

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	1
		ILLINOIS	CONTRACT NO. 97688	

INDEX OF SHEETS

01-17-2020 LETTING ITEM 151

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10	TRAIL DETOUR PLAN
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HIGHWAY STANDARDS

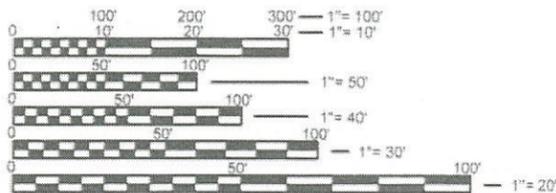
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
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601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
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701006-05	OFF-RD OPERATIONS, 2L, 2W 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
728001-01	TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS

DESIGN DESIGNATION

ROADWAY CLASSIFICATION =	TRAIL
DESIGN SPEED =	10 MPH
CURRENT ADT (2018) =	NONE
DESIGN YEAR ADT (2038) =	20

ADJACENT ROADWAY CLASSIFICATION

ROADWAY CLASSIFICATION =	PRINCIPAL ARTERIAL (IL 157)
DESIGN SPEED =	45 MPH
CURRENT ADT (2018) =	21,000
DESIGN YEAR ADT (2038) =	N/A



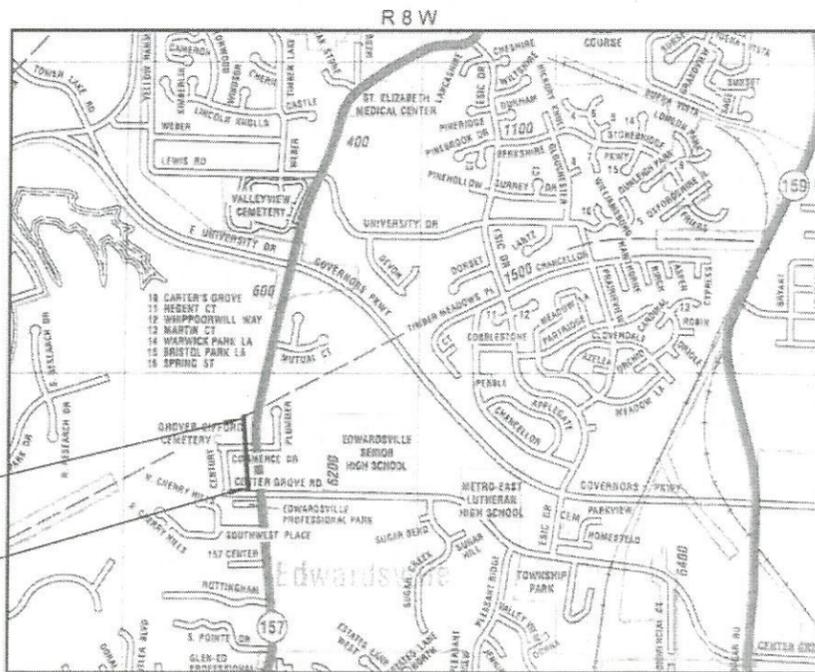
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
TAP FUNDS

CITY OF EDWARDSVILLE
IL-157 AND CENTER GROVE ROAD
NATURE TRAIL CONNECTION
FAP ROUTE 592
SECTION 17-00111-00-BT
MADISON COUNTY
PROJECT NO. RVHK (873)
JOB NO. C-98-004-19



LOCATION MAP
NOT TO SCALE

GROSS LENGTH OF PROJECT = 1,022' = (0.194 MILES)
NET LENGTH OF PROJECT = 966' = (0.183 MILES)



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED: _____ DATE 9-26-19
HAL PATTON MAYOR OF EDWARDSVILLE
PASSED: _____ DATE October 29, 2019
Keith Roberts DISTRICT 8 ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID: _____ DATE October 29, 2019
BASED ON LIMITED REVIEW: _____ DATE Keith Roberts REGION 5 ENGINEER



Brian S. Heil, P.E.
LICENSE EXPIRES 11/30/2019
DATE: 9/26/19



Collinsville: 100 Lumber Court, Suite 101, Collinsville, IL 62234, 618.245.2200
Belleville: 29 East Main Street, Belleville, IL 62220, 618.416.4682
St. Louis: 720 Olive, Suite 700, St. Louis, MO 63101, 314.588.8081
St. Charles: 300 North Main, Suite 201, St. Charles, MO 63031, 636.456.4277
ILLINOIS DESIGN FIRM LICENSE NO. 184.001115

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OF THE STATE OF ILLINOIS

GENERAL NOTES

GENERAL

- WHERE TREE REMOVAL CONFLICTS WITH EXISTING UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CUT THE TREE OFF AT THE GROUND LINE AND GRIND THE STUMP AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE COMPLETELY REMOVING TREES AND ROOTS UNDER PAVED SURFACES. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR TREE REMOVAL.
- THE CONTRACTOR SHALL REMOVE TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND ERECT AT TEMPORARY LOCATIONS AND MAINTAIN THROUGHOUT THE CONSTRUCTION PERIOD. AS SOON AS CONSTRUCTION OPERATIONS WILL ALLOW, ALL SIGNS SHALL BE PERMANENTLY RE-INSTALLED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST. ANY DAMAGE TO SIGNS WILL BE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD, INCLUDING POTHOLING POTENTIAL UTILITY CONFLICTS, PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION.
- THE CONTRACTOR SHALL STAGE ALL WORK IN SUCH A WAY AS TO MAINTAIN INGRESS AND EGRESS TO ALL ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION. AGGREGATE FOR TEMPORARY ACCESS WILL BE MEASURED FOR PAYMENT AS SPECIFIED IN THE CONTRACT. THE COST OF ALL OTHER MATERIALS REQUIRED AND ALL OTHER LABOR NECESSARY TO COMPLY WITH THIS PROVISION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.
- THE CONTRACTOR SHALL CONFINE ALL OPERATIONS TO THE CONSTRUCTION LIMITS LINE SHOWN ON THE PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL FERTILIZE, SEED AND MULCH ALL EARTH SURFACES DISTURBED BY CONSTRUCTION. FERTILIZER, SEEDING AND MULCH WITHIN THE CONSTRUCTION LIMITS AS PROVIDED IN THE CONTRACT. FERTILIZER, SEEDING AND MULCH OUTSIDE THESE LIMITS DUE TO CONSTRUCTION ENCROACHMENTS WILL NOT BE MEASURED FOR PAYMENT AND WILL BE RESTORED TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE CONTRACT.

GRADING & PAVING

- THE CONTRACTOR SHALL CONTACT THE ENGINEER DURING SUBGRADE PREPARATION AND PRIOR TO SOIL MODIFICATION TO DETERMINE THE NECESSITY OF THE PROPOSED SUBGRADE IMPROVEMENT. IF THE SUBGRADE IS FOUND TO REQUIRE OR NOT TO REQUIRE REMEDIAL PROCEDURES, SOIL MODIFICATION AND MODIFIER MAY BE ADDED OR DELETED.

PAVEMENT MARKING

- ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH IDOT HIGHWAY STANDARDS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).
- THE PAVEMENT MARKING LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE. PROPOSED CROSSWALKS AND STOP BARS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER, IF NECESSARY, TO MATCH FIELD CONDITIONS.

DRAINAGE

- STORM SEWER INVERTS SHOWN ON THE PLANS HAVE BEEN CALCULATED TO THE CENTER OF THE STRUCTURE. THE STORM SEWER SLOPES SHOWN ON THE PLANS ARE THE PERCENT GRADE FROM CENTER TO CENTER OF STRUCTURE. THE LENGTH OF STORM SEWERS SHOWN ON THE PLANS IS THE DISTANCE FROM CENTER TO CENTER OF STRUCTURE. FLARED END SECTIONS ARE LOCATED BY STATION, OFFSET AND FLOWLINE ELEVATION AT THE FLARED END OF THE FLARED END SECTION.
- THE CONTRACTOR SHALL INCLUDE THE COST OF MAKING CONNECTIONS TO EXISTING DRAINAGE STRUCTURES IN THE CONTRACT UNIT PRICE FOR PROPOSED PIPE CULVERTS OR TYPE B INLETS AS ASSOCIATED WITH EACH CONNECTION.
- ALL STRUCTURES CONSTRUCTED, ADJUSTED, OR RECONSTRUCTED UNDER THE CONTRACT SHALL BE CLEANED OF ANY DEBRIS, ACCUMULATION OF SILT, OR FOREIGN MATTER AT THE END OF EACH WORKING DAY AND AT THE TIME OF FINAL COMPLETION. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE FOR VARIOUS DRAINAGE ITEMS INCLUDED IN THE CONTRACT.
- THE STATION AND OFFSET TO ALL MANHOLES AND INLETS ARE GIVEN TO CENTER OF OPENING AT THE BASE OF THE FRAME AND GRATE LID. CONCENTRIC DRAINAGE STRUCTURES WERE ASSUMED WHEN CALCULATING ALL DIMENSIONS.

APPROXIMATE QUANTITIES, SYMBOLS & ABBREVIATIONS

- THE FOLLOWING ITEMS AND APPROXIMATE QUANTITIES ARE INCLUDED IN THE "SUMMARY OF QUANTITIES" IN ORDER TO ESTABLISH A UNIT COST FOR WORK WHICH MAY BE REQUIRED TO CONSTRUCT THIS SECTION. THE ACTUAL QUANTITY OF EACH ITEM SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

AGGREGATE FOR TEMPORARY ACCESS	30 TON
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	100 CU YD

- THE FOLLOWING SYMBOLS AND ABBREVIATIONS SUPPLEMENT OR SUPERCEDE HIGHWAY STANDARD 000001

BO	BY OTHERS
CONSTR	CONSTRUCTION
CP	CONTROL POINT
DND	DO NOT DISTURB
ESMT	EASEMENT
ELEV	ELEVATION
K	LENGTH OF VERTICAL CURVE PER PERCENT GRADE DIFFERENCE
N/F	NOW OR FORMALLY
O/C	OIL AND CHIP
PERM	PERMANENT
PVI	POINT OF VERTICAL INTERSECTION
PVC	POLYVINYL CHLORIDE PIPE
TCE	TEMPORARY CONSTRUCTION EASEMENT
TBA	TO BE ADJUSTED
TBR	TO BE REMOVED
TBRL	TO BE RELOCATED
TYP	TYPICAL
W	WIDTH

UTILITY CONTACTS

THE FOLLOWING UTILITY COMPANIES MAY HAVE FACILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION THAT MAY REQUIRE ADJUSTMENT, RELOCATION OR REMOVAL. ALL ARE MEMBERS OF J.U.L.I.E., UNLESS NOTED OTHERWISE.

AT&T (TELEPHONE) 203 GOETHE STREET COLLINSVILLE, IL 62234 (618) 346-6400	CITY OF EDWARDSVILLE (WATER & SEWER) 118 HILLSBORO AVENUE EDWARDSVILLE, IL 62025 (618) 692-7535	*IDOT (TRAFFIC SIGNALS & STREET LIGHTING) 1102 EASTPORT PLAZA DRIVE COLLINSVILLE, IL 62234 (618) 346-3110
CHARTER COMMUNICATIONS (CABLE TV) 815 CHARTER COMMONS TOWN & COUNTRY, MO 63017 (636) 387-6650	AMEREN (GAS & ELECTRIC) 2600 NORTH CENTER MARYVILLE, IL 62062 (618) 346-1287	

*NON-J.U.L.I.E. MEMBER: THE ILLINOIS DEPARTMENT OF TRANSPORTATION IS NOT A J.U.L.I.E. MEMBER. COSTS TO LOCATE THEIR FACILITIES WILL BE BY THE CONTRACTOR AND INCLUDED IN THE CONTRACT LUMP SUM COST.

THE ABOVE INFORMATION REPRESENTS THE BEST INFORMATION AVAILABLE TO THE OWNER AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS TAKEN THE FOREGOING INTO CONSIDERATION IN PREPARING HIS/HER BID, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS OR INCONVENIENCE CAUSED BY SAME.

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED TO BE APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. ILLINOIS LAW REQUIRES A MINIMUM 48-HOUR NOTICE TO ALL UTILITY COMPANIES BEFORE DIGGING. FIELD LOCATIONS OF UNDERGROUND FACILITIES MAY BE OBTAINED BY CALLING THE J.U.L.I.E. SYSTEM AT 800-892-0123 AND PROVIDING 48 HOURS ADVANCE NOTICE. NON-J.U.L.I.E. MEMBERS MAY BE CONTACTED DIRECT.

ANY FACILITIES OR APPURTENANCES WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHOULD BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF ANY SUCH FACILITY IN THEIR REMOVAL AND REARRANGEMENT OPERATIONS IN ORDER THAT THESE OPERATIONS AND THE CONSTRUCTION OF THIS PROJECT MAY PROGRESS IN A REASONABLE MANNER. ALL ROADSIDE OBJECTS (UTILITY POLES, FIRE HYDRANTS, SIGNS, ETC.) SHALL BE RELOCATED TO PROVIDE A MINIMUM OF 2 FEET CLEARANCE, MEASURED FROM THE FACE OF CURB TO THE NEAR EDGE OF THE OBJECT. THE COST OF ANY NECESSARY RELOCATIONS MAY BE INCURRED BY THE OWNER IF OTHER ARRANGEMENTS CANNOT BE MADE OR PRIOR AGREEMENTS ARE NOT IN PLACE

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATIONS
PHONE: 800-892-0123

COMMITMENTS

NONE

FILE NAME = 17063 - GENERAL NOTES & UTILITY CONTACTS.DWG



USER NAME =	ANDY MUELLER	DESIGNED -	___	REVISED -	
		DRAWN -	___	REVISED -	
PLOT SCALE =		CHECKED -	___	REVISED -	
PLOT DATE =	2019-10-17	DATE -		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, & UTILITIES, & COMMITMENTS

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	2
IL-157 AND CGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ...			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES					
QTY	QTY	CODE NO.	ITEM	UNIT	TOTAL
		20100500	TREE REMOVAL (ACRES)	ACRES	0.25
		20200100	EARTH EXCAVATION	CU YD	445
		20800150	TRENCH BACKFILL	CU YD	10
		20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	100
		20400800	FURNISHED EXCAVATION	CU YD	410
		21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1,267
		21101805	COMPOST FURNISH AND PLACE, 2"	SQ YD	2,560
		25100630	EROSION CONTROL BLANKET	SQ YD	1,660
		28000305	TEMPORARY DITCH CHECKS	FOOT	102
		28000400	PERIMETER EROSION CONTROL BARRIER	FOOT	100
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	100
		28000500	INLET AND PIPE PROTECTION	EACH	3
		28100107	STONE RIP RAP, CLASS A4	SQ YD	52
		28200200	FILTER FABRIC	SQ YD	52
		35100300	AGGREGATE BASE COURSE TYPE A, 4"	SQ YD	84

SUMMARY OF QUANTITIES					
QTY	QTY	CODE NO.	ITEM	UNIT	TOTAL
		35100500	AGGREGATE BASE COURSE TYPE A, 6"	SQ YD	1,420
		40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	30
		42400100	PORTLAND CEMENT CONCRETE SIDEWALK, 4"	SQ FT	589
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	10,048
		42400800	DETECTABLE WARNINGS	SQ FT	60
		44000600	SIDEWALK REMOVAL	SQ FT	340
		44000400	GUTTER REMOVAL	FOOT	40
		50105220	PIPE CULVERT REMOVAL	FOOT	25
		54001001	BOX CULVERT END SECTIONS, CULVERT NO 1	EACH	1
		542A0220	PIPE CULVERTS, CLASS A, TYPE 1, 15"	FOOT	53
		542A0229	PIPE CULVERTS, CLASS A, TYPE 1, 24"	FOOT	22
		542A0235	PIPE CULVERTS, CLASS A, TYPE 1, 30"	FOOT	24
		54213660	PRECAST REINFORCED CONCRETE FLARED END SECTION, 15"	EACH	1
		54213669	PRECAST REINFORCED CONCRETE FLARED END SECTION 24"	EACH	1
		54213675	PRECAST REINFORCED CONCRETE FLARED END SECTION 30"	EACH	2

FILE NAME = 17063 RE-DESIGN.DWG



USER NAME =	ANDY MUELLER	DESIGNED -	---	REVISED -	---
		DRAWN -	---	REVISED -	---
PLOT SCALE =		CHECKED -	---	REVISED -	---
PLOT DATE =	2019-10-18	DATE -	---	REVISED -	---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 1 OF 2 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	3
IL-157 AND CGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES				
QTY	UNIT	CODE NO.	ITEM	TOTAL
	SQ YD	59100100	GECCOMPOSITE WALL DRAIN	45
	EACH	60240305	INLETS, TYPE B, TYPE 10 FRAME & GRATE	1
	FOOT	60202800	CONCRETE GUTTER, TYPE B	640
Δ	CU YD	66903200	NON-SPECIAL WASTE DISPOSAL	30
Δ	EACH	66903530	SOIL DISPOSAL ANALYSIS	1
Δ	LSUM	66901001	REGULATED SUBSTANCES PRE CONSTRUCTION PLAN	1
Δ	LSUM	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	1
Δ	CAL DAY	66901006	REGULATED SUBSTANCES MONITORING	2
	LSUM	67100100	MOBILIZATION	1
	LSUM	70102632	TRAFFIC CONTROL AND PROTECTION, STND 701602	1
	LSUM	70102640	TRAFFIC CONTROL AND PROTECTION, STND 701801	1
Δ	SQ FT	72000100	SIGN PANEL TYPE 1	53.2
Δ	FOOT	72800100	TELESCOPING STEEL SIGN SUPPORT	183.0
Δ	FOOT	78001110	PAINT PAVEMENT MARKING, LINE 4"	500
Δ	FOOT	78001180	PAINT PAVEMENT MARKING, LINE 12"	35

SUMMARY OF QUANTITIES				
QTY	UNIT	CODE NO.	ITEM	TOTAL
Δ	FOOT	78001180	PAINT PAVEMENT MARKING, LINE 24"	120
Δ	EACH	88500400	RELOCATE EXISTING PED PUSH BUTTON	2
*	EACH	X0322936	REMOVE EXISTING FLARED END SECTION	2
*	FOOT	X1200050	BOX CULVERT REMOVAL	30
*	ACRE	X2500920	SEEDING, CLASS 1A, SPECIAL	0.5
Δ	FOOT	X5091725	BICYCLE RAILING, SPECIAL	86
Δ	EACH	X7240600	REMOVE AND RE-ERECT EXISTING SIGN	3
*	EACH	Z0004002	BOLLARDS	2
*	LSUM	Z0013798	CONSTRUCTION LAYOUT	1
*	LSUM	Z0016702	DETOUR SIGNING	1
*	FOOT	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	90

Δ SPECIALTY ITEMS

FILE NAME = 17003 RE-DESIGN.DWG



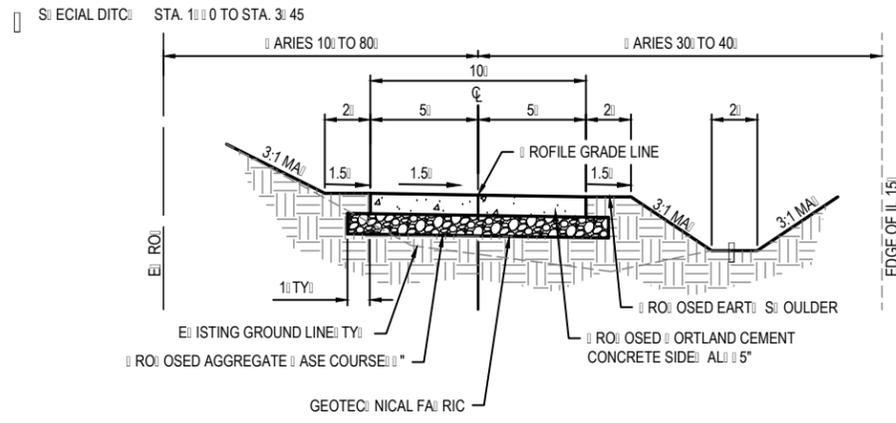
USER NAME =	ANDY MUELLER	DESIGNED -	---	REVISED -	---
		DRAWN -	---	REVISED -	---
PLOT SCALE =		CHECKED -	---	REVISED -	---
PLOT DATE =	2019-10-17	DATE -	---	REVISED -	---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

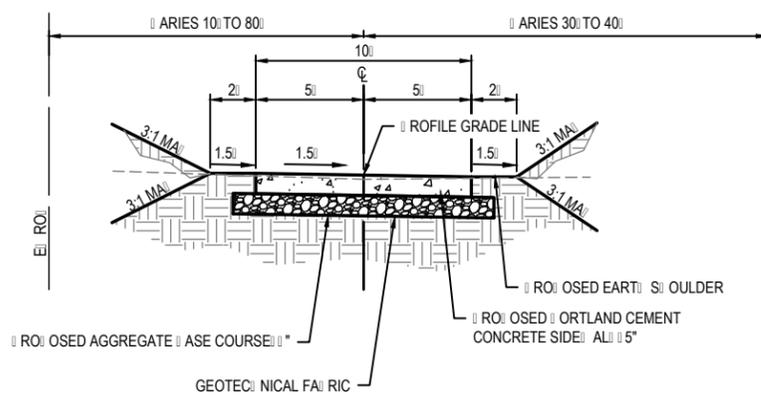
SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

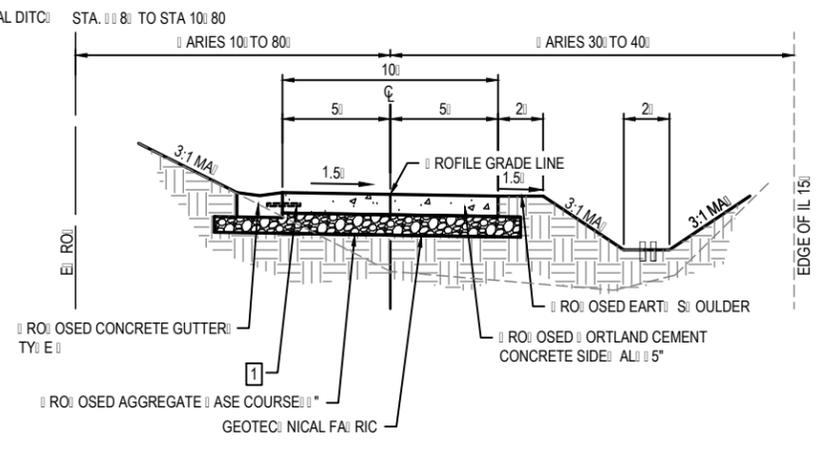
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-001111-00-BT	MADISON	19	4
I-157 AND OGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT	



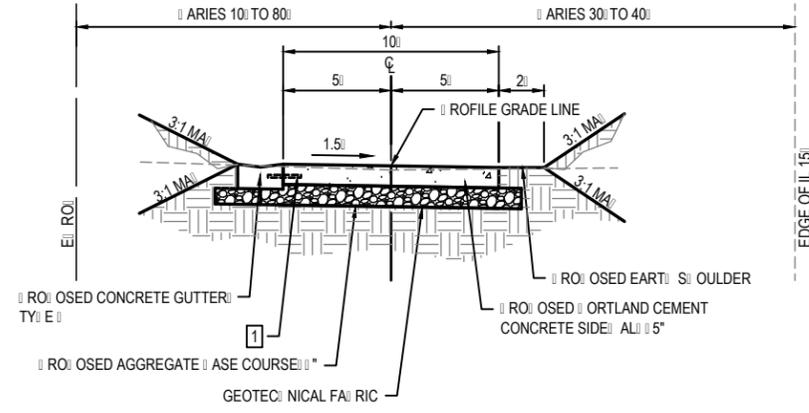
TYPICAL TRAIL SECTION
 SCALE: NO SCALE
 STA. 100 TO STA. 345
 STA. 100 TO STA. 345



TYPICAL TRAIL SECTION NO DITCH
 SCALE: NO SCALE
 STA. 100 TO STA. 100
 STA. 40 TO STA. 101
 STA. 20 TO STA. 80
 OMITTED: STA. 101 TO STA. 20



TYPICAL TRAIL SECTION WITH GUTTER
 SCALE: NO SCALE
 STA. 345 TO STA. 500
 STA. 80 TO STA. 100



TYPICAL TRAIL SECTION WITH GUTTER NO DITCH
 SCALE: NO SCALE
 STA. 500 TO STA. 40
 STA. 100 TO STA. 112

1 LONGITUDINAL JOINT TIE BARS SHALL BE NO. 4 AT 36" CENTERS IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINTS ON STANDARD 420001.

FILE NAME = 17063 RE-DESIGN.DWG



USER NAME =	SAM WRIGLEY	DESIGNED -	---	REVISED -	---
PLOT SCALE =		DRAWN -	---	REVISED -	---
PLOT DATE =	2019-09-18	CHECKED -	---	REVISED -	---
		DATE -	---	REVISED -	---

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS		
SCALE: NO SCALE	SHEET NO. 1 OF 1 SHEETS	STA. 100 TO STA. 110

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	5
IL-157 AND CGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT	

EARTHWORK

STATION	STATION	EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (NOTE 1) (CU YD)	EMBANKMENT (NOTE 2) (CU YD)	FURNISHED EXCAVATION (CU YD)
100	675	100	90	525	435
725	1110	345	310	285	-25
TOTAL		445	400	810	410

EARTHWORK NOTES:

- ESTIMATED SHRINKAGE FACTOR = 10%.
- APPROXIMATE EMBANKMENT QUANTITY IS SHOWN FOR INFORMATION ONLY.

CURB & GUTTER

STATION	STATION	OFFSET	GUTTER REM (FOOT)	CONC GUTTER TB (FOOT)
3+45	6+40	LT		295
6+70	7+27	LT/RT	40	40
7+86	11+10	LT		305
TOTAL			40	640

DRAINAGE

STATION	STATION	OFFSET	BOX CUL END SEC C1 (EACH)	GEOCOMPOSITE WALL DR (SQ YD)	BOX CULVERT REMOVAL (FOOT)	BICYCLE RAILING SPL (FOOT)	P UNDR FOR STRUCT 4 (FOOT)
11+16		RT	1	45	30	86	90
TOTAL			1	45	30	86	90

EROSION CONTROL

STATION	STATION	OFFSET	EROSION CONTR BLANKET (SY YD)	TEMP EROS CONTR SEED (NOTE 1) (POUND)	TEMP DITCH CHECKS (FOOT)	PERIMETER EROS BAR (FOOT)	INLET & PIPE PROTECTION (EACH)
3+45		RT					1
3+45		LT					1
11+00		RT					1
1+00	6+70	RT	667	30	39		
1+00	6+70	LT		30		50	
7+30	11+10	RT	693	20	63		
7+30	11+10	LT	300	20		50	
TOTAL			1,660	100	102	100	3

EROSION CONTROL NOTES:

- THE QUANTITY FOR TEMPORARY EROSION CONTROL SEEDING ASSUMES TWO SEPARATE APPLICATIONS AT A RATE OF 100 POUNDS/ACRE PER APPLICATION. THE CONTRACTOR SHALL APPLY AS NECESSARY AND AS DIRECTED BY THE ENGINEER IN THE FIELD.
- DITCH CHECK QUANTITY IS BASED ON AN ASSUMED HEIGHT OF 12". QUANTITY AND SPACING WILL VARY IF A DIFFERENT HEIGHT DITCH CHECK IS USED.

SIDEWALK

STATION	STATION	GEOTECH FAB F/GR STAB (SQ YD)	AGG BASE CSE, TA 4 (SQ YD)	AGG BASE CSE, TA 6 (SQ YD)	PC CONC SIDEWALK 4 (NOTE 1) (SQ FT)	PC CONC SIDEWALK 5 (NOTE 1) (SQ FT)	DETECTABLE WARNINGS (NOTE 1) (SQ FT)	SIDEWALK REM (SQ FT)	BOLLARDS (EACH)
0+95	1+00		7		58		10	58	
1+00	6+82	760		830		3918	20		1
1+37	1+54		15		133	150	10		
6+50	6+82		45		398				
7+38	11+10	507		557		5698	20		1
11+10	11+25			33		282		282	
TOTAL		1,267	67	1,420	589	10,048	60	340	2

SIDEWALK NOTES:

- SIDEWALK RAMPS ACCESSIBLE TO THE DISABLED ARE REQUIRED. SEE PLAN SHEETS FOR LOCATIONS AND TYPES. SEE CONSTRUCTION DETAILS SHEET AND HIGHWAY STANDARD 424001 FOR CURB RAMP DETAILS.

SIGN

STATION	OFFSET	TYPE	DESCRIPTION	SIZE (FT X FT)	SIGN PANEL T1 (SQ FT)	TELES STL SIN SUPPORT (FOOT)	REM & RE ERECT EX SIN (EACH)	NOTES (EACH)
1+13	LT	R1-1	STOP	18 X 18	2.25	16		PLACE R5-3 ON BACK SIDE
		SP-Q	BIKERS DISMOUNT	24 X 18	3			
		R5-3	NO MOTOR VEHICLES	24 X 24	4			
2+80	RT	W11-1	BICYCLE SIGN	30 X 30	6.25			
6+54	RT	R1-1	STOP	18 X 18	2.25	14.5		
6+60	RT	R1-1	STOP	30 X 30		14.5	1	EXISTING STOP SIGN TO BE RELOCATED
6+62	LT	R5-3	NO MOTOR VEHICLES	24 X 24	4.00	15		
6+76	LT	W11-1	BICYCLE SIGN	30 X 30	6.25	16.5		
6+76	LT	D11-1	BIKE ROUTE	24 X 18	3.00	16		
		M6-1	SINGLE ARROW	21 X 15	2.20			
7+38	LT	R1-1	STOP	18 X 18	2.25	14.5		PLACE R5-3 ON BACK SIDE
		R5-3	NO MOTOR VEHICLES	24 X 24	4.00			
7+42	RT	D3-1	STREET NAME	24 X 8		13.5	1	REPLACE SIGN SUPPORT
9+25	RT	SP-2L	BIKE X-ING	30 X 30	6.25	18		
		W11-1P	"BIKE X-ING"	24 X 18	3.00			
11+08	RT	R1-1	STOP	18 X 18	2.25	14.5		
11+25	LT	W2-2	INTERSECTION WARNING	18 X 18		15	1	EXISTING SIGN AND PLAQUE TO BE RELOCATED
		W16-2aP	225' AHEAD	12 X 6				
11+25	RT	W2-1	INTERSECTION WARNING	18 X 18	2.25			REPLACE SIGN PANEL ON EX POST (EAST OF 157)
TOTAL:					53.2	183.0	3	

FILE NAME = 17063 RE-DESIGN.DWG



USER NAME =	ANDY MUELLER	DESIGNED -	---	REVISED -	---
PLOT SCALE =		DRAWN -	---	REVISED -	---
PLOT DATE =	2019-10-18	CHECKED -	---	REVISED -	---
		DATE -	---	REVISED -	---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	6
IL-157 AND CGR NATURE TRAIL CONNECTION				CONTRACT NO. 97688
FED. ROAD DIST. NO. ILLINOIS				FED. AID PROJECT

DRAINAGE

STATION	STATION	OFFSET	TRENCH BACKFILL (CU YD)	STONE RIPRAP CL A4 (SQ YD)	FILTER FABRIC (SQ YD)	PIPE CULVERT REMOV (FOOT)	P CUL CL A 1 15 (FOOT)	P CUL CL A 1 24 (FOOT)	P CUL CL A 30 (FOOT)	PRC FLAR END SEC 15 (EACH)	PRC FLAR END SEC 24 (EACH)	PRC FLAR END SEC 30 (EACH)	INLETS TB T10F&G (EACH)	REMOV EX FLAR END SEC (EACH)
1+40	1+60	RT	2				28							
1+43		RT												1
1+60	1+77	RT		6	6					1				
3+45		LT											1	1
3+45		RT	2	7	7			22			1			
10+98		LT		16	16							1		
10+98		RT		23	23							1		
10+98		LT/RT	3						24					
11+03	11+25	RT	3			25	25							
TOTAL			10	52	52	25	53	22	24	1	1	2	1	2

SPECIAL WASTE DISPOSAL

STATION	STATION	OFFSET	REM & DISP UNS MATL (CU YD)	NON SPL WASTE DISPOSL (CU YD)	REG SUB MATL (CAL DA)
1+00	11+16	LT/RT	100	30	2
TOTAL			100	30	2

SEEDING

STATION	STATION	OFFSET	TREE REMOVAL ACRES	SEEDING CL 1A SPL (ACRE)	NITROGEN FERT NUTR (NOTE 1) (POUND)	PHOSPHORUS FERT NUTR (NOTE 1) (POUND)	POTASSIUM FERT NUTR (NOTE 1) (POUND)	MULCH METHOD 2 (NOTE 1) (ACRE)	COMPOST F & P 2 (SY YD)
1+00	6+70	RT		0.15	13.5	13.5	13.5	0.15	667
1+00	6+70	LT		0.15	13.5	13.5	13.5	0.15	587
7+30	11+10	RT		0.10	9.0	9.0	9.0	0.10	693
7+30	11+10	LT		0.10	9.0	9.0	9.0	0.10	613
10+40	10+98	LT/RT	0.25						
TOTAL			0.25	0.5	45	45	45	0.5	2560

SEEDING NOTES:

- FERTILIZER AND MULCH QUANTITIES ARE SHOWN FOR INFORMATION ONLY. THE COST FOR FERTILIZER NUTRIENTS AND MULCH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR SEEDING, CLASS 1A (SPECIAL). THE APPLICATION RATE FOR FERTILIZER NUTRIENTS IS 90 LBS/ACRE FOR ESTIMATION PURPOSES.
- TREE REMOVAL ROUNDED TO THE NEAREST QUARTER ACRE

PAVEMENT MARKING

STATION	STATION	OFFSET	COMMENT	PAINT PVT MK LINE 4 (NOTE 1) (FOOT)	PAINT PVT MK LINE 12 (NOTE 1) (FOOT)	PAINT PVT MK LINE 24 (NOTE 1) (FOOT)	RELOC EX PED PUSH-BUT (NOTE 2) (EACH)
1+00	1+85	CL	SOLID YELLOW	85			
1+01		RT					2
1+85	6+00	CL	SKIP DASH YELLOW	104			
6+00	6+70	CL	SOLID YELLOW	97			
6+70		RT	STOP BAR		5		
6+70	7+27	LT	COMMERCE DRIVE CROSSWALK		20	120	
7+27		LT	STOP BAR		5		
7+27	7+96	CL	SOLID YELLOW	80			
7+96	10+30	CL	SKIP DASH YELLOW	59			
10+30	11+10	CL	SOLID YELLOW	75			
11+10		RT	STOP BAR		5		
TOTAL				500	35	120	2

PAVEMENT MARKING NOTES:

- SEE HIGHWAY STANDARD 780001 FOR PAVEMENT MARKING DETAILS.
- QUANTITY INCLUDES PEDESTRIAN PUSH BUTTONS ON BOTH SIDES OF IL RTE 157

FILE NAME = T0003 RE-DESIGN.DWG



USER NAME =	ANDY MUELLER	DESIGNED -	---	REVISED -	---
PLOT SCALE =		DRAWN -	---	REVISED -	---
PLOT DATE =	2019-10-18	CHECKED -	---	REVISED -	---
		DATE -	---	REVISED -	---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

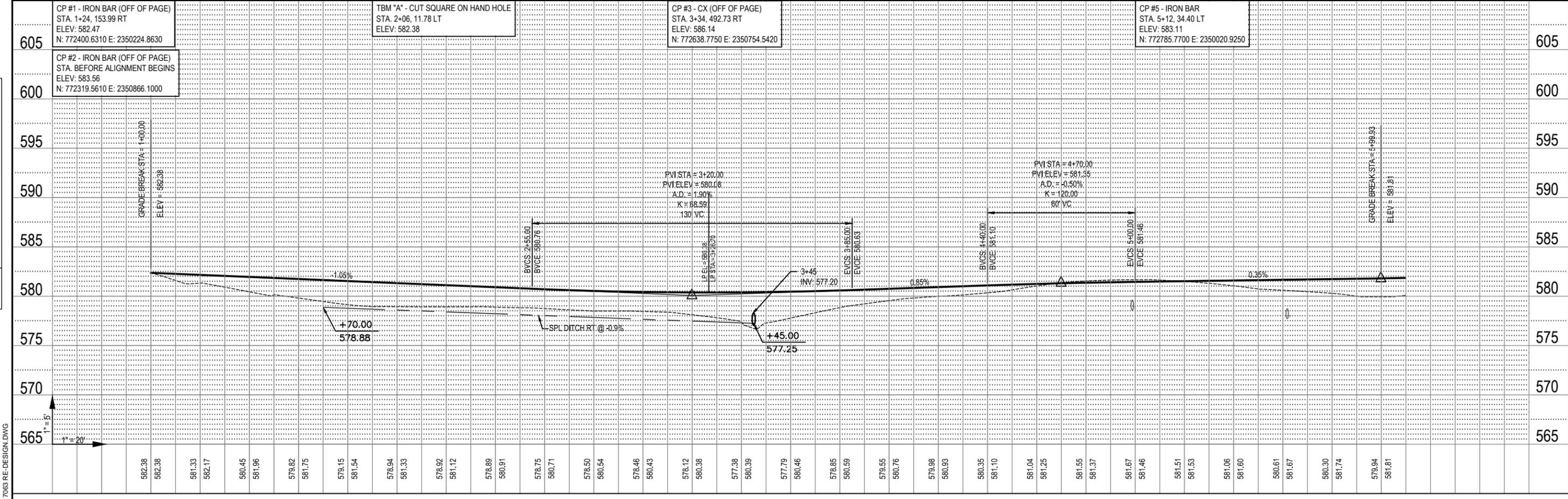
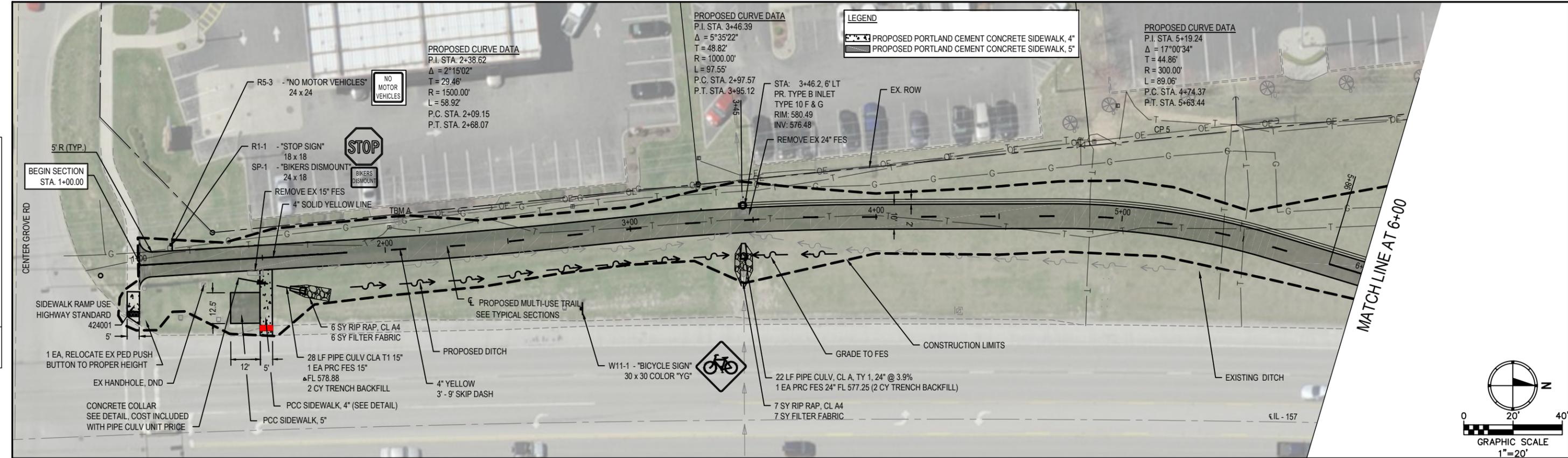
SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	7

ILL-157 AND CGR NATURE TRAIL CONNECTION CONTRACT NO. 97688
FED ROAD DIST. NO. ILLINOIS FED AID PROJECT

DATE	
BY	
REVIEWED	
PLANNED	
ALIGNED	
CHECKED	
DATE	
NO.	

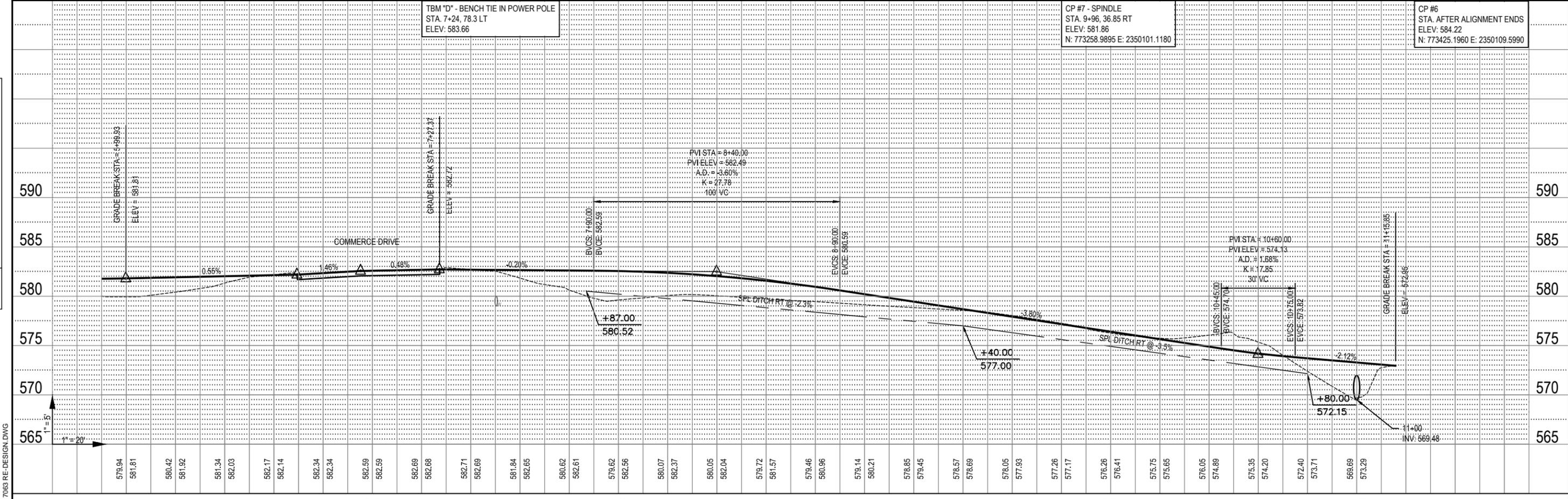
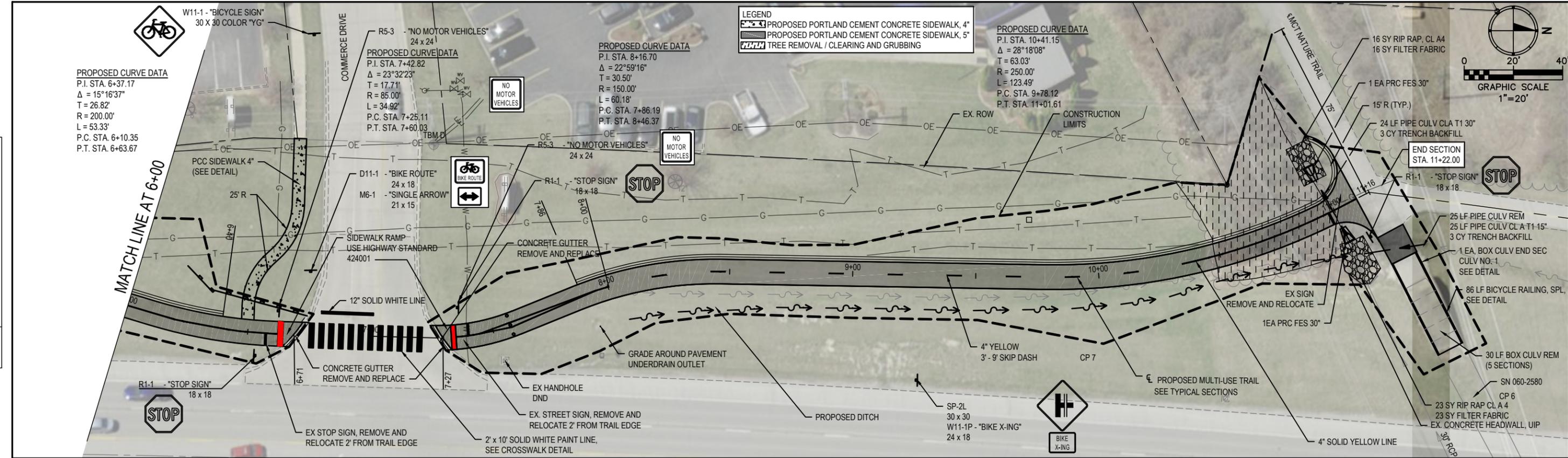
DATE	
BY	
REVIEWED	
PLANNED	
CHECKED	
DATE	
NO.	



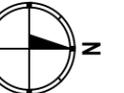
 ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115	USER NAME = ANDY MUELLER PLOT SCALE = 1" = 1' PLOT DATE = 2019-10-17	DESIGNED - DRAWN - CHECKED - DATE -	BID DOCUMENTS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED TRAIL PLAN AND PROFILE	F.A.P. RTE. 592 SECTION 17-00111-00-BT COUNTY MADISON TOTAL SHEETS 19 SHEET NO. 8
	ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115	DATE	DATE	SCALE: 1" = 20' SHEET NO. 1 OF 2 SHEETS STA. 1+00 TO STA. 6+70	IL-157 AND CGR NATURE TRAIL CONNECTION CONTRACT NO. 97688	ILLINOIS

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
ALIGNED	
CHECKED	
DATE	
NO.	
NO.	
NO.	
NO.	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NO.	
NO.	
NO.	
NO.	



 ILLINOIS DESIGN FIRM LICENSE NO.: 184,001115	USER NAME = ANDY MUELLER PLOT SCALE = 1" = 1' PLOT DATE = 2019-10-17	DESIGNED - DRAWN - CHECKED - DATE -	BID DOCUMENTS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED TRAIL PLAN AND PROFILE	F.A.P. RTE. 592 SECTION 17-00111-00-BT COUNTY MADISON TOTAL SHEETS 19 SHEET NO. 9
	SCALE: 1" = 20' SHEET NO. 2 OF 2 SHEETS STA. 6+70 TO STA. 11+10	IL-192 AND CGR NATURE TRAIL CONNECTION CONTRACT NO. 97688 ILLINOIS				



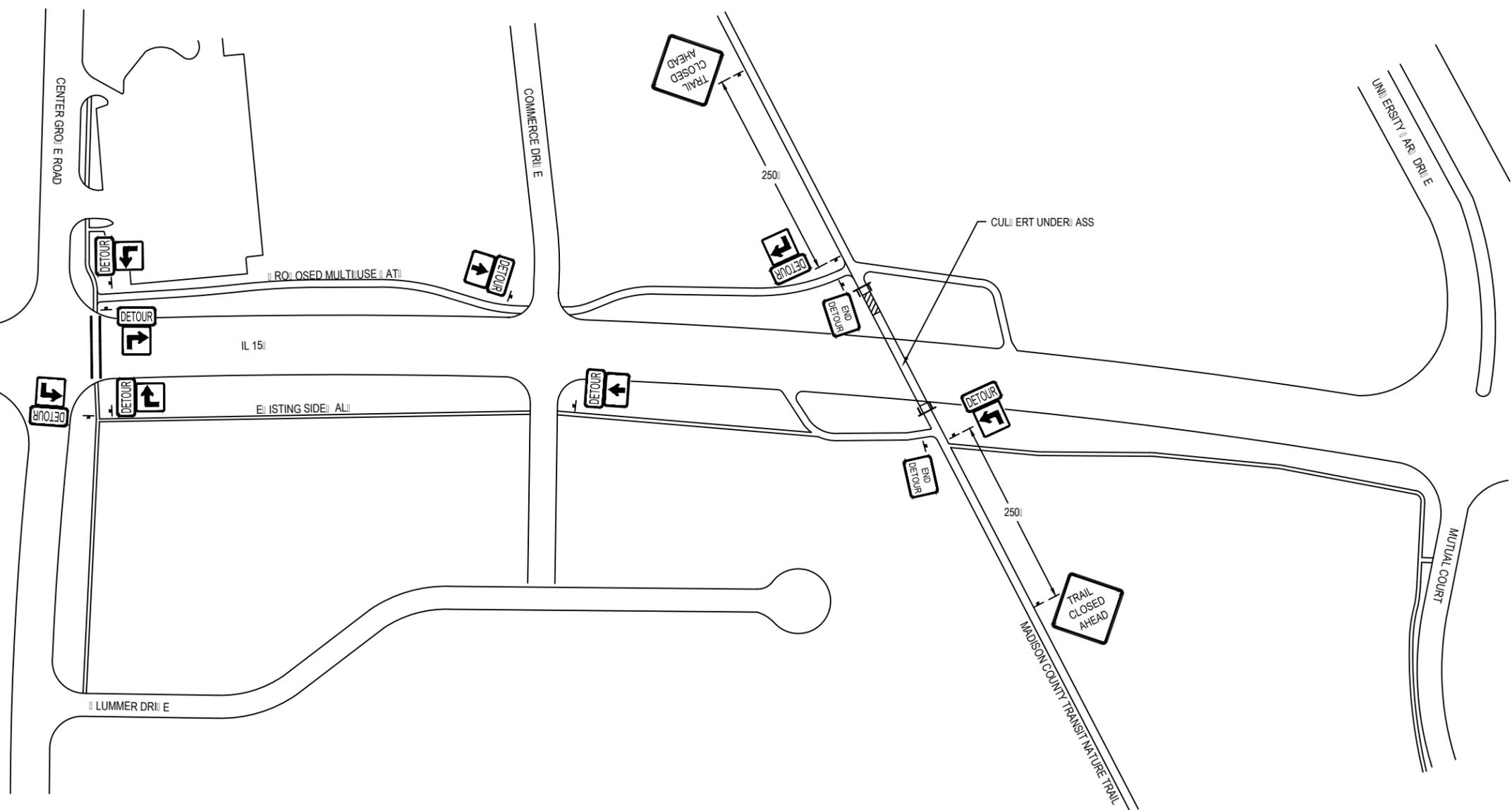
NOT TO SCALE

NOTES:

1. ALL SIGNS MAY BE PLACED ON TYPE III ARRICADES
2. ALL SIGNAGE SHOULD BE ON THE EAST SIDE OF ALL TYPE III ARRICADES FOR DETOUR SIGNING

LEGEND

-  20x3/48" x 48" (FLUORESCENT ORANGE)
-  SPECIAL (24" x 24") (FLUORESCENT ORANGE)
-  SPECIAL (24" x 24") (FLUORESCENT ORANGE)
-  M4:8 (24" x 12") (ORANGE)
-  M4:8 (24" x 18") (ORANGE)
-  M1:3 (21" x 15") (FLUORESCENT ORANGE)
-  TRAFFIC CONTROL SIGN LOCATION
-  WORK AREA
-  TYPE III ARRICADE



FILE NAME = 17063 RE-DESIGN.DWG

OATES ASSOCIATES
 ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115

USER NAME =	SAM WRIGLEY	DESIGNED -	---	REVISED -	---
PLOT SCALE =	6" = 1'	DRAWN -	---	REVISED -	---
PLOT DATE =	2019-09-18	CHECKED -	---	REVISED -	---
		DATE -	2008-02-25	REVISED -	---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAIL DETOUR PLAN

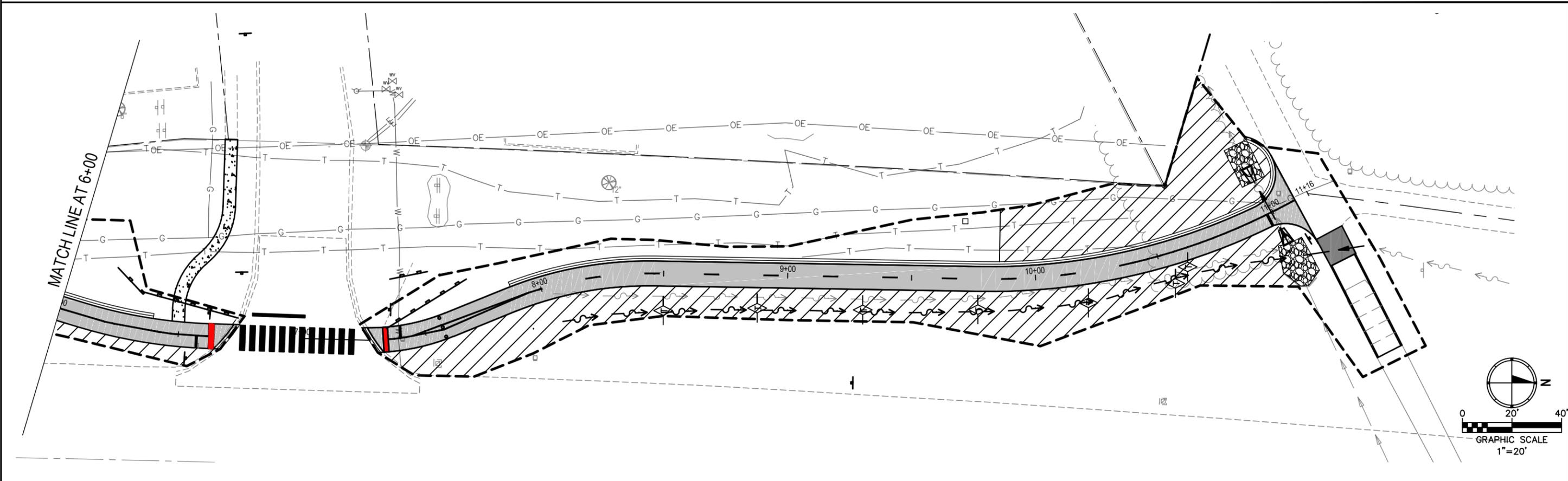
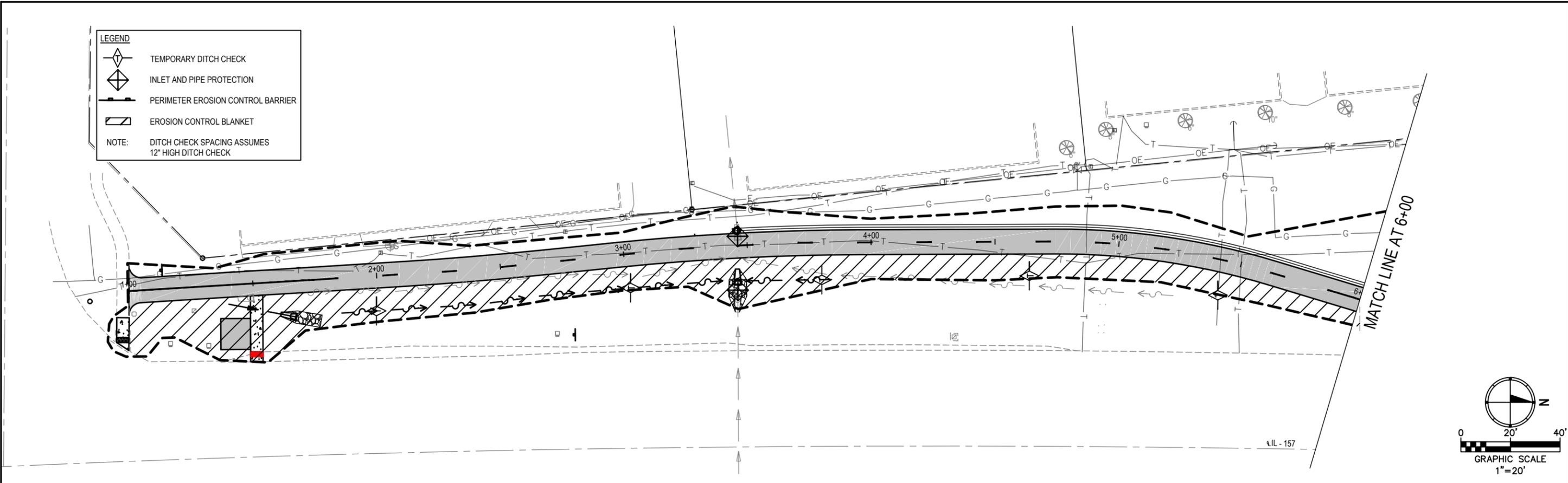
SCALE: SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
492	17-00111-00-BT	ST. CLAIR	19	10
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

LEGEND

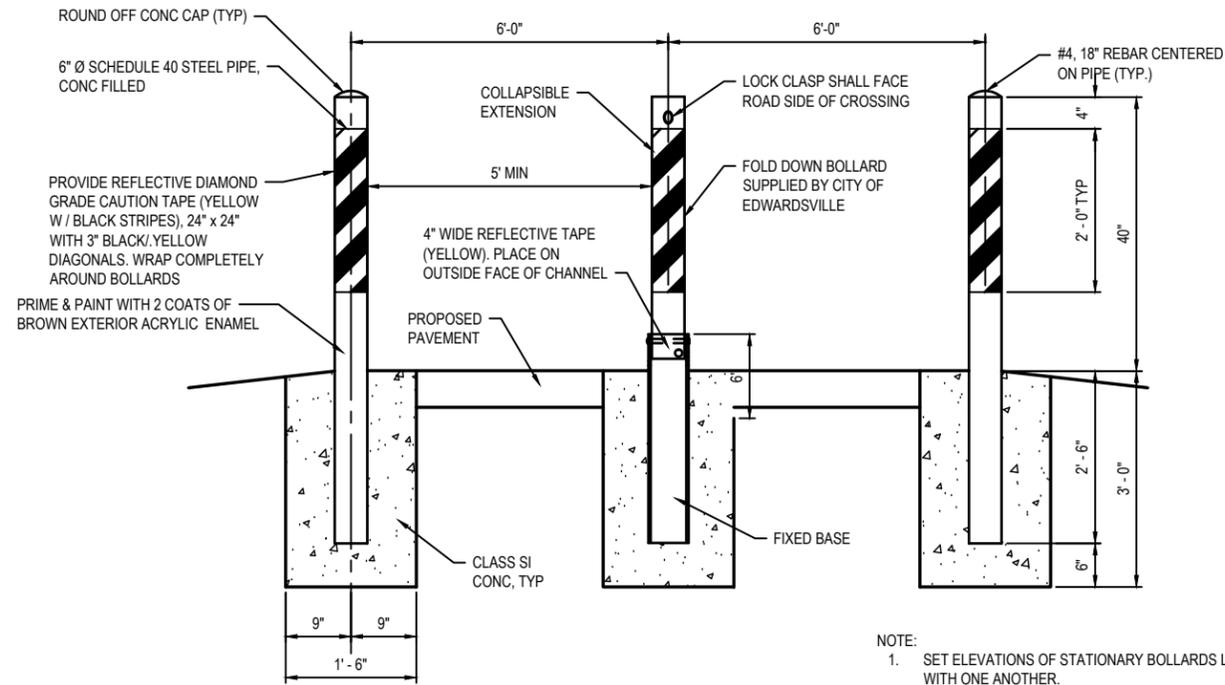
-  TEMPORARY DITCH CHECK
-  INLET AND PIPE PROTECTION
-  PERIMETER EROSION CONTROL BARRIER
-  EROSION CONTROL BLANKET

NOTE: DITCH CHECK SPACING ASSUMES 12" HIGH DITCH CHECK



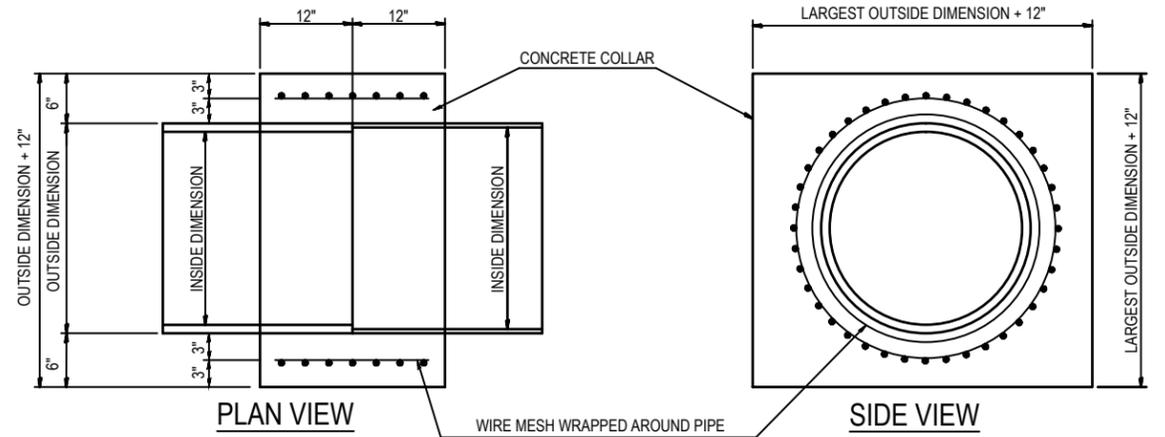
FILE NAME = 17063 RE-DESIGN.DWG

 <p>OATES ASSOCIATES www.oatesassociates.com ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115</p>	USER NAME = ANDY MUELLER	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL SHEET		F.A. RTE. = 592	SECTION = 17-00111-00-BT	COUNTY = ST. CLAIR	TOTAL SHEETS = 19	SHEET NO. = 11
	PLOT SCALE = 6" = 1'	CHECKED -	REVISED -				SCALE: SHEET NO. 1 OF 1 SHEETS	STA. 1+00 TO STA. 11+10	CONTRACT NO. = 97688		
	PLOT DATE = 2019-10-17	DATE = 2008-02-25	REVISED -				FED. ROAD DIST. NO. = ILLINOIS		FED. AID PROJECT		



BOLLARD ASSEMBLY DETAIL
SCALE: NO SCALE

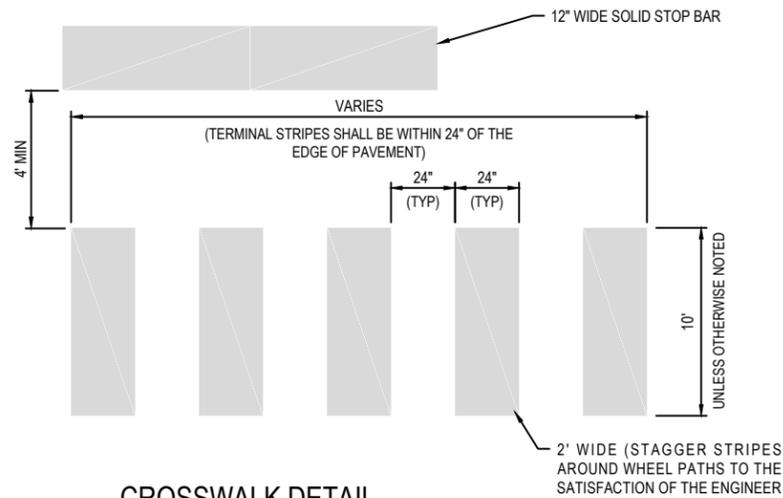
NOTE:
1. SET ELEVATIONS OF STATIONARY BOLLARDS LEVEL WITH ONE ANOTHER.



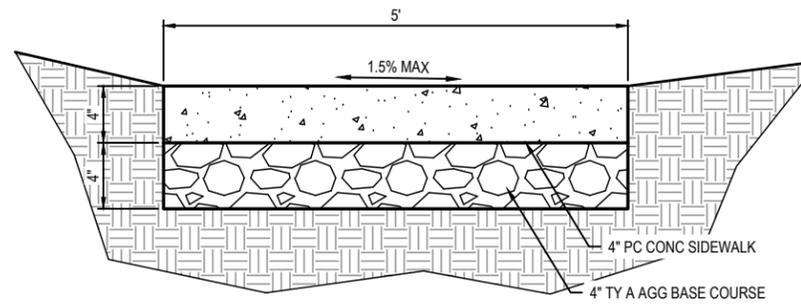
CONCRETE COLLAR NOTES

1. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
2. WHEN CONCRETE COLLARS ARE USED TO CONNECT PIPES OF DIFFERENT OUTSIDE DIMENSIONS, THE CONCRETE COLLAR SHALL BE FORMED USING THE LARGEST OUTSIDE DIMENSION. (SEE END VIEW)
3. THE WIRE MESH SHALL WEIGHT NOT LESS THAN 54 POUNDS PER 100 SQ. FT.
4. CONCRETE COLLARS AND THE WORK REQUIRED WILL BE INCLUDED IN THE PRICE FOR THE PIPE CULVERT THEY ARE CONNECTED TO.

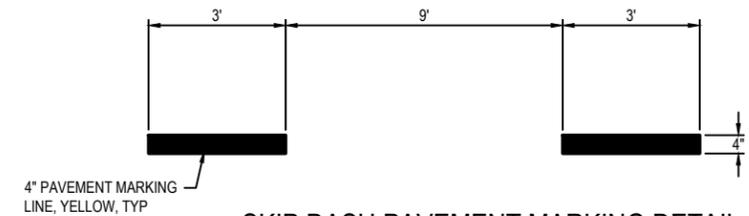
CONCRETE COLLAR DETAIL
SCALE: NO SCALE



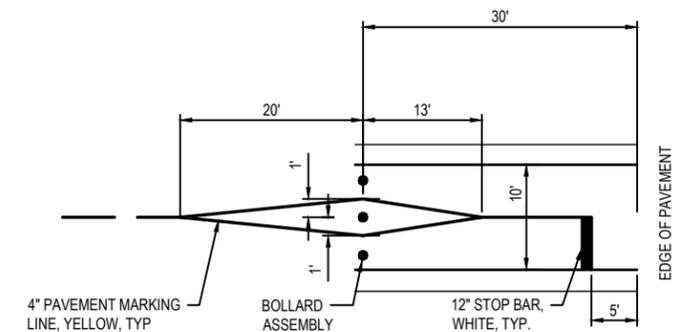
CROSSWALK DETAIL
SCALE: NO SCALE



PCC SIDEWALK, 4\"/>



SKIP DASH PAVEMENT MARKING DETAIL
SCALE: NO SCALE



CROSSING DETAIL
SCALE: NO SCALE

FILE NAME = 17063 RE-DESIGN.DWG



USER NAME =	ANDY MUELLER	DESIGNED -	---	REVISED -	---
PLOT SCALE =		DRAWN -	---	REVISED -	---
PLOT DATE =	2019-10-17	CHECKED -	---	REVISED -	---
		DATE -	---	REVISED -	---

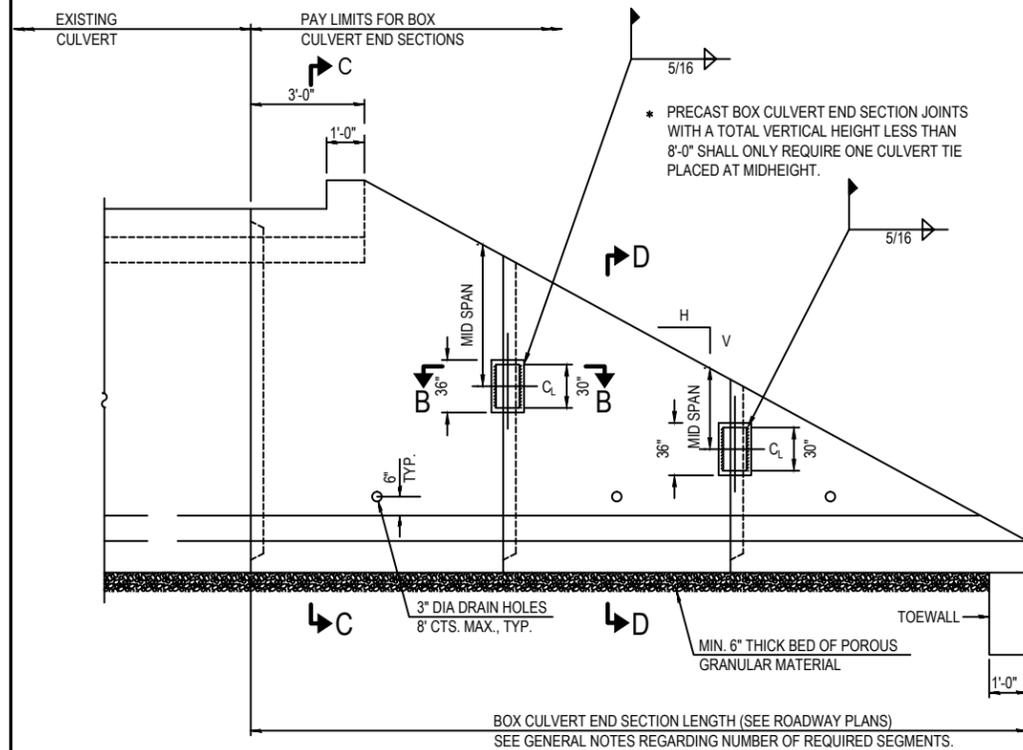
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS		
SCALE: NO SCALE	SHEET NO. 1 OF 4 SHEETS	STA. 1+00 TO STA. 11+10

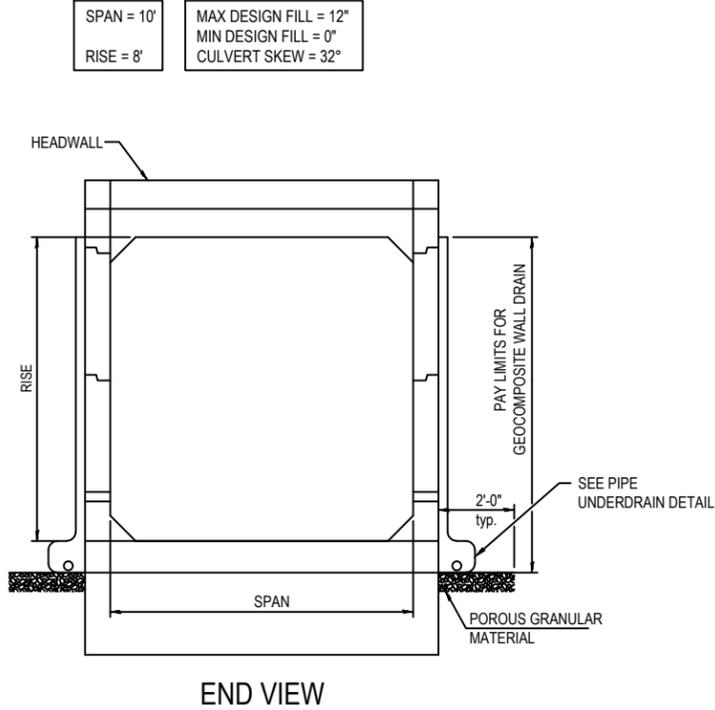
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	12
IL-157 AND GGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT	

GENERAL NOTES

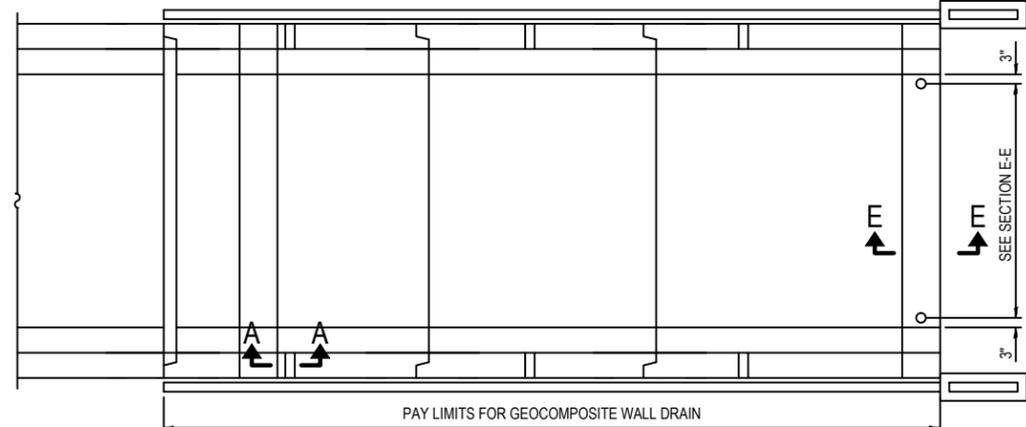
- BOX CULVERT END SECTIONS SHALL BE CONSTRUCTED ACCORDING TO THE REQUIREMENTS OF SECTION 540 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED HEREIN. THIS WORK WILL BE MEASURED FOR PAYMENT AS EACH, WITH EACH END OF EACH CULVERT BEING ONE EACH. END SECTIONS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR BOX CULVERT END SECTIONS OF THE CULVERT NUMBER SPECIFIED.
- TYPICAL BOX SECTION DIMENSIONS, MATERIALS, AND REINFORCEMENT DETAILS FOR BOX CULVERT END SECTIONS SHALL BE ACCORDING TO THE REQUIREMENTS OF ASTM C 1577 AS REQUIRED FOR THE DESIGN OF THE PORTION OF THE CULVERT WITHIN THE LIMITS OF PRECAST CONCRETE BOX CULVERTS EXCEPT AS MODIFIED HEREIN.
- NUMBER OF SEGMENTS SHOWN IN ELEVATION IS FOR EXAMPLE ONLY. LENGTH AND NUMBER OF PRECAST BOX SECTIONS REQUIRED TO CONSTRUCT BOX CULVERT END SECTIONS SHALL BE DETERMINED BY THE CONTRACTOR.
- SEE ROADWAY PLANS FOR EMBANKMENT SLOPE (V:H).
- 1" DIA ANCHOR RODS FOR THE CULVERT TIES SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1554, GRADE 105. STRUCTURAL STEEL FOR THE TIE PLATE AND RESTRAINT ANGLE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.04 OF THE STANDARD SPECIFICATIONS. ALL COMPONENTS OF THE CULVERT TIE DETAIL SHALL BE GALVANIZED ACCORDING TO THE REQUIREMENTS OF AASHTO M 111 OR M 232 AS APPLICABLE. 2" X 2" X 5/8" PLATE WASHERS SHALL BE PROVIDED UNDER EACH NUT REQUIRED FOR THE ANCHOR RODS. ANCHOR RODS CONNECTING PRECAST SECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION FOLLOWED BY AN ADDITIONAL TURN ON ONE OF THE NUTS FOR ANCHOR RODS INSTALLED IN THE WALLS. MATCH MARKS SHALL BE PROVIDED ON THE BOLT AND NUT TO VERIFY RELATIVE ROTATION BETWEEN THE BOLT AND THE NUT. HOLES IN THE WALLS FOR THE CULVERT TIE ASSEMBLY MAY BE DRILLED USING CORE BITS IN LIEU OF USING FORMED HOLES.
- ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING OR CONSTRUCTING THE TOEWALL AND CULVERT TIES WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR BOX CULVERT END SECTIONS OF THE CULVERT NUMBER SPECIFIED.
- DRAIN HOLES SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 503.11 OF THE STANDARD SPECIFICATIONS UNLESS NOTED OTHERWISE.
- NONWOVEN GEOTEXTILE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1080.01. THE MINIMUM WEIGHT OF THE FABRIC SHALL BE 6 OZ. / SQ. YD..
- THE MAXIMUM PERMISSIBLE BOX CULVERT FLOOR TOLERANCE SHALL BE 3/8" VERTICAL AND 3/8" HORIZONTAL. IF ACTUAL OFFSETS ALONG ENTIRE LENGTH OF EXISTING CULVERT AND PROPOSED CULVERT END SECTION EXCEED THESE LIMITATIONS, THE JOINT SHALL BE REPAIRED WITH AN EPOXY MORTAR IN ACCORDANCE WITH ARTICLE 1025.02 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE FOR BOX CULVERT END SECTION.
- THE JOINT BETWEEN THE END OF THE EXISTING CULVERT AND THE NEW END SECTION WILL BE FILLED WITH AN EPOXY MORTAR IN ACCORDANCE WITH ARTICLE 1025.02 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE FOR BOX CULVERT END SECTION.



ELEVATION



END VIEW

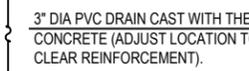


PLAN

CONCRETE HEADWALL FOR PIPE UNDERDRAINS

12" X 12" X 6" BLOCK OF CA5, CA7, OR CATT COARSE AGGREGATE PLACED OVER DRAIN OPENING. BLOCK OF AGGREGATE SHALL BE COMPLETELY WRAPPED IN NONWOVEN GEOTEXTILE FABRIC.

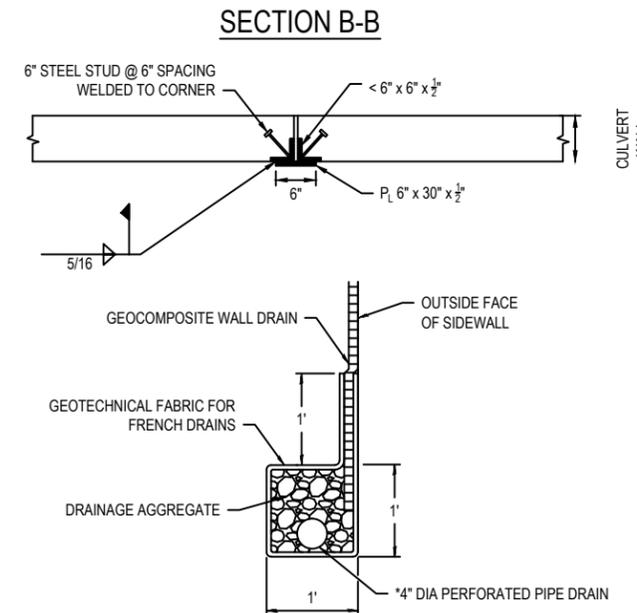
PROVIDE A DOUBLE LAYER OF 12" X 12" NONWOVEN GEOTEXTILE FABRIC CENTERED OVER THE DRAIN HOLE. FABRIC SHALL BE SEALED TO THE CONCRETE WITH MASTIC.



* SQUARE FOAM BLOCKOUT AROUND PVC DRAIN (TO BE REMOVED WITH FORMWORK)

SECTION A-A

(ALL COSTS ASSOCIATED WITH FURNISHING AND CONSTRUCTING THE ABOVE DRAIN DETAIL WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE ASSOCIATED WORK.)



PIPE UNDERDRAIN DETAIL

* COST INCLUDED WITH PIPE UNDERDRAINS FOR STRUCTURES 4". ALL DRAINAGE COMPONENTS SHALL EXTEND TO 2'-0" FROM THE END OF EACH WINGWALL, EXCEPT AN OUTLET PIPE SHALL EXTEND UNTIL INTERSECTING WITH SIDE SLOPES. THE PIPES SHALL DRAIN INTO CONCRETE HEADWALLS. SEE HIGHWAY STANDARD 601101.

SINGLE CELL PRECAST BOX CULVERT TAPERED END SECTIONS

SCALE: NO SCALE

BOX CULVERT END SECTION, CULVERT NO.1
SHEET 1 OF 2

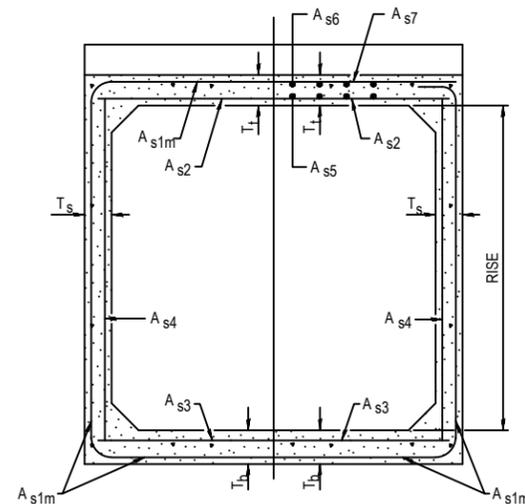
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS

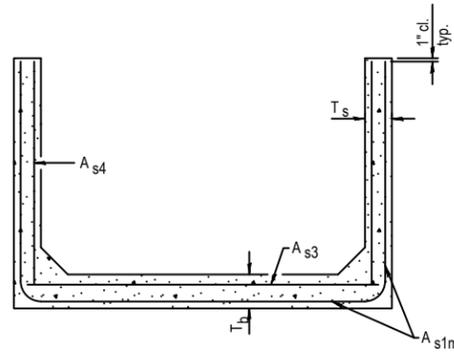
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	13
IL-157 AND GGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT	

SCALE: NO SCALE SHEET NO. 2 OF 4 SHEETS STA. 1+00 TO STA. 11+10

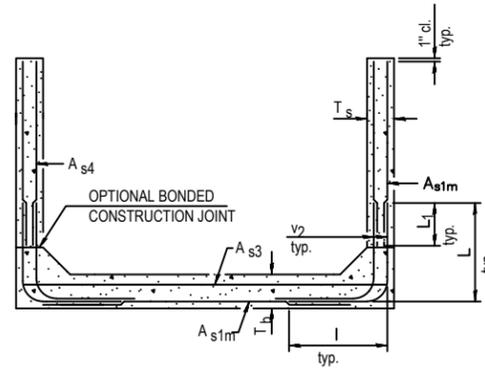
USER NAME = ANDY MUELLER	DESIGNED -	REVISIONS
PLOT SCALE =	DRAWN -	REVISIONS
PLOT DATE = 2019-10-17	CHECKED -	REVISIONS
	DATE -	REVISIONS



SECTION C-C



SECTION D-D



ALTERNATE SECTION D-D

As1m REINFORCEMENT (IN ² ./FT.)											
RISE (ft)	2	3	4	5	6	7	8	9	10	11	12
T _s (in.) 4	0.19	0.17									
5	0.26	0.21	0.18								
6	0.22	0.26	0.23	0.22							
7	0.25	0.33	0.59	0.27	0.28						
8	0.40	0.35	0.43	0.39	0.36	0.34	0.40				
9	0.44	0.39	0.35	0.43	0.40	0.37	0.36	0.48			
10	0.48	0.42	0.38	0.47	0.44	0.41	0.38	0.42	0.56		
11	0.52	0.45	0.54	0.50	0.46	0.44	0.41	0.46	0.50	0.65	
12	0.55	0.49	0.58	0.54	0.50	0.48	0.45	0.46	0.46	0.61	0.75

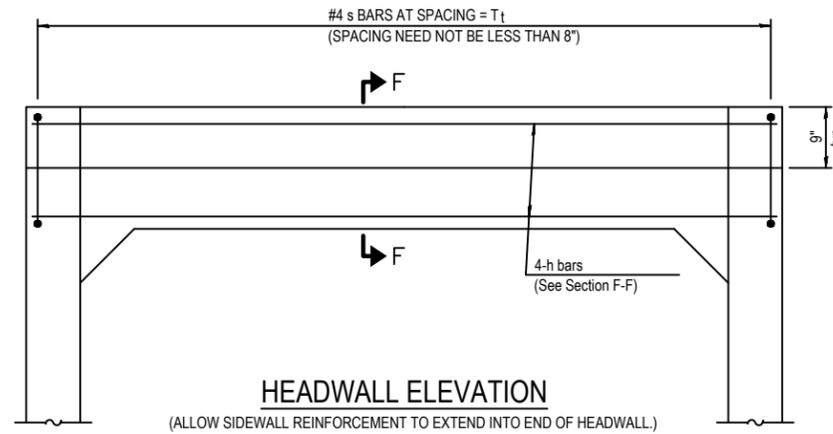
(AS1M REINFORCEMENT BASED UPON WELDED WIRE REINFORCEMENT CONFORMING TO AASHTO M 55 OR M 221)

NOTES:

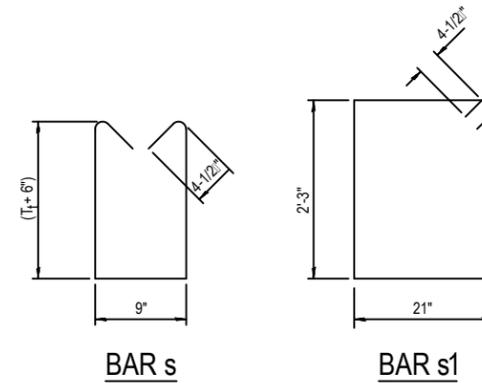
L₁ DIMENSION

- #3 BAR = 2'-0"
- #4 BAR = 2'-8"
- #5 BAR = 3'-4"
- #6 BAR = 3'-11"

1. ALTERNATE SECTION D-D IS PROVIDED TO ALLOW THE CONTRACTOR THE OPTION OF CASTING THE BOTTOM SLAB OF THE END SECTION FIRST FOLLOWED BY CONSTRUCTION OF THE SIDEWALLS USING CONVENTIONAL FORMING METHODS. SHOP DRAWINGS THAT DETAIL SLAB THICKNESS AND REINFORCEMENT LAYOUT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL WHEN USING ALTERNATE SECTION D-D.
2. THE SIZE AND SPACING OF THE V2 BARS SHALL PROVIDE A MINIMUM REINFORCEMENT AREA ALONG EACH FACE OF THE WALLS (IN²./FT.) EQUAL TO 1.10*(AS1M). V2 BARS MAY CONSIST OF #3 THRU #6 SIZE REINFORCEMENT BARS AND THE LONGITUDINAL SPACING SHALL NOT EXCEED THE LESSER OF THE WALL THICKNESS OR 8 INCHES.
3. BONDED CONSTRUCTION JOINTS SHALL BE PREPARED ACCORDING TO ARTICLE 503.09 OF THE STANDARD SPECIFICATIONS.

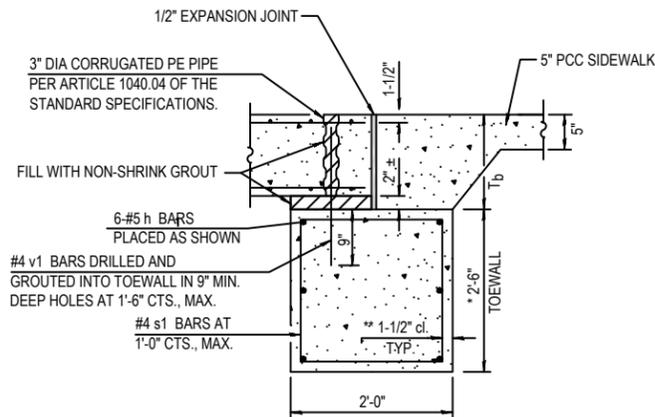


HEADWALL ELEVATION



BAR s

BAR s1

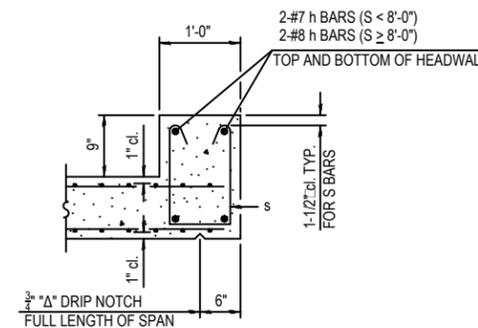


SECTION E-E

TOEWALL CONSTRUCTION SEQUENCE

1. PERFORM EXCAVATION AND CONSTRUCT TOEWALL.
2. BACKFILL ACCORDING TO THE APPLICABLE PARAGRAPHS OF ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS AND PLACE BEDDING FOR PRECAST BOX CULVERT END SECTIONS.
3. SET PRECAST BOX CULVERT END SECTION.
4. DRILL AND EPOXY GROUT REINFORCEMENT IN TOEWALL IN ACCORDANCE WITH SECTION 584 OF THE STANDARD SPECIFICATIONS.
5. PRESSURE GROUT VOIDS USING NON-SHRINK GROUT CONFORMING TO SECTION 1024 OF THE STANDARD SPECIFICATIONS.

- * THE CONTRACTOR MAY FURNISH A PRECAST OR CAST-IN-PLACE TOEWALL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE PRECAST TOEWALL DURING HANDLING. ADDITIONAL LIFTING POINTS MAY BE REQUIRED DEPENDING UPON THE LENGTH OF THE TOEWALL OR THE CONTRACTOR MAY NEED TO MODIFY THE DESIGN OF THE TOEWALL FOR THE PROPOSED HANDLING THE METHOD.
- ** IF SOIL CONDITIONS PERMIT, THE SIDES OF THE TOEWALL MAY BE POURED DIRECTLY AGAINST THE SOIL. THE CLEAR COVER ON THE SIDES OF THE TOEWALL SHALL BE INCREASED TO 3" BY INCREASING THE THICKNESS OF THE TOEWALL.



SECTION F-F

BOX CULVERT END SECTION, CULVERT NO.1
SHEET 2 OF 2

FILE NAME = 17063 RE-DESIGN.DWG



USER NAME =	ANDY MUELLER	DESIGNED -	___	REVISED -	___
PLOT SCALE =		DRAWN -	___	REVISED -	___
PLOT DATE =	2019-10-17	CHECKED -	___	REVISED -	___
		DATE -	___	REVISED -	___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

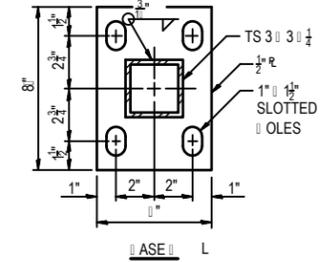
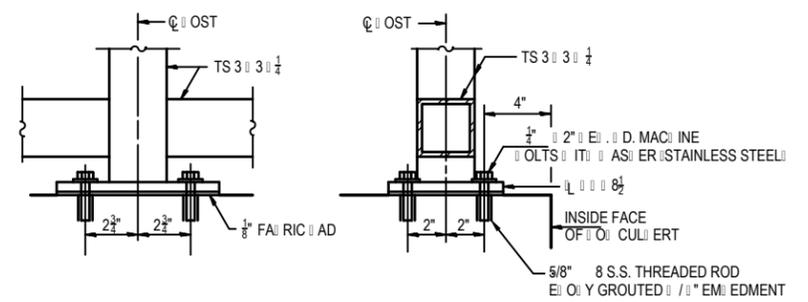
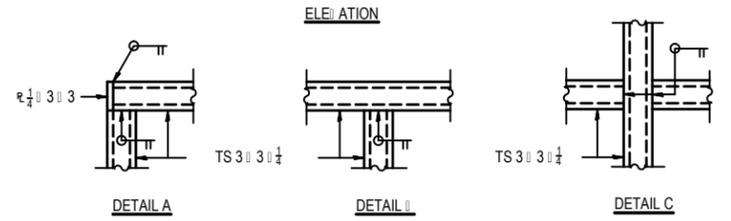
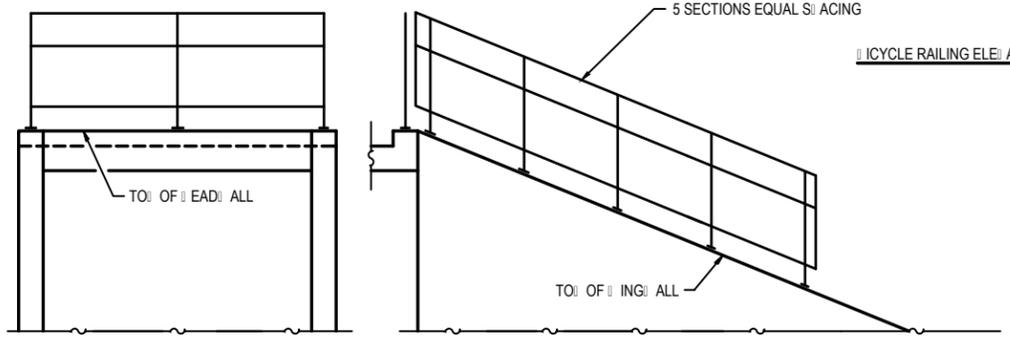
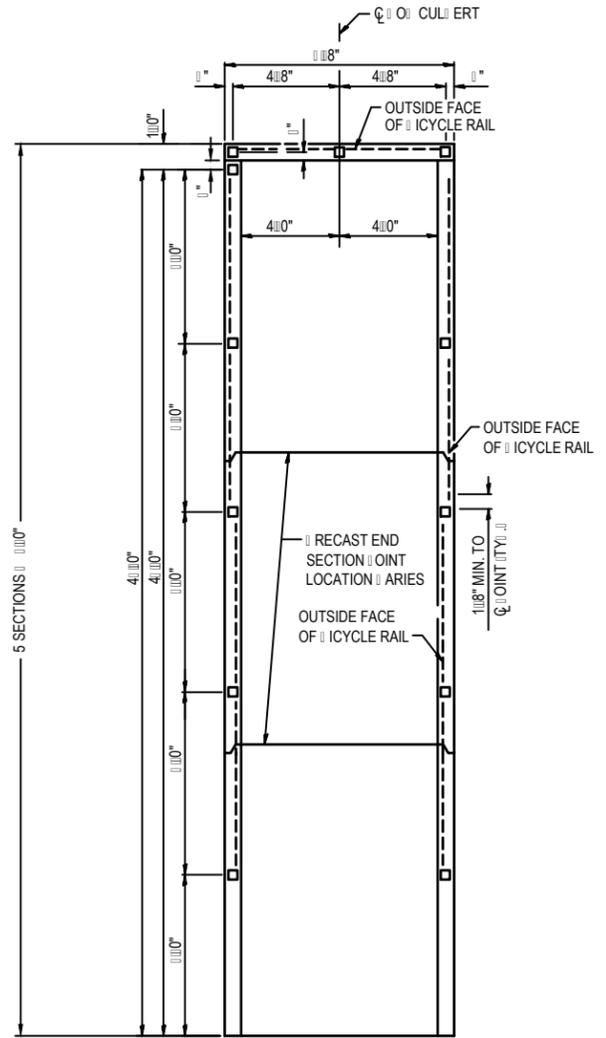
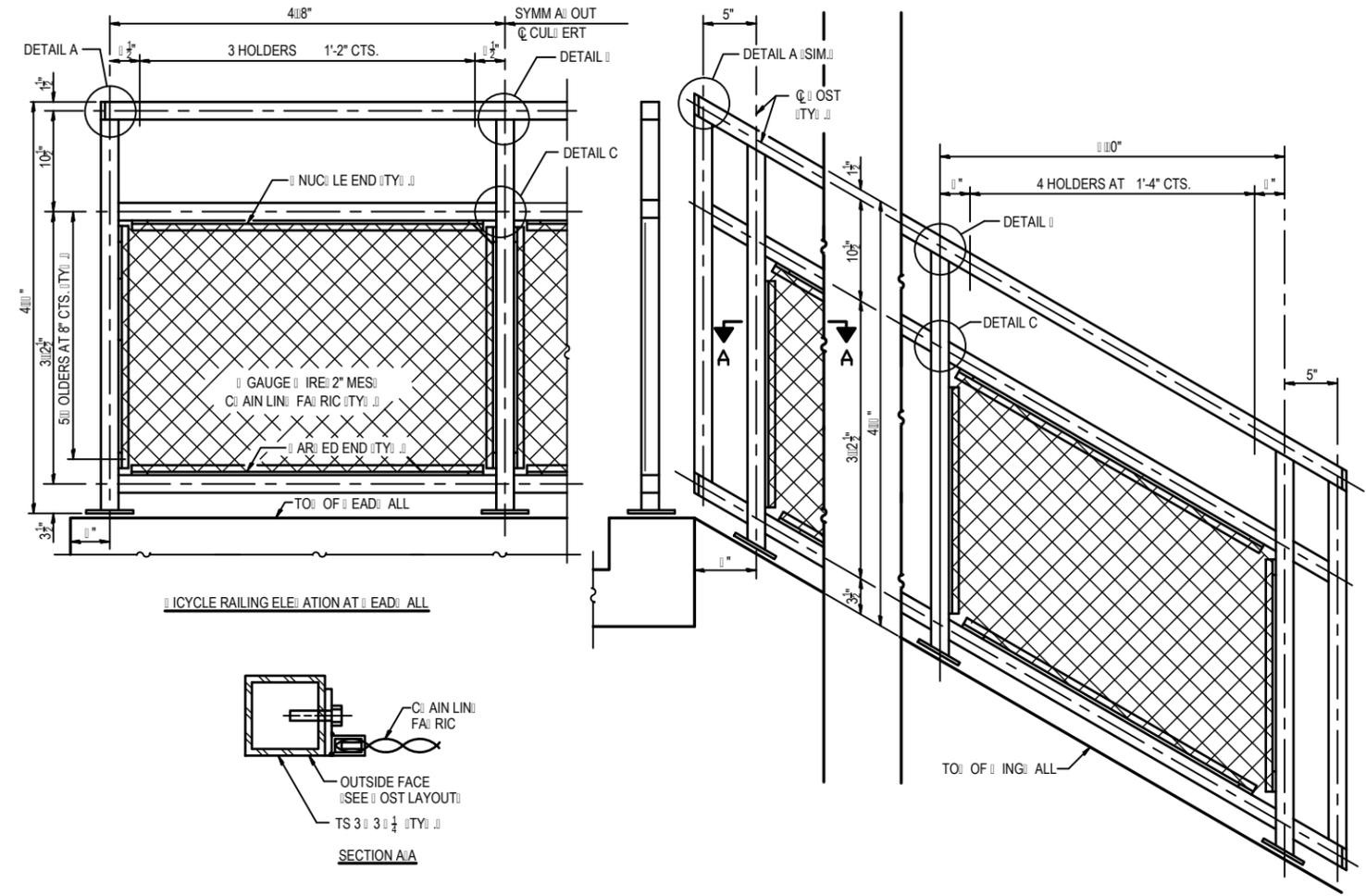
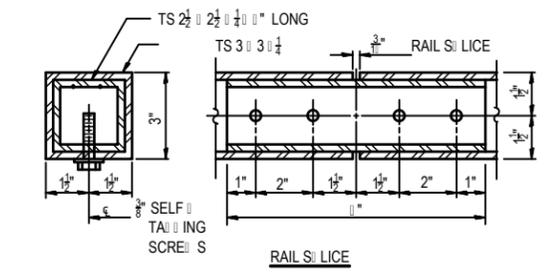
DETAILS

SCALE: NO SCALE SHEET NO. 3 OF 4 SHEETS STA. 1+00 TO STA. 11+10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	14
IL-157 AND GGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT	

NOTES

- RAILING SHALL BE ACCORDING TO SECTION 501 OF THE STANDARD SPECIFICATIONS. CEILING TIES AS NOTED AND SHALL BE PROVIDED FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR CYCLE RAILING SPECIAL.
- THE GAUGE FACILITIES SHALL BE ACCORDING TO ARTICLE 100.2(D) OF THE STANDARD SPECIFICATIONS.
- INSTALLATION OF THE MAIN LINE FACILITIES SHALL BE ACCORDING TO SECTION 104 OF THE STANDARD SPECIFICATIONS.
- ALL STRUCTURAL STEEL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A 500 GRADE STRUCTURAL STEEL TUBING.
- ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 250 GRADE 250.
- THE MAIN LINE FACILITIES SHALL BE LACED ALONG THE OUTSIDE FACE AS SHOWN ON SECTION A/A AND THE POST LAYOUT PLAN.
- STRETCHERS SHALL BE USED AT ALL FOUR SIDES OF EACH PANEL.
- IF THE OPTION OF DRILLING AND EPOXY GROUTING THE ANCHORS OR RODS IS CHOSEN, THE CONTRACTOR SHALL USE THE CASULE OR THE ADHESIVE CARTRIDGE TYPE ANCHORS OR RODS THAT HAVE BEEN REPEATEDLY TESTED AND GIVEN A PRIOR APPROVAL BY THE DEPARTMENT. THE CONTRACTOR SHALL INSTALL THE ANCHORS OR RODS IN PRE-DRILLED HOLES ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES. THE CASULE OR THE ADHESIVE CARTRIDGE SHALL BE SEALED WITH REPEASUREMENTS OF THE ADHESIVE COMING.
- SPACE REINFORCEMENT TO MISS ANCHORS OR RODS.
- ALL POSTS, RAILING SLICES, ANCHORS OR DEVICES AND ENT PLATES SHALL BE GALVANIZED AFTER SHOP FABRICATION ACCORDING TO AASHTO M 111 AND ASTM A 385. ALL BOLTS, NUTS, WASHERS AND ANCHORS OR RODS SHALL BE GALVANIZED ACCORDING TO AASHTO M 232 ELECT STAINLESS STEEL BOLTS AS NOTED.
- ENT HOLES FOR GALVANIZING SHALL BE LACED IN THE POSTS AND RAILS AT LOCATIONS THAT WILL NOT ALLOW THE ACCUMULATION OF MOISTURE IN THE MEMBERS.
- THE MAIN LINE FACILITIES SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 100.2(A)(1)(A) OR C OF THE STANDARD SPECIFICATIONS.
- COORDINATE CYCLE RAILING POST LOCATIONS WITH THE CURT END SECTION SHOP DRAWINGS PRIOR TO FABRICATION. DIMENSIONAL CHANGES WILL BE ALLOWED ONLY UNDER THE WRITTEN AUTHORIZATION OF THE ENGINEER.



IN LIEU OF THE CAST-IN PLACE ANCHOR DEVICES, THE CONTRACTOR SHALL PROVIDE THE OPTION OF DRILLING AND EPOXY GROUTING THE ANCHORS OR RODS FOR THE CONNECTIONS ON TOP OF THE BRACKETS. EMBEDMENT SHALL BE ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

ICYCLE RAILING SPECIAL

FILE NAME = 17063 RE-DESIGN.DWG

POST LAYOUT
ALL DIMENSIONS MEASURED ORIGINALLY.

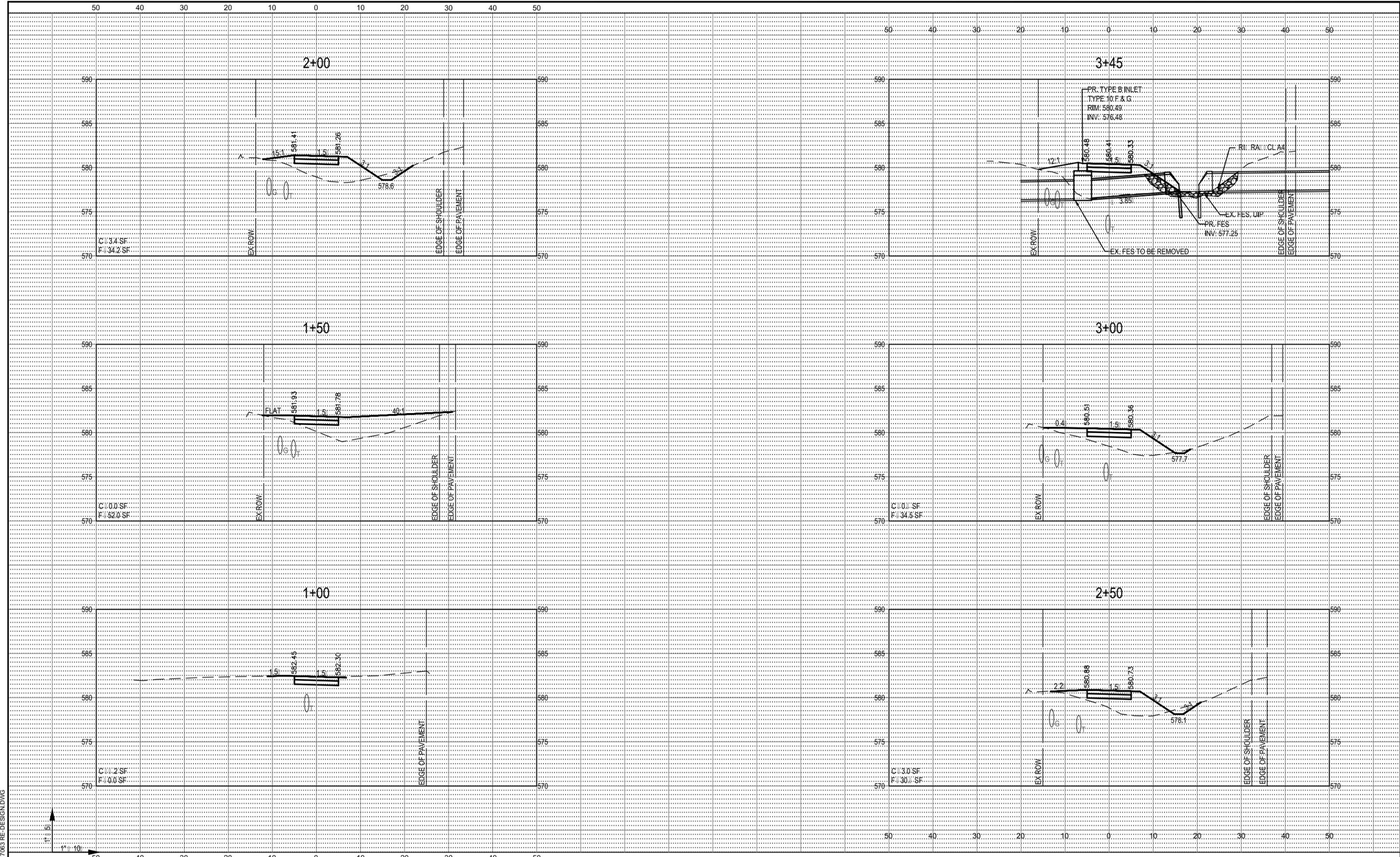
OATES ASSOCIATES
www.oatesassociates.com
ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115

USER NAME =	SAM WRIGLEY	DESIGNED -	---	REVISED -	---
PLOT SCALE =		DRAWN -	---	REVISED -	---
PLOT DATE =	2019-09-18	CHECKED -	---	REVISED -	---
		DATE -	---	REVISED -	---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NO SCALE	SHEET NO. 4 OF 4 SHEETS	STA. 11.00 TO STA. 11.10
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F.A.P. RTE. 592	SECTION 17-00111-00-BT	COUNTY MADISON	TOTAL SHEETS 19	SHEET NO. 15
IL-157 AND GGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



FILE NAME = 17083 RE-DESIGN.DWG



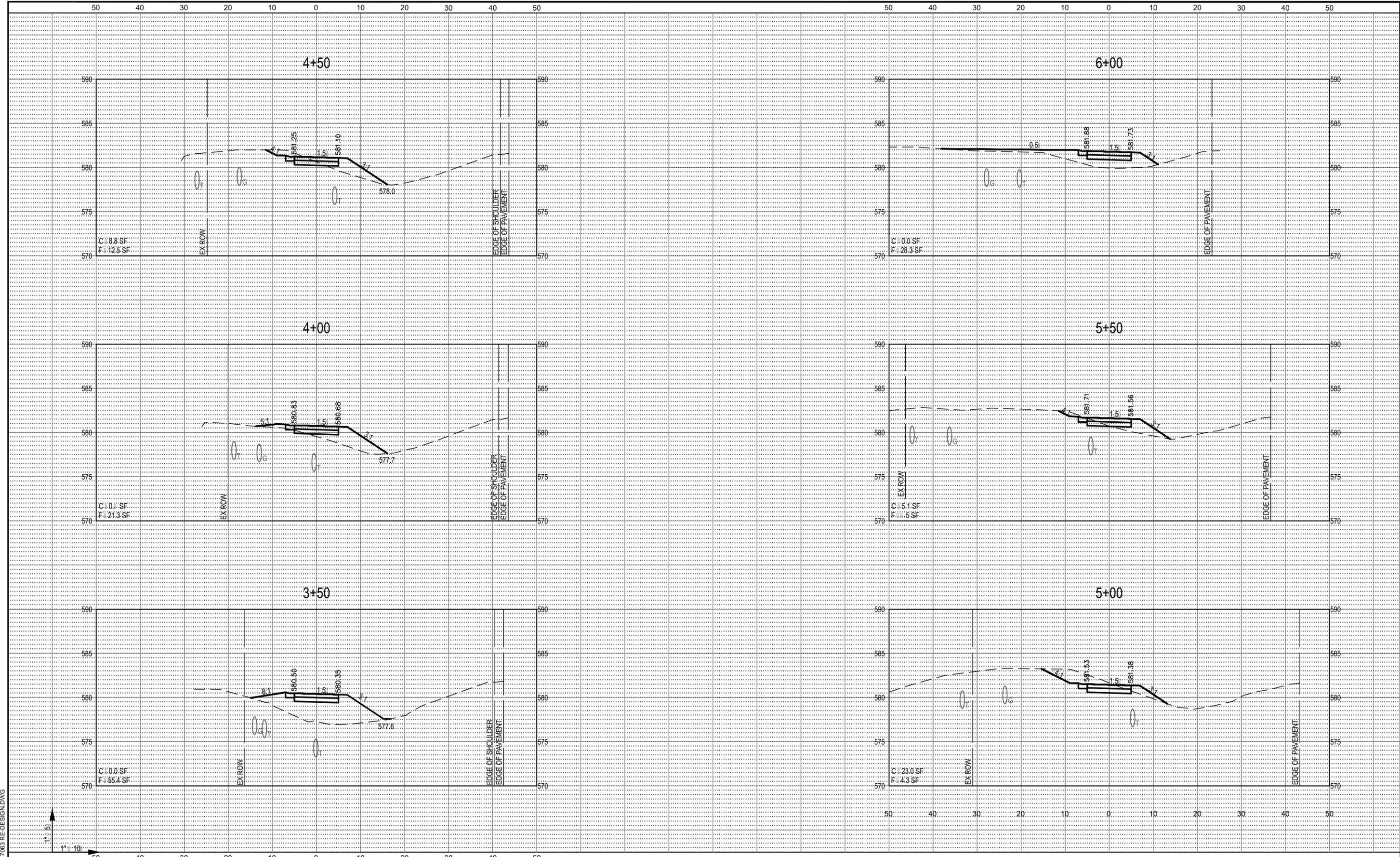
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PLOT SCALE =	1" = 10'	DRAWN -	---	REVISED -	---
PLOT DATE =	2019-09-18	CHECKED -	---	REVISED -	---
		DATE -	---	REVISED -	---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: SHEET NO. 1 OF 4 SHEETS STA. 1+00 TO STA. 3+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	17-00111-00-BT	MADISON	19	16
IL-157 AND GGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



FILE NAME = 17083 RE-DESIGN.DWG

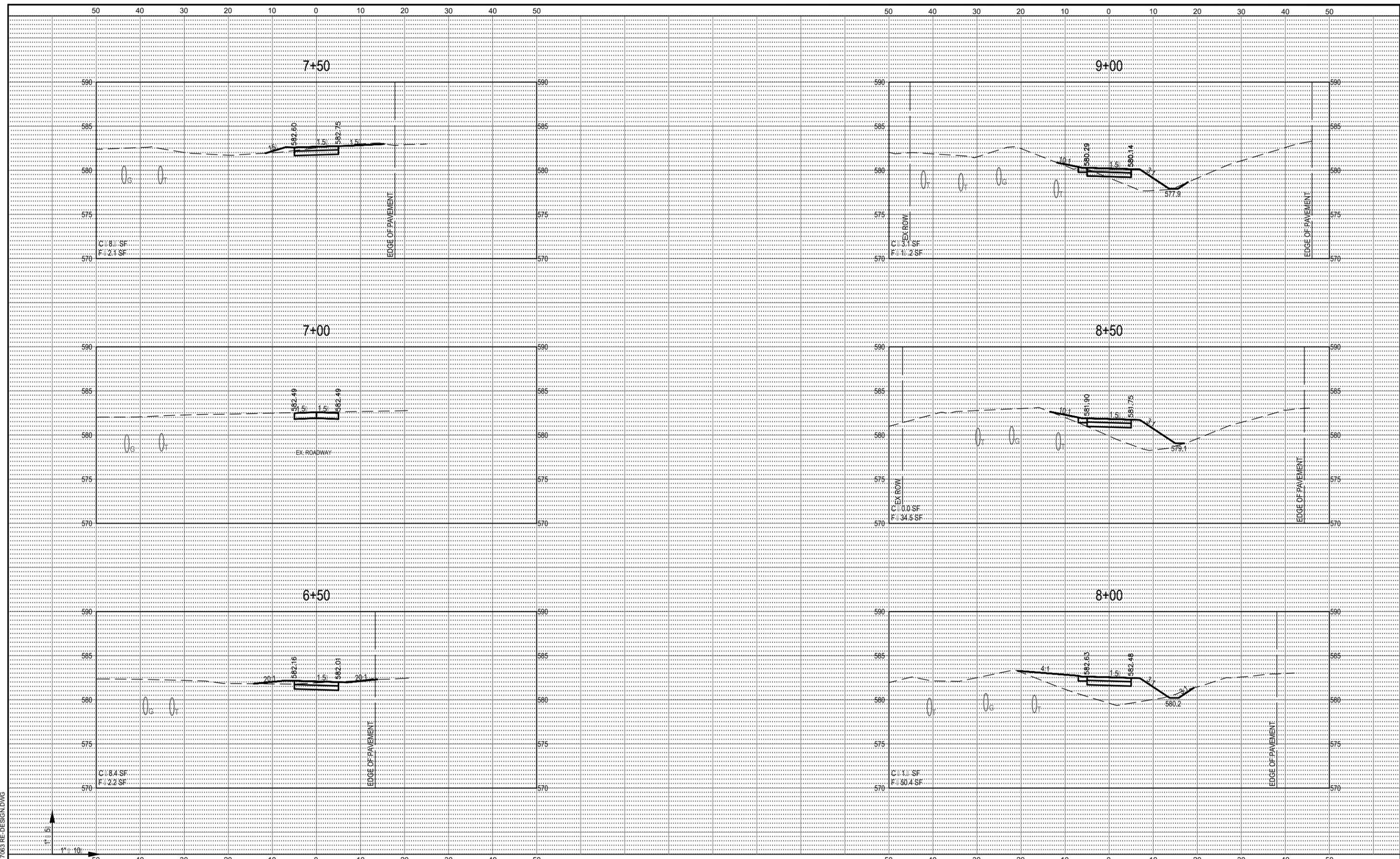
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	PLOT DATE = 2019-09-18	CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

SCALE: SHEET NO. 2 OF 4 SHEETS STA. 3+50 TO STA. 4+00

F.A.P. RTE. 592	SECTION 17-00111-00-BT	COUNTY MADISON	TOTAL SHEETS 19	SHEET NO. 17
IL-157 AND GGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		



FILE NAME = 17083 RE-DESIGN.DWG

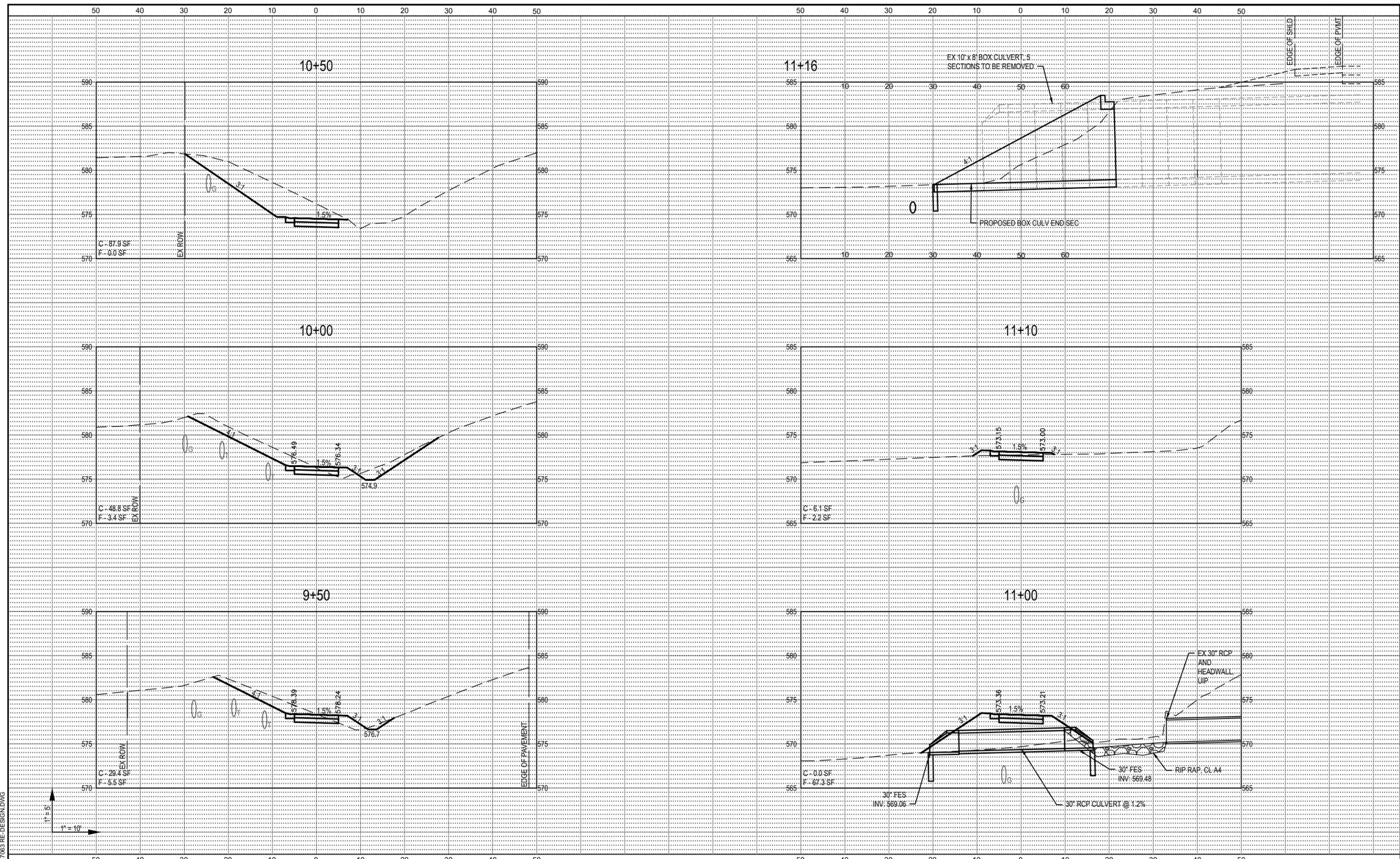
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	PLOT DATE = 2019-09-18	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: SHEET NO. 3 OF 4 SHEETS STA. 0+50 TO STA. 4+41

F.A.P. RTE. 592	SECTION 17-00111-00-BT	COUNTY MADISON	TOTAL SHEETS 19	SHEET NO. 18
IL-157 AND CGR NATURE TRAIL CONNECTION			CONTRACT NO. 97688	
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		



FILE NAME = 17083 RE-DESIGN.DWG

<p>OATES ASSOCIATES www.oatesassociates.com ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115</p>	USER NAME = ANDY MUELLER	DESIGNED -	REVISED -
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	PLOT DATE = 2019-10-17	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: SHEET NO. 4 OF 4 SHEETS STA. 9+50 TO STA. 11+10

F.A.P. RTE. 592	SECTION 17-00111-00-BT	COUNTY MADISON	TOTAL SHEETS 19	SHEET NO. 19
IL-157 AND GGR NATURE TRAIL CONNECTION		CONTRACT NO. 97688		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		