CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

900 EAST SEWER UPSIZE PROJECT PHASE 1

Volume 2 of 2 Drawings

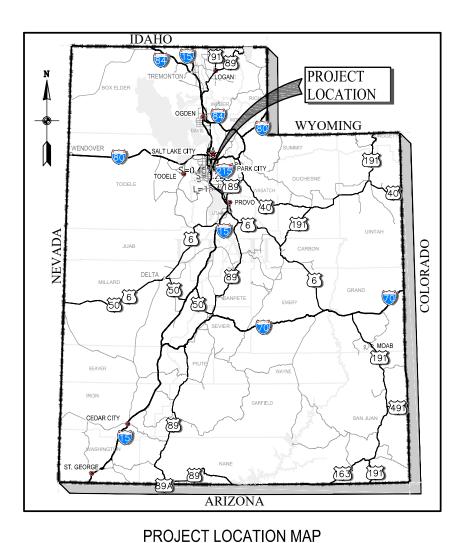




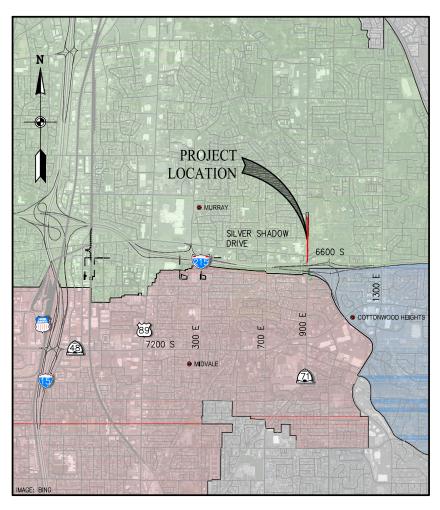
DRAWINGS FOR CONSTRUCTION OF THE

900 EAST SEWER UPSIZE PROJECT PHASE 1

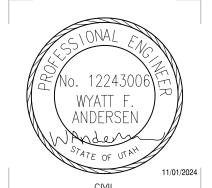
COTTONWOOD IMPROVEMENT DISTRICT



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PROJECT VICINITY MAP

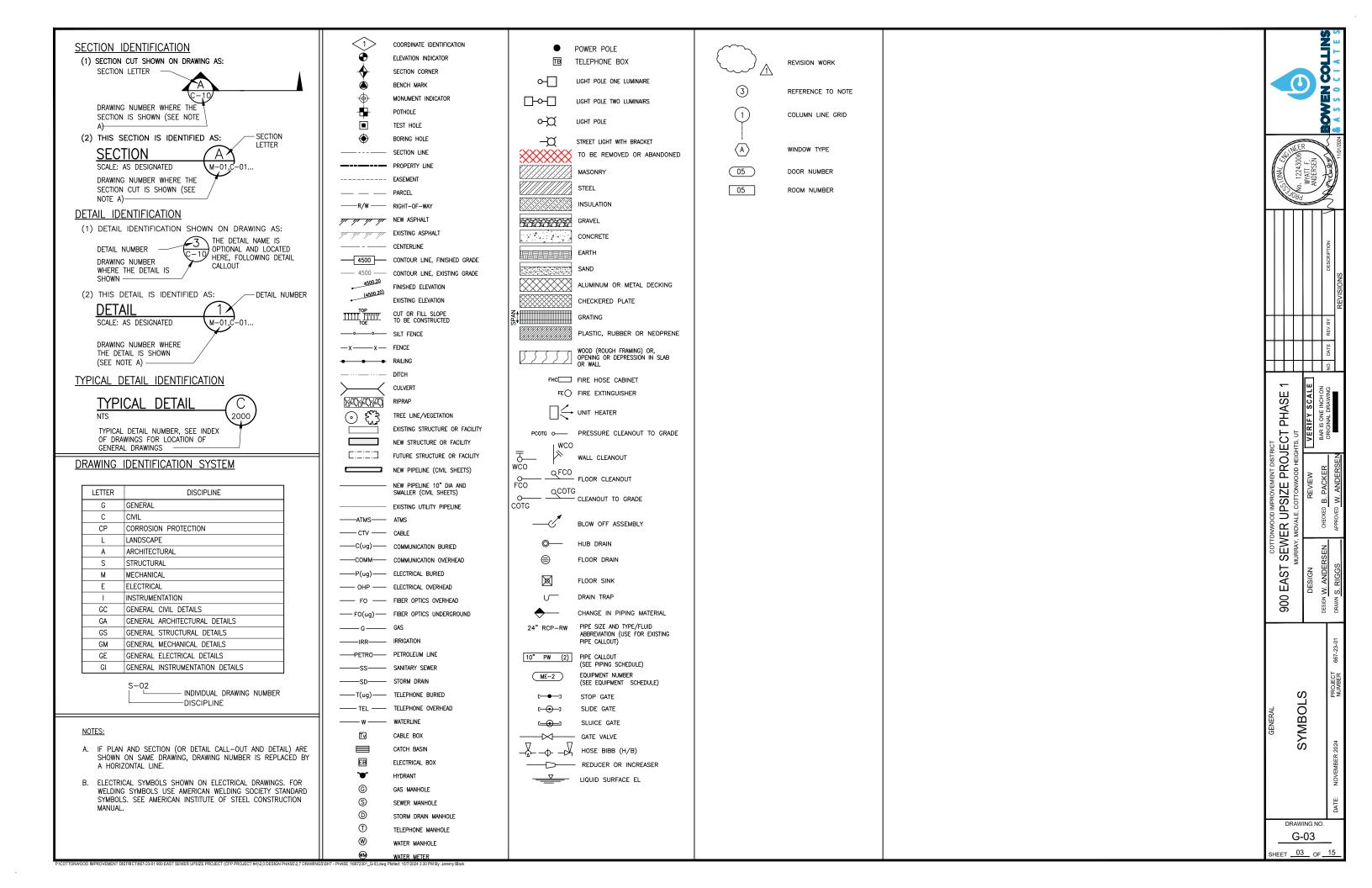






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PS		HTS, UT	VERIFY SCALE	INC II CIN GV G	CONTRACT CON	ONIGINAL DRAWING		
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	DEX OF DRAWINGS.			IND VICINITY MAPS		PROJECT	NUMBER	

@ AASHTO	AT AMERICAN ASSOCIATION OF STATE HIGHWAY	CLR CLST	CLEAR, CLEARANCE CEMENT LINED STEEL PIPE	EQUIP	EQUIPMENT	ID IF	INSIDE DIAMETER INVERT ELEVATION	NW	NORTHWEST	SPEC SPECS	SPECIFIED, SPECIFICATION SPECIFICATIONS	<u> </u>
	TRANSPORTATION OFFICIALS	CLSI	CONTROLLED LOW STRENGTH MATERIAL	ETC EVAP	ETCETERA EVAPORATOR	I IF	INSIDE FACE	1		SPECS	SPECIFICATIONS SPACING	=
AB	ANCHOR BOLT	CM	CENTIMETER STRENGTH WATERIAL	EVAP	END VERTICAL CURVE	in	INCH	о то о	OUT TO OUT	SPKR	SPEAKER	1 -
ABBR	ABBREVIATION	CML & C	CEMENT MORTAR LINED AND COATED	EVCE	END VERTICAL CURVE ELEVATION	IN LB	INCH-POUND	ОС	ON CENTER, OVER-CROSSING	SPLY	SUPPLY	
ABS	ACRYLONITRILE—BUTADIENE—STYRENE	CMP	CORRUGATED METAL PIPE	EVCS	END VERTICAL CURVE STATION	INFL	INFLUENT	OD	OUTSIDE DIAMETER, OVERALL DIMENSION	SPRT	SUPPORT	The state of the s
AC	ASPHALTIC CONCRETE OR ALTERNATING CURRENT OR ACTIVATED CARBON	CMU	CONCRETE MASONRY UNIT	EW	EACH WAY, EYE WASH	INSUL	INSULATING	OF	OUTSIDE FACE, OVERFLOW	SQ	SQUARE	
ACI	AMERICAN CONCRETE INSTITUTE	CO	CLEANOUT	EXH	EXHAUST	INVT	INVERT	OFS	OVERFLOW STRUCTURE	SQ FT	SQUARE FOOT	
ACP	ASPHALTIC CONCRETE PAVEMENT	COL	COLUMN COMMUNICATION	EXIST	EXISTING	IOB IPS	INLET OUTLET BYPASS IRON PIPE SIZE	OH OPER	OVERHEAD OPERATOR, OPERATING	SR	SUPPLY REGISTER	5
ADDL	ADDITIONAL	COMM	COMBINED	EXP ANR EXP JT	EXPANSION BOLT, ANCHOR EXPANSION JOINT	IRR	IRRIGATION	OPER	OPENING	SS	SANITARY SEWER, SERVICE SINK	1 3
ADJ	ADJACENT OR ADJUSTABLE	CONC	CONCRETE, CONCENTRIC	EXT	EXTERIOR, EXTENSION, EXTERNAL	IIXIX	IMMOAHON	OPP	OPPOSITE	SST STA	STAINLESS STEEL STATION	×
AER AFF	AERATION ABOVE FINISH FLOOR	COND	CONDENSER, CONDENSATE		EXTERIOR, EXTERIOR, EXTERIOR			ORIG	ORIGINAL	STD	STANDARD	
AGGR	AGGREGATE	CONN	CONNECTION			JA	JORDAN AQUEDUCT	OVHD	OVERHEAD	STIFF	STIFFENER	NEER
AH	AIR HANDLER	CONST	CONSTRUCTION, CONSTRUCT	F	FAHRENHEIT, FACE	JT	JOINT	OZ	OUNCE	STL	STEEL	
AIR CONT	AIR CONDITIONING	CONT	CONTINUED, CONTINUOUS, CONTINUATION	F TO F	FACE TO FACE	JTS	JOINTS			STRL	STRUCTURAL	24 75 /g
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	COORD	COORDINATE COPPER	FAB	FABRICATION, FABRICATE, OR FABRICATED	JVWTP	JORDAN VALLEY WATER TREATMENT PLANT	1		SUC	STRUCTURAL UNDERDRAIN COLLECTOR	
A1	ALLINAINI INA ALLINA	COTG	CLEAN-OUT TO GRADE	FB	FLAT BAR			PC	PORTLAND CEMENT, POINT OF CURVE OR PRIMARY CLARIFIER	SWA	SOUTHWEST AQUEDUCT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
AL ALTN	ALUMINUM, ALUM ALTERNATIVE. ALTERNATE	CPLG	COUPLING	FC	FLEXIBLE COUPLING			PCC	PORTLAND CEMENT CONCRETE	SYM SYMM	SYMBOL SYMMETRICAL	William J
ANOD	ANODIZED	CPS	CULINARY PUMP STATION	FCA	FLANGE COUPLING ADAPTER	K	KELVIN, KILO OR THOUSAND POUNDS	PCF	POUNDS PER CUBIC FOOT	SYS	SYSTEM	
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	CPVC	CHLORINATED POLYVINYL CHLORIDE	FCO	FLOOR CLEANOUT	KG KV	KILOGRAM	PE	PLAIN END, POLYELECTROLYTE POLYMER,		5.5. <u>2.</u>	
APPROX	APPROXIMATE	CS	CAST STEEL OR CAUSTIC SODA	FD FDN	FLOOR DRAIN FOUNDATION	l kw	KILOVOLT KILOWATT	PG	POLYETHYLENE PRESSURE GAUGE			
APVD	APPROXIMATE	CTRD CTR	CENTERED CENTER	FDR	FEEDER	KWH	KILOWATT HOUR	F G	PRESSURE GAUGE	T	THICKNESS, TOP, TOILET	
ARCH	ARCHITECTURAL	CTSK	COUNTERSUNK	FEXT	FIRE EXTINGUISHER	1		pН	HYDROGEN ION CONCENTRATION	T&B	TOP AND BOTTOM	No
ARV	AIR RELEASE VALVE	CU FT	CUBIC FOOT	FF	FLAT FACE, FAR FACE, FINISH FLOOR			PI	PLANT INFLUENT, POINT OF INTERSECTION	T&G TAN	TONGUE AND GROOVE TANGENT	
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	CU IN	CUBIC INCH	FG	FINISH GRADE, FLOW GLASS	L	LEFT OR LITER	PJF	PREMOLDED JOINT FILLER	TBC	TOP BACK OF CURB	
ACTM	AMEDICANI SOCIETY FOR TESTING AND MATERIAL	CU YD	CUBIC YARD	FH	FIRE HYDRANT	LAB	LABORATORY	PL	PLATE, PROPERTY LINE, PLACE	ТВМ	TEMPORARY BENCH MARK	_
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIAL	CULV	CULVERT	FLR	FLOOR	LAV	LAVATORY	PLYWD	PLYWOOD	TDH	TOTAL DYNAMIC HEAD	
ASSY	ASSEMBLY	CV	CHECK VALVE	FL FLEX	FLOW LINE FLEXIBLE	rc rb	POUND LENGTH OF CURVE	PM	PUMP, PROPELLER METER	TECH	TECHNICAL	
AUTO	AUTOMATIC	CWO	COLD WATER	FLEX	FLEXIBLE	I LF	LINEAR FEET	POB	POINT OF BEGINNING	TEL	TELEPHONE	
AUX	AUXILIARY	CWO	CHAIN WHEEL OPERATOR CYLINDER	FM	FORCE MAIN (SANITARY SEWER)	LG	LENGTH OR LONG	PP	POTASSIUM PERMANGANATE	TEMP	TEMPERATURE, TEMPORARY	₽
AVAR	AIR VACUUM AND AIR RELEASE VALVE	OIL	CIEMBER	FND	FOUND	LH	LEFT HAND	PPD	POUNDS PER DAY	THK	THICK THREADED	
AWS AWWA	AMERICAN WELDING SOCIETY AMERICAN WATER WORKS ASSOCIATION			FNSH	FINISH	LIP	LIP OF GUTTER	PPH	POUNDS PER HOUR	THR'D TK	TANK	
OUID	AMERICAN HATER HOURS ASSOCIATION	d	PENNY	FO	FIBER OPTIC	I LL	LIVE LOAD	PPM PR	PARTS PER MILLION	TO	TOP OF	1
I		DBA	DEFORMED ANCHOR	FRP	FIBERGLASS REINFORCED PLASTIC	LLV LOL	LONG LEG VERTICAL LENGTH OF LINE	PR PRC	PAIR POINT OF REVERSE CURVE	TOC	TOP OF CONCRETE	
B & S	BELL & SPIGOT	DBL	DOUBLE	FW	FINISH WATER RECEDIOR	LDL	LOW POINT	PREFAB	PREFABRICATED	TOG	TOP OF GRADE	O Z
BC	BEGIN CURVE, BOLT CIRCLE	DEC	DIRECT CURRENT	FWR	FINISH WATER RESERVOIR	LR LR	LONG RADIUS	PRI	PRIMARY	TP	TELEPHONE POLE, TURNING POINT	
BF	BLIND FLANGE, BUTTERFLY VALVE	DEG DEMO	DEGREE DEMOLITION. DEMOLISH	I		LT	LIGHT, LEFT	PRV	PRESSURE REGULATING/REDUCING VALVE	TW	TOP OF WALL	←
BFG BFP	BELOW FINISH GRADE BACK FLOW PREVENTER	DEQ	DEPARTMENT OF ENVIRONMENTAL QUALITY	G	GAS	LVL	LEVEL		,	TYP	TYPICAL	H H SH
BFV	BACK FLOW PREVENTER BUTTERFLY VALVE			GA	GAGE, GAUGE	LWL	LOW WATER LEVEL	PS	PRESSURE SWITCH, PUMP STATION			AS Sc.
BHD	BULKHEAD	DET	DETAIL PROPERTY OF	GAL	GALLON	LWR	LOWER	PSF	POUNDS PER SQUARE FOOT	UBC	UNIFORM BUILDING CODE	PHA RIFY S IS ONE IN
BHP	BRAKE HORSEPOWER	DI	DUCTILE IRON, DROP INLET	GALV	GALVANIZED	1		PSI	POUNDS PER SQUARE INCH	UD	UNDERDRAIN	☐ ☐ ☐ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑ ∑
BLDG	BUILDING	DIA DIAG	DIAMETER DIAGONAL	GEN GFI	GENERATOR	IM	METER, MALE (PIPE THREAD)	PSIG PT	POUNDS PER SQUARE INCH GAUGE POINT OF TANGENT, PRESSURE TREATED	UG	UNDERGROUND	SAR SER
BLK	BLACK OR BLOCK	DIAC	DIAPHRAGM	GFI	GROUND FAULT INTERRUPTER GALVANIZED IRON	MACH	MACHINE	PTDF	PRESSURE TREATED DOUGLAS FIR	UH	UNIT HEATER	
BLKG	BLOCKING	DIFF	DIFFUSER	GIS	GEOGRAPHIC INFORMATION SYSTEM	MAN	MAGNETIC, MANUAL	PV	PAVEMENT	UL	UNDERWRITERS LABORATORIES	
BLT BM	BOLT BEAM, BENCH MARK	DIM	DIMENSION	GL	GLASS	MATL	MATERIAL	PVC	POLYVINYL CHLORIDE	UNO USBR	UNLESS NOTED OTHERWISE U.S. BUREAU OF RECLAMATION	
BO BM	BLOW-OFF ASSEMBLY, BLOW-OFF	DIP	DUCTILE IRON PIPE	GLAZ	GLAZING	MAX	MAXIMUM	PVI	POINT OF VERTICAL INTERSECTION	USBR	U.S. DUNLAU OF RECLAMATION	KEIN OF THE
BOT	BOTTOM	DIR	DIRECTION	GLV	GLOBE VALVE	МВ	MACHINE BOLT	PW	POTABLE WATER			ACI NE M
BPS	BOOSTER PUMPING STATION	DISCH DIST	DISCHARGE DISTANCE	GND	GROUND	MCC	MOTOR CONTROL CENTER	1		٧	VALVE, VENT, VOLT, VACUUM	7. 170 TTON REVI
BPV	BACK PRESSURE VALVE	DIST	DISTANCE	GPD GPH	GALLONS PER DAY GALLONS PER HOUR	MECH MEMB	MECHANICAL, MECHANISM MEMBRANE	I DAD	DADILIC	VAR	VARIES, OR VARIABLE	PSI B. B.
BRK	BRICK	D-LOAD	LOADING CONDITION FOR RCP	GPH GPM	GALLONS PER HOUR GALLONS PER MINUTE	MEMB	METAL	RAD RC	RADIUS REINEORCED CONCRETE	VC	VERTICAL CURVE	
BTU	BRITISH THERMAL UNIT	DMPR	DAMPER	GR	GRADE	MFR	MANUFACTURER	RCP	REINFORCED CONCRETE REINFORCED CONCRETE PIPE	VCP	VITRIFIED CLAY PIPE	§ ~ § ₹
BTWN BUR	BETWEEN BUILT-UP ROOFING	DN	DOWN, DECANT	GR BRK	GRADE BREAK, GRADE CHANGE	MG	MILLION GALLONS	RD RD	ROOF DRAIN OR ROAD	VERT VIC	VERTICAL VICTAULIC COUPLING	SEWER MURRAY, MIDVA
BVC	BUILT-UP ROUFING BEGIN VERTICAL CURVE	DOT	DEPARTMENT OF TRANSPORTATION	GRTG	GRATING	MGD	MILLION GALLONS PER DAY	RDCR	REDUCER, REDUCING	VIC	VOLUME	[
BVC	BEGIN VERTICAL CURVE ELEVATION	DP	DAMP PROOFING	GRV	GROOVED	MH	MANHOLE, MONORAIL HOIST	RECIRC	RECIRCULATION	VPI	VERTICAL POINT OF INFLECTION	S
BVCS	BEGIN VERTICAL CURVE STATION	DR	DOOR, DRAIN	GSP	GALVANIZED STEEL PIPE	MI	MALLEABLE IRON	RED	REDUCING	VSS	VOLATILE SUSPENDED SOLIDS	
BW	BACK WASH, FILTER BACKWASH	DS	DRENCH SHOWER & EYE WASH, DOWNSPOUT	GV CVD	GATE VALVE	MID MIL	MIDDLE	REF	REFERENCE, REFER	VTC	VENT THROUGH CEILING	EAST DESIGN
		DWG	DRAWING	GYP	GYPSUM BOARD	MIN	1/1,000 INCH MINIMUM OR MINUTE	REG	REGULATING, REGISTER	VTR	VENT THROUGH ROOF	I → Isi
•	OFNITIONANE ON OFFICIAL	DWL	DOWEL	I		MISC	MINIMUM OR MINUTE MISCELLANEOUS	REINF	REINFORCE, REINFORCED			C □ ỷ
CAR	CENTIGRADE OR CELSIUS CABINET			Н	HEIGHT	MJ	MECHANICAL JOINT	REQD	REQUIRED	l w	WEST WASTE WIDE STANCE (SSAN)	900 pesign 1
CAB CAP	CABINET CAPACITY	=(u.s)	5, 5550 (A) (A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B	HAS	HEADED ANCHOR STUD	MO	MASONRY OPENING	REV RF	REVISION ROOF, RAISED FACE	I w	WEST, WASTE, WIDE FLANGE (BEAM) WITH	3, "
CARV	COMBINATION AIR RELEASE VALVE	E(UG)	ELECTRICAL (UNDERGROUND)	НВ	HOSE BIBB	MPH	MILES PER HOUR	RND	ROUND FACE	W/ W/O	WITHOUT	
CB	CATCH BASIN	E(OH)	ELECTRICAL (OVERHEAD POWER) EAST	HD	HUB DRAIN	MTG	MOUNTING	RPM	REVOLUTIONS PER MINUTE	WC WC	WATER COLUMN OR WATER CLOSET	1
CC	CENTER TO CENTER	FA	EACH	HDPE HDR	HIGH DENSITY POLYETHYLENE HEADER	MTL MTR	METAL OR MATERIAL	RP RP	RADIUS POINT	wco	WALL CLEANOUT	
CCP	CONCRETE CYLINDER PIPE	EB	EXPANSION BOLT	HDW HDW	HEADER HARDWARE	MIR MWS	MOTOR MAXIMUM WATER SURFACE	RS	RAW SEWAGE	WD	WOOD	
CD	CEILING DIFFUSER CHEMICAL DRAIN AND VENT	EC	END CURVE	HEX	HEXAGONAL	CANIM	MAAIMUM WATER SURFACE	RST	REINFORCING STEEL, RESET	WH	WATER HEATER	
CER	CERAMIC	ECC	ECCENTRIC	HGR	HANGER			RT	REGULATING TANK, RADIOGRAPHIC, RIGHT	WS	WATER STOP, WATER SURFACE	l σ la
CFH	CUBIC FEET PER HOUR	EF	EACH FACE, EXHAUST FAN	НМ	HOLLOW METAL	N	NORTH	RV	ROOF VENT	WSP	WELDED STEEL PIPE	Į Ž į
CFM	CUBIC FEET PER MINUTE	EFF	EFFLUENT EXISTING CRADE	HORIZ	HORIZONTAL	NAVD	NORTH AMERICAN VERTICAL DATUM	R/W	RIGHT OF WAY	WSTP WT	WATER STOP WEIGHT	
CFR	CODE OF FEDERAL REGULATIONS	EG EL	EXISTING GRADE ELEVATION	HP	HORSEPOWER, HIGH PRESSURE, HEAT PUMP,	NBS	NATIONAL BUREAU OF STANDARDS	RW RW	RAW WATER	I www	WELDED WIRE MESH	
CFS	CUBIC FEET PER SECOND	ELB	ELBOW	HR	HIGH POINT HEATING RETURN, HOUR, HOSE RACK	NC NE	NORMALLY CLOSED	I		I	WEDED TIME MEDIT	[월 절]
CG CGB	CHLORINE GAS CORD GRIP BUSHING	ELEV	ELEVATION	HS	HIGH STRENGTH	NEC NEC	NORTHEAST NATIONAL ELECTRIC CODE	1				
CHBD	CHALKBOARD	ELEC	ELECTRICAL, ELECTRONIC	HSS	HOLLOW STRUCTURAL SECTION	NEMA	NATIONAL ELECTRIC CODE NATIONAL ELECTRICAL MANUFACTURES	S	SOUTH, SECOND	XMFR	TRANSFORMER	GENERAL
CHEM	CHEMICAL	EMB	EMBEDMENT	HTG	HEATING		ASSOCIATION	SA	SAMPLE, SAMPLE LINE	XMTR	TRANSMITTER	K
CHG	CHANGE	EMER	EMERGENCY	HTR	HEATER	NF NEDA	NEAR FACE	SCFM	STANDARD CUBIC FEET PER MINUTE	XS	EXTRA STRONG	子 3E
CHKD PL	CHECKERED PLATE	ENCL	ENCLOSURE	HV	HOSE VALVE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	SCH	SCHEDULE STORM PRAIN			#
CI	CAST IRON	ENG ENGR	ENGINE ENGINEER	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	NIC	NOT IN CONTRACT	SD SECT	STORM DRAIN SECTION	YD	YARD	`
CIP	CAST IRON PIPE	ENGR EP	EDGE OF PAVEMENT	HWL	HIGH WATER LEVEL	NO	NUMBER OR NORMALLY OPEN	SECT	SECTION SHEET	YP	YARD PIPING	
CISP CJ	CAST IRON SOIL PIPE CONSTRUCTION JOINT	EPDM	ETHYL PROPYLENE DIENE MONOMER	HWO	HANDWHEEL OPERATED	NOM	NOMINAL	SIM	SIMILAR	YR	YEAR	
CJP	COMPLETE JOINT PENETRATION	EPS	EXPANDED POLYSTYRENE	HYD	HYDRANT, HYDRAULIC	NPT	NATIONAL PIPE THREAD	SLP	SLOPE			
CL	CHLORINATOR, CHAIN LINK, CENTERLINE OR	EQ	EQUAL	I		NS NSF	NEAR SIDE NATIONAL SANITATION FOUNDATION	SP	SPACING, STATIC PRESSURE			
	CHLORINE	EQL SP	EQUALLY SPACED	ICFM	INLET CUBIC FEET PER MINUTE	NTS NTS	NATIONAL SANITATION FOUNDATION NOT TO SCALE	SPA	SPACED			DRAWING NO.
				ICFM	INLET CODIC FEET MEK MINUTE	1"13	HOT TO SUMEL	1				G-02
				I				1				
<u></u>		<u></u>		<u></u>		<u>l</u>		<u></u>				SHEET <u>02</u> OF <u>1</u>
_	nt District/667-23-01 900 East Sewer Upsize Project (CFP Project #4)\2.0 Design Phase\2.7							_				



GENERAL NOTES

- SYMBOLOGY: SYMBOLS FOR STRUCTURES, PIPE, ETC. USED FOR IDENTIFICATION ARE SHOWN IN LEGENDS AND SHALL BE FOLLOWED THROUGHOUT THE PLANS WHENEVER APPLICABLE. NOT ALL OF THE VARIOUS COMPONENTS SHOWN IN THESE LEGENDS ARE NECESSARILY USED IN THE PROJECT.
- 2. DRAWINGS SCALE: SCALE OF THE DRAWINGS OR DETAILS ARE SHOWN IN TITLE BLOCK OR DIRECTLY UNDER THE PLAN OR DETAIL. THE SIZE OF THE ORIGINAL PLOTTED DRAWINGS IS 22"X34". CARE SHOULD BE TAKEN TO REVIEW AND VERIFY THE SCALE BAR IN THE TITLE BLOCK AREA TO DETERMINE THE SCALE OF REDUCED
- CONTRACT DOCUMENTS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION ACTIVITIES PER THE CONTRACT DOCUMENTS. ANY ADDITIONS, DELETIONS, OR MODIFICATIONS SHALL FIRST MEET WITH THE WRITTEN APPROVAL OF THE ENGINEER AND THE OWNER.
- PERMITS: CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND COMPLY WITH ALL REQUIREMENTS OF GOVERNING AGENCIES. SEE UDOT GENERAL NOTE 1 FOR ENCROACHMENT PERMIT AND WAIVER TO BE ACQUIRED BY THE CONTRACTOR FOR WORK WITHIN LIDOT RIGHT-OF-WAY
- 5. <u>EASEMENTS AND RIGHT-OF-WAY:</u> THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE ESTABLISHED RIGHTS-OF-WAY AND EASEMENTS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, VEHICLES AND EQUIPMENT, LIMITS OF TRENCH EXCAVATION, EXCAVATED MATERIAL, AND BACKFILL STORAGE AND/OR STAGING AREA(S). IF THE CONTRACTOR REQUIRES ADDITIONAL CONSTRUCTION AREAS, IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ADDITIONAL AGREEMENTS OR PERMISSIONS FROM INDIVIDUAL PROPERTY OWNERS.
- EXISTING UTILITIES: EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED ON A RECORDS SEARCH BY LOCAL CONTROLLING AGENCIES AND ARE APPROXIMATELY LOCATED. EXISTING UTILITIES ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF AND PRESERVING ALL UTILITIES INCLUDING THOSE NOT SHOWN OR INCORRECTLY SHOWN ON THE PLANS. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST TWO (2) WEEKS IN ADVANCE OF UTILITY CONFLICTS REQUIRING RELOCATION OF MAIN LINES, AND AT LEAST ONE (1) WEEK IN ADVANCE OF CONFLICTS REQUIRING RELOCATION OF SERVICE LATERALS
- EXISTING IMPROVEMENTS PROTECTION: THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT ALL EXISTING IMPROVEMENTS FROM DAMAGE WHICH ARE TO REMAIN IN PLACE. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED TO ORIGINAL OR BETTER CONDITION TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR
- 8. EXISTING SERVICE LINES: THE CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING SERVICE LINES FOR GAS, SEWER, WATER, AND OTHER UTILITIES AND REPAIRING DAMAGE MADE TO SUCH LINES AS A RESULT OF THE CONTRACTOR'S OPERATIONS. NOT ALL SERVICE CONNECTIONS FOR UTILITIES ARE SHOWN ON THE DRAWINGS.
- 9. SHORING AND PUBLIC SAFETY: CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMANCE WITH LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES. CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF THE PUBLIC AND PROTECTION OF PERSONNEL AND WORKERS
- 10. HOT MIX ASPHALT AVAILABILITY: IF THE CONTRACTOR CHOOSES TO WORK ON THE PROJECT WHEN HOT MIX ASPHALT IS NOT AVAILABLE, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE GOVERNING AGENCY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY ASPHALT SURFACING MATERIAL WHEN HOT MIX ASPHALT BECOMES AVAILABLE, THE CONTRACTOR SHALL REMOVE THE TEMPORARY ASPHALT, FURNISH AND INSTALL THE HOT MIX ASPHALT AT NO ADDITIONAL COST TO THE OWNER.
- 11. SURVEY MONUMENTS: CONTRACTOR SHALL NOT DESTROY, REMOVE, OR DISTURB ANY EXISTING SURVEY MONUMENTS WITHOUT AUTHORIZATION OF CONTROLLING AGENCY. NO PAVEMENT CUTTING OR REMOVAL SHALL BEGIN UNTIL ALL SURVEY MARKERS OR MONUMENT POINTS THAT HAVE THE POTENTIAL OF BEING DISTURBED BY THE CONSTRUCTION OPERATIONS HAVE BEEN PROPERLY REFERENCED BY A REGISTERED LAND SURVEYOR, ALL SURVEY MONUMENTS OR POINTS DISTURBED BY THE CONTRACTOR SHALL BE ACCURATELY RESET BY A REGISTERED LAND SURVEYOR AFTER ALL RESTORATION AND RESURFACING HAS BEEN COMPLETED AT NO EXPENSE TO THE
- 12. <u>NOTIFYING PUBLIC:</u> COTTONWOOD IMPROVEMENT DISTRICT WILL HIRE A THIRD-PARTY TO MANAGE PUBLIC RELATIONS FOR THE PROJECT. THE CONTRACTOR SHALL SUPPORT THE THIRD-PARTY PUBLIC RELATIONS MANAGER BY PROVIDING SCHEDULES, CONTACT INFORMATION, ETC. PER THE CONTRACT DOCUMENTS.
- 13. CONTRACTOR'S SCHEDULE: CONTRACTOR SHALL PROVIDE AN UPDATED CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE SPECIFICATIONS FOR WORKING IN THE PUBLIC RIGHT-OF-WAY PRIOR TO CONSTRUCTION AND REGULARLY THROUGHOUT CONSTRUCTION.
- 14. EXISTING UTILITY VERIFICATION: CONTRACTOR TO VERIFY DEPTHS OF ALL UTILITIES IN THE FIELD BY POT-HOLING A MINIMUM OF 400 FEFT AHEAD OF PIPELINE CONSTRUCTION TO AVOID CONFLICTS WITH DESIGNED PIPELINE GRADE AND ALIGNMENT. IF A CONFLICT ARISES DUE TO FAILURE TO PERFORM THE AFOREMENTIONED. POT-HOLING, CONTRACTOR SHALL RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST
- 15. SETTLEMENT: CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF EXCAVATIONS AND ANY DAMAGE MADE TO UTILITIES RESULTING FROM
- 16. <u>NEW PIPE PROTECTION:</u> CONTRACTOR SHALL PREVENT ANY GROUND WATER OR DEBRIS FROM ENTERING THE NEW PIPE DURING CONSTRUCTION.
- 17 PIPE CONSTRUCTION: LAY PIPE TO DEPTH AND ALONG HORIZONTAL ALIGNMENT AS DEFINED IN THESE DRAWINGS. CONTRACTOR SHALL NOT DEVIATE FROM PROPOSED ALIGNMENT OR GRADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

- 18. CONCRETE REPLACEMENT: EXCEPT AS NOTED OTHERWISE, CONTRACTOR SHALL REPLACE ALL CURB AND GUTTER, SIDEWALK, CONCRETE DRIVEWAYS, AND CONCRETE WATERWAYS DISTURBED DURING CONSTRUCTION PER GOVERNING AGENCY REQUIREMENTS TO THE NEAREST JOINT.
- 19. <u>BUSINESS AND RESIDENTIAL ACCESS</u>: CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY ACCESS FOR ALL BUSINESSES AND RESIDENTS IMPACTED BY CONSTRUCTION OF THE PROJECT, VEHICULAR ACCESS TO RESIDENTIAL PROPERTY MAY NOT BE BLOCKED FOR MORE THAN 24 HOURS. BUSINESS ACCESS SHALL NOT BE BLOCKED DURING BUSINESS HOURS. CONTRACTOR SHALL CONTACT AND COORDINATE WITH RESIDENTS 48 HOURS PRIOR IF VEHICULAR ACCESS WILL BE BLOCKED FOR UP
- 20. SAW CUTTING: CONTRACTOR SHALL SAW CUT ASPHALT, SIDEWALK, AND WHERE REQUIRED, CURB AND GUTTER AT THE LIMITS OF ALL TRENCH EXCAVATION.
- 21. EMERGENCY SERVICES: CONTRACTOR MUST NOTIFY ALL EMERGENCY SERVICES OF THE WORK PRIOR TO START OF PROJECT.
- 22. <u>AERIAL PHOTOGRAPHY:</u> AERIAL PHOTOGRAPHY PROVIDED ON DRAWINGS IS FROM HEXAGON IN OCTOBER 2021.
- 23. DEWATERING: GROUND WATER AND SURFACE WATER CONTROL SHALL BE PERFORMED AND RESPONSIBLY HANDLED BY THE CONTRACTOR ACCORDING TO AND IN COMPLIANCE WITH, ALL LOCAL GOVERNING AUTHORITIES. GROUND WATER PUMPING IS ANTICIPATED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE POTENTIAL PUMPING NEEDS. GROUND WATER CONDITIONS ARE DOCUMENTED IN THE GEOTECHINICAL REPORT FOR CONTRACTOR'S REFERENCE FOUND IN THE APPENDIX OF THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL OBTAIN DEWATERING PERMIT AS
- 24. COORDINATE SYSTEM: SEE KEY SHEET DRAWING G-06 FOR COORDINATE SYSTEM, SURVEY CONTROL POINTS, AND TABLE.
- 25. STAKING, TESTING, AS-BUILTS AND CCTV INSPECTION: CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND CONSTRUCTION REDLINED DRAWINGS DOCUMENTING ANY MINOR CHANGES TO THE PROJECT. CONTRACTOR WILL ALSO PROVIDE SOIL, ASPHALT, AND CONCRETE PAVEMENT COMPACTION TESTING, NEW MANHOLE AND SEWER PIPING TESTING BY A THIRD PARTY. CONTRACTOR SHALL PROVIDE ENGINEER WITH A QA/QC PLAN FOR APPROVAL PRIOR TO THE BEGINNING OF CONSTRUCTION. CID WILL PROVIDE CCTV INSPECTION OF THE NEW PIPELINES.
- 26. MATERIAL DISPOSAL: EXISTING STRUCTURES AND PIPING THAT ARE REMOVED AND DISPOSED OF MUST COMPLY WITH DISPOSAL REQUIREMENTS FROM ALL FEDERAL, STATE, AND LOCAL AGENCIES.
- 27. MINIMUM PIPE SEPARATION: MAINTAIN A MINIMUM 18" VERTICAL SEPARATION BETWEEN NEW PIPELINES AND EXISTING UTILITIES. WHERE INSPECTOR DETERMINES MECHANICAL COMPACTION CANNOT BE ADEQUATELY PERFORMED, CONTRACTOR SHALL BACKFILL TRENCH AREAS WHERE NEW PIPELINES CROSS UNDER EXISTING BURIED UTILITIES WITH CEMENT TREATED FLOWABLE FILL.
- 28. <u>OVERHEAD POWER LINES:</u> CONTRACTOR SHALL COMPLY WITH SAFETY REQUIREMENTS FOR OPERATING CONSTRUCTION EQUIPMENT AND CONSTRUCTION ACTIVITIES BENEATH HIGH VOLTAGE POWER LINES.
- 29. ASPHALT PAVEMENT RESTORATION:
 - ASPHALT AND ROAD BASE RESTORATION SHALL CONFORM TO THE REQUIREMENTS IDENTIFIED UNDER THE UDOT GENERAL NOTES OF DRAWING G-05 FOR ASPHALT PAVEMENT RESTORATION IN UDOT ROW.
 - UTILITY LID CONCRETE COLLARS IMPACTED BY CONSTRUCTION SHALL BE REPLACED PER UDOT STANDARDS.
 - C. PAINT STRIPING IS TO BE REPLACED WITH THE SAME MATERIAL WITHIN 48 HOURS OF COMPLETION OF THE ASPHALT PAVEMENT.
- 30. ABANDONING SEWER MAINS AND MANHOLES:
 - EXISTING PIPE TO BE ABANDONED IN-PLACE IN UDOT AND CITY RIGHT-OF-WAY, SHALL BE PUMPED FULL WITH FLOWABLE FILL AND CAPPED AT EACH END.
- B. WORK TO ABANDON EXISTING SEWER MANHOLES IN-PLACE SHALL BE PER DETAIL
- 31. CONSTRUCTION SPECIFICATIONS: ALL WORK ON NEW AND EXISTING SANITARY SEWER IMPROVEMENTS SHALL BE IN ACCORDANCE WITH COTTONWOOD IMPROVEMENT DISTRICT'S MATERIAL AND CONSTRUCTION SPECIFICATIONS (LATEST EDITION), UNLESS NOTED OTHERWISE IN THE CONTRACT DOCUMENTS. THESE CAN BE FOUND AT THE FOLLOWING WEBSITE: https://cottonwoodimprovement.gov/.
- 32. <u>CONFINED SPACES:</u> CONTRACTOR SHALL BE REQUIRED TO MEET ALL FEDERAL CONFINED SPACE IN CONSTRUCTION STANDARDS AS CONTAINED IN THE US DEPARTMENT OF LABOR, OSHA REGULATION 29 CFR, SUBPART AA. COTTONWOOD IMPROVEMENT DISTRICT HAS DETERMINED THAT ALL SANITARY SEWER MANHOLES AND GRAVITY SEWERS ARE CONFINED
- 33. <u>FRAME_AND_COVER_SALVAGE</u>: FOR REMOVED SEWER MANHOLE FRAME AND COVERS, CONTRACTOR SHALL SALVAGE THEIR CASTINGS AND RETURN THEM TO COTTONWOOD IMPROVEMENT DISTRICT
- 34. ASBESTOS CEMENT: IF ASBESTOS CEMENT SEWER LINES ARE ENCOUNTERED AND REQUIRE THEY SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS IN AN APPROVED LOCATION EQUIPPED TO HANDLE SUCH

- 35. EXISTING SEWER LATERALS: EXISTING SEWER LATERAL LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND ARE BASED ON BEST AVAILABLE INFORMATION.
 CONTRACTOR SHALL LOCATE AND RECONNECT ALL EXISTING LATERALS TO NEW MAIN PIPE USING SDR-35 PVC PIPE AND FITTINGS PER SPECIFICATIONS AND REQUIREMENTS.
 UNLESS OTHERWISE NOTED, IF EXISTING LATERAL AND PROPOSED LATERAL PIPES ARE OF DISSIMILAR MATERIALS, CONTRACTOR SHALL PROVIDE AND INSTALL A FERNOO STRONGBACK COUPLING OR MISSION COUPLING TO MAKE CONNECTION BETWEEN THE TWO LATERAL PIPE TYPES. IF EXISTING LATERAL AND PROPOSED LATERAL PIPES ARE OF SIMILAR MATERIALS AND ARE OF PVC, CONTRACTOR SHALL PROVIDE AND INSTALL A GASKETED PVC REPAIR COUPLING AS NEEDED. CONTRACTOR SHALL HAVE THESE FITTINGS ON HAND FOR 4-INCH AND 6-INCH DIAMETERS, PENDING ON THE CONTRACTOR'S VERIFICATION OF THE EXISTING SEWER LATERAL'S SIZE. ANY INTERRUPTION OF SEWER LINE SERVICE SHALL BE COORDINATED WITH PROPERTY OWNERS AND COTTONWOOD IMPROVEMENT DISTRICT.
- 36. <u>REPAIR FITTINGS:</u> CONTRACTOR SHALL HAVE SHEER BAND REPAIR FITTINGS ON HAND FOR VITRIFIED CLAY, CONCRETE, NON-REINFORCED CONCRETE, ASBESTOS CEMENT, ABS,
- 37. PIPE MATERIAL TYPE: NEW SEWER MAINS SHALL BE CENTRIFUGALLY CAST OR FILAMENT WOUND FIBERGLASS REINFORCED POLYMER MORTAR (CCFRPM) PIPING WITH MINIMUM STIFFNESS RATING OF 46 PSI (SN 46) AND NEW LATERALS SHALL BE PVC SDR-35 UNLESS OTHERWISE NOTED. PIPE SIZES SHALL BE AS INDICATED ON THE DRAWINGS
- 38. MARKING TAPE: MARKING TAPE SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF ALL
- 39. TESTING: CONTRACTOR SHALL TEST ALL WORK PERFORMED ON THE SANITARY SEWER SYSTEM. VACUUM TESTS ARE REQUIRED ON ALL NEW SEWER MANHOLES. IN THE EVENT OF A LEAK, THE CONTRACTOR SHALL LOCATE THE LEAKAGE AND RESTACK, RESEAL, AND RETEST SEWER MANHOLE AT NO ADDITIONAL COST TO THE OWNER. AIR TESTS ARE REQUIRED ON ALL NEW SEWER PIPE SEGMENTS THAT WON'T HAVE SEWER LATERAL(S) CONNECTED TO THEM. IN THE EVENT OF A LEAK, THE CONTRACTOR SHALL LOCATE THE LEAKAGE, REPAIR THE LEAK, AND RETEST THE PIPE SEGMENT AT NO ADDITIONAL COST. TO THE OWNER. A CCTV INSPECTION OF EACH COMPLETED PIPE SEGMENT (MANHOLE TO MANHOLE) IS REQUIRED BEFORE PAYMENT OF THAT SEGMENT. A FINAL CCTV INSPECTION OF THE ENTIRE INSTALLATION WILL BE REQUIRED AFTER COMPLETION OF THE SEWER SYSTEM, INCLUDING FINAL MANHOLE ADJUSTMENT. TESTS SHALL BE IN ACCORDANCE WITH COTTONWOOD IMPROVEMENT DISTRICT'S SPECIFICATIONS AND REQUIREMENTS.
- 40. SEWER MAIN CONNECTIONS: COORDINATE CONNECTION OF EXISTING SEWER MAINS TO NEW SEWER MAINS WITH DISTRICT INSPECTOR PRIOR TO PERFORMING THE WORK.
- 41. PIPE SLOPES AND LENGTHS: UNLESS OTHERWISE SHOWN, PIPE SLOPE AND DISTANCES SHOWN IN PROFILES ARE FROM INSIDE EDGE OF MANHOLE. CONTRACTOR SHALL EXTEND PIPE INTO MANHOLE AS REQUIRED PER MANHOLE MANUFACTURER REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR DETERMINING ACTUAL PIPE LENGTH QUANTITIES
- 42. BYPASS PUMPING: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP ALL EXISTING ACTIVE SEWER MAIN LINES AND LATERALS IN SERVICE AT ALL TIMES DURING CONSTRUCTION PER SPECIFICATIONS. ANY INTERRUPTION OF SEWER LINE SERVICE SHALL BE COORDINATED WITH PROPERTY OWNERS. BYPASS PUMPING OR OTHER MEANS MAY BE NECESSARY AND SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ACTUAL PEAK FLOWS DURING CONSTRUCTION MAY EXCEED ESTIMATED CONDITIONS. CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE BYPASS PUMPING NEEDS. CONTRACTOR SHALL PROVIDE A PLAN TO PROTECT BYPASS PUMPING LINES USED DURING CONSTRUCTION TO CROSS DRIVEWAYS, STREETS, ETC. AS PART OF THE BYPASS PUMPING PLAN. BYPASS PLANS USING PUMPING FOUIPMENT SHALL INCLUDE CONTINUOUS (24 HR/DAY) MONITORING BY A QUALIFIED INDIVIDUAL OF THE PUMPING EQUIPMENT AND PUMPING REDUNDANCY (ALL EQUIPMENT, PUMPS, ETC. (EXCLUDING PIPING)). PLAN SHALL ALSO INCLUDE PUMPING CALCULATIONS PUMP CURVES PIPING INFO. THRUST RESTRAINT METHODS WHERE NEEDED, ROAD RAMPS/BRIDGES WHERE NEEDED, SIGN NOTIFICATIONS WHERE NEEDED, TRAFFIC LIGHTS WHERE NEEDED, REFLECTIVE BARRICADES AS NEEDED, ETC. THE WORDING ON THE SIGNS SHALL BE APPROPRIATE FOR THE SITUATION. ALL RAMPS/BRIDGES SHALL BE IN COMPLIANCE WITH ADA REQUIREMENTS AND STANDARDS. CONTRACTOR SHALL PROVIDE SPILL CONTAINMENT FOR ALL EQUIPMENT AND FUEL STORAGE AT THE PUMPING SITES. RESTORATION OF ALL AREAS DISTURBED BY BYPASS PUMPING OPERATIONS SHALL BE TO THE SATISFACTION OF PROPERTY OWNERS, UDOT AND CITY STANDARDS. ESTIMATED 2025 PEAK FLOWS FOR THE SEWER LINES THAT MAY NEED BYPASS PUMPING ARE SHOWN IN GPM ON THE PLAN VIEW OF THE SEWER CONSTRUCTION DRAWINGS UPSTREAM OF ALL MANHOLES WHERE SEWER FLOW IS INTRODUCED INTO THE SYSTEM ALONG THE PROJECT ALIGNMENT, BYPASS PUMPING HOSES SHALL BE FUSED HDPE OR POLYURETHANE LAYFLAT HOSE BY MIDWEST HOSE & SPECIALTY AND INSTALLED PER THE MANUFACTURER'S GUIDELINES. COORDINATE BYPASS PUMPING WITH COTTONWOOD IMPROVEMENT DISTRICT.
- 43. PIPE ZONE AND TRENCH BACKFILL: FOR PIPE ZONE AND TRENCH BACKFILL MATERIAL AND COMPACTION REQUIREMENTS SEE
- 2006 44. MANHOLES: MANHOLES ARE 6-FT TO 8-FT IN DIAMETER (SEE DRAWINGS) AND_SHALL HAVE VENTED LIDS. MANHOLES SHALL BE ACID RESISTANT CONCRETE. SIM 2002
- 45. SEWER TIE INS: FIELD VERIFY TIE IN LOCATION FOR SEWER LINES PRIOR TO COMMENCING WORK. REPORT ANY DISCREPANCIES BETWEEN EXPECTED LOCATION AND ACTUAL LOCATION TO THE ENGINEER IMMEDIATELY.
- 46. NOT USED

- 47. JORDAN AND SALT LAKE CANAL RIGHT-OF-WAY: THE FOLLOWING CONDITIONS APPLY TO WORK IN THE JORDAN AND SALT LAKE CANAL (JSLC) RIGHT-OF-WAY (SEE DRAWING
 - A. NOTIFICATION MUST BE GIVEN AT LEAST 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION WORK AND RE-NOTIFICATION OF RE-COMMENCEMENT OF WORK FOLLOWING ANY CESSATION OF WORK FOR MORE THAN 4 (FOUR) DAYS MUST BE GIVEN. CALL DAVE MAIORANO, THE SALT LAKE CITY PUBLIC UTILITIES IRRIGATION SUPERVISOR (SLCDPU). FAILURE TO DO SO WILL RESULT IN A \$5,000 FINE.
 - B. CONTACT INFORMATION FOR SLCDPU:
 - DAVE MAIORANO, SI CDPU, IRRIGATION SUPERVISOR, 801-483-6784. • KARRYN GREENLEAF, SLCDPU, PROPERTY AND EASEMENTS, 801-483-6769
 - ANY CHANGES IN DESIGN DRAWINGS AFTER THE ENCROACHMENT AGREEMENT HAS BEEN EXECUTED MUST BE REVIEWED AND ACCEPTED BY SLCDPU.
 - D. WORK CANNOT INTERFERE WITH DELIVERY OF WATER THE CONTRACTOR MUST HAVE BORE PITS AND TRENCHLESS BORING EQUIPMENT READY BY OCTOBER 01, 2025 AND CONTRACTOR CAN'T START THE TRENCHLESS BORING UNTIL OCTOBER 02, 2025. CONSTRUCTION WITHIN JSLC CORRIDORS MUST BE COMPLETED BETWEEN OCTOBER 02, 2025 AND OCTOBER 30, 2025.
 - E. ALL CONSTRUCTION WITHIN CANAL CORRIDOR MUST BE COMPLETED TO SLCDPU STANDARDS.
 - F. IF DISTURBED, CANAL OPERATION AND MAINTENANCE ROAD (0&M ROAD) MUST BE RETURNED TO PRECONSTRUCTION STATE OR BETTER, FOLLOWING CONSTRUCTION.

 O&M ROAD MUST BE AVAILABLE FOR USE BY SLCDPU PERSONNEL NO LATER THAT
 - G. CANALS MAY COLLECT WATER DURING STORM EVENTS OR AT OTHER UNEXPECTED TIMES. THIS WATER WILL NEED TO BE BYPASSED IF THE SYSTEM IS BLOCKED IN
 - H. CONTRACTOR TO NOTIFY DAVE MAIORANO OF SLCDPU WHEN TRENCH PLUGS (CLAY DAMS) ARE INSTALLED, VERIFICATION OF TRENCH PLUG (CLAY DAM) COMPLETION MUST BE PERFORMED BY SLCDPU BEFORE BACKFILLING. DAVE MAIORANO CAN BE REACHED AT 801-483-6784.
 - IF DISTURBED CANAL FLOOR AND EMBANKMENT MATERIAL REMOVED FOR EXCAVATION SHALL BE REPLACED WITH 24-INCH MINIMUM THICKNESS OF 10⁻⁶ CM/SEC PERMEABILITY CLAY MATERIAL, COMPACTED TO 96-PERCENT MODIFIED PROCTOR IN 6-INCH MAXIMUM LIFTS.
 - J. IF DISTURBED, CANAL EMBANKMENT SHALL BE SHAPED TO MATCH THE EXISTING
 - K. APPLICANT IS REQUIRED TO PERFORM COMPACTION TESTING AT THE APPLICANT'S COST. TEST RESULTS MUST BE SUBMITTED TO SLCDPU. ALL FAILED MATERIAL SHALL BE REMOVED AND COMPACTED TO SPECIFICATIONS. TESTING MUST BE PERFORMED BY A LICENSED SOILS LAB
 - OPEN-CUT TRENCHES SHALL BE CUT AT MINIMUM 2 HORIZONTAL TO 1 VERTICAL SO THAT BACKFILL CAN PROPERLY COMPACTED.
 - PIPE ZONE BACKFILL SHALL BE LEAN CONCRETE CONFORMING TO CONCRETE FOR FILL REQUIREMENTS OF THE SPECIFICATIONS. LEAN CONCRETE SHALL BE INSTALLED UP TO BOTTOM OF 12-INCH CLAY LAYER.
 - N. CONTRACTOR SHALL POTHOLE AND LOCATE THE TOP OF THE NEW CASING ON BOTH-SIDES OF THE CULVERT DURING THE BORE TO CONFIRM ELEVATIONS OF THE NEW
 - O. CONTRACTOR SHALL PROVIDE CAMERA INSPECTION OF THE INSIDE OF THE BOX CULVERT BEFORE THE TRENCHLESS BORING AND AFTER THE TRENCHLESS BORING. AN SLCDPU INSPECTOR MUST BE ON SITE DURING THE CAMERA INSPECTION, IF INSIDE OF THE BOX CULVERT REQUIRES CLEANING PRIOR TO CAMERA INSPECTION. THE CONTRACTOR MUST PROVIDE THIS SERVICE.
- 48. LANDSCAPE RESTORATION: IN LANDSCAPED OR UNPAVED AREAS. CONTRACTOR SHALL STRIP, STOCKPILE, AND REPLACE EXISTING TOPSOIL (MIN. TOP 12 INCHES OF MATERIAL) WITHIN THE TRENCH CUT. CONTRACTOR SHALL GRADE AND RESTORE GROUNDING MATCHING OR EXCEEDING ORIGINAL LANDSCAPING CONDITIONS. THIS INCLUDES, BUT NOT LIMITED TO: TOPSOIL, GRASS, TREES, BUSHES, SIDEWALK, STAIRS, CONCRETE SLABS, SPRINKLERS, AND LANDSCAPE ROCKS. CONTRACTOR SHALL COORDINATE RESTORATION WITH PROPERTY OWNER PRIOR TO PERFORMING THE WORK.





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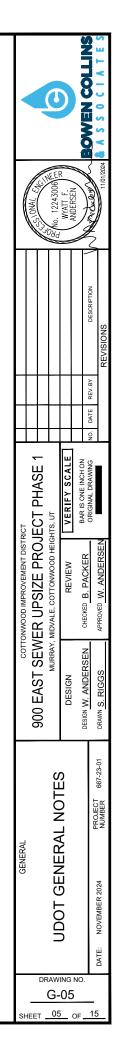
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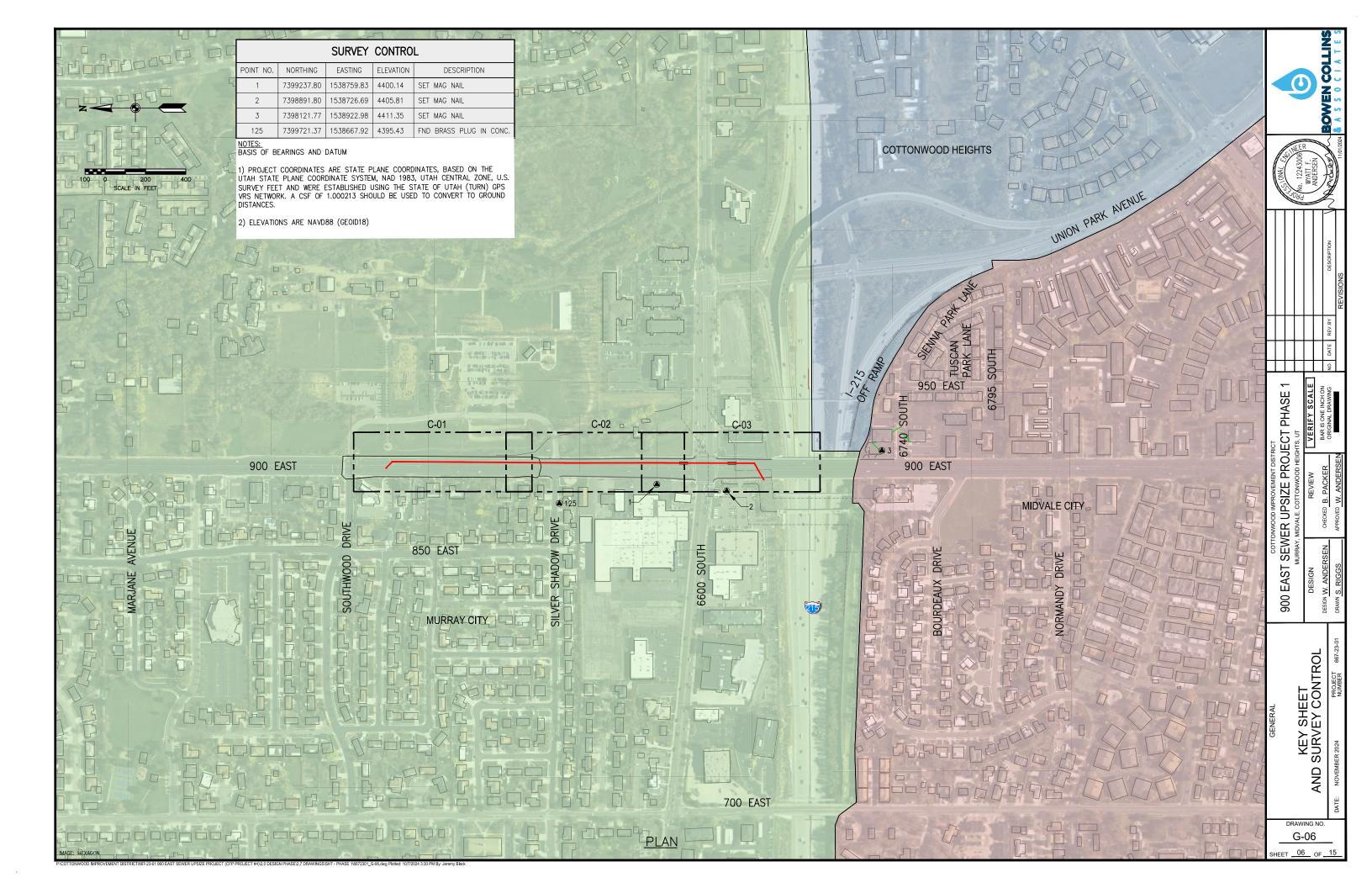
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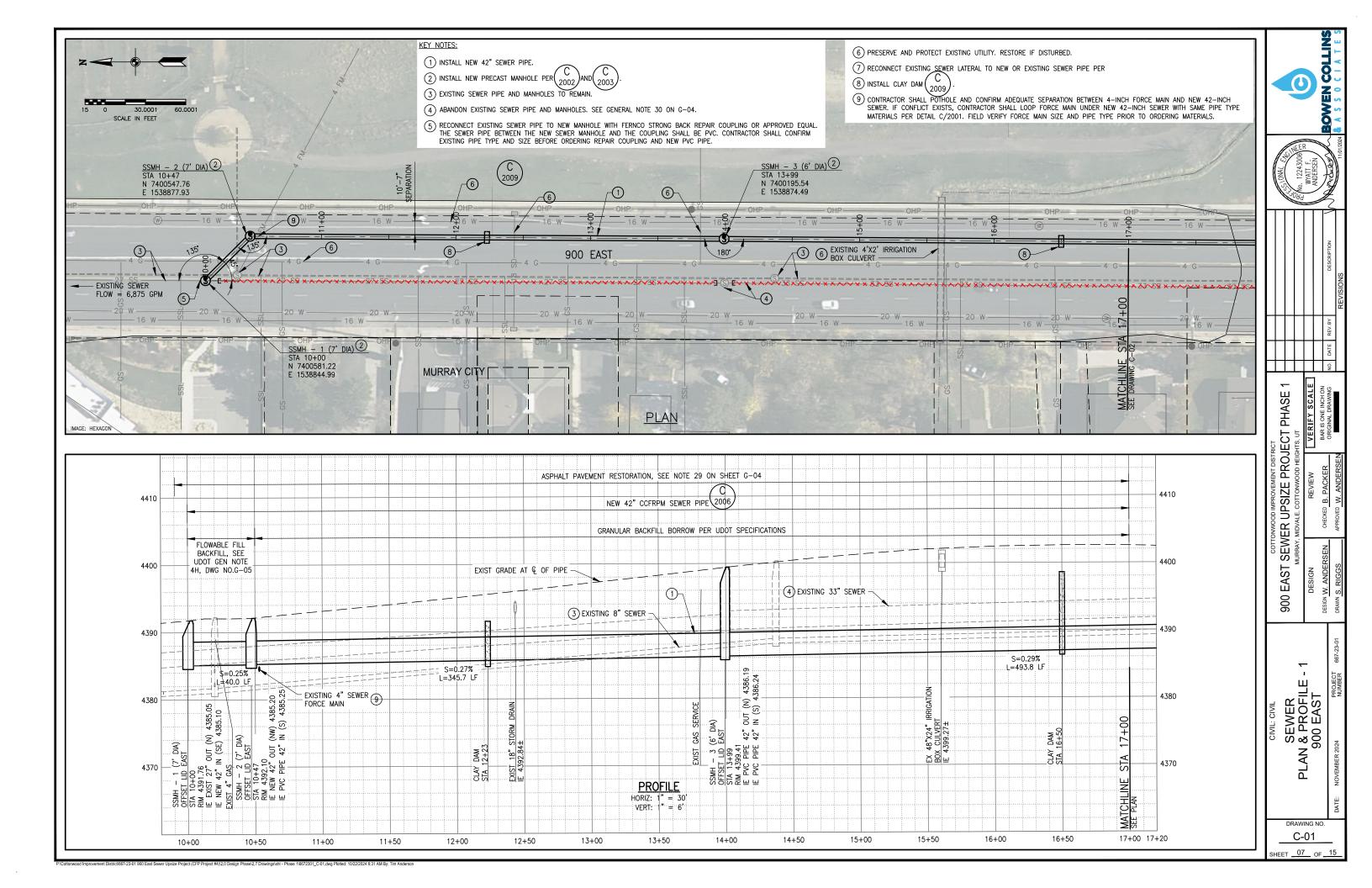
UDOT GENERAL NOTES

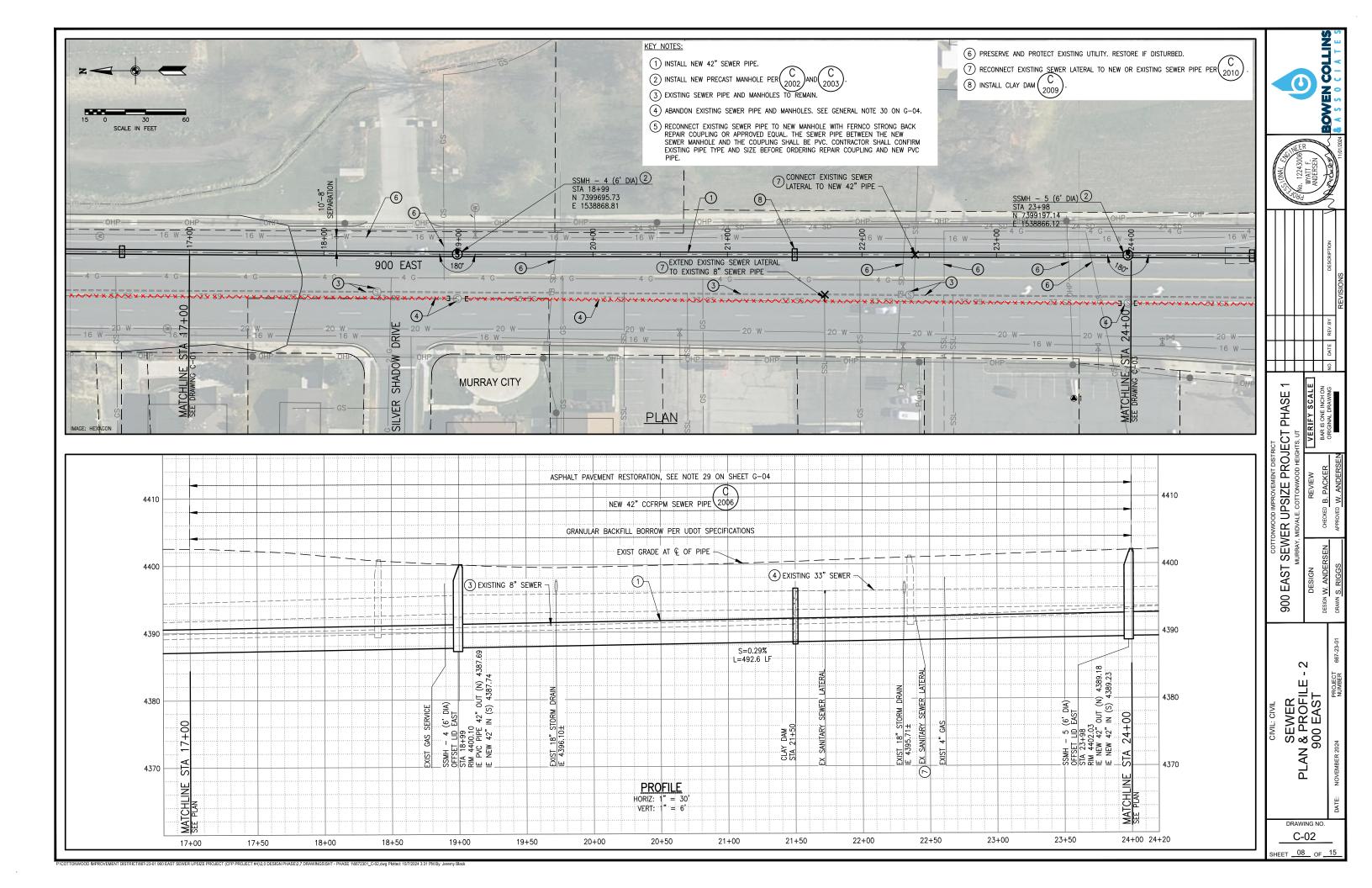
- THE CONTRACTOR SHALL PREPARE AND SUBMIT TRAFFIC CONTROL PLANS FOR REVIEW AND APPROVAL BY UDOT MEETING MUTCD REQUIREMENTS. CONTRACTOR SHALL INSPECT TRAFFIC CONTROL DEVICES DAILY (NIGHT AND DAY) BY A CERTIFIED TRAFFIC CONTROL MAINTAINER TO ASSURE TRAFFIC CONTROL IS FUNCTIONING PROPERLY. WORK WILL NOT BEGIN UNTIL THE PLANS HAVE BEEN APPROVED AND THE CONTRACTOR HAS OBTAINED A UDOT ENCROACHMENT PERMIT AND A NOISE ORDINANCE WAIVER. CONCRETE JERSEY BARRIERS SHALL BE INSTALLED AROUND ANY OPEN CUT TRENCHES. JERSEY BARRIERS SHALL BE REMOVED WHEN OPEN CUT TRENCHES ARE COVERED WITH STEEL PLATING OR WHEN TRENCHES ARE BACKFILLED
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR WETTING DOWN DRY MATERIAL FOR DUST
- 3. ANY TRAFFIC SENSOR LOOPS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH UDOT SPECIFICATIONS BY A UDOT APPROVED CONTRACTOR
- 4. THE FOLLOWING CONDITIONS APPLY TO CONSTRUCTION WITHIN THE UDOT
 - WORK WITHIN THE UDOT RIGHT-OF-WAY SHALL BE COMPLETED BETWEEN APRIL 15 AND NOVEMBER 15. NO WORK OUTSIDE THESE TIMES IS ALLOWED.
 - B. UDOT RESERVES THE RIGHT, AT ITS OPTION, TO INSTALL A RAISED MEDIAN ISLAND OR RESTRICT THE DRIVER'S ACCESS TO A RIGHT-IN OR RIGHT-OUT AT
 - C. CONTRACTOR MAY NOT CLOSE MORE THAN ONE LANE AT ANY TIME DURING DAYTIME HOURS (9 AM — 3:30 PM). ADDITIONAL WORK RESTRICTIONS OR MODIFICATIONS MAY BE IMPOSED AT THE TIME OF THE ENCROACHMENT PERMIT. WORK GENERALLY IS NOT ALLOWED IN THE UDOT ROADWAY DURING THE AM/PM PEAK TRAFFIC HOURS (5:00 AM - 9 AM AND 3:30 PM - 9:00 PM). NO JACKHAMMERING OR SAWCUTTING BETWEEN THE HOURS OF 10:00 PM TO 5:00 AM. WEEKEND HOURS MAY BE EXTENDED UPON WRITTEN APPROVAL FROM
 - D. REPLACE ALL PAVEMENT MARKINGS IN KIND (TAPE WITH TAPE AND PAINT WITH PAINT). INSTALL ALL PAINT LINES WITH PERMANENT PAINT APPLICATION PER UDOT SPECIFICATION 02765. PAINT MUST HAVE AT LEAST 6 MONTHS LIFE AS DETERMINED BY UDOT'S PERMITS OFFICER.
 - E. ALL NEW PAVEMENT WORDS, ARROWS AND SYMBOLS MARKING WITHIN THE RIGHT-OF-WAY SHALL BE PRE-FORMED THERMO PLASTIC. ALL LETTERS. ARROWS, AND SYMBOLS SHALL CONFORM WITH THE "STANDARD ALPHABET FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" ADOPTED BY THE FEDERAL HIGHWAY
 - F. ALL SIGNS INSTALLED ON THE UDOT RIGHT-OF-WAY MUST BE BE HIGH INTENSITY GRADE (TYPE IX SHEETING) WITH A B3 SLIP BASE. INSTALL ALL SIGNS PER UDOT SN SERIES DRAWINGS.
 - G. BEFORE COMMENCING WORK ON THE STATE ROADWAY, THE CONTRACTOR WHO IS AWARDED THE PROJECT MUST HAVE A PERFORMANCE BOND ON FILE WITH UDOT, OBTAIN AN ENCROACHMENT PERMIT FROM THE REGION TWO PERMITS OFFICE, AND PROVIDE PROOF OF LIABILITY INSURANCE IN THE UTAH DEPARTMENT OF TRANSPORTATION'S NAME. THE MINIMUM AMOUNT IS \$1,000,000 PER OCCURRENCE AND \$2,000,000 IN AGGREGATE, FOR DETAILS, CONTACT 801-975-4808.
 - H. FOR ALL UTILITY ROAD CUTS PERPENDICULAR TO THE UDOT RIGHT-OF-WAY AND IN UDOT INTERSECTIONS (INCLUDING ALL UTILITY SERVICES AND HYDRANTS), FLOWABLE FILL SHALL BE USED AS BACKFILL PER UDOT'S CURRENT MIX DESIGN (50-150 PSI) UDOT SPEC. 03575. FLOWABLE FILL SHALL EXTEND FROM THE TOP OF PIPE ZÓNE TO THE BOTTOM OF ASPHALT WITHOUT ANY BASE COURSE. FOR ALL OTHER EXCAVATION UNPAVED PORTIONS OF THE UDOT RIGHT-OF-WAY, THE CONTRACTOR SHALL BACKFILL WITH 12" MIN UDOT APPROVED ROAD BASE AND COMPACT PER UDOT SPEC. 02721 (6" LIFTS AND MEET 97% COMPACTION).
 - CONTRACTOR IS REQUIRED TO HIRE AN INDEPENDENT TESTING COMPANY FOR ALL MATERIAL TESTING WITHIN THE UDOT RIGHT-OF-WAY. THE COMPANY MUST BE LISTED ON UDOT'S WEBSITE.
 - J. OWNER AND CONTRACTOR ARE RESPONSIBLE FOR ANY DAMAGE TO THE UDOT RIGHT-OF-WAY THAT MAY BE DIRECTLY OR INDIRECTLY CAUSED BY CONSTRUCTION ACTIVITIES. FOR CURB AND GUTTER INLETS, SEE STD. DWG. NO. CB 1, FOR CURB AND GUTTERS, SEE DETAIL TYPE B2-A ON STD. DWG. NO. GW 2B, AND FOR SIDEWALK, SEE STD. DWG. NO. GW 3A (SIM) IN UDOT'S STANDARDS AND SPECIFICATIONS
 - K. TRAFFIC SIGNAL INSTALLATION OR MODIFICATION REQUIRES A SEPARATE WARRANTY BOND ONCE THE WORK HAS BEEN COMPLETED AND ACCEPTED. THE PERMITTEE IS RESPONSIBLE FOR HIRING AN INDEPENDENT INSPECTION COMPANY TO PERFORM INSPECTION SERVICES FOR ALL SIGNAL WORK COMPLETED. FOR A LIST OF UDOT APPROVED CONTRACTORS AND CONSULTANTS CONTACT THE REGION 2 TRAFFIC SIGNALS ENGINEER
 - PARTIAL ADA RAMP REPLACEMENT IS NOT ALLOWED. WHEN PART OF AN ADA RAMP MUST BE REMOVED, THE ENTIRE RAMP IS REQUIRED TO BE REPLACED PER UDOT STANDARDS, SPECIFICATIONS, AND STANDARD DRAWINGS. A UDOT CERTIFIED INSTALLER IS REQUIRED TO REPLACE ADA RAMPS.
 - M. PLATES OVER TRENCHES SHALL BE MILLED INTO THE ASPHALT IN UDOT RIGHTS-OF-WAY AND BUMP SIGNS PLACED ACCORDING TO UDOT SPECIFICATIONS.
 - N. EACH LANE DISTURBED BY MORE THAN HALF THE LANE WIDTH SHALL BE MILLED AND OVERLAID WITH ONE INCH OGSC ASPHALT (UDOT SPEC 02786)

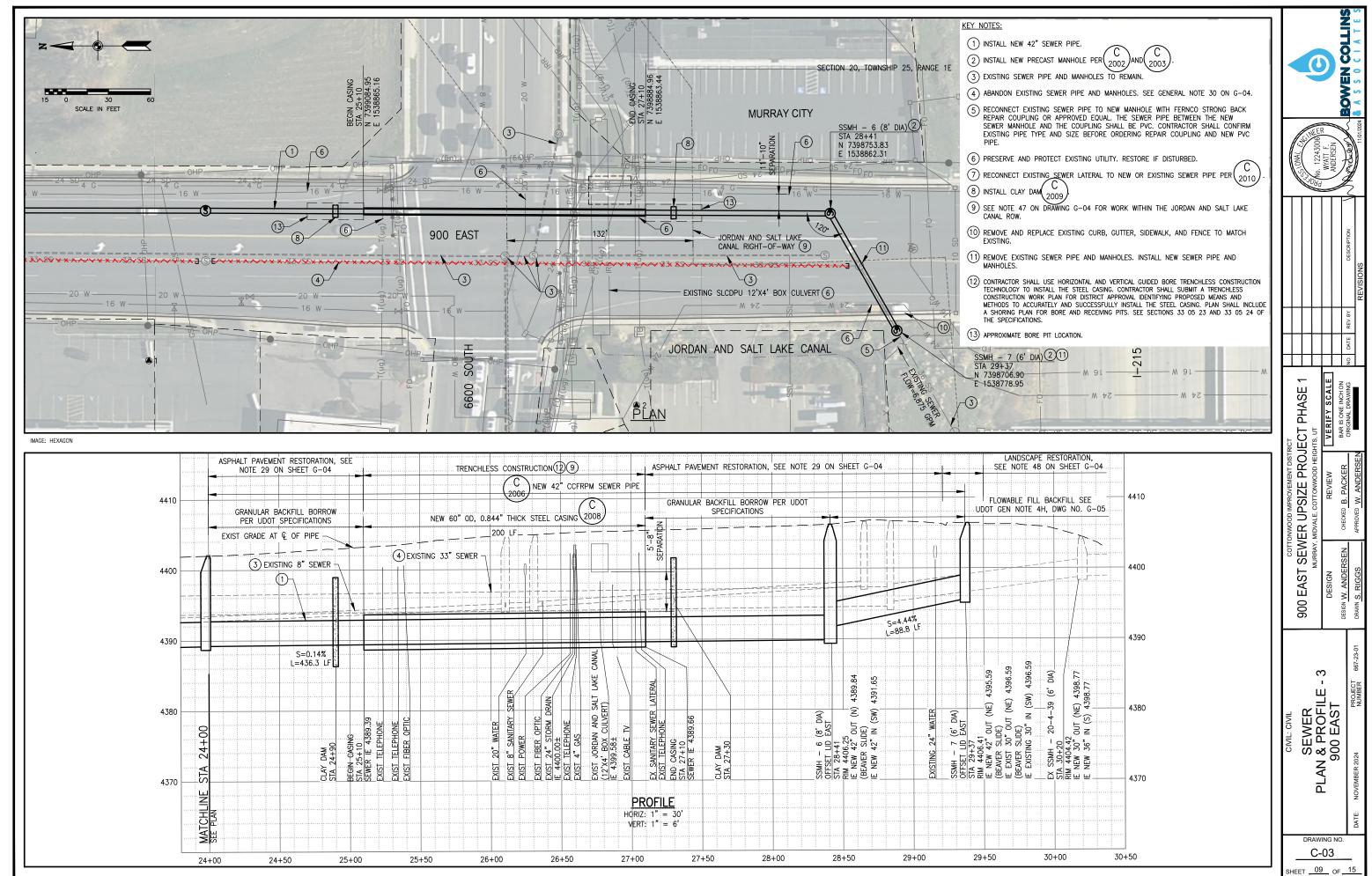


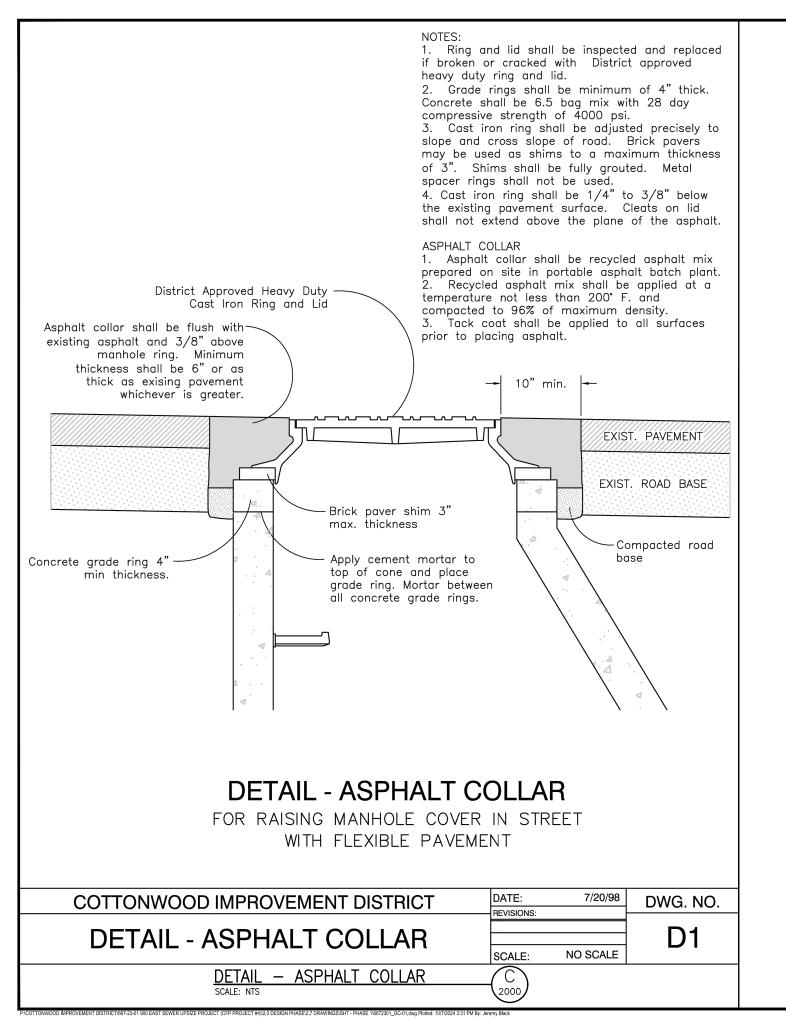
FOR THE FULL LANE WIDTH. TRENCHES IN INTERSECTIONS WITHIN UDOT R.O.W. WILL BE MILLED AND OVERLAID 20 FEET TO EACH SIDE OF THE TRENCH UNLESS OTHERWISE DIRECTED BY UDOT. NO ASPHALT SEAMS ALLOWED IN THE WHEEL RUT OF A LANE. LANES WITH DISTURBANCES LESS THAN HALF THE WIDTH SHALL BE MILLED AND OVERLAYED TO THE MIDDLE OF THE LANE. O. ALL PAVING IN A STATE ROAD SHALL BE PG 64-28 HMA OR BETTER MEETING UDOT STANDARDS. PAVEMENT THICKNESS SHALL BE 7" MINIMUM AND ROAD BASE THICKNESS SHALL BE 8" MINIMUM COMPACTED TO 97% (EACH). LIFTS SHALL BE IN ACCORDANCE WITH UDOT STANDARDS. ALL PAVING SHALL TAKE PLACE BETWEEN APRIL 15 TO OCTOBER 15. TRENCH EXCAVATION IN ROADWAY SHALL NOT EXCEED MORE THAN 500 FT LONG UNTIL THE ASPHALT PAVING IS RESTORED. UDOT SHALL APPROVE ASPHALT SUBMITTALS PRIOR TO INSTALLATION. CONTRACTOR MUST PROVIDE ACCESS TO BUSINESSES DURING BUSINESS HOURS AND PROVIDE APPROPRIATE SIGNAGE.







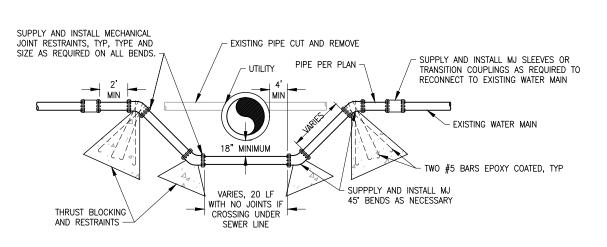




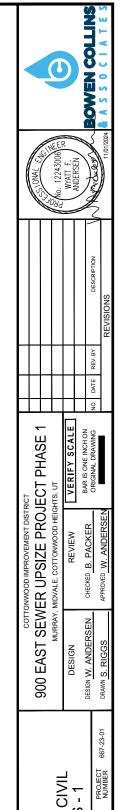
- ALL BENDS, COUPLINGS OR FITTINGS TO BE RATED BETTER THAN OR EQUAL TO ANSI/AWWA-C110/A21.10 AND ANSI/AWWA-C111/A21.11 STANDARDS @ A MIN PRESSURE RATING OF 350 PSI FOR DUCTILE IRON.
- 2. ALL DUCTILE IRON PIPE TO BE RATED EQUAL TO ANSI/AWWA-C151/A21.51, ANSI/AWWA-C111/A21.11 AND ANSI/AWWA C150/A21.50 STANDARDS, THICKNESS CLASS 52 MIN.
- 3. ALL PIPE, FITTINGS, COUPLINGS, THRUST RESTRAINTS AND BLOCKING ARE TO BE IN ACCORDANCE WITH AWWA SPECIFICATIONS AND APWA REQUIREMENTS UNLESS OTHERWISE SPECIFIED.
- 4. ALL BURIED REBAR, FITTINGS, COUPLINGS, VALVES AND MECHANICAL JOINT NUTS AND BOLTS ARE TO BE COATED WITH NON OXIDE GREASE CHEVRON FM 1 OR APPROVED EQUAL, COVERED WITH 8 MIL MIN POLYETHYLENE SHEETING, AND TAPE WRAPPED WITH AWWA C209 OR 214, 70 MIL MIN THICKNESS.
- CONNECTIONS TO STEEL OR TRANSIT PIPE WILL REQUIRE TRANSITION COUPLINGS OR SLEEVES WITH TRANSITION GASKETS AS REQUIRED.
- 6. ALL CROSSINGS OR LOOPS UNDER OR OVER OTHER UTILITIES ARE TO BE INSTALLED IN ACCORDANCE WITH THE UTAH PUBLIC DRINKING WATER REGULATIONS, CURRENT REVISIONS.
- 7. MATERIALS SUBSTITUTIONS TO BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION AND IN ACCORDANCE WITH SPECIFICATIONS
- ALL BENDS AND FITTINGS SHALL REMAIN EXPOSED UNTIL ENGINEER OR OWNER HAS COMPLETED ALL REQUIRED MEASUREMENTS OF THE INSTALLED LOOP. LOOPS BURIED PRIOR TO MEASUREMENT WILL BE REQUIRED TO BE COMPLETELY EXCAVATED AND RE-BACKFILLED AT THE CONTRACTOR'S EXPENSE.

- DRAWING IS INTENDED FOR REFERENCE ONLY, CONTRACTOR TO PROVIDE ALL FIELD MODIFICATIONS REQUIRED TO COMPLETE THE INSTALLATION AS REQUIRED BY ENGINEER.
- 10. PRIOR TO POURING CONCRETE FOR THRUST BLOCKS, WRAP PIPE SYSTEM WITH 8 MIL THICK PLASTIC SHEET TO PREVENT BONDING OF CONCRETE TO PIPE SYSTEM.
- 11. BEARING SURFACE SHOULD, WHERE POSSIBLE, BE PLACED AGAINST UNDISTURBED SOIL. WHERE NOT POSSIBLE, FILL BETWEEN THE BEARING SURFACE AND UNDISTURBED SOIL SHOULD BE COMPACTED TO 90% STD. PROCTOR DENSITY, MINIMUM.

NOTE TO SPECIFIER: INSTALL AIR VALVE PER OWNER PREFACE ON UPHILL SIDE OF LOOP



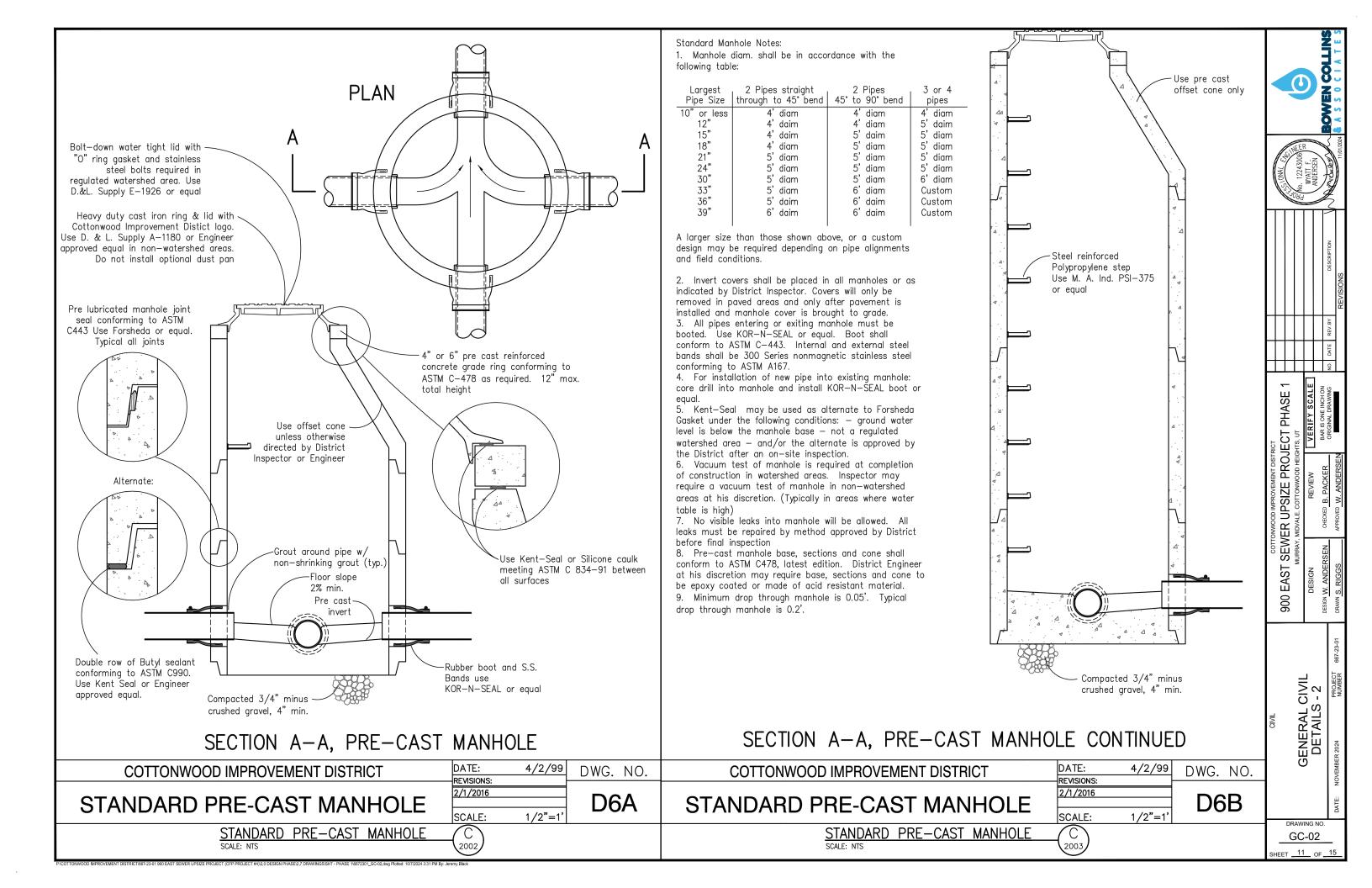
4" THRU 12" WATER MAIN LOOP

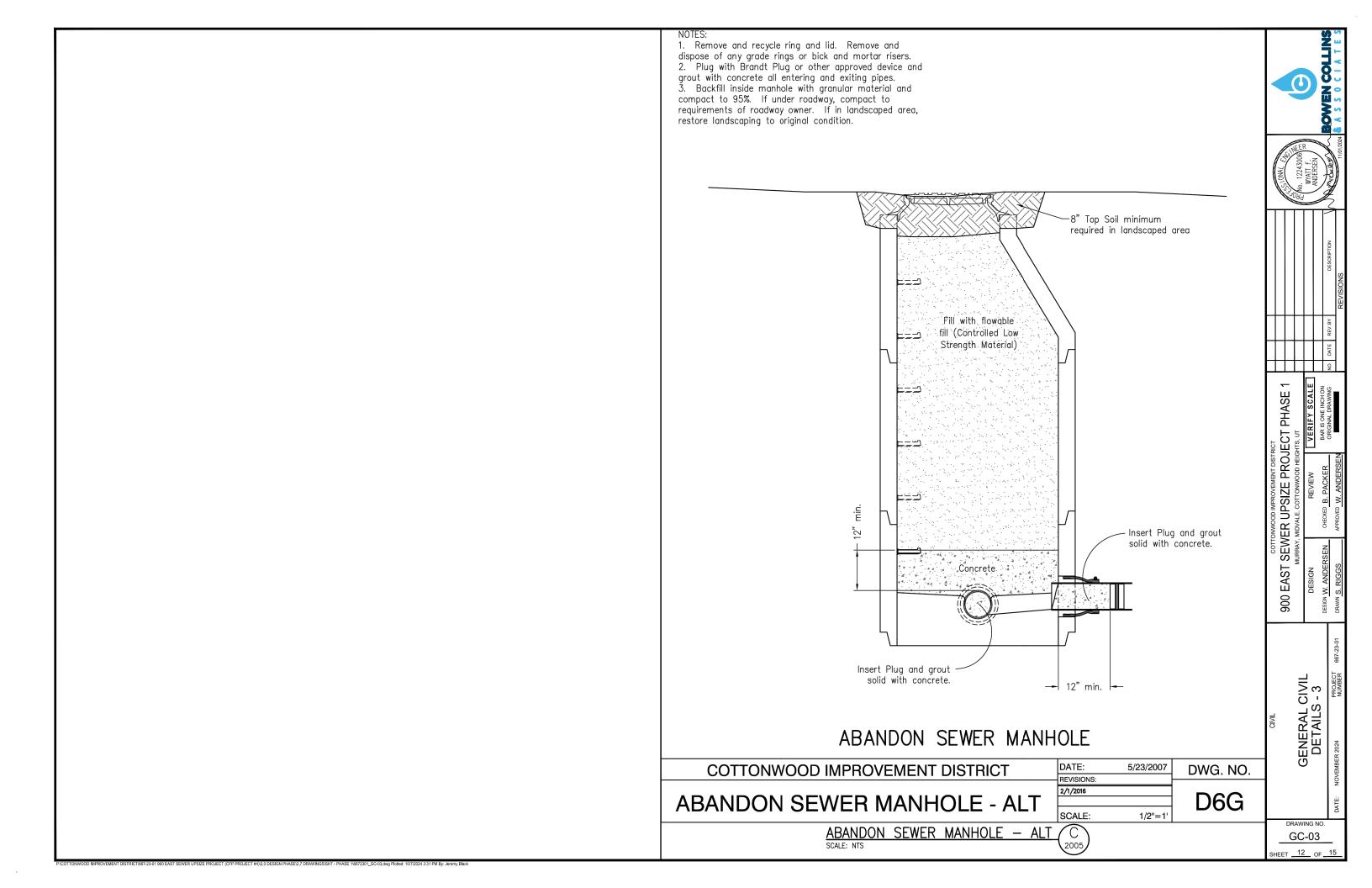


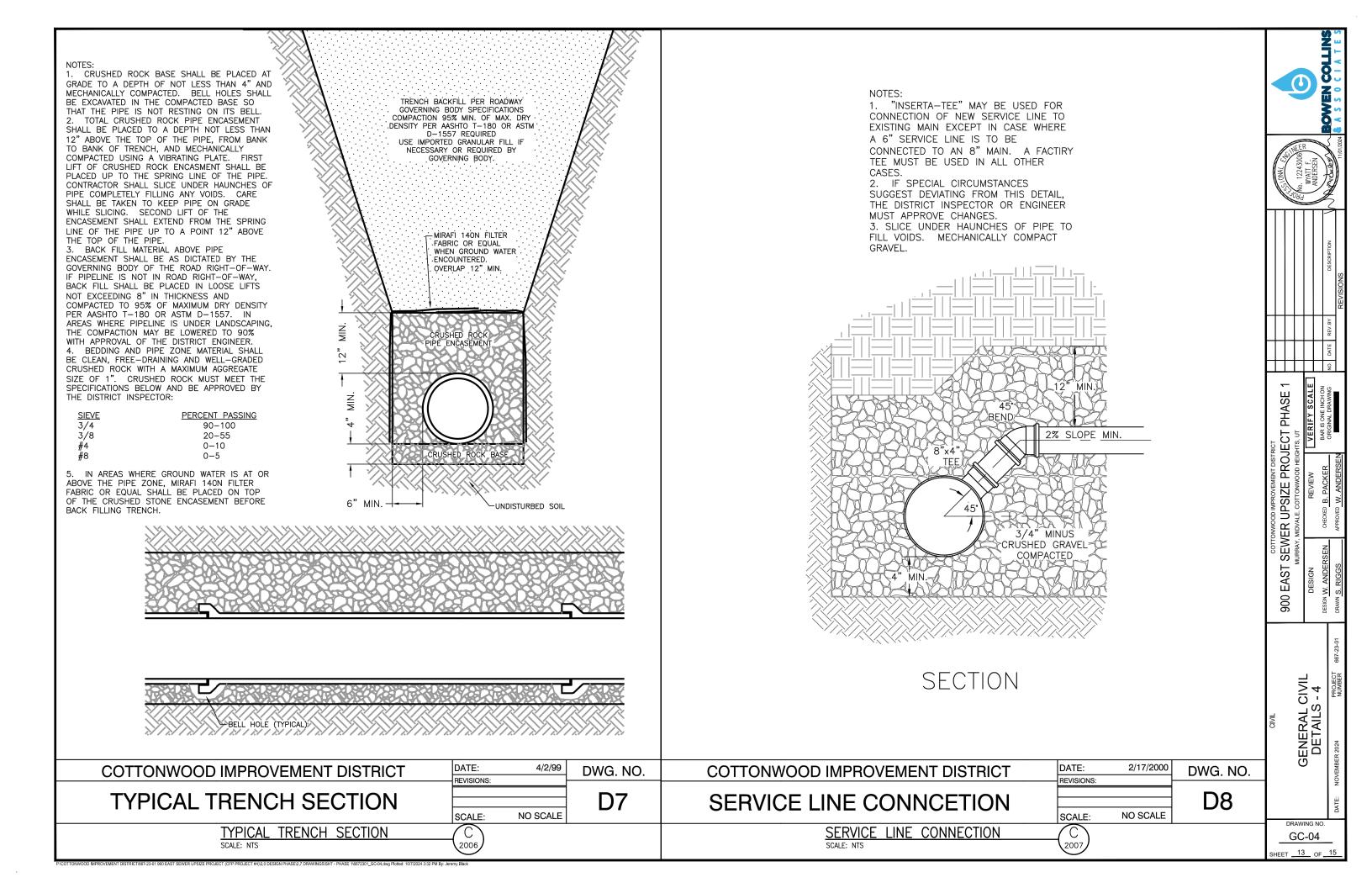
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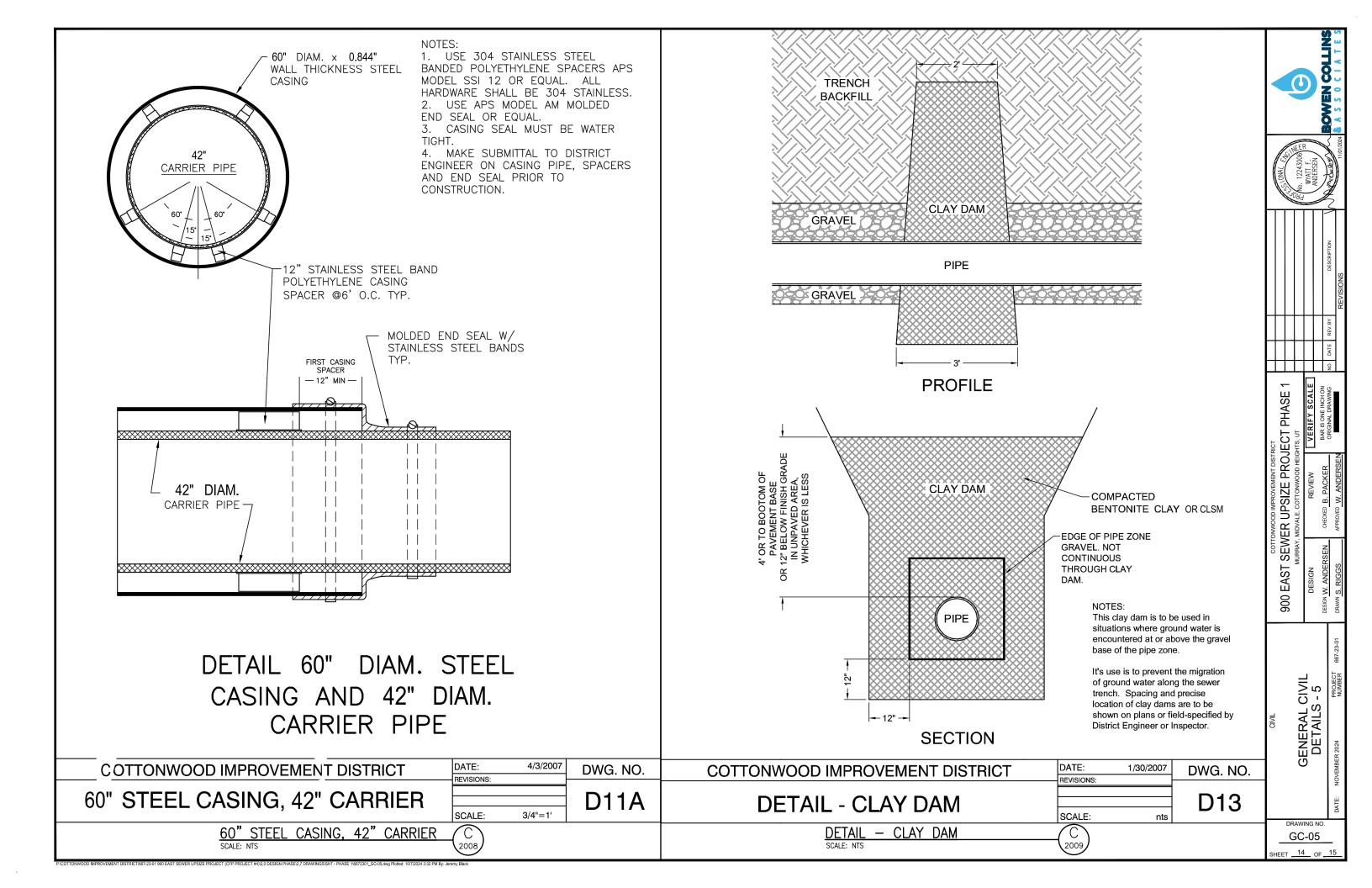
GC-01

SHEET 10 OF 15









NOTES: 1. IF SPECIAL CIRCUMSTANCES SUGGEST DEVIATING FROM THIS DETAIL, THE DISTRICT INSPECTOR OR ENGINEER MUST APPROVE CHANGES. 2. SLICE UNDER HAUNCHES OF PIPE TO FILL VOIDS. MECHANICALLY COMPACT GRAVEL. 2% SLOPE MIN. STAINLESS STEEL BANDED COUPLER WITH STAINLESS STEEL SHEAR BAND MISSION OR FERNCO

22° or 45°

SECTION

3/4" MINUS 3 CRUSHED GRAVEL COMPACTED

COTTONWOOD IMPROVEMENT DISTRICT	DATE:	2/4/2013	DWG. NO.
SERVICE LINE RE-CONNCETION	20415	1"=1'	D14
SERVICE LINE RE—CONNECTION SCALE: NTS	SCALE: -(2010)	1"=1"	

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						DESCRIPTION	REVISIONS
						REV. BY	
						NO. DATE	
ISTRICT	DOINPROVEMENT DISTRICT		EIGHTS, UT	VERIFY SCALE	NO HONI HINO SI MAN	ORIGINAL DRAWING	
COTTONWOOD IMPROVEMENT DISTRICT		_	MURRAY, MIDVALE, COTTONWOOD HEIGHTS, UT	REVIEW		CHECKED B. PACKER	APPROVED W. ANDERSEN
ЩОО	MIO TO A DOO	SOU EAST SEVER	MURRAY	DESIGN		DESIGN W. ANDERSEN	DRAWN S. RIGGS
CIVIL					DELAILS - 6		DATE: NOVEMBER 2024 PROJECT 667-23-01
SH	-HEE	C		ING -0			. 5