REQUEST FOR PROPOSALS FOR

Uniontown/Brownsville Searights Maintenance Facility Infrastructure Cabling

ISSUING OFFICE

Pennsylvania Turnpike Commission

Information Technology Department

Technology Infrastructure

Communication Systems

RFP NUMBER

11-10350-2984

DATE OF ISSUANCE

March 2, 2011

REQUEST FOR PROPOSALS FOR

Uniontown/Brownsville Searights Maintenance Facility Infrastructure Cabling

TABLE OF CONTENTS

PART I

GENERAL INFORMATION FOR PROPOSERS

I-1. Purpose. This request for proposals (RFP) provides interested Proposers with sufficient information to enable them to prepare and submit proposals for consideration by the Pennsylvania Turnpike Commission (Commission) to satisfy a need for **Uniontown/Brownsville Searights Maintenance Facility Infrastructure Cabling.**

I-2. Issuing Office. This RFP is issued for the Commission by the Information Technology Department, Technology Infrastructure, Communication Systems.

I-3. Scope. This RFP contains instructions governing the proposals to be submitted and the material to be included therein; a description of the service to be provided; requirements which must be met to be eligible for consideration; general evaluation criteria; and other requirements to be met by each proposal.

I-4. Problem Statement. The Commission is building a new Searights Maintenance Facility on the Mon-Fayette Expressway on the Uniontown/Brownsville segment at mile marker 18.0 SB. The Maintenance Facility will require infrastructure cabling for work station network access, radio communications and campus network connectivity. Refer to Part IV for a detailed statement of work.

I-5. Type of Contract. It is proposed that if a contract is entered into as a result of this RFP, it will be a fixed price contract. The Commission may in its sole discretion undertake negotiations with Proposers whose proposals as to price and other factors show them to be qualified, responsible, and capable of performing the work.

I-6. Rejection of Proposals. The Commission reserves the right to reject any and all proposals received as a result of this request, or to negotiate separately with competing Proposers.

I-7. Subcontracting. Any use of subcontractors by a Proposer must be identified in the proposal. During the contract period use of any subcontractors by the selected Proposer, which were not previously identified in the proposal, must be approved in advance in writing by the Commission.

A firm that responds to this solicitation as a prime may not be included as a designated subcontractor to another firm that responds to the same solicitation. **Multiple responses under any of the foregoing situations may cause the rejection of all responses of the firm or firms involved.** This does not preclude a firm from being set forth as a designated subcontractor to more than one prime contractor responding to the project advertisement.

I-8. Incurring Costs. The Commission is not liable for any costs the Proposer incurs in preparation and submission of its proposal, in participating in the RFP process or in anticipation of award of contract.

I-9. Mandatory Pre-proposal Conference. A **mandatory** pre-proposal conference will be held on **Thursday, March 17, 2011, at 11:30 AM, in the Mon/Fayette Expressway Phase II Construction Management Office, located at 408 Liberty Street, California, PA 15419; Phone: (724) 938-8050, extension 124. There will be a walk through at the construction site after the general meeting. All participants must wear hard hats and reflective vests while reviewing the site.** The purpose of this conference is to clarify any points in the RFP, which may not have been clearly understood. Questions should be forwarded prior to the meeting to ensure sufficient analysis can be made before an answer is supplied. Written questions should be submitted by email to RFP-Q@paturnpike.com with **RFP 11-10350-2984** in the Subject Line to be received no later than **March 14, 2011 by 2:00 PM.** In view of the limited facilities available for the conference, it is requested representation be limited to **2** individuals per Proposer. The pre-proposal conference is for information only. Answers furnished during the conference will not be official until verified, in writing, by the Issuing Office. All questions and written answers will be issued as an addendum to and become part of this RFP.

FAILURE TO BE REPRESENTED AND SIGNED IN AT THIS MANDATORY PRE-PROPOSAL CONFERENCE WILL BE CAUSE FOR REJECTION OF PROPOSAL.

I-10. Addenda to the RFP. If it becomes necessary to revise any part of this RFP before the proposal response date, addenda will be posted to the Commission's website under the original RFP document. It is the responsibility of the Proposer to periodically check the website for any new information or addenda to the RFP.

The Commission may revise a published advertisement. If the Commission revises a published advertisement less than ten days before the RFP due date, the due date will be extended to maintain the minimum ten-day advertisement duration if the revision alters the project scope or selection criteria. Firms are responsible to monitor advertisements/addenda to ensure the submitted proposal complies with any changes in the published advertisement.

I-11. Response. To be considered, proposals must be delivered to the Pennsylvania Turnpike Commission's Contracts Administration Department, Attention: Wanda Metzger, on or before **12:00 noon on Friday, April 1, 2011.** The Pennsylvania Turnpike Commission is located at 700 South Eisenhower Boulevard, Middletown, PA 17057 (Street address). Our mailing Address is P. O. Box 67676, Harrisburg, PA 17106.

Please note that use of U.S. Mail delivery does not guarantee delivery to this address by the above-listed time for submission. Proposers mailing proposals should allow sufficient delivery time to ensure timely receipt of their proposals. If the Commission office location to which proposals are to be delivered is closed on the proposal response date, due to inclement weather, natural disaster, or any other cause, the deadline for submission shall be automatically extended until the next Commission business day on which the office is open. Unless the Proposers are otherwise notified by the Commission, the time for submission of proposals shall remain the same.

I-12. Proposals. To be considered, Proposers should submit a complete response to this RFP, using the format provided in PART II. Each proposal should be submitted in **7** hard copies and one **complete and exact** copy of the technical proposal on CD-ROM in Microsoft Office or Microsoft Office-compatible format to the Contract Administration Department. No other distribution of proposals will be made by the Proposer. Each proposal page should be numbered for ease of reference. Proposals must be signed by an official authorized to bind the Proposer to its provisions and include the Proposer's Federal Identification Number. For this RFP, the proposal must remain valid for at least 120 days.

Moreover, the contents of the proposal of the selected Proposer and this RFP will become contractual obligations if a contract is entered into.

Each and every Proposer submitting a proposal specifically waives any right to withdraw or modify it, except as hereinafter provided. Proposals may be withdrawn by written or telefax notice received at the Commission's address for proposal delivery prior to the exact hour and date specified for proposal receipt. However, if the Proposer chooses to attempt to provide such written notice by telefax transmission, the Commission shall not be responsible or liable for errors in telefax transmission. A proposal may also be withdrawn in person by a Proposer or its authorized representative, provided its identity is made known and it signs a receipt for the proposal, but only if the withdrawal is made prior to the exact hour and date set for proposal receipt. A proposal may only be modified by the submission of a new sealed proposal or submission of a sealed modification which complies with the requirements of this RFP.

I-13. Economy of Preparation. Proposals should be prepared simply and economically, providing a straightforward, concise description of the Proposer's ability to meet the requirements of the RFP.

I-14. Discussions for Clarification. Proposers who submit proposals may be required to make an oral or written clarification of their proposals to the Issuing Office to ensure thorough mutual understanding and Proposer responsiveness to the solicitation requirements. The Issuing Office will initiate requests for clarification.

I-15. Best and Final Offers. The Issuing Office reserves the right to conduct discussions with Proposers for the purpose of obtaining "best and final offers." To obtain best and final offers from Proposers, the Issuing Office may do one or more of the following: a) enter into pre-selection negotiations; b) schedule oral presentations; and c) request revised proposals. The Issuing Office will limit any discussions to responsible Proposers whose proposals the Issuing Office has determined to be reasonably susceptible of being selected for award.

I-16. Prime Proposer Responsibilities. The selected Proposer will be required to assume responsibility for all services offered in its proposal whether or not it produces them. Further, the Commission will consider the selected Proposer to be the sole point of contact with regard to contractual matters.

I-17. Proposal Contents. Proposals will be held in confidence and will not be revealed or discussed with competitors, unless disclosure is required to be made (i) under the provisions of any Commonwealth or United States statute or regulation; or (ii) by rule or order of any court of competent jurisdiction. All material submitted with the proposal becomes the property of the Pennsylvania Turnpike Commission and may be returned only at the Commission's option. Proposals submitted to the Commission may be reviewed and evaluated by any person other than competing Proposers at the discretion of the Commission. The Commission has the right to use any or all ideas presented in any proposal. Selection or rejection of the proposal does not affect this right.

In accordance with the Pennsylvania Right-to-Know Law (RTKL), 65 P.S. § 67.707 (Production of Certain Records), Proposers shall identify any and all portions of their Proposal that contains confidential proprietary information or is protected by a trade secret. Proposals shall include a written statement signed by a representative of the company/firm identifying the specific portion(s) of the Proposal that contains the trade secret or confidential proprietary information.

Proposers should note that "trade secrets" and "confidential proprietary information" are exempt from access under Section 708(b)(11) of the RTKL. Section 102 defines both "trade secrets" and "confidential proprietary information" as follows:

Confidential proprietary information: Commercial or financial information received by an agency: (1) which is privileged or confidential; **and** (2) the disclosure of which would cause substantial harm to the competitive position of the person that submitted the information.

Trade secret: Information, including a formula, drawing, pattern, compilation, including a customer list, program, device, method, technique or process that: (1) derives independent economic value, actual or potential, from not being generally known to and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use; **and** (2) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy. The term includes data processing software by an agency under a licensing agreement prohibiting disclosure.

65 P.S. §67.102 (emphasis added).

The Office of Open Records has determined that a third party must establish a trade secret based upon factors established by the appellate courts, which include the following:

the extent to which the information is known outside of his business;
the extent to which the information is known by employees and others in the business;
the extent of measures taken to guard the secrecy of the information;
the value of the information to his business and to competitors;
the amount of effort or money expended in developing the information; and
the ease of difficulty with which the information could be properly acquired or duplicated by others.

See Crum v. Bridgestone/Firestone North Amer. Tire., 907 A.2d 578, 585 (Pa. Super. 2006).

The Office of Open Records also notes that with regard to "confidential proprietary information the standard is equally high and may only be established when the party asserting protection shows that the information at issue is either 'commercial' or 'financial' and is privileged or confidential, and the disclosure ***would*** cause substantial competitive harm." (emphasis in original).

For more information regarding the RTKL, visit the Office of Open Records' website at www.openrecords.state.pa.us.

I-18. Debriefing Conferences. Proposers whose proposals are not selected will be notified of the name of the selected Proposer and given the opportunity to be debriefed, at the Proposer's request. The Issuing Office will schedule the time and location of the debriefing. The Proposer will not be compared with other Proposers, other than the position of its proposal in relation to all other proposals.

I-19. News Releases. News releases pertaining to this project will not be made without prior Commission approval, and then only in coordination with the Issuing Office.

I-20. Commission Participation. Unless specifically noted in this section, Proposers must provide all services to complete the identified work. The contractor will be responsible to provide all the labor, tools, parts, installation supplies, installation equipment, including trucks and vans, test equipment and instrumentation, office supplies and generally any materials that are required to perform the services requested through the term of this contract. The contractor may be required to provide storage space for

equipment like GAI-Tronics hardware skids, cabinets, racks and cable during the term of the contract. The Commission will not provide any physical storage space, office space or any office services to the contractor. The Commission will not supply any parts, equipment, tools or materials for this contract except for fiber drivers if necessary and GAI-Tronics equipment.

I-21. Cost Submittal. The cost submittal shall be placed in a separately sealed envelope within the sealed proposal and kept separate from the technical submittal. **Failure to meet this requirement may result in disqualification of the proposal.**

I-22. Term of Contract. The term of the contract will commence on the Effective Date (as defined below) and will end 90 days from the date the contractor is given access to the site to begin installation of the infrastructure cabling. The Commission shall fix the Effective Date after the contract has been fully executed by the Contractor and by the Commission and all approvals required by Commission contracting procedures have been obtained.

I-23. Proposer's Representations and Authorizations. Each Proposer by submitting its proposal understands, represents, and acknowledges that:

a. All information provided by, and representations made by, the Proposer in the proposal are material and important and will be relied upon by the Issuing Office in awarding the contract(s). Any misstatement, omission or misrepresentation shall be treated as fraudulent concealment from the Issuing Office of the true facts relating to the submission of this proposal. A misrepresentation shall be punishable under 18 Pa. C.S. 4904.

b. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication or agreement with any other Proposer or potential Proposer.

c. Neither the price(s) nor the amount of the proposal, and neither the approximate price(s) nor the approximate amount of this proposal, have been disclosed to any other firm or person who is a Proposer or potential Proposer, and they will not be disclosed on or before the proposal submission deadline specified in the cover letter to this RFP.

d. No attempt has been made or will be made to induce any firm or person to refrain from submitting a proposal on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.

e. The proposal is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.

f. To the best knowledge of the person signing the proposal for the Proposer, the Proposer, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four (4) years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding or proposing on any public contract, except as disclosed by the Proposer in its proposal.

g. To the best of the knowledge of the person signing the proposal for the Proposer and except as otherwise disclosed by the Proposer in its proposal, the Proposer has no outstanding, delinquent obligations to the Commonwealth including, but not limited to, any state tax liability not being contested on appeal or other obligation of the Proposer that is owed to the Commonwealth.

h. The Proposer is not currently under suspension or debarment by the Commonwealth, or any other state, or the federal government, and if the Proposer cannot certify, then it shall submit along with the proposal a written explanation of why such certification cannot be made.

i. The Proposer has not, under separate contract with the Issuing Office, made any recommendations to the Issuing Office concerning the need for the services described in the proposal or the specifications for the services described in the proposal.

j. Each Proposer, by submitting its proposal, authorizes all Commonwealth agencies to release to the Commission information related to liabilities to the Commonwealth including, but not limited to, taxes, unemployment compensation, and workers' compensation liabilities.

I-24. Prevailing Wage Rates. The Provisions of the Pennsylvania Prevailing Wage Act of August 15, 1961, P.L. 987 as amended, together with the rates and regulations promulgated by the Secretary of Labor and Industry, will apply to this project

I-25. Insurance.

A. General. Do not commence work under the contract until all insurance, and insurers, under this section have been obtained and approved by the Commission. Before or at the execution of a Contract, provide the Commission with certificates of insurance evidencing the coverage required. Have all primary and excess liability policies contain the following clause: "Thirty (30) days written notice of any cancellation, non-renewal, limit or coverage reduction is to be sent to the Commission by Certified Mail." The preceding is subject to existing Commonwealth of Pennsylvania statutory cancellation provisions relating to non-payment of premium and misrepresentation by the insured. Maintain the insurance described herein until the work is completed and a Final Certificate of Completion has been issued. All insurance policies must be written by an Insurance Company licensed and authorized to do business in Pennsylvania and acceptable to the Commission. Have all insurance policies and certificates signed by a resident Pennsylvania Agent of the issuing Company. However, in the case of an eligible surplus lines insurer, have all policies and certificates also signed by a party duly authorized to bind, on behalf of the eligible surplus lines insurer, the certified coverage's.

B. Worker's Compensation and Employer's Liability Insurance. Take out, pay for and maintain during the life of the contract, Worker's Compensation Insurance in statutory required limits for the protection of all employees. Provide, pay for and maintain during the life of the contract, Employer's Liability Insurance in limits of not less than $500,000 bodily injury each accident, $500,000 bodily injury by disease, and $500,000 bodily injury by disease each employee.

C. Commercial General Liability Insurance. Includes: Products/Completed Operations; Blanket Contractual Liability - All Written & Oral Contracts; premises and operations liability; explosion, collapse and underground; personal injury; independent contractors; broad form property damage;

severability of interests provisions; personal injury and advertising liability; premises medical payments; host liquor liability; fire damage legal liability - real property; incidental malpractice (including employees); nonowned watercraft; and automatic coverage for newly acquired entities. The minimum required limits for the Commercial General Liability policy will be as follows:

- $2,000,000 Each Occurrence
- $2,000,000 Advertising and Personal Injury Limit
- $2,000,000 General Aggregate per Location/Per Site
- $2,000,000 Products and Completed Operations Aggregate
- $50,000 Fire Damage Legal, Any One Fire
- $5,000 Medical Payments

D. Commercial Automobile Liability Insurance - covering all owned hired, leased and non-owned vehicles with a minimum limit of liability of $1,000,000 per occurrence.

E. Commercial Umbrella/Excess Insurance - with the following minimum limits:

- $5,000,000 Per Occurrence
- $5,000,000 General Aggregate
- $5,000,000 Products/Completed Operations Aggregate

F. The Commercial General Liability and Automobile Liability policies will name the Pennsylvania Turnpike Commission, the Commonwealth of Pennsylvania, Pennsylvania Department of Transportation, Michael Baker, Jr., Inc., the Design Engineer and the Construction Manager, if any, as an Additional Insured.

G. Special Hazards. Requirements concerning Railroad Protective Insurance, Modification of Blasting Insurance Requirements and Insurance for other special hazards will, if required, be included in the Special Provisions.

H. Proof of Insurance. Before commencing work, furnish to the Commission three original certificates of insurance outlining the coverage's detailed above. The certificate will also indicate the Additional Insured status of the Commission and the appropriate cancellation/non-renewal notice wording. The insurance company certificates will be in standard ACORD form and will contain the address and phone number of the insurance company or insurance agent. If appropriate, the Commission reserves the right to request certified copies of the contractor's insurance coverage's.

I. Payment. Incidental to the project.

PART II

INFORMATION REQUIRED FROM PROPOSERS

Proposals must be submitted in the format, including heading descriptions, outlined below. To be considered, the proposal must respond to all requirements in this part of the RFP. Any other information thought to be relevant, but not applicable to the enumerated categories, should be provided as an appendix to the proposal. Each proposal shall consist of two (2) separately sealed submittals. The submittals are as follows: (i) Technical Submittal, in response to Part II-1 through II-6 hereof; (ii) Cost Submittal, in response to Part II-7 hereof.

The Commission reserves the right to request additional information which, in the Commission's opinion, is necessary to assure that the Proposer's competence, number of qualified employees, business organization, and financial resources are adequate to perform according to the RFP.

The Commission may make such investigations as deemed necessary to determine the ability of the Proposer to perform the work, and the Proposer shall furnish to the Issuing Office all such information and data for this purpose as requested by the Commission. The Commission reserves the right to reject any proposal if the evidence submitted by, or investigation of, such Proposer fails to satisfy the Commission that such Proposer is properly qualified to carry out the obligations of the agreement and to complete the work specified.

II-1. Statement of the Problem. State in succinct terms your understanding of the goals, objectives and the services required by this RFP.

II-2. Management Summary. Include a narrative description of the proposed effort and a list of the items to be delivered and services to be provided.

II-3. Work Plan. Describe in narrative form your technical plan for accomplishing the work. Use the task descriptions in Part IV of this RFP as your reference point. Modifications of the task descriptions are permitted; however, reasons for changes should be fully explained. Indicate the number/type of technicians/personnel and person hours allocated to each task. Indicate the equipment you will use to accomplish tasks like lifts, bucket trucks, types of testing gear and whether they are part of your inventory. Include a detailed comprehensive project schedule or similar type display, time related, showing each event anticipated by the Proposer.

II-4. Prior Experience. Include experience in infrastructure cabling for both copper and fiber installation and electrical services as they may apply to this RFP. The Proposer should indicate any experience they may have in the installation of radio communication systems, intercoms and speakers. Experience shown should be work done by individuals who will be assigned to this project as well as that of your company. Projects referred to should be identified and the name of the customer shown, including the name, address, and telephone number of the responsible official of the customer, company, or agency who may be contacted.

II-5. Personnel. Include the number and names where practicable of qualified personnel for all tasks required to complete the project with the following compliance. To be considered for this project the Proposer **must** identify the Project Manager that will be assigned to this project in your response and provide that individual's resume identifying their background, experience and education. All other personnel that the Proposer intends to utilize during the project should be identified in the proposal by

providing a resume of the personnel's background, experience and education. The Proposer must indicate the intended types of work to which the individual would be assigned. The Proposer must be able to assign technicians that have experience in troubleshooting, installing, terminating and testing all types of fiber, copper and coaxial cables. The Proposer must provide proof that assigned personnel are current in training. The Proposer must demonstrate that they have the necessary resources available in personnel, experience and equipment to perform more advanced types of fiber cable installations such as the components and skills required to successfully splice fiber, mechanical or fusion. For work distribution of employees, the Commission would expect a Project Manager **on site** during the initial start of the project, as requested/required during the installation and during the GAI-Tronics communication system initialization/certification process. The Project Manager must be available during the term of the installation and participate in the walk through at the end of the project. The Project Manager will be the point of contact between the Commission's Project Manager and all of the Proposer's personnel. The Project manager will manage all facets of the project ensuring that the installation meets all specifications set forth in this RFP. A senior technician with no less than 2 years field experience in all facets pertaining to this project should be on site with any junior level personnel at all times to participate and oversee all operations throughout the term of the project. The successful Proposer should have at least 1 staff member that has a RCDD certification rating and at least 1 staff member that is a certified CAD operator available to the Commission throughout the term of the project. Identify all subcontractors you intend to use and the services they will perform.

II-6. DBE/MBE/WBE Participation. The Turnpike Commission is committed to the inclusion of disadvantaged, minority, and woman firms in contracting opportunities. Responding firms shall clearly identify DBE/MBE/WBE firms, expected to participate in this contract, in their Proposal. Proposed DBE/MBE/WBE firms must be certified by the Pennsylvania Department of General Services (www.dgs.state.pa.us) or the Pennsylvania Unified Certification Program (www.paucp.com) at the time of the submission of the proposal. While D/M/WBE participation is not a requirement for this RFP, inclusion of D/M/WBEs will be a factor in the evaluation determination. **If further information is desired concerning DBE/MBE/WBE participation**, direct inquiries to the Pennsylvania Turnpike Commission's Contract Administration Department by calling (717) 939-9551 Ext. 4241.

II-7. Cost Submittal. The information requested in this section shall constitute your cost submittal. **The Cost Submittal shall be placed in a separate sealed envelope within the sealed proposal, separate from the technical submittal.**
Proposers should **not** include any assumptions in their cost submittals. If the proposer includes assumptions in its cost submittal, the Issuing Office may reject the proposal.
The total cost you are proposing must be broken down but not limited to the following components:

a. Direct Labor Costs. Itemize to show the following for each category of personnel with a different rate per hour:

1. Personnel category: e.g., Senior Technician, Junior Technician, Electrician, Project Manager, RCDD, AutoCad Operator, etc.
2. Estimated hours per task by personnel category.
3. Estimated number of employees that would be assigned per task by personnel category.
4. Rate per hour by task and personnel category.
5. Total cost for each category by task and for all direct labor costs.

b. **Labor Overhead.** Specify what is included and the rate used. If there is no labor overhead rate in your proposal, so state.

c. **Travel and Subsistence.** Itemize transportation, lodging and meals per diem costs separately. Each category should be listed as a separate line item. Show the estimated hours that will be spent in travel by personnel category and the associated cost of those hours. Show the estimated number of days and number of personnel that you believe will be included in costs for lodging. Show the estimated number of days and number of personnel that will be included in costs for meals. Travel and subsistence costs must not exceed current Conus rates and IRS approved mileage rates. If there are no travel and subsistence costs in your proposal, so state.

d. **Subcontract Costs.** Itemize as in (a) above. If there are no subcontract costs in your proposal, so state.

e. **Cost of Supplies and Materials.** Itemize each as a separate line item, provide unit cost and extended price. In addition, provide a separate line item for total cost of materials by task, e.g., Total cost of data/voice cable and components; Total cost of GAI-Tronics copper cable and components, Total cost of fiber cable and components, etc. Indicate material mark up percentage.

f. **Other Direct Costs.** Itemize. If there are no other direct costs in your proposal, so state.

g. **General Overhead Costs.** Specify what is included and rate used. If there are no general overhead costs in your proposal, so state.

h. **Separate line item totals as <u>completely installed</u> for sub-categories under Part IV Work Statement Section IV-4. Tasks.**, e.g., Section A. 1., Section B. 1., Section C. 1., Section C. 2., etc.

i. **Total Cost**. Provide a separate line item for total material cost, for total labor cost and for total project cost.

Any costs not provided in the cost proposal will be assumed as no charge to the Commission.

The selected Proposer shall only perform work on this contract after the Effective Date is affixed and the fully-executed contract sent to the selected Proposer. The Commission shall issue a written Notice to Proceed to the selected Proposer authorizing the work to begin on a date which is on or after the Effective Date. The selected Proposer shall not start the performance of any work prior to the date set forth in the Notice to Proceed and the Commission shall not be liable to pay the selected Proposer for any service or work performed or expenses incurred before the date set forth in the Notice to Proceed. No Commission employee has the authority to verbally direct the commencement of any work under this Contract.

PART III

CRITERIA FOR SELECTION

III-1. Mandatory Responsiveness Requirements. To be eligible for selection, a proposal should be (a) timely received from a Proposer; (b) properly signed by the Proposer; and (c) formatted such that all cost data is kept separate from and not included in the Technical Submittal.

III-2. Proposals will be reviewed and evaluated by a committee of qualified personnel selected by the Commission. This committee will recommend for selection the proposal that most closely meets the requirements of the RFP and satisfies Commission needs. Award will only be made to a Proposer determined to be responsive and responsible in accordance with Commonwealth Management Directive 215.9, Contractor Responsibility Program.

III-3. The following criteria will be used in evaluating each proposal:

a. Understanding the Problem. This refers to the Proposer's understanding of the Commission needs that generated the RFP, of the Commission's objectives in asking for the services and of the nature and scope of the work involved.

b. Proposer Qualifications. This refers to the ability of the Proposer to meet the terms of the RFP, especially, the quality, certifications, relevancy, ability to meet schedules and similar contracts recently completed by the Proposer. This also includes the Proposer's financial ability to undertake a project of this size for the contract term outlined in this RFP.

c. Personnel Qualifications. This refers to the competence of professional personnel who would be assigned to the job by the Proposer. Qualifications of professional personnel will be measured by experience, education and certifications, with particular reference to experience on projects similar to that described in the RFP. Particular emphasis is placed on the qualifications of the project manager.

d. Soundness of Approach. Emphasis here is on the techniques for sequence and relationships of major steps to determine the most proficient process and methods for managing the contract and completing the requested work employing the highest standards. Of equal importance is whether the technical approach is completely responsive to all written specifications and requirements contained in the RFP and if it appears to meet Commission objectives.

e. **Flexibility.** This refers to the Proposer's capability to meet scheduling constraints and work effectively. Of equal importance is the ability of the Proposer to have a flexible schedule and willingness to redirect staff allocation due to unanticipated complications so as not to burden the Commission with additional costs to complete the project.

e. Available Facilities. This refers to the Proposer's capability to securely warehouse and transport equipment, hardware and/or materials associated with this project like GAI-Tronics Tele-panels on skids or wall mount telephone hardware if space would not be available in a Commission Facility.

f. Cost. While this area may be weighted heavily, it will not normally be the deciding factor in the selection process. The Commission reserves the right to select a proposal based upon all the factors listed above, and will not necessarily choose the firm offering the best price. The Commission will select the firm with the proposal that best meets its needs, at the sole discretion of the Commission.

g. DBE/MBE/WBE Participation. This refers to the inclusion of D/M/WBE firms, as described in Part II-6, and the extent to which they are expected to participate in this contract. Participation will be measured in terms of total dollars committed or percentage of total contract amount to certified D/M/WBE firms.

PART IV

WORK STATEMENT

IV-1. Objectives.

a. General. The Pennsylvania Turnpike is building the Searights Maintenance Facility at 135 Upper Middletown Road, Smock, PA 15480, along the Mon/Fayette Expressway. This facility will require access to the Commission's network.

b. Specific. The objective of this RFP is to secure a qualified cabling contractor to install the infrastructure necessary to support the network services required for the Searights Maintenance Facility. This contract will provide the cabling necessary to support data/voice workstation network connectivity, voice hardware installation, GAI-Tronics cabling infrastructure, radio hardware installation/certification and campus connection to the Commission's existing long haul roadway fiber that runs through the median on the Mon/Fayette Expressway Uniontown to Brownsville segment. The Commission expects a completed comprehensive cabling system that meets or exceeds the required warranted standards as the final deliverable for this project. The Contractor will work within the schedule that the General Contractor dictates at all times during the project. Access to the site might occur as early as July 2011. The successful contractor will be notified of schedule provisions as construction proceeds at the site. The Proposer should state any site requirements they may have in their RFP, e.g., if utilizing a trailer indicate the size and the anticipated site storage needs, etc. The Contractor will provide and be responsible for their own security of their equipment and all materials required to complete the objectives of this RFP throughout the duration of this project. The Commission will not sustain any expense for lost, stolen or damaged equipment/materials**.**

IV-2. Nature and Scope of the Project. This project will be located at mile marker 18.0 Southbound along the Turnpike Mon/Fayette Uniontown/Brownville highway segment. The cabling infrastructure that will be installed includes copper cable for workstation, voice and GAI-Tronics radio connectivity as well as single mode fiber for the campus building connection to the network. In addition it is the Commission's intention to make the Maintenance Facility part of the established network ring between all the network points of presence along the Mon/Fayette Uniontown/Brownsville highway segment. The contractor will also be responsible for the installation of all GAI-Tronics hardware, GAI-Tronics system fiber drivers if necessary, wall mount telephones and their associated hardware. The contractor may be responsible for some minor electrical work.

IV-3. Requirements.

1. Codes, Ordinances and Regulations. All cabling and materials included in this specification shall be installed and maintained in accordance with prevailing codes, ordinances and regulations and meet or exceed guidelines sponsored or endorsed by the National Fire Protection Agency (NFPA) and the National Electrical Code (NEC). The cable shall meet all requirements stated in this specification. The fiber cabling shall consist of cable, system components and connecting hardware manufactured by Corning Cable Systems to obtain a NPI warranty. The copper data/voice cabling must consist of copper cable manufactured by BerkTek and system components and connecting hardware manufactured by Ortronics and/or BerkTek to obtain a NetClear$_{GT3}$ warranty. If this document and any of the documents listed below are in conflict, then the more stringent requirement shall apply. All documents listed are believed to be the most current releases of the documents. The Contractor has the responsibility to determine and adhere to the most recent release when developing the proposal for installation.

Specifically, the structured cabling system shall be in strict accordance with and reflect the **latest codes, standards, regulations and ordinances** in effect at the time the PO is issued for all cabling types, but not limited to, the following. This document does not replace any code, either partially or wholly. The contractor must be aware of local codes that may impact this project.

National Electrical Code® (NEC)® Section 770 and 800.
Non-Plenum Applications - Applicable Flame Tests: UL 1666. Cables shall be listed OFNR (OFCR)
Plenum Applications - Applicable Flame Test: NFPA 262. Cables shall be listed OFNP (OFCP)
Finished cables shall conform to the applicable performance of the Insulated Cable Engineers Association, Inc. (ICEA) Standard for Fiber Optic Premises Distribution Cable (ICEA S-83-596-2001)
The cable shall meet the requirements of ANSI/ICEA Standard for Fiber Optic Outside Plant Communications Cable, ANSI/ICEA S-87-640-2006
The cable should be in accordance with EIA/TIA-598 Optical Fiber Cable Color Coding
The cable shall meet the requirements of ANSI/ICEA Standard for Fiber Optic Indoor/Outdoor Communications Cable, ANSI/ICEA S-104-696-2001
The cable shall meet the requirements of ANSI/ICEA Standard for Fiber Optic Inside Communications Cable, ANSI/ICEA S-83-596-2001
The optical fiber shall be a matched-clad design manufactured by the outside vapor deposition process
Electronic Industries Association (EIA) Publications 455 series of Standard Test Procedures for Fiber Optic Fibers, Cables, Transducers, Connecting and Terminating Devices
EIA/TIA-455-61-A (FOTP-61) Measurement of Fiber or Cable Attenuation
EIA/TIA -455-171-A Attenuation by Substitution Measurement – for Short Length Multi-mode Graded Index and Single Mode Optical Fibers Cable Assemblies
EIA/TIA-526-14 Optical Power Loss Measurement of Installed Multi-mode Fiber Cable Plant
EIA/TIA-455-60-A Measurements of Fiber Optic Cable Length Using an OTDR
Nationally Recognized Testing Laboratory (NRTL) 11
ANSI/TIA/EIA - 568-B.1, Commercial Building Telecommunications Cabling Standard Part 1: General Requirements, April, 2001
ANSI/TIA/EIA - 568-B.2, Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted-Pair Cabling Components, April, 2001
ANSI/TIA/EIA - 568-B.2-1, Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted Pair Cabling Components, Addendum 1 – Transmission Performance Specifications for 4-pair 100 Ω Category 6 Cabling
ANSI/TIA/EIA - 568-B.3, Commercial Building Telecommunications Cabling Standard Part 3: Optical Fiber Cabling Components, March, 2000
ANSI/TIA/EIA – 569-B, Commercial Building Standard for Telecommunications Pathways and Spaces, October, 2004
ANSI/TIA/EIA – 570-B, Residential Telecommunications Cabling Standard, April, 2004
ANSI/TIA/EIA – 606-A, Administration Standard for Telecommunications Infrastructure of Commercial Buildings, February, 2002
ANSI/TIA/EIA – 607-A, Commercial Building Grounding and Bonding Requirements for Telecommunications, October, 2002
ANSI/ TIA/EIA – 758-A, Customer-Owned Outside Plant Telecommunications Cabling Standard, August, 2004
BICSI - TDMM, Building Industries Consulting Services International, Telecommunications Distribution Methods Manual (TDMM)
National Fire Protection Agency (NFPA – 70), National Electrical Code (NEC) –2005
FCC 47 CFR 68
NEMA 250

ADA, Americans with Disabilities Act

2. General Provisions. The Proposer must provide all the labor, parts, installation equipment, test equipment/instrumentation and materials necessary to meet the objectives of this Proposal. The installation of all cabling systems must be done in a workman like fashion, resulting in a quality installation for the Commission. Any work judged not acceptable by the Commission must be redone at no charge to the Commission. The Proposer must ensure that all fiber cable is installed with proper "strain relief" by installing/utilizing Corning Universal Clamps. All copper cable for data/voice must be appropriately installed to provide the necessary "strain relief, bend radius and cable routing" for proper installation of high performance cross connect products, meeting all specifications of ANSI/TIA/EIA-568-B. All GAI-Tronics copper cable and connecting hardware cabling must be installed as to provide the necessary "strain relief" as determined by the GAI-Tronics Corporation and the chosen cable Manufacturer's installation specifications. Any fiber splicing must be "fusion splicing" and the Proposer must provide a list of any proposed fiber splices for the project along with the reason for the intended splice. All support structures must meet Commission standards. No cable is to be left exposed. All cable is to be in conduit, on ladder rack/cable tray, or correctly suspended in J hooks above a drop ceiling, following standards for each cable type. All drops should be tied with fabric cable ties, i.e. Velcro. No plastic tie wraps should be used. All fiber inserts must follow the standard color code for Corning Fiber installation. All cables must be permanently labeled on both ends of each cable. Cable To/From direction must be clearly indicated on the panels. All cabling labels must follow the Commission's standards. Any penetrations made or entered by said contractor must be fire stopped according to EIA/TIA standards and local building codes. All grounding, electrical receptacles and rack power strip hardware and the installation of those electrical systems must comply with or exceed the standards set forth in the National Electrical Code (NEC), the National Fire Protection Agency (NFPA) and any local ordinances/building codes. Any electrical tasks must be installed by a qualified electrician.

3. Proposer's Certifications, Credentials and Requirements. The Proposer, must have the following resources, certifications/credentials and experience **before** submitting a proposal. Proof verifying the certifications/credentials, experience and resources must be provided at the time the proposal is submitted. The Proposer must be a Corning Cable Systems LANscape® Solutions Network of Preferred Installers member, (NPI) and must provide written warranty certification and evidence of current NPI program membership. The Proposer must offer a twenty-five (25) year warranty for the premises/campus fiber cabling solution comprised of covered Corning Cable Systems products. The Proposer must follow all warranty registration procedures set forth by Corning Cable Systems, including submitting all required materials to Corning Cable Systems for warranty certification. The Proposer must be a Certified Installer Plus, NetClear® Warranty installer and provide evidence of program standing. The Proposer must offer a NetClear® 25-year System Warranty on the copper, premise/campus structured cabling system, comprised of BerkTek/Ortronics' products and must follow all warranty registration procedures set forth for installations for a NetClear^{GT3} Cabling System. Proposer must have an RCDD on staff that will be available to the Commission throughout the contract term. The Proposer must have an AutoCAD operator on staff that will be available during the course of the project. The Proposer must have a qualified Project Manager on staff, assigned and available to be on site as required for the term of the project to handle all aspects of the requirements set forth in this RFP. The Proposer must be able to provide any electrical requirement solutions utilizing appropriately certified personnel for each task, throughout the project duration, (i.e.: rack receptacles, grounding, etc.).

4. Cable and Components Systems. The contractor shall warrant that all materials and equipment furnished under the contract are in good working order, free from defects, and in

conformance with system specifications. Any equipment or materials supplied by the contractor for the project that become damaged, found to be faulty, or that do not meet the specifications set forth in this RFP must be replaced to the PTC's satisfaction at no additional cost to the Commission. All installed equipment must conform to the manufacturer's official published specifications. The contractor shall agree to repair, adjust, and/or replace, (as determined by the Purchaser to be in its best interest), any damaged or defective equipment, materials, or other parts of the system at the contractor's sole cost. The Purchaser will incur no costs for service or replacement of parts. All third party warranties shall be passed through from contractor to Purchaser. The contractor shall warrant and supply evidence that the installation of materials and hardware will be made in strict compliance with all applicable provisions of the National Electric Code®, the rules and regulations of the Federal Communications Commission, and state and/or local codes or ordinances that may apply. The contractor shall warrant that the system will function as specified in the approved manufacturer's Technical Description Guide. The contractor shall warrant that the system shall accommodate traffic at the levels specified in all appropriate sections of this proposal. All materials used for the copper cable installation/termination of workstation/voice drops must meet all requirements, specifications and performance standards as to provide a 25 year NetClear^{GT3} Manufacturer's warranty for the site. All workstation/voice drops will be 110 terminations to the building second floor MDF room patch panels. All materials used for the fiber installations must meet all requirements, specifications and performance standards as to provide a 25 year NPI Manufacturer's warranty for the campus. All materials used for the copper cable installation of the radio system must meet the specifications set forth by the GAI-Tronics Corporation for the hardware that will be installed throughout the campus. All parts should be designed for high density to conserve space in the housing(s)/panel(s) and electronics racks. Data/Voice jacks will all be the same color matching the wall plate color. The contractor will follow all GAI-Tronics manufacturer installation procedures as detailed in the Installation and Maintenance Manual. The contractor will follow all installation procedures from the manufacturer for the chosen copper cable that is used for GAI-Tronics system installation. The contractor will schedule the initialization and certification of all GAI-Tronics installed equipment directly with the GAI-Tronics Corporation representative.

5. Testing and Certification of Cabling. All fiber cables, components and systems must be tested and certified to meet all warranty conditions. All copper cable, components and systems for data/voice must be tested and certified to meet all warranty conditions. All copper cable, components and systems for GAI-Tronics systems must be tested and certified to meet the GAI-Tronics Corporation and the chosen manufacturer of the cable performance and specification requirements. All testing and certification of cabling will be the responsibility of the contractor. All test results for each type of cable must be documented providing the results by cable label as installed. Tests must be conducted with FLUKE/MICROTEST devices. Test documentation must be provided in the form of electronic media, (CD) and paper, from the cable tester(s) selected by the contractor and approved by the Commission. The contractor will submit one paper copy and 3 separate CD copies, of all cable test results for each type of cable. The CD's and each paper copy should be clearly labeled as follows:

- LANMark 2000 Copper Cable Test Results
- Corning 96 Strand Single Mode Fiber Test Results
- GAI-Tronics Copper Cable Test Results

6. Final Fiber System Test - All backbone and horizontal cabling, which is terminated by the contractor, shall be tested to applicable EIA/TIA Standards.
a. The insertion loss for each mated fiber optic connector pair shall be 0.75 dB. Reflectance for single-mode single fiber UPC cable assemblies shall be -55 dB. Mated connector pair loss testing shall be

based on one unidirectional OTDR inspection in accordance with the OTDR operating manual for systems greater than 300 meters.
b. In addition to connector insertion loss for each mated pair, the contractor shall perform end-to-end insertion loss testing for each single-mode fiber at 1310 nm and 1550 nm from one direction for each terminated fiber span in accordance with TIA/EIA-526-7 (OFSTP 7). For spans greater than 90 meters, each tested span must test to a value less than or equal to the value determined by calculating a link loss budget. For horizontal spans less than or equal to 90 meters, each tested span must be < 2.0 dB.
c. Inspect each terminated single-mode fiber span for continuity and anomalies with an OTDR at 1550 nm from one direction in accordance with OTDR operating manual for systems greater than 100 meters.
d. The attenuation loss of any fusion splice must be less than **.**1 dB

7. Final Copper System Test for Workstation Data/Voice cabling – Category 6 Performance - All twisted-pair copper cable links shall be tested for continuity, pair reversals, shorts, opens and performance as indicated below. Additional testing is required to verify Category performance.
a. Follow the standards requirements established in ANSI/TIA/EIA-568-B .1, B.2 and B.2-1
b. Use a Level III test unit to verify category 6 performance.
c. Minimal Tests:

1. Wire Map
2. Length
3. Attenuation
4. NEXT (Near end crosstalk)
5. Return Loss
6. ELFEXT Loss
7. Propagation Delay
8. Delay skew
9. PSNEXT (Power sum near-end crosstalk loss)
10. PSELFEXT (Power sum equal level far-end crosstalk loss)

8. Access. The contractor may be given access to the construction site in July, 2011. The specific dates will be determined after the contract is awarded and issued. The contractor must be able to proceed immediately with installation tasks based on that permission to proceed date. The intention of the Commission is to have all the infrastructure cabling identified in this RFP completed by July 31, 2011. The contractor will coordinate their activities with the construction project manager on site to ensure there are no conflicts between installation tasks and construction project objectives. The contractor must be willing/able to comply with any time constraints/schedules that the General Contractor for the site may impose. The contractor must be flexible in their ability to start initiation of work based on the construction schedule progression. The contractor must be able to redirect their staff to other projects should delays arise due to building construction schedules, unforeseen complications, imperfect conditions that must be corrected before work may proceed, inclement weather conditions, etc., at no additional cost to the Commission.

9. Accuracy. The contractor will be totally responsible for accurately determining the amount of fiber required, including all service slack necessary to completely satisfy the requirements of this RFP prior to submitting a proposal. The contractor will be totally responsible for accurately determining the total amount of copper cable for both the data/voice and GAI-Tronics installations including any service slack required prior to submitting a proposal. The Contractor will be responsible for all parts utilized for the RFP including part numbers and counts necessary to completely satisfy this RFP. If the Proposer determines there should be modifications/additions to the part specifications in order to satisfy the RFP objectives they should so state and provide alternatives and/or additional

solutions in their response. See attached drawings and supporting documentation to determine requirements.

10. Final Acceptance Tasks.
a. A walkthrough of the entire project with the Contractor's Project Manager and Commission staff will be scheduled at the end of the installation after all testing and certification of the infrastructure cabling system is completed, to identify any outstanding tasks or issues that might need to be addressed to finalize the project. A list will be developed from this walk through and provided to the Contractor.
b. The Commission will turn up electronic systems at all building locations in this phase and run data loads from the site to the Central Administration Building to determine if the system accommodates the traffic levels as set forth in the proposal and as required to provide warranties for the site. The successful performance of the cabling system for a two week period will constitute acceptance of the system.
c. All outstanding tasks identified during the review period must be addressed and resolved to the Commission's satisfaction before the contract may be closed out.

IV-4. Tasks.
The contractor shall perform the following tasks to provide an infrastructure for the Searights Maintenance Facility communications and campus network requirements. The contractor should refer to spreadsheet "**Appendix B,** Searights Maintenance Facility Drops By Location and Type". The sheet is organized by the assigned room number and/or station location/ number as indicated on the site drawings, (**Appendix D**). The contractor should use the site, architectural, electrical and communication system drawings, (**Appendix D**), to determine footage, locations of the conduit and connecting JB system to the Mon/Fayette highway median and to verify cabling requirements. The contractor should use "**Appendix C**, Searights Maintenance Facility Part Specifications" spreadsheet to determine part requirements and installation locations for the campus. The contractor should refer to "**Appendix E**, Searights Maintenance Facility MDF Room Layout" visio drawing, for the general MDF configuration, electrical provisions, wall mounted equipment locations, heights and elevations. The contractor should use "**Appendix F,** Searights Maintenance Facility Rack Layout For Voice And Data" for hardware placement in the physical racks. Exact rack placement and actual electrical tasks associated with the data center will be finalized during an initial site walk through at the beginning of the installation phase.

A. Housings/Panel Racks, Electronics Racks, Components and Hardware for Data/Voice and Network

1. MDF Room 153 located on the second floor of the Searights Maintenance Facility
a. Install a 7 foot standing rack in the second floor MDF for the electronics equipment. Location will be in the row adjacent to the wall where the GAI-Tronics Control Panel will be mounted. See "Appendix E Searights Maintenance Facility MDF Room Layout" for general positioning. Exact location will be field verified. Electronics and cable management will be installed by others.
b. Install a 7 foot standing rack in the second floor MDF for fiber housing and patch panel installation next to the rack installed in task "a." Location will be in the row adjacent to the wall where the GAI-Tronics Control Panel will be mounted. See "Appendix E Searights Maintenance Facility MDF Room Layout" for general positioning. Exact location will be field verified.
c. Install a 7 foot standing rack in the second floor MDF for miscellaneous equipment next to the rack installed in task "b." Location will be in the row adjacent to the wall where the GAI-Tronics Control Panel will be mounted. See "Appendix E Searights Maintenance Facility MDF Room Layout" for general positioning. Exact location will be field verified. Cable management and associated rack equipment will be installed by others.

d. Install a cable chase on either side of each of the 7 foot standing rack(s) installed in tasks "a., b. and c." in a manner that all of the racks installed in the above tasks are connected together by the cable chase. Secure the cable chase to the racks. See "Appendix F Searights Maintenance Facility Rack Layout For Voice and Data" for positioning.
e. Secure all installed racks at the top and the bottom. The method of securing racks and chases must be identified and will be approved by the Commission's Project Manager prior to installation.
f. Ground each rack as appropriate to meet NEC standards or above.
g. Install 1 Geist electrical strip each, on the back of the 7 foot standing racks designated for electronics and miscellaneous equipment, in a manner that will not impede the loading/installation of panels, electronic equipment and other hardware in to the center compartment area of each rack.
h. Install one, 4 receptacle quad electrical box with a whip that has a twist lock plug on the end at the bottom of the 7 foot standing racks designated for electronics and miscellaneous equipment, in a manner that will not impede the loading/installation of panels, electronic equipment and miscellaneous hardware in to the center compartment area of each rack. The box must have a cable long enough to plug in to the twist lock receptacle located above the rack(s).
i. Install a 1 U cable management above and below each housing and patch panel that will be installed in the 7 foot standing rack allocated for fiber housing and patch panel installation.
j. Install a PCH-04U fiber housing at the top of the rack that will be used for fiber housing and patch panels, immediately below the first 1 U cable management installed in task "i."
k. Install the high density CAT 6 patch panels between cable management installed in task "i.", in the 7 foot standing rack allocated for fiber housing and patch panel installation to accommodate CAT 6e data/voice plenum cable terminations.
l. Provide five, 1 U cable management for the electronics rack. Cable management for the electronics rack will be installed by others.
m. The additional cable management may be used for the miscellaneous equipment rack if required. This would be determined during the initial walk through of the site prior to the beginning of the cable installation. Any unused cable management will be given to the Turnpike for their inventory.

B. Copper Cable Data/Voice – Contractor will not pull any cables to data/voice box locations until a coordination walk through verifying rough in box positions/existence is completed with the Commission's Project Manager and the Construction Management Consultant. All data/voice cable will be installed to either a rough-in wall box on a wall or to a floor box, Wiremold RFB6-OG, (or equivalent). Each rough-in wall box/floor box has a one inch conduit with a pull string to above the drop ceiling for cable installation. All data/voice cable except the second floor Maintenance Facility internal copper will be pulled through the 1 inch conduit to the corridor cable tray, then transition to the 4 inch conduits that run to the second floor MDF Room 153 and will be pulled to the termination point utilizing the second floor MDF ladder rack/chase system as required. The second floor copper will be pulled through 1 inch conduits to above the drop ceiling and transition as appropriate to ladder rack in the MDF to the location of the patch panel termination points. The contractor will be responsible for bundling and securing all cabling in a manner that clarifies system groupings and properly supports suspended cabling according to the latest standards and the manufacturer's recommended installation procedures. Use the Appendix B spreadsheet "Searights Maintenance Facility Drops By Location and Type" and the Appendix D drawings to verify the locations of boxes. The total number of data/voice cables for the Searights Maintenance building will be 153.

1. Workstation Cable for Data/Voice and Phone Hardware – Buildings 1, (Maintenance) and 2, (Truck Garage)
a. The contractor will install 4, LANMark 2000 CAT 6e cables from each data/voice box indicated on the drawings, to MDF Room 153 in the Searights Maintenance Building.

b. The contractor will install 1, LANMark 2000 CAT 6e cable from each of the vestibule and wall mount phone rough in boxes to MDF Room 153 in the Searights Maintenance Building.
c. The contractor will install a wall plate that holds a single jack and 1 jack each for the vestibule drops.
d. The contractor will install a wall plate and 4 jacks for all other data/voice drops where the cable will be terminated in a "wall" rough in box as indicated on the drawings.
e. If the cable is terminated in a Wiremold RFB6-OG, (or equivalent), floor box, the contractor will install 4 inserts and 4 jacks in each box.
f. All labels shall follow PTC standards and all labels must follow through end to end between buildings for each cable run.
g. Patch panels should be clearly permanently labeled.
h. Cables should be clearly permanently labeled on each end of each cable.
i. Jacks should be clearly permanently labeled.
j. Each cable will be terminated on a CAT6 patch panel located in the rack allocated for panels, in MDF Room 153 of the Searights Maintenance Building.
k. Each cable and components will be end to end tested and certified to GT3 standards.
l. The contractor must provide enough service loop for each cable, to accommodate moving any patch panel or the patch panel rack to any other area within MDF Room 153 without having to re-cable.
m. The contractor will install all wall mounted phone hardware at the locations designated on the drawings. The Turnpike will provide the phone and mounting hardware for installation.
n. The contractor will install the appropriate lightning protection on each end for any copper cable that will enter/exit the Maintenance Facility.

C. Copper Cable and Radio Hardware for the GAI-Tronics Communication System

1. General Requirements – Buildings 1, (**Searights Maintenance Facility) and 2 (Truck Garage) GAI-Tronics Cable and Radio Equipment.** Contractor will not pull any cables to GAI-Tronics equipment locations until a coordination walk through verifying rough in box positions/existence is completed with the Commission's Project Manager and the Construction Management Consultant. The GAI- Tronics installation is comprised of a variety of units. The GAI-Tronics system will be a 70 volt system. The contractor should refer to the drawings for clarification of unit type and location within the facility. The control panel will be installed by the contractor in MDF Room 153 second floor of the Maintenance Building on the west wall close to the conduit penetrations from the first floor at the southwest corner of the MDF. Speaker units will be flush mount, a box speaker or a bullhorn speaker. Intercom units will be flush mount wall units, a wall unit offset on a wall over a rough in box or will be a desk unit. The desk unit is similar to a standard phone which plugs into a GAI-Tronics box. The GAI-Tronics box is approximately 8 inches W x 8 inches L x 5 inches D and includes two (2), 11-point termination strips. The cable that attaches to the GAI-Tronics desk unit is a pre-manufactured cable with a 22 pin connector to plug in to the GAI-Tronics box. The desk unit is connected to the other end of the cable and the connection is pre-soldered. That cable is 8 feet long. There will be two methods of installation for desk units depending on the type of furniture involved and the proximity of a wall where the box could be mounted. If there is a wall and the furniture accommodates, the GAI-Tronics box will mount over top of the rough in box. If the furniture designed for the area precludes the box from being mounted over a rough in box the contractor will install the GAI-Tronics box inside a RFB-11-OG, Wiremold floor box, (or equivalent). The GAI-Tronics box will be placed inside the floor box and the contractor will bring the pre-soldered cable in to the floor box through the grommet opening, plugging the 22 pin connector into the box in a manner that ensures cable strain relief as installed.

2. GAI-Tronics Control Panel.
a. The contractor will install the GAI-Tronics Control Panel on the wall of the second floor MDF at the

location indicated on the drawing.
b. The contractor will appropriately ground the panel to NEC or better standards and following any specifications set forth by the GAI-Tronics Corporation.
c. The Control Panel must be secured in a manner that it will not pull away from the wall when loaded with a 250 pound capacity. If this requires a strut system the contractor will be responsible for the design and installation.

3. Copper Cable and GAI-Tronics Radio Hardware
a. The contractor will install a separate home run cable from each GAI-Tronics unit to the GAI-Tronics Control Panel in MDF Room 153 in the Searights Maintenance Building. Installation shall follow procedures in the GAI-Tronics Installation and Maintenance Manual. Refer to Appendix C, Searights Maintenance Facility Part Specifications" spreadsheet, for the type of cable to be used for GAI-Tronics equipment.
b. The contractor will terminate the GAI-Tronics copper cable in to the GAI-Tronics Control Panel that they installed on the west wall of MDF Room 153.
c. All copper GAI-Tronics cables must be permanently labeled on each end to PTC standards.
d. All control panel terminations must comply with the GAI-Tronics Installation and Maintenance Manual and adhere to the design that will be provided by GAI-Tronics for the system.
e. Each cable must be end to end tested to comply with the chosen cable manufacturer's specifications and the GAI-Tronics Corporation installed requirements/standards.
f. The contractor will install the appropriate lightning protection on each end for any copper cable that will enter/exit the Maintenance Facility.
g. All labeling in the Searights Maintenance Building GAI-Tronics Control panel must comply with PTC standards.
h. All labels must follow through end to end between buildings for each GAI-Tronics installed device.
i. The contractor will install wall mount intercom units at the locations designated in the drawings to GAI-Tronics Corporation specifications.
j. The contractor will install flush mount ceiling speakers, bull horn speakers and volume control at the locations designated in the drawings, to GAI-Tronics Corporation specifications.
k. The contractor will install GAI-Tronics desk unit cabling to rough in boxes at the locations designated in the drawings following GAI-Tronics specifications.
l. The contractor will install the desk unit box over the rough in boxes on the wall or in the floor box at the locations designated in the drawings following GAI-Tronics specifications.
m. The contractor will contact the GAI-Tronics Corporation directly to set a date to initialize/certify the GAI-Tronics installation. The contractor must notify the Turnpike's GAI-Tronics Coordinator at least three weeks in advance of the scheduled review date.
n. The contractor will not initialize any GAI-Tronic units until the GAI-Tronics representative is present on site and at that time authorizes initialization during the formally scheduled initialization/certification testing date.
o. The contractor will work with GAI-Tronics to remedy any issues that arise through the initialization/certification process.
p. A second phase of acceptance testing will be performed after the Turnpike has moved in to the facility. The GAI-Tronics system will be tested under regular use conditions including running equipment and various mechanical tools on full power in the garage bay while testing out the speaker capacities and clarity before the certification of the system will be accepted by the Commission's Information Technology GAI-Tronics representative.
q. At the time of certification and during the second phase testing representatives from/for the PTC will also be present and must agree that the system is working to their satisfaction before the system is

accepted. Each representative will have to sign the "Acceptance Sign Off For GAI-Tronics Certification" for the system to be considered acceptable by the Commission.

D. HIRSCH System Cable

1. The location of the HIRSCH control panel in MDF Room 153 will be field verified before the contractor runs any cable for the network connection.
2. The contractor will install one LANMark 2000 cable to port 47, on the first CAT 6 patch panel from the top of the rack allocated for housing and panel installation to the HIRSCH control panel. The contractor should put an RJ45 connector on the HIRSCH side of the cable so it can be plugged directly in to the unit.
3. The cable should be clearly permanently labeled on both ends of the cable.
4. The label on the cable should follow PTC standard labels and be marked as A-47.
5. The label on patch panel port 47 should be marked as HIRSCH.
6. The cable must be tested and certified.
7. The contractor must notify the Turnpike's project manager when the HIRSCH cabling is complete so testing can be scheduled for HIRSCH system connectivity and certification.

E. HVAC System Cable

1. The contractor will install one blank and jack inside the HVAC control panel.
2. The contractor will install one LANMark 2000 cable from the HVAC control panel jack to port 48 on the first CAT 6 patch panel from the top of the rack allocated for housing and panel installation in MDF Room 153.
3. The cable should be clearly permanently labeled on both ends of the cable.
4. The label on the jack should follow PTC standard labels and be marked as A-48.
5. The label on the cable should follow PTC standard labels and be marked A-48.
6. The label on patch panel port 48 should be labeled HVAC.
7. The cable must be tested and certified.
8. The contractor must notify the Turnpike's project manager when the HVAC cabling is complete so testing can be scheduled for HVAC system connectivity and certification.

F. Campus Site Fiber Cable - The contractor should appropriately secure and protect any un-terminated (free hanging), fiber in this bid. The contractor will install one complete loop of fiber cable slack around the interior wall of each junction box, (approximately 20 foot), for each cable for service loops. The contractor will install 50 foot of slack inside the Maintenance Facility MDF for each fiber cable for service loops. If possible all fusion splicing should utilize LID technology.

1. From the Searights Maintenance Facility MDF Room 153 to the JB 11 off the east side of the Searights grounds to Station 331 located in the median of the Mon/Fayette highway near Searights ramp 18.
a. The contractor shall intercept the long haul roadway fiber that is currently installed in the median on the Mon/Fayette Expressway at station 331 located near Ramp 18.
b. The contractor shall cut the fiber that is installed in the green HDPE conduits located in station 331 and fusion splice all 96 strands of each end, (one from the north and one from the south), to the 2 new fiber cables that will be run to the Searights Maintenance Facility from the highway median. Each cable run should be spliced in to its respective 3M Fiber Optic Splice Enclosure. Each enclosure should be clearly labeled showing cable fiber direction.

c. The contractor should provide a service loop for each fiber cable in the station box. The contractor will pull the 2 new fiber cables from station 331 in the median to the JB-11 box located on the east property of the Maintenance grounds near the salt dome.
d. The contractor should place a service loop for each cable in the JB-11 box.
e. The contractor should continue pulling the 2 new 96 strand fiber cables through the 4 inch communication conduits and associated manholes as specified on the drawings that run from the JB-11 to the Maintenance Facility second floor MDF Room 153.
f. The contractor should install a service loop for each cable in each manhole throughout the cable run from the JB-11 box to the second floor MDF room 153.
g. The contractor shall pull the fiber in to the MDF through the floor penetrations, use the vertical cable ladder and installed cable tray as a pathway to the PCH-04U housing that is located in the rack for fiber and panel installation.
h. The contractor should install a service loop for each 96 strand fiber cable that was brought in to MDF Room 153.
i. Install 2, CCH-CP12-A9 Connector Panels in the PCH-04U housing in the rack located in MDF room 153.
j. Install 3, M67-048 fusion splice trays in the PCH-04U housing in the rack located in MDF room 153.
k. Each 96 strand cable installed to the PCH-04U housing in MDF room 153 will use 1 (one) each, 12 strand pigtail.
l. The contractor should fusion splice the blue tube coming from the north median roadway fiber and the blue tube that is coming from south median fiber in to the splice tray in the PCH-04U housing.
m. The contractor should fusion splice the orange fiber tubes from the north and south median cable straight through to the Ramp 18 SEA-S Utility building.
n. Terminate the Corning 96 strand fiber cables using the factory terminated SM 12 strand pigtails in to the fusion splice trays installed in the Ortronics rack connector housings and/or straight splice through as called out in the aforementioned tasks.
o. The contractor will end to end test and certify the fiber cable and components. The contractor must test all 96 strands of roadway fiber from Ramp 18 SEA-S through to the Redstone Tower for full system certification.
p. The contractor will clearly permanently mark From/To Locations on the Fiber Housing Connector Panels. Panels will need to be labeled in MDF Room 153, at the SEA-S utility building and the M-19 Data Recording Room to include the Maintenance Facility.
q. The contractor will clearly mark fiber strand count and type of fiber on the Fiber Housing Connector Panels. Panels will need to be labeled in MDF Room 153, at the SEA-S utility building and the M-19 Data Recording Room to include the Maintenance Facility in the network ring.

IV-5. Reports and Project Control.

a. Task Plan. A work plan for each task that identifies the work elements of each task, the resources assigned to the task, and the time allotted to each element and the deliverable items to be produced.

b. Status Report. A weekly progress report covering activities, problems, and recommendations; the report should be keyed to the work plan developed by the Proposer in its proposal, as amended or approved by the Commission.

c. Problem Identification Report. An "as required" report, identifying problem areas. The report should describe the problem and its impact on the overall project and on each affected task.

It should list possible courses of action with advantages and disadvantages of each, and include Contractor recommendations with supporting rationale.

d. Final Report(s). The final submission will consist of the following documentation that must be delivered and reviewed by the Commission's Project Manager prior to the closing of the contract and final payment.

1. **As-Built Documentation – Visio and CAD format**
2. **Data/Voice Copper Cable Test Results**
3. **GAI-Tronics Copper Cable Test Results**
4. **Fiber Cable Test Results**
5. **NetClear Warranty Certificate**
6. **Corning NPI Warranty Certificate**
7. **Acceptance Sign Off For GAI-Tronics Certification Form**

pennsylvania
DEPARTMENT OF LABOR & INDUSTRY
BUREAU OF LABOR LAW COMPLIANCE

Appendix A

PREVAILING WAGES PROJECT RATES

Project Name: Pennsylvania Turnpike Uniontown/Brownsville Maintenance Facility Infrastructure Cabling
Awarding Agency: Pennsylvania Turnpike, Information Technology Department
Contract Award Date: 5/1/2011
Serial Number: 11-00761
Project Classification: Building
Determination Date: 2/10/2011
Assigned Field Office: Altoona
Field Office Phone Number: 814-940-6224
Toll Free Phone Number:

Fayette County

Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	8/1/2010		$31.87	$20.04	$51.91
Asbestos & Insulation Workers	8/1/2011		$33.27	$20.04	$53.31
Asbestos & Insulation Workers	8/1/2012		$34.67	$20.04	$54.71
Boilermakers	6/1/2008		$33.90	$20.06	$53.96
Boilermakers	8/1/2010		$37.52	$22.49	$60.01
Bricklayer	6/1/2009		$27.28	$14.76	$42.04
Bricklayer	12/1/2009		$27.53	$15.51	$43.04
Bricklayer	6/1/2010		$28.08	$16.01	$44.09
Bricklayer	12/1/2010		$28.55	$16.34	$44.89
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2009		$27.82	$11.19	$39.01
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2010		$28.11	$11.91	$40.02
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	1/1/2011		$28.39	$12.02	$40.41
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2011		$28.77	$13.05	$41.82
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2012		$29.53	$13.68	$43.21

PREVAILING WAGES PROJECT RATES

Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2013		$30.28	$14.33	$44.61
Cement Finishers	6/1/2009		$25.79	$11.82	$37.61
Cement Finishers	12/1/2009		$25.79	$12.27	$38.06
Cement Finishers	6/1/2010		$26.79	$12.27	$39.06
Cement Finishers	12/1/2010		$26.79	$12.77	$39.56
Dockbuilder/Pile Driver Divers	1/1/2010		$29.95	$12.25	$42.20
Drywall Finisher	6/1/2009		$24.45	$13.59	$38.04
Drywall Finisher	6/1/2010		$24.55	$14.49	$39.04
Drywall Finisher	6/1/2011		$25.30	$14.74	$40.04
Drywall Finisher	6/1/2012		$26.05	$14.99	$41.04
Electric Lineman	5/31/2009		$39.54	$16.03	$55.57
Electric Lineman	5/31/2010		$38.00	$17.73	$55.73
Electric Lineman	5/30/2011		$38.88	$17.96	$56.84
Electric Lineman	11/28/2011		$39.78	$18.20	$57.98
Electric Lineman	5/28/2012		$40.70	$18.45	$59.15
Electric Lineman	11/26/2012		$41.63	$18.70	$60.33
Electricians & Telecommunications Installation Technician	12/26/2008		$33.11	$17.13	$50.24
Electricians & Telecommunications Installation Technician	12/25/2009		$35.61	$17.13	$52.74
Electricians & Telecommunications Installation Technician	12/24/2010		$38.01	$17.13	$55.14
Elevator Constructor	1/1/2011		$41.13	$21.99	$63.12
Floor Layer - No Rate Established (Use Carpenters)	10/4/2001		$0.00	$0.00	$0.00
Glazier	9/1/2010		$27.54	$18.31	$45.85
Glazier	9/1/2011		$28.04	$19.06	$47.10
Glazier	9/1/2012		$28.54	$19.81	$48.35
Glazier	9/1/2013		$29.04	$20.31	$49.35
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2009		$29.43	$21.41	$50.84
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2010		$30.03	$22.71	$52.74
Laborers (Class 01 - See notes)	6/1/2009		$20.92	$9.27	$30.19
Laborers (Class 01 - See notes)	12/1/2009		$20.92	$9.72	$30.64

PREVAILING WAGES PROJECT RATES

Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 01 - See notes)	6/1/2010		$20.92	$9.72	$30.64
Laborers (Class 01 - See notes)	1/1/2011		$21.17	$10.52	$31.69
Laborers (Class 01 - See notes)	1/1/2012		$21.42	$11.32	$32.74
Laborers (Class 01 - See notes)	1/1/2013		$21.67	$12.12	$33.79
Laborers (Class 01 - See notes)	1/1/2014		$21.92	$12.92	$34.84
Laborers (Class 01 - See notes)	1/1/2015		$22.17	$13.72	$35.89
Laborers (Class 02 - See notes)	6/1/2009		$21.07	$9.27	$30.34
Laborers (Class 02 - See notes)	12/1/2009		$21.07	$9.72	$30.79
Laborers (Class 02 - See notes)	6/1/2010		$21.07	$9.72	$30.79
Laborers (Class 02 - See notes)	1/1/2011		$21.32	$10.52	$31.84
Laborers (Class 02 - See notes)	1/1/2012		$21.57	$11.32	$32.89
Laborers (Class 02 - See notes)	1/1/2013		$21.82	$12.12	$33.94
Laborers (Class 02 - See notes)	1/1/2014		$22.07	$12.92	$34.99
Laborers (Class 02 - See notes)	1/1/2015		$22.32	$13.72	$36.04
Laborers (Class 03 - See notes)	6/1/2009		$21.20	$9.27	$30.47
Laborers (Class 03 - See notes)	12/1/2009		$21.20	$9.72	$30.92
Laborers (Class 03 - See notes)	6/1/2010		$21.20	$9.72	$30.92
Laborers (Class 03 - See notes)	1/1/2011		$21.45	$10.52	$31.97
Laborers (Class 03 - See notes)	1/1/2012		$21.70	$11.32	$33.02
Laborers (Class 03 - See notes)	1/1/2013		$21.95	$12.12	$34.07
Laborers (Class 03 - See notes)	1/1/2014		$22.20	$12.92	$35.12
Laborers (Class 03 - See notes)	1/1/2015		$22.45	$13.72	$36.17
Laborers (Class 04 - See notes)	6/1/2009		$21.67	$9.27	$30.94
Laborers (Class 04 - See notes)	12/1/2009		$21.67	$9.72	$31.39
Laborers (Class 04 - See notes)	6/1/2010		$21.67	$9.72	$31.39
Laborers (Class 04 - See notes)	1/1/2011		$21.92	$10.52	$32.44
Laborers (Class 04 - See notes)	1/1/2012		$22.17	$11.32	$33.49
Laborers (Class 04 - See notes)	1/1/2013		$22.42	$12.12	$34.54
Laborers (Class 04 - See notes)	1/1/2014		$22.67	$12.92	$35.59
Laborers (Class 04 - See notes)	1/1/2015		$22.92	$13.72	$36.64
Landscape Laborer	7/1/2009		$18.25	$9.05	$27.30

PREVAILING WAGES PROJECT RATES

Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Landscape Laborer	7/1/2010		$18.25	$9.90	$28.15
Landscape Laborer (Skilled)	7/1/2009		$18.67	$9.05	$27.72
Landscape Laborer (Skilled)	7/1/2010		$18.67	$9.90	$28.57
Landscape Laborer (Tractor Operator)	7/1/2009		$18.97	$9.05	$28.02
Landscape Laborer (Tractor Operator)	7/1/2010		$18.97	$9.90	$28.87
Marble Finisher	6/1/2009		$19.17	$10.55	$29.72
Marble Finisher	12/1/2009		$19.32	$11.05	$30.37
Marble Finisher	6/1/2010		$19.52	$11.70	$31.22
Marble Mason	6/1/2010		$19.42	$9.41	$28.83
Millwright	6/1/2008		$32.71	$14.29	$47.00
Millwright	6/1/2011		$34.42	$15.08	$49.50
Operators (Class 01 - see notes)	6/1/2009		$28.99	$14.80	$43.79
Operators (Class 01 - see notes)	6/1/2010		$30.22	$15.32	$45.54
Operators (Class 01 - see notes)	6/1/2011		$31.45	$15.40	$46.85
Operators (Class 02 -see notes)	6/1/2009		$25.80	$14.80	$40.60
Operators (Class 02 -see notes)	6/1/2010		$26.78	$15.32	$42.10
Operators (Class 02 -see notes)	6/1/2011		$27.76	$15.40	$43.16
Operators (Class 03 - see notes)	6/1/2009		$24.08	$14.80	$38.88
Operators (Class 03 - see notes)	6/1/2010		$25.06	$15.32	$40.38
Operators (Class 03 - see notes)	6/1/2011		$26.04	$15.40	$41.44
Painters Class 6 (see notes)	6/1/2009		$24.77	$12.81	$37.58
Painters Class 6 (see notes)	6/1/2010		$25.28	$13.53	$38.81
Painters Class 6 (see notes)	6/1/2010		$25.28	$14.78	$40.06
Pile Driver Diver Tender (Building, Heavy, Highway)	1/1/2010		$29.95	$12.25	$42.20
Pile Driver Divers (Building, Heavy, Highway)	1/1/2009		$43.28	$12.00	$55.28
Pile Driver Divers (Building, Heavy, Highway)	1/1/2010		$44.39	$12.25	$56.64
Pile Driver Divers (Building, Heavy, Highway)	1/1/2010		$44.39	$12.25	$56.64
Plasterers	6/1/2009		$26.13	$11.70	$37.83
Plasterers	6/1/2010		$26.13	$12.15	$38.28
Plasterers	6/1/2011		$26.58	$12.15	$38.73

PREVAILING WAGES PROJECT RATES

Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Plasterers	6/1/2012		$27.03	$12.15	$39.18
Plumbers and Steamfitters	6/1/2010		$30.14	$18.83	$48.97
Plumbers and Steamfitters	1/1/2011		$29.46	$19.51	$48.97
Plumbers and Steamfitters	6/1/2011		$31.13	$19.86	$50.99
Pointers, Caulkers, Cleaners	7/1/2009		$25.88	$13.33	$39.21
Pointers, Caulkers, Cleaners	12/1/2009		$25.98	$13.83	$39.81
Pointers, Caulkers, Cleaners	6/1/2010		$25.98	$14.33	$40.31
Pointers, Caulkers, Cleaners	12/1/2010		$26.36	$14.53	$40.89
Roofers	6/1/2009		$26.00	$11.69	$37.69
Roofers	6/1/2010		$27.50	$11.69	$39.19
Roofers	12/1/2010		$26.87	$12.32	$39.19
Sheet Metal Workers	7/1/2010		$31.46	$20.81	$52.27
Sheet Metal Workers	1/1/2011		$31.18	$21.09	$52.27
Sprinkerfitters	1/1/2010		$33.85	$17.60	$51.45
Sprinkerfitters	1/1/2011		$33.35	$18.45	$51.80
Sprinkerfitters	4/1/2011		$34.18	$18.45	$52.63
Sprinkerfitters	1/1/2012		$34.18	$18.60	$52.78
Sprinkerfitters	4/1/2012		$35.21	$18.65	$53.86
Sprinkerfitters	1/1/2013		$35.21	$18.80	$54.01
Stone Masons	12/1/2007		$27.55	$13.47	$41.02
Stone Masons	12/1/2009		$28.92	$15.20	$44.12
Stone Masons	6/1/2010		$29.32	$15.85	$45.17
Stone Masons	12/1/2010		$29.75	$16.22	$45.97
Terrazzo Finisher	6/1/2009		$25.61	$12.04	$37.65
Terrazzo Finisher	12/1/2009		$25.76	$12.54	$38.30
Terrazzo Finisher	12/1/2010		$26.36	$13.19	$39.55
Terrazzo Setter	6/1/2009		$26.15	$13.05	$39.20
Terrazzo Setter	12/1/2009		$26.30	$13.55	$39.85
Terrazzo Setter	6/1/2010		$26.90	$14.20	$41.10
Terrazzo Setter	12/1/2010		$26.90	$14.20	$41.10
Tile & Marble Finisher	6/1/2010		$26.36	$13.19	$39.55

PREVAILING WAGES PROJECT RATES

Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Tile Finisher	6/1/2009		$20.77	$10.55	$31.32
Tile Finisher	12/1/2009		$20.92	$11.05	$31.97
Tile Finisher	6/1/2010		$21.12	$11.70	$32.82
Tile Setter	12/1/2008		$26.85	$13.45	$40.30
Tile Setter	12/1/2009		$27.10	$13.95	$41.05
Tile Setter	6/1/2010		$27.40	$14.60	$42.00
Truckdriver class 1(see notes)	1/1/2009		$24.23	$11.44	$35.67
Truckdriver class 1(see notes)	1/1/2010		$24.98	$12.04	$37.02
Truckdriver class 2 (see notes)	1/1/2009		$24.38	$11.51	$35.89
Truckdriver class 2 (see notes)	1/1/2010		$25.13	$12.11	$37.24
Truckdriver class 3 (see notes)	1/1/2009		$24.91	$11.75	$36.66
Truckdriver class 3 (see notes)	1/1/2010		$25.64	$12.37	$38.01

PREVAILING WAGES PROJECT RATES

Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter Welder	1/1/2009		$28.23	$12.16	$40.39
Carpenter Welder	1/1/2010		$29.18	$12.56	$41.74
Carpenters	1/1/2009		$27.53	$12.16	$39.69
Carpenters	1/1/2010		$28.48	$12.56	$41.04
Cement Finishers	1/1/2009		$26.72	$12.97	$39.69
Cement Finishers	1/1/2010		$27.62	$13.42	$41.04
Iron Workers	6/1/2009		$29.43	$21.41	$50.84
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2010		$30.03	$22.71	$52.74
Laborers (Class 01 - See notes)	1/1/2009		$23.30	$12.65	$35.95
Laborers (Class 01 - See notes)	1/1/2010		$23.75	$13.55	$37.30
Laborers (Class 02 - See notes)	1/1/2009		$23.46	$12.65	$36.11
Laborers (Class 02 - See notes)	1/1/2010		$23.91	$13.55	$37.46
Laborers (Class 03 - See notes)	1/1/2009		$23.85	$12.65	$36.50
Laborers (Class 03 - See notes)	1/1/2010		$24.30	$13.55	$37.85
Laborers (Class 04 - See notes)	1/1/2009		$24.30	$12.65	$36.95
Laborers (Class 04 - See notes)	1/1/2010		$24.75	$13.55	$38.30
Laborers (Class 05 - See notes)	1/1/2009		$24.71	$12.65	$37.36
Laborers (Class 05 - See notes)	1/1/2010		$25.16	$13.55	$38.71
Laborers (Class 06 - See notes)	1/1/2009		$21.55	$12.65	$34.20
Laborers (Class 06 - See notes)	1/1/2010		$22.00	$13.55	$35.55
Laborers (Class 07 - See notes)	1/1/2009		$24.20	$12.65	$36.85
Laborers (Class 07 - See notes)	1/1/2010		$24.65	$13.55	$38.20
Laborers (Class 08 - See notes)	1/1/2009		$25.70	$12.65	$38.35
Laborers (Class 08 - See notes)	1/1/2010		$26.15	$13.55	$39.70
Operators (Class 01 - see notes)	1/1/2009		$26.38	$14.44	$40.82
Operators (Class 01 - see notes)	1/1/2010		$27.18	$14.99	$42.17
Operators (Class 02 -see notes)	1/1/2009		$26.12	$14.44	$40.56
Operators (Class 02 -see notes)	1/1/2010		$26.92	$14.99	$41.91
Operators (Class 03 - See notes)	1/1/2009		$22.47	$14.44	$36.91
Operators (Class 03 - See notes)	1/1/2010		$23.27	$14.99	$38.26

PREVAILING WAGES PROJECT RATES

Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Class 04 - See notes)	1/1/2009		$22.01	$14.44	$36.45
Operators (Class 04 - See notes)	1/1/2010		$22.81	$14.99	$37.80
Operators (Class 05 - See notes)	1/1/2009		$21.76	$14.44	$36.20
Operators (Class 05 - See notes)	1/1/2010		$22.56	$14.99	$37.55
Painters Class 1 (see notes)	6/1/2009		$27.24	$12.81	$40.05
Painters Class 1 (see notes)	6/1/2010		$27.84	$13.53	$41.37
Painters Class 1 (see notes)	6/1/2010		$27.84	$15.03	$42.87
Painters Class 2 (see notes)	6/1/2009		$27.77	$12.81	$40.58
Painters Class 2 (see notes)	6/1/2010		$28.38	$13.53	$41.91
Painters Class 2 (see notes)	6/1/2010		$28.38	$15.03	$43.41
Painters Class 3 (see notes)	6/1/2009		$29.81	$12.81	$42.62
Painters Class 3 (see notes)	6/1/2010		$30.48	$13.53	$44.01
Painters Class 3 (see notes)	6/1/2010		$30.48	$15.28	$45.76
Painters Class 4 (see notes)	6/1/2009		$23.79	$12.81	$36.60
Painters Class 4 (see notes)	6/1/2010		$24.38	$13.53	$37.91
Painters Class 4 (see notes)	6/1/2010		$24.38	$14.93	$39.31
Painters Class 5 (see notes)	6/1/2009		$19.28	$12.81	$32.09
Painters Class 5 (see notes)	6/1/2010		$19.81	$13.53	$33.34
Painters Class 5 (see notes)	6/1/2010		$19.81	$14.67	$34.48
Piledrivers	1/1/2009		$28.85	$12.00	$40.85
Piledrivers	1/1/2010		$29.95	$12.25	$42.20
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2010		$30.27	$26.09	$56.36

APPENDIX B

SEARIGHTS MAINTENANCE FACILITY DROPS BY LOATION AND TYPE

Office Number/Description	Data and Voice Drops	GAI-Tronics Desk Set Drop	GAI-Tronics Flush Mount Speaker	Volume Control	GAI-Trnics Flush Mount Intercom	GAI-Tronics Wall Mount Intercom	Gai-Tronics Bull Horn Speaker	96 Strand Single Mode Fiber
101 (Vestibule)	1							
102 (Corridor)			2		1			
104 (Section Office)	28	2						
105 (Foreman's Office)	12	1		1				
106 (Meeting Room)	36		1	1				
108 (Lunch Room)	9	1						
111 (Women's Locker Room)			1					
114 (Mens Locker Room)			1					
118 (Road Tools)	4				1			
119 (Electrical Room)	1							
120 (Vestibule)	1							
123 (General Storage)	4				1			
124 (Tools/Parts)	4				1			
125 (Passage)			1					
126 (Mechanic's Office)	16				1			
130 (Repair "A" area)	4							

APPENDIX B SEARIGHTS MAINTENANCE FACILITY DROPS BY LOATION AND TYPE

Office Number/Description	Data and Voice Drops	GAI-Tronics Desk Set Drop	GAI-Tronics Flush Mount Speaker	Volume Control	GAI-Trnics Flush Mount Intercom	GAI-Tronics Wall Mount Intercom	Gai-Tronics Bull Horn Speaker	96 Strand Single Mode Fiber
132 (Repair "B" area)	5			1	1			
133 (Vehicle Storage)							2	
152 (Second Floor ATC)	4							
153 (Second Floor MDF)	17					1		
201 (Large Equipment Storage)	5			1			3	
HIRSCH Controller	1							
HVAC Controller	1							
Campus Fiber to Second Floor*								2
Totals	**153**	**4**	**6**	**4**	**6**	**1**	**5**	**2**

***Campus fiber will enter the second floor MDF from both the north and the south side of the roadway fiber terminating in a PCH-04U Housing**

Appendix C

SEARIGHTS MAINTENANCE FACILITY PART SPECIFICATIONS

Hardware	Part Number	Location		TOTAL QTY
Fiber Connectors Factory Pre-Terminated				
12 Strand SM Pigtails with LC Connectors	000412R8131003M	Searights Maintenance Facility		2
CCH Panels				
CCH Connector Panel, 12 fiber, LC, single-mode, Duplex Adapters, Ceramic Composite Housing	CCH-CP12-A9	Searights Maintenance Facility		2
Rack Mount Connector Housings				
Pretium Closet Connector Housing, 12 Panel Capacity and 12 Splice Tray Capacity, 4 Unit High, Comes with one UCC-001	PCH-04U	Searights Maintenance Facility		1
Standard Splice Trays and Housing Accessories				
Splice Tray Bracket for PCH-04U	PC4-SPLC-12SR	Searights Maintenance Facility		1
Strain Relief Bracket for PCH-04U	PC4-STRN	Searights Maintenance Facility		2
Fusion Splice Tray (0.2"), 12 Fiber Capacity, Heat Shrink, Type 2S	M67-048	Searights Maintenance Facility		3
Fusion Splice Protection- Heat Shrinks 40mm long, package of 50	2806032-01	Searights Maintenance Facility, Station 331 in MFE median		5
Outdoor Fiber Enclosures - End Points				
3M Fiber Optic Splice Enclosure Case, with 96 single fusion fiber splice capacity	2178-S	Station 331 in MFE Median		2
3M Fiber Splice Enclosure Cable Expansion Kit	2181-LS	Station 331 in MFE Median		2
3M Fusion Splice Organizer Tray, holds 24 single fusion splices with 96 single fiber capacity	2524-FT	Station 331 in MFE Median		8
Copper Cable and Components				
Berk-Tek Lanmark 2000 Plenum Copper Cable for Voice and Data - Blue	10163780	Searights Maintenance Facility		153 Drops
Ortronics Clarity CAT 6 High Density 48 port Patch	OR-PHD66U48	Searights Maintenance Facility		4
Ortronics Trac-Jack Ivory	OR-TJ600-13	Searights Maintenance Facility		153
Ortronics Faceplate, holds four jacks, Ivory	OR-40300546-13	Searights Maintenance Facility non floor box wall boxes, Searights MDF		33
Ortronics Faceplate, holds one jack - for vestibule	OR-40300549-13	Searights Maintenance Vestibule		2
Wiremold Bezel for Floor Box Data/Voice - Package of 2 accommodates 4 Trac-Jacks	RFB6RT	Searights Maintenance Facility		1
Ortronics TracJack Blank Module - Package of 10	OR-42100002	Searights Maintenance Facility HVAC Control Panel		1

Appendix C

SEARIGHTS MAINTENANCE FACILITY PART SPECIFICATIONS

Hardware	Part Number	Location		TOTAL QTY
Copper Cable and Components (cont)				
BELDEN 6347FE 18 AWG -9P STR BC FLAMARREST FOIL SHD FLAMARREST JKT NAT **-OR-** Equivalent, (Must be approved by GAI-Tronics Corporation and PTC)	**6347FE 9 PR/CMP -OR- Equivalent P/N**	Searights Maintenance Facility MDF GAI-Tronics Control Panel To Each GAI-Tronics Unit In Building 1 and Building 2		**26 Drops**
Fiber Cable				
ALTOS All-Dielectric Cable, 96 Fiber, Single-mode, 0.4/0.3 dB/km Attenuation	**096EW4-T4101D20**	Searights Maintenance MDF to Station 331 in MFE median		**2 cables from station 331 on MFE to Searights Maint 2nd floor MDF - Footage Field Verified**
Racks and Patch Cables				
Ortronics, 7 ' open rack, black, 19"	**OR-604004600**	Searights Maintenance MDF		**3**
Ortronics Cable Management Panel with five horizontal plastic distribution rings, 1.7" H x 2.70" D, 1 rack unit (1.75"), black	**OR-808004759**	Searights Maintenance MDF		**30**
Ortronics Vertical Cable Chase - double sided	**OR-DVMS706**	Searights Maintenance MDF		**4**
CAT 6 Copper Patch Cables - 5 foot, gray	**OR-MC605-08**	Installed by others		**150**
CAT 6 Copper Patch Cable - 7 foot, blue	**OR-MC607-06**	Installed by others		**100**
CAT 6 Copper Patch Cables - 9 foot, purple	**OR-MC609-07**	Installed by others		**50**
LC to LC SM Fiber Zip Cord 1 meter	**040402R5120001M**	Installed by others		**24**
LC to LC SM Fiber Zip Cord 2 meter	**040402R5120002M**	Installed by others		**24**
Electrical Components As Required				
Hubbel, 20 amp 125 volt, Twist Lock Receptacle	**HBL2310**	Searights Maintenance MDF		**3 if not installed by others**
Geist Mfg., 66 inch, Vertical Rack 20 outlet, 125 volt, 20 amp, Power Strip, with 10 ft. cord, regular end, black (plugs into back of UPS unit)	**VRTBN200-10210**	Searights Maintenance MDF		**2**

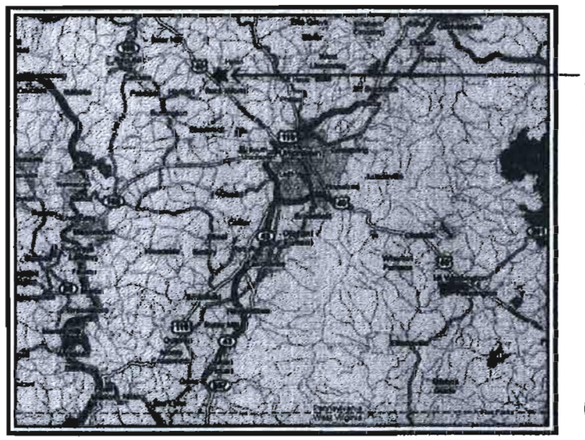
COMMONWEALTH OF PENNSYLVANIA

Appendix D

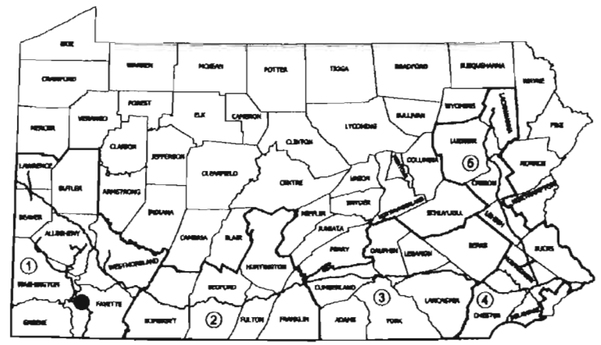
PENNSYLVANIA TURNPIKE COMMISSION

DRAWINGS FOR

CONTRACT NUMBER M-015.30X001-3-02 GENERAL CONSTRUCTION
CONTRACT NUMBER M-015.30X001-3-03 PLUMBING WORK
CONTRACT NUMBER M-015.30X001-3-04 ELECTRICAL WORK
CONTRACT NUMBER M-015.30X001-3-05 HEATING VENTILATING AIR CONDITIONING WORK
FOR
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA



PROJECT LOCATION
MAINTENANCE FACILITY CONSTRUCTION SITE
MILEPOST M-18.0 SB
MENALLEN TOWNSHIP, FAYETTE COUNTY



DISTRICT	COUNTY	TOWNSHIP / BOROUGH	SECTION	SHEETS
1	FAYETTE	MENALLEN TOWNSHIP	61C	265

0 2 4 6
MILES

CONSULTANTS:

BURSICH ASSOCIATES, INC.
CIVIL
PITTSBURGH, PENNSYLVANIA

PRIZER DESIGN GROUP
LANDSCAPE ARCHITECTURE
BOYLESTOWN, PENNSYLVANIA

WBS NUMBER M-015.30X001-3-02, 03, 04, 05	
NETWORK NUMBER:	7091280, 7001281, 7001282, 7001283
FILE NAME:	CS101.DWG
DRAWING TYPE:	COVERSHEET
STRUCTURE NUMBER:	
DATE:	MAY 19, 2010
DRAWING:	CS1.01
SHEET:	001 OF 265

DANIEL R. VODZAK, RA
REGIONAL DIRECTOR
VITETTA

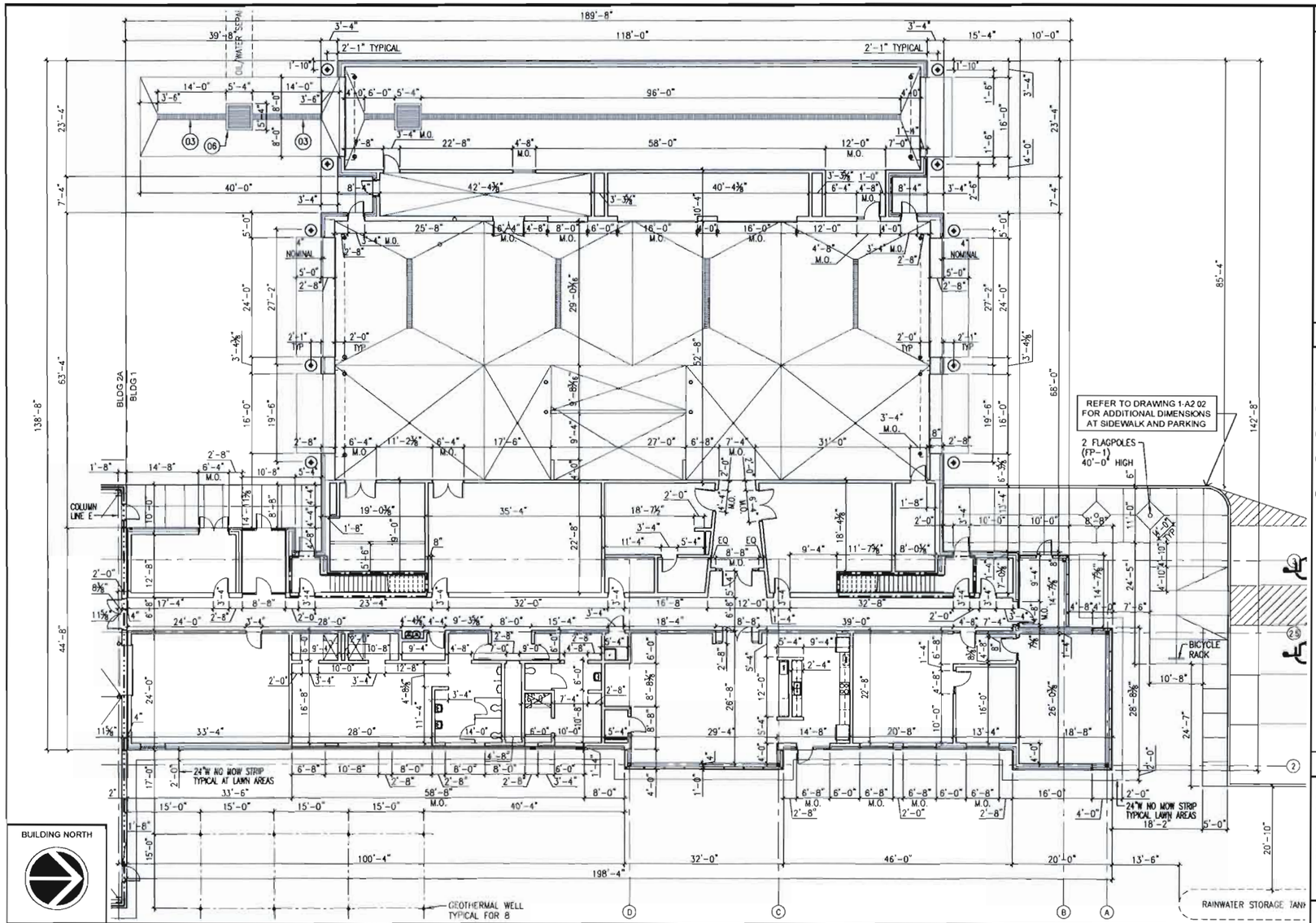
PREPARED BY:
VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
APRIL 28, 2010
DATE

CHIEF ENGINEER
PENNSYLVANIA TURNPIKE
COMMISSION

APPROVED: May 24, 2010
DATE
CHIEF ENGINEER, PENNSYLVANIA TURNPIKE COMMISSION

RECOMMENDED: May 24, 2010
DATE
SECRETARY TREASURER, PENNSYLVANIA TURNPIKE COMMISSION

APRIL 08, 2010
COMMISSION APPROVAL



FLOOR PLAN NOTES

1. THESE GENERAL NOTES APPLY TO ALL FLOOR PLAN DRAWINGS IN THIS SET THEREFORE, SOME NOTES MAY NOT BE APPLICABLE TO THIS SPECIFIC DRAWING.
2. REFER TO CS1.04 FOR TYPICAL SYMBOL LEGENDS.
3. REFER TO DRAWINGS A100 SERIES DRAWINGS FOR CODE INFORMATION, INCLUDING OCCUPANCY CLASS, CONSTRUCTION TYPE, RATED WALL LOCATIONS, ETC.
4. REFER TO STRUCTURAL DRAWINGS FOR LAYOUT AND DIMENSIONS OF COLUMN GRID.
5. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS AND DETAILS OF DEPRESSED FLOOR SLABS, EQUIPMENT PADS, ETC.
6. ALL DIMENSIONS ARE TO THE OUTER SURFACE OF THE PARTITIONS, UNLESS NOTED OTHERWISE.
7. BUILDING 1: AIR BARRIER IS TO BE APPLIED TO THE INTERIOR SURFACE OF ALL CHASE WALLS, UNLESS NOTED OTHEWISE.
8. BUILDING 1: CONTRACTOR TO VERIFY THE MANUFACTURER'S REQUIREMENTS FOR THE EXTENT OF LEVEL FLOOR AREA AROUND LIFT EQUIPMENT.
9. REFER TO ENGINEERING DRAWINGS (S, M, P, FP, E) FOR LOCATIONS OF CONCRETE EQUIPMENT PADS.
10. HATCHING INDICATES INTERIOR PARTITIONS THAT EXTEND TO UNDERSIDE OF STRUCTURE, TYPICAL.

KEY NOTES

(01) REFER TO DETAIL 1/1-A2.31 FOR LOCATION OF RECESSED FLOOR GRILLE IN VESTIBULE 101.

(02) REFER TO DETAIL 2/1-A2.31 FOR LOCATION OF RECESSED FLOOR GRILLE IN VESTIBULE 121.

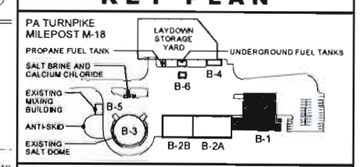
(03) COORDINATE TRENCH DRAIN LOCATIONS AND DETAILS WITH STRUCTURAL AND PLUMBING DRAWINGS.

(04) COORDINATE FLOOR DRAIN LOCATIONS AND DETAILS WITH STRUCTURAL AND PLUMBING DRAWINGS.

(05) REFER TO STRUCTURAL DRAWINGS FOR TOP OF SLAB ELEVATIONS AND ELEVATIONS FOR SLOPED CONCRETE FLOOR SLABS.

(06) COORDINATE CATCH BASIN LOCATION AND DETAILS WITH STRUCTURAL AND PLUMBING DRAWINGS.

KEY PLAN



CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 718-4747, FAX: (215) 718-4740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17101, TELEPHONE: (717) 783-5861, FAX: (717) 783-7470

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

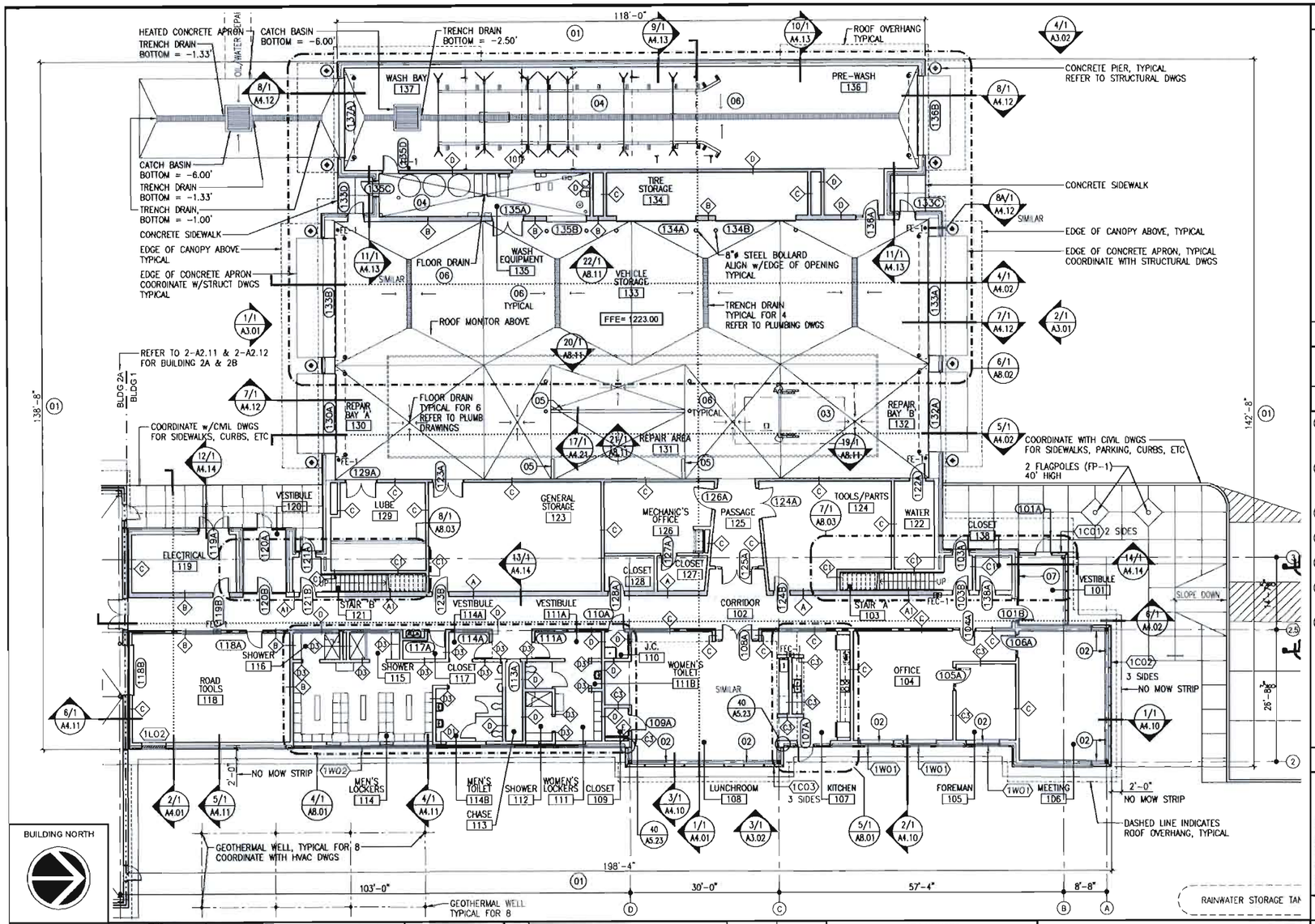
WBS NUMBER: M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-A201.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1
ARCHITECTURAL
FIRST FLOOR PLAN
BUILDING DIMENSIONS

DRAWING: **1-A2.01**
SHEET: 045 OF 265



FLOOR PLAN NOTES

1. THESE GENERAL NOTES APPLY TO ALL FLOOR PLAN DRAWINGS IN THIS SET. THEREFORE, SOME NOTES MAY NOT BE APPLICABLE TO THIS SPECIFIC DRAWING.
2. REFER TO CS1.04 FOR TYPICAL SYMBOL LEGENDS.
3. REFER TO DRAWINGS A100 SERIES DRAWINGS FOR CODE INFORMATION, INCLUDING OCCUPANCY CLASS, CONSTRUCTION TYPE, RATED WALL LOCATIONS, ETC.
4. REFER TO STRUCTURAL DRAWINGS FOR LAYOUT AND DIMENSIONS OF COLUMN GRID.
5. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS AND DETAILS OF DEPRESSED FLOOR SLABS, EQUIPMENT PADS, ETC.
6. ALL DIMENSIONS ARE TO THE OUTER SURFACE OF THE PARTITIONS, UNLESS NOTED OTHERWISE.
7. BUILDING 1: AIR BARRIER IS TO BE APPLIED TO THE INTERIOR SURFACE OF ALL CHASE WALLS, UNLESS NOTED OTHEWISE.
8. BUILDING 1: CONTRACTOR TO VERIFY THE MANUFACTURER'S REQUIREMENTS FOR THE EXTENT OF LEVEL FLOOR AREA AROUND LIFT EQUIPMENT.
9. REFER TO ENGINEERING DRAWINGS (S, M, P, FP, E) FOR LOCATIONS OF CONCRETE EQUIPMENT PADS.
10. HATCHING INDICATES INTERIOR PARTITIONS THAT EXTEND TO UNDERSIDE OF STRUCTURE, TYPICAL.

FLOOR PLAN LEGEND

ROLLER WINDOW SHADE
REFER TO SPEC

KEY NOTES

(01) ONLY OVERALL DIMENSIONS ARE SHOWN ON DRAWING FOR GRAPHIC CLARITY. REFER TO DIMENSION PLAN ON DRAWING A2.00 FOR MORE DETAILED DIMENSIONS. MOUNTING TYPE AND MATERIALS.

(02) PROVIDE ROLLER WINDOW SHADES. SIZES VARY. CONTRACTOR TO FIELD VERIFY SIZES AFTER THE CURTAINWALL IS INSTALLED. REFER TO SPEC FOR MOUNTING TYPE AND MATERIALS.

(03) REFER TO DRAWINGS 1-A2.41, 1-A2.42, AND 1-A2.43 FOR INFORMATION REGARDING LIFT EQUIPMENT.

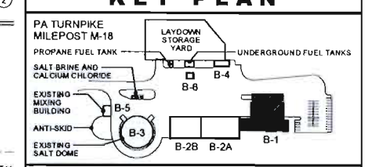
(04) REFER TO DRAWINGS 1-A2.41, 1-A2.42, AND 1-A2.43 FOR REGARDING WASH BAY EQUIPMENT.

(05) PARTIAL HEIGHT WALL. TOP OF WALL AT 5'-4" AFF. REFER TO DETAIL 17/1-A4.21.

(06) REFER TO STRUCTURAL DRAWINGS FOR TOP OF CONCRETE FLOOR SLAB ELEVATIONS AND ELEVATIONS FOR SLOPE CONCRETE FLOOR SLABS.

(07) 28" WIDE BY 27" PLAQUE (PLQ-1) REFER TO DWG 1-A4.23 FOR DETAILS AND ELEVATIONS.

KEY PLAN



CONSULTANT SEAL

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4746
224 NORTH FRONT STREET, WORMLEYSBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-0661, FAX: (717) 763-7870

PREPARED FOR:
THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.

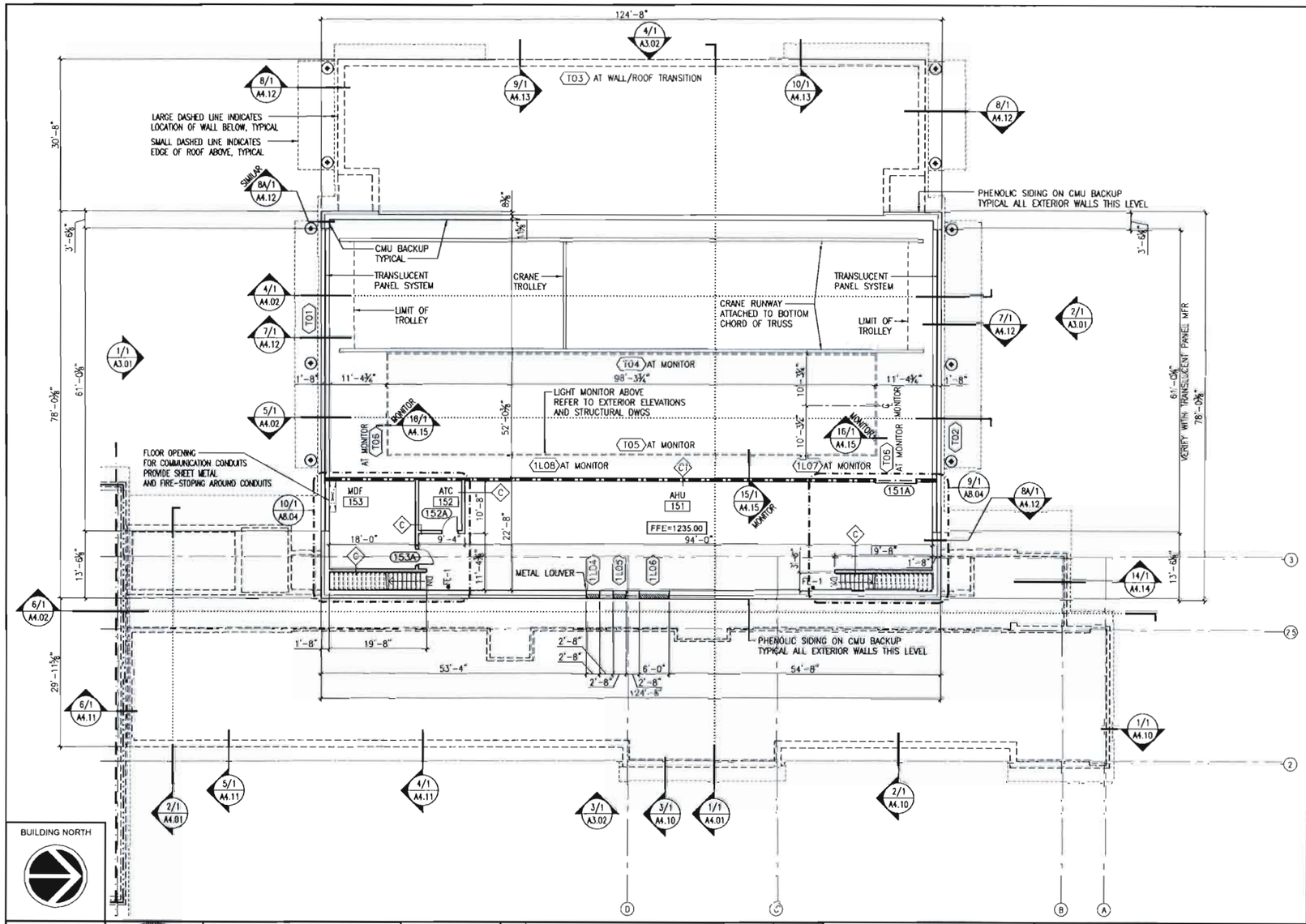
WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-A211.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1
ARCHITECTURAL
FIRST FLOOR PLAN

DRAWING: 1-A2.11
SHEET: 047 OF 265

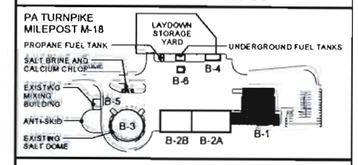


BUILDING NORTH

FLOOR PLAN NOTES

1. THESE GENERAL NOTES APPLY TO ALL FLOOR PLAN DRAWINGS IN THIS SET. THEREFORE, SOME NOTES MAY NOT BE APPLICABLE TO THIS SPECIFIC DRAWING
2. REFER TO CS1.04 FOR TYPICAL SYMBOL LEGENDS.
3. REFER TO DRAWINGS A100 SERIES DRAWINGS FOR CODE INFORMATION, INCLUDING OCCUPANCY CLASS, CONSTRUCTION TYPE, RATED WALL LOCATIONS, ETC.
4. REFER TO STRUCTURAL DRAWINGS FOR LAYOUT AND DIMENSIONS OF COLUMN GRID.
5. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS AND DETAILS OF DEPRESSED FLOOR SLABS, EQUIPMENT PADS, ETC.
6. ALL DIMENSIONS ARE TO THE OUTER SURFACE OF THE PARTITIONS, UNLESS NOTED OTHERWISE.
7. BUILDING 1: AIR BARRIER IS TO BE APPLIED TO THE INTERIOR SURFACE OF ALL CHASE WALLS, UNLESS NOTED OTHEWISE.
8. BUILDING 1: CONTRACTOR TO VERIFY THE MANUFACTURER'S REQUIREMENTS FOR THE EXTENT OF LEVEL FLOOR AREA AROUND LIFT EQUIPMENT.
9. REFER TO ENGINEERING DRAWINGS (S, M, P, FP, E) FOR LOCATIONS OF CONCRETE EQUIPMENT PADS
10. HATCHING INDICATES INTERIOR PARTITIONS THAT EXTEND TO UNDERSIDE OF STRUCTURE, TYPICAL.

KEY PLAN



CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 718-4747, FAX: (215) 218-4740
234 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17101, TELEPHONE: (717) 763-5641, FAX: (717) 763-7470

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

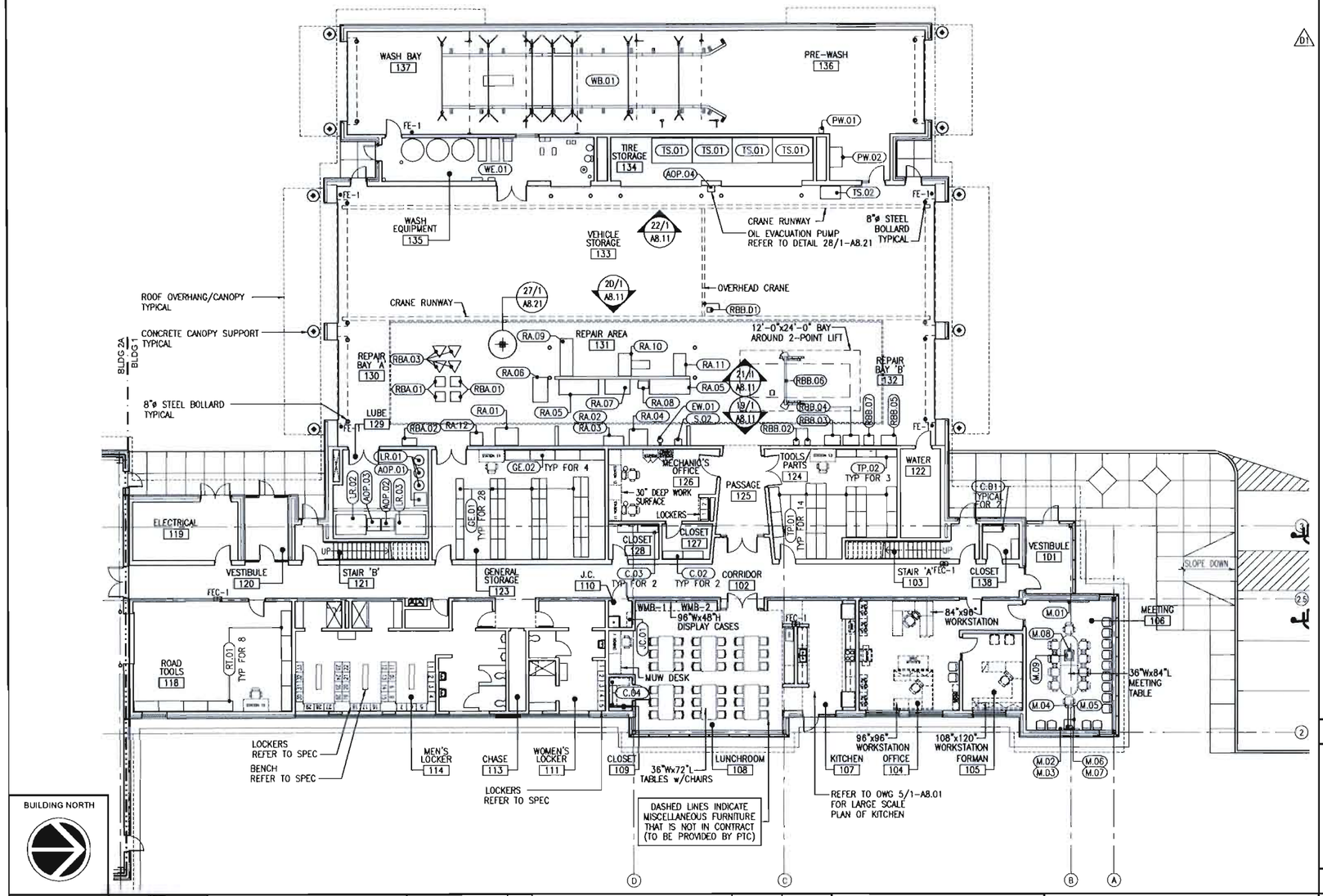
NO.	REVISIONS	DATE	APPR.

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-A221.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA
DISTRICT: 1 COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1
ARCHITECTURAL
SECOND FLOOR PLAN

DRAWING: **1-A2.21**
SHEET: 048 OF 265

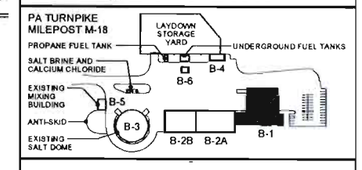


BUILDING NORTH

GENERAL EQUIPMENT PLAN NOTES

1. REFER TO 1-A2.42 & 1-A2.43 FOR EQUIPMENT SCHEDULES.
2. REFER TO LARGE SCALE PLAN 5/1-A8.01 FOR ADDITIONAL INFORMATION REGARDING APPLIANCES FOR KITCHEN ~~110~~ 107
3. OFFICE FURNITURE IS TO BE PROVIDED BY PTC, AND IS NOT INCLUDED IN THE CONSTRUCTION CONTRACT. FURNITURE HAS BEEN SHOWN DASHED ON THIS DRAWING FOR REFERNCE AND COORDINATION PURPOSES.
4. CONTRACTOR TO VERIFY POWER AND UTILITY **REQUIREMENTS WITH THE EQUIPMENT MANUFACTURER'S** REQUIREMENTS.
5. REFER TO PLUMBING DRAWINGS FOR INFORMATION REGARDING THE COMPRESSED AIR SYSTEM AND THE LUBRICATION SYSTEM

KEY PLAN



CONSULTANT SEAL

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA MAIN, BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7672

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-A241.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

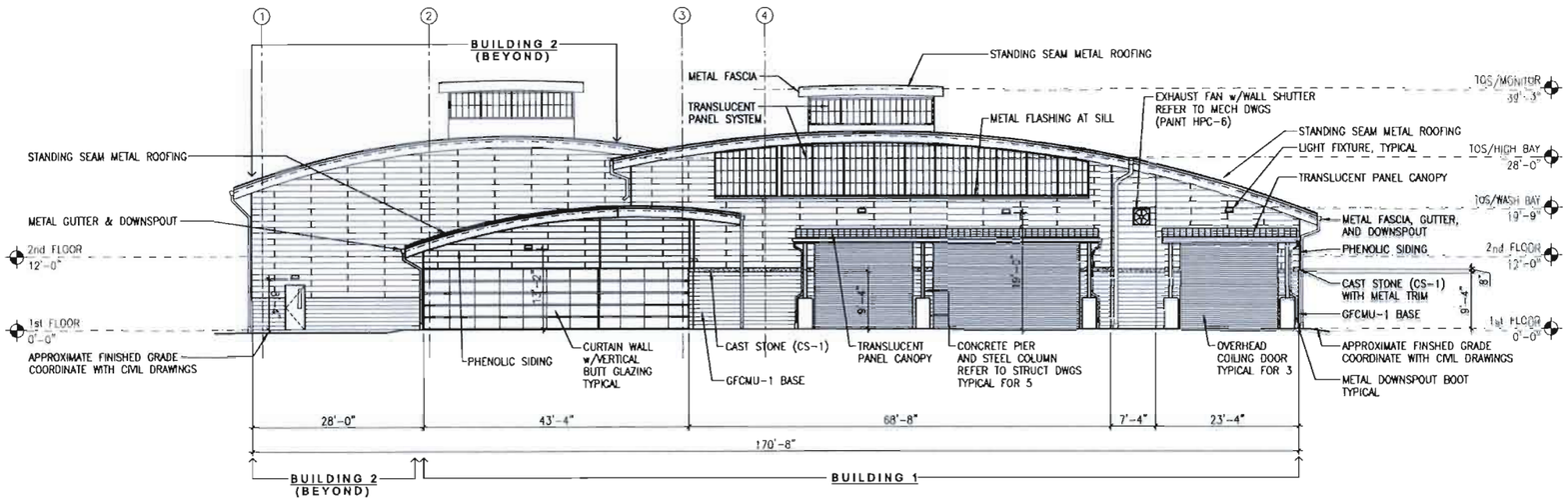
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1
ARCHITECTURAL
FIRST FLOOR
FURNITURE & EQUIPMENT PLAN

DRAWING: **1-A2.41**
SHEET: 051 OF 265

D1 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10

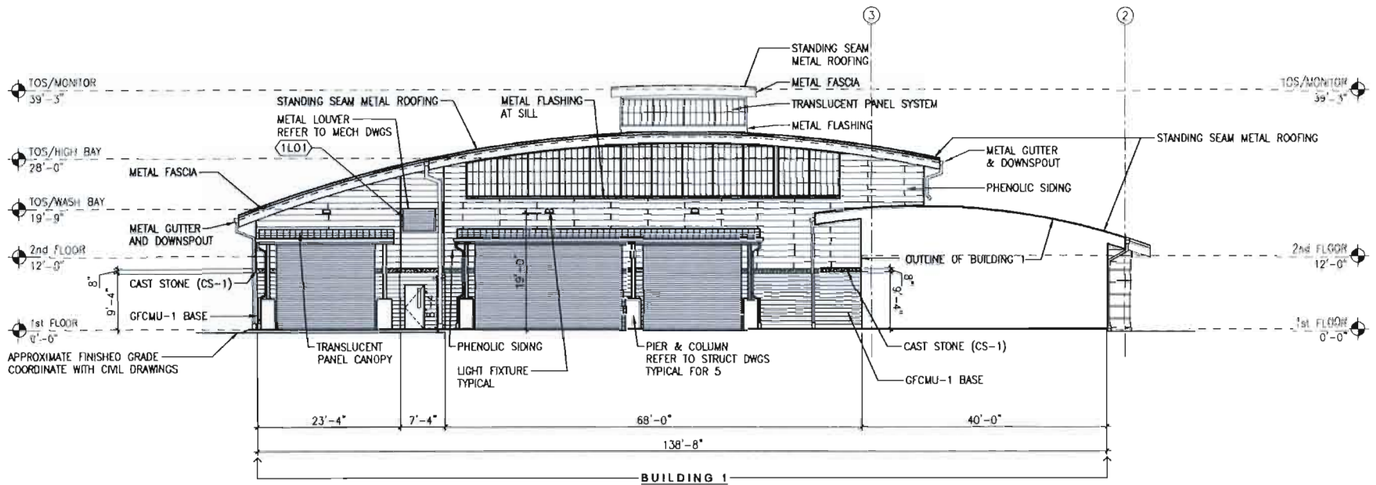


SCALE:
1" = 10'-0"

BUILDING 1 - EXTERIOR ELEVATION - NORTH **2**

EXTERIOR ELEVATION NOTES

1. THESE GENERAL NOTES APPLY TO ALL EXTERIOR ELEVATION DRAWINGS IN THIS SET. THEREFORE, SOME NOTES MAY NOT BE APPLICABLE TO THIS SPECIFIC DWG.
2. FOR INFORMATION REGARDING WALL CONSTRUCTION, REFER TO WALL SECTIONS/DETAILS ON "A400" DRAWINGS.
3. DOORS & WINDOWS ARE DIMENSIONED TO THE ROUGH OPENING. REFER TO "A500" SERIES DRAWINGS FOR MORE INFORMATION REGARDING DOORS & WINDOWS.
4. COORDINATE CONTROL JOINT LOCATIONS WITH STRUCTURAL DRAWINGS AND SPECIFICATIONS.
5. REFER TO ARCHITECTURAL & MECHANICAL DRAWINGS AND SPECS FOR EXTERIOR LOUVER TYPES AND SIZES.
6. EXTERIOR LIGHTING IS SHOWN FOR COORDINATION AND MOUNTING HEIGHT REFERENCE. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION. REVIEW MOUNTING HEIGHTS WITH ARCHITECT IN FIELD, AS REQUIRED.
7. REFER TO THE PROJECT SPECIFICATIONS FOR MORE INFORMATION REGARDING MATERIALS AND FINISHES.
8. HATCH PATTERNS ARE SHOWN FOR GRAPHIC CLARITY ONLY. THEY DO NOT INDICATE THE TYPE OF MATERIAL, COLOR, OR FINISH TO BE USED.
9. REFER TO ROOF PLAN DRAWINGS FOR SIZES OF GUTTERS AND DOWNSPOUTS.
10. REFER TO DETAIL 3/1-A4.01 FOR LAP-SIDING LAYOUT DIAGRAM FOR VERTICAL SPACING.



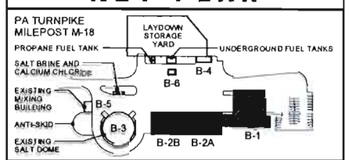
SCALE:
1" = 10'-0"

BUILDING 1 - EXTERIOR ELEVATION - SOUTH **1**

KEY NOTE

(1) LOUVER TO BE PROVIDED AS PART OF TRANSLUCENT PANEL ASSEMBLY. REFER TO SPEC.

KEY PLAN



CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4745
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17101, TELEPHONE: (717) 763-5661, FAX: (717) 763-7670

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.

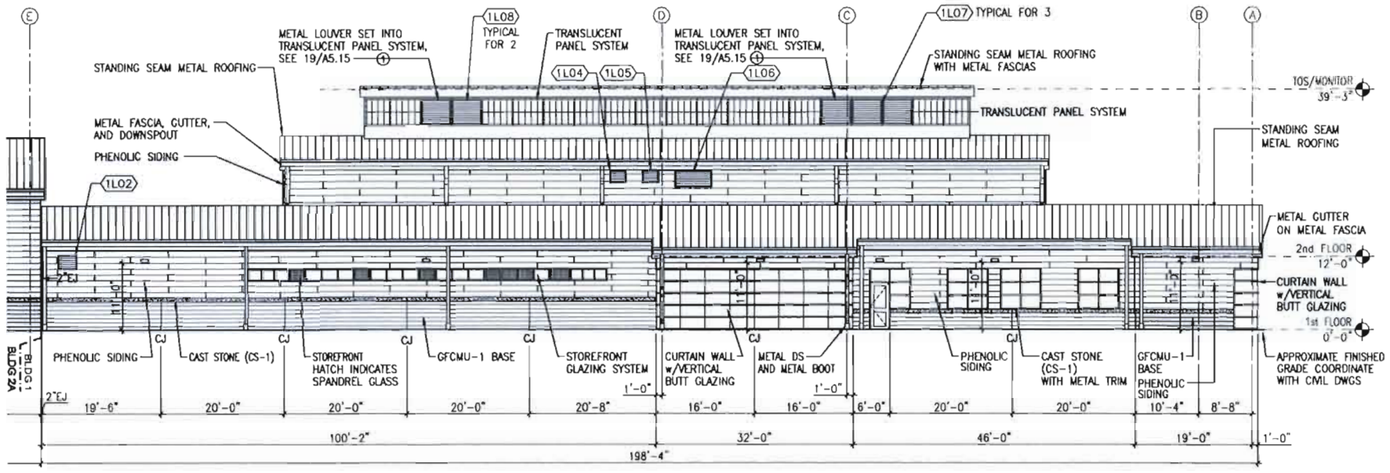
WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-A301.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1
ARCHITECTURAL
EXTERIOR ELEVATIONS
SOUTH & NORTH

DRAWING: **1-A3.01**
SHEET: 054 OF 265



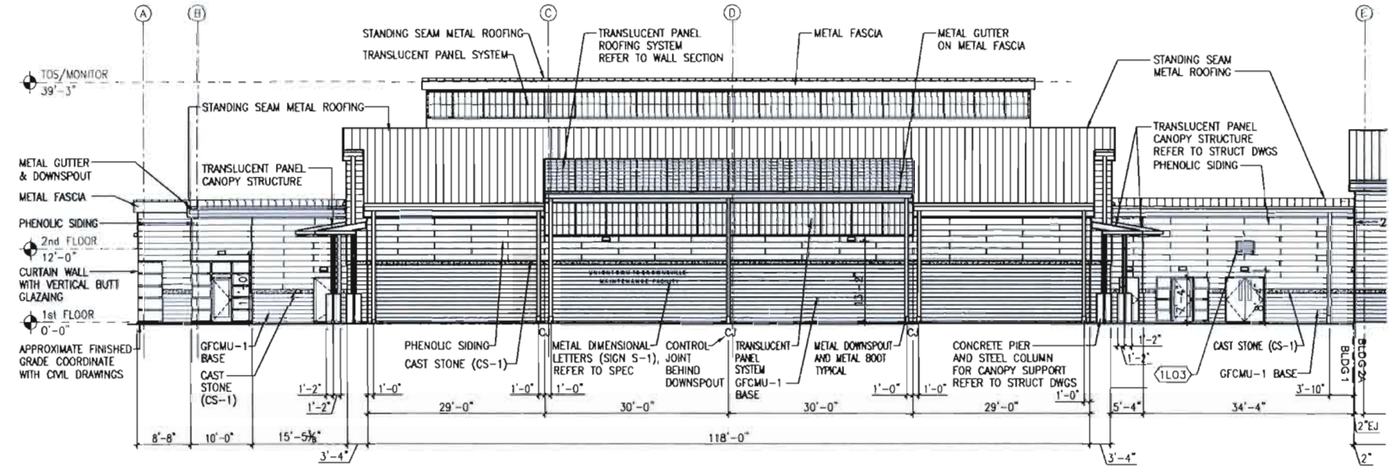
NOTE: REFER TO DRAWINGS 1-A3.01 AND 2-A3.01 FOR TYPICAL EXTERIOR ELEVATION NOTES.

SCALE: 1" = 10'-0"

BUILDING 1 - EXTERIOR ELEVATION - EAST **3**

EXTERIOR ELEVATION NOTES

1. THESE GENERAL NOTES APPLY TO ALL EXTERIOR ELEVATION DRAWINGS IN THIS SET. THEREFORE, SOME NOTES MAY NOT BE APPLICABLE TO THIS SPECIFIC DWG.
2. FOR INFORMATION REGARDING WALL CONSTRUCTION, REFER TO WALL SECTIONS/DETAILS ON "A400" DRAWINGS.
3. DOORS & WINDOWS ARE DIMENSIONED TO THE ROUGH OPENING. REFER TO "A500" SERIES DRAWINGS FOR MORE INFORMATION REGARDING DOORS & WINDOWS.
4. COORDINATE CONTROL JOINT LOCATIONS WITH STRUCTURAL DRAWINGS AND SPECIFICATIONS.
5. REFER TO ARCHITECTURAL & MECHANICAL DRAWINGS AND SPECS FOR EXTERIOR LOUVER TYPES AND SIZES.
6. EXTERIOR LIGHTING IS SHOWN FOR COORDINATION AND MOUNTING HEIGHT REFERENCE. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION. REVIEW MOUNTING HEIGHTS WITH ARCHITECT IN FIELD, AS REQUIRED.
7. REFER TO THE PROJECT SPECIFICATIONS FOR MORE INFORMATION REGARDING MATERIALS AND FINISHES.
8. HATCH PATTERNS ARE SHOWN FOR GRAPHIC CLARITY ONLY. THEY DO NOT INDICATE THE TYPE OF MATERIAL, COLOR, OR FINISH TO BE USED.
9. REFER TO ROOF PLAN DRAWINGS FOR SIZES OF GUTTERS AND DOWNSPOUTS.
10. REFER TO DETAIL 3/11-A4.01 FOR LAP-SIDING LAYOUT DIAGRAM FOR VERTICAL SPACING



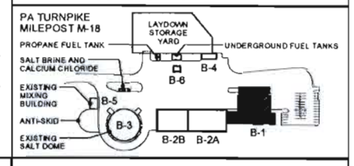
SCALE: 1" = 10'-0"

BUILDING 1 - EXTERIOR ELEVATION - WEST **4**

KEY NOTE

① LOUVER TO BE PROVIDED AS PART OF TRANSLUCENT PANEL ASSEMBLY. REFER TO SPEC.

KEY PLAN



CONSULTANT SEAL

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA DANIEL R. VITETTA

VITETTA SEAL

PREPARED BY: VITETTA

ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN

PHILADELPHIA MAIN BUSINESS CENTER, 4747 South Broad Street, Philadelphia, Pennsylvania 19112, Telephone: (215) 755-4747, FAX: (215) 755-4746

334 North Front Street, Wormleysburg, Pennsylvania 17043, Telephone: (717) 763-3663, FAX: (717) 763-7676

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR

WBS NUMBER M-015.30X001-3-02, 03, 04, 05

NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263

FILE NAME: 1-A302.DWG

SCALE: 1" = 10'-0" (0' 5' 10' 20')

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

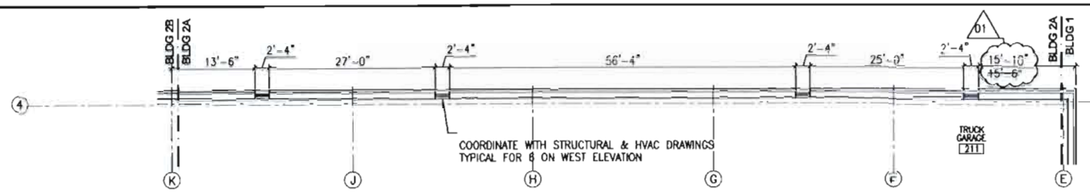
DISTRICT: 1 | COUNTY: FAYETTE

TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1 ARCHITECTURAL EXTERIOR ELEVATIONS WEST & EAST

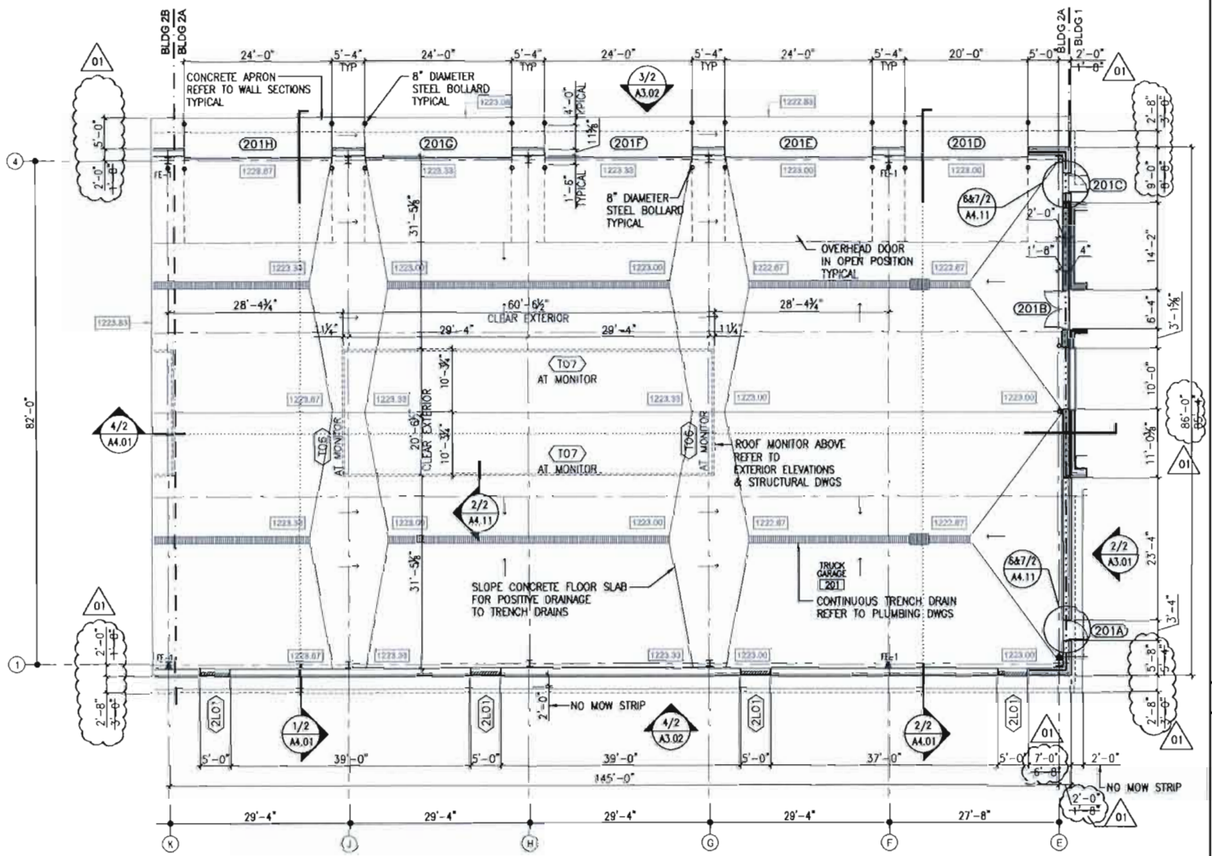
DRAWING: **1-A3.02**

SHEET: 055 OF 265



SCALE:
1" = 10'-0"

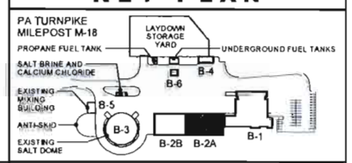
BUILDING 2A - PARTIAL FIRST FLOOR PLAN ABOVE OVERHEAD DOORS **2**



FLOOR PLAN NOTES

1. THESE GENERAL NOTES APPLY TO ALL FLOOR PLAN DRAWINGS IN THIS SET. THEREFORE, SOME NOTES MAY NOT BE APPLICABLE TO THIS SPECIFIC DRAWING.
2. REFER TO CS1.04 FOR TYPICAL SYMBOL LEGENDS.
3. REFER TO DRAWINGS A100 SERIES DRAWINGS FOR CODE INFORMATION, INCLUDING OCCUPANCY CLASS, CONSTRUCTION TYPE, RATED WALL LOCATIONS, ETC.
4. REFER TO STRUCTURAL DRAWINGS FOR LAYOUT AND DIMENSIONS OF COLUMN GRID.
5. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS AND DETAILS OF DEPRESSED FLOOR SLABS, EQUIPMENT PADS, ETC.
6. ALL DIMENSIONS ARE TO THE OUTER SURFACE OF THE PARTITIONS, UNLESS NOTED OTHERWISE.
7. BUILDING 1: AIR BARRIER IS TO BE APPLIED TO THE INTERIOR SURFACE OF ALL CHASE WALLS, UNLESS NOTED OTHEWISE.
8. BUILDING 1: CONTRACTOR TO VERIFY THE MANUFACTURER'S REQUIREMENTS FOR THE EXTENT OF LEVEL FLOOR AREA AROUND LIFT EQUIPMENT.
9. REFER TO ENGINEERING DRAWINGS (S, M, P, FP, E) FOR LOCATIONS OF CONCRETE EQUIPMENT PADS.
10. HATCHING INDICATES INTERIOR PARTITIONS THAT EXTEND TO UNDERSIDE OF STRUCTURE, TYPICAL.

KEY PLAN



BUILDING NORTH

SCALE:
1" = 10'-0"

BUILDING 2A - ARCHITECTURAL - FIRST FLOOR PLAN **1**

CONSULTANT SEAL

REGISTERED ARCHITECT PENNSYLVANIA DANIEL R. VITETTA

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER
1707 SOUTH BROAD STREET
PHILADELPHIA, PENNSYLVANIA 19145
TELEPHONE: (215) 218-4707
FAX: (215) 218-4940
224 NORTH FRONT STREET
HARRISBURG, PENNSYLVANIA 17101
TELEPHONE: (717) 763-1661
FAX: (717) 763-7670

PREPARED FOR
THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 2-A211.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

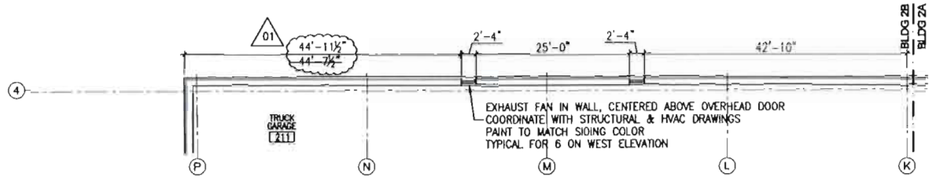
UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 2A
ARCHITECTURAL
FIRST FLOOR PLAN

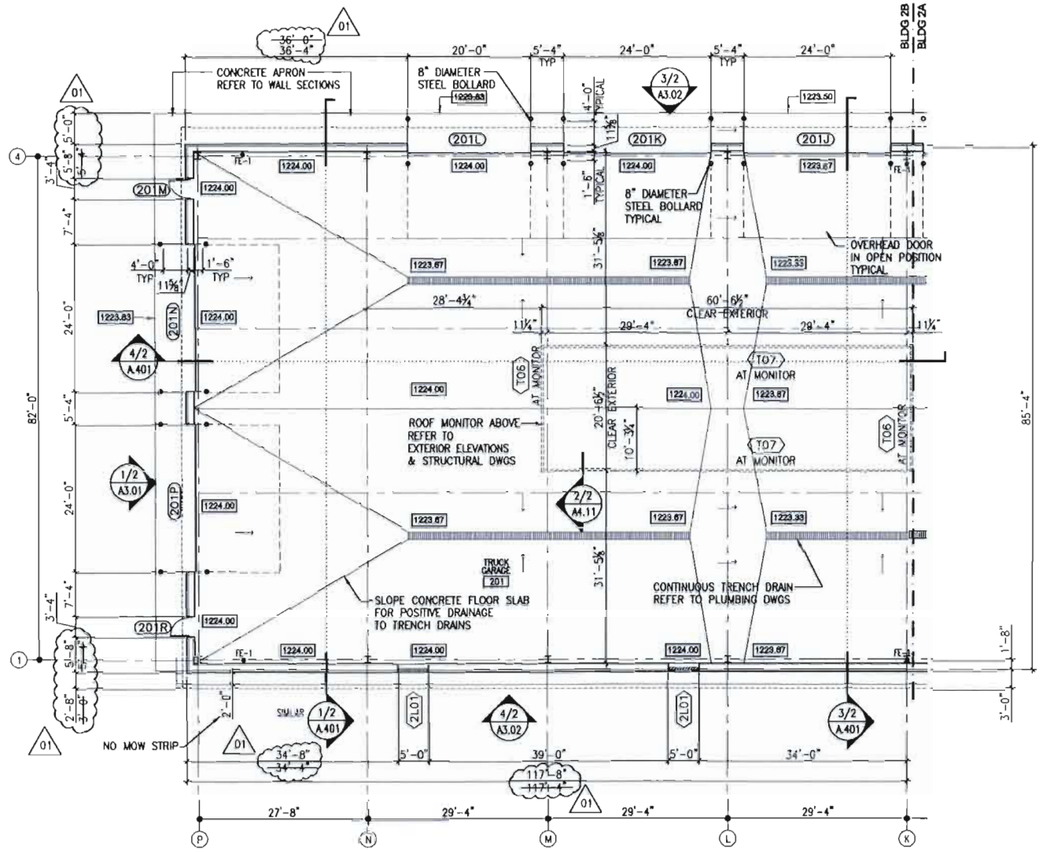
DRAWING: **2-A2.11**
SHEET: 082 OF 265

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



SCALE:
1" = 10'-0"

BUILDING 2B - PARTIAL FIRST FLOOR PLAN ABOVE OVERHEAD DOORS **2**



BUILDING NORTH

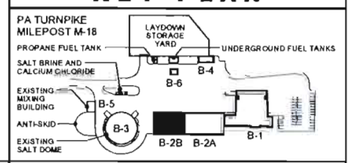
SCALE:
1" = 10'-0"

BUILDING 2B - ARCHITECTURAL - FIRST FLOOR PLAN **1**

FLOOR PLAN NOTES

1. THESE GENERAL NOTES APPLY TO ALL FLOOR PLAN DRAWINGS IN THIS SET. THEREFORE, SOME NOTES MAY NOT BE APPLICABLE TO THIS SPECIFIC DRAWING.
2. REFER TO CS1.04 FOR TYPICAL SYMBOL LEGENDS.
3. REFER TO DRAWINGS A100 SERIES DRAWINGS FOR CODE INFORMATION, INCLUDING OCCUPANCY CLASS, CONSTRUCTION TYPE, RATED WALL LOCATIONS, ETC.
4. REFER TO STRUCTURAL DRAWINGS FOR LAYOUT AND DIMENSIONS OF COLUMN GRID.
5. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS AND DETAILS OF DEPRESSED FLOOR SLABS, EQUIPMENT PADS, ETC.
6. ALL DIMENSIONS ARE TO THE OUTER SURFACE OF THE PARTITIONS, UNLESS NOTED OTHERWISE
7. BUILDING 1: AIR BARRIER IS TO BE APPLIED TO THE INTERIOR SURFACE OF ALL CHASE WALLS, UNLESS NOTED OTHEWISE.
8. BUILDING 1: CONTRACTOR TO VERIFY THE MANUFACTURER'S REQUIREMENTS FOR THE EXTENT OF LEVEL FLOOR AREA AROUND LIFT EQUIPMENT.
9. REFER TO ENGINEERING DRAWINGS (S, M, P, FP, E) FOR LOCATIONS OF CONCRETE EQUIPMENT PADS.
10. HATCHING INDICATES INTERIOR PARTITIONS THAT EXTEND TO UNDERSIDE OF STRUCTURE, TYPICAL.

KEY PLAN



CONSULTANT SEAL

REGISTERED ARCHITECT PENNSYLVANIA DANIEL A. VORZAK

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 336-5757, FAX: (215) 336-5760
324 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7670

PREPARED FOR:
THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 2-A212.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

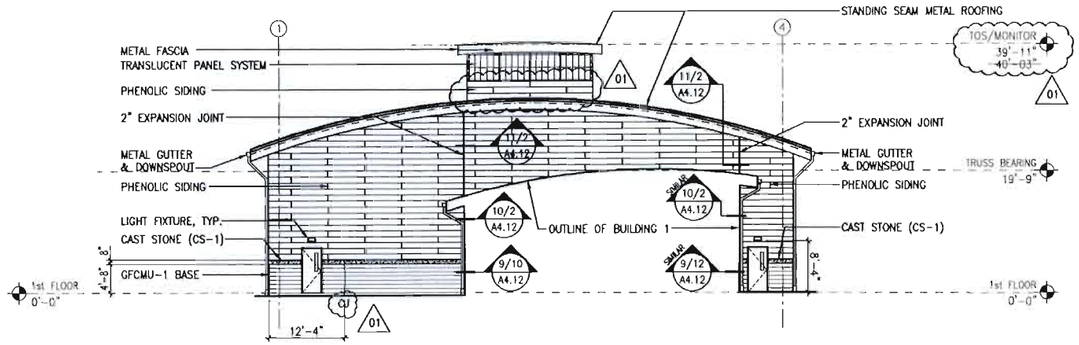
UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 2B
ARCHITECTURAL
FIRST FLOOR PLAN

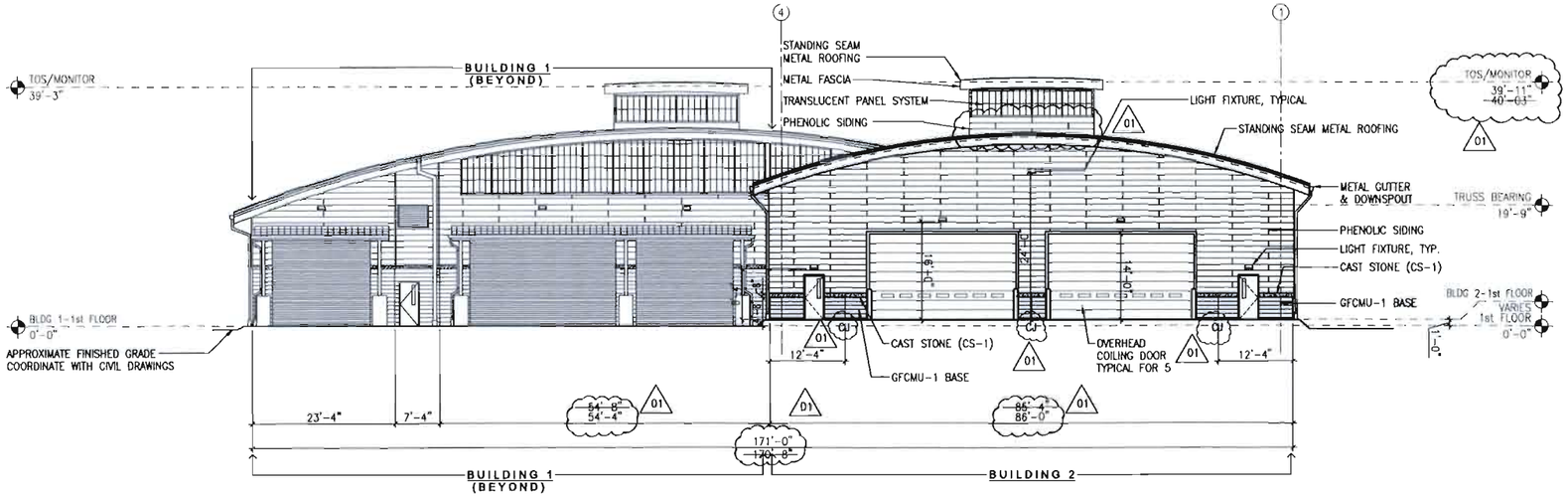
DRAWING: **2-A2.12**
SHEET: 083 OF 265

ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



SCALE:
1" = 10'-0"

BUILDING 2 - EXTERIOR ELEVATION - NORTH **2**



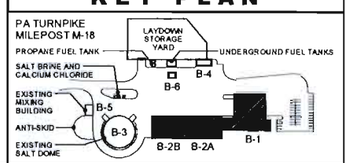
SCALE:
1" = 10'-0"

BUILDING 2 - EXTERIOR ELEVATION - SOUTH **1**

EXTERIOR ELEVATION NOTES

1. THESE GENERAL NOTES APPLY TO ALL EXTERIOR ELEVATION DRAWINGS IN THIS SET. THEREFORE, SOME NOTES MAY NOT BE APPLICABLE TO THIS SPECIFIC DWG.
2. FOR INFORMATION REGARDING WALL CONSTRUCTION, REFER TO WALL SECTIONS/DETAILS ON "A400" DRAWINGS.
3. DOORS & WINDOWS ARE DIMENSIONED TO THE ROUGH OPENING. REFER TO "A500" SERIES DRAWINGS FOR MORE INFORMATION REGARDING DOORS & WINDOWS.
4. COORDINATE CONTROL JOINT LOCATIONS WITH STRUCTURAL DRAWINGS AND SPECIFICATIONS.
5. REFER TO ARCHITECTURAL & MECHANICAL DRAWINGS AND SPECS FOR EXTERIOR LOUVER TYPES AND SIZES.
6. EXTERIOR LIGHTING IS SHOWN FOR COORDINATION AND MOUNTING HEIGHT REFERENCE. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION. REVIEW MOUNTING HEIGHTS WITH ARCHITECT IN FIELD, AS REQUIRED.
7. REFER TO THE PROJECT SPECIFICATIONS FOR MORE INFORMATION REGARDING MATERIALS AND FINISHES.
8. HATCH PATTERNS ARE SHOWN FOR GRAPHIC CLARITY ONLY. THEY DO NOT INDICATE THE TYPE OF MATERIAL, COLOR, OR FINISH TO BE USED.
9. REFER TO ROOF PLAN DRAWINGS FOR SIZES OF GUTTERS AND DOWNSPOUTS.
10. REFER TO DETAIL 3/1-A4.01 FOR LAP-SIDING LAYOUT DIAGRAM FOR VERTICAL SPACING.

KEY PLAN



CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 2929 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4760
524 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7490

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
01	ADD1 (M-015.30X001-3-02,03,04,05)	02JUL10	

WBS NUMBER: M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 2-A301.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

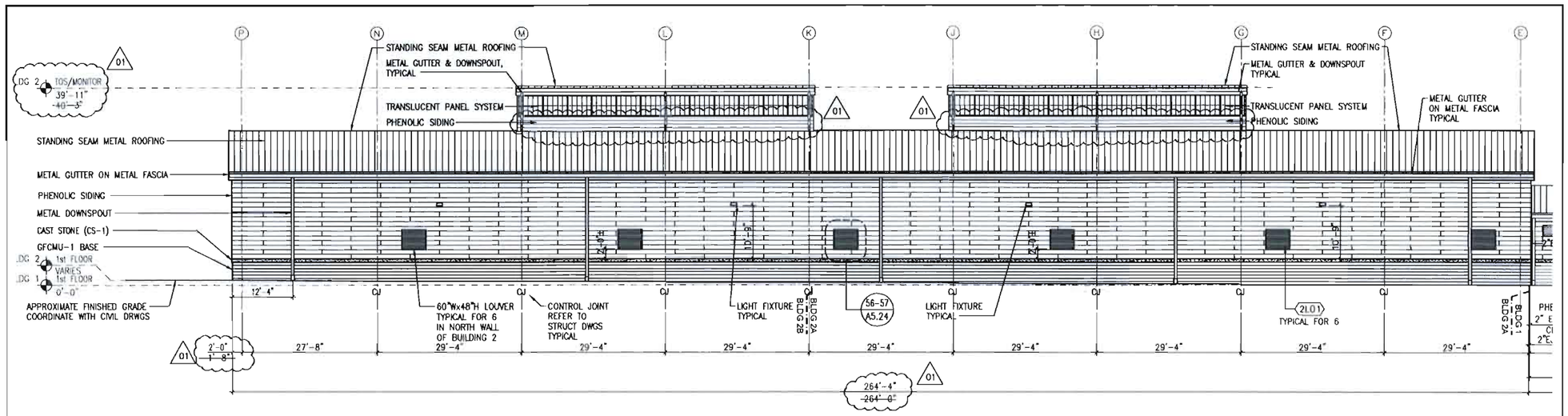
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 2 ARCHITECTURAL EXTERIOR ELEVATIONS SOUTH & NORTH

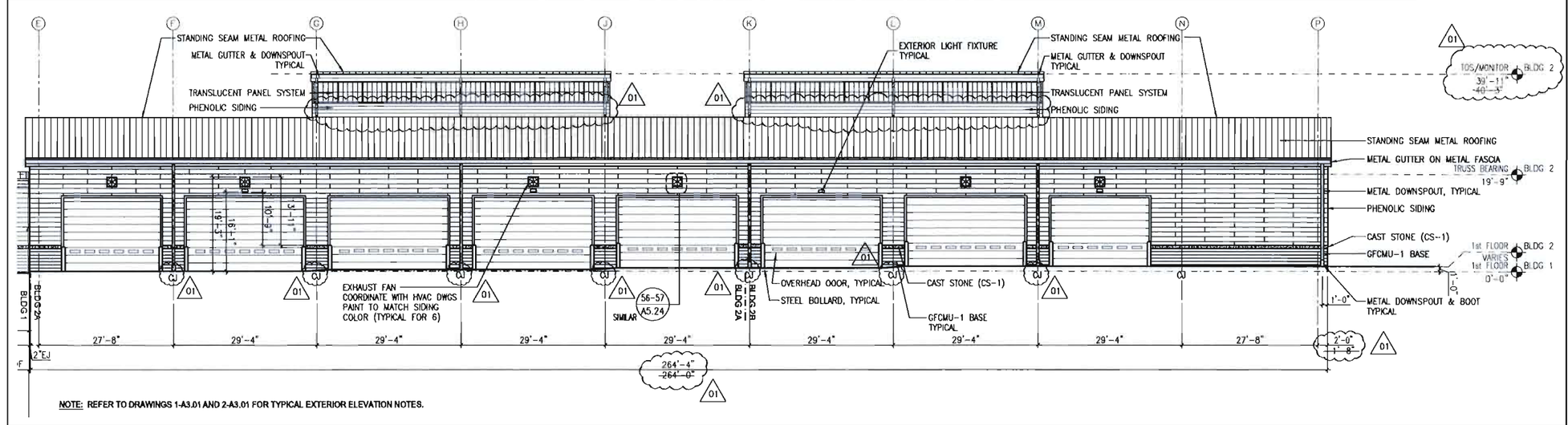
DRAWING: **2-A3.01**
SHEET: 088 OF 265

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



SCALE: 1" = 10'-0"

BUILDING - EXTERIOR ELEVATION - EAST **4**



NOTE: REFER TO DRAWINGS 1-A3.01 AND 2-A3.01 FOR TYPICAL EXTERIOR ELEVATION NOTES.

SCALE: 1" = 10'-0"

BUILDING 2 - EXTERIOR ELEVATION - WEST **3**

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 318-4747, FAX: (215) 318-4760
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-3661, FAX: (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 2-A302.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

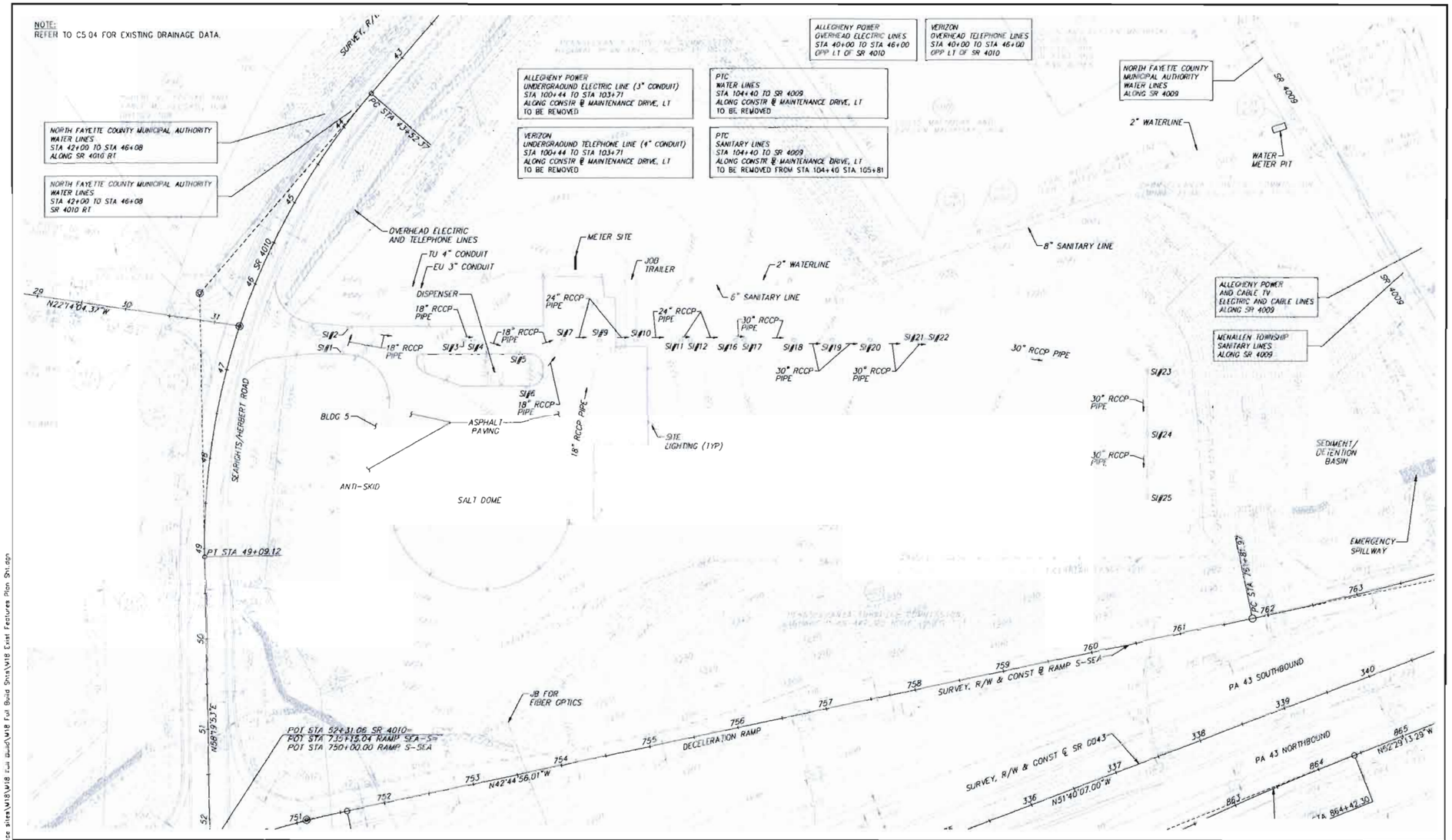
DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 2A ARCHITECTURAL EXTERIOR ELEVATIONS WEST & EAST

DRAWING: **2-A3.02**
SHEET: 089 OF 265

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10

NOTE:
REFER TO C5.04 FOR EXISTING DRAINAGE DATA.



PREPARED BY: WILBUR SMITH ASSOCIATES 503 MARTINDALE STREET PITTSBURGH, PENNSYLVANIA 15212		M-015.30X001-3-02, 03, 04, 05	UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA	M18 SITE EXISTING FEATURES PLAN
PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION	No. REVISIONS DATE APPR.	NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263	DISTRICT: 1 COUNTY: FAYETTE	DRAWING: C3.01
		FILE NAME: M18 Exist Features Plan Sht	TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP	SHEET: 005 OF 265
		SCALE: 50 25 0 50 FT		

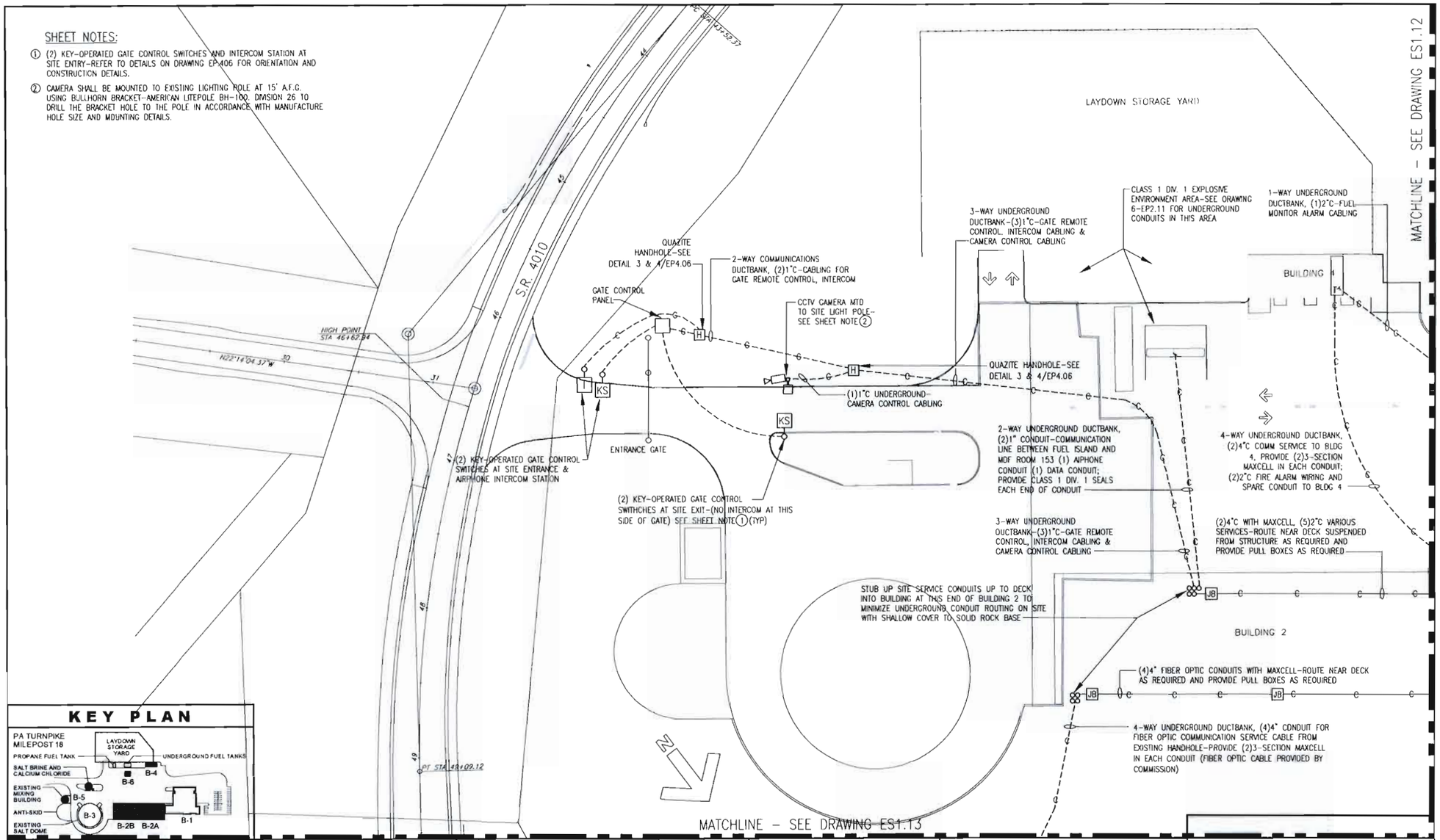
5/27/2010
m:\m5 & m18 maintenance sites\M18\M18 Full Build Site\M18 Exist Features Plan Sht.dgn

M18 Exist Features Plan Sht.dgn 5/27/2010 2:57:35 PM

SHEET NOTES:

① (2) KEY-OPERATED GATE CONTROL SWITCHES AND INTERCOM STATION AT SITE ENTRY–REFER TO DETAILS ON DRAWING EP-406 FOR ORIENTATION AND CONSTRUCTION DETAILS.

② CAMERA SHALL BE MOUNTED TO EXISTING LIGHTING POLE AT 15' A.F.G. USING BULLHORN BRACKET–AMERICAN LITEPOLE BH–100. DIVISION 26 10 DRILL THE BRACKET HOLE TO THE POLE IN ACCORDANCE WITH MANUFACTURE HOLE SIZE AND MOUNTING DETAILS.



KEY PLAN

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER, 6363 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19113, TELEPHONE: (215) 218-4747, FAX: (215) 576-6740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17101, TELEPHONE: (717) 763-5661, FAX: (717) 763-7670

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

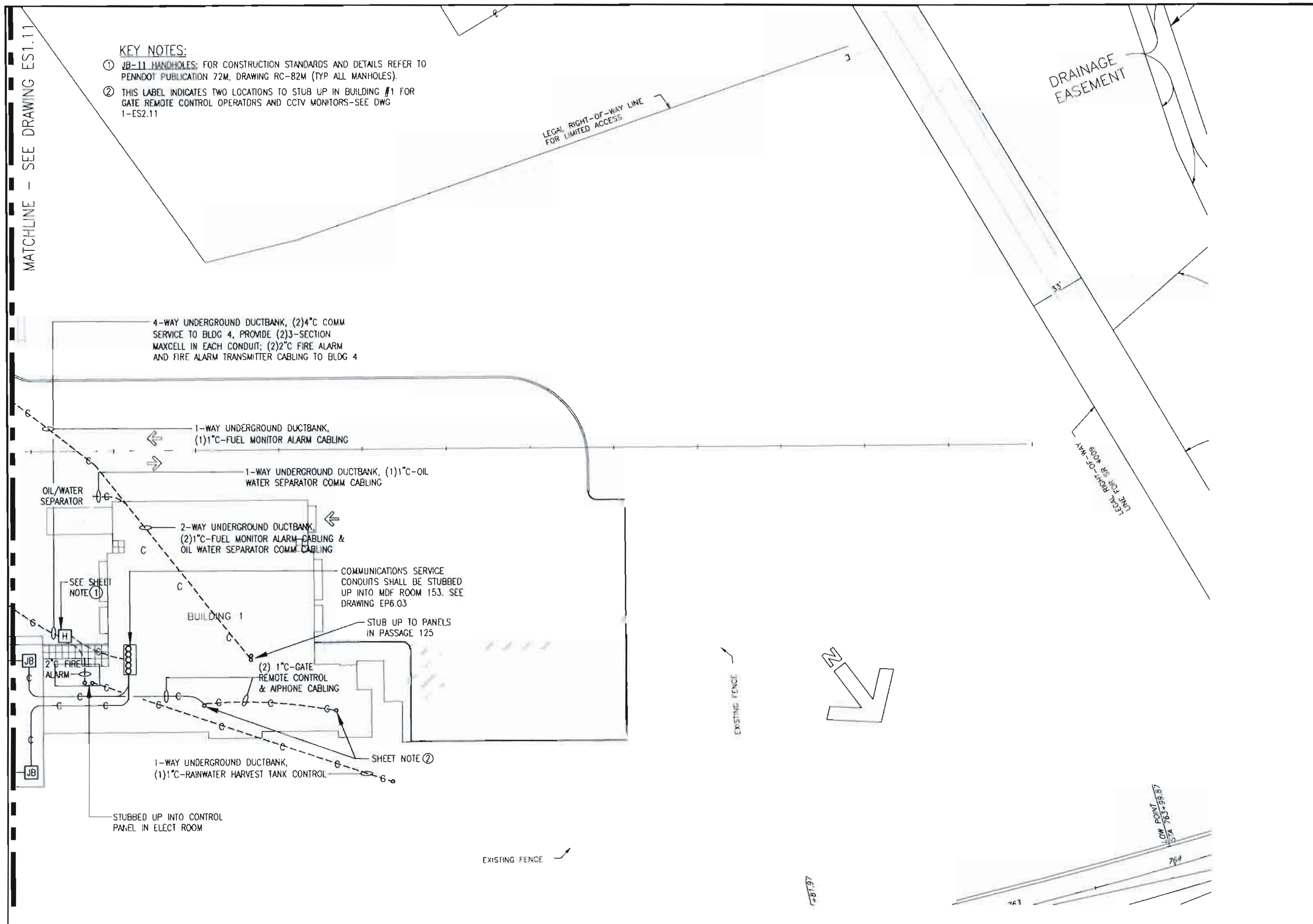
WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001280, 7001281, 7001282, 7001283
FILE NAME: ES1_11.DWG
SCALE: 0' 15' 30' 60'

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

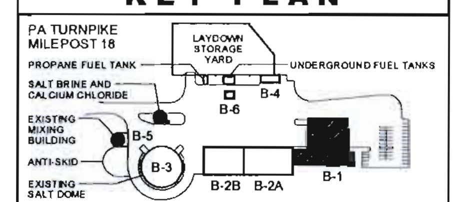
DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL COMMUNICATIONS SITE PLAN PART 1 OF 3

DRAWING: **ES1.11**
SHEET: 198 OF 265


MATCHLINE - SEE DRAWING ES1.11
KEY NOTES:
① JB-11 HANDHOLES: FOR CONSTRUCTION STANDARDS AND DETAILS REFER TO PENNDOT PUBLICATION 72M, DRAWING RC-82M (TYP ALL MANHOLES).
② THIS LABEL INDICATES TWO LOCATIONS TO STUB UP IN BUILDING #1 FOR GATE REMOTE CONTROL OPERATORS AND CCTV MONITORS-SEE DWG 1-ES2.11
LEGAL RIGHT-OF-WAY LINE FOR LIMITED ACCESS
DRAINAGE EASEMENT
4-WAY UNDERGROUND DUCTBANK, (2)4"C COMM SERVICE TO BLDG 4, PROVIDE (2)3-SECTION MAXCELL IN EACH CONDUIT; (2)2"C FIRE ALARM AND FIRE ALARM TRANSMITTER CABLING TO BLDG 4
1-WAY UNDERGROUND DUCTBANK, (1)1"C-FUEL MONITOR ALARM CABLING
1-WAY UNDERGROUND DUCTBANK, (1)1"C-OIL WATER SEPARATOR COMM CABLING
OIL/WATER SEPARATOR
2-WAY UNDERGROUND DUCTBANK, (2)1"C-FUEL MONITOR ALARM CABLING & OIL WATER SEPARATOR COMM CABLING
COMMUNICATIONS SERVICE CONDUITS SHALL BE STUBBED UP INTO MDF ROOM 153. SEE DRAWING EP6.03
SEE SHEET NOTE ①
BUILDING 1
STUB UP TO PANELS IN PASSAGE 125
(2) 1"C-GATE REMOTE CONTROL & AIPHONE CABLING
2"C FIRE ALARM
JB
SHEET NOTE ②
1-WAY UNDERGROUND DUCTBANK, (1)1"C-RAINWATER HARVEST TANK CONTROL
STUBBED UP INTO CONTROL PANEL IN ELECT ROOM
EXISTING FENCE
LEGAL RIGHT-OF-WAY LINE FOR SR 4029
N
LOW POINT

KEY PLAN



CONSULTANT SEAL	VITETTA SEAL	PREPARED BY: VITETTA ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN; PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740; 224 NORTH FRONT STREET, WORMLEYSBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7970; PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION	PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

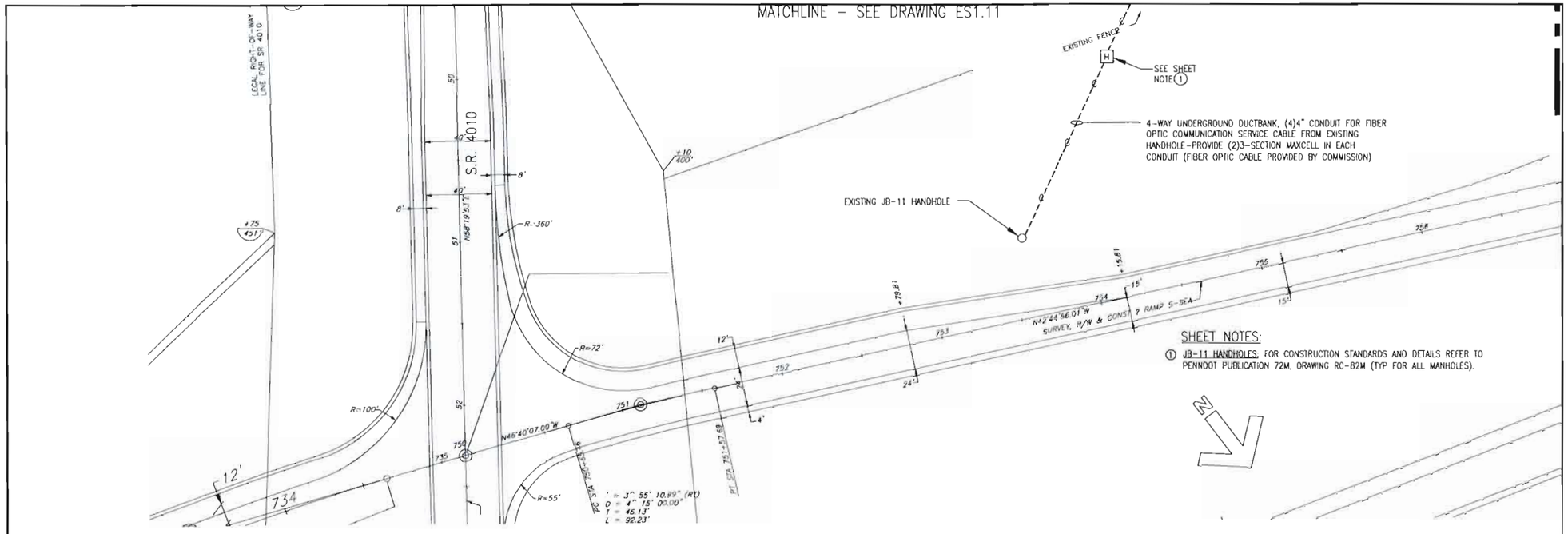
WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: ES1_12.DWG
SCALE: 0' 15' 30' 60'

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

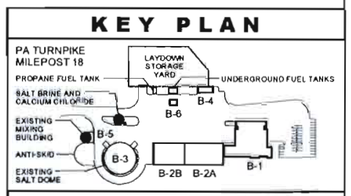
DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL
COMMUNICATIONS SITE PLAN
PART 2 OF 3

DRAWING: **ES1.12**
SHEET: 199 OF 265



KEY PLAN



CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · ENVIRONMENTAL · CONSTRUCTION MANAGEMENT

PHILADELPHIA MAIN BUSINESS CENTER
1717 SOUTH BROAD STREET
PHILADELPHIA, PENNSYLVANIA 19112
TELEPHONE: (215) 218-4747
FAX: (215) 218-4762

224 NORTH FRONT STREET
HARRISBURG, PENNSYLVANIA 17101
TELEPHONE: (717) 763-5961
FAX: (717) 763-7670

PREPARED FOR:
THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: ES1_13.DWG
SCALE: 0' 15' 30' 60'

UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA
DISTRICT: 1 COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL
COMMUNICATIONS SITE PLAN
PART 3 OF 3

DRAWING: **ES1.13**
SHEET: 200 OF 265

CONTRACT	DISTRICT / BORO	COUNTY	CADD / DWG NAME	SHEET
01-002-FCGF-C	MLNALLEN	FAYETTE	MFCSIG15.DGN	15 OF 48

MON / FAYETTE EXPRESSWAY, SECTION 51C

REVISION NUMBER	REVISIONS	DATE	BY

SEE PLAN SHEET 22 OF 48

STOP PAY TOLL
2 AXLES 0.00
ADDITIONAL AXLES
0.00 PER AXLE

(15) 3 TYPE A SIGN, FOR SIGN DETAILS, SEE SHEET 35 OF 48.

CONCRETE ENCASEMENT FOR HDPE CONDUIT., SEE SHEET 4 OF 48 FOR DETAIL.

STA 731+00

SURVEY & CONST @ SEA-S

RAMP SEA-S
STA 725+80.00 TO STA 730+00.00
SEE TOLL FACILITY PLANS

Upper Middletown Rd.
TYPE D MODIFIED SIGN FOR SIGN FABRICATION, SEE SHEET 42 OF 48

SURVEY, R/W & CONST @ SR 0043

SR 4010

SURVEY & CONST @ S-SEA

CONCRETE ENCASEMENT FOR HDPE CONDUIT., SEE SHEET 4 OF 48 FOR DETAIL.

FLEXIBLE ORANGE DELINEATOR

FLEXIBLE ORANGE DELINEATOR

JB-11, SPECIAL

SEE PLAN SHEET 14 OF 48

SEE PLAN SHEET 16 OF 48

RAMP N-SEA
STA 818+20.00 TO STA 822+40.00
SEE TOLL FACILITY PLANS

TYPE A SIGN FOR SIGN DESIGN, SEE SHEET 33 OF 48

Searights 1
New Salem 4
Waltersburg 4

SURVEY & CONST @ N-SEA

SURVEY & CONST @ SEA-N

SEE PLAN SHEET 21 OF 48

SIGNING PLAN

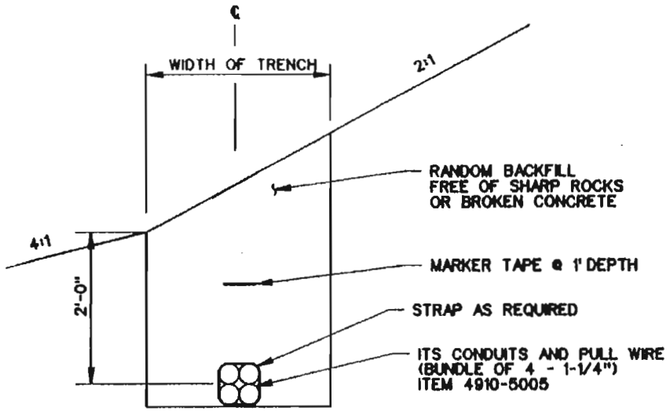
SCALE IN FEET
0 50 100

DRAWN BY	SPR
CHECKED BY	MW

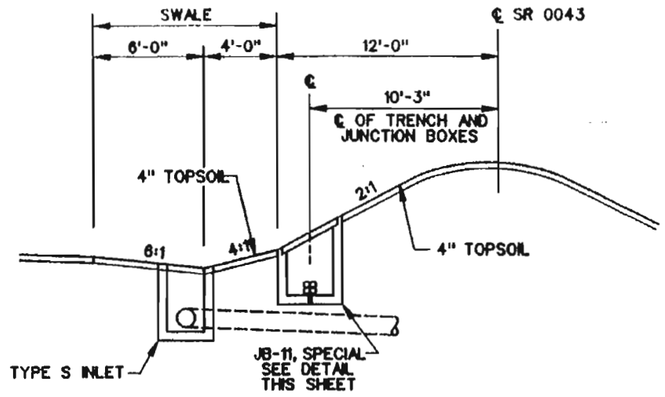
COMMONWEALTH OF PENNSYLVANIA
MATTHEW WALERYSTAK
ENGINEER
057995

CONTRACT	TOWNSHIP / BORO	COUNTY	FILE / DWG. NAME	SHEET
01-002-FCGD-C	NORTH UNION	FAYETTE	A2UDT01.DGN	156 OF 367
SR 0043 (MFE-UNIONTOWN TO BROWNSVILLE, SECTION 51A2)				

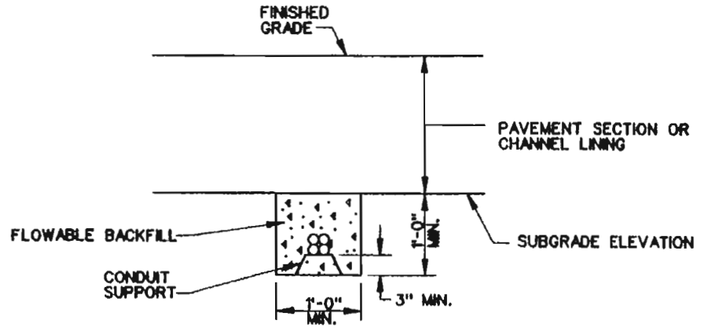
REVISION NUMBER	REVISIONS	DATE	BY



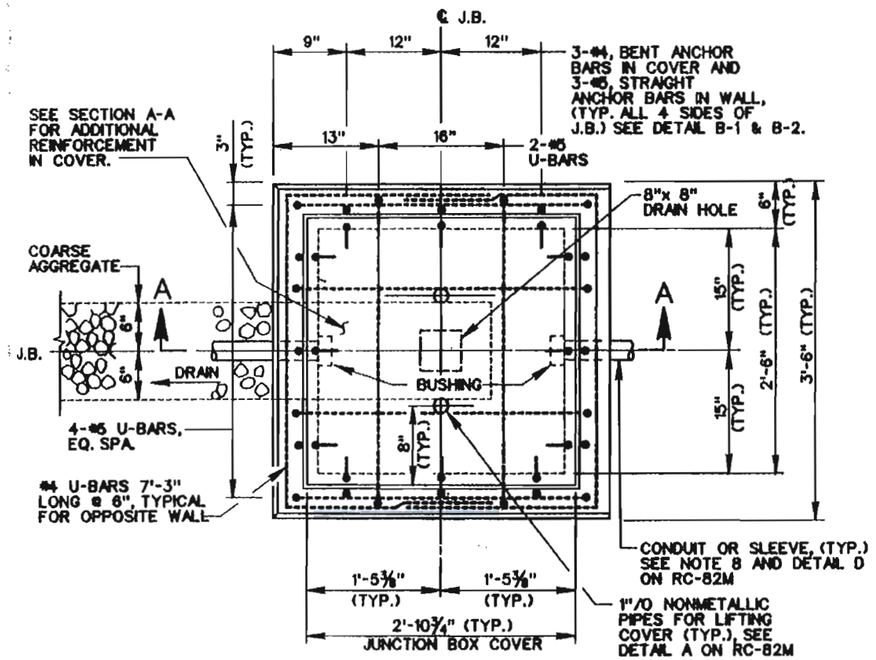
TRENCH FOR ITS CONDUIT
(ITEM 4910-6000)
NTS



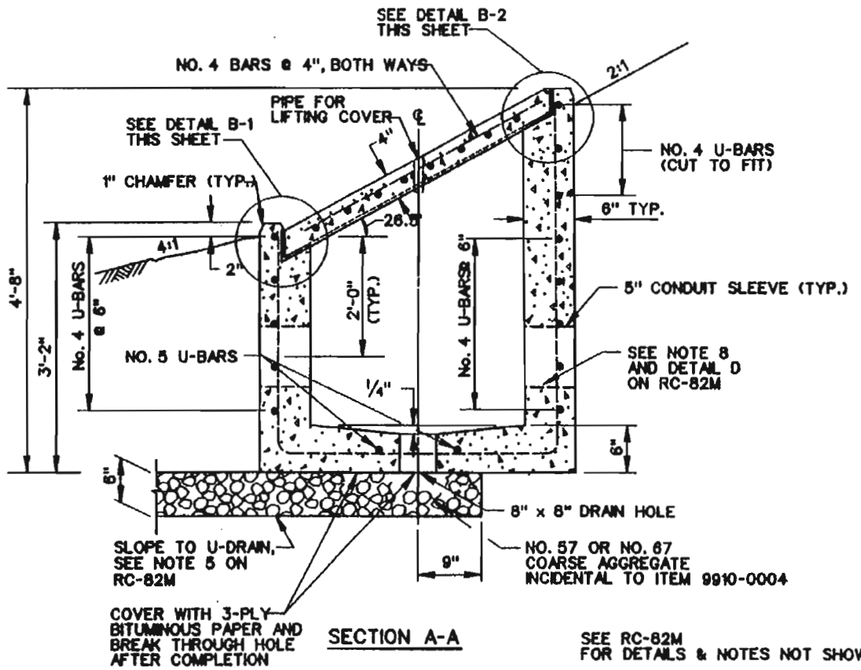
INSTALLATION DETAIL
(LOCATED IN 2:1 MEDIAN MOUND SLOPE)
NTS



ENCASEMENT DETAIL FOR HDPE CONDUIT
(ITEM 9000-0020)
NTS

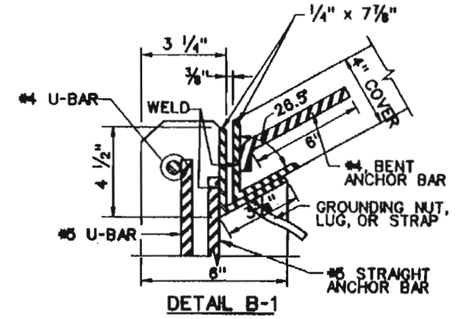


PLAN



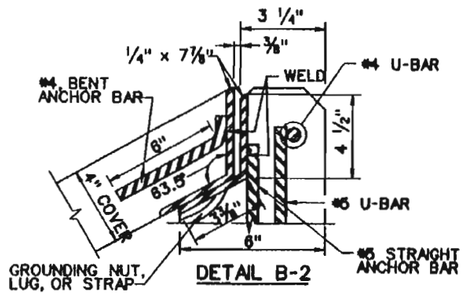
SECTION A-A

SEE RC-82M FOR DETAILS & NOTES NOT SHOWN



DETAIL B-1

COVER FRAME AND SUPPORTING FRAME



DETAIL B-2

COVER FRAME AND SUPPORTING FRAME

JUNCTION BOX, JB-11 SPECIAL
(ITEM 9910-0004)
NTS

UTILITY DETAILS
CONDUITS & JUNCTION BOXES
(NOT TO SCALE)

THOMAS P. LENCH
039687-E

ELECTRICAL ABBREVIATIONS

ABOVE FINISHED FLOOR	AFF
ABOVE FINISHED GRADE	AFG
ALTERNATING CURRENT	AC
ALUMINUM	AL
AMERICAN WIRE GAUGE	AWG
AMPERE	A/AMP
APPROXIMATE (LY)	APPROX
AUTOMATIC TRANSFER SWITCH	ATS
BATTERY	BATT
BREAKER	BKR
CABINET	CAB
CEILING	CLG
CIRCUIT	CIR/CKT
CIRCUIT BREAKER	CB
CLEAR	CLR
CLOSED CIRCUIT TELEVISION	CCTV
COMMUNICATION	COMM
CONCRETE	CONC
CONDUIT	C
COPPER	CU
CARD READER	CR
CURRENT TRANSFORMER	CT
DETAIL	DET
DIAMETER	DIA
DIRECT CURRENT	DC
DISCONNEGT	DISC
DISTRIBUTION	DIST
DISTRIBUTION PANEL	DP
DRAWING	DWG
DUAL ELEMENT	DE
EACH	EA
ELECTRIC WATER COOLER	EWC
ELECTRICAL	ELEC
ELECTRICAL METALLIC TUBING	EMT
EMERGENCY	E/EMER
ENCLOSURE	ENCL
EQUIPMENT	EQUIP
EXHAUST FAN	EF
EXPLOSION PROOF	XP
FIRE ALARM	FA
FIRE ALARM ANNUNCIATOR PANEL	FAAP
FIRE ALARM CONTROL PANEL	FACP
FIXTURE	FIXT
FLOOR	FL
FLUORESCENT	FLUOR
FOOT CANDLES	FC
FULL LOAD AMPERES	FLA
FU	FUSE
GENERATOR	GEN
GROUND	GND/G
GROUND FAULT INTERRUPTER	GFI
GYPSUM WALLBOARD	GWB
HAND DRYER (ELECTRIC)	HD
HAND HOLE	HH
HEATING VENTILATING, AND AIR CONDITIONING	HVAC
HERTZ	HZ
HIGH INTENSITY DISCHARGE	HID
HIGH POWER FACTDR	HPF
HORSEPOWER	HP

INCANDESCENT	INCAN
INTERCOM	I
JUNCTION BOX	JB
KEYSWITCH	KS
KILOVOLT AMPERE	KVA
KILOWATT	KW
LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT	LSIG
LIGHT	LT
LIGHTING	LTG
LOW VOLTAGE	LV
MAIN CIRCUIT BREAKER	MCB
MAIN DISTRIBUTION PANEL	MDP
MAIN LUGS ONLY	MLO
MANHOLE	MH
MANUFACTURER	MFR
MEDIUM VOLTAGE	MV
METAL HALIDE	MH
METAL-CLAD CABLE	MC
MISCELLANEOUS	MISC
MOUNTED	MTD
MOUNTING HEIGHT	MTG HT
NATIONAL ELECTRICAL CODE	NEC
NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	NEMA
NORMALLY CLOSED	NC
NORMALLY OPEN	NO
NOT APPLICABLE	N/A
NOT TO SCALE	NTS
ON CENTER	DC
OVERHEAD	OH
PANEL	PNL
PASSIVE INFRARED	PIR
PHOTOCELL	PC
PLYWOOD	PLY
POLE	P
POLYVINYL CHORIDE	PVC
POTENTIAL TRANSFORMER	PT
PULL BOX	PB
	REC/RECP
RECEPTACLE	RCP
REFLECTED CEILING PLANS	REQ'D
REQUIRED	RGS
RIGID GALVANIZED STEEL CONDUIT	RM
ROOM	
	SCHED/SCH
SCHEDULE	SW
SWITCH	SWBD
SWITCHBOARD	
TIMECLOCK	TC
TELEPHONE	TEL
TRANSFORMER	XFMR
TYPICAL	TYP
U.G.	UNDERGRD
UNDERWRITER'S LABORATORIES	UL
UNLESS OTHERWISE NOTEO	U.O.N.
VAPOR PROOF	VP
VOLT	V
WEATHERPROOF	WP

STANDARD MOUNTING HEIGHTS

CEILING	FIRE ALARM DETECTOR, MOTION DETECTOR
12" BELOW CEILING OR 8'-0" AFF MAX	EXIT LIGHTS
7'-4"	VISUAL FIRE ALARM AUDIO/VISUAL FIRM ALARM TO BOTTOM OF LENS
6'-6"	TOP OF LTG OR POWER PANEL TOP OF TEL CABINET/BACKBOARD
6'-0" MAX.	TOP OF SAFETY OISC SWITCH TOP OF CONTACTORS U.O.N. TOP OF MAGNETIC STARTS
4'-0"	LIGHT SWITCHES TELEPHONE HANDSET (WALL MOUNTED) FIRE ALARM PULL STATION INTERCOM STATION WALL MOUNTED INTERCOM, CARD READER EMERGENCY SHUT-OFF SWITCHES
1'-6"	RECEPTACLES, DESK TYPE TELEPHONE OUTLETS, LOW TELEVISION OUTLETS, COMPUTER OUTLETS
0'-0"	FINISHED FLOOR (FF) IN FLOOR JUCTION BOXES

1. IN MASONRY CONSTRUCTION THE MOUNTING HEIGHTS SHALL BE USED FOR REFERENCE TO THE NEAREST BLOCK OR BRICK COURSING.
2. THE ABOVE MOUNTING SHALL BE ADHERED TO UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE ON THE DRAWINGS OR SPECIFICATIONS.
3. COORDINATE ANY MOUNTING HEIGHTS OF CONCERN WITH REPRESENTATIVE.
4. THE LISTED MOUNTING HEIGHT DIMENSIONS SHALL BE MADE FROM ACTUAL FIELD MEASUREMENTS.

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH PA UCC 2009.
2. ALL WIRING UNLESS OTHERWISE NOTED ON DRAWINGS SHALL BE MINIMUM #12 AWG.
3. ALL CONDUITS SHALL BE SIZED IN ACCORDANCE WITH NEC UNLESS SHOWN LARGER ON DRAWINGS. HOWEVER, NO CONDUIT SHALL BE LESS THAN 1".
4. ALL CONDUIT EXPOSED TO THE WEATHER SHALL BE STANDARD WALL RIGID GALVANIZED STEEL CONDUIT.
5. ALL WIRING SHALL BE IN METAL CONDUIT, UNLESS OTHERWISE NOTED.
6. WHERE CONTRACTOR COMBINES MULTIPLE CIRCUITS IN ONE CONDUIT, THEY SHALL INSTALL ALL HOMERUN BRANCH AND FEEDER WIRING IN ACCORDANCE WITH NEC 310 AND NEC CHAPTER NINE, REGARDING OERATING OF CONDUCTOR AMPACITIES AND ALLOWABLE CONDUIT FILL.
7. THE CONTRACTOR SHALL IDENTIFY ALL JUNCTION AND PULL BOXES ABOVE CEILING WITH THE PANELBOARD AND BRANCH CIRCUIT NUMBER MARKED ON COVER PLATE USING MAGIC MARKER. PROVIDE ENGRAVED LAMINATED ACRYLIC OR MELAMINE PLASTIC NAMEPLATES (1-3/4 INCH X 3-1/2 INCH WITH 3/4 INCH LETTERS) FOR DISTRIBUTION PANELS, MOTOR STARTERS & DISCONNECTS, AND ALL PANELBOARDS. A TYPEWRITTEN DIRECTORY SHALL BE PROVIDED FOR ALL PANELBOARDS.
8. ALL EMPTY CONOUITS (ELECTRICAL, TELEPHONE, DATA, TV, ETC.) SHALL HAVE A PULLING LINE AS LISTED IN THE SPECIFICATION SECTION 260533
9. ALL PULL LINES SHALL BE IDENTIFIED LISTING ORIGIN, INTERMEDIATE PULL POINTS AND TERMINATION. SPECIFIC LOCATIONS OF ORIGIN, INTERMEDIATE PULL POINTS AND TERMINATION SHALL BE INDICATED.
10. ALL CABLES SHALL BE SECURED WITH UL LISTED SUPPORTS, RATED FOR SPACE (I.E. PLENUM RATED), IN WHICH CABLES ARE INSTALLED.
11. WHERE CONDUIT, OR CABLES, PASS THROUGH FIRE RATED FLOORS OR WALLS, THE SLEEVES SHALL BE COMPLETELY SEALED WITH A FIRE STOP MATERIAL THAT IS UL LISTED AND ACCEPTED BY THE REPRESENTATIVE AS BEING SUITABLE FOR THIS SERVICE. REFER TO SPEC SECTION 260500.
12. CONNECTION TO MOTOR TERMINAL BOXES, SOLENOIDS, AND ANY OTHER DEVICES HAVING ADJUSTABLE MOUNTING FACILITIES OR WHICH ARE SUBJECT TO VIBRATION SHALL BE MADE IN LIQUID TIGHT METALLIC WHENEVER A FLEXIBLE CONDUIT IS EMPLOYED.
13. THE DIRECTION OF ROTATION OF ALL MOTORS SHALL BE VERIIFIED. BEFORE TESTING FOR ROTATION ALL COUPLINGS SHALL BE DISCONNECTED TO PREVENT DAMAGE TO DRIVEN EQUIPMENT.
14. PROVIDE PROPER ACCESS PANELS AS SPECIFIED IN SECTION 083113 IN WALLS AND GWB CEILINGS FOR ANY EQUIPMENT, DEVICES, SWITCHES, CONTACTORS, PULL & JUNCTION BOXES ETC. REQUIRING ACCESS. IF ACCESS PRODUCTS AS SPECIFIED SECTION 083113 ARE IN CONFLICT WITH PRODUCTS SPECIFIED IN DIVISION 26, SECTION 083113 SHALL GOVERN.
15. GENERALLY WIRING AND CONDUIT SHALL BE CONCEALED BY BUILDING FINISH. WHERE WIRING CANNOT BE CONCEALED SURFACE RACEWAY SHALL BE USED; SURFACE MOUNTED EMT SHALL BE USED IN ALL MECHANICAL ROOMS OR OTHER UTILITY SPACES NOT NORMALLY ACCESSIBLE TO THE PUBLIC.
16. RECEPTACLES MOUNTED ABOVE COUNTER OR BACKSPLASH SHALL BE MOUNTED HORIZONTALLY 6" ABOVE THE COUNTER OR BACKSPLASH UNLESS OTHERWISE DIRECTED BY THE REPRESENTATIVE.
17. ALL RECEPTACLES LOCATED WITHIN 6' OF A SINK SHALL BE GFI.
18. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SMALL SCALE ONLY. THEY CONVEY THE INTENT OF THE WORK BUT DO NOT SHOW DETAIL SUCH AS JUNCTION ANO PULL BOXES REQUIRED BY THE SPECIFICATIONS. PROVIDE ALL MATERIALS AND METHODS CALLED FOR IN THE SPECIFICATIONS IN ORDER TO PROVIDE A COMPLETE INSTALLATION OF ALL WORK.
19. LIGHTING FIXTURES SHALL BE MOUNTEO IN CEILING GRID SYSTEMS UTILIZING METHODS OF ATTACHMENT IN ACCORDANCE WITH NEC ARTICLE 410 AND UL REQUIREMENTS.
20. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS (RCP) FOR EXACT LOCATION OF LIGHT FIXTURES AND CEILING TYPES. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CEILING TYPES WITH FIXTURE MOUNTING HARDWARE. FINAL LOCATION SUBJECT TO THE REPRESENTATIVE'S REVIEW OF CONTRACTOR GENERATED COORDINATION DRAWINGS.
21. FINAL OUTSIDE BUILDING LIGHTING FIXTURE LOCATIONS AND MOUNTING HEIGHTS SHALL BE AS DEFINEO ON THE ARCHITECTURAL BUILDING ELEVATIONS TO DETERMINE ROUGH-IN LOCATIONS.
22. COORDINATE WITH ARCHITECTURAL FURNITURE PLANS AND CASEWORK ELEVATIONS TO AID IN RECEPTACLE AND WIRING DEVICE ROUGH-IN LOCATIONS. COORDINATE WITH ALL FURNITURE AND OTHER EQUIPMENT INSTALLERS BEFORE ROUGH-IN TD AVOID INTERFERENCE WITH INSTALLED EQUIPMENT.
23. COORDINATE WITH ALL OTHER DIVISIONS FOR EXACT LOCATIONS OF EQUIPMENT REQUIRING POWER CONNECTIONS.
24. ALL MULTI-SWITCH LOCATIONS SHALL BE GANGED IN A COMMON BACKBOX. LOCATIONS WITH (4) SWITCHES OR LESS SHALL HAVE A COMMON FACEPLATE WHERE FEASIBLE.
25. SEE ENLARGED ELECTRICAL ROOM PLANS FOR EXACT PANELBOARD LOCATIONS.
26. COORDINATE LOCATION OF WALL SWITCHES, OUTLETS AND OTHER WALL MOUNTED HARDWARE WITH ARCHITECTURAL FLOOR PLANS TO AVOID CONFLICTS WITH OTHER INSTALLED EQUIPMENT.
27. LONG FEEDER RUNS ARE BASED ON 2% VOLTAGE DROP CALCULATION FOR WIRE SIZE. CONTRACTOR SHALL VERIFY ACTUAL LENGTH OF RUN AND UPGRADE WIRE SIZE AS REQUIRED FOR ACTUAL VOLTAGE DROP ANTICIPATED AT NO COST TO THE COMMISSION.
28. THE METHOD AND FREQUENCY OF ATTACHING ANY ELECTRICAL EQUIPMENT AND LIGHT FIXTURES TD THE STRUCTURAL ELEMENTS SHALL BE SUBJECT TO THE REPRESENTATIVE'S REVIEW.

TEMPORARY POWER AND LIGHTING

TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED BY DIVISION 26. REQUIREMENTS ARE FULLY OUTLINED IN SPECIFICATION SECTION 01500D.

CONSULTANT SEAL | VITETTA SEAL

PREPARED BY: VITETTA
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, WORMLEYSBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5861, FAX: (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: E1_01.DWG
SCALE: NONE

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL COVER SHEET PART 1 OF 3

DRAWING: **E1.01**
SHEET: 189 OF 265

SPECIAL PURPOSE RECEPTACLE SCHEDULE

SYMBOL	NEMA #	DEVICE RATINGS	C/B
HA	5-30R	30A- 125V., 2P. 3W.	30A- 1P
HB	5-50R	50A- 125V., 2P. 3W.	50A- 1P
HC	6-20R	20A- 250V., 2P. 3W.	20A- 2P
HD	6-30R	30A- 250V., 2P. 3W.	30A- 2P
HE	6-50R	50A- 250V., 2P. 3W.	50A- 2P
HF	14-20R	20A- 125/250V., 3P. 4W.	20A- 2P
HG	14-30R	30A- 125/250V., 3P. 4W.	30A- 2P
HH	14-50R	50A- 125/250V., 3P. 4W.	50A- 2P
HJ	14-60R	60A- 125/250V., 3P. 4W.	60A- 2P
HK	15-20R	20A- 250V., 3ø, 3P. 4W.	20A- 3P
HL	15-30R	30A- 250V., 3ø, 3P. 4W.	30A- 3P
HM	15-50R	50A- 250V., 3ø, 3P. 4W.	50A- 3P
HN	15-60R	60A- 250V., 3ø, 3P. 4W.	60A- 3P
HP	L5-20R	20A- 125V., 2P. 3W. TWIST-LOCK	20A- 1P
HR	L5-30R	30A- 125V., 2P. 3W. TWIST-LOCK	30A- 1P
HS	L6-20R	20A- 250V., 1ø, 2P. 3W. TWIST-LOCK	20A- 2P
HT	L6-30R	30A- 250V., 1ø, 2P. 3W. TWIST-LOCK	30A- 2P
HV	L21-20R	20A- 120/208V., 3ø, 4P. 5W. TWIST-LOCK	20A- 3P
HW	L21-30R	30A- 120/208V., 3ø, 4P. 5W. TWIST-LOCK	30A- 2P
HY	18-50R	50A- 120/208V., 3ø, 4P. 4W.	40A- 3P
HZ	L19-30R	30A- 277/480V., 3ø, 4P. 4W. TWIST-LOCK	30A- 3P

CIRCUITING DOCUMENTATION CONVENTIONS

SYMBOL	LINE CIRCUITING - (MOST USED CIRCUITING METHOD)
	HOME RUN TO PANEL - ARROWS AND NUMBERS INDICATE CIRCUIT CONNECTIONS IN DESIGNATED PANEL

SYMBOL	TEXT CIRCUITING - (USED WHEN NECESSARY IN LIEU OF LINE CIRCUITING TO MAINTAIN DRAWING CLARITY)
RT11-1	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL
RG11-3	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL
RT11-3	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL
RM12-2	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL
RM11-1 [8]	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL
RT11-4 (J)	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL
ELM11-3	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL
LG11-5	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL
LM11-9	NUMBER INDICATES CONNECTED CIRCUIT NUMBER IN DESIGNATED PANEL

FIRE ALARM SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
FACP	ADDRESSABLE FIRE ALARM CONTROL PANEL	F X	FIRE ALARM COMBINATION HORN/STROBE ADA RATED & SYNCHRONIZED WALL MOUNTED 'WG' DENOTES WIRE GUARD 'WP' DENOTES WEATHERPROOF
FAAP	LCD FIRE ALARM ANNUNCIATOR PANEL	S X	FIRE ALARM STROBE ADA RATED & SYNCHRONIZED 'WG' DENOTES WIRE GUARD 'WP' DENOTES WEATHERPROOF
F X	ADDRESSABLE FIRE ALARM MANUAL PULL STATION 'WP' DENOTES WEATHER PROOF	FSD	COMBINATION FIRE/SMOKE DAMPER
H	CONVENTIONAL THERMAL DETECTOR FX - FIXED TEMPERATURE ONLY- SET AT 135 DEGREES F.		END OF LINE SUPERVISORY DEVICE
S X	ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR WG = WIRE GUARD		MAGNETIC DOOR HOLDER
D	ADDRESSABLE DUCT SMOKE DETECTOR W/REMOTE LED INDICATION & ADDRESSABLE RELAY	FCPS	FIELD CHARGEABLE POWER SUPPLY
M	ADDRESSABLE MONITOR MODULE	TS	SPRINKLER SUPERVISORY TAMPER SWITCH (PROVIDED BY DIVISION 22)
C	ADDRESSABLE CONTROL MODULE	FS	SPRINKLER INITIATING FLOW SWITCH (PROVIDED BY DIVISION 22)
		PS	SPRINKLER INITIATING PRESSURE SWITCH (PROVIDED BY DIVISION 22)

LIGHTING INTENSITY SCHEDULE

LOCATIONS:	IESNA RECOMMENDED FOOT-CANDLES	TARGETED DESIGN FOOT-CANDLES
OFFICES, MEETING ROOMS	30	30 TO 50
STORAGE	10	10 TO 30
TRUCK WASH	10	15 TO 25
TOILETS AND WASHROOMS	10	10 TO 20
LUNCHROOMS	10	20 TO 30
LOCKER ROOMS	10	10 TO 30
CORRIDORS	5	7 TO 15
VEHICLE MAINTENANCE/TRUCK REPAIR	50	50 TO 60
MECHANICAL/ELECTRICAL ROOM	30	30
TRUCK GARAGE	5	15 TO 20
SALT SHED	5	10
MACHINE SHOPS	50	50 TO 60

ILLUMINANCE INTENSITY STANDARDS ARE DERIVED FROM THE CATEGORIES LISTED IN IESNA CHAPTER 10, FIGURE 10-9 AND ACCOMPANYING TASK CHARTS.

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA

PHILADELPHIA MAIN & FINANCE CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740; 234 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17101, TELEPHONE: (717) 763-5961, FAX: (717) 763-7670

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER: M-015.30X001-3-02, 03, 04, 05

NETWORK NUMBER: 7001280, 7001281, 7001282, 7001283

FILE NAME: E1_02.DWG

SCALE: NONE

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 COUNTY: FAYETTE

TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL COVER SHEET PART 2 OF 3

DRAWING: **E1.02**

SHEET: 190 OF 265

ELECTRICAL SYMBOL LIST

SYMBOL	DESCRIPTION
	SHADED INDICATES LIGHT FIXTURE SHALL BE CONNECTED TO EMERGENCY CIRCUIT DERIVED FROM 'EMERGENCY' TRANSFER SWITCH
A b	2'x4' FLUORESCENT LIGHT FIXTURE-CAPITAL LETTER INDICATES FIXTURE TYPE, LOWER CASE LETTER INDICATES SPECIFIC SWITCH CONTROL DESIGNATION WHERE APPLICABLE
	2' X 2' FLUORESCENT LIGHT FIXTURE
	1' X 4' FLUORESCENT LIGHT FIXTURE
	4' FLUORESCENT LIGHT FIXTURE-1' WIDE OR LESS
	8' FLUORESCENT LIGHT FIXTURE-1' WIDE OR LESS
	RECESSED OR SURFACE CEILING MOUNTED DOWNLIGHT
	WALL MOUNTED DOWNLIGHT
	WALL WASHER LIGHT FIXTURE. TYPE AS INDICATED ON DWGS.
	EXIT LIGHT ARROWS INDICATE DIRECTION. TYPE AS INDICATED ON DWG. (WALL MOUNTED AND SINGLE OR DOUBLE FACE)
	EXIT LIGHT ARROWS INDICATE DIRECTION TYPE AS INDICATED ON DWGS. (CEILING MOUNTED AND SINGLE OR DOUBLE FACE)
S_a S_b	SINGLE POLE SWITCH 20A-125V MTD 48" AFF. LOWER CASE LETTERS INDICATE FIXT TO BE CONTROLLED VIA GANGED SWITCHES.
a,b	INDICATES LIGHT FIXTURE USING DUAL-LEVEL SWITCHING. CONNECT EACH BALLAST TO SEPARATE SWITCH. REFER TO DETAIL 4/EP4.06.
S	SINGLE POLE TOGGLE SWITCH
S_3	THREE-WAY SWITCH
S_4	FOUR-WAY SWITCH
S_K	INDICATES KEY-OPERATED FORK-TYPE SWITCH
S_T	INDICATES MANUAL MOTOR STARTER W/ THERMAL OVERLOAD PROTECTION
S_X	INDICATES SWITCH WITH NEMA 4X CORROSION RESISTANT RATING
	INDICATES EMERGENCY SHUT OFF SWITCH
OS1	CEILING MOUNTED 360 DEGREE PASSIVE INFRARED OCCUPANCY SENSOR
OS2	CEILING MOUNTED DUAL TECHNOLOGY PIR/ULTRASONIC OCCUPANCY SENSOR
PC	PHOTOCELL
TC	DIGITAL ASTRONOMIC TIMECLOCK
C	ELECTRICALLY HELD LIGHTING CONTACTOR- AMPERE RATING & NUMBER OF POLES INDICATED
	SIMPLEX RECEPTACLE 20A-125V, NEMA 5-20R GROUNDING TYPE MTD 18" UON-'GFI' INDICATES GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
	DUPLEX RECEPTACLE 20A-125V, NEMA 5-20R GROUNDING TYPE MTD 18" UON

SYMBOL	DESCRIPTION
	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE, NEMA 5-20R, 20A-125V (WP) WEATHERPROOF LOCKABLE COVER TYPICAL TO CARLON CAT#E9UWG OR EQUAL (PROVIDE LOCK AND KEY)
	QUADRUPLEX RECEPTACLE 20A-125V, NEMA 5-20R GROUNDING TYPE MOUNTED 18" UON
C	DUPLEX RECEPTACLE 20A-125V GROUNDING TYPE, NEMA 5-20R FLUSH MOUNTED AT CEILING
B	SINGLE SPECIAL PURPOSE OUTLET WITH SPECIFIC NEMA CONFIGURATION. REFER TO SPECIAL RECEPTACLE SCHEDULE ON DWG E1.02.
	SINGLE SPECIAL PURPOSE OUTLET WITH NEMA CONFIGURATION TO BE FIELD DETERMINED BASED ON INSTALLED EQUIPMENT
FB	COMBINATION FLOOR BOX FOR TELEPHONE, DATA AND POWER WITH DEVICES AS SHOWN ON PLANS - SEE DETAIL 4/EP4.03
FB	COMBINATION FLOOR BOX FOR POWER, DATA AND CCTV MONITOR WITH DEVICES AS SHOWN ON PLANS - SEE DETAIL 4/EP4.03
	16" DIAMETER WEATHERPROOF INDUSTRIAL CABLE REEL WITH SOLID STEEL CONSTRUCTION, A NEMA 4X ENCLOSURE RATING, MULTI-POSITION ROLLER GUIDE AND A 340° PIVOT BASE. REEL SHALL INCLUDE MINIMUM OF 50' SOW-A TYPE CABLE (#12AWG CONDUCTORS) AND NEMA 5-20R RECEPTACLE.
	4" SQUARE X 2 1/8"D OUTLET BOX WITH (1) 1"C (WITH PULL STRING) STUBBED UP TO ABOVE NEAREST ACCESSIBLE CEILING, FOR DATA 'W' INDICATES WALL MOUNTED AT 48" AFF TO CENTERLINE OF OUTLET. FACEPLATE SHALL BE PROVIDED BY PTC.
	4" SQUARE X 2 1/8"D OUTLET BOX WITH (1) 1"C (WITH PULL STRING) STUBBED UP TO ABOVE NEAREST ACCESSIBLE CEILING, FOR CCTV MONITOR AND CONTROL CABLING (PROVIDED BY DIVISION 26)
W	4" SQUARE OUTLET BOX WITH (1) 1"C (WITH PULL STRING) STUBBED UP TO ABOVE NEAREST ACCESSIBLE CEILING, FOR WALL MOUNTED TELEPHONE (TELEPHONE SYSTEM AND CONNECTION PROVIDED BY OWNER)
CR	4" SQUARE X 2 1/8"D OUTLET BOX WITH (1) 1"C (WITH PULL STRING) STUBBED UP TO ABOVE NEAREST ACCESSIBLE CEILING, FOR CARD READER (CARD READER AND CONNECTION PROVIDED BY PTC)
	4" SQUARE X 1 1/8"D OUTLET BOX WITH (1) 1"C (WITH PULL STRING) STUBBED UP TO ABOVE NEAREST ACCESSIBLE CEILING, FOR CEILING MOUNTED DOME CAMERA (CAMERA AND CONNECTION PROVIDED BY DIVISION 26)
	4" SQUARE X 2 1/8"D OUTLET BOX WITH (1) 1"C (WITH PULL STRING) ROUTED UNDERGROUND ON SITE TO IDF ROOM 151 IN BUILDING 1, FOR OUTDOOR FIXED CAMERA (CAMERA AND CONNECTION PROVIDED BY DIVISION 26, REFER TO SITE PLANS FOR CAMERA LOCATION AND CONDUIT ROUTING)
	CCTV MONITOR
C SM	GAI-TRONICS SURFACE MOUNTED WALL UNIT, REFER TO DETAIL 3A/EP4.07
C	GAI-TRONICS FLUSH WALL UNIT; REFER TO DETAIL 3/EP4.07
C	GAI-TRONICS FLUSH CEILING SPEAKER, PROVIDE ATLAS 6" DIAM SPEAKER BACK-BOX AND 1" CONDUIT TO CABLE TRAY OR GAI-TRONICS CONTROL PANEL.
B	GAI-TRONICS BULL HORN SPEAKERS; PROVIDE 4"x4"x2-1/8" DEEP R.O. BOX AND 1" CONDUIT TO CABLE TRAY OR TEL/DATA 201
B	500 BROWN PHONE; PROVIDE 4"x4"x2-1/8" DEEP R.O. BOX AND 1" CONDUIT TO CABLE TRAY OR GAI-TRONICS CONTROL PANEL.
FB G	FLOOR BOX FOR GAI-TRONICS FEED TO DESK UNIT; REFER TO DETAIL 3/EP4.03
VC	4" SQUARE X 2 1/8"D OUTLET BOX WITH (1) 1"C (WITH PULL STRING) STUBBED UP TO ABOVE NEAREST ACCESSIBLE CEILING, FOR P/A SYSTEM VOLUME CONTROL (GAITRONICS P/A SYSTEM AND CONNECTION PROVIDED BY PTC) FACEPLATES SHALL BE PROVIDED BY PTC. REFER TO 2/EP4.07.
G	GAI-TRONICS WALL FEED; REFER TO DETAIL 5/EP4.07

SYMBOL	DESCRIPTION
MH	ELECTRIC SERVICE MANHOLE PROVIDED IN ACCORDANCE WITH ALLEGHENY POWER COMPANY STANDARDS
HH	ELECTRIC, TELEPHONE OR COMMUNICATIONS HANDHOLE PROVIDED IN ACCORDANCE WITH PENNDOT PUBLICATION 72M STANDARDS
	CONDUIT ROUTED EXPOSED OR CONCEALED BY FINISH
	CONDUIT RUN EMBEDDED IN BUILDING CONSTRUCTION OR RUN UNDERGROUND. REFER TO DWGS FOR APPLICATION.
---E---	UNDERGROUND POWER CABLING
---C---	UNDERGROUND COMMUNICATIONS SERVICE CONDUIT
	CONDUIT STUBBED UP THROUGH FLOOR
	WIRE BASKET TYPE CABLE TRAY MOUNTED ABOVE CEILING
	OPEN LADDER TYPE CABLE TRAY
	277/480V 3ϕ 4W PANEL (PANELBOARD CONSTRUCTION E.G. SQUARE D 'NEHB' SERIES)
	120/208V 3ϕ 4W PANEL (PANELBOARD CONSTRUCTION E.G. SQUARE D 'NQOD' SERIES)
T	TRANSFORMER - RATING AS INDICATED IN SINGLE LINE DIAGRAM, MOUNTED ON 4" HIGH CONCRETE HOUSEKEEPING PAD
	SWITCHBOARD - FLOOR MOUNTED ON CONCRETE HOUSEKEEPING PAD (SWITCHBOARD CONSTRUCTION, E.G. SQUARE D 'QED' SERIES)
	GROUND ROD - 3/4" COPPER-CLAD STEEL ROD 10'-0" LONG
	MOTOR
	DISCONNECT SWITCH RATING AND TYPE AS REQUIRED BY NEC
	FUSED DISCONNECT SWITCH WITH FUSE RATING AS SHOWN ON DRAWINGS
	COMBINATION MOTOR CONTROLLER/DISCONNECT SWITCH } PROVIDED BY DIV 23, WIRED BY DIV 26, U.N.O.
	MAGNETIC MOTOR CONTROLLER }
	DUPLEX RECEPTACLE MOUNTED TO STUBBED-UP BOX 6" ABOVE FINISHED FLOOR TO CENTER OF BOX
J	JUNCTION BOX
T	SMALL TRANSFORMER WITH LOW-VOLTAGE SECONDARY FOR AUTOSENSOR TOILET ROOM FIXTURE FLUSHING-TRANSFORMAR SHALL BE MOUNTED ABOVE ACCESSIBLE CEILING IN A NEMA 1 ENCLOSURE (TYP)
+8'-0"AFF	INDICATES SPECIFIC MOUNTING HEIGHT ABOVE FINISHED FLOOR
+	INDICATES MOUNTING HEIGHT ABOVE COUNTER, SINK OR BACK SPLASH
KS	KEY OPERATED TUMBLER TYPE SWITCH SPECIFIC TO USE WITH MOTORIZED ENTRANCE GATE
RC	REMOTE CONTROL STATION FOR OUTDOOR ENTRANCE GATE DPERATION (CONTROL STATION LOCATED INSIDE BUILDING 1)
EF 1	MECHANICAL EQUIPMENT LABEL; IDENTIFICATION NUMBER
1 E4.01	DETAIL NUMBER; DRAWING NUMBER

AIPHONE SYMBOLS	AIPHONE SYSTEM SYMBOL DESCRIPTION
IM	AIPHONE INTERCOM MASTER CALL STATION
IS	AIPHONE INTERCOM SUB-STATION WITH SPEAKER AND CALL BUTTON
S	WEATHERPROOF INTERCOM TRUMPET SPEAKER
B	WEATHERPROOF INTERCOM CALL BUTTON

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA

PHILADELPHIA MAIN BUSINESS CENTER, 1243 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4742

224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17101, TELEPHONE: (717) 763-1661, FAX: (717) 763-7670

PREPARED FOR:

THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER: M-015.30X001-3-02, 03, 04, 05

NETWORK NUMBER: 7001280, 7001281, 7001282, 7001283

FILE NAME: E1_03.DWG

SCALE: NONE

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

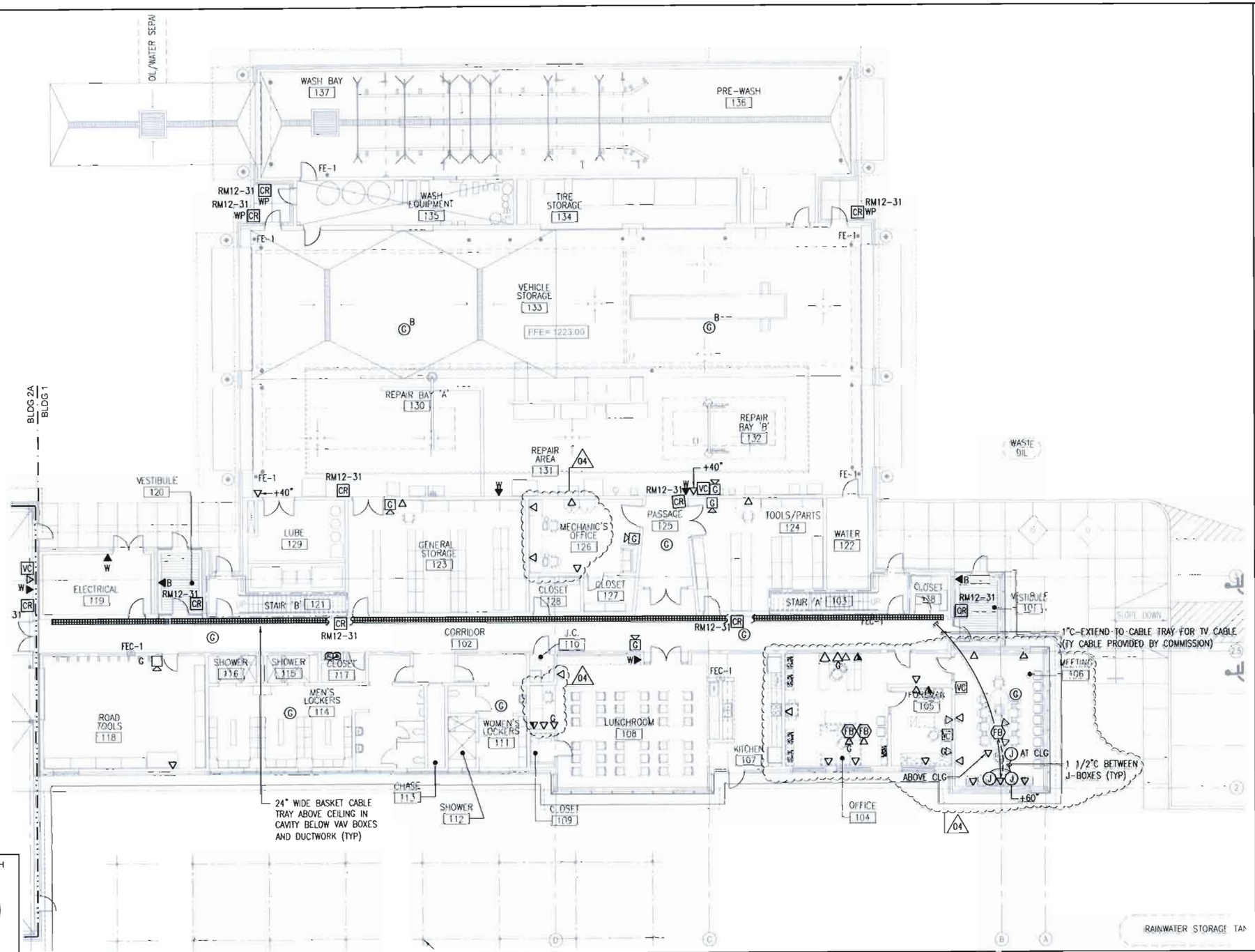
DISTRICT: 1 COUNTY: FAYETTE

TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL COVER SHEET PART 3 OF 3

DRAWING: **E1.03**

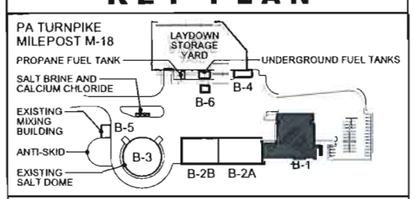
SHEET: 191 OF 265



GENERAL NOTES:

1. ALL WALL MOUNTED DATA OUTLETS SHALL INCLUDE 1" EMPTY CONDUIT WITH PULL WIRE ROUTED TO CABLE TRAY IN CORRIDOR 102.
2. ALL FLOOR BOX MOUNTED DATA OUTLETS SHALL INCLUDE 1" EMPTY CONDUIT WITH PULL WIRE ROUTED FROM RISER INDICATED IN WALL TO CABLE TRAY IN CORRIDOR 102.
3. ALL OUTLET BOXES RELATED TO THE GAI-TRONICS P/A SYSTEM SHALL BE MOUNTED AND ASSOCIATED CONDUITS ROUTED IN ACCORDANCE WITH THE INSTRUCTIONS NOTED ON DETAIL DRAWINGS EP4.07 AND EP4.08.
4. FOR POWER AND COMMUNICATIONS CONDUIT REQUIREMENTS FOR CARD READER SYSTEM REFER TO TYPICAL DETAILS ON DRAWING EP4.09.
5. SEE DRAWINGS E1.01, E1.02, AND E1.03 FOR SYMBOL LISTS AND RELATED INFORMATION
6. ALL VOICE/DATA BOXES AT REPAIR BAY 'A' 130 , REPAIR AREA 131, AND REPAIR BAY 'B' 132 SHALL BE MOUNTED AT 40" AFF TO BOTTOM OF BOX.

KEY PLAN



BUILDING NORTH

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
04	ASI-020	02.11.2011	DRV
03	ASI-011	12.23.2010	DRV
02	ASI-002	08.03.2010	DRV

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-EC211.DWG
SCALE: 0' 5' 10' 20'

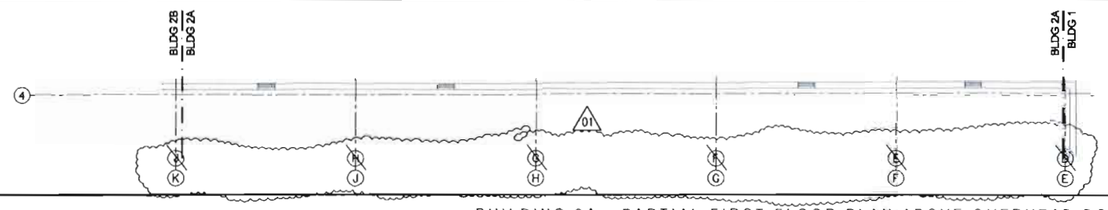
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

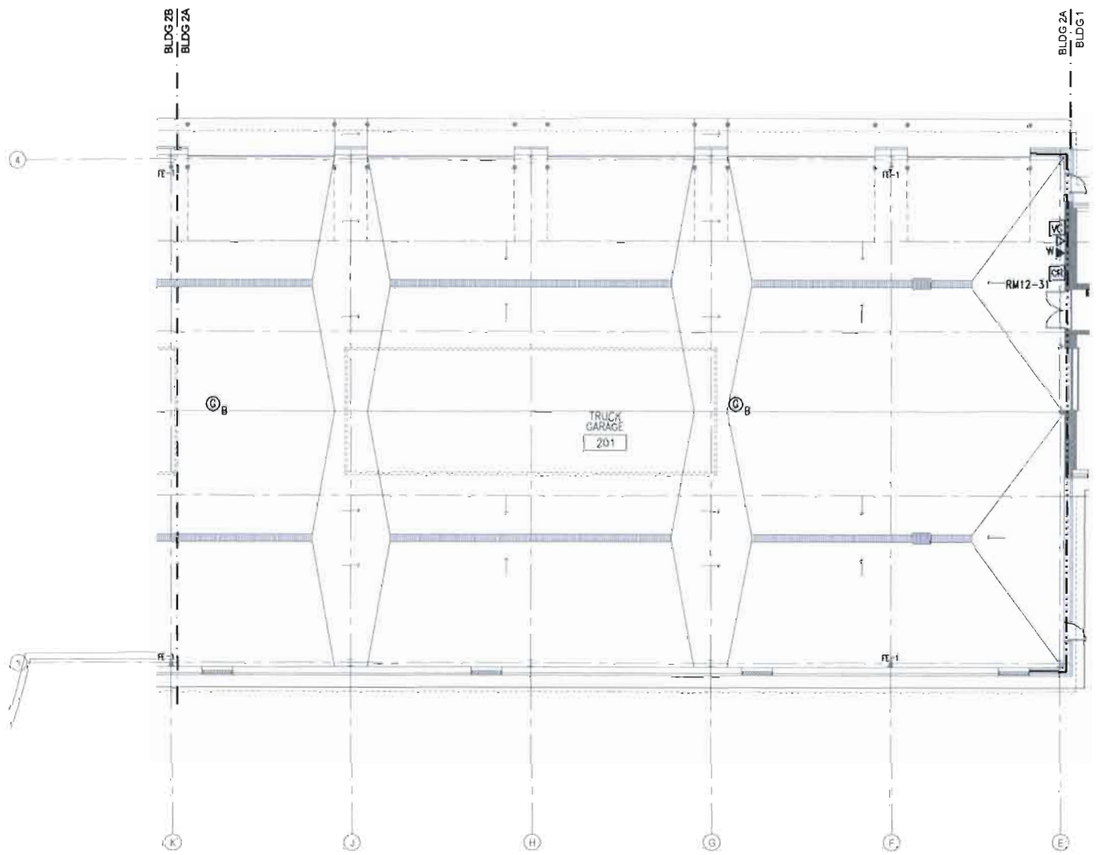
BUILDING 1 COMMUNICATIONS FIRST FLOOR PLAN

DRAWING: 1-EC2.11
SHEET: 201 OF 265

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



BUILDING 2A - PARTIAL FIRST FLOOR PLAN ABOVE OVERHEAD DOORS **2**

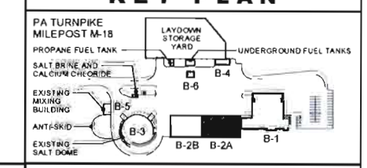


BUILDING 2A - COMMUNICATIONS - FIRST FLOOR PLAN **1**

GENERAL NOTES:

1. ALL WALL MOUNTED DATA OUTLETS SHALL INCLUDE 1" EMPTY CONDUIT WITH PULL WIRE ROUTED TO CABLE TRAY IN CORRIDOR 102.
2. ALL OUTLET BOXES RELATED TO THE GAI-TRONICS P/A SYSTEM SHALL BE MOUNTED AND ASSOCIATED CONDUITS ROUTED IN ACCORDANCE WITH THE INSTRUCTIONS NOTED ON DETAIL DRAWING EP4.07 AND EP4.08.
3. SEE DRAWINGS E1.01, E1.02 AND E1.03 FOR SYMBOL LISTS AND RELATED INFORMATION

KEY PLAN



BUILDING NORTH

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER
1747 SOUTH BROAD STREET
PHILADELPHIA, PENNSYLVANIA 19113
TELEPHONE: (215) 218-4747
FAX: (215) 218-4740
333 NORTH FRONT STREET
HARRISBURG, PENNSYLVANIA 17043
TELEPHONE: (717) 763-5641
FAX: (717) 763-7672

PREPARED FOR:
THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 2-EC211.DWG
SCALE: 0' 5' 10' 20'

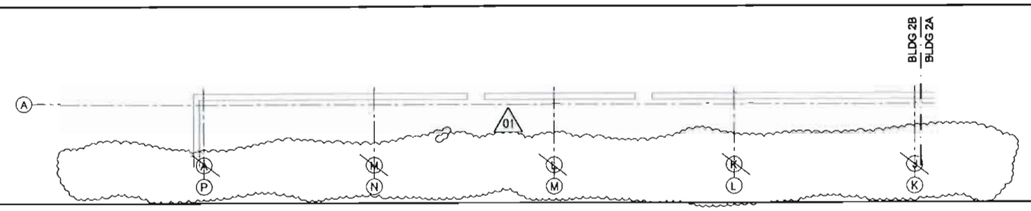
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

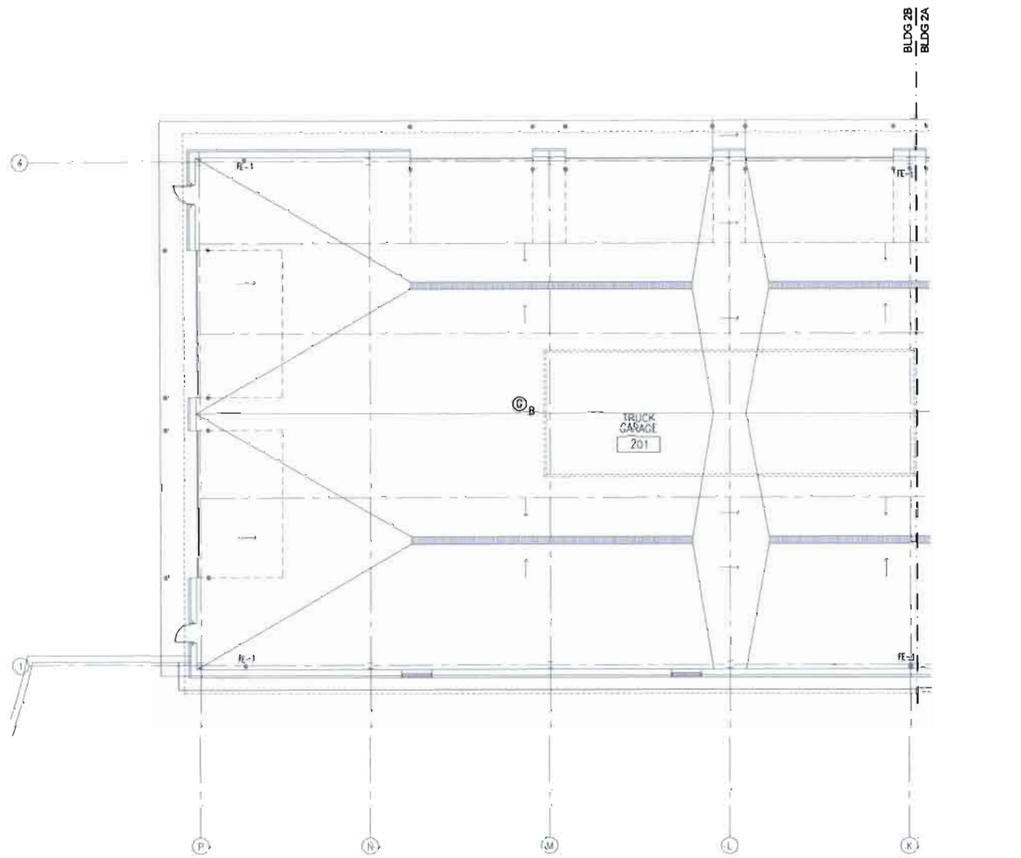
BUILDING 2A COMMUNICATIONS FIRST FLOOR PLAN

DRAWING: **2-EC2.11**
SHEET: 209 OF 265

ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



BUILDING 2B - PARTIAL FIRST FLOOR PLAN ABOVE OVERHEAD DOORS **2**

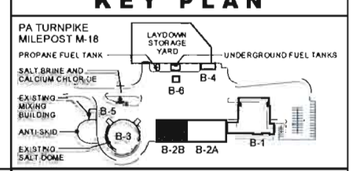


BUILDING 2B - COMMUNICATIONS - FIRST FLOOR PLAN **1**

GENERAL NOTES:

1. ALL OUTLET BOXES RELATED TO GAI-TRONICS PA SYSTEM SHALL BE MOUNTED AND ASSOCIATED CONDUITS ROUTED IN ACCORDANCE WITH THE INSTRUCTIONS NOTED ON DETAIL DRAWING EP4.07 AND EP4.08.

KEY PLAN



BUILDING NORTH

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - CONSTRUCTION MANAGEMENT - INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7670

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 2-EC212.DWG
SCALE: 0' 5' 10' 20'

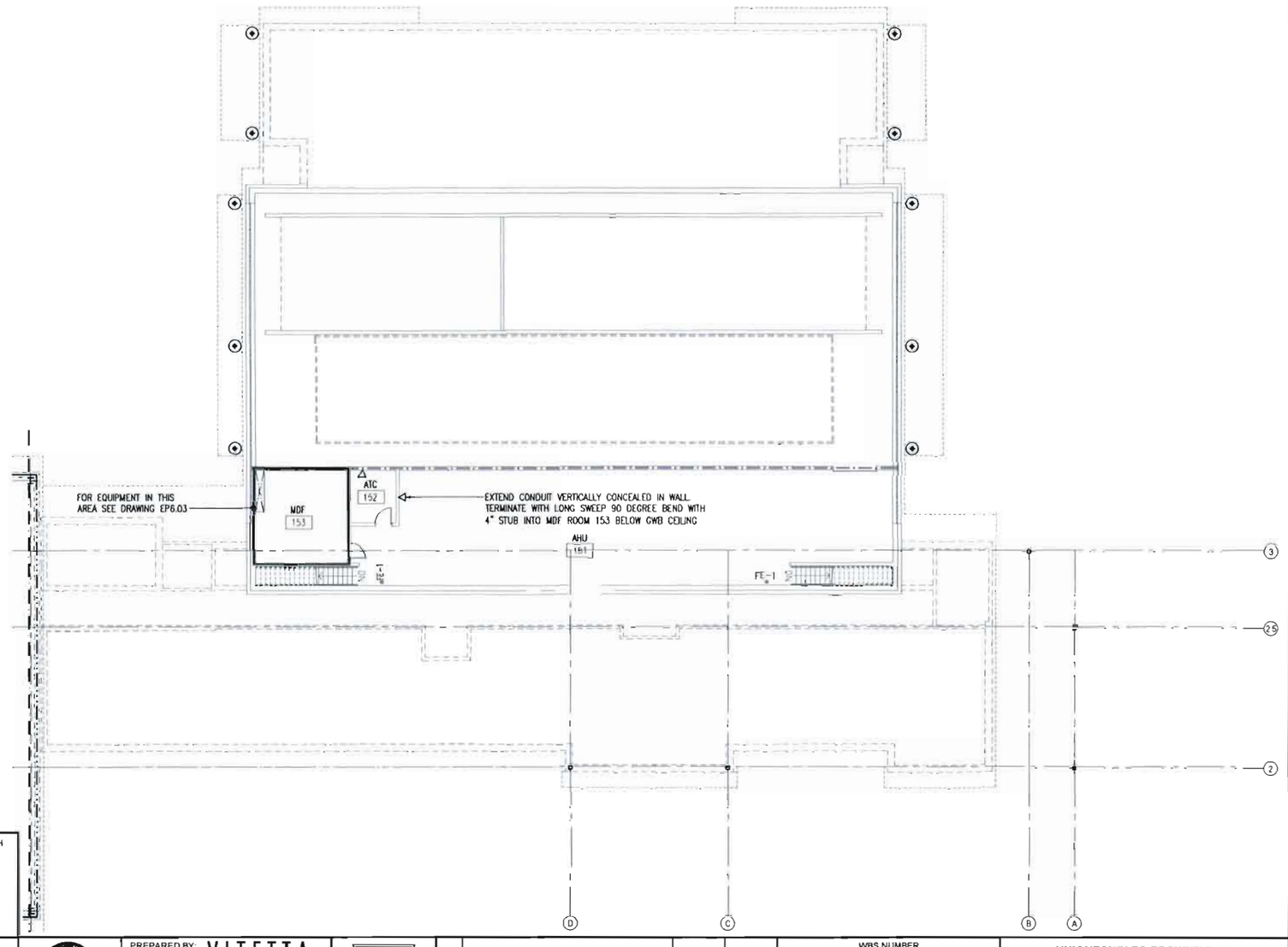
UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 2B
COMMUNICATIONS
FIRST FLOOR PLAN

DRAWING: **2-EC2.12**
SHEET: 210 OF 265

ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10

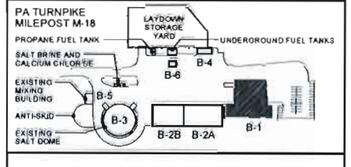


GENERAL NOTES:

1. ALL WALL MOUNTED DATA OUTLETS SHALL BE INCLUDE 1" EMPTY CONDUIT WITH PULL WIRE U.O.N.

BUILDING NORTH

KEY PLAN



CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA

ARCHITECTURE - ENGINEERING CONSULTING DESIGN

PHILADELPHIA MAIN BUSINESS CENTER
4747 SOUTH BROAD STREET
PHILADELPHIA, PENNSYLVANIA 19112
TELEPHONE: (215) 218-4747
FAX: (215) 218-4740

224 NORTH FRONT STREET
HARRISBURG, PENNSYLVANIA 17101
TELEPHONE: (717) 763-5961
FAX: (717) 763-7870

PREPARED FOR:

THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05

NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263

FILE NAME: 1-EC221.DWG

SCALE: 0' 5' 10' 20'

UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

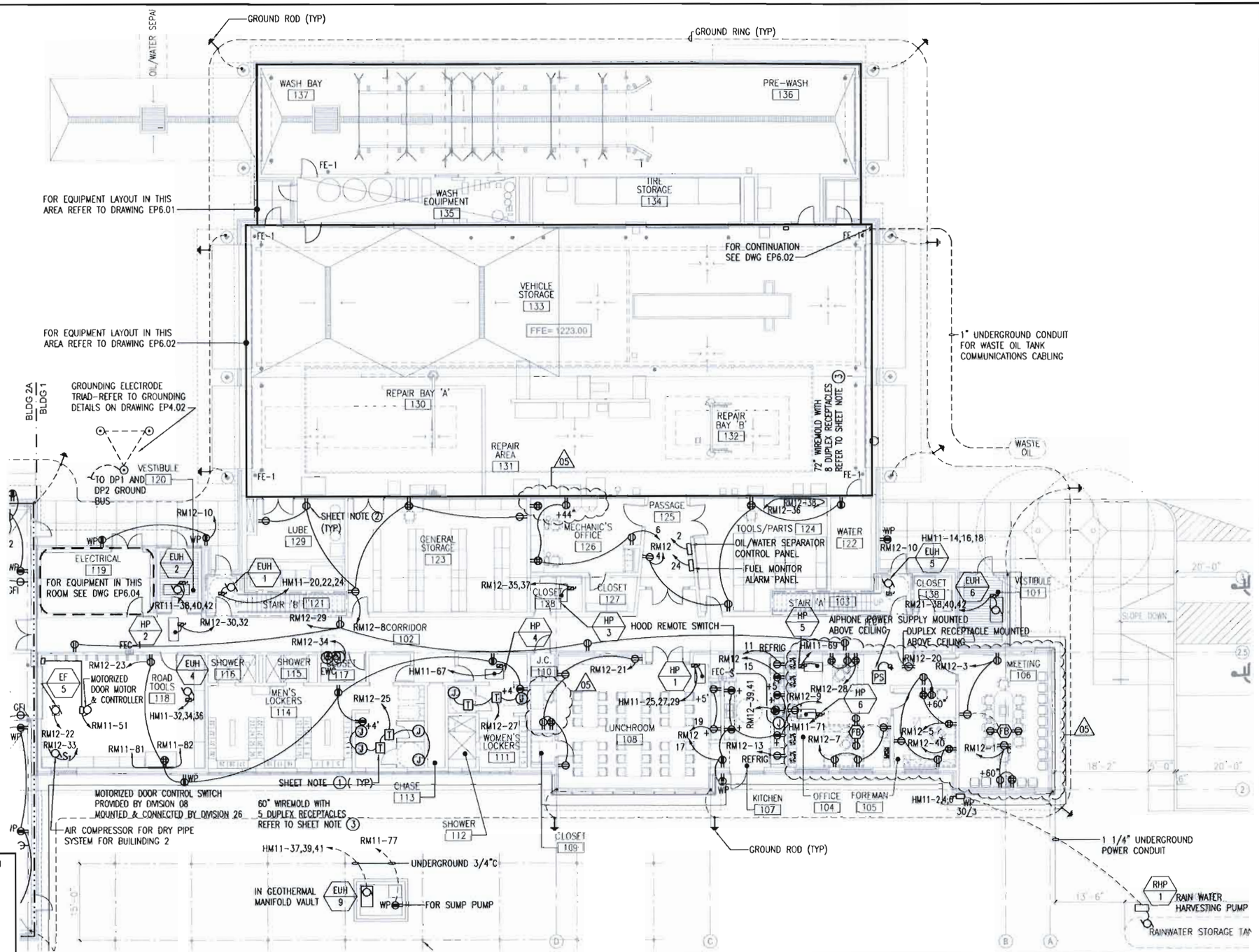
DISTRICT: 1 | COUNTY: FAYETTE

TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1
COMMUNICATIONS
SECOND FLOOR PLAN

DRAWING: **1-EC2.21**

SHEET: 202 OF 265



GENERAL NOTES:

1. PROVIDE AND INSTALL FOR ALL FLOOR BOXES A SEPARATE (NOT SHOWN) 1" CONDUIT BELOW THE FLOOR FROM THE FLOOR BOX TO THE CLOSEST WALL FOR INSTALLATION OF COMMUNICATIONS CABLES BY THE COMMISSION. PROVIDE PULL STRING AS SPECIFIED FOR EMPTY RACEWAYS. REFER TO DRAWING 1-A2.41 FOR FURNITURE AND EQUIPMENT PLAN.
2. FOR PANEL SCHEDULES REFER TO DRAWING EP5.01 THRU EP5.03.
3. FOR GROUNDING DETAILS REFER TO DRAWING EP4.02.

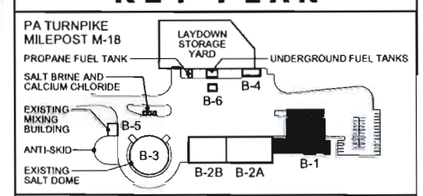
SHEET NOTES:

(1) FOR ALL AUTOSENSORS SINKS AND TOILETS PROVIDE A FULL CONDUIT SYSTEM BETWEEN MFR'S CEILING MOUNTED \TRANSFORMER AND EACH SENSOR POSITION. COORDINATE WITH SYSTEM INSTALLER FOR EXACT QUANTITY AND LOCATIONS OF TRANSFORMERS AND SENSORS. INSTALL AND CONNECT ALL CONDUIT CABLING PER MFR'S INSTRUCTIONS.

(2) FOR THE OUTLETS IN LUBE ROOM USE DUSTPROOF STAINLESS STEEL COVERS, MODEL #WP8.

(3) PROVIDE SERIES G4000 LARGE RACEWAY, COMPLETE WITH DUPLEX RECEPTACLES, ENDS, COVER, AND OTHER ACCESSORIES, MANUFACTURED BY LEGRAND WIREMOLD TWO (2) CIRCUITS BE LENGTH OF WIREMOLD, WITH RECEPTACLES ON STAGGERED CIRUITS.

KEY PLAN



CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA MAIN BUSINESS CENTER, 8747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, WORMLEYSBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
05	ASI-020	02.11.2011	DRV
04	ASI-011	12.23.2010	DRV
03	ASI-004	09.22.2010	DRV
02	ASI-002	08.03.2010	DRV

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-EP211.DWG
SCALE: 0' 5' 10' 20'

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

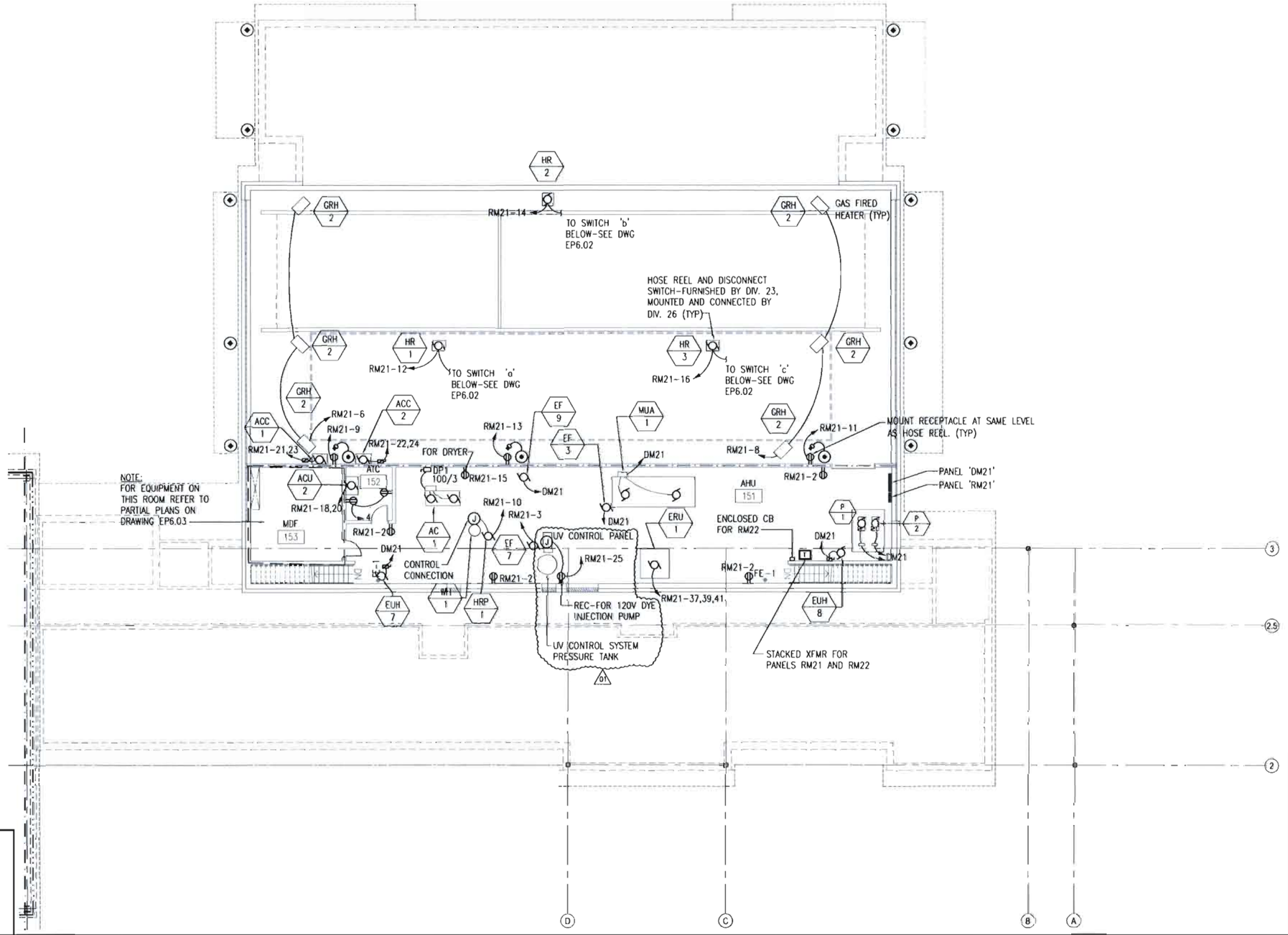
BUILDING 1 POWER FIRST FLOOR PLAN

DRAWING: 1-EP2.11
SHEET: 205 OF 265

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10

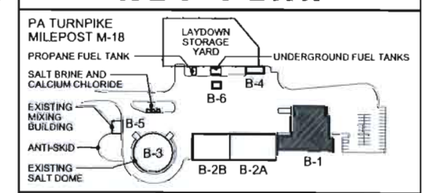
GENERAL NOTES:

1. FOR PANEL SCHEDULES REFER TO DRAWING EP5.01 THRU EP5.03.



BUILDING NORTH

KEY PLAN



CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4748
224 NORTH FRONT STREET, WORMLEYSBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
01	ASI-011	12.23.2010	DRV

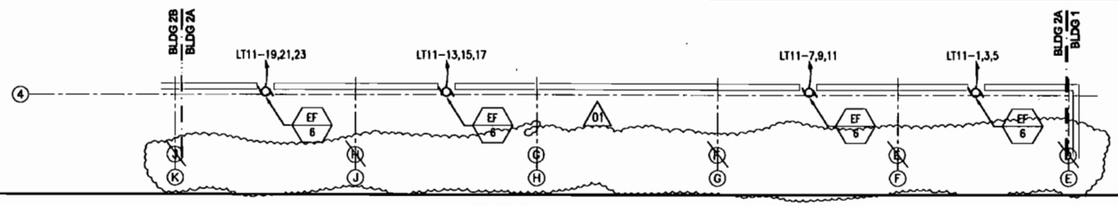
WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-EP221.DWG
SCALE: 0' 5' 10' 20'

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

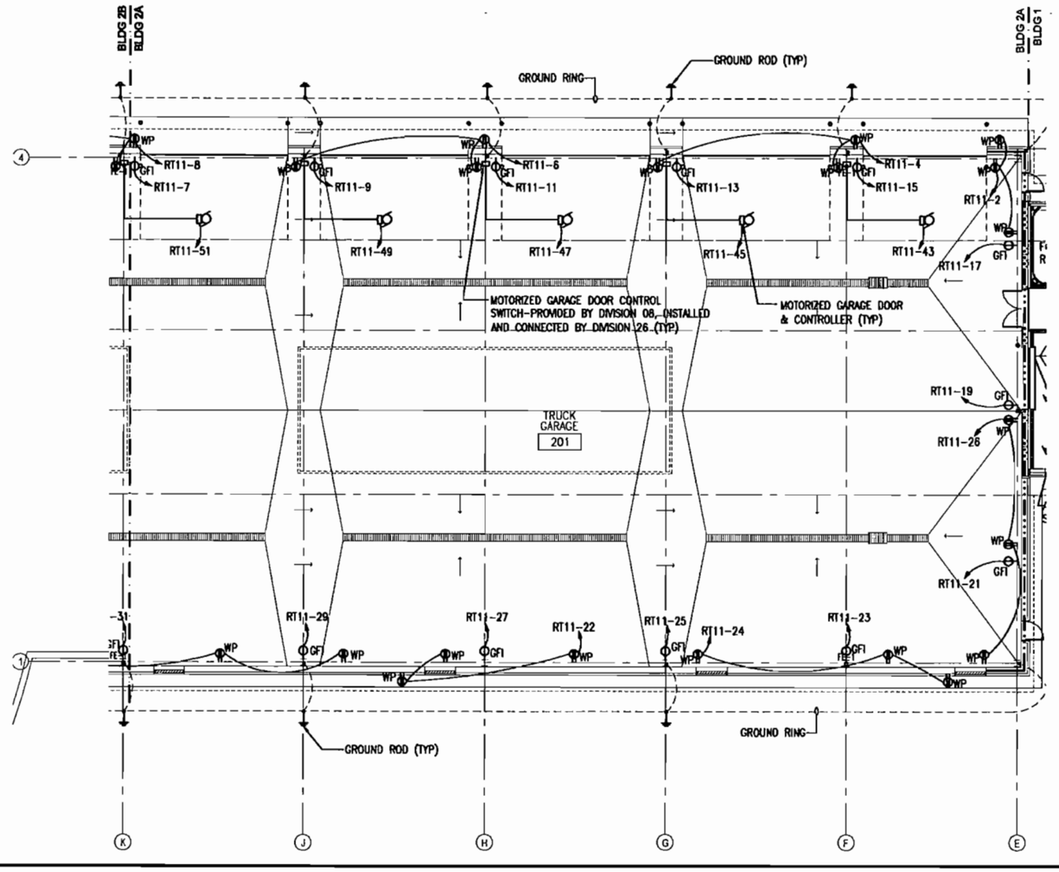
DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1 POWER SECOND FLOOR PLAN

DRAWING: **1-EP2.21**
SHEET: 206 OF 265



BUILDING 2A - PARTIAL FIRST FLOOR PLAN ABOVE OVERHEAD DOORS **2**



BUILDING 2A - POWER - FIRST FLOOR PLAN **1**

GENERAL NOTES:

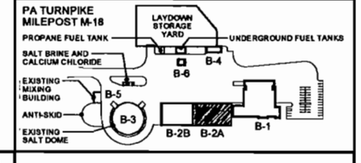
1. FOR PANEL SCHEDULES REFER TO DRAWING EP5.01 THRU EP5.03.
2. FOR GROUNDING DETAILS REFER TO DRAWING EP4.02.
3. ALL OUTLETS IN GARAGE AREA SHALL BE MOUNTED 24" A.F.F..

SHEET NOTES

① MOTORIZED GARAGE DOOR MOTOR & CONTROLLER ARE FURNISHED BY DIVISION 8, INSTALLED AND CONNECTED BY DIVISION 26.

② MOTORIZED GARAGE DOOR CONTROL SWITCH IS FURNISHED BY DIVISION 8, INSTALLED & CONNECTED BY DIVISION 26 UNDER DIRECTION OF PTC REPRESENTATIVES.

KEY PLAN



BUILDING NORTH

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING
PHILADELPHIA BANK, BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4243
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17101, TELEPHONE: (717) 763-0881, FAX (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO:	REVISIONS	DATE	APPR.

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 2-EP211.DWG
SCALE: 0' 5' 10' 20'

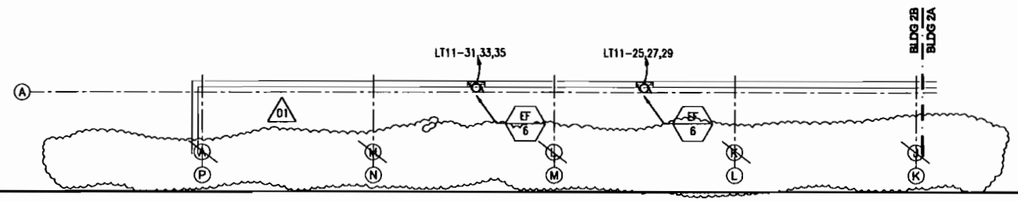
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

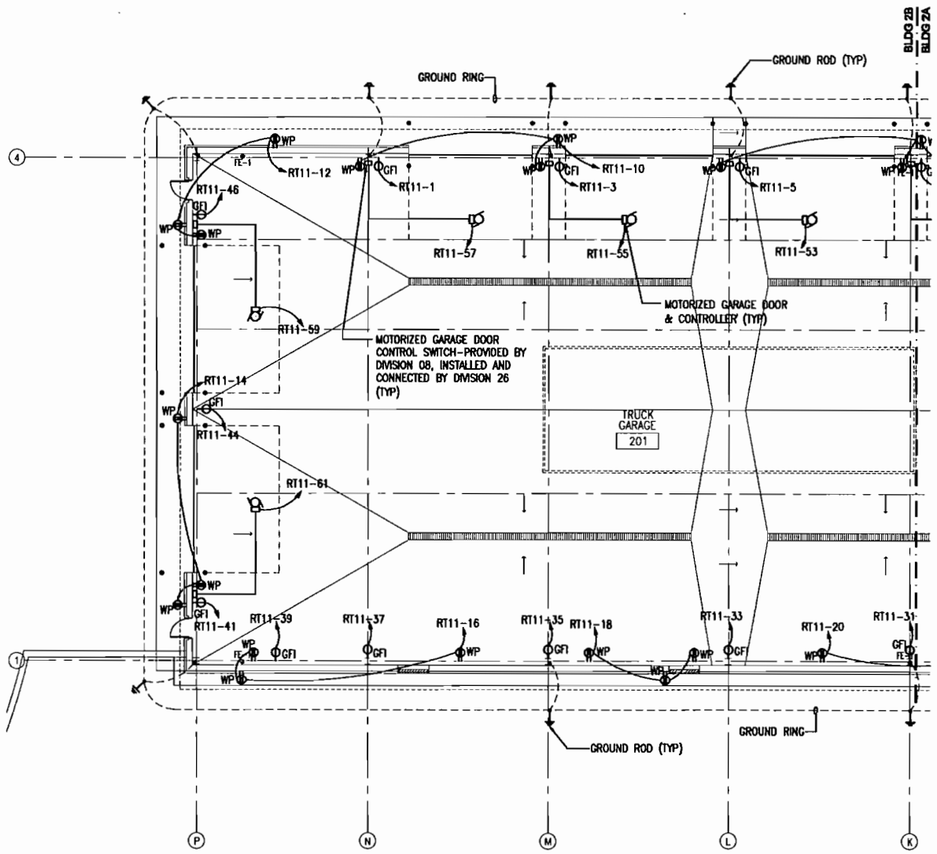
BUILDING 2A
POWER
FIRST FLOOR PLAN

DRAWING: 2-EP2.11
SHEET: 213 OF 265

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



BUILDING 2B - PARTIAL FIRST FLOOR PLAN ABOVE OVERHEAD DOORS **2**



BUILDING 2B - POWER - FIRST FLOOR PLAN **1**

GENERAL NOTES:

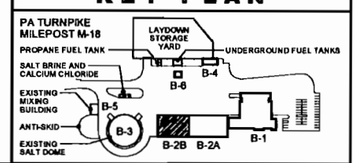
1. FOR PANEL SCHEDULES REFER TO DRAWING EP5.01 THRU EP5.03.
2. FOR GROUNDING DETAILS REFER TO DRAWING EP4.02.
3. ALL OUTLETS IN GARAGE AREA SHALL BE MOUNTED 24" A.F.F.

SHEET NOTES

① MOTORIZED GARAGE DOOR MOTOR & CONTROLLER ARE FURNISHED BY DIVISION 8, INSTALLED AND CONNECTED BY DIVISION 26.

② MOTORIZED GARAGE DOOR CONTROL SWITCH IS FURNISHED BY DIVISION 8, INSTALLED & CONNECTED BY DIVISION 26 UNDER DIRECTION OF PTC REPRESENTATIVES.

KEY PLAN



BUILDING NORTH

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4720
224 NORTH FRONT STREET, SCHUYLKILL, PENNSYLVANIA 17943, TELEPHONE: (717) 783-0051, FAX: (717) 783-3610

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.

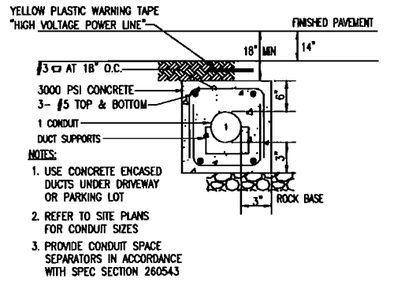
WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 2-EP212.DWG
SCALE: 0' 5' 10' 20'

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA
DISTRICT: 1 COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

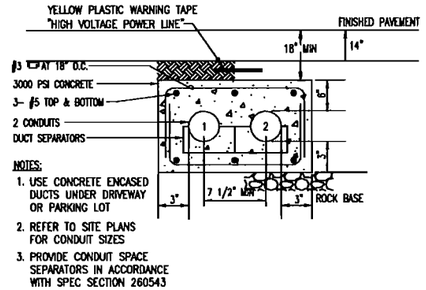
BUILDING 2B
POWER
FIRST FLOOR PLAN

DRAWING: 2-EP2.12
SHEET: 214 OF 265

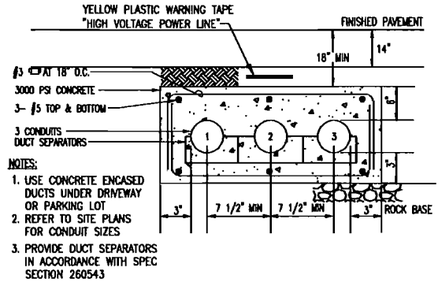
ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



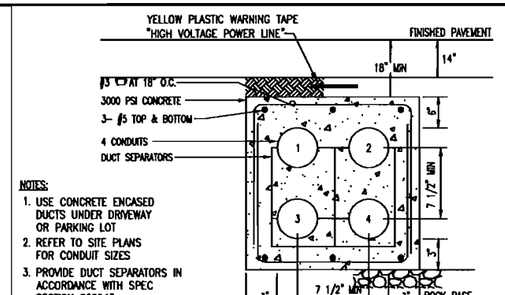
1 TYPICAL 1-WAY DUCTBANK
NTS



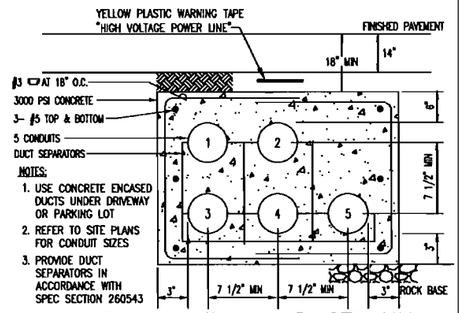
2 TYPICAL 2-WAY DUCTBANK
NTS



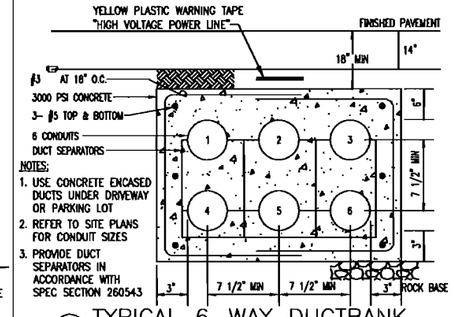
3 TYPICAL 3-WAY DUCTBANK
NTS



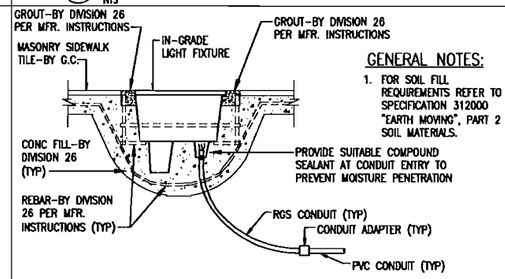
4 TYPICAL 4-WAY DUCTBANK
NTS



5 TYPICAL 5-WAY DUCTBANK
NTS

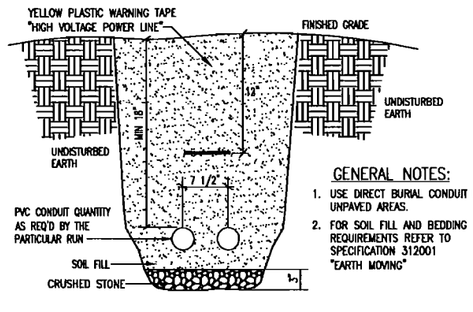


6 TYPICAL 6-WAY DUCTBANK
NTS



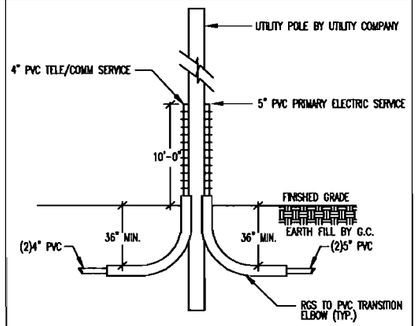
GENERAL NOTES:
1. FOR SOIL FILL REQUIREMENTS REFER TO SPECIFICATION 312000 "EARTH MOVING", PART 2 SOIL MATERIALS.

NTS 8 DETAIL: IN-GROUND MOUNTED FLAG POLE LIGHT FIXTURE

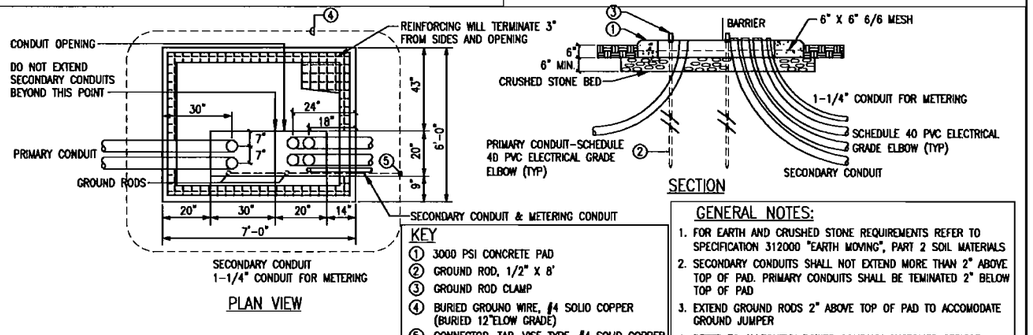


GENERAL NOTES:
1. USE DIRECT BURIAL CONDUIT IN UNPAVED AREAS.
2. FOR SOIL FILL AND BEDDING REQUIREMENTS REFER TO SPECIFICATION 312001 "EARTH MOVING"

NTS 9 TYPICAL DIRECT BURIAL CONDUIT DUCTBANK



NTS 10 UTILITY POLE-ELECTRIC AND TELE/COMM SERVICE



KEY
1. 3000 PSI CONCRETE PAD
2. GROUND ROD, 1/2" X 8'
3. GROUND ROD CLAMP
4. BURIED GROUND WIRE, #4 SOLID COPPER (BURIED 12"ELOW GRADE)
5. CONNECTOR, TAP, VISE TYPE, #4 SOLID COPPER

GENERAL NOTES:
1. FOR EARTH AND CRUSHED STONE REQUIREMENTS REFER TO SPECIFICATION 312000 "EARTH MOVING", PART 2 SOIL MATERIALS
2. SECONDARY CONDUITS SHALL NOT EXTEND MORE THAN 2" ABOVE TOP OF PAD. PRIMARY CONDUITS SHALL BE TEMINATED 2" BELOW TOP OF PAD
3. EXTEND GROUND RODS 2" ABOVE TOP OF PAD TO ACCOMODATE GROUND JUMPER
4. REFER TO ALLEGHENY POWER COMPANY CUSTOMER SERVICE REQUIREMENTS MANUAL FOR ALL XFMR PAD REQUIREMENTS

NTS 11 UTILITY TRANSFORMER PAD PER ALLEGHENY POWER STANDARDS

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA BANK BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 336-6747, FAX: (215) 336-6760
334 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5861, FAX: (717) 763-7870

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

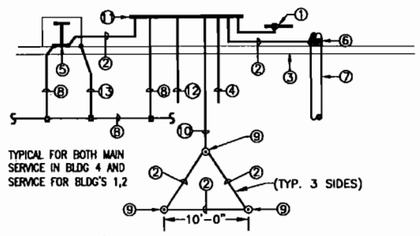
PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: EP4_01.DWG
SCALE: NONE

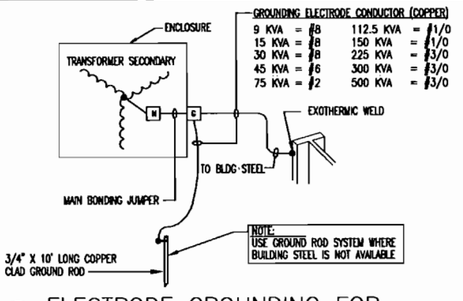
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA
DISTRICT: 1 COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL DETAILS PART 1 OF 10
DRAWING: EP4.01
SHEET: 228 OF 265

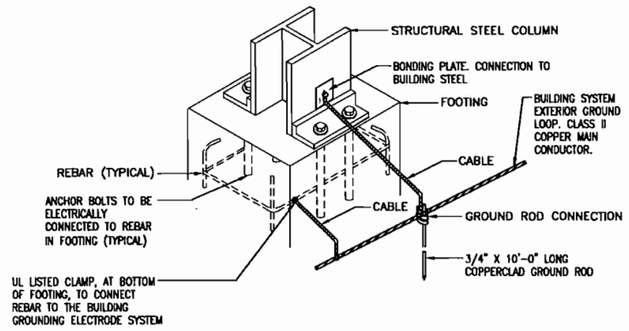


LEGEND	
①	SWITCHBOARD OR SERVICE DISCONNECT GROUND BUS.
②	# 4/0 BARE CU. GROUND CONDUCTOR IN 1-1/4 "C.
③	BUILDING EXTERIOR WALL.
④	# 4/0 BARE CU. GROUND CONDUCTOR IN CONCRETE ENCASEMENT TO XFMR & GEN PAD GROUNDING GRID.
⑤	STRUCTURAL STEEL EXOTHERMIC CONNECTION.
⑥	GROUNDING CLAMP ON METALLIC PIPE.
⑦	WATER SERVICE PIPE.
⑧	# 4/0 BARE CU. GROUND CONDUCTOR FROM THE BUILDING GROUND LOOP.
⑨	3/4" X 10'-0" LONG COPPERWELD GROUND ROD DRIVEN WITH TOP 1'-0" BELOW GRADE.
⑩	500 KCMIL CU. GROUND CONDUCTOR IN 1-1/4 "C.
⑪	MAIN BUILDING SYSTEM GROUND BUS.
⑫	# 4/0 BARE CU. GROUND CONDUCTOR in 1-1/4"C TO TELECOMM GROUND BUS.
⑬	#4 BARE CU. GROUND CONNECTOR ENCASED IN 2" OF CONCRETE TO BUILDING STRUCTURE REBAR AT STRUCTURE FOOTINGS.

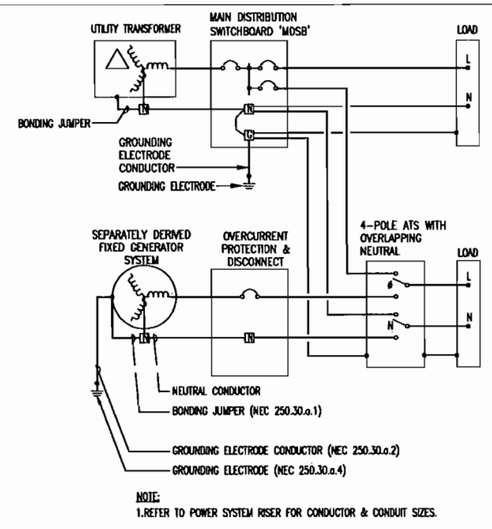
NTS (1) ELECTRIC SERVICE GROUNDING



NTS (4) ELECTRODE GROUNDING FOR LOCAL TRANSFORMERS

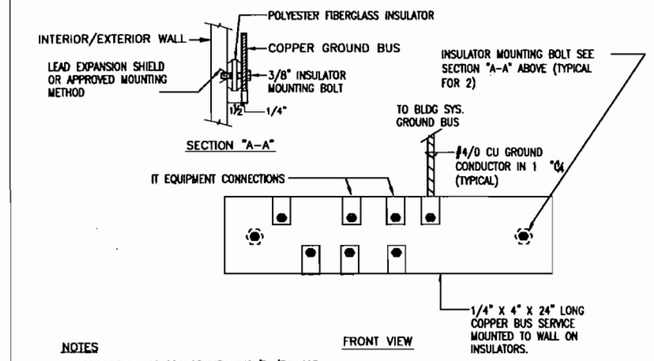


NTS (2) STRUCTURAL STEEL AND FOOTING GROUNDING DETAIL



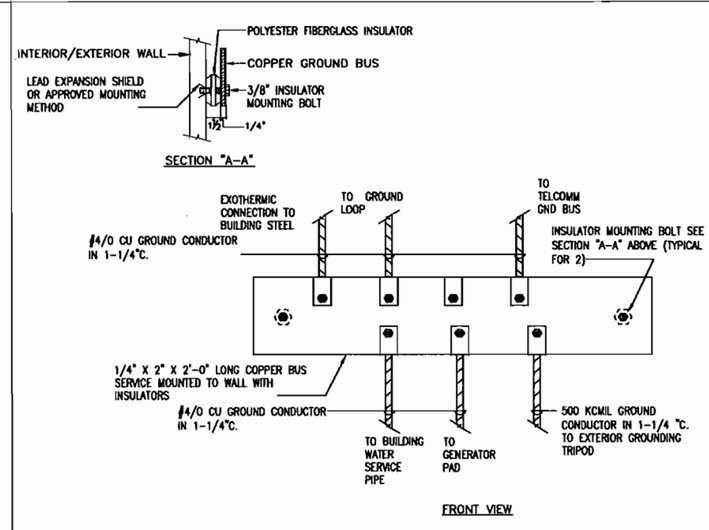
NOTE:
1.REFER TO POWER SYSTEM RISER FOR CONDUCTOR & CONDUIT SIZES.

(5) SEPARATELY DERIVED SYSTEM
NTS



NOTES
1. PROVIDE IN ACCORDANCE WITH ANSI/TIA/EIA-607.
2. BONDING: PROVIDE #6 GREEN INSULATED WIRE FROM METALLIC EQUIPMENT TO HALO, GROUND BAR TO HALO AND ACROSS LADDER RACK SPLICES/CROSSES/TEES. (TYP)

(3) TEL/COMM GROUND BUS DETAIL
NTS



(6) ELECTRIC SERVICE GROUNDING
NTS

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA SMALL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4768
ERA NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-0881, FAX: (717) 763-7676

PREPARED FOR:
THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.

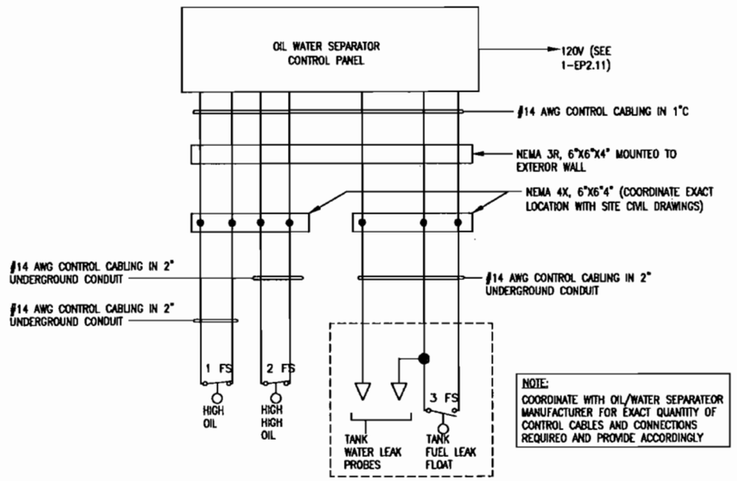
WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001282, 7001281, 7001282, 7001283
FILE NAME: EP4_02.DWG
SCALE: NONE

UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL
DETAILS
PART 2 OF 10

DRAWING: EP4.02
SHEET: 229 OF 265



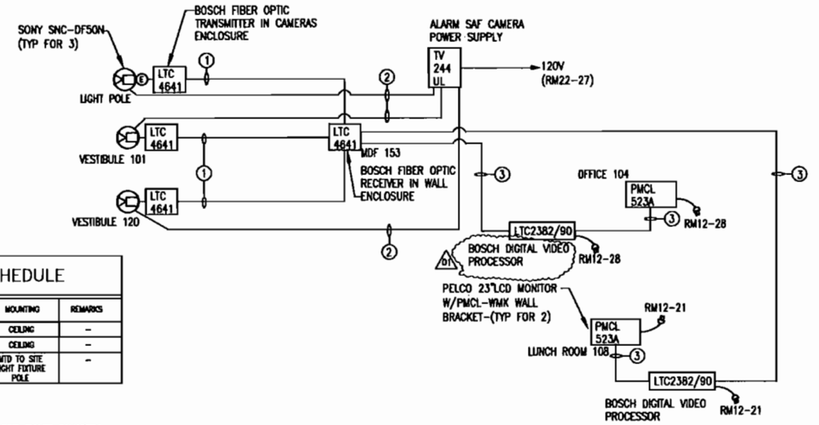
NTS (1) OIL WATER SEPARATOR SCHEMATIC WIRING DIAGRAM

LEGEND:

① FIBER OPTIC CABLE

② (2) 16 AWG CU

③ COAXIAL CABLE



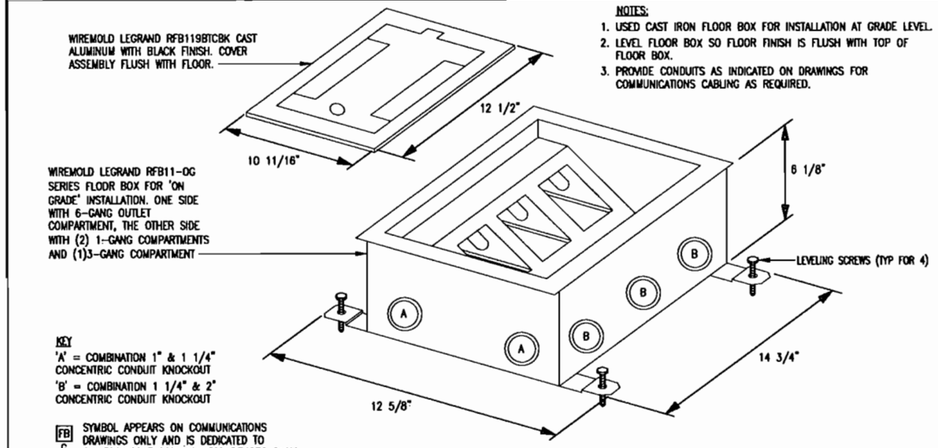
VIDEO SURVEILLANCE CAMERA SCHEDULE

CAMERA I.D. NO.	INDOOR	OUTDOOR	LOCATION	TYPE	MOUNTING	REMARKS
01	X		VESTIBULE 101	FIXED DOME	CEILING	--
02	X		VESTIBULE 120	FIXED DOME	CEILING	--
03		X	OUTSIDE ENTRANCE GATE	PIRE DOME FIXED (01)	MTD TO SITE LIGHT FIXTURE POLE	--

GENERAL NOTES:

1. RISER DIAGRAM IS DIAGRAMMATIC ONLY. REFER TO FLOOR PLANS FOR EXACT QUANTITY AND LOCATION OF CAMERAS. ALL SYSTEM INTEGRATION SHALL BE PROVIDED IN ACCORDANCE WITH RISER DIAGRAM.

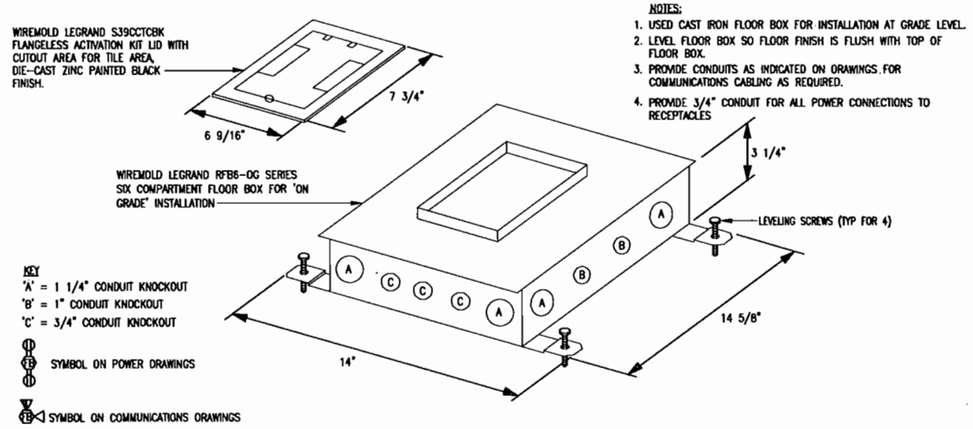
NTS (2) VIDEO SURVEILLANCE SYSTEM RISER DIAGRAM



NOTES:

1. USED CAST IRON FLOOR BOX FOR INSTALLATION AT GRADE LEVEL.
2. LEVEL FLOOR BOX SO FLOOR FINISH IS FLUSH WITH TOP OF FLOOR BOX.
3. PROVIDE CONDUITS AS INDICATED ON DRAWINGS FOR COMMUNICATIONS CABLING AS REQUIRED.

NTS (3) DETAIL-MULTIPLE SECTION DEEP FLOOR BOX DEDICATED TO GAI-TRONICS FLOOR MOUNTED DEVICES



NOTES:

1. USED CAST IRON FLOOR BOX FOR INSTALLATION AT GRADE LEVEL.
2. LEVEL FLOOR BOX SO FLOOR FINISH IS FLUSH WITH TOP OF FLOOR BOX.
3. PROVIDE CONDUITS AS INDICATED ON DRAWINGS FOR COMMUNICATIONS CABLING AS REQUIRED.
4. PROVIDE 3/4" CONDUIT FOR ALL POWER CONNECTIONS TO RECEPTACLES

NTS (4) DETAIL-MULTIPLE SECTION FLOOR BOX COMBINATION POWER/COMM FOR GENERAL USE

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4752
334 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-8681, FAX: (717) 763-7670

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

SCALE: NONE

WBS NUMBER M-015.30X001-3-02, 03, 04, 05

NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263

FILE NAME: EP4_03.DWG

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE

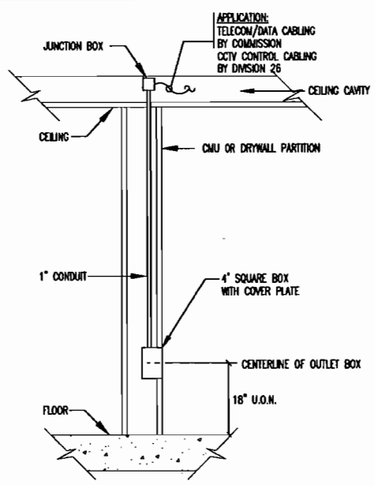
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL DETAILS PART 3 OF 10

DRAWING: EP4.03

SHEET: 230 OF 265

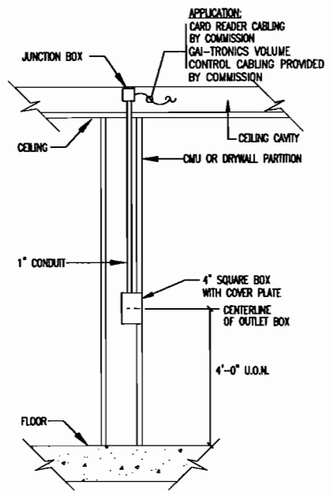
ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



1 COMMUNICATIONS CONDUIT DETAIL

NTS

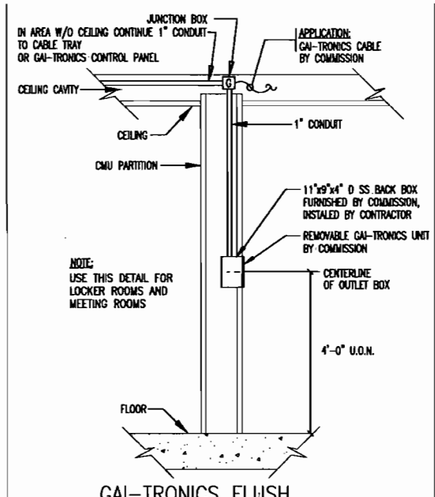
▽ ▼ SYMBOLS ON DWGS



2 4' AFF OUTLET CONDUIT DETAIL

NTS

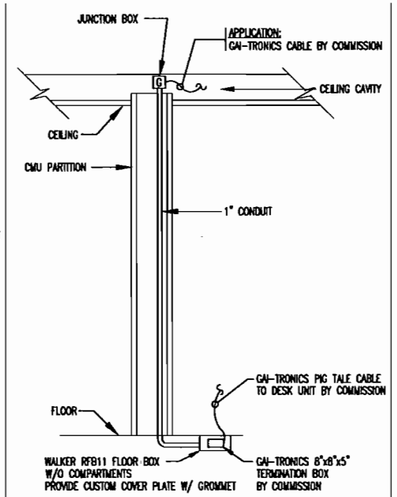
B W CR VC RC SYMBOLS ON DWGS



NTS 3 3A GAI-TRONICS FLUSH MOUNTED WALL UNIT

DETAIL 3A SIMILAR BACK BOX IS SURFACE MOUNTED (ALL WORK BY CONTRACTOR U.N.O.)

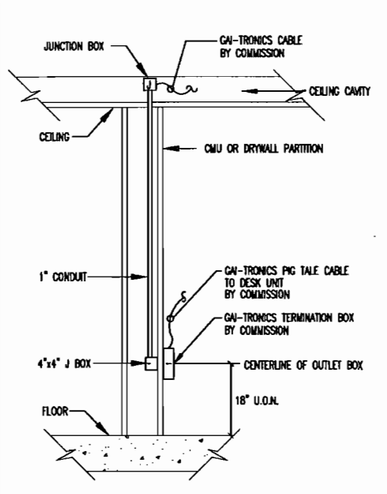
▽ SYMBOLS G ON DWGS



NTS 4 FLOOR BOX FOR GAI-TRONICS

(ALL WORK BY CONTRACTOR U.N.O.)

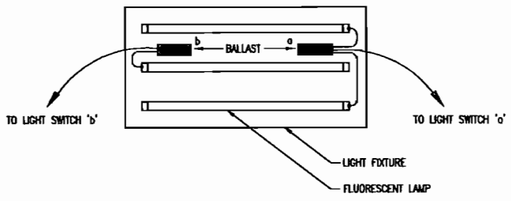
FB G SYMBOLS ON DWGS



5 GAI-TRONICS WALL FEED

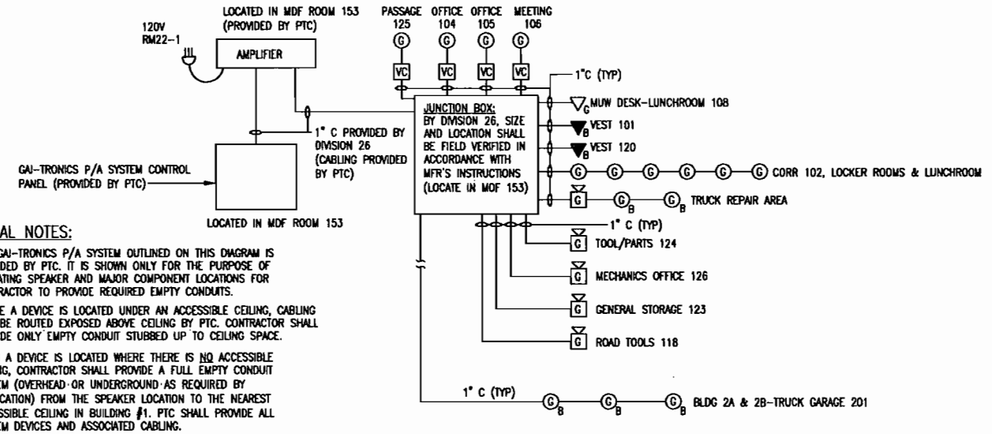
(ALL WORK BY CONTRACTOR U.N.O.)

G ▽ SYMBOLS ON DWGS



NTS 6 DETAIL -- DUAL-LEVEL SWITCHING

S_aS_b SYMBOL ON DWGS WHEN MULTI-BALLAST FIXTURES USE DUAL-LEVEL SWITCHING



GENERAL NOTES:

1. THE GAI-TRONICS P/A SYSTEM OUTLINED ON THIS DIAGRAM IS PROVIDED BY PTC. IT IS SHOWN ONLY FOR THE PURPOSE OF INDICATING SPEAKER AND MAJOR COMPONENT LOCATIONS FOR CONTRACTOR TO PROVIDE REQUIRED EMPTY CONDUITS.
2. WHERE A DEVICE IS LOCATED UNDER AN ACCESSIBLE CEILING, CABLING WILL BE ROUTED EXPOSED ABOVE CEILING BY PTC. CONTRACTOR SHALL PROVIDE ONLY EMPTY CONDUIT STUBBED UP TO CEILING SPACE.
3. WHEN A DEVICE IS LOCATED WHERE THERE IS NO ACCESSIBLE CEILING, CONTRACTOR SHALL PROVIDE A FULL EMPTY CONDUIT SYSTEM (OVERHEAD OR UNDERGROUND AS REQUIRED BY APPLICATION) FROM THE SPEAKER LOCATION TO THE NEAREST ACCESSIBLE CEILING IN BUILDING #1. PTC SHALL PROVIDE ALL SYSTEM DEVICES AND ASSOCIATED CABLING.
4. FINAL LOCATION OF ALL EQUIPMENT AND DEVICES SHALL BE COORDINATED IN THE FIELD BY PTC ON-SITE REPRESENTATIVE. COORDINATE WITH DESIGNATED REPRESENTATIVE BEFORE ALL ROUGH-IN.

7 GAI-TRONICS P/A SPEAKER SYSTEM RISER DIAGRAM

NTS

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA

ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN

PHILADELPHIA MAIN BUSINESS CENTER
4747 SOUTH BROAD STREET
PHILADELPHIA, PENNSYLVANIA 19112
TELEPHONE: (215) 218-4747
FAX: (215) 218-4740

324 NORTH FRONT STREET
HARRISBURG, PENNSYLVANIA 17043
TELEPHONE: (717) 763-5661
FAX: (717) 763-7670

PREPARED FOR:

THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.

SCALE: NONE

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05

NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263

FILE NAME: EP4_07.DWG

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

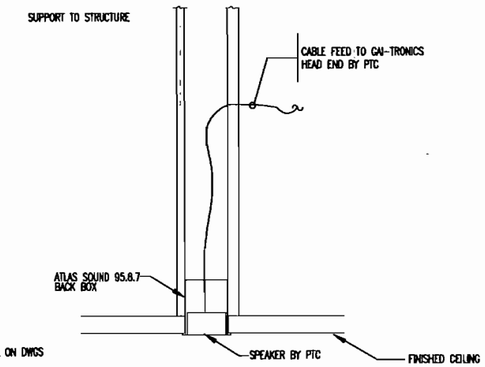
DISTRICT: 1 COUNTY: FAYETTE

TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL DETAILS PART 7 OF 10

DRAWING: EP0007

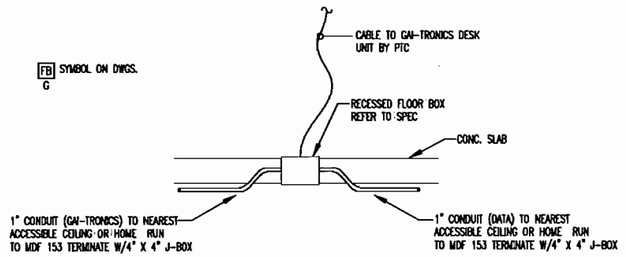
SHEET: 234 OF 265



1 GAI-TRONICS RECESSED CEILING SPEAKER DETAIL

NTS

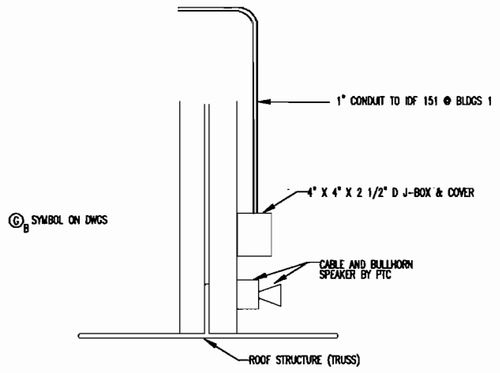
ALL WORK BY CONTRACTOR UON



2 GAI-TRONICS FLOOR BOX FEED DETAIL

NTS

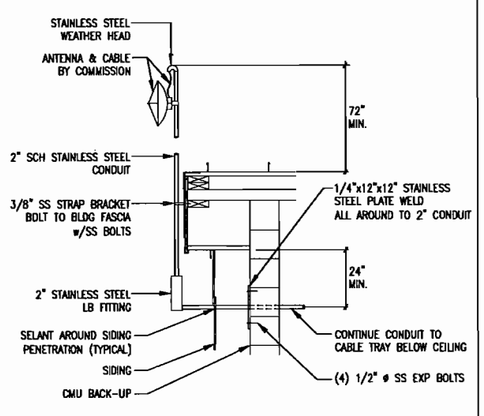
ALL WORK BY CONTRACTOR UON



3 GAI-TRONICS BULLHORN SPEAKER DETAIL

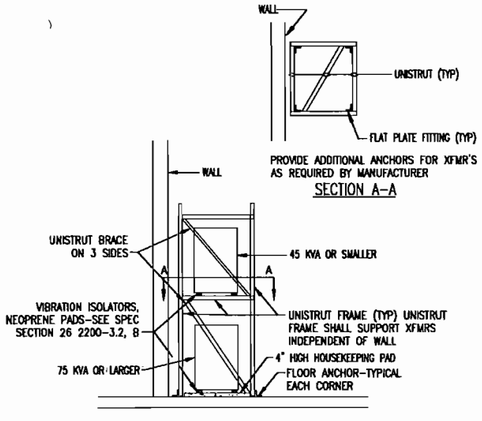
NTS

ALL WORK BY CONTRACTOR UON

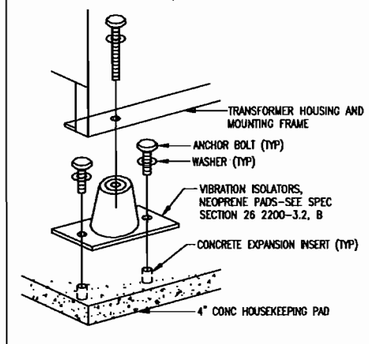


4 FA TRANSMITTER ANTENNA SUPPORT DETAIL

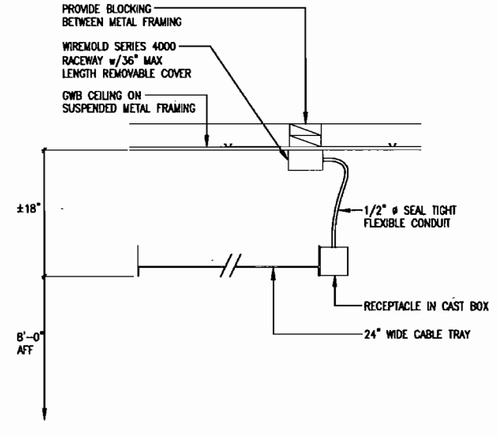
NTS



NTS 5 STACKED TRANSFORMER MOUNTING DETAIL



NTS 6 TRANSFORMER ANCHORING DETAIL



7 RECEPTACLES AT CABLE TRAY

NTS

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA BANK BUSINESS CENTER, 1617 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19113, TELEPHONE: (215) 218-4747, FAX: (215) 218-4748
224 NORTH FRONT STREET, SUNBURY, PENNSYLVANIA 17843, TELEPHONE: (717) 743-8081, FAX: (717) 743-7670

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.

WBS NUMBER M-015.30X001-3-02, 03, 04, 05

NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263

FILE NAME: EP4_08.DWG

SCALE: NONE

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 COUNTY: FAYETTE

TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL DETAILS PART 8 OF 10

DRAWING: EP4.08

SHEET: 235 OF 265

LIGHTING PANEL — LM11

BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

480/277 V AC — 3 PHASE 4 WIRE + GND

BUS 100 A COPPER — 35 KA RMS SYM.
■ MAIN LUGS ONLY ☐ 100 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	LTG – OFFICE 104, 105, 106	2#12, 1#12G	20A-1P	2.1		.70	20A-1P	2#12, 1#12G	LTG – CORR 102, PASSAGE 125	–	2
3	–	LTG – RM 107-110	2#12, 1#12G	20A-1P	1.5		1.9	20A-1P	2#12, 1#12G	LTG – RM 118, 119, 123, 129	–	4
5	–	LTG – RM 111-117	2#12, 1#12G	20A-1P	1.1		1.2	20A-1P	2#12, 1#12G	LTG – RM 122, 124, 126-128	–	6
7	–	LTG – RM 134, 135 (01)	2#12, 1#12G	20A-1P	.4		1.3	20A-1P	2#12, 1#12G	LTG – RM 130-132	–	8
9	–	LTG – OPEN BAY, MONITOR SWITCH 'e'	2#12, 1#12G	20A-1P	.70		2.0	20A-1P	2#12, 1#12G	LTG – AHU 151, ATC 152, MDF 153	–	10
11	–	LTG – OPEN BAY, SWITCH 'a'	2#12, 1#12G	20A-1P	2.1		.60	20A-1P	2#12, 1#12G	FLAG POLE IN-GRADE LIGHTING	–	12
13	–	LTG – OPEN BAY, SWITCH 'b'	2#12, 1#12G	20A-1P	2.1		–	20A-1P			–	14
15	–	LTG – OPEN BAY, SWITCH 'c'	2#12, 1#12G	20A-1P	2.1		–	20A-1P			–	16
17	–	LTG – OPEN BAY, SWITCH 'd'	2#12, 1#12G	20A-1P	2.1		–	20A-1P			–	18
19	–	LTG-TRUCK WASH BAYS-SWITCH 'a'	2#12, 1#12G	20A-1P	1.9		–	20A-1P			–	20
21	–	LTG-TRUCK WASH BAYS-SWITCH 'b'	2#12, 1#12G	20A-1P	1.7		–	20A-1P			–	22
23	–	SPARE		20A-1P	–		–	20A-1P			–	24
25	–			20A-1P	–		–	20A-1P			–	26
27	–			20A-1P	–		–	20A-1P			–	28
29	–			20A-1P	–		–	20A-1P			–	30
31	–	SPACE								SPACE	–	32
33	–										–	34
35	–										–	36
37	–										–	38
39	–										–	40
41	–										–	42

(01) (01)

REMARKS: –

LIGHTING 23.5 KVA HEATING – KVA
RECEPTACLES – KVA MISCELLANEOUS – KVA
AC – KVA SUB PANELS – KVA

TOTAL CONNECTED LOAD 23.5 KVA 31 A

LIGHTING DOUBLE PANEL — LT11

BUILDING: U/B TRUCK GARAGE BLDG #2
FLOOR: FIRST FLOOR
ROOM: TRUCK GARAGE 201

480/277 V AC — 3 PHASE 4 WIRE + GND

BUS 225 A COPPER — 35 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 225 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	EF-6 (3/4 HP)	3#12, 1#12G	20A / 3P	1.3		2.4	20A-1P	2#12, 1#12G	LTG-INDUCTION FIXTURES, SWITCH (b)	–	2
3	–						2.4	20A-1P	2#12, 1#12G	LTG-INDUCTION FIXTURES, SWITCH (c)	–	4
5	–						2.4	20A-1P	2#12, 1#12G	LTG-INDUCTION FIXTURES, SWITCH (d)	–	6
7	–	EF-6 (3/4 HP)	3#12, 1#12G	20A / 3P	1.3		2.4	20A-1P	2#12, 1#12G	LTG-INDUCTION FIXTURES, SWITCH (e)	–	8
9	–						2.4	20A-1P	2#12, 1#12G	LTG-INDUCTION FIXTURES, SWITCH (f)	–	10
11	–						1.4	20A-1P	2#12, 1#12G	LTG-FLUORESCENT FIXTURES, SWITCH (o)	–	12
13	–	EF-6 (3/4 HP)	3#12, 1#12G	20A / 3P	1.3		–	20A-1P		SPARE	–	14
15	–						–	20A-1P		SPARE	–	16
17	–						–	20A-1P		SPARE	–	18
19	–	EF-6 (3/4 HP)	3#12, 1#12G	20A / 3P	1.3		–	20A-1P		SPARE	–	20
21	–						–	20A-1P		SPARE	–	22
23	–						–	20A-1P		SPARE	–	24
25	–	EF-6 (3/4 HP)	3#12, 1#12G	20A / 3P	1.3		–	20A-1P		SPARE	–	26
27	–						–	20A-1P		SPARE	–	28
29	–						–	20A-1P		SPARE	–	30
31	–	EF-6 (3/4 HP)	3#12, 1#12G	20A / 3P	1.3		–	20A		SPARE	–	32
33	–										–	34
35	–							3P			–	36
37	–	SPARE	–	20A / 3P	–		75.0	125A / 3P	SEE SINGLE LINE DIAGRAM	FEED FOR RT11 VIA 75 KVA XFMR	–	38
39	–						–			–	–	40
41	–			3P			–	3P		–	–	42

REMARKS: –

LIGHTING 13.4 KVA HEATING – KVA
RECEPTACLES – KVA MISCELLANEOUS 75.0 KVA
VENTILATION 7.8 KVA SUB PANELS – KVA

TOTAL CONNECTED LOAD 96.2 KVA 116 A

SITE LIGHTING PANEL — SL

BUILDING: U/B SERVICE BUILDING #4
FLOOR: FIRST
ROOM: GENERATOR 402

480/277 V AC — 3 PHASE 4 WIRE + GND

BUS 100 A COPPER — 65 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 100 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	SITE LIGHTING	2#8, 1#8G	20A-1P	1.58		–	20A-1P		SPARE	–	2
3	–	SITE LIGHTING	2#8, 1#8G	20A-1P	1.23		–	20A-1P		SPARE	–	4
5	–	SITE LIGHTING	2#8, 1#8G	20A-1P	1.4		–	20A-1P		SPARE	–	6
7	–	SITE LIGHTING	2#8, 1#8G	20A-1P	1.4		–	20A-1P		SPARE	–	8
9	–	SITE LIGHTING	2#8, 1#8G	20A-1P	1.4		–	20A-1P		SPARE	–	10
11	–	SITE LIGHTING	2#8, 1#8G	20A-1P	1.4		–	20A-1P		SPARE	–	12
13	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	14
15	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	16
17	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	18
19	–	SPACE								SPACE	–	20
21	–										–	22
23	–										–	24
25	–										–	26
27	–										–	28
29	–										–	30
31	–										–	32
33	–										–	34
35	–										–	36
37	–										–	38
39	–										–	40
41	–										–	42

REMARKS: –

LIGHTING 8.4 KVA HEATING – KVA
RECEPTACLES – KVA MISCELLANEOUS – KVA
AC – KVA – – KVA

TOTAL CONNECTED LOAD 8.4 KVA 10 A

NORMAL/EMERGENCY LIGHTING DISTRIBUTION PANEL — ELDG1

BUILDING: U/B SERVICE BUILDING #4
FLOOR: FIRST
ROOM: GENERATOR 403

480/277 V AC — 3 PHASE 4 WIRE + GND

BUS 100 A COPPER — 65 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 100 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	EMERG LTG-BUILD # 4	2#12, 1#12G	20A-1P	.96		10.0	60A / 3P	4#2, 1#8G	FEED FOR PANEL	–	2
3	–	OUTSIDE EMERG LTG- BUILD # 4	2#12, 1#12G	20A-1P	.70					ELM11	–	4
5	–	FUEL CANOPY LTG	2#10, 1#10G	20A-1P	.90						–	6
7	–	EMERG LTG-BUILD #4 EGRESS DOORS	2#12, 1#12G	20A-1P	.3		–	60A / 3P	–	SPARE	–	8
9	–	SPARE		20A-1P	–					SPARE	–	10
11	–	SPARE		20A-1P	–						–	12
13	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	14
15	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	16
17	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	18
19	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	20
21	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	22
23	–	SPACE			–		–			SPACE	–	24
25	–				–		–				–	26
27	–				–		–				–	28
29	–				–		–				–	30
31	–				–		–				–	32
33	–				–		–				–	34
35	–				–		–				–	36
37	–				–		–				–	38
39	–				–		–				–	40
41	–				–		–				–	42

REMARKS: –

LIGHTING 2.7 KVA HEATING – KVA
RECEPTACLES – KVA MISCELLANEOUS 10.0 KVA
AC – KVA – – KVA

TOTAL CONNECTED LOAD 12.7 KVA 15 A

NORMAL/EMERGENCY LIGHTING PANEL — ELM11

BUILDING: U/B MAINTENANCE BUILDING #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

480/277 V AC — 3 PHASE 4 WIRE + GND

BUS 100 A COPPER — 35 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 60 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	EMERG LTG– FIRST FLOOR MAINT BLDG	2#12, 1#12G	20A-1P	1.4		.50	20A-1P	2#12, 1#12G	EMERG LTG-TRUCK GARAGE	–	2
3	–	EXIT LTG-MAINT BLD	2#12, 1#12G	20A-1P	.10		.10	20A-1P	2#12, 1#12G	EXIT LTG-TRUCK GARAGE	–	4
5	–	EMERG LTG-MAINT BLD SECOND FLOOR	2#12, 1#12G	20A-1P	.80		.50	20A-1P	2#12, 1#12G	EMERG LTG-TRUCK WASH	–	6
7	–	EMERG LTG-MAINT BLD STAIRS	2#12, 1#12G	20A-1P	.50		.7	20A-1P	2#12, 1#12G	OUTSIDE BLDG LIGHTING AT EXIT DOORS	–	8
9	–	SPARE		20A-1P	–		2.9	20A-1P	2#10, 1#10G	OUTSIDE BUILDING LIGHTING	–	10
11	–	SPARE		20A-1P	–		2.5	20A-1P	2#10, 1#10G	OUTSIDE BUILDING LIGHTING	–	12
13	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	14
15	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	16
17	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	18
19	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	20
21	–	SPACE			–		–			SPACE	–	22
23	–				–		–				–	24
25	–				–		–				–	26
27	–				–		–				–	28
29	–				–		–				–	30
31	–				–		–				–	32
33	–				–		–				–	34
35	–				–		–				–	36
37	–				–		–				–	38
39	–				–		–				–	40
41	–				–		–				–	42

REMARKS: –

LIGHTING 10.0 KVA HEATING – KVA
RECEPTACLES – KVA MISCELLANEOUS – KVA
AC – KVA – – KVA

TOTAL CONNECTED LOAD 10.0 KVA 12 A

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4750
224 NORTH FRONT STREET, WORMLEYSBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7070

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
01	ASI-011	12.23.2010	DRV

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: EP5_01.DWG
SCALE: NONE

UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL
PANEL SCHEDULES
PART 1 OF 3

DRAWING: EP5.01
SHEET: 241 OF 265

POWER PANEL

RG11
BUILDING: U/B SERVICE BUILDING #4
FLOOR: FIRST FLOOR
ROOM: ELECT 403

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 400 100 A COPPER
400 100 A MAIN C.B.
65 KA RMS SYM.
☐ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
■ 100 A MAIN C.B.
☐ FLUSH MOUNTED
☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	-	GEN-BATTERY CHARGER	2#12, 1#12G	20A-1P	.30		.90	20A-1P	2#12, 1#12G	OUTSIDE RECEPTACLE	-	2
3	-	GEN-BLOCK HEATER	2#10, 1#10G	30A	3.0		.54	20A-1P	2#12, 1#12G	REC-ELECTRICAL RM 402	-	4
5	-	TO CHANGE TO 40A/2P BREAKER AND 6KW LOAD		2P			.90	20A-1P	2#12, 1#12G	REC-GEN. RM 403, PUMP RM 404	-	6
7	-	EF-2 (1/4 HP)	2#12, 1#12G	20A-1P	.70		.30	20A-1P	2#12, 1#12G	GASOLINE OVERFILL ALARM	-	8
9	-	EF-8 (1/2 HP)	2#12, 1#12G	20A-1P	1.2		.30	20A-1P	2#12, 1#12G	DIESEL OVERFILL ALARM	-	10
11	-	FUEL SYSTEM DAYTANK	2#12, 1#12G	20A-1P	.80		.60	20A-1P	2#12, 1#12G	VAPOR RECOVERY PANEL	-	12
13	-	GASOLINE DISPENSER	2#12, 1#12G	20A-1P	.80		-	20A-1P		SPARE	-	14
15	-	DIESEL DISPENSER	2#12, 1#12G	20A-1P	.80		-	20A-1P		SPARE	-	16
17	-	VAPOR RECOVERY COLLECTOR	2#12, 1#12G	20A-1P	.30		-	20A-1P		SPARE	-	18
19	-	FUEL MONITOR CONSOLE	2#12, 1#12G	20A-1P	.30			20A-1P		SPARE	-	20
21	-	EF-10 (1/4 HP)	2#12, 1#12G	20A-1P	.70		-	20A-1P		SPARE	-	22
23	-	TIME CLOCKS	2#12, 1#12G	20A-1P	.50		2.0	20A	2#10, 1#10G	DIESEL FUEL DISPENSER PUMP	-	24
25	-	LIGHTING-OUTDOOR STORAGE BINS	2#8, 1#8G	20A-1P	.4		-	2P		-	-	26
27	-	SPARE		20A-1P	-		2.0	20A	2#10, 1#10G	GASOLINE DISPENSER PUMP	-	28
29	-	SPARE		20A-1P	-		-	2P		-	-	30
31	-	SPARE		20A-1P	-		2.0	20A	2#10, 1#10G	E85 DISPENSER PUMP	-	32
33	-	MOTORIZED GATE OPERATOR	3#4, 1#4G	20A	-		-	2P		-	-	34
35	-	1 HP-S.R. 4010 ROAD ENTRANCE			1.7		-	20A		SPARE	-	36
37	-			3P	-		-	2P		SPARE	-	38
39	-	BACKFEED FOR EXISTING PANEL 'MSP'	SEE SINGLE	200A	14.0		-	30A		SPARE	-	40
41	-	ON OUTDOOR SERVICE RACK	LINE DIAGRAM	2P	-		-	2P		SPARE	-	42

REMARKS: -
-
-
-

LIGHTING .4 KVA
RECEPTACLES 2.34 KVA
AC 2.6 KVA
HEATING - KVA
MISCELLANEOUS 29.6 KVA
- - KVA
TOTAL CONNECTED LOAD 34.9 KVA 98 A

RECEPTACLE PANEL (SECTION 1)

RM11
BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 400 A COPPER
22 KA RMS SYM.
☐ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
■ 250 A MAIN C.B.
☐ FLUSH MOUNTED
☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	-	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		1.8	20A-1P	2#12, 1#12G	ITEM RBB.07-PORTABLE CUT OFF SAW	-	2
3	-	REPAIR BAY 'B' RM 132		2P			2.9	30A-1P	2#10, 1#10G	ITEM RBB.02-PORTABLE BATT CHARGER	-	4
5	-	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		2.9	30A-1P	2#10, 1#10G	ITEM RBB.02-PORTABLE BATT CHARGER	-	6
7	-	VEHICLE STORAGE RM 133		2P			1.7	20A-1P	2#12, 1#12G	ITEM RA.08-DRILL PRESS (3/4 HP)	-	8
9	-	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		2.8	30A-1P	2#12, 1#12G	ITEM RA.11-CAR TIRE CHANGER, 2 HP	-	10
11	-	PRE-WASH RM 134		2P			.54	20A-1P	2#12, 1#12G	CONV REC-REPAIR BAY 'A' RM 130	-	12
13	-	MOTORIZED DOR	2#12, 1#12G	20A	1.8		.9	20A-1P	2#12, 1#12G	CONV REC-VEHICLE STORAGE 133	-	14
15	-	WASH BAY RM 135		2P			.72	20A-1P	2#12, 1#12G	CONV REC-VEHICLE STORAGE 133	-	16
17	-	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		.72	20A-1P	2#12, 1#12G	CONV REC-REPAIR BAY 'A' RM 130	-	18
19	-	VEHICLE STORAGE RM 133		2P			.36	20A-1P	2#12, 1#12G	CONV REC-REPAIR BAY 'A' RM 130	-	20
21	-	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		1.3	20A-1P	2#12, 1#12G	CONV REC-TRUCK WASH AREA	-	22
23	-	REPAIR BAY 'A' RM 130		2P			.5	20A-1P	2#12, 1#12G	RADIANT HEATER GRH-1 PRE-WASH 134	-	24
25	-	ITEM PW.02-HIGH PRESSURE WASHER	2#12, 1#12G	30A	5.0		.5	20A-1P	2#12, 1#12G	RADIANT HEATER GRH-1 WASH BAY 135	-	26
27	-	RECEPTACLES		2P			.1	20A-1P	2#12, 1#12G	CEILING FANS CF-1 AND CF-2	-	28
29	-	CONV REC-REPAIR AREA 131	2#12, 1#12G	20A-1P	.72		1.0	20A-1P	2#12, 1#12G	REC-WATER HEATER, WASH EQUIP. 135	-	30
31	-	CONV REC-REPAIR AREA 131	2#12, 1#12G	20A-1P	.72		.54	20A-1P	2#12, 1#12G	REC-WASH EQUIP. 135	-	32
33	-	CONV REC-REPAIR AREA 131	2#12, 1#12G	20A-1P	.72		.9	20A-1P	2#12, 1#12G	EF-4 (1/3 HP)	-	34
35	-	CONV REC-REPAIR AREA 131	2#12, 1#12G	20A-1P	.54		.50	20A-1P	2#12, 1#12G	REC-WATER SOFTENER, WASH EQUIP.135	-	36
37	-	CONV REC-REPAIR BAY 'B' RM 132	2#12, 1#12G	20A-1P	.9		.54	20A-1P	2#12, 1#12G	CONV REC-REPAIR AREA 131	-	38
39	-	CONV REC-REPAIR BAY 'B' RM 132	2#12, 1#12G	20A-1P	.72		1.9	30A-1P	2#10, 1#10G	ITEM RA.12-GRINDER, 1 HP	-	40
41	-	WASTE OIL TANK ALARM PANEL	2#12, 1#12G	20A-1P	.5		2.3	40A-1P	2#8, 1#10G	ITEM RA.12-DOWNDRAFT TABLE, 1.5 HP	-	42

REMARKS: PROVIDE FEED THROUGH LUGS
-
-
-

RECEPTACLE PANEL (SECTION 2)

RM11
BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 400 A COPPER
22 KA RMS SYM.
■ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
☐ - A MAIN C.B.
☐ FLUSH MOUNTED
☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
43	-	ITEM RA.04-PARTS WASHER	2#8, 1#10G	50A	9.7			20A	3#12, 1#12G	ITEM RA.07-BLAST CABINET & DUST	-	44
45	-	7 KW HEATER, 2 HP PUMP		2P			1.7			COLLECTER 1 HP	-	46
47	-	SPARE		50A	-			3P			-	48
49	-	-		2P				20A	3#12, 1#12G	ITEM RA.09-TRUCK TIRE CHANGER	-	50
51	-	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		2.8			2 HP	-	52
53	-	ROAD TOOLS 118		2P				3P			-	54
55	-	SPARE		20A	-		30A	20A	3#10, 1#10G	ITEM RBB.06 TWO-POST LIFT	-	56
57	-			2P			2.8	3P 2P		2 HP	-	58
59	-	SPARE		20A	-						-	60
61	-			2P				20A		SPARE	-	62
63	-	SPARE		30A	-		-				-	64
65	-			2P				3P			-	66
67	-	SPARE		30A	-			20A		SPARE	-	68
69	-			2P			-				-	70
71	-	SPARE		20A	-			3P			-	72
73	-							20A		SPARE	-	74
75	-			3P			-				-	76
77	-	REC-SUMP PUMP IN GEOTHERMAL VAULT	2#12, 1#12G	20A-1P	.8			3P			-	78
79	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	80
81	-	WIREMOLD REC IN ROAD TOOLS 118	2#12, 1#12G	20A-1P	.54		.36	20A-1P	2#12, 1#12G	WIREMOLD REC IN ROAD TOOLS 118	-	82
83	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	84

REMARKS: -
-
-
-

SHOP EQUIPMENT 40.3 KVA
CONV RECEPTACLES 10.12 KVA
AC 1.0 KVA
HEATING 1.0 KVA
MISCELLANEOUS 12.1 KVA
- - KVA
TOTAL CONNECTED LOAD 64.5 KVA 179.6 A

RECEPTACLE PANEL

RM12
BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 225 A COPPER
22 KA RMS SYM.
☐ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
■ 150 A MAIN C.B.
☐ FLUSH MOUNTED
☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	-	REC-MEETING 106	2#12, 1#12G	20A-1P	.72		.5	20A-1P	2#12, 1#12G	OIL/WATER SEPARATOR CONTROL PANEL	-	2
3	-	REC-MEETING 106	2#12, 1#12G	20A-1P	.72		.72	20A-1P	2#12, 1#12G	REC-TOOL PARTS 124 AREA	-	4
5	-	REC-FOREMAN 105	2#12, 1#12G	20A-1P	1.1		1.1	20A-1P	2#12, 1#12G	REC-MECHANIC'S OFFICE 126	-	6
7	-	REC-OFFICE 104	2#12, 1#12G	20A-1P	.72		.9	20A-1P	2#12, 1#12G	REC-STORAGE 123, LUBE 129	-	8
9	-	REC-COPIER, OFFICE 104	2#12, 1#12G	20A-1P	1.0		.54	20A-1P	2#12, 1#12G	REC-OUTSIDE	-	10
11	GFI	REC-REFRIGERATOR, KITCH 107	2#12, 1#12G	20A-1P	1.2		.54	20A-1P	2#12, 1#12G	REC-ELECT 119	-	12
13	GFI	REC-REFRIGERATOR, KITCH 107	2#12, 1#12G	20A-1P	1.2		.1	20A-1P	2#12, 1#12G	RAIN WATER SYSTEM CONTROL PANEL	-	14
15	-	REC-MICROWAVE OVEN, KITCH 107	2#12, 1#12G	20A-1P	1.2		.5	20A-1P	2#12, 1#12G	FIRE ALARM CONTROL PANEL	-	16
17	-	CONV REC-KITCH 107	2#12, 1#12G	20A-1P	1.1		.1	20A-1P	2#12, 1#12G	TIME CLOCK OUTSIDE LIGHT	-	18
19	-	REC-MICROWAVE OVEN, LUNCH 108	2#12, 1#12G	20A-1P	1.2		.6	20A-1P	2#12, 1#12G	APHONE INTERCOM MASTER STATIONS	-	20
21	-	REC-LUNCH 108	2#12, 1#12G	20A-1P	.9		1.2	20A-1P	2#12, 1#12G	EF-5 (1/2 HP)	-	22
23	-	REC-LOCKER ROOM AREA	2#12, 1#12G	20A-1P	1.3		.5	20A-1P	2#12, 1#12G	FUEL MONITOR ALARM PANEL	-	24
25	-	AUTOSENSOR SINKS & TOILETS	2#12, 1#12G	20A-1P	.2		.2	20A-1P	2#8, 1#8G	NEW WATER METER PIT POWER	-	26
27	-	AUTOSENSOR SINKS & TOILETS	2#6, 1#10G	60A-1P	.2		.72	20A-1P	2#12, 1#12G	REC-OFFICE 104	-	28
29	-	REC-CORR 102	2#12, 1#12G	20A-1P	.72		2.1	20A	2#12, 1#12G	HEAT PUMP HP-2	-	30
31	-	CARD READERS	2#12, 1#12G	20A-1P	.9			2P			-	32
33	-	AIR COMPRESSR (1/2 HP)	2#12, 1#12G	20A-1P	1.2		1.0	20A-1P	2#12, 1#12G	EWC'S CORR 102	-	34
35	-	HEAT PUMP HP-3	2#12, 1#12G	15A	.80		.72	20A-1P	2#12, 1#12G	WIREMOLD REC IN TOOLS/PARTS 124	-	36
37	-	3.5 FLA		2P	-		.72	20A-1P	2#12, 1#12G	WIREMOLD REC IN TOOLS/PARTS 124	-	38
39	-	ELECTRICAL RANGE-KITCHEN 107	2#6, 1#10G	50A	8.0		.54	20A-1P	2#12, 1#12G	REC-FOREMAN 105	-	40
41	-			2P			-	20A-1P		SPARE	-	42

REMARKS: 1. PROVIDE WITH FEED THRU LUGS.
2. PROVIDE GFCI CIRCUIT BREAKERS WHERE LABELED 'GFI'
-
-

LIGHTING - KVA
RECEPTACLES 19.4 KVA
AC 1.2 KVA
HEATING 3.0 KVA
MISCELLANEOUS 14.0 KVA
- - KVA
TOTAL CONNECTED LOAD 37.6 KVA 104.0 A

POWER PANEL

RM21
BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: SECOND FLOOR
ROOM: AHU ROOM 151

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 100 A COPPER
22 KA RMS SYM.
☐ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
■ 100 A MAIN C.B.
☐ FLUSH MOUNTED
☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	-	SPARE		20A-1P	-		.72	20A-1P	2#12, 1#12G	REC-AHU 151	-	2
3	-	EF-7 (1/6 HP)	2#12, 1#12G	20A-1P	.50		.36	20A-1P	2#12, 1#12G	REC-ATC 152	-	4
5	-	SPARE		15A	-		.30	20A-1P	2#12, 1#12G	(3) GRH-2	-	6
7	-			2P			.30	20A-1P	2#12, 1#12G	(3) GRH-2	-	8
9	-	CORD REEL RECP	2#12, 1#12G	20A-1P	.18		.60	20A-1P	2#12, 1#12G	WH-1 AND HRP-1 (1/6 HP)	-	10
11	-	CORD REEL RECP	2#12, 1#12G	20A-1P	.18		.50	20A-1P	2#12, 1#12G	HR-1 (1/6 HP)	-	12
13	-	CORD REEL RECP	2#12, 1#12G	20A-1P	.18		.50	20A-1P	2#12, 1#12G	HR-2 (1/6 HP)	-	14
15	-	DRYER FOR AC-1 COMPRESSOR	2#12, 1#12G	20A-1P	1.0		.50	20A-1P	2#12, 1#12G	HR-3 (1/6 HP)	-	16
17	-	ACU-1	2#12, 1#12G	15A	.3		.3	15A	2#12, 1#12G	ACU-2	-	18
19	-			2P				2P			-	20
21	-	ACC-1	2#12, 1#12G	15A	2.9		2.9	15A	2#12, 1#12G	ACC-2	-	22
23	-			2P				2P			-	24
25	-	WATER UV TREATMENT SYSTEM	2#12, 1#12G	20A-1P	.5		-	20A-1P		SPARE	-	26
27	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	28
29	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	30
31	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	32
33	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	34
35	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	36
37	-	ERU-1	3#12, 1#12G	15A	-		-	15A	3#12, 1#12G	EUH-6	-	38
39	-				1.7		5.0				-	40
41	-			3P	-		-	3P			-	42

REMARKS: -
-
-
-

LIGHTING - KVA
RECEPTACLES 1.62 KVA
AC 6.7 KVA
HEATING 5.0 KVA
MISCELLANEOUS 5.9 KVA
- - KVA
TOTAL CONNECTED LOAD 19.22 KVA 53.4 A

POWER PANEL

RM22
BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: SECOND FLOOR
ROOM: MDF 153

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 225 A COPPER
22 KA RMS SYM.
☐ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
■ 150 A MAIN C.B.
☐ FLUSH MOUNTED
☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1		5.0	30A	2#10, 1#10G	RECTIFIER CONNECTION	-	2
3	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			-	4
5	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1		5.0	30A	2#10, 1#10G	RECTIFIER CONNECTION	-	6
7	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			-	8
9	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1		4.9	30A	2#10, 1#10G	BATTERY RACK-MDF 153	-	10
11	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			-	12
13	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1		4.9	30A	2#10, 1#10G	BATTERY RACK-MDF 153	-	14
15	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			-	16
17	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			30A		SPARE	-	18
19	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			-	20
21	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			30A		SPARE	-	22
23	-	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			-	24
25	-	GAI-TRONICS SYSTEM PANELS	2#12, 1#12G	20A-1P	1.0		-	20A-1P		SPARE	-	26
27	-	FIRE ALARM TRANSMITTER	2#12, 1#12G	20A-1P	.5		-	20A-1P		SPARE	-	28
29	-	CAMERA POWER SUPPLY PANEL	2#12, 1#12G	20A-1P	1.0		-	20A-1P		SPARE	-	30
31	-	SECURITY PANEL	2#12, 1#12G	20A-1P	.5		-	20A-1P		SPARE	-	32
33	-	FM 200 PANEL	2#12, 1#12G	20A-1P	.5		-	20A-1P		SPARE	-	34
35	-	REC-MDF 153	2#12, 1#12G	20A-1P	.36		-	20A-1P		SPARE	-	36
37	-	REC-MDF 153	2#12, 1#12G	20A-1P	.18		.36	20A-1P	2#12, 1#12G	REC-MDF 153	-	38
39	-	REC-MDF 153	2#12, 1#12G	20A-1P	.36		.18	20A-1P	2#12, 1#12G	REC-MDF 153	-	40
41	-	REC-MDF 153	2#12, 1#12G	20A-1P	.36		.36	20A-1P	2#12, 1#12G	REC-MDF 153	-	42

REMARKS: PROVIDE 200% CAPACITY NEUTRAL BUS
-
-
-

LIGHTING - KVA
RECEPTACLES 2.2 KVA
AC - KVA
HEATING - KVA
MISCELLANEOUS 3.5 KVA
RACK EQUIPMENT 33.0 KVA
TOTAL CONNECTED LOAD 38.7 KVA 108 A

RECEPTACLE PANEL

RSDR
BUILDING: U/B MAINTENANCE OUTDOOR RACK
FLOOR: M-18 SITE
ROOM: OUTSIDE AT SALT/BRINE AREA

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 225 A COPPER
22 KA RMS SYM.
☐ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
■ 150 A MAIN C.B.
☐ FLUSH MOUNTED
☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	-	PANEL 'RS11' FEEDERS	3#8, 1#8G	60A	5.9			20A	3#4, 1#4G	MOTORIZED GATE OPERATOR	-	2
3	-	SALT DOME BUILDING 3		2P			1.7			1 HP-S.R. 4010 ROAD ENTRANCE	-	4
5	-	PANEL 'RS12' FEEDERS	3#6, 1#8G	60A	10.1			3P			-	6
7	-	SALT/BRINE EQUIPMENT LOCATION		2P			.2	20A-1P	3#8, 1#8G	CAMERA AT GATE HEATER	-	8
9	-	ANTI-SKID BLDG #5 POWER/LIGHTING	2#8, 1#8G	20A-1P	.80		-	20A-1P		SPARE	-	10
11	-	SPARE		20A	-		-	20A-1P		SPARE	-	12
13	-			2P			-	20A-1P		SPARE	-	14
15	-	SPARE		20A	-		-	20A-1P		SPARE	-	16
17	-			2P			-	20A-1P		SPARE	-	18
19	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	20
21	-	SPARE		20A-1P	-		-	20A-1P		SPARE	-	22
23	-	SPACE								SPACE	-	24
25	-										-	26
27	-										-	28
29	-										-	30
31	-										-	32
33	-										-	34
35	-										-	36
37	-										-	38
39	-										-	40
41	-										-	42

RSDP PANEL DELETED

REMARKS: 1. PANEL SHALL BE SUITABLE FOR SERVICE ENTRANCE
2. PANEL SHALL BE NEMA 4X CORROSION RESISTANT RATED
-
-

LIGHTING - KVA
RECEPTACLES - KVA
AC - KVA
HEATING - KVA
MISCELLANEOUS 18.7 KVA
- - KVA
TOTAL CONNECTED LOAD 18.7 KVA 52 A

EXISTING OUTDOOR RACK MOUNTED PANEL

MSP
BUILDING: SITE M-18
FLOOR: AT SERVICE RACK
ROOM:

120/240 V AC
1 PHASE
3 WIRE + GND

BUS 225 A COPPER
10 KA RMS SYM.
☐ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
■ 225 A MAIN C.B.
☐ FLUSH MOUNTED
☐ 200% CAPACITY NEUTRAL BUS

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	OH	PANEL 'RS11' FEEDERS	3#6, 1#6G	60A	5.3		-	150A		SPARE - DELETED OFFICE TRAILER FEED	UG	2
3	-	SALT DOME BUILDING 3		2P	-		-	2P		-	-	4
5	OH	PANEL 'RS12' FEEDERS	3#6, 1#6G	60A	7.7		-	20A-1P		SPARE - DELETED SITE LIGHTING CKT	UG	6
7	-	SALT/BRINE EQUIPMENT LOCATION		2P	-		-	20A-1P		SPARE - DELETED SITE LIGHTING CKT	UG	8
9	OH	ANTI-SKID BLDG #5 POWER/LIGHTING	2#8, 1#8G	20A-1P	.8		-	20A-1P		SPARE - DELETED SITE LIGHTING CKT	UG	10
11	-	CAMERA HEATER AT ENTRANCE GATE	3#8, 1#8G	20A-1P	.2		-	20A-1P		SPARE - DELETED SITE LIGHTING CKT	UG	12
13	-	-		20A-1P	-		-	20A-1P		SPARE - DELETED SITE LIGHTING CKT	UG	14
15	-	-		20A-1P	-		-	20A-1P		-	-	16
17	-	-		20A-1P	-		-	20A-1P		-	-	18
19	-	-		20A-1P	-		-	20A-1P		-	-	20
21	-	-		20A-1P	-		-	20A-1P		-	-	22
23	-	-		20A-1P	-		-	20A-1P		-	-	24

REMARKS: 1. EXIST PANEL IS SUITABLE FOR SERVICE ENTRANCE
2. EXIST PANEL IS NEMA 4X CORROSION RESISTANT RATED
3. CIRCUIT #11 IS A NEW CIRCUIT TO BE CONNECTED TO EXISTING 20/1 BKR

LIGHTING - KVA
RECEPTACLES - KVA
AC - KVA
HEATING - KVA
MISCELLANEOUS 14.0 KVA
- - KVA
TOTAL CONNECTED LOAD 14.0 KVA 67 A

EXISTING RECEPTACLE PANEL

RS12
BUILDING: U/B MAINT OUTDOOR RACK
FLOOR: M-18 SITE
ROOM: OUTSIDE AT SALT/BRINE AREA

120/240 V AC
1 PHASE
3 WIRE + GND

BUS 100 A COPPER
10 KA RMS SYM.
☐ MAIN LUGS ONLY
■ SURFACE MOUNTED
■ BOLTED BRANCH C.B.
■ 60 A MAIN C.B.
☐ FLUSH MOUNTED
☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	-	EXIST LIQUID TRANSFER PUMP-1 1/2 HP		40A-1P	2.3		-	20A-1P		EXISTING SPARE	-	2
3	-	LIQUID TRANSFER PUMP-1 1/2 HP	2#8, 1#10G	40A-1P	2.3		-	20A-1P		EXISTING SPARE	-	4
5	-	SALT BRINE SYSTEM SHELTER	2#6, 1#6G	50A-1P	3.6		-	20A-1P		EXISTING SPARE	-	6
7	GFI	REC-SALT BRINE AIR COMPRESSOR	2#12, 1#12G	20A-1P	1.7		-	20A-1P		EXISTING SPARE	-	8
9	GFI	REC-CONV AT SALT BRINE AREA	2#12, 1#12G	20A-1P	.18		-	20A-1P		EXISTING SPARE	-	10
11	-	EXISTING SPARE		20A-1P	-		-	20A-1P		EXISTING SPARE	-	12

REMARKS: 1. EXIST PANEL IS SUITABLE FOR SERVICE ENTRANCE
2. EXIST PANEL IS NEMA 4X CORROSION RESISTANT RATED
3. REPLACE EXISTING 20/1 CB WITH 'GFI' CB FOR CKT #7
4. FOR CIRCUIT #3 PROVIDE NEW BREAKER
5. CIRCUITS 3,5,7 & 9 ARE NEW CIRCUITS

LIGHTING - KVA
RECEPTACLES .18 KVA
AC - KVA
HEATING - KVA
MISCELLANEOUS 9.9 KVA
- - KVA
TOTAL CONNECTED LOAD 10.1 KVA 48 A

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN

PHILADELPHIA NAVAL BUSINESS CENTER
4747 SOUTH BROAD STREET
PHILADELPHIA, PENNSYLVANIA 19112
TELEPHONE: (215) 218-4747
FAX: (215) 218-4740

224 NORTH FRONT STREET
WORMLEYSBURG, PENNSYLVANIA 17043
TELEPHONE: (717) 763-5661
FAX: (717) 763-7970

PREPARED FOR:
THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
05	ASI-020	02.11.2011	DRV
04	ASI-016	01.17.2011	DRV
03	ASI-011	12.23.2010	DRV
02	ASI-004	09.22.2010	DRV

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: EP5_02.DWG
SCALE: NONE

UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1
COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL
PANEL SCHEDULES
PART 2 OF 3

DRAWING: EP5.02
SHEET: 242 OF 265

RECEPTACLE PANEL (SECTION 1)

RT11

BUILDING: U/B TRUCK GARAGE BUILDING #2
FLOOR: FIRST FLOOR
ROOM: TRUCK GARAGE 201

208/120 V AC, 3 PHASE, 4 WIRE + GND

BUS 400 A COPPER — 22 KA RMS SYM.
☐ MAIN LUGS ONLY — ■ 250 A MAIN C.B.
■ SURFACE MOUNTED — ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. — ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	2
3	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	4
5	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	6
7	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	8
9	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	10
11	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	12
13	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	14
15	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	16
17	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	18
19	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	20
21	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	22
23	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	24
25	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		.54	20A-1P	2#12, 1#12G	CONV REC	–	26
27	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		–	20A-1P		SPARE	–	28
29	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		–	20A-1P		SPARE	–	30
31	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		–	20A-1P		SPARE	–	32
33	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		–	20A-1P		SPARE	–	34
35	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		–	20A-1P		SPARE	–	36
37	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		–	15A / 3P	3#12, 1#12G	EUH-2	–	38
39	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5		5.0				–	40
41	–	REC-BLOCK HEATER	2#12, 1#12G	20A-1P	1.5						–	42

REMARKS:
1. PROVIDE FEED THRU LUGS.
2. ALL OUTLETS CONNECTED TO THIS PANEL ARE LOCATED IN TRUCK GARAGE 201 ADJACENT TO BUILDING #1

RECEPTACLE PANEL (SECTION 2)

RT11

BUILDING: U/B TRUCK GARAGE BUILDING #2
FLOOR: FIRST FLOOR
ROOM: TRUCK GARAGE 201

208/120 V AC, 3 PHASE, 4 WIRE + GND

BUS 400 A COPPER — 22 KA RMS SYM.
■ MAIN LUGS ONLY — ☐ A MAIN C.B.
■ SURFACE MOUNTED — ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. — ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
43	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		1.5	20A-1P	2#12, 1#12G	REC-BLOCK HEATER	–	44
45	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		1.5	20A-1P	2#12, 1#12G	REC-BLOCK HEATER	–	46
47	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		–	20A-1P		SPARE	–	48
49	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		–	20A-1P		SPARE	–	50
51	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		–	20A-1P		SPARE	–	52
53	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		–	20A-1P		SPARE	–	54
55	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		–	20A-1P		SPARE	–	56
57	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		–	20A-1P		SPARE	–	58
59	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		–	20A-1P		SPARE	–	60
61	–	MOTORIZED GARAGE DOOR	2#12, 1#12G	20A-1P	1.2		–	20A-1P		SPARE	–	62
63	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	64
65	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	66
67	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	68
69	–	SPACE			–		–			SPACE	–	70
71	–				–		–				–	72
73	–				–		–				–	74
75	–				–		–				–	76
77	–				–		–				–	78
79	–				–		–				–	80
81	–				–		–				–	82
83	–				–		–				–	84

REMARKS:

LIGHTING	– KVA	REC (BLOCK HTR)	34.5 KVA
RECEPTACLES (CONV)	7.0 KVA	MISCELLANEOUS	17.0 KVA
AC	– KVA	–	– KVA
TOTAL CONNECTED LOAD	58.5 KVA	162.5 A	

HVAC DOUBLE PANEL SECTION 1

HM11

BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

480/277 V AC, 3 PHASE, 4 WIRE + GND

BUS 225 A COPPER — 30 KA RMS SYM.
☐ MAIN LUGS ONLY — ■ 225 A MAIN C.B.
■ SURFACE MOUNTED — ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. — ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	SPARE		15A			–	15A / 3P	3#12, 1#12G	RAIN WATER HARVESTING PUMP RHP-1	–	2
3	–						2.4			1 1/2 HP	–	4
5	–			3P			–	3P		–	–	6
7	–	SPARE		15A				15A		SPARE	–	8
9	–	–			–		–				–	10
11	–			3P				3P			–	12
13	–	SPARE		15A				15A / 3P	3#12, 1#12G	EUH-5	–	14
15	–	–			–		7.5				–	16
17	–			3P				3P			–	18
19	–	SPARE	–	15A				15A / 3P	3#12, 1#12G	EUH-1	–	20
21	–	–			–		7.5				–	22
23	–			3P				3P			–	24
25	–	HP-1 (12.2 FLA)	3#12, 1#12G	20A				15A		SPARE	–	26
27	–				5.8		–				–	28
29	–			3P				3P			–	30
31	–	SHOP ITEM RA,TO	3#12, 1#12G	20A				15A / 3P	3#12, 1#12G	EUH-4	–	32
33	–	TRUCK & CAR TIRE BALANCER			13.2		7.5				–	34
35	–			3P				3P			–	36
37	–	EUH-9, GEOTHERMAL WELL	3#12, 1#12G	15A				15A / 3P	3#12, 1#12G	EUH-3	–	38
39	–				3.0		3.0				–	40
41	–			3P				3P			–	42

REMARKS:

HVAC DOUBLE PANEL SECTION 2

HM11

BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

480/277 V AC, 3 PHASE, 4 WIRE + GND

BUS 225 A COPPER — 30 KA RMS SYM.
■ MAIN LUGS ONLY — ☐ – A MAIN C.B.
■ SURFACE MOUNTED — ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. — ☐ 200% CAPACITY NEUTRAL BUS

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
43	–	SPARE		15A			–	15A		SPARE	–	44
45	–						–			–	–	46
47	–			3P			–	3P		–	–	48
49	–	SPARE		15A			–	15A		SPARE	–	50
51	–	–					–			–	–	52
53	–	–		3P			–	3P		–	–	54
55	–	SPARE		15A			–	15A		SPARE	–	56
57	–	–					–			–	–	58
59	–	–		3P			–	3P		–	–	60
61	–	SPARE		15A			–	15A		SPARE	–	62
63	–	–					–			–	–	64
65	–	–		3P			–	3P		–	–	66
67	–	HP-4, 9.4 FLA	2#12, 1#12G	15A-1P	2.6		–	20A-1P		SPARE	–	68
69	–	HP-5, 11.5 FLA	2#12, 1#12G	20A-1P	3.2		–	20A-1P		SPARE	–	70
71	–	HP-6, 11.5 FLA	2#12, 1#12G	20A-1P	3.2		–	20A-1P		SPARE	–	72
73	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	74
75	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	76
77	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	78
78	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	80
81	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	82
83	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	84

REMARKS:

LIGHTING	– KVA	HEATING	37.4 KVA
RECEPTACLES	– KVA	MISCELLANEOUS	29.2 KVA
AC	– KVA	–	– KVA
TOTAL CONNECTED LOAD	66.6 KVA	80 A	

01 ASI-011 — 12.23.2010 — DRV

CONSULTANT SEAL — VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-1740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5681, FAX: (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.
01	ASI-011	12.23.2010	DRV

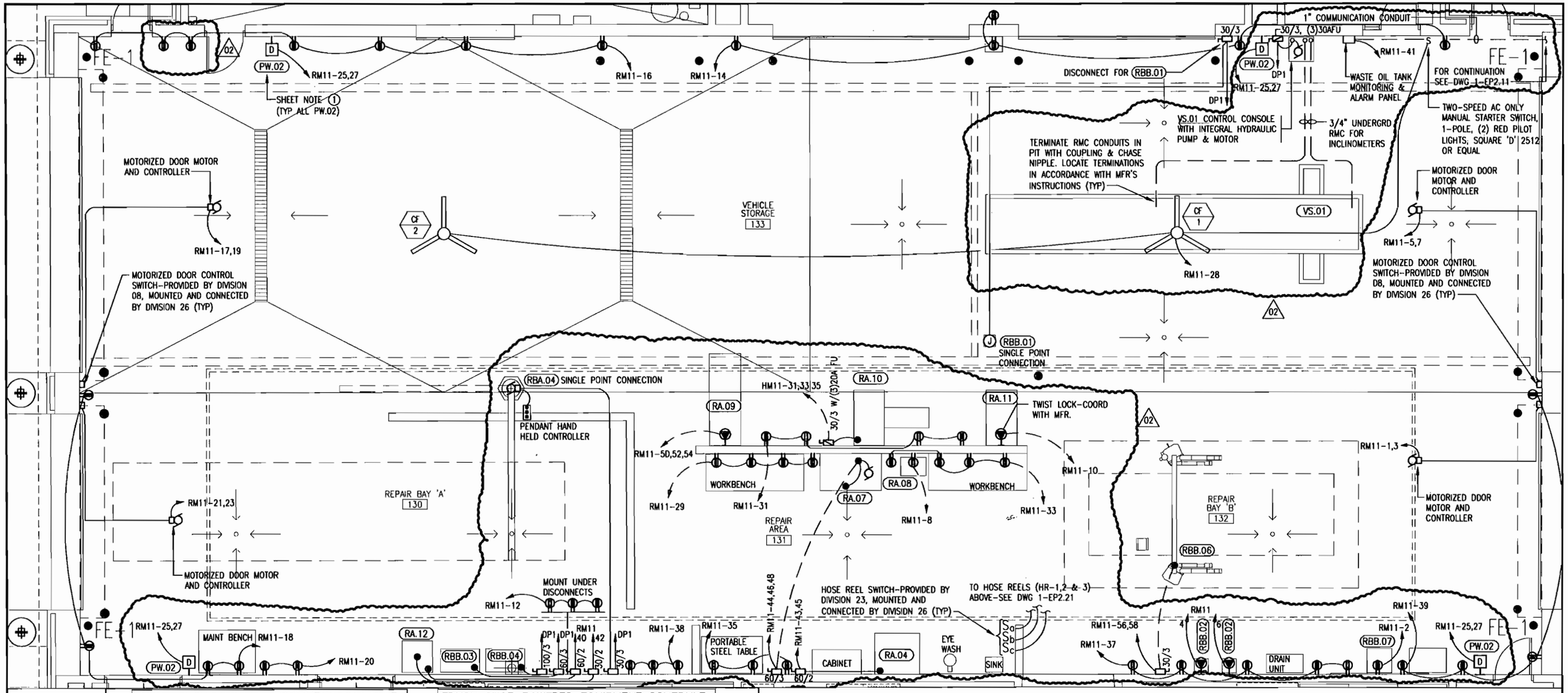
WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: EP5_03.DWG
SCALE: NONE

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 — COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL PANEL SCHEDULES PART 3 OF 3

DRAWING: EP5.03
SHEET: 243 OF 265



TRUCK SHOP POWERED EQUIPMENT SCHEDULE

I.D. TAG	DESCRIPTION	VOLTAGE	LOAD
RA.04	PARTS WASHER	208V-1ø	60A
RA.07	BLAST CABINET & DUST COLLECTOR	208V-3ø	20A
RA.08	DRILL PRESS	120V-1ø	3/4HP, 20A
RA.09	TRUCK TIRE CHANGER	208V-3ø	20A
RA.10	TRUCK & CAR TIRE BALANCER	460V-3ø	20A
RA.11	CAR TIRE CHANGER	120V-1ø	2 HP, 30A
RA.12	GRINDER DOWNDRAFT TABLE	120V-1ø	1 HP 1-1/2 HP (02)
RBA.04	3 TON JIB CRANE	460V-3ø	1 HP, 1.8A
VS.01	3 POST SCISSORS LIFT	460V-3ø	(2)5HP, 16A

TRUCK SHOP POWERED EQUIPMENT SCHEDULE

I.D. TAG	DESCRIPTION	VOLTAGE	LOAD
RBA.01	PORTABLE LIFT CHARGER UNIT	120V-1ø	20A
RBB.01	UNDER HUNG CRANE & HOIST	460V-3ø	(3)1 HP
RBB.02	BATTERY CHARGER (02)	120V-1ø	30A
RBB.03	MIG WELDER (01)	460V-3ø	27A
RBB.04	STICK WELDER	460V-3ø	49.4 KVA
RBB.06	TWO POST LIFT	208V-1ø	2 HP
RBB.07	CUT OFF SAW (PORTABLE)	120V-1ø	15A
PW.02	HIGH PRESSURE WASHER	208V-1ø	30A

(01)

GENERAL NOTES:

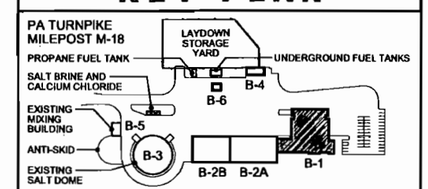
1. COORDINATE WITH SHOP AND REPAIR EQUIPMENT PROVIDER FOR FINAL POWER OUTLET AND DISCONNECTING MEANS REQUIREMENTS BASED ON INSTALLED EQUIPMENT.
2. ALL RECEPTACLES IN REPAIR AREAS AND VEHICLE STORAGE SHALL BE MOUNTED 42" AFF TO CENTER OF OUTLET.
3. ALL SWITCHES AND CONTROL STATIONS SHALL BE MOUNTED MINIMUM 4'-0" AFF.

SHEET NOTES:

1. THE OUTLETS FOR SHOP ITEM PW.02, HIGH PRESSURE WASHER, ARE ALL CONNECTED TO THE SAME 2-POLE CIRCUIT SINCE THERE IS ONLY ONE WASHER UNIT WHICH THE COMMISSION DESIRES TO PLUG IN AT VARIOUS LOCATIONS. INTERCONNECT THE OUTLETS AS REQUIRED SIMILAR TO MULTIPLE DUPLEX RECEPTACLE CIRCUITS.
2. CONDUITS FOR VS.01 LIFT CONTROL CONSOLE SHALL BE PROVIDED WITH EXPLOSION PROOF SEAL-OFF FITTINGS PER MFR. EXPLOSION PROOF FITTING SHALL BE CROUSE-HIND EYS OR EQUAL CLASS 1 DIV. 1 SIMILAR TO SEALS USED ON DETAIL 10/EP4.01 (TYP).

(02)

KEY PLAN



BUILDING NORTH

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7670

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURNPIKE

NO.	REVISIONS	DATE	APPR.
02	ASI-011	12.23.2010	DRV

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: EP6_02.DWG
SCALE: 0' 2' 4' 8'

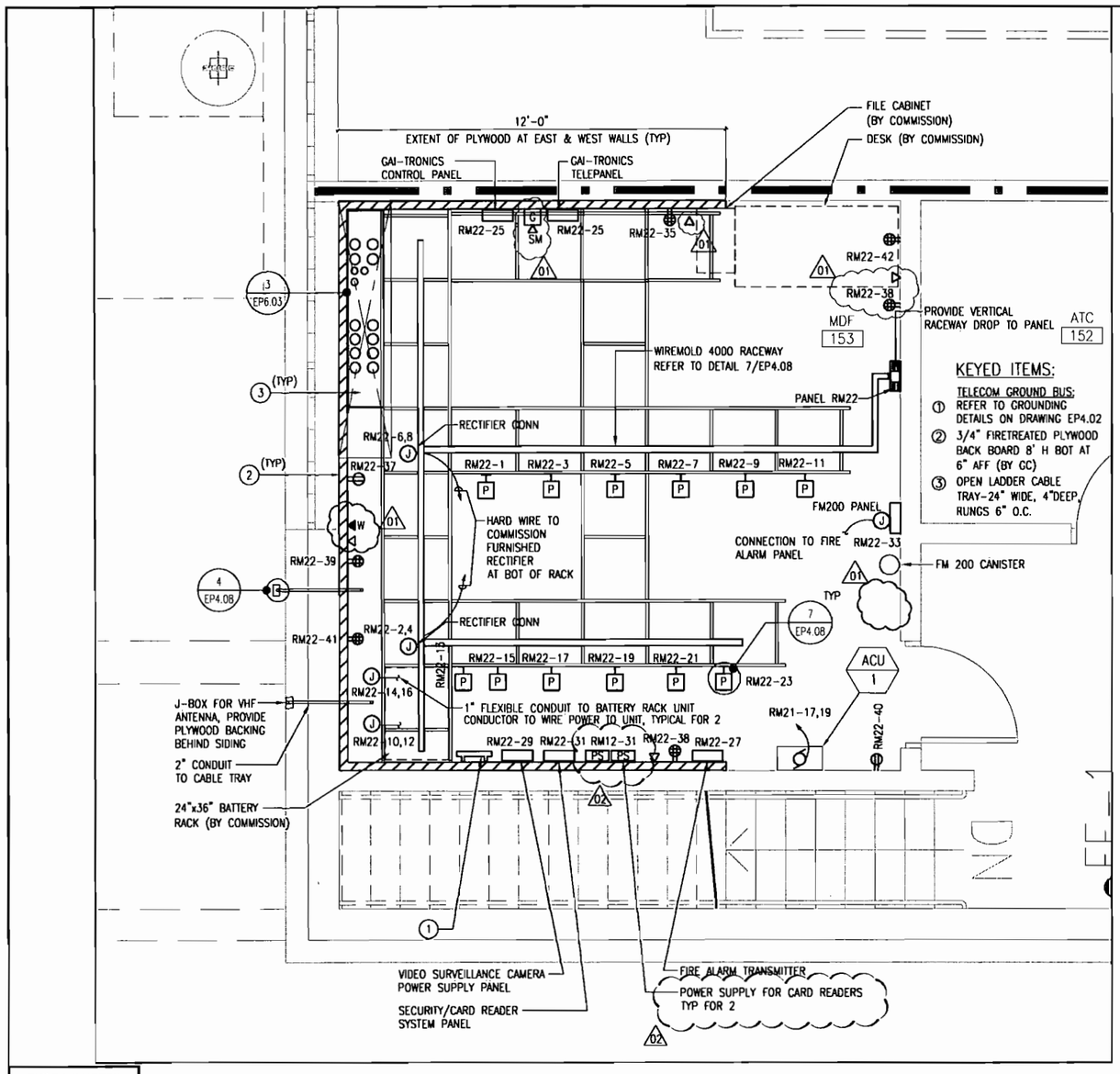
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL PARTIAL PLANS BUILDING 1 TRUCK REPAIR AREA EQUIPMENT

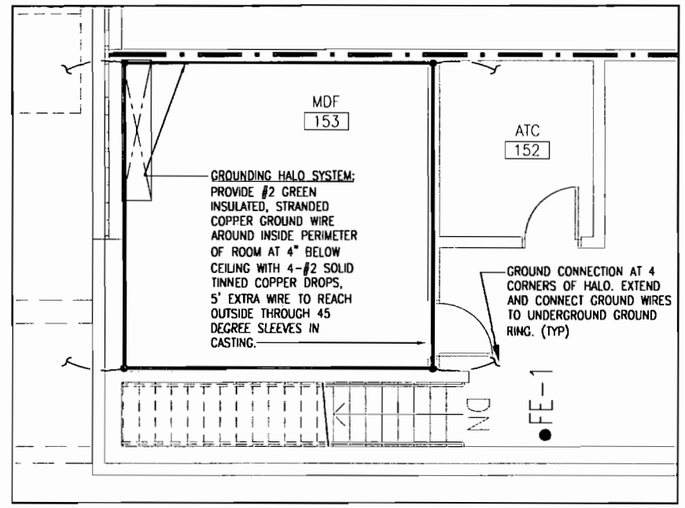
DRAWING: EP6.02
SHEET: 245 OF 265

(01) ADD(T-048.00R001-3-2)02JUL10



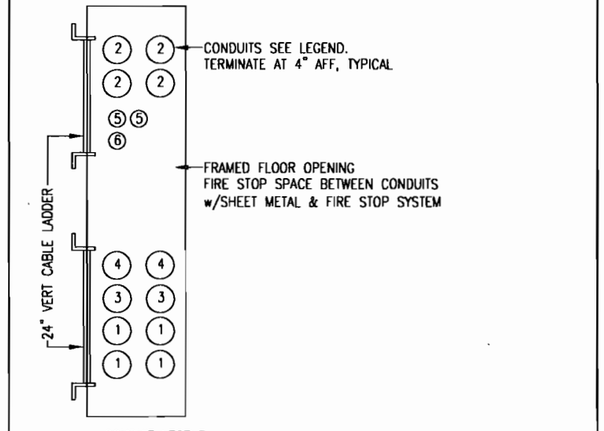
0' 1' 2' 4'

1 PARTIAL PLAN–BUILDING 1
MDF ROOM LOWER PART



0' 2' 4' 8'

2 PARTIAL PLAN–BUILDING 1
MDF ROOM UPPER PART



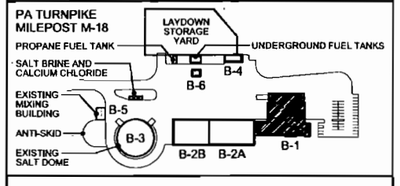
CONDUIT LEGEND

1. 4"C – FIBER OPTIC TO MANHOLE ON SITE NEAR SR43 (COMM SITE PLANS)
2. 4"C – TO CABLE TRAY AT CORRIDOR 102
3. 4"C – TO BUILDING 4 COMM SERVICE
4. 4"C – TO UTILITY POLE AT S.R. 4010 (COMM SITE PLANS)
5. 2" C TO CCTV CAMERA CONTROLS
6. 2" C FOR FIRE ALARM TRANSMITTER SIGNAL TO ANTENNA

3 CONDUIT RISER AT MDF ROOM 153
NTS

BUILDING NORTH

KEY PLAN



KEYED ITEMS:

TELECOM GROUND BUS:

1. REFER TO GROUNDING DETAILS ON DRAWING EP4.02
2. 3/4" FIRETREATED PLYWOOD BACK BOARD 8' H BOT AT 6" AFF (BY GC)
3. OPEN LADDER CABLE TRAY-24" WIDE, 4"DEEP, RUNGS 6" O.C.

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, WORMLEYSBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5681, FAX: (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
02	ASI No. 019	01.28.2011	DRV
01	ASI-002R1	10.19.2010	DRV

SCALE: AS NOTED

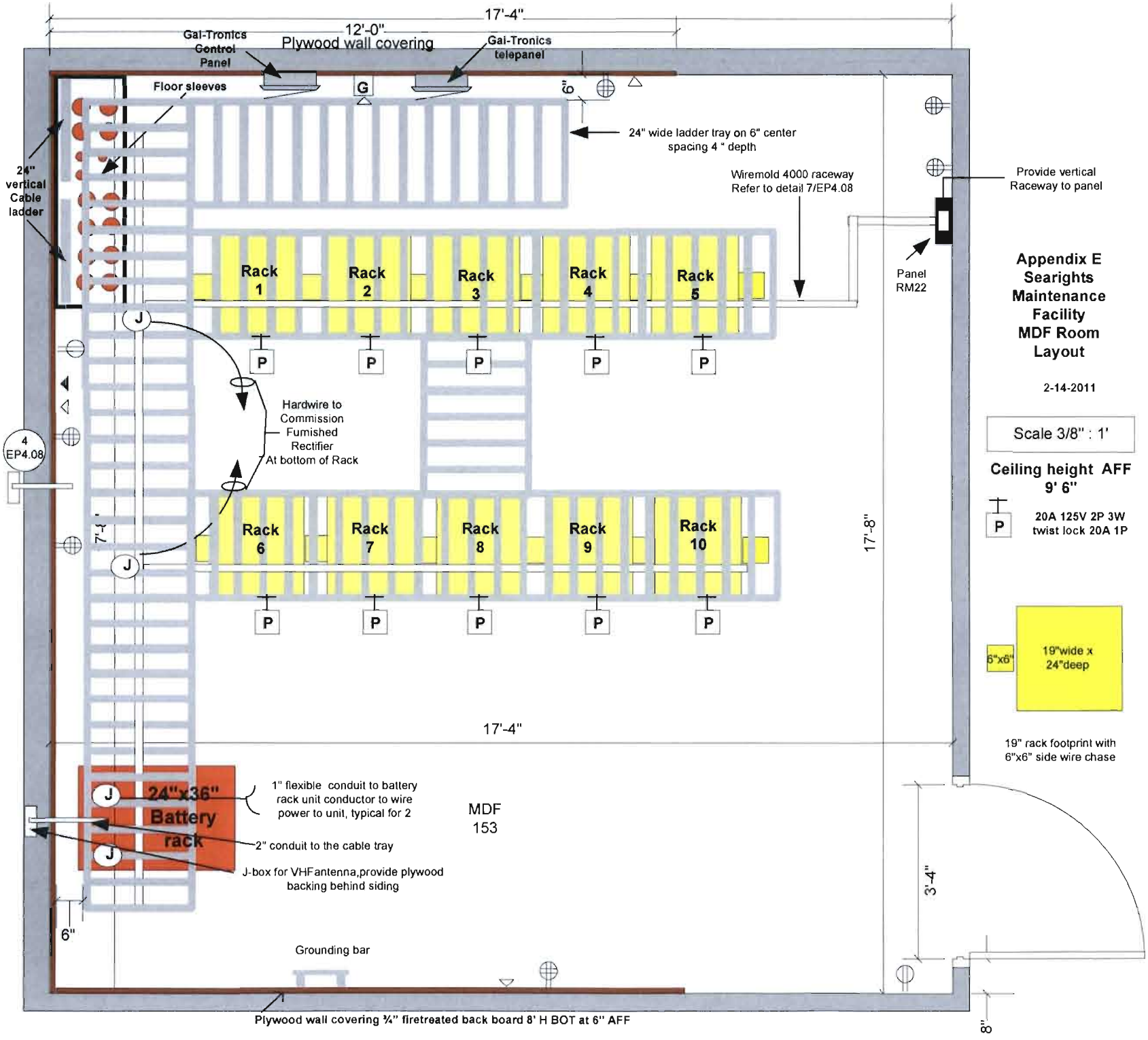
WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: EP6_03.DWG

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

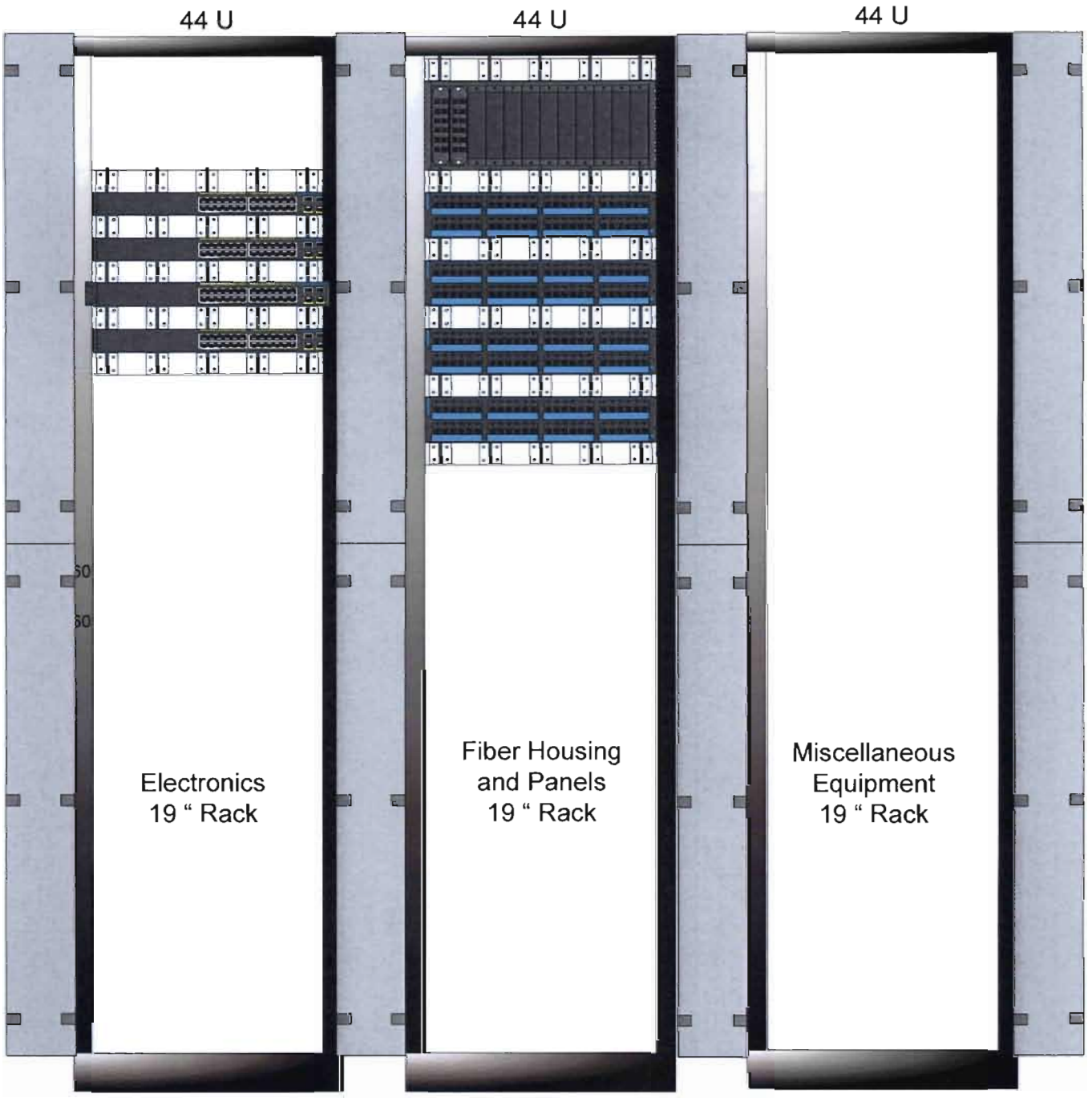
DISTRICT: 1 COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL PARTIAL PLANS BUILDING 1 MDF ROOM EQUIPMENT

DRAWING: **EP6.03**
SHEET: 246 OF 265


17'-4"
12'-0"
Plywood wall covering
Gai-Tronics Control Panel
Gai-Tronics telepanel
Floor sleeves
G
24" vertical Cable ladder
24" wide ladder tray on 6" center spacing 4 " depth
Wiremold 4000 raceway Refer to detail 7/EP4.08
Provide vertical Raceway to panel
Panel RM22
Rack 1
Rack 2
Rack 3
Rack 4
Rack 5
Rack 6
Rack 7
Rack 8
Rack 9
Rack 10
J
P
Hardwire to Commission Fumished Rectifier At bottom of Rack
4 EP4.08
7'-4"
17'-8"
17'-4"
24"x36" Battery rack
1" flexible conduit to battery rack unit conductor to wire power to unit, typical for 2
2" conduit to the cable tray
J-box for VHF antenna,provide plywood backing behind siding
MDF 153
6"
Grounding bar
3'-4"
8"
Plywood wall covering ¾" firetreated back board 8' H BOT at 6" AFF
Appendix E
Searights Maintenance Facility
MDF Room Layout
2-14-2011
Scale 3/8" : 1'
Ceiling height AFF 9' 6"
20A 125V 2P 3W twist lock 20A 1P
6"x6"
19"wide x 24"deep
19" rack footprint with 6"x6" side wire chase

APPENDIX F
SEARIGHTS MAINTENANCE FACILITY RACK LAYOUT FOR DATA AND VOICE



Addendum No. 1

RFP # 11-10350-2984

UNIONTOWN/BROWNSVILLE SEARIGHTS MAINTENANCE FACILITY INFRASTRUCTURE CABLING

Prospective Respondents: You are hereby notified of the following information in regard to the referenced RFP:

REVISIONS

"APPENDIX D" DRAWINGS AND ASSOCIATED CHANGES FOR INSTALLATION COUNTS

The following "Appendix D" CAD Drawings have been amended since the original advertisement for the project. These drawings will replace the same originally posted drawings.

- **1-A2.41**
- **1-EC2.11**
- **1-EP2.11**
- **EP.502**

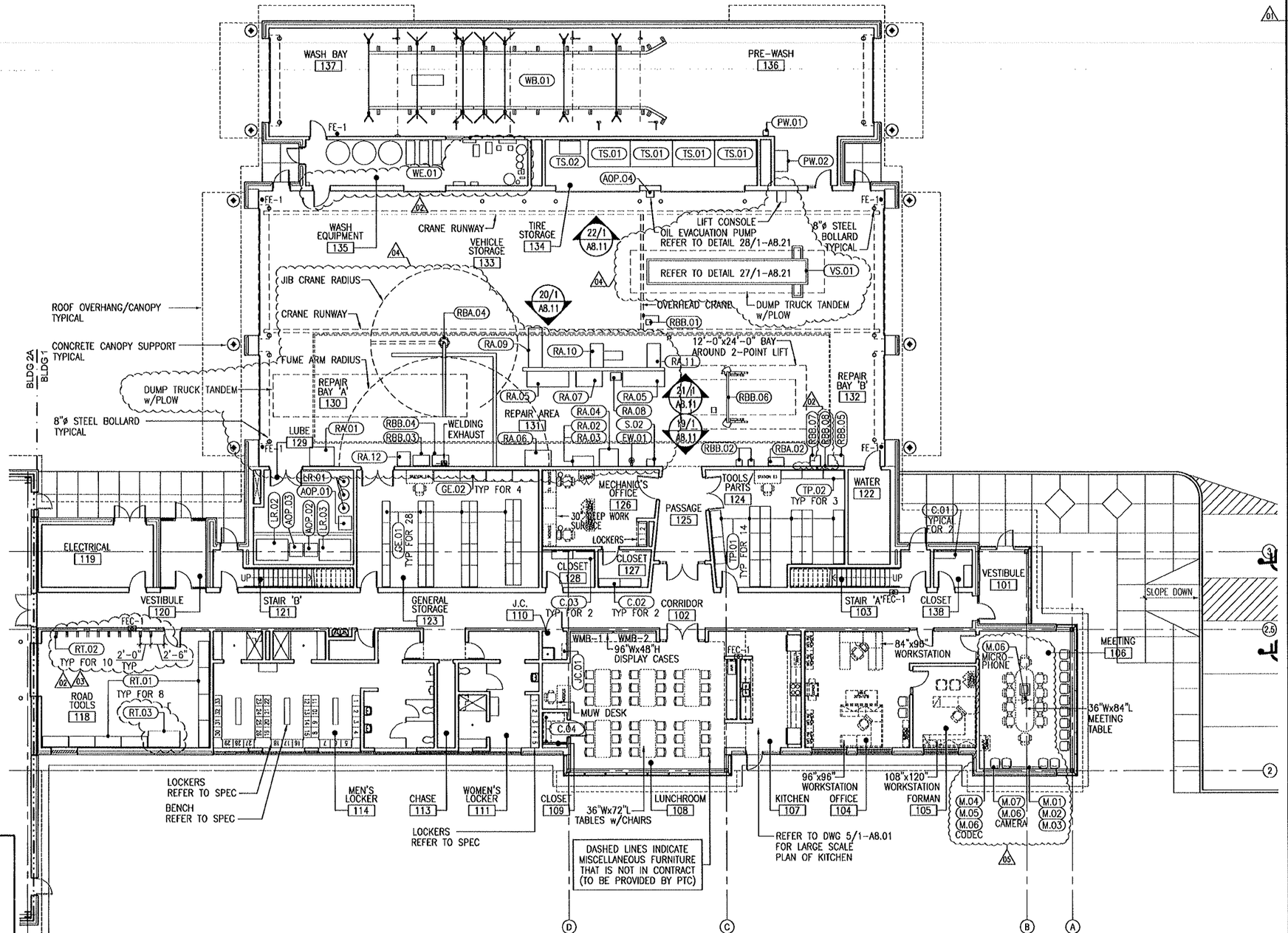
Refer to CAD drawing 1-EC2.11. The changes to the amended drawing will affect the number of data/voice drops to be installed as follows:

- ✓ **The wall mount phone on the southeast wall in the garage bay located close to Repair Area 130 has been eliminated from the drawing. This was already deleted from "Appendix B"'s drop count and will not affect the totals as advertised.**
- ✓ **The data drop on the southeast wall of Conference Room 106 is not shown on the latest drawing but is still valid. The count was included in the original posting and will not change.**
- ✓ **One of the data drops located on the east wall of Room 106 has been eliminated. This will affect the count by -4. That brings the total count for data/voice for Room 106 to 32 drops.**
- ✓ **That represents a total final count for the facility for data/voice to 149.**

No questions were submitted in response to the above referenced RFP up to and including the Pre-Proposal Conference on March 17, 2011.

All other terms, conditions and requirements of the original RFP dated **March 2, 2011** remain unchanged unless modified by this Addendum.

APPENDIX D - REVISONS

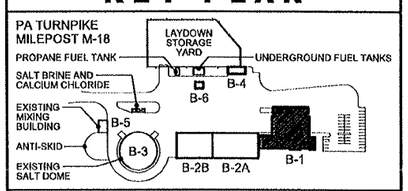


GENERAL EQUIPMENT PLAN NOTES

01

1. REFER TO 1-A2.42 & 1-A2.43 FOR EQUIPMENT SCHEDULES.
2. REFER TO LARGE SCALE PLAN 5/1-A8.01 FOR ADDITIONAL INFORMATION REGARDING APPLIANCES FOR KITCHEN ~~110~~ 107.
3. OFFICE FURNITURE IS TO BE PROVIDED BY PTC, AND IS NOT INCLUDED IN THE CONSTRUCTION CONTRACT. FURNITURE HAS BEEN SHOWN DASHED ON THIS DRAWING FOR REFERNCE AND COORDINATION PURPOSES.
4. CONTRACTOR TO VERIFY POWER AND UTILITY REQUIREMENTS WITH THE EQUIPMENT MANUFACTURER'S REQUIREMENTS.
5. REFER TO PLUMBING DRAWINGS FOR INFORMATION REGARDING THE COMPRESSED AIR SYSTEM AND THE LUBRICATION SYSTEM.

KEY PLAN



BUILDING NORTH

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
234 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7870

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
05	ASI-020	03.02.2011	DRV
04	ASI-011	12.23.2010	DRV
03	ASI-006	09.28.2010	DRV
02	ASI-004	09.22.2010	DRV

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-A241.DWG
SCALE: 1" = 10'-0" (0' 5' 10' 20')

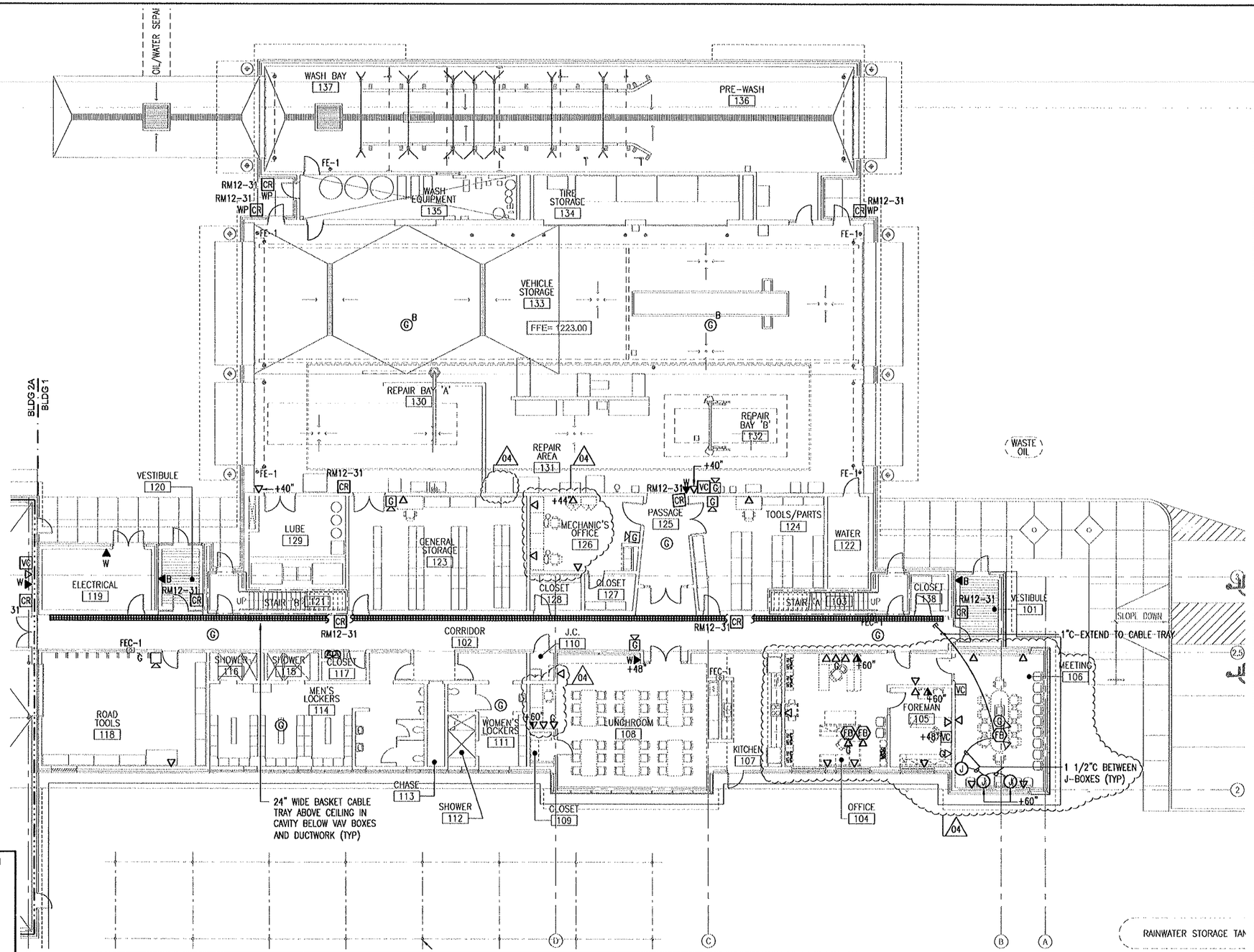
UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1 ARCHITECTURAL FIRST FLOOR FURNITURE & EQUIPMENT PLAN

DRAWING: 1-A2.41
SHEET: 051 OF 285

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10

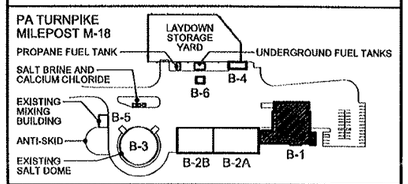


BUILDING NORTH

GENERAL NOTES:

1. ALL WALL MOUNTED DATA OUTLETS SHALL INCLUDE 1" EMPTY CONDUIT WITH PULL WIRE ROUTED TO CABLE TRAY IN CORRIDOR 102.
2. ALL FLOOR BOX MOUNTED DATA OUTLETS SHALL INCLUDE 1" EMPTY CONDUIT WITH PULL WIRE ROUTED FROM RISER INDICATED IN WALL TO CABLE TRAY IN CORRIDOR 102.
3. ALL OUTLET BOXES RELATED TO THE GAI-TRONICS P/A SYSTEM SHALL BE MOUNTED AND ASSOCIATED CONDUITS ROUTED IN ACCORDANCE WITH THE INSTRUCTIONS NOTED ON DETAIL DRAWINGS EP4.07 AND EP4.08.
4. FOR POWER AND COMMUNICATIONS CONDUIT REQUIREMENTS FOR CARD READER SYSTEM REFER TO TYPICAL DETAILS ON DRAWING EP4.09.
5. SEE DRAWINGS E1.01, E1.02, AND E1.03 FOR SYMBOL LISTS AND RELATED INFORMATION
6. ALL VOICE/DATA BOXES AT REPAIR BAY 'A' 130 , REPAIR AREA 131, AND REPAIR BAY 'B' 132 SHALL BE MOUNTED AT 40" AFF TO BOTTOM OF BOX.

KEY PLAN



PREPARED BY: VITETTA
ARCHITECTURE - ENGINEERING - PLANNING - INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 763-5661, FAX: (717) 763-7970

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
04	ASI-020	03.02.2011	DRV
03	ASI-011	12.23.2010	DRV
02	ASI-002	08.03.2010	DRV

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-EC211.DWG
SCALE: 0' 5' 10' 20'

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

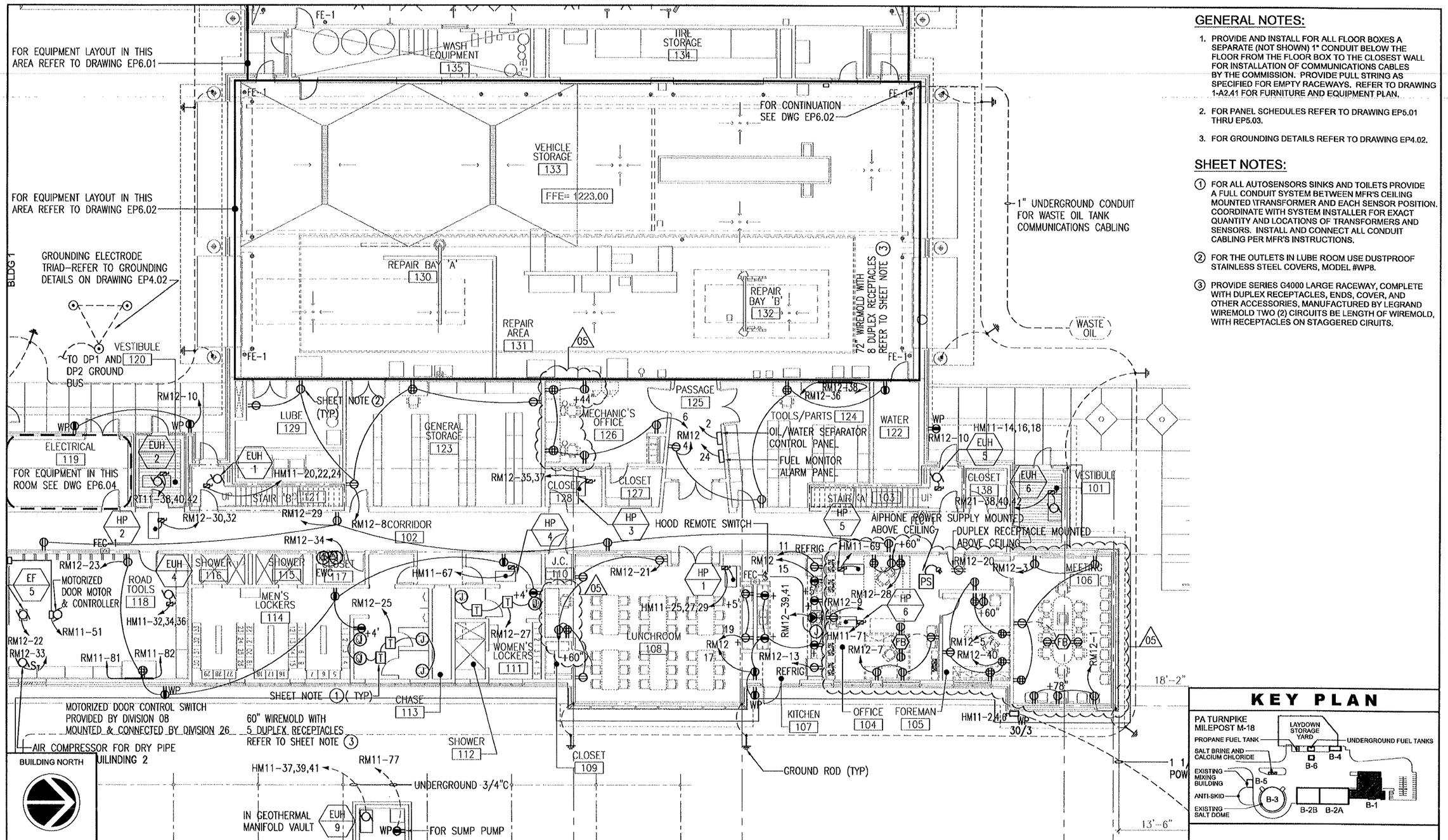
DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1 COMMUNICATIONS FIRST FLOOR PLAN

DRAWING: 1-EC2.11
SHEET: 201 OF 265

CONSULTANT SEAL | VITETTA SEAL

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10



GENERAL NOTES:

1. PROVIDE AND INSTALL FOR ALL FLOOR BOXES A SEPARATE (NOT SHOWN) 1" CONDUIT BELOW THE FLOOR FROM THE FLOOR BOX TO THE CLOSEST WALL FOR INSTALLATION OF COMMUNICATIONS CABLES BY THE COMMISSION. PROVIDE PULL STRING AS SPECIFIED FOR EMPTY RACEWAYS. REFER TO DRAWING 1-A2.41 FOR FURNITURE AND EQUIPMENT PLAN.
2. FOR PANEL SCHEDULES REFER TO DRAWING EP5.01 THRU EP5.03.
3. FOR GROUNDING DETAILS REFER TO DRAWING EP4.02.

SHEET NOTES:

(1) FOR ALL AUTOSENSORS SINKS AND TOILETS PROVIDE A FULL CONDUIT SYSTEM BETWEEN MFR'S CEILING MOUNTED \TRANSFORMER AND EACH SENSOR POSITION. COORDINATE WITH SYSTEM INSTALLER FOR EXACT QUANTITY AND LOCATIONS OF TRANSFORMERS AND SENSORS. INSTALL AND CONNECT ALL CONDUIT CABLING PER MFR'S INSTRUCTIONS.

(2) FOR THE OUTLETS IN LUBE ROOM USE DUSTPROOF STAINLESS STEEL COVERS, MODEL #WP8.

(3) PROVIDE SERIES G4000 LARGE RACEWAY, COMPLETE WITH DUPLEX RECEPTACLES, ENDS, COVER, AND OTHER ACCESSORIES, MANUFACTURED BY LEGRAND WIREMOLD TWO (2) CIRCUITS BE LENGTH OF WIREMOLD, WITH RECEPTACLES ON STAGGERED CIRUITS.

KEY PLAN

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN
PHILADELPHIA NAVAL BUSINESS CENTER, 4747 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19112, TELEPHONE: (215) 218-4747, FAX: (215) 218-4740
224 NORTH FRONT STREET, HARRISBURG, PENNSYLVANIA 17043, TELEPHONE: (717) 783-5661, FAX: (717) 783-7870

PREPARED FOR: THE PENNSYLVANIA TURNPIKE COMMISSION

CONSULTANT SEAL | VITETTA SEAL

NO.	REVISIONS	DATE	APPR.
05	ASI-020	03.02.2011	DRV
04	ASI-011	12.23.2010	DRV
03	ASI-004	09.22.2010	DRV
02	ASI-002	08.03.2010	DRV

WBS NUMBER M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: 1-EP211.DWG
SCALE: 0' 5' 10' 20'

UNIONTOWN TO BROWNSVILLE MAINTENANCE FACILITY AT MILEPOST M-18.0 SB IN FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 | COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

BUILDING 1 POWER FIRST FLOOR PLAN

DRAWING: 1-EP2.11
SHEET: 205 OF 265

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10

POWER PANEL

RG11

BUILDING: U/B SERVICE BUILDING #4
FLOOR: FIRST FLOOR
ROOM: ELECT 403

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 400 ~~100~~ A COPPER 65 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 400 ~~100~~ A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	GEN-BATTERY CHARGER	2#12, 1#12G	20A-1P	.30		.90	20A-1P	2#12, 1#12G	OUTSIDE RECEPTACLE	–	2
3	–	GEN-BLOCK HEATER	2#10, 1#10G	30A	3.0		.54	20A-1P	2#12, 1#12G	REC-ELECTRICAL RM 402	–	4
5	–	TO CHANGE TO 40A/2P BREAKER AND 6KW LOAD		2P			.90	20A-1P	2#12, 1#12G	REC-GEN. RM 403, PUMP RM 404	–	6
7	–	~~EF-2 (1/4 HP)~~	~~2#12, 1#12G~~	~~20A-1P~~	.70		.30	20A-1P	2#12, 1#12G	GASOLINE OVERFILL ALARM	–	8
9	–	EF-8 (1/2 HP)	2#12, 1#12G	20A-1P	1.2		.30	20A-1P	2#12, 1#12G	DIESEL OVERFILL ALARM	–	10
11	–	FUEL SYSTEM DAYTANK	2#12, 1#12G	20A-1P	.80		.50	20A-1P	2#12, 1#12G	VAPOR RECOVERY PANEL	–	12
13	–	GASOLINE DISPENSER	2#12, 1#12G	20A-1P	.80		–	20A-1P		SPARE	–	14
15	–	DIESEL DISPENSER	2#12, 1#12G	20A-1P	.80		–	20A-1P		SPARE	–	16
17	–	VAPOR RECOVERY COLLECTOR	2#12, 1#12G	20A-1P	.30		–	20A-1P		SPARE	–	18
19	–	FUEL MONITOR CONSOLE	2#12, 1#12G	20A-1P	.30			20A-1P		SPARE	–	20
21	–	EF-10 (1/4 HP)	2#12, 1#12G	20A-1P	.70		–	20A-1P		SPARE	–	22
23	–	TIME CLOCKS	2#12, 1#12G	20A-1P	.50		2.0	20A	2#10, 1#10G	DIESEL FUEL DISPENSER PUMP	–	24
25	–	LIGHTING-OUTDOOR STORAGE BINS	2#8, 1#8G	20A-1P	.4		–	2P		–	–	26
27	–	~~SPARE~~		20A-1P	–		2.0	20A	2#10, 1#10G	GASOLINE DISPENSER PUMP	–	28
29	–	SPARE		20A-1P	–		–	2P		–	–	30
31	–	SPARE		20A-1P			2.0	20A	2#10, 1#10G	E85 DISPENSER PUMP	–	32
33	–	MOTORIZED GATE OPERATOR	3#4, 1#4G	20A	–		–	2P		–	–	34
35	–	1 HP-S.R. 4010 ROAD ENTRANCE			1.7		–	20A		SPARE	–	36
37	–			3P	–		–	2P		SPARE	–	38
39	–	BACKFEED FOR EXISTING PANEL 'MSP'	SEE SINGLE	200A	14.0		–	30A		SPARE	–	40
41	–	ON OUTDOOR SERVICE RACK	LINE DIAGRAM	2P	–		–	2P		SPARE	–	42

REMARKS: –
–
–
–

LIGHTING	.4	KVA	HEATING	–	KVA
RECEPTACLES	2.34	KVA	MISCELLANEOUS	29.6	KVA
AC	2.6	KVA	–	–	KVA

TOTAL CONNECTED LOAD 34.9 KVA 96 A

RECEPTACLE PANEL (SECTION 1)

RM11

BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 400 A COPPER 22 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 250 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		1.8	20A-1P	2#12, 1#12G	ITEM RBB.07-PORTABLE CUT OFF SAW	–	2
3	–	REPAIR BAY 'B' RM 132		2P			2.9	30A-1P	2#10, 1#10G	ITEM RBB.02-PORTABLE BATT CHARGER	–	4
5	–	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		2.9	30A-1P	2#10, 1#10G	ITEM RBB.02-PORTABLE BATT CHARGER	–	6
7	–	VEHICLE STORAGE RM 133		2P			1.7	20A-1P	2#12, 1#12G	ITEM RA.08-DRILL PRESS (3/4 HP)	–	8
9	–	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		2.8	30A-1P	2#12, 1#12G	~~ITEM RA.11-CAB TIRE CHANGER, 2 HP~~	–	10
11	–	PRE-WASH RM 134		2P			.54	20A-1P	2#12, 1#12G	CONV REC-REPAIR BAY 'A' RM 130	–	12
13	–	MOTORIZED DOR	2#12, 1#12G	20A	1.8		.9	20A-1P	2#12, 1#12G	~~CONV REC-VEHICLE STORAGE 133~~	–	14
15	–	WASH BAY RM 135		2P			.72	20A-1P	2#12, 1#12G	CONV REC-VEHICLE STORAGE 133	–	16
17	–	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		.72	20A-1P	2#12, 1#12G	CONV REC-REPAIR BAY 'A' RM 130	–	18
19	–	VEHICLE STORAGE RM 133		2P			.36	20A-1P	2#12, 1#12G	CONV REC-REPAIR BAY 'A' RM 130	–	20
21	–	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		1.3	20A-1P	2#12, 1#12G	CONV REC-TRUCK WASH AREA	–	22
23	–	REPAIR BAY 'A' RM 130		2P			.5	20A-1P	2#12, 1#12G	RADIANT HEATER GRH-1 PRE-WASH 134	–	24
25	–	ITEM PW.02-HIGH PRESSURE WASHER	2#12, 1#12G	30A	5.0		.5	20A-1P	2#12, 1#12G	RADIANT HEATER GRH-1 WASH BAY 135	–	26
27	–	RECEPTACLES		2P			.1	20A-1P	2#12, 1#12G	CEILING FANS CF-1 AND CF-2	–	28
29	–	CONV REC-REPAIR AREA 131	2#12, 1#12G	20A-1P	.72		1.0	20A-1P	2#12, 1#12G	REC-WATER HEATER, WASH EQUIP. 135	–	30
31	–	CONV REC-REPAIR AREA 131	2#12, 1#12G	20A-1P	.72		.54	20A-1P	2#12, 1#12G	REC-WASH EQUIP. 135	–	32
33	–	CONV REC-REPAIR AREA 131	2#12, 1#12G	20A-1P	.72		.9	20A-1P	2#12, 1#12G	EF-4 (1/3 HP)	–	34
35	–	CONV REC-REPAIR AREA 131	2#12, 1#12G	20A-1P	.54		.50	20A-1P	2#12, 1#12G	REC-WATER SOFTENER, WASH EQUIP.135	–	36
37	–	CONV REC-REPAIR BAY 'B' RM 132	2#12, 1#12G	20A-1P	.9		.54	20A-1P	2#12, 1#12G	CONV REC-REPAIR AREA 131	–	38
39	–	CONV REC-REPAIR BAY 'B' RM 132	2#12, 1#12G	20A-1P	.72		1.9	30A-1P	2#10, 1#10G	ITEM RA.12-GRINDER, 1 HP	–	40
41	–	WASTE OIL TANK ALARM PANEL	2#12, 1#12G	20A-1P	.5		2.3	40A-1P	2#8, 1#10G	ITEM RA.12-DOWNDRAFT TABLE, 1.5 HP	–	42

REMARKS: PROVIDE FEED THROUGH LUGS
–
–
–

RECEPTACLE PANEL (SECTION 2)

RM11

BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 400 A COPPER 22 KA RMS SYM.
■ MAIN LUGS ONLY ☐ – A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
43	–	ITEM RA.04-PARTS WASHER	2#8, 1#10G	50A	9.7			20A	3#12, 1#12G	ITEM RA.07-BLAST CABINET & DUST	–	44
45	–	7 KW HEATER, 2 HP PUMP		2P			1.7			COLLECTER 1 HP	–	46
47	–	SPARE		50A	–			3P			–	48
49	–	–		2P				20A	3#12, 1#12G	ITEM RA.09-TRUCK TIRE CHANGER	–	50
51	–	MOTORIZED DOOR	2#12, 1#12G	20A	1.8		2.8			2 HP	–	52
53	–	ROAD TOOLS 118		2P				3P			–	54
55	–	SPARE		20A	–		30A	~~20A~~	3#10, 1#10G	ITEM RBB.06 TWO-POST LIFT	–	56
57	–			2P			2.8	~~3P~~ 2P		2 HP	–	58
59	–	SPARE		20A	–						–	60
61	–			2P				20A		SPARE	–	62
63	–	SPARE		30A	–		–				–	64
65	–			2P				3P			–	66
67	–	SPARE		30A	–			20A		SPARE	–	68
69	–			2P			–				–	70
71	–	SPARE		20A	–			3P			–	72
73	–							20A		SPARE	–	74
75	–			3P			–				–	76
77	–	REC-SUMP PUMP IN GEOTHERMAL VAULT	2#12, 1#12G	20A-1P	.8			3P			–	78
79	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	80
81	–	WIREMOLD REC IN ROAD TOOLS 118	2#12, 1#12G	20A-1P	.54		.36	20A-1P	2#12, 1#12G	WIREMOLD REC IN ROAD TOOLS 118	–	82
83	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	84

REMARKS: –
–
–
–

SHOP EQUIPMENT	40.3	KVA	HEATING	1.0	KVA
CONV RECEPTACLES	10.12	KVA	MISCELLANEOUS	12.1	KVA
AC	1.0	KVA	–	–	KVA

TOTAL CONNECTED LOAD 64.5 KVA 179.5 A

RECEPTACLE PANEL

RM12

BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: FIRST FLOOR
ROOM: ELECT 119

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 225 A COPPER 22 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 150 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	REC-MEETING 106	2#12, 1#12G	20A-1P	.72		.5	20A-1P	2#12, 1#12G	OIL/WATER SEPARATOR CONTROL PANEL	–	2
3	–	REC-MEETING 106	2#12, 1#12G	20A-1P	.72		.72	20A-1P	2#12, 1#12G	REC-TOOL PARTS 124 AREA	–	4
5	–	REC-FOREMAN 105	2#12, 1#12G	20A-1P	.54		1.1	20A-1P	2#12, 1#12G	REC-MECHANIC'S OFFICE 128	–	6
7	–	REC-OFFICE 104	2#12, 1#12G	20A-1P	.72		.9	20A-1P	2#12, 1#12G	REC-STORAGE 123, LUBE 129	–	8
9	–	REC-COPIER, OFFICE 104	2#12, 1#12G	20A-1P	1.0		.54	20A-1P	2#12, 1#12G	REC-OUTSIDE	–	10
11	GFI	REC-REFRIGERATOR, KITCH 107	2#12, 1#12G	20A-1P	1.2		.54	20A-1P	2#12, 1#12G	REC-ELECT 119	–	12
13	GFI	REC-REFRIGERATOR, KITCH 107	2#12, 1#12G	20A-1P	1.2		.1	20A-1P	2#12, 1#12G	RAIN WATER SYSTEM CONTROL PANEL	–	14
15	–	REC-MICROWAVE OVEN, KITCH 107	2#12, 1#12G	20A-1P	1.2		.5	20A-1P	2#12, 1#12G	FIRE ALARM CONTROL PANEL	–	16
17	–	CONV REC-KITCH 107	2#12, 1#12G	20A-1P	1.1		.1	20A-1P	2#12, 1#12G	TIME CLOCK OUTSIDE LIGHT	–	18
19	–	REC-MICROWAVE OVEN, LUNCH 108	2#12, 1#12G	20A-1P	1.2		.6	20A-1P	2#12, 1#12G	AIPHONE INTERCOM MASTER STATIONS	–	20
21	–	REC-LUNCH 108	2#12, 1#12G	20A-1P	.9		1.2	20A-1P	2#12, 1#12G	EF-5 (1/2 HP)	–	22
23	–	REC-LOCKER ROOM AREA	2#12, 1#12G	20A-1P	1.3		.5	20A-1P	2#12, 1#12G	FUEL MONITOR ALARM PANEL	–	24
25	–	AUTOSENSOR SINKS & TOILETS	2#12, 1#12G	20A-1P	.2		.2	20A-1P	2#8, 1#8G	NEW WATER METER PIT POWER	–	26
27	–	AUTOSENSOR SINKS & TOILETS	2#6, 1#10G	60A-1P	.2		.72	20A-1P	2#12, 1#12G	REC-OFFICE 104	–	28
29	–	REC-CORR 102	2#12, 1#12G	20A-1P	.72		2.1	20A	2#12, 1#12G	HEAT PUMP HP-2	–	30
31	–	CARD READERS	2#12, 1#12G	20A-1P	.9			2P			–	32
33	–	AIR COMPRESSIR (1/2 HP)	2#12, 1#12G	20A-1P	1.2		1.0	20A-1P	2#12, 1#12G	EWC'S CORR 102	–	34
35	–	HEAT PUMP HP-3	2#12, 1#12G	15A	.80		.72	20A-1P	2#12, 1#12G	WIREMOLD REC IN TOOLS/PARTS 124	–	36
37	–	3.5 FLA		2P	–		.72	20A-1P	2#12, 1#12G	WIREMOLD REC IN TOOLS/PARTS 124	–	38
39	–	ELECTRICAL RANGE-KITCHEN 107	2#6, 1#10G	50A	.72		.54	20A-1P	2#12, 1#12G	REC-FOREMAN 105	–	40
41	–			2P			–	20A-1P		SPARE	–	42

REMARKS: 1. PROVIDE WITH FEED THRU LUGS.
2. PROVIDE GFCI CIRCUIT BREAKERS WHERE LABELED 'GFI'
–
–

LIGHTING		KVA	HEATING	3.0	KVA
RECEPTACLES	19.1	KVA	MISCELLANEOUS	14.0	KVA
AC	1.2	KVA	–	–	KVA

TOTAL CONNECTED LOAD 37.3 KVA 104 A

POWER PANEL

RM21

BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: SECOND FLOOR
ROOM: AHU ROOM 151

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 100 A COPPER 22 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 100 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	SPARE		20A-1P	–		.72	20A-1P	2#12, 1#12G	REC-AHU 151	–	2
3	–	EF-7 (1/6 HP)	2#12, 1#12G	20A-1P	.50		.36	20A-1P	2#12, 1#12G	REC-ATC 152	–	4
5	–	SPARE		15A	–		.30	20A-1P	2#12, 1#12G	(3) GRH-2	–	6
7	–			2P			.30	20A-1P	2#12, 1#12G	(3) GRH-2	–	8
9	–	CORD REEL RECP	2#12, 1#12G	20A-1P	.18		.60	20A-1P	2#12, 1#12G	WH-1 AND HRP-1 (1/6 HP)	–	10
11	–	CORD REEL RECP	2#12, 1#12G	20A-1P	.18		.50	20A-1P	2#12, 1#12G	HR-1 (1/6 HP)	–	12
13	–	CORD REEL RECP	2#12, 1#12G	20A-1P	.18		.50	20A-1P	2#12, 1#12G	HR-2 (1/6 HP)	–	14
15	–	DRYER FOR AC-1 COMPRESSOR	2#12, 1#12G	20A-1P	1.0		.50	20A-1P	2#12, 1#12G	HR-3 (1/6 HP)	–	16
17	–	ACU-1	2#12, 1#12G	15A	.3		.3	15A	2#12, 1#12G	ACU-2	–	18
19	–			2P				2P			–	20
21	–	ACC-1	2#12, 1#12G	15A	2.9		2.9	15A	2#12, 1#12G	ACC-2	–	22
23	–			2P				2P			–	24
25	–	WATER UV TREATMENT SYSTEM	2#12, 1#12G	20A-1P	.5		–	20A-1P		SPARE	–	26
27	–	~~SPARE~~		20A-1P	–		–	20A-1P		SPARE	–	28
29	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	30
31	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	32
33	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	34
35	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	36
37	–	ERU-1	3#12, 1#12G	15A	–		–	15A	3#12, 1#12G	EUH-6	–	38
39	–				1.7		5.0				–	40
41	–			3P	–		–	3P			–	42

REMARKS: –
–
–
–

LIGHTING	–	KVA	HEATING	5.0	KVA
RECEPTACLES	1.62	KVA	MISCELLANEOUS	5.9	KVA
AC	6.7	KVA	–	–	KVA

TOTAL CONNECTED LOAD 19.22 KVA 53.4 A

POWER PANEL

RM22

BUILDING: U/B MAINTENANCE BLDG #1
FLOOR: SECOND FLOOR
ROOM: MDF 153

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 225 A COPPER 22 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 150 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1		5.0	30A	2#10, 1#10G	RECTIFIER CONNECTION	–	2
3	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			–	4
5	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1		5.0	30A	2#10, 1#10G	RECTIFIER CONNECTION	–	6
7	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			–	8
9	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1		4.9	30A	2#10, 1#10G	BATTERY RACK-MDF 153	–	10
11	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			–	12
13	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1		4.9	30A	2#10, 1#10G	BATTERY RACK-MDF 153	–	14
15	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			–	16
17	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			30A		SPARE	–	18
19	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			–	20
21	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			30A		SPARE	–	22
23	–	TWIST LOCK REC-MDF 153	2#12, 1#12G	20A-1P	1.1			2P			–	24
25	–	GAI-TRONICS SYSTEM PANELS	2#12, 1#12G	20A-1P	1.0		–	20A-1P		SPARE	–	26
27	–	FIRE ALARM TRANSMITTER	2#12, 1#12G	20A-1P	.5		–	20A-1P		SPARE	–	28
29	–	CAMERA POWER SUPPLY PANEL	2#12, 1#12G	20A-1P	1.0		–	20A-1P		SPARE	–	30
31	–	SECURITY PANEL	2#12, 1#12G	20A-1P	.5		–	20A-1P		SPARE	–	32
33	–	FM 200 PANEL	2#12, 1#12G	20A-1P	.5		–	20A-1P		SPARE	–	34
35	–	REC-MDF 153	2#12, 1#12G	20A-1P	.36		–	20A-1P		SPARE	–	36
37	–	REC-MDF 153	2#12, 1#12G	20A-1P	.18		.36	20A-1P	2#12, 1#12G	REC-MDF 153	–	38
39	–	REC-MDF 153	2#12, 1#12G	20A-1P	.36		.18	20A-1P	2#12, 1#12G	REC-MDF 153	–	40
41	–	REC-MDF 153	2#12, 1#12G	20A-1P	.36		.36	20A-1P	2#12, 1#12G	REC-MDF 153	–	42

REMARKS: PROVIDE 200% CAPACITY NEUTRAL BUS
–
–
–

LIGHTING	–	KVA	HEATING	–	KVA
RECEPTACLES	2.2	KVA	MISCELLANEOUS	3.5	KVA
AC	–	KVA	RACK EQUIPMENT	33.0	KVA

TOTAL CONNECTED LOAD 38.7 KVA 108 A

RECEPTACLE PANEL

RSDR

BUILDING: U/B MAINTENANCE OUTDOOR RACK
FLOOR: M-18 SITE
ROOM: OUTSIDE AT SALT/BRINE AREA

208/120 V AC
3 PHASE
4 WIRE + GND

BUS 225 A COPPER 22 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 150 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

RSDP PANEL DELETED

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B C	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	PANEL 'RS11' FEEDERS	3#6, 1#8G	60A	5.9			20A	3#4, 1#4G	MOTORIZED GATE OPERATOR	–	2
3	–	SALT DOME BUILDING 3		2P			1.7			1 HP-S.R. 4010 ROAD ENTRANCE	–	4
5	–	PANEL 'RS12' FEEDERS	3#6, 1#8G	60A	10.1			3P			–	6
7	–	SALT/BRINE EQUIPMENT LOCATION		2P			.2	20A-1P	3#8, 1#8G	CAMERA AT GATE HEATER	–	8
9	–	ANTI-SKID BLDG #5 POWER/LIGHTING	2#8, 1#8G	20A-1P	.80		–	20A-1P		SPARE	–	10
11	–	SPARE		20A	–		–	20A-1P		SPARE	–	12
13	–			2P			–	20A-1P		SPARE	–	14
15	–	SPARE		20A	–		–	20A-1P		SPARE	–	16
17	–			2P			–	20A-1P		SPARE	–	18
19	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	20
21	–	SPARE		20A-1P	–		–	20A-1P		SPARE	–	22
23	–	SPACE								SPACE	–	24
25	–										–	26
27	–										–	28
29	–										–	30
31	–										–	32
33	–										–	34
35	–										–	36
37	–										–	38
39	–										–	40
41	–										–	42

REMARKS: 1. PANEL SHALL BE SUITABLE FOR SERVICE ENTRANCE
2. PANEL SHALL BE NEMA 4X CORROSION RESISTANT RATED
–
–

LIGHTING	–	KVA	HEATING	–	KVA
RECEPTACLES	–	KVA	MISCELLANEOUS	18.7	KVA
AC	–	KVA	–	–	KVA

TOTAL CONNECTED LOAD 18.7 KVA 52 A

EXISTING OUTDOOR RACK MOUNTED PANEL

MSP

BUILDING: SITE M-18
FLOOR: AT SERVICE RACK
ROOM:

120/240 V AC
1 PHASE
3 WIRE + GND

BUS 225 A COPPER 10 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 225 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ 200% CAPACITY NEUTRAL BUS

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	OH	PANEL 'RS11' FEEDERS	3#6, 1#6G	60A	5.3		–	150A		SPARE – DELETED OFFICE TRAILER FEED	UG	2
3	–	SALT DOME BUILDING 3		2P	–		–	2P		–	–	4
5	OH	PANEL 'RS12' FEEDERS	3#6, 1#6G	60A	7.7		–	20A-1P		SPARE – DELETED SITE LIGHTING CKT	UG	6
7	–	SALT/BRINE EQUIPMENT LOCATION		2P	–		–	20A-1P		SPARE – DELETED SITE LIGHTING CKT	UG	8
9	OH	ANTI-SKID BLDG #5 POWER/LIGHTING	2#8, 1#8G	20A-1P	.8		–	20A-1P		SPARE – DELETED SITE LIGHTING CKT	UG	10
11	–	CAMERA HEATER AT ENTRANCE GATE	3#8, 1#8G	20A-1P	.2		–	20A-1P		SPARE – DELETED SITE LIGHTING CKT	UG	12
13	–	–		20A-1P	–		–	20A-1P		SPARE – DELETED SITE LIGHTING CKT	UG	14
15	–	–		20A-1P	–		–	20A-1P		–	–	16
17	–	–		20A-1P	–		–	20A-1P		–	–	18
19	–	–		20A-1P	–		–	20A-1P		–	–	20
21	–	–		20A-1P	–		–	20A-1P		–	–	22
23	–	–		20A-1P	–		–	20A-1P		–	–	24

REMARKS:
1. EXIST PANEL IS SUITABLE FOR SERVICE ENTRANCE
2. EXIST PANEL IS NEMA 4X CORROSION RESISTANT RATED
3. CIRCUIT #11 IS A NEW CIRCUIT TO BE CONNECTED TO EXISTING 20/1 BKR

LIGHTING	–	KVA	HEATING	–	KVA
RECEPTACLES	–	KVA	MISCELLANEOUS	14.0	KVA
AC	–	KVA	–	–	KVA

TOTAL CONNECTED LOAD 14.0 KVA 67 A

EXISTING RECEPTACLE PANEL

RS12

BUILDING: U/B MAINT OUTDOOR RACK
FLOOR: M-18 SITE
ROOM: OUTSIDE AT SALT/BRINE AREA

120/240 V AC
1 PHASE
3 WIRE + GND

BUS 100 A COPPER 10 KA RMS SYM.
☐ MAIN LUGS ONLY ■ 60 A MAIN C.B.
■ SURFACE MOUNTED ☐ FLUSH MOUNTED
■ BOLTED BRANCH C.B. ☐ PLUG-IN BRANCH C.B.

CKT NO		CIRCUIT DESCRIPTION	MINIMUM WIRE SIZE (*)	CIRCUIT BREAKER	CONN. LOAD	PHASE A B	CONN. LOAD	CIRCUIT BREAKER	MINIMUM WIRE SIZE (*)	CIRCUIT DESCRIPTION		CKT NO
1	–	EXIST LIQUID TRANSFER PUMP-1 1/2 HP		40A-1P	2.3		–	20A-1P		EXISTING SPARE	–	2
3	–	LIQUID TRANSFER PUMP-1 1/2 HP	2#8, 1#10G	40A-1P	2.3		–	20A-1P		EXISTING SPARE	–	4
5	–	SALT BRINE SYSTEM SHELTER	2#6, 1#6G	50A-1P	3.6		–	20A-1P		EXISTING SPARE	–	6
7	GFI	REC-SALT BRINE AIR COMPRESSOR	2#12, 1#12G	20A-1P	1.7		–	20A-1P		EXISTING SPARE	–	8
9	GFI	REC-CONV AT SALT BRINE AREA	2#12, 1#12G	20A-1P	.18		–	20A-1P		EXISTING SPARE	–	10
11	–	EXISTING SPARE		20A-1P	–		–	20A-1P		EXISTING SPARE	–	12

REMARKS:
1. EXIST PANEL IS SUITABLE FOR SERVICE ENTRANCE
2. EXIST PANEL IS NEMA 4X CORROSION RESISTANT RATED
3. REPLACE EXISTING 20/1 CB WITH 'GFI' CB FOR CKT #7
4. FOR CIRCUIT #3 PROVIDE NEW BREAKER
5. CIRCUITS 3,5,7 & 9 ARE NEW CIRCUITS

LIGHTING	–	KVA	HEATING	–	KVA
RECEPTACLES	.18	KVA	MISCELLANEOUS	9.9	KVA
AC	–	KVA	–	–	KVA

TOTAL CONNECTED LOAD 10.1 KVA 48 A

01 (NOTES MOVED)

CONSULTANT SEAL

VITETTA SEAL

PREPARED BY: VITETTA
ARCHITECTURE · ENGINEERING · PLANNING · INTERIOR DESIGN

PHILADELPHIA NAVAL BUSINESS CENTER
4747 SOUTH BROAD STREET
PHILADELPHIA, PENNSYLVANIA 19112
TELEPHONE: (215) 218-4747
FAX: (215) 218-4740

224 NORTH FRONT STREET
WORMLEYSBURG, PENNSYLVANIA 17043
TELEPHONE: (717) 763-5661
FAX: (717) 763-7870

PREPARED FOR:
THE PENNSYLVANIA TURNPIKE COMMISSION

PENNA TURN-PIKE

NO.	REVISIONS	DATE	APPR.
05	ASI-020	03.02.2011	DRV
04	ASI-016	01.17.2011	DRV
03	ASI-011	12.23.2010	DRV
02	ASI-004	09.22.2010	DRV

WBS NUMBER
M-015.30X001-3-02, 03, 04, 05
NETWORK NUMBER: 7001260, 7001261, 7001262, 7001263
FILE NAME: EP5_02.DWG
SCALE: NONE

UNIONTOWN TO BROWNSVILLE
MAINTENANCE FACILITY
AT MILEPOST M-18.0 SB
IN
FAYETTE COUNTY, PENNSYLVANIA

DISTRICT: 1 COUNTY: FAYETTE
TOWNSHIP / BOROUGH: MENALLEN TOWNSHIP

ELECTRICAL
PANEL SCHEDULES
PART 2 OF 3

DRAWING: **EP5.02**
SHEET: 242 OF 265

01 ADD1 (M-015.30X001-3-02,03,04,05) 02JUL10

SIGN-IN SHEET

PREPROPOSAL CONFERENCE RFP #11-10350-2984

DATE: March 17, 2011

TIME: 11:30 AM

	COMPANY NAME	REP NAME	ADDRESS	PHONE	EMAIL
1	PTC	STEPHANIE BENTLEY	700 S EISENHOWER BLVD MIDDLETOWN PA 17057	717 939 9551	sbentley@paturnpike.com
2	PTC	Barry Altman		717-939-9551	baltman@paturnpike.com
3	POWER CONTRACTING CO.	RICH BALDWIN	61 ARCH ST CARNEGIE PA 15106	412-279-0889	rbaldwin@pcc-pgh.com
4	PTC	Kevin Shelleby		724-433-0829	KSHELLEB@PATURNPIKE.com
5	Henkels & McCoy Inc	Jamie Berrier	5230 N Susquehanna Trail York PA 17406	717-266-5641	JBerrier@Henkels.com
6	Henkels & McCoy Inc.	Ricky Gilliland	5230 N. Susquehanna Trail. York Pa. 17406	717-266-5641	rgilliland@Henkels.com
7	THAYER POWER (VERIZON BUSS.)	CHRIS LODER	973 NEW CASTLE RD	724-865-1155	ROBERTSPOLI@THAYERPC.COM
8	PA. Turnpike Comm.	Kirk Garman	700 S. Eisenhower Blvd. Middletown, Pa. 17057	717-645-2233	kgarman@paturnpike.com
9	CM Services	James Kondos	408 Liberty Avenue, California, PA	412-523-6528	JAKONDOS@UZBWEST.com
10	ALCM Andy Witowski	Andy Witowski	408 Liberty Ave California PA	412-997-0087	ANWitowski@UZBWEST.com
11	~~Jim Trebilcock~~ F.B. Abel Inc	Jim Trebilcock	620 Edgar St York Pa 17406	717 845 1639	Jim T@ib-abel.com
12					
13					
14					
15					
16					

Power Contracting Company

61 Arch Street Ext. Suite 201
Carnegie, PA 15106
Phone: 412-278-0889
Fax: 412-278-0989

POWER CONTRACTING COMPANY
Commercial & Industrial

Rich Baldwin
Project Manager

Cell: 412-779-5765
Email: rbaldwin@pcc-pgh.com

Jamie Berrier
Project Manager

Office: 717.266.5641
Fax: 717.266.2642
Cell: 717.600.5012

jberrier@henkels.com
www.henkels.com

Henkels & McCoy, Inc.

EAST REGION
5230 N. Susquehanna Trail
York, PA 17406

PERFORMANCE has built our business...®

RICKY E. GILLILAND
FIBER CABLE SUPERVISOR

Office: 717.266.5641
Fax: 717.266.2642
Mobile: 717.600.5462

rgilliland@henkels.com
www.henkels.com

Henkels & McCoy, Inc.

EAST REGION
5230 N. Susquehanna Trail
York, PA 17406

PERFORMANCE has built our business...®

BOB SYPOLT

CHRIS LODER
PROJECT SUPERVISOR

Thayer Power and Communication Line Construction Co., Inc.

973 NEW CASTLE RD. • BUTLER, PA 16001

OFFICE: (724) 865-1155
FAX: (724) 865-1158
WEB: www.thayerpc.com

CELL 814-449-0177
~~CELL: (814) 440-4508~~

IB ABEL INC

ELECTRICAL COMMUNICATIONS UTILITIES
ENGINEERING CONSTRUCTION SERVICE

JAMES R. TREBILCOCK, R.C.D.D
VICE PRESIDENT
COMMUNICATION DIVISION

620 EDGAR STREET
YORK, PA 17403
WWW.IB-ABEL.COM

OFFICE: 717.845.1639
CELL: 717.577.3081
FAX: 717.843.5614

JIMT@IB-ABEL.COM