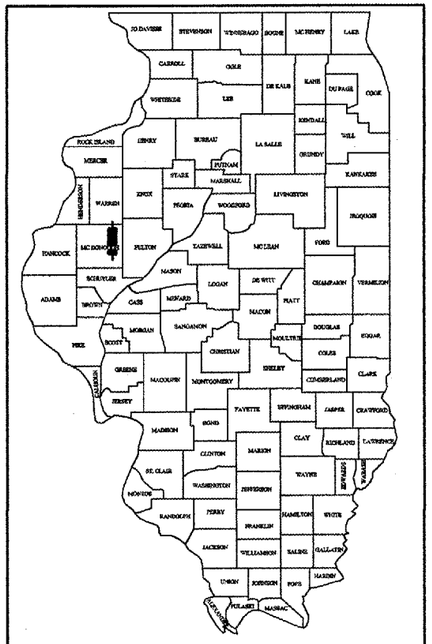
68602

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	MC DONOUGH	30	1

* D4 CULVERT REPAIR 2007

D-94-071-06



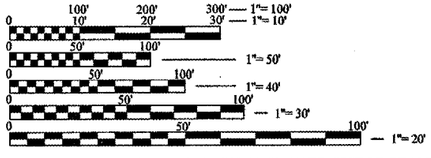
LOCATION OF SECTION INDICATED THUS: -

INDEX OF SHEETS

LIST OF STANDARDS

STATEWIDE	DISTRICT 4
630001-7 701006-2	281001-D4
630101-7701306-1	406101-D4
630301-4701311-2	440001-D4
635006-2701321-8	630101-D4
635011-1701326-2	630201-D4
001001-1 702001-6	635101-D4
704001-3	780001-D4
780001-1	

SCALES



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

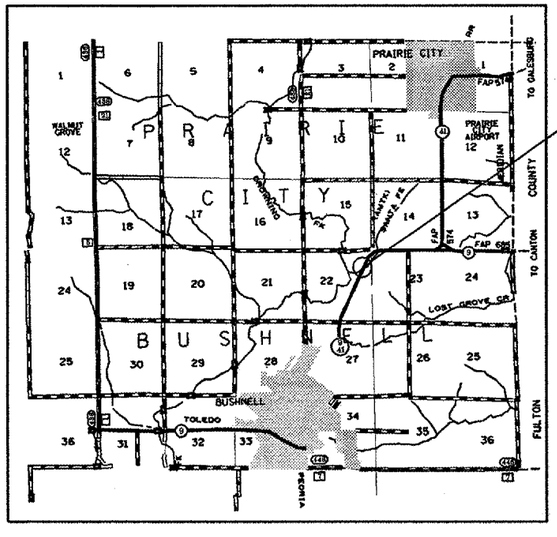
CONTRACT NO. 68602

CATALOG NO. 033292-00D

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 685 (IL. ROUTE 9/41)
D4 CULVERT REPAIR 2007
MC DONOUGH COUNTY
C-94-092-06



GROSS LENGTH OF SECTION = 732.5 FEET = 0.1 Mi

PROJECT LOCATION

STA 682+97.5 TO STA 690+02.5

BOX CULVERT REPLACEMENT OF STRUCTURE CARRYING IL 9/41 OVER TRIBUTARY OF DROWNING CREEK (S.N. 055-2504) 0.3 MILES SOUTH OF TR N2100

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 4/9 2007 WSL
J. E. Crowe
REGIONAL ENGINEER
May 11, 2007
Eric E. Harm
Interim ENGINEER OF DESIGN AND ENVIRONMENT
May 11, 2007
Milton R. Sees, P.E.
DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER: JIM MILLER 309-671-3451

DESIGNER: JIM MILLER 309-671-3451

CONTRACT #68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	MC DONOUGH	30	2
STA.		TO STA.		

* D4 CULVERT REPAIR 2007

COMMITMENTS

No Commitments have been made for this project

DESIGN CRITERIA

This project was designed in accordance with 3R Policies, Procedures and Guidelines.

GENERAL NOTES

ENVIRONMENTAL REVIEWS

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.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to 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.

The required environmental resource documentation shall include the following:

* BDE Form 2289 (Environmental Survey Request)
* A location map showing the size limits and location of the use area
* Signed property owner agreement form
* Color photographs depicting the use area

Please note that a minimum of two weeks shall be allowed for the District to obtain the required environmental clearances.

The contractor shall be responsible for diverting water flow from the construction area for each stage at no additional cost to the department. The method chosed must be approved by the resident engineer.

Included is a copy of the original box culvert plans. The contractor may use this for reference in bidding the removal. The contractor is responsible for verifying any descrepencies that may exist.

STATUS OF UTILITIES

Verizon					
Route	Offset	Location	Type of Utility	Type of Conflict	Disposition
IL 9/41	35' LT	690+00 RT	Buried Telephone	Furnished Exc	Caution

ENGINEERS FIELD OFFICE

Add the following sentence to the end of paragraph 670.02 (i) and 670.04 (e):
All of the telephone lines provided shall have unpublished numbers.

AGGREGATE SURFACE COURSE , TYPE B & AGGREGATE SHOULDER, TYPE B

Aggregate Surface Course, Type B & Aggregated Shoulder, Type B shall be required for all granular construction of side roads, entrances, and mailbox turnouts, whether or not portions of the surfaces thus constructed are to be covered with a bituminous surface, except where noted differently on the plans.

UTILITIES - LOCATIONS / INFORMATION ON PLANS

The locations of existing water mains, gas mains, sewers, electric power lines, telephone lines and other utilities as shown on the plans are based on careful field investigation and the best information available, but they are not guaranteed. Unless elevations are shown --- all utility locations shown on the cross sections are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

PAVEMENT STATION NUMBERS AND PLACEMENT

The contractor shall provide labor and materials required to imprint pavement station numbers in the finished surface of the pavement and/or overlay. The numbers shall be approximately 3/4" wide, 5" high, and 5/8" deep. The pavement station numbers shall be installed as specified herein:

Interval - 200 feet (English stationing)

Bottom of numbers - 6" from the inside edge of the pavement markings.

Location - right edge of pavement in direction of increasing stations.

Format - english pavement staions shall use this format "XX+X00 (XX)" where X represents the pavement station. This work will not be paid for separately , but will be considered included in the cost of the associated pavement and/or overlay pay items

Mixture Use (s)	HMA Surface Cse.	HMA Base Course, Widening	HMA Base Course, 10.5"
AC/PG:	PG 64-22	PG 64-22	PG 64-22
RAP%(Max)**	15%	25%	25%
Design Air Voids:	4.0%@N=50	4.0%@N=50	4.0%@N=50
Mixture Composition: (Gradation Mixture)	IL 9.5 or IL 12.5	IL 19.0	IL 19.0
Friction Aggregate:	Mixture D (dolomite only)	N.A.	N.A.

** If RAP option is selected, the asphalt cement grade may need to be adjusted, as determined by the District Materials Engineer.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SH N
685	*	MCDONOUGH		3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* D4 CULVERT REPAIR 2007 68602

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNITS	TOTAL QUANTITY	XO28-2A		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	14.8	14.8		
20400800	FURNISHED EXCAVATION	CU YD	14.4	14.4		
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	60	60		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	100	100		
25000300	SEEDING, CLASS 3	ACRE	0.1	0.1		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	9.0	9.0		
25000500	PHOPHORUS FERTILIZER NUTRIENT	POUND	9.0	9.0		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	9.0	9.0		
28000720	MULCH, METHOD 2	ACRE	0.1	0.1		
28100207	STONE RIPRAP, CLASS A4	TON	84.2	84.2		
28200200	FILTER FABRIC	SQ YD	63.2	63.2		
35501326	HOT-MIX ASPHALT BASE COURSE, 10 1/2"	SQ YD	82.3	82.3		
35600900	HOT-MIX ASPHALT BASE COURSE WIDENING	TON	91.5	91.5		
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.89	0.89		
40600300	AGGREGATE (PRIME COAT)	TON	4.5	4.5		

	SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE		
	CODE NO.	ITEM	UNITS	TOTAL QUANTITY	XO28-2A		
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	190.0	190.0		
	40600990	TEMPORARY RAMP	SQ YD	44.4	44.4		
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	250.0	250.0		
	44000100	PAVEMENT REMOVAL	SQ YD	75.1	75.1		
	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	2042.5	2042.5		
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	18.0	18.0		
	50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1.0	1.0		
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	8,320	8,320		
	50800515	BAR SPLICERS	EACH	43.0	43.0		
	54003000	CONCRETE BOX CULVERTS	CU YD	36.6	36.6		
*	63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	825.0	825.0		
*	63000025	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	25.0	25.0		
*	63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4.0	4.0		
	63200310	GUARDRAIL REMOVAL	FOOT	262.0	262.0		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4.0	4.0		

* SPECIALTY ITEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	MCDONOUGH		4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* D4 CULVERT REPAIR 2007 68602

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNITS	TOTAL QUANTITY	X028-2A		
67100100	MOBILIZATION	L SUM	1.0	1.0		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1.0	1.0		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L. SUM	1.0	1.0		
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1.0	1.0		
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1.0	1.0		
70103815	TRAFFIC CONTROL SURVELLIANCE	CAL DA	2.0	2.0		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1.0	1.0		
70106700	TEMPORARY RUMBLE STRIP	EACH	6.0	6.0		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	384.0	384.0		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1964.0	1964.0		
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	52.0	52.0		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	366.1	366.1		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	318.0	318.0		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	318.0	318.0		
* 78005110	EPOXY PAVEMENT MARKING-LINE 4"	FOOT	1410.0	1410.0		
* 78005130	EPOXY PAVEMENT MARKING-LINE 6"	FOOT	180.0	180.0		

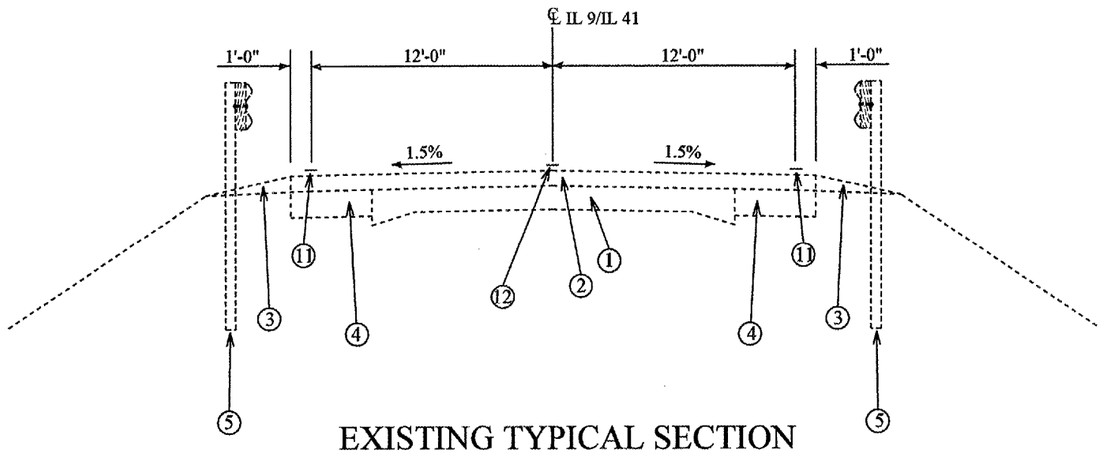
SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNITS	TOTAL QUANTITY	X028-2A		
78200410	GUARDRAIL MARKERS, TYPE A	EACH	20.0	20.0		
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4.0	4.0		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	489.0	489.0		
X0301512	GUARDRAIL AGGREGATE EROSION CONTROL	TON	106.4	106.4		
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	65.0	65.0		
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2.0	2.0		
Z0030340	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2.0	2.0		
Z0054500	ROCK FILL	TON	40.6	40.6		

* SPECIALTY ITEM

CONTRACT # 68602

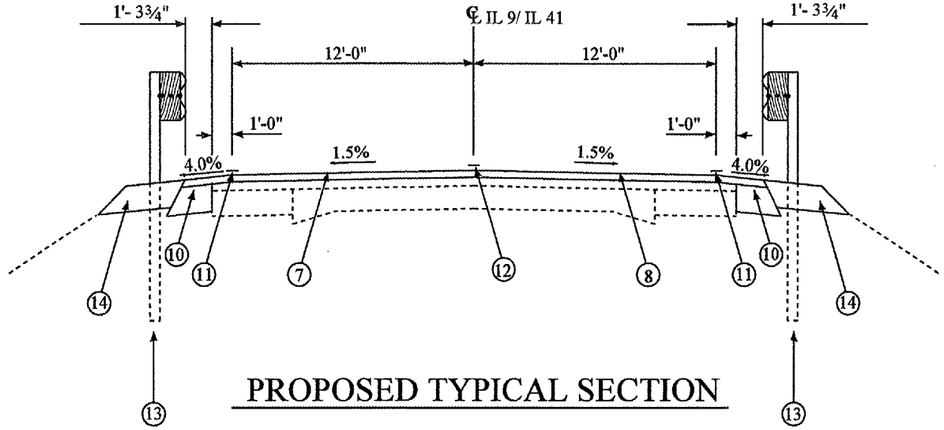
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	McDONOUGH	30	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* D4 CULVERT REPAIR 2007



EXISTING TYPICAL SECTION

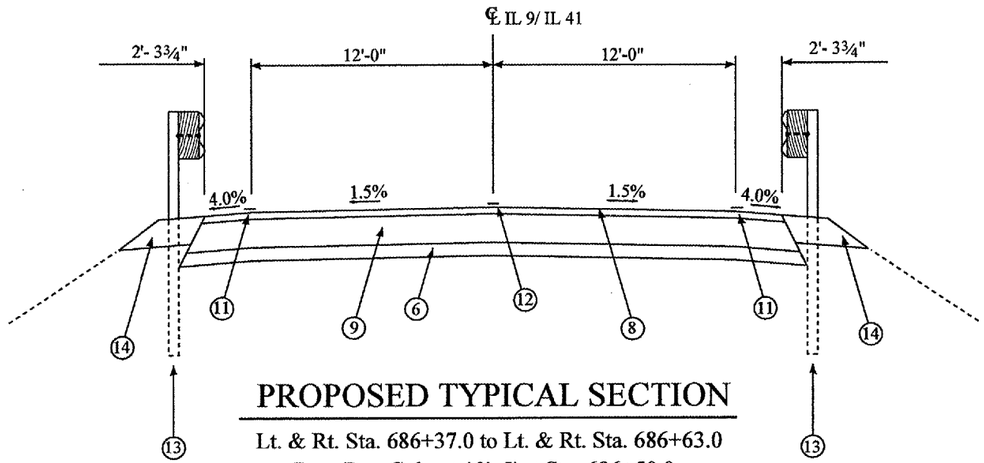
LT/ RT STA 682+84.0 - LT/ RT STA 690+16.5
Existing Box Culvert 6'x6' at Sta. 686+50.0



PROPOSED TYPICAL SECTION

Lt. -- Sta. 684+43.5 to Sta. 686+37.0 ; Sta. 686+63.0 to Sta. 689+68.5
Rt. -- Sta. 683+31.5 to Sta. 686+37.0 ; Sta. 686+63.0 to Sta. 688+56.5

⑦, ⑧, ⑪, ⑫ - Lt. & Rt. Sta. 682+97.5 to Sta. 686+37.0 ; Sta. 686+63.0 to Sta. 691+02.5



PROPOSED TYPICAL SECTION

Lt. & Rt. Sta. 686+37.0 to Lt. & Rt. Sta. 686+63.0
Prop Box Culvert 10'x5' at Sta. 686+50.0

⑥ 8" @ Lt & Rt Sta. 686+37 - Sta. 686+44.5
Lt & Rt Sta. 686+55.5 - Sta. 686+63
4" @ Sta. 686+44.5 - Sta. 686+55.5

LEGEND

① EXISTING CONCRETE PAVEMENT
② EXISTING BITUMINOUS OVERLAY
③ EXISTING AGGREGATE SHOULDER
④ EXISTING BITUMINOUS WIDENING
* ⑤ EXISTING GUARDRAIL
⑥ PROP SUB-BASE GRANULAR MATERIAL - TY A - 4" - 8"
(SEE DETAIL OF EXCAVATION AND BACKFILL FOR BOX CULVERTS)
⑦ PROPOSED HMA SURF REMOVAL - 2"
⑧ PROPOSED HMA SURFACE COURSE MIX "D", N50 -2"
⑨ PROPOSED BASE HMA COURSE 10 1/2"
⑩ PROPOSED HMA BASECOURSE WIDENING- 8.5"
⑪ EXISTING / PROPOSED EPOXY PAINT PAVEMENT MARKING - 4"
⑫ EXISTING / PROPOSED EPOXY PAINT PAVEMENT MARKING - 6"
* ⑬ PROP SPBGR - TY A / PROP SPBGR - TY A (ATTACHED TO STRUCTURES)
* ⑭ PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL / AGG SHLD TY B - 8"

* SEE SCHEDULE OF QUANTITIES FOR STATIONS

TYPICAL SECTION
IL 9/41

CONTRACT = 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	•	McDonough		69
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• D4 CULVERT REPAIR 2007

SCHEDULE OF QUANTITIES

SEEDING SCHEDULE

LOCATION	SEEDING CLASS 3 (ACRES)	NITROGEN FERT. NUT. (LBS)	PHOSPHORUS FERT. NUT. (LBS)	POTASSIUM FERT. NUT. (LBS)	MULCH METHOD 2 (ACRES)
JOBSITE	0.1	9	9	9	0.1

GUARDRAIL REMOVAL

LOCATION	LENGTH (FT)
RT. 687+07 - 686+05.5	101.5
LT. 687+19 - 685+58.5	160.5
TOTAL	262

GUARDRAIL

LOCATION	SPBGR TYP. A (FT)	SPBGR ATTCH. TO STRUCTURE (FT)	TRAF. BARR TERM TYP. 1 SPCL TAN (EACH)	GUARDRAIL MRKS.TYP. A (EACH)	TERM MRKRS DIR. APPL. (EACH)
683+31.5 - 688+56.5 RT	412.5	12.5	2	10	2
689+68.5 - 684+43.5 LT	412.5	12.5	2	10	2
TOTAL	825	25	4	20	4

GROUND STABILIZATION

LOCATION	REM & DISP OF UNSUITABLE (CU YD)	GEOTECH FAB FOR GRND STAB. (SQ YD)	ROCK FILL (TON)	FILTER FAB FOR USE W/ RIPRAP (SQ YD)	STONE RIPRAP CLASS A4 (TON)
686+50 LT.	7.4	22	14.9	21.8	42.1
686+50 RT.	7.4	22	14.9	21.8	42.1
TOTAL	14.8	44	29.8	43.6	84.2

TEMPORARY RAMP

LOCATION	(SQ YD)
682+97.5 - 682+90.5	22.2
689+95.5 - 690+0.5	22.2
TOTAL	44.4

TOPSOIL

LOCATION	SQYD
682+97.5 - 683+43.5 RT	25
688+44.5 - 688+90.5 RT	25
684+09.5 - 684+55.5 LT	25
689+56.5 - 690+02.5 LT	25
TOTAL	100

AGG.SHLDR. TYP.B

LOCATION	SQYD
682+97.5 - 683+43.5 RT	4.5
688+44.5 - 688+90.5 RT	4.5
684+09.5 - 684+55.5 LT	4.5
689+56.5 - 690+02.5 LT	4.5
TOTAL	18

RESURFACING SCHEDULE

LOCATION	LENGTH (FT)	WIDTH (FT)	BIT MAT PRIME COAT (TON)	AGGREGATE PRIME COAT (TON)	HMA SRF CSE MIX "C" N50 (TON)	HMA BSE CSE WIDENING (TON)	HMA BIN CSE SUP,IL-9.0, N50 (TON)	HMA REM BUTT JOINT (SQ YD)	HMA SURF REM 2" (SQ YD)	PAVEMENT REM (SQ YD)
682+97.5 - 683+27.5	30	28.5	0.04	0.19	10.64	3.97		95.0		
683+27.5 - 686+37	309.5	28.5	0.39	1.96	109.8	40.92			980.1	
686+37 - 686+63	26	28.5	0.03	0.16	9.2	1.72	48.4		82.3	75.1
686+63 - 689+72.5	309.5	28.5	0.39	1.96	109.8	40.9			980.1	
689+72.5 - 690+02.5	30	28.5	0.04	0.19	10.64	4.0		95.0		
TOTALS	705	142.5	0.89	4.5	250.0	91.5	48.4	190.0	2042.5	75.1

FURNISHED EXCAVATION

LOCATION	SQYD
682+97.5 - 683+43.5 RT	3.6
688+44.5 - 688+90.5 RT	3.6
684+09.5 - 684+55.5 LT	3.6
689+56.5 - 690+02.5 LT	3.6
TOTAL	14.4

TRAFFIC CONTROL SURVEILLANCE

	CAL DAYS
PRE-STAGE I	2
TOTAL	2

PAVEMENT MARKING

LOCATION	EPOXY PAVT. MRK. LINE 6" (FT)	EPOXY PAVT. MRK. LINE 4" (FT)	PAVEMENT MRK. REM. (SQFT)	SHORT TERM PAV. MRK (FT)	TEMP PAVT MRK. LIN.12" (FT)	TEMP PAVT MRK. LIN. 4" (FT)	WORK ZONE PVT. MRK. REM (SQFT)
682+97.5 - 690+02.5 STAGE I			289		26	982	140.8
682+97.5 - 690+02.5 STAGE II			200		26	982	140.8
682+97.5 - 690+02.5 STAGE III	180	1410		384			84.5
TOTAL	180	1410	489	384	52	1964	366.1

TEMP BRIDGE TRAF. SIGNALS

LOCATION	EACH
JOB SITE	1
TOTAL	1

TEMP. RUMBLE STRIPS

LOCATION	EACH
676+33	2
671+08	2
665+83	2
696+67	2
701+92	2
707+17	2
TOTAL	12

LOCATION	TEMP. CONC. BARRIER (FT)	TEMP. CONC. BARR. REL. (FT)
688+09 - 684+91	318	318
TOTAL	318	318

REM OF EXIST. STR. NO. 1

LOCATION	EACH
686+50	1
TOTAL	1

TEMP SOIL RENTENTION SYSTEM

LOCATION	SQFT
686+50	65
TOTAL	65

GUARDRAIL AGG. EROSION CNTRL

LOCATION	TON
684+52 - 689+65 LT	26.6
683+22 - 688+47 RT	26.6
TOTAL	53.2

LOCATION	TEMP. IMPACT ATTN. TEST LEV. 2 (EACH)	REL. TEMP ATTN. (EACH)
STAGE I	2	
STAGE II		2
TOTAL	2	2

TRAFFIC CONTROL STANDARDS

	EACH	L. SUM
701321	1	
701326		1
701201		1
701306		1
TOTAL	1	3

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

DATE CHECKED BY

PLOT DATE = 4/6/2007
FILE NAME = c:\projects\d4stand\miscstand_jan.dgn
PLOT SCALE = 216.867 ' / IN.
USER NAME = brucebm

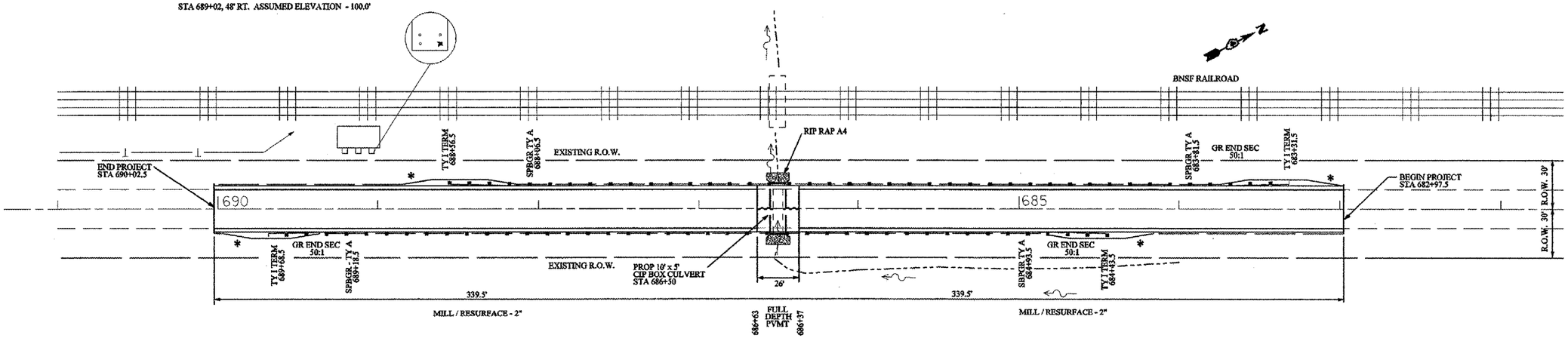
CONTRACT NO. 68602

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	-	MCDONOUGH		7
STA. 682+97.5		TO STA. 690+02		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

*04 CULVERT REPAIR 2007

PLAN | SURVEYED | DRAWN | ALIGNMENT CHECKED | RT. OF WAY CHECKED | PLOT FILE NAME | NOTE BOOK | NO. | BY | DATE

TBM 1 - CHISELED "X" ON BOLTHEAD ON SE CORNER OF RAILROAD STRUCTURE,
STA 689+02, 48' RT. ASSUMED ELEVATION = 100.0'



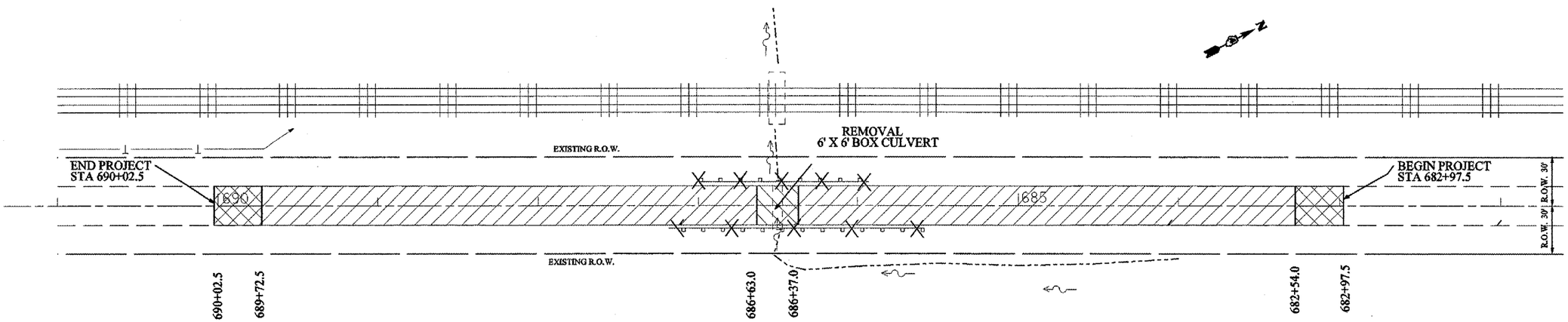
NOTE: HMA BSE CSE WID STA 682+97.5 - 690+02.5 RT
STA 682+97.5 - 686+37 LT
STA 686+37 - 690+02.5 LT

* REFER TO STD 630301 FOR GUARDRAIL END SECTION WIDENING DETAILS

0 25 50 75 100 125
SCALE IN FEET

PROPOSED PLAN

PROFILE | SURVEYED | DRAWN | GRADES CHECKED | FINAL NOTED | PLOT FILE NAME | NOTE BOOK | BY | DATE



LEGEND

XXX GUARDRAIL REM

HMA SURFACE REM - 2" NOTE: STA 686+37 - 686+63 WILL ALSO BE MILLED

PAVEMENT REM

HMA SURFACE REM - BUTT JOINT

0 25 50 75 100 125
SCALE IN FEET

REMOVAL PLAN

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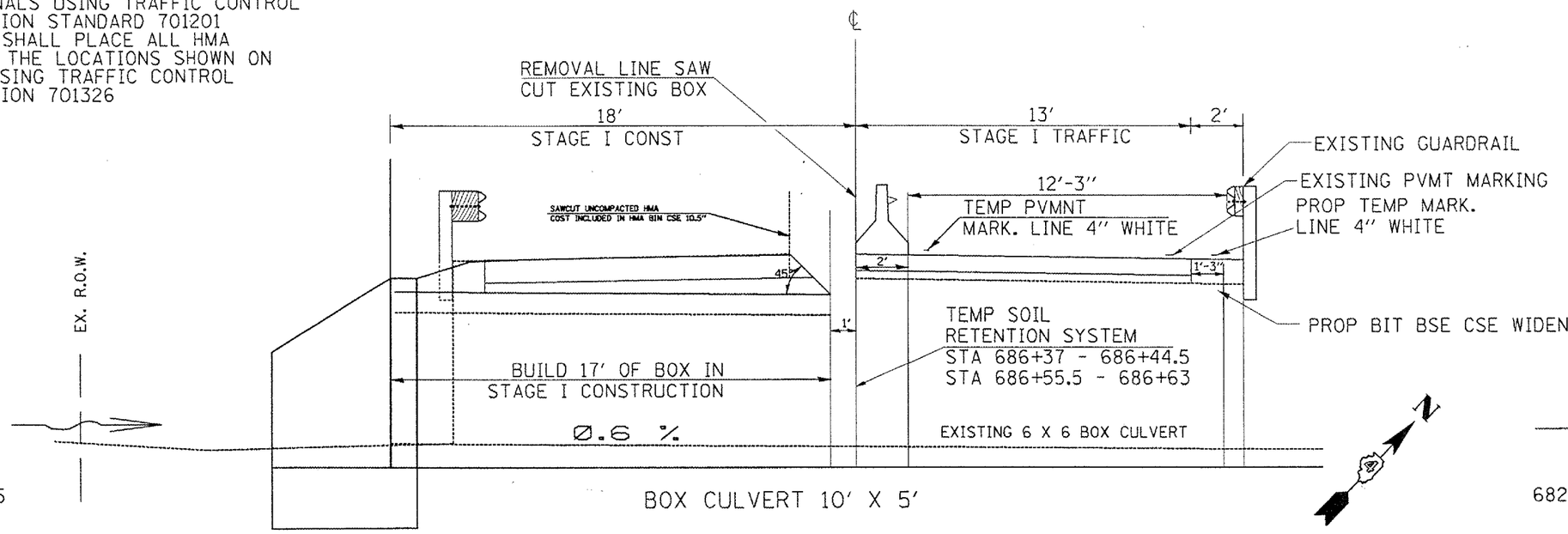
CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH	30	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PRE-STAGE I CONST

CONTRACTOR SHALL INSTALL TEMPORARY TRAFFIC SIGNALS USING TRAFFIC CONTROL AND PROTECTION STANDARD 701201
CONTRACTOR SHALL PLACE ALL HMA WIDENING AT THE LOCATIONS SHOWN ON THE PLANS USING TRAFFIC CONTROL AND PROTECTION 701326

STAGE I CONSTRUCTION
(Looking South)



STAGE I CONSTRUCTION

INSTALL TEMPORARY BARRICADES, SIGNS, AND TEMPORARY PAVEMENT MARKINGS AS DETAILED ON TRAFFIC CONTROL AND PROTECTION STANDARD 701301.

EXISTING GUARDRAIL ON WEST SIDE IS TO REMAIN IN PLACE DURING STAGE I CONSTRUCTION AND NEW GUARDRAIL MUST BE ERECTED BEFORE OPENING LANE TO TRAFFIC.

INSTALL TEMPORARY EARTH RETAINING SYSTEM.

PERFORM WORK SUCH AS; PAV. REM., GUARDRAIL REM., STRUCTURE REM., REM. OF UNSUITABLE, CAST IN PLACE BOX CULVERT, BACKFILL, HMA BIN. CSE., AND ALL COLLATERAL WORK FOR THE EAST SIDE OF THE ROAD.

HMA BSE CSE WID
CONSTRUCTION ZONE
HMA BIN CSE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGING PLAN

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 4/28/2007
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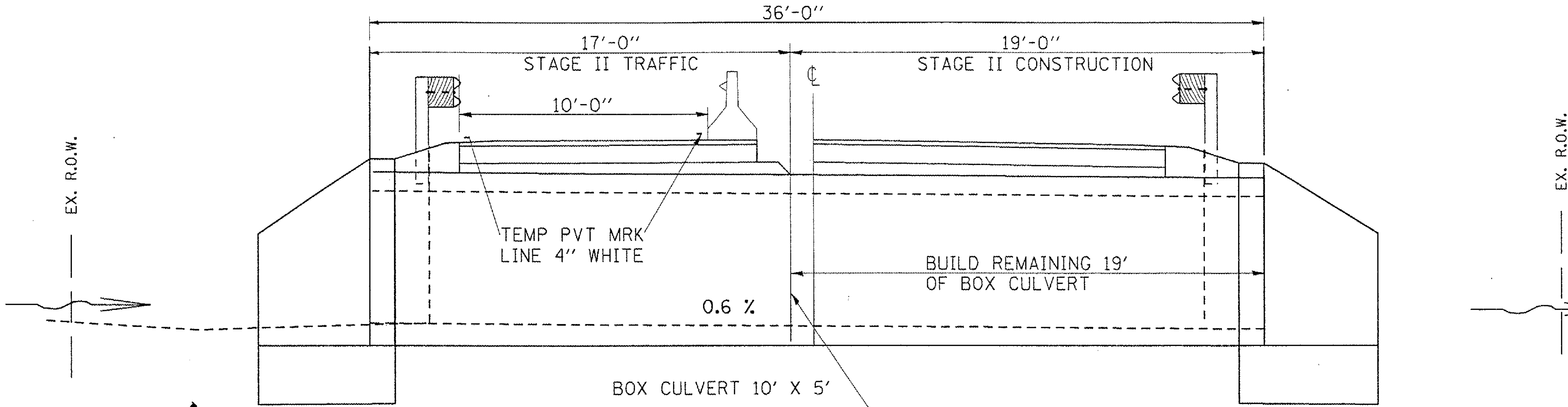
CONTRACT NO. 68602

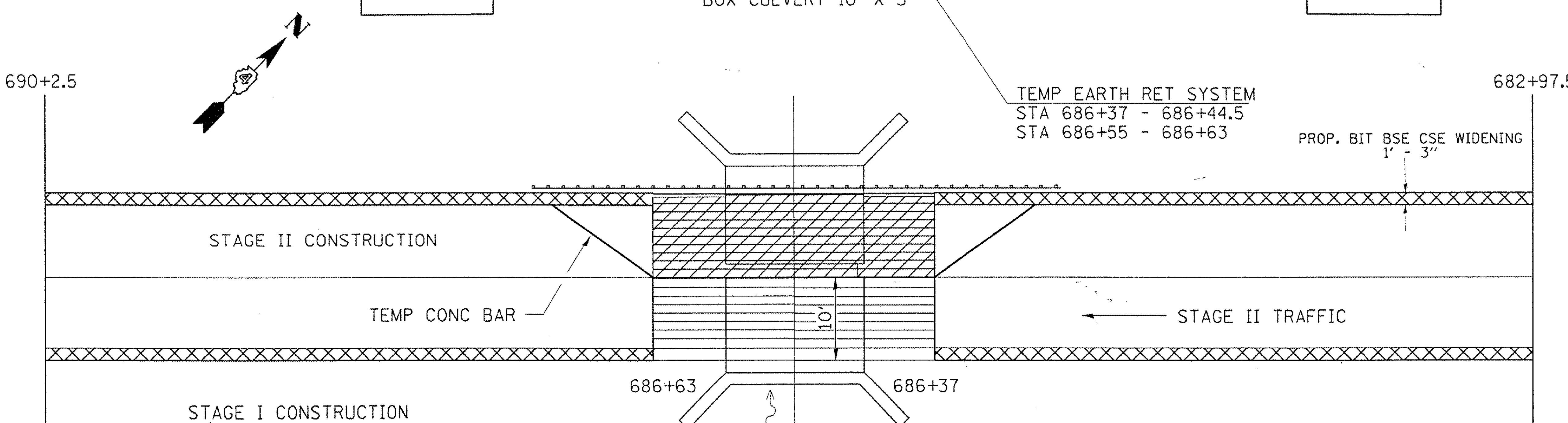
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH	30	9

STA. TO STA.

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

STAGE II CONSTRUCTION
(Looking South)





HMA BSE CSE WID

CONSTRUCTION ZONE

HMA BIN CSE

STAGE I CONSTRUCTION

INSTALL TEMPORARY BARRICADES, SIGNS, AND TEMPORARY PAVEMENT MARKINGS AS DETAILED ON TRAFFIC CONTROL AND PROTECTION STANDARD 701301.

EXISTING GUARDRAIL ON WEST SIDE IS TO REMAIN IN PLACE DURING STAGE I CONSTRUCTION AND NEW GUARDRAIL MUST BE ERECTED BEFORE OPENING LANE TO TRAFFIC.

INSTALL TEMPORARY EARTH RETAINING SYSTEM.

PERFORM WORK SUCH AS; PAV. REM., GUARDRAIL REM., STRUCTURE REM., REM. OF UNSUITABLE, CAST IN PLACE BOX CULVERT, BACKFILL, HMA BIN. CSE., AND ALL COLLATERAL WORK FOR THE EAST SIDE OF THE ROAD.

STAGE III

CONTRACTOR SHALL COMPLETE MILLING, PAVING, STRIPING OPERATIONS ACCORDING TO THE PLANS. USING TRAFFIC CONTROL AND PROTECTION STANDARD 701306, 701311.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGING PLAN

SCALE: VERT. HORIZ.

DATE

DRAWN BY

CHECKED BY

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CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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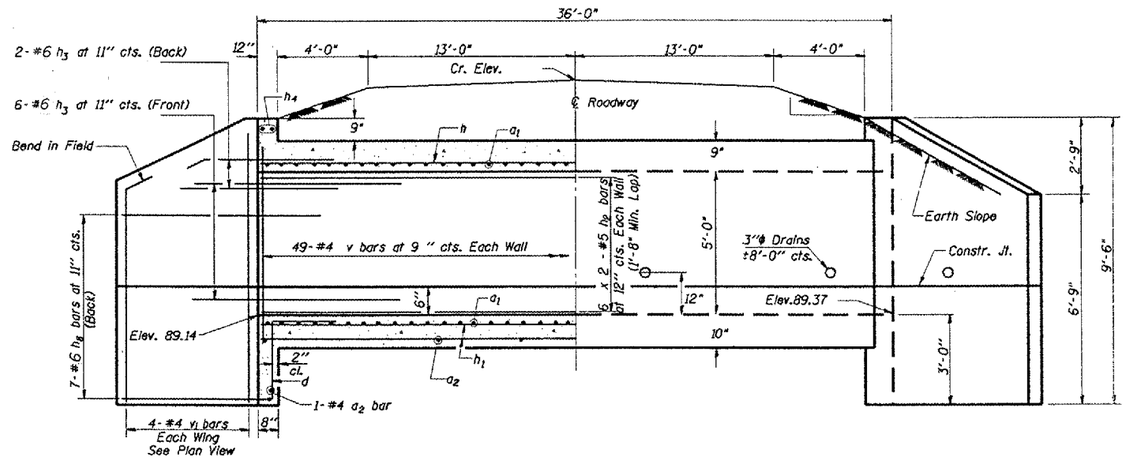
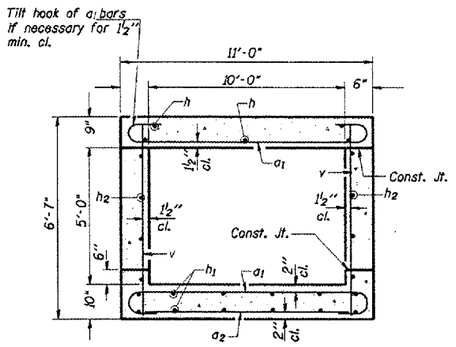
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

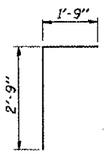
* D4 CULVERT REPAIR 2007



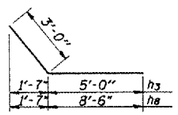
HALF LONG. SECTION HALF ELEVATION



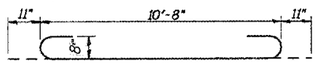
SECTION THRU BARREL



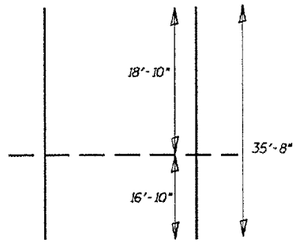
BAR d



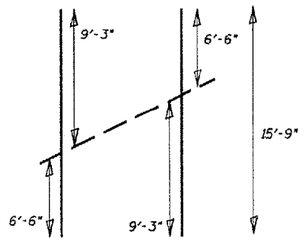
BARS h_3 & h_2



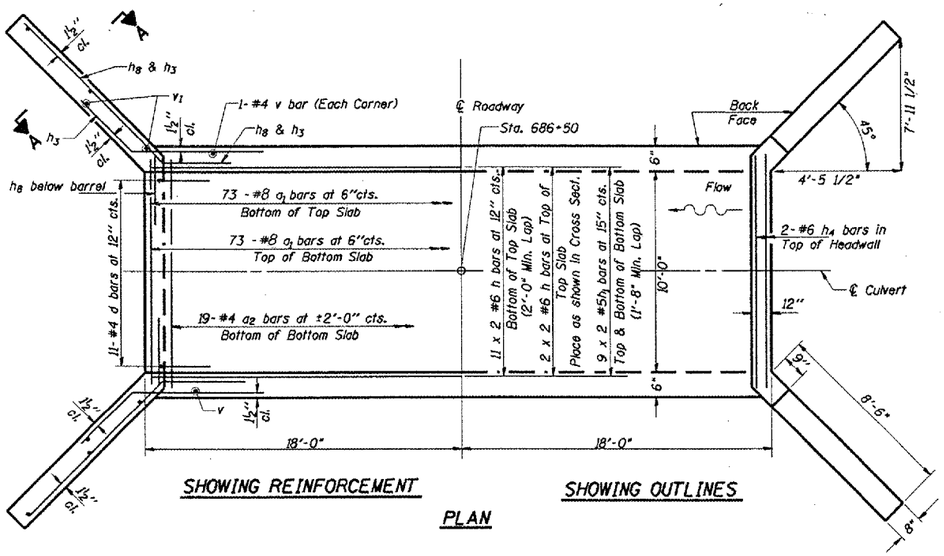
BAR a_1



CUTLINE FOR h, h_1, h_2

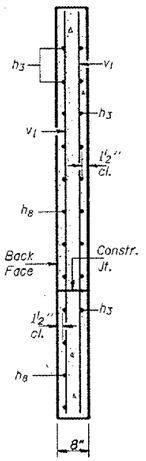


CUTLINE FOR V_1

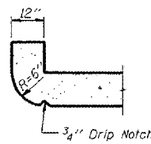


SHOWING REINFORCEMENT SHOWING OUTLINES

PLAN



SECTION A-A



SECTION THRU HEADWALL
(Up Stream End Only)

LOADING HS 20-44 & ALT.

DESIGN STRESSES
fy = 60,000 psi
f'c = 3,500 psi

LOCATION:	BARRELS
SIZE	LAP
#4	1'-4"
#5	1'-8"
#6	2'-0"

LOCATION:	WINGWALLS
SIZE	LAP
#4	1'-8"
#5	2'-2"
#6	2'-7"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_1 (E)	146	#8	12'-6"	
a_2 (E)	21	#4	9'-8"	
d (E)	22	#4	4'-6"	
h (E)	13	#6	35'-8"	
h_1 (E)	18	#5	35'-8"	
h_2 (E)	12	#5	35'-8"	
h_3 (E)	32	#6	8'-0"	
h_4 (E)	4	#6	10'-6"	
h_8 (E)	28	#6	11'-4"	
v (E)	102	#4	6'-3"	
v_1 (E)	8	#4	15'-9"	
Concrete Box Culverts			Cu. Yd.	36.6
Reinforcement Bars			Pound	8320
Bar Splicers			Each	43

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 AASHTO M-31. M-42 or M-53. Grade 60.

Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

All construction joints shall be bonded.

Temporary benchmark is located on SE corner of Railroad structure. chisled "X" on bolt head Sta. 689+02, 48' RT

*PRECAST BOX CULVERT OPTION IS NOT ALLOWED

SSB-H-0 6-1-2000

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS

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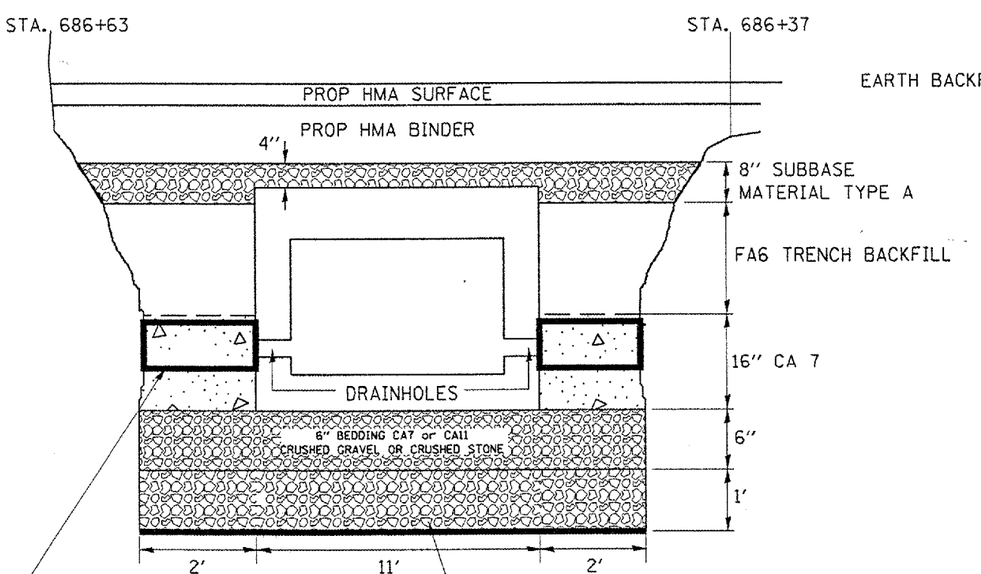
CONTRACT • 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	•	McDonough	30	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• D4 CULVERT REPAIR 2007

ROADWAY PROFILE VIEW

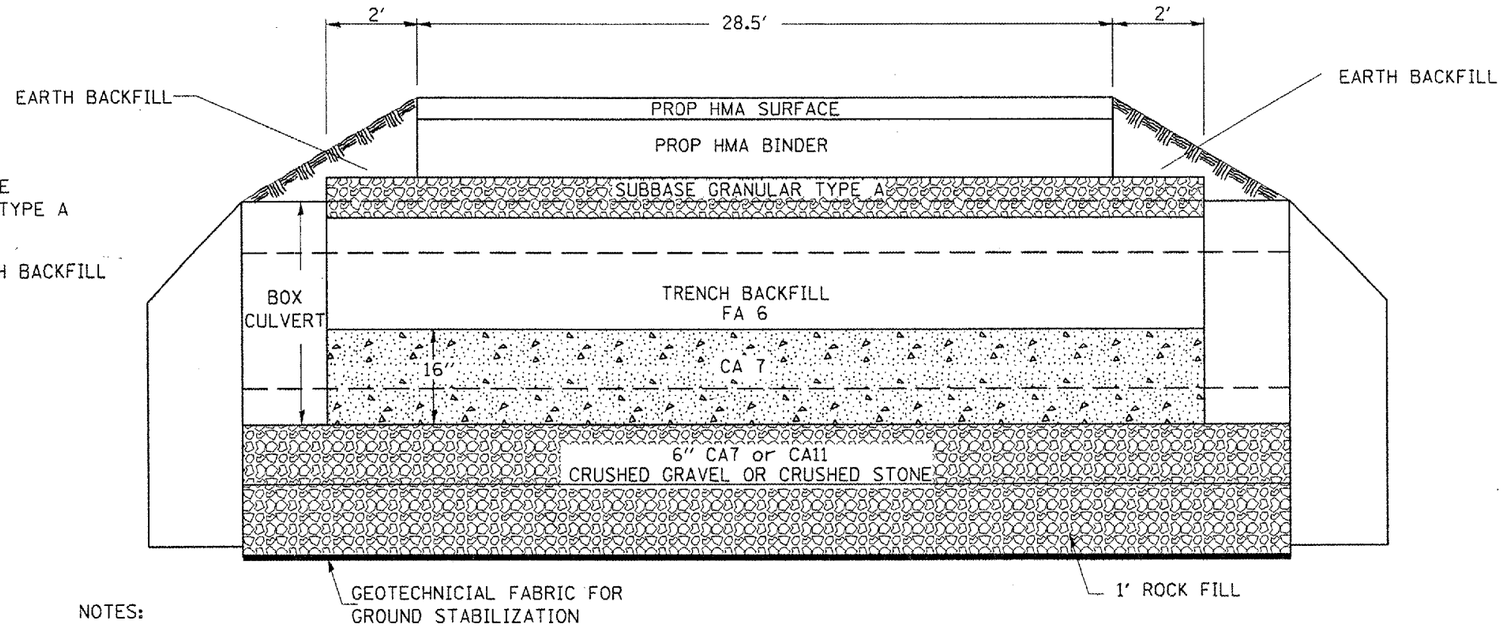
NON-WOVEN GEOTECHNICAL FABRIC FOR FRENCH DRAINS



2' x 2' x 1' DEPOSIT OF CA 5, 7, OR 11 IN FABRIC ENVELOPE IN ACCORDANCE WITH ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS (TYPICAL)

PROPOSED REMOVAL & DISPOSAL OF UNSUITABLE, AND REPLACE WITH ROCKFILL WITH GEOTECHNICIAL FABRIC FOR GROUND STABILIZATION. PAID FOR BY RESPECTIVE PAY ITEMS

ROADWAY CROSS SECTION VIEW



NOTES:

1. EXCEPT AS SPECIFIED IN THIS DETAIL, THE PLACEMENT AND COMPACTION OF BACKFILL SHALL BE IN ACCORDANCE WITH ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS.

2. TRENCH BACKFILL SHALL BE COMPACTED BY EITHER METHOD 2 OR METHOD 3 SPECIFIED IN ARTICLE 550.07, OR IN ACCORDANCE WITH METHOD 1 SPECIFIED IN ARTICLE 550.07, EXCEPT THAT THE COMPACTED LIFTS SHALL NOT EXCEED 8" IN THICKNESS. TRENCH BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD LAB DENSITY.

3. THE NON-WOVEN GEOTECHNICAL FABRIC FOR FRENCH DRAINS SHALL CONFORM TO ARTICLE 1080.05 OF THE STANDARD SPECIFICATIONS.

4. ALL COSTS ASSOCIATED WITH EXCAVATION AND FA 6 BACKFILL, SUB BASE GRANULAR MATERIAL TYPE A, 6" BEDDING LAYER, FABRIC FOR FRENCH DRAINS PER THIS DETAIL SHALL BE INCLUDED IN THE UNIT PRICE PER CUBIC YD FOR CONCRETE BOX CULVERT, OF THE TYPE AND SIZE SPECIFIED.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF EXCAVATION AND BACKFILL FOR BOX CULVERTS

NOT TO SCALE

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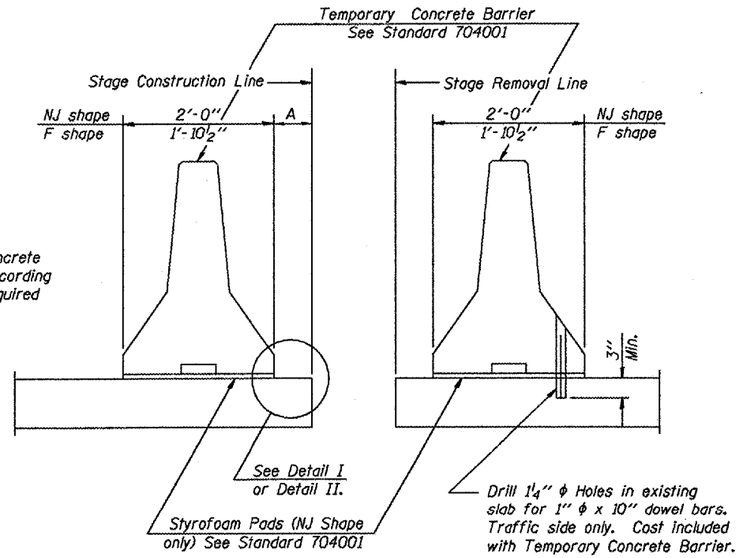
CONTRACT * 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	McDonough		17
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* D4 CULVERT REPAIR 2007



NEW SLAB

EXISTING SLAB

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

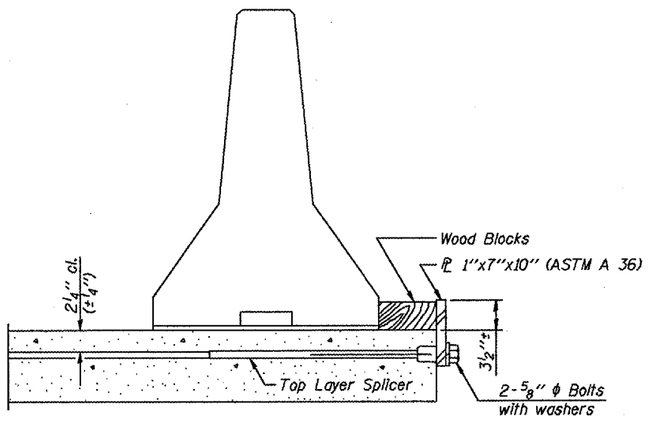
NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel ℙ to the top layer of couplers with 2-$\frac{5}{8}$" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel ℙ to the concrete slab with 2-$\frac{5}{8}$" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

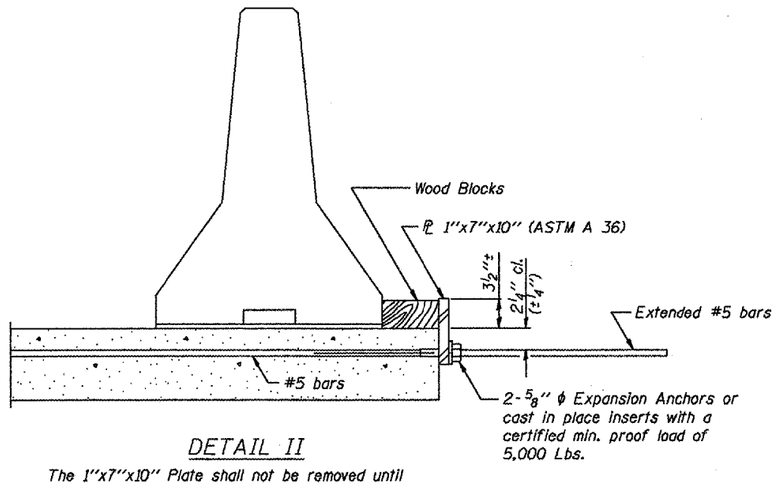
Cost of anchorage is included with Temporary Concrete Barrier.

SECTIONS THRU SLAB



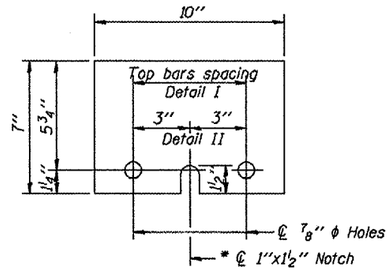
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



ℙ 1"x7"x10"

* Required only with Detail II

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER

IL 91L 41

DROWNING CREEK TRIBUTARY

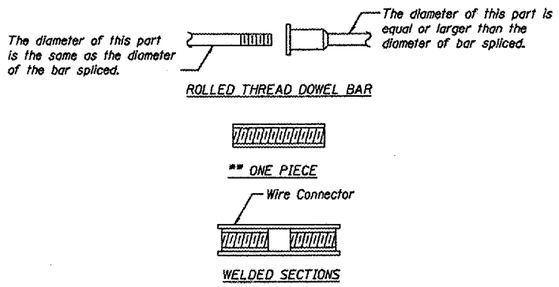
SN # 055-2504

DATE CHECKED BY

CONTRACT * 68602

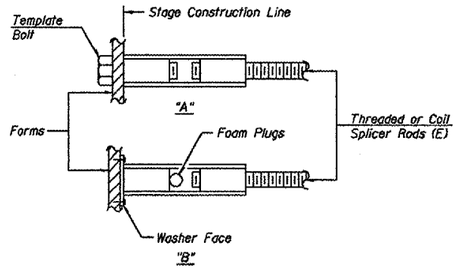
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	McDonough		13
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* D4 CULVERT REPAIR 2007



BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_f$

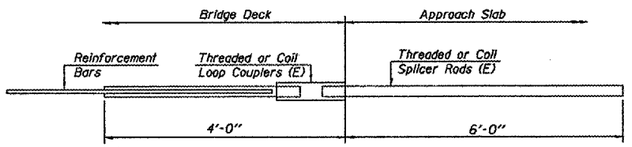
② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times fs_{allow} \times A_f$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
fs_{allow} = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
A_f = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES

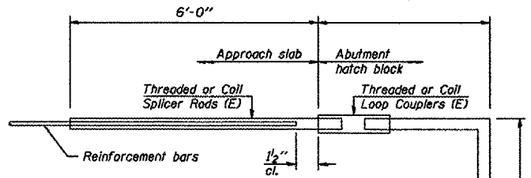
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



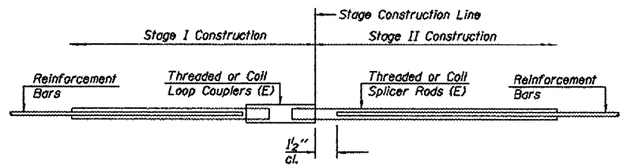
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =



STANDARD

Bar Size	No. Assemblies Required
#5	30
#6	13

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BAR SPLICER DETAIL
IL 91L 41
DROWNING CREEK TRIBUTARY
SN # 055-2504

DATE CHECKED BY

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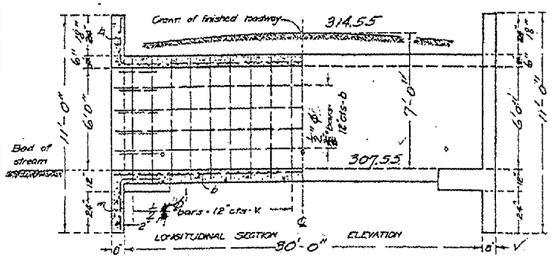
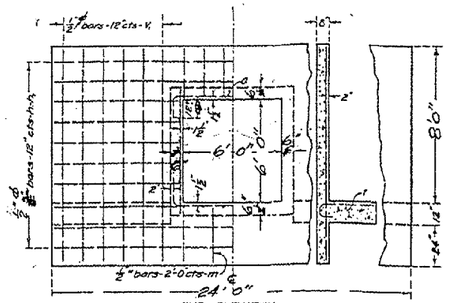
USER NAME = brucebm

STATE OF ILLINOIS
STATE HIGHWAY DEPARTMENT
REINFORCED CONCRETE BOX CULVERT

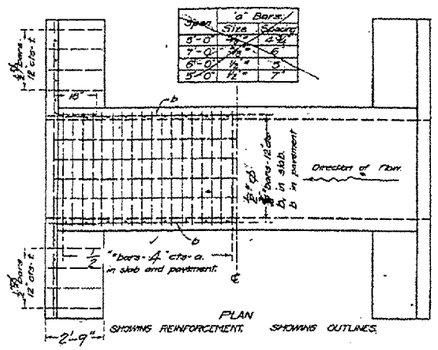
BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
9	McDonough	36	25	23





Note - Use "m" bars in downstream headwall only.
Bar is designed for no fill.
Maximum clearance = 7'-6"

Span	"a" Bars: Size	Spacing
6'-0"	#6	6"
7'-0"	#6	6"
8'-0"	#7	6"
9'-0"	#7	7"



BILL OF MATERIAL

Bars	No.	Size	Length
V	60	#6	6'-9"
V1	40	#8	10'-6"
h	12	#6	23'-6"
h1	24	#6	@ 10'0"
a	188	#6	@ 6"
b	34	#6	@ 6"
b1	14	#6	@ 12"
c	40	#6	@ 6"
m	4	#6	5'-0"
Steel - Lbs.			3940
Concrete - Cu. Yds.			383

Class A concrete to be used throughout
Proportions 1 - 2½ - 4

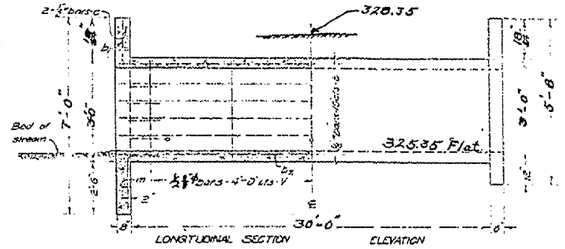
Sta. 666+50
State Bond Issue
Route 9
Section 36
McDonough County.

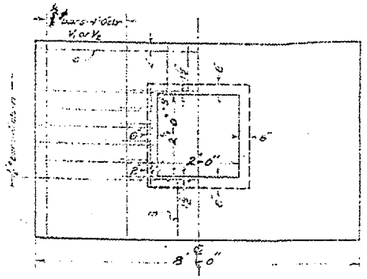
PASSED
[signature]
ENGINEER OF DESIGN.

618

STATE OF ILLINOIS
STATE HIGHWAY DEPARTMENT
REINFORCED CONCRETE BOX CULVERT

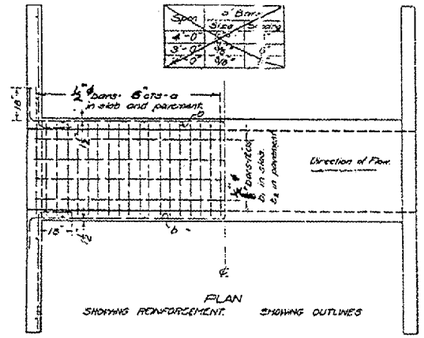
BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
9	McDonough	36	25	14





Note.
Fill over box should be limited to 4'-0" Maximum Clearance = 4'-0"
Use "m" bars in downstream headwall only.

Span	"a" Bars: Size	Spacing
4'-0"	#6	6"
5'-0"	#6	6"
6'-0"	#7	6"
7'-0"	#7	6"



BILL OF MATERIAL

Bars	No.	Size	Length
V	16	#6	2'-9"
V1	4	#6	5'-6"
V2	4	#6	5'-0"
n	16	#6	4'-0"
a	126	#6	4'-0"
b	18	#6	18'-0"
b1	4	#6	18'-0"
b2	4	#6	16'-6"
c	4	#6	7'-6"
m	2	#6	5'-0"
Steel - Lbs.			820
Concrete - Cu. Yds.			7.8

Class A concrete to be used throughout
Proportions 1 - 2½ - 4

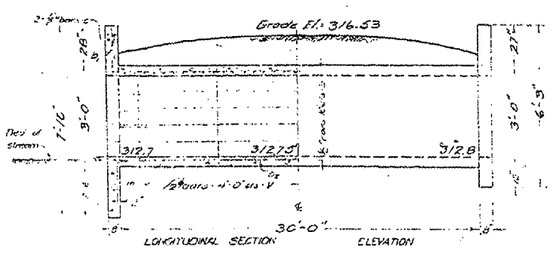
Sta. 705+00
State Bond Issue.
Route 9.
Section 36
Mc Donough County

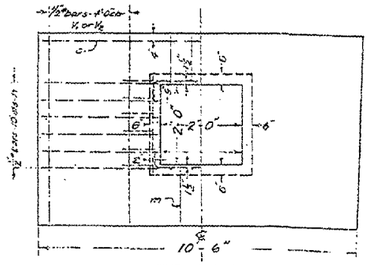
PASSED
[signature]
ENGINEER OF DESIGN.

618

STATE OF ILLINOIS
STATE HIGHWAY DEPARTMENT
REINFORCED CONCRETE BOX CULVERT

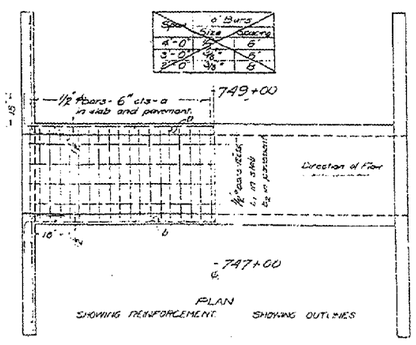
BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
9	McDonough	36	25	23





Note.
Fill over box should be limited to 4'-0"
Maximum Clearance = 4'-0"
Use "m" bars in downstream headwall only.

Span	"a" Bars: Size	Spacing
4'-0"	#6	6"
5'-0"	#6	6"
6'-0"	#7	6"



BILL OF MATERIAL

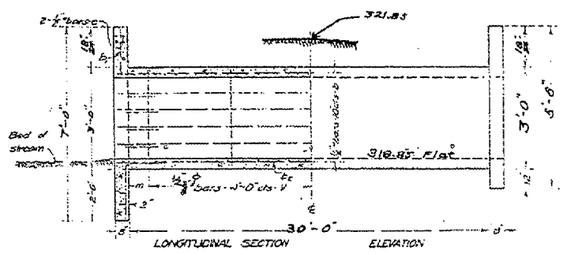
Bars	No.	Size	Length
V	16	#6	2'-9"
V1	4	#6	5'-6"
V2	4	#6	5'-0"
n	16	#6	4'-0"
a	126	#6	4'-0"
b	18	#6	18'-0"
b1	4	#6	18'-0"
b2	4	#6	16'-6"
c	4	#6	7'-6"
m	2	#6	5'-0"
Steel - Lbs.			860
Concrete - Cu. Yds.			9.0

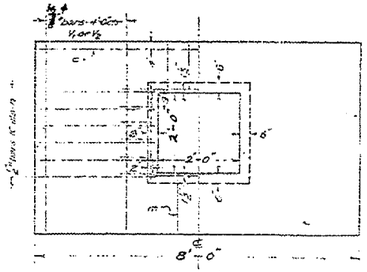
Class A concrete to be used throughout
Proportions 1 - 2½ - 4

Sta. 748+00
& Sec 36
ate Bond Issue

STATE OF ILLINOIS
STATE HIGHWAY DEPARTMENT
REINFORCED CONCRETE BOX CULVERT

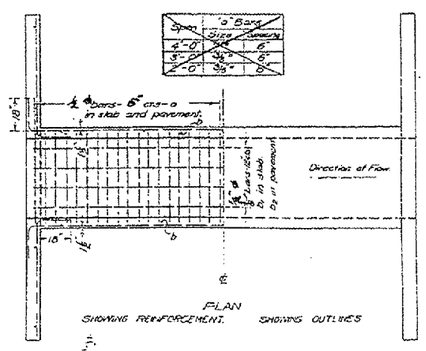
BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
9	McDonough	36	25	23





Note.
Fill over box should be limited to 4'-0"
Maximum Clearance = 4'-0"
Use "m" bars in downstream headwall only.

Span	"a" Bars: Size	Spacing
4'-0"	#6	6"
5'-0"	#6	6"
6'-0"	#7	6"
7'-0"	#7	6"



BILL OF MATERIAL

Bars	No.	Size	Length
V	16	#6	2'-9"
V1	4	#6	5'-6"
V2	4	#6	5'-0"
n	16	#6	4'-0"
a	126	#6	4'-0"
b	18	#6	18'-0"
b1	4	#6	18'-0"
b2	4	#6	16'-6"
c	4	#6	7'-6"
m	2	#6	5'-0"
Steel - Lbs.			820
Concrete - Cu. Yds.			7.8

Class A concrete to be used throughout
Proportions 1 - 2½ - 4

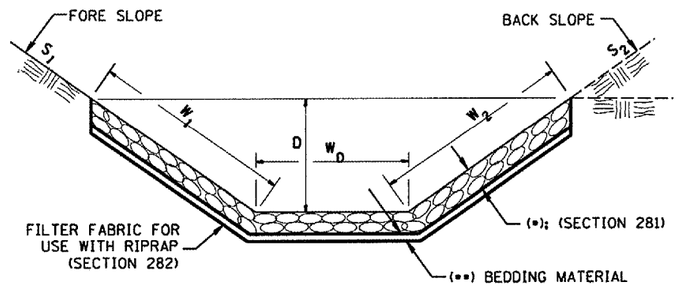
Sta. 698+85
State Bond Issue

FOR INFORMATION ONLY

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		15
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

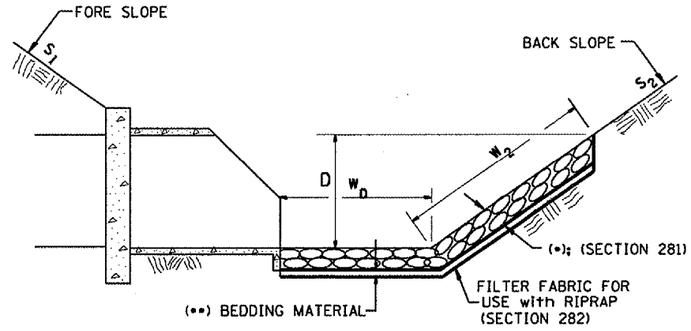
CASE 1
(DITCH)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m^2)
TOTAL				

(1) WIDTH = $W_1 + W_2 + W_D$

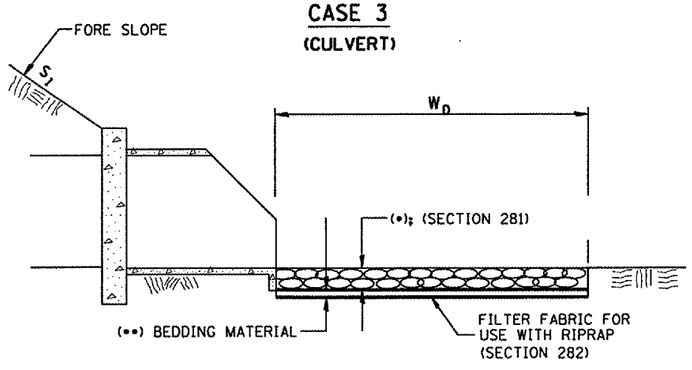
CASE 2
(CULVERT & SLOPE)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m^2)
TOTAL				

(1) WIDTH = $W_2 + W_D$

CASE 3
(CULVERT)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m^2)
TOTAL				

(1) WIDTH = W_D

1. Designer to modify this Special Detail Sheet, as needed for inclusion in plans.
2. (•) Designer to specify pay item including material, quality, and gradation.
3. (••) Designer to specify thickness of bedding material.
4. Include District Special Provision if needed.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. A-12.02, NEW REVISION BOX	T.P.
12-1-97	CORRECT FILTER FABRIC LEADER ARROW	J.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SPECIAL DETAIL SHEET

RIPRAP DITCH FOR EROSION PROTECTION

CADD DETAIL 281001-D4

SCALE: NOT DRAWN TO SCALE

DRAWN BY CADD

CHECKED BY

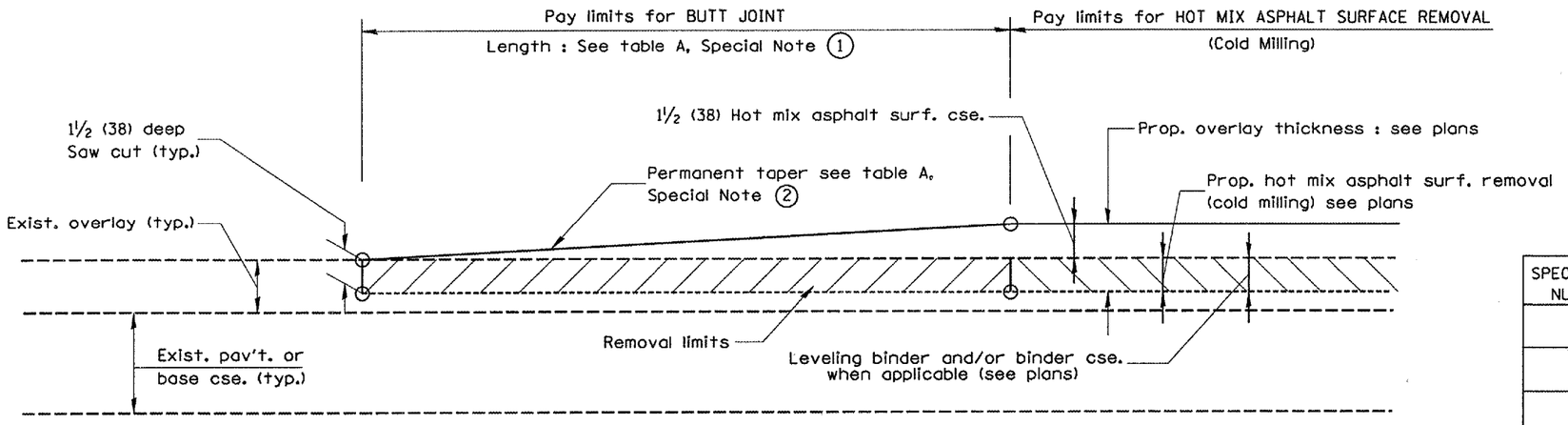
$$DATE$$

DGN-ONLY

281001-D4

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		16
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

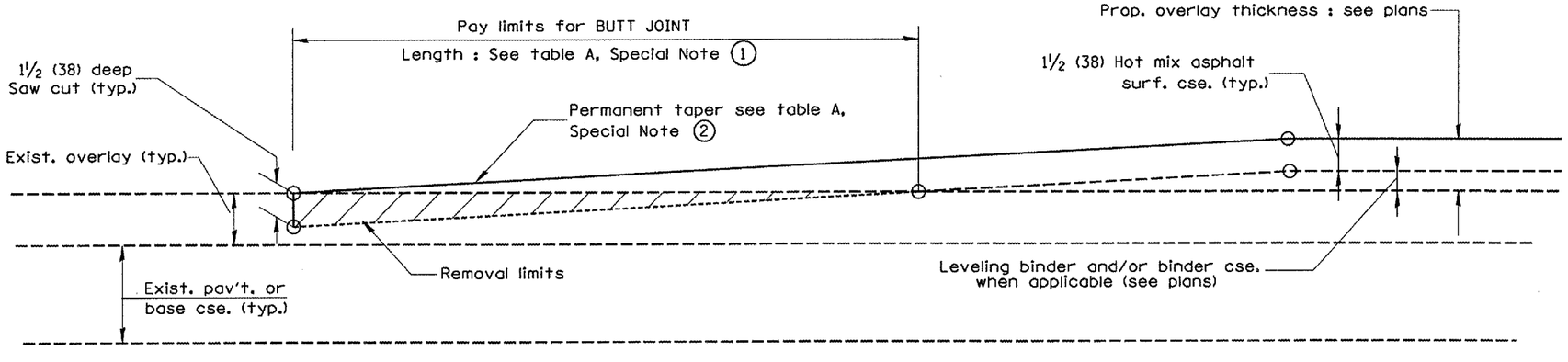
TABLE A
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
(2)	PERMANENT TAPER RATE	1:480	1:240
(3)	TEMPORARY RAMP TAPER RATE	1:80	1:40
(4)	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
(5)	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.

DESIGNER NOTES:
1. Include District Special Provision for Butt Joints & for Hot Mix Asphalt Removal (Cold Milling).
2. The butt joints pay item includes the saw cut & temporary ramp. Payment for the Butt Joint applies whether or not the project features Hot Mix Asphalt Removal (Cold Milling).



CASE 2 : NO HOT MIX ASHALT SURFACE REMOVAL (COLD MILLING)

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. C-23.01, NEW REVISION BOX	T.P.
4-1-97	CORRECTION TO DEPTH	J.A.
9-15-05	REVISED DESIGNER NOTE	M.M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

BUTT JOINTS

CADD STD NO. 406101-D4 SHEET 1 OF 3

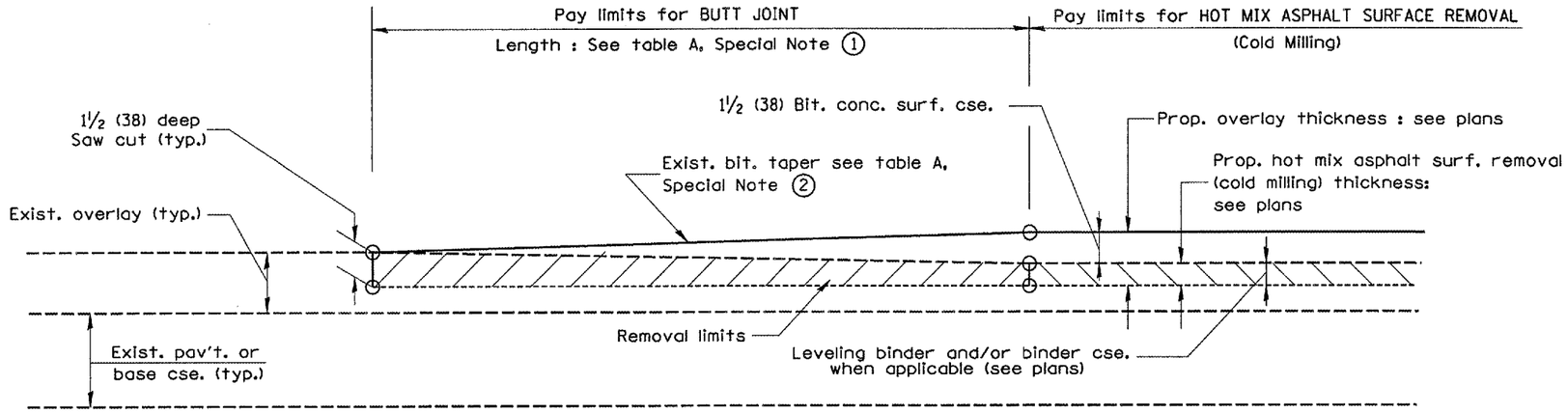
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD

DATE CHECKED BY

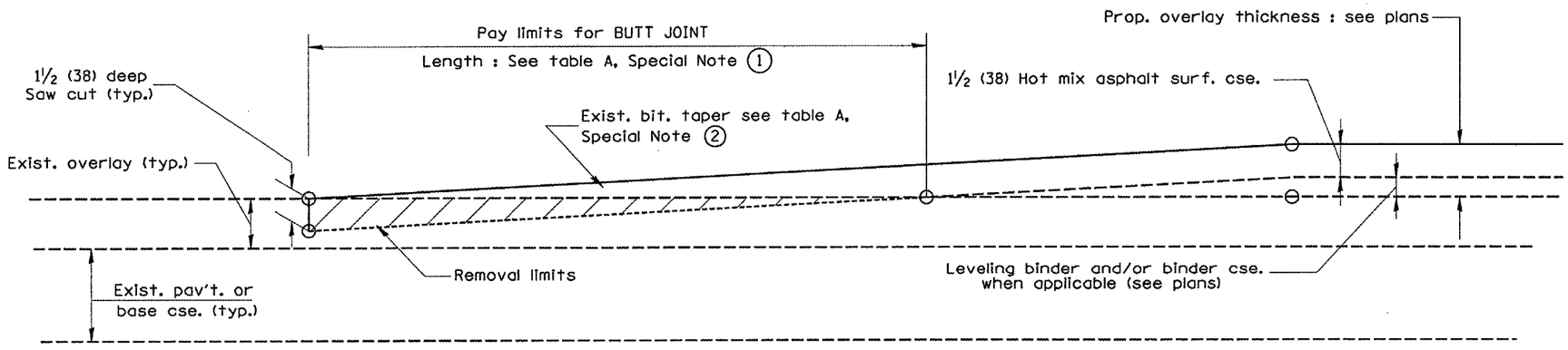
406101-D4 (1)

CONTRACT NO. 68602

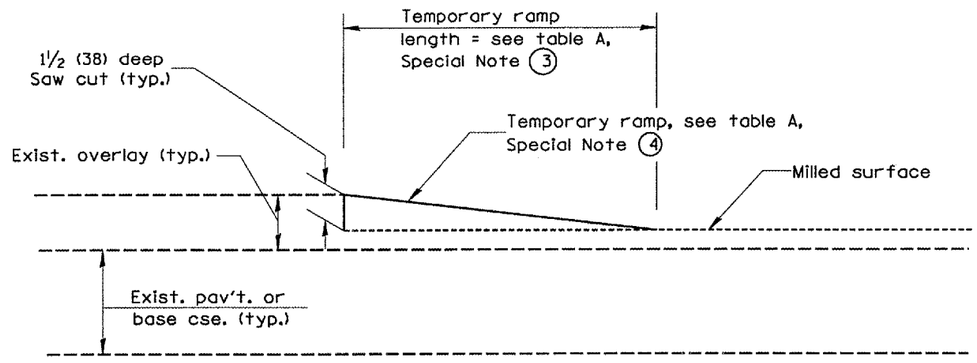
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		17
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 3 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

BUTT JOINTS

CADD STD NO. 406101-D4 SHEET 2 OF 3

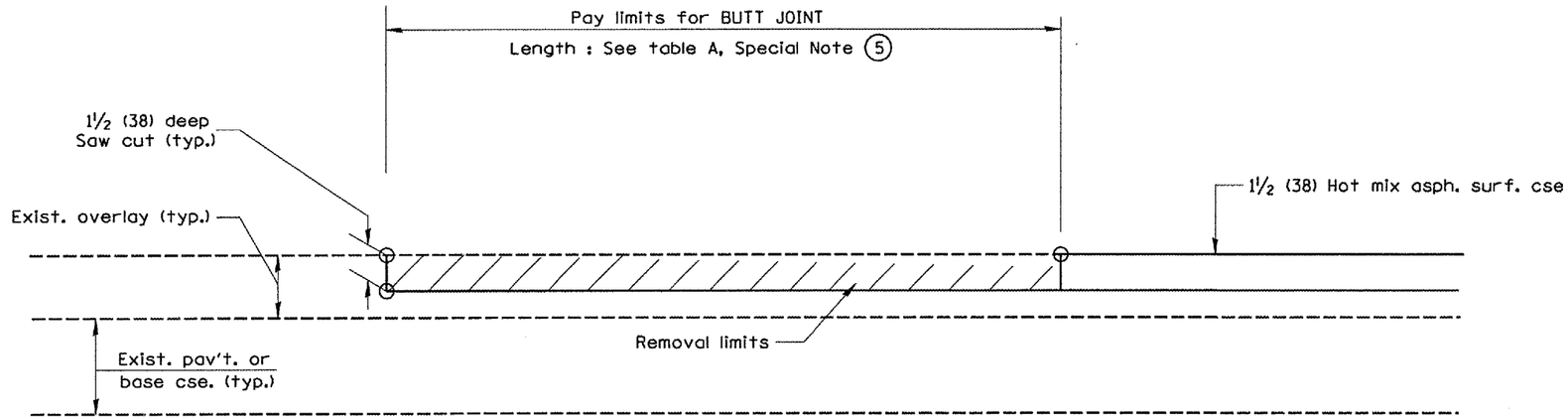
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD

CHECKED BY

406101-D4 (2)

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		18
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



CASE 5 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

BUTT JOINTS

CADD STD NO. 406101-D4 SHEET 3 OF 3

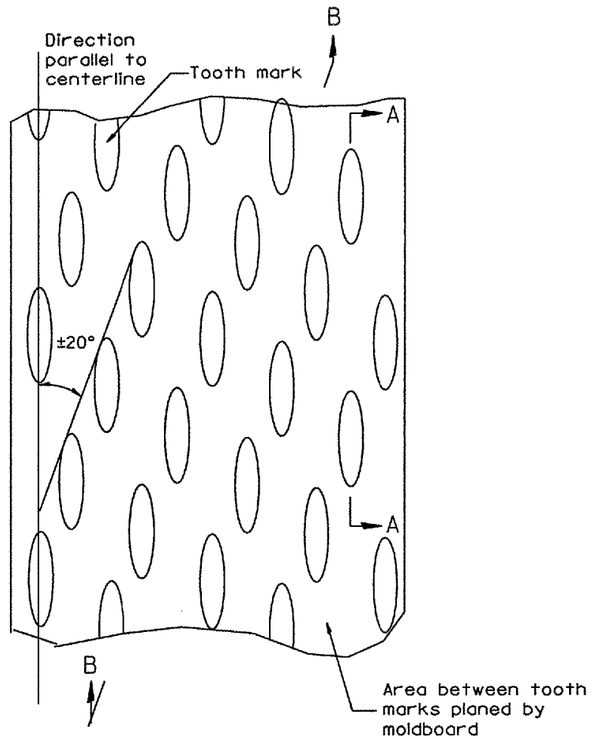
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD

CHECKED BY

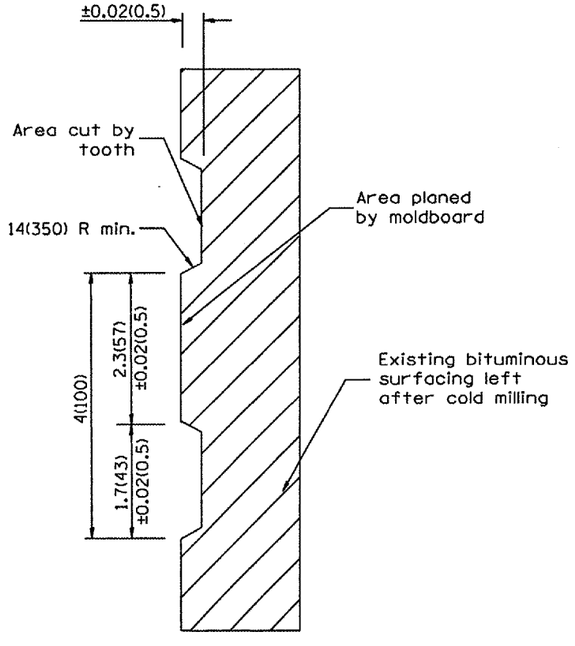
406101-D4 (3)

CONTRACT NO. 68602

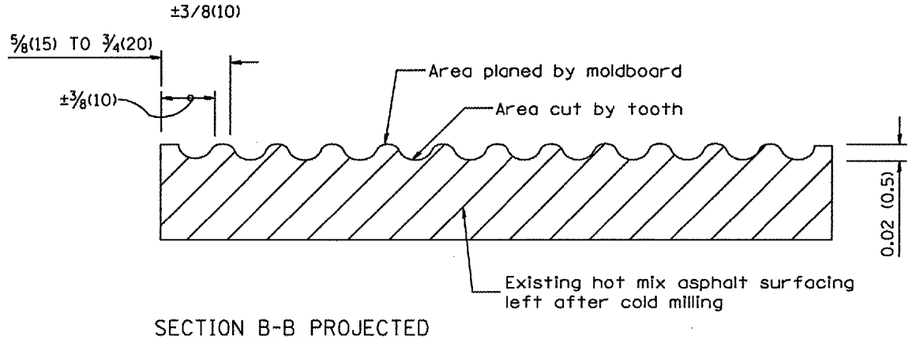
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		19
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



PLAN



SECTION A-A



SECTION B-B PROJECTED
PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

DESIGNER NOTE
1. INCLUDE DISTRICT SPECIAL PROVISION, IF APPLICABLE.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1- 1-97	RENUM. C-104.01, NEW REVISION BOX	T. P.
4-20-98	REMOVED MILLING DETAIL FROM STD.	J. A.
9-08-98	CORRECT NOTE LEADER PLACEMENT	R. W.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

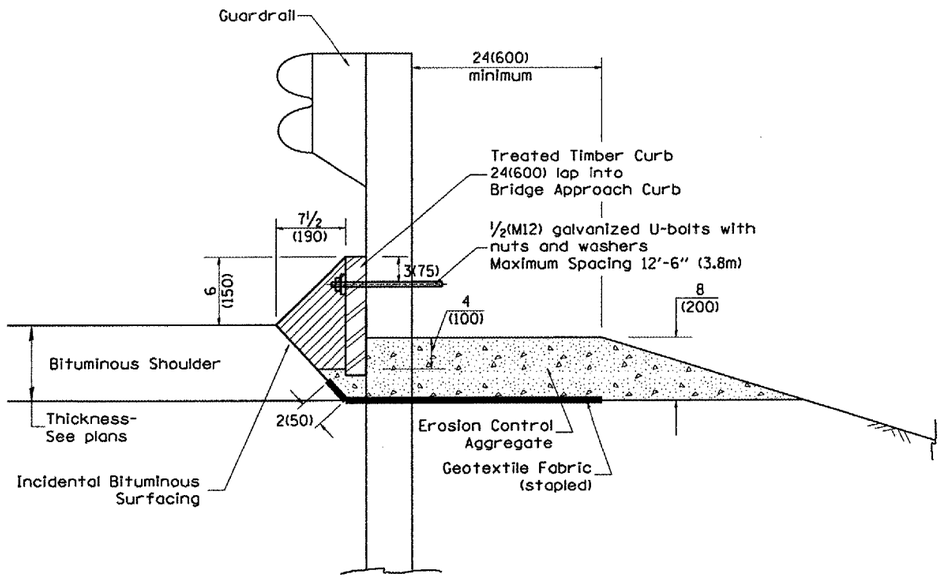
CADD STD NO. 440001-D4

SCALE: NOT DRAWN TO SCALE — DRAWN BY CADD

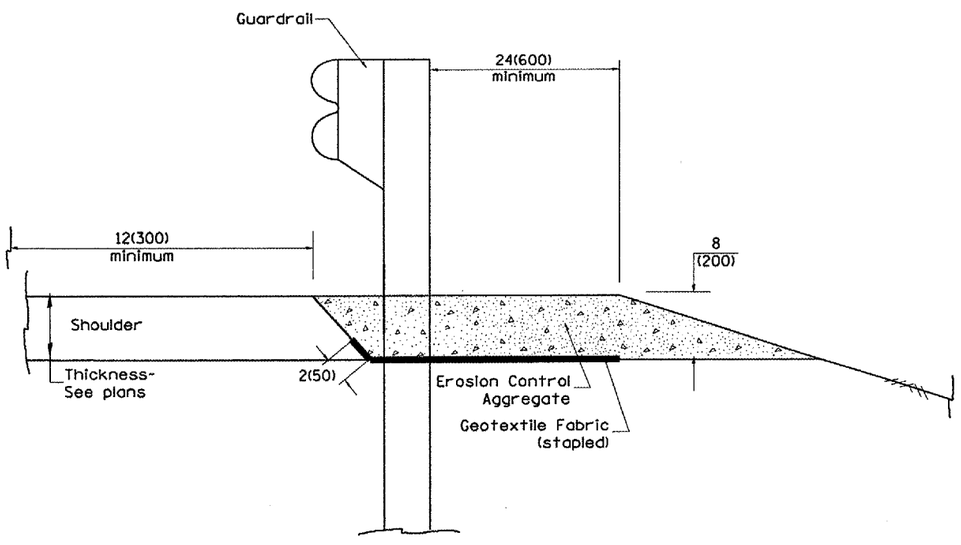
DATE — CHECKED BY

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		20
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: EROSION CONTROL CURB

1. This work shall consist of grading as needed, installing hardware and treated timber boards, furnishing and placing mastic material and incidental bituminous surfacing in front of Steel Plate Beam Guardrail in accordance with Plan Details.

2. Timber shall be treated in accordance with Article 1007.12. All preservatives specified in the article will be allowed. Waterborne preservatives "asa" and "cca" shall have a minimum retention of 0.40 lbs./cu. ft. (6.4 kg/m³)

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. C-22.01, NEW REVISION BOX	T.P.
3-1-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.
11-3-00	CORRECTION TO NOTES	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

GUARDRAIL EROSION CONTROL TREATMENTS

CADD STD NO. 630101-D4(1)

SCALE: NOT DRAWN TO SCALE

SHEET 1 OF 2

DRAWN BY CADD

CHECKED BY

630101-D4(1)

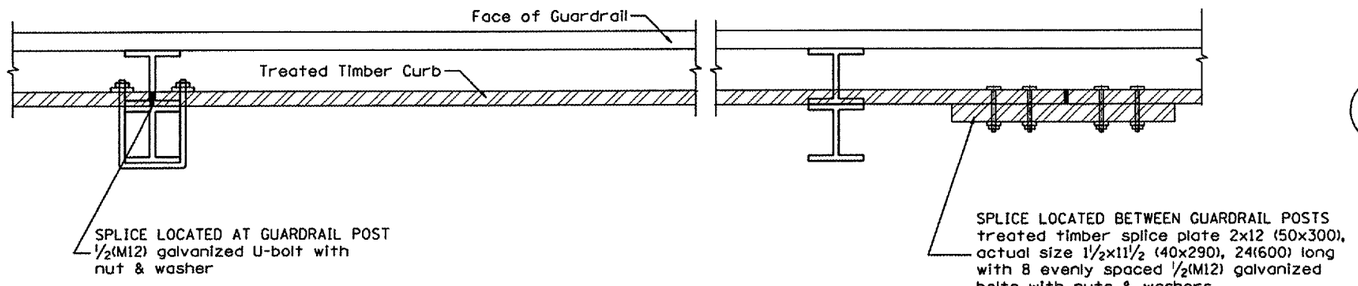
1. Use EROSION CONTROL CURB at guardrail installations where grades are equal to or greater than 1% and at inlets. [Include District Special Provision)
2. Use GUARDRAIL AGGREGATE EROSION CONTROL at guardrail installations where grades are less than 1% (Include District Special Provision)
3. Include State Standards 609001, 609006 or 610001 if applicable.
4. Include the following District Cadd Standards as needed: Slope Drains for Exposed Pipes; Slope Drains for Buried Pipes; Seepage Collars for Buried Pipes; Seepage Collars for Exposed Pipes; Concrete Thrust Blocks and Pipe Elbow.
5. Include District Special Provision -"Aggregate Quality" for projects located in the Western Area of the District - approx. dividing line is IL 97.

$$DATE$$

DGN-ONLY

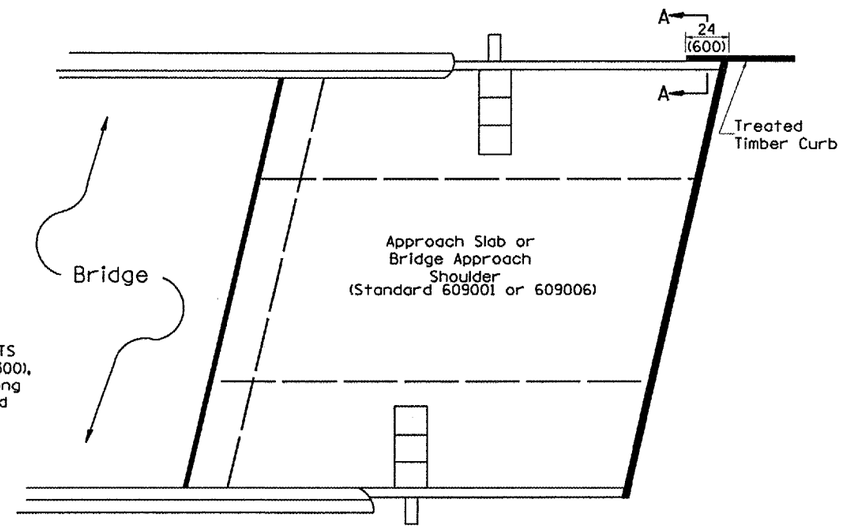
CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



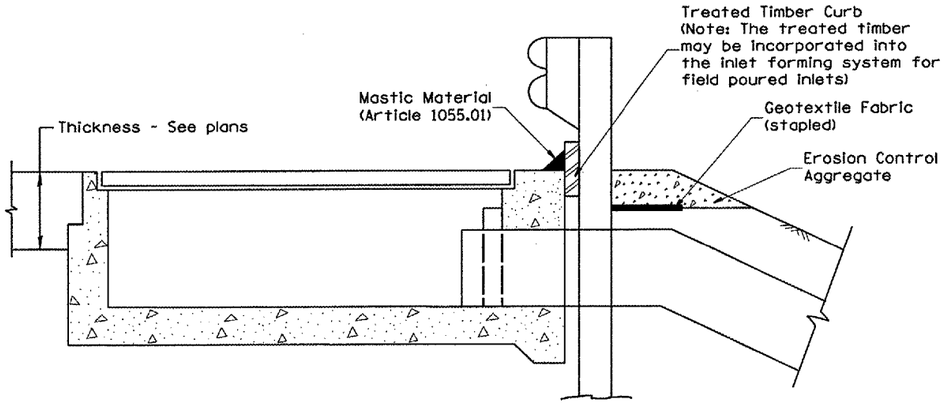
DETAIL A

(Typical Treated Timber Splices)

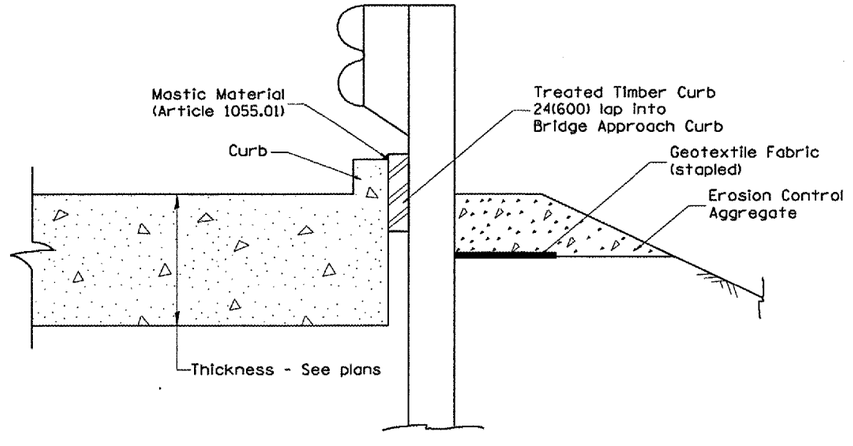


PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)



TYPICAL SECTION WITH EROSION CONTROL CURB AT INLETS TYPE E & F (STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH EROSION CONTROL CURB AT BRIDGE APPROACH CURB
(STANDARD 609001 OR 609006)

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

GUARDRAIL EROSION CONTROL TREATMENTS

CADD STD NO. 630101-D4(2)
SCALE: NOT DRAWN TO SCALE

SHEET 2 OF 2
DRAWN BY CADD
CHECKED BY

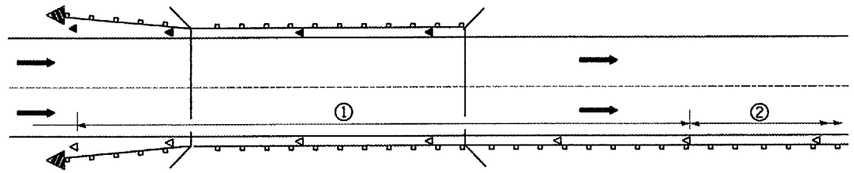
$$DATE$$

DGN-ONLY

630101-D4(2)

CONTRACT NO. 68602

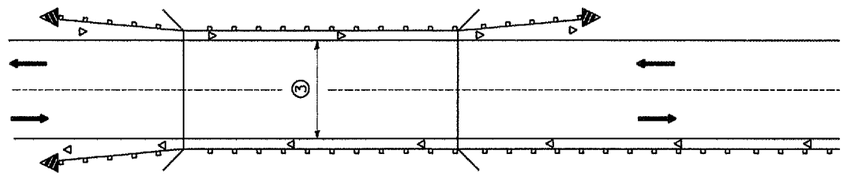
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		22
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



① Spacing 80 ft. (24 m) max. for first 400 ft. (122 m) or curve spacing shown in Standard 635001, whichever is less (min. 4 reflectors regardless of length).

② After 400 ft. (122 m), transition to normal delineator spacing shown in Standard 635001, and continue as required.

ONE-WAY TRAFFIC



③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the bridge pavement is less than 24 (610) wider than the pavement approaching the bridge.

TWO-WAY TRAFFIC

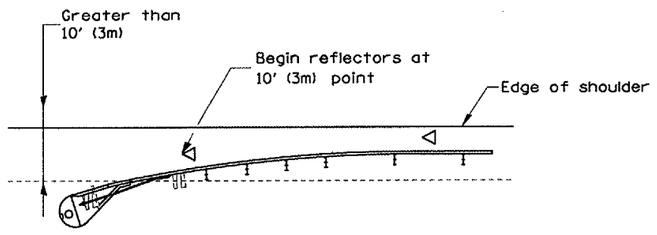
GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS

LEGEND

◁ Monodirectional silver

◀ Monodirectional amber

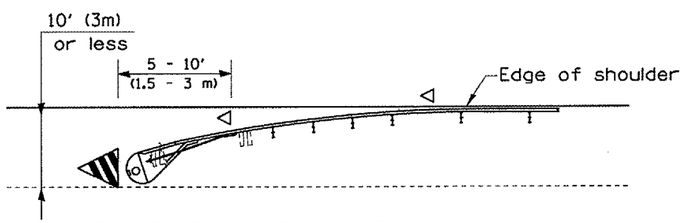
Terminal Marker - Black/Yellow Left or Right as appropriate



NOTE: Omit terminal marker when terminal over 10' (3m) from edge of paved shoulder or break point of unpaved shoulder, or when terminal buried in backslope.

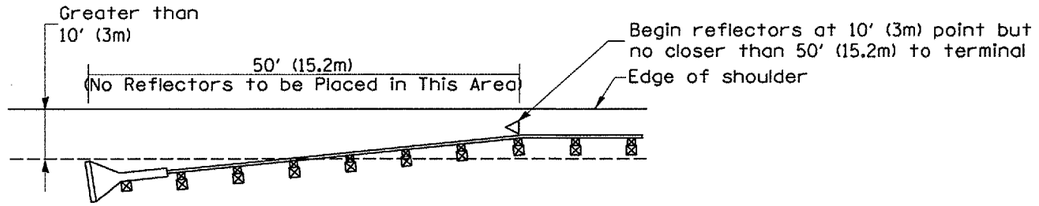
Traffic Barrier Terminal Type(•) and/or Turned-Down Terminal

[Terminal over 10' (3m) from edge of shoulder]
•See Plans for Type



Traffic Barrier Terminal Type(•) and/or Turned-Down Terminal

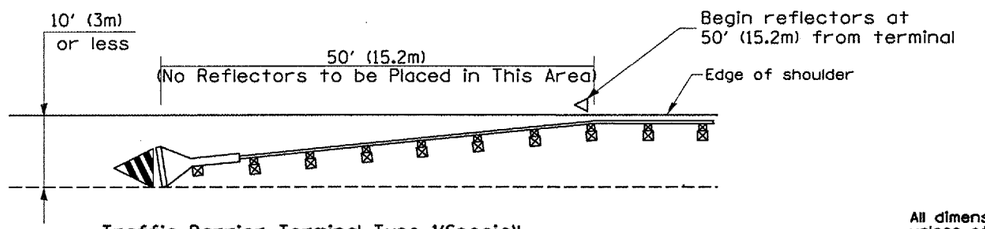
[Terminal over 10' (3m) or less from edge of shoulder]
•See Plans for Type



NOTE: Omit terminal marker when terminal over (10') from edge of paved shoulder or break point of unpaved shoulder.

Traffic Barrier Terminal Type 1 (Special)

[Terminal over 10' (3m) from edge of shoulder]



Traffic Barrier Terminal Type 1(Special)

[Terminal 10' (3m) or less from edge of shoulder]

TERMINAL MARKER PLACEMENT

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. E-10.02, NEW REVISION BOX	T.P.
3-1-97	CORRECT STD. SPEC. *	J.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

GUARDRAIL AND BARRIER WALL DELINEATION

CADD STD. NO. 635101-D4 SHEET 1 OF 3

SCALE: NOT DRAWN TO SCALE DRAWN BY CADD CHECKED BY

635101-D4 (1)

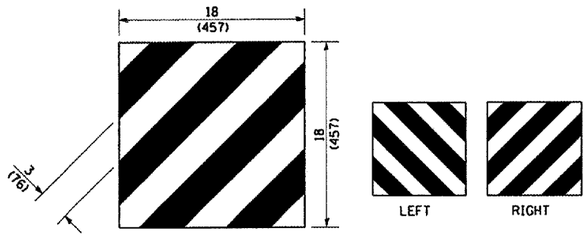
DESIGNER NOTE:
1. INCLUDE APPROPRIATE SPECIAL PROVISIONS FOR "GUARD RAIL DELINEATION POLICY: 1. TERMINAL MARKER, 2. TERMINAL MARK POST, AND 3. GUARDRAIL AND BARRIER WALL MARKERS." FROM INTERIM SPECIAL PROVISIONS 94-7a, "GUARDRAIL AND BARRIER WALL DELINEATION."
2. IF POST MOUNT TERMINAL MARKER IS USED, INCLUDE STATE STD. 720011.

$$DATE$$

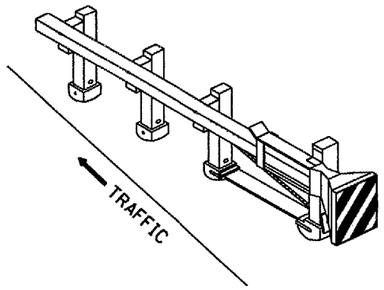
•DGN-ONLY•

CONTRACT NO. 68602

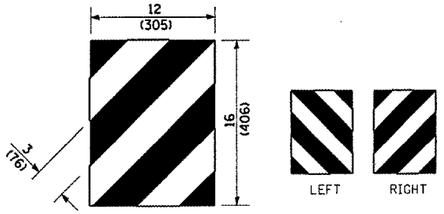
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		23
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



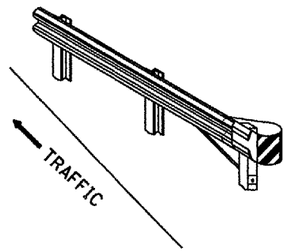
For Traffic Barrier Terminal Type 1 (Special)



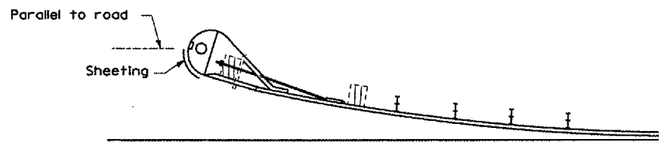
Standard Treatment - Direct Applied Sheeting
Traffic Barrier Terminal Type 1 (Special)



For Traffic Barrier Terminal Type (•)
and Post Mount
• See Plans for Type



Standard Treatment - Direct Applied Sheeting
Traffic Barrier Terminal Type (•)
• See Plans for Type



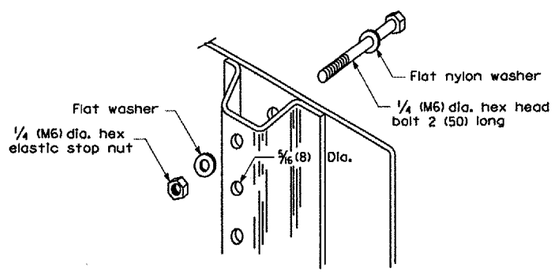
Sheeting Position for
Traffic Barrier Terminal Type (•)
• See Plans for Type

TERMINAL MARKER DETAILS

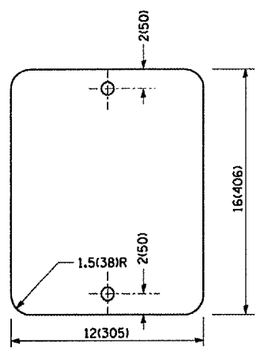
Color: Black / Yellow reflectorized

OM - I100 (L or R) Direct applied reflective sheeting

OM - I200 (L or R) Post mounted

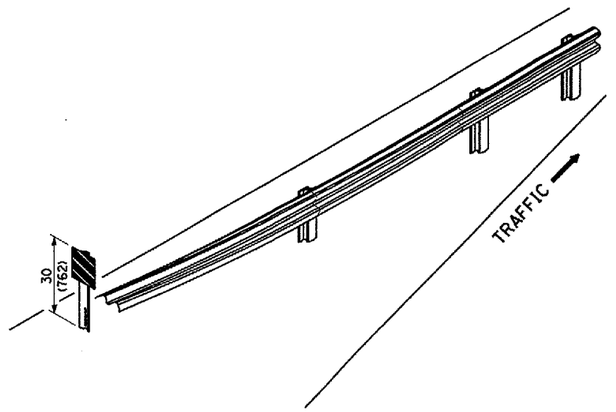


DETAIL OF MOUNTING TERMINAL MARKER TO POST



STANDARD TERMINAL MARKER

POST MOUNTED TERMINAL MARKER ASSEMBLY



ALTERNATE TREATMENT - POST MOUNTED
(For turned-down terminal where sheeting cannot be direct applied)

TERMINAL MARKER TREATMENTS

GENERAL NOTES

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

GUARDRAIL AND
BARRIER WALL DELINEATION

CADD STD. NO. 635101-04 SHEET 2 OF 3
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD
CHECKED BY

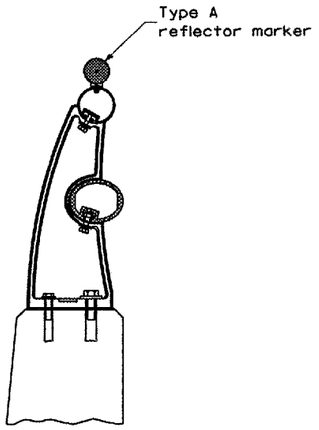
$$DATE$$

DGN-ONLY

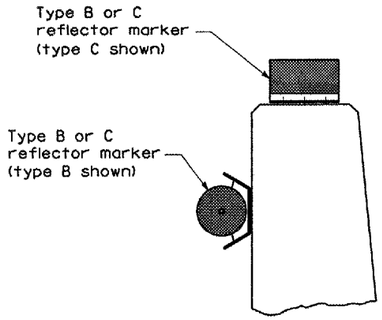
635101-D4 (2)

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		24
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

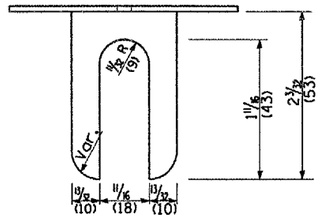


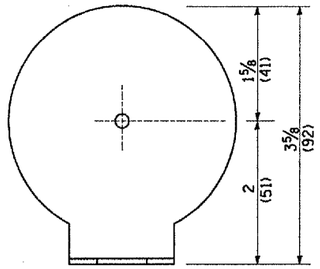
TYPICAL MOUNTING DETAIL
FOR BRIDGE RAIL REFLECTOR

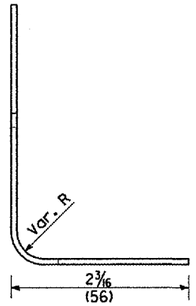


TYPICAL MOUNTING DETAIL
FOR BARRIER WALL REFLECTOR

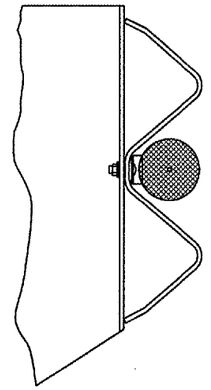
REFLECTOR MOUNTING



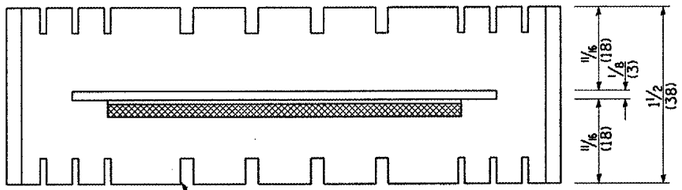


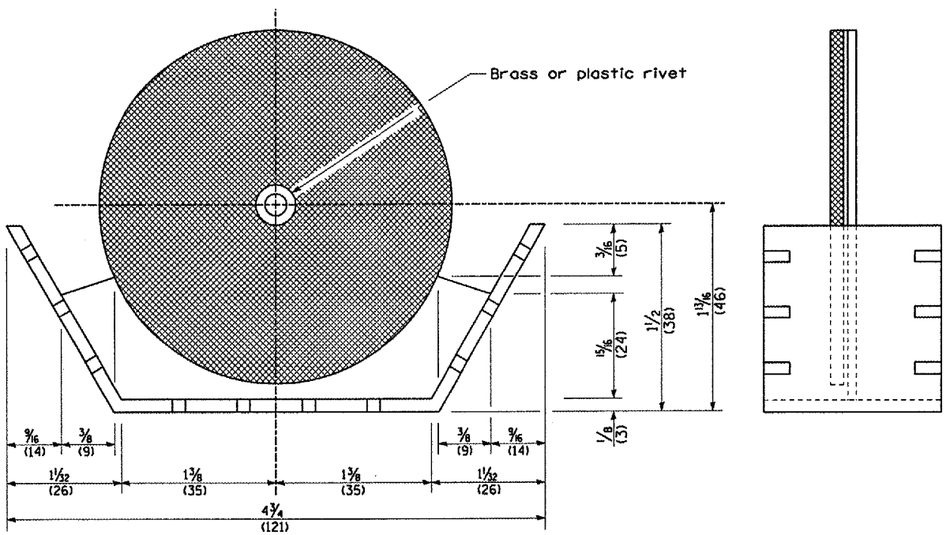


REFLECTOR MARKER TYPE A

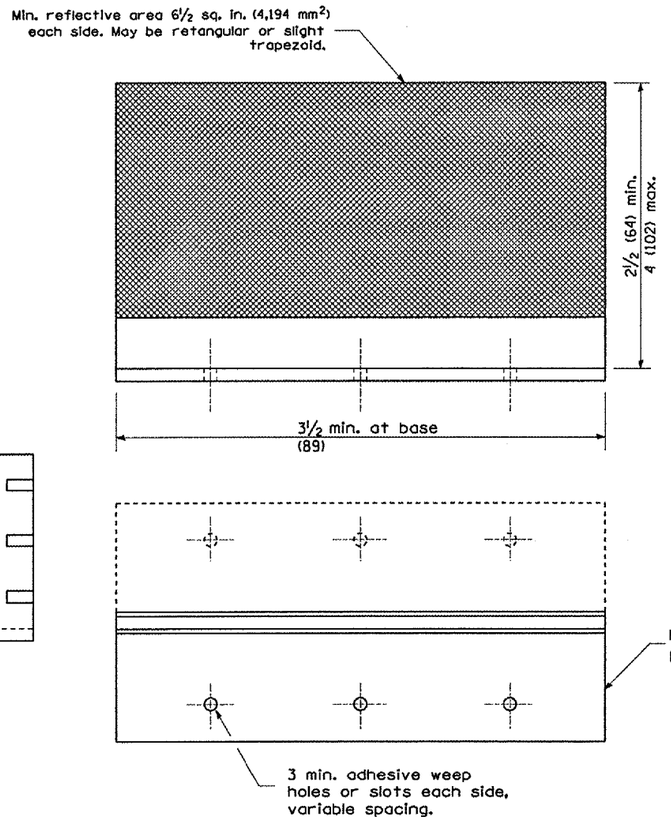


TYPICAL GUARDRAIL MOUNTING WITH
REFLECTOR MARKER TYPE A

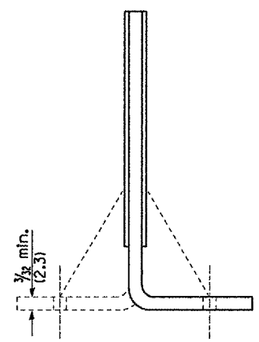




REFLECTOR MARKER TYPE B



REFLECTOR MARKER TYPE C



Cross section may be "T"
or "L" shaped and may have
side supports at ends.

REFLECTORS

All dimensions are in inches (millimeters)
unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

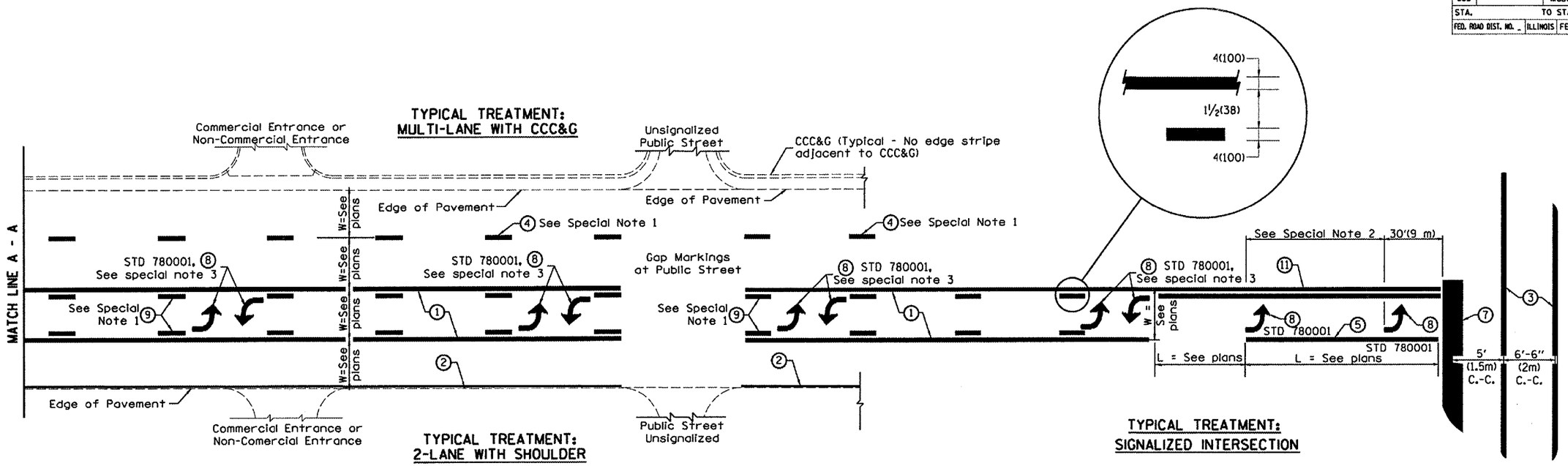
GUARDRAIL AND
BARRIER WALL DELINEATION

CADD STD. NO. 635101-04 SHEET 3 OF 3
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD
CHECKED BY

635101-D4 (3)

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		25
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

1. 4(100) Solid (Yellow)
2. 4(100) Solid (White)
3. 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
   2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
4. 6(150) Skip-Dash (White) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
5. 8(200) Solid (White)
6. 12(300) Diagonal (White) (Item 6 is shown on Std. 780001)
7. 24(600) Stop Bar (White)
8. Letters & Arrows — 33' (10m) (See Std. 780001 and Special Notes 2 & 3)
9. 4(100) Skip-Dash (Yellow) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
10. 12(300) Diagonal (Yellow) (See Table A) — 45°
11. 4(100) Double Solid (Yellow) — 11(280) C.-C. — See Table A

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversly across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
   A. A minimum of two (2) arrows is required.
   B. The maximum spacing between arrows is 80' (24 m).
   C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
   A. A minimum of two (2) arrow pairs is required.
   B. The maximum spacing between arrow pairs is 200' (61 m).
   C. Arrow pairs shall be evenly spaced if three (3) or more are required.
   D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

All dimensions are in inches (millimeters) unless otherwise noted.

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)

$$DATE$$

DATE	REVISIONS	BY
1-1-97	RENUM. F-8.03, NEW REVISION BOX	T.P.
2-7-97	ADD BI DIRECTIONAL DIMENSION	J.A.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.
8-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

TYPICAL PAVEMENT MARKINGS

CADD STANDARD 780001-D4
SCALE: NOT DRAWN TO SCALE

SHEET 1 OF 2
DRAWN BY CADD
CHECKED BY

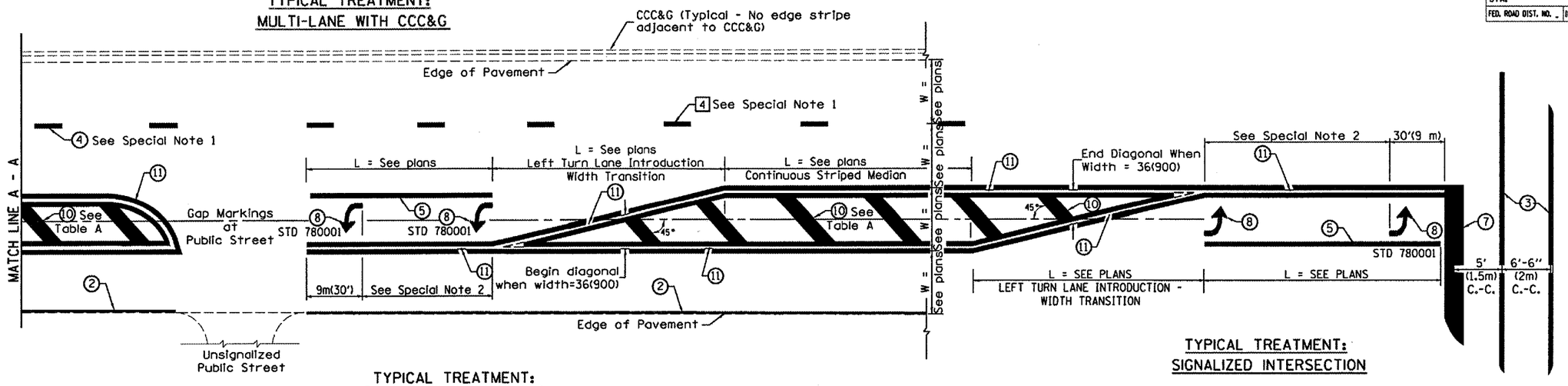
DGN-ONLY

780001-D4 (1)

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685		McDONOUGH		26
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

TYPICAL TREATMENT:
MULTI-LANE WITH CCC&G

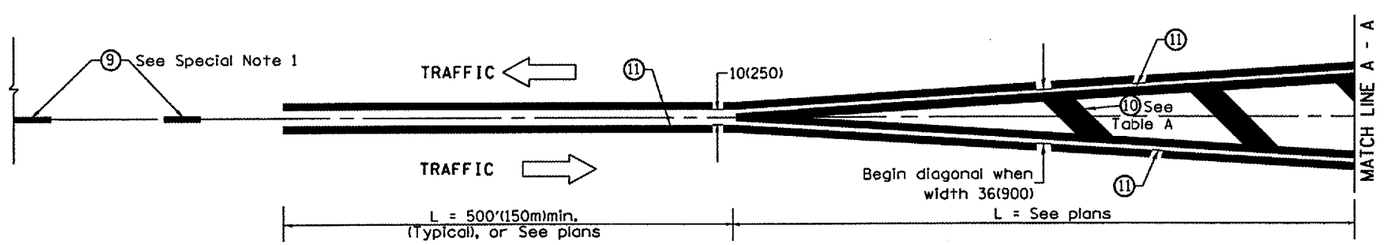


TYPICAL TREATMENT:
2-LANE WITH SHOULDER

TYPICAL MEDIAN TRANSITIONS

TYPICAL TREATMENT:
SIGNALIZED INTERSECTION

FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

TYPICAL PAVEMENT MARKINGS

CADD STANDARD 780001-D4
SCALE: NOT DRAWN TO SCALE

SHEET 2 OF 2
DRAWN BY CADD
CHECKED BY

$$DATE$$

DGN-ONLY

780001-D4 (2)

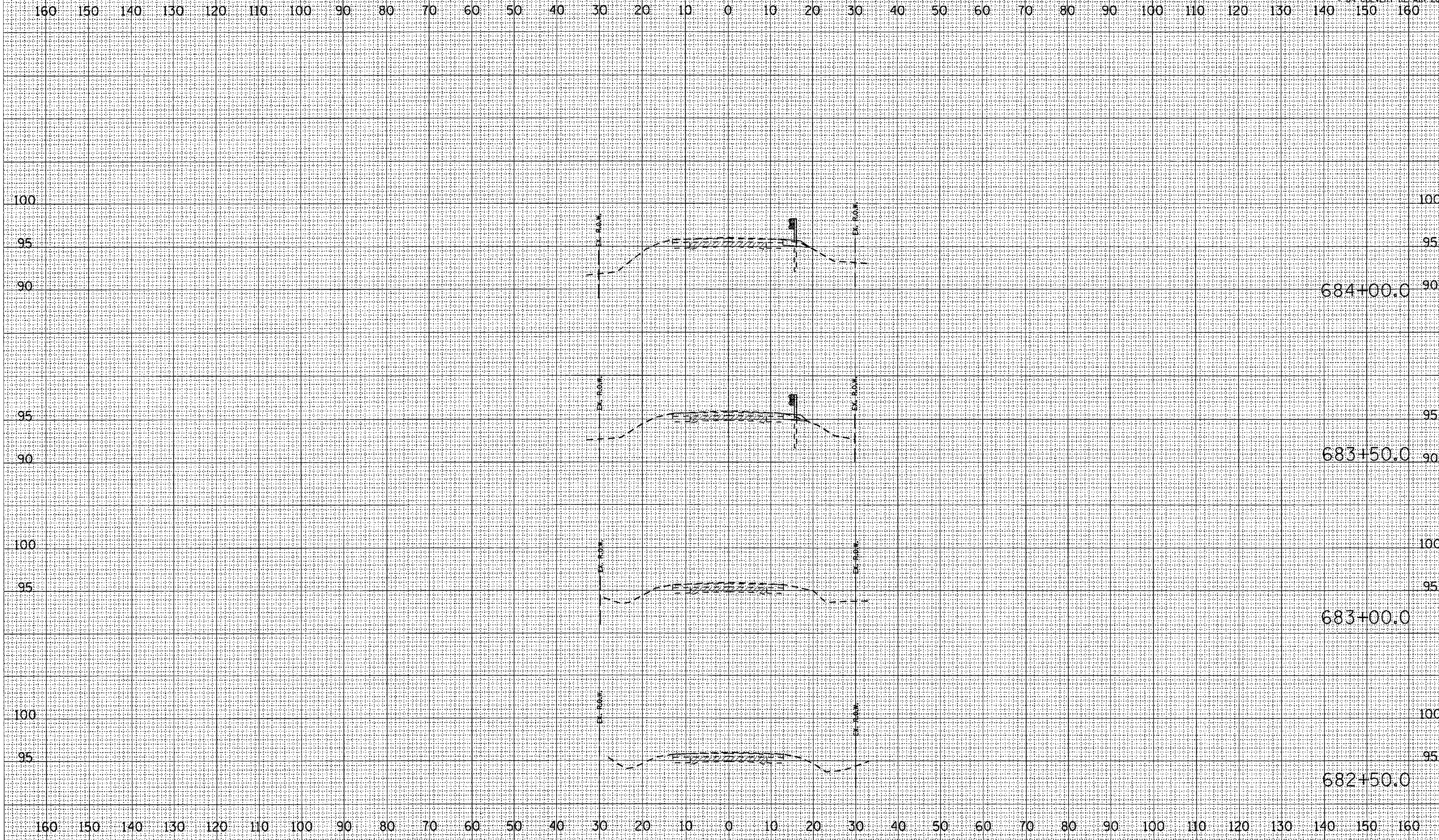
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	MCDONOUGH		27

CONTRACT NO. 68602

STA. 682+50.0 TO STA. 684+00.0

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

* D4 CULVERT REPAIR 2007



IL 9/41 MAINLINE

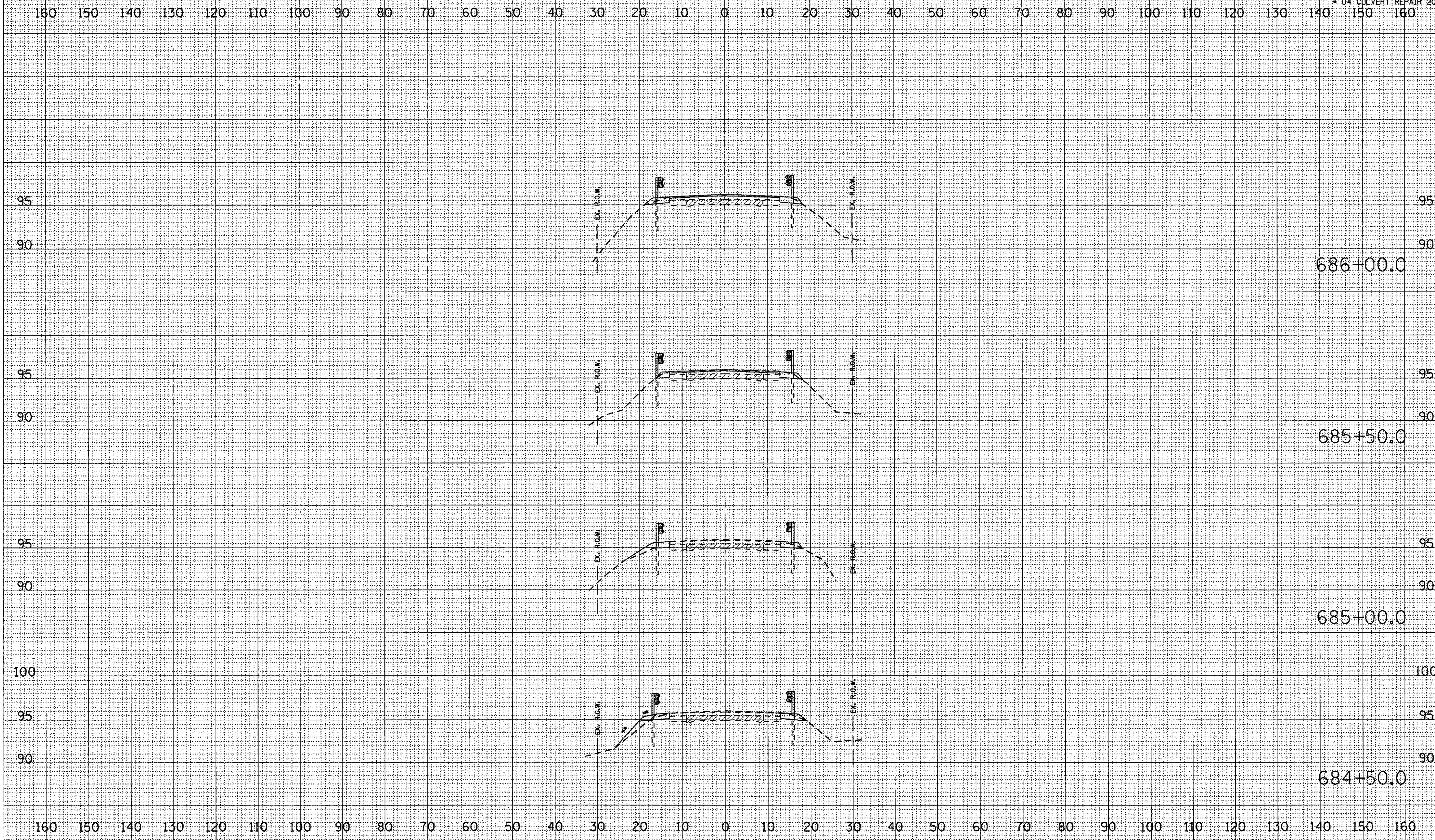
CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	MCDONOUGH		28

STA. 684+50.0 TO STA. 686+00.0

FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

* D4 CULVERT REPAIR 2007



FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
	AREAS		
NO.	AREAS CHECKED		

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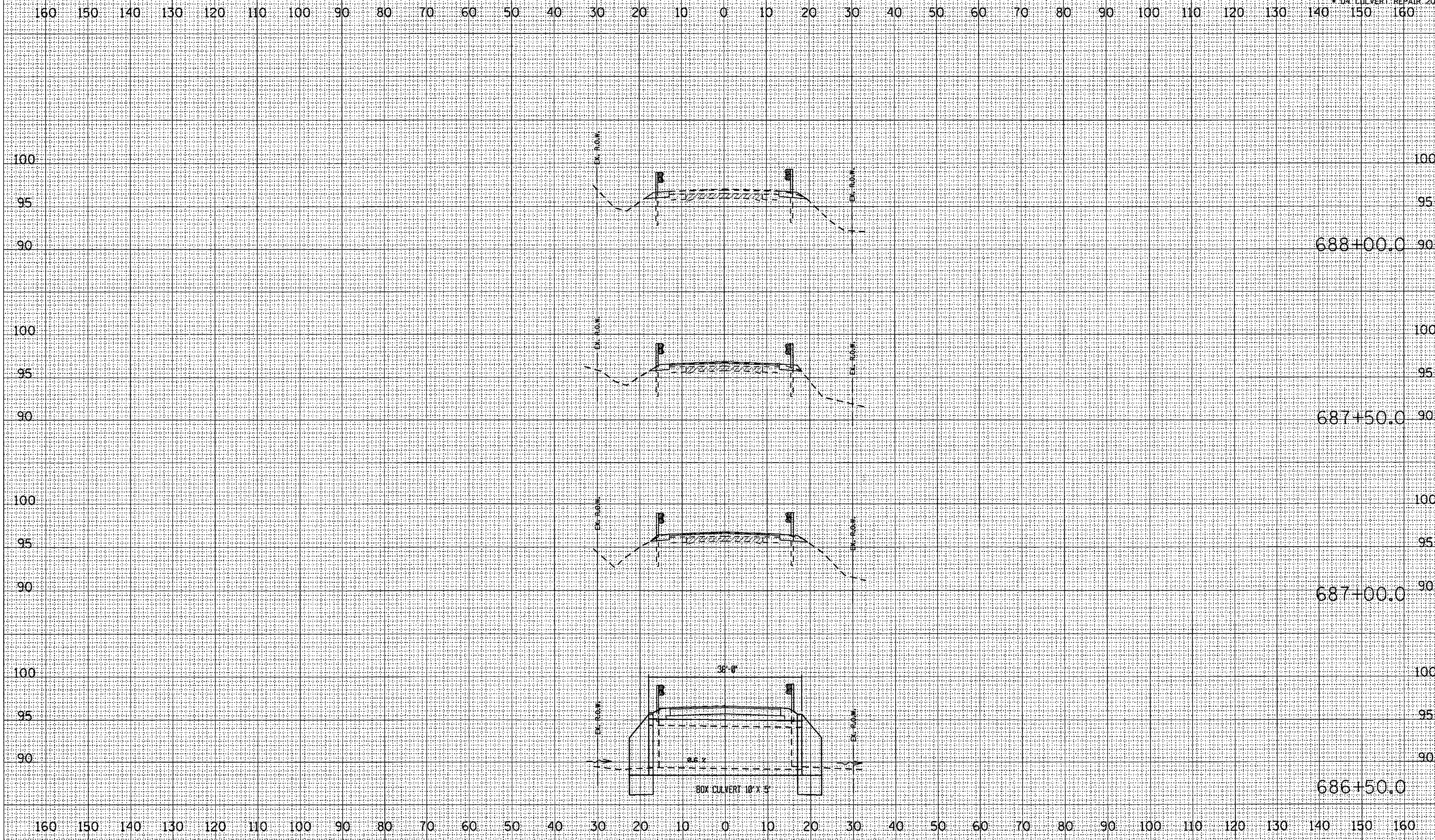
IL 9/41 MAINLINE

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	MCDONOUGH		29
STA. 686+50.0 TO STA.688+00.0				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* D4 CULVERT REPAIR 2007

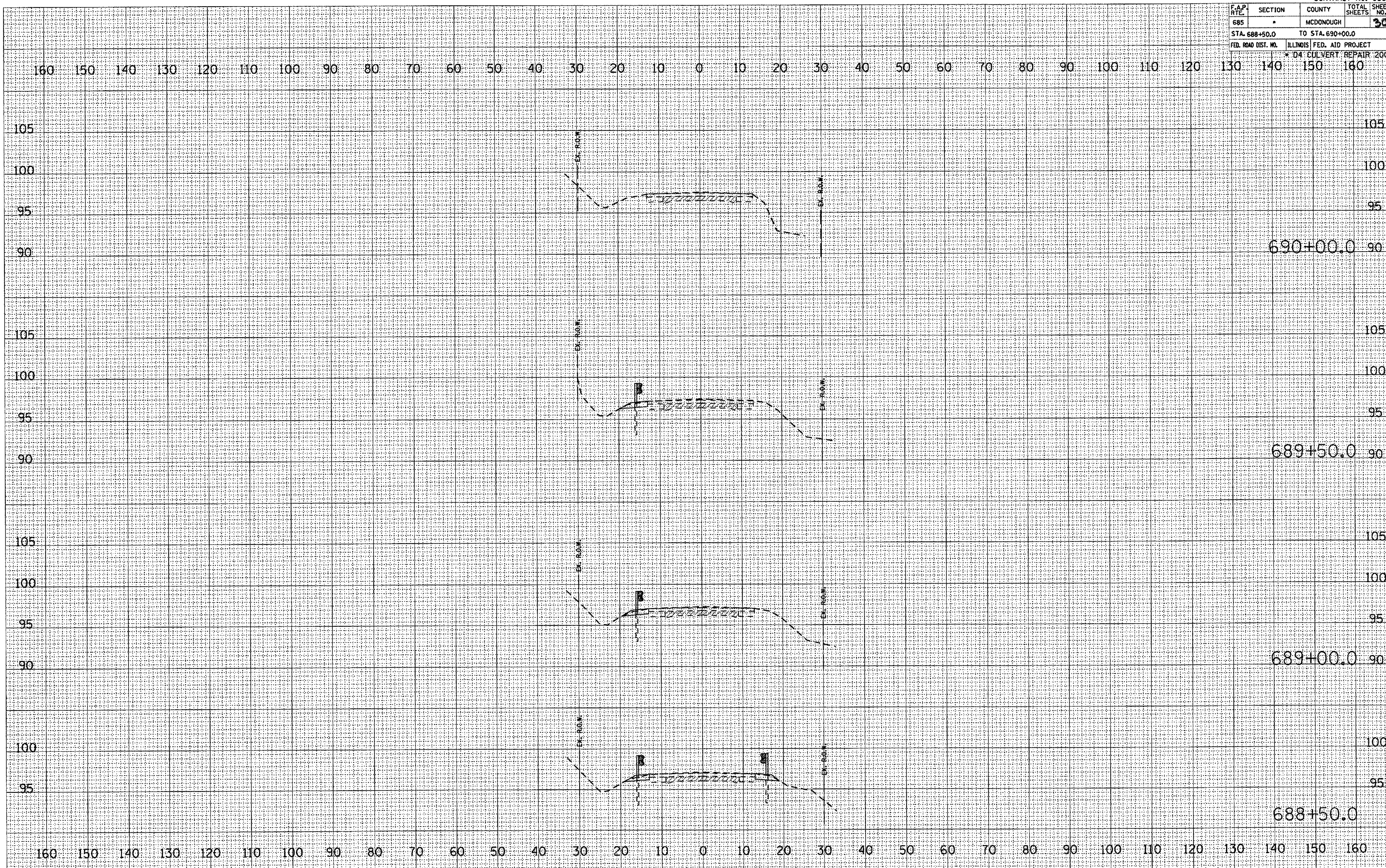


IL 9/41 MAINLINE

CONTRACT NO. 68602

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	*	MCDONOUGH		30
STA. 688+50.0		TO STA. 690+00.0		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* D4 CULVERT REPAIR 2007



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USER NAME = bruceebm

IL 9/41 MAINLINE