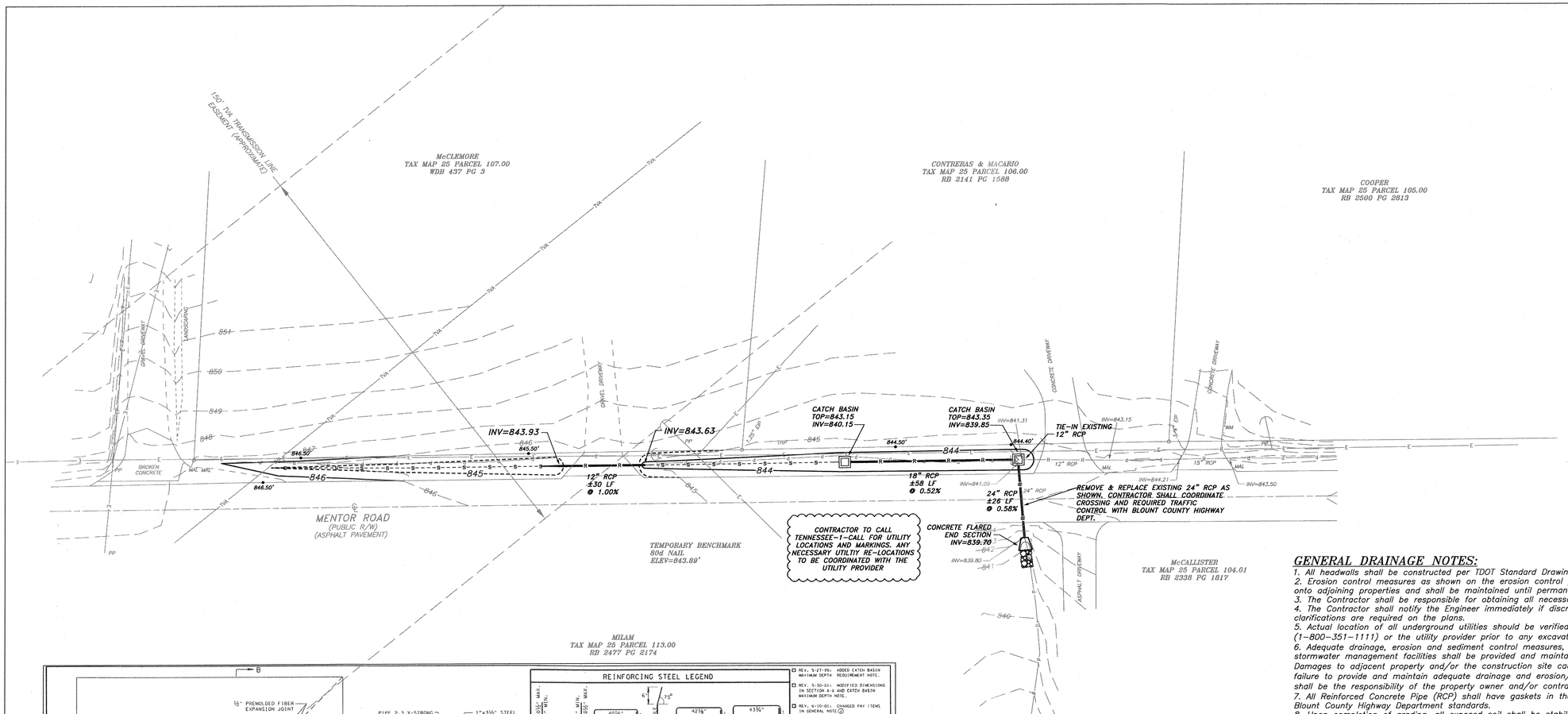
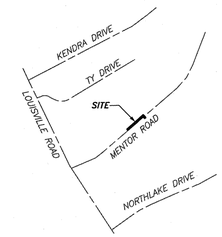


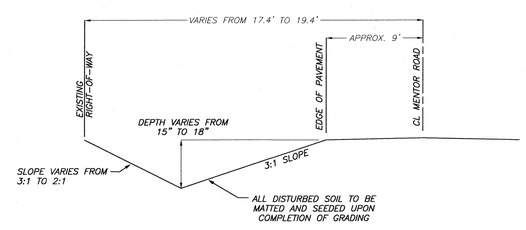


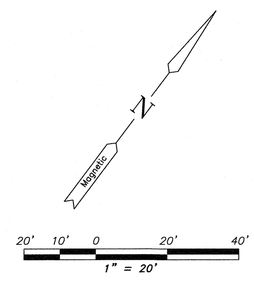
LOCATION MAP
NOT TO SCALE

GENERAL DRAINAGE NOTES:

1. All headwalls shall be constructed per TDOT Standard Drawings or precast equivalent.
2. Erosion control measures as shown on the erosion control plans need to be installed to prevent siltation onto adjoining properties and shall be maintained until permanent vegetation is established.
3. The Contractor shall be responsible for obtaining all necessary permits prior to construction.
4. The Contractor shall notify the Engineer immediately if discrepancies or omissions are found or if clarifications are required on the plans.
5. Actual location of all underground utilities should be verified through Tennessee 1 call (1-800-351-1111) or the utility provider prior to any excavation or construction.
6. Adequate drainage, erosion and sediment control measures, best management practices, and/or other stormwater management facilities shall be provided and maintained at all times during construction. Damages to adjacent property and/or the construction site caused by the contractor's or property owner's failure to provide and maintain adequate drainage and erosion/sediment control for the construction area shall be the responsibility of the property owner and/or contractor.
7. All Reinforced Concrete Pipe (RCP) shall have gaskets in the joints and shall be installed based on Blount County Highway Department standards.
8. Upon completion of grading, all exposed soil shall be stabilized with an appropriate matting material and seeded.

DETAIL "A"
PROPOSED MENTOR ROAD DITCH DETAIL
NOT TO SCALE

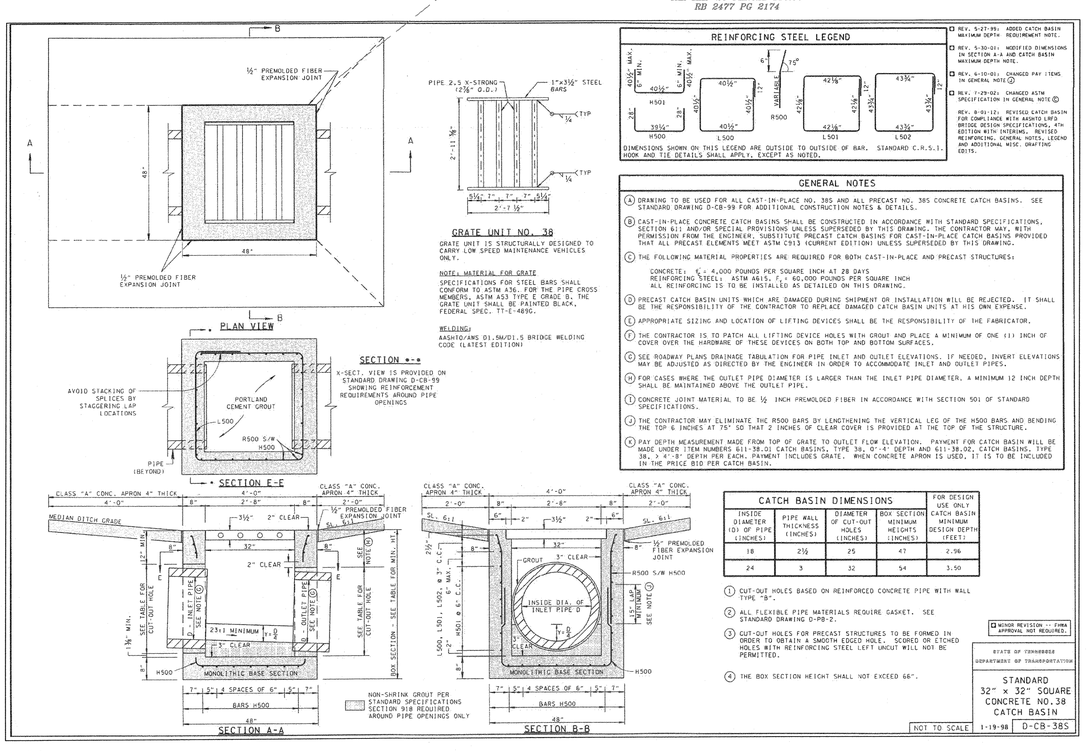




LEGEND:

EIR	EXISTING IRON ROD
NIR	NEW IRON ROD
A=	ARC LENGTH
R=	RADIUS
D=	CENTRAL ANGLE (DELTA)
B=	CHORD BEARING
C=	CHORD LENGTH
Ac.	ACRES
SF	SQUARE FEET
WDB	WARRANTY DEED BOOK
PG	PAGE
℄	CENTERLINE
CO	SEWER CLEANOUT
CB	CATCH BASIN (DESIGN)
FH	FIRE HYDRANT
GM	GAS METER
	POLE GUY ANCHOR
	HANDICAP PARKING
	SEWER LATERAL
MH	MANHOLE (EXISTING)
JB	JUNCTION BOX (DESIGN)
PP	POWER POLE (PP)
SP	SUPPORT POLE (SP)
	SIGN (POST)
999.99'	SPOT HEIGHT
	TEMPORARY BENCHMARK
WV	WATER VALVE

	BOUNDARY LINE
	ROAD RIGHT-OF-WAY LINE
	PARCEL LINE
	EASEMENT LINE
	BUILDING SETBACK LINE
	ROAD CENTERLINE
	EDGE OF ROAD
	EDGE OF GRAVEL/ROAD
	CONCRETE CURB
	PARKING/LANE STRIPES (EXISTING)
C C	CORRUGATED METAL PIPE (CMP)
FD	FRENCH DRAIN
X X	FENCE LINE
SF	SILT FENCE (EROSION CONTROL)
E	ELECTRIC LINE (OVERHEAD)
UE	ELECTRIC LINE (EXISTING U/G)
OUE	ELECTRIC LINE (DESIGN U/G)
UT	PHONE LINE (UNDERGROUND)
UG	UNDERGROUND (U/G) GAS LINE
W	WATER LINE (EXISTING)
PVC	PVC PIPE LINE
SS	SEWER LINE (EXISTING)
SFM	SEWER FORCE MAIN (EXISTING)
d d	DITCH LINE
	BUILDING CANOPY LINE
	RIP RAP LINE
	EXISTING INTERMEDIATE CONTOUR
900	EXISTING INDEX CONTOUR
	DESIGN INTERMEDIATE CONTOUR
900	DESIGN INDEX CONTOUR



REINFORCING STEEL LEGEND

- REV. 5-27-99: ADDED CATCH BASIN MAXIMUM DEPTH REQUIREMENT NOTE.
- REV. 5-30-01: MODIFIED DIMENSIONS IN SECTION A-A AND CATCH BASIN MAXIMUM DEPTH NOTE.
- REV. 6-10-01: CHANGED PAY ITEMS IN GENERAL NOTE (2)
- REV. 7-29-02: CHANGED ASTM SPECIFICATION IN GENERAL NOTE (2)

REV. 8-01-12: REVISED CATCH BASIN FOR COMPLIANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION WITH INTERIMS. REVISED REINFORCING. GENERAL NOTES. LEGEND AND ADDITIONAL MISC. DRAFTING EDITS.

GENERAL NOTES

(A) DRAWING TO BE USED FOR ALL CAST-IN-PLACE NO. 38S AND ALL PRECAST NO. 38S CONCRETE CATCH BASINS. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL CONSTRUCTION NOTES & DETAILS.

(B) CAST-IN-PLACE CONCRETE CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS UNLESS SUPERSEDED BY THIS DRAWING. THE CONTRACTOR MAY, WITH PERMISSION FROM THE ENGINEER, SUBSTITUTE PRECAST CATCH BASINS FOR CAST-IN-PLACE CATCH BASINS PROVIDED THAT ALL PRECAST ELEMENTS MEET ASTM C913 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.

(C) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR BOTH CAST-IN-PLACE AND PRECAST STRUCTURES:

CONCRETE: f'_c = 4,000 POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL: ASTM A615, f_y = 60,000 POUNDS PER SQUARE INCH
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

(D) PRECAST CATCH BASIN UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT HIS OWN EXPENSE.

(E) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.

(F) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF ONE (1) INCH OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.

(G) SEE ROADWAY PLANS DRAINAGE TABULATION FOR PIPE INLET AND OUTLET ELEVATIONS. IF NEEDED, INVERT ELEVATIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.

(H) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 12 INCH DEPTH SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.

(I) CONCRETE JOINT MATERIAL TO BE ½" INCH PREMOLDED FIBER IN ACCORDANCE WITH SECTION 501 OF STANDARD SPECIFICATIONS.

(J) THE CONTRACTOR MAY ELIMINATE THE R500 BARS BY LENGTHENING THE VERTICAL LEG OF THE H500 BARS AND BENDING THE TOP 6 INCHES AT 75° SO THAT 2 INCHES OF CLEAR COVER IS PROVIDED AT THE TOP OF THE STRUCTURE.

(K) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611-38.01 CATCH BASINS, TYPE 38, 0'-4' DEPTH AND 611-38.02, CATCH BASINS, TYPE 38, > 4'-8' DEPTH PER EACH. PAYMENT INCLUDES GRATE. WHEN CONCRETE APRON IS USED, IT IS TO BE INCLUDED IN THE PRICE BID PER CATCH BASIN.

CATCH BASIN DIMENSIONS

INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	BOX SECTION MINIMUM HEIGHTS (INCHES)	FOR DESIGN USE ONLY CATCH BASIN MINIMUM DESIGN DEPTH (FEET)
18	2½	25	47	2.96
24	3	32	54	3.50

(1) CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".

(2) ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.

(3) CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.

(4) THE BOX SECTION HEIGHT SHALL NOT EXCEED 66".

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

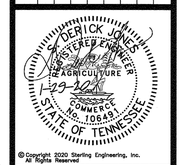
STANDARD
32" x 32" SQUARE
CONCRETE NO.38
CATCH BASIN

NOT TO SCALE | 1-19-98 | D-CB-38S

SINCE 1979
STERLING
ENGINEERING, INC.
CIVIL ENGINEERING
CONSULTING
LAND SURVEYING
LAND PLANNING
1020 WILLIAM BLOUNT DRIVE
MARYVILLE, TENNESSEE
37802-8401
P.O. BOX 4878
MARYVILLE, TENNESSEE
37802-4878
PHONE: 865-984-3905
FAX: 865-981-2815
www.sterling.us.com

DRAINAGE PLAN FOR
TOWN OF LOUISVILLE
MENTOR ROAD
LOUISVILLE, TN

DATE	BY	REVISIONS



© Copyright 2020 Sterling Engineering, Inc. All Rights Reserved

SHEET
CD1

DESIGNED:	RDR
DRAWN:	RDR
CHECKED:	SDJ
DATE:	1/9/20
SCALE:	1" = 20'
DRAWING:	6867-CD
PROJECT NO:	SEI#6867

H:\6867\dwg\6867-CD.dwg, 1/29/2020 12:07:44 PM, adjones, 1:1