4-24-09 Letting, Item 227

CONTRACT NO. 74172

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28 BR	COLES	21	1
F.H.W.A. REG.	ILLINOIS	PROJECT		

D-97-045-06

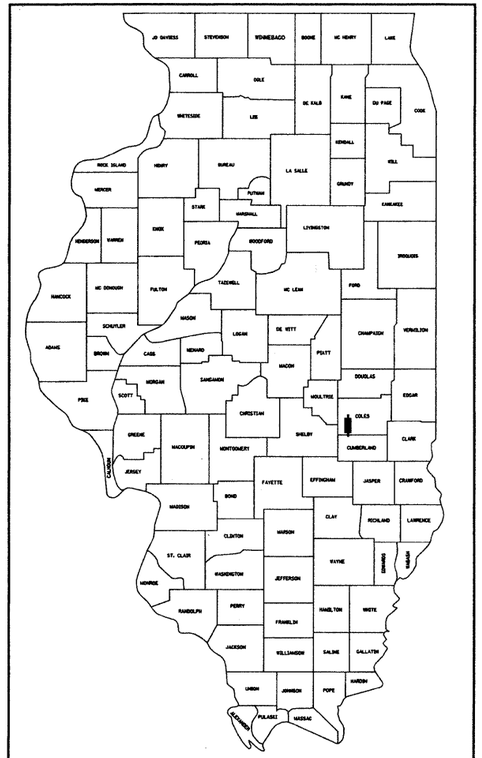
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

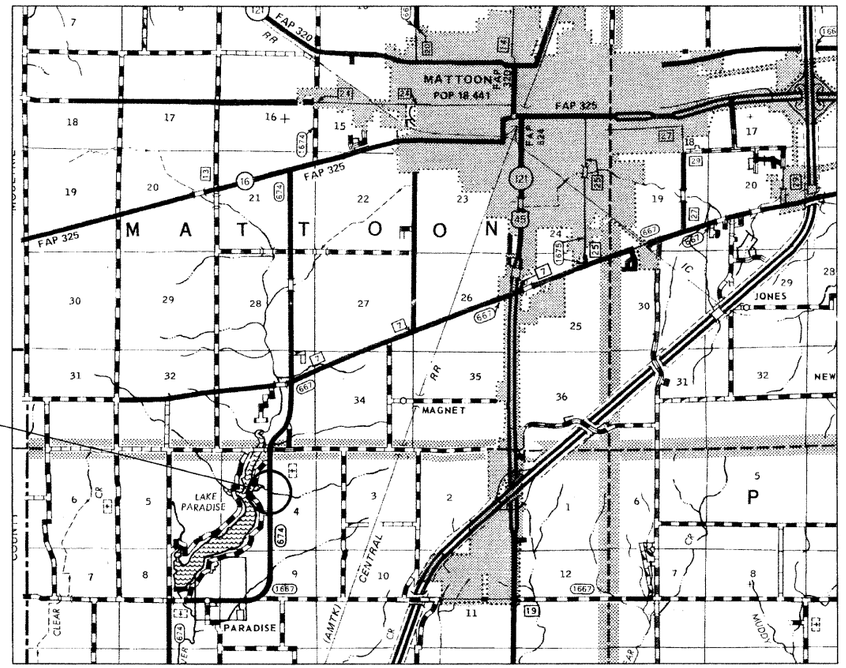
FAS 674 (FISH HATCHERY ROAD)
SECTION 28 BR
COLES COUNTY
PROJECT (ESP-0674(111)

C-97-083-06
CULVERT REPLACEMENT

FOR INDEX OF SHEETS, SEE SHEET NO. 2



LOCATION OF SECTION INDICATED THUS: ■



N

SECTION 28BR
~~PROJECT STPRS-674( )~~
BEGINS STATION 7+650.000
ENDS STATION 7+800.000
S.N. 015-8305

TOTAL LENGTH OF SECTION = 150.000 METERS = 0.150 KILOMETERS
NET LENGTH OF SECTION = 107.860 METERS = 0.110 KILOMETERS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 4 20 09
Roger L. Driskell
DISTRICT ENGINEER

EXAMINED March 13, 20 09
Charles J. Ingersoll /D
ENGINEER OF DESIGN & ENVIRONMENT

APPROVED March 13, 20 09
Christine M. Reed /D
DIRECTOR, DIVISION OF HIGHWAYS

DESIGN DESIGNATION

ADT	FUNCTIONAL CLASS	LEG
2000 (2004)	MAJOR COLLECTOR	CH 31

FOR UNDERGROUND UTILITY LOCATIONS CALL
J.U.L.I.E.
TOLL FREE
TEL. 1-800-892-0123
PARADISE TOWNSHIP

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 74172

ROUTE: FAS 674 SECTION: 28BR COUNTY:COLES

DESIGNER: JENNIFER WENTHE
SQUAD LEADER: JENNIFER WENTHE
PROJECT ENGINEER: TOM RONAN

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28 BR	COLES	21	2

INDEX OF SHEETS - GENERAL NOTES

INDEX OF SHEETS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 21:

STD. NO.	DESCRIPTION
000001-05	"STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS"
001001-02	AREAS OF REINFORCEMENT BARS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
406201-01	MAILBOX TURNOUT
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
542101-02	REINFORCED CONCRETE END SECTIONS FOR PIPE CULVERTS 375 MM THRU 900 MM DIA AT RIGHT ANGLES WITH ROADWAY
542301-02	PRECAST REINFORCED CONCRETE FLARED END SECTION
630001-08	STEEL PLATE BEAM GUARDRAIL
630101-08	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701001-02	"OFF-ROAD OPERATIONS, 2L, 2W, MORE THAT 15' AWAY"
701006-03	"OFF-RD OPERATIONS, 2L, 2W, 15' TO 24"" FROM PAVEMENT EDGE"
701011-02	"OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY"
701306-02	"LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR " SPEEDS >= 45 MPH
701311-03	"LANE CLOSURE 2L, 2W, MOVING OPERATIONS - DAY ONLY"
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS; THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007; AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

THIS PROJECT IS LOCATED ON FAS ROUTE 674 (FISH HATCHERY ROAD) IN COLES COUNTY, APPROXIMATELY 3.3 MILES SOUTH OF IL 16, AT STRUCTURE NUMBER 015-8305. THE WORK INCLUDED IN SECTION 28BR CONSISTS OF REMOVING THE EXISTING TRIPLE 1.22 M X 1.22 M BOX CULVERT AND REPLACING IT WITH A DOUBLE 2.1 M X 2.1 M PRECAST BOX CULVERT, EARTHWORK, PAVEMENT PATCHING, GUARDRAIL, AND ANY OTHER WORK NECESSARY TO COMPLETE THE SECTION.

UPON COMPLETION OF THE PROJECT THE RESIDENT ENGINEER SHALL CALL MIKE WORTHEY AT (217) 342-8284 TO ARRANGE FOR FINAL PAVEMENT MARKING.

THE MATERIAL USED FOR AGGREGATE SHOULDERS, TYPE B SHALL BE CRUSHED STONE, CRUSHED CONCRETE, OR RAP.

THE MATERIAL USED FOR POROUS GRANULAR BACKFILL SHALL BE CA-6.

THE PAVEMENT OVER THE BOX CULVERT SHALL BE PATCHED IN ACCORDANCE WITH SECTION 442 OF THE STANDARD SPECIFICATIONS. THE ESTIMATED DEPTH OF THE EXISTING PAVEMENT AND SUBSEQUENT RESURFACING THICKNESSES IS SHOWN ON THE EXISTING TYPICAL SECTIONS.

THE RESIDENT ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE CURING TIME FOR THE VARIOUS HOT-MIX ASPHALT LIFTS.

THE CONTRACTOR SHALL PROVIDE INTERNET ACCESSIBILITY TO THE HOT-MIX ASPHALT PLANT QUALITY CONTROL LAB SO THAT HOT-MIX ASPHALT PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL HOT-MIX ASPHALT ITEMS.

THE CONTRACTOR SHALL USE EITHER RC-70 OR AN EMULSIFIED POLYMER PRIME SS-1HP FOR THE PAY ITEM BITUMINOUS MATERIALS (PRIME COAT).

A UNIFORMLY STRAIGHT SAW CUT SHALL BE MADE AT LOCATIONS WHERE PROPOSED NEW CONSTRUCTION WILL ABUT EXISTING HOT-MIX ASPHALT SURFACES. THE SAW CUT SHALL BE MADE FULL DEPTH THROUGH THE EXISTING SURFACE. THIS WORK WILL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT ITEMS INVOLVED AND NO EXTRA COMPENSATION WILL BE ALLOWED.

THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE. FIELD MARKINGS OF UTILITIES IN CRITICAL AREAS MAY BE OBTAINED BY PROVIDING A MINIMUM OF 96 HOURS ADVANCE NOTICE THROUGH THE J.U.L.I.E. SYSTEM BY CALLING 800-892-0123.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE:	PAVEMENT PATCHING (FULL DEPTH)
PG GRADE:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ Ndesign = 70
MIXTURE COMPOSITION:	IL-19
FRICTION AGGREGATE:	N/A

MIXTURE USE:	INCIDENTAL HMA
PG GRADE:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ Ndesign = 50
MIXTURE COMPOSITION:	IL-9.5
FRICTION AGGREGATE:	MIXTURE C

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN THE CALCULATING PLAN QUANTITIES:

AGGREGATE SHOULDERS	2.433	M TON/CU M
BITUMINOUS MATERIALS (PRIME COAT)	0.5	L/SQ M
AGGREGATE (PRIME COAT)	2	KG/SQ M
HOT-MIX ASPHALT	2.243	M TON/CU M

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28 BR	COLES	21	3

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	100% FED. CONSTRUCTION TYPE CODE: X028-2A
*	MX033771	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	METER	15	15
	28000300	TEMPORARY DITCH CHECKS	EACH	4	4
	28000500	INLET AND PIPE PROTECTION	EACH	2	2
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
	54001000	BOX CULVERT END SECTIONS	EACH	2	2
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2
	67100100	MOBILIZATION	L SUM	1	1
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
	70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	14	14
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	2
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	8	8
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2
	M2020010	EARTH EXCAVATION	CU M	12	12
	M2021200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU M	30	30
	M2040800	FURNISHED EXCAVATION	CU M	102	102
	M2090110	POROUS GRANULAR BACKFILL	CU M	43	43
	M2501000	SEEDING, CLASS 2 (SPECIAL)	HA	0.1	0.1

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	100% FED. CONSTRUCTION TYPE CODE: X028-2A
	M2800250	TEMPORARY EROSION CONTROL SEEDING	KG	11	11
	M2810707	STONE DUMPED RIPRAP, CLASS A4	SQ M	42	42
	M3511010	AGGREGATE BASE COURSE, TYPE B	M TON	52	52
	M4080500	INCIDENTAL HOT-MIX ASPHALT SURFACING	M TON	17	17
	M4402010	DRIVEWAY PAVEMENT REMOVAL	SQ M	58	58
	M4429000	PAVEMENT PATCHING (FULL DEPTH)	SQ M	71	71
	M4812150	AGGREGATE SHOULDERS, TYPE B 150MM	SQ M	18	18
	M5010522	PIPE CULVERT REMOVAL	METER	18	18
	M5020100	STRUCTURE EXCAVATION	CU M	59	59
	M5402070	PRECAST CONCRETE BOX CULVERT 2.1M X 1.2M (M273)	METER	22	22
	M542E016	END SECTIONS 375MM	EACH	1	1
	M542E020	END SECTIONS 450MM	EACH	2	2
	M542H025	PIPE CULVERTS, CLASS A, TYPE 1 375MM	METER	13	13
	M542H030	PIPE CULVERTS, CLASS A, TYPE 1 450MM	METER	9	9
*	M6300100	STEEL PLATE BEAM GUARD RAIL, TYPE A	METER	69	69
*	M6300200	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	METER	15	15
	M6320030	GUARDRAIL REMOVAL	METER	64	64
	M7030100	SHORT-TERM PAVEMENT MARKING	METER	3	3
	M7031000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ M	2	2
*	MZ054505	ROCK FILL - REPLACEMENT	M TON	73	73

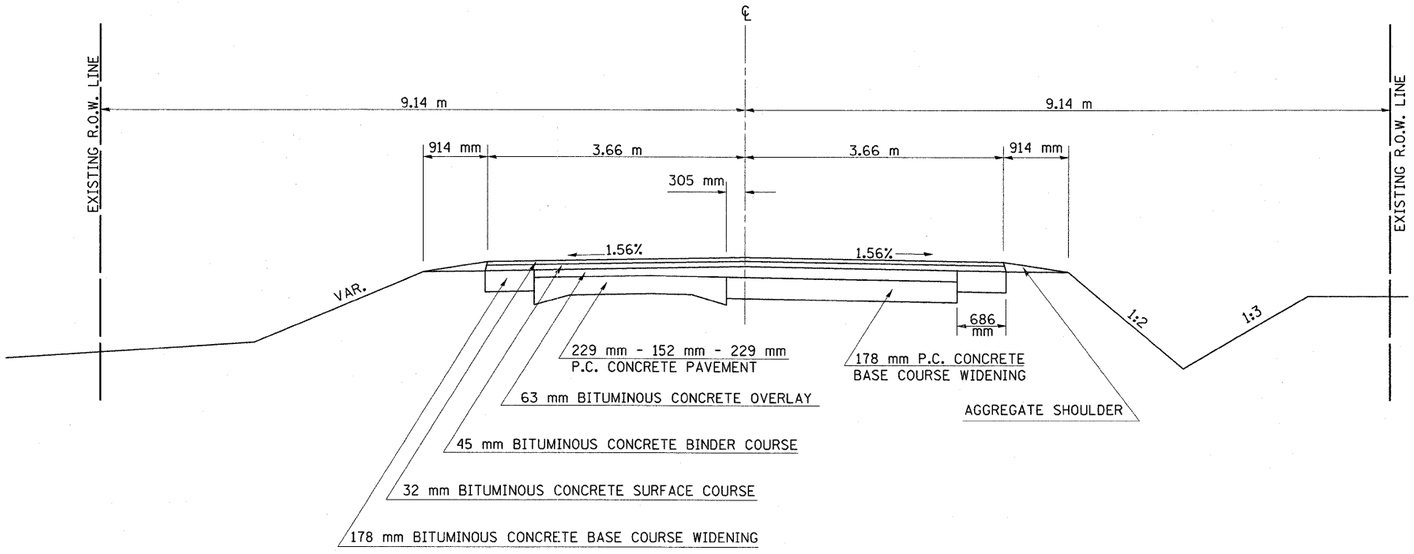
* SPECIALTY ITEMS

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	4

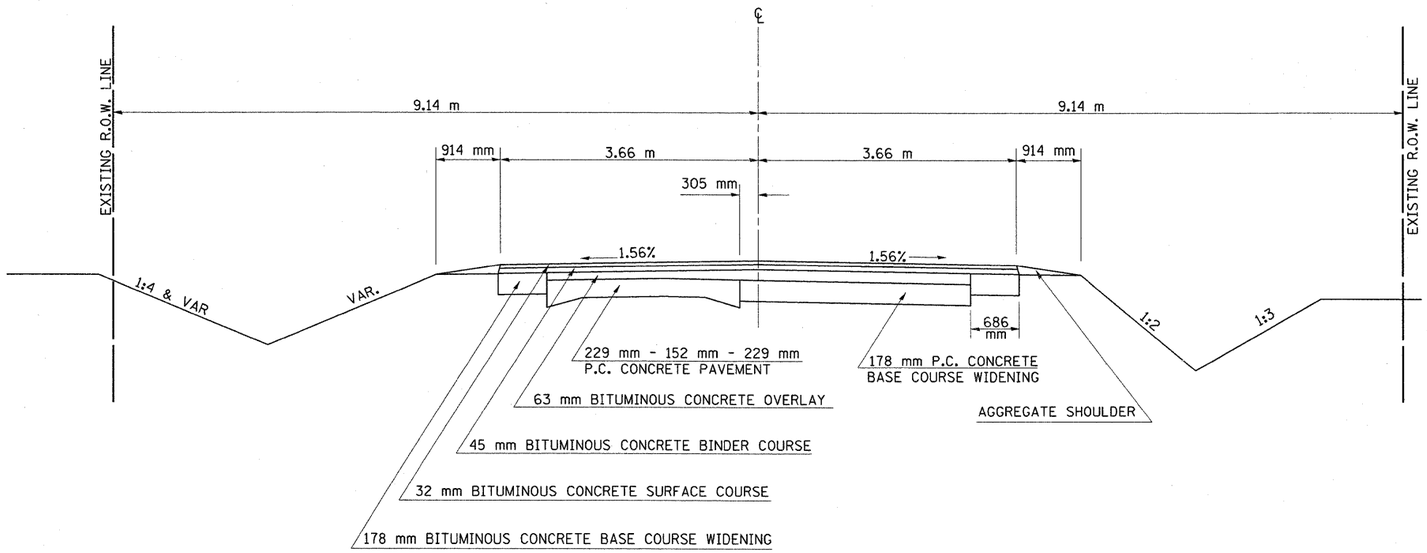
EXISTING TYPICAL CROSS SECTION

STATION 7+650.000 TO STATION 7+706.792



EXISTING TYPICAL CROSS SECTION

STATION 7+706.792 TO STATION 7+800.000

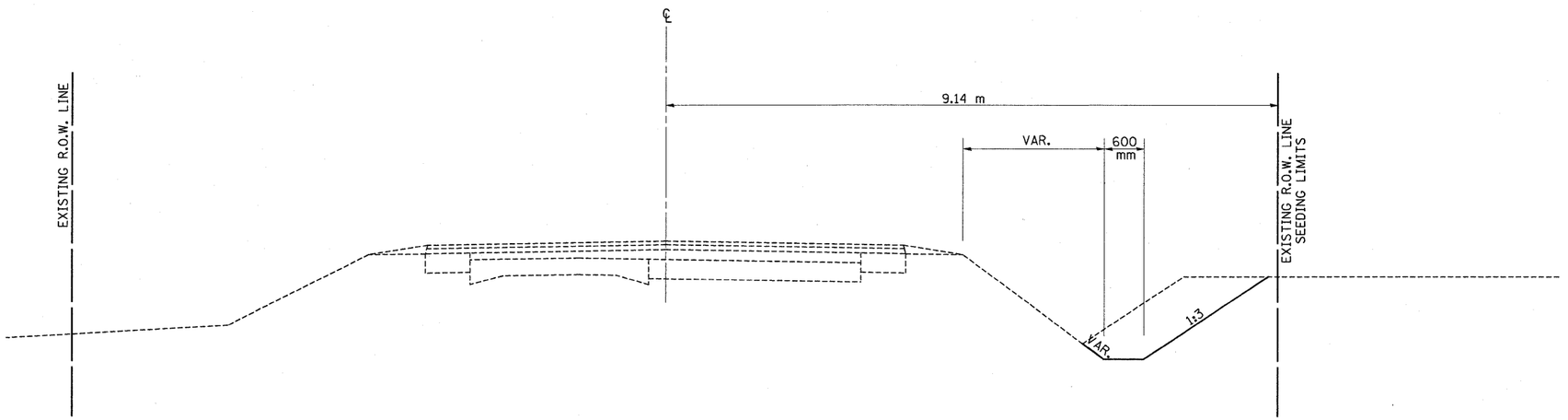


CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	5

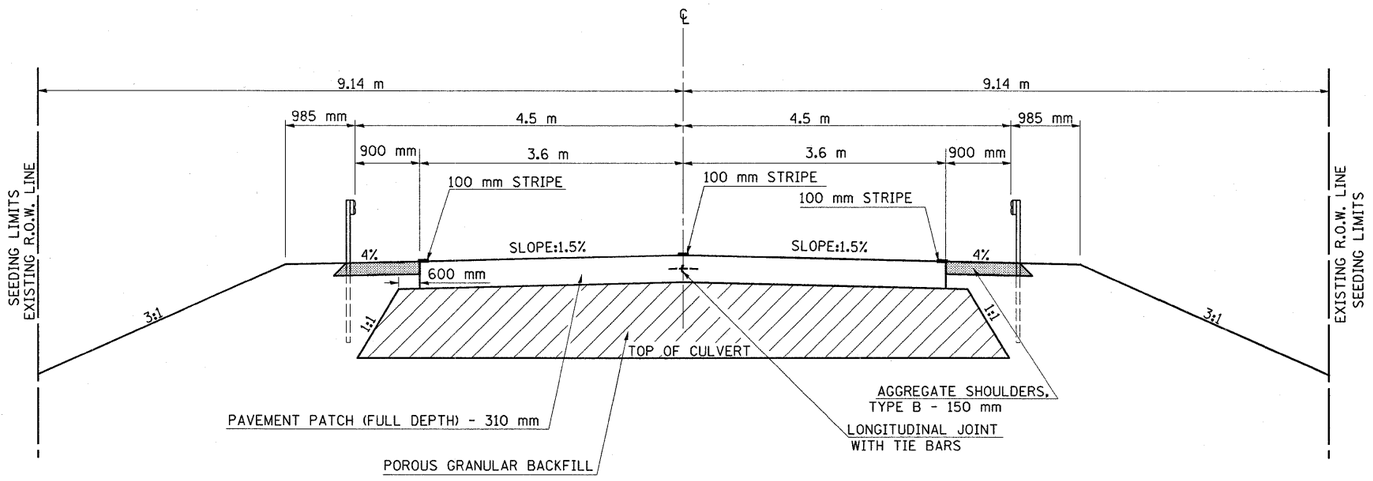
PROPOSED TYPICAL CROSS SECTION (1)

STATION 7+650.000 TO STATION 7+701.933 (2)



PROPOSED TYPICAL CROSS SECTION (2)

(1) STATION 7+701.933 TO STATION 7+711.651 (3)

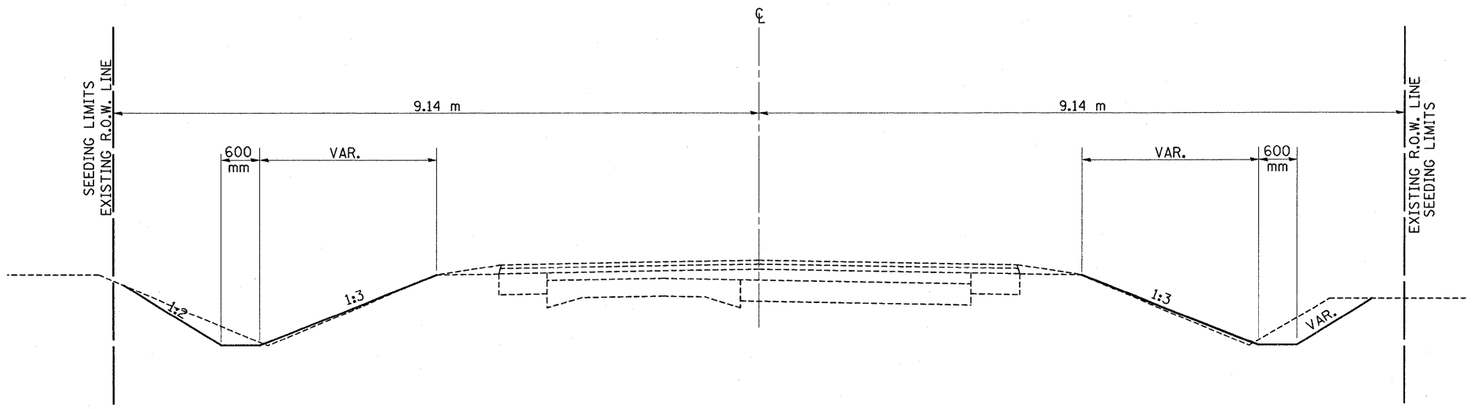


CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	6

PROPOSED TYPICAL CROSS SECTION ③

② STATION 7+711.651 TO STATION 7+800.000



CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28 BR	COLES	21	7

SCHEDULE OF QUANTITIES

EARTHWORK SCHEDULE				
Location	EARTH EXCAVATION	EARTH EXCAV. ADJ. FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE
				WASTE(+) SHORTAGE(-)
	CUBIC METERS	CUBIC METERS	CUBIC METERS	CUBIC METERS
7+650 to 7+750	12.0	9.0	111.0	-102.0
TOTALS	12.0	9.0	111.0	-102.0
ASSUME 25% SHRINKAGE FACTOR FOR EARTH EXCAVATION **STRUCTURE EXCAV.=59.0 CU M NOT TO BE USED IN EMBANK.				

SEEDING, CLASS 2 (SPECIAL)

STATION	HA
7+650 TO 7+750	0.1
TOTAL = 0.1 HA	

TEMPORARY EROSION CONTROL SEEDING

STATION	KG
7+650 TO 7+750	11.0
TOTAL = 11.0 KG	

AGGREGATE SHOULDERS, TYPE B 150MM

STATION	SQ M
7+702 TO 7+712	18.0
TOTAL = 18.0 SQ M	

STRUCTURE EXCAVATION

STATION	CU M
7+702 TO 7+712	59.0
TOTAL = 59.0 CU M	

POROUS GRANULAR BACKFILL

STATION	CU M
7+702 TO 7+712	43.0
TOTAL = 43.0 CU M	

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

STATION	CU M
7+702 TO 7+712	30.0
TOTAL = 30.0 CU M	

ROCK FILL - REPLACEMENT

STATION	M TON
7+702 TO 7+712	73.0
TOTAL = 73.0 M TON	

REMOVAL OF EXISTING STRUCTURES

STATION	EACH
7+706.792	1.0
TOTAL=1.0 EACH	

PIPE CULVERT REMOVAL

STATION	METER
RT. 7+696.9	9.0
RT. 7+732.6	8.7
TOTAL= 18.0 METERS	

BOX CULVERTS END SECTIONS

STATION	EACH
LT. AND RT. 7+06.792	2.0
TOTAL= 2.0 EACH	

STONE DUMPED RIPRAP A4

STATION	AREA (SQ M)
LT. 7+706.792	21.0
RT. 7+706.792	21.0
TOTAL=42.0 SQ M	

AGGREGATE BSE. CSE. TYPE B

LOCATION	DESCRIPTION	AREA (SQ M)	QUANT. (M TON)
LT. 7+780	MAILBOX TURNOUT	39.3	12.8
LT. 7+668	MAILBOX TURNOUT	39.3	12.8
RT. 7+732	PRIVATE ENT.	43.1	14.1
RT. 7+697	PRIVATE ENT.	38.2	12.5
			TOTAL = 52.0 M TON

INCIDENTAL HMA SURFACE

LOCATION	DESCRIPTION	AREA (SQ M)	QUANT. (M TON)
LT. 7+780	MAILBOX TURNOUT	32.6	4.0
LT. 7+668	MAILBOX TURNOUT	32.6	4.0
RT. 7+732	PRIVATE ENT.	39.7	4.8
RT. 7+697	PRIVATE ENT.	34.6	4.2
	*.00239 M TON/SQ M X 51mm		TOTAL=17.0 M TON

DRIVEWAY PAVEMENT REMOVAL

LOCATION	DESCRIPTION	AREA (SQ M)
RT. 7+697	PRIVATE ENT.	31.5
RT. 7+732	PRIVATE ENT.	26.9
		TOTAL=58.0 SQ M

PAVEMENT PATCHING (FD)	AREA (SQ M)
7+701.933 TO 7+711.651	71.0

GUARDRAIL SCHEDULE LOCATION	GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	STEEL PLATE BEAM GUARD RAIL, TYPE A	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	STEEL PLATE BEAM GUARD RAIL (SHORT RADIUS)	TRAFFIC BARRIER TERMINAL, TYPE 2	GUARDRAIL MARKERS, TYPE A	TERMINAL MARKERS - DIRECT APPLIED
	METER	EACH	EACH	METER	METER	EACH	EACH	EACH
SW CORNER		1.0	11.4				2.0	1.0
SE CORNER					7.6	1.0	2.0	
W SIDE CULVERT	37.8			7.6				
E SIDE CULVERT	25.9			7.6				
NW CORNER		1.0	45.7				2.0	1.0
NE CORNER			11.4		7.6	1.0	2.0	
TOTALS=	64.0	2.0	69.0	15.0	15.0	2.0	8.0	2.0

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	28BR	COLES	21	8
STA. 7+675.000	TO STA. 7+750.000			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

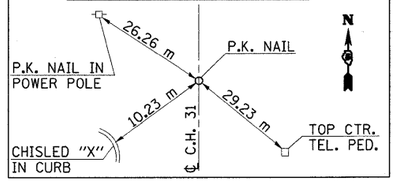
• F.A.S. 674 (C.H. 31)

1:250

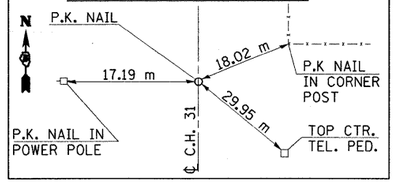
0 2.5 5 7.5 10 12.5 25

SEC. 4, T11N, R7E, 3RD. P.M.

P.O.T. STATION 7+737.770



P.O.T. STATION 7+871.180



STATE OF ILLINOIS

CITY OF MATTOON WATER DEPT.

PRECAST CONCRETE BOX CULVERT (M273)
2 @ 2.1 m x 1.2 m x 10.97 m
PROPOSED STRUCTURE NO. 015-8318
U.S.F.L., 5.49 m RT. 7+706.792, ELEV. = 208.622
D.S.F.L., 5.49 m RT. 7+706.792, ELEV. = 208.614
BOX CULVERT END SECTION
FOR DETAIL, SEE SHEET

PROPOSED MAILBOX
LT. STA. 7+668

EXISTING MAILBOX TO BE RELOCATED

EXISTING GUARDRAIL AND TERMINALS TO BE REMOVED

EXISTING MAILBOX TO BE RELOCATED

PROPOSED MAILBOX
LT. STA. 7+780

ABD WATER LINE

EXISTING R.O.W. LINE

EXISTING R.O.W. LINE

9.144 m
7.32 m
9.144 m

7+650

℄ COUNTY HIGHWAY 31

7+701.933

7+711.651

7+750

7+800

5.18 m R.

EXISTING R.O.W. LINE

EXISTING R.O.W. LINE

7+630.00 ℄
4.9 m AGG. P.E.

7+641.00 ℄
4.0 m AGG. P.E.

EXISTING 380 mm x 7.4 m CMP
TO REMAIN IN PLACE

7+667.400 ℄
3.4 m CONC. P.E.

+675.000
10.7 m RT.

7+696.900 ℄
4.0 m AGG. P.E.

+700.000
10.7 m RT.

5.18 m R.

EXISTING GUARDRAIL AND TERMINALS TO BE REMOVED

7+732.600 ℄
3.3 m AGG. P.E.

EXISTING 450 mm x 8.7 m CMP
TO BE REMOVED

EXISTING 380 mm x 6.8 m
TO REMAIN IN PLACE

EXISTING 305 mm x 5.08 m CMP
TO REMAIN IN PLACE

JOHN B. ALUMBAUGH

EXISTING 3 @ 1.22 m x 1.22 m
X 10.31 m CONCRETE BOX CULVERT
EXISTING STRUCTURE NO. 015-8305
A.R. STATION 7+706.792
WITH HEADWALLS TO BE REMOVED
REMOVE EXISTING STRUCTURE
1 EACH

CHARLES M. THOMPSON
REBECCA A. THOMPSON

PIPE CULVERTS, CLASS A, TYPE 1
450 mm x 8.5 m
U.S.F.L., 6.8 m RT., 7+737.250, ELEV. = 209.726
D.S.F.L., 7.5 m RT., 7+728.710, ELEV. = 209.538
END SECTION, 450 mm - 2 EACH

PIPE CULVERTS, CLASS A, TYPE 1
375 mm x 12.5 m
U.S.F.L., 6.4 m RT., 7+690.920, ELEV. = 209.219
D.S.F.L., 6.1 m RT., 7+704.110, ELEV. = 209.032
END SECTION, 375 mm - 1 EACH
ATTACH TO BOX WING • SEE DETAIL

EXISTING 380 mm x 11.3 m CMP
TO BE REMOVED

B.M. 4588-2:
CHISELED "□" SOUTH END
OF EAST HEADWALL.
ELEATION = 210.349

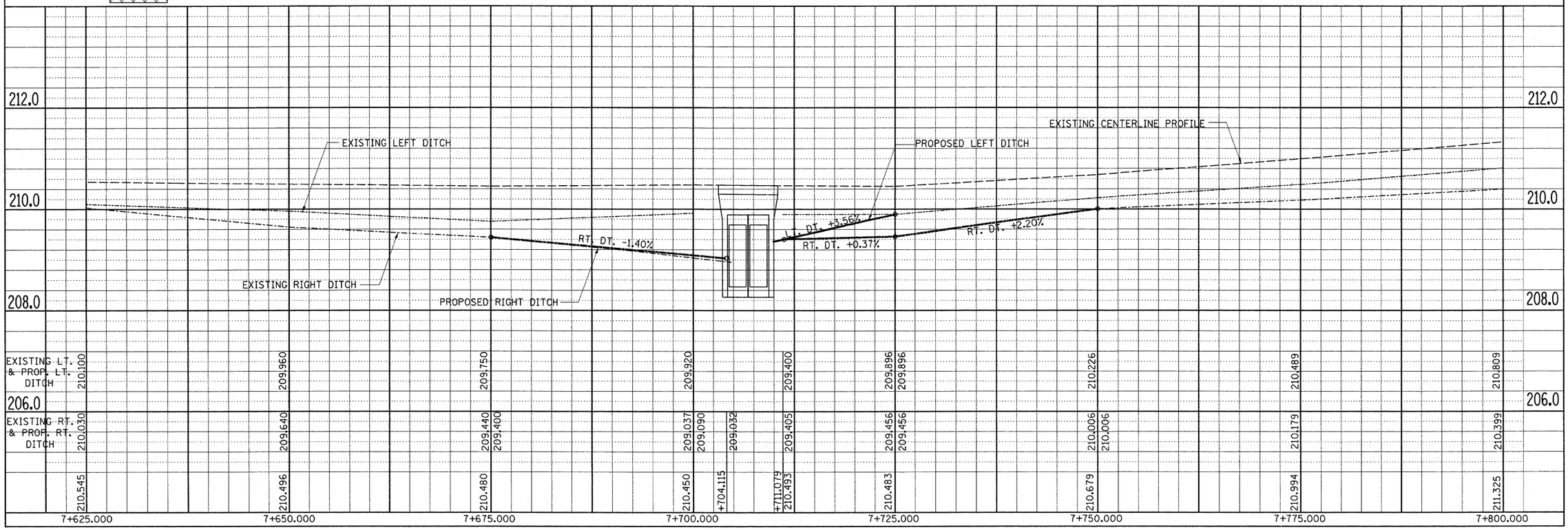
STONE DUMP RIPRAP

INCIDENTAL HMA RESURFACING

PAVEMENT PATCH FULL DEPTH

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

SEC. 4, T11N, R7E, 3RD. P.M.



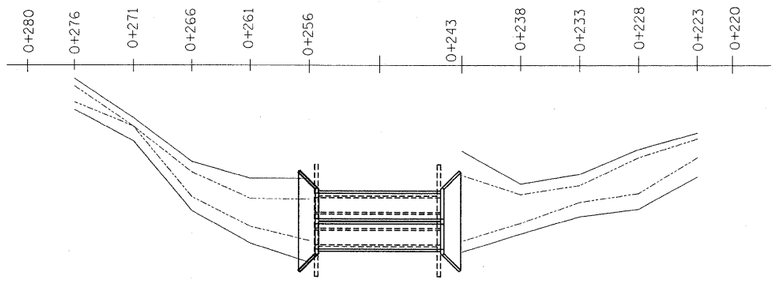
ORIGINAL SURVEY NOTE BOOK ____ DATE ____ BY ____
SURVEYED ____ PLOTTED ____ TEMPLATE ____ AREAS ____ AREAS CHECKED ____ NO. ____

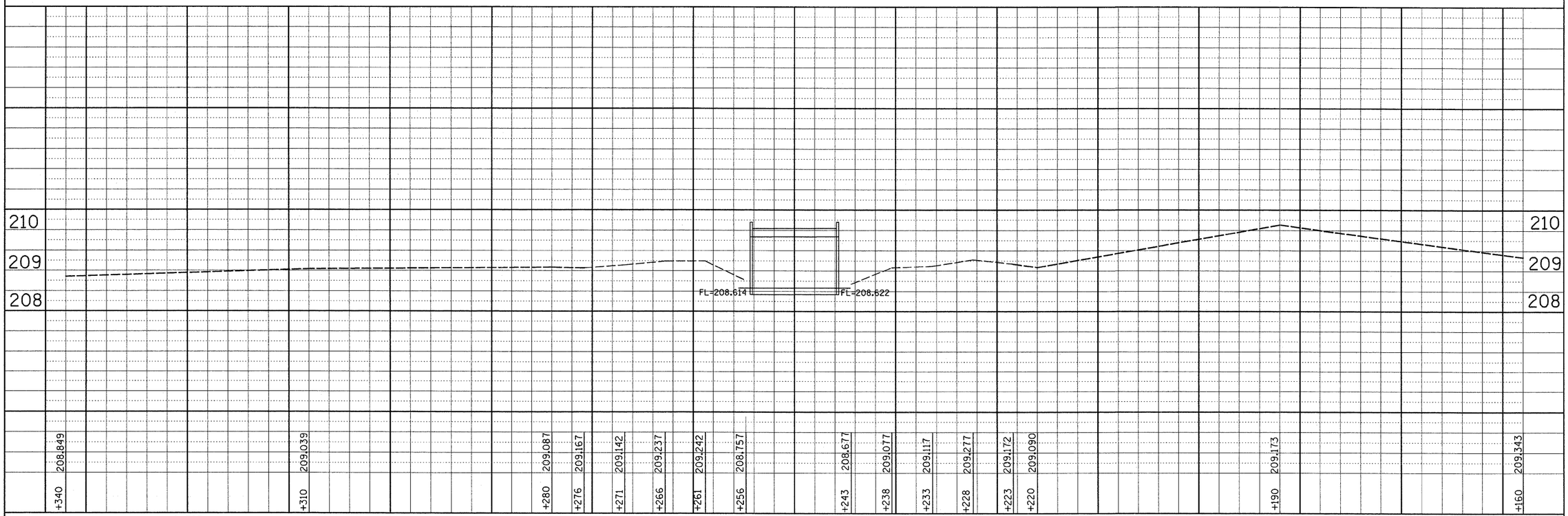
CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	28BR	COLES	21	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• F.A.S. 674 (C.H. 31)

STREAM PROFILE





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

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

CONTRACT NO. 74172

SEC. 4, T11N, R7E, 3RD. P.M.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	288R	COLES	21	10
STA. 7+675.000		TO STA. 7+750.000		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

• F.A.S. 674 (C.H. 31)

1:250

0 2.5 5 7.5 10 12.5 25

EROSION CONTROL DETAIL SHEET

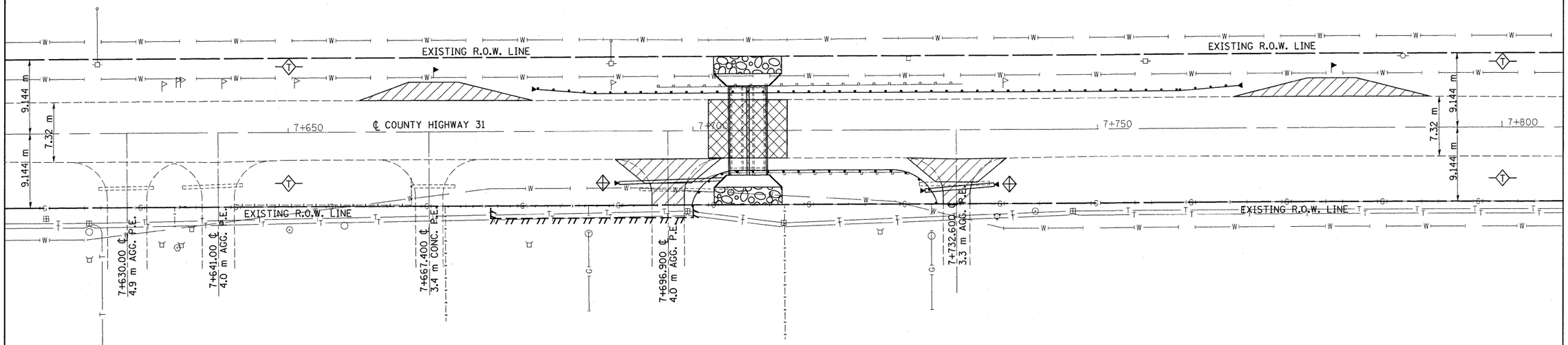
INLET AND PIPE PROTECTION

RT 7+690	1.0	EACH
RT 7+740	1.0	EACH
TOTAL =	2.0	EACH

TEMPORARY DITCH CHECK

LT 7+650	1.0	EACH
RT 7+650	1.0	EACH
LT 7+800	1.0	EACH
RT 7+800	1.0	EACH
TOTAL =	4.0	EACH

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



ORIGINAL SURVEY NOTE BOOK ____ NO. ____ | SURVEYED ____ | PLOTTED ____ | TEMPLATE AREAS ____ | AREAS CHECKED ____ | BY ____ | DATE ____

- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- STONE DUMP RIPRAP
- INCIDENTAL BITUMINOUS RESURFACING
- PAVEMENT PATCH FULL DEPTH

EROSION CONTROL GENERAL NOTES

EROSION CONTROL MEASURES AT THE START OF CONSTRUCTION:

1. THE AREAS OF EXCAVATION AND EMBANKMENT PLACEMENT SHALL BE MANAGED FOR THE PURPOSES OF CONTROLLING EROSION WITHIN THE IMPROVEMENT AREA, REDUCING WATER FLOW BY TEMPORARY DIVERSION, MINIMIZING SILTATION AT THE RIGHT-OF-WAY LINE, AND ESTABLISHING VEGETATIVE COVER WHICH WILL BECOME PERMANENT VEGETATION AND ACT AS AN EROSION CONTROL BARRIER. WORK AT THE START OF CONSTRUCTION SHALL CONSIST OF THE FOLLOWING:

   (a) AREAS OF EXISTING VEGETATION (WOODS AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED FOR PRESERVING AND SHALL BE PROTECTED FROM MOWING, BRUSH CUTTING, TREE REMOVAL, AND OTHER ACTIVITIES THAT WOULD BE DETRIMENTAL TO THEIR MAINTENANCE AND DEVELOPMENT.

   (b) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

   (c) BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE START OF CONSTRUCTION WHEN NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN CALENDAR DAYS.

EROSION CONTROL MEASURES DURING CONSTRUCTION:

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED FROM DAMAGING EFFECTS OF CONSTRUCTION. THE CONTRACTOR SHALL NOT USE THIS AREA FOR PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.

   (a) WITHIN THE CONSTRUCTION ZONE, CRITICAL AREAS WHICH HAVE A HIGH FLOW OF WATER, AS DETERMINED BY THE ENGINEER, SHALL REMAIN UNDISTURBED UNTIL CONTINUOUS OPERATIONS CAN ENSURE TIMELY COMPLETION OF WORK IN THESE AREAS TO MINIMIZE SOIL EROSION.

   (b) EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN CALENDAR DAYS.

EROSION CONTROL MEASURES AFTER FINAL GRADING:

1. EXCAVATION AND EMBANKMENT AREAS SHALL BE PERMANENTLY SEEDED WHEN FINAL GRADE. EROSION CONTROL BLANKET SHALL BE PLACED ON ALL DISTURBED AREAS.

   (a) TEMPORARY EROSION CONTROL SYSTEMS SHALL REMAIN IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY WITH ALL PROPOSED TURF AREAS SEEDED AND A PROPER STAND ESTABLISHED.

SEC. 4, T11N, R7E, 3RD. P.M.

CONTRACT NO. 74172

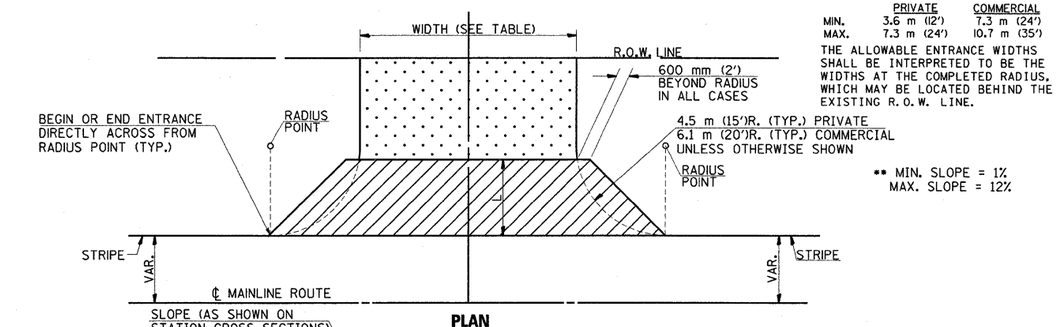
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28 BR	COLES	21	11

TYPICAL DETAIL OF RURAL PRIVATE AND COMMERCIAL ENTRANCES
ADJACENT TO PROPOSED BITUMINOUS SHOULDERS (AGGREGATE OR EARTH)

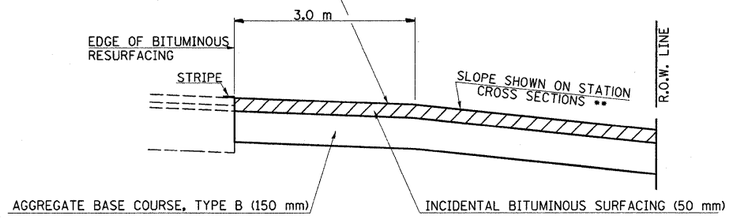
ALLOWABLE ENTRANCE WIDTHS:

	PRIVATE	COMMERCIAL
MIN.	3.6 m (12')	7.3 m (24')
MAX.	7.3 m (24')	10.7 m (35')

THE ALLOWABLE ENTRANCE WIDTHS SHALL BE INTERPRETED TO BE THE WIDTHS AT THE COMPLETED RADIUS, WHICH MAY BE LOCATED BEHIND THE EXISTING R.O.W. LINE.



PLAN

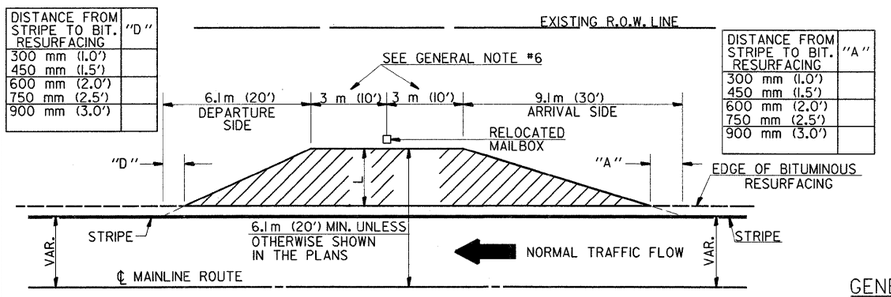


PROFILE

* EARTH EXCAVATION REQUIRED FOR THE CONSTRUCTION OF THE AGGREGATE SURFACE COURSE SHALL BE INCLUDED IN THE COST OF AGGREGATE SURFACE COURSE.

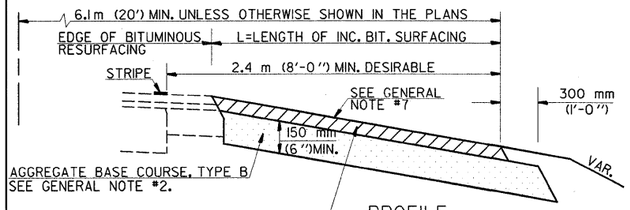
TYPICAL DETAIL OF RURAL MAILBOX TURNOUTS

DISTANCE FROM STRIPE TO BIT. RESURFACING	"D"
300 mm (1.0')	
450 mm (1.5')	
600 mm (2.0')	
750 mm (2.5')	
900 mm (3.0')	



DISTANCE FROM STRIPE TO BIT. RESURFACING	"A"
300 mm (1.0')	
450 mm (1.5')	
600 mm (2.0')	
750 mm (2.5')	
900 mm (3.0')	

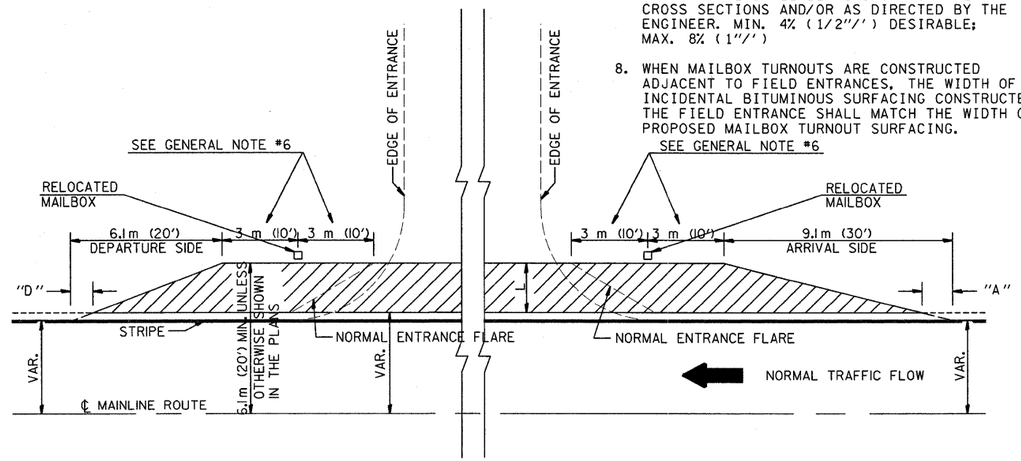
PLAN



PROFILE

GENERAL NOTES

1. THE EXISTING SURFACE SHALL BE PREPARED IN ACCORDANCE WITH SECTION 408 OF THE STANDARD SPECIFICATIONS.
2. AGGREGATE BASE COURSE, TYPE B OF THE THICKNESS SPECIFIED IN THE PLANS 150 mm (6" MIN.) SHALL BE USED WHERE IN THE OPINION OF THE ENGINEER THERE IS NOT SUFFICIENT BASE MATERIAL FOR THE PROPOSED MAILBOX TURNOUTS. THIS MATERIAL SHALL GENERALLY BE USED TO WIDEN ALL EXISTING MAILBOX TURNOUTS OR TO CONSTRUCT NEW MAILBOX TURNOUTS WHERE NONE NOW EXISTS.
3. THE AGGREGATE BASE COURSE SHALL BE CONSTRUCTED 0.3 m (1') WIDER THAN THE SURFACE DIMENSIONS AS SHOWN ABOVE.
4. ANY NECESSARY WORK BEHIND THE INCIDENTAL BITUMINOUS SURFACING SHALL BE AS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
5. THE TEMPORARY RELOCATION OF EXISTING MAILBOXES SHALL BE IN ACCORDANCE WITH ARTICLE 107.20 (107.19) OF THE STANDARD SPECIFICATIONS.
6. WHEN MORE THAN ONE RELOCATED MAILBOX IS INCLUDED IN A PARTICULAR LOCATION THE TWO 10' DIMENSIONS AS SHOWN ABOVE SHALL BE FROM THE END MAILBOX.
7. CROSS SLOPE SHALL BE AS SHOWN ON THE STATION CROSS SECTIONS AND/OR AS DIRECTED BY THE ENGINEER. MIN. 4% (1/2"/') DESIRABLE; MAX. 8% (1"/')
8. WHEN MAILBOX TURNOUTS ARE CONSTRUCTED ADJACENT TO FIELD ENTRANCES, THE WIDTH OF THE INCIDENTAL BITUMINOUS SURFACING CONSTRUCTED FOR THE FIELD ENTRANCE SHALL MATCH THE WIDTH OF THE PROPOSED MAILBOX TURNOUT SURFACING.



TYPICAL MAILBOX TURNOUT PLACEMENT
ADJACENT TO ENTRANCE

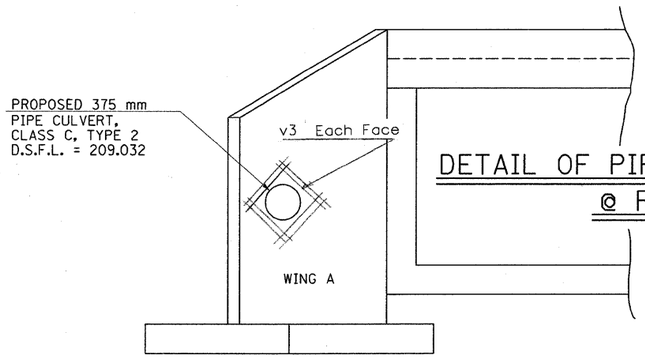
	NAME	DATE
DESIGNED	J.M.H.	12/88
CHECKED	P.E.K.	12/88
CADD NO.	C-1.25	

REVISIONS	
NAME	DATE
J.M.H.	4/89
J.M.H.	1/92
D.L.P.	5/96

REVISIONS	
NAME	DATE
D.L.P.	10/96

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28 BR	COLES	21	12

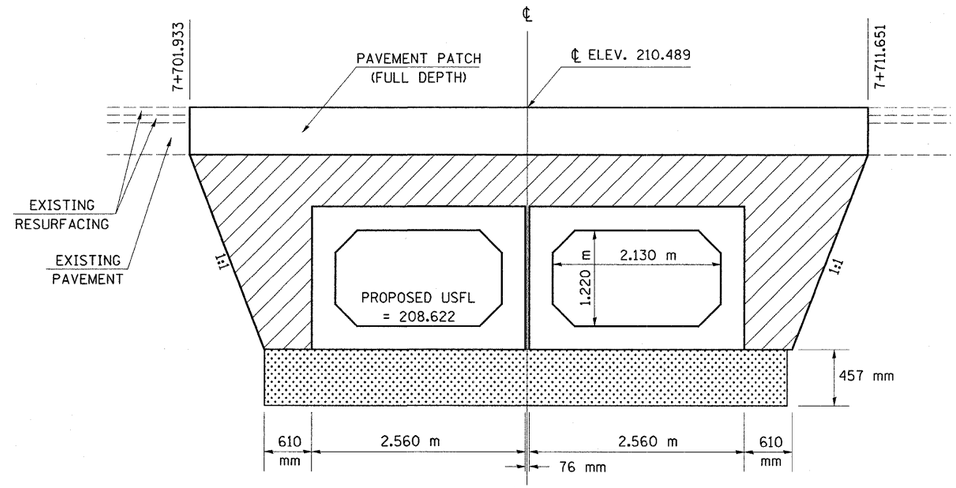


DETAIL OF PIPE CULVERT THRU WINGWALL @ RT. STA. 7+704.662

NOTE:
PIPE SHALL BE EPOXY GROUTED ON THE INSIDE AND OUTSIDE OF THE WINGWALL. THIS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PIPE. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

UPSTREAM END VIEW

DETAIL OF POROUS GRANULAR BACKFILL PAY LIMITS



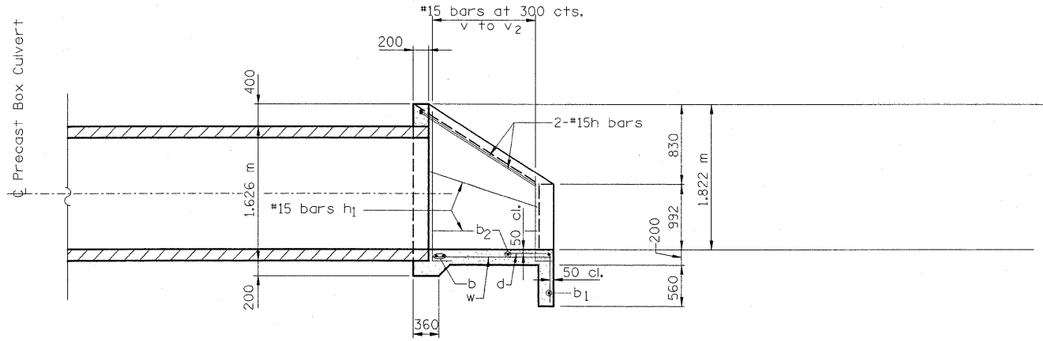
℄ PROPOSED DOUBLE 2.130 m X 1.220 m
PRECAST CONCRETE BOX CULVERT
A.R. STATION 7+706.792

ROCKFILL - REPLACEMENT

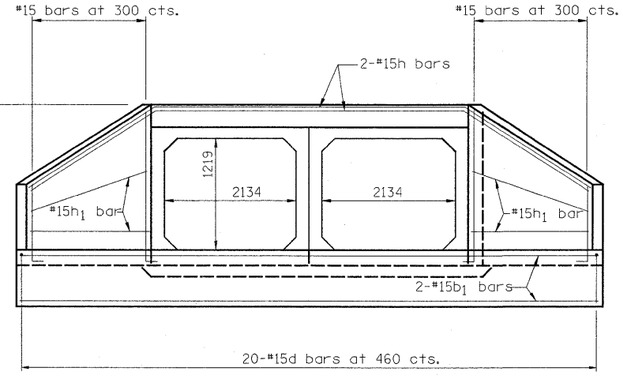
POROUS GRANULAR BACKFILL
PLAN QUANTITY = 43.2 CU. METERS.

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28 BR	COLES	21	13



SECTION A-A



END VIEW

NOTES

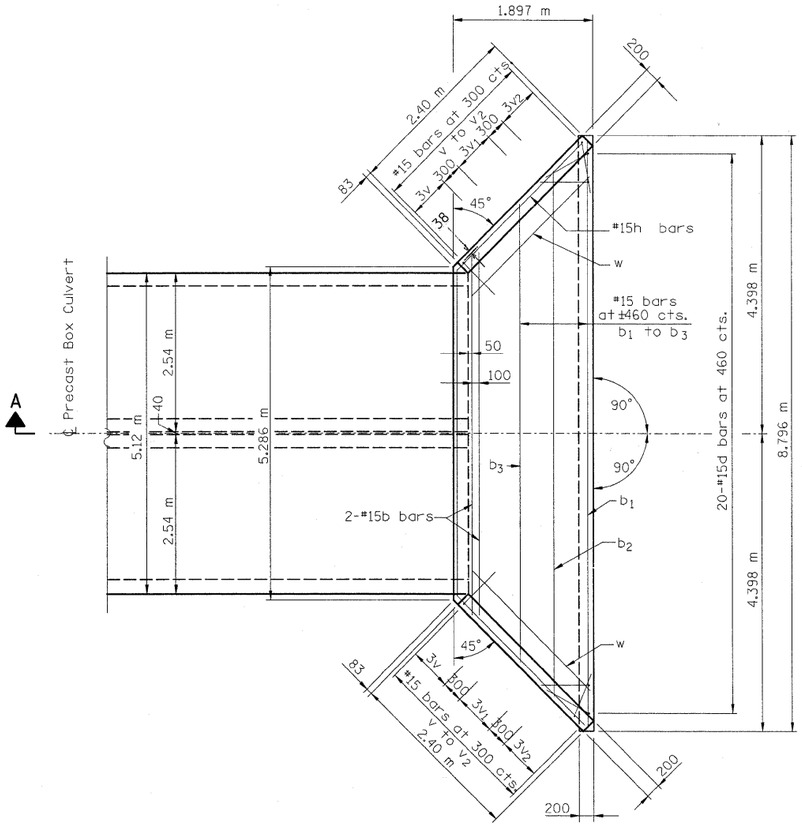
All bars shall be round and shall conform to the requirements of Art. 1006.10 of the Standard Specifications.

Concrete Box Culverts shall be used throughout.

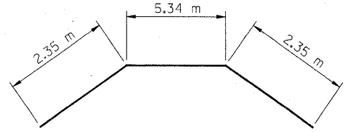
Build tops of headwalls parallel to grade line.

The Precast Concrete Box Culvert Sections shall conform to the requirements of AASHTO M273.

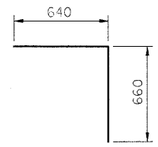
All dimensions are in millimeters (mm) unless otherwise noted.



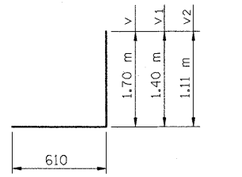
PLAN



BAR h



BAR d



BARS v, v1, & etc.

BILL OF MATERIAL (ONE HEADWALL)

Bar	No.	Size	Length (m)	Shape
b	2	#15	5.54	——
b_1	2	#15	8.79	——
b_2	1	#15	7.77	——
b_3	1	#15	6.81	——
d	20	#15	1.30	⌐
h	2	#15	10.04	⌒
h_1	2	#15	2.30	——
v	6	#15	2.31	⌟
v_1	6	#15	2.01	⌟
v_2	6	#15	1.72	⌟
v3	16	#15	1.30	——
w	2	#15	2.30	——
Reinforcement Bars			kg	240
Concrete Box Culverts			Cu. m	5.6

Item	Unit	Quantity
Box Culvert End Sections	Each	2

BOX CULVERT END SECTIONS (CAST IN PLACE)
STA. 7+706.792 0° SKEW

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

Illinois Department of Transportation
Division of Highways
IDOT - Dist 5

SOIL BORING LOG

Page 1 of 1

Date 10/19/01

ROUTE FAS 674 (C.H. 31) DESCRIPTION 4 Miles SW of Mattoon LOGGED BY CNA

SECTION 28BR LOCATION NW. SEC. 4, TWP. 11N, RNG. 7E, 3rd PM

COUNTY Coles DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 015-8305
Station 7+706.788

BORING NO. 1 N. Abut
Station 7+710.2
Offset 3.8 m Rt.
Ground Surface Elev. 210.5 m

Surface Water Elev. 209.6 m
Stream Bed Elev. 209.4 m

Groundwater Elev.:
First Encounter 208.4 m
Upon Completion ____ m
After ____ Hrs. ____ m

DEPTH (m)	BLOWS (/150 mm)	UCS Qu (kPa)	MOIST (%)
Dark Gray Silt Loam to Loam			
	2		
-1.5	2 2	86 B	20
208.7			
Dark Gray Dirty Medium Sand to Sand Loam Mixed	1		
	1 2	-	20
207.9			
Brown Clay Loam Till with Small Oxidized Veins	1		
	4	316	15
-3.0	6	B	
207.3			
Gray Clay Loam Till	3		
	6 9	278 B	13
	4		
	7	431	13
-4.9	12	B	
205.9			
End of Boring			
-6.0			

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, from 137 (Rev. 8-99)

SOIL BORING 015S305.GPJ IL_DOT.GDT 10/25/01

Illinois Department of Transportation
Division of Highways
IDOT - Dist 5

SOIL BORING LOG

Page 1 of 1

Date 10/19/01

ROUTE FAS 674 (C.H. 31) DESCRIPTION 4 Miles SW of Mattoon LOGGED BY CNA

SECTION 28BR LOCATION NW. SEC. 4, TWP. 11N, RNG. 7E, 3rd PM

COUNTY Coles DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 015-8305
Station 7+706.788

BORING NO. 2 S. Abut.
Station 7+704.1
Offset 3.8 m Lt.
Ground Surface Elev. 210.5 m

Surface Water Elev. 209.6 m
Stream Bed Elev. 209.4 m

Groundwater Elev.:
First Encounter 208.4 m
Upon Completion ____ m
After ____ Hrs. ____ m

DEPTH (m)	BLOWS (/150 mm)	UCS Qu (kPa)	MOIST (%)
Dark Gray Silt Loam with Small Sand Seams	1		
	2	77	24
-1.5	3	B	
208.7			
Dark Gray Loam	2		
	2	115	14
208.1	2	B	
Brown Clay Loam Till with Small Oxidized Veins	1		
	2	517	13
-3.0	7	B	
	3		
	6	565	13
206.7	10	B	
Gray Clay Loam Till	2		
	4	316	13
-4.3	8	B	
205.9			
End of Boring			
-6.0			

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, from 137 (Rev. 8-99)

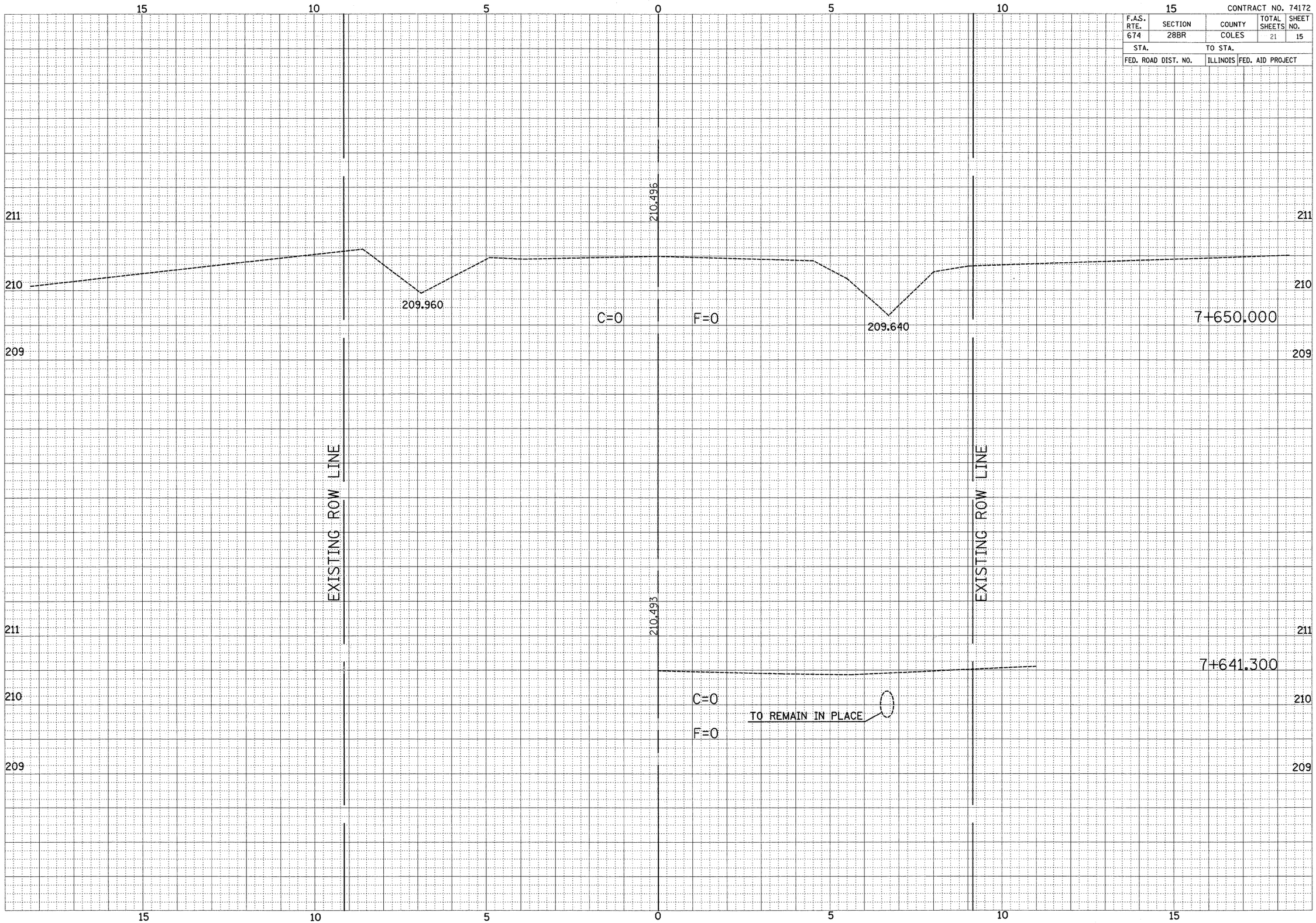
SOIL BORING 015S305.GPJ IL_DOT.GDT 10/25/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

CONTRACT NO. 74172				
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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



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

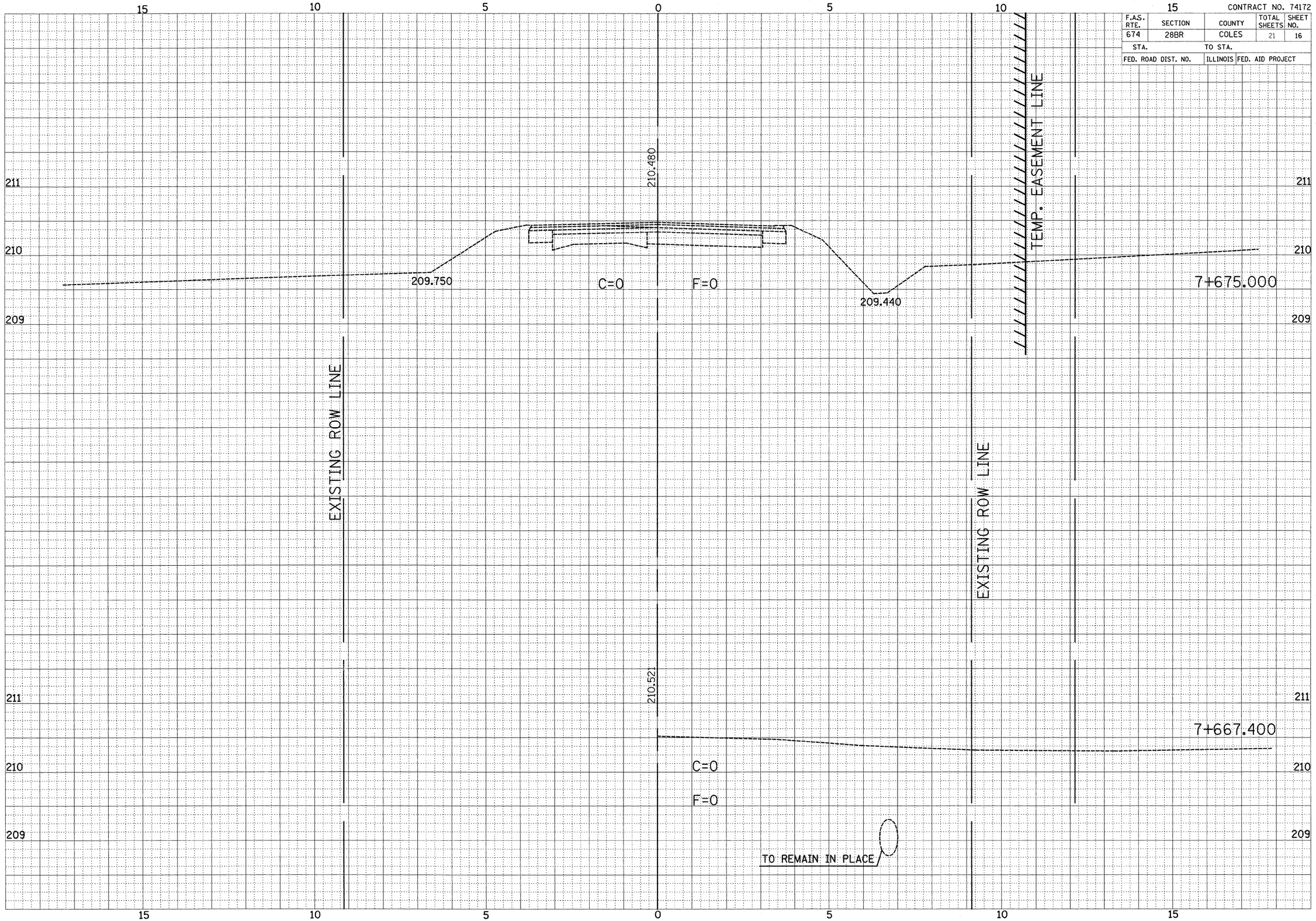
2/4/2009

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	16
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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

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



CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	17
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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

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

15 10 5 0 5 10 15

211 210 209

210.450

4 %

1:3

209.924

F=0.33
C=0

F=0
C=0

FL=209.090

TO BE REMOVED

7+700.000

EXISTING ROW LINE

TEMP. EASEMENT LINE

210.440

C=0
F=0

FL=209.133

TO BE REMOVED

7+696.900

210.452

VAR.

C=0
F=2.45

FL=209.204

7+691.850

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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

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

15 10 5 0 5 10 15

211
210
209

210.459
210.489

8.3% VAR. 1.5 % 1.5 % 8.3% VAR.

FL = 208.614

FL = 208.622

7+706.792

C=0 F=0

EXISTING ROW LINE

EXISTING ROW LINE

210.484

1:3 4 %

4 %

7+702.510

C=0
F=0.23

C=0
F=0.8

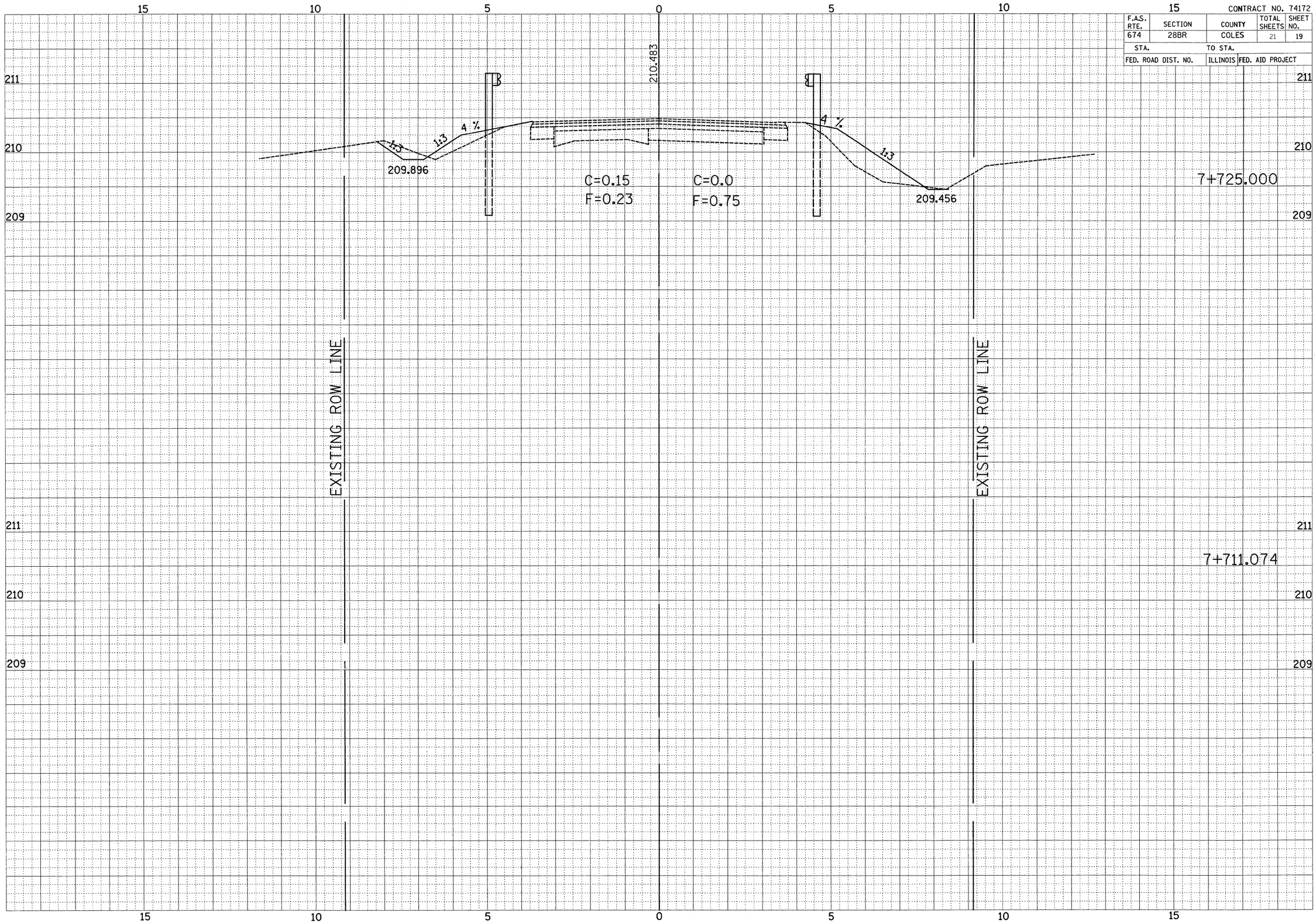
FL = 209.055

TO BE REMOVED

15 10 5 0 5 10 15

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	19
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

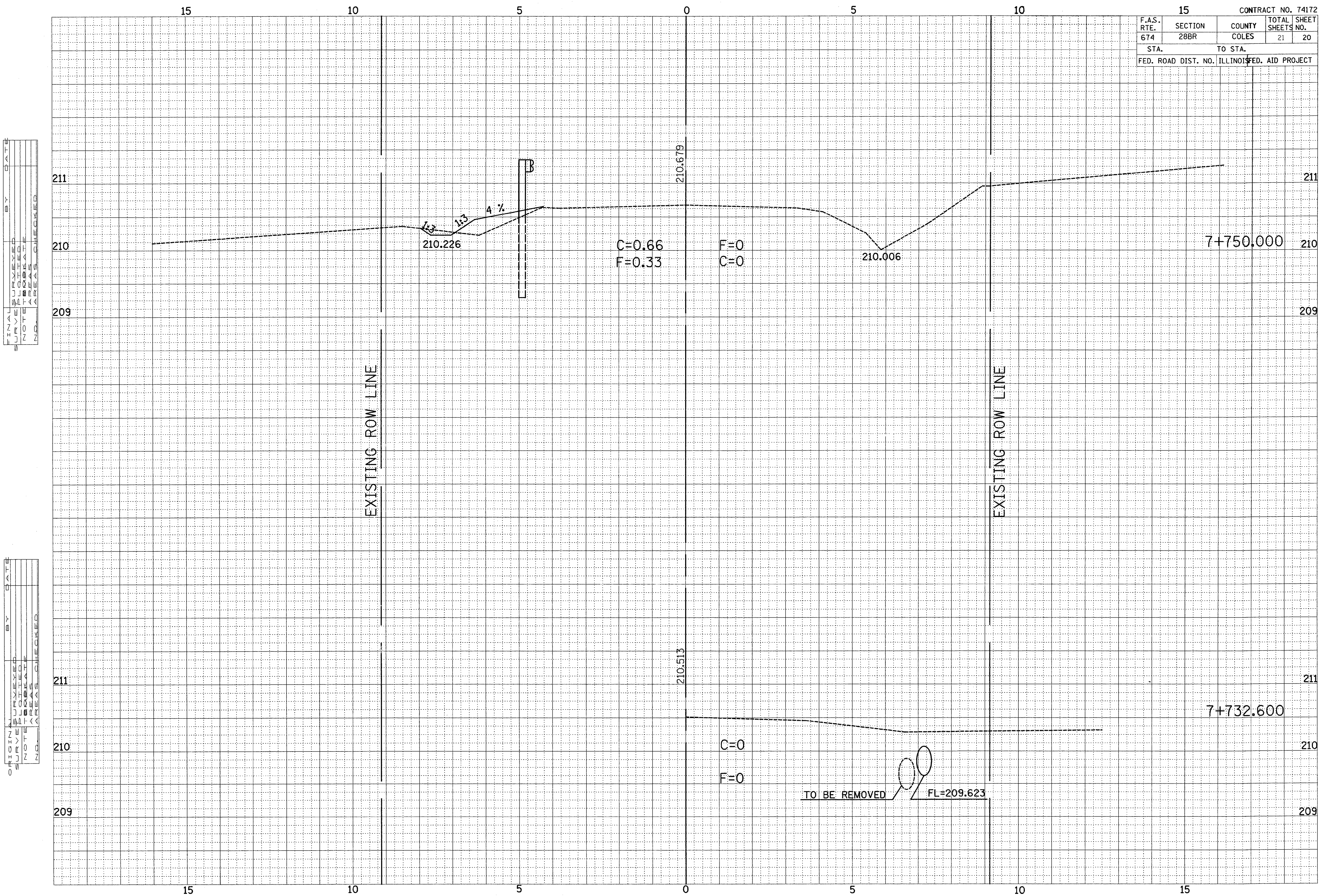


FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



2/4/2009

CONTRACT NO. 74172

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
674	28BR	COLES	21	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEYED BY	DATE
SURVEYED BY	
NOTES BOOK	
AREAS OF	
NO. AREAS CHECKED	

FINAL SURVEYED BY	DATE
SURVEYED BY	
NOTES BOOK	
AREAS OF	
NO. AREAS CHECKED