MODIFICATION FOR RE-BID #1

Governor's Office of Storm Recovery
Oceanside Fire District Headquarters
Storm Hardening Rebid
CR38 General Construction
Project Number 3341409999

The attention of all Bidders is called to the following Modifications. These Modifications are hereby included in and made a part of the Contract Documents, whether or not attached thereto.

All requirements of the original Project Specifications and Drawings, including previously issued Addenda (No.1-2), shall remain in force except as amended by these Modifications.

1. ALL BIDS PREVIOUSLY RECEIVED FOR THIS CONTRACT HAVE BEEN REJECTED.

2. Bids shall be received on November 19, 2020, at the time and location indicated in the Notice to Bidders.

3. Replace the Notice to Bidders bound in the Project Manual and dated August 12, 2020, with the attached Notice to Bidders, dated October 30, 2020.

4. Replace the Information for Bidders bound in the Project Manual, with the attached Information for Bidders.

5. A blank **Form of Bid** is attached for the convenience of the bidders.

6. A blank **Form of Bid – Alternate** is attached for the convenience of the bidders.

7. A blank **Form of Bid Bond** is attached for the convenience of the bidders.

8. Replace the General Decision Number: NY20200012 07/17/2020 with the attached General Decision Number: NY20200012 08/28/2020.

Attachments:

1. Notice to Bidders, dated October 30, 2020
2. Information for Bidders
3. Form of Bid
4. Form of Bid – Alternate
5. Form of Bid Bond
6. Addendum # 1 dated September 22, 2020
7. Addendum # 2 dated October 5, 2020
8. General Decision Number: NY20200012 08/28/2020

NOTICE TO BIDDERS
DORMITORY AUTHORITY OF THE STATE OF NEW YORK ("DASNY")
Governor's Office of Storm Recovery
Oceanside Fire District Headquarters
Storm Hardening Rebid
CR38 General Construction
Project Number 3341409999

Sealed bids for the above Work located at **Oceanside Fire District Headquarters, 65 Foxhurst Road, Oceanside, New York 11572** will be received by DASNY at its office located at 515 Broadway, Albany, NY 12207. Each bid must be identified, on the outside of the envelope, with the name and address of the bidder and designated a bid for the Project titled above. When a sealed bid is placed inside another delivery jacket, the bid delivery jacket must be clearly marked on the outside **"BID ENCLOSED"** and **"ATTENTION: CONSTRUCTION CONTRACTS – DOMINICK DONADIO."** DASNY will not be responsible for receipt of bids which do not comply with these instructions.

All individuals who plan to attend pre-bid meetings or bid openings in person will be required to complete and present a DASNY Covid-19 Daily Worksite Screening Questionnaire, present government-issued picture identification to building security officials and obtain a visitors pass prior to attending the bid opening. The questionnaire and all instructions are located after Section 19.0 of the Information for Bidders.

Individuals and entities submitting bids in person or by private delivery services should allow sufficient time for processing through building security to assure that bids are received prior to the deadline for submitting bids.

All bid openings will be made available for viewing live via Zoom at www.zoom.us. To enter the meeting, select "Join a Meeting" then enter Meeting Id 353 471 6521, Password 351895. Individuals are strongly encouraged to utilize this public viewing option as an alternative to in person attendance at bid openings.

Only those bids in the hands of DASNY, available to be read at **2:00 PM** local time on **November 19, 2020** will be considered. Bids shall be publicly opened and read aloud. Bid results can be viewed at DASNY's website; http://www.dasny.org.

In accordance with State Finance Law § 139-j and § 139-k, this solicitation includes and imposes certain restrictions on communications between DASNY personnel and a prospective bidder during the procurement process. Designated staff for this solicitation is: **Mallik Dokku, Project Manager, 65-30 Kissena Boulevard, Flushing, New York 11367, 917-589-4125, mdokku@dasny.org** (the Owner's Representative) **and DASNY at ccontracts@dasny.org**. Contacts made to other DASNY personnel regarding this procurement may disqualify the prospective bidder and affect future procurements with governmental entities in the State of New York. For more information pursuant to this law, refer to DASNY's website; http://www.dasny.org or the OGS website; http://www.ogs.state.ny.us.

Prospective bidders are advised that the Contract Documents for this Project contain new "GENERAL CONDITIONS for CONSTRUCTION" dated July 28, 2020 that contain significant revisions from those documents previously contained in DASNY's Contract Documents. Prospective bidders are further advised to review applicable sections of these General Conditions for any potential impact on their bid price prior to submittal of the bid.

A complete set of Contract Documents may be viewed and/or purchased online from Camelot Print and Copy Centers. Only those Contract Documents obtained in this manner will enable a prospective bidder to be identified as an official plan holder of record. DASNY takes no responsibility for the completeness of Contract Documents obtained from other sources. Contract Documents obtained from other sources may not be accurate or may not contain addenda that may have been issued. In addition, prospective bidders are advised that the Contract Documents for this Project contain new "GENERAL CONDITIONS for CONSTRUCTION" dated July 28, 2020 that contain significant revisions from those documents previously contained in DASNY's Contract Documents. Prospective bidders are further advised to review applicable sections of these General Conditions for any potential impact on their bid price prior to submittal of the bid. The plan holders list and a list of interested subcontractors and material suppliers may be viewed at DASNY's website: http://www.dasny.org. For Bid Opportunities and other DASNY related news, follow us on Twitter @NYS_DASNY and Facebook https://www.facebook.com/pages/DASNY-Dormitor-Authority-of-the-State-of-New-York/307274192739368.

To view the Contract Documents online, click the following link: www.camelotplanroom.com or type it into your web browser. Then click on the Public Jobs link on the left side of the page. If you would like to purchase the Contract Documents and become a registered planholder click the link "Register for an account" and follow the steps to create a free account (if you have not previously set one up). Once you have a Login and Password, log in to the planroom. To order a **DIGITAL DOWNLOAD** of the Contract Documents and be placed on the bidder's list, add the Contract Document(s) to your cart and proceed to the checkout. All major credit cards are accepted online. A purchase of a digital download is **required** to become a registered planholder. Printed sets of the Contract Documents are also available to planholders for an additional cost and may be ordered through the online planroom or by mailing a check. The purchase of the digital downloads and printed sets are non-refundable and non-returnable. Please contact Camelot's Bid Department at (518) 435-9696 or email them at camelotbids@teamcamelot.com for more information.

If you prefer to order a CD of the Contract Documents in place of the digital download, please send your non-refundable check/money order in the amount of $15.00 payable to Camelot Print and Copy Centers to:

Camelot Print & Copy Centers
630 Columbia St. Ext.
Latham, NY 12110
Attn: Bid Department

If you are ordering by mail, please include ALL the following on a transmittal with your check or money order:

Company Name
Address (physical address only)
Contact Person
Phone Number
Email (for communication including addendum notifications)
Company Fax number
FedEx or UPS shipping account number

If you do not have a shipping account, please send an additional non-refundable check for $20 payable to Camelot Print and Copy Centers.

Please include your Federal ID number, telephone and fax numbers on your Bank Check or Postal Money Order. NOTE: Bid due date is subject to change if Contract Documents are not available when requested, therefore, please call to confirm the availability of Contract Documents. If the Contract Documents will

not be picked up by the purchaser, the purchaser will need to provide an account number for shipping of the documents or send an additional non-refundable check for $20 payable to Camelot Print and Copy Centers.

For the convenience of prospective bidders, subcontractors and material suppliers, the Contract Documents will be displayed at the following locations:

Construction Journal
Contact information for hard copy distribution
Robin Martinos
400 SW 7th St.
Stuart, FL 34994
Contact information after documents have been issued
Melissa Lapierre
Phone: 802-658-3797 ext 525
Fax: 802-862-4926
M.LaPierre@constructionjournal.com

ConstructConnect
Attn: Production
30 Technology Parkway S. Suite 500
Norcross, GA 30092
Email: projects@cmdgroup.com
Contact: Vera Bifulco
Ph: (800) 364-2059

Dodge Data & Analytics
3315 Central Avenue
Hot Springs, AR 71901
Contact: William Fleming
william.fleming@construction.com
Ph: (518) 269-7735
No Fax number

Reuben R. McDaniel, III, President & CEO
October 30, 2020

INFORMATION FOR BIDDERS

Section 1.0 - Bid Opening

Individuals and entities submitting bids in person or by private delivery services should allow sufficient time for processing through building security to assure that bids are received prior to the deadline for submitting bids.

All bid openings will be made available for viewing live via Zoom at www.zoom.us. To enter the meeting, select "Join a Meeting" then enter Meeting Id 353 471 6521, Password 351895. Individuals are strongly encouraged to utilize this public viewing option as an alternative to in person attendance at bid openings.

Section 2.0 - Examination of the Contract Documents and Site

A. Prospective bidders shall examine the Contract Documents carefully and, before bidding, shall make a written request to the Owner and Design Professional, for an interpretation or correction of any ambiguity, inconsistency, or error therein which should be discovered by a reasonably prudent bidder. Every request for such interpretation must be received at least ten (10) days prior to the date fixed for the opening of the bid. Such interpretation or correction, as well as additional Contract provisions the Owner shall decide to include, shall be issued in writing by the Owner as an Addendum, which shall be provided to each prospective bidder recorded as having received a copy of the Contract Documents from the Owner and shall be available at the places where the Contract Documents are available for inspection by prospective bidders. Such Addendum shall become a part of the Contract Documents and shall be binding on prospective bidders whether or not the bidder receives or acknowledges the actual notice of such Addendum. Requirements of the Contract Documents shall apply to Addenda.

B. Only interpretations, corrections or additional Contract provisions issued in writing by the Owner as Addenda shall be binding. No officer, agent or employee of the Owner or the Design Professional is authorized to explain or to interpret the Contract Documents by any other method and any such explanation or interpretation, if given, must not be relied upon by the bidder.

C. At the time of the opening of bids, each bidder shall be presumed to have inspected the Site and to have read and to be familiar with the Contract Documents. The failure or omission of any bidder to receive or to examine any Contract Document shall in no way relieve any bidder from any obligation in respect to the bid of such bidder.

Section 3.0 - Qualifications of Bidder

A. The Owner shall investigate the responsibility of any bidder to determine the ability of any bidder to perform the Work. Bidders shall provide the Owner with all information requested to conduct such investigation, including but not limited to references, a list of prior projects, and complete financial data, within five (5) business days of receiving the Pre Award Letter and Checklist from the Owner. The Owner reserves the right to reject any bid if the requested items are not submitted as required or if the bidder fails to demonstrate to the Owner's satisfaction that the bidder is responsible or qualified to carry out the obligations of the Contract or to complete the Work as contemplated.

B. The bidder or its principals shall have a minimum of five (5) years experience in similar work and shall provide to the Owner within five (5) business days of receiving the Pre Award Letter and Checklist, a list of five (5) contracts of similar size, scope, and complexity to this Project completed or substantially completed within the last ten (10) years. Projects with complex technical specification sections may require additional experience in terms of both time as well as number of similarly completed projects.

C. Experience will be viewed from both the perspective of completed projects of comparable size, scope and complexity, as well as the experience and qualifications of the bidder's personnel. The determination of relevant project experience in terms of size, scope and complexity will be at the sole and exclusive discretion of the Owner.

D. In the event the bidder fails to establish to the satisfaction of the Owner, as set forth in (A) thru (C) above, that the bidder is both responsible and meets the qualification requirements of the solicitation, the Owner reserves the right, in its sole discretion, to reject any bid.

Section 4.0 - Executive Order No. 170.1 – Uniform Guidelines for Responsibility Determinations

The criteria contained in Executive Order No. 170.1 dated June 23, 1993 (9 NYCRR § 4.170, Context and Analysis, Historical Note 32) will also be applied in the bid review process. In the event of any conflict between the criteria in Executive Order No. 170.1 and the criteria in the Contract Documents, the stricter criteria shall apply.

Section 5.0 - Executive Order No. 125 – NYS Vendor Responsibility Questionnaire

A. For any contract $10,000 or more, the New York State Vendor Responsibility Questionnaire For-Profit Construction (CCA-2) shall be submitted by the apparent low bidder to the Owner. Executive Order No. 125 dated May 22, 1989 is found at 9 NYCRR §4.125.

B. The bidder shall submit a New York State Vendor Responsibility Questionnaire For-Profit Construction (CCA-2) to the Owner for any subcontractor proposed for the Work upon request of the Owner.

C. The Owner recommends that vendors file the required Vendor Responsibility Questionnaire online via the New York State VendRep System (the "System"). To enroll in and use the System, see the System Instructions at http://www.osc.state.ny.us/vendrep/vendor_index.htm or go directly to the VendRep System online at https://portal.osc.state.ny.us. Vendors must provide their New York State Vendor Identification Number when enrolling. To request assignment of a Vendor ID or for System assistance, contact the Office of the State Comptroller's ("OSC") Help Desk at 866-370-4672 or 518- 408-4672 or by email at ciohelpdesk@osc.state.ny.us. Vendors opting to complete and submit a paper questionnaire can obtain the appropriate questionnaire from the System website www.osc.state.ny.us/vendrep or may contact the Owner (DASNY) or OSC's Help Desk for a copy of the paper form.

Section 6.0 – 2005 Procurement Lobbying Law

A. Pursuant to provisions of the General Conditions, Article 18 – 2005 Procurement Lobbying Law, for any contract $15,000 or more, the 2005 PROCUREMENT LOBBYING LAW – CERTIFICATION form is to be submitted with the bid.

B. All bidders, domestic and foreign, must be in compliance with New York State business registration requirements. Contact the NYS Department of State regarding compliance.

Section 7.0 - Approval of Subcontractors/Subcontract Limits

A. Pursuant to provisions of the General Conditions, Article 6 - Subcontracts, bidders shall within the time specified by the Owner, submit to the Owner the names of the subcontractors which the bidder proposes

to use on the Contract. The Owner reserves the right to reject any bid if the names of proposed subcontractors, or additional subcontractor information, are not submitted as required.

B. The Contractor shall not make Subcontracts totaling a dollar amount which is more than the percentage of the total Contract price indicated below. The Owner may modify these requirements at any time, including after receipt of bids, when determined to be in the best interest of the Owner.

Subcontract limits are as follows:

Contract Trade	%	Contract Trade	%
CR38 General Construction	65%		

Section 8.0 - Opportunity Programs Requirements

A. Pursuant to provisions of the General Conditions, Article 20 – Opportunity Programs and Article 21 – Service-Disabled Veteran Owned Businesses, the Contractor agrees, in addition to any other nondiscrimination provision of the Contract and at no additional cost to the Owner, to fully comply and cooperate with the Owner in the implementation of NYS Executive Law ARTICLE 15-A, PARTICIPATION BY MINORITY GROUP MEMBERS AND WOMEN WITH RESPECT TO STATE CONTRACTS and Article 17-B, SERVICE DISABLED VETERAN OWNED BUSINESSES. These requirements will include: equal employment opportunities for minority group members and women (EEO), plus opportunities for minority and women-owned business enterprises (M/WBE). The Contractor's demonstration of good faith efforts shall also be a part of these requirements.

B. The Owner has adopted a goal oriented approach to ensure employment of EEO & M/WBE at a level commensurate with their capability and availability. The Owner has determined that the goals for EEO & M/WBE participation in the Work of the Contract are follows:

Percent of Total Work Force (EEO):

Minority & Women Workforce Goal (for all trades) **25**%

Percent of Total Contract (M/WBE):

Minority Business Enterprise Goal **15**%

Women's Business Enterprise Goal **15**%

Service Disabled Veteran Owned Businesses **6%**

The goals stated above, for each contract, do not apply to bids of less than $100,000.

C. The apparent low bidder shall submit within the specified time frames, the following:

1. A Statewide Utilization Management Plan ("SUMP") via the NYS Contract System. Hard copies of the plan will no longer be accepted and no award can be made without an approved plan**.** Please login to the NYS Contract System at https://ny.newnycontracts.com to view and complete the SUMP. If you are a new user, click on **Account Lookup"** to identify your account by company name. You can then **"Request New User"** to be set up so that you can access the account. **It is important that the staff member who is responsible for reporting payment information for your firm is also set up as a user in the System.** Email notifications regarding the approval/denial

of the plan will come from the New York State Contract System so please ensure the address is listed in your contacts to avoid messages being deleted as spam.

2. The Statewide Utilization Management Plan ("SUMP") shall be submitted within seventy-two (72) hours after being notified of apparent low bid status. The SUMP shall list all proposed Subcontractors and material suppliers the bidder intends to use to perform the Work of the Contract including an identification of the NYS Empire State Development Corporation ("ESD") certified M/WBE Subcontractors and material suppliers the bidder intends to use to achieve the participation goals established above. The **Scope Verification Form** shall accompany the SUMP for each M/WBE Subcontractor listed on the SUMP. Only NYS ESD certified M/WBEs submitted in the SUMP will qualify for M/WBE credit. The Owner or ESD can assist the bidder in locating NYS certified M/WBEs.

3. The Owner will review the SUMP and issue the bidder a notice of acceptance or deficiency within twenty (20) days of its receipt. A notice of deficiency shall include (i) the name of any M/WBE which is not acceptable for the purpose of complying with the M/WBE participation goals and the reasons why it is not acceptable; (ii) elements of the Work of the Contract, which the Owner has determined can be reasonably structured by the bidder to increase the likelihood of participation in the Contract by M/WBEs; and (iii) other information which the Owner determines to be relevant to the SUMP.

4. The bidder shall respond to the notice of deficiency within seven (7) business days of receipt by submitting to the Owner a written remedy in response to the notice of deficiency. If the written remedy that is submitted is not timely or is found by the Owner to be inadequate, the Owner shall notify the bidder and direct the bidder to submit, within five (5) business days, a Request for Waiver. Failure to file the waiver form in a timely manner may be grounds for disqualification of the bid.

5. The bidder who has written documentation of good faith efforts to obtain commitments from M/WBE subcontractors and material suppliers prior to submitting the SUMP may submit a request for waiver form at the same time it submits the SUMP. If a Request for Waiver is submitted with the SUMP and is not accepted by the Owner, the provisions of clauses (i) and (ii) of paragraph 3 regarding the notice of deficiency and written remedy will apply. In this case, the bidder may submit a second Request for Waiver as directed by the Owner.

6. If the bidder does not submit a SUMP, remedy deficiencies in the SUMP, submit a Request for Waiver, or if the Owner determines that the SUMP does not indicate that the M/WBE participation goals will be met and/or that the bidder has failed to document good faith efforts, the Owner may reject the bidder as being not-responsible.

7. The bidder shall attempt to utilize, in good faith, any M/WBE identified within the SUMP, at least to the extent indicated in the SUMP.

8. The bidder shall submit to the Owner, within thirty (30) days from the acceptance of the SUMP, copies of the executed Subcontract and the accepted schedule of values for each M/WBE Subcontract and the fully executed purchase order agreement to each M/WBE supplier identified on the accepted Utilization Plan. Each executed agreement shall include reference to the Contract.

9. Six Month Workforce Utilization Schedule.

D. Failure to provide the above plans and the aforementioned information may be cause for rejection of the bid. To become more familiar with the Opportunity Program Requirements, a Pre Bid Meeting Outline is available on the Dormitory Authority's website.

Section 9.0 - Preparation of Bids

A. Bids must be submitted on the Form of Bid supplied by the Owner in the bidder's full legal name or the bidder's full legal name plus a registered assumed name. Bids shall be enclosed in a sealed envelope, addressed to the Owner, and marked with the name and address of the bidder, and the name of the Project. All blank spaces for bid prices must be filled in, using both words and figures, words to take precedence over figures. Conditional bids shall not be accepted. Bids shall not contain any recapitulation of the Work to be done. No oral, facsimile transmittal, electronic or telephonic bids or modifications of bids shall be considered. Bids shall contain an original signature of the bidder in the space provided on the Form of Bid.

B. Bids that are illegible or that contain omissions, alterations, additions, or items not called for in the bidding documents may be rejected as not responsive. Any bid which modifies, limits, or restricts all or any part of such bid, other than as expressly provided for in the Contract Documents, may be rejected as not responsive.

C. The Owner may reject any bid not prepared and submitted in accordance with the provisions of the Contract Documents.

D. Any bid may be withdrawn prior to the scheduled time for the opening of bids or authorized postponement thereof and any bid received after such time and date shall not be considered.

E. No bidder may withdraw a bid within sixty (60) days after the actual date of the opening thereof. After sixty (60) days, the Owner, at its sole discretion, may request that the bidder extend the expiration of the bid, as often as deemed necessary, to a date set by the Owner. After sixty (60) days, if the Contract has not been awarded and the Owner elects to not request an extension, the Owner may consider the bid as expired and return the bid security.

F. No action or proceeding concerning in any way any bid for the Contract or the Contract shall be brought against the Owner in any location other than Albany County unless the Owner specifically consents, in writing, to a change of venue.

Section 10.0 - Bid Security

A. In the amount of five percent (5%) of the base bid amount, each bid must be accompanied by a certified check of the bidder made payable to the Dormitory Authority or by a bid bond prepared on the form of bid bond included in the Contract Documents, duly executed by the bidder as principal, and the surety thereon. Bidder failure to provide bid security as prescribed, may result in rejection of the bid. Bid bonds submitted as bid security shall contain an original signature of both the bidder and the surety providing the bid bond in the space provided on the Form of Bid Bond. The surety shall be authorized to do business in the State of New York by the New York State Department of Financial Services, rated at least A- by A. M. Best and Company, or meet such other requirements as are acceptable to the Owner in its sole and exclusive discretion.

B. Any certified checks submitted as bid security shall be returned to all except the three (3) lowest bidders after the opening of bids, and the remaining checks shall be returned to the three (3) lowest bidders after the Owner and the accepted bidder have executed the Agreement, or if no Agreement has been

executed within sixty (60) days after the date of the opening of bids, upon demand of the bidder at any time thereafter so long as such bidder has not been notified of the acceptance of such bid.

C. Bid Bonds of all but the bidder executing the Agreement shall be destroyed by the Owner either 1) after the Owner and the accepted bidder have executed the Agreement, or 2) if no Agreement has been executed, sixty (60) days after the date of the opening of bids.

Section 11.0 – Compliance With Laws

The bidder shall sign and submit with the bid the COMPLIANCE WITH LAWS – CERTIFICATION form included in the Contract Documents.

Section 12.0 - Bid Designation

A. Each bid shall bear on the outside of the envelope the name of the bidder, its address, its telephone number and designated as bid for the following:

Governor's Office of Storm Recovery
Oceanside Fire District Headquarters
Storm Hardening Rebid
CR38 General Construction
Project Number 3341409999

B. Bids submitted via; mail, express service, or messenger service shall indicate on the exterior of the envelope the words **"BID ENCLOSED." Attention: "Construction Contracts – Dominick Donadio."**

Section 13.0 - Award of Contract

A. Award of the Contract shall be made to the bidder submitting the lowest bid, if:

1. In the opinion of the Owner, the bid is responsive to the bid solicitation, and such bidder is qualified to perform the Work involved, is responsible and reliable.

2. The bidder submits required documents as described under Section 17.0 – Forms and Documents.

3. On contracts of One Million Dollars ($1,000,000) or more, the bidder furnishes within Seventy-two (72) hours after low bidder notification, documentation of efforts to encourage the participation of New York State enterprises as suppliers and subcontractors. Also, in a post-award compliance report, furnish documentation of efforts to provide notification to New York State residents of employment opportunities, through the New York State Job Service Division, or provide such notification in a manner consistent with existing collective bargaining contracts or agreements.

B. Alternates, if stated in the Form of Bid, shall be chosen at the sole and exclusive discretion of the Owner when awarding the Contract. Alternates shall be listed in their order of priority, and acceptance shall be made in the same order, except that the Owner, at its sole and exclusive discretion, may by-pass any Maintenance or Warranty Service Alternates. The lowest bid will then be determined by adding, to the bidder's total base bid, all Alternates chosen by the Owner.

C. The Owner reserves the sole and exclusive right to reject any bid or all bids, to waive any informalities or irregularities or omissions in any bid received or to afford any bidder an opportunity to remedy any informality or irregularity.

D. The execution of the Agreement shall not be construed as a guarantee by the Owner that the plant, equipment, and the general scheme of proposed operations of a bidder is either adequate or suitable for the satisfactory performance of the Work or that other data supplied by a bidder is accurate.

Section 14.0 - Required Bonds and Insurance

A. Simultaneously with the delivery of the signed Agreement, the successful bidder shall furnish to the Owner and maintain, at its own cost and expense a Performance Bond in an amount at least equal to one hundred percent (100%) of the Contract amount as security for faithful performance of the Contract and also a Payment Bond in an amount at least equal to one hundred percent (100%) of the Contract amount for the payment of all persons performing labor under the Contract or furnishing materials for the Contract. The Performance Bond and Payment Bond surety must be authorized to do business in New York State by the NYS Department of Financial Services, rated at least A- by A.M. Best and Company or meet such other requirements as are acceptable to the Owner in its sole and exclusive discretion.

B. Attorneys-in-fact who sign said bonds on behalf of a surety must affix to each bond a certified and effectively dated copy of their power of appointment.

C. Bidders should carefully review the Contract Documents for the requirements for insurance and bonds for this Contract including, but not limited to, Articles 6, 14 and 15 of the General Conditions and the sample certificate of insurance provided by the Owner in the bidding documents. The deductible for General Conditions Section 15.06 A is $50,000 for SUNY projects and $250,000 for all other projects.

Section 15.0 - Damages for Failure to Enter into Agreement

The successful bidder, upon failure or refusal to sign and deliver the Agreement and bonds required within fourteen (14) days after such bidder has received the Letter of Intent, shall forfeit to the Owner as damages for such failure or refusal, the bid security, or the sum of the difference between the total bid of the successful bidder and the total bid of the bidder submitting the next lowest bid, whichever sum shall be higher.

Section 16.0 - Substantial Completion and Liquidated Damages

A. All the Work of the Contract Documents shall commence at the time to be specified in the Notice to Proceed and the Contractor shall achieve Substantial Completion no later than **January 27, 2022.**

B. Liquidated Damages may be assessed for each and every calendar day that the Work of the Contract is not complete, after the above stated date for Substantial Completion of the Work, at the rate of **Three Thousand and 00/100 Dollars ($3,000.00).**

C. .

Section 17.0 – Forms and Documents

Each bidder shall complete and submit to the Owner, pursuant to provisions stated in the Information for Bidders, the following forms and documents:

Bidding Requirements: each bidder shall submit the following at time of bid:

- Form of Bid
- 2005 Procurement Lobbying Law - Certification
- Code of Business Ethics - Certification
- Compliance with Laws - Certification
- W-9 Form
- Alternate Form
- Bid Security

Contract Forms for Construction: the successful bidder shall submit the following for execution of the Contract:

- Statewide Utilization Management Plan with if applicable, Request for Waiver documentation - within seventy-two (72) hours after low bidder notification
- Scope Verification Form – within seventy-two (72) hours after low bidder notification
- Workforce Utilization Schedule – prior to commencement of the Work
- Required Insurance Form – within three (3) days after low bidder notification
- New York State Vendor Responsibility Questionnaire For-Profit Construction (CCA-2)
- New York State Vendor Responsibility Questionnaire For-Profit Construction (CCA-2) for each subcontractor named with the bid for the HVAC, plumbing and electric work (if applicable)
- Agreement - within fourteen (14) days after Letter of Intent
- Payment Bond – with Contractor's signed Agreement
- Performance Bond – with Contractor's signed Agreement

Section 18.0 – Project Labor Agreement

The Dormitory Authority of the State of New York("DASNY") and the Building and Construction Trades Council of Greater New York and Vicinity (the "Council") have entered into a Memorandum of Understanding ("MOU") that requires the use of a Project Labor Agreement ("PLA") on applicable covered projects within the City of New York. While this Project is considered an "Excluded Project", under the MOU and therefore the use of a PLA is optional on this Project, the successful prime contractor performing work on this Project shall have the option to voluntarily execute the PLA. This is to provide potential bidders of the Project with notice of this option, consistent with the provisions of the MOU. Execution of the applicable PLA following the Information for Bidders is not a requirement to perform work on this Project.

Section 19.0 – Interim Guidance For Construction Activities During The COVID-19 Public Health Emergency

All contractors at a DASNY project must comply with the "INTERIM GUIDANCE FOR CONSTRUCTION ACTIVITIES DURING THE COVID-19 PUBLIC HEALTH EMERGENCY" issued by the New York State Department of Health and located at: https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/ConstructionMasterGuidance.pdf.

Prior to mobilization, all contractors will be required to provide a Site Specific Safety Plan in accordance with the requirements of the Guidance and furnish such Plan to the DASNY project manager. This shall be part of the overall Site Specific Safety Plan required by Article 14, Section 14.01B of the General Conditions.

FORM OF BID

TO THE DORMITORY AUTHORITY OF THE STATE OF NEW YORK
(Owner)

For_____
(Title of Project)

Pursuant to and in compliance with the Owner's Notice to Bidders dated _____ and the Contract Documents relating hereto, the undersigned hereby offers to Provide all plant, labor, materials, supplies, equipment, Allowances, if applicable and other facilities and things necessary or proper for or incidental to the Work of:

_____
(Contract Type or Trade)

as required by, and in strict accordance with applicable Contract Documents, including written changes thereto, and addenda issued by the Owner and sent to the undersigned or delivered to the bidder or available to the bidder prior to the opening of bids, whether received by the undersigned or not, for the total sum of:

_____
(Written Dollar Amount)

($_____)
(Figure Dollar Amount)

The above Written Dollar Amount is the undersigned's bid and no other number on any page submitted with this page 1 of the FORM OF BID can be the undersigned's bid under any circumstance.

The bid may be withdrawn at any time prior to the scheduled time for the opening of bids or any authorized postponement thereof.

If the Letter of Intent is sent or delivered to the undersigned within sixty (60) days after the date of opening of the bids, or any time thereafter before the bid is withdrawn, the undersigned shall, within fourteen (14) days after the date of such Letter of Intent, execute and deliver the Agreement in the form included in the Contract Documents.

The undersigned hereby designates as the undersigned's office to which the Letter of Intent may be sent or delivered:

Name: _____

Firm's Legal Name: _____

Street Address: _____

PO Box #: _____

City, State, Zip Code: _____

Email Address: _____

FORM OF BID

Non-collusive Bidding Certification

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and, in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief:

1. The prices in the bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;

2. Unless otherwise required by law, the prices which have been quoted in the bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and

3. No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.

Date: _____

Firm's Legal Name: _____

Street Address: _____

City, State, Zip Code: _____

By: _____
(Signature of Officer)

Title: _____

Officer Name: _____
(Print)

Phone Number: _____

Fax Number: _____

E-Mail Address: _____

Taxpayer ID or Social Security Number: _____

Submit Bid to:
DASNY
Attn: CONTRACTS UNIT – BID ENCLOSED
515 Broadway
Albany, New York 12207

FORM OF BID – ALTERNATE
Governor's Office of Storm Recovery
Oceanside Fire District Headquarters
Storm Hardening
CR38 General Construction
Project Number 3341409999

The bidder must fill in (**in ink**), in the appropriate space below, the NET CHANGE to its bid on page 1 of the Form of Bid for the Alternates listed below.

If the work described in an Alternate does not affect the bid of the bidder, the bidder **must insert** the dollar amount of "**zero**" in the place provided for the Alternate price. In the event an Alternate is left blank, then it will be deemed that the bidder intended to insert "zero" and the bidder's price for the affected Alternate will be "zero" dollars. If said Alternate is accepted, the Contractor will be required to perform all work required by that Alternate for zero dollars.

The price of the Alternate shall reflect the difference in the cost of performing the work for said Alternate and no Claims for extra work or additional work, by reason of said Alternate, shall be considered.

The description of the Alternate is located in the Specifications and on the Drawings.

Submit Alternate price indicating the difference in the bid for the following Alternates:

ALTERNATE No. 1
Supply and install antenna

_____Dollars ($_____)

BID BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we:

_____ as Principal,
(Legal Title of the Bidder)

and _____ as Surety,
(Legal Title of the Surety)

are hereby held and firmly bound unto the Dormitory Authority - State of New York in the penal sum of:

_____,
(Amount)

or in the full and just sum of the difference between the total bid of the Principal and the total bid of the bidder submitting the next lowest bid, whichever sum shall be higher, for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this _____ day of _____ 20____.

Whereas the Principal has submitted to the Dormitory Authority - State of New York a certain bid, made a part hereof, to enter into a Contract in writing for the:

_____
(Title of Project)

NOW, THEREFORE the conditions of this obligation is such that::

A. This obligation shall be void:

   1. If said bid shall be rejected or in the alternate.

   2. If said bid shall be accepted and the Principal shall execute and deliver the Agreement in the form attached hereto (properly completed; in accordance with said bid) and shall furnish bonds for the faithful performance of said Contract by the Principal, and for the payment of persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the Contract created by the acceptance of said bid.

   Otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

B. The penal sum of this Bond is in addition to any other Bond furnished by the Contractor and in no way shall be impaired or affected by any other Bond.

C. The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and said Surety's Bond in no way shall be impaired or affected by any extension of time within which the Owner may accept such bid; and said Surety does hereby waive notice of any such extension.

BID BOND

IN WITNESS WHEREOF:

the parties hereto have executed this Bond the day and year first above written.

IN THE PRESENCE OF:

(Principal)	(Surety)
(Signature)	(Signature)
(Title)	(Title)
(Address)	(Address)
(City, State, Zip Code)	(City, State, Zip Code)
(Phone Number & FAX Number)	(Phone Number & FAX Number)
(Email Address)	(Email Address)

BID BOND

ACKNOWLEDGEMENT OF CONTRACTOR EXECUTING BID BOND IF A CORPORATION

STATE OF _____

COUNTY OF _____

On the ___ day of _____ in the year 20___, before me personally came _____, to me known, who, being by me duly sworn, did depose and say that he/she resides at:

_____
(street, city, state, zip code)

that he/she is the _____ of _____, the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name thereto by authority of the Board of Directors of said corporation.

_____
Notary Public

ACKNOWLEDGEMENT OF CONTRACTOR EXECUTING BID BOND IF A PARTNERSHIP, LIMITED LIABILITY COMPANY OR INDIVIDUAL

STATE OF _____

COUNTY OF _____

On the ___ day of _____ in the year 20___, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, personally known or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public

ACKNOWLEDGEMENT OF SURETY

STATE OF _____

COUNTY OF _____

On the ___ day of _____ in the year 20___, before me personally came _____, to me known, who, being by me duly sworn, did depose and say that he/she resides at:

_____
(street, city, state, zip code)

that he/she is the _____ of _____, the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name thereto by authority of the Board of Directors of said corporation.

_____
Notary Public

ADDENDUM No. 1
Date: 9/22/2020

DORMITORY AUTHORITY - STATE OF NEW YORK

OCEANSIDE FIRE DISTRICT

DASNY STORM HARDENING PROJECT
AT 65 FOXHURST STREET

DASNY JDE #: 3341409999 CR38

This **ADDENDUM** is hereby included in and made part of the Contract whether or not attached thereto. All requirements of the original Specifications and Drawings shall remain in force except as noted by this **ADDENDUM No. 1**

THE PURPOSE OF THIS ADDENDUM IS TO CHANGE THE FOLLOWING ITEMS:

Item No. 1 – Detail 3/C-300.00 indicates existing asphalt with a 2'' wearing course and 6'' subbase with notations to only remove & replace the 2'' wearing course throughout and to replace the subbase where damaged.

Response: This detail indicates the resurfacing of existing on-site asphalt parking lot, with stripping of top 2-inches of asphalt ("wearing course"), remaining 2-inches of pavement to receive tack coat as indicated for resurfacing. "Subbase" refers to compacted aggregate layer – typically size No. 3 stone per specs – beneath asphalt pavement.

Item No. 2 - Detail 3/C-400.00 indicates soil boring data stating the existing asphalt thickness in the parking lot is only 4'' thick.

Response: Contractor to refer to soil boring information.

Item No. 3 - Detail 6/C-600.00 indicates a standard NCDPW asphalt paving section showing 1 ½'' wearing course and a 10'' subbase.

Response: Revise note to read "1-1/2" thick asphalt concrete top rut avoidance (item no. 36 DRA)" on detail 6/C-600. Details 6/C-600 and 7/C-600 apply to asphalt restoration within the right-of-way per Nassau County requirements.

Item No. 4 - Please confirm the thickness of the existing wearing course to be milled, the thickness of the new wearing course, the extent of subbase repair scope we should

assume for bidding purposes and confirm the thickness we should assume for the existing subbase, thank you.

Response: See borings completed by others shown Sheet C-400.00 for asphalt thickness.

Item No. 5 – Section 0965663 – 3 Para 2.01Q Rubber Floor Tile Color, please confirm this scope will be based on black, light grey, or dark grey color.

Response: The floor tile is to be black with the integral yellow backup stripes. Locations of backup stripes to be coordinated in field with owner.

Item No. 6 - Please provide missing spec sections for 221223 – Sanitary Waste Interceptor and 260000 – Electrical.

Response: Specification 221223 – Sanitary Waste Interceptor is not required and will be omitted from the Table of Contents, see attached revised. Specification 260000 – Electrical has been included with this addendum, see attached.

Item No. 7 - Please add Spec Section 221323 – Oil Interceptors to the Table of Contents.

Response: Specification 221323 – Sanitary Waste Interceptors was mislabeled and will be amended to read “221323 - Oil Interceptors” has been added to the table of contents. See attached documents.

Item No. 8 - Please revise the Table of Contents to show Spec Section 078400 - Firestopping instead of 078413 – Penetration Firestopping.

Response: The table of contents has been amended and included in this addendum. See attached documents.

Item No. 9 – Who is responsible for furnishing and installing the fire alarm, Per E-103 – Fire Alarm notes. If the electrical contractor shall be responsible for furnishing and installing, please provide Fire Alarm vendor contact information.

Response: Delete Note F3 on Drawing E-103.00 and insert new Note F3 to state “All fire alarm equipment shall be provided and installed by the contractor. Contractor shall submit a complete set of drawings and product specifications for approval. Upon approval from Engineer (H2M), Contractor shall submit complete package, with New York professional engineer’s stamp, to Fire Marshal and/or AHJ as per local requirements. The Contractor shall have a licensed New York State Professional Engineer stamp all drawings and applications, including submittals for approval from H2M. Upon completion of project, all fire alarm work shall be inspected, approved, and permitted per local AHJ requirements. Pay for all fees to obtain permits and approval.

Item No. 10, Clarification to Parapet Wall – Contractor is to provide solid blocking at parapet for proper installation of roof membrane.

Item No. 11, Clarification to Antenna Design – See attached proposed Antenna basis of design, the contractor is responsible for providing signed and sealed design documents to architect/engineer for review/comment during the shop drawing process.

Item No. 12 – Please clarify if the exterior façade of the back up masonry waterproofing is in the whole wall along that side of building or just patches here and there that will sum up 190 sf?

Response: The backup masonry waterproofing is assumed to exist throughout the exterior wall until such time as evidence can be provided otherwise. The limitations of the project impact however, have determined that there will be approximately 190 square feet of the wall that will be impacted. As such, the abatement quantity has been limited to those locations of the wall that will be impacted by the work of this project. It is the responsibility of the Abatement Contractor and the General Contractor to coordinate the exact locations and extent of impacts at this wall that will require abatement.

Item No. 13 – Please clarify if when taking out the PCB caulking, we are only abating the caulking and leaving the door and the window or we have to dispose of window and door as well?

Response: PCB caulking has been identified as to be abated in those locations where the project plans call for the removal of windows/doors. In these locations, the PCB caulking that was identified will be disturbed and thus needs to be abated prior to any work that would otherwise impact this material. It is the Abatement Contractor's and General Contractor's responsibility to determine the most effective or efficient means of window removal, but the PCB caulking must be abated, and no remnant or concealed materials may be left that would be impacted by the removal of the windows thereafter.

END OF ADDENDUM

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ENVIRONMENTAL SURVEY REPORT

EXISTING PROPERTY SURVEY

LIST OF DRAWINGS

Dormitory Authority State of New York
Governor's Office of Storm Recovery
GOSR – Oceanside Critical Facilities – Fire District – Headquarters – 65 Foxhurst Road
DASNY PROJECT NO: 3341409999
H2M Project No.: DASN 1703

E-104 – HEADQUARTERS ELECTRICAL SCHEDULES AND DETAILS

Tower Input Data

The main tower is a 3x guyed tower with an overall height of 70.00 ft above the ground line.
The base of the tower is set at an elevation of 30.00 ft above the ground line.
The face width of the tower is 1.50 ft at the top and 1.50 ft at the base.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

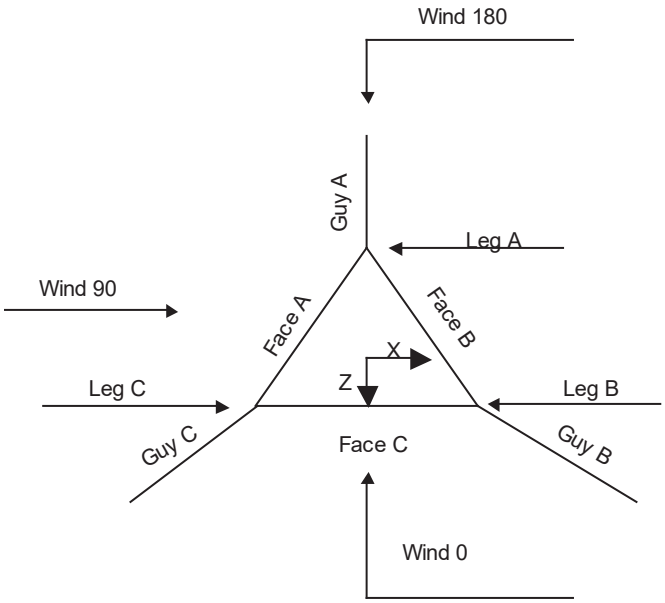
- Tower is located in Nassau County, New York.
- Basic wind speed of 101 mph.
- Structure Class III.
- Exposure Category C.
- Topographic Category 1.
- Crest Height 0.00 ft.
- Pressures are calculated at each section.
- Safety factor used in guy design is 1.
- Stress ratio used in tower member design is 1.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules
	Consider Moments - Horizontals		Assume Legs Pinned	√	Calculate Redundant Bracing Forces
	Consider Moments - Diagonals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Use Moment Magnification	√	Use Clear Spans For Wind Area	√	SR Leg Bolts Resist Compression
√	Use Code Stress Ratios	√	Use Clear Spans For KL/r		All Leg Panels Have Same Allowable
√	Use Code Safety Factors - Guys	√	Retension Guys To Initial Tension		Offset Girt At Foundation
	Escalate Ice	√	Bypass Mast Stability Checks		Consider Feed Line Torque
	Always Use Max Kz	√	Use Azimuth Dish Coefficients	√	Include Angle Block Shear Check
	Use Special Wind Profile	√	Project Wind Area of Appurt.		Use TIA-222-G Bracing Resist. Exemption
√	Include Bolts In Member Capacity	√	Autocalc Torque Arm Areas		Use TIA-222-G Tension Splice Exemption
	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Poles
√	Secondary Horizontal Braces Leg	√	Sort Capacity Reports By Component		Include Shear-Torsion Interaction
	Use Diamond Inner Bracing (4 Sided)		Triangulate Diamond Inner Bracing		Always Use Sub-Critical Flow
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Use Top Mounted Sockets
	SR Members Are Concentric		Ignore KL/ry For 60 Deg. Angle Legs	√	Pole Without Linear Attachments
					Pole With Shroud Or No Appurtenances
					Outside and Inside Corner Radii Are Known

ANSI/TIA-222-G

State	County	Min. Basic Wind Speed V (mph)	Max. Basic Wind Speed V (mph)	Min. Basic Wind Speed with Ice V_i (mph)	Max. Basic Wind Speed with Ice V_i (mph)	Min. Design Ice Thickness t_i (in.)	Max. Design Ice Thickness t_i (in.)	Design Frost Depth (in.)	Min. S_S	Max. S_S	Notes
NY	NASSAU	105	115	50	50	0.75	0.75	50	0.34	0.42	-
NY	NEW YORK	95	110	50	50	0.75	0.75	50	0.42	0.43	-



Corner & Starmount Guyed Tower

Tower Section Geometry

Tower Section	*Tower Elevation*	*Assembly Database*	*Description*	*Section Width*	*Number of Sections*	*Section Length*
	ft			*ft*		*ft*
T1-T2	70.00-30.00			1.50	2	20.00

Tower Section Geometry *(cont'd)*

Tower Section	*Tower Elevation*	*Diagonal Spacing*	*Bracing Type*	*Has K Brace End Panels*	*Has Horizontals*	*Top Girt Offset*	*Bottom Girt Offset*
	ft	*ft*				*in*	*in*
T1-T2	70.00-30.00	1.25	K Brace Left	No	Yes	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1-T2 70.00-30.00	Pipe	P1.25x.14	A500-50 (50 ksi)	Solid Round	1/2	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1-T2 70.00-30.00	Flat Bar	1x1/2	A36 (36 ksi)	Flat Bar	1x1/2	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1-T2 70.00-30.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1-T2 70.00-30.00	No	No	1	0.7 0.7	0.7 0.7	0.7 0.7	0.65 0.65	0.65 0.65	1 1	1 1

[1]*Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.*

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1-T2 70.00-30.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1-T2 70.00-30.00	Flange	0.7500 A325N	1	0.5000 A325N	0	0.5000 A325N	0	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0

Guy Data

Guy Elevation ft	Guy Grade		Guy Size	Initial Tension K	%	Guy Modulus ksi	Guy Weight plf	L_u ft	Anchor Radius ft	Anchor Azimuth Adj. °	Anchor Elevation ft	End Fitting Efficiency %
65	EHS	A	3/8	1.54	10%	21000	0.273	58.65	48.00	0.0000	30.00	100%
		B	3/8	1.54	10%	21000	0.273	59.86	49.50	0.0000	30.00	100%
		C	3/8	1.54	10%	21000	0.273	58.65	48.00	0.0000	30.00	100%

Guy Data*(cont'd)*

Guy Elevation ft	Mount Type	Torque-Arm Spread ft	Torque-Arm Leg Angle °	Torque-Arm Style	Torque-Arm Grade	Torque-Arm Type	Torque-Arm Size
65	Corner						

Guy Data *(cont'd)*

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap.	Pull-Off Grade	Pull-Off Type	Pull-Off Size
65.00	A572-50 (50 ksi)	Solid Round			No	A36 (36 ksi)	Flat Bar	1x1/2

Guy Data *(cont'd)*

Guy Elevation ft	Cable Weight A K	Cable Weight B K	Cable Weight C K	Cable Weight D K	Tower Intercept A ft	Tower Intercept B ft	Tower Intercept C ft	Tower Intercept D ft
65	0.02	0.02	0.02		0.30 1.0 sec/pulse	0.32 1.0 sec/pulse	0.30 1.0 sec/pulse	

Guy Data *(cont'd)*

Guy Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Torque Arm K_x	Torque Arm K_y	Pull Off K_x	Pull Off K_y	Diagonal K_x	Diagonal K_y
65	No	No			0.65	0.65	1	1

Guy Data *(cont'd)*

Guy Elevation ft	Torque-Arm Bolt Size in	Torque-Arm Number	Torque-Arm Net Width Deduct in	Torque-Arm U	Pull Off Bolt Size in	Pull Off Number	Pull Off Net Width Deduct in	Pull Off U	Diagonal Bolt Size in	Diagonal Number	Diagonal Net Width Deduct in	Diagonal U
65	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75

Guy Pressures

Guy Elevation ft	Guy Location	z ft	q_z psf	q_z Ice psf	Ice Thickness in
65	A	47.50	28		
	B	47.50	28		
	C	47.50	28		

Guy-Mast Forces (Excluding Wind) - No Ice

Guy Elevation ft	Guy Location	Chord Angle °	Guy Tension Top Bottom K	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
65	A	36.5963	1.55 1.54	0.00	0.93	-1.24	-0.80	0.00	0.00

Guy Elevation ft	Guy Location	Chord Angle °	Guy Tension Top / Bottom K	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
	B	35.7411	1.55 1.54	1.09	0.91	0.63	0.39	0.00	-0.68
	C	36.5963	1.55 1.54	-1.07	0.93	0.62	0.40	0.00	0.70
			Sum:	**0.01**	2.77	**0.01**	**-0.01**	0.00	**0.01**

Guy-Tensioning Information

Guy Elevation ft		H ft	V ft	Temperature At Time Of Tensioning: 0 F Initial Tension K	0 F Intercept ft	20 F Initial Tension K	20 F Intercept ft	40 F Initial Tension K	40 F Intercept ft	60 F Initial Tension K	60 F Intercept ft	80 F Initial Tension K	80 F Intercept ft	100 F Initial Tension K	100 F Intercept ft	120 F Initial Tension K	120 F Intercept ft
65	A	47.13	35.00	1.957	0.24	1.818	0.26	1.679	0.28	1.540	0.30	1.402	0.33	1.263	0.37	1.126	0.42
	B	48.63	35.00	1.966	0.25	1.824	0.27	1.682	0.29	1.540	0.32	1.399	0.35	1.257	0.39	1.117	0.44
	C	47.13	35.00	1.957	0.24	1.818	0.26	1.679	0.28	1.540	0.30	1.402	0.33	1.263	0.37	1.126	0.42

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
CR 50 1070 (7/8 FOAM)	C	No	Yes	Ar (CaAa)	70.00 - 30.00	2	2	1.1700	1.1700		0.28

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	70.00-50.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	8.775	0.000	0.01
T2	50.00-30.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	8.775	0.000	0.01

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	70.00-50.00	A	1.991	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		C		0.000	0.000	18.728	0.000	0.25
T2	50.00-30.00	A	1.911	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	18.332	0.000	0.24

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	1	CR 50 1070 (7/8 FOAM)	50.00 - 70.00	1.0000	1.0000
T2	1	CR 50 1070 (7/8 FOAM)	30.00 - 50.00	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(2) UHF	A	From Leg	0.00 0.00 0.00	0.0000	70.00	No Ice	3.15	3.15	0.01
UHF	B	From Leg	0.00 0.00 0.00	0.0000	70.00	No Ice	3.15	3.15	0.01
UHF	C	From Leg	0.00 0.00 0.00	0.0000	70.00	No Ice	3.15	3.15	0.01

Tower Pressures - No Ice

$G_H = 1.100$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft^2	Face	A_F ft^2	A_R ft^2	A_{leg} ft^2	Leg %	C_AA_A In Face ft^2	C_AA_A Out Face ft^2
T1 70.00-50.00	60.00	1.137	29	32.767	A	0.227	6.715	5.533	79.71	0.000	0.000
					B	0.227	6.715		79.71	0.000	0.000
					C	0.227	6.715		79.71	8.775	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T2 50.00-30.00	40.00	1.044	27	32.767	A	0.227	6.715	5.533	79.71	0.000	0.000
					B	0.227	6.715		79.71	0.000	0.000
					C	0.227	6.715		79.71	8.775	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.01	0.21	A	0.212	2.557	29	1	1	4.099	0.61	30.73	C
70.00-50.00			B	0.212	2.557		1	1	4.099			
			C	0.212	2.557		1	1	4.099			
T2	0.01	0.21	A	0.212	2.557	27	1	1	4.099	0.56	28.21	C
50.00-30.00			B	0.212	2.557		1	1	4.099			
			C	0.212	2.557		1	1	4.099			
Sum Weight:	0.02	0.43								1.18		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.01	0.21	A	0.212	2.557	29	0.8	1	4.054	0.61	30.54	A
70.00-50.00			B	0.212	2.557		0.8	1	4.054			
			C	0.212	2.557		0.8	1	4.054			
T2	0.01	0.21	A	0.212	2.557	27	0.8	1	4.054	0.56	28.04	A
50.00-30.00			B	0.212	2.557		0.8	1	4.054			
			C	0.212	2.557		0.8	1	4.054			
Sum Weight:	0.02	0.43								1.17		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.01	0.21	A	0.212	2.557	29	0.85	1	4.065	0.57	28.25	B
70.00-50.00			B	0.212	2.557		0.85	1	4.065			
			C	0.212	2.557		0.85	1	4.065			
T2	0.01	0.21	A	0.212	2.557	27	0.85	1	4.065	0.52	25.94	B
50.00-30.00			B	0.212	2.557		0.85	1	4.065			
			C	0.212	2.557		0.85	1	4.065			
Sum Weight:	0.02	0.43								1.08		

Discrete Appurtenance Pressures - No Ice $G_H = 1.100$

Description	Aiming Azimuth °	Weight K	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
UHF	0.0000	0.03	0.00	-0.87	70.00	1.174	30	6.30	6.30
UHF	120.0000	0.01	0.75	0.43	70.00	1.174	30	3.15	3.15
UHF	240.0000	0.01	-0.75	0.43	70.00	1.174	30	3.15	3.15
	Sum Weight:	0.06							

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice+1.0 Guy
3	1.2 Dead+1.6 Wind 30 deg - No Ice+1.0 Guy
4	1.2 Dead+1.6 Wind 60 deg - No Ice+1.0 Guy
5	1.2 Dead+1.6 Wind 90 deg - No Ice+1.0 Guy
6	1.2 Dead+1.6 Wind 120 deg - No Ice+1.0 Guy
7	1.2 Dead+1.6 Wind 150 deg - No Ice+1.0 Guy
8	1.2 Dead+1.6 Wind 180 deg - No Ice+1.0 Guy
9	1.2 Dead+1.6 Wind 210 deg - No Ice+1.0 Guy
10	1.2 Dead+1.6 Wind 240 deg - No Ice+1.0 Guy
11	1.2 Dead+1.6 Wind 270 deg - No Ice+1.0 Guy
12	1.2 Dead+1.6 Wind 300 deg - No Ice+1.0 Guy
13	1.2 Dead+1.6 Wind 330 deg - No Ice+1.0 Guy

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	9	6.91	0.26	0.01
	Max. H_x	12	4.06	0.35	-0.00
	Max. H_z	8	4.84	0.00	0.01
	Min. Vert	3	-4.49	-0.26	-0.01
	Min. H_x	4	-4.36	-0.35	-0.00
	Min. H_z	13	1.29	0.26	-0.01
Leg B	Max. Vert	7	6.98	-0.32	-0.56
	Max. H_x	13	-4.45	0.32	0.56
	Max. H_z	13	-4.45	0.32	0.56
	Min. Vert	13	-4.45	0.32	0.56
	Min. H_x	7	6.98	-0.32	-0.56
	Min. H_z	7	6.98	-0.32	-0.56
Leg A	Max. Vert	2	8.27	-0.29	0.49
	Max. H_x	9	-4.51	0.32	-0.56
	Max. H_z	3	6.92	-0.32	0.56
	Min. Vert	8	-5.91	0.29	-0.49
	Min. H_x	3	6.92	-0.32	0.56
	Min. H_z	9	-4.51	0.32	-0.56
Guy C @ 48 ft	Max. Vert	10	-0.28	-0.31	0.18

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Elev 30 ft Azimuth 240 deg					
	Max. H_x	10	-0.28	-0.31	0.18
	Max. H_z	4	-1.77	-2.11	1.22
	Min. Vert	4	-1.77	-2.11	1.22
	Min. H_x	4	-1.77	-2.11	1.22
	Min. H_z	10	-0.28	-0.31	0.18
Guy B @ 49.5 ft Elev 30 ft Azimuth 120 deg	Max. Vert	6	-0.27	0.31	0.18
	Max. H_x	12	-1.71	2.10	1.21
	Max. H_z	12	-1.71	2.10	1.21
	Min. Vert	12	-1.71	2.10	1.21
	Min. H_x	6	-0.27	0.31	0.18
	Min. H_z	6	-0.27	0.31	0.18
Guy A @ 48 ft Elev 30 ft Azimuth 0 deg	Max. Vert	2	-0.22	-0.00	-0.27
	Max. H_x	11	-1.03	0.06	-1.40
	Max. H_z	2	-0.22	-0.00	-0.27
	Min. Vert	8	-1.88	-0.00	-2.58
	Min. H_x	5	-1.03	-0.06	-1.40
	Min. H_z	8	-1.88	-0.00	-2.58

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	3.28	0.00	0.00	0.02	-0.03	-0.00
1.2 Dead+1.6 Wind 0 deg - No Ice+1.0 Guy	3.70	0.00	-0.98	-9.14	-0.03	0.00
1.2 Dead+1.6 Wind 30 deg - No Ice+1.0 Guy	3.77	0.45	-0.77	-7.35	-4.38	-0.05
1.2 Dead+1.6 Wind 60 deg - No Ice+1.0 Guy	3.82	0.64	-0.37	-3.62	-6.36	-0.11
1.2 Dead+1.6 Wind 90 deg - No Ice+1.0 Guy	3.73	0.65	-0.00	-0.13	-6.49	-0.14
1.2 Dead+1.6 Wind 120 deg - No Ice+1.0 Guy	3.65	0.64	0.37	3.49	-6.05	-0.11
1.2 Dead+1.6 Wind 150 deg - No Ice+1.0 Guy	3.79	0.45	0.78	7.46	-4.27	-0.05
1.2 Dead+1.6 Wind 180 deg - No Ice+1.0 Guy	3.86	0.00	0.98	9.35	-0.07	-0.00
1.2 Dead+1.6 Wind 210 deg - No Ice+1.0 Guy	3.77	-0.44	0.78	7.49	4.16	0.05
1.2 Dead+1.6 Wind 240 deg - No Ice+1.0 Guy	3.63	-0.63	0.37	3.53	5.99	0.11
1.2 Dead+1.6 Wind 270 deg - No Ice+1.0 Guy	3.70	-0.65	-0.00	-0.10	6.42	0.14
1.2 Dead+1.6 Wind 300 deg - No Ice+1.0 Guy	3.78	-0.64	-0.37	-3.61	6.28	0.11
1.2 Dead+1.6 Wind 330 deg - No Ice+1.0 Guy	3.75	-0.45	-0.77	-7.35	4.31	0.05

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.00	-0.56	0.00	-0.00	0.56	-0.00	0.009%
2	0.00	-0.68	-2.74	-0.00	0.68	2.74	0.005%
3	1.29	-0.66	-2.24	-1.29	0.66	2.24	0.003%
4	1.99	-0.65	-1.15	-1.99	0.65	1.15	0.006%
5	2.16	-0.66	-0.00	-2.16	0.66	0.00	0.002%
6	2.00	-0.68	1.15	-2.00	0.68	-1.15	0.001%
7	1.29	-0.66	2.24	-1.29	0.66	-2.24	0.004%
8	-0.00	-0.65	2.73	0.00	0.65	-2.73	0.001%
9	-1.29	-0.66	2.24	1.29	0.66	-2.24	0.003%
10	-2.00	-0.68	1.16	2.00	0.68	-1.16	0.002%
11	-2.16	-0.66	0.00	2.16	0.66	-0.00	0.002%
12	-1.99	-0.65	-1.15	1.99	0.65	1.15	0.005%
13	-1.29	-0.66	-2.24	1.29	0.66	2.24	0.003%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00007381
2	Yes	10	0.00000001	0.00026371
3	Yes	10	0.00000001	0.00019115
4	Yes	8	0.00000001	0.00024691
5	Yes	10	0.00000001	0.00011226
6	Yes	10	0.00000001	0.00009010
7	Yes	10	0.00000001	0.00019734
8	Yes	9	0.00000001	0.00007841
9	Yes	10	0.00000001	0.00019074
10	Yes	10	0.00000001	0.00009714
11	Yes	10	0.00000001	0.00010961
12	Yes	8	0.00000001	0.00023043
13	Yes	10	0.00000001	0.00019491

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection ft	Gov. Load Comb.	Tilt °	Twist °
T1	70 - 50	0.084	8	0.1538	0.2887
T2	50 - 30	0.042	8	0.1307	0.1443

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection ft	Tilt °	Twist °	Radius of Curvature ft

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection ft	Tilt °	Twist °	Radius of Curvature ft
70.00	(2) UHF	8	0.084	0.1538	0.2887	124701
65.00	Guy	8	0.074	0.1496	0.2525	124701

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	70	Leg	A325N	0.7500	1	0.76	29.82	0.025 ✔	1	Bolt Tension
T2	50	Leg	A325N	0.7500	1	5.45	29.82	0.183 ✔	1	Bolt Tension

Guy Design Data

Section No.	Elevation ft	Size	Initial Tension K	Breaking Load K	Actual T_u K	Allowable ϕT_n K	Required S.F.	Actual S.F.
T1	65.00 (A) (117)	3/8 EHS	1.54	15.40	3.20	9.24	1.000	2.889 ✔
	65.00 (B) (116)	3/8 EHS	1.54	15.40	2.98	9.24	1.000	3.099 ✔
	65.00 (C) (112)	3/8 EHS	1.54	15.40	3.02	9.24	1.000	3.062 ✔

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	70 - 50	P1.25x.14	20.00	1.25	55.6 K=2.00	0.6685	-3.03	24.00	0.126 [1] ✔
T2	50 - 30	P1.25x.14	20.00	1.25	55.6 K=2.00	0.6685	-7.79	24.00	0.325 [1] ✔

[1] P_u / ϕP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	70 - 50	1/2	1.95	1.77	119.1 K=0.70	0.1963	-0.77	3.01	0.254 [1] ✔
T2	50 - 30	1/2	1.95	1.77	119.1 K=0.70	0.1963	-0.84	3.01	0.278 [1] ✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	70 - 50	1x1/2	1.50	1.36	73.6 K=0.65	0.5000	-0.31	12.18	0.025 [1] ✔
T2	50 - 30	1x1/2	1.50	1.36	73.6 K=0.65	0.5000	-0.00	12.18	0.000 [1] ✔

[1] P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	70 - 50	P1.25x.14	20.00	1.25	27.8	0.6685	2.52	30.08	0.084 [1] ✔
T2	50 - 30	P1.25x.14	20.00	1.25	27.8	0.6685	5.45	30.08	0.181 [1] ✔

[1] P_u / ϕP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	70 - 50	1/2	1.95	1.77	170.2	0.1963	0.78	6.36	0.123 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T2	50 - 30	1/2	1.95	1.77	170.2	0.1963	0.83	6.36	0.130 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	70 - 50	1x1/2	1.50	1.36	113.2	0.5000	0.31	16.20	0.019 [1]
T2	50 - 30	1x1/2	1.50	1.36	113.2	0.5000	0.03	16.20	0.002 [1]

[1] P_u / ϕP_n controls

Top Guy Pull-Off Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	70 - 50	1x1/2	1.50	1.36	113.2	0.5000	1.40	16.20	0.086 [1]

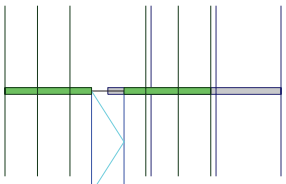
[1] P_u / ϕP_n controls

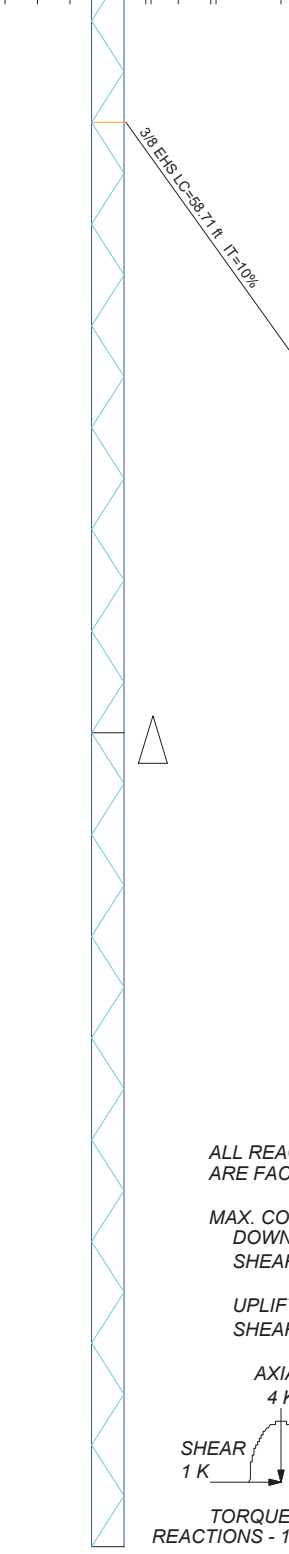
Section Capacity Table

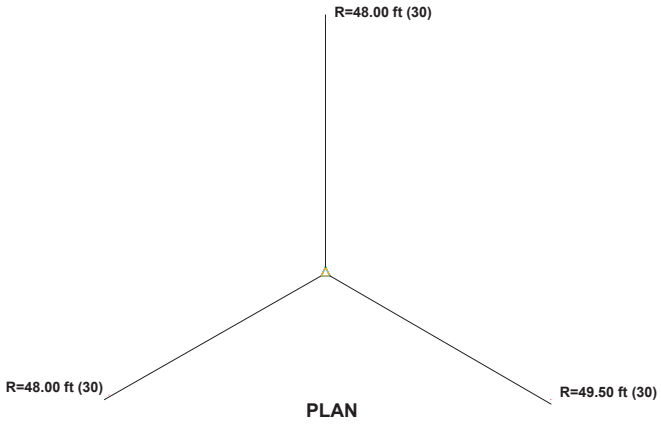
Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	70 - 50	Leg	P1.25x.14	2	-3.03	24.00	12.6	Pass
T2	50 - 30	Leg	P1.25x.14	60	-7.79	24.00	32.5	Pass
T1	70 - 50	Diagonal	1/2	50	-0.77	3.01	25.4	Pass
T2	50 - 30	Diagonal	1/2	65	-0.84	3.01	27.8	Pass
T1	70 - 50	Top Girt	1x1/2	5	-0.31	12.18	2.5	Pass
T2	50 - 30	Top Girt	1x1/2	9	0.03	16.20	0.2	Pass
T2	50 - 30	Bottom Girt	1x1/2	61	0.00	0.00	0.0	Pass
T1	70 - 50	Guy A@65	3/8	117	3.20	9.24	34.6	Pass
T1	70 - 50	Guy B@65	3/8	116	2.98	9.24	32.3	Pass
T1	70 - 50	Guy C@65	3/8	112	3.02	9.24	32.7	Pass
T1	70 - 50	Top Guy Pull-Off@65	1x1/2	114	1.40	16.20	8.6	Pass

Summary

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
						Leg (T2)	32.5	Pass
						Diagonal (T2)	27.8	Pass
						Top Girt (T1)	2.5	Pass
						Bottom Girt (T2)	0.0	Pass
						Guy A (T1)	34.6	Pass
						Guy B (T1)	32.3	Pass
						Guy C (T1)	32.7	Pass
						Top Guy Pull-Off (T1)	8.6	Pass
						Bolt Checks	18.3	Pass
						RATING =	**34.6**	**Pass**







Section	Legs	Leg Grade	Diagonals	Diagonal Grade	Top Girts	Bottom Girts	Top Guy Pull-Offs	Face Width (ft)	# Panels @ (ft)	Weight (K)
T1	P1.25x.14	A500-50	SR 1/2	A36	1x1/2	1x1/2	1x1/2	1.5	32 @ 1.25	0.2
T2						1x1/2	N.A.			0.2
						N.A.				0.4

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) UHF	70	UHF	70
UHF	70		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A500-50	50 ksi	62 ksi	A36	36 ksi	58 ksi

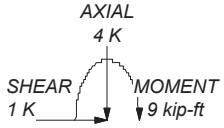
TOWER DESIGN NOTES

1. Tower is located in Nassau County, New York.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 101 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower Structure Class III.
5. Topographic Category 1 with Crest Height of 0.00 ft
6. TOWER RATING: 34.6%

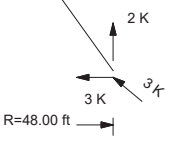
ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 8 K
SHEAR: 1 K

UPLIFT: -6 K
SHEAR: 1 K



TORQUE 0 kip-ft
REACTIONS - 101 mph WIND



ALL REACTIONS ARE FACTORED

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FAX: 315.524.4249

Job: **119-21005**			
Project: ***40 ft GT on 30 ft Tall Building - Oceanside Fire Distric***			
Client: H2M Architect + Engineer	Drawn by: FAN	App'd:	
Code: TIA-222-G	Date: 07/23/19	Scale: NTS	
Path:		Dwg No. E-1	

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Oil interceptors.
   2. Solids interceptors.

1.02 ACTION SUBMITTALS

A. Product Data: For each type of interceptor.

B. Shop Drawings: For each type and size of precast concrete interceptor indicated.

   1. Include materials of construction, dimensions, rated capacities, retention capacities, location and size of each pipe connection, furnished specialties, and accessories.

1.03 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Interceptors, drawn to scale, and coordinated with each other, using input from installers of the items involved:

   1. Piping connections. Include size, location, and elevation of each.
   2. Interface with underground structures and utility services.

PART 2 - PRODUCTS

2.01 OIL INTERCEPTORS

A. Cast-Iron or Steel Oil Interceptors: Factory-fabricated; with removable sediment bucket or strainer, baffles, vents, and flow-control fitting on inlet.

   1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

      a. MIFAB, Inc.
      b. WATTS.
      c. Zurn Industries, LLC.

   2. Inlet, Outlet, Vent, and Waste-Oil Outlet Piping Connections: Hub, hubless, or threaded, unless otherwise indicated.
   3. Extension: Cast-iron or steel shroud, full size of interceptor, extending from top of interceptor to grade.
   4. Cover: Cast iron or steel, with steel reinforcement to provide ASTM C 890, [**A-03, walkway**] <**Insert loading type**> load.

5. Comply with requirements in Section 231113 "Facility Fuel-Oil Piping" for waste-oil storage tank and piping.

B. Capacities and Characteristics:
1. Shall be as specified on drawings and drawing schedules.
2. Provide oil level monitoring and alarm.

2.02 PRECAST CONCRETE MANHOLE RISERS

A. Precast Concrete Manhole Risers: ASTM C 478, with rubber-gasket joints.

1. Structural Design Loads:

a. Light-Traffic Load: Comply with ASTM C 890, A-8.
b. Medium-Traffic Load: Comply with ASTM C 890, A-12.
c. Heavy-Traffic Load: Comply with ASTM C 890, A-16.
d. Walkway Load: Comply with ASTM C 890, A-03.

2. Length: From top of underground concrete structure to grade.
3. Riser Sections: 3-inch minimum thickness and 36-inch diameter.
4. Top Section: Eccentric cone, unless otherwise indicated. Include top of cone to match grade ring size.
5. Gaskets: ASTM C 443, rubber.
6. Steps: Individual FRP steps, FRP ladder, or ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals.

B. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, diameter matching manhole frame and cover, and height as required to adjust the manhole frame and cover to indicated elevation and slope.

C. Manhole Frames and Covers: Ferrous; 24-inch ID by 7- to 9-inch riser with 4-inch-minimum width flange and 26-inch-diameter cover.

1. Ductile Iron: ASTM A 536, Grade 60-40-18, unless otherwise indicated.
2. Gray Iron: ASTM A 48/A 48M, Class 35, unless otherwise indicated.
3. Include indented top design with lettering cast into cover, using wording equivalent to the following:
a. Oil Interceptors in Sanitary Sewerage System: "OIL INTERCEPTOR AND SANITARY SEWER."

PART 3 - EXECUTION

3.01 EARTHWORK

A. Excavating, trenching, and backfilling are specified in Section 312000 "Earth Moving."

3.02 INSTALLATION

A. Equipment Mounting:

1. Install oil interceptors on cast-in-place concrete equipment base(s).
2. Comply with requirements for equipment bases and foundations specified in Section 033000 "Cast-in-Place Concrete."

B. Install precast concrete interceptors according to ASTM C 891.

C. Set interceptors level and plumb.

D. Install manhole risers from top of underground concrete interceptors to manholes and gratings at finished grade.

E. Set tops of manhole frames and covers flush with finished surface in pavements.

F. Set tops of grating frames and grates flush with finished surface.

G. Set metal interceptors level and plumb.

H. Set tops of metal interceptor covers flush with finished surface in pavements.

I. Install grease interceptors, including trapping, venting, and flow-control fitting, according to authorities having jurisdiction and with clear space for servicing.

1. Above-Floor Installation: Set unit with bottom resting on floor unless otherwise indicated.
2. Flush with Floor Installation: Set unit and extension, if required, with cover flush with finished floor.
3. Recessed Floor Installation: Set unit in receiver housing having bottom or cradle supports, with receiver housing cover flush with finished floor.
4. Install cleanout immediately downstream from interceptors not having integral cleanout on outlet.

J. Install grease removal devices on floor. Install trap, vent, and flow-control fitting according to authorities having jurisdiction.

1. Install control panel adjacent to unit unless otherwise indicated.

K. Install oil interceptors, including trapping, venting, and flow-control fitting, according to authorities having jurisdiction and with clear space for servicing.

L. Install solids interceptors with cleanout immediately downstream from interceptors that do not have integral cleanout on outlet.

1. Install trap on interceptors that do not have integral trap and are connected to sanitary drainage and vent systems.

3.03 CONNECTIONS

A. Piping installation requirements are specified in Section 221316 "Sanitary Waste and Vent Piping." Drawings indicate general arrangement of piping, fittings, and specialties.

B. Make piping connections between interceptors and piping systems.

3.04 IDENTIFICATION

A. Identification materials and installation are specified in Section 312000 "Earth Moving."

1. Arrange for installation of green warning tapes directly over piping and at outside edges of underground interceptors.
2. Use warning tapes or detectable warning tape over ferrous piping.
3. Use detectable warning tape over nonferrous piping and over edges of underground structures.

B. Equipment Nameplates and Signs: Install engraved plastic-laminate equipment nameplate or sign on or near each of the following:
1. Oil interceptors.
2. Oil level sensor and alarm.

END OF SECTION 221323

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Demolition of existing electrical systems.

B. Secondary power wiring and distribution system.

C. Lighting, including lamps.

D. Wiring devices.

1.02 RELATED WORK

A. Field painting, except such painting as is required to maintain shop coat painting and factory finish painting.

B. Flashing and sealing of conduits through outside walls.

C. Cutting and patching for electrical work, except for errors and omissions under this Division.

1.03 QUALITY ASSURANCE

A. It is understood that the rights and benefits given the Owner by the guarantees found in the technical specifications are in addition to and not in derogation of any rights or benefits found in the special and general provisions of the contract.

B. Electrical equipment provided under this Division shall be turned over in operating condition. Instruction on further operation and maintenance shall be included in the operating and maintenance instructions.

1.04 REFERENCES

A. Perform work in accordance with standards listed below. Where these specifica-tions are more stringent, they take precedence. In case of conflict, obtain a decision from the Engineer.
   1. NFPA-70: National Electrical Code
   2. NFPA-101: Life Safety Code
   3. New York State Energy Code
   4. New York State Building Code
   5. Applicable New York State Administrative Code
   6. Applicable Town Ordinances.
   7. Electric utility rules and regulations.
   8. Telephone utility rules and regulations.

1.05 PERMITS AND FEES

A. The Contractor shall obtain and pay for all permits, construction charges, fees, licenses, certificates, inspections and other use charges required in connection with the work.

B. Such permits include, but are not limited to:
   1. Transportation and disposal of debris.
   2. Temporary Electrical Services and Permanent Electrical Service.
   3. Telephone Service.
   4. Electrical Inspectors, Inc., or a pre-approved electrical inspection agency.
   5. Road opening permits.

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT

A. All materials and equipment used in carrying out these specifications shall have UL listing and label. Specifications and drawings indicate name, type, or catalog numbers of materials and equipment to be used as standards. Proposals shall be based on these standards. Contractor may use materials and equipment equivalent to those speci-fied, subject to Engineer's approval.

PART 3 - EXECUTION

3.01 COORDINATION

A. Carefully examine specifications, drawings and project site to be thoroughly familiar with items which require electrical connections and coordination. Electrical drawings are dia-grammatic and shall not be scaled for exact sizes.

B. Notify other Contractors of any deviations or special conditions necessary for the installation of work. Interferences between work of various contractors to be resolved prior to installation. Work installed not in compliance with specifications and drawings and without properly checking and coordinating as specified above shall, if necessary, be removed and properly reinstalled without additional cost to the Owner. Engineer to be mediating authority in all disputes arising on project.

C. Equipment shall be installed in accordance with manufacturer's recommendation. Where conflicts occur between contract documents and these recommendations, a clarification shall be requested of the Engineer for decision before preceding with such work.

D. Insofar as it is possible to determine in advance, advise masonry tradesmen to leave proper chases and openings. Place all outlets, anchors, sleeves, and supports prior to pouring concrete or installation of masonry work. Should the Contractor neglect doing this, any cutting and/or patching required to be done is at this Contractor's expense.

E. FIRE ALARM – For any facilities that utilize an existing fire alarm system, the contractor shall coordinate with the owner and fire alarm monitoring company prior to removing or disabling any devices. It shall be the contractor’s responsibility to provide fire watch as per the latest addition of the Fire Code of New York State. The contractor shall provide fire watch for all areas of a facility while occupied and unoccupied when any device or part of the fire alarm system is de-activated or put into “test mode”.

3.02 CUTTING AND PATCHING

A. Repair or replace routine damage caused by cutting in performance of work under this Division.

B. Correct unnecessary damage caused due to installation of electrical work, brought about through carelessness or lack of coordination.

C. Holes cut through floor slabs to be core drilled with drill designed for this purpose. All openings, sleeves, and holes in slabs to be properly sealed, fire proofed and waterproofed.

D. Repairs to be performed with materials which match existing materials and to be installed in accordance with appropriate sections of these specifications.

3.03 TESTS

A. On completion of work, installation shall be completely operational and entirely free from ground, short circuits, and open circuits. Perform a thorough operational test in presence of the Engineer. Balance all circuits so that feeders to panels are not more than 10% out of balance between phases with all available load energized and operating. Furnish all labor, materials and instruments for above tests.

B. Furnish Engineer with a copy of such tests including identification of each circuit and readings recorded, also the main service ground resistance test as described in Section 260526 of these specifications. Test information to include ampere readings of all panels and major circuit breakers, isolation resistance reading of motors and transformers.

3.04 IDENTIFICATION OF EQUIPMENT

A. Properly identify the following:
   1. Disconnect switches.
   2. Individually mounted circuit breakers.

B. Use permanently attached black phenolic plates with 1/4-inch white engraved lettering on the face of each, attached with two sheet metal screws.

C. Panelboard identification plates shall indicate panel by name.

3.05 INSTALLATION

A. The Contractor shall carefully move and replace existing equipment, appliances and all related items, as required to conduct proposed work.

B. Install and conduct all work per applicable NEC, State and local codes.

END OF SECTION

ADDENDUM No. 2
Date: 10/5/2020

DORMITORY AUTHORITY - STATE OF NEW YORK

OCEANSIDE FIRE DISTRICT

DASNY STORM HARDENING PROJECT
AT 65 FOXHURST STREET

DASNY JDE #: 3341409999 CR38

This **ADDENDUM** is hereby included in and made part of the Contract whether or not attached thereto. All requirements of the original Specifications and Drawings shall remain in force except as noted by this **ADDENDUM No. 2**

THE PURPOSE OF THIS ADDENDUM IS TO CHANGE THE FOLLOWING ITEMS:

Item No. 1, Clarification to MWBE Requirements –

The MWBE Directory of NYS Certified Firms can be found here:
https://ny.newnycontracts.com/

Here is the Directory of NYS Certified SDVOB firms:
https://online.ogs.ny.gov/SDVOB/search

Item No. 2, Clarification to Contract Documents – DASNY's liquidated damages for this project are set forth in the Information for Bidders.

Item No. 3, Clarification to Project Duration –The actual physical completion date for the construction work is January 30, 2022.

Item No. 4, Clarification to Contract Requirements – Sub-contract limit remains the same at 65%.

Item No. 5, Clarification to Contract Requirements – Contractor will not be allowed to use the Owners Facilities. Contractor shall provide their own sanitary facilities.

Item No. 6, Clarification to Security Requirement – 24/7 security guard is not needed but it is the responsibility of the contractor to safeguard the work area, installations, and their materials.

Item No. 7, Clarification to Contract Requirements – A small construction trailer will be allowed at the work area. Contractor is to coordinate the location with the Owners representative.

Item No. 8, Clarification to Budget – DASNY's estimate range is $2.00 to $2.50 million dollars.

Item No. 9, Clarification to Fire Alarm– The Owner, "Oceanside Fire District" has certified staff maintain the existing fire alarm system. Refer to Addendum #1 for additional information.

Item No. 10, Clarification to Antenna Design – Owner, "Oceanside Fire District" will provide all equipment to be mounted on the proposed radio tower. The Contractor shall coordinate the required equipment with the Owner prior to design. Contractor will be required to mount District provided equipment to proposed tower.

Item No. 11, Clarification to Contract Documents – No exterior building signage is required for this project. Civil Signage will still be required as per contract documents.

Item No. 12, Clarification to Contract Documents – Sheet S100 scale is to be 1/8" not ¼"=1'-0" as indicated.

Item No. 13, Clarification to BMS – There is currently no BMS system in the existing building.

Item No. 14, Clarification to Soil Excavation – The contractor is to assume all soil is to be replaced as per S-100 notes 2 and 3.

END OF ADDENDUM

"General Decision Number: NY20200012 08/28/2020

Superseded General Decision Number: NY20190012

State: New York

Construction Types: Building, Heavy, Highway and Residential

Counties: Nassau and Suffolk Counties in New York.

BUILDING CONSTRUCTION PROJECTS, RESIDENTIAL CONSTRUCTION PROJECTS (including single family homes and apartments up to and including 4 stories), HEAVY CONSTRUCTION PROJECTS, HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate,if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	05/01/2020
2	06/12/2020
3	07/03/2020
4	07/17/2020
5	08/28/2020

ASBE0012-001 12/30/2019

	Rates	Fringes
Asbestos Workers/Insulator Includes application of all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems	$ 69.01	34.16
HAZARDOUS MATERIAL HANDLER	$ 39.00	12.75

BOIL0005-001 01/01/2017

	Rates	Fringes
BOILERMAKER	$ 55.23	33%+24.12+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Thanksgiving Day, Memorial Day, Independence Day, Labor Day and Good Friday, Friday after Thanksgiving, Christmas Eve Day and New Year's Eve

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* BRNY0001-001 07/01/2020

	Rates	Fringes
BRICKLAYER	$ 62.54	29.40
MASON - STONE	$ 67.88	36.91

CARP0290-001 07/01/2019

	Rates	Fringes
Carpenters:		
Building		
Nassau County (Portion of county that lies west of Seaford Creek and south of the Southern State Parkway)	$ 52.50	46.28
Nassau County (Remainder of County) and Suffolk County	$ 49.38	32.71
Heavy & Highway	$ 44.51	26.55
Residential	$ 39.23	25.12

CARP0740-001 07/01/2020

	Rates	Fringes
MILLWRIGHT	$ 55.70	53.61

CARP1556-008 07/01/2020

	Rates	Fringes
Carpenters:		
DIVERS TENDERS	$ 50.34	51.79
DIVERS	$ 70.80	51.79
DOCKBUILDERS	$ 55.93	51.79
PILEDRIVERMAN	$ 55.93	51.79

CARP1556-011 07/01/2020

	Rates	Fringes
Carpenters:		
TIMBERMEN	$ 51.05	51.24

CARP2287-003 07/01/2015

	Rates	Fringes
CARPENTER		
Soft Floor Layers	$ 50.50	45.23

ELEC0025-001 04/26/2020

	Rates	Fringes
ELECTRICIAN	$ 54.00	16%+29.00

ELEC0025-002 04/27/2019

	Rates	Fringes
Electricians:		
Maintenance Unit	$ 43.70	12%+18.52
Telephone Unit	$ 37.83	16%+19.16
Wiring for single or multiple family dwellings and apartments up to and including 3 stories	$ 28.65	13%+12.14

ELEC1049-002 03/31/2019

	Rates	Fringes
Line Construction:		
Substation and Switching structures pipe type cable installation and maintenance jobs or projects; Railroad electrical distribution/ transmission systems maintenance (when work is not performed by railroad employees) Overhead and Underground transmission/distribution line work. Fiber optic, telephone cable and equipment;		
Groundman	$ 32.31	21.94
Heavy Equipment Operator	$ 45.93	28.24
Lineman & Cable Splicer	$ 57.41	29.72
Material Man	$ 49.95	29.57

ELEV0001-002 03/17/2018

	Rates	Fringes
ELEVATOR MECHANIC		
Elevator Constructor	$ 64.48	36.21+a+b
Modernization and Repair	$ 50.49	40.399+a+b

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Good Friday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

b. PAID VACATION: An employee who has worked less than 5 years shall recieve vacation pay credit on the basis of 4% of his hourly rate for all hours worked; an employee who has worked 5 to 15 years shall receive vacation pay credit on the basis of 6% of his hourly rate for all hours worked; an employee who has worked 15 or more years shall receive

vacation pay credit on the basis of 8% of his hourly rate for all hours worked.

ENGI0138-001 06/01/2019

BUILDING CONSTRUCTION

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 65.25	36.95+a
GROUP 2	$ 61.89	36.95+a
GROUP 3	$ 45.11	36.95+a
GROUP 4	$ 45.11	36.95+a
GROUP 5	$ 43.11	36.95+a

NOTES:

Hazmat premiums:

Level A	3.50
Level B	2.50
Level C	1.50
Level D	1.00

Oiler on truck cranes with boom length of 100 ft. or more .25

FOOTNOTE:

a. Paid Holidays: New Year's Day, Lincoln's Birthday, Washington's Birthday or President's Day (in lieu of Lincoln's or Washington's Birthday), Good Friday, Memorial Day, Indpendence Day, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day or days celebrated as such. Any holiday that falls on a Saturday will be celebrated on Friday.

POWER EQUIPMENT OPERATOR CASSIFICATIONS

GROUP 1: Asphalt spreader, backhoe crawler capacity over cater- piller 225 and lomatsu 300, Boiler (thermoplastic), Cherry picker, over 50 tons, CMI or maxim spreader, concrete pump (with oiler), crane (crawler truck), crane (on barge), crane (stone setting), crane (structural steel), crane (with clam shell), derrick, dragline, dredge, gradall, grader, hoist (3 drum), loading machine (bucket) cap of 10 yds or over micro-trap, with compressor (negative air machine), milling machine, large pile driver, power winch, Stone setting/structural steel, power winch (truck mounted/stone steel) powerhouse, road paver scoop, carry-all, scraper in tandem shovel, sideboom tractor, sideboom tractor (used in tank work), stone spreader (self propelled tank work), zamboni (ice machine)

GROUP 2: Backhoe, boom truck, bulldozer, cherypicker, conveyor (multi), dinky locomotive, forklift, hoist, 2 drum, loading machine, loading machine (front end) mechanical compactors, (machine drawn), mulch machine (machine-fed), mechanic, power winch, other than stone/structural steel, power winch (truck mounted other than stone steel) pump (hydraulic, with boring machine), roller, (asphalt), scoop (carry-all scraper), tower crane (maintenance man), trenching machine

GROUP 3: Comrpessor (structural steel), Compressor (2 or more in battery), concrete finishing mchine, concrete spreader, conveyor, curb machine (asphalt or concrete), curing machine, fireman, hoist (1 drum), micro-trap, (self contained, negative air machine), pump (4 inches or over), pump (hydraulic), pump (jet), pump (sumbersible), pump (well point), pulvi-mixer, ridge cutter, roller (dirt), striping machine, vac-all, welding and burning, welding machine (pile work), welding machine (structural steel)

GROUP 4: Compressor, compressor (on crane), compressor (pile work), compressor (stone setting), concrete breaker, concrete saw or cutter, forklift (walk behind, power operated), generator-pile work, generator, hydra hammer, mechanical compactors (hand operated), oiler (truck crane), pin puller, portable heaters, powerbroom, power buggies, pump (double action diaphgrgm), pump (gypsum), trench machine (hand), welding machine

GROUP 5: Batching plant (on site of job), generator (small), mixer (with skip), mixer (2 small with or without skip), mixer (2 bag or over, with or without skip), mulch machine, oiler, pump (centrifugal, up to 3 inches), root cutter, stump chipper, tower crane (oiler), tractor (caterpillar or wheel vibrator)

ENGI0138-002 08/01/2019

HEAVY & HIGHWAY

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 68.83	37.35+a
GROUP 2	$ 64.30	37.35+a
GROUP 3	$ 47.08	37.35+a
GROUP 4	$ 47.08	37.35+a
GROUP 5	$ 45.06	37.35+a
GROUP 6	$ 38.40	12.25+a

NOTES:
Hazmat premiums:

Level A	3.50
Level B	2.50
Level C	1.50
Level D	1.00

Truck and Crawler Cranes long boom premiums:

boom lengths (including jib) 100-149 ft	1.00
boom lenghts (including jib) 150-249 ft	1.50
boom lenghts (including jib) 250-349 ft	2.00
boom lengths (including jib) 350 ft	3.00

Cranes using clamshell buckets	.25
Front end loader 10 yds and above	.25
Oiler on truck cranes with boom length of 100 ft. or more	.25

FOOTNOTE:

a. Paid Holidays: New Years Day, Lincoln's Birthday, Washington's Birthday or Presidents Day (in lieu of Lincoln's or Washington's Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's

Day, Thanksgiving Day, Christmas Day or days celebrated as such. Any holiday that falls on Saturday will be celebrated on Friday.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt spreader, backhoe crawler (capacity over caterpiller 225 and komatsu 300), boiler (thermoplastic), boring machine (post hole), cgherry picker (over 50 ton), CMI or maxim spreader, concrete pump, with oiler, crane (crawler truck), crane (on barge), crane (stone setting) crane (structural steel), crane (with clam shell), derrick, dragline, dredge, gradall, grader, hoist (3 drums), loading machine (bucket) capacity of 10 yards or over, micro-trap (with compressor-negative air machine), milling machine (large), piledriver, power winch (stone setting structural steel), power winch (truck mounted/stone steel), power-house, road paver, scoop, carry all (scraper in tandem), shovel, sideboom tractor, sideboom tractor (used in tank work), stone spreader (self-propelled), tank work, tower crane

GROUP 2: Bulldozer, Backhoe, Boom Truck, Boring machine/augur, Cherrypicker, Conveyor (multi), Dinky Locomotive, Forklift, Hoist (2 drum), Loading Machine, Loading Machine (front end), Mechanical Compactor (machine drawn), Mechanic, Mulch Machine (machine- fed), Power Winch (other than stone/structural steel), Power Winch (truck mounted/other than stone steel), Pump Hydraulic (with boring machine), Roller (asphalt), Scoop (carry-all, scraper), Tower Crane (maintenance man), Trenching Machine, Vermeer Cutter, Work Boat

GROUP 3: Curb Machine (asphalt or concrete), Maintenance Engineer (small equipment), Maintenance engineer (well-point) Mechanic (fieldman), Micro-Trap (self contained, negative air machine), Milling Machine (small), Pulvi-mixer, Pump (4 inches or over), Pump Hydraulic, Pump Jet, Pump Submersible, Pump (well point), Roller Dirt, Vac-All, Welding and burning, Compressor (structural steel), Compressor (2 or more battery), Concrete Finishing Machine, Concrete Spreader, Conveyor, Curing Machine, Fireman, Hoist (one drum), Ridge Cutter, Striping Machine, Welding Machine (pile work), Welding Machine (structural Steel).

GROUP 4: Compressor, Compressor on crane, Compressor (pile work), Compressor (stone setting), Concrete Breaker, Concrete Saw or Cutter, Fork Lift (walk behind, power operated), Generator- Pile Work, Generator, Hydra Hammer, Mechanical Compoactors (hand operated), Oiler (truck crane), Pin Puller, Portable Heaters, Powerbroom, Power buggies, Power Grinders, Pump (double action diaphragm), Pump gypsum, Pump (single action 1 to 3 inches), Trench Machine hand, Welding Machine

GROUP 5: Batching Plant (on site of job), Generator (small), Grinder, Mixer (with skip), Mixer (2 small with or without skip), Mixer (2 bag or over, with or without skip), Mulch Machine, Oiler, Pump (centrifugal, up to 3 inches), Root Cutter, Stump Chipper, Tower Crane (oiler), Track Tamper (2 engineers, each), Tractor (caterpillar or wheel), Vibrator, Work boat (deckhand),

GROUP 6: Well drillers

IRON0046-003 07/01/2019

	Rates	Fringes
IRONWORKER		
METALLIC LATHERS AND REINFORCING IRONWORKERS	$ 44.65	46.67

IRON0197-001 07/01/2019

	Rates	Fringes
IRONWORKER		
STONE DERRICKMAN	$ 50.91	54.11

IRON0361-001 07/01/2019

	Rates	Fringes
IRONWORKER (STRUCTURAL)	$ 51.45	78.42

IRON0580-001 07/01/2019

	Rates	Fringes
IRONWORKER, ORNAMENTAL	$ 45.15	55.62

LABO0066-001 07/01/2020

BUILDING

	Rates	Fringes
Laborers:		
Laborers	$ 40.80	30.04
Plasterers Tenders	$ 40.80	30.04

LABO0078-001 12/01/2016

	Rates	Fringes
LABORERS		
BUILDING CONSTRUCTION ASBESTOS (Removal, Abatement, Encapsulation or Decontamination of asbestos); LEAD; & HAZARDOUS WASTE LABORERS (Hazardous Waste, Hazardous Materials, Biochemical and Mold Remediation, HVAC, Duct Cleaning, Re-spray Fireproofing, etc)	$ 36.00	16.20

LABO1298-001 06/01/2018

HEAVY & HIGHWAY

	Rates	Fringes
Laborers:		
Asphalt Rakers; Formsetters	$ 44.68	33.47+a

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     Asphalt Shovelers, Roller
     Boys & Tampers.............$ 43.36          33.47+a
     Regular Laborers...........$ 39.35          33.47+a

A. FOOTNOTES:

  Laborers working in a hazardous material hot zone shall
  receive an additional 20% premium.

  Where the contract provides for night work outside the
  regular hours of work, the employees shall be paid at
  straight time plus a 30% night work premium for the 8 hours
  worked during the night.

  Firewatch work performed after regular hours shall be paid an
  additional 10% premium.  Second and Third Shift work will
  be paid at a 30% premium.

  Contractor requesting laborers certified for hazardous
  material work and/or employed on hazardous material shall
  be required to pay an additional 10% premium.

----------------------------------------------------------------
 PAIN0009-002 05/01/2019

                                  Rates          Fringes

PAINTER
     GLAZIERS...................$ 46.05            43.37
     Painters, Drywall Finishers.$ 45.70            27.67
     Spray, Scaffold,
     Sandblasting...............$ 48.70            27.67
----------------------------------------------------------------
 PAIN0806-010 10/01/2018

                                  Rates          Fringes

Painters:
     Stuctural Steel and Bridge..$ 49.50            41.88
----------------------------------------------------------------
 PAIN1974-002 06/28/2018

                                  Rates          Fringes

Painters:
     DRYWALL TAPERS/POINTERS.....$ 47.82            25.21
----------------------------------------------------------------
 PLAS0262-003 08/01/2019

                                  Rates          Fringes

PLASTERER.....................$ 45.73            30.37
----------------------------------------------------------------
 PLAS0780-001 07/01/2018

                                  Rates          Fringes

CEMENT MASON/CONCRETE FINISHER...$ 51.97            33.56
----------------------------------------------------------------
 PLUM0200-001 11/01/2019

                                  Rates          Fringes

PLUMBER
     BUILDING CONSTRUCTION:......$ 52.48            40.55
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     RESIDENTIAL CONSTRUCTION:...$ 29.96            13.41
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 PLUM0638-001 07/26/2019

                                   Rates          Fringes

PLUMBER
     SERVICE FITTERS.............$ 41.75            14.00
     SPRINKLER FITTERS,
     STEAMFITTERS................$ 57.50            50.39

  Service Fitter work shall consist of all repair, service and
  maintenance work on domestic, commercial and industrial
  refrigeration, air conditioning and air cooling, stoker and
  oil burner apparatus and heating apparatus etc., including
  but not exclusively the charging, evacuation, leak testing
  and assembling for all machines for domestic, commercial
  and industrial refrigeration, air conditioning and heating
  apparatus. Also, work shall include adjusting, including
  capacity adjustments, checking and repairing or replacement
  of all controls and start up of all machines and repairing
  all defects that may develop on any system for domestic,
  commercial and industrial refrigeration and all air
  conditioning, air cooling, stoker and oil burner apparatus
  and heating apparatus regardless of size or type.

----------------------------------------------------------------
 ROOF0154-001 05/01/2019

                                   Rates          Fringes

ROOFER.........................$ 41.00            36.72
----------------------------------------------------------------
 SHEE0028-002 07/31/2014

                                   Rates          Fringes

SHEET METAL WORKER
     BUILDING CONSTRUCTION.......$ 50.91            36.70
     RESIDENTIAL CONSTRUCTION....$ 27.22            16.48
----------------------------------------------------------------
 TEAM0282-002 07/01/2019

                                   Rates          Fringes

TRUCK DRIVER...................$ 38.945       47.5625+a

FOOTNOTES:

  a. PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial
  Day, Independence Day, Labor Day, Columbus Day, Election
  Day, Veterans' Day (Armistice Day), Thanksgiving Day, Day
  after Thanksgiving and Christmas Day.  Employees working
  two (2) days in the calendar week in which a holiday falls
  are to be paid for such holiday, provided that they shape
  each remaining workday during such calendar week.

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WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave
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for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average

calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"