

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ROADWAY	
				0003	URBAN
44000189	HOT-MIX ASPHALT SURFACE REMOVAL, 10"	SQ YD	1537	1537	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	891	891	
44003100	MEDIAN REMOVAL	SQ FT	5748	5748	
44004250	PAVED SHOULDER REMOVAL	SQ YD	22652	22652	
44201747	CLASS D PATCHES TYPE IV, 8 INCH	SQ YD	306	306	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	1126	1126	
48300500	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SQ YD	1537	1537	
48300600	PORTLAND CEMENT CONCRETE SHOULDERS 11"	SQ YD	15455	15455	
48301000	PROTECTIVE CCAT	SQ YD	15455	15455	
50104400	CONCRETE HEADWALL REMOVAL	EACH	16	16	
50105220	PIPE CULVERT REMOVAL	FOOT	433	433	
50200100	STRUCTURE EXCAVATION	CU YD	477	477	
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	121	121	
50300225	CONCRETE STRLCTURES	CU YD	56.1	56.1	
50300300	PROTECTIVE CCAT	SQ YD	163	163	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ROADWAY	
				0003	URBAN
50800105	REINFORCEMENT BARS	POUND	19,860	19,860	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	23,430	23,430	
54002020	EXPANSION BOLTS 3/4 INCH	EACH	54	54	
54003000	CONCRETE BOX CULVERTS	CU YD	98	98	
542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	3	3	
542A1069	PIPE CULVERTS, CLASS A, TYPE 2 24"	FOOT	11	11	
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	52	52	
542D1069	PIPE CULVERTS, CLASS D, TYPE 2 24"	FOOT	154	154	
542JA042	PIPE CULVERTS, CLASS A 42" (JACKED)	FOOT	236	236	
542JA048	PIPE CULVERTS, CLASS A 48" (JACKED)	FOOT	220	220	
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1	1	
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	3	3	
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	8	8	
54213693	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"	EACH	3	3	

△ REVISED 7-22-2024

REV - MS

MODEL: D:\a\l...
 FILE NAME: ...
 USER: ...
 DATE: ...

USER NAME	DESIGNED	REVISED
DRAWN	CHECKED	REVISED
PLOT SCALE	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

F.A.I. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
270	60-3K-1	MADISON	576	5
CONTRACT NO. 76818				

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ROADWAY	
				0003	URBAN
* 72000100	SIGN PANEL - TYPE 1	SQ FT	265	265	
* 72000200	SIGN PANEL - TYPE 2	SQ FT	178	178	
* 72000300	SIGN PANEL - TYPE 3	SQ FT	7235	7235	
* 72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	1	
* 72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	10	10	
* 72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	196	196	
* 72400320	REMOVE SIGN PANEL - TYPE 2	SQ FT	380	380	
* 72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	4242	4242	
* 72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	20	20	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	8	
* 72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	67304	67304	
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	255.5	255.5	
* 73000100	WOOD SIGN SUPPORT	FOOT	209.8	209.8	
* 73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	23	23	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ROADWAY	
				0003	URBAN
* 73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	174	174	
* 73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	131.7	131.7	
* 73304000	OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	FOOT	42.33	42.33	
* 73400100	CONCRETE FOUNDATIONS	CU YD	123.9	123.9	
* 73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	40.4	40.4	
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	5	5	
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	2	2	
73602000	REMOVE OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	EACH	2	2	
73700100	REMOVE GROUND MOUNTED SIGN SUPPORT	EACH	9	9	
73700200	REMOVE CONCRETE FOUNDATION - GROUND MOUNT	EACH	19	19	
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	16	16	
73800900	REMOVE OVERHEAD SIGN STRUCTURE WALKWAY	FOOT	32.5	32.5	
* 78004600	PERFORMED PLASTIC PAVEMENT MARKING, TYPE D - LETTERS AND SYMBOLS	SQ FT	1155	1155	
* 78004630	PERFORMED PLASTIC PAVEMENT MARKING, TYPE D - LINE 6"	FOOT	19317	19317	

MODEL: D:\a\l...
 FILE NAME: ...
 USER: ...
 DATE: ...

△ REVISED 7-18-2024

USER NAME: Jan Johnson PLOT SCALE: 1/8" = 1'-0" PLOT DATE: 6/5/2024	DESIGNED: _____ DRAWN: _____ CHECKED: _____ DATE: _____	REVISED: _____ REVISED: _____ REVISED: _____ REVISED: _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____	F.A.I. SITE: 270 SECTION: 60-3K-1 COUNTY: MADISON TOTAL SHEETS: 576 SHEET NO.: 8 CONTRACT NO. 76818 ILLINOIS FED. AID PROJECT
---	--	--	---	---	---

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ROADWAY	
				0003	URBAN
* X1400174	REMOVE AND REINSTALL EXISTING CCTV CAMERA AND EQUIPMENT	L SUM	1	1	
X2010310	TREE REMOVAL (SPECIAL)	UNIT	308	308	
X4020500	AGGREGATE SURFACE COURSE, TYPE B 6"	SQ YD	9	9	
X4202005	DIAMOND GRINDING AND GROOVING (ROADWAY SECTION)	SQ YD	46466	46466	
X6024504	INLETS, TYPE B, WITH FRAME AND GRATE (SPECIAL)	EACH	4	4	
X6060101	CLASS 51 CONCRETE PIPE UNDER DRAIN OUTLET	CU YD	17	17	
X6640104	FENCE REMOVAL	FOOT	125	125	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	
* X8100105	CONDUIT SPLICE	EACH	5	5	
X8302151	TEMPORARY WOOD POLE, 50 FT., CLASS 4	EACH	11	11	
X8301804	REMOVAL OF TEMPORARY WOOD POLES AND FIBER OPTIC CABLE	L SUM	1	1	
X8410102	TEMPORARY LIGHTING SYSTEM	L SUM	1	1	
X8570000	SMART TRAFFIC MONITORING SYSTEM	L SUM	1	1	
* X8570231	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1	1	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ROADWAY	
				0003	URBAN
* X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1	1	
* X8710318	FIBER OPTIC UTILITY MARKER	EACH	7	7	
* X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	5068	5068	
* X8710075	FIBER OPTIC CABLE IN CONDUIT, 72 COND. S.M. F.O.	FOOT	2880	2880	
* X8710103	ETHERNET SWITCH	EACH	2	2	
* X8891007	VIDEO VEHICLE DETECTION SYSTEM COMPLETE	EACH	2	2	
* X8891503	REMOVE AND REINSTALL VIDEO DETECTION CAMERA	EACH	1	1	
X8900100	TEMPORARY TRAFFIC SIGNAL INSTALLATION (SPECIAL)	EACH	1	1	
X8950510	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	2880	2880	
Z0023500	FILLING EXISTING CULVERTS	CU YD	69	69	
Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1	1	
* Z0054517	ROCK FILL - FOUNDATION	TON	159	159	
* Z0054486	ROCK FILL FOUNDATION	CU YD	106	106	
Ø Z0076600	TRAINEES	HOUR	4500	4500	
Z0070100	SURVEY MONUMENT COVER ASSEMBLY	EACH	3	3	
Ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	4500	4500	
Z0076870	UNDERDRAIN CONNECTION TO STRUCTURE	EACH	29	29	

Ø 0042

△ REVISED 7-22-2024

REV. - MS

MODEL: D:\a\l\...
 FILE NAME: ...
 USER: ...
 DATE: ...

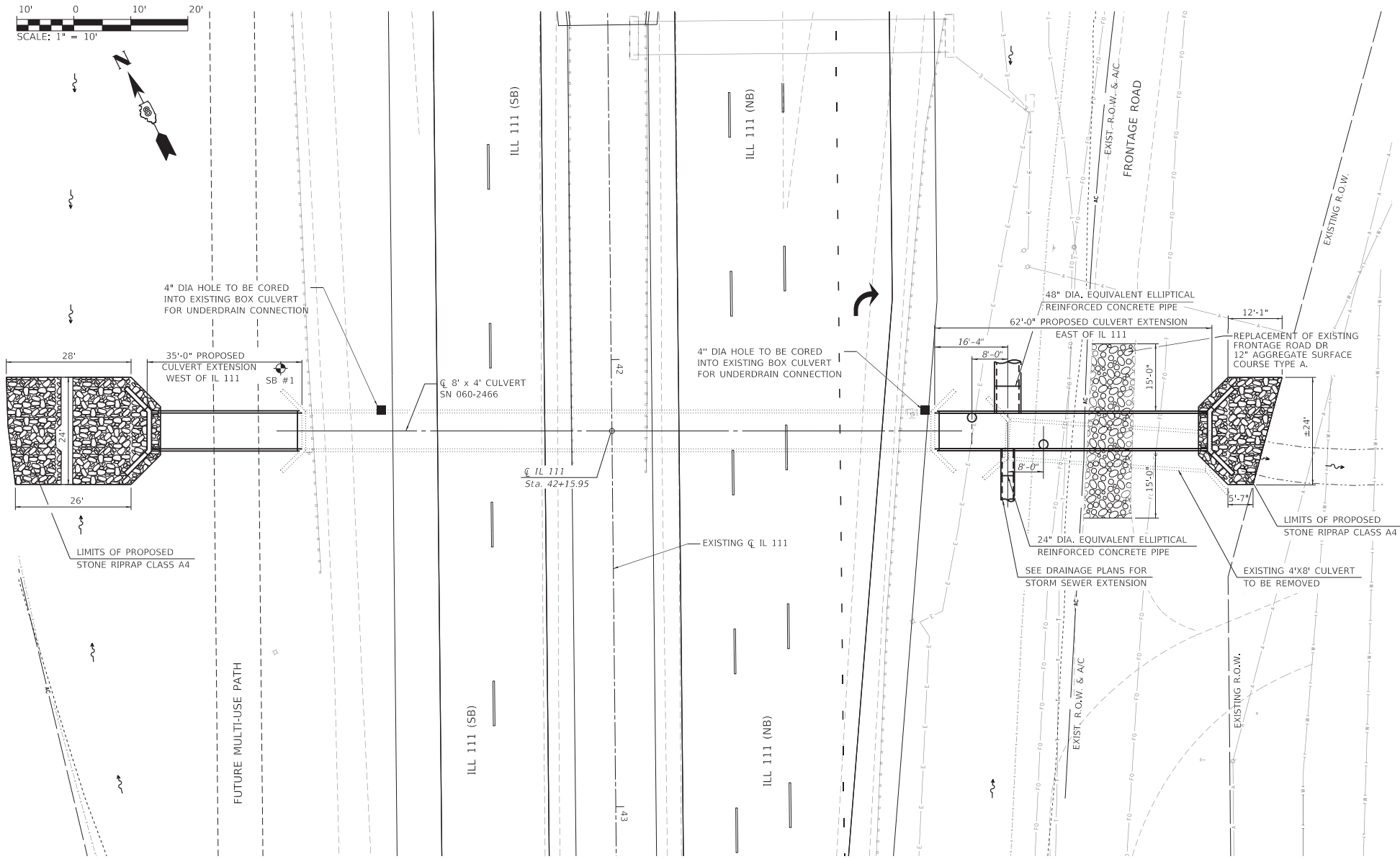
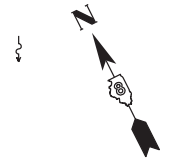
USER NAME	DESIGNED	REVISED
DRAWN	CHECKED	REVISED
PLOT SCALE	CHECKED	REVISED
PLOT DATE	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: _____ SHEET _____ OF _____ SHEETS STA: _____ TO STA: _____

F.A.I. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
270	60-3K-1	MADISON	576	12
			CONTRACT NO. 76818	
ILLINOIS FED. AID PROJECT				



MODEL: Detail
 FILE NAME: I:\DOT\170661\Drawings\Drawings\Subcontract\Phase I\Culvert Extension\IL 111 General Plan.dwg

USER NAME = Blake Young	DESIGNED - DAC	REVISIONS
	CHECKED -	REVISIONS
PLOT SCALE = N/A	DRAWN - DAC	REVISIONS
PLOT DATE = 7/11/2024 (7:15:43 PM)	CHECKED -	REVISIONS

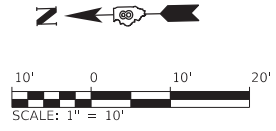
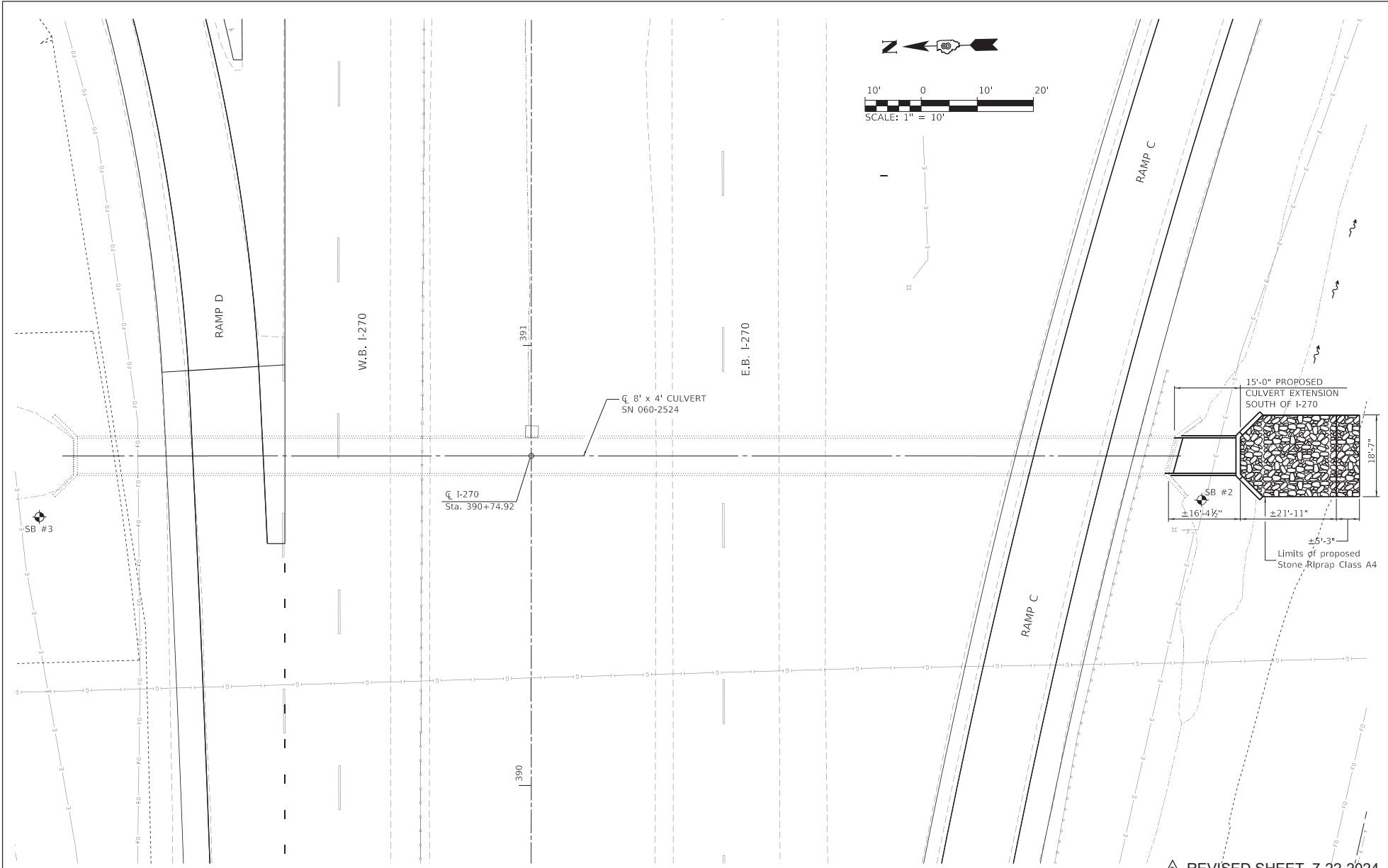
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - STRUCTURE NO. 060-2466
IL 111 CULVERT EXTENSIONS

SHEET OF SHEETS

REVISED SHEET 7-22-2024			
F.A.I. SITE	SECTION	COUNTY	TOTAL SHEET NO.
270	60-3K-1	MADISON	576 274
			CONTRACT NO. 76818
ILLINOIS FED. AID PROJECT			

MODEL: Detail
 FILE NAME: I:\D:\1710661\Drawings\Drawings\General\Plan\Culvert Extension\060-2524 Ramp C General Plan.dwg



REVISED SHEET 7-22-2024

USER NAME = Blake Young	DESIGNED - DAC	REVISED -
CHECKED - IDK	REVISED -	
PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 7/11/2024 (7:10:49 PM)	CHECKED -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN - STRUCTURE NO. 060-2524
 I-270 RAMP C**

F.A.I. SITE: 270	SECTION: 60-3K-1	COUNTY: MADISON	TOTAL SHEETS: 275
			CONTRACT NO. 76818
ILLINOIS FED. AID PROJECT			

SHEET OF SHEETS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				FAP582 FAI 270	NONE 0001 S.N.
72000100	SIGN PANEL - TYPE 1	SQ FT	265	265	
72000200	SIGN PANEL - TYPE 2	SQ FT	178	178	
72000300	SIGN PANEL - TYPE 3	SQ FT	7235	7235	
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	1	
72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	10	10	
72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	196	196	
72400320	REMOVE SIGN PANEL - TYPE 2	SQ FT	380	380	
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	4242	4242	
72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	67304	67304	
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	255.5	255.5	
73000100	WOOD SIGN SUPPORT	FOOT	209.8	209.8	
73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	23	23	
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	174	174	
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	131.7	131.7	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				FAP582 FAI 270	NONE 0001 S.N.
73304000	OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	FOOT	43	43	
73400100	CONCRETE FOUNDATIONS	CU YD	123.9	123.9	
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	40.4	40.4	
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	5	5	
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	2	2	
73602000	REMOVE OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	EACH	2	2	
73700100	REMOVE GROUND MOUNTED SIGN SUPPORT	EACH	9	9	
73700200	REMOVE CONCRETE FOUNDATION - GROUND MOUNT	EACH	19	19	
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	16	16	
73800300	REMOVE OVERHEAD SIGN STRUCTURE WALKWAY	FOOT	32.5	32.5	
81102100	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	5166	5166	
X0526811	ABANDON CONDUIT IN PLACE	EACH	3	3	
X032730	REMOVAL OF EXISTING SIGN LIGHTING UNIT WITH NO SALVAGE	EACH	6	6	
X8100105	CONDUIT SPLICE	EACH	5	5	
X1400013	REMOVAL OF CABLE IN CONDUIT	FOOT	1722	1722	



REVISED 7-18-2024

MODEL NUMBER: 111111
FILE NAME: 111111

USER NAME - USER	DESIGNED - GDO	REVISED -
	DRAWN - GDO	REVISED -
PLOT SCALE - 2.0000 ' / 1" BL	CHECKED - STS	REVISED -
PLOT DATE - 7/18/2024	DATE - 7/18/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: 2.0000 ' / 1" SHEET OF SHEETS STA. TO STA.

F.A.I. SITE NO. 270	SECTION 60-3K-1	COUNTY MADISON	TOTAL SHEETS 576	SHEET NO. 196
			CONTRACT NO. 76818	
			ILLINOIS FED. AID PROJECT	

EXISTING SIGNING SCHEDULE

STATION	OFFSET	ROADWAY	SIGN NAME	SIGN DESCRIPTION	Existing Structure Number	EXISTING PANEL DIMENSIONS			REMOVE SIGN PANEL TYPE 1	REMOVE SIGN PANEL TYPE 2	REMOVE SIGN PANEL TYPE 3	REMOVE SIGN ASSEMBLY TYPE A	REMOVE SIGN ASSEMBLY TYPE B	REMOVE GROUND MOUNTED SIGN SUPPORT	REMOVE CONCRETE FOUNDATION GROUND MOUNT	REMOVE CONCRETE FOUNDATION OVERHEAD	REMOVE OVERHEAD SIGN STRUCTURE SPAN	REMOVE OVERHEAD SIGN STRUCTURE CANTILEVER	REMOVE OVERHEAD SIGN STRUCTURE BRIDGE MOUNTED	REMOVE OVERHEAD SIGN STRUCTURE WALKWAY	
						WIDTH (FT)	HEIGHT (FT)	DEPTH (FT)													
427+50	180' R/L	1270	WB-TR-EX008	SERVICE - GAS EXITS EA RB		15.0	11.0														
			WB-WF-EX009	SERVICE - FLOOD EXITS EA RB		15.0	11.0					1		1.0	2.0						
427+00	103' R/L	1270	WB-FM-EX081	S-1NF - EX01 EA		2.5	2.0	5.0													
430+00	94' P/L	1270	WB-CL-EX002	PAVING - 100' RB E 1111 POINT ON BEACH WOOD RIVER - SUT ONLY DOWN ARROW	803000270.004	10.0	10.0			250.0						2.0			1		
433+50	98' L/L	1270	WB-WF-EX063	SERVICE - FLOOD EXITS EA RB		12.0	13.5			102.0				1.0	2.0						
438+50	119' R/L	1270	WB-WF-EX064	SERVICE - LOOKING EXITS RB EA		12.0	13.5			102.0				1.0	2.0						
450+00	98' L/L	1270	WB-WF-EX066	SERVICE - BRIDGE PAVING ROAD FOOD GREAT RIVER ROAD SOUTH EXIT EA NORTH EXIT RB		17.0	13.5			229.5				1.0	2.0						
458+00	94' P/L	1270	WB-WF-EX065	SERVICE - EXIT RB		9.0	3.5														
			WB-WF-EX068	CURVE - IL 111 NORTH WOOD RIVER NEXT RIGHT		18.0	11.0					1		1.0	2.0						
			WB-TR-EX076	CURVE - WB AL 111 WOOD RIVER PORTION BEACH 1		23.0	17.0			301.0											32.5
			WB-TR-EX078	CURVE - WB AL 111 WOOD RIVER PORTION BEACH 1		23.0	17.0			210.0											
469+25	87' R/L 1.3 P/L	1270	WB-TR-EX079	CURVE - EXIT TA 125 SOUTH HEMPARD BRIDGE OVER ARROW	803000270.007	14.0	15.0			210.0						2.0					32.5
						Total:	126	180	420	1	20	0	10	16	5	3	3	3	3	3	32.5

SIGN LIGHTING REMOVAL

SIGN LOCATION	STATION	STRUCTURE	REMOVAL OF EXISTING SIGN LIGHTING UNIT WITH NO SALVAGE	REMOVAL OF CABLE IN CONDUIT	ABANDON CONDUIT IN PLACE	CONDUIT SPLICE	ELECTRIC CABLE IN CONDUIT (600V (VLP- TYPE USE) 1/1C NO. 6)
			EA	FT	EA	EA	FT
I270 EB	387+48	85060270R005.6	0	320	0	1	930
I270 EB	404+40	85060270R005.9	2	0	1	0	0
I270 EB	326+67	8506270R004.4	4	467	0	1	1461
IL 111 NB	41+30	850605111R007.2	0	380	0	1	1050
IL 111 SB	20+00	850605111L007.7	0	205	0	1	675
I270 WB	414+50	85060270L005.1	0	350	0	1	1050
I270 WB	399+20	85060270L005.9	0	0	1	0	0
I270 WB	469+25	85060270L007.2	0	0	1	0	0
Totals			6	1722	3	5	5166

REVISION 7-18-2024

MODEL NUMBER, NAME, FILE NAME, SHEETS

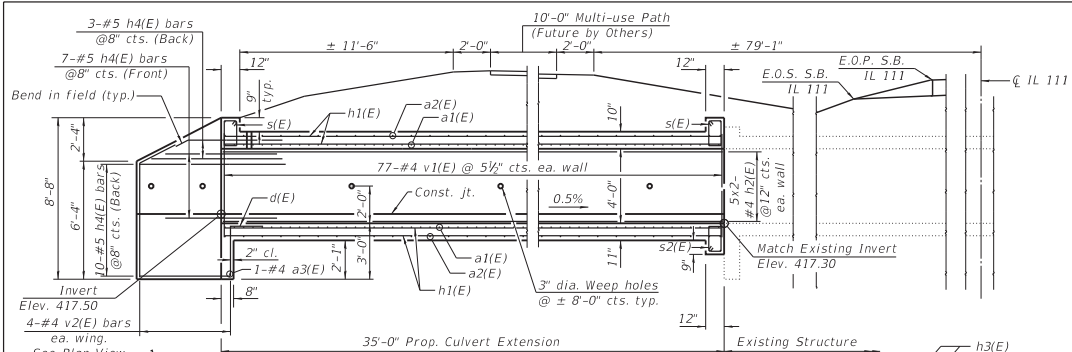
USER NAME - USER_	DESIGNED - GDO	REVISION -
	DRAWN - GDO	REVISION -
PLOT SCALE - 2.0000 ' / 1" BL	CHECKED - STS	REVISION -
PLOT DATE - 7/18/2024	DATE - 7/18/2024	REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

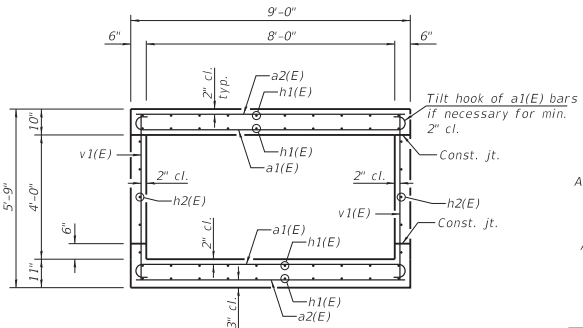
EXISTING SIGN SCHEDULE

F.A.I. SITE	SECTION	COUNTY	TOTAL SHEETS
270	6D-3K-1	MADISON	576 / 400
			CONTRACT NO. 76818
			ILLINOIS FED. AID PROJECT

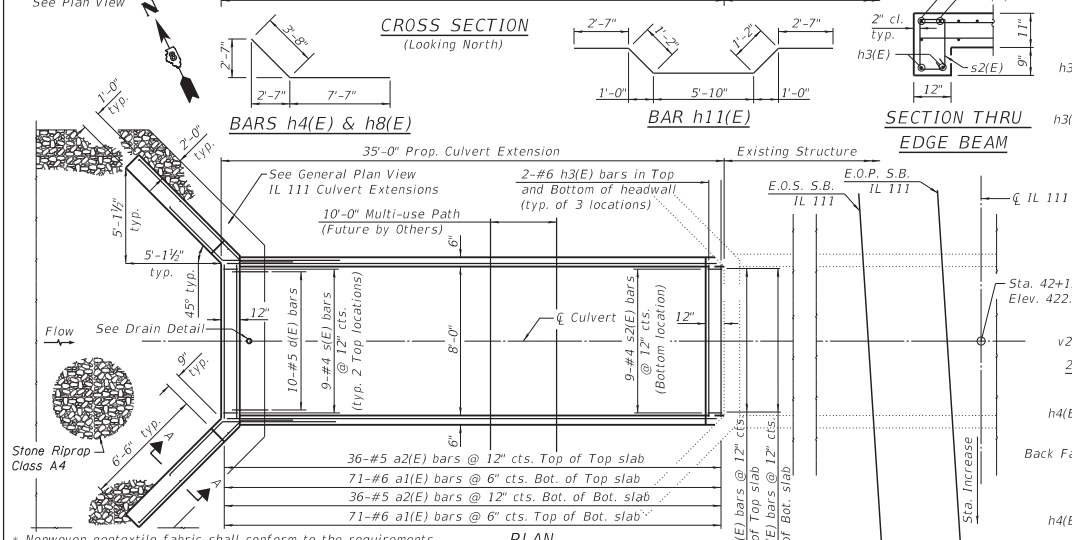
SCALE: 2.0000 ' / 1" SHEET OF SHEETS STA. TO STA.



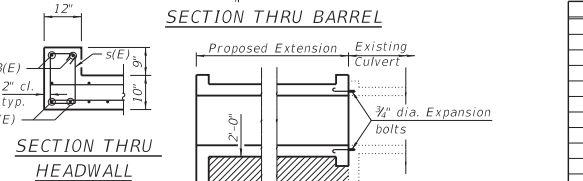
CROSS SECTION
(Looking North)



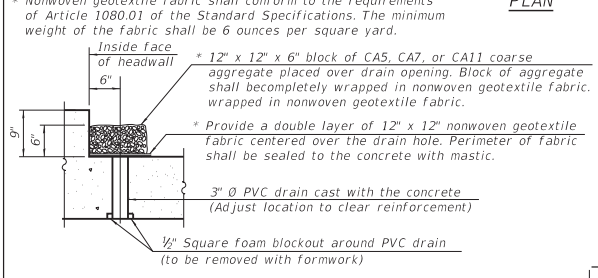
SECTION THRU BARREL



PLAN

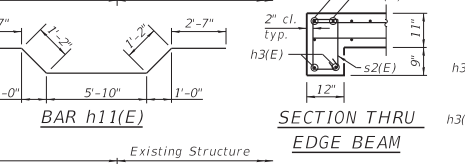


SECTION THRU HEADWALL

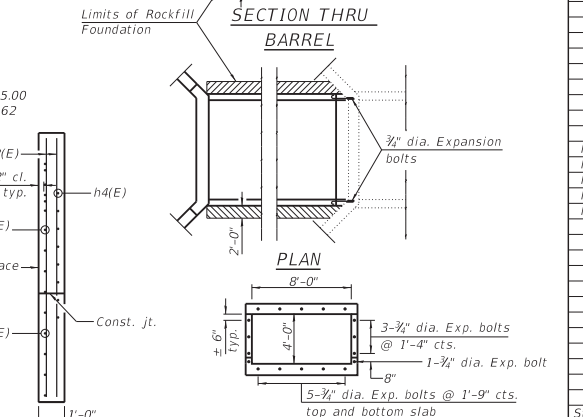


DRAIN DETAIL

(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.)



SECTION THRU EDGE BEAM



CROSS SECTION THRU BARREL TYP. EXPANSION BOLT DETAILS

Notes:
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60. All reinforcement bars shall be epoxy coated.
It shall be the responsibility of the contractor to divert the existing culvert in order to keep the construction area free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included in the item Concrete Box Culverts.
Precast end sections will not be allowed.
All construction joints shall be bonded.
Limits of Removal and Replacement of weak soils with Rock Fill Foundation will be determined by the Engineer.
The minimum Unconfined Compressive Strength of the layer below the removal limit shall be 1.0 tsf.

DESIGN STRESSES
NEW CONSTRUCTION
EXIST. STRUCTURE

field units
f_c = 3,500 psi
f_y = 60,000 psi

LOADING HS20-44

Allow 50 psf for future wearing surface

DESIGN SPECIFICATIONS

AASHTO Std. Specs. 17th Edition, 2002

No precast alternate is allowed.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	142	#6	10'-0"	U
a2(E)	72	#5	8'-8"	U
a3(E)	1	#4	8'-10"	U
a4(E)	250	#6	10'-0"	U
a5(E)	126	#5	8'-8"	U
a6(E)	1	#4	8'-10"	U
a7(E)	16	#4	5'-6"	U
d(E)	10	#5	4'-5"	U
d1(E)	10	#5	4'-5"	U
h1(E)	80	#5	18'-6"	U
h2(E)	20	#4	18'-4"	U
h3(E)	12	#6	8'-10"	U
h4(E)	40	#5	11'-3"	U
h5(E)	120	#5	22'-3"	U
h6(E)	30	#4	22'-1"	U
h7(E)	12	#6	8'-10"	U
h8(E)	40	#5	11'-3"	U
h9(E)	6	#6	14'-1"	U
h10(E)	16	#5	4'-0"	U
h11(E)	2	#5	13'-4"	U
h12(E)	4	#6	11'-4"	U
h13(E)	16	#5	6'-7"	U
h14(E)	32	#6	4'-0"	U
s(E)	18	#4	4'-7"	U
s1(E)	18	#4	4'-7"	U
s2(E)	9	#4	4'-9"	U
s3(E)	9	#4	4'-9"	U
v1(E)	154	#4	5'-5"	U
v2(E)	8	#4	8'-4"	U
v3(E)	272	#4	5'-5"	U
v4(E)	8	#4	8'-4"	U
v5(E)	14	#6	5'-10"	U
Stone Riprap Class A4		Sq. Yd.	125	
Aggregate Surface Course, Type B		Cu. Yd.	9	
Structure Excavation		Cu. Yd.	415	
Expansion Bolts 3/4"		Each	36	
Reinforcement Bars, Epoxy Coated		Pound	16700	
Concrete Box Culverts		Cu. Yd.	81.5	
Rock Fill - Foundation		Ton	138	
Removal and Disposal of Unsuitable Material for Structures		Cu. Yd.	106	

Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.

Min. Bar Lap
#5(E) = 2'-5"
#4(E) = 2'-0"

MODEL: Detail FILE NAME: I:\DOT\110601\Draws\0202_03\020203\111 West Culvert Ext. Draw.dwg

USER NAME = Blake Young	DESIGNED - DAC	REVISION -
CHECKED -	REVISION -	
PLOT SCALE = N/A	DRAWN - DAC	REVISION -
PLOT DATE = 7/11/2024 (7:10:46 PM)	CHECKED -	REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED BOX CULVERT EXTENSION
IL 111 CULVERT EXTENSION - WEST

F.A.L. 270	SECTION 60-3K-1	COUNTY MADISON	TOTAL SHEET NO. 576
			CONTRACT NO. 76818

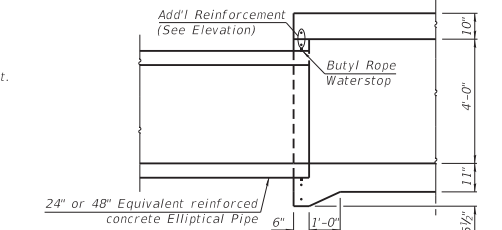
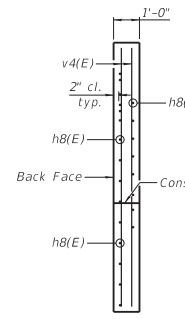
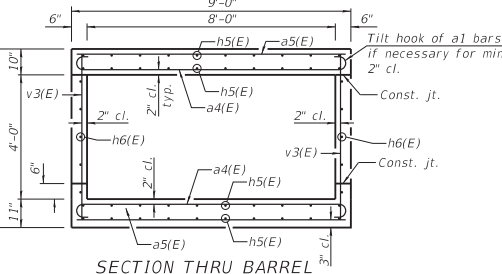
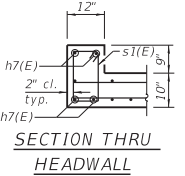
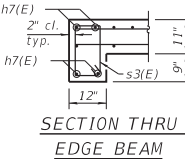
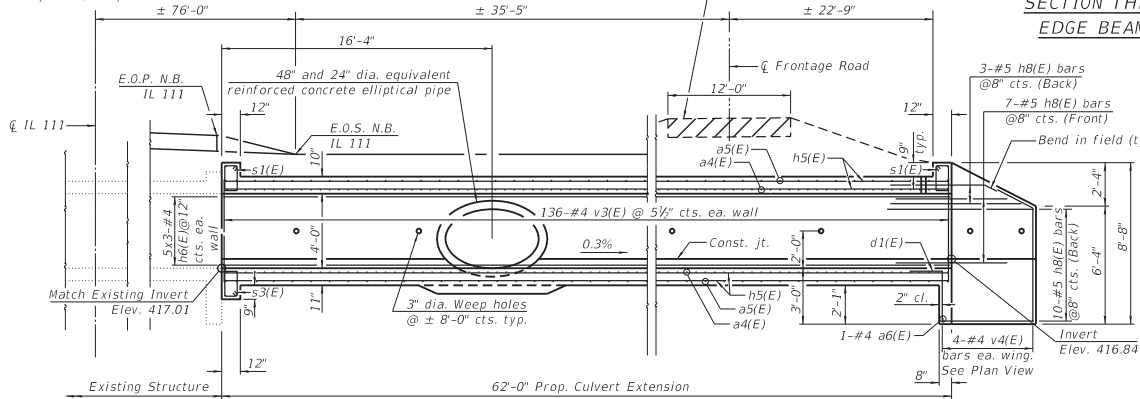
DESIGN STRESSES
NEW CONSTRUCTION
EXIST. STRUCTURE

LOADING HS20-44
 Allow 50 psf for future wearing surface
DESIGN SPECIFICATIONS

No precast alternate is allowed.

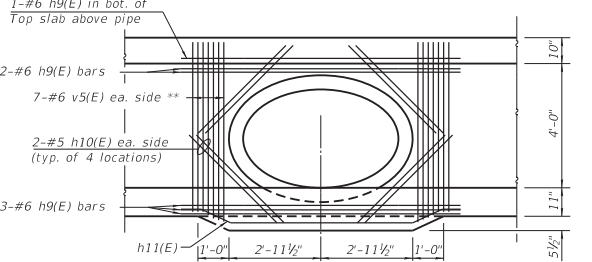
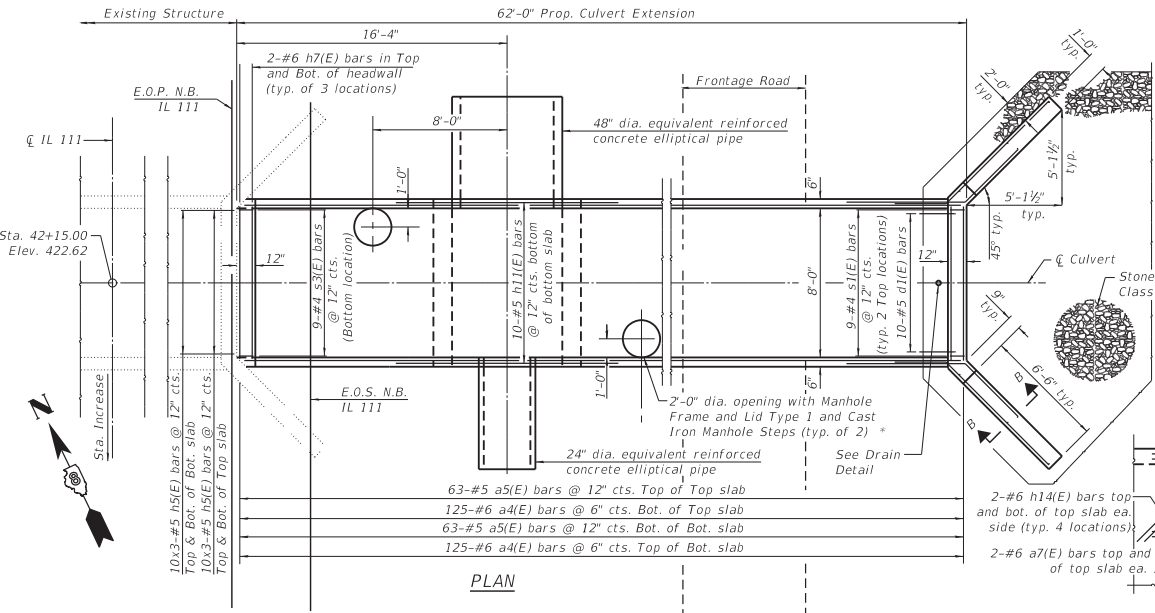
field units
 f_c = 3,500 psi
 f_y = 60,000 psi

AASHTO Std. Specs. 17th Edition, 2002



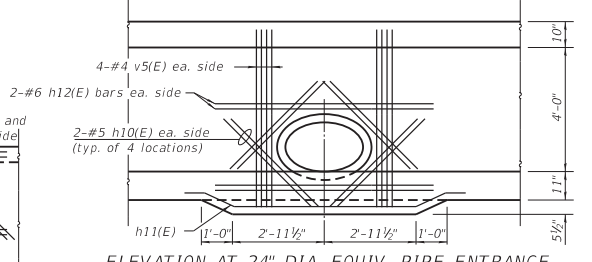
CROSS SECTION
 (Looking North)

CROSS SECTION AT PIPE ENTRIES



ELEVATION AT 48" DIA. EQUIV. PIPE ENTRANCE

** Trim bars as necessary.



ELEVATION AT 24" DIA. EQUIV. PIPE ENTRANCE

Notes:
 See IL 111 Culvert Extension - West sheet for Bill of Material.
 Price of Manhole Frames and Lids Type 1 and Cast Iron Manhole Steps to be included in cost of Concrete Box Culverts.

REVISIONED SHEET 7-22-2024

*See Highway Standard 604001-05 for Manhole Frame and Lid Type 1
 See Highway Standard 602701-02 for Cast Iron Manhole Steps

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED BOX CULVERT EXTENSION
IL 111 CULVERT EXTENSION - EAST

F.A.I. SITE:	SECTION	COUNTY	TOTAL SHEET
270	60-3K-1	MADISON	576 466
			CONTRACT NO. 76818
ILLINOIS FED. AID PROJECT			

MODEL: Detail
 FILE NAME: I:\DOT\170681\Draws\0202\Revised\Sheet\Detail\IL111_East_Culvert_Ext_Details.dwg

USER NAME = Blake Young	DESIGNED - DAC	REVISIONED -
CHECKED -	REVISIONED -	REVISIONED -
PLOT SCALE = N/A	DRAWN - DAC	REVISIONED -
PLOT DATE = 7/11/2024 (7:10:46 PM)	CHECKED -	REVISIONED -

SHEET OF SHEETS

SB #1 IL-111 CROSSING



Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 4/1/21

ROUTE FAP 582 DESCRIPTION I-270 at IL 111 Interchange, SN 060-2466 LOGGED BY VPG

SECTION 60-3K-1 LOCATION Madison Co. I-270/ IL 111, SEC. 35, TWP. 4N, RNG. 9W, 3rd PM, Latitude, Longitude

COUNTY Madison DRILLING METHOD Hand Auger HAMMER TYPE

STRUCT. NO. 060-2466
Station
BORING NO. 1
Station
Offset 10.0 ft North of CL of Culvert
Ground Surface Elev. ft (ft) (/6") (tsf) (%)

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

Soil Description	Depth (ft)	Penetration (tsf)	Blow Count (N)
Brown CLAYEY soil	0.8	P	45
	1.8	P	41
	2.5	P	36
End of Boring			
	-5		
	-10		
	-15		
	-20		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, form 137 (Rev. 8-99)

REVISED SHEET 7-22-2024

MODEL: Detail FILE NAME: I:\DOT\170661\Drawings\Boring\Boring\Boring\111 Boring.dwg

USER NAME = Blake Young	DESIGNED - DAC	REVISED -
CHECKED -	REVISED -	
PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 7/11/2024 (7:10:47 PM)	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED BOX CULVERT EXTENSIONS
BORING LOG 1**

SHEET OF SHEETS

F.A.I. SITE: 270	SECTION: 60-3K-1	COUNTY: MADISON	TOTAL SHEETS: 576	SHEET NO.: 467
			CONTRACT NO. 76818	
ILLINOIS FED. AID PROJECT				

DESIGN STRESSES
NEW CONSTRUCTION
EXIST. STRUCTURE

field units
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi

LOADING HS20-44

Allow 50 psf for future wearing surface

DESIGN SPECIFICATIONS

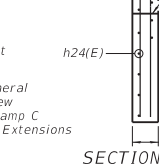
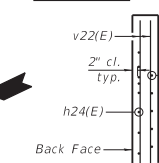
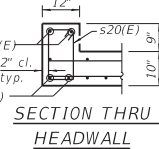
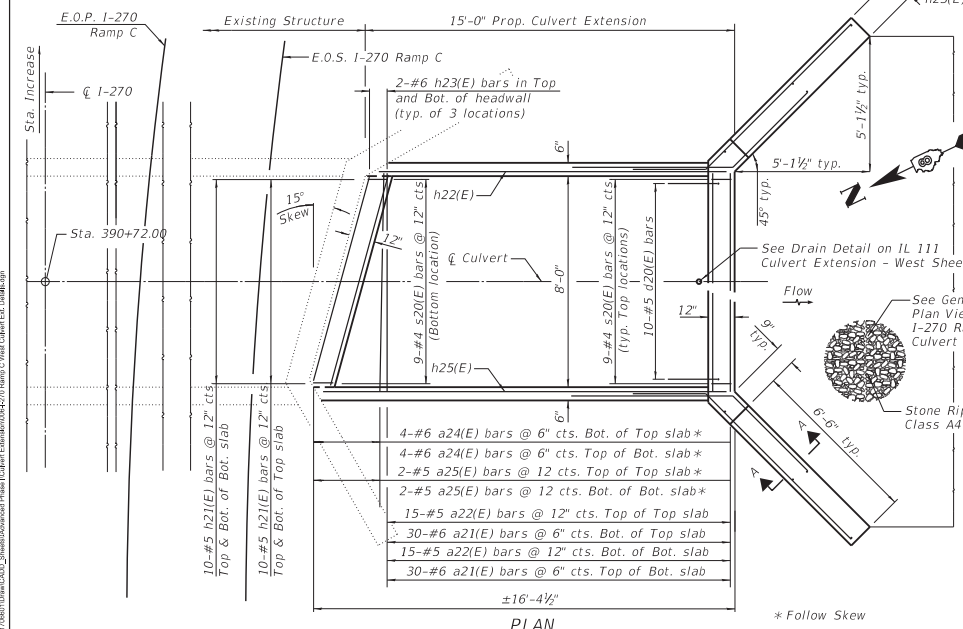
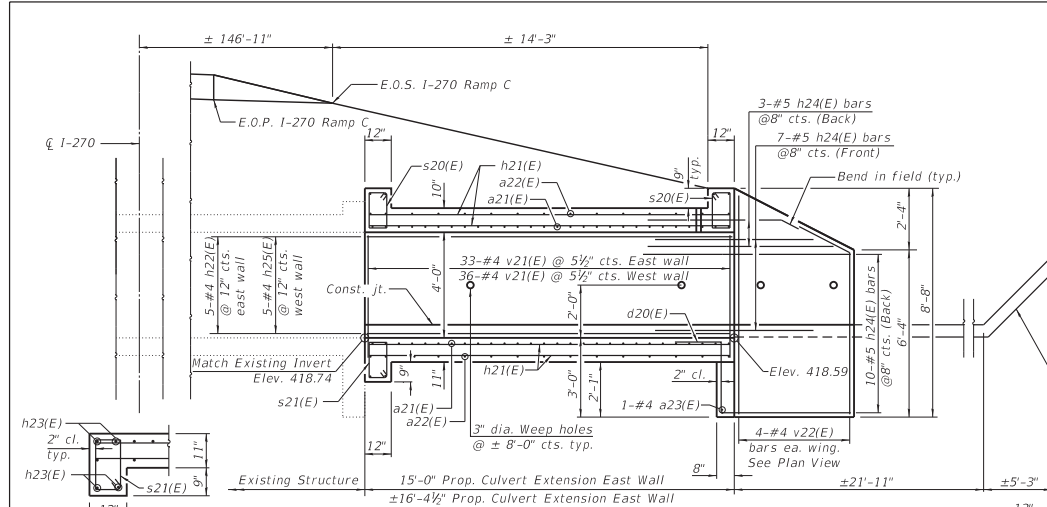
AASHTO Std. Specs. 17th Edition, 2002
 No precast alternate is allowed.

BILL OF MATERIAL

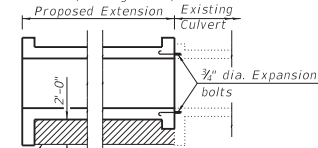
Bar	No.	Size	Length	Shape
a21(E)	60	#6	10'-0"	U
a22(E)	30	#5	8'-8"	U
a23(E)	1	#4	8'-10"	U
a24(E)	8	#6	9'-9"	U
a25(E)	4	#5	8'-11"	U
d20(E)	10	#5	4'-5"	L
h21(E)	40	#5	16'-1"	U
h22(E)	5	#4	14'-7"	U
h23(E)	12	#6	8'-10"	U
h24(E)	40	#5	11'-3"	U
h25(E)	5	#4	16'-1"	U
s20(E)	18	#4	4'-7"	U
s21(E)	9	#4	4'-9"	U
v21(E)	69	#4	5'-5"	U
v22(E)	8	#4	8'-4"	U

Stone Riprap, Class A4	Sq. Yd.	71
Structure Excavation	Cu. Yd.	62
Expansion Bolts $\frac{3}{4}$ "	Each	18
Reinforcement Bars, Epoxy Coated	Pound	3160
Concrete Box Culverts	Sq. Yd.	16.8
Rock Fill - Foundation	Ton	21
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	15

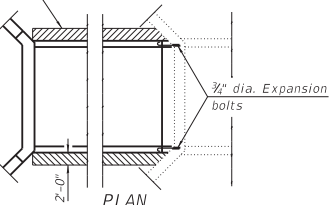
Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.



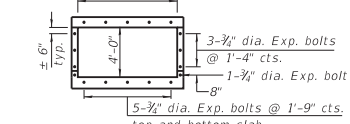
SECTION THRU BARREL
 (Looking South)



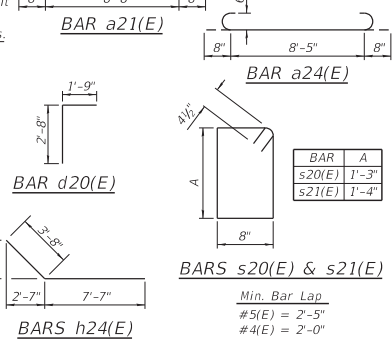
SECTION THRU BARREL



PLAN



CROSS SECTION THRU BARREL TYP. EXPANSION BOLT DETAILS



Notes:
 A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
 Reinforcement bars shall conform to the requirements of ASTM A706. Grade 60. All reinforcement bars shall be epoxy coated.
 It shall be the responsibility of the contractor to divert the existing culvert in order to keep the construction area free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included in the item Concrete Box Culverts.
 Precast end sections will not be allowed.
 All construction joints shall be bonded.
 Limits of Removal and Replacement of weak soils with Rock Fill Foundation will be determined by the Engineer.
 Bars are to be trimmed and skewed in the field as necessary near existing culvert end of new culvert.
 The minimum Unconfined Compressive Strength of the layer below the removal limit shall be 1.0 tsf.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PROPOSED BOX CULVERT EXTENSION
 I-270 RAMP C

F.A.L. SITE	SECTION	COUNTY	TOTAL SHEET NO.
270	60-3K-1	MADISON	576 468

MODEL: Detail
 FILE NAME: I:\DOT\170686\Drawings\Drawings\Proposed Phase Culvert Extension\I-270 Ramp C West Culvert Ext. Detail.dwg
 DATE: 7/11/2024 (7:12:50 PM)

USER NAME	DESIGNED	REVISION
Blake Young	DAC	-
CHECKED	-	REVISION
-	-	-
PLOT SCALE	N/A	DRAWN
-	-	DAC
PLOT DATE	7/11/2024 (7:12:50 PM)	CHECKED
-	-	REVISION
-	-	-

