MIDWAY CITY

NORTH CENTER STREET - WATER & SEWER IMPROVEMENTS 2024

MIDWAY CITY

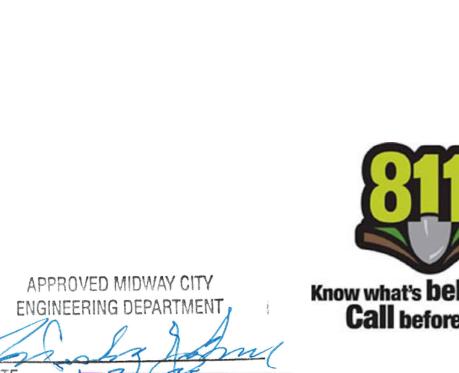
CELESTE JOHNSON	····· MAYOR
LISA ORME······	···· COUNCIL MEMBER
JEFF DRURY	···· COUNCIL MEMBER
JC SIMONSEN · · · · · · · · · · · · · · · · · · ·	COUNCIL MEMBER
CRAIG SIMONS	···· COUNCIL MEMBER
KEVIN PAYNE	···· COUNCIL MEMBER
WESLEY JOHNSON, PE	CITY ENGINEER

ENGINEERING CONSULTANTS (SE)

DEREK ANDERSON, PE PRINCIPAL ENGINEER JOHN KEYSER, PE PROJECT ENGINEER









	ABBREV	ΊΑΤΙΟ	ONS
AB	ANCHOR BOLT	JT.	JOINT
ALT.	ALTERNATE	J.B.	JUNCTION BOX
ALUM.	ALUMINUM	U.D.	LENGTH
ACI	AMERICAN CONCRETE INSTITUTE	_	LINEAR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LF	LINEAR FEET
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	МН	MANHOLE
۷	ANGLE	MFR.	MANUFACTURER
APPROX. or ~	APPROXIMATELY	MATL.	MATERIAL
ASSY.	ASSEMBLY	MAX.	MAXIMUM
0	AT (MEASUREMENTS)	MECH.	MECHANICAL
AVG.	AVERAGE	MJ	MECHANICAL JOINT
B.M.	BENCH MARK	MGD	MILLIONS OF GALLONS PER DAY
BSC	BITUMINOUS SURFACE COURSE	MIN.	MINIMUM
B.F.	BLIND FLANGE	N	NORTH
B.W.	BOTH WAYS	NAC	NEVADA ADMINISTRATIVE CODE
вот.	ВОТТОМ	NDOT	NEVADA DEPARTMENT OF TRANSPORTATION
BLDG.	BUILDING	NDEP	NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION
BLM	BUREAU OF LAND MANAGEMENT	NO. OR #	NUMBER
BSDW	BUREAU OF SAFE DRINKING WATER (NV)	O.C.	ON CENTER
Q	CENTER LINE	OD	OUTSIDE DIAMETER
CO	CLEAN OUT	PERP.	PERPENDICULAR
CONC.	CONCRETE	PL.	PLATE
CONT.	CONTINUOUS	±	PLUS OR MINUS
CMP	CORRUGATED METAL PIPE	PE	POLYETHYLENE
CPLG.	COUPLING	PE. PIPE	POLYETHYLENE PIPE
CFS	CUBIC FEET PER SECOND	PVC	POLYVINYL-CHLORIDE
CU.	CUBIC	LB. OR #	POUND
CU. YD.	CUBIC YARD	PSI	POUNDS PER SQUARE INCH
DEG. OR	DEGREE	PG	PRESSURE GAUGE
Δ	DELTA	P	PROPERTY LINE
DET.	DETAIL	R	RADIUS
DIAG.	DIAGONAL	RED.	REDUCER
DIA. OR Ø	DIAMETER	REM.	REMOVE
DIM	DIMENSION	REQ'D	REQUIRED
DIST.	DISTRIBUTION		REVISION
DWG	DRAWING	•	RIGHT-OF-WAY
DIP	DUCTILE IRON PIPE	SCH	SCHEDULE
E	EAST	SHT.	SHEET
EA.	EACH	SL	SLOPE
E.F.	EACH FACE	S	SOUTH
ELEV. OR	ELEVATION	SPEC.	SPECIFICATION
ELL.	ELBOW	SQ.	SQUARE
EOP	EDGE OF PAVEMENT	SF	SQUARE FEET
E.W.	EACH WAY	SQ. IN.	SQUARE INCHES
EXIST.	EXISTING	ST. STL.	STAINLESS STEEL
FT OR '	FEET	STD.	STANDARD
FG	FINISHED GRADE	STA	STATION
FS	FINISHED SURFACE	STL.	STEEL
FTG.	FITTING		SYMMETRICAL
FLG	FLANGE	TBC	TOP BACK CURB
FLEX.	FLEXIBLE	TYP.	TYPICAL
Æ	FLOW LINE	UAC	UTAH ADMINISTRATIVE CODE
GALV.	GALVANIZED	UBC	UNTREATED BASE COURSE
GPM	GALLONS PER MINUTE	UDOT	UTAH DEPARTMENT OF TRANSPORTATION
	GATE VALVE	VERT.	VERTICAL
GA.	GAUGE		VOLUME
	HIGH DENSITY POLYETHYLENE	WS	WATER SURFACE

W/REQ'D WHERE REQUIRED

W/ WITH

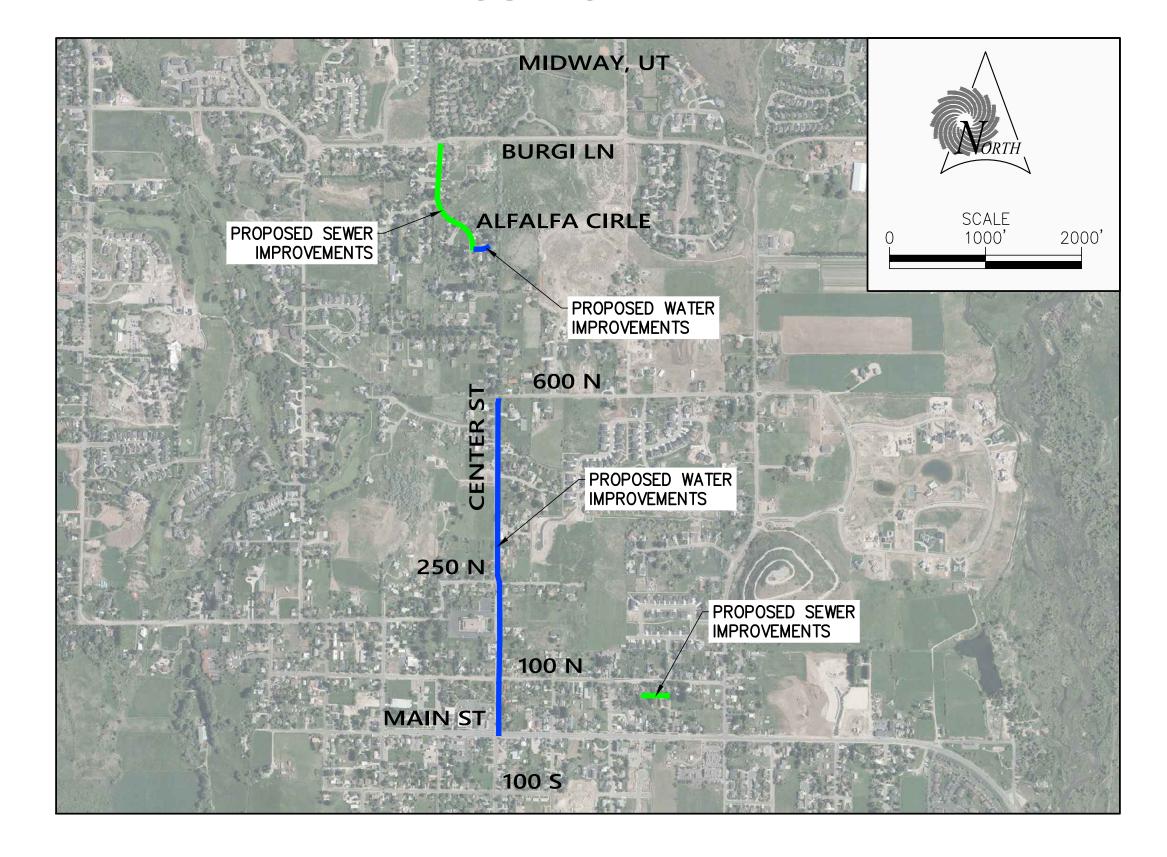
H.W.L. HIGH WATER LEVEL

ID INSIDE DIAMETER

HORIZ. HORIZONTAL

IN. OR " INCH

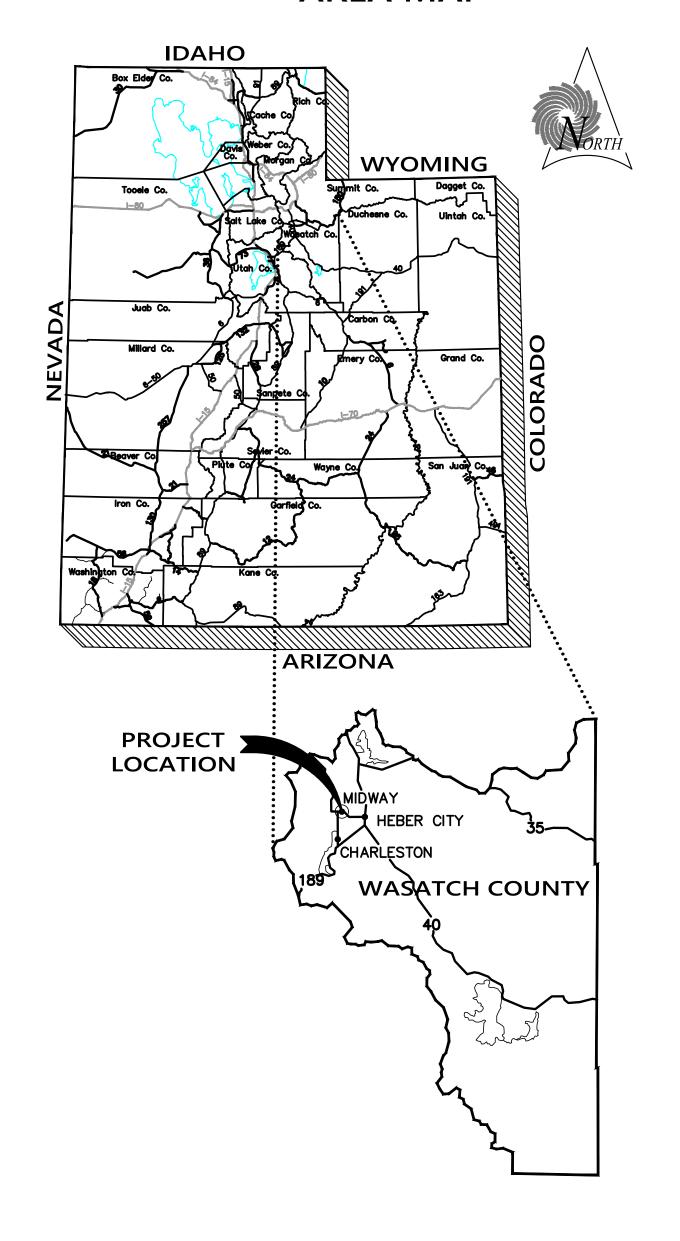
LOCATION MAP

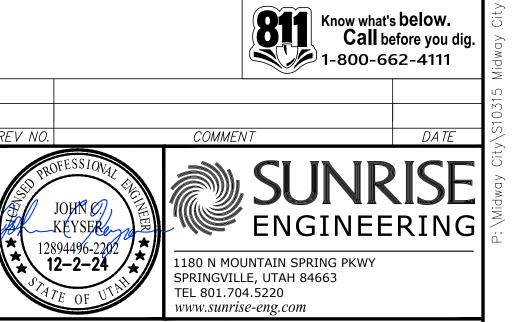


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AREA MAP





MIDWAY CITY

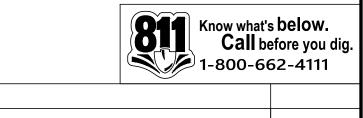
NORTH CENTER STREET-WATER & SEWER IMPROVEMENTS

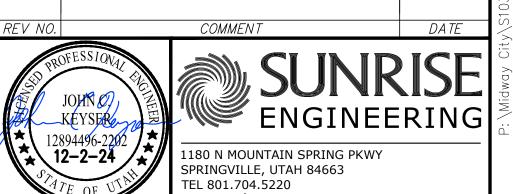
ABBREVIATIONS, LOCATION MAP, AREA MAP, & SHEET INDEX

SEI NO.DESIGNEDDRAWNCHECKEDSHEET NO.S10315KRMKRMDSA2

G2

SYMBOL LEGEND LINETYPE LEGEND **PROPOSED EXISTING EXISTING PROPOSED** — — x" sd — — x" SD — STORM DRAIN LINE (SIZE AS SHOWN) STORM DRAIN MANHOLE \bigcirc — — x" w — — x" W — WATER LINE (SIZE AS SHOWN) WATER MANHOLE (S) (IR) S — — x" s — — x" S — SEWER LINE (SIZE AS SHOWN) SEWER MANHOLE (R) — — x" irr — — x" IRR — IRRIGATION LINE (SIZE AS SHOWN) IRRIGATION MANHOLE — — x" fd — — x" FD — FIELD DRAIN LINE (SIZE AS SHOWN) MANHOLE CATCH BASIN GAS LINE **ELECTRIC** AIR RELEASE VALVE VALVE UNDERGROUND ELECTRIC FIRE HYDRANT _____ohe _____OHE _____ OVERHEAD ELECTRIC WATER METER TELECOMMUNICATIONS BACKFLOW PREVENTER FIBER OPTIC TEE BARBED WIRE FENCE # 閠 _____ CHAINLINK FENCE **CROSS** ---**ELBOW** WOOD FENCE 45D FITTING MISC. FENCE 22.5D FITTING ROCK WALL 11.25D FITTING · _____ · ____ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · ___ · __ · ___ · ___ · __ · ___ · __ · ___ · __ · ___ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · __ · _ · __ · __ · __ · _ · __ · __ · __ · _ · __ · __ · _ · __ · _ · __ · _ · __ · _ · __ · _ · _ · __ · _ · _ · _ · __ · _ · _ · _ · __ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · _ · CMU OR CONCRETE WALL REDUCER EDGE OF PAVEMENT ____eop ___ ___**EOP ____** 0 SEWER CLEANOUT MAJOR CONTOUR MINOR CONTOUR IRRIGATION VALVE POC POC IRR POINT OF CONNECTION HIGH WATER ELEVATION GM GM GAS METER FLOWLINE GAS RISER RIGHT-OF-WAY GAS VALVE PERPETUAL EASEMENT FIELD DRAIN PROPERTY LINE POWER POLE **BOUNDARY LINE GUY WIRE** ELECTRIC MANHOLE/VAULT/CABINET SECTION LINE SETBACK LINE JUNCTION BOX POWER PEDESTAL TRANSFORMER STREET LIGHT PARKING LOT LIGHT **\(\)** TRAIL LIGHT FIELD/COURT LIGHT COMMUNICATIONS VAULT SIGN **VEGETATION** BRASS CAP MONUMENT BENCHMARK





MIDWAY CITY

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NORTH CENTER STREET-WATER & SEWER IMPROVEMENTS

LEGEND

SEI NO. DESIGNED DRAWN CHECKED SHEET NO. S10315 KRM KRM DSA 3

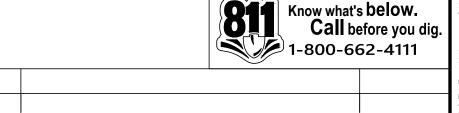
- 2. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODE ORDINANCES AND REGULATIONS. CONTRACTOR SHALL OBTAIN NECESSARY BUILDING AND OTHER PERMITS AND SPECIAL INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES. ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED AND SAFE MANNER. IN THE CASE OF A CONFLICTING REQUIREMENT, THE MORE STRINGENT SHALL GOVERN.
- ALL PIPELINES SHALL BE INSTALLED AT LOCATIONS AND DEPTHS REQUIRED BY THE CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS OR AS OTHERWISE DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL NOT MOVE THE PLANNED ALIGNMENT OF ANY CULINARY WATER PIPELINE WITHOUT THE WRITTEN CONSENT OF BOTH THE OWNER AND THE ENGINEER.
- 4. ALL COSTS ASSOCIATED WITH THIS PROJECT SHALL BE INCLUDED IN THE PRICES INDICATED IN THE BID SCHEDULE FOR THE VARIOUS ITEMS OF WORK.
- 5. ALL CONSTRUCTION WORK SHALL BE PERFORMED WITHIN EXISTING RIGHTS-OF-WAY OR RIGHTS-OF-WAY OBTAINED BY THE OWNER FOR CONSTRUCTION PURPOSES.
- 6. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN ALL ROAD CONSTRUCTION, BARRICADES, CHANNELING DEVICES, AND CONSTRUCTION SIGNS IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) FOR ROAD CONSTRUCTION ACTIVITIES.
- TRAFFIC ACCESS SHALL BE MAINTAINED FOR LOCAL RESIDENTS TO PROPERTIES ALONG CONSTRUCTION BOUNDARIES. THE CONTRACTOR SHALL PROVIDE RESIDENTS AT LEAST A 24 HOUR NOTICE BEFORE WATER IS TO BE SHUT OFF AND ANY WORK PERFORMED IN FRONT OF THEIR PROPERTY.
- 8. ALL DAMAGE TO EXISTING ROADWAYS OTHER THAN THAT REPLACED AS PART OF THE CONSTRUCTION PROCESS SHALL BE REPLACED OR REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 9. ALL ASPHALT PATCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION FROM THE EXISTING ASPHALT TO THE PATCH. THE NEW SURFACE SHALL MATCH EXISTING GRADE. DEVIATION FROM THIS SHALL BE IN ACCORDANCE WITH SECTION 02500.3.4.3 OF THE CONTRACT SPECIFICATIONS.
- 10. ANY CANAL OR DITCH CROSSINGS NOT SPECIFICALLY CALLED OUT ON THE PLANS AND BID SCHEDULE ARE CONSIDERED INCIDENTAL TO PIPELINE INSTALLATION, AND SHALL NOT BE PAID FOR SEPARATELY.
- 11. THE CONTRACTOR SHALL PROVIDE MEANS OF MANAGING ANY STORM WATER, GROUNDWATER, OR NUISANCE WATER FROM INTERFERING WITH THE CONSTRUCTION OPERATION. THE COST OF CONTROLLING ALL WATER SHALL BE INCLUDED IN THE CONTRACT PRICE FOR RELATED BID ITEMS.
- 12. THE CONTRACTOR SHALL INCLUDE THE COST FOR ALL EXCAVATION AND DISPOSAL OF EXCESS AND UNSUITABLE MATERIAL IN THE CONTRACT UNIT PRICE FOR THE RELATED BID ITEM.
- 13. ALL DEBRIS RESULTING FROM WORK ON THE PROJECT SHALL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE APPROPRIATE ARRANGEMENTS FOR DISPOSAL SITES AT WHICH DEBRIS MAY BE LAWFULLY DISPOSED. NO CONSTRUCTION DEBRIS WILL BE BURIED IN ANY PIPELINE TRENCH OR OTHER PROJECT EXCAVATION
- 14. THE CONTRACTOR HAS THE ULTIMATE RESPONSIBILITY TO LOCATE ALL UTILITIES (ABOVE AND UNDERGROUND) PRIOR TO CONSTRUCTION. ANY UTILITIES DISTURBED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED AT THE CONTRACTOR'S EXPENSE UNLESS PAYMENT IS PROVIDED IN SEPARATE ITEMS OF WORK. THE CONTRACTOR MUST CALL BLUE STAKES PRIOR TO ANY WORK REQUIRING EXCAVATION OF ANY TYPE. THE ENGINEER MAY SHOW SOME EXISTING UTILITIES ON THE PLANS FOR REFERENCE ONLY. THE LOCATIONS ARE NOT EXACT AND SHOULD ONLY BE USED FOR REFERENCE. IN ADDITION, OTHER UTILITIES MAY BE PRESENT, AND THE UTILITIES SHOWN MAY NOT ACTUALLY EXIST AT THE LOCATIONS SHOWN.
- 15. AN EFFORT HAS BEEN MADE TO SHOW THE EXISTING SYSTEM AND THE PROPOSED IMPROVEMENTS AS ACCURATELY AS POSSIBLE. ALL PIPELINE LOCATIONS AND SIZES ARE SHOWN ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER. HOWEVER, THE ACTUAL FIELD CONDITIONS MAY VARY. ADDITIONAL WORK MAY BE REQUIRED, AND LIKEWISE, PROPOSED WORK MAY BE ELIMINATED BASED ON ACTUAL FIELD CONDITIONS. THE ADDITION OR ELIMINATION OF WORK SHALL BE DETERMINED BY THE OWNER. MINOR VARIATIONS IN ACTUAL FIELD CONDITIONS WITHIN THE PROJECT SCOPE ARE TO BE EXPECTED AND SHALL NOT WARRANT A COST INCREASE.
- 16. THE CONTRACTOR SHALL PROTECT VENDOR SUPPLIED EQUIPMENT AND COMPONENTS FROM DAMAGE DUE TO WEATHER OR OTHER CAUSE. SENSITIVE INSTRUMENTATION AND ELECTRICAL AND ELECTRONIC EQUIPMENT SHALL BE STORED INDOORS IN A CLEAN DRY ENVIRONMENT UNTIL THEY ARE INSTALLED IN THE PROJECT.
- 17. DURING CLEANUP ALONG CONSTRUCTION RIGHTS-OF-WAY, ROAD DRAINAGE PROFILES SHALL BE GRADED AND RESTORED. ALL ROCKS LARGER THAN 2" SHALL BE RAKED OUT AND REMOVED OR BURIED
- 18. BID ITEM QUANTITIES ARE ESTIMATED BY THE ENGINEER. ACTUAL QUANTITIES MAY VARY AND PAYMENT WILL BE BASED ON ACTUAL QUANTITIES INSTALLED.
- 19. DISCOVERY AND NOTIFICATION OF CULTURAL RESOURCES AND HISTORICAL/ARCHAEOLOGICAL OBJECTS IF A SUSPECTED OR UNSUSPECTED HISTORICAL, ARCHAEOLOGICAL, OR PALEONTOLOGICAL ITEM, FEATURE, SITE OR OTHER CULTURAL RESOURCE IS ENCOUNTERED, CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY STOPPED IN THE VICINITY OF THE DISCOVERY AND THE ENGINEER AND OWNER SHALL BE NOTIFIED OF THE NATURE AND EXACT LOCATION OF THE FINDING. THE CONTRACTOR SHALL NOT DAMAGE THE DISCOVERED OBJECTS AND SHALL PROVIDE WRITTEN CONFIRMATION OF THE DISCOVERY TO THE ENGINEER WITHIN TWO (2) CALENDAR DAYS. THE OWNER AND ENGINEER ARE REQUIRED TO IMMEDIATELY NOTIFY THE STATE HISTORICAL PRESERVATION OFFICE (SHPO) AND THE UTAH GEOLOGICAL SURVEY (UGS). THE SHPO AND UGS, WILL INVESTIGATE THE FINDING AND DETERMINE IF THE RESOURCE REQUIRES PROTECTION AND THE DISPOSITION OF THE SAID RESOURCE.

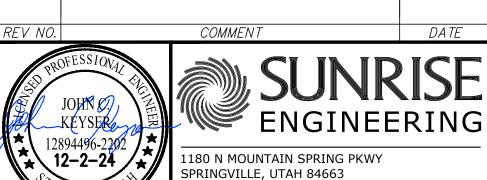
WATER NOTES

- 1. ALL WATERLINES SHALL HAVE MINIMUM COVER OF 5 FEET AS SPECIFIED BY OWNER'S STANDARD.
- 2. THE INSTALLATION OF VARIABLE SIZED OPENINGS IN TEES, ELBOWS, CROSSES, ETC. WHERE APPLICABLE IS AN ACCEPTABLE ALTERNATIVE TO THE USE OF REDUCERS.
- 3. ALL BURIED DUCTILE IRON VALVES AND FITTINGS SHALL BE CAREFULLY WRAPPED OR SLEEVED WITH PLASTIC TO PREVENT CONTACT WITH SOIL DURING OR AFTER INSTALLATION, BACKFILL, AND AFTER CONSTRUCTION HAS BEEN COMPLETED. STAINLESS STEEL BOLTING HARDWARE FOR FITTINGS SHALL BE COATED WITH ANTI-SEIZE LUBRICANT AFTER TIGHTENING TO FURTHER PREVENT CORROSION.
- 4. THE CONTRACTOR SHALL MAKE ALL CONNECTIONS TO EXISTING LINES WHERE SHOWN ON THE PLANS AND AS NEEDED TO OBTAIN A FULLY FUNCTIONAL SYSTEM.
- 5. ALL CONNECTIONS TO EXISTING LINES ARE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE PIPELINE AND SHALL NOT BE PAID FOR SEPARATELY.
- 6. PIPELINES THAT ARE TO BE ABANDONED SHALL BE CUT OFF AT THE SUPPLY PIPELINE OR AT THE POINT OF TIE IN TO THE NEW PIPELINES. A SECTION SHALL BE CUT OUT OF THE ABANDONED LINE AND DISPOSED. A MECHANICAL JOINT TYPE CAP WITH A MEGALUG RESTRAINT OR A BLIND FLANGE SHALL BE INSTALLED ON BOTH SIDES OF THE ABANDONED PIPE WHERE THE SECTION WAS REMOVED. A TIE-IN CONNECTION TO THE EXISTING PIPELINE MEETS THE REQUIREMENT OF A CAP. UNDER NO CIRCUMSTANCE SHALL A PIPE BE ABANDONED BY SIMPLY SHUTTING VALVES. ALL VALVE BOXES ON THE SECTION OF ABANDONED PIPELINE SHALL BE REMOVED, ANY REQUIRED EXCAVATION SHALL BE BACKFILLED AND ASPHALT PATCHED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
- DURING CONSTRUCTION AND TESTING OF THE CULINARY WATER DISTRIBUTION SYSTEM, THE CONTRACTOR SHALL PROVIDE EACH RESIDENT ON THE AFFECTED STREET AT LEAST A 24 HOUR NOTICE BEFORE TAKING THE CULINARY WATER SYSTEM ON THAT STREET OUT OF SERVICE.
- DURING CONSTRUCTION, SITE WATERING SHALL BE PERFORMED BY THE CONTRACTOR AS REQUIRED TO MINIMIZE FUGITIVE DUST. THE CONTRACTOR IS REQUIRED TO METER ALL WATER TAKEN OUT OF THE EXISTING CULINARY WATER SYSTEM FOR CONSTRUCTION. HOWEVER, THE OWNER WILL NOT CHARGE THE CONTRACTOR FOR WATER REQUIRED FOR CONSTRUCTION AND TESTING OR USE ON THE PROJECT.
- 9. ALL CONNECTIONS TO POLYETHYLENE SERVICE LATERAL TUBING FROM THE CORPORATION STOP AT THE MAINLINE TO THE METER SETTER AT THE SERVICE METER SETTER, INCLUDING SPLICES TO EXISTING POLYETHYLENE TUBING SHALL BE MADE USING MUELLER INSTATITE OR APPROVED EQUAL CONNECTORS. THE CONTRACTOR SHALL INSTALL ADAPTERS TO FACILITATE CONNECTION TO SETTERS AND CORPORATION STOPS AS NEEDED.
- 10. SERVICE LATERAL TUBING SHALL BE INSTALLED UNDER ROADWAYS BY PULLING OR BY MISSILING. ROADWAYS SHALL NOT BE OPEN CUT FOR SERVICE LATERAL INSTALLATION UNLESS APPROVED OTHERWISE BY THE ENGINEER ON A CASE BY CASE BASIS.
- 11. ALL FITTINGS, NIPPLES, CONNECTORS, ETC. USED IN SERVICE CONNECTIONS SHALL BE BRASS OR STAINLESS STEEL NO PVC, BLACK IRON, OR GALVANIZED FITTINGS OR NIPPLES SHALL BE USED.
- 12. SERVICE LATERALS SMALLER THAN 1 INCH, THAT WILL BE CONNECTED TO NEW PIPELINES, SHALL BE UPGRADED TO 1 INCH SDR9 CTS POLY SERVICE LATERALS OR AS SPECIFIED PER THE MIDWAY STANDARD DETAILS. SERVICES THAT ARE 1 INCH OR LARGER THAT WILL BE CONNECTED TO NEW PIPELINES SHALL REMAIN THE SAME SIZE UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- 13. BOTH MEGALUGS AND CONCRETE THRUST BLOCKS SHALL BE USED AT ALL LOCATIONS WHERE RESTRAINING SYSTEMS ARE REQUIRED. ALL MEGALUGS SHALL HAVE STAINLESS STEEL OR EPOXY BOLTS.
- 14. METER SETTERS AND BARRELS WHICH ARE LOCATED OUTSIDE OF CITY ROW SHALL BE RELOCATED TO THE
- 15. AT THE TIME OF COMPLETION OF ALL WORK, THE CONTRACTOR SHALL INSPECT AND CYCLE ALL VALVES IN THE SYSTEM TO ENSURE THAT THEY ARE IN THE CORRECT POSITION AND THAT THE VALVES WORK PROPERLY. THIS INCLUDES EXISTING VALVES THAT WERE NOT REPLACED AS PART OF THE PROJECT AND EXISTING AND NEW FIRE HYDRANT VALVES.
- 16. ALL WATER MAINS SHALL BE FILLED, PRESSURE TESTED, AND DISINFECTED IN ACCORDANCE WITH SPECIFICATIONS AND/OR LOCAL/STATE REGULATIONS.

SEWER NOTES

- CONTRACTOR IS TO FIELD VERIFY LOCATIONS, INVERT ELEVATIONS, AND MATERIALS OF ALL EXISTING SEWER PIPES OR MANHOLES AT TIE-IN POINTS PRIOR TO COMMENCING ANY NEW SEWER CONSTRUCTION. SHOULD ANY LOCATION, ELEVATION, OR MATERIAL DIFFER FROM THAT SHOWN ON THESE PLANS, CONTRACTOR IS TO CONTACT ENGINEER FOR DIRECTION.
- 2. ALL PIPELINES SHALL BE INSTALLED AT LOCATIONS AND DEPTH REQUIRED ON THE PLANS AND/OR AS OTHERWISE DIRECTED BY ENGINEER. CONTRACTOR SHALL NOT MOVE THE PLANNED ALIGNMENT OF ANY IMPROVEMENTS WITHOUT THE WRITTEN CONSENT OF BOTH ENGINEER AND OWNER. STANDARD OFFSET DISTANCES FROM OTHER EXISTING UTILITIES SHALL BE MAINTAINED DURING CONSTRUCTION OF NEW LINES.
- 3. THE INLET AND OUTLET PIPE CONNECTIONS TO MANHOLES SHALL BE CONSTRUCTED BY USE OF FLEXIBLE COMPRESSION JOINTS NO CLOSER THAN 12 INCHES TO, AND NO FARTHER THAN 36 INCHES FROM, THE MANHOLE WALL. NO FLEXIBLE COMPRESSION JOINTS SHALL BE EMBEDDED IN THE MANHOLE BASE OR BENCH.
- 4. SEWER PIPE JOINT DEFLECTION SHALL NOT EXCEED PIPE MANUFACTURER'S RECOMMENDATION. PIPES SHALL NOT BE DEFLECTED AT JOINTS UNLESS CALLED FOR IN THESE PLANS.
- 5. ALL TESTS REQUIRED BY THE PROJECT SPECIFICATIONS SHALL BE PERFORMED IN THE PRESENCE OF OWNER/ENGINEER OR THEIR REPRESENTATIVE. ANY PIPE SEGMENT OR STRUCTURE FAILING TO PASS A TEST SHALL BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- 6. ALL EXFILTRATION, INFILTRATION AND AIR TESTING OF LINES SHALL BE IN ACCORDANCE WITH OWNER STANDARDS.
- 7. UNLESS OTHERWISE SPECIFIED, FLOWABLE BACKFILL SHALL BE USED WHERE VERTICAL SEPARATION BETWEEN PIPES IS 9 INCHES OR LESS.
- WHEN ADJUSTING MANHOLES, CONTRACTOR SHALL INSTALL PLYWOOD COVERS IN SANITARY SEWER MANHOLE INVERTS AS WELL AS STEEL PLATE COVERS OVER MANHOLES (AFTER MANHOLE RINGS/FRAMES ARE REMOVED) TO PREVENT DEBRIS FROM ENTERING SEWER MANHOLES AND CORRESPONDING LINES. DEBRIS IN MANHOLES SHALL BE REMOVED PRIOR TO PLYWOOD REMOVAL.
- 9. PLYWOOD AND STEEL COVERS FOR MANHOLES SHALL BE INSTALLED AND REMOVED IN THE PRESENCE OF OWNERS REPRESENTATIVE. ALL DEBRIS DROPPED INTO THE SEWER MANHOLES AND CORRESPONDING LINES SHALL BE RETRIEVED AT CONTRACTOR'S EXPENSE. CONTRACTOR SHALL CLEAN (E.G., JET VAC OR EQUIVALENT) DEBRIS OUT OF THE AFFECTED MANHOLES AND/OR SEWER LINES IN THE PRESENCE OF OWNER REPRESENTATIVE.





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NORTH CENTER STREET-WATER & SEWER IMPROVEMENTS

TEL 801.704.5220

STANDARD NOTES

SEI NO. | DESIGNED | DRAWN CHECKED SHEET NO KRM KRM DSA

DATE

PROJECT NOTES

- 1. ALL WORK PERFORMED IN MIDWAY CITY SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE MIDWAY CITY STANDARD SPECIFICATIONS AND DRAWINGS.
- 2. ALL MATERIALS, GRADING, EARTHWORK, ETC. SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE MIDWAY CITY STANDARD SPECIFICATIONS.
- 3. CONTRACTOR SHALL PROVIDE ALL CONNECTIONS, FITTINGS, HARDWARE, ETC. TO INSTALL A COMPLETE, FUNCTIONING SYSTEM AND SHALL INCLUDE ALL SUCH MISCELLANEOUS MATERIALS IN THE COST OF THE VARIOUS BID ITEMS.
- 4. CONTRACTOR TO PREVENT DIRT AND FOREIGN MATTER FROM ENTERING MANHOLES, CATCH BASINS, INLETS, PIPE, ETC. THROUGHOUT DURATION OF CONSTRUCTION.
- 5. CONTRACTOR SHALL USE EXTREME CAUTION TO AVOID A CONFLICT, CONTACT OR DAMAGE TO EXISTING UTILITIES, SUCH AS POWER LINES, SEWER LINES, STORM DRAINS, STREET LIGHTS, TELEPHONE LINES, TELEVISION LINES, WATER LINES, POLES OR OTHER APPURTENANCES DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. ANY SUCH CONFLICT, CONTACT OR DAMAGE SHALL BE IMMEDIATELY COMMUNICATED TO THE PUBLIC WORKS DEPARTMENT.
- 6. CONTRACTOR MAY SECURE PICTURES OF THE CONDITIONS OF THE EXISTING PUBLIC RIGHT—OF—WAY IMPROVEMENTS SUCH AS CURBING, SIDEWALK, LANDSCAPING, ASPHALT SURFACES, ETC. IN THE EVENT THAT PUBLIC RIGHT—OF—WAY IMPROVEMENTS ARE DAMAGED AND NO PICTURES ARE TAKEN, THE PUBLIC WORKS DEPARTMENT WILL ASSUME THE CORRECTION OF THE DAMAGE IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 7. NO EXCAVATIONS OR STREET CUTS SHALL BE PERFORMED WITHIN THE PUBLIC RIGHT—OF—WAY WITHOUT FIRST OBTAINING A PERMIT FROM THE CITY. CUT PERMITS SHALL BE VALID FOR A PERIOD OF 60 DAYS. SUCH PERMITS SHALL BE ISSUED BY THE CITY UPON THE APPLICANT MEETING THE CONDITIONS AND MAKING THE COMMITMENTS AS SHOWN ON THE STANDARD CITY CUT PERMIT DRAWING.
- 8. ALL UTILITY LOCATIONS ARE APPROXIMATE. PRIOR TO COMMENCING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING BLUE STAKES FOR LOCATION OF ALL UTILITIES. 1–800–662–4111.
- 9. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR LOCATION OF SERVICE AND/OR RELOCATION OF UTILITIES IN CONFLICT WITH PROPOSED CONSTRUCTION. ENGINEER SHALL NOT BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC.
- 10. MIDWAY CITY REQUIRES THAT THE CONTRACTOR WORKING IN THE CITY RIGHT—OF—WAY, POT HOLE FOR ANY EXISTING UTILITIES THAT MAY BE IN THE AREA BEFORE ANY OTHER EXCAVATION BEGIN.
- 9. BEFORE COMMENCING WORK ON THE STATE HIGHWAY, THE CONTRACTOR IS REQUIRED TO OBTAIN AN ENCROACHMENT PERMIT ACCOMPANIED BY A TRAFFIC CONTROL PLAN FROM THE APPLICABLE REGION'S PERMITS OFFICE BEFORE WORKING WITHIN THE STATE RIGHT—OF—WAY.
- 10. IN ORDER TO AVOID UNNECESSARY DAMAGE TO PAVED SURFACES, BACKHOES, OUTRIGGERS, TRACK EQUIPMENT OR ANY OTHER CONSTRUCTION EQUIPMENT THAT MAY PROVE DAMAGING TO ASPHALT SHALL USE RUBBER CLEATS OR PAVING PAD WHEN OPERATING ON OR CROSSING SAID SURFACES.
- 11. NO EXCAVATION OF ANY KIND SHALL BE LEFT OPEN OVERNIGHT.
- 12. CONTRACTOR IS RESPONSIBLE TO VERIFY TIE IN POINTS TO EXISTING IMPROVEMENTS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER 5 WORKING DAYS PRIOR TO CONSTRUCTION IF EXISTING CONDITIONS ARE DIFFERENT FROM WHAT IS SHOWN ON THESE PLANS. CONTRACTOR SHALL COORDINATE FIELD MODIFICATIONS WITH OWNER PRIOR TO MAKING SUCH MODIFICATIONS IN THE FIELD.
- 13. ANY AMBIGUITIES, DISCREPANCIES, OBSTRUCTIONS, DEFICIENCIES, ETC. DISCOVERED ON THESE PLANS OR WITH THE PROPOSED IMPROVEMENTS ARE TO BE RESOLVED BY ENGINEER OR ITS APPOINTED REPRESENTATIVE. IF ANYONE OTHER THAN ENGINEER OR ITS APPOINTED REPRESENTATIVE MAKE ANY MODIFICATIONS, THEY ARE SOLELY RESPONSIBLE FOR THOSE MODIFICATIONS.
- 14. ANY EXISTING ITEM REMOVED TO FACILITATE CONSTRUCTION SHALL BE REPLACED IN THE SAME OR BETTER CONDITION AT CONTRACTOR'S EXPENSE.

DESIGN CRITERIA

1. INTRODUCTION

SUNRISE ENGINEERING IS UNDER CONTRACT WITH MIDWAY CITY FOR WATER AND SEWER SYSTEM IMPROVEMENTS ALONG NORTH CENTER STREET FROM 600 NORTH TO MAIN STREET, AND FROM BURGI LANE TO ALFALFA CIRCLE RESPECTIVELY.

2 WATER SYSTEM IMPROVEMENTS

THE PURPOSE OF THIS PROJECT IS TO REPLACE THE EXISTING 8" WATER MAIN WITH A NEW 10" PVC C900 DR18 WATER MAIN.

3 SEWER SYSTEM IMPROVEMENTS

THE PURPOSE OF THIS PROJECT IS TO SLIP-LINE THE EXISTING SEWER MAIN.



REV NO.

COMMENT

DATE

SUNRISE

KEYSER

12894496-2202

1180 N MOUNTAIN SPRING PKWY

www.sunrise-eng.com

MIDWAY CITY

TEL 801.704.5220

SPRINGVILLE, UTAH 84663

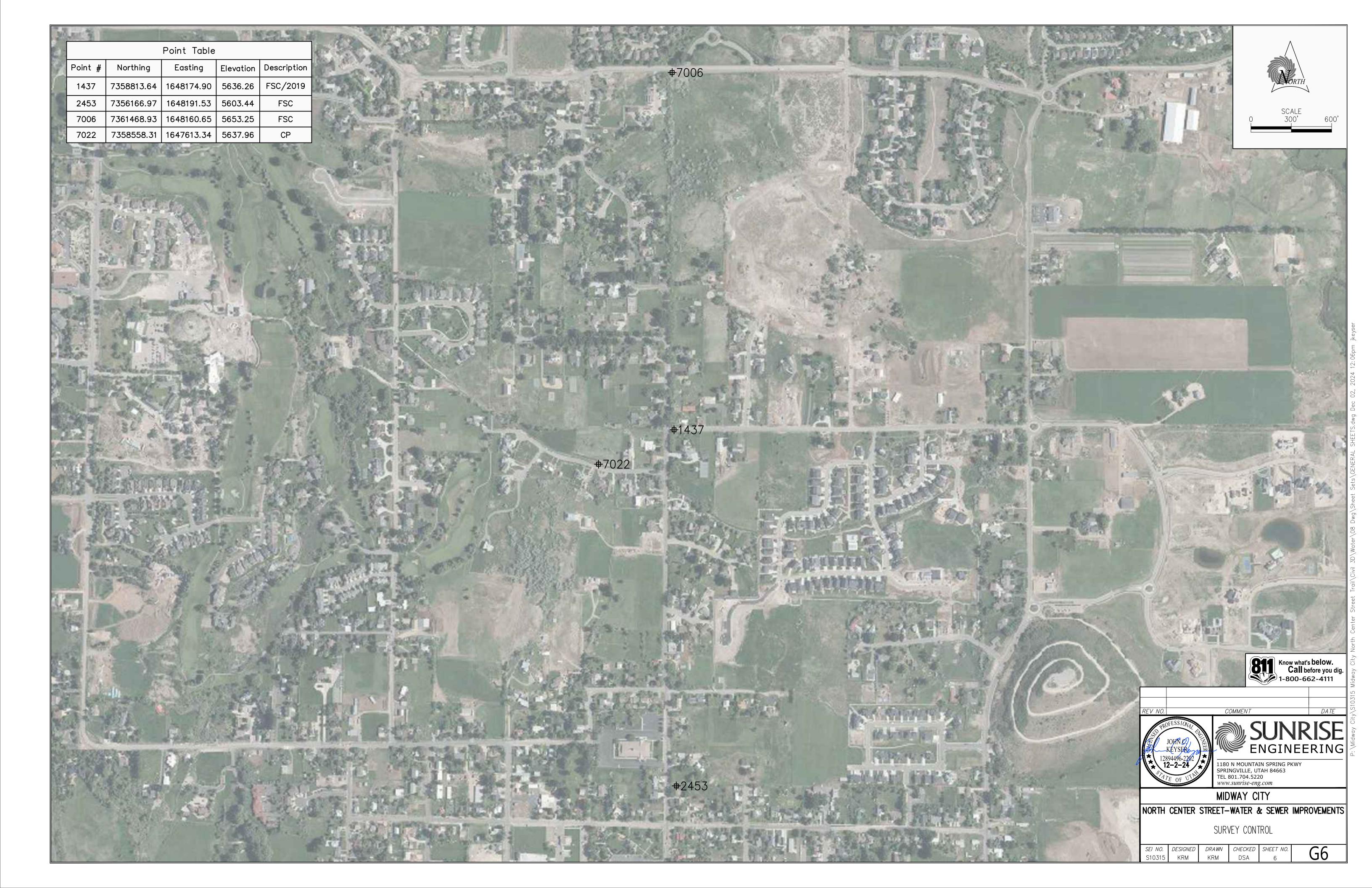
NORTH CENTER STREET-WATER & SEWER IMPROVEMENTS

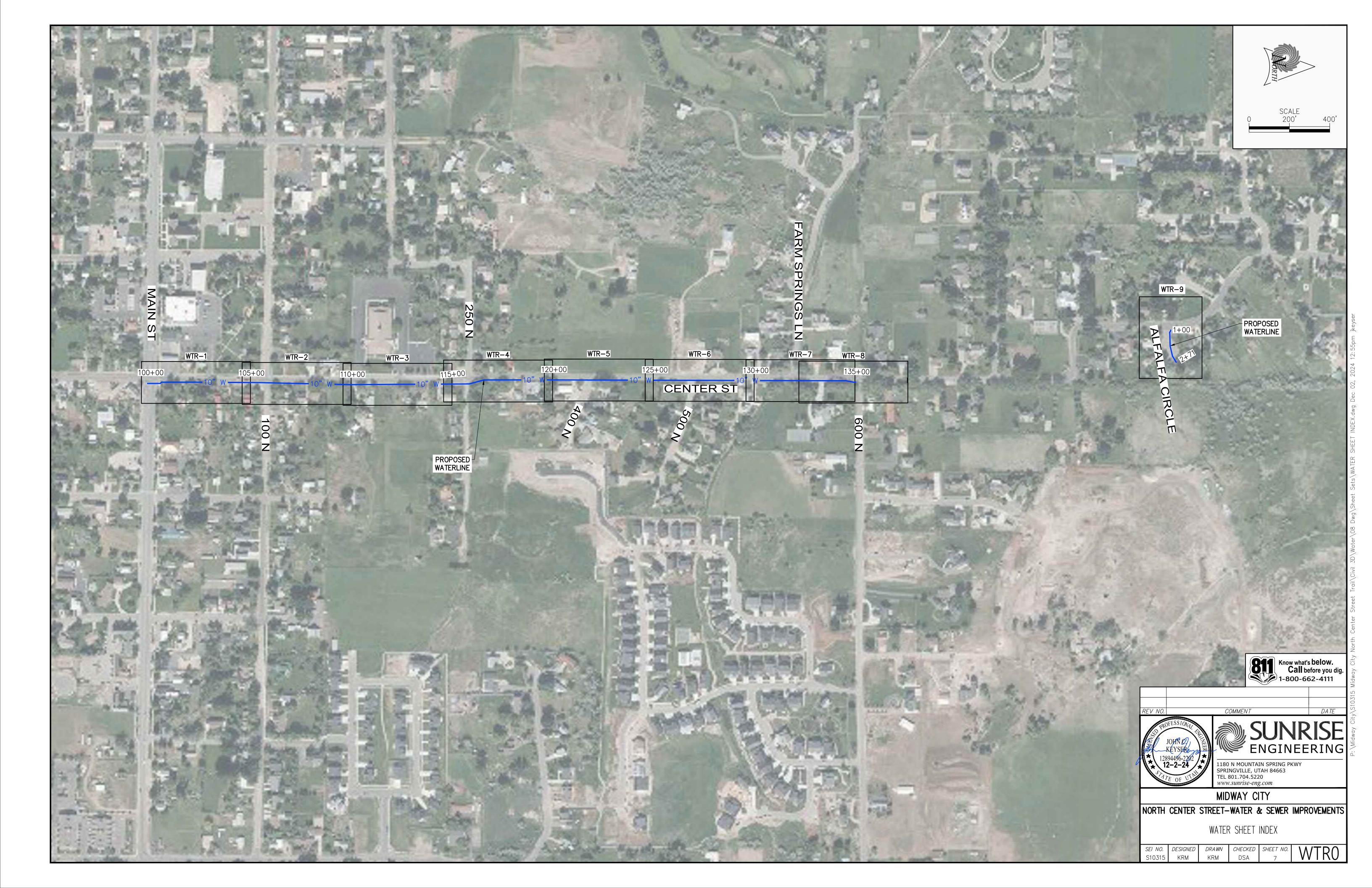
PROJECT NOTES & DESIGN CRITERIA

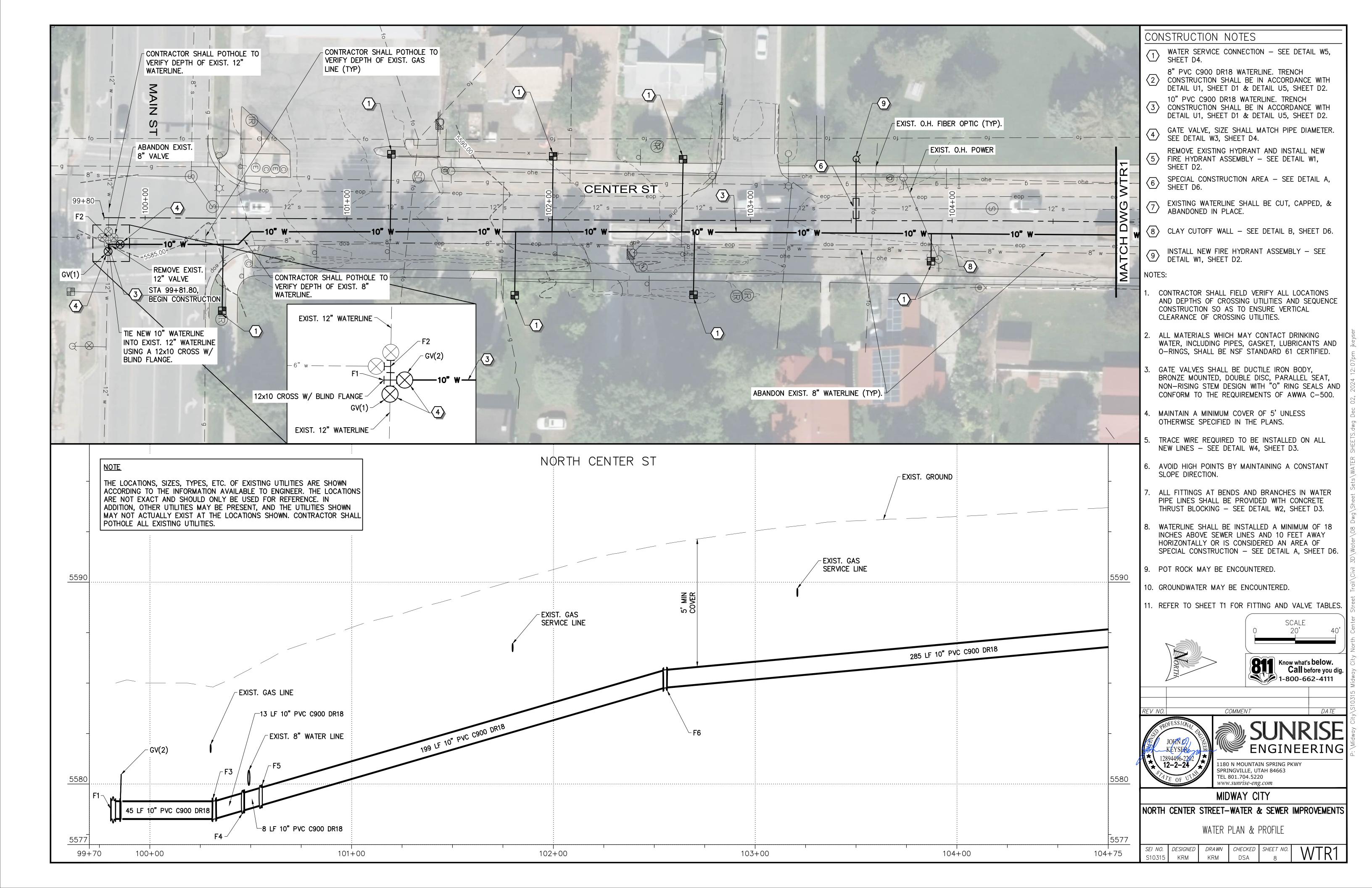
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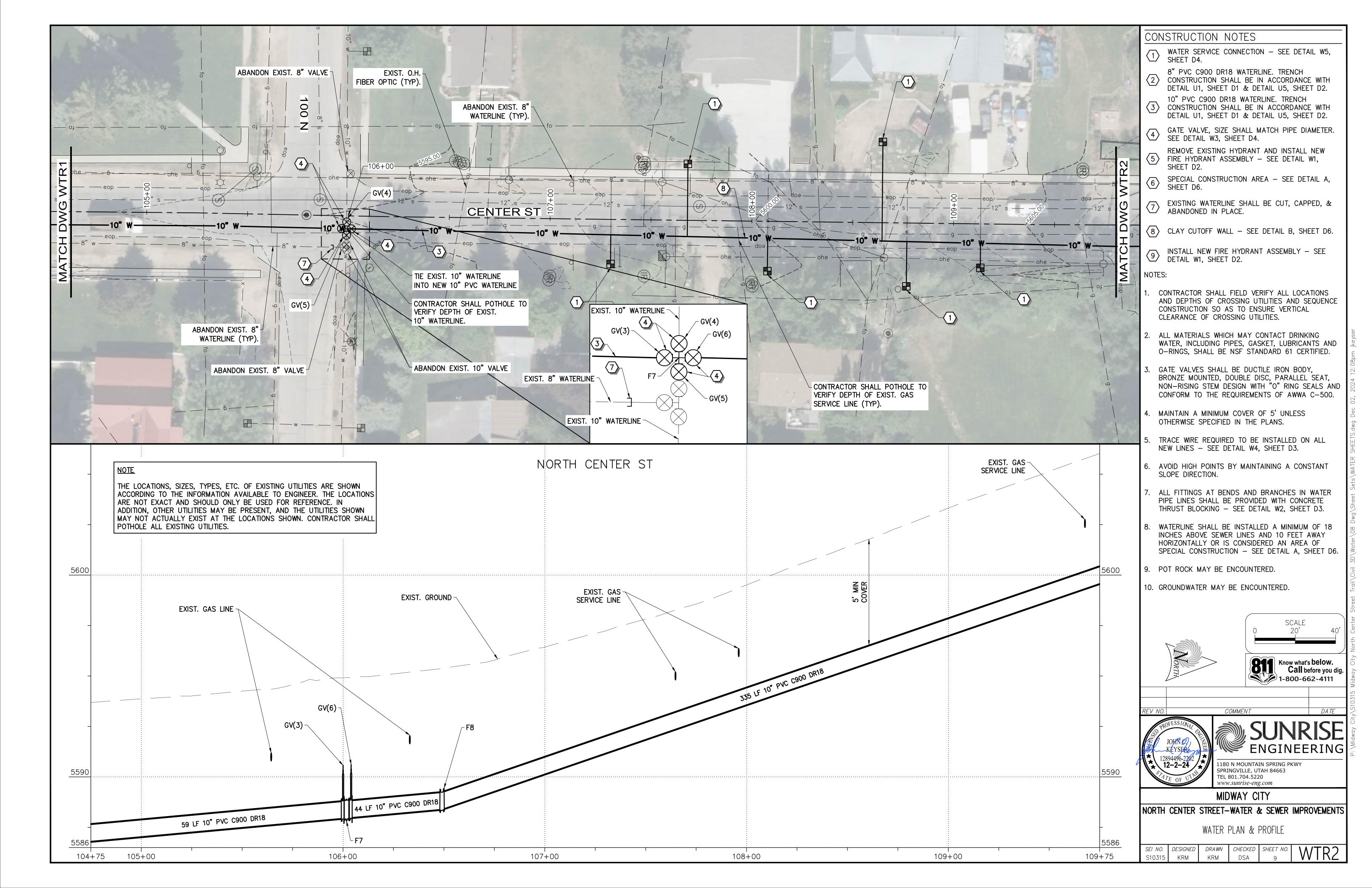
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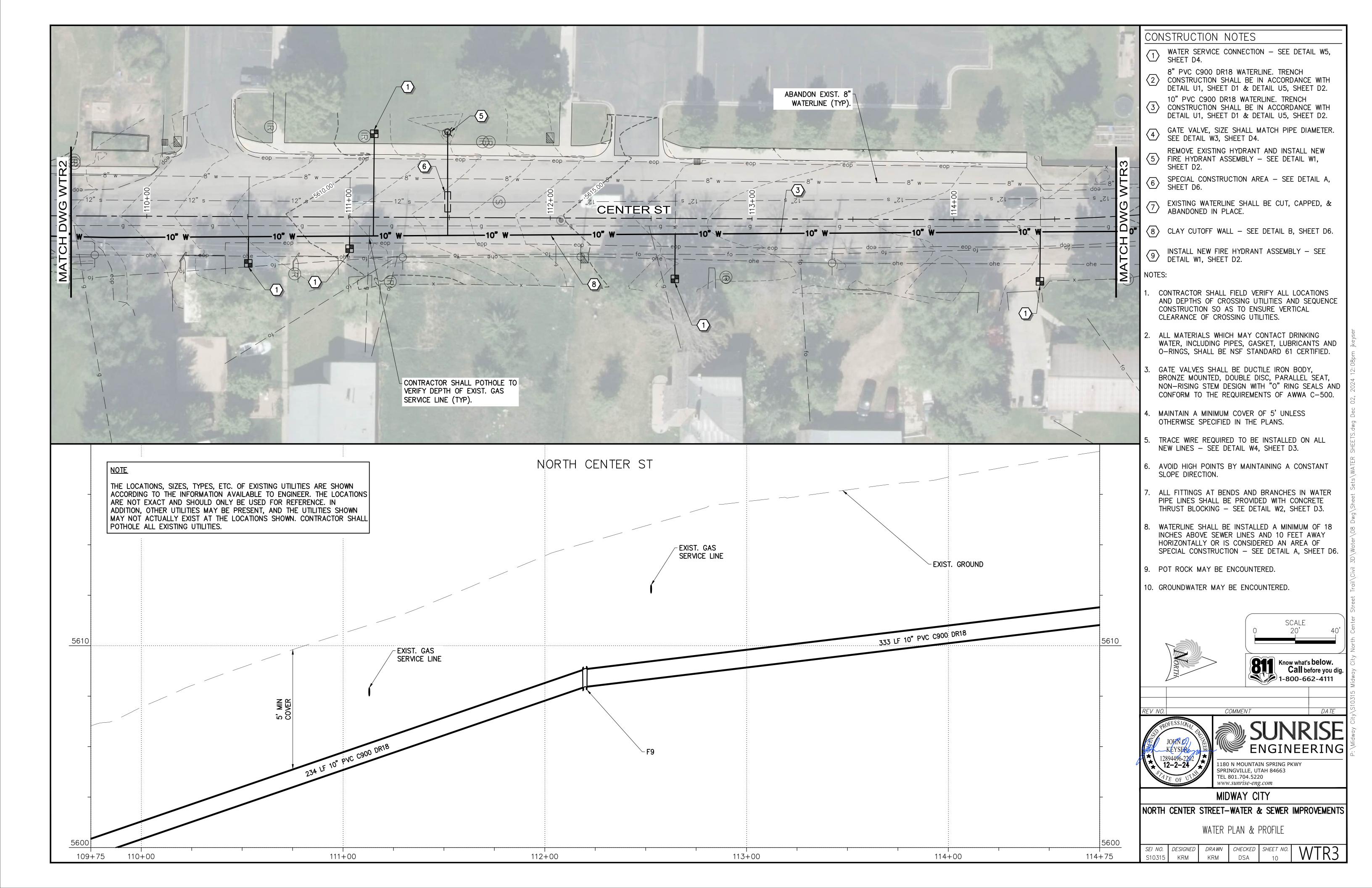
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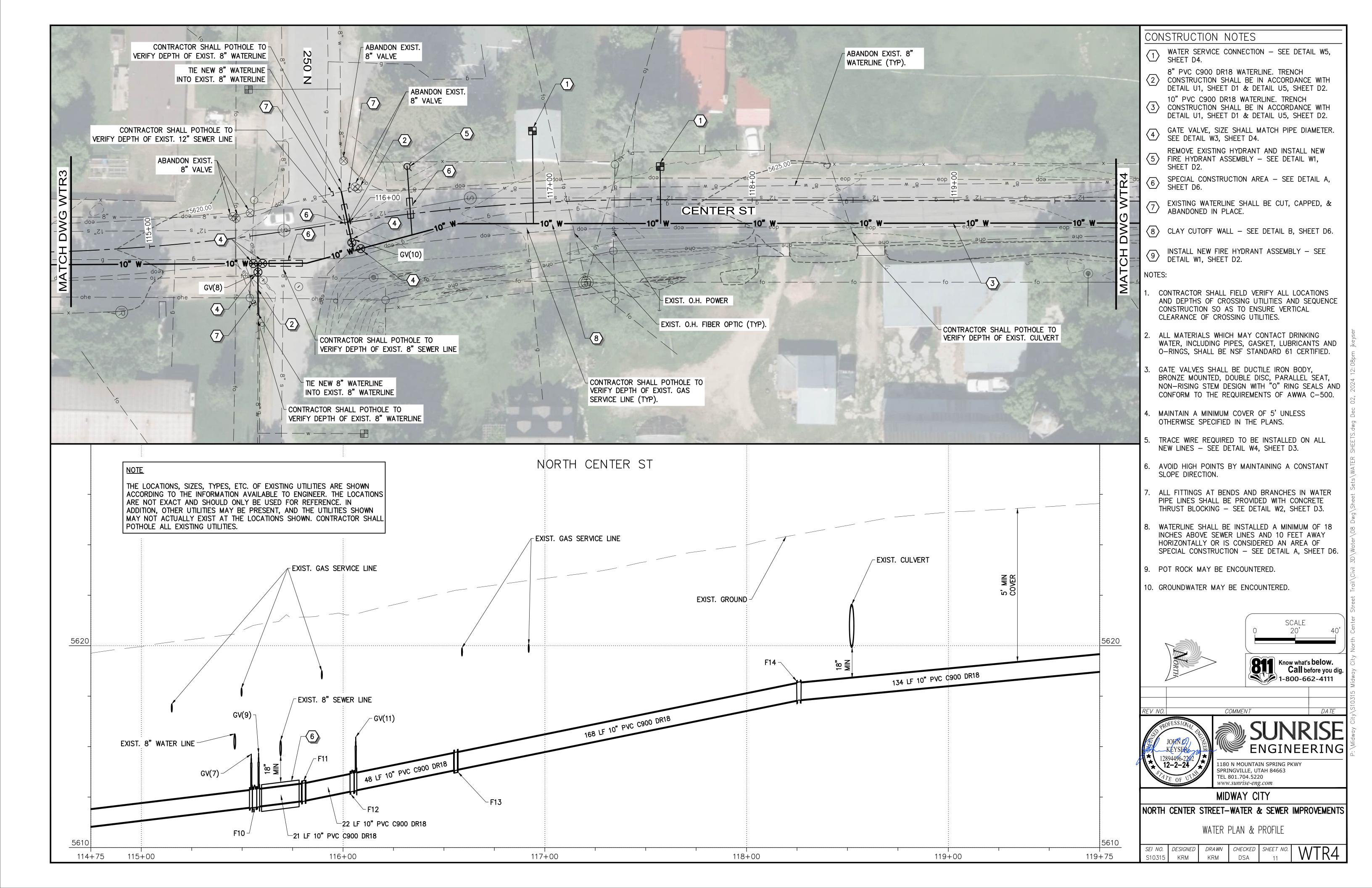


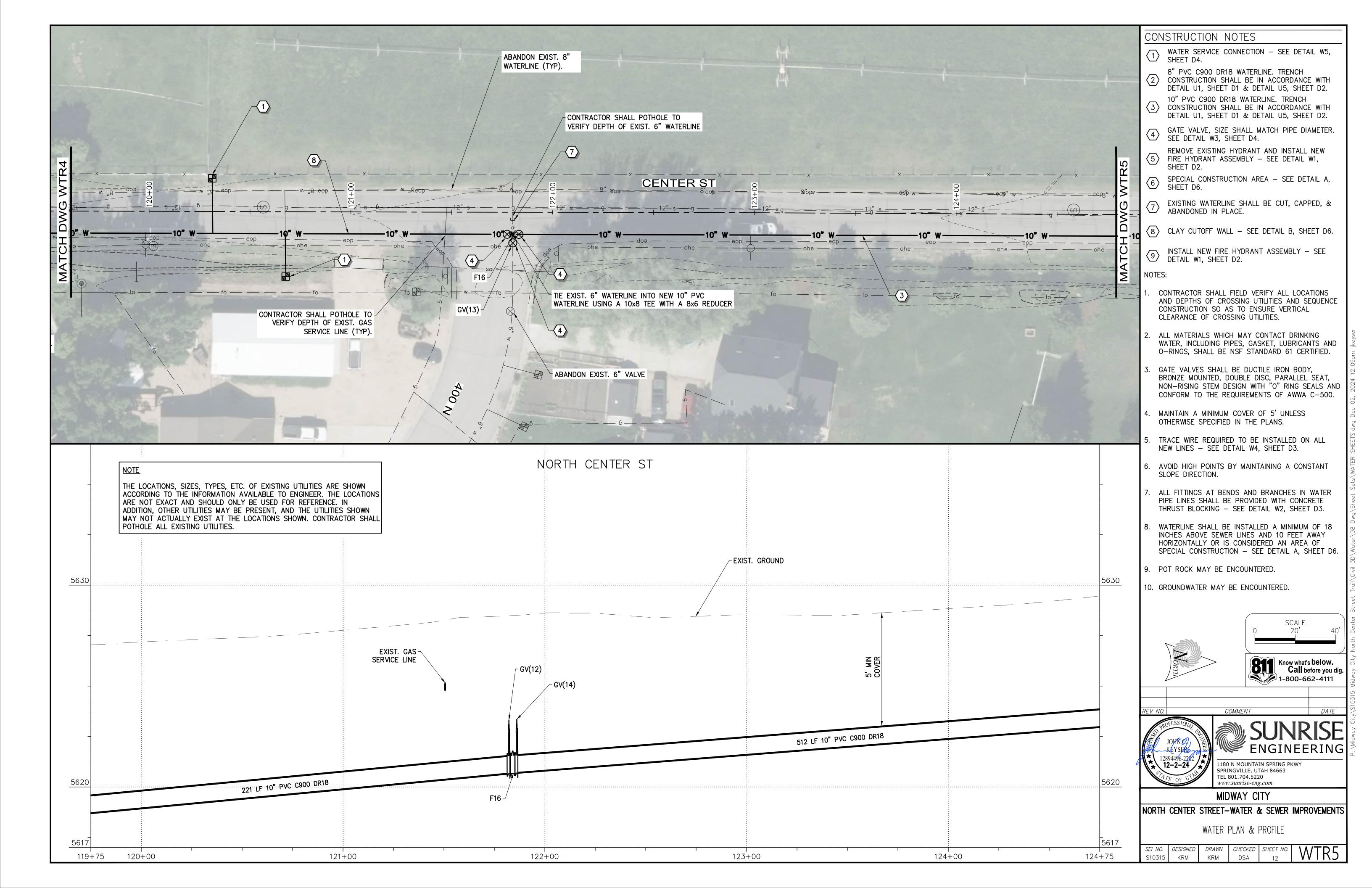


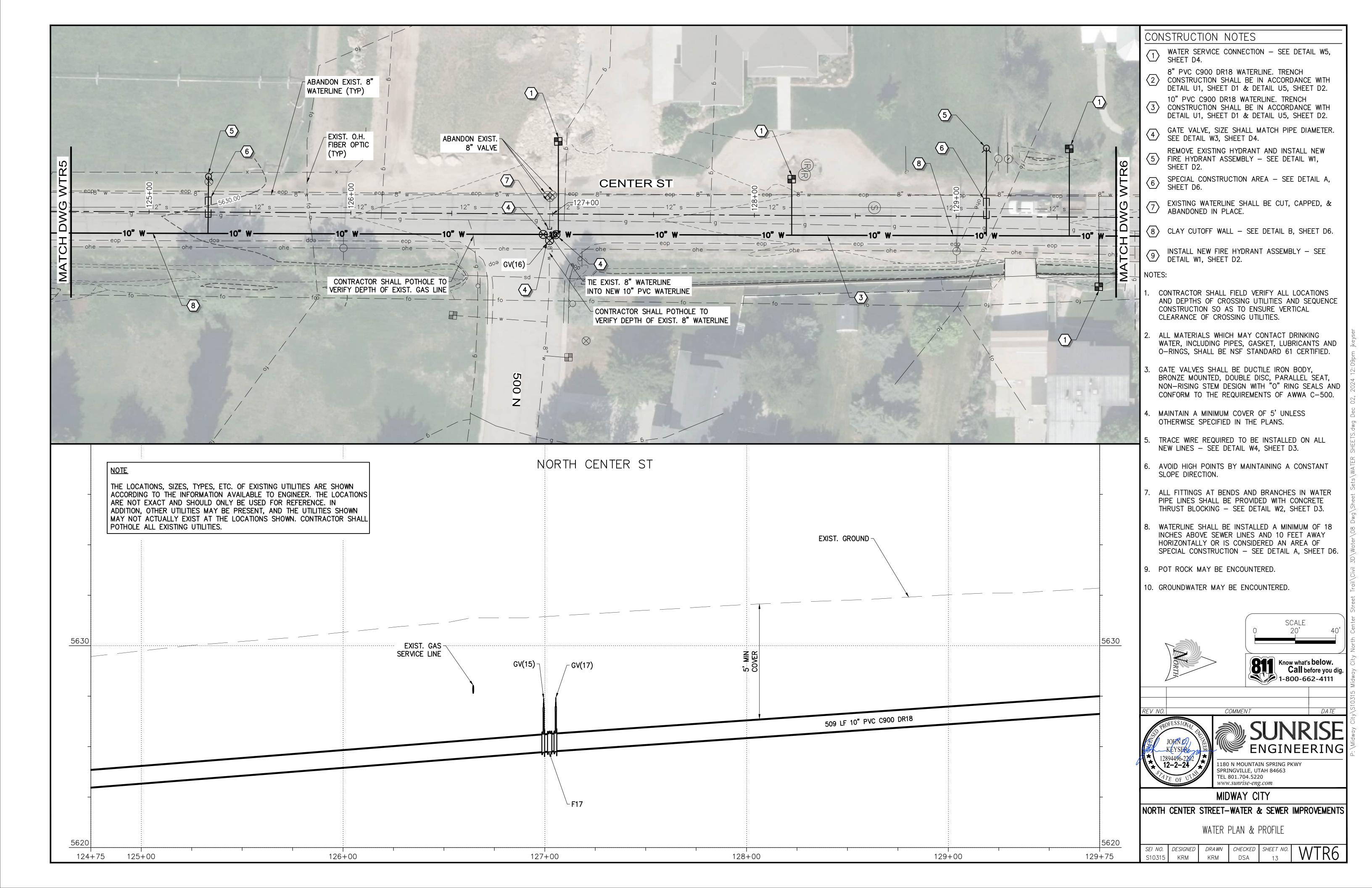


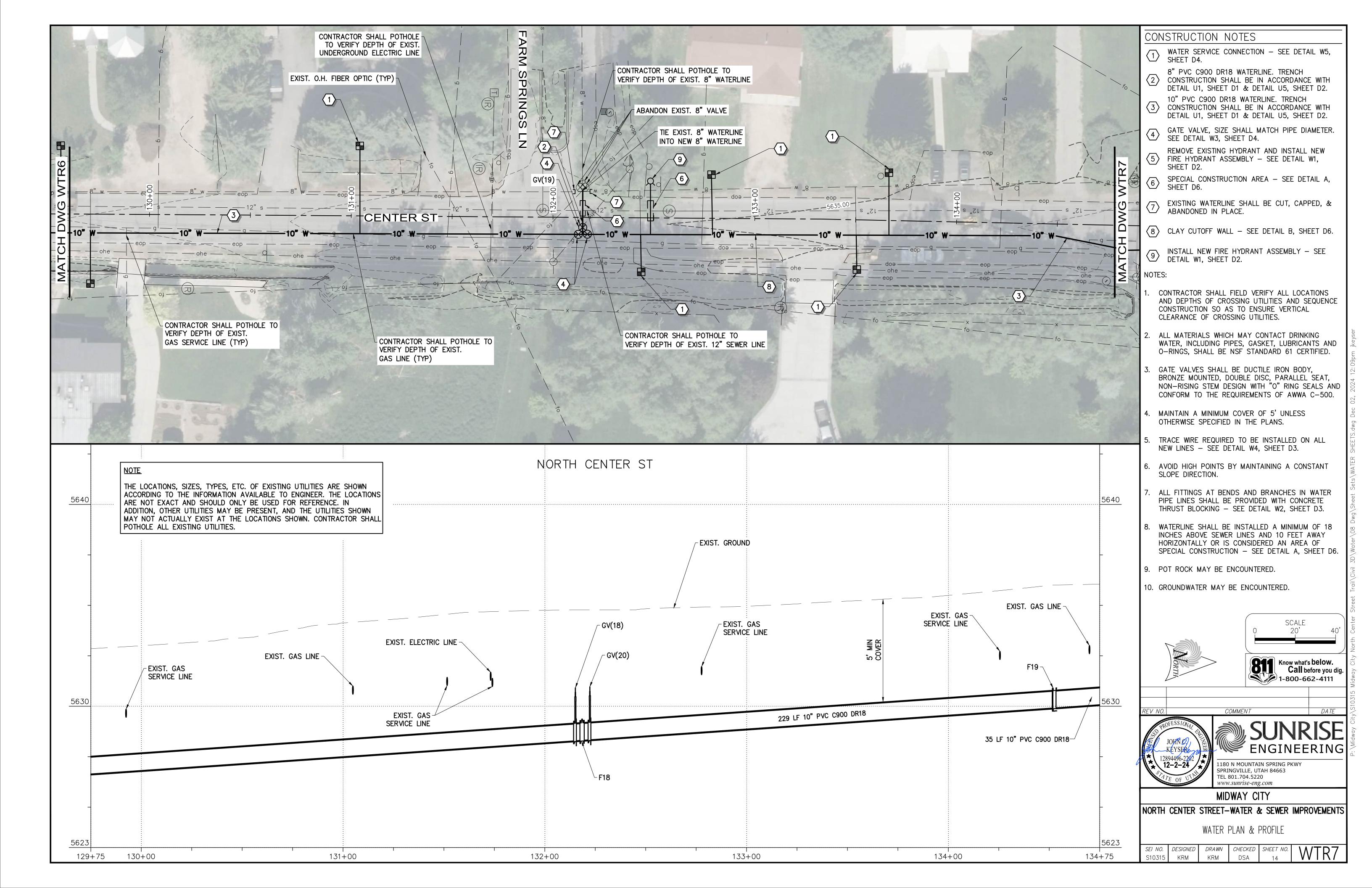


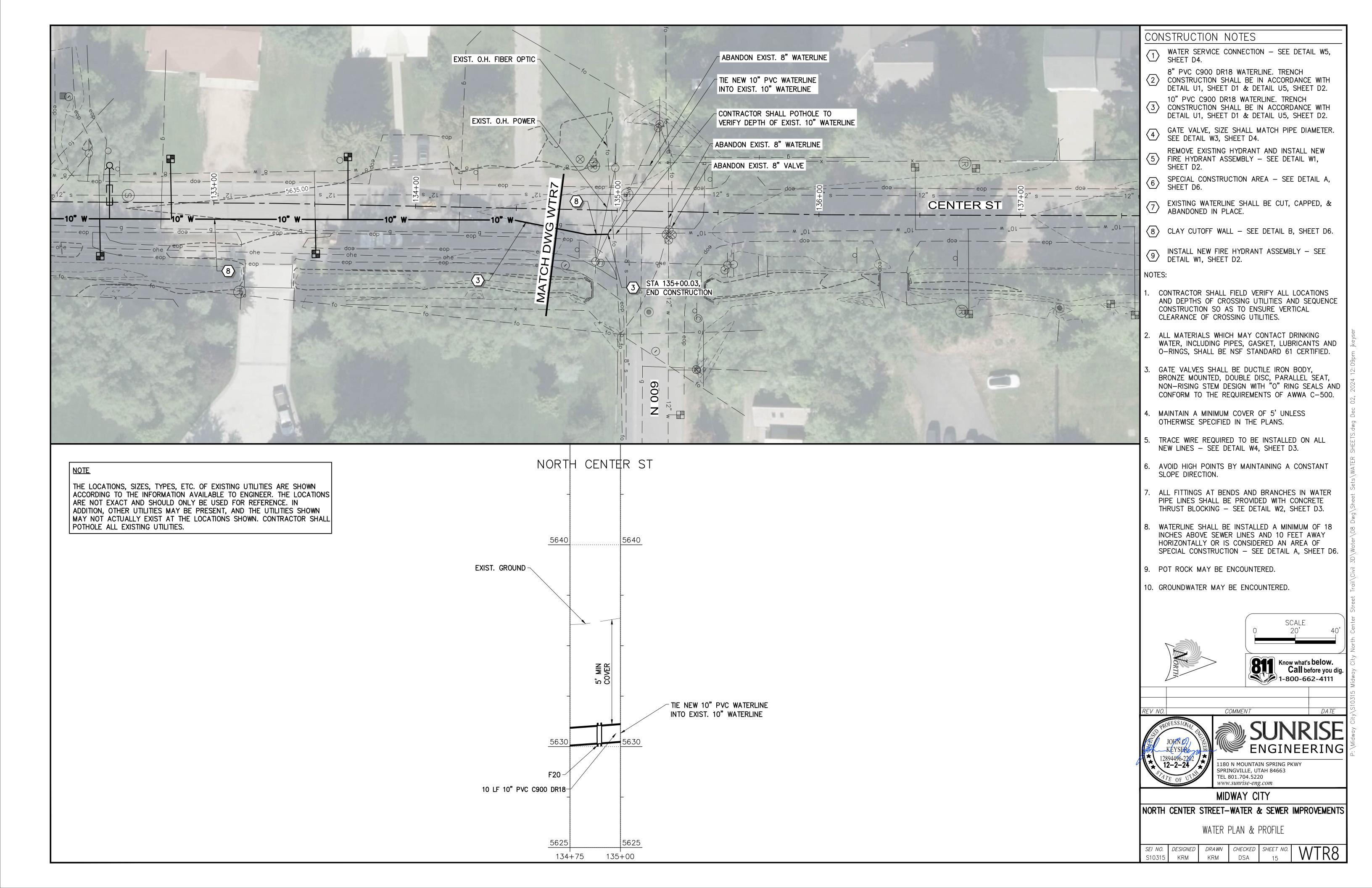


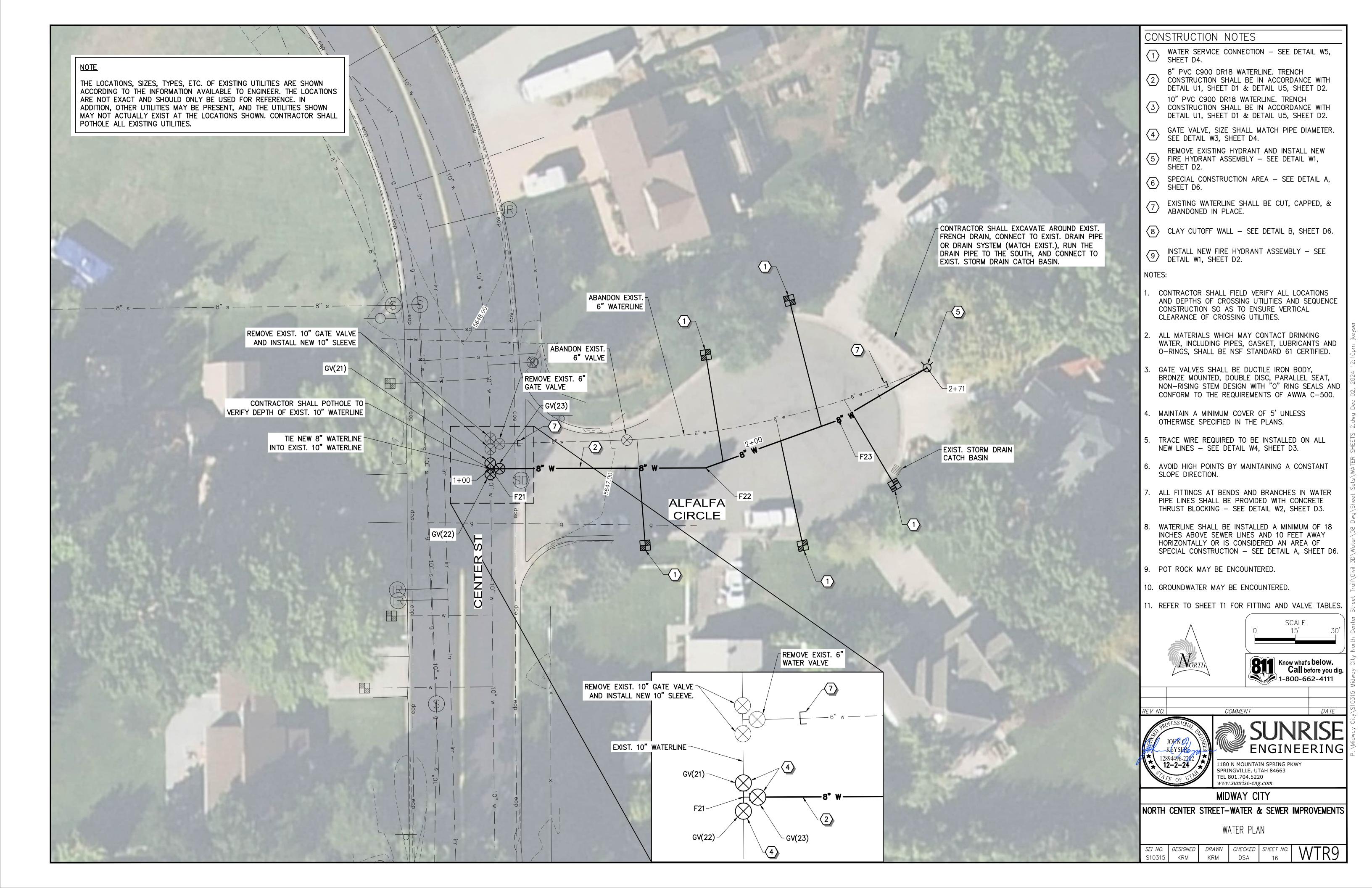












FITTING TABLE								
Fitting Name	Diameter	Angle	Fitting Type	Connection Type	Station	Thrust Protection		
F1	12 in x 12 in x 10 in x 10 in	_	cross	FL X FL	99+81.80	Thrust Blocking per Detail D3/W2		
F2	12 in x 12 in x 6 in	_	tee	FL X FL	99+81.84	Thrust Blocking per Detail D3/W2		
F3	10 in x 10 in	11.25	elbow	MJ X MJ	100+31.93	Thrust Blocking per Detail D3/W2		
F4	10 in x 10 in	45	elbow	MJ X MJ	100+46.26	Thrust Blocking per Detail D3/W2		
F5	10 in x 10 in	45	elbow	MJ X MJ	100+55.04	Thrust Blocking per Detail D3/W2		
F6	10 in x 10 in	11.25	elbow	MJ X MJ	102+55.40	Thrust Blocking per Detail D3/W2		
F7	10 in x 10 in x 10 in x 10 in		cross	FL X FL	106+01.76	Thrust Blocking per Detail D3/W2		
F8	10 in x 10 in	11.25	elbow	MJ X MJ	106+49.08	Thrust Blocking per Detail D3/W2		
F9	10 in x 10 in	11.25	elbow	MJ X MJ	112+19.88	Thrust Blocking per Detail D3/W2		
F10	10 in x 10 in x 8 in	_	tee	FL X FL	115+56.18	Thrust Blocking per Detail D3/W2		
F11	10 in x 10 in	11.25	elbow	MJ X MJ	115+80.55	Thrust Blocking per Detail D3/W2		
F12	10 in x 10 in x 8 in	_	tee	FL X FL	116+04.54	Thrust Blocking per Detail D3/W2		
F13	10 in x 10 in	11.25	elbow	MJ X MJ	116+55.96	Thrust Blocking per Detail D3/W2		
F14	10 in x 10 in	11.25	elbow	MJ X MJ	118+25.95	Thrust Blocking per Detail D3/W2		
F15	8 in x 6 in	_	reducer	FL X FL	121+84.13	Thrust Blocking per Detail D3/W2		
F16	10 in x 10 in x 8 in	_	tee	FL X FL	121+84.10	Thrust Blocking per Detail D3/W2		
F17	10 in x 10 in x 8 in	_	tee	FL X FL	127+02.42	Thrust Blocking per Detail D3/W2		
F18	10 in x 10 in x 8 in	_	tee	FL X FL	132+18.48	Thrust Blocking per Detail D3/W2		
F19	10 in x 10 in	11.25	elbow	MJ X MJ	134+52.66	Thrust Blocking per Detail D3/W2		
F20	10 in x 10 in	11.25	elbow	MJ X MJ	134+89.60	Thrust Blocking per Detail D3/W2		

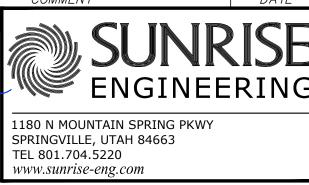
Valve Name	Size	Туре	Connection Type	Station
GV(1)	12	Gate	FL X MJ	99+81.66
GV(2)	10	Gate	FL X MJ	99+85.95
GV(3)	10	Gate	FL X MJ	105+99.94
GV(4)	10	Gate	FL X MJ	106+01.69
GV(5)	10	Gate	FL X MJ	106+01.76
GV(6)	10	Gate	FL X MJ	106+03.93
GV(7)	10	Gate	FL X MJ	115+54.44
GV(8)	10	Gate	FL X MJ	115+56.27
GV(9)	10	Gate	FL X MJ	115+58.07
GV(10)	8	Gate	FL X MJ	116+06.01
GV(11)	10	Gate	FL X MJ	116+06.24
GV(12)	10	Gate	FL X MJ	121+82.13
GV(13)	8	Gate	FL X MJ	121+84.14
GV(14)	10	Gate	FL X MJ	121+86.05
GV(15)	10	Gate	FL X MJ	126+99.36
GV(16)	8	Gate	FL X MJ	127+02.32
GV(17)	10	Gate	FL X MJ	127+05.3
GV(18)	10	Gate	FL X MJ	132+15.07
GV(19)	8	Gate	FL X MJ	132+18.48
GV(20)	10	Gate	FL X MJ	132+22.2

	FITTING TABLE								
Fitting Name	ame Diameter Angle Fitting Type Connection Type Station Thrust Protection								
F21	10 in x 10 in x 8 in		tee	FL X FL	1+00.00	Thrust Blocking per Detail D3/W2			
F22	8 in x 8 in	22.50	elbow	MJ X MJ	1+79.93	Thrust Blocking per Detail D3/W2			
F23	8 in x 8 in	11.25	elbow	MJ X MJ	2+32.52	Thrust Blocking per Detail D3/W2			

VALVE TABLE									
Valve Name Size Type Connection Type Station									
GV(21)	10	Gate	FL X MJ	1+00.00					
GV(22)	10	Gate	FL X MJ	1+00.01					
GV(23)	8	Gate	FL X MJ	1+02.24					





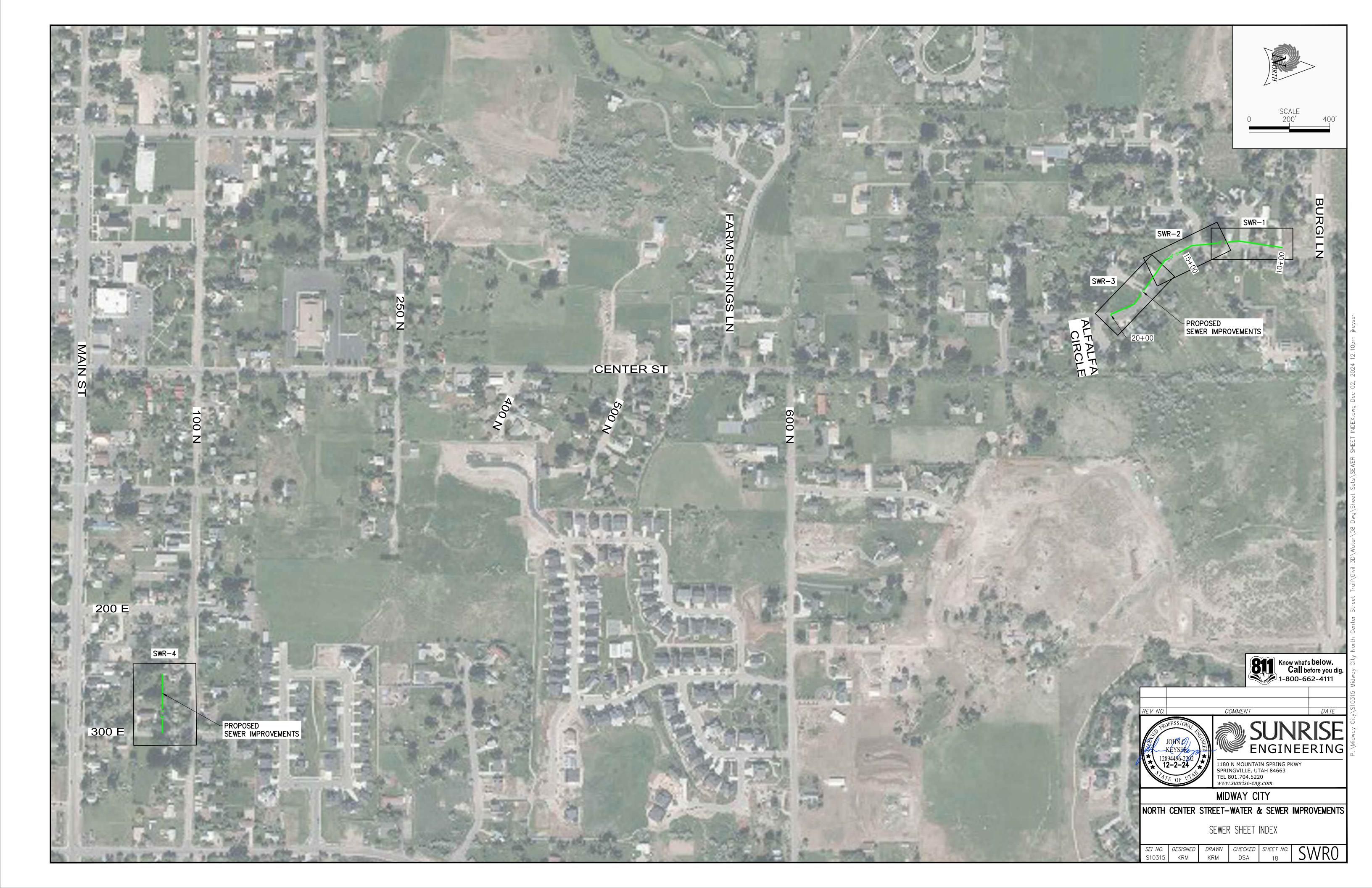


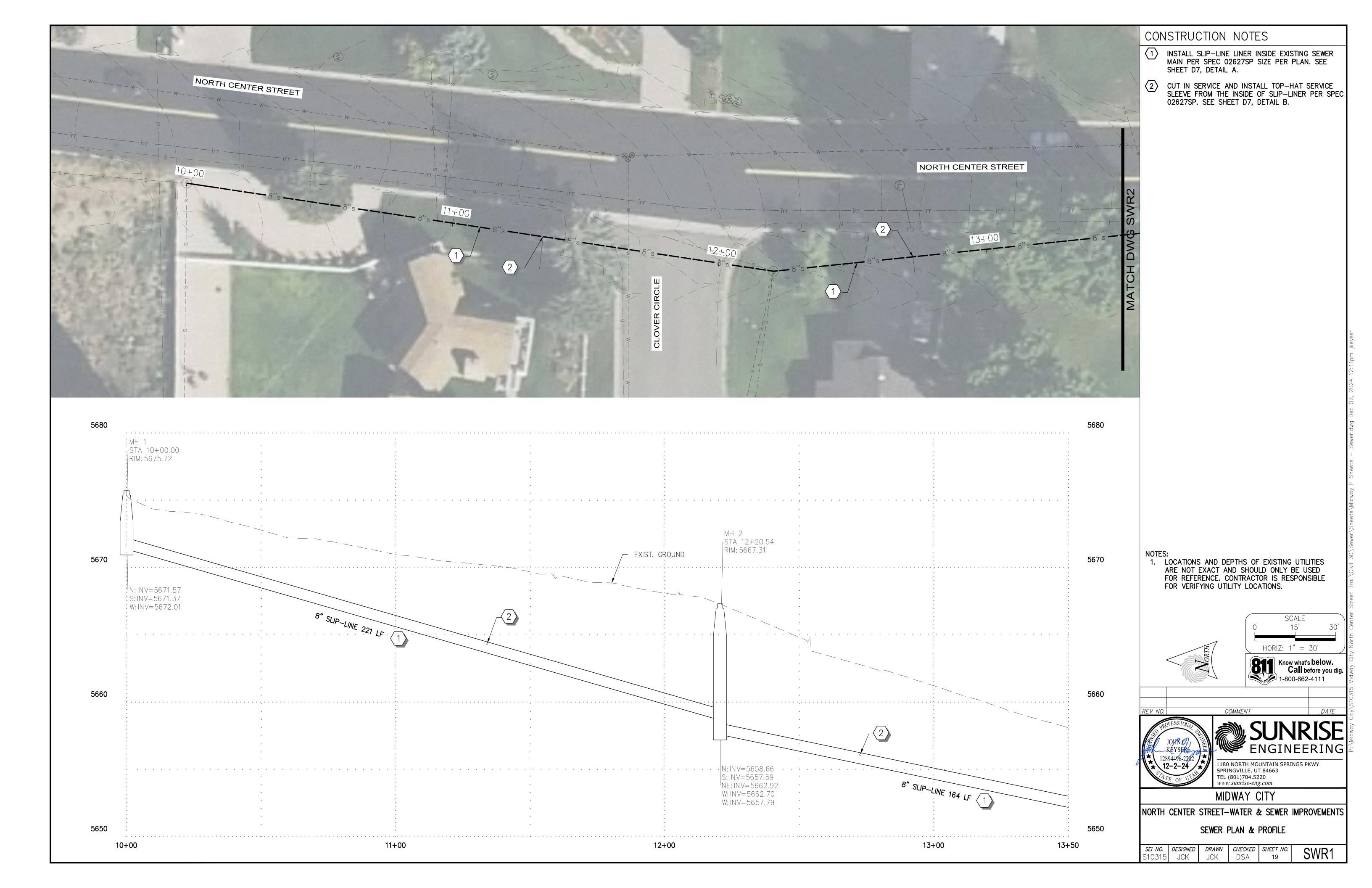
MIDWAY CITY

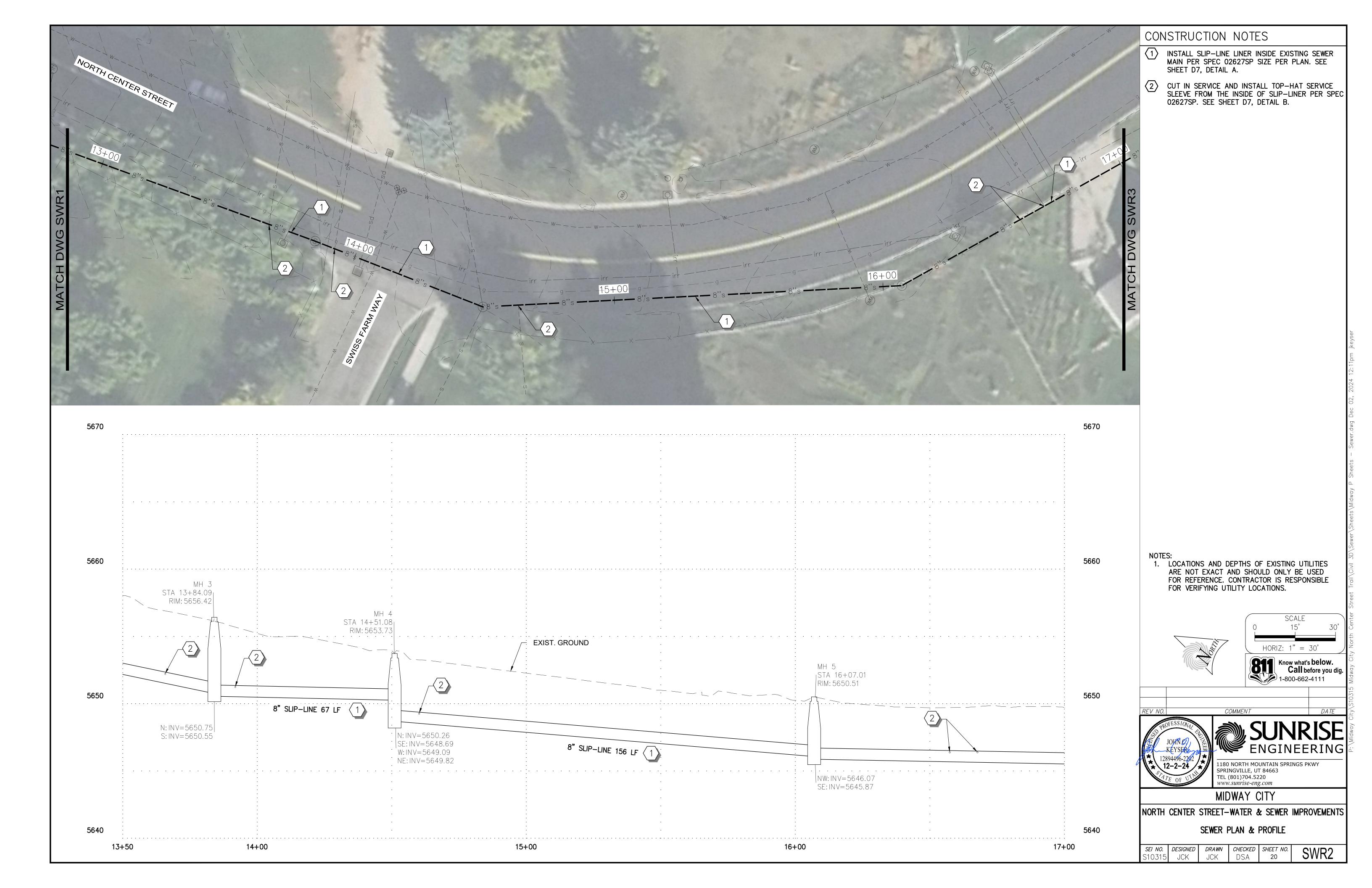
NORTH CENTER STREET-WATER & SEWER IMPROVEMENTS

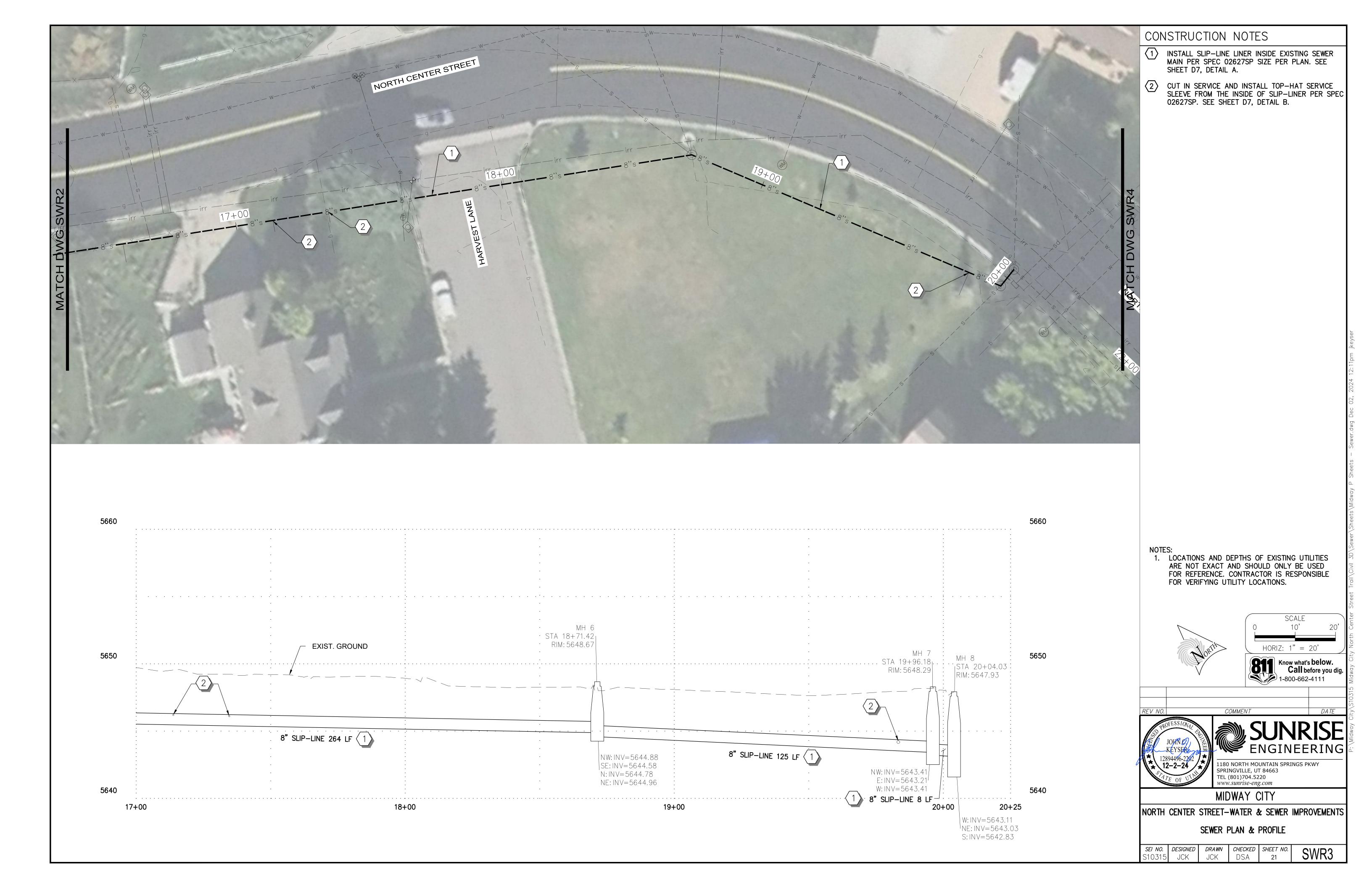
FITTING & VALVE TABLES

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S10315 KRM KRM DSA 17

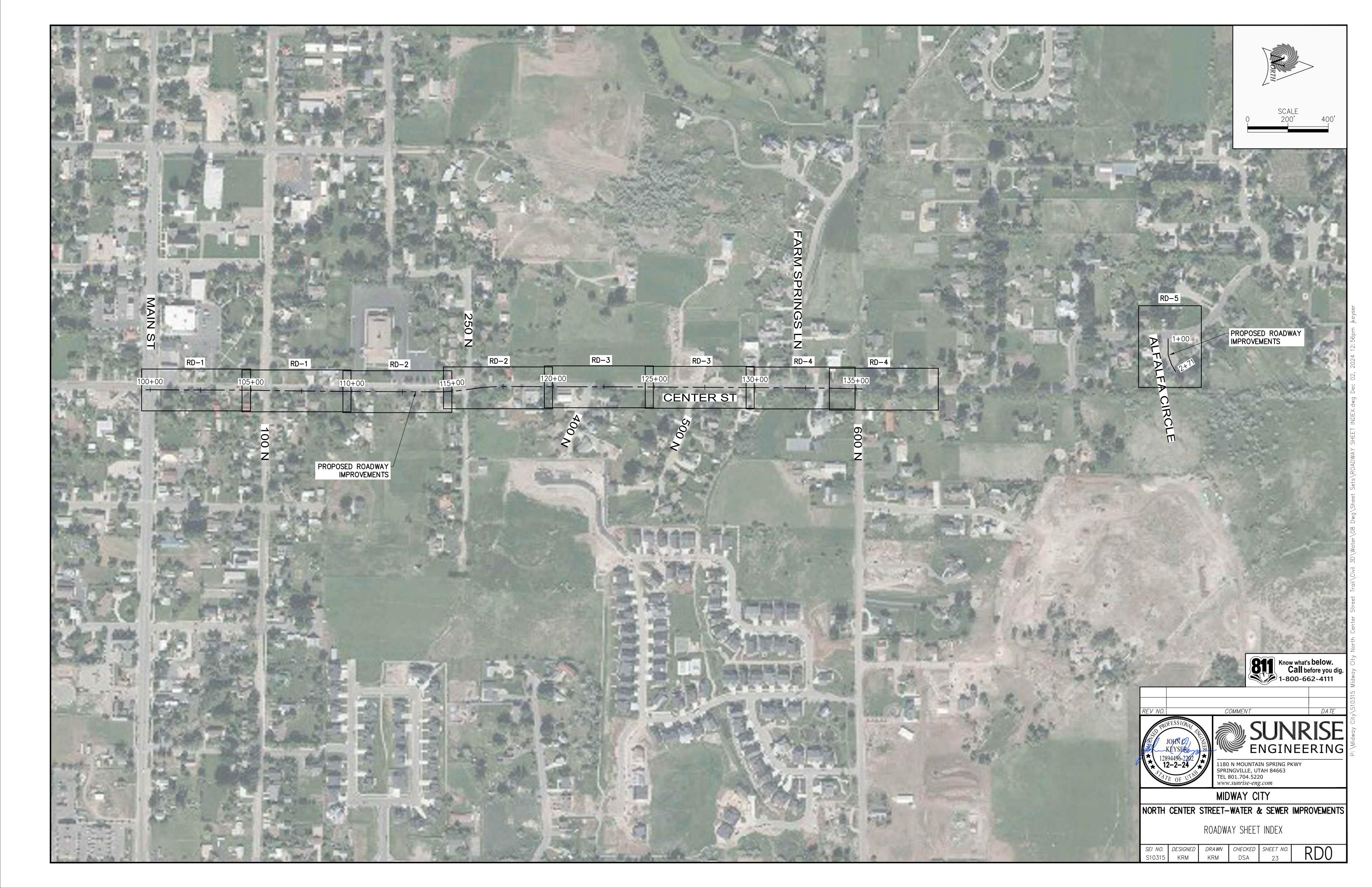


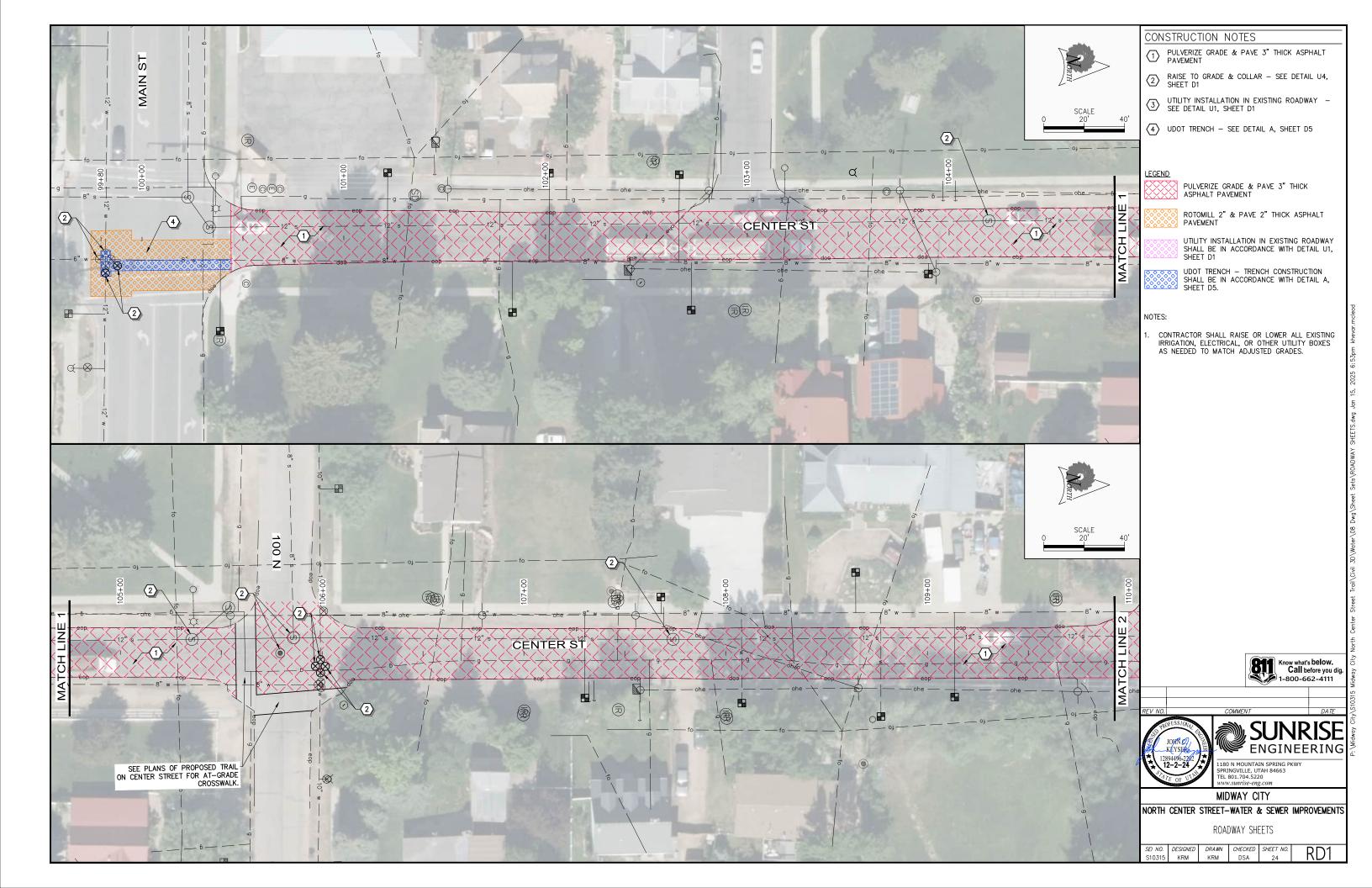


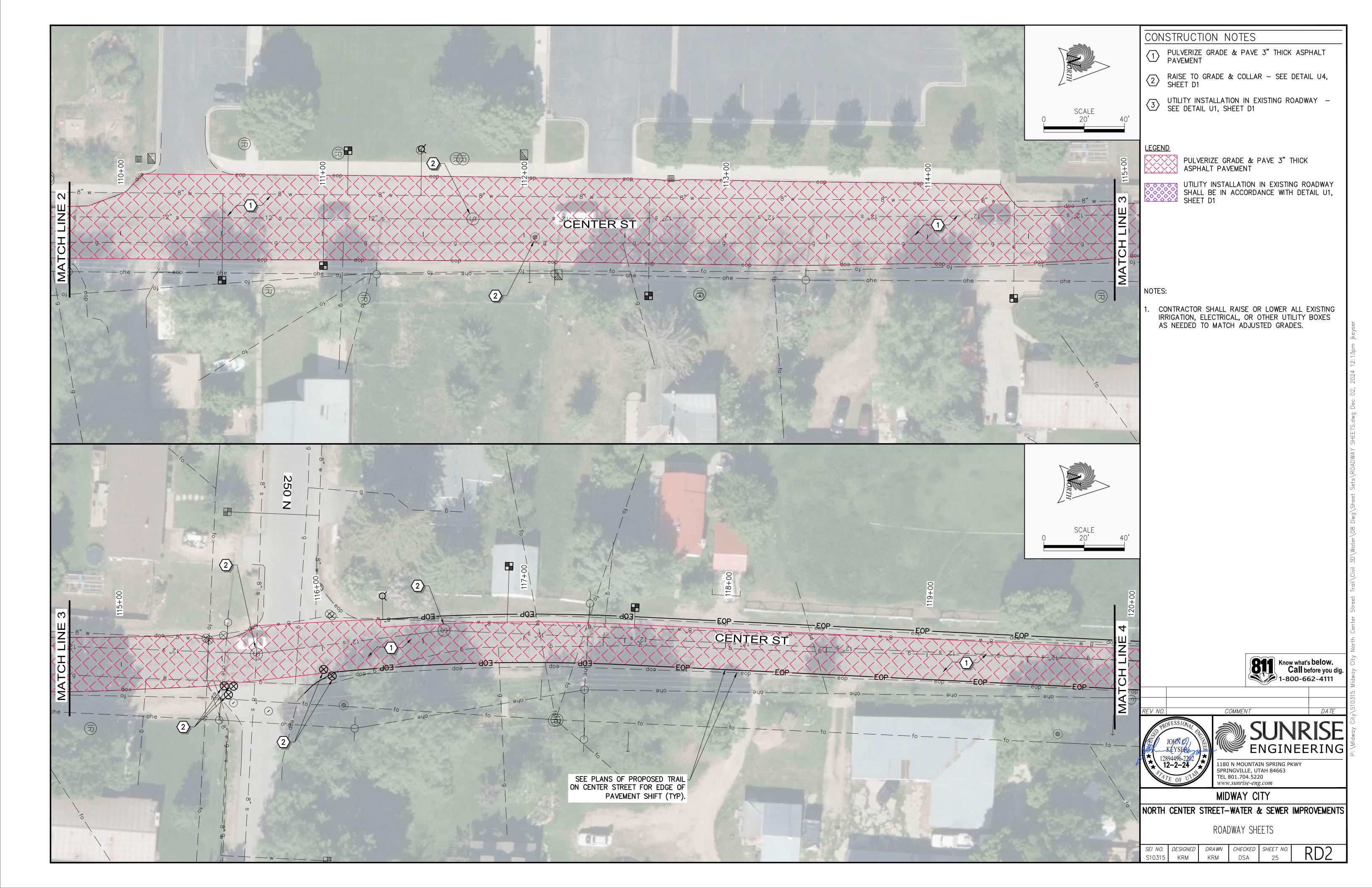


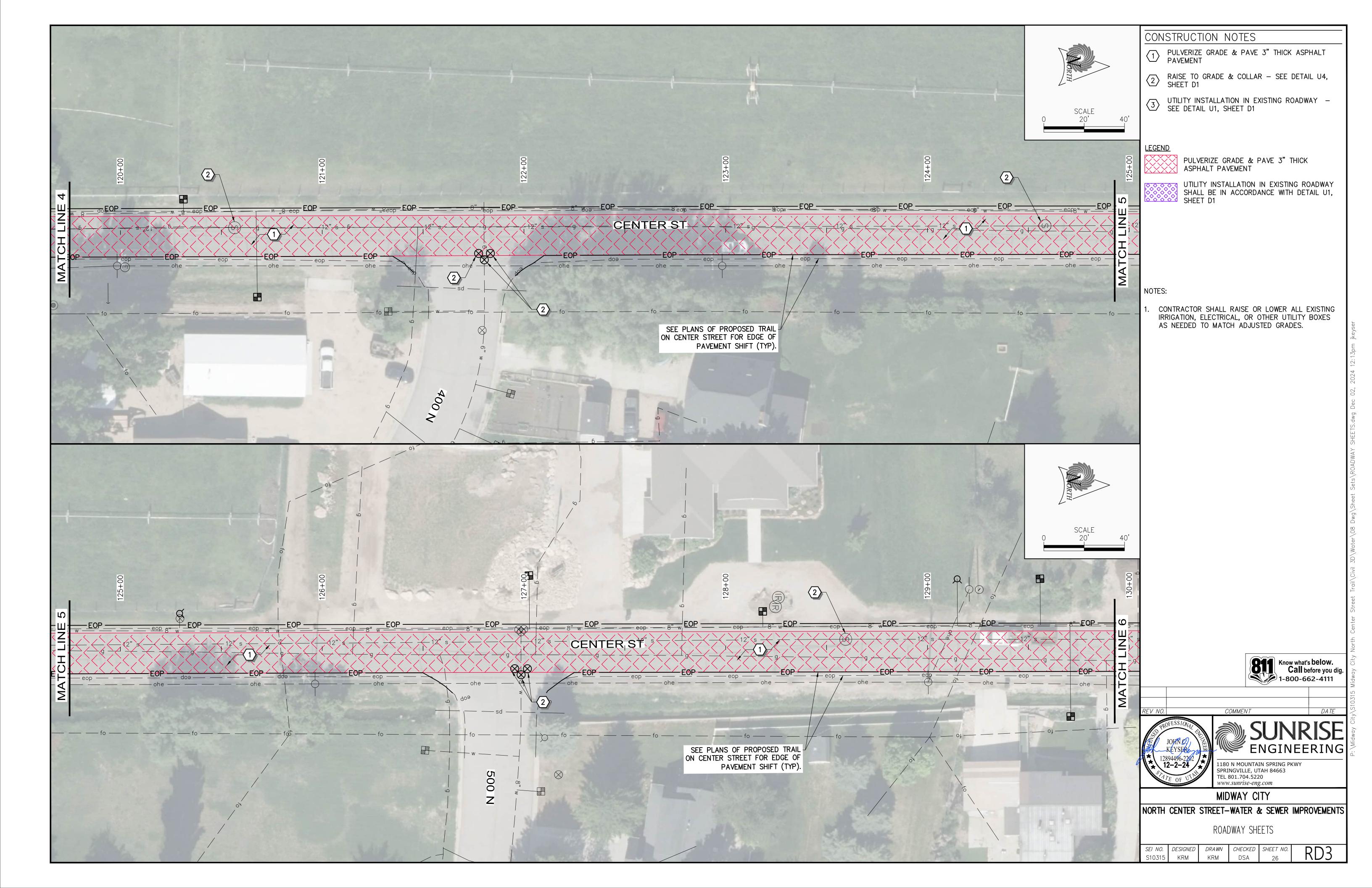




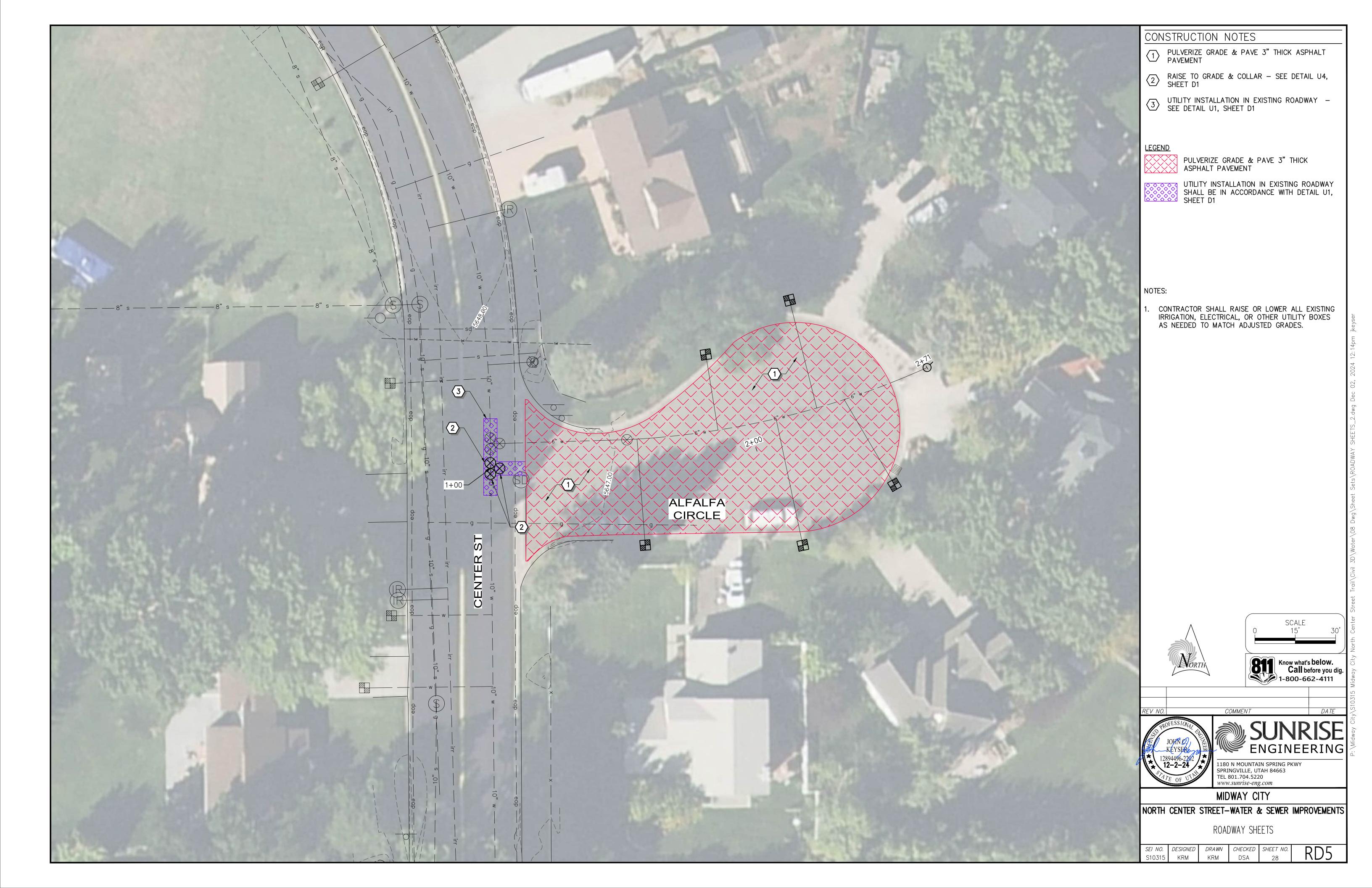












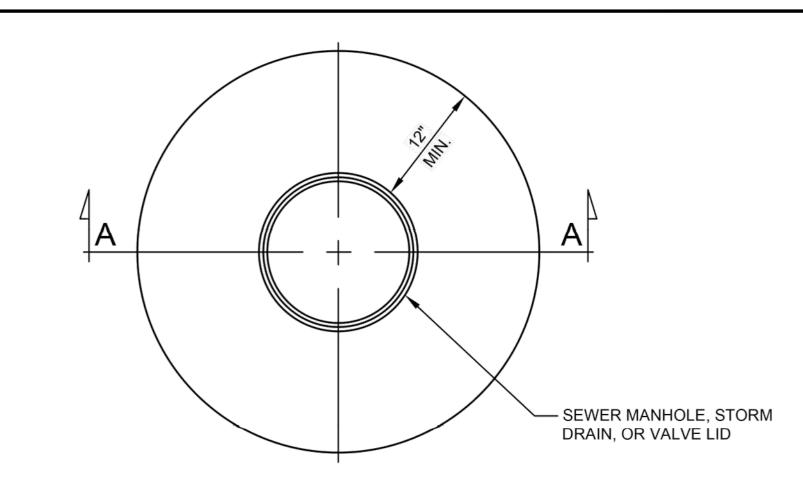
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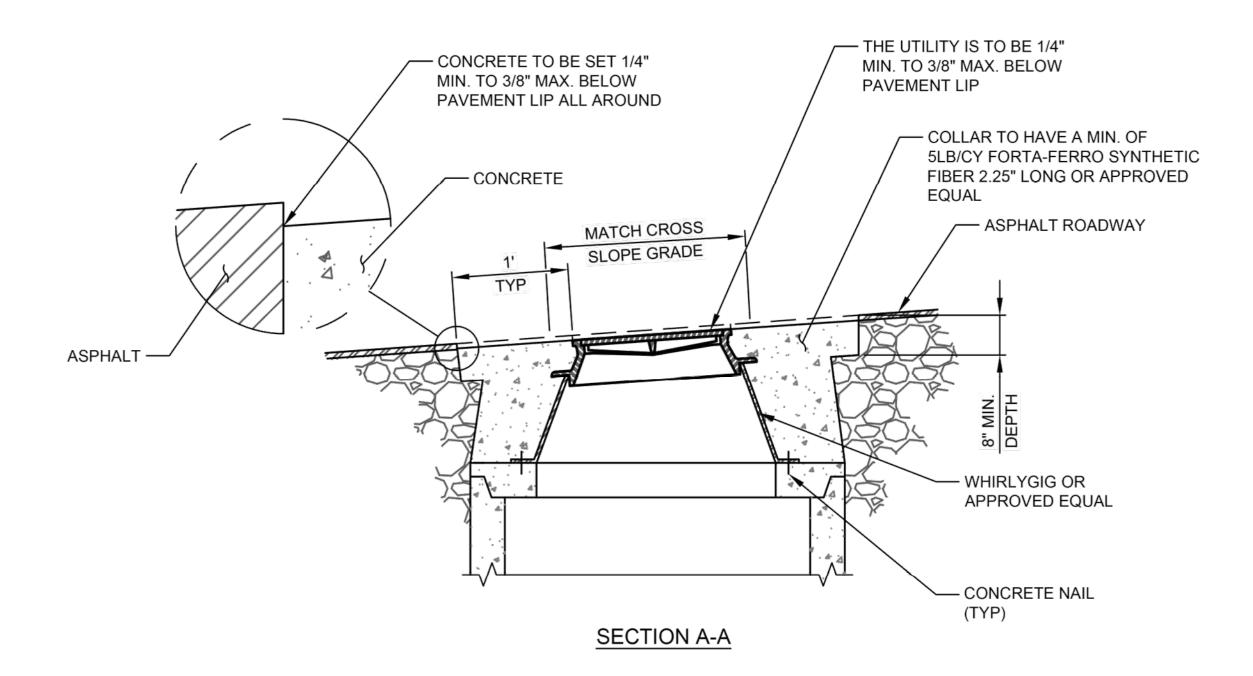
1. COMPACTED BEDDING MATERIAL SHALL CONSIST OF SAND, OR WELL GRADED CRUSHED ROCK 1/2" MINIMUM 3/4" MAXIMUM. MATERIALS, METHOD AND COMPACTION, SHALL BE APPROVED BY ENGINEER. PEA GRAVEL IS PROHIBITED, EXCEPT WHEN APPROVED BY ENGINEER. 2. USE PROPER MARKER TAPE APPROVED BY ENGINEER.

BY SOIL CONDITIONS

- REFER TO SECTION 02225-3.08 FOR COMPACTION DETAILS.
- 4. MIDWAY CITY MAY CHOOSE AT THE CITY'S EXPENSE TO INSTALL 3" CONDUIT WITHIN TRENCH FOR FUTURE USE.

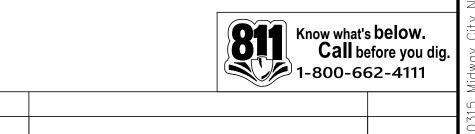
UTILITY INSTALLATION IN EXISTING ROADWAY TYP N.T.S.

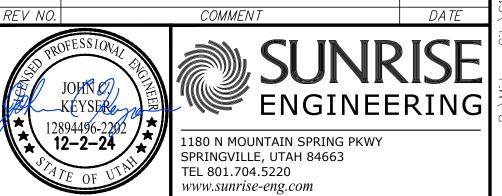




- 1. CONCRETE COLLAR, CLASS 4500 PSI, 7 BAG MIX, SEE SECTION 03304.
- 2. COLLAR PERIMETER SHALL BE CUT USING A SAW UNLESS APPROVED BY THE ENGINEER.
- DETAIL IS FOR ALL MANHOLES AND VALVES.
- 4. ALL MANHOLES, CATCH BASINS, VALVE BOXES AND VERTICAL STRUCTURES SHALL BE COMPACTED USING A JUMPING JACK TYPE DEVICE WITH MAXIMUM LIFTS NOT TO EXCEED 6 INCHES OR AS RECOMMENDED BY JUMPING JACK MANUFACTURES. DENSITY TESTS SHALL BE TAKEN AT EVERY MANHOLE, CATCH BASIN, VALVE BOX AND VERTICAL STRUCTURES.





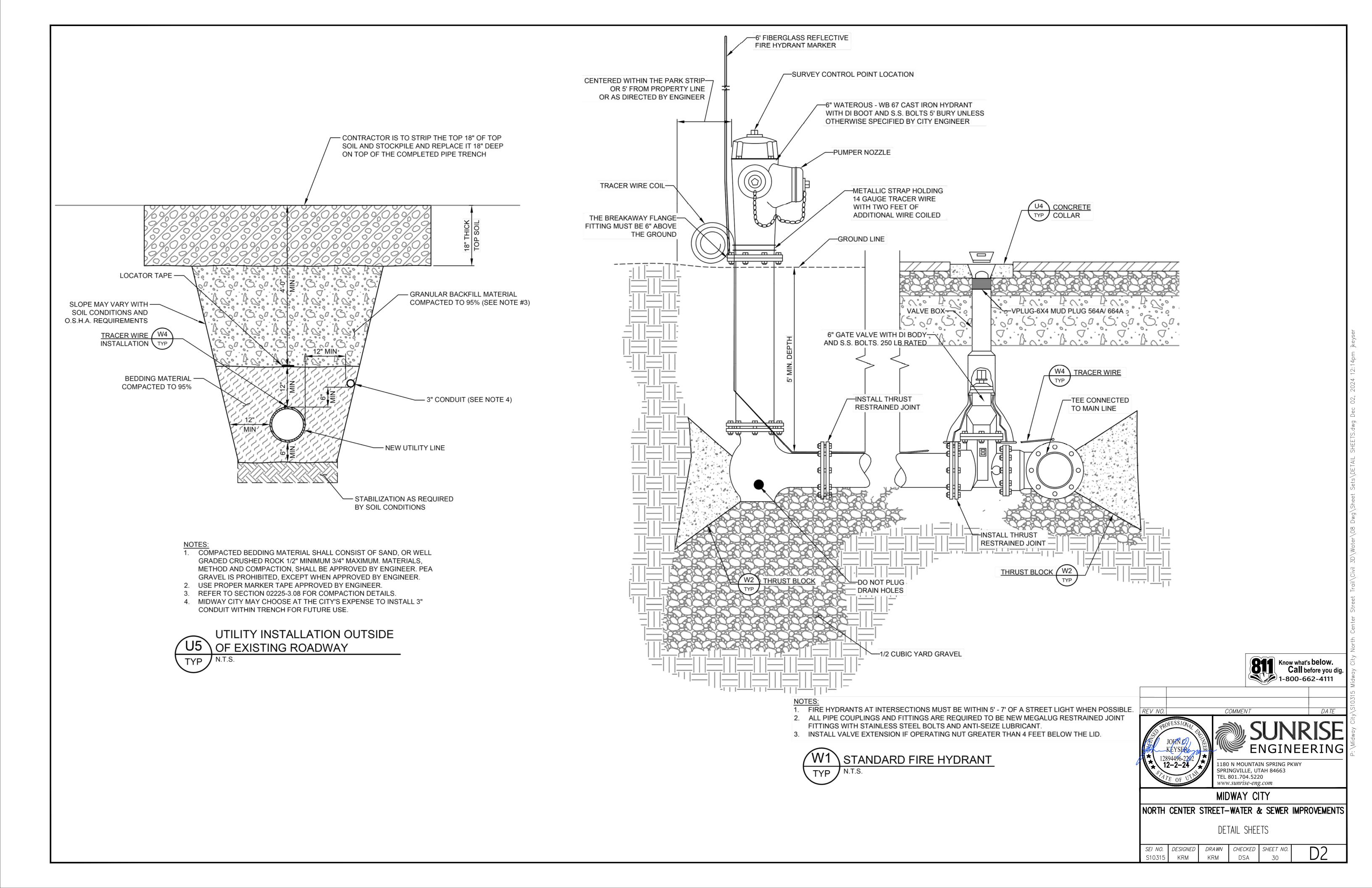


MIDWAY CITY

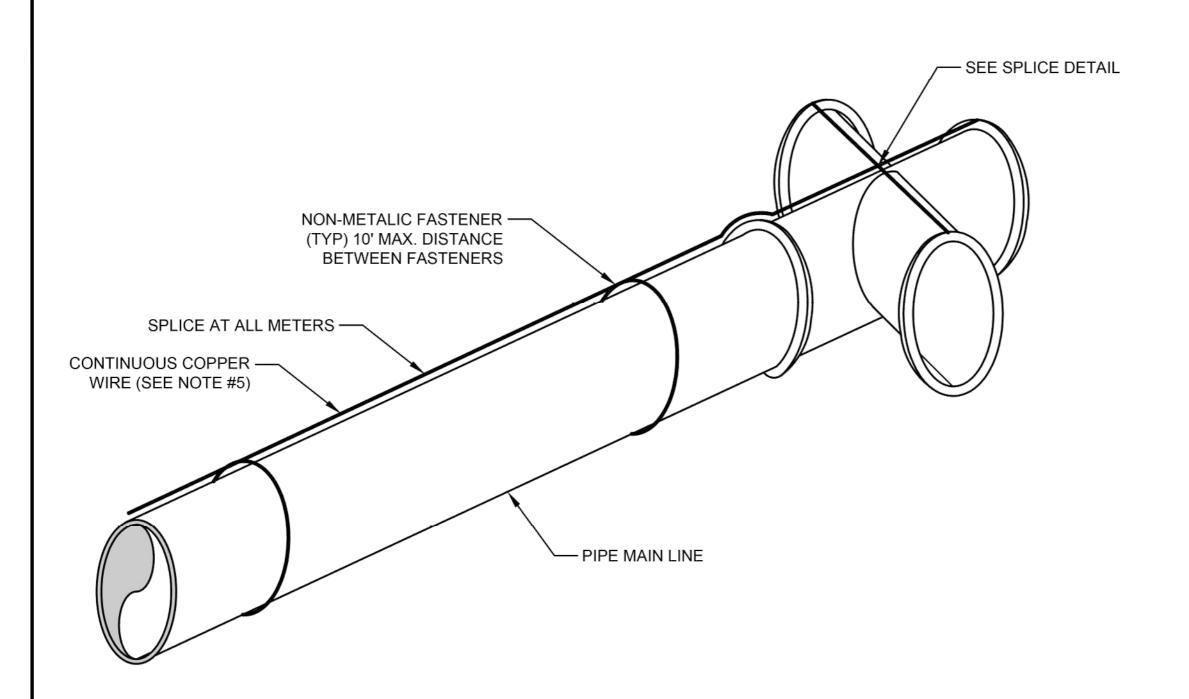
NORTH CENTER STREET-WATER & SEWER IMPROVEMENTS

DETAIL SHEETS

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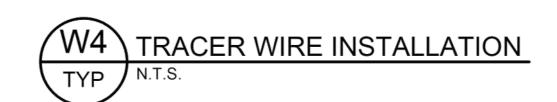


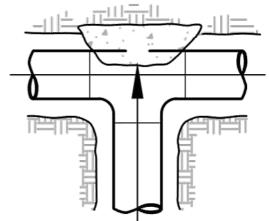
SPLICE DETAIL

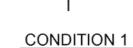


NOTES:

- 1. COPPER TRACER WIRE TO BE INSTALLED THE LENGTH OF PIPELINE AND EACH CULINARY SERVICE, AND SECONDARY SERVICE, ALONG EACH PRESSURIZED IRRIGATION PIPELINE AND SERVICE. TRACER WIRE TO BE BROUGHT UP IN AT LEAST ONE VALVE IN EACH INTERSECTION. TRACER WIRE TO BE BROUGHT TO THE END OF EACH FIRE HYDRANT ON CULINARY LINES. (NOT TO EXCEED 500 FEET).
- 2. TRACER WIRE TO BE INSTALLED ALONG EACH WATER SERVICE TO THE METER CAN.
- 3. TRACER WIRE TO BE INSTALLED AND MAINTAINED ON TOP OF PIPE CENTERLINE DURING BACKFILL.
- 4. SPLICE KIT USED TO ELECTRICALLY CONNECT TWO OR MORE PRESTRIPPED COPPER WIRES AND MOISTURE SEAL THE CONNECTION FOR DIRECT BURIAL. THE KIT SHALL INCLUDE A 3M (OR APPROVED EQUAL) PERFORMANCE PLUS WIRE CONNECTOR AND A HIGH IMPACT, UV RESISTANT POLYPROPYLENE TUBE PREFILLED WITH MOISTURE-RESISTANT GREASE.
- 5. COPPER WIRE SHALL BE #12 AWG SOLID UF TYPE WITH CROSS-LINKED POLYETHYLENE INSULATION.
- 6. CONTRACTOR SHALL TEST TRACER WIRE FOR CONTINUITY PRIOR TO PAVING IN THE PRESENCE OF THE
- 7. THE TEE/CROSS IS SHOWN WITHOUT VALVES AND IS INTENDED TO SHOW TRACER WIRE ROUTING ONLY.
- 8. ALL PIPE COUPLINGS AND FITTINGS ARE REQUIRED TO BE NEW MEGALUG RESTRAINED JOINT FITTINGS ON PIPE
- 9. ALL BOLT KITS/ PACKS SHALL BE STAINLESS STEEL WITH ANTI-SEIZE LUBRICANT.
- 10. ANY FLANGED FITTING SHALL USE PAPER GASKET.



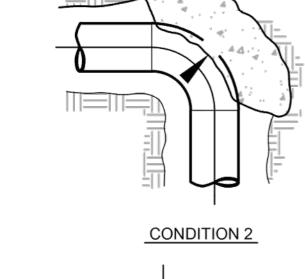


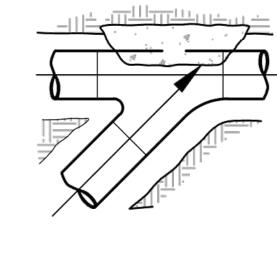


CONDITION 5

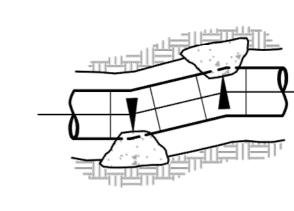
CONDITION 9

(AT ENGINEER DISCRETION)

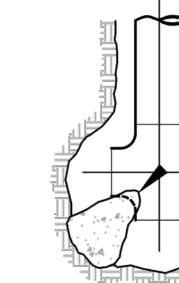




CONDITION 3

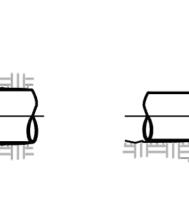


CONDITION 4

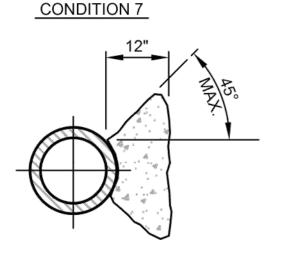


CONDITION 8

CONDITION 6



ANCHOR REQ'D FOR VALVES 12" OR LARGER



TYPICAL SECTION THRU THRUST BLOCK

THRUST BLOCK BEARING AREA IN SQ. FT.									
PIPE	CONDITION								
SIZE	1	2	3	4	5	6	7	8	9
4	2.6	3.3	2.6	1.3	1.3	2.0	3.3	2.6	1.3
6	4.6	6.5	3.9	2.0	2.6	3.3	6.5	4.6	2.0
8	7.8	11.0	5.9	3.3	3.9	5.9	11.0	7.8	3.3
10	12.4	17.5	9.8	5.2	6.5	9.1	17.5	12.4	5.2
12	17.5	24.8	13.6	7.8	9.1	12.3	24.8	17.5	7.8
14	24.0	33.8	18.2	9.7	12.3	16.9	33.8	24.0	9.7
16	31.1	44.0	23.8	12.7	15.5	23.2	44.0	31.1	12.7
20	48.6	68.8	37.2	19.8	24.2	36.3	68.8	48.6	19.8
24	89.8	90.1	48.8	24.9					24.9

- 1. ALL THRUST BLOCK BEARING FACES SHALL BE POURED AGAINST UNDISTURBED SOIL OR APPROVED COMPACTED BACKFILL.
- 2. CONCRETE SHALL BE CLASS 6.0-B-3000. SEE SECTION 03304-2.06.
- 3. ALL THRUST BLOCK SIDES SHALL BE FORMED.
- 4. CALCULATED ON 225 LB. TEST PRESSURE AND ALLOWABLE BEARING PRESSURE OF 2000 LBS. PER SQUARE FEET.
- 5. IN POORER SOILS SPECIAL DESIGN IS REQUIRED.





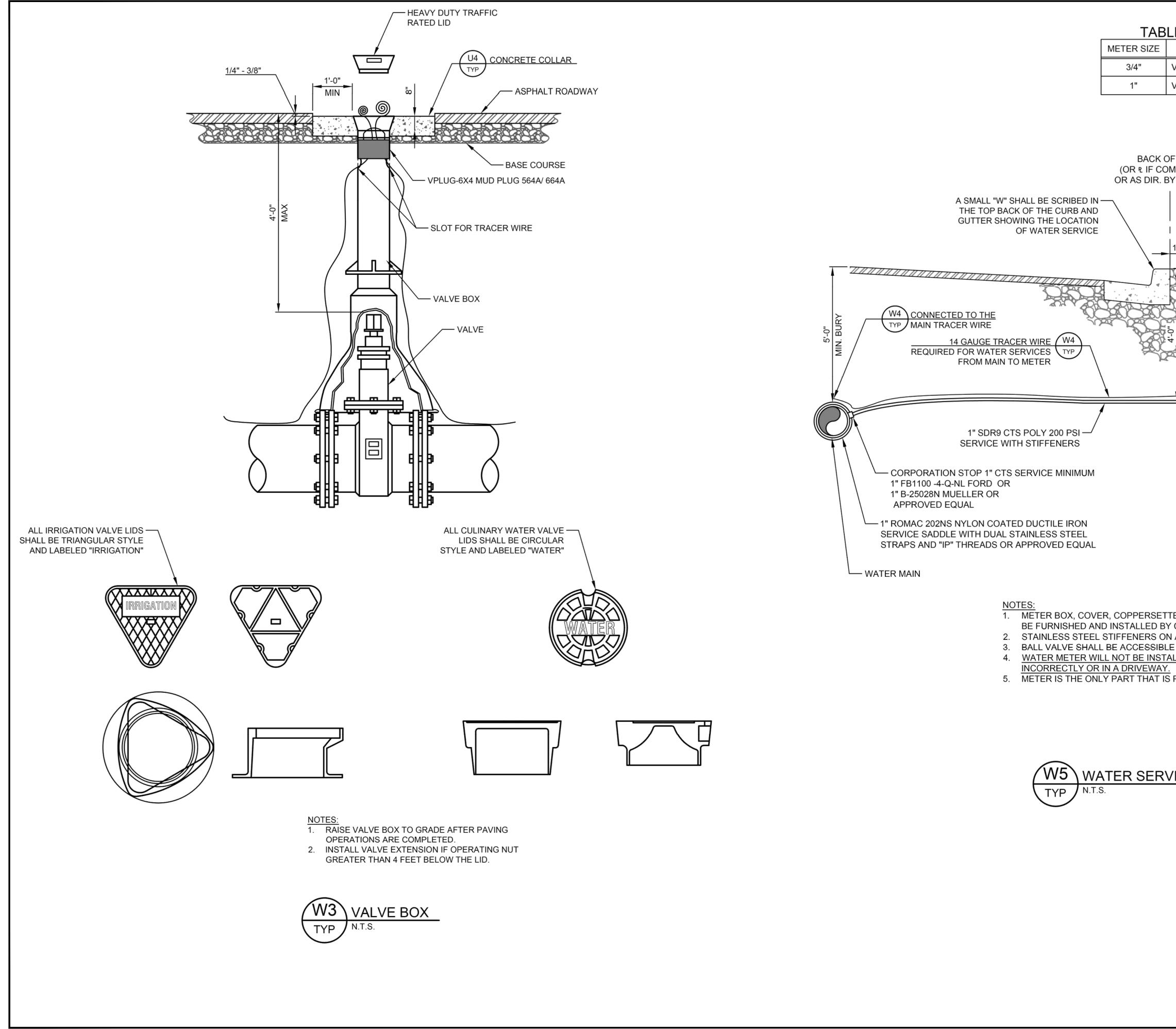


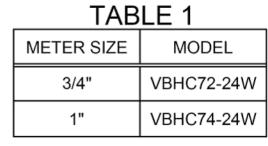
MIDWAY CITY

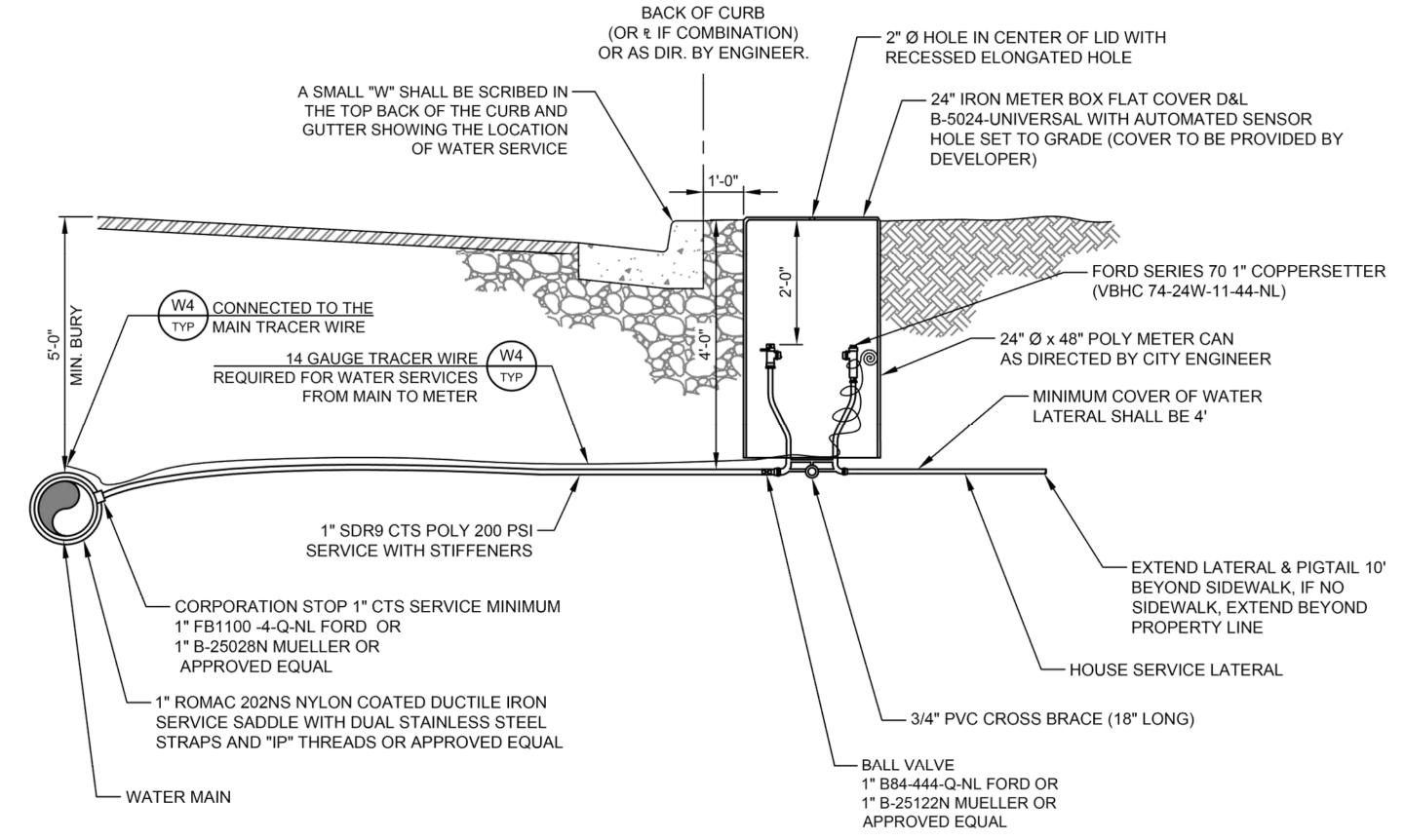
NORTH CENTER STREET-WATER & SEWER IMPROVEMENTS

DETAIL SHEETS

SEI NO. | DESIGNED | DRAWN | CHECKED | SHEET NO. KRM KRM DSA







- 1. METER BOX, COVER, COPPERSETTER, CORPORATION STOP, & SERVICE LINES TO BE FURNISHED AND INSTALLED BY CONTRACTOR/ DEVELOPER.
- 2. STAINLESS STEEL STIFFENERS ON ALL POLY CONNECTIONS.
- 3. BALL VALVE SHALL BE ACCESSIBLE FROM INSIDE CAN.
- WATER METER WILL NOT BE INSTALLED IF METER CAN IS INSTALLED
- 5. METER IS THE ONLY PART THAT IS PROVIDED BY THE CITY.





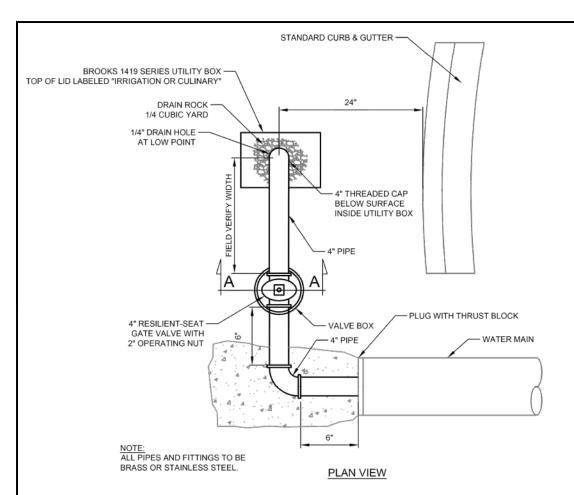


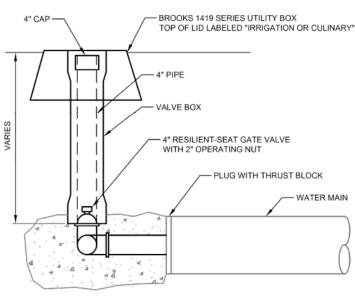
MIDWAY CITY

NORTH CENTER STREET-WATER & SEWER IMPROVEMENTS

DETAIL SHEETS

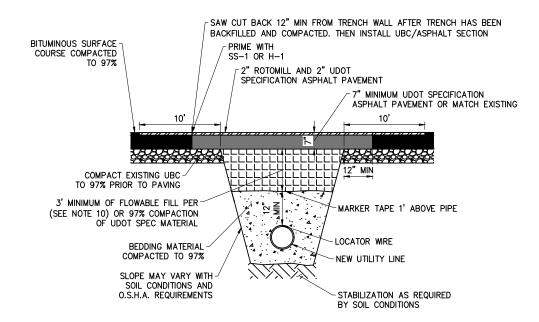
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SECTION A-A



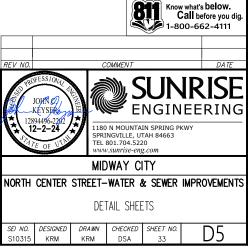


UTILITY INSTALLATION IN EXISTING UDOT ROADWAYS NOT TO SCALE

<u>NOTES</u>

- 1. COMPACTED BEDDING MATERIAL SHALL CONSIST OF SAND, OR 3/4" DRAIN ROCK.
- . MATERIALS, METHOD & COMPACTION SHALL BE APPROVED BY ENGINEER AND COMPLY W/
- 3. PEA GRAVEL AND COURSE SAND SHALL ONLY BE ALLOWED W/ ENGINEER'S APPROVAL.
- USE OF NATIVE MATERIAL FOR BACKFILL IS PROHIBITED (EXCEPT AS APPROVED BY THE CITY ENGINEER AND UDOT WITH FULL TIME TESTING AND INSPECTION).
- USE PROPER MARKER TAPE AS APPROVED BY CITY ENGINEER.
- 6. INSTALL TRACER WIRE AS PER CITY OF MIDWAY STANDARD DRAWING.
- 7. TRENCHES LESS THAN 2 FOOT WIDE MAY USE FLOWABLE—FILL OR SAND WITH HOT MIX TOP AND TACKED EDGES WITH CITY APPROVAL, AND UDOT APPROVAL.
- 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.
- BEFORE COMMENCING WORK ON THE STATE HIGHWAY, THE CONTRACTOR IS REQUIRED TO OBTAIN AN ENCROACHMENT PERMIT ACCOMPANIED BY A TRAFFIC CONTROL PLAN FROM THE APPLICABLE REGION'S PERMITS OFFICE BEFORE WORKING WITHIN THE STATE RIGHT—OF—WAY.

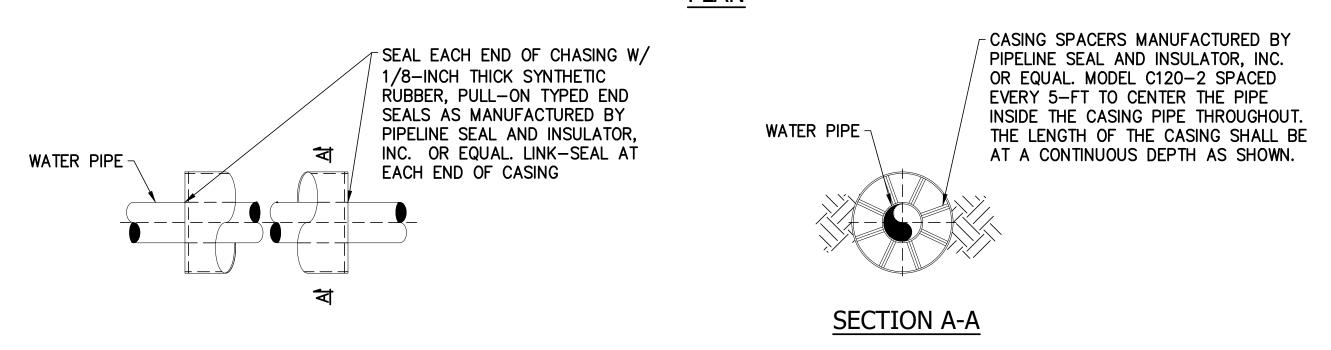
- FOR ALL PERPENDICULAR ROAD CUTS, USE FLOWABLE FILL PER UDOT'S CURRENT MIX DESIGN (50-150 PSI) UDOT SPEC. 03575.
- FOR EXCAVATIONS OUTSIDE OF THE ROADWAY, BACK FILL WITH UDOT APPROVED GRANULAR BORROW AND ROAD BASE. COMPACTION PER UDOT SPEC. 2056 AND 2721.
- THE CONTRACTOR IS REQUIRED TO HIRE AN INDEPENDENT COMPANY FOR ALL TESTING WITHIN THE UDOT RIGHT—OF—WAY.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE UDOT RIGHT-OF-WAY THAT MAY BE DIRECTLY OR INDIRECTLY CAUSED BY THE DEVELOPMENT ACTIVITY.
- ALL ABOVE GROUND FEATURES INCLUDING UTILITIES (POLES, FIRE HYDRANTS, BOXES, ETC.) MUST BE RELOCATED OUT OF THE AASHTO CLEAR ZONE OR A MINIMUM OF 18" BEHIND CURB.
- CONTRACTOR SHALL COORDINATE WITH UDOT TO DETERMINE ALLOWED WORK TIMES AND ALLOWED LANE CLOSURES OR SHOULDER WORK DURING DAYTIME HOURS.



<u>NOTES</u>

1. CASING ONLY REQUIRED WHEN CROSSING UNDER OR WITHIN 18" OF SEWER LINES OR OTHER NON-POTABLE WATERLINE.

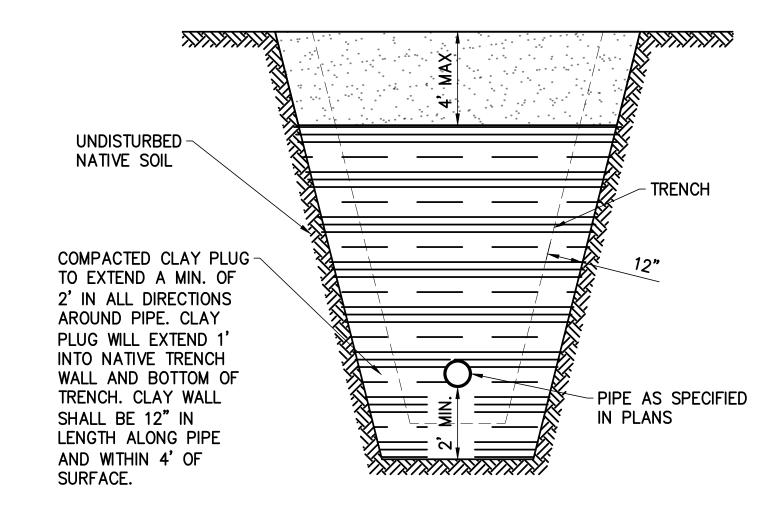
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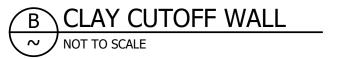


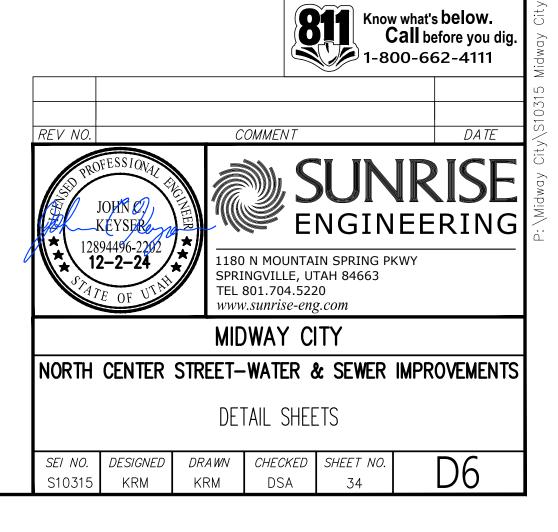
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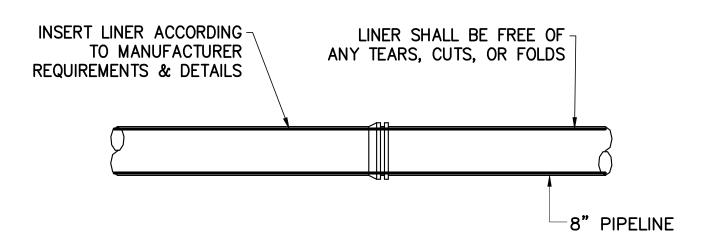
- 1. CARRIER PIPE SHALL BE TESTED BEFORE SEALING THE ENDS OF THE CASING.
- 2. SPACERS SHALL BE SECURELY ATTACHED TO CARRIER PIPE PER MANUFACTURER'S REQUIREMENTS.
- 3. CASING PIPE SHALL BE A53 GRADE STEEL CASING WITH 0.375" MINIMUM THICKNESS. SIZE AS SPECIFIED ON PLANS.
- 4. CASING SHALL BE CENTERED ON EXISTING UTILITY.
- 5. JOINT RESTRAINTS FOR JOINTS INSIDE OF THE CASING ARE REQUIRED.



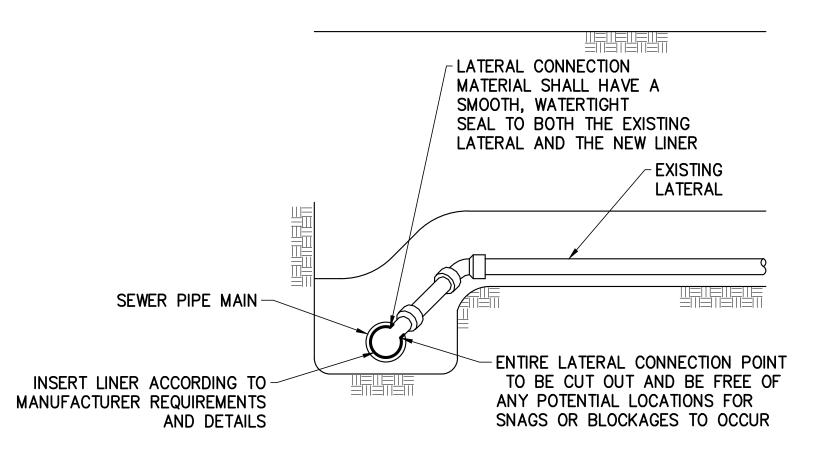








A DETAIL - SEWER PIPE LINING
TYP NOT TO SCALE



B DETAIL - SEWER LATERAL TO LINING CONNECTION
TYP NOT TO SCALE

