

October 29, 2019
BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA
Y20-719-TA / ADDENDUM # 3
EASTERN REGIONAL WATER SUPPLY FACILITY - SODIUM HYPOCHLORITE
SYSTEM CONVERSION TO BULK

REVISED Bid Opening Date: ~~November 5, 2019~~ November 7, 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. Underlining indicates additions, deletions are indicated by ~~strikethrough~~.

A. Bid Opening Date is extended from ~~November 5, 2019~~ to November 7, 2019 at 2:00 P.M.

B. CLARIFICATIONS

1. Q: What is the roofing material on building 50? Once the HVAC penetrations are made, what roofing repairs will need to be made?

A: See attached design development document (June 8, 2002) for description of the Building 50 roof membrane and associated detail No. 1.01. Any roofing membrane thru-penetrations or repair work necessary shall be watertight and in accordance with existing 20-year ND (No Dollar Limit) manufacturer's written weathertightness warranty provided by the Owner. Also attached is a typical penetration detail for membrane roofing that can be used as the basis of design. Actual thru-penetration and repair shall be approved by the roof manufacturer.

2. Q: Drawing G-10 calls for a temporary 30,000-gallon minimum storage tank. Is there a requirement to provide containment for this tank?

A: Yes. Refer to Section 11400 2.02.A.1. Chemical storage tank shall be double-walled and contained within OSHA approved secondary containment.

3. Q: Drawing G-10 calls for a temporary 30,000-gallon minimum storage tank. Can this minimum gallonage requirement be met with multiple tanks? There are no tanks of this size that have built-in containment.

A: Yes, multiple tanks are acceptable. Layout of temporary tanks and metering pump system will be subject to review/approval by the engineer and owner and shall fit within the space constraints shown on the Drawings.

4. Q: Drawing G-10 calls for a temporary 30,000-gallon minimum storage tank. Request the total minimum gallonage requirement be shrunk to 26,600 gallons to take advantage of tank sizes currently available in

the only supplier of temporary tanks in Florida. The plant uses under 2,000 gpd and its bleach supplier makes deliveries on one day notice so this should not be an issue.

A: Contractors shall bid the job as specified and shown in the Drawings.

5. **Q: Page 33 of the Invitation to Bid, Number 28 contains some very specific language regarding the required references. After review of the elements described, we believe that these are far too stringent and likely can only be met by the largest firms in our industry. As such, this will disproportionately affect smaller firms and discourage bidders from participating on the project. Such requirements do not appear to fit a project of this size and nature. We ask that these requirements be reviewed and significantly modified so that participation may be encouraged.**

A: Refer to Addendum No. 1 for revisions to the element requirements for the References.

6. **Q: Sheet M101 call to remove existing Louvers at northside of Process 50 but after site visit, there is a rolling door at the east opening, please clarify if only the west opening should be demo' d and new coil door installed.**

A: Confirmed. Refer to S101, S102 and A101 for louver removal and overhead door installation. Refer to modifications below in Part C of this addendum.

7. **Q: There is a screen wall at the Brine room in Process 75, as the contractor is to remove and replace the FRP tanks, the screen wall will need to be removed. Should the contractor re-install the existing or replace with new frame & screen?**

A: Replace any screen wall removed for removal of the brine storage tank and equipment in the brine room in Process Building 75 with new frame and screen. Refer to Drawing modifications below in Part B of this addendum.

8. **Q: Sheet D101 call for Dual Containment for the new 1" NaOCI pipe, please clarify what size the containment pipe is to be and material to be used.**

A: Carrier pipe shall be 1-inch, containment pipe shall be 4-inch. Both carrier pipe and containment pipe shall be Schedule 80 PVC per Section 15076.

C. Drawings

- 1. Drawing M101, Replace Drawing Sheet M101 Process 50 HVAC Demolition Plan with the attached Revised Drawing Sheet M101 Process 50 HVAC Demolition Plan.**
- 2. Drawing D110, Replace Drawing Sheet D110 Process 75 Existing NaOCI Bldg Demolition Plan with the attached Revised Drawing Sheet D110 Process 75 Existing NaOCI Bldg Demolition Plan.**

D. All other terms, conditions, and specifications of the IFB remain unchanged.

E. The Bidder 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 the proposal.

Receipt acknowledged by:

Authorized Signature

Date Signed

Title

Name of Firm

Architecture
Roof Consulting
Construction Technology
AA C000932



601 North Fern Creek Avenue
Suite 100
Orlando, Florida 32803-
4899
(407) 896-7875
FAX (407) 898-6043

June 8, 2012

Mr. William Hicks, Senior Project Manager
Orange County Government
9150 Curry Ford Road
Orlando, Florida 32825

mike.hicks@ocfl.net

Re: Design Development for the Roof Replacement of Designated Buildings at the Eastern Water Treatment Plant, Orlando Florida

Dear Mike:

This letter and the attached information presents our design development statement related to the referenced project. The intent at this point in the design process is to identify specific areas of concern, provide options, and make a recommendation to you. Following your review and direction to proceed, we will develop bid and construction documents to provide for the construction for the scope of work that has been agreed to.

We have identified each individual building according to the existing building numbers. The following statement will break down each building individually and review roofs areas per building.

BUILDING 50 (Roof Areas 50/A & 50/B):

Existing Roof System: The building is comprised of two deck areas that are accessible to each other by an exterior wall ladder (see plan sheet A2). The existing roof system is a single-ply membrane fastened over a non-tapered rigid isocyanurate insulation on a structure deck comprised of a 2"-3" poured concrete topping over pre-cast double tees. The building perimeter is a parapet condition with the single-ply membrane running up the vertical parapet to the exterior edge and is terminated with edge metal.

There is an existing lightning protection system along the center of the parapet wall with lightning protection downleads penetrating thru the parapet wall and interior building wall to grade where it is grounded.

Insulation and Slope: The two roof areas at this building have different insulation thickness. Roof area 50/A is 1 ½" thick, while 50/B is 3" thick of rigid insulation (see roofcuts 3). Roof area 50/A is over a pump room and does not require a controlled environment so a thermal value of R-20 is not required. Roof area 50/B sits over a control room where environmental services are used to cool the room for its monitoring equipment. We have provided a thermal resistance work sheet to sheet that indicates the current R-value is above 20 and has sufficient insulation thickness (see thermal Resistance Worksheet 50/B).

Both deck areas are sloped at ¼" per foot in the structure. Roof area 50/A slopes two-ways to the east and west perimeter side. 50/B slopes in a single direction to the south building side. These slopes are adequate to remove water and no further slope increase will be necessary.

Drainage: As mentioned above the deck slopes to the perimeter of the building parapet walls, water is removed from 8" x 8" sized scuppers evenly spaced along the parapet wall. Each Scupper has a leaderhead with a 6" x 6" square downspout that removes water below. The Downspouts along the South end of the building drop to splash blocks; while along the west side drops into stormwater boots that tied into a nearby storm drain. The east side downspouts drop water into a gravel yard around the mechanical units at grade. All three drop areas are functioning sufficiently.

Our design will include the use of the existing downspouts to remain and new scupper and leader head fabrications to be installed. Emergency overflows will need to be added per Florida building Code (FBC) to each parapet wall with primary drains. These are indicated per plan (see sheet A2).

Miscellaneous Items: The existing lightning protection system will be removed, properly stored and reinstalled upon completion of the new roof system. Existing downloads penetrating the parapet wall shall remain in place.

The existing deck access ladder between 50/A & 50/B will remain, but will require repairs and a new exterior deck access ladder will be installed along the north side of the building coordinated on-site so as not too interfere with existing building components.

New Roof System: For these roof areas, we propose to adhere a non-tapered rigid polyisocyanurate insulation and gypsum coverboard to the existing concrete deck. A three-ply, granular surfaced, SBS modified bitumen membrane roofing and 2-ply flashing membrane system would then be torch applied to the coverboard. The new roof system would carry a 20 year NDL (No Dollar Limit) manufacturer's weathertightness warranty, and all metal flashings would be mill finish stainless steel

BUILDING 60 (Roof Areas 60/A & 60/B):

Existing Roof System: The building is comprised of two decks, 60/A was part of the original construction and a small additional along the northwest corner noted as 60/B. Both areas are level with each other and separated by an expansion joint bellow (see plan sheet A2). The existing roof system is a single-ply membrane fastened over a non-tapered rigid polyisocyanurate insulation on a structure deck comprised of a 2"-3" poured concrete topping over pre-cast 8" hollow core planks. The building perimeter is a three sided parapet condition and an edge condition along the west side perimeter only. The single-ply membrane runs up the vertical parapet to the exterior edge and is terminated with edge metal.

There is an existing lightning protection system along the center of the parapet wall with lightning protection downloads penetrating thru the parapet wall and interior building wall to grade where it is grounded.

Insulation and Slope: Both roof areas are 1 ½" thick with non-tapered rigid insulation (see roofcuts 1). The area below is non-enclosed and does not require a minimum thermal resistance value.

Deck areas are sloped within the structure along the east and west perimeter edge of the building at an adequate ¼" per foot.

Drainage: The east side of the building parapet has three 8" x 8" scuppers. These scuppers have leaderheads and downspouts that run the water along grade below. It was noted the all three downspouts run into a 10" x 10" square horizontal downspout "channel" that wraps around the building to the north corner and drops vertically to tie into a stormwater boot. The scuppers and downspouts, and "channel" are all sufficiently sized and in good condition.

We are recommending keeping this existing drainage system, Replacing only the scupper fabrications and leaderheads. Emergency overflows will need to be added per FBC to each parapet wall with primary drains. These are indicated per plan (see sheet A2).

Along the west side is the perimeter edge are five (5) 6" diameter roof; drains are roughly 11'-0" from the edge aligned evenly. Tapered insulation had been used to counter the slope at the perimeter edge to slope back to the drains. These drains are tied into 6" x 6" square drains similar in construction to the exterior downspouts. We are going to remove and install new roof drains at existing locations on deck area 50/A. At 50/B we are centering the drain between the building parapets (see sheet A2). All drains will be tied into the existing downspout piping that will remain in place

Miscellaneous Items: The existing lightning protection system will be removed, properly stored and reinstalled upon completion of the new roof system. Existing downleads penetrating the parapet wall shall remain in place.

As requested we are adding a new exterior deck access ladder that will be installed along the east side of the building and coordinated on-site, so as not to interfere with existing building components.

New Roof System: For these roof areas, we propose to adhere non-tapered rigid polyisocyanurate insulation and gypsum coverboard to the existing concrete deck. A three-ply, granular surfaced, SBS modified bitumen membrane roofing and 2-ply flashing membrane system would then be torch applied to the coverboard. The new roof system would carry a 20 year ND (No Dollar Limit) manufacturer's weathertightness warranty, and all metal flashings would be mill finish stainless steel

BUILDING 70 (Roof Area 70/A):

Existing Roof System: The building is a single roof area with a parapet wall enclosed on all sides. The existing roof system is a single-ply membrane fastened over a non-tapered rigid polyisocyanurate insulation on a structure deck comprised of a 2"-3" poured concrete topping over pre-cast 8" hollow core planks. The single-ply membrane runs up the vertical parapet to the exterior edge and is terminated with edge metal.

There is an existing lightning protection system along the center of the parapet wall with lightning protection downleads penetrating thru the parapet wall and interior building wall to grade where it is grounded.

Insulation and Slope: Roof area is 1 ½" thick with non-tapered rigid insulation (see roofcuts 1). The area below is used as storage with no environmental services requiring a minimum r-value.

The deck is sloped two ways along a center ridge sloping to the north and south parapet walls with a adequate ¼" per foot slope in the structure.

Drainage: As mentioned above the deck slopes to the perimeter of the building parapet walls, water is removed from 8" x 8" sized scuppers along the parapet wall. Each Scupper has a leaderhead with a 6" x 6" square downspout that removes water below. The Downspouts drop to splash blocks and concrete slab.

Our design will include the use of the existing downspouts to remain and new scupper and leader head fabrications to be installed. Emergency overflows will need to be added per FBC to each parapet wall with primary drains. These are indicated per plan (see sheet A3).

Miscellaneous Items: The existing lightning protection system will be removed, properly stored and reinstalled upon completion of the new roof system. Existing downleads penetrating the parapet wall shall remain in place.

New Roof System: For these roof areas, we propose to adhere non-tapered rigid polyisocyanurate insulation and gypsum coverboard to the existing concrete deck. A three-ply, granular surfaced, SBS modified bitumen membrane roofing and 2-ply flashing membrane system would then be torch applied to the coverboard. The new roof system would carry a 20 year ND (No Dollar Limit) manufacturer's weathertightness warranty, and all metal flashings would be mill finish stainless steel.

BUILDING 80 (Roof Area 80/A):

Existing Roof System: The building is a single roof area with a parapet wall enclosed on all sides. The existing roof system is a single-ply membrane fastened over a non-tapered rigid polyisocyanurate insulation on a structure deck comprised of a 2"-3" poured concrete topping over pre-cast 8" hollow core planks. The single-ply membrane runs up the vertical parapet to the exterior edge and is terminated with edge metal.

There is an existing lightning protection system along the center of the parapet wall with lightning protection downloads penetrating thru the parapet wall and interior building wall to grade where it is grounded.

Insulation and Slope: Roof area is 3" thick with non-tapered rigid insulation (see roofcuts 2). The area below is a motor control center and has environmental services requiring a minimum insulation thermal value of R-20 (see Thermal Resistance Worksheet Bldg 80).

The deck slopes a single direction to the north parapet wall, with a ¼" per foot slope in the structure.

Drainage: Water is removed from two (2) 8" x 8" sized scuppers along the parapet wall. Each Scupper has a leaderhead with a 6" x 6" square downspout that removes water below. The Downspouts drop to splash blocks at grade.

It was observed that both downspouts run horizontal to the east and west sides of the building. The east side downspout dumps water along the street in front of a stormwater drain, while the west side drops it at grade nearby a monitoring well. We are proposing to reroute both of these downspouts to a different location that will cause minimum impact.

Our design will include the use of the existing downspouts to remain and new scupper and leader head fabrications to be installed. Emergency overflows will need to be added per FBC to the parapet wall with primary drains. These are indicated per plan (see sheet A3).

Miscellaneous Items: The existing lightning protection system will be removed, properly stored and reinstalled upon completion of the new roof system. Existing downloads penetrating the parapet wall shall remain in place.

New Roof System: For these roof areas, we propose to adhere non-tapered rigid polyisocyanurate insulation and gypsum coverboard to the existing concrete deck. A three-ply, granular surfaced, SBS modified bitumen membrane roofing and 2-ply flashing membrane system would then be torch applied to the coverboard. The new roof system would carry a 20 year NDL (No Dollar Limit) manufacturer's weathertightness warranty, and all metal flashings would be mill finish stainless steel.

BUILDING 90 (Roof Areas 90/A-90/E):

Existing Roof System/Insulation and Slope/Drainage: Building 90 is the Operations Building and has multiple roof areas with different structural deck types. Areas to be reroofed are identified per plan (see sheet A4). Because it is a multi-functional building there are environmental services in areas 90/C-90/E only. Several roof hatches exist and allow access to all areas.

90/A - Existing roof system is a single-ply membrane fastened over a non-tapered rigid polyisocyanurate insulation on a structure deck comprised of a 2"-3" poured concrete topping over 8" hollow core plank. The structural deck slopes in a single direction at ¼" per foot to the SW end along a perimeter edge condition. Water drops to the slab at grade below. The rake sides of the deck are parapet conditions that transition into a wall along roof area 90/B.

90/B – This deck area is a barrel vault roof with a single-ply membrane over a 1½” rigid insulation board on a cast in-place concrete over metal form deck. Water is drained to deck areas partially to grade, 90/A and 90/C from a perimeter edge condition.

90/C - Existing roof system is a single-ply membrane fastened over a tapered rigid polyisocyanurate insulation on a structure deck comprised of a 2”-3” poured concrete topping over 8” hollow core plank. There is an expansion joint curb along deck area 90/E with a bellow type flashing. The structural deck is flat, and a tapered insulation system slopes to scuppers along parapet walls at the NE and East sides of the deck (see sheet A4). The average insulation thickness is 6.25” and is more than adequate to meet minimal thermal resistance value (see thermal resistance worksheet 90/C).

Water is removed from four (4) 8” x 8” sized scuppers along the parapet wall. Each Scupper has a leaderhead with a 6” x 6” square downspout that removes water below. The Downspouts along the NE side drop to a shared concrete swail, while along the East side ties into a stormwater line. Our design will include the use of the existing downspouts to remain and new scupper and leader head fabrications to be installed. Emergency overflows will need to be added per FBC to each parapet wall with primary drains. These are indicated per plan (see sheet A4).

90/D – The deck area is an obscure octagon and is centered along the main building. There are two expansion joint conditions found along decks 90/C and N.I.C. deck to the NW side. At the center of the deck is a clerestory rotunda encompassing deck area 90/E. There are several gravity and power vents and gooseneck penetrations.

The existing roof system is a single-ply membrane fastened over a tapered rigid polyisocyanurate insulation on a structure deck comprised of a 2”-3” poured concrete topping over 8” hollow core plank. The taper systems high side starts at the rotunda in the center and slopes to the exterior parapet walls.

Water is removed from six (6) 8” x 8” sized scuppers along the parapet wall. Each Scupper has a leaderhead with a 6” x 6” square downspout that removes water below. The Downspouts along the West side drop to a shared concrete swail, while all remaining downspouts ties into a stormwater line. Our design will include the use of the existing downspouts to remain and new scupper and leader head fabrications to be installed. Emergency overflows will need to be added per FBC to each parapet wall with primary drains. These are indicated per plan (see sheet A4).

90/E - This deck area is round with a single-ply membrane over a tapered rigid insulation board on a cast in-place concrete over metal form deck. The deck encloses a clerestory rotunda. A Taper insulation slopes to entire perimeter edge condition at ¼” per foot and drops to deck area 90/D below.

Miscellaneous Items: The existing lightning protection system will be removed, properly stored and reinstalled upon completion of the new roof system. Existing downloads penetrating the parapet wall shall remain in place.

New Roof System: It was observed that there are minimal penetrations along all deck areas at building 90. And each individually deck area is unusually shaped and slopes in a variation that creates several indistinct transitions that can be easier to address with a specific type of membrane system. Upon discussion it was determined that a Single-ply membrane offers the most advantages to the obscure conditions found. This will apply to all deck areas and will be applied as follows:

90/A & 90/B - For these roof areas, we propose to fully adhere a non-tapered rigid polyisocyanurate insulation and gypsum coverboard to the existing concrete deck. Then fully adhere a smooth surfaced PVC or Elvaloy thermoplastic single-ply membrane with woven polyester fabric reinforcement to the coverboard. The new roof system would carry a 20 year NDL (No Dollar Limit) manufacturer’s weathertightness warranty, and all metal flashings would be PVC coated aluminum.

90/C - 90/E - For these roof areas, we propose to fully adhere a ¼” per foot tapered rigid polyisocyanurate insulation and gypsum coverboard to the existing concrete deck. Then fully adhere a smooth surfaced PVC or Elvaloy thermoplastic single-ply membrane with woven polyester fabric reinforcement to the coverboard. The new roof system would carry a 20 year NDL (No Dollar Limit) manufacturer’s weathertightness warranty, and all metal flashings would be PVC coated aluminum and mill finished stainless.

Drawings

Detail 1.01 Typical parapet wall conditions along low side of Buildings 50, 80, & 90. Modified bitumen roof system with a coping cap at the existing block wall over a concrete deck.

Detail 1.02 Typical parapet wall conditions along low side of Buildings 60 & 70. Modified bitumen roof system with a coping cap at the existing cast in-place wall over a concrete deck.

Detail 1.03 Typical parapet wall conditions along low side of Building 90. Single-ply roof system with coping cap at the existing block wall over a concrete deck.

Detail 1.04 Typical Edge flashing detail at parapet wall over an existing concrete deck.

Conclusion:

Overall roof area replacement based on membrane types are as follows:

Torched applied Modified Bitumen System – 24,666 Sq. Ft.

Fully adhered Single-ply Membrane System – 24,077 Sq. Ft.

The original cost estimate submitted was \$555,906. We believe this estimate still applies due to several factors being added to the scope that was not initially included.

Following your review, we will be pleased to answer your questions. Upon your direction we will proceed with completing the bid and construction documents to facilitate the work.

Please contact us should you require further information or clarification of the material presented.

Sincerely,

A/R/C Associates, Incorporated

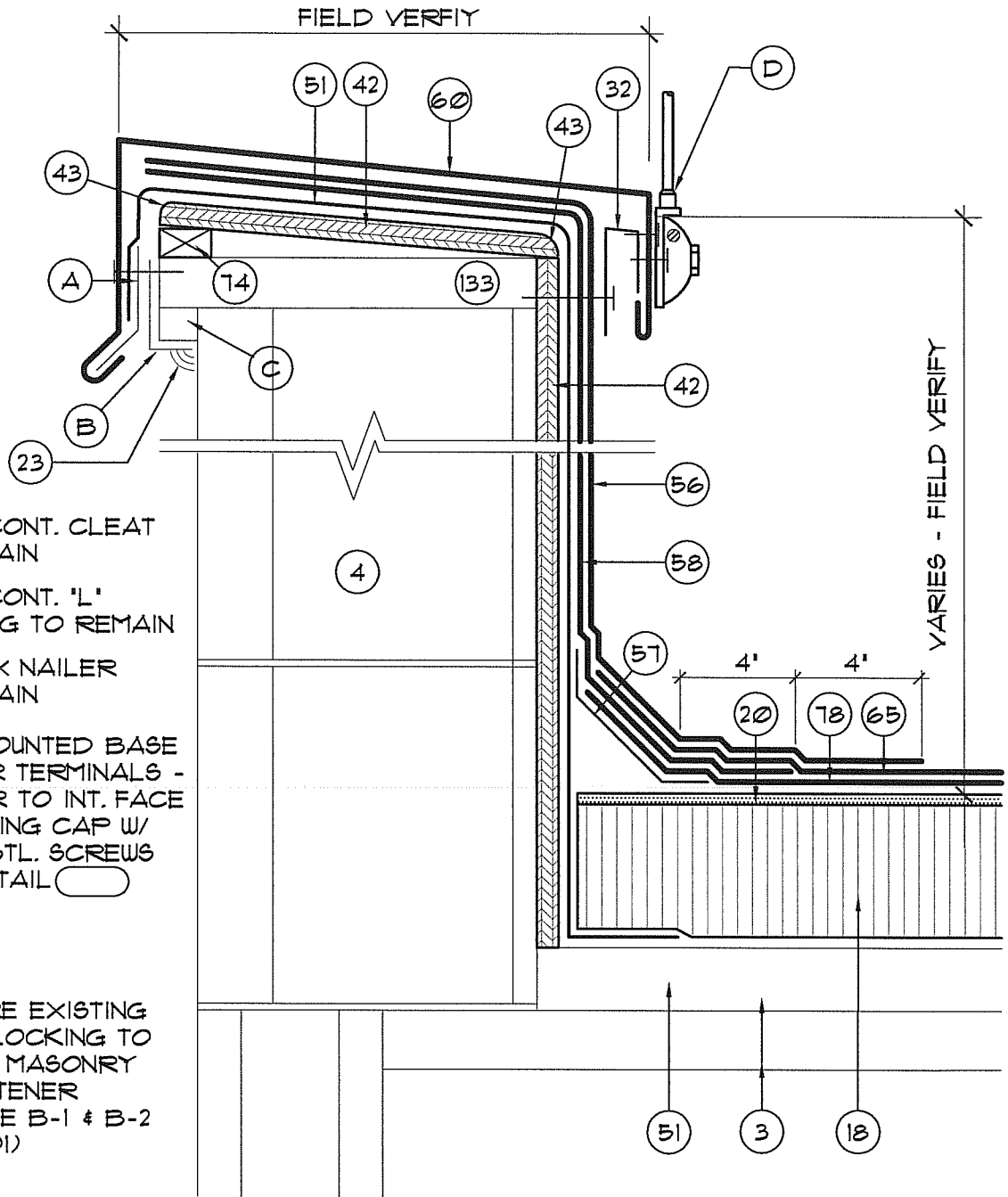


Troy Giebert, Project Manager



Joseph J. Williams, President
Architect, AIA, Roof Consultant, RRC

Attachment: Thermal Calculations, Roof Cuts, Details, and Plans



- A. EXIST. CONT. CLEAT TO REMAIN
- B. EXIST. CONT. 'L' FLASHING TO REMAIN
- C. EXIST. 1X NAILER TO REMAIN
- D. SIDE-MOUNTED BASE FOR AIR TERMINALS - ANCHOR TO INT. FACE OF COPING CAP W/ (2)-ST. STL. SCREWS SEE DETAIL

NOTE:
RESECURE EXISTING WOOD BLOCKING TO EXISTING MASONRY PER FASTENER SCHEDULE B-1 & B-2 (DWG. 8.01)

- 3. EXIST. CONC. DECK W/ CONC. TOPPING
- 4. EXIST. SPLIT BLOCK PARAPET WALL
- 17. NON-TAPERED RIGID INSULATION
- 20. GYPSUM ROOF BOARD
- 23. SEALANT
- 43. ROUND OFF THIS EDGE
- 51. DRY-IN MEMBRANE
- 56. MOD. BIT. FLASHING - CAP
- 57. NON-COMBUSTIBLE CANT
- 58. MOD. BIT. FLASHING - INTERPLY
- 60. PARAPET CAP-SEE DET.
- 65. MODIFIED BITUMEN CAP SHEET
- 74. 1 x 2 WOOD BLK'G SCREW FASTEN AT 12' O.C. STAGGERED. COUNTERSINK SCREWHEADS.
- 78. 2-MOD. BIT. INTERPLY SHEETS
- 133. EXIST. WOOD BLK'G TO REMAIN, REPLACE WHERE DAMAGED OR DETERIORATED



A/R/C Associates Incorporated

601 NORTH FERN CREEK AVENUE SUITE 100
ORLANDO, FLORIDA 32803-4899
TEL (407)896-7875 FAX (407)898-6043

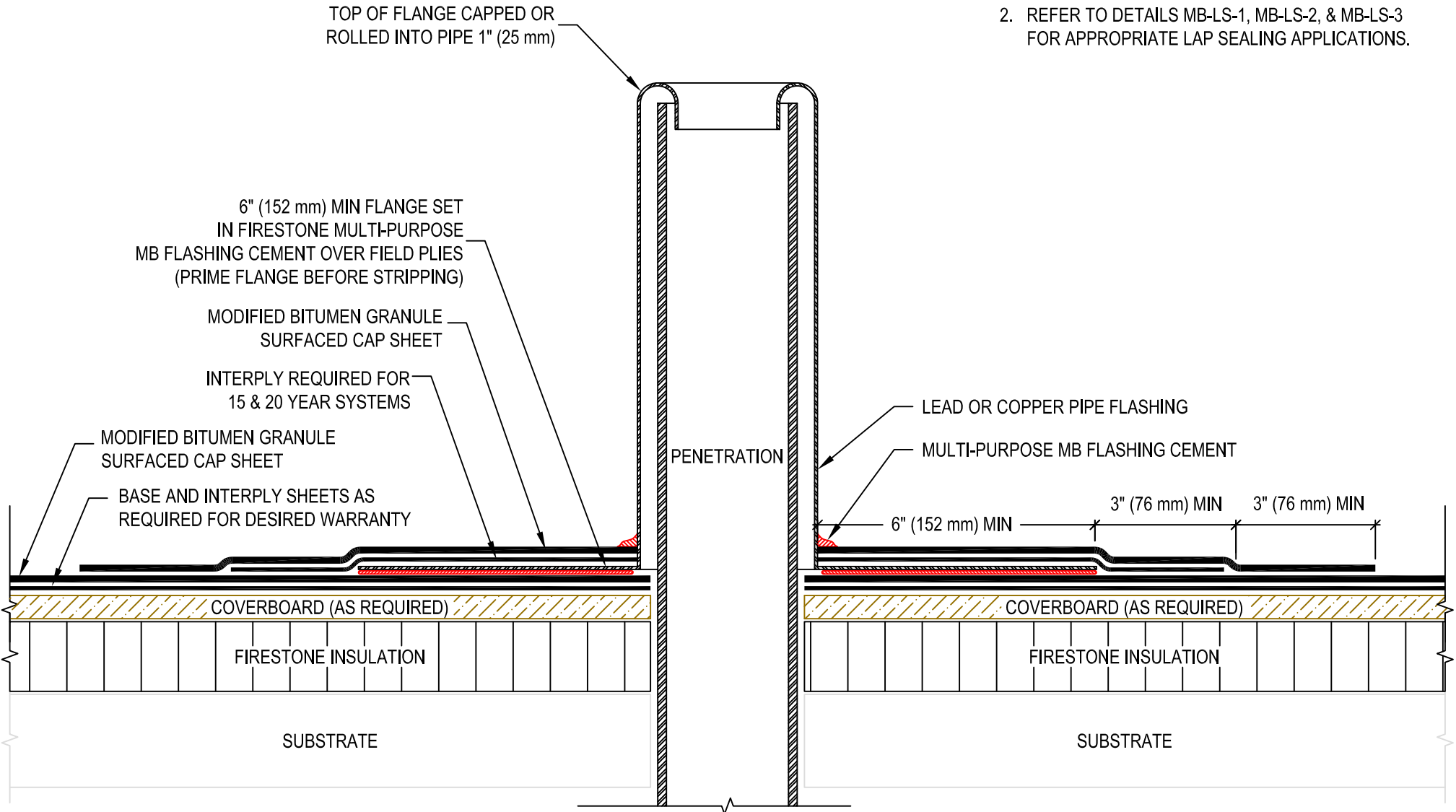
TITLE LOW SIDE PARAPET WALL
FLASHING AT BLDG 50, 80 &
90

SCALE 3"=1'



NOTES:

1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. REFER TO DETAILS MB-LS-1, MB-LS-2, & MB-LS-3 FOR APPROPRIATE LAP SEALING APPLICATIONS.



MAXIMUM WARRANTY: **20 YEARS**

PLUMBING VENT

ISSUE/REVISION
DATE:
7/08/2014

DETAIL NO.

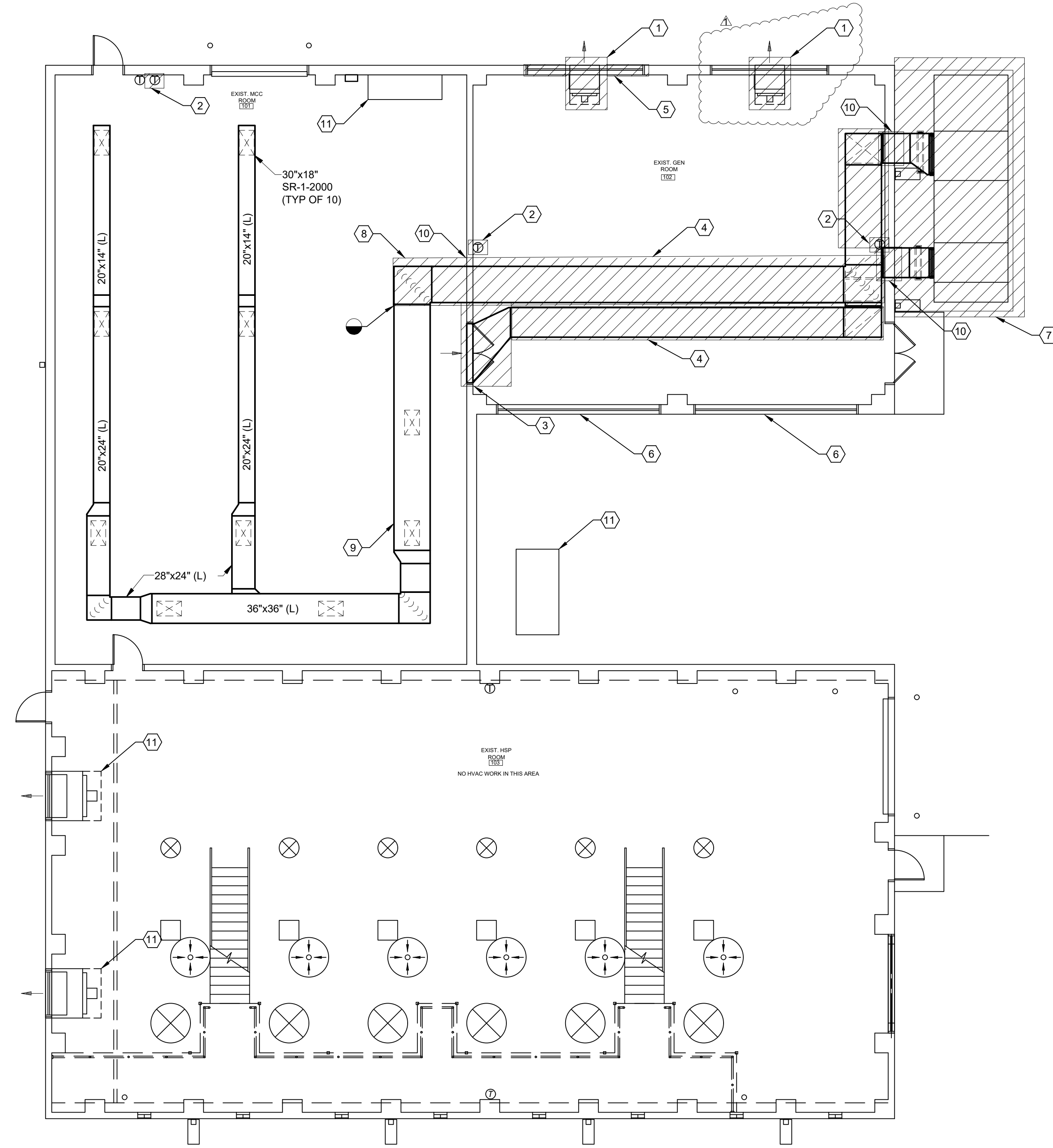
ASPHALT SYSTEMS

ACCEPTABLE SYSTEMS: MODIFIED BITUMEN

NOT TO SCALE

MB-P-3

10/24/2019 11:39:09 AM - O:\PROJECTS\ORLANDO\IER10034\200-10034-18003\CAD\SHETSHEETFILES\M101 PROCESS 50 HVAC PLANS DWG - DIAL, VICKASH



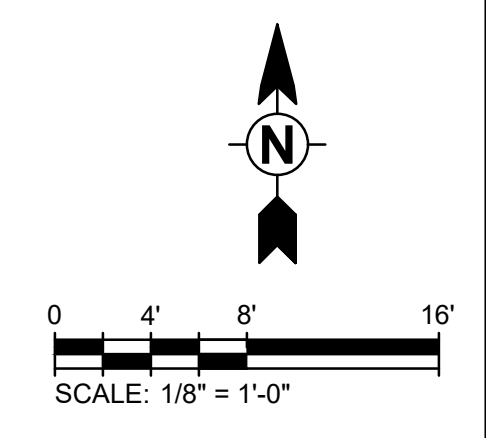
1 PROCESS 50 HVAC DEMOLITION PLAN
M101 SCALE: 1/8" = 1'-0"

DEMOLITION GENERAL NOTES:

- COORDINATE DEMOLITION AND DISPOSAL WITH THE REQUIREMENTS OF SECTION 02050 AND THE OWNER.
- CONTRACTOR SHALL FIELD VERIFY LOCATIONS, DIMENSIONS, AND CONFIGURATION OF ALL EXISTING EQUIPMENT, DUCTWORK, HANGERS, SUPPORTS, ANCHORS, CONTROLS, ETC.

DEMOLITION KEY NOTES:

- REMOVE EXISTING EXHAUST FAN INCLUDING ALL ASSOCIATED DUCTWORK, SUPPORTS, CONTROLS, WIRING, CONDUIT, ETC.
- REMOVE EXISTING THERMOSTATS INCLUDING ALL ASSOCIATED CONTROLS, WIRING, CONDUIT, ETC.
- REMOVE EXISTING DUCTWORK AND RETURN GRILLE THROUGH WALL. INFILL AND PATCH TO MATCH EXISTING. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- REMOVE EXISTING DUCTWORK INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, ETC.
- EXISTING LOUVER SHALL BE REMOVED AND REPLACED WITH ROLL UP DOOR. SEE ARCHITECTURAL/STRUCTURAL DRAWINGS FOR DETAILS.
- EXISTING LOUVER TO REMAIN.
- REMOVE EXISTING GRADE MOUNTED ROOFTOP UNIT INCLUDING ALL ASSOCIATED DUCTWORK, SUPPORTS, PIPING, CONTROLS, WIRING, ETC. REMOVE EXISTING CONCRETE PAD.
- REMOVE EXISTING DUCTWORK AS REQUIRED TO ALLOW FOR NEW DUCTWORK CONNECTION. SEE M-102 FOR EXTENT OF DEMOLITION.
- EXISTING DUCTWORK IN ELECTRICAL ROOM INCLUDING EXISTING HANGERS, SUPPORTS, SUPPLY REGISTERS, ETC. TO REMAIN.
- REMOVE EXISTING DUCTWORK THROUGH WALL. INFILL AND PATCH TO MATCH EXISTING. SEE STRUCTURAL DRAWINGS FOR DETAILS.
- EXISTING EQUIPMENT TO REMAIN.
- EXISTING T-STAT TO REMAIN.



TETRA TECH
ENGINEERING BUSINESS NO. 2429
www.tetratech.com
201 E. PINE STREET, SUITE 1000
ORLANDO, FL 32801
PHONE: (407)-839-3955 FAX: (407)-839-3790

BID SET

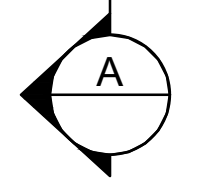
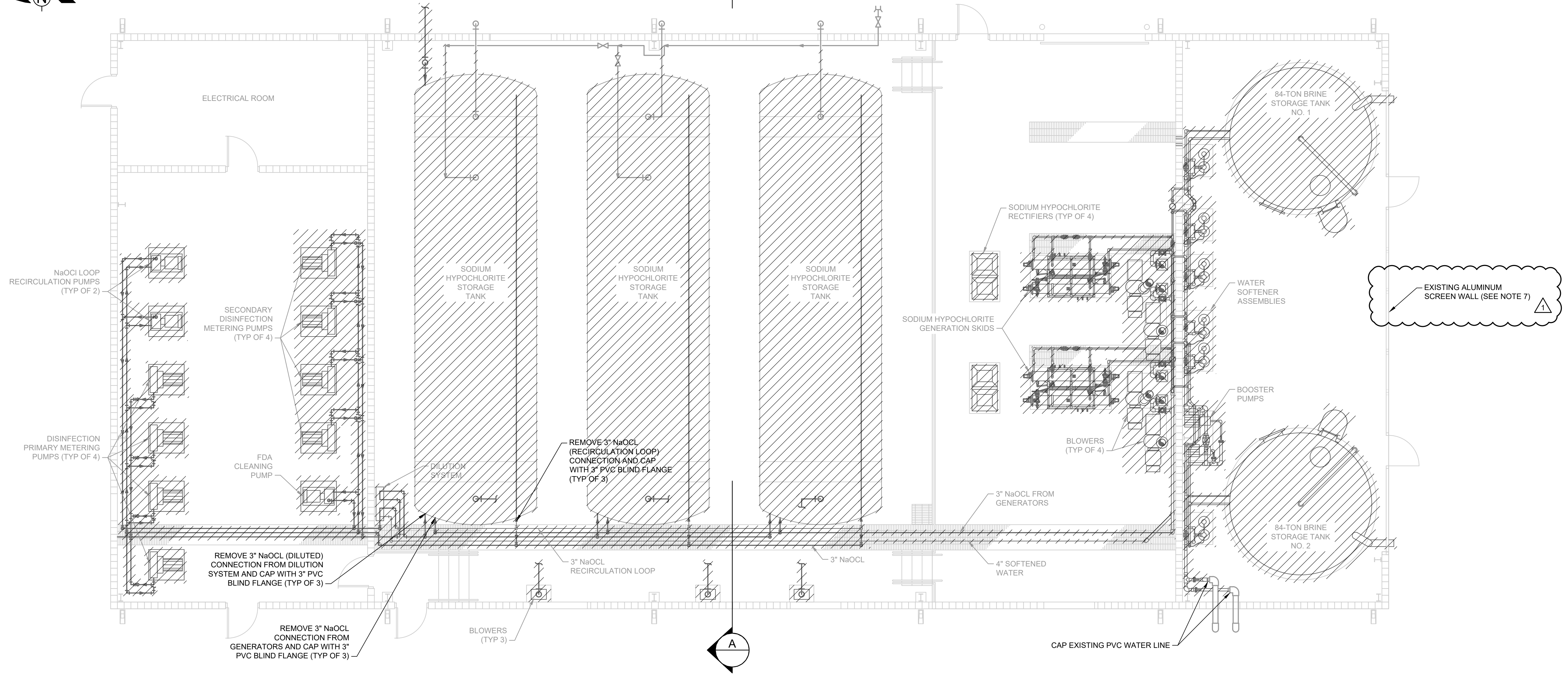
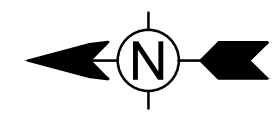
MARK	DATE	DESCRIPTION	BY
A	OCT-19	ADDENDUM NO.3	MGS

ORANGE COUNTY UTILITIES
EASTERN REGIONAL WATER SUPPLY FACILITY
SODIUM HYPOCHLORITE SYSTEM CONVERSION TO BULK
PROCESS 50
HVAC DEMOLITION PLAN

Project No.: 200-10034-18003
Designed By: MGS
Drawn By: VBD
Checked By: LER

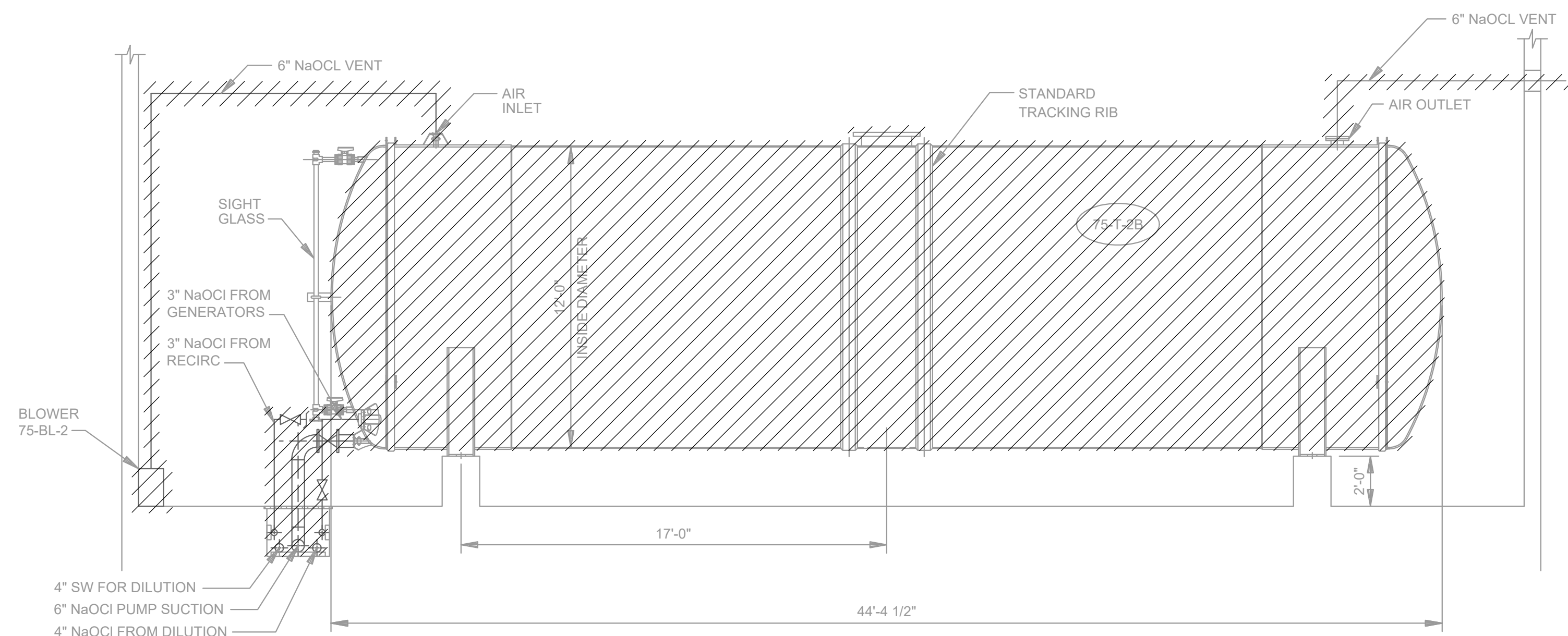
M101

10/24/2019 12:27:19 PM - O:\PROJECTS\ORLANDO\IER10034\200-10034-18003\CAD\ISHEETFILES\D110 PROCESS 75 BUILDING DEMO.DWG - SANFORD, CHADWICK



PLAN
SCALE: 3/16"=1'-0"

- NOTES:**
- ALL EQUIPMENT RELATED TO THE SODIUM HYPOCHLORITE GENERATION SYSTEM, INCLUDING BRINE STORAGE TANKS, SOFTENING SYSTEM, HYPOCHLORITE GENERATORS, BLOWERS, INTERCONNECTING PIPING AND VALVES, ELECTRICAL AND CONTROLS SHALL REMAIN IN SERVICE UNTIL THE STORAGE TANK MODIFICATIONS AND METERING PUMP REPLACEMENT FOR BULK SODIUM HYPOCHLORITE DELIVERY, STORAGE AND FEED IS ACCEPTED FOR FULL-TIME OPERATION BY THE OWNER AND IS FULLY OPERATIONAL AND CLEARED FOR SERVICE BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. IT IS INTENDED THAT EVERYTHING ASSOCIATED WITH THE SODIUM HYPOCHLORITE GENERATION SYSTEM BE DEMOLISHED, REMOVED AND PROPERLY DISPOSED OF SUCH THAT THIS AREA CAN BE USED FOR FUTURE FACILITIES. DISASSEMBLE, REMOVE AND PROPERLY DISPOSE OF ALL EQUIPMENT, STORAGE TANKS, PIPING, VENT LINES, PUMPS, VALVE, ELECTRICAL PANELS, CONTROL PANELS, DEVICES, CONDUIT, WIRING AND ALL OTHER EQUIPMENT RELATED TO THIS SYSTEM. DO NOT DISTURB FACILITIES NOT DESIGNATED FOR DEMOLITION.
 - CONTRACTOR SHALL SUBMIT A DETAILED DEMOLITION PLAN PROVIDING THE SEQUENCE FOR DEMOLITION, CONSTRUCTION AND TEMPORARY STORAGE AND FEED SYSTEM FOR THE SODIUM HYPOCHLORITE STORAGE AND FEED PUMP MODIFICATIONS OUTLINING STEP BY STEP SEQUENCE AND DURATION OF TANK MODIFICATIONS, METERING PUMP REPLACEMENT, SUCTION AND FEED PIPING REMOVAL AND INSTALLATION OF NEW SUCTION AND FEED PIPING, ELECTRICAL AND CONTROL MODIFICATIONS, TEMPORARY STORAGE AND FEED SYSTEM INSTALLATION AND OPERATIONS AND ALL OTHER SEQUENCING EVENTS TO DEMONSTRATE THE CAPABILITY OF MAINTAINING PRE AND POST DISINFECTION OPERATION WITHOUT DISRUPTION IN SERVICE. SEE SPECIFICATION SECTION 01010 FOR ADDITIONAL SEQUENCING REQUIREMENTS AND SECTION 11400 FOR REQUIREMENTS OF THE TEMPORARY STORAGE AND FEED SYSTEM.
 - ALL WALL, CEILING AND SLAB PENETRATIONS SHALL BE PATCHED AND SEALED. REMOVE EXISTING EQUIPMENT PADS FOLLOWING DEMOLITION OF ASSOCIATED EQUIPMENT AND PATCH FLOOR TO MATCH EXISTING.
 - ALL DISTURBED SURFACES SHALL BE PATCHED AND COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09900.
 - SEE ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS FOR THE REMOVAL OF ELECTRICAL AND CONTROLS EQUIPMENT.
 - SEE SPECIFICATION SECTION 02050 FOR ADDITIONAL DEMOLITION REQUIREMENTS.
 - REMOVE AND REPLACE EXISTING ALUMINUM SCREEN WALL AS NEEDED TO REMOVE EXISTING BRINE STORAGE TANKS. ANY SCREEN / ALUMINUM FRAME REMOVED FOR ACCESS TO BRINE STORAGE TANKS SHALL BE REPLACED WITH NEW.



A SECTION
SCALE: 1/4"=1'-0"

TETRA TECH
ENGINEERING BUSINESS NO. 2429
www.tetratech.com
201 E. PINE STREET, SUITE 1000
ORLANDO, FL 32801
PHONE: (407) 839-3955 FAX: (407) 839-3790

BID SET

MARK	DATE	DESCRIPTION
1	10/20/19	ADDENDUM NO. 3

ORANGE COUNTY UTILITIES
EASTERN REGIONAL WATER SUPPLY FACILITY
SODIUM HYPOCHLORITE SYSTEM CONVERSION TO BULK
PROCESS 75 EXISTING
NaOCl BLDG
DEMOLITION PLAN

Project No.: 200-10034-18003
Designed By: JCB
Drawn By: JTE
Checked By:

D110

Bar Measures 1 inch