# CONTRACT DOCUMENTS FOR CONSTRUCTION OF

# CROSSTOWN WATER TREATMENT PLANT IMPROVEMENTS

BID #960-B



PREPARED FOR

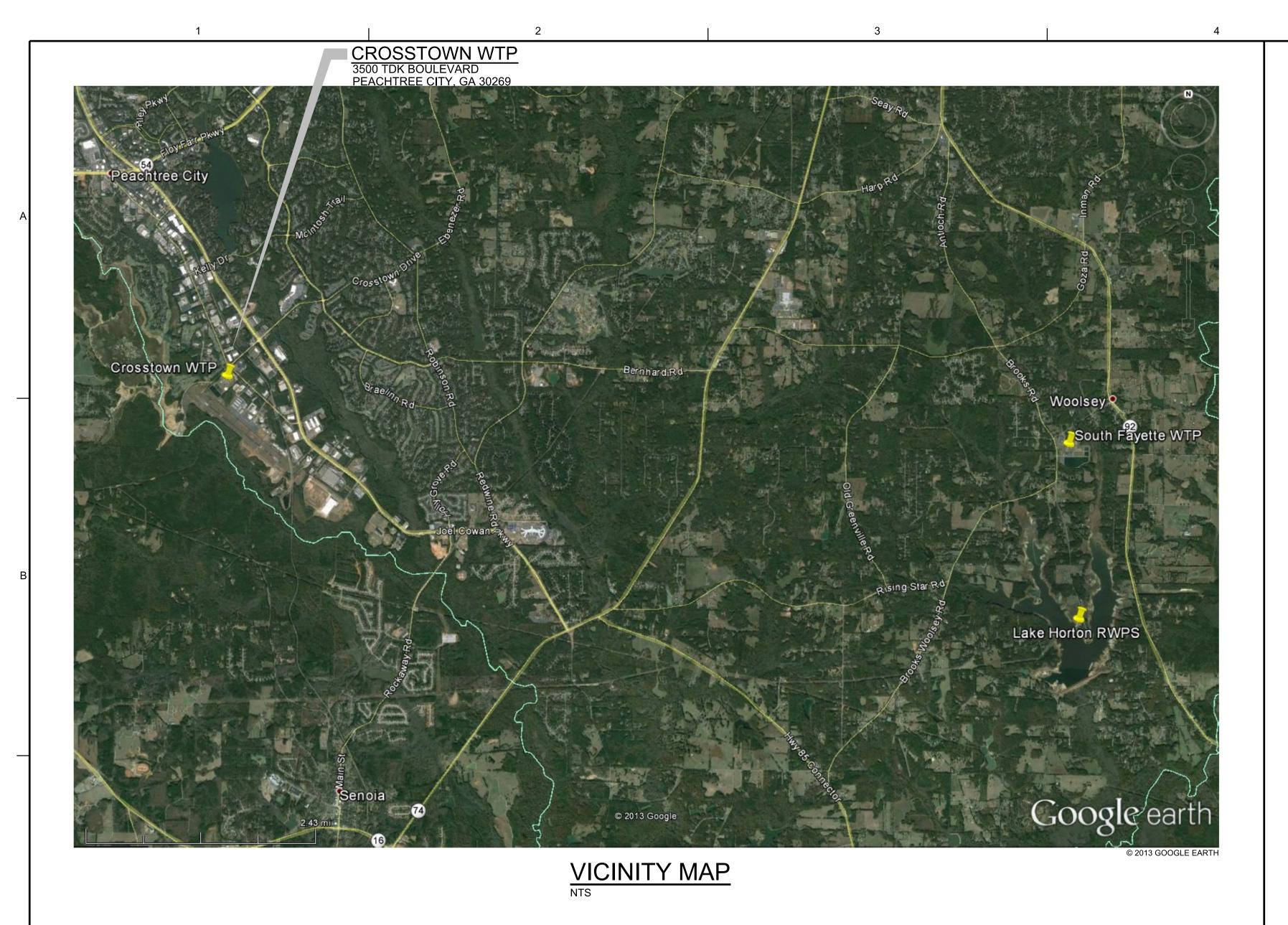
# FAYETTE COUNTY WATER SYSTEM FAYETTE COUNTY, GEORGIA

VOLUME 2 OF 2 DRAWINGS

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CH2MHILL®

Project No. 497074
MAY 2015



LOCATION MAP - CROSSTOWN WTP

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PEORG/	GEOISTERE, A	No. 030039	PROFESSIONAL   -i-	M. GINEER P.	CHAEL E. D.	
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PLOT DATE: 5/1/2015

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	Α	AMMETER, AMPERES	CRS	PVC COATED RIGID STEEL	FSHS	FOLDING SHOWER SEAT	LHR	LEFT HAND REVERSE	PP	POWER POLE	STIF	STIFFENER		
	AB	ANCHOR BOLT	CS	CUP SINK	FT	FOOT OR FEET	LLH	LONG LEG HORIZONTAL	PPL	POLYPROPYLENE LINED	STIRR	STIRRUP		
	ABDN	ABANDON ALTERNATING CURRENT	CSATC	CERAMIC SUSPENDED ACOUSTICAL	FTG FU	FOOTING FIXTURE UNIT	LLV LNTL	LONG LEG VERTICAL LINTEL	PRCST PREFAB	PRECAST PREFABRICATION	STL ST	STEEL STRAIGHT		ONAL CATA
	AC	ASPHALTIC CEMENT	СТ	TILE CEILING CERAMIC TILE	FVNR	FULL VOLTAGE NON-REVERSING	LONG	LONGITUDINAL	PRES	PRESSURE	STRL	STRUCTURAL		03000 ESSINE
	ACI	AMERICAN CONCRETE INSTITUTE	CT	CURRENT TRANSFORMER	FVR	FULL VOLTAGE REVERSING	LOS	LOCK-OUT STOP PUSHBUTTON	PRI	PRIMARY	STRUCT	STRUCTURE	Min'	NO N
	ACST ACU	ACOUSTICAL AIR CONDITIONING CONDENSING UNIT	CTR CTR'D	CENTER CENTERED	FWD	FORWARD	LP L.P.	LIGHT POLE LOW POINT	PRM PROJ	PERMANENT REFERENCED MARKER PROJECTION	SUSP SV	SUSPENDED SOLENOID VALVE		MIC
	ACO	AREA DRAIN	CTSK	COUNTERSUNK			L.P. LR	LATCHING RELAY	PROP	PROPERTY	SYMM	SYMMETRICAL		<del></del>
	ADD	ADDITIONAL	CU	CUBIC	G, GND	GROUND	LR	LOCAL-REMOTE	PS	POLYCARBONATE SHEET				
	AFD	ADJUSTABLE FREQUENCY DRIVE	CU FT	CUBIC FOOT	GA	GAUGE	LR	LONG RADIUS	PSF	POUNDS PER SQUARE FOOT	T	THERMOSTAT		
А	AFF AG	ABOVE FINISHED FLOOR ACOUSTICAL GLASS	CU IN CU YD	CUBIC INCH CUBIC YARD	GAL GALV	GALLON GALVANIZED	LS LTG	LABORATORY SINK LIGHTS OR LIGHTING	PSI PSIG	POUNDS PER SQUARE INCH POUNDS PER SQUARE INCH, GAUGE	T&B T&G	TOP AND BOTTOM TONGUE AND GROOVE		
	AGGR	AGGREGATE	CUH	COPPER TUBING, HARD DRAWN	GB	GRAB BAR	LWL	LOW WATER LEVEL	PSIG PT	POINT OF TANGENCY	T&G	TOP OF		1 1 1 2
	AHR	ANCHOR	CV	CHECK VALVE	GC	GROOVED COUPLING	LYRS	LAYERS	PT	POTENTIAL TRANSFORMER	TAN	TANGENT		
	AISC	AMERICAN INSTITUTE OF	CWR	CABINET DOOR MOUNTED	GFI	GROUND FAULT INTERRUPTER	MODIL	MOD AND DECOMINATED	PT	PRESSURE TREATED	TB	TERMINAL BOARD		
	AL (ALUM)	STEEL CONSTRUCTION ALUMINUM		WASTE RECEPTACLE	GFR GL	GOUND FAULT RELAY GLASS	M&BH MA	MOP AND BROOM HOLDER MANUAL-AUTO	PTAC PTD	PACKAGED TERMINAL AIR CONDITIONING PAPER TOWEL DISPENSER	TB TBG	TOWEL BAR TUBING		
	ALKY	ALKALINITY	D	DRAIN	GPD	GALLONS PER DAY	MAS	MASONRY	PV	PLUG VALVE	TC	TIME TO CLOSE		
	ALTN, (ALT)	ALTERNATE	D	PENNY NAIL SIZE	GPH	GALLONS PER HOUR	MATL	MATERIAL	PVC, P.V.C.	POLYVINYL CHLORIDE	TCAE	TIME CLOSE AFTER ENERGIZATION	1	
	AM ANDZ	AUTO-MANUAL ANODIZE	DAS DBA	DATA ACQUISTION SYSTEM DEFORMED BAR ANCHOR	GPM GRTG	GALLONS PER MINUTE GRATING	MAX MB	MAXIMUM MACHINE BOLT	PVI	POINT OF VERTICAL INTERSECTION	TCL2 TDH	TOTAL CHLORINE RESIDUAL TOTAL DYNAMIC HEAD		
	APPROX	APPROXIMATE	DBL	DOUBLE	GSP	GALVANIZED STEEL PIPE	MC	MASONARY CLEARANCE	PVMT PVT	PAVEMENT POINT OF VERTICAL TANGENCY	TDR	TIME DELAY RELAY		
	APVD	APPROVED	DC	DIRECT CURRENT	GV	GATE VALVE	MC	MODULATE-CLOSE	QT	QUARRY TILE	TECH	TECHNICAL		
	ARCH	ARCHITECTURAL ANALOG RELAY	DEG	DEGREE DETAIL	GVL	GRAVEL	MCC	MOTOR CONTROL CENTER	R (RAD)	RADIUS	TEL	TELEPHONE TEMPORARY		
$\dashv$	AR ARV	ANALOG RELAY AIR RELEASE VALVE	DET DF	DOUGLAS FIR	GWB GYP	GYPSUM WALL BOARD GYPSUM	MECH MET	MECHANICAL METAL	RC	REINFORCED CONCRETE	TEMP TF	TOP FACE		
	ASU	AIR SUPPLY UNIT	DF	DRINKING FOUNTAIN	<b>3</b> 11	G11 GG	MFD	MANUFACTURED	RCP, R.C.P. RCPT	REINFORCED CONCRETE PIPE RECEPTACLE	TFG	TEMPERED FLOAT GLASS		
	ATS	AUTOMATIC	DHEC	DEPT OF HEALTH AND	Н	HORN OR HOWLER	MFR	MANUFACTURER	RD	ROAD	THD	THREAD		
	AUTO AUX	AUTOMATIC AUXILIARY	DDI	ENVIRONMENTAL CONTROL DROP INLET	HAS HB	HEADED ANCHOR STUD HOSE BIB	MGD MH	MILLION GALLONS PER DAY MANHOLE	RD	ROOF DRAIN	THK THRU	THICKNESS THROUGH		<u> </u>
	AVG	AVERAGE	DI	DUCTILE IRON	HC HB	HOLLOW CORE	MIN	MINIMUM	RDCR RDW	REDUCER REDWOOD	TJB	THROUGH TERMINAL JUNCTION BOX		
	AVRV	AIR VACUUM RELEASE VALVE	DIA, O	DIAMETER	HD	HUB DRAIN	MIR	MIRROR	RDW R.E.	REDWOOD RIM ELEVATION	TL	TEFLON LINE PIPE		
	@	AT	DIAG DIP, D.I.P.	DIAGONAL DUCTILE IRON PIPE	H.D.P.E.	HIGH DENSITY POLY PIPE	MISC	MISCELLANEOUS	REF	REFER OR REFERENCE	TO	TIME TO OPEN		
	(B) R	BELL BRONZE TINT	DIP, D.I.P. DIR	DIRECTION	HDR HDW	HEADER HARDWARE	MJ MLO	MECHANICAL JOINT MAIN LUGS ONLY	REF	REFRIGERATOR	TOAD TOAE	TIME OPEN AFTER ENERGIZATION		
	BAL	BALANCE	DISCH	DISCHARGE	HESR	HYPALON ELASTIC SHEET ROOFING	MMP	MECHANICAL MOUNTING PANEL	REFR REINF	REFRIGERATE, REFRIGERANT REINFORCED, REINFORCING, REINFORCE	T.O.P.	TOP OF PIPE		
	B.C.R.	BROWARD COUNTY RECORDS	DOL DS	DIRECT-ON-LINE DOWNSPOUT	HGL	HYDRAULIC GRADE LINE	M.O.	MASONRY OPENING	REQD	REQUIRED	TP	TURNING POINT		
	BD BE	BUTTERFLY DAMPER BLIND FLANGE	DS DWG	DOWNSPOUT DRAWING	HGT HH	HEIGHT HANDHOLE	MP MPU	METAL PANEL MULTIPURPOSE UNIT	RG	REFLECTIVE	TRANS TRANSV	TRANSFORMER TRANSVERSE		
В	BFV	BLIND FLANGE BUTTERFLY VALVE	DWN	DOWN	нн HID	HANDHOLE HIGH INTENSITY DISCHARGE	MPU MTD	MOUNTED	RH	RIGHT HAND	TRANSV	TRANSVERSE TREAD		
	ВН	BUD HEIGHT	Δ	DELTA	НК	HOOK	MTS	MANUAL TRANSFER SWITCH	RH RHR	RODHOLE RIGHT HAND REVERSE	TS	TUBE STEEL		
	BL	BASELINE	_	5.07	HM	HOLLOW METAL	MTS	MILL TYPE STEEL PIPE	RL	RAIN LEADER	TTD	TOILET TISSURE DISPENSER		
	BFP BLDG	BACKFLOW PREVENTER BUILDING	E	EAST EMPTY	HOA HOR	HAND-OFF-AUTO HAND-OFF-REMOTE	MV MWS	MERCURY VAPOR MAXIMUM WATER SURFACE	RL	RAISE LOWER	TU-X TURB	TREATMENT UNIT NO. X TURBIDITY		
	BLK	BLOCK	EA	EACH	HORIZ	HORIZONTAL	IVIVVO	WAXIWOW WATER SORT ACE	RLS RM	RUBBER LINED STEEL ROOM	TYP	TYPICAL		
	BM	BEAM	EE	EMERGENCY EYEWASH	HP	HORSEPOWER	N	NORTH	ROL	RAISE-OFF-LOWER				
	BM B.O.S.	BENCHMARK BOTTOM OF STRUCTURE	EF	EACH FACE EXHAUST FAN	H.P. HPS	HIGH POINT HIGH PRESSURE SODIUM	N/A N/C	NOT APPLICABLE NORMALLY CLOSED	RPM	REVOLUTIONS PER MINUTE	U ON UBC	UNLESS OTHERWISE NOTED UNIFORM BUILDING CODE		
	BOT, (BOTT), B/	BOTTOM OF STRUCTURE	EFF	EFFLUENT	HR	HOSE RACK	N/O	NORMALLY OPEN	RS RST	RIGID STEEL REINFORCING STEEL	UH	UNIT HEATER		
	BRG	BEARING	EL, ELEV	ELEVATION	HRDN	HARDENER	N, NEUT	NEUTRAL	RST RTN	RETURN	UR	URINAL		
	BSP	BLACK STEEL PIPE	ELB	ELBOW	HV	HOSE VALVE	NA	NON-AUTOMATIC	RRUB	RADIAL RUBBER	UVR	UNDER VOLTAGE RELAY		
	BV BVC	BALL VALVE BEGINNING OF VERTICAL CIRCUIT	E!FS ELC	EXTERIOR !NSULATION FINISH SYSTEM ELECTRICAL LOAD CENTER	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	ND NGS STA	NAPKIN DISPOSAL  NATIONAL GEODETIC SURVEY STATION	R/W	RIGHT OF WAY	V	VALVE		დ >
4	5.0	BEGINNING OF VERTICAL SINGOFF	ELEC	ELECTRIC, ELECTRICAL	HW	HEADWALL	NIC	NOT IN CONTRACT	RW	RAW WATER	V	VENT	pg _	
	С	CONDUIT	ENGR	ENGINEER	HWL	HIGH WATER LEVEL	NO, #	NUMBER	S	I-BEAM	V	VOLT	Rog 600	EME SYS
	°C C-C	DEGREE CELSIUS CENTER TO CENTER	EOG EOP	EDGE OF GUTTER EDGE OF PAVEMENT	IC	INTERRUPTING CAPACITY	NP NPT	NON-PROTECTED  NATIONAL PIPE THREADS	S	SLOPE	V VR	VOLTMETER, VOLTS VAPOR BARRIER	od ige	DVE DVE SR S
	CAB	CABINET	E.O.W.	EDGE OF WATER	ID	INSIDE DIAMETER	NS	NON-SHRINK	S	SOUTH SWITCH	VC	VERTICAL CURVE	Wood 80 032	PR( TE)
	CAR	CARPET	EP	EDGE OF PAVING EXPLOSION PROOF	IE, I.E.	INVERT ELEVATION	NTS	NOT TO SCALE	SATC	SUSPENDED ACOUSTICAL TILE CEILING	VCP	VITRIFIED CLAY PIPE	Dun Row GA 3	<u>3</u> 9   <u>₩</u> ≯ <u>L</u>
	CATV	CABLE TELEVISION	EP EQ	EQUAL EQUAL	IF	INSIDE FACE	0.70.0	OUT TO OUT	SC	SHOWER CURTAIN	VDR	VERTICLE DRYING RACK		
	CB, C.B.	CATCH BASIN CIRCUIT BREAKER	EQ SP	EQUALLY SPACED	IN	INSULATING GLASS INCH	O TO O OA	OUT TO OUT OVERALL	SCBA	SELF CONTAINED BREATHING APPARATUS	VERT VIB	VERTICAL VIBRATION	thtre ass	
	CC	CONTROL CABLE	EQPT, (EQUIP)	EQUIPMENT	INCAND	INCANDESCENT	OC	ON CENTER	SCC SCFM	SOLID CORE STANDARD CUBIC FEED PER MINUTE	VP	VENEER PLASTER	eac eac mb	hoi XVI CC TE
	CCP	CENTRAL CONTROL SYSTEM	ETM EVC	ELAPSED TIME METER END OF VERTICAL CURVE	INJS	INJECTIONS	OC .	OPEN-CLOSE	SCH	STANDARD COBIC FEED PER MINOTE SCHEDULE	VPC	POINT OF VERTICAL CURVATURE	0 P G	STC TTE YEI
	CCS CFM	CENTRAL CONTROL SYSTEM CUBIC FEET PER MINUTE	EW	EACH WAY	INST INSTM	INSTANTANEOUS INSTRUMENT, INSTRUMENTATION	OCA OCR	OPEN-CLOSE-AUTO OPEN-CLOSE-REMOTE	SCR	SHOWER CURTAIN ROD	VPI VPS	POINT OF VERTICAL INTERSECTION VENEER PLASTER SYSTEM	660 40	OS: YE1
	CHAN, C	CHANNEL (BEAM)	EXH	EXHAUST	INSUL	INSULATION	OD	OUTSIDE DIAMETER	SCU	SPEED CONTROL UNIT	VPT	POINT OF VERTICAL TANGENT	١	CR FA
С	CHDPE	CORRUGATED HÍGH DENSITY POLYETHYLENE PIPE	EXP EXP	EXPANSION EXPOSED	INVT	INVERT	OF	OUTSIDE FACE	SD SDMH SDMH	SOAP DISPENSER STORM DRAIN MANHOLE	VT	VINYL TILE		
	CHEM	CHEMICAL	EXP AB	EXPOSED EXPANSION ANCHOR BOLT	IRRIG ITG	IRRIGATION INSULATED TEMPERED GLASS	OHW OL	OVERHEAD WIRE OVERLOAD RELAY	SDMH, S.D.M.H. SDWK	STORM DRAIN MANHOLE SIDEWALK	VTR	VENT THRU ROOF		
	CI	CAST IRON	EXP JT	EXPANSION JOINT	IU	INTAKE UNIT	OL 00	OVERLOAD RELAY ON-OFF	SEC	SECONDARY	W	WATER		
	CIP CIPS	CAST IRON PIPE CAST IRON SOIL PIPE	EX, EXST, (EXIST)	EXISTING	IVV	IRRIGATION WELL	OOA	ON-OFF-AUTO	SECT	SECTION	W	WEST		
	CIPS	CAST IRON SOIL PIPE CONSTRUCTION JOINT	EXT	EXTERIOR	I ID	JUNCTION BOX	OOR	ON-OFF-REMOTE	SED SEW	SEDIMENTATION SEWAGE	W	WIDE FLANGE (BEAM)		
	CKT	CIRCUIT	^F	DEGREE FAHRENHEIT	J, JB JAN	JUNCTION BOX  JANITOR	OP OPER	OPAQUE PANEL OPERATOR	SF	SLOWER-FASTER	W/ WC	WITH WATER CLOSET		
	©, CL	CENTERLINE CEMENT LINED DUCTILE IRON PIPE	F, FU	FUSE	JCT	JUNCTION	OPNG	OPENING	SF	SQUARE FEET	WD	WOOD	@	
	CLDI C.L.F.	CHAIN LINK FENCE	FAI	FRESH AIR INLET	JT	JOINT	O.R.B.	OFFICIAL RECORD BOOKS	SG SGWB	LAMINATED SAFETY GLASS SUSPENDED GYPSUM WALL BOARD	WG	WIRE GLASS	Ĭ	
	CLG	CEILING	FC FCA	FLEXIBLE CONDUIT FLANGED COUPLING ADAPTER			OSC OSD	OPEN-STOP-CLOSE OPEN SITE DRAIN	SH	SHOWER	WH WH	WATER HEATER WATTHOUR METER		
	CLO	CLOSET	FCL2	FREE CHLORINE RESIDUAL	K	KEY INTERLOCK	OZ	OUNCE	SH (SHT)	SHEET	WHD	WATTHOUR DEMAND METER		<u>S</u>
	CLR CL2	CLEAR CHLORINE	FCO	FLOOR CLEANOUT	KIP	THOUSAND POUNDS			SHA SHS	SURFACE HARDENING AGENT SOLIDS HANDLING SYSTEM	WP	WATERPROOF		Z
$\dashv$	CMP, C.M.P.	CORRUGATED METAL PIPE	FCTY FD	FACTORY FLOOR DRAIN	KIT KSK	KITCHEN KITCHEN SINK	P PAV	PILASTER, PIPE PAVER TILE	SHS SIM	SOLIDS HANDLING SYSTEM SIMILAR	WP WR	WEATHERPROOF WASTE RECEPTACLE	▎▟▃	<u> </u>
	CMU	CONCRETE MASONRY UNIT	FDN	FOUNDATION	KV	KILOVOLTS	PAV P.B.	PLAT BOOK	SMH	STORMWATER MANHOLE	WS	WASTE RECEPTABLE WATER SURFACE		
	CO COL	CLEANOUT COLUMN	FDR	FEEDER	KVA	KILOVOLT AMPERES	РВ	PUSHBUTTON SWITCH	SOLN	SOLUTION	WS	WATERSTOP		ER
	CONC	CONCRETE	FEXT	FIRE EXTINGUISHER FINISHED FLOOR	KVAR	KILOVOLT AMPERES REACTIVE	PC PC	PHOTOCELL	SP SPA.	SPACE OR SPACES SPACING	WS	WELDED STEEL		
	CONDTN	CONDITIONED	FG	FINISHED FLOOR FINISH GRADE	KW	KILOWATT	PC PF	POINT OF CURVE PLAIN END	SPEC, SPECS	SPECIFICATIONS	WTP WTR	WATER TREATMENT PLANT WATER		٦ ؉
	CONST	CONNECTION	FHY	FIRE HYDRANT	L	ANGLE, LENGTH	PED	PEDESTAL PEDESTAL	SPEC'D.	SPECIFIED	WU	WALL URN		<u>@</u>
	CONST CONT	CONSTRUCT CONTINUOUS, CONTINUATION	FIG	FIGURE	L	ARC LENGTH	PEP	POLYETHYLENE PIPE	SPLY	SUPPLY SQUARE	WWTP	WASTEWATER TREATMENT PLANT		l &
	CONTR	CONTRACTOR	FL FLG	FLOW LINE FLANGE	LA I AR	LIGHTNING ARRESTER LABORATORY	PF PG.	PANEL FRONT PAGE	SQ SQ FT	SQUARE SQUARE FOOT, FEET				4
	COORD	COORDINATE	FLG FL (FLR)	FLOOR	LAM	LAMINATE	rg. pH	PAGE HYDROGEN ION CONCENTRATION	SQ IN	SQUARE INCH				
	CP CP-X	CENTER PIVOT CONTROL PANEL NO. X	FLEX	FLEXIBLE	LAT	LATITUDE	PI	POINT OF INTERSECTION	SR	SHORT RADIUS				
	CP-X CPLG	CONTROL PANEL NO. X COUPLING	FLH	FLAT HEAD	LAV	LAVATORY	PJF	PREMOULDED JOINT FILLER	SS SS, SST	START-STOP STAINLESS STEEL	NOTES:			
	CPRSR	COMPRESSOR	FLTR FLUOR	FILTER FLUORESCENT	LB I R	LICENSED BUSINESS POUND	PL Di	PLATE (STEEL) PROPERTY LINE or PARCEL LINE	SS, SST SSH	STAINLESS STEEL SAFETY SHOWER	1. THIS IS A STA	ANDARD LEGEND SHEET, THEREFORE		
	CPT	CONTROL POWER TRANFORMER	FNSH	FINISH	LB/CU FT	POUNDS PER CUBIC FOOT	PL PLAS	PROPERTY LINE OF PARCEL LINE PLASTIC	SSK	SERVICE SINK		EVIATIONS MAY APPEAR ON THIS		
	CPVC CR	CHLORINATED PVC CONTROL RELAY	FP	FIELD PANEL	LC	LIGHTING CONTACTOR	PLC	PROGRAMMABLE LOGIC CONTROLLER	S.S.M.H.	SANITARY SEWER MANHOLE		NOT ON THE DRAWINGS. GINEER FOR ABBREVIATIONS NOT		
	CRS	COLD ROLLED STEEL	FPS ED W.Y	FEET PER SECOND	LF LC	LINEAR FEET	PLC-X	PROGRAMMABLE LOGIC CONTROLLER	STA STD	STATUS STANDARD	LISTED.	The state of the s		1" = X'
			FP-W-X FR	FIELD PANEL NO. WX FORWARD REVERSE	LG LH	LONG LEFT HAND	PLYWD	NO. X PLYWOOD	STM	STANDARD STORM WATER			\ <del>\ \ \ \ \</del>	VERIFY SCALE
			FRP	FIBERGLASS REINFORCED PLASTIC	_··	<del></del>	PNL	PANEL					-	AR IS ONE INCH ON
														PRIGINAL DRAWING.
													0	1"
													DATE	MAY 201
													PROJ	49707
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PLOT DATE: 5/1/2015

PLOT TIME: 8:30:49 AM

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G-02

## **GENERAL SITE NOTES:**

- SOURCE OF TOPOGRAPHY SHOWN ON THE CIVIL PLANS ARE BASE MAPS CREATED FROM FIELD MEASUREMENTS, AERIAL PHOTOGRAPHS, AND RECORD DRAWINGS OF THE CROSSTOWN WTP SITE.
- EXISTING CONDITIONS MAY VARY FROM THOSE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND ADJUST WORK PLAN ACCORDINGLY PRIOR TO BEGINNING CONSTRUCTION.
- EXISTING TOPOGRAPHY, STRUCTURES, AND SITE FEATURES ARE SHOWN SCREENED AND/OR LIGHT-LINED. NEW FINISH GRADE, STRUCTURES, AND SITE FEATURES ARE SHOWN HEAVY-LINED. (FUTURE STRUCTURES AND SITE FEATURES FROM THE AUGUST 2014, FAYETTE COUNTY WATER SYSTEMS' CHEMICAL SYSTEMS AND ACTUATOR IMPROVEMENTS PROJECT HAVE BEEN SHOWN WITH HEAVY, DASHED-LINES IN THIS PLAN.) FUTURE STRUCTURES AND SITE FEATURES WILL BE LABELED "(N.I.C.)" NOT IN CONTRACT, THROUGHOUT THE PLANS.
- MAINTAIN, RELOCATE, OR REPLACE EXISTING SURVEY MONUMENTS, CONTROL POINTS, AND STAKES WHICH ARE DISTURBED OR DESTROYED. PERFORM THE WORK TO PRODUCE THE SAME LEVEL OF ACCURACY AS THE ORIGINAL MONUMENT(S) IN A TIMELY MANNER, AND AT THE CONTRACTOR'S EXPENSE.
- 5. UNITS: SURVEY FEET
- PRIOR TO SITING ANY PROPOSED SITE FEATURES, CONTRACTOR SHALL ESTABLISH HORIZONTAL AND VERTICAL CONTROLS TO BE CORRELATED TO THE GEORGIA STATE PLANE WEST COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (NAD83) AND NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
- 7. PROVIDE TEMPORARY FENCING AS NECESSARY TO MAINTAIN SECURITY AT ALL TIMES.
- 8. ELEVATIONS GIVEN ARE TO FINISH GRADE UNLESS OTHERWISE SHOWN.
- SLOPE UNIFORMLY BETWEEN CONTOURS AND SPOT ELEVATIONS SHOWN.
- 10. ALL DISTURBED AREAS NOT RECEIVING A GRAVEL, ASPHALT, OR CONCRETE SURFACE SHALL BE COVERED WITH COMMON BURMUDA GRASS.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION CONTROL DEVICES DURING CONSTRUCTION. EROSION CONTROL DEVICES AND LOCATIONS ARE SHOWN ON THE CIVIL SITE PLANS. REFER TO GEORGIA SOIL AND WATER CONSERVATION COMMISSION MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, SIXTH EDITION, JANUARY 2014 FOR DETAILS.
- 12. CONTRACTOR SHALL TAKE ALL OTHER MEASURES TO POSITIVELY PRECLUDE EROSION MATERIALS FROM LEAVING THE SITE. REFER TO SITE PLAN AND EROSION CONTROL NOTES.
- 13. STAGING AREA SHALL BE FOR CONTRACTOR'S EMPLOYEE PARKING, CONTRACTOR'S TRAILERS AND ON-SITE STORAGE OF MATERIALS.

## **GENERAL YARD PIPING AND UTILITIES NOTES:**

- EXISTING UNDERGROUND UTILITIES SHOWN WERE OBTAINED FROM AS-BUILTS AND FROM FIELD MEASUREMENTS. NO GUARANTEE IS MADE TO THE ACCURACY OF THE INFORMATION SHOWN. CONTRACTOR SHALL FIELD VERIFY DEPTH AND LOCATION PRIOR TO EXCAVATION. PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION.
- FOR PIPING FLOW STREAM IDENTIFICATION. SEE DRAWING G-11.
- EXISTING PIPING AND EQUIPMENT ARE SHOWN SCREENED AND/OR LIGHT-LINED. NEW PIPING AND EQUIPMENT ARE SHOWN HEAVY-LINED.
- 4. UNLESS OTHERWISE SHOWN ALL PIPING SHALL HAVE A MINIMUM OF 30" COVER.
- 5. ALL PIPES SHALL HAVE A CONSTANT SLOPE BETWEEN INVERT ELEVATIONS UNLESS A FITTING IS SHOWN.
- ALL NEW WATER PIPES MUST BE PROPERLY FLUSHED, PRESSURE TESTED, CHLORINATED AND BACTERIOLOGICALLY TESTED. AS SPECIFIED.
- 7. FOR TRENCHING AND BACKFILL, SEE (3123-110)
- 8. FOR SURFACE RESTORATION OF ASPHALT CONCRETE, CONCRETE PAVEMENT AND GRASS, SEE (3123-115).
- MINIMUM ALLOWABLE CLEARANCE BETWEEN PIPES AT CROSSINGS SHALL BE 3". CONTROLLED DENSITY FILL SUPPORT IS REQUIRED AS SHOWN ON (3123-120)

## **GENERAL NOTE:**

- THIS IS A STANDARD LEGEND SHEET THEREFORE, NOT ALL OF THE INFORMATION SHOWN MAY BE USED ON THIS PROJECT.
- 2. CONTACT ENGINEER FOR ITEMS NOT LISTED.

## CIVIL LEGEND

#### **THIS CONTRACT EXISTING** SPOT ELEVATION ⊗ 158.5 × 157.7 **CONTOUR LINE EMBANKMENT AND SLOPE** 3:1 DRAINAGEWAY OR DITCH OR CATCH BASIN OR INLET TRENCH DRAIN OR (S) **MANHOLE ELECTRICAL MANHOLE** ELECTRIC HANDHOLE POST OR GUARD POST **GUY ANCHOR** FIRE HYDRANT UTILITY POLE 44 LIGHT POLE ° BM BENCH MARK

#### SURVEY CONTROL POINT OR $\triangle$ POINT OF INTERSECTION BRUSH/TREE LINE

N 1000.00

E 1000.00

\* D

₹``} **\*** \\ TREE ---- PROPERTY LINE

----- STAGING OR WORK AREA LIMITS

CENTER LINE, BUILDING, ROAD, ETC.

---- MATCHLINE

ORANGE BARRIER FENCE

----- FUTURE STRUCTURES AND SITE FEATURES

STRUCTURE, BUILDING OR FACILITY LOCATION POINT - COORDINATES

**BORING LOCATION AND NUMBER** 

DEMOLITION

STRUCTURE, BUILDING OR FACILITY

ASPHALT CONCRETE PAVEMENT

RESURFACED ROAD GRADED AGGREGATE

GRAVEL SURFACING

BASE DRIVE

CONCRETE ENCASEMENT

CONCRETE PAVEMENT OR SIDEWALK

CURB

CURB AND GUTTER

SINGLE SWING GATE

DOUBLE SWING GATE

SLIDING GATE

CHAIN LINK FENCE

WIRE FENCE

SILT FENCE

**CULVERT** 

CURB INLET FILTER

**GRADE SLOPE DIRECTION** 

YARD PIPING LEGEND

8" PE PVC

NOMINAL PIPE DIAMETER

- PIPE USE IDENTIFICATION

PIPING < 30" DIAMETER

PIPING ≥ 30" DIAMETER

**EXISTING PIPE TO BE ABANDONED** 

EXISTING PIPE TO BE REMOVED

NON-FREEZE HOSE VALVE (V-X)

NON-FREEZE HOSE VALVE WITH HOSE RACK (V-X)

X = NO. IN SPECIFICATIONS

X = NO. IN SPECIFICATIONS

GATE VALVE AND VALVE BOX

PLUG VALVE AND VALVE BOX

FLEXIBLE COUPLING

90° ELBOW UP

BEND < 90° UP

CAP OR PLUG

FIRE HYDRANT

**CLEANOUT** 

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITIES, THE CONTRACTOR SHALL CLEARLY AND

APPROPRIATE MEANS. THE LIMITS OF DISTURBANCE BARRIER SHALL REMAIN IN PLACE FOR THE

SOIL DISTURBING ACTIVITIES WILL INCLUDE: PLACEMENT OF EROSION AND SEDIMENT CONTROL,

EXCAVATION AND BACKFILL, AND SURFACE RESTORATION. ALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF SITE WORK AND REMAIN

CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL MEASURES EACH DAY TO ENSURE

IN THE GROUND. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED

ALL AREAS WHICH HAVE BEEN DISTURBED SHALL BE PERMANENTLY SEEDED BEFORE THE COMPLETION (

CONTRACTORS' FAILURE TO INSTALL, OPERATE AND MAINTAIN ALL EROSION CONTROL MEASURES WILL

10. CONTRACTOR SHALL SELECT A DESIGNATED WASTE COLLECTION AREA AND PROVIDE LIDS FOR WASTE

CONTAINMENT. SOLID WASTE SHALL BE REMOVED AND DISPOSED OFFSITE AT A REGULAR SCHEDULE.

RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE INSTALLED OR

UNTIL COMPLETION OF WORK. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE DAMAGED ITEMS

CONTRACTOR SHALL NOT BE REQUIRED TO SUBMIT AN EROSION CONTROL PERMIT. THE DISTURBED

ACCURATELY DEMARCATE THE LIMITS OF DISTURBANCE WITH STAKES, RIBBONS, OR OTHER

NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS OF DISTURBANCE.

DEMOLITION, SITE CLEARING, GRADING OPERATIONS, FACILITIES CONSTRUCTION, TRENCH

SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS

NO BURN OR BURY PITS SHALL BE PERMITTED ON THE SITE WITHOUT THE EXPRESS WRITTEN

EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, AND CONCURRENT

OF THE APPROVED PLAN DOES NOT PROVED FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR

11. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF

12. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION

AUTHORIZATION OF THE SITE OWNER AND/OR THE ENGINEER OF RECORD.

SECURELY ATTACHED TO THE FENCE POSTS. AND TO SEE THAT THE FENCE POSTS ARE FIRMLY

AREA DURING CONSTRUCTION SHALL BE LESS THAN 1 ACRE AT ALL TIMES.

90° ELBOW DOWN

BEND < 90° DOWN

CONCENTRIC REDUCER

BUTTERFLY VALVE AND VALVE BOX

INDICATOR POST VALVE

PIPE MATERIAL

THIS CONTRACT

- - - - - - - - - -

**EXISTING** 

\_\_\_

EROSION CONTROL NOTES

ENTIRE DURATION OF THE PROJECT.

THAT THEY ARE WORKING PROPERLY.

ONE-HALF THE HEIGHT OF THE FENCE.

WITH LAND-DISTURBING ACTIVITIES.

TREAT THE SEDIMENT SOURCE.

WITH MULCH OR TEMPORARY SEEDING.

RETURNED TO THEIR PROPER FUNCTIONAL CONDITION.

CONSTRUCTION.

S. C.	ST S	★ No. 311	PROFESS	SNGINE SOGINE	A A.	
					APVD	
					ВУ	

			ВУ		JR
				APVD	
			REVISION	СНК	J RAMOS
			RE	DR	TLOOSE
					DE

1" = X'

	VERIFY SCALE
	BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"
DATE	MAY 201
PROJ	49707
DWG	G-(

PLOT DATE: 5/1/2015

13. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED

#### **DESIGN CRITERIA**

- APPLICABLE CODE: 2012 INTERNATIONAL BUILDING CODE (IBC), AS AMENDED BY GEORGIA STATE BUILDING CODE.
- REFER TO THE DRAWINGS FOR ADDITIONAL AND SPECIFIC STRUCTURE LOADINGS AND REQUIREMENTS.

3. RISK CATEGORY:

4. ROOF LOADS: **SNOW LOADS:** GROUND SNOW LOAD, Pa = 5 PSF TERRAIN CATEGORY = C

SNOW EXPOSURE FACTOR, Ce = 1.0 IMPORTANCE FACTOR, I = 1.2 MINIMUM FLAT ROOF SNOW LOAD, Pf = 10 PSF SNOW DRIFTS PER ASCE 7 ROOF LIVE LOAD = 20 PSF STORAGE TANK ROOF = 20 PSF

SUPERIMPOSED MPE LOADS APPLIED TO ALL ROOFS = 10 PSF 5. WIND LOADS: ULTIMATE DESIGN WIND SPEED. V = 120 MPH NOMINAL DESIGN WIND SPEED = 93 MPH EXPOSURE CATEGORY = C

> COMPONENT AND CLADDING WALL ELEMENTS (WINDOWS, DOORS, LOUVERS, SIDING, ETC FOR STRUCTURES UNDER 20 FEET IN HEIGHT) = 39 PSF

SEISMIC LOADS: MAPPED SPECTRAL RESPONSE ACCELERATIONS

= 0.161 g= 0.084 g= 8 second DESIGN SPECTRAL RESPONSE ACCELERATIONS = 0.172 g= 0.135 gSITE CLASS = D = D SEISMIC DESIGN CATEGORY IMPORTANCE FACTOR. I = 1.50

STRUCTURES HAVE BEEN ANALYZED USING THE EQUIVALENT LATERAL FORCE PROCEDURES OF ASCE 7.

= 20 PSF

7. LATERAL FORCE RESISTING SYSTEMS

**EQUIPMENT SHELTER ROOF** 

FLAT BOTTOM GROUND SUPPORTED TANKS: REINFORCED OR PRESTRESSED CONCRETE WITH REINFORCED NONSLIDING BASE

 $= C_S W$ = 0.129

FOR STRUCTURE SPECIFIC LOADS SEE PLANS

9. HYDRAULIC LOADS: FOR HYDRAULIC LOADS SEE PLANS

10. SOIL DESIGN PARAMETERS:

11. FROST DEPTH:

A. NET ALLOWABLE SOIL BEARING PRESSURES: 2000 PSF

**EQUIVALENT DRAINED FLUID PRESSURES:** 

40 PCF ACTIVE: AT REST: 60 PCF PASSIVE: 180 PCF

COEFFICIENT OF FRICTION: 0.45 COMPACTED STRUCTURAL FILL

0.35 NATIVE SOIL

D. SOIL UNIT WEIGHT: 120 PCF

GROUND WATER (GW) ELEVATION:

NORMAL HIGH GW EL 832.50' EL 809.00' 100 YEAR FLOOD EL 767.00'

#### **GENERAL INFORMATION**

- FOR ABBREVIATIONS NOT LISTED, SEE ASME Y14.38 "ABBREVIATIONS AND ACRONYMS: PUBLICATION AS DISTRIBUTED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME).
- DESIGN DETAILS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS OCCURRING THROUGHOUT THE PROJECT, WHETHER OR NOT THEY ARE INDIVIDUALLY CALLED OUT.
- VERIFY FINAL OPENING DIMENSIONS IN WALLS, SLABS, AND DECKS WITH OTHER DISCIPLINE DRAWINGS PRIOR TO CONSTRUCTION OF THESE ELEMENTS.
- DRAWINGS. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO PLACING SLABS, WALLS AND FOUNDATIONS. COORDINATE PIPING OPENINGS WITH OTHER DISCIPLINE DRAWINGS.

4. FOR NUMBER, TYPE, SIZE, ARRANGEMENT, AND/OR LOCATION OF EQUIPMENT PADS SEE OTHER DISCIPLINE

- 5. DO NOT CUT OR MODIFY STRUCTURAL MEMBERS FOR PIPES, DUCTS, ETC, UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE ENGINEER
- 6. VISITS TO THE JOB SITE BY THE ENGINEER TO OBSERVE THE CONSTRUCTION DO NOT IN ANY WAY MEAN THAT ENGINEER IS GUARANTOR OF CONSTRUCTOR'S WORK, NOR RESPONSIBLE FOR THE COMPREHENSIVE OR SPECIAL INSPECTIONS, COORDINATION, SUPERVISION, OR SAFETY AT THE JOB SITE.
- DETAILING AND DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES SHOWN ARE BASED ON AS-BUILT DESIGN DRAWINGS, AND DO NOT NECESSARILY REPRESENT THE AS-CONSTRUCTED CONDITIONS. THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS, ELEVATIONS AND DETAILING OF THE EXISTING STRUCTURES PRIOR TO UNDERTAKING ANY WORK THAT IS AFFECTED BY THE EXISTING STRUCTURE.

#### SPECIAL INSPECTION AND RELATED TESTING

- SPECIAL INSPECTION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY REQUIRED INSPECTIONS BY THE BUILDING OFFICIAL. THE CONTRACTOR SHALL SCHEDULE BOTH INSPECTIONS.
- SPECIFIED CONCRETE AND MASONRY AND OTHER MATERIAL TESTING DURING CONSTRUCTION WILL BE OWNER FURNISHED. SPECIFIED LABORATORY TEST MIXES AND SIMILAR TEST RESULTS TO VERIFY MATERIAL QUALITY AND CONFORMANCE TO SPECIFICATIONS, AND SUBMITTED FOR REVIEW PRIOR TO ACCEPTANCE FOR USE ON THE PROJECT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- SPECIAL INSPECTION. TESTING AND OBSERVATION (OWNER FURNISHED) IS REQUIRED IN ACCORDANCE WITH IBC SECTIONS 110 AND 1704 AS INDICATED IN THE STATEMENT OF SPECIAL INSPECTION.

## **FOUNDATIONS**

- REFER TO GEOTECHNICAL DATA REPORT FOR CROSSTOWN WTP BY MALLETT & ASSOCIATES. DATED DECEMBER 21, 1990 AND SUPPLEMENTAL DESIGN MEMO BY CH2M HILL DATED MARCH, 2014.
- 2. EXCAVATIONS SHALL BE SHORED TO PREVENT SUBSIDENCE OR DAMAGE TO ADJACENT EXISTING STRUCTURES, STREETS, UTILITIES, ETC.
- 3. FOUNDATION SLABS, SLABS-ON-GRADE AND WALL AND COLUMN FOUNDATIONS SHALL BEAR ON MINIMUM 6 INCHES OF COMPACTED GRANULAR FILL UNLESS NOTED OTHERWISE.

FOUNDATION BEARING SURFACES SHALL BE OBSERVED BY A GEOTECHNICAL ENGINEER OR QUALIFIED DESIGNEE PRIOR TO PLACEMENT OF FORMWORK OR REINFORCING STEEL. THE OBSERVATION SHALL VERIFY IF THE ACTUAL EXPOSED SUBGRADE IS AS ANTICIPATED BY THE SITE SPECIFIC BORINGS AND DATA REPORTS.

## FORMWORK, SHORING AND BRACING

STRUCTURES SHOWN ON THE DRAWINGS HAVE BEEN DESIGNED FOR STABILITY UNDER FINAL CONDITIONS ONLY. DESIGN SHOWN DOES NOT INCLUDE NECESSARY COMPONENTS OR EQUIPMENT FOR STABILITY OF THE STRUCTURES DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR WORK RELATING TO CONSTRUCTION ERECTION METHODS, BRACING, SHORING, RIGGING, GUYS, SCAFFOLDING, FORMWORK, AND OTHER WORK AIDS REQUIRED TO SAFELY PERFORM THE WORK SHOWN.

## CONCRETE REINFORCING

REINFORCING STEEL

ASTM A615, GRADE 60

- FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CRSI MSP-1 "MANUAL OF STANDARD PRACTICE" AND ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE"
- CLEARANCE FOR REINFORCEMENT BARS, UNLESS SHOWN OTHERWISE, SHALL BE: WHEN PLACED ON GROUND: OTHER CONCRETE SURFACES:
- REFER TO WALL CORNER AND WALL INTERSECTION REINFORCING DETAIL 0330-003. WALL CORNER REINFORCING SIZES AND SPACINGS SHALL BE AS SHOWN ON THE DRAWINGS AND REFERENCED TO THIS DETAIL. TYPICAL HORIZONTAL WALL REINFORCING SHALL LAP WITH THE CORNER HORIZONTAL REINFORCING.
- 5. 90 DEGREE BENDS, UNLESS OTHERWISE SHOWN, SHALL BE ACI 318 STANDARD HOOKS.
- 6. WALL CORNER AND WALL INTERSECTION REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH COLUMNS OR PILASTERS. REINFORCEMENT SHALL BE EXTENDED INTO CONNECTING WALLS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING WALLS, AS INDICATED IN DETAIL 0330-003.
- REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING **MINIMUM REQUIREMENTS:**

1										
CONCRETE DES	SIGN STRENGTH	= 4,000 F	PSI MIN	AT 28 D	AYS	GRAD	E 60 RE	INFORC	ING STE	EL
BAR SIZE		#3	#4	#5	#6	#7	#8	#9	#10	#11
LAP SPLICE LEN	NGTH									
SPACING<6"	TOP BAR *	1'-4"	2'-0"	3'-0"	4'-0"	5'-10"	6'-8"	7'-7"	8'-6"	9'-5"
	OTHER BAR	1'-4"	1'-7"	2'-4"	3'-1"	4'-6"	5'-2"	5'-10"	6'-7"	7'-3"
SPACING≥6"	TOP BAR *	1'-4"	1'-6"	2'-0"	2'-5"	3'-6"	4'-0"	5'-0"	6'-2"	7'-5"
	OTHER BAR	1'-4"	1'-4"	1'-7"	1'-10"	2'-9"	3'-1"	3'-10"	4'-9"	5'-8"
EMBEDMENT LE	ENGTH									
SPACING<6"	TOP BAR *	1'-0"	1'-7"	2'-4"	3'-1"	4'-6"	5'-2"	5'-10"	6'-7"	7'-3"
	OTHER BAR	1'-0"	1'-3"	1'-9"	2'-5"	3'-6"	4'-0"	4'-6"	5'-1"	5'-7"
SPACING≥6"	TOP BAR *	1'-0"	1'-3"	1'-7"	1'-10"	2'-9"	3'-1"	3'-10"	4'-9"	5'-8"
	OTHER BAR	1'-0"	1'-0"	1'-3"	1'-5"	2'-1"	2'-5"	3'-0"	3'-8"	4'-5"

TOP BARS SHALL BE DEFINED AS ANY HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12 INCHES OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR IN ANY SINGLE POUR. HORIZONTAL WALL BARS ARE CONSIDERED TOP BARS.

### **CAST IN PLACE CONCRETE**

1. 28-DAY COMPRESSIVE STRENGTHS:

4000 PSI

56-DAY COMPRESSIVE STRENGTHS:

5000 PSI

- 4. CONTINUOUS WATERSTOP AS SPECIFIED SHALL BE INSTALLED IN CONSTRUCTION JOINTS OF WATER HOLDING BASINS, CHANNELS, AND BELOW GRADE STRUCTURES, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE.
- 5. CONSTRUCTION JOINTS INDICATED ARE SUGGESTED LOCATIONS. CONTRACTOR MAY REVISE LOCATION OF JOINTS, SUBJECT TO SPECIFIED REQUIREMENTS. LAYOUT SHOWING ALL CONSTRUCTION JOINT LOCATIONS SHALL BE SUBMITTED FOR REVIEW BY ENGINEER.
- 6. ROUGHEN (1/4" AMPLITUDE) AND CLEAN CONSTRUCTION JOINTS IN WALLS AND SLABS AS SPECIFIED PRIOR TO PLACING ADJACENT CONCRETE.
- COORDINATE PLACEMENT OF OPENINGS, CURBS, DOWELS, SLEEVES, CONDUITS, BOLTS AND INSERTS PRIOR TO PLACEMENT OF CONCRETE.
- 8. NO ALUMINUM CONDUIT OR PRODUCTS CONTAINING ALUMINUM OR ANY OTHER MATERIAL INJURIOUS TO THE CONCRETE SHALL BE EMBEDDED IN THE CONCRETE
- 9. PATCH FORM TIE HOLES IN ACCORDANCE WITH SPECIFICATION 03 30 00.

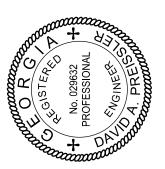
3. DESIGN STRENGTHS ARE SAME AS 28-DAY COMPRESSIVE STRENGTHS.

#### **DEFERRED SUBMITTALS**

- DEFERRED SUBMITTALS ARE THOSE PORTIONS OF THE DESIGN WHICH ARE NOT SUBMITTED AT THE TIME OF PERMIT APPLICATION AND WHICH ARE TO BE SUBMITTED TO THE PERMITTING AGENCY FOR ACCEPTANCE PRIOR TO INSTALLATION OF THAT PORTION OF THE WORK
- WHERE DEFERRED SUBMITTALS INCLUDE ADDITIONAL MATERIALS, INSTALLATION, ANCHORAGE. OR CERTIFICATION OF COMPONENTS THAT REQUIRE SPECIAL INSPECTION AND/OR STRUCTURAL OBSERVATION TO MEET CODE REQUIREMENTS, THE DEFERRED SUBMITTAL SHALL INCLUDE SPECIFIC LINE ITEMS TO BE ADDED TO THE APPROPRIATE TABLES IN THE PROJECT'S QUALITY ASSURANCE PLAN AND STATEMENT OF SPECIAL INSPECTIONS PLAN IF THEY ARE NOT ALREADY IDENTIFIED.
- THE FOLLOWING IS A LIST OF DEFERRED SUBMITTALS PER FAYETTE COUNTY, GA CODE OF ORDINANCES. SECTION 102-229 THAT ARE EXPECTED TO CONTAIN STRUCTURAL CALCULATIONS OR SAFETY RELATED SYSTEM INFORMATION FOR REVIEW TO MEET BUILDING PERMITTING REQUIREMENTS FOR DESIGNED SYSTEMS. PRIOR TO INSTALLATION OF THE INDICATED STRUCTURAL ELEMENT, EQUIPMENT, DISTRIBUTION SYSTEM, OR COMPONENT OR ITS ANCHORAGE, THE CONTRACTOR SHALL SUBMIT THE REQUIRED CALCULATIONS AND SUPPORTING DATA AND DRAWINGS FOR REVIEW AND ACCEPTANCE BY THE ENGINEER ADDITIONALLY, ACCEPTANCE INDICATED ON THE ENGINEER'S COMMENT FORM, ALONG WITH THE COMPLETED, FINAL SUBMITTAL SHALL THEN BE FILED BY THE CONTRACTOR AND ACKNOWLEDGED AS ACCEPTED BY THE PERMITTING AGENCY PRIOR TO INSTALLATION OF THESE ITEMS.

SPECIFICATION SECTION OR DRAWING	ITEM
01 88 15	ANCHORAGE AND BRACING
06 82 00	GLASS-FIBER-REINFORCED PLASTICS
13 34 26	FABRICATED CANOPIES
40 05 15	PIPING SUPPORT SYSTEMS
43 40 02	FIBERGLASS REINFORCED PLASTIC TANKS
43 40 20	POWDERED ACTIVATED CARBON (PAC) STORAGE AND FEED SYSTEM
OTHER	ANY EQUIPMENT OR COMPONENT IN WHICH A TECHNICAL SPECIFICATION REQUIRES SUBMITTAL OF EQUIPMENT OR ANCHORAGE SYSTEM CALCULATIONS

FILENAME: 001-G-1004\_497074.dgn



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					APVD		TV OF
				REVISION	CHK	D PREISSLER	NAI SERVICE IS THE PROPER
				RE	DR	P DENNING	DEAS AND DESIGNS INCORPORATED HEREIN AS AN INSTRUMENT OF PROFESSIONAL SERVICE IS THE DROBERTY OF
						S TROYAN	AS A N
				DATE		S TR	RATED HERE
				NO.	DSGN		NCORPO
/ Road 6 600	10	SENHMH	SVSTEM		A CIA		DEAS AND DESIGNS

1" = X' VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.

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## STATEMENT OF SPECIAL INSPECTION

#### **GENERAL NOTES:**

- THE STATEMENT OF SPECIAL INSPECTIONS DRAWINGS PROVIDE PROJECT COMPLIANCE WITH THE PROVISIONS OF THE 2012 INTERNATIONAL BUILDING CODE (IBC) CHAPTER 17 FOR SPECIAL INSPECTION, STRUCTURAL OBSERVATION, AND TESTING FOR WIND AND SEISMIC RESISTANCE AS APPLICABLE. EXCEPT WHERE OTHERWISE NOTED, THIS INSPECTION IS OWNER FURNISHED.
- STANDARD SPECIAL INSPECTION REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS ARE CONTAINED IN TABLE 1.
- STANDARD SPECIAL INSPECTION REQUIREMENTS FOR STRUCTURAL COMPONENTS, REGARDLESS OF WIND OR SEISMIC DESIGN CATEGORIES, ARE CONTAINED IN TABLE 2. STANDARD TESTING REQUIREMENTS FOR STRUCTURAL COMPONENTS ARE CONTAINED IN TABLE 3.
- PROJECT SPECIFIC REQUIREMENTS FOR STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORIES C, D, E, OR F ARE CONTAINED IN TABLE 4. ADDITIONAL TESTING REQUIREMENTS FOR STRUCTURAL RESISTANCE ARE CONTAINED IN TABLE 6.
- PROJECT SPECIFIC REQUIREMENTS FOR STRUCTURES SUBJECT TO NOMINAL DESIGN WIND SPEEDS IN EXCESS OF 110 MPH ARE CONTAINED IN TABLE 5.
- FOR ADDITIONAL REQUIREMENTS, REFER TO SPECIFICATION SECTION 01 45 33, SPECIAL INSPECTION, **OBSERVATION AND TESTING. THESE INCLUDE:** 
  - CONTRACTOR'S REQUIREMENTS TO PROVIDE ACCESS TO THE WORK FOR REQUIRED INSPECTIONS. AND TO PROVIDE NOTICE OF REQUIRED INSPECTIONS AND STRUCTURAL OBSERVATION.
  - CONTRACTOR'S STATEMENT OF RESPONSIBILITY FOR WORK TO BE PERFORMED ON SYSTEMS DESIGNATED UNDER THE STATEMENT OF SPECIAL INSPECTIONS PLAN FOR WIND OR SEISMIC
  - C. DEFINITIONS AND TERMINOLOGY USED IN THIS STATEMENT OF SPECIAL INSPECTIONS.

#### SPECIAL INSPECTION:

- SPECIAL INSPECTION WILL BE IN ACCORDANCE WITH IBC SECTIONS 1704 AND 1705 TOGETHER WITH LOCAL AND STATE AMENDMENTS. REFER TO THE TABLES CONTAINED ON THESE GENERAL SHEETS FOR PROJECT SPECIFIC INSPECTION TYPES AND FREQUENCIES.
- SPECIAL INSPECTIONS WILL BE PROVIDED BY A CERTIFIED OR QUALIFIED INSPECTOR AND ASSOCIATED TESTING WILL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY. THE OWNER WILL SECURE AND PAY FOR THE SERVICES OF THE AGENCY TO PERFORM ALL SPECIAL INSPECTION AND ASSOCIATED TESTS. INSPECTORS FOR EACH SYSTEM AND MATERIAL WILL BE INTERNATIONAL CODE COUNCIL (ICC) CERTIFIED OR OTHERWISE APPROVED BY THE BUILDING OFFICIAL.
- THE SPECIAL INSPECTOR WILL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONTRACT DOCUMENTS AND SUBMIT RECORDS OF INSPECTION. ALL DISCREPANCIES WILL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
- SPECIAL INSPECTION AND ASSOCIATED TESTING REPORTS WILL BE SUBMITTED TO THE ENGINEER, CONTRACTOR BUILDING OFFICIAL, AND OWNER WITHIN ONE WEEK OF INSPECTION OR WITHIN ONE WEEK OF TEST COMPLETION. INSPECTIONS FOR WHICH REPORTING WILL BE REQUIRED ARE NOTED IN THE TABLES CONTAINED ON THIS STATEMENT OF SPECIAL INSPECTIONS.
- AT THE CONCLUSION OF CONSTRUCTION, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF PREVIOUSLY NOTED DISCREPANCIES WILL BE SUBMITTED.
- SPECIAL INSPECTION REPORTS AND FINAL REPORT IN ACCORDANCE WITH SECTION 1704.2.4 SHALL BE SUBMITTED TO THE BUILDING OFFICIAL PRIOR TO THE TIME THAT PHASE OF THE WORK IS APPROVED FOR OCCUPANCY.

#### **GEOTECHNICAL OBSERVATION:**

- ALL FOUNDATION BEARING SURFACES SHALL BE INSPECTED BY GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL. ADDITIONAL SPECIAL INSPECTION REQUIREMENTS ARE LISTED IN TABLE 1.
- 2. GEOTECHNICAL TESTING REQUIREMENTS ARE LISTED IN TABLE 3.

#### SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE:

- SPECIAL INSPECTIONS REQUIREMENTS FOR SEISMIC RESISTANCE WILL BE IN ACCORDANCE WITH IBC SECTION 1705.11 TOGETHER WITH LOCAL AND STATE AMENDMENTS.
- SPECIAL INSPECTIONS REQUIREMENTS FOR SEISMIC RESISTANCE SHALL APPLY TO THE SYSTEMS AND COMPONENTS LISTED IN TABLE 4.
- MAIN SYSTEMS REQUIRED TO BE COVERED UNDER PROJECT SPECIAL INSPECTION REQUIREMENTS INCLUDE THE FOLLOWING TOGETHER WITH THEIR CONNECTIONS. REFER TO SPECIFICATION 01 45 33, SPECIAL INSPECTION, **OBSERVATION AND TESTING.** 
  - CONTAINMENT STRUCTURES.
  - PAC STORAGE AND FEED SYSTEM ANCHORAGE.
  - FABRICATED CANOPY

#### SPECIAL INSPECTIONS FOR WIND RESISTANCE:

SPECIAL INSPECTIONS REQUIREMENTS FOR WIND RESISTANCE IN ACCORDANCE WITH IBC SECTION 1705.10 ARE NOT APPLICABLE TO THIS PROJECT

#### STRUCTURAL OBSERVATION:

- STRUCTURAL OBSERVATION WILL BE IN ACCORDANCE WITH IBC SECTION 1704.5 TOGETHER WITH LOCAL AND STATE AMENDMENTS. REFER TO PROJECT SPECIFIC NOTES ON THIS SHEET.
- ON-SITE STRUCTURAL OBSERVATION WILL BE PERFORMED FOR EACH IDENTIFIED SEISMIC FORCE- OR WIND FORCE-RESISTING SYSTEM, INCLUDING FOUNDATIONS AND CONNECTIONS. REFER TO THE GENERAL STRUCTURAL NOTES FOR THE BASIC SEISMIC AND WIND FORCE-RESISTING SYSTEMS FOR THE STRUCTURES INCLUDED IN THE
- STRUCTURAL OBSERVATION WILL BE PERFORMED BY A REGISTERED PROJECT DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY REQUIRED SPECIAL INSPECTIONS OR INSPECTIONS BY THE BUILDING OFFICIAL.
- STRUCTURAL OBSERVATION REPORTS, NOTING ANY DEFICIENCIES IN OBSERVED CONSTRUCTION, WILL BE DELIVERED TO THE CONTRACTOR, BUILDING OFFICIAL, AND OWNER FOLLOWING EACH OBSERVATION. THE CONTRACTOR WILL BE NOTIFIED ON-SITE OR BY PHONE OR EMAIL WITHIN 24 HOURS UPON FINDING DEFICIENCIES.
- AT THE CONCLUSION OF CONSTRUCTION, A WRITTEN STATEMENT WILL BE PROVIDED TO VERIFY THAT THE STRUCTURAL OBSERVATION SITE VISITS WERE MADE AND WHETHER THERE REMAIN ANY STRUCTURAL DEFICIENCIES THAT HAVE NOT BEEN RESOLVED.
- STRUCTURAL OBSERVATION WILL INCLUDE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM FOR EACH STRUCTURE CONTAINED IN THE WORK, THE CONTRACTOR SHALL SCHEDULE AND FACILITATE STRUCTURAL OBSERVATION INCLUDING THE FOLLOWING:

	STRUCTURAL SYSTEM	STAGE	ITEMS	COMMENTS
1.	CONCRETE STRUCTURES	PRIOR TO FIRST CONCRETE PLACEMENT ON FIRST PRIMARY LIQUID CONTAINING STRUCTURE WHEN ITEMS CAN STILL BE REVISED	REINFORCING STEEL, WALL DOWELS, WATERSTOPS, EMBEDS, AND SIMILAR ITEMS	NOTE 1
2.	CONCRETE STRUCTURES	AT COMPLETION OF PLACEMENT OF ALL CONCRETE COMPONENTS FOR THE FIRST PRIMARY LIQUID CONTAINING STRUCTURES	CONCRETE TOLERANCES, FINISHING, LIQUID TIGHTNESS, AND SIMILAR ITEMS	NOTE 1
3.	AT ADDITIONAL TIMES DURING CONSTRUCTION WHICH THE ENGINEER OR OWNER DEEM THE NEED FOR ADDITIONAL STRUCTURAL OBSERVATION			NOTE 1
4.	AT SUBSTANTIAL COMPLETION OF PRIMARY STRUCTURAL FEATURES FOR DETERMINATION OF FINAL CONDITION OF STRUCTURE			NOTE 1

STRUCTURAL OBSERVER TO DISCUSS ITEMS AND SITE-SPECIFIC CONDITIONS WITH SPECIAL INSPECTOR AND FIELD INSPECTION STAFF DURING OBSERVATION.

#### STRUCTURAL ABBREVIATIONS

@ AB ACI ADDL	AT ANCHOR BOLT AMERICAN CONCRETE INSTITUTION ADDITIONAL	J JB JT	JOIST JOIST BEARING JOINT
ADJ AFF	ADJACENT ABOVE FINISH FLOOR	KIP(S) KSF	KIPS PER SQUARE FOOT
AHR AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	KSI L	KIPS PER SQUARE INCH ANGLE OR L-SHAPE
AL ALLOW ALTN	ALUMINUM ALLOWABLE ALTERNATE	LB(S) LF LL	POUND(S) FORCE LINEAR FEET LIVE LOAD
ANSI APPROX	AMERICAN NATIONAL STANDARDS INSTITUTE APPROXIMATE	LLH LLV LNTL	LONG LEG VERTICAL LINTEL
APVD ARCH. ASTM	APPROVED	LONG. LPT LSL	LONGITUDINAL
AWS	AND MATERIALS AMERICAN WELDING SOCIETY	MATL MAX	MATERIAL
BF BLDG BO	BOTTOM FACE BUILDING BOTTOM OF	MB MECH MET.	MACHINE BOLT MECHANICAL
BOT BRG		MFD MFR(S) MIN	MANUFACTURED
C CHKD PL		MISC	MISCELLANEOUS
CJ CL CLR	CONSTRUCTION JOINT CENTERLINE CLEARANCE, CLEAR	NA NIC NO.	NUMBER
COL CONC CONN	COLUMN CONCRETE CONNECTION	NTS OC	NOT TO SCALE ON CENTER
CONT COORD CRSI	CONTINUOUS COORDINATE CONCERTE REINFORCING STEEL	OD O.F. OPNG(S)	OUTSIDE DIAMETER OUTSIDE FACE
CTR CTRD	INSTITUTE CENTER CENTERED	OPP PJF	OPPOSITÈ
CU	CUBIC	PKG PL	PACKAGE PLATE
DBA DBL DEG	DEFORMED BAR ANCHOR DOUBLE DEGREE	PLF PREFAB PRELIM	PREFABRICATE(D) PRELIMINARY
DET DIA DIAG	DETAIL DIAMETER DIAGONAL	PRI PSF PSI	POUNDS FORCE PER SQUARE INC
DIM. DIR DL	DIMENSION DIRECTION DEAD LOAD	PT PVC	PRESSURE TREATED POLYVINYL CHLORIDE
DWG DWL	DRAWING DOWEL	R RAD RC	RADIUS, RISER RADIUS REINFORCED CONCRETE
EA EF EJ	EACH EACH FACE EXPANSION JOINT	RECT REF REINF	RECTANGULAR, RECTANGLE REFERENCE
EL ELEC EMBED	ELEVATION ELECTRICAL	REQD RST	REQUIRED REINFORCING STEEL
ENGR EQL	ENGINEER EQUAL	SCHED SIM	SIMILAR
EQPT EQUIV	EQUALLY SPACED EQUIPMENT EQUIVALENT	SOG SP SPEC(S)	SPACE SPECIFICATION(S)
EW EXP JT EXST	EACH WAY EXPANSION JOINT EXISTING	SPECD SQ SSL	SQUARE SHORT SLOTTED HOLE
EXT FAB	EXTERIOR  FABRICATE, FABRICATION	SST STD STL	
FB FD FDN	FLAT BAR FLOOR DRAIN FDN	STR STRL	
FF FG FL	FINISH FLOOR FINISH GRADE FLOOR	SYMM T&B	
FRP FT	FIBERGLASS REINFORCED PLASTIC FEET, FOOT	TC TEMP	TOP OF CONCRETE, TOP OF CURE TEMPERATURE
FTG FV	FIELD VERIFY	TF THK THKNS	THICK THICKNESS
GA GALV GRTG	GAUGE, GAGE GALVANIZED (HOT DIP) GRATING	T.O. TST TW	TOP OF STEEL TOP OF WALL
H.A.S. HDR	HEADED ANCHOR STUD HEADER	TYP UNIF	TYPICAL  UNIFORM, UNIFORMLY
HORIZ HPT HSS	HORIZONTAL HIGH POINT HOLLOW STRUCTURAL SECTION	UON VERT	UNLESS OTHERWISE NOTED VERTICAL
HVAC	HEATING , VENTILATION, AND AIR CONDITIONING	W W/	WIDE FLANGE BEAM WITH
IBC ID	INTERNATIONAL BUILDING CODE INSIDE DIAMETER	W/O WP	WITHOUT WORKING POINT
I.F. IN. INSUL	INSIDE FACE INCH(ES) INSULATION	WS WT WWF	WATERSTOP, WATER SURFACE WEIGHT WELDED WIRE FABRIC
INTMD INTR	INTERMEDIATE INTERIOR		

ACRONYMS FOR USE ON DRAWINGS AND RELATED DOCUMENTS" AS DISTRIBUTED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME).

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2. CONTACT ENGINEER FOR ABBREVIATIONS NOT LISTED



1" = X' VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. MAY 2015 497074 G-05

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			TAE	BLE 1			
		REQUIRE	NON-STRUCT	URAL SPECIAL	INSPECTION		
		REFE	R TO SPECIFICA	ATION SECTION	01 45 33		
SYSTEM OR MATERIAL	2012 IBC CODE REFERENCE	STANDARD	PERIODIC OWNER FURNISHED SPECIAL INSPECTION (SEE NOTE 1)	CONTINUOUS OWNER FURNISHED SPECIAL INSPECTION	REQUIRED REPORTING BY SPECIAL INSPECTOR TO DESIGNATED DISTRIBUTION LIST	COMMENTS	TESTING FOR SPECIAL INSPECTION
	1		GEOTECHNICAL	T	1		
1. SOILS:  A. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	1705.6, 1803.5.8, 1803.5.9, 1804.5	SECTION 31 23 13, SUBGRADE PREPARATION	X		X	PROFESSIONAL OBSERVATION BY GEOTECHNICAL ENGINEER	
B. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		SECTION 31 23 16, EXCAVATION	Х		X	PROFESSIONAL OBSERVATION BY GEOTECHNICAL ENGINEER	
C. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	1705.6	SECTION 31 23 23, FILL AND BACKFILL	Х		Х		SEE TABLE 3 FOR GRADATION TEST REQUIREMENTS
D.VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	1705.6, 1803.5.8	SECTION 31 23 23, FILL AND BACKFILL		Х	X		SEE TABLE 3 FOR DENSITY TEST REQUIREMENTS
E. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		SECTION 31 23 13, SUBGRADE PREPARATION	X		X	PROFESSIONAL OBSERVATION BY GEOTECHNICAL ENGINEER	SEE TABLE 3 FOR DENSITY TEST REQUIREMENTS
	<u> </u>		GEN	NERAL	<u> </u>	1	<u> </u>
1. CONSTRUCTION MATERIALS AND SYSTEMS THAT ARE ALTERNATIVES TO MATERIALS AND SYSTEMS PRESCRIBED BY CODE			X		X		
2. UNUSUAL DESIGN APPLICATION OF CODE	1705.1.1 ITEM 2			Х	Х		

STRUCTURAL

SEE TABLE 2.

REQUIREMENTS

MATERIALS

ADDITIONAL

3. INSTALLATION OF

MANUFACTURER'S

MATERIALS THAT REQUIRE

INSTRUCTIONS BEYOND CODE

1703.4.2,

1705.1.1 ITEM 3

1. PERIODIC INSPECTION IS DEFINED AS INSPECTION BY THE SPECIAL INSPECTOR OF ALL MATERIALS AND SYSTEMS, IN SOME CASES PERFORMED DURING THEIR PLACEMENT AND IN ALL CASES PERFORMED UPON COMPLETION OF THEIR PLACEMENT. THE COMPLETION INSPECTION SHALL BE PERFORMED SO THAT WORK CAN BE CORRECTED PRIOR TO OTHER RELATED WORK PROCEEDING.

ICC-ES

**EVALUATION** 

REPORTS

#### **TABLE 2** REQUIRED STRUCTURAL SPECIAL INSPECTION **REFER TO SPECIFICATION SECTION 01 45 33**

		KEFER	R 10 SPECIFICA	TION SECTION	U 1 45 33	T	I
SYSTEM	2012 IBC CODE REFERENCE	REFERENCED STANDARD	PERIODIC OWNER FURNISHED SPECIAL INSPECTION (SEE NOTE 1)	CONTINUOUS OWNER FURNISHED SPECIAL INSPECTION	REQUIRED REPORTING BY SPECIAL INSPECTOR TO DESIGNATED DISTRIBUTION LIST		TESTING FOR SPECIAL INSPECTION
			CON	CRETE			
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT	1705.3, 1903.1, 1910.4	ACI 318: 3.5, 7.1-7.7	Х		X		
2. INSPECTION OF ANCHORS CAST IN CONCRETE	1705.3, 1908.5, 1909.1	ACI 318: 8.1.3, 21.2.8	X		X		
3. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS	1705.3, 1909.1	ACI 318: 3.8.6, 8.1.3, 21.2.8, ICC-ES EVALUATION REPORTS	X		X	PROVIDE CONTINUOUS SPECIAL INSPECTION WHERE REQUIRED BY ICC-ES REPORT	
4. VERIFYING USE OF REQUIRED DESIGN MIX	1705.3, 1904.2, 1910.2, 1910.3	ACI 318: Ch. 4, 5.2-5.4	X		Х		
5. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	1705.3, 1910.10	ASTM C 172, ASTM C 31, ACI 318: 5.6, 5.8		X	X		SEE TABLE 3 FO CONCRETE TEST REQUIREMENTS
S. INSPECTION OF CONCRETE FOR PROPER APPLICATION TECHNIQUES	1705.3, 1910.6, 1910.7, 1910.8	ACI 318: 5.9, 5.10		Х	Х		
7. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	1705.3, 1910.9	ACI 318: 5.11-5.13	X		Х		
8. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	1705.3, 1906.1	ACI 318: 6.1.1	X		Х		
9. INSPECTION OF WATERSTOPS FOR PROPER SHAPE, LOCATION, JOINT QUALITY, AND SURROUNDING CONCRETE PLACEMENT			X		X		
10. VERIFY PROPER INSTALLATION OF MECHANICAL REINFORCING SPLICES AND CONNECTIONS	1705.1.1 ITEM 3, 1705.3	ICC-ES EVALUATION REPORTS	Х		X		

1. PERIODIC INSPECTION IS DEFINED AS INSPECTION BY THE SPECIAL INSPECTOR OF ALL MATERIALS AND SYSTEMS, IN SOME CASES PERFORMED DURING THEIR PLACEMENT AND IN ALL CASES PERFORMED UPON COMPLETION OF THEIR PLACEMENT. THE COMPLETION INSPECTION SHALL BE PERFORMED SO THAT WORK CAN BE CORRECTED PRIOR TO OTHER RELATED WORK PROCEEDING.

1" = X'

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.

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		TESTIA		LE 3 D SPECIAL INSPI	ECTION		
			·	TION SECTION 01			
						REQUIRED	
						REPORTING TO	
						DESIGNATED	
	TYPE OR		2012 IBC CODE			DISTRIBUTION	
MATERIAL	SCOPE	STANDARD	REFERENCE	FREQUENCY	BY WHOM	LIST	COMMENTS
	·		GEOTE	CHNICAL			
CONTROLLED FILL	GRADATION	ASTM D422	1704.7	SECTION 31 23 23,	OWNER'S	X	
				FILL AND BACKFILL	APPROVED		
CONTROLLER FILL	OOM DA OTION I	A OTAL DOOR	4704.7	05050N 04 00 00	TESTING AGENCY	V	
CONTROLLED FILL	COMPACTION	ASTM D698	1704.7	SECTION 31 23 23, FILL AND BACKFILL	OWNER'S APPROVED	X	
				FILL AND BACKFILL	TESTING AGENCY		
CONTROLLED FILL	DENSITY	ASTM D1556, D6938	1704.7	SECTION 31 23 23,	OWNER'S	X	
		,		FILL AND BACKFILL	APPROVED		
					TESTING AGENCY		
PREPARED SUBGRADE	DENSITY	ASTM D1556, D6938	1704.7	SECTION 31 23 13,	OWNER'S	X	
				SUBGRADE	APPROVED		
			CONC	PREPARATION	TESTING AGENCY		
CONCRETE	STRENGTH	ASTM C39	1704.4, 1905.6	RETE ONCE EACH DAY,	OWNER'S	X	
CONCINETE	OTTENOTT	7.01111 000	1704.4, 1000.0	BUT NOT LESS	APPROVED		
				THAN ONE SAMPLE	TESTING AGENCY		
				FOR EACH 100			
				CUBIC YARDS OR			
				5,000 SFT OF			
				WALLS OR SLABS			
CONCRETE	SLUMP	ASTM C143, C94	1704.4	PLACED ONE SAMPLE PER	OWNER'S	X	
OUNCIAL IE	SLUIVIP	ASTIVI C143, C34	170 <del>4.4</del>	STRENGTH TEST	APPROVED	_ ^	
					TESTING AGENCY		
CONCRETE	AIR CONTENT	ASTM C231, C94	1704.4	ONE SAMPLE PER	OWNER'S	X	
				STRENGTH TEST	APPROVED		
					TESTING AGENCY		
CONCRETE	TEMPERATURE	ASTM C1064	1704.4	ONE SAMPLE PER	OWNER'S	X	
				STRENGTH TEST	APPROVED		
					TESTING AGENCY		

				TABLE 4				
	RE	QUIRED SPECIAL	INSPECTION FO	R SEISMIC RESIS	STANCE FOR ST	RUCTURAL SYST	EMS	
	RE	FER TO TABLE 2	FOR STANDARD	STRUCTURAL S	PECIAL INSPECT	TION REQUIREME	NTS	
The Seismic Design Category (	SDC) for this Projec	t is D.						
	INSPECTION					REQUIRED		
	REQUIRED			DEDIODIO		REPORTING BY		
	FOR			PERIODIC	CONTINUOUS	SPECIAL		
	FOLLOWING			OWNER	OWNER	INSPECTOR TO	COMMENTS	
	SEISMIC			FURNISHED	FURNISHED	DESIGNATED	FOR DETAILS, REFER TO	TESTING FOR
	DESIGN	2012 IBC CODE	STANDARD OR	SPECIAL	SPECIAL	DISTRIBUTION	SPECIFICATION SECTION	SPECIAL
OVOTEM	CATEGORIES	REFERENCE	CODE	INSPECTION (SEE NOTE 1)	INSPECTION	LIST	01 45 33	INSPECTION
SYSTEM	CATEGORIES	REFERENCE		. ,		LIST	014535	INSPECTION
INSTALLATION OF PIPING	"C" AND ABOVE	1705.11.6 ITEM 3	PRU	OCESS MECHANI X	CAL	X	T T	
SYSTEMS MEANT TO CARRY	C AND ABOVE	1703.11.011LW 3		^		^		
FLAMMABLE, COMBUSTIBLE								
OR HIGHLY TOXIC CONTENTS								
AND ITS ASSOCIATED							1001	
MECHANICAL UNITS								
INSTALLATION OF OTHER	"C" AND ABOVE	1705.11.4		X		X	NOTES 2 & 3	
SEISMIC SUPPORTS FOR				^			1.0.120 2 0.0	
DESIGNATED MECHANICAL								
SYSTEMS AND THEIR								
COMPONENTS								
		T	,	STRUCTURAL		T		
SEISMIC-FORCE-RESISTING SYSTEMS	"C" AND ABOVE	1705.11 ITEM 1			Х	X		

NOTES

1. PERIODIC INSPECTION IS DEFINED AS INSPECTION BY THE SPECIAL INSPECTOR OF ALL MATERIALS AND SYSTEMS, IN SOME CASES

PERFORMED DURING THEIR PLACEMENT AND IN ALL CASES PERFORMED UPON COMPLETION OF THEIR PLACEMENT. THE

COMPLETION INSPECTION SHALL BE PERFORMED SO THAT WORK CAN BE CORRECTED PRIOR TO OTHER RELATED WORK PROCEEDING AND COVERING THE INSPECTED WORK

2. TESTING OF SYSTEMS AND THEIR ANCHORAGE SHALL BE IN CONFORMANCE WITH 2012 IBC SECTION 1705.12.

2. TESTING OF SYSTEMS AND THEIR ANCHORAGE SHALL BE IN CONFORMANCE WITH 2012 IBC SECTION 1705.12.

3. CERTIFICATION OF SYSTEMS AND THEIR ANCHORAGE SHALL BE IN CONFORMANCE WITH 2012 IBC SECTION 1705.12.

#### TABLE 5

#### REQUIRED SPECIAL INSPECTION FOR WIND RESISTANCE FOR STRUCTURAL SYSTEMS

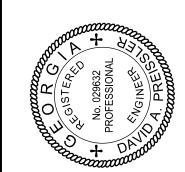
The 3-second-gust Nominal Wind Speed for this Project is 93 mph.
The Wind Exposure is Category C.

The Wind Exposure is Cat	•					
SYSTEM	2012 IBC CODE REFERENCE	STANDARD OR CODE	PERIODIC OWNER FURNISHED SPECIAL INSPECTION (SEE NOTE 1)	CONTINUOUS OWNER FURNISHED SPECIAL INSPECTION	REQUIRED REPORTING BY SPECIAL INSPECTOR TO DESIGNATED DISTRIBUTION LIST	COMMENTS FOR DETAILS, REFER TO SPECIFICATION SECTION 01 45 33
		-	TABLE NOT USED			

		Т	TAB ESTING FOR SEIS	LE 6 SMIC RESISTANC	E		
		REFE	R TO SPECIFICA	TION SECTION 01	45 33		
	TYPE OR		2012 IBC CODE			REQUIRED REPORTING TO DESIGNATED DISTRIBUTION	
MATERIAL	SCOPE	STANDARD	REFERENCE	FREQUENCY	BY WHOM	LIST	COMMENTS
			OTH	HER			
DESIGNATED SEISMIC SYSTEM COMPONENTS (AND ASSOCIATED ANCHORAGES) SUBJECT TO PROVISIONS OF ASCE 7 SECTION 13.2.2	CERTIFICATE OF COMPLIANCE	ASCE 7 SECTION 13.2.2	1705.12 ITEM 2	EACH SYSTEM OR COMPONENT	MANUFACTURER	Х	NOTE 2
DESIGNATED SEISMIC SYSTEM COMPONENTS (AND ASSOCIATED ANCHORAGES) SUBJECT TO PROVISIONS OF ASCE 7 SECTION 13.2.1	CERTIFICATE OF COMPLIANCE	ASCE 7 SECTION 13.2.1	1705.12 ITEM 3	EACH SYSTEM OR COMPONENT	MANUFACTURER	Х	NOTE 2

#### NOTES

- 1. TESTING AND QUALIFICATION FOR SEISMIC RESISTANCE ARE REQUIRED FOR SEISMIC-FORCE-RESISTING SYSTEMS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, OR F, UNLESS OTHERWISE NOTED.
- 2. BASED ON ACTUAL TEST ON SHAKE TABLE, BY THREE-DIMENSIONAL SHOCK TESTS, BY AN ANALYTICAL METHOD USING DYNAMIC CHARACTARISTICS AND FORCES, BY THE USE OF EXPERIENCE DATA, OR BY MORE RIGOROUS ANALYSIS PROVIDING FOR EQUIVALENT SAFETY.



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					APVD		SSLER	©СН2М
					ВУ		D PREISSLER	
						APVD		TY OF
					REVISION	CHK	D PREISSLER	SIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.
					RE	DR	P DENNING	NSTRUMENT OF PROFESSIC
							OYAN	IN, AS AN IN

CROSSTOWN WTP IMPROVEMENTS
FAYETTE COUNTY WATER SYSTEM
FAYETTE COUNTY, GEORGIA

AL INSPECTION S

GENERAL TURAL SPECIAL INSF TABLES

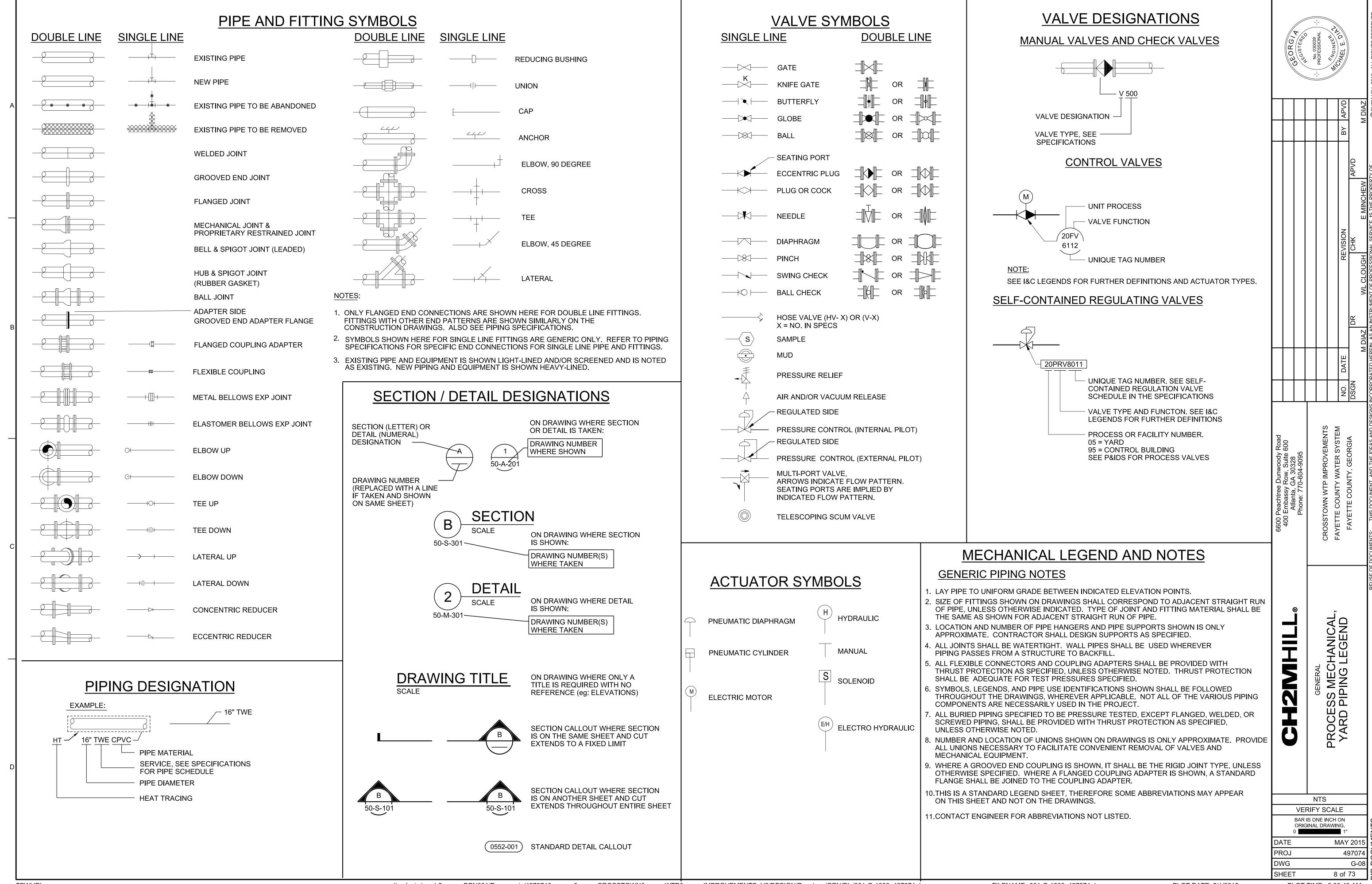
1" = X'

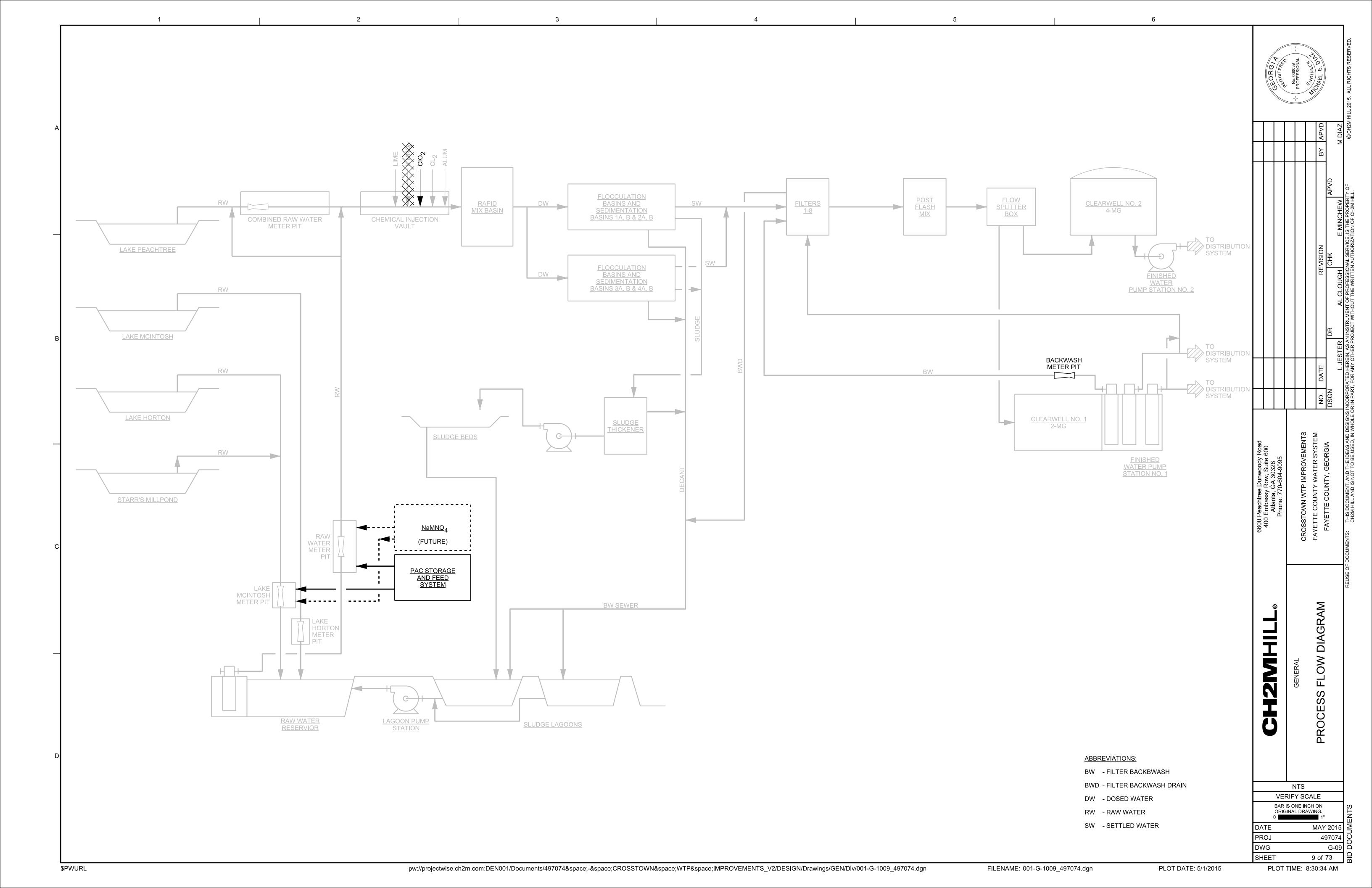
VERIFY SCALE

BAR IS ONE INCH ON
ORIGINAL DRAWING.
0 1"

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PROJ 497074
DWG G-07
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#### INSTRUMENT IDENTIFICATION INSTRUMENT IDENTIFICATION LETTERS TABLE FIRST-LETTER SUCCEEDING-LETTERS PROCESS OR READOUT OR **READOUT OR** READOUT OR LETTER **MODIFIER** PASSIVE FUNCTION PASSIVE FUNCTION PASSIVE FUNCTION INITIATING VARIABLE **EXAMPLE SYMBOLS** ALARM ANALYSIS (+) BURNER, COMBUSTION USER'S CHOICE (\*) USER'S CHOICE (\*) USER'S CHOICE (\*) UNIT PROCESS NUMBER USER'S CHOICE (\*) CONTROL DENSITY (S.G.) DIFFERENTIAL D CLARIFYING ABBREVIATIONS Ε VOLTAGE PRIMARY ELEMENT. SENSOR — FIRST LETTER(S) RATIO FLOW RATE - SUCCEEDING LETTER(S) (FRACTION) LLUUS GATE W G USER'S CHOICE (\*) GLASS, GAUGE **VIEWING DEVICE** SET LETTER (USED WHEN THERE ARE MULTIPLE DEVICES HAND (MANUAL) HIGH Н WITH THE SAME UNIT NUMBER) CURRENT (ELECTRICAL) INDICATE **POWER** SCAN · UNIT NUMBER TIME, TIME SCHEDULE TIME RATE **CONTROL STATION** OF CHANGE - LOOP NUMBER LEVEL LIGHT (PILOT) LOW **MOTION** М **MOMENTARY** MIDDLE, INTERMEDIATE **TORQUE** USER'S CHOICE (\*) **USER'S CHOICE (\*)** USER'S CHOICE (\*) USER'S CHOICE (\*) ORIFICE, RESTRICTION PRESSURE, VACUUM POINT (TEST) CONNECTION **INTEGRATE** Q QUANTITY TOTALIZE DIGITAL SYSTEM INTERFACES **RADIATION** RECORD OR PRINT SPEED, FREQUENCY SAFETY SWITCH S ANALOG INPUT **TEMPERATURE TRANSMIT** U MULTI VARIABLE MULTI FUNCTION MULTI FUNCTION MULTI FUNCTION ANALOG OUTPUT VIBRATION. VALVE, DAMPER, MECHANICAL ANALYSIS LOUVER WEIGHT, FORCE WELL W DISCRETE OUTPUT UNCLASSIFIED (\*) UNCLASSIFIED (\*) **UNCLASSIFIED** (\*) **UNCLASSIFIED** (\*) X AXIS Х RELAY, COMPUTE, **EVENT, STATE** Y AXIS OR PRESENCE CONVERT POSITION **Z AXIS** DRIVE, ACTUATOR **UNCLASSIFIED FINAL** CONTROL ELEMENT TABLE BASED ON THE INTERNATIONAL SOCIETY OF AUTOMATION (ISA) STANDARD. (+) WHEN USED, EXPLANATION IS SHOWN ADJACENT TO INSTRUMENT SYMBOL. SEE ABBREVIATIONS AND LETTER SYMBOLS. (\*) WHEN USED, DEFINE THE MEANING HERE FOR THE PROJECT. SPECIAL CASES ACCESSORY DEVICES GENERAL INSTRUMENT OR <u>TRANSDUCERS</u> **FUNCTIONAL SYMBOLS** CURRENT A ALARM A ANALOG YL ON AND OFF EVENT DIGITAL PNEUMATIC CONTROLLER LIGHTS FIELD MOUNTED VOLTAGE PF PULSE FREQUENCY INDICATOR FREQUENCY PD PULSE DURATION RECORDER **REAR-OF-PANEL** 00 HYDRAULIC SWITCH MOUNTED (OPERATOR RESISTANCE HS ` INACCESSIBLE) TRANSMITTER PANEL MOUNTED **EXAMPLE**

**CURRENT TO PNEUMATIC** 

TRANSDUCER (BACK OF

PANEL, IN A FLOW LOOP)

FY

N=1,2,3,ETC **ON-OFF HAND SWITCH** MAINTAINED CONTACT SWITCH (CONTROLLED **DEVICE WILL RESTART** ON RETURN OF POWER UNCLASSIFIED AFTER POWER FAILURE). **EXAMPLE** 

SS

′ HS Ì

TRANSMITTER AS AN

ACCESSORY TO A

FLOW ELEMENT

STOP-START HAND SWITCH

MOMENTARY CONTACT

ON RETURN OF POWER

AFTER POWER FAILURE).

SWITCHES (CONTROLLED

DEVICE WILL NOT RESTART

#### CL<sub>2</sub> etc. (A) PROCESS (OPEN CHANNEL) CM COMPUTER-MANUAL COD CHEMICAL OXYGEN DEMAND (A) TOTAL OF 2 SIGNALS CP-X CONTROL PANEL NO. X ANALOG SIGNAL \_\_\_\_\_ (4 TO 20 mAdc, ETC.) 3 TYPICAL SETS OF DC DIRECT CURRENT DISCRETE 2 SIGNALS EACH. DCS DISTRIBUTED CONTROL SYSTEM (ON/OFF, ETC.) TOTAL OF 6 SIGNALS. DCU DISTRIBUTED CONTROL UNIT DO DISSOLVED OXYGEN **CONNECTING LINES** PNEUMATIC SIGNAL FILLED SYSTEM SIGNAL ENSW ETHERNET SWITCH HYDRAULIC SYSTEM SIGNAL FCL<sub>2</sub> FREE CHLORINE RESIDUAL DATA LINK FOPP FIBER OPTIC PATCH PANEL FOS FAST-OFF-SLOW BUILDING OR **FOSA** FAST-OFF-SLOW-AUTO FACILITY BOUNDARY FAST-OFF-SLOW-REMOTE **FOSR** PACKAGE SYSTEM NON-CONNECTING LINES FP-W-X FIELD PANEL NO. WX (W=UNIT PROCESS NUMBER \_ \_ \_ \_ \_ \_ \_ \_ **EQUIPMENT** FR FORWARD-REVERSE TYPICAL BREAK ---- ----HOA HAND-OFF-AUTO ---- P---- POWER HOR HAND-OFF-REMOTE ISR --- MSC --- MANUFACTURER'S SUPPLIED CABLE INTRINSICALLY SAFE RELAY LEL LOWER EXPLOSIVE LIMIT INTERFACE SYMBOLS LOS LOCKOUT STOP LR LOCAL-REMOTE MA MANUAL-AUTO MC MODULATE-CLOSE MCC-X MOTOR CONTROL CENTER NO. X WA → PROCESS INTERFACE MSC MANUFACTURER SUPPLIED CABLE OC OPEN-CLOSE(D) OCA OPEN-CLOSE-AUTO WA D SIGNAL INTERFACE OCR **OPEN-CLOSE-REMOTE** 00 ON-OFF OOA ON-OFF-AUTO OOR ON-OFF-REMOTE SOURCE UNIT PROCESS NO. (1 OR 2 DIGITS) ORP **OXIDATION REDUCTION POTENTIAL** OSC **OPEN-STOP-CLOSE** INTERFACE NO. (2 DIGITS) HYDROGEN ION CONCENTRATION DESTINATION DRAWING NO. PLC PROGRAMMABLE LOGIC CONTROLLER SOURCE DRAWING NO. RIO REMOTE I/O UNIT REMOTE MULTIPLEXING MODULE NO. X RM-X RTU-X REMOTE TELEMETRY UNIT NO. X INTERFACE TO OR FROM PROCESS **SLOWER-FASTER** $^7$ EXTERNAL TO PROJECT $^{\circ}$ SS START-STOP SUPERVISORY SET POINT CONTROL TCL<sub>2</sub> TOTAL CHLORINE RESIDUAL PROCESS OR SIGNAL TOC **TOTAL ORGANIC CARBON** ►(N) LINE CONTINUATION (N)-TOD TOTAL OXYGEN DEMAND TURB **TURBIDITY** UPS UNINTERRUPTABLE POWER SUPPLY

PARALLELING LINES

## SELF CONTAINED VALVE & **EQUIPMENT TAG NUMBERS**

LINE LEGEND

PRIMARY PROCESS

(CLOSED CONDUIT

BYPASS PROCESS

DASHED LINE INDICATES

**SECONDARY PROCESS** 

ALTERNATE FLOW STREAM)

W-D-X-Y

**UNIT PROCESS NUMBER** 

ARV AIR RELEASE VALVE AVRV AIR AND VACUUM RELEASE VALVE EJECTOR

G GATE M MECHANICAL EQUIPMENT P PUMP T TANK

LOOP NUMBER **UNIT NUMBER** 

## **GENERAL NOTES**

VIBRATION

DIFFERENCE

CHARACTERIZED

REPEAT OR BOOST

SQUARE ROOT

MULTIPLY

AVERAGE

DIVIDE

SUM

VHC

VIB

F(X)

AVG

1:1

COMPONENTS AND PANELS SHOWN WITH A SINGLE ASTERISK (\*) ARE TO BE PROVIDED AS PART OF A PACKAGE SYSTEM.

**VOLATILE HYDROCARBONS** 

RAISED TO THE Nth POWER

SELECT HIGHEST SIGNAL

SELECT LOWEST SIGNAL

GAIN OR ATTENUATE

ABBREVIATIONS & LETTER SYMBOLS

CHLORINE (TYPICAL: USE STANDARD CHEMICAL

**ELEMENT ABBREVIATIONS)** 

X=PANEL NUMBER)

ALTERNATING CURRENT

COMPUTER-AUTO-MANUAL

**CENTRAL CONTROL SYSTEM** 

**AUTO-MANUAL** 

ADJUSTABLE FREQUENCY DRIVE

AFD

AM

CAM

CCS

- COMPONENTS AND PANELS SHOWN WITH A DOUBLE ASTERISK (\*\*) ARE TO BE PROVIDED UNDER DIVISION 16, ELÉCTRICAL.
- THIS IS A STANDARD LEGEND. THEREFORE, NOT ALL OF THIS INFORMATION MAY BE USED ON THE PROJECT.



STRUMENTATION AND LEGEND SHEET NTS

**VERIFY SCALE** BAR IS ONE INCH ON ORIGINAL DRAWING. MAY 201 497074 G-10

\$PWURL

(OPERATOR

ACCESSIBLE)

MCC MOUNTED

**PLC FUNCTION** 

SHARED DISPLAY,

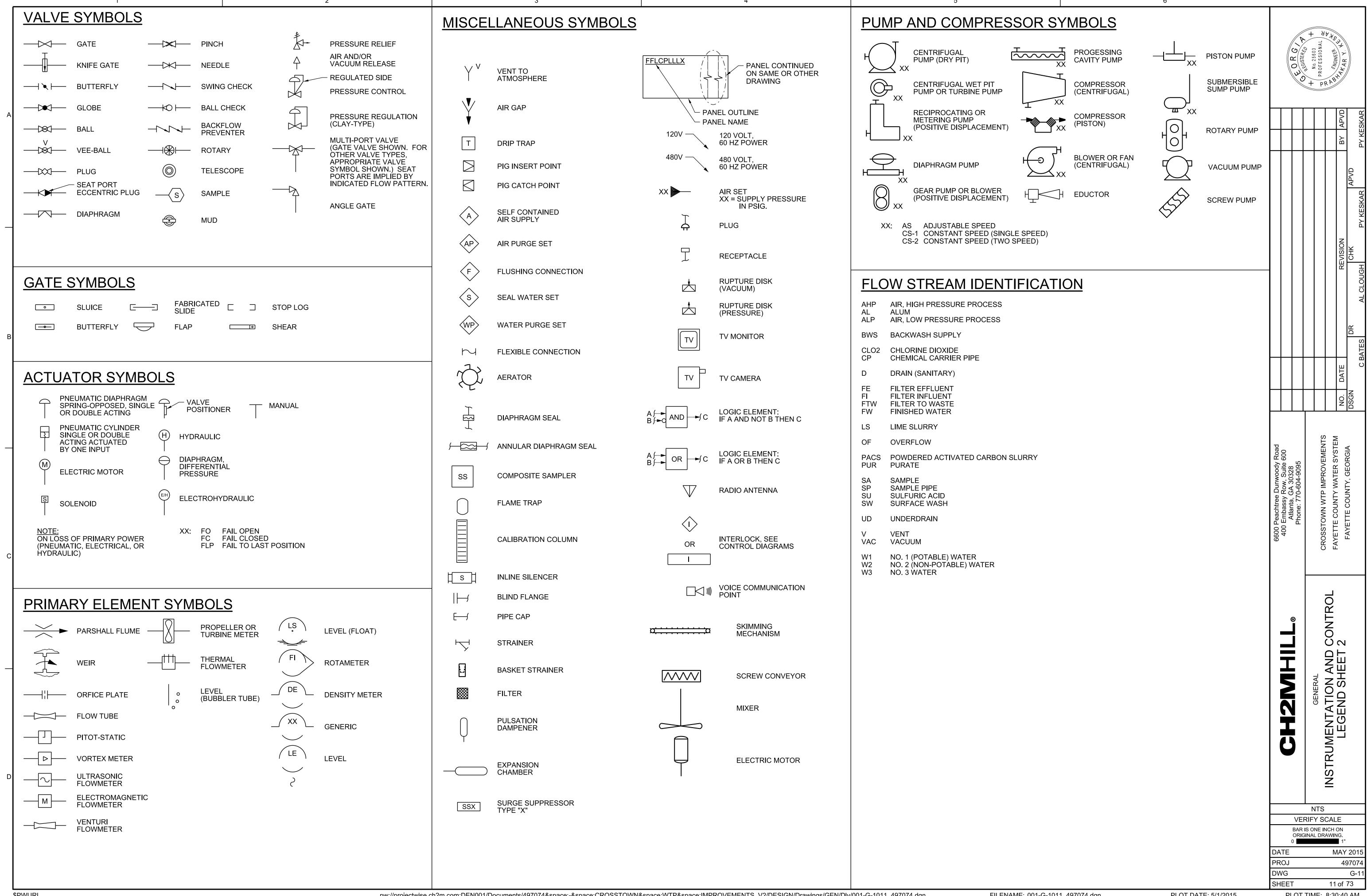
SHARED CONTROL

COMPUTER FUNCTION

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IBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION		
	ONE LINE DIAGRAMS-1		CONTROL DIAGRAMS-1		CONTROL DIAGRAMS-2		POWER SYSTEM PLAN-1		* 43
	DRAWOUT AIR CIRCUIT BREAKER, LOW VOLTAGE	<u> </u>	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY OPEN	———	CAPACITOR		CONNECTION POINT TO EQUIPMENT SPECIFIED. RACEWAY, CONDUCTOR, TERMINATION AND CONNECTION	O R G	No. 21063 PROFESSIONAL
400	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE, UNO		PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY CLOSED	+	BATTERY	MCC-A	IN THIS DIVISION.  MAJOR ELECTRICAL COMPONENT OR DEVICE - NAME	M Out	PRO M
or AT	CIRCUIT BREAKER, STATIC TRIP UNIT, SENSOR AMP TRIP AND FRAME RATINGS SHOWN, 3 POLE, UNO		PUSH BUTTON SWITCH, MAINTAINED CONTACTS WITH MECHANICAL INTERLOCK	~~	LIMIT SWITCH, NORMALLY OPEN, CLOSES AT END OF TRAVEL		OR IDENTIFYING SYMBOL AS SHOWN.		
	CIRCUIT BREAKER, MAGNETIC TRIP ONLY, TRIP	a_		0—10	LIMIT SWITCH, NORMALLY CLOSED, OPENS AT END OF TRAVEL	LPXXA	PANELBOARD - SURFACE MOUNTED		
100/M	RATING SHOWN, 3 POLE, UNO		3 POSITION SELECTOR SWITCH MAINTAINED CONTACT	٥٥	TEMPERATURE SWITCH, OPENS ON TEMPERATURE RISE	T T T	<ul><li>PANELBOARD LETTER OR NUMBER</li><li>FACILITY NUMBER</li></ul>		
400	CIRCUIT BREAKER WITH CURRENT LIMITING FUSES, TRIP AND FUSE RATING INDICATED, 3 POLE, UNO	HAND OFF REMOTE	SELECTOR SWITCH - MAINTAINED CONTACT - CHART	2	TEMPERATURE SWITCH, CLOSES ON TEMPERATURE RISE		LP - LOW VOLTAGE PANEL DP - DISTRIBUTION PANEL		
) 225	FUSED SWITCH, SWITCH AND FUSE CURRENT RATING	***	IDENTIFIES OPERATION WHEN NEEDED FOR CLARITY:  POSITION	Jo	FLOAT SWITCH, NORMALLY OPEN, CLOSES ON DESCENDING LEVEL		PANELBOARD - FLUSH MOUNTED		
<sup>)</sup> 225 	INDICATED, 3 POLE, UNO SWITCH, CURRENT RATING INDICATED, 3 POLE, UNO		CKT HAND OFF REMOTE X - CLOSED CONTACT  1 X O O O O O O O O O O O O O O O O O O	CT O	FLOAT SWITCH, NORMALLY OPEN, CLOSES ON		TERMINAL JUNCTION BOX		
60 (3)	FUSE, CURRENT RATING AND QUANTITY INDICATED				RISING LEVEL	M	MOTOR, SQUIRREL CAGE INDUCTION		
00 (0)			TOGGLE SWITCH, ON-OFF TYPE	To	PRESSURE SWITCH, NORMALLY CLOSED, OPENS ON RISING PRESSURE				
1—X—	MAGNETIC STARTER WITH OVERLOAD, NEMA SIZE INDICATED, FVNR UNO	ON OFF	SELECTOR SWITCH, ON-OFF TYPE	20	PRESSURE SWITCH, NORMALLY OPEN, CLOSES ON RISING PRESSURE	(G)	GENERATOR, VOLTAGE AND SIZE AS INDICATED.	$  \   \   \  $	
AFD	ELECTRONIC STARTER/SPEED CONTROL RVSS = REDUCED VOLTAGE SOFT STARTER				FLOW SWITCH, CLOSES ON INCREASED FLOW	─ <del>-</del> LPXXA	HOME RUN - DESTINATION SHOWN	$  \   \   \  $	
	AFD = AC ADJUSTABLE FREQUENCY DRIVE  DC = DC ADJUSTABLE SPEED DRIVE  RVAT = REDUCED VOLTAGE AUTO TRANSFORMER TYPE	0 0 ×			FLOW SWITCH, OPENS ON INCREASED FLOW	——— or —/// <sub>G</sub>	EXPOSED CONDUIT AND CONDUCTORS*		
	RVAT = REDUCED VOLTAGE AUTO TRANSFORMER TYPE RVRT = REDUCED VOLTAGE REACTOR TYPE	\\	MUSHROOM HEAD PUSHBUTTON SWITCH	NGR	NEUTRAL GROUND CURRENT LIMITING RESISTOR	or - +/+ + - G	CONCEALED CONDUIT AND CONDUCTORS*		
<b></b>	CABLE OR BUS CONNECTION POINT	O, (A), (O	INDICATING LIGHT, PUSH-TO-TEST, LETTER INDICATES COLOR	RES	CALIBRATING RESISTOR		CROSSHATCHES WITH BAR INDICATE NO.10 CONDUCTOR. SIZE CONDUIT ACCORDING TO SPECIFICATIONS		+
К	KEY INTERLOCK	(A)	INDICATING LIGHT - LETTER INDICATES COLOR A - AMBER G - GREEN S - STROBE	(GEN)	TACHOMETER GENERATOR		AND APPLICABLE CODE.  CONDUIT AND CONDUCTOR CALLOUT, SEE LEGEND.		
• •——	SURGE ARRESTER (GAP TYPE)		B - BLUE R - RED C - CLEAR W - WHITE	GFS	GROUND FAULT SENSOR	[A1] —			
<b>-  (</b> 10	CAPACITOR - KVAR INDICATED, 3 PHASE	ETM	ELAPSED TIME METER		FLACUED	<b>─</b>	CONDUIT DOWN		
<u> </u>	AC MOTOR, COURDED OF A OF INDUCTION	O(M)O	MOTOR STARTER CONTACTOR COIL		FLASHER		CONDUIT UP	Soad 00	MENTS
3 /	AC MOTOR, SQUIRREL CAGE INDUCTION - HORSEPOWER INDICATED	OCRXO	CONTROL RELAY, X INDICATES NUMERICAL ORDER IN CIRCUIT		SEALED CONTACT		CONDUIT, STUBBED AND CAPPED	voody F Suite 6 1328 -9095	IMPROVE
G	GENERATOR, KW/KVA RATING SHOWN	O(TDR)O	TIME DELAY RELAY, X INDICATES NUMERICAL ORDER IN CIRCUIT		BUZZER		CONDUIT TERMINATION AT CABLE TRAY	e Dunw y Row, 3 , GA 30:	TP IMF
00/625 	ANIAL OC METER WITH CVAITOUR COALE DANICE CHOWN	(SV) X	SOLENOID VALVE, X INDICATES NUMERICAL ORDER IN CIRCUIT	<b>-</b> \\\\\_	POTENTIOMETER	EX	EXISTING CONDUIT/ DUCT BANK	Peachtre Embass Atlanta Phone: 7	N NWO
0-600V	ANALOG METER WITH SWITCH - SCALE RANGE SHOWN  V = VOLTAGE  KW = KILOWATTS		CONTACT - NORMALLY OPEN	<b>-</b> \\\\-	RESISTOR	——ВD——	BUS DUCT - SEE SPECIFICATIONS	6600 P 400 E	ROSST
	A = AMPERAGE KVAR = KILOVARS PF = POWER FACTOR		CONTACT - NORMALLY CLOSED		BLOWN FUSE INDICATOR	CE	CONCRETE ENCASED CONDUIT		S
M	DIGITAL POWER METER (MULTIFUNCTION)		REMOTE DEVICE		BLOWN FUSE INDICATOR	DB	DIRECT BURIED CONDUIT		
	UTILITY REVENUE METER	000	TIME DELAY RELAY CONTACT, NORMALLY OPEN, CLOSES WHEN ENERGIZED AND TIMED OUT		COAXIAL CABLE	FO	FIBER OPTIC CONDUIT		
	GROUND	To	TIME DELAY RELAY CONTACT, NORMALLY CLOSED, OPENS WHEN ENERGIZED AND TIMED OUT	=	MULTICONDUCTOR SHIELDED CABLE	XXXX	CONCRETE ENCASED DUCT BANK WHERE XXXX IS THE DUCT BANK NAME. SEE CIRCUIT AND RACEWAY CODING DEFINITION	<b>©</b>	
<u> </u>		~~	TIME DELAY RELAY CONTACT, CLOSES WHEN ENERGIZED, OPENS WHEN DE-ENERGIZED AND TIMED OUT	<u> </u>			CONCEALED CONDUIT ROUTING AREA		
15 KVA 480-120, 1 PH	0/240V TRANSFORMER, SIZE, VOLTAGE RATINGS,	- <del>-</del>	TIME DELAY RELAY CONTACT, OPENS WHEN ENERGIZED, CLOSES WHEN DE-ENERGIZED AND		DUPLEX RECEPTACLE		CONDUIT ROUTING AREA	<b>Ξ</b>	
, , , , , , , , , , , , , , , , , , ,	AND PHASE INDICATED	o∏lo	TIMED OUT  MOTOR SPACE HEATER				CABLE TRAY	5	NERAL
$\frac{\mathcal{L}}{\mathcal{L}}$	SHIELDED ISOLATION TRANSFORMER		TERMINAL BLOCK, REMOTE		RELAY, WITH MECHANICAL LATCH	Ⅱ	TRANSFORMER	<u>N</u>	GENE
480-120V	POTENTIAL TRANSFORMER, VOLTAGE RATING	0	TERMINAL BLOCK, INTERNAL		FULLWAVE DIODE BRIDGE (AC TO DC)	① or HH	GENERAL CONTROL OR WIRING DEVICE. LETTER SYMBOLS OR ABBREVIATIONS		
)( <sub>(3)</sub>	AND QUANTITY INDICATED		FUSED TERMINAL BLOCK			cs	INDICATE TYPE OF DEVICE  CONTROL STATION, SEE CONTROL DIAGRAMS	U	ī
5 <b>€</b> (3)	CURRENT TRANSFORMER, RATIO(100:5) AND QUANTITY INDICATED (3)		FUSE, RATING INDICATED	NOTES:		30 📑	FOR CONTROL DEVICE(S) REQUIRED.  NONFUSED DISCONNECT SWITCH, CURRENT RATING		
	CONNECTION POINT TO EQUIPMENT SPECIFIED IN OTHER	l CPT l			RD LEGEND SHEETS. SOME SYMBOLS AND ABBREVIATIONS E LEGEND AND NOT ON THE DRAWINGS.	60/40 <b>□</b> ²	INDICATED, 3 POLE  FUSED DISCONNECT SWITCH, CURRENT RATING INDICATED, 3 POLE		
	DIVISIONS. RACEWAY, CONDUCTOR AND CONNECTION IN THIS DIVISION	120V	TRANSFORMER, CONTROL POWER	2. FOR ADDITIONAL AE	BREVIATIONS OF OTHER DIVISIONS (HVAC, MECHANICAL, AND ITECTURAL) SEE OTHER LEGENDS.	00/40 /	(60/40, 60=SWITCH RATING / 40=FUSE RATING) 3 POLE	VEF	NTS RIFY SC
SPD	SURGE PROTECTIVE DEVICE	•	THERMOCOUPLE	OTTOOTOTAL/ARON		2 🔀	COMBINATION CIRCUIT BREAKER AND MAGNETIC STARTER, NEMA SIZE INDICATED		IS ONE ING SINAL DRA
_ <del></del>								DATE PROJ	
								DWG SHEET	

_		1   2	2	3
-	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
		POWER SYSTEM PLAN - 2		GROUND SYSTEM PLAN
	100/40	BREAKER, SEPARATELY MOUNTED, CURRENT RATING INDICATED	•	GROUND ROD
		(100/40, 100 = FRAME SIZE; 40 = TRIP RATING) 3 POLE	0	GROUND ROD IN TEST WELL
	© <sup>2</sup>	CONTACTOR, MAGNETIC, NEMA SIZE INDICATED	G	GROUNDING CONDUCTOR, SIZE AS INDICATED
А	L 30	LIGHTING CONTACTOR, CURRENT RATING INDICATED	<u> </u>	PIGTAIL FOR CONNECTION TO EQUIPMENT CABINET OR FRAME
	<b>X</b> <sup>2</sup>	STARTER, MAGNETIC NEMA SIZE INDICATED	G	EQUIPMENT GROUND BUS
	XX ⊕ 2	CONVENIENCE RECEPTACLE - DUPLEX UNLESS NOTED OTHERWISE	N	EQUIPMENT NEUTRAL BUS
		WP - WEATHERPROOF C - CLOCK HANGER TL - TWIST LOCK CRE - CORROSION RESISTANT GFCI - GROUND FAULT CIRCUIT INTERRUPTER		ABBREVIATION AND DESCRIPTION
		SUBSCRIPT NUMBER AT RECEPTACLE INDICATES CIRCUIT	A AC	AMMETER, AMPERE, AMBER ALTERNATING CURRENT
4	€	240V RECEPTACLE	AFD AFF	ADJUSTABLE FREQUENCY DRIVE ABOVE FINISHED FLOOR
	<b>\bigsize</b>	CONVENIENCE RECEPTACLE - QUADRUPLEX	ATS	AUTOMATIC TRANSFER SWITCH
	φ φ φ	MULTI OUTLET ASSEMBLY	BRKR C	BREAKER  CONDUIT, CONTACTOR
		DUPLEX CONVENIENCE RECEPTACLE - FLUSH IN FLOOR	CPT CR CT	CONTROL POWER TRANSFORMER CONTROL RELAY CURRENT TRANSFORMER
	₽	CONVENIENCE RECEPTACLE, PEDESTAL, DUPLEX SINGLE FACE UNLESS INDICATED OTHERWISE	DC DP	DIRECT CURRENT DISTRIBUTION PANEL
В	L20R <sup>20</sup> 🙆	RECEPTACLE, SPECIAL PURPOSE-NEMA CONFIGURATION	E	EMPTY
	T	AND AMPERAGE INDICATED THERMOSTAT	F, FU FREQ	FUSE FREQUENCY
		UTILITY REVENUE METERING FACILITY	G GEN GFCI	GROUND GENERATOR GROUND FAULT CIRCUIT INTERRUPTER
		ELECTRIC UNIT HEATER	GND	GROUND
	EUH	LLLCTRIC ONIT FILATER	НН	HANDHOLE
4		ELECTRIC AIR CONDITIONER	HOA HP HS	HAND-OFF-AUTO HORSEPOWER HAND SWITCH
	——————————————————————————————————————	(SELF CONTAINED UNIT) UTILITY POLE	HZ	HERTZ
		LIGHTING SYSTEM PLAN	IC	INTERRUPTING CAPACITY
	or M		J, J-BOX	JUNCTION BOX KILOAMPERES
	(1) or (1)	LUMINAIRE, SEE SCHEDULE	KA KV KVA	KILOVOLT KILOVOLT AMPERES
	(1)	LUMINAIRE, SEE SCHEDULE	KW	KILOWATTS
С		LUMINAIRE WITH INTERNAL BATTERY BACKUP, SEE SCHEDULE	M MCC MH	MAGNETIC CONTACTOR COIL MOTOR CONTROL CENTER MANHOLE, METAL HALIDE
		STRIP LUMINAIRE, SEE SCHEDULE	NA N C	NON-AUTOMATIC
	□-4 or ○-4	LUMINAIRE AND POLE, SEE SCHEDULE	N.O. NTS	NORMALLY OPEN NOT TO SCALE
	+5 or $+5$	WALL MOUNTED LUMINAIRE, SEE SCHEDULE	OL PB	OVERLOAD RELAY PULL BOX
	1 -	FLOOD LIGHTS - AIM IN THE DIRECTION SHOWN	RGS	RIGID GALVANIZED STEEL CONDUIT
		STANDBY LIGHTING UNIT, SURFACE MOUNTED, SEE SCHEDULE	SS SST	START STOP STAINLESS STEEL
	$XX \overrightarrow{\bigotimes}$ or $\overrightarrow{\underline{\bigotimes}}$	EXIT LIGHTS - FILLED SECTION INDICATES LIGHTED FACE, ARROW INDICATES EGRESS DIRECTIONAL INDICATORS, XX = FIXTURE NUMBER, SEE SCHEDULE	SV SWBD TYP	SOLENOID VALVE SWITCHBOARD TYPICAL
	\$ <sub>a or</sub> 2a	SMALL LETTER SUBSCRIPT AT SWITCH AND LUMINAIRE INDICATES SWITCHING. SUBSCRIPT NUMBER AT LUMINAIRE INDICATES CIRCUIT	V W	VOLTAGE, VOLT WATT
	<b>\$</b> 3	WALL SWITCH:	WP	WEATHERPROOF
D		2- DOUBLE POLE P- PILOT LIGHT 3- THREE WAY K- KEY OPERATED 4- FOUR WAY D- DIMMER WP- WEATHERPROOF CRE- CORROSION RESISTANT EX- EXPLOSIONPROOF L- MOMENTARY 3-WAY M- MOTOR RATED MS- MANUAL STARTER WITH OVERLOADS	XFMR	TRANSFORMER
	os	OCCUPANCY SENSOR		
	LC	LIGHTING CONTACTOR		
	MD	MOTION DETECTOR		
	PC	PHOTOCELL		

#### GENERAL CIRCUIT CONDUCTOR AND CONDUIT IDENTIFICATION

	POWER CIRC	CUIT CALLOUT	S	PO	WER CABLE CIRCUIT CALLOUTS
[P1]	[1/2"FLEX, 2#12,#12G]	[P24]	[1"C,3#8,3#14,1#10G]	[PC1]	[3/4"C,1 (3C#12,1#12G) TYPE 2]
[P2]	[3/4"C,2#12,1#12G]	[P25]	[1"C,3#8,4#14,1#10G]	[PC2]	[3/4"C,1 (3C#10,1#10G) TYPE 2]
[P3]	[3/4"C,3#12,1#12G]	[P26]	[1"C,3#8,5#14,1#10G]	[PC3]	[1"C,1 (3C#8,1#10G) TYPE 2]
[P4]	[3/4"C,4#12,1#12G]	[P27]	[1"C,2#6, 1#10G]	[PC4]	[1 1/4"C,2 (3C#12,1#12G) TYPE 2]
[P5]	[3/4"C,5#12,1#12G]	[P28]	[1"C,3#6, 1#10G]	[PC5]	[1 1/2"C,2 (3C#10,1#10G) TYPE 2]
[P6]	[3/4"C,6#12,1#12G]	[P29]	[1"C,3#6, 2#14,1#10G]	[PC1A]	[3/4"C,1 (2C#12,1#12G) TYPE 2]
[P7]	[3/4"C,7#12,1#12G]	[P30]	[1"C,3#6, 3#14,1#10G]	[PC2A]	[3/4"C,1 (2C#10,1#10G) TYPE 2]
[P8]	[3/4"C,8#12,1#12G]	[P31]	[1"C,3#6, 4#14,1#10G]		
[P9]	[3/4"C,3#12,2#14,1#12G]	[P32]	[1"C,3#6, 5#14,1#10G]		
[P10]	[3/4"C,3#12,3#14,1#12G]	[P33]	[1"C,3#4,1#8G]		
[P11]	[3/4"C,3#12,4#14,1#12G]	[P34]	[1 1/4"C,3#4,3#14,1#8G]		
[P12]	[3/4"C,3#12,5#14,1#12G]	[P35]	[1 1/4"C,3#4,5#14,1#8G]		EMPTY CONDUIT
[P13]	[3/4"C,3#12,6#14,1#12G]	[P36]	[1 1/4"C,3#3, 1#8G]	[EC 4]	
[P14]	[3/4"C,3#12,7#14,1#12G]	[P37]	[1 1/4"C,3#3, 3#14,1#8G]	[EC-1]	[3/4"C,WITH PULL STRING]
[P15]	[3/4"C,2#10,1#10G]	[P38]	[1 1/4"C,3#2, 1#6G]	[EC-2]	[1"C,WITH PULL STRING]
[P16]	[3/4"C,3#10,1#10G]	[P39]	[1 1/4"C,3#1, 1#6G]	[EC-3]	[1 1/4"C,WITH PULL STRING]
[P17]	[3/4"C,3#10,2#14,1#10G]	[P40]	[1 1/2"C,3#1, 3#14,1#6G]	[EC-4]	[1 1/2"C,WITH PULL STRING]
[P18]	[3/4"C,3#10,3#14,1#10G]	[P41]	[1 1/2"C,3#2/0, 1#6G]	[EC-5]	[2"C,WITH PULL STRING]
[P19]	[3/4"C,3#10,4#14,1#10G]	[P42]	[2"C,3#3/0, 1#4G]	[EC-6]	[3"C,WITH PULL STRING]
[P20]	[3/4"C,3#10,5#14,1#10G]	[P43]	[2"C,3#4/0, 1#4G]	[EC-7]	[4"C,WITH PULL STRING] [5"C,WITH PULL STRING]
[P21]	[1"C,2#8,1#10G]	[P44]	[3"C,3-350KCMIL, 1 #1G]	[EC-8]	[5 C,WITH POLL STRING]
[P22]	[1"C,3#8,1#10G]	[P45]	[2"C,4#1, 1#6G]		
[P23]	[1"C,3#8,2#14,1#10G]	[P46]	[2"C,3#2/0, 1#4G]		
		[P47]	[2"C,4#1/0, 1#6G]		
Α	NALOG CIRCUIT CALLOUTS	CON	TROL CIRCUIT CALLOUTS	CON	TROL CABLE CIRCUIT CALLOUTS
[A1]	[3/4"C,1 TYPE 3]	[C1]	[3/4"C,MSC]	[CC5]	[3/4"C,1-5C TYPE 1]
[A2]	•				•
	[1"C.2 TYPE 3]	1 1021	13/4"(`')#14 1#14(;1		13/4"C.1-7C TYPE 11
	[1"C,2 TYPE 3] [1"C.3 TYPE 3]	[C2]	[3/4"C,2#14,1#14G]	[CC7] [CC9]	[3/4"C,1-7C TYPE 1] [1"C.1-9C TYPE 1]
[A3]	[1"C,3 TYPE 3]	[C3]	[3/4"C,3#14,1#14G]	[CC9]	[1"C,1-9C TYPE 1]
[A3] [A4]	[1"C,3 TYPE 3] [1"C,4 TYPE 3]	[C3] [C4]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G]	[CC9] [CC12]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1]
[A3] [A4] [A5]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3]	[C3] [C4] [C5]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G]	[CC9] [CC12] [CC19]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1]
[A3] [A4] [A5] [A6]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3]	[C3] [C4] [C5] [C6]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G]	[CC9] [CC12] [CC19] [CC25]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1]
[A3] [A4] [A5] [A6] [A7]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3]	[C3] [C4] [C5] [C6] [C7]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G]	[CC9] [CC12] [CC19] [CC25]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A9]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8] [C9]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A9]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A9] [A10]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A9] [A10] [A11]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A9] [A10] [A11] [A12] [A13]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A9] [A10] [A11] [A12] [A13]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,13 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,14#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A10] [A11] [A12] [A13] [A14] [A15]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,13 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14] [C15]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,15#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A10] [A11] [A12] [A13] [A14] [A15]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,14 TYPE 3] [2"C,14 TYPE 3]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14] [C15] [C16]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,15#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A10] [A11] [A12] [A13] [A14] [A15] [A16] [A17]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,13 TYPE 3] [2"C,14 TYPE 3] [3/4"C,1 TYPE 4]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14] [C15] [C16] [C17]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,14#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,16#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A10] [A11] [A12] [A13] [A14] [A15] [A16] [A17] [A18]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,14 TYPE 3] [2"C,14 TYPE 3] [3/4"C,1 TYPE 4] [3/4"C,2 TYPE 4]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14] [C15] [C16] [C17] [C18]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,16#14,1#14G] [3/4"C,17#14,1#14G] [3/4"C,16#14,1#14G] [3/4"C,17#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A9] [A10] [A12] [A13] [A14] [A15] [A16] [A17] [A18] [A19]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,13 TYPE 3] [2"C,14 TYPE 3] [2"C,14 TYPE 4] [3/4"C,1 TYPE 4] [1"C,3 TYPE 4] [1 1/4"C,4 TYPE 4]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14] [C15] [C16] [C17] [C18] [C19]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,16#14,1#14G] [3/4"C,17#14,1#14G] [3/4"C,17#14,1#14G] [3/4"C,18#14,1#14G] [3/4"C,18#14,1#14G] [3/4"C,19#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A9] [A10] [A11] [A12] [A13] [A14] [A15] [A16] [A17] [A18] [A19] [A20]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,13 TYPE 3] [2"C,14 TYPE 3] [2"C,14 TYPE 4] [3/4"C,1 TYPE 4] [11-C,3 TYPE 4] [1 1/4"C,4 TYPE 4]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14] [C15] [C16] [C17] [C18] [C19] [C20]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,16#14,1#14G] [3/4"C,16#14,1#14G] [3/4"C,17#14,1#14G] [3/4"C,17#14,1#14G] [3/4"C,18#14,1#14G] [3/4"C,18#14,1#14G] [3/4"C,19#14,1#14G] [3/4"C,19#14,1#14G] [1"C,20#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A10] [A11] [A12] [A13] [A14] [A15] [A16] [A17] [A18] [A20] [A21]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,13 TYPE 3] [2"C,14 TYPE 3] [2"C,14 TYPE 4] [3/4"C,2 TYPE 4] [1 1/4"C,5 TYPE 4] [1 1/4"C,5 TYPE 4]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14] [C15] [C16] [C17] [C18] [C19] [C20] [C21]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,16#14,1#14G] [3/4"C,16#14,1#14G] [3/4"C,17#14,1#14G] [3/4"C,17#14,1#14G] [3/4"C,19#14,1#14G] [3/4"C,19#14,1#14G] [1"C,20#14,1#14G] [1"C,20#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
[A3] [A4] [A5] [A6] [A7] [A8] [A10] [A11] [A12] [A13] [A14] [A15] [A16] [A17] [A18] [A19] [A20] [A21] [A22]	[1"C,3 TYPE 3] [1"C,4 TYPE 3] [1 1/4"C,5 TYPE 3] [1 1/4"C,6 TYPE 3] [1 1/2"C,7 TYPE 3] [1 1/2"C,8 TYPE 3] [1 1/2"C,9 TYPE 3] [2"C,10 TYPE 3] [2"C,11 TYPE 3] [2"C,12 TYPE 3] [2"C,13 TYPE 3] [2"C,14 TYPE 3] [2"C,14 TYPE 4] [3/4"C,1 TYPE 4] [1 1/4"C,4 TYPE 4] [1 1/4"C,5 TYPE 4] [1 1/4"C,6 TYPE 4] [1 1/4"C,7 TYPE 4]	[C3] [C4] [C5] [C6] [C7] [C8] [C9] [C10] [C11] [C12] [C13] [C14] [C15] [C16] [C17] [C18] [C19] [C20] [C21]	[3/4"C,3#14,1#14G] [3/4"C,4#14,1#14G] [3/4"C,5#14,1#14G] [3/4"C,6#14,1#14G] [3/4"C,7#14,1#14G] [3/4"C,8#14,1#14G] [3/4"C,9#14,1#14G] [3/4"C,10#14,1#14G] [3/4"C,11#14,1#14G] [3/4"C,12#14,1#14G] [3/4"C,13#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,15#14,1#14G] [3/4"C,16#14,1#14G] [3/4"C,17#14,1#14G] [3/4"C,18#14,1#14G] [3/4"C,19#14,1#14G] [1"C,20#14,1#14G] [1"C,20#14,1#14G] [1"C,22#14,1#14G]	[CC9] [CC12] [CC19] [CC25] [CC37]	[1"C,1-9C TYPE 1] [1"C,1-12C TYPE 1] [1 1/2"C, 1-19C TYPE 1] [1 1/2"C,1-25C TYPE 1] [2"C,1-37C TYPE 1]
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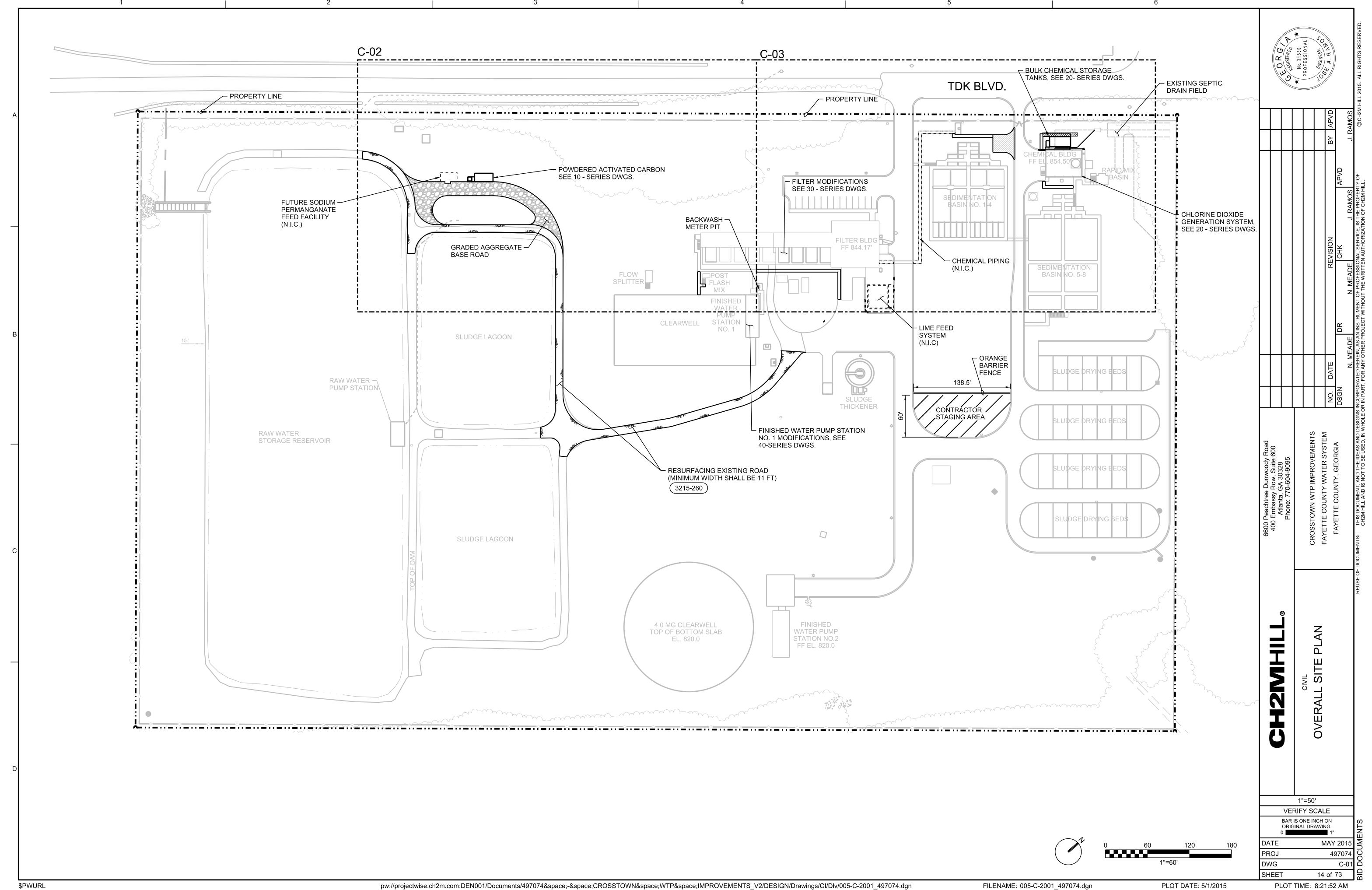
- 1. FOR CABLE TYPES, SEE SPECIFICATIONS.
- 2. CONDUIT SIZES ARE BASE ON THE AREA OF THW CONDUCTORS.
- 3. SIZING OF CONDUCTORS #2AWG AND SMALLER BASED ON AMPACITIES AT 60 DEGREES C, SIZING OF CONDUCTORS #1AWG AND LARGER BASED ON AMPACITIES AT 75 DEGREES C.
- 4. WHERE CIRCUITS ARE UNDERGROUND, DIRECT BURIED OR CONCRETE ENCASED, MINIMUM CONDUIT SIZE SHALL BE 1".
- 5. FOR METRIC CONDUIT SIZES USE THE FOLLOWING CONVERSION:

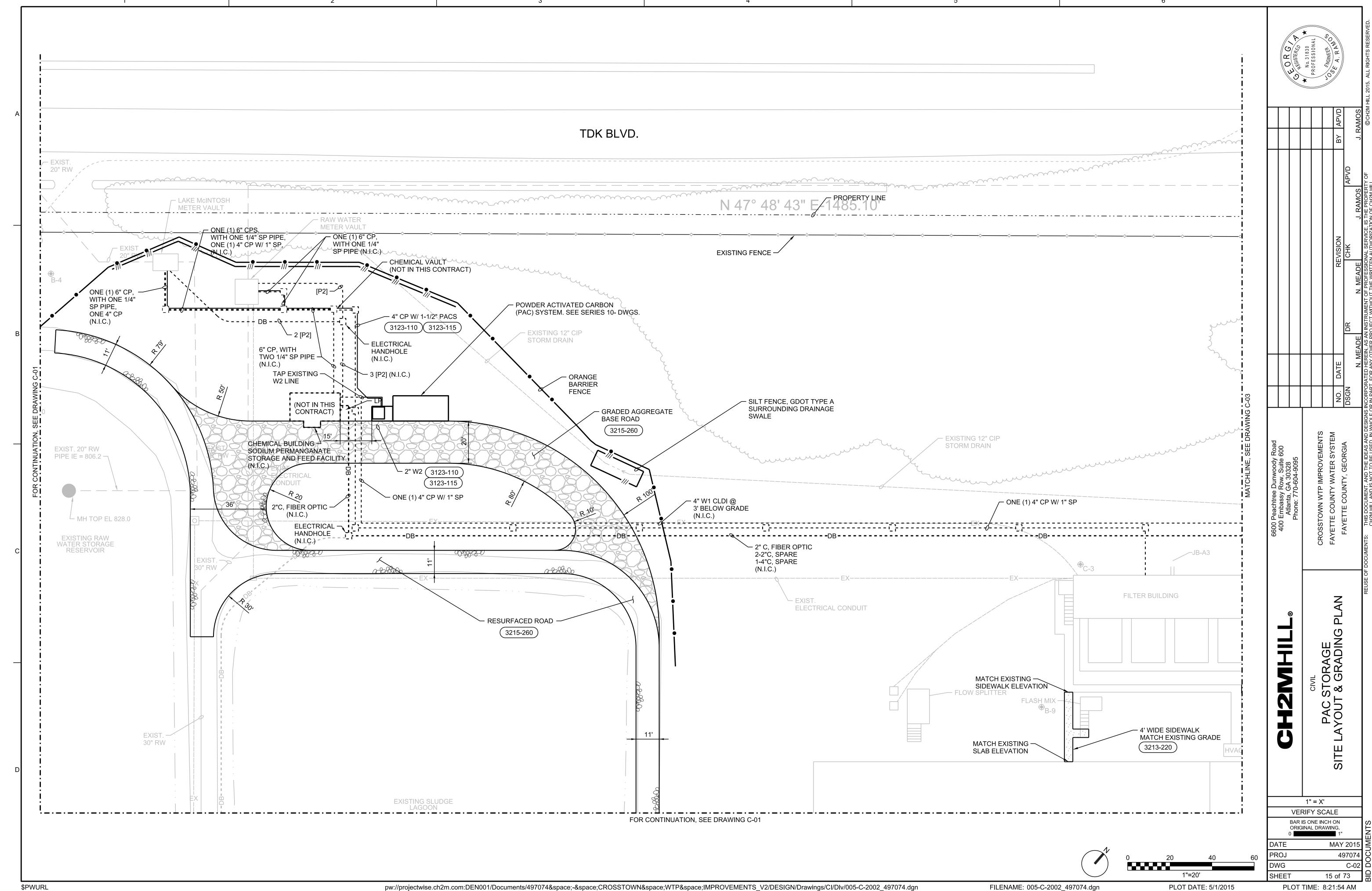
	.,
3/4" = 21 mm	1 1/2" = 41 m
I" = 27 mm	2" = 53 mm

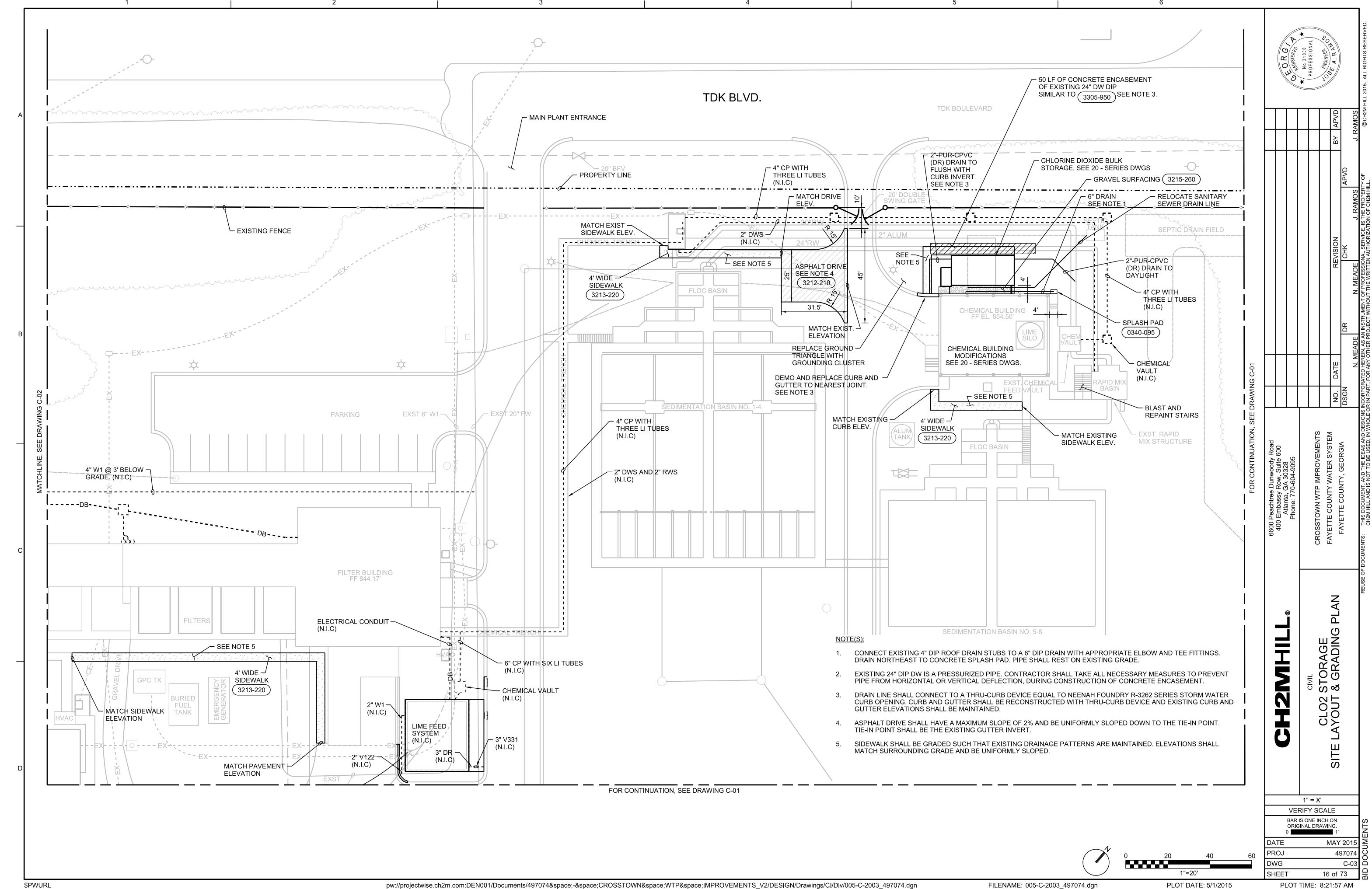
6600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095         CROSSTOWN WTP IMPROVEMENTS         Properate COUNTY WATER SYSTEM         Properate COUNTY WATER SYSTEM         Properate COUNTY WATER SYSTEM         Properate COUNTY WATER SYSTEM         NO.         DATE         PROPERATE COUNTY WATER SYSTEM         PROPERATE COUNTY WATER SYSTEM         NO.         DATE         PROPERATE COUNTY WATER SYSTEM         PROPERATE COUNTY WATER SYSTEM         NO.         DATE         PROPERATE COUNTY WATER SYSTEM         NO.         DATE         PROPERATE COUNTY WATER SYSTEM         PROPERATE COUNTY WATER SYSTEM         NO.         DATE         PROPERATE COUNTY WATER SYSTEM         PROPERATE SYSTEM         PROPAGE SYSTEM	NO.   DATE   CHK   APVD   NMEYER   APVD   NMINSTRIMENT OF BOOTERS CHANGE SETTING SE	6600 Peachtree Dunwoody Road
600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095 Phone: 770-604-9095 ETTE COUNTY WATER SYSTEM NO. DATE AYETTE COUNTY, GEORGIA DSGN NO. DATE OBJECT NO. DATE NO. DATE THIS DOCUMENT AND THE IDEA AND DESIGNAL SERVICE IS THE BEODESIS	6600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM FAYETTE COUNTY, GEORGIA  FAYETTE COUNTY, FAYETTE COUNTY, GEORGIA  FAYETTE COUNTY, FAYETTE COUNTY, GEORGIA  FAYETTE COUNTY	CH2IMHILL®  Atlanta, GA 30328 Phone: 770-604-9095  GENERAL  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM SHEET 2  ELECTRICAL LEGEND FAYETTE COUNTY, GEORGIA  SHEET 2  FAYETTE COUNTY, GEORGIA  SHEET 2  FAYETTE COUNTY, GEORGIA  NO. DATE FAYETTE COUNTY, GEORGIA FAYETTE COUNTY, GEORGI
600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095 SSTOWN WTP IMPROVEMENTS ETTE COUNTY WATER SYSTEM NO. DATE AYETTE COUNTY, GEORGIA DSGN NO. DATE DSGN NO. DATE NO. MEYER	6600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM NO. DATE FAYETTE COUNTY, GEORGIA DSGN  N MEYER N MEYER	GHZMHILL®  Atlanta, GA 30328 Phone: 770-604-9095  GENERAL  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM SHEET 2  ELECTRICAL LEGEND FAYETTE COUNTY, GEORGIA  NO. DATE DSGN  NAEYER  NAEYER  NAEYER  NAMEYER  NAMEY
600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095 SSTOWN WTP IMPROVEMENTS ETTE COUNTY WATER SYSTEM NO. DATE AYETTE COUNTY, GEORGIA DSGN NO. DATE DSGN NO. DATE NO. MEYER	6600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM NO. DATE FAYETTE COUNTY, GEORGIA DSGN  N MEYER N MEYER	GHZMHILL®  Atlanta, GA 30328 Phone: 770-604-9095  GENERAL  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM SHEET 2  ELECTRICAL LEGEND FAYETTE COUNTY, GEORGIA  NO. DATE DSGN  NAEYER  NAEYER  NAEYER  NAMEYER  NAMEY
600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095 SSTOWN WTP IMPROVEMENTS ETTE COUNTY WATER SYSTEM NO. DATE AYETTE COUNTY, GEORGIA DSGN NO. DATE DSGN NO. DATE NO. MEYER	## CROSSTOWN WTP IMPROVEMENTS    FAYETTE COUNTY, GEORGIA   DOCUMENTS	GHZMHILL®  Atlanta, GA 30328 Phone: 770-604-9095  GENERAL  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM SHEET 2  ELECTRICAL LEGEND FAYETTE COUNTY, GEORGIA  NO. DATE DSGN  NAEYER  NAEYER  NAEYER  NAMEYER  NAMEY
600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095 SSTOWN WTP IMPROVEMENTS ETTE COUNTY WATER SYSTEM NO. DAT THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORDORATED	6600 Peachtree Dunwoody Road 400 Embassy Row, Suite 600 Atlanta, GA 30328 Phone: 770-604-9095  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM NO. DAT FAYETTE COUNTY, GEORGIA DSGN	GENERAL  GENERAL  GENERAL  GENERAL  GENERAL  SHEET 2  Hone: 770-604-9095  CROSSTOWN WTP IMPROVEMENTS FAYETTE COUNTY WATER SYSTEM NO. DAT FAYETTE COUNTY, GEORGIA  DSGN
96   46   16   16   16   16   16   16   1	66C 40 CROS FAYE: FAYE:	CHAZINAL LEGEND  SENERAL  SHEET 2  FAYE  FAYE  FAYE  SHEET 2
96   46   16   16   16   16   16   16   1	66C 40 CROS FAYE: FAYE:	CHAZINAL LEGEND  SENERAL  SHEET 2  FAYE  FAYE  FAYE  SHEET 2
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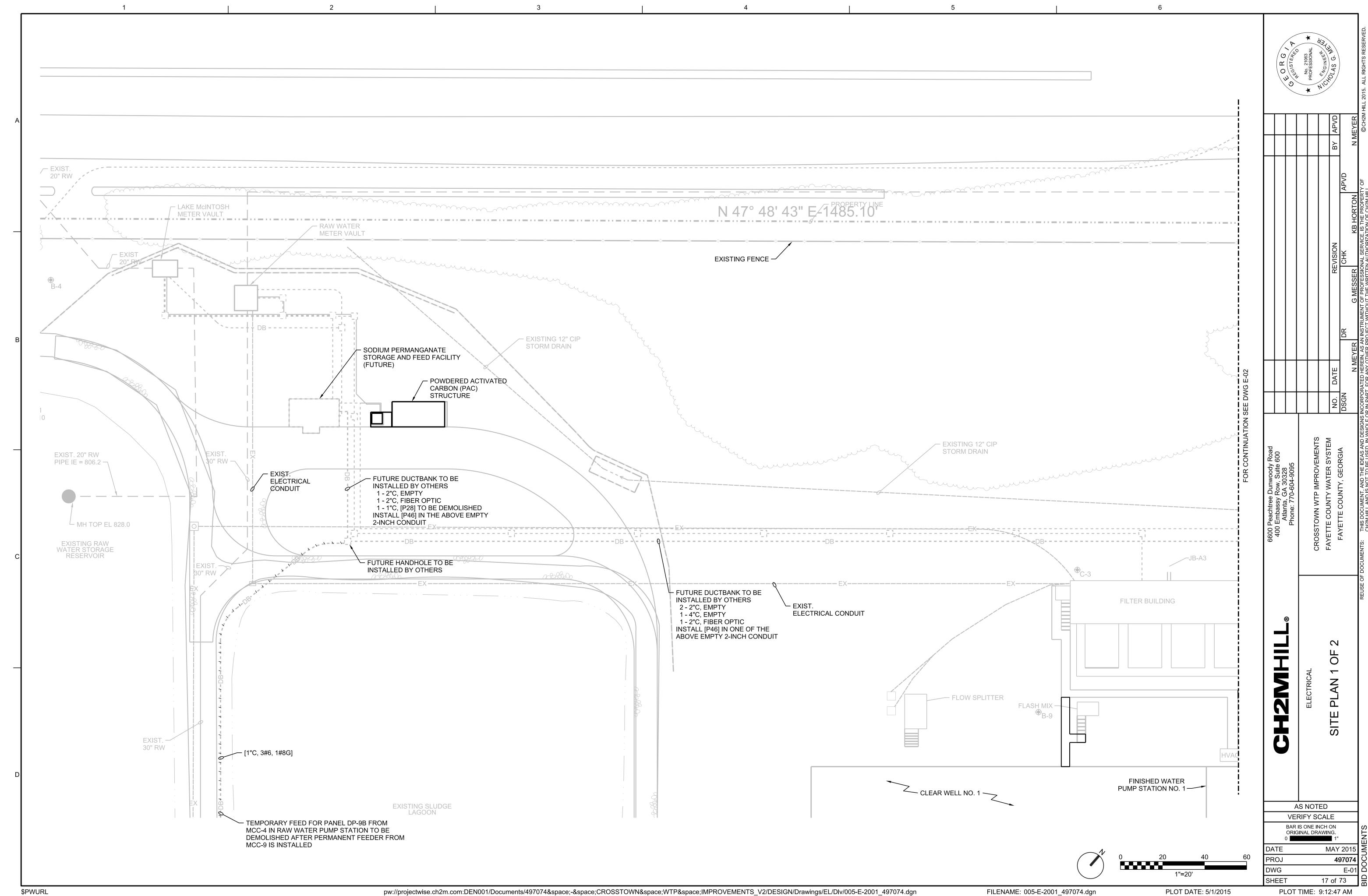
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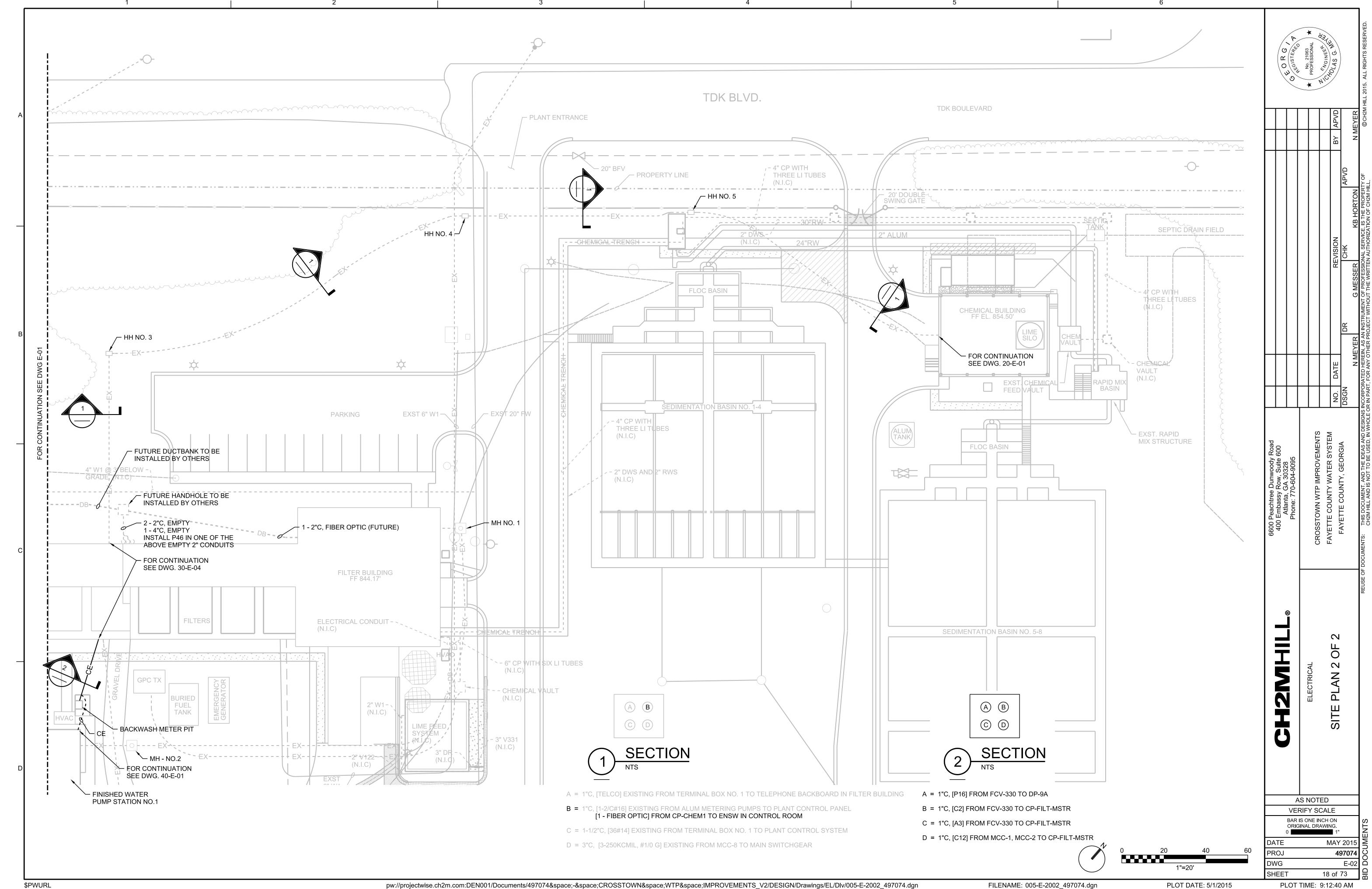
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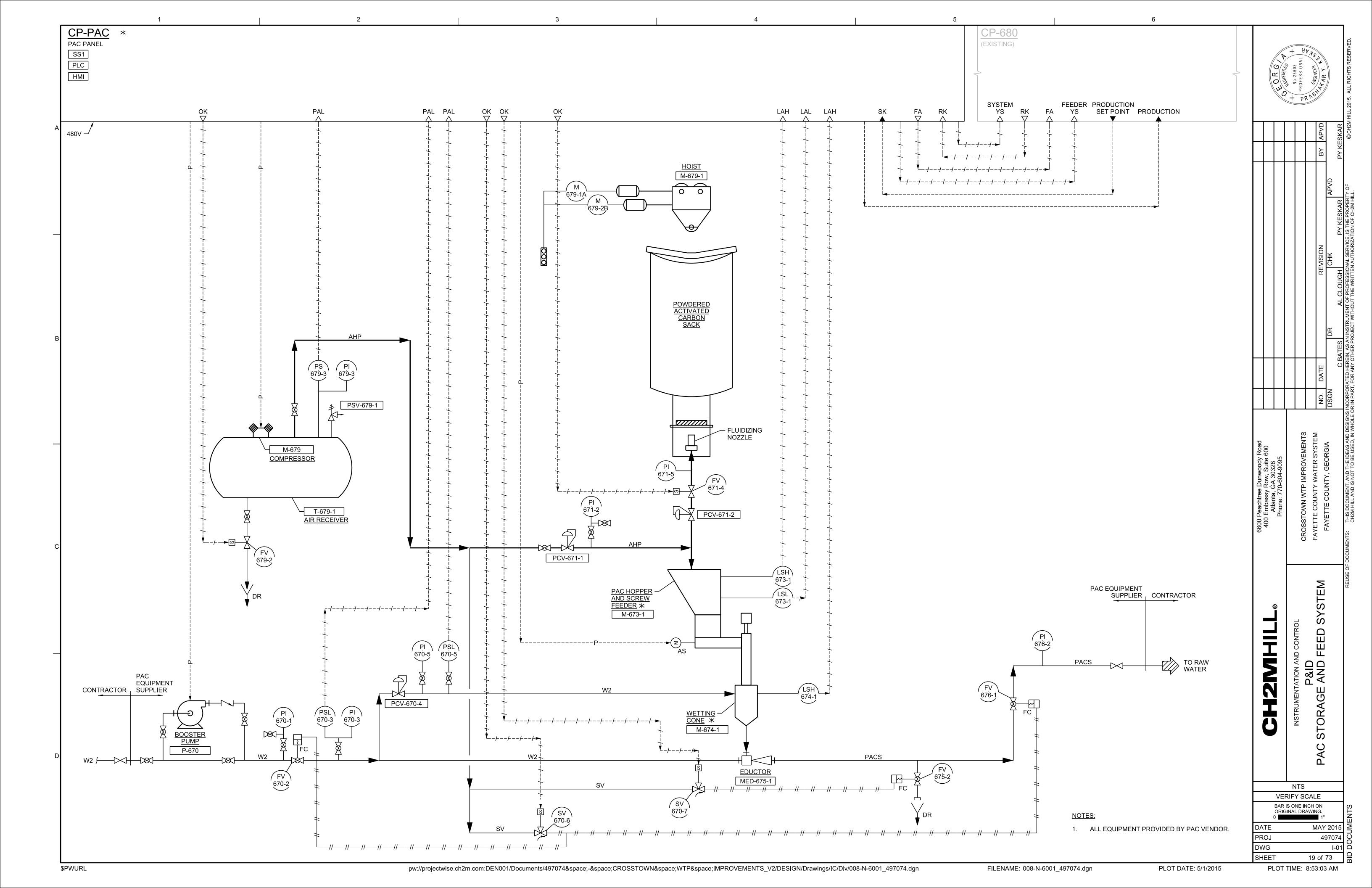


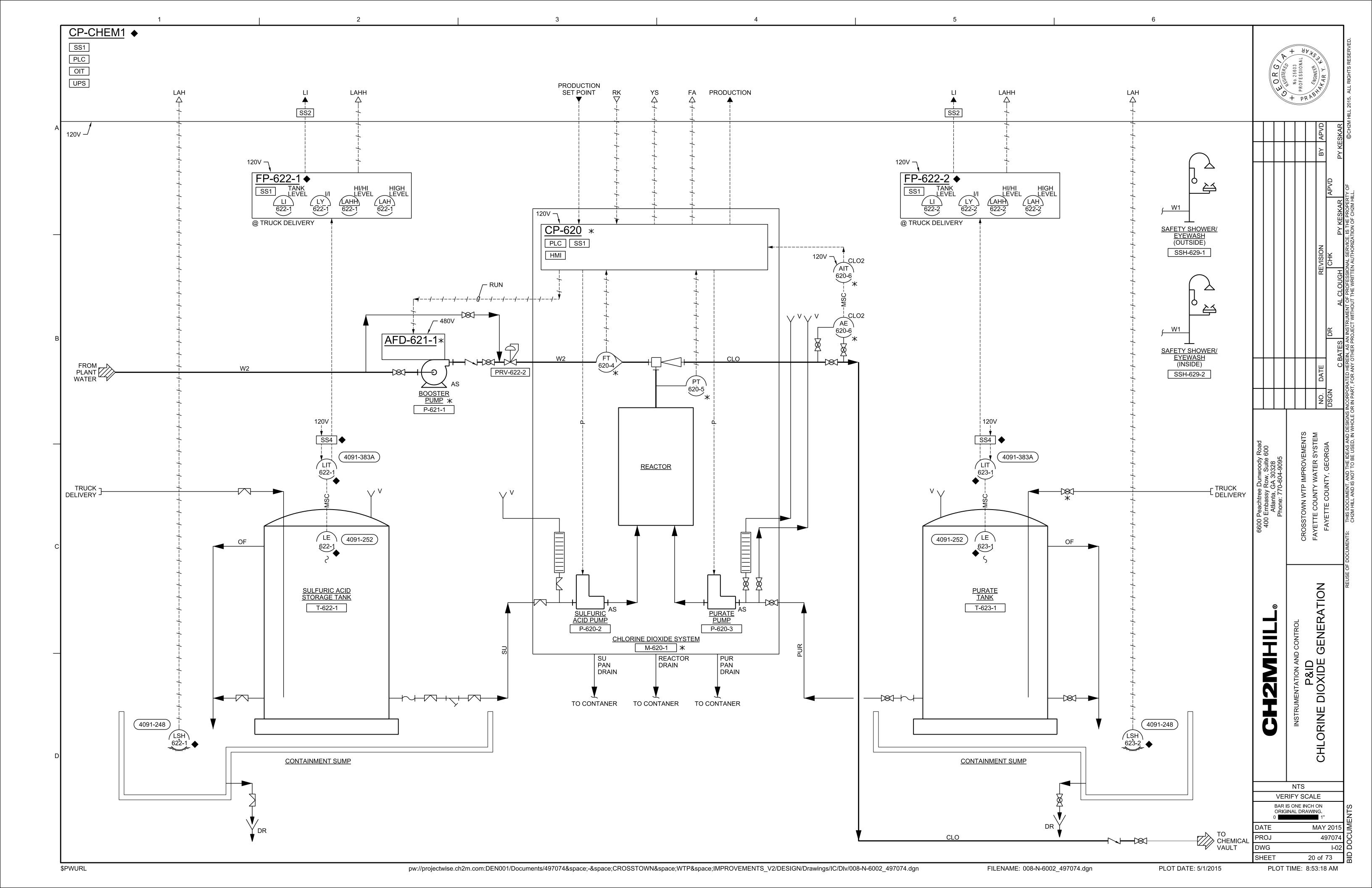


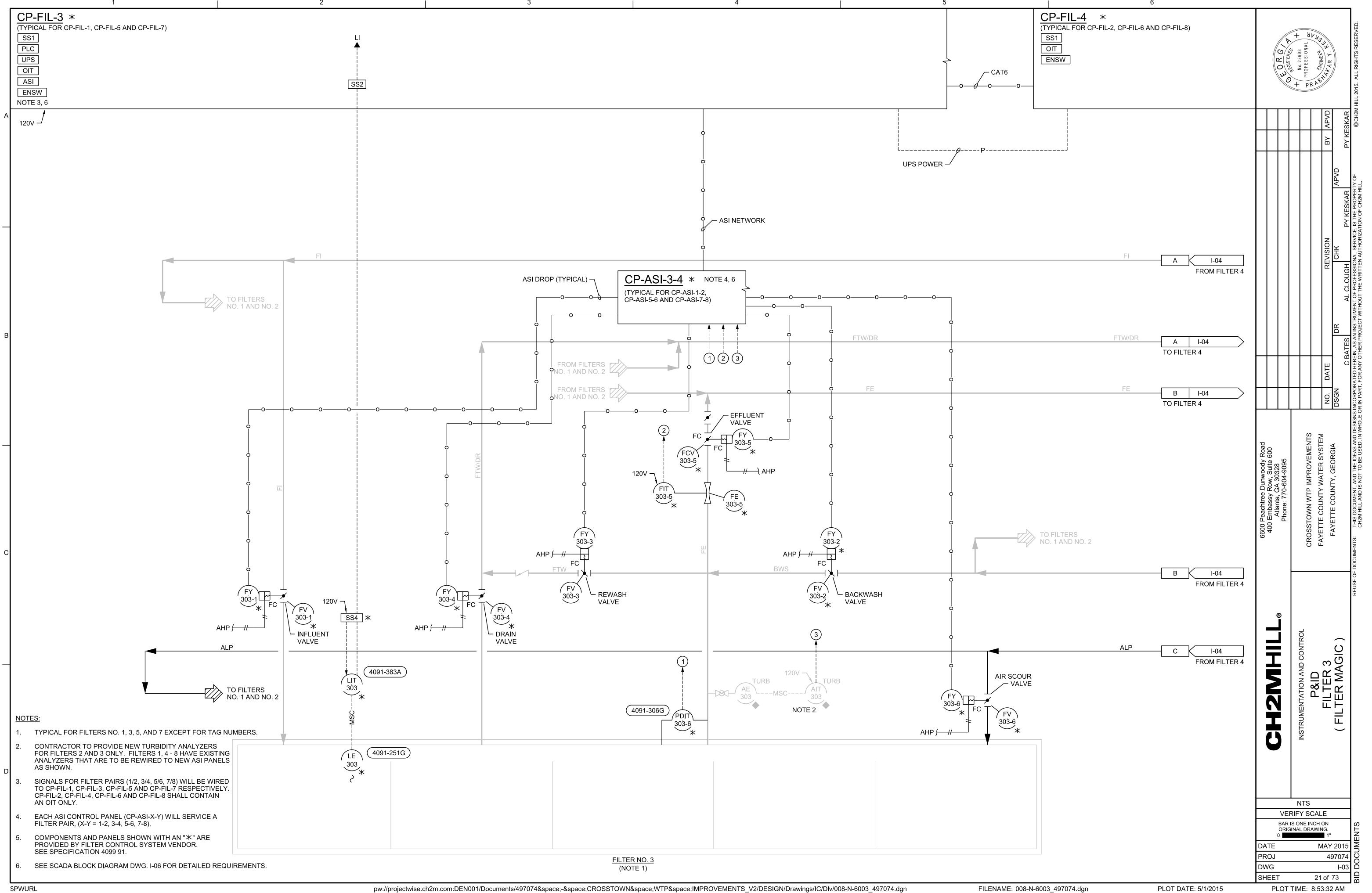


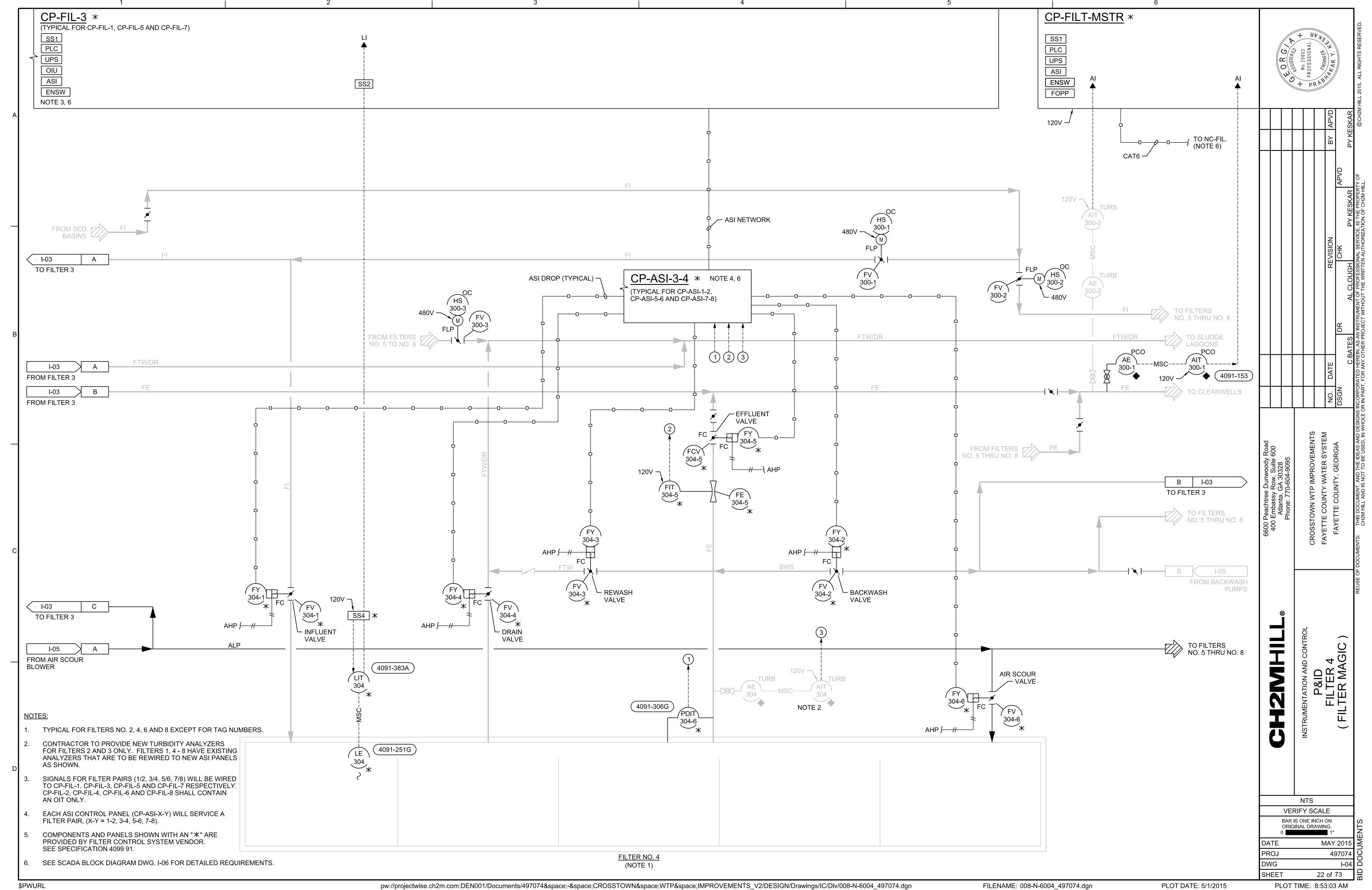


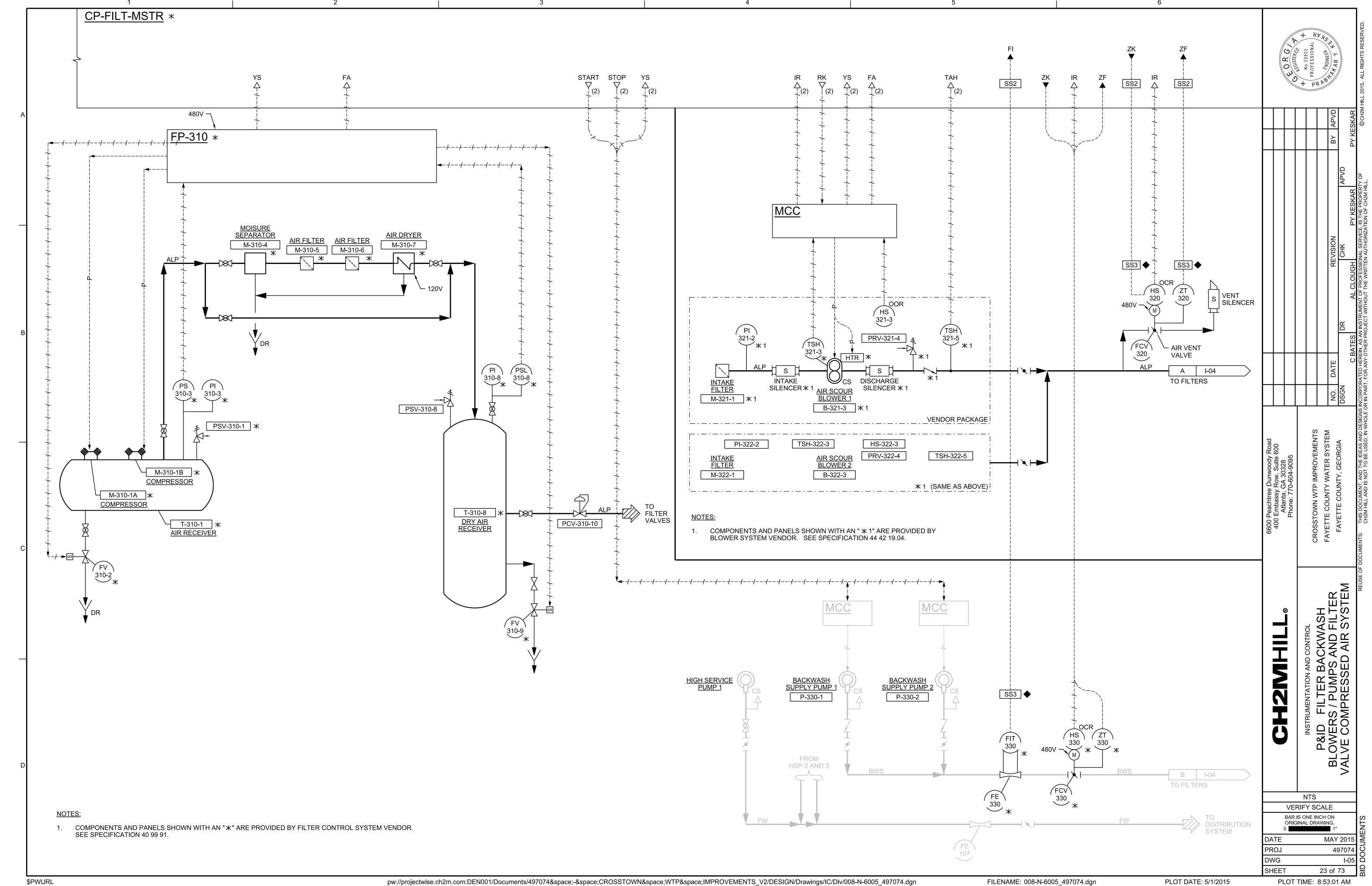


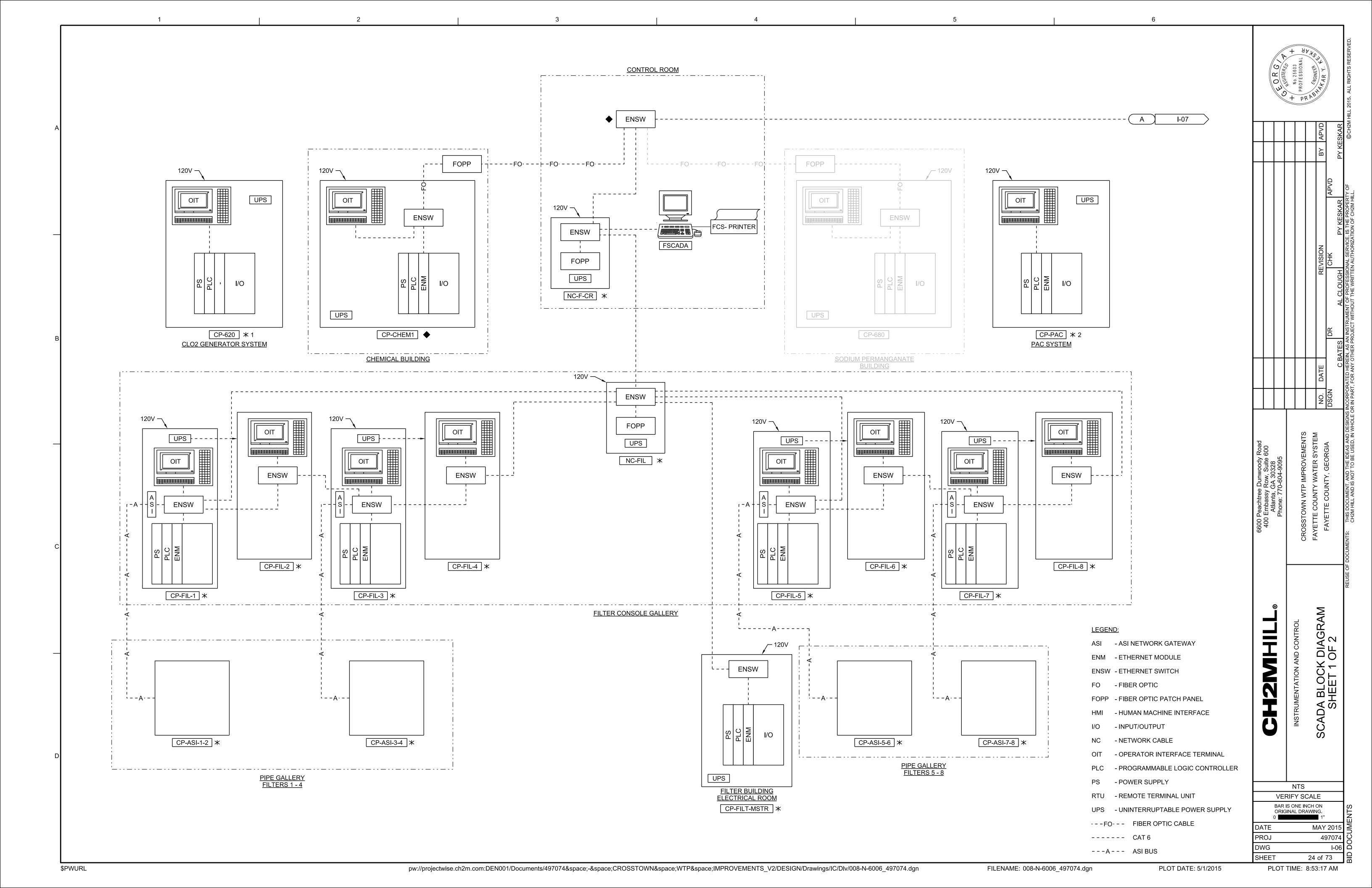


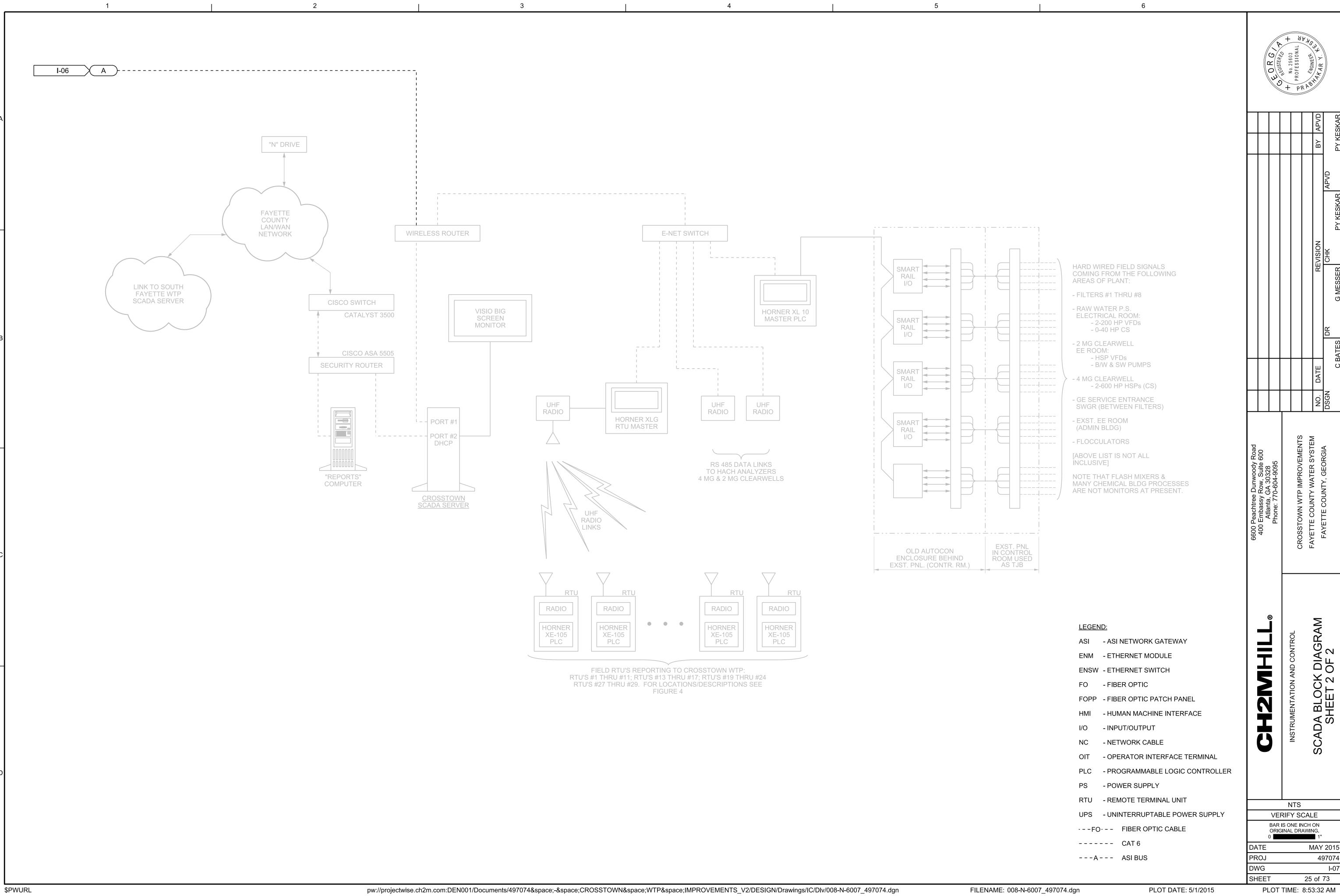


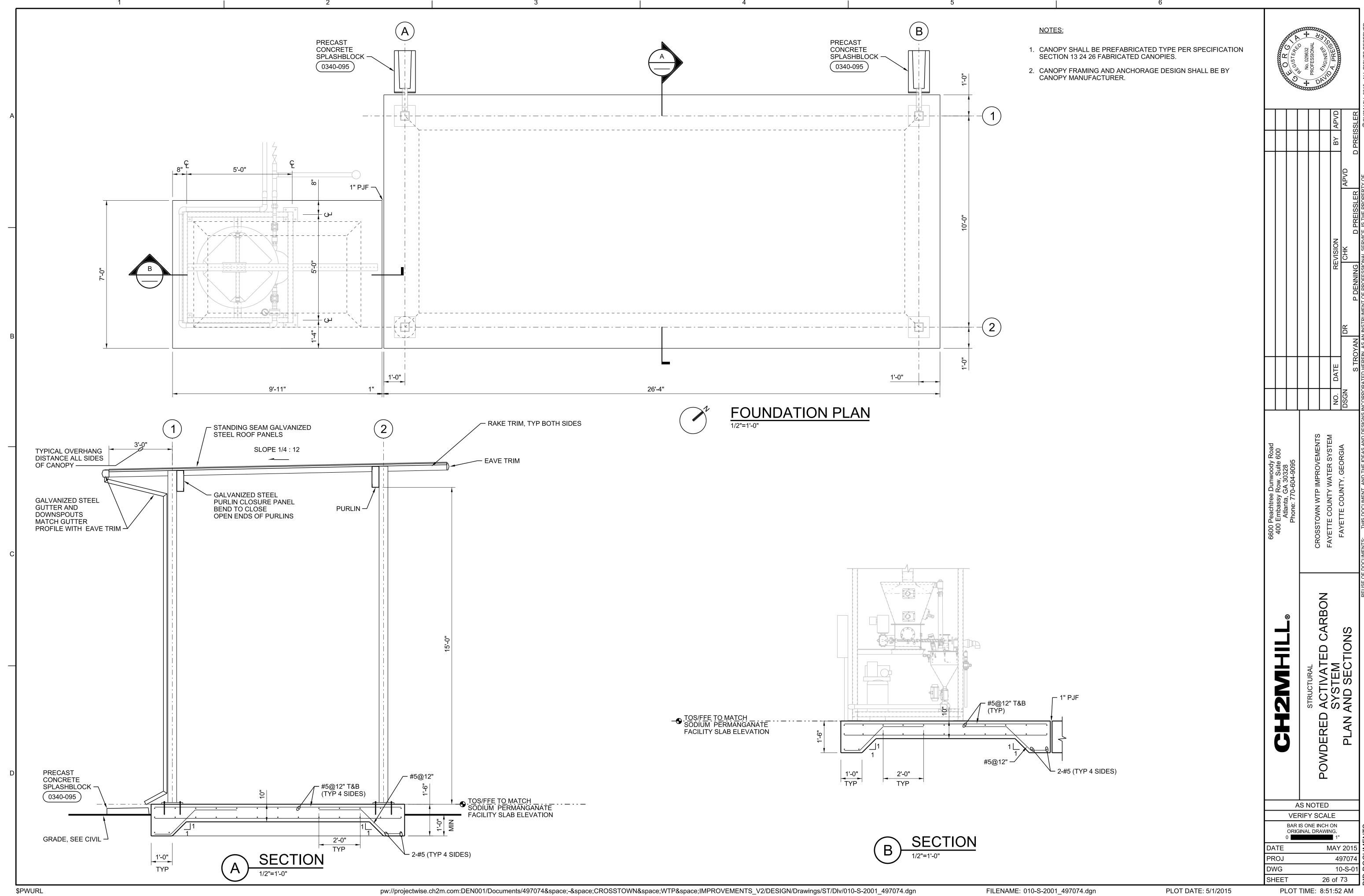


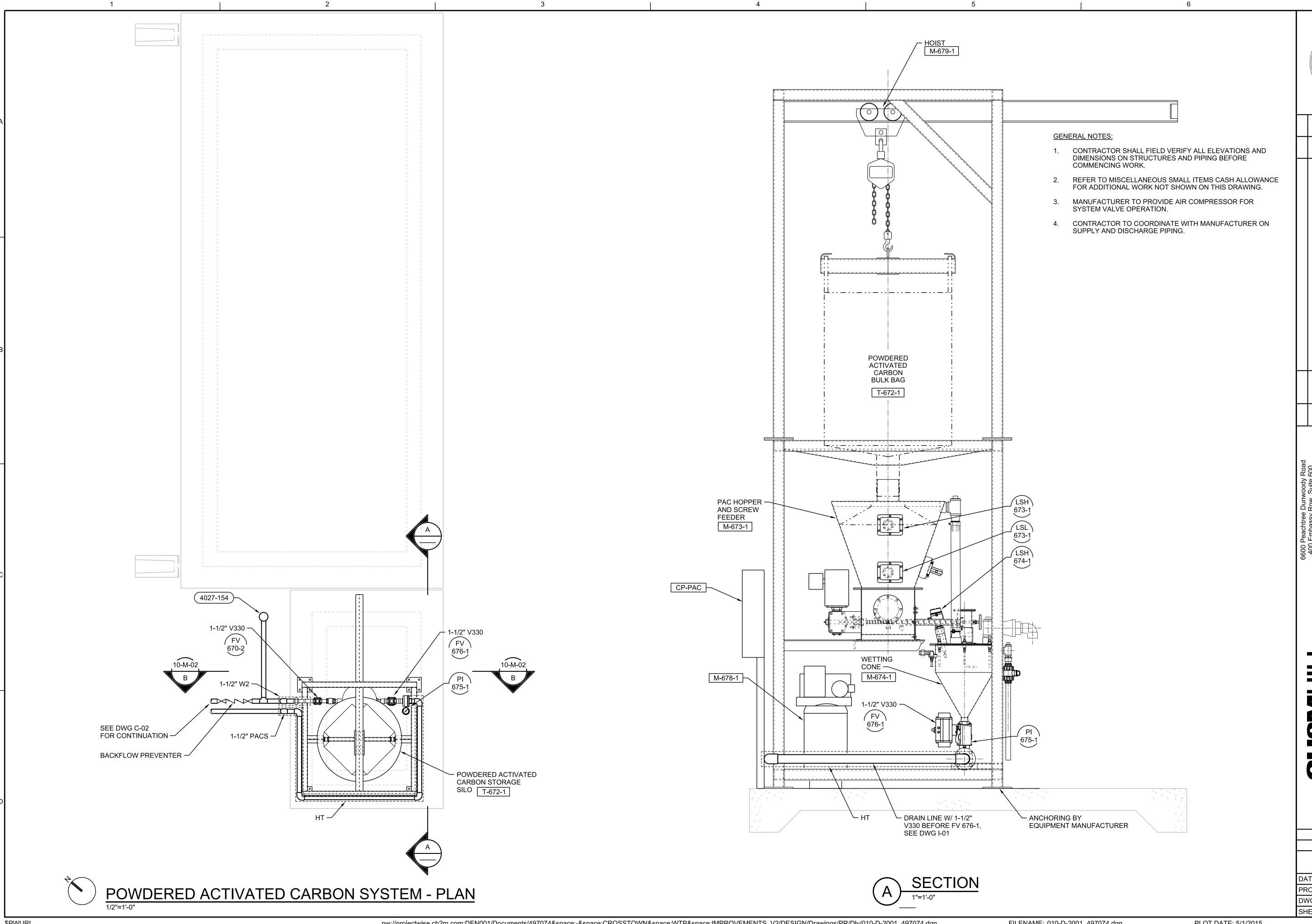












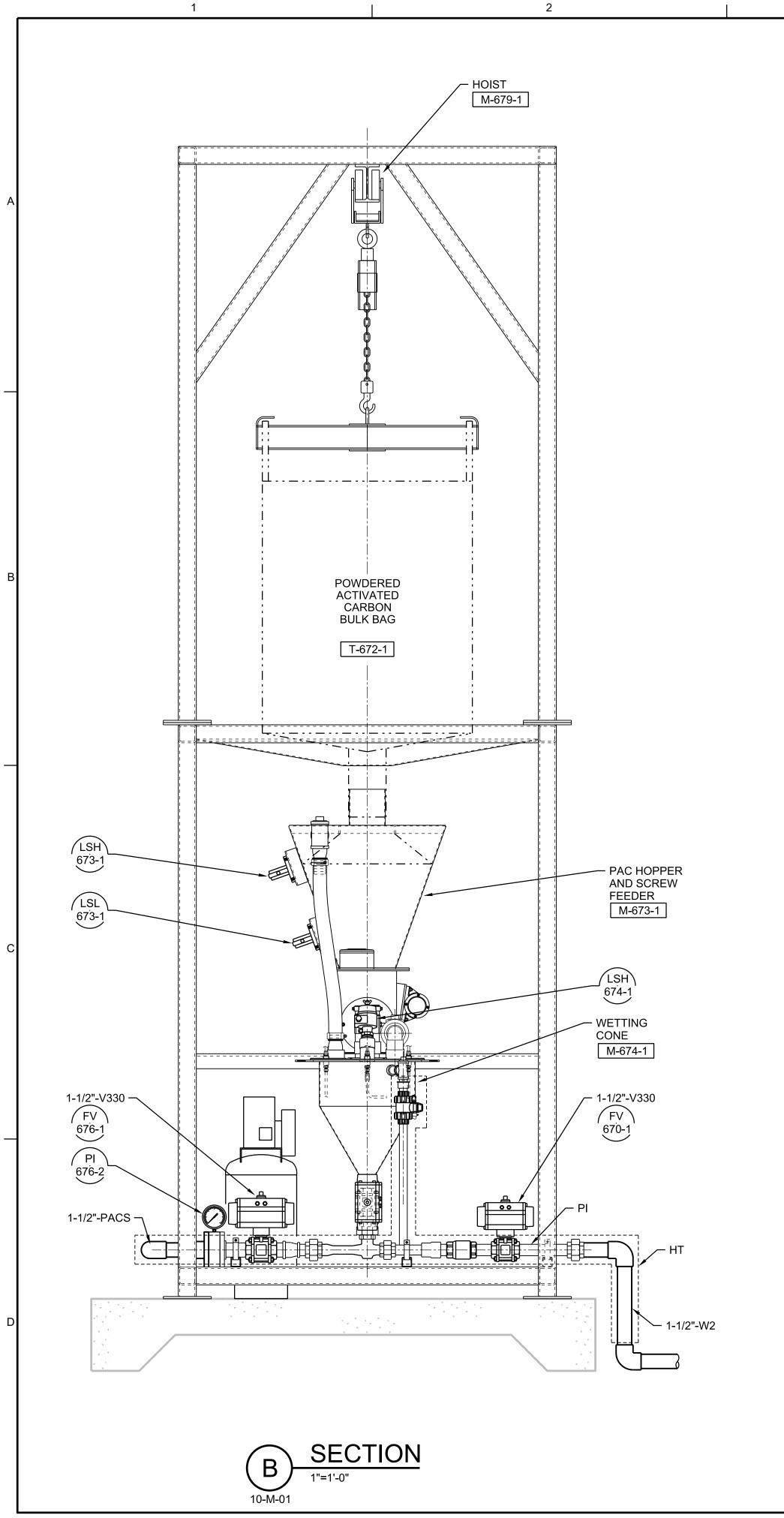
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POWDERED

AS NOTED VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.



							APVD	
						REVISION	ЭНЭ	E MINCHEW
						REVI	D	WL CLOUGH
							DR	24
								- JESTER
						DATE		L JE
						NO.	DSGN	
ussy Row, Suite 600 nta, GA 30328 E. 770-604-9095 WTP IMPROVEMENTS UNTY WATER SYSTEM COUNTY, GEORGIA DSGI								

- CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS AND DIMENSIONS ON STRUCTURES AND PIPING BEFORE COMMENCING WORK.
- REFER TO MISCELLANEOUS SMALL ITEMS CASH ALLOWANCE FOR ADDITIONAL WORK NOT SHOWN ON THIS DRAWING.
- SYSTEM VALVE OPERATION.

## **GENERAL NOTES:**

- 3. MANUFACTURER TO PROVIDE AIR COMPRESSOR FOR

AS NOTED

POWDERED

SECTION,

NOTES

SYSTEM DETAIL AND I

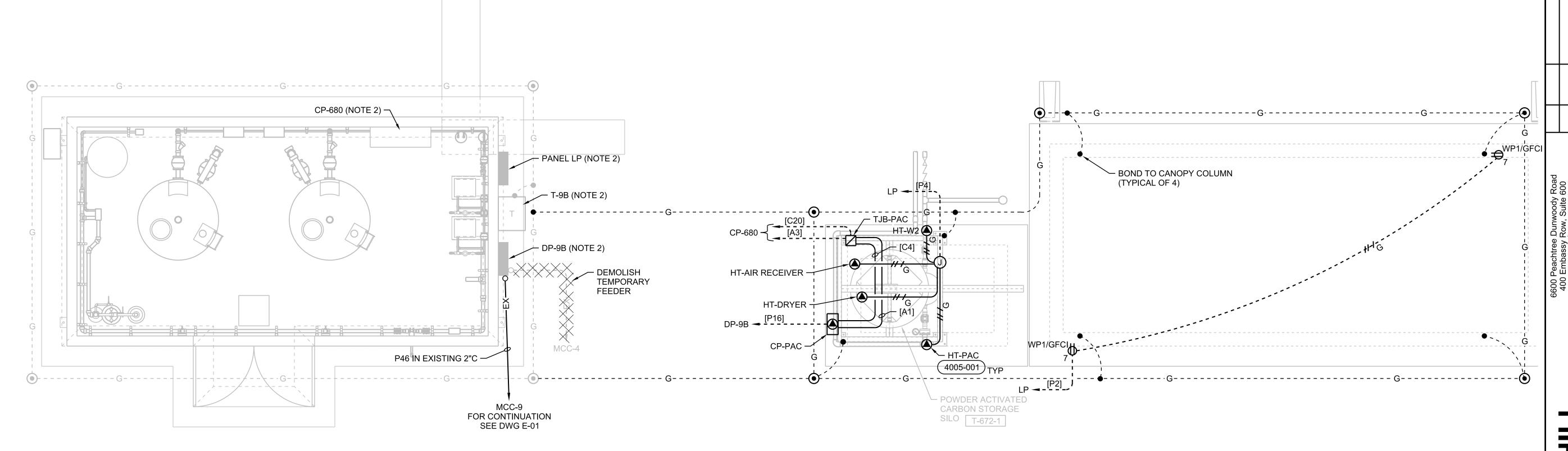
28 of 73

SHEET

PANE	L: DP-9	9B		LOCA	TION:	SODI	UM PE	ERMANGANATE BUILDING				
SERV	ICE VC	<b>DLTAGE</b>	E: 480V	PHAS	SE: 3			WIRE: 3				
TOTAL	LOAD	KVA:	7.6	BUS S	SIZE:	125A		MAIN SIZE: 100A	TYPE:	YPE: MCB		
REMA	RKS:	NOTE	S 2, 3	NEUT	RAL:	NONE		MOUNTING: SURFACE, NEMA 3F	₹			
LO	AD IN K			BKR	СКТ	СКТ	BKR		LO	AD IN I	(VA	
Α	В	С	CIRCUIT DESCRIPTION	A/P	1	NO.	ı	CIRCUIT DESCRIPTION	Α	В	С	
2.2			TDANICEODMED T OD		1	2			0.4			
	2.1		TRANSFORMER T-9B	45/3	3	4	30/3	CP-PAC		0.4		
		2.0	(PANEL LP-9B)		5	6					0.4	
					7		1					
			SPARE	20/3			1	SPARE				
					11							
					13		4					
			SPARE	20/3	15		t	SPARE				
					17							
				0.5	19		4					
			SPACE	3P	21	_	4	SPACE				
					23							
			SPACE	3P	25			SPACE				
			SPACE	38	27	+	1	SPACE				
					29 31							
			SPACE	3P	33	_	4	SPACE				
			JOI AGE	JF"	35			OI AOL				
					37							
			SPACE	3P	39	_	4	SPACE				
			10.7.02		41		4	0.7.02				

0.4 0.4 0.4

PANEL	.: LP			LOCA	TION:	SODI	UM PI	ERMANGANATE BUILDING			
SERVICE VOLTAGE: 208/120V					PHASE: 3			WIRE: 4			
TOTAL LOAD KVA: 6.3					BUS SIZE: 125			MAIN SIZE: 100	TYPE: MCB		
REMARKS: * PROVIDE EGFI RATED BREAKERS;								MOUNTING: SURFACE, NEMA 3R			
		NOTES	,					,			
LOAD IN KVA				BKR	CKT	CKT	BKR		LOA	DINK	VA
Α	В	С	CIRCUIT DESCRIPTION	A/P	NO.	NO.	A/P	CIRCUIT DESCRIPTION	Α	В	С
					1	2	20/1	RECEPTACLES	0.7		
			SPACE	3P	3	4	20/1	EXTERIOR LIGHT		0.2	
					5	6	20/1	INTERIOR LIGHTS			0.4
0.4			RECEPT-PAC	20/1	7	8	20/1	SPARE			
	0.5		SPARE	20/1	9	10	20/1	SPARE			
			SPARE	20/1	11	12	20/1	CHEMICAL PUMP P-682-1			0.
			SPARE	20/1	13	14	20/1	SPARE			
	0.2		HEAT TRACE	20/1*	15	16	20/1	CP-680		1.0	
		0.2	HEAT TRACE	20/1*	17	18	20/1	EX FAN			0.
0.9			RECEPT-SAMPLE PUMP	20/1	19	20	20/1	LIT-682-1,LI-682-2	0.2		
	0.2		HT-PAC, -W2, -DRYER	20/1*	21	22	1P	SPACE			
		0.5	HT-AIR-RECEIVER	20/1*	23	24	1P	SPACE			
			SPACE	1P	25	26	1P	SPACE			
			SPACE	1P	27	28	1P	SPACE			
			SPACE	1P	29	30	1P	SPACE			
1.3	0.9	0.7	TOTAL						0.9	1.2	1.3



pw://projectwise.ch2m.com:DEN001/Documents/497074&space;-&space;CROSSTOWN&space;WTP&space;IMPROVEMENTS\_V2/DESIGN/Drawings/EL/Dlv/010-E-2001\_497074.dgn



SODIUM PERMANGANATE - PLAN
3/8"=1'-0"

2.2 2.1 2.0 TOTAL



## POWDERED ACTIVATED CARBON SYSTEM - PLAN 3/8"=1'-0"

#### NOTES:

- 1. ALL EXPOSED CONDUIT, FITTINGS, AND ASSOCIATED MATERIALS SHALL BE RGS. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL HAVE A MINIMUM RATING OF NEMA 4X. ALL ELECTRICAL BOXES AND ENCLOSURES SHALL BE STAINLESS STEEL. ALL SUPPORTING MATERIALS AND HARDWARE SHALL BE STAINLESS STEEL.
- 2. TRANSFORMER T-9B, CP-680, AND PANELS LP AND DP-9B ARE FUTURE EQUIPMENT TO BE INSTALLED BY OTHERS.
- 3. BOLD ITEMS IN THE PANELBOARD SCHEDULES ARE NEW CIRCUIT BREAKERS AND / OR LOADS ADDED UNDER THIS CONTRACT.
- 4. ACTIVATED CARBON IS GENERALLY CONSIDERED TO BE COMBUSTIBLE DUST AND SO THE PAC STORAGE AND HANDLING AREA DESERVE CONSIDERATION AS CLASS II LOCATIONS AS DESCRIBED IN NFPA 70, ARTICLE 500. ALTHOUGH IT IS PROBABLE THAT COMBUSTIBLE DUST WILL BE PRESENT IN THESE LOCATIONS, IT IS DETERMINED THAT THESE LOCATIONS SHALL BE UNCLASSIFIED PER THE FOLLOWING JUSTIFICATION:

  \* DUST WILL NOT REMAIN SUSPENDED IN THE AIR IN SUFFICIENT QUANTITIES TO BE AN IGNITABLE MIXTURE.

  \* DUST LAYERS WILL NOT ACCUMULATE ON EQUIPMENT AND THEREFORE WILL NOT INTERFERE WITH THE SAFE DISSIPATION OF HEAT.

A PROFESSIONAL A PAGE OF GO NO. 21063

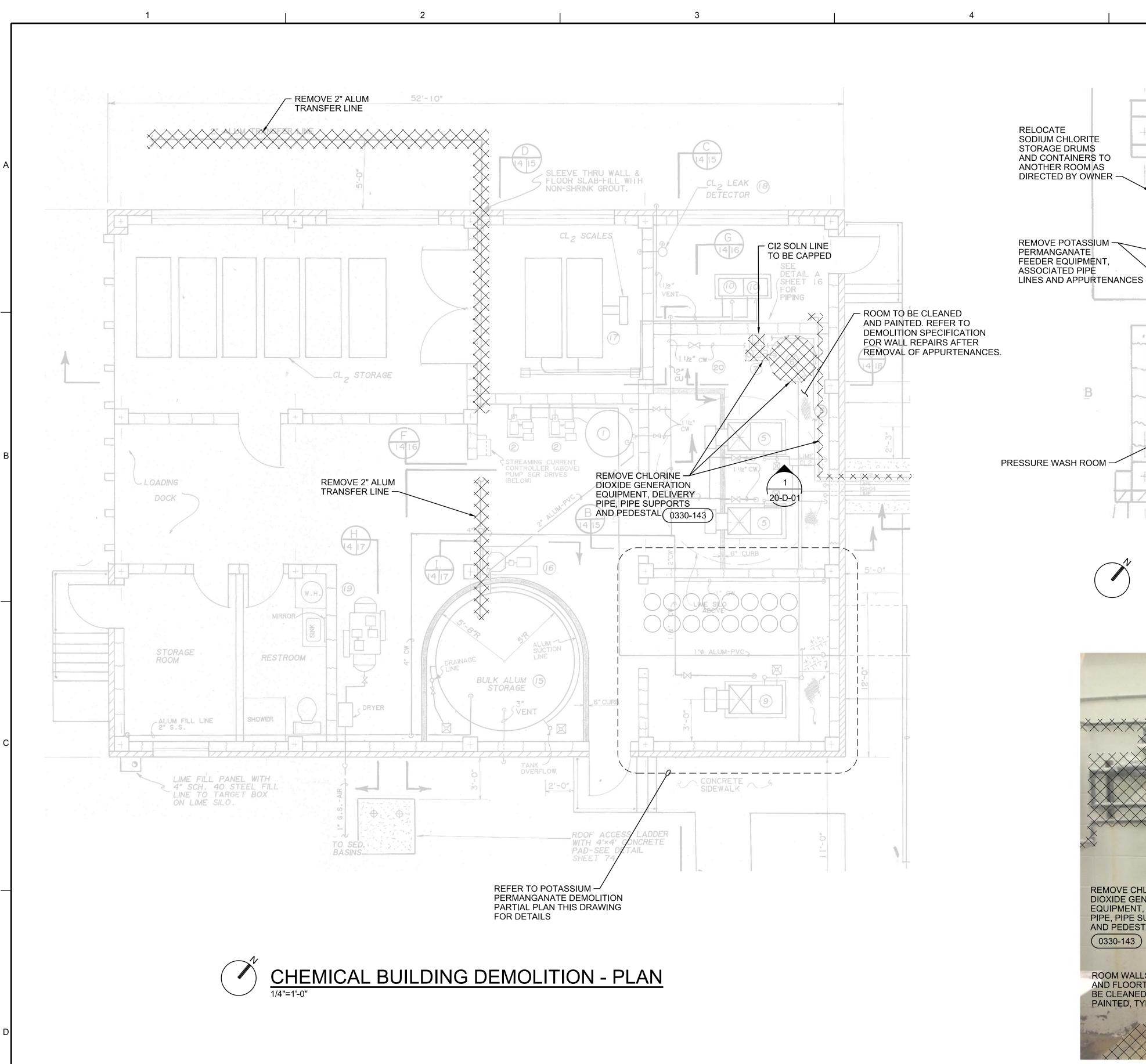
RECTOR OF GO NO. 21063

RECTOR OF GO NO. 21063

\$PWURL

**497074** 10-E-01

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REMOVE CHLORINE
DIOXIDE GENERATION
EQUIPMENT, DELIVERY
PIPE, PIPE SUPPORTS
AND PEDESTAL

NOTES:

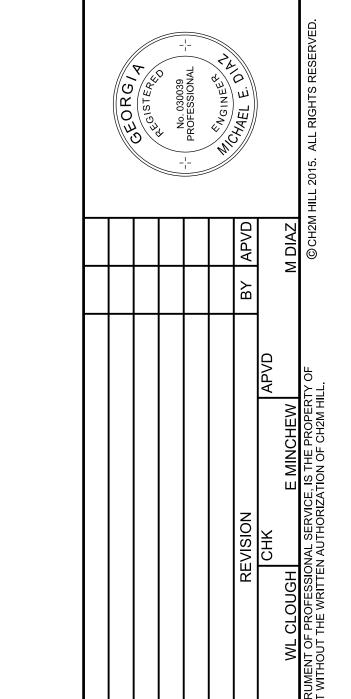
- EXISTING DRAWINGS HAVE BEEN USED FOR BACKGROUND. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS & DIMENSIONS ON STRUCTURES AND PIPING BEFORE COMMENCING WORK.
- REFER TO MISCELLANEOUS SMALL ITEMS CASH ALLOWANCE FOR ADDITIONAL REMOVAL NOT SHOWN ON THIS DRAWING.



(0330-143)

ROOM WALLS -AND FLOORTO BE CLEANED &

PAINTED, TYP



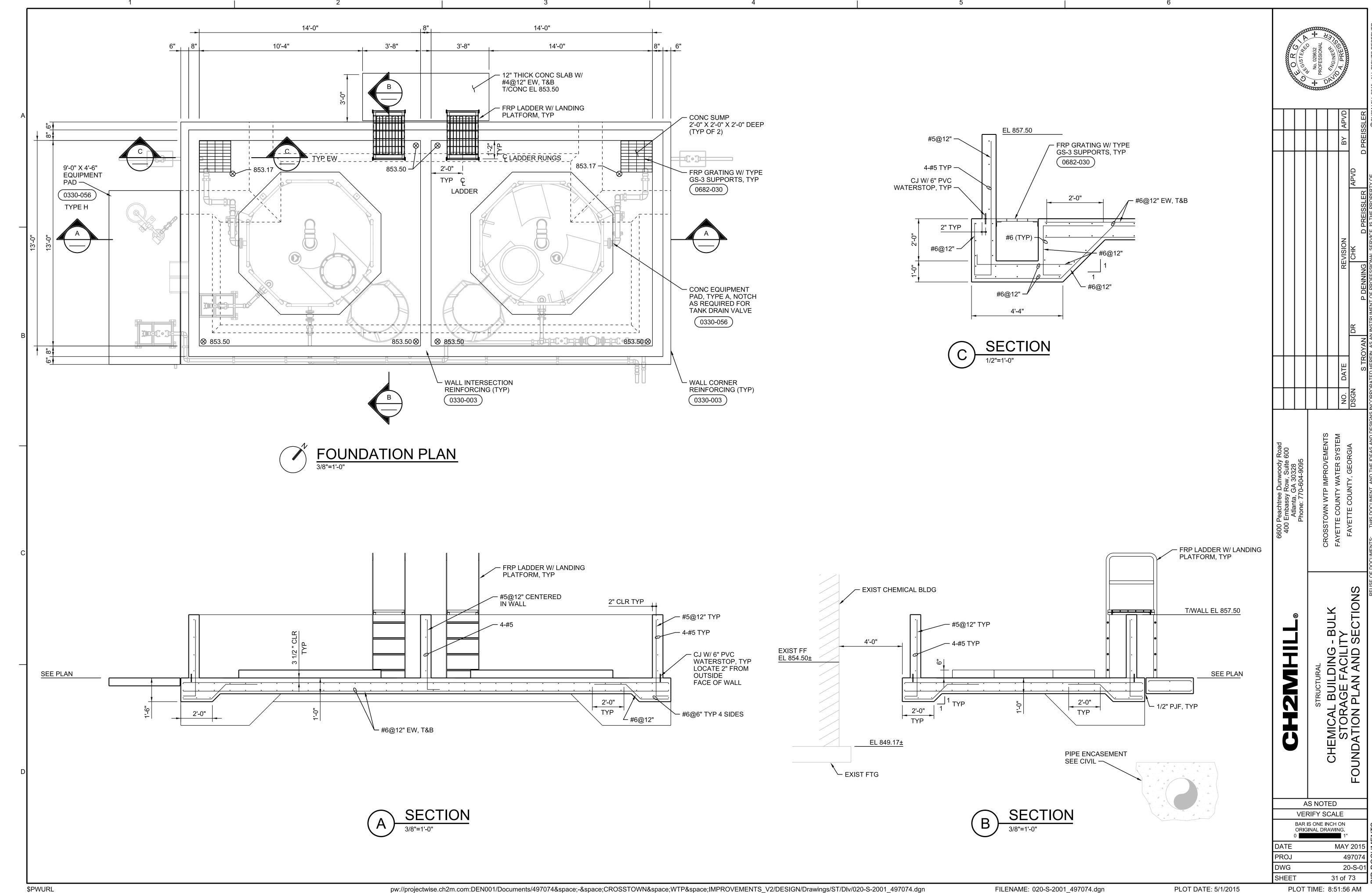
KMnO4 DEMOLITION - PARTIAL PLAN	
X	M.

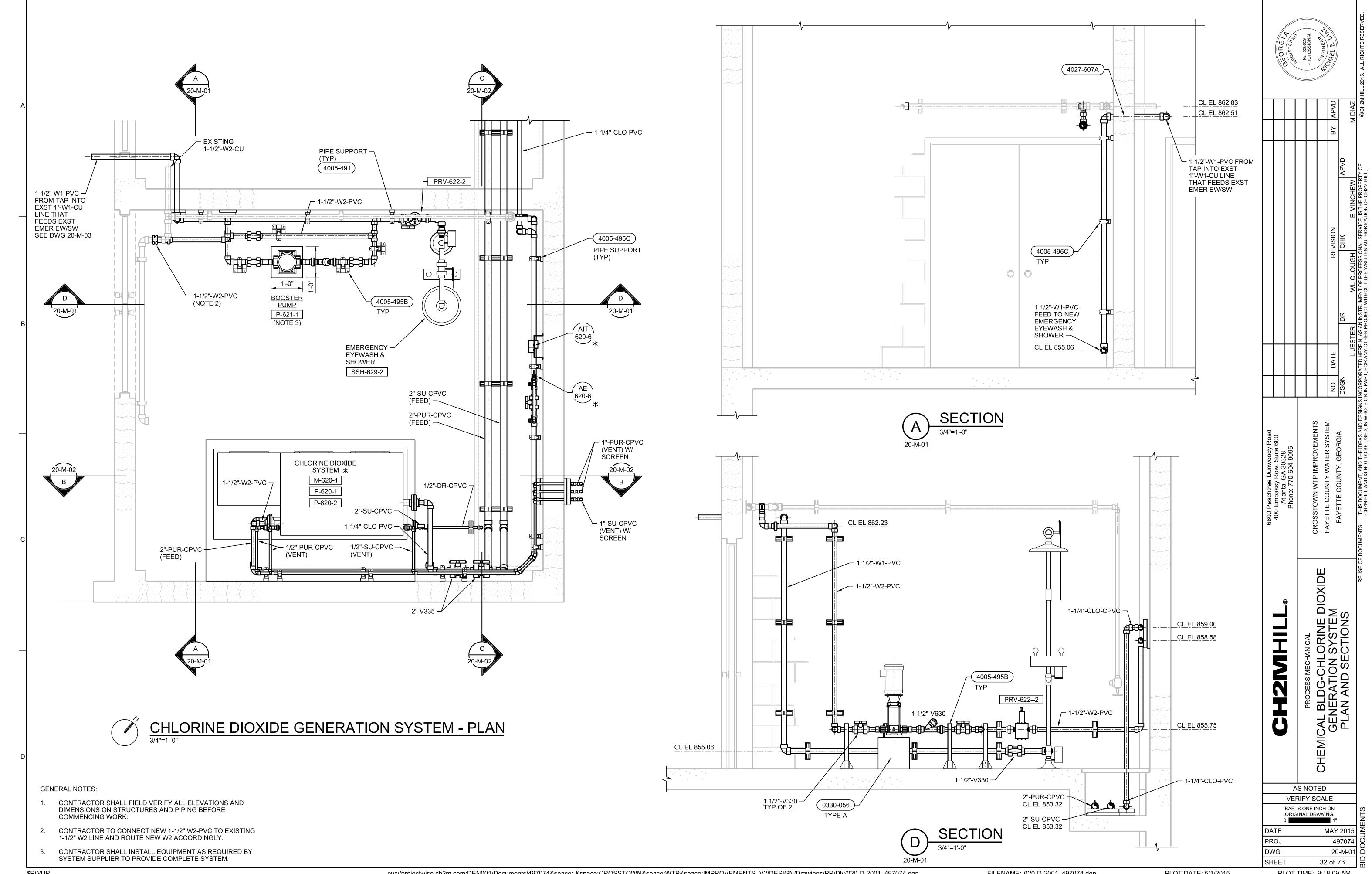
I"P ALUM-

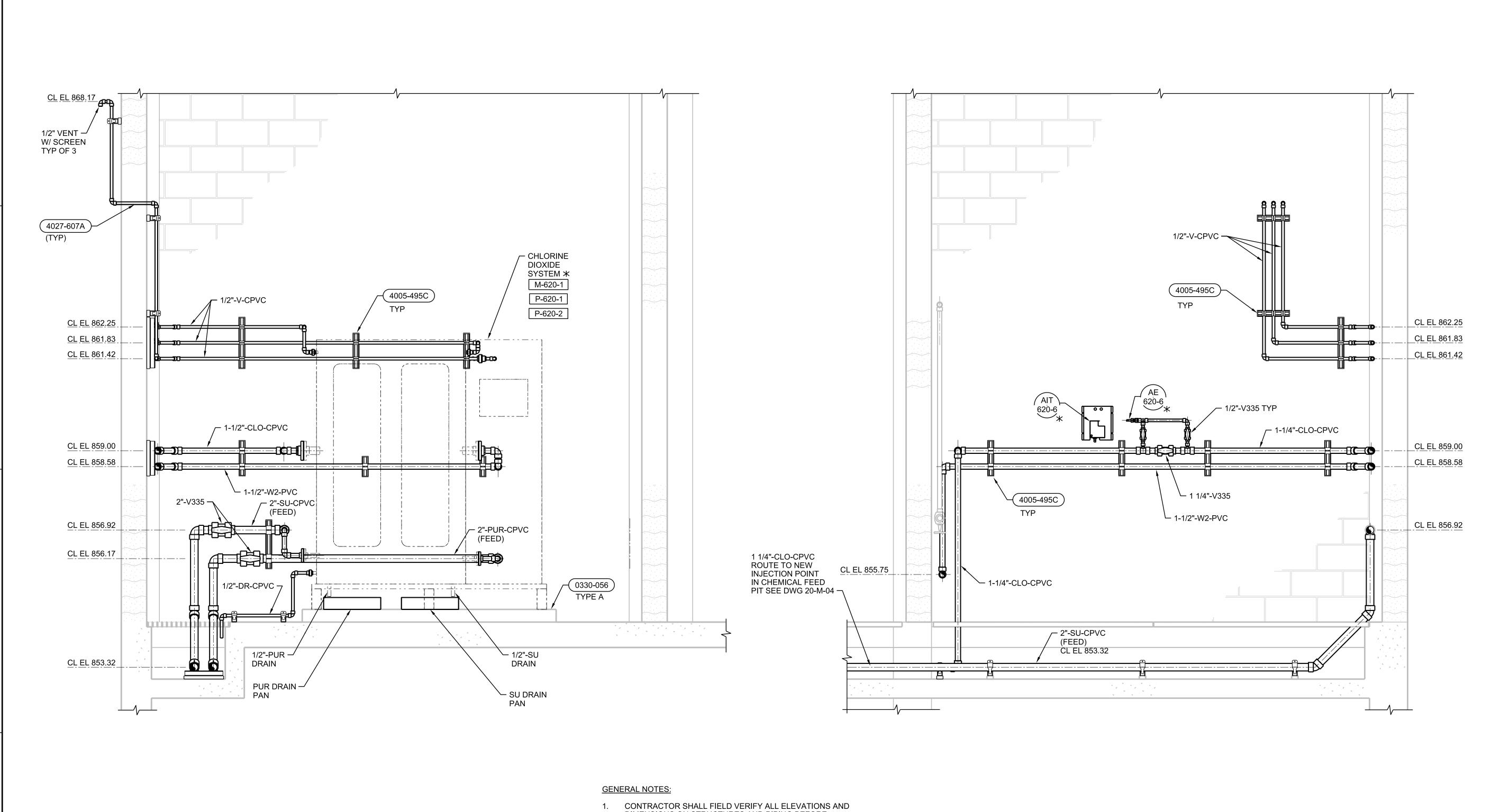
**VERIFY SCALE** BAR IS ONE INCH ON ORIGINAL DRAWING. MAY 201 497074 20-D-01 30 of 73

AS NOTED

- PIPES TO REMAIN IN SERVICE





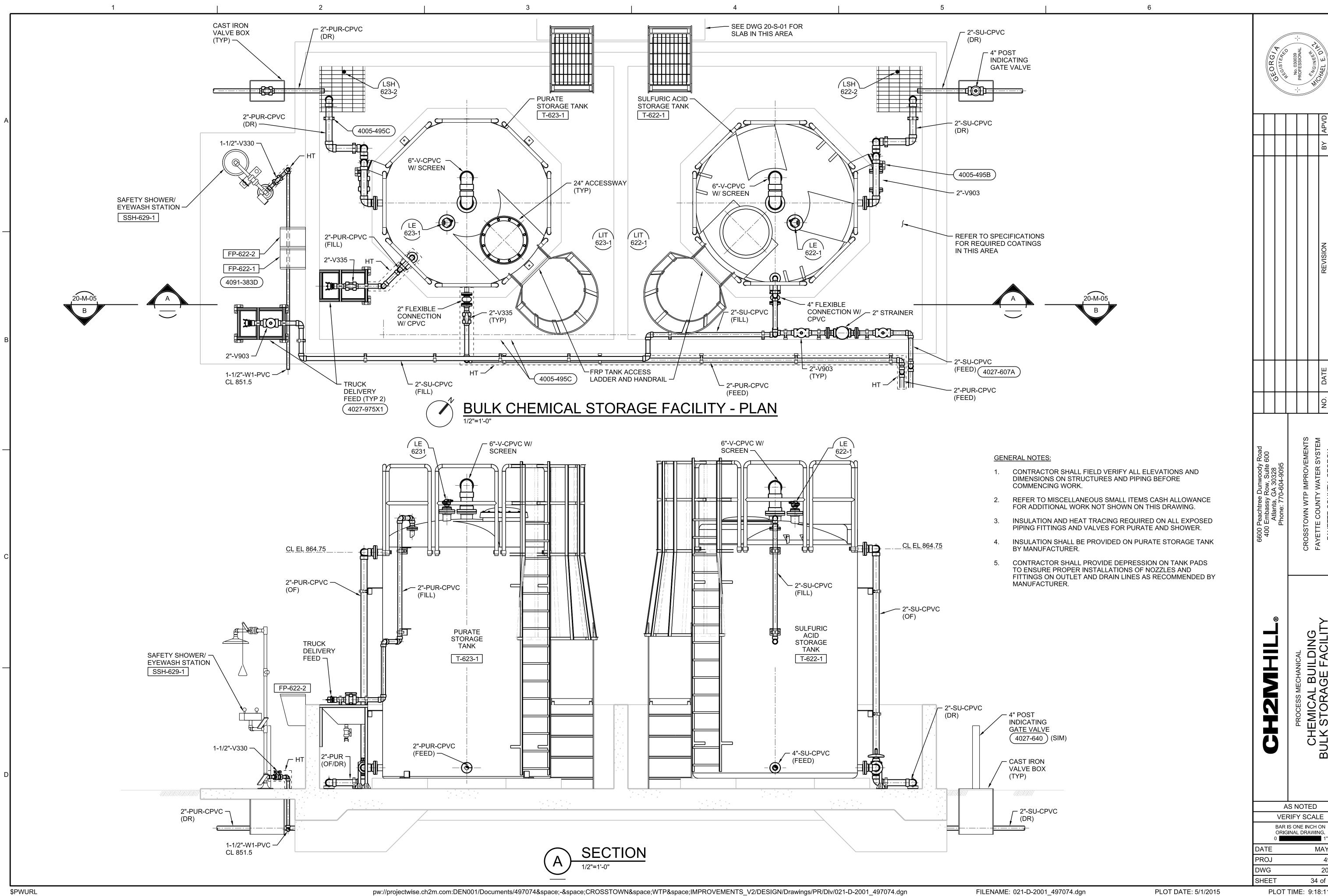


- DIMENSIONS ON STRUCTURES AND PIPING BEFORE COMMENCING WORK.
- REFER TO MISCELLANEOUS SMALL ITEMS CASH ALLOWANCE FOR ADDITIONAL WORK NOT SHOWN ON THIS DRAWING.



AS NOTED **VERIFY SCALE** BAR IS ONE INCH ON ORIGINAL DRAWING. MAY 2015 497074 20-M-02 33 of 73

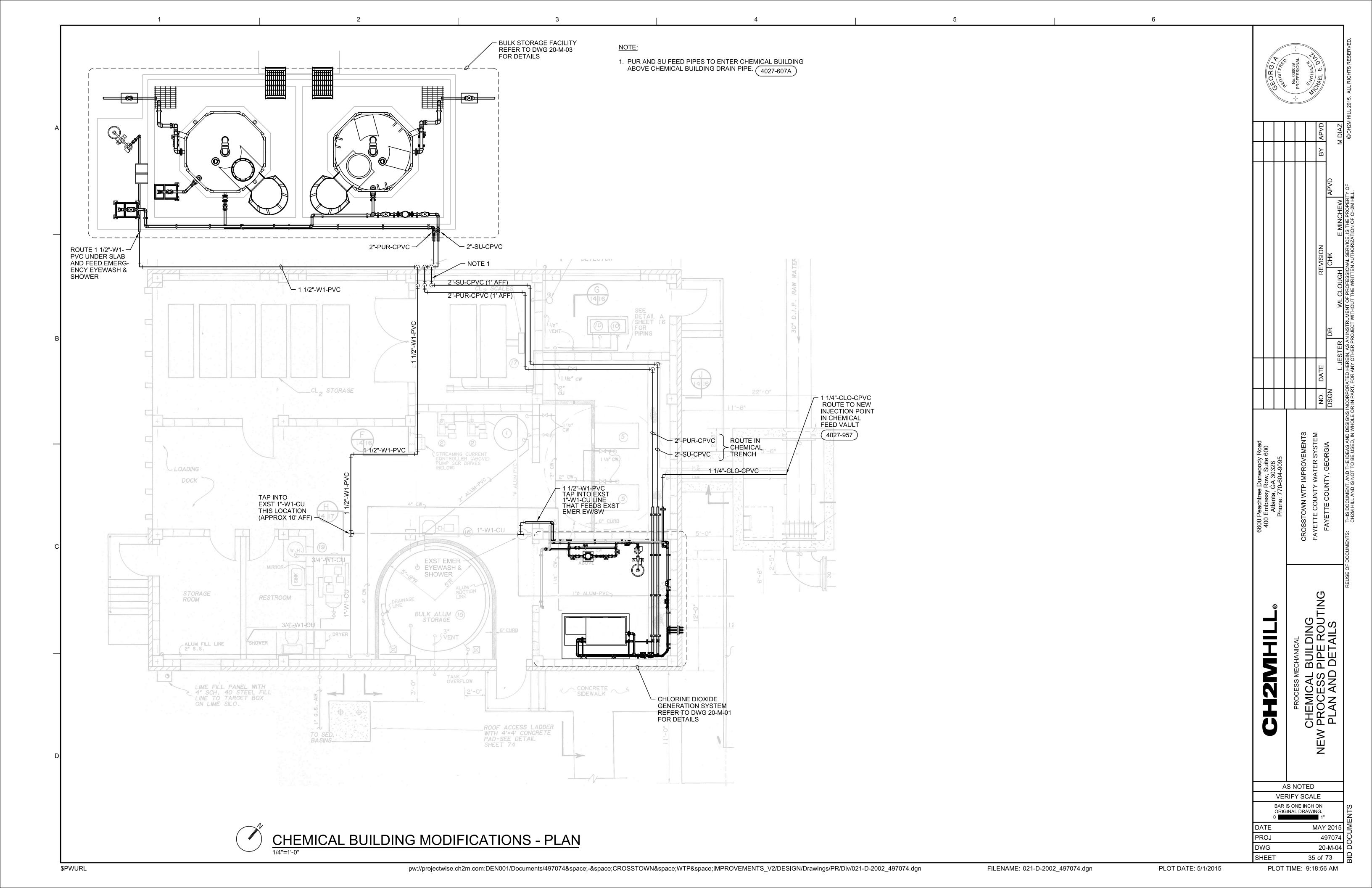
EMICAL BLDG-CHLORINE DIOXID GENERATION SYSTEM SECTIONS

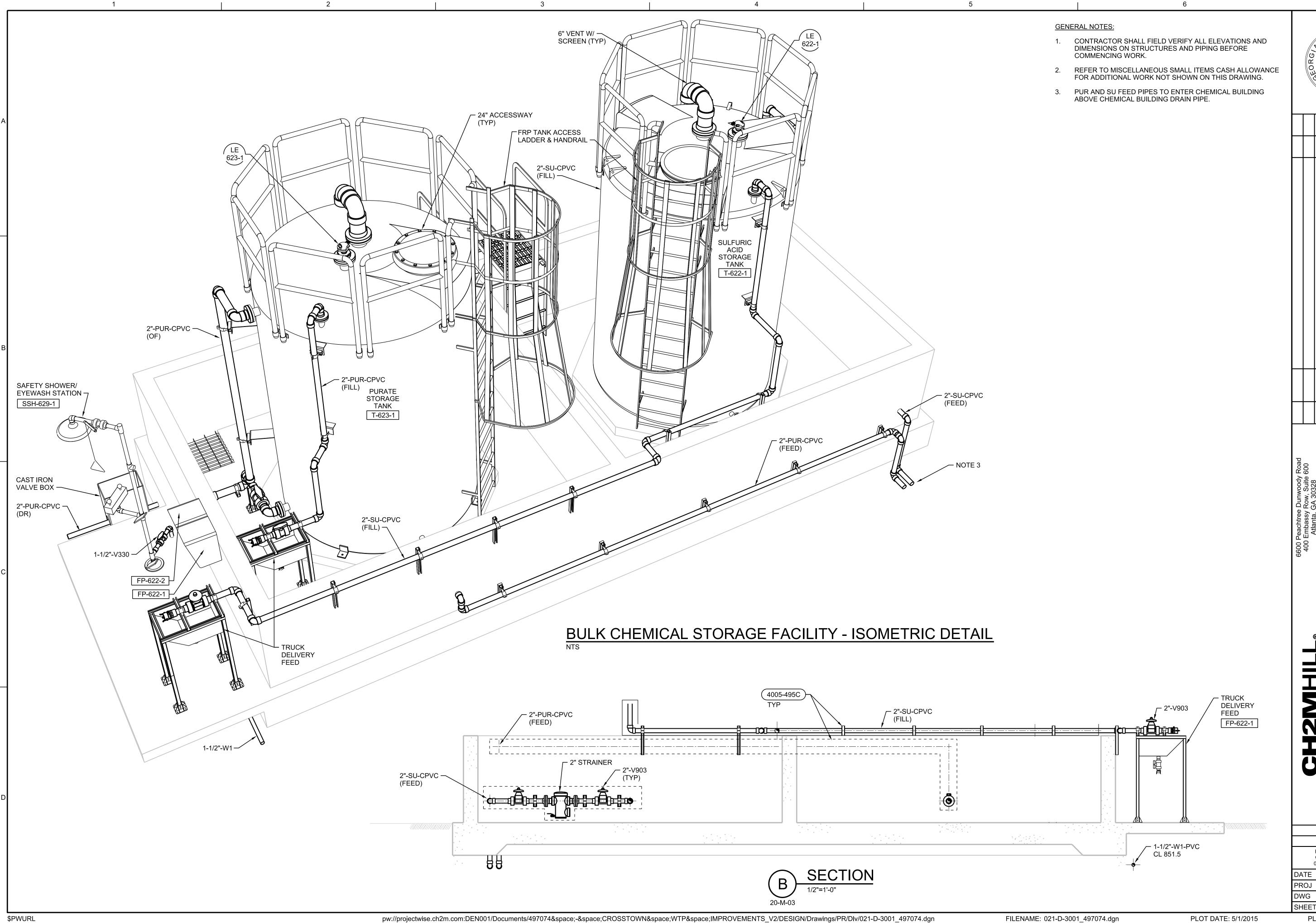


MAY 2015

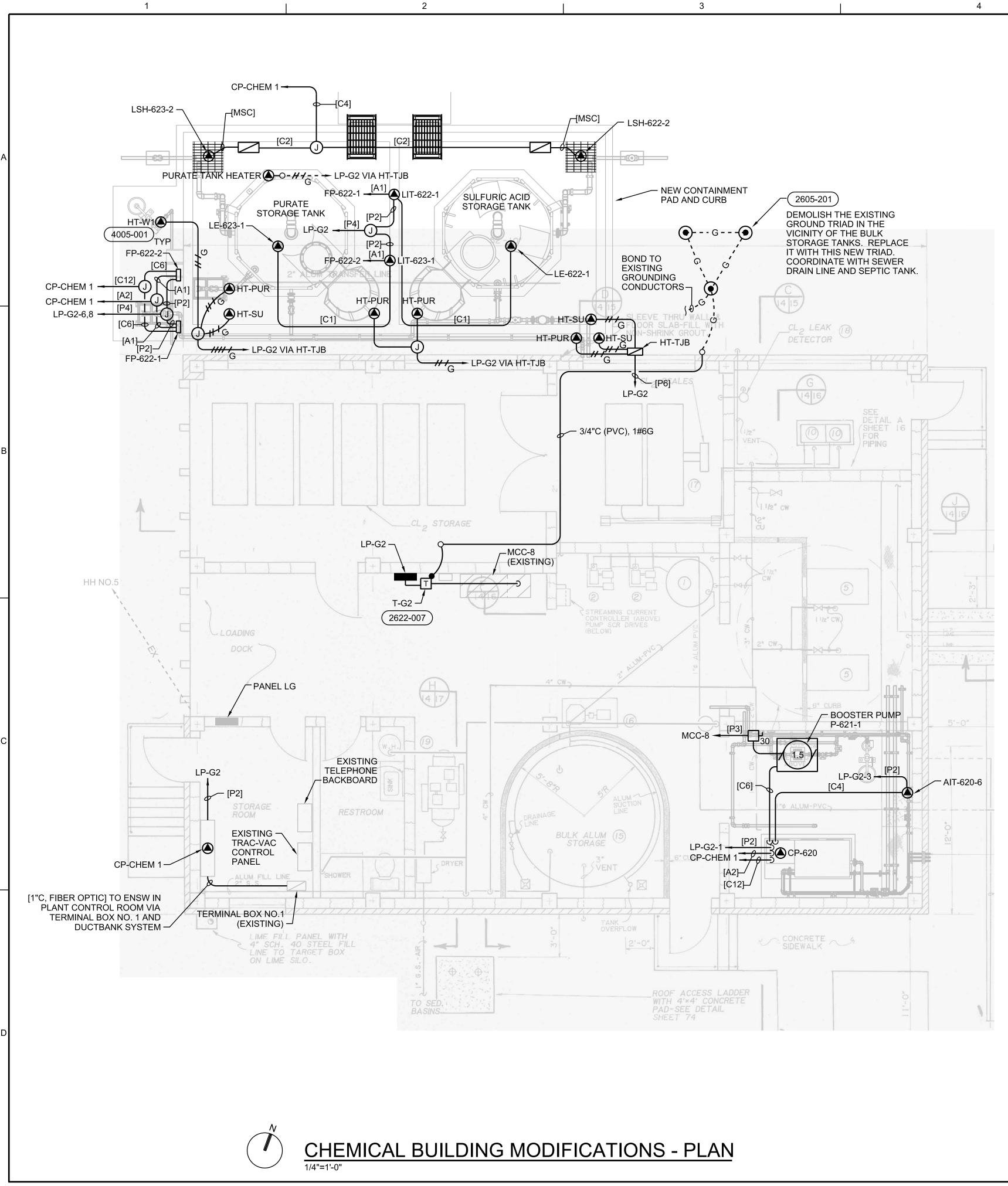
34 of 73

497074 20-M-03





AS NOTED VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. 20-M-05 36 of 73

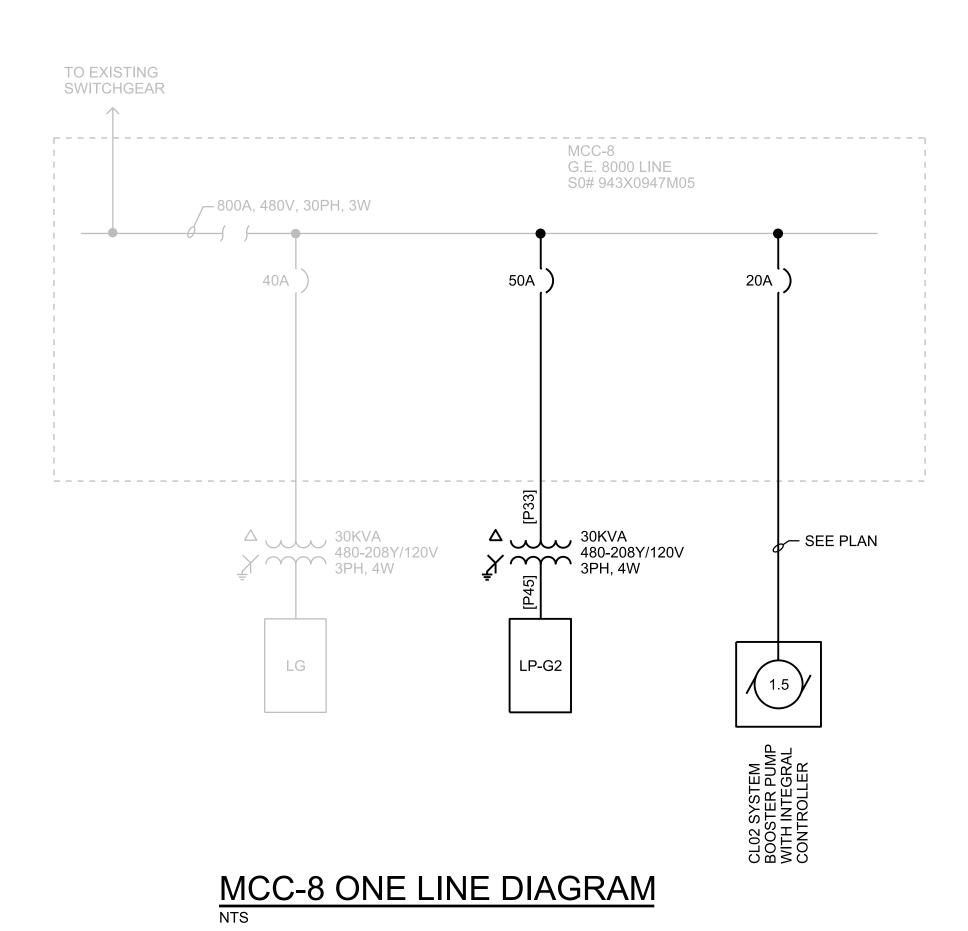


NOTES:

- 1. THE AREAS BOTH INSIDE AND OUTSIDE THE CHEMICAL BUILDING ARE WET AND CORROSIVE. ALL EXPOSED CONDUIT, FITTINGS, AND ASSOCIATED MATERIALS SHALL BE PVC COATED RGS WITHIN 8'-0" AFF AND WHERE WITHIN 6'-0" OF A PUMP, CHEMICAL STORAGE TANK, OR INSTRUMENT REGARDLESS OF ITS ELEVATION ABOVE THE FLOOR. CONDUIT AND FITTINGS ABOVE 8'-0" MAY BE RGS. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL HAVE A MINIMUM RATING OF NEMA 4X, UNLESS INDICATED OTHERWISE. ALL ELECTRICAL BOXES AND ENCLOSURES SHALL BE STAINLESS STEEL. ALL SUPPORTING MATERIALS AND HARDWARE SHALL BE STAINLESS STEEL, EXCEPT FOR STORAGE TANK CONTAINMENT AREA WHICH SHALL BE FRP.
- ROUTE ALL CONDUITS INTO THE STORAGE TANK CONTAINMENT AREA AS EXPOSED; DO NOT PENETRATE THE CONTAINMENT WALLS OR FLOOR.

	6600 Peachtree Dunwoody Road						
	400 Embassy Row, Suite 600 Atlanta GA 30328						
	Phone: 770-604-9095						
ELECTBICAL							
	CROSSTOWN WTP IMPROVEMENTS						
CAL BUILDING	EAVETTE COLINTY WATER SYSTEM						
PLAN		NO. DATE		REV	REVISION		BY APVD
	FAYETTE COUNTY, GEORGIA	DSGN	DR		CHK	APVD	
		z	N MEYER	G MESSER	KB HORTON	NO	N MEYER

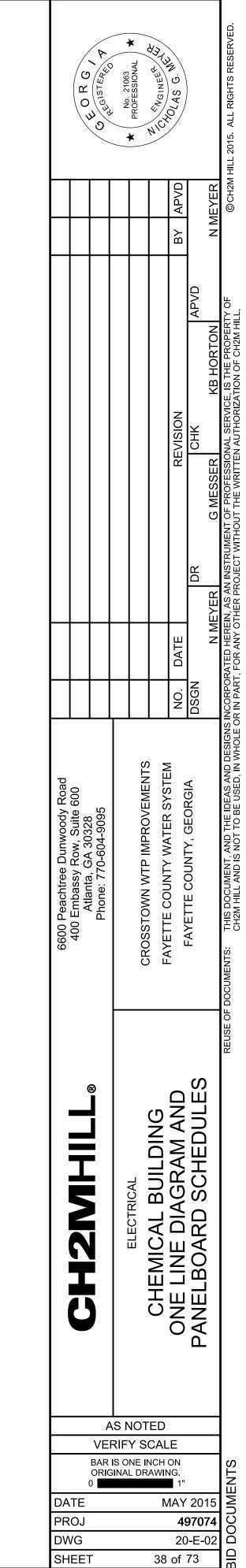
## PROJ 497074 DWG 20-E-01 SHEET 37 of 73

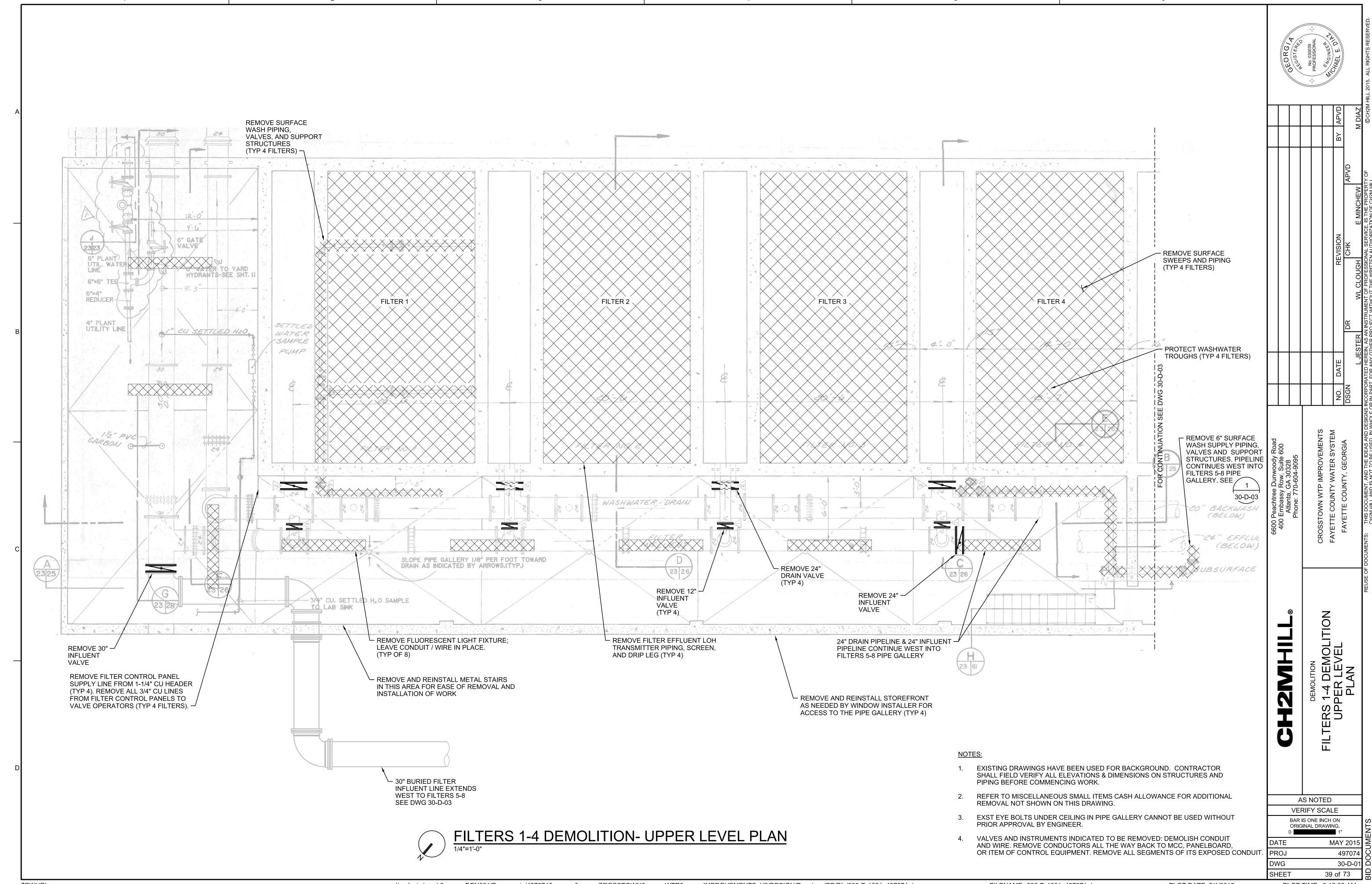


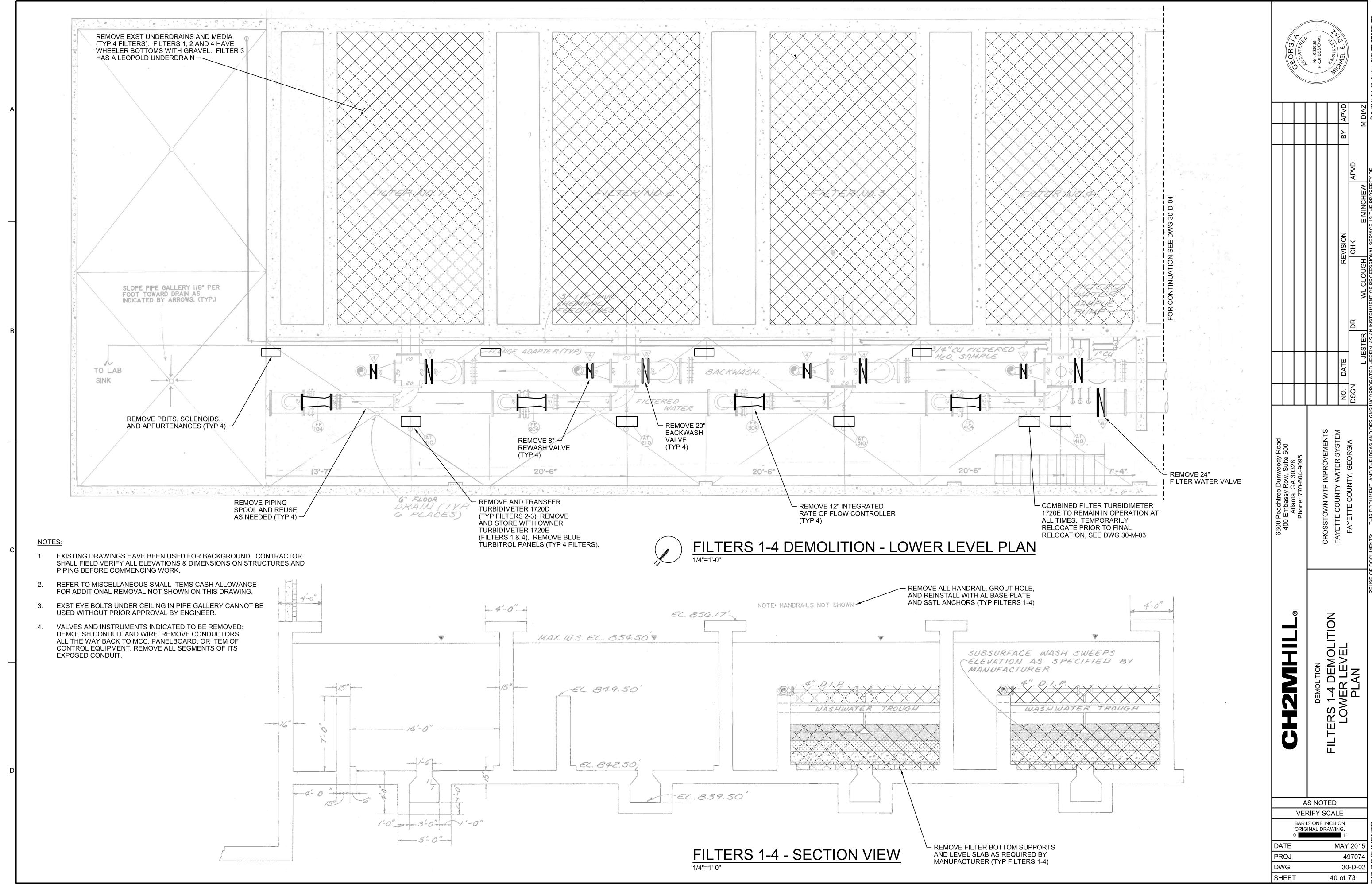
	SPARE	SPACE
	SPARE	
	PRE FLASH MIXER	
	ALUM TRASTER PUMP	SPACE
		CL02 SYSTEM BOOSTER PUMP
SPACE		TRANSFORMER
MLO		LG2

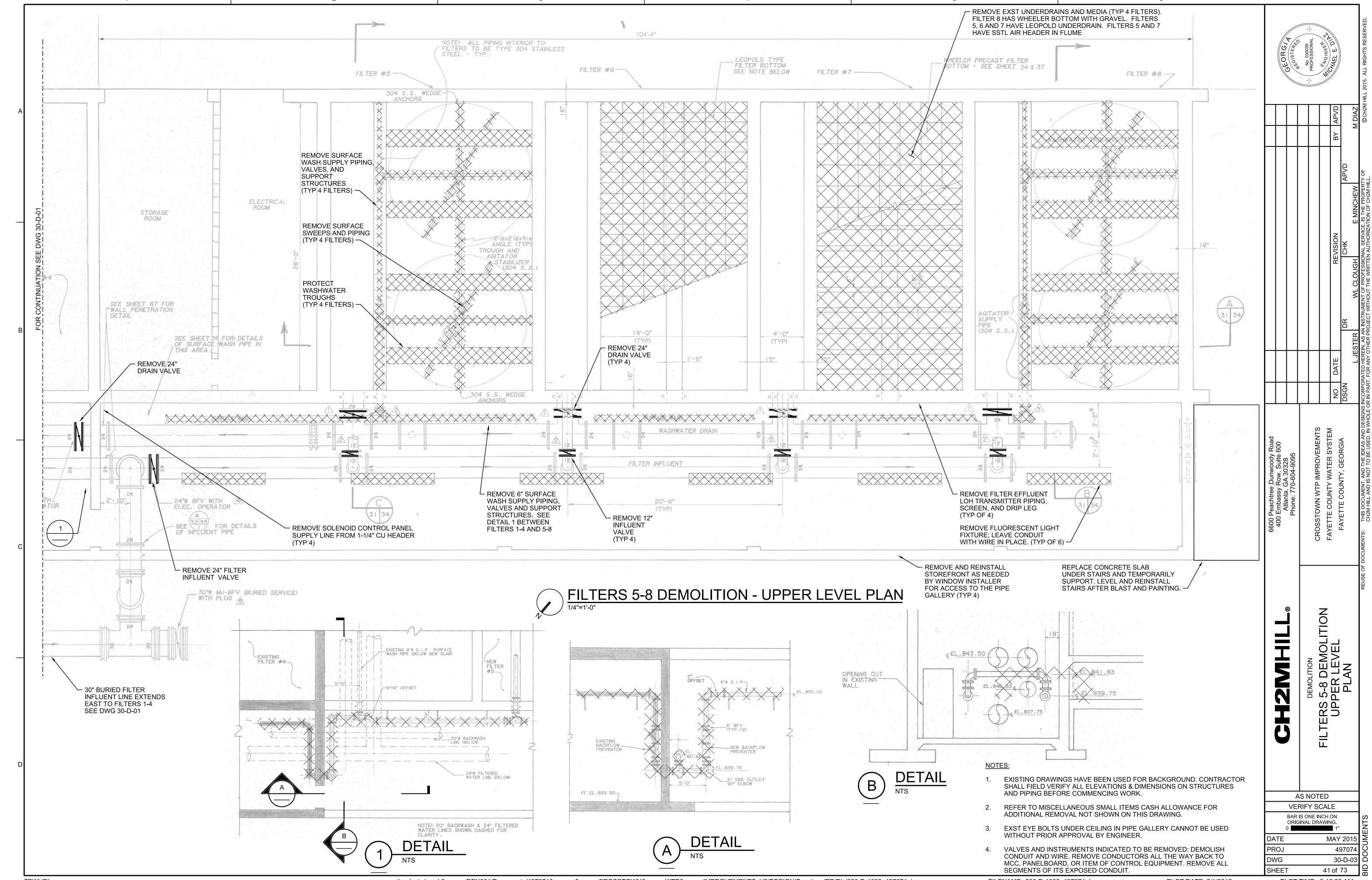
MCC-8 FRONT ELEVATION
NTS

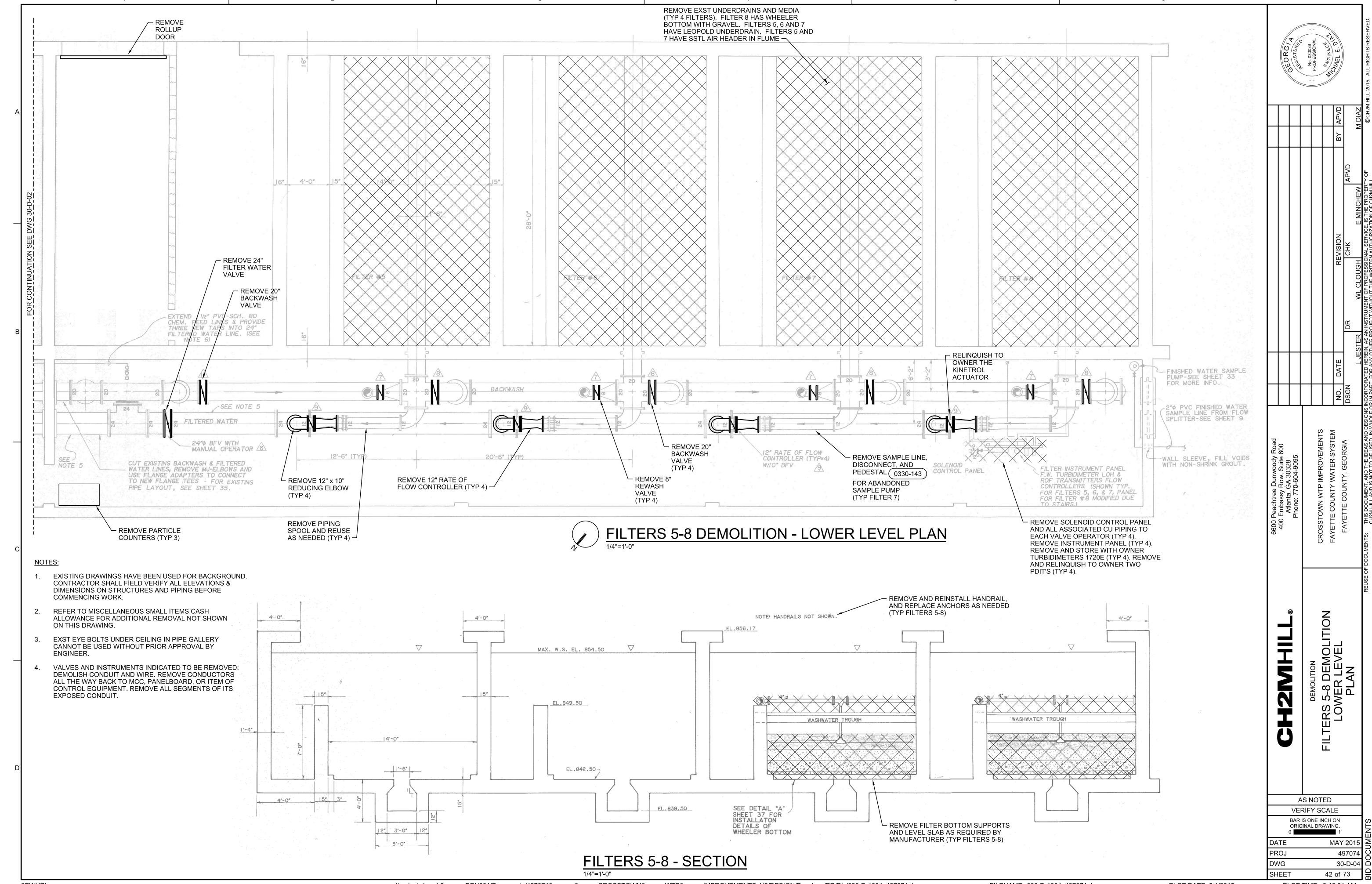
PANEL	L: LP-0	<del></del>		LOCA	TION:	CHE	MICAL	BUILDING			
SERVI	CE VC	DLTAGE	E: 208/120V	PHAS	E: 3			WIRE: 4			
TOTAL	LOAD	KVA:	3.6	BUS S	SIZE:	100A		MAIN SIZE: 100A	TYPE:	MCB	
REMA	RKS:	SPD;	* PROVIDE EGFI BREAKERS	NEUT	RAL: I	FULL		MOUNTING: SURFACE			
1.0/	AD IN F	<u> </u>	T	BKD	CKT	CKT	BKR		10	AD IN F	<u> </u>
A	В	C	CIRCUIT DESCRIPTION	A/P	1		A/P	CIRCUIT DESCRIPTION	A	В	C
1.0	ь		CP-620 CHLORINE DIOXIDE	20/1	1			LIT-622-1	0.1	D	
1.0	0.1		AIT-620-6	20/1	3			LIT-623-1	0.1	0.1	
	0.1	0.5	CP-CHEM1	20/1	5		l	FP-622-1		0.1	0.
		0.5	SPARE	20/1	7			FP-622-2	0.2		0.
			SPARE	20/1	9			SPARE	0.2		
			SPARE	20/1	11			SPARE			
			SPARE	20/1	13	<b>+</b>		SPARE			
			SPARE	20/1	15			SPARE			
			SPARE	20/1	17			SPARE			
0.2			HT-PUR	20/1*	19	-		SPARE			
	0.2		HT-SU, HT-W1	20/1*				SPARE			
		1.0	PURATE TANK HEATER	20/1*				SPARE			
				20 (04)	25	26		SPACE			
			SPARE	20/2*	27	28		SPACE			
			SPACE	1P	29	30	1P	SPACE			
			SPACE	1P	31	32	1P	SPACE			
			SPACE	1P	33	34	1P	SPACE			
			SPACE	1P	35	36	1P	SPACE			
			SPACE	1P	37	38	1P	SPACE			
			SPACE	1P	39	40	1P	SPACE			
			SPACE	1P	41	42	1P	SPACE			
1.2	0.3	1.5	TOTAL						0.3	0.1	0.

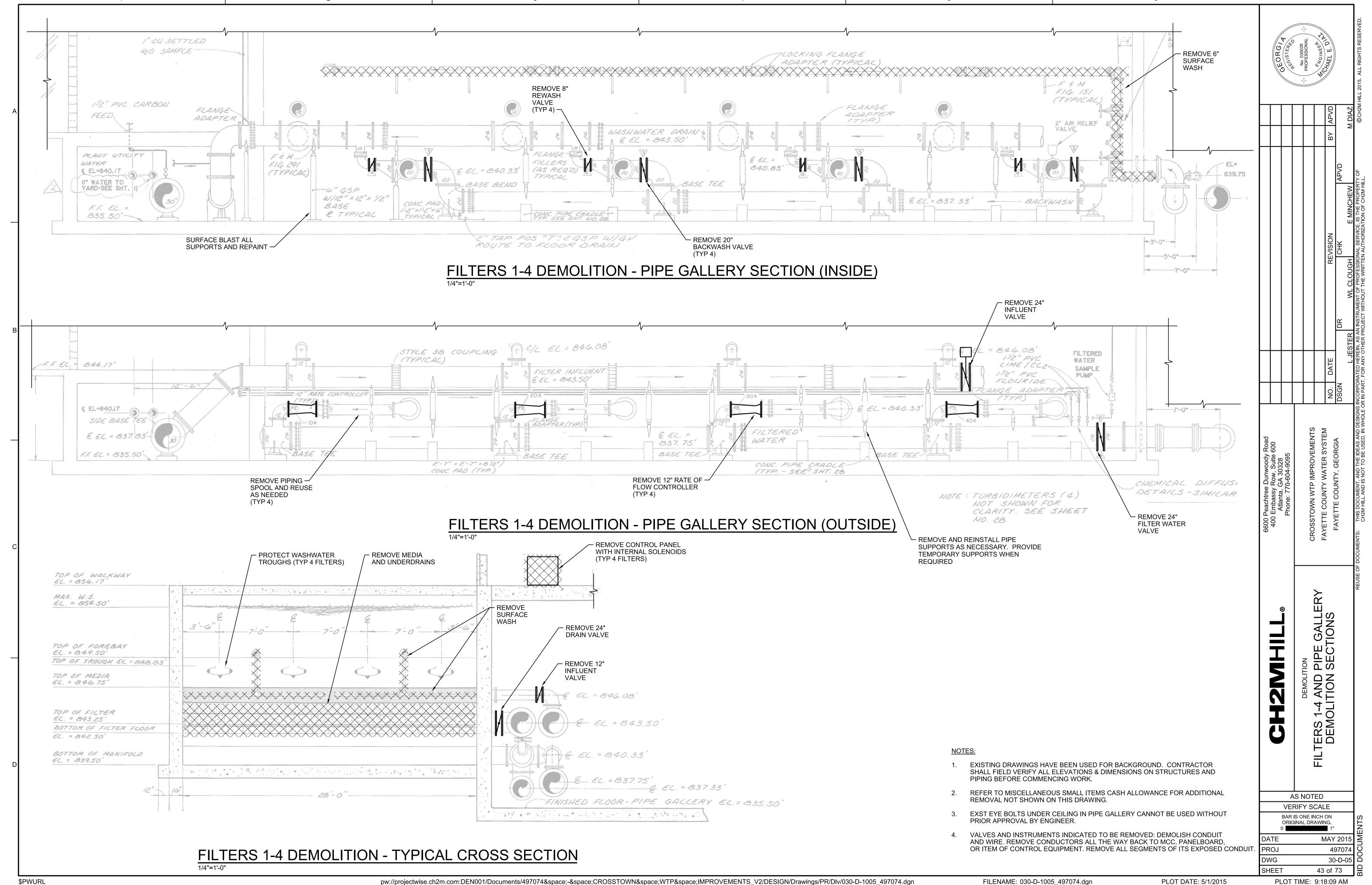


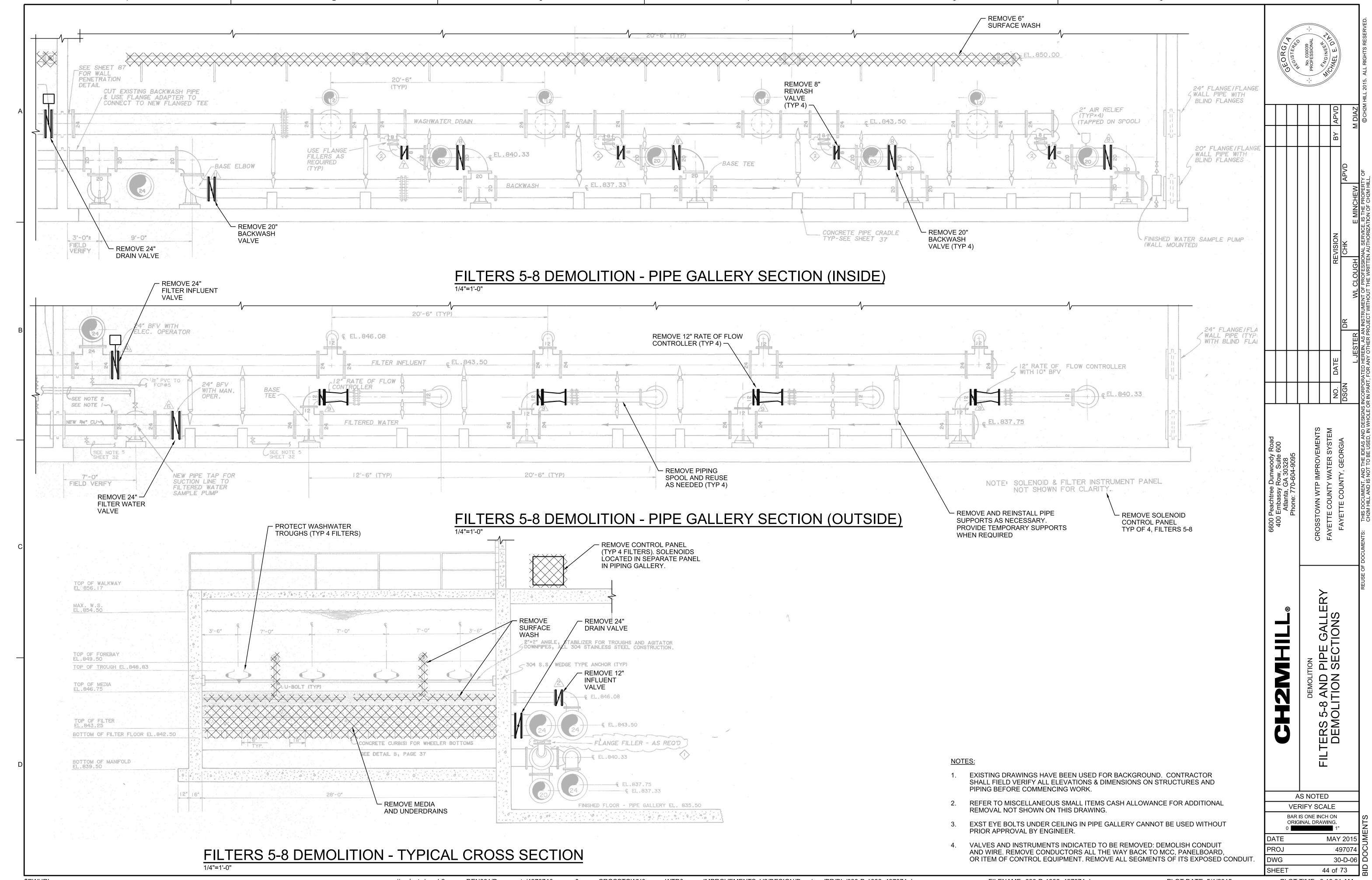


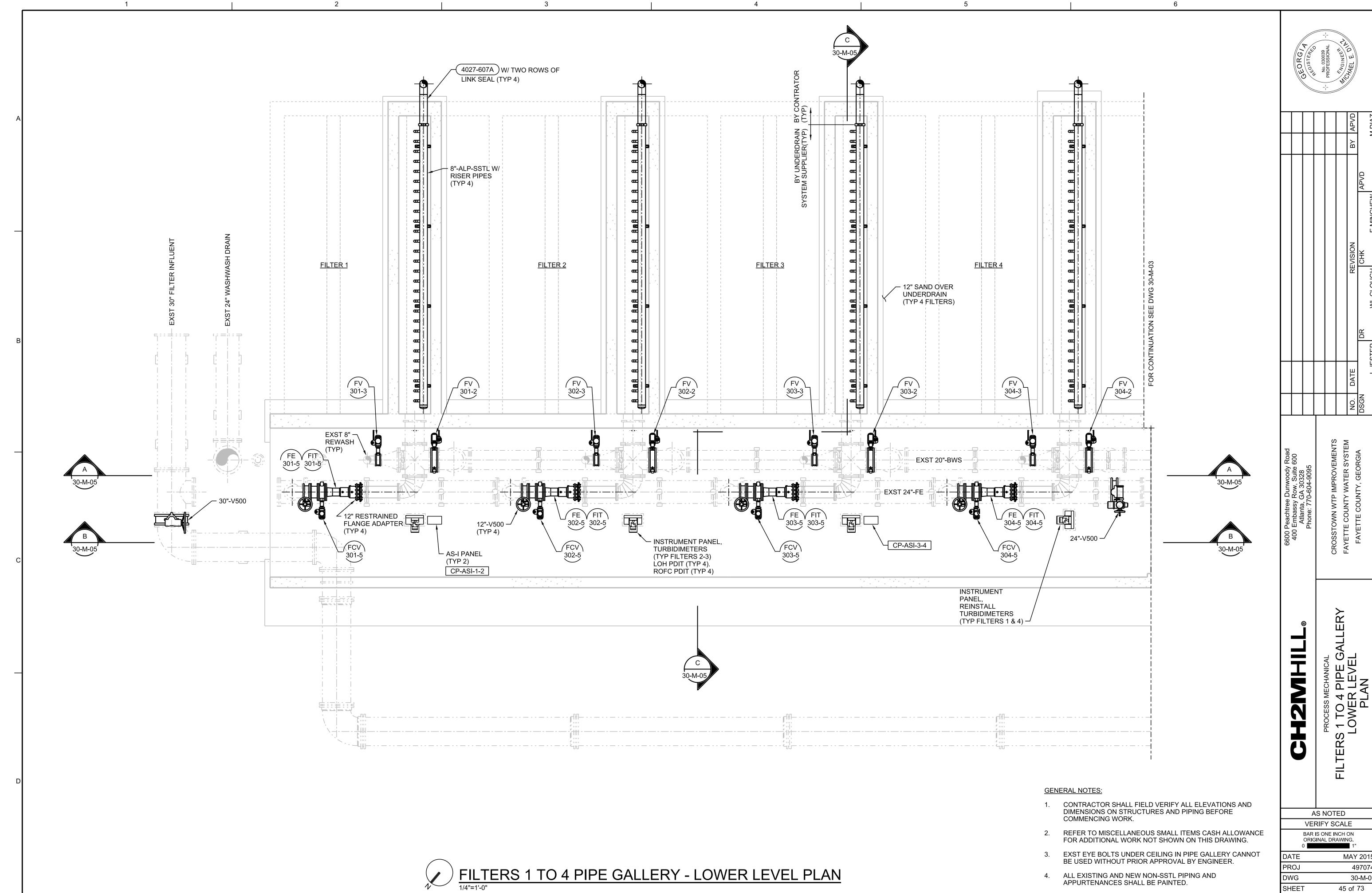






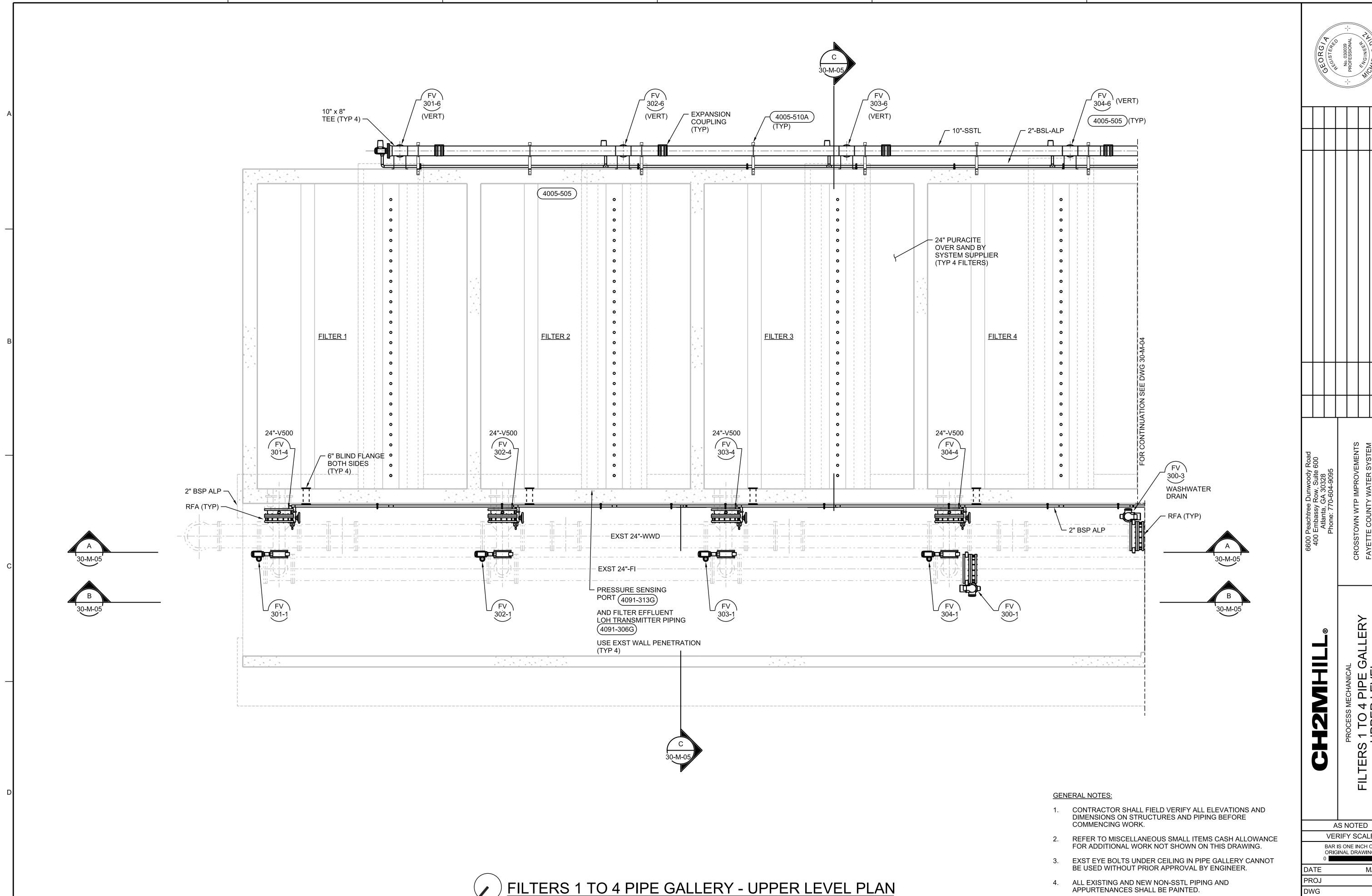






497074

30-M-01



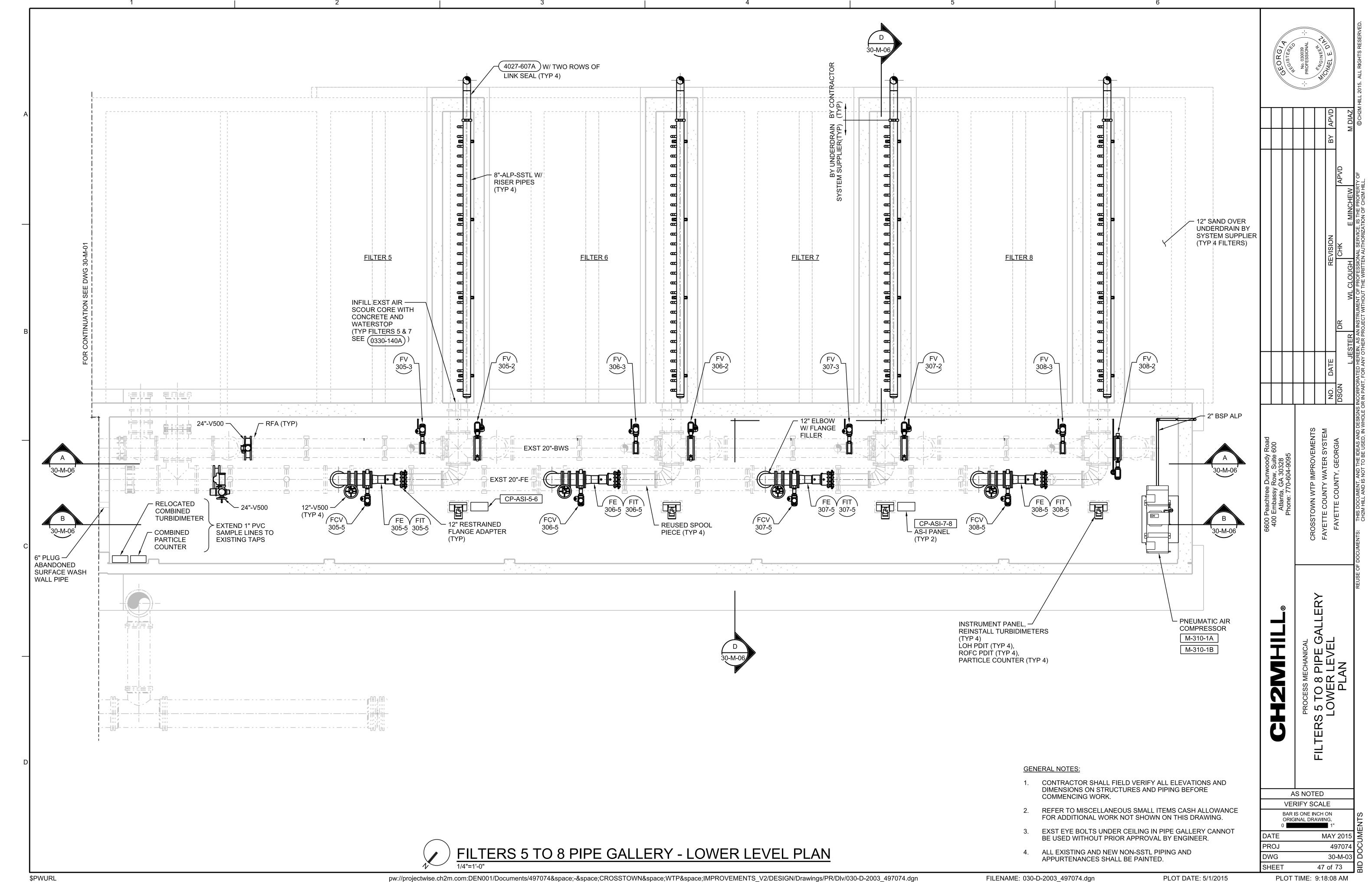
**VERIFY SCALE** BAR IS ONE INCH ON ORIGINAL DRAWING. MAY 2015 497074 30-M-02 SHEET

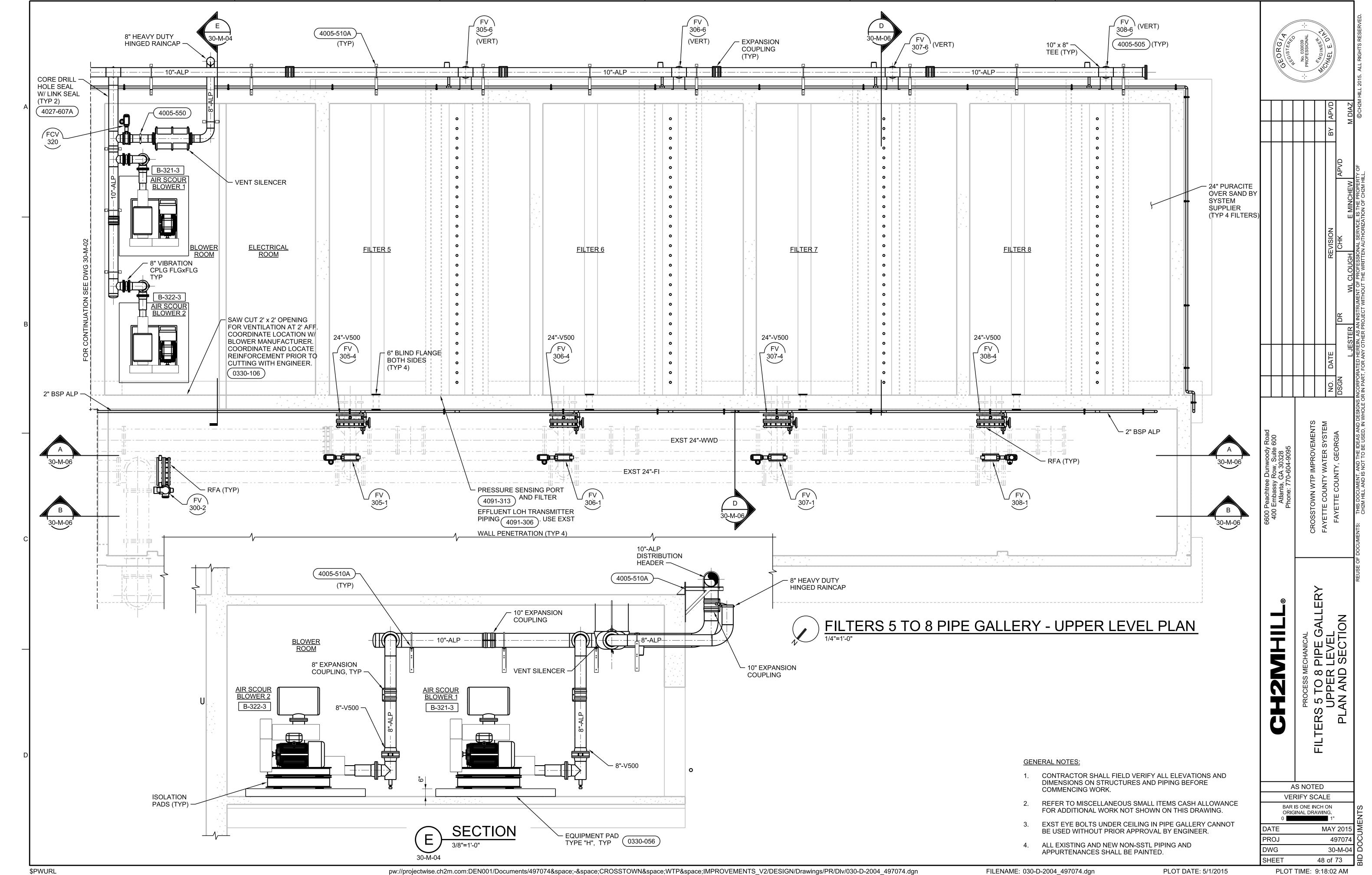
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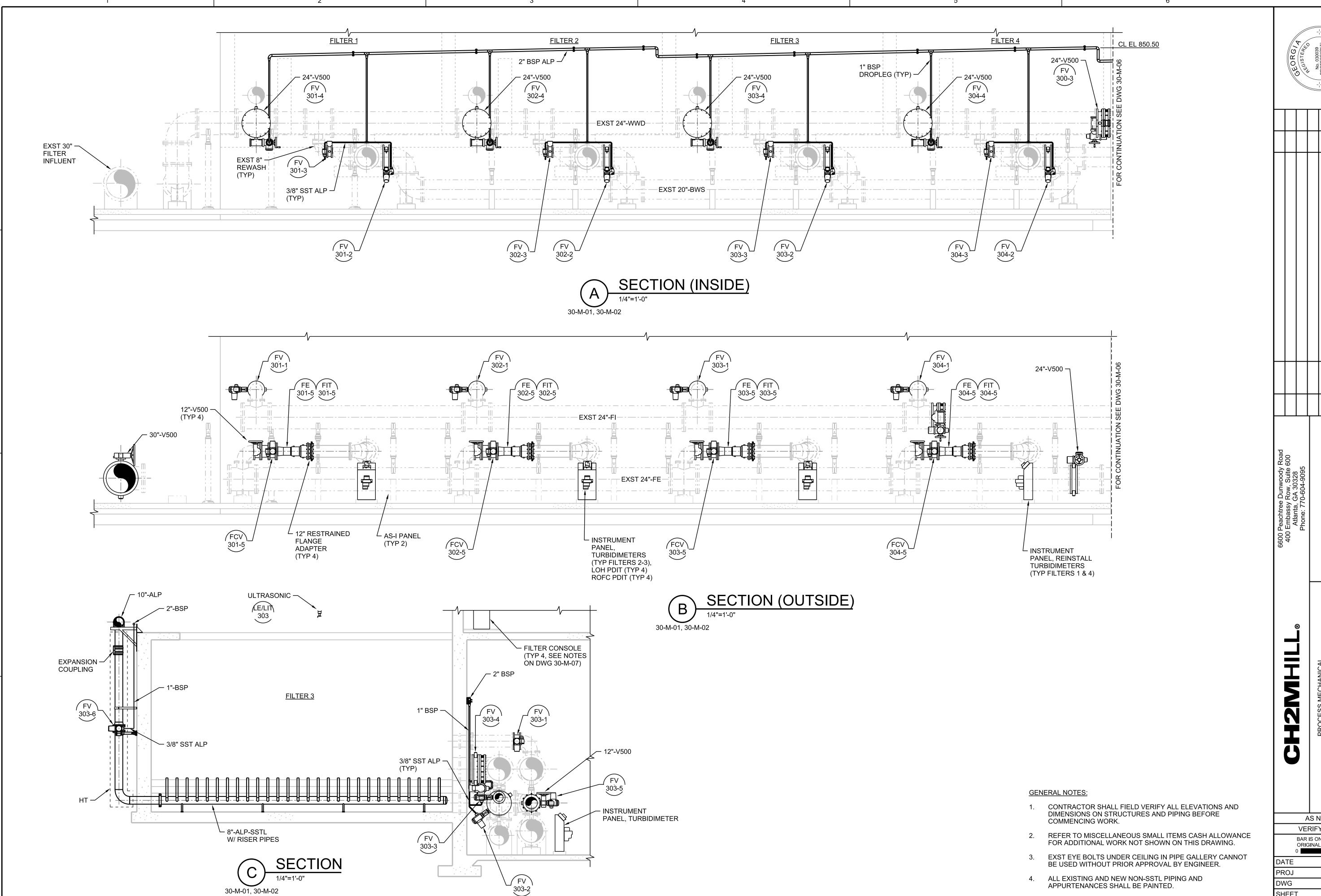
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PLOT DATE: 5/1/2015

\$PWURL



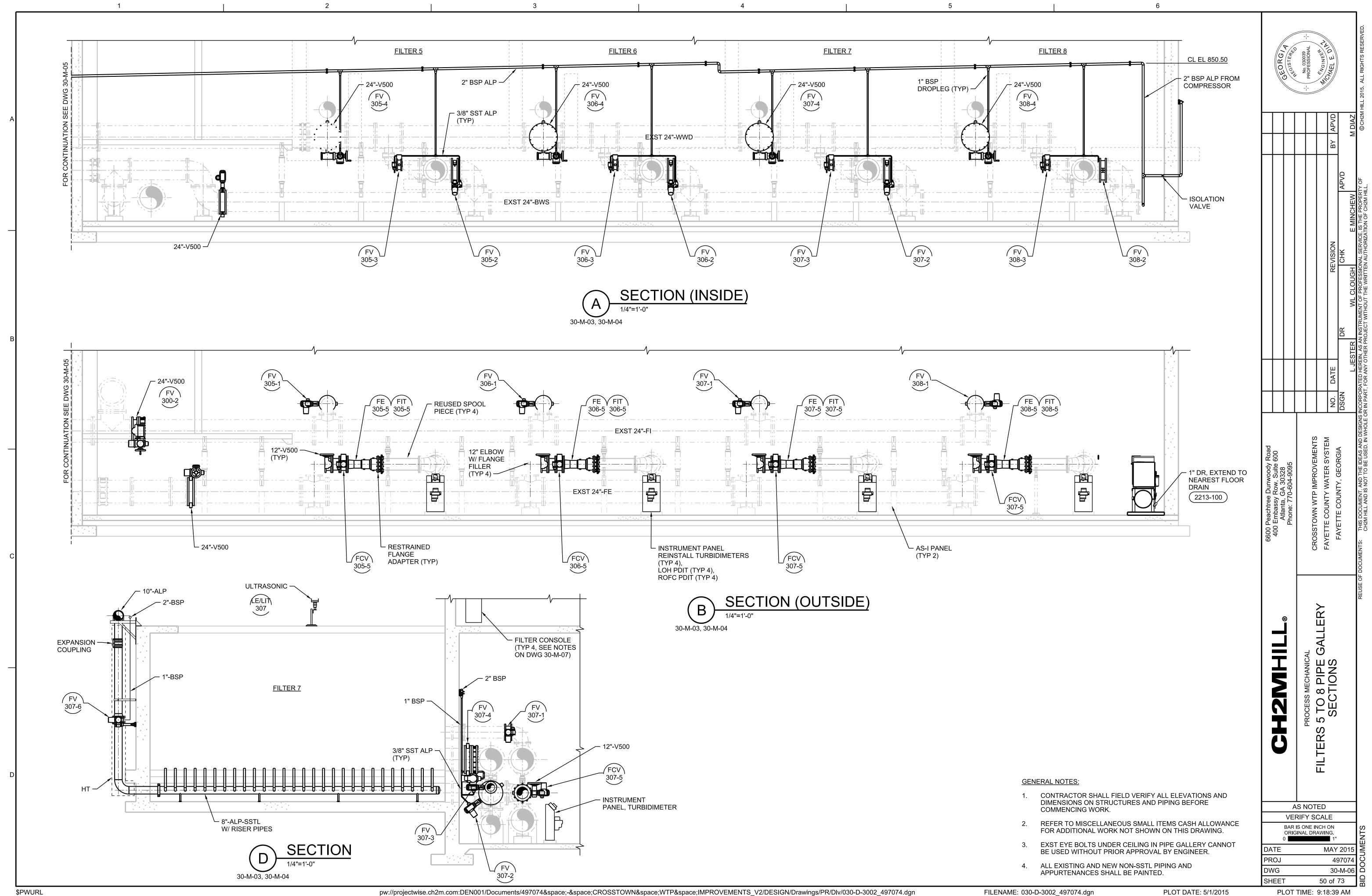


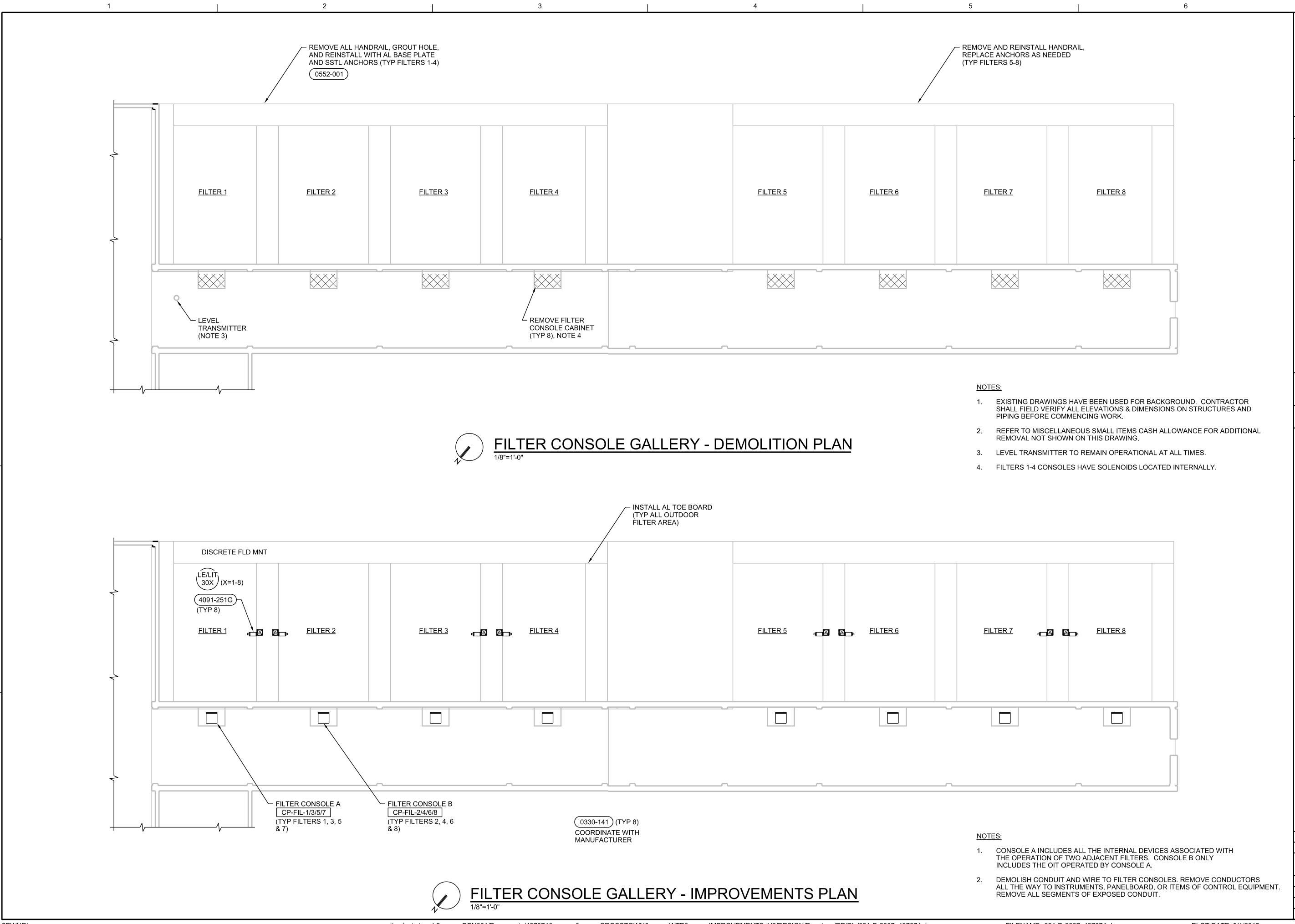


AS NOTED **VERIFY SCALE** BAR IS ONE INCH ON ORIGINAL DRAWING. MAY 2015

I TO 4 PIPE SECTIONS

497074 30-M-05 49 of 73 PLOT TIME: 9:18:28 AM





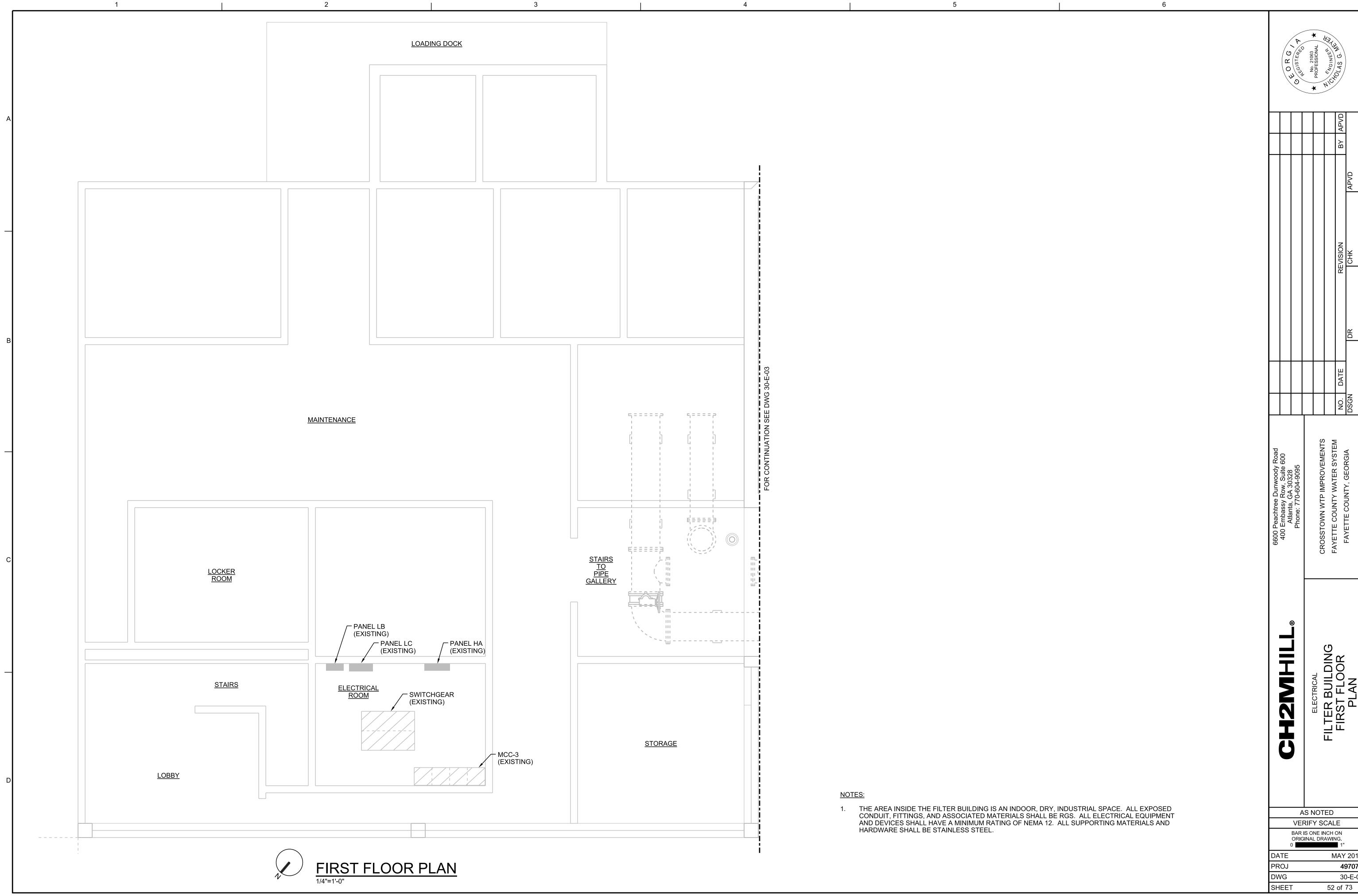
AS NOTED

**VERIFY SCALE** 

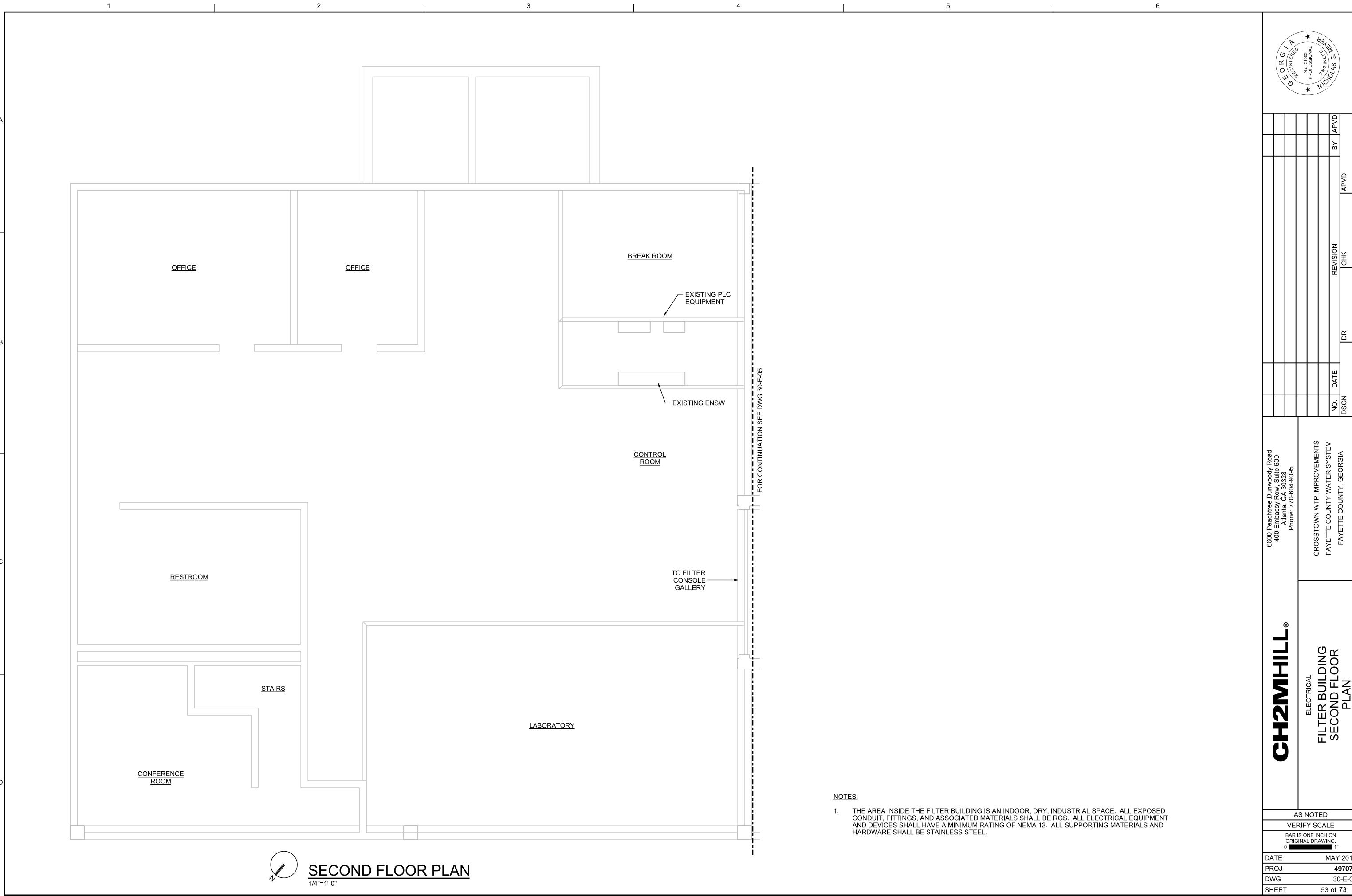
BAR IS ONE INCH ON ORIGINAL DRAWING.

MAY 201

497074

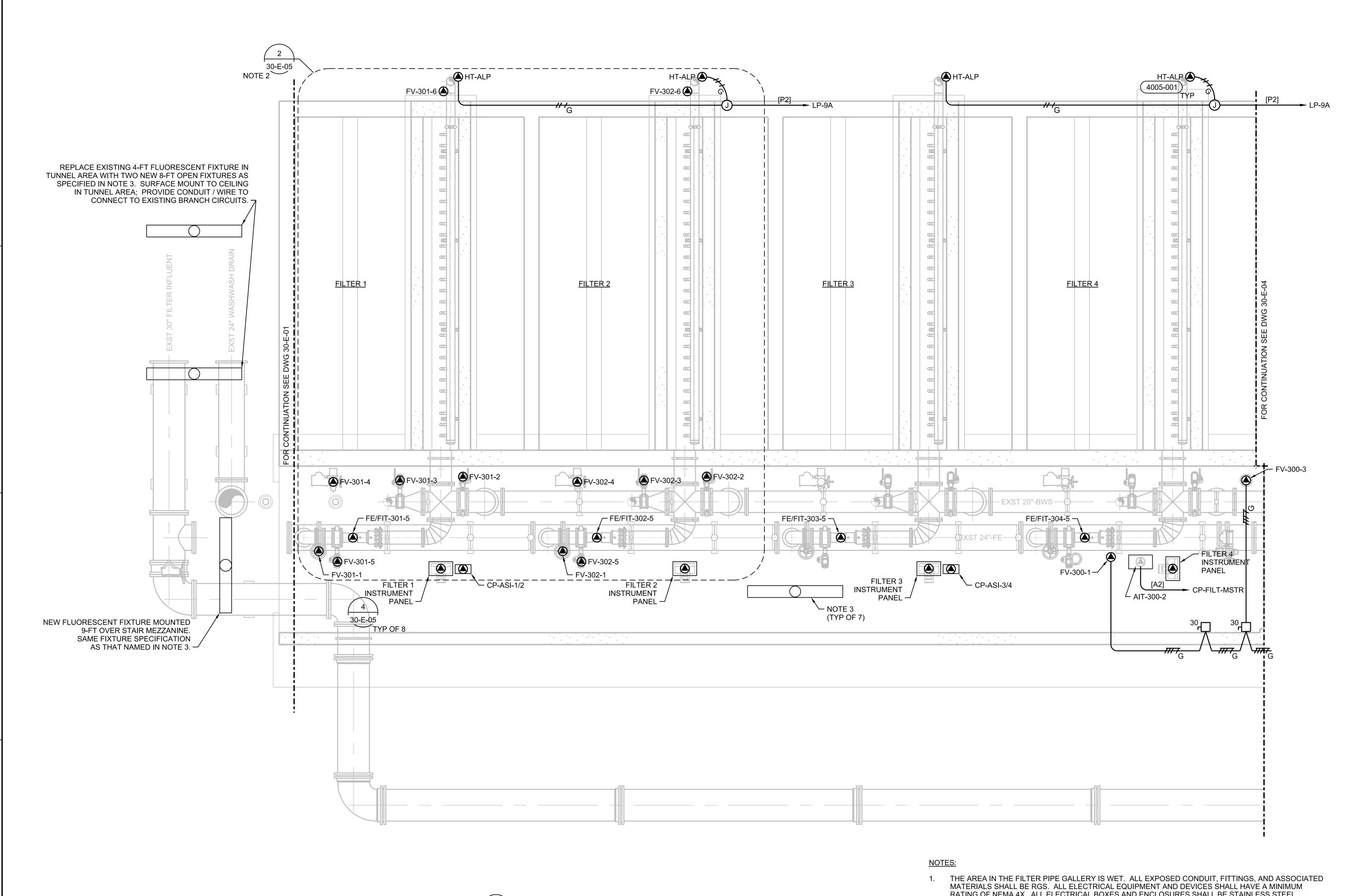


MAY 2015



FILENAME: 030-E-2002\_497074.dgn

MAY 2015



- RATING OF NEMA 4X. ALL ELECTRICAL BOXES AND ENCLOSURES SHALL BE STAINLESS STEEL. ALL SUPPORTING MATERIALS AND HARDWARE SHALL BE STAINLESS STEEL.
- FOR CLARITY ONLY THE FILTER VALVES FOR FILTERS 1 AND 2 ARE SHOWN. VALVES FOR FILTERS 3 / 4, 5 / 6, AND 7 / 8 ARE LOCATED SIMILARLY.
- REPLACE THE EXISTING 8-FT FLUORESCENT FIXTURES IN FILTERS 1-4 PIPE GALLERY WITH SEVEN NEW 8-FT OPEN INDUSTRIAL FIXTURES. NEW FIXTURES SHALL BE EQUAL TO COLUMBIA LIGHT-KL PREMIUM INDUSTRIAL 8-FT, 2-LAMP; WITH 15% UP LIGHT; 2-96T8HO FLUORESCENT LAMPS; ELECTRONIC BALLAST, INSTANT START; UNIVERSAL VOLTAGE 120/277V; CHAIN HANGER ASSEMBLY. MOUNT FIXTURES AT 12-FT AFF,

ALIGNED LENGTHWISE WITH THE PIPE GALLERY. RECONNECT TO EXISTING LIGHTING BRANCH CIRCUIT / CONDUIT.

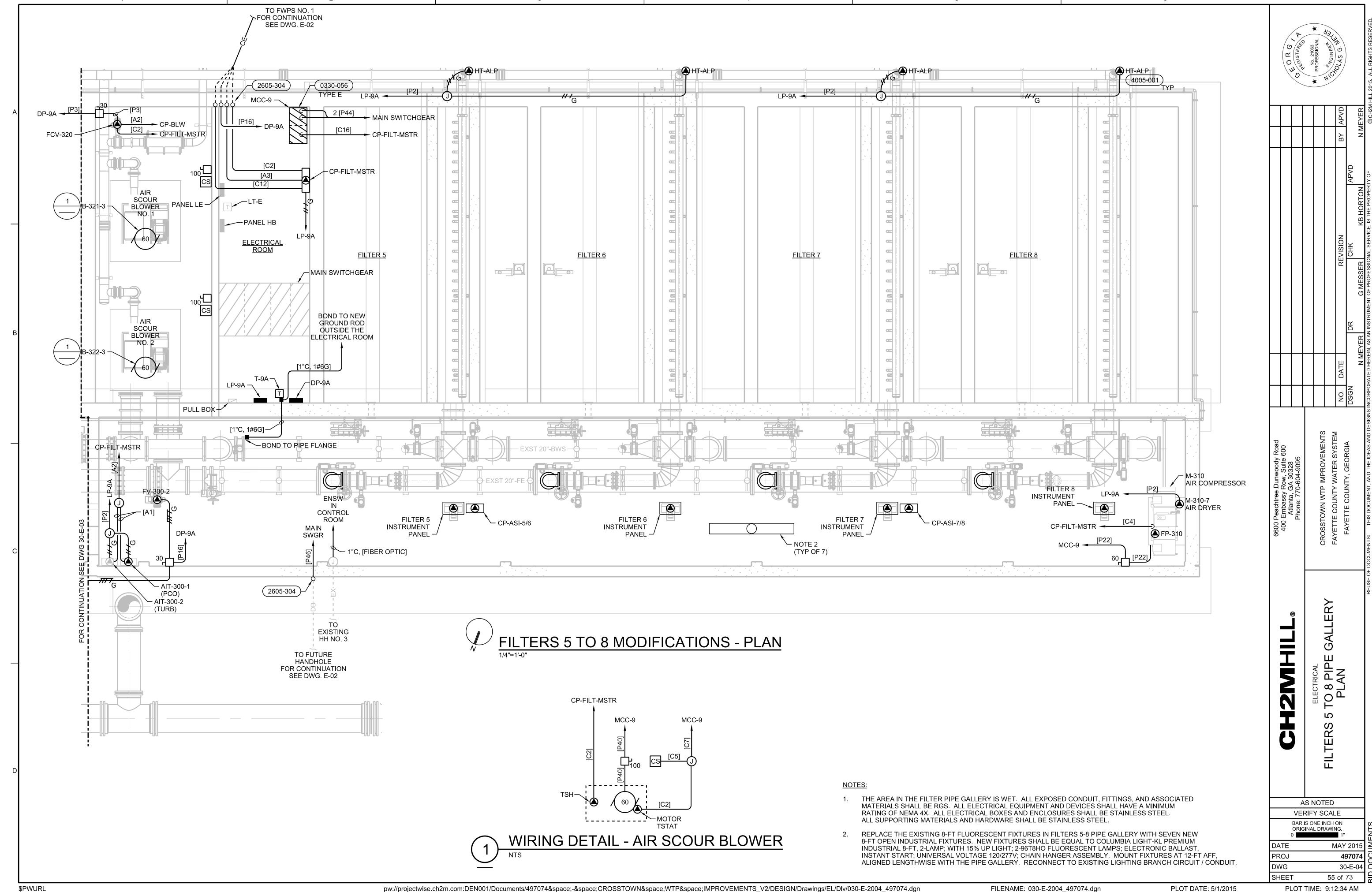
FILTERS 1 TO 4 MODIFICATIONS - PLAN
1/4"=1'-0"

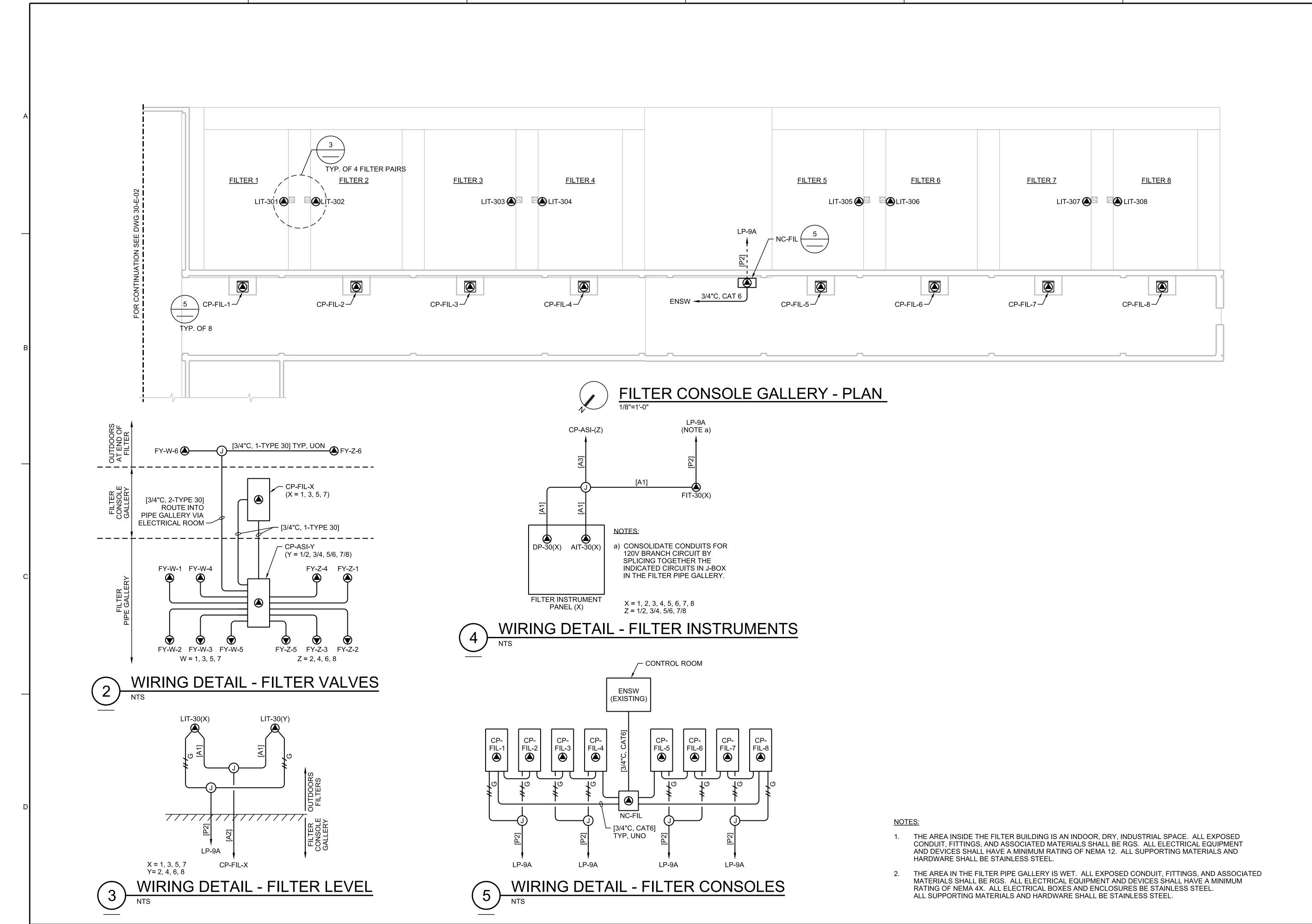
AS NOTED

**VERIFY SCALE** 

BAR IS ONE INCH ON

ORIGINAL DRAWING.





APVD

APVD

APVE

	6600 Peachtree Dunwoody Road						
	400 Embassy Row, Suite 600 Atlanta GA 30328						
	Phone: 770-604-9095						
ELECIRICAL	SEOSSTOWN WITH IMPROVEMENTS						
FILTERS 1 TO 8	EAVETTE COLINATER SYSTEM						
FILTER CONSOLE GALLERY		ON	DATE	R	REVISION		BY AP
D AN	FAYETTE COUNTY, GEORGIA	DSGN		DR	CHK	APVD	
			N MEYER	G MESSER	KB HORTON		N MEY
REUSE OF	REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF	S INCORPORA	<b>TED HEREIN, AS</b>	AN INSTRUMENT OF PROFESSIC	INAL SERVICE, IS THE PROPERT	Y OF	00

SHEET

MAY 201

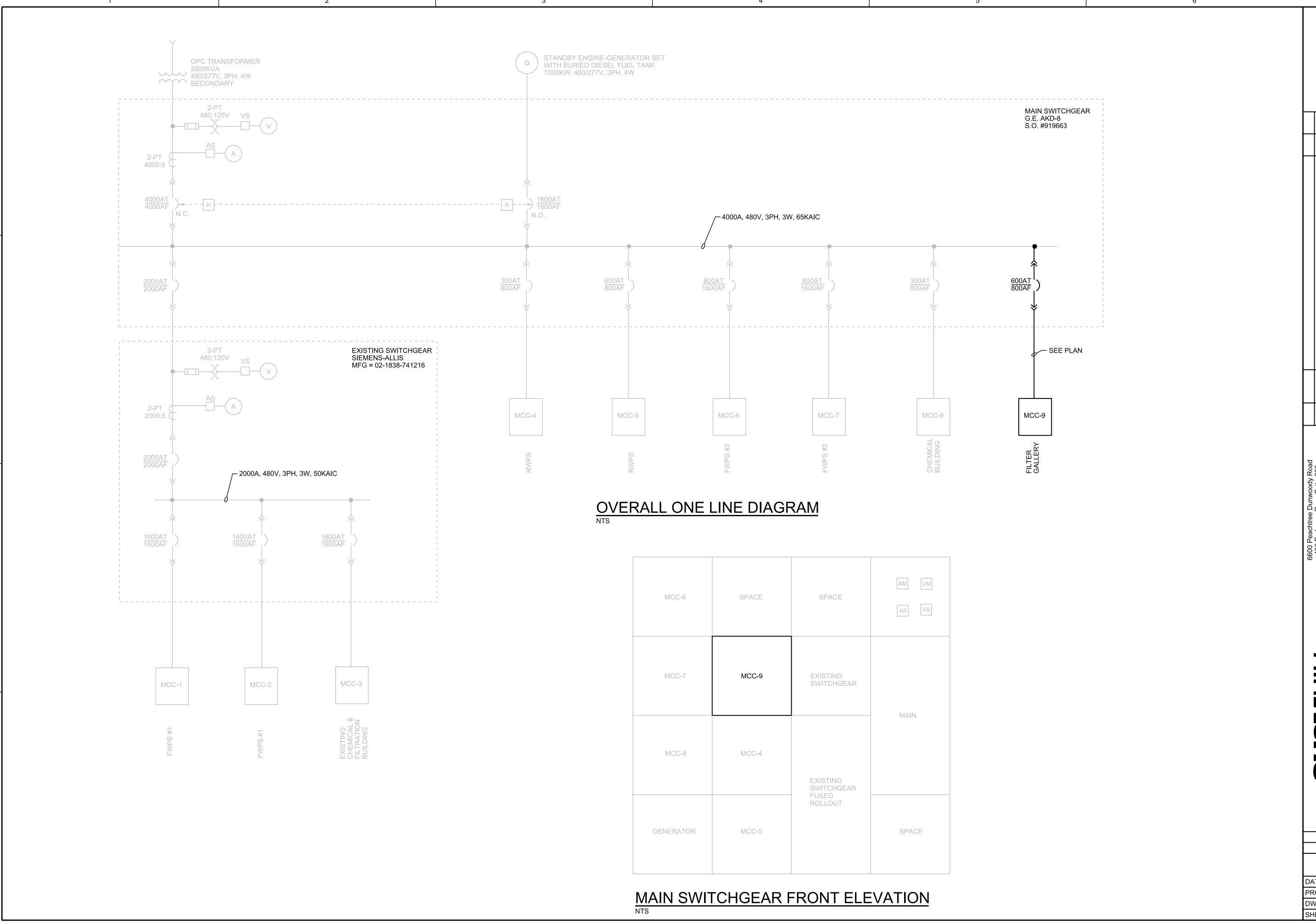
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**497074** 30-E-05

AS NOTED

**VERIFY SCALE** 

BAR IS ONE INCH ON ORIGINAL DRAWING.



06\_497074.dgn PLOT DATE: 5/1/2015

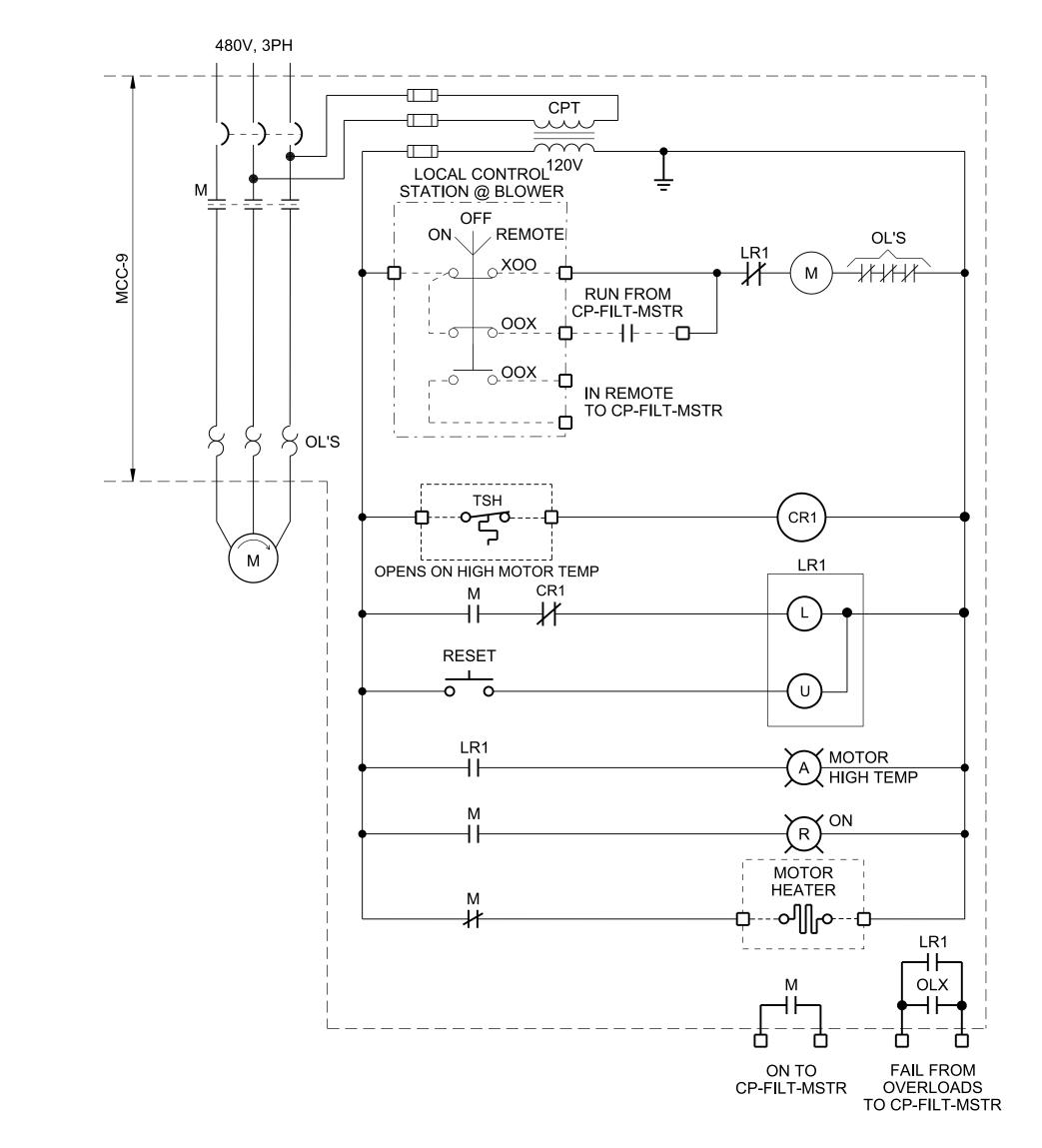
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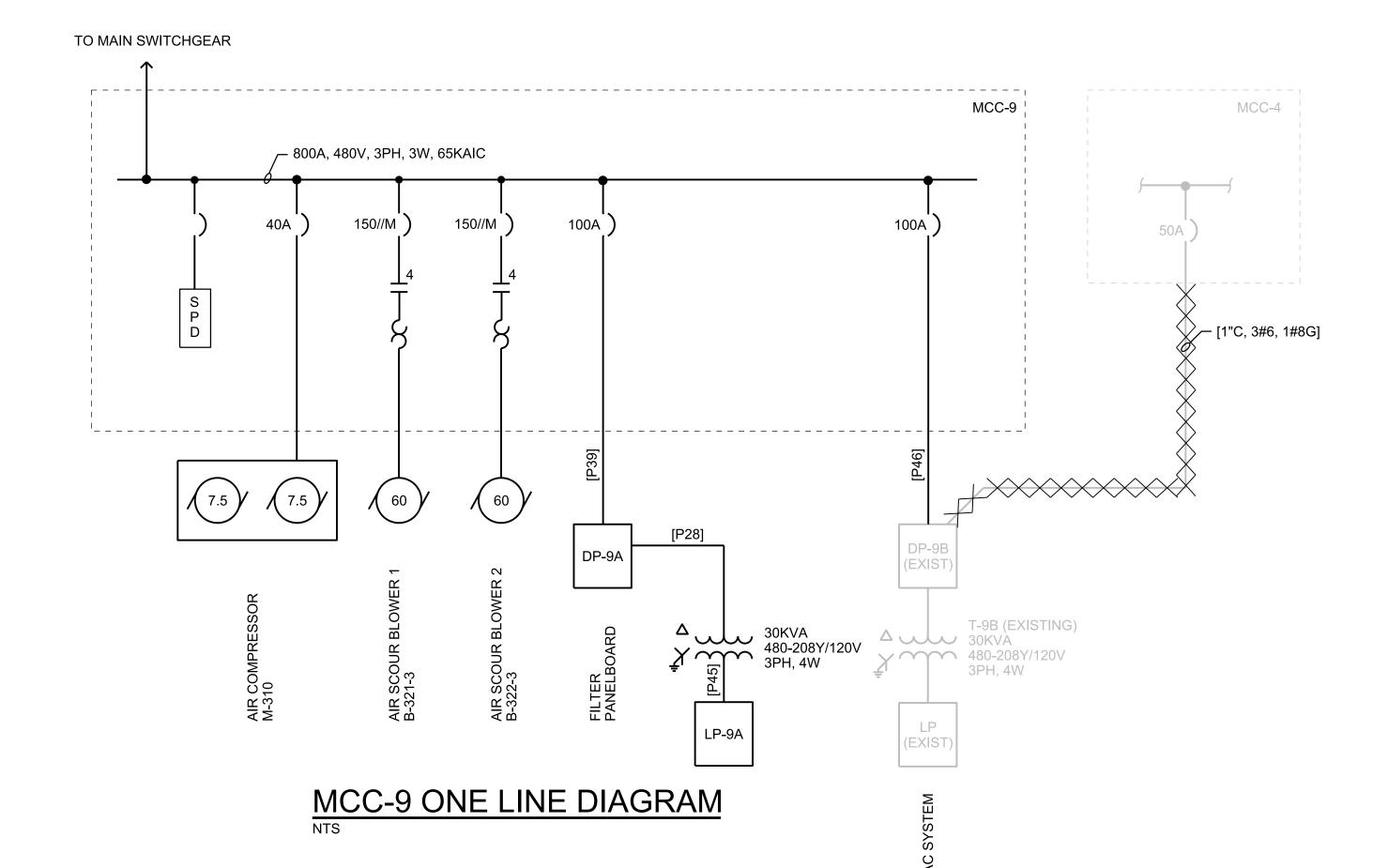
AS NOTED
VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

MAY 2015

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## AIR SCOUR BLOWER 1 (B-321-3) AIR SCOUR BLOWER 2 (B-322-3) NTS

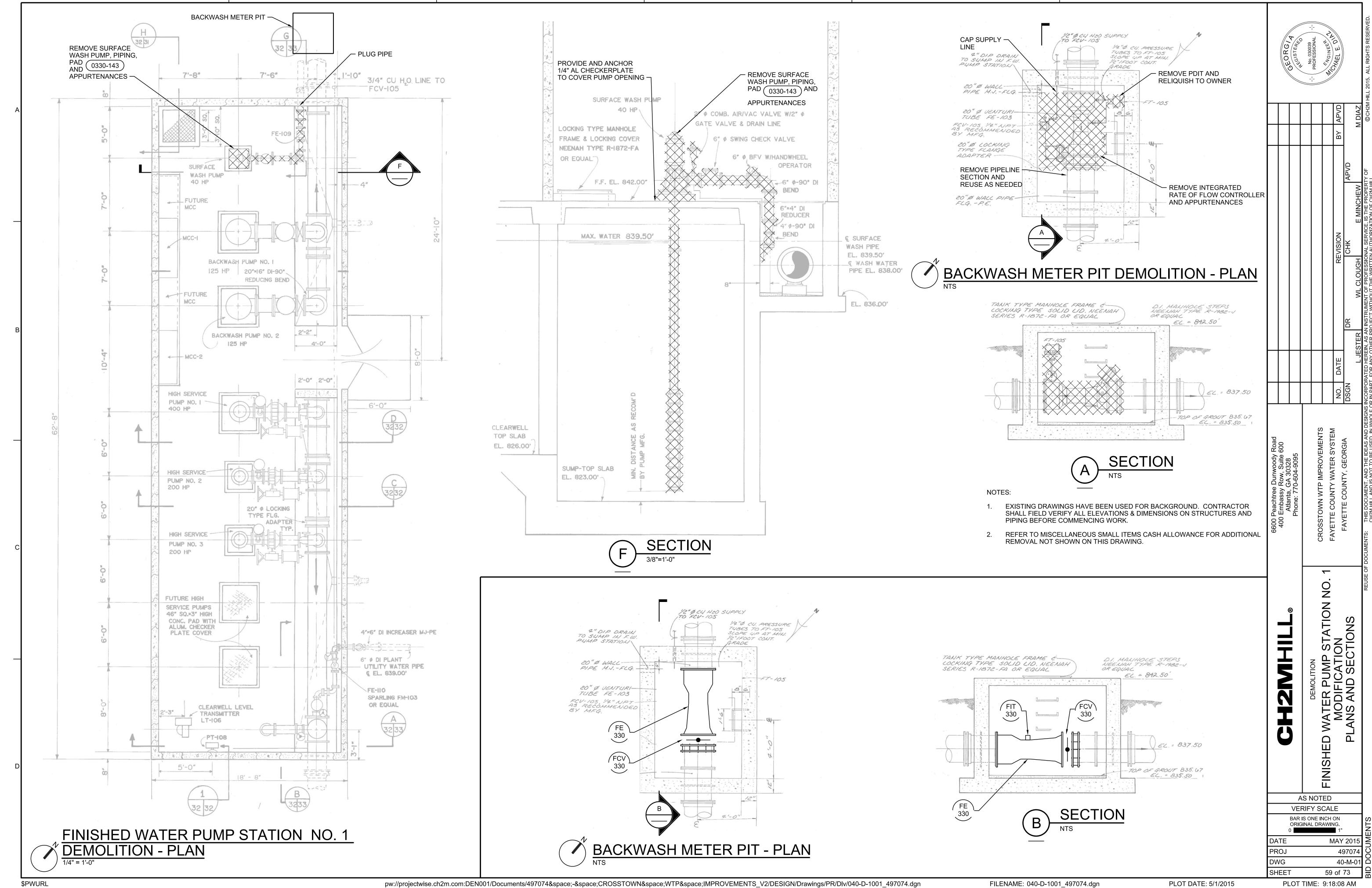
PANEI	L: DP-9	)A		LOCA	TION:	FILTE	R ELE	EC RM#2			
SERVI	ICE VC	LTAG	E: 480V	PHAS	E: 3			WIRE: 3			
OTAL	LOAD	KVA:	27.0	BUS S	SIZE:	125A		MAIN SIZE: 100A	TYPE:	MCB	
REMA	RKS:	SPD						MOUNTING: SURFACE	AIC:	65,000	)
LOA	AD IN Ł	(VA		BKR	CKT	CKT	BKR		LO	AD IN I	<del></del>
Α	В	С	CIRCUIT DESCRIPTION	A/P	1	NO.		CIRCUIT DESCRIPTION	Α	В	С
3.6					1	2		FC) / 220	0.3		
	3.1		TRANSFORMER T-9A (LP-9A)	60/3	3	4	20/3	FCV-320 AIR VENT VALVE		0.3	
		3.4			5	6		AIR VENT VALVE			0.3
1.3					7	8			1.3		
	1.3		FCV-330	30/3 9 10 30/3 FV-300-1		1.3					
		1.3			11	12					1.3
					13				1.3		
			SPACE	3P	15		30/3	FV-300-2		1.3	
					17	18					1.3
					19				1.3		
			SPACE	3P	21	22	30/3	FV-300-3		1.3	
					23	24					1.3
					25						
			SPACE	3P	27	28	3P	SPACE			
					29						
					31	32					
			SPACE	3P	33		3P	SPACE			
					35						
					37	38	0.0				
			SPACE	3P	39		3P	SPACE			
4.0	<b>.</b>				41	42			1.5		
4.9	4.4	4.7	TOTAL						4.3	4.3	4.3

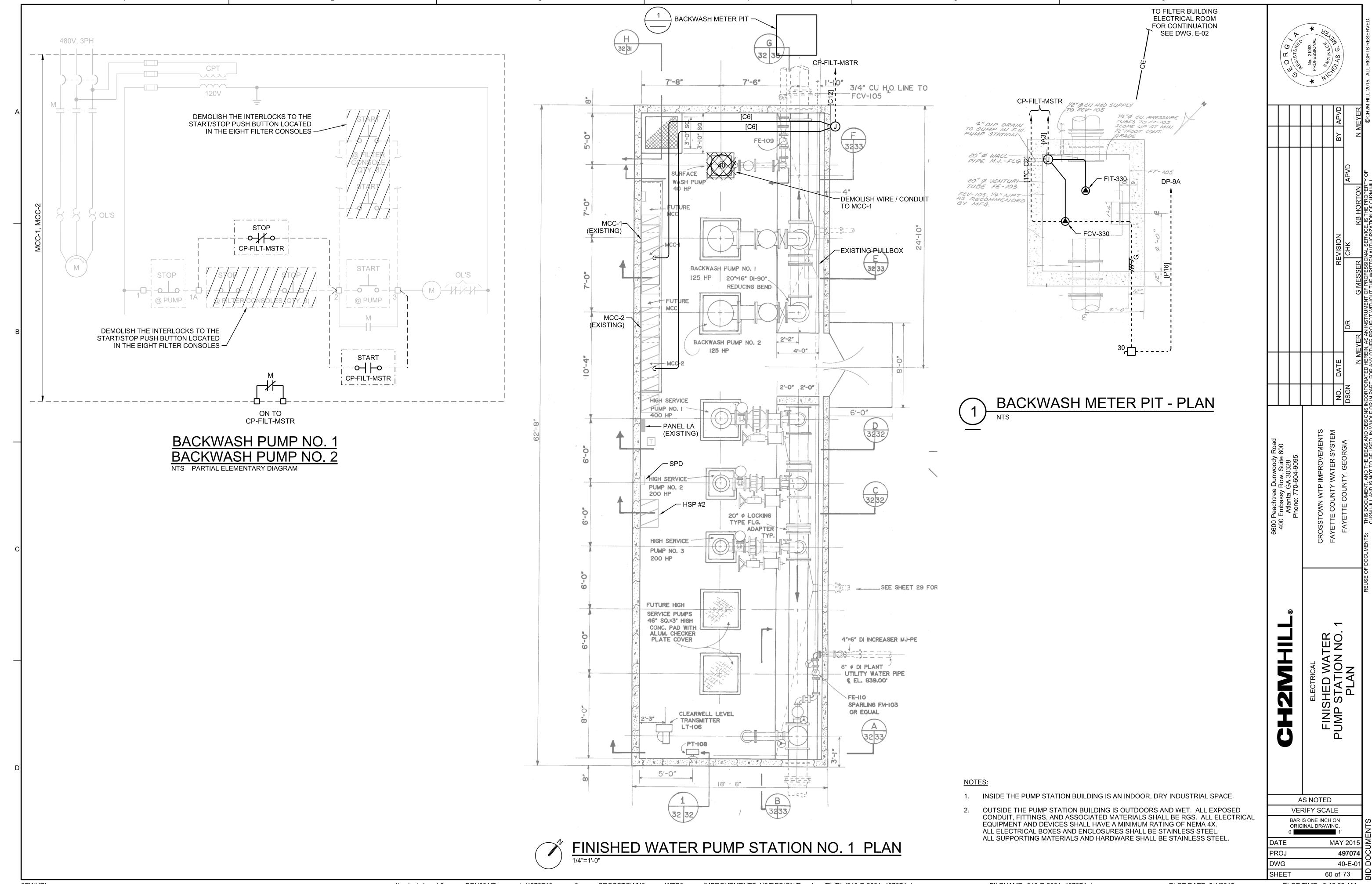
PANEI	 _: LP-9	A		LOCA	TION:	FILTE	R ELE	EC RM#2			
SERVI	CE VC	LTAGE	E: 208/120V	PHAS	E: 3			WIRE: 4			
_	LOAD	_		BUS S	SIZE:	100A		MAIN SIZE: 100A	TYPE:	МСВ	
_	RKS:			NEUT				MOUNTING: SURFACE			
LOA	AD IN P	(VA		BKR	CKT	CKT	BKR		LO	AD IN P	(VA
Α	В	С	CIRCUIT DESCRIPTION	A/P	NO.	NO.	A/P	CIRCUIT DESCRIPTION	Α	В	С
0.5			NC-FIL, AIT-300-1	20/1	1	2	20/1	FIT-301,-302	0.2		
	0.2		LIT-301,-302	20/1	3	4	20/1	FIT-303,-304		0.2	
		0.2	LIT-303,-304	20/1	5	6	20/1	FIT-305,-306			0.2
0.2			LIT-305,-306	20/1	7	8	20/1	FIT-307,-308	0.2		
	0.2		LIT-307,-308	20/1	9	10	20/1	CP-FILT-MSTR		1.0	
		0.5	HT-ALP (FILTER 1/2)	20/1*	11	12	20/1	CP-FIL-1, CP-FIL-2			1.0
0.5			HT-ALP (FILTER 3/4)	20/1*	13	14	20/1	CP-FIL-3, CP-FIL-4	1.0		
	0.5		HT-ALP (FILTER 5/6)	20/1*	15	16	20/1	CP-FIL-5, CP-FIL-6		1.0	
		0.5	HT-ALP (FILTER 7/8)	20/1*	17	18	20/1	CP-FIL-7, CP-FIL-8			1.0
0.5			AIR DRYER M-310-7	20/1*	19	20	20/1	SPARE			
			SPARE	20/1*	21	22	20/1	SPARE			
			SPARE	20/1	23	24	20/1	SPARE			
			SPARE	20/1	25	26	20/1	SPARE			
			SPARE	20/1	27	28	20/1	SPARE			
			SPARE	20/1	29	30	20/1	SPARE			
			SPACE	1P	31	32	1P	SPACE			
			SPACE	1P	33	34	1P	SPACE			
			SPACE	1P	35	36	1P	SPACE			
			SPACE	1P	37	38	1P	SPACE			
			SPACE	1P	39	40	1P	SPACE			
			SPACE	1P	41	42	1P	SPACE			
1.7	0.9	1.2	TOTAL						1.4	2.2	2.2

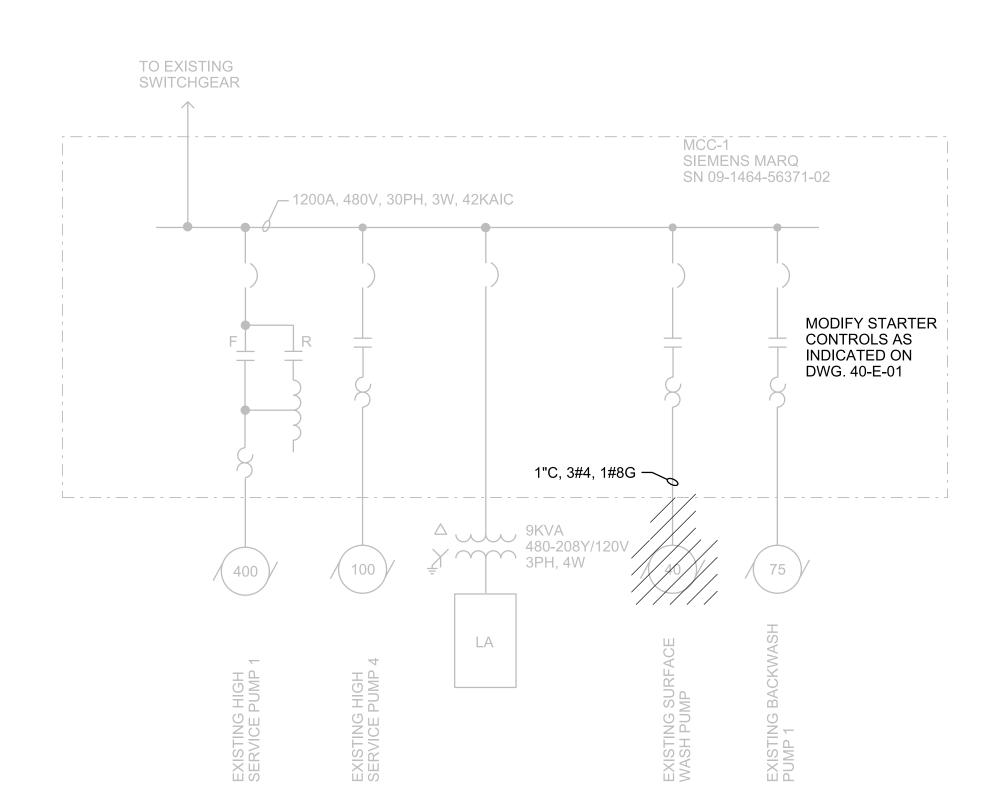
MLO	SPACE
IVILO	SPACE
	SPACE
SPD	AIR COMPRESSOR
	DP-9A
SPACE	DP-9B
AIR SCOUR BLOWER 1 B-321-3	AIR SCOUR BLOWER 2 B-322-3

MCC-9 FRONT ELEVATION
NTS

AS	NOTED
VERI	FY SCALE
_,	ONE INCH ON IAL DRAWING. 1"
ATE	MAY 2015
ROJ	497074
WG	30-E-07
HEET	58 of 73



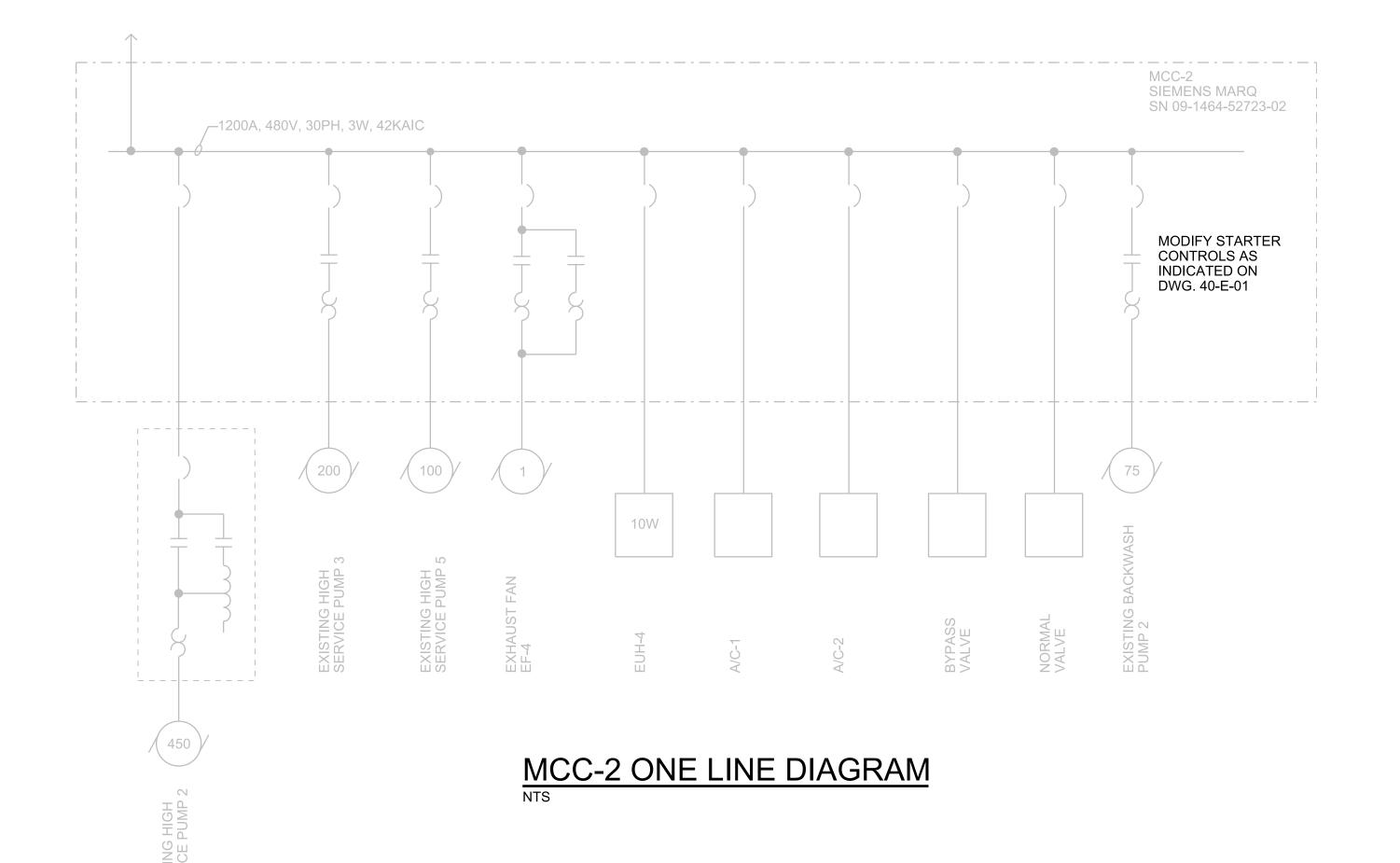




## MCC-1 ONE LINE DIAGRAM

	LIGHTING TRANSFORMER		SPACE
	SPARE	MLO	SPACE
HIGH	SPACE		SPACE
SERVICE PUMP 1		SURFACE WASH PUMP	
		ABANDONED STARTER	
	BACKWASH PUMP 1	SPACE	HIGH SERVICE PUMP 4
		SPACE	

MCC-1 FRONT ELEVATION
NTS



SPACE	EUH-4	A/C-1 A/C-2		SPACE	
EF-4	BYPASS NORMAL VALVE	MLO		SPACE	MLO
	SPACE			SPACE	SPACE
			MLO		
HIGH SERVICE PUMP 3		BACKWASH PUMP 2		HIGH SERVICE PUMP 5	HIGH SERVICE PUMP 2

MCC-2 FRONT ELEVATION
NTS

MO * MICHO									©CH2M HILL 2015. ALL F
						BY APVD		N MEYER	@сн2м
						ВУ		Z	
							APVD		'Y OF .L.
						REVISION	CHK	KB HORTON	INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.
						RE	DR	G MESSER	

AS NOTED

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

