FCWS - TRILITH STUDIOS ELEVATED WATER STORAGE TANK

ISSUED FOR BID JULY 2023



VICINITY MAP NOT TO SCALE



OWNER:



ENGINEER OF RECORD

LEGAL ENTITY: ARCADIS-U.S., INC.



2839 PACES FERRY ROAD, SUITE 400, ATLANTA, GA 30339-3769 TEL: 770-431-8666 FAX: 770-435-2666 www.ARCADIS.com



Know what's **below**. Call before you dig.

ARCADIS ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS (HORIZONTAL AND VERTICAL). THE EXISTING UTILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

ARCADIS LEGAL ENTITY: ARCADIS U.S., INC. 2839 PACES FERRY ROAD SUITE 900 ATLANTA, GA 30339

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER



FCWS-TRILITH STUDIOS ELEVATED WATER STORAGE TANK

400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, **UNITED STATES**

REVISIONS				
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JULY 2023 FILE NAME: T. THOMAS

DESIGNED BY: M. DEEPALI DRAWN BY: CHECKED BY: H. GILES

SHEET TITLE

GENERAL

COVER SHEET AND SITE LOCATION

G-01 SHEET 1 OF 60

NTS

LOCATION MAP NOT TO SCALE

DRAWING INDEX DRAWING DRAWING NAME NUMBER **GENERAL** G - 01 COVER SHEET AND SITE LOCATION DRAWING INDEX G - 02 CIVIL C - 00 03 CIVIL NOTES, SYMBOLS AND ABBREVIATIONS C - 01 **EXISTING CONDITIONS PLAN** 05 C - 02 OVERALL SITE PLAN 06 C - 03 INTERMEDIATE GRADING PLAN FINAL GRADING PLAN C - 04 C - 05 UTILITY PLAN 80 C - 06 ENLARGED UTILITY PLAN 09 10 C - 07 PRESSURE PIPE PROFILES (SHEET 1 OF 2) C - 08 PRESSURE PIPE PROFILES (SHEET 2 OF 2) C - 09 STORM SEWER PROFILES C - 10 CIVIL DETAILS ESC-01 EROSION & SEDIMENT CONTROL LEGEND & NOTES ESC-02 NPDES COMPLIANCE (SHEET 1 OF 2) ESC-03 NPDES COMPLIANCE (SHEET 2 OF 2) ESC-04 SOIL MAP NPDES COMPLIANCE MAP ESC-05 19 ESC-06 EROSION AND SEDIMENT CONTROL - INITTIAL PHASE 20 ESC-07 EROSION AND SEDIMENT CONTROL - INTERMEDIATE PHASE ESC-08 EROSION AND SEDIMENT CONTROL - FINAL PHASE 22 ESC-09 EROSION & SEDIMENT CONTROL DETAILS (SHEET 1 OF 2) EROSION & SEDIMENT CONTROL DETAILS (SHEET 2 OF 2) 23 ESC-10 PROCESS MECHANICAL 24 M - 01 MECHANICAL LEGENDS, SYMBOLS, AND ABBREVIATIONS 25 M - 02 ELEVATED STORAGE TANK PLAN 26 M - 03 ELEVATED STORAGE TANK SECTIONS 27 M - 04 BOOSTER PUMP STATION PLAN 28 M - 05 BOOSTER PUMP STATION SECTIONS 29 TANK CONTROL VALVE VAULT PLAN AND SECTIONS M - 06

M - 07

MECHANICAL DETAILS

	DRAWING	DRAWING INDEX DRAWING NAME
	NUMBER	
24	S 04	STRUCTURAL CENERAL NOTES
31	S - 01	GENERAL NOTES STRUCTURAL NOTES AND SPECIAL INSPECTIONS
32	S - 02	STRUCTURAL NOTES AND SPECIAL INSPECTIONS
33	S - 03	BUILDING FOUNDATION PLAN
34	S - 04	BUILDING BASE SLAB PLAN
35	S - 05	BUILDING ROOF PLAN
36	S - 06	BUILDING SECTIONS (SHEET 1 OF 2)
37	S - 07	BUILDING SECTIONS (SHEET 2 OF 2)
38	S - 08	BUILDING TYPICAL DETAILS
		ARCHITECTURE
39	A - 01	BOOSTER PUMP STATION BUILDING GENERAL NOTES, FLOOR AND ROOF PLANS
40	A - 02	BOOSTER PUMP STATION BUILDING ELEVATIONS
41	A - 03	BOOSTER PUMP STATION BUILDING TYPICAL DOOR DETAILS, SCHEDULES AND SIGNAGE TYPE
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42	E - 01A	LEGEND, SYMBOLS, AND ABBREVIATIONS -SHEET 1 OF 2
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44	E - 02	ELECTRICAL SITE PLAN
45	E - 03	ONE LINE DIAGRAM
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53	I - 01	INSTRUMENTATION SYMBOLS AND LEGEND
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		HVAC
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59		BOOSTER PUMP STATION PLAN AND SECTIONS
JJ	H - 02	DOODIEN I OWN OTATION I LAW AND OLUTIONS

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CON	ISULTANTS		
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COPY		CADIS U.S., INC.	
	JECT STATUS JECT NO.:	: ISSUE FOR BID 30135792	
	NAME:	JULY 2023 G-02	
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		GENERAL	

DRAWING INDEX SCALE: NTS G-02 SHEET 2 OF 60

GENERAL NOTES

- 1. THE CONTRACTOR SHALL FURNISH ALL MATERIALS FOR, AND PROPERLY RESTORE ALL PAVEMENT, DRIVES, SIDEWALK, AND CURBS, WHICH MAY HAVE BEEN DAMAGED, REMOVED OR DISTURBED AS RESULT OF ACCOMPLISHING THE WORK.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING GRADES AND DIMENSIONS AND NOTIFYING THE ENGINEER IN ADVANCE AND IN WRITING OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK.
- 3. EXISTING UTILITY LOCATIONS SHOWN ARE BASED ON SURFACE OBSERVATION AND LIMITED DETECTION SERVICES. NOT ALL EXISTING UTILITIES ARE SHOWN ON THE DRAWING. CONTRACTOR IS RESPONSIBLE FOR DETERMINING BOTH THE EXACT LOCATION OF ALL EXISTING UTILITIES AND FOR DETERMINING THEIR PROTECTION DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL OPERATIONS WITH ALL UTILITIES WHICH MAY BE IN CONFLICT WITH HIS WORK.
- 4. A COPY OF THE APPROVED SET OF CONSTRUCTION PLANS MUST BE ON THE JOBSITE AT ALL TIMES DURING CONSTRUCTION.
- 5. ALL EROSION AND SEDIMENTATION CONTROLS AND TREE PROTECTION SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE ACTIVITY.
- 6. NO WORK SHALL TAKE PLACE PRIOR TO 7:00AM OR AFTER 5:30PM, MONDAY THROUGH FRIDAY. WORK ON WEEKENDS SHALL BE PROHIBITED UNLESS AUTHORIZED BY THE CITY OF DALTON PUBLIC WORKS PROJECT MANAGER.
- 7. UNLESS NOTED OTHERWISE ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF DALTON AND STATE OF GEORGIA STANDARDS AND SPECIFICATIONS.
- 8. WHERE SHOWN ON DRAWINGS ALL SUBSURFACE TOPOGRAPHICAL FEATURES WHICH INCLUDE GROUND WATER TABLE, PARTIALLY WEATHERED ROCK, AND ROCK SHOWN ARE APPROXIMATE. THE CONTRACTOR AT HIS EXPENSE SHALL CONDUCT ADDITIONAL SUBSURFACE SOIL EXPLORATION IF DEEMED NECESSARY.
- 9. BECAUSE THE PROJECT CONSTRUCTION SITE IS LOCATED NEAR RESIDENTIAL STREETS ADJACENT TO OCCUPIED RESIDENCES, ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED IN SUCH A MANNER THAT WILL PROVIDE ACCEPTABLE LEVELS OF SAFETY AND MAINTENACE OF UTILITIES ROADWAY, TRAFFIC, DRIVEWAYS, SIDEWALKS, ETC. TO ALL OWNERS, CITY OF DALTON DEPARTMENT OF PUBLIC WORKS, MANAGEMENT, AND OTHER UTILITIES. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN AND PROTECT ALL UTILITY SERVICES AND DRIVEWAY ACCESS, TO BUT NOT LIMITED TO, RESIDENTS, EMERGENCY SERVICES, VEHICLES, AND PEDESTRIAN TRAFFIC, ETC.
- 10. THE CONTRACTOR SHALL COORDINATE, OBTAIN APPROVAL AND PROVIDE TEMPORARY TRAFFIC ROUTING PLANS PRIOR TO ANY LANE CLOSURES WITH THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION.
- 11. ALL WORK AROUND THE EXISTING UTILITIES AND UTILITY STRUCTURES WHETHER ABOVE OR BELOW GROUND SHALL BE PERFORMED IN A MANNER THAT WILL AVOID DAMAGE TO THE UTILITIES AND STRUCTURES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL ACCURATELY LOCATE ABOVE AND BELOW UTILITIES WHICH MAY BE AFFECTED BY THE WORK AND PROTECT ALL UTILITIES NOT DESIGNATED FOR REMOVAL, RESTORATION, OR REPLACEMENT IN THE COURSE OF CONSTRUCTION. PROVIDE 72 HOURS OF ADVANCE NOTICE TO THE UTILITY OWNER AND WHITFIELD COUNTY PRIOR TO BEGINNING CONSTRUCTION IN THE VICINITY OF THE EXISTING UTILITIES. FOR EXISTING UTILITY LOCATION ASSISTANCE CALL THE UNDERGROUND UTILITIES PROTECTION CENTER (GA 811).
- 12. ANY DAMAGE TO EXISTING UTILITIES CAUSED BY THE CONTRACTOR, CONTRACTOR'S CREW AND/OR EQUIPMENT SHALL BE THE CONTRACTOR'S COST AND RESPONSIBILITY TO REPLACE PER OWNER'S STANDARDS AND SPECIFICATIONS.
- 13. THE REFUSE RESULTING FROM THE CLEARING AND GRUBBING OPERATION SHALL BE HAULED TO A DISPOSAL SITE SECURED BY THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE COUNTY AND MUNICIPAL REGULATIONS. NO DEBRIS OF ANY KIND SHALL BE DEPOSITED IN ANY STREAM OR BODY OF WATER, OR IN ANY STREET OR ALLEY. NO DEBRIS SHALL BE DEPOSITED UPON ANY PRIVATE PROPERTY EXCEPT BY WRITTEN CONSENT OF THE PROPERTY OWNER. IN NO CASE SHALL ANY MATERIAL BE LEFT ON THE PROJECT, SHOVED ONTO ABUTTING PRIVATE PROPERTIES, OR BE BURIED IN THE EMBANKMENTS OR TRENCHES ON THE PROJECT.
- 14. FINISHED GRADING OF THE DISTURBED AREA SHALL BE ACCORDING TO CIVIL DRAWINGS. NO STANDING WATER OR PONDING OF ANY KIND IS ALLOWED. ALL DISTURBED AREA SHALL BE IMMEDIATELY GRASSED.
- 15. THIS PROJECT IS LOCATED IN THE VICINITY OF POLES AND POWER LINES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITIES TO OBTAIN AN OVERHEAD UTILITY TICKET PRIOR TO WORKING ADJACENT TO THE POWER LINES AND POLES.
- 16. THE CONTRACTOR SHALL COMPLY WITH THE STATE OF GEORGIA MANUAL FOR EROSION AND SEDIMENT CONTROL STANDARDS, LATEST EDITION.
- 17. IN THE EVENT ACTIVE UTILITY SERVICES REQUIRE INTERRUPTION, THE CONTRACTORS SHALL COORDINATE AND CONSULT WITH THE OWNER OR/OWNERS AND OBTAIN APPROVAL FROM THEM PRIOR TO SERVICES BEING DISRUPTED.
- 18. THE CONTRACTOR SHALL ALL TIMES CONTROL DUST AND DEBRIS FROM THE OPERATIONS TO A LEVEL ACCEPTABLE TO THE CITY OF DALTON AND LOCAL BUSINESSES AT ALL TIMES.
- 19. ALL UTILITY WORK WITHIN THE WHITFIELD COUNTY RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE TO WHITFIELD COUNTY STANDARDS AND SPECIFICATIONS, LATEST EDITION. WORK ON THE SITE SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
- 20. TEMPORARY DISCONNECTION, REMOVAL AND/OR REPLACEMENT OF THE FOLLOWING ITEMS BUT NOT LIMITED TO, FIRE HYDRANTS, WATER METERS, BACK FLOW PREVENTION DEVICES, VAULTS, MANHOLE AND OTHER POTABLE WATER SYSTEM APPURTENANCES. ASSOCIATED APPURTENANCES SHALL BE IN STRICT ACCORDANCE WITH THE LATEST WHITFIELD COUNTY STANDARDS AND SPECIFICATIONS. BEFORE CONNECTION, REMOVAL AND/OR REPLACEMENT OF ANY UTILITIES. THE CONTRACTOR SHALL CONTACT AND OBTAIN APPROVAL FROM CITY OF DALTON PUBLIC WORKS REPRESENTATIVES PRIOR TO CONSTRUCTION.
- 21. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE WHITFIELD COUNTY OR LOCAL AUTHORITY FIRE MARSHAL PRIOR TO REMOVING ANY FIRE HYDRANTS OR ANY FIRE PROTECTION UTILITIES. ANY WORK OR MATERIALS REQUIRED BY THE FIRE MARSHAL TO TEMPORARILY PROVIDE FOR FIRE PROTECTION TO THE LOCAL BUSINESS SHALL BE PART OF THE CONTRACTOR'S SCOPE OF WORK. "OUT-OF-SERVICE RINGS" WILL BE REQUIRED FOR HYDRANTS WHILE OUT OF
- 22. ALL EXCAVATION SHALL BE ADEQUATELY SHORED TO ENSURE WORKER SAFETY. ALL PIPE LAYING OPERATIONS SHALL COMPLY WITH OSHA REQUIREMENTS FOR TRENCH SAFETY.
- 23. MAINTENANCE AND TRAFFIC: THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL ROAD PERMITS FROM THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS INCLUDING PROVIDING ANY RESTORATION BONDS. THE CONTRACTOR SHALL PROVIDE A DETAILED PHASED TRAFFIC CONTROL PLAN BASED ON THE PROPOSED WORK PHASING AS DETERMINED BY THE CONTRACTOR.
- 24. 72 HOURS NOTICE IS REQUIRED TO GEORGIA 811 UTILITY PROTECTION CENTER BEFORE ANY PLANNED DIGGING. http://www.georgia811.com

STAKING NOTES

- 1. THE EXISTING CONDITIONS SITE FEATURES ARE BASED ON FIELD SURVEY CONDUCTED BY CHASTAIN & ASSOCIATES, P.C. IN JANUARY AND SEPTEMBER OF 2021.
- 2. HORIZONTAL DATUM IS REFERENCED TO NAD-83 GEORGIA STATE PLANE, WEST ZONE.
- 3. VERTICAL DATUM IS REFERENCED TO NAVD 88.

GRADING NOTES:

- 1. CONTRACTOR SHALL NOT PERMIT EQUIPMENT TO BE USED IN SUCH A MANNER AS TO CAUSE EQUIPMENT TO EXCESSIVELY BUMP OR RUT THE SUBGRADE OR OTHER PREPARED
- 2. CONTRACTOR SHALL GRADE IN A MANNER TO ESTABLISH LONG SMOOTH GRADIENTS IN ORDER TO REDUCE ABRUPT CHANGES, DIPS AND SHARP TRANSITIONS IN THE FINISHED
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE POSITIVE DRAINAGE ON GRADED SURFACE AREAS AT 1% MINIMUM ON HARDSCAPE AT 2% MINIMUM ON GRADE UNLESS
- 4. ANY REQUIRED DETENTION FACILITIES AND EROSION CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- 5. ELEVATIONS GIVEN ARE TO FINISH GRADE UNLESS OTHERWISE SHOWN.
- 6. SLOPE UNIFORMLY BETWEEN CONTOURS AND SPOT ELEVATIONS SHOWN.
- 7. UNLESS SHOWN ON THE EROSION & SEDIMENT CONTROL PLANS AND / OR LANDSCAPING PLANS, ALL DISTURBED AREAS NOT RECEIVING A SURFACE SHALL BE COVERED IN GRASS.
- 8. GENERALLY TAKE STANDARD PRECAUTIONS TO PROTECT TREES. SEE LANDSCAPE DRAWINGS FOR TREE PROTECTION REQUIREMENTS WHEN APPLICABLE.

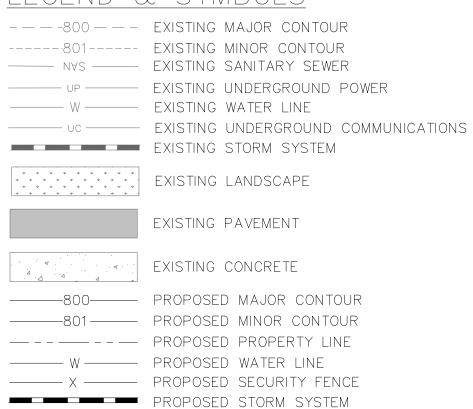
DEMOLITION NOTES:

- 1. THE CONTRACTOR SHALL DEMOLISH AND REMOVE ALL EXISTING, PAVEMENT, SIDEWALK, CURB, GUTTER, PAVERS, ETC., NOTED TO BE REMOVED WITHIN THE DEMOLITION LIMITS AS SHOWN ON THIS PLAN UNLESS OTHERWISE NOTIFIED.
- 2. CONTRACTOR TO PROVIDE AND MAINTAIN NECESSARY FENCES, BARRICADES, LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED FOR THE PROTECTION AND SAFETY OF THE PUBLIC THROUGHOUT THE DEMOLITION AND CONSTRUCTION ACTIVITIES ON THE SITE.
- 3. CONTRACTOR SHALL MINIMIZE THE IMPACT OF CONSTRUCTION ACTIVITIES ON THE TRAFFIC FLOW TO SURROUNDING FACILITIES TO REMAIN.
- 4. CONTRACTOR SHALL SAW CUT PAVEMENT, SIDEWALKS AND CURB & GUTTER AT THE LIMIT OF DEMOLITION FOR REMOVAL.
- 5. ALL EXISTING PIPE TO BE ABANDONED SHALL BE CUT, AND PLUGGED OR CAPPED AT EACH END. WHERE EXISTING PIPING INTERFERES WITH NEW PIPING OR CONSTRUCTION, IT SHALL BE REMOVED BEYOND THE LIMITS REQUIRED FOR THE PROPER COMPLETION OF THE WORK AND THE OPEN ENDS PLUGGED OR CAPPED UNLESS OTHERWISE SHOWN. LINES SHALL BE PLUGGED OR CAPPED AT LEAST 12-INCHES BEHIND OR BELOW FINISH BUILDING SURFACE AND AT LEAST 12-INCHES BELOW PROPOSED GRADE SURFACE.
- 6. THE CONTRACTOR SHALL INSTALL ALL INITIAL EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO BEGINNING DEMOLITION OPERATIONS.

PROJECT COMPLETION

1. PRIOR TO ACCEPTANCE AND FINAL PAYMENT, CONTRACTOR IS TO PROVIDE AN AS-BUILT SURVEY, WHICH IS A DRAWING PREPARED AND SIGNED BY A REGISTERED LAND SURVEYOR REGISTERED IN THE STATE OF GEORGIA ILLUSTRATING THE LOCATIONS, DIMENSIONS AND ELEVATIONS OF A DEVELOPMENT AS IT HAS BEEN CONSTRUCTED FOLLOWING COMPLETION OF CONSTRUCTION ON DIRECT FIELD MEASUREMENTS AND SHOWN TO SCALE.

LEGEND & SYMBOLS



---- PROPOSED EASEMENT PROPOSED BUILDING

PROPOSED CONCRETE

PROPOSED GRAVEL

GRASSED AREA

CIVIL ABBREVIATIONS

GRD.

GROUND

	APPROXIMATE ASPHALT BUILDING BOTTOM OF CURB CENTERLINE CATCH BASIN CLEANOUT CONCRETE CONTINUED COUPLING CUBIC YARD(S) DIATOMACEOUS EARTH DETAIL DROP INLET DUCTILE IRON PIPE DIAMETER DISCHARGE DRAWING EACH EFFLUENT EXPANSION JOINT ELEVATION ELECTRIC EQUAL EXISTING FLOW CONTROL VALVE FLOOR DRAIN FOUNDATION FINISHED FLEXIBLE FLANGE FLOOR FOOTING FEET	<u> </u>	
APPROX.	. APPROXIMATE	GRAT.	GRATING
ASPH	ASPHALT	HORIZ.	HORIZONTAL
BLDG.	BUILDING	ID	INSIDE DIAMETER
BOC	BOTTOM OF CURB	IN., "	INCHES
⊕ €	CENTERLINE	INF.	INFLUENT
CB	CATCH BASIN	INV.	INVERT
CO	CLEANOUT	JT.	JOINT
CONC.	CONCRETE	LF	LINEAR FOOT/FEET
CONT.	CONTINUED	MAS	MASONRY
CPLG.	COUPLING	MAX.	MAXIMUM
CY	CUBIC YARD(S)	MFR.	MANUFACTURER
DE	DIATOMACEOUS EARTH	MGD	MILLION GALLONS PER DAY
DET.	DETAIL	МН	MANHOLE
DI	DROP INLET	MIN.	MINIMUM
DIP	DUCTILE IRON PIPE	NC	NORMALLY CLOSED
DIA.	DIAMETER	NO	NORMALLY OPEN
DISCH.	DISCHARGE	NO.	NUMBER
DWG	DRAWING	OD	OUTSIDE DIAMETER
EA.	EACH	PDW	PROCESS DRAIN TO WASTE
EFF.	EFFLUENT	PE	POLYETHYLENE
EJ	EXPANSION JOINT	PG.	PROPOSED GROUND
ELEV.	ELEVATION	PROP.	PROPOSED
ELEC.	ELECTRIC	PSI -	POUNDS PER SQUARE INCH
EQ.	EQUAL	R	REDUCER
EXIST.	EXISTING	REINE.	REINFORCEMENT OR REINFORC
FCV	FLOW CONTROL VALVE	REQ'D.	REQUIRED
FD.	FLOOR DRAIN	ROW	RIGHT OF WAY
FDN	FOUNDATION	SHI.	SHEET
FIN.	FINISHED	SS	STAINLESS STEEL
FLEX.	FLEXIBLE	SID.	STANDARD
FLG	FLANGE	STRUC.	STRUCTURAL
FLK.	FLOOR	TOC	TOP OF CURB
FIG.	FOOTING	IHK.	THICK
+ I.	FEE I	TYP.	TYPICAL

VERT. VERTICAL

WITH

W/

ARCADIS U.S., INC.

2839 PACES FERRY ROAD SUITE 900, ATLANTA, GA 30339 TE: 770-431-8666 WWW.ARCADIS.COM

CONSULTANTS

SEALS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

400 VETERANS PARKWAY FAYETTEVILLE, GA 30214



PROJECT STATUS: ISSUE FOR BID 30135792 PROJECT NO.: JULY 2023 C-00 FILE NAME:

TAYLOR H. TITTLE, PE MADISON A. SMITH, EIT DRAWN BY: DAVID A. WILSON, PE CHECKED BY:

SHEET TITLE

CIVIL NOTES, SYMBOLS & ABBREVIATIONS

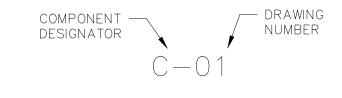
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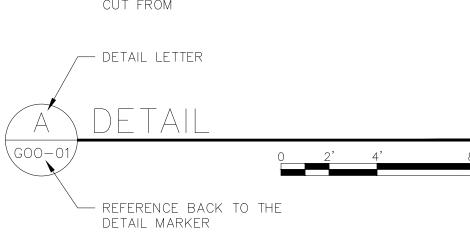
C-00SHEET 3 OF 60

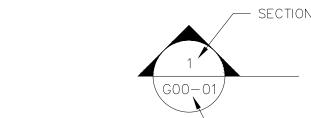
DRAWING NUMBER EXPLANATION

TITLE MARKERS



- REFERENCE BACK TO THE PLAN SHEET SECTION IS CUT FROM

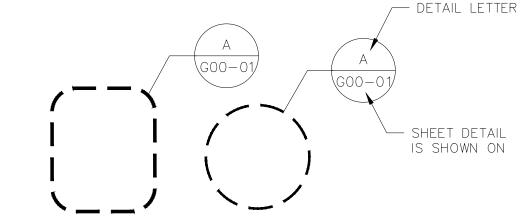


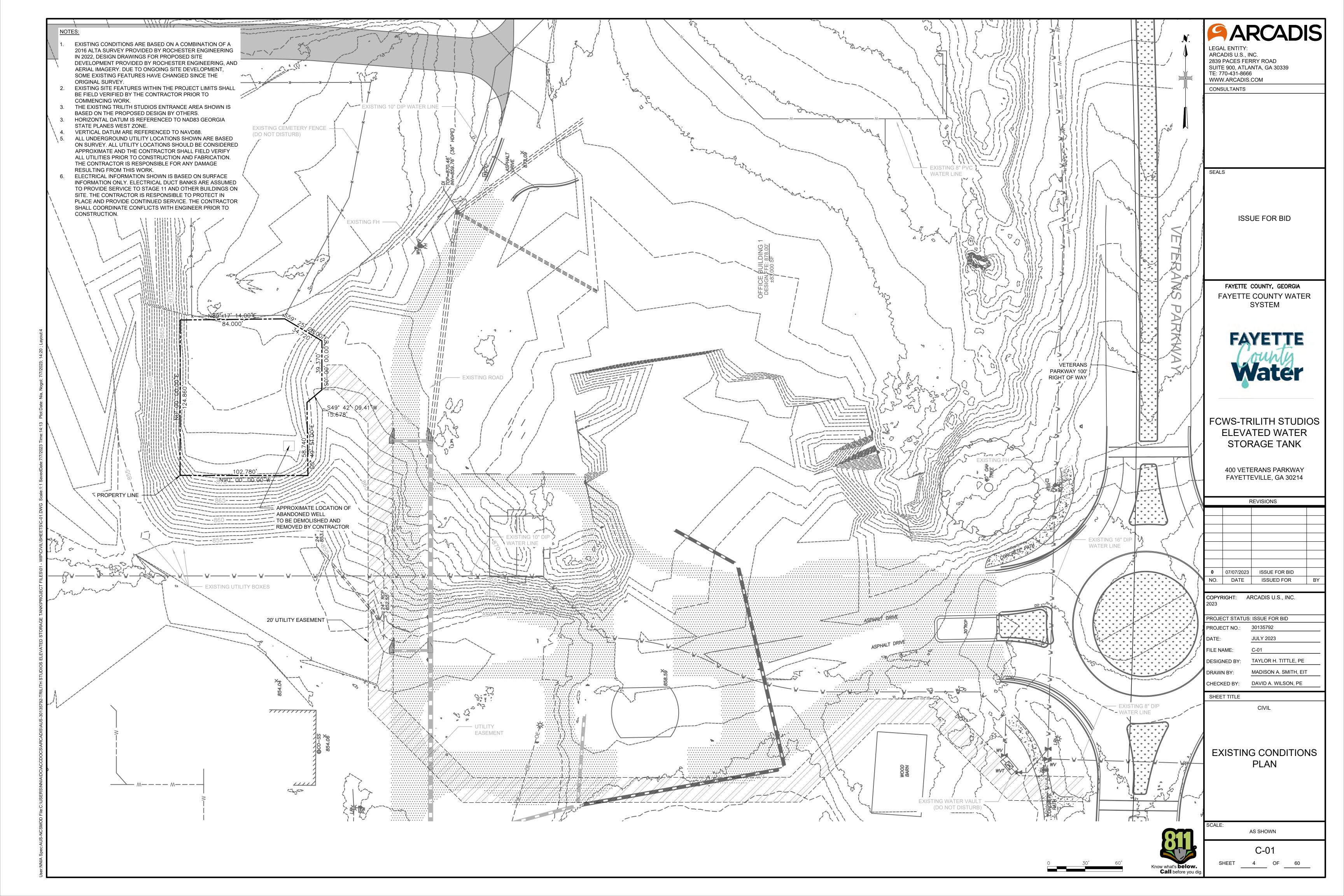


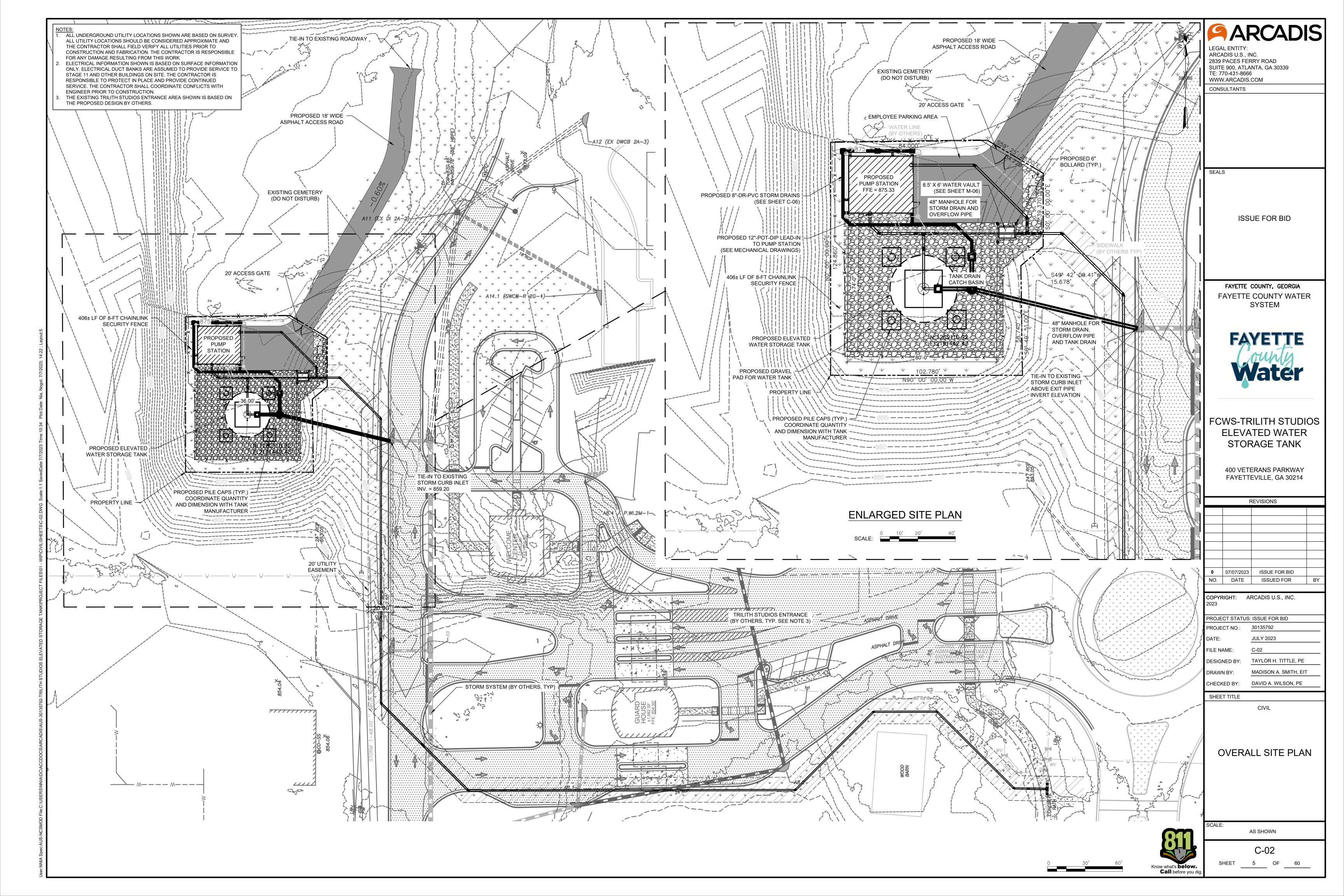
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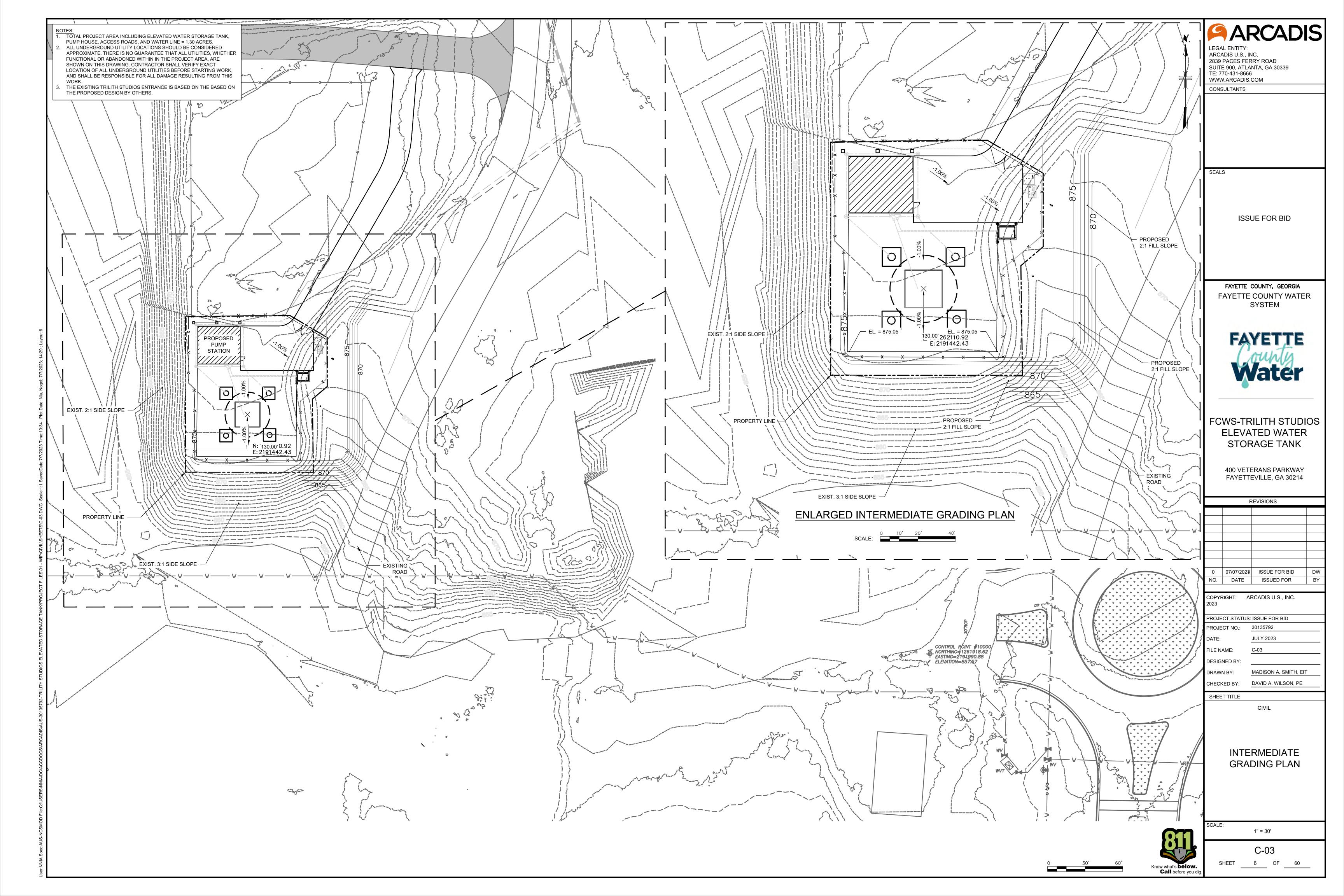
SECTION MARKERS

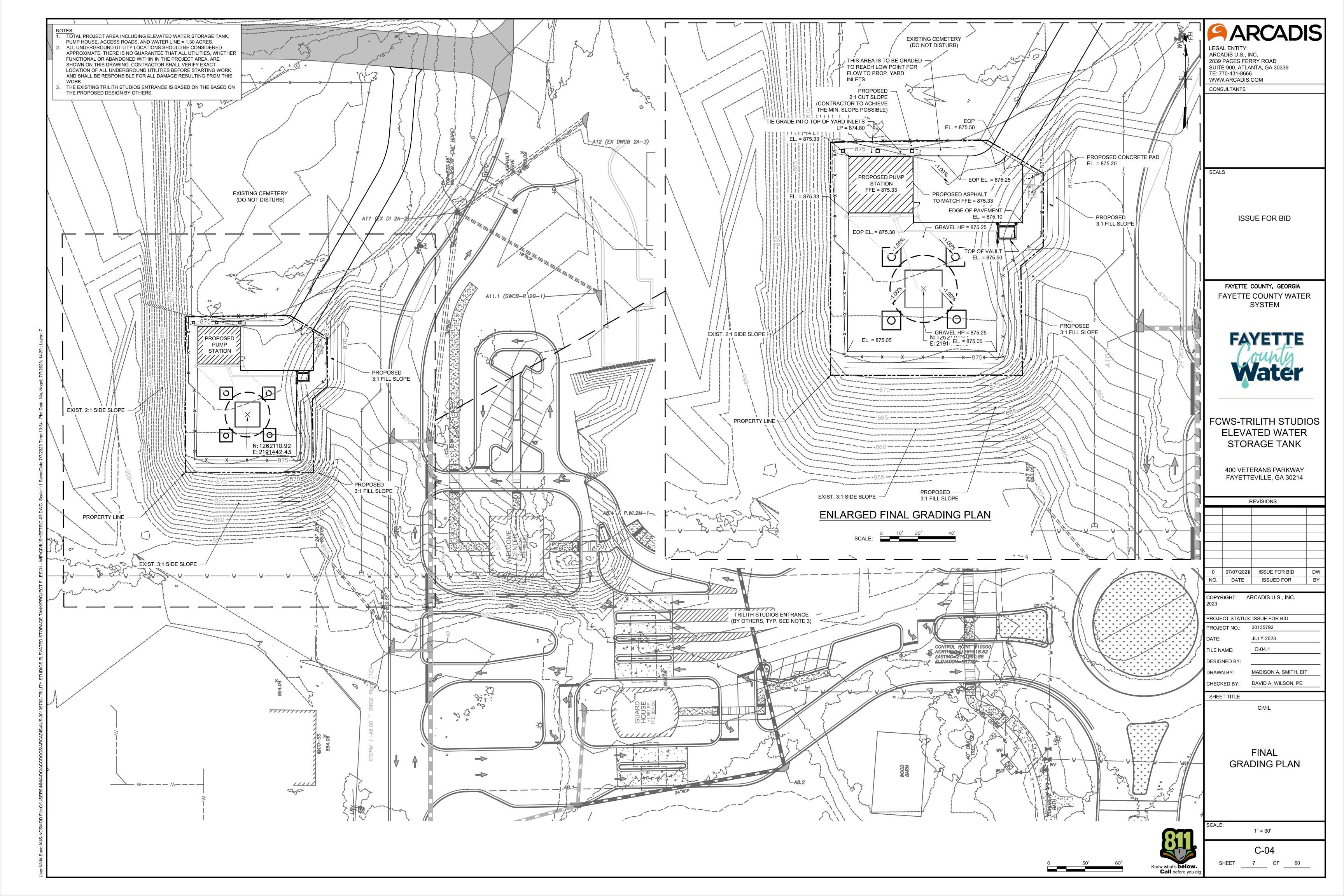
DETAIL MARKERS

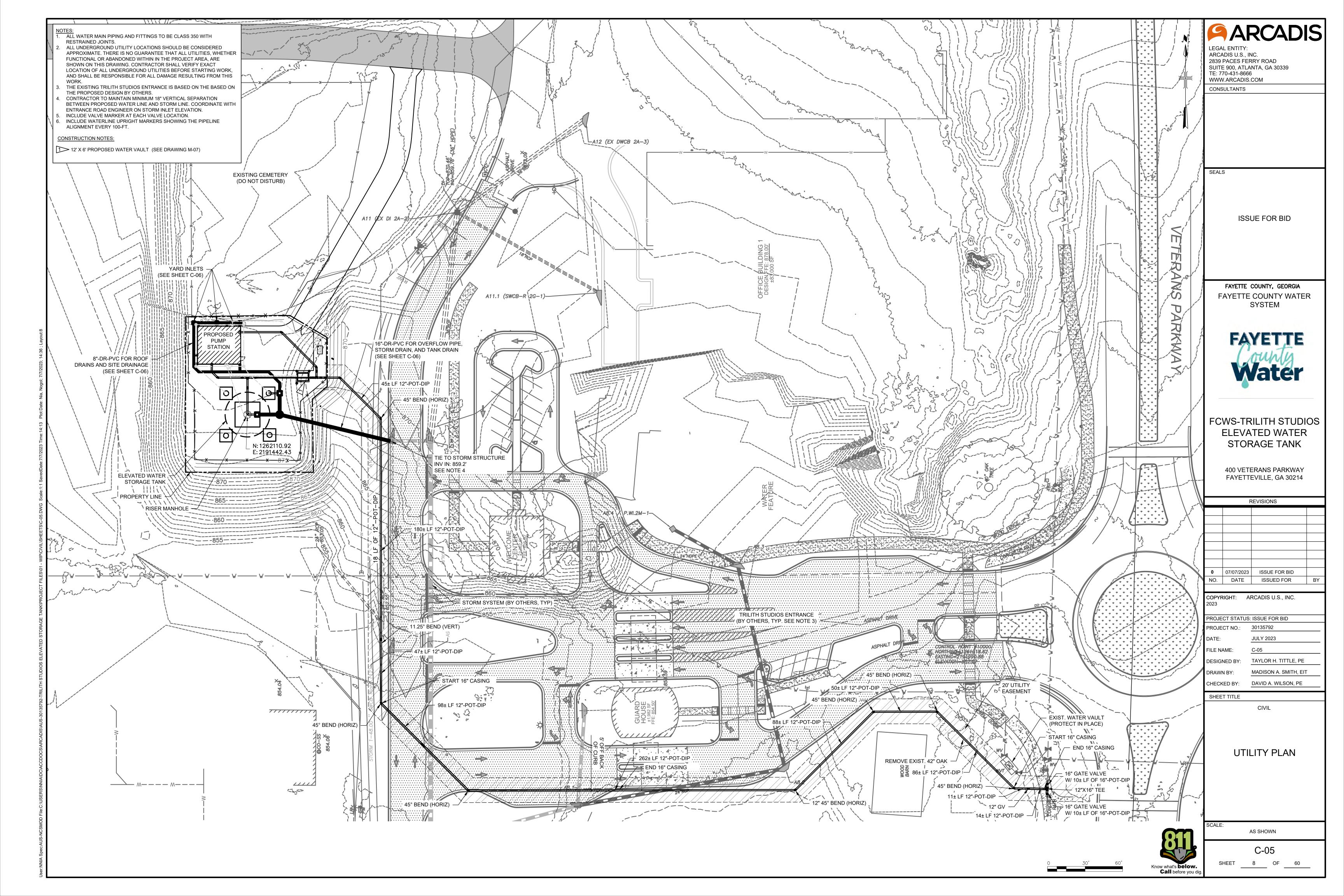


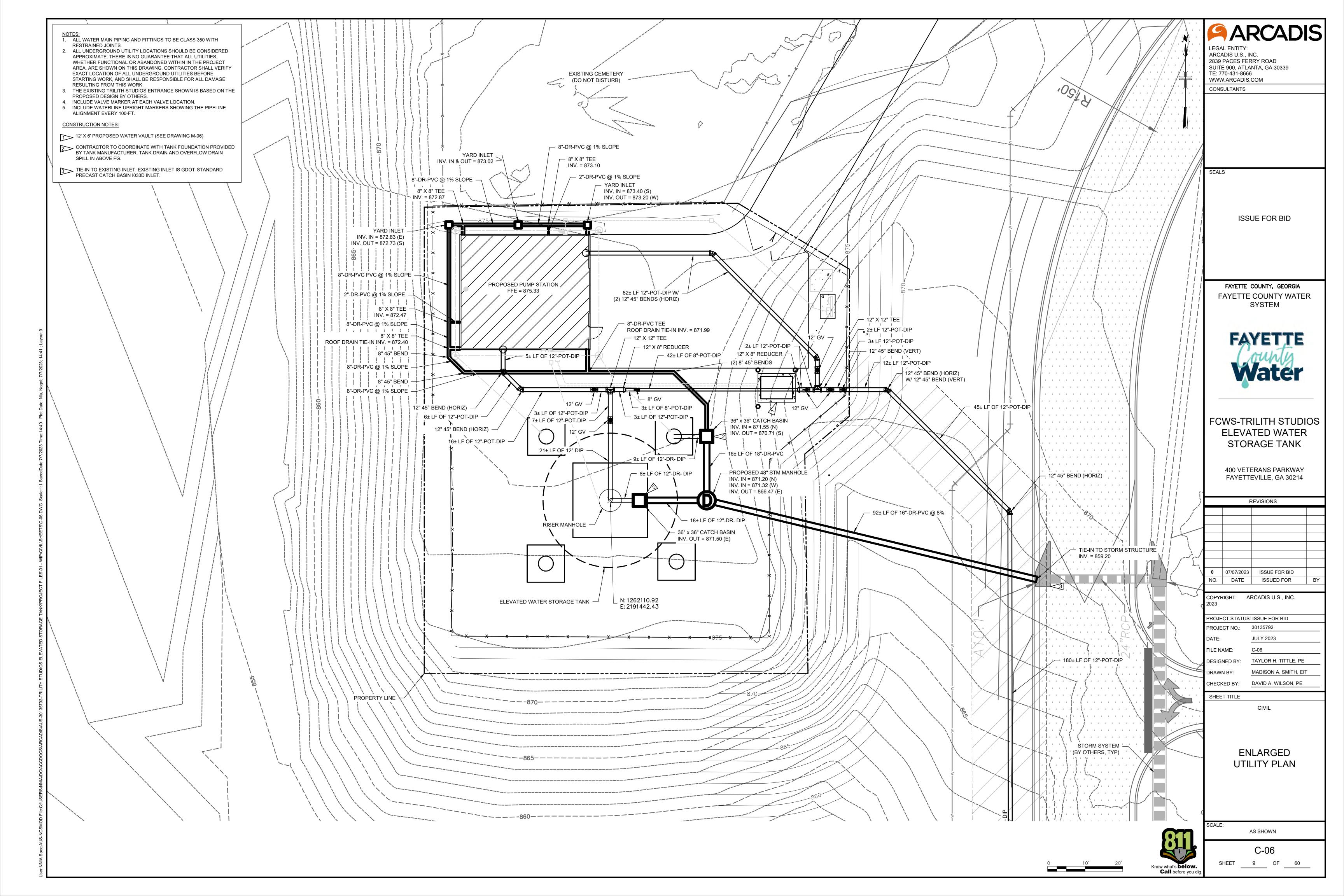


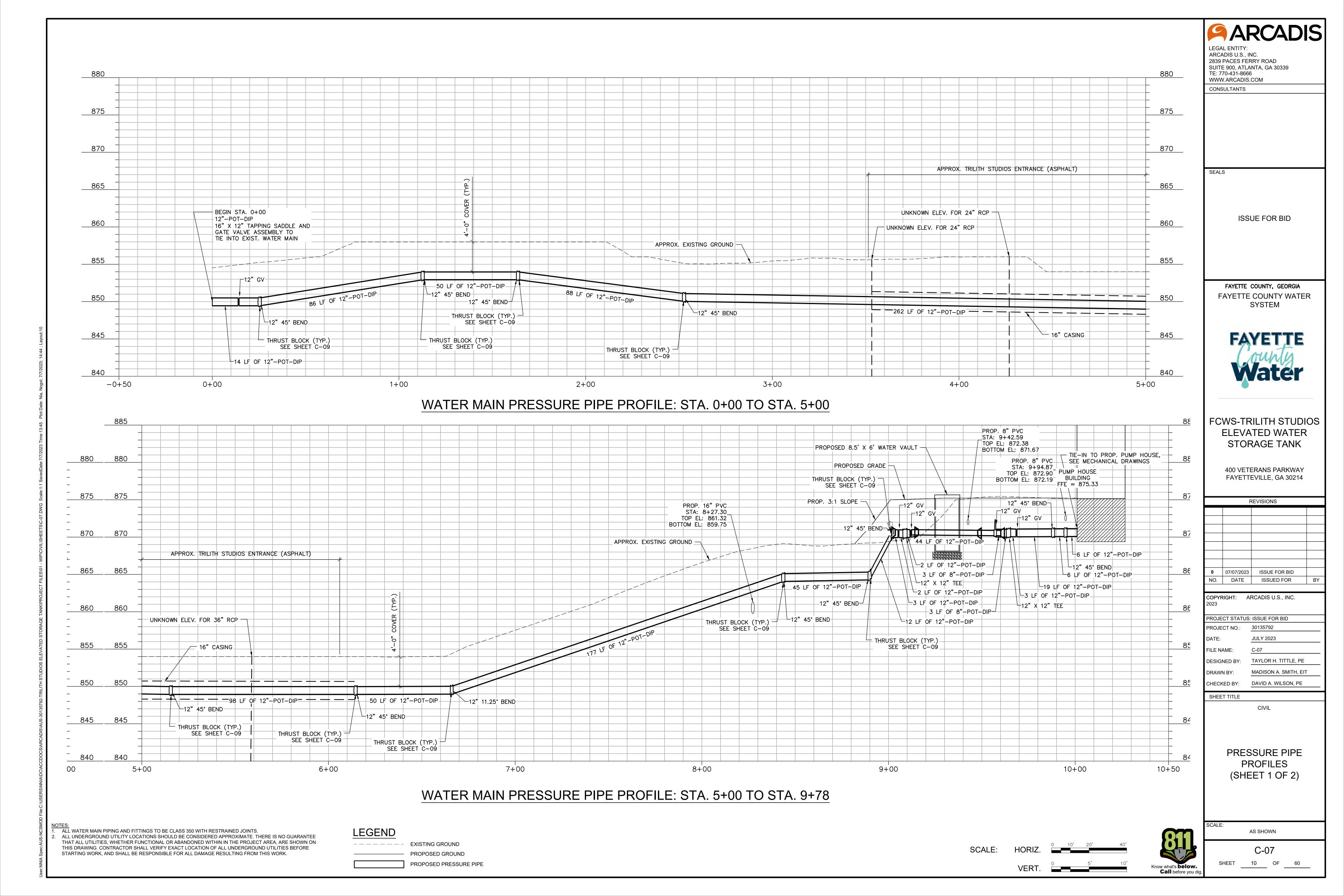




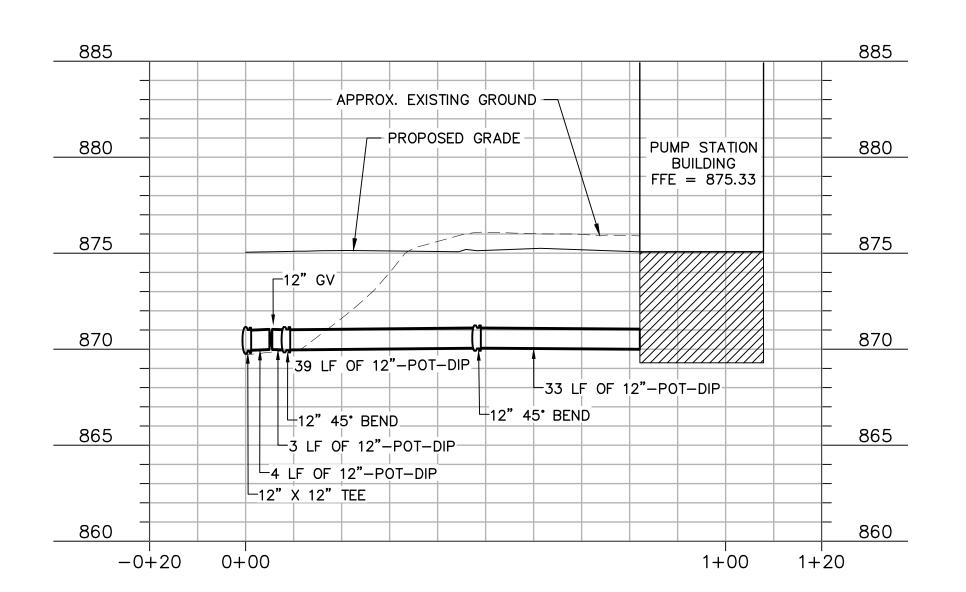








WATER TANK TO 12"X12" TEE



PUMP STATION BUILDING TO WATER VAULT TEE

NOTES:

1. ALL WATER MAIN PIPING AND FITTINGS TO BE CLASS 350 WITH RESTRAINED JOINTS.

1. THE CONTINUE SHOULD BE CONSIDERED APPROXIMATE. THE ALL UNDERGROUND UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. THERE IS NO GUARANTEE THAT ALL UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN IN THE PROJECT AREA, ARE SHOWN ON THIS DRAWING. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK, AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK.

LEGEND ---- EXISTING GROUND PROPOSED GROUND PROPOSED PRESSURE PIPE

Know what's **below. Call** before you dig.

ARCADIS U.S., INC. 2839 PACES FERRY ROAD SUITE 900, ATLANTA, GA 30339 TE: 770-431-8666 WWW.ARCADIS.COM CONSULTANTS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

> 400 VETERANS PARKWAY FAYETTEVILLE, GA 30214

> > REVISIONS

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PROJECT STATUS: ISSUE FOR BID					
PROJECT NO.: 30135792					
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JULY 2023 FILE NAME: TAYLOR H. TITTLE, PE

MADISON A. SMITH, EIT DAVID A. WILSON, PE CHECKED BY:

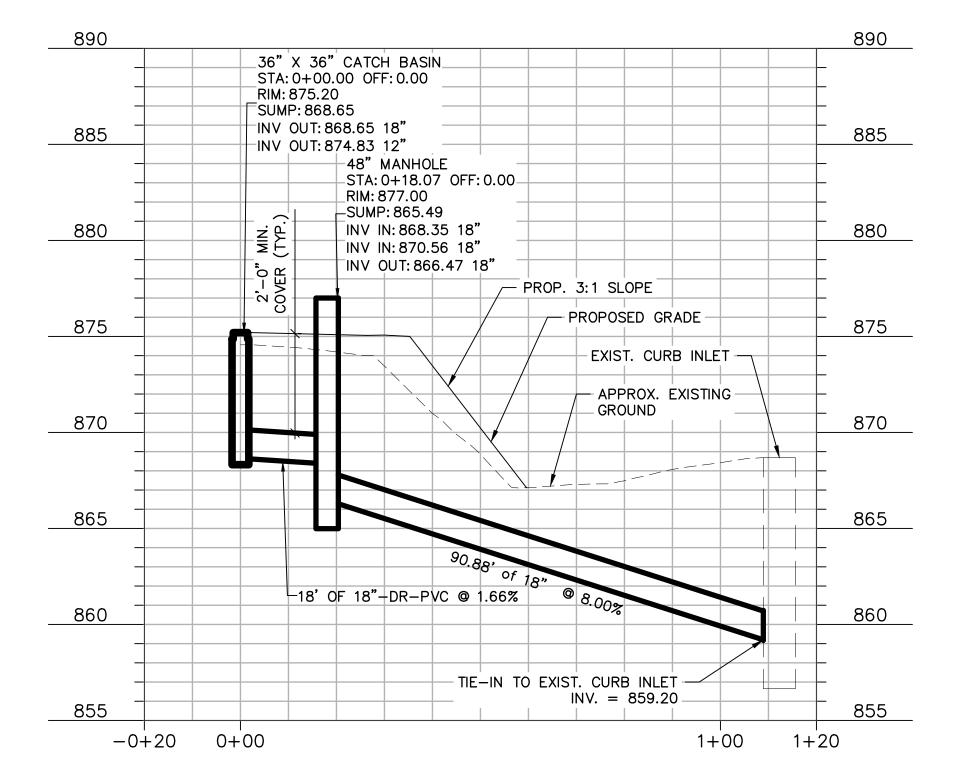
SHEET TITLE

CIVIL

PRESSURE PIPE **PROFILES** (SHEET 2 OF 2)

AS SHOWN

C-08 SHEET _____ 0F ____ 60



STORM SEWER LINE FROM TANK DRAIN CATCH BASIN TO EXISTING GDOT CURB INLET

LEGAL ENTITY:
ARCADIS U.S., INC.

LEGAL ENTITY:
ARCADIS U.S., INC.
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FAYETTE COUNTY, GEORGIA
FAYETTE COUNTY WATER
SYSTEM



FCWS-TRILITH STUDIOS
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400 VETERANS PARKWAY FAYETTEVILLE, GA 30214

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PROJECT STATUS: ISSUE FOR BID
PROJECT NO.: 30135792

DATE: JULY 2023

FILE NAME: C-07

DESIGNED BY: TAYLOR H. TITTLE, PE

DRAWN BY: MADISON A SMITH FIT

DRAWN BY: MADISON A. SMITH, EIT

CHECKED BY: DAVID A. WILSON, PE

SHEET TITLE

STORM SEWER PROFILES

SCALE:

AS SHOWN

C-09
SHEET 12 OF 60

ALL WATER MAIN PIPING AND FITTINGS TO BE CLASS 350 WITH RESTRAINED JOINTS.

ALL UNDERGROUND UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. THERE IS NO GUARANTEE THAT ALL UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN IN THE PROJECT AREA, ARE SHOWN ON THIS DRAWING. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK, AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK.

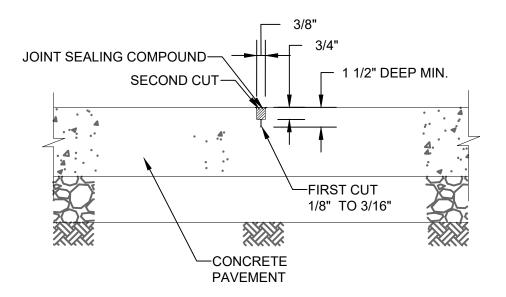
LEGEND
----- EXISTING GROUND

PROPOSED STORM SEWER PIPE

SCALE: H

O 5'





ALLOW 30 DAYS CONC. CURING THEN FILL JOINTS W/ "DYNATRED" POLYURETHANE NON-SAG TRAFFIC GRADE SEALANT PECORA CORP. (W/ PRIMERS) OR APPROVED EQUAL, APPLIED IN ACCORDANCE W/ MANUFACTURERS INSTRUCTIONS.

SAWED CONTROL JOINT

NTS

EXISTING PAVEMENT NEW PAVEMENT SAWCUT EXIST-PAVEMENT, SEE PLANS **ELEVATION AND SLOPE** SEAL ASPHALT FACE PER SPEC-TO MATCH EXISTING CONDITIONS SECTION 02500 ALONG SAWCUT BEFORE PLACING NEW PAVEMENT SEE PLANS MATCH EXISTING WIDTH SEE TYPICAL ROADWAY SECTION FOR PAVEMENT — **EXISTING** GROUND — 4" CONCRETE JOINT SHALL BE SMOOTH AND PATCH TO BE LEVEL FROM ONE END TO THE OTHER. IF SURFACE IS NOT SMOOTH, GRIND ASPHALT TO PROVIDE SMOOTH SURFACE. 2.9 W.W.F. COMPACTED CENTERED IN **EARTH** ASPHALT TO ASPHALT TRANSITION #57 STONE

PAVEMENT TRANSITION DETAIL

PIPE OR CASING DIA INCHES	Bd TRENCH WIDT TOP OF PIPE FE
4"	2.00
6"	2.00
8"	2.33
10"	2.50
12"	2.67
15"	3.00
18"	3.25
20"	3.54
24"	3.83

Bd - MAXIMUM TRENCH WIDTH AT 12" ABOVE TOP OF PIPE IF DITCH IS CUT WIDER THAN Bd SHOWN THE CONTRACTOR WILL BE REQUIRED TO INCREASE BEDDING TO COMPENSATE FOR ADDITIONAL LOAD ON PIPE AT HIS OWN EXPENSE.

─ SURFACE SUITABLE BACKFILL MATERIAL TO BE APPROVED BY ENGINEER USE No. 12 OR 14 INSULATED CAP WIRE TAPED TO PIPE (PVC PIPE ONLY) SUITABLE BACKFILL MATERIAL (IN SHADED AREA) TO BE COMPACTED BY HAND IN 6" LAYERS SUITABLE BEDDING MATERIAL TO BE APPROVED BY ENGINEER REMOVE LARGE ROCKS FROM

CONCRETE PAVEMENT

WATER LINE DETAILS FOR PVC & D.I. PIPE **OPEN AREAS**

STANCHION SADDLE PIPE SUPPORT DETAIL

PIPE SIZE X	А	В	DEPTH C						
	90° BEND								
12"	1'-6"	2'-0"	3'-0"						
10"	1'-4"	2'-0"	2'-6"						
8"	1'-0"	1'-6"	2'-0"						
6"	1'-0"	1'-0"	2'-0"						
4"	0'-9"	1'-0"	1'-0"						
	45° BEND								
12"	1'-0"	3'-4"	1'-0"						
10"	0'-9"	2'-6"	1'-0"						
8"	0'-9"	1'-6"	1'-0"						
6"	0'-9"	1'-0"	1'-0"						
4"	0'-6"	1'-0"	1'-0"						
	22 1/2 °	BEND							
12"	1'-0"	1'-9"	1'-0"						
10"	0'-9"	1'-6"	0'-10"						
8"	0'-9"	1'-0"	0'-8"						
6"	0'-9"	1'-0"	0'-6"						
4"	0'-6"	1'-0"	0'-4"						

TABLE OF DIMENSIONS FOR HORIZONTAL & VERTICAL SAG BENDS.

PIPE SIZE X	А	В	DEPT C			
	11 1/4°	BEND				
12"	1'-0"	1'-0"	1'-0"			
10"	0'-9"	1'-0"	0'-10"			
8"	0'-9"	1'-0"	0'-8"			
6"	0'-9"	1'-0"	0'-6"			
4"	0'-6"	1'-0"	0'-4"			
UNBALANCED TEE & PLUG						
12"	2'-0"	4'-6"	2'-0"			
10"	1'-0"	3'-0"	2'-0"			
8"	1'-0"	2'-9"	1'-6"			
6"	1'-0"	1'-0"	1'-0"			
4"	1'-0"	1'-0"	1'-0"			
	TEE					
12"	2'-0"	4'-6"	2'-0"			
10"	1'-9"	3'-0"	2'-0"			
8"	1'-6"	2'-9"	1'-6"			
6"	1'-0"	1'-0"	1'-0"			
4"	1'-0"	1'-0"	1'-0"			
ΓΔRI E ΩE Γ	IMENSIONS	FOR				

PIPE SADDLE W/U-BOLT

- BASE STAND

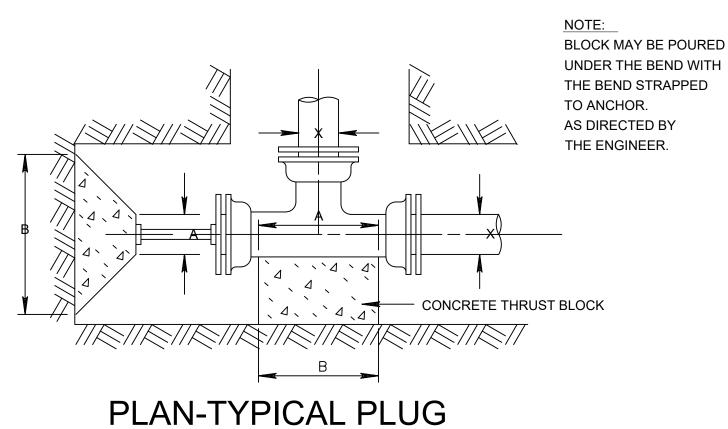
ANCHORS)

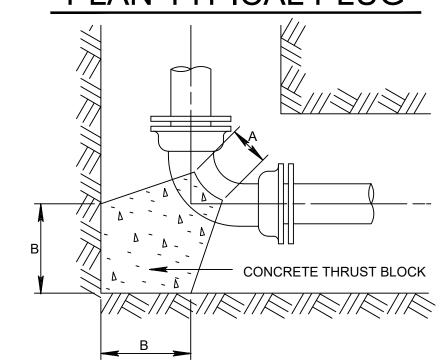
(BOLT TO FLOOR

W/ SS EXPANSION

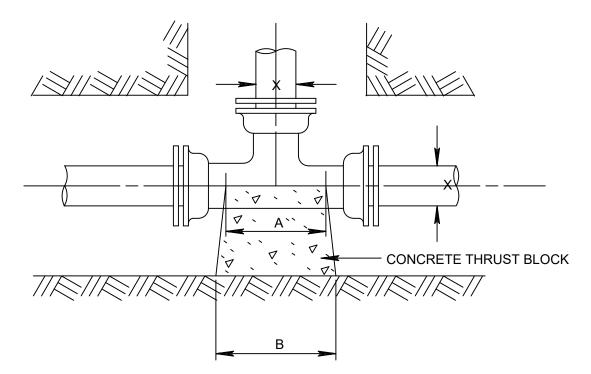
1"NON-SHRINK

TABLE OF DIMENSIONS FOR **HORIZONTAL & VERTICAL SAG**



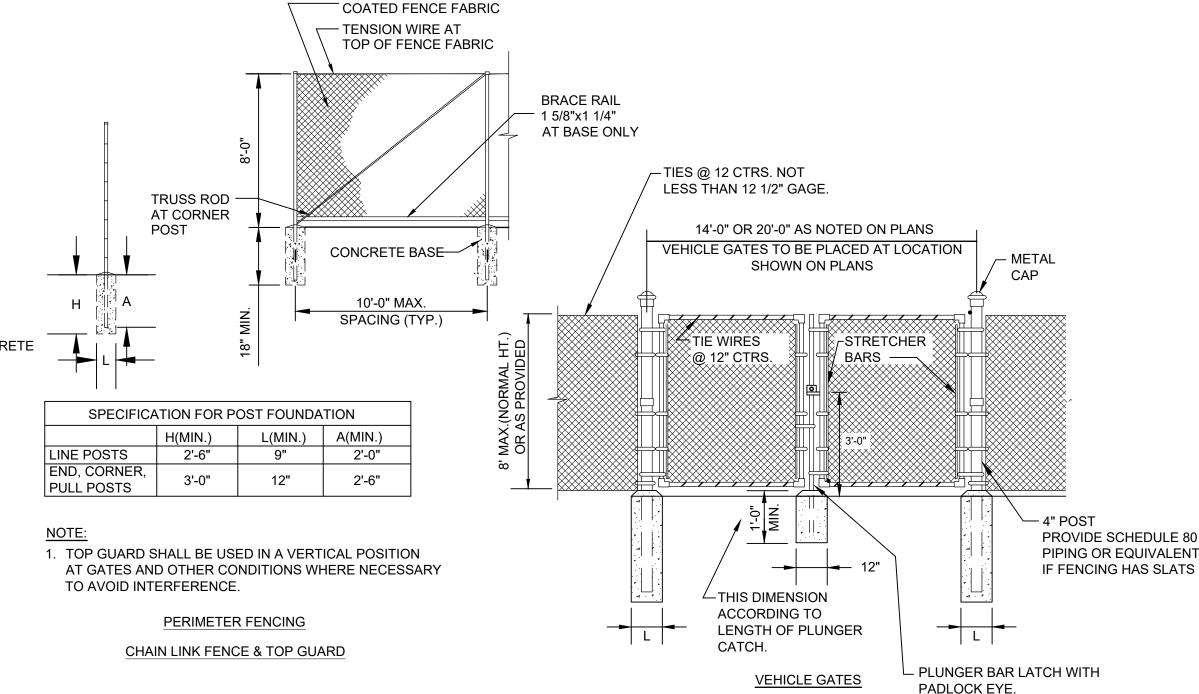


PLAN-TYPICAL HORIZONTAL BEND

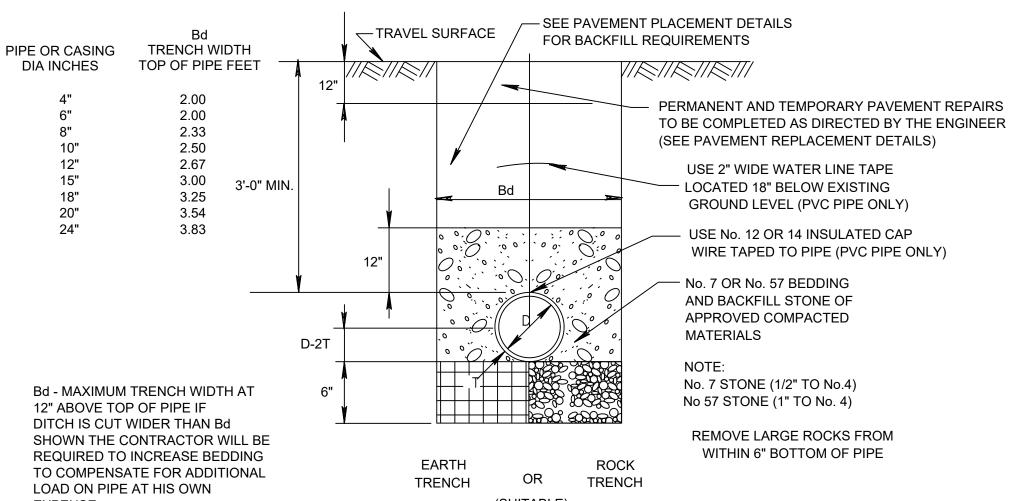


PLAN-TYPICAL TEE

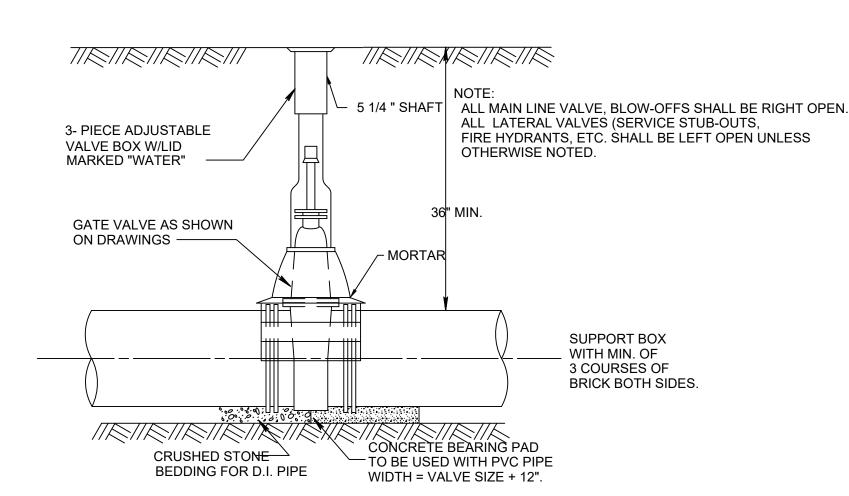
WITHIN 6" BOTTOM OF PIPE



CHAIN LINK PERIMETER FENCING AND GATE DETAILS



WATER LINE DETAILS FOR PVC & D.I. PIPE TRAVELED AREAS



TYPICAL VALVE BOX AND GATE VALVE PIPE DIAMETER OR LESS



ARCADIS ARCADIS U.S., INC. 2839 PACES FERRY ROAD SUITE 900, ATLANTA, GA 30339 TE: 770-431-8666 WWW.ARCADIS.COM CONSULTANTS

SEALS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA **FAYETTE COUNTY WATER**

SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

400 VETERANS PARKWAY FAYETTEVILLE, GA 30214

REVISIONS					
0	07/07/2023	ISSUE FOR BID			
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PROJECT STATUS: ISSUE FOR BID

JULY 2023 FILE NAME: TAYLOR H. TITTLE, PE

MADISON A. SMITH, EIT DRAWN BY DAVID A. WILSON, PE CHECKED BY:

SHEET TITLE

CIVIL

CIVIL DETAILS

AS SHOWN

C-10 SHEET 13 OF 60

GEORGIA UNIFORM CODING SYSTEM

FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE PRACTICE DETAIL MAP

CODE	PRACTICE	DETAIL	SYMBOL	DESCRIPTION
	CHECKDAM		J	A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT		(LABEL)	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION		Cr , disp	A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on—site vehicle transportation routes.
DC	STREAM DIVERSION CHANNEL		*	A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Ö	DIVERSION			An earth channel or dike located above, below, or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE		(LABEL)	A flexible conduit of heavy—duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE		Dn2 (LABEL)	A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand—placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE		Sr) (LABEL)	Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER	A STATE OF THE STA	\rightarrow	A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM		5	A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL		Re (LABEL)	A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING		(LABEL)	A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1)	SEDIMENT BARRIER		TYPE (NDICATE TYPE)	A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN		(LABEL)	A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP			A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.
Sk	FLOATING SURFACE SKIMMER		Sk) (LABEL)	A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
			Spb	A linear control device constructed as a diversion perpendicular to the direction of the runoff to

CONSTRUCTION SEQUENCE:

1. FOR EACH STAGE OF CONSTRUCTION THE FOLLOWING SEQUENCE WILL

perpendicular to the direction of the runoff to

employment of intermediate dikes.

enhance dissipation and infiltration of runoff, wh

creating multiple sedimentation chambers with th

- 1.1. CONFIRM LOCATIONS OF AND CONSTRUCT/INSTALL INITIAL EROSION AND SEDIMENT CONTROL BMPS WITHIN THE LIMITS OF THE STAGE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITIES ON SITE. INITIAL EROSION AND SEDIMENT CONTROL BMPS SHALL INCLUDE THE FOLLOWING: CONSTRUCTION FENCING, TREE PROTECTION FENCING, SILT FENCING, INLET SEDIMENT TRAPS, SAND BAG SEDIMENT BARRIER, AND CONSTRUCTION ENTRANCES. ALL EROSION AND SEDIMENT CONTROL BMPS TO BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS.
- 1.2. CLEAR AND GRUB TO THE LIMITS REQUIRED FOR CONSTRUCTION AND REMOVE EXISTING TREES AS SHOWN ON THE PLANS.
- 1.3. EXCAVATE TRENCHES FOR INSTALLATION OF THE WATER INFRASTRUCTURE PIPING, AS NECESSARY, CONSTRUCT PIPE DIVERSIONS TO DIVERT AND BYPASS RUNOFF FROM EXISTING
- 1.4. BEGIN INTERMEDIATE PHASE EXCAVATION AND GRADING ACTIVITIES AFTER ALL REQUIRED INITIAL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND CONSTRUCTED.
- 1.5. BEGIN CONSTRUCTION OF WATER TANK AND WATER INFRASTRUCTURE PIPING, UTILITY RELOCATIONS, CURB AND GUTTER, DRIVEWAYS, ROADWAYS, AND REMAINING STRUCTURES AS SHOWN ON PLANS. INSTALL INLET PROTECTION AS SHOWN ON
- 1.6. ESTABLISH FINISHED GRADES AT EARLIEST POSSIBLE DATE.

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM CROSSING		Sr (LABEL)	A temporary bridge or culvert—type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION		(SI)	A paved or short section of riprap channel at th outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING		⊢(Su)—I	A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN		Tc	A floating or staked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain).
Тр	TOPSOILING		(SHOW STRIPING AND STORAGE AREAS)	The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed are after completion of construction activities.
Tr	TREE PROTECTION	0	(DENOTE TREE CENTERS)	To protect desirable trees from injury during construction activity.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		Bf (AMEL)	Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)	Jest Land Land	Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)	100 mg	Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)	3	Ds4	A permanent vegetative cover using sods on highly erodable or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
FI-Co	FLOCCULANTS AND COAGULANTS		FI-Co	Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)	N. S. C.	Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Tac	TACKIFIERS AND BINDERS	G.	Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.

DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY VEGETATION AND MULCH IF LAND-DISTURBING ACTIVITIES CEASE FOR MORE THAN 14 CALENDAR DAYS IN ACCORDANCE WITH NPDES REQUIREMENTS. ONCE FINAL GRADES ARE ESTABLISHED, APPLY PERMANENT SOIL STABILIZATION IN ACCORDANCE WITH PLANS. ANY DISTURBED AREA REMAINING IDLE FOR 30 DAYS SHALL BE STABILIZED WITH PERMANENT VEGETATION.

- 2. THE FOLLOWING SHALL APPLY AFTER ALL CONSTRUCTION STAGES ARE
- 2.1. AFTER FINAL STABILIZATION FOR THE PROJECT AS DEFINED BY NPDES GAR100001 IS ACHIEVED, RETURN TO THE SITE AND REMOVE ALL TEMPORARY MEASURES INCLUDING SILT FENCES, SEDIMENT TRAPS, AND DIVERSIONS. INSTALL PERMANENT VEGETATION TO ALL AREAS (EXCEPT IMPERVIOUS SURFACES) DISTURBED BY THE TEMPORARY MEASURES.
- 2.2. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES INCLUDING CONSTRUCTION FENCING, TREE PROTECTION FENCING, AND CONSTRUCTION ENTRANCES WITHIN 30 DAYS AFTER FINAL

MANAGEMENT PLAN

- ALL EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY AND AFTER EVERY RAINFALL ALL NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO PREVENT FURTHER DAMAGE AND EROSION. STRUCTURES THAT SHALL BE INSPECTED INCLUDE:
- SEDIMENT BARRIER SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. SEDIMENT BARRIERS SHALL BE REPLACED PER MANUFACTURER'S RECOMMENDATIONS OR THE HEIGHT OF THE PRODUCT IS NOT MAINTAINING
- STORM DRAIN INLET PROTECTION INSPECT STONE FILTER RING INLET STRUCTURE AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE FILTER RING HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT
- SLOPE STABILIZATION ALL EROSION CONTROL BLANKETS AND MATTING SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION, PARTICULARLY AFTER RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OR BREAKAGE OCCURS, REINSTALL THE MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. CONTINUE TO MONITOR THESE AREAS UNTIL
- INLET SEDIMENT TRAP TRAP SHOULD BE CLEANED OUT AFTER HEAVY RAIN EVENTS. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE TRAP.
- SEEDING, FERTILIZING, AND MULCHING SEEDED AREAS SHALL BE INSPECTED FOR FAILURE AND NECESSARY REPÁIRS SHALL BE MADE IMMEDIATELY.
- CONSTRUCTION ENTRANCE/EXIT INSPECT CONSTRUCTION ROAD SURFACE DAILY, MAINTAIN WHEN NEEDED IN A CONDITION TO PREVENT SEDIMENT AND TOPSOIL FROM LEAVING THE SITE.

SITE NOTES:

- 1. PROJECT IS LOCATED IN FAYETTE COUNTY WITHIN THE CITY OF FAYETTEVILLE, GEORGIA.
- 2. PROJECT LATITUDE/LONGITUDE: (33.469325, -84.511536)
- APPROXIMATE TOTAL DISTURBED ACREAGE OF THE TRILITH STUDIOS ELEVATED WATER TANK
- 4. THE RECEIVING WATER FOR THIS PROJECT IS SANDY CREEK.
- IT IS ANTICIPATED THAT THE PROJECT WILL NOT HAVE ANY BUFFER ENCROACHMENTS AND BUFFER VARIANCE WILL NOT BE REQUIRED.
- WETLAND CERTIFICATION: THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLAND INVENTORY MAPS HAVE BEEN CONSULTED; AND, 2) THE APPROPRIATE PLAN SHEET [] DOES/ [X] DOES NOT INDICATE AREAS OF UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS AS SHOWN ON THE MAPS; AND, 3) IF WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLAND SHALL NOT OCCUR UNLESS THE APPROPRIATE FEDERAL WETLANDS ALTERATION ("SECTION 404") PERMIT HAS BEEN OBTAINED
- NO PORTION OF THIS SITE LIES WITHIN A SPECIAL FLOOD HAZARD ZONE "AE" OR "A". THE SITE LIES WITHIN THE FIRM MAPS OF THE CITY OF FAYETTEVILLE FLOOD INSURANCE STUDY. FIRM MAP NUMBERS: 13113C0082E AND 13113COO84E, EFFECTIVE DATE: SEPTEMBER 26, 2008.
- 8. THE PRE-DEVELOPMENT RUNOFF COEFFICIENT (CN) IS 61 AND THE POST-DEVELOPMENT RUNOFF COEFFICIENT IS 68.
- MAINTENANCE AND TRAFFIC: THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL ROAD PERMITS FROM THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION INCLUDING PROVIDING ANY RESTORATION BONDS. THE CONTRACTOR SHALL PROVIDE A DETAILED PHASED TRAFFIC CONTROL PLAN BASED ON THE PROPOSED WORK PHASING AS
- DETERMINED BY THE CONTRACTOR. 10. PRIMARY PERMITTEE & 24-HOUR CONTACT:
- VANESSA TIGERT **FAYETTE COUNTY WATER SYSTEM** ADDRESS: 245 MCDONOUGH RD.
- FAYETTEVILLE, GA 30214 PHONE: 770-320-6016 EMAIL: VTIGERT@FAYETTECOUNTYGA.GOV

EROSION CONTROL

- EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR EROSION CONTROL AND SHALL COMPLY WITH THE STANDARDS / SPECIFIC TO THE "MANUAL FOR EROSION CONTROL AND SEDIMENT CONTROL IN
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE.
- PERMANENT VEGETATION SHALL BE PLACED AT ALL AREAS GRADED TO FINAL GRADE IMMEDIATELY UPON COMPLETION. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING. DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER (DS1). ON SLOPES THAT ARE 2:1 OR STEEPER, MULCH WILL BE ANCHORED.
- IN CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5:1 AND WITH THE HEIGHT TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFER, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET.
- SEDIMENT / EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT.
 EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED
 ONE HALF THE CAPACITY OF THE DEVICE. THE CONTRACTOR SHALL FURNISH, INSTALL, AND
 MAINTAIN AND ADDITIONAL ENOUGH CONTROL MEASURES AS DIRECTED BY THE GOVERNING JURISDICTION AND/OR THE ENGINEER
- THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES AND ENSURE THAT THEY ARE PROPERLY FUNCTIONING PRIOR TO ANY LAND DISTURBANCE ACTIVITIES.
- AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
- 8. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT OF THE ATT THE SERVICE OF THE COUNTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- 10. ANY DISTURBED AREAS LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
- 11. BUILDING MATERIALS AND BUILDING PRODUCTS NOT IN USE SHALL BE COVERED BY HEAVY

		CONSTR	RUCTION SCHEDU	LE		
ACTIVITY	MONTH 2	MONTH 4	MONTH 6	MONTH 8	MONTH 10	MONTH 12
SITE PREPARATION						
EROSION CONTROL						
TANK AND WATER INFRASTRUCTURE INSTALLATION						
PAVEMENT REPLACEMENT						
RESTORATION						

TREE PROTECTION

- WHEN DIGGING NEAR TREES, THE CONTRACTOR SHALL PRUNE ALL EXPOSED ROOTS ONE INCH IN DIAMETER OR LARGER ON THE SIDE OF THE TRENCH ADJACENT TO THE TREES. PRUNING SHALL CONSIST OF MAKING A CLEAN CUT FLUSH WITH THE SIDE OF THE TRENCH TO PROMOTE NEW ROOT GROWTH.
- 2. THE CONTRACTOR SHALL PROTECT ALL TREES AND VEGETATION ON SITE EXCEPT AS
- TREE PROTECTION DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY CLEARING, GRUBBING OR GRADING.

POLLUTION CONTROLS

- BMP'S SUCH AS CONSTRUCTION EXITS, WATERING STATIONS, AND SWEEPERS MAY BE JTILIZED TO MINIMIZE OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF
- 2. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY
- PETROLEUM BASED PRODUCTS- CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.
- 3.1. SOLVENTS- ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- 3.2. CONCRETE TRUCK WASHING- WASHOUT OF CONCRETE DRUMS AT THE CONSTRUCTION SITE IS PROHIBITED. CONTRACTOR IS TO SELECT LOCATIONS ON THE SITE FOR CONCRETE WASH DOWN THAT MEET THE CONDITIONS OF THE NPDES STAND ALONE PERMIT. CONCRETE WASH DOWN AREA SHOULD BE OUTSIDE OF THE AREA THAT IS MARKED FOR EXCAVATION. CONTRACTOR SHALL SELECT AN EPA RECOMMENDED WASHOUT BMP TO BE USED AND SUBMIT LOCATIONS AND WASH OUT BMP TYPE FOR ENGINEER'S APPROVAL
- 3.3. FERTILIZER/HERBICIDES- THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL ÎN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN
- 3.4. CONSTRUCTION MATERIALS- NO CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF ACCORDING TO

APPLICABLE STATE AND LOCAL REGULATIONS.

- 3.5. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
- SOIL CLEANUP AND CONTROL PRACTICES
 4.1. LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP
- WILL BE CLEARLY POSTED AND PROCEDURES MADE AVAILABLE TO SITE PERSONNEL. 4.2. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO: BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND. SAWDUST AND PROPÉRTY LABELÉD PLASTIC AND METAL WASTE CONTAINERS.
- 4.3. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
- 4.4. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY, ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
- 4.5. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT
- 4.6. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS A 1-800-424-8802.
- 4.7. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
- 4.8. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.
- 4.9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY A LICENSED
- 5. SANITARY UNIT WILL BE ONSITE TO COLLECT ALL SANITARY WASTE DURING CONSTRUCTION

PROJECT DESCRIPTION

WATER LINE, AND ACCESS ROAD.

THE EXISTING TRILITH STUDIOS SITE IS A MOVIE PRODUCTION CAMPUS THAT HAS MULTIPLE STAGE BUILDINGS FOR PRODUCTION. THE PROJECT AREA FOR THE WATER TANK IS ON AN EXISTING GRASSED HILL ADJACENT TO THE CEMETERY NEAR THE ENTRANCE OF THE TRILITH CAMPUS THE TRILITH STUDIOS IMPROVEMENTS INCLUDE CONSTRUCTION OF A WATER TANK, PUMP HOUSE,

	CONSTR	RUCTION SCHEDU	<u>ILE</u>	T	T			
TH 2	MONTH 4	MONTH 6	MONTH 6 MONTH 8 MONTH 10					

- APPROVED BY THE ENGINEER AND/OR FAYETTE COUNTY.
- PROTECT THE TRUNKS OF ANY TREES BEING PRESERVED WITHIN THE TEMPORARY OR PERMANENT EASEMENTS WITH STRAPPED ON PLANKING OR SIMILAR PROTECTIVE DEVICE.

FAYETTE COUNTY WATER SYSTEM

FAYETTE COUNTY, GEORGIA

ISSUE FOR BID

ARCADIS U.S., INC.

TE: 770-431-8666 WWW.ARCADIS.COM

CONSULTANTS

SEALS

2839 PACES FERRY ROAD

SUITE 900, ATLANTA, GA 30339



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

400 VETERANS PARKWAY FAYETTEVILLE, GA 30214

		REVISIONS	
0	07/07/2023	ISSUE FOR BID	
NO.	DATE	ISSUED FOR	BY
	-		

COPYRIGHT: ARCADIS U.S., INC.

PROJECT STATUS: ISSUE FOR BID PROJECT NO.: JULY 2023

ESC-01 FILE NAME: TAYLOR H. TITTLE, PE

SHEET TITLE

MADISON A. SMITH, EIT DRAWN BY DAVID A. WILSON, PE CHECKED BY:

EROSION & SEDIMENT CONTROL

EROSION & SEDIMENT CONTROL LEGEND & NOTES



AS SHOWN

ESC-01 14 OF 60



EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST INFRASTRUCTURE CONSTRUCTION PROJECTS

		EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST INFRASTRUCTURE CONSTRUCTION PROJECTS SWCD: <u>CITY OF DALTON</u>
City/Count	ty: <u>CITY OF</u>	Address: 461 SANDY CREEK ROAD FAYETTEVILLE/FAYETTE COUNTY Date on Plans: TBD
Name & er	mail of pers	son filling out checklist: TAYLOR TITTLE, taylor.tittle@arcadis.com
Page #	Y/N	TO BE SHOWN ON ES&PC PLAN
ESC-01	Y	1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
ESC-01 TO ESC-13	Υ	2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed)
ESC-01	Y	3 The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.4 Provide the name, address, email address, and phone number of primary permittee.
ESC-01	Υ	5 Note total and disturbed acreages of the project or phase under construction.
ESC-01	Υ	6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.
ESC-01 TO ESC-13	Y	7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
ESC-01	Y	8 Descriptions of the nature of construction activity and existing site conditions.
COVER ESC-01	Y	9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas,
ESC-02	Y	wetlands, marshlands, etc. which may be affected. 11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC
250 02		Plan as stated on Part IV page 21 of the permit.
ESC-02	Υ	12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 20 of the permit. *
ESC-02	Υ	13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on Part IV.D.6.c.(3) page 37 of the permit as applicable. *
ESC-02	Υ	14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation." in accordance with Part IV.A.5 page 26 of the permit. *
ESC-01	Y	15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
ESC-01	V	16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
ESC-01	Y	17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."
ESC-01	Υ	18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a
ESC-01	Y	Section 404 permit." * 19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and
ESC-01	Υ	sediment control measures and practices prior to land disturbing activities." 20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented
ESC-01	Υ	to control or treat the sediment source." 21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch
N/A	N	or temporary seeding." 22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream
		of and within the same watershed as, any portion of a Biota Impaired Stream Segment must comply with Part III. C. of the permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. * THIS PROJECT IS NOT DISCHARGING TO AN IMPAIRED STREAM SEGMENT OR WITHIN 1 LINEAR MILE UPSTREAM OF ANY IMPAIRED STREAM SEGMENT.
N/A	N	23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or
		requirements included in the TMDL Implementation Plan. * THERE IS NOT A TMDL IMPLEMENTATION PLAN FOR THE PROJECT.
ESC-01	Υ	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited. *
ESC-01	Y	25 Provide BMPs for the remediation of all petroleum spills and leaks.26 Description of the measures that will be installed during the construction process to control pollutants in storm water that
E3C-01	<u>'</u>	will occur after construction operations have been completed. *
ESC-01	Υ	27 Description of practices to provide cover for building materials and building products on site. *
ESC-01	Υ	28 Description of the practices that will be used to reduce the pollutants in storm water discharges. *
ESC-01	Υ	29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
ESC-03	Υ	30 Provide complete requirements of Inspections and record keeping by the primary permittee. *
ESC-03	Υ	31 Provide complete requirements of Sampling Frequency and Reporting of sampling results. *
ESC-03	Υ	32 Provide complete details for Retention of Records as per Part IV.F. of the permit. *
ESC-03	Υ	33 Description of analytical methods to be used to collect and analyze the samples from each location. *
ESC-02	Υ	34 Appendix B rationale for NTU values at all outfall sampling points where applicable. *
ESC-05	Y	35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable. *
ESC-06 TO ESC-13	Υ	36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single

Existing Continues USGS 11: 2007 Togographical Sheets Proposed Contours 11: 400 Centerline Profile N/A N 39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional Bill as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at ways associated by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at ways associated profession and the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Endosin & Sediment Control in Georgia 2016 Edition. * N/A N UNDARED STREAM SEGMENT. N/A N 10 Use of alternative BMP for applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffer required by the Local Issuing Authority. Clearly note and delineate all areas of impact. THERE ARE NO 25 THE LOCAL ISSUING AUTHORITY. N/A N 14 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffer required by the Local Issuing Authority. Clearly note and delineate all areas of impact. THERE ARE NO 25 THE LOCAL ISSUING AUTHORITY. N/A N 14 Delineation of on-site wetands and all State waters located on and within 200 feet of the project site. THERE ARE NO 5 OS THE WETLANDS AND NO STATE WATERS LOCATED WITHIN 200FT OF THE PROJECT STATE WATERS LOCATED WITHIN 200FT OF THE PROJECT STATE WATER ARE NO 200FT OF THE PROJECT STATE WATERS LOCATED WITHIN 200FT OF THE PROJECT STATE WATER ARE NO 200FT OF THE PROJECT STATE WATERS LOCATED WITHIN 200FT OF THE PROJECT STATE WATER ARE NO 200FT OF THE PROJECT STATE WATER ARE NO 200FT OF THE PROJECT STATE WATER ARE NO 200FT OF THE PROJECT STATE WATER STAT	ESC-04 TO	Υ	39. Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:
Proposed Contours	ESC-13		38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: Existing Contours USGS 1": 2000' Topographical Sheets
N/A N 39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BI as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidano Document found at www.gaewce.georgia.gov. THIS PROJECT IS NOT DISCHARGING TO AN IMPAIRED STREAM SEGMENT OR WITHIN 1 LINEAR MILE UPS OF ANY IMPAIRED STREAM SEGMENT OR WITHIN 1 LINEAR MILE UPS OF ANY IMPAIRED STREAM SEGMENT. N/A N 40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sadiment Control in Georgia 2018 Edition.* THIS PROJECT IS NOT DISCHARGING TO AN IMPAIRED STREAM SEGMENT OR WITHIN 1 LINEAR MILE UPS OF ANY IMPAIRED STREAM SEGMENT. N/A N 10 Elineation of the applicable 25-foot of 50-foot undisturbed buffers adjacent to State waters and any additional buffer required by the Local Bissing Authority. Clearly note and delineate all areas of impact. THERE ARE NO 25-FT OR 50-FT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS OR ANY ADDITIO BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY. N/A N 14 Delineation of on-site verticands and all State waters located on and within 200 feet of the project site. THERE ARE NO ON-SITE WETLANDS AND NO STATE WATERS LOCATED WITHIN 200FT OF THE PROJECT STATE WATERS ADDITION AND ADDITION AND ADDITION AND ADDITION AND ADDITION ADDITION AND ADDITION ADDITION AND ADDITION ADDITION ADDITION AND ADDITION ADDITIO			
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ESC-05 TO ESC-13 Y 48 The limits of disturbance for each phase of construction. 49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storace volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual m included for structural BMPs and all calculations used by the design professional to obtain the required sediment storace when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water the surface are not feasible, a written justification explaining this decision must be included in the Plan. ESC-05 TO ESC-13 Y 50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend. ESC-12 TO ESC-13 Y 51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set fort the Manual for Erosion and Sediment Control in Georgia. ESC-12 TO ESC-13 Y 52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates are seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that see will take place and for the appropriate geographic region of Georgia. * If using this checklist for a project that is less than 1 acre and not part of a common development but within 200	ESC-05	Υ	Identify/Delineate all storm water discharge points.
SSC-05 TO SC-13	FSC-04	V	
49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment stora volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attain must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual mincluded for structural BMPs and all calculations used by the design professional to obtain the required sediment storation when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water the surface are not feasible, a written justification explaining this decision must be included in the Plan. ESC-05 TO ESC-13 Y 50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend. ESC-12 TO ESC-13 Y 51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set fort the Manual for Erosion and Sediment Control in Georgia. ESC-12 TO ESC-13 Y 52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates are seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that see will take place and for the appropriate geographic region of Georgia. * If using this checklist for a project that is less than 1 acre and not part of a common developm	ESC-05 TO ESC-13		
ESC-13 TO ESC-13		Y	retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attain must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water
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but within 200 ft of a perennial stream, the * checklist items would be N/A.			
·			
Effective January 1, 2022			·
			Effective January 1, 2022

NPDES - NTU APPENDIX B VALUES

SIZE OF SITE: 1.30 ACRES SURFACE WATER DRAINAGE AREA: 0.00203 SQUARE MILES TYPE OF RECEIVING WATER: WARM WATER NTU VALUE: 200

			Surface	Water Draina	age Area, squ	uare miles			
		0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
	1.00-10	75	150	200	400	750	750	750	750
214 - 01-	10.01-25	50	100	100	200	300	500	750	750
Site Size, acres	25.01-50	50	50	100	100	200	300	750	750
	50.01-100	50	50	50	100	100	150	300	600
	100.01+	50	50	50	50	50	100	200	100

ARCADIS LEGAL ENTITY: ARCADIS U.S., INC. 2839 PACES FERRY ROAD SUITE 900, ATLANTA, GA 30339

TE: 770-431-8666 WWW.ARCADIS.COM

CONSULTANTS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS, PERIMETER CONTROL BMPS, AND SEDIMENT BASINS WITHIN 7

DATE

DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION:

DATE OF INSPECTION I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLAN ON THE DATE OF INSPECTION.

GSWCC LEVEL II CERTIFICATION NO. GSWCC NO. 0000088369. EXPIRES 07/08/2025

INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN.

THESE DEFICIENCIES MUST BE ADDRESSED IMMEDIATELY AND A RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED

ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

DAYS AFTER INSTALLATION.

CERTIFICATION STATEMENTS

FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

> 400 VETERANS PARKWAY FAYETTEVILLE, GA 30214

	F	REVISIONS	
0	07/07/2023	ISSUE FOR BID	
NO.	DATE	ISSUED FOR	B'

PROJECT STATUS: ISSUE FOR BID 30135792 PROJECT NO.:

JULY 2023 ESC-02 FILE NAME:

TAYLOR H. TITTLE, PE MADISON A. SMITH, EIT DAVID A. WILSON, PE CHECKED BY:

SHEET TITLE

EROSION & SEDIMENT CONTROL

NPDES COMPLIANCE (SHEET 1 OF 2)

TAYLOR H. TITTLE GSWCC LEVEL II CERTIFICATION NO. 0000088369 EXPIRES 07/08/2025





AS SHOWN

ESC-02

SHEET 15 OF 60

SAMPLING FREQUENCY AND REPORTING GENERAL PERMIT NO. GAR 100001 -EFFECTIVE (AUGUST 1, 2018)

SAMPLING METHODS & PROCEDURES GENERAL PERMIT NO. GAR 100001 - EFFECTIVE (AUGUST 1, 2018) REPRESENTATIVE SAMPLING ON INFRASTRUCTURE CONSTRUCTION PROJECT

Receiving water samples and storm water discharge samples will be collected by "grab samples", as specified in Part IV.D.6 of the GAR 100001 permit. All "grab samples" will be collected using the following methods and procedures.

GAR 100001.

stromwater system.

ARCADIS ARCADIS U.S., INC. 2839 PACES FERRY ROAD

SUITE 900. ATLANTA. GA 30339 TE: 770-431-8666 WWW.ARCADIS.COM

CONSULTANTS

SEALS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA



FCWS-TRILITH STUDIOS **ELEVATED WATER**

400 VETERANS PARKWAY

0	07/07/2023	ISSUE FOR BID									
NO.	DATE	ISSUED FOR	BY								
COPYRIGHT: ARCADIS U.S., INC. 2023											
PROJE	CT STATUS:	ISSUE FOR BID									
PROJE	CT NO.:	30135792									

JULY 2023

FILE NAME: DESIGNED BY:

MADISON A. SMITH, EIT DAVID A. WILSON, PE

SHEET TITLE

EROSION & SEDIMENT CONTROL

AS SHOWN

ESC-03

INSPECTIONS

- (1). Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted.
- (2). Measure and record rainfall within disturbed areas of the site that have not met final stabilization once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday. The data collected for the purpose of compliance with this permit shall be representative of the monitored activity. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.
- (3). Certified personnel (provided by the primary permittee) shall inspect the following at least once every fourteen (14) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation; and (c) structural control measures Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is submitted.
- (4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination has been submitted) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).
- (5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection
- (6). A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e. initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5). of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction site that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

RETENTION OF RECORDS

- 1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:
 - a. A copy of all Notices of Intent submitted to EPD;
 - b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this
 - c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
 - d. A copy of all monitoring information, results, and reports required by this permit; e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of
 - this permit; f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and
 - g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2) of this
- 2. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the the NOT is submitted in accordance with Part VI of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

SAMPLING FREQUENCY

- (1). The primary permittee must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any storm water discharge to a monitored receiving water and/or from a monitored outfall location within forty-five (45) minutes or as soon as possible.
- (2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.
- (3). Sampling by the permittee shall occur for the following qualifying events:
 - (a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a stormwater discharge that occurs during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location:
 - (b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first:
 - (c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;
 - (d). Where sampling pursuant to (a), (b), or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b), or (c) above; and
 - (e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.
 - *Note that the permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

REPORTING

- 1. The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD using the electronic submittal service provided by EPD. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.
- 2. All sampling reports shall include the following information:
- a. The rainfall amount, date, exact place and time of sampling or measurements;
- b. The name(s) of the certified personnel who performed the sampling and measurements;
- c. The date(s) analyses were performed;
- d. The time(s) analyses were initiated;
- e. The name(s) of the certified personnel who performed the analyses; f. References and written procedures, when available, for the analytical techniques or methods used;
- g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes,
- etc., used to determine these results:
- h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU;" and i. Certification statement that sampling was conducted as per the Plan.
- 3. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The permittee shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI.

SAMPLE TYPE

All sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved); the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be prepared by the EPD.

Sample containers should be labeled prior to collecting the samples. Samples should be well mixed before transferring to a secondary container. Large mouth, well cleaned and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.

Manual, automatic or rising stage sampling may be utilized. Samples required by the permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. If automatic sampling is utilized and the automatic sampler is not activated during the qualifying event, the permittee must utilize manual sampling or rising stage sampling during the next qualifying event. Dilution of samples is not required. Samples may be analyzed directly with a properly calibrated turbidimeter. Samples are not required to be cooled. Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in the permit must be reported to EPD as specified in Part IV.E.

SAMPLING POINTS

For construction activities the primary permittee must sample all receiving water(s), or all outfall(s), or a combination of receiving water(s) and outfall(s). Samples taken for the purpose of compliance with the permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and /or the stormwater outfalls using the following minimum guidelines:

The upstream sample for each receiving water must be taken immediately upstream of the confluence of the first stormwater discharge from the permitted activity (i.e. the discharge farthest upstream at the site) but downstream of any other stormwater discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity value.

The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last stormwater discharge from the permitted activity (i.e. the discharge farthest downstream at the site) but upstream of any other stormwater discharge not associated with the permit activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the stormwater outfall channel(s). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall stormwater channel. The sampling container should be held so that the opening faces upstream. The samples should be kept free from floating debris.

Permittees do not have to sample sheet flow that flows onto undisturbed natural areas or areas stabilized by the project. Stabilized shall mean 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures as defined in the Manual (excluding a crop of annual vegetation and a seeding of target crop perennials appropriate for the region).

All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether stormwater runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.

The sampling location for the disturbed drainage basin above shall be monitored concurrent

PROJECT SAMPLING POINTS

with land disturbance/clearing. Sampling is required during construction and until all disturbed areas are stabilized. Stabilization shall mean at least 70% of the disturbed soil surface is uniformly covered in permanent vegetation or equivalent permanent stabilization measures (such as the use of rip rap, permanent mulches or geotextiles) have been employed.

For this project, a sampling point located at the downstream stormwater outlet will be

sampled for the construction project in accordance with current NPDES General Permit No.

The Project for the Trilith Studios Water Tank involves construction of a elevated water tank

and a water pipeline. The sampling location is shown on ESC-05 at the outfall from the

FAYETTE COUNTY WATER SYSTEM

STORAGE TANK

FAYETTEVILLE, GA 30214

REVISIONS

DATE: ESC-02

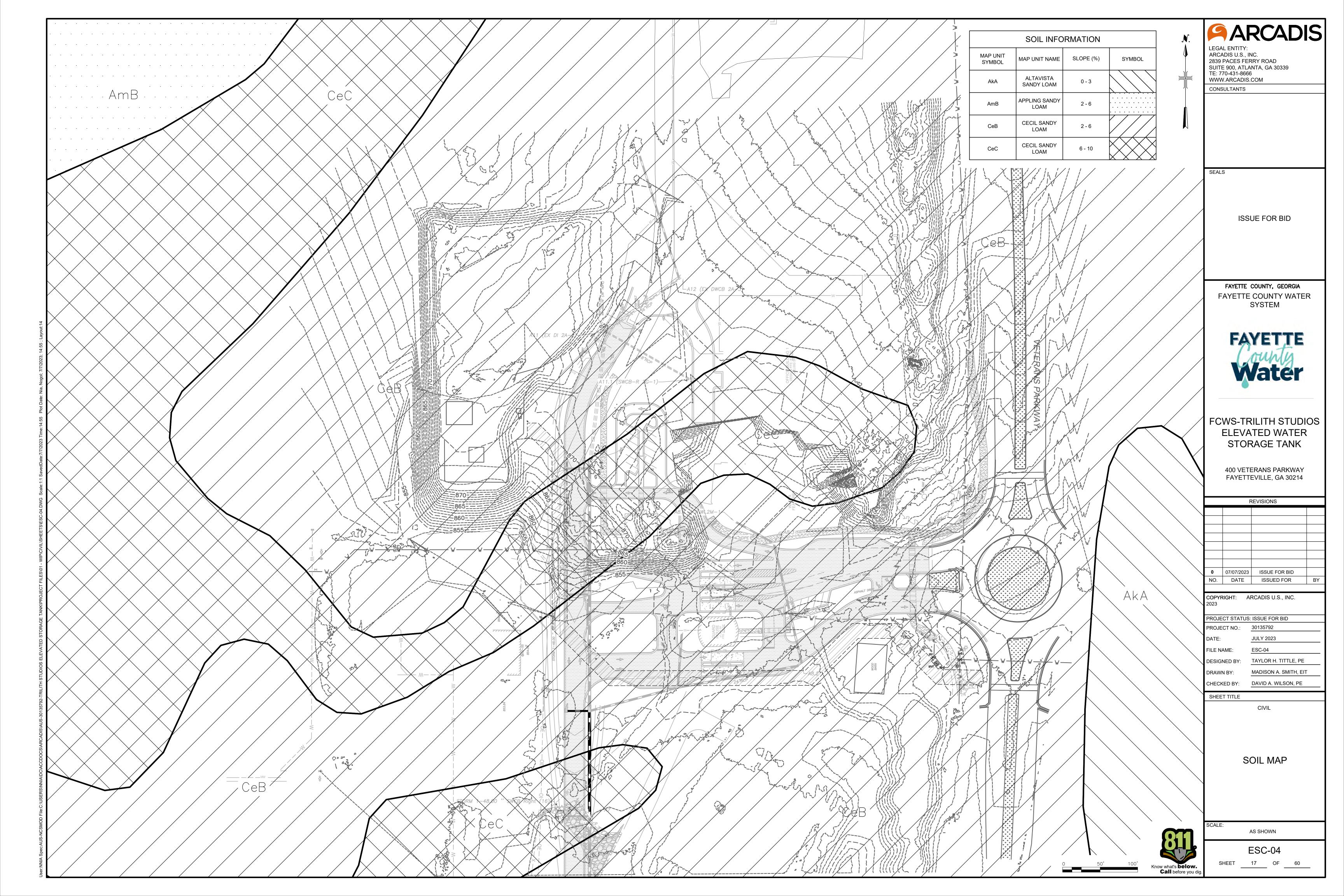
> TAYLOR H. TITTLE, PE CHECKED BY:

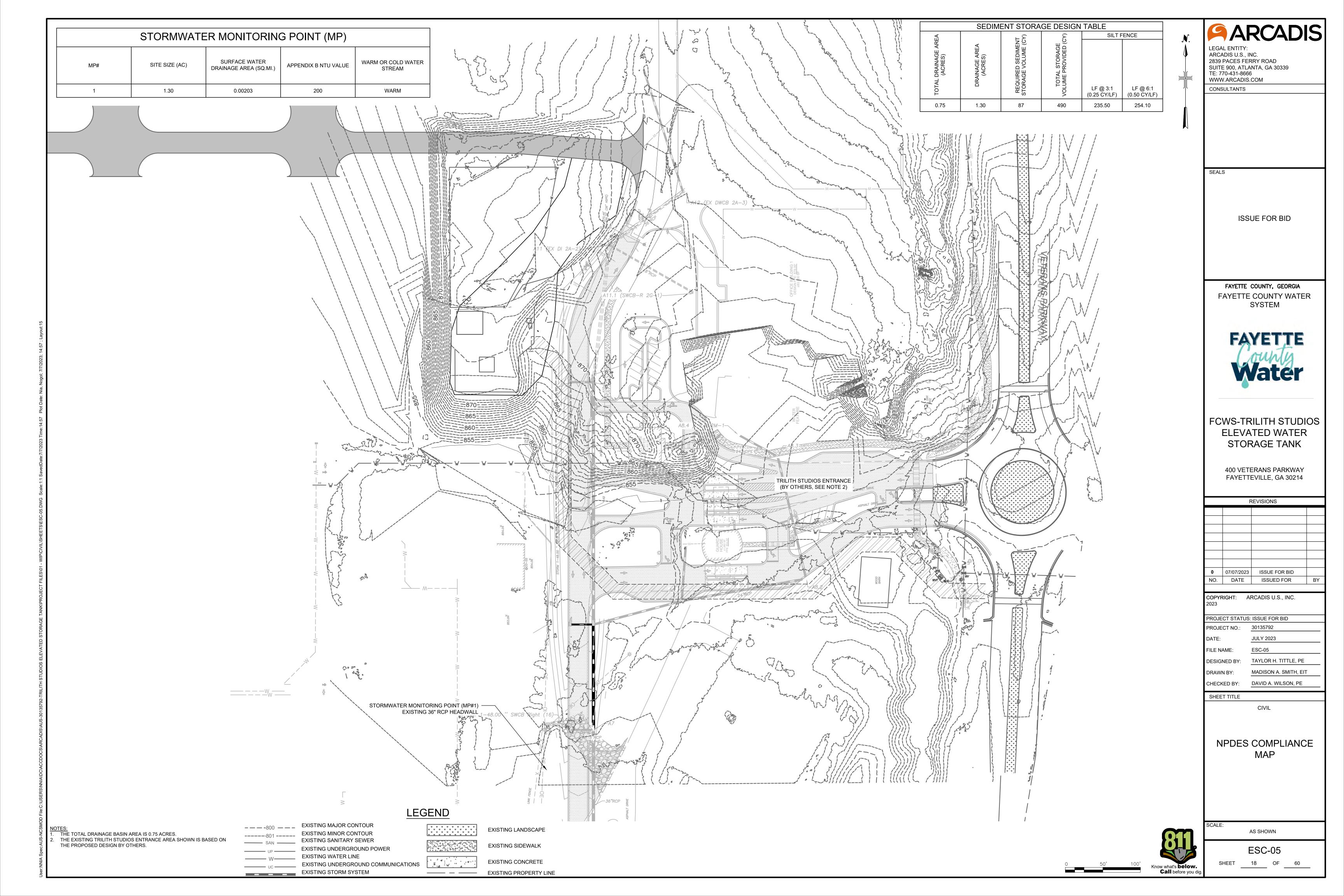
NPDES COMPLIANCE (SHEET 2 OF 2)

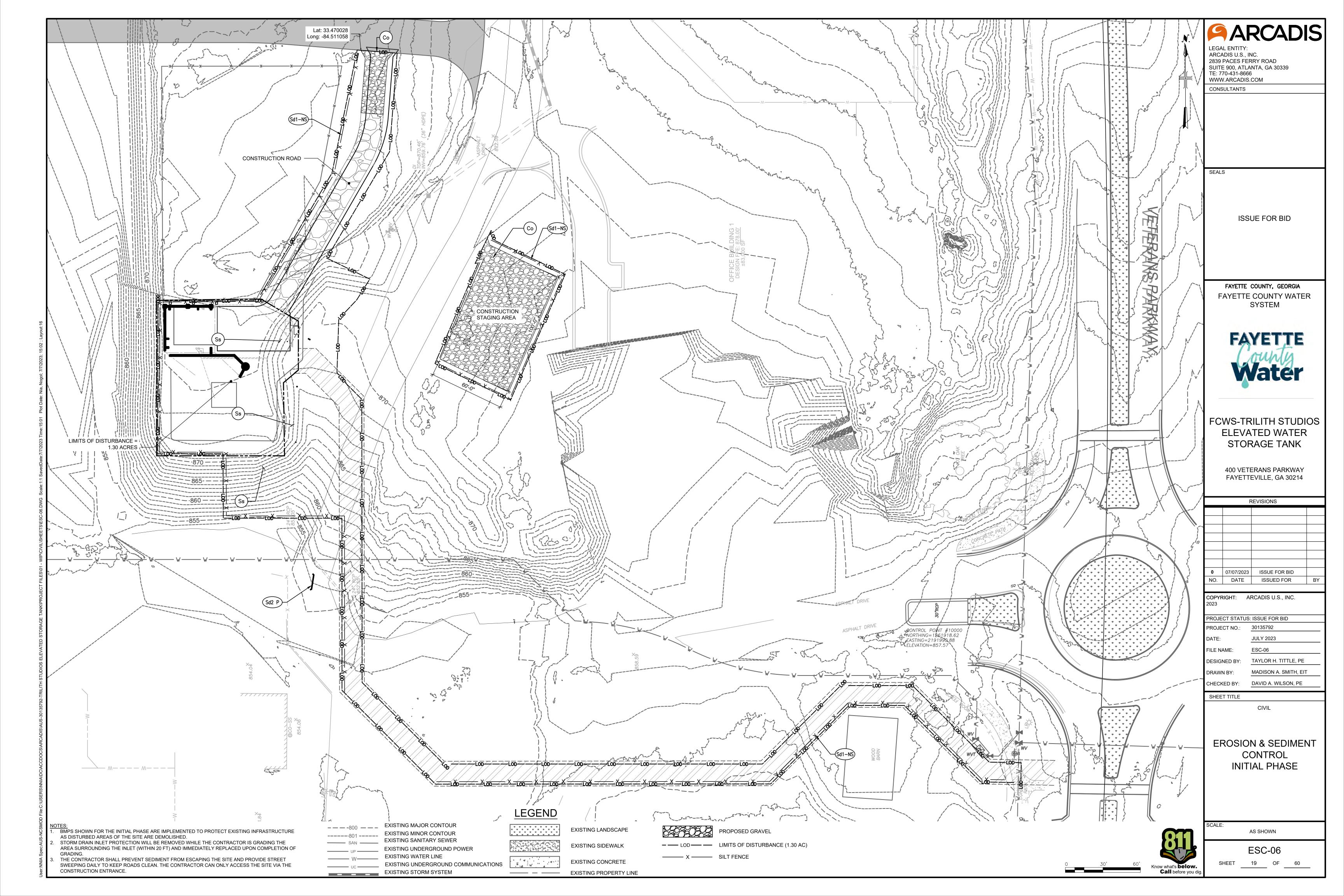
Note: Monitors shall be located as shown on the drawings or as directed by the Engineer of Record and/or Georgia EPD.

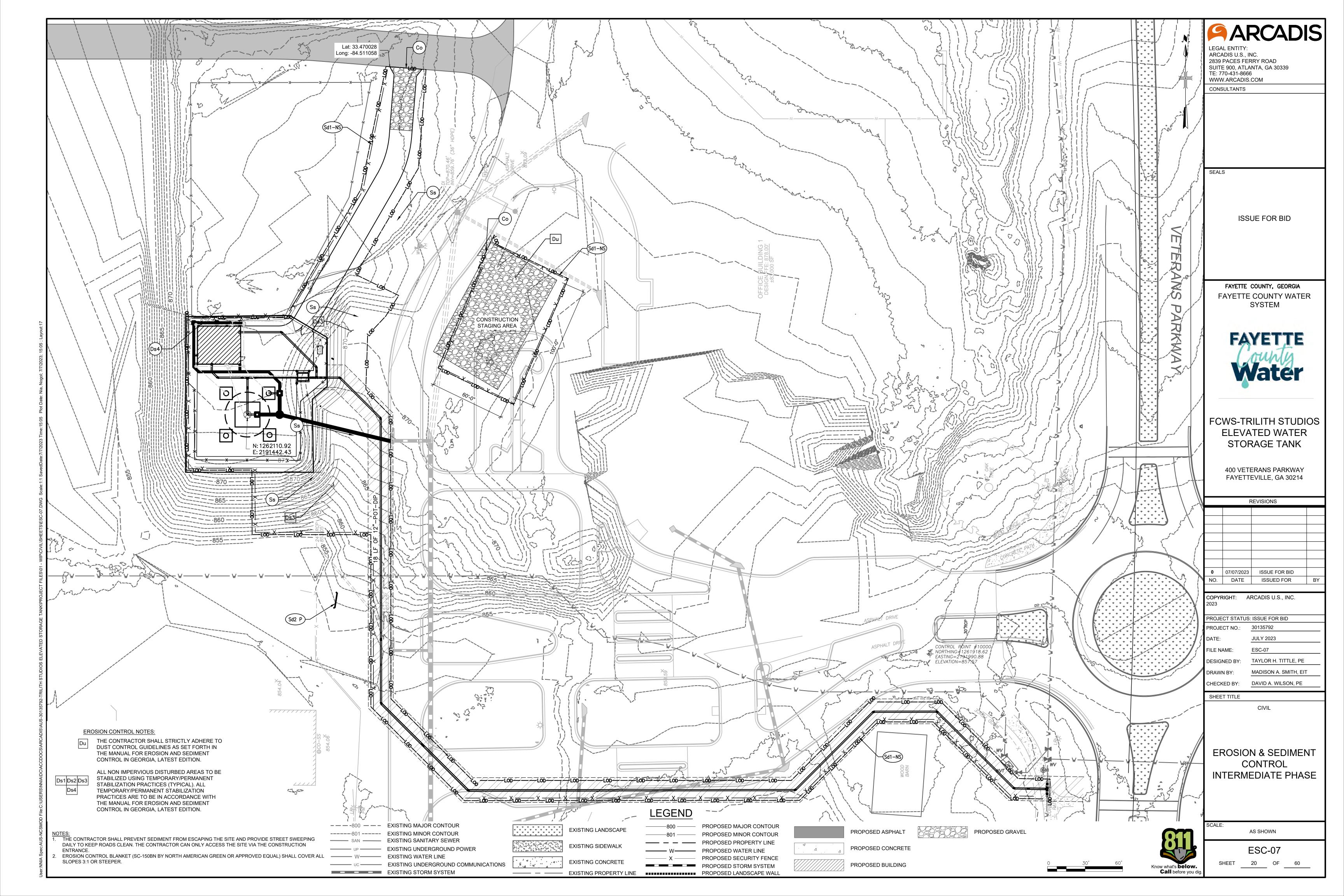
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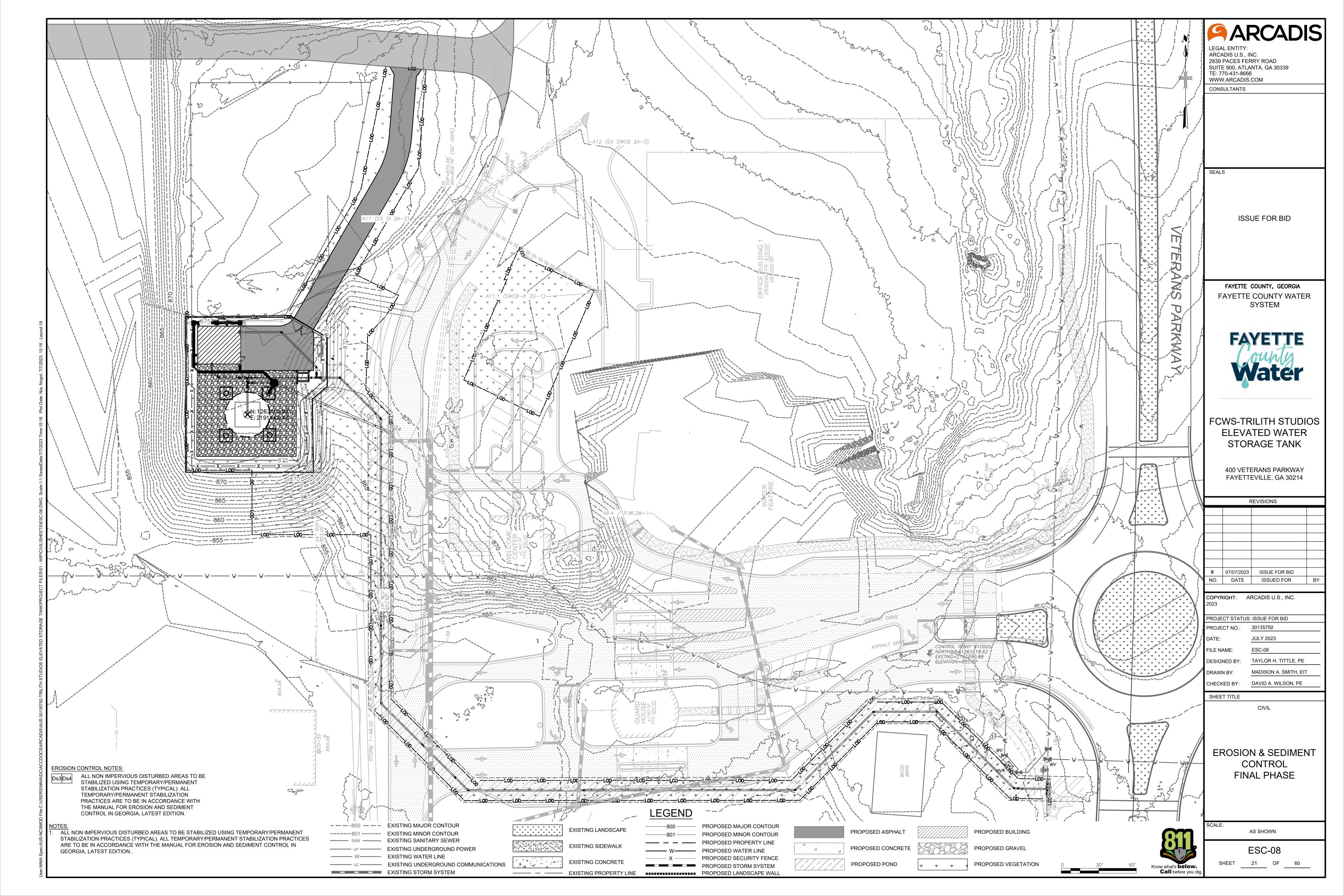
SHEET 16 OF 60





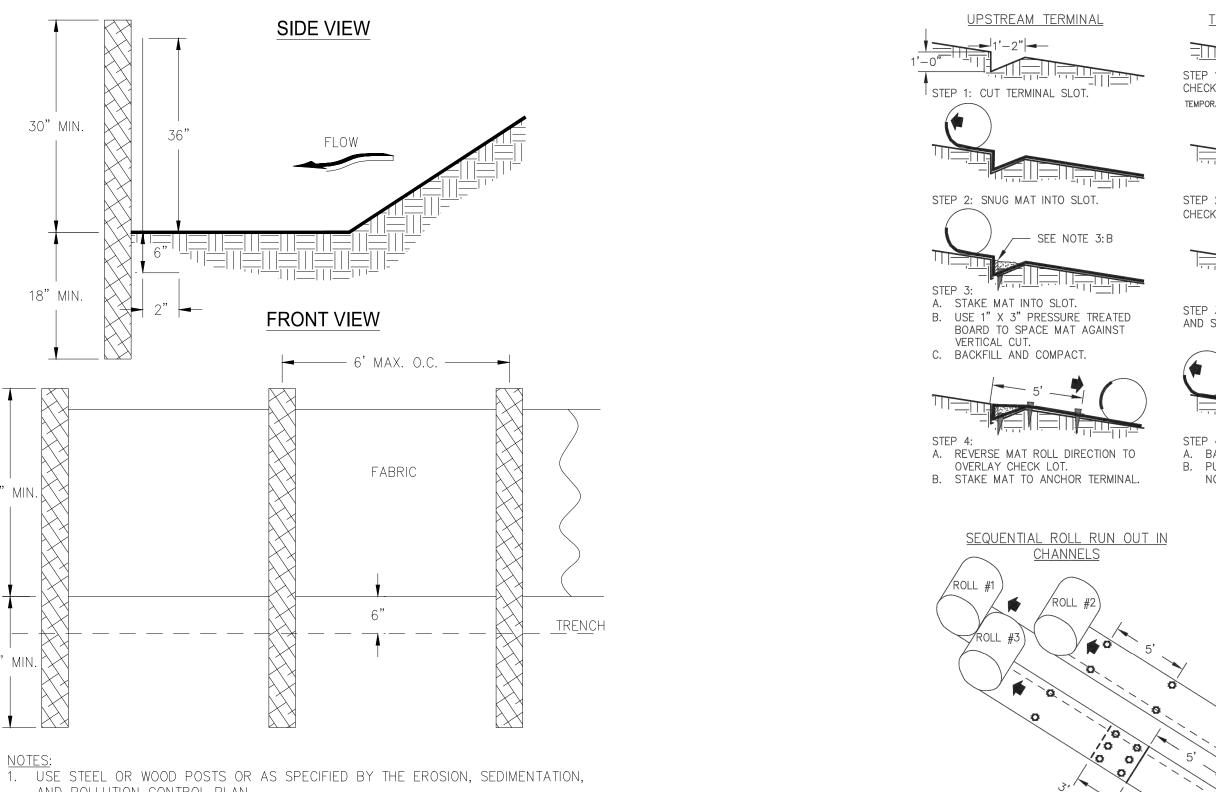






TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

BLANKET AND MATTING CROSS-SECTIONS



2. SILT FENCE - TYPE NON-SENSITIVE (SD1-NS) SHALL MEET THE SPECIFICATIONS

SILT FENCE -

3. Sd1-NS = TYPE A SILT FENCE.

N.T.S.

OF SILT FENCE, TYPE A AS DESCRIBED IN SECTION 171 OF THE "GDOT STANDARD

SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS", 2013 EDITION.

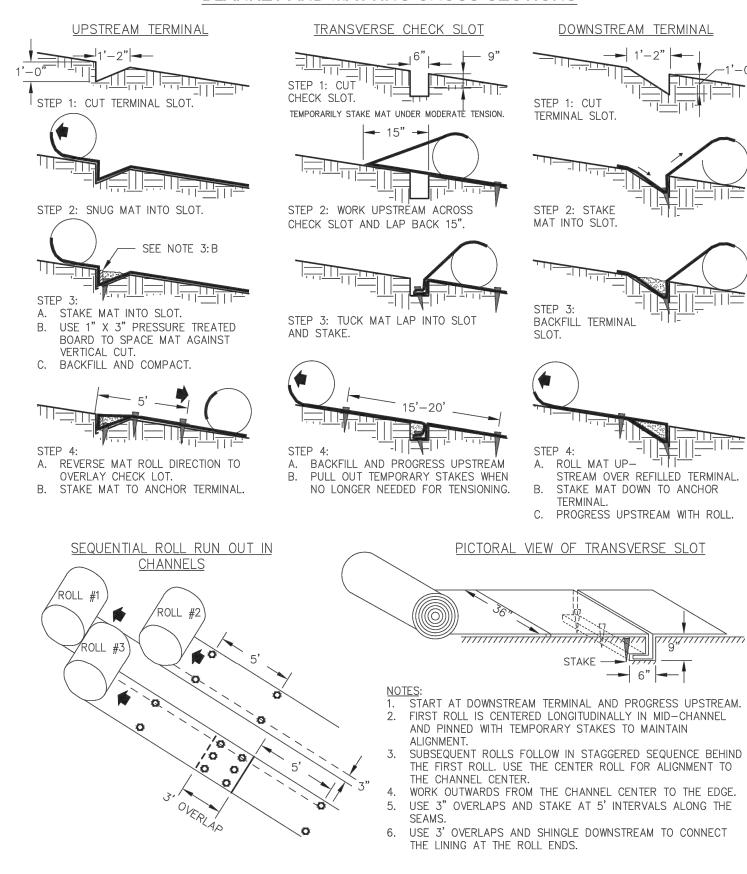


Figure 6-10.1 - Typical Installation Guidelines for Matting and Blankets

<u>DEFINITION</u>

CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS, AND DEMOLITION SITES.

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

METHOD AND MATERIALS

A. TEMPORARY METHODS

MULCHES, SEE STANDARD DS1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY), SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO STANDARD TB-TACKIFIERS AND BINDERS. RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

VEGETATIVE COVER. SEE STANDARD DS2 - DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING). SPRAY-ON ADHESIVES. THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. REFER TO STANDARD TB-TACKIFIERS AND BINDERS.

TILLAGE. THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

IRRIGATION. THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

BARRIERS. SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

CALCIUM CHLORIDE. APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

B. PERMANENT METHODS

PERMANENT VEGETATION. SEE STANDARD DS3 -DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

TOPSOILING. THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL. SEE STANDARD TP -TOPSOILING.

STONE. COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE STANDARD CR-CONSTRUCTION ROAD STABILIZATION.

EXIT DIAGRAM HARD SURFACE PUBLIC ROAD SEDIMENT TRAP (SEE NOTE 8) **CULVERT UNDER** ENTRANCE (IF NEEDED) DIVERSION RIDGE (SEE NOTE 6) N.S.A. R-2 (1.5"-3.5") COARSE AGGREGATE GEOTEXTILE UNDERLINER TIRE WASHRACK AREA/ TIRE WASHERS SUPPLY WATER TO WASH N.S.A. R-2 (1.5"-3.5") **ENTRANCE ELEVATION** WHEELS IF NECESSARY COARSE AGGREGATE **ORIGINAL GRADE** GEOTEXTILE UNDERLINER

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.

2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.

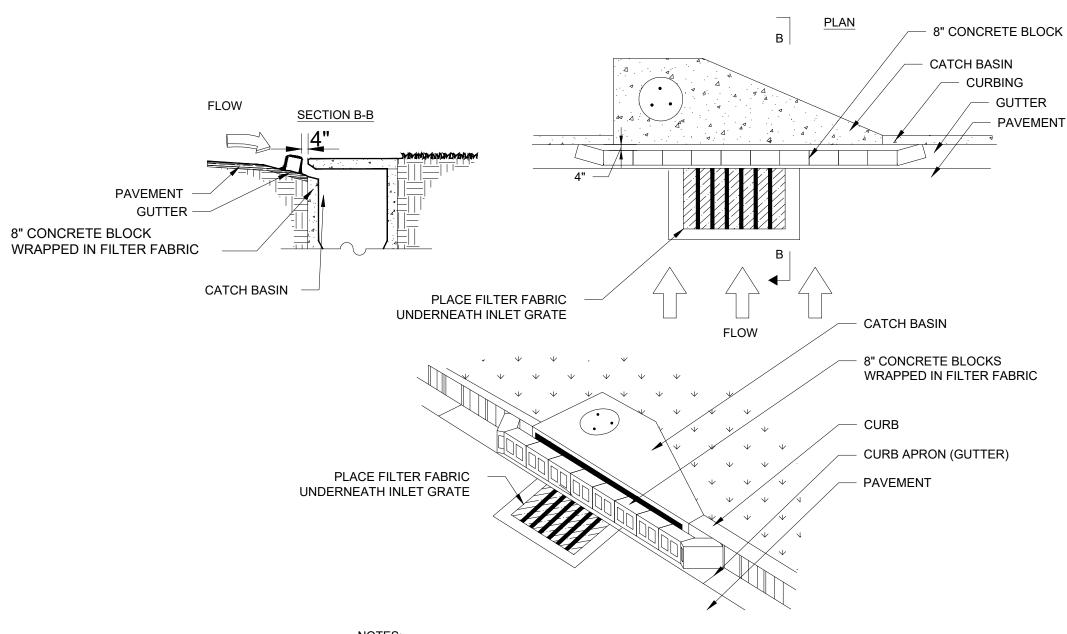
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE). 4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".

5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'. 6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.. 7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES. 8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT

DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE). 9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL <u>SUITABLE</u> FOR TRUCK TRAFFIC THAT

REMOVE MUD AND DIRT. 10.MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

> APORARY CONSTRUCTION EXIT SCALE: NONE



1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.

2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.

3. FACE OPENINGS IN BLOCKS OUTWARD.

4. LEAVE A GAP OF APPROXIMATELY 4 INCHES BETWEEN THE CURB AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT HAZARDOUS PONDING.

5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.





ARCADIS ARCADIS U.S., INC. 2839 PACES FERRY ROAD SUITE 900, ATLANTA, GA 30339 TE: 770-431-8666 WWW.ARCADIS.COM

CONSULTANTS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER

SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

400 VETERANS PARKWAY FAYETTEVILLE, GA 30214

REVISIONS

0 | 07/07/2023 | ISSUE FOR BID DATE ISSUED FOR COPYRIGHT: ARCADIS U.S., INC. PROJECT STATUS: ISSUE FOR BID PROJECT NO.:

JULY 2023 ESC-09 TAYLOR H. TITTLE, PE

MADISON A. SMITH, EIT DAVID A. WILSON, PE CHECKED BY:

SHEET TITLE

EROSION & SEDIMENT CONTROL

EROSION & SEDIMENT CONTROL DETAILS (SHEET 1 OF 2)

AS SHOWN

ESC-09

SHEET 22 OF 60

SEEDING SCHEDULE TEMPORARY COVER

<u>SPECIES</u>	BROADCAST <u>RATES — PLS</u> PER <u>ACRE</u>	BROADCAST <u>RATES – PLS</u> PER 1000 <u>SQ. FT.</u>	RESOURCE AREA^3	(S	SOL ATE	ID I S,	DOT	ES TEE	IND L	INES	3 11	IDIC	IMU Cate L D.	ΞD	S.)
				J	F	М	Α	М	J	J	Α	S	0	N	D
BARLEY (HORDEUM VULGARE)			M-L												
ALONE	3 BU. (144 LBS.)	3.3 LB.	Р								12			٠,	
IN MIXTURES	½ BU. (24 LBS.)	0.6 LB.	С	J	F	М	A	М	J	J	A	S	0	N	D
LESPEDEZA, ANNUAL (LEZPEDEZA STRIATA)			M-L												
ALONE	40 LBS.	0.9 LB.	Р		=1	-									
IN MIXTURES	10 LBS.	0.2 LB.	С	##I		M	A	М	J	J	A	S	0	N	<u> </u>
LOVEGRASS, WEEPING (ERAGROSTIS CURVULA)			$M\!-\!L$			##I									
ALONE	4 LBS.	0.1 LB.	Р			••			***						
IN MIXTURES	2 LBS.	0.05 LB.	С	J	F		Α	М	J	.1	Α	S	0	N	<u> </u>
MILLET, BROWNTOP (PANCIUM FASCICULATUM)			M-L			IVI				•	-				
ALONE	40 LBS.	0.9 LB.	Р				1 11 10			-,					
IN MIXTURES	10 LBS.	0.2 LB.	С		F	М	A	М	J	J	Δ	S	0	N	<u></u>
MILLET, PEARL (PENNESETUM GLAUCUM)			M-L P			IVI	,,,,,								
ALONE	50 LBS.	1.1 LB.	C	Ļ	Г	14	A				A	-	0	N	F
OATS (AVENA SATIVA)			M-L	J	Γ	M	A	M	J	J	A	2	U	IN.	•
ALONE	4 BU. (128 LBS.)	2.9 LB.	Р											-	1
IN MIXTURES	1 BU. (32 LBS.)	0.7 LB.	С	J	F	М	Α	М	J	J	A	S	0	N	D
RYE (SECALE CEREALE)			M-L			IVI	-	IVI							•
ALONE	3 BU. (168 LBS.)	3.9 LB.	Р								##				
IN MIXTURES	½ BU. (28 LBS.)	0.6 LB.	С	J	F	М	Δ	М		J	Λ	S	0	N	D
TRITICALE (X-TRITICOSECALE)						IVI		IVI							
ALONE	3 BU. (144 LBS.)	3.3 LB.	С	###								**			##
IN MIXTURES	½ BU. (24 LBS.)	0.6 LB.			г	14		М			Α	S	0	N	D
RYEGRASS, ANNUAL (LOLIUM TEMULENTUM)	, , ,		M-L					М	J	J	A		0		
ALONE	40 LBS.	0.9 LB.	P C			,,,,,									
SUDANGRASS (SORGHUM SUDANESE)			M-L	J	ŀ	M	A	М	J	J	A	S	0	N	D
(SORGHUM SUDANESE) ALONE	60 LBS.	1.4 LB.	P C			188)									
WHEAT (TRITICUM AESTIVUM)			M-L	J	F	М	Α	М	J	J	Α	S		N	D
ALONE	3 BU. (180 LBS.)	4.1 LB.	P												
IN MIXTURES	½ BU. (30 LBS.)	0.7 LB.	C												

LIME: APPLY AT A RATE OF ONE TON PER ACRE FERTILIZER: APPLY 500-700 POUNDS OF 10-10-10 OR EQUIVALENT PER ACRE

SEEDING SCHEDULE PERMANENT COVER

				_											
<u>SPECIES</u>	BROADCAST RATES - PLS PER ACRE	BROADCAST RATES - PLS PER 1000 <u>SQ. FT.</u>	RESOURCE AREA^3	(S) D IN	SOL AT NDI	LID ES, CA	NG LIN DO TED NAL	ES TT Pl	INI ED ERI	DIC LII MIS	NES SIE	3			UN
							Α					S	0	N	D
BERMUDA, SPRIGS (CYNODON DACTYLON)	40 CU. FT. OR	0.9 CU. FT.	M-L P			M 1				135 135					
COASTAL COMMON OR TIFT 44	SOD PLUGS 3'X3'	0.3 00.11.	С	J	F	M	Α	М	(4,4) J	. 	A	S	0	N	D
BERMUDA, COMMON (CYNODON DACTYLON)							, (SEE			
ALONE	10 LBS.	0.2 LB.					U		UL						
W/ OTHER PERRENIALS	6 LBS.	0.1 LB.		J	F	М	Α		EEI J		Α	S	0	N	D
FESCUE, TALL (FESTUCA															
ARUNDINACEA)			M-L			_							122		
ALONE	50 LBS.	1.1 LB.	Р								##				
W/OTHER PERRENIALS	30 LBS.	0.7 LB.		J	F	М	Α	М	J	J	Α	S	0	N	D
CROWNVTECH (CORONILLA VARIA) W/WINTER ANNUALS OR			M-L												
COOL SEASON GRASSES	15 LBS.	0.3 LB.	Р	J	F	М	Α	М	J	J	Α	S	0	N	D
REED CANARY GRASS (PHARLARIS			M-L												
ARUNDINACEA) ALONE	50 LBS.	1.1 LB.													
W/OTHER PERRENIALS	30 LBS.	0.7 LB.	Р		F	М	Α	М	.1	.I	A		0		D
				Ĭ					_	Ť	, ,				_
CENTIPEDE (EREMOCHLOA	BLACK SOD		Р												
OPHIUROIDES)	ONLY		С												
				J	F	М	Α	М	J	J	Α	S	0	N	D
LOVEGRASS, WEEPING (ERAGROSTIS CURVULA)			M-L												
ALONE	4 LBS.	0.1 LB.	Р		•										
W/OTHER PERRENIALS	2 LBS.	0.05 LB.	С		F	М	Α	М	J	J.	Α	S	0	N	D
LESPEDEZA, SERICEA (LESPEDEZA CUNEATA)									J	,	, ,	3			٦
SCARIFIED	60 LBS.	1.4 LB.	M-L												
UNSCARIFIED	75 LBS.	1.7 LB.	Р												
UNSCARII ILD						l									

1. YOU MAY USE ANY OTHER SPECIES IF APPROVED BY MANUAL OF EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

ALL FERTILIZER RATE AND APPLICATION, SEED QUALITY, SEEDBED PREPERATION, INNOCULANTS, PLANTING, AND MULCHING SHALL COMPLY WITH MANUAL OF EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

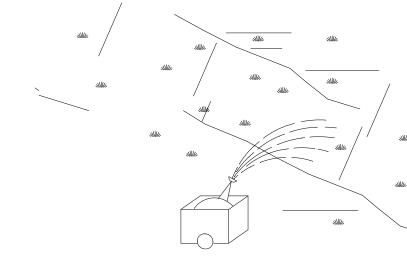
FERTILIZER REQUIREMENTS PERMANENT COVER

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
	FIRST	6-12-12	1500 lbs./AC.	50-100 lbs./AC. 1/2/
1. COOL SEASON GRASSES	SECOND	6-12-12	1000 lbs./AC.	
	MAINTENANCE	10-10-10	400 lbs./AC.	30 lbs./AC.
2. COOL SEASON	FIRST	6-12-12	1500 lbs./AC.	0-50 lbs./AC. 1/
GRASSES	SECOND	10-10-10	1000 lbs./AC.	
& LEGUMES	MAINTENANCE			
3. GROUND	FIRST	10-10-10	1300 lbs./AC. 3/	
COVERS	SECOND	10-10-10	1300 lbs./AC. 3/	
	MAINTENANCE	10-10-10		
4. PINE SEEDLINGS	FIRST	20-10-5	ONE 21-GRAM PELLET PER SEEDLING PLACED IN THE CLOSING HOLE	
5. SHRU	FIRST	0-10-10	700 lbs./AC.	
LESPEDEZA	MAINTENANCE	0-10-10	700 lbs./AC. 4/	
6. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500 lbs./AC.	30 lbs./AC. 5/
7	FIRST	6-12-12	1500 lbs./AC.	50-100 lbs./AC. 2/6/
7. WARM SEASON GRASSES	SECOND	6-12-12	800 lbs./AC.	50-100 lbs./AC. 2/
	MAINTENANCE	400 lbs./AC.	30 lbs./AC.	
8. WARM SEASON	FIRST	6-12-12	1500 lbs./AC.	50 lbs./AC. 6/
GRASSES & LEGUMES	SECOND	0-10-10	1000 lbs./AC.	
a LEGOIVIES	MAINTENANCE	0-10-10	400 lbs./AC.	

LIME: APPLY AT A RATE OF ONE TON PER ACRE

- 1/ APPLY IN SPRING FOLLOWING SEEDING. 2/ APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
- 3/ APPLY IN 3 SPLIT APPLICATIONS.
- 4/ APPLY WHEN PLANTS ARE PRUNED. 5/ APPLY TO GRASS SPECIES ONLY.
- 6/ APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

SCALE: NONE



ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS.

- 1. < 12 MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATION.
- 2. SITE PREPARATION: - GRADING AND SHAPING
- SEEDBED PREPARATION - APPLY LIME AND FERTILIZER
- PLANT SEEDINGS, SELECT SPECIES BY SEASON AND REGION
- APPLY MULCHING MATERIAL IF NEEDED - IRRIGATE IF NEEDED BUT NOT @ RATE TO CAUSE EROSION
- 3. PLANTING DATES DEPEND ON SPECIES AND REGION (MOUNTAIN, PIEDMONT OR COASTAL)

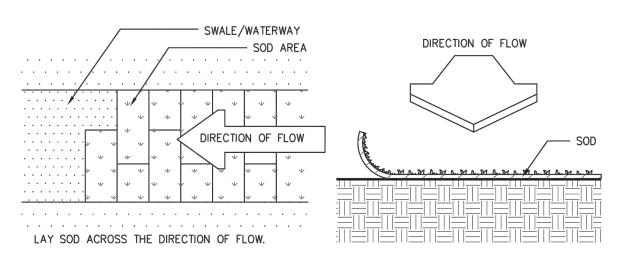
NOTES: CONTRACTOR SHALL STABILIZE ALL AREAS WITH TEMPORARY VEGETATION THAT ARE TO BE EXPOSED WITHOUT STORM WATER PROTECTION FOR LONGER THAN 7 DAYS.



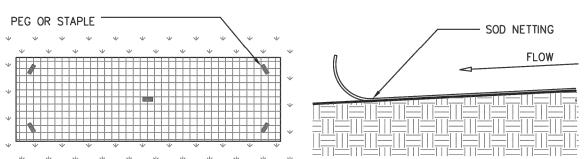
(WITH TEMPORARY SEEDINGS)

SODDED WATERWAYS

SOD DIRECTIONS

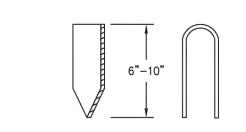


NETTING DIRECTIONS



LAY NET WITH THE DIRECTION OF FLOW.

PEG DETAIL



IN CRITICAL AREAS, SECURE SOD WITH NETTING USING STAPLES. USE PEGS OR STAPLES TO FASTEN SOD FIRMLY -- AT THE ENDS OF STRIPS AND IN THE CENTER, OR EVERY 3-4 FEET IF MOW, DRIVE PEGS OR STAPLES FLUSH

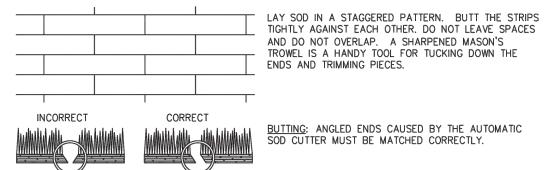
Source: Va. DSWC

Figure 6-6.1

WITH THE GROUND.

SOD MAINTENANCE AND INSTALLATION

SOD LAYOUT AND PREPARATION



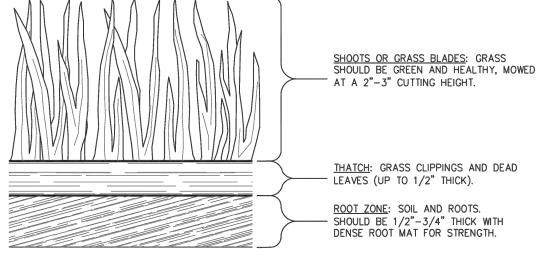
DIRECTIONS FOR INITIAL MAINTENANCE

Step 1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL

Step 2. Water to a depth of 4" as needed. Water well as soon as the sod

Step 3. MOW WHEN THE SOD IS ESTABLISHED -- IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").

APPEARANCE OF GOOD SOD



Source: Va. DSWC

Figure 6-6.2

Know what's **below.**

SEALS **ISSUE FOR BID**

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CONSULTANTS

2839 PACES FERRY ROAD

SUITE 900, ATLANTA, GA 30339

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

> 400 VETERANS PARKWAY FAYETTEVILLE, GA 30214

> > **REVISIONS**

0	07/07/2023	ISSUE FOR BID		
NO.	DATE	ISSUED FOR	В	
COPYF 2023	right: Ai	RCADIS U.S., INC.		
PROJE	CT STATUS:	ISSUE FOR BID		
PROJECT NO.:		30135792		
DATE:		JULY 2023		
FILE N	AME:	ESC-09		

SHEET TITLE **EROSION & SEDIMENT CONTROL**

DESIGNED BY: TAYLOR H. TITTLE, PE

CHECKED BY:

MADISON A. SMITH, EIT

DAVID A. WILSON, PE

EROSION & SEDIMENT CONTROL DETAILS (SHEET 2 OF 2)

SCALE:

ESC-10

SHEET 23 OF 60

AS SHOWN

Table 6-6.1. Fertilizer Requirements for Soil Surface Application Fertilizer Fertilizer Fertilizer Rate Rate Season Type (lbs/acre) (lbs/sq ft) 10-10-10 1000 .025 Fall

Table 6-6.2 Sod Planting Requirements						
Grass	Varieties	Resource Area	Growing Season			
Bermudagrass	Common Tifway Tifgreen Tiflawn	M-L,P,C P,C P,C P,C	warm weather			
Bahiagrass	Pensacola	P,C	warm weather			
Centipede	-	P,C	warm weather			
St. Augustine	Common Bitterblue Raleigh	С	warm weather			
Zoysia	Zoysia Emerald Myer		warm weather			
Tall Fescue	Kentucky	M-L,P	cool weather			
Fertiliz	Table 6-6 zer Requirem					
	i		Nitrogon			

Table 6-6.3 Fertilizer Requirements for Sod							
Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)			
cool	first	6-12-12	1500	50-100			
season	second	6-12-12	1000	-			
grasses	maintenance	10-10-10	400	30			
warm	first	6-12-12	1500	50-100			
season	second	6-12-12	800	50-100			
grasses	maintenance	10-10-10	400	30			

DISTURED AREA STABILIZATION (WITH PERMANENT VEGETATION)

DISTURED AREA STABILIZATION

ESTABLISHING A PERMANENT VEGETATIVE COVER AS A DISTURBED AREA. 1. APPLICABLE ON HIGHLY ERODIBLE OR SEVERELY ERODED AREAS, SOMETIMES CALLED "CRITICAL AREAS" INCLUDING: - CUT OR FILL SLOPES - EARTH SPILLWAYS - BORROW AREAS

(WITH MULCHING)

311///

ESTABLISHING A TEMPORARY PROTECTION FOR

1. MULCH MATERIALS SHALL CONSIST OF DRY

CONTROL MATTING OR NETTING, OR

2. THIS STANDARD APPLIED TO GRADES OR

POLYETHYLENE FILM.

STRAW OR HAY AT 2.5 TONS PER ACRE, WOOD

CLEARED AREAS WHICH MAY BE SUBJECTED TO

AND CAN BE STABILIZED WITH A MULCH COVER.

EROSION CONTROL FOR 6 MONTHS OR LESS,

CHIPS AT 6 TO 9 TONS PER ACRE, EROSION

DISTURBED AREAS USING SPECIFIC MULCH MATERIALS.

- CHANNEL BANKS - BERMS

- ROADSIDES - SPOIL AREAS - GULLIED LANDS

2. GRADING AND SHAPING REQ'D.

WHERE FEASIBLE AND PRACTICAL. 3. SEEDBED PREPARATION (NOT REQ'D. IF USING HYDRAULIC SEEDING AND FERTILIZING)

SLOPE SEEDBED

3:1 OR FLATTER > 4" DEEP 2:1 TO 3:1 1" TO 4" DEEP

2:1 OR STEEPER DEPRESSIONS EVERY 6"-8" WITH HAND TOOL

4. HAVE SOIL ANALYZED FOR LIME AND FERTILIZER RATE. 5. MULCH ALL SLOPES STEEPER THAN 3%AND IN BOTTOM

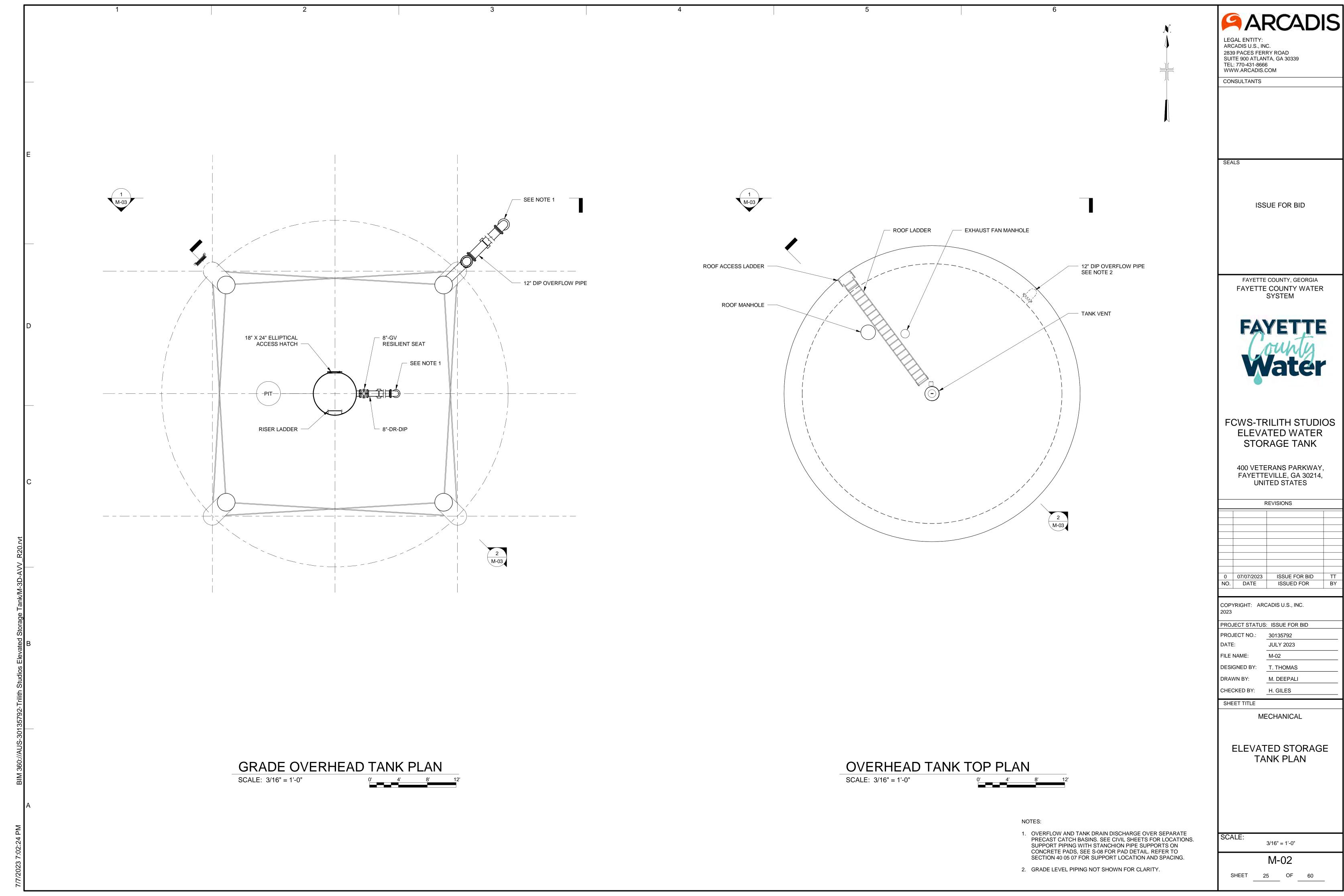
OF SPILLWAYS AND ON ROADBANKS.

6. ANCHOR MULCH IMMEDIATELY.

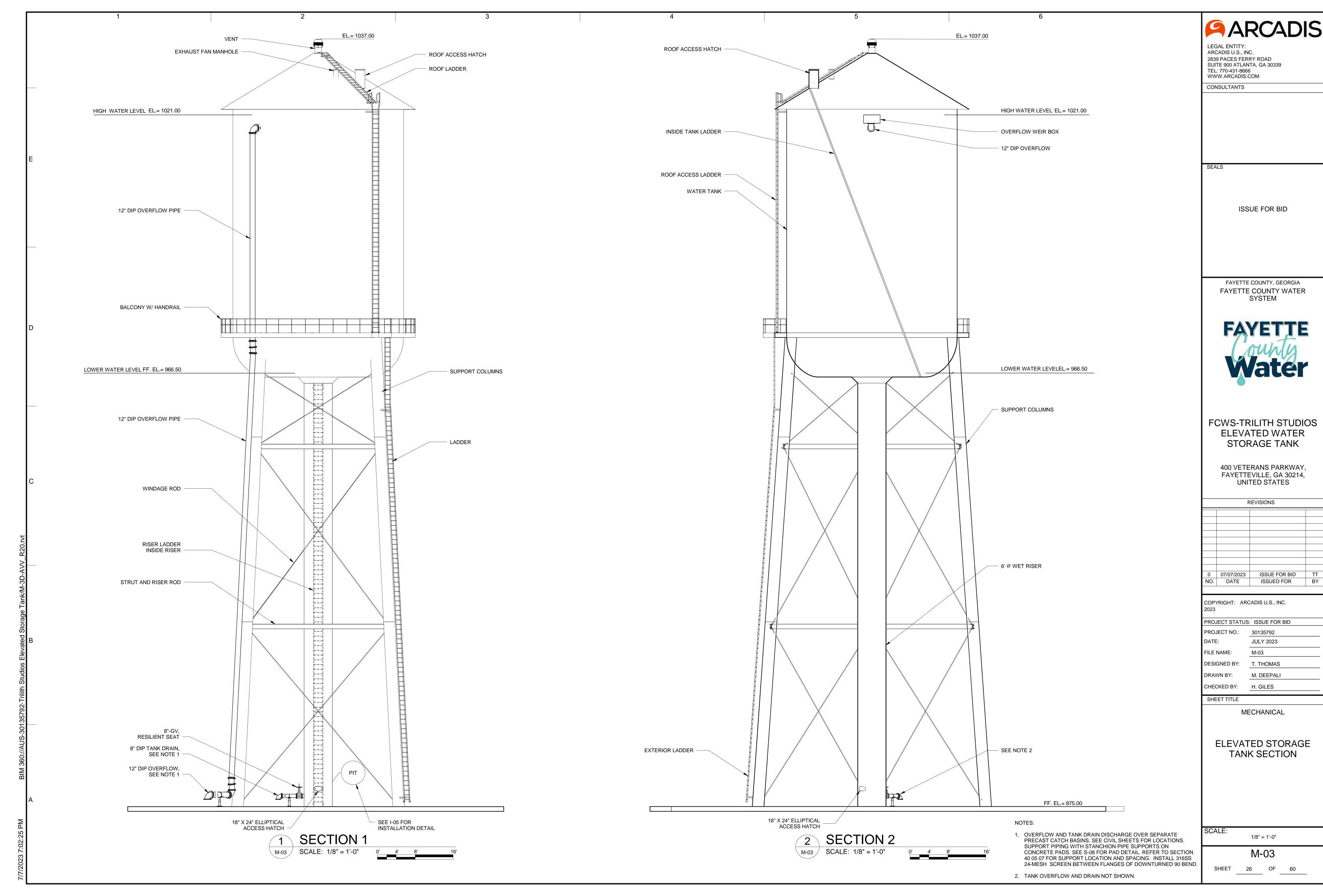
(WITH SOD)

Call before you dig.

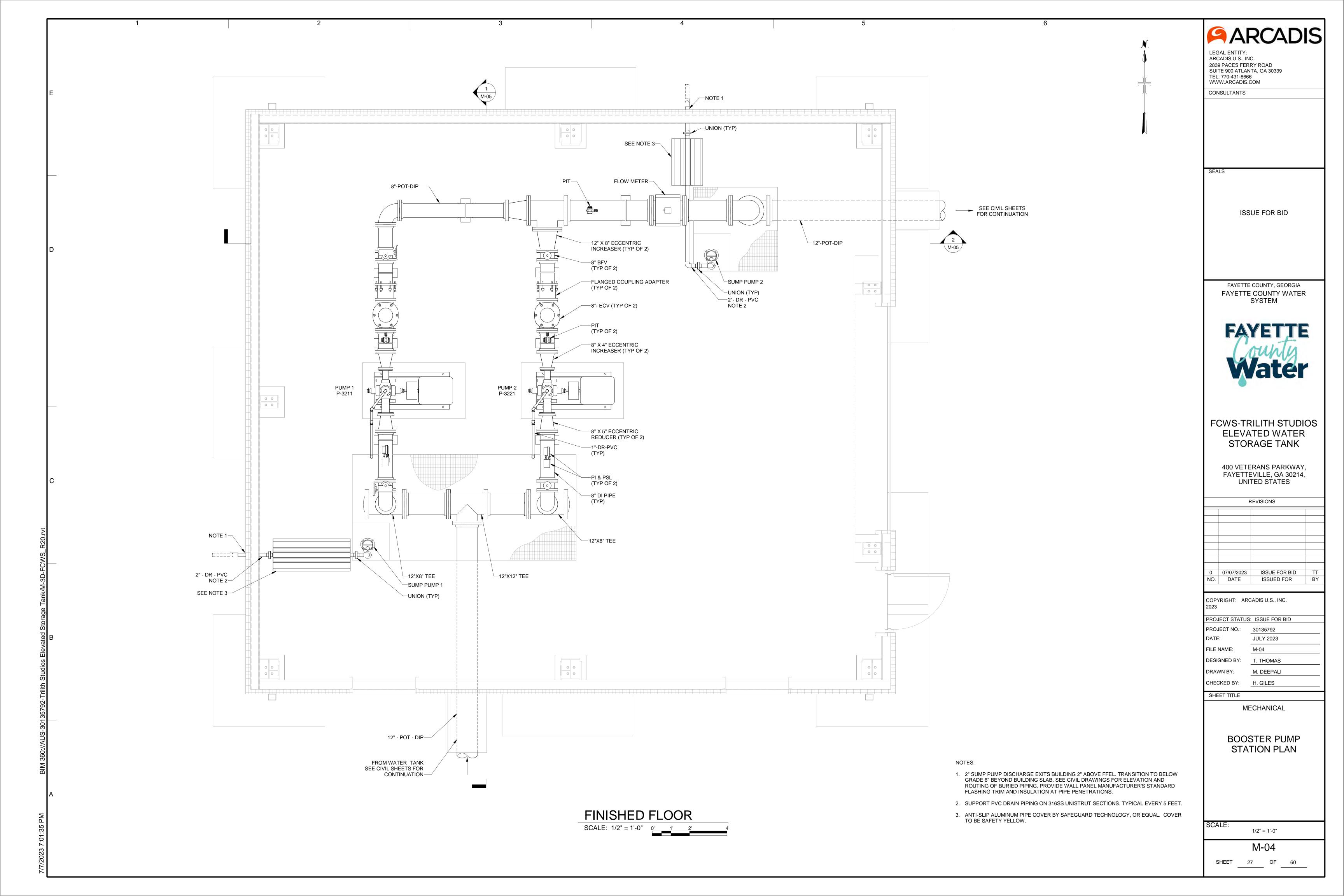
ARCADIS NOTES: LEGAL ENTITY: 1. PIPELINES, VALVES AND EQUIPMENT SHALL BE FURNISHED, FABRICATED, ERECTED AND OTHERWISE INSTALLED TO LINES, ELEVATIONS LOCATIONS, AND DIMENSIONS AS SHOWN, SPECIFIED OR REQUIRED FOR A COMPLETE ARCADIS U.S., INC. INSTALLATION. THE CONTRACTOR SHALL MEASURE ALL DIMENSIONS SHOWN PROPERLY AND SHALL TAKE SUCH FIELD DIMENSIONS AS MAY BE NECESSARY TO PROPERLY INSTALL ALL PIPELINES, VALVES AND EQUIPMENT. DIMENSIONS AND LOCATIONS OF EXISTING EQUIPMENT, PIPING, AND STRUCTURES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO NEW EQUIPMENT FABRICATION. 2839 PACES FERRY ROAD SUITE 900 ATLANTA, GA 30339 2. ALL PIPELINES, VALVES AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH CONTRACT DOCUMENTS AND MANUFACTURER'S SPECIFICATIONS, IN A NEAT WORKMANLIKE MANNER, AND IN TEL: 770-431-8666 WWW.ARCADIS.COM ACCORDANCE WITH APPROVED SHOP AND WORKING DRAWINGS. CONSULTANTS 3. ALL CONSTRUCTION MATERIALS REQUIRING STORAGE SHALL BE STORED IN STRICT CONFORMANCE WITH CONTRACT DOCUMENTS, MANUFACTURER'S SPECIFICATIONS, RECOMMENDATIONS AND INSTRUCTIONS. 4. SEQUENCE OF WORK: REFER TO SPECIFICATION SECTION 01 14 16 - COORDINATION WITH OWNER'S OPERATIONS. 5. THE INSTALLATION DEPICTED IN THESE PLANS IS BASED UPON THE PEERLESS AE SERIES SPLIT-CASE PUMP. IF A DIFFERENT MANUFACTURER THAN THAT IS LISTED IN THE SPECIFICATION SECTION 43 21 12.23 -CENTRIFUGAL AXIAL SPLIT CASE PUMPS IS USED, THE CONTRACTOR IS FULLY RESPONSIBLE TO MAKE ALL ADJUSTMENTS FOR A COMPLETE AND OPERABLE SYSTEM, INCLUDING ANY REDESIGN COST BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER. 6. REFER TO ELECTRICAL FOR ROOM HAZARDOUS & CORROSIVE AREA CLASSIFICATION. **ISSUE FOR BID** SCHEMATIC PIPING SYMBOLS VALVE LEGEND FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER WELD NECK FLANGE SYM PLAN ELEV SYSTEM \odot AIR RELEASE VALVE (AR) FLANGED AIR/VACUUM VALVE (AV) COMBINATION AIR VALVE (CA) MECHANICAL JOINT BALL VALVE (BV) **GROOVED END** BALL CHECK VALVE (BC) WELDED BUTTERFLY VALVE (BFV) BUTTERFLY DAMPER (BD) BELL & CHECK VALVE (CH) CPVC/PVC/COPPER FCWS-TRILITH STUDIOS **ELEVATED WATER** TELESCOPING VALVE (TV) (RESTRAINED JOINT) STORAGE TANK DIAPHRAGM VALVE (DV) FORGED STEEL SOCKET/THREADED 400 VETERANS PARKWAY, \triangle SUCTION FOOT VALVE (FV) FAYETTEVILLE, GA 30214, HDPE IPS (FLANGED) UNITED STATES THREE-WAY PLUG VALVE (TW) REVISIONS FOUR-WAY VALVE (FW) **ABBREVIATIONS** GLOBE VALVE (GL) CAST IRON HUBLESS GATE VALVE (GV) PIPE SERVICE FLANGED FLARE CURB STOP (CS) AIR (LOW PRESSURE PROCESS) COMPRESSED AIR KNIFE GATE VALVE (KV) BLIND FLANGE **DIVERTER GATE** DG НО HYDRAULIC OIL 0 07/07/2023 ISSUE FOR BID MUD VALVE (MD) ISSUED FOR HIGH PRESSURE PLANT WATER HPW3 NO. DATE **EXPANSION JOINT** LS LEVEL SENSOR NEEDLE VALVE (NV) OF OVERFLOW POT POTABLE WATER COPYRIGHT: ARCADIS U.S., INC. FLEXIBLE COUPLING SAM SAMPLE PINCH VALVE (PI) SAN SANITARY PROJECT STATUS: ISSUE FOR BID **FLANGED AUTOMATIC PRESSURE** COUPLING ADAPTER REDUCING VALVES (PR) PROJECT NO.: 30135792 DATE: JULY 2023 AUTOMATIC PRESSURE SUSTAINING VALVES (PS) COUPLING ADAPTER **VALVE TYPES** FILE NAME: M-01 AUTOMATIC ELECTRONIC CONTROL VALVES DESIGNED BY: T. THOMAS ECCENTRIC PLUG VALVE (PV) DISMANTLING JOINT ARV AIR RELEASE VALVE AVV AIR VACUUM VALVE M. DEEPALI DRAWN BY: **EXAMPLE: NEW PIPE LABEL** RELIEF VALVE (RV) BFV BUTTERFLY VALVE CHECKED BY: H. GILES HARNESSED BLV BALL VALVE DISMANTLING JOINT \searrow ECV ELECTRIC CHECK VALVE SLUICE GATE (SL) SHEET TITLE G۷ GATE VALVE GBV GLOVE VALVE SLIDE GATE (SG) DIAMETER PIPE HEAT TRACED/ MECHANICAL KGV KNIFE GATE VALVE SLIDE PLATE (SP) (INCHES) SERVICE MATERIAL PRESSURE REDUCING VALVE PRV PSV PRESSURE SUSTAINING VALVE \bowtie SOLENOID VALVE (SV) SG SLUICE GATE MECHANICAL SOLENOID VALVE EXAMPLE: VALVE LABEL FO=FAIL OPEN LEGENDS, SYMBOLS PIPE MATERIALS FC=FAIL CLOSED AND ABBREVATIONS **BLACK STEEL** COPPER DIAMETER CPVC CHLORINATED POLYVINYL CHLORIDE (INCHES) TYPE CS CARBON STEEL DIP DUCTILE IRON PVC POLYVINYL CHLORIDE **RPVC** REINFORCED PVC FLEXIBLE HOSE SSTL STAINLESS STEEL ST STEEL SCALE: NTS M-01 SHEET 24 OF 60

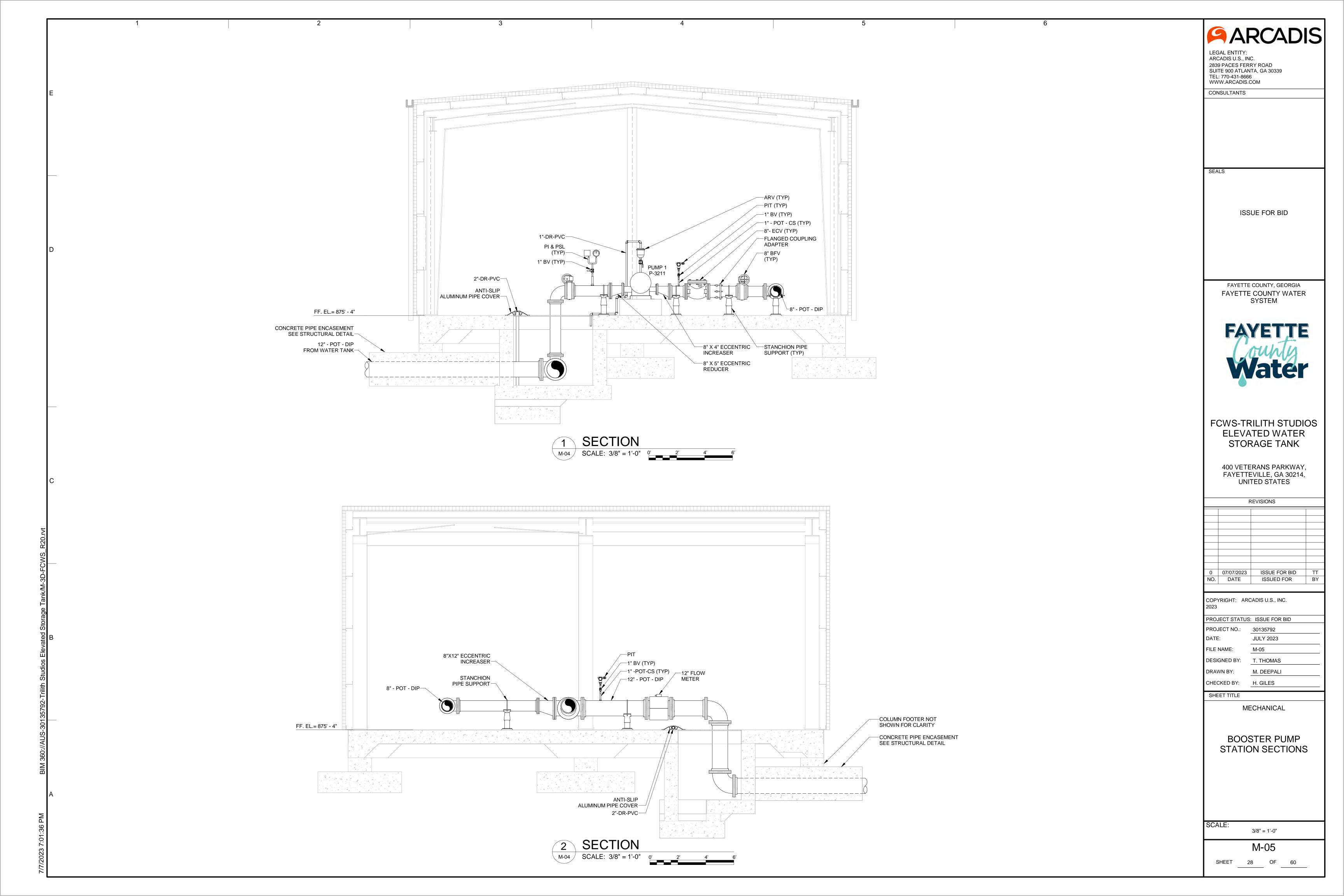


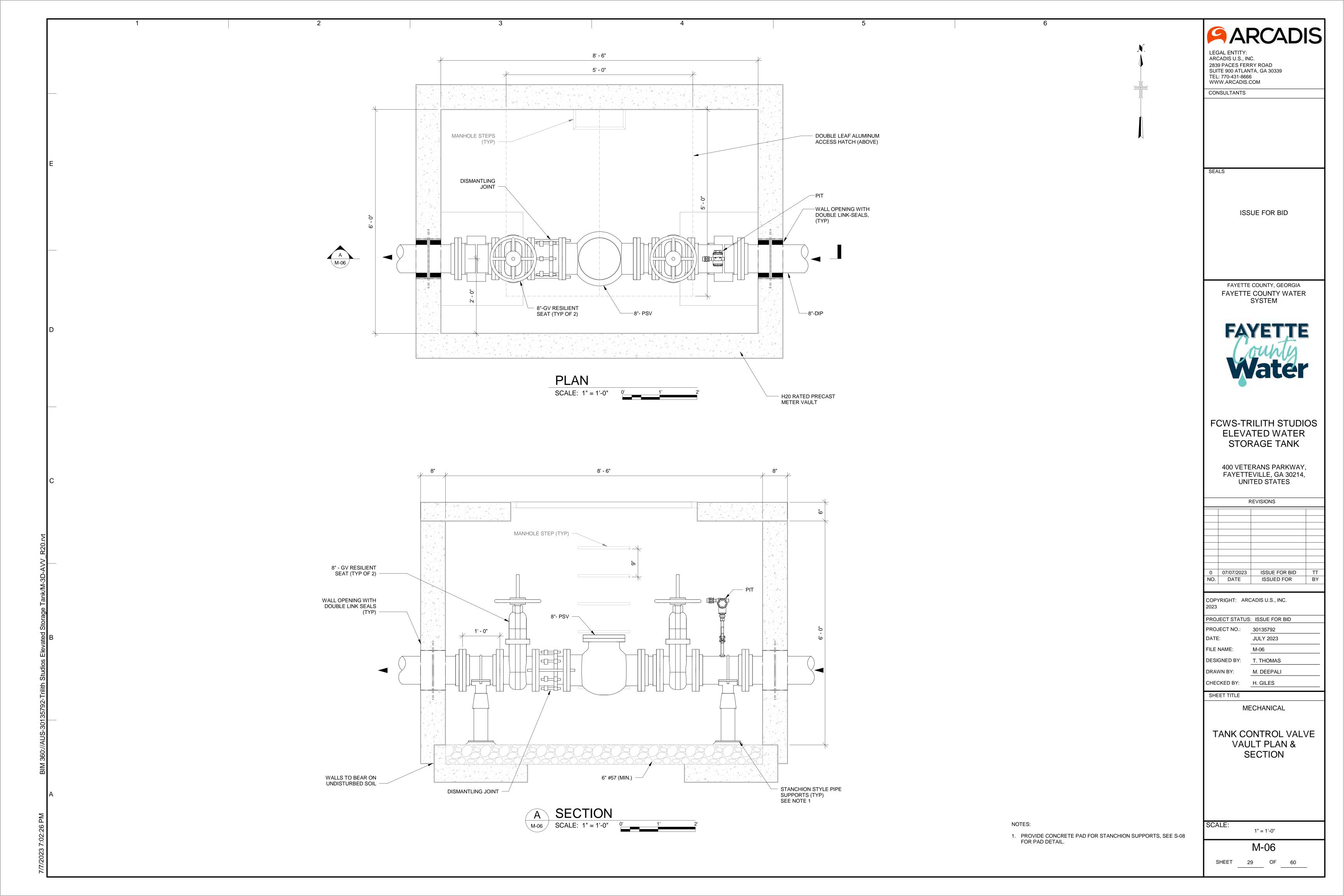
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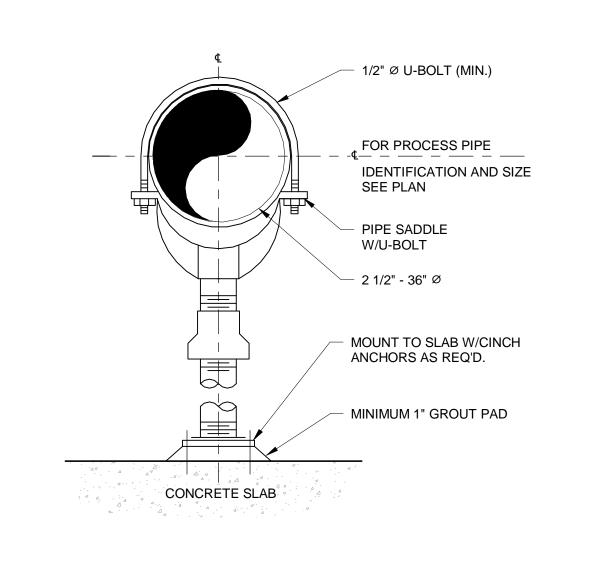


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0	07/07/2023	ISSUE FOR BID	TT
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		I.	









STANCHION PIPE SUPPORT DETAIL NOT TO SCALE

> THREADED TIE RODS (TYP)

> > COUPLING

PIPE DIA 2"-8"=18" PIPE DIA 10"-48"=24"

CONFORM TO AWWA M11.

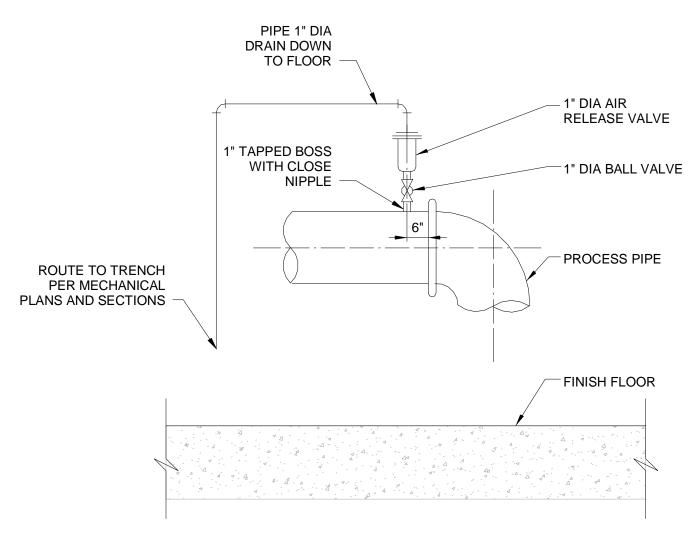
1. THE NUMBER OF TIE RODS, HARNESS LUGS CONFIGURATION AND

MATERIAL THICKNESS SHALL BE IN ACCORDANCE WITH ANSI/HI 14.4.A.4.6.1

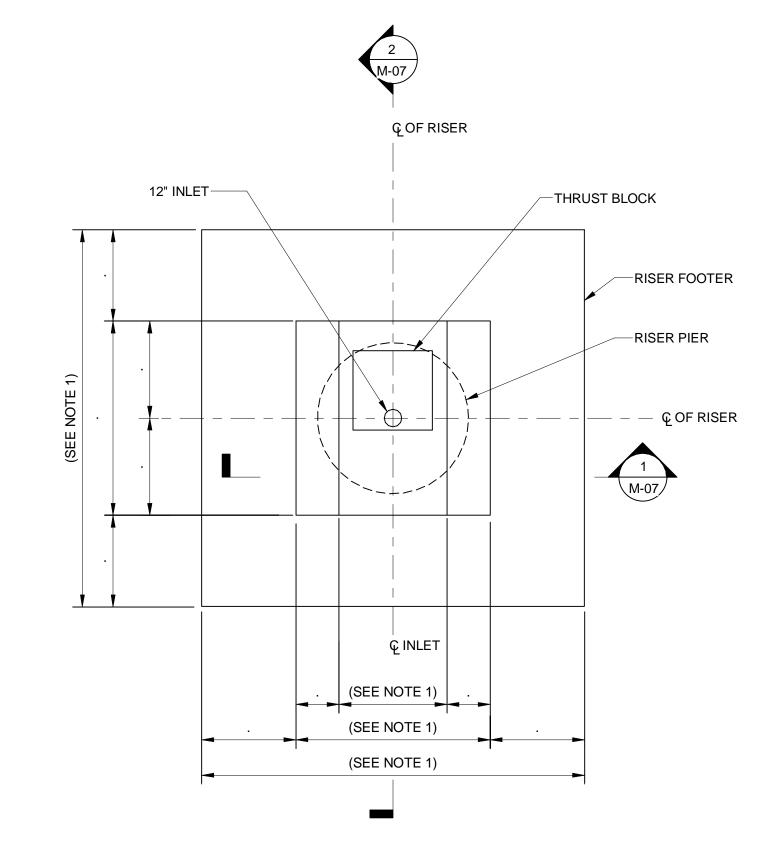
FOR PIPING CONNECTED TO A PUMP. OTHER PIPING CONNECTIONS SHALL

DETAIL NOTE:

GUSSET PLATE (TYP)



AIR RELEASE VALVE DETAIL NOT TO SCALE



HARNESSED FLANGED COUPLING ADAPTER DETAIL NOT TO SCALE

- EXTRA LONG FLANGE BOLTS

CAST IRON OR

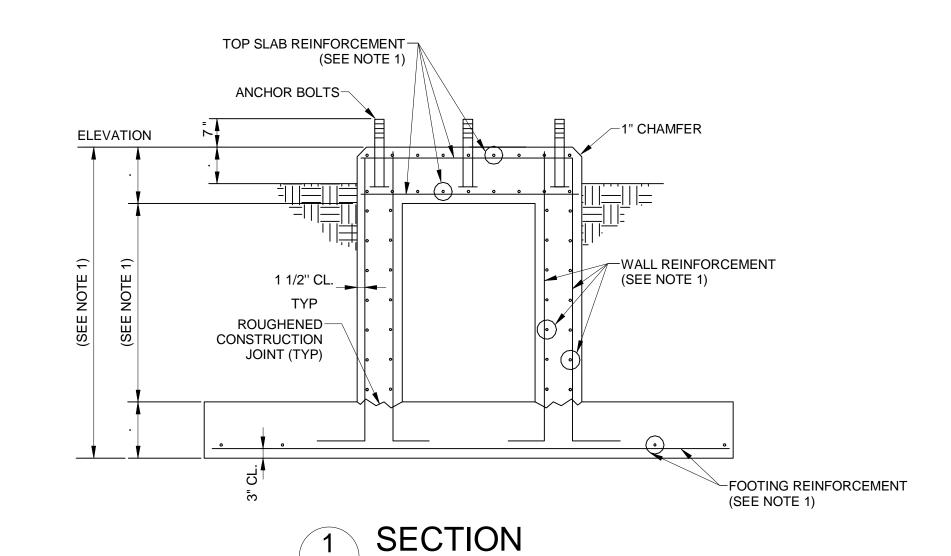
HARNESS LUG WELDED TO PIPE (SEE NOTE)

DUCTILE IRON PIPE

CARBON STEEL OR

STAINLESS STEEL PIPE

CENTER PIER PLAN NOT TO SCALE



STANDARD WEIGHT STEEL INLET/OUTLET PIPE -CEMENT-LINED D.I. BASE ELBOW (M.J. x M.J.) THRUST BLOCK (SEE PLAN VIEW DETAIL) POUR AFTER BASE ELBOW IS INSTALLED

CENTER PIER FOUNDATION DIMENSIONS AND CONCRETE
REINFORCEMENT REQUIREMENTS SHALL BE DETERMINED BY

TANK CONTRACTOR.

SECTION NOT TO SCALE

ARCADIS LEGAL ENTITY: ARCADIS U.S., INC. 2839 PACES FERRY ROAD SUITE 900 ATLANTA, GA 30339 TEL: 770-431-8666 WWW.ARCADIS.COM CONSULTANTS

SEALS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

> 400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, **UNITED STATES**

REVISIONS NO. DATE ISSUED FOR

PROJECT STATUS: ISSUE FOR BID PROJECT NO.: 30135792 JULY 2023

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DESIGNED BY: T. THOMAS DRAWN BY: M. DEEPALI CHECKED BY:

FILE NAME:

H. GILES

SHEET TITLE

MECHANICAL

M-07

MECHANICAL DETAILS

SCALE:

M-07

NTS

SHEET 30 OF 60

EMBEDMENT A OR G STRAIGHT BAR LENGTH WITH EMBEDMENT STD HOOK-LENGTH -STRAIGHT 90° HOOK

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CONSULTANTS

SEALS

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FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



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PROJECT STATUS: ISSUE FOR BID PROJECT NO.: 30135792 DATE: JULY 2023

FILE NAME: S-01 DESIGNED BY: C. GALLO / P. LUNKAD V. SRIPAL DRAWN BY:

D. DUNCAN CHECKED BY:

SHEET TITLE

STRUCTURAL

GENERAL NOTES

SCALE:

S-01

NO SCALE

SHEET 31 OF 60

- G-15 DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS.
- CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
- OPENINGS AND PENETRATIONS: THE CONTRACTOR SHALL SUBMIT COMPOSITE DRAWINGS INDICATING ALL FLOOR OPENINGS AND PENETRATIONS THROUGH STRUCTURAL MEMBERS REQUIRED TO ACCOMMODATE THE HVAC. PLUMBING AND ELECTRICAL WORK THE CONTRACTOR SHALL FOLLOW THE TYPICAL FRAMING DETAILS AT OPENINGS AND REINFORCEMENT DETAILS AT PENETRATIONS THROUGH STRUCTURAL MEMBERS. ACCORDINGLY, THE CONTRACTOR SHALL SUBMIT SHOP DETAILS TO THE ENGINEER FOR REVIEW.

STRUCTURAL METALS

- S-1 DETAIL, FABRICATE, AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, LATEST EDITION.
- S-2 STEEL MATERIAL:
 - A) STRUCTURAL TUBING, ASTM A 500, GRADE C PER CODE B) STRUCTURAL PIPE, ASTM A 53, GRADE B
 - C) W SHAPES, ASTM A992
 - D) ALL OTHER SHAPES ASTM A572 GRADE 50
 - E) PLATES AND ANGLES ASTM A 36 (UON)
- S-3 DO NOT PAINT STEEL SURFACES WHICH ARE TO BE WELDED OR ENCASED IN CONCRETE.

	MIN LAP LENGTHS FOR				MIN EMBEDMENT LENGTHS				MIN STD. HOOKS			
BAR	BEAMS AND	BEAMS AND COLUMNS* SLABS AND WALLS **		SLABS AND WALLS ** FOR BEAMS FOR SLABS		WITH	90°	13	5°			
SIZE	CLASS B		CLASS B		AND COLUMNS *		AND W	AND WALLS **		A OR G	A OR G	Н
	TOP***	OTHERS	TOP***	OTHERS	TOP***	OTHERS	TOP***	OTHERS	НООК	A OR G	AORG	п
#3	25	19	16	16	19	15	12	12	5	6	4	2.5
#4	33	25	20	16	25	19	15	12	7	8	4.5	3
#5	41	31	25	19	31	24	19	15	9	10	5.5	3.75
#6	49	37	29	23	37	29	23	18	10	12	8	4.5
#7	71	54	43	33	54	42	33	25	12	14	9	5.25
#8	81	62	49	37	62	48	37	29	14	16	10.5	6
#9	91	70	60	46	70	54	46	36	15	19	-	-
#10	102	79	74	57	79	61	57	44	17	22	-	-
#11	114	87	89	69	87	67	68	53	19	24	-	-

135° HOOK

REINFORCEMENT LAP SPLICE, EMBEDMENT LENGTH AND STANDARD HOOKS TABLE IS BASED ON A MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 4000 PSI AND 60000 PSI

- THE MINIMUM LAP LENGTH FOR BEAMS, COLUMNS AND STRAIGHT EMBEDMENTS ARE BASED ON A 3 BAR DIAMETER MINIMUM CENTER TO CENTER BAR SPACING AND A 2 INCH
- ** THE MINIMUM LAP LENGTH FOR SLABS, WALLS AND STRAIGHT EMBEDMENTS ARE BASED ON A 6 INCH BAR SPACING AND A 2 INCH BAR COVER. IF THE LAP CONDITION DOES NOT CONFORM TO THESE REQUIREMENTS, THEN USE BEAM LAP LENGTHS; OR COMPLY WITH
- *** TOP BARS ARE DEFINED AS ALL HORIZONTAL BARS WITH 12" OR MORE FRESH CONCRETE
 - WHERE SPLICES ARE REQUIRED BETWEEN BARS OF DIFFERENT SIZES. THE LAP LENGTH SHALL BE NO LESS THAN THE EMBEDMENT LENGTH OF THE LARGER BAR OR THE LAP

GENERAL:

THIS STRUCTURAL QUALITY ASSURANCE PLAN IDENTIFIES THE RESPONSIBILITIES OF THE CONTRACTOR AND THE SPECIAL INSPECTOR IN PERFORMING THE TESTING AND INSPECTION OF THE WORK REQUIRED BY CHAPTER 17 OF THE BUILDING CODE THAT IS WITHIN THE SCOPE OF THE STRUCTURAL ENGINEERING SERVICES FOR THIS PROJECT. REFER TO OTHER PORTIONS OF THE CONSTRUCTION DOCUMENTS FOR TESTING AND INSPECTIONS REQUIRED OF MECHANICAL, ELECTRICAL, CIVIL, OR OTHER BUILDING COMPONENTS.

CONTRACTOR'S RESPONSIBILITIES:

CONTRACTOR SHALL NOTIFY SPECIAL INSPECTION AGENCY/LABORATORY AT LEAST 48 HOURS PRIOR TO START OF WORK AND COOPERATE WITH THE INDIVIDUAL SPECIAL INSPECTORS AND TESTING AGENCIES EMPLOYED BY THE OWNER TO FACILITATE CODE REQUIRED SPECIAL INSPECTIONS.

CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTION" SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT PER SECTION 1704.4.

SPECIAL INSPECTOR'S RESPONSIBILITIES:

THE SPECIAL INSPECTOR SHALL BE A LICENSED ENGINEER IN THE STATE OF GEORGIA OR PERFORMING APPROPRIATE DUTIES DIRECTLY UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF GEORGIA AND HAVE A THOROUGH UNDERSTANDING OF THE SPECIAL INSPECTION REQUIREMENTS OF THE 2018 IBC. THE SPECIAL INSPECTOR SHALL BE AN INDIVIDUAL OR INDIVIDUALS CERTIFIED OR EXPERIENCED TO PERFORM SUCH INSPECTIONS IN A PARTICULAR FIELD.

THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND FURNISH REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. PERIODIC REPORTS SHALL BE PROVIDED AND SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED TO THE SATISFACTION OF THE SPECIAL INSPECTOR. THE DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE WORK.

A WEEKLY REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED. AT THE COMPLETION OF THE SPECIAL INSPECTIONS, THE LICENSED PROFESSIONAL ENGINEER IN CHARGE OF PERFORMING THE SPECIAL INSPECTION SHALL CERTIFY THE FINAL SPECIAL INSPECTION REPORT AND AFFIX HIS/HER SEAL TO THE SPECIAL INSPECTOR'S FINAL REPORT. PROVIDE THREE (3) COPIES OF THIS REPORT TO THE PROJECT ENGINEER.

SOILS:

CONTRACTOR SHALL PERFORM THE FOLLOWING:

1. SUBMIT TEST REPORTS FOR ENGINEERED FILL. CONTRACTOR TO COORDINATE BUILDING DEPARTMENT INSPECTIONS AND SPECIAL INSPECTIONS.

SPECIAL INSPECTOR SHALL PERFORM THE FOLLOWING:

TABLE 1705.6 REQUIRED VERIFICATION AND INSPECTION	N OF SOILS	
VERIFICATION AND INSPECTION	С	Р
 VERIFY MATERIALS BELOW FOOTINGS AND SLAB- ON-GRADE ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. 	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPE DEPTH AND HAVE REACHED PROPER MATERIAL.	ER .	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS. AS A MINIMUM, PERFORM ONE TEST PER LIFT FOR EVERY 2,500 SQUARE FEET OF FILL PLACED.		Х
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	3	Х

C = CONTINUOUS P = PERIODIC

CAST-IN-PLACE CONCRETE:

CONTRACTOR SHALL PERFORM THE FOLLOWING:

- 1. ESTABLISH CONCRETE MIX DESIGN PROPORTIONS PER ACI 318. SUBMIT THREE COPIES OF THE CONCRETE MIX DESIGNS. INCLUDE THE FOLLOWING:
 - TYPE AND QUANTITIES OF MATERIALS
 - SLUMP AIR CONTENT
 - FRESH UNIT WEIGHT
 - AGGREGATES SIEVE ANALYSIS
 - DESIGN COMPRESSIVE STRENGTH LOCATION OF PLACEMENT IN STRUCTURE
 - METHOD OF PLACEMENT
 - METHOD OF CURING SEVEN-DAY AND 28-DAY COMPRESSIVE STRENGTHS
- 2. SUBMIT A CERTIFICATION FROM EACH MANUFACTURER OR SUPPLIER STATING THAT MATERIALS MEET THE REQUIREMENTS OF THE SPECIFIED ASTM AND ACI STANDARDS.
- 3. SUBMIT CERTIFICATION THAT THE READY-MIXED CONCRETE PLANT COMPLIES WITH THE REQUIREMENTS OF THE NATIONAL READY MIX CONCRETE ASSOCIATION.

SPECIAL INSPECTOR SHALL PERFORM THE FOLLOWING:

2. RI 3. IN 4. IN CO	SPECT REINFORCEMENT, INCLUDING PRESTRESSING ENDONS, AND VERIFY PLACEMENT. EINFORCING BAR WELDING: a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; b. INSPECT SINGLE PASS FILET WELDS, MAXIMUM 5/16"; AND A. INSPECT ALL OTHER WELDS. SPECT ANCHORS CAST IN CONCRETE. SPECT ANCHORS POST - INSTALLED IN HARDENED ONCRETE MEMBERS. b a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY	- X	P X X X X	REFERENCE STANDARD ACI 318 Ch: 20, 25.2, 25.3, 26.6.1-26.6.3 AWS D1.4 ACI 318: 26.6.4	IBC REFERENCE 1908.4
2. RI 3. IN 4. IN CO	ENDONS, AND VERIFY PLACEMENT. EINFORCING BAR WELDING: a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; b. INSPECT SINGLE PASS FILET WELDS, MAXIMUM 5/16"; AND A. INSPECT ALL OTHER WELDS. SPECT ANCHORS CAST IN CONCRETE. SPECT ANCHORS POST - INSTALLED IN HARDENED ONCRETE MEMBERS. b a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY		x x	25.3, 26.6.1-26.6.3 AWS D1.4	1908.4
3. IN 4. IN	a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; b. INSPECT SINGLE PASS FILET WELDS, MAXIMUM 5/16"; AND A. INSPECT ALL OTHER WELDS. SPECT ANCHORS CAST IN CONCRETE. SPECT ANCHORS POST - INSTALLED IN HARDENED ONCRETE MEMBERS. b a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY		Х	-	-
4. IN	SPECT ANCHORS POST - INSTALLED IN HARDENED ONCRETE MEMBERS. ^b a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY	-	Х		
C	ONCRETE MEMBERS. ^b a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY			ACI 318: 17.8.2	-
	OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. D. MECHANICAL ANCHORS AND ADHESIVE ANCHORS. NOT DEFINED IN 4.a.	Х	x	ACI 318: 17.8.2.4 ACI 318: 17.8.2	-
5. VI	ERIFY USE OF REQUIRED DESIGN MIX.	-	Х	ACI 318 Ch: 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
F(C(RIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS OR STRENGTH TESTS, PERFORM SLUMP AND AIR ONTENT TESTS, AND DETERMINE THE EMPERATURE OF THE CONCRETE.	х	-	ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	1908.10
	SPECT CONCRETE AND SHOTCRETE PLACEMENT FOR ROPER APPLICATION TECHNIQUES.	х	-	ACI 318: 26.5	1908.6, 1908.7, 1908.8
	ERIFY MAINTENANCE OF SPECIFIED CURING EMPERATURE AND TECHNIQUES.	-	Х	ACI 318: 26.5.3-26.5.5	1908.9
9. IN	SPECT PRESTRESSED CONCRETE FOR:				
	a. APPLICATION OF PRESTRESSING FORCE; AND b. GROUTING OF BONDED PRESTRESSING TENDONS.	X X	-	ACI 318: 26.10 ACI 318: 26.10	-
10. IN	SPECT ERECTION OF PRECAST CONCRETE MEBERS.	-	Х	ACI 318: Ch. 26.9	-
72 1A	ERIFY IN -SITU CONCRETE STRENGTH, PRIOR TO FRESSING OF TENDONS IN POST-TENSIONED CONCRETE ND PRIOR TO REMOVAL OF SHORES AND FORMS FROM EAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 26.11.2	-
	SPECT FORMWORK FOR SHAPE, LOCATION AND MENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	Х	ACI 318: 26.11.1.2 (b)	-

TABLE 1705.3

C = CONTINUOUS P = PERIODIC

ADHESIVE ANCHORS FOR ANCHORAGE INTO CONCRETE:

MANUFACTURERS:

- 1. HILTI HIT-RE 500 V3 EPOXY ADHESIVE ANCHORS
- OR AS APPROVED.
 - INJECTABLE TWO-COMPONENT ADHESIVE.
 - HILTI ANCHOR ROD HAS-R 316 STAINLESS STEEL THREADED ROD COMPLYING WITH
 - ASTM F593 CONDITION CW. ADHESIVE ANCHORAGE SYSTEM SHALL BE SEISMIC QUALIFIED WITH CURRENT
 - ICC-ES ESR REPORT (ICC-ES-ESR 3814). INSTALLERS TO BE TRAINED BY ANCHOR MANUFACTURER.
 - 10% OF ALL ADHESIVE ANCHORS TO BE LOAD TESTED, AS INSTALLED IN FIELD, TO ENSURE ALLOWABLE MANUFACTURER LOADS ARE ACHIEVED.

STRUCTURAL STEEL

CONTRACTOR SHALL PERFORM THE FOLLOWING:

- 1. SUBMIT CERTIFICATION THAT THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM REQUIRED WORK WITHOUT SPECIAL INSPECTIONS PER IBC 1704.2.5.2.
- 2. IF FABRICATOR IS NOT APPROVED, SPECIAL INSPECTION OF THE FABRICATED ITEMS SHALL BE REQUIRED. SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.
- 3. CONTRACTOR TO COORDINATE BUILDING DEPARTMENT INSPECTIONS AND SPECIAL INSPECTIONS.
- 4. SUBMIT CERTIFIED MILL TEST REPORTS FOR STRUCTURAL STEEL.
- 5. SUBMIT MANUFACTURER'S CERTIFICATE OF COMPLIANCE FOR HIGH-STRENGTH BOLTING AND WELD FILLER MATERIALS.

SPECIAL INSPECTOR SHALL PERFORM THE FOLLOWING:

- 1. SPECIAL INSPECTION FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360-16.
- 2. SUBMIT CERTIFICATION THAT THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM REQUIRED WORK WITHOUT SPECIAL INSPECTIONS.
- 3. IF FABRICATOR IS NOT APPROVED, SPECIAL INSPECTION OF THE FABRICATED SHALL BE REQUIRED. SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.
- 4. SPECIAL INSPECTION FOR SEISMIC RESISTANCE FOR STRUCTURAL STEEL SHALL BE PERFORMED AS SPECIFIED.

VERIFICATION AND INSPECTION	С	Р	REFERENCED STANDARD
MATERIAL VERIFICATION OF HIGH- STRENGTH BOLTS, NUTS AND WASHERS:			
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.		Х	ASTM MATERIAL SPECS; AISC 360 SECTION A3.3
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.		Х	
2. INSPECTIONS OF HIGH-STRENGTH BOLTING:			
A. SNUG TIGHT JOINTS		Х	AISC 360 SECTION M2.5
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD FORMED STEEL DECK:			
A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360.		Х	AISC 360 SECTION A3.1
B. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.		X	APPLICABLE ASTM STANDARDS
C. MANUFACTURER'S CERTIFIED TEST REPORT.		Х	
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:			
A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.		Х	AISC 360, SECTION A3.5, AND APPLICABLE AWS A5 DOCUMENT
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.		Х	
5. INSPECTION OF WELDING:			
A. STRUCTURAL STEEL & COLD- FORMED STEEL DECK:			
 COMPLETE AND PARTIAL PENETRATION AND GROOVE WELDS 	X		
2) MULTIPLE FILLET WELDS	Х		
3) SINGLE PASS FILLET WELDS > 5/16"	Х		AWS D1.1
4) PLUG AND SLOT WELDS	X		
5) SINGLE PASS FILLET WELDS <= 5/16"		Х	
6) FLOOR AND DECK ROOF WELDS		Х	AWS D1.3
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE:			
A. DETAILS SUCH AS BRACING AND STIFFENING		X	
B. MEMBER LOCATIONS		Х	
C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION		Х	
7. VERIFY EACH FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES		Х	
			C = CONTINUOUS

P = PERIODIC

LEGAL ENTITY: ARCADIS U.S., INC. 2839 PACES FERRY ROAD SUITE 900 ATLANTA, GA 30339 TEL: 770-431-8666 WWW.ARCADIS.COM

CONSULTANTS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, UNITED STATES

REVISIONS 07/07/2023 ISSUE FOR BID NO. DATE ISSUED FOR

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PROJECT STATUS: ISSUE FOR BID PROJECT NO.: 30135792

JULY 2023 FILE NAME: S-02 DESIGNED BY:

C. GALLO / P. LUNKAD V. SRIPAL DRAWN BY:

SHEET TITLE

CHECKED BY:

STRUCTURAL

D. DUNCAN

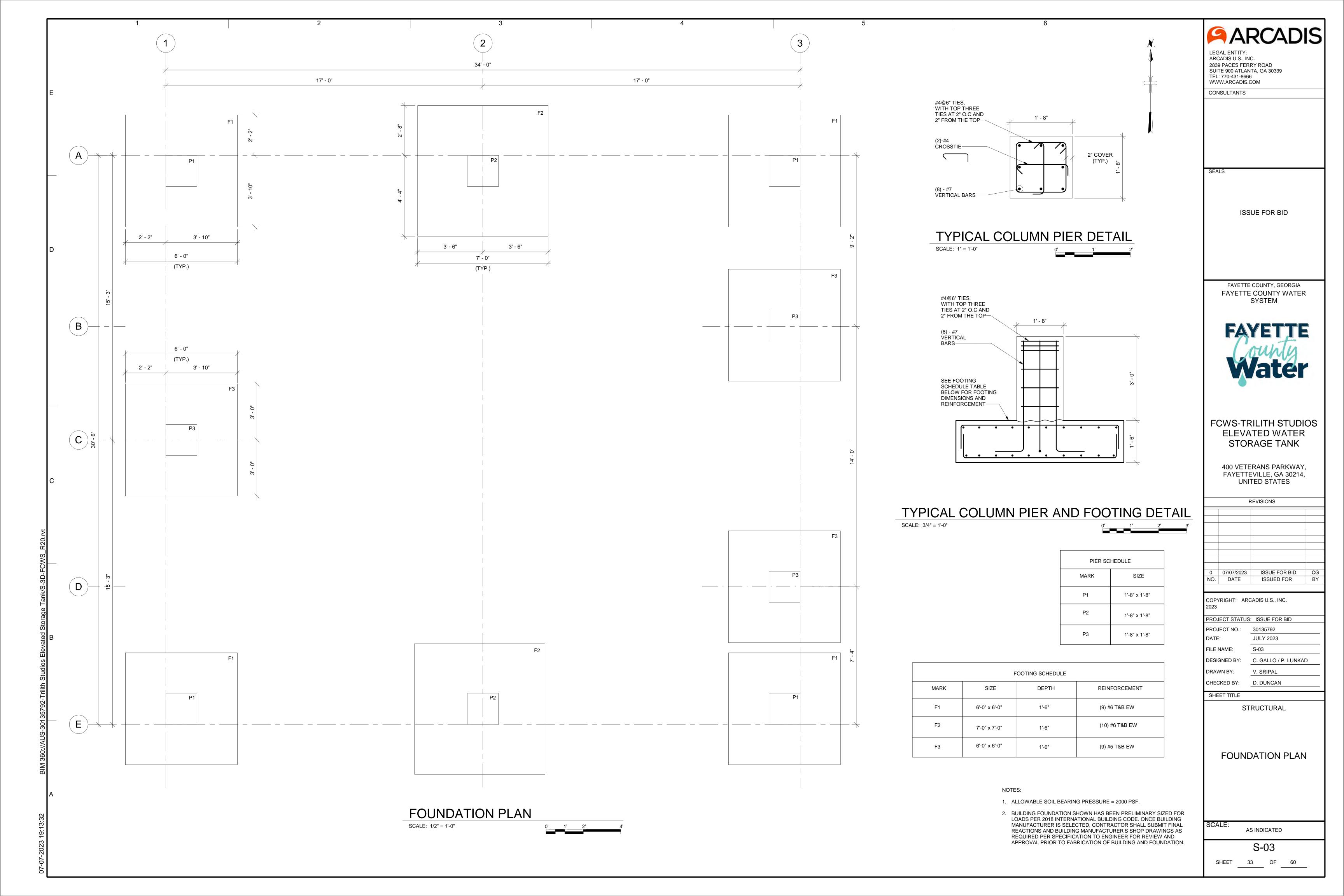
STRUCTURAL NOTES AND SPECIAL **INSPECTIONS**

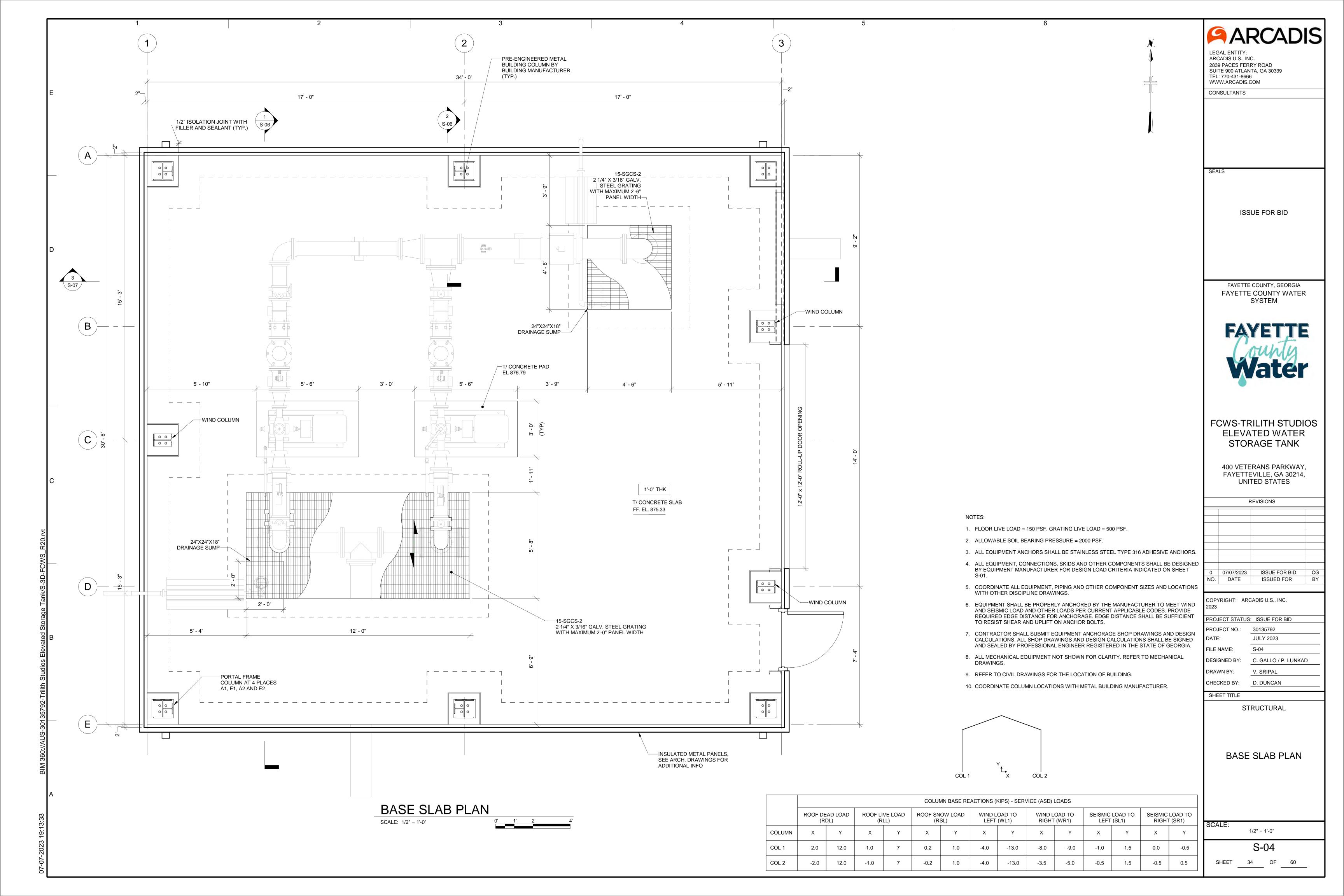
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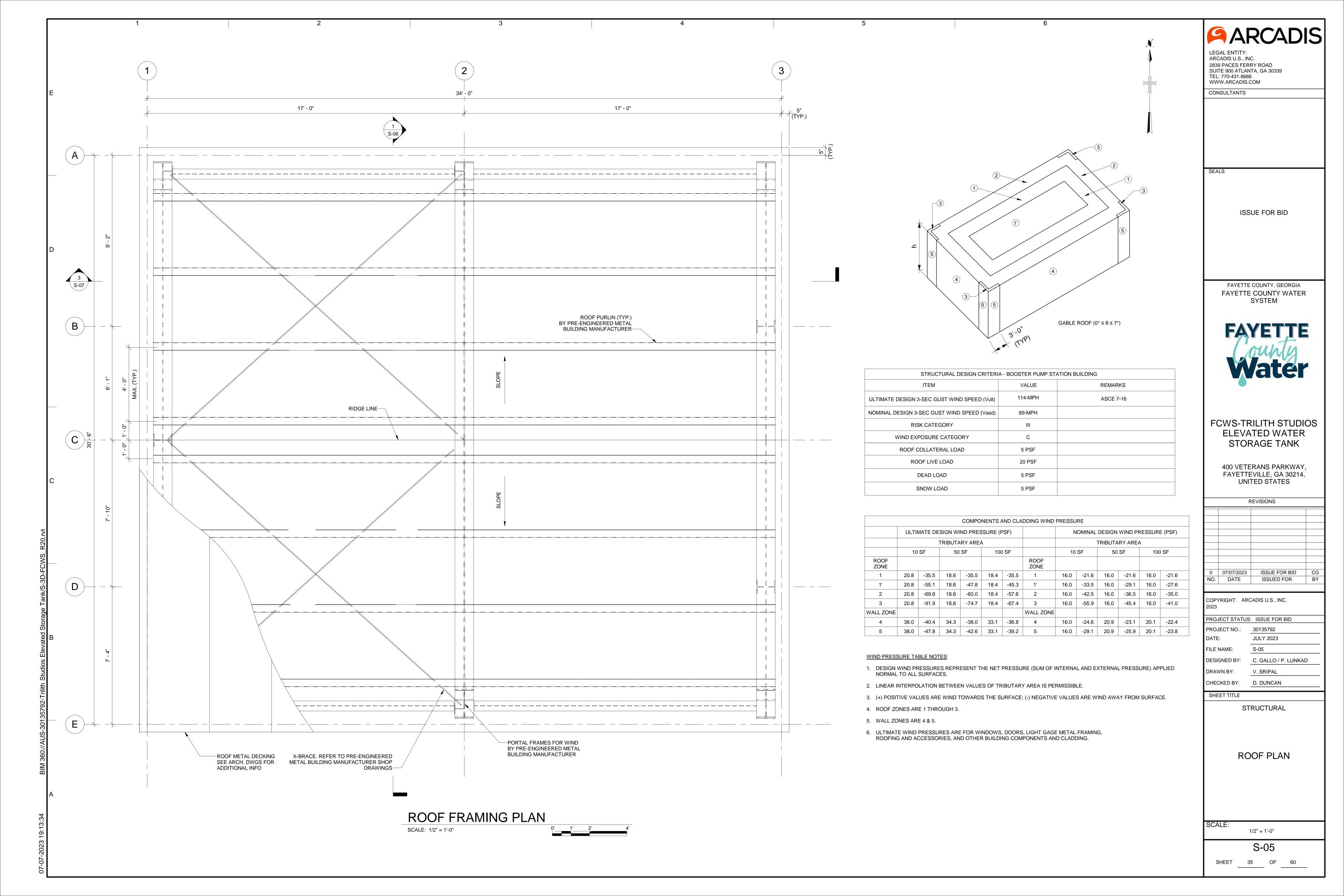
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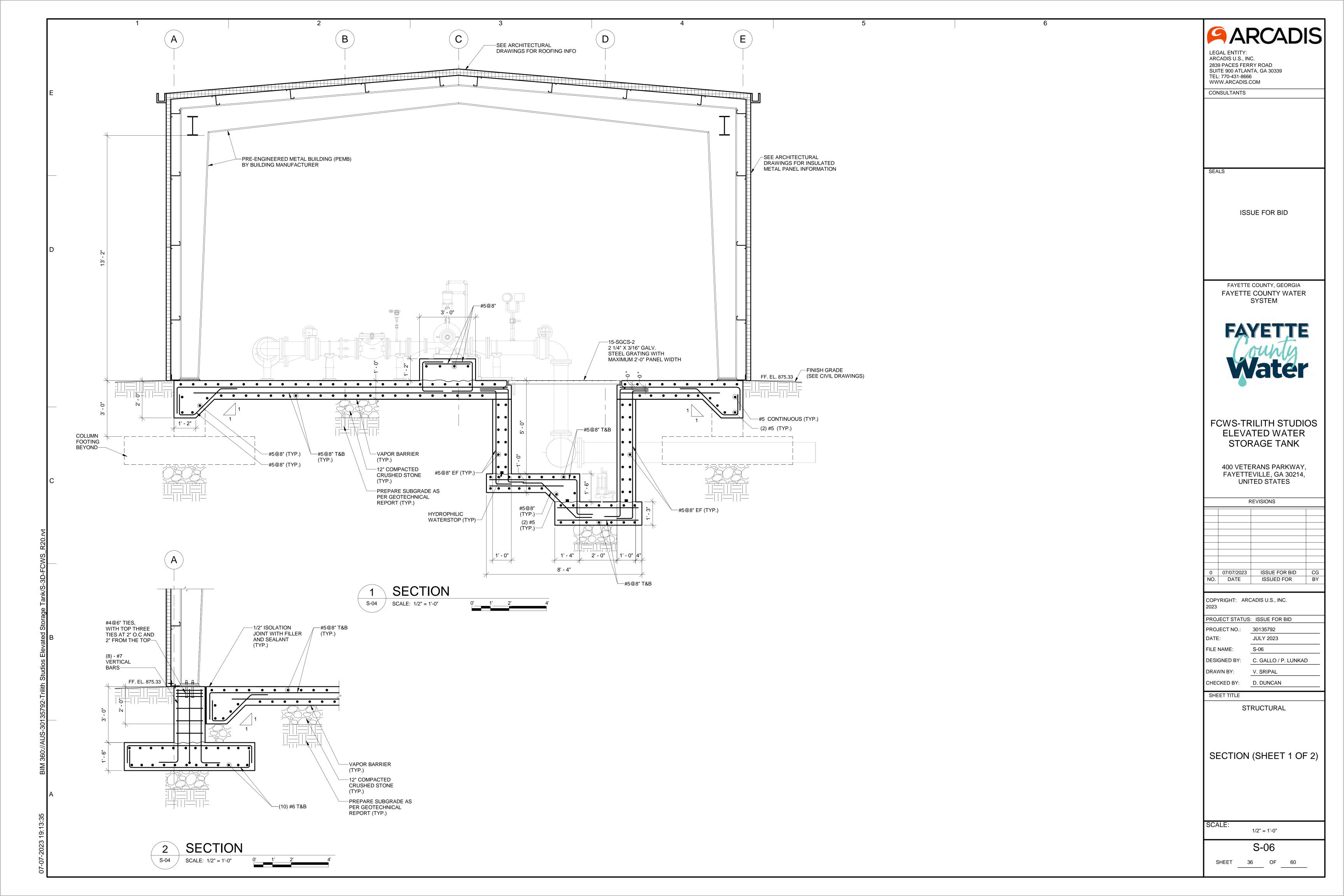
S-02

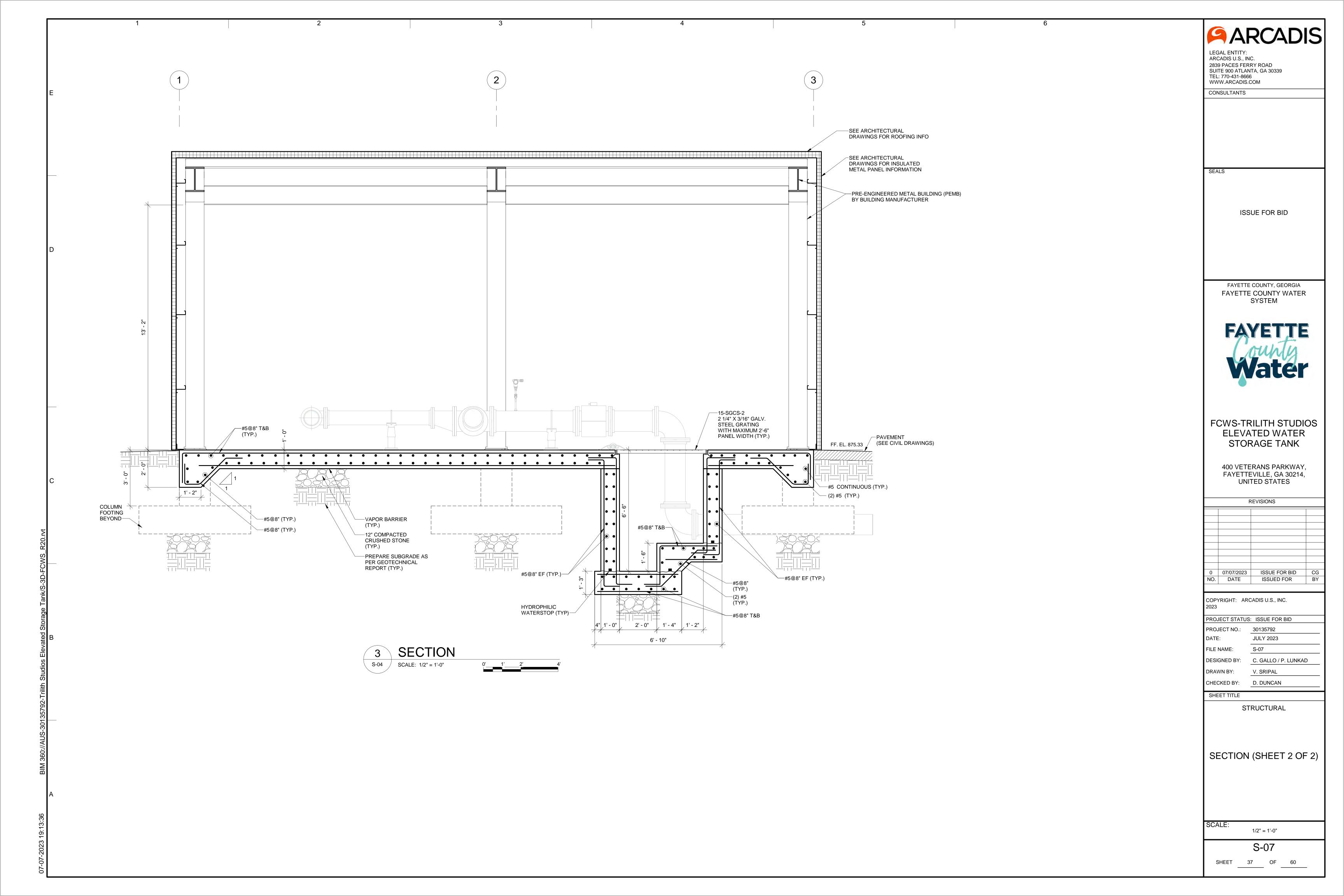
SHEET 32 OF 60

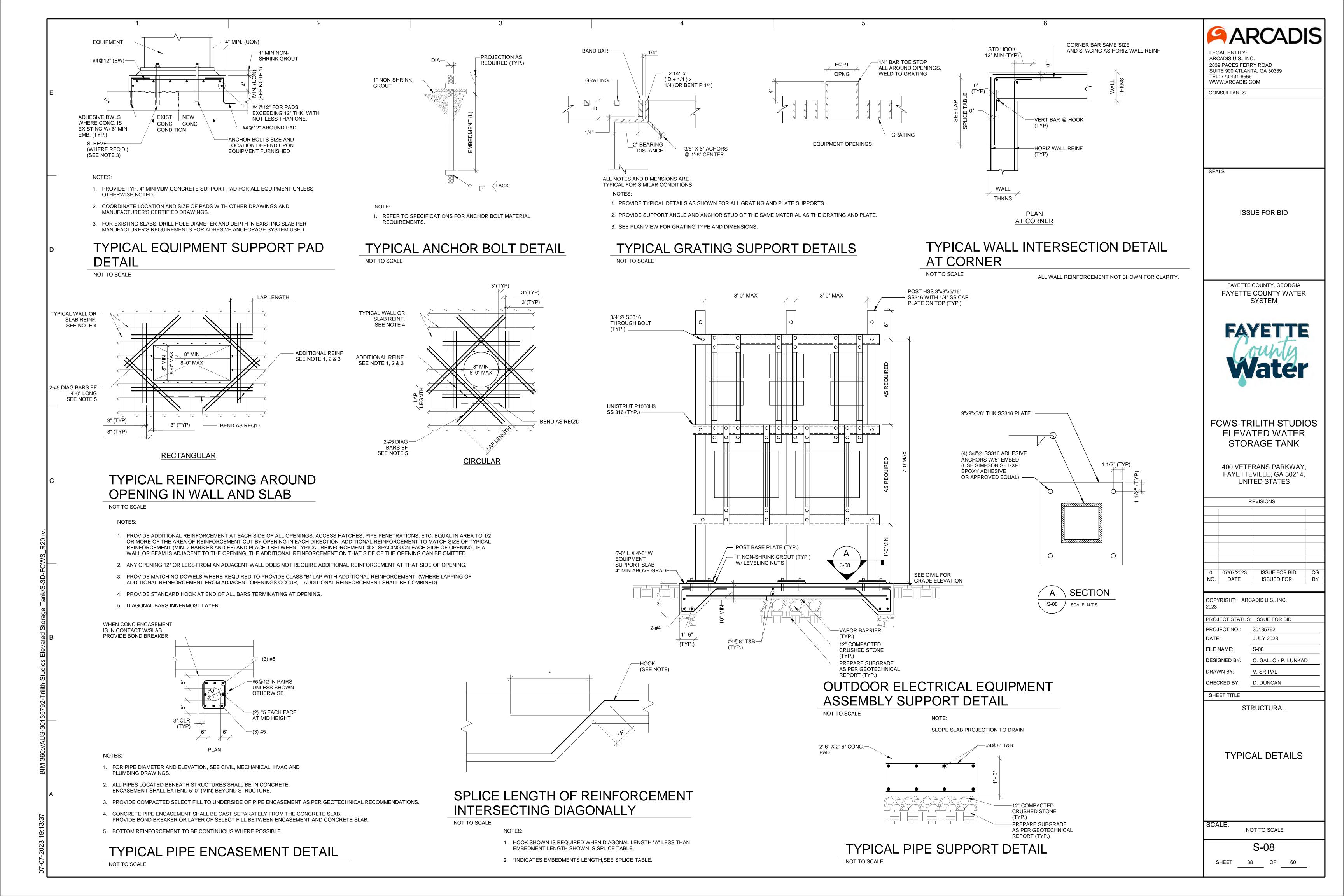


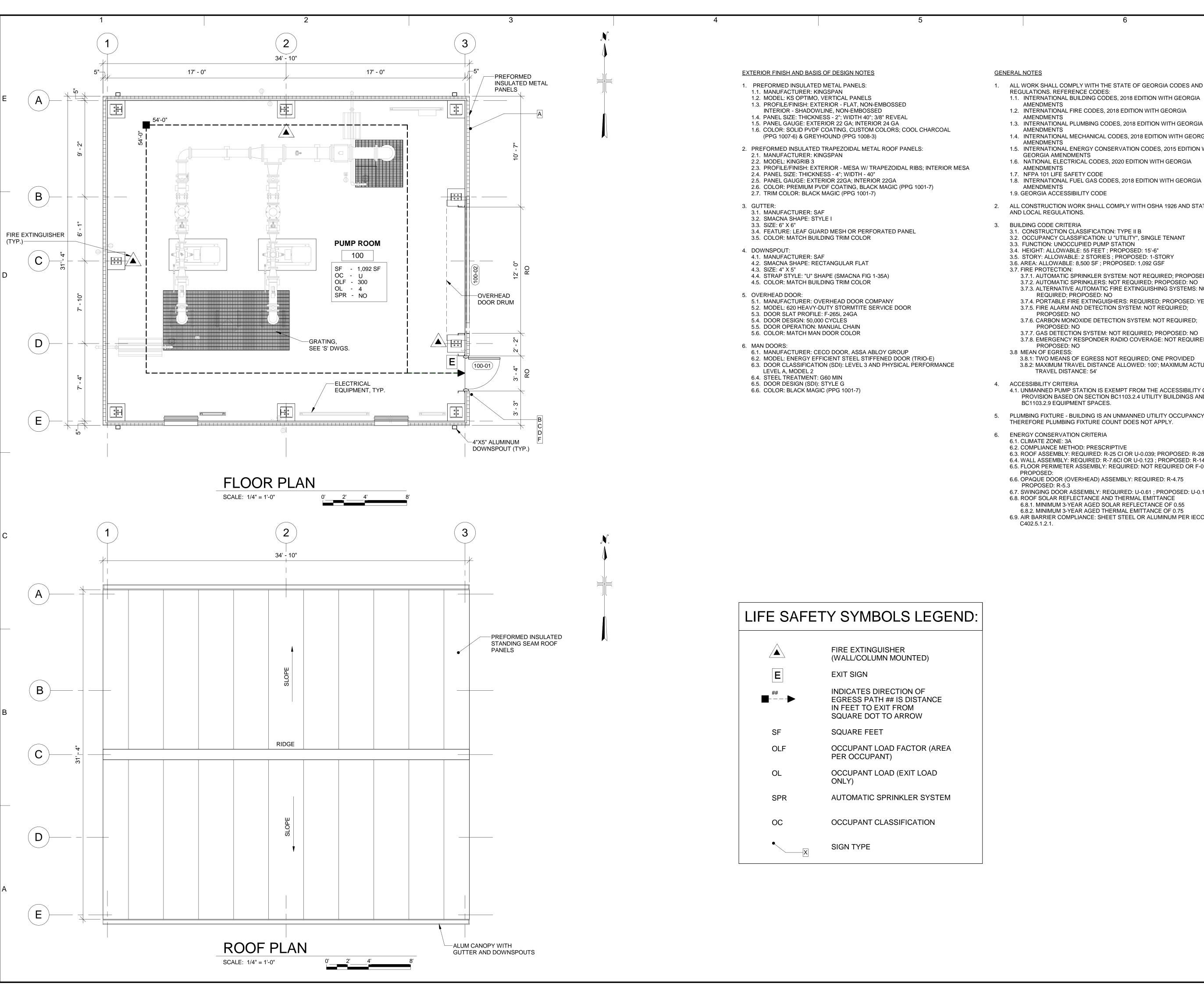












- ALL WORK SHALL COMPLY WITH THE STATE OF GEORGIA CODES AND REGULATIONS. REFERENCE CODES:
- 1.2. INTERNATIONAL FIRE CODES, 2018 EDITION WITH GEORGIA
- 1.3. INTERNATIONAL PLUMBING CODES, 2018 EDITION WITH GEORGIA
- 1.4. INTERNATIONAL MECHANICAL CODES, 2018 EDITION WITH GEORGIA
- 1.5. INTERNATIONAL ENERGY CONSERVATION CODES, 2015 EDITION WITH
- 1.6. NATIONAL ELECTRICAL CODES, 2020 EDITION WITH GEORGIA
- 1.7. NFPA 101 LIFE SAFETY CODE
- ALL CONSTRUCTION WORK SHALL COMPLY WITH OSHA 1926 AND STATE
- **BUILDING CODE CRITERIA**
- 3.2. OCCUPANCY CLASSIFICATION: U "UTILITY", SINGLE TENANT
- 3.3. FUNCTION: UNOCCUPIED PUMP STATION
- 3.4. HEIGHT: ALLOWABLE: 55 FEET; PROPOSED: 15'-6" 3.5. STORY: ALLOWABLE: 2 STORIES; PROPOSED: 1-STORY
- 3.6. AREA: ALLOWABLE: 8,500 SF; PROPOSED: 1,092 GSF
- 3.7.1. AUTOMATIC SPRINKLER SYSTEM: NOT REQUIRED; PROPOSED: NO 3.7.2. AUTOMATIC SPRINKLERS: NOT REQUIRED; PROPOSED: NO 3.7.3. ALTERNATIVE AUTOMATIC FIRE EXTINGUISHING SYSTEMS: NOT
- REQUIRED; PROPOSED: NO 3.7.4. PORTABLE FIRE EXTINGUISHERS: REQUIRED; PROPOSED: YES
- 3.7.5. FIRE ALARM AND DETECTION SYSTEM: NOT REQUIRED; PROPOSED: NO
- 3.7.6. CARBON MONOXIDE DETECTION SYSTEM: NOT REQUIRED;
- PROPOSED: NO 3.7.7. GAS DETECTION SYSTEM: NOT REQUIRED; PROPOSED: NO
- 3.7.8. EMERGENCY RESPONDER RADIO COVERAGE: NOT REQUIRED; PROPOSED: NO
- 3.8.1: TWO MEANS OF EGRESS NOT REQUIRED; ONE PROVIDED
- 3.8.2: MAXIMUM TRAVEL DISTANCE ALLOWED: 100'; MAXIMUM ACTUAL TRAVEL DISTANCE: 54'
- ACCESSIBILITY CRITERIA
- 4.1. UNMANNED PUMP STATION IS EXEMPT FROM THE ACCESSIBILITY CODE PROVISION BASED ON SECTION BC1103.2.4 UTILITY BUILDINGS AND BC1103.2.9 EQUIPMENT SPACES.
- PLUMBING FIXTURE BUILDING IS AN UNMANNED UTILITY OCCUPANCY AND THEREFORE PLUMBING FIXTURE COUNT DOES NOT APPLY.
- **ENERGY CONSERVATION CRITERIA**
 - 6.2. COMPLIANCE METHOD: PRESCRIPTIVE
- 6.3. ROOF ASSEMBLY: REQUIRED: R-25 CI OR U-0.039; PROPOSED: R-28.4
- 6.4. WALL ASSEMBLY: REQUIRED: R-7.6CI OR U-0.123 ; PROPOSED: R-14.4 6.5. FLOOR PERIMETER ASSEMBLY: REQUIRED: NOT REQUIRED OR F-0.73;
- 6.6. OPAQUE DOOR (OVERHEAD) ASSEMBLY: REQUIRED: R-4.75 PROPOSED: R-5.3
- 6.7. SWINGING DOOR ASSEMBLY: REQUIRED: U-0.61; PROPOSED: U-0.14 6.8. ROOF SOLAR REFLECTANCE AND THERMAL EMITTANCE
- 6.8.1. MINIMUM 3-YEAR AGED SOLAR REFLECTANCE OF 0.55 6.8.2. MINIMUM 3-YEAR AGED THERMAL EMITTANCE OF 0.75
- 6.9. AIR BARRIER COMPLIANCE: SHEET STEEL OR ALUMINUM PER IECC

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SEALS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS ELEVATED WATER STORAGE TANK

400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, **UNITED STATES**

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PROJECT STATUS: ISSUE FOR BID

PROJECT NO.: 30135792 JULY 2023

FILE NAME: A-01 E. DAWKINS DESIGNED BY: V. SRIPAL

DRAWN BY: CHECKED BY: E. DAWKINS

SHEET TITLE

ARCHITECTURAL

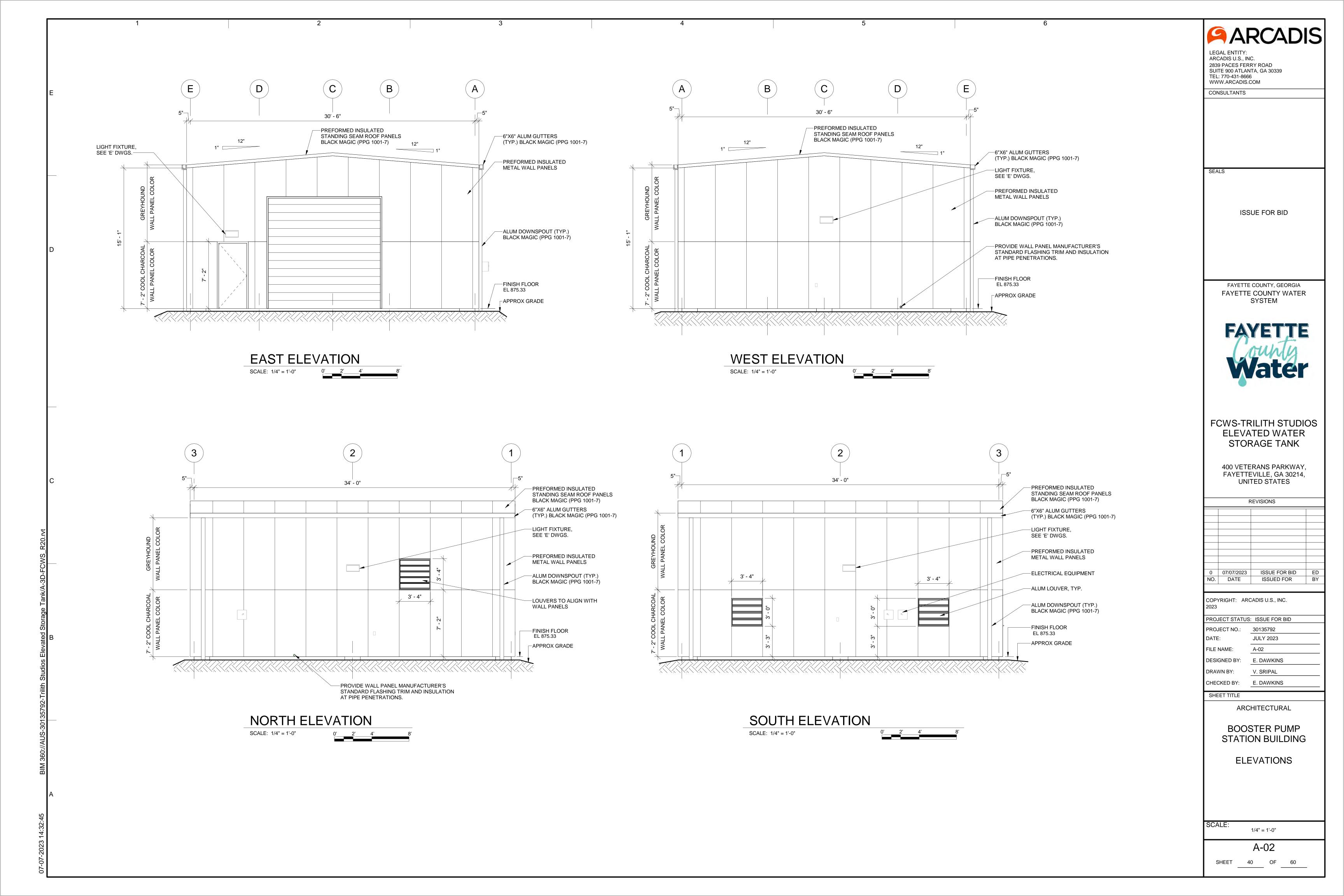
BOOSTER PUMP STATION BUILDING GENERAL NOTES, FLOOR AND ROOF **PLANS**

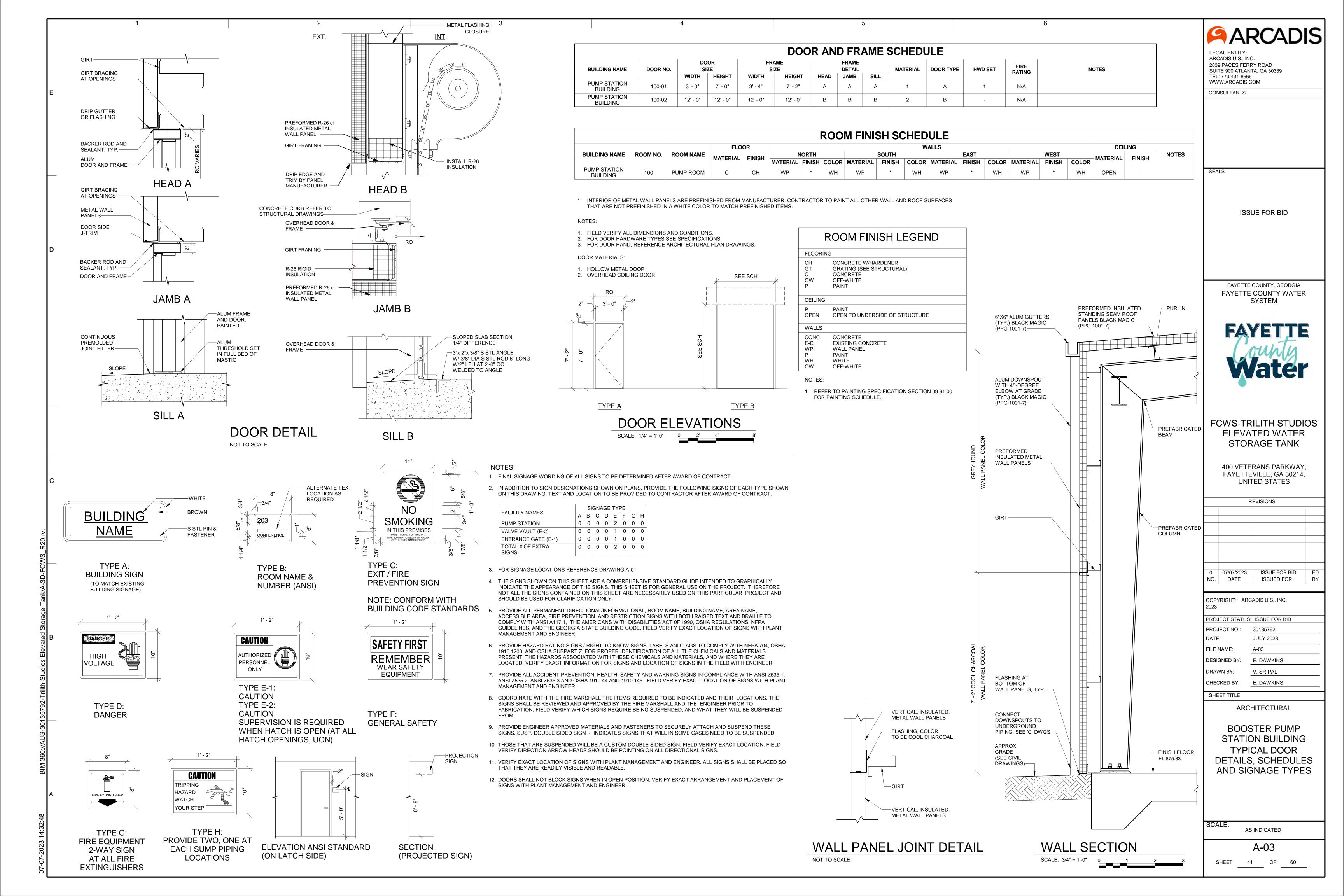
SCALE:

1/4" = 1'-0"

A-01

SHEET 39 OF 60





INSTRUMENTS

INSTRUMENT DEVICE: LETTERS IDENTIFY DEVICE FUNCTION, NUMBERS WHERE INDICATED DENOTE LOOP NUMBER PRESSURE CONTROLLER PRESSURE SWITCH (PSH DENOTES PRESSURE SWITCH HIGH AND PSL DENOTES PRESSURE LOW) FLOW SWITCH (FSH DENOTES FLOW SWITCH HIGH AND FSL DENOTES FLOW SWITCH LOW) LIMIT SWITCH LIMIT SWITCH OPEN LIMIT SWITCH CLOSED PIT PRESSURE TRANSMITTER (I DENOTES INDICATING TYPE AND PE DENOTES PRESSURE ELEMENT) LIT LEVEL TRANSMITTER (LE DENOTES LEVEL ELEMENT) FIT FLOW TRANSMITTER (FE DENOTES FLOW ELEMENT) ANALYSIS TRANSMITTER (AE DENOTES ANALYSIS ELEMENT) (TIT)TEMPERATURE TRANSMITTER (TE DENOTES TEMPERATURE ELEMENT)

TEMPERATURE SWITCH (TSH DENOTES TEMPERATURE SWITCH HIGH AND TSL DENOTES TEMPERATURE SWITCH LOW) LEVEL SWITCH (LSH DENOTES LEVEL SWITCH HIGH AND LSL DENOTES LEVEL SWITCH LOW. LE DENOTES LEVEL ELEMENT)

MANUAL OPERATED VALVE WITH POSITION CONTROLS

AIR OPERATED CONTROL VALVE

MOISTURE SENSOR

HORN

MV

STROBE/HORN COMBINATION

MOTOR BEARING DETECTOR P= PUMP BEARING

MOTOR VIBRATION DETECTOR P= PUMP VIBRATION

GENERAL NOTES:

- THE SYMBOLS AND ABBREVIATIONS LISTED REPRESENT A COMPREHENSIVE STANDARD GUIDE INTENDED FOR GENERAL USE ON ALL PROJECTS. THEREFORE, NOT ALL OF THE SYMBOLS AND ABBREVIATIONS CONTAINED ON THESE SHEETS ARE NECESSARILY USED ON THIS PARTICULAR
- THE CONTRACTOR SHALL READ AND UNDERSTAND THE ENTIRE SET OF CONSTRUCTION DOCUMENTS. THIS INCLUDES BUT IS NOT LIMITED TO THE PLANS AND SPECIFICATIONS FOR ALL DISCIPLINES . THIS WILL ENSURE THAT HE UNDERSTANDS THE FULL SCOPE OF WORK AND IS ABLE TO CONVEY THE REQUIRED MATERIALS AND METHODS OF INSTALLATION TO THE ESTIMATORS, SUPPLIERS AND INSTALLERS.
- CONTRACTOR SHALL VISIT PROJECT SITE AND MAKE HIMSELF/HERSELF AWARE OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING A BID FOR
- COORDINATE ANY AND ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION IN ORDER TO AVOID CONFLICTS DURING CONSTRUCTION.
- WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OF INSTALLATION OR NATURE OF THE WORK REQUIRED, THE CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT ANY ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES MAY BE MADE WITHOUT WRITTEN CONSENT FROM THE ENGINEER AND OWNER.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ENFORCED EDITION OF THE NATIONAL ELECTRIC CODE, NATIONAL ELECTRIC SAFETY CODE, UFE SAFETY CODE AND ALL OTHER LOCAL AND STATE CODES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
- EQUIPMENT LOCATIONS SHOWN ARE APPROXIMATE. EXTEND CONDUIT & WIRE TO INSTALLED LOCATIONS AT NO ADDITIONAL COST TO THE OWNER.
- ELECTRICAL SYSTEMS SHALL BE COMPLETE AND OPERABLE AT PROJECT
- UNLESS OTHERWISE SPECIFIED OR NOTED, ALL WALL MOUNTED ELECTRICAL PANELS, ENCLOSURES, AND SIMILAR EQUIPMENT SHALL BE MOUNTED 6'-6 " (MAX) FROM THE TOP OF THE PANEL TO FINISHED FLOOR OR GRADE.
- A SEPARATE EQUIPMENT GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH CIRCUIT (SEPARATE CONDUCTOR IN THE CONDUIT). THE CONDUCTOR SHALL BE TERMINATED AT THE PROPER DEVICE. TERMINAL OR LUG AT THE POWER SOURCE (MCC GROUND BUS, PANELBOARD GROUND BUS, ETC.). GROUND CONDUCTOR SIZE SHALL BE PER THE LATEST EDITION OF THE NEC.
- CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO BEAMS AND WALLS.
- NO CONDUIT SMALLER THAN 3/4" PIPE SIZE NOR WIRE SMALLER THAN NO. 12AWG SHALL BE USED UNLESS OTHERWISE NOTED.
- SWITCHES SHALL BE MOUNTED 4'-6" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. RECEPTACLES SHALL BE MOUNTED 18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
- 14. ALL SURFACE MOUNTED PANELS AND PANELBOARDS ON THE INSIDE OF THE EXTERIOR WALLS ABOVE GRADE, OR IN OTHER LOCATIONS CONSIDERED AS DAMP, SHALL BE MOUNTED SO AS TO MAINTAIN A 1/4 " AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL.
- ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE TOP CIRCUIT BREAKER OPERATING HANDLE TO THE FLOOR SHALL NOT EXCEED 6'-6".
- 16. IN GENERAL, PULL BOXES OR JUNCTION BOXES SHALL BE PROVIDED IN ACCORDANCE WITH THE SPECIFICATIONS, NEC ABOVE GRADE, JUNCTION, PULL AND TERMINAL BOXES SHALL BE OF STAINLESS STEEL CONSTRUCTION.
- 17. CONDUIT AND WIRE FOR SWITCHES AND/OR RECEPTACLES AND SHALL BE a. MINIMUM 3/4" CONDUIT, TYPE AS SPECIFIED.
 - MINIMUM NO. 12 COPPER WIRE, TYPE AS SPECIFIED, QUANTITY OF WIRES AS REQUIRED. PROVIDE SEPARATE NEUTRAL FOR EACH
- 18. CONTRACTOR SHALL PROVIDE A LIGHTNING PROTECTION SYSTEM IN STRICT ACCORDANCE WITH SPECIFICATION 26 41 13 LIGHTINING PROTECTION FOR STRUCTURES.

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ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, UNITED STATES

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N. DESHPANDE **DESIGNED BY:** K. SATHISH DRAWN BY: CHECKED BY: T. POWELL

SHEET TITLE

ELECTRICAL

LEGEND, SYMBOLS, AND **ABBREVIATIONS - SHEET** 1 OF 2

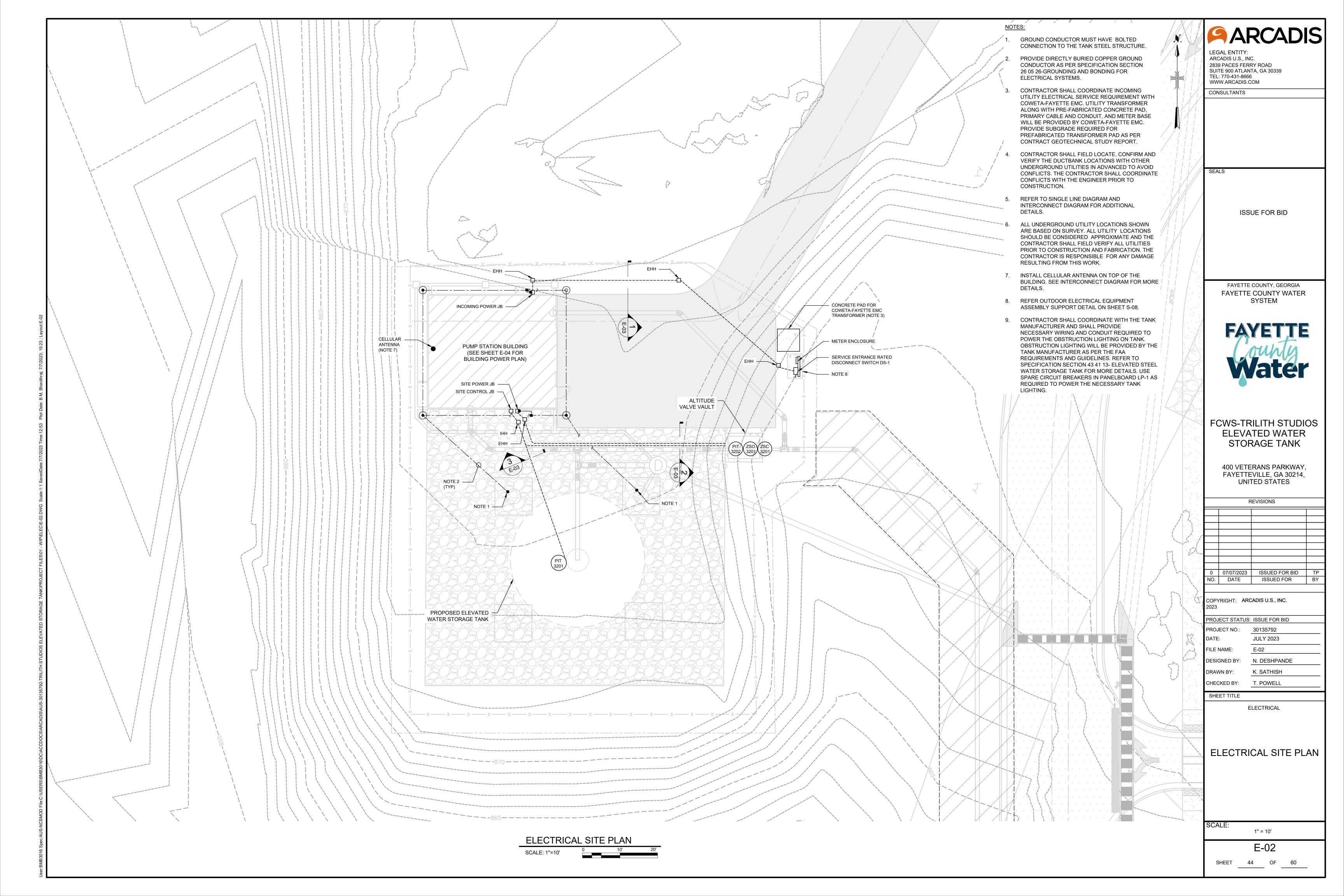
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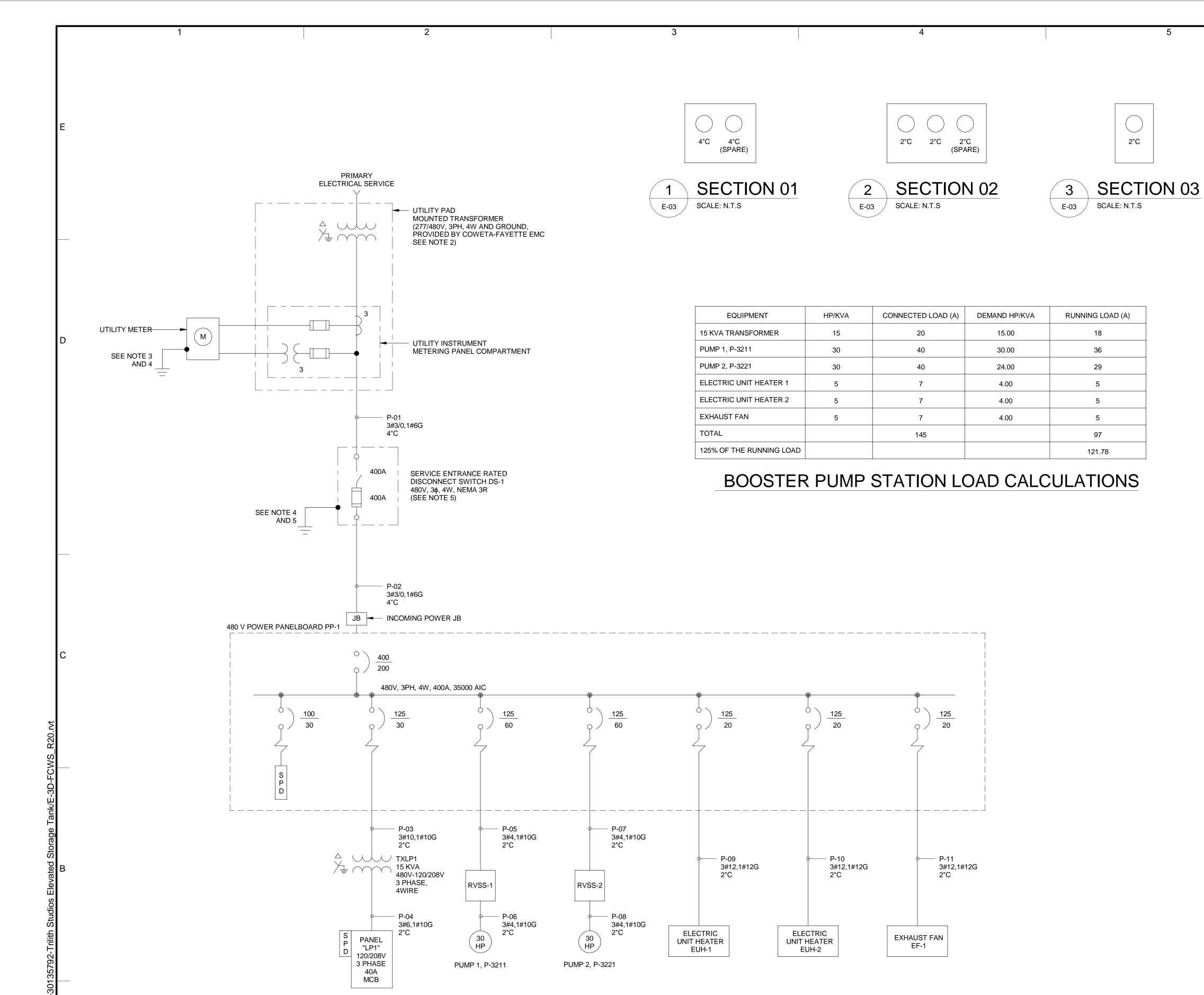
N.T.S

E-01A

SHEET 42 OF 60

1	2		3	4		5		6	(A A DCA DIC
<u>PLANS</u>				ABB	REVIATIONS				ARCADIS LEGAL ENTITY:
1-3	FLUORESCENT LIGHTING FIXTURE - SURFACE OR PENDANT MOUNTED.		#4/0 GROUND CABLE BURIED 2'-6" BELOW GRADE						ARCADIS U.S., INC. 2839 PACES FERRY ROAD SUITE 900 ATLANTA, GA 30339
a a	FIRST NUMERAL DENOTES LIGHTING PANEL (LP1), SECOND NUMBER DENOTES BRANCH CIRCUIT NUMBER. LOWER CASE LETTER DENOTES SWITCHED CIRCUIT.		UNLESS OTHERWISE NOTED CLASS I COPPER LIGHTNING CONDUCTOR	A Al AO	AMPERE ANALOG INPUT ANALOG OUTPUT	MCC MTS MCP	MOTOR CONTROL CENTER MANUAL TRANSFER SWITCH MOTOR CIRCUIT PROTECTOR		TEL: 770-431-8666 WWW.ARCADIS.COM
E	FLUORESCENT LIGHTING FIXTURE WITH BATTERY PACK SURFACE OR PENDANT.	PC PC	UNLESS OTHERWISE NOTED PHOTOCELL	AC AFC AFF AFG	ALTERNATING CURRENT ABOVE FINISHED CONCRETE ABOVE FINISHED FLOOR ABOVE FINISHED GRADE	MFR MOV	MANUFACTURER MOTOR OPERATED VALVE		CONSULTANTS
	PENDANT OR CEILING MOUNTED LIGHTING FIXTURE.		INDICATING LIGHT, PT-DENOTES PUSH TO	AG AL	ABOVE GRADE ALUMINUM	MTG MH	MOUNTING MANHOLE		
	WALL MOUNTED LIGHTING FIVEHER		TEST TYPE LETTER INDICATES LENS COLOR W-WHITE G-GREEN A-AMBER	ATC ATS AUX	AUTOMATIC TEMPERATURE CONTROL AUTOMATIC TRANSFER SWITCH AUXILIARY	N/A NC NO	NON-APPLICABLE NORMALLY CLOSED NORMALLY OPENED		
	WALL MOUNTED LIGHTING FIXTURE.	PT	R-RED B-BLUE C-CLEAR	AUTO AWG	AUTOMATIC AMERICAN WIRE GAUGE	NTS OL	NOT TO SCALE OVERLOAD		
	POLE OR STANCHION MOUNTED LIGHTING FIXTURE.		SWITCH - TOGGLE OPEN MOMENTARY CONTACT	BD BKR BLDG	BOARD BREAKER BUILDING	OS PB	OCCUPANCY SENSOR PUSH BUTTON		SEALS
	TWO (2) POLE OR STANCHION MOUNTED LIGHTING FIXTURES	0 0	PUSH BUTTON NORMALLY OPEN	BV C	BUTTERFLY VALVE CONDUIT	PFC PNL	POWER FACTOR CORRECTION PANEL		
GF ⊕©	POLE MOUNTED FIXTURE WITH GF RECEPTACLE	0 0	MOMENTARY CONTACT PUSH BUTTON NORMALLY CLOSED	CBV CB CKT CLG	CABLE BY VENDOR CIRCUIT BREAKER CIRCUIT CEILING	PR PT PTZ	PAIR POTENTIAL TRANSFORMER PAN-TILT-ZOOM		ISSUE FOR BID
	WALL MOUNTED EXIT LIGHT	00	SWITCH - TEMPERATURE NORMALLY CLOSED. OPENS ON RISING	CTRL CP	CONTROL CONTROL PANEL	REC REQ RGS	RECEPTACLE REQUIRED RIGID GALVANIZED STEEL		
D A3 a	LED WALL PACK LIGHT FIXTURE WITH FULLCUTOFF LENS, SUITABLE FOR WET AND CORROSIVE LOCATIONS	5	TEMPERATURE SWITCH - TEMPERATURE NORMALLY OPEN. CLOSES ON RISING	CPT CT CU	CONTROL POWER TRANSFORMER CURRENT TRANSFORMER COPPER	RVSS SP	REDUCED VOLTAGE SOFT START SPARE		
D	FIXTURE DESIGNATION SYMBOL. SEE LIGHTING FIXTURE SCHEDULE FOR DESCRIPTION AND TYPE. ALL FIXTURES SHOWN IN A ROOM		TEMPERATURE	DI DO	DISCRETE INPUT DISCRETE OUTPUT	SS SPD SPDT	STAINLESS STEEL SURGE PROTECTION DEVICE SINGLE POLE DOUBLE THROW		
150 10'-0" AFF	WITH THIS SYMBOL SHALL BE OF TYPE INDICATED BY LETTER; NUMBER IN SYMBOL INDICATES LAMP WATTAGE AND NUMBER OF NUMBER IN SYMBOL INDICATES LAMP WATTAGE AND NUMBER OF	0_0	SWITCH - PRESSURE NORMALLY CLOSED. OPENS ON RISING PRESSURE	DB DC DCS	DECIBELS DIRECT CURRENT DISTRIBUTED CONTROL SYSTEM	SPST SV SW	SINGLE POLE DOUBLE THROW SINGLE POLE SINGLE THROW SOLENOID VALVE SWITCH		FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER
	NUMBER BELOW SYMBOL INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR OR AS NOTED.		SWITCH - PRESSURE NORMALLY OPEN. CLOSES ON RISING PRESSURE	DISC DN DPDT DP	DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DISTRIBUTION PANEL	SWBD SWGR	SWITCHBOARD SWITCHGEAR		SYSTEM
I-2 \ominus	DUPLEX CONVENIENCE RECEPTACLE, 2 POLE, 3 WIRE, 120 VOLTS A.C. 20 AMP RECEPTACLE DESIGNATIONS, FIRST NUMBER DENOTES PANEL, SECOND NUMBER DENOTES CIRCUIT NUMBER. GF-DENOTES GROUND		VALVE LIMIT SWITCH (OPEN)	DF DS DWG EC	DISTRIBUTION PANEL DISCONNECT SWITCH DRAWING EMPTY CONDUIT	TB TDR TEMP	TERMINAL BOX TIME DELAY RELAY TEMPERATURE		FAYETTE
GF/WIP ←	FAULT, WIP-WEATHER PROOF WHILE IN USE. SINGLE CONVENIENCE RECEPTACLE, 2 POLE, 3 WIRE; 120		VALVE LIMIT SWITCH (CLOSED)	EL EMH EMT	ELEVATION ELECTRICAL MANHOLE ELECTRICAL METALLIC TUBING	TEW TSP TYP	THERMOCOUPLE EXTENSION WIRE TWISTED SHIELDED PAIR TYPICAL		County
	VOLTS AC. 20 AMP UNLESS NOTED OTHERWISE ON DRAWINGS. POWER RECEPTACLE, 2 POLE, 3 WIRE 250 VOLTS A.C. 20			EO EX	ELECTRICALLY OPERATED EXISTING	UG UON	UNDERGROUND UNLESS OTHERWISE NOTED		Water
→	AMP UNLESS NOTED ÖTHERWISE ON DRAWINGS. SINGLE POLE SWITCH - LOWER CASE		SWITCH - LIMIT NORMALLY OPEN.	FUT FVNR	FUTURE FULL VOLTAGE NON-REVERSING	UPS V	UNINTERRUPTIBLE POWER SUPPLY VOLTS		
Ψ \$ 2	LETTER DENOTES SWITCHING. TWO POLE SWITCH	0-0	SWITCH - LIMIT NORMALLY CLOSED.	GALV GFI G, GND	GALVANIZED GROUND FAULT INTERRUPTER GROUND	VAC VDC VFD	VOLTS ALTERNATING CURRENT VOLTS DIRECT CURRENT VARIABLE FREQUENCY DRIVE		
↓ 2 LP1-2 ►	BRANCH CIRCUIT HOME RUN TO PANELBOARD LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER. AS A MINIMUM, ALL WIRING SHALL BE 3#12 AWG IN 3/4" CONDUIT. #10 AWG WIRE	CRI 	NORMALLY OPEN CONTACT, NUMBER INDICATES RELAY.	HOA HTR	HAND-OFF-AUTO HEATER	W W/O WP	WATTS WITHOUT WEATHERPROOF		FCWS-TRILITH STUDIOS ELEVATED WATER
	SHALL BE USED FOR RUNS BETWEEN PANEL AND FIRST LIGHTING FIXTURE OR RECEPTACLE EXCEEDING 50 FEET, UNLESS OTHERWISE NOTED ON DRAWING.	\downarrow	NORMALLY CLOSED CONTACT	IMT ITB	INTERMEDIATE METALLIC TUBING INSTRUMENT TERMINAL BOX	XFMR XP	TRANSFORMER EXPLOSION PROOF		STORAGE TANK
<i>→</i>	INDICATES HOMERUN AND CONDUIT TAG			JB, J KAIC	JUNCTION BOX THOUSAND AMPERE INTERRUPTING CURRENT	1PH 3PH	SINGLE PHASE THREE PHASE THREE WIRE		400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214,
CC12	INDICATES HOMERUN AND CONDUIT TAG LIGHTING, APPLIANCE OR	OL 	THERMALLY ACTUATED MOTOR OVERLOAD RELAY, LATCHES CLOSED ON OVERLOAD	KCMIL KVA KW	THOUSAND CIRCULAR MILS KILOVOLT-AMPERES KILOWATTS	3W 4W	THREE WIRE FOUR WIRE		UNITED STATES
	INSTRUMENT PANELBOARD POWER PANELBOARD	OL	THERMALLY ACTUATED MOTOR OVERLOAD RELAY, LATCHES OPEN ON OVERLOAD	KWH LA LCP	KILOWATT-HOURS LIGHTNING ARRESTOR LOCAL CONTROL PANEL				REVISIONS
	INDICATES NEW EQUIPMENT/EXPOSED CONDUIT	1 I	SOLENOID VALVE	LTG LV	LIGHTING LOW VOLTAGE				
% K20	CONDUIT TURNING DOWN		MOTOR STARTER CONTACTOR COIL						
	CONDUIT TURNING UP	M	CONTACTOR COIL COIL DESIGNATION: M-COIL						0 07/07/2023 ISSUED FOR BID TP
/E-3D-	CONDUIT CAPPED INDICATES EXISTING EQUIPMENT/CONDUIT		MOTOR STARTER CONTACTOR COIL						NO. DATE ISSUED FOR BY
e Tank	INDICATES CONDUIT UNDERGROUND OR CONCEALED IN CEILING, WALLS, BELOW OR IN FLOOR SLAB	(RUN)	COIL DESIGNATION: R-RUN						COPYRIGHT: ARCADIS U.S., INC. 2023
Storage (M) (M) OR [MOTOR, UNIT HEATER-NUMERAL DENOTES LIGHTING PANEL AND BRANCH CIRCUIT NUMBER. MOTOR SYMBOL	_	CONTROL RELAY COIL DESIGNATION:						PROJECT STATUS: ISSUE FOR BID PROJECT NO.: 30135792
9 1-24 1-24 L-24 B	SHOWN DASHED DENOTES EQUIPMENT LOCATED ON ROOF.	CR	CR-CONTROL RELAY MX-AUXILIARY RELAY TR-TIMING RELAY						DATE: JULY 2023
80	DEMOLITION		AR-ALARM RELAY RR-READY RELAY						FILE NAME: E-01B DESIGNED BY: N. DESHPANDE
Studio EHH	ELECTRICAL MANHOLE ELECTRICAL HANDHOLE	H A	SELECTOR SWITCH, 2 POSITION						DRAWN BY: K. SATHISH CHECKED BY: T. POWELL
## IMH	INSTRUMENTATION MANHOLE	○ (X,O)	MAINTAINED CONTACT (O,X) DENOTES CONTACT BLOCK						CHECKED BY: T. POWELL SHEET TITLE
35792.	INSTRUMENTATION MANHOLE INSTRUMENTATION HANDHOLE	\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc	CONFIGURATION X INDICATES CONTACT CLOSED, O DENOTES CONTACT OPEN.						ELECTRICAL
S-3013	AUTOMATIC TRANSFER SWITCH	О Н . Д							
0://AU	GROUND TEST POINT		SELECTOR SWITCH, 3 POSITION						LEGEND, SYMBOLS, AND
● WIT	GROUND ROD	0 0	MAINTAINED CONTACT						ABBREVIATIONS - SHEET 2 OF 2
m	EXOTHERMIC WELDED GROUND CONNECTION	0 0							
A •	BOLTED GROUND CONNECTION		ELECTRIC SPACE HEATER ELEMENT						
MG -	GROUND	ETM	ELAPSED TIME METER						SCALE:
3:24:48									N.T.S
/2023 ;									E-01B SHEET 43 OF 60
/2//2									SHEET 43 OF 60





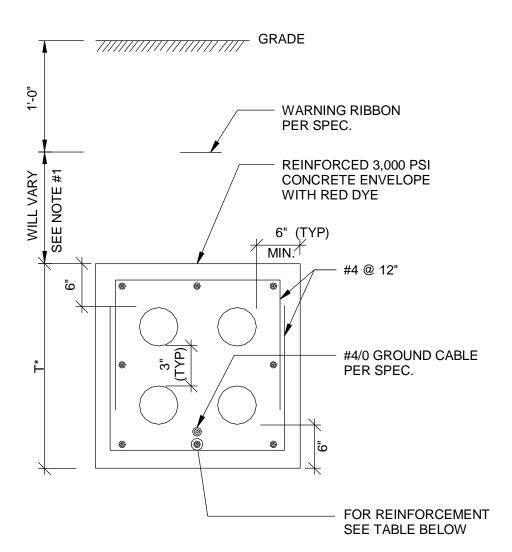
ONE-LINE DIAGRAM

NOT TO SCALE

- NO UNDERGROUND CONCRETE ENCASED CONDUIT SMALLER THAN 2" PIPE SIZE SHALL BE USING UNLESS OTHERWISE NOTED.
- FOLLOWING ASSUMPTIONS HAVE BEEN CONSIDERED FOR UTILITY TRANSFORMER TRANSFORMER KVA- 500 MINIMUM %Z- 2.80 X/R RATIO- 3.5

AVAILABLE FAULT CURRENT- 21,480A ELECTRICAL EQUIPMENT SPECIFIED UNDER THIS PROJECT IS RATED FOR KILO-AMPERE INTERUPPTING CAPACITY OF 35 KAIC, HENCE MEETS THE INTERRUPTING AND WITHSTAND RATING REQUIREMNT TO HANDLE AVAILABLE FAULT CURRENT IN CASE OF A FAULT CONDITION.

- CONTRACTOR TO COORDINATE AND PROVIDE METER SOCKET PER THE REQUIREMENTS OF COWETA-FAYETTE EMC. PROVIDE CONNECTION FROM THE METER ENCLOSURE TO THE GROUNDING ELECTRODE SYSTEM.
- BOND THE GROUNDING ELECTRODE CONDUCTOR TO AN ACCEPTABLE GROUDING ELECTRODE SYSTEM IN ACCORDANCE WITH NEC SECTION 250. THIS MAY INCLUDE A CONCRETE ENCASED ELECTRODE OR A GROUND ROD. THE SYSTEM SHALL BE CONNECTED TO THE GROUND RING AS SHOWN ON SHEET E-02 AND E-04. PROVIDE A SUPPLEMENTAL GROUND ROD IF THE RESISTANCE TO EARTH EXCEEDS 5 OHMS.
- PROVIDE 600V, DUAL ELEMENT, TIME DELAY, 200KAIC, CLASS RK5 TYPE FUSES (SIZE AS SHOWN).



	REINFORCEMENT TABLE	
DUCT BANK THICKNESS SEE NOTE #2	UNDER ROADWAY*	AT NON-TRAFFIC AREA
T < 18"	#8 @ 12" (MIN) ALL AROUND	#6 @12" ALL AROUND
T > 18"	#7 @ 12" (MIN) ALL AROUND	#5 @12" ALL AROUND



- DUCT BANK DIMENSION (1'-0" MINIMUM) VARIES TO CLEAR OTHER UNDERGROUND SYSTEMS AND TO MAINTAIN SLOPE AS REQUIRED.
- DUCT BANK DEPTH AND WIDTH VARIES, REFER TO PLAN DRAWINGS FOR SIZES.

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SEALS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, UNITED STATES

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PROJECT STATUS: ISSUE FOR BID PROJECT NO.: JULY 2023 FILE NAME: E-03 N. DESHPANDE DESIGNED BY:

DRAWN BY: CHECKED BY: T. POWELL

SHEET TITLE

ELECTRICAL

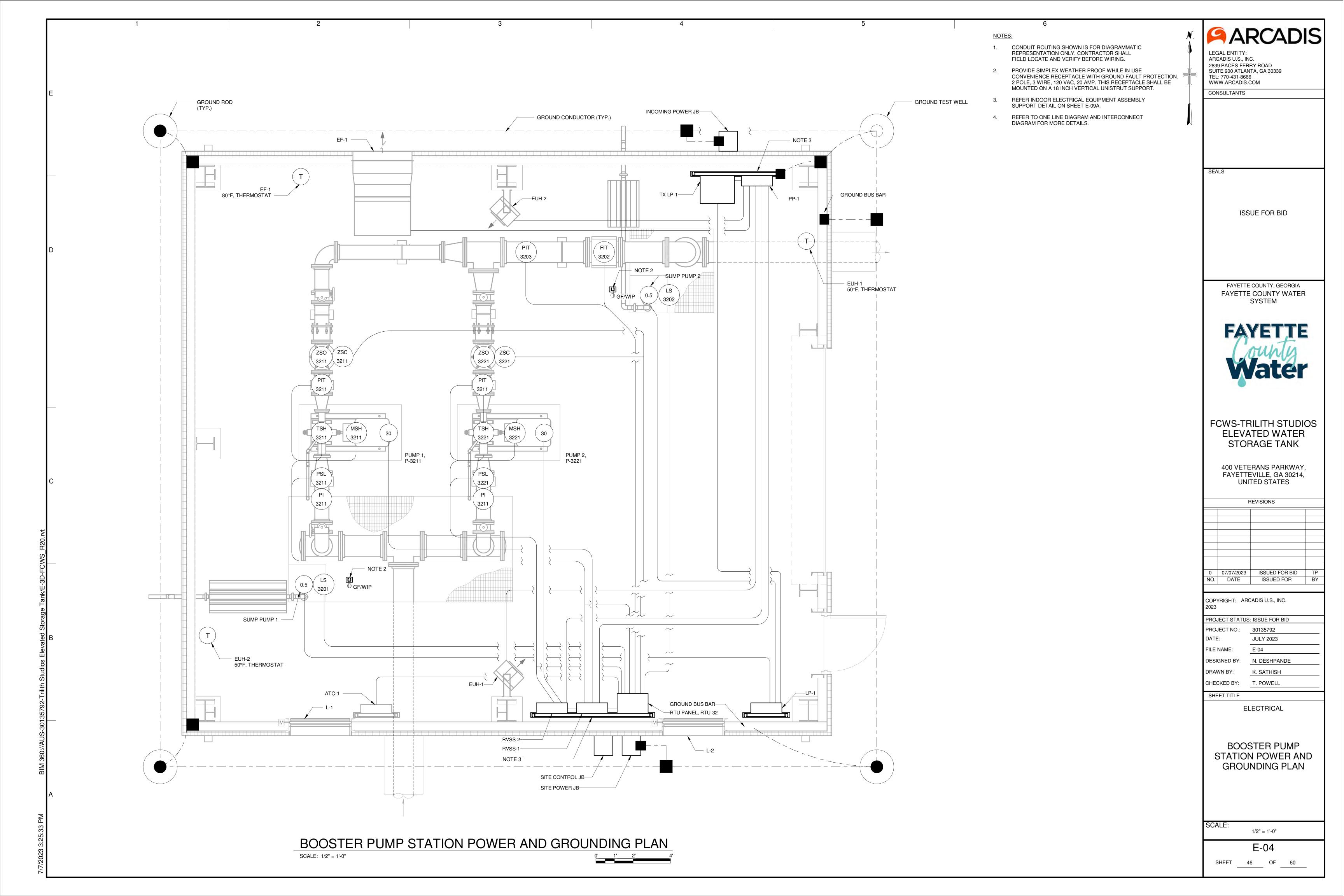
ONE LINE DIAGRAM

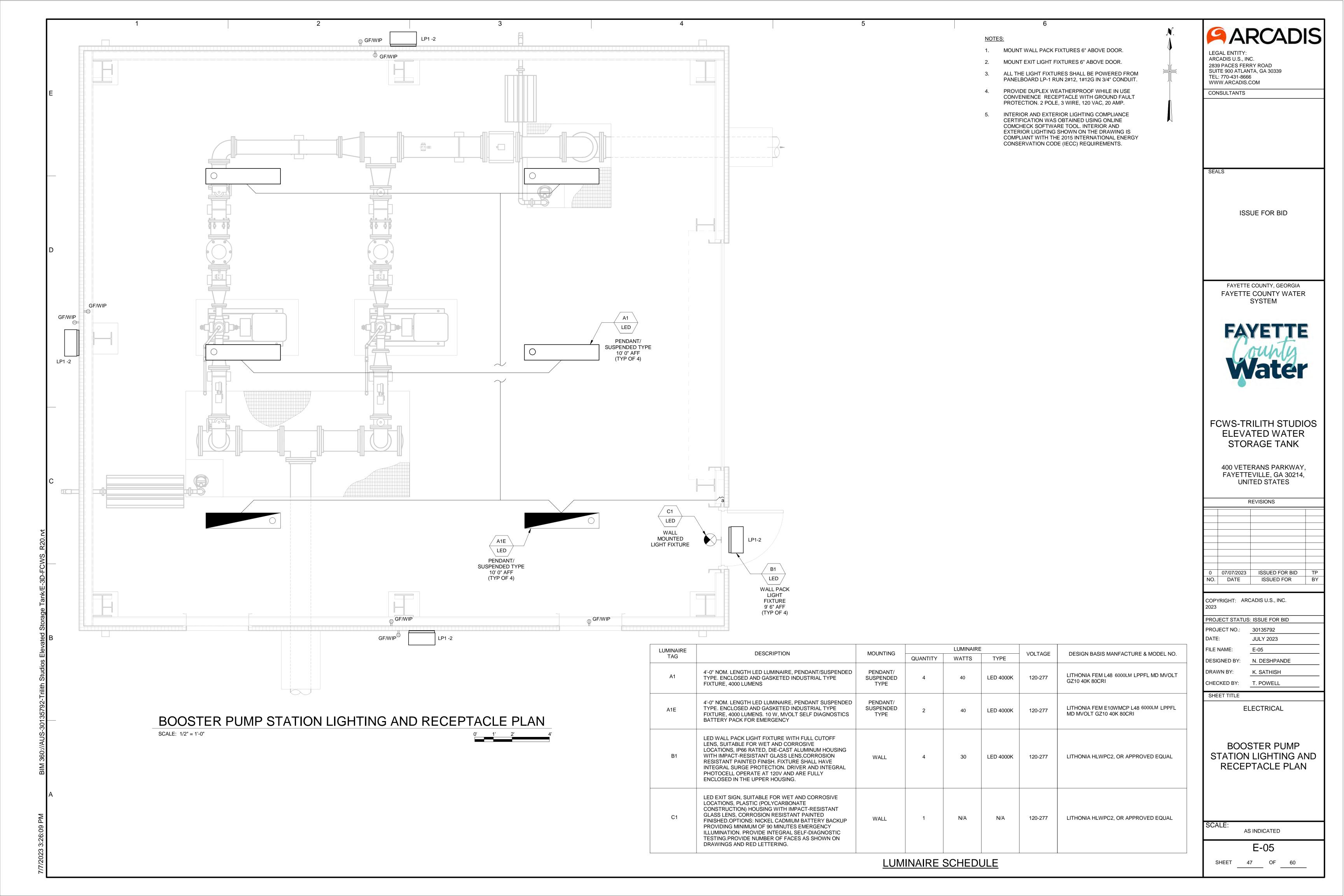
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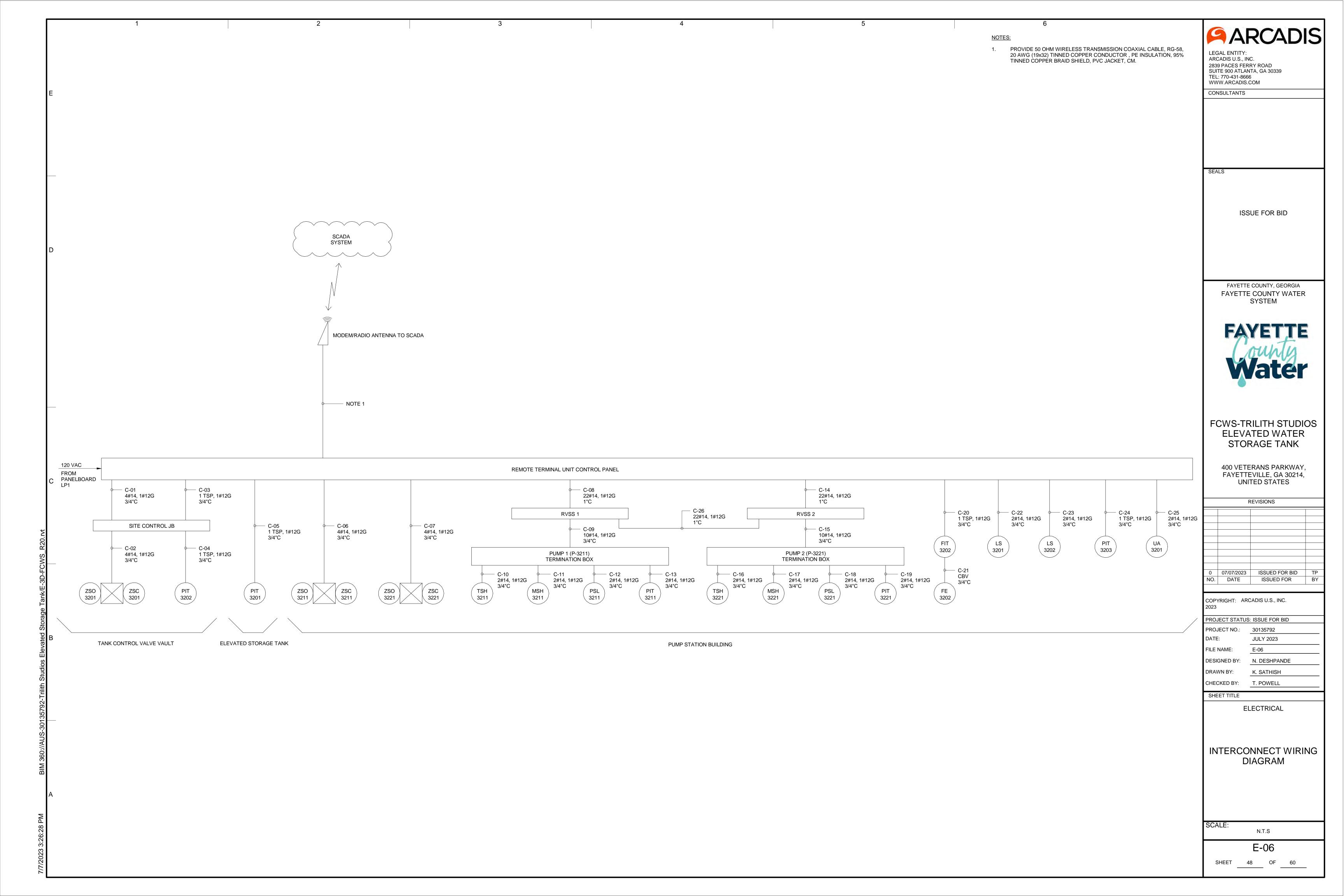
E-03

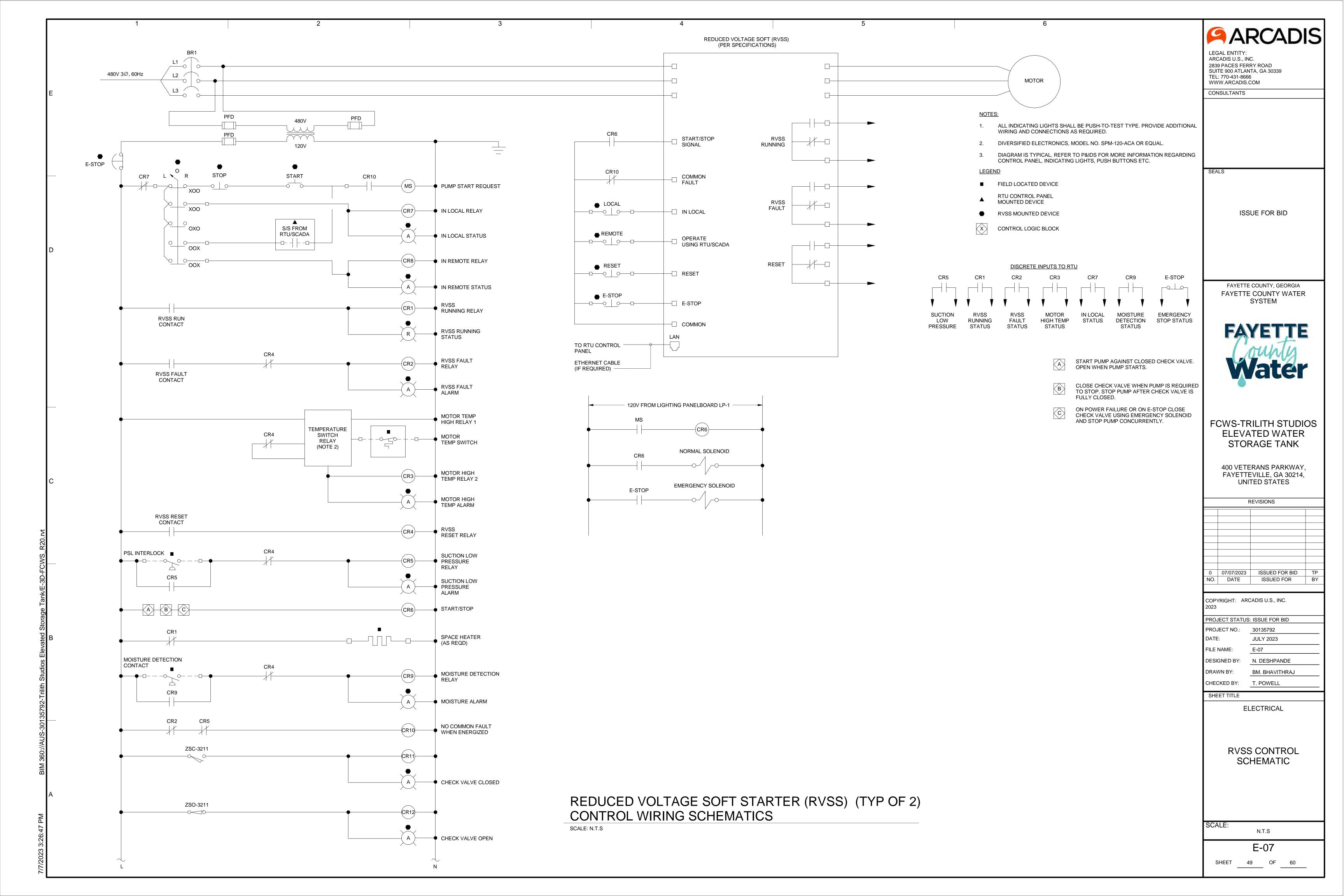
SHEET 45 OF 60

N.T.S









KVA PER PHASE AMP CKT NO. CKT NO. DESCRIPTION OF LOAD DESCRIPTION OF LOAD LOAD KVA AMPS AMPS LOAD KVA 20 BUILDING INTERIOR LIGHTING 8.3 4.2 BUILDING EXTERIOR LIGHTING 20 2 8.3 20 BUILDING INDOOR RECEPTACLES 1.2 1.7 SWING CHECK VALVE-01 SOLENOIDS 20 4 20 RTU CONTROL PANEL 1 8.3 1.2 1.7 SWING CHECK VALVE-02 SOLENOIDS 20 6 0.2 20 FLOWMETER 0.1 0.8 1 0.3 1.7 0.2 SOLENOID ACTUATED VALVE 20 8 4.2 10 20 SUMP PUMP 1 0.5 8.3 BUILDING EXTERIOR RECEPTACLES 20 12 20 HVAC ATC PANEL 0.5 4.2 1.0 4.2 0.5 SUMP PUMP 2 20 SPARE 14 13 20 SPARE 1 0.0 20 16 SPARE 15 20 SPARE 20 18 17 20 SPARE 0.0 SPARE 20 SERVICE CHARACTERISTICS TOTAL KVA 1.8 2.7 2.2 PANEL LP-1 A MLO VOLTS: 208Y/120 40 A MCB LOCATION TRILITH BOOSTER PUMP STATION PHASE: GRAND CONNECTED TOTAL KVA 6.7 BUILDING PUMP STATION BUILDING WIRE: NOTES: 35k MIN AIC SYMM, FULLY RATED ASSEMBLY

PANEL SCHEDULE LP1

NOT TO SCALE

	, w				လ္ပ		KVA PER PHAS	SE .	ပ္သ				0 0	
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD KVA	AMPS	POLES	A	В	С	POLES	AMPS	LOAD KVA	DESCRIPTION OF LOAD	TRIP	CKT NO
1	40	PUMP 1, P-3211	18	21.7	3	12.0			3	21.7	18	PUMP 2, P-3221	40	2
							12.0							
								12.0						
7	20	ELECTRIC UNIT HEATER, EUH-1	5	6.0	3	2.0			3	1.2	1	EXHAUST FAN, EF-1	20	8
							2.0							
								2.0						
13	20	ELECTRIC UNIT HEATER, EUH-2	5	6.0	3	6.7			3	18.0	15	15 KVA TRANSFORMER, TXLP1	30	14
							6.7							
					_			6.7	_					
19	40	SPARE			3	0.0	0.0		3			SPARE	20	20
							0.0	0.0						
25	40	SPARE			3	0.0		0.0	3			SPARE	40	26
23	40	OF AILE			3	0.0	0.0		3			OF AIRE	40	20
							0.0	0.0						
31	40	SPARE			3	0.0		0.0	3			SPARE	40	32
							0.0							
								0.0						
37	20	SPARE			3	0.0			3			SPARE	20	38
							0.0							
								0.0						
	PANFI	PP-1	то	TAL KVA		20.7	20.7	20.7		VOLTS:	480Y/277	SERVICE CHARACTERISTICS		A MI O
L		TRILITH BOOSTER PUMP STATION							\dashv	PHASE:		-	200	A MLO A MCB
		PUMP STATION BUILDING	GRAND	CONNEC	TED TO	TAL KVA	62	2.0		WIRE:		-		
	NOTES:						I			35k	MIN AIC SY	YMM, FULLY RATED ASSEMBLY		_

PANEL SCHEDULE PP1

NOT TO SCALE

ARCADIS LEGAL ENTITY:
ARCADIS U.S., INC.
2839 PACES FERRY ROAD
SUITE 900 ATLANTA, GA 30339

TEL: 770-431-8666 WWW.ARCADIS.COM

CONSULTANTS

SEALS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS-TRILITH STUDIOS **ELEVATED WATER** STORAGE TANK

400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, UNITED STATES

	R	REVISIONS	
0	07/07/2023	ISSUED FOR BID	TP
NO.	DATE	ISSUED FOR	BY
			•

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PROJECT STATUS: ISSUE FOR BID PROJECT NO.: JULY 2023 FILE NAME: E-08

N. DESHPANDE DESIGNED BY: K. SATHISH DRAWN BY: CHECKED BY: T. POWELL

SHEET TITLE

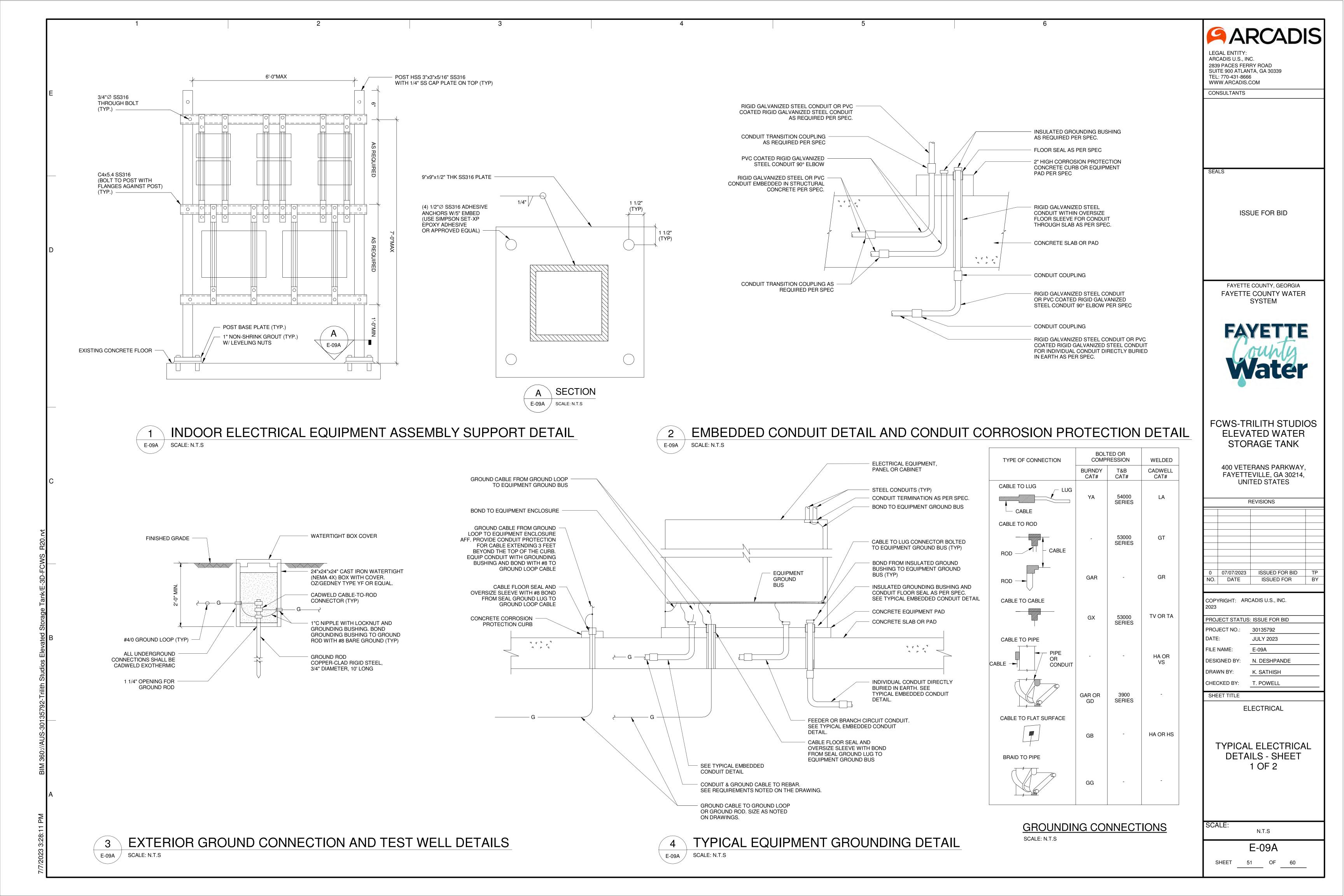
ELECTRICAL

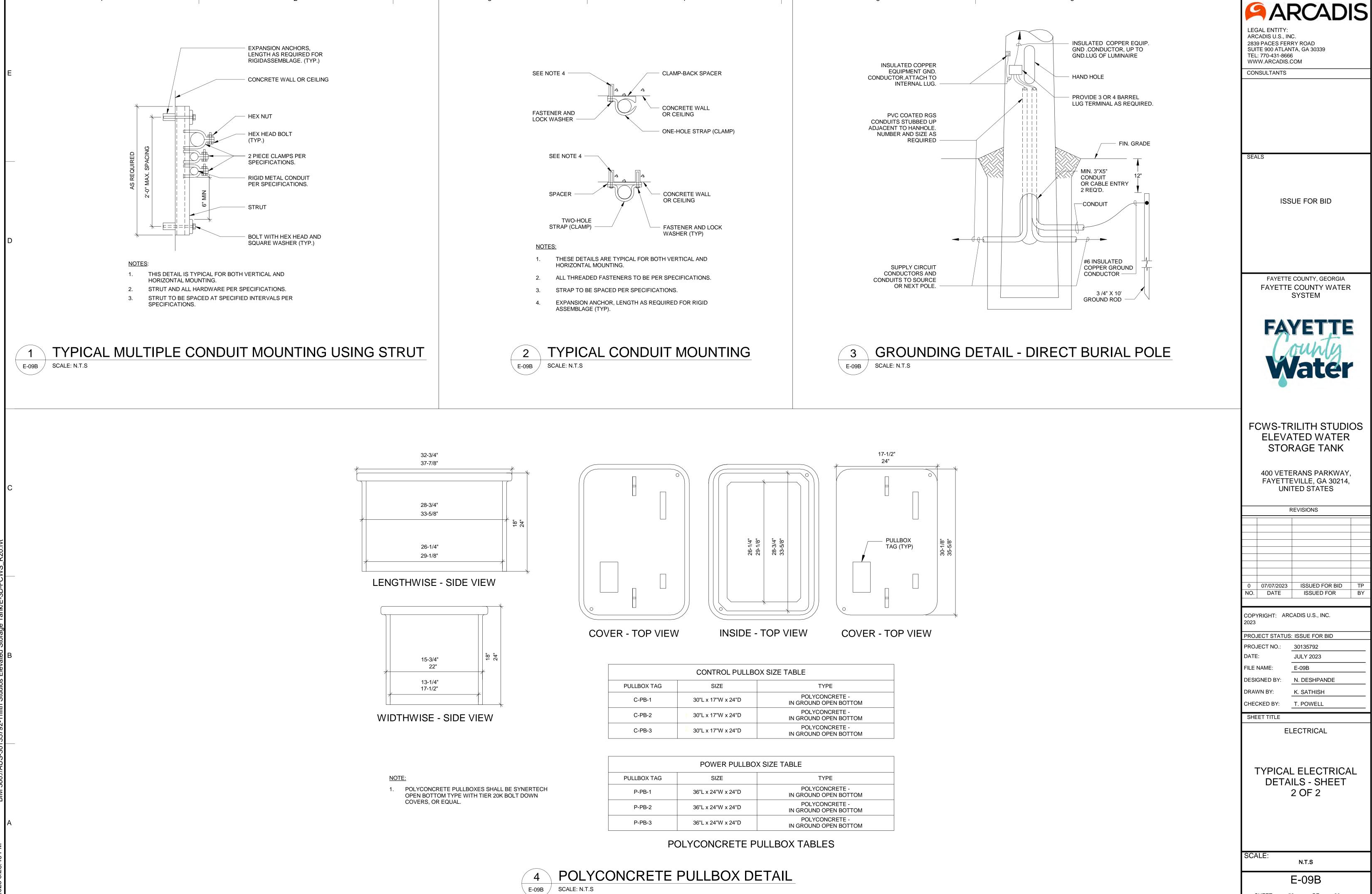
PANELBOARD SCHEDULE

SCALE:

N.T.S

E-08 SHEET 50 OF 60





E-09B SHEET 52 OF 60

ISSUE FOR BID

SYSTEM

UNITED STATES

REVISIONS

ISSUED FOR

JULY 2023

N. DESHPANDE

K. SATHISH

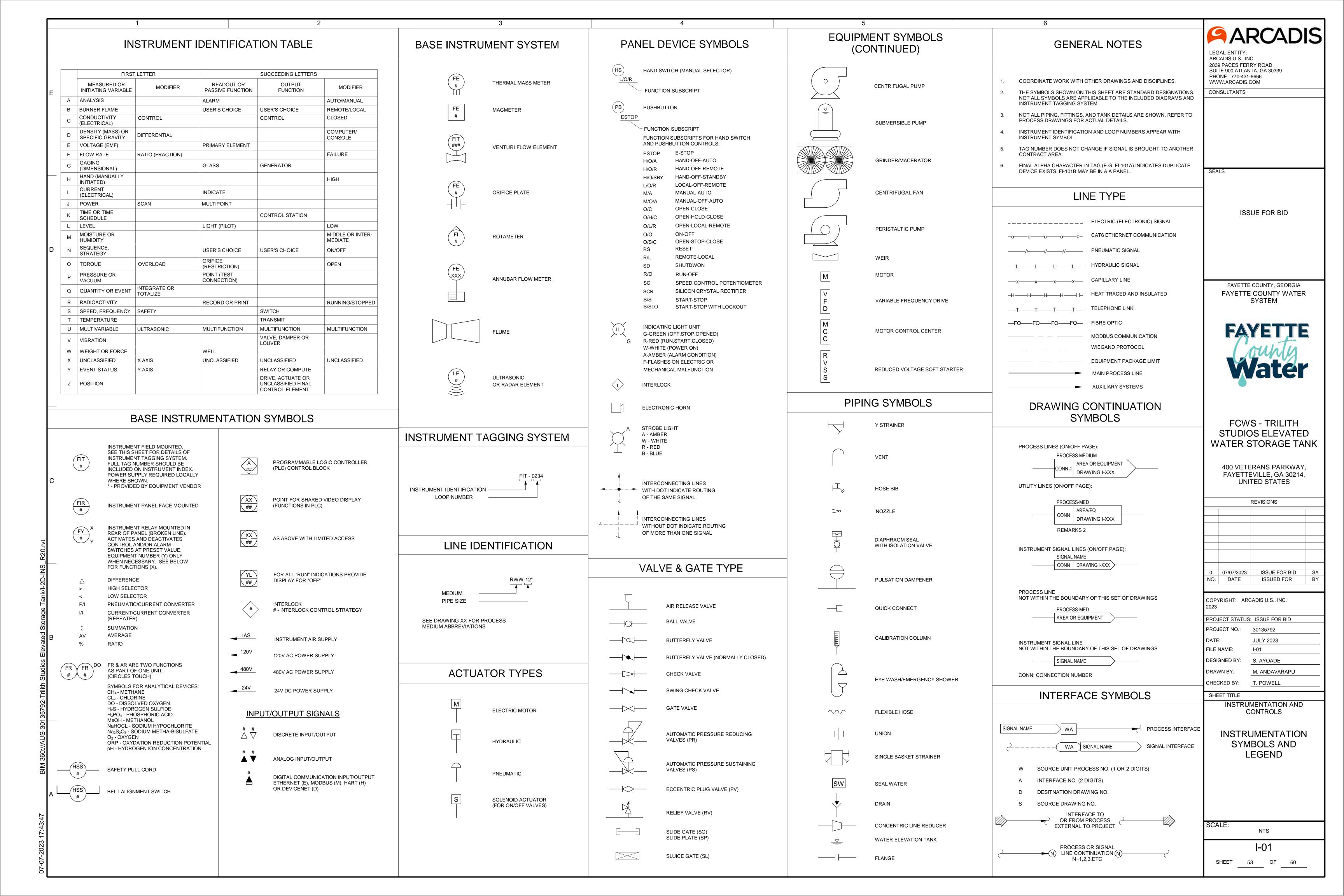
T. POWELL

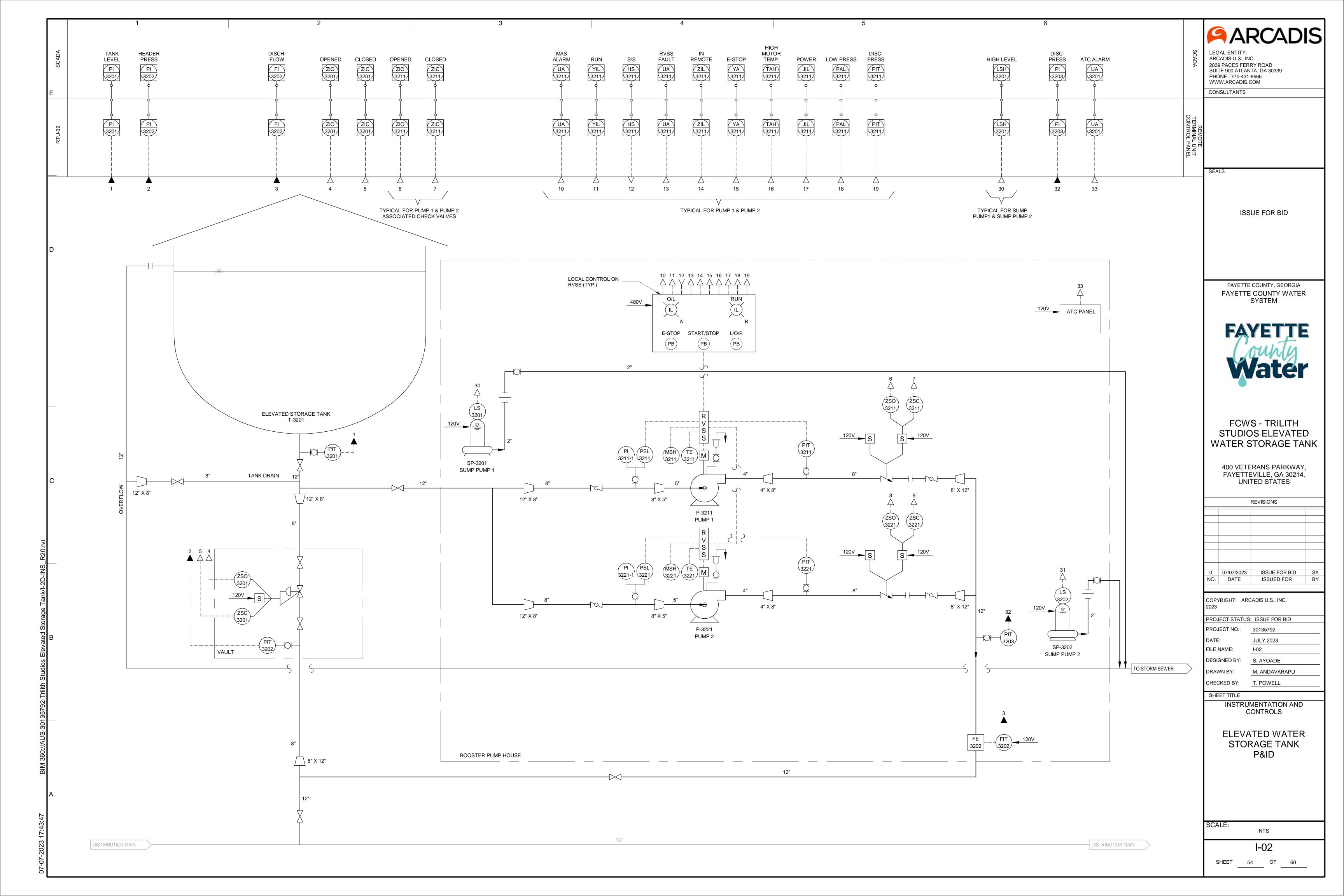
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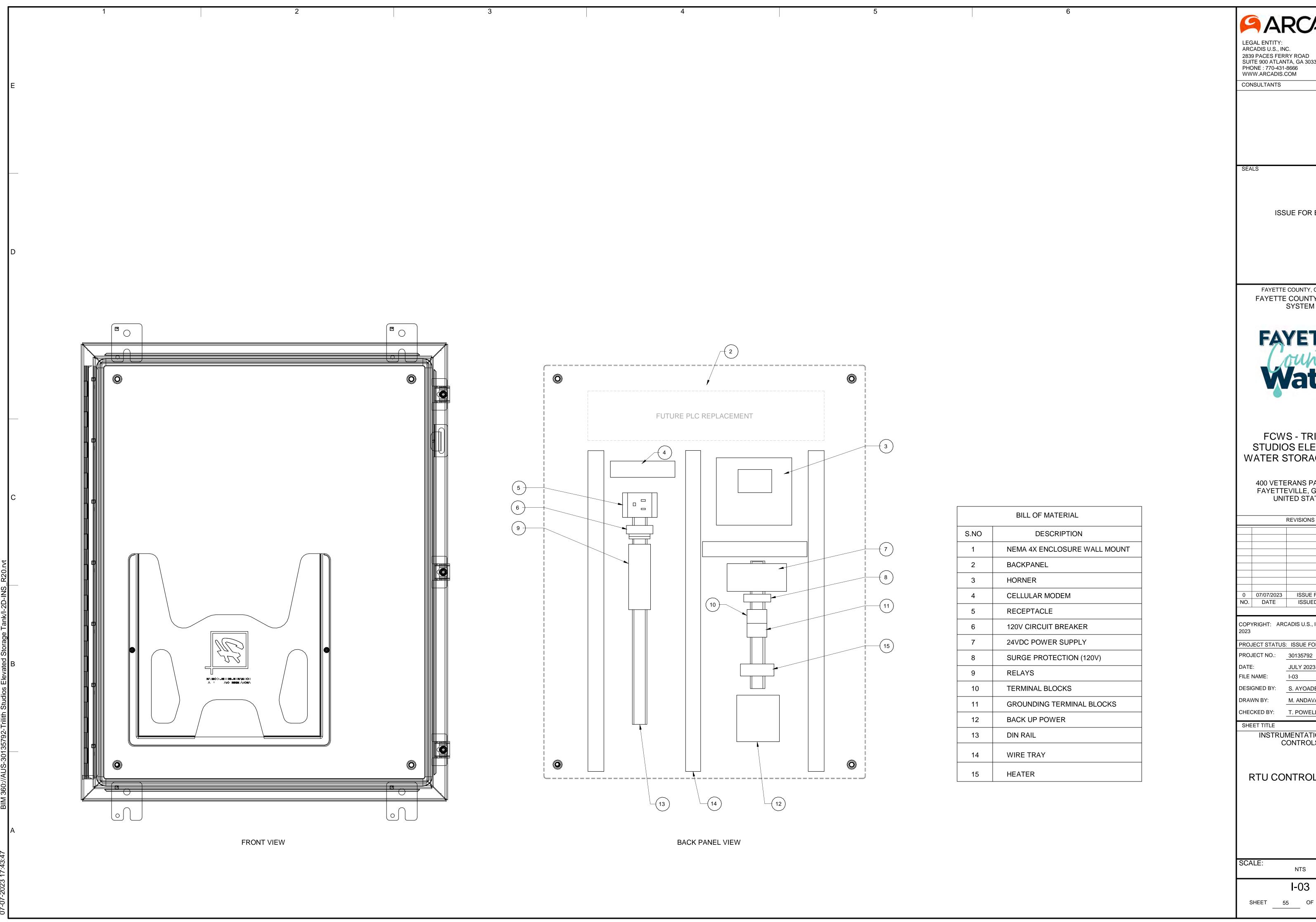
2 OF 2

N.T.S

E-09B







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ISSUE FOR BID

FAYETTE COUNTY, GEORGIA FAYETTE COUNTY WATER SYSTEM



FCWS - TRILITH STUDIOS ELEVATED WATER STORAGE TANK

400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, UNITED STATES

		REVISIONS	
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JULY 2023 FILE NAME: I-03 DESIGNED BY: S. AYOADE

DRAWN BY: M. ANDAVARAPU T. POWELL CHECKED BY:

SHEET TITLE

INSTRUMENTATION AND CONTROLS

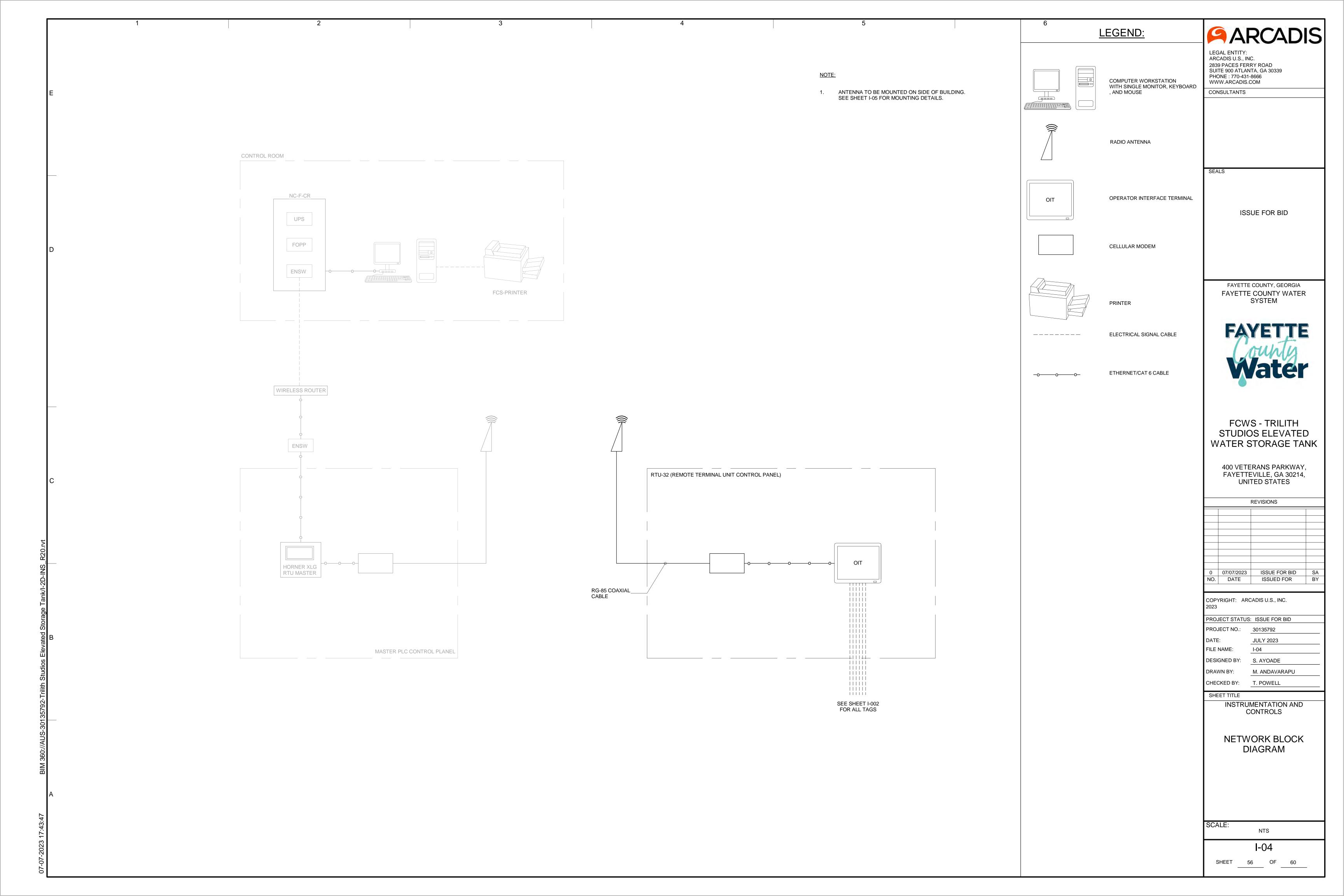
RTU CONTROL PANEL

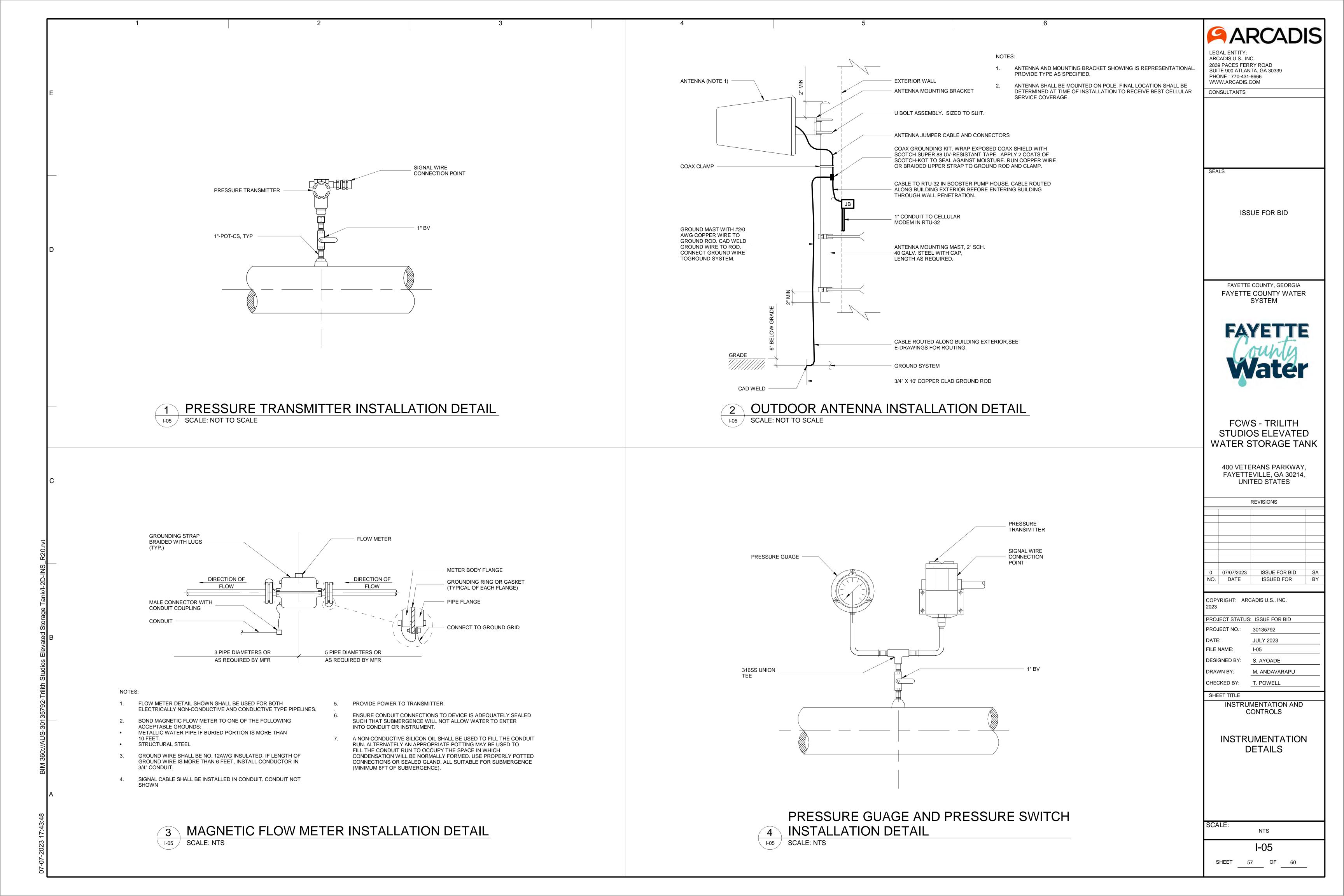
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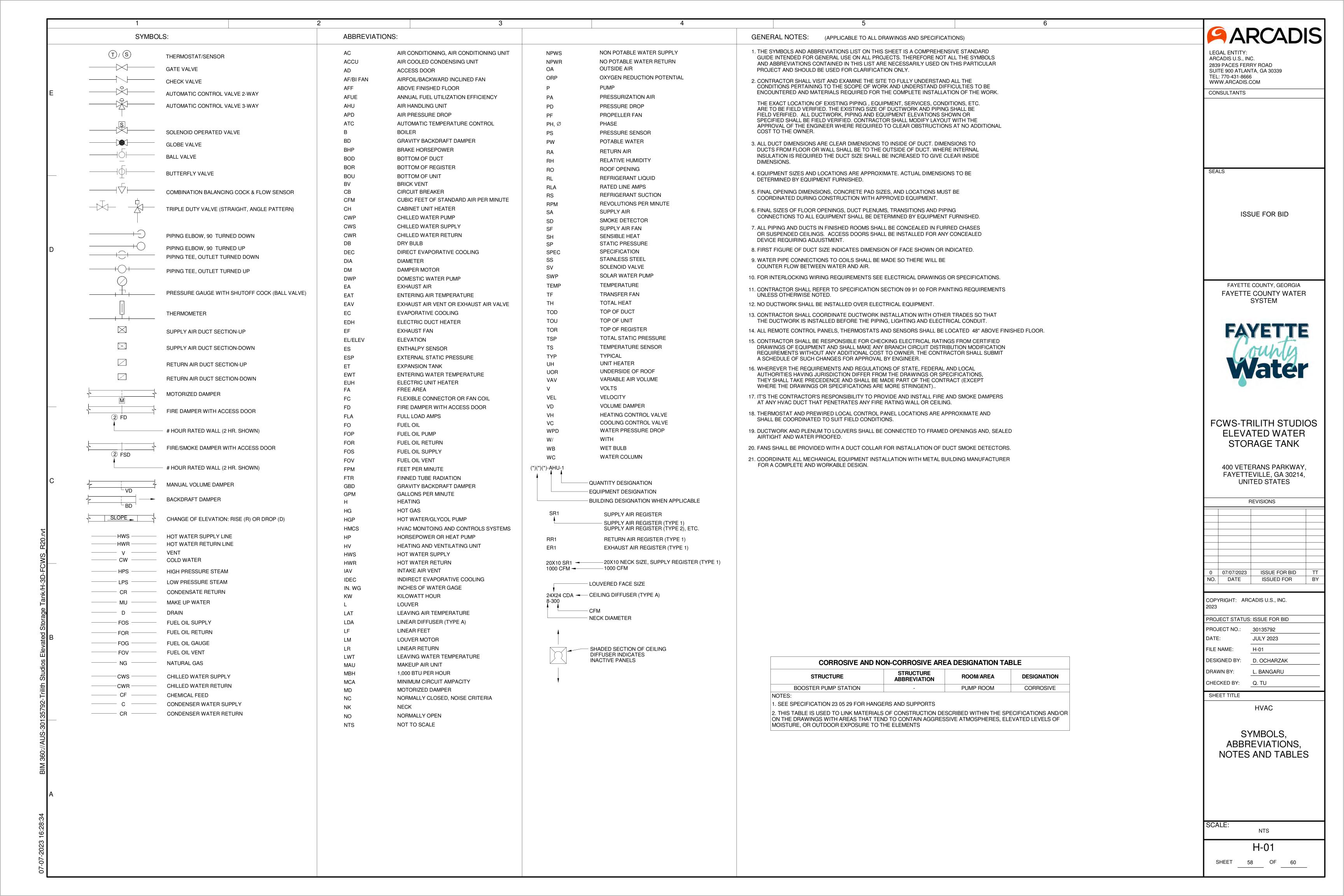
I-03

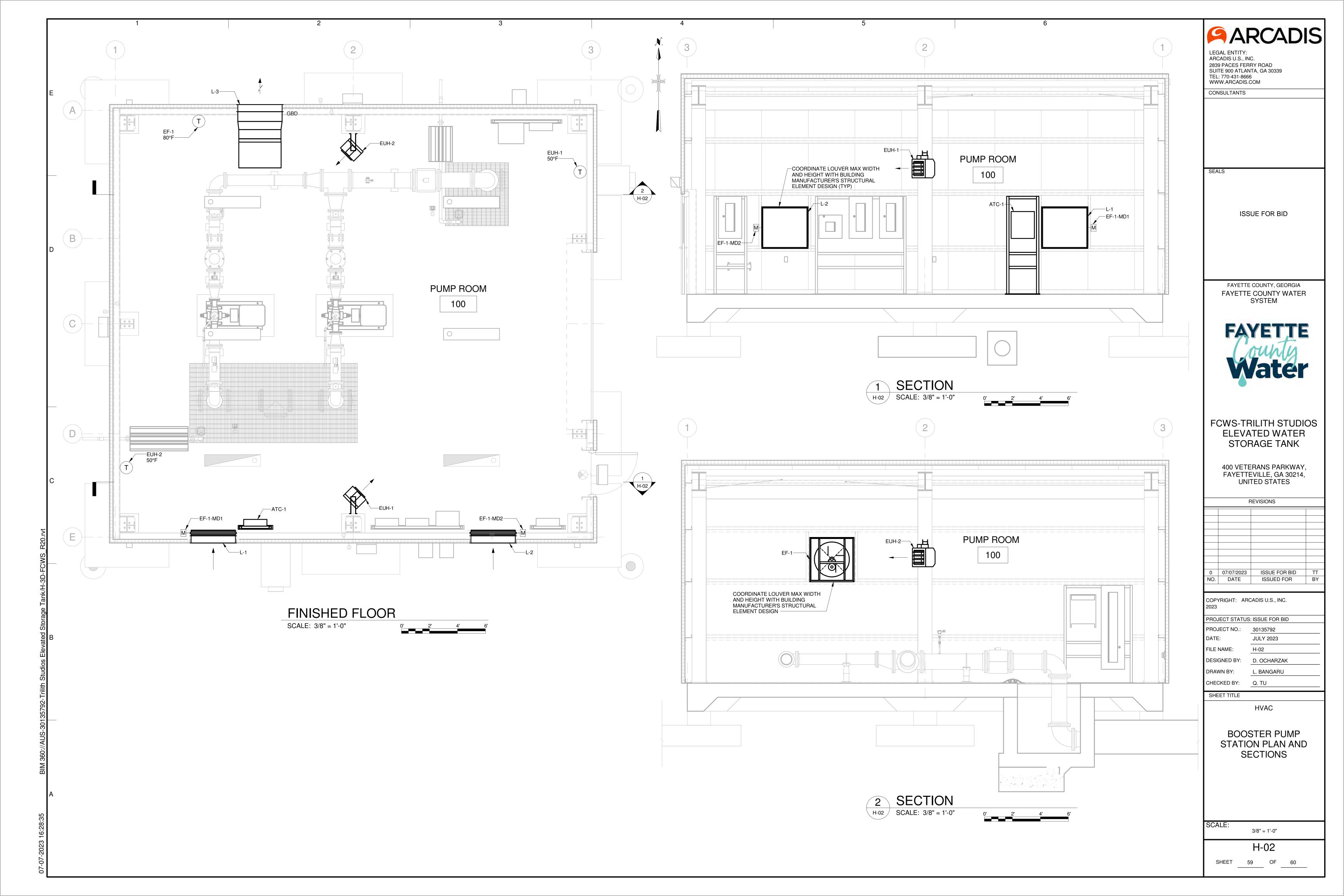
SHEET 55 OF 60

NTS









AIRFLOW

B'' MIN.

COLUMN OR WALL

ELECTRIC UNIT HEATER

NOTES:

-STAINLESS STEEL

MOUNTING HARDWARE

- BY DIVISION 26

480/240/208 3

SINGLE PHASE

POWER TO HVAC

HVAC UNIT (EUH, EF

AHU, ACCU ETC)

120 V/1 PH/60 HZ POWER

SUPPLY WIRE AND CONDUIT

NOTES:

120V AND 24V

BY DIV 23-

CONTROL WIRE

EQUIPMENT BY

PHASE AND

DIV 26 \sim

1. SEE SECTION 23 09 00 FOR SEQUENCES OF OPERATIONS AND ADDITIONAL TEMPERATURE CONTROLS INFORMATION

ATC PANEL

(BY HVAC)

3 ATC PANEL WIRING SCHEMATIC
SCALE: NTS

-AUDIO VISUAL ALARM

COMMON ALARM SIGNAL WIRE AND

ALL WIRING AND CONDUIT TO FIELD DEVICES

(THERMOSTATS, TEMPERATURE CONTROLLERS, LOUVER AND DAMPER OPERATORS, SMOKE

SENSORS, CONTROL VALVES, TEMPERATURE

UNLESS SHOWN ON THE ELECTRICAL DRAWINGS

DETECTORS, SWITCHES, UNIT HEATERS PRESSURE

SENSORS, ETC) AND 120V FANS BY HVAC CONTRACTOR

CONDUIT TO PLANT SCADA SYSTEM

SIGNAL WIRE AND CONDUIT TO

MOTOR STARTERS AT MCC BY

BY DIVISION 26

DIVISION 26

(BY HVAC)

NOTES:

COORDINATE INSTALLATION WITH METAL BUILDING MANUFACTURER'S STANDARD CONSTRUCTION DETAILS AND DESIGN.





1. MAINTAIN MANUFACTURER'S MINIMUM

CLEARANCE REQUIREMENTS.

ELECTRIC UNIT HEATER SCHEDULE COIL DATA MOTOR DATA TOTAL FAN TEMP. RISE THROW DISCHARGE WEIGHT MARK NO. LOCATION SERVICE HEIGHT **MODEL** NOTES AMPS CFM ORIENTATION (°F) (FT) (AFF) HORIZONTAL 32 CHROMALOX LUH 1,2,3 EUH-1 & EUH-2 | BOOSTER PUMP STATION | PUMP ROOM | 13.7 | 4 | 480/3/60 | 1550 | 1/35 | 480/1/60 | 5.1 | 380 8 FT

CENTERS (MIN TWO PER SIDE)

1. INSTALL PER MFR INSTRUCTIONS
2. SPECIFICATION SECTION 23 82 39.43

1. INSTALL PER MFR INSTRUCTIONS

2. SPECIFICATION SECTION 23 34 05

3. WALL MOUNTED THERMOSTAT

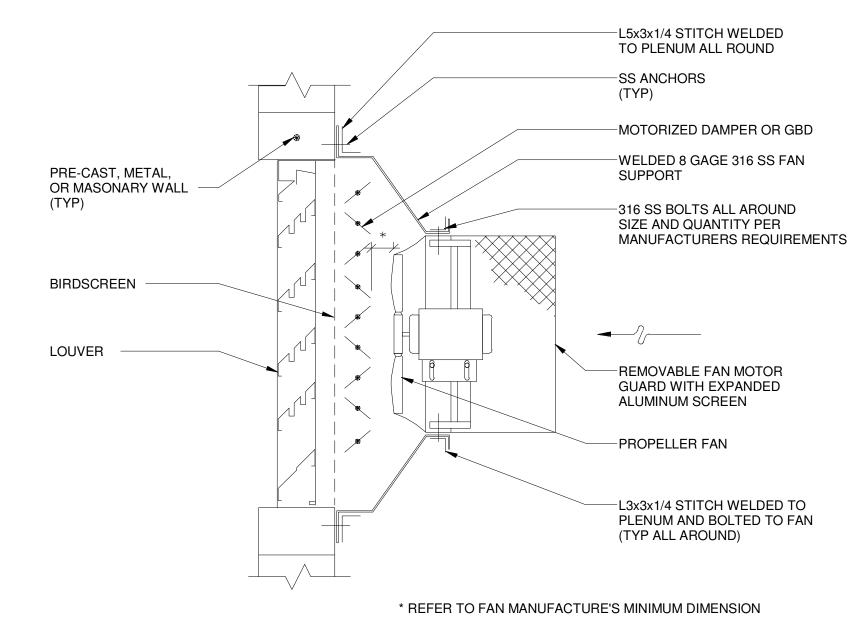
3. DISCONNECT BY DIV 26

4. 22 SONES

						FAN	SCHEDULE								
MARK NO.	LOCATION	SERVICE	TYPE	DRIVE	AIRFLOW (CFM)	ESP (IN. W.G.)	FAN SPEED (RPM)	HP	ВНР	RPM	V/HP/HZ	WEIGHT (LB)	MFR	MODEL	NOTES
EF-1	BOOSTER PUMP STATION	PUMP ROOM	PROPELLER WALL FAN	BELT	4000	0.38	1246	3/4	0.57	1750	460/3/60	80	LOREN COOK	EWB 24EW	1,2,3,4
NOTES:															

	LOCATION	05D/405	SIZE (IN)			ACTUATOR			NOTEO
MARK NO.	LOCATION	SERVICE	(WXH)	TYPE	ENCLOSURE	VOLTS/PH/HZ	MFR	MODEL	NOTES
EF-1-MD1, EF-1-MD2	BOOSTER PUMP STATION	PUMP ROOM	40X36	2-POS, SR, NC	NEMA 4X	120/1/60	BELIMO	AF SERIES	1,2,3,4,5
NOTES:									
1. INSTALL PER MFR INSTR 2. CONTROL DAMPER PER		3. ACTUATOR PER S 4. COORDINATE ACT						TH APPROVED E	QUIPMENT

MARK NO	LOCATION	SERVICE	TYPE	SIZE (IN) (WXH)	MIN. FREE AREA (SF)	MFR	MODEL	NOTES
L-1, L-2	BOOSTER PUMP STATION	PUMP ROOM	FIXED	40X36	4.73	C/S	A6097	1,2,3
L-3	BOOSTER PUMP STATION	EF-1	FIXED	40X40	5.36	C/S	A6097	1,2,3



NOTE :

1. FAN SHALL BE REMOVABLE FOR CLEANING OF LOUVER AND BIRDSCREEN.

2. ALL STRUCTURAL STEEL SIZES, BOLT SIZES AND PLENUM THICKNESS SHOWN ARE MINIMUM AND SHALL BE CONSTRUCTED OF 316 STAINLESS STEEL. CONTRACTOR TO PROVIDE ADDITIONAL SUPPORT AND/OR INCREASE SIZES AS REQUIRED TO SUPPORT FAN AND APPURTENANCES. SUBMIT SHOP DRAWINGS DEMONSTRATING THAT THE ENTIRE SYSTEM IS PROPERLY SUPPORTED USING A SAFTEY FACTOR OF 5.

3. PLENUM SIDES, TOP AND BOTTOM TO BE FASTENED TO WALL W/ 1/2" DIA ANCHORS AT 24" C/C (MINIMUM 4 BOLTS). KEEP 3 1/2" EDGE DISTANCE FOR BOLTS

4. COORDINATE INSTALLATION WITH METAL BUILDING MANUFACTURER'S STANDARD CONSTRUCTION DETAILS AND DESIGN.

4 WALL MOUNTED PROPELLER FAN DETAIL SCALE: NTS

LEGAL ENTITY:
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TEL: 770-431-8666
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SEALS

CONSULTANTS

ISSUE FOR BID

FAYETTE COUNTY, GEORGIA
FAYETTE COUNTY WATER

SYSTEM



FCWS-TRILITH STUDIOS
ELEVATED WATER
STORAGE TANK

400 VETERANS PARKWAY, FAYETTEVILLE, GA 30214, UNITED STATES

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PROJECT STATUS: ISSUE FOR BID

 PROJECT NO.:
 30135792

 DATE:
 JULY 2023

 FILE NAME:
 H-03

 DESIGNED BY:
 D. OCHARZAK

DRAWN BY: L. BANGARU
CHECKED BY: Q. TU

SHEET TITLE

HVAC

DETAILS, SCHEMATIC AND SCHEDULES

SCALE:

H-03

NTS

SHEET 60 OF 60

BIM 360*//AUS-30135792-Trilith Studios

70.00.00