

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
323	(13X)I-3	MACON	7	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 74342		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 323 (U.S. ROUTE 36)
SECTION (13X)I-3

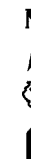
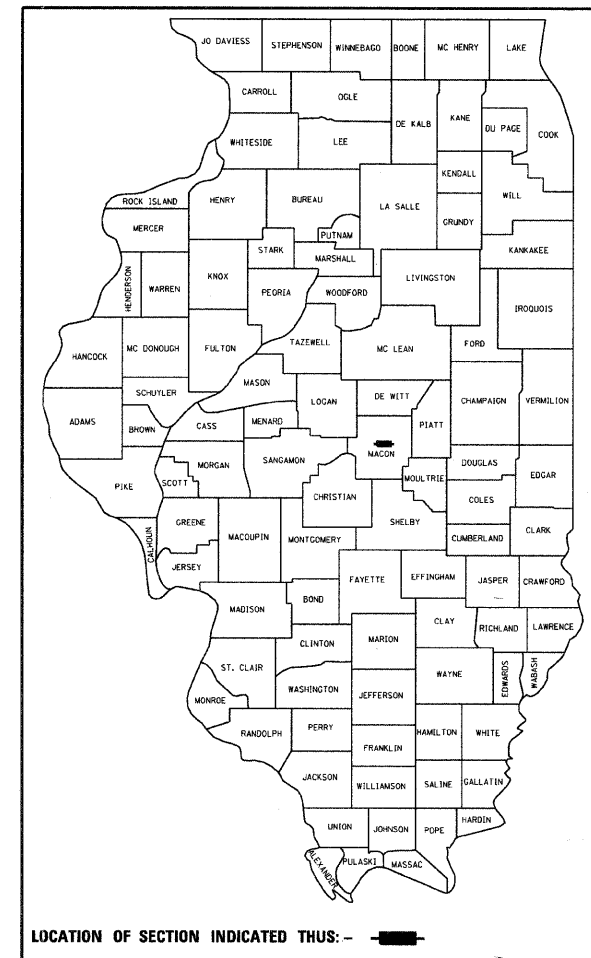
**RCCP CULVERT INSTALLATION
MACON COUNTY**

C-97-110-08

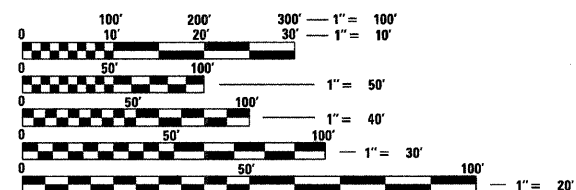
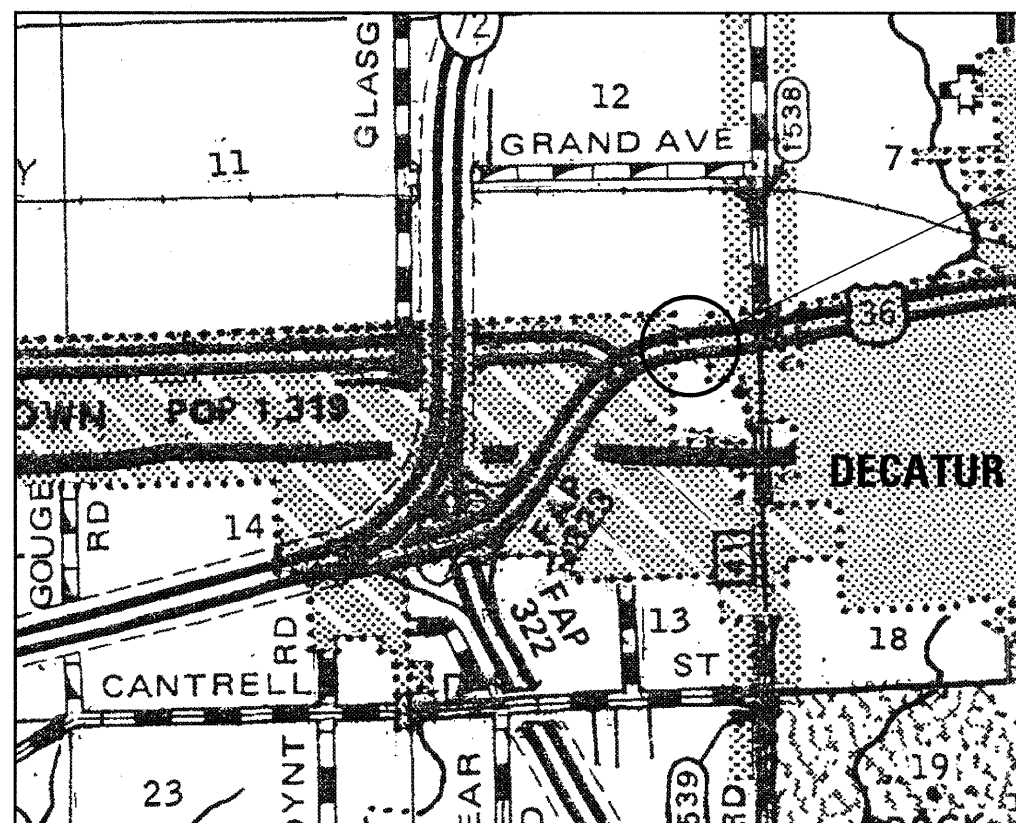
FOR INDEX OF SHEETS, SEE SHEET NO. 2

2007 ADT = 8500

D-97-058-08



F.A.P. ROUTE 323
SECTION (13X)I-3
MACON COUNTY
STATION 635 + 87



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

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

PROJECT ENGINEER: TOM RONAN

CONTRACT NO. 74342

GROSS LENGTH = 100 FT. = 0.019 MILE

NET LENGTH = 100 FT. = 0.019 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 3 20 09

Roger J. Shubert
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27, 20 09
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 20 09
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

GENERAL NOTES

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

THE WORK INCLUDED IN THIS SECTION CONSISTS OF JACKING A 48" PIPE CULVERT BENEATH U.S. ROUTE 36, REROUTING AN EXISTING FIELD TILE, GRADING AND SHAPING DITCHES, RIPRAP PLACEMENT, TRAFFIC CONTROL, AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION. THE PROPOSED PIPE WILL BE INSTALLED TO THE EAST OF AND PARALLEL TO THE TWO EXISTING PIPE CULVERTS BENEATH U.S. ROUTE 36 AND SHALL BE LOCATED AT APPROXIMATELY STATION 635+87.7. THE PROPOSED PIPE CULVERT SHALL BE PLACED SO THAT THE OUTSIDE OF THE WEST SIDE OF THE PROPOSED PIPE IS 5 FT FROM THE OUTSIDE OF THE EAST SIDE OF THE ORIGINAL 48" CMP.

THE PROPOSED PROJECT IS LOCATED ON U.S. ROUTE 36 IN MACON COUNTY, APPROXIMATELY 1300 FEET WEST OF WYCKLES ROAD.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES ON SITE PRIOR TO ANY CONSTRUCTION AND WILL BE HELD RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THE FACILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 1-800-892-0123 FOR UTILITY LOCATIONS.

THE INVERT ELEVATIONS AND TOP OF LID ELEVATION FOR THE INLET LOCATED AT RT STA 635+64 WERE ESTIMATED USING AN EXISTING SURVEY AND PROPOSED CROSS SECTIONS FROM AN EXISTING SET OF AS-BUILT PLANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING ADJUSTMENTS TO THE DRAINAGE STRUCTURE IN ORDER TO MATCH FIELD ELEVATIONS AND CONDITIONS. THIS WORK WILL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR INLETS, TYPE B, TYPE 1 FRAME CLOSED LID.

A PORTION OF THE EXISTING HEADWALLS WILL BE REMOVED TO MAKE ROOM FOR THE PROPOSED 48" PIPE TO BE JACKED INTO PLACE. THE PORTION OF THE EXISTING HEADWALL THAT WILL BE REMOVED WILL BE DETERMINED AS PER THE DETAILS SHOWN ON SHEET 5 OF THE PLANS OR AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CONCRETE HEADWALL REMOVAL.

THE EXISTING 12" FIELD TILE THAT OUTLETS ON THE EAST SIDE OF THE SOUTH HEADWALL WILL BE REMOVED FROM THE SOUTH HEADWALL TO THE LOCATION OF THE PROPOSED INLET, TYPE B AS SHOWN ON SHEET 4 OF THE PLANS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR EXISTING FIELD TILE REMOVAL.

ELEVATIONS ARE BASED OFF THE FOLLOWING BENCHMARKS:

BENCHMARK: A CHISELED SQUARE ON THE SOUTH SIDE OF THE TOP OF FOUNDATION OF IDOT LIGHT STANDARD LOCATED 0.1 MILES EAST OF THE CENTERLINE OF WYCKLES ROAD ON THE SOUTH SIDE OF ROUTE 36 R.O.W.
ELEVATION 671.77

TEMPORARY BENCHMARK # 1: A CHISELED SQUARE ON THE SOUTH HEADWALL OF DUAL CULVERTS UNDER US ROUTE 36 LOCATED APPROXIMATELY 1200 FEET WEST OF WYCKLES ROAD
ELEVATION: 660.62

TEMPORARY BENCHMARK # 2: A CHISELED SQUARE ON THE NORTH HEADWALL OF DUAL CULVERTS UNDER US ROUTE 36 LOCATED APPROXIMATELY 1200 FEET WEST OF WYCKLES ROAD
ELEVATION: 661.90

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, & GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	PLAN SHEET
5	CONCRETE HEADWALL REMOVAL DETAILS
6	EROSION CONTROL DETAILS & SCHEDULES
7	BORING LOG

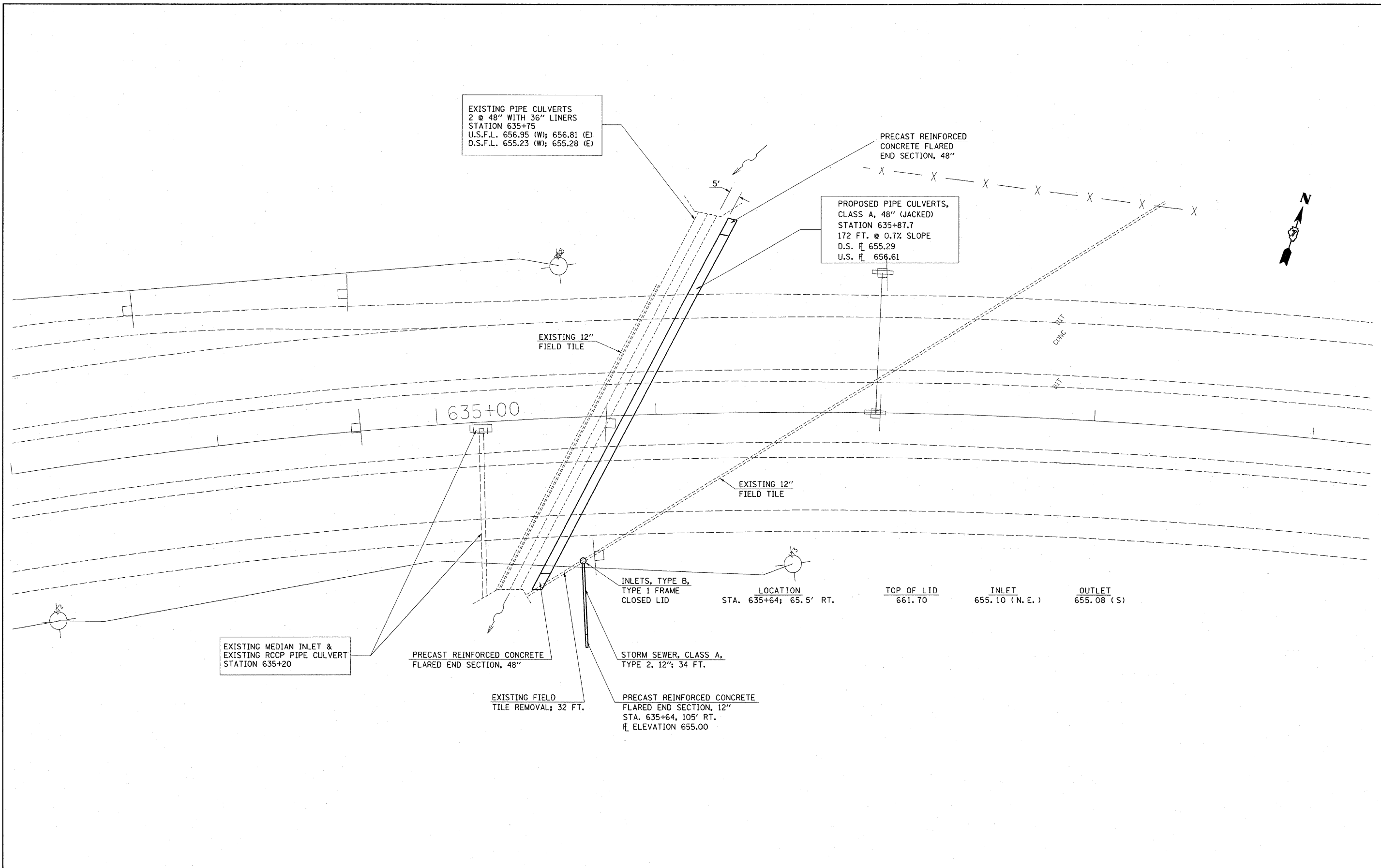
THE FOLLOWING STANDARDS ARE PART OF THESE PLANS AND ARE INCLUDED FOLLOWING SHEET NUMBER 7:

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
542301-02	PRECAST REINFORCED CONCRETE FLARED END SECTION
602306-02	INLET - TYPE B
701101-02	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24' FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701421-02	LANE CLOSURE, MULTILANE, DAY ONLY, SPEEDS 45 MPH TO 55 MPH
701901-01	TRAFFIC CONTROL DEVICES

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & INDEX OF SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			323	(13X)-3	MACON	7	2	
		CHECKED -	REVISED -			CONTRACT NO. 74342					
		DATE -	REVISED -			SCALE: NA	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

SUMMARY OF QUANTITIES			URBAN	100% STATE
CODE NO	ITEM	UNIT	TOTAL	CONSTRUCTION
			QUANTITIES	TYPE CODE
				Y007
21400100	GRADING AND SHAPING DITCHES	FOOT	110	110
25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.2	0.2
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	20	20
28000300	TEMPORARY DITCH CHECKS	EACH	3	3
28000500	INLET AND PIPE PROTECTION	EACH	3	3
28100107	STONE RIPRAP, CLASS A4	SQ YD	124	124
28200200	FILTER FABRIC	SQ YD	124	124
50104300	CONCRETE HEADWALL REMOVAL	CU YD	1	1
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1
54213693	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"	EACH	2	2
542JA048	PIPE CULVERTS, CLASS A 48" (JACKED)	FOOT	172	172
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	34	34
60240215	INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	EACH	1	1
67100100	MOBILIZATION	L SUM	1	1
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1
X0324079	EXISTING FIELD TILE REMOVAL	FOOT	32	32

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			323	(13X)I-3	MACON	7	3	
		CHECKED -	REVISED -			CONTRACT NO. 74342					
		DATE -	REVISED -			SCALE: NA	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT



EXISTING PIPE CULVERTS
 2 @ 48" WITH 36" LINERS
 STATION 635+75
 U.S.F.L. 656.95 (W); 656.81 (E)
 D.S.F.L. 655.23 (W); 655.28 (E)

PROPOSED PIPE CULVERTS,
 CLASS A, 48" (JACKED)
 STATION 635+87.7
 172 FT. @ 0.7% SLOPE
 D.S. ℓ 655.29
 U.S. ℓ 656.61

EXISTING 12"
 FIELD TILE

635+00

EXISTING 12"
 FIELD TILE

INLETS, TYPE B,
 TYPE 1 FRAME
 CLOSED LID

LOCATION
 STA. 635+64; 65.5' RT.

TOP OF LID
 661.70

INLET
 655.10 (N.E.)

OUTLET
 655.08 (S)

EXISTING MEDIAN INLET &
 EXISTING RCCP PIPE CULVERT
 STATION 635+20

PRECAST REINFORCED CONCRETE
 FLARED END SECTION, 48"

STORM SEWER, CLASS A,
 TYPE 2, 12"; 34 FT.

EXISTING FIELD
 TILE REMOVAL; 32 FT.

PRECAST REINFORCED CONCRETE
 FLARED END SECTION, 12"
 STA. 635+64, 105' RT.
 ℓ ELEVATION 655.00

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 PLOT DATE = 2/3/2009

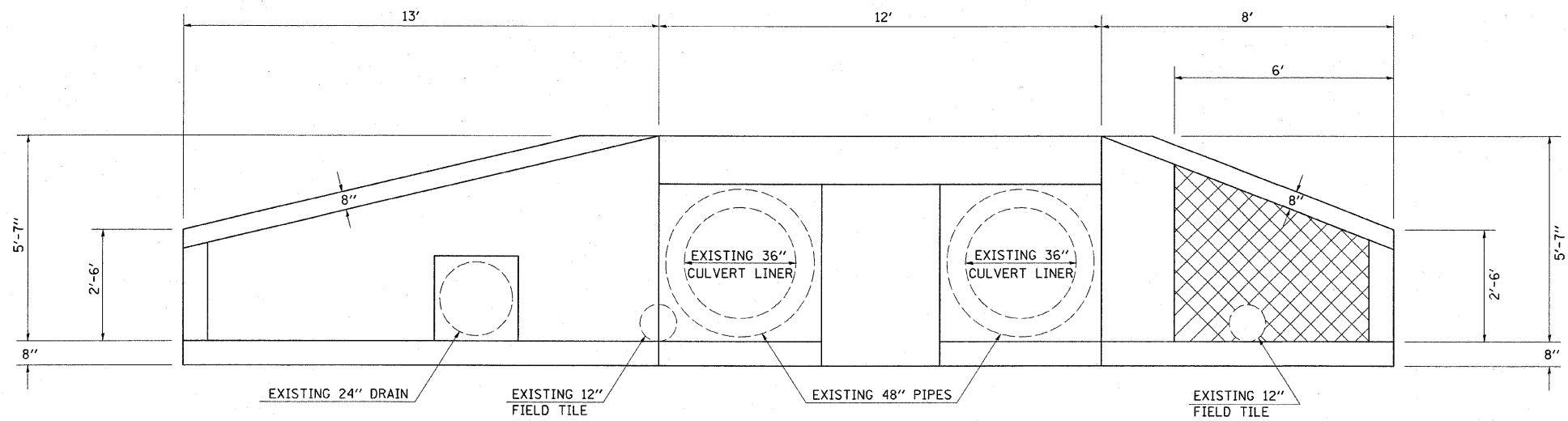
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION
 SCALE: 20
 SHEET NO. 1 OF 1 SHEETS
 STA. 633+00 TO STA. 639+00

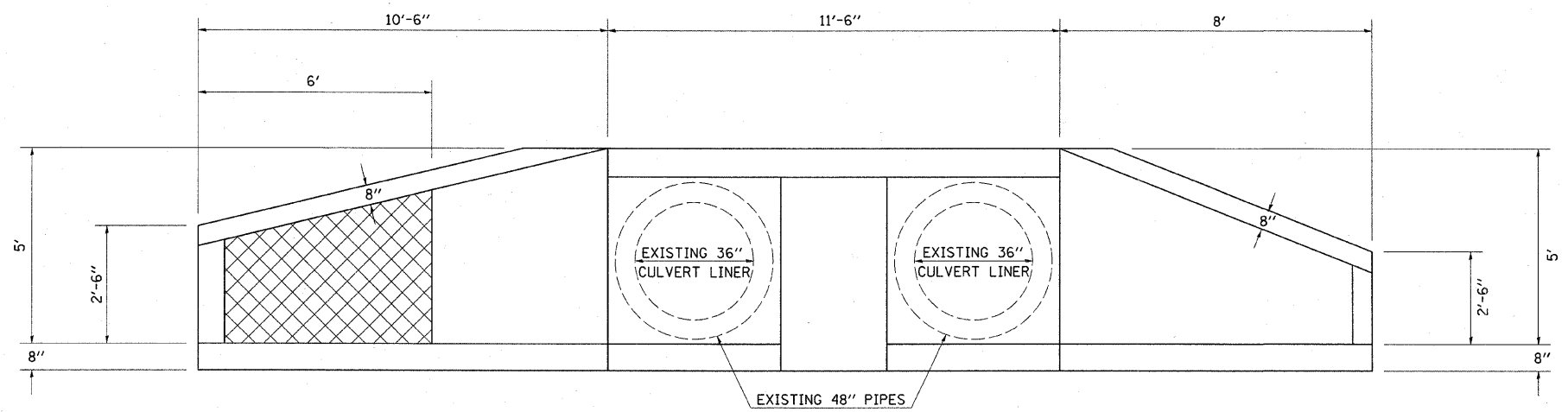
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
323	(13X)I-3	MACON	7	4
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74342	



**SOUTH HEADWALL
(LOOKING NORTH)**

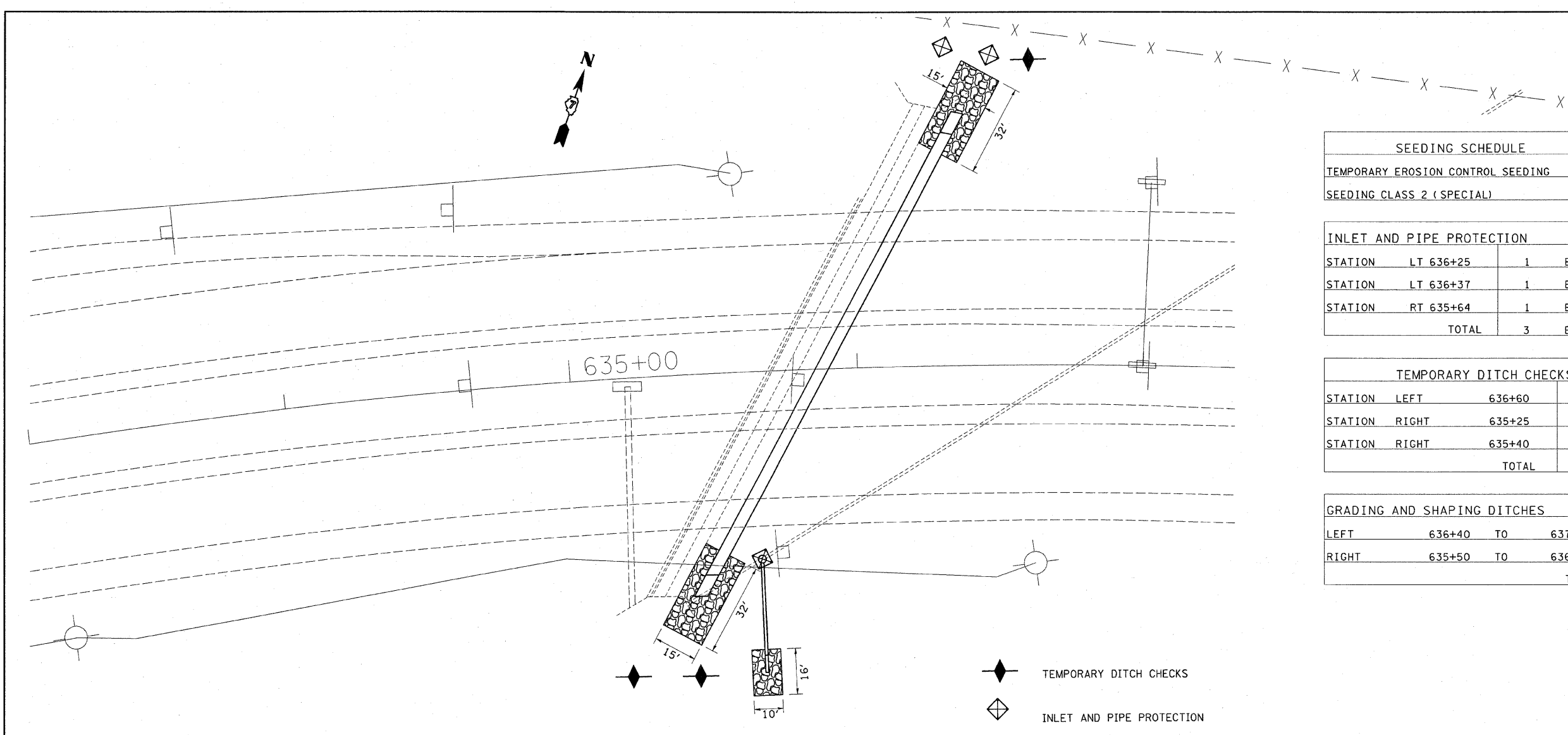
 CONCRETE HEADWALL REMOVAL

LOCATION	QUANTITY
SOUTH HEADWALL	0.5 CU. YD.
NORTH HEADWALL	0.5 CU. YD.
TOTAL	= 1.0 CU. YD.



**NORTH HEADWALL
(LOOKING SOUTH)**

 CONCRETE HEADWALL REMOVAL



SEEDING SCHEDULE		
TEMPORARY EROSION CONTROL SEEDING	20	POUND
SEEDING CLASS 2 (SPECIAL)	0.20	ACRES

INLET AND PIPE PROTECTION			
STATION	LT 636+25	1	EACH
STATION	LT 636+37	1	EACH
STATION	RT 635+64	1	EACH
TOTAL		3	EACH

TEMPORARY DITCH CHECKS				
STATION	LEFT	636+60	1	EACH
STATION	RIGHT	635+25	1	EACH
STATION	RIGHT	635+40	1	EACH
TOTAL			3	EACH

GRADING AND SHAPING DITCHES				
LEFT	636+40	TO	637+00	60 FEET
RIGHT	635+50	TO	636+00	50 FEET
TOTAL				110 FEET

◆ TEMPORARY DITCH CHECKS
 ◻ INLET AND PIPE PROTECTION

EROSION CONTROL GENERAL NOTES

EROSION CONTROL MEASURES AT THE START OF CONSTRUCTION:

- 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:
 - 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.
 - DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
 - BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDDED AT THE START OF CONSTRUCTION WHEN NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN CALENDAR DAYS.

EROSION CONTROL MEASURES DURING CONSTRUCTION:

- 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.
 - 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.
 - EARTH STOCKPILES SHALL BE TEMPORARILY SEEDDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN CALENDAR DAYS.

EROSION CONTROL MEASURES AFTER FINAL GRADING:

- EXCAVATION AND EMBANKMENT AREAS SHALL BE PERMANENTLY SEEDDED WHEN FINAL GRADE. EROSION CONTROL BLANKET SHALL BE PLACED ON ALL DISTURBED AREAS.
 - 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 SEEDDED AND A PROPER STAND ESTABLISHED.

STONE RIPRAP, CLASS A4		
Station		
RT 635+40	53	SQ YD
LT 636+35	53	SQ YD
RT 635+64	18	SQ YD
TOTAL	124	SQ YD

FILTER FABRIC		
Station		
RT 635+40	53	SQ YD
LT 636+35	53	SQ YD
RT 635+64	18	SQ YD
TOTAL	124	SQ YD

BORING LOGS
SECTION (13X)I-3
PIPE CULVERT, EAST OF HARRISTOWN BLVD.

Illinois Department of Transportation <small>Division of Highways Illinois Department of Transportation</small>		SOIL BORING LOG				Page <u>1</u> of <u>1</u>																									
		Date <u>6/16/08</u>																													
ROUTE <u>FAP 36 (US 36)</u>	DESCRIPTION <u>Pipe Culvert, East of Harristown Blvd</u>	LOGGED BY <u>E. Sandschafer</u>																													
SECTION <u>(13X)I-3</u>	LOCATION <u>NE 14, SEC. 13, TWP. 16 N, RNG. 1 E, 3 PM</u>																														
COUNTY <u>Macon</u>	DRILLING METHOD <u>Hollow stem auger & split spoon</u>	HAMMER TYPE <u>Auto 140#</u>																													
STRUCT. NO. <u>NA</u>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>D</td><td>B</td><td>U</td><td>M</td><td></td> </tr> <tr> <td>E</td><td>L</td><td>C</td><td>O</td><td></td> </tr> <tr> <td>P</td><td>O</td><td>S</td><td>I</td><td></td> </tr> <tr> <td>T</td><td>W</td><td>S</td><td></td><td></td> </tr> <tr> <td>H</td><td>S</td><td>Qu</td><td>T</td><td></td> </tr> </table>	D	B	U	M		E	L	C	O		P	O	S	I		T	W	S			H	S	Qu	T		Surface Water Elev. <u>654.99</u> ft	D	B	U	M
D		B	U	M																											
E	L	C	O																												
P	O	S	I																												
T	W	S																													
H	S	Qu	T																												
Station <u>058+pipeculv</u>		Stream Bed Elev. <u>654.89</u> ft	P	O	S	I																									
BORING NO. <u>1</u>		Groundwater Elev.: <u>Dry</u> ft	H	S	Qu	T																									
Station <u>635+21</u>		First Encounter <u>Dry</u> ft																													
Offset <u>52.00ft Lt</u>		Upon Completion <u>Dry</u> ft																													
Ground Surface Elev. <u>662.91</u> ft		After <u>Backfilled</u> ft	(ft)	(6")	(tsf)	(%)																									
6" shoulder mixture of crushed aggregate and clay.	662.41	Very stiff, damp, gray, CLAY LOAM TILL. (continued)	7	2.6	11																										
Very stiff to medium, damp, dark gray, CLAY.		Extent of exploration.	11	B																											
	3	Benchmark: BM 53 chiseled square on West end of South existing pipe culvert headwall, Sta 635+55 = 660.37' elevation.																													
	4																														
	7																														
	4																														
	5																														
	7																														
	2																														
	3	1.3	29																												
	4	B																													
	2																														
	2	0.6	21																												
	4	B																													
	2																														
	6	2.4	14																												
	7	B																													
Very stiff, damp, gray, CLAY LOAM TILL.	648.41		8																												
			8	4.0	11																										
			12	B																											
			5																												
			8	2.9	11																										
			12	B																											
			5																												

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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)

Illinois Department of Transportation <small>Division of Highways Illinois Department of Transportation</small>		SOIL BORING LOG				Page <u>1</u> of <u>1</u>																									
		Date <u>6/16/08</u>																													
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D		B	U	M																											
E	L	C	O																												
P	O	S	I																												
T	W	S																													
H	S	Qu	T																												
Station <u>058+pipeculv</u>		Stream Bed Elev. <u>654.89</u> ft	P	O	S	I																									
BORING NO. <u>2</u>		Groundwater Elev.: <u>Dry</u> ft	H	S	Qu	T																									
Station <u>636+30</u>		First Encounter <u>Dry</u> ft																													
Offset <u>55.00ft Lt</u>		Upon Completion <u>Dry</u> ft																													
Ground Surface Elev. <u>665.34</u> ft		After <u>Backfilled</u> ft	(ft)	(6")	(tsf)	(%)																									
6" shoulder mixture of crushed aggregate and clay.	664.84	Hard, damp, gray, CLAY LOAM TILL. (continued)	8	3.5	12																										
Stiff to medium, damp, red/gray/black, CLAY.		Extent of exploration.	11	B																											
	6																														
	7	5.1	12																												
	8	B																													
	4																														
	4	1.5	22																												
	6	PP																													
	2																														
	4	1.0	25																												
	4	B																													
	2																														
	2																														
	3																														
Stiff, damp, gray, CLAY LOAM.	655.84		4	1.3	25																										
			4	B																											
			2																												
			2																												
			3	0.7	23																										
			2	PP																											
			2																												
			6																												
			10	4.4	12																										
			16	B																											
			7																												
			11	4.6	11																										
			14	B																											
			5																												

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The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
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BBS, from 137 (Rev. 8-99)