran Owned Business Enterprise (SDVOBE)	Yes	No

[The above table is for informational and statistical use only.]

PURCHASE ORDERS SHOULD BE SENT TO:

(COMPANY NAME) _____

ADDRESS _____

CONTACT _____

PHONE NUMBER _____ FAX NUMBER _____

EMAIL ADDRESS _____

AFFIRMATION: Within the past five years, has your firm, any affiliate, any predecessor company or entity, owner, Director, officer, partner or proprietor been the subject of a Federal, State, Local government suspension or debarment?
YES _____ NO _____ if yes, please explain _____

THIS PAGE SHALL BE SIGNED, NOTARIZED AND RETURNED FOR YOUR BID TO BE CONSIDERED

SWORN TO AND SUBSCRIBED BEFORE ME this _____ day of _____, 20 _____

Notary Public _____ My commission expires _____

City of _____ County of _____ State of _____

STATE OF DELAWARE
Department of Transportation
Contract No. DOT1712-STEEL_POLES
Contract Title: STEEL POLES

Attachment: B

SUBCONTRACTOR INFORMATION FORM

PART I – STATEMENT BY PROPOSING VENDOR		
1. CONTRACT NO.	2. Proposing Vendor Name:	3. Mailing Address
4. SUBCONTRACTOR		
a. NAME	4c. Company OSD Classification: Certification Number: _____	
b. Mailing Address:	4d. Women Business Enterprise <input type="checkbox"/> Yes <input type="checkbox"/> No 4e. Minority Business Enterprise <input type="checkbox"/> Yes <input type="checkbox"/> No 4f. Disadvantaged Business Enterprise <input type="checkbox"/> Yes <input type="checkbox"/> No 4g. Veteran Owned Business Enterprise <input type="checkbox"/> Yes <input type="checkbox"/> No 4h. Service Disabled Veteran Owned Business Enterprise <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. DESCRIPTION OF WORK BY SUBCONTRACTOR		
6a. NAME OF PERSON SIGNING	7. BY (Signature)	8. DATE SIGNED
6b. TITLE OF PERSON SIGNING		
PART II – ACKNOWLEDGEMENT BY SUBCONTRACTOR		
9a. NAME OF PERSON SIGNING	10. BY (Signature)	11. DATE SIGNED
9b. TITLE OF PERSON SIGNING		

STATE OF DELAWARE
Department of Transportation
Contract No. DOT1712-STEEL_POLES
Contract Title: STEEL POLES

Attachment: C

BUSINESS REFERENCES

List a minimum of three business references, including the following information:

- Business Name and Mailing address
- Contact Name and phone number
- Number of years doing business with
- Type of work performed

Please do not list any State Employee as a business reference. If you have held a State contract within the last 5 years, please list the contract.

1.	Contact Name & Title:	
	Business Name:	
	Address:	
	Email:	
	Phone # / Fax #:	
	Current Vendor (YES or NO):	
	Years Associated & Type of Work Performed:	
2.	Contact Name & Title:	
	Business Name:	
	Address:	
	Email:	
	Phone # / Fax #:	
	Current Vendor (YES or NO):	
	Years Associated & Type of Work Performed:	
3.	Contact Name & Title:	
	Business Name:	
	Address:	
	Email:	
	Phone # / Fax #:	
	Current Vendor (YES or NO):	
	Years Associated & Type of Work Performed:	

STATE OF DELAWARE PERSONNEL MAY NOT BE USED AS REFERENCES.

STATE OF DELAWARE
Department of Transportation
Contract No. DOT1712-STEEL_POLES
Contract Title: STEEL POLES

Attachment: D

CONFIDENTIALITY FORM

☐ **By checking this box**, the Vendor acknowledges that they are not providing any information they declare to be confidential or proprietary for the purpose of production under 29 Del. C. ch. 100, Delaware Freedom of Information Act.

[illegible]

Note: Add additional pages as needed.

BIDDER: _____

BID FORM

**** ALL COLUMNS MUST BE COMPLETED AS INDICATED ****

ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
1	20	Ea. 25' (7.6 m) Steel Round Strain Pole @ _____ Dollars & _____ Cents per each		
2	20	Ea. 28' (8.5 m) Steel Round Strain Pole @ _____ Dollars & _____ Cents per each		
3	20	Ea. 30' (9.1 m) Steel Round Strain Pole @ _____ Dollars & _____ Cents per each		
4	40	Ea. 32' (9.8 m) Steel Round Strain Pole @ _____ Dollars & _____ Cents per each		
5	20	Ea. 37' (11.3 m) Steel Round Strain Pole @ _____ Dollars & _____ Cents per each		
6	8	Ea. 25' (7.6 m) Steel 16-Flute Ornamental Strain Pole @ _____ Dollars & _____ Cents per each		

****ALL COLUMNS MUST BE COMPLETED AS INDICATED****
ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN LEGIBLY IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
7	8	Ea. 28' (8.5 m) Steel 16-Flute Ornamental Strain Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
8	8	Ea. 30' (9.1 m) Steel 16-Flute Ornamental Strain Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
9	8	Ea. 32' (9.8 m) Steel 16-Flute Ornamental Strain Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
10	8	Ea. 37' (11.3 m) Steel 16-Flute Ornamental Strain Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
11	20	Ea. Steel Round Mast Arm Pole, Type A @		
		_____ Dollars &		
		_____ Cents		
		per each		
12	60	Ea. Steel Round Mast Arm Pole, Type B @		
		_____ Dollars &		
		_____ Cents		
		per each		

****ALL COLUMNS MUST BE COMPLETED AS INDICATED****

ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN LEGIBLY IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
13	60	Ea. Steel Round Mast Arm Pole, Type C @		
		_____ Dollars &		
		_____ Cents		
		per each		
14	8	Ea. Steel 16-Flute Ornamental Mast Arm Pole, Type A @		
		_____ Dollars &		
		_____ Cents		
		per each		
15	25	Ea. Steel 16-Flute Ornamental Mast Arm Pole, Type B @		
		_____ Dollars &		
		_____ Cents		
		per each		
16	5	Ea. 20' (6.1 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
17	5	Ea. 25' (7.6 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
18	10	Ea. 30' (9.1 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		

****ALL COLUMNS MUST BE COMPLETED AS INDICATED****
ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN LEGIBLY IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
19	15	Ea. 35' (10.7 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
20	15	Ea. 40' (12.2 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
21	15	Ea. 45' (13.7 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
22	15	Ea. 50' (15.2 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
23	25	Ea. 55' (16.8 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
24	35	Ea. 60' (18.3 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		

****ALL COLUMNS MUST BE COMPLETED AS INDICATED****
ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN LEGIBLY IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
25	25	Ea. 70' (21.3 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
26	20	Ea. 80' (24.4 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
27	25	Ea. 90' (27.4 m) Steel Round Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
28	5	Ea. 20' (6.1 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
29	5	Ea. 25' (7.6 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		
30	5	Ea. 30' (9.1 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents		
		per each		

ALL COLUMNS MUST BE COMPLETED AS INDICATED

ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN LEGIBLY IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
31	5	Ea. 35' (10.7 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents per each		
32	10	Ea. 40' (12.2 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents per each		
33	5	Ea. 45' (13.7 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents per each		
34	10	Ea. 50' (15.2 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents per each		
35	10	Ea. 55' (16.8 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents per each		
36	10	Ea. 60' (18.3 m) Steel 16-Flute Ornamental Mast Arm @		
		_____ Dollars &		
		_____ Cents per each		

****ALL COLUMNS MUST BE COMPLETED AS INDICATED****
ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN LEGIBLY IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
37	5	Ea. 6' (1.8 m) Steel Round Pedestal Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
38	5	Ea. 10' (3.0 m) Steel Round Pedestal Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
39	5	Ea. 14 (4.3 m) Steel Round Pedestal Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
40	5	Ea. 6' (1.8 m) Steel 16-Flute Ornamental Pedestal Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
41	70	Ea. 10' (3.0 m) Steel 16-Flute Ornamental Pedestal Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
42	5	Ea. 14' (4.3 m) Steel 16-Flute Ornamental Pedestal Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		

****ALL COLUMNS MUST BE COMPLETED AS INDICATED****
ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN LEGIBLY IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
43	60	Ea. 40' Steel Round Vehicle Detector Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
44	20	Ea. Cast Aluminum Ornamental Strain and Mast Arm Pole Split Base @		
		_____ Dollars &		
		_____ Cents		
		per each		
45	30	Ea. Cast Aluminum Ornamental Pedestal Pole Split Base @		
		_____ Dollars &		
		_____ Cents		
		per each		
46	70	Ea. Set of Four, Breakaway Couplings with One Hex Nut, Two Flat Washers and Two Shims Per Coupling @		
		_____ Dollars &		
		_____ Cents		
		per each		
47	35	Ea. Aluminum Skirt for Breakaway Couplings, 8" (203 mm) B.C.		
		_____ Dollars &		
		_____ Cents		
		per each		
48	35	Ea. Aluminum Skirt for Breakaway Couplings, 12" (305 mm) B.C.		
		_____ Dollars &		
		_____ Cents		
		per each		

Contract No. DOT1712-STEEL_POLES
Contract Title: STEEL POLES

Attachment: E-9

ALL COLUMNS MUST BE COMPLETED AS INDICATED

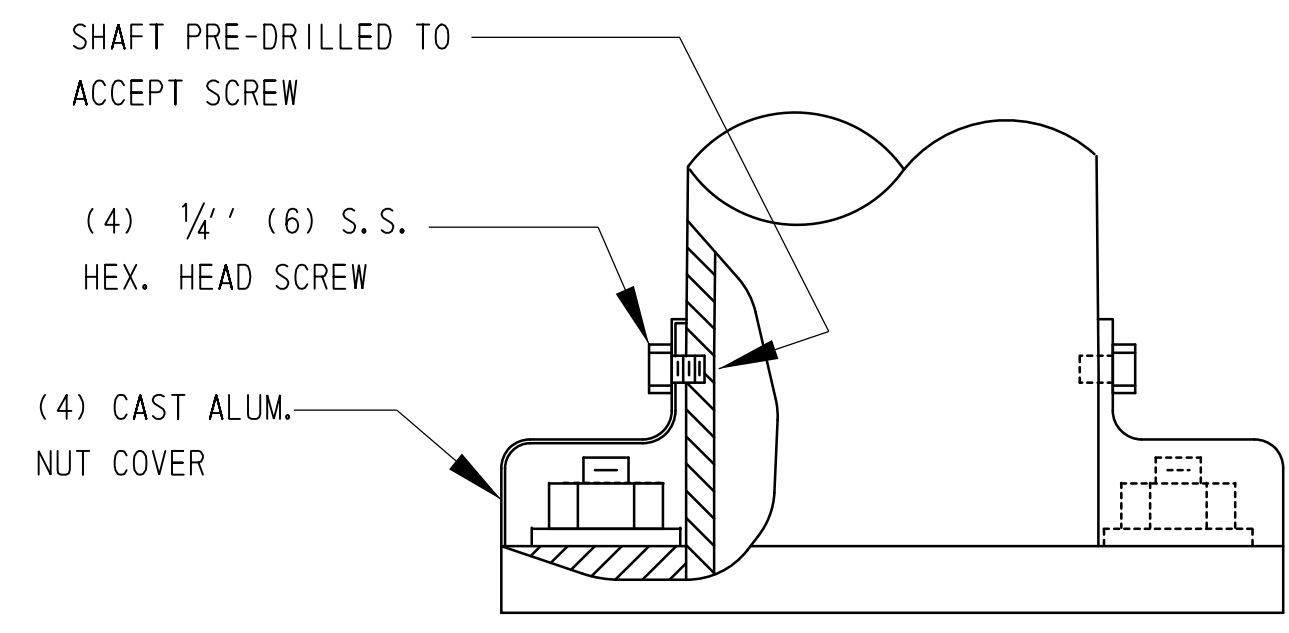
ALL FIGURES MUST BE TYPEWRITTEN OR HANDWRITTEN LEGIBLY IN INK

ITEM NO.	APPROX. QUANTITY	ITEMS & UNIT PRICES IN WORDS	UNIT PRICES IN DOLLARS & CENTS	AMOUNT IN DOLLARS & CENTS
49	60	Ea. 17" Cast Aluminum Transformer Base for Vehicle Detector Pole with a set of Four Connection Bolts with nuts and washers @		
		_____ Dollars &		
		_____ Cents		
		per each		
50	5	Ea. 50' (15.2 m) CCTV Camera Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		
51	25	Ea. 75' (22.9 m) CCTV Camera Pole @		
		_____ Dollars &		
		_____ Cents		
		per each		

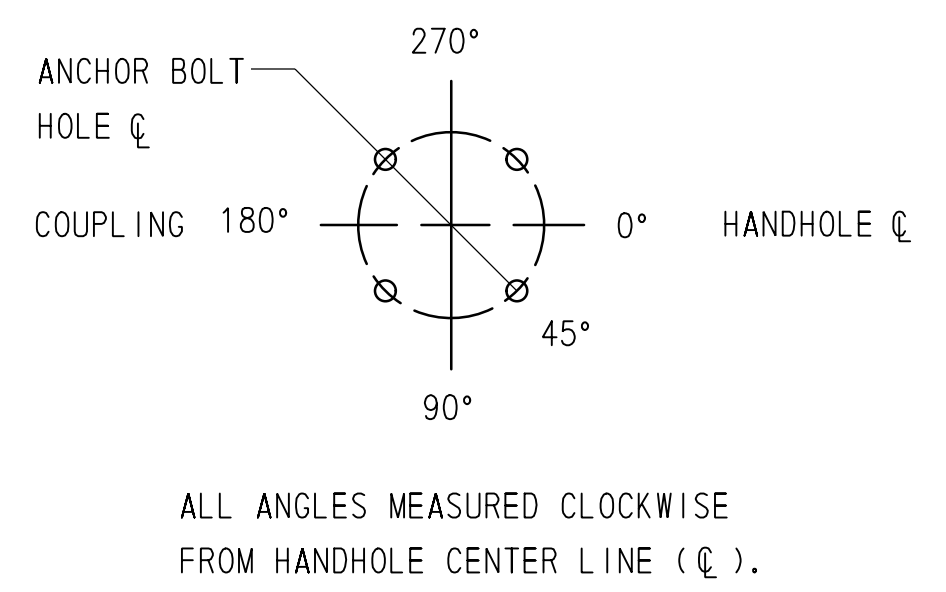
TOTAL BID AMOUNT \$ _____

Contract No. DOT1712-STEEL_POLES
Contract Title: STEEL POLES

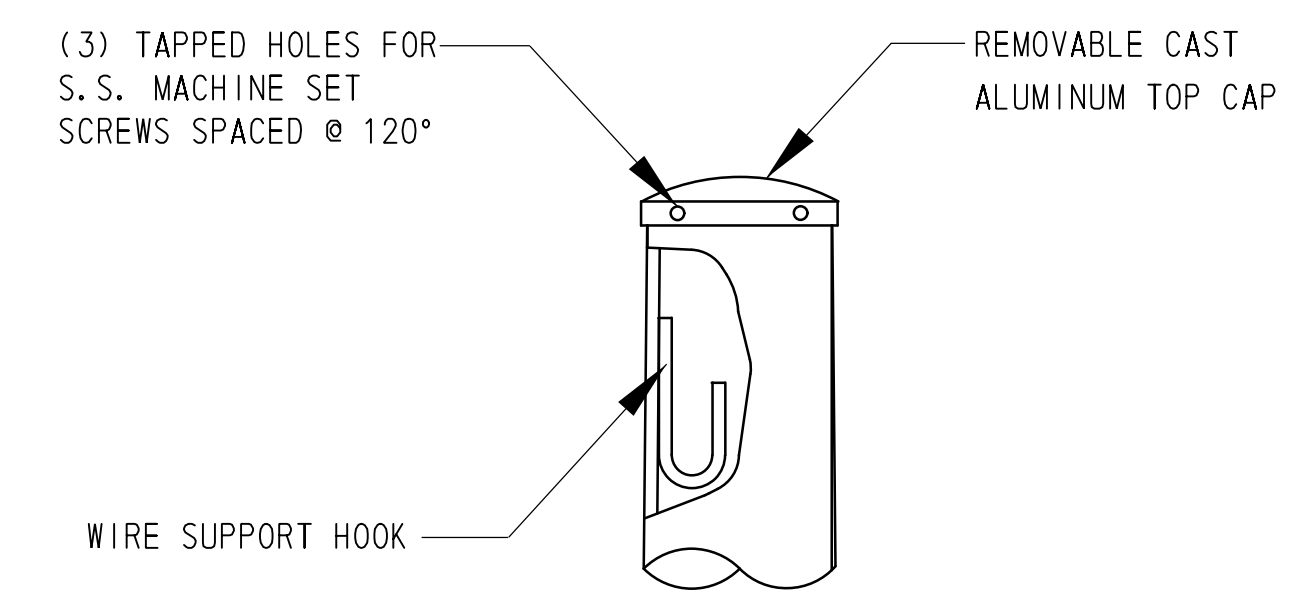
Detail Sheets



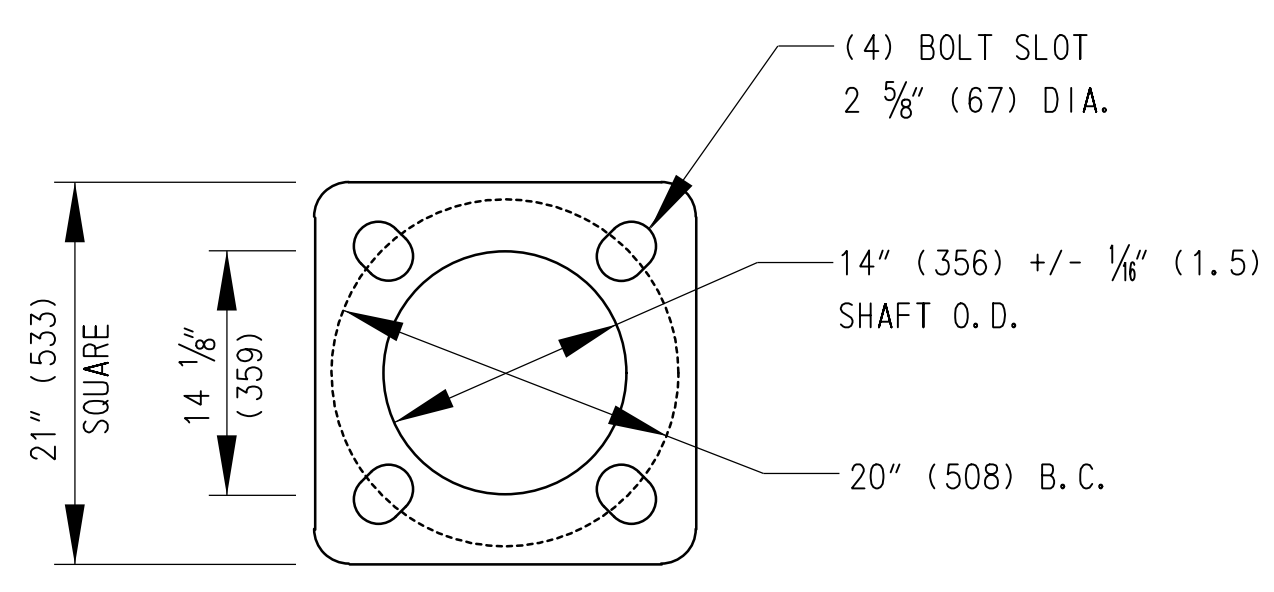
NUT COVER DETAIL



TOP VIEW ORIENTATION

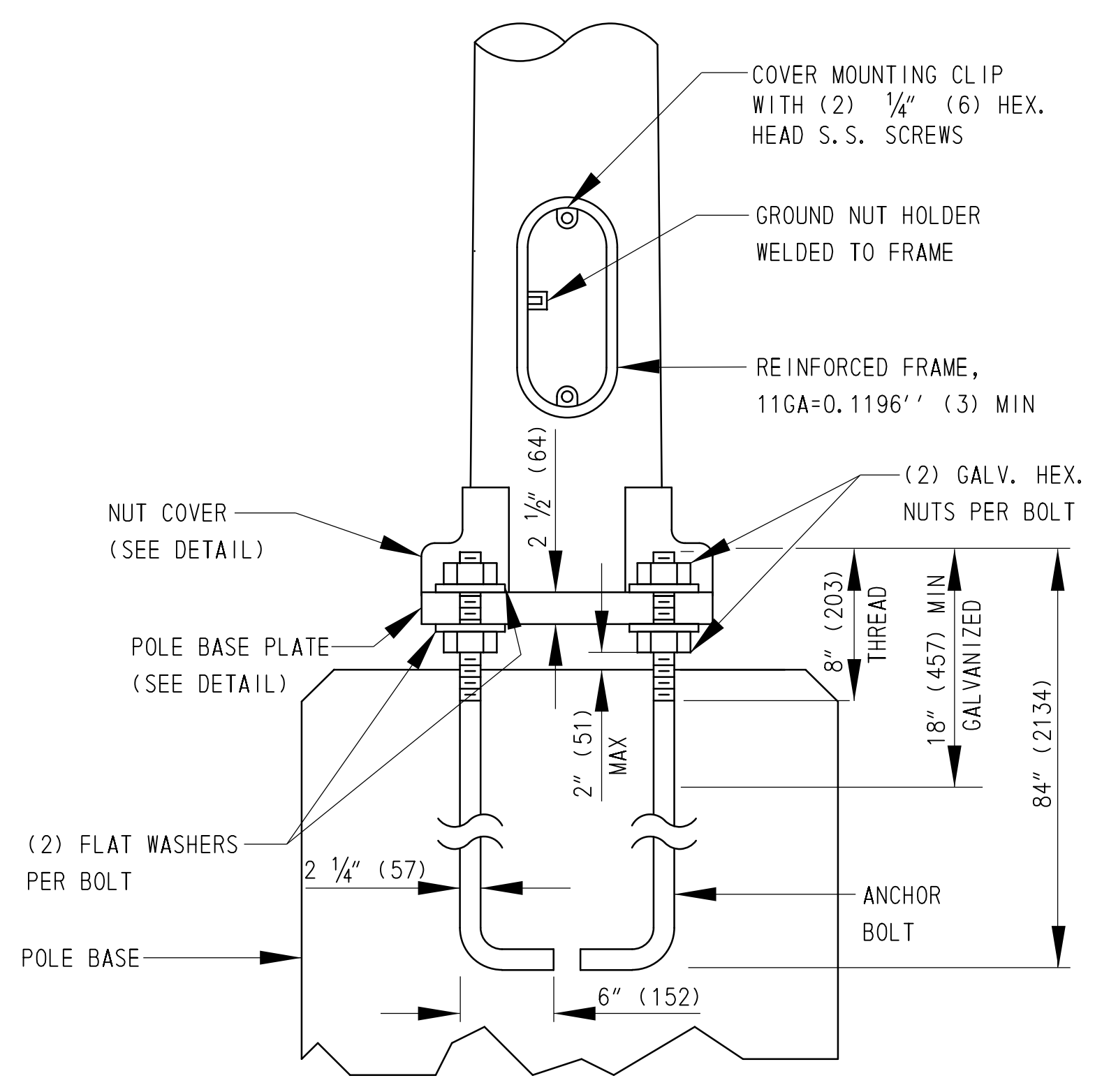


POLE TOP DETAIL
ORIENTATION OF WIRE
SUPPORT HOOK AS REQUIRED

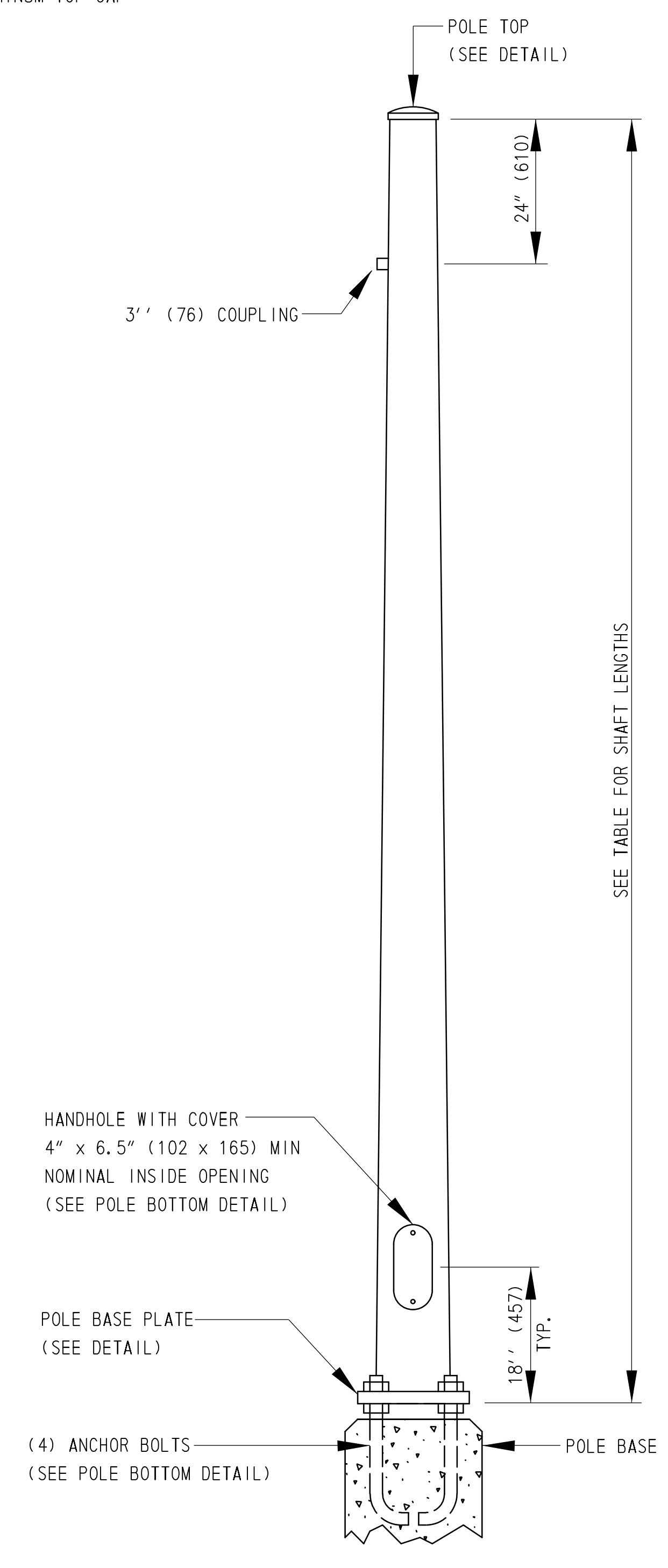


POLE BASE PLATE DETAIL

ROUND TAPERED SHAFTS					
SHAFT LENGTH	SHAFT WALL THICKNESS	SHAFT MATERIAL MIN. YIELD STRENGTH	SHAFT O.D. @ BASE END	SHAFT O.D. @ TOP END	SHAFT TAPER
25' (7.6 M)	0.625" (15.9 MM)	55,000 PSI	14" (356 MM)	10.5" (267 MM)	0.14 IN/FT (11.7 MM/M)
28' (8.5 M)	0.625" (15.9 MM)	55,000 PSI	14" (356 MM)	10.1" (256 MM)	0.14 IN/FT (11.7 MM/M)
30' (9.1 M)	0.625" (15.9 MM)	55,000 PSI	14" (356 MM)	9.8" (249 MM)	0.14 IN/FT (11.7 MM/M)
32' (9.8 M)	0.625" (15.9 MM)	55,000 PSI	14" (356 MM)	9.5" (242 MM)	0.14 IN/FT (11.7 MM/M)
37' (11.3 M)	0.625" (15.9 MM)	55,000 PSI	14" (356 MM)	8.8" (224 MM)	0.14 IN/FT (11.7 MM/M)

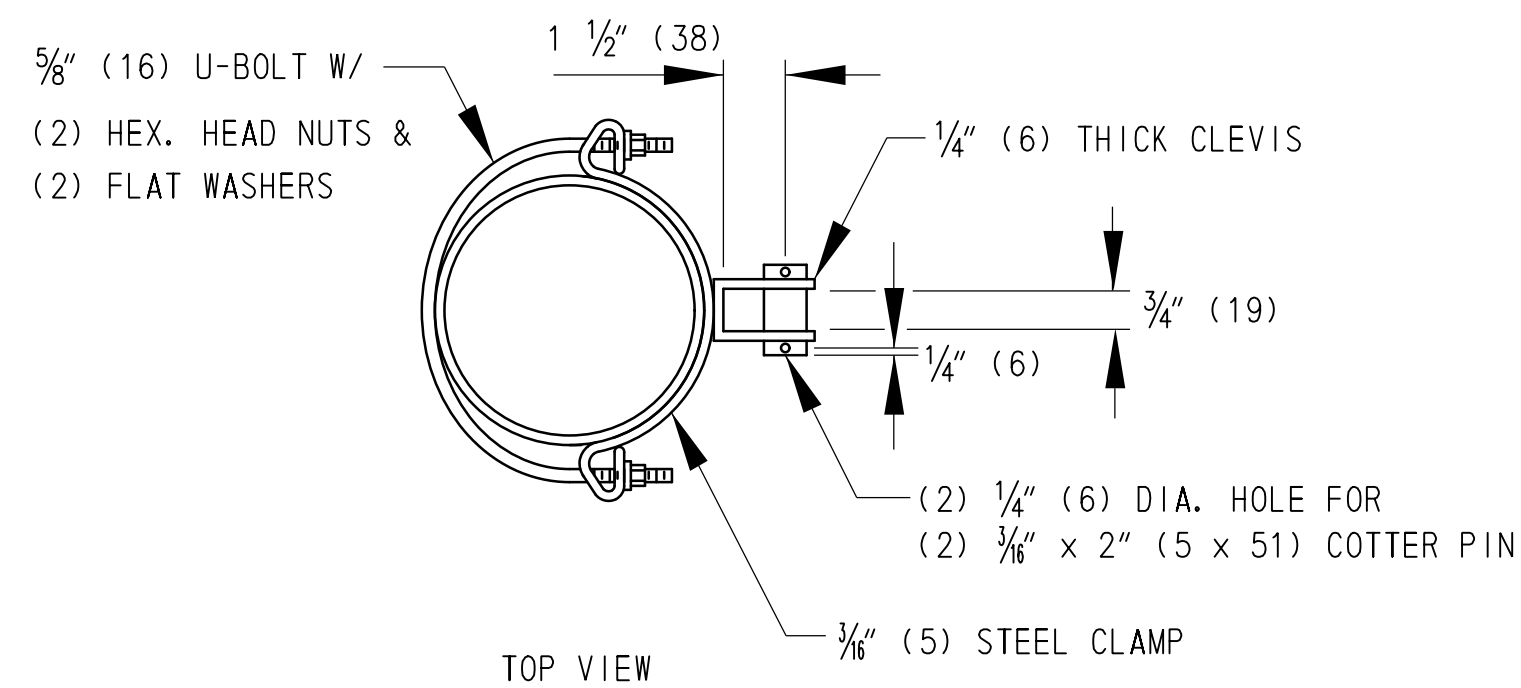


POLE BOTTOM DETAIL

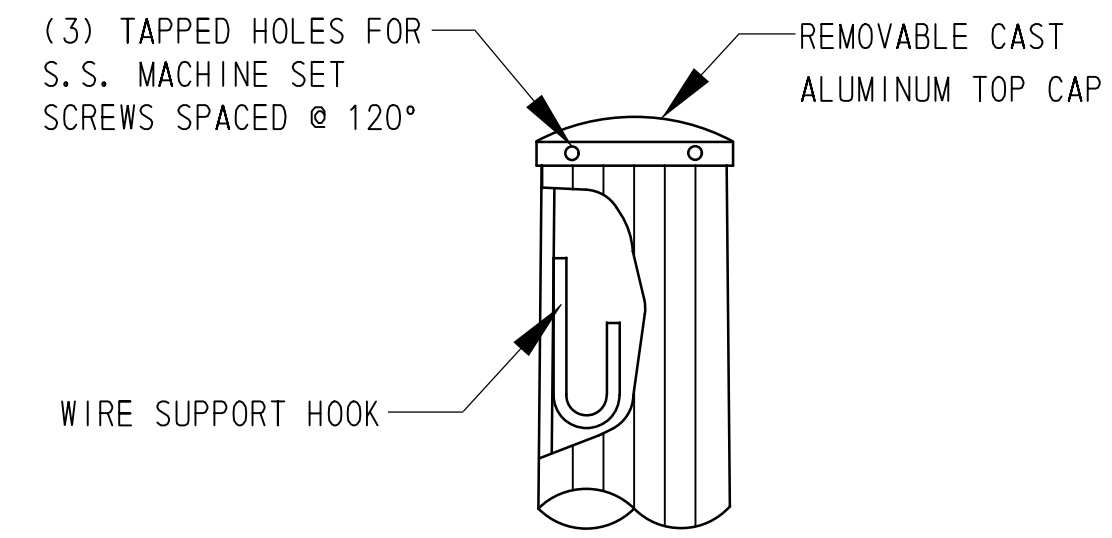
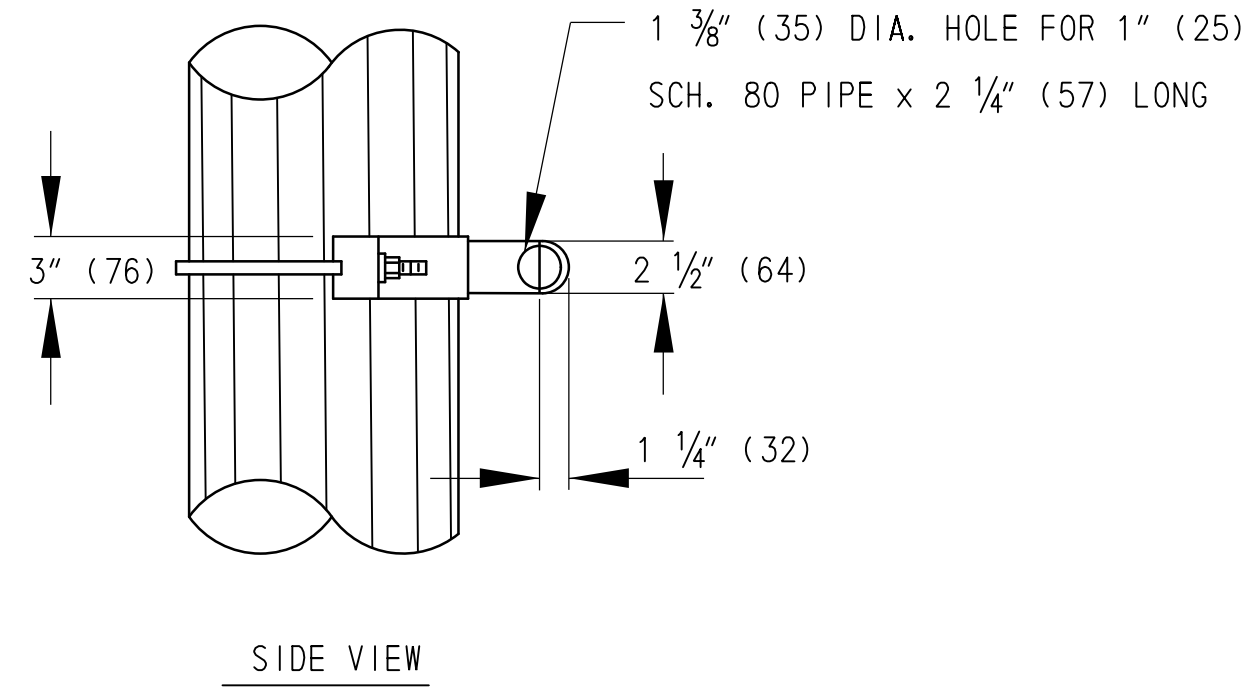


PLAN SYMBOL

SCALE : N. T. S.

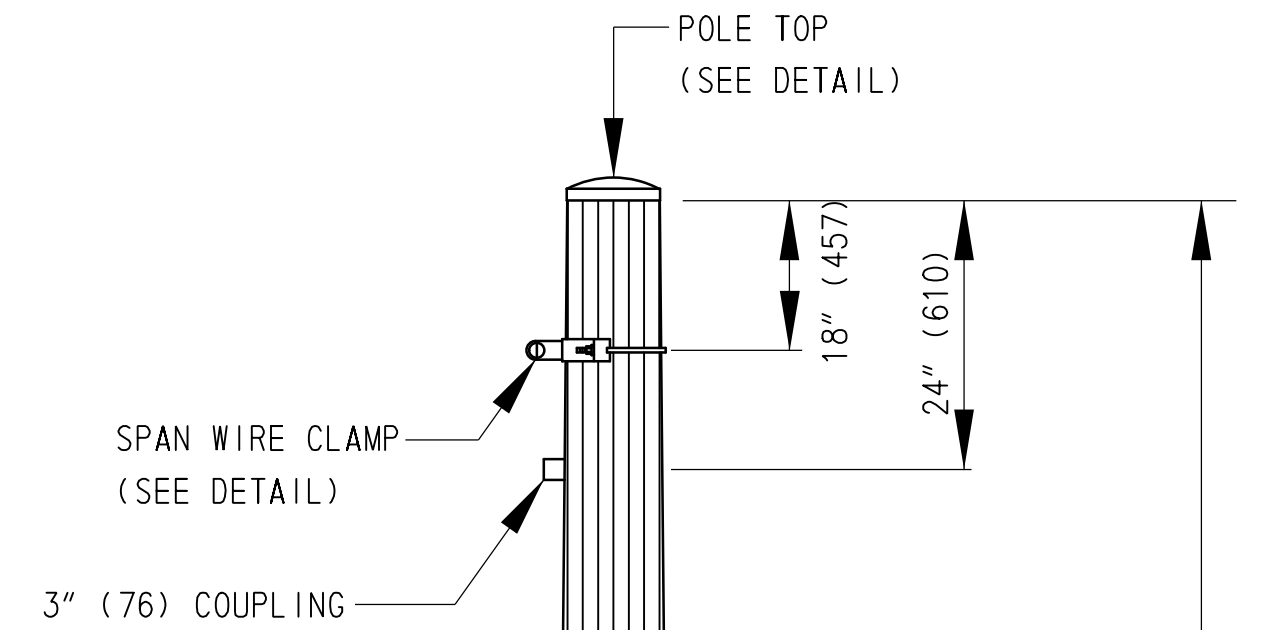


SPAN WIRE CLAMP DETAIL

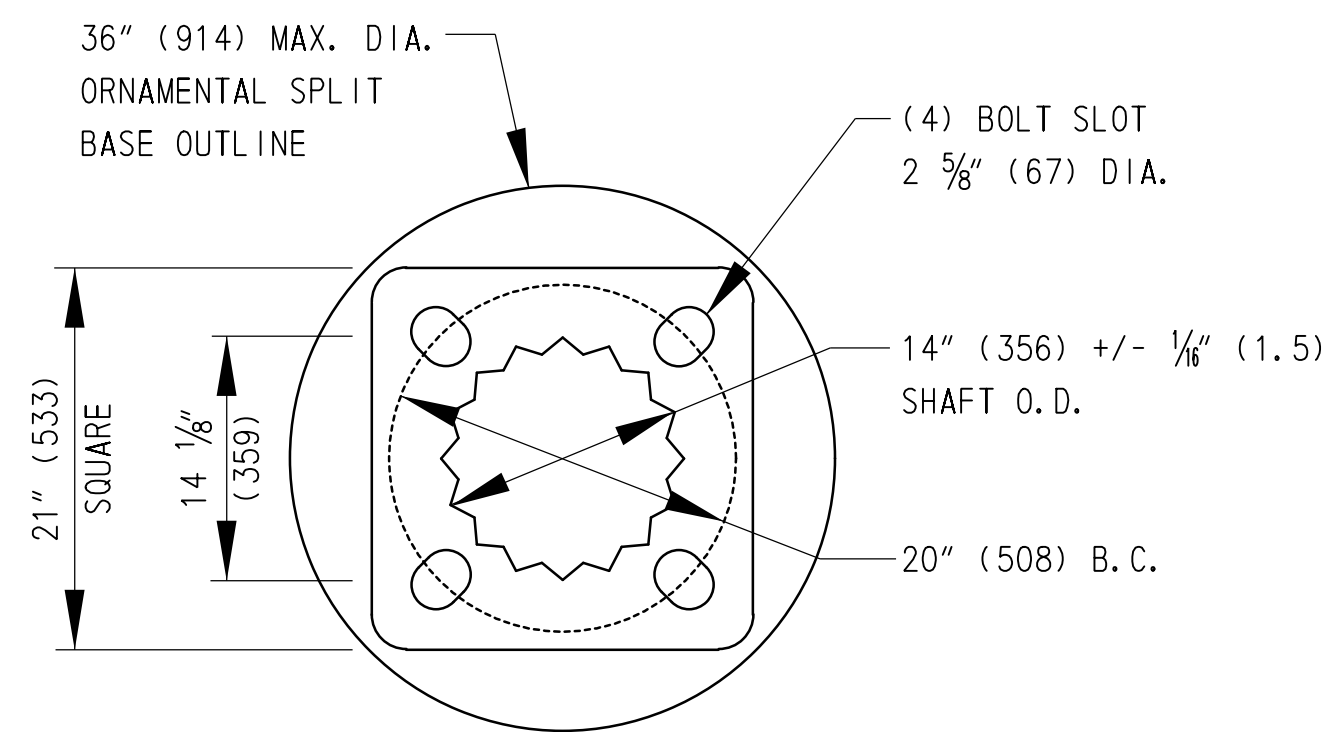


POLE TOP DETAIL

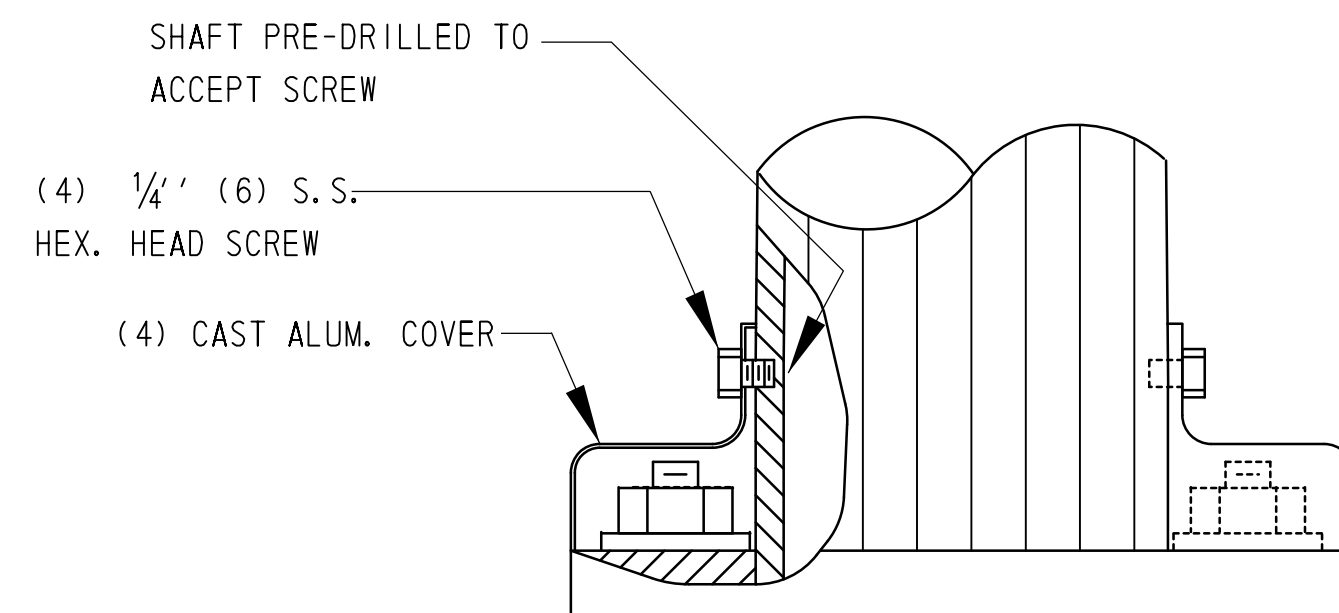
ORIENTATION OF WIRE
SUPPORT HOOK AS REQUIRED



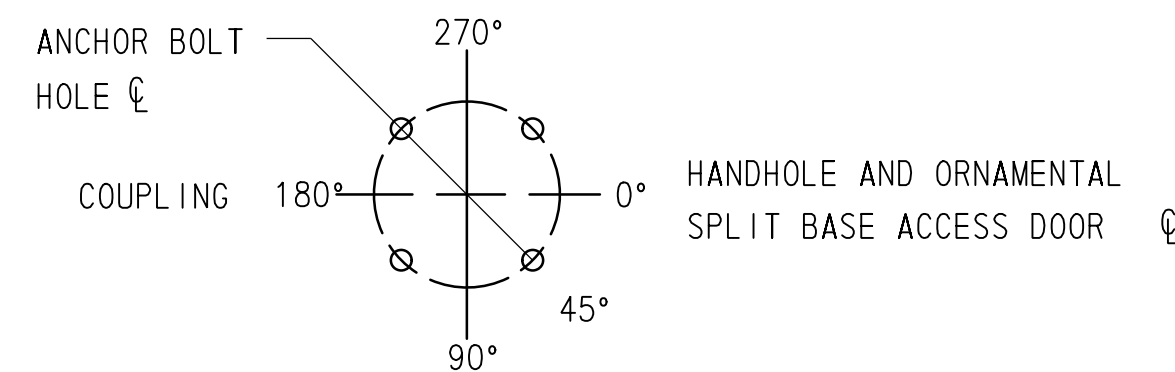
SEE TABLE FOR SHAFT LENGTHS



POLE BASE PLATE DETAIL

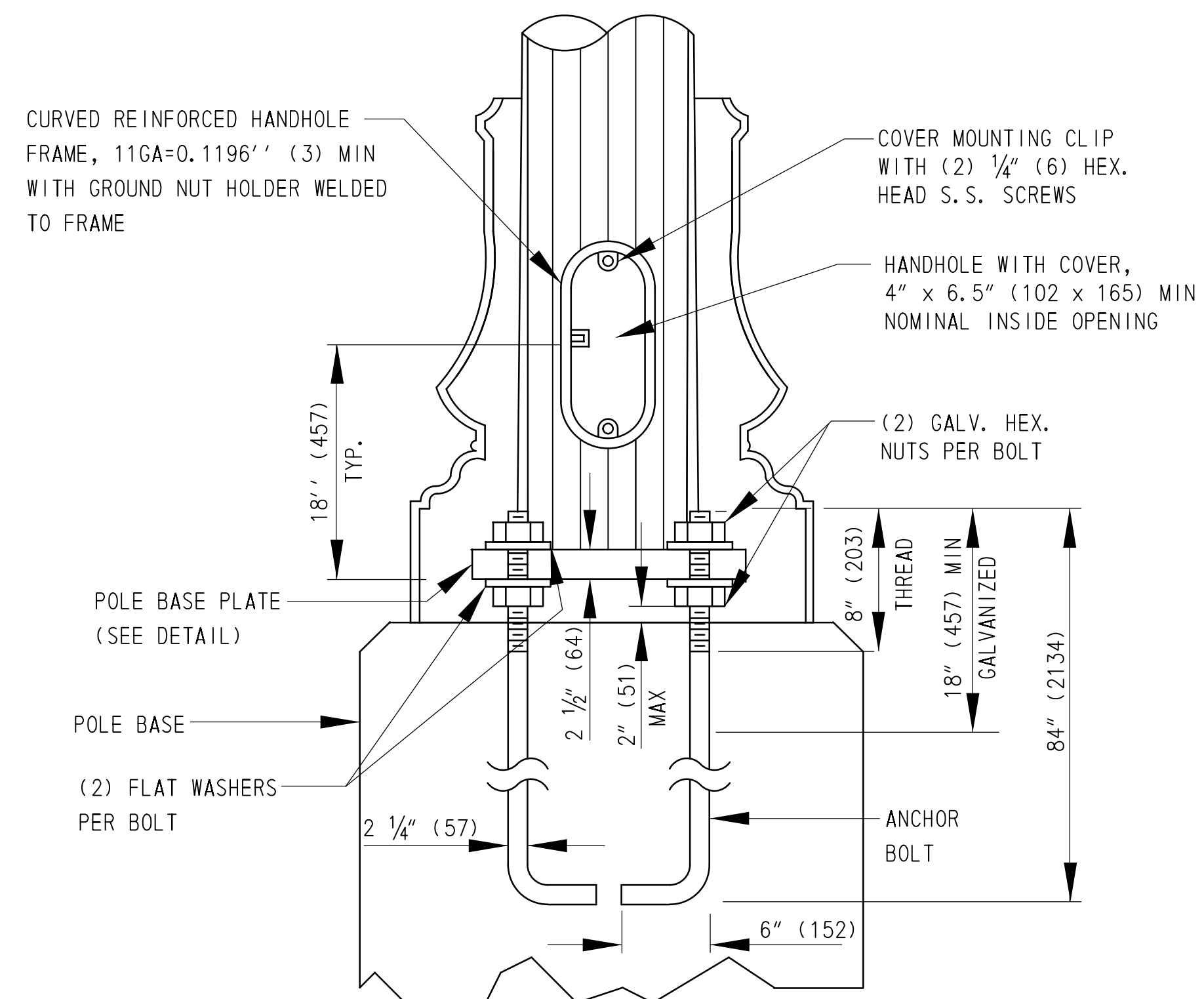


NUT COVER DETAIL

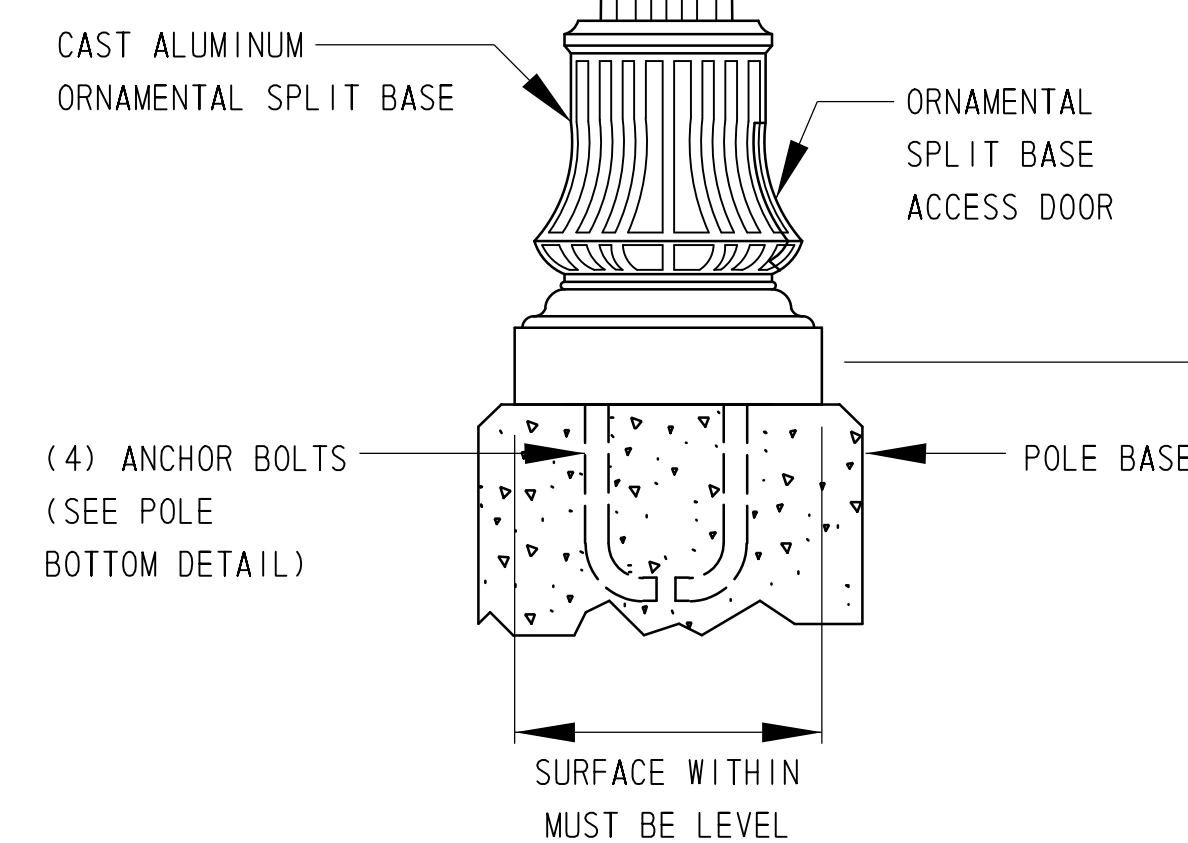


ALL ANGLES MEASURED CLOCKWISE
FROM HANDHOLE C.

TOP VIEW ORIENTATION



POLE BOTTOM DETAIL



PLAN SYMBOL

④



DELAWARE
DEPARTMENT OF TRANSPORTATION

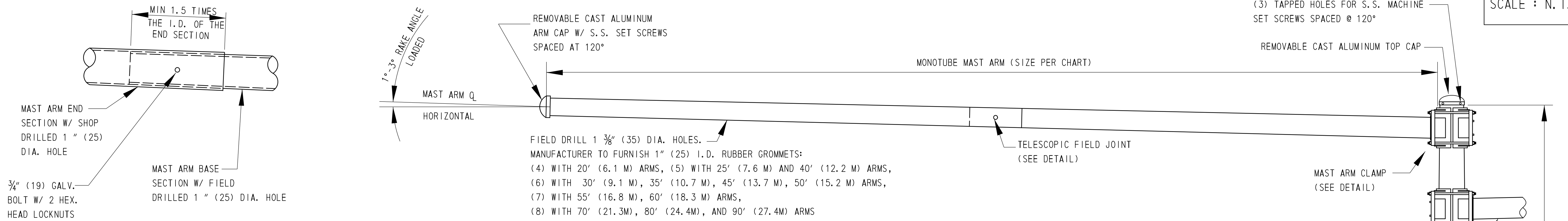
STEEL 16-FLUTE ORNAMENTAL STRAIN POLE

CONTRACT DETAIL SHEET 2 OF 10

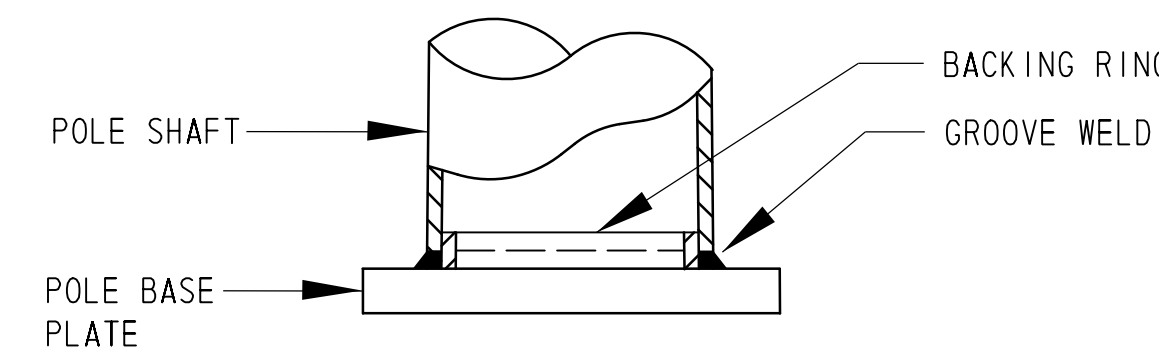
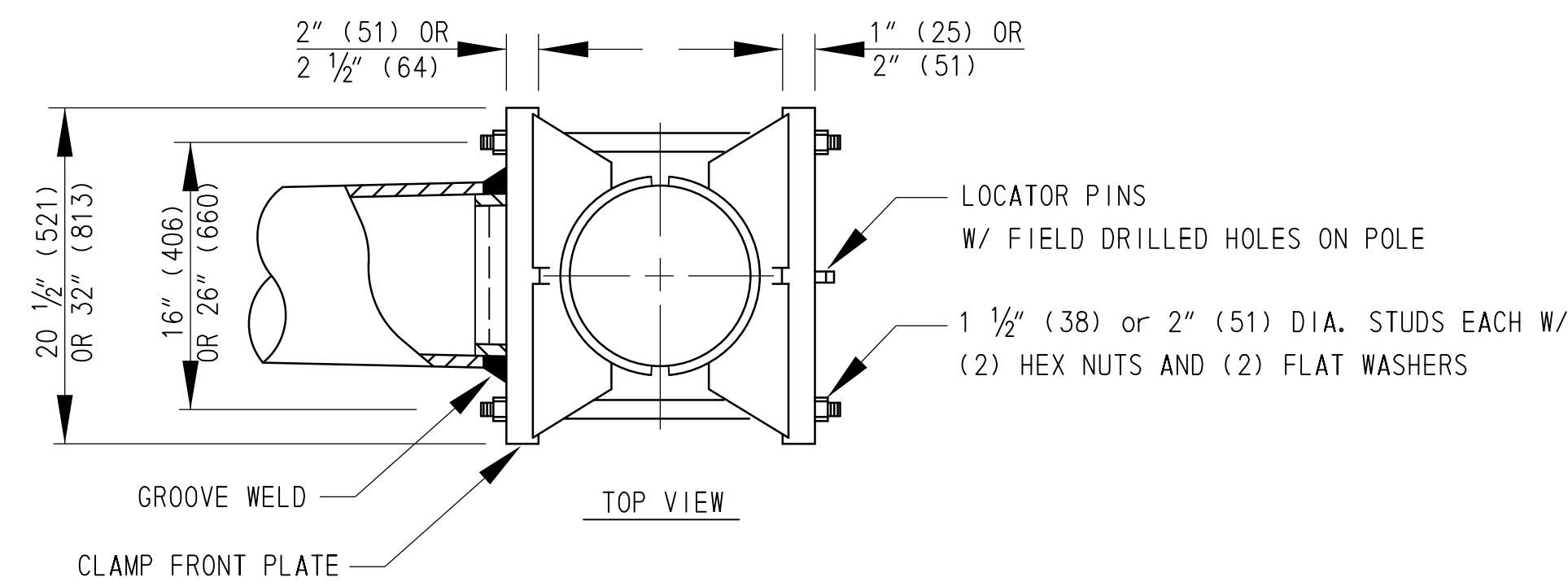
STEEL POLES

CONTRACT: DOT1712-STEELPOLES

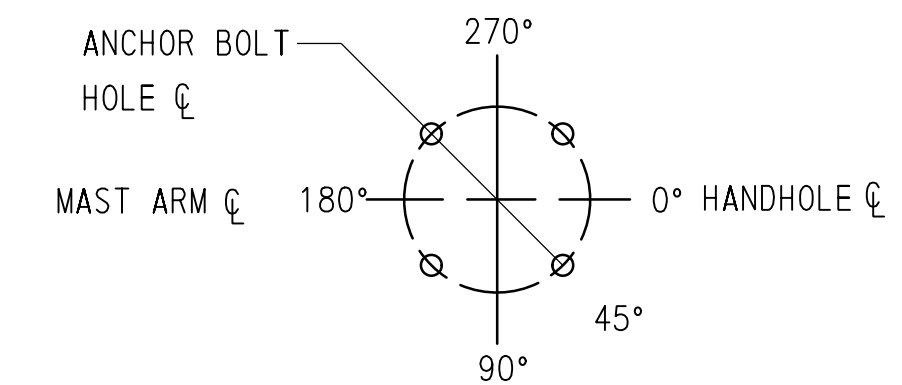
SCALE : N. T. S.



TELESCOPIC FIELD JOINT DETAIL

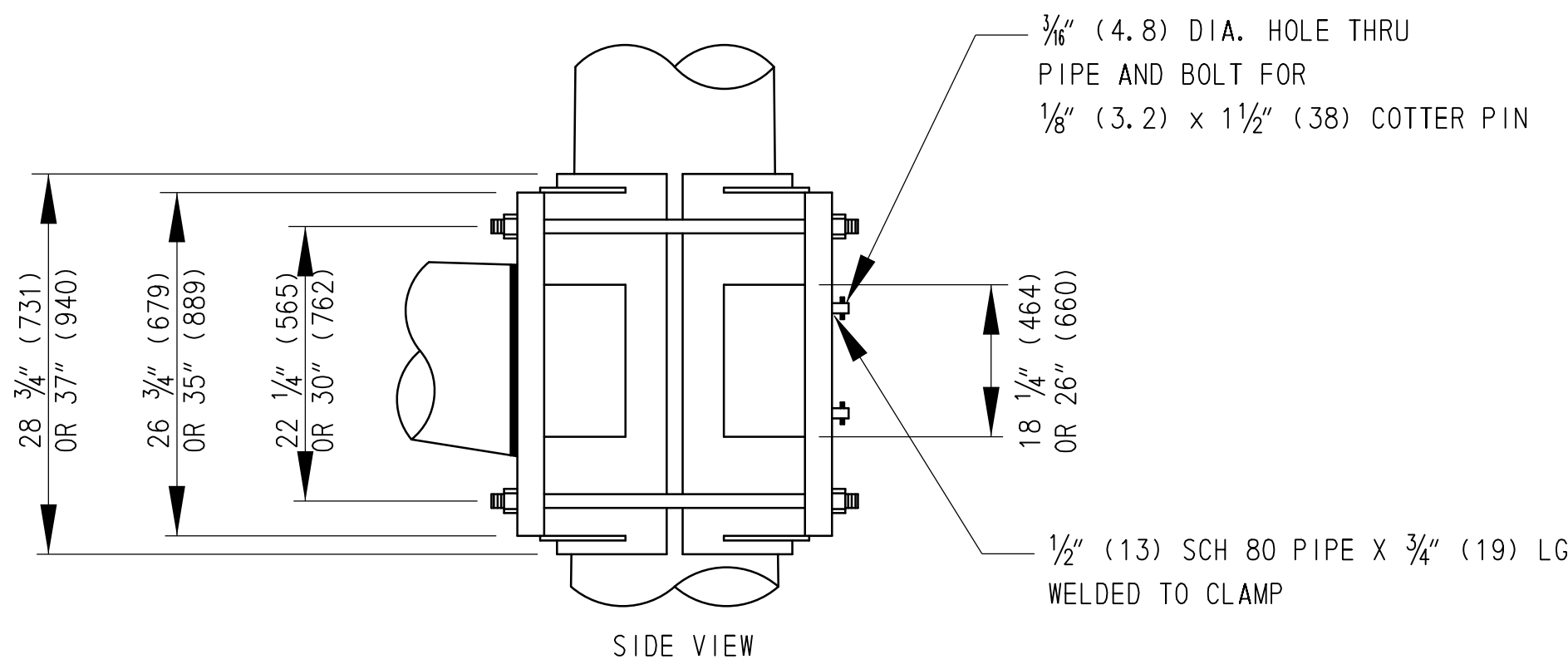


POLE SHAFT TO POLE BASE PLATE CONNECTION DETAIL



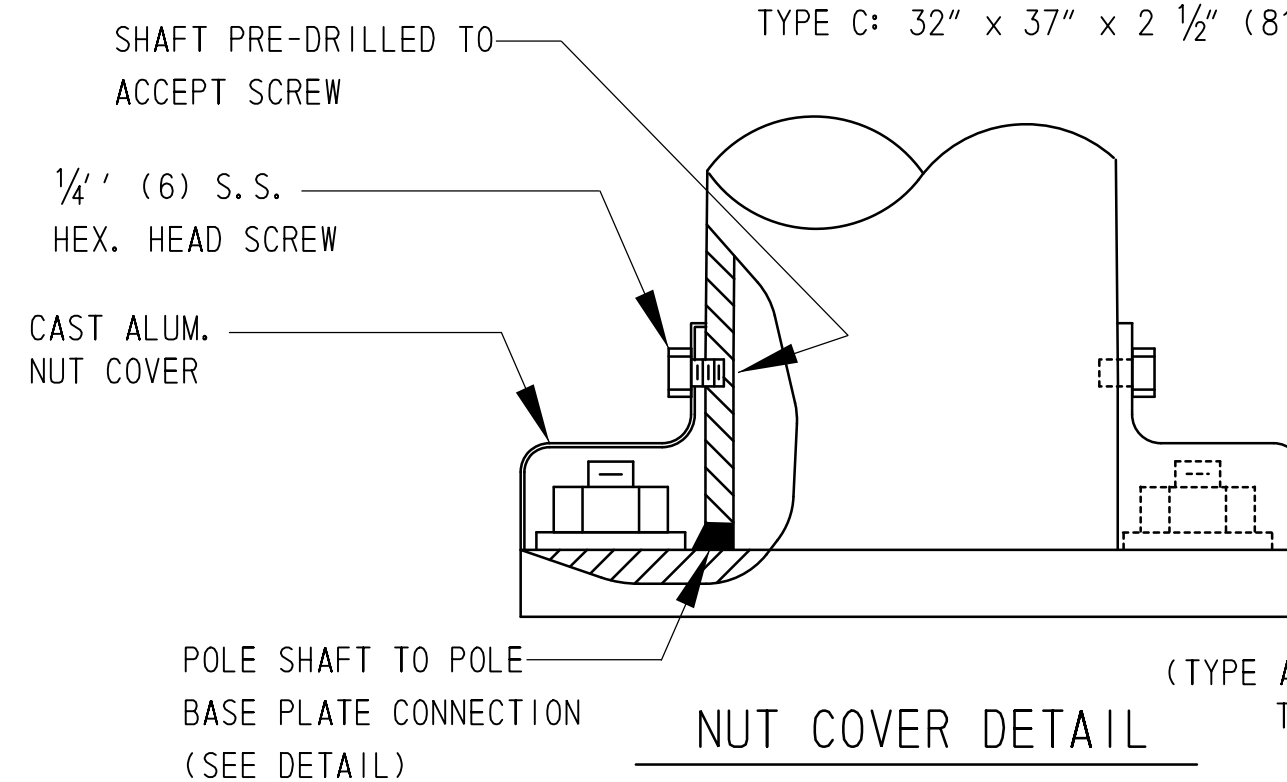
ALL ANGLES MEASURED CLOCKWISE FROM HANDHOLE Q.

TOP VIEW ORIENTATION

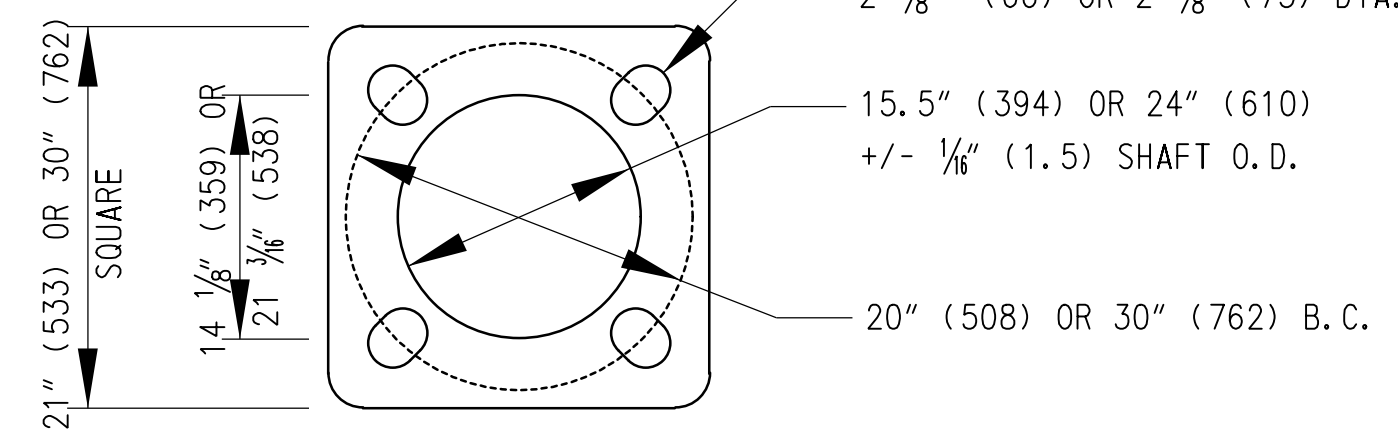


MAST ARM CLAMP DETAIL

(TYPE A AND TYPE B: 20 1/2" x 28 3/4" x 2" (521 x 731 x 51) CLAMP FRONT PLATE, TYPE C: 32" x 37" x 2 1/2" (813 x 940 x 64) CLAMP FRONT PLATE)

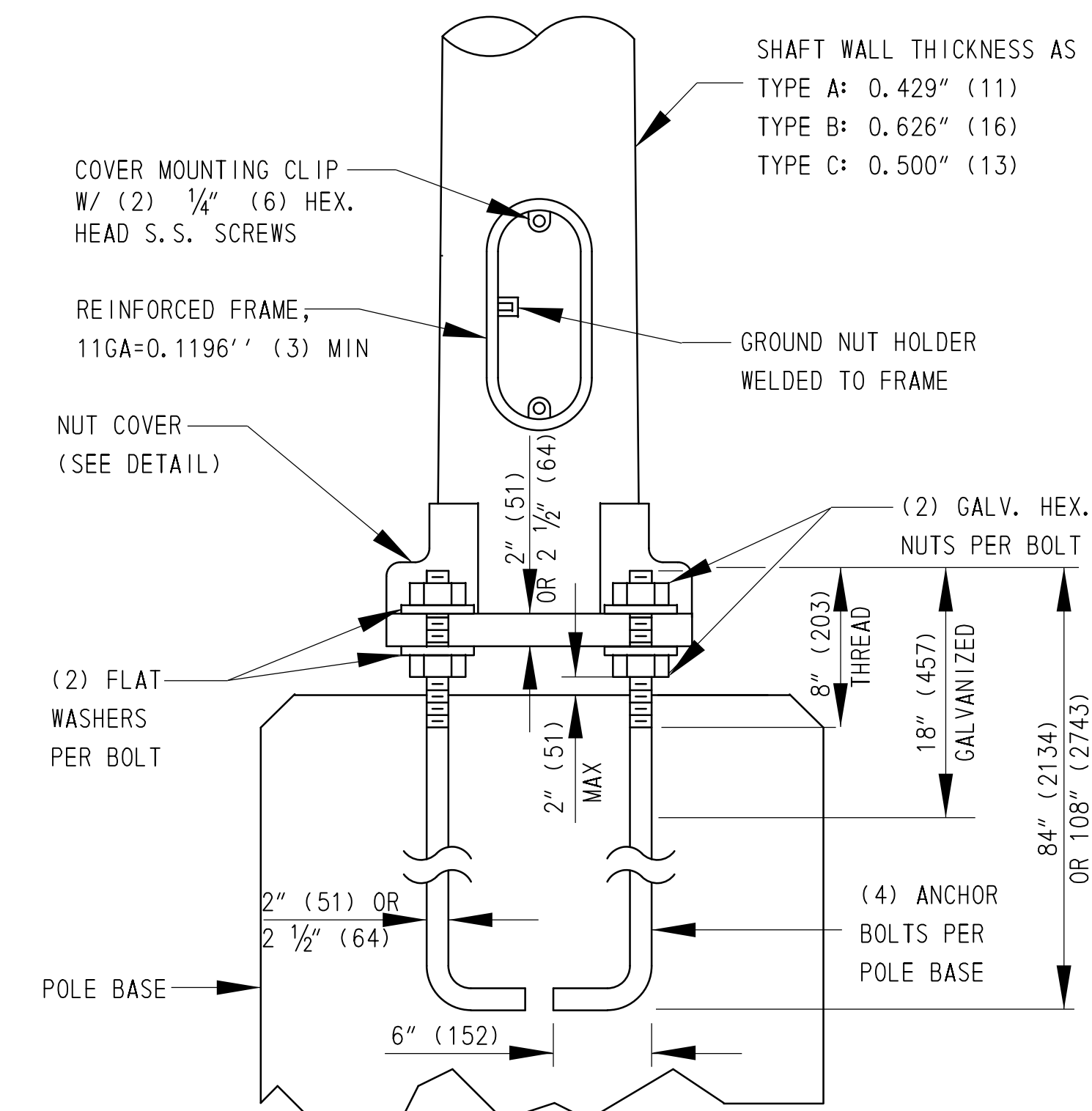


NUT COVER DETAIL



POLE BASE PLATE DETAIL

(TYPE A AND TYPE B: 21" x 21" x 2" (533 x 533 x 51) BASE PLATE W/ 15.5" (394) O.D. SHAFT, TYPE C: 30" x 30" x 2 1/2" (762 x 762 x 64) BASE PLATE W/ 24" (610) O.D. SHAFT)



POLE BOTTOM DETAIL

(TYPE A: 2" DIA. x 84" x 6" (51 DIA. x 2134 x 152) BOLTS, TYPE B AND TYPE C: 2 1/2" DIA. x 108" x 6" (64 DIA. x 2743 x 152) BOLTS)

HANDHOLE W/ COVER 4" x 6.5" (102 x 165) MIN NOMINAL INSIDE OPENING (SEE POLE BOTTOM DETAIL)

POLE BASE PLATE (SEE DETAIL)

ANCHOR BOLTS (SEE POLE BOTTOM DETAIL)

POLE BASE

PLAN SYMBOL



DELAWARE
DEPARTMENT OF TRANSPORTATION

STEEL ROUND MAST ARM POLE

CONTRACT DETAIL SHEET 3 OF 10

STEEL POLES

CONTRACT: DOT1712-STEELPOLES

STEEL ROUND MAST ARMS						
POLE TYPE	MAST ARM LENGTH	MAST ARM WALL THICKNESS @ BASE END	MAST ARM MATERIAL MIN. YIELD STRENGTH	MAST ARM SECTIONS	MAST ARM O. D. @ BASE END	MAST ARM TAPER
A	20' (6.1 M)	0.250" (6.4 MM)	55,000 PSI	ONE	12.50" (318 MM)	0.14 IN/FT (11.7 MM/M)
A	25' (7.6 M)	0.313" (7.9 MM)	55,000 PSI	ONE	12.75" (324 MM)	0.14 IN/FT (11.7 MM/M)
A	30' (9.1 M)	0.358" (9.1 MM)	55,000 PSI	ONE	14.00" (356 MM)	0.14 IN/FT (11.7 MM/M)
A	35' (10.7 M)	0.429" (10.9 MM)	55,000 PSI	ONE	15.00" (381 MM)	0.14 IN/FT (11.7 MM/M)
A	40' (12.2 M)	0.429" (10.9 MM)	55,000 PSI	ONE	14.50" (368 MM)	0.14 IN/FT (11.7 MM/M)
B	45' (13.7 M)	0.563" (14.3 MM)	55,000 PSI	TWO	15.00" (381 MM)	0.14 IN/FT (11.7 MM/M)
B	50' (15.2 M)	0.500" (12.7 MM)	55,000 PSI	TWO	14.50" (368 MM)	0.14 IN/FT (11.7 MM/M)
B	55' (16.8 M)	0.626" (15.9 MM)	55,000 PSI	TWO	14.75" (375 MM)	0.14 IN/FT (11.7 MM/M)
B	60' (18.3 M)	0.563" (14.3 MM)	55,000 PSI	TWO	15.75" (400 MM)	0.14 IN/FT (11.7 MM/M)
C	70' (21.3 M)	0.500" (12.7 MM)	55,000 PSI	THREE	19.00" (483 MM)	0.14 IN/FT (11.7 MM/M)
C	80' (24.4 M)	0.563" (14.3 MM)	55,000 PSI	THREE	20.00" (508 MM)	0.14 IN/FT (11.7 MM/M)
C	90' (27.4 M)	0.563" (14.3 MM)	55,000 PSI	THREE	23.00" (584 MM)	0.14 IN/FT (11.7 MM/M)

STEEL 16-FLUTE ORNAMENTAL MAST ARMS						
POLE TYPE	MAST ARM LENGTH	MAST ARM WALL THICKNESS @ BASE END	MAST ARM MATERIAL MIN. YIELD STRENGTH	MAST ARM SECTIONS	MAST ARM O. D. @ BASE END	MAST ARM TAPER
A	20' (6.1 M)	0.250" (6.4 MM)	55,000 PSI	ONE	13.50" (342 MM)	0.14 IN/FT (11.7 MM/M)
A	25' (7.6 M)	0.313" (7.9 MM)	55,000 PSI	ONE	14.00" (356 MM)	0.14 IN/FT (11.7 MM/M)
A	30' (9.1 M)	0.358" (9.1 MM)	55,000 PSI	ONE	14.50" (368 MM)	0.14 IN/FT (11.7 MM/M)
A	35' (10.7 M)	0.429" (10.9 MM)	55,000 PSI	ONE	14.35" (365 MM)	0.14 IN/FT (11.7 MM/M)
A	40' (12.2 M)	0.429" (10.9 MM)	55,000 PSI	ONE	14.35" (365 MM)	0.14 IN/FT (11.7 MM/M)
B	45' (13.7 M)	0.563" (14.3 MM)	55,000 PSI	TWO	15.50" (394 MM)	0.14 IN/FT (11.7 MM/M)
B	50' (15.2 M)	0.563" (14.3 MM)	55,000 PSI	TWO	14.50" (368 MM)	0.14 IN/FT (11.7 MM/M)
B	55' (16.8 M)	0.626" (15.9 MM)	55,000 PSI	TWO	15.50" (394 MM)	0.14 IN/FT (11.7 MM/M)
B	60' (18.3 M)	0.563" (14.3 MM)	55,000 PSI	TWO	16.50" (406 MM)	0.14 IN/FT (11.7 MM/M)

NOTE: WORK THIS INDEX IN CONJUNCTION WITH
CONTRACT DETAIL SHEETS 3 AND 4.



DESIGN LOADING
TRAFFIC CONTROL EQUIPMENT
LATERAL SPACING ALONG MAST ARMS

LEGEND

- ➡ ①

3-SECTION SIGNAL HEAD WITH BACKPLATE
- ➡ ②

5-SECTION SIGNAL HEAD WITH BACKPLATE
- ⬇

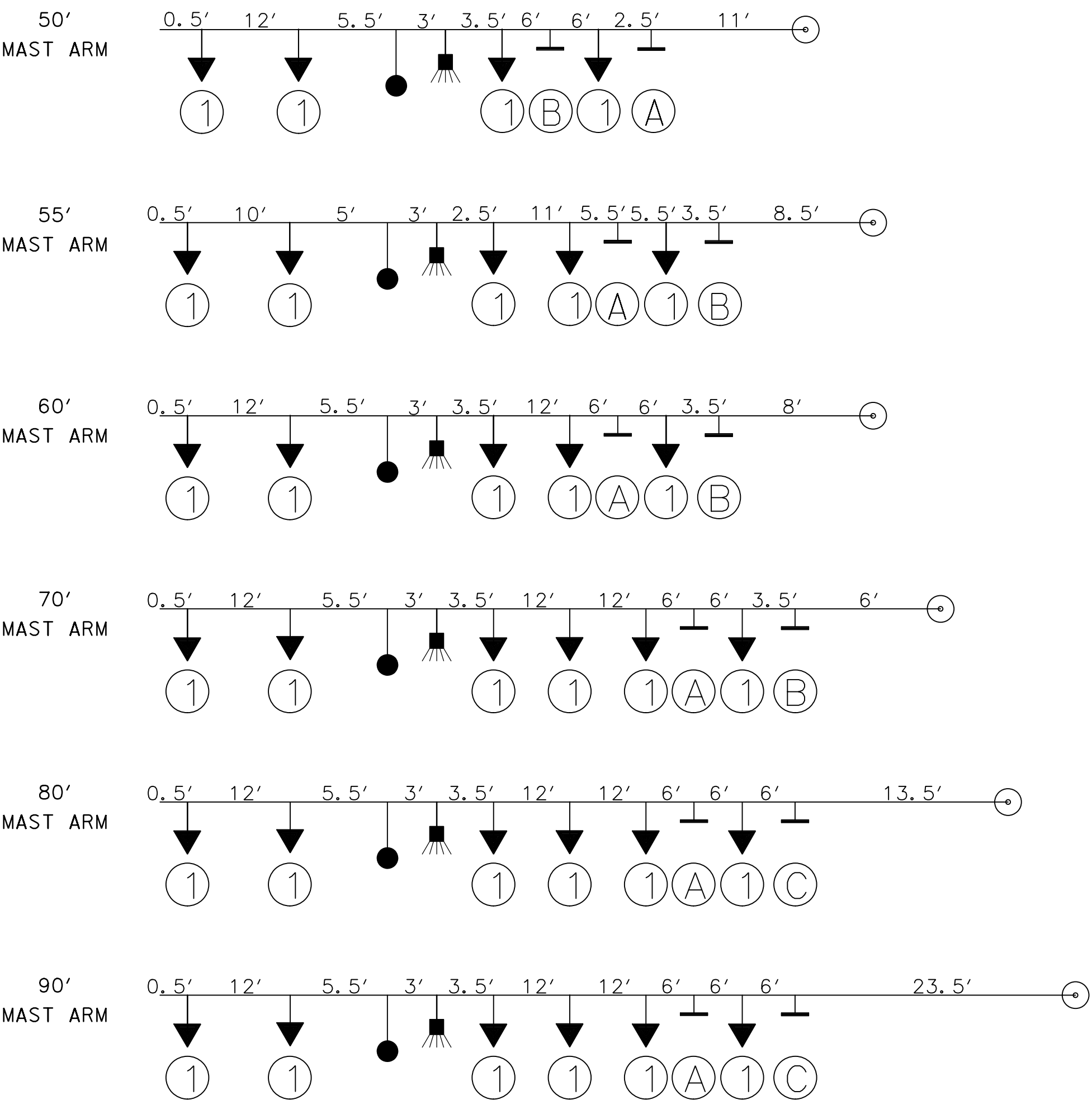
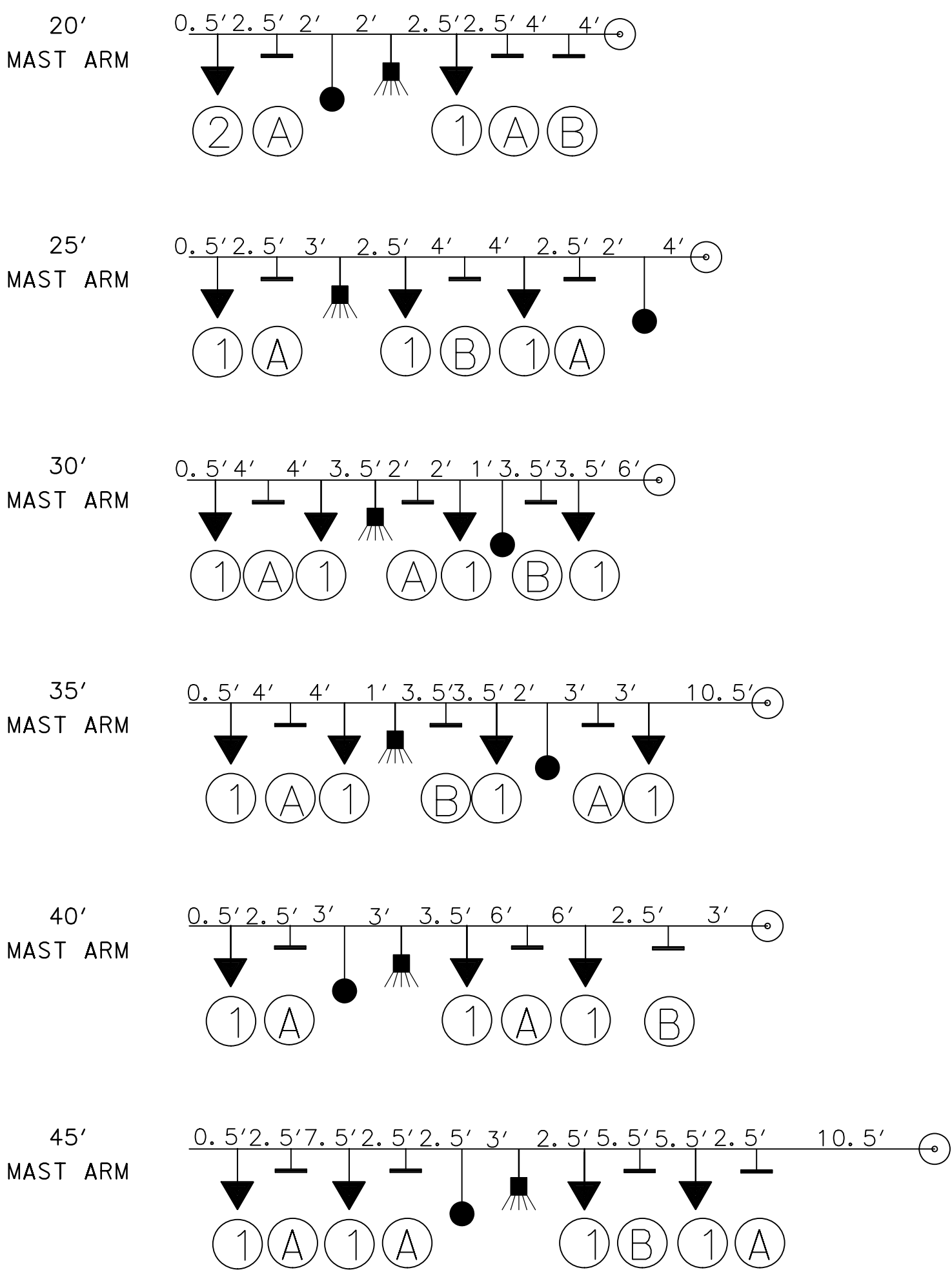
OVERHEAD DETECTION UNIT
- EMERGENCY PREEMPTION RECEIVER
- ⊥ ①

24" x 30" SIGN
- ⊥ ②

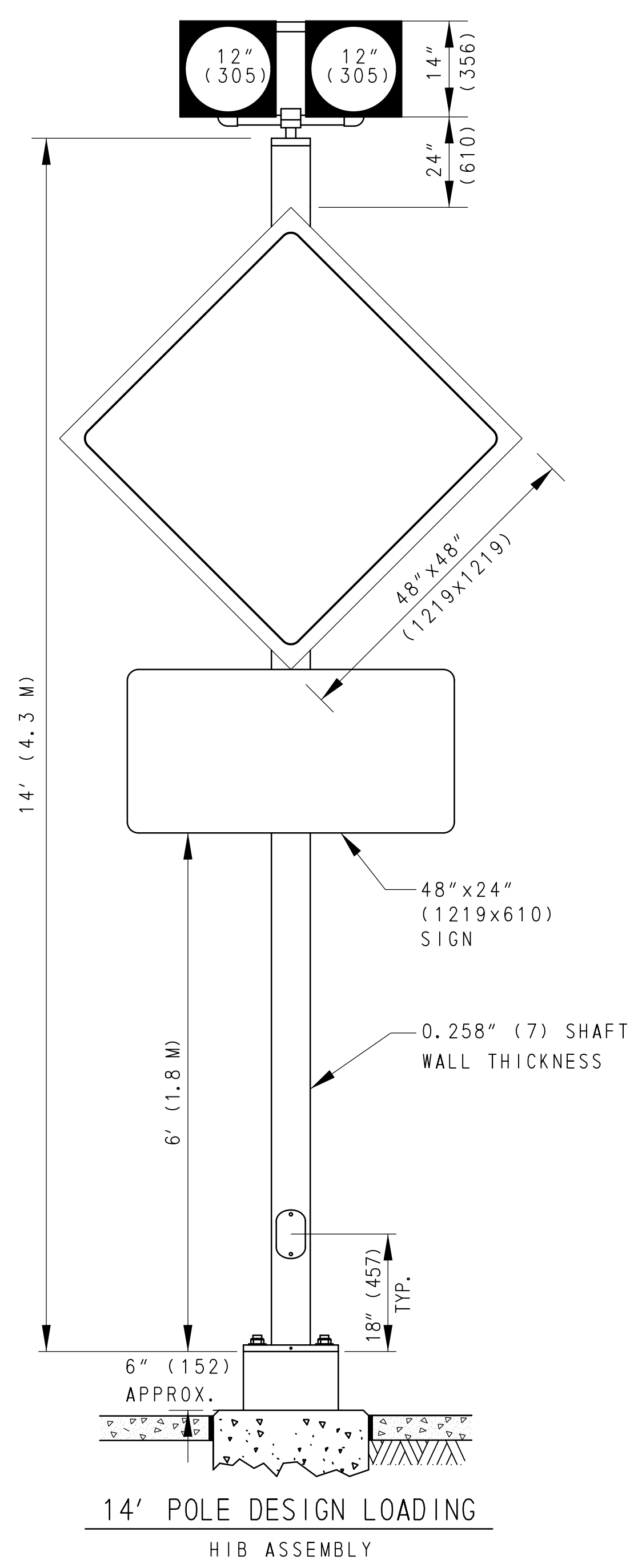
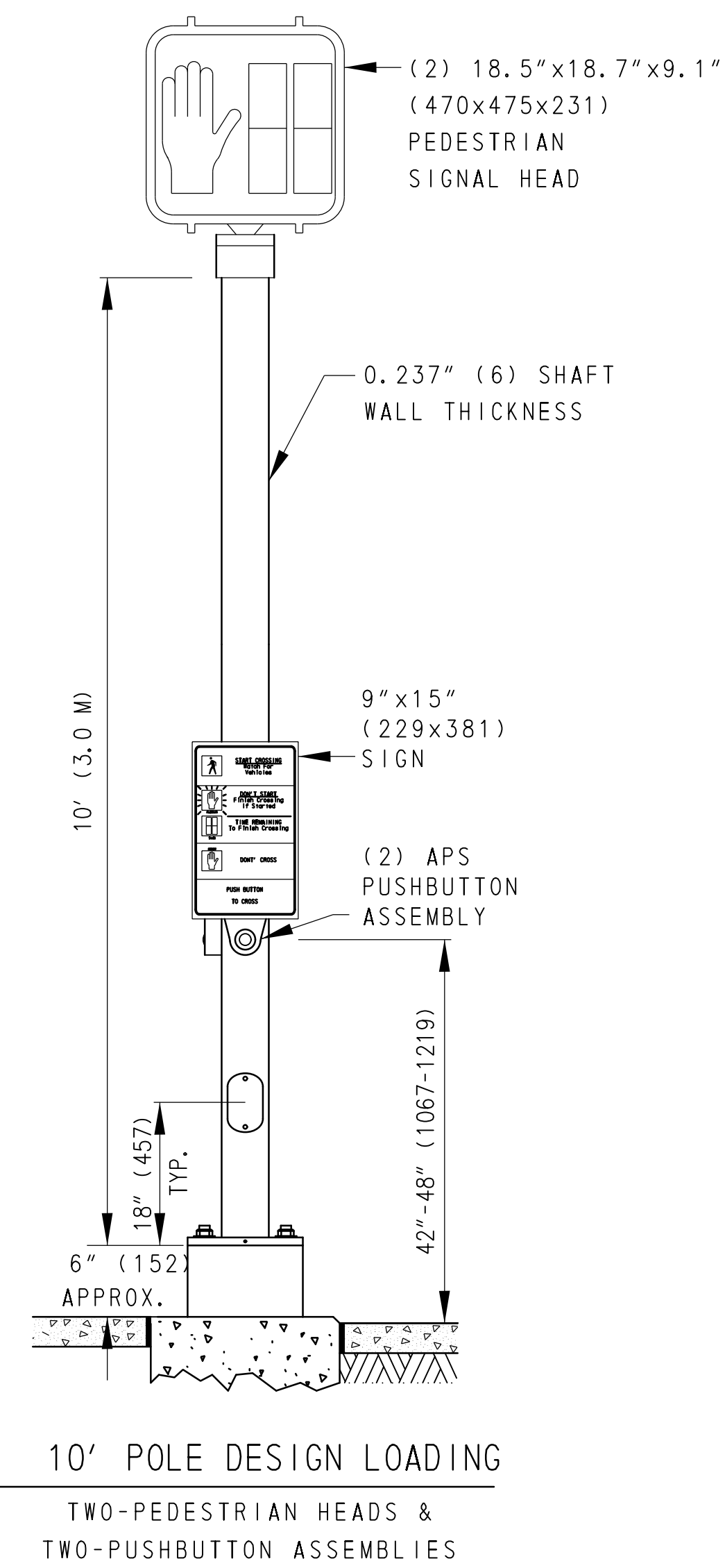
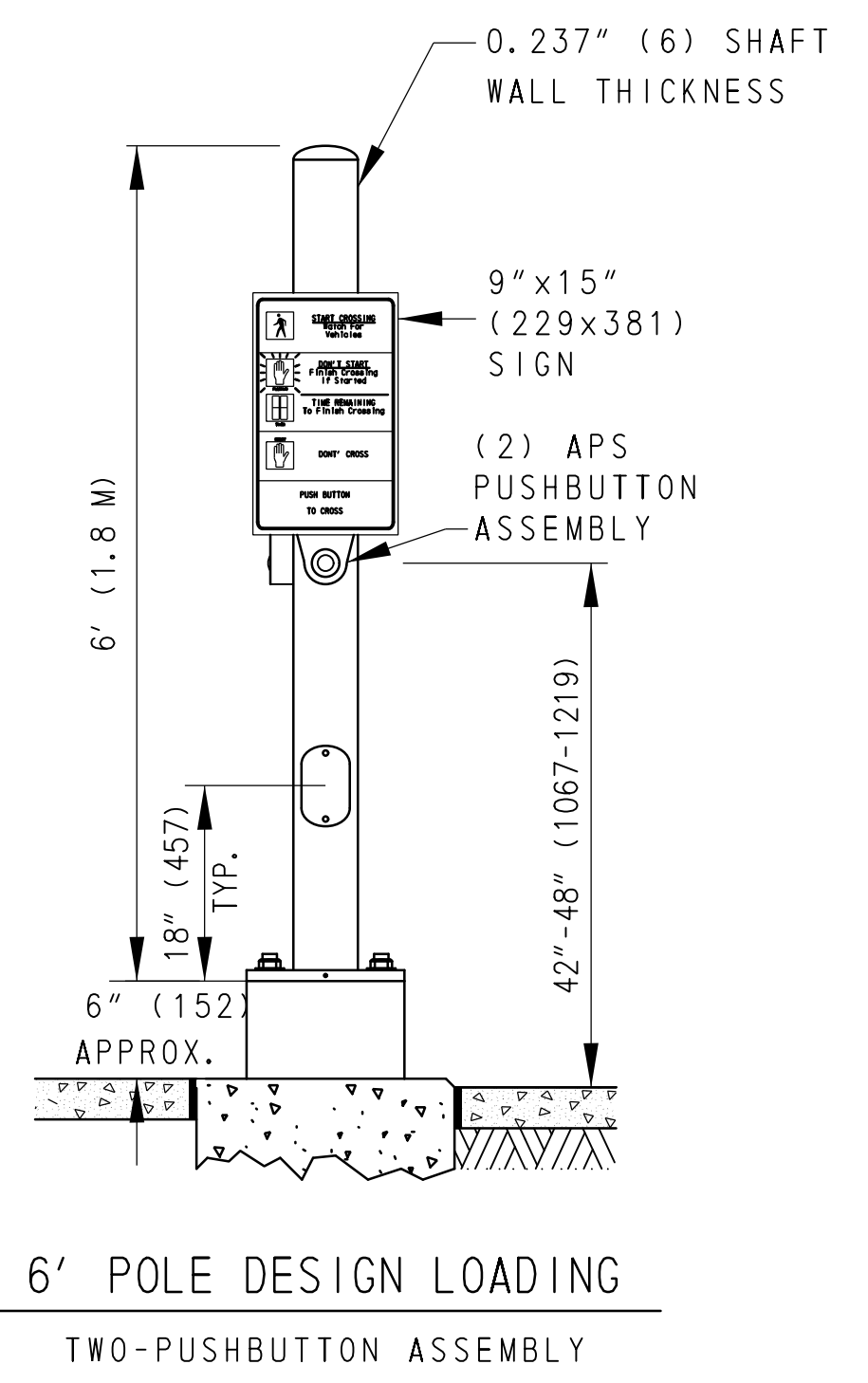
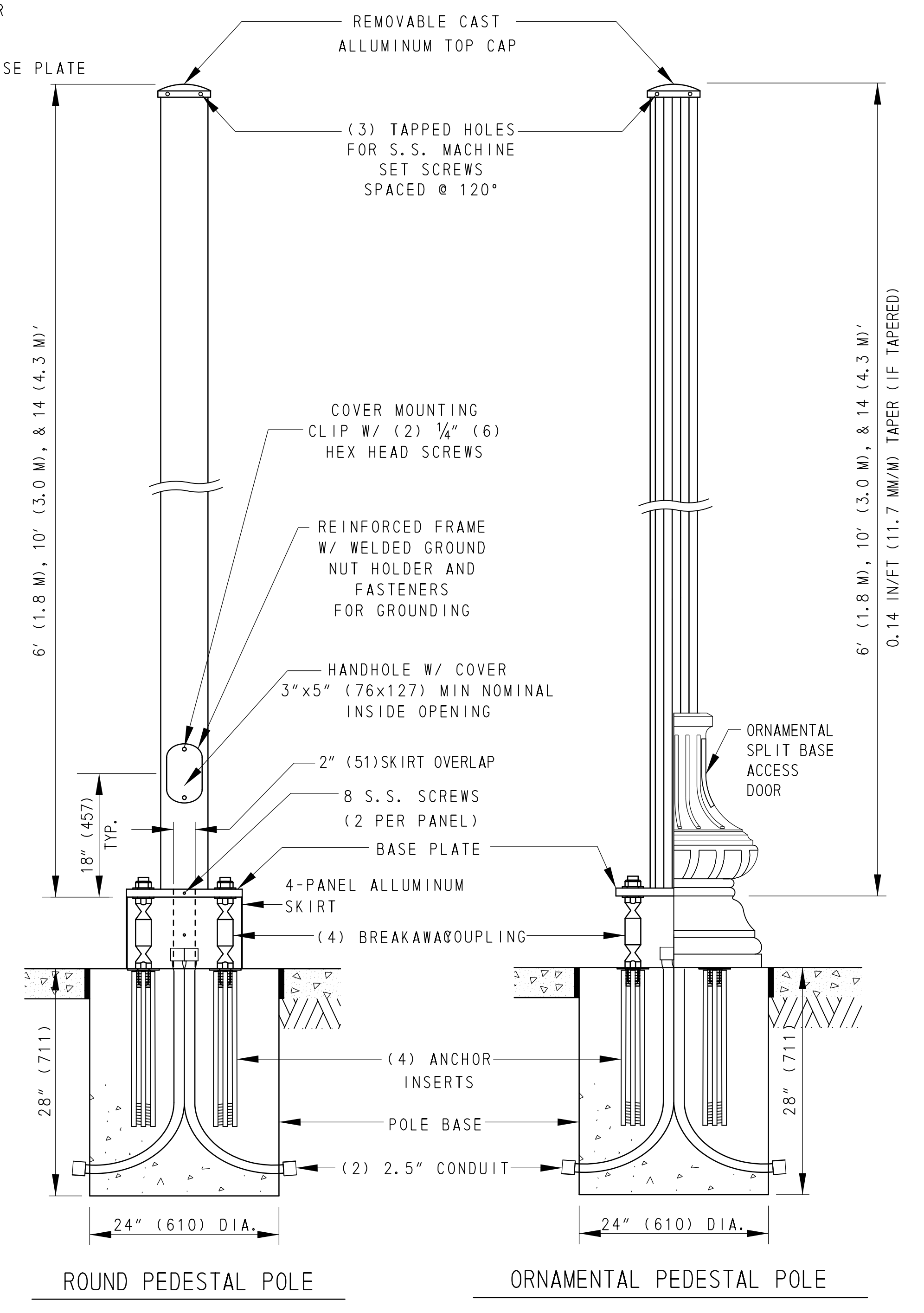
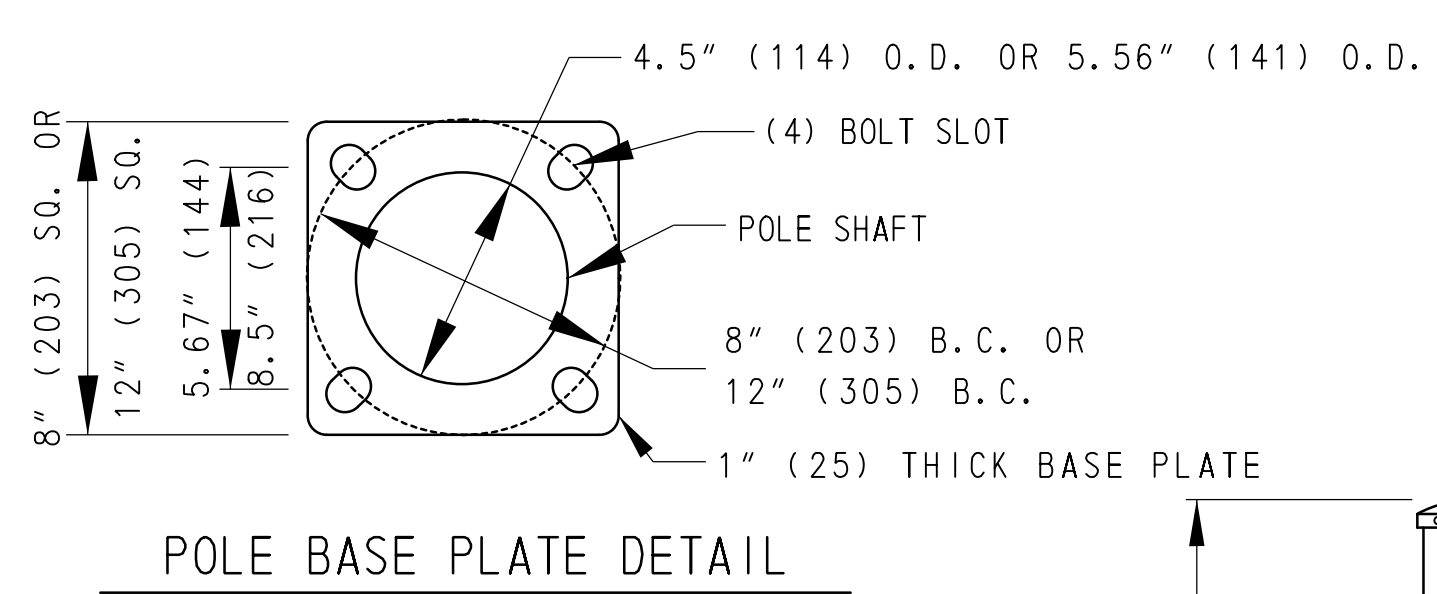
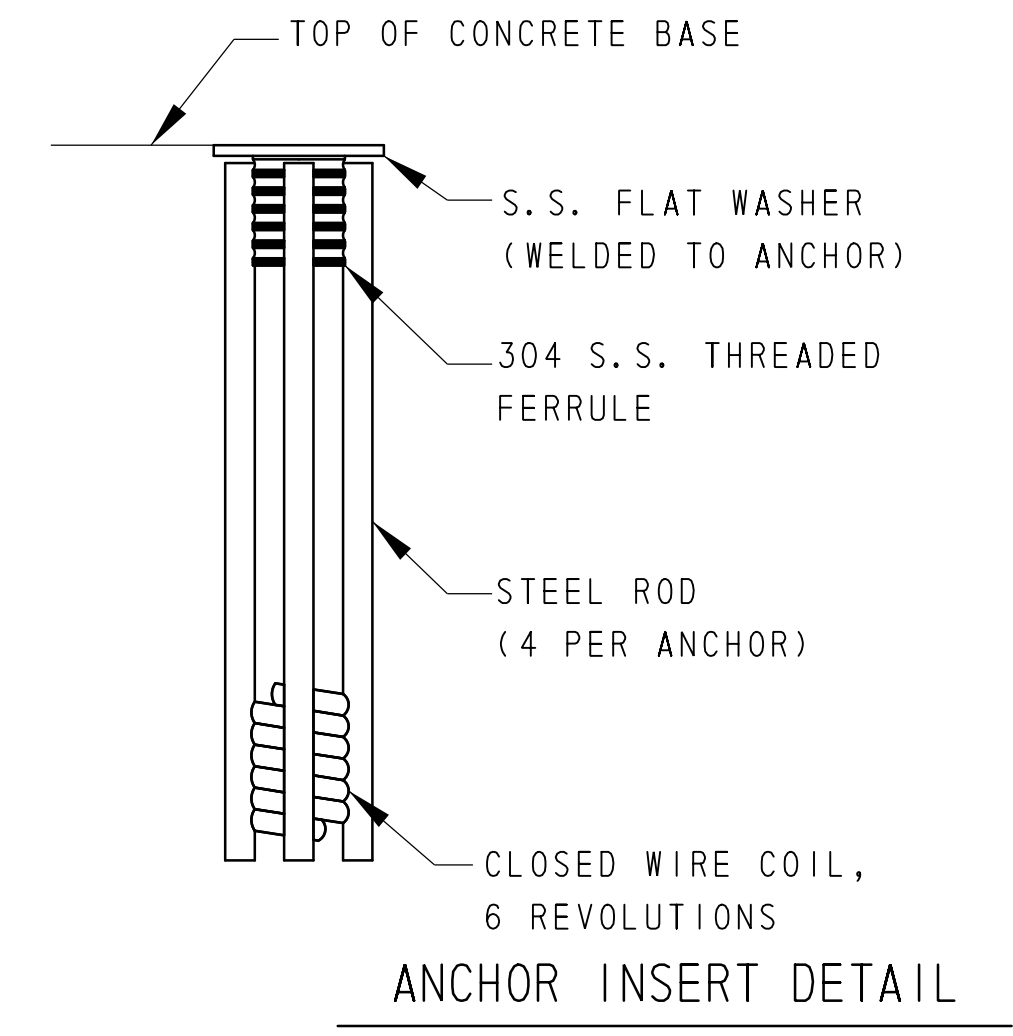
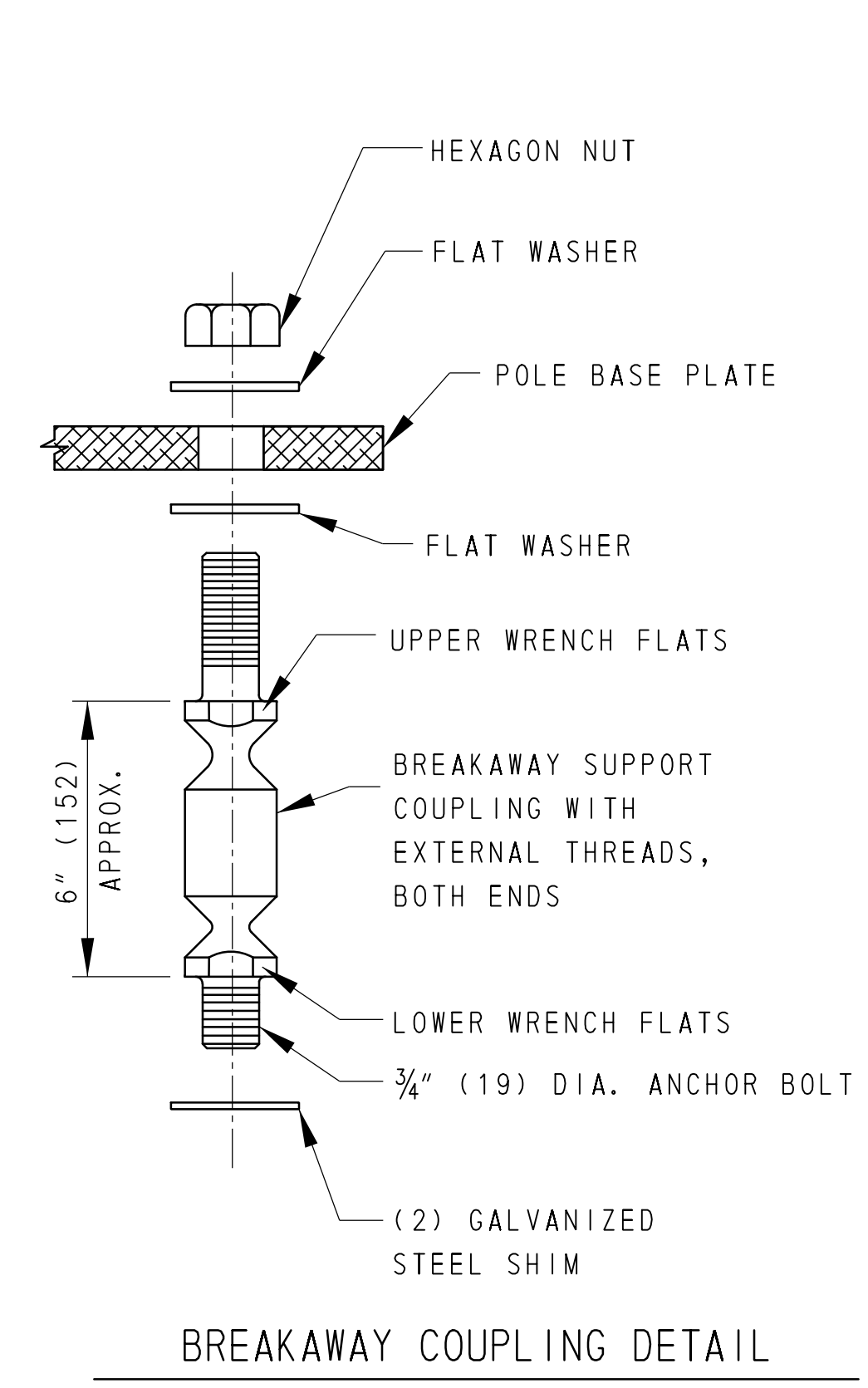
18" x 60" SIGN
- ⊥ ③

18" x 120" SIGN
- ⊙

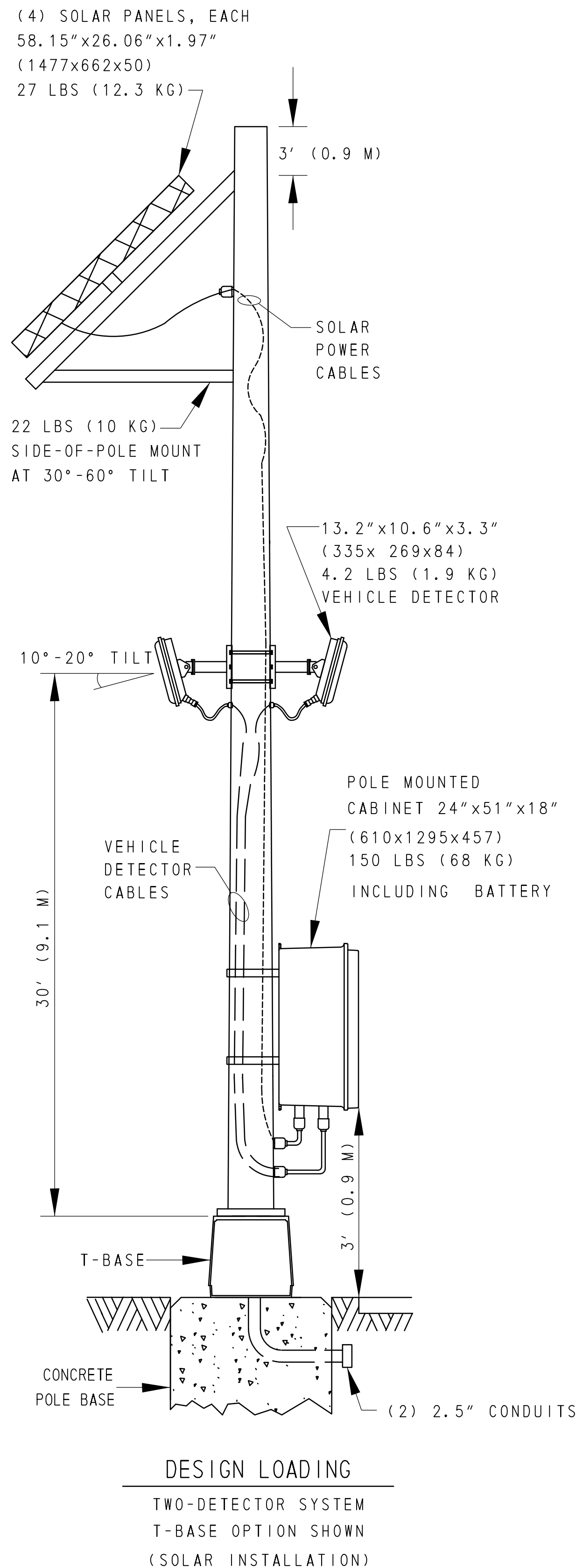
MAST ARM POLE



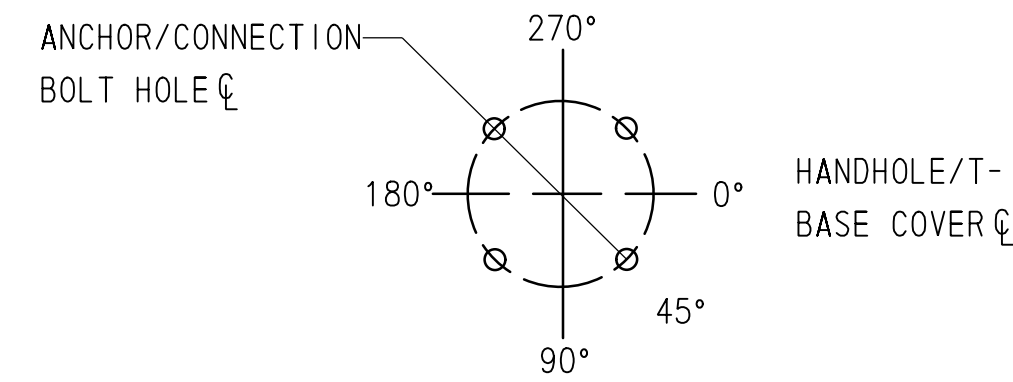
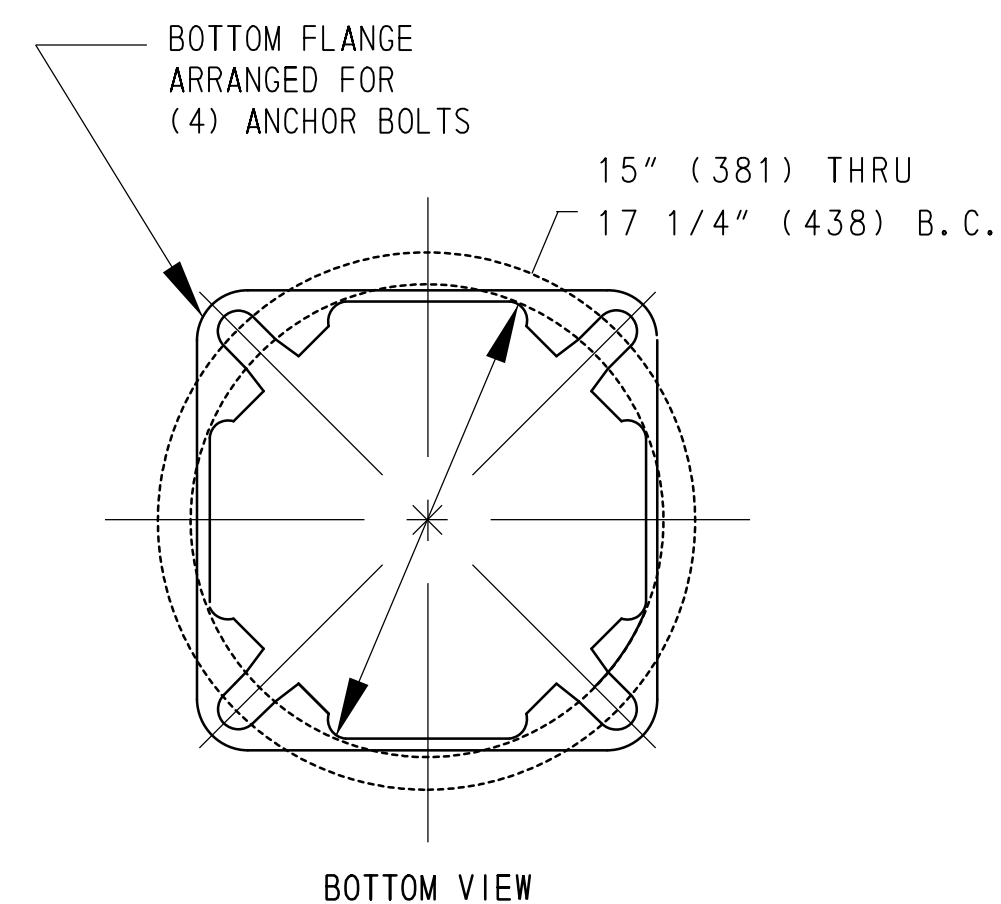
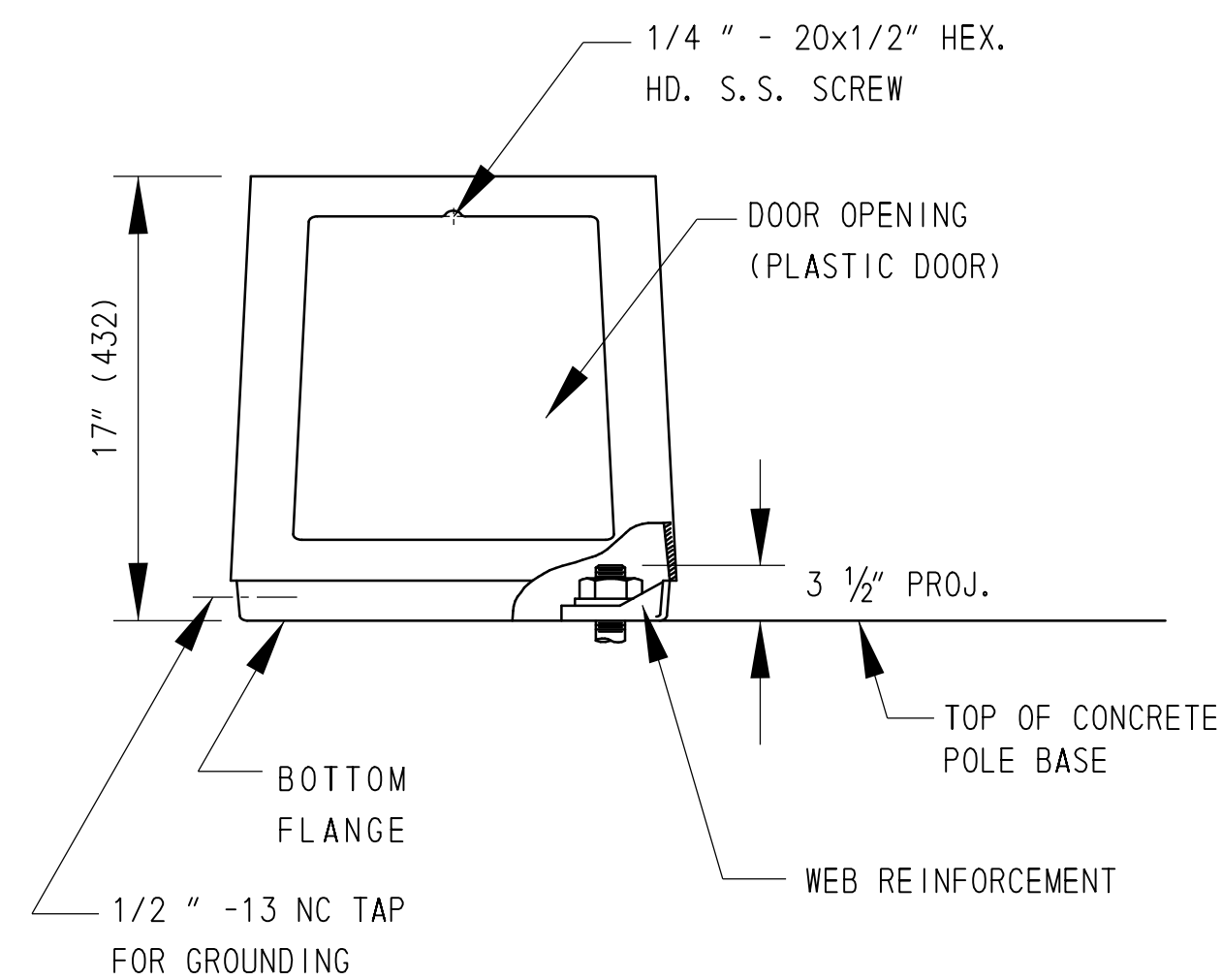
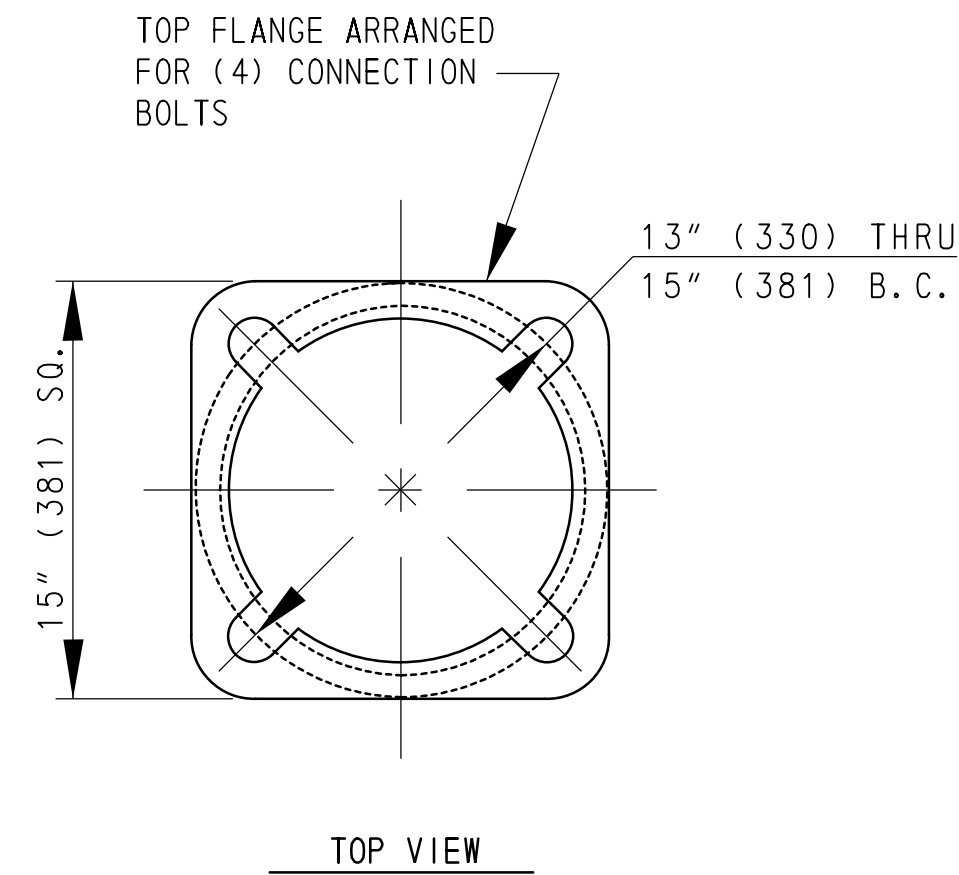
SCALE : N. T. S.



PLAN SYMBOL

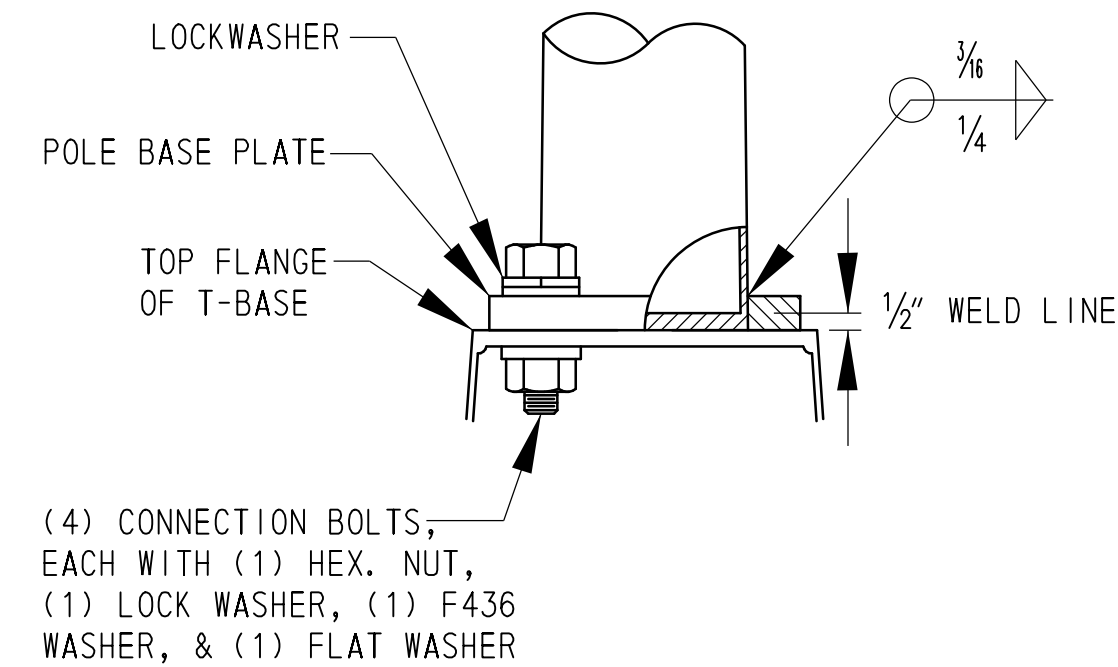


ALUMINUM TRANSFORMER BASE (T-BASE) DETAIL

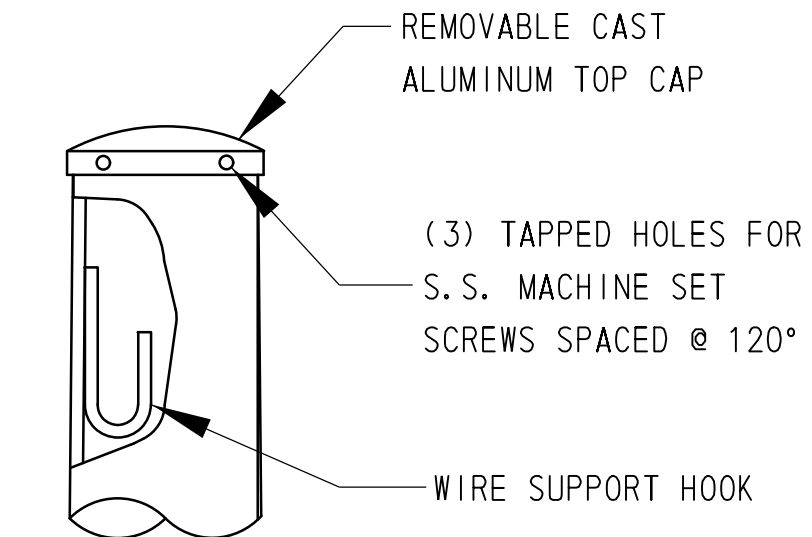
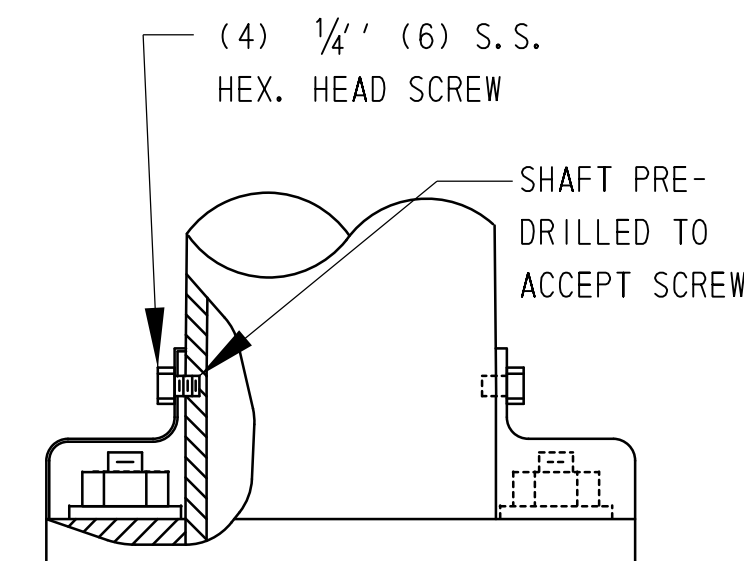
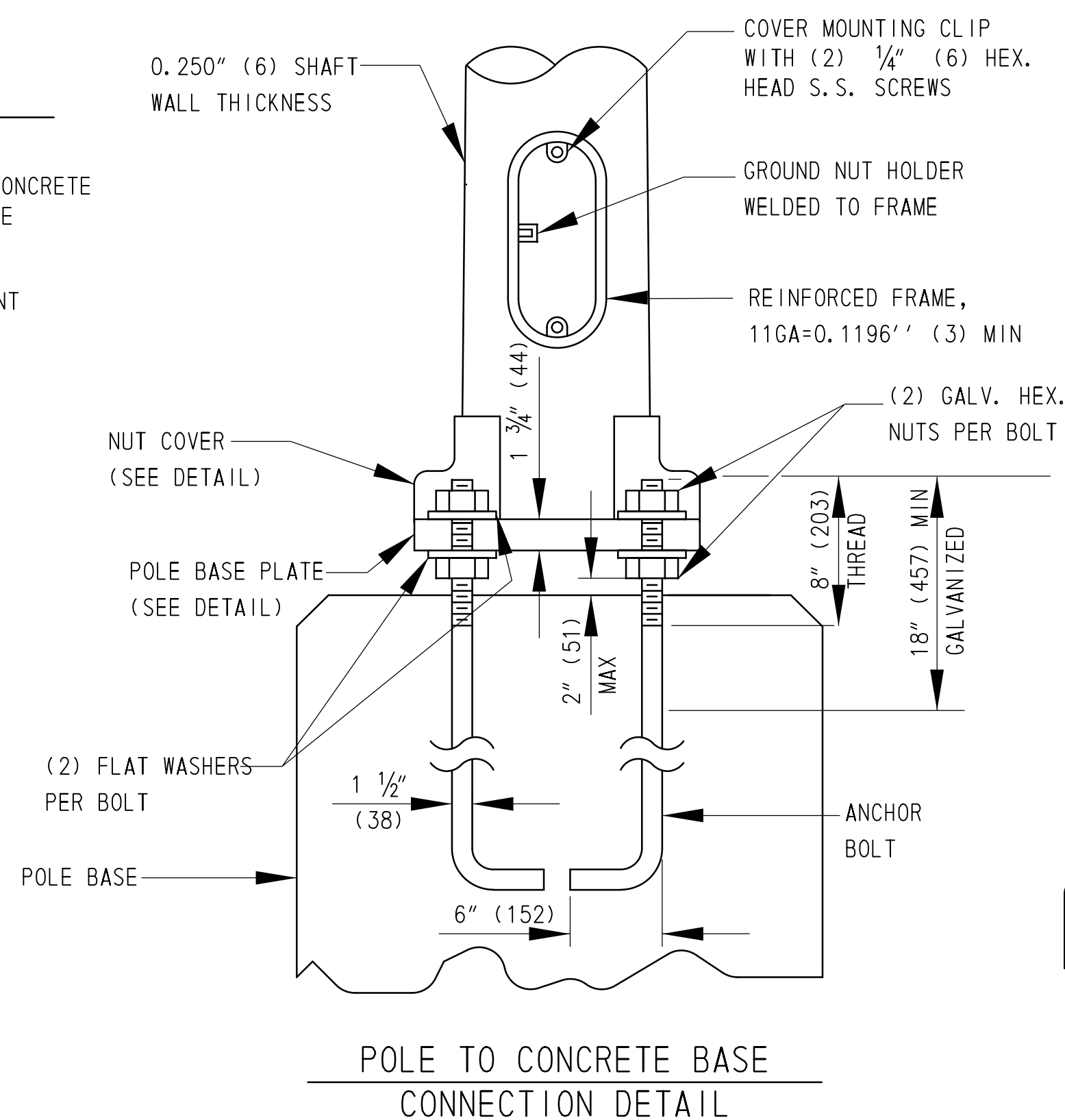


TOP VIEW ORIENTATION

ALL ANGLES MEASURED CLOCKWISE
FROM T-BASE COVER/HANDHOLE C

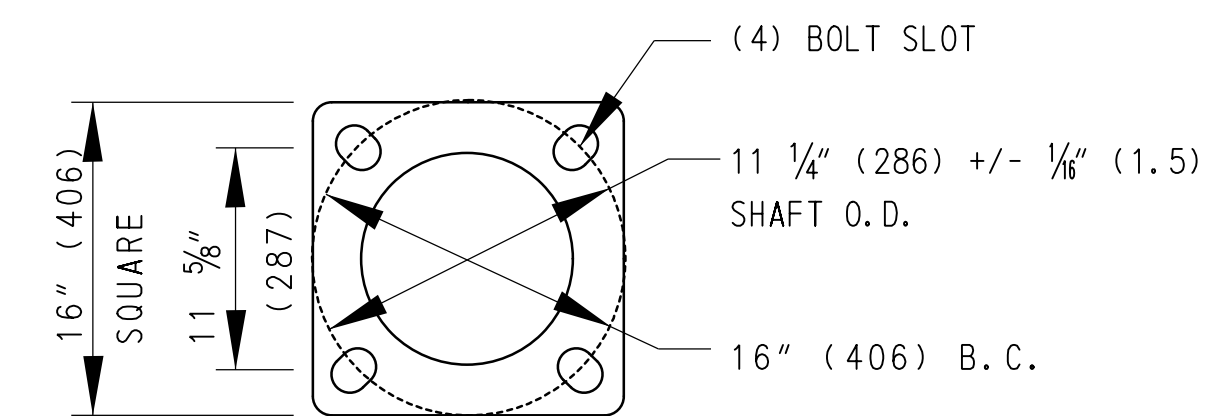


POLE TO T-BASE CONNECTION DETAIL



POLE TOP DETAIL

ORIENTATION OF WIRE
SUPPORT HOOK AS REQUIRED



POLE BASE PLATE DETAIL

HANDHOLE WITH COVER
4"x6.5" (102x165) MIN
NOMINAL INSIDE OPENING
(SEE POLE TO CONCRETE
BASE CONNECTION DETAIL)

(4) CONNECTION BOLTS
(SEE POLE TO T-BASE
CONNECTION DETAIL)

POLE BASE PLATE
(SEE DETAIL)

ALUMINUM
T-BASE
(SEE DETAIL)

(4) ANCHOR
BOLTS

CONCRETE
POLE BASE

PLAN SYMBOL



SCALE : N. T. S.

40.0' (12.2 M) @ 0.14 IN/FT (11.7MM/M) TAPER

18" (457)

T-BASE OPTION SHOWN



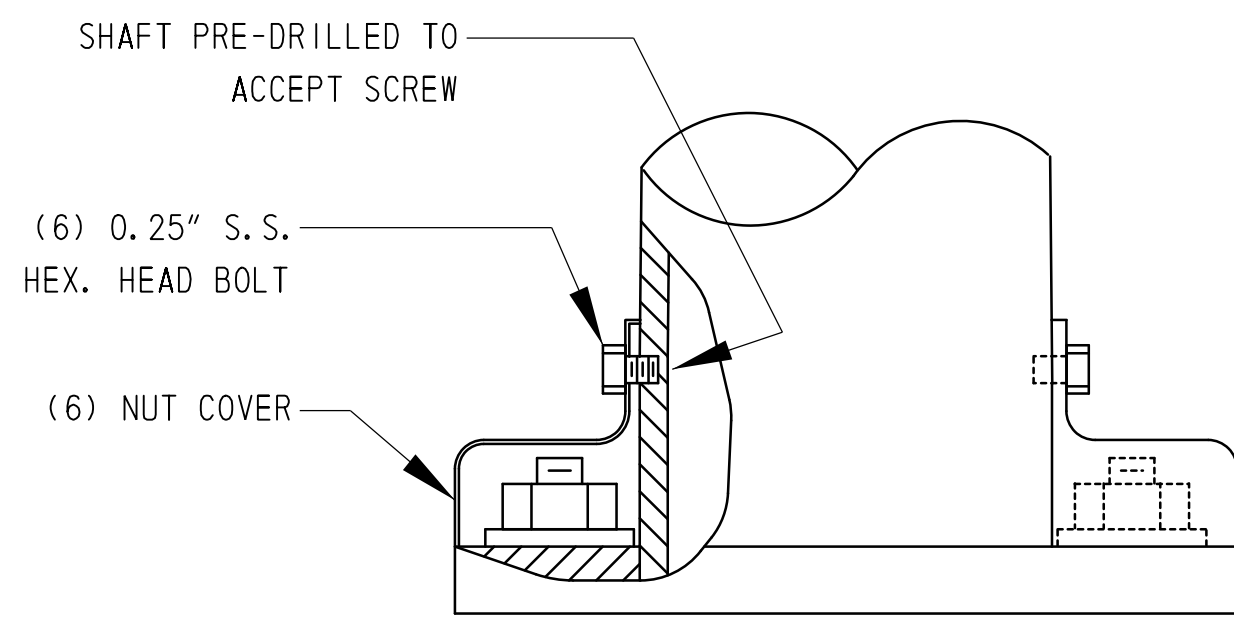
DELAWARE
DEPARTMENT OF TRANSPORTATION

STEEL ROUND VEHICLE DETECTOR POLE

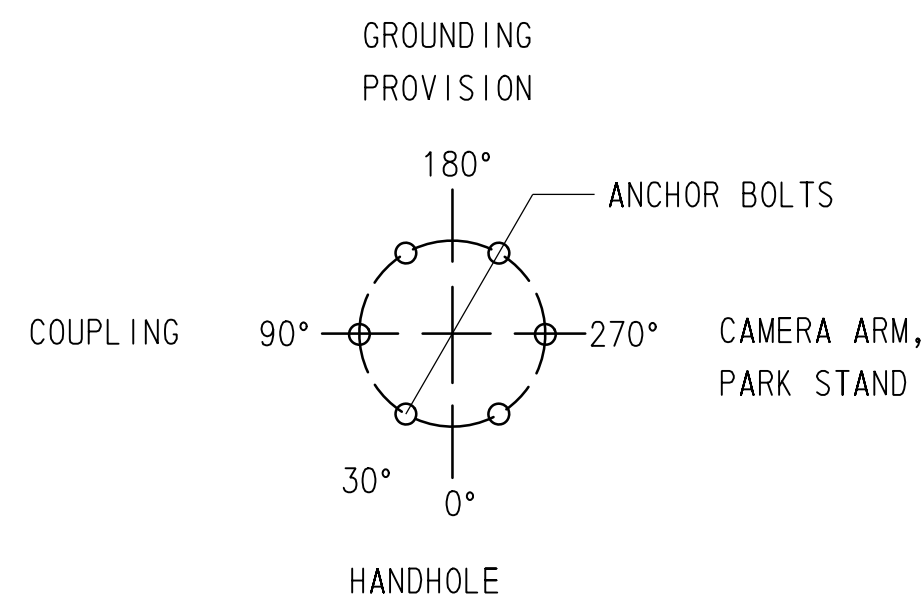
CONTRACT DETAIL SHEET 8 OF 10

STEEL POLES

CONTRACT: DOT1712-STEELPOLES

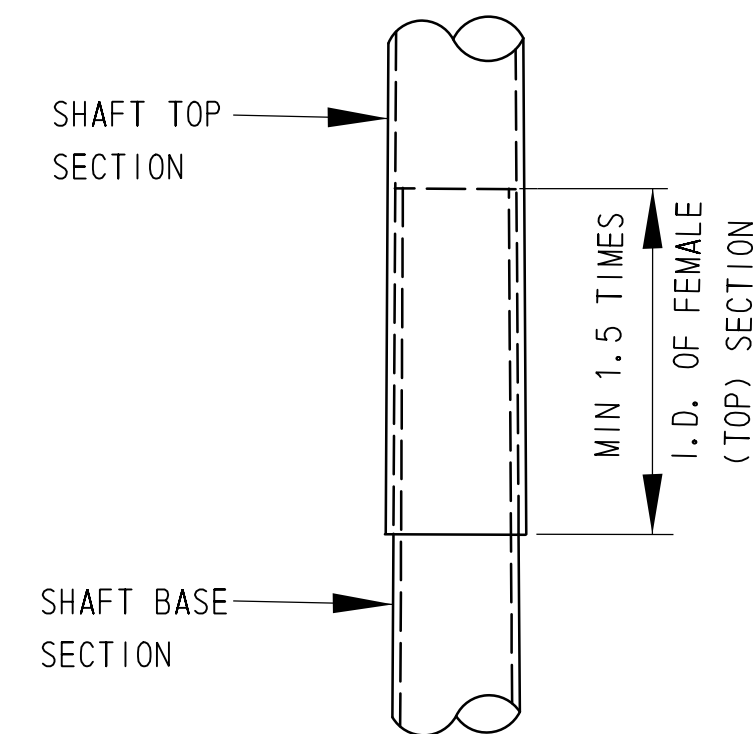


NUT COVER DETAIL

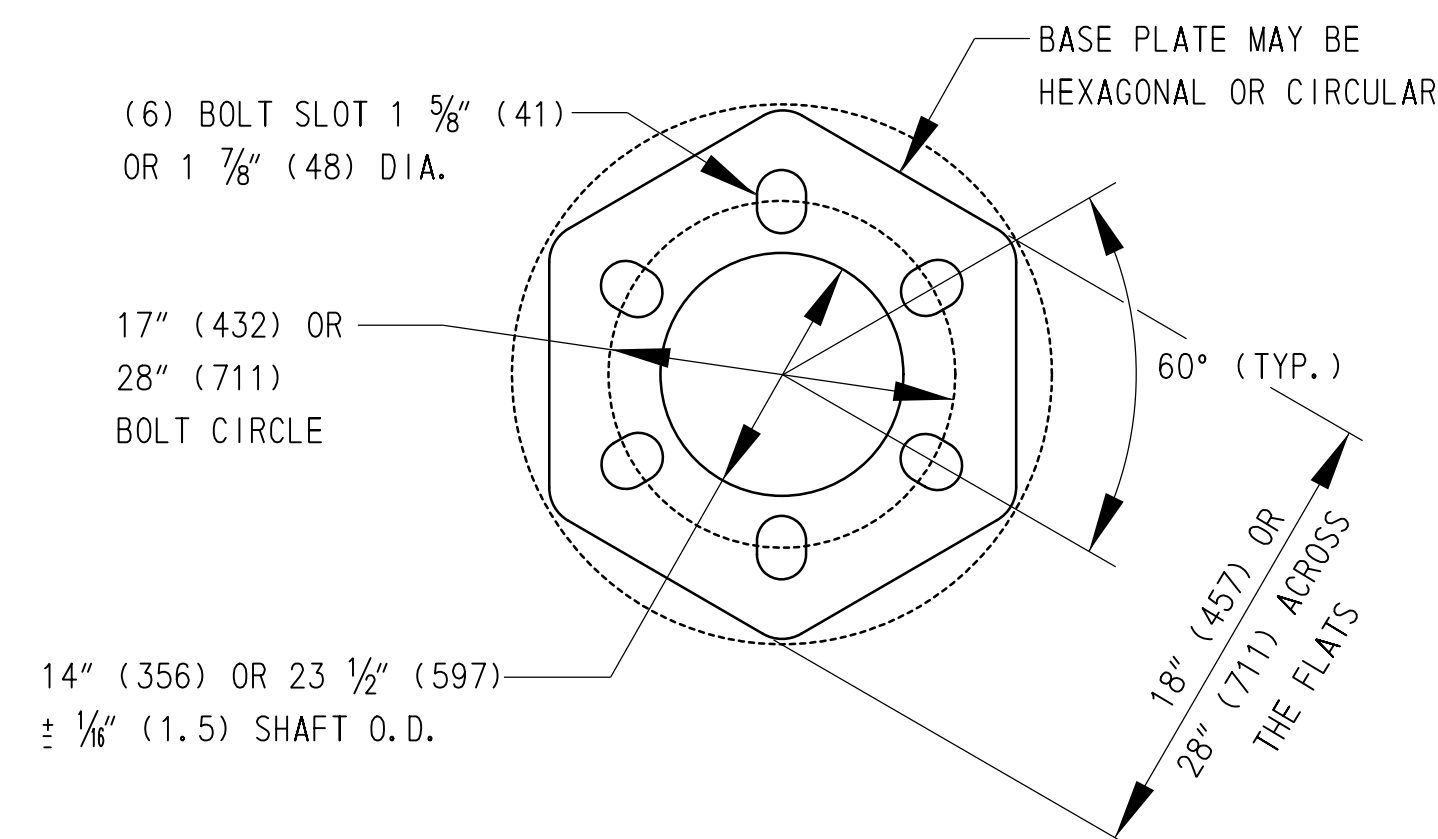


TOP VIEW ORIENTATION

ALL ANGLES MEASURED CLOCKWISE FROM HANDHOLE AS VIEWED FROM POLE TOP

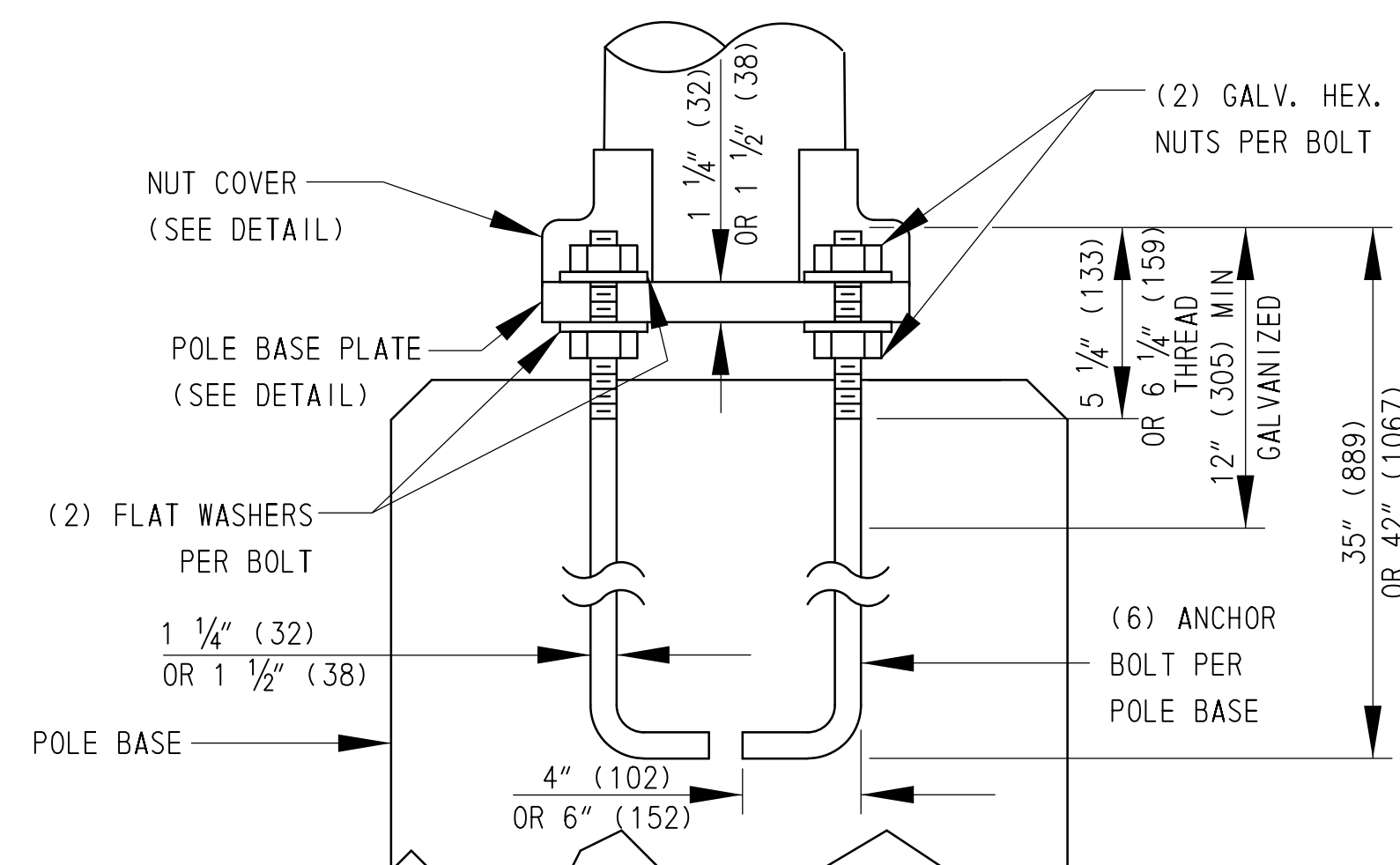


TELESCOPIC JOINT DETAIL



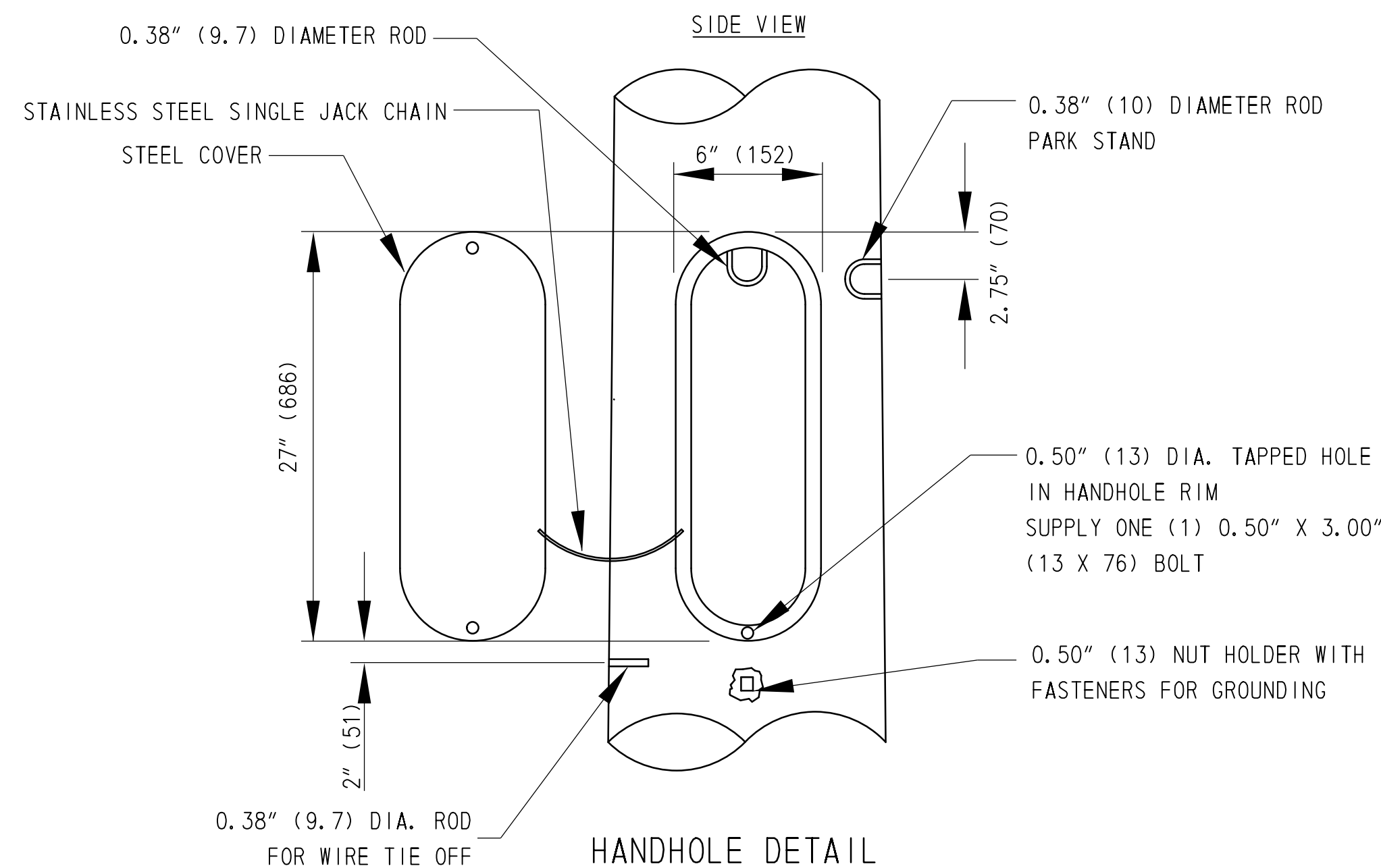
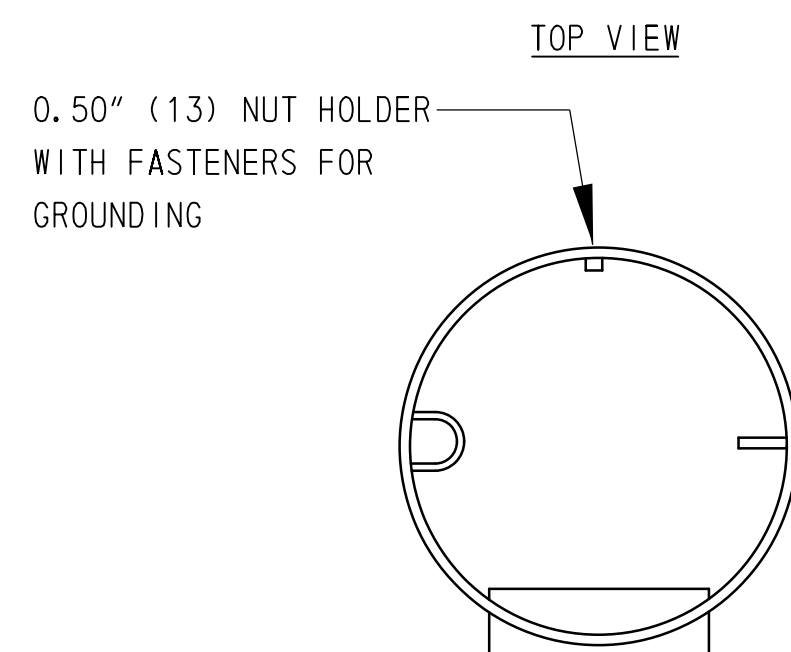
POLE BASE PLATE DETAIL

(50': 18" x 1 1/4" (457 x 32) BASE PLATE W/ 14" (356) O.D. SHAFT,
75': 28" x 1 1/2" (711 x 38) BASE PLATE W/ 23.5" (597) O.D. SHAFT)

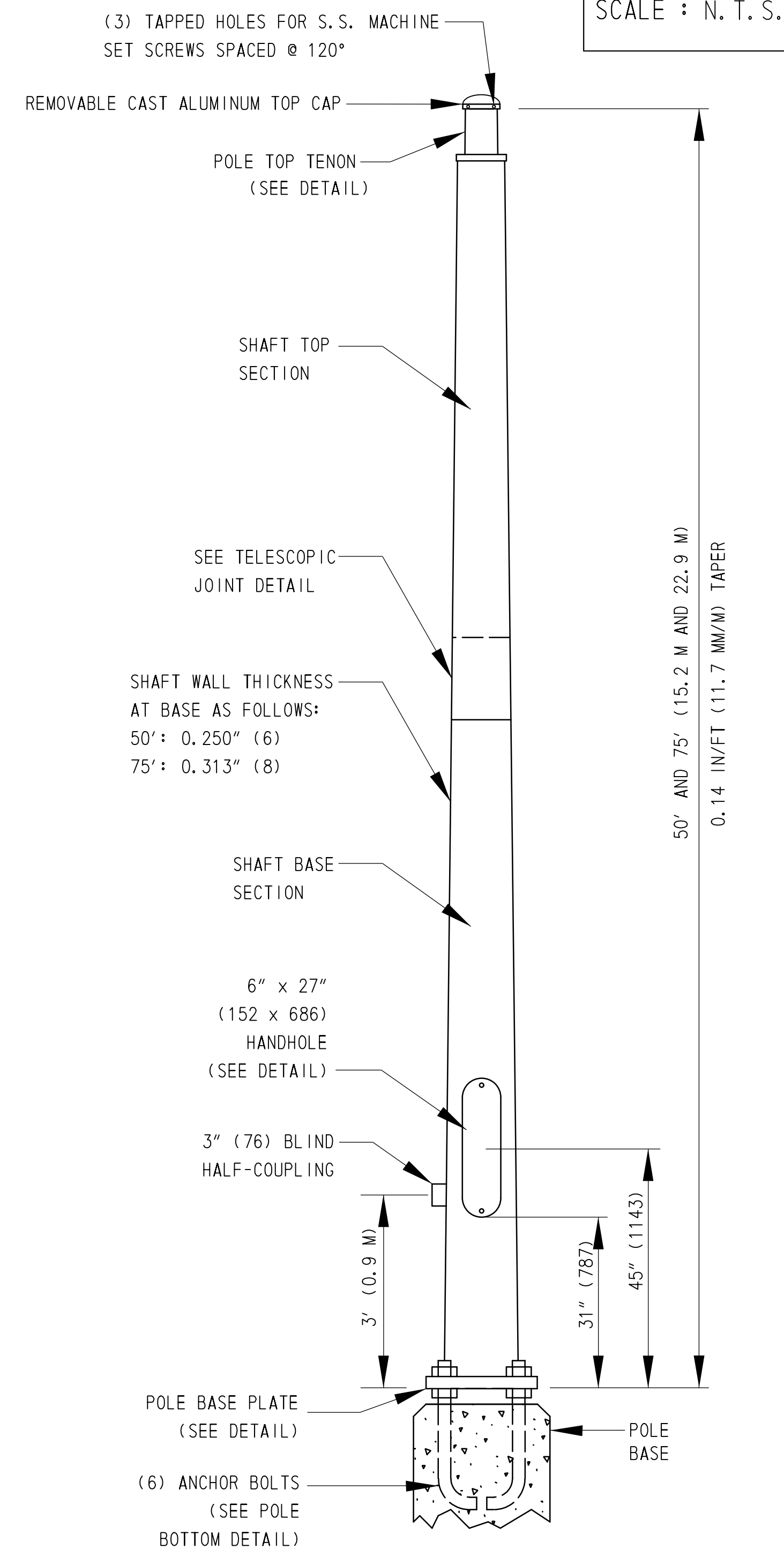


POLE BOTTOM DETAIL

(50': 1 1/4" DIA. x 35" x 4" (32 DIA. x 889 x 102) BOLTS,
75': 1 1/2" DIA. x 42" x 6" (38 DIA. x 1067 x 152) BOLTS)



HANDHOLE DETAIL



CAMERA POLE
TWO SHAFT SECTIONS SHOWN

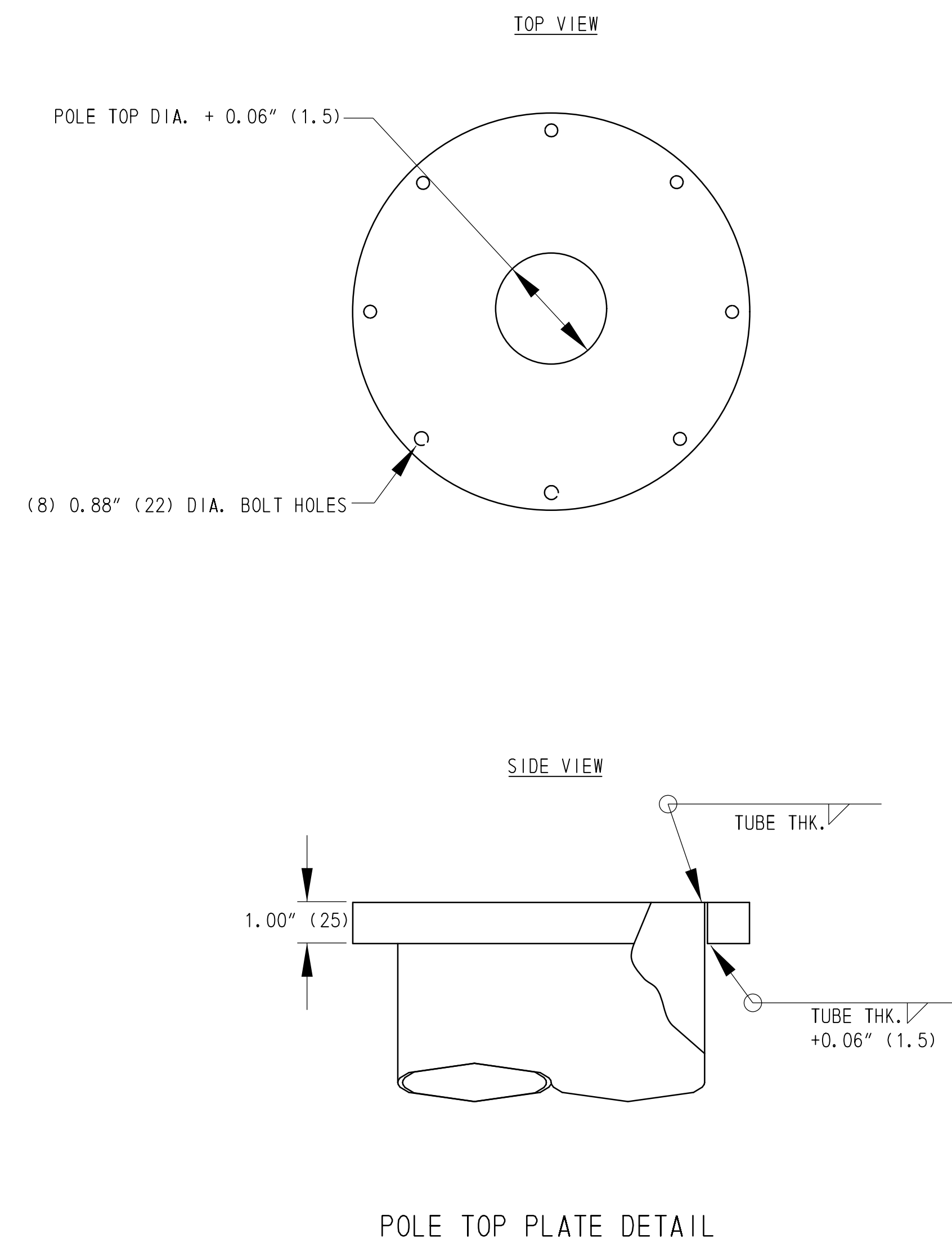
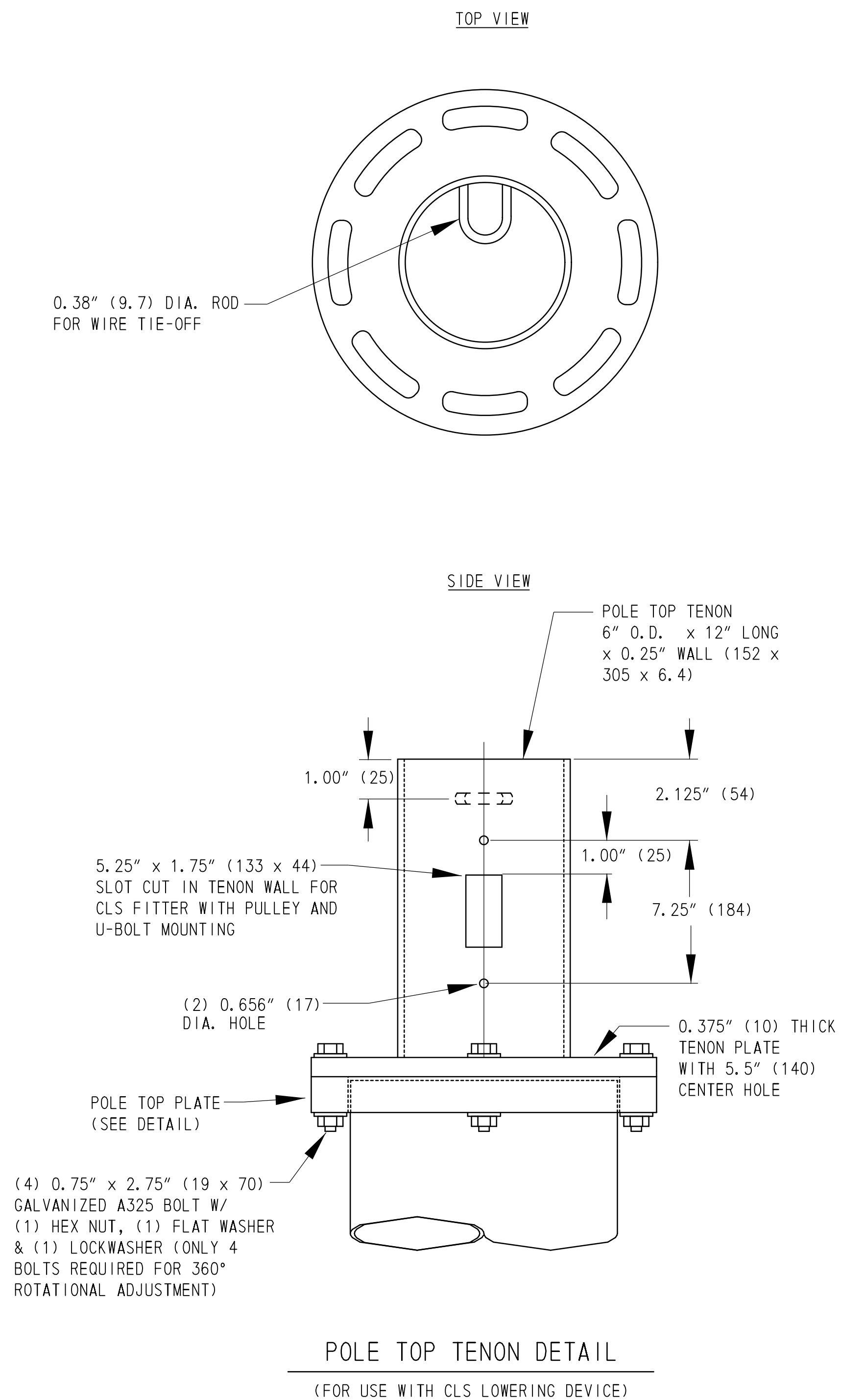
PLAN SYMBOL



DELAWARE
DEPARTMENT OF TRANSPORTATION

50' AND 75' CCTV CAMERA POLE
CONTRACT DETAIL SHEET 9 OF 10

STEEL POLES
CONTRACT NO. DOT1712-STEELPOLES



PLAN SYMBOL



DELAWARE
DEPARTMENT OF TRANSPORTATION

50' AND 75' CCTV CAMERA POLE
CONTRACT DETAIL SHEET 10 OF 10

STEEL POLES
CONTRACT NO. DOT1712-STEELPOLES