# COLLIER COUNTY WATER-SEWER DISTRICT SOUTH COUNTY WATER RECLAMATION FACILITY PRELIMINARY TREATMENT SCREEN REPLACEMENT



## **BOARD OF COUNTY COMMISSIONERS**

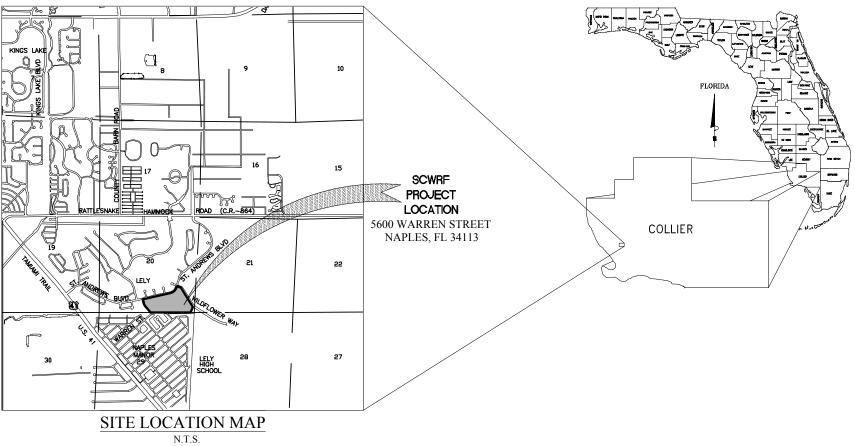
RICK LOCASTRO DISTRICT 1 CHRIS HALL DISTRICT 2 BURT L. SAUNDERS DISTRICT 3 DAN KOWAL DISTRICT 4 WILLIAM L. MC DANIEL, JR

## **COUNTY MANAGER**

AMY PATTERSON

## PUBLIC UTILITIES DIVISION

INTERM PUBLIC UTILITIES ADMINISTRATOR JAMES DELONY, PE MATTHEW MCLEAN, PE DIVISION DIRECTOR PUBLIC UTILITIES ENGINEERING ROBERT VON HOLLE DIVISION DIRECTOR WASTEWATER ROBERT EDGE SCWRF PLANT MANAGER LOURDES SANTIAGO PROJECT MANAGER III SUPERVISOR-PROJECT MANAGEMENT SHON FANDRICH, PE WAYNE KARLOVICH, PE SUPERVISOR-PROJECT MANAGEMENT OF SUBREGIONAL UTILITIES





NAPLES, FL. 34110 PHONE: 239.254.2000 **ISSUED FOR BIDDING** MAY, 2025

CAD File 340793\_CV

DATE 05/02/2025 COVER SHEET

MECHANICAL SHEET INDEX					
SHEET NO.	SHEET TITLE				
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THIS ITEM HAS BEEN DIGITALLY SIGNED

AND SEALED BY JARED M. MELLEIN, P.E.

ON 05/02/2025. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED

AND SEALED AND THE SIGNATURE MUST

BE VERIFIED ON ANY ELECTRONIC COPIES.

MECHANICAL ENGINEER:

BOWMAN

JARED M. MELLEIN, PE

950 ENCORE WAY NAPLES, FL - 34110 PHONE: 239.254.2000

STRUCTURAL SHEET INDEX				
SHEET NO.	SHEET TITLE			
S1-1	STRUCTURAL NOTES			
S1-2	REPAIR PLAN LOWER			
S1-3	REPAIR PLAN UPPER			



PAUL S. MOERSCHEL, PE 11926 FAIRWAY LAKES DR, FORT MYERS, FL - 33913 PHONE: 239.939.1414

ELECTRICAL SHEET INDEX				
SHEET NO.	SHEET TITLE			
E-1	ELECTRICAL SYMBOLS LEGEND, DRAWING INDEX & GENERAL NOTES			
E-2	UPPER LEVEL HEADWORKS ELECTRICAL DEMOLITION PLAN			
E-3	UPPER LEVEL HEADWORKS POWER, CONTROLS, LIGHTNING PROTECTION & BONDING PLAN			
E-4	LOWER LEVEL HEADWORKS POWER & CONTROLS PLAN			
ED-1	ELECTRICAL DETAILS			
ED-2	ELECTRICAL DETAILS			
ED-3	ELECTRICAL DETAILS			

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY FERNANDO FUENTES, P.E. ON 05/02/2025. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SCWRF PRELIMINARY TREATMENT SCREEN REPLACEMENT

DRAWING INDEX 5600 WARREN STREET, NAPLES, FL, 3 COLLIER COUNTY

THESE DRAWINGS ARE NOT APPROVED UNLESS SIGNED AND SEALED BELOW:

JARED M. MELLEIN, P.E. FL. LICENSE NO. 89872 05/02/2025

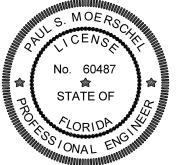
J.M. R.V. N.D. DESIGN DRAWN CHKD

JOB No. 340793-01-001

CAD File 340793\_CV

DATE 05/02/2025 DRAWING INDEX G-2

ELECTRICAL ENGINEER: RKS CONSULTING ENGINEERS FERNANDO FUENTES, PE 12651 MCGREGOR BLVD FORT MYERS, FL - 33919 PHONE: 239.481.6775



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PAUL S. MOERSCHEL, P.E. ON 05/29/25 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

STRUCTURAL ENGINEER: TRC WORLDWIDE ENGINEERING

- B. Damage to existing utilities and property during construction shall be repaired and/or replaced at Contractor's expense.
- C. All driveway, sidewalks and other existing facilities, utilities and improvements shall be restored equal to pre-construction conditions or better and to the satisfaction of the Engineer.
- D. The Contractor shall be limited to the work ours of 7:00 AM to 5:00 PM Monday through Friday. No noise producing work shall be performed prior to 8:00 AM. No Saturday or evening work shall be allowed without prior written approval of the County Project Manager. Approved night time work may be required.
- E. If the SCWRF will have other construction projects ongoing, the Contractor shall coordinate his work with these other projects. This coordination shall include submitting weekly schedules and cooperating with other contractors.
- F. Collier County Public Utility Standard Details and Specifications (County Utilities Standards Manual) are applicable to this project and are made a part of the Contract Documents by reference. Refer to latest edition and revisions of the County Utilities Standards. In the event of conflict between the County Utilities Standards and the Contract Documents, the more stringent requirement shall apply.
- A mandatory Pre-Bid conference accompanied with project site visit will be required for any Contractor submitting a bid.
- H. Prior to commencing work, the Contractor shall submit for approval of the following:
  - 1. Construction Schedule in bar chart format using Microsoft Project software or approved equal.
  - 2. Schedule of Values and Cash Flow Projections for progress payments.
- D. Shop drawings for all equipment and materials must be approved prior to manufacture, installation or payment by the Owner.
- E. Prior to the startup of any equipment, the Contractor shall submit and receive approval of the Draft Manufacturer's Operation and Maintenance Manual. Refer to Specification Sections 01330 and 01830. Following Startup, the Manual shall be finalized prior to Substantial Completion.
- F. Prior to Substantial Completion, the Contractor shall submit as-built drawings. The Contractor shall markup actual installed length and location of material and equipment. The Contractor shall sign and date the markup as-built drawings.

## **DEMOLITION NOTES**

- A. Prior to commencing any demolition of the influent screens, panels, isolation gates and appurtenances, the Contractor shall obtain written approval from the County Project Manager and have an approved plan submitted and approved in accordance with specifications Section 01160.
- B. The Contractor shall remove, and dispose of all demolished items as shown and specified on the Contract Documents.
- C. Remove all anchor bolts associated with equipment that is being removed to a depth of at least  $\frac{1}{2}$ " below the surface of existing concrete and patched with SIKA-123C or equal prior to applying new coatings. All new equipment shall utilize all new 316 stainless steel bolts, washers, and nuts.
- D. See Specification Section 01110 for additional information and requirements.
- E. It is the Contractor responsibility to use non-destructive methods (radar, x-ray, etc.) to locate embedded conduit in concrete prior to demolition, saw cutting or core drilling. Relocate and reconstruct affected per electrical specifications.

## SPECIAL PROJECT REQUIREMENTS (BYPASS)

- A. Shut down of the Influent Screening system can be scheduled only with prior written approval of the SCWRF Plant Manager and the County Project Manager. Only one influent screen may be taken out of service at a time.
- B. Contractor shall prepare and submit detail plans for working on Influent Screens 1 and 2, stop logs as well as slide gates S-2 S-7 as identified on the Contract Documents. See sheet M-11 for addition shutdown procedures.
- C. The opening and closing of gates shall be coordinated and performed only by County staff and with approval by the SCWRF Plant Manager or their designee.
- D. The Contractor shall provide all necessary equipment and labor to remove the wastewater from the channels, clean channels and bypass flow. The equipment shall include but not limited to pumps, hoses, vacuum truck, etc.
- . All channel coating and concrete repair work shall be performed 'by others'. General Contractor to coordinate with coating contractor during all channel shutdowns to execute required work.
- F. Work on slide gates, stop logs and influent screens must be completed with flows being bypassed/redirected as required to the Parkson Screen, Pista Grit Unit channel, and manual screen bypass channel.
- G. Contractor to provide all necessary equipment, material, and labor to install any temporary bulkhead required to assist in isolating any new equipment to be installed.
- H. The entire work area shall be considered a Class 1, Division-2, Group-D Classified Areas; Contractor to use suitable material and methods. The Contractor shall meet all regulatory requirements for entering and working in Confined Space.
- Any Contractor's construction shutdown of plant access drives shall be coordinated with SCWRF Plant Manager and County Project Manager.

## COATING EXPOSED PIPING AND METAL SURFACES

- A. The Contractor shall paint all new and modified exposed ductile iron, PVC piping and metal surfaces. Stainless steel does not get painted.
- . Surface preparation for ductile iron, equipment and other metal surfaces:
- 2. Paint shall be:
- . Seal all asphalt coated pipe prior to application of prime coat. Submit technical information on sealer for approval.
- c. Prime coat: Tnemec N69, 2-3 mil dft or approved equal.
- . Finish coat: Tnemec 73, 2-3 mil dft or approved equal.
- e. Color shall match existing pipe and appurtenances in other areas of the SCWRF. Color chart shall be submitted.

## PUBLIC UTILITIES DIVISION 5N-RELIABILITY ENGINEERING & OPERATIONS REQUIREMENTS

- A. The contractor's special attention is needed to assure compliance with the Collier County Public Utilities Five Ns. These relate to all County utilities facilities including, but not limited to, water and wastewater treatment facilities; raw water pumping and transmission facilities; potable water storage, transmission, and distribution facilities; wastewater collection, transmission, and pumping facilities; irrigation quality water storage, pumping, transmission, and distribution systems; and solid waste transfer station and landfill facilities. Any deviation to these requirements shall be reviewed and considered on a case-by-case basis by utility and other County staff. The Five Ns are:
- 1. No offsite odor at any time. (24 hours per day, 7 days per week, 365 days per year)
- 2. No sanitary sewer overflows (SSOs-Spills). (7 days per week, 365 days per year)
- 3. No fugitive dust emissions (7 days per week, 365 days per year).
- 4. No offsite noises, all sound emission shall be mitigated prior to fence line per Land Development Code. (7 days per week, 365 days per year)
- No offsite light emission, all light emissions shall be mitigated prior to fence line per Land Development Code.

ELORIDA CERTIFICATE OF AUTHORIZATION NUMBER 30462

950 Encore Way Naples, FL 34110 Phone (239) 254-2000

SCREEN REPLACEMENT

ENERAL NOTES

ARREN STREET, NAPLES, FL, 34'

THESE DRAWINGS ARE NOT APPROVED UNLESS SIGNED AND SEALED BELOW :

JARED M. MELLEIN, P.E

05/02/2025

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JOB	No		3407	793	_	01-0	001	
CAD File 340793_CV								
DATE 05/02/2025								
GENERAL NOTES								

## SEQUENCE OF WORK

The following Sequence of Work has been prepared for the proposed project. The Bidder/Contractor shall review the sequence and may propose additions or changes in the sequence. A full schedule of work shall be prepared by the Contractor and submitted for review and approval prior to any work at the site. NOTE: This sequence is based on work starting at Influent Screen No. 1; however, this may be changed to allow initial work starting Influent Screen No. 2.

- A. Issuance of overall Notice to Proceed
- B. Preconstruction meeting and preconstruction submittals.
- C. Field verification of all measurements for the proposed influent screens, including channel width for new gates, channel wall widths, and required proposed aluminum channel cover modifications.
- D. Issuance of Notice to Proceed on Screen replacement work.
- E. Coordination with SCWRF Plant Manager and County Project Manager or their designee for shutdown of influent screens.
- F. A written plan shall be submitted detailing the schedule and methodology for taking all channels and equipment out of service to perform the work in accordance with specification Section 01140 is required to be submitted by the contractor and approved by the County and the Engineer in advance of performing the work.
- G. The Contractor shall provide a minimum of 72 hours advance notice before requesting approval to remove a channel from service.
- H. The Contractor shall provide all needed bulkheads and dewatering equipment to take channels out of service and install stop logs, replace gates, and install influent screens shown on plans.
- . The Contractor shall have all equipment and materials onsite and available for installation prior to taking a channel offline so that downtime of the channel can be minimized.
- J. Coating and concrete repair work to be performed 'by others'. Coordination between Contractors shall be made prior to any channel shutdown/bypass work. All channel coating rehabilitation work shall be completed, inspected and approved by the Owner prior to installing the influent screens. Manual bar screen to be removed for channel coating/concrete repair work and reinstalled when coating/repair work is completed.
- C. All gates and screening system equipment associated with the first channel shall be fully completed, tested and found to be fully functioning for a minimum of 5 days before the second channel can be approved for removal from service.
- L. Isolation of each screen shall be accomplished through routing of flow to existing Parkson Screen and bypass channel as well as existing manual screen and bypass channel.
- M. One screen shall be taken out of service, demolished, tested, and put into service at a time.
- N. Demolition of existing Influent Screen including anchor bolts removal and patching in the channels. See demolition notes on sheet G-3 regarding anchor bolt demolition and replacement work requirements.
- O. Installation of new screen system, including wash press and sluice, drop chute, anchor bolts, supports, piping, etc.
- P. Installation of new gates, actuators, level sensors, aluminum decking, electrical control panels, conduit, etc.
- Q. Introduction of wastewater to Influent Screen No.1.
- R. Notice to Proceed on Influent Screen No.2 work. Sequence of work will be similar to that on Influent Screen No.1.
- S. Removal and replacement of existing gates shall be coordinated with isolations needed for replacement of Influent Screens No. 1 & 2.
- T. Upon startup of both Influent Screens and gates, a final completion walk through will be completed. NOTE: Individual substantial completion walkthroughs for individual gates and screens will be completed at various stages.

## **LEGEND**

*	FIRE HYDRANT ASSEMBLY		CASING PIPE
	WATER VALVE	EXISTING WATER MAIN	WATER MAIN
<b>●</b>	WATER METER	EXISTING FORCE MAIN	FORCE MAIN
¥	BLOW OFF	EXISTING STORM DRAIN	STORM DRAIN
<b></b>	AIR RELEASE VALVE	EXISTING TELEPHONE	BURIED TELEPHONE CABLE
	REDUCER	EXISTING ELECTRICAL	BURIED ELECTRIC CABLE
	22 1/2° BEND	EXISTING TV	BURIED TELEVISION CABLE
	45° BEND	*	FENCE
Ē	90° BEND		EDGE OF PAVEMENT
	TEE		FACE OF/BACK OF CURB
	CROSS		RIGHT OF WAY
Ī	PLUG		EASEMENT
$\triangleright$	MITERED END SECTION		SIDEWALK

## **ABBREVIATIONS:**

	AMERICAN NATIONAL STANDARDS INSTITUTE APARTMENT AIR RELEASE VALVE AMERICAN SOCIETY FOR TESTING AND MATE AVENUE AMERICAN WATER WORKS ASSOCIATION BURIED ELECTRIC BOULEVARD BASE LINE BENCH MARK BURIED TELEPHONE BUTTERFLY VALVE ASBESTOS CEMENT CENTER TO CENTER CAST IRON CLASS/CENTERLINE CLAY CLEANOUT CONCRETE CORPORATION CONTROL PANEL COURT COPPER TUBE SIZE DUCTILE IRON PIPE DIAMETER DRIVE/DIMENSION RATIO EASEMENT ELEVATION EDGE OF PAVEMENT EXISTING FINISH FLOOR ELEVATION FORCE MAIN FLORIDA DEPARTMENT OF TRANSPORTATION FEET FLANGED PIPE FITTING FIBER OPTIC GALVANIZED GATE VALVE HIGH—DENSITY POLYETHYLENE WASH AND PRESS	L LF ERIALLN	LANE MAXIMUM MANHOLE MINIMUM MECHANICAL JOINT NUMBER NOT TO SCALE OPTIONAL BASE GROUP ON CENTER EACH WAY PROFILE GRADE LINE PLACE POWER POLE WOOD POWER POLE CONCRETE PROPOSED PER SQUARE INCH POLYVINYL CHLORIDE PAVEMENT RIGHT OF CENTERLINE REINFORCED CONCRETE PIPE ROAD REDUCER REQUIRED RESTRAINED MECHANICAL JOINT RIGHT OF WAY SCHEDULE SEWER CLEANOUT STANDARD DIMENSION RATIO SANITARY MANHOLE SANITARY MANHOLE SANITARY SEWER/STAINLESS STEEL STRATION SOLVENT WELD SIDEWALK TYPICAL
GALV GV HDPE	FIBER OF IC GALVANIZED GATE VALVE HIGH-DENSITY POLYETHYLENE	SW TYP UE VCP	
WAP	WASH AND PRESS	WM	WATER METER/WATER MAIN

SOME PLORIDA CERTIFICATE OF AUTHORIZATION NUMBER 30462

SOU ERCORE Way
Naples, FL 34110
Phone (239) 254-2000

EPLACEMENT

L NOTES

ET, NAPLES, FL, 3411

SCREEN REPL GENERAL 5600 WARREN STREET,

JARED M. MELLEIN, P.E. FL. LICENSE NO. 89872 05/02/2025

DATE DESCRIPTION

J.M. R.V. N.D.
DESIGN DRAWN CHKD

SCALE

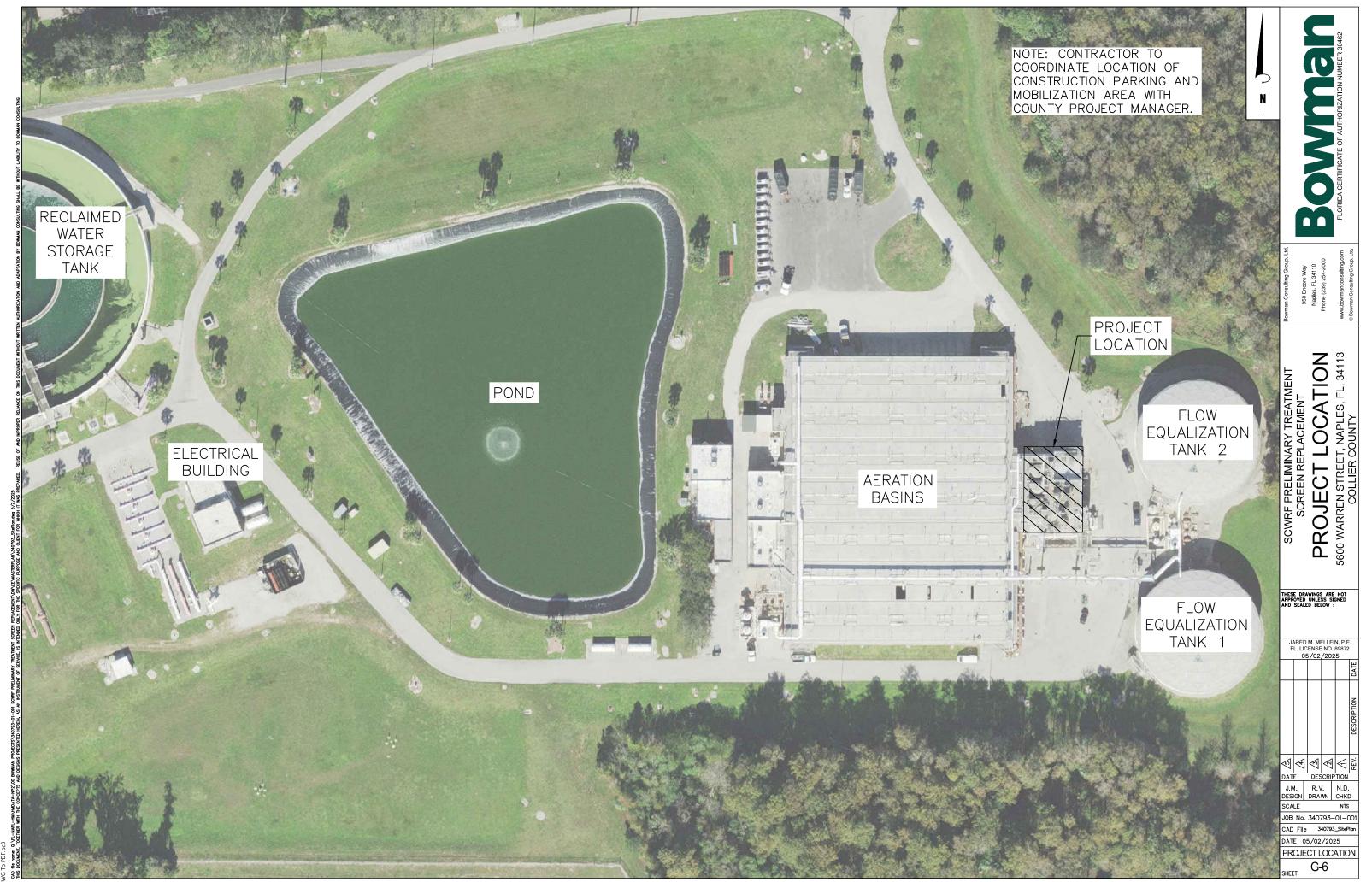
JOB No. 340793-01-001

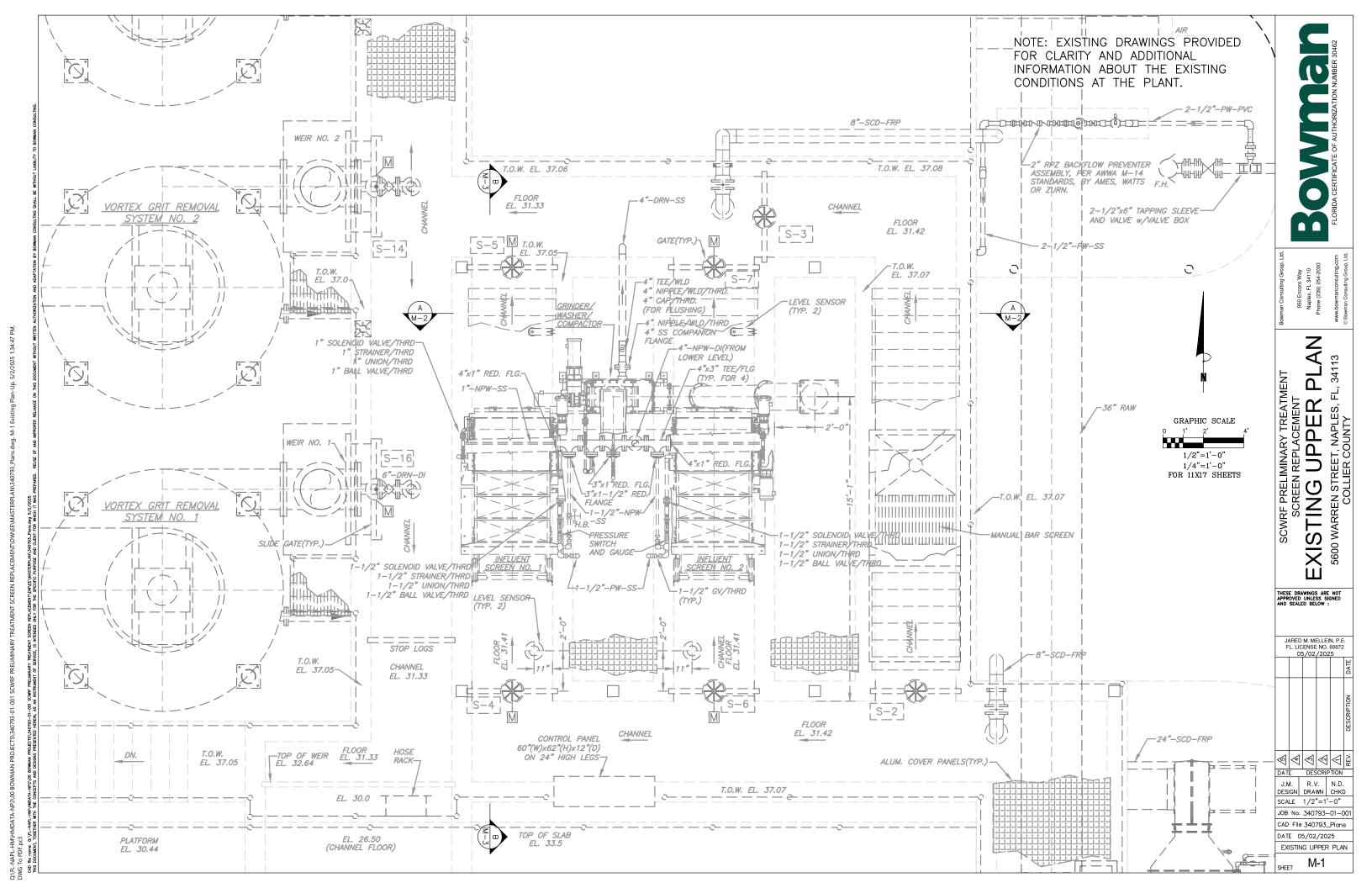
CAD File 340793 CV

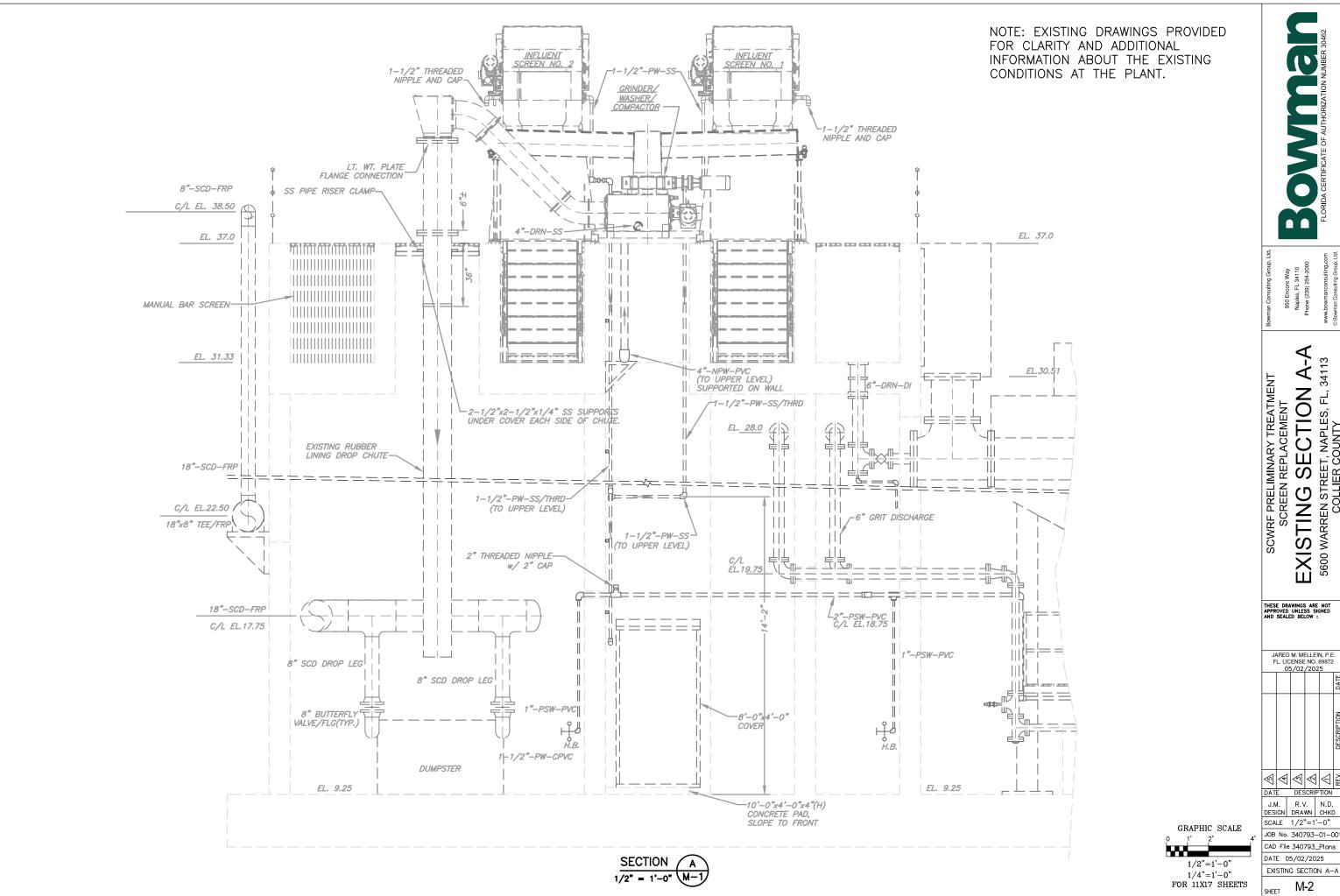
DATE 05/02/2025

GENERAL NOTES

Q.XE.-NAPL-HM/HMDATA-NP2/00 BOWMAN PROJECTS\340793-01-001 SCWRF PRELIMINARY TREATMENT SCREEN REPLACEMENT/DW/EE\MAS DWG To PDF.pc3 CAO fin rome: CXT-NAPL-HWY-MR2/00 BOMMAN PROJECTS\40793-01-001 SCWRF PRELIMINAY TREATMENT SCREIN REPLADMENTOWET WASTER-MAY-MAYBOTS. CXT-NAPL—MAYMATA-WEY/00 BOMMAN PROJECTS\40793-01-001 SCWRF PRELIMINAY TREATMENT SCREIN REPLADMENTOWET WASTER-MAY-MAYBOTS. CXT-NAPL CAN BE CAN A PRELIMINAY TREATMENT SCREIN REPLADMENTOWET WASTER-MAY BOTS SAZION SAZION







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EXISTING

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JARED M. MELLEIN, P.E. FL. LICENSE NO. 89872 05/02/2025 J.M. R.V. N.D. DESIGN DRAWN CHKD SCALE 1/2"=1'-0" JOB No. 340793-01-001 CAD File 340793\_Plans DATE 05/02/2025

M-2

NOTE: EXISTING DRAWINGS PROVIDED FOR CLARITY AND ADDITIONAL INFORMATION ABOUT THE EXISTING CONDITIONS AT THE PLANT.



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SCWRF PRELIMINARY TREATMENT SCREEN REPLACEMENT EXISTING SECTION E

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DATE 05/02/2025

EXISTING SECTION B-B

M-3

GRAPHIC SCALE 1/2"=1'-0"

1/4"=1'-0"

FOR 11X17 SHEETS



B-B

DEMOLITION SECTION 5600 WARREN STREET, NAPLES, FL, 341 COLLIER COUNTY

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CAD File 340793\_Plans DATE 05/02/2025 DEMOLITION SECTION B-B

M-6

1/2"=1'-0" 1/4"=1'-0" FOR 11X17 SHEETS

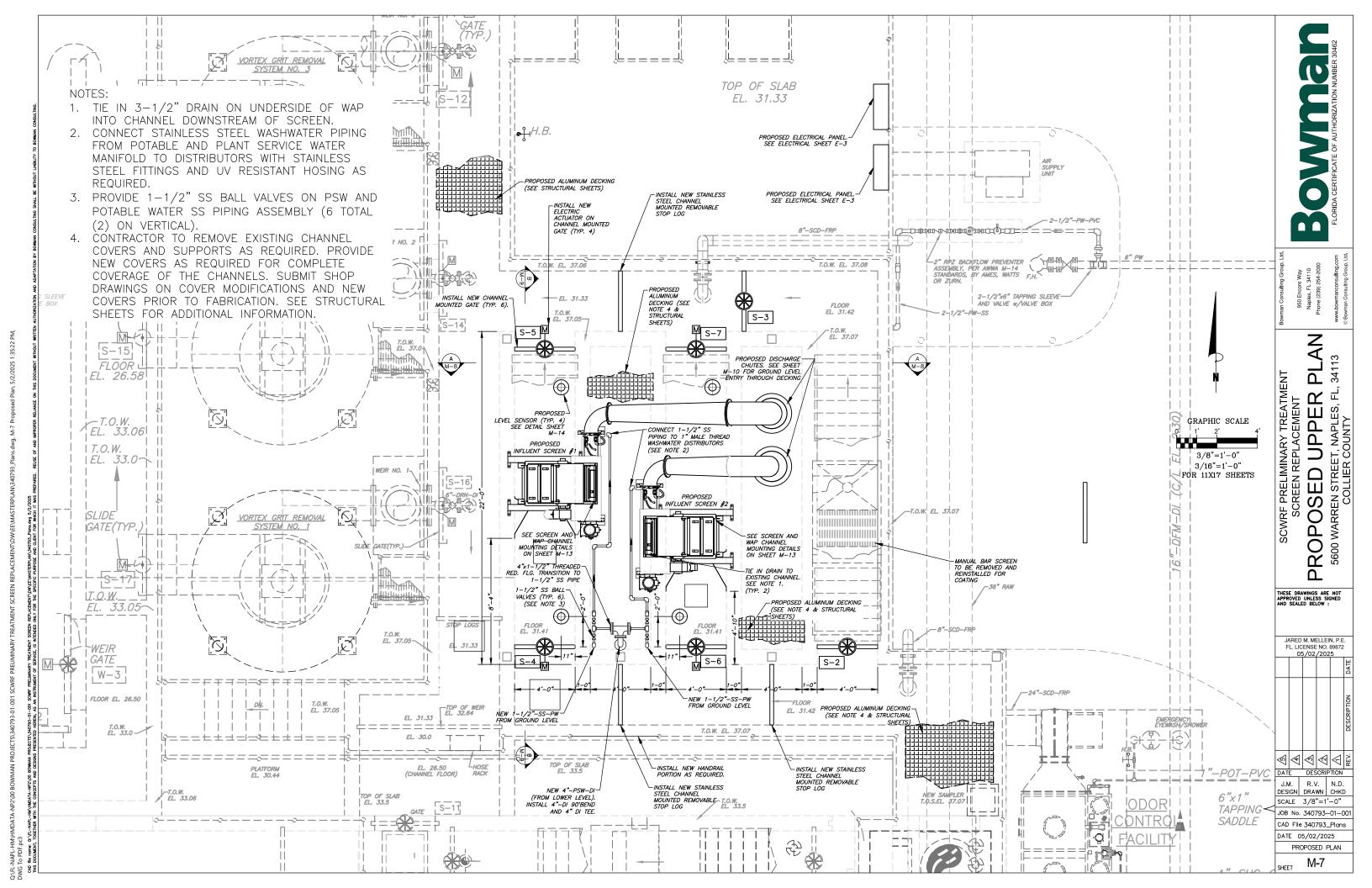
GRAPHIC SCALE

-PIPE HANGER(TYP.) SEE DETAIL SHEET (2)1-1/2"-PW-SS 4"-NPW-PVC (SUPPORT FROM | | (SUPPORT ON WALL) 4"-NPW-PVC (SUPPY LINE)

<u>INFLUENT</u> SCREEN NO.

-1-1/2" SOLENOID VALVE/THRD 1-1/2" STRAINER/THRD 1-1/2" UNION/THRD 1-1/2" BALL VALVE/THRD

LEVEL SENSOR



ELORIDA CERTIFICATE OF AUTHORIZATION NUMBER 30462

950 Encore Way Naples, FL 3410

PROPOSED SECTION A-4 5600 WARREN STREET, NAPLES, FL, 34113

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SCALE 1/2"=1'-0"

JOB No. 340793-01-001 CAD File 340793\_Plans DATE 05/02/2025

GRAPHIC SCALE

1/2"=1'-0" 1/4"=1'-0" FOR 11X17 SHEETS

PROPOSED SECTION A-A

SHEET M-8



N B-B ,34113 SCWRF PRELIMINARY TREATMENT SCREEN REPLACEMENT PROPOSED SECTION 5600 WARREN STREET, NAPLES, FL, COLLIER COUNTY

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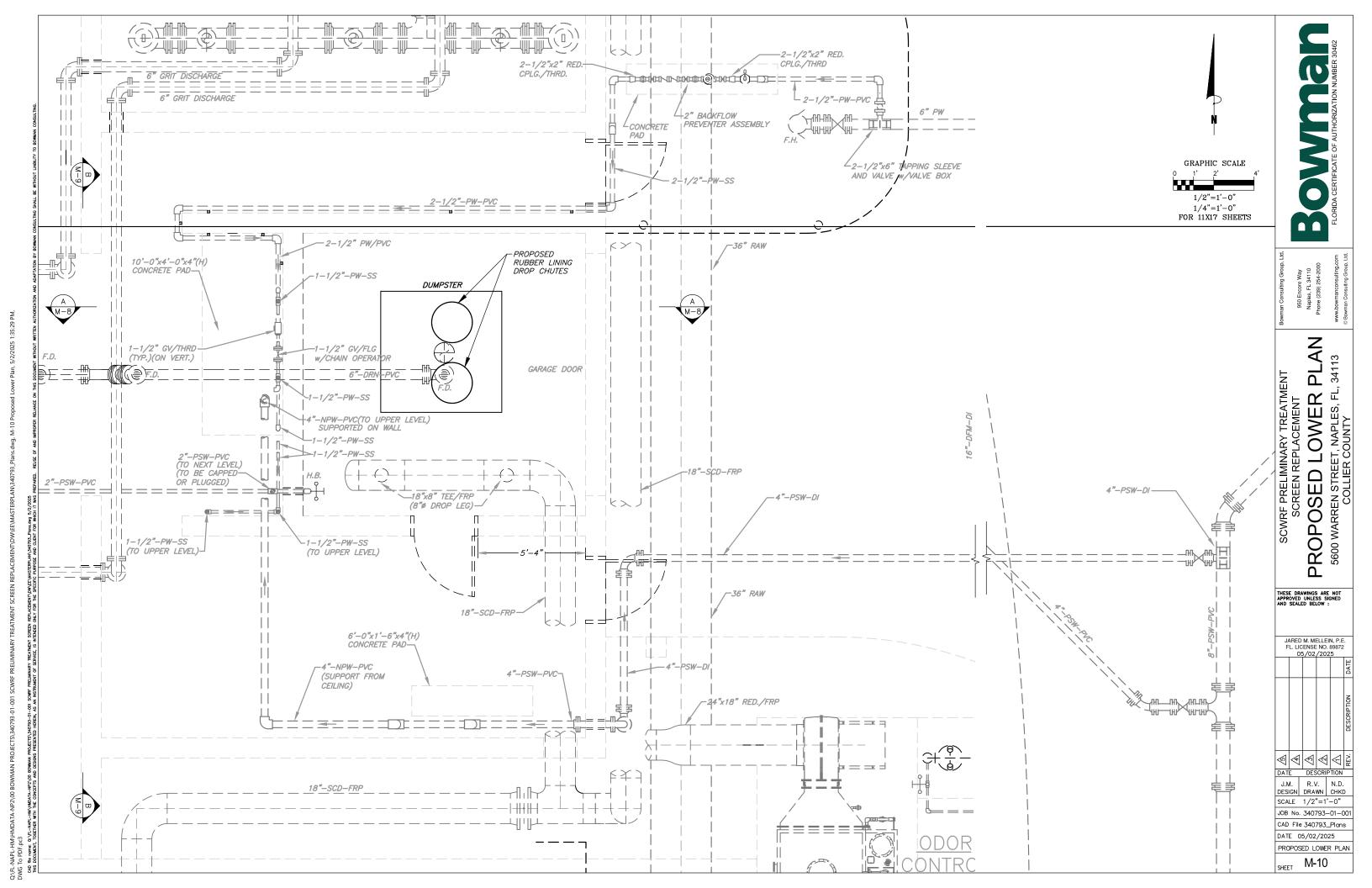
JOB No. 340793-01-001 CAD File 340793\_Plans DATE 05/02/2025

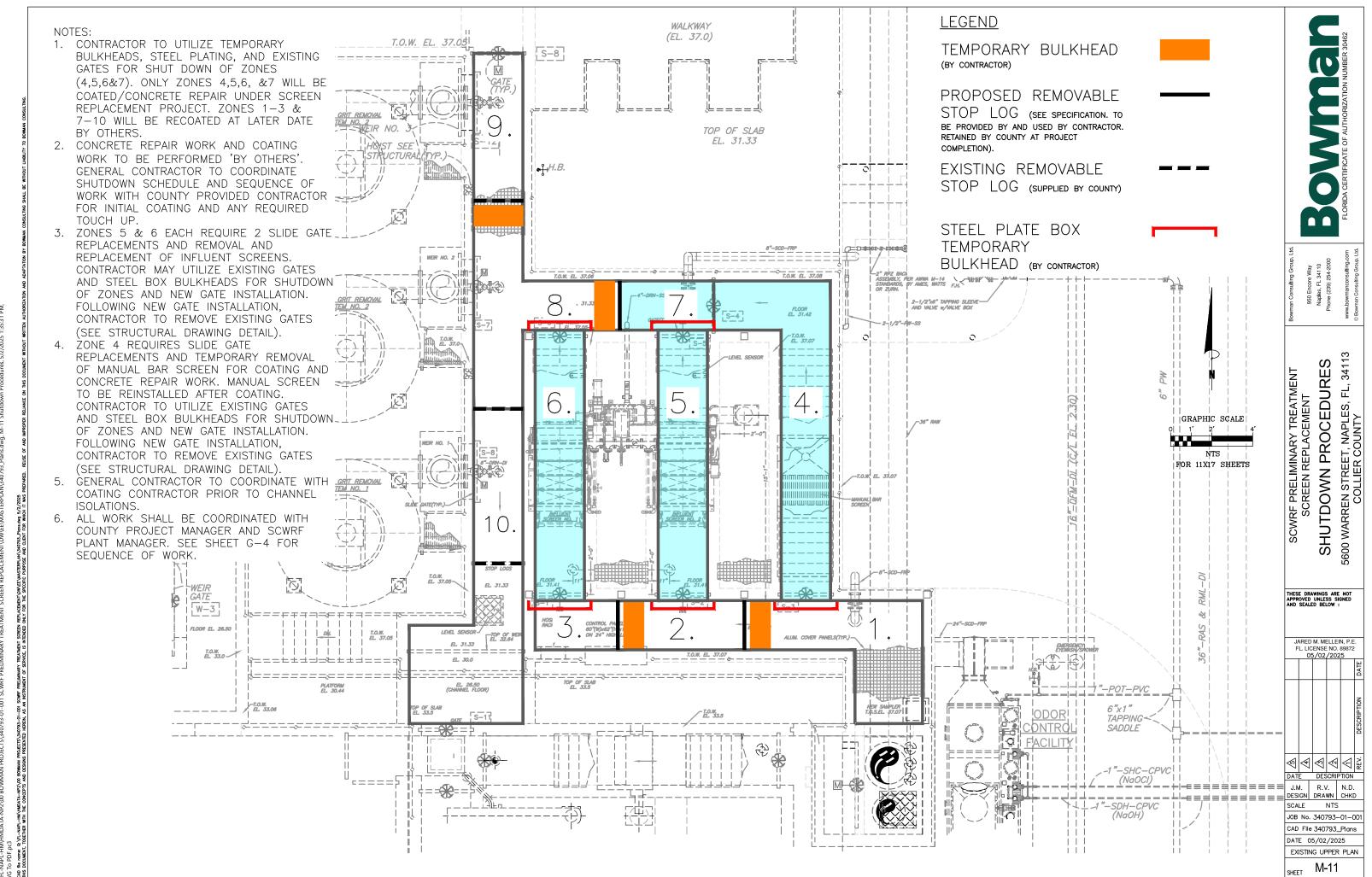
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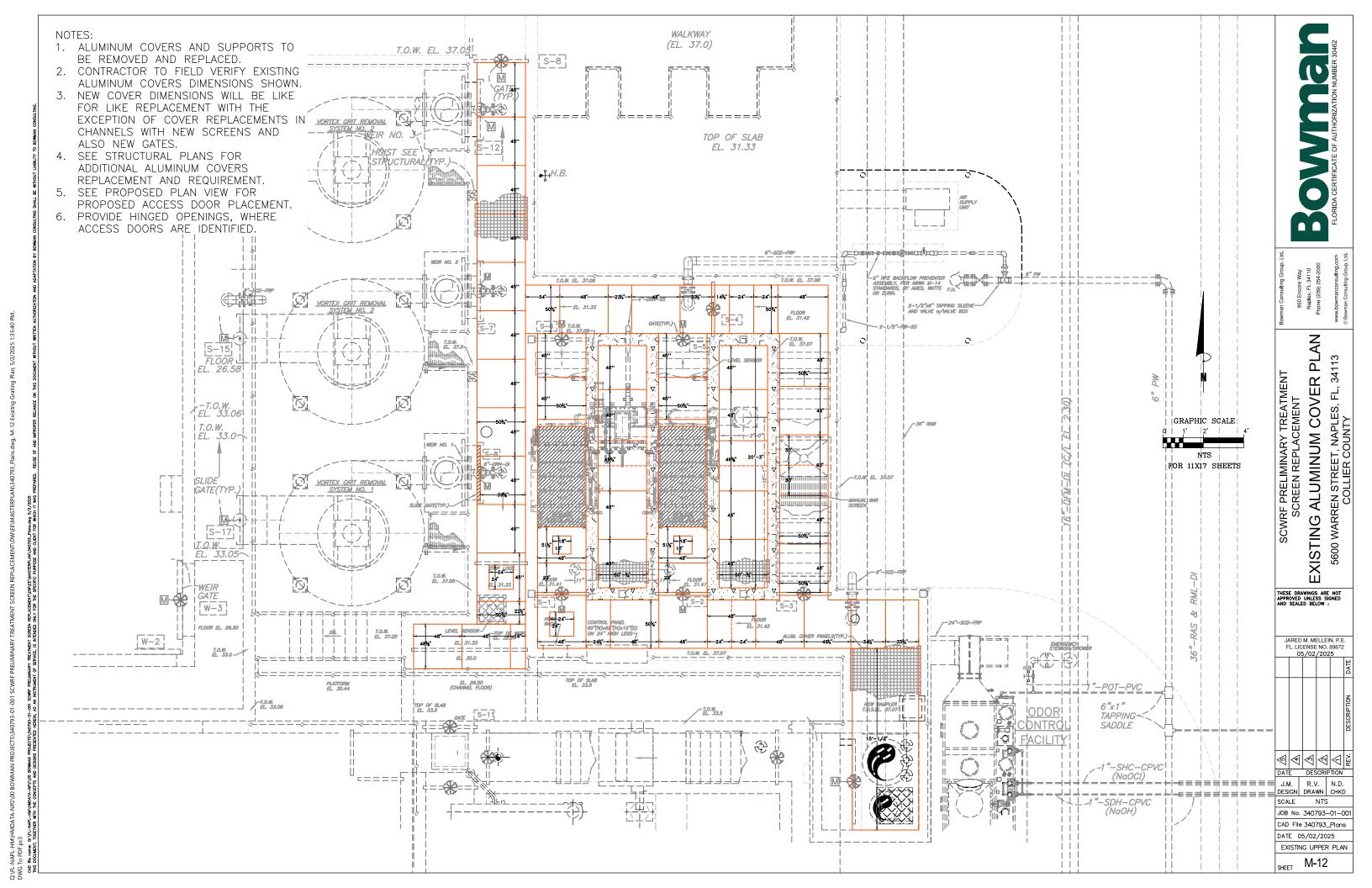
1/4"=1'-0" FOR 11X17 SHEETS

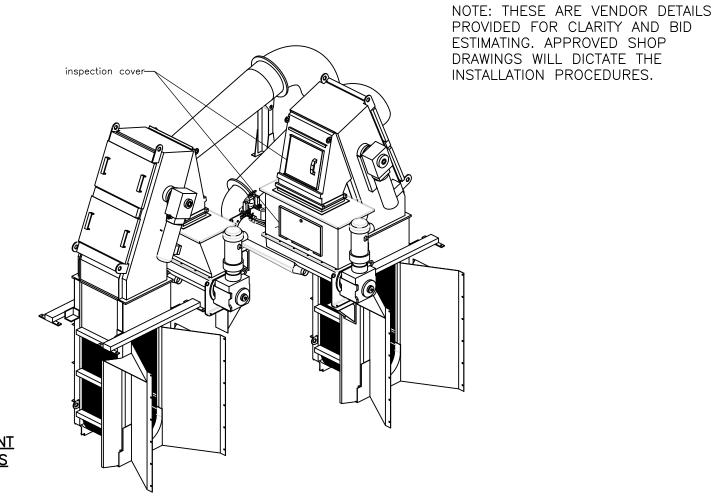
PROPOSED SECTION B-B M-9

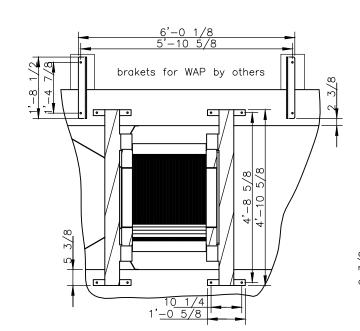
SECTION B 1/2" = 1'-0" M-7



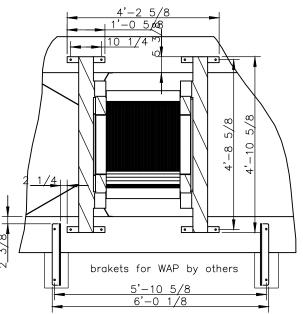




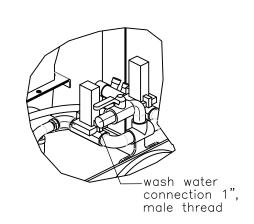




CHANNEL MOUNTING DETAIL
INFLUENT SCREEN #1
NTS



CHANNEL MOUNTING DETAIL
INFLUENT SCREEN #2
NTS



WASH WATER CONNECTION DETAIL

(DETAIL A)

NTS

ELORIDA CERTIFICATE OF AUTHORIZATION NUMBER 30462

950 Encore Way Naples, FL 34110 Phone (239) 254-2000

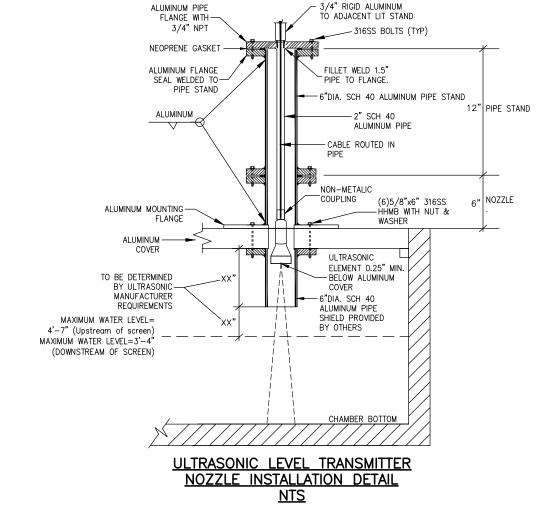
\_S APLES, FL, 34113

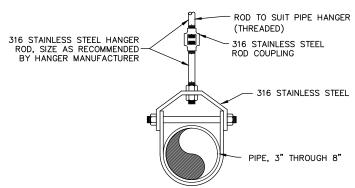
DETAILS 5600 WARREN STREET, NAPLES, FL, COLLIER COUNTY

THESE DRAWINGS ARE NOT APPROVED UNLESS SIGNED AND SEALED BELOW:

DETAILS

SHEET M-13

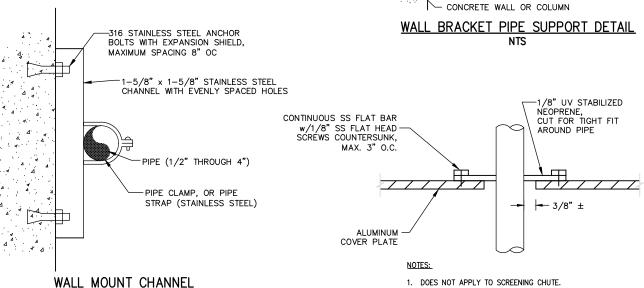




HANGER FOR 3" THROUGH 16" PIPE NTS

PIPE SUPPORT DETAIL

NTS



1. DOES NOT APPLY TO SCREENING CHUTE.

2. COORDINATE LOCATION OF ALL PIPE PENETRATIONS TO AVOID CHANNEL SUPPORTS AND STIFFENERS.

PIPE PENETRATIONS THRU ALL ALUMINUM COVER PLATES DETAIL NTS

PIPE, 4" THROUGH 10"

316 STAINLESS STEEL U-BOLT

316 STAINLESS STEEL

WALL BRACKET

─ 316 STAINLESS STEEL ANCHOR BOLTS WITH EXPANSION SHIELD (TYP)



34113 SCWRF PRELIMINARY TREATMENT SCREEN REPLACEMENT 5600 WARREN STREET, NAPLES, COLLIER COUNTY **DETAILS** 

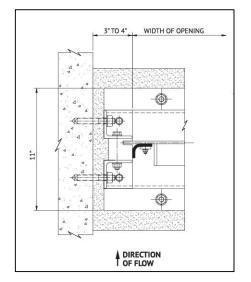
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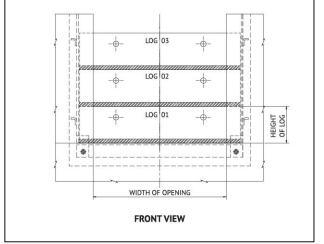
DETAILS SHEET M-14

FREE 88"-	TOP OF CHANNEL  TOP OF SLIDE BOARD -20°	O BENING  GROUT FILL  DIRECTION  OF FLOW
WIDTH OF CHANNEL		GROUTFILL DIRECTION OF FLOW
FRONT VIEW	SIDE VIEW	CIVIL DETAILS

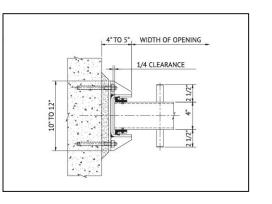
GATE DETAIL NTS



GATE DETAIL NTS



STOP LOG DETAIL



STOP LOG DETAIL (PLAN) <u>NTS</u>

### GATE NOTES:

- 1. GATE SHALL BE CONSTRUCTED FROM 316 SS
- 2. GATE OPERATORS SHOWN ON THE DRAWINGS ARE FOR ILLUSTRATION ONLY. DESIGN OF GATE OPERATORS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- 3. GROUT SHALL BE EUCLID NS GROUT OR APPROVED EQUAL INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 4. ALL ANCHOR SYSTEMS SHALL BE SS AND APPROVED.
- 5. DRILL, INSTALL SS ANCHORS INTO CONCRETE W/ S7 ADHESIVE (RED HEAD) PER MANUFACTURER REQUIREMENTS.  $5^{\circ}$  MIN EMBEDMENT INTO CONCRETE
- 6. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO SUBMITTAL.
- 7. PLANS, DETAILS, AND SPECIFICATIONS BASED UPON RODNEY HUNT SERIES A-212 SIDE WALL ANCHORED.

### STOP LOG NOTES:

- 1. STOP LOGS SHALL BE CONSTRUCTED FROM 316 SS
- 2. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO SUBMITTAL.
- 7. PLANS, DETAILS, AND SPECIFICATIONS BASED UPON RODNEY HUNT SERIES A-412 LOG MOUNTED SEALING ARRANGEMENT.

34113 5600 WARREN STREET, NAPLES, COLLIER COUNTY **DETAILS** 

SCWRF PRELIMINARY TREATMENT SCREEN REPLACEMENT

THESE DRAWINGS ARE NOT APPROVED UNLESS SIGNED AND SEALED BELOW:

JARED M. MELLEIN, P.E FL. LICENSE NO. 89872 J.M. R.V. N.D. DESIGN DRAWN CHKD SCALE NTS JOB No. 340793-01-001 CAD File 340793\_Plans

DATE 05/02/2025 DETAILS

SHEET M-15

- 1010 GENERAL:

  A. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS, CONSULT THESE DRAWINGS FOR DEPRESSIONS, DIMENSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- C. WHERE DRAWINGS AND SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT RESTRICTIONS AND REQUIREMENTS SHALL GOVERN
- D. PLAN NOTES, DETAILS AND SECTIONS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES. TYPICAL DETAILS AND SECTIONS NOT CUT ON PLANS SHALL APPLY UNLESS NOTED OTHERWISE.
- E. THE STRUCTURE IS DESIGNED TO BE SELE-SUPPORTING AND STABLE AFTER THE THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE BUILDING AND IT'S COMPONENTS DURING REPECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE DOWNS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION COMPLIES WITH OSHA REGULATION INCLUDING DESIGN OF CONNECTIONS OF MEMBERS THAT WILL NOT BE FULLY COMPLETED AT THE TIME OF INSTALLATION.
- TOWER CRANES ARE A CONTRACTOR RESPONSIBILITY AND SHALL BE DESIGNED FOR APPLICABLE CRITERIA INCLUDING BUT NOT LIMITED TO INSURANCE REQUIREMENTS AND APPLICABLE BUILDING CODES AT THE PROJECT LOCATION. THE CONTRACTOR SHALL SUBMIT A CRANE LAYOUT, SHOP DRAWNIOS, CALCULATIONS AND REACTIONS FOR BOTH FOUNDATIONS AND CRANE TIE-IN LOCATIONS, SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. THE ENGINEER OF RECORD SHALL BE RETAINED BY THE CONTRACTOR TO EVALUATE CRANE TIE-IN FORCES ON THE BUILDING STRUCTURE AND TO PROVIDE CRANE FOUNDATION DESIGN.

1015 ALTERATION OF EXISTING FACILITY:
A. INFORMATION SHOWN FOR THE EXISTING FACILITY ON THESE DRAWINGS WERE TAKEN FROM THE DRAWINGS THAT WERE:

PREPARED FOR: COLLIER COUNTY
PREPARED BY: HOLE MONTES/CHZMHILL
ENTITLED: SOUTH COUNTY WATER RECLAMATION FACILITY
DATED: 9/05

B. WORK SHOWN ON THESE PLANS ASSUMES THAT THE ORIGINAL CONSTRUCTION WAS PERFORMED IN ACCORDANCE WITH THE ABOVE INDICATED ORIGINAL DRAWINGS INCLUDING (BUT NOT LIMITED TO) DIMENSIONS, ELEVATIONS, MEMBER SIZES, MATERIALS, DETAILS, ETC. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE CONDITIONS RELATING TO THE EXISTING STRUCTURE AND TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR

1060 DESIGN AND CONSTRUCTION STANDARDS:
A. THE STRUCTURAL SYSTEM FOR THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING CODES AND REFERENCED STANDARDS:

FLORIDA BUILDING CODE 8th EDITION BY THE INTERNATIONAL CODE (FBC 2023)

(ADM1-2020) 2020 EDITION OF THE ALUMINUM DESIGN MANUAL

(ACI 318-19) 2019 EDITION OF AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE

(AISC 15 ED) FIFTEENTH EDITION OF THE STEEL CONSTRUCTION MANUAL BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION

(AISI S100-16) NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, WITH SUPPLEMENT 2 (2020)

MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES BY THE AMERICAN SOCIETY OF CIVIL

2018 EDITION OF NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION WITH 2018 SUPPLEMENT BY AMERICAN FOREST & PAPER ASSOCIATION

(PCI) PCI DESIGN HANDBOOK - PRECAST AND PRESTRESSED CONCRETE 8TH

(PTI) POST-TENSION MANUAL 6TH EDITION, POST TENSION INSTITUTE

(SDI) STEEL DECK INSTITUTE ROOF DECK DESIGN MANUALL (2ND EDITION), FLOOR DECK DESIGN MANUAL (2ND EDITION), AND DIAPHRAGM DESIGN MANUAL (4TH

(SJI-100-15) STANDARD SPECIFICATIONS FOR K-SERIES, LH-SERIES, AND DLH SERIES OPEN WEB STEEL JOISTS AND FOR JOIST GIRDERS

(TMS 402-2016) BUILDING CODE FOR MASONRY STRUCTURES

B. CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE ABOVE REFERENCED CODES AND STANDARDS AND THE FOLLOWING

(ACI 117-10) SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION

(ACI 301-16) SPECIFICATIONS FOR TOLERANCES FOR STRUCTURAL CONCRETE

CONSTRUCTION MATERIALS

(ACI 304R-00) RECOMMENDED PRACTICES FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE. (ACI 305R-10) HOT WEATHER CONCRETING

(ACI 306R-16) COLD WEATHER CONCRETING

(ACI 309R-05) GUIDE FOR CONSOLIDATION OF CONCRETE

(ACI 315-18) DETAILS AND DETAILING OF CONCRETE REINFORCING

(MNL-15 (16)) FIELD REFERENCE MANUAL: SPECIFICATIONS FOR STRUCTURA CONCRETE (ACI 301-16) WITH SELECTED ACI AND ASTM REFERENCES

(AWS D1.1-20) STRUCTURAL WELDING CODE - STEEL

(AWS D1.4-17) STRUCTURAL WELDING CODE - REINFORCING STEEL

(TPIWTCA BCSI-18 (W/ 2020 UPDATES)) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES

1120 SUBMITTAL (SHOP DRAWING) REVIEW:
A. SUBMITTALS (SHOP DRAWINGS) WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE SUBMITTALS (SHOP DRAWINGS) WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY, IF ANY DEVIATIONS FROM CONTRACT DOCUMENTS BECOME APPARENT DURING REVIEW, AS A COURTESY, ENGINEER/ARCHITECT MAY MARK UP DEVIATIONS ON SHOP DRAWINGS DURING THE SUBMITTAL PROCESS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VERIEY COMPLIANCE WITH THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO QUANTITY, LENGTH, ELEVATIONS AND DIMENSIONS. FABRICATION REQUIREMENTS, CONSTRUCTION MEANS AND METHODS, COORDINATION OF WORK WITH OTHER TRADES OR CONSTRUCTION SAFETY REQUIREMENTS.

B. SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ARCHITECT/ENGINEER. DRAWINGS SUBMITTED WITHOUT REVIEW, OR IS SUBMITTAL IS INCOMPLETE, WILL BE REJECTED AND WILL NOT BE REVIEWED. JENKINS & CHARLAND/TRC WORLDWIDE ENGINEERING. INC WILL NOT BE RESPONSIBLE FOR DELAYS CAUSED BY

C. SHOP DRAWING SUBMITTALS SHALL COMPLY WITH SPECIFICATION SECTION 01330.

D. THE CONTRACT DOCUMENTS WILL GOVERN OVER THE SHOP DRAWINGS UNLESS

E. CHANGES AND ADDITIONS MADE ON RE-SUBMITTALS SHALL BE CLEARLY FLAGGED AND NOTED. THE PURPOSE OF THE RE-SUBMITTALS SHALL BE CLEARLY NOTED ON THE LETTER OF TRANSMITTAL. ARCHITECT/ENGINEER REVIEW WILL BE LIMITED TO THOSE I

3307 PENETRATIONS:
A. NO PENETRATIONS SHALL BE MADE IN ANY STRUCTURAL MEMBERS OTHER THAN THOSE SPECIFICALLY DESIGNATED ON THE STRUCTURAL DRAWINGS WITHOUT PREVIOUS APPROVAL OF THE ENGINEER. CONTRACTOR SHALL SUBMIT A PENETRATION PLAN FOR APPROVAL INDICATING ANY PENETRATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS PRIOR TO CONCRETE PLACEMENT.

3601 POST-INSTALLED ANCHORS:
A. POST INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE

B. CONTRACTOR SHALL OBTAIN APPROVAL FROM ENGINEER OF RECORD PRIOR TO USING POST-INSTALLED ANCHORS FOR MISSING OR MISPLACED CAST-IN ANCHORS.

C. CARE SHALL BE GIVEN TO AVOID DAMAGING EXISTING REBAR WHEN DRILLING HOLES. HOLES SHALL BE DRILLED AND CLEANED PER MANUFACTURER'S INSTRUCTIONS.

D. UNLESS SPECIFIED OTHERWISE, ANCHORS SHALL BE EMBEDDED IN THE APPROPRIATE SUBSTRATE WITH A MINIMUM EMBEDMENT OF 8 TIMES THE NOMINAL ANCHOR DIAMETER OR THE EMBEDMENT REQUIRED FOR SUPPORT OF THE INTENDED LOAD, ANCHORS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AT NOT LESS THAN MINIMUM EDGE DISTANCE AND/OR SPACING INDICATED IN THE MANUFACTURER'S LITERATURE.

E. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED BELOW SHALL SUBSTITUTION REQUESTS FOR PROJUCT SO THEN THAN THOSE LISTED BELOW SHIP
BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL WITH
CALCULATIONS PREPARED, SIGNED AND SEALED BY AN ENGINEER REGISTERED IN
THE JURISDICTION OF THE PROJECT SHOWING THAT THE SUBSTITUTED PRODUCT
WILL ACHIEVE AN EQUIVALENT CAPACITY USING THE APPROPRIATE DESIGN

F. ACCEPTABLE PRODUCTS FOR ANCHORS EXPOSED TO WEATHER OR FOR

a. CONCRETE MECHANICAL ANCHORS:

TRUBOLT BY ITW REDHEAD - AISI 316 STAINLESS STEEL KWIK BOLT 3 BY HILTI - AISI 316 STAINLESS STEEL

POWER STUD BY POWERS - AISI 316 STAINLESS STEEL

h SCREW ANCHORS TAPPER BY POWERS
 HUS-H BY HILTI

- AISI 316 STAINLESS STEEL

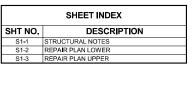
c. CONCRETE OR SOLID GROUTED CMU ADHESIVE ANCHORS:

• HY 200 MAX BY HILTI - AISI 316 STAINLESS STEEL

			ABBREVIATIONS		
ADDL	- ADDITIONAL	FOM	- FACE OF MASONRY	PAF	- POWER ACTUATED FASTENERS
AR	- ANCHOR ROD	FS	- FAR SIDE	PART	- PARTITION
ALT	- ALTERNATE	FT	- FOOT	PARTL	- PARTIAL
APPROX	<ul> <li>APPROXIMATELY</li> </ul>	F#	- FOOTING	PCJ	<ul> <li>PRECAST CONCRETE JOIST</li> </ul>
ARCH	- ARCHITECT	FTG	- FOOTING	PJP	<ul> <li>PARTIAL JOINT PENETRATION</li> </ul>
ARCHL	- ARCHITECTURAL	FV	- FIELD VERIFY	PL	- PLATE
B/	- BOTTOM OF	GA	- GAUGE	PLF	<ul> <li>POUNDS PER LINEAR FOOT</li> </ul>
BC	- BOTTOM CHORD	GALV	- GALVANIZED	PSF	- POUNDS PER SQUARE FOOT
BLDG	- BUILDING	GC	- GENERAL CONTRACTOR	PSI	- POUNDS PER SQUARE INCH
BM	- BEAM	GT	- GIRDER TRUSS	PT	- POST TENSIONED
BOTT	- BOTTOM	HC	- HOLLOW CORE	PrT	PRESSURE TREATED
BRG	- BEARING	HCP	- HOLLOW CORE PLANK	PNL	- PANEL
C/C	- CENTER TO CENTER	HDG	- HOT DIPPED GALVANIZED	R	- RADIUS
CF	- CONTINUOUS FOOTING	HG	- HIP GIRDER	REG	- REGULAR
CIP	- CAST IN PLACE	HK	- HOOK	REINF	- REINFORCING
CJ	- CONTRACTION JOINT	HORIZ	- HORIZONTAL	REM	- REMAINDER
CJP	- COMPLETE JOINT PENETRATION	HP	- HIGH POINT	REQD	- REQUIRED
CL. C	- CENTERLINE	HP HS	- HIGH POINT - HIGH STRENGTH	REV	- REQUIRED - REVISED/REVISION
CLR	- CLEAR	IJ	- ISOLATION JOINT	RM	- ROOM
CMU	- CONCRETE MASONRY UNIT	INFO	- INFORMATION	RO	- ROUGH OPENING
CNTRD	- CENTERED	INS	- INSULATION	RQMTS	- REQUIREMENTS
COL	- COLUMN	INT	- INTERIOR	SCHED	- SCHEDULE
CONC	- CONCRETE	IRR	- IRREGULAR	SECT	- SECTION
CONFIG	- CONFIGURATION	JB	- JOIST BEARING	SIM	- SIMILAR
CONT	- CONTINUOUS	JBE	<ul> <li>JOIST BEARING ELEVATION</li> </ul>	SL	- SLOPE
CONTR	- CONTRACTOR	JR	- JAMB REINFORCING	SOG	- SLAB-ON-GRADE
CTR	- CENTER	JT	- JO <b>I</b> NT	SP	- SPIRAL
DBL	- DOUBLE	K	<ul> <li>KIP(s), 1000 POUNDS</li> </ul>	SQ	- SQUARE
DD	- DECK DRAIN	KLF	<ul> <li>KIPS PER LINEAR FOOT</li> </ul>	SS	- STAINLESS STEEL
DTL	- DETA <b>I</b> L	KJ	<ul> <li>CONSTRUCTION JOINT</li> </ul>	STD	- STANDARD
DIA	- DIAMETER	L	- ANGLE	STL	- STEEL
DIM	- DIMENSION	LG	- LONG	STRUCTL	- STRUCTURAL
DN	- DOWN	LLH	- LONG LEG HORIZONTAL	SW#	- SHEARWALL
DR	- DRAIN	LLV	- LONG LEG VERTICAL	SW	- SHORT WAY
DWG	- DRAWING	LP	- LOW POINT	T/	- TOP OF
EA	- EACH	ĹW	- LONG WAY	TB	- TIE BEAM
EE	- EACH END	LWT	- LIGHTWEIGHT	TC	- TIE COLUMN
EF	- EACH FACE	MFR	- MANUFACTURER	TEMP	- TEMPERATURE
EJ	- EXPANSION JOINT	MAS	- MASONRY	TG	- TRUSS GIRDER
EL	- ELEVATION	MO	- MASONRY OPENING	TH	- TRUSS GIRDER - TRUSS HIP
ELEV	- ELEVATION - ELEVATOR	MATL	- MATERIAL	THK	- THICK
ENGR	- ENGINEER	MAX	- MAXIMUM	TJ	- TRUSS JACK
EOR	- ENGINEER - ENGINEER OF RECORD	MECHL	- MECHANICAL	TR	- TRUSS JACK - TRUSS
EOR		MECHL	- MECHANICAL - METAL	TYP	- TYPICAL
	- EDGE OF SLAB				
EQ	- EQUAL	MIN	- MINIMUM	UNO	- UNLESS NOTED OTHERWISE
EW	- EACH WAY	MISC	- MISCELLANEOUS	VERT	- VERTICAL
EXIST	- EXISTING	NS	- NEAR SIDE	W/	- WITH
EXP	- EXPANSION	NIC	- NOT IN CONTRACT	W/O	- WITHOUT
EXT	- EXTERIOR	NTS	- NOT TO SCALE	WD	- WOOD
FIN	- FINISH	NW	- NORMAL WEIGHT	WF	- WALL FOOTING
FLR	- FLOOR	oc	- ON CENTER	WP	- WORK POINT
FD	- FLOOR DRAIN	ОН	- OPPOSITE HAND	WWR	<ul> <li>WELDED WIRE REINFORCING</li> </ul>
FDN	- FOUNDATION	OPNG	- OPENING		

ADDDEVIATIONS

	LE	GEND	
ITEM	SYMBOL	ITEM	SYMBOL
CONCRETE (COLUMN)		ELEVATION SYMBOL	T/FTG
EARTH			-1-4 +
CONCRETE (WALL)	4 7 4 4 7 4 4 4	STEP IN FTG., GRADE BM. OR OTHE	· · · · · · · · · · · · · · · · · · ·
CONCRETE SHEARWALL	1916 (34.1)	BEAM SPLICE	Ÿ
LOAD BEARING CONCRETE BLOCK (CMU)		MOMENT CONNECTION	
CONCRETE BLOCK SHEARWALL (CMU)		TOP OF STEEL ELEVATION	BEAM TAG
NON-LOAD BEARING (INFILL) CONCRETE BLOCK (CMU)		AND	(+20'-8") &
WOOD WALL		PLATE	<u></u> е
WOOD SHEARWALL		CENTERLINE	
LOAD BEARING METAL STUD WALL		NUMBER (PRECEEDING)	
METAL STUD SHEAR WALL		MINUS OR COMPRESSION	
		POUNDS (FOLLOWING)	#
SECTION INDICATOR		STEP IN STRUCTURE OR DEPRESS	ED SLAB 1" (\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	\$0.3	COLUMN SYMBOLS	REINFORCING SYMBOLS
ELEVATION INDICATOR	1 S0.3	- INDICATES COLUMN BELOW	4/12T
DETAIL INDICATOR	1 80.3	- INDICATES COLUMN THRU	BAR SIZE  B=BOTTOM  C='C'  E='E'
		- INDICATES COLUMN ABOVE	BAR PLACEMENT
TOP REBAR			
BOTTOM REBAR		1	1





SCRE

PRELIMINARY TREATMENT REPLACEMENT

S NOT STRUCTURAL WARREN STREET, COLLIER CO

5



DATE

SHEET

PSM

DESCRIPTION

KLI PSM DESIGN DRAWN CHKD

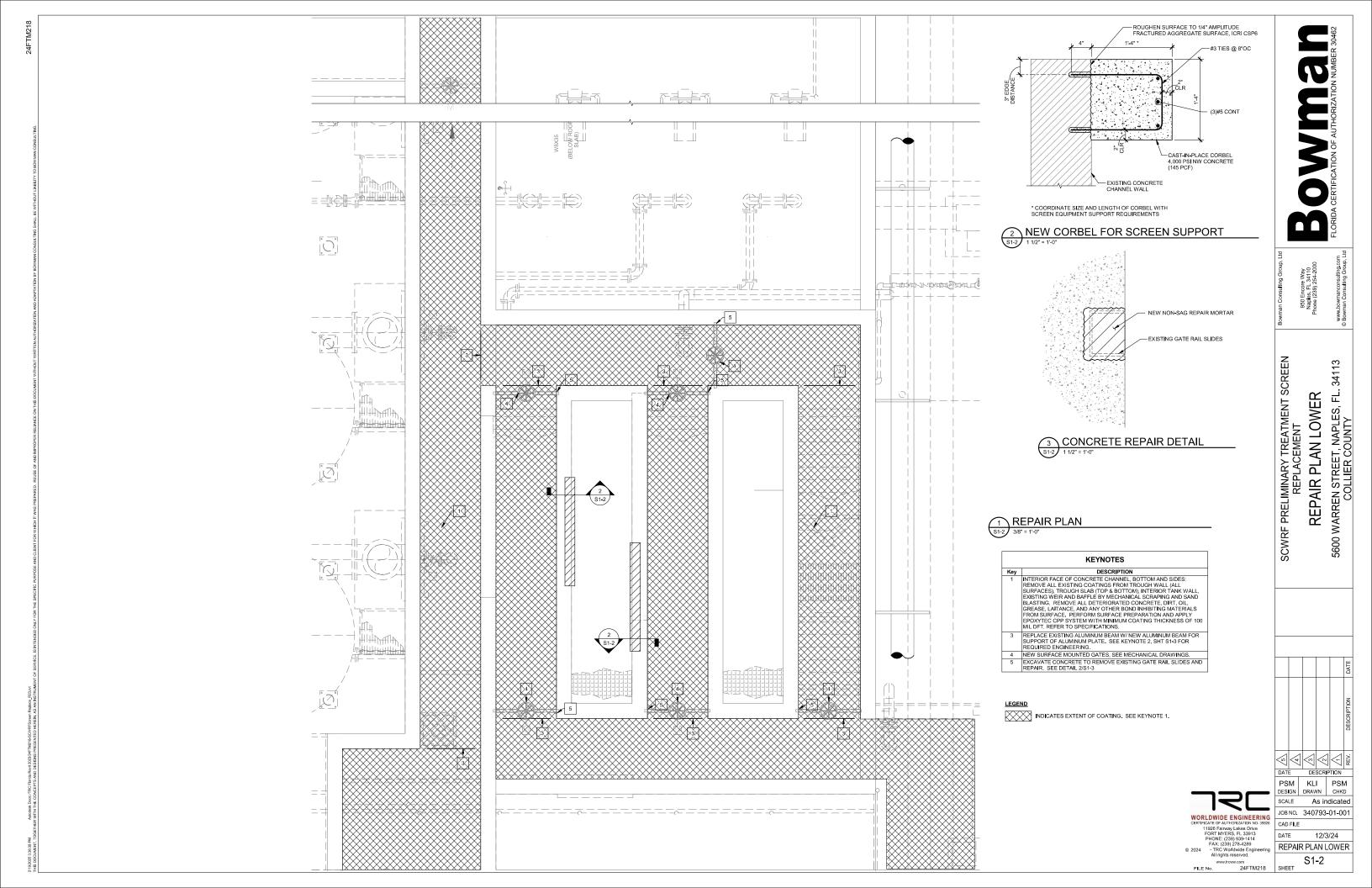
12/3/24

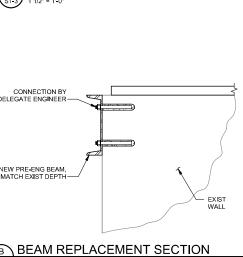
12" = 1'-0"



24FTM218 FILE No.

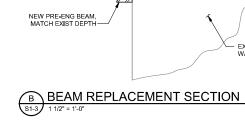
SCALE JOB NO. 340793-01-001 CAD FILE DATE STRUCTURAL NOTES

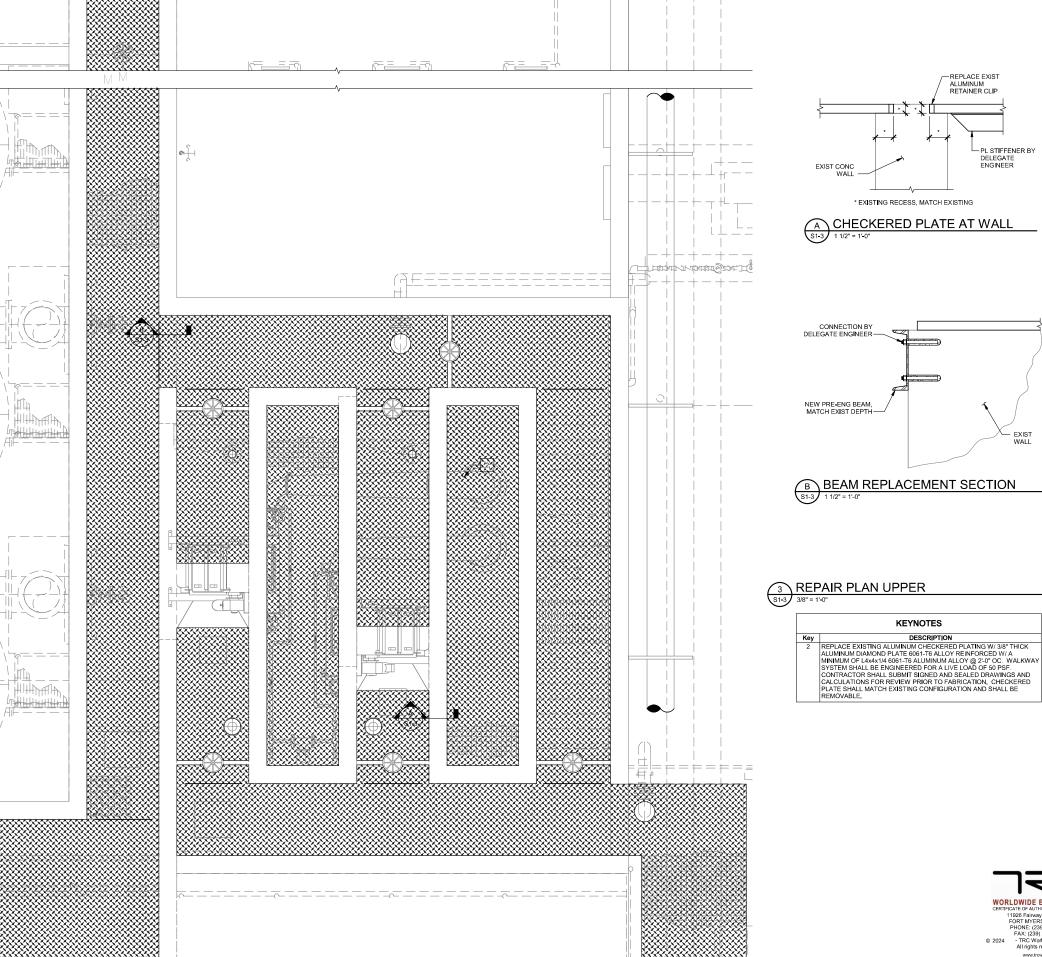




- REPLACE EXIST ALUMINUM RETAINER CLIP

-PL STIFFENER BY DELEGATE ENGINEER







PSM KLI PSM DESIGN DRAWN CHKD SCALE As indicated JOB NO. 340793-01-001 CAD FILE DATE 12/3/24 REPAIR PLAN UPPER www.trcww.com 24FTM218

SHEET

DATE DESCRIPTION

## **CONTROL/ELEMENTARY SYMBOLS**

NORMALLY OPEN CONTACT

 $\dashv\vdash$ 

 $\rightarrow \vdash$ 

 $\overline{\phantom{a}}$ 

 $\overline{\phantom{a}}$ 

(AIT)

(AT)

P/G

PFT PS

TS)

\$/\$) (\$V)

(zs)

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WW

OII

—Ø-

NORMALLY CLOSED CONTACT LIMIT SWITCH, NORMALLY OPEN

LIMIT SWITCH, NORMALLY CLOSED PRESSURE SWITCH, NORMALLY OPEN PRESSURE SWITCH, NORMALLY CLOSED

FLOAT SWITCH, NORMALLY OPEN FLOAT SWITCH, NORMALLY CLOSED FLOW SWITCH, NORMALLY OPEN

FLOW SWITCH, NORMALLY CLOSED TEMPERATURE SWITCH, NORMALLY OPEN TEMPERATURE SWITCH, NORMALLY CLOSED NORMALLY OPEN. TIMED TO CLOSE CONTACT NORMALLY CLOSED, TIMED TO OPEN CONTACT

NORMALLY CLOSED, TIMED TO CLOSE CONTACT NORMALLY OPEN TIMED TO OPEN CONTACT

ANALYZER INDICATOR TRANSMITTER

ALARM RELAY

ALARM TIMER

CONTROL RELAY

FLOW INDICATOR TRANSMITTER (TOTALIZER)

FLOW SWITCH HIGH/LOW (LLS) (FS)

LIQUID LEVEL SWITCH

(L/T) (LIT) LEVEL INDICATOR TRANSMITTER

LIMIT SWITCH OR LEVEL SWITCH

MOTOR SWITCH MANUAL

MOTOR STARTER

PRESSURE GAUGE

PROCESS FLOW TIMER PRESSURE SWITCH

TEMPERATURE SWITCH

TIMING RELAY

SURGE SUPPRESSION DEVICE

SOLENOID VALVE

VIBRATION SWITCH

TOROUF SWITCH

ZERO SPEED SWITCH

ALARM INDICATING LIGHT

RUN INDICATING LIGHT

MOMENTARY CONTACT PUSHBUTTON

MOMENTARY BREAK PUSHBUTTON OR RESET

KEYED SWITCH

MAINTAINED CONTACT ON-OFF SWITCH START/STOP (S/S) CONTROL SWITCH MAINTAINED CONTACT

MOLDED CASE CIRCUIT BREAKER CONTROL POWER TRANSFORMER

REMOTE TERMINAL BLOCK POINT

COPPERWELD GRD. ROD

DELTA GROUND ROD LAYOUT (3) COPPERWELD GRD. RODS COPPERWELD GRD. ROD

## HAND OFF REMOTE CONTROL STATION

HAND OFF AUTO CONTROL STATION MOTOR STRIP HEATER

## SYSTEM SYMBOL LEGEND

SYSTEMS BACKBOARD AS NOTED

SYSTEMS CABINET AS NOTED OR MARKED. LIGHTNING PROTECTION AIR TERMINAL

STREAMER RETARDING TYPE. STREAMER RETARDING AIR TERMINAL MOUNTED TO LIGHT POLE.

## SINGLE LINE DIAGRAM SYMBOLS

VOLTMETER

POWER FACTOR METER (kw) KILOWATT METER

AMMETER

THREE PHASE VOLT SWITCH

THREE PHASE AMP SWITCH

AT CURRENT TRANSMITTER

AS

KW KILOWATT TRANSMITTER

POWER FACTOR TRANSMITTER

СР LOCAL CONTROL PANEL

GFI GROUND FAULT INTERRUPTER

WATT HOUR METER FUSE

 $\neg \vdash$ 

**≪**□≫ DRAW-OUT CIRCUIT BREAKER

MOULDED CASE CIRCUIT BREAKER

TYPICAL STARTER CONTROL. SEE SWITCHGEAR  $\boxtimes$ CONTROL DIAGRAMS FOR EXACT TYPE

(NO)

ELECTRIC A.C. MOTOR, NO. INDICATES HORSEPOWER ELECTRIC D.C. MOTOR, NO. INDICATES HORSEPOWER.

SERVICE OR EQUIPMENT GROUND.

NON-FUSIBLE DISCONNECT SWITCH, 30A,3P UNLESS



NON-FUSIBLE DISCONNECT SWITCH, 30A,3P UNLESS OTHERWISE INDICATED, WITH REMOTE CONTROL STATICAS REQUIRED BY ELEMENTARY DIAGRAMS OR SPECS.



LIGHTING PANELBOARD



POWER PANELBOARD KIRK KEY INTERLOCK



CURRENT TRANSFORMERS POTENTIAL TRANSFORMERS



MANUAL OR AUTOMATIC TRANSFER SWITCH

## ELECTRICAL PLAN SYMBOLS

(J) FLUSH MOUNTED JUNCTION BOX



BRANCH CIRCUIT CONDUIT AND WIRE GENERALLY SURFACE MOUNTED, CONCEALED ABOVE CEILINGS SLASH MARKS INDICATE NUMBER OF CONDUCTORS; (MARKS SHOWN TO AID CONTRACTOR IN BIDDING, THE CONTRACTOR SHALL PROVIDE THE REQUIRED CONDUCTORS UNDER THE CONTRACT SUM WHETHER OR NOT SHOWN). SHORT SLASHES INDICATE PHASE CONDUCTOR OR SWITCH LEG, LONG INDICATE NEUTRAL CONDUCTOR GREEN GROUND CONDUCTOR NOT SHOWN; ALL CONDUITS REQUIRE COPPER GROUND CONDUCTOR. TWO CONDUCTORS PLUS GROUND REQUIRED, MINIMUM.



CONDUIT AND WIRE CONCEALED IN FLOOR SLAB OR UNDERGROUND.

BRANCH CIRCUIT PANELBOARD AS NOTED; SEE PANEL SCHEDULES

TRANSFORMER, SIZE AS INDICATED

DISCONNECT SWITCH SIZE PER FOUIPMENT NAME PLATE OR AS NOTED: FOR DISCONNECTS. SERVING MOTOR LOADS OF 10HP OR GREATER AND FOR ALL MOTOR LOADS SERVED THROUGH VARIABLE FREQUENCY DRIVES; PROVIDE SURGE SUPPRESSION DEVICE EQUAL TO SQ.-D. SDSA4040 OR EQUAL AT DISCONNECT.



COMBINATION MAGNETIC MOTOR STARTER PROVIDED BY ELECTRICAL U.N.O. MOTOR CONNECTION

## LIGHT FIXTURES (SEE FIXTURE SCH.)

0 0

LED TROFFER FIXTURE AND CEILING OUTLET BOX LED WALL MOUNTED FIXTURE AND OUTLET BOX



LED TROFFER FIXTURE WITH INTEGRAL NICAD EMERGENCY BATTERY



LED WALL MOUNTED FIXTURE WITH INTEGRAL NICAD EMERGENCY BATTERY PACK



LED WALL MOUNTED FIXTURE & OUTLET BOX



EMERGENCY LIGHTING BATTERY PACK FIXTURE: PROVIDE EXIT LIGHT FIXTURE AND WALL OR CEILING OUTLET BOX (SHADED QUADRANT INDICATES FACE(S) OF FIXTURE)



LED FIXTURE POLE MOUNTED

LED FIXTURE & CEILING OUTLET BOX

## DRAWING INDEX

LOWER LEVEL HEADWORKS POWER & CONTROLS PLAN ELECTRICAL DETAILS ELECTRICAL DETAILS

FLECTRICAL DETAILS

FLECTRICAL SYMBOLS LEGEND DRAWING INDEX & GENERAL NOTES UPPER LEVEL HEADWORKS ELECTRICAL DEMOLITION PLAN
UPPER LEVEL HEADWORKS POWER, CONTROLS, LIGHTNING PROTECTION &

## MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT. REFER TO SITE SURVEY DRAWINGS FOR EXACT LOCATIONS OF EXISTING FACILITIES ALL WORK SHALL COMPLY WITH THE NATIONAL FLECTRICAL CODE NATIONAL FLECTRICAL SAFETY CODE LITILITY REQUIRMENTS

DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO THE MECHANICAL AND STRUCTURAL DRAWINGS AND APPROVED

PROVIDE SCHEDULE 40 PVC CONDUIT BELOW GRADE IN CONCRETE ENCASED DUCT BANKS, PROVIDE SCHEDULE 80 PVC CONDUIT BELOW GRADE IN NON-ENCASED DUCT BANKS. MAJOR DUCT BANKS AS INDICATED, MINOR DUCT BANKS AS DIRECTED BY ENGINEER IN FIELD. PROVIDE BELL END CONDUIT IN MANHOLES AND AT STUBUP LOCATIONS. ALL U.G. PROCESS RELATED CONDUIT SHALL BE PROTECTED IN CONCRETE ENCASEMENT.

**ELECTRICAL GENERAL NOTES** 

CONDUCTORS SHALL NOT BE SPLICED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

FURNISH AND INSTALL A #2 TINNED BARE COPPER COUNTERPOISE WIRE ABOVE ALL CONDUITS IN DUCT BANKS, BONDED TO BUILDING COUNTERPOISE AT BOTH ENDS.

ALL VENDOR PROVIDED ENCLOSURES, DISCONNECTS, J-BOXES, TERMINAL CABINETS, ETC. & MOUNTING HARDWARE LOCATED EXTERIOR OR IN NON AIR CONDITIONED SPACED SHALL BE NEMA 4X STAINLESS STEEL UNLESS NOTED OTHERWISE

ALL CONDUITS (POWER, CONTROL, INSTRUMENTATION, ETC.) SHALL HAVE EQUIPMENT GROUNDING CONDUCTOR SIZED PER TABLE

DO NOT ARANDON FLECTRICAL IN PLACE. REMOVE CONDUCTORS BACK TO PANEL/MCC. REMOVE CONDUIT BACK TO FIRST MANHOLE, HANDHOLE OR REUSE FOR NEW WORK. REMOVE COMPLETE DUCT BANK AND MANHOLES IF NOT BEING REUSED.

THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL INSTRUMENT/CONTROL EQUIPMENT LOCATIONS WITH THE MECHANICAL DRAWINGS AND THE CONTROLS CONTRACTOR PRIOR TO ROUGH—IN. LOCATIONS SHOWN ON DRAWING ARE APPROXIMATE ONLY. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL CONTROL CABLING REQUIRED WITH THE CONTRACTOR PRIOR TO ROUGH—IN. DOCUMENT COORDINATION TO THE GENERAL CONTRACTOR PRIOR TO ROUGH—IN.

THE SEQUENCE OF CONSTRUCTION WILL REQUIRE TEMPORARY ELECTRICAL SERVICES BE PROVIDED TO ALL AFFECTED FACILITIES TO MAINTAIN CONTINUOUS OPERATION DURING CONSTRUCTION. GENERAL CONTRACTOR SHALL COORDINATE AND COMMUNICATE ALL REQUIRED TEMPORARY REQUIREMENTS WITH ELECTRICAL CONTRACTOR. GENERAL CONTRACTOR TO ASSUME OVERALL RESPONSIBILITY TO COORDINATE WITH OWNER TO ENSURE POWER TO ALL EXISTING FACILITIES IS ONLY INTERRUPTED AS AUTHORIZED BY OWNER.

ALL CONDUCTORS SHALL BE ROUTED IN AND OUT OF MANHOLES TAKING THE LONGEST DISTANCE TO ALLOW FOR SLACK CABLE

CONDUCTOR PULLING TENSIONS SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATION. CONTRACTOR SHALL INSTALL PULL BOXES TO MEET MANUFACTURER'S REQUIREMENTS.

ALL CIRCUITS SHALL BE IDENTIFIED IN JUNCTION BOXES, PULL BOXES, CONTROL PANELS, PANELBOARDS, LIGHTING POLES, CONTROLLERS AND SERVICE POINTS. IDENTIFICATION SHALL MATCH PANELBOARD SCHEDULES, MCC SECTION, I&C SHOP DRAWINGS & SCHEDULES & TAG LISTS, ETC.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUIT AND WIRING INSTALLATION FOR ALL VENDOR FURNISHED EQUIPMENT (PACKAGE SYSTEMS). IF THE SHOP DRAWINGS DIFFER FROM THE DESIGNED FACILITIES, THE CONTRACTOR SHALL REDESIGN THE FACILITIES AND SUBMIT THE REVISED DESIGN FOR THE ENGINEER'S APPROVAL AT NO ADDITIONAL COST TO THE OWNER, PRIOR TO ELECTRICAL SUBMITTAL THE CONTRACTOR SHALL VERIFY ALL SUPPLIED BREAKER SIZES, STARTER SIZES, OVERLOAD SIZES, ETC. FOR ALL SYSTEMS SUCH AS HVAC, EXHAUST FANS, CHEMICAL PUMPS ETC. AND MODIFY BREAKERS, OVERLOADS, ETC. IN CONTRACTOR SUPPLIED EQUIPMENT ACCORDINGLY.

ALL EXCAVATIONS FOR CONDUITS, HANDHOLES, MANHOLES AND PULLBOXES NEAR EXISTING PIPING, CONDUIT AND EQUIPMENT SHALL BE HAND EXCAVATED AND COORDINATED WITH ENGINEER. DAMAGE TO EXISTING SYSTEMS ARE TO BE IMMEDIATELY REPORTED TO OWNER AND REPAIRED TO OWNER AND ENGINEER SATISFACTION AT NO CHANGE TO CONTRACT.

ALL ENCLOSURES, TERMINAL CABINETS, WIREWAYS, PULL BOXES ETC. SHALL CONTAIN A GROUNDING BUS BAR. CONNECT ALL RACEWAY BONDS TO BUS BAR VIA GROUNDING BUSHING AND EXTEND BONDING JUMPER FROM BUS BAR TO ENCLOSURE.

17. CONTRACTOR SHALL CORE DRILL EXISTING CONCRETE WALLS, FLOORS, MANHOLES, HANDHOLES AND PULL BOXES FOR CONDUIT PENETRATIONS. SEAL PENETRATIONS WITH NON-SHRINK GROUT OR APPROPRIATE FIRE RATED DEVICES WHERE APPLICABLE.

18. ALL SPARE CONDUITS SHALL BE SEALED WITH A CAP AT BOTH ENDS AND A PULL STRING INSTALLED WITH IDENTIFICATION ON

PROVIDE TYPEWRITTEN PANEL SCHEDULES IN PANELBOARD & TYPEWRITTEN TERMINAL BLOCK SCHEDULES IN TERMINAL CABINETS;

IT IS THE CONTRACTOR'S RESPONSIBILITIES TO USE NON-DESTRUCTIVE IMAGING METHODS (RADAR, XRAY) TO LOCATE EMBEDDED CONDUIT IN CONCRETE PRIOR TO DEMOLITION, SAW CUTTING AND CORE DRILLING. RELOCATE AND RECONSTRUCT AFFECTED CONDUIT AND WIRE PER ELECTRICAL SPECIFICATIONS.

ALL ENCLOSURES, TERMINAL CABINETS, WIREWAYS, PULL BOXES ETC. SHALL CONTAIN A GROUNDING BUS BAR. CONNECT ALL RACEWAY BONDS TO BUS BAR VIA GROUNDING BUSHING AND EXTEND BONDING JUMPER FROM BUS BAR TO ENCLOSURE.

22. PROVIDE CONDUIT DUCT SEAL AT ALL CONDUIT ENDS.

23. FLEXIBLE CONDUITS SHALL BE USED TO TERMINATE ALL MOTORS AND OTHER VIBRATING EQUIPMENT & SHALL BE A MAXIMUM OF THESE DRAWINGS ARE NOT APPROVED UNLESS SIGNED AND SEALED BELOW:

PROVIDE 2' MINIMUM DISTANCE BETWEEN PARALLEL RUNS OF LOW VOLTAGE 480V/120V POWER CONDUITS AND I&C CONDUITS. POWER CONDUIT SHALL CROSS INSTRUMENTATION CONDUIT PERPENDICULAR AT RIGH ANGLES WITH 6" SEPARATION FOR 480V/120V.

25. COMPLY WITH NEC REQUIREMENTS FOR HAZARDOUS AREAS AS DEFINED BY NFPA-820 STANDARDS FOR PROTECTION IN WASTEWATER TREATMENT AND COLLECTION FACILITIES CURRENT EDITION



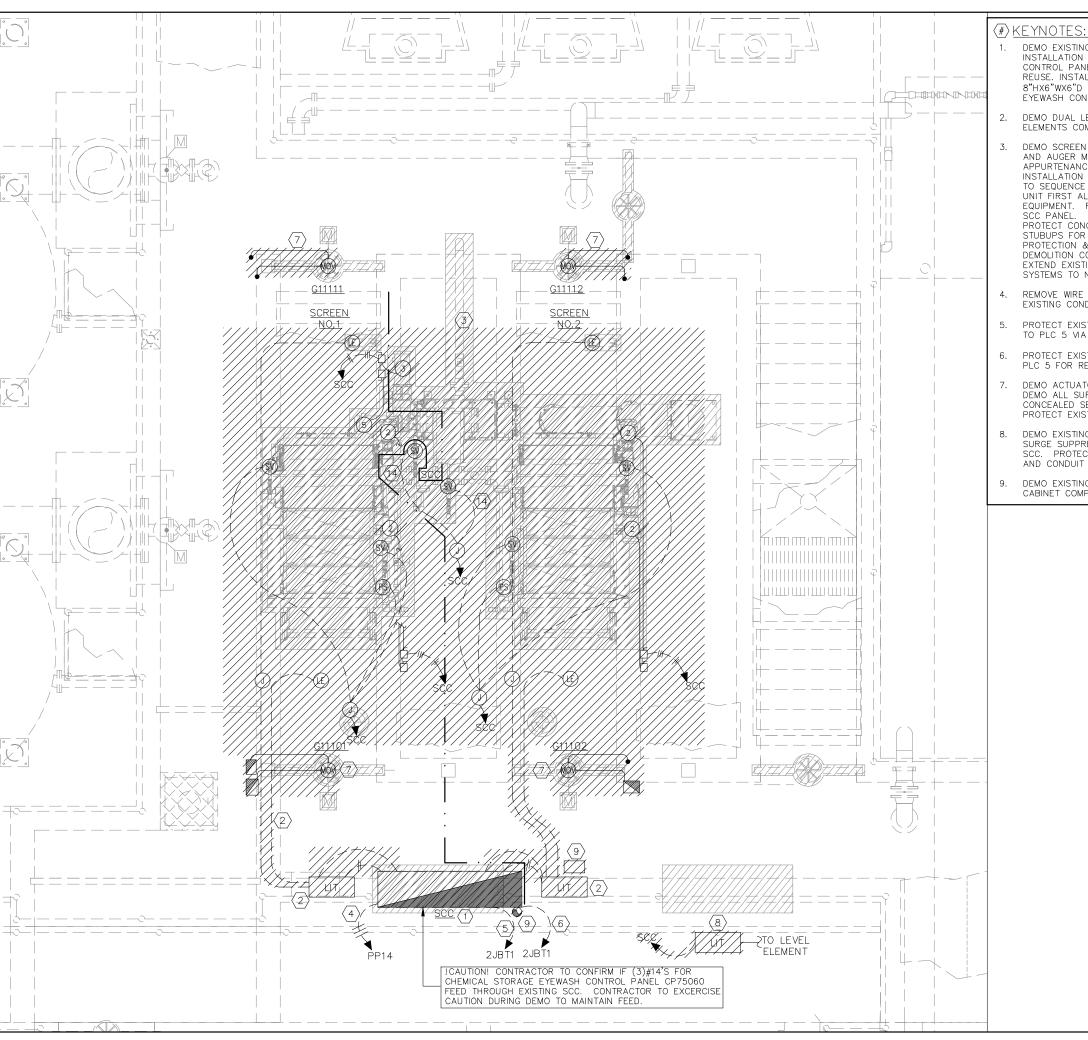
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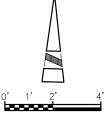
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RNANDO E. FUENTES JR., I



- DEMO EXISTING SCREEN CONTROL PANEL; SCC UPON INSTALLATION OF NEW SCREEN NO.2 AND SCC-2 CONTROL PANEL. PROTECT EXISTING CONDUIT FOR REUSE. INSTALL STAINLESS STEEL NEMA 4X 8"HX6"WX6"D MIN. PULLBOX FOR CHEMICAL STORAGE EYEWASH CONTROL PANEL WRING.
- DEMO DUAL LEVEL INDICATOR TRANSMITTERS AND ELEMENTS COMPLETE.
- DEMO SCREEN NO.1, SCREEN NO.2, GRINDER MOTOR AND AUGER MOTOR ELECTRICAL EQUIPMENT AND APPURTENANCES COMPLETE TO FACILITATE INSTALLATION OF NEW SCREEN UNITS. CONTRACTOR TO SEQUENCE DEMOLITION OF EXISTING SCREEN NO.2 UNIT FIRST ALONG WITH GRINDER AND AUGER EQUIPMENT. REMOVE ALL WIRE BACK TO EXISTING SCC PANEL. DEMO ALL SURFACE MOUNTED CONDUIT. PROTECT CONCEALED CONDUIT SECTIONS AND CONDUIT STUBUPS FOR REUSE. PROTECT EXISTING LIGHTNING PROTECTION & BONDING SYSTEMS THROUGHOUT DEMOLITION CONNECTION POINTS. REROUTE AND EXTEND EXISTING LIGHTNING PROTECTION & BONDING SYSTEMS TO NEW EQUIPMENT AND ENCLOSURES.
- REMOVE WIRE BACK TO PP14, CAP AND ABANDON EXISTING CONDUIT IN PLACE.
- PROTECT EXISTING (2)1"C. WITH (20)#14 CONDUCTORS TO PLC 5 VIA 2TJB1 FOR REUSE.
- PROTECT EXISTING (1)1"C. WITH FIBER OPTIC CABLE TO PLC 5 FOR REUSE.
- DEMO ACTUATOR, SPLICE AND TERMINATION BOXES. DEMO ALL SURFACE MOUNTED CONDUIT AND PROTECT CONCEALED SECTION OF CONDUIT FOR REUSE.
  PROTECT EXISTING POWER AND I&C WIRE FOR REUSE.
- DEMO EXISTING MANUAL BAR SCREEN TRANSMITTER, SURGE SUPPRESSOR, CONDUIT AND WRE BACK TO SCC. PROTECT TRANSMITTER, MANUFACTURER CABLE AND CONDUIT TO LEVEL ELEMENT FOR REINSTALLATION
- DEMO EXISTING WEATHERSTATION AND TERMINATION CABINET COMPLETE.



1/4"=1'-0" FOR 11"X17" SHEET 1/2"=1'-0" FOR 22"X34" SHEET

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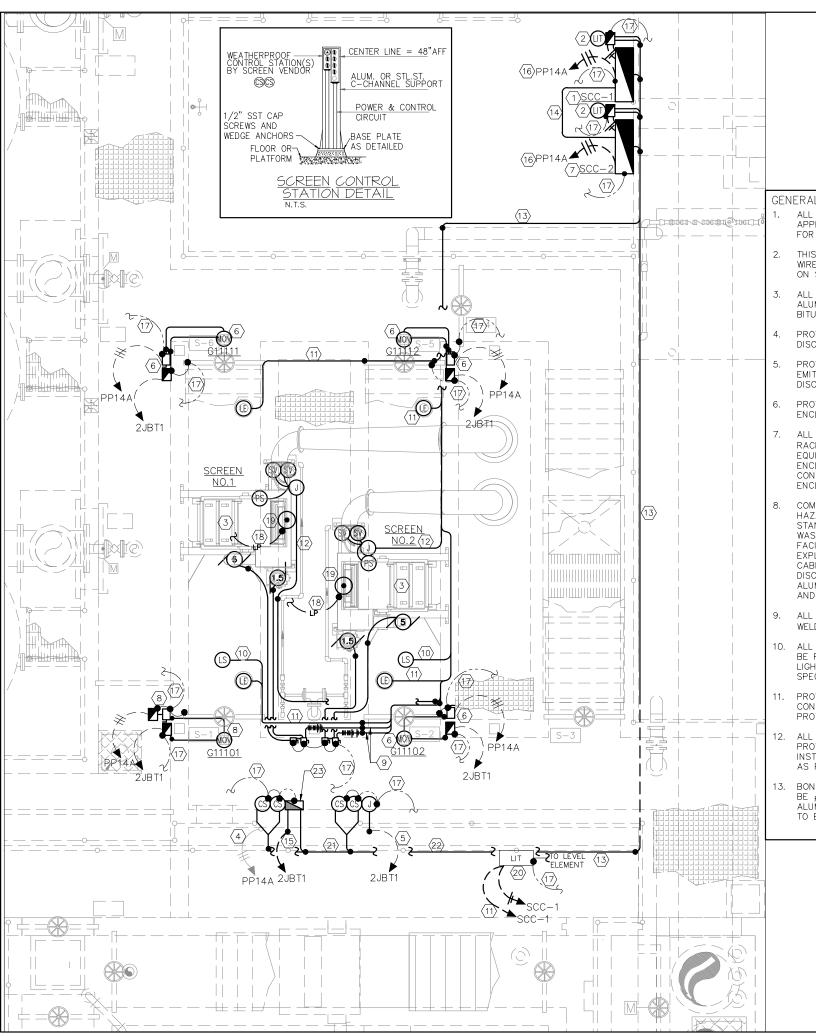
SCWRF PRELIMINARY TREATMENT
SCREEN REPLACEMENT
UPPER LEVEL HEADWORKS ELECTRICAL
DEMOLITION PLAN
5600 WARREN STREET, NAPLES, FL, 34113 5600 WARREN STREET COLLIER (

THESE DRAWINGS ARE NOT APPROVED UNLESS SIGNED AND SEALED BELOW:



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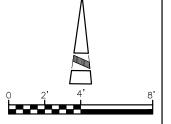




MAIN ROOF/DOWN CONDUCTOR TYPICAL

#2/0 TINNED BARE COPPER COUNTERPOISE LOOP GROUND.

#2 TINNED SOLID COPPER OR SOLID ALUMINUM TO EQUIPMENT/CABINETS ETC.



3/16"=1'-0" FOR 11"X17" SHEET 3/8"=1'-0" FOR 22"X34" SHEET

### GENERAL NOTES:

- ALL EQUIPMENT & DEVICE LOCATIONS ARE APPROXIMATE. COORDINATE WITH SHOP DRAWING FOR EXACT LOCATIONS.
- THIS PLAN DOES NOT INDICATE ALL CONDUIT & WIRE REQUIRED; SEE ADDITIONAL REQUIREMENTS ON SINGLE LINE & ELEMENTARY DRAWINGS.
- ALL CONDUIT ELLS UNDER SLAB SHALL BE RIGID ALUMINUM CONDUIT COATED WITH TWO COATS OF BITUMASTIC COATING.
- PROVIDE 480V-3P TVSS ON MOTOR DISCONNECTS; SQ-D SDSA4040D.
- PROVIDE VAPOR CORROSION PROTECTION EMITTERS IN ALL LOCAL CONTROL PANELS, DISCONNECTS, MCCS, ATS, PANEL BOARDS, ETC.
- PROVIDE SUNSHIELDS FOR VFD, PLC, AND FIBER FNCLOSURES.
- ALL EQUIPMENT SHALL BE HUNG ON EQUIPMENT RACK OR FREE STANDING ON 12" LEGS. NO EQUIPMENT SHALL BE MOUNTED WITH THE ENCLOSURE BOTTOM IN DIRECT CONTACT WITH CONCRETE PAD. OPEN WINDOW CUTTING OF ENCLOSURE BOTTOMS IS NOT PERMITTED.
- COMPLY WITH NEC REQUIREMENTS FOR HAZARDOUS AREAS AS DEFINED BY NFPA-820 STANDARDS FOR FIRE PROTECTION IN WASTEWATER TREATMENT AND COLLECTION FACILITIES CURRENT EDITION. PROVIDE EXPLOSION PROOF PANELS, TERMINATION CABINETS, SPLICE BOXES & MOTOR DISCONNECTS. PROVIDE RATED CONDUIT HUBS, ALUMINUM RIGID CONDUIT, FLEXIBLE FITTINGS AND SEALOFFS TO COMPLY.
- ALL U.G CONNECTIONS TO BE VIA EXOTHERMIC WELD (CADWELD) UNLESS INDICATED OTHERWISE.
- ALL WORK INDICATED ON THIS DRAWING, IS TO BE PERFORMED IN COMPLIANCE WITH THE LIGHTNING PROTECTION DETAILS AND SPECIFICATIONS.
- PROVIDE CONCEALED SLEEVES OR FLAT STRAP CONDUCTOR ON ALL WALKWAYS FOR LIGHTNING PROTECTION CONDUCTOR.
- ALL REQUIRED BONDS MAY NOT BE SHOWN; PROVIDE ADDITIONAL BONDS TO ALL DEVICES, INSTRUMENTS, CABINETS, CONTROL VALVES, ETC. AS REQUIRED TO COMPLY WITH UL AND NEC.
- BONDS DIRECTLY TO GROUNDING SYSTEM ARE TO BE #2 TINNED SOLID COPPER. BONDS TO ALUMINUM LIGHTNING PROTECTION SYSTEM ARE TO BE #2 SOLID ALUMINUM.

### (#) KEYNOTES:

- SCREEN CONTROL PANEL ; SCC-1. INSTALL SEALOFFS ON ALL CONDUITS. CONTRACTOR TO INSTALL & TERMINATE FIBER PATCH PANEL AND STRATIX SWITCH
- DUAL LEVEL INDICATOR TRANSMITTERS.
- NEW SCREEN EQUIPMENT. CONTRACTOR TO COORDINATE EXACT ALUMINUM RIGID CONDUIT ROUTING AND FIELD WIRING REQUIREMENTS WITH APPROVED MANUFACTURER SUBMITTALS PRIOR TO COMMENCING CONSTRUCTION. TRANSMIT ANY INCONSISTENCIES TO ENGINEER. INSTALL NEW LIGHTNING PROTECTION SYSTEM AND BOND TO EXISTING MAIN ROOF
- CAPPED, ABANDONED CONDUIT.
- (2)1"C. WITH (20)#14 CONDUCTORS TO PLC 5 VIA
- NEW ACTUATOR, DISCONNECT, I&C TERMINATION CABINET.
- SCREEN CONTROL PANEL; SCC-2. EXTEND/REROUTE EXISTING CONDUIT TO PANEL. INSTALL SEALOFFS ON
- 10. 5 CONDUCTOR #14 CONTROL CABLE IN 1"C.
- 11. (2) PAIR #16 TSP INSTRUMENTATION CABLE IN 1"C.
- 12. (9) CONDUCTOR #14 CONTROL CABLE IN 1.25"C.
- SURFACE MOUNT ALUMINUM RIGID CONDUITS HIGH ALONG EXTERIOR WALL OF STRUCTURE AND BELOW WALKWAYS. SEPARATE POWER AND I&C CONDUITS
- 15. FIBER OPTIC CABLE IN EXISTING CONDUIT TO PLC 5
- (3)#10 + (1)#10 GRD IN 1"C. SURFACE MOUNT ALUMINUM RIGID CONDUIT ALONG EXTERIOR OF STRUCTURE WALL TO PANELBOARD. SEAL PENETRATION THROUGH WALL WITH NON-SHRINK GROUT.
- #2 SOLID ALUMINUM BOND TO EXISTING LP MAIN ROOF CONDUCTOR, TYPICAL
- 18. MAIN ROOF CONDUCTOR TO EXISTING LP MAIN ROOF CONDUCTOR. TYPICAL.
- 19. ROOF MOUNTED STREAMER RETARDING AIR TERMINAL.
- 20. RELOCATED MANUAL BAR SCREEN LEVEL TRANSMITTER
- 21. NEW 12 STRAND MULTIMODE FIBER OPTIC CABLE IN 2"C. + (2) SETS OF (24)#14 + #14GRD IN 1"C.
- 2"C. + (4) SETS OF (24)#14 + #14GRD IN 1"C.
- MOUNTED ON ALUMINUM STAND. MAKE PENETRATIONS ON BOTTOM OF ENCLOSURE ONLY.

- IN ALLOTED SPACE WITHIN CONTROL PANEL.
- CONDUCTORS

- NEW ACTUATOR, DISCONNECT, I&C TERMINATION CABINET & 480V SPLICE BOX.
- (6)#10 + (4)#12 + (2)#12 GRD IN 1"C.

- 14. (2)CAT6 INDUSTRIAL ETHERNET CABLE IN 2"C.
- VIA 2TJB1.

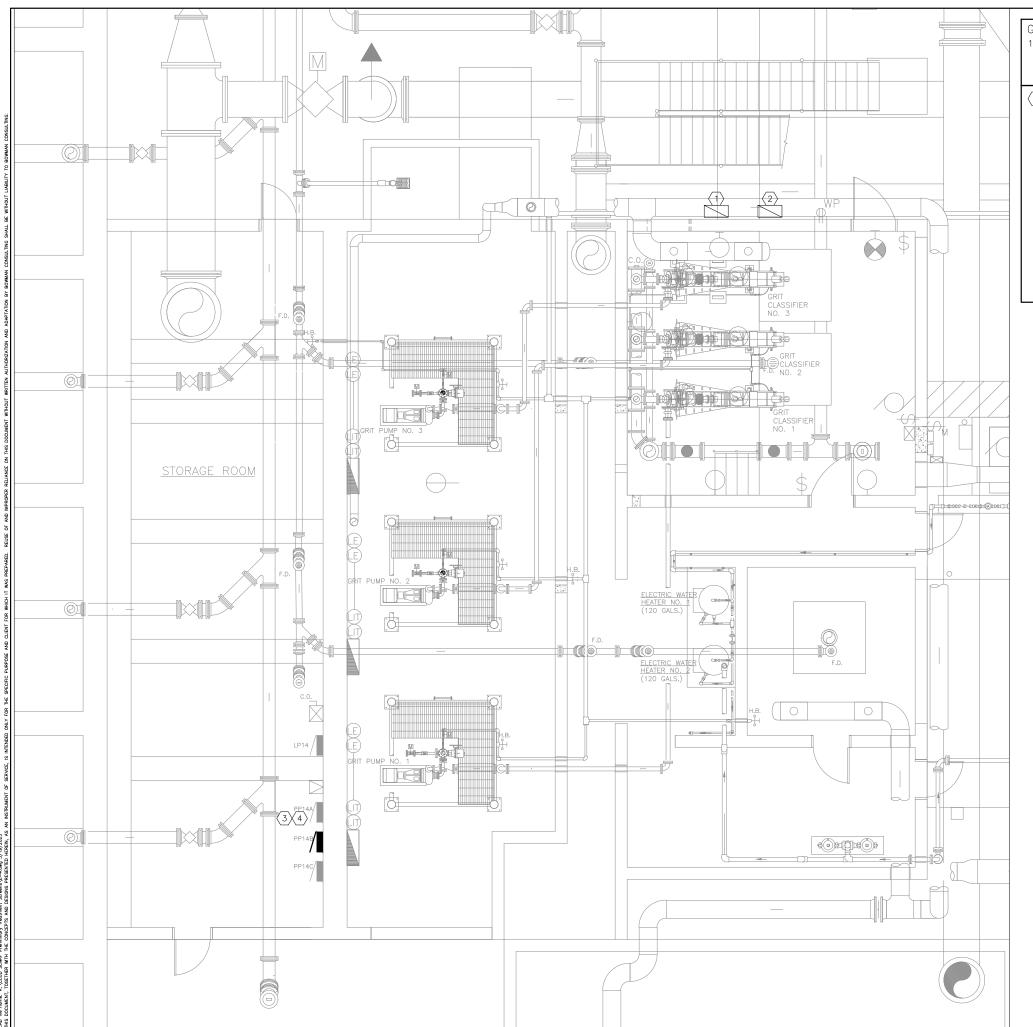
- 22. NEW 12 STRAND MULTIMODE FIBER OPTIC CABLE IN
- 23. NEMA 4X FIBER OPTIC TERMINATION CABINET (FTC)

(S POWER, CONTROLS ON & BONDING PLAN , NAPLES, FL, 34113 HEADWORKS FOR THE ADVISOR & EARL STREET, NAP COLLIER COUNT UPPER LEVEL HEAF LIGHTNING PRO 5600 WARREN S COI

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JM

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### GENERAL NOTES:

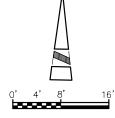
ALL EQUIPMENT & DEVICE LOCATIONS ARE APPROXIMATE. COORDINATE WITH SHOP DRAWING FOR EXACT LOCATIONS.

## ⟨#⟩ KEYNOTES:

- EXISTING CONTROL TERMINATION CABINET 2TJB1 TO REMAIN. EXISTING GATE SIGNALS ROUTE THROUGH TERMINATION CABINET TO PLC-5.
- EXISTING ANALOG TERMINATION CABINET 2TJB2 TO REMAIN. EXISTING GATE SIGNALS ROUTE THROUGH TERMINATION CABINET TO PLC-5.
- EXISTING PANEL BOARD PP14A TO REMAIN. PROVIDE NEW TYPE WRITTEN PANEL SCHEDULE.
- PROVIDE NEW 480V-3P, 30AT GE SPECTRA RMS SERIES BREAKER FOR SCC-2 CONTROL PANEL FEED. CONTRACTOR MAY UTILIZE SPARE BREAKER IF AVAILABLE.
- EXISTING 480V-3P, 30AT GE SPECTRA RMS SERIES BREAKER TO REMAIN. UTILIZE TO FEED SCC-1 CONTROL PANEL.



PANELBOARD PP-14A N.T.S.



1/8"=1'-0" FOR 11"X17" SHEET 1/4"=1'-0" FOR 22"X34" SHEET

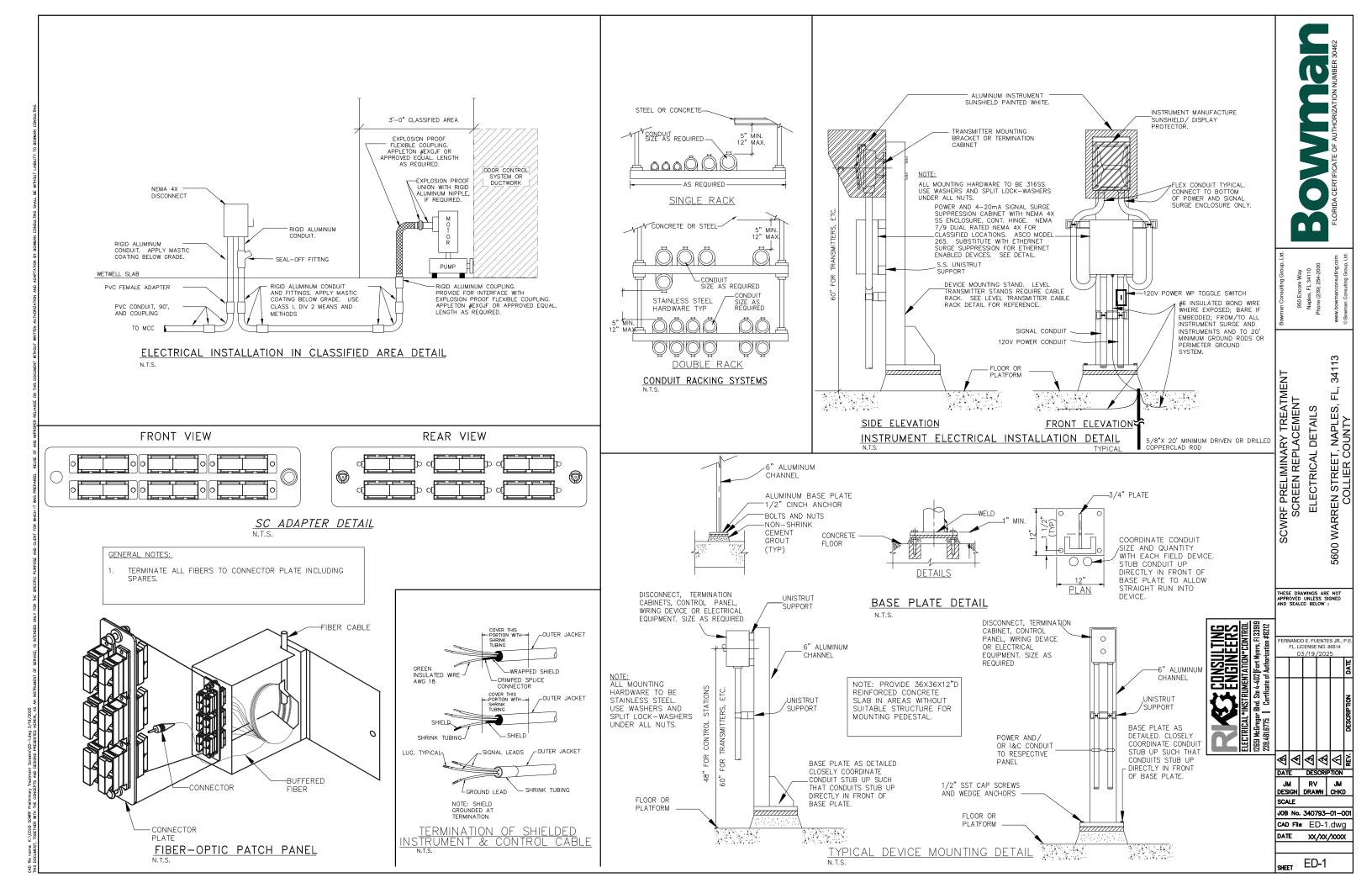
SCWRF PRELIMINARY TREATMENT SCREEN REPLACEMENT LOWER LEVEL HEADWORKS POWER & CONTROLS PLAN 5600 WARREN STREET, NAPLES, FL, COLLIER COUNTY

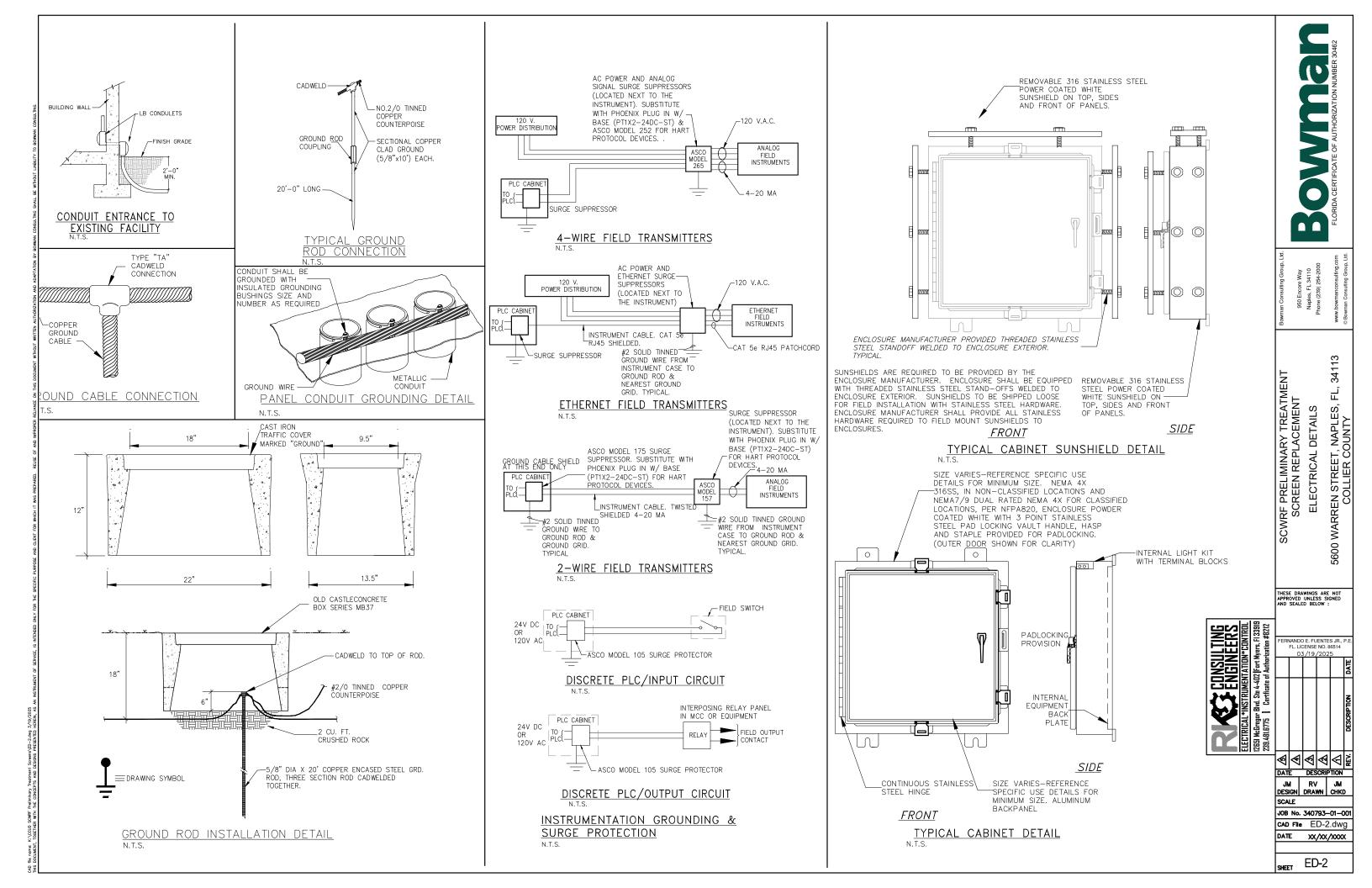
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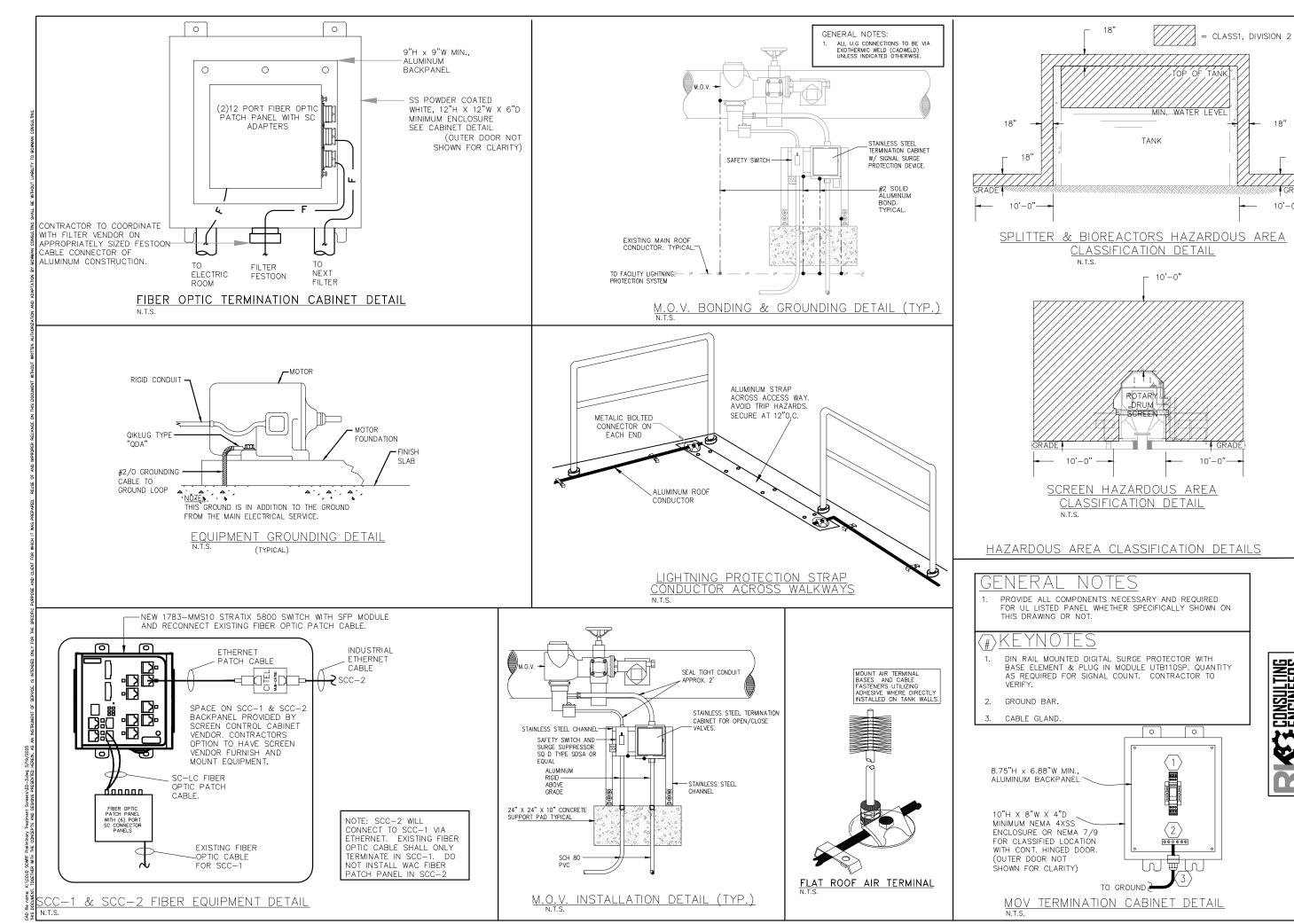


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E-4







GRADE

341, WRF PRELIMINARY TREATMENT SCREEN REPLACEMENT 5600 WARREN STREET, NAPLES, COLLIER COUNTY **ELECTRICAL DETAILS** 

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DATE DESCRIPTION JM RV JM DESIGN DRAWN CHKD SCALE JOB No. 340793-01-001 CAD File ED-3.dwg

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