

November 22, 2019

**BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA
ADDENDUM NO. 1 / IFB NO. Y20-722-TA**

PUMP STATION R/R PACKAGE 16 IMPROVEMENTS

BID OPENING DATE: ~~November 26, 2019~~ December 3, 2019

This Addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions and/or revisions to and shall take precedence over the original documents. Additions are indicated by underlining, deletions are indicated by ~~strikethrough~~.

A. BID OPENING DATE IS CHANGED FROM ~~November 26, 2019~~ TO December 3, 2019 AT 2:00 P.M.

B. CLARIFICATIONS

1. **Q: Sheet C-201 shows a relocated light pole. This light pole is not shown on the electrical drawing. Please furnish the existing location, height and type of the pole.**

A: According to light pole owner, Duke Energy Florida, the pole is a promenade model concrete light pole, 16 feet in height with an Ocala model light fixture. Attached sheets E-200 and E-202 have been revised to show the location of the existing light pole. Please contact Duke Energy when the light pole is ready to be relocated. Refer to Sheet G-102 of the construction plans for Duke's contact information. The picture below shows the light pole in question.



C. ~~MEASUREMENT AND PAYMENT SECTION 01025 IS DELETED AND REPLACED WITH REVISED MEASUREMENT AND PAYMENT SECTION 01025 ATTACHED AND LABELLED THIS ADDENDUM.~~

D. ACKNOWLEDGEMENT OF ADDENDA

- a. The Proposer shall acknowledge receipt of this addendum by completing the applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned not later than the date and time for receipt of proposal.
- b. All other terms, conditions and specifications remain the same.
- c. Receipt acknowledged by:

Authorized Signature

Date Signed

Title

Name of Firm

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. This Section specifies administrative and procedural requirements to define pay items and determine payable amounts, and includes but is not limited to:
 - 1. General Provisions
 - 2. Work Not Paid for Separately
 - 3. Measurement for Payment
 - 4. Partial Payment for Stored Materials and Equipment

1.02 GENERAL PROVISIONS

- A. This specification includes standard descriptions for all bid items. This Contract's specific bid items are listed in the Bid Schedule.
- B. The total Contract Amount shall cover the Work required by the Contract Documents. All costs in connection with the successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction, equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices bid. All Work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the prices bid.
- C. If used, all estimated quantities stipulated in the Bid Schedule or other Contract Documents are approximate and are to be used only (a) for the purpose of comparing the bids submitted for the Work, and (b) as a basis for determining an initial Contract Amount. The actual amounts of Work completed and materials furnished under unit price items may differ from the estimated quantities. The County does not expressly or by implication represent that the actual quantities involved will correspond exactly to the quantities stated in the Bid Schedule; nor shall the Contractor plead misunderstanding or deception because of such estimate or quantities or of the character, location or other conditions pertaining to the Work. Payment to the Contractor will be made only for the actual quantities of work performed or material furnished in accordance with the Drawings and other Contract Documents, and it is understood that the quantities may be increased or decreased as provided in the General Conditions.
- D. If used, the unit prices listed in the Bid Schedule shall include all services, obligations, responsibilities, labor, materials, devices, equipment, royalties and license fees, supervision, temporary facilities, construction equipment, bonds, insurance, taxes, clean up, traffic control, control surveys, field offices, close out, overhead and profit and all connections, appurtenances and any other incidental items of any kind or nature, as are necessary to complete the Work in accordance with the Contract Documents.

- E. Except for mobilization/demobilization and project record documents, payment for Work will be based on the percent of completed work of each item in the Schedule of Values, including stored materials, as determined by the County. Progress of work in each item of the Schedule of Values will be determined separately by the County. However, the County will issue a single payment certificate for progress on the Contract.
- F. The Contractor agrees that it will make no claim for damages, anticipated profits, or otherwise because of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore.
- G. Where payment by scale weight is specified under certain items, the Contractor shall provide suitable weighing equipment which shall be kept in accurate adjustment at all times and certified. The weighing of all material shall be performed by the Contractor in the presence and under the supervision of the County.
- H. All schedules included in the Contract Documents are given for convenience and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quantity of materials and equipment included in work to be done under this Contract.
- I. Where pipe fittings are noted on the Drawings, such notation is for the Contractor's convenience and does not relieve the Contractor from laying and jointing different or additional items where required.
- J. All contracts shall be subject to 10% minimum retainage as defined in the General Conditions and the Agreement.

1.03 WORK NOT PAID FOR SEPARATELY

- A. Delivery: Payment for equipment delivery, storage or freight shall be included in the pay items including their installation and no other separate payment will be made therefore.
- B. Bonds: Payment for bonds required by the Contract shall be included in the pay items for the Work covered by the required bonds and no separate payment will be made.
- C. Preparation of Site: Payment for preparation of site shall be included in pay items proposed for the various items of Work and no separate payment will be made therefore. Preparation of site includes setting up construction plant, offices, shops, storage areas, sanitary and other facilities required by the specifications or state law or regulations; providing access to the site; obtaining necessary permits and licenses; payments of fees; general protection, temporary heat and utilities including electrical power; providing shop and working drawings, certificates and schedules; providing required insurance; preconstruction photographs and videos; clearing and grubbing; removal of existing pavements, sidewalks and curbs; trench excavation, sheeting, shoring and bracing; dewatering and disposal of surplus water; structural fill, backfill, compaction and grading; testing materials and apparatus; maintenance of drainage systems; appurtenant work; record drawing and close-out documentation; cleaning up; and all other work regardless of its nature which may not be specifically referred to in a Bid Item but is necessary for the complete construction of the project set forth by the Contract.

D. Permitting & Permit Fees:

1. Payment for Orange County permits (Section 01065) shall be based on 0.2% fixed percentage of the total base bid amount.

E. Sanitary Sewer Overflows:

1. The contractor shall be liable for any and all sanitary sewer overflows associated with the Contract, regardless of fault. The Contractor shall be liable for all County personnel labor and equipment costs, penalties and fines resulting from sanitary sewer overflows. Such occurrences may be considered violations of Florida Statutes or administrative rules and may result in additional liability beyond that outlined below for damages and restoration, and the judicial imposition of civil penalties, pursuant to Sections 403.121 and 403.161 Fla Stat. Contractor will be assessed the following penalties for any and each Sanitary Sewer Overflow:
 - a. For a domestic or industrial wastewater violation not involving a surface water or groundwater quality violation, OCU shall assess a penalty of \$2,000 for each unpermitted or unauthorized event or occurrence.
 - b. For an unpermitted or unauthorized discharge that resulted in a surface water or groundwater quality violation, OCU shall assess a penalty of \$5,000 for each unpermitted or unauthorized event or occurrence.
 - c. In addition, for any and all unpermitted or unauthorized discharge, OCU shall assess a penalty in the amount of \$1.00 per gallon of sanitary sewer overflow, up to a maximum amount of \$100,000 per each Sanitary Sewer Overflow.

- F. The County reserves the right to delete any item included in the Schedule of Values and decrease the Contract Price by the scheduled amount for the item deleted.

1.04 MEASUREMENT FOR PAYMENT

A. Methods of Measurement - Generally:

1. Units of measurement shall be defined in general terms as follows:
 - a. Linear Feet (LF)
 - b. Square Feet (SF)
 - c. Square Yards (SY)
 - d. Cubic Yards (CY)
 - e. Each (EA)
 - f. Sacks (SK)
 - g. Lump Sum (LS)
2. Unit Price Contracts/Items:
 - a. Linear Feet (LF) shall be measured along the horizontal length of the centerline of the installed material, unless otherwise specified. Pipe shall be measured along the length of the completed pipeline, regardless of the type of joint required, without deduction for the length of valves or fittings. Pipe included within the limits of lump sum items will not be measured.
 - b. Square Feet (SF), Square Yards (SY), Cubic Yards (CY), Each (EA) and Sacks (SK) shall be measured as the amount of the unit of measure installed and compacted within the limits specified and shown in the Specifications and Drawings. Slope angles and elevations shall be measured using land-surveying equipment. Contractor shall provide supporting documentation (i.e. drawings, delivery tickets, invoices, survey calculations, etc.) to verify actual installed quantities.

B. Lump Sum Contracts/Items - Generally:

1. Quantities provided in the Schedule of Values are for the purpose of estimating the completion status for progress payments. Payment will be made for each individual item on a percentage of completion basis as estimated by the Contractor and approved by the County.
2. Adjustments to costs provided in the accepted Schedule of Values may be made only by Change Order.
3. The County reserves the right to delete any item included in the Schedule of Values and decrease the Contract Price by the scheduled amount for the item deleted.

1.05 MEASUREMENT AND PAYMENT ITEMS

A. ***Only those bid items included in the Bid Schedule are applicable for this Contract.*** The County has standardized the measurement and payment items. Currently, there are approximately 100 measurement and payment items describing approximately 300 bid items. The bid item numbering system comprises five sections that are divided into 23 subsections. The sections and subsections are listed below.

10. General Requirements
 - 10.1 General
11. Site Work
 - 11.1 Miscellaneous
 - 11.2 Road Work
 - 11.3 Install/Replace Fence or Wall
 - 11.4 Bypass Pumping
 - 11.5 Abandon or Remove Pipe/Structure
12. Pressure Pipes
 - 12.1 Pressure Pipe and Fittings and Restrained Joints
 - 12.2 Valves
 - 12.3 Tapping Sleeve and Valve Assembly
 - 12.4 Cut-in Connections to Existing Main
 - 12.5 Piping Appurtenances
 - 12.6 Directional Drill
 - 12.7 Pipe Bursting
13. Wastewater Collection System
 - 13.1 Cleaning Sanitary Sewers
 - 13.2 CCTV Sanitary Sewers
 - 13.3 Install/Replace Sanitary Sewer
 - 13.4 Install/Replace Sanitary Manholes
 - 13.5 Sanitary Manhole Rehabilitation
 - 13.6 Sanitary Service Laterals and Cleanouts
 - 13.7 Cured-in-Place Pipe (CIPP) Liner
 - 13.8 Sanitary Sewer Pipe Bursting
14. Pump Stations
 - 14.1 Wastewater Duplex Pump Station
 - 14.2 Wastewater Triplex Pump Station

All of the subsections have bid item measurement and payment descriptions. Several bid items in the Project Bid Schedule may be described with the same bid item measurement and payment description in Table A, "Measurement and Payment Items". The bid items in the Project Bid Schedule are related to the Section 01025 measurement and payment items as follows:

1. All of the bid items in the Project Bid Schedule have 8 numerical digits.
2. Table A, "Measurement and Payment Items" for each of the bid items there are five numerical digits followed by ".xxx".
3. The first 5 numerical digits of the bid item in the Project Bid Schedule designate the measurement and payment item found in Table A, "Measurement and Payment Items."

Table A

BID ITEM	Orange County Utilities MEASUREMENT AND PAYMENT ITEMS
1.	<p>Reference ID 14.120.110 Duplex Pump Station PS 3394 Ranchero</p> <p>a. Measurement: Measurement for this item shall be based on satisfactory rehabilitation of the existing Pump Station complete and ready for continuous operation.</p> <p>b. Payment: Payment of the applicable Contract lump sum price as stated in the proposal will be full compensation for furnishing all labor, materials, and equipment necessary to rehabilitate the existing pump station and provide bypass pumping as indicated on the Drawings. Work includes but is not necessarily limited to the following: Pump Station improvements and modifications including fencing and gates, lining of existing manholes (MH33940022 and MH33940023), rehabilitate and line the existing wet well, removal and replacement of the top slab, pumps, motors, SCADA control panel, cables, rails, valves, pressure piping and appurtenances and complete removal of SCADA poles as shown on the Drawings. All demolition, removal and disposal of existing facilities as noted in the Drawings including tie-ins, intercepts, conflicts and abandonment of piping, conduits or electrical services. All coordination, materials and equipment, tools and labor to replace the existing water service connection or extend an existing water service connection. All coordination with the electric power company, materials, equipment, tools, labor and fees to install an electrical service connection. Installation of all site and adjacent improvements noted on drawings including driveways and driveway connections, fencing with curb and gate, asphalt and concrete paving, rock fill and sodding. All work required to construct, complete start-up testing and deliver a complete operational Pump Station without interruption of service.</p> <p>Payment for General Requirements (Section 01001) shall include bonds, permits, and required insurance, project signs, preconstruction audio-video documentation, maintenance of traffic, public information officer, and any other preconstruction expense necessary for the start of the work</p>

	<p>shall also be included. This Work also consists of the general project management of the Work including but not limited to, field supervision and office management, as well as other incidental cost for management of the Work during duration of the Contract. This work also includes maintenance of the field offices for the duration of the Contract.</p> <p>Measurement for various items covered under General Requirements, will not be made for payment, and all items shall be included in the lump sum price. This item will be paid upon each payment request made by the Contractor. The Contractor shall attach with the pay request invoices to substantiate the appropriate insurance and bonds have been obtained by the Contractor.</p> <p>Payment for Mobilization/Demobilization shall include Work consisting of the preparatory Work and operations in mobilizing for beginning Work on the Contract, including, but not limited to, movement of those personnel, equipment, supplied and incidentals to the project site, preparation of submittals, and for the establishment of temporary offices and buildings, safety equipment and first aid supplies, project signs, field surveys, sanitary and other facilities required by these specifications, and State and local laws and regulations. The Work specified in this item also consists of demobilization or the operations normally involved in ending Work on the project including, but not limited to termination and removal of temporary utility service and field offices; demolition and removal of temporary structures and facilities; restoration of the Contractor storage areas; disposal of trash and rubbish, and any other post-construction work necessary for the proper conclusion of the Work. This pay item may not exceed 5% of the Total Base Bid amount.</p> <p>Payment for Project Record Documents (Section 01720) shall be based on satisfactory progress of the Contractor to provide Project Record Documents including the certified as-built survey, in accordance with the County requirements and specifications. This pay item shall be a minimum of 1% of the Total Base Bid amount.</p> <p>Payment for Indemnification: In consideration of the Contractor's Indemnity Agreement as set out in the Contract Documents, County specifically agrees to give the Contractor \$25.00 and other good and valuable consideration, receipt of which is acknowledged upon signing of the Agreement.</p>
2.	<p>Reference ID 14.120.111 Duplex Pump Station Rehabilitation PS 3088 Emerywood</p>
	<p>a. Measurement: Measurement for this item shall be based on satisfactory rehabilitation of the existing Pump Station complete and ready for continuous operation.</p> <p>b. Payment: Payment of the applicable Contract lump sum price as stated in the proposal will be full compensation for furnishing all labor, materials, and equipment necessary to construct a pump station as indicated on the</p>

Drawings. Work includes but is not necessarily limited to the following: Pump Station improvements and modifications includes installation of proposed manholes (MH30880012 and MH30880013) sewer gravity line, lining of existing gravity sewer and manhole (MH30880005), rehabilitate and line the existing wetwell, removal and replacement of the top slab, pumps, motors, SCADA control panel, cables, rails, valves, water service connection, pressure piping, and appurtenances and complete removal of SCADA poles as shown on the Drawings. All demolition, removal and disposal of existing facilities as noted in the Drawings including tie-ins, intercepts, conflicts and abandonment of piping, conduits or electrical services. All coordination with the electric power company, materials, equipment, tools, labor and fees to install an electrical service connection. Installation of all site and adjacent improvements noted on drawings including driveways and driveway connections, fencing with curb and gate, asphalt and concrete paving, rock fill and sodding. All work required to construct, complete start-up testing and deliver a complete operational Pump Station without interruption of service.

Payment for General Requirements (Section 01001) shall include bonds, permits, and required insurance, project signs, preconstruction audio-video documentation, maintenance of traffic, public information officer, and any other preconstruction expense necessary for the start of the work shall also be included. This Work also consists of the general project management of the Work including but not limited to, field supervision and office management, as well as other incidental cost for management of the Work during duration of the Contract. This work also includes maintenance of the field offices for the duration of the Contract.

Measurement for various items covered under General Requirements, will not be made for payment, and all items shall be included in the lump sum price. This item will be paid upon each payment request made by the Contractor. The Contractor shall attach with the pay request invoices to substantiate the appropriate insurance and bonds have been obtained by the Contractor.

Payment for Mobilization/Demobilization shall include Work consisting of the preparatory Work and operations in mobilizing for beginning Work on equipment, supplied and incidentals to the project site, preparation of submittals, and for the establishment of temporary offices and buildings, safety equipment and first aid supplies, project signs, field surveys, sanitary and other facilities required by these specifications, and State and local laws and regulations. The Work specified in this item also consists of demobilization or the operations normally involved in ending Work on the project including, but not limited to termination and removal of temporary utility service and field offices; demolition and removal of temporary structures and facilities; restoration of the Contractor storage areas; disposal of trash and rubbish, and any other post-construction work necessary for the proper conclusion of the Work. This pay item may not exceed 5% of the Total Base Bid amount.

Payment for Project Record Documents (Section 01720) shall be based on

	<p>satisfactory progress of the Contractor to provide Project Record Documents including the certified as-built survey, in accordance with the County requirements and specifications. This pay item shall be a minimum of 1% of the Total Base Bid amount.</p> <p>Payment for Indemnification: In consideration of the Contractor's Indemnity Agreement as set out in the Contract Documents, County specifically agrees to give the Contractor \$25.00 and other good and valuable consideration, receipt of which is acknowledged upon signing of the Agreement.</p>
3.	<p>Reference ID 14.120.112 Duplex Pump Station Rehabilitation PS 3891</p> <p>Lake Irma</p>
	<p>a. Measurement: Measurement for this item shall be based on satisfactory rehabilitation of the existing Pump Station complete and ready for continuous operation.</p> <p>b. Payment: Payment of the applicable Contract lump sum price as stated in the proposal will be full compensation for furnishing all labor, materials, and equipment necessary to rehabilitate the existing pump station and provide bypass pumping as indicated on the Drawings. Work includes but is not necessarily limited to the following: Pump Station improvements and modifications including rehabilitate and line the existing wet well, lining of existing gravity sewer and manhole (MH38910001), replacement of the top slab, pumps, motors, control panel, SCADA control panel, cables, rails, valves, pressure piping and appurtenances and complete removal of SCADA poles as shown on the Drawings. All coordination with the electric power company, materials, equipment, tools, labor and fees to install an electrical service connection. All demolition, removal and disposal of existing facilities as noted in the Drawings including tie-ins, intercepts, conflicts and abandonment of piping, conduits or electrical services. All coordination, materials and equipment, tools and labor to replace the existing water service connection or extend an existing water service connection. Installation of all site and adjacent improvements noted on drawings including driveways and driveway connections, asphalt and concrete paving, rock fill and sodding. All work required to construct, complete start-up testing and deliver a complete operational Pump Station without interruption of service.</p> <p>Payment for General Requirements (Section 01001) shall include bonds, permits, and required insurance, project signs, preconstruction audio-video documentation, maintenance of traffic, public information officer, and any other preconstruction expense necessary for the start of the work shall also be included. This Work also consists of the general project management of the Work including but not limited to, field supervision and office management, as well as other incidental cost for management of the Work during duration of the Contract. This work also includes maintenance of the field offices for the duration of the Contract.</p>

	<p>Measurement for various items covered under General Requirements, will not be made for payment, and all items shall be included in the lump sum price. This item will be paid upon each payment request made by the Contractor. The Contractor shall attach with the pay request invoices to substantiate the appropriate insurance and bonds have been obtained by the Contractor.</p> <p>Payment for Mobilization/Demobilization shall include Work consisting of the preparatory Work and operations in mobilizing for beginning Work on the Contract, including, but not limited to, movement of those personnel, equipment, supplied and incidentals to the project site, preparation of submittals, and for the establishment of temporary offices and buildings, safety equipment and first aid supplies, project signs, field surveys, sanitary and other facilities required by these specifications, and State and local laws and regulations. The Work specified in this item also consists of demobilization or the operations normally involved in ending Work on the project including, but not limited to termination and removal of temporary utility service and field offices; demolition and removal of temporary structures and facilities; restoration of the Contractor storage areas; disposal of trash and rubbish, and any other post-construction work necessary for the proper conclusion of the Work. This pay item may not exceed 5% of the Total Base Bid amount.</p> <p>Payment for Project Record Documents (Section 01720) shall be based on satisfactory progress of the Contractor to provide Project Record Documents including the certified as-built survey, in accordance with the County requirements and specifications. This pay item shall be a minimum of 1% of the Total Base Bid amount.</p> <p>Payment for Indemnification: In consideration of the Contractor's Indemnity Agreement as set out in the Contract Documents, County specifically agrees to give the Contractor \$25.00 and other good and valuable consideration, receipt of which is acknowledged upon signing of the Agreement.</p>
4.	<p>Reference ID 14.120.113 Duplex Pump Station Rehabilitation PS 3895 Arbor Ridge West Unit 7</p>
	<p>a. Measurement: Measurement for this item shall be based on satisfactory rehabilitation of the existing Pump Station complete and ready for continuous operation.</p> <p>b. Payment: Payment of the applicable Contract lump sum price as stated in the proposal will be full compensation for furnishing all labor, materials, and equipment necessary to rehabilitate the existing pump station and provide bypass pumping as indicated on the Drawings. Work includes but is not necessarily limited to the following: Pump Station improvements and modifications including fencing and gates, rehabilitate and line the existing wet well, sanitary manholes (MH38950001 and MH38950023), lining and de-scaling of existing 8" and 10" sanitary sewer lines, removal and replacement of top slab, pumps, motors, control</p>

panel, SCADA control panel, cables, rails, valves, pressure piping and appurtenances and complete removal of SCADA poles as shown on the Drawings. All coordination with the electric power company, materials, equipment, tools, labor and fees to install an electrical service connection. All demolition, removal and disposal of existing facilities as noted in the Drawings including tie-ins, intercepts, conflicts and abandonment of piping, conduits or electrical services. All coordination, materials and equipment, tools, and labor to replace the existing water service connection, or extend an existing water service connection. Installation of all site and adjacent improvements noted on drawings including driveways and driveway connections, fencing with curb and gate, asphalt and concrete paving, rock fill and sodding. All work required to construct, complete start-up testing and deliver a complete operational Pump Station without interruption of service.

Payment for General Requirements (Section 01001) shall include bonds, permits, and required insurance, project signs, preconstruction audio-video documentation, maintenance of traffic, public information officer, and any other preconstruction expense necessary for the start of the work shall also be included. This Work also consists of the general project management of the Work including but not limited to, field supervision and office management, as well as other incidental cost for management of the Work during duration of the Contract. This work also includes maintenance of the field offices for the duration of the Contract.

Measurement for various items covered under General Requirements, will not be made for payment, and all items shall be included in the lump sum price. This item will be paid upon each payment request made by the Contractor. The Contractor shall attach with the pay request invoices to substantiate the appropriate insurance and bonds have been obtained by the Contractor.

Payment for Mobilization/Demobilization shall include Work consisting of the preparatory Work and operations in mobilizing for beginning Work on the Contract, including, but not limited to, movement of those personnel, equipment, supplied and incidentals to the project site, preparation of submittals, and for the establishment of temporary offices and buildings, safety equipment and first aid supplies, project signs, field surveys, sanitary and other facilities required by these specifications, and State and local laws and regulations. The Work specified in this item also consists of demobilization or the operations normally involved in ending Work on the project including, but not limited to termination and removal of temporary utility service and field offices; demolition and removal of temporary structures and facilities; restoration of the Contractor storage areas; disposal of trash and rubbish, and any other post-construction work necessary for the proper conclusion of the Work. This pay item may not exceed 5% of the Total Base Bid amount.

Payment for Project Record Documents (Section 01720) shall be based on satisfactory progress of the Contractor to provide Project Record Documents including the certified as-built survey, in accordance with the

	<p>County requirements and specifications. This pay item shall be a minimum of 1% of the Total Base Bid amount.</p> <p>Payment for Indemnification: In consideration of the Contractor's Indemnity Agreement as set out in the Contract Documents, County specifically agrees to give the Contractor \$25.00 and other good and valuable consideration, receipt of which is acknowledged upon signing of the Agreement.</p>
5.	<p>Reference ID 14.120.114 Duplex Pump Station Rehabilitation PS 3221R Harvey Street</p>
	<p>a. Measurement: Measurement for this item shall be based on satisfactory rehabilitation of the existing Pump Station complete and ready for continuous operation.</p> <p>b. Payment: Payment of the applicable Contract lump sum price as stated in the proposal will be full compensation for furnishing all labor, materials, and equipment necessary to relocate and replace the existing pump station and provide bypass pumping as indicated on the Drawings. Work includes but is not necessarily limited to the following: Pump Station improvements and modifications including fencing and gates, remove, relocate and install a new wet well with liner, install proposed manholes with liner (MH322101033 and MH32210034), removal and replacement of the top slab, pumps, motors, control panel, SCADA control panel, cables, rails, valves, pressure piping and appurtenances and complete removal of SCADA poles as shown on the Drawings. All coordination with the electric power company, materials, equipment, tools, labor and fees to install an electrical service connection. All demolition, removal and disposal of existing facilities as noted in the Drawings including tie-ins, intercepts, conflicts and abandonment of piping, conduits or electrical services. All coordination, materials and equipment, tools, and labor to replace the existing, water service connection, or extend an existing water service connection. Installation of all site and adjacent improvements noted on drawings including driveways and driveway connections, fencing with curb and gate, asphalt and concrete paving, rock fill and sodding. All work required to construct, complete start-up testing and deliver a complete operational Pump Station without interruption of service.</p> <p>Payment for General Requirements (Section 01001) shall include bonds, permits, and required insurance, project signs, preconstruction audio-video documentation, maintenance of traffic, public information officer, and any other preconstruction expense necessary for the start of the work shall also be included. This Work also consists of the general project management of the Work including but not limited to, field supervision and office management, as well as other incidental cost for management of the Work during duration of the Contract. This work also includes maintenance of the field offices for the duration of the Contract.</p>

Measurement for various items covered under General Requirements, will not be made for payment, and all items shall be included in the lump sum price. This item will be paid upon each payment request made by the Contractor. The Contractor shall attach with the pay request invoices to substantiate the appropriate insurance and bonds have been obtained by the Contractor.

Payment for Mobilization/Demobilization shall include Work consisting of the preparatory Work and operations in mobilizing for beginning Work on the Contract, including, but not limited to, movement of those personnel, equipment, supplied and incidentals to the project site, preparation of submittals, and for the establishment of temporary offices and buildings, safety equipment and first aid supplies, project signs, field surveys, sanitary and other facilities required by these specifications, and State and local laws and regulations. The Work specified in this item also consists of demobilization or the operations normally involved in ending Work on the project including, but not limited to termination and removal of temporary utility service and field offices; demolition and removal of temporary structures and facilities; restoration of the Contractor storage areas; disposal of trash and rubbish, and any other post-construction work necessary for the proper conclusion of the Work. This pay item may not exceed 5% of the Total Base Bid amount.

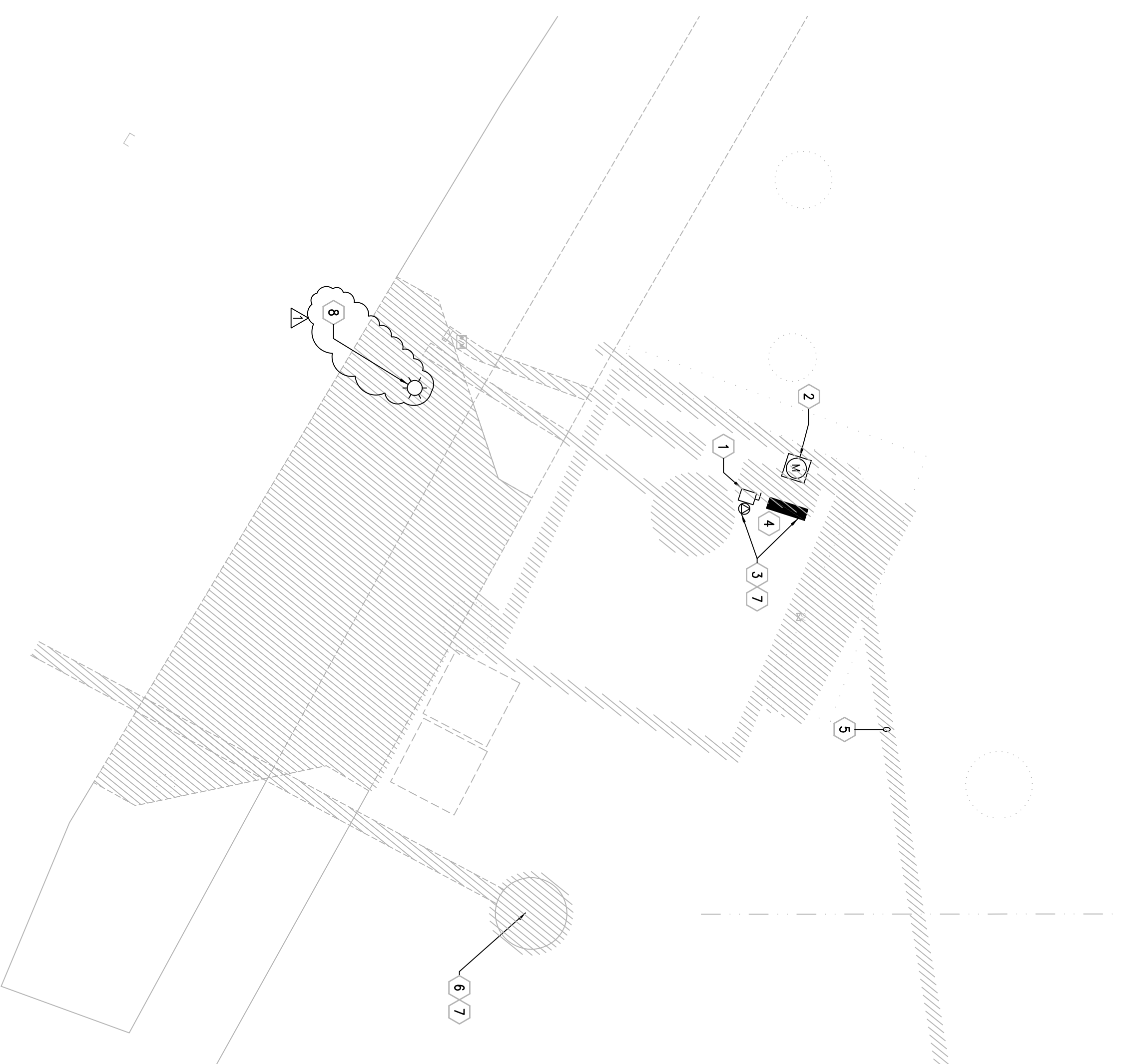
Payment for Project Record Documents (Section 01720) shall be based on satisfactory progress of the Contractor to provide Project Record Documents including the certified as-built survey, in accordance with the County requirements and specifications. This pay item shall be a minimum of 1% of the Total Base Bid amount.

Payment for Indemnification: In consideration of the Contractor's Indemnity Agreement as set out in the Contract Documents, County specifically agrees to give the Contractor \$25.00 and other good and valuable consideration, receipt of which is acknowledged upon signing of the Agreement.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

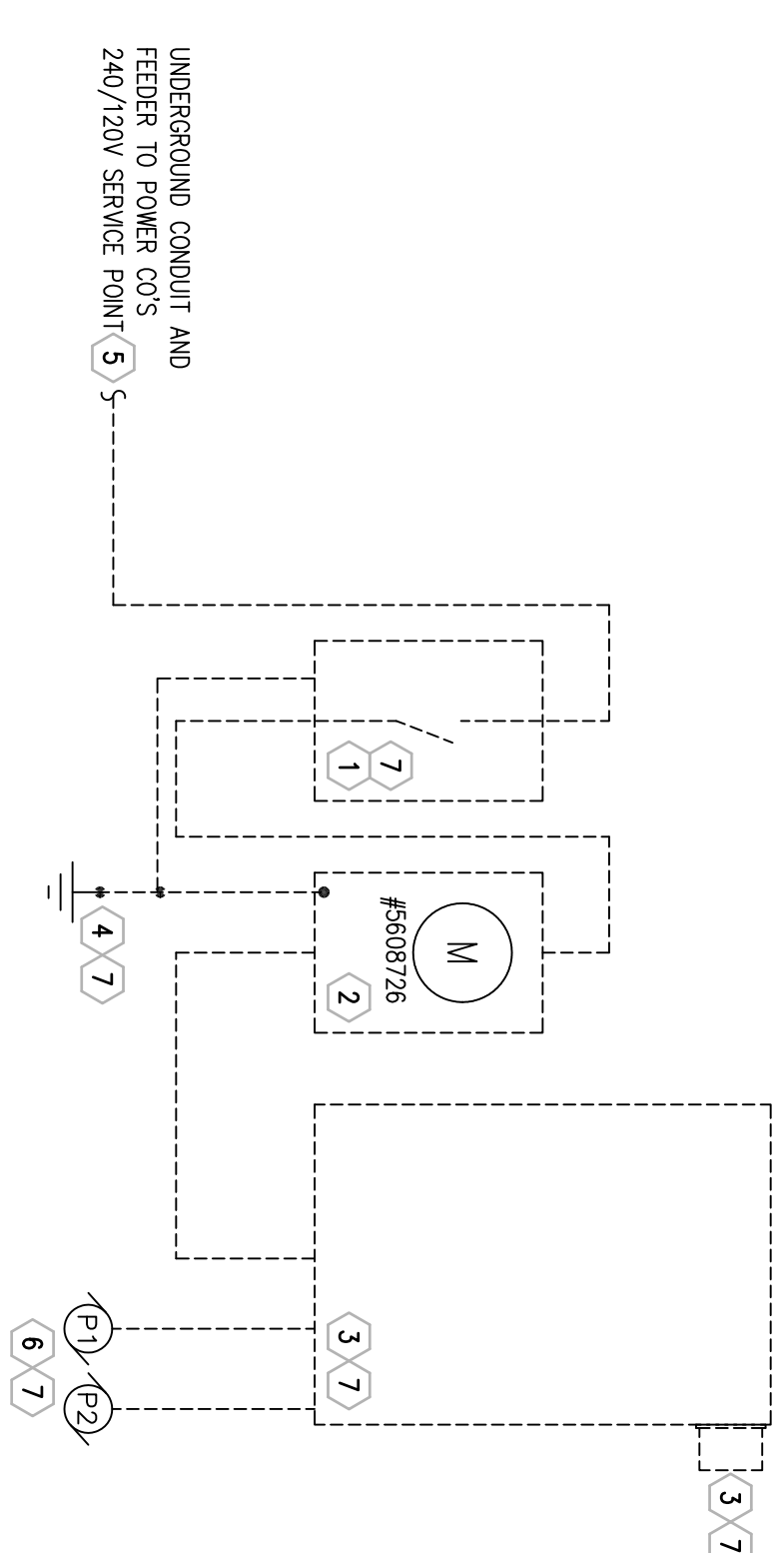
END OF SECTION



PS 3088 ELECTRICAL DEMOLITION PLAN
SCALE: 1/4"=1'-0"

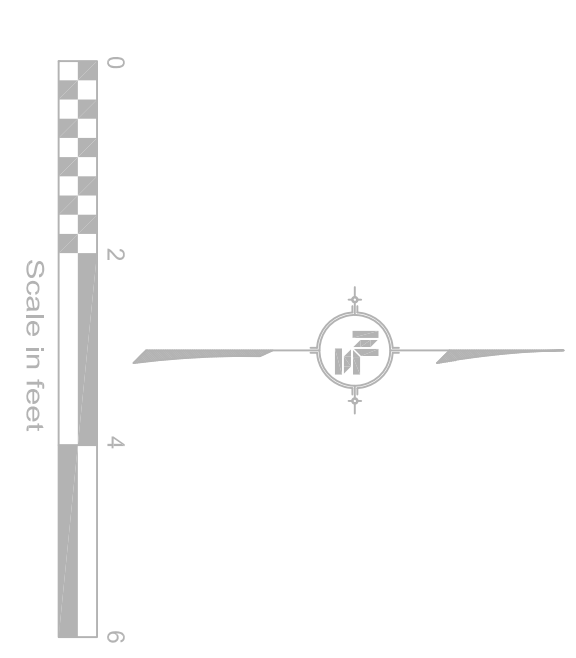
DEMOLITION KEY NOTES

- 1 EXISTING MAIN DISCONNECT SWITCH AND ALL ASSOCIATED CONDUIT, WIRE AND MOUNTING DEVICES TO BE DISCONNECTED AND REMOVED.
- 2 EXISTING METER BASE AND ASSOCIATED CONDUIT AND WIRE TO BE DISCONNECTED AND REMOVED. METER #5608726 TO BE TURNED OVER TO THE POWER COMPANY SERVING THE FACILITY.
- 3 EXISTING PUMP CONTROL PANEL AND GENERATOR RECEPTACLE, INCLUDING ALL ASSOCIATED CONDUIT, WIRE, AND MOUNTING DEVICES TO BE DISCONNECTED AND REMOVED.
- 4 ALL EXISTING GROUNDING, RODS, ASSOCIATED CABLE AND MOUNTING DEVICES SHALL BE DISCONNECTED AND REMOVED.
- 5 EXISTING BURIED ELECTRICAL UTILITY LINE BETWEEN THE POWER COMPANY TRANSFORMER AND EXISTING PUMP STATION SHALL BE DISCONNECTED AND REMOVED. COORDINATE ALL NECESSARY WORK WITH POWER COMPANY.
- 6 EXISTING PUMPS AND ALL ASSOCIATED CONDUIT, WIRE, FLOATS AND MOUNTING DEVICES TO BE DISCONNECTED AND REMOVED.
- 7 CONTRACTOR TO REMOVE EXISTING ELECTRICAL EQUIPMENT AND DISPOSE OF AS DIRECTED BY OWNER'S REPRESENTATIVE.
- 8 EXISTING METAL LIGHT POLE WITH A LIGHT FIXTURE TO BE DISCONNECTED AND RELOCATED. EXISTING ELECTRICAL SERVICE TO BE EXTENDED TO THE NEW LOCATION. SEE DRAWING E202.



NOTE:
ALL ELECTRICAL EQUIPMENT AND DEVICES SHOWN DASHED ON THIS DRAWING ARE EXISTING TO BE REMOVED (TRP).

PS 3088 DEMOLITION SINGLE LINE DIAGRAM
NOT TO SCALE



DEMOLITION LEGEND:
 DENOTES ITEMS TO BE REMOVED AND / OR DEMOLISHED



PS 3088
NOT TO SCALE



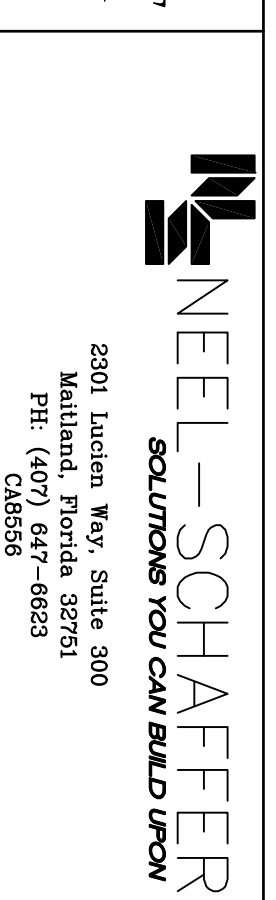
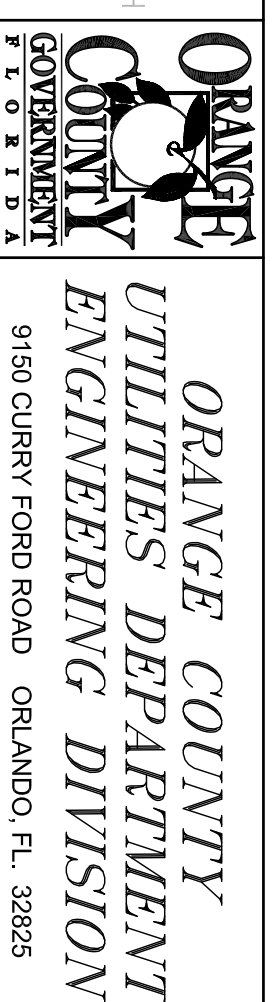
PS 3088 EQUIPMENT RACK
NOT TO SCALE



PS 3088 BACK SIDE OF EQUIPMENT RACK
NOT TO SCALE

REV	DATE	DESCRIPTION
A	11/19/2019	ADDENDUM NO. 1

LINE IS 2 INCHES AT FULL SIZE
(IF NOT SCALE ACCORDINGLY)



ELECTRICAL DEMOLITION
PLAN PS 3088
EMERYWOOD

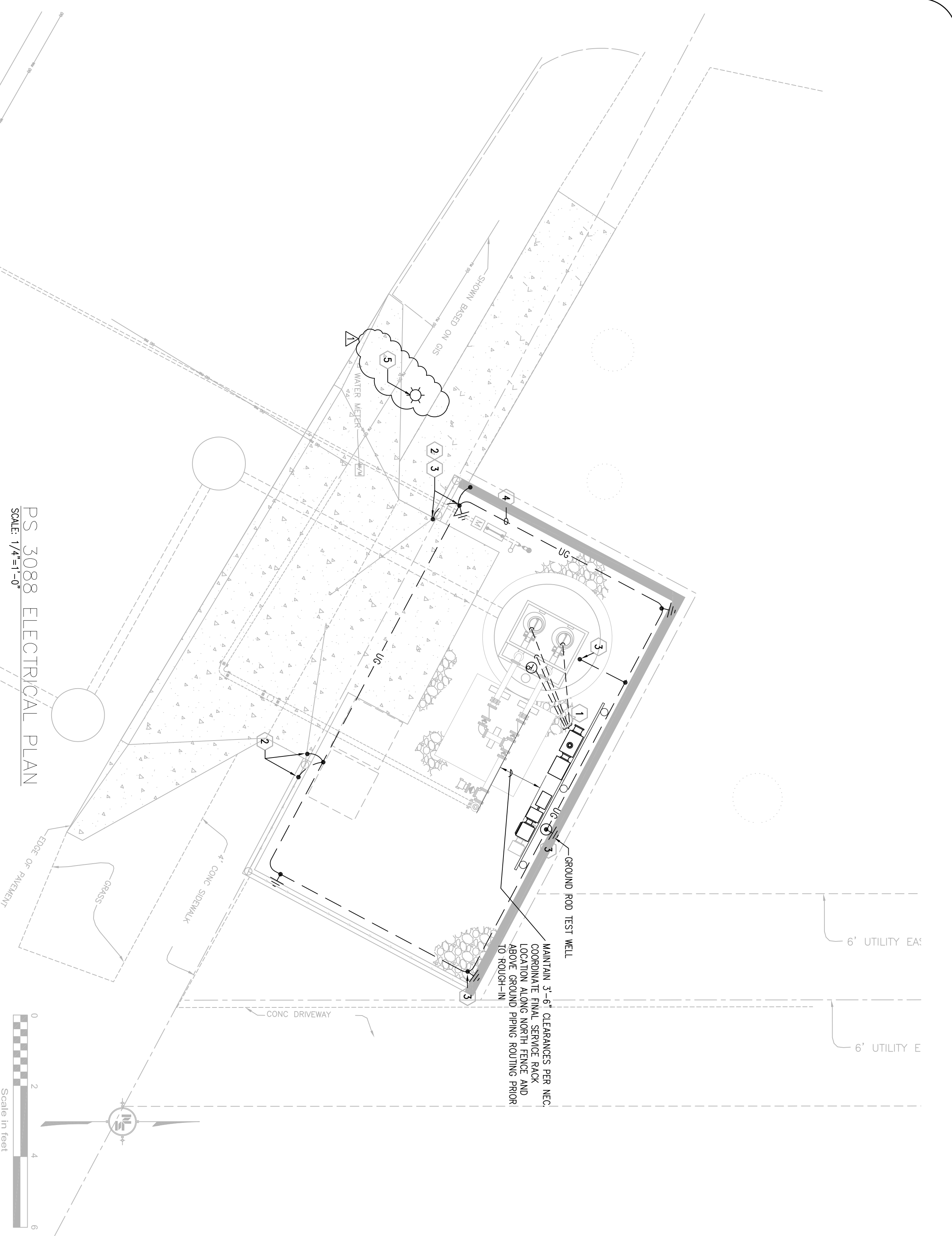
AUGUSTO E. BOBES, JR.
PROFESSIONAL ENGINEER
FLORIDA LICENSE # 39410

OCU FILE NO.: 79528
DESIGNED BY: AZ
DRAWN BY: AZ
CHECKED BY: AB/J
CADD FILE: E-200.DWG

SCALE: AS SHOWN
DRAWING NO.: **E-200**
SHEET: 43 OF 58

AUGUSTO E. BOBES, JR., P.E.
FLORIDA P.E. # 39410

BOBES ASSOCIATES
CONSULTING ENGINEERS
150 CIRCLE DRIVE, MAITLAND, FL 32751
TELEPHONE: 407.628.0882
FAX: 407.628.0882
E-MAIL: INFO@BOBESENGINEERING.COM
GUS BOBES, JR., P.E., P.E. NUMBER 39410



GENERAL ELECTRICAL PLAN NOTES

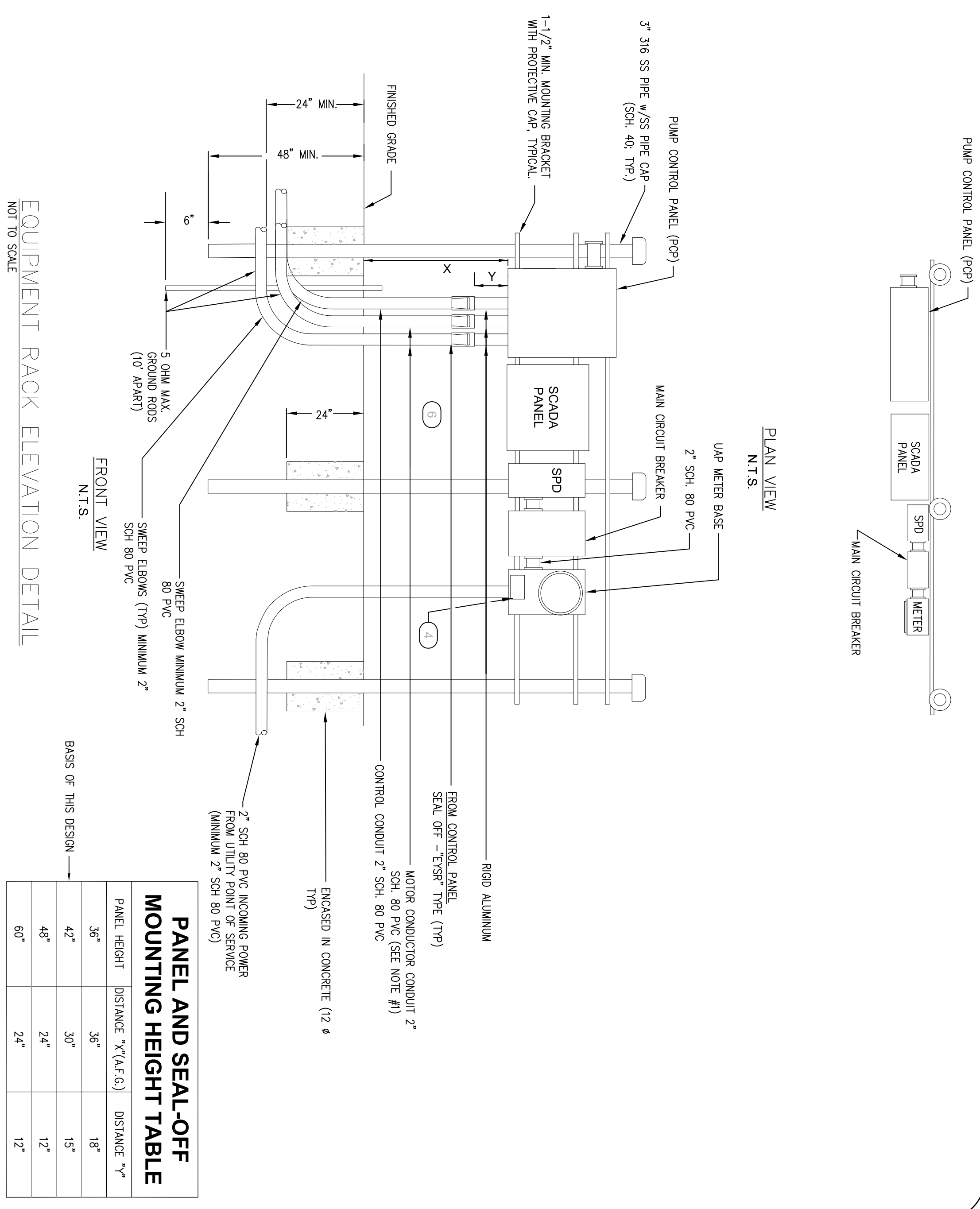
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF FLORIDA BUILDING CODE (FBC 2017), NFPA-70, ALL APPLICABLE REQUIREMENTS OF ALL LOCAL, COUNTY, AND STATE CODES AND STANDARDS, AND ALL REQUIREMENTS OF THE SERVING ELECTRICAL UTILITY.
2. DEBRIS AND PROVIDE 2 INCH PULLSTOPS AND END BUSHINGS FOR ALL EMPTY CONDUITS.
3. ALL ELECTRICAL ENCLOSURES SHALL BE 316 STAINLESS STEEL, SCHEDULE 40, WEATHERPROOF.
4. ALL RACK MOUNTING HARDWARE SHALL BE 316 STAINLESS STEEL, SCHEDULE 40.
5. THE ELECTRICAL DIAGRAMS ARE DIAGNOSTIC AND DO NOT NECESSARILY INDICATE EXACT LOCATIONS OF EQUIPMENT OR ALL REQUIRED FITTINGS AND HARDWARE. PROVIDE ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED FOR A COMPLETE OPERATING SYSTEM. COORDINATE EQUIPMENT LOCATION AND WIRING WITH ACTUAL FIELD CONDITIONS AND EQUIPMENT ACTUALLY PROVIDED.
6. CIRCUIT BREAKER SHALL BE SC-0, OR EQUAL, (AS LISTED IN APPENDIX D).
7. UNDERGROUND CONDUITS SHALL BE SCHEDULE 80 PVC BELOW GRADE. MINIMUM CONDUIT SIZE SHALL BE 3/4" ABOVE GRADE, AND 1" BELOW GRADE. UNDERGROUND CONDUIT SHALL BE RUN A MINIMUM OF 24" BELOW FINISHED GRADE.
8. CABLE AND WIRE SHALL BE COPPER, DUAL RATED, TYPE THHN/THW, EXCEPT GROUND CONDUCTORS SHALL BE SOFT DRAWN COPPER.
9. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" X 10 FT., DRIVEN SO TOP OF ROD IS 12" BELOW GRADE. ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC WELDS, ERCO "CADDWELD" OR EQUAL, UNLESS OTHERWISE NOTED. PROVIDE ONE GROUND TEXT WELL WITH METAL COVER AND RAISED STAMPED LETTERING INDICATING "GROUND".
10. INSTALL AND CONNECT ALL ELECTRICAL EQUIPMENT FURNISHED UNDER OTHER SECTIONS.
11. WARRANTEE ENTIRE ELECTRICAL INSTALLATION FOR A PERIOD OF ONE YEAR FROM THE FINAL ACCEPTANCE DATE. PROMPTLY REPLACE AND/OR REPAIR ANY EQUIPMENT OR WIRING PROVIDED UNDER DIVISION 16 DURING THE WARRANTEE PERIOD WITH NO ADDITIONAL COSTS TO THE OWNER.
12. PUMP CONTROL PANEL WILL BE FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED AND WIRING BY ELECTRICAL CONTRACTOR. CIRCUIT DIAGRAM AND DETAILS ARE PROVIDED FROM DATA RECEIVED FROM THE VENDOR, AND ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE. ACTUAL CIRCUITRY AND SPECIFIC DETAILS OF EQUIPMENT PROVIDED MAY VARY.

RENOVATION KEY NOTES

1. PROVIDE BURIED 1" C. FOR BACKFLOW PREVENTER, 2" C. FOR FLOAT CABLE AND 2'-2" C. FOR PUMPS FROM PUMP CONTROL PANEL.
2. BOND CHAIN LINK FENCE AND GATE TO BURIED GROUND COUNTERPOISE CONDUCTOR, UTILIZING EXOTHERMIC WELD CONNECTION (TYP.).
3. AN ELECTRICAL GROUNDING SYSTEM SHALL BE INSTALLED AS PER THE NATIONAL ELECTRICAL CODE, LOCAL CODES AND ORDINANCES. AN UNDERGROUND FEMURTER CABLE GROUNDING SYSTEM SHALL BE INSTALLED WITH CONNECTIONS TO AT LEAST METAL COVER, VALVE VAULT COVER, CONTROL PANELS, UTILITY COMPANY TRANSFORMER, MANUAL DISCONNECT SWITCH AND METAL FENCE. REFER TO GROUNDING DETAILS.
4. STRANDED TINED COPPER #2/0 COUNTERPOISE CONDUCTOR BURIED 30" MIN. BELOW FINISHED GRADE.
5. EXISTING RELOCATED LIGHT POLE AND EXPOSURE. EXTEND EXISTING SERVICE TO NEW POLE LOCATION (UTILIZE CONDUIT AND WIRE OF SAME SIZE AND TYPE AS EXISTING).

EQUIPMENT RACK INSTALLATION NOTES

1. ALL MOUNTING HARDWARE, BRACKETS AND ELECTRICAL ENCLOSURES SHALL BE 316 STAINLESS STEEL.
2. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED WIND LOAD CALCULATIONS FROM A STRUCTURAL ENGINEER LICENSED IN THE STATE OF FLORIDA. ELECTRICAL EQUIPMENT SERVICE RACK TO BE CERTIFIED PER FLORIDA BUILDING CODE.
3. ABOVE GRADE ALUMINUM OR STAINLESS STEEL CONDUIT TO BE TRANSLATED TO PVC SCHEDULE 80, ROUTED BELOW GRADE.
4. ALL CONTROL PANELS SHALL BE U.L. LABELED AND SHALL COMPLY WITH ARTICLE 409 OF THE N.E.C.
5. PUMP MOTOR CONDUIT SHALL BE SIZED TO MEET 409 CONDUIT FILL CODE REQUIREMENT. MINIMUM CONDUIT SIZE TO BE 2" SCH 80 PVC.
6. 3'-1" CONDUIT TO BE INSTALLED BETWEEN PUMP CONTROL PANEL AND SCADA PANEL. CONTRACTOR TO INSTALL CONDUIT AND PULL STRING ONLY - FINAL CONNECTIONS BETWEEN PUMP CONTROL PANEL AND SCADA PANEL BY OTHERS.
7. 2" CONDUIT TO MET WELL WITH 3 CONDUCTOR AND GROUNDING CABLES 4 - 2/C & GND. FLOAT SWITCH CABLES ARE FINISHED WITH PUMPS AND FLOAT SWITCHES INSTALLED AND WIRING UNDER THE CONTRACT.
8. ON A 4-WIRE, DELTA SYSTEM, THE HIGH-LEG SHALL BE IDENTIFIED WITH ORANGE COLOR TAPE AT ALL CONNECTION POINTS AND SHALL BE LOCATED ON THE "B" PHASE AT THE LINE SIDE OF THE MAIN DISCONNECT.
9. POWER SUPPLY SHALL BE UNDERGROUND ON THE LEFT STATION SITE AND SHALL BE 3-PHASE, FROM A 3-PHASE SOURCE ONLY, 100 AMP SERVICE MINIMUM.
10. COORDINATE/VERIFY WITH THE POWER CO. FOR UTILIZATION OF EXISTING ELECTRICAL POINT OF SERVICE.
11. REFER TO SCADA PANEL AND POLE DETAILS FOR CONDUIT REQUIREMENTS.
12. THE STATION NAME, ORANGE COUNTY I.D. NUMBER, AND ADDRESS SHALL BE AFFIXED TO THE FRONT OF THE METER CABINET.



AUGUSTO E. BOBES, JR., P.E.
 FLORIDA P.E. # 39410

BOBES ASSOCIATES
 CONSULTING ENGINEERS
 150 CIRCLE DRIVE, MAITLAND, FL 32751
 TELEPHONE: 407.628.0882
 FAX: 407.628.0882
 AUGUSTO E. BOBES, JR., P.E., P.L. NUMBER 39410

REV	DATE	DESCRIPTION
A	11/19/2019	ADDENDUM NO. 1

ORANGE COUNTY UTILITIES DEPARTMENT
 ENGINEERING DIVISION
 9150 CURRY FORD ROAD ORLANDO, FL 32825

NEEL-SCHAFFER SOLUTIONS YOU CAN BUILD UPON
 2801 Lucien Way, Suite 300
 Maitland, Florida 32751
 PH: (407) 628-6656

ELECTRICAL PLAN
 PS 3088
 EMERYWOOD

AUGUSTO E. BOBES, JR.
 PROFESSIONAL ENGINEER
 FLORIDA LICENSE # 39410

OCU FILE NO.: 79528
 DESIGNED BY: AZ
 DRAWN BY: AZ
 CHECKED BY: ABJ
 CADD FILE: E-202.DWG

SCALE: AS SHOWN
 DRAWING NO.: E-202
 SHEET: 45 OF 88