

MINGO COUNTY REDEVELOPMENT AUTHORITY  
MINGO COUNTY, WEST VIRGINIA

KERMIT AQUAPONICS FACILITY  
THRASHER PROJECT #101-030-3155

ADDENDUM #4  
January 25, 2019

Prospective Bidders:

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated January 2, 2019 and any prior addenda. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

ADDENDUM 3 CLARIFICATIONS:

1. Refer to Q10. Investigation Reports and note the following:  
Q10A: Yes. The geotechnical report is issued as a reference.  
Q10B: No. Neither a Phase I or Phase II ESA shall be required for this project.
2. Refer to Q12: Borrow Material and Spoils and note the following: The Contractor should bid the Earth-Moving based on the site being balanced with suitable soils within the LOD.
3. Refer to Spec Section 310513 Soils for Earthwork, 2.1 Subsoil Materials: The Contractor should bid the Earth-Moving based on the site being balanced with suitable soils within the LOD.
4. Refer to Spec Section 312000 Earth Moving, 3.2 Excavation General: The Contractor should bid the Earth-Moving based on the site being balanced with suitable soils within the LOD.

BIDDING REQUIREMENTS:

1. A revised Bid Form is included with this Addendum.

**SPECIFICATIONS:**

1. Revised Index is included with this Addendum.
2. ADDED: Casework Specification.
3. REVISED: Bat Gate Specification.

**DRAWINGS:**

1. The following drawing sheets are included with this Addendum:
  - C-7.0 – Site Plan
  - C-23.0 – Site Detail
  - C-25.0 – Site Detail
  - P1.01r – Plumbing Plans
  - E1.01r – Electrical Plans
  - SK1.01 – Pit Locations

**BIDDER QUESTIONS:**

- Q1: Does the pump need to be explosion proof? The Class 1 Group D reference on drawing C-22.0 seems to indicate that it is required?
- A1: The pumps don't need to be Explosion Proof. However, all conduit running from the control panel to the pump station needs to be provided with explosion proof seal offs as noted on the Typical Control Panel Detail. These seal offs eliminate flammable gasses from migrating from the wet well to the control panel and potentially creating a fire/explosion.
- Q2: Xylem does not recommend VFDs to be used with grinder pumps. They need full torque. Do you still require a VFD?
- A2: VFD's are not required for the pumps.
- Q3: It appears there is abundant confusion on the greenhouse construction. The Nelson Pade info in the spec reads as if they are supplying the greenhouse and the environmental control equip. After speaking with John Pade, I assume we are only providing a greenhouse from greenhouse vendor and not any Nelson Pade equipment. One greenhouse vendor has raised many questions about the contract documents. Please see their comments below. What is written (in 133419 Metal Bldg System) doesn't lend itself to match what is typically supplied by these greenhouse manufacturers? What are we to do, attempt to match the contract documents, or try to match the design intent for a greenhouse?

A3: Contractor shall provide and install the greenhouse and environmental control equipment. Various constraints forced the design of the greenhouse to be 'atypical' of what would be provided as a standard greenhouse. The specifications and drawings have been specifically tailored to the needs and constraints of this project. For this reason, Contractors must attempt to provide components consistent with the contract documents.

Q4: Is there any Aquaponics equipment supplied or installed via this contract?

A4: No aquaponics equipment is to be supplied or installed via this contract.

Q5: Does this project have to comply with American Iron & Steel?

A5: No.

Q6: Are there any domestic requirements for this project?

A6: No.

Q7: Refer to Specification (Bate Gate) Part 1 - General 1.1 Summary:

This work shall consist of de-watering the existing mine pool, excavating the mine opening, bat gate seal, and back-filling the opening to near original grade. It shall be constructed in accordance with typical details at the locations shown on the plans. Materials shall conform to those listed below. In mine portals where the face up on the portal will remain untouched the recommended Bat Gate Seal will be placed on the face of the portal with no pipe installed. Bat Gate Seals or portals to receive Bat Gate seal can only be excavated and installed from May 1 to August 31.

Q7A: In order to provide a bid proposal on the amount of de-watering necessary to install the Bat Gates, has a hydronic study and /or geotechnical study been conducted to indicate the volume of water each portal holds? The investigation reports & mining maps should identify the length, width and height of the portals.

A: Based on visual inspection of the portals it is not apparent that any mine pool is present in any of the portals. It is not anticipated that any water will be encountered during the installation of the bat gates however this language is left in the specification in the event that water is encountered. No hydronic or geotechnical study was performed at any of the portals.

Q7B: The amount of water to be removed from each portal is unknown. Has the design team provided any information as to how the portals are to be de-watered other than Article B. 1.3 Construction Methods?

A: See previous answer.

Q7C: Other than the mentioning of potential dangerous gases such as methane and black-damp, has the water in the portals been tested for any hazardous contaminants?

A: See previous answer.

Q7D: The work schedule at the portals is restricted to May 1 to August 31. The substantial completion time has been identified as June 1, 2019. Due to the complexity of the work and restrictions, there appears to be not enough calendar days to complete the work at the portals. How is this issue to be managed?

A: A month is sufficient time to install 4 bat gates. How it will be done is means and methods and is the sole responsibility of the Contractor. If it is deemed by all parties that more time is required to install the bat gates, the 30 days between Substantial Completion and Final Completion may be used at no penalty to the Contractor as these are not considered crucial for the operation and occupancy of the building.

Q8: Section 1.2 Bat Gate:

The bat gates shall conform to detail drawings as shown on the plans. The bat gates can be made of structural steel material. Contractor will submit shop drawings for approval by WVDEP prior to installation. There are several suppliers than can supply steel gates. Marine grade paint shall be applied to all steel on Bat Gates.

Q8A: The details on sheet C-25.0 indicates the width varies. Could the design team detail engineered drawings identifying precisely what lengths, heights and widths are required? Should this be a bid item based upon lineal foot as identified in article C. 1.4 Method of Measurement?

A: The exact dimensions will not be known until the portal openings are excavated. Therefore these dimensions cannot be provided. The intent is to have the bat gates to be bid as each and all items necessary to their installation shall be incidental to this item.

Q 8B: The specs state for the Contractor to submit shop drawings to WVDEP. Will the shop drawings be submitted to TTG for review and approval?

A: Yes, the spec has been revised.

Q8C: The specs state for the Contractor to submit shop drawings to WVDEP. Did the design team coordinate with WVDEP on the details provided on sheet C-25.0 prior to releasing the project out for bid?

A: Yes, the spec has been revised.

Q8D: Are there any review fees and permit fees required by WVDEP for reviewing the Bat Gate shop drawings?

A: The Bat Gate Spec has been revised to indicate the Engineer will review the shop drawings.

Q8E: Are there any inspection requirements by WVDEP prior to installing the Bat Gates and after the Bat Gates has been installed?

A: No.

Q9: Section 1.4 Method of Measurement A – G:

It appears many of the items mentioned in the method of measurement have not been identified on the bid form.

Q9A: Should there be a unit of measure on the bid form for de-watering?

A: Revised spec is included with this Addendum.

Q9B: Should there be a unit of measure on the bid form for wet mine seals?

A: Revised spec is included with this Addendum.

Q9C: Should there be a unit of measure on the bid form for modified mine seals?

A: Revised spec is included with this Addendum.

Q9D: Should there be a unit of measure for the material and construction of the structural steel for the Bate Gates on the bid form in lieu of each?

A: Revised spec is included with this Addendum.

Q10: Drawing C-18.0 shows a dumpster pad detail, however, none of the other civil drawings show where the dumpster pad is located. Would you please provide a location and size for the dumpster pad? Also will the dumpster pad require any fencing or bollards?

A10: No dumpster pad shall be required for this project.

Q11: Drawing C-23.0 calls for a concrete curb and gutter around the parking lot, however, there is no cross-section detail on the curb. Would you care to elaborate on the type of curb and gutter to be installed?

A11: Detail sheet has been revised to delete the curb and gutter and is attached to this addendum.

Q12: With respect to the gravel beds, is there any type of base (i.e., concrete, stone, etc.) required beneath the gravel beds?

A12: See response to Q2 in Addendum 03.

Q13: The width and heights of the gates are an unknown as far as we can see, and will vary. This brings up a few questions about bidding and some concern about the construction schedule.

a. The cost of these gates could go up or down with each change in width. The posts are at 4'-0" centers max, anything over 8'-0" wide would add another post, more length to the horizontals and so forth and so on.

b. The cost of these gates could go up or down "dramatically" with each change in height. Having to add additional horizontal pieces would be extremely expensive

and there could be many for what we know. We are supposed to bid a unit price for these gates, shouldn't we have a dimensioned size to go with as a basis for bid? Also, if they are an unknown until the holes are dug, they could not even be detailed until each one was ready, delaying the approval process and fabrication which in turn could delay the project completion time.

A13: The overall dimensions of these gates are dependent on the opening once it is excavated. Therefore the Engineer has no way to determine these dimensions prior to them being excavated. The Contractor should have the ability to visit the site and visually inspect each opening and make a determination as to what they feel the size of the gates will be. These are standard AML details and bidding methods for the WV DEP AML program.

Q14: Are the gates to be fully shop assembled or are they to be field assembled to some extent?

A14: The intent would be for them to be shop assembled to the extent possible and the remainder to be field assembled.

Q15: What tubing is the note in the rectangle box referring to that is to be 4" cc max?

A15: That is the 4" x 4" x 3/8" steel uprights and the detail should say 4'oc Max.

Q16: The "Horizontal's" are called out as angle 4 x 4 but the dimensions provided in the detail show 6 x 6?

A16: The detail has been revised for clarification and is attached to this addendum.

Q17: Are the dimensions called out in the detail critical? Steel is not perfect and if these have to be held exactly, the steel may need to be milled?

A17: Although dimensions are not critical, dimensions need to be as close to indicated as practical within acceptable tolerances.

Q18: We cannot determine where the extension lines for the dimensions on the detail point to?

A18: The detail has been revised for clarification.

Q19: The embedment detail says to be approved by the engineer. For all we know, that length could get much longer than it appears to show. Could the engineer approve a length in advance of bidding?

A19: The overall dimensions of these gates are dependent on the opening once it is excavated. Therefore the Engineer has no way to determine these dimensions prior to them being excavated. The Contractor should have the ability to visit the site and visually inspect each opening and make a determination as to what they feel the size of the gates will be. These are standard AML details and bidding methods for the WV DEP AML program.

Q20: Are the diagonal cross lines in the detail "break lines"?

A20: Yes.

Q21: What are the marks on the top tube to the left in the elevation?"

A21: The detail has been revised for clarification.

Q22: Please provide a casework specification.

A22: A casework specification is attached to this addendum.

Q23: Please indicate the material for the countertops?

A23: Countertops shall be plastic laminate in the Breakroom and stainless steel elsewhere.

Q24: Sheet C-1.0: General Notes:

Q24A: Note 10: All unsuitable and excess material shall be removed from site at the responsibility of the Contractor.

A: In Addendum # 3 the response to this question was, "In the event, the Contractor should be able to borrow or waste within LOD to balance the site".

Q24B: Will concrete and masonry spoils be permitted to be spoiled on site and what would be the minimal size of the materials to be spoiled, if permissible to be spoiled?

A: No concrete or masonry spoils will be permitted to be spoiled onsite.

Q24C: Note 14: All disturbed areas must be seeded and mulched after construction has been completed. Before seeding takes place, the disturbed areas shall be graded to a smooth line. All sod areas shall receive 6" of topsoil and planting areas shall receive 12" according with landscaping plans. (Topsoil must not contain aggregate larger than 1"). Topsoil can be found on site. If more topsoil is needed, a borrow pit can be designated.

Question: Based upon the lay-out plans and geo-tech reports has the EOR determined enough topsoil is available on site to perform the scope of work as identified within this General Note or will an off-site borrow pit be required?

A: It is expected that there will be a suitable amount of topsoil available and no offsite borrow area will be necessary.

Q24D: Cannot seem to locate a landscaping plan to determine the quantities required for 12" of topsoil installation, could this area be defined?

A: No landscaping plan is available. Please price this work based on 6" of topsoil to be placed on all disturbed areas that are to be vegetated following construction.

Q24E: Note: 16: In the event an error with the plans seems apparent, the matter must be taken up with the Engineer for careful review before proceeding with construction.

Question: What if an error with the plans is discovered while performing the construction, will the Contractor be reimbursed by the Engineer or Owner and



would the cost of the error be covered by Error & Emission Insurance coverage from the Engineering Firm or by the General Contractor?

A: If any error is discovered on the plans at any time the Contractor shall notify the Engineer through the RFI process to get it resolved. Compensation will occur as outlined in the Contract.

Q24F: Note 18: Contractor is responsible for obtaining borrow material for site if applicable. Contractor must obtain all applicable permits for borrow site, which includes all State, Federal, County or Local permits.

In Addendum # 3 the response to this question was, "In the event, the Contractor should be able to borrow or waste within LOD to balance the site".

Question: For bidding purposes are we assume the materials are available on site and no borrow site will be required?

A: Contractor should bid the Earth-Moving based upon a balanced site.

Q24G: Note 17. States, "All permits must be secured prior to construction. These permits will be required by the Owner." Should the permit for a borrow site be required by the Owner as well?

A: No.

Q25: Sheet C-1.0: Erosion and Sediment Controls Notes:

Q25A: Who is responsible for conducting the daily written reports and giving directives to perform the maintenance of the erosion controls per the requirements of the existing NOI permit WVR108868?

A: The Contractor shall be responsible for the work described.

Q25B: Who is responsible for the closure of the existing NOI permit WVR108868?

A: The Owner shall be responsible for this work.

Q25C: Who is responsible for the renewal of the existing NOI permit WVR108869, should the permit need to be extended?

A: The Owner shall be responsible for this work.

Q25D: Were the bidding documents stamped 1-4-2019 by Civil Engineer from TTG used to establish the existing NOI permit WVR108868?

A: Yes

Q26: Contacts on Sheet C-1.0 Utilities

Q26A: Has a work order been established for the underground gas service?

A: No

Q26B: If a work order has been established for the gas service, could the work order be included in the addendum for review by General Contractors?

A: N/A

Q26C: Who is responsible for the fees for the gas service?

A: The Contractor shall be responsible for the work described.



Q26D: Has a work order been established for the electrical service?

A: No

Q26E: If a work order has been established for the electric service, could the work order be included in the addendum for review by General Contractors?

A: N/A

Q26F: Who is responsible for the fees for the electrical service?

A: The Contractor shall be responsible for the work described.

Q26G: Has a work order been established for the underground water service?

A: No

Q26H: If a work order has been established for the water service, could the work order be included in the addendum for review by General Contractors?

A: N/A

Q26I: Who is responsible for the fees for the water service?

A: The Contractor shall be responsible for the work described.

Q26J: Has a work order been established for the underground sanitary service?

A: No

Q26K: If a work order has been established for the sanitary service, could the work order be included in the addendum for review by General Contractors?

A: N/A

Q26L: Who is responsible for fees of the sanitary service?

A: The Contractor shall be responsible for the work described.

Q26M: Will communication be required?

A: Communications typically refer to intercom systems. No intercom systems are being used on this project. Standard telephone and data systems shall be provided in accordance with the contract documents.

Q26N: Has a work order been established for the communication service?

A: No

Q26O: If a work order has been established for communication service, could the work order be included in the addendum for review by General Contractors?

A: N/A

Q26P: Who is responsible for the fees of the communication service?

A: The Contractor shall be responsible for the work described.

Q27: Sheet C-2.0:

Line Item # 4 - Description - Unit CY - Quantity 1,914

Clarification: To avoid an unnecessary surprise to the Owner of the actual billing of the line item once under construction. We request the EOR to review the following: The quantities identified for bidding do not add up to the quantities being requested per the Scope of Work description with the plans and specifications. Please clarify.

A27: Quantities listed are estimates for bidding purposes only. Contractor shall be responsible to verify their own quantities and bid accordingly.

Q28: Sheet C-3.0

Old Gas Line Found Assumed Inactive.

Q28A: Does the gas line found interfere with new construction?

A: No

Q28B: Who is responsible for the fees associated with the relocation of the assumed inactive gas line found should the gas line be within the LOD?

A: N/A

Q29: Sheet C-4.0 Existing gas line to be relocated by others prior to excavation

Q20A: Has the relocation of the existing gas line already been accomplished?

A: No. This work is anticipated to be completed between 02/18-03/11.

Q29B: Will the relocation of the existing gas line be relocated within the 90 day bid hold period or sooner?

A: See response above.

Q30: Sheet C-6.0

Note 6: No earthwork activities are planned for bate gate installation areas.

Will sediment and holding ponds be required for dewatering the portals if water table of the portals is higher than the proposed elevations of the bate gate concrete footing and piping?

A: Dewatering, if necessary will need to be done in accordance with WV DEP BMP manual.

Q31: Sheet C-7.0

Appears there are (2) two existing R/W Existing Right-Of-Way running through the existing building footprint.

Q31A: What actions is required by the Contractor or Owner to construct the proposed building over or under an existing R/W?

A: The R/W lines shown are the limits of the existing gasline R/W that is to be relocated. The R/W extents will move with the relocation.

Appears the proposed water line is designed to be installed under the existing caboose location.

Q31B: Who is responsible for the relocation of the caboose?

A: The intent would be to avoid the caboose with the water line. A revised sheet C-7.0 has been provided.

Q31C: Is excavation through railroad tracks required to install the force main and water line?

A: No

Proposed Solar Panel Location

Q31D: Please define the scope of work for solar panels and who is responsible for the solar panel location scope of work?

A: The proposed solar panels are future development and are not part of this contract.

Q32: Sheet C-8.0

Q32A: Will access roads be required to perform the (2) proposed bat gate mine seals?

A: No access roads are planned for this work.

Q32B: Will a bid line item for access roads be required on the bid form?

A: No access roads are planned for this work.

Q32C: Will the access roads be permitted to remain in place?

A: No access roads are planned for this work.

Q33: Sheet C-9.0

Q33A: Will access roads be required to perform the (2) proposed bat gate mine seals?

A: No access roads are planned for this work.

Q33B: Will a bid line item for access roads be required on the bid form?

A: No access roads are planned for this work.

Q33C: Will the access roads be permitted to remain in place?

A: No access roads are planned for this work.

Q34: Sheet C-18.0 Typical Sidewalk Section and Parking Area Pavement Section

Q34A: Clarification: No concrete curbs or curb & gutter required on the project. Is this correct?

A: Correct

Q34B: Clarification: No turn-down sidewalks required on this project. Is this correct?

A: Correct

Q35: Sheet C-21.0 Proposed Aquaponics Lift Station

Reviewed the civil plan sheets and plumbing plan sheets and cannot locate where the proposed aquaponics lift station is to be installed. Who is responsible for the complete and operational proposed aquaponics lift station and key notes 1018?

A: The lift station is shown just off of the western corner of the proposed building on sheet C-7.0. The Contractor will be responsible for the installation of the proposed lift station.

Q36: Sheet C-23.0

Clarification: Reviewing the trench back-fill details, other than splash block, there are no details requiring lean concrete and concrete back-fill for all underground utilities. Is this correct?

A: Yes

Q37: Sheet S001

Q37A: Construction Means & Methods Note: 3 ADS Consulting Engineering shall not have control over or charge of and shall not be responsible in any way for construction means, methods, techniques, sequences, or procedures, or safety or safety precautions and programs in connection with any construction activities, since these are solely Contractor's responsibility under the Contract.

Is ADS or The Thrasher Group the Structural Engineer of Record?

A: ADS is the Structural Engineer of Record and as such, is only responsible for the foundation work.

Q37B: Construction Means & Methods Note 4: ADS Consulting Engineers shall not be responsible for Contractor's schedule or failures to carry out any construction activities in accordance with the Contract Documents. ADS Consulting Engineers shall not have control over or charge of action of Contractor, Subcontractor, or any of their Agents, or employees, or any other persons performing portions of any construction activities.

Is ADS or The Thrasher Group the Structural Engineer of Record?

A: ADS is the Structural Engineer of Record – only responsible for the foundation work.

Q38: In lieu of water and burlap, will cure and seal application be permitted as an alternate means for curing?

A38: Cure and seal application is acceptable, but seal data will need to be submitted for review.

Q39: Cast-In-Place Concrete Note 23: Preparing, curing, transporting, and testing concrete cylinders. For each class of concrete placed, at least four cylinders shall be taken for each 50 cubic yards, or fraction thereof, of each class of concrete placed each day. Cylinders are to be taken in accordance with ASTM C31 and results shall be submitted to the Architect/Engineer, Construction manager and owner. Two cylinders will be tested at 7 days and two at 28 days.

Clarification: Owner is responsible for testing as per Note 21 on Sheet C-1.0. Is this correct?

A39: Correct.

Q40: Performance Requirements Note 16: General Contractor shall review and coordinate elevator rail and hoist requirements with structural drawings. Notify structural engineer immediately if changes are required. Is this note applicable to this project?

A40: Not applicable.

Q41: Foundations Note 1: Foundation design is based on the recommendations from the geotechnical report prepared by Environmental & Geotechnical Engineering Solutions, report number W17011 dated February 2017. Geotechnical Report shall be part of the bid documents and shall govern over any conflicting information on other documents. Structural Engineer is not responsible for subsurface conditions encountered in the field different from those assumed for design.

Q41A: Is the geotechnical report number W17011 dated February 2017 for reference material only?

A: Geotechnical report is for reference only.

Q41B: Will Environmental & Geotechnical Engineering Solutions be providing the quality controls for the Owner as per note 21 on Sheet C-1.0?

A: The Owner shall be responsible for providing these quality control services.

Q42: Foundations Note 3: Notify the Architect of any unusual soil conditions that are in variance with the test borings, such as ground water, substandard bearing material, or obstructions.

Q42A: Will the contractor be paid for any dewatering of ground water or natural springs that would hinder the excavation activities?

A: No dewatering is anticipated.

Q42B: Will the contractor be paid for any over excavation for substandard bearing material?

A: If the building pad is brought to level per the Contract Documents, the material will be suitable for bearing.

Q42C: Will the contractor be paid for any excavation of obstructions including boulders in which the equipment on site may have to be up sized in order to excavate, lift and haul away?

A: No.

Q43: Foundations Note 11: When excavations approach the found water level, the water level shall be continuously lowered by an acceptable dewatering system so that the water level is maintained continuously a minimum of 2'-0" below excavation.

Should there be a bid item with a unit of measure on the bid form to cover this note?

Foundations Note 12: Shale containing pyrites must be protected as indicated in the Geotechnical Report.

Clarification: Please provide additional information to clarify the direction to be taken to protect the pyrites.

A43: See geotechnical report for more clarification, if applicable.

Q44: Sheet S100 Ground Floor Plan

Within the perimeter of the proposed gravel bed, shall the turn-down of the concrete slab be any deeper than the 5" concrete slab noted?

A44: Gravel beds are in the interior of the building so no turn-down slab is needed in those areas.

Q45: Sheet A1.01 Floor Plan

Clarification: The dimension from center of column line to center of next column is 10'-0" and is typical from column line 1 - 25. Is this correct?

A45: Dimensions are as indicated.

Q46: Sheet A1.01 Floor Plan

Clarification: There appears to be an FEC identified between column line 15 & 16 and column line B & C. Please provide additional information on mounting requirements.

A46: For bidding purposes, assume fire extinguisher may be bracket mounted on either column 15, or 16. No cabinet is required. Final locations and quantities of fire extinguishers and cabinets shall be determined by AHJ.

Q47: Sheet P1.01

Who is responsible for the plumbing connections to the Aquaponics equipment?

A47: Contractor shall be responsible for final connections to Owner supplied aquaponics equipment.

Q48: MEP General Gas Piping Notes: All natural gas piping shall be primed and painted two coats yellow unless noted otherwise.

Does all refer to interior gas line piping as well?

A48: Yes

Q49: Mechanical: Are we to include Testing & Balancing by a third party contractor?

A49: Yes

Q50: Sheet E2.01

Who is responsible for the electrical connections to the Aquaponics equipment?

A50: Contractor to provide final connection to all Owner supplied aquaponics equipment.

Q51: Electrical: Shall all the overhead and in-wall electrical rough-in be installed with EMP or will MC cable be permissible since MC cable meets Electrical Code?

A51: MC Cable is acceptable in the office and processing areas where it's installed per NEC. Conduit shall be used in the greenhouse and aquaponics area.

Q52: Sheet E1.01 G1 Light Fixtures Clarification

Clarification: The G1's are being provided by others, for clarification they are being installed by others as well. Is this correct?

A52: G1's are being supplied by others. Installation and final connections shall be made by Contractor

Q53: Specification 133419 Metal Building Systems & supporting documentation and specification pages 1-7 provided by Nelson Pade.

Do these two specifications go hand in hand and will the "Delegated Design" trump the structural & Architectural notations and details provided on the drawings?

A53: Yes. These two documents are meant to be used in conjunction. Delegated Design drawings must be submitted for review by EOR and AOR.

Q54: Section: 074293 Soffit Panels

Could the soffit panels be provided by the Greenhouse Manufacturer to keep the building components consistent?

A54: Contractor is ultimately responsible for sourcing all materials applicable to this project. All sourced materials must be submitted to the AOR/EOR for review. If the greenhouse manufacturer is able to supply soffit panels that meet the requirements of the contract documents, they will be considered, but not guaranteed to be accepted.

Q55: It is of our opinion not enough time has been allotted to perform the construction activities for this size of project. The response to a past question about minimizing the bid hold period was denied, however the bid was extended and the substantial completion date remains the same. It is unlikely the submittal process will be completed by June 1, 2019, much less the overall construction activities. A question was submitted, " should the contractor include in their proposal monies for an accelerated schedule. The response was no.

Clarification: Please clarify on how a contractor is to submit a proposal based upon a bid hold period of 90 days should the substantial completion date of June 1, 2019 remain. Assuming, per specifications, the submittal procedure will consume the first 45 days of the contract from the Notice to Proceed, time-line for delegated design requirements on the building structure itself, and time-line for manufacturing the building and the comment of no accelerated schedule is wanted by the Owner.



Q55A: Does the Owner want the contractor to include the liquidated damage amount of \$500.00 a day times the number of days the General Contractor schedules within his bid days?

A: It is not the intention of the Owner to place any undue burden on the Contractor with regards to the schedule of this project. However, the Contractor reserves the right to bid the project in any way they see fit, assuming compliance with the Contract documents.

Q55B: Question: Should there be another line item identifying the liquidated damage lump sum anticipated by the General Contractor?

A: No such line item will be added to the Bid Form as described. If the Contractor chooses to include this cost in their bid, they will do so at their sole discretion and distribute this cost as they see fit.

Q56: After having gone thru this thoroughly, there are several issues that need to be addressed and an addendum done right away.

I will state as follows:

Q56A: 1) Specifications under "Roll up curtain side vent" calls for:

1---10' x 138' curtain. There should be 2, one for each side.

1---10' x 38' curtain. That is correct. That goes on southeast sidewall.

1---10' x 18' curtain. There should be 2, one for each side.

1---10' x 58' curtain. That is wrong size. That should be 10' x 30'.

A: Only (2) 10' x 138' curtains are required. The others may be omitted. The West wall of the greenhouse portion is a drywall assembly and the East wall is opaque metal panel.

Q56B: 2) Specifications for doors call for:

2—6068 double swing doors. That is wrong. There should be 3. One is located on northwest sidewall to allow fishtanks to be moved into house.

A: Provide exterior doors as indicated on plans.

Q56C: 2—3068 single swing doors. That is correct, however placement is not shown correctly on drawing.

A: Provide exterior doors as indicated on plans.

Q57: On page 34 of architecture drawings, (Sheet #A3.02), the following items are called out and are incorrect in each view.

Q57A: a) Batt insulation by greenhouse mfr. There is no batt insulation and cannot be. Double bubble insulation is provided by greenhouse manufacturer.

A: Provide insulation of type and thickness adequate to meet minimum energy efficiency requirements for metal buildings; ASHRAE 90.1-2007 Addendum G.

Q57B: b) Metal soffit panel by greenhouse mfr. There is no soffit on a greenhouse.

- A: The design of this building includes a covered porch area requiring metal soffit. If the greenhouse manufacturer is unable to supply this material, the Contractor shall be responsible for providing and installing this material from another source.
- Q57C: c) Liner panel by greenhouse mfr. There is no liner panel supplied by greenhouse mfr. There are columns spaced 10' apart and corrugated metal max rib with double bubble insulation on the metal portion of greenhouse and 8mm twinwall polycarbonate on the polycarbonate section of the greenhouse.
- A: Exposed insulation will not be an acceptable interior finish for the office/processing/packaging areas of the building. An interior finish must be provided. The design intent was for a standard metal building liner panel to be used. If the greenhouse manufacturer is unable to provide this material, the Contractor shall be responsible for providing and installing this material from another source.
- Q57D: d) Standing seam roof. This may be just verbiage, but for clarification, on the metal portion of the roof, it is corrugated max rib metal.
- A: If the greenhouse manufacturer is unable to provide a standing seam roofing system for the metal portion, the Contractor shall be responsible for providing and installing this material from another source.

Sincerely,



THE THRASHER GROUP, INC.

Josh Lyons  
Architect



**MINGO COUNTY REDEVELOPMENT AUTHORITY  
MINGO COUNTY, WEST VIRGINIA  
KERMIT AQUAPONICS FACILITY**

**Thrasher Project # 101-030-3155**

**BID FORM**

**ARTICLE 1 – BID RECIPIENT**

- 1.01 This Bid is submitted to:

***MINGO COUNTY REDEVELOPMENT AUTHORITY  
1657 E. 4<sup>TH</sup> AVENUE  
WILLIAMSON, WV 25661***

- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

**ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS**

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

**ARTICLE 3 – BIDDER’S REPRESENTATIONS**

- 3.01 In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

**Addendum No.**

**Addendum Date**

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |
|  |  |

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

#### **ARTICLE 4 – BIDDER'S CERTIFICATION**

##### **4.01 Bidder certifies that:**

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
  - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
  - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

## ARTICLE 5 – BASIS OF BID

### GENERAL

The Bidder shall take notice of and shall be responsible for any local or state taxes levied and applicable, and the cost for the same shall be included as part of the submitted Bid.

The total Bid cost stated includes a complete operating installation including furnishing and installation of any and all changes or additions in plans, piping, mechanical work, additional electrical work, accessories, controls, etc. necessary to accommodate alternative equipment systems or materials used in construction.

### **BID PROPOSAL**

The Bidder agrees to perform all required Work described in the detailed Specifications and as shown on the Plans for the complete construction. The Project "Sequence of Construction" has been detailed in the Drawings and Specification Division 1, Project Summary, Section 1010, Part-2 Execution. The Bidder agrees to perform all the Work proposed for the total of the following Bid prices.

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

**PROPOSED  
MINGO COUNTY REDEVELOPMENT AUTHORITY  
MINGO COUNTY, WEST VIRGINIA  
KERMIT AQUAPONICS FACILITY**

**Thrasher Project # 101-030-3155**

### **BID SCHEDULE**

***NOTE: Bid Unit PRICE amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern. Bids shall include sales tax and all other applicable taxes and fees.***

| Item # | Qty. | UNIT | DESCRIPTION                                                      | UNIT PRICE | UNIT PRICE WRITTEN IN WORDS | TOTAL PRICE |
|--------|------|------|------------------------------------------------------------------|------------|-----------------------------|-------------|
| 1      | 1    | LS   | MOBILIZATION / DEMOBILIZATION                                    |            |                             |             |
| 2      | 1    | LS   | PRE-CONSTRUCTION VIDEO OF PROJECT AREA (LESS THAN 10% TOTAL BID) |            |                             |             |
| 3      | 1    | LS   | EROSION & SEDIMENT CONTROL (SEWER AND WATERLINE)                 |            |                             |             |

| Item # | Qty.  | UNIT | DESCRIPTION                                  | UNIT PRICE | UNIT PRICE WRITTEN IN WORDS | TOTAL PRICE |
|--------|-------|------|----------------------------------------------|------------|-----------------------------|-------------|
| 4      | 1,914 | CY   | BUILDING OVER-EXCAVATION                     |            |                             |             |
| 5      | 1     | LS   | CLEARING & GRUBBING (LESS THAN 5% TOTAL BID) |            |                             |             |
| 6      | 400   | CY   | EARTHWORK                                    |            |                             |             |
| 7      | 1     | EA   | STABILIZED CONSTRUCTION ENTRANCE             |            |                             |             |
| 8      | 132   | LF   | 18" HDPE STORM DRAIN                         |            |                             |             |
| 9      | 100   | LF   | ROCK LINED DITCH                             |            |                             |             |
| 10     | 225   | LF   | GRASS LINED DITCH                            |            |                             |             |
| 11     | 3     | EA   | ROCK OUTLET PROTECTION                       |            |                             |             |
| 12     | 2     | EA   | CONCRETE HEADWALL                            |            |                             |             |
| 13     | 560   | LF   | SUPER SILT FENCE                             |            |                             |             |
| 14     | 2,035 | SY   | FABRIC FOR SEPARATION                        |            |                             |             |

| Item # | Qty.  | UNIT | DESCRIPTION                                 | UNIT PRICE | UNIT PRICE WRITTEN IN WORDS | TOTAL PRICE |
|--------|-------|------|---------------------------------------------|------------|-----------------------------|-------------|
| 15     | 163   | TN   | HMA WEARING COURSE, TYPE I                  |            |                             |             |
| 16     | 325   | TN   | HMA BASE COURSE, TYPE II                    |            |                             |             |
| 17     | 452   | CY   | AGGREGATE BASE COARSE, CLASS 1              |            |                             |             |
| 18     | 1     | LS   | PARKING LOT STRIPING                        |            |                             |             |
| 19     | 100   | SY   | CONCRETE SIDEWALK                           |            |                             |             |
| 20     | 1,168 | LF   | 2" PVC C-900 WATERLINE                      |            |                             |             |
| 21     | 1,168 | LF   | 4" SCH. 80 PVC CASING WITH SPACERS          |            |                             |             |
| 22     | 1     | EA   | 1-1/4" PRESSURE INLINE CLEANOUT             |            |                             |             |
| 23     | 1     | EA   | 1-1/4" COMBINATION VACUUM/AIR RELEASE VALVE |            |                             |             |
| 24     | 1     | EA   | WATER METER SETTING                         |            |                             |             |
| 25     | 2     | EA   | 2" GATE VALVE COMPLETE WITH BOX AND LID     |            |                             |             |



| Item # | Qty.  | UNIT | DESCRIPTION                                                                    | UNIT PRICE | UNIT PRICE WRITTEN IN WORDS | TOTAL PRICE |
|--------|-------|------|--------------------------------------------------------------------------------|------------|-----------------------------|-------------|
| 26     | 1     | EA   | WATER LINE TIE-INS, COMPLETE                                                   |            |                             |             |
| 27     | 1,090 | LF   | 1.25" PVC SDR-17 CL 250 FORCEMAIN                                              |            |                             |             |
| 28     | 20    | LF   | 8" SDR-35 SEWER LINE                                                           |            |                             |             |
| 29     | 1     | EA   | 8" SDR-35 SANITARY CLEANOUT                                                    |            |                             |             |
| 30     | 1     | LS   | LIFT STATION, COMPLETE IN PLACE                                                |            |                             |             |
| 31     | 1     | EA   | CONNECT TO EXISTING MANHOLE                                                    |            |                             |             |
| 32     | 1     | AC   | SEEDING AND MULCHING                                                           |            |                             |             |
| 33     | 32    | LF   | 2" HDPE GAS LINE                                                               |            |                             |             |
| 34     | 20    | LF   | 6" STEEL CASING                                                                |            |                             |             |
| 35     | 4     | EA   | STANDARD BAT GATE                                                              |            |                             |             |
| 36     | 1     | EA   | BUILDING PACKAGE<br>(Including all MEP, cladding, foundations, finishes, etc.) |            |                             |             |

---

**TOTAL BID:** \_\_\_\_\_

\_\_\_\_\_ (\$ \_\_\_\_\_)

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(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

**NOTE: THE CONTRACTOR'S UNIT PRICES SHALL INCLUDE PURCHASE AND INSTALLATION, COMPLETE IN PLACE, PER BID ITEM IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS.**

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

**METHOD OF AWARD**

If at the time this contract is to be awarded, the lowest total bid submitted by a qualified, responsible Bidder does not exceed the amount of funds then estimated by the Owner, as available to finance the Contract; the construction contract will be awarded. If such bids exceed such amount, the Owner may reject all bids. The Owner may award the contract on the total bid submitted by a qualified responsible Bidder.

**ARTICLE 6 – TIME OF COMPLETION**

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

**ARTICLE 7 – ATTACHMENTS TO THIS BID**

- 7.01 The following documents are submitted with and made a condition of this Bid:
- A. Bid Opening Requirements

**ARTICLE 8 – DEFINED TERMS**

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

## ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

\_\_\_\_\_

By:

*[Signature]*

\_\_\_\_\_

*[Printed name]*

\_\_\_\_\_

*(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest:

*[Signature]*

\_\_\_\_\_

*[Printed name]*

\_\_\_\_\_

Title:

\_\_\_\_\_

Submittal Date:

\_\_\_\_\_

Address for giving notices:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone Number:

\_\_\_\_\_

Fax Number:

\_\_\_\_\_

Contact Name and e-mail address:

\_\_\_\_\_

\_\_\_\_\_

Bidder's License No.:

\_\_\_\_\_

*(where applicable)*

**NOTE TO USER:** *Use in those states or other jurisdictions where applicable or required.*

**MINGO COUNTY REDEVELOPMENT AUTHORITY  
MINGO COUNTY, WEST VIRGINIA  
FOR THE  
KERMIT AQUAPONICS FACILITY**

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## SECTION 123216 - MANUFACTURED PLASTIC-LAMINATE-CLAD CASEWORK

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes plastic-laminate-clad cabinets of stock design.

#### 1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For plastic-laminate-clad casework.
- C. Samples: For casework and hardware finishes.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Quality Standard Compliance Certificates: AWI Quality Certification Program.
- B. Sample warranty.

#### 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

#### 1.6 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of casework that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Five years from date of Substantial Completion.



## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Advanced Cabinet Systems (ACS).
  2. Chandler Plywood Products.
  3. Diversified Fixture.
  4. Hausmann Industries, Inc.
  5. Mica-Tec.
  6. Plastic Sales Corp.
  7. Terrill Manufacturing Company.
  8. Windham Millwork, Inc.
  9. PR Bean Casework

### 2.2 CASEWORK, GENERAL

- A. Quality Standard: Unless otherwise indicated, comply with the AWI/AWMAC/WI's "Architectural Woodwork Standards" for grades of casework indicated for construction, finishes, installation, and other requirements.
1. Grade: Custom.
  2. Provide inspections of casework fabrication and installation together with labels and certificates from AWI certification program indicating that casework complies with requirements of grades specified.
- B. Product Designations: Drawings indicate sizes, configurations, and finish materials of manufactured plastic-laminate-clad casework by referencing designated manufacturer's catalog numbers. Other manufacturers' casework of similar sizes and door and drawer configurations, of same finish materials, and complying with the Specifications may be considered. See Section 016000 "Product Requirements."
- C. Product Designations: Drawings indicate configurations of manufactured plastic-laminate-clad casework by referencing designations of Casework Design Series numbering system in Appendix A of the AWI/AWMAC/WI's "Architectural Woodwork Standards."

### 2.3 PLASTIC-LAMINATED-FACED CABINETS

- A. Design: Frameless cabinet construction with the following door and drawer-front style:
1. Flush overlay.
- B. Grain Direction for Wood-Grain Plastic Laminate:
1. Doors: Vertical with continuous vertical matching.

2. Drawer Fronts: Vertical with continuous vertical matching.
3. Face Frame Members: Lengthwise.
4. End Panels: Vertical.
5. Bottoms and Tops of Units: Side to side.
6. Knee Space Panels: Vertical.
7. Aprons: Horizontal.

C. Exposed Materials:

1. Plastic-Laminate Grade: VGS.
  - a. Colors and Patterns: As selected by Architect from manufacturer's full range.
2. Edgebanding: Plastic laminate matching adjacent surfaces.
3. Solid Wood: Clear hardwood lumber of species indicated, selected for compatible grain and color.
  - a. Wood Finish: As selected by Architect from casework manufacturer's full range.

D. Semiexposed Materials:

1. Plastic Laminate: Grade VGS unless otherwise indicated. Provide plastic laminate for semiexposed surfaces unless otherwise indicated.
  - a. Colors and Patterns: As selected by Architect from manufacturer's full range.
  - b. Provide plastic laminate of same grade as exposed surfaces for interior faces of doors and drawer fronts and other locations where opposite side of component is exposed.
2. Hardboard: Use only for cabinet backs where exterior side of back is not exposed.
3. Metal for Steel Drawer Pans: Cold-rolled, carbon-steel sheet complying with ASTM A 1008/A 1008M; matte finish; suitable for exposed applications.
4. Unless otherwise indicated, provide specified edgebanding on all semiexposed edges.

E. Concealed Materials:

1. Solid Wood: With no defects affecting strength or utility.
2. Plywood: Hardwood plywood.
3. Plastic Laminate: Grade BKL.
4. Particleboard.
5. MDF.
6. Hardboard.

2.4 MATERIALS

- A. Maximum Moisture Content for Lumber: 7 percent for hardwood and 12 percent for softwood.
- B. Hardwood Plywood: HPVA HP-1, particleboard core except where veneer core is indicated.

- C. Softwood Plywood: DOC PS 1.
- D. Particleboard: ANSI A208.1, Grade M-2.
- E. MDF: Medium-density fiberboard, ANSI A208.2, Grade 130.
- F. Hardboard: ANSI A135.4, Class 1 tempered.
- G. Plastic Laminate: High-pressure decorative laminate complying with NEMA LD 3.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Arborite.
    - b. Formica Corporation.
    - c. Lamin-Art, Inc.
    - d. Nevamar; a Panolam Industries International, Inc. brand.
    - e. Pionite, a Panolam Industries International, Inc. brand.
    - f. Wilsonart LLC.
  - 2. Finish: Match Architect's sample.
- H. PVC Edgebanding for Plastic Laminate: Rigid PVC extrusions, through color with satin finish, 0.12 inch thick at doors and drawer fronts, 0.04 inch thick elsewhere.

## 2.5 CASEWORK HARDWARE AND ACCESSORIES

- A. Hardware, General: Unless otherwise indicated, provide manufacturer's standard satin-finish, commercial-quality, heavy-duty hardware.
  - 1. Use threaded metal or plastic inserts with machine screws for fastening to particleboard except where hardware is through-bolted from back side.
- B. Frameless Concealed Hinges (European Type): BHMA A156.9, Type B01602, self-closing.
- C. Wire Pulls: Solid stainless-steel wire pulls, fastened from back with two screws.
- D. Door Catches: Powder-coated, nylon-roller spring catch or dual, self-aligning, permanent magnet catch.
- E. Door and Drawer Bumpers: Self-adhering, clear silicone rubber.
- F. Drawer Slides: BHMA A156.9, Type B05091.
- G. Adjustable Shelf Supports: Single-pin metal shelf rests complying with BHMA A156.9, Type B04013.

### PART 3 - EXECUTION

#### 3.1 CASEWORK INSTALLATION

- A. Grade: Install casework to comply with same quality standard grade as item to be installed.
- B. Install casework level, plumb, and true in line; shim as required using concealed shims. Where casework abuts other finished work, apply filler strips and scribe for accurate fit, with fasteners concealed where practical.
- C. Base Cabinets: Set cabinets straight, level, and plumb. Adjust subtops within 1/16 inch of a single plane. Align similar adjoining doors and drawers to a tolerance of 1/16 inch. Bolt adjacent cabinets together with joints flush, tight, and uniform.
- D. Wall Cabinets: Hang cabinets straight, level, and plumb. Adjust fronts and bottoms within 1/16 inch of a single plane. Fasten cabinets to hanging strips, masonry, framing, wood blocking, or reinforcements in walls and partitions. Align similar adjoining doors to a tolerance of 1/16 inch.
- E. Fasten casework to adjacent units and to masonry, framing, wood blocking, or reinforcements in walls and partitions to comply with the AWI/AWMAC/WT's "Architectural Woodwork Standards."
- F. Install hardware uniformly and precisely. Set hinges snug and flat in mortises unless otherwise indicated. Adjust and align hardware so moving parts operate freely and contact points meet accurately. Allow for final adjustment after installation.
- G. Adjust operating hardware so doors and drawers operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.
- H. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.

END OF SECTION 123216

Mingo County Redevelopment Authority  
Kermit Aquaponics Facility  
101-030-3155

ADDED  
Addendum No. 4  
January 25, 2019

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## BAT GATES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This work shall consist of dewatering the existing mine pool if water is present, excavating the mine opening, installing a standard bat gate seal, and backfilling the opening to near original grade. It shall be constructed in accordance with the typical details at the locations shown on the plans. Materials shall conform to those listed below. In mine portals where the face up on the portal will remain untouched the recommended Bat Gate Seal will be placed on the face of the portal with no pipe installed. Bat Gate Seals or portals to receive Bat Gate seal can only be excavated and installed from May 1 to August 31.

#### 1.2 BAT GATE

- A. The bat gates shall conform to the detail drawings as shown on the plans. The bat gates can be made of structural steel material. Contractor will submit shop drawings for approval by the Engineer prior to installation. There are several suppliers that can supply steel gates. Marine grade paint shall be applied to all steel on Bat Gates.

#### 1.3 CONSTRUCTION METHODS

- A. If water is present at the portal, excavation of the mine opening shall proceed in a manner which will control the release of the mine pool. The opening shall be cleaned of debris to the satisfaction of the Engineer.

The Contractor shall be solely responsible for any damages caused by dewatering activities.

- B. If water is present at the portal a Dewatering Plan shall be submitted and approved by the Engineer prior to any work taking place. The Contractor shall install and operate a water treatment system utilizing soda ash briquettes in a manner approved by the engineer to maintain a pH between 6.0 and 9.0 in all water above base flow while dewatering mine. Anytime a mine portal is being dewatered a call must be made to the spill hotline at 1-800-642-3074 to advise of the work being performed. Contractor must get either a confirmation number or a name of the person taking the call.

The contractor is also advised that abandoned mine workings could contain dangerous gases such as methane and blackdamp. The contractor shall be responsible for worker safety when working around mine openings.

- C. The bat gate seals will require excavation into the mine entries/collapsed portals for proper installation. The Contractor shall perform this work after taking all necessary precautions with regard to control and treatment of the impounded water, if present, with all work being performed at the risk of the Contractor. The Owner accepts no responsibility or liability for any related construction activities. A dewatering plan shall be submitted to the Owner and

Engineer for approval prior to seal construction, with pool reduction possibly being provided from above with a well-point system or a similar dewatering scheme.

Construction of bat gate seals shall be in accordance with the plan details. The Contractor shall adhere to OSHA Regulation 29 CFR Part 1926 during all excavation and trenching activities.

#### 1.4 METHOD OF MEASUREMENT

- A. Bat Gate Mine Seals shall be measured per each installed and approved at the unit price bid per each and shall include all excavation, steel, concrete, and reinforcement necessary to complete the seal as shown on the Plans and details in these Specifications.

#### 1.5 BASIS OF PAYMENT

- A. The unit price for Bat Gate Mine Seal shall include the excavation, steel, concrete, reinforcement, and all equipment, material and labor necessary for their installation.

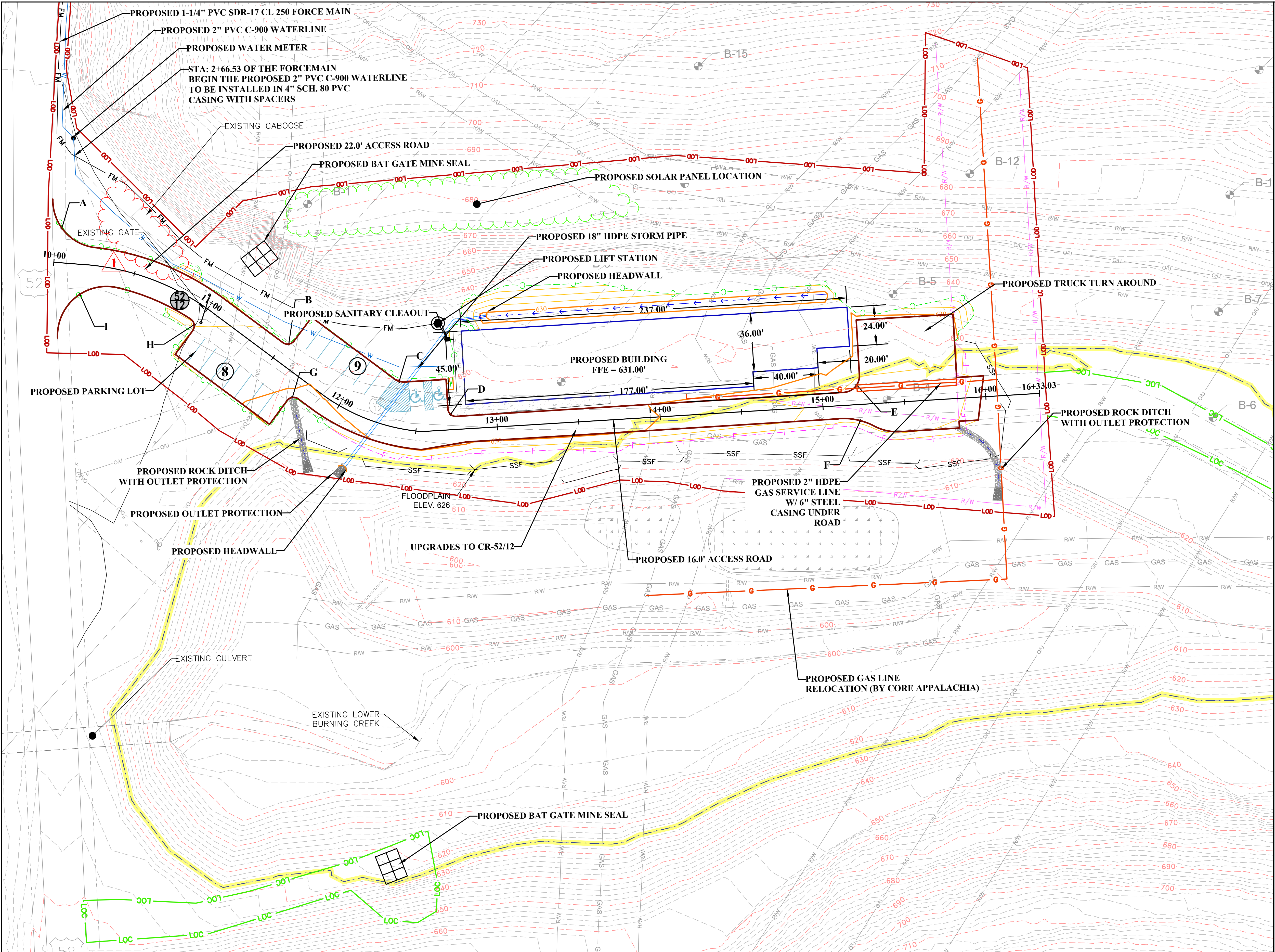
#### 1.6 PAY ITEMS

- A. "Bat Gate", per each.

END OF SECTION



LAYOUT TAB: 07-SITE PLAN  
CAD FILE: R:\000-3155-AQUAPONICS-DOWNSTREAM STRATEGIES-Drawing\3155 - Site Plan.dwg  
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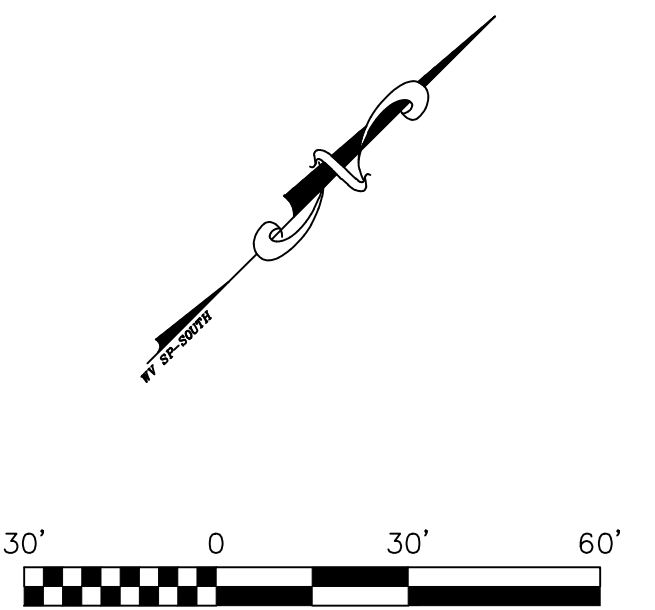
#### PLAN LEGEND

|     |                                |
|-----|--------------------------------|
| --- | PROPERTY LINE                  |
| --- | EXISTING CONTOURS              |
| --- | EXISTING WETLAND               |
| --- | EXISTING PAVED ROAD EDGE       |
| --- | EXISTING UNPAVED ROAD EDGE     |
| --- | EXISTING DRIVEWAY              |
| --- | EXISTING BUILDING              |
| --- | EXISTING CULVERT               |
| --- | EXISTING UTILITY POLE          |
| --- | EXISTING OVERHEAD UTILITY      |
| --- | EXISTING GAS LINE              |
| --- | EXISTING SEWER LINE            |
| --- | EXISTING WATER LINE            |
| --- | EXISTING MANHOLE               |
| --- | PROPOSED SUPER SILT FENCE      |
| --- | LIMIT OF DISTURBANCE           |
| --- | PROPOSED CONTOURS              |
| --- | PROPOSED CUT LIMIT             |
| --- | PROPOSED FILL LIMIT            |
| --- | PROPOSED PERMANENT DITCH       |
| --- | PROPOSED HDPE CULVERT          |
| --- | PROPOSED EDGE OF ACCESS ROAD   |
| --- | PROPOSED EDGE OF PAD           |
| --- | PROPOSED GAS LINE              |
| --- | PROPOSED FORCE MAIN            |
| --- | PROPOSED WATER LINE            |
| --- | PROPOSED LIMIT OF CONSTRUCTION |
| --- | PROPOSED RIGHT-OF-WAY          |
| --- | EXISTING RIGHT-OF-WAY          |

#### NOTES

- PROPERTY LINES SHOWN ARE A COMBINATION OF TAX MAPS AND FIELD SURVEY PERFORMED BY THRASHER. BASE MAPPING FOR THIS PROJECT IS BASED ON FIELD SURVEY PERFORMED BY THRASHER AND AVAILABLE LIDAR MAPPING.
- ALL COORDINATES ARE IN NAD-83 WV STATE PLANE SOUTH ZONE, US FOOT DATUM, UNLESS OTHERWISE NOTED.
- BUILDING TO BE CONSTRUCTED UNDER A SEPARATE CONTRACT. SITE CONTRACTOR SHALL COORDINATE WITH BUILDING CONTRACTOR FOR ALL PHASES OF CONSTRUCTION.
- GASLINE WILL BE RELOCATED BY CORE APPALACHIA PRIOR TO SITE CONSTRUCTION.
- ASPHALT WEARING COURSE IS NOT TO BE INSTALLED UNTIL BUILDING CONSTRUCTION IS COMPLETE.
- NO EARTHWORK ACTIVITIES ARE PLANNED FOR BAT GATE INSTALLATION AREAS.

| # | Radius |
|---|--------|
| A | 30.00  |
| B | 5.01   |
| C | 10.00  |
| D | 5.07   |
| E | 10.00  |
| F | 40.00  |
| G | 5.00   |
| H | 5.00   |
| I | 30.00  |



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| PHASE No.    |
| CONTRACT No. |
| PROJECT No.  |
| 101-030-3155 |

CONSTRUCTION PLANS FOR  
MINGO COUNTY REDEVELOPMENT AUTHORITY  
MINGO COUNTY AQUAPONICS FACILITY  
KERMIT, WEST VIRGINIA  
SITE PLAN LAYOUT

SHEET No.  
**C-7.0**

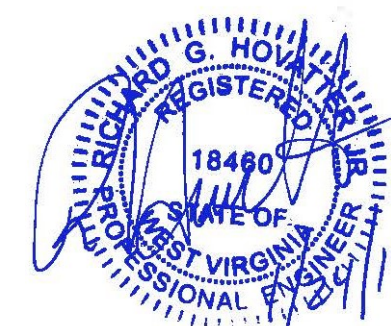
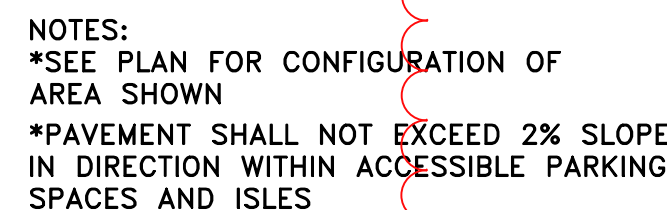


### COLOR CODES FOR UTILITY LOCATING MAGNETIC WARNING TAPE



TYPICAL CROSS SECTIONS OF TRENCHES  
NOT TO SCALE

- NOTES:
1. PROVIDE NYLON PULL STRINGS AND CAPS IN EACH CONDUIT
  2. INSTALL PER INDIVIDUAL UTILITY SPECIFICATIONS,
  3. MAINTAIN MINIMUM SEPARATION AS REQUIRED BY EACH UTILITY AND BY CODE.
  4. PIPE SHALL NOT BE INSTALLED DIRECTLY ON BEDROCK.
  5. WATERLINE SHALL BE INSTALLED WITH MINIMUM 4' SEPARATION FROM OTHER UTILITY LINES (ELECTRIC, GAS, COMMUNICATIONS). WATERLINE AND SEWER SHALL BE SEPARATED 10' HORIZONTALLY AND 18" VERTICALLY.



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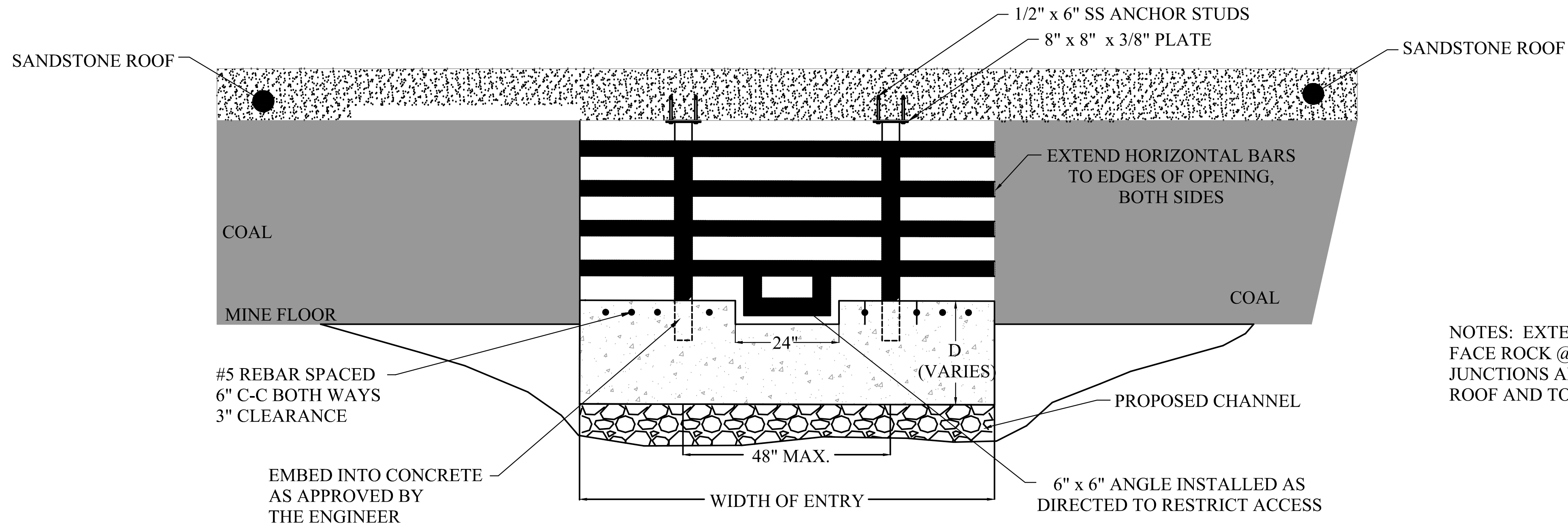
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| <b>101-030-3155</b> |

CONSTRUCTION PLANS FOR  
MINGO COUNTY REDEVELOPMENT AUTHORITY  
MINGO COUNTY AQUAPONICS FACILITY  
KERMIT, WEST VIRGINIA  
DETAILS

SHEET No.

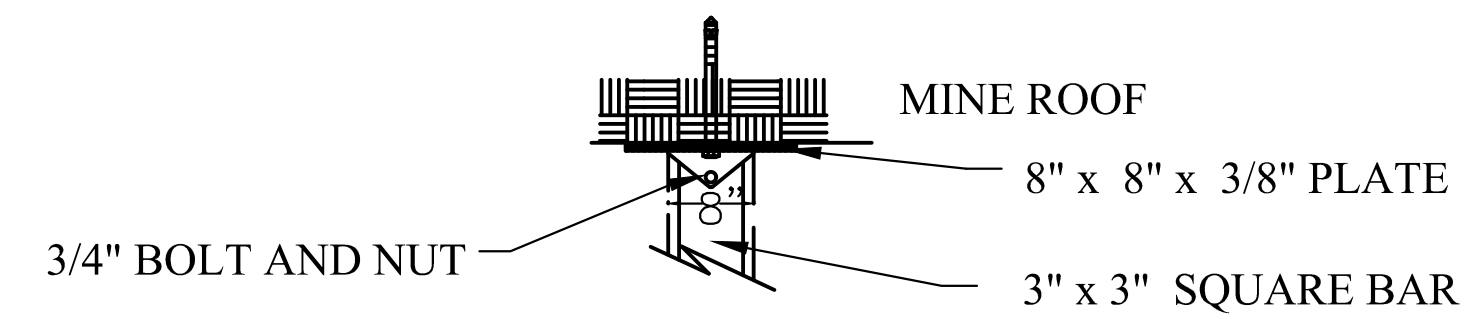
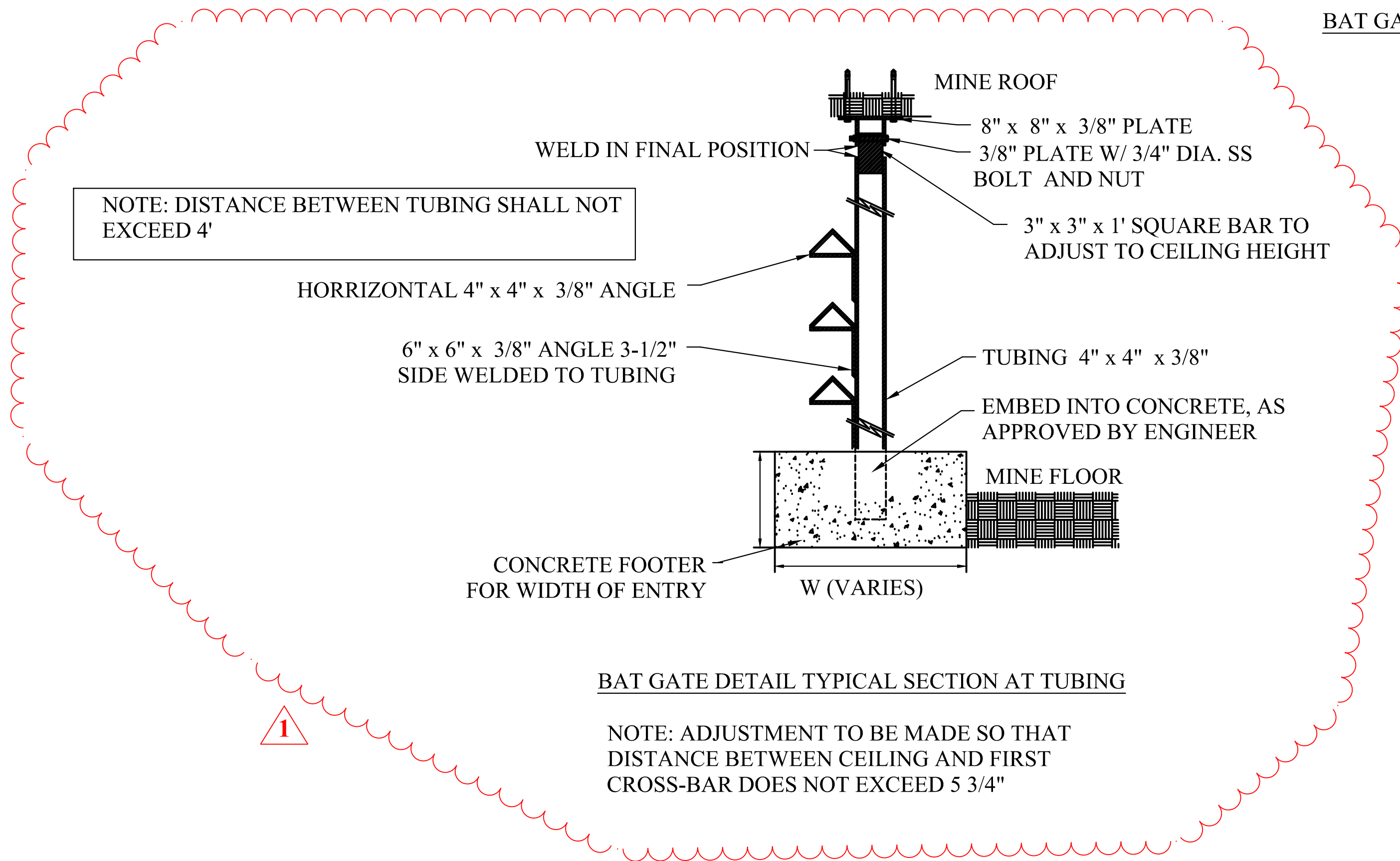
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NOTES: EXTEND HORIZONTAL BARS TO W/IN 2" OF RIB OR FACE ROCK @ ALL LOCATIONS FULLY WELD STEEL @ ALL JUNCTIONS ADD ADDITIONAL 6" x 6" ANGLE BETWEEN ROOF AND TOP BAR TO MAINTAIN 5.75" MAX. OPENING

BAT GATE DETAIL



ROOF PLATE TO 3"X3" SQUARE BAR CONNECTOR DETAIL

STANDARD BAT GATE DETAIL  
NOT TO SCALE



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|     |     |         |                         |
|-----|-----|---------|-------------------------|
| 1   | RJH | 1/24/19 | REVISED BAT GATE DETAIL |
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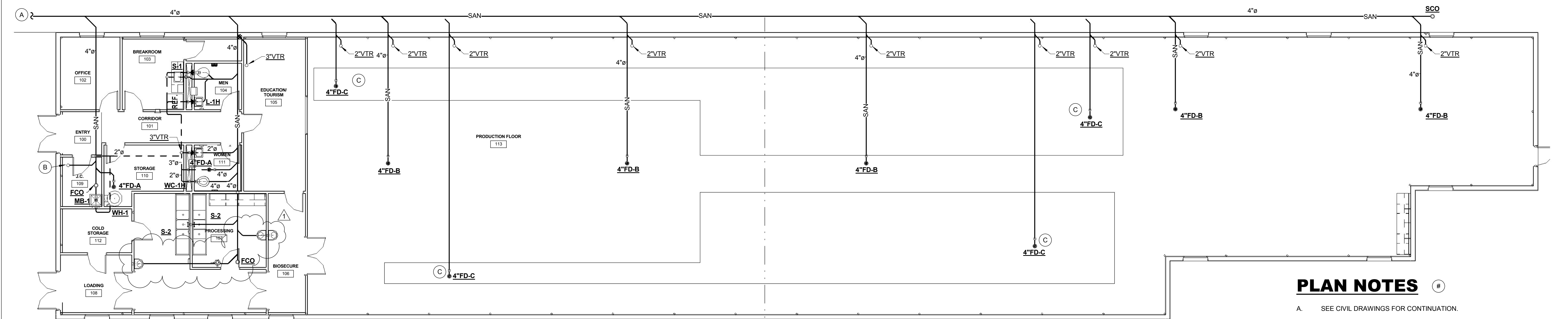
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CONSTRUCTION PLANS FOR  
MINGO COUNTY REDEVELOPMENT AUTHORITY  
MINGO COUNTY AQUAPONICS FACILITY  
KERMIT, WEST VIRGINIA  
DETAILS

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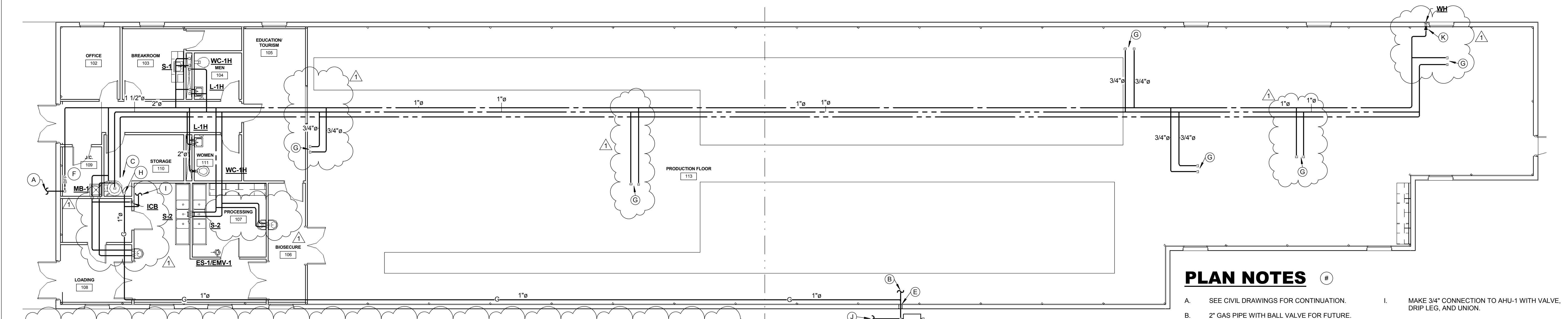


PLAN NOTES

- A. SEE CIVIL DRAWINGS FOR CONTINUATION.
- B. 4" HUB DRAIN FOR BFP.
- C. SEE NYLOPLAST DRAIN BASIN DETAIL ON SHEET P2.01.

NOTE: COORDINATE FLOOR DRAIN LOCATION WITH AQUAPONIC EQUIPMENT.

1 Drainage and Vent Plan  
1/8" = 1'-0"

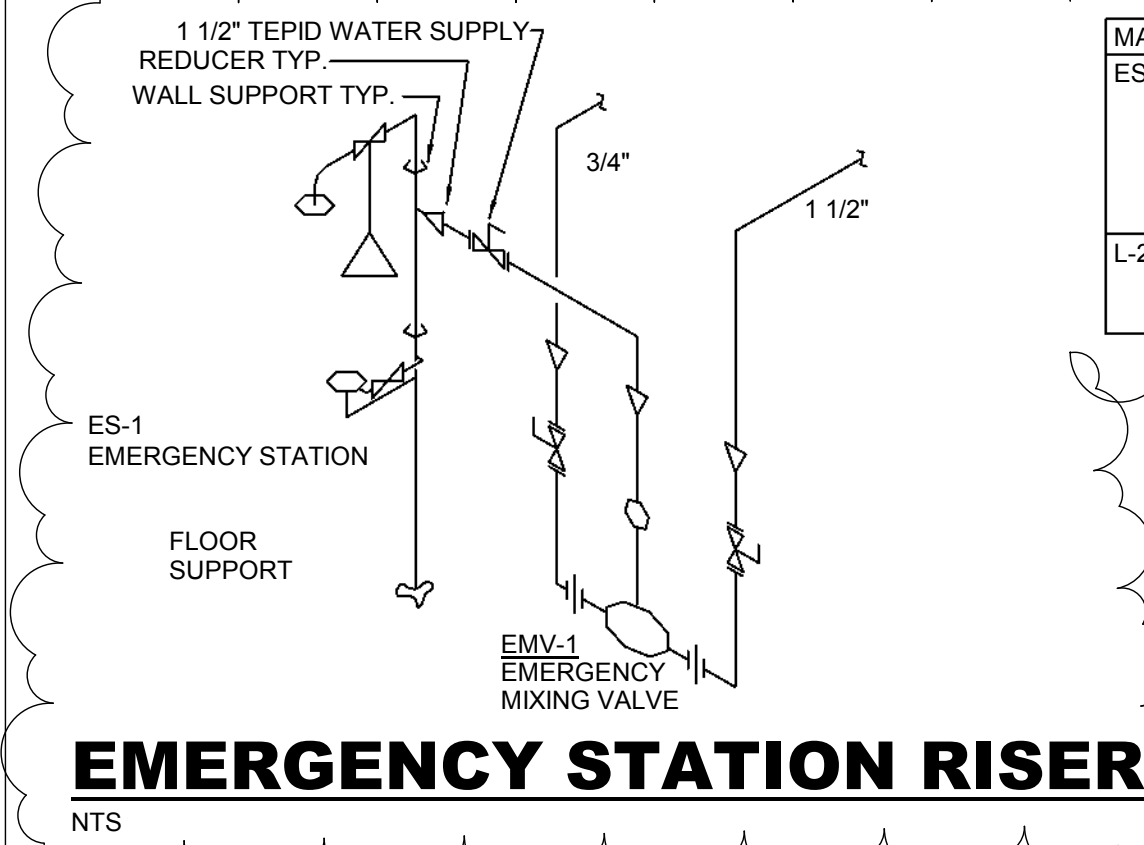


PLAN NOTES

- A. SEE CIVIL DRAWINGS FOR CONTINUATION.
- B. 2" GAS PIPE WITH BALL VALVE FOR FUTURE. COORDINATE TERMINATION POINT WITH GREENHOUSE MANUFACTURER.
- C. SEE WATER HEATER DETAIL.
- D. GAS METER. SEE DETAIL.
- E. SLEEVE AND SEAL GAS PIPE THROUGH WALL.
- F. 2" WATER ENTRANCE. SEE DETAIL SHEET P2.01.
- G. 3/4" HOT WATER AND COLD WATER DOWN TO WALL-HYDRANT WITH BALL VALVE IN VERTICAL. COORDINATE EXACT LOCATION WITH ARCHITECTURAL WALL AND ARCHITECTURAL EQUIPMENT.
- H. MAKE 3/4" CONNECTION TO WATER HEATER WITH VALVE, DRIP LEG, AND UNION.
- I. MAKE 3/4" CONNECTION TO AHU-1 WITH VALVE, DRIP LEG, AND UNION.
- J. MAKE 2" CONNECTION TO GENERATOR WITH VALVE, DRIP LEG, AND UNION.
- K. BALL VALVE IN VERTICAL.

NOTE: ALL DOMESTIC WATER LINES IN GREENHOUSE SPACE SHALL BE INSULATED. PROVIDE UV RESISTANT COVERING ON INSULATION.

2 Domestic Piping Plan  
1/8" = 1'-0"



EMERGENCY STATION RISER

NTS

| MARK | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                        | HW   | CW     | SAN    | VENT   | MOUNTING HEIGHT |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|--------|--------|-----------------|
| ES-1 | COMBINATION EMERGENCY SHOWER EYE/FACE WASH; BRADLEY NO. S19-310PTT SHOWER HEAD AND EYE WASH BOWL CONSTRUCTED OF STAINLESS STEEL, CHROME-PLATED BRASS 1/2" IPS STAY OPEN EYE WASH BALL VALVE, TWIN PERFORATED DISCFACED WASH HEADS WITH PROTECTIVE POP-OFF SPRAY HEAD COVERS, PIPE AND FITTINGS TO 1 1/4" GALVANIZED STEEL 1 1/4" IPS WATER SUPPLY FROM BRADLEY S19-2200 THERMOSTATIC MIXING VALVE. | 1"   | 1 1/2" | 1 1/2" | 1 1/2" | FLOOR/WALL      |
| L-2  | ELKAY NO. ELV1817CS3 STAINLESS STEEL WALL LAVATORY, 16"x17" 4" CENTER SET FITTING, ANGLE BRACKETS, "P" TRAP, ZURN XL LEAD FREE #Z6915 FAUCET WITH THERMOSTATIC MIXER.                                                                                                                                                                                                                              | 1/2" | 1/2"   | 1 1/2" | 1 1/2" | 34" TO RIM      |

|                                                                                                                                                                                                                                                         |    |         |             |
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| APPROVED: STAFF     | DATE: |
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| SURVEY BY:          |       |
| FIELD BOOK No.:     |       |

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PLUMBING PLANS  
AQUAPONICS FACILITY  
MINGO CO., WV  
JANUARY 2019  
BIDDING DOCUMENTS

SHEET No.

P1.01r



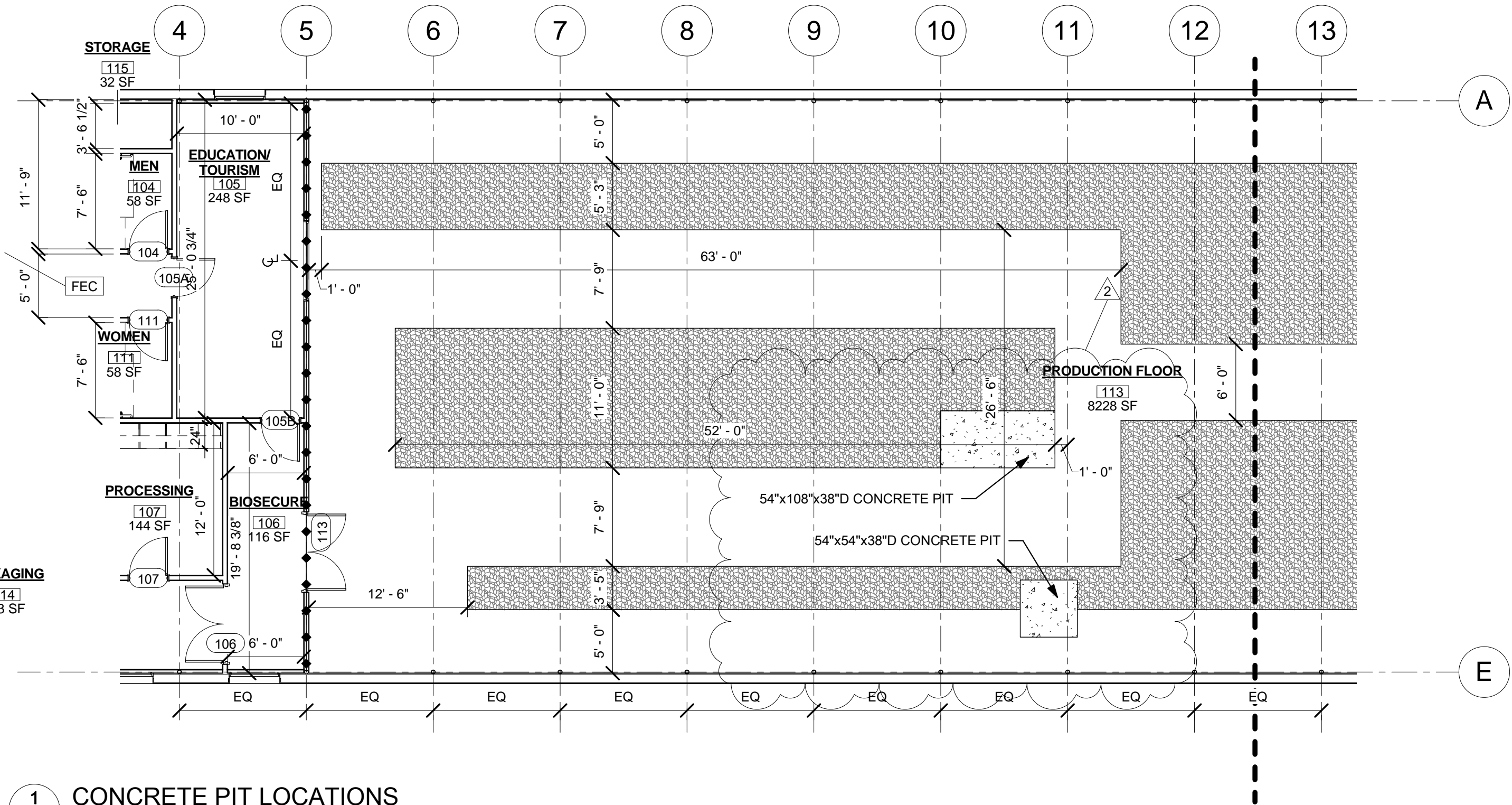


Author

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CAD FILE: \\TTG-FS1\Pigs\Josh Lyons\Revit Local Files\2017\20190117\_Aquaponics\_BID\_v2017\_CENTRAL\_jlyons@thrashereng.com.rvt

LAYOUT TAB: PIT LOCATIONS



1 CONCRETE PIT LOCATIONS  
SK1.01 1/8" = 1'-0"

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| CONTRACT No. |
| PROJECT No.  |
| 030-3155     |

PIT LOCATIONS  
AQUAPONICS FACILITY  
MINGO CO., WV  
JANUARY 2019  
ADDENDUM 04

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| SHEET No. |
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