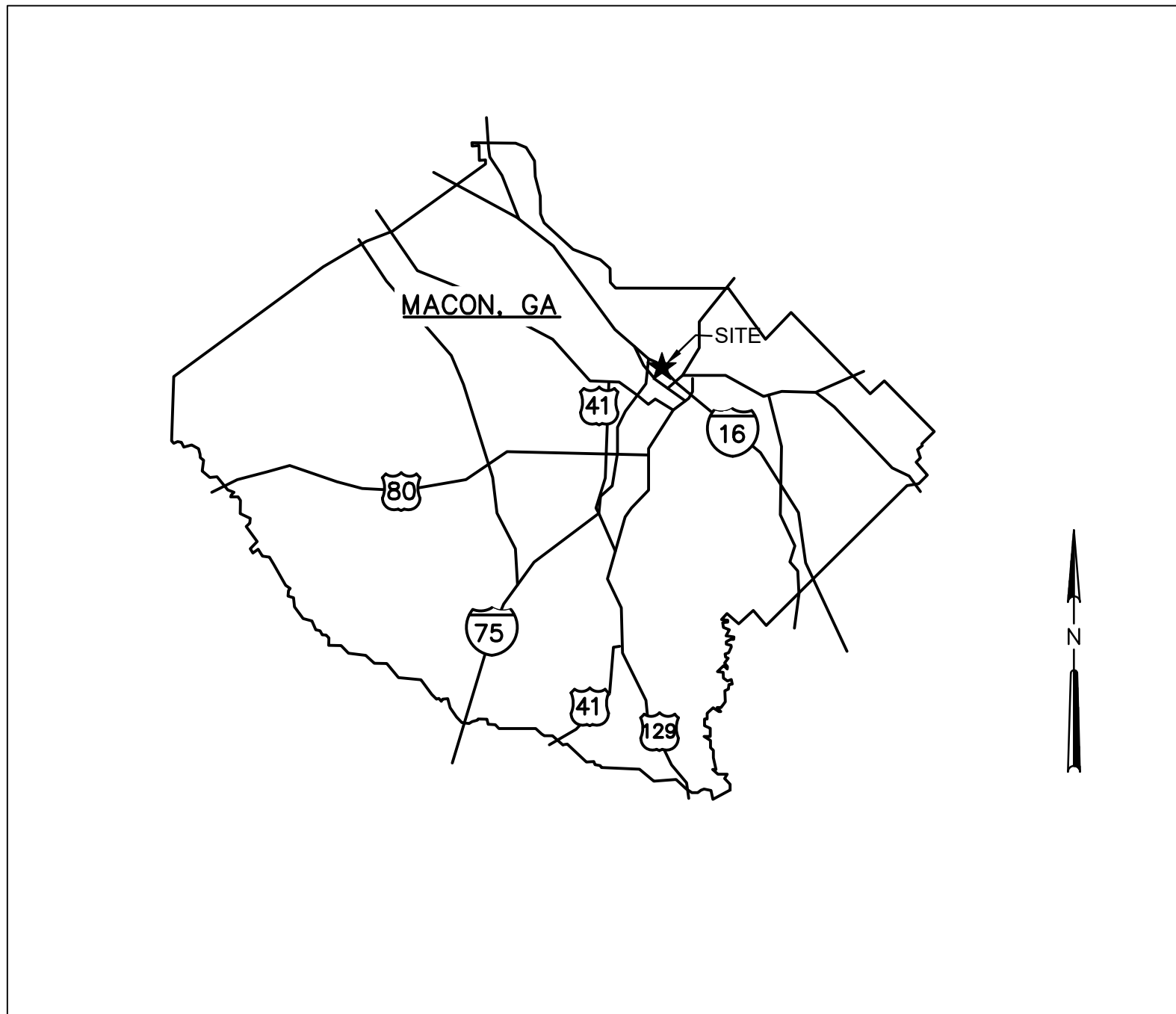


# MACON WATER AUTHORITY STRUCTURAL REPAIRS FOR AMERSON WTP



VICINITY MAP  
NTS



MACON, GEORGIA



1201 Front Avenue // Suite F // Columbus, GA 31901  
PHONE (706) 321-4590

INITIAL ISSUE  
JANUARY 2026

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MACON WATER AUTHORITY  
STRUCTURAL REPAIRS FOR AMERSON WTP

CODES AND STANDARDS

THE FOLLOWING CODES AND STANDARDS HAVE BEEN USED AS THE BASIS FOR DESIGN AND/OR SHALL BE UTILIZED BY THE CONTRACTOR TO ESTABLISH MINIMUM LEVELS OF QUALITY AND CONSTRUCTION TECHNIQUES.

- A. GENERAL
A. INTERNATIONAL BUILDING CODE (IBC 2018, WITH 2020-2025 GEORGIA AMENDMENTS),
B. AMERICAN SOCIETY OF CIVIL ENGINEERS, "MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES," (ASCE 7-16),
B. CONCRETE
A. AMERICAN CONCRETE INSTITUTE, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-14),
B. AMERICAN CONCRETE INSTITUTE, "SPECIFICATIONS FOR STRUCTURAL CONCRETE," (ACI 301-16),
C. AMERICAN CONCRETE INSTITUTE, "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES" (ACI 308-06),
D. ACI 350, "TIGHTNESS TESTING OF ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES"
E. ACI 117, LATEST EDITION, "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS"
F. ACI 308.1, LATEST EDITION, "SPECIFICATION FOR CURING CONCRETE"
G. ACI 315, LATEST EDITION, "DETAILS AND DETAILING OF REINFORCED CONCRETE STRUCTURES"
H. ACI SP-96, LATEST EDITION, "ACI DETAILING MANUAL"
I. CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE" LATEST EDITION.
J. AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM) A615, LATEST EDITION, "STANDARD SPECIFICATION FOR DEFORMED AND PLAIN CARBON-STEEL BARS FOR CONCRETE REINFORCEMENT"

CONCRETE

- 1. STRUCTURAL CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 4,500 PSI AT 28-DAYS.
2. CONCRETE SHALL BE PROPORTIONED, BATCHED, MIXED, PLACED, CONSOLIDATED, AND CURED IN ACCORDANCE WITH ACI 301, 304, 306, 309 AND 318.
3. ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR ENTRAINED.
4. WHERE STRIP/GRADE FOOTINGS OR WALLS INTERSECT COLUMN FOUNDATIONS, LONGITUDINAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH THE COLUMN FOUNDATION.
5. UNLESS OTHERWISE SHOWN, THE CONCRETE CLEAR COVER AT ALL REINFORCING STEEL SHALL BE:
A. CONCRETE CAST AGAINST EARTH 3"
B. CONCRETE EXPOSED TO EARTH OR WEATHER 2"
C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER 3/4"
6. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED IN ACCORDANCE WITH ACI 304 AND ACI 309.
7. PROVIDE 3/4"x3/4"x 45 DEGREE CHAMFERED CORNERS AT ALL EXPOSED CONCRETE CORNERS UNO.
8. FOR HYDRAULIC STRUCTURES, CONTRACTOR SHALL PROVIDE A MINIMUM OF 7-DAYS BETWEEN ADJACENT POURS. ADDITIONALLY, CONCRETE STRENGTH SHALL MEET OR EXCEED 70% OF THE SPECIFIED DESIGN COMPRESSIVE STRENGTH PRIOR TO PLACING ADJACENT POURS.
9. CONCRETE STRENGTH SHALL MEET OR EXCEED 100% OF THE SPECIFIED DESIGN COMPRESSIVE STRENGTH PRIOR TO APPLYING ANY LOAD TO THE MEMBER.

REINFORCING STEEL FOR CONCRETE

- 1. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 (DEFORMED).
2. WELDED WIRE REINFORCEMENT (WWR) SHALL CONFORM TO ASTM A1064 AND SHALL BE PROVIDED IN FLAT SHEETS ONLY. FABRIC SHALL LAP TWO FULL MESHES AND BE SECURELY FASTENED AT EACH SIDE AND EACH END.
3. DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL, UNLESS OTHERWISE NOTED, SHALL CONFORM TO ACI MNL-66, THE CRSI, "MANUAL OF STANDARD PRACTICE," AND ACI 318.
4. REINFORCING STEEL SHALL BE CONTINUOUS ACROSS ALL CONSTRUCTION JOINTS UNO.
5. REINFORCING STEEL SHALL NOT BE HEATED OR WELDED OR FIELD BENT AND MUST BE DRY AND FREE OF CONTAMINANTS SUCH AS RUST, DIRT, GREASE, AND PROTECTIVE COATINGS. ALL BAR SPLICES SHALL BE CLASS B TENSION SPLICES IN ACCORDANCE WITH ACI 318.
7. REINFORCEMENT DETAILING SHALL BE AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE REFERENCED CODES AND STANDARDS.
8. EPOXY AND OTHER PROTECTIVE COATINGS SHALL NOT BE APPLIED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.

SLAB ON GRADE

- 1. SLAB ON GRADE HAS BEEN DESIGNED USING A MODULUS OF SUBGRADE REACTION OF 100 PCF.
2. EXCAVATED / STRIPPED AREAS SHALL BE PROOF-ROLLED WITH APPROPRIATE EQUIPMENT AS APPROVED BY THE GEOTECHNICAL ENGINEER. SOFT AREAS SHALL BE REMOVED AND REPLACED WITH APPROVED BACKFILL AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
3. SAWED CONTROL JOINTS SHALL BE CUT AS SOON AS SLAB CAN BE WALKED ON, BUT STARTED NO LATER THAN 8 HOURS AFTER POURING. CONTROL JOINTS SHALL BE COMPLETED NO LATER THAN 16 HOURS AFTER POURING. THESE TIME LIMITS SHALL APPLY REGARDLESS OF THE TIME OF DAY. AN EARLY ENTRY DRY CUT SAW SUCH AS THE SOFF-CUT SYSTEM SHALL BE USED.
4. ADEQUATE MEASURE TO PREVENT PLASTIC SHRINKAGE OF SLAB SHALL BE TAKEN BY THE CONTRACTOR AS OUTLINED IN ACI 302.1R.

EXISTING CONDITIONS:

- 1. RENOVATION/REPAIR OF EXISTING STRUCTURES REQUIRES THOROUGH COORDINATION OF THE CONTRACT DOCUMENTS WITH EXISTING CONDITIONS. THE CONTRACTOR MUST VERIFY ALL RELEVANT EXISTING CONDITIONS, DIMENSIONS, AND DETAILS PRIOR TO BEGINNING CONSTRUCTION. REPORT ANY DEVIATIONS FROM CONDITIONS OR DIMENSIONS SHOWN ON THE CONTRACT DOCUMENTS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW OF THE DESIGN AND POSSIBLE REVISION OF THE CONTRACT DOCUMENTS.
2. THE NATURE OF STRUCTURAL DEMOLITION AND STABILIZATION IS INHERENTLY UNCERTAIN; THE EXACT CONDITION AND CAPACITY OF EACH STRUCTURAL ELEMENT CANNOT BE VERIFIED PRIOR TO THE COMMENCEMENT OF WORK. AS A RESULT, IT IS IMPERATIVE TO REPORT ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND ACTUAL FIELD CONDITIONS, AS WELL AS ANY ELEMENT OF QUESTIONABLE STRUCTURAL INTEGRITY IMMEDIATELY TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW.
3. NO ATTEMPT HAS BEEN MADE TO DEFINE EACH SPECIFIC STRUCTURAL ELEMENT THAT MUST BE REMOVED, ENHANCED, OR REPLACED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE CONDITION OF INDIVIDUAL ELEMENTS, TO DETERMINE WHICH ELEMENTS CAN BE SALVAGED, WHICH ELEMENTS MUST BE REPLACED, AND WHICH ELEMENTS ARE QUESTIONABLE. THE CONTRACTOR SHOULD CONSULT WITH THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD TO DETERMINE THE APPROPRIATE PROCEDURE FOR HANDLING ELEMENTS IN QUESTIONABLE CONDITION.

CONCRETE/CMU ANCHORS

- 1. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND MATERIAL TYPE.
2. SUBSTITUTION OF EXPANSION OR DRILLED AND GROUTED-IN ANCHORS FOR EMBEDDED ANCHORS SHOWN ON THE DRAWINGS WILL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER.
3. CARE SHALL BE TAKEN WHEN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH REINFORCING WHERE POSSIBLE. HOLES SHALL BE DRY, CLEANED AND CLEANED PER THE MANUFACTURER'S INSTRUCTIONS. ALTERNATIVE DRILLING METHODS AND INSTALLATION CONDITIONS MAY BE ACCEPTABLE PROVIDED INSTALLER HAS RECEIVED WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER OF RECORD.
4. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AT NOT LESS THAN MINIMUM EDGE DISTANCES AND/OR SPACINGS INDICATED IN THE MANUFACTURER'S LITERATURE.
5. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL ARRANGE FOR A MANUFACTURER'S FIELD REPRESENTATIVE TO PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED. ONLY TRAINED INSTALLERS SHALL PERFORM POST INSTALLED ANCHOR INSTALLATION. A RECORD OF TRAINING SHALL BE KEPT ON SITE AND BE MADE AVAILABLE TO THE EOR AS REQUESTED.
6. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC.
A. ANCHORAGE TO CONCRETE
a. ADHESIVE (EPOXY) ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
1. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HIT-Z CARBON STEEL THREADED ROD.
2. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM WITH HAS-E-55 ASTM F1554 GRADE 55 CONTINUOUSLY THREADED ROD PER ICC ESR-4868.
b. MECHANICAL (EXPANSION) ANCHORS FOR CRACKED AND UNCRACKED CONCRETE
1. HILTI KWIK BOLT-T22 CARBON STEEL EXPANSION ANCHORS PER ICC ESR-4266
2. HILTI KWIK HUS-Z CARBON STEEL EXPANSION ANCHORS PER ICC ESR-3027
B. REBAR DOWELING INTO CONCRETE
a. ADHESIVE FOR CRACKED AND UNCRACKED CONCRETE USE:
1. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM.
C. ANCHORAGE TO SOLID GROUTED MASONRY
a. ADHESIVE (EPOXY) ANCHORS USE:
1. HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM WITH HAS-E-55 ASTM F1554 GRADE 55 CONTINUOUSLY THREADED ROD.
2. MECHANICAL (EXPANSION) ANCHORS USE:
3. HILTI KWIK BOLT-T22 CARBON STEEL EXPANSION ANCHORS PER ICC ESR-4561
4. HILTI KWIK HUS-Z CARBON SCREW ANCHORS PER ICC ESR-3056
D. ANCHORAGE TO HOLLOW / MULTI-WYTHE MASONRY
a. ADHESIVE ANCHORS USE:
1. HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM WITH HAS-E-55 ASTM F1554 GRADE 55 CONTINUOUSLY THREADED ROD.
2. THE APPLICABLE PRODUCT SIZE SHALL BE USED PER ADHESIVE MANUFACTURER'S RECOMMENDATION.
7. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR OTHER SUCH METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS THAT HAVE BEEN SEALED BY ANOTHER LICENSED ENGINEER DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF MEETING THE PERFORMANCE OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, INSTALLATION TEMPERATURE, MOISTURE CONDITION OF CONCRETE, AND DRILLING METHODS.

MISCELLANEOUS

- 1. GENERAL NOTES AND TYPICAL DETAILS DESCRIBE GENERAL CRITERIA APPLICABLE TO ALL SIMILAR CONDITIONS THROUGHOUT THE PROJECT REGARDLESS OF WHETHER OR NOT THEY ARE SPECIFICALLY REFERENCED IN THE PLANS OR DETAILS.
2. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE STRUCTURAL ENGINEER BEFORE CONTINUING WITH CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE THE STRUCTURAL DOCUMENTS WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION AND CIVIL DOCUMENTS. ARCHITECT/STRUCTURAL ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY.
4. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, FOR DIMENSIONS TO BE CONFIRMED AT THE JOBSITE, FOR FABRICATION PROCESSES, AND FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION.
5. NO SUBSTITUTIONS OF MATERIAL WILL BE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, MILL CERTIFICATES, AND PRODUCT DATA FOR ALL MATERIALS AND PRODUCTS SHOWN IN THE CONSTRUCTION DOCUMENTS, INCLUDING BUT NOT LIMITED TO, CONCRETE MIX DESIGNS, STEEL REINFORCEMENT, STRUCTURAL STEEL, AND CAST-IN-PLACE AND POST-INSTALLED ANCHORS. THE SHOP DRAWINGS SHALL INCLUDE BOTH FABRICATION AND ERECTION DRAWINGS AND SHALL CONTAIN PLANS, ELEVATIONS, AND DETAILS. REPRODUCTION OF THE CONSTRUCTION DRAWINGS IS NOT AN ACCEPTABLE SHOP DRAWING SUBMITTAL.
7. SHOP DRAWINGS SHALL NOT BE REVIEWED FOR APPROVAL UNLESS CHECKED BY THE FABRICATOR AND APPROVED BY THE CONTRACTOR. REVIEW OF THE SHOP DRAWINGS BY THE ENGINEER DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL REQUIREMENTS SET FORTH IN THE CONSTRUCTION DOCUMENTS.
8. CONTRACTOR SHALL COMPLY WITH LOCAL, STATE, FEDERAL AND OWNERS SAFETY REGULATIONS WHILE WORKING. STRUCTURAL ENGINEER DOES NOT ASSUME ANY RESPONSIBILITY FOR CONSTRUCTION SITE SAFETY.
9. CONTRACTOR SHALL REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS
10. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS BEFORE STARTING WORK. NOTIFY STRUCTURAL ENGINEER OF ANY DISCREPANCY. NOTIFY STRUCTURAL ENGINEER IN WRITING OF CONDITIONS ENCOUNTERED IN THE FIELD CONTRADICTORY TO THOSE SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS.
11. THE DESIGN OF GLAZING SYSTEMS, COLD FORMED METAL FRAMING, RAILINGS, SKYLIGHTS, STAIRS, AND OTHER SYSTEMS NOT SHOWN IN THE STRUCTURAL DRAWINGS HAVE BEEN DELEGATED. THESE SYSTEMS ARE TO BE DESIGNED, FURNISHED, AND INSTALLED BY OTHER PORTIONS OF THE CONTRACT DOCUMENTS.
12. COMPLETE SHOP DRAWINGS FOR CONSTRUCTION OF ALL APPLICABLE SPECIALTY DESIGN ITEMS, INCLUDING BUT NOT LIMITED TO, GLAZING SYSTEMS, COLD FORMED METAL FRAMING, RAILINGS, SKYLIGHTS, STAIRS, AND OTHER SYSTEMS NOT SHOWN IN THE STRUCTURAL DRAWINGS WILL BE SIGNED AND SEALED BY A REGISTERED DESIGN PROFESSIONAL LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED AND WILL BE AVAILABLE DURING TIMES OF CONSTRUCTION INSPECTION.

STRUCTURAL STEEL/ANCHORS

- 1. STRUCTURAL STEEL SHAPES SHALL BE AS FOLLOWS, U.N.O.:
A. W-SHAPES: ASTM A992
B. M, S, C, MC-SHAPES: ASTM A36
C. HSS-SHAPES: ASTM A500 GRADE B
D. STRUCTURAL PIPE: ASTM A53 GRADE B
E. L-SHAPES, PLATES, BARS: ASTM A36
2. ALL BOLTED CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS FOR STRUCTURAL MEMBERS SHALL BE AS FOLLOWS:
A. STEEL BOLTS: ASTM A325 WITH A 3/4-INCH MINIMUM DIAMETER
B. STAINLESS STEEL BOLTS: ASTM F593, TYPE 316, WITH A 3/4-INCH MINIMUM DIAMETER. ALL WELDING SHALL BE IN ACCORDANCE WITH THE REFERENCED CODES AND STANDARDS AND SHALL BE PERFORMED BY CERTIFIED WELDERS.
A. WELDING ELECTRODES: E70XX
4. REMOVE ALL RUST, DIRT, PAINT, AND GALVANIZING FROM STEEL PRIOR TO WELDING.
5. NO OPENINGS SHALL BE CUT IN STRUCTURAL STEEL MEMBERS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER.

ABBREVIATIONS

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes terms like ANCHOR BOLT, FIN FLR, FINISHED FLOOR, PREFAB, PREFABRICATED, etc.



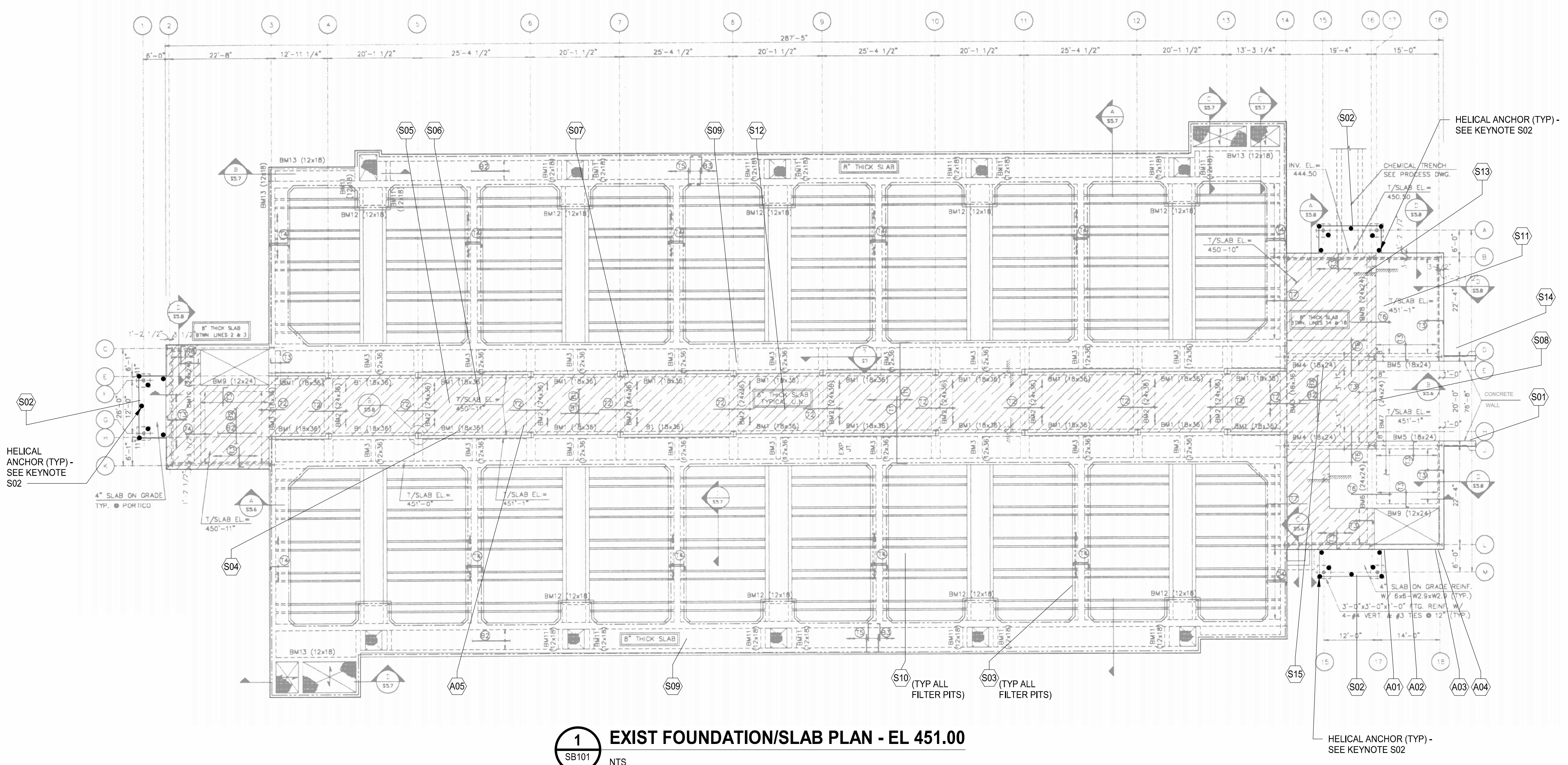
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STRUCTURAL GENERAL NOTES AND ABBREVIATIONS
MACON WATER AUTHORITY
STRUCTURAL REPAIRS FOR AMERSON WTP
MACON, GA

Table with 4 columns: REVISION INFORMATION, DATE, CHK, DR, REV. Includes revision history for 01/16/2026.

S-001
FILE NO: 3618125

Discipline: SCS  
SHEET: STRUCTURAL REPAIR BUILDING PLAN  
Filename: AutoCAD Docu/Amerson WTP Structural Repairs - 3618125/01125\_ASR\_B\_R021.rvt  
Time: 0:06  
1/14/2026 10:44 AM



**1** EXIST FOUNDATION/SLAB PLAN - EL 451.00  
SB101 NTS

### PLAN NOTES

- SEE SHEET S-001 FOR GENERAL NOTES AND ABBREVIATIONS.
- CONTRACTOR TO COORDINATE WITH MACON WATER AUTHORITY REGARDING PHASING REQUIREMENTS OF WORK AT FILTER PITS.
- CONTRACTOR TO COORDINATE SCHEDULING OF ALL WORK WITH MACON WATER AUTHORITY.

### KEYED NOTES

- A01 REMOVE DEBRIS AND VEGETATION AT INTERIOR SLAB TO EXTERIOR SLAB JOINT; PROVIDE NEW BACKER ROD AND SEALANT (SEE 2/SB301 AND 3/SB301).
- A02 REMOVE BLACK BUILD-UP FROM WATER STAINS AT EXTERIOR VENEER (SEE 2/SB301 AND 3/SB301).
- A03 REPAIR OR REPLACE DAMAGED/DEFLECTING GUTTERS; RESEAL GUTTER SEAMS PER MFR REQUIREMENTS TO PREVENT FUTURE LEAKS (SEE 4/SB302). GUTTER REPAIR/REPLACEMENT WORK TO BE DONE BY OTHERS.
- A04 EXTEND DOWNSPOUTS 8'-0" MIN AWAY FROM BUILDING (SEE 3/SB302).
- A05 REMOVE STALACTITES AND EFFLORESCENCE AFTER MOISTURE SOURCES HAVE BEEN MINIMIZED OR ELIMINATED PER STRUCTURAL AND MECHANICAL REPAIRS, PER THE CONSTRUCTION DOCUMENTS (SEE 5/SB301 AND 6/SB301).
- S01 CONCRETE REPAIR AT RAMP: PROVIDE RIGID EPOXY INJECTION AT CONCRETE CRACKS AT RAMP WALL (UNIT PRICE). WHERE SIGNIFICANT SPALLING HAS OCCURRED, SAWCUT SURFACE AND PATCH. SEE SPECIFICATIONS FOR ADDL INFORMATION (SEE 5/SB302 AND 6/SB302).
- S02 SETTLEMENT REPAIR: PRESSURE GROUT UNDER EXISTING FOUNDATIONS AND PROVIDE HELICAL ANCHOR UNDERPINNING FOR 25 KIP SERVICE LEVEL COLUMN LOAD (QUANTITY AS SHOWN) TO SUPPORT THE EXISTING SLAB AND COLUMNS. HELICAL ANCHOR DELEGATED DESIGN BY SPECIALTY FOUNDATION CONTRACTOR. SHOP DRAWING SUBMITTAL (INCLUDING FINAL QUANTITY AND LAYOUT) TO BE REVIEWED BY EOR PRIOR TO FABRICATION OR INSTALLATION. SEE SPECIFICATIONS FOR ADDL INFORMATION. (SEE 1/SB303).
- S03 FILTER PIT CONCRETE REPAIR: PROVIDE POLYURETHANE CRACK INJECTION AT CRACKS IN FILTER PIT WALLS (UNIT PRICE). SEE SPECIFICATIONS FOR ADDL INFORMATION. (SEE 4/SB301).
- S04 PIPE GALLERY WALL CONCRETE REPAIR: PROVIDE POLYURETHANE CRACK INJECTION AT CRACKS IN PIPE GALLERY WALLS (UNIT PRICE). WHERE SIGNIFICANT SPALLING HAS OCCURRED, SAWCUT SURFACE AND PATCH. SEE SPECIFICATIONS FOR ADDL INFORMATION. (SEE 5/SB301).
- S05 PIPE GALLERY ELEVATED SLAB REPAIR FOR CRACKS AND SPALLING: SAWCUT AND PATCH CONCRETE WHERE SIGNIFICANT SPALLING HAS OCCURRED AT UNDERSIDE OF ELEVATED SLAB IN PIPE GALLERY. PROVIDE POLYURETHANE CRACK INJECTION THAT IS APPROVED FOR OVERHEAD USE AT CRACKS IN ELEVATED SLAB IN PIPE GALLERY (UNIT PRICE). (SEE 6/SB301 AND SPECIFICATIONS FOR ADDL INFORMATION).
- S06 PIPE GALLERY ELEVATED SLAB REPAIR FOR REBAR CORROSION: WHERE CORROSION IS VISIBLE, CHIP OUT CONCRETE AROUND REBAR, REMOVE CORROSION, AND PATCH CONCRETE (UNIT PRICE). IF REBAR HAS EXPERIENCED MORE THAN 20% SECTION LOSS FROM CORROSION, CONTACT STRUCTURAL EOR FOR FURTHER DIRECTION. SEE SPECIFICATIONS FOR ADDL INFORMATION. (SEE 6/SB301).
- S07 CONCRETE/SEALANT REPAIR AT PIPE PENETRATIONS IN PIPE GALLERY: PROVIDE POLYURETHANE CRACK INJECTION AT CRACKS AND AROUND PIPE PENETRATIONS IN PIPE GALLERY (UNIT PRICE). SEE SPECIFICATIONS FOR ADDL INFORMATION. (SEE 1/SB302).
- S08 PIPE GALLERY PIPE PENETRATION REPAIR AT CLEAN OUT PIPE: CLEAR DEBRIS FROM CLEAN OUT PIPE. PROVIDE POLYURETHANE CRACK INJECTION AT WALLS CRACKS AND AT PIPE PENETRATION IN PIPE GALLERY WALL. SEE SPECIFICATIONS FOR ADDL INFORMATION. (SEE 5/SB303).
- S09 EXTERIOR WALKWAY SLAB REPAIRS AROUND FILTER PITS: V-ROUTE CRACKS AT EXTERIOR ELEVATED SLABS AND FILL WITH FLEXIBLE SEALER (NSF 61 APPROVED). FINISH TO BE SLIP RESISTANT. SEE SPECIFICATIONS FOR ADDL INFORMATION. (SEE 3/SB303).
- S10 EPOXY COATING FOR INCREASED "WATER-TIGHTNESS": PROVIDE EPOXY COATING CONFORMING TO SYSTEM 434W, PER SPECIFICATION SECTION 09 90 00, AT INSIDE FACE OF FILTER PIT WALLS AND AT EXTERIOR ELEVATED SLABS ADJACENT TO THE FILTER PITS. SEE PLAN NOTE 2 FOR PHASING REQUIREMENTS.
- S11 NEW DEHUMIDIFIER UNIT: REPLACE EXISTING ON EXISTING INTERIOR HOUSEKEEPING PAD (SEE MECHANICAL DRAWINGS).
- S12 NEW DUCTWORK (SEE MECHANICAL DRAWINGS); NEW DUCTWORK IS TO BE HUNG FROM EXISTING ELEVATED SLAB IN PIPE GALLERY - LOCATE DUCTWORK SO IT DOES NOT INTERFERE WITH EXISTING MONORAIL SYSTEM. LOCATE REBAR PRIOR TO DRILLING FOR ANY DUCTWORK SUPPORTS AND DO NOT DAMAGE REBAR. (SEE MECHANICAL DRAWINGS FOR ADDL INFORMATION). (SEE 4/SB303).
- S13 EXISTING STEEL GRATING AT SUMP PUMP TO REMAIN; PROVIDE 1/8" CONT CHECKERED PLATE ON TOP OF GRATING. TACK WELD TO GRATING AS REQUIRED TO SECURE. CUT OPENINGS IN CHECKERED PLATE AS REQUIRED FOR PIPE PENETRATIONS. SEE MECHANICAL DRAWINGS FOR ADDL INFORMATION. (SEE 2/SB303).
- S14 NEW CONDENSING UNIT (SEE MECHANICAL DRAWINGS); PROVIDE EXTERIOR EQUIPMENT CONCRETE SLAB PER DETAIL 2/SB304.
- S15 NEW 3'x4' OPENING IN EXISTING CMU WALL. SEE DETAIL 3/SB304.

### PLAN LEGEND

- DENOTES PROPOSED LOCATION OF HELICAL ANCHOR (EXACT QUANTITY AND LOCATIONS TO BE DETERMINED BY SPECIALTY FOUNDATION CONTRACTOR)



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STRUCTURAL FILTER BUILDING PLAN

MACON WATER AUTHORITY

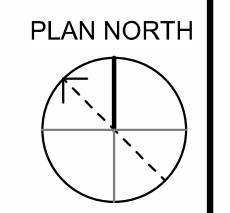
STRUCTURAL REPAIRS FOR AMERSON WTP

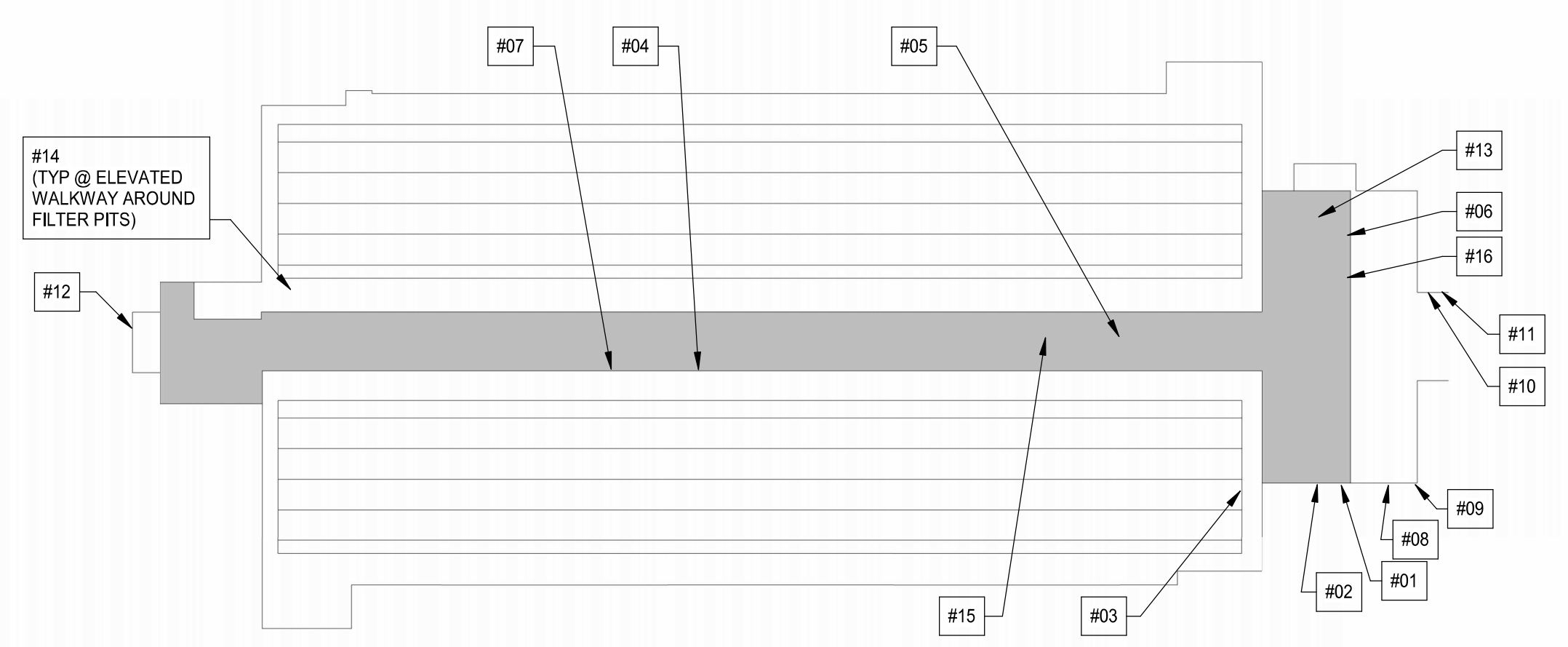
MACON, GA

REV	DR	CHK	DATE	DESCRIPTION
0	ACM	ZRR	01/16/2026	INITIAL ISSUE

SB101

FILE NO: 3618125





**1 PHOTO KEYPLAN**  
SB301 NTS



REMOVE BLACK BUILD-UP FROM WATER STAINS AT EXTERIOR WALLS - SEE KEYNOTE A02 ON SB101

REMOVE VEGETATION AND DEBRIS AT INTERIOR SLAB TO EXTERIOR SLAB JOINT; PROVIDE NEW BACKER ROD AND SEALANT - SEE KEYNOTE A01 ON SB101

**2 PHOTO #01 - EXTERIOR SLAB JOINT AND EXTERIOR VENEER**  
SB301 NTS



REMOVE BLACK BUILD-UP FROM WATER STAINS AT EXTERIOR WALLS - SEE KEYNOTE A02 ON SB101

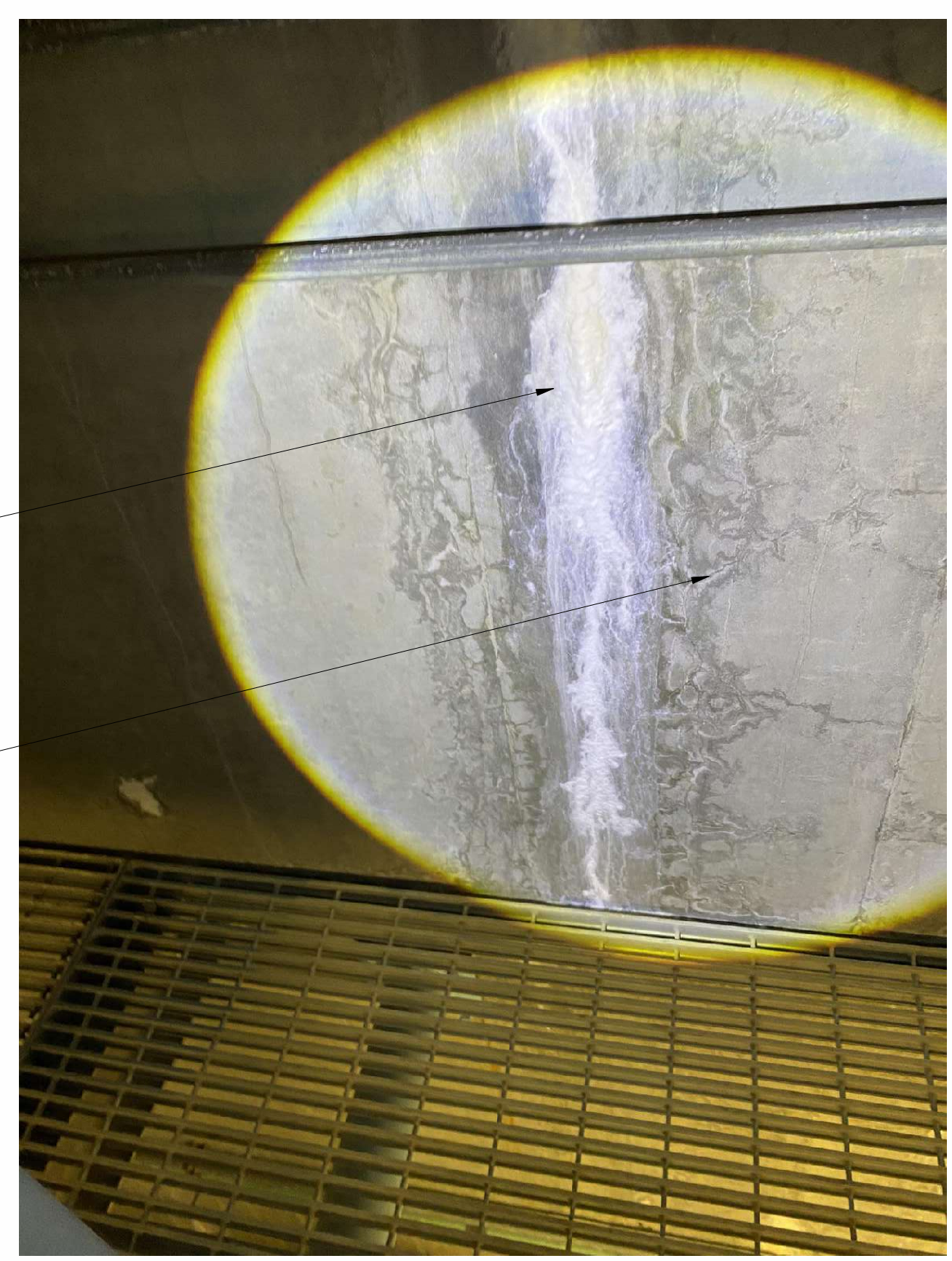
REMOVE VEGETATION AND DEBRIS AT INTERIOR SLAB TO EXTERIOR SLAB JOINT; PROVIDE NEW BACKER ROD AND SEALANT - SEE KEYNOTE A01 ON SB101

**3 PHOTO #02 - EXTERIOR SLAB JOINT AND EXTERIOR VENEER**  
SB301 NTS



REPAIR CONCRETE CRACKING/SPALLING - SEE KEYNOTE S03 ON SB101

**4 PHOTO #03 - FILTER PIT WALL REPAIR**  
SB301 NTS



REMOVE EFFLORESCENCE - SEE KEYNOTE A05 ON SB101

REPAIR CONCRETE CRACKING IN PIPE GALLERY - SEE KEYNOTE S04 ON SB101

**5 PHOTO #04 - PIPE GALLERY WALL REPAIR**  
SB301 NTS



REMOVE EFFLORESCENCE - SEE KEYNOTE A05 ON SB101

REMOVE STALACTITES - SEE KEYNOTE A05 ON SB101

**6 PHOTO #05 - PIPE GALLERY SLAB UNDERSIDE**  
SB301 NTS



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STRUCTURAL SITE PHOTOS  
MACON WATER AUTHORITY  
STRUCTURAL REPAIRS FOR AMERSON WTP  
MACON, GA

REVISION INFORMATION		DESCRIPTION:	
REV	DATE	INITIAL ISSUE	
0	01/16/2026		
DR	ACM	ZRR	
CHK	ZRR		



NEW JOINT SEALANT AT EXISTING PIPE PENETRATION - SEE KEYNOTE S07 ON SB101

1 PHOTO #06 - PIPE PENETRATION  
SB302 NTS



WATER IN EXISTING OPEN TRENCH TO BE HARD PIPED - SEE MECHANICAL DRAWINGS AND DETAIL 2/SB303

2 PHOTO #07 - WATER FLOWING IN OPEN TRENCH  
SB302 NTS



EXTEND DOWNSPOUT 8'-0" MIN. FROM BUILDING - SEE KEYNOTE A04 ON SB101

3 PHOTO #08 - DOWNSPOUT  
SB302 NTS



REPAIR OR REPLACE DEFLECTING GUTTER AND RESEAL GUTTER SEAMS - SEE KEYNOTE A03 ON SB101 (GUTTER REPAIR/REPLACEMENT WORK TO BE DONE BY OTHERS)

4 PHOTO #09 - DAMAGED GUTTER  
SB302 NTS



REPAIR CONCRETE CRACKING - SEE KEYNOTE S01 ON SB101

5 PHOTO #10 - RAMP WALL  
SB302 NTS



REPAIR CONCRETE CRACKING - SEE KEYNOTE S01 ON SB101

6 PHOTO #11 - RAMP WALL  
SB302 NTS

Drawing Set: SB302 STRUCTURAL SITE PHOTOS  
Drawing: AutoCAD Doc/Ameron WTP Structural Repairs - 3618125/01/25\_ASR\_B\_R04.rvt  
File Path: 1/14/2026 11:45:01 AM

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GEORGIA REGISTERED PROFESSIONAL ENGINEER  
No. PE051192  
ZINAH R ROSENBERG  
Date: 2026.02.04 09:19:45-05'00'

STRUCTURAL SITE PHOTOS  
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SB302

PRESSURE GROUT UNDER EXISTING FOUNDATIONS AND PROVIDE HELICAL ANCHORS - SEE KEYNOTE S02 ON SB101



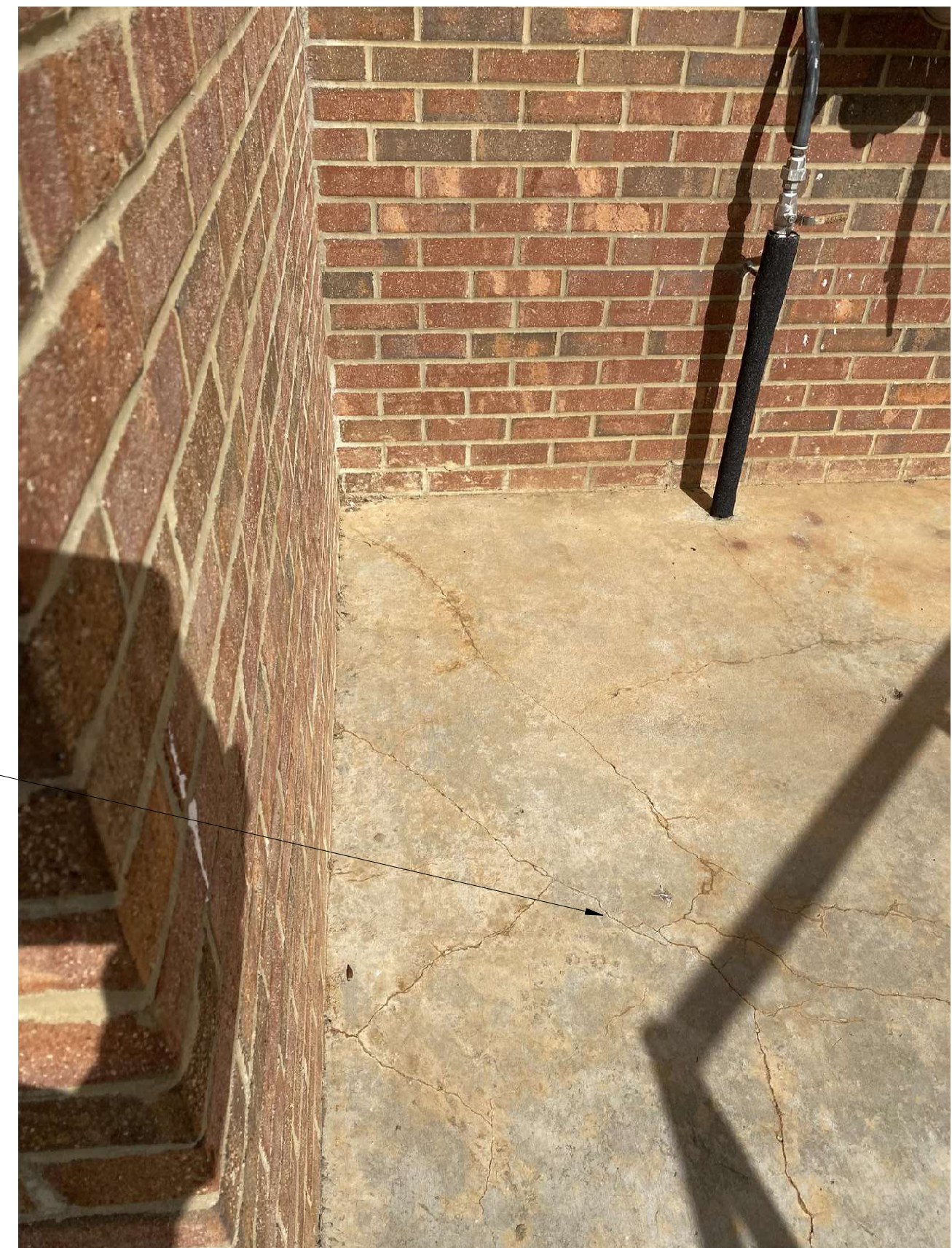
1 PHOTO #12 - WEST PORTICO  
SB303 NTS

EXISTING STEEL GRATING AT SUMP PUMP TO REMAIN; PROVIDE 1/8" CONT CHECKERED PLATE ON TOP OF GRATING. TACK WELD TO GRATING AS REQUIRED TO SECURE. CUT OPENINGS IN CHECKERED PLATE AS REQUIRED FOR PIPE PENETRATIONS - SEE KEYNOTE S13 ON SB101.

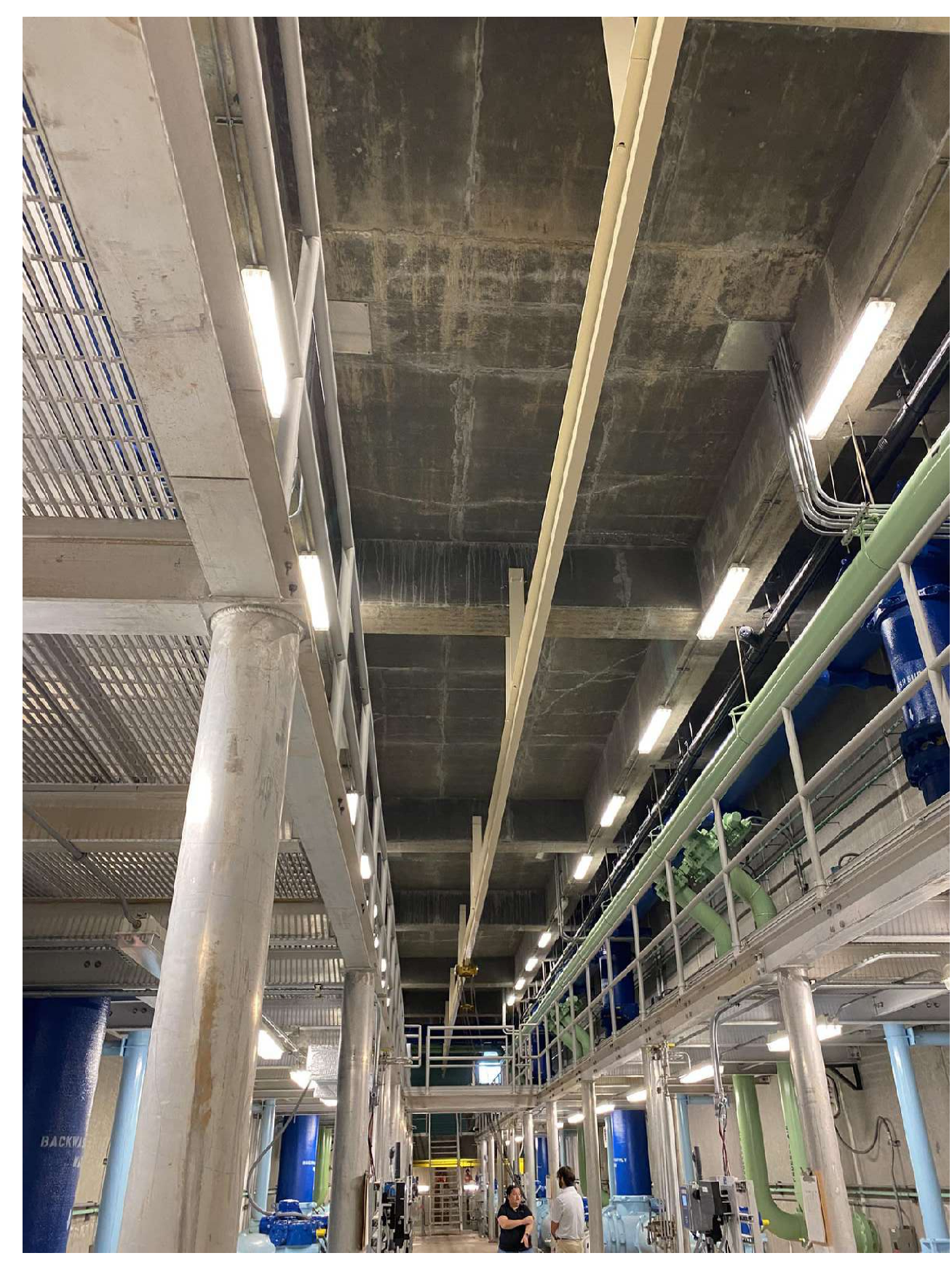


2 PHOTO #13 - STEEL PLATE AT SUMP PUMP PIT  
SB303 NTS

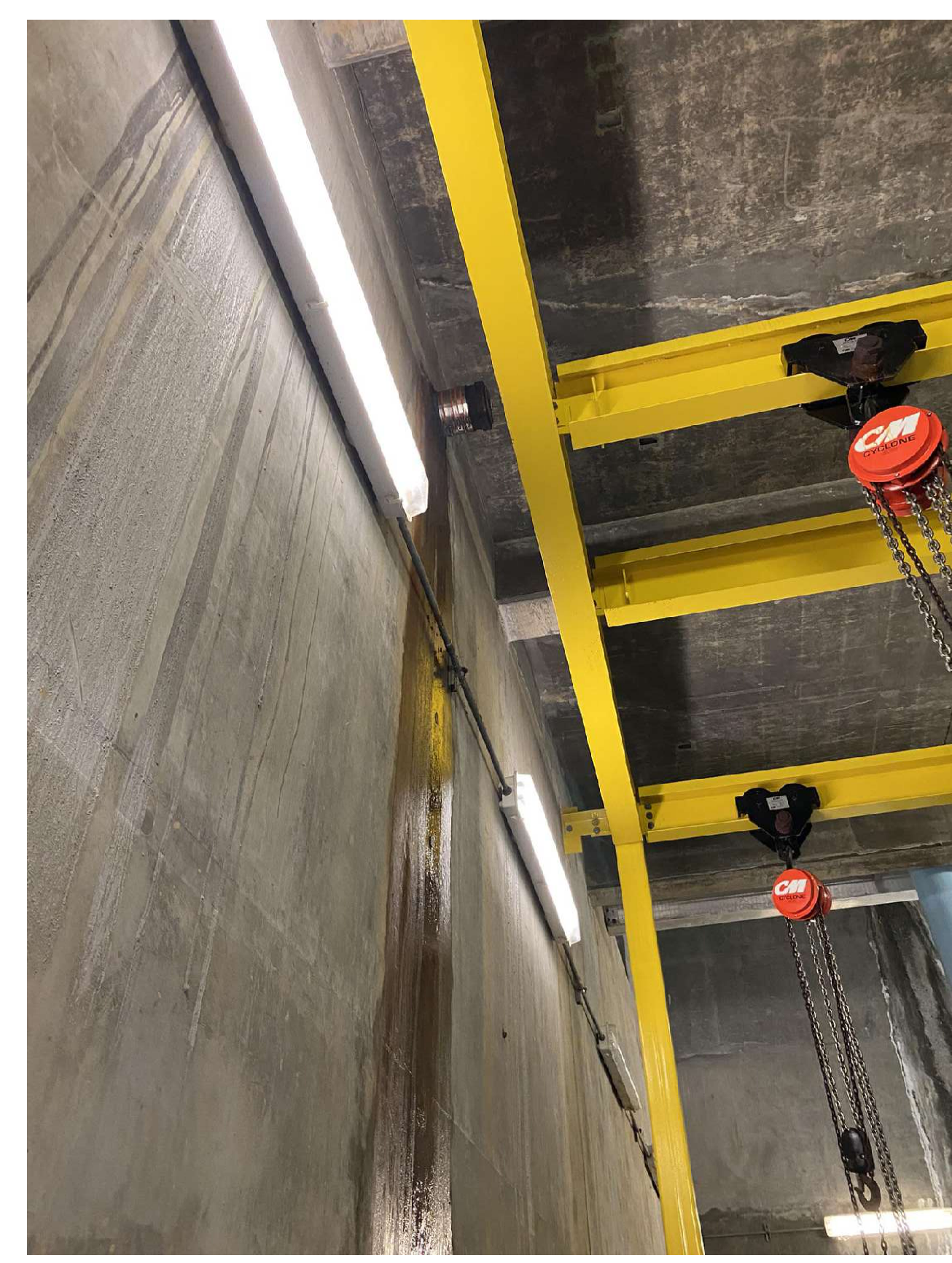
CRACKING AT EXTERIOR ELEVATED SLAB AROUND FILTER PITS - SEE KEYNOTE S09 ON SB101



3 PHOTO #14 - CRACKING AT EXTERIOR ELEVATED SLAB  
SB303 NTS



4 PHOTO #15 - ELEVATED SLAB WHERE NEW DUCTWORK WILL BE HUNG  
SB303 NTS



5 PHOTO #16 - CLEAN OUT PIPE  
SB303 NTS

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STRUCTURAL SITE PHOTOS

MACON WATER AUTHORITY

STRUCTURAL REPAIRS FOR AMERSON WTP

MACON, GA

REVISION INFORMATION

REV	DR	CHK	DATE	DESCRIPTION
0	ACM	ZRR	01/16/2026	INITIAL ISSUE

SB303

FILE NO: 3618125





HVAC LEGEND		
SYMBOL	DESCRIPTION	ABBV.
	SIDEWALL SUPPLY AIR GRILLE/REGISTER	SAG/SAR
	SIDEWALL RETURN AIR GRILLE/REGISTER	RAG/RAR
	DUCT MTD. SIDEWALL SUPPLY AIR GRILLE/REGISTER	SG
	SUPPLY DUCT RISE/DROP	
	RETURN DUCT RISE/DROP	
	EXHAUST DUCT RISE/DROP	
	SQUARE ELBOW WITH DOUBLE THICKNESS TURNING VANES	
	MANUAL VOLUME DAMPER	MVD
	NEW DUCTWORK	
	EXISTING DUCTWORK TO REMAIN	
	EXISTING DUCTWORK TO BE REMOVED	
	DUCT MOUNTED SMOKE DETECTOR	
	THERMOSTAT	T'STAT
	HUMIDISTAT	H'STAT
	AIRFLOW DIRECTION RETURN / EXHAUST	
	AIRFLOW DIRECTION SUPPLY	
SA	SUPPLY AIR	
RA	RETURN AIR	
OA	OUTSIDE AIR	
AFF	ABOVE FINISHED FLOOR	
B.O.D.	BOTTOM OF DUCT	
	CONNECT TO EXISTING	
	DIFFUSER NECK SIZE	
	DIFFUSER SCHEDULE	
	CFM	

NOTE: DUCT RUNOUT TO NECK SAME SIZE UNLESS OTHERWISE NOTED

### GENERAL DEMOLITION NOTES (MECHANICAL):

- COORDINATE ALL PHASES OF DEMOLITION WORK CLOSELY WITH OWNER. PROVIDE OWNER WRITTEN NOTICE NO LESS THAN TEN (10) CALENDAR DAYS PRIOR TO SHUTDOWN OF ANY PORTION OF MECHANICAL SYSTEM IN USE BY THE OWNER.
- REMOVE AND DISPOSE OF DEMOLISHED MATERIALS OFF-SITE IN A MANNER CONFORMING TO STATE AND LOCAL REGULATIONS AND AT NO ADDITIONAL EXPENSE TO OWNER.
- THE OWNER RESERVES THE RIGHT TO RETAIN ANY OR ALL DEMOLISHED MATERIALS. PRIOR TO START OF WORK, SCHEDULE WALK-THROUGH OF JOBSITE WITH OWNER TO IDENTIFY THOSE MATERIALS TO BE RETAINED BY THE OWNER. DELIVER MATERIALS TO OWNER'S STORAGE SPACE ON CAMPUS AT NO ADDITIONAL COST TO OWNER.
- SCOPE OF DEMOLITION OF MATERIALS IDENTIFIED ON PLAN INCLUDES ANY ASSOCIATED AUXILIARY MATERIAL NOT TO BE RE-USED. THIS INCLUDES, BUT IS NOT LIMITED TO: INSULATION, HANGARS, MOUNTING BRACKETS, HANGAR ROD, CONDUIT, AND CONDUCTORS.
- DEMOLISH EXISTING CONTROLS MADE INOPERABLE BY SCOPE OF DEMOLITION. TURN OVER CONTROL COMPONENTS TO OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO: EQUIPMENT CONTROL PANELS, SENSORS, ACTUATORS, RELAYS, AND METERS.
- WHERE SCOPE OF DEMOLITION WORK RESULTS IN AN OPEN WALL, FLOOR, OR ROOF PENETRATION, PATCH OPENING WITH CONSTRUCTION MATCHING EXISTING ASSEMBLY CONSTRUCTION OR AS APPROVED BY ARCHITECT. WHERE ASSEMBLY IS FIRE RATED, PATCH OPENINGS WITH U.L. LISTED METHOD THAT MAINTAINS FIRE RATING OF ASSEMBLY.
- PRIOR TO DEMOLITION OF REFRIGERANT-CONTAINING EQUIPMENT, RECOVER AND DISPOSE OF REFRIGERANT IN ACCORDANCE WITH EPA REQUIREMENTS. REFRIGERANT RECOVERY SHALL BE PERFORMED BY AN EPA-LICENSED TECHNICIAN.
- WHERE SCOPE OF DEMOLITION REQUIRES PARTIAL REMOVAL OF DUCT AND PIPE SYSTEMS, CAP AND SEAL REMAINING DUCT OR PIPE OPENINGS AND INSULATE AND JACKET EXPOSED SURFACES TO MATCH REMAINING SYSTEMS.
- WHERE SCOPE OF DEMOLITION INCLUDES REMOVAL OF PIPING CONNECTED TO A REMAINING SYSTEM, DEMOLISH PIPING BACK TO ACTIVE MAIN AND CAP.

### GENERAL NOTES (MECHANICAL):

- FURNISH LABOR, INSTALL MATERIALS AND EQUIPMENT, AND INCLUDE SERVICES AND INCIDENTALS PROPER TO THE INSTALLATION OF WORK INVOLVED FOR A COMPLETE AND OPERATING FACILITY.
- GUARANTEE WORK TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE OR AS REQUIRED BY SPECIFICATIONS.
- THE CONTRACTOR TO OBTAIN AND PAY FOR REQUIRED PERMITS, FEES AND INSPECTIONS FOR THE PROJECT.
- PROVIDE EQUIPMENT THAT BEARS ACCEPTANCE LABEL FROM CERTIFIED TESTING LABORATORY (UL OF OTHER).
- COORDINATE WITH OTHER TRADES, SPECS AND DRAWINGS, AND OWNER'S DIRECTIONS.
- SURVEY JOB SITE OBTAIN A FULL UNDERSTANDING OF THE WORK INVOLVED IN CONNECTION WITH EXISTING CONDITIONS. ADDITIONAL FEES WILL NOT BE PAID FOR MISSING OR OVERLOOKED CONDITIONS REQUIRING ADDITIONAL WORK IF DETERMINED BY THE ENGINEER THAT SAID CONDITIONS COULD HAVE BEEN REASONABLY DETECTED DURING THE JOB SURVEY.
- EQUIPMENT SELECTION AS SHOWN ON THE DRAWING IS FOR DESIGN PURPOSES ONLY. ACTUAL INSTALLED EQUIPMENT MAY DIFFER FROM THAT SHOWN. EQUIPMENT PERFORMANCE CHARACTERISTICS AND TYPE ARE THE GOVERNING FACTORS IN SUBSTITUTION "OR EQUAL" COORDINATE EQUIPMENT ELECTRICAL REQUIREMENTS WITH ELECTRICAL DRAWINGS.
- THE MECHANICAL DRAWINGS ARE GENERALLY DIAGRAMMATIC AND SHOW THE RELATIONSHIP BETWEEN EQUIPMENT AND CONNECTIONS. DO NOT SCALE THE DRAWINGS FOR EXACT SIZE OR LOCATION. DETAILS AND ASSEMBLY DRAWINGS ARE SPECIFIC AND SHOULD BE CLOSELY FOLLOWED.
- INSTALL THE MECHANICAL SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION, THE INTERNATIONAL BUILDING CODE, THE INTERNATIONAL MECHANICAL CODE, INTERNATIONAL FUEL GAS CODE, NFPA 90A, NFPA 54, ETC.
- FABRICATE AND INSTALL DUCTS IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS."
- FABRICATE SHEET METAL DUCTWORK FROM GALVANIZED STEEL SHEET, ASTM 527.
- EXTERNALLY INSULATE SUPPLY DUCTWORK WITHIN THE BUILDING ENVELOPE UNLESS OTHERWISE NOTED. DUCT DIMENSIONS ARE NET INSIDE DIMENSIONS. DO NOT INSULATE GENERAL EXHAUST DUCT. INSULATION SHALL BE 2" THICK, R-6 FIBERGLASS BLANKET TYPE WITH VAPOR BARRIER JACKET.
- DUCTWORK ELBOWS WILL BE RADIUS TYPE WHERE INSTALLATION PERMITS. CENTERLINE RADIUS WILL BE NOMINALLY 1.5 X W, WHERE A RADIUS TYPE ELBOW IS NOT FEASIBLE, ELBOW WILL BE SQUARE THROATED TYPE WITH TURNING VANES.
- INSTALL BALANCING DAMPERS AT BRANCH DUCT TAKE-OFFS AND AT DUCT RUNOUTS ON END OF RUNS.
- INSTALL SLEEVES WHERE DUCTS OR PIPING PENETRATE FOUNDATION WALLS, PARTITIONS, FLOOR OR ROOF. PACK AROUND SLEEVES AND SEAL WEATHER TIGHT. INSTALL FLASHING AS REQUIRED.
- UNLESS OTHERWISE NOTED, MOUNT WALL THERMOSTATS AT 4'-6" ABOVE FINISHED FLOOR.
- INSTALL CONTROLS IN ACCORDANCE WITH SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
- COORDINATE THE LOCATIONS OF EQUIPMENT TO PROVIDE NECESSARY CLEARANCES FOR MAXIMUM PERFORMANCE AND MAINTENANCE.
- SIZE REFRIGERANT LINES IN ACCORDANCE WITH DX EQUIPMENT MANUFACTURERS' RECOMMENDATION, ASHRAE STANDARDS, APPLICABLE DETAILS AND SPECIFICATIONS, WHERE CONDITIONS WARRANT, CONSIDER LENGTH OF RUN, NUMBER/TYPE OF FITTINGS, AND CHANGE IN ELEVATION IN SIZING REFRIGERANT LINES. INSULATE REFRIGERANT PIPING PER MANUFACTURERS RECOMMENDATION. INSULATION SHALL BE MINIMUM 1" THICK ELASTOMERIC FOAM. PAINT EXPOSED INSULATION WITH TWO COATS OF WHITE WEATHERPROOF PAINT.
- RECIRCULATING AIR HANDLING UNITS 2000 CFM OR GREATER WILL HAVE A SMOKE DETECTOR INSTALLED IN THE SUPPLY AIR STREAM AHEAD OF ANY BRANCH CONNECTIONS. THE SENSING DEVICE WILL AUTOMATICALLY SHUTDOWN THE SYSTEM FAN(S) IF SMOKE IS DETECTED. PROVIDE AUDIO/VISUAL ALARM INDICATION AT LOCATION APPROVED BY OWNER.
- ENGAGE THE SERVICES OF A CERTIFIED TEST & BALANCING CONTRACTOR TO BALANCE THE AIRFLOW IN ACCORDANCE WITH NEBB OR AABC TAB PROCEDURES. PROVIDE THREE (3) COPIES OF TAB REPORT FOR REVIEW AND APPROVAL.
- OUTSIDE AIR DAMPER CONTROL: PROVIDE MOTION SENSORS ABOVE EACH STAIR LANDING DOWN TO PIPE GALLERY. WIRE TO OPEN MOTORIZED OUTSIDE AIR DAMPER WHEN MOTION IS DETECTED BY EITHER SENSOR. WHEN MOTION IS NOT DETECTED BY BOTH SENSORS FOR 15 CONTINUOUS MINUTES, OUTSIDE AIR DAMPER SHALL CLOSE.

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MECHANICAL GENERAL NOTES AND LEGENDS

MACON WATER AUTHORITY  
**AMERSON WTP STRUCTURAL REPAIRS**  
MACON, GA

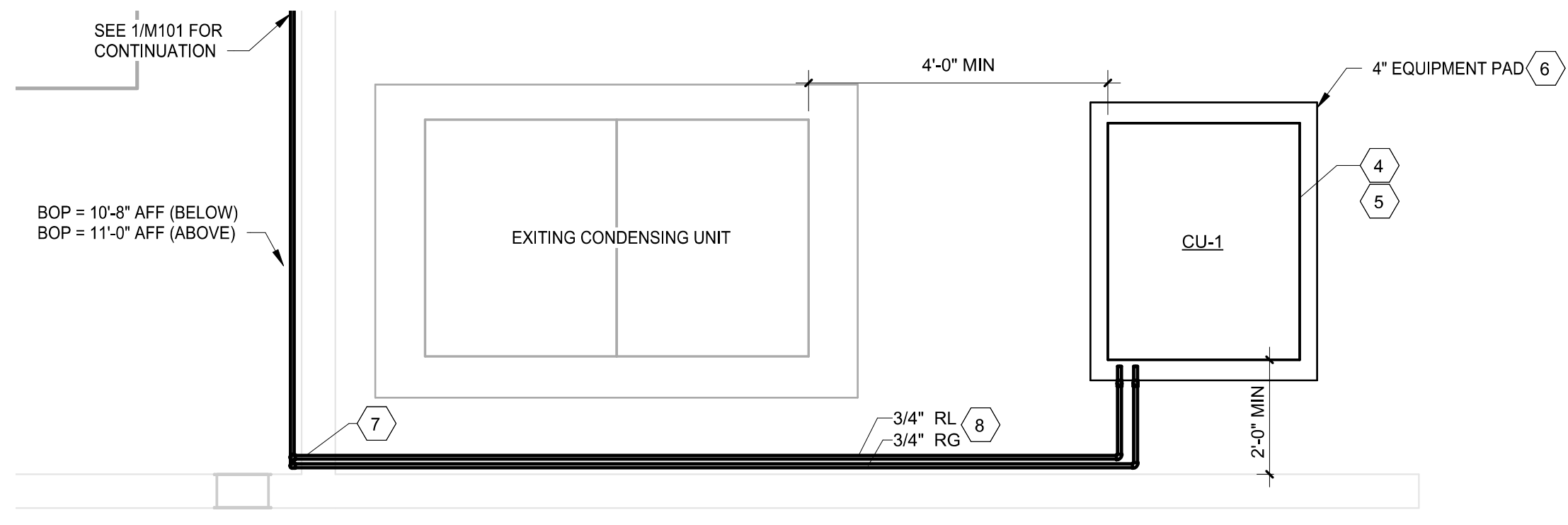
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M001

FILE NO: 3618125

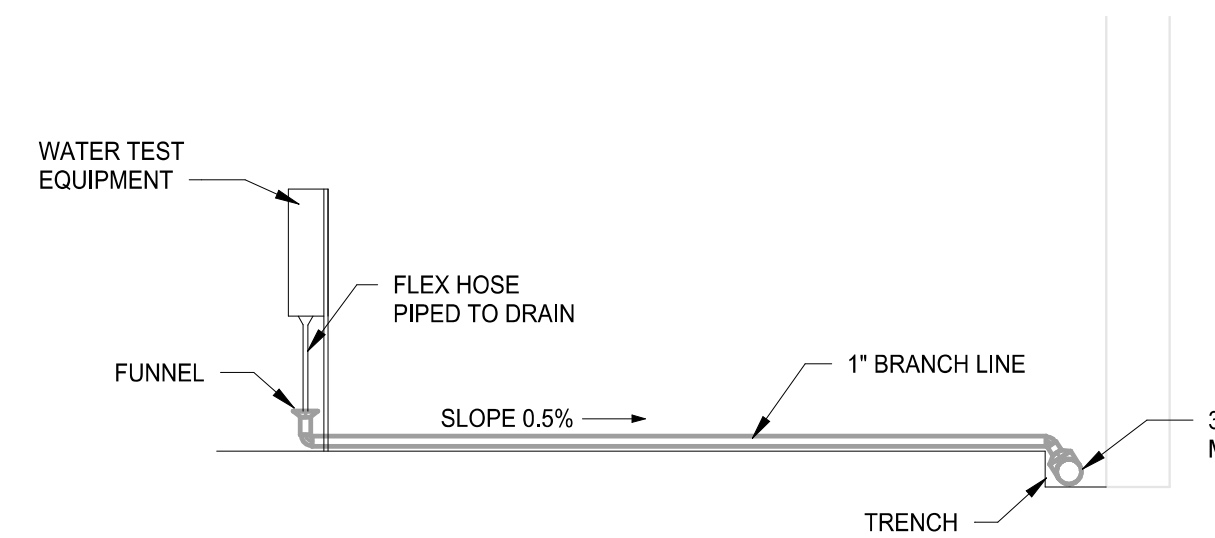


Drawing Set: 100  
 M101 MECHANICAL NEW WORK PLAN  
 Project: Amerson WTP Structural Repairs - 3618125/3618125\_ASL\_M\_102.dwg  
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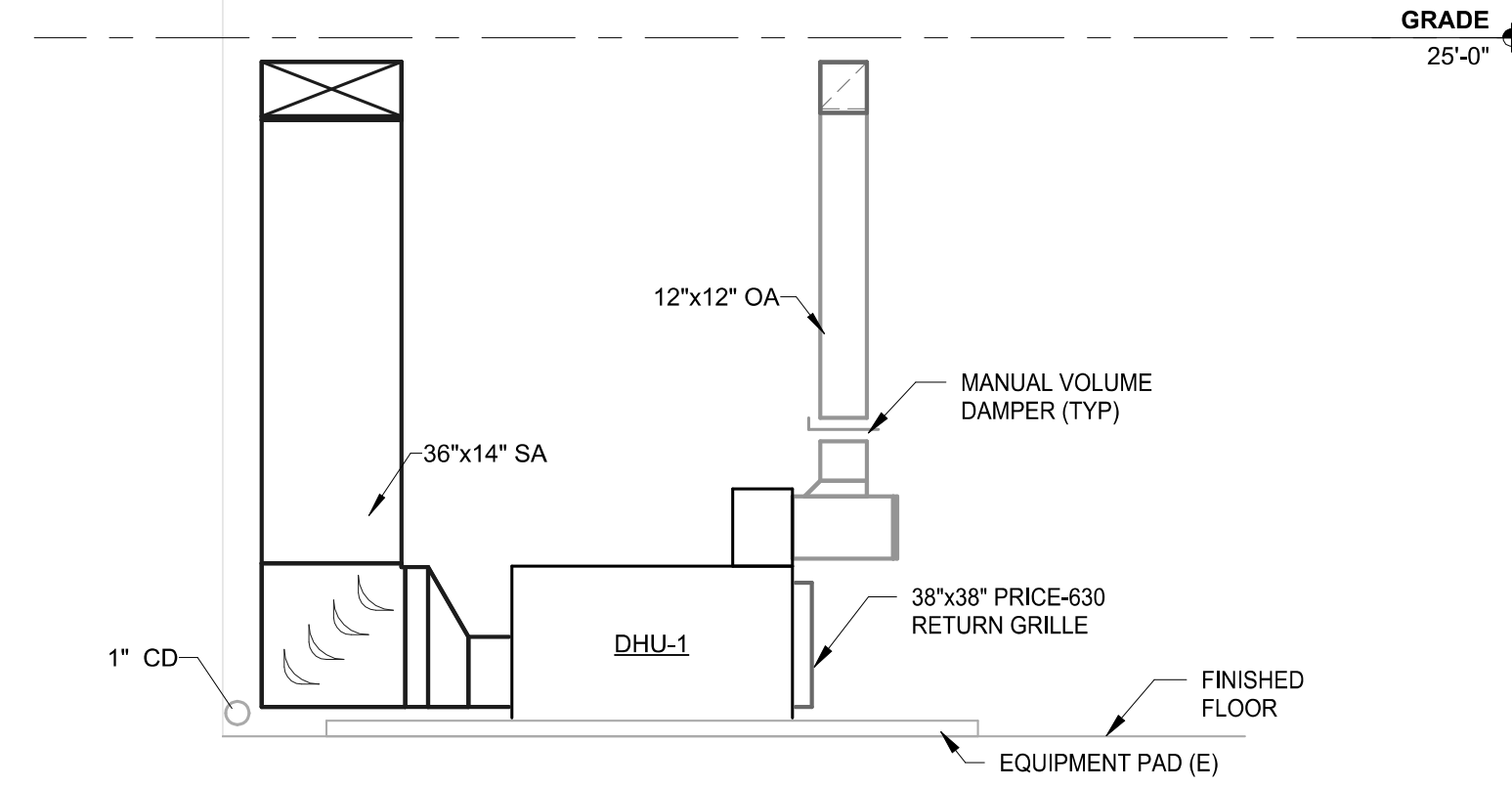


NOTE:  
LOCATE CONDENSING UNIT ON GRADE OUTSIDE OF THE BUILDING. EL. = 451.00.

**2 CONDENSING UNIT ENLARGED PLAN**  
M101 SCALE: 3/8" = 1'-0"



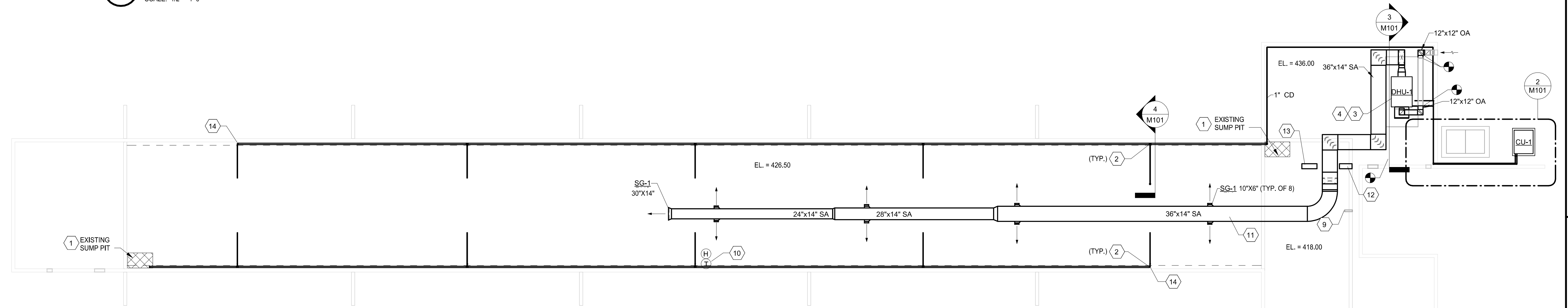
**4 DRAIN BRANCH TO TEST STATION**  
M101 SCALE: 1/2" = 1'-0"



**3 DHU-1 SECTION VIEW**  
M101 SCALE: 1/4" = 1'-0"

**KEYED NOTES**

- 1 SEE STRUCTURAL DRAWINGS FOR SUMP PIT GRATE REPLACEMENT. COORDINATE OPENINGS IN NEW SUMP PIT COVER TO SUPPORT EXISTING PIPE PENETRATIONS.
- 2 ROUTE 3" SCH. 40 PVC PIPE FROM FURTHEST TESTING STATION TO THE EXISTING SUMP PIT. MAKE PIPE CONNECTIONS TO ALL TEST STATION DRAINS WITH 1" SCH. 40 PVC PIPE. ROUTE 3" MAIN AT 0.5% SLOPE DOWN TOWARD SUMP PIT.
- 3 PROVIDE A 3-POLE 30A BREAKER ON CIRCUIT 49/51/53 OF PANEL HF1 SECTION 2. PROVIDE (3#10 & 1#10G) IN 3/4" FROM PANEL TO UNIT. PROVIDE A 600V/3-POLE/30A/NEMA 12 FUSED DISCONNECT (FUSE AS REQUIRED) WITHIN 6' OF UNIT.
- 4 PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE NEC AND ALL APPLICABLE STATE AND LOCAL CODES. ALL CONDUCTORS SHALL BE COPPER, SINGLE CONDUCTOR, THHN/THWN-2. ALL CONDUIT SHALL BE RIGID GALVANIZED STEEL (RGS) UNLESS OTHERWISE NOTED. FINAL CONNECTION TO UNIT FROM DISCONNECT SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT (LFMC). ALL JUNCTION BOXES SHALL BE NEMA 3R RATED. COORDINATE FUSE SIZES WITH MISC LISTED IN FINAL EQUIPMENT SUBMITTALS.
- 5 PROVIDE A 3-POLE 20A BREAKER ON CIRCUIT 44/46/48 OF PANEL HF1 SECTION 2. PROVIDE (3#12 & 1#12G) IN 3/4" FROM PANEL TO UNIT. PROVIDE A 600V/3-POLE/30A/NEMA 4X FUSED DISCONNECT (FUSE AS REQUIRED) WITHIN 6' OF UNIT.
- 6 SEE STRUCTURAL DETAIL 4/SB303.
- 7 CORE DRILL WALL. PROVIDE PIPE SLEEVE FOR REFRIGERANT PIPING AND SEAL PENETRATION WITH WEATHERPROOF CAULK.
- 8 SECURE REFRIGERANT PIPING TO EXISTING WALL.
- 9 REMOVE AND REPLACE PIPE SEAL AT WALL PENETRATION. REFER TO DETAIL 2/M501.
- 10 MOUNT COMBINATION THERMOSTAT AND HUMIDISTAT 42" AFF. COORDINATE FINAL LOCATION WITH EXITING PIPE AND CONDUITS MOUNTED ON WALL.
- 11 ROUTE DUCT TIGHT TO UNDERSIDE OF SLAB ABOVE.
- 12 PROVIDE 24"x14" TRANSFER THROUGH IN EXISTING WALL OPENING. TRANSFER GRILLES SHALL BE PRICE-630.
- 13 CUT NEW 48"x36" OPENING IN CMU WALL ABOVE DOOR. SEE STRUCTURAL DETAIL 3/SB304. TRANSFER GRILLES SHALL BE PRICE-630.
- 14 PROVIDE 2" VENT AT BEGINNING OF MAIN. EXTEND VERTICALLY 12" AND PROVIDE A U-BEND TO DRAIN OVER TRENCH.



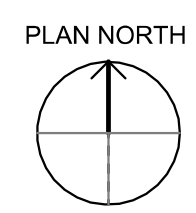
**1 MECHANICAL OVERALL PLAN - PIPE GALLERY**  
M101 SCALE: 3/32" = 1'-0"

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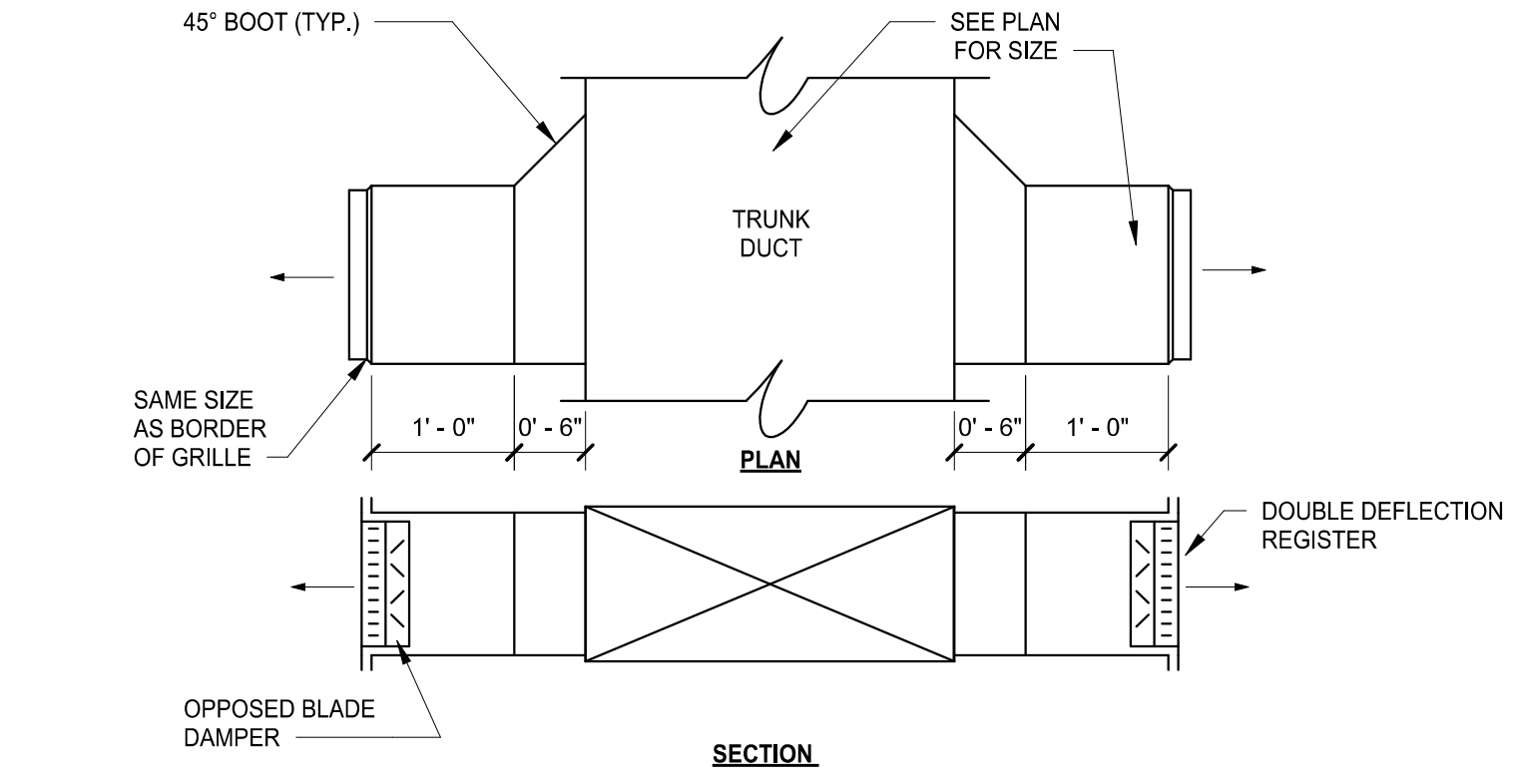
MECHANICAL NEW WORK PLAN  
 MACON WATER AUTHORITY  
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 MACON, GA

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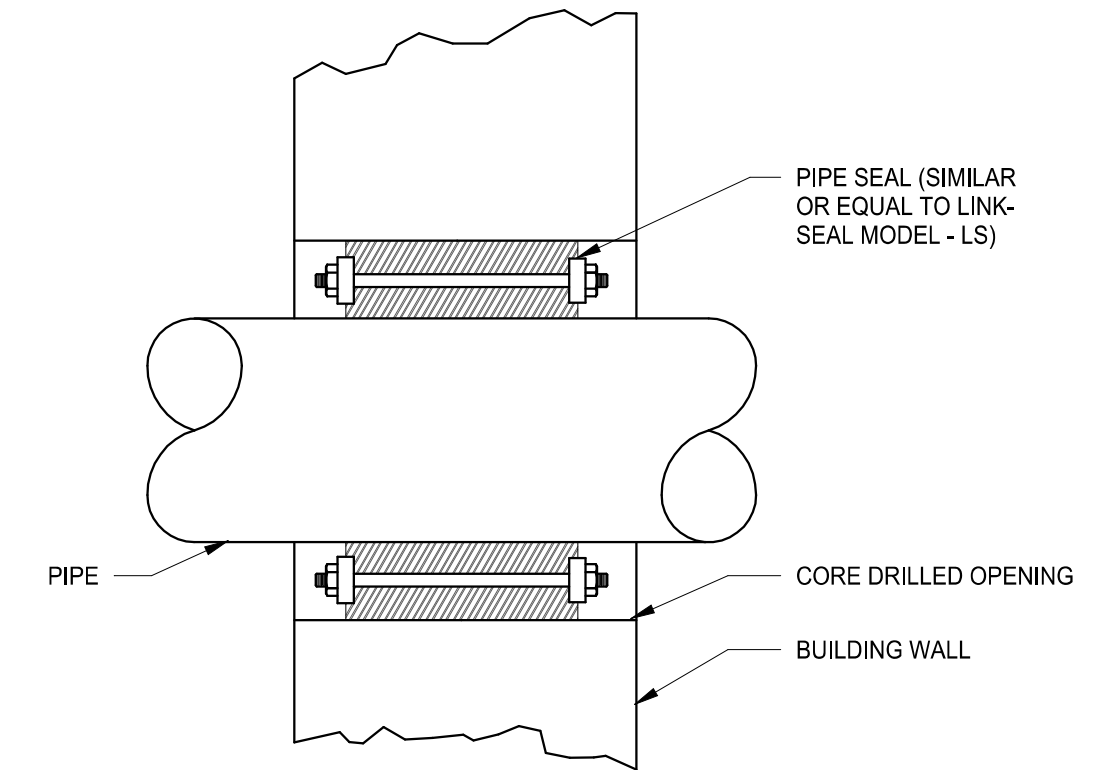


**M101**

FILE NO: 3618125



**1** SUPPLY AIR DRUM LOUVER INSTALLATION  
 M501 NTS

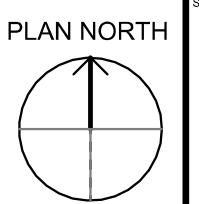


**2** PIPE WALL PENETRATION  
 M501 NTS



MECHANICAL DETAILS  
 MACON WATER AUTHORITY  
**AMERSON WTP STRUCTURAL REPAIRS**  
 MACON, GA

REV	CHK	DEL	DESCRIPTION
0			



## DEHUMIDIFICATION UNIT SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NUMBER	SERVICE	LOCATION	MIN. OA (CFM)	SUPPLY FAN DATA					DX REFRIGERATION DATA					RETURN FILTER DATA		UNIT ELECTRICAL DATA			WEIGHT (LBS.)	REMARKS		
							AIRFLOW (CFM)	EXT. S.P. (IN. WC)	TOTAL S.P. (IN. WC)	MOTOR		TOTAL (MBH)	TOTAL HEAT REJECTION (MBH)	EAT DB (F)	EAT WB (F)	MOISTURE REMOVAL (LB/HR)	NOMINAL CAPACITY (TONS)	REF TYPE	TYPE / THICKNESS (IN.)	MERV	MCA			MOPD	V/PH/Hz
										QTY	HP														
DHU-1	DEHUMIDIFICATION UNIT	DESERT AIRE	LW08RNNN4	PIPE GALLERY	INDOORS	445	4300	0.5	1.5	1	5	86	113	80	66.6	23.3	8	R-454B	PLEATED / 4 IN.	8	22	30	460/3/60	1300	1-6

**REMARKS:**

- |  |  |
|--|--|
| 1. ALL COILS SHALL BE COATED WITH A CORROSION INHIBITOR<br>2. SUPPLY FAN SECTION<br>3. HOT GAS REHEAT CONDENSER COIL<br>4. BACNET MS/TP COMPATABLE | 5. DUCT MOUNTED SMOKE DETECTOR<br>6. FACTORY INTALLED OUTSIDE AIR DAMPER, WIRE TO OPEN DAMPER WHEN FAN IS OPERATING. |
|--|--|

## CONDENSING UNIT (DX SPLIT) SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NUMBER	SERVICE	LOCATION	NOMINAL CAPACITY (TONS)	MRE	DESIGN AMBIENT TEMP. (F)	REFRIG. TYPE	CONDENSING FAN(S)		ELECTRICAL DATA			WEIGHT (LBS.)	REMARKS
										QTY (NO.)	HP (EACH)	MCA	MOCP	V/PH/Hz		
CU-1	OUTDOOR, AIR-COOLED, DX SPLIT	DESERT AIRE	RCD44VPNN-18414PNNA	DHU-1	OUTDOORS	8.0	2.5	96.0	R-454B	1	4	6.5	10	460/3/60	400	1-3

**REMARKS:**

1. POWDER COATED GALVANNEALED STEEL CABINET CONSTRUCTION
2. FAN GUARDS SHALL BE HEAVY-GAUGE, CLOSED-MESH STEEL WIRE
3. WEATHERPROOF ELECTRICAL PANEL

## AIR DEVICE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NUMBER	TYPE	MOUNT	NECK TYPE	MAX NC LEVEL	REMARKS
SG-1	SUPPLY GRILLE	PRICE	620	DOUBLE DEFLECTION REGISTER	SIDEWALL	RECTANGULAR	45	1-3

**REMARKS**

1. OPPOSED BLADE NECK DAMPER
2. ALUMINUM CONSTRUCTION
3. MILL FINISH

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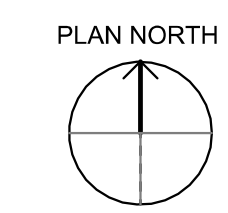
MECHANICAL SCHEDULES

MACON WATER AUTHORITY

AMERSON WTP STRUCTURAL REPAIRS

MACON, GA

REVISION INFORMATION		DESCRIPTION
REV	CHK / DEL	INITIAL / ISSUE
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M601

FILE NO: 3618125

Drawing Set: 100  
 M601 MECHANICAL SCHEDULES  
 Drawing  
 Date: 01/18/2024  
 Drawn By: [Name]  
 Checked By: [Name]  
 Project: Macom WTP Structural Repairs - 3618125-001025\_ASL\_M\_125.dwg