THE CITY OF ALEXANDER CITY

ALDOT PROJECT NUMBER BR-0063(507)

UTILITY RELOCATIONS ON STATE ROUTE 63 BID #24-19

2024

SHEET/DRAWING INDEX

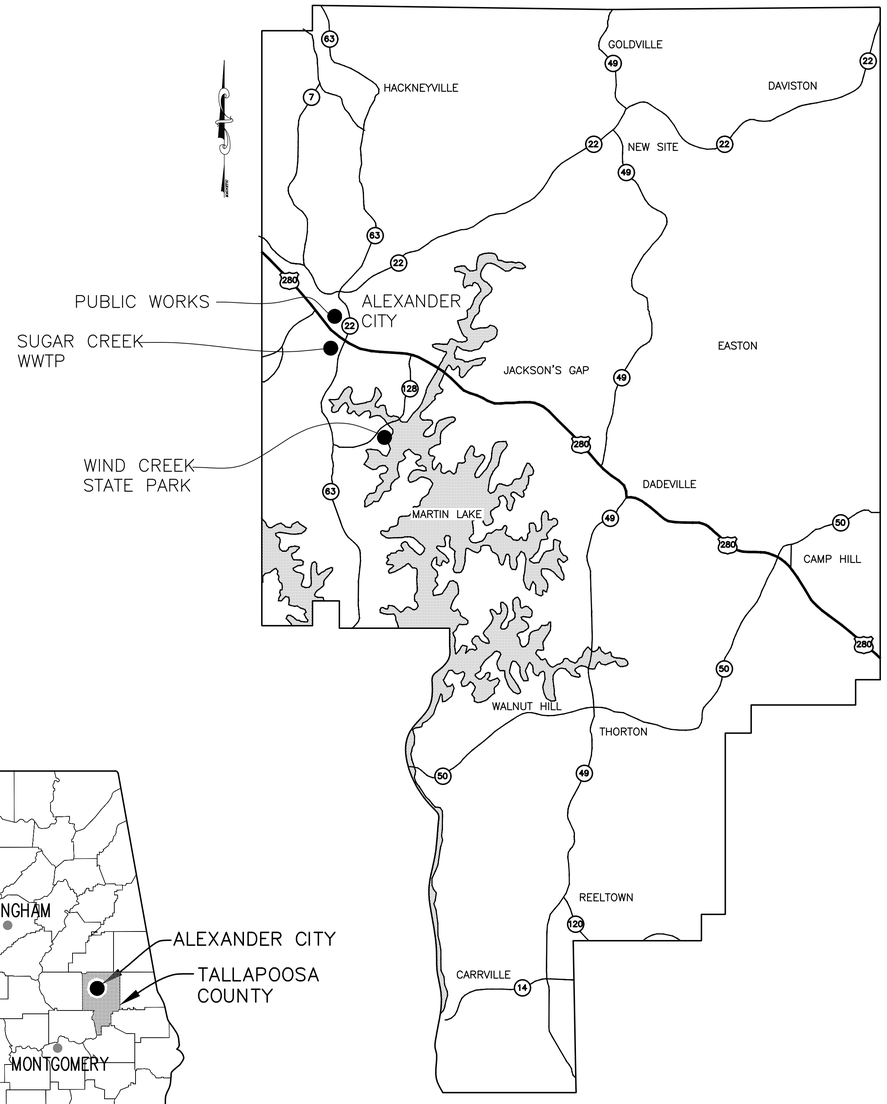
Municipal Consultants, Inc. Birmingham, Alabama

ALABAMA LICENSED NO. 33656 PROFESSIONAL ENGINEER TRENT R. TURNER

6-17-24

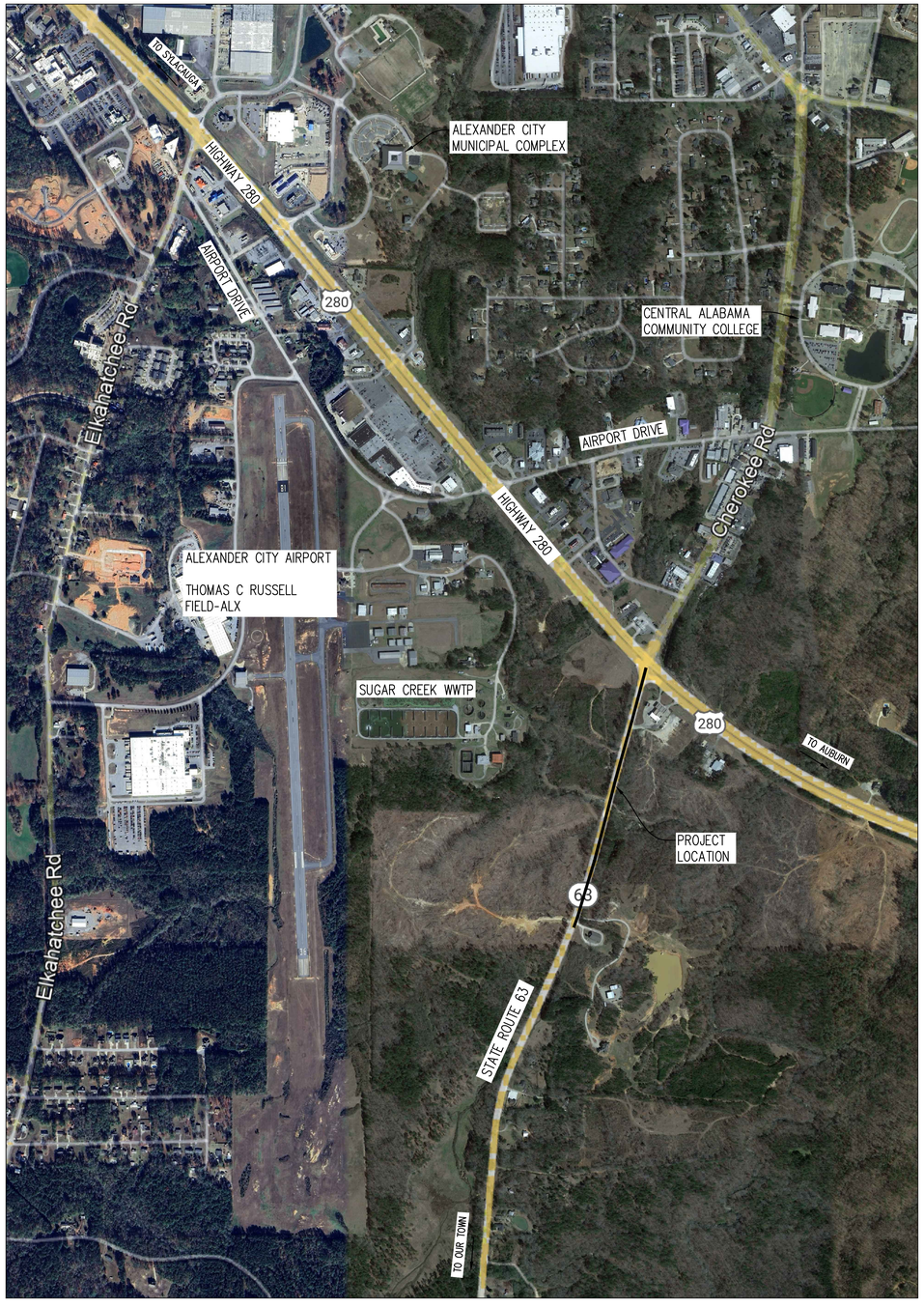
ALEXANDER CITY ALABAMA

BID SET



ALABAMA MAP

TALLAPOOSA COUNTY, ALABAMA



LOCATION MAP

Municipal Consultants, Inc.
200 Century Park South, Suite 212
Birmingham, Alabama 35226
(205) 822-0397

THE CITY OF ALEXANDER CITY

ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
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ALABAMA LICENSED NO. 33656 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Drawing Title	LOCATION MAP
Project No.	
Date	06-2024
Scale	NONE
Sheet	2
	BID SET

LEGEND

Symbol	Description	Symbol	Description
WM	PROPOSED WATER MAIN	R/R	RAILROAD CROSSING
	PROPOSED FIRE HYDRANT	S	EXISTING SEWER MANHOLE
	PROPOSED VALVE	GV	EXISTING GAS VALVE (OR METER)
AR	PROPOSED AIR RELIEF ASSEMBLY, TYPE DENOTED	WV	EXISTING WATER VALVE
SS	EXISTING SANITARY SEWER		EXISTING FIRE HYDRANT
W	EXISTING WATER MAIN		EXISTING WATER METER
S	EXISTING SANITARY SEWER FORCE MAIN		NEW WATER METER
FOC	EXIST. UNDERGROUND FIBER OPTIC CABLE		TREE OR SHRUB
UC	EXIST. UNDERGROUND CABLE	CP 1	SURVEY CONTROL POINT
G	EXIST. UNDERGROUND GAS MAIN		BENCH MARK
OE	EXIST. OVERHEAD ELECTRIC		11.25° BEND
	ACQUIRED EASEMENT		22.5° BEND
ROW	EXISTING RIGHT OF WAY		45° BEND
	SLOPE DIRECTION INDICATOR		90° BEND
	TREE LINE		TEE
			WYE
			CAP OR PLUG
	FENCE (TYPE VARIES)		REDUCER
			PROPERTY PIN
	EXISTING STORM SEWER		ROW MONUMENT
	CONCRETE HEAD WALL		MAILBOX
	EXISTING STORM SEWER INLET		ASPHALT ROAD OR DRIVE
	CATCH BASIN		GRAVEL ROAD OR DRIVE
	GUIDE WIRE ANCHOR		CONCRETE
E	UTILITY POLE		RIP RAP
L	LIGHT POLE		APPROXIMATE PROPERTY LINE
	TELEPHONE OR FOC PEDESTAL		RAILROAD
T	SIGN		

ABBREVIATIONS

Abbreviation	Meaning
@	AT
AL, ALUM	ALUMINUM
APPROX	APPROXIMATE
ASPH	ASPHALT
ASSY	ASSEMBLY
BLDG	BUILDING
BLK	BLOCK
BM	BENCHMARK
BOT, BTM	BOTTOM
BS	BOTH SIDES
CCP	CONCRETE CULVERT PIPE
CI	CAST IRON
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
℄	CENTER LINE
CMU	CONCRETE MASONRY UNIT
CL	CLASS
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
DIA	DIAMETER
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
DWN	DOWN
DWG	DRAWING
EA	EACH
EF	EACH FACE
ELEC	ELECTRICAL
EL, ELEV	ELEVATION
EQ	EQUAL
EW	EACH WAY
EX,EXIST	EXISTING
EXP	EXPANSION
EXT	EXTINGUISHER
FH	FIRE HYDRANT
FIN GR	FINISH GRADE
FL	FLOW LINE
FLG	FLANGED
FT	FOOT
FTG	FOOTING
GALV	GALVANIZED
GL	GAS LINE
GR	GRADE
GRVL	GRAVEL
GV	GATE VALVE
H,HGT,HT	HEIGHT
HORIZ	HORIZONTAL
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HZ	HERTZ
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCHES
INV	INVERT
JT	JOINT
LEN	LENGTH
LIN	LINEAL, LINEAR
LG	LONG
LOC	LOCATION
LT	LEFT
MANUF	MANUFACTURER
MAX	MAXIMUM
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
N	NORTH
NIC	NOT IN CONTRACT
NO.,#	NUMBER
NPW	NON POTABLE WATER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OHP	OVERHEAD POWER
PE	PLAIN END
PH	PHASE
PI	POINT OF INTERSECTION
PL, PLS	PLATE, PLACES
PO	PUSH ON
PP	POWER POLE
PSI	POUNDS PER SQUARE INCH
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R,RAD	RADIUS
RCP	REINFORCED CONC PIPE
RED	REDUCER
REINF	REINFORCING
REQD	REQUIRED
RJ	RESTRAINED JOINT
ROW, R/W	RIGHT-OF-WAY
RS	RESILIENT SEAT
RT	RIGHT
S	SOUTH, SLUDGE
SCH	SCHEDULE
SECT	SECTION
SF	SQUARE FEET
SHT	SHEET
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	SANITARY SEWER
STA	STATION
STD	STANDARD
ST STL,SS	STAINLESS STEEL
SS	SANITARY SEWER
T&B	TOP AND BOTTOM
TBM	TEMPORARY BENCHMARK
TEMP	TEMPORARY, TEMPERED
THK	THICKNESS
TOC	TOP OF CURB
TOW	TOP OF WALL
TYP	TYPICAL
UH	UNIT HEATER
V	VALVE,VENTILATOR,VOLTS
VERT	VERTICAL
VT	VENTILATOR
W	WEST,WIDTH,WINDOW,WATER
W/	WITH
W/O	WITHOUT
WL	WATER LINE
WS	WATERSTOP
WTM	WATER TRANSMISSION MAIN
WWF	WELDED WIRE FABRIC
WTP	WATER TREATMENT PLANT
WWTP	WASTEWATER TREATMENT PLANT
X	BY

GENERAL NOTES:

1. ALL EXISTING UTILITY LINE LOCATIONS ARE APPROXIMATE AND MAY NOT BE SHOWN ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE AGENCY TWO WORKING DAYS BEFORE DIGGING COMMENCES TO VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES, DRAINAGE, AND OBSTRUCTIONS AS REQUIRED BY ALABAMA STATE LAW. ALABAMA ONE CALL, INC. MAY BE CONTACTED AT 1–800–292–8525, OR AT 252–4444 IN BIRMINGHAM. CONTRACTOR SHALL REPAIR AND/OR REPLACE LIKE–KIND ANY SUCH ITEMS THAT ARE DAMAGED BY HIS CREWS DURING CONSTRUCTION.

2. THE CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES (WHETHER OR NOT THEY ARE SHOWN) AT CROSSING LOCATIONS PRIOR TO PERFORMING ANY WORK. WHERE UTILITIES MIGHT CONFLICT WITH THE WORK, THE CONTRACTOR SHALL VERIFY THE DEPTH OF THE UTILITY BY EXCAVATION AND DEEPEN THE CASING AS REQUIRED TO AVOID THE CONFLICT. THERE SHALL BE NO EXTRA PAYMENT FOR DEEPENING THE CASING. ALL CASING ELEVATIONS SHALL BE FINALIZED BEFORE PIPE IS LAID IN THE VICINITY OF THE CROSSING.

3. CONTRACTOR SHALL LOCATE AND UNCOVER ALL POTENTIALLY CONFLICTING UTILITIES BEFORE CONSTRUCTION GRADES OR DEPTHS ARE FINALIZED AND PIPE IS LAID. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE LOCATION, TYPE, AND SIZE OF ALL EXISTING UTILITIES, OBSTRUCTIONS, FENCING, DRAINAGE, ETC. CONSULT WITH UTILITY COMPANIES WHEN WORKING CLOSE TO THEIR LINES. UTILITIES ON PLANS (AND IF SHOWN ON PROFILES) ARE SHOWN IN APPROXIMATE LOCATIONS AND MAY BE AT ASSUMED ELEVATIONS. CONTRACTOR TO VERIFY ALL.

4. FITTINGS REQUIRED IN THE FIELD BUT NOT SHOWN ON THE DRAWINGS MUST BE AUTHORIZED BY THE ENGINEER.

5. FORMED (I.E. PLYWOOD FORMS) CONCRETE THRUST BLOCKS ARE REQUIRED AGAINST ALL FITTINGS AND ARE TO BE POURED AGAINST UNDISTURBED EARTH. ALL FITTINGS SHALL BE WRAPPED IN FELT PAPER OR PLASTIC BEFORE CONCRETE THRUST BLOCKS ARE POURED. ALL PIPE BRACING SHALL BE LEFT UNCOVERED UNTIL INSPECTED BY THE ENGINEER. CONCRETE THRUST BLOCKS AND COLLARS MUST BE CURED A MINIMUM OF 5 DAYS PRIOR TO CUTTING AN EXISTING LINE OR APPLYING TEST PRESSURES TO THE NEW LINE.

6. ALL RESTRAINED JOINT PIPE SHALL BE FULLY EXTENDED FROM THE ADJOINING PIPE BELL DURING INSTALLATION.

7. ALL ROCK SHALL BE UNDERCUT A MINIMUM OF 12" BELOW THE PIPE INVERT AND PIPE IS TO BE BEDDED IN STONE OR EARTHEN MATERIALS – SEE DETAILS. PIPE BEDDING MATERIAL SHALL BE #57 CRUSHED STONE COMPACTED TO 95% STANDARD PROCTOR DENSITY OR AS INDICATED.

8. ALL OPEN CUT TRAFFIC WAYS, ROADWAYS, PARKING LOTS, DRIVES, GRAVEL AREAS, FUTURE DRIVES, ETC., AND ALL AREAS LYING WITHIN PRISM OF TRAFFIC WAYS SHALL HAVE PUGMIX/MOIST, TYPE "B" BACKFILL AS SPECIFIED IN SECTION 825 OF A.D.O.T. SPECIFICATION MANUAL AND COMPACTED TO 100% STANDARD PROCTOR DENSITY MINIMUM WITH VIBRATORY COMPACTOR (MAX. 6" LIFTS) FOR ITS ENTIRE TRENCH HEIGHT AND WIDTH TO PREVENT SETTLEMENT. ALL ASPHALT AND CONCRETE TO BE NEATLY SAW CUT.

9. ANY PROPERTY (I.E. FENCING, LANDSCAPING, SHRUBBERY, DRIVEWAYS, ACCESS ROADS, STRUCTURES, ETC.) THAT IS DAMAGED, REMOVED, AND/OR DISTURBED DURING CONSTRUCTION SHALL BE REPLACED OR RESTORED LIKE–KIND (AS A MINIMUM) IN A TIMELY MANNER FOLLOWING COMPLETION OF CONSTRUCTION IN THAT AREA. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL SHRUBBERY, SOD, SPRINKLER HEADS, ETC. LIKE–KIND (WHETHER OR NOT THEY ARE SHOWN ON THE DRAWINGS) THAT IS DAMAGED, REMOVED, AND/OR DISTURBED DURING CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL REIMBURSE THE PROPERTY OWNER FOR THE VALUE OF ANY IRREPLACEABLE PROPERTY LOCATED ON PRIVATE PROPERTY (i.e. NOT WITHIN R.O.W. OR EASEMENTS) THAT HAS BEEN REMOVED OR DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES.

10. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING CROSSING LOCATIONS TO DETERMINE EXISTING FIELD CONDITIONS. CASING SIZES SHOWN ON THE DRAWINGS SHALL BE CONSIDERED THE MINIMUM SIZES REQUIRED. NO EXTRA PAYMENT SHALL BE MADE FOR CONDITIONS ENCOUNTERED SUCH AS ROCK, SOFT CONDITIONS, ETC. CASING SPACERS SHALL BE CASCADE.

11. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ACCESS TO CONSTRUCTION SITES FOR MOVEMENT OF MATERIALS, CREWS, AND OTHER REQUIREMENTS TO CONSTRUCT THE PROJECT WHEN EXISTING EASEMENTS AND PUBLIC ACCESS DOES NOT SATISFY CONTRACTOR.

12. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF ANY ROW MONUMENTS OR PROPERTY PINS DISTURBED DURING CONSTRUCTION.

13. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR SAFETY. THE ENGINEER IS NOT RESPONSIBLE FOR SAFETY. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA STANDARDS AND RECOMMENDATIONS, ETC., APPLICABLE TO ALL WORK AND COMPONENTS ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL CONTINUOUSLY UTILIZE SAFETY PRACTICES THAT MAY BE NEEDED FOR THE FULL PROTECTION OF ALL PERSONS INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION PERSONNEL, THE OWNER'S PERSONNEL, INSPECTORS, AND THE GENERAL PUBLIC, ETC.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EXCESS MATERIALS RESULTING FROM THE WORK.

15. FINE GRADE ALL DISTURBED AREAS TO LEAVE THE AREA FREE OF DRAINAGE PROBLEMS.

16. DEEPENING OF WATER MAIN, WHERE REQUIRED, SHALL BE ACHIEVED BY DEFLECTION OF THE PIPE. NO VERTICAL BENDS WILL BE ALLOWED UNLESS SPECIFIED OTHERWISE, OR APPROVED BY ENGINEER.

17. ALL CONNECTIONS TO EXISTING LINES TO BE COORDINATED WITH THE CITY OF ALEXANDER CITY TO MINIMIZE INTERRUPTION OF WATER SERVICE.

18. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES BEFORE LAYING ANY PIPE. SANITARY SEWER, FORCE MAINS, AND WATER LINES MAY BE UNMARKED PVC MATERIAL. UTILITIES MAY REQUIRE "POT-HOLING" FOR ACTUAL LOCATIONS. IN THE EVENT THAT ANY UTILITY IS DAMAGED IN CONSTRUCTION IT IS THE CONTRACTORS RESPONSIBILITY TO REPAIR THE DAMAGE.

19. THE CONTRACTOR SHALL COORDINATE AND PAY FOR LOCATING AND STAKING THE EXISTING R.O.W. AND ACQUIRED RIGHT OF WAY LINES SHOWN ON THE DRAWINGS AS REQUIRED ON THE PROPOSED WATERLINE SIDE OF HIGHWAY (STATE ROUTE) 63. ALL SUCH SUCH SURVEYING IS TO BE PERFORMED BY A PROFESSIONAL LAND SURVEYOR (PLS). THE CONTRACTOR IS NOT ALLOWED TO LAY PIPE UNLESS THE RIGHT OF WAY HAS BEEN STAKED BY THE PLS. ALL PIPE, FITTINGS, MARKERS, VALVES, ETC. SHALL BE INSTALLED WITHIN RIGHT OF WAY OR ACQUIRED RIGHT OF WAY LIMITS. THIS WORK SHALL BE SUBSIDIARY TO THE "DUCTILE IRON PIPE" BID ITEMS, SEE BASIS OF PAYMENTS.

20. CONTRACTOR IS TO CLEAR AND GRUB THE WATERLINE AND FORCE MAIN PATH AS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS FROM THE RIGHT OF WAY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY TREES OR BUSHES THAT MAY DIE AS A RESULT OF THE WATERLINE AND FORCE MAIN CONSTRUCTION.

21. PIPE SHALL BE LAID ON RISING OR FALLING GRADES WITH SUFFICIENT DEPTH TO ELIMINATE AIR POCKETS THROUGHOUT PROJECT UNLESS AN AIR RELEASE VALVE IS SHOWN. NO AIR RELEASE VALVES WILL BE ADDED TO PROJECT WITHOUT APPROVAL OF THE ENGINEER.

22. UNLESS SHOWN OTHERWISE, ALDOT REQUIRES MINIMUM OF 36" COVER FOR PIPE WITHIN ITS RIGHT OF WAY AND A MINIMUM OF 48" COVER UNDER ROADWAYS AND DITCHLINES WITHIN ITS RIGHT OF WAY.

23. ALL MISCELLANEOUS WORK REQUIRED BUT NOT SHOWN IS CONSIDERED INCIDENTAL TO THE WORK AND SHALL BE INCLUDED IN THE CONTRACTORS BID PRICE FOR THE PIPE OR OTHER ITEMS AS NEEDED.

24. ALL RIGHT OF WAY, ACQUIRED RIGHT OF WAY, PROPERTY LINES, ETC. AND ALL FIELD SURVEYING SHOWN IN THE DRAWINGS HAVE BEEN PROVIDED BY THE ALABAMA DEPARTMENT OF TRANSPORTATION AND MAY NOT REFLECT ACTUAL PROPERTY LINE LOCATIONS AND/OR CURRENT PROPERTY OWNERS. CONTRACTOR IS RESPONSIBLE FOR LOCATING THE EXISTING R.O.W., ACQUIRED RIGHT OF WAY, AND EASEMENTS SHOWN ON THE DRAWINGS FOR THE ENTIRE PROJECT AREA.

25. ALL ELECTRICAL WORK AND MATERIAL(S) SHALL BE IN FULL COMPLIANCE WITH ALL APPLICABLE CODES, LAWS, AND ORDINANCES, THE NATIONAL ELECTRICAL CODE (NEC) AND THE REGULATIONS OF THE LOCAL UTILITY COMPANIES. ALL ELECTRICAL EQUIPMENT PROVIDED AND INSTALLED FOR THIS PROJECT SHALL MEET THE REQUIREMENTS OF UNDERWRITERS LABORATORIES STANDARDS FOR SAFETY OR OTHER EQUIVALENT NATIONALLY RECOGNIZED STANDARDS (E.G. ANSI) FOR THE SPECIFIC PRODUCT.

26. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF ALEXANDER CITY RULES AND REGULATIONS, TALLAPOOSA COUNTY AGENCIES, AND ALABAMA DEPARTMENT OF TRANSPORTATION RULES AND REGULATIONS, AS APPLICABLE. CONTRACTOR SHALL OBTAIN AND PAY FOR ANY AND ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES OF INSPECTIONS AND APPROVAL, AND THE LIKE.

PROJECT SPECIFIC NOTES:

1. BEFORE ANY MATERIALS ARE DELIVERED AND PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL VIDEO (IN THE PRESENCE OF THE FIELD ENGINEER) THE ENTIRE PROJECT SITE AND ANY OTHER AREAS WHICH MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES AND PROVIDE AN ACCEPTABLE HIGH QUALITY RECORDED VIDEO TO THE OWNER AND ENGINEER ON A DVD OR OTHER MEDIA ACCEPTABLE TO THE OWNER. VIDEO SHALL BE OF GOOD QUALITY AND BE TAKEN WITH VERY STEADY FRAME AND BE CLEAR AND EASILY WATCHABLE. COORDINATE WITH OWNER AND ENGINEER.

2. KEEP PIPE CLEAN AND REMOVE ALL DEBRIS AND DIRT FROM INSIDE OF PIPE TO BE INSTALLED AND PREVIOUS PIPES INSTALLED IN ORDER TO MINIMIZE FLUSHING WATER REQUIRED WHEN PIPE INSTALLATION IS COMPLETE. WHEN PIPE LAYING IS NOT IN PROGRESS, INCLUDING BREAK PERIODS, THE OPEN ENDS OF THE PIPE SHALL BE CLOSED BY PLUGS OR APPROVED MEANS.

3. GATE VALVES SHALL BE RESILIENT SEAT WITH A MINIMUM WORKING PRESSURE OF 250 PSI AND PER THE SPECIFICATIONS. BURIED GATE VALVES SHALL HAVE MECHANICAL JOINT ENDS WITH MEGA–LUG RESTRAINING GLANDS (BY EBAA FOUNDRY) AND RODDED TO THE NEAREST FITTING(S), VALVE(S), THRUST COLLAR(S), AND/OR CASING.

4. ALL PIPE FITTINGS SHALL BE MECHANICAL JOINT, FULL BODY DUCTILE IRON WITH MEGA–LUG RESTRAINING GLANDS (BY EBAA FOUNDRY OR EQUAL). IN AREAS WHERE RESTRAINED JOINT PIPE IS NOT SPECIFICALLY CALLED FOR INTO OR OUT OF A FITTING, A FULL JOINT OF PUSH ON JOINT PIPE WILL BE REQUIRED OUT OF EACH END OF THE FITTING. CONTRACTOR SHALL COORDINATE AS REQUIRED IN FIELD AND WITH PIPE SUPPLIER. ALL PIPE FITTINGS AND VALVES SHALL BE RODDED TO THE NEAREST FITTING(S), VALVE(S), THRUST COLLARS(S), AND/OR CASING, UNLESS INDICATED OTHERWISE. SEE THE ROD SCHEDULE IN DETAILS FOR SIZE AND REQUIREMENTS.

5. EXISTING WATER LINES TO BE ABANDONED AFTER NEW LINE SECTIONS ARE FULLY OPERATIONAL AND ALL SERVICES HAVE BEEN TRANSFERRED. COORDINATE WITH ENGINEER ALL LINES TO BE ABANDONED. CONTRACTOR SHALL HAVE REPAIR MATERIALS ON SITE AT ALL TIMES FOR IMMEDIATE REPAIR OF ANY LINE BREAKS DURING CONSTRUCTION. LINE BREAKS SHALL BE FIXED IMMEDIATELY, NO EXCEPTIONS. ALL REPAIRS TO WATER MAINS AND/OR SERVICES SHALL BE ACCEPTABLE TO THE OWNER AND ENGINEER AND SHALL BE MADE AT NO ADDITIONAL COST.

6. EXISTING WATER MAINS DO NOT HAVE LOCATION TAPE OR WIRE AND THUS THE LOCATION IS UNKNOWN. MATERIAL MAY BE IRON OR PVC. CONTRACTOR SHALL POTHOLE ALL EXISTING LINES AND SERVICES AS REQUIRED AND ADJUST PROPOSED FACILITIES AS REQUIRED AND APPROVED BY FIELD ENGINEER, AT NO ADDITIONAL COST.

7. CONTRACTOR TO COORDINATE WITH OWNER AND INFORM ALL POTENTIAL USERS WHEN MAINS/SERVICE LINES WILL BE OUT OF SERVICE. ALL WATER SERVICES ARE TO BE RELOCATED TO THE PROPOSED LINES. DURING CONSTRUCTION, TEMPORARY WATER SERVICES SHALL BE INSTALLED TO THESE CUSTOMERS, AS REQUIRED. COORDINATE AS REQUIRED WITH OWNER, ENGINEER, AND AFFECTED WATER CUSTOMERS. ALL SERVICE RECONNECTIONS/RELOCATIONS SHALL INCLUDE A COMPLETE NEW CONTINUOUS COPPER SERVICE LATERAL FROM THE NEW MAIN TO THE RELOCATED OR NEW METER. NO COUPLINGS OR FITTINGS ARE ALLOWED UNLESS APPROVED BY ENGINEER. EXISTING METERS SHALL BE RELOCATED AND RECONNECTED TO EXISTING CUSTOMER SERVICE LATERALS UNLESS OWNER CHOOSES TO PROVIDE A NEW METER, SEE DETAILS. COORDINATE LOCATIONS WITH ENGINEER.

8. ALL PIPING TO BE CLASS 350, DUCTILE IRON UNLESS OTHERWISE INDICATED.

9. TESTING OF LINES AND APPURTENANCES SHALL BE AS SPECIFIED. CONTRACTOR MAY USE CLOSED VALVES OR TEMPORARILY PLUGGED LINES AT HIS OPTION TO SUCCESSFULLY TEST THE INSTALLED FACILITIES IN ACCORDANCE WITH HIS CONSTRUCTION SCHEDULE AND ACTIVITIES. ALL TEST SEGMENTS AND PRESSURES SHALL BE APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL AIR FROM THE FACILITIES BEFORE ANY TESTING IS PERFORMED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL FLUSH POINTS, AIR RELEASE POINTS, ETC. (WITH ENGINEER'S APPROVAL) TO ADEQUATELY TEST AND DISINFECT THE NEW LINES. CONTRACTOR SHALL PROVIDE ALL NECESSARY AND REQUIRED ITEMS TO FILL FACILITIES, TEST, DISINFECT, ENSURE EXISTING FACILITIES CANNOT BE CONTAMINATED BY BACKFLOW WHILE FILLING AND TESTING, REMOVE AIR, ETC. RELOCATED MAINS SHALL BE INSTALLED, TESTED AND APPROVED FOR SERVICE PRIOR TO CONNECTION TO EXISTING MAINS.

10. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING EROSION, RUN–OFF, AND SEDIMENT CONTROL IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES AND REGULATIONS. THE CONTRACTOR SHALL ACQUIRE AN NPDES PERMIT FOR THE ENTIRE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING AND IMPLEMENTING ALL APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) FOR THE PREVENTION AND CONTROL OF NONPOINT SOURCES OF POLLUTANTS DURING AND AFTER PROJECT IMPLEMENTATION. THE CONTRACTOR, AT A MINIMUM, MUST IMPLEMENT BMP'S AS PROVIDED IN THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL & STORMWATER MANAGEMENT ON CONSTRUCTION SITES & URBAN AREAS, AS AMENDED, AND ALL APPLICABLE EPA STORMWATER POLLUTION PREVENTION PLANS AND BEST MANAGEMENT PRACTICES PUBLICATIONS, AS AMENDED. ADDITIONAL DEVICES SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER AS REQUIRED TO PREVENT SILTATION, EROSION, & OTHER DEGRADATION OR POLLUTION TO SITE OR ADJACENT PROPERTIES, STREAMS, DITCHES, PUBLIC ROADWAYS, ETC. CONTRACTOR IS RESPONSIBLE FOR THE RENEWAL OF ALL NPDES PERMITS AS REQUIRED FOR THE PROJECT. ALL COSTS ASSOCIATED WITH BMP PLANS, IMPLEMENTING BMPS, PERMIT FEES, ETC. SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE INCLUDED IN THE BID.

11. CONTRACTOR SHALL INCLUDE ALL COSTS FOR HOLDING AND BRACING UTILITY POLES AS REQUIRED.

12. . CONTRACTOR SHALL CLEAR AND GRUB AS REQUIRED OR AS APPROVED BY THE OWNER. ALL ROOTS, STUMPS, BRUSH, STONES ETC. SHALL BE COMPLETELY REMOVED AND AREA SMOOTHLY GRADED TO ALLOW PROPERTY OWNER TO MAINTAIN (I.E. MOW AND/OR BUSH HOG) AFTER CONSTRUCTION. CLEARING DEBRIS SHALL BE DISPOSED OF OFF–SITE BY CONTRACTOR.

13. CONTRACTOR IS FULLY RESPONSIBLE FOR PROTECTING ROADWAYS AND PROVIDING STABILIZATION AS REQUIRED TO PROTECT THE ROADWAY. STABILIZATION (I.E. SHORING, ETC.) SHALL BE AS APPROVED AND REQUIRED BY THE RESPECTIVE D.O.T. THE CONTRACTOR SHALL PROVIDE ANY DETAILS, PLANS OR DRAWINGS THE RESPECTIVE D.O.T. MAY REQUEST. ANY AND ALL SUCH COSTS SHOULD BE INCLUDED IN THE CONTRACTORS BID.

14. AT ALL LOCATIONS WHERE MATERIAL IS REMOVED NEAR EXISTING THRUST BLOCKS, FITTINGS, ETC. CONTRACTOR SHALL BRACE AS REQUIRED. ANY FILL MATERIAL SHALL BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 98% SPD.

15. CONTRACTOR TO GRADE, DRESS, AND GRASS DISTURBED AREAS IN ACCORDANCE WITH D.O.T. REGULATIONS AND/OR SPECIFICATIONS A MINIMUM OF EVERY 10 DAYS OR 2000 FEET OF WATER LINE INSTALLATION, WHICH EVER OCCURS SOONER, THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR IS SUBJECT TO BE SUSPENDED FROM INSTALLING PIPE FOR VIOLATION WITH NO REIMBURSEMENT FOR SUSPENSION OF WORK. IF TESTING IS NOT COMPLETED AND IF FOR ANY REASON THE WORK IS INSPECTED OR REPAIRED AFTER THIS CLEANUP WORK IS COMPLETED, THEN THE CONTRACTOR WILL BE REQUIRED TO RESTORE AREA(S) AGAIN, AT NO ADDITIONAL COST TO THE OWNER.

16. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AS REQUIRED FOR THE DURATION OF THE PROJECT. CONTRACTOR SHALL CONTINUALLY MAINTAIN TRAFFIC FLOW TO BUSINESSES AND RESIDENTS WITH MINIMUM DISRUPTION OF BUSINESS ACCESS. CONTRACTOR SHALL COORDINATE AS REQUIRED WITH PROPERTY OWNERS TO ENSURE UNOBSTRUCTED ACCESS DURING SPECIFIC/CRITICAL TIMES OF DAY IF NECESSARY.

17. THE LOCATION AND TYPE OF EXISTING WATER LINES ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING LINE LOCATIONS, SIZES, AND MATERIALS OF PIPE BEFORE ORDERING MATERIALS FOR CONNECTIONS. SPECIAL TRANSITION GASKETS AND/OR ACCESSORIES MAY BE REQUIRED, NO EXTRA PAYMENTS SHALL BE MADE FOR SUCH MATERIALS AND WORK.

18. CONTRACTOR SHALL PROVIDE GPS COORDINATES (X,Y, & Z STATE PLANE COORDINATES, AND SUB FOOT ACCURACY) OF ALL VALVE LOCATIONS, FITTINGS, BENDS, CONNECTIONS, BORE CROSSINGS AND A MINIMUM OF EVERY 100 FEET ALONG PIPELINE. INFORMATION TO BE PROVIDED IN DIGITAL FORMAT COMPATIBLE WITH ENGINEERS AND OWNERS SOFTWARE PLATFORM. CONTRACTOR SHALL PROVIDE TO ENGINEER ONCE PROJECT IS COMPLETE.

19. ROCK (IF ANY LOCATED OR FOUND) SHALL BE UNDERCUT A MINIMUM OF 12" FOR PIPING. PIPE SHALL BE BED IN STONE OR EARTHEN MATERIAL FREE OF ROCKS AND STONES. ALL ROCK EXCAVATION (IF ANY) SHALL BE INCLUDED IN THE BID PRICE ITEMS. THERE SHALL BE NO EXTRA TIME OR PAYMENT FOR THE REMOVAL OF ROCK REQUIRED FOR THE PIPE INSTALLATION.

20. EXISTING FIRE HYDRANTS, VALVES, VALVE BOXES, ETC. THAT ARE TO BE ABANDONED SHALL BE REMOVED FROM SERVICE AND RETURNED TO THE OWNER.

21. ALL WATER METERS SHALL BE INSTALLED OFF OF ALDOT ROW AND FLUSH WITH EXISTING GROUND.

22. NO BLASTING WILL BE ALLOWED ON THIS PROJECT UNLESS SUBMITTED AND APPROVED BY ALDOT, OWNER, AND ENGINEER. ANY AND ALL ROCK ENCOUNTERED SHALL BE REMOVED AS REQUIRED. ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE BID ITEMS LISTED. NO ADDITIONAL PAYMENT FOR THIS WILL BE GRANTED.

23. ALL COSTS ASSOCIATED WITH EXCAVATING, BORROWING, HAULING, PLACING, AND COMPACTING SOIL (WHETHER FROM A BORROW SITE OR ON-SITE) SHALL BE INCLUDED IN THE BID PRICE. ALL MATERIAL PROVIDED SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION OR PLACEMENT. ALL FILL MATERIAL SHALL BE CLEAN, FREE OF ORGANICS AND BOULDERS GREATER THAN 6" IN ANY DIRECTION. LIQUID LIMIT (LL) AND PLASTIC INDEX (PI) OF FILL MATERIAL SHALL NOT EXCEED 50 AND 30, RESPECTIVELY. ALL FILL SHALL BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 95% SPD OR OTHERWISE NOTED. EACH LIFT MAY BE TESTED BY THE OWNER'S GEOTECHNICAL REPRESENTATIVE. IF TESTED, EACH LIFT MUST PASS COMPACTION AND TESTING REQUIREMENTS BEFORE PLACEMENT OF SUCCESSIVE LIFTS.

24. ALL SOD, SHRUBBERY AND LANDSCAPE AREAS REMOVED FOR CONSTRUCTION SHALL BE REPLACED WITH LIKE KIND.

25. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE EFFECTED CUSTOMERS, RESIDENTS, AND/OR BUSINESS PRIOR TO PERFORMING CONNECTIONS OR SERVICE CONNECTIONS. COORDINATE RELOCATION OF SERVICES WITH WORK. SERVICES MUST BE RELOCATED BEFORE MAINS CAN BE ABANDONED.

26. ALL WATER REQUIRED FOR FILLING, TESTING, FLUSHING (FOR CLEANING, AIR REMOVAL, AND WATER QUALITY), ETC. SHALL BE PROVIDED BY THE CONTRACTOR FOR ALL PIPELINES THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING, OBTAINING, TRANSFERRING/CONVEYING, ETC. SAID WATER. ALL COST ASSOCIATED WITH COORDINATING, OBTAINING, TRANSFERRING/CONVEYING (I.E. TEMPORARY PUMPS, PIPING, HOT TAPS, HYDRANTS, CONNECTIONS, VALVES, ETC.), ETC. WATER SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE OWNER WILL PROVIDE A METER FOR MEASUREMENT OF CONTRACTOR'S WATER USAGE AND WILL CHARGE THE CONTRACTOR AT THE PER THOUSAND GALLON RATE BILLED BY THE CITY OF $5.00. COST OF WATER SHALL BE INCLUDED IN PIPE BID PRICE.

27. THE GROUND (DIRT, SOIL, AREAS, ETC.) EAST OF STATE ROUTE 63 BETWEEN HIGHWAY 280 AND SUGAR CREEK HAS BEEN OR IS CURRENTLY CONTAMINATED WITH GASOLINE. THE CONTRACTOR SHALL BE AWARE OF THIS CONDITION AND SHALL TAKE ALL PRECAUTIONS ASSOCIATED WITH IT WHEN DIGGING, WELDING, AND INSTALLING PIPING, FITTINGS, CASINGS, ETC. CONTRACTOR SHALL PLAN WORK REQUIRED ACCORDINGLY. SEE SPECIAL PROVISIONS AND DRAWINGS FOR ADDITIONAL NOTES AND REQUIREMENTS.

28. THERE SHALL BE A PRE-CONNECTION CONFERENCE WITH THE CONTRACTOR, ALDOT, OWNER AND ENGINEER A MINIMUM OF 1 WEEK PRIOR TO PERFORMING ANY OF THE CONNECTIONS SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR HANDLING RAW SEWAGE DRAINING FROM EXISTING PIPES DURING CONSTRUCTION. SEE CONNECTION NOTES.

Municipal Consultants, Inc.
200 Century Park South, Suite 212
Birmingham, Alabama 35226
(205) 822-0387

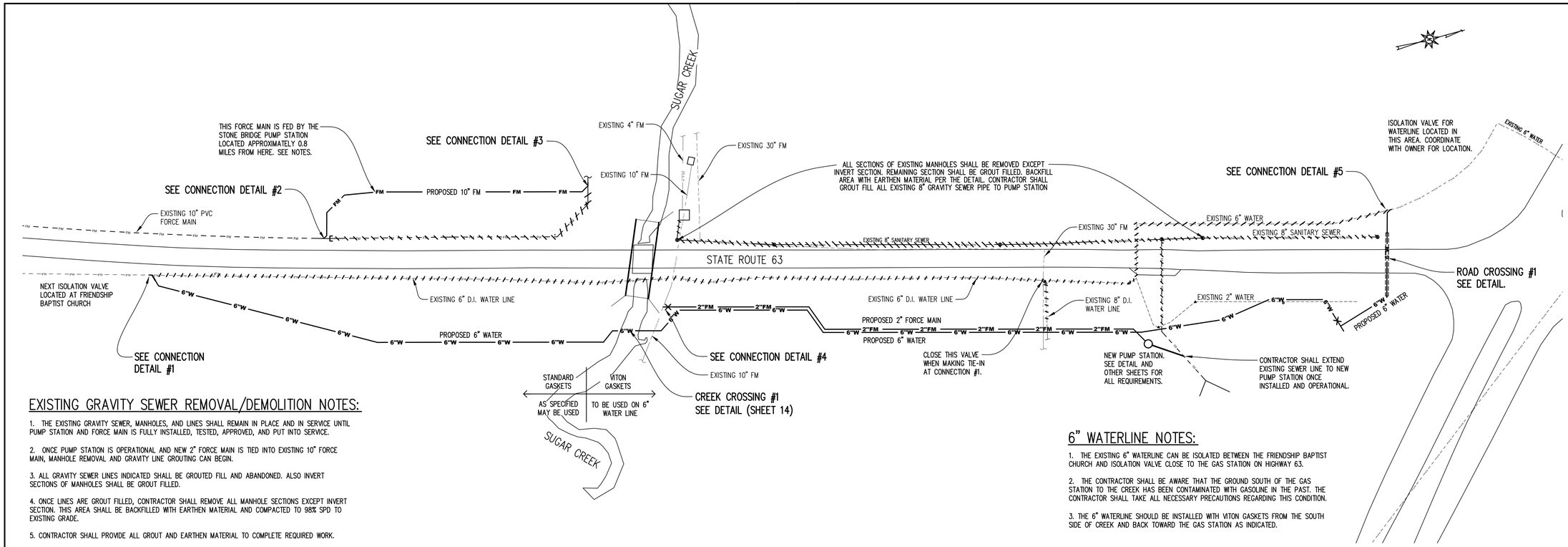
THE CITY OF ALEXANDER CITY
ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

ALABAMA LICENSED NO. 33656 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title: PROJECT NOTES AND LEGEND
BID SET

Drawing
Project No.
Date: 06–2024
Scale: NONE
Sheet: 3



EXISTING GRAVITY SEWER REMOVAL/DEMOLITION NOTES:

1. THE EXISTING GRAVITY SEWER, MANHOLES, AND LINES SHALL REMAIN IN PLACE AND IN SERVICE UNTIL PUMP STATION AND FORCE MAIN IS FULLY INSTALLED, TESTED, APPROVED, AND PUT INTO SERVICE.

2. ONCE PUMP STATION IS OPERATIONAL AND NEW 2" FORCE MAIN IS TIED INTO EXISTING 10" FORCE MAIN, MANHOLE REMOVAL AND GRAVITY LINE GROUTING CAN BEGIN.

3. ALL GRAVITY SEWER LINES INDICATED SHALL BE GROUTED FILL AND ABANDONED. ALSO INVERT SECTIONS OF MANHOLES SHALL BE GROUT FILLED.

4. ONCE LINES ARE GROUT FILLED, CONTRACTOR SHALL REMOVE ALL MANHOLE SECTIONS EXCEPT INVERT SECTION. THIS AREA SHALL BE BACKFILLED WITH EARTHEN MATERIAL AND COMPACTED TO 98% SPD TO EXISTING GRADE.

5. CONTRACTOR SHALL PROVIDE ALL GROUT AND EARTHEN MATERIAL TO COMPLETE REQUIRED WORK.

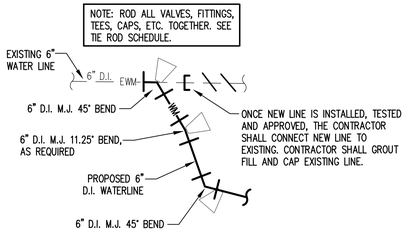
6" WATERLINE NOTES:

1. THE EXISTING 6" WATERLINE CAN BE ISOLATED BETWEEN THE FRIENDSHIP BAPTIST CHURCH AND ISOLATION VALVE CLOSE TO THE GAS STATION ON HIGHWAY 63.

2. THE CONTRACTOR SHALL BE AWARE THAT THE GROUND SOUTH OF THE GAS STATION TO THE CREEK HAS BEEN CONTAMINATED WITH GASOLINE IN THE PAST. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS REGARDING THIS CONDITION.

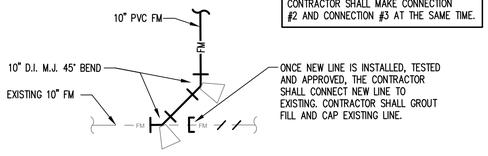
3. THE 6" WATERLINE SHOULD BE INSTALLED WITH VITON GASKETS FROM THE SOUTH SIDE OF CREEK AND BACK TOWARD THE GAS STATION AS INDICATED.

NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.



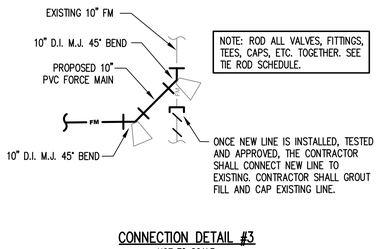
CONNECTION DETAIL #1
NOT TO SCALE

NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.



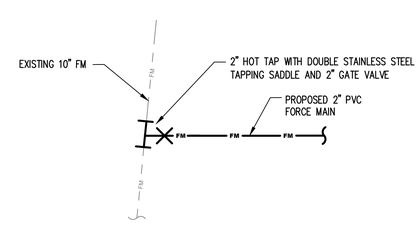
CONNECTION DETAIL #2
NOT TO SCALE

NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.



CONNECTION DETAIL #3
NOT TO SCALE

NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.



CONNECTION DETAIL #4
NOT TO SCALE

10" SEWER FORCE MAIN CONNECTION NOTES:

1. THIS 10" SEWER FORCE MAIN IS FED THE CITY'S STONE BRIDGE PUMP STATION LOCATED APPROXIMATELY 0.8 MILES SOUTH OF THIS LOCATION ON HIGHWAY 63. THERE IS A SHUTOFF VALVE JUST NORTH OF THE CONNECTION POINT INSIDE A VAULT FOR ISOLATION FROM THE SYSTEM.

2. ONCE THE NEW 10" LINE IS INSTALLED, TESTED, AND APPROVED FROM CONNECTION #2 TO CONNECTION #3, THE CONTRACTOR SHALL COORDINATE WITH THE CITY TO STOP PUMPING SEWAGE FROM THE STONE BRIDGE PUMP STATION IN ORDER TO MAKE TIE-IN.

3. DURING THIS TIME, THE CONTRACTOR SHALL PUMP OUT AND HAUL ALL SEWAGE RECEIVED AT THE STONE BRIDGE PUMP UNTIL THE CONNECTIONS ARE MADE ON THE 10" LINE.

4. IN ACCORDANCE WITH THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM), THE CONTRACTOR SHALL BE AWARE THAT THE CONTENTS OF THIS 10" LINE CANNOT BE DISCHARGED ONTO THE GROUND OR INTO THE CREEK. THE CONTRACTOR WILL BE REQUIRED TO FULLY EVACUATE THE CONTENTS OF LINE PRIOR TO MAKING A CONNECTION.

5. THE EVACUATION OF CONTENTS OF THIS LINE IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL CONTENTS REMOVED SHALL BE HAULED TO THE WWTP OR DISCHARGED INTO A LOCAL MANHOLE/PUMP STATION THAT WILL GO BACK TO THE WWTP.

6. THE CONTRACTOR SHALL PROVIDE ALL HOT TAPS, PIPING, VALVES, CONNECTIONS, ETC. FOR ACCESSING CONTENTS OF PIPE IN LOWEST AREA.

7. ALL HAULING, BYPASS PIPING, PUMPS, ETC. REQUIRED TO REMOVE CONTENTS FROM PIPE AND PUMP STATION ARE THE RESPONSIBILITY OF THE CONTRACTOR.

8. THIS AREA OF THE LINE IS ONE OF THE LOWER AREAS AND THEREFORE, MUCH OF THE LINE WILL FLOW ON IT ONCE IT IS CUT OR TAPPED. THE ESTIMATED AMOUNT OF RAW SEWAGE THAT WILL HAVE TO BE EVACUATED FROM THE LINE IS APPROXIMATELY 15,000 GALLONS.

9. ONCE THE LINE IS FULLY EVACUATED, CONTRACTOR SHALL MAKE ALL TIE-INS AND CONNECTIONS AS SHOWN.

10. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER MAIN SIZES, TYPES, HORIZONTAL AND VERTICAL LOCATION, AND TIE-IN LOCATION PRIOR TO ORDERING MATERIALS FOR TIE-IN. COORDINATE WITH FIELD ENGINEER.

CONNECTION NOTES:

1. THESE DRAWINGS ARE SCHEMATIC. CONNECTIONS SHOWN ARE GENERAL & DO NOT NECESSARILY CONTAIN ALL STEPS OR LIST ALL MATERIALS REQUIRED TO MAKE CONNECTIONS. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK ASSOCIATED WITH THIS PROJECT.

2. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER MAIN SIZES, TYPES, HORIZONTAL AND VERTICAL LOCATION, AND TIE-IN LOCATION PRIOR TO ORDERING MATERIALS FOR TIE-IN. COORDINATE WITH FIELD ENGINEER.

3. CONCRETE KICKERS REQUIRED AT ALL FITTINGS. CONCRETE FOR KICKERS SHALL BE HIGH EARLY TYPE

4. THE CONTRACTOR SHALL COORDINATE ALL WORK AND SEQUENCING WITH THE CITY OF ALEXANDER CITY AND ENGINEER. NO CONNECTIONS SHALL BE MADE WITHOUT THE CITY'S PERMISSION. ALL CONNECTIONS TO EXISTING MAINS SHOULD BE PERFORMED IN TIMES APPROVED BY THE CITY.

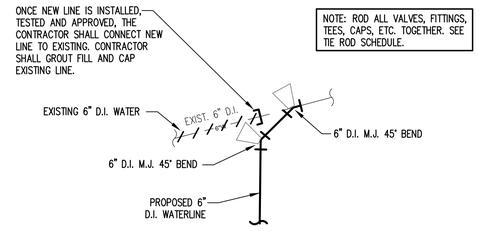
5. THE ENDS OF ALL ABANDONED LINES SHALL BE SEALED WITH GROUT OR OTHER MEANS AS APPROVED BY ENGINEER. ABANDONED VALVES SHALL HAVE THEIR OPERATING NUTS REMOVED AND BE BURIED.

6. RELOCATED MAINS SHALL BE INSTALLED, TESTED AND APPROVED FOR SERVICE PRIOR TO CONNECTION TO EXISTING MAINS. CONTRACTOR SHALL PERFORM AS MUCH WORKS AS POSSIBLE PRIOR TO EXISTING MAINS CUT FOR CONNECTIONS.

7. ADDITIONAL VALVES, PLUGS OR FLUSHING OUTLETS FOR TESTING OR FLUSHING SHALL BE AT THE CONTRACTORS EXPENSE.

8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING BRACING FOR PROPOSED AND EXISTING WATER MAINS, FORCE MAINS, AND VALVES, THAT ARE NOT CONNECTED BUT ARE UNDER PRESSURE. ADDITIONAL BRACING OF VALVES AND/OR FITTINGS MAY BE REQUIRED TO ACCOMMODATE CONSTRUCTION.

9. CONTRACTOR SHALL ROD ALL FITTINGS, VALVES, CASINGS TO FITTING/VALVES, ETC. WITHIN 10'± OF EACH OTHER FOR ALL CONNECTIONS.



CONNECTION DETAIL #5
NOT TO SCALE

Municipal Consultants, Inc.
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(205) 822-0367

THE CITY OF ALEXANDER CITY

ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

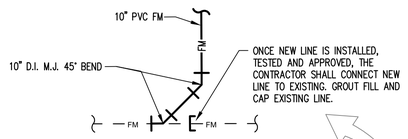
ALABAMA LICENSED NO. 33658 PROFESSIONAL ENGINEER BRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Drawing	Title	
Project No.	SEQUENCING SCHEMATIC	BID SET
Date	06-2024	
Scale	1" = 30'	
Sheet	4	

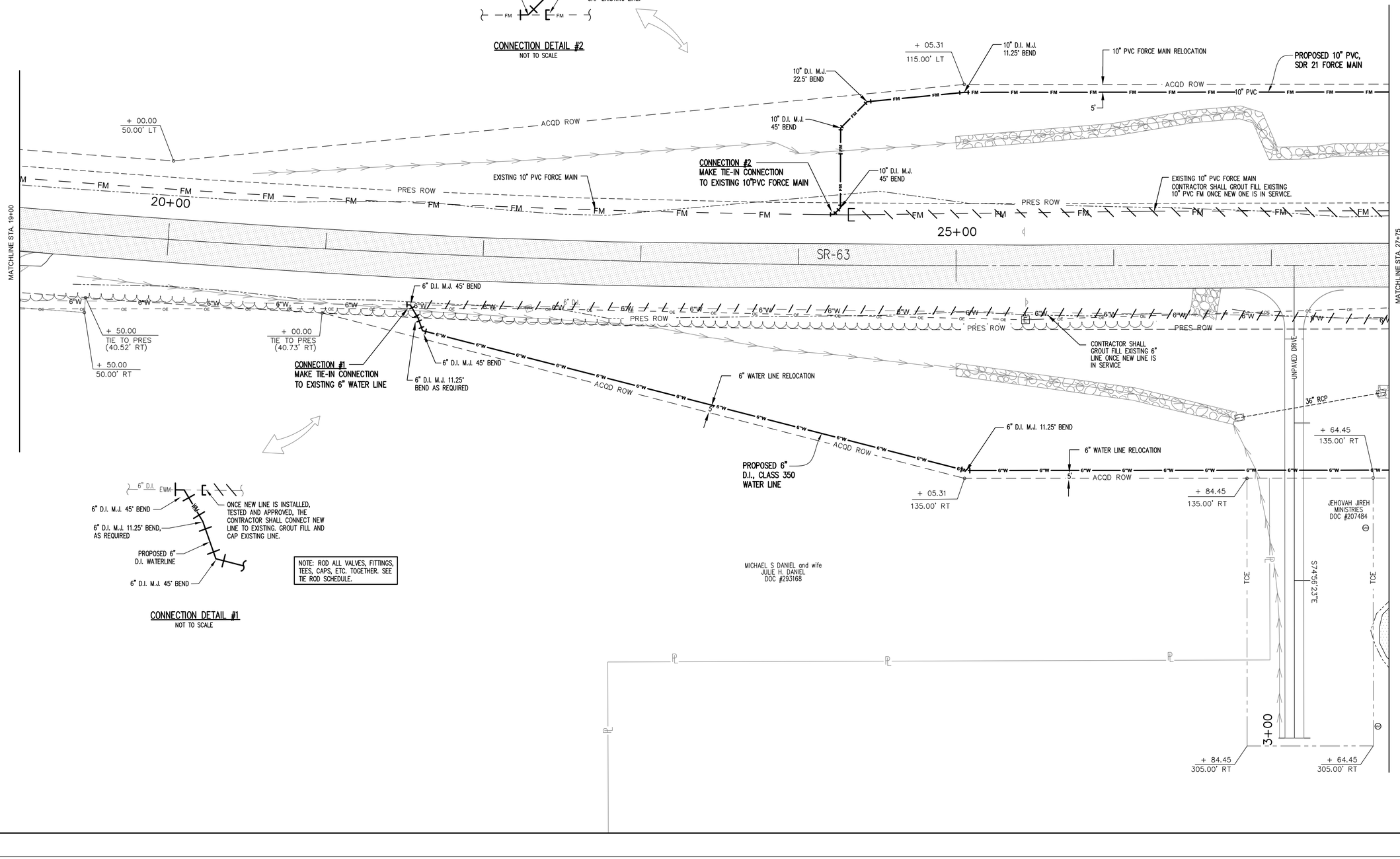
NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.

NOTE: CONTRACTOR SHALL MAKE CONNECTION #2 AND CONNECTION #3 AT THE SAME TIME.



CONNECTION DETAIL #2
NOT TO SCALE

63 MARKETPLACE INC
DOC #344946



NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.

CONNECTION DETAIL #1
NOT TO SCALE

Municipal Consultants, Inc.
200 Century Park South, Suite 212
Birmingham, Alabama 35226
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THE CITY OF ALEXANDER CITY

ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

ALABAMA LICENSED NO. 33658 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title: UTILITY RELOCATION PLAN

Drawing:
Project No.:
Date: 06-2024
Scale: 1" = 30'
Sheet: 5

BID SET

NOTE:
CONTRACTOR SHALL MAKE CONNECTION #2 AND CONNECTION #3 AT THE SAME TIME.

10" D.I. M.J. 45° BEND
PROPOSED 10" PVC FORCE MAIN
10" D.I. M.J. 45° BEND

NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.

ONCE NEW LINE IS INSTALLED, TESTED AND APPROVED, THE CONTRACTOR SHALL CONNECT NEW LINE TO EXISTING. GROUT FILL AND CAP EXISTING LINE.

CONNECTION DETAIL #3
NOT TO SCALE

NOTES:

THESE NOTES APPLY TO ALL UTILITY RELOCATION PLAN SHEETS.

1. CONTRACTOR SHALL SEE ALL CONNECTION AND SEQUENCING NOTES AND OTHER REQUIREMENTS THROUGHOUT THE DRAWINGS.

2. CONTRACTOR SHALL GROUT FILL ABANDONED PORTIONS OF 6", 8, AND 10" LINES. THE ENDS OF ALL ABANDONED LINES SHALL BE SEALED WITH GROUT, CAPS, OR OTHER MEANS AS APPROVED BY ENGINEER. ABANDONED VALVES (IF ANY) SHALL HAVE THEIR OPERATING NUTS REMOVED AND BE BURIED.

3. ALL ROCK (IF ANY LOCATED OR FOUND) SHALL BE UNDERCUT A MINIMUM OF 12" FOR PIPING. PIPE SHALL BE BED IN CRUSHED STONE OR EARTHEN MATERIAL FREE OF ROCKS AND STONES AS INDICATED IN DETAILS. ALL ROCK EXCAVATION (IF ANY) SHALL BE INCLUDED IN THE BID PRICE ITEMS. THERE SHALL BE NO EXTRA TIME OR PAYMENT FOR THE REMOVAL OF ROCK REQUIRED FOR THE PIPE INSTALLATION.

4. ALL COSTS ASSOCIATED WITH EXCAVATING, BORROWING, HAULING, PLACING, AND COMPACTING SOIL (WHETHER FROM A BORROW SITE OR ON-SITE) SHALL BE INCLUDED IN THE BID PRICE. ALL MATERIAL PROVIDED SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION OR PLACEMENT.

5. ALL FILL MATERIAL SHALL BE CLEAN, FREE OF ORGANICS AND BOULDERS GREATER THAN 6" IN ANY DIRECTION. LIQUID LIMIT (LL) AND PLASTIC INDEX (PI) OF FILL MATERIAL SHALL NOT EXCEED 50 AND 30, RESPECTIVELY. ALL FILL SHALL BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 95% SPD OR OTHERWISE NOTED.

DRAINAGE CHANNEL
SUGAR CREEK

LARRY W. MORRIS and BEVERLY MORRIS
DOC #295737

+80.00
115.00' LT
SEWER CONNECTION BOX
+ 00.00
135.00' LT
EXISTING 4" FORCE MAIN
EXISTING 30" FORCE MAIN
PROPOSED 30" FORCE MAIN (NOT IN CONTRACT)
+60.00
135.00' LT

PROPOSED 10" PVC FORCE MAIN RELOCATION
ACQD ROW
5'
10" D.I. M.J. 45° BEND
CONNECTION #3
MAKE TIE-IN CONNECTION TO EXISTING 10" FORCE MAIN
24" RCP
PROPOSED 10" FORCE MAIN (NIC)
NOTE A:
ALL SECTIONS OF EXISTING MANHOLES SHALL BE REMOVED EXCEPT INVERT SECTION. REMAINING SECTION SHALL BE GROUT FILLED. BACKFILL AREA WITH COMPACTED EARTHEN MATERIAL. SEE DETAIL.
CONTRACTOR SHALL GROUT FILL ALL EXISTING 8" GRAVITY SEWER PIPE TO PUMP STATION
EXISTING 10" PVC FORCE MAIN
ROW
CONTRACTOR SHALL GROUT FILL 10" LINE ONCE NEW IS IN SERVICE
EXISTING 8" GRAVITY SEWER
PRES ROW
8" SAN SEW
30+00
SR-63
EXISTING 10" FORCE MAIN

FOY JAMES SOLLIE & JANE FOY ORENSHAW
DOC #348629
NOTE A:
ALL SECTIONS OF EXISTING MANHOLES SHALL BE REMOVED EXCEPT INVERT SECTION. REMAINING SECTION SHALL BE GROUT FILLED. BACKFILL AREA WITH COMPACTED EARTHEN MATERIAL. SEE DETAIL.
+50.00
75.00' LT
+18.05
75.00' LT
EXISTING 30" EFFLUENT FM
35+00

CONNECTION #4
MAKE TIE-IN CONNECTION TO EXISTING 10" FORCE MAIN
PROPOSED 2" PVC FORCE MAIN
PROPOSED 6" D.I. WATER
2" D.I. M.J. 45° BEND
6" D.I. M.J. 45° BEND
6" D.I. M.J. 45° BEND
6" D.I. M.J. 45° BEND
PROPOSED 6" D.I. WATER
+ 80.00
85.00' RT
HIGH VOLTAGE WOOD STRUCTURE
+ 75.00
85.00' RT
+ 00.00
120.00' RT
PROPOSED 6" D.I., CLASS 350 WATER LINE
NEW 2" PVC FORCE MAIN FROM PUMP STATION
PROPOSED 6" D.I. WATER
+ 40.25
120.00' RT
CONTRACTOR SHALL GROUT FILL EXISTING 6" LINE ONCE NEW LINE IS IN SERVICE
PROPOSED 30" FORCE MAIN (NOT IN CONTRACT)
GAS MONITORING WELL (TYPICAL)
DRAINAGE CHANNEL
RIP-RAP
EXISTING 8" WATER LINE
36" RCP
14" CPP
+30.00
135.00' RT
JEHOVAH JIREH MINISTRIES
DOC #207484
STANDARD GASKETS (ALLOWED)
VITON GASKETS (REQUIRED)
CREEK CROSSING (SEE DETAIL-SHEET 14)
NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.
EXISTING 10" FM
2" HOT TAP WITH DOUBLE STAINLESS STEEL TAPPING SADDLE AND 2" GATE VALVE
PROPOSED 2" PVC FORCE MAIN

CONNECTION DETAIL #4
NOT TO SCALE

FREEWAY EXPRESS, INC.
DOC #272895

THE GROUND (DIRT, SOIL, AREAS, ETC.) EAST OF STATE ROUTE 63 BETWEEN HIGHWAY 280 AND SUGAR CREEK HAS BEEN OR IS CURRENTLY CONTAMINATED WITH GASOLINE. THE CONTRACTOR SHALL BE AWARE OF THIS CONDITION AND SHALL TAKE ALL PRECAUTIONS ASSOCIATED WITH IT WHEN DIGGING AND INSTALLING PIPING, FITTINGS, CASINGS, ETC. CONTRACTOR SHALL PLAN WORK REQUIRED ACCORDINGLY.

B-00DC10 P-006367
ALLEN OIL COMPANY

MATCHLINE STA. 27+75
MATCHLINE STA. 36+75

Municipal Consultants, Inc.
200 Century Park South, Suite 212
Birmingham, Alabama 35226
(205) 822-0367

THE CITY OF ALEXANDER CITY
ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

ALABAMA LICENSED NO. 33658 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title	UTILITY RELOCATION PLAN
Drawing	
Project No.	
Date	06-2024
Scale	1" = 30'
Sheet	6
	BID SET

6" D.I. M.J. 45° BEND

ONCE NEW LINE IS INSTALLED, TESTED AND APPROVED, THE CONTRACTOR SHALL CONNECT NEW LINE TO EXISTING. GROUT FILL AND CAP EXISTING LINE WITH A 6" CAP.

6" D.I. M.J. 45° BEND

PROPOSED 6" D.I. WATERLINE

NOTE: ROD ALL VALVES, FITTINGS, TEES, CAPS, ETC. TOGETHER. SEE TIE ROD SCHEDULE.

CONNECTION DETAIL #5
NOT TO SCALE

LARRY W. MORRIS and BEVERLY MORRIS DOC #295737

FOY JAMES SOLLIE & JANE FOY CRENSHAW DOC #348629

CONTRACTOR SHALL GROUT FILL EXISTING 6" LINE ONCE NEW LINE IS IN SERVICE

NOTE A:
ALL SECTIONS OF EXISTING MANHOLES SHALL BE REMOVED EXCEPT INVERT SECTION. REMAINING SECTION SHALL BE GROUT FILLED. BACKFILL AREA WITH COMPACTED EARTHEN MATERIAL. SEE DETAIL.

CONNECTION #5
MAKE TIE-IN CONNECTION TO EXISTING 6" WATER LINE

+ 82.28
TIE TO PRES
(75.00' LT)

ROWM
138+75
175 RT

EXISTING 6" STEEL GAS LINE

50.00
75.00' LT

+0.00
75.00' LT

EX. DRANAGE CHANNEL

EXISTING 6" D.I. WATER LINE

6" CAP

6" D.I. M.J. 45° BEND

EXISTING 8" D.I. GRAVITY SEWER

8"SAN.SEW.

CONTRACTOR SHALL GROUT FILL ALL EXISTING 8" GRAVITY SEWER PIPE TO PUMP STATION

ROAD CROSSING #1
(SEE DETAIL)

SR-63

PROPOSED 6" WATERLINE

PROPOSED 6" STEEL GAS LINE (NOT IN CONTRACT)

END PROJECT
STA: 42+70.27

N29°04'14"E

40+00

45+00

US-280 EBR / SR-22

US-280 WBR / SR-22

18" RCP

EXISTING SEWER LATERAL. CONTRACTOR SHALL GROUT FILL ONCE NEW PUMP STATION AND LINE IS IN SERVICE.

EX. DRANAGE CHANNEL

6" D.I. M.J. 22.5° BEND

+ 00.00
TIE TO PRES
(69.38' RT)

2" WATER

6" D.I. M.J. 45° BEND

+ 95.65
TIE TO PRES
(90.00' RT)

30" RCP

30" CMP

PRES ROW

+ 64.00
90.00' RT

PROPOSED 6" WATERLINE

6" D.I. VALVE

6" D.I. M.J. 45° BEND

2" PVC 45° BEND

+ 00.00
120.00' RT

ACQD ROW

+ 30.00
100.00' RT

6" D.I. M.J. 22.5° BEND

BLDG

6" D.I. M.J. TEE

6" D.I. M.J. CAP

PROPOSED 6" D.I., CLASS 350 WATER LINE

LUMP SUM ROAD CROSSING #1:
90 L.F. OF 14" (MINIMUM) STEEL CASING AT 0.25" WALL THICKNESS WITH 110± OF 6" D.I. R.J. PIPE THROUGH CASING

EXISTING GAS VALVES

EXISTING 6" STEEL GAS LINE

END WORK
STA: 45+50.00

WATER METERS, (TYP) RELOCATE METERS OFF ROW. EXTEND NEW SERVICE AS REQUIRED

PROPOSED 6" WATER LINE

NEW PACKAGE PUMP STATION FOR GAS STATION (SEE DETAIL - SHEET 13)

NEW PUMP STATION TO BE POWERED FROM EXISTING POWER SERVICE ON THIS POLE. COORDINATE IN FIELD.

BUSINESS DR

EXXON GAS STATION

ALLEN LTD, INC. DOC #276860

GASPUMP AWNING

MATCHLINE STA. 38+75

PUMP STATION NOTES:

1. THE CONTRACTOR SHALL INTERCEPT THE EXISTING SEWER LINE EXTENDING FROM THE GAS STATION IN THE PARKING LOT AND EXTEND IT TO THE NEW PUMP STATION LOCATION.
2. THE CONTRACTOR MAY USE THE SAME SIZE AND TYPE MATERIAL FOR SEWER EXTENSION. THE CONTRACTOR SHALL PATCH THE CONCRETE AS REQUIRED.
3. THE CONTRACTOR SHALL POWER THE NEW PUMP STATION FROM THE EXISTING POWER SERVICE LOCATED ON THE POLE ADJACENT TO PUMP STATION LOCATION. THE EXISTING POWER SERVICE IS A 240V, THREE PHASE SERVICE WITH A 240V SINGLE PHASE PANEL.
4. ALL PUMP STATION ASSEMBLIES TO BE THIRD PARTY LISTED CLASS 1, DIV 1, EXPLOSION PROOF.
5. THE AREA WHERE THE PUMP STATION IS TO BE INSTALLED, IS FULL OF BOULDERS, STONES, CONCRETE PIECES, AND OTHER UNCLASSIFIED BACKFILL (I.E. JUNK). CONTRACTOR SHALL EXCAVATE UNCLASSIFIED MATERIAL AS REQUIRED TO INSTALL PUMP STATION AND DISCHARGE PIPING. ONCE INSTALLED, CONTRACTOR SHALL BACKFILL AROUND PUMP STATION AND DISCHARGE PIPING WITH EARTHEN MATERIALS APPROVED FOR BACKFILL.
6. SEE PUMP STATION DETAIL FOR ADDITIONAL REQUIREMENTS.

LEGEND
⊙ = MONITORING WELL

P-006367
OMPANY
OF SYLACAUGA, INC.

Municipal Consultants, Inc.
200 Century Park South, Suite 212
Birmingham, Alabama 35226
(205) 822-0367

THE CITY OF ALEXANDER CITY

ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

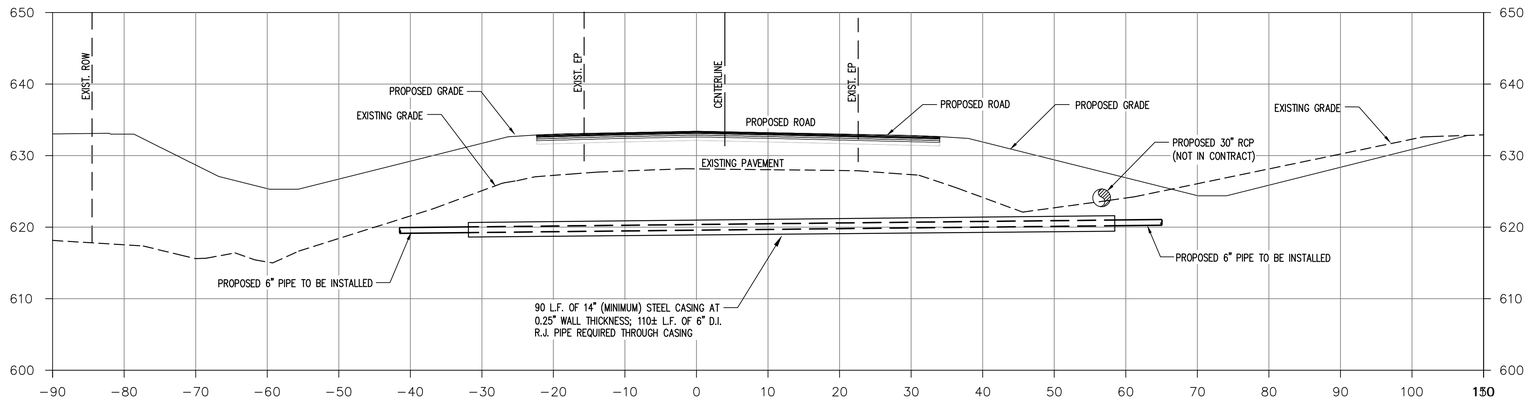
ALABAMA LICENSED NO. 33656 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24

NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title: UTILITY RELOCATION PLAN

Drawing: BID SET
Project No.:
Date: 06-2024
Scale: 1" = 30'
Sheet: 7



ROAD CROSSING #1 PROFILE

STATION 40 + 86.00
SCALE: HORIZONTAL 1" = 10'
VERTICAL 1" = 10'

CROSSING NOTES:

1. THE LOCATION, ELEVATION, DEPTH, TYPE, ETC. OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING LINE LOCATIONS, DEPTHS, SIZES, AND MATERIALS OF PIPE BEFORE ORDERING MATERIALS FOR CROSSING OR INSTALLING CASING. COORDINATE WITH FIELD ENGINEER DURING CONSTRUCTION.

2. ONCE ALL EXISTING LINES ARE LOCATED, CONTRACTOR MAY ADJUST FINAL CASING GRADE, ELEVATION, ETC. AS REQUIRED TO ACCOUNT FOR EXISTING UTILITY LINE LOCATIONS. COORDINATE ALL WITH THE FIELD ENGINEER DURING CONSTRUCTION.

3. CONTRACTOR SHALL ROD ALL FITTINGS, VALVES, CASINGS TO FITTING/VALVES, ETC. WITHIN 10'± OF EACH OTHER FOR ALL CONNECTIONS AND CROSSINGS.

4. THE PROPOSED 30" STORM PIPE SHOWN WILL BE LAID AT A LATER DATE AS PART OF THE ROADWAY CONSTRUCTION. THE CONTRACTOR SHALL BE AWARE OF THIS AND SHALL VERIFY CASING WILL BE BENEATH THE BOTTOM OF STORM PIPING. THE CONTRACTOR SHALL COORDINATE ALL WITH ALDOT AND ALDOT DRAWINGS.

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ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

ALABAMA LICENSED NO. 33658 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title: ROAD CROSSING PROFILE

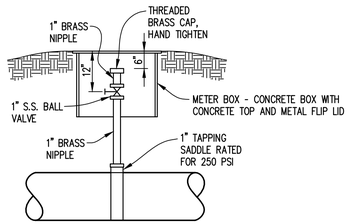
Drawing	BID SET
Project No.	
Date	06-2024
Scale	AS SHOWN
Sheet	8

NOTES FOR AIR VALVE ASSEMBLIES:

1. PLACE ALL AIR VALVE ASSEMBLIES WHERE SHOWN OR AS DIRECTED BY ENGINEER.

2. AIR VALVE ASSEMBLIES MUST BE ON FULL JOINT AND IN MIDSPAN OF PIPE. CONTRACTOR MUST LAY PIPE SUCH THAT AIR VALVE ASSEMBLY WILL BE ON HIGH SPOT.

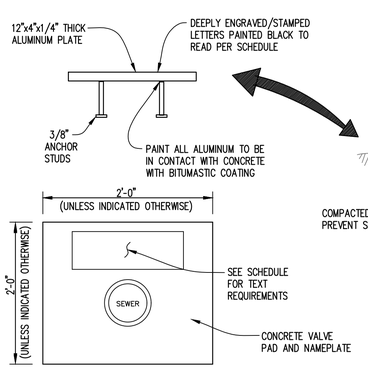
3. AIR VALVE ASSEMBLIES MAY BE INSTALLED FOR USE BY CONTRACTOR FOR BLEEDING AIR AND FLUSHING LINES AS APPROVED BY THE ENGINEER. ALL ASSEMBLIES INSTALLED SHALL REMAIN AFTER CONSTRUCTION.



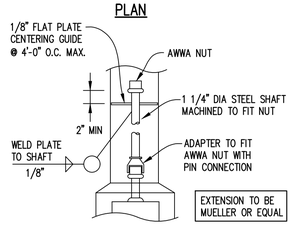
SECTION

MANUAL AIR VALVE ASSEMBLY

SCALE: N.T.S.



PLAN

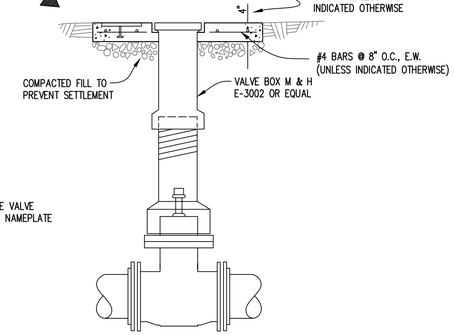


VALVE STEM EXTENSION

NOTES:

1. VALVE STEM EXTENSION REQUIRED WHERE DEPTH TO OPERATE EXCEEDS 4'-0". FINAL DEPTH OF OPERATOR NUT BELOW FINAL GRADE SHALL NOT EXCEED 4'-0".

2. VALVE NAMEPLATES REQ'D FOR ALL VALVES AND SHALL READ ACCORDING TO SCHEDULE.



SECTION

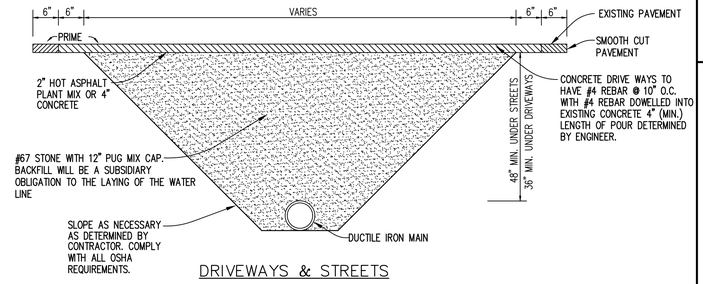
ENGRAVING SCHEDULE	
LINE VALVES	ENGRAVING TO READ
2" NEW FM - VALVE	2" FM FROM PS - *
6" WATER VALVE	6" MAIN LINE - *
* NUMBER OF TURNS TO OPEN/CLOSE VALVE	

ENGRAVING NOTES:

1. COORDINATE THE NUMBER FOR TURNS TO OPEN/CLOSE A VALVE WITH SUBMITTALS AND SPECIFIC LOCATION/VALVE. COORDINATE WITH ENGINEER DURING SUBMITTAL PROCESS. PROVIDE SUBMITTAL OF NUMBERING PLAN.

VALVE BOX DETAIL

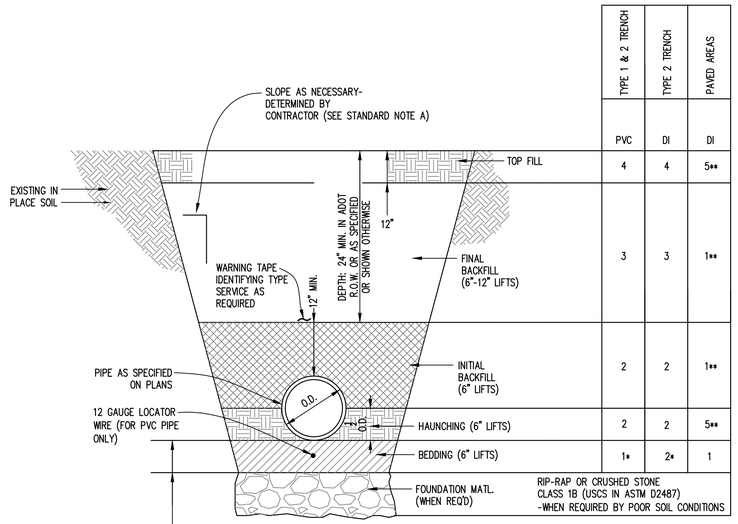
SCALE: N.T.S.



DRIVEWAYS & STREETS

TYP. ROAD CROSSING BY OPEN CUT

SCALE: N.T.S.



	TYPE 1 & 2 TRENCH	TYPE 2 TRENCH	PAVED AREAS
	PVC	DI	DI
TOP FILL	4	4	5**
FINAL BACKFILL (6"-12" LIFTS)	3	3	1**
INITIAL BACKFILL (6" LIFTS)	2	2	1**
HAUNCHING (6" LIFTS)	2	2	5**
BEDDING (6" LIFTS)	1*	2*	1
FOUNDATION MATL. (WHEN REQ'D)	RIP-RAP OR CRUSHED STONE CLASS 1B (USCS IN ASTM D2487) -WHEN REQUIRED BY POOR SOIL CONDITIONS		

NOTE: IN AREAS WHERE ROCK IS ENCOUNTERED, 12" MIN. CRUSHED STONE IS REQUIRED UNDER ALL TYPES/KINDS OF PIPE

* BEDDING NOT REQUIRED FOR PRESSURE MAINS UNLESS IN AREAS OF ROCK EXCAVATION OR UNSUITABLE SOIL; EXCAVATED BELL HOLES REQ'D FOR PIPES GREATER THAN 4" DIA.

** TEMPORARY PUG-MIX BACKFILL REQ'D UNTIL PAVEMENT PLACEMENT IS COMPLETE. IF REQUIRED TO PREVENT SETTLEMENT, PUG-MIX MAY BE SUBSTITUTED FOR NO. 57 AND 67 STONE IN PAVED AREAS WITH DEEP CUTS. ALL BACKFILL UNDER PAVED AREAS SHALL BE COMPACTED TO 98% STANDARD PROCTOR DENSITY (MINIMUM).

*** PIPE BEDDED IN 6-INCH MINIMUM LOOSE SOIL UNDER THE PIPE. BACKFILL CONSOLIDATED TO TOP OF PIPE. ALL BACKFILL IS NATIVE MATERIAL FREE OF 1" & LARGER ROCKS AND FOREIGN MATERIAL (APPROXIMATELY 80% STANDARD PROCTOR, AASHTO T-99). WHEN ROCK IS ENCOUNTERED USE 12" STONE UNDER PIPE. BELL HOLE MUST BE EXCAVATED FOR EACH JOINT OF PIPE.

BEDDING AND BACKFILL FOR TRENCHES DETAIL

SCALE: N.T.S.

MATERIALS	DESCRIPTION
1	CRUSHED STONE, ASTM-448 NO. 57 OR 67 GRADATION. FOR PVC USE NO. 67 STONE ONLY.
2	SELECT EXCAVATED MATERIAL REASONABLY DRY (WITHIN LIMITS REQ'D FOR COMPACTION) NO STONES GREATER THAN 1" DIA.
3	EXCAVATED MATERIAL REASONABLY DRY (WITHIN LIMITS REQ'D FOR COMPACTION) NO STONES GREATER THAN 12" DIA.
4	SELECT TOPSOIL MATERIAL TO SUPPORT VEGETATION, NO STONES GREATER THAN 1/2" DIA.
5	CRUSHED STONE, MOIST "PUG-MIX" PER ALDOT SECTION 825

JOB SPECIFIC NOTES

A. STONE BACKFILL AND BEDDING FOR CROSSINGS AND ROCK IS INCIDENTAL TO THE PROJECT AND SHALL BE INCLUDED IN THE PRICE OF THE PIPE.

STANDARD NOTES:

A. SLOPE, BENCHING, SHORING, ETC. AS DETERMINED AND DESIGNED BY THE CONTRACTOR. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE OSHA REGULATIONS FOR "OPEN TRENCH EXCAVATIONS". ALSO, TO THE EXTENT POSSIBLE, AS DETERMINED BY THE CONTRACTOR, TRENCH WALL SHORING METHODS SHALL BE USED IN PAVED AREAS TO MINIMIZE PAVING REPAIR REQUIREMENTS.

B. ALL MATERIALS SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT 2%± OPTIMUM MOISTURE CONTENT TO PREVENT SETTLEMENT, UNLESS STATED OTHERWISE. MATERIALS UNDER PAVING, CONCRETE, STRUCTURES, ETC. SHALL BE COMPACTED TO A MINIMUM 98-100% STANDARD PROCTOR DENSITY. MECHANICAL COMPACTION SHALL BE BY VIBRATORY SHEEPSFOOT OR OTHER EQUIPMENT SPECIFICALLY DESIGNED FOR THE COMPACTION OF EARTH. COMPACTION EQUIPMENT SHALL BE ON-SITE PRIOR TO BEGINNING OF WORK. MECHANICAL COMPACTION SHALL BE COMPLETED IN LOOSE LIFTS AS SHOWN ON DETAILS.

C. BEDDING REQUIRED FOR ALL GRAVITY LINES, ALL PVC LINES, AND ALL CONCRETE LINES. BEDDING REQUIRED IN ALL AREAS OF ROCK EXCAVATION OR UNSUITABLE SOILS. EXCAVATED BELL HOLES REQUIRED FOR PIPES GREATER THAN 4" DIAMETER.

D. FOR PAVED AREAS, TEMPORARY COMPACTED PUG-MIX BACKFILL REQUIRED UNTIL PAVEMENT PLACEMENT IS COMPLETE. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN THIS PUG-MIX TO KEEP IT FLUSH WITH THE ADJACENT PAVING, ETC. UNTIL THE FINAL PAVING IS PLACED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ASPHALT OR CONCRETE PATCHES WHEN NEEDED FOR PUBLIC SAFETY AND/OR CONVENIENCE.

E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND UTILIZING APPROPRIATE MEANS AND METHODS OF CONSTRUCTION TO ENSURE THAT THE ENTIRE AREAS UNDER THE HAUNCHES OF THE PIPE ARE FILLED WITH THE REQUIRED MATERIALS AND COMPACTED APPROPRIATELY.

F. ADDITIONAL AND/OR SPECIAL REQUIREMENTS MAY BE REQUIRED BY THE PLANS, SPECIFICATIONS, AND/OR CONTRACT DOCUMENTS. CONTRACTOR SHALL MEET REQUIREMENTS OF THE OWNER AND TRANSPORTATION DEPARTMENT.

TIE ROD SCHEDULE		
TEST PRESSURE	250 PSI OR LESS	
PIPE DIA. (IN.)	TIE RODS	
	DIA. (IN.)	NO. REQ'D
2	5/8	2
3	5/8	2
6	3/4	2
8	3/4	2
10	3/4	4
12	3/4	4
14	3/4	5
16	3/4	6
18	3/4	6
20	3/4	7
24	3/4	8
30	1	8
36	1	10
42	1-1/4"	10
48	1-1/4"	12

NOTE:

1. TIE RODS SHALL CONFORM TO ASTM A193 GRADE B7 AND NUTS SHALL CONFORM TO ASTM A194 GRADE 2H.

TIE-ROD SCHEDULE

SCALE: N.T.S.

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BID #24-19
2024

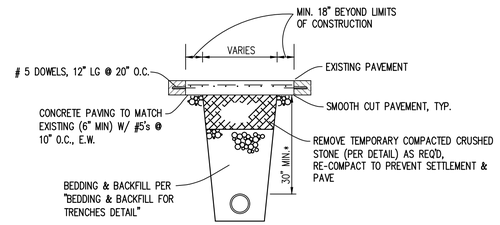
ALABAMA LICENSED NO. 33655 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

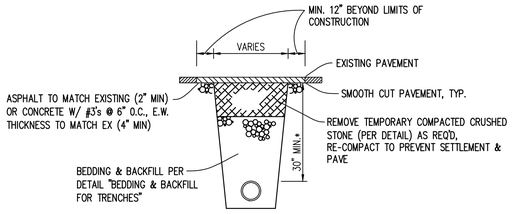
Title: STANDARD DETAILS

BID SET

Drawing	
Project No.	
Date	06-2024
Scale	AS SHOWN
Sheet	9



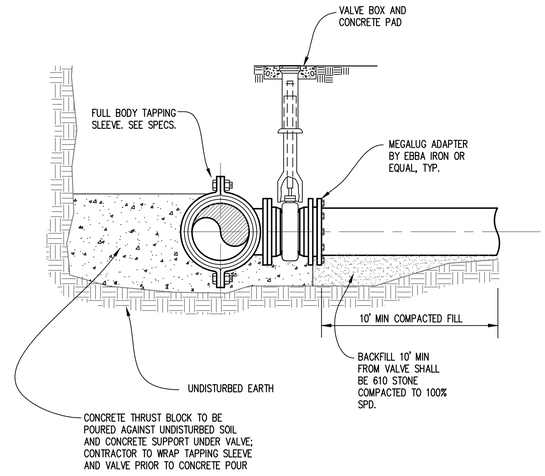
CONCRETE PAVED AREAS



ASPHALT PAVED AREAS

TYP. ASPHALT AND CONCRETE PAVEMENT REPLACEMENT DETAIL (NOT USED AT ROADWAY CROSSINGS)

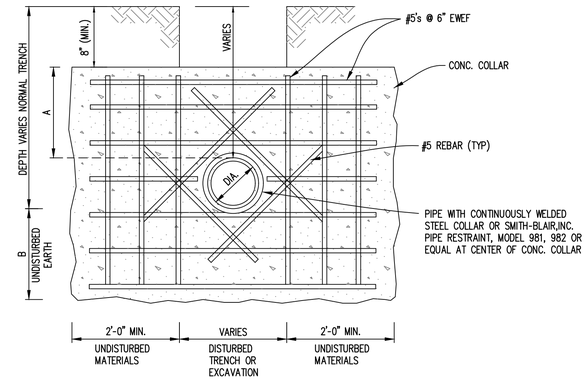
SCALE: N.T.S.



TAPPING SLEEVE AND VALVE DETAIL

SCALE: N.T.S.

PIPE DIA. (IN.)	A (IN.)*	B (IN.)*	THICK.(IN.)	#MATS STL
0 - 12	12	12	12	1
14 - 24	18	18	18	2
>24	24	24	24	2



* MIN. DIMENSION. CONC. THRUST COLLAR MUST BE IN UNDISTURBED MATERIAL & POURED AGAINST FIRM UNDISTURBED EARTH. USE SUFFICIENT COLLAR & REBAR LENGTHS SUCH THAT MIN. DIMENSION IS OBTAINED ON BOTH SIDES OF DISTURBED TRENCH OR EXCAVATION.

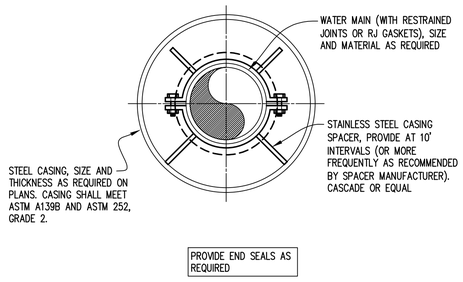
THRUST COLLAR DETAIL

SCALE: N.T.S.

NOTES:

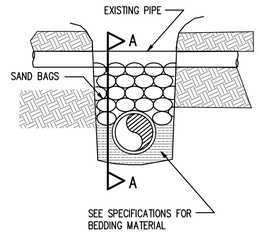
1. SPACERS SHALL PROVIDE RESTRAINT FROM MOVING.

2. ALL PIPE INSTALLED WITHIN CASINGS SHALL BE BRACED TO PREVENT SHIFTING OR FLOATATION DURING BACKFILLING OPERATIONS.

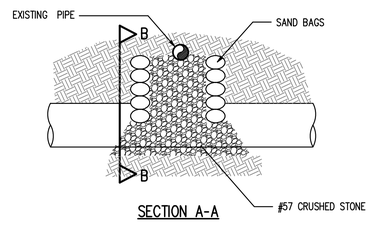


CASING SPACER DETAIL

SCALE: N.T.S.



SECTION B-B



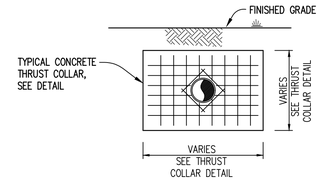
SECTION A-A

TYPICIAL METHOD OF PROTECTING UTILITIES OR OTHER PIPE CROSSINGS WHERE NOT LOCATED UNDER PAVING

ALL METHODS RESPONSIBILITY OF CONTRACTOR

EXISTING UTILITY PROTECTION

SCALE N.T.S.



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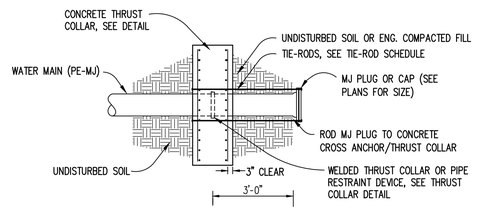

TOP VIEW

CROSS ANCHOR ASSEMBLY

SCALE: N.T.S.

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BID #24-19
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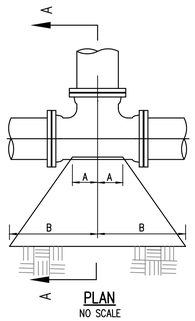
ALABAMA LICENSED NO. 33656 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Drawing	Title	BID SET
Project No.	STANDARD DETAILS	
Date 06-2024		
Scale AS SHOWN		
Sheet 10		



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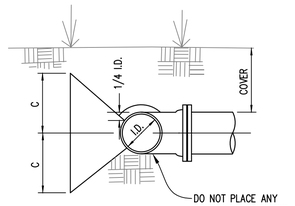
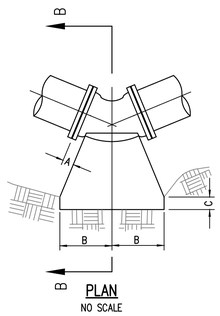


SECTION A
NO SCALE

TYPICAL CONCRETE BRACING FOR TEES

PIPE DIA.	A	B	C	MIN. COVER
4"	5"	1'-0"	1'-0"	2'-6"
6"	6"	1'-0"	1'-0"	2'-6"
8"	8"	1'-6"	1'-6"	2'-6"
10"	10"	2'-0"	2'-0"	3'-0"
12"	10"	2'-0"	2'-0"	3'-0"
14"	1'-0"	2'-6"	2'-6"	3'-0"
16"	1'-0"	3'-0"	3'-0"	3'-0"
18"	1'-2"	3'-6"	3'-6"	3'-6"
20"	1'-4"	3'-6"	3'-6"	3'-6"
24"	1'-7"	4'-6"	3'-6"	3'-6"



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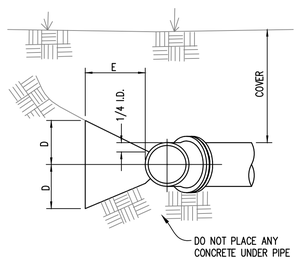
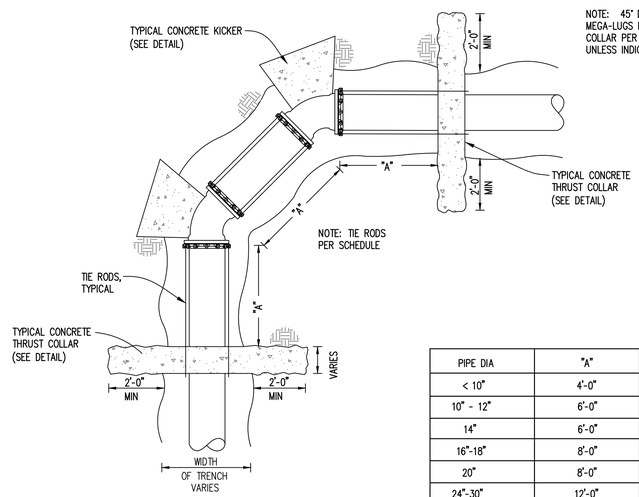


SECTION B
NO SCALE

TYPICAL CONCRETE BRACING FOR 45° BENDS

PIPE DIA.	A	B	C	D	E	MIN. COVER
4"	4 1/2 "	1'-0"	1'-0"	1'-0"	1'-0"	2'-6"
6"	4 1/2 "	1'-0"	9"	1'-0"	1'-2"	2'-6"
8"	4 1/2 "	1'-6"	3"	1'-0"	1'-2"	2'-6"
10"	4 1/2 "	1'-6"	-	1'-6"	1'-6"	3'-0"
12"	6"	2'-0"	-	2'-0"	2'-0"	3'-0"
14"	6"	2'-6"	-	2'-0"	2'-0"	3'-0"
16"	6"	2'-6"	-	2'-6"	2'-0"	3'-0"
18"	6"	3'-0"	-	2'-6"	2'-6"	3'-6"
20"	6"	3'-0"	-	3'-0"	2'-6"	3'-6"
24"	7"	3'-6"	-	3'-6"	2'-10"	3'-6"

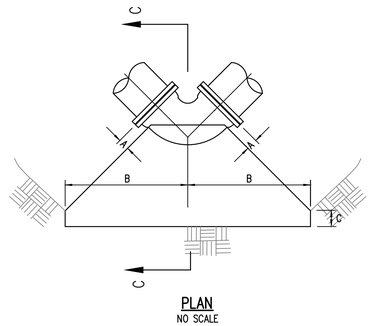


NOTE: 45° D.I. MJ FITTINGS WITH MEGA-LUGS RODDED TO EACH THRUST COLLAR PER TIE ROD SCHEDULE UNLESS INDICATED OTHERWISE.

PIPE DIA	"A"	# RODS*
< 10"	4'-0"	2
10" - 12"	6'-0"	4
14"	6'-0"	5
16"-18"	8'-0"	6
20"	8'-0"	7
24"-30"	12'-0"	8
* SEE TIE ROD SCHEDULE		

TYPICAL AT TWO 45° BENDS

SCALE: N.T.S.



PLAN
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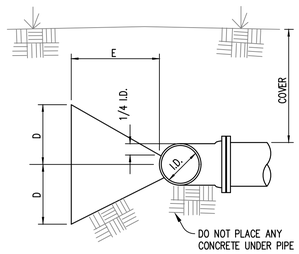

SECTION C
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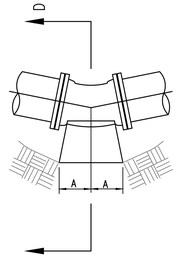

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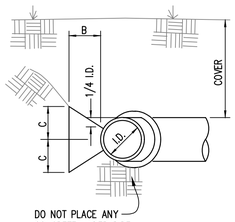

SECTION D
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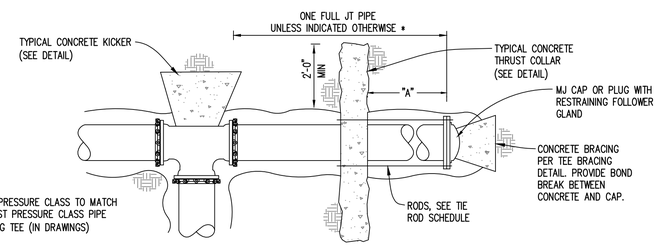


* PIPE PRESSURE CLASS TO MATCH GREATEST PRESSURE CLASS PIPE ENTERING TEE (IN DRAWINGS)

TYPICAL CONCRETE BRACING FOR 90° BENDS

PIPE DIA.	A	B	C	D	E	MIN. COVER
4"	4-1/2"	1'-0"	1'-8"	1'-0"	2'-0"	2'-6"
6"	4-1/2"	1'-6"	1'-7"	1'-0"	2'-0"	2'-6"
8"	4-1/2"	2'-0"	1'-6"	1'-6"	2'-6"	2'-6"
10"	4-1/2"	2'-0"	1'-1"	2'-0"	2'-6"	3'-0"
12"	4-1/2"	2'-6"	1'-0"	2'-6"	2'-6"	3'-0"
14"	6"	3'-0"	1'-2"	2'-6"	2'-6"	3'-0"
16"	6"	3'-6"	1'-0"	3'-0"	2'-6"	3'-0"
18"	6"	4'-0"	10"	3'-6"	3'-0"	3'-6"
20"	6"	4'-6"	11"	3'-6"	3'-0"	3'-6"
24"	7"	5'-6"	8"	3'-6"	3'-0"	3'-6"

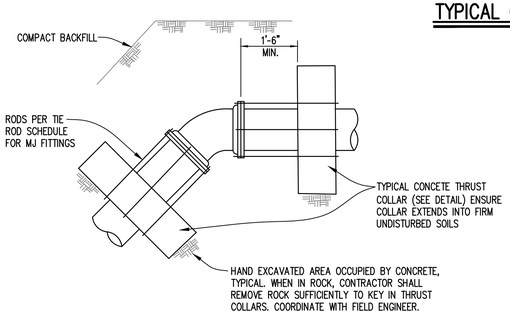
NOTE: CONCRETE MUST BE POURED AGAINST UNDISTURBED SUITABLE SOIL. IF NOT ABLE TO POUR AGAINST UNDISTURBED SUITABLE EARTH, POUR CONCRETE KICKER AND TWO THRUST COLLARS PER DETAIL.

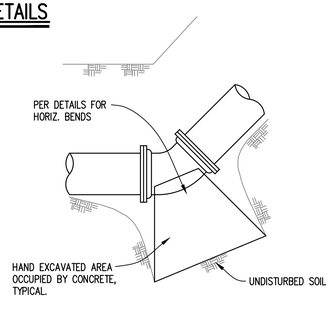
TYPICAL CONCRETE BRACING FOR 11 1/4° & 22 1/2° BENDS

	22 1/2° BENDS				11 1/4° BENDS			
PIPE DIA.	A	B	C	MIN.COVER	A	B	C	MIN.COVER
4"	6"	1'-0"	6"	2'-6"	6"	1'-0"	6"	2'-6"
6"	1'-0"	1'-0"	6"	2'-6"	1'-0"	1'-0"	6"	2'-6"
8"	1'-0"	1'-0"	1'-0"	2'-6"	1'-0"	1'-0"	1'-0"	2'-6"
10"	1'-0"	1'-6"	1'-0"	3'-0"	1'-0"	1'-0"	1'-0"	3'-0"
12"	1'-6"	2'-0"	1'-0"	3'-0"	1'-0"	1'-6"	1'-0"	3'-0"
14"	1'-6"	2'-0"	1'-6"	3'-0"	1'-6"	1'-6"	1'-0"	3'-0"
16"	2'-0"	2'-0"	1'-6"	3'-0"	1'-6"	1'-6"	1'-0"	3'-0"
18"	2'-0"	2'-6"	2'-0"	3'-6"	1'-6"	2'-0"	1'-6"	3'-6"
20"	2'-6"	2'-6"	2'-0"	3'-6"	1'-6"	2'-0"	1'-6"	3'-6"
24"	2'-6"	3'-0"	2'-6"	3'-6"	2'-0"	2'-0"	2'-0"	3'-6"

TYPICAL CONCRETE KICKER DETAILS

SCALE: N.T.S.





CONCRETE BRACING FOR VERTICAL BENDS DETAIL

SCALE: N.T.S.

GENERAL NOTES FOR ALL THRUST BLOCKS/COLLARS:

1. GENERAL DIMENSIONS SHALL BE CONSIDERED AS MINIMUMS, CONTRACTOR SHALL BE RESPONSIBLE FOR INCREASING DIMENSIONS AS REQUIRED FOR ACTUAL FIELD CONDITIONS ENCOUNTERED. CONTRACTOR TO ENSURE ALL THRUST RESTRAINT IS ADEQUATE.

2. ALL CONCRETE FOR THRUST RESTRAINT SHALL BEAR AGAINST FIRM UNDISTURBED SOILS.

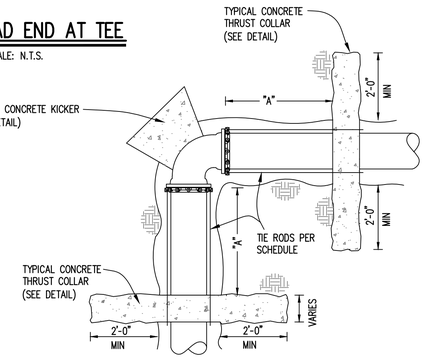
3. CONTRACTOR SHALL WRAP ALL ACCESSORIES BOLTS, NUTS, CONNECTIONS, ETC. IN PLASTIC SUCH THAT THEY CAN BE REMOVED WITHOUT THE NEED FOR CONCRETE REMOVAL.

4. UNLESS INDICATED OTHERWISE IN PLANS, ALL FITTINGS SHALL BE MJ WITH RESTRAINING FOLLOWER GLANDS. RESTRAINING FOLLOWER GLANDS SHALL BE MEGA-LUG OR EQUAL. RETAINER GLANDS NOT ALLOWED.

5. ENSURE ALL THRUST COLLARS ARE POURED AGAINST FIRM UNDISTURBED SOILS. HAND EXCAVATED AREA OCCUPIED BY CONCRETE, TYPICAL. WHEN IN ROCK, CONTRACTOR SHALL REMOVE ROCK SUFFICIENTLY TO KEY IN THRUST COLLARS. COORDINATE WITH FIELD ENGINEER.

TYPICAL DEAD END AT TEE

SCALE: N.T.S.



TYPICAL 90° BEND

SCALE: N.T.S.

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THE CITY OF ALEXANDER CITY

ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

ALABAMA LICENSED NO. 33658 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title: STANDARD DETAILS

BID SET

Drawing:
Project No.:
Date: 06-2024
Scale: AS SHOWN
Sheet: 11

METER INSTALLATION NOTES:

1. CONTRACTOR IS TO REPLACE ALL EXISTING SERVICES ON LINE FROM NEW LINE TO METER. NO JOINTS ALLOWED IN SERVICES. SERVICE PIPE SHALL MEET THE REQUIREMENTS OF THE CITY OF ALEXANDER, AS APPLICABLE. NEW SERVICE PIPE SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR FROM NEW WATER MAIN TO EXISTING METER (OR RELOCATED EXISTING METER).

2. METERS TO BE SET IMMEDIATELY OFF RIGHT OF WAY AT LOCATION APPROVED BY THE ENGINEER AND OWNER.

3. CONTRACTOR SHALL PROVIDE ALL FITTINGS AND ACCESSORIES (COUPLINGS, ADAPTERS, BRASS NIPPLES, FITTINGS, ETC.) REQUIRED TO RELOCATE/RECONNECT METERS AND CONNECT TO EXISTING CUSTOMER SERVICE LINES.

4. SERVICE MATERIAL SHALL BE 1" AND 2" TYPE K COPPER TUBING; UNLESS PEXA IS APPROVED FOR USE BY OWNER'S WATER DEPARTMENT. PEXA SHALL BE MUNICIPEX AS MANUFACTURED BY REHAM CONSTRUCTION, LLC. AND CONTRACTOR SHALL USE STAINLESS STEEL INSERTS AT ALL FITTINGS AND VALVES. CASINGS SHALL BE SEALED AT EACH END.

5. PIPE DEPTH SHALL BE MINIMUM 36" FOR COUNTY ROW AND 48" FOR STATE ROW.

6. DIRECTIONAL BORES FOR CASINGS/SERVICES SHALL BE AT A MINIMUM DEPTH OF 48". CASINGS SHALL EXTEND A MINIMUM 2' BEYOND EDGE OF PAVEMENT OR CURB.

7. USAGE OF ANGLED AND STRAIGHT CURB STOPS SHALL BE AT THE DIRECTION OF ALEXANDER CITY.

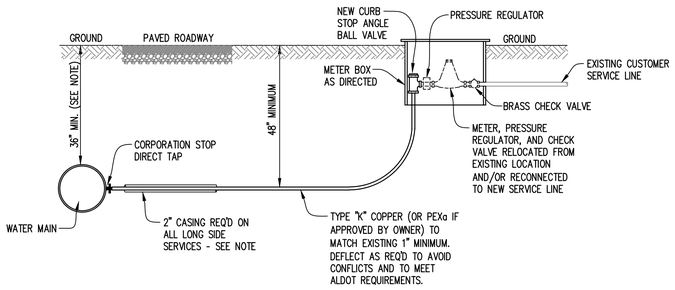
8. THE CONTRACTOR SHOULD REUSE EXISTING METER BOXES WHERE POSSIBLE. ALL VALVE BOXES INSTALLED IN PAVEMENT OR TRAFFIC AREAS SHOULD HAVE A HS-20 LOAD RATING OR BETTER. CONTRACTOR TO PROVIDE NEW METER BOXES AND LIDS ON ALL BOXES DAMAGED DURING CONSTRUCTION. THESE BOXES SHOULD BE SAME MODEL AS EXISTING BOXES.

9. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALEXANDER CITY AND ALL CUSTOMERS AT LEAST TWO (2) DAYS PRIOR TO RECONNECTING/RELOCATING SERVICE.

PARTIAL MATERIALS LIST:

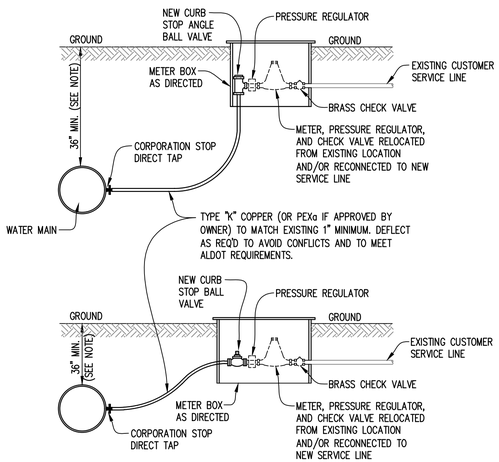
CORP STOPS:	1" BRASS BALL TYPE CORPORATION STOP - FORD FB10004.
CURB STOPS:	¾" ANGLE CURB STOP - FORD BA43-332W* 1" ANGLE CURB STOP - FORD BA43-444W* ¾" STRAIGHT CURB STOP - FORD B43-332W* 1" STRAIGHT CURB STOP - FORD B43-444W*
BALL VALVES:	¾" BRASS BALL VALVE SCREW JOINT - NIBCO T580 1" BRASS BALL VALVE SCREW JOINT - NIBCO T580
METER ADAPTORS:	¾" METER ADAPTOR - FORD A-14 1" METER ADAPTOR - FORD A-34
METER COUPLINGS:	¾" BRASS METER COUPLING - FORD C38-23-2.5 1" BRASS METER COUPLING - FORD C38-44-2.625
METER BOXES:	18" x 24" RECTANGULAR METER BOX - POLYPLASTIC NDS D-1500 DICIR

*TO BE APPROVED BY OWNER PRIOR TO INSTALLATION



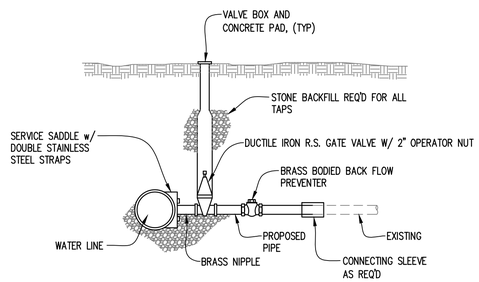
TYPICAL LONGSIDE METER INSTALLATION

SCALE N.T.S.



TYPICAL SHORTSIDE METER INSTALLATION

SCALE N.T.S.



TYPICAL 1.5" - 3" SERVICE MAIN CONNECTION

SCALE: N.T.S.

SCHEDULE OF ACCEPTABLE MATERIALS

NOTE:
THE FOLLOWING LIST DOES NOT REPRESENT ALL MATERIALS REQUIRED ON THE PROJECT. LISTING BELOW DOES NOT IMPLY THAT MATERIALS SHOWN ON PLANS SHEETS ARE INTERCHANGEABLE. REQUIREMENTS OF NOTES, PLAN SHEETS AND SPECIFICATIONS PREVAIL IN THE EVENT OF A CONFLICT.

3/4" HIGH PRESSURE REGULATOR (75-125PSI) WATTS 25AUB-HP OR EQUAL
1" HIGH PRESSURE REGULATOR (75-125PSI) WATTS 25AUB-HP OR EQUAL
2" HIGH PRESSURE REGULATOR (75-125PSI) WATTS 25AUB-HP OR EQUAL
1" X 3/4" BACK FLOW PREVENTOR WITH METER CONNECTOR ATTACHED WATTS 710U2 OR EQUAL
1" BACK FLOW PREVENTOR WITH METER CONNECTOR ATTACHED WATTS 710U2 OR EQUAL
2" BACK FLOW PREVENTOR WITH METER CONNECTOR ATTACHED WATTS 007QT OR EQUAL3/4" BRASS BALL TYPE CORPORATION STOP - FORD FB10003 OR EQUAL
1" BRASS BALL TYPE CORPORATION STOP -FORD FB10004 OR EQUAL
2" BRASS BALL TYPE CORPORATION STOP - FORD FB10007 OR EQUAL
3/4" ANGLE CURB STOPS - FORD BA43-332W OR EQUAL
1" ANGLE CURB STOPS - FORD BA43-344W OR EQUAL
3/4" STRAIGHT CURB STOP - FORD B43-332W OR EQUAL
1" STRAIGHT CURB STOP - FORD B43-444W OR EQUAL
3/4" GRIP JOINT - GASKET/NUT ASSEMBLY - FORD GJN 4-3 OR EQUAL
1" GRIP JOINT - GASKET/NUT ASSEMBLY - FORD GJN 4-4 OR EQUAL
3/4" PACK JOINT - GASKET/NUT ASSEMBLY - FORD NG-D4 OR EQUAL
1" PACK JOINT - GASKET/NUT ASSEMBLY - FORD NG-F4 OR EQUAL
2" METER ADAPTER KITS (FLANGE TYPE) FORD CF31-77 OR EQUAL
2" BRONZE GATE VALVES SCREW JOINT - NIBCO T113 OR EQUAL
3/4" BRASS BALL VALVES SCREW JOINT - NIBCO T580 OR EQUAL
1" BRASS BALL VALVES SCREW JOINT - NIBCO T580 OR EQUAL
2" BRASS BALL VALVES SCREW JOINT
2" DUAL CHECK VALVE - FORD HFS31-777 OR EQUAL
3/4" METER ADAPTERS - FORD A-14 OR EQUAL
1" METER ADAPTERS - FORD A-34 OR EQUAL
3/4" BRASS METER COUPLING, FORD C38-23-2.5 OR EQUAL
1" BRASS METER COUPLING, FORD C38-44-2.625 OR EQUAL
2" BRASS METER COUPLING, FORD C38-77-3.0625 OR EQUAL
1" COMPRESSION TO COMPRESSION COUPLING - FORD C44-44 OR EQUAL
1" COMPRESSION TO MALE COUPLING - FORD C84-44 OR EQUAL
1" COMPRESSION TO FEMALE COUPLING - FORD C14-44 OR EQUAL
1" COMPRESSION L OR 90 - FORD L44-44 OR EQUAL
1" COMPRESSION TEES - FORD T444-444Q OR EQUAL
2" COMPRESSION TO COMPRESSION COUPLING - FORD C44-77 OR EQUAL
3/4" COMPRESSION COUPLING - FORD C44-33 OR EQUAL
3/4" FEMALE TO COMPRESSION COUPLING - FORD C14-33 OR EQUAL
3/4" MALE TO COMPRESSION COUPLING - FORD C84-33 OR EQUAL
3/4" X 1" COMPRESSION TEE - FORD T444-334 OR EQUAL
2" L 2500 RESILIENT WEDGE GATE VALVE, NRS WITH 2" OPERATING NUT, SCREW JOINT OR EQUAL
3/4" BRASS COUPLING - IRON PIPE THREADS - MERIT OR EQUAL
1" BRASS COUPLING - IRON PIPE THREADS - MERIT OR EQUAL
2" BRASS COUPLING - IRON PIPE THREADS - MERIT OR EQUAL
3/4" X CLOSE BRASS NIPPLE - TRENTON OR EQUAL
1 X CLOSE BRASS NIPPLE - TRENTON OR EQUAL
2 X CLOSE BRASS NIPPLE - TRENTON OR EQUAL
3/4" X 2" BRASS NIPPLE - TRENTON OR EQUAL
3/4" X 3" BRASS NIPPLE - TRENTON OR EQUAL
3/4" X 4" BRASS NIPPLE - TRENTON OR EQUAL
3/4" X 5" BRASS NIPPLE - TRENTON OR EQUAL
1" X 2" BRASS NIPPLE - TRENTON OR EQUAL
1" X 3" BRASS NIPPLE - TRENTON OR EQUAL
1" X 4" BRASS NIPPLE - TRENTON OR EQUAL
1" X 5" BRASS NIPPLE - TRENTON OR EQUAL
1" X 6" BRASS NIPPLE - TRENTON OR EQUAL
2" X 2" BRASS NIPPLE - TRENTON OR EQUAL
2" X 4 " BRASS NIPPLE - TRENTON OR EQUAL
2" X 6 " BRASS NIPPLE - TRENTON OR EQUAL
2" X 12 " BRASS NIPPLE - TRENTON OR EQUAL
2" X 24 " BRASS NIPPLE - TRENTON OR EQUAL
3/4" BRASS UNIONS - MERIT OR EQUAL
1" BRASS UNIONS - MERIT OR EQUAL
2" BRASS UNIONS - MERIT OR EQUAL
1" X 2" BRASS BELL REDUCER - MERIT OR EQUAL
2" 90 DEGREE BRASS ELBOWS
2" BRASS TEE
12" X 18" RECTANGULAR METER BOX
POLYPLASTIC OR EQUIVALENT WITH CAST IRON, HINGED READER LID DFW D-1200-DICIR OR EQUAL
18" X 24" RECTANGULAR METER BOX
POLYPLASTIC OR EQUIVALENT WITH CAST IRON, HINGED READER LID DFW D-1500-DICIR OR EQUAL
24" X 36" RECTANGULAR METER BOX
POLYPLASTIC OR EQUIVALENT WITH CAST IRON, HINGED READER LID DFW 1730 OR EQUAL
12" X 18" CONCRETE METER BOX WITH LID: 36-H OR EQUAL
METER BOX LID FOR 12 X 18 CONCRETE METER BOX (LID ONLY)
METER BOX LID FOR 12 X 18 METER BOX (LID ONLY) DFW OR EQUAL
METER BOX LID FOR 18 X 24 METER BOX (LID ONLY) DFW OR EQUAL
METER BOX LID FOR 24 X 36 METER BOX (LID ONLY) DFW OR EQUAL

FIRE HYDRANT (36" DEPTH) - STYLE 129 M & H, AMERICAN DARLING B84B OR EQUAL
FIRE HYDRANT (4'0" DEPTH) - STYLE 129 M & H, AMERICAN DARLING B84B OR EQUAL
FIRE HYDRANT (4'6" DEPTH) - STYLE 129 M & H, AMERICAN DARLING B84B OR EQUAL
6" X 6" FIRE HYDRANT "T" AMERICAN TABLE 5-24 OR EQUAL
8" X 6" FIRE HYDRANT "T" AMERICAN TABLE 5-24 OR EQUAL
6 X 24 ANCHOR COUPLING
6" RESILIENT WEDGE MECHANICAL JOINT GATE VALVE - AMERICAN, MUELLER 2360 OR EQUAL
6" TAPPING VALVE - AMERICAN, M & H 4067 OR EQUAL
10" TAPPING VALVE - AMERICAN, M & H 4067 OR EQUAL
18" VALVE BOX 461S OR EQUAL
24" VALVE BOX 562S OR EQUAL
2" X 6" TAPPING SADDLE FOR DUCTILE IRON FORD F202 SERIES OR EQUAL
3/4" X 6" TAPPING SADDLE FOR PVC - FORD S70-603 OR EQUAL
1" X 6" TAPPING SADDLE FOR PVC - FORD S70-604 OR EQUAL
2" X 6" TAPPING SADDLE FOR PVC - FORD S70-607 OR EQUAL
6" MEGALUG OR EQUAL ACCESSORY PACKS FOR DUCTILE IRON
6" MEGALUG OR EQUAL ACCESSORY PACKS FOR DUCTILE IRON WITH VITON GASKETS
10" MEGALUG OR EQUAL ACCESSORY PACKS FOR DUCTILE IRON
10" MEGALUG OR EQUAL ACCESSORY PACKS FOR PVC
6" DUCTILE IRON PIPE PRESSURE CLASS 350 SLIP JOINT
6" DUCTILE IRON PIPE PRESSURE CLASS 350 SLIP JOINT WITH VITON GASKETS
10" DUCTILE IRON PIPE PRESSURE CLASS 350 SLIP JOINT
10" PVC PIPE PRESSURE CLASS SDR 21
6" MECHANICAL JOINT X IPS TRANSITION GASKETS
8" MECHANICAL JOINT X IPS TRANSITION GASKETS
10" MECHANICAL JOINT X IPS TRANSITION GASKETS
3/4" REPAIR CLAMPS, FORD STYLE FLSC -088-3R OR EQUAL 3" LENGTH
1" REPAIR CLAMPS, FORD STYLE FLSC -113-3R OR EQUAL 3" LENGTH
2" REPAIR CLAMPS, FORD STYLE FLSC-213 - 6R OR EQUAL 6" LENGTH
3" REPAIR CLAMPS, FORD STYLE FS1 OR EQUAL 15" LENGTH
4" REPAIR CLAMPS, FORD STYLE FS1 OR EQUAL 15" LENGTH
6" REPAIR CLAMPS, FORD STYLE FS1 OR EQUAL 15" LENGTH
10" REPAIR CLAMPS, FORD STYLE FS2 OR EQUAL 20" LENGTH
2" KNOCK ON HUBS (PLASTIC) HARCO 109 - OR EQUAL
3" KNOCK ON HUBS (PLASTIC) HARCO 109 - OR EQUAL
4" KNOCK ON HUBS (PLASTIC) HARCO 109 - OR EQUAL
6" KNOCK ON HUBS (PLASTIC) HARCO 109 - OR EQUAL

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THE CITY OF ALEXANDER CITY

ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

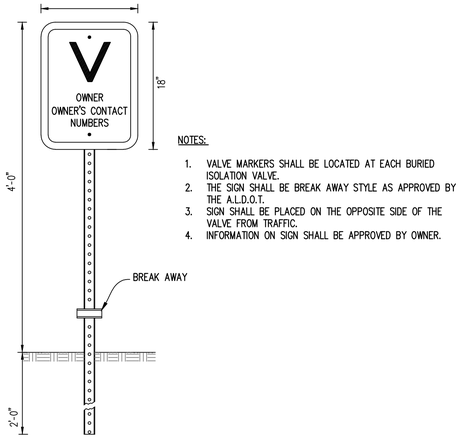
ALABAMA LICENSED NO. 33658 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24

NOT VALID WITHOUT SIGNATURE

BAR = 1"

Drawing	Title: STANDARD DETAILS
Project No.	
Date	06-2024
Scale	AS SHOWN
Sheet	12

BID SET

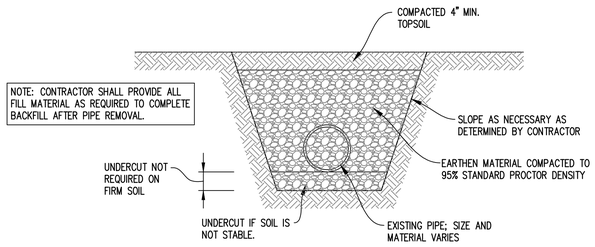


NOTES:

1. VALVE MARKERS SHALL BE LOCATED AT EACH BURIED ISOLATION VALVE.
2. THE SIGN SHALL BE BREAK AWAY STYLE AS APPROVED BY THE A.L.D.O.T.
3. SIGN SHALL BE PLACED ON THE OPPOSITE SIDE OF THE VALVE FROM TRAFFIC.
4. INFORMATION ON SIGN SHALL BE APPROVED BY OWNER.

TYP. METAL POST VALVE MARKER DETAIL

SCALE: N.T.S.



TYPICAL SECTION FOR REMOVED PIPE

SCALE: N.T.S.

PUMP STATION NOTES AND REQUIREMENTS:

1. THE BASIS OF DESIGN IS A DUPLEX PUMP STATION WITH 2-LIBERTY SUBMERSIBLE PUMPS, A 4' DIAMETER FIBERGLASS WET WELL, FIBERGLASS PUMP CONTROL PANEL, AND ALL ACCESSORIES AND APPURTENANCES REQUIRED. EACH PUMP SHALL BE RATED AT 50 GPM @ 150' TDH. CONFIRM FINAL WITH OWNER DURING CONSTRUCTION.

2. ALL PUMP STATION ASSEMBLY, PANEL, SYSTEMS, ETC. TO BE THIRD PARTY LISTED CLASS 1, DIV 1 EXPLOSION PROOF.

3. PUMP STATION SHALL BE 240V, SINGLE PHASE. THE CONTRACTOR SHALL POWER THE NEW PUMP STATION CONTROL PANEL FROM THE EXISTING POWER SERVICE LOCATED NEAR THE PUMP STATION LOCATION. SEE PLAN SHEETS. THE EXISTING POWER SERVICE IS A 240V, THREE PHASE SERVICE WITH A 240V SINGLE PHASE PANEL.

4. THE AREA WHERE THE PUMP STATION IS TO BE INSTALLED, IS FULL OF BOULDERS, STONES, CONCRETE PIECES, AND OTHER UNCLASSIFIED BACKFILL (I.E. JUNK). CONTRACTOR SHALL EXCAVATE UNCLASSIFIED MATERIAL AS REQUIRED TO INSTALL PUMP STATION AND DISCHARGE PIPING. ONCE INSTALLED, CONTRACTOR SHALL BACKFILL AROUND PUMP STATION AND DISCHARGE PIPING WITH EARTHEN MATERIALS APPROVED FOR BACKFILL.

5. SHOP DRAWINGS SHALL BE APPROVED BY CITY OF ALEXANDER CITY BEFORE ORDERING OF MATERIALS OR PUMP STATION.

6. THE PUMP STATION SHALL BE PROVIDED WITH ALL ACCESSORIES AND APPURTENANCES AS REQUIRED. THIS IS INCLUDING, BUT NOT LIMITED TO, FLOATS, S.S. FLOAT HOLDER, PUMPS, PUMP CABLE, PUMP CONTROL PANEL, ALUMINUM HATCH, FIBERGLASS WET WELL, DISCHARGE PIPING, CHECK VALVES, GATE VALVES, VENT, ETC.

7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT, WIRING, ETC. FROM POWER POLE TO PUMP STATION LOCATION. CONDUIT FROM POWER POWER TO PUMP STATION SHALL BE BURIED UNDERGROUND AND ENCASED IN CONCRETE.

8. ALL POWER WIRING INSTALLED FOR POWER, PUMPS, ETC. SHALL BE TYPE RHH. ALL SIGNAL WIRE FOR ALARMS AND CONTROLS MAY BE TYPE THHN.

9. ALL EXPOSED CONDUIT, BOXES, FITTINGS, ETC. SHALL BE ALUMINUM UNLESS NOTED OTHERWISE. ALL BURIED CONDUIT MAY BE PVC. CONDUITS TO BE RUN NEAT, PLUMB, LEVEL. ETC. TO THE MAXIMUM EXTENT POSSIBLE.

10. ALL CONDUIT, PANELS, BOXES, ETC. SHALL BE INSTALLED AND PROPERLY SUPPORTED USING ALUMINUM OR STAINLESS STEEL UNI-STRUT, STRUCTURAL MEMBERS, ETC. OR AS APPROVED. ALL ALUMINUM MOUNTED TO CONCRETE SHALL BE COATED WITH A BITUMASTIC COATING. PROVIDE ALL SUPPORTS, BRACKETS, ETC. AS REQUIRED TO SUPPORT CONDUIT(S).

11. ALL ATTACHMENT HARDWARE (I.E. BOLTS, NUTS, ANCHOR BOLTS, WASHERS, ETC.) SHALL BE STAINLESS STEEL.

12. THE CONTRACTOR SHALL PROVIDE ALL CONDUCTORS, CONDUITS, TERMINATIONS, JUNCTION BOXES, ETC. AS REQUIRED BY NEC, THE EQUIPMENT SUPPLIED, AND AS REQUIRED FOR A COMPLETE INSTALLATION.

13. THE CONTRACTOR SHALL GROUND NEW PUMP STATION, PANELS, ETC. IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC). WITH BARE GROUND CABLES AND CADWELD CONNECTIONS.

14. THESE PLANS DO NOT SHOW ALL THE APPURTENANCES, DETAILS, CONNECTIONS, COMPONENTS, WIRING, AND MATERIALS, ETC. REQUIRED TO PROPERLY PERFORM THE WORK. CONTRACTOR SHALL PROVIDE ALL MEANS, METHODS, AND MISCELLANEOUS APPURTENANCES, ETC., AS REQUIRED TO PERFORM AND PROPERLY COMPLETE THE WORK. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED WIRING, ELECTRICAL COMPONENTS, MOUNTING HARDWARE, ETC. AT NO EXTRA TIME OR COST TO THE OWNER FOR A COMPLETE AND FULLY FUNCTIONAL PROJECT.

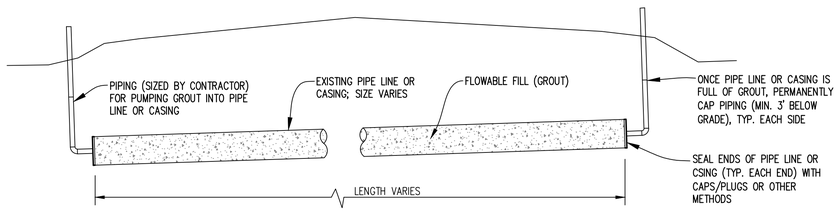
15. ALL WORK AND MATERIAL(S) SHALL BE IN FULL COMPLIANCE WITH ALL APPLICABLE CODES, LAWS, AND ORDINANCES, THE NATIONAL ELECTRICAL CODE (NEC) AND THE REGULATIONS OF THE LOCAL UTILITY COMPANIES.

16. SIZE AND INSTALL CONDUCTORS AND CONDUIT AS REQUIRED PER NEC AND FOR EQUIPMENT BEING PROVIDED.

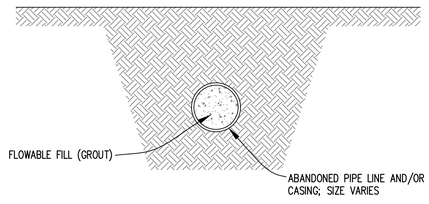
17. THE CONTRACTOR SHALL INSPECT ALL SITE WHERE WORK IS NEEDED TO DETERMINE DIMENSIONS AND ALL CONDITIONS AFFECTING PUMP STATION AND ELECTRICAL WORK. FAILURE TO DO SO SHALL IN NO WAY RELIEVE CONTRACTOR OF HIS RESPONSIBILITY UNDER CONTRACT.

18. PROVIDE DANGER SIGNS, VOLTAGE LABELS, ARC FLASH LABELS, ETC. FOR ALL PANELS, EQUIPMENT, DISCONNECT SWITCHES, ETC. PER NEC.

19. THE CONTRACTOR SHALL PROVIDE AN AIR GAP BETWEEN THE WET WELL AND THE PUMP CONTROL PANEL. THE CONDUIT FROM WET WELL SHOULD TERMINATE ONCE 1.5' ABOVE THE GROUND. EXPOSED WIRE SHOULD EXTEND 1' BEFORE ENTERING CONDUIT AND INTO THE BOTTOM OF PANEL. PROTECT EXPOSED WIRE WITH AN ALUMINUM CAGE AROUND CONDUIT AND WIRE/CABLE. PROVIDE REMOVABLE SEALANTS IN ALL CONDUIT ENTRY AND EXIT POINTS FROM WET WELL.



TYPICAL SECTION

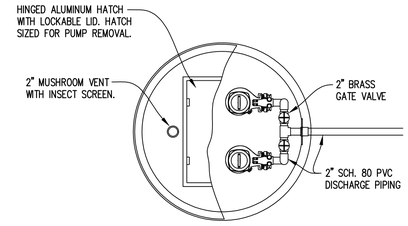


NOT ALL EXISTING PIPE LINES/ CASINGS ARE SHOWN OR CALLED OUT ON THE PLANS. CONTRACTOR SHALL BE PREPARED TO GROUT FILL ADDITIONAL PIPE LINES/ CASINGS FOUND DURING THE PROJECT.

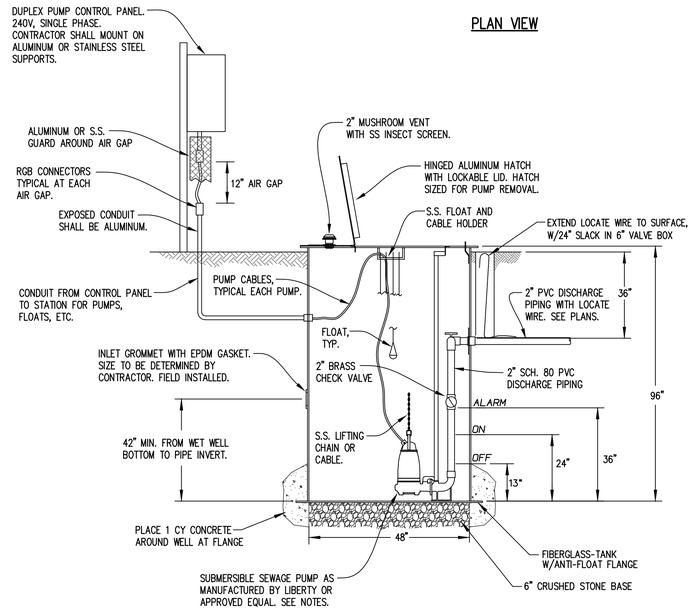
SECTION

GROUT FILLED ABANDONED PIPELINE AND/OR CASING

SCALE N.T.S.



PLAN VIEW



SECTION VIEW

LIFT STATION PLAN & SECTION VIEWS

SCALE: N.T.S.

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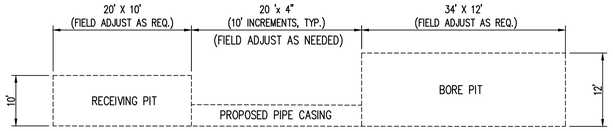
THE CITY OF ALEXANDER CITY

ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

ALABAMA LICENSED NO. 33656 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

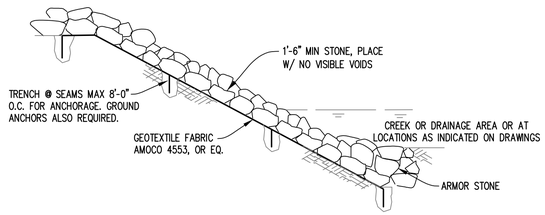
BAR = 1"

Drawing	Title	BID SET
Project No.	STANDARD DETAILS	
Date 06-2024		
Scale AS SHOWN		
Sheet 13		



TYPICAL CASE & BORE / RECIEVING PIT DETAIL
PLAN VIEW

SCALE: N.T.S.



NOTES:

1. STONE FOR CHANNEL PROTECTION RIP RAP SHALL BE SELECTED LIMESTONE ROCK CONSISTING OF WELL GRADED STONE WEIGHING FROM 10 POUNDS TO 200 POUNDS EACH WITH AT LEAST 50% WEIGHING OVER 80 POUNDS. BOTH WIDTH AND THICKNESS SHOULD BE 1/3 THE LENGTH FOR EACH STONE. NOT MORE THAN 10% BY TOTAL WEIGHT SHALL WEIGH LESS THAN 10 POUNDS AND NOT MORE THAN 10% BY TOTAL WEIGHT SHALL WEIGH MORE THAN 200 POUNDS.

2. RIP-RAP ALL DISTURBED AREAS ALONG CREEK BANKS, ANY DRAINAGE AREA WITH SLOPES GREATER THAN 3:1, AND OTHER AREAS AS INDICATED ON THE DRAWINGS OR DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

TYPICAL SLOPE PROTECTION USING RIP-RAP DETAIL

SCALE: N.T.S.

CREEK CROSSING NOTES:

BMP PLAN NOTES:

1. CONTRACTOR SHALL IMPLEMENT AND MAINTAIN BEST MANAGEMENT PRACTICES (BMPS) TO PREVENT TO THE MAXIMUM EXTENT POSSIBLE POTENTIAL DISCHARGES OF POLLUTANTS FROM ASSOCIATED ACTIVITIES.

2. CONTRACTOR SHALL IMPLEMENT APPROPRIATE MEASURES TO MINIMIZE THE POTENTIAL FOR A DECREASE OF INSTREAM DISSOLVED OXYGEN AND SHALL NOT CONTRIBUTE TO OR CAUSE A VIOLATION OF APPLICABLE WATER QUALITY STANDARDS FOR INSTREAM DISSOLVED OXYGEN.

3. CONTRACTOR SHALL IMPLEMENT AND MAINTAIN EFFECTIVE BMPS, INCLUDING FLOATING TURBIDITY SCREENS TO MINIMIZE DOWNSTREAM TURBIDITY.

4. DURING ALL INSTREAM ACTIVITY, CONTRACTOR SHALL VISUALLY MONITOR OR MEASURE BACKGROUND TURBIDITY AND SHALL SUSPEND OPERATIONS SHOULD TURBIDITY DIRECTLY DOWNSTREAM OF ACTIVITY EXCEED BACKGROUND TURBIDITY BY MORE THAN 50 NTUS.

CROSSING NOTES:

1. CONTRACTOR SHALL ACQUIRE ALL CREEK CROSSING PERMITS REQUIRED AND ADHERE TO ALL APPLICABLE GENERAL AND SPECIAL CONDITIONS AS REQUIRED BY PERMITS.

2. DOWNSTREAM FLOWS MUST BE MAINTAINED DURING CONSTRUCTION.

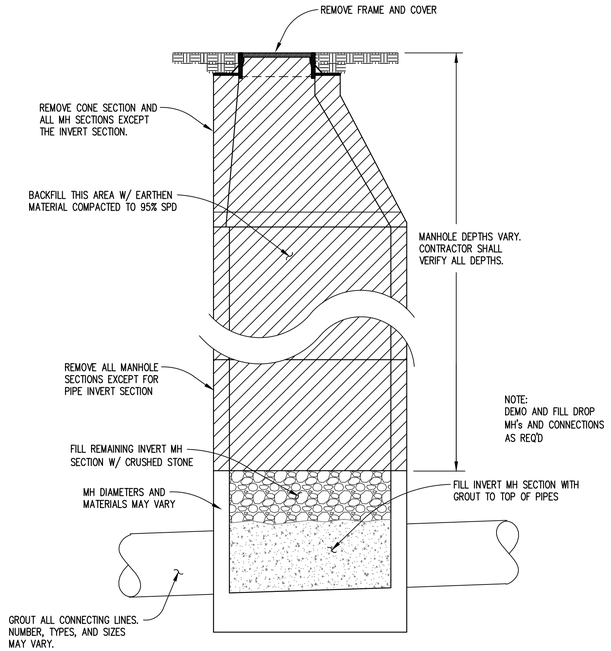
3. PRECONSTRUCTION CONTOURS WITHIN THE FLOW PATH SHALL BE RESTORED AND BE EQUAL TO THE FINAL, POST-CONSTRUCTION CONTOURS.

4. SIDECAST MATERIAL WITHIN THE STREAMBED SHALL NOT BE DISPERSED DUE TO FLOW CURRENTS OR OTHER FORCES, AND EXCESS MATERIAL SHALL BE REMOVED ENTIRELY IN LESS THAN THREE MONTHS.

5. EXPOSED SLOPES AND STREAM BANKS SHALL BE STABILIZED IMMEDIATELY UPON CROSSING A WATERBODY.

6. WITHIN THE FLOW PATH, PIPE BEDDING/BACKFILL MATERIAL SHALL PREFERABLY BE EXCAVATED MATERIAL SHOULD IT BE DEEMED SUITABLE. SEE TYPICAL CREEK CROSSING DETAIL.

7. CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO COMPLETE WORK DURING LOW-FLOW OR NO-FLOW CONDITIONS.



NOTES:

1. ALL FRAMES AND COVER, SECTIONS, CONE, ETC. SHALL BE RETURNED TO OWNER (IF DESIRED) AS NECESSARY OR REQUIRED.

2. ANY REMAINING MATERIAL SHALL BE PROPERLY DISPOSED OF OFFSITE BY CONTRACTOR.

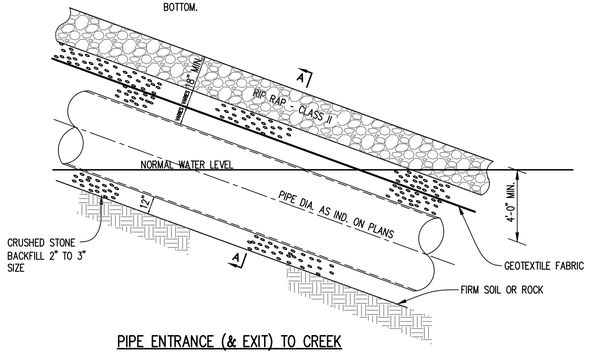
3. CONTRACTOR SHALL PROVIDE ALL GROUT AND DIRT BACKFILL AS PART OF THE PROJECT. SEE OTHER SHEETS FOR BACKFILL REQUIREMENTS.

TYPICAL DETAIL FOR DEMOLITION OF EXISTING MANHOLE ALONG ABANDONED SEWER SECTIONS

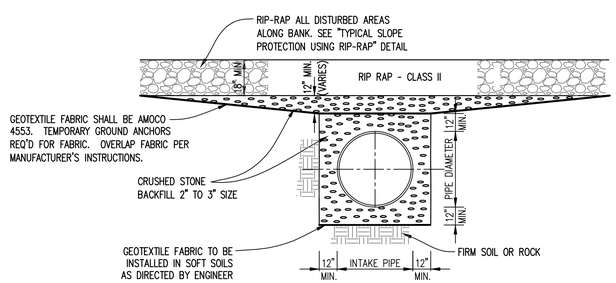
SCALE N.T.S.

NOTE:

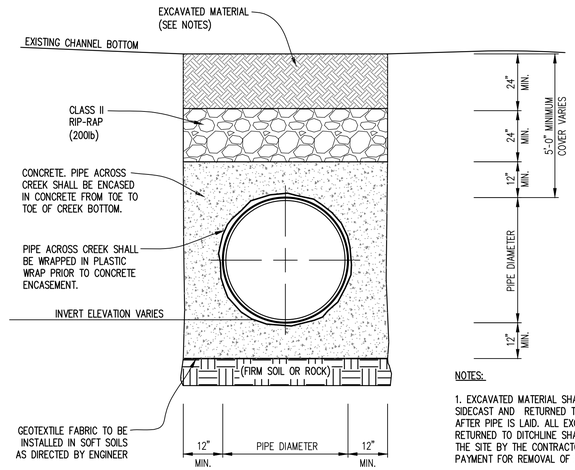
1. PIPE ENTRANCE/EXIT DETAIL APPLIES FROM THE TOP OF BANK DOWN TO THE TOE OF THE BANK WHERE THE BANK TRANSITIONS TO THE CREEK BOTTOM OR PER THE LIMITS INDICATED ON THE DRAWINGS. TYPICAL CREEK CROSSING SECTION APPLIES OUT IN THE CREEK BOTTOM.



PIPE ENTRANCE (& EXIT) TO CREEK



PIPE ENTRANCE (& EXIT) TO CREEK - SECTION A-A



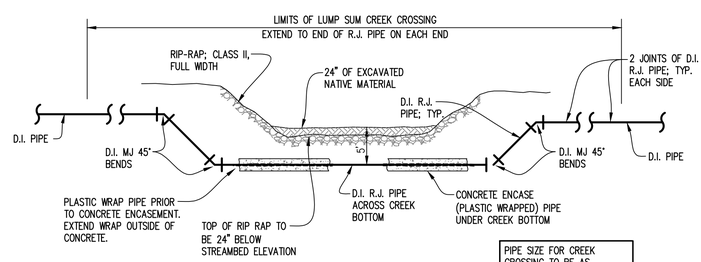
CREEK CROSSING SECTION

NOTES:

1. EXCAVATED MATERIAL SHALL BE TEMPORARILY SIDECAST AND RETURNED TO TOP OF DITCHLINE AFTER PIPE IS LAID. ALL EXCAVATED MATERIAL NOT RETURNED TO DITCHLINE SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR WITH NO EXTRA PAYMENT FOR REMOVAL OF SIDECAST MATERIAL.

2. PROVISIONS MUST BE MADE TO ENSURE AGAINST PIPE FLOTATION.

3. CONTRACTOR SHALL PLASTIC WRAP AND CONCRETE ENCASE PIPE UNDER CREEK FROM TOE OF BANK TO TOE OF BANK AS A MINIMUM.



PIPE SIZE FOR CREEK CROSSING TO BE AS INDICATED ON THE DRAWINGS.

CREEK CROSSING PROFILE

TYPICAL CREEK CROSSING DETAIL

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BAR = 1"

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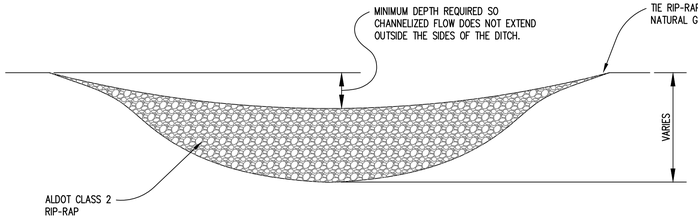
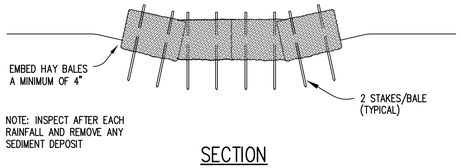


RIP-RAP CHECK DAM DETAIL

SCALE: N.T.S.



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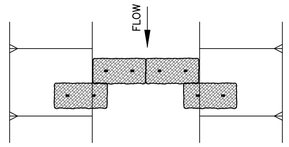
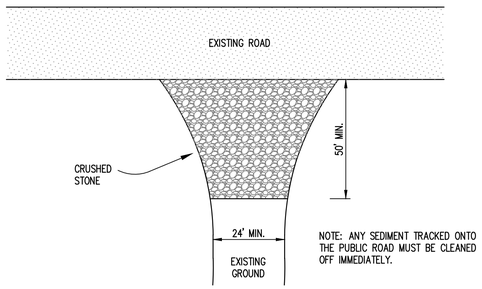


PLAN

SCALE: N.T.S.

HAY BALE DITCH CHECK DETAIL

SCALE: N.T.S.



PLAN

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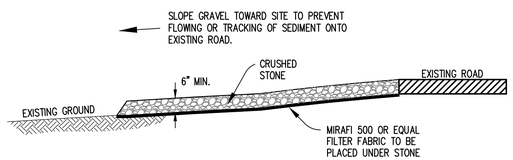
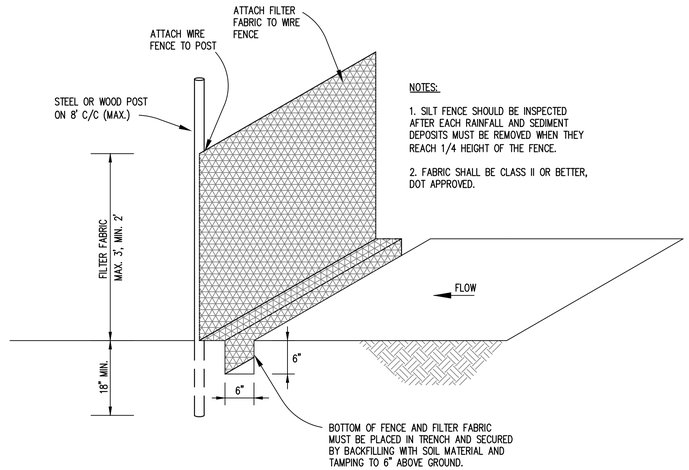


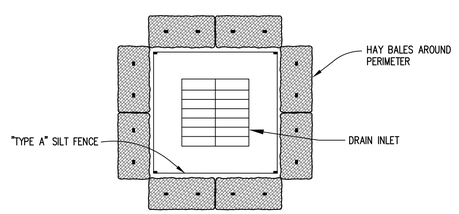
CONSTRUCTION ENTRANCE DETAIL

SCALE: N.T.S.



SILT FENCE DETAIL

SCALE: N.T.S.



INLET PROTECTION DETAIL

SCALE: N.T.S.

BMP GENERAL NOTES:

THE FOLLOWING REQUIREMENTS ARE TO BE CONSIDERED MINIMUM STANDARDS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN AN NPDES PERMIT FOR THE PROPOSED WORK AS REQUIRED BY THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM). BY BIDDING THE PROJECT, THE CONTRACTOR IS CERTIFYING THAT IF AWARDED THE CONTRACT, HE WILL BE THE SOLE PERMITEE ON THIS PERMIT AND THAT HE SHALL INDEMNIFY THE OWNER AGAINST AND SHALL BE SOLELY RESPONSIBLE FOR ANY FINES OR MONETARY DAMAGES ASSOCIATED WITH STORMWATER RUNOFF AND CONTROL.

1. THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) FOR THE PREVENTION AND CONTROL OF NONPOINT SOURCES OF POLLUTANTS DURING AND AFTER PROJECT IMPLEMENTATION. THE CONTRACTOR, AT A MINIMUM, MUST IMPLEMENT BMP'S AS PROVIDED IN THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL & STORMWATER MANAGEMENT ON CONSTRUCTION SITES & URBAN AREAS, AS AMENDED, AND THE EPA STORMWATER POLLUTION PREVENTION FOR CONSTRUCTION ACTIVITIES-DEVELOPING POLLUTION PREVENTION PLANS AND BEST MANAGEMENT PRACTICES, AS AMENDED. THE EROSION CONTROL DEVICES SHOWN ON THIS PLAN ARE A MINIMUM. ADDITIONAL DEVICES SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER AS REQ'D TO PREVENT SILTATION, EROSION, & OTHER DEGRADATION OR POLLUTION TO SITE OR ADJACENT PROPERTIES, STREAMS, DITCHES, PUBLIC ROADWAYS, ETC.

2. SITE GRADING SHALL BE MAINTAINED SO THAT NO UPSLOPE DRAINAGE ENTERS EXCAVATED OR DISTURBED AREAS.

3. TO THE EXTENT PRACTICAL, THE CONTRACTOR SHALL SCHEDULE HIS ACTIVITIES TO MINIMIZE THE AMOUNT OF AREA DISTURBED AT ANY ONE TIME.

4. ALL STOCKPILE EXCAVATED MATERIAL SHALL BE GRASSED OR COVERED WITHIN 72 HOURS OF STOCKPILING. GRASSING AND FERTILIZATION OF STOCKPILED SOILS SHALL BE AS PER THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL & STORMWATER MANAGEMENT ON CONSTRUCTION SITES & URBAN AREAS. SEED RATES SPECIFIED IN THE MANUAL SHALL BE DOUBLED.

5. CONTRACTOR SHALL AS A MINIMUM INSPECT STORMWATER CONTROLS ONCE EVERY TWO WEEKS AND FOLLOWING A 1/2" OR GREATER RAINFALL IN ANY 24 HOUR PERIOD. SILT FENCING SHALL ALSO BE CHECKED WHEN WIND GUSTS EXCEED 25 MPH. DEFICIENCIES FOUND IN STORMWATER CONTROLS SHALL BE CORRECTED IMMEDIATELY. THE CONTRACTOR SHALL MAINTAIN A LOG OF ALL INSPECTION ACTIVITIES.

6. THE CONTRACTOR SHALL INSTALL SILT FENCING AROUND THE PROJECT PERIMETER AS REQUIRED PRIOR TO COMMENCING PROJECT. IN THE EVENT THAT THE PROJECT REQUIRES TEMPORARY CHANNELIZATION OF STORMWATER RUNOFF, THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN APPROPRIATE BMP CONTROLS (SETTLING BASINS, CHECK DAMS, ETC.)

SHALL INSTALL SILT FENCING AROUND THE PROJECT PERIMETER AS REQUIRED PRIOR TO COMMENCING PROJECT. IN THE EVENT THAT THE PROJECT REQUIRES TEMPORARY CHANNELIZATION OF STORMWATER RUNOFF, THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN APPROPRIATE BMP CONTROLS (SETTLING BASINS, CHECK DAMS, ETC.)

7. PERMANENT VEGETATION OF ALL DISTURBED AREAS IS REQUIRED. ONCE ALL LAND DISTURBANCES HAVE CEASED & ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED, EROSION CONTROL DEVICES SHALL BE REMOVED. SEE SPECIFICATIONS FOR GRASSING REQUIREMENTS.

8. A CONSTRUCTION ENTRANCE IS REQUIRED AT ALL ENTRANCE/EXITS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PUBLIC ROADWAYS IMMEDIATELY.

9. ALL DISTURBED AREAS LEFT INACTIVE FOR LONGER THAN 13 DAYS SHALL BE TEMPORARILY GRASSED OR COVERED TO PREVENT EROSION.

10. PERMANENT TURF REINFORCEMENT MATS ARE REQUIRED ON ALL SLOPES 2:1 OR STEEPER, AS WELL AS ALL DITCH LINES & SIDES.

11. BMP MEASURES MAY BE SHOWN OUTSIDE OF CONSTRUCTION LIMITS AND/OR RIGHTS OF WAY FOR CLARITY. CONTRACTOR SHALL NOT INSTALL BMP'S BEYOND PROJECT BOUNDARIES.

12. CONTRACTOR IS RESPONSIBLE FOR THE RENEWAL OF ALL NPDES PERMITS AS REQUIRED FOR THE PROJECT.

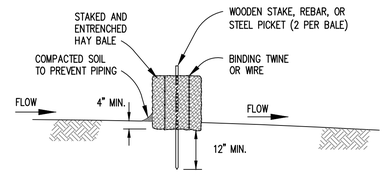
13. SEE SPECIFICATIONS FOR SEEDING REQUIREMENTS.

EROSION CONTROL NOTES:

1. CONTRACTOR SHALL OBTAIN AN "NPDES" PERMIT FOR THE SITE PRIOR TO CONSTRUCTION.

2. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE PROVISIONS OF THE "NPDES" PERMIT AND FOR PROVIDING EROSION AND SEDIMENTATION CONTROL IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

3. CONTRACTOR SHALL MAINTAIN ALL "BMP's" DURING CONSTRUCTION AND REMOVE ALL SEDIMENT AND EROSION CONTROL DEVICES FOLLOWING STABILIZATION.



HAY BALE STAKING DETAIL

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Sheet	15

TRAFFIC CONTROL NOTES:

1. NO ONE SET OF TEMPORARY TRAFFIC CONTROL (TTC) DEVICES CAN SATISFY ALL CONDITIONS FOR A GIVEN PROJECT OR INCIDENT. AT THE SAME TIME, DEFINING DETAILS THAT WOULD BE ADEQUATE TO COVER ALL APPLICATIONS IS NOT PRACTICAL. INSTEAD, THESE DETAILS DISPLAY TYPICAL APPLICATIONS THAT DEPICT COMMON APPLICATIONS OF TTC DEVICES. THE TTC SELECTED BY THE CONTRACTOR FOR EACH SITUATION DEPENDS ON MANY FACTORS SUCH AS (BUT NOT LIMITED TO): THE TYPE OF HIGHWAY, ROAD USER CONDITIONS, DURATION OF OPERATION, PHYSICAL CONSTRAINTS, THE NEARNESS OF THE WORK SPACE OR INCIDENT MANAGEMENT ACTIVITY TO ROAD USERS, ETC. CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR DESIGNING, PLANNING AND COORDINATING ALL TRAFFIC CONTROL DETAILS AND THEIR SUCCESSFUL IMPLEMENTATION IN ACCORDANCE WITH THE ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AS A MINIMUM.

2. THE CONTRACTOR SHALL PREPARE HIS OWN SPECIFIC DETAILED TTC PLAN, PREPARED BY PERSON(S) TRAINED AND CERTIFIED IN PROPER TTC PRACTICES AND PRINCIPLES. PLAN SHALL HAVE DETAILS OF PLANNED WORK AND TTC MEASURES TO BE EMPLOYED BASED ON THE CONTRACTOR'S PLANNED MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR'S PLAN SHALL BE SUBMITTED TO THE ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) FOR REVIEW AND APPROVAL BEFORE BEGINNING ANY WORK ON THE PROJECT. ANY CHANGES IN THE FINAL APPROVED TTC PLAN SHOULD BE APPROVED BY ALDOT.

3. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR SAFETY. THE ENGINEER IS NOT RESPONSIBLE FOR SAFETY. THE CONTRACTOR SHALL CONTINUOUSLY UTILIZE SAFETY PRACTICES THAT MAY BE NEEDED FOR FULL PROTECTION OF ALL PERSONS INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION PERSONNEL, THE OWNER'S PERSONNEL, FIELD ENGINEERS, INSPECTORS, THE GENERAL PUBLIC, ETC. ALL WORKERS SHALL CAREFULLY FOLLOW PROPER SAFETY PROCEDURES AT ALL TIMES.

4. ALL WORKERS SHOULD BE TRAINED ON HOW TO WORK NEXT TO MOTOR VEHICLE TRAFFIC IN A WAY THAT MINIMIZES THEIR VULNERABILITY. WORKERS HAVING SPECIFIC TTC RESPONSIBILITIES SHOULD BE TRAINED IN TTC TECHNIQUES, DEVICE USAGE, PLACEMENT, ETC.

5. TO PROVIDE ACCEPTABLE LEVELS OF OPERATIONS, ROUTINE AND FREQUENT DAY AND NIGHT INSPECTIONS OF TTC ELEMENTS SHOULD BE PERFORMED BY THE CONTRACTOR. INDIVIDUALS THE CONTRACTOR EMPLOYS FOR TTC SHOULD BE KNOWLEDGEABLE (FOR EXAMPLE, TRAINED AND/OR CERTIFIED) AND EXPERIENCED IN THE PRINCIPLES OF PROPER TTC AND SHOULD BE ASSIGNED RESPONSIBILITY FOR SAFETY IN TTC ZONES. THESE INDIVIDUALS SHOULD CHECK THAT ALL TTC DEVICES OF THE PROJECT ARE CONSISTENT WITH THE TTC PLAN; ARE EFFECTIVE FOR MOTORISTS, BICYCLISTS, PEDESTRIANS, AND WORKERS; MEET ALL SHELBY COUNTY ROADS AND TRANSPORTATION DEPARTMENT REQUIREMENTS; CONDUCT HAZARD ASSESSMENTS; DETERMINE WHETHER ENGINEERING, ADMINISTRATIVE, OR PERSONAL PROTECTION MEASURES SHOULD BE IMPLEMENTED; ENSURE CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AS A MINIMUM; ENSURE CONFORMANCE WITH OSHA REQUIRMENETS; ETC. THE CONTRACTOR SHALL PROPERLY AND CAREFULLY MAINTAIN ALL HIS TRAFFIC CONTROL DEVICES THROUGHOUT THE ENTIRE DURATION OF THE PROJECT.

6. SPECIAL PLANS PREPARATION AND COORDINATION WITH HIGHWAY AGENCIES, LAW ENFORCEMENT AND OTHER EMERGENCY UNITS, UTILITIES, SCHOOLS, TRUCKING COMPANIES, INDUSTRIES, OSHA, ETC. MIGHT BE NEEDED TO ADDRESS SPECIAL, UNEXPECTED, OR UNUSUAL ROAD USER OPERATION SITUATIONS.

7. ALL PERSONS WHO ARE EXPOSED EITHER TO TRAFFIC OR WORK VEHICLES AND CONSTRUCTION EQUIPMENT WITHIN OR NEAR THE TTC ZONE SHALL ALWAYS WEAR HIGH VISIBILITY (AND HIGH REFLECTIVITY) SAFETY APPAREL AS SPECIFIED BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AS A MINIMUM.

8. PROJECT NOTIFICATION SIGNS ARE REQUIRED AT EACH END OF THE SITE, STATING THE SPONSOR, TYPE OF CONSTRUCTION, START DATE, AND DURATION, PLACED A MINIMUM OF ONE WEEK IN ADVANCE OF COMMENCING CONSTRUCTION. SIGN AND PLACEMENT OF SIGN SHALL BE AS APPROVED BY THE ALABAMA DEPARTMENT OF TRANSPORTATION.

9. CONSTRUCTION WARNING SIGNS SHALL BE PLACED 1500, 1000 AND 500 FEET IN ADVANCE OF THE WORK ZONE LIMITS ON STATE ROUTE 195 AND STATE ROUTE 5 AND ON EACH INTERSECTING STREET WITHIN THE PROJECT LIMITS. SIGNS AND PLACEMENT SHALL BE AS APPROVED BY THE ALABAMA DEPARTMENT OF TRANSPORTATION.

10. ROADS MUST REMAIN OPEN AT ALL TIMES DURING THE ENTIRE CONSTRUCTION PROJECT. SINGLE LANE CLOSURES SHALL BE COORDINATED WITH THE ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) WHEN NECESSARY FOR CONSTRUCTION ACTIVITIES. THESE LOCATIONS AND PLANNED DETAILS SHOULD BE SHOWN IN THE CONTRACTOR'S TRAFFIC CONTROL PLANS SUBMITTED TO ALDOT. LANE CLOSURES ARE NOT ALLOWED AT NIGHT OR DURING THE MORNING AND AFTERNOON PEAK TRAVEL TIMES OR DURING PERIODS OF RAIN, ETC.

11. DURING NON-WORKING HOURS NO EQUIPMENT OR MATERIAL SHALL BE PARKED OR STORED CLOSER THAN 30 FEET FROM THE EDGE OF ANY ROADWAY CARRYING TRAFFIC IF POSSIBLE. CHANNELIZING DRUMS ARE TO BE LOCATED ALONG THE EDGE OF THE ROADWAY (SEE TYPICAL MATERIAL AND EQUIPMENT STORAGE DETAIL THIS SHEET) WHEN EQUIPMENT OR MATERIAL IS STORED LESS THAN 30' FROM ROADWAY. ALL CONTRACTOR'S EMPLOYEES' PERSONAL VEHICLES, AND CONTRACTOR'S EQUIPMENT NOT IN OPERATION, SHALL BE PARKED A MINIMUM OF 30 FEET FROM THE TRAVELED ROADWAY DURING WORKING HOURS, AS NOT TO CREATE A HAZARD.

12. WHERE THE LOCATION OF A REQUIRED SIGN FALLS IN A DRIVEWAY, SIDEWALK, BRIDGE, ETC., OR IN A NON-DESIRABLE LOCATION, OR WHERE THE VISIBILITY OF A SIGN IS LIMITED TO THE TRAVELING PUBLIC, ETC., THE LOCATION SHALL BE ADJUSTED AS APPROVED BY THE ALABAMA DEPARTMENT OF TRANSPORTATION.

13. WHEN FLAGGERS ARE REQUIRED TO BE USED THEY SHALL BE TRAINED, EXPERIENCED, AND MEET ALL REQUIREMENTS AND CAREFULLY FOLLOW ALL PROCEDURES OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AS A MINIMUM AND THE ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT). ALL HAND SIGNALING DEVICES AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AS A MINIMUM AND ALDOT.

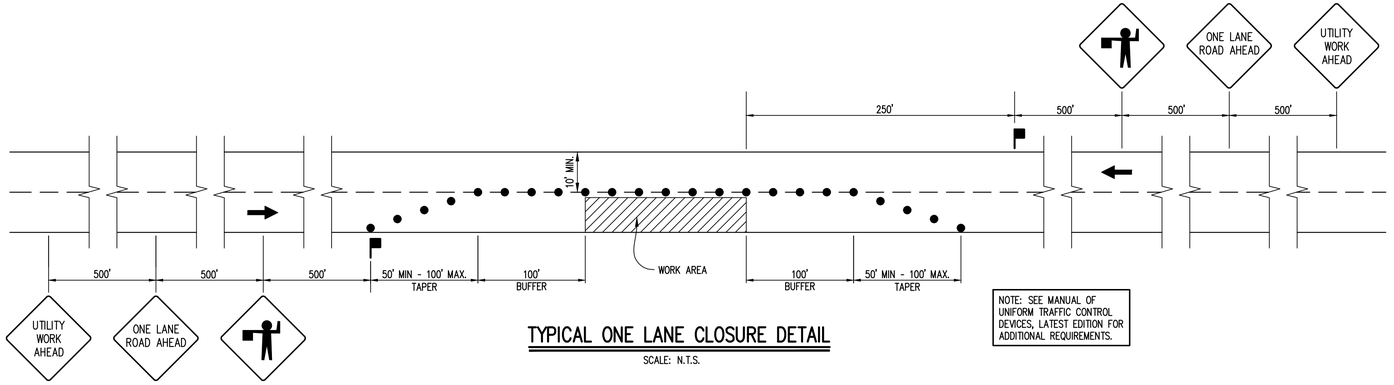
14. ALL TRAFFIC CONTROL DEVICES (SIGNS, SIGNALS, MARKINGS, CHANNELIZING DEVICES, LIGHTS, TEMPORARY TRAFFIC BARRIERS, AND OTHER DEVICES); THEIR PLACEMENTS; AND THEIR MAINTENANCE SHALL BE PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AS A MINIMUM AND THE ALABAMA DEPARTMENT OF TRANSPORTATION.

15. ANYTIME PIPE IS STRUNG OUT WITHIN 10 FEET OF THE ROAD, TRAFFIC DRUMS, ACCEPTABLE TO THE ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) ARE REQUIRED TO BE PLACED BETWEEN THE ROAD AND THE PIPE AT SPACING APPROVED BY ALDOT. THE TRAFFIC DRUMS SHALL BE PLACED SIMULTANEOUSLY WITH OR PRIOR TO THE PLACEMENT OF THE PIPE.

16. KEEP ALL GRAVEL, MUD, AND DIRT, ETC., CONTINUALLY AND EFFECTIVELY CLEANED FROM ALL ROADS AT ALL TIMES.

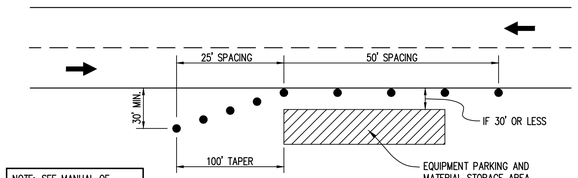
17. KEEP DEVICES AND REFLECTIVE SURFACES, ETC., CLEAN SO THEY CAN EFFECTIVELY SERVE THEIR PURPOSE.

18. IF THE PAVING OR ROAD IS DAMAGED BY THE CONTRACTOR, IT SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. NO PAVING OR ROAD SHALL BE LEFT OVERNIGHT IN A POTENTIALLY UNSAFE CONDITION, OR IN A CONDITION THAT MAY BECOME UNSAFE. ALL SUCH REPAIRS, AND THE TIMING FOR THE REPAIRS, SHALL BE TO THE SATISFACTION OF THE OWNER AND THE ALABAMA DEPARTMENT OF TRANSPORTATION.



TYPICAL ONE LANE CLOSURE DETAIL

SCALE: N.T.S.

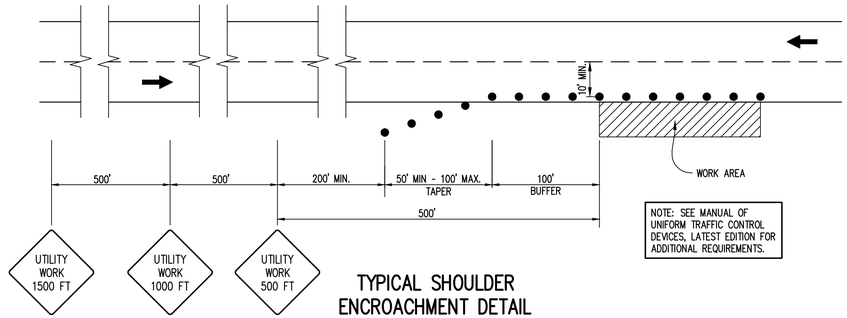


NOTE: SEE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION FOR ADDITIONAL REQUIREMENTS.

NOTE: AREAS FOR PARKING EQUIPMENT OR STORING MATERIALS SHALL BE AS FAR AS PRACTICAL FROM THE EDGE OF PAVEMENT.

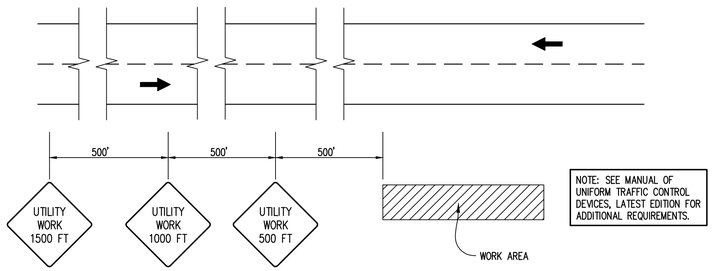
TYPICAL MATERIAL AND EQUIPMENT STORAGE DETAIL

SCALE: N.T.S.



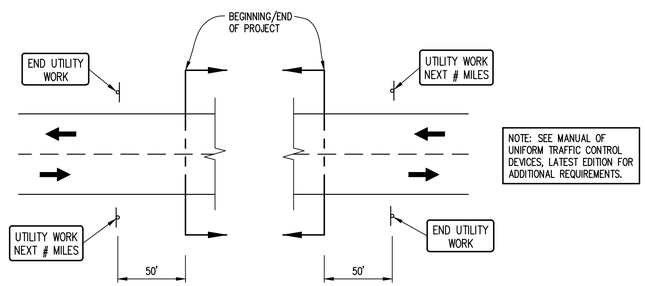
TYPICAL SHOULDER ENCROACHMENT DETAIL

SCALE: N.T.S.



TYPICAL WORK BEYOND THE SHOULDER DETAIL

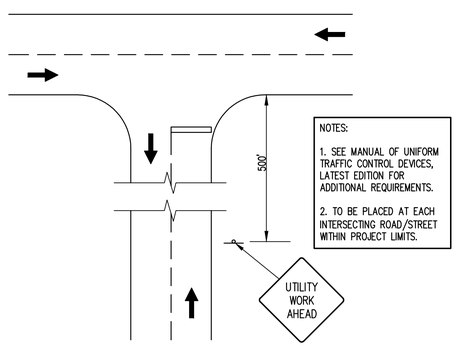
SCALE: N.T.S.



NOTE: FOR THE NUMBER OF MILES FOR UTILITY WORK SIGN, ROUND UP TO THE NEXT WHOLE NUMBER THAN THE DISTANCE OF THE PROJECT.

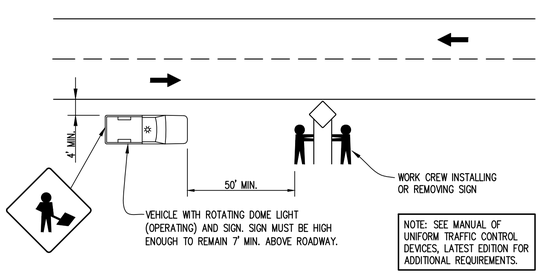
TYPICAL BEGINNING AND END OF PROJECT NOTIFICATION SIGN DETAIL

SCALE: N.T.S.



TYPICAL INTERSECTING STREET DETAIL

SCALE: N.T.S.



TYPICAL PLACEMENT AND REMOVAL OF SIGNAGE DETAIL

SCALE: N.T.S.

LEGEND

- SIGN
- REFLECTIVE CHANNELIZING DRUM
- FLAGGER

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THE CITY OF ALEXANDER CITY
ALDOT #BR-0063(507)
UTILITY RELOCATIONS ON STATE ROUTE 63
BID #24-19
2024

ALABAMA LICENSED NO. 33656 PROFESSIONAL ENGINEER TRENT R. TURNER
6-17-24
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title	TRAFFIC CONTROL DETAILS
Drawing	BID SET
Project No.	
Date	06-2024
Scale	AS SHOWN
Sheet	16