288 & 294 Murray Fork Road Drainage Improvements

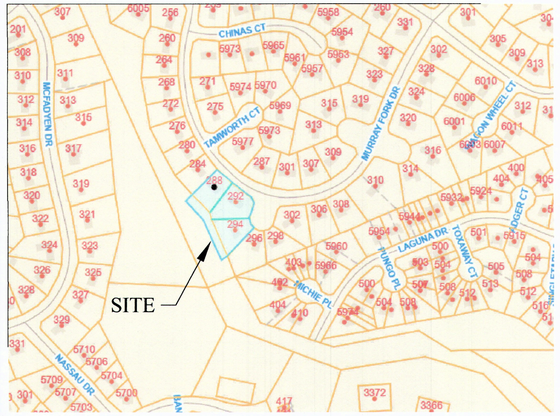
FAYETTEVILLE NC
AMERICA'S CAN DO CITY

APPENDIX A

Drawings

FAYETTEVILLE NC
PUBLIC SERVICES

288 & 294 MURRAY FORK RD DRAINAGE IMPROVEMENTS



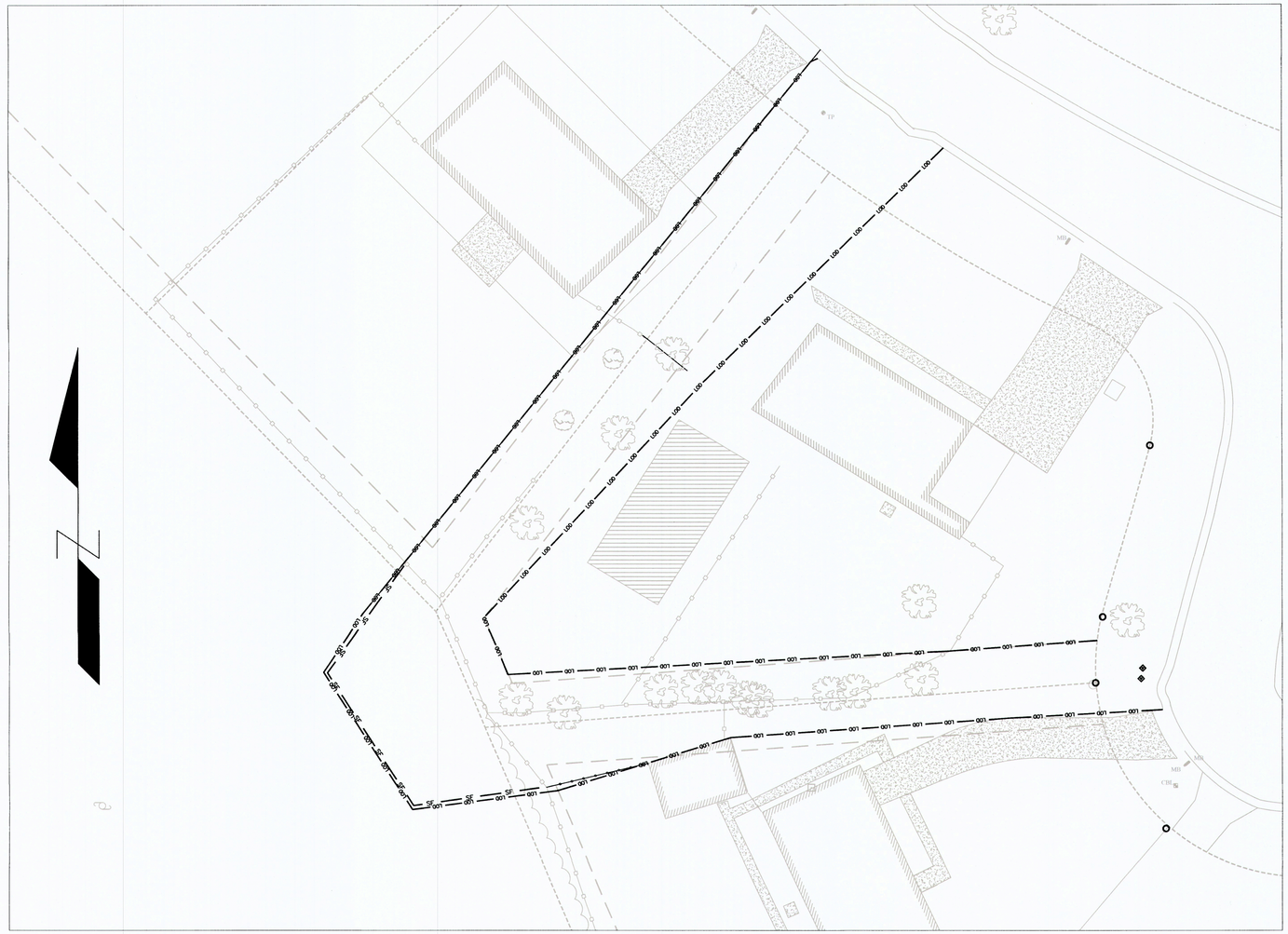
VICINITY MAP

PROJECT SCOPE

THIS PROJECT CONSISTS OF:

The Demolition/Removal/Abandonment of:
163 LF of 15" RCP, 189 LF of 24" RCP(Grout fill and Abandon), 2 existing headwalls, 14 trees, 3 driveway aprons, 341 LF of asphalt curb, 1 box w/ catch basin cover, 218 LF of 4' chainlink fence

The Installation of:
156 LF of 24" HDPE, 167 LF of 18" HDPE, 40 LF of 15" RCP, 2 precast headwalls w/ rip rap energy dissipation, 1 precast junction box w/ manhole cover, 2 precast junction boxes with catch basin covers, 3 driveway aprons, 341 LF of 24" verticle curb, 218' of 4' chainlink fence



INDEX

811
Know what's below.
Call before you dig.

PROJECT CONTACTS
CITY OF FAYETTEVILLE

Engineering	Byron Reeves, PE, CFM Assistant Public Services Director - Engineering 433 Hay Street, Fayetteville, NC 28301 (910) 433-1301 byronreeves@fayettevillenc.gov
Construction Management	Jeff Riddle, PLS Construction Manager 339 Alexander Street, Fayetteville, NC 28301 (910) 433-1661 jeffreyriddle@fayettevillenc.gov
Traffic Services	Brian McGill, PE Interim Public Services Director - Traffic 339 Alexander Street, Fayetteville, NC 28301 (910) 433-1170 brianmcgill@fayettevillenc.gov

288&294 MURRAY FORK DRAINAGE IMPROVEMENTS
DRAINAGE ASSISTANCE PROGRAM

PLAN TYPE: COVER
SHEET NUMBER: 1 of 4

FAYETTEVILLE NC
AMERICA'S CAN DO CITY
ENGINEERING DIVISION
ENGINEERING & INFRASTRUCTURE DEPARTMENT
433 HAY STREET FAYETTEVILLE, NC 28301

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046346 BYRON S. REEVES
DATE: 1/13/25

REVISIONS
REV. # | DESCRIPTION | REV BY | DATE

DRAWN : CSA
DESIGN : CSA
CHECK : CSA
APPROVED : BR
PROJECT NAME : MURRAY FORK DAP
SCALE : SCALE
DATE : 12DEC2024

PROJECT NO. _____ PROJECT #
SUB-LEDGER NO. _____ SUB-LEDGER #

ABBREVIATIONS

ASPH - ASPHALT
B/C - BACK OF CURB
BM - BENCHMARK
BFP - BACK FLOW PREVENTER
CB - CATCH BASIN
CP - CABLEVISION PEDESTAL
C&G - CURB AND GUTTER
C/L - CHAIN LINK
CMP - CORRUGATED METAL PIPE
CO - CLEANOUT
CONC - CONCRETE
CONST - CONSTRUCTION
CP - CONTROL POINT
CTR - CENTER
DB - DEED BOOK
DEPT - DEPARTMENT
DI - DROP INLET
DIP - DUCTILE IRON PIPE
DWA - DRIVEWAY ASPHALT
DWB - DRIVEWAY BRICK
DWC - DRIVEWAY CONCRETE
DWD - DRIVEWAY DIRT
DWG - DRIWEWAY GRAVEL
E - EAST/EASTING
EOP - EDGE OF PAVEMENT
ESMT - EASEMENT
EV - ELECTRICAL VAULT
F/C - FACE OF CURB
FES - FLARED END SECTION
FH - FIRE HYDRANT
FOB - FIBER OPTIC BURIED
FOM - FIBER OPTIC MARKER
FP - FLAG POLE
GV - GAS VALVE
GW - GUY WIRE
GWV - GATE WATER VALVE
HDPE - HIGH DENSITY POLYETHYLENE
INV - INVERT
JB - JUNCTION BOX
LF - LINEAR FOOT
LOD - LIMITS OF DISTURBANCE
LP - LIGHT POLE
MAX - MAXIMUM
MB - MAILBOX
MHEL - MANHOLE ELECTRIC
MHSD - MANHOLE STORM DRAIN
MHSS - MANHOLE SANITARY SEWER
MHTP - MANHOLE TELEPHONE
N - NORTH/NORTHING
O.C. - ON CENTER
O/H - OVERHEAD
PVMT - PAVEMENT
PC - POINT OF CURVATURE
PERM -PERMANENT
PG - PAGE
PI - POINT OF INTERSECTION
PVC - POLYVINYL CHLORIDE
PP - POWER POLE
RCP - REINFORCED CONCRETE PIPE
R/W - RIGHT OF WAY
S- SOUTH
SC - SAWCUT
SD - STORM DRAIN
S/R - SPLIT RAIL
SS - SANITARY SEWER
STA - STATION
STD - STANDARD
SWA - SIDEWALK ASPHALT
SWB - SIDEWALK BRICK
SWC - SIDEWALK CONCRETE
SY - SQUARE YARD
TC - TRASH CAN
TD - TRUNCATED DOME
TCE - TEMPORARY CONSTRUCTION EASEMENT
TCP - TERRA COTTA PIPE
TP - TELEPHONE PEDESTAL
TSB - TRAFFIC SIGNAL BOX
TVP - TRAVERSE POINT
TYP - TYPICAL
U.O.N. - UNLESS OTHERWISE NOTED
UP - UTILITY POLE
W - WEST
WCR - WHEELCHAIR RAMP
WM - WATER METER
WV - WATER VAULT

LEGEND

PROPOSED CONCRETE
PROPOSED CONCRETE CURB AND GUTTER
PROPOSED RIGHT-OF-WAY
PROPOSED FENCE
PROPOSED UNDERGROUND GAS
PROPOSED UNDERGROUND WATER
PROPOSED SANITARY SEWER
PROPOSED STORM DRAIN
PROPOSED TEMPORARY CONSTRUCTION EASEMENT
PROPOSED EASEMENT
SILT FENCE - LIMITS OF DISTURBANCE
PROPOSED SWALE
PROPOSED TRUNCATED DOMES
PROPOSED SANITARY SEWER MAN HOLE
PROPOSED STORM SEWER MAN HOLE
PROPOSED ELECTRICAL MAN HOLE
PROPOSED TELEPHONE MAN HOLE
PROPOSED CATCH BASIN
PROPOSED DROP INLET
PROPOSED ELECTRICAL VAULT
PROPOSED WATER VAULT
PROPOSED WATER METER
PROPOSED SANITARY SEWER CLEAN OUT
PROPOSED POWER POLE
PROPOSED LIGHT POLE
PROPOSED FIRE HYDRANT
PROPOSED GATE WATER VALVE
PROPOSED GAS VALVE
PROPOSED TREE
PROPOSED SHRUB
INLET PROTECTION
PROPOSED FLAIRED END SECTION
PROPOSED HEADWALL

WETLANDS
EXISTING CONCRETE/SIDEWALK
EXISTING CONCRETE CURB AND GUTTER
EXISTING RIGHT-OF-WAY
EXISTING FENCE
EXISTING UNDERGROUND GAS
EXISTING UNDERGROUND WATER
EXISTING SANITARY SEWER
EXISTING STORM SEWER
EXISTING FIBER OPTIC BURIED
EXISTING UNDERGROUND ELECTRIC
EXISTING OVERHEAD ELECTRIC
EXISTING TELEPHONE CABLE
EXISTING CABLEVISION
EXISTING TRAIN TRACKS
EXISTING EASEMENT
EXISTING SWALE
EXISTING SANITARY SEWER MAN HOLE
EXISTING STORM SEWER MAN HOLE
EXISTING ELECTRICAL MAN HOLE
EXISTING TELEPHONE MAN HOLE
EXISTING CATCH BASIN
EXISTING DROP INLET
EXISTING ELECTRICAL VAULT
EXISTING WATER VAULT
EXISTING WATER METER
EXISTING SANITARY SEWER CLEAN OUT
EXISTING POWER POLE
EXISTING LIGHT POLE
EXISTING FIRE HYDRANT
EXISTING WATER VALVE
EXISTING GAS VALVE

EXISTING CONCRETE MONUMENT
EXISTING SURVEY CONTROL MARKER
EXISTING PROPERTY CORNER (EIR/ERB/SIR/EIP)
EXISTING MAILBOX
EXISTING TREE
EXISTING SHRUB
EXISTING FLAIRED END SECTION
EXISTING HEADWALL

288&294 MURRAY FORK DRAINAGE IMPROVEMENTS
DRAINAGE ASSISTANCE PROGRAM

SHEET NUMBER 2 of 4

PLAN TYPE: LEGEND

FAYETTEVILLE NC
AMERICA'S CAN DO CITY
ENGINEERING DIVISION
ENGINEERING & INFRASTRUCTURE DEPARTMENT
433 HAY STREET FAYETTEVILLE, NC 28301

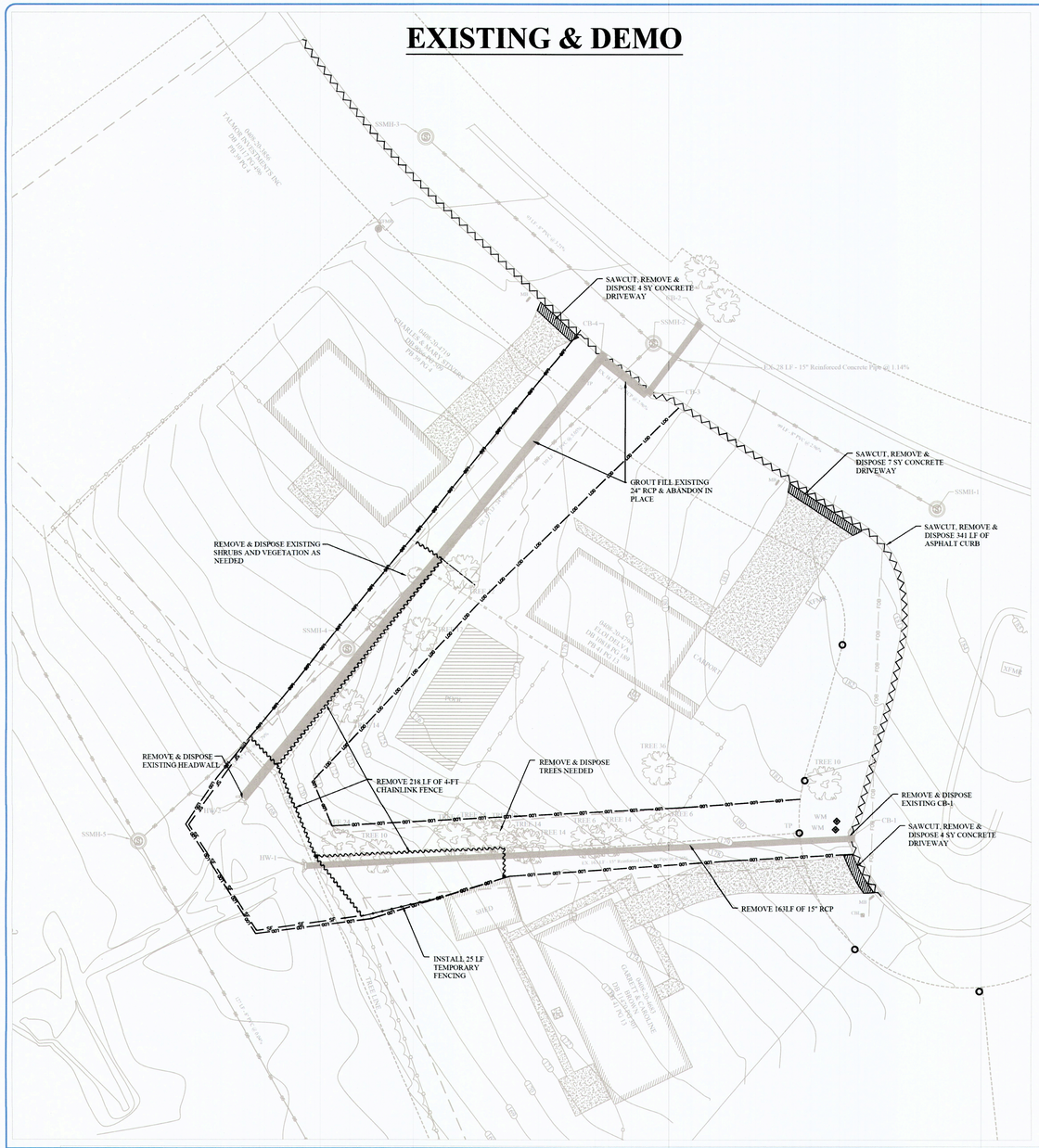
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 040346 BYRON S. REED
1/13/25

REVISIONS
REV. # | DESCRIPTION | REV.BY | DATE

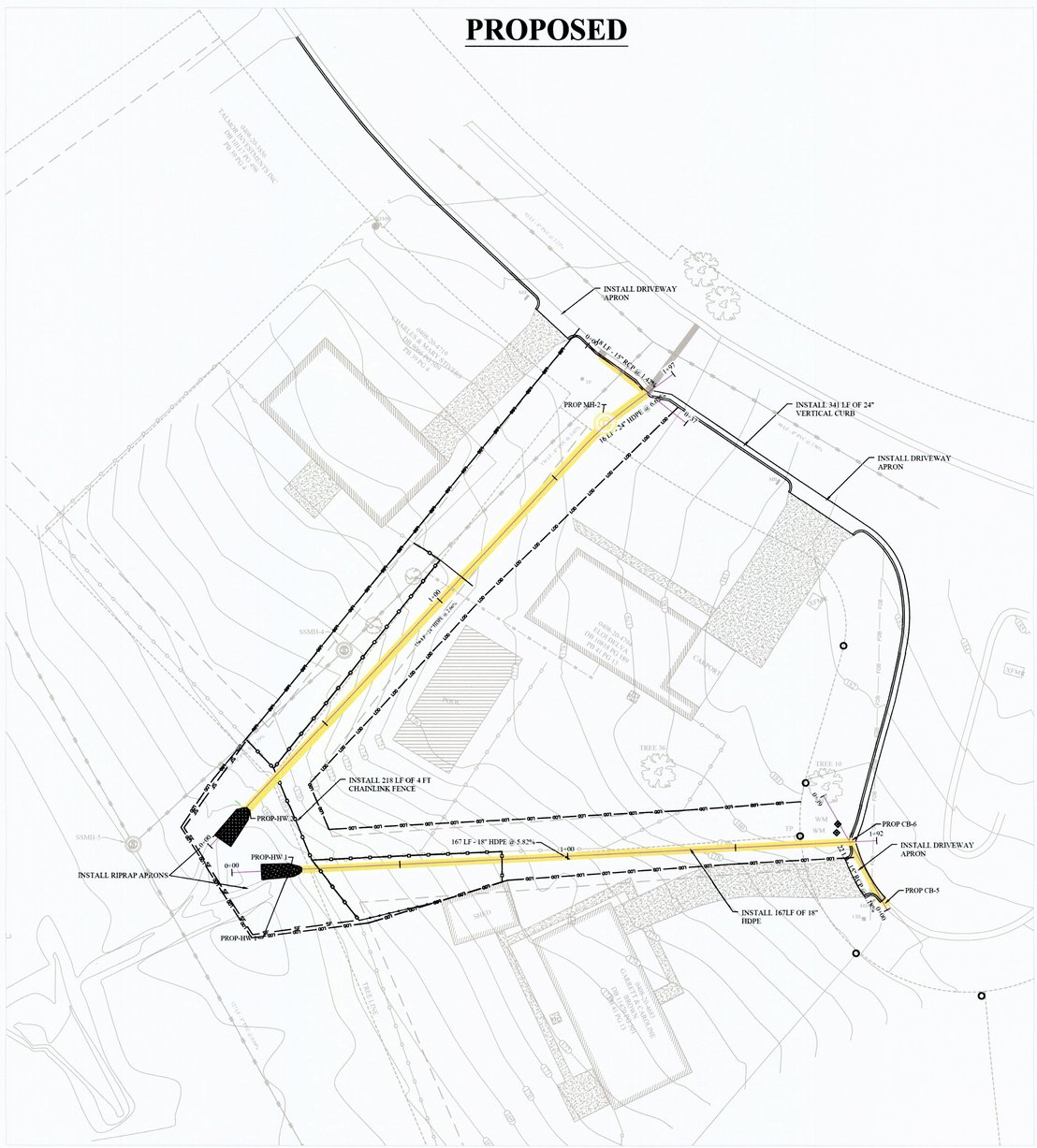
PROJECT NAME : MURRAY FORK DAP
SCALE :
SCALE :
DATE : 12DEC2024
DRAWN : CSA
DESIGN : CSA
CHECK : CSA
APPROVED : BR

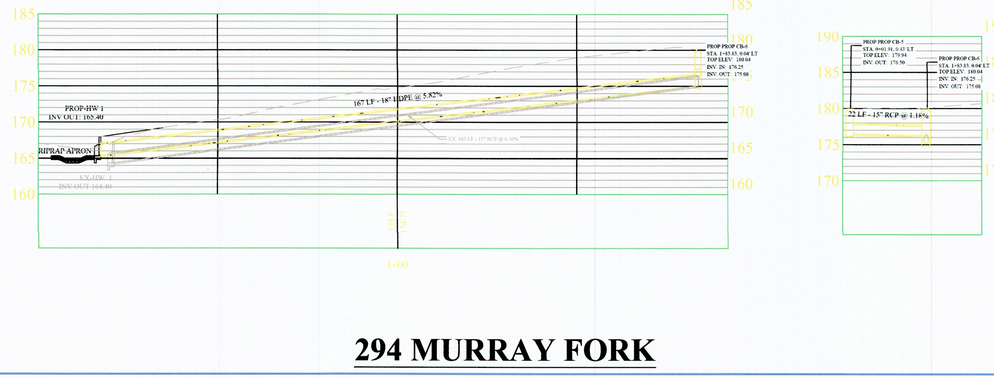
PROJECT NO. _____ PROJECT #
SUB-LEDGER NO. _____ SUB-LEDGER #

EXISTING & DEMO

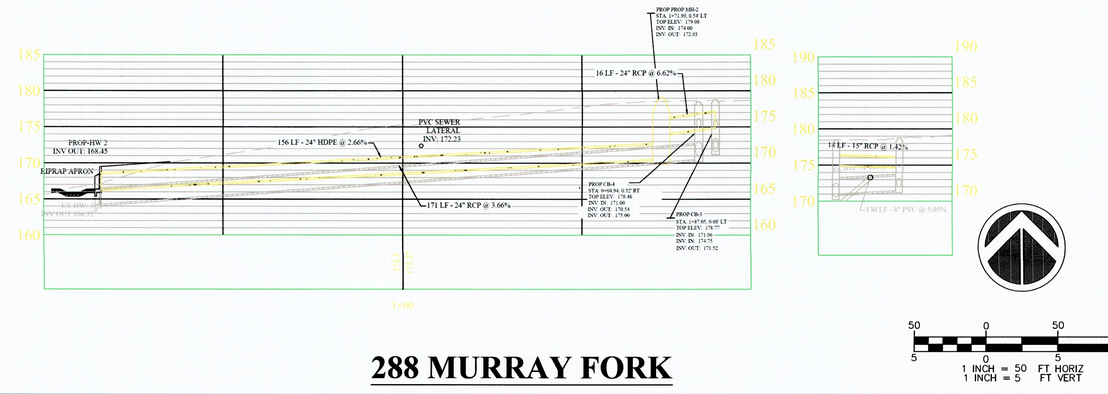


PROPOSED





294 MURRAY FORK



288 MURRAY FORK

50 0 50 100
5 0 5 10
1 INCH = 50 FT HORIZ
1 INCH = 5 FT VERT

288&294 MURRAY FORK DRAINAGE IMPROVEMENTS
DRAINAGE ASSISTANCE PROGRAM

PLAN TYPE: PLAN

SHEET NUMBER: 3 of 4

FAYETTEVILLE
AMERICA'S CAN DO CITY
ENGINEERING DIVISION
ENGINEERING & INFRASTRUCTURE DEPARTMENT
433 HAY STREET FAYETTEVILLE, NC 28301

NORTH CAROLINA PROFESSIONAL SEAL 040346 ENGINEER BYRON S. SIKES
11/5/25
DATE

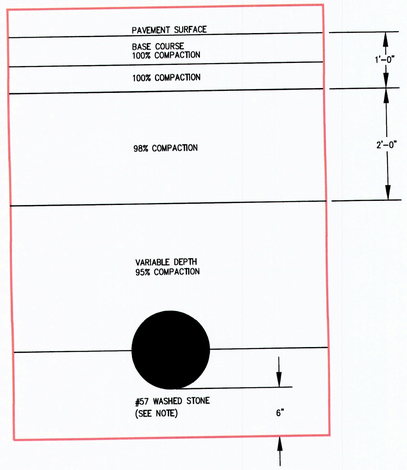
REVISIONS

REV. #	DESCRIPTION	REV.BY	DATE

DRAWN :	CSA
DESIGN :	CSA
CHECK :	CSA
APPROVED :	BR
PROJECT	MURRAY FORK DAP
NAME :	
SCALE :	1"=20'-0"
DATE :	12DEC2024

PROJECT NO. _____ PROJECT #

SUB-LEDGER NO. _____ SUB-LEDGER #



NOTES:

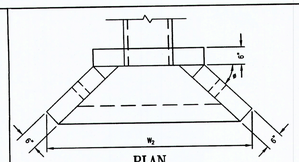
1. STONE BEDDING FOR PIPE IS REQUIRED UNLESS OTHERWISE APPROVED BY CITY ENGINEER OR THEIR DESIGNEE.

FAYETTEVILLE!
ENGINEERING DIVISION
433 HAY ST. 28301
(910) 433-1656
http://www.fayettevillenc.gov

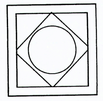
TYPICAL STORM DRAIN COMPACTION

Rev. Date: 26 JAN 21
Not to Scale
Review Date: 26 JAN 21

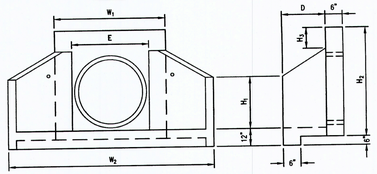
DR-1



PLAN



WALL SECTION



FRONT ELEV.

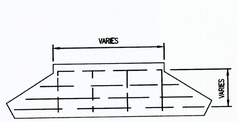
SIDE ELEV.

PIPE SIZE ID	HOLE SIZE	REINF.	W_1	W_2	H_1	H_2	H_3	D	E	ø	WT.
12",15"	18",21"	#4	2'-2"	5'-5"	1'-3"	3'-1"	12"	1'-3"	1'-9"	40°	1600
18"	27"	#4	2'-8"	6'-1"	1'-8"	3'-7"	12"	1'-6"	2'-3"	45°	2100
21",24"	33"	#5	4'-3"	7'-9"	2'-0"	4'-3"	12"	1'-10"	2'-9"	45°	2850
27",30"	39"	#5	4'-8"	8'-4"	2'-4"	4'-8"	12"	2'-0"	3'-3"	45°	3700
36"	48"	#5	5'-8"	10'-10"	3'-3"	5'-9"	12"	2'-11"	4'-4"	45°	5600
42",48"	56",63"	#5	6'-7"	12'-6"	3'-8"	6'-8"	12"	3'-4"	5'-3"	45°	7500
54",60"	72",80"	#5	8'-5"	13'-4"	4'-5"	8'-0"	12"	3'-4"	7'-3"	50°	10000
66",72"	87"	#5	8'-8"	13'-4"	4'-5"	9'-0"	27"	3'-4"	7'-5"	50°	10000

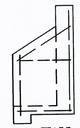
HEADWALL DIMENSIONS FOR CONCRETE PIPE

GENERAL NOTES:

1. ALL CONCRETE TO BE 4000 PSI MIN.
2. REINFORCEMENT STEEL SHALL MEET ASTM 615 GRADE 60 WITH 2" MIN. CLEARANCE.
3. CHAMFER ALL EXPOSED EDGES 3/4".
4. PRECAST HEADWALL UNIT SHALL BE CAREFULLY POSITIONED ON THE PREPARED FOUNDATION AND PIPE INSERTED INTO HEADWALL OR HEADWALL SLID OVER PIPE AND CHECKED FOR ALIGNMENT.
5. PIPE SHALL BE GROUTED INTO HEADWALL WITH CEMENTITIOUS MATERIAL BY CONTRACTOR. BONDING AGENT MAY BE USED IF REQD.
6. CARE SHALL BE TAKEN DURING BACKFILLING AND COMPACTION TO PREVENT DAMAGE AND MAINTAIN ALIGNMENT. MINOR DAMAGE TO THE UNIT MAY BE REPAIRED BY CONTRACTOR WHEN PERMITTED BY ENGINEER.
7. REINFORCEMENT VARIES WITH SIZE OF UNIT.
8. VARIOUS HOLE SIZE AND SHAPES AVAILABLE BY SPECIAL ORDER.
9. ALL DIMENSIONS ARE NOMINAL.



SE SECTION



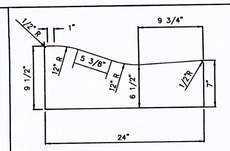
WING & WALL SECTION

FAYETTEVILLE!
ENGINEERING DIVISION
433 HAY ST. 28301
(910) 433-1656
http://www.fayettevillenc.gov

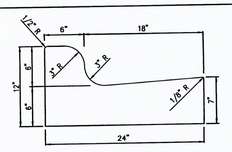
PRECAST CONCRETE HEADWALL SYSTEM 12" THRU 72" PIPE

Rev. Date: 26 JAN 21
Not to Scale
Review Date: 26 JAN 21

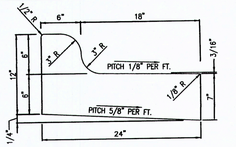
DR-18



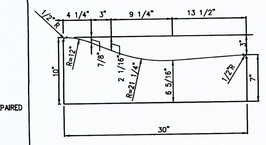
TYPICAL 24" ROLL-BACK CURB



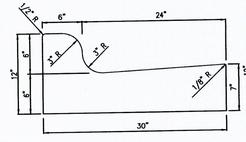
TYPICAL 24" VERTICAL CURB



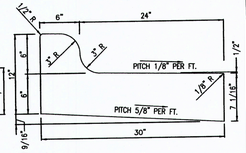
TYPICAL 24" SPILL-OFF CURB



TYPICAL 30" ROLL CURB



TYPICAL 30" VERTICAL CURB



TYPICAL 30" SPILL-OFF CURB

NOTES

1. ALL CURBS CONSTRUCTED OF 3000 PSI CONCRETE.
2. CONTRACTION JOINTS EVERY 10'; EXPANSION JOINTS EVERY 30'.
3. CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
4. TOP 6" OF SUBGRADE BENEATH THE CURB AND GUTTER SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY.

FAYETTEVILLE!
ENGINEERING DIVISION
433 HAY ST. 28301
(910) 433-1656
http://www.fayettevillenc.gov

24" AND 30" CURB DETAILS

Rev. Date: 26 JAN 21
Not to Scale
Review Date: 26 JAN 21

SD-1

SIZE D IN.	MIN. SLOPE (FT)		CLEARANCE DIST. (FT)	
	RCP	CMP	RCP	CMP
15	0.00325	0.01107	2.4	2.3
18	0.00255	0.00868	2.7	2.6
24	0.00174	0.00592	3.3	3.1
30	0.00129	0.00439	3.8	3.6
36	0.00101	0.00345	4.3	4.1
42	0.00082	0.00281	4.9	4.6
48	0.00069	0.00235	5.4	5.1

MINIMUM FILL UNDER ROADWAYS	
PIPE CLASS	MINIMUM FILL
CLASS III	2'
CLASS IV	1'
CLASS V	1'

FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE.

NOTES:
1. THE MAXIMUM PIPE VELOCITY SHALL NOT EXCEED 20 FT PER SEC., BUT SHALL NOT CAUSE SCOUR OR OTHER EROSION PROBLEMS IN THE RECEIVING CHANNEL.
2. SLOPES REQUIRED TO MAINTAIN MINIMUM VELOCITY OF 3 FT PER SEC. AT FULL FLOW.
3. THE MINIMUM SIZE STORM DRAIN PIPE SHALL BE 15 IN.
4. ALL STORM DRAINAGE PIPE USED WITHIN CITY RIGHT-OF-WAY SHALL BE REINFORCED CONCRETE PIPE (RCP). ALL RCP SHALL BE CLASS III OR HIGHER.
5. CLEARANCE DISTANCE IS DETERMINED FROM THE PIPE INVERT ELEVATION UP.
6. A MINIMUM OF 5" OF #57 WASHED STONE IS REQUIRED FOR ALL PIPE INSTALLATION. SEE CITY OF FAYETTVILLE STANDARD DETAIL DR-1.

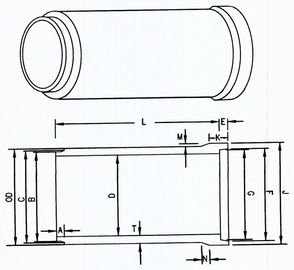
FAYETTEVILLE!
ENGINEERING DIVISION
433 HAY ST. 28301
(910) 433-1656
http://www.fayettevillenc.gov

MINIMUM SLOPE & COVER FOR STORM DRAIN AND CULVERT PIPE

Rev. Date: 26 JAN 21
Not to Scale
Review Date: 26 JAN 21

DR-19.2

SIZE D	T	L	POUNDS PER FOOT	ASTM SPEC. & CLASS	OD	A	B	C	E	F	G	J	K	M	N	PLANT
15	B2 1/4	8'	134	ASTM C76 III IV V	19 1/2	2	16 15/16	17 1/4	2	17 3/4	17	21 3/8	4 1/2	7/16	1 1/4	SR VN-KN
18	B2 1/2	8'	173	ASTM C76 III IV V	23	2	20	20 3/4	2	21 1/4	20 1/2	23 1/2	6 1/2	3/4	1 1/4	SR VN-KN
24	B3	8'	268	ASTM C76 III IV V	30	2 1/2	26 3/16	26 7/8	2 13/16	27 3/4	27	31 1/32	4 1/4	1/2	1 1/2	VN-KN SR
30	B3 1/2	8'	396	ASTM C76 III IV V	37	2 15/16	32 1/16	33 1/8	3	34 1/32	33 1/32	38 1/2	5 1/2	3/4	1 1/2	SR-K
36	B4	8'	543	ASTM C76 III IV V	44	3 3/4	39 1/4	39 29/32	3 13/16	40 19/32	40 5/16	46 1/2	6	1 1/4	2 11/16	SR-K



A MINIMUM OF 5" OF #57 WASHED STONE IS REQUIRED FOR ALL PIPE INSTALLATION. SEE CITY CITY OF FAYETTEVILLE STANDARD DETAIL DR-1.

MODIFIED TONGUE AND GROOVE

8 FOOT LENGTH

MORTAR OF FLEXIBLE PLASTIC TYPE JOINT

SPECIFICATIONS:

ASTM C 76-LATEST
NCDOT REINFORCED IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS

LIFT HOLES STANDARD ON 36" AS ALLOWED PER ASTM SPECIFICATIONS

MINIMUM FILL UNDER ROADWAYS	
PIPE CLASS	MINIMUM FILL
CLASS III	2'
CLASS IV	1'
CLASS V	1'

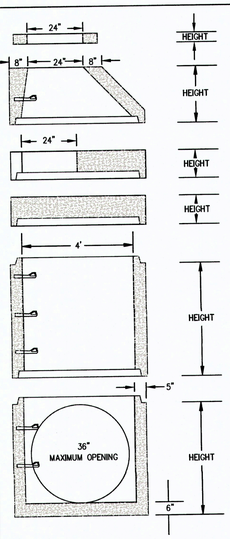
FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE.

FAYETTEVILLE!
ENGINEERING DIVISION
433 HAY ST. 28301
(910) 433-1656
http://www.fayettevillenc.gov

15" THRU 36" PIPE

Rev. Date: 26 JAN 21
Not to Scale
Review Date: 26 JAN 21

DR-19



FUQUAY VARINA PLANT SPECIFICATIONS:
ASTM C 478 - LATEST
AASHTO M 199 - LATEST
WITH AASHTO M-198B PREFORMED PLASTIC OR ASTM C-443 RUBBER GASKET JOINTS. REINFORCED IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS.

HEIGHT FEET	HEIGHT INCHES	WEIGHT POUNDS
GRADING RING		
.33'	4"	150
.50'	6"	235
ECCENTRIC CONE		
2.00'	24"	1695
3.00'	36"	2550
4.00'	48"	3400
FLAT TOP		
1.00'	12"	1700

SOLID FLAT TOP
CUSTOM VENT OR METER OPENINGS PLACED PER CUSTOMER REQUEST.
FLAT TOPS MEET H-20 LOADING.

1.00'	12"	2000

RISER

1.00'	12"	865
1.33'	16"	1150
2.67'	32"	2310
4.00'	48"	3460
5.33'	64"	4610

REGULAR MONOLITHIC BASE
WITH 6" BASE INCLUDED IN HEIGHT SHOWN.

2.67'	32"	3250
4.00'	48"	4400
5.33'	60"	5265

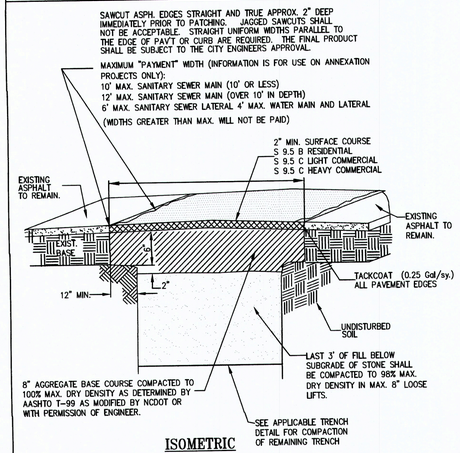
NOTES:
1. PRECAST MANHOLES MAY BE USED WITH PRIOR APPROVAL FROM THE CITY ENGINEER.
2. PRECAST MANHOLES ARE NOT PERMITTED INSIDE RIGHT-OF-WAY OR EASEMENTS.

FAYETTEVILLE!
ENGINEERING DIVISION
433 HAY ST. 28301
(910) 433-1656
http://www.fayettevillenc.gov

4-FOOT DIAMETER PRECAST REINFORCED CONCRETE MANHOLE SECTIONS

Rev. Date: 26 JAN 21
Not to Scale
Review Date: 26 JAN 21

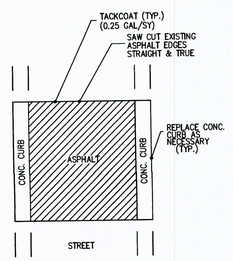
DR-14



ISOMETRIC

NOTE:
SEE DETAIL SD-16.2 FOR TYPICAL CROSS SECTION OF PAVEMENT STRUCTURE

SEE ADDITIONAL NOTES ON DETAIL SD-11.2



PLAN

FAYETTEVILLE!
ENGINEERING DIVISION
433 HAY ST. 28301
(910) 433-1656
http://www.fayettevillenc.gov

TYPICAL PERMANENT SAWCUT AND PAVEMENT PATCH
PAGE 2 OF 3

Rev. Date: 26 JAN 21
Not to Scale
Review Date: 26 JAN 21

SD-11.1

NOTES:

1. CONTRACTOR SHALL PATCH PAVEMENT TO THE SAME PAVEMENT CROSS SECTION AS EXISTED PRIOR TO REMOVING PAVEMENT. THE STREET CROWN SHALL BE RESTORED. PATCH SHALL MATCH EXISTING PAVEMENT WITHIN .02' WHEN CHECKED WITH A 10' STRAIGHT EDGE. ADJUST PAVER AS REQUIRED. PATCH PAVING MAY OCCUR PRIOR TO PULLING MANDREL THRU SS PROVIDED DENSITY TEST OF TRENCH BACKFILL MEET THE REQUIRED DENSITY AND ENGINEER APPROVES PATCHING STREET PRIOR TO MANDREL TESTING SANITARY SEWER MAIN.
2. WHERE PATCH OF CURBING OCCURS CONTRACTOR SHALL MATCH EXISTING CURB GRADES WITHIN 0.02 FEET. PATCHES THAT ARE ABOVE THE CURB GRADE LINE WILL NOT BE ACCEPTABLE AND SHALL BE REMOVED AND REPATCHED AT NO EXPENSE TO THE OWNER. CURB PATCH SHALL BE THE SAME SHAPE/TEMPLATE AS THE EXISTING CURB.
3. CONTRACTOR SHALL BE REQUIRED TO PROVIDE TRAFFIC CONTROL AND DEVICES AS REQUIRED BY THE MUTCD OR N.C. SUPPLEMENT. WORK CAN NOT PROCEED UNTIL THE MEASURES ARE IN PLACE. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT NEW PAVEMENT FROM TRAFFIC AND OTHER SOURCES OF DAMAGE UNTIL ASPHALT HAS SUFFICIENTLY COOLED TO PREVENT DAMAGE FROM SURFACE DEFLECTIONS.
4. CONTRACTOR SHALL SAWCUT EXIST. PAVEMENT STRAIGHT AND TRUE PRIOR TO REMOVING ASPHALT FOR UTILITY INSTALLATION. THE ENGINEER MAY APPROVE THE USE OF A MILLING MACHINE FOR REMOVAL OF THE EXISTING PAVEMENT WITHIN TRENCH LIMITS. WHERE MILLING IS APPROVED THE CONTRACTOR SHALL PLACE AND COMPACT MILLINGS IN MILLED AREA TO PROVIDE AN INTERIM TRAFFIC SURFACE. MILLING WHERE APPROVED BY ENGINEER IS AN ALTERNATE TO CUTTING ASPHALT AND DISPOSING OFF-SITE.
* 5. AFTER UTILITY IS INSTALLED AND TESTED AND THE EXCESS BASE MATERIAL REMOVED (APPROX. 2") CONTRACTOR SHALL AGAIN SAWCUT EXISTING PAVEMENT STRAIGHT AND TRUE IMMEDIATELY PRIOR TO PAVING AS NOTED ABOVE.
6. MILLING OPERATIONS SHALL BE LIMITED TO 1800 FEET PER MAIN LINE CREW NOT TO EXCEED 3000 FEET IN TOTAL OF DISTURBED ROADWAY FOR THE ENTIRE PROJECT AT ONE TIME WHERE. CONTRACTOR SHALL PATCH PAVE DISTURBED AREA OF ROADWAY PRIOR TO DISTURBING ADDITIONAL ROADWAY.
7. AT NO TIME SHALL THE TRENCH BE LEFT UNATTENDED WITH A VERTICAL DROP GREATER THAN 1 INCH FROM ASPHALT SURFACE TO TOP OF BACKFILLED TRENCH.
8. IF PAVEMENT SETTLEMENT OCCURS WITHIN WARRANTY PERIOD (SEE PROJECT SPECIFICATIONS), THE CONTRACTOR SHALL REPATCH AT NO ADDITIONAL EXPENSE TO THE OWNER.
* 9. NCDOT WILL REQUIRE FULL DEPTH ASPHALT PATCH TO MATCH EXISTING ASPHALT THICKNESS ON STATE MAINTAINED ROADS. NCDOT REQUIRES PATCH PAVING SAME DAY AS REMOVAL.
10. TEST FOR DENSITY OF COMPACTION MAY BE MADE AT THE OPTION OF THE ENGINEER AND DEFICIENCIES SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE ENGINEER MAY HAVE COMPACTION TEST PERFORMED AFTER THE BACKFILL IS COMPLETE. CONTRACTOR SHALL BE REQUIRED TO EXCAVATE TO VARIOUS ELEVATIONS FOR DENSITY TESTING EXCAVATION, BACKFILL AND RECOMPACTION SHALL BE PERFORMED AT NO ADDITIONAL COSTS TO THE OWNER.

* --- NOTES 5 & 9 APPLY TO PERMANENT PAVEMENT PATCHES ONLY.

FAYETTEVILLE!
ENGINEERING DIVISION
433 HAY ST. 28301
(910) 433-1656
http://www.fayettevillenc.gov

NOTES FOR TYPICAL PERMANENT AND TEMPORARY SAWCUT AND PAVEMENT PATCH
PAGE 3 OF 3

Rev. Date: 26 JAN 21
Not to Scale
Review Date: 26 JAN 21

SD-11.2

288&294 MURRAY FORK DRAINAGE IMPROVEMENTS
DRAINAGE ASSISTANCE PROGRAM

SHEET NUMBER 4 of 4

PLAN TYPE: DETAILS

FAYETTEVILLE
AMERICA'S CAN DO CITY

ENGINEERING DIVISION
ENGINEERING & INFRASTRUCTURE DEPARTMENT
433 HAY STREET FAYETTEVILLE, NC 28301

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 040346 BYRON S. REED 12/21/21

REVISIONS		REV/BY
REV. #	DESCRIPTION	DATE

DRAWN : CSA
DESIGN : CSA
CHECK : CSA
APPROVED : BR

PROJECT : MURRAY FORK DAP
NAME :
SCALE : 1"=20'-0"
DATE : 12DEC2024

PROJECT NO. _____ PROJECT # _____
SUB-LEDGER NO. _____ SUB-LEDGER # _____