07-31-2020 LETTING ITEM 081

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

MERCER 25 1 16-00110-00-BR ILLINOIS CONTRACT NO. 89719 FED. ROAD DIST. NO.

INDEX TO SHEETS

SHEET NO. DESCRIPTION COVER SHEET GENERAL NOTES SUMMARY OF QUANTITIES AND SCHEDULES TYPICAL SECTIONS 4-5 ALIGNMENT, BENCHMARK, AND RIGHT OF WAY DETOUR PLAN 7-8 REMOVAL PLAN 10-11 PLAN AND PROFILES

STRUCTURAL PLANS

STORM WATER POLLUTION PREVENTION PLAN

PLANS FOR PROPOSED

SURFACE TRANSPORTATION PROGRAM - BRIDGE

PROJECT 4LS2(375) SECTION 16-00110-00-BR **MERCER COUNTY** F.A.S. 215 (CH 16) OVER SNAKE CREEK C-94-032-17

HIGHWAY STANDARD DETAIL PLANS

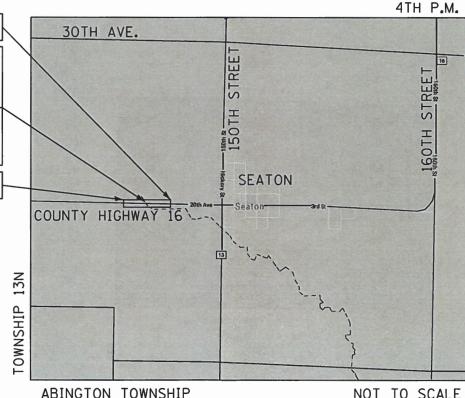
000001-07 515001-04 001001-02 701901-08 280001-07 BLR 22-7 BLR 21-9

AVERAGE DAILY TRAFFIC (ADT)

FAS 215 (CH 16) 300 VPD (2014)

FUNCTIONAL CLASSIFICATION

MAJOR COLLECTOR - FAS 215 (CH 16)



LOCATION MAP

FAS 215 (CH 16) GROSS/NET LENGTH : = 1000 L.F. (0.19 MILES)

LOCATION OF SECTION INDICATED THUS: - -LECNARDO MARCATELL 081-006320 DATE SIGNED : 2/10/2020 LIC. EXP. DATE : 11/30/2020

STRUCTURAL ENGINEER'S SEAL APPLIES TO PLAN SHEETS 14 TO 16.



LIC. EXP. DATE : 11/30/2021

NCMT

APPROVED 2118 LOCAL AGENCY OFFICIAL PASSED 03 - 27 OF LOCAL ROADS & STREETS RELEASING FOR BID BASED ON LIMITED REVIEW March Z STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

MERCER COUNTY ENGINEER: RICK WALKER

CONTRACT NO. 89719 CATALOG NO. 035443-00

12-13

14-18

19-25

0

0

0

0

IMPROVEMENT ENDS STATION 12+00.00 EXISTING STRUCTURE NO. 066-3041
EXISTING SINGLE SPAN, STEEL BEAM AND
REINFORCED CONCRETE DECK BRIDGE.
32'-0" O. TO O. WIDTH, SKEW=45 DEG.
(TO BE REMOVED)

PROPOSED STRUCTURE NO. 066-3166 REINFORCED CONCRETE TRIPLE 8'X 8' BOX CULVERT, 47'-9" O. TO O. HEADWALLS, SKEW = 45 DEG.

IMPROVEMENT BEGINS STATION 2+00.00

ABINGTON TOWNSHIP

RANGE 4W



GENERAL NOTES

- 1. ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM.
- 2. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.
- 3. CONTRACTOR SHALL DISPOSE OF ALL CONSTRUCTION DEBRIS IN CONFORMANCE WITH CURRENT IFPA REGULATIONS.
- 4. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT CONSTRUCTION WORKERS, ABUTTING PROPERTY, UTILITIES, PEDESTRIANS, AND VEHICLES.
- 5. THE LOCATION OF DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE CONTRACT.
- 6. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OF THE CONSTRUCTION SCHEDULE PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THESE FACILITIES FROM DAMAGE DURING CONSTRUCTION OF THE IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY COMPANIES TO CAUSE THE ADJUSTMENT, RELOCATION, OR REMOVAL OF EXISTING UTILITIES AS NECESSARY TO ALLOW CONSTRUCTION OF THE PROPOSED IMPROVEMENTS IDENTIFIED IN THESE PLANS.
- 7. ALL AREAS DISTURBED DURING CONSTRUCTION OPERATIONS AND NOT PART OF THE WORK AS SHOWN HEREIN SHALL BE RESTORED TO ORIGINAL CONDITION TO THE SATISFACTION OF MERCER COUNTY AT NO ADDITIONAL COMPENSATION TO THE CONTRACTOR. IT IS INCUMBENT UPON THE CONTRACTOR TO SHOW THAT DAMAGED AREAS WERE NOT DISTURBED BY CONSTRUCTION OPERATIONS.
- 8. WHEN CONCRETE REMOVAL IS REQUIRED, IT MUST BE ACCOMPLISHED BY SAWCUT, SLEDGES, AND PNEUMATIC HAND TOOLS. EQUIPMENT AND METHODS USED MUST BE SUCH AS TO PREVENT CRACKING, SHATTERING, OR SPALLING OF CONCRETE THAT IS TO REMAIN. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.
- 9. ALL HMA PAVEMENT SURFACE COURSES, CONCRETE BASE COURSES, CONCRETE PAVEMENTS, CURBS, GUTTERS, AND SIDEWALKS WHICH ARE TO BE REMOVED MUST BE SAWCUT AT THE LIMITS OF REMOVAL TO AVOID DAMAGE TO ADJACENT PROPERTIES.
- 10. THE CONTRACTOR SHALL MAINTAIN SURFACE DRAINAGE OF THE ROAD THROUGHOUT THE CONSTRUCTION PROCESS.
- 11. CONTRACTOR IS RESPONSIBLE FOR REMOVAL, STORAGE, AND RE-INSTALLATION OF ALL EXISTING SIGNAGE, BENCHES, SIDEWALK RAILINGS, AND OTHER ITEMS THAT ARE IMPACTED BY THIS CONTRACT AND ARE NOT SHOWN AS BEING REPLACED. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY OF THESE ITEMS THAT ARE DAMAGED AS A RESULT OF THIS CONTRACT AT NO ADDITIONAL COST. THE REMOVAL AND RE-INSTALLATION OF THESE ITEMS SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE CONTRACT.
- 12. EXISTING TRAFFIC CONTROL SIGNS AND DEVICES THAT ARE IN CONFLICT WITH CONSTRUCTION TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE REMOVED OR COVERED BY THE CONTRACTOR ONCE THE CONSTRUCTION TRAFFIC CONTROL SYSTEM IS IN PLACE. ANY SIGNS OR DEVICES LEFT IN PLACE ARE TO BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGED SIGNS OR DEVICES SHALL BE REPAIRED OR REPLACED BY
- 13. CARE MUST BE TAKEN FOR ANY EARTH EXCAVATION NEAR EXISTING TREES SO THAT DAMAGE TO THE TREE ROOTS DOES NOT OCCUR.
- 14. ALL STATION AND OFFSET REFERENCES ARE TO THE ROADWAY CENTERLINE UNLESS OTHERWISE NOTED. THE STATE PLANE COORDINATE SYSTEM HAS BEEN USED FOR THE HORIZONTAL CONTROL.
- 15. PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM FIELD SURVEYS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENTSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION.
- 16. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION.
- 17. THE CONTRACTOR MUST CONTACT J.U.L.I.E. AT LEAST 48 HOURS BEFORE EXCAVATING ANY MATERIAL OR BORING OPERATIONS. THE FOLLOWING UTILITY COMPANIES HAVE BEEN CONTACTED AND THEIR EXISTING FACILITIES ARE SHOWN ON THESE PLANS BASED ON RECORD DRAWINGS AND FIELD SURVEYS.

FRONTIER COMMUNICATIONS; KALIN HINSHAW (815-895-1515)

AMEREN ILLINOIS; MARTIN FULLER (618-236-6281)

DISTRICT FOUR GENERAL NOTES

- THE MERCER COUNTY HIGHWAY DEPARTMENT SHOULD BE CONTACTED AND PRIOR APPROVAL OBTAINED FOR ANY TREE REMOVAL BEYOND THE LIMITS/LOCATIONS INCLUDED IN THE PLANS. (201.04)
- 2. THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS. (542.00)
- PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- * BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BURROW AREAS)
- * BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
 COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- * BORROW AREA ENTRY AGREEMENT FORM D4 PIO101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES. (204.00)

PAVEMENT DESIGN

COUNTY HIGHWAY 16

CLASS II ROAD, DESIGN PERIOD = 20 YRS

SDT = 570 VPD. TRAFFIC FACTOR = 0.152

7" FULL DEPTH HMA OVER 12" AGGREGATE BASE COURSE

HMA MIXTURE REQUIREMENTS TABLE

THE FOLLOWING HMA REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

LOCATION(S):	COUNTY HIGHWA	Y 16	
MIXTURE USE(S):	POLYMERIZED SURFACE	POLY. BINDER TOP LIFT	BINDER LOWER LIFT
PG:	SBS OR SBR PG 58-28	SBS OR SBR PG 58-28	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL-9.5	IL-9.5	IL-19.0
FRICTION AGGREGATE:	MIX C	N/A	N/A
MIXTURE WEIGHT:	116 LB/SQ YD/IN	116 LB/SQ YD/IN	116 LB/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA	QC/QA	QC/QA
SUBLOT SIZE:	N/A	N/A	N/A
NUMBER OF ROLLER PASSES:	N/A	N/A	N/A
THICKNESS:	1 1/2"	1 1/2"	4′′

NOTE: BITUMINOUS MATERIALS (TACK COAT) RATE SHALL BE 0.08 LBS/SF FOR ALL LIFTS.

COMMITMENTS

ANY FIELD TILES DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH A PLASTIC PIPE OF MATCHING SIZE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ANY FIELD TILES NO SHOWN ON THE PLANS WHICH REQUIRE ADJUSTMENT SHALL BE ADJUSTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

	PAVEMENT SCHEDULE										
		31101000	40200900	40600275	40700100	40701821					
LOCATION		ION	SUBBASE GRANULAR MATERIAL, TYPE B	AGGREGATE SURFACE COURSE, TYPE B	BITUMINOUS MAT. (PRIME COAT)	BITUMINOUS MAT. (TACK COAT)	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 7"				
STATION	то	STATION	TON	CUYD	POUND	POUND	SQ YD				
2+00.00		6+65.14	847.6		2558.3	1637.3	1137.0				
6+65.14		7+02.86	68.7		207.5	132.8	92.2				
7+02.86		12+00.00	905.9		2734.3	1749.9	1215.2				
5+40.42, RT		, RT		43.0							
10+19.38, LT		8, LT		43.0							
TOTAL		TOTAL	1822	86	5500	3520	2444				



MODEL NAME =	DESIGNED	-	LM/EM	REVISED -
FILE NAME =	DRAWN	-	ЕММ	REVISED -
PLOT SCALE = 2.0000 '/ in.	CHECKED	-	EJH	REVISED -
PLOT DATE = 2/19/2020 8:30:43 AM	DATE	-	NOVEMBER 2018	REVISED -

MERCER COUNTY HIGHWAY DEPARTMENT MERCER COUNTY, ILLINOIS

SCALE:

COUN	ITY HIG	GHV	VAY	′ 1	6 STRI	JCTURE	REPLACEMENT	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			GI	ΕN	FRAI I	NOTES		215	16-00110-00-BR	MERCER	25	2
			٠.			10120				CONTRAC	T NO.	89719
	CHEET	- 1	OΕ	1	CHEETC	CTA	TO STA		THE PROPERTY OF A	ID DDG IFOT		

		SUMMARY OF QUANTITIES		
Ī	PAYITEM NO.	DESCRIPTION	UNIT	BID QUANTITY
	20101000	TEMPORARY FENCE	FOOT	620
1	20200100	EARTH EXCAVATION	CU YD	1,027
Ī	20300100	CHANNEL EXCAVATION	CU YD	207
ľ	20700220	POROUS GRANULAR EMBANKMENT	CU YD	709
Ī	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	3,188
ľ	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	3,851
1	25000210	SEEDING, CLASS 2A	ACRE	0.8
Ī	25100630	EROSION CONTROL BLANKET	SQ YD	3,851
	28000305	TEMPORARY DITCH CHECKS	FOOT	64
Ī	28000400	PERIMETER EROSION BARRIER	FOOT	1,009
1	28100109	STONE RIPRAP, CLASS A5	SQ YD	190
	28200200	FILTER FABRIC	SQ YD	190
	31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	1,822
	40200900	AGGREGATE SURFACE COURSE, TYPE B	CU YD	86
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	5,500
ľ	40700100	BITUMINOUS MATERIALS (TACK COAT)	POUND	3,520
	40701821	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 7"	SQ YD	2,444
1	44000100	PAVEMENT REMOVAL	SQ YD	2,367
	48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	802
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1.0
	50105220	PIPE CULVERT REMOVAL	FOOT	73
	50200100	STRUCTURE EXCAVATION	CU YD	581
	50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	263
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	56,280
	51500100	NAME PLATES	EACH	1
	54003000	CONCRETE BOX CULVERTS	CU YD	234
	542C0223	PIPE CULVERTS, CLASS C, TYPE 1 18"	FOOT	78
	542D0211	PIPE CULVERTS, CLASS D, TYPE 1 6"	FOOT	45
	63200310	GUARDRAIL REMOVAL	FOOT	349
	67100100	MOBILIZATION	LSUM	1
	X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	231
1	X2010400	STUMP REMOVAL ONLY	UNIT	166
1	X7240300	SIGN REMOVAL	EACH	4
	Z0013798	CONSTRUCTION LAYOUT	LSUM	1
1	Z0016702	DETOUR SIGNING	L SUM	1
1	Z0054500	ROCK FILL	TON	543

1 SEE SPECIAL PROVISIONS

PIPE CULVERTS, CLASS C, TYPE 1, 18"										
UPSTREAM DOWNSTREAM 542C0223										
STATION	0/	S	INVERT	ΤO	STATION	N 0/S INVERT		INVERT	FOOT	
5+03	30.51	RT	608.96		5+81	34.5′	RT	607.33	78.0	
	TOTAL								78.0	

SIGN REMO	X7240300	
STATION	0/S	EACH
5+93.78	18.9' LT	1
6+23.25	18.9' RT	1
7+71.13	18.5′ LT	1
7+99.25	18.5' RT	1
	TOTAL	4

RIPRAP SCHEDULE	STONE RIPRAP, CLASS A5	FILTER FABRIC
	28100109	28200200
LOCATION	SO YD	SQ YD
NORTH END OF CULVERT	95.0	95.0
SOUTH END OF CULVERT	95.0	95.0
TOTAL	190.0	190.0
	*	

STATION	0/\$	UNII
7+12.60	44.1′ RT	7
7+13.48	42.9' RT	12
7+13.99	45.9' RT	12
7+14.90	44.3' RT	12
7+15.56	45.6′ RT	12
7+18.29	43 . 6′ RT	12
7+18.65	48.4' RT	12
7+18.67	42.4′ RT	12
7+19.18	50 . 1′ RT	12
7+20.10	41.3′ RT	16
7+19.85	42.6′ RT	7
7+20.23	45.7′ RT	7
7+20.68	46.3′ RT	6
7+20.08	47.2' RT	6
7+21.23	47.9' RT	12
7+20.10	48.4' RT	9
	TOTAL	166

STUMP REMOVAL ONLY

		PIPE CULVERT REMOVAL	GUARDRAIL REMOVAL					
		50105220	63200310					
STATION	0/	S	то	STATION	0/	S	FOOT	FOOT
5+25.74	27.8	RT		5+58.28	28.4'	RT	32.5	
5+95.50	19.1′	LT		7+70.24	18.7'	LT		175.5
6+25.25	18.6′	RT		7+97.81	19.2'	RT		173.2
6+80.89	16.6'	LT		6+93.91	24.0′	LΤ	40.0	
			DTAL	73.0	349.0			

PER	28000400			
STATION	TO	STATION	0/\$	LENGTH (FT)
6+38.00		9+89.00	LT	360.0
10+49.00		12+00.00	LT	160.0
7+26.00		12+00.00	RT	489.0
			TOTAL	1009.0

EARTHWORK SCHEDULE

EMBANKMENT

CUBIC YARD

3.9

8.1

8.1

7.6

8.2

10.8

12.5

12.9

14.2

16.4

16.2

12.0

16.4

17.2

11.9

9.7

8.6

16.4

34.6

41.7

30.0

25.0

20.3

11.3

9.4

10.7

10.4

9.8

9.3

7.7

7.8

10.7

10.0

5.1

5.6

7.7

6.9

6.9

6.6

2.9

502.0

EXCAVATION

ADJUSTED FOR

SHRINKAGE

CUBIC YARD

18.2

24.4

26.4

25.1

19.5

19.1

22.9

23.2

24.2

23.2

22.3

22.9

16.4

17.9

29.3

32.1

21.5

43.3

65.9

42.7

37.9

27.5

8.3

7.8

7.3

6.6

5.4

4.2

4.2

5.1

6.5

14.6

22.4

16.0

8.4

8.6

9.3

9.0

9.5

11.1

770.0

EARTH

EXCAVATION

20200100

CUBIC YARD

24.3

32.5

35.2

33.4

26.0

25.5

30.6

31.0

32.2

31.0

29.7

30.5

21.9

23.8

39.0

42.8

28.7

57.7

87.9

56.9

50.6

36.6

11.1

10.4

9.8

8.8

7.2

5.6

5.6

6.8

8.7

19.4

29.9

21.3

11.2

11.5

12.4

12.0

12.7

14.9

1027.0

LOCATION

STATION TO STATION

2+25.00

2+50.00

2+75.00

3+00.00

3+25.00

3+50.00

3+75.00

4+00.00

4+25.00

4+50.00

4+75.00

5+00.00

5+25.00

5+50.00

5+75.00

6+00.00

6+25.00

6+50.00

6+75.00

7+00.00

7+25.00

7+50.00

7+75.00

8+00.00

8+25.00

8+50.00

8+75.00

9+00.00

9+25.00

9+50.00

9+75.00

10+00.00

10+25.00

10+50.00

10+75.00

11+00.00

11+25.00

11+50.00

11+75.00

12+00.00

TOTALS

2+00.00

2+25.00

2+50.00

2+75.00

3+00.00

3+25.00

3+50.00

3+75.00

4+00.00

4+25.00

4+50.00

4+75.00

5+00.00

5+25.00

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5+75.00

6+00.00

6+25.00

6+50.00

6+75.00

7+00.00

7+25.00

7+50.00

7+75.00

8+00.00

8+25.00

8+50.00

8+75.00

9+00.00

9+25.00

9+50.00

9+75.00

10+00.00

10+25.00

10+50.00

10+75.00

11+00.00

11+25.00

11+50.00

11+75.00

X2010400

FARTHWORK

BALANCE

WASTE (+) OR

SHORTAGE (-)

CUBIC YARD

+14.3

+16.3

+18.3

+17.4

+11.3

+8.3

+10.4

+10.3

+10.0

+6.8

+6.1

+10.9

0.0

+0.7

+17.3

+22.4

+12.9

+26.9

+31.3

+1.0

+8.0

+2.5

-11.9

-3.5

-2.1

-4.2 -5.0

-5.6 -5.1

-2.6

-1.3

+3.8

+12.4

+10.8

+2.8

+0.9

+2.4

+2.1

+2.9

+8.2

+269.0

CHANNEL

EXCAVATION

20300100

CUBIC YARD

42.1

36.0

42.3

70.5

16.1

STRUCTURE

EXCAVATION

50200100

CUBIC YARD

25.5

85.6

162.0

157.4

93.5 47.2

9.3

581.0

		C	M	T
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MODEL NAME =	DESIGNED	-	LM/EM	REVISED	
FILE NAME =	DRAWN	-	ЕММ	REVISED	-
PLOT SCALE = 2.0000 '/ in.	CHECKED	-	EJH	REVISED	-
PLOT DATE = 2/19/2020 8:30:50 AM	DATE	-	NOVEMBER 2018	REVISED	-

MERCER COUNTY HIGHWAY DEPARTMENT MERCER COUNTY, ILLINOIS

	COUNTY	HIG	HW	ΑΥ	16 BI	RIDGE	REPLACEMENT
	SUMMA	ARY	OF	Qι	JANTI	ries &	SCHEDULES
SCALE:	SHEET	1	OF	1	SHEETS	STA.	TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
215	16-00110-00-BR	MERCER	25	3
		CONTRAC	T NO. 8	39719
	ILLINOIS FED. A	D PROJECT		

REMOVAL AND

DISPOSAL OF

UNSUITABLE

MATERIAL FOR

STRUCTURES

50200450 CUBIC YARD

5.2

23.7

70.4

88.9

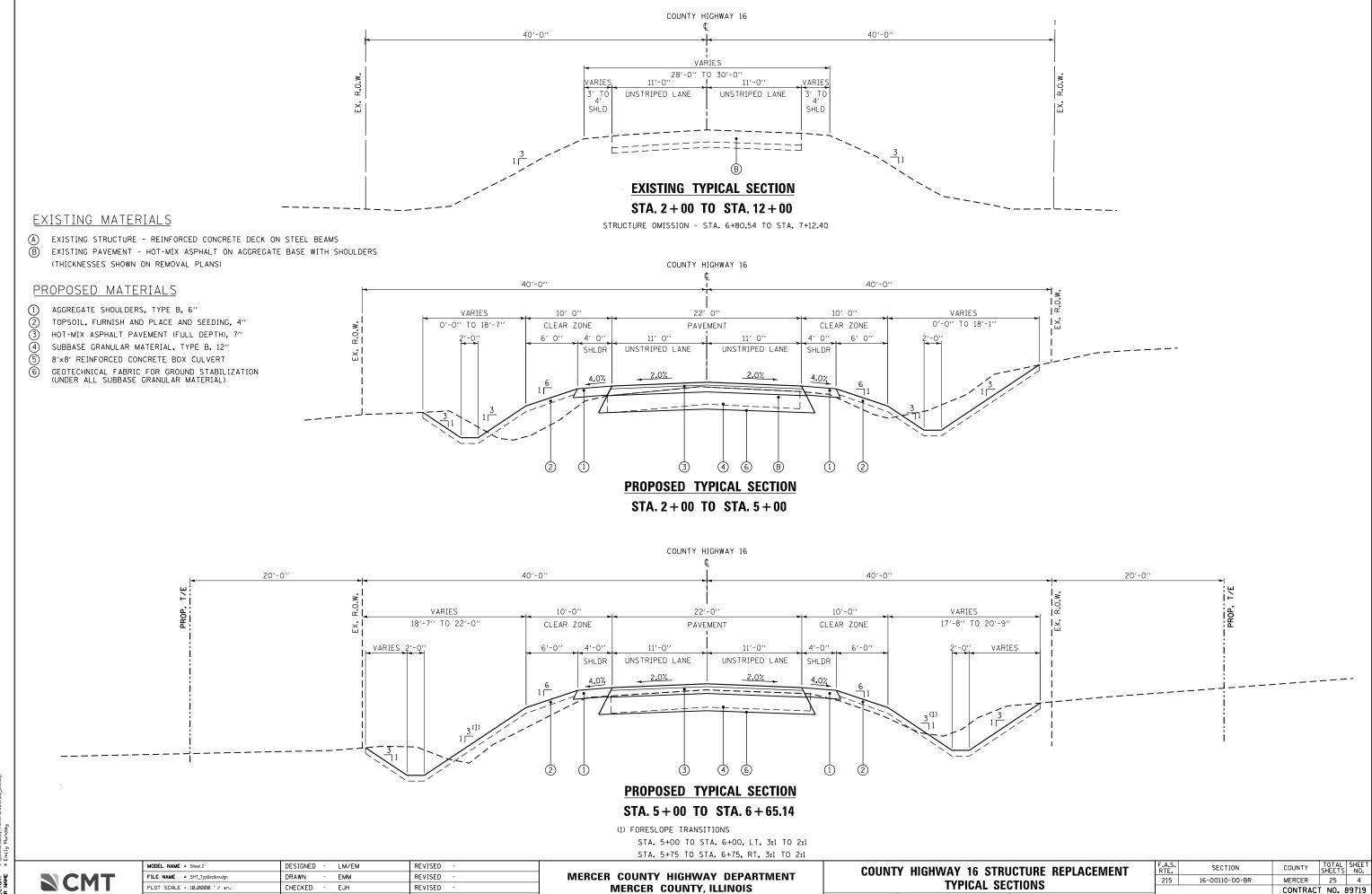
51.4

19.1

4.7

263.0

TORY =



SCALE: 1" = 5' SHEET 1

OF 2 SHEETS STA.

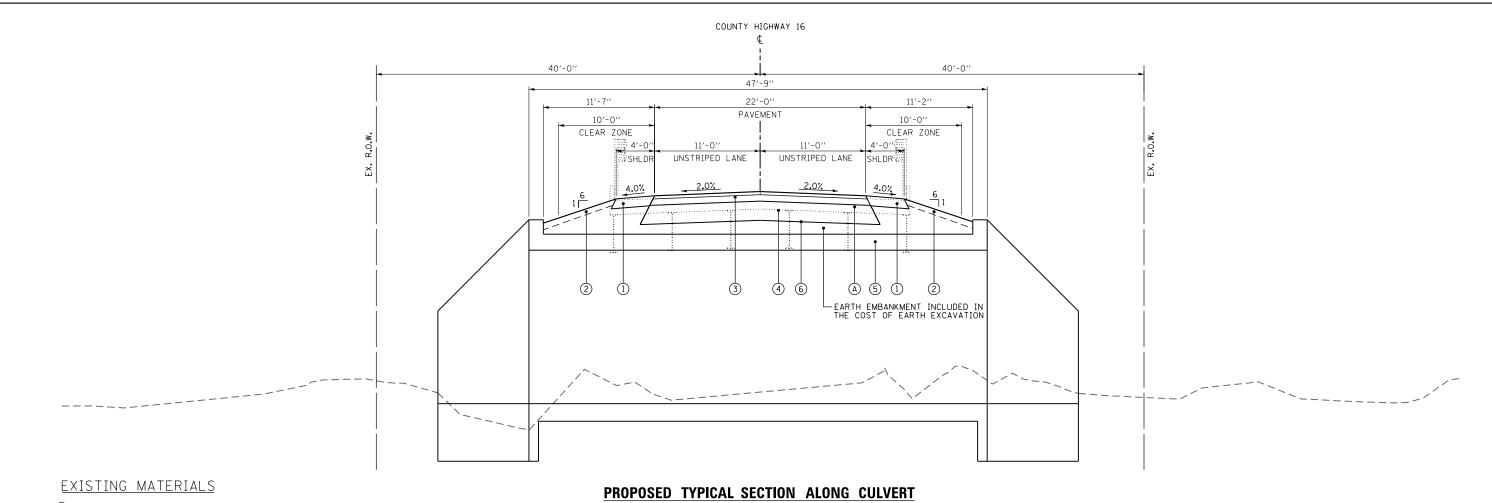
CONTRACT NO. 89719

PLOT DATE = 2/19/2020 8:31:02 AM

DATE

NOVEMBER 2018

REVISED



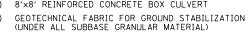
- (A) EXISTING STRUCTURE REINFORCED CONCRETE DECK ON STEEL BEAMS
- B EXISTING PAVEMENT HOT-MIX ASPHALT ON AGGREGATE BASE WITH SHOULDERS (THICKNESSES SHOWN ON REMOVAL PLANS)

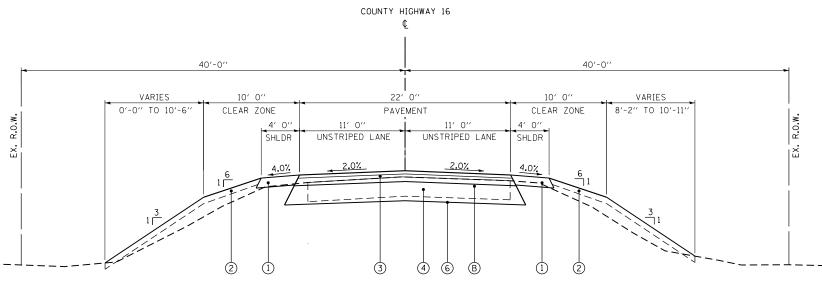
STA. 6 + 65.14 TO STA. 7 + 02.86

(DIMENSIONS GIVEN PERPENDICULAR TO CENTERLINE AT THIS SECTION)

PROPOSED MATERIALS

- AGGREGATE SHOULDERS, TYPE B, 6"
- TOPSOIL, FURNISH AND PLACE AND SEEDING. 4"
- HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 7"
- SUBBASE GRANULAR MATERIAL, TYPE B, 12"
- 8'x8' REINFORCED CONCRETE BOX CULVERT





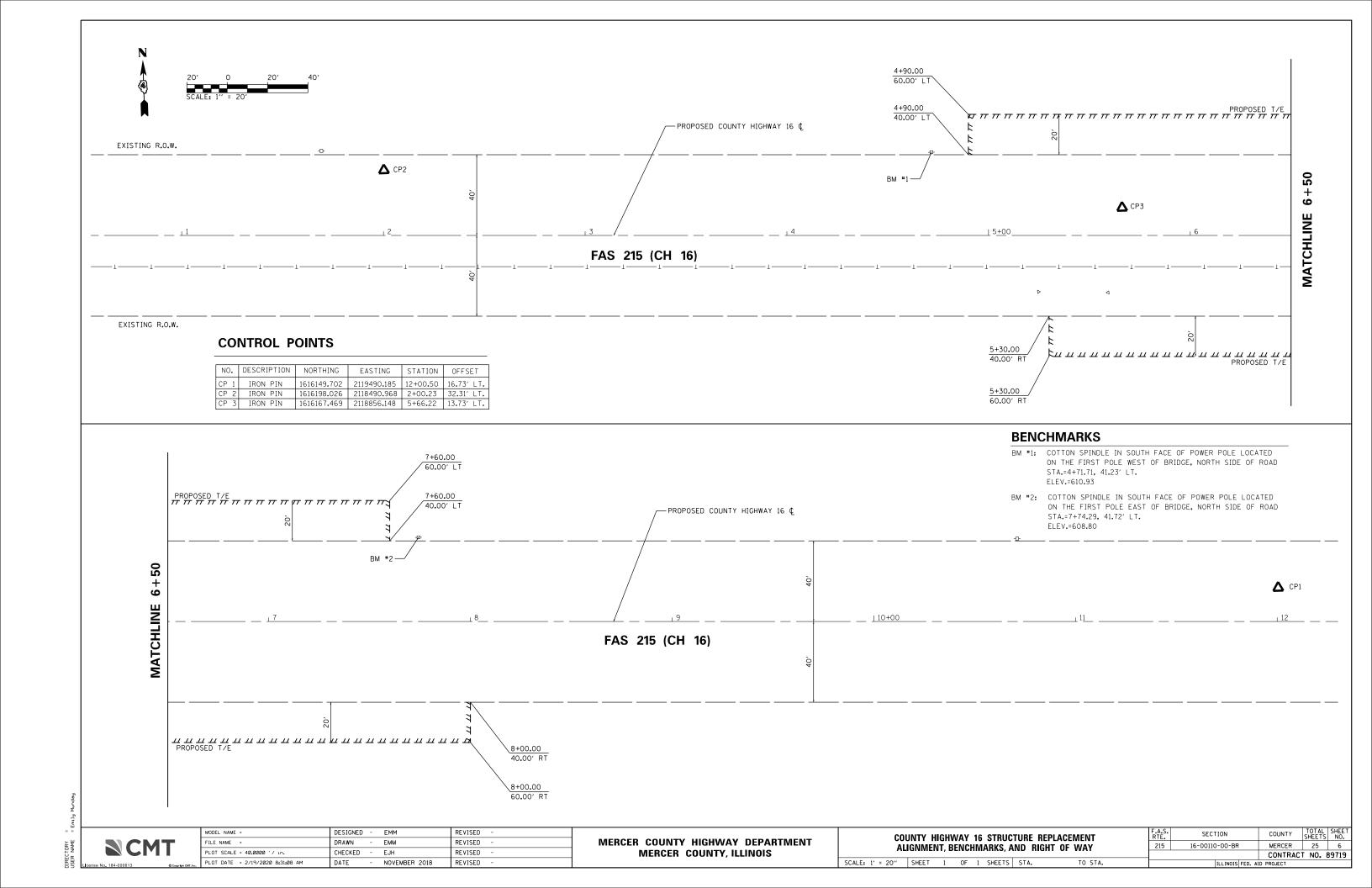
PROPOSED TYPICAL SECTION STA. 7 + 02.86 TO STA. 12 + 00

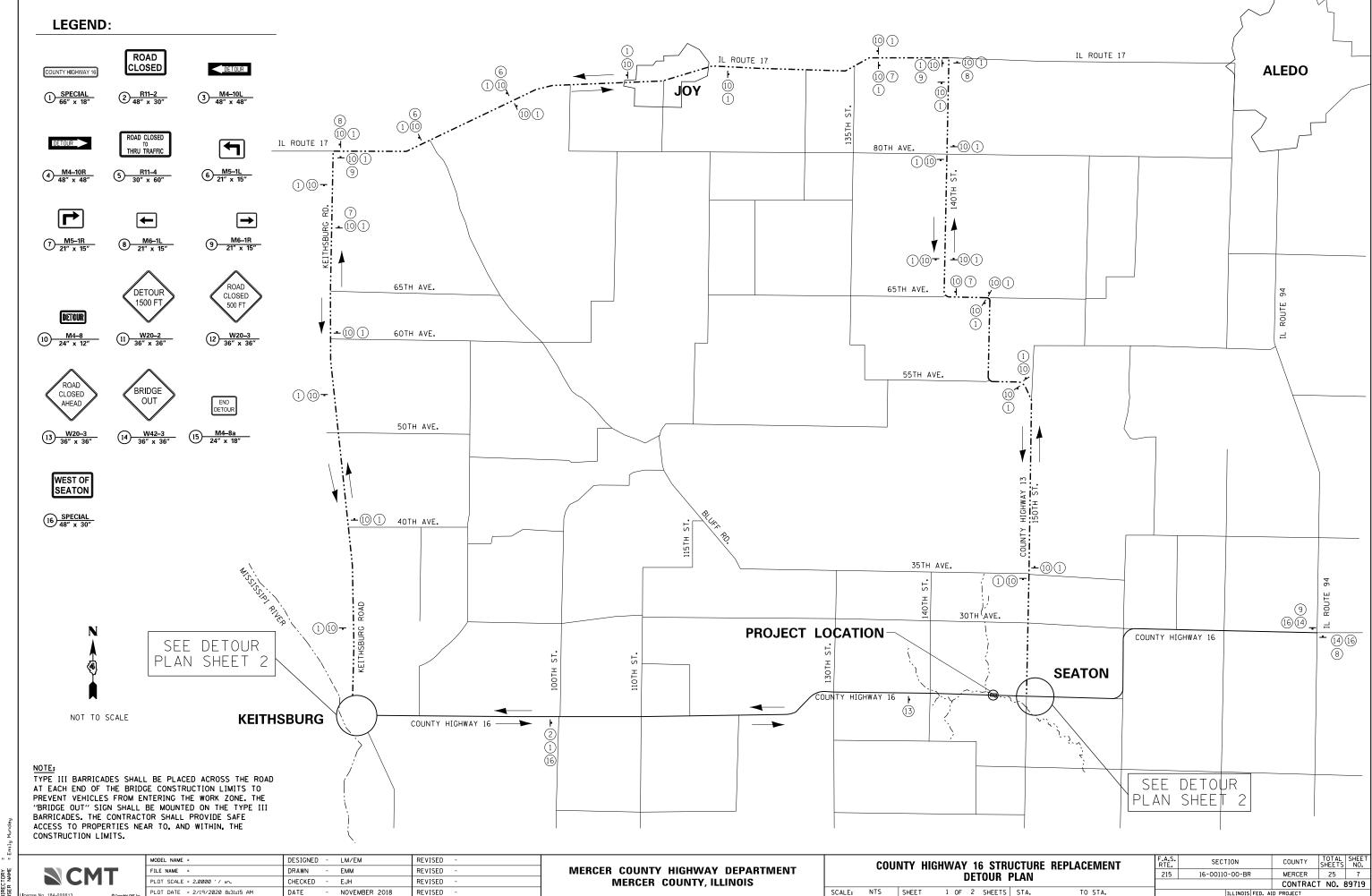
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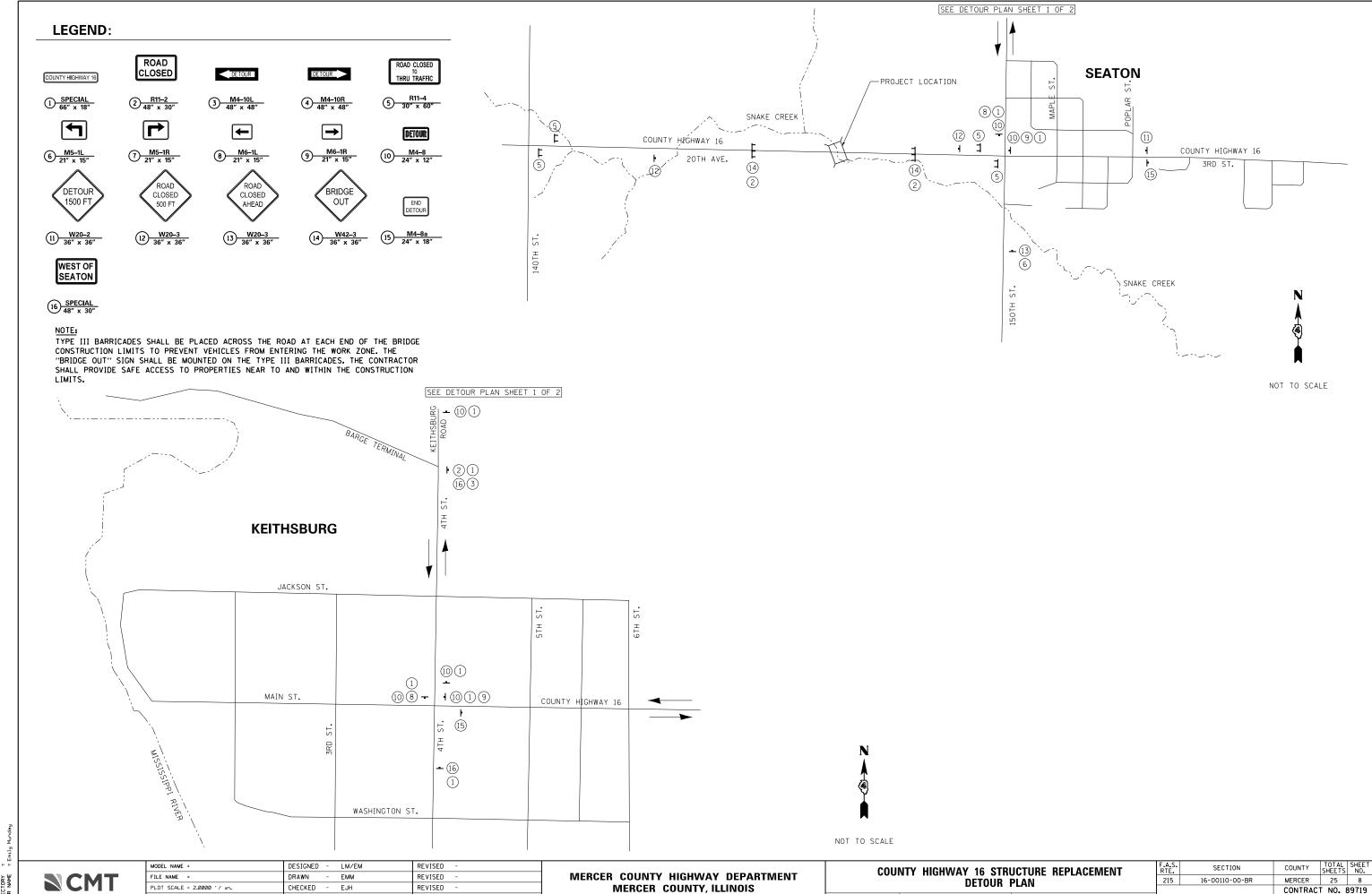
MERCER COUNTY HIGHWAY DEPARTMENT MERCER COUNTY, ILLINOIS

COUNT	REPLACEMENT				
		CTIONS			
SCALE: 1" = 5"	SHEET 2	0F 2	SHEETS	STA.	TO STA.

	ILLINOIS FED. A	ID PROJECT		
		CONTRAC	I NO.	89719
215	16-00110-00-BR	MERCER	25	5
RTE.	SECTION	COUNTY	SHEETS	NO.



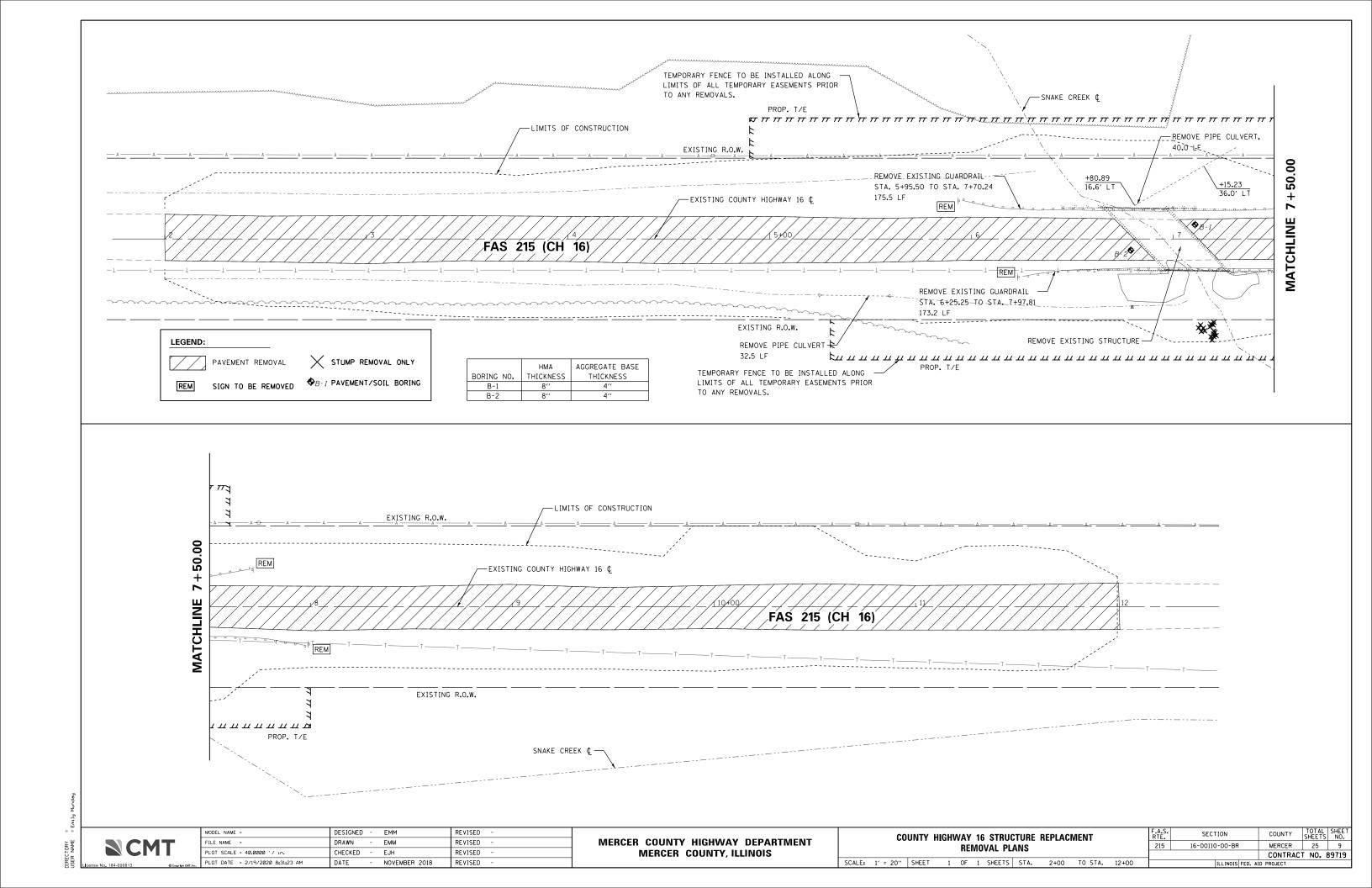


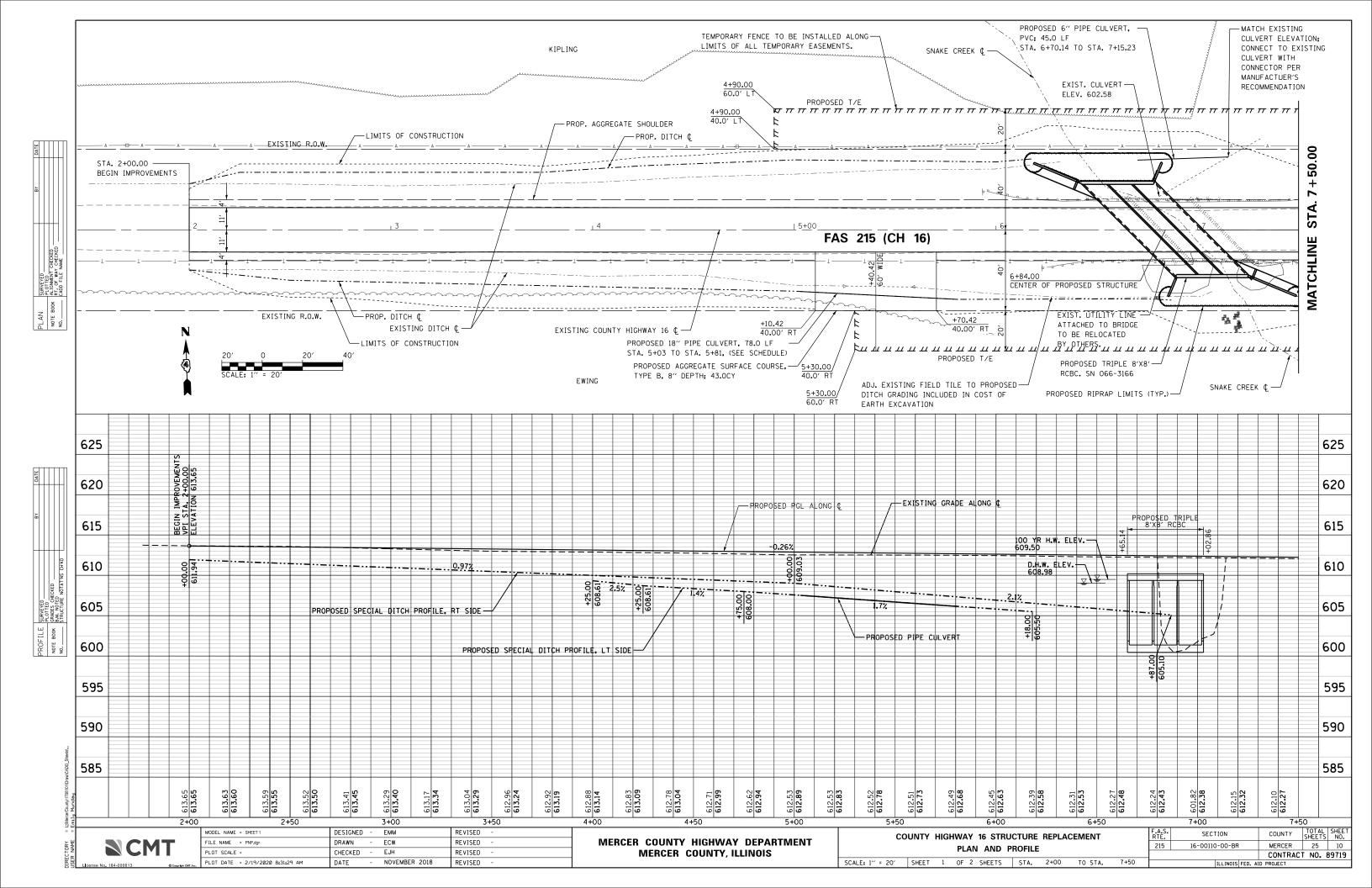


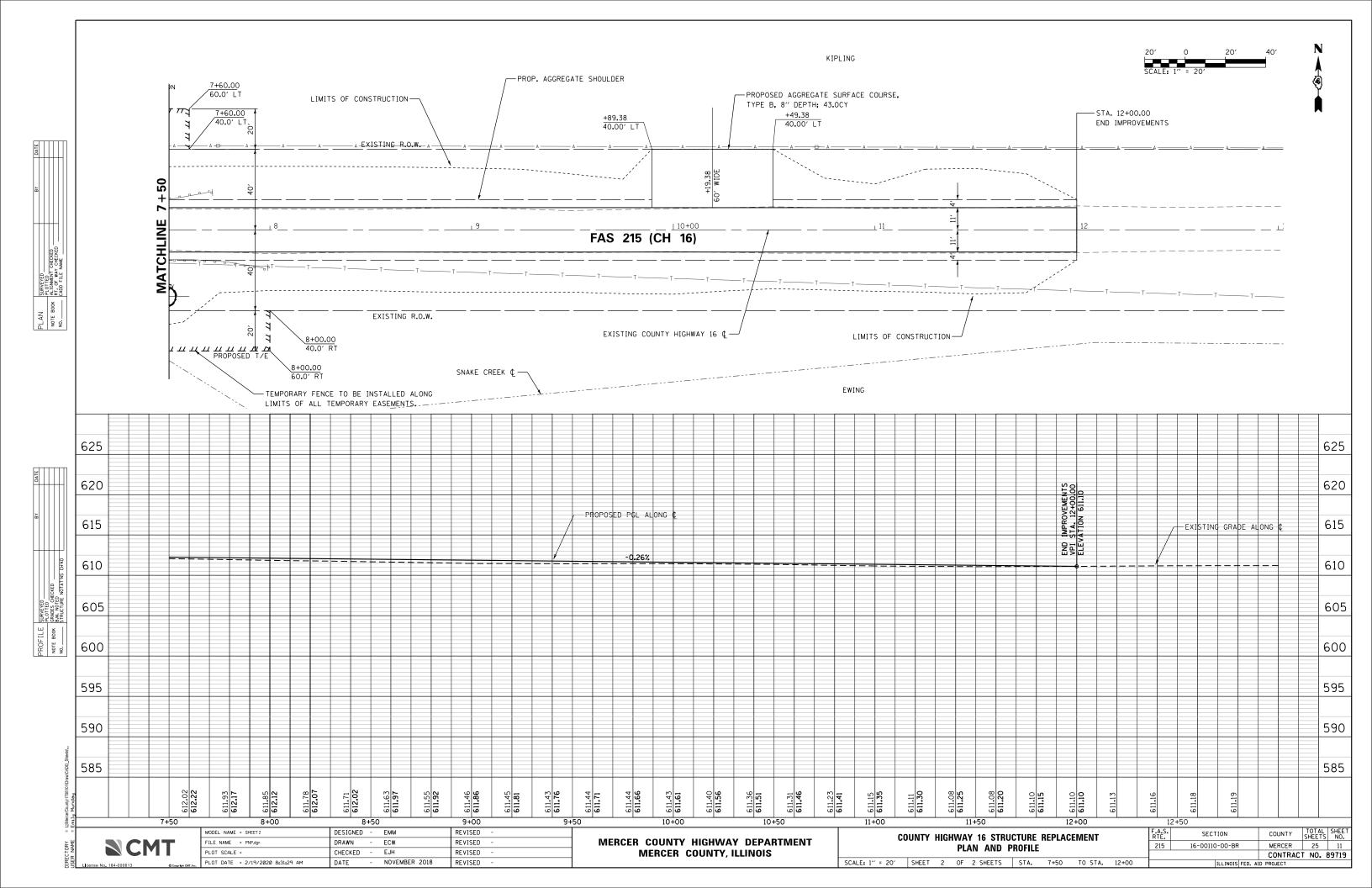
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SCALE: NTS SHEET 2 OF 2 SHEETS STA. TO STA.

CONTRACT NO. 89719







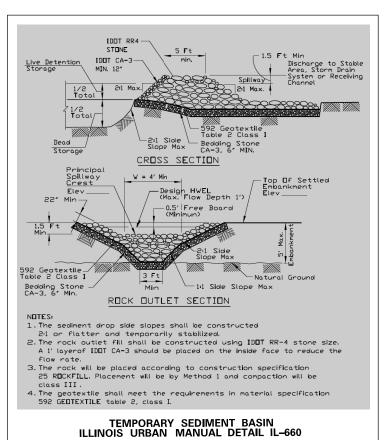
- 1. THE CONTRACTOR SHALL INSTALL ALL APPLICABLE EROSION CONTROL MEASURES PRIOR TO ANY SITE DISTURBANCE.
- 2. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS SHOWN ON THIS EROSION CONTROL PLAN. MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
- 3. ALL UNSURFACED (OR PERMANENT NON-AGGREGATE) AREAS DISTURBED BY CONSTRUCTION OPERATIONS SHALL RECEIVE A MINIMUM 4" OF TOPSOIL, FERTILIZER, SEED, HYDRAULIC MULCH AND/OR EROSION CONTROL BLANKET IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL TURF AREAS SHALL BE CHECKED REGULARLY TO MAINTAIN A HEALTHY STAND OF GRASS. AREAS SHALL BE FERTILIZED AND RESEEDED AS REQUIRED.
- 4. CONTRACTOR SHALL ESTABLISH POINTS OF INGRESS AND EGRESS FROM EXISTING ROADWAYS. THE WORK SHALL BE IN ACCORDANCE WITH THE DETAIL ENTITLED STABILIZED CONSTRUCTION ENTRANCE.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT WHICH MAY COLLECT IN THE CULVERT SYSTEM.
- 6. SEDIMENT SHALL BE REMOVED FROM STRAW WATTLES OR SILT FENCE WHEN IT REACHES ONE-HALF THE HEIGHT OF THE BARRIER IN PLACE.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENTATION CONTROL MEASURES AS NECESSARY TO BE MAINTAINED IN FULLY FUNCTIONAL CONDITION THROUGHOUT THE ENTIRE PROJECT.
- 8. CONTRACTOR TO REMOVE ALL CONSTRUCTION DEBRIS, MUD, TEMPORARY FENCING, ETC. UPON COMPLETION OF CONSTRUCTION.
- 9. TEMPORARY EROSION CONTROL DEVICES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 10. ALL PERMANENT AND/OR TEMPORARY CHANNEL RELOCATION OR MODIFICATION SHALL BE CONSTRUCTED UNDER DRY CONDITIONS AND STABILIZED PRIOR TO DIVERSION OF FLOW THROUGH THE NEW CHANNEL.
- 11. ANY DEVIATION OF THE TEMPORARY EROSION CONTROL PLAN OR SCHEDULE BY THE CONTRACTOR SHALL BE AT THE DISCRETION OF THE ENGINEER.
- 12. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- 13. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOATATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- 14. CLASS 2A SEEDING SHALL BE PLACED ON SLOPES WITHIN 4' ADJACENT TO THE SHOULDERS, ON ALL DITCH FORESLOPES AND DITCH BOTTOMS AS WELL AS ALL SLOPES NOT ADJACENT TO THE

BEST MANAGEMENT PRACTICES SEQUENCE:

THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING SEQUENCE OF EVENTS DURING CONSTRUCTION AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY CHANGES MADE TO THE PHASING:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND PERIMETER EROSION CONTROL AT EDGE OF LIMITS OF DISTURBANCE.

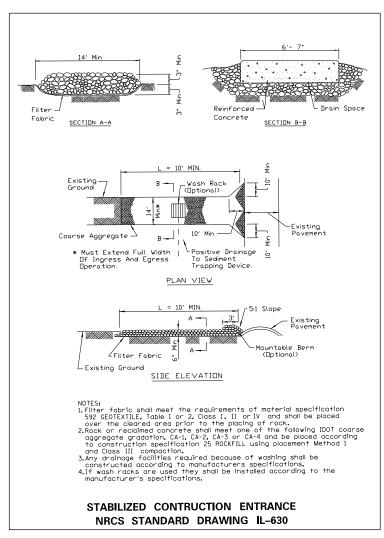
- 2. BEGIN ROUGH GRADING OF SITE. TEMPORARILY STABILIZE ALL DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 CALENDAR DAYS OR MORE (UNLESS CONSTRUCTION ACTIVITY WILL RESUME ON THAT PORTION WITH 14 DAYS.) THE LAST PASS ON ANY ROUGH GRADED SLOPE SHALL BE UP AND DOWN THE SLOPE, SO THAT DOZER TRACKS ARE LEFT PERPENDICULAR OR ACROSS THE SLOPE, NOT IN
- 3. INSTALL DITCH CHECKS AS ROUGH GRADING PROGRESSES AND MAINTAIN AS NEEDED.
- 4. MAINTAIN PERIMETER EROSION CONTROL (SILT FENCE, STRAW WATTLES) TO BE FREE OF ACCUMULATED SEDIMENT. REPAIR AS NEEDED AND REPLACE WHEN DAMAGED.
- 5. PROVIDE PIPE PROTECTION APPROPRIATE FOR STAGE OF CONSTRUCTION. MAINTAIN CULVERTS TO BE FREE OF ACCUMULATED SEDIMENT DURING CONSTRUCTION. REPAIR/REPLACE AS NEEDED.
- 6. PROVIDE CONCRETE WASHOUT FACILITIES IN ACCORDANCE WITH ILLINOIS URBAN MANUAL FOR ALL CEMENTITIOUS MATERIALS INCLUDING PORTLAND CEMENT CONCRETE, MORTAR, STUCCO, PAINT AND/OR GROUT. WASH WATERS CANNOT BE DISCHARGED EITHER INTO THE GROUND OR SEWERS. CLEAN CONCRETE WASH OUT FACILITIES TO MAINTAIN CAPACITIES. WASHOUT BASINS SHALL BE INCIDENTAL TO ANY CONCRETE PAY ITEMS.
- 7. PAVE SITE AND APPURTENANCES. COMPLETE FINAL STABILIZATION
- 8. PERFORM FINAL GRADING, LANDSCAPING AND SEEDING AS SHOWN. MAINTAIN BMP'S IN PLACE UNTIL ALL VEGETATED AREAS HAVE ACHIEVED FINAL STABILIZATION REQUIREMENTS (UNIFORM 70% COVERAGE).
- 9. WHEN FINAL STABILIZATION IS ACHIEVED AS DETERMINED BY OWNER'S REPRESENTATIVE, REMOVE ALL TEMPORARY BMP'S AND FILE NOTICE OF TERMINATION WITH IEPA ON OWNER'S BEHALF.



EROSION CONTROL MAINTENANCE:

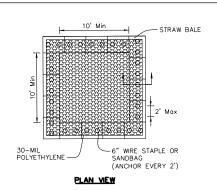
ALL MEASURES STATED ON THIS EROSION CONTROL PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED CONTRACTOR REPRESENTATIVE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.50" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- 1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
- 2. ALL TURF AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED, AREAS SHOULD BE FERTILIZED, WATERED, AND RE-SEEDED AS NEEDED.
- 3. PERIMETER EROSION CONTROL SYSTEMS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE-HALF THE HEIGHT OF THE CONTROL DEVICE.
- 4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO ADJACENT PAVEMENTS. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.



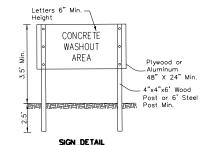
DISTURBED AREA SUMMARY

SEEDED AREA	0.82 AC
IMPERVIOUS AREA	0.69 AC
TOTAL DISTURBED AREA	1.51 AC



6" Wire Staple or Sandbag-Liner Anchor

STRAW BALE ANCHOR SECTIONS



Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.

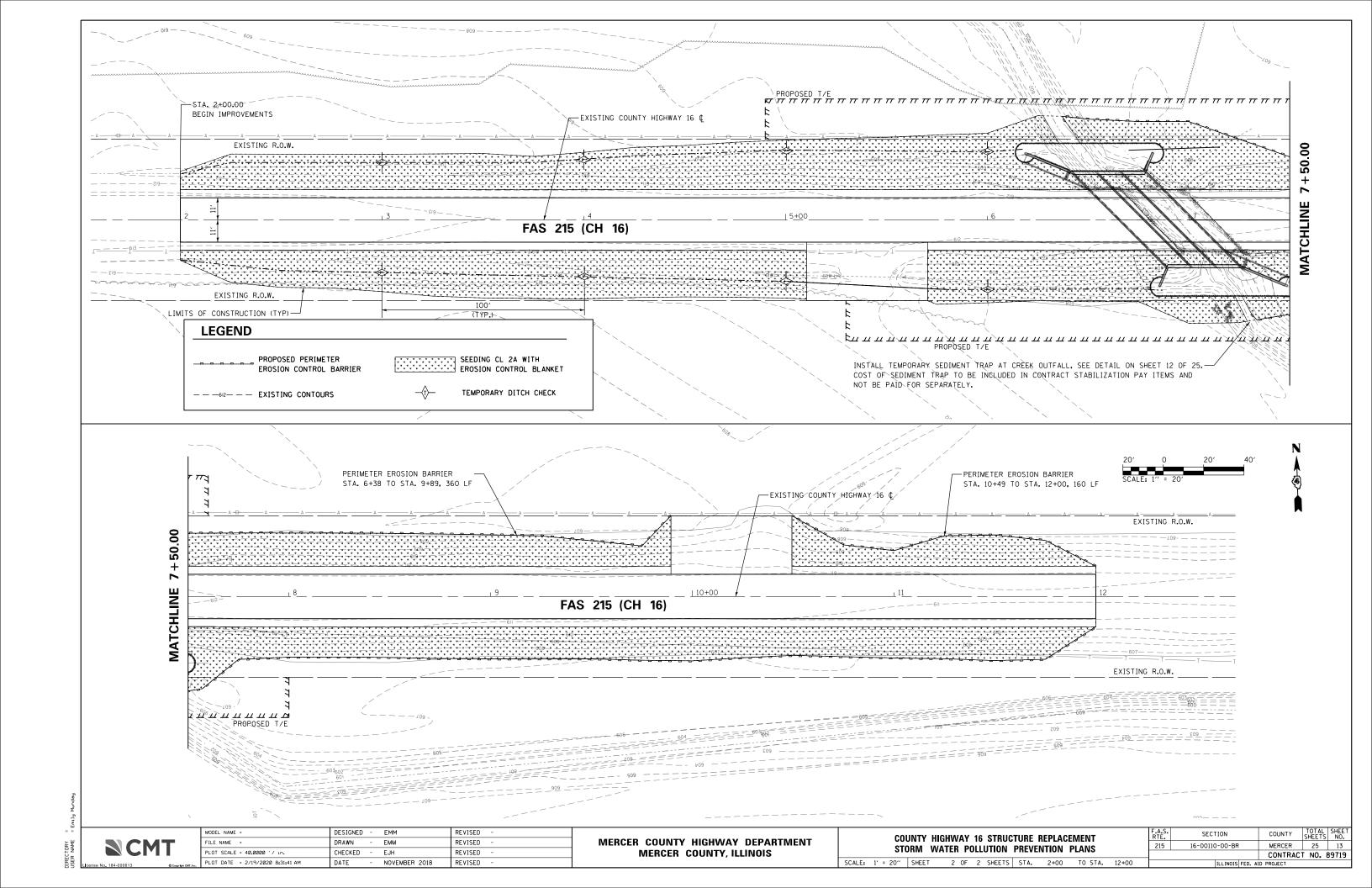
TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE ILLINOIS URBAN MANUAL DETAIL IUM-654SB

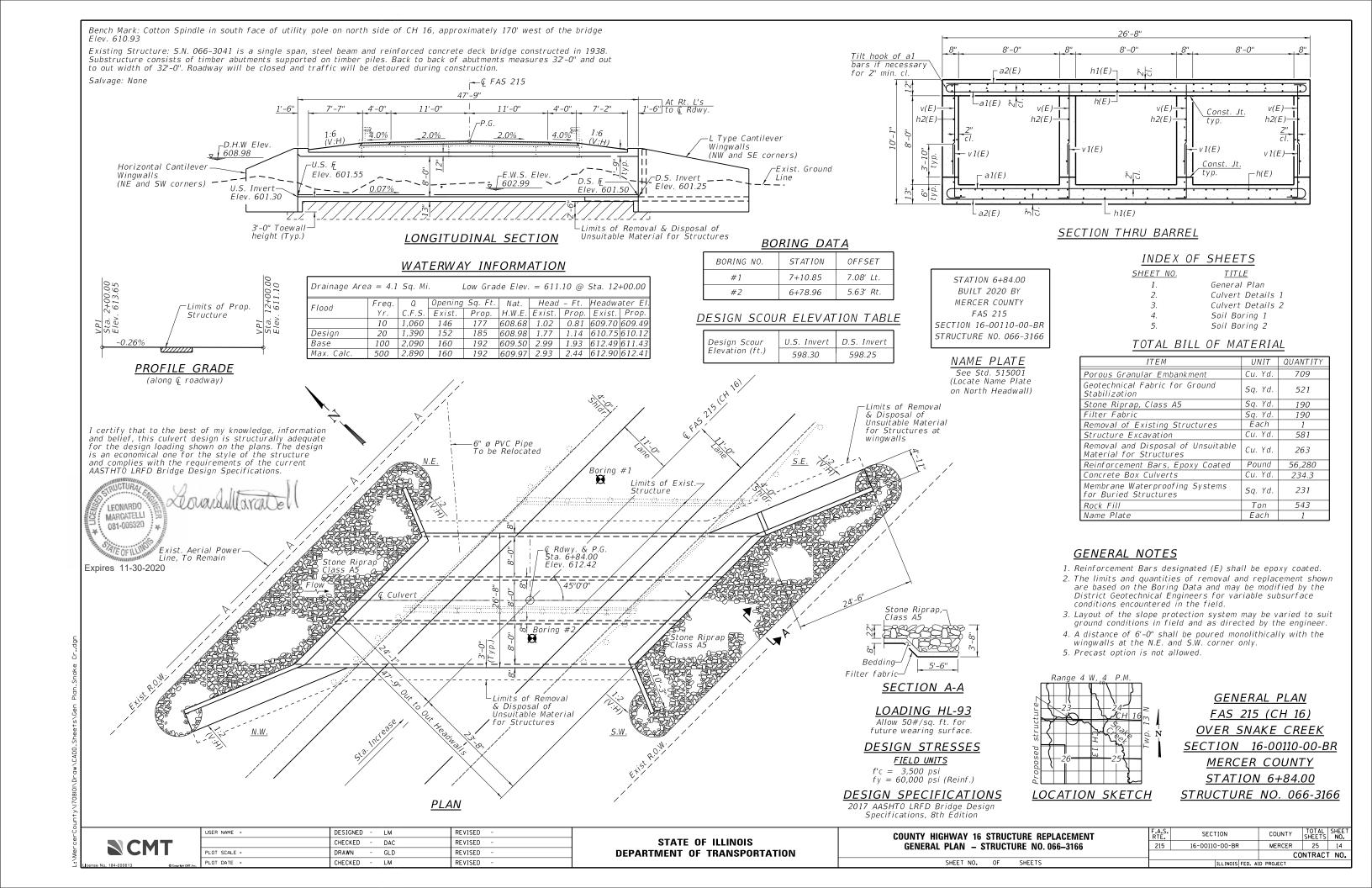
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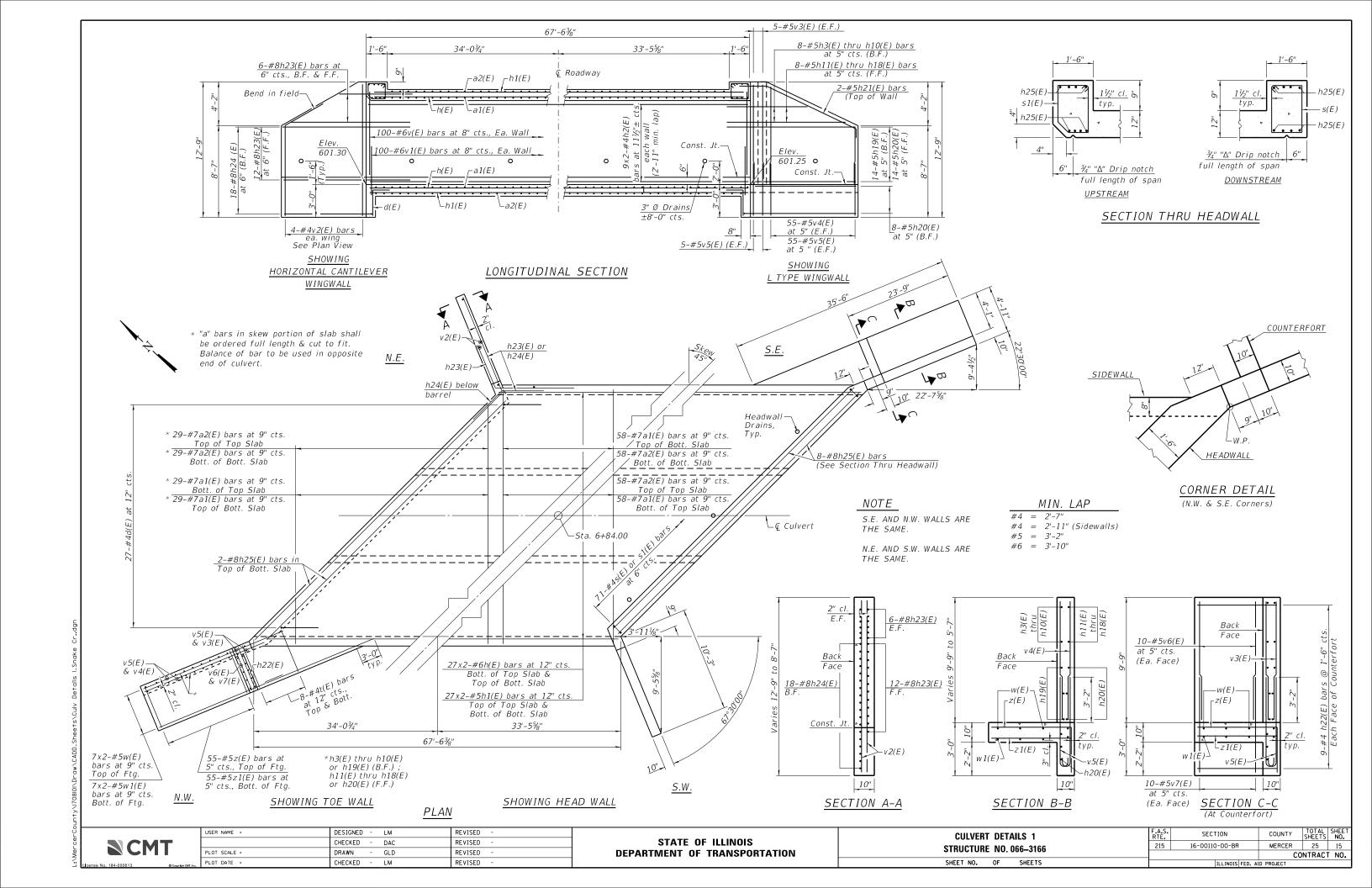
MERCER COUNTY HIGHWAY DEPARTMENT MERCER COUNTY, ILLINOIS

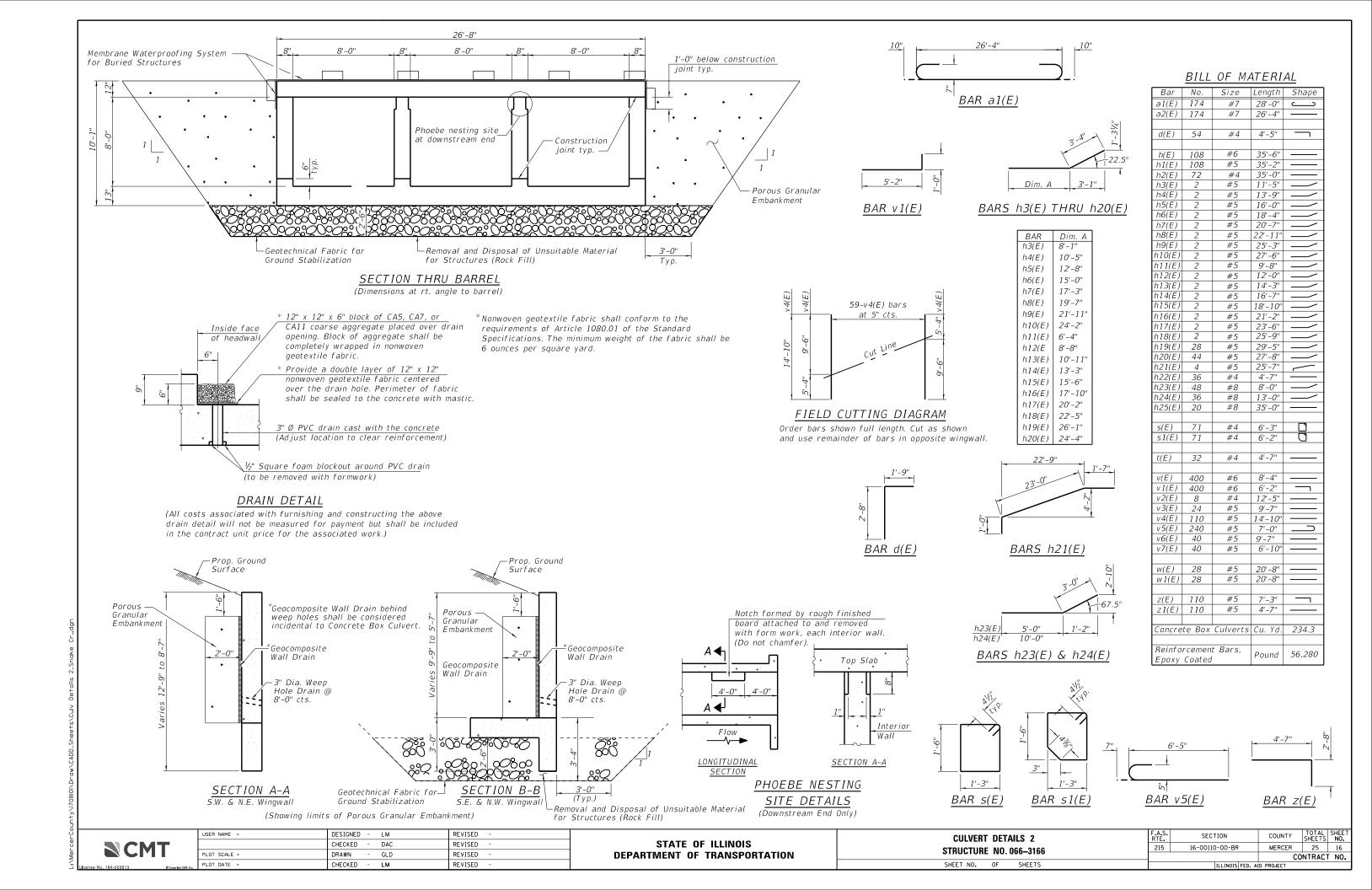
COUNTY HIGHWAY 16 STRUCTURE REPLACEMENT STORM WATER POLLUTION PREVENTION PLANS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
215	16-00110-00-BR	MERCER	25	12
		CONTRAC	T NO. 8	39719









					nnical Engineering BORING LOG		Date	Page 1/2	
ROUTE FAS 215 DESC	RIPTI	ON _C	.H. 16 I	Bridge	Over Snake Creek				
SECT. <u>16-00110-00-BR</u>	STR	UCT. N	10. <u>06</u>	6-316	6 DRILLED BY	B. Wi	lliamso	n	
COUNTY Mercer LOC	CATION	Sea	aton		S. <u>23</u> , TWP	13N	_ , RN	G	4W
Boring No.	D E P T H	B L O W s	Qu tsf	w %	Surface Water Elev. Groundwater Elev.: when drilling at Completion after Hrs.	DEPTH	B L O W s	Qu tsf	W. %
Asphalt Pavement	Н"	3	131	70			3	131	70
Aggregate Base 611.0 Stiff dark brown SILTY CLAY LOAM	0 —	11 11 10	P 1.25	24	Stiff gray SILTY LOAM		2 2 4	B 1.27	14
		3 3 3	P 1.5	25			2 4 4	B 1.27	14
Soft brown SILTY LOAM	0	1 1 2	P 0.5	27		_			
Medium stiff dark brown SILTY CLAY LOAM		0 1 3	P 0.75	29			1 3 3	B 1.35	13
Very soft dark brown SILTY CLAY LOAM		0 0 0	P 0.25	42		35			
Very soft gray SILTY LOAM		0 0 1	P 0.25	30			1 3 3	B 1.97	15
		0 1 1	P 0.25	26					
Medium stiff gray SILTY CLAY LOAM	-20	1 2 2	B 0.82	26			1 2 3	B 0.98	16
Stiff gray-brown SILTY LOAM	0	2 3 3	B 1.44	18		45			
Stiff brown SILTY LOAM	0	2 3 3	B 1.64	15		-50	2 2 4	B 1.48	15

ILLINOIS DEPARTMENT OF TRANSPORTATION Ramsey Geotechnical Engineering STRUCTURE BORING LOG

Boring No. <u>B-1 East Abutment</u> Station <u>7+10.85</u> Offset <u>7.08ft LT</u>	D E P T	B L O W	Qu	w
Elevation <u>562.00</u> ft	н	S	tsf	%
Stiff gray SILTY LOAM				
	_			
		1 2 3	B 1.76	14
		3 4 6	B 1.97	16
2" Thick fine sand seam at 64.8'		3 5 6	B 1.44	14
End of Boring at 65'				

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

EXCMT

USER NAME =	DESIGNED - CJW	REVISED -
	CHECKED - LM	REVISED -
PLOT SCALE =	DRAWN - GLD	REVISED -
PLOT DATE =	CHECKED - LM	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING 1 STRUCTURE NO. 066–3166		CECTION	COLINETY	TOTAL	SHEET
		SECTION	COUNTY	SHEETS	NO.
		16-00110-00-BR	MERCER	25	17
		CONTRACT NO.			
SHEET NO. OF SHEETS	ILLINOIS FED. AID PROJECT				

-County/1708101/Draw/CADD_Sheets/SoilBoring I.d

ILLINOIS DEPARTMENT OF TRANSPORTATION Ramsey Geotechnical Engineering STRUCTURE BORING LOG ROUTE FAS 215 DESCRIPTION C.H. 16 Bridge Over Snake Creek DRILLED BY B. Williamson SECT. <u>16-00110-00-BR</u> ___ STRUCT. NO. 066-3166 COUNTY Mercer LOCATION Seaton S. <u>23</u> , TWP. <u>13N</u> , RNG. <u>4W</u> Surface Water Elev. L O W S Groundwater Elev.: LOWS when drilling Qu tsf Qu tsf at Completion W % W % Surface Elev. 612.10 ft Asphalt Pavement Stiff to very stiff gray SILTY LOAM Aggregate Base Stiff dark brown SILTY CLAY LOAM 1.0 1.64 Stiff brown-dark brown SILTY CLAY LOAM B 1.76 1.5 Stiff dark brown SILTY CLAY LOAM Medium stiff gray-brown SILTY CLAY LOAM 0.75 1.93 Very soft brown-gray SILTY LOAM 0.25 0.25 2.58 Very soft brown SILTY LOAM 0.25 Stiff brown-gray SILTY 1.35 2.0 Medium stiff to stiff brown-gray SILTY LOAM 0.94 3.44 1.48 SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION Ramsey Geotechnical Engineering STRUCTURE BORING LOG

STRUCTURE NO. 066-3166

ROUTE FAS 215

SECTION 16-00110-00-BR

COUNTY Mercer L O W S W % Qu tsf Elevation 562.10 ft Very stiff gray SILTY LOAM B 2.01 2.99 18" Thick fine sand seam at 63' End of Boring at 65'

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

EXCMT

٦	USER NAME =	DESIGNED - CJW	REVISED -
ı		CHECKED - LM	REVISED -
ı	PLOT SCALE =	DRAWN - GLD	REVISED -
	PLOT DATE =	CHECKED - LM	REVISED -

STATE OI	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

SOIL BORING 2 Structure No. 066–3166		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		16-00110-00-BR	MERCER	25	18
			CO	NTRACT	NO.
SHEET NO. OF SHEETS	ILLINOIS FED. AID PROJECT				

ounty/1708101/Draw/CADD_Sheets/SoilBoring 2.dgn

