1-15-10 Letting, Item 016

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	✱ 40	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 78086		

✱ 40-1=39

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

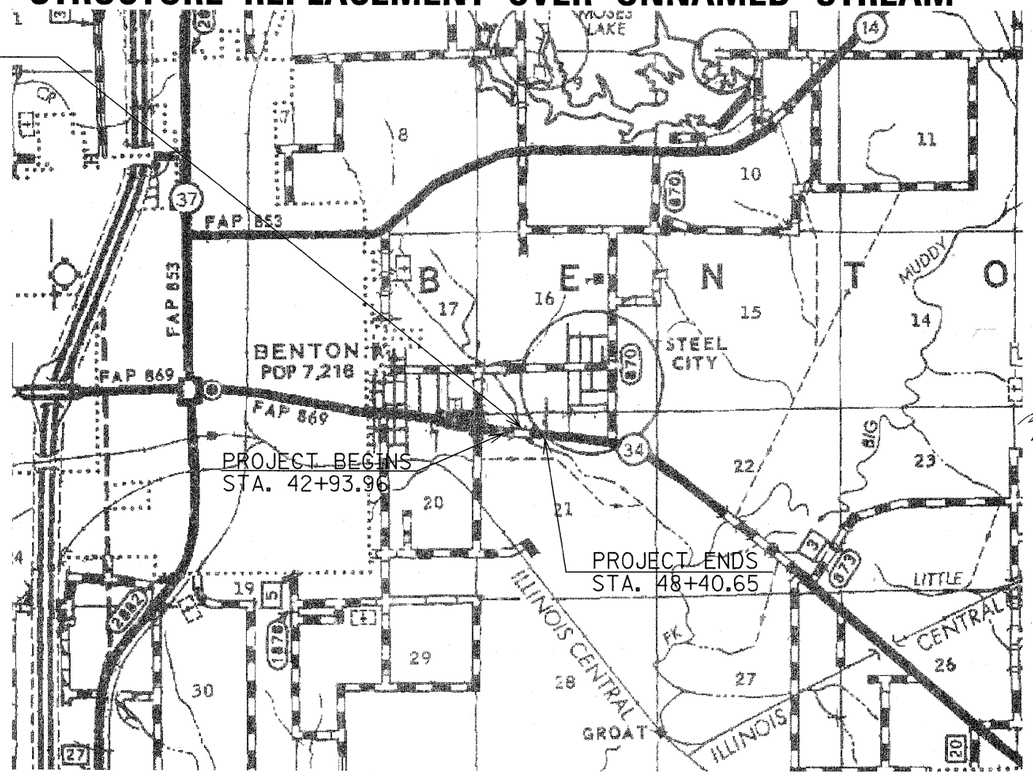
FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

FAP ROUTE 869 (IL 34)
SECTION 101B-1
PROJECT: ESP-0869(036)
FRANKLIN COUNTY
C-99-073-08
STRUCTURE REPLACEMENT OVER UNNAMED STREAM

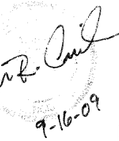
TRAFFIC DATA:
2007 ADT FOR FAP 869 (IL 34)
4,190 WITH 6.7 % TRUCKS

PROPOSED BRIDGE ON IL 34
OVER UNNAMED STREAM
STRUCTURE NO. 028-0084
OVER UNNAMED STREAM
STRUCTURE ℄ STATION 45+65.88
SINGLE SPAN-STEEL BEAM BRIDGE
73'-0" BK TO BK ABUTS: 25° SKEW
EXISTING STRUCTURE #: 028-0042

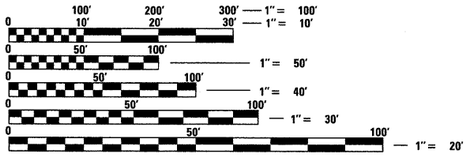
TOWNSHIPS: BENTON



LOCATION OF SECTION INDICATED THUS:-



APPROX. SCALE
1" = 1500'



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

FAP RTE 869 (IL 34):
GROSS LENGTH OF PROJECT : 546.69 FT. = .10 MILES
SN 028-0084
ROADWAY LENGTH = 473.69 FT
BRIDGE LENGTH = 73 FT
NET LENGTH OF PROJECT = 546.69 FT

D-99-055-08

GEOTECH
ENGINEERING & TESTING, INC.
601 NORTH 4th STREET, MURRAY, KENTUCKY 42071, PHONE - 270.753.7307
500 SOUTH 17th STREET, PADUCAH, KENTUCKY 42003, PHONE - 270.443.1995
403 NORTH COURT STREET, MARION, ILLINOIS 62959, PHONE - 618.997.9190
WWW.GEOTECHENGINEERS.NET

9-16-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct 13 20 09
Mary C Ramie
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
December 4, 2009
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT
December 4, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER: DAVID PICHE (618) 549-2171

CONTRACT NO. 78086

GENERAL NOTES

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING FIELD DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE THICKNESS OF BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL ASPHALT:	2.016 TONS/CU. YD.
ALL AGGREGATE:	2.05 TONS/CU. YD.
AGGREGATE PRIME COAT:	0.0015 TONS/SQ. YD.
BITUMINOUS MATERIALS (PRIME COAT):	0.09 GAL./SQ. YD.
RIPRAP (A3&A4):	1.50 TONS/CU. YD.

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR, HOWEVER, WILL BE PAID FOR THE ACTUAL QUANTITY FURNISHED AT THE UNIT PRICE BID FOR THE WORK. EXISTING PLANS ARE AVAILABLE FOR REVIEW AT THE DISTRICT 9 OFFICE.

IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.16 REGARDLESS IF TRACK MOUNTED OR WHEELED.

AT ALL LOCATIONS WHERE THE PROPOSED HOT-MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT-MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.

QUANTITIES SHOWN IN THE PLANS FOR BRIDGE DECK GROOVING AND PROTECTIVE COAT INCLUDE THE BRIDGE, THE BRIDGE APPROACH PAVEMENTS, AND THE BRIDGE APPROACH PAVEMENT CONNECTORS (PCC).

PROTECTIVE COAT SHALL BE APPLIED TO THE BRIDGE, THE BRIDGE APPROACH PAVEMENT, AND THE BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), IN ACCORDANCE WITH ARTICLE 503.19 OF THE STANDARD SPECIFICATION. THE SEASONAL EXCEPTION SHALL NOT APPLY. THE PROTECTIVE COAST SHALL BE APPLIED REGARDLESS OF THE CURING METHOD USED. THE RATE OF APPLICATION FOR EACH COAT ON SAW CUT GROOVED AREAS SHALL BE 25 SQUARE YARDS PER GALLON OF MIXTURE.

TREES SHALL BE PRESERVED THROUGHOUT THIS SECTION AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. GENERALLY, TREES OUTSIDE THE CLEAR ZONE, AND WHICH DO NOT INTERFERE WITH CONSTRUCTION, SHALL NOT BE DISTURBED.

ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE LEFT IN PLACE UNTIL REMOVAL IS REQUIRED TO CONSTRUCT FINAL GRADE LINES.

THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION.

THE DISTRICT BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 10 DAYS PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS. THE BUREAU OF OPERATIONS WILL THEN DETERMINE THE ACTUAL LIMITS TO BE STRIPED AS 'NO PASSING' ZONES.

THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHOULD APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.

THE CENTERLINE PAVEMENT MARKING SHOULD BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHOULD BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHOULD BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.

VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE STAGE II NEW BRIDGE PARAPET. THE BARRIER WALL REFLECTORS SHALL BE INSTALLED PRIOR TO OPENING TO TRAFFIC.

ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC. THE TEMPORARY TRAFFIC SIGNALS SHALL BE SET TO FLASH TO RED.

THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT AND SHOULDER SLOPES SHALL NOT EXCEED 8%.

ON ALL SUPERELEVATED CURVES, THE PROPOSED BASE COURSE WIDENING SHALL BE CONSTRUCTED WITH A SLOPE CONFORMING TO THE RATE OF SUPERELEVATION OF THE EXISTING PAVEMENT.

ALL OBSTRUCTIONS WHICH ARE WITHIN THE CLEAR ZONE SHOWN ON THE TYPICAL SECTION, AND ARE NOT SHIELDED BY THE PROPOSED GUARDRAIL, SHALL BE REMOVED BETWEEN STATION 42+71.71 AND STATION 49+36.91. TYPICAL OBSTRUCTIONS ARE HEADWALLS, FOUNDATIONS, ETC. WHICH PROJECT 100 mm (4 IN.) OR MORE ABOVE THE GROUNDLINE; AND TREES WHICH WILL MATURE TO A DIAMETER OF 100 mm (4 IN.) OR GREATER.

THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

COMMITMENTS: NONE AS OF 10/16/08

STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542301-02	PRECAST REINFORCED CONCRETE FLARED END SECTION
630001-08	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
631031-08	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER & MOUNTING DETAILS
666001-01	RIGHT OF WAY MARKERS
701001-02	OFF ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5 (15') AWAY
701006-03	OFF-ROAD OPERATIONS, 2L 2W, 4.5m (15') TO PAVEMENT EDGE
701011-02	OFF ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701201-03	LANE CLOSURE, 2L 2W, DAY ONLY, ON-ROAD TO 600mm (24") OFF-ROAD, FOR SPEEDS> 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701311-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701321-10	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-03	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS>45MPH
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER
780001-02	TYPICAL PAVEMENT MARKINGS
601101-01	

INDEX OF SHEETS

Location(s):	- Hot-Mix Asphalt Surface Course
Mixture Use(s):	- Hot-Mix Asphalt Surface Course, Mix D, N90
AC/PG:	- PG64-22
RAP % (Max):	- 10
Design Air Voids:	- 4.0%, 90 Gyration Design
Mixture Composition: (Gradation Mixture)	- IL-9.5 mm or IL 12.5 mm
Friction Aggregate:	- D Surface

Location(s):	- Leveling Binder (Machine Method), N90
Mixture Use(s):	- Hot-Mix Asphalt Surface Course, Mix C, N90
AC/PG:	- PG64-22
RAP % (Max):	- 10
Design Air Voids:	- 4.0%, 90 Gyration Design
Mixture Composition: (Gradation Mixture)	- IL-9.5 mm or IL 12.5 mm
Friction Aggregate:	- None

Location(s):	- Hot-Mix Asphalt Shoulders
Mixture Use(s):	- Hot-Mix Asphalt Shoulders
AC/PG:	- PG58-22
RAP % (Max):	- 50
Design Air Voids:	- 2.0%, 30 Gyration Design
Mixture Composition: (Gradation Mixture)	- HMA Shoulders
Friction Aggregate:	- None

Prepared By: DISTRICT STUDIES & PLANS ENGINEER
Examined By: DISTRICT LAND ACQUISITION ENGINEER
Examined By: DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By: DISTRICT OPERATIONS ENGINEER
Examined By: DISTRICT CONSTRUCTION ENGINEER
Examined By: DISTRICT MATERIALS ENGINEER
Examined By: DISTRICT PROJECT IMPLEMENTATION ENGINEER
Examined By: ASSISTANT REGIONAL ENGINEER
Approved By: DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Oct 13 2009
DATE

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES; HIGHWAY STANDARDS
IL 34 OVER UNNAMED STREAM

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	2
		CONTRACT NO. 78086		

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

SUMMARY OF QUANTITIES

COUNTY:	FRANKLIN
ROUTE:	FAP 869 (IL34)
FUNDING:	100% FEDERAL
WORK TYPE:	
CONSTRUCTION TYPE CODE:	X071-2A

CODE NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	158
20300100	CHANNEL EXCAVATION	CU YD	388
20400100	BORROW EXCAVATION	CU YD	409
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	147
25000200	SEEDING, CLASS 2	ACRE	0.3
25000350	SEEDING, CLASS 7	ACRE	0.3
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	40
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	28
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	28
25000700	AGRICULTURAL GROUND LIMESTONE	TON	0.6
25100115	MULCH, METHOD 2	ACRE	0.3
25100630	EROSION CONTROL BLANKET	SQ YD	1407
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	120
28000305	TEMPORARY DITCH CHECKS	FOOT	36
28000400	PERIMETER EROSION BARRIER	FOOT	955
28000500	INLET AND PIPE PROTECTION	EACH	1
28100105	STONE RIPRAP, CLASS A3	SQ YD	20
28100107	STONE RIPRAP, CLASS A4	SQ YD	767
28200200	FILTER FABRIC	SQ YD	787
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	192
40600645	LEVELING BINDER (MACHINE METHOD), N90	TON	86
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	174
40603345	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	109
40800010	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	102
40800030	AGGREGATE (PRIME COAT)	TON	1.6
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	127

COUNTY:	FRANKLIN
ROUTE:	FAP 869 (IL 34)
FUNDING:	100% FEDERAL
WORK TYPE:	
CONSTRUCTION TYPE CODE:	X071-2A

CODE NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY
44000100	PAVEMENT REMOVAL	SQ YD	294
44004250	PAVED SHOULDER REMOVAL	SQ YD	192
48100100	AGGREGATE SHOULDERS, TYPE A	TON	37
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	331
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	335
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	249
50300225	CONCRETE STRUCTURES	CU YD	63.4
50300255	CONCRETE SUPERSTRUCTURE	CU YD	237.6
50300260	BRIDGE DECK GROOVING	SQ YD	632
50300280	CONCRETE ENCASEMENT	CU YD	4.2
50300300	PROTECTIVE COAT	SQ YD	748
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
50500505	STUD SHEAR CONNECTORS	EACH	1278
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	63,630
50800515	BAR SPLICERS	EACH	574
51201610	FURNISHING STEEL PILES HP12X63	FOOT	385
51202305	DRIVING PILES	FOOT	385
51203610	TEST PILE STEEL HP12X63	EACH	2
~~51204650~~	~~PILE SHOES~~	~~EACH~~	~~16~~
51500100	NAME PLATES	EACH	1
52100520	ANCHOR BOLTS, 1"	EACH	24
542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	7
54213459	END SECTIONS 24"	EACH	2
54248510	CONCRETE COLLAR	CU YD	0.88
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	94

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		DRAWN -	REVISED -
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	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 34 OVER UNNAMED STREAM
REV. 11-12-09

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	3
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

COUNTY:	FRANKLIN
ROUTE:	FAP 869 (IL 34)
FUNDING:	100% FEDERAL
WORK TYPE:	
CONSTRUCTION TYPE CODE:	X071-2A

	CODE NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY
	60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	172
*	6300000!	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	300
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3
	63200310	GUARDRAIL REMOVAL	FOOT	301
	66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	2
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8
	67100100	MOBILIZATION	L SUM	1
	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	2
	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
	70106700	TEMPORARY RUMBLE STRIP	EACH	6
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	262
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1477
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	87
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	437.5
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	412.5
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1477
*	78200405	GUARDRAIL MARKERS	EACH	12
*	78200500	BARRIER WALL MARKERS	EACH	2
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	30
*	86200300	UNINTERRUPTIBLE POWER SUPPLY, EXTENDED	EACH	1
	X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	492
	X6330103	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT	EACH	1
	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	8
	Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2
	Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2

* Specialty Items

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		DRAWN -	REVISED -
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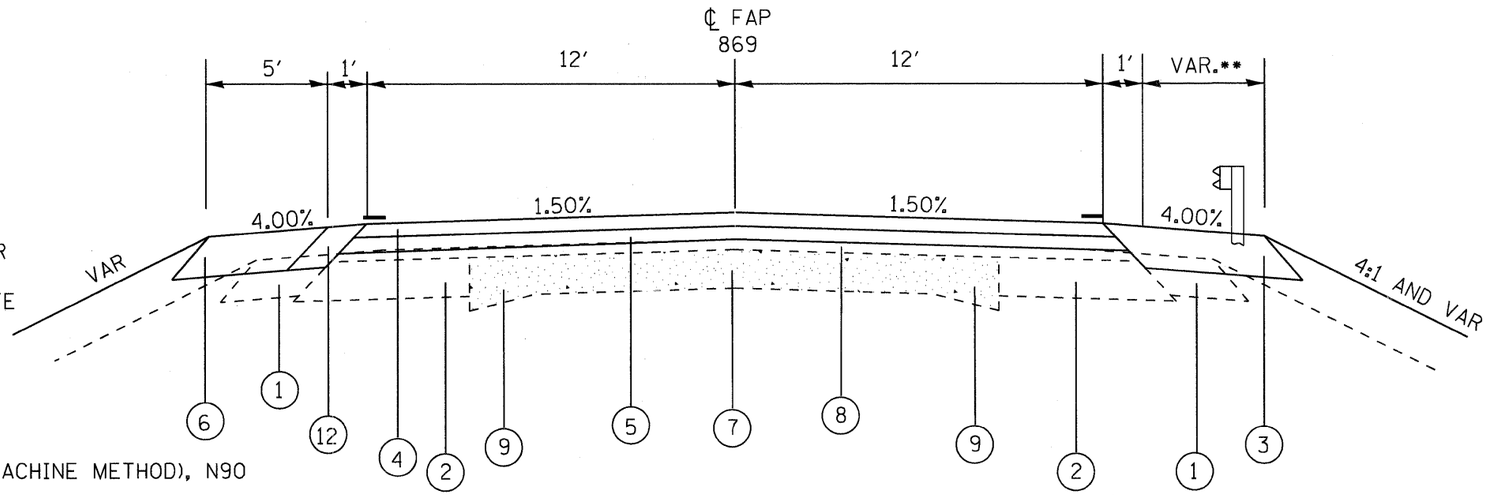
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	4
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



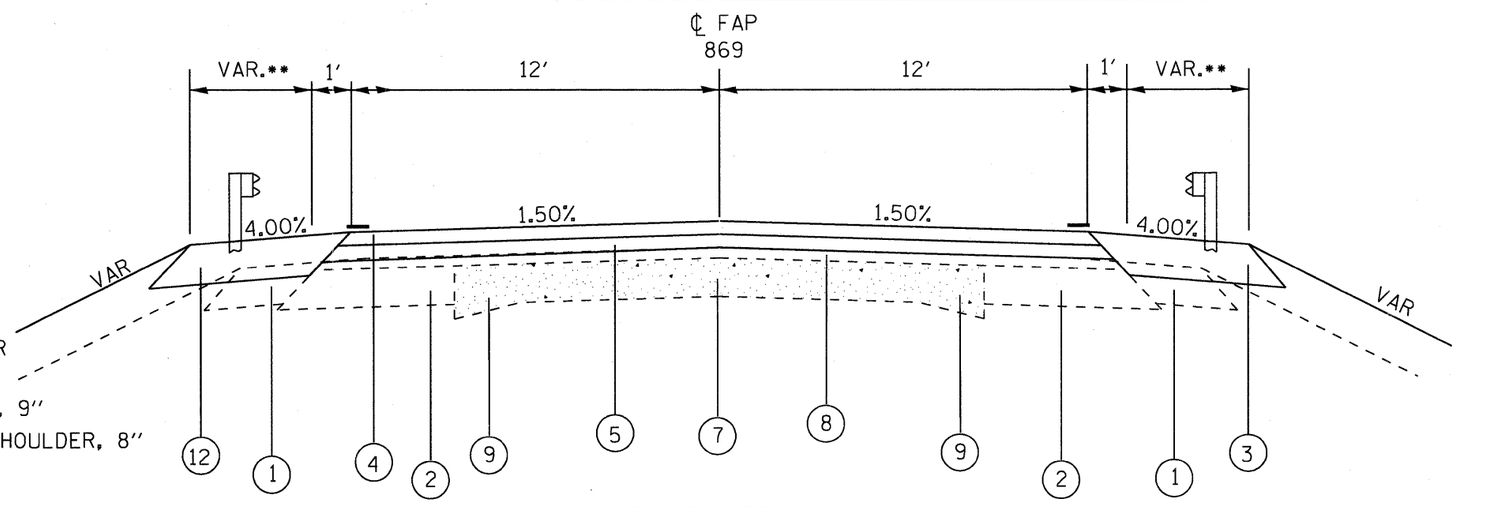
1. EXISTING AGGREGATE SHOULDER
2. EXISTING BITUMINOUS CONCRETE PAVEMENT WIDENING, 9″
3. PROPOSED HOT-MIX ASPHALT SHOULDER, 8″
4. PROPOSED HOT MIX ASPHALT SURFACE COURSE, 1 1/4″
5. PROPOSED LEVELING BINDER (MACHINE METHOD), N90
6. PROPOSED AGGREGATE SHOULDER TYPE A, 8″
7. EXISTING PCC PAVEMENT, 6″
8. EXISTING BITUMINOUS SURFACE
9. EXISTING PCC PAVEMENT, 9″
12. PROPOSED HOT-MIX ASPHALT SHOULDER, 10″

TO BE USED
STA. 42+93.96 TO 43+47.53

*EXISTING 13′ PAVEMENT STRIPED 12′ LANES

**SEE HMA SHOULDER & GUARDRAIL SHEET FOR WIDTHS OF PROPOSED HMA SHOULDER

***SEE PAVING SCHEDULE FOR HMA SHOULDER THICKNESS



1. EXISTING AGGREGATE SHOULDER
2. EXISTING BITUMINOUS CONCRETE PAVEMENT WIDENING, 9″
3. PROPOSED HOT-MIX ASPHALT SHOULDER, 8″
4. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, 1 1/4″
5. PROPOSED LEVELING BINDER (MACHINE METHOD), N90
7. EXISTING PCC PAVEMENT, 6″
8. EXISTING BITUMINOUS SURFACE
9. EXISTING PCC PAVEMENT, 9″
12. PROPOSED HOT-MIX ASPHALT SHOULDER, 10″

TO BE USED
STA. 46+47.30 TO 47+83.40

*EXISTING 13′ PAVEMENT STRIPED 12′ LANES

**SEE HMA SHOULDER & GUARDRAIL SHEET FOR WIDTHS OF PROPOSED HMA SHOULDER

***SEE PAVING SCHEDULE FOR HMA SHOULDER THICKNESS

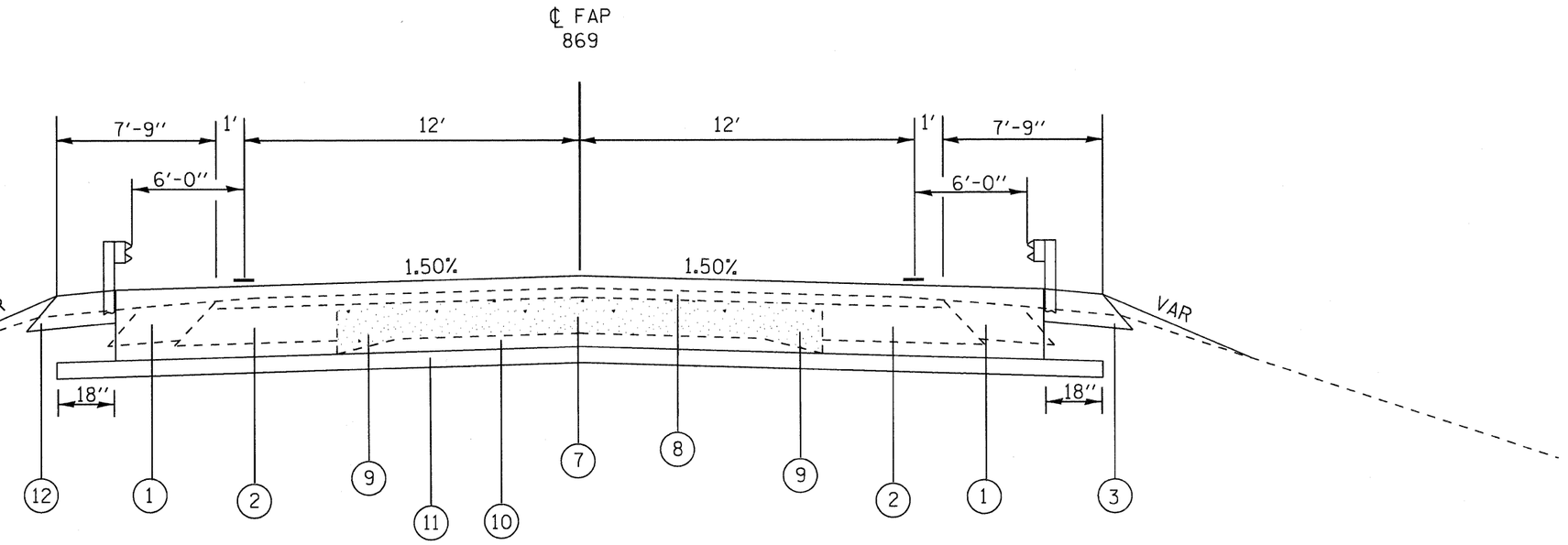
FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = *SCALE*	CHECKED -	REVISED -
	PLOT DATE = *DATE*	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	5
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

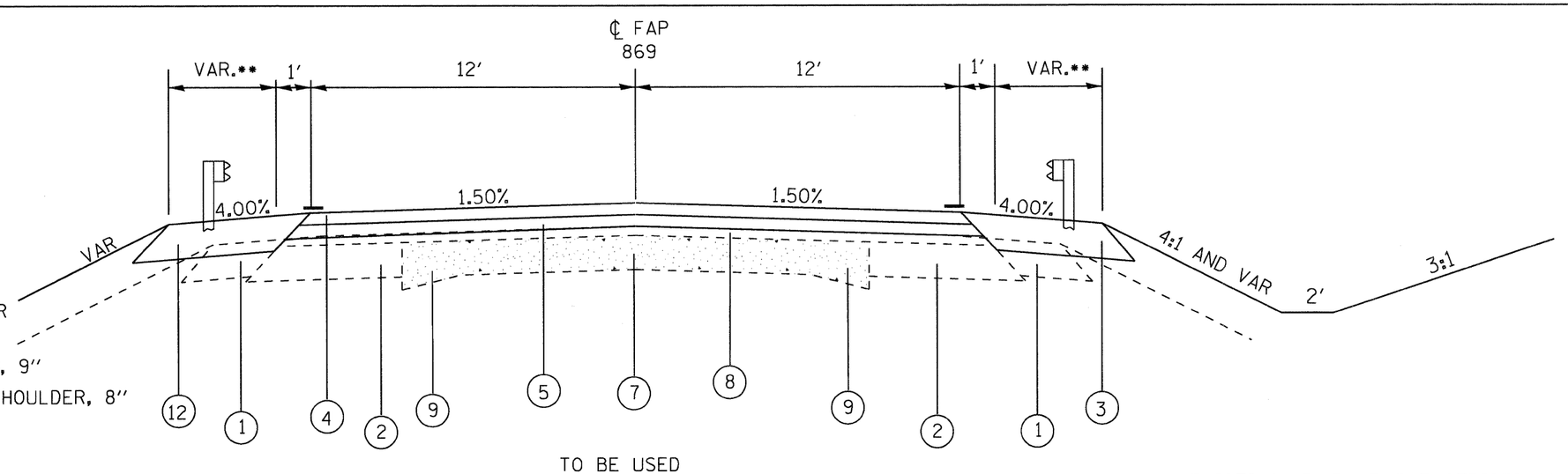


1. EXISTING AGGREGATE SHOULDER
2. EXISTING BITUMINOUS CONCRETE PAVEMENT WIDENING, 9"
3. PROPOSED HOT-MIX ASPHALT SHOULDER, 8"
7. EXISTING PCC PAVEMENT, 6"
8. EXISTING BITUMINOUS SURFACE
9. EXISTING PCC PAVEMENT, 9"
10. PROPOSED BRIDGE APPROACH PAVEMENT CONNECTOR, (PCC), 15" & VAR,
11. PROPOSED STABILIZED SUB-BASE, 4"
12. PROPOSED HOT-MIX ASPHALT SHOULDER, 10"

TO BE USED

STA. 44+84.25 TO 45+08.40
STA. 46+23.46 TO 46+47.13

*EXISTING 13' PAVEMENT STRIPED 12' LANES



1. EXISTING AGGREGATE SHOULDER
2. EXISTING BITUMINOUS CONCRETE PAVEMENT WIDENING, 9"
3. PROPOSED HOT-MIX ASPHALT SHOULDER, 8"
4. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, 1 1/4"
5. PROPOSED LEVELING BINDER (MACHINE METHOD), N90
7. EXISTING PCC PAVEMENT, 6"
8. EXISTING BITUMINOUS SURFACE
9. EXISTING PCC PAVEMENT, 9"
12. PROPOSED HOT-MIX ASPHALT SHOULDER, 10"

TO BE USED

STA. 43+47.53 TO 44+84.25

*EXISTING 13' PAVEMENT STRIPED 12' LANES

**SEE HMA SHOULDER & GUARDRAIL SHEET FOR WIDTHS OF PROPOSED HMA SHOULDER

***SEE PAVING SCHEDULE FOR HMA SHOULDER THICKNESS

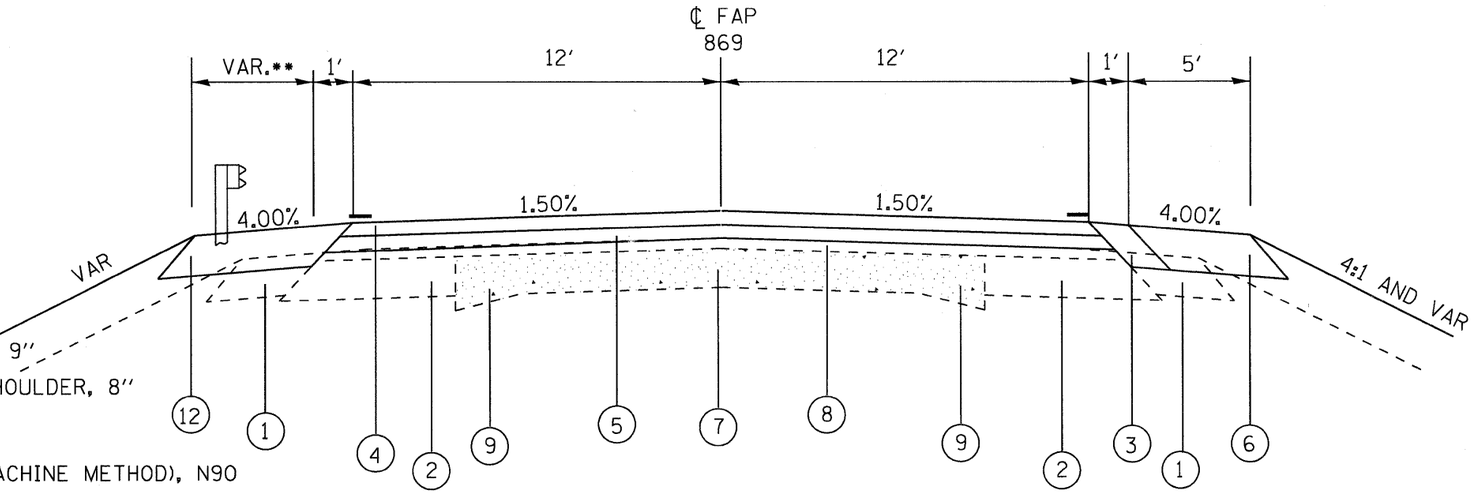
FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = *SCALE*	CHECKED -	REVISED -
	PLOT DATE = *DATE*	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	6
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



1. EXISTING AGGREGATE SHOULDER
2. EXISTING BITUMINOUS CONCRETE PAVEMENT WIDENING, 9"
3. PROPOSED HOT-MIX ASPHALT SHOULDER, 8"
4. PROPOSED HOT MIX ASPHALT SURFACE COURSE, 1 1/4"
5. PROPOSED LEVELING BINDER (MACHINE METHOD), N90
6. PROPOSED AGGREGATE SHOULDER TYPE A, 8"
7. EXISTING PCC PAVEMENT, 6"
8. EXISTING BITUMINOUS SURFACE
9. EXISTING PCC PAVEMENT, 9"
12. PROPOSED HOT-MIX ASPHALT SHOULDER, 10"

TO BE USED
STA. 47+83.40 TO 48+40.65

*EXISTING 13' PAVEMENT STRIPED 12' LANES

**SEE HMA SHOULDER & GUARDRAIL SHEET FOR WIDTHS OF PROPOSED HMA SHOULDER

***SEE PAVING SCHEDULE FOR HMA SHOULDER THICKNESS

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	7
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

REMOVAL

LOCATION STATION TO STATION	PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL	HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
	SQ YD	SQ YD	SQ YD
STAGE 1			
STA 44+84.25 TO 45+39.69	97		
STA 46+05.25 TO 46+47.13	82		
STAGE 2			
RT STA 43+49.00 TO 45+40.14		100	
STA 44+84.25 TO 45+39.69	69		
STA 46+05.25 TO 46+47.13	46		
RT. STA 46+12.98 TO 47+82		92	
POST-STAGE 2			
STA 42+38.96 TO 42+68.96			87
STA 48+65.65 TO 48+95.65			87
PROJECT TOTAL	294	192	174

PAVEMENT MARKING SCHEDULE

LOCATION STATION TO STATION	TEMPORARY PAVEMENT MARKING LINE 4"		PAINT PAVEMENT MARKING LINE 4"		SHORT-TERM PAVMENT MARKING
	WHITE	YELLOW	WHITE	YELLOW	
	FOOT	FOOT	FOOT	FOOT	FOOT
STA 42+38.96 TO 48+95.65	1312	165	1312	165	262
PROJECT TOTAL	1477		1477		262

GUARDRAIL

LOCATION STATION TO STATION	STEEL PLATE BEAM GUARDRAIL, TYPE A 6.75 POSTS	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT	TRAFFIC BARRIER TERMINAL TYPE 6	GUARDRAIL REMOVAL	GUARDRAIL MARKERS	BARRIER WALL MARKERS	TERMINAL MARKER DIRECT APPLIED
	FOOT	EACH	EACH	EACH	FOOT	EACH	EACH	EACH
STAGE 1								
LT STA 43+74.47 TO 45+07.62	37.5	1		1				1
LT STA 43+74.47 TO 48+15.16						6	1	
LT STA 44+99.00 TO 45+39.00					40			
LT STA 45+92.01 TO 46+14.44					27			
LT STA 46+07.01 TO 48+15.16	112.5	1		1				1
LT STA 46+37.10 TO 47+97.47					165			
STAGE 2								
RT STA 43+16.67 TO 45+24.82	112.5	1		1				1
RT STA 43+16.67 TO 47+56.98						6	1	
RT 44+63.58			1					
RT STA 45+13.48 TO 45+42.05					29			
RT STA 46+14.08 TO 46+53.66					40			
RT STA 46+23.84 TO 47+56.98	37.5			1				1
PROJECT TOTAL	300	3	1	4	301	12	2	4

SEEDING AND FERTILIZING SCHEDULE

LOCATION STATION TO STATION	TEMPORARY EROSION CONTROL SEEDING	SEEDING, CLASS 2	SEEDING, CLASS 7	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE	MULCH METHOD 2
	POUND	ACRE	ACRE	POUND	POUND	POUND	TON	ACRE
STAGE 1								
LT STA 42+93.96 TO 48+40.65	60	0.15	0.15	20	14	14	0.3	0.15
STAGE 2								
RT STA 42+93.96 TO 48+40.65	60	0.15	0.15	20	14	14	0.3	0.15
PROJECT TOTAL	120	0.3	0.3	40	28	28	0.6	0.3

PIPE CULVERTS

LOCATION STATION TO STATION	PIPE CULVERTS, CLASS A TYPE 1 24"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	CONCRETE COLLAR
	FOOT	EACH	CU YD
STAGE 1			
LT. STA 43+17.35	3	1	0.44
STAGE 2			
RT. STA 43+17.35	4	1	0.44
PROJECT TOTAL	7	2	0.88

CONCRETE BARRIER

LOCATION STATION TO STATION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TL-3	RELOCATE IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TL-3
	FOOT	FOOT	EACH	EACH
STAGE 1				
STA 43+47.33 TO 47+84.06	437.5		2	
STAGE 2				
STA 43+59.77 TO 47+71.60		412.5		2
PROJECT TOTAL	437.5	412.5	2	2

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 34 OVER UNNAMED STREAM

SCALE: NTS | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	8
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EARTHWORK

LOCATION STATION TO STATION	EARTHWORK EXCAVATION	FOR INFORMATION ONLY				BORROW SWELL FACTOR	BORROW EXCAVATION	REMARKS
		AVERAGE SHRINKAGE FACTOR	EARTH EXCAVATION (ADJUSTED)	EMBANKMENT	BALANCE WASTE (+) SHORTAGE (-)			
	CU YD	%	CU YD	CU YD	CU YD	%	CU YD	
STAGE 1								
LT STA 42+93.96 TO 48+40.65	48	41.7	20	240	-220	0.18	260	
STAGE 2								
RT STA 42+93.96 TO 48+40.65	110	50.8	56	182	-126	0.18	149	
PROJECT TOTAL	158						409	

EROSION CONTROL SCHEDULE

LOCATION STATION TO STATION	EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	TEMPORARY DITCH CHECKS	INLET & PIPE PROTECTION
	SQ YD	FOOT	EACH	EACH
STAGE 1				
LT STA 42+93.96 TO 45+00.43	358	240		
LT STA 45+98.75 TO 48+40.65	351	253		
STAGE 2				
RT STA 42+93.96 TO 45+33.17	420	250		
RT STA 42+95			1	
RT STA 43+17				1
RT STA 43+75			1	
RT STA 44+25			1	
RT STA 46+30.76 TO 48+40.65	278	212		
PROJECT TOTAL	1407	955	3	1

PAVING SCHEDULE

LOCATION STATION TO STATION	HOT-MIX ASPHALT SURFACE COURSE MIX D, N90	LEVELING BINDER (MACHINE METHOD), N90	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	HOT-MIX ASPHALT SHOULDERS, 8"	HOT-MIX ASPHALT SHOULDERS, 10"	AGGREGATE SHOULDERS, TYPE A	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	PROTECTIVE* COAT	BRIDGE* DECK GROOVING
	TON	TON	GALLON	TON	SQ YD	SQ YD	TON	SQ YD	SQ YD	SQ YD	SQ YD
PRE-STAGE 1											
RT STA 43+49.00 TO 45+40.14								100			
RT STA 46+12.98 TO 47+82.00								92			
STAGE 1											
LT STA 43+47.53 TO 45+05.71						139					
LT STA 44+84.25 TO 45+00.33									26	26	26
LT STA 46+33.30 TO 46+47.13									44	44	44
LT STA 46+08.93 TO 48+40.65						196					
STAGE 2											
RT STA 42+93.96 TO 45+22.93					193						
RT STA 44+84.25 TO 45+00.33									38	38	38
RT STA 46+25.73 TO 47+83.40					138						
RT STA 46+33.30 TO 46+47.13									19	19	19
POST-STAGE 2											
STA 42+38.96 TO 42+93.96	15										
STA 42+93.96 TO 44+84.25	40	43	51	0.8							
LT STA 42+93.96 TO 43+57.40							18				
STA 46+47.13 TO 48+40.65	39	43	51	0.8							
RT STA 47+73.98 TO 48+40.65							19				
STA 48+40.65 TO 48+95.65	15										
PROJECT TOTAL	109	86	102	1.6	331	335	37	192	127	127	127

* SEE BRIDGE BILL OF MATERIAL FOR ADDITIONAL QUANTITIES

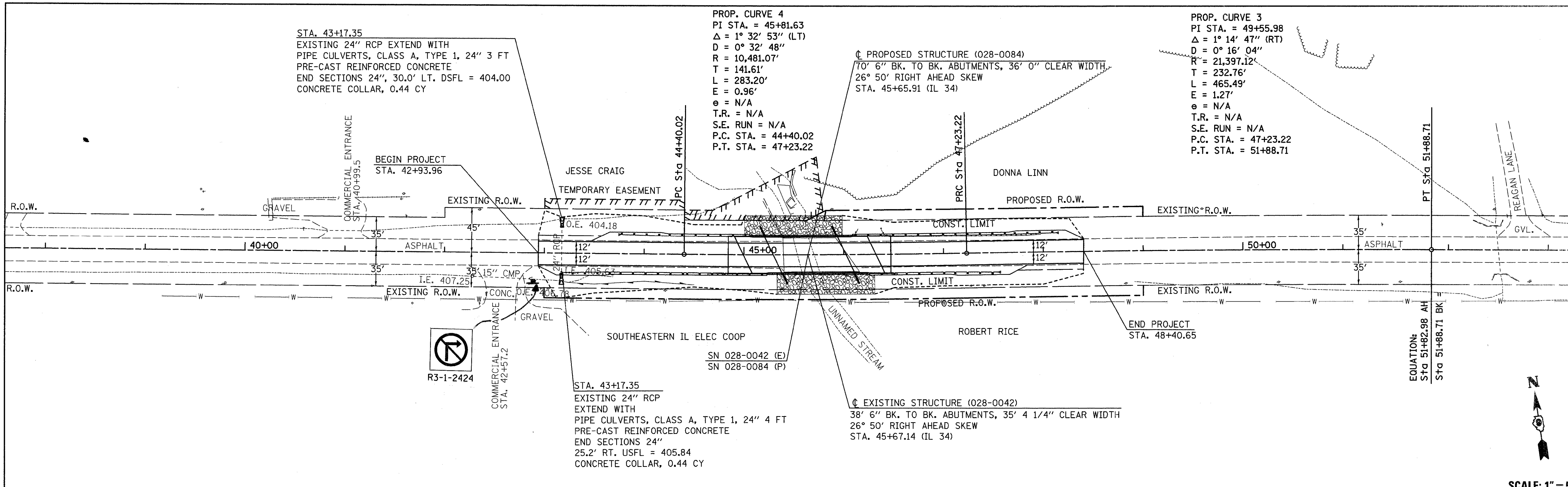
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

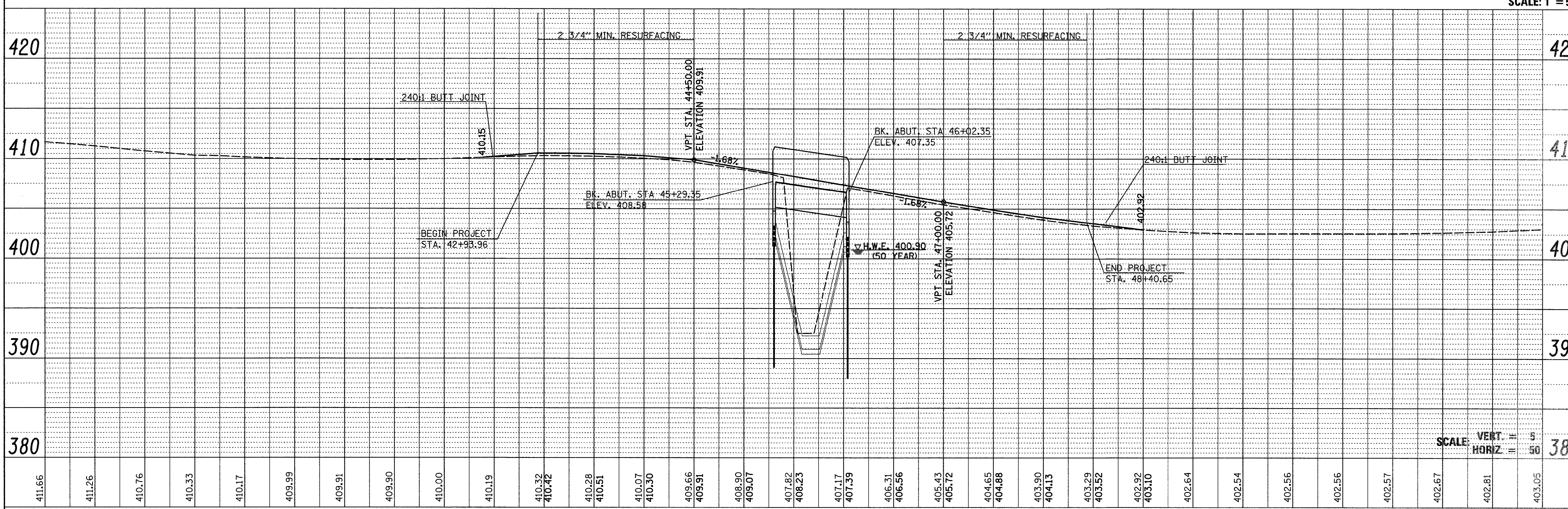
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 34 OVER UNNAMED STREAM

SCALE: NTS | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	9
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		


PROP. CURVE 4
PI STA. = 45+81.63
Δ = 1° 32′ 53″ (LT)
D = 0° 32′ 48″
R = 10,481.07′
T = 141.61′
L = 283.20′
E = 0.96′
e = N/A
T.R. = N/A
S.E. RUN = N/A
P.C. STA. = 44+40.02
P.T. STA. = 47+23.22
PROP. CURVE 3
PI STA. = 49+55.98
Δ = 1° 14′ 47″ (RT)
D = 0° 16′ 04″
R = 21,397.12′
T = 232.76′
L = 465.49′
E = 1.27′
e = N/A
T.R. = N/A
S.E. RUN = N/A
P.C. STA. = 47+23.22
P.T. STA. = 51+88.71
STA. 43+17.35
EXISTING 24″ RCP EXTEND WITH
PIPE CULVERTS, CLASS A, TYPE 1, 24″ 3 FT
PRE-CAST REINFORCED CONCRETE
END SECTIONS 24″, 30.0′ LT. DSFL = 404.00
CONCRETE COLLAR, 0.44 CY
℄ PROPOSED STRUCTURE (028-0084)
70′ 6″ BK. TO BK. ABUTMENTS, 36′ 0″ CLEAR WIDTH
26° 50′ RIGHT AHEAD SKEW
STA. 45+65.91 (IL 34)
COMMERCIAL ENTRANCE STA. 40+99.5
BEGIN PROJECT
STA. 42+93.96
JESSE CRAIG
TEMPORARY EASEMENT
PC Sta 44+40.02
PRC Sta 47+23.22
DONNA LINN
PT Sta 51+88.71
REAGAN LANE
R.O.W.
GRAVEL
EXISTING R.O.W.
PROPOSED R.O.W.
EXISTING R.O.W.
O.E. 404.18
CONST. LIMIT
40+00
ASPHALT
45+00
50+00
ASPHALT
GVL.
35′
45′
12′
12′
12′
12′
35′
I.E. 407.25
15″ CMP
I.E. 405.63
24″ RCP
R.O.W.
EXISTING R.O.W.
CONC.
O.E. 406.78
CONST. LIMIT
PROPOSED R.O.W.
EXISTING R.O.W.
GRAVEL
R3-1-2424
COMMERCIAL ENTRANCE STA. 42+57.2
SOUTHEASTERN IL ELEC COOP
UNNAMED STREAM
ROBERT RICE
END PROJECT
STA. 48+40.65
EQUATION:
Sta 51+82.98 AH
Sta 51+88.71 BK
SN 028-0042 (E)
SN 028-0084 (P)
STA. 43+17.35
EXISTING 24″ RCP
EXTEND WITH
PIPE CULVERTS, CLASS A, TYPE 1, 24″ 4 FT
PRE-CAST REINFORCED CONCRETE
END SECTIONS 24″
25.2′ RT. USFL = 405.84
CONCRETE COLLAR, 0.44 CY
℄ EXISTING STRUCTURE (028-0042)
38′ 6″ BK. TO BK. ABUTMENTS, 35′ 4 1/4″ CLEAR WIDTH
26° 50′ RIGHT AHEAD SKEW
STA. 45+67.14 (IL 34)
N
SCALE: 1″ = 50′


420
410
400
390
380
2 3/4″ MIN. RESURFACING
2 3/4″ MIN. RESURFACING
2401 BUTT JOINT
410.15
VPT STA. 44+50.00
ELEVATION 409.91
-1.68%
BK. ABUT. STA 46+02.35
ELEV. 407.35
BK. ABUT. STA 45+29.35
ELEV. 408.58
-1.68%
2401 BUTT JOINT
402.92
BEGIN PROJECT
STA. 42+93.96
H.W.E. 400.90
(50 YEAR)
VPT STA. 47+00.00
ELEVATION 405.72
END PROJECT
STA. 48+40.65
SCALE: VERT. = 5
HORIZ. = 50
411.66
411.26
410.76
410.33
410.17
409.99
409.91
409.90
410.00
410.19
410.32
410.42
410.28
410.51
410.07
410.30
409.66
409.91
408.90
409.07
407.82
408.23
407.17
407.39
406.31
406.56
405.43
405.72
404.65
404.88
403.90
404.13
403.29
403.52
402.92
403.10
402.64
402.54
402.56
402.56
402.57
402.67
402.81
403.05
38+00
39+00
40+00
41+00
42+00
43+00
44+00
45+00
46+00
47+00
48+00
49+00
50+00
51+00
52+00
53+00

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
IL 34 OVER UNNAMED STREAM

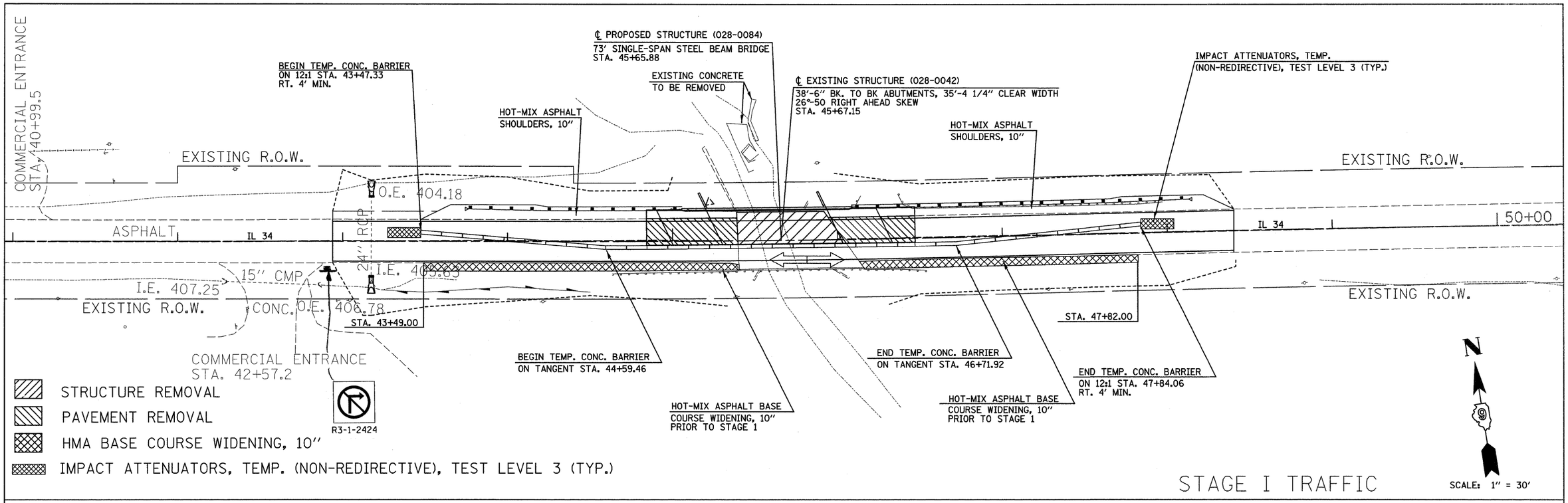
SCALE: 1″=50′ HORZ | SHEET NO. OF SHEETS | STA. 42+71.71 TO STA. 49+36.91

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	10
		CONTRACT NO. 78086		

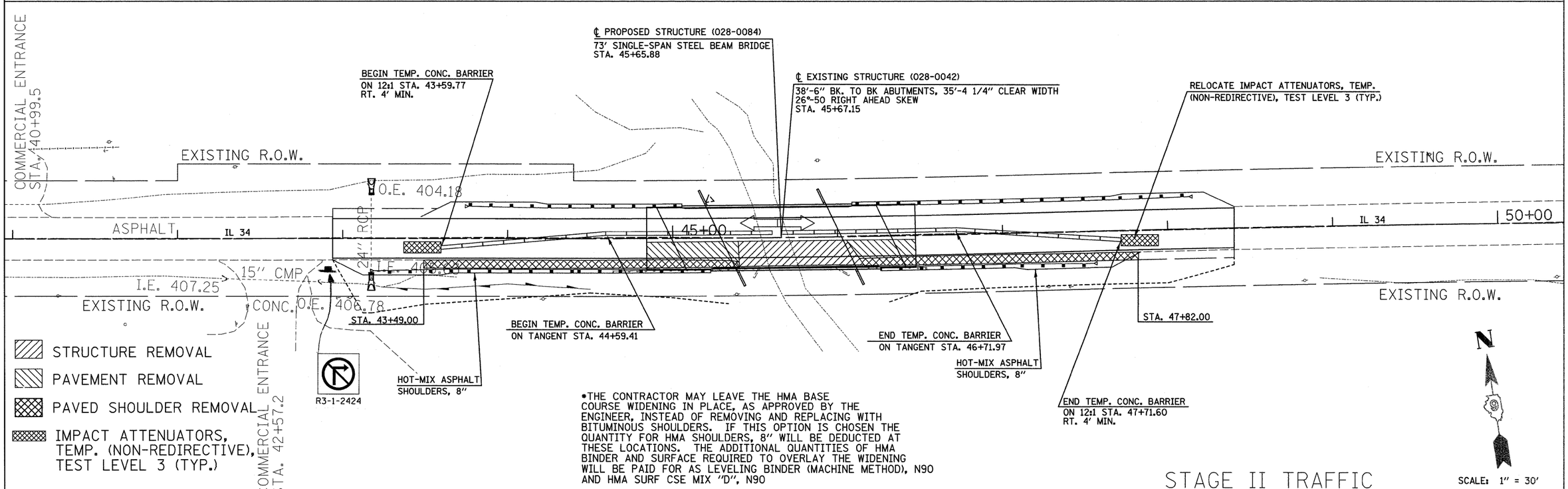
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, R.O.W. CHECKED, CADD FILE NAME, NOTE BOOK NO. ___ | BY | DATE

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK NO. ___ | BY | DATE



STAGE I TRAFFIC



STAGE II TRAFFIC

*THE CONTRACTOR MAY LEAVE THE HMA BASE COURSE WIDENING IN PLACE, AS APPROVED BY THE ENGINEER, INSTEAD OF REMOVING AND REPLACING WITH BITUMINOUS SHOULDERS. IF THIS OPTION IS CHOSEN THE QUANTITY FOR HMA SHOULDERS, 8" WILL BE DEDUCTED AT THESE LOCATIONS. THE ADDITIONAL QUANTITIES OF HMA BINDER AND SURFACE REQUIRED TO OVERLAY THE WIDENING WILL BE PAID FOR AS LEVELING BINDER (MACHINE METHOD), N90 AND HMA SURF CSE MIX "D", N90

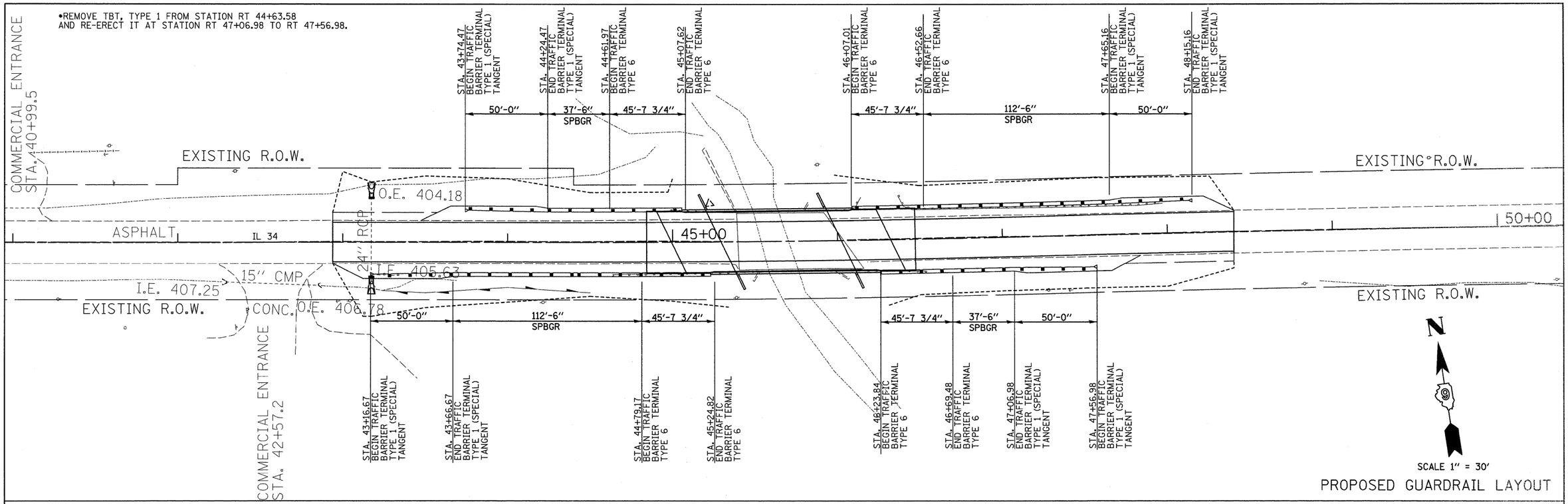
FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

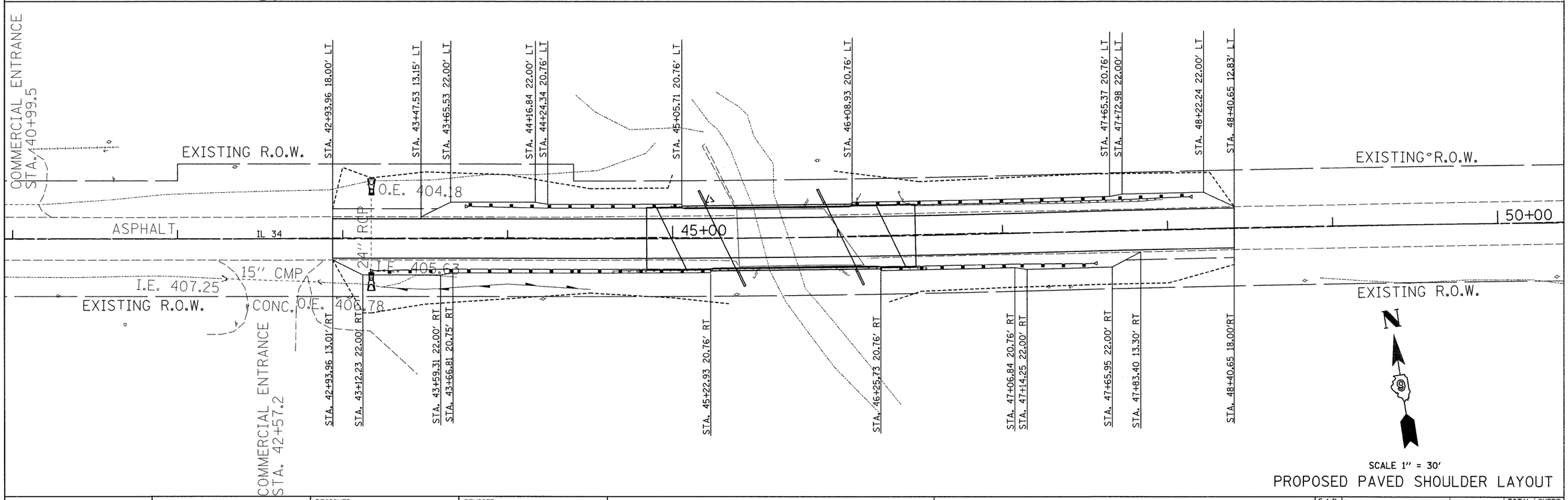
STAGING PLAN
IL 34 OVER UNNAMED STREAM

SCALE: 1"=30' | SHEET NO. OF SHEETS | STA. 42+71.71 TO STA. 49+36.91

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	11
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROPOSED GUARDRAIL LAYOUT



PROPOSED PAVED SHOULDER LAYOUT

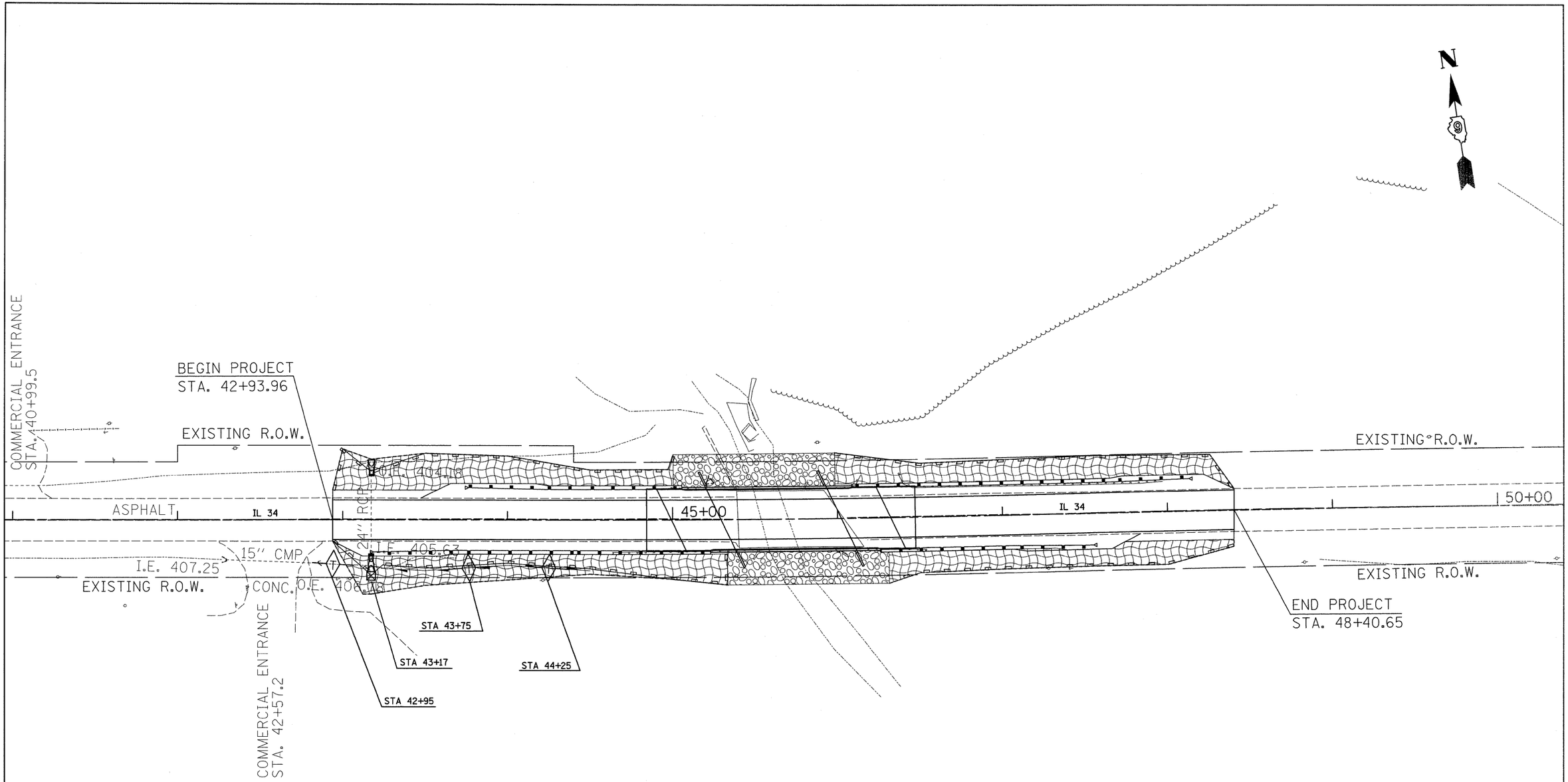
FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = *SCALE*	CHECKED -	REVISED -
	PLOT DATE = *DATE*	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHOULDER AND GUARDRAIL PLAN
IL 34 OVER UNNAMED STREAM

SCALE: 1"=30' | SHEET NO. OF SHEETS | STA. 42+71.71 TO STA. 49+36.91

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	12
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SCALE: 1" = 30'

FILE NAME = $FILCL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

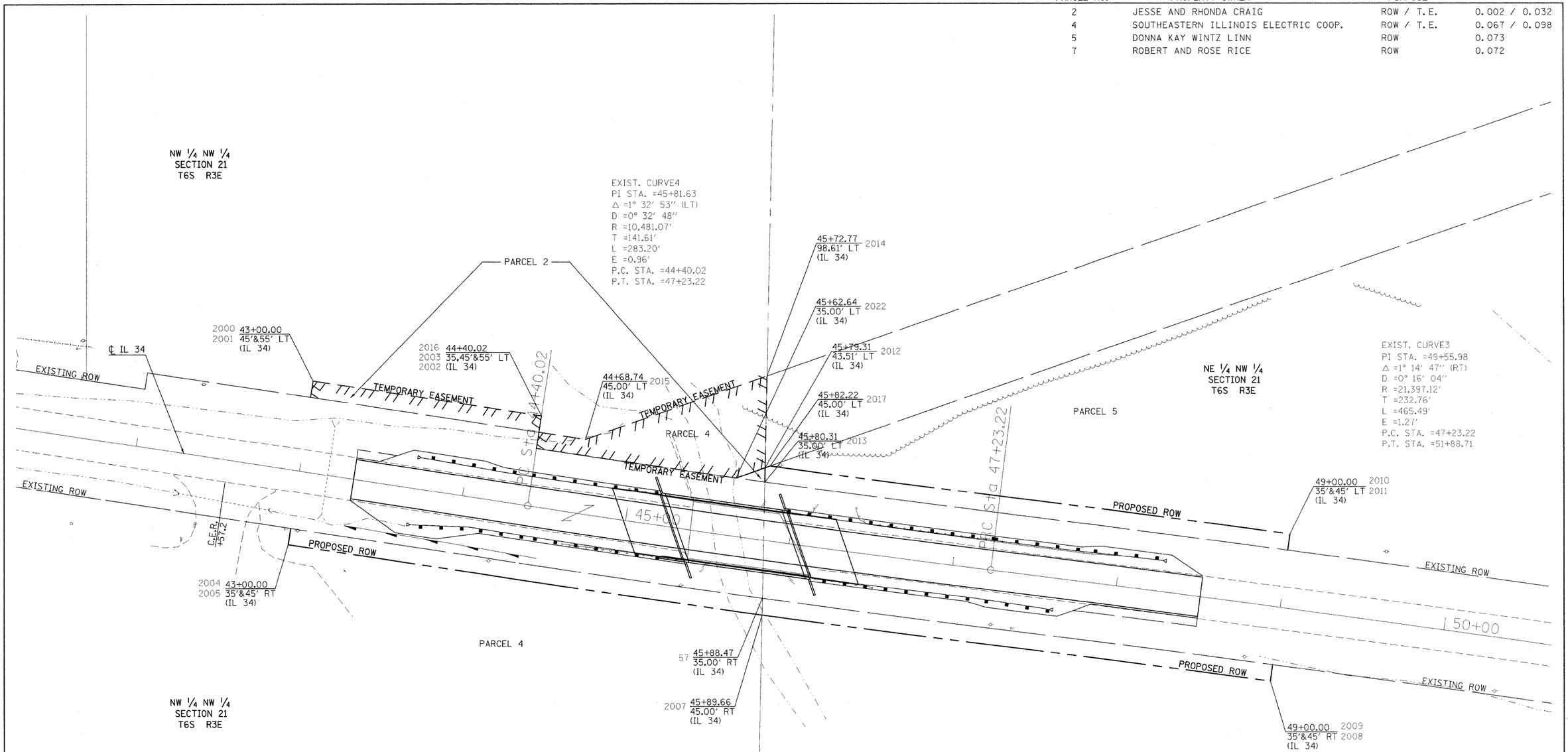
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
IL 34 OVER UNNAMED STREAM

SCALE: 1"=30' | SHEET NO. OF SHEETS | STA. 42+71.71 TO STA. 49+36.91

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	13
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PARCEL NO.	PROPERTY OWNER	PURPOSE	ACREAGE
2	JESSE AND RHONDA CRAIG	ROW / T.E.	0.002 / 0.032
4	SOUTHEASTERN ILLINOIS ELECTRIC COOP.	ROW / T.E.	0.067 / 0.098
5	DONNA KAY WINTZ LINN	ROW	0.073
7	ROBERT AND ROSE RICE	ROW	0.072



POINT COORDINATES

PT 57	N 483434.0830	E 824849.4450
PT 2000	N 483555.5439	E 824575.7030
PT 2001	N 483565.4290	E 824577.2146
PT 2002	N 483544.2635	E 824715.6270
PT 2003	N 483534.3784	E 824714.1154
PT 2004	N 483476.4632	E 824563.6102
PT 2005	N 483466.5781	E 824562.0986
PT 2007	N 483423.7570	E 824849.2248
PT 2008	N 483383.5563	E 825157.1494
PT 2009	N 483393.4680	E 825158.4753
PT 2010	N 483462.8500	E 825167.7567
PT 2011	N 483472.7617	E 825169.0826
PT 2012	N 483512.8533	E 824851.1382
PT 2013	N 483504.2839	E 824850.9541
PT 2014	N 483568.3211	E 824852.3294
PT 2015	N 483530.0946	E 824742.3884
PT 2016	N 483524.4933	E 824712.6038
PT 2017	N 483513.9255	E 824854.2219
PT 2022	N 483506.7260	E 824833.5157

N

30′ 0 15′ 30′

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USER NAME = cornelllm	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 30.0000 ′ / IN.	CHECKED -	REVISED -	
PLOT DATE = 10/7/2009	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

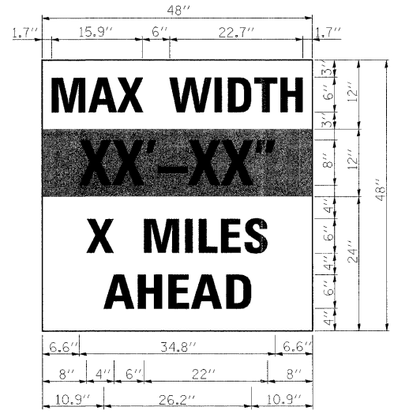
IL 34
RIGHT OF WAY

SCALE: 1″=30′ | SHEET NO. OF SHEETS | STA. 42+00.00 TO STA. 50+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	14
	R-99-001-09	CONTRACT NO. 78086		
	ILLINOIS FED. AID PROJECT			

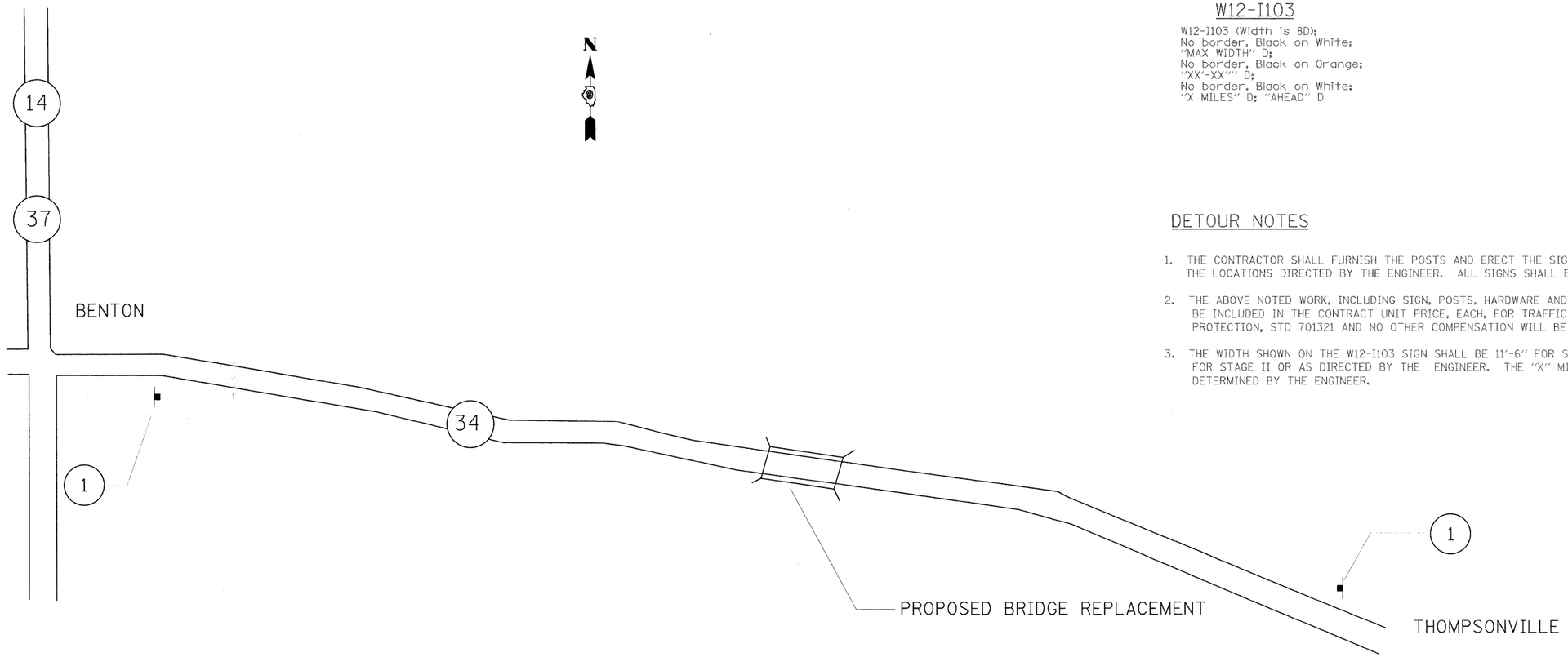
SIGN LEGEND

1



W12-I103

W12-I103 (Width is 8D);
No border, Black on White;
"MAX WIDTH" D;
No border, Black on Orange;
"XX'-XX"" D;
No border, Black on White;
"X MILES" D; "AHEAD" D



DETOUR SIGNING PLAN

DETOUR NOTES

1. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATIONS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE POST MOUNTED
2. THE ABOVE NOTED WORK, INCLUDING SIGN, POSTS, HARDWARE AND LABOR SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, EACH, FOR TRAFFIC CONTROL AND PROTECTION, STD 701321 AND NO OTHER COMPENSATION WILL BE ALLOWED.
3. THE WIDTH SHOWN ON THE W12-I103 SIGN SHALL BE 11'-6" FOR STAGE I AND 12'-6" FOR STAGE II OR AS DIRECTED BY THE ENGINEER. THE "X" MILES AHEAD WILL BE DETERMINED BY THE ENGINEER.

FILE NAME = O:\Program Development\Studies and Plans\Bridge Hydraulics\Work\SN 028-0042\Submitte	USER NAME = cornelllm	DESIGNED -	REVISED -
		DRAWN Sheets\D978086-sht-detour.dgn	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/2/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WIDE LOAD DETOUR
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

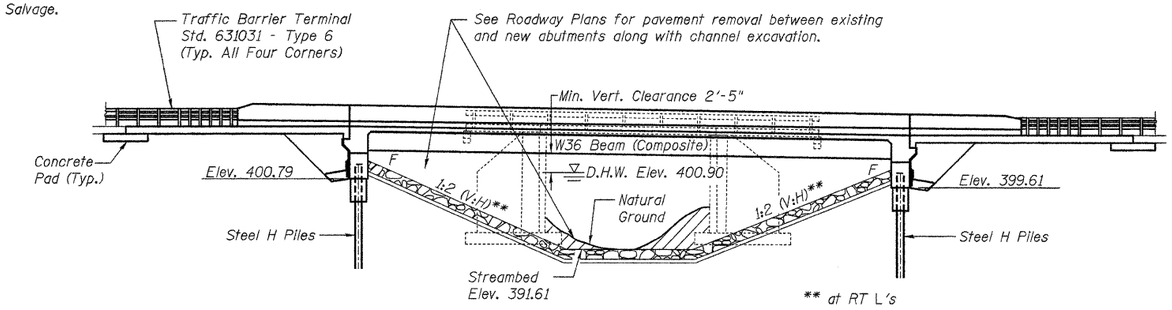
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	15
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Bench Mark: Chiseled "□" on northeast wingwall of SN 028-0042, Elev. 406.19

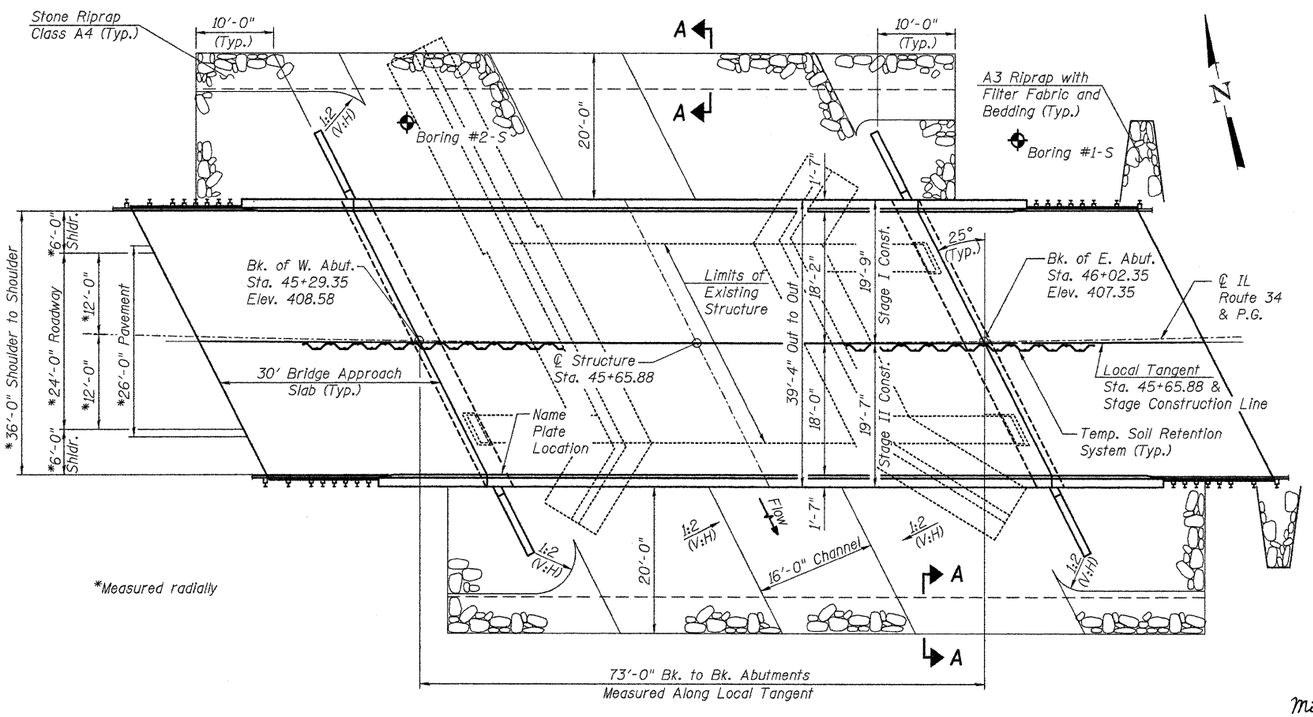
Existing Structure: S.N. 028-0042 was built in 1934 as S.B.I. 143, Section 101X-1 at Sta. 45+67.15. In 1980 under FAP 869 (IL 34) Section (101X-1)BY, the superstructure was widened. Existing structure is a single span concrete T-Beam and Prestressed concrete deck beam bridge on closed abutments, 38'-6" bk. to bk. abutments, 35'-4¼" out to out with 26°-50' right ahead skew. The Contractor shall remove and replace the existing structure. Staged Construction shall be utilized to maintain one lane of traffic during construction.

No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION



*Measured radially

PLAN

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	400.79	399.61

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TSD)
ENGINEER OF BRIDGES AND STRUCTURES

CURVE DATA

(Prop. Curve 4)
Δ = 1°32'53"
D = 0°32'48"
T = 141.61'
L = 283.20'
E = 0.96'
R = 10481.07'
SE = N.C.
P.C. = Sta. 44+40.02
P.T. = Sta. 47+23.22
P.I. = Sta. 45+81.63

INDEX OF SHEETS

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.239 g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.713 g
Soil Site Class = C

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

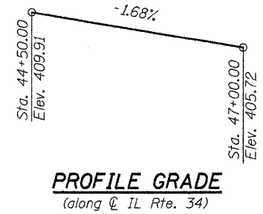
LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

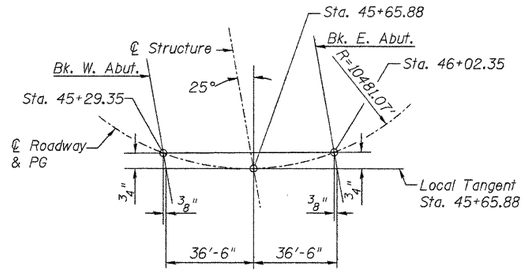
FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

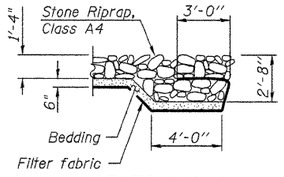


PROFILE GRADE

(along ℄ IL Rte. 34)



OFFSET SKETCH



SECTION A-A

WATERWAY INFORMATION

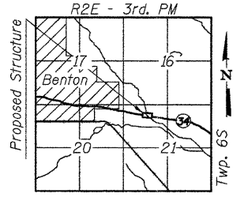
Drainage Area = 3.22 sq. mi. Low Grade Elev. 402.54 ft @ Sta. 60.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	962	225.5	258.9	400.0	1.8	0.4	401.8	400.4
Design	50	2155	253.6	303.9	400.9	2.4	1.3	403.3	402.2
Base	100	2542	259.8	314.4	401.1	2.2	1.7	403.3	402.8
Overtopping		2225	253.6	303.9	400.9	2.5	1.6	403.4	402.5

Existing 10-yr Velocity = 4.27 ft/s
Proposed 10-yr Velocity = 3.72 ft/s

MICHAEL T. HALEY 81-5991 CHATHAM
LICENSED STRUCTURAL ENGINEER ★ STATE OF ILLINOIS ★

Michael J. Haley 9-23-09
Michael T. Haley Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2010



LOCATION SKETCH

GENERAL PLAN
IL RT. 34 OVER UNNAMED STREAM
F.A.P. RTE. 869 - SEC. 101B-1
FRANKLIN COUNTY
STATION 45+65.88
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 1
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	16
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 58450 lbs (AASHTO M270, Grade 50)
= 3580 lbs (AASHTO M270, Grade 36)

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Interstate Green, Munsell. No. 7.5G 4/8. See Special Provision for "Cleaning and Painting New Metal Structures".

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Slipforming of the parapet is not allowed.

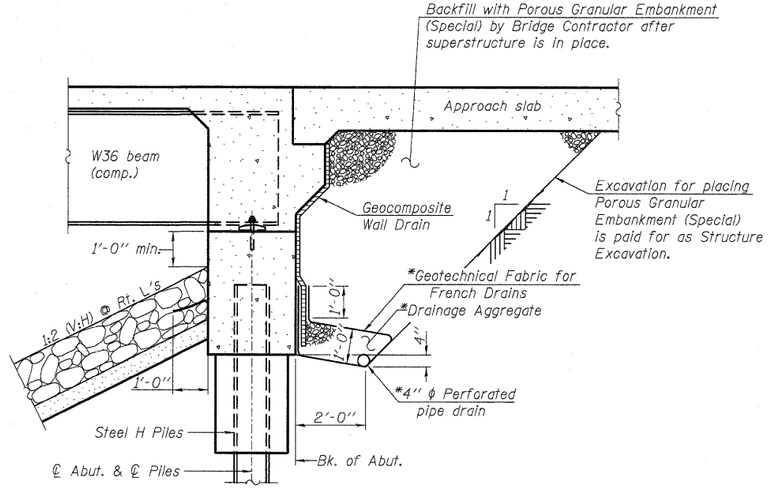
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

The SSPC QP1 Painting Contractor Certification is required for this contract.

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Porous Granular Embankment, Special	Cu. Yd.	-	147	147
	Stone Riprap, Class A3	Sq. Yd.	-	20	20
	Stone Riprap, Class A4	Sq. Yd.	-	767	767
	Filter Fabric	Sq. Yd.	-	787	787
**	Protective Coat	Sq. Yd.	626	-	626
	Removal of Existing Structures	Each	-	-	1
	Structure Excavation	Cu. Yd.	-	249.0	249.0
	Concrete Structures	Cu. Yd.	-	63.4	63.4
	Concrete Superstructure	Cu. Yd.	237.6	-	237.6
**	Bridge Deck Grooving	Sq. Yd.	505	-	505
	Concrete Encasement	Cu. Yd.	-	4.2	4.2
	Furnishing and Erecting Structural Steel	Lump Sum	1	-	1
	Stud Shear Connectors	Each	1278	-	1278
	Reinforcement Bars, Epoxy Coated	Pound	50980	12650	63630
	Bar Splicers	Each	466	108	574
	Furnishing Steel Piles HP12x63	Foot	-	385	385
	Driving Piles	Foot	-	385	385
	Test Pile Steel HP12x63	Each	-	2	2
	Name Plates	Each	1	-	1
	Anchor Bolts, 1"	Each	-	24	24
	Geocomposite Wall Drain	Sq. Yd.	-	94	94
	Pipe Underdrains for Structures 4"	Foot	-	172	172
	Asbestos Bearing Pad Removal	Each	-	8	8
	Temporary Soil Retention System	Sq. Ft.	-	492	492

** Includes Approach Slab



SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

STATION 45+65.88
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 869 SEC 101B-1
LOADING HL-93
STRUCTURE NO. 028-0084

NAME PLATE

See Std. 515001

GENERAL NOTES & DETAILS
STRUCTURE NO. 028-0084

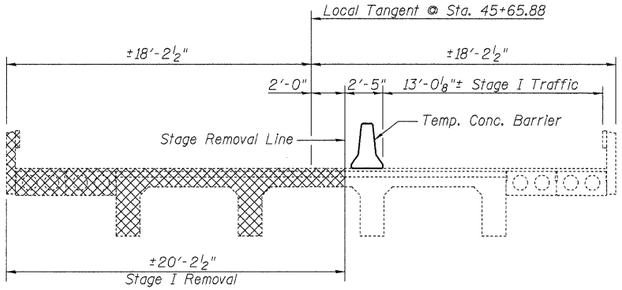
LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH | Checked By: WTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

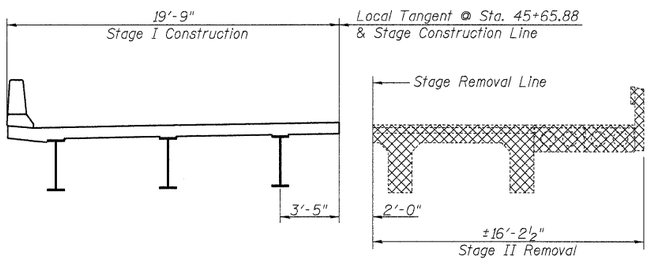
SHEET NO. 2
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	17
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

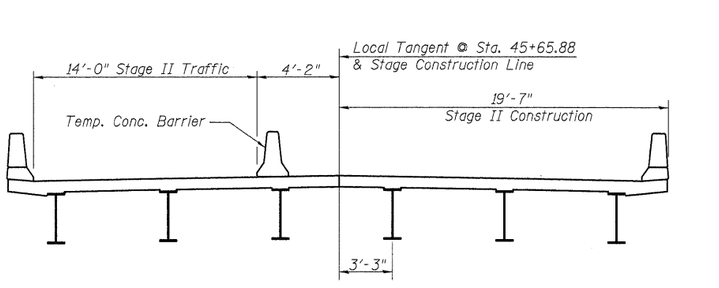
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



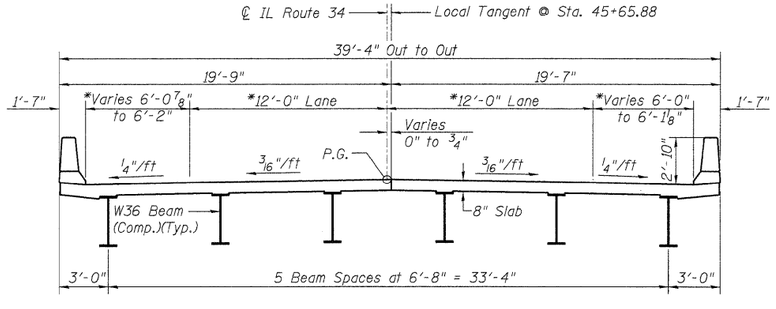
STAGE I REMOVAL & TRAFFIC



STAGE I CONSTRUCTION & STAGE II REMOVAL



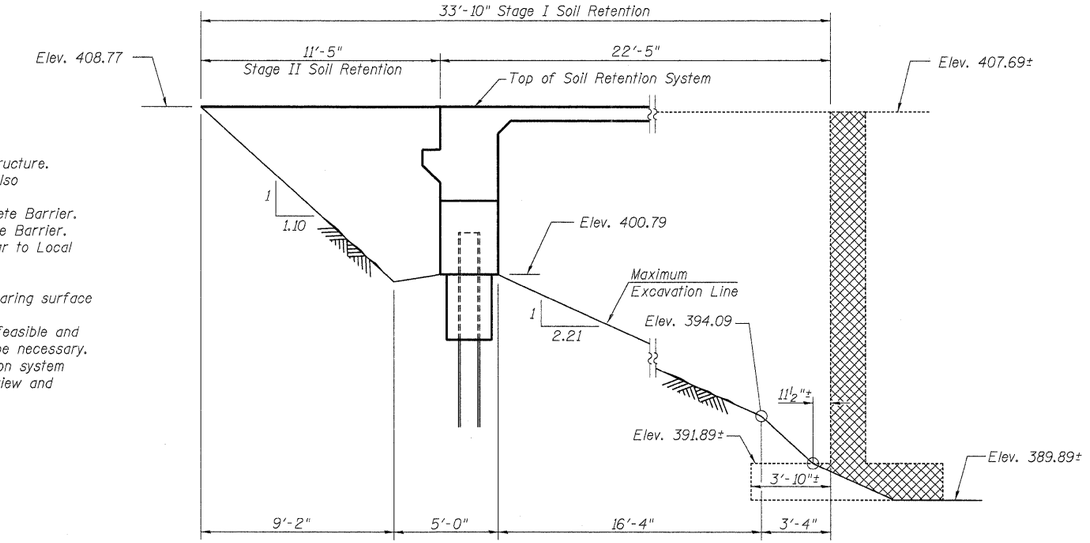
STAGE II CONSTRUCTION & TRAFFIC



PROPOSED CROSS SECTION

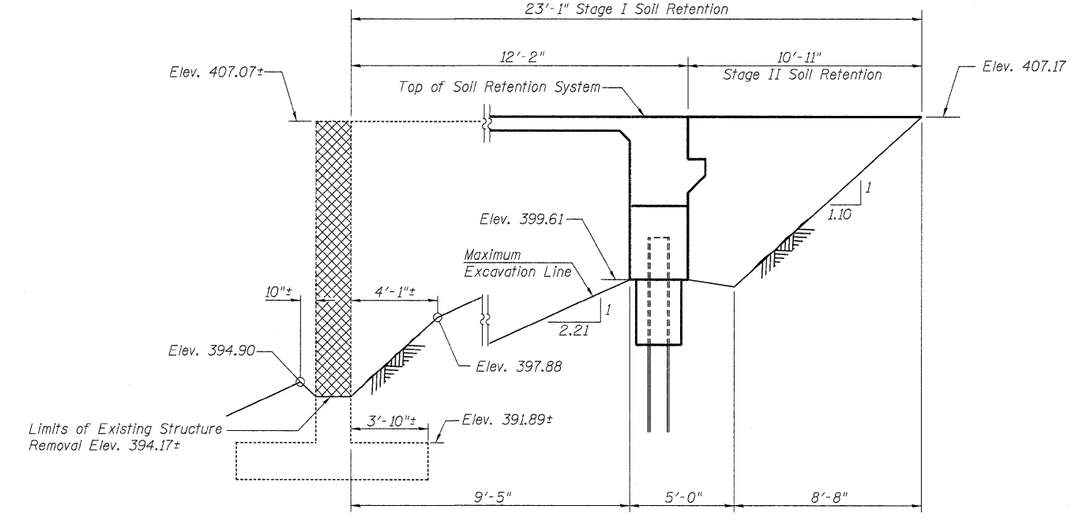
* Radial Dimensions

Notes:
1. Cross Hatched areas indicate removal of existing structure.
2. Location of Stage Removal & Construction lines is also applicable to abutments.
3. See roadway plans for quantity of Temporary Concrete Barrier.
4. See sheet 4 to 17 for details of Temporary Concrete Barrier.
5. All transverse dimensions are measured perpendicular to Local Tangent at Sta. 45+65.88, unless otherwise shown.
6. All cross sections are Looking East.
7. Removal of existing bridge railing and bituminous wearing surface is included with Removal of Existing Structure.
8. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



TEMPORARY SOIL RETENTION AT WEST ABUTMENT

(Dimensions measured along Stage Construction Line)



TEMPORARY SOIL RETENTION SYSTEM AT EAST ABUTMENT

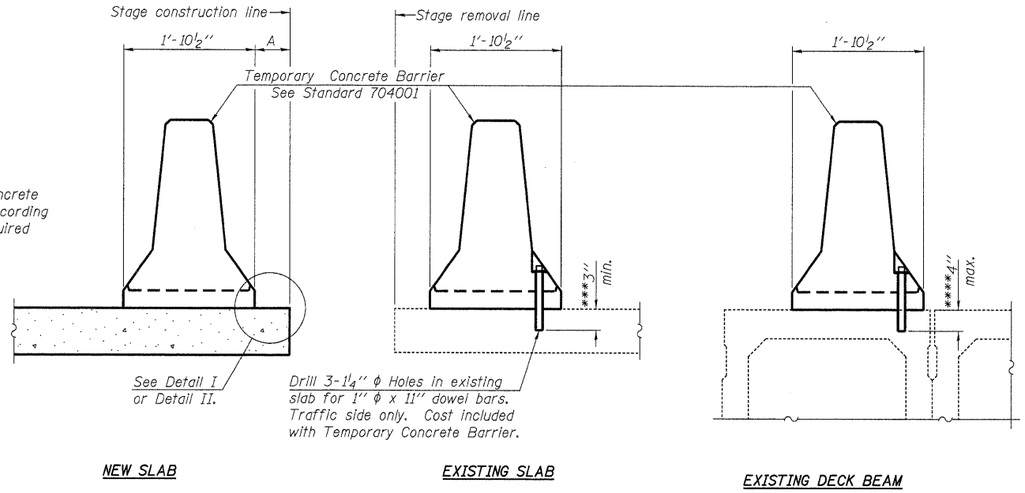
(Dimensions measured along Stage Construction Line)

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD. Consulting Engineers, Chatham, Illinois	SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
Designed By: ESH · Checked By: MTH · Drawn By: TBP · Date: 2/2009 · File: 028-0084.dgn	17 SHEETS	869	101B-1	FRANKLIN	40 / 18
				CONTRACT NO. 78086	
		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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".



NEW SLAB | EXISTING SLAB | EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

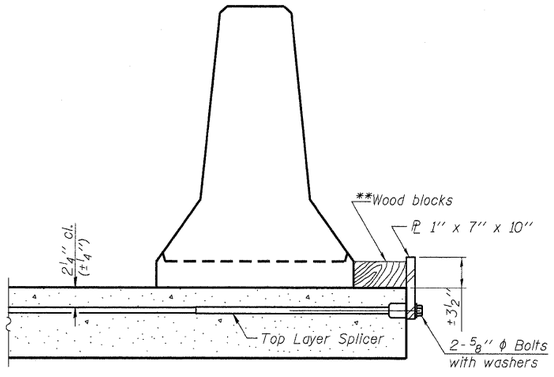
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x 10" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

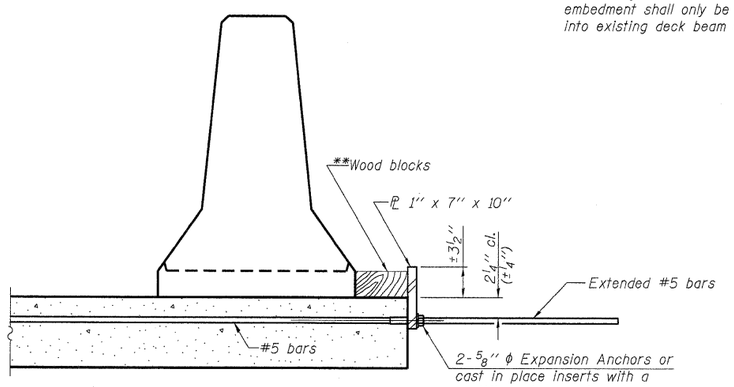
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

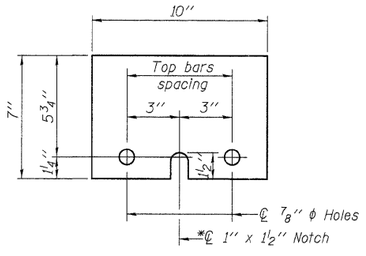


DETAIL I



DETAIL II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER ℙ 1" x 7" x 10"

* Required only with Detail II

TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD. Consulting Engineers, Chatham, Illinois	SHEET NO. 4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
Designed By: ESH · Checked By: MTH · Drawn By: TBP · Date: 2/2009 · File: 028-0084.dgn	17 SHEETS	869	101B-1	FRANKLIN	40 / 19
				CONTRACT NO. 78086	
		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abut.	45+21.50	-16.66	408.42	408.42
℄ Brg. W. Abut.	45+22.88	-16.66	408.40	408.40
C	45+32.90	-16.70	408.23	408.30
D	45+42.91	-16.73	408.06	408.18
E	45+52.93	-16.74	407.89	408.04
F	45+62.94	-16.75	407.73	407.88
G	45+72.96	-16.75	407.56	407.68
H	45+82.98	-16.74	407.39	407.46
℄ Brg. E. Abut.	45+93.23	-16.71	407.22	407.22
Bk. of E. Abut.	45+94.62	-16.71	407.19	407.19

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abut.	45+24.64	-10.00	408.50	408.50
℄ Brg. W. Abut.	45+26.02	-10.01	408.48	408.48
C	45+36.03	-10.04	408.31	408.38
D	45+46.04	-10.07	408.14	408.26
E	45+56.05	-10.08	407.97	408.12
F	45+66.06	-10.08	407.80	407.95
G	45+76.07	-10.08	407.63	407.76
H	45+86.08	-10.06	407.47	407.54
℄ Brg. E. Abut.	45+96.33	-10.04	407.29	407.29
Bk. of E. Abut.	45+97.71	-10.04	407.27	407.27

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abut.	45+27.78	-3.35	408.55	408.55
℄ Brg. W. Abut.	45+29.15	-3.35	408.53	408.53
C	45+39.16	-3.38	408.36	408.43
D	45+49.16	-3.40	408.19	408.31
E	45+59.16	-3.41	408.02	408.17
F	45+69.17	-3.42	407.85	408.00
G	45+79.17	-3.41	407.69	407.81
H	45+89.17	-3.39	407.52	407.59
℄ Brg. E. Abut.	45+99.42	-3.36	407.35	407.35
Bk. of E. Abut.	46+00.80	-3.36	407.32	407.32

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abut.	45+30.91	3.31	408.50	408.50
℄ Brg. W. Abut.	45+32.29	3.30	408.48	408.48
C	45+42.28	3.28	408.31	408.38
D	45+52.28	3.26	408.14	408.26
E	45+62.28	3.25	407.97	408.12
F	45+72.27	3.25	407.81	407.95
G	45+82.27	3.26	407.64	407.76
H	45+92.27	3.28	407.47	407.54
℄ Brg. E. Abut.	46+02.51	3.31	407.30	407.30
Bk. of E. Abut.	46+03.88	3.32	407.27	407.27

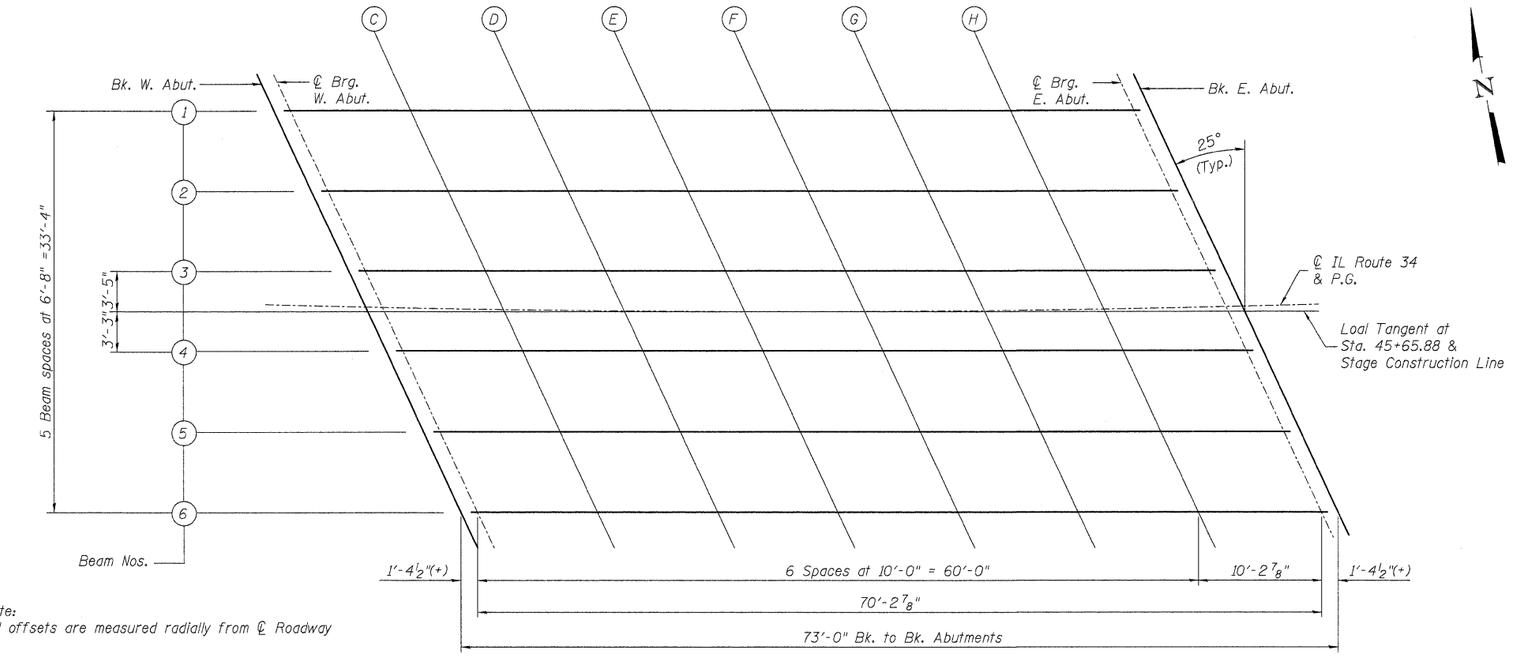
BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abut.	45+34.03	9.97	408.34	408.34
℄ Brg. W. Abut.	45+35.41	9.96	408.32	408.32
C	45+45.40	9.94	408.15	408.22
D	45+55.39	9.92	407.98	408.10
E	45+65.38	9.92	407.82	407.97
F	45+75.37	9.92	407.65	407.80
G	45+85.37	9.94	407.48	407.60
H	45+95.36	9.96	407.31	407.38
℄ Brg. E. Abut.	46+05.59	9.99	407.14	407.14
Bk. of E. Abut.	46+06.97	10.00	407.12	407.12

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abut.	45+37.16	16.62	408.16	408.16
℄ Brg. W. Abut.	45+38.54	16.62	408.14	408.14
C	45+48.52	16.60	407.97	408.04
D	45+58.50	16.59	407.80	407.92
E	45+68.49	16.58	407.64	407.79
F	45+78.47	16.59	407.47	407.62
G	45+88.46	16.61	407.30	407.42
H	45+98.44	16.63	407.13	407.20
℄ Brg. E. Abut.	46+08.67	16.67	406.96	406.96
Bk. of E. Abut.	46+10.04	16.68	406.94	406.94

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN

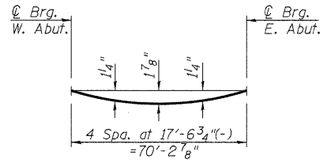
Note:
All offsets are measured radially from ℄ Roadway

℄ ROADWAY & P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abut.	45+29.35	0.00	408.58	408.58
℄ Brg. W. Abut.	45+30.73	0.00	408.55	408.55
C	45+40.75	0.00	408.39	408.45
D	45+50.75	0.00	408.22	408.34
E	45+60.76	0.00	408.05	408.20
F	45+70.76	0.00	407.88	408.03
G	45+80.75	0.00	407.71	407.83
H	45+90.75	0.00	407.55	407.62
℄ Brg. E. Abut.	46+00.97	0.00	407.37	407.37
Bk. of E. Abut.	46+02.35	0.00	407.35	407.35

LOCAL TANGENT & STAGE CONSTRUCTION LINE

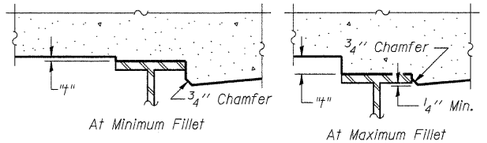
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abut.	45+29.38	0.06	408.58	408.58
℄ Brg. W. Abut.	45+30.76	0.06	408.55	408.55
C	45+40.76	0.03	408.38	408.45
D	45+50.76	0.01	408.22	408.34
E	45+60.76	0.00	408.05	408.20
F	45+70.76	0.00	407.88	408.03
G	45+80.76	0.01	407.71	407.83
H	45+90.76	0.03	407.54	407.62
℄ Brg. E. Abut.	46+01.00	0.06	407.37	407.37
Bk. of E. Abut.	46+02.38	0.06	407.35	407.35



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

Note:
The above deflections are not to be used in the field if the engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" as shown on this sheet.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown above, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

TOP OF SLAB ELEVATIONS STRUCTURE NO. 028-0084

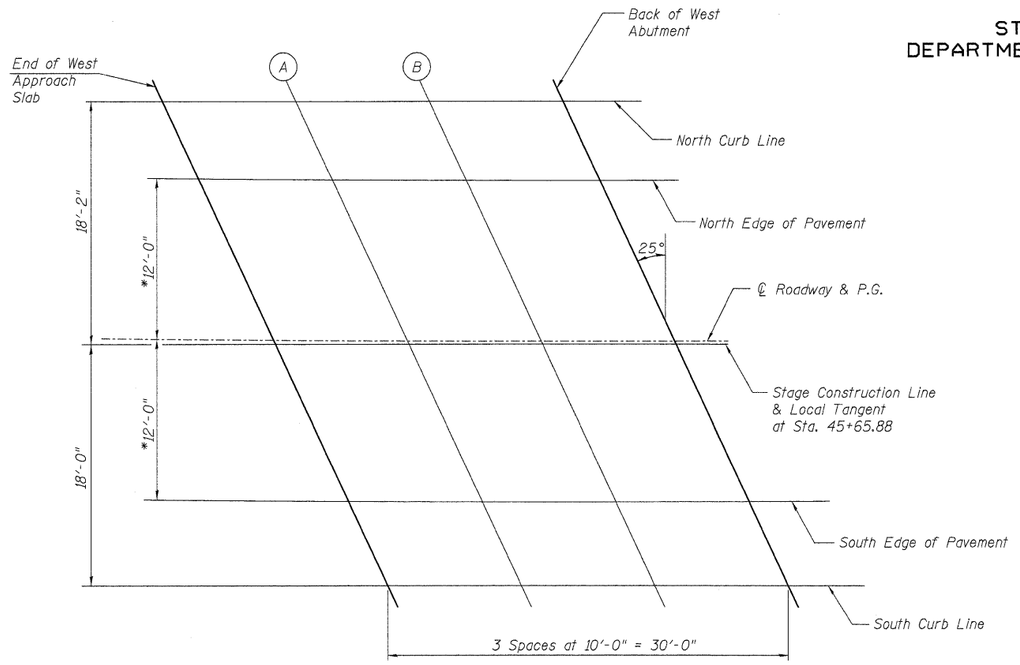
LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 5
17 SHEETS

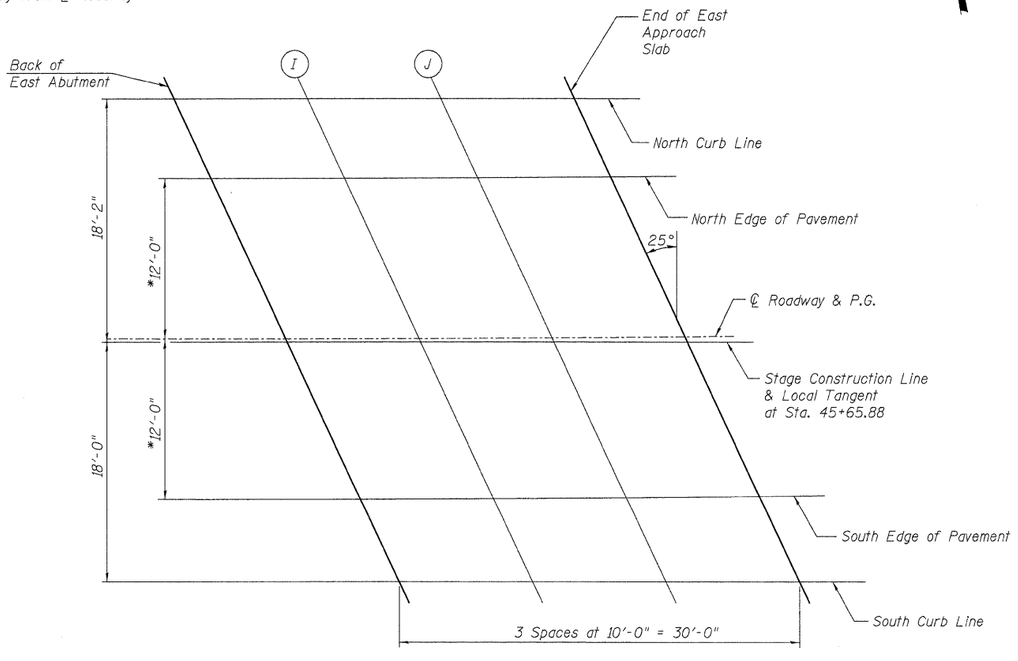
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	20
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN - WEST APPROACH

* Measured radially from ℄ Roadway



PLAN - EAST APPROACH

NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	44+90.78	-17.90	408.91
A	45+00.80	-17.96	408.74
B	45+10.81	-18.02	408.58
Bk. W. Abut.	45+20.83	-18.07	408.41
Bk. E. Abut.	45+93.96	-18.13	407.18
I	46+03.97	-18.10	407.01
J	46+13.99	-18.06	406.84
End E. Appr. Slab	46+24.01	-18.01	406.67

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	44+93.58	-12.00	408.99
A	45+03.63	-12.00	408.82
B	45+13.66	-12.00	408.65
Bk. W. Abut.	45+23.70	-12.00	408.48
Bk. E. Abut.	45+96.80	-12.00	407.26
I	46+06.79	-12.00	407.09
J	46+16.79	-12.00	406.92
End E. Appr. Slab	46+26.77	-12.00	406.75

℄ ROADWAY & P.G.

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	44+99.28	0.00	409.08
A	45+09.31	0.00	408.91
B	45+19.33	0.00	408.75
Bk. W. Abut.	45+29.35	0.00	408.58
Bk. E. Abut.	46+02.35	0.00	407.35
I	46+12.33	0.00	407.18
J	46+22.31	0.00	407.02
End E. Appr. Slab	46+32.28	0.00	406.85

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	44+99.38	-0.21	409.08
A	45+09.38	-0.15	408.91
B	45+19.38	-0.10	408.74
Bk. W. Abut.	45+29.38	-0.06	408.58
Bk. E. Abut.	46+02.38	-0.06	407.35
I	46+12.38	-0.10	407.18
J	46+22.38	-0.15	407.01
End E. Appr. Slab	46+32.38	-0.21	406.84

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	45+04.96	12.00	408.80
A	45+14.98	12.00	408.63
B	45+24.99	12.00	408.46
Bk. W. Abut.	45+34.99	12.00	408.29
Bk. E. Abut.	46+07.89	12.00	407.07
I	46+17.86	12.00	406.90
J	46+27.82	12.00	406.74
End E. Appr. Slab	46+37.78	12.00	406.57

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End W. Appr. Slab	45+07.87	18.16	408.62
A	45+17.86	18.11	408.46
B	45+27.84	18.07	408.29
Bk. W. Abut.	45+37.82	18.04	408.12
Bk. E. Abut.	46+10.70	18.10	406.90
I	46+20.68	18.14	406.73
J	46+30.66	18.20	406.56
End E. Appr. Slab	46+40.64	18.27	406.39

Note:
Offsets are measured radially from ℄ Roadway

APPROACH SLAB ELEVATIONS
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

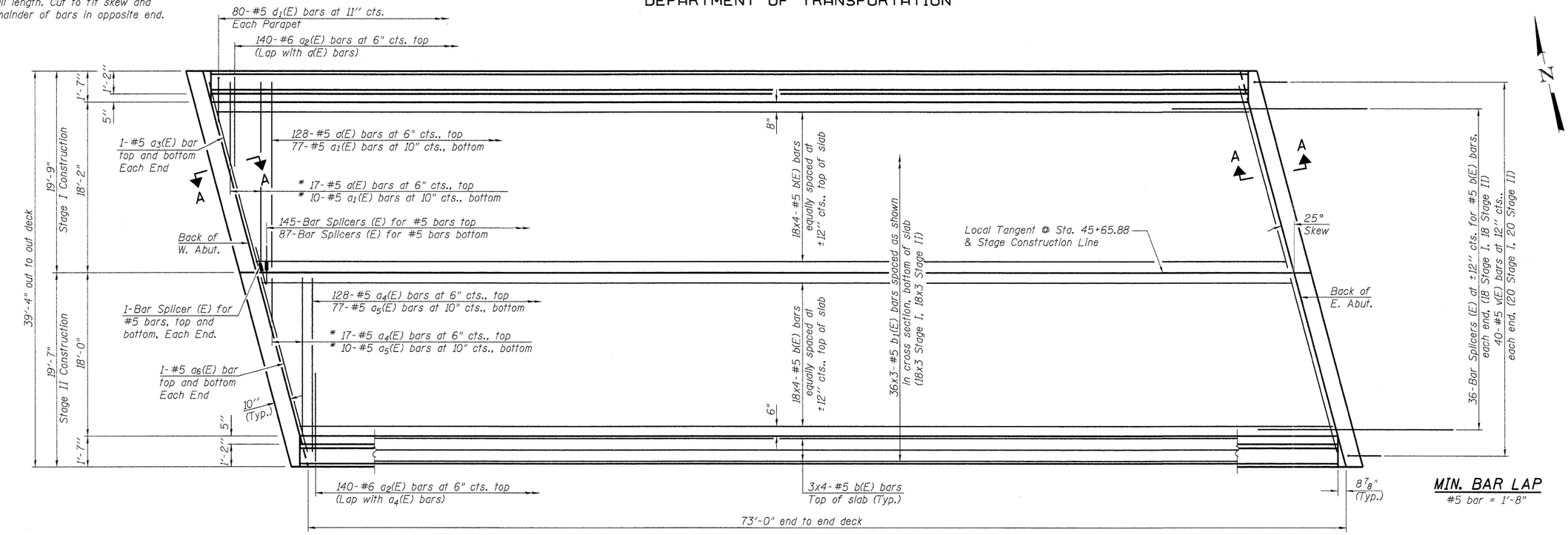
Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 6
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	21
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

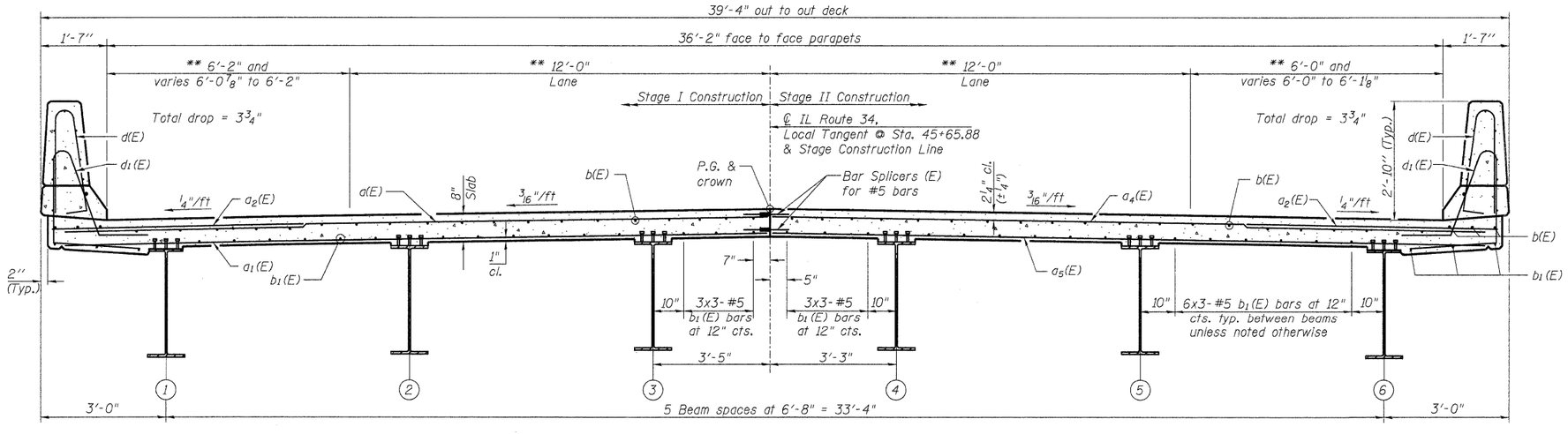
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Order $a(E)$, $a_1(E)$, $a_4(E)$ and $a_5(E)$ bars full length. Cut to fit skew and use remainder of bars in opposite end.



PLAN

MIN. BAR LAP
#5 bar = 1'-8"



** Measured radially from ℄ Roadway.

CROSS SECTION @ STA. 45+65.88
(Looking East)

Notes:
See Sheet 8 of 17 for superstructure details, parapet reinforcement and Bill of Material.
Bars indicated thus 18 x 4-#5 etc. indicates 18 lines of bars with 4 lengths per line.
See Sheet 11 of 17 for Section A-A.
See Sheet 15 of 17 for Bar Splicer Details.

SUPERSTRUCTURE
STRUCTURE NO. 028-0084

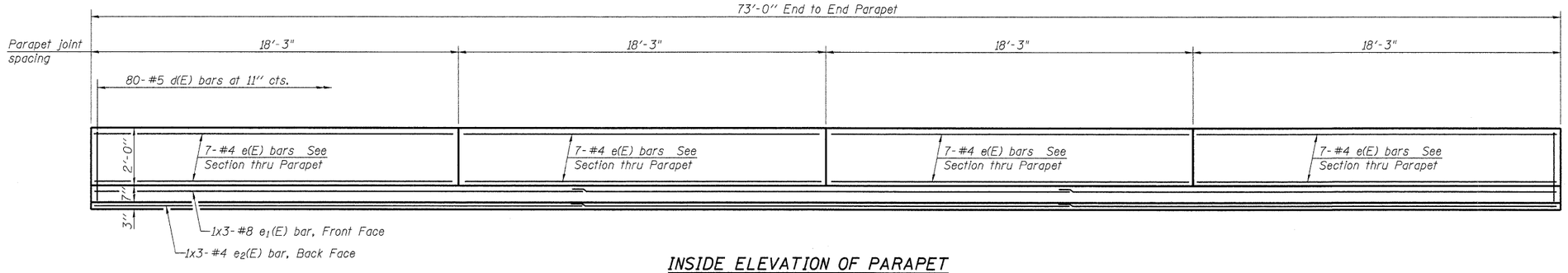
LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 7
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	22
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

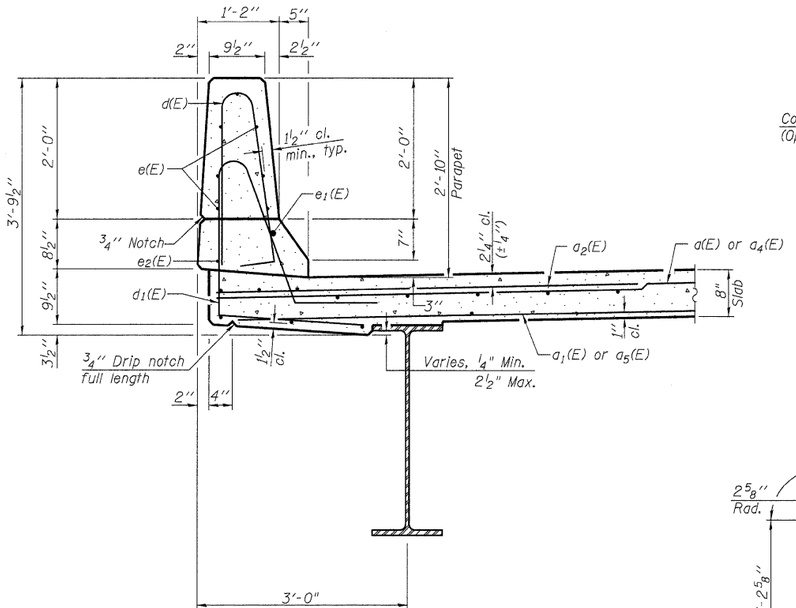
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



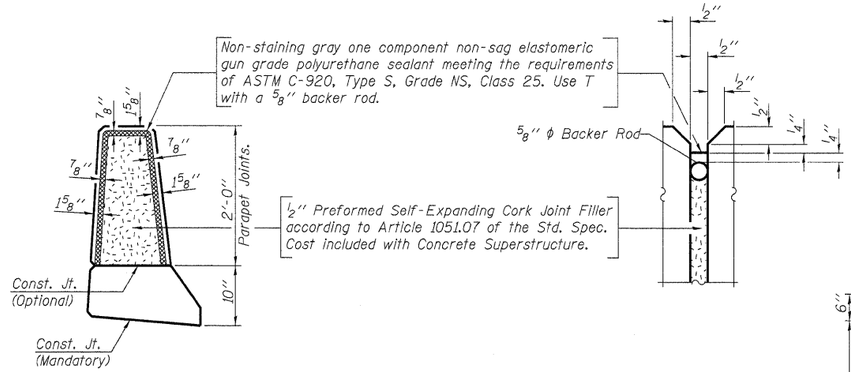
INSIDE ELEVATION OF PARAPET

MINIMUM BAR LAP

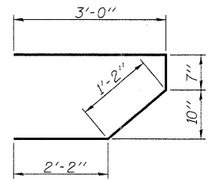
(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"



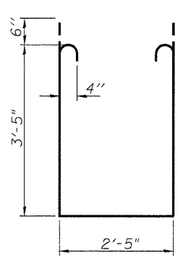
SECTION THRU PARAPET



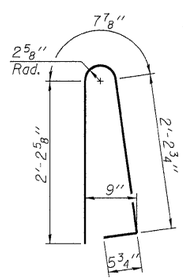
PARAPET JOINT DETAILS



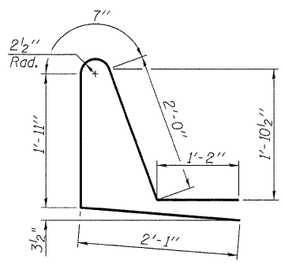
BAR s(E)



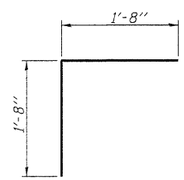
BAR s1(E)



BAR d(E)



BAR d1(E)



BAR v(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	145	#5	19'-4"	——
d1(E)	87	#5	19'-0"	——
d2(E)	280	#6	6'-0"	——
d3(E)	4	#5	21'-3"	——
d4(E)	145	#5	19'-2"	——
d5(E)	87	#5	18'-10"	——
d6(E)	4	#5	21'-1"	——
b(E)	168	#5	19'-6"	——
b1(E)	108	#5	25'-5"	——
d(E)	160	#5	5'-7"	
d1(E)	160	#5	7'-9"	
e(E)	56	#4	18'-0"	——
e1(E)	6	#8	26'-7"	——
e2(E)	6	#4	25'-2"	——
m(E)	20	#6	21'-5"	——
m1(E)	24	#6	9'-1"	——
m2(E)	8	#6	6'-0"	——
m3(E)	4	#6	2'-6"	——
m4(E)	2	#6	3'-0"	——
m5(E)	2	#6	2'-9"	——
s(E)	88	#5	6'-11"	⊐
s1(E)	72	#4	10'-3"	⊔
v(E)	80	#5	3'-4"	⌐
Reinforcement Bars, Epoxy Coated			Pound	24150
Concrete Superstructure			Cu. Yd.	121.0

Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

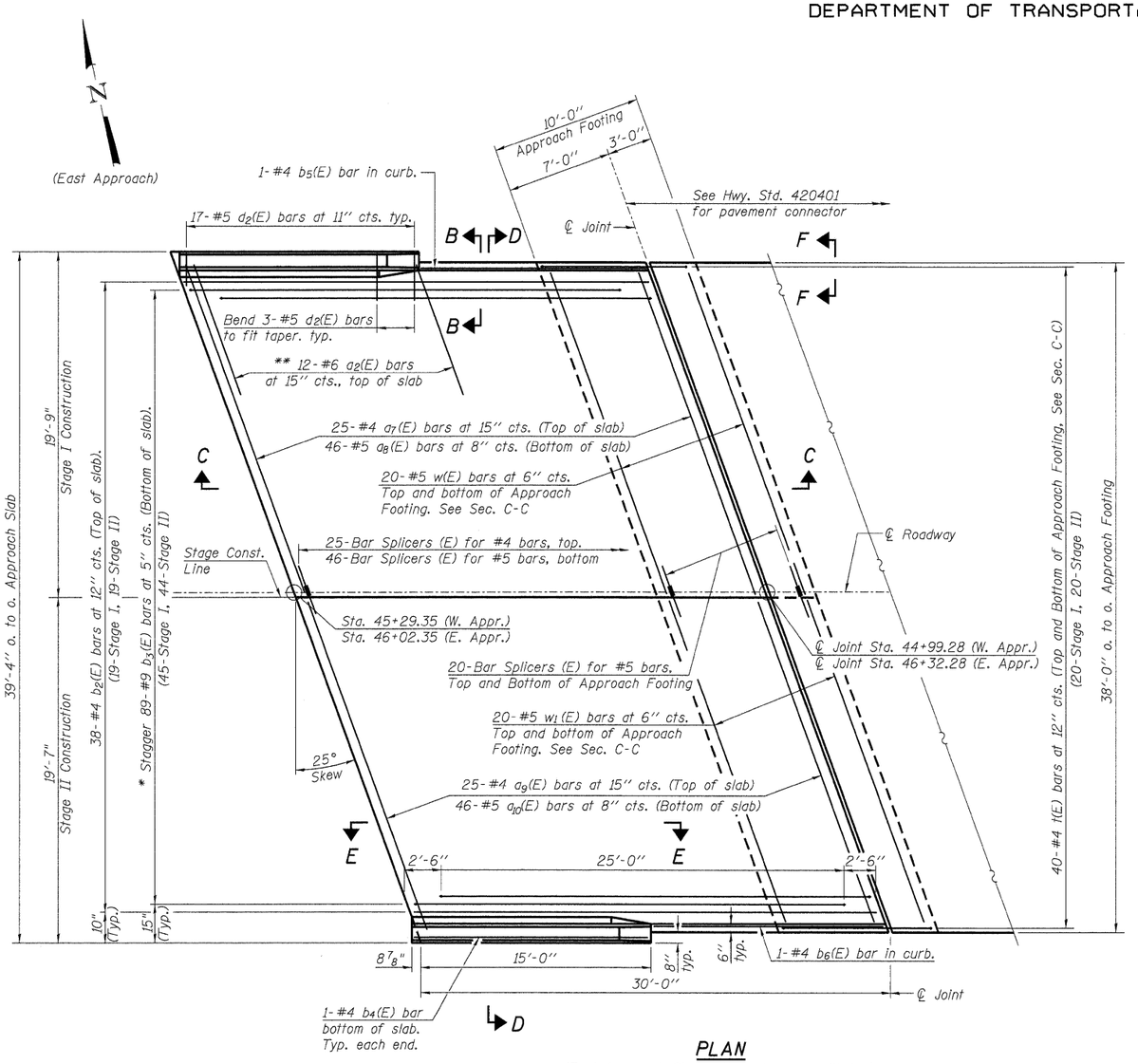
Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 8
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	23
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
See sheet 10 of 17 for Sections C-C & D-D and View E-E.
$a_7(E)$, $a_8(E)$, $a_9(E)$, $a_{10}(E)$, bar spacings measured parallel to Stage Construction Line.

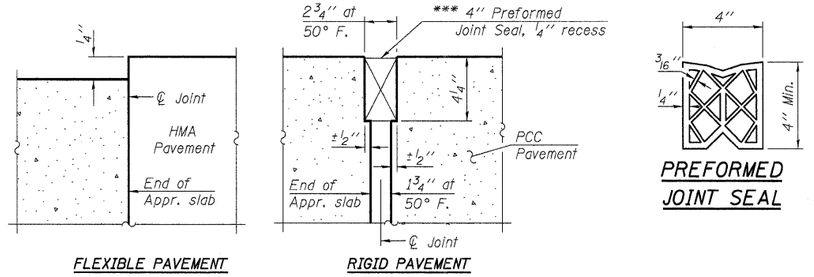


PLAN

(East Approach Shown, West Approach Similar)

* Tilt #9 $b_3(E)$ bars as required to maintain clearance.
** Alternate with $a_7(E)$ and $a_9(E)$ bars, typ. each parapet.

*** Cost included with Concrete Superstructure.

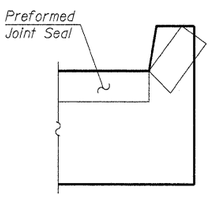


FLEXIBLE PAVEMENT

RIGID PAVEMENT

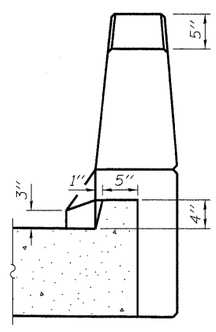
PREFORMED JOINT SEAL

DETAIL A



VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



VIEW B-B

BRIDGE APPROACH SLAB DETAILS-1
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

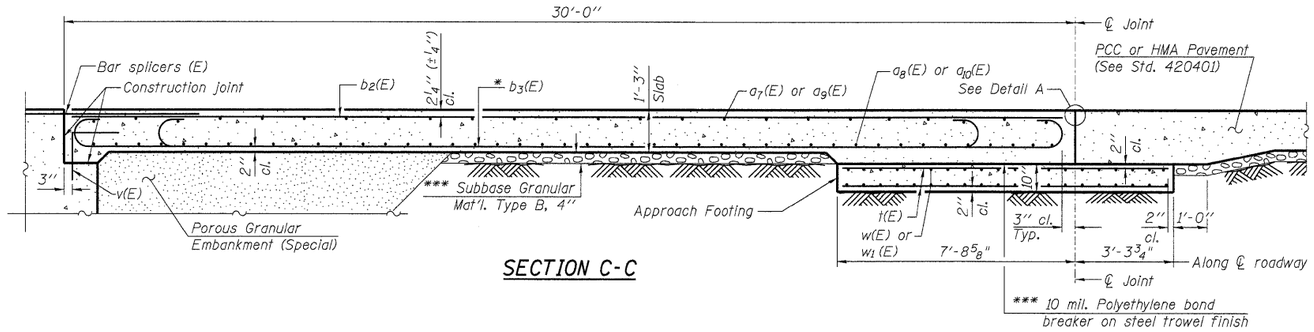
Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 9
17 SHEETS

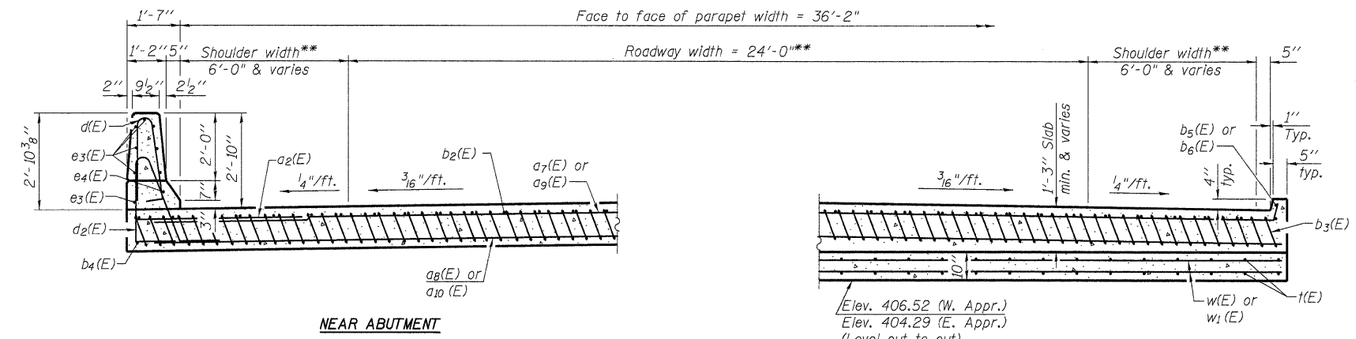
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	24
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
See sheet 9 of 17 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 8 of 17.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 15 of 17.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 17.



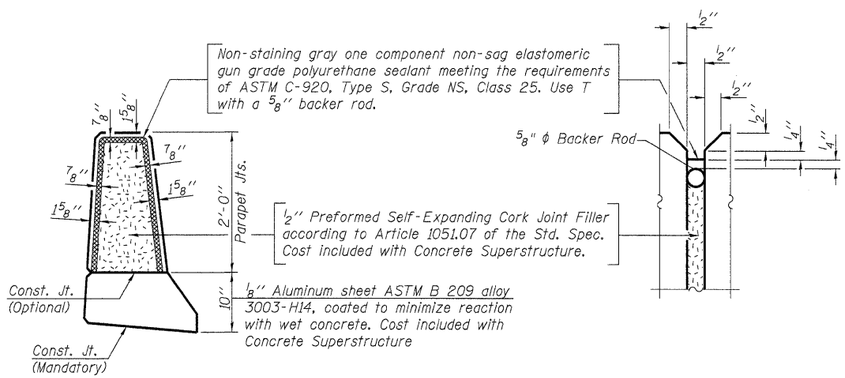
SECTION C-C



NEAR ABUTMENT

SECTION D-D
(See Plan for dimensions not shown)

AT APPROACH FOOTING

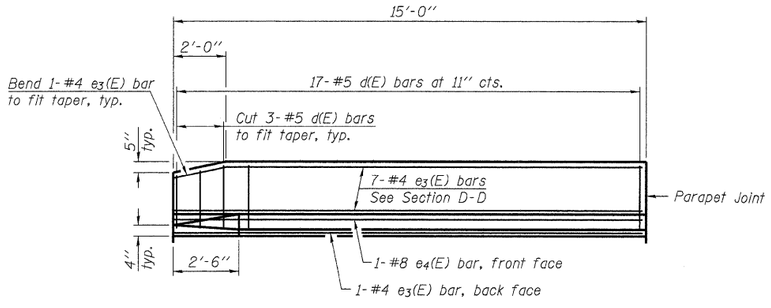


PARAPET JOINT DETAILS

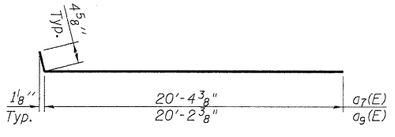
* Tilt #9 b3(E) bars as required to maintain clearance.
** Measured radially.
*** Cost included with Concrete Superstructure.

TWO APPROACHES
BILL OF MATERIAL

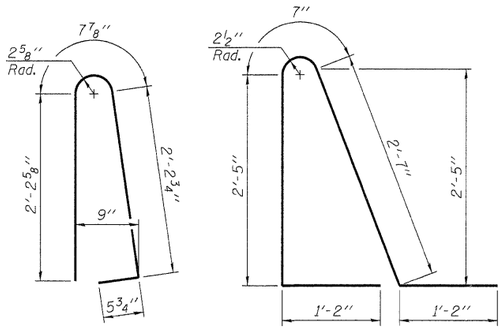
Bar	No.	Size	Length	Shape
a2(E)	48	#6	6'-0"	
a7(E)	50	#4	20'-9"	
a8(E)	92	#5	20'-9"	
a9(E)	50	#4	20'-7"	
a10(E)	92	#5	20'-7"	
b2(E)	76	#4	29'-7"	
b3(E)	178	#9	29'-9"	
b4(E)	4	#4	14'-8"	
b5(E)	2	#4	15'-1"	
b6(E)	2	#4	14'-2"	
d(E)	68	#5	5'-7"	
d2(E)	68	#5	7'-11"	
e3(E)	32	#4	14'-8"	
e4(E)	4	#8	14'-8"	
t(E)	160	#4	10'-8"	
w(E)	80	#5	20'-9"	
w1(E)	80	#5	20'-7"	
Concrete Superstructure		Cu. Yd.	116.6	
Concrete Structures		Cu. Yd.	23.4	
Reinforcement Bars, Epoxy Coated		Pound	31420	



VIEW E-E

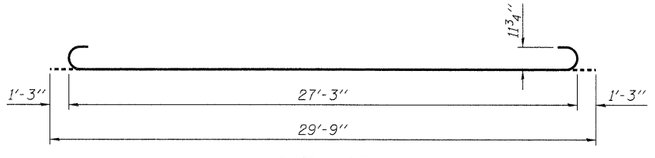


BARS a7(E) and a9(E)



BAR d(E)

BAR d2(E)



BAR b3(E)

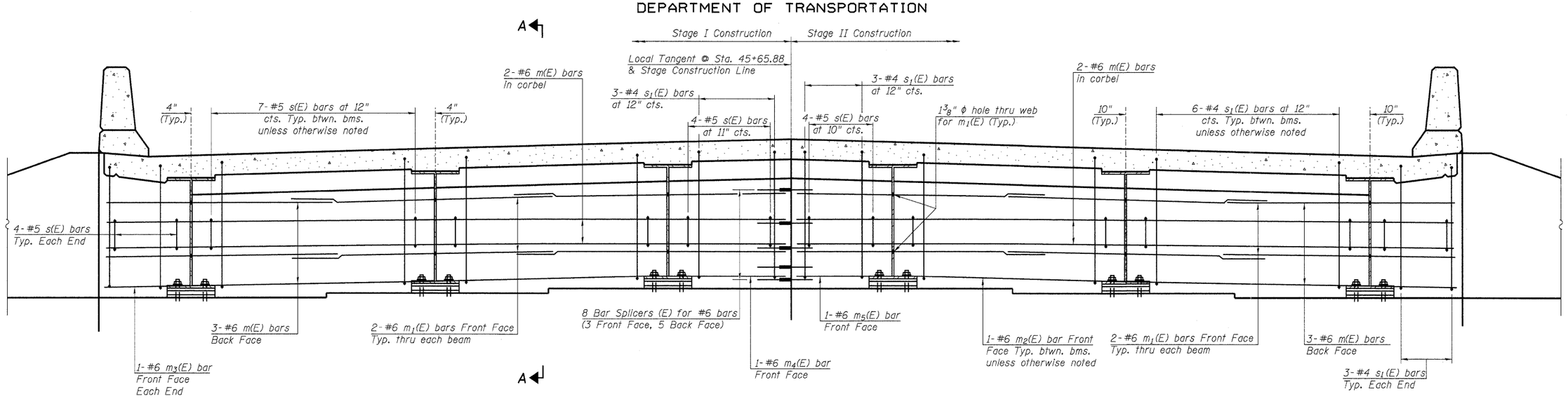
BRIDGE APPROACH SLAB DETAILS-2
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 10
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	25
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



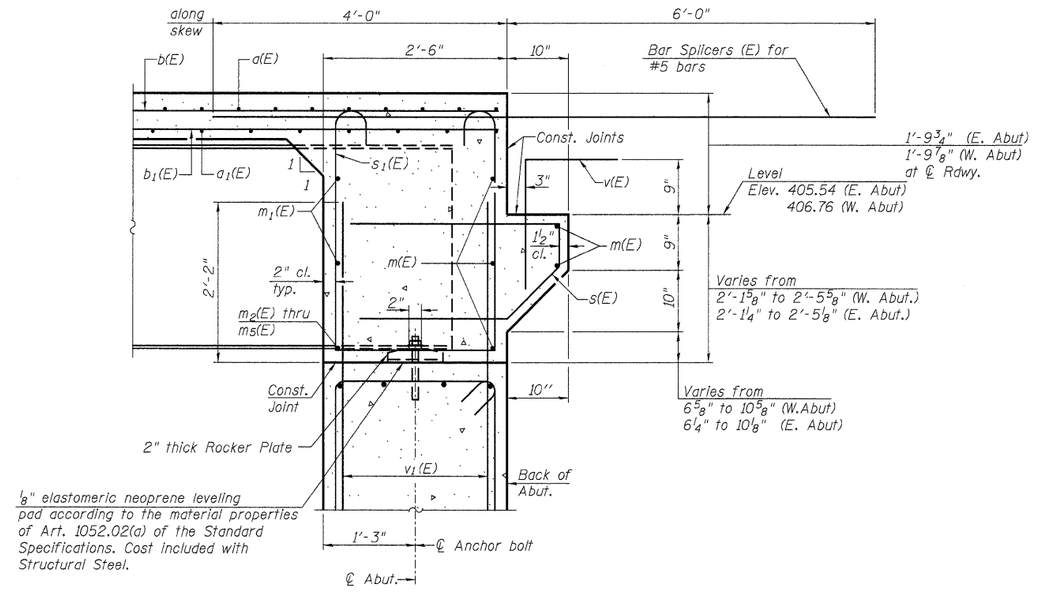
DIAPHRAGM ELEVATION AT EAST ABUTMENT

(Looking East)
(All horizontal dimensions at right angles to Local Tangent)
(West Abutment mirrored about Local Tangent)

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 17.
Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 17.
For details of bars s(E) & s_1(E) see sheet 8 of 17.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
For location of holes thru web, see sheet 12 of 17.

MIN. BAR LAP

#6 bar = 2'-9"



SECTION A-A

(Dimensions at right angles to abutment, except as shown.)

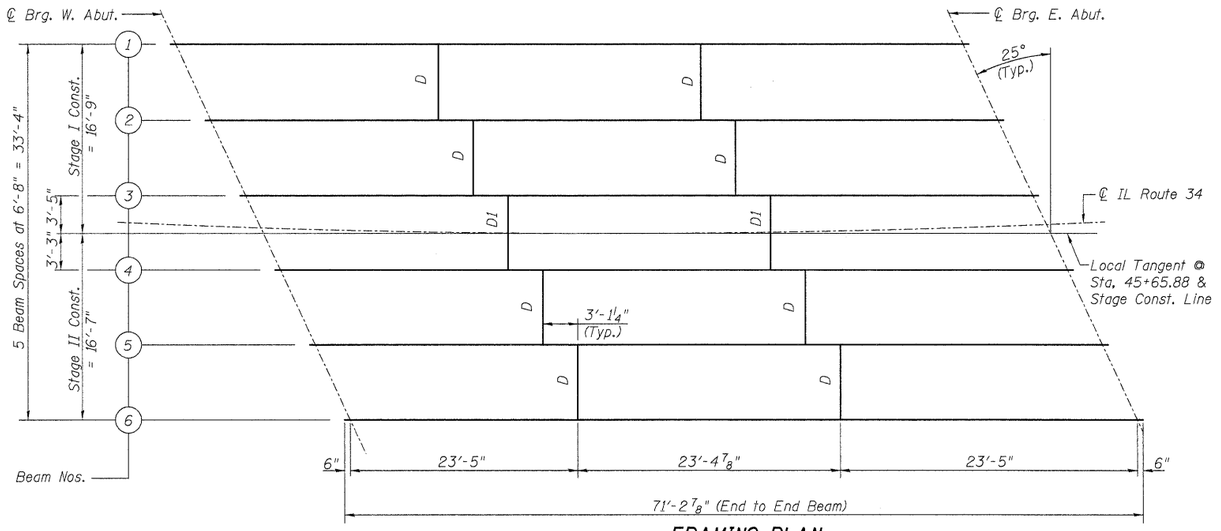
CONCRETE END DIAPHRAGMS
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 11
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	26
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

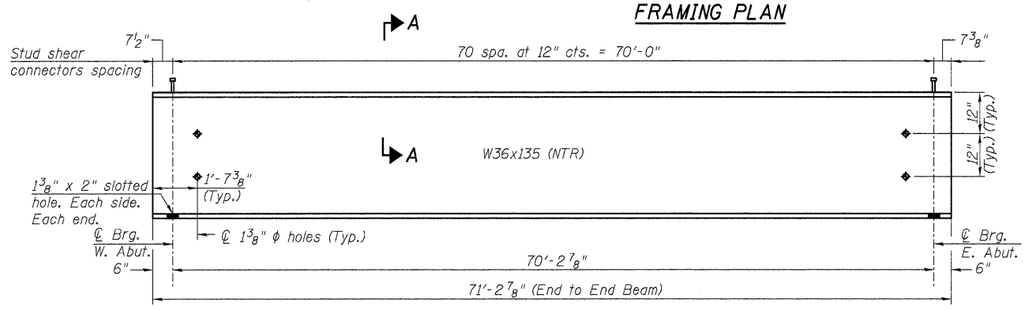


FRAMING PLAN

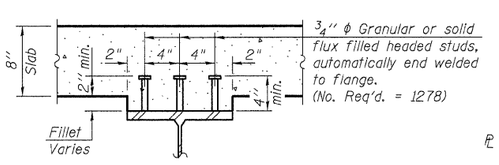
INTERIOR BEAM MOMENT TABLE		0.5 Span
I_s	(in^4)	7800
$I_c(n)$	(in^4)	22577
$I_c(3n)$	(in^4)	16433
S_s	(in^3)	439
$S_c(n)$	(in^3)	681
$S_c(3n)$	(in^3)	611
DC1	(k/')	0.837
M_{DC1}	('k)	516
DC2	(k/')	0.150
M_{DC2}	('k)	93
DW	(k/')	0.301
M_{DW}	('k)	186
M_{L+IM}	('k)	1005
M_u (Strength I)	('k)	2799
$\phi_f M_n$	('k)	3509
f_s DC1	(ksi)	14.10
f_s DC2	(ksi)	1.83
f_s DW	(ksi)	3.65
f_s 1.3(L+IM)	(ksi)	23.02
f_s (Service II)	(ksi)	42.60
V_f	(k)	25.45

INTERIOR BEAM REACTION TABLE		Abut.
R_{DC1}	(k)	30.2
R_{DC2}	(k)	5.3
R_{DW}	(k)	10.6
R_{L+IM}	(k)	82.9
R_{Total}	(k)	129.0

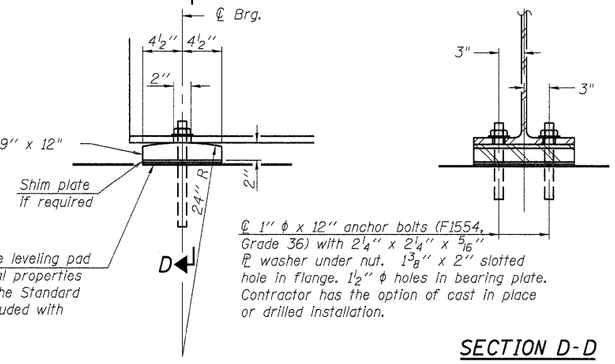
I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.^{4} and in.^{3}).
$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in.^{4} and in.^{3}).
$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).
DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
M_u (Strength I): Factored design moment (kip-ft.). $1.25\,(M_{DC1} + M_{DC2}) + 1.5\,M_{DW} + 1.75\,M_{L+IM}$
$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
f_s (Service II): Sum of stresses as computed from the moments below (ksi). $M_{DC1} + M_{DC2} + M_{DW} + 1.3\,M_{L+IM}$
V_f: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.



BEAM ELEVATION



SECTION A-A



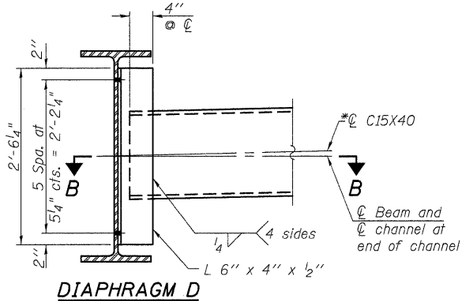
SECTION D-D

ELEVATION AT ABUTMENT

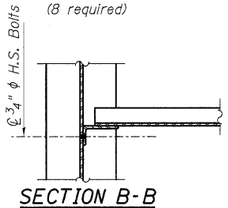
FIXED BEARING

TOP OF BEAM ELEVATIONS
(For Fabrication Only)

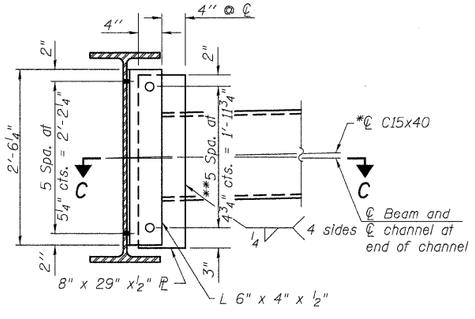
Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
℄ Brg. W. Abut.	407.69	407.76	407.81	407.76	407.61	407.43
℄ Brg. E. Abut.	406.50	406.58	406.63	406.58	406.43	406.25



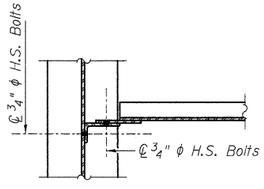
DIAPHRAGM D
(8 required)



SECTION B-B



DIAPHRAGM D1
(2 required)



SECTION C-C

Notes:
¾" ϕ H.S. Bolts 15/16" ϕ Holes, unless otherwise noted. Two hardened washers required for each set of oversized holes and 5/16" plate washer over slotted holes.
*C15x50 is permitted to facilitate material acquisition. Calculated weight of structural steel is based on C15x40. The alternate, if utilized, shall be provided at no additional cost to the Department.
** ¾" ϕ HS bolts, 13/16" x 1⅞" vertical slotted holes in 8" x 29" x ½" plate and L 6" x 4" x ½". Slots shall be positioned such that the bolts start at one end with no concrete load and finish near the opposite end after the deck pour. Bolts in slotted holes shall be finger tightened and then fully tightened after second stage deck pour.

NOTES:

1. All beams shall be W36x135 AASHTO M270 Grade 50 (NTR). All bearing plates shall be AASHTO M270 Grade 50.
2. All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.
3. Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
4. Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
5. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

SHIM PLATES

	Beam 3
West Abut.	5/8"
East Abut.	5/8"

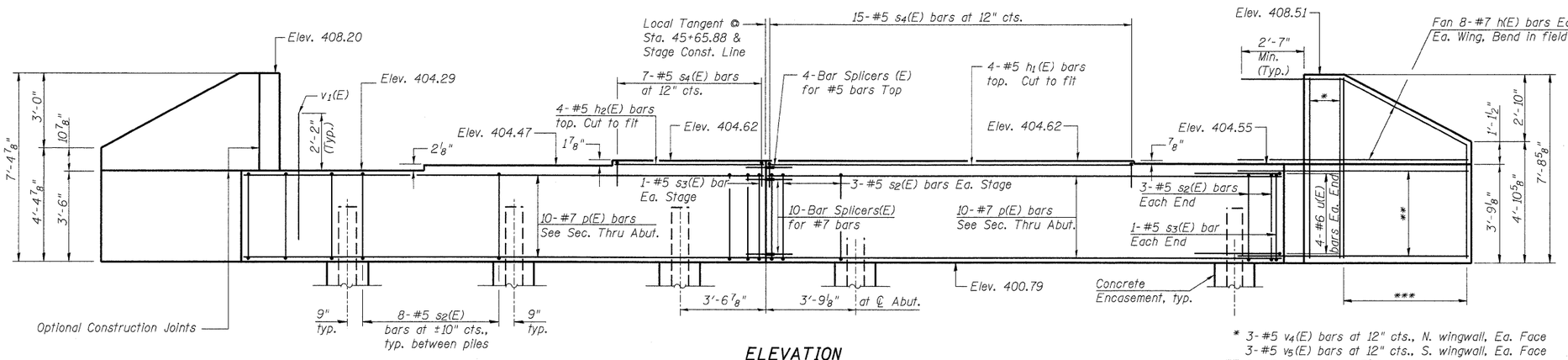
FRAMING PLAN & STEEL DETAILS
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 12
17 SHEETS

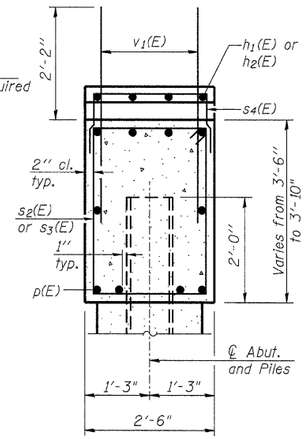
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	27
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

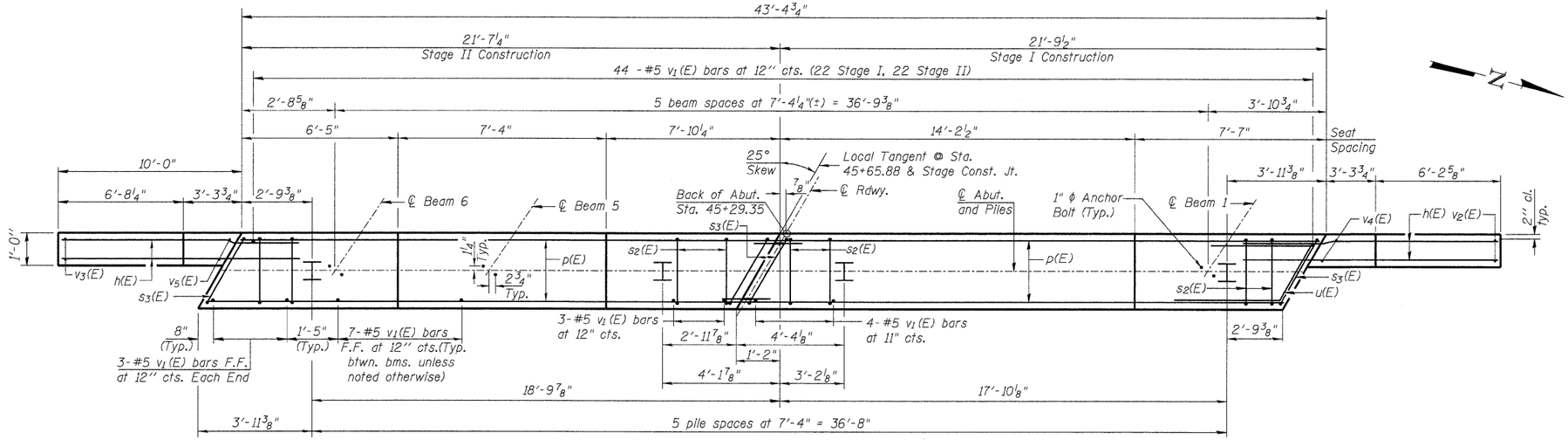


* 3-#5 v_4(E) bars at 12" cts., N. wingwall, Ea. Face
3-#5 v_5(E) bars at 12" cts., S. wingwall, Ea. Face
** 8-#7 h(E) bars at 5½" cts., N. wingwall, Ea. Face
7-#7 h(E) bars at 5½" cts., S. wingwall, Ea. Face
*** 7-#5 v_2(E) bars at 12" cts., N. wingwall, Ea. Face
7-#5 v_3(E) bars at 12" cts., S. wingwall, Ea. Face
(See Field Cutting Diagram)

ELEVATION
(Looking West)



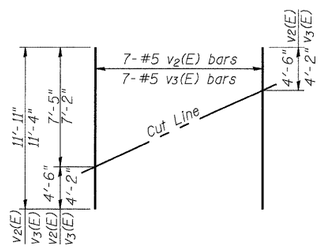
SEC. THRU ABUT.
(Dimensions at Rt. L's)



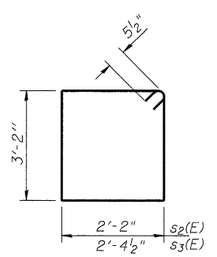
PLAN

BILL OF MATERIAL

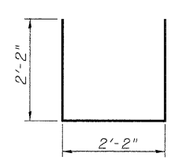
Bar	No.	Size	Length	Shape
h(E)	62	#7	12'-6"	—
h_1(E)	4	#5	15'-1"	—
h_2(E)	4	#5	7'-7"	—
p(E)	20	#7	21'-5"	—
s_2(E)	44	#5	11'-7"	⌐
s_3(E)	4	#5	12'-0"	⌐
s_4(E)	22	#5	6'-6"	⌐
u(E)	8	#6	8'-1"	⌐
v_1(E)	85	#5	4'-4"	—
v_2(E)	7	#5	11'-11"	—
v_3(E)	7	#5	11'-4"	—
v_4(E)	6	#5	7'-5"	—
v_5(E)	6	#5	7'-1"	—
Structure Excavation		Cu. Yd.	124.5	
Concrete Structures		Cu. Yd.	20.0	
Reinforcement Bars, Epoxy Coated		Pound	4030	
Furnishing Steel Piles HP 12x63		Foot	190	
Test Pile, Steel HP 12x63		Each	1	
Driving Piles		Foot	190	
Concrete Encasement		Cu. Yd.	2.1	
Anchor bolts, 1"		Each	12	



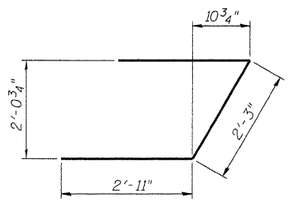
FIELD CUTTING DIAGRAM
Order v_2(E) and v_3(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s_2(E) & s_3(E)



BAR s_4(E)



BAR u(E)

Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss Anchor Bolts.

PILE DATA
Type: Steel HP12x63
Nominal Required Bearing: 497 kips
Factored Resistance Available: 249 kips
Est. Length: 38'
No. Production Piles: 5
No. Test Piles: 1

For details of Bar Splicers, see sheet 15 of 17.
For details of piles and Concrete Encasement, see sheet 16 of 17.
For details of Integral Abutment Bearing, see Sheet 12 of 17.
For drainage details, see Section Thru Abutment on sheet 2 of 17.

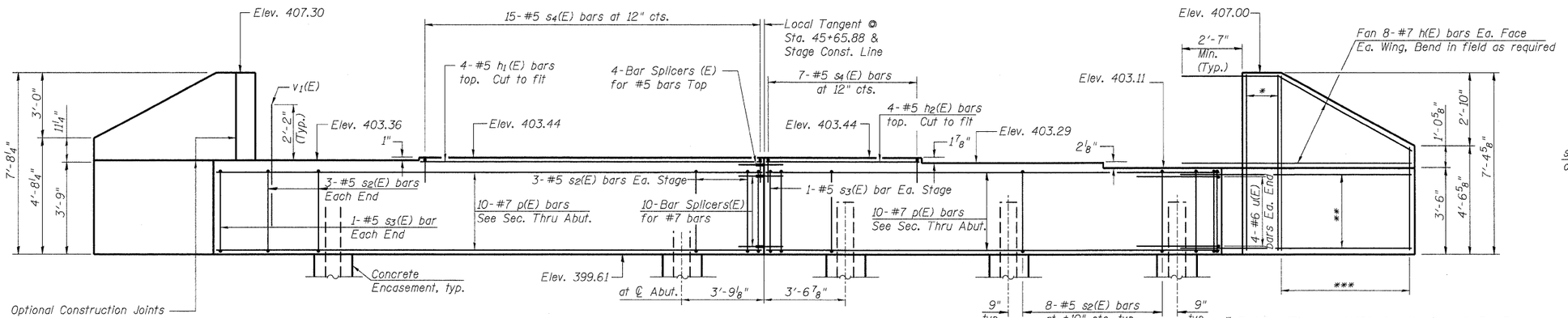
WEST ABUTMENT
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 13
17 SHEETS

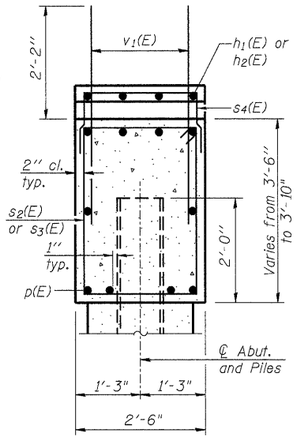
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	28
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

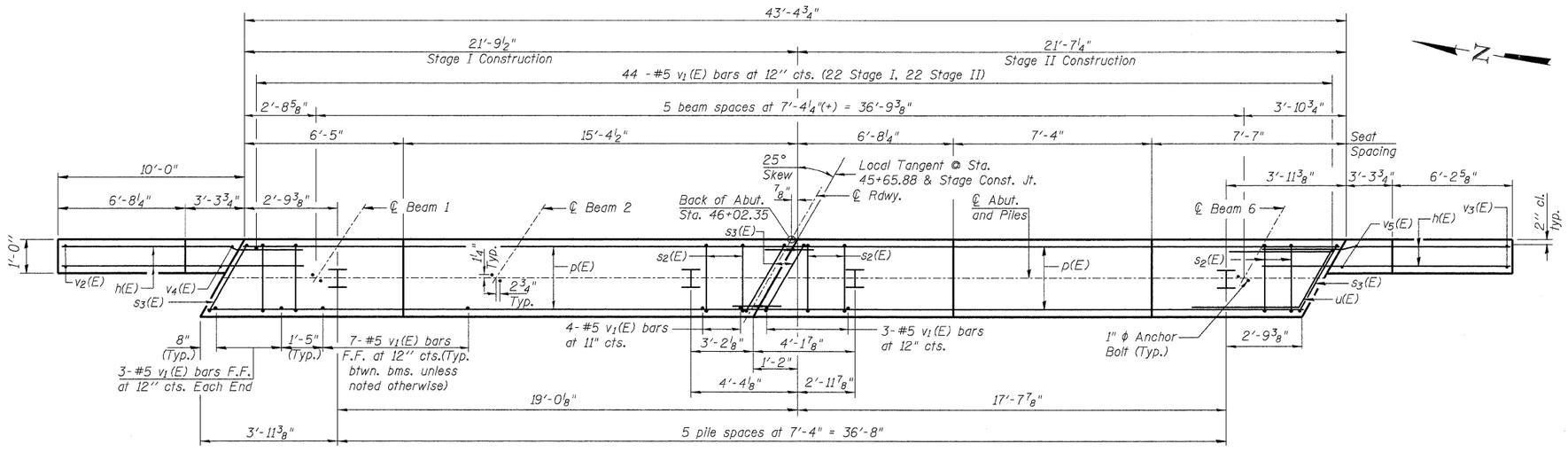


ELEVATION
(Looking East)

* 3-#5 v_4(E) bars at 12" cts., N. wingwall, Ea. Face
3-#5 v_5(E) bars at 12" cts., S. wingwall, Ea. Face
** 8-#7 h(E) bars at 5½" cts., N. wingwall, Ea. Face
7-#7 h(E) bars at 5½" cts., S. wingwall, Ea. Face
*** 7-#5 v_2(E) bars at 12" cts., N. wingwall, Ea. Face
7-#5 v_3(E) bars at 12" cts., S. wingwall, Ea. Face
(See Field Cutting Diagram)



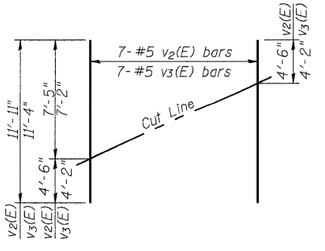
SEC. THRU ABUT.
(Dimensions at Rt. L's)



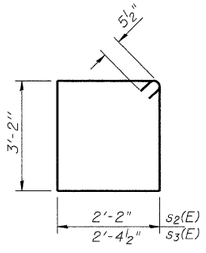
PLAN

BILL OF MATERIAL

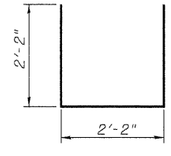
Bar	No.	Size	Length	Shape
h(E)	62	#7	12'-6"	
h_1(E)	4	#5	15'-1"	
h_2(E)	4	#5	7'-7"	
p(E)	20	#7	21'-5"	
s_2(E)	44	#5	11'-7"	
s_3(E)	4	#5	12'-0"	
s_4(E)	22	#5	6'-6"	
u(E)	8	#6	8'-1"	
v_1(E)	85	#5	4'-4"	
v_2(E)	7	#5	11'-11"	
v_3(E)	7	#5	11'-4"	
v_4(E)	6	#5	7'-5"	
v_5(E)	6	#5	7'-1"	
Structure Excavation		Cu. Yd.	124.5	
Concrete Structures		Cu. Yd.	20.0	
Reinforcement Bars, Epoxy Coated		Pound	4030	
Furnishing Steel Piles HP 12x63		Foot	195	
Test Pile, Steel HP 12x63		Each	1	
Driving Piles		Foot	195	
Concrete Encasement		Cu. Yd.	2.1	
Anchor bolts, 1"		Each	12	



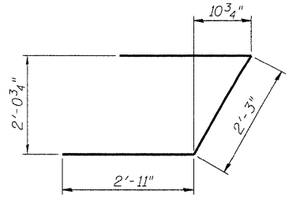
FIELD CUTTING DIAGRAM
Order v_2(E) and v_3(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s_2(E) & s_3(E)



BAR s_4(E)



BAR u(E)

Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss Anchor Bolts.

PILE DATA
Type: Steel HP 12x63
Nominal Required Bearing: 497 kips
Factored Resistance Available: 249 kips
Est. Length: 39'
No. Production Piles: 5
No. Test Piles: 1

For details of Bar Splicers, see sheet 15 of 17.
For details of piles and Concrete Encasement, see sheet 16 of 17.
For details of Integral Abutment Bearing, see Sheet 12 of 17.
For drainage details, see Section Thru Abutment on sheet 2 of 17.

EAST ABUTMENT
STRUCTURE NO. 028-0084

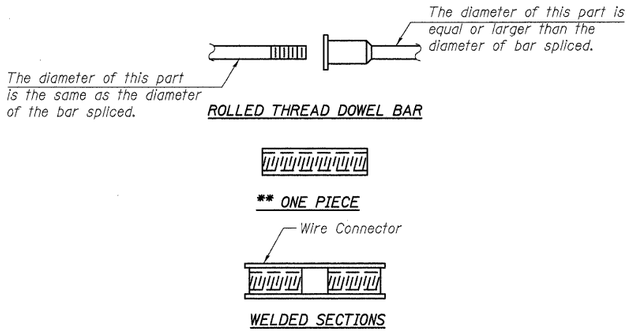
LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 14
17 SHEETS

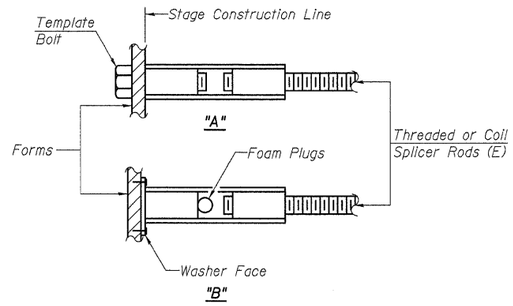
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	29
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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.

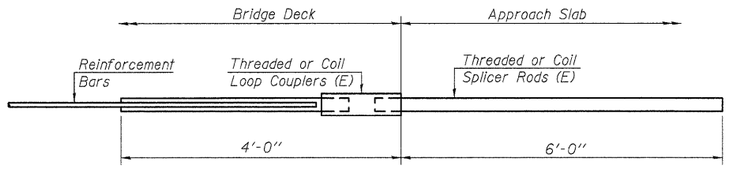
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times fy \times A_t$

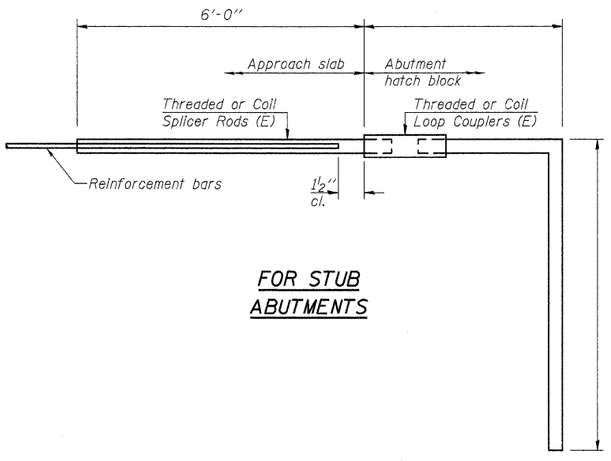
Where fy = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

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	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



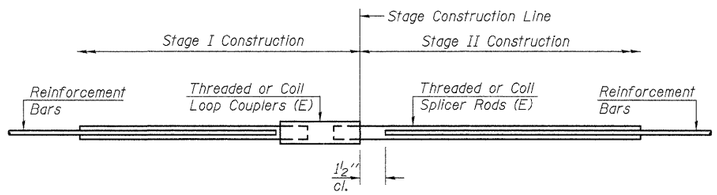
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 72



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



STANDARD

Bar Size	No. Assemblies Required	Location
#5	236	Deck Slab
#4	50	Approach Slab
#5	92	Approach Slab
#5	80	Approach Footing
#6	16	End Diaphragm
#5	8	Abutments
#7	20	Abutments

BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

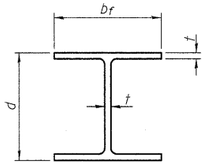
SHEET NO. 15
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	30
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BSD-1

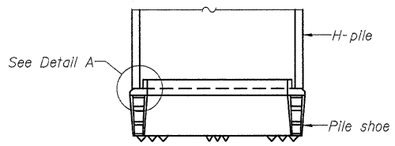
10-1-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

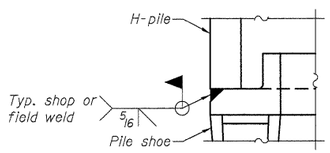


STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



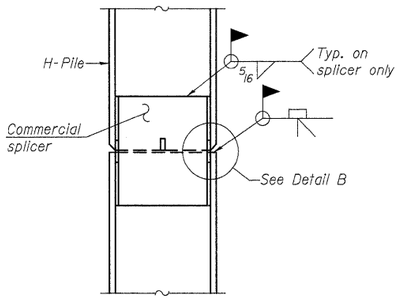
ELEVATION



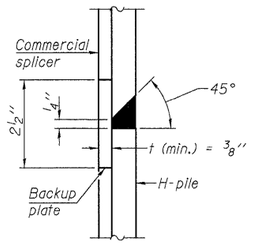
DETAIL A

H-PILE SHOE ATTACHMENT

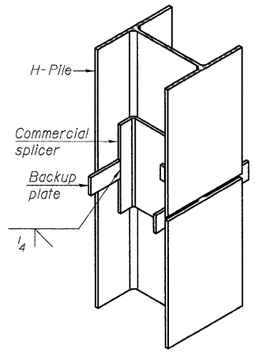
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

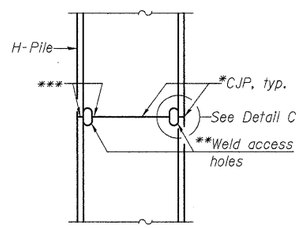


DETAIL "B"

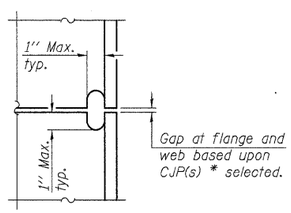


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



ELEVATION



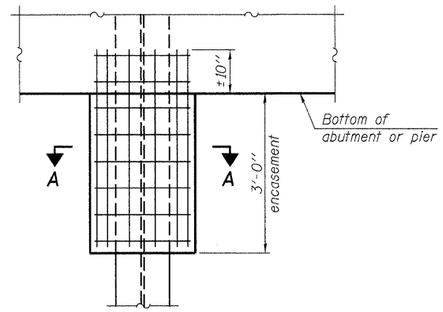
DETAIL C

COMPLETE PENETRATION WELD SPLICE

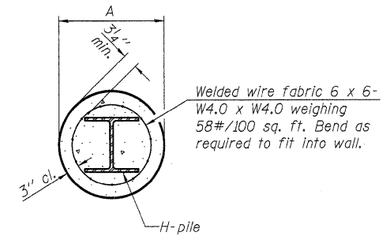
* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

*** Interrupt welds 1/4" from end of each pile.



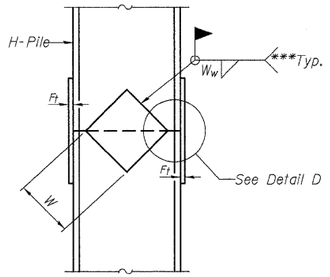
ELEVATION



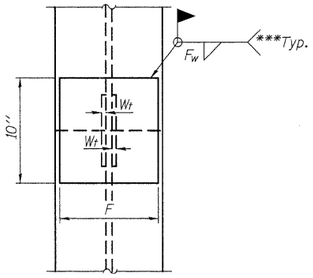
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

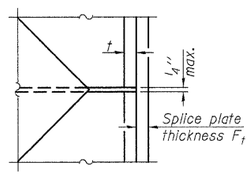
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

STEEL PILE DETAILS
STRUCTURE NO. 028-0084

F-HP 10-1-08

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

SHEET NO. 16
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	31
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation
Boring Log
Sheet 1 of 2

ILL 34 Over Stream East of Benton
Route: ILL 34 Structure Number: 028-0042 Date: 4/25/2006
Section Bored By: Bryan Keller
County: Franklin Location: 0.9 MI. E. Benton Checked By: Rob Graeff

Boring No 1-S
Station 46+05
Offset 27' LT CL
Ground Surface 404.9 Ft

Surf Wat Elev: 391.5
Ground Water Elevation
when Drilling 392.9
At Completion 388.1
At: 168 Hrs: 396.8

DEPTH	BLOWS	Qu tsf	W%	DEPTH	BLOWS	Qu tsf	W%
Stiff, moist, brown, Silty Clay A-6 with Coal Chips					4 8	0.8B	23
377.9							
	3			Very stiff, moist, brown, Silt Loam A-6 with a Sand Layer	3		
	4 3	1.1B	22		7 15	2.5B	16
375.4							
	WH			Stiff, moist, brown, Silt Loam A-6 with some Gravel	5		
	2 1	1.1B	21		7 9	1.2B	22
372.9							
Soft, very moist, brown, Silty Clay Loam A-6 with Coal Chips	1 2 2	0.4B	26	Hard, moist, grey, Silty Clay to Clay Loam A-6 with some Rotten Wood	3 7 8	4.4B	17
395.4				370.4			
Very soft, very moist, brown, Silty Clay Loam A-6	WH WH WH	0.2B	25	Very stiff, moist, grey, Clay Loam A-6	2 4 6	2.7S	16
392.9				367.4			
Medium, very moist, brown, Silty Clay A-6 with Sandy Gravel Layers	WH 1 3	0.6B	18	Hard, dry, weathered Clay Shale	7	86/12"	
	WH			Hard, dry, grey, Clay Shale	40.0	100/8"	
	2 4	0.7B	21	Bottom of hole = 50.0 ft			
387.9				Free water observed at 12.0 ft.			
Soft, very moist, brown, Silty Clay A7-6	1 2 4	0.4B	23	Elevation referenced to Center of Existing Structure Bk E. Abut Sta 45+86 Elev = 406.9 ft			
385.4							
Stiff, moist, brown, Silty Clay A-6	2 6 7	1.9S	19	To convert "N" values to "N60" values multiply by 1.25.	45.0		
382.9							
Medium, very moist, brown, Silty Clay A-6 with Sandy Gravel Layers	2 5 6	0.9S	24				
	2			Hard, dry, grey, Clay Shale	50.0	100/6"	

N-Std Pentr Test: 2" OD Sampler,140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation
Boring Log
Sheet 1 of 2

ILL 34 Over Stream East of Benton
Route: ILL 34 Structure Number: 028-0042 Date: 5/2/2006
Section Bored By: Bryan Keller
County: Franklin Location: 0.9 MI. E. Benton Checked By: Rob Graeff

Boring No 2-S
Station 45+28
Offset 28' LT CL
Ground Surface 407.2 Ft

Surf Wat Elev: 391.5
Ground Water Elevation
when Drilling 390.2
At Completion 378.6
At: Hrs:

DEPTH	BLOWS	Qu tsf	W%	DEPTH	BLOWS	Qu tsf	W%
Medium, very moist, brown, Silty Clay Loam A-6					14 17	3.7B	14
	1				2		
379.2	3 4	0.7B	20		3 16	3.7B	14
				Very stiff, moist, grey, Clay Loam A-6 with a Rotten Wood Layer 377.7			
	1			Hard, damp, grey, Clay Loam A-6	7		
	2 3	0.7S	22		16 16	6.4B	13
375.2							
	1			Hard, moist, grey, Clay Loam A-6	4 8 13	4.7B	14
	2 2	0.9S	22				
397.7				372.7			
Soft, very moist, brown, Silty Clay Loam A-6	WH 1 2	0.4B	25	Very stiff, moist, brown mottled grey, Silty Clay A-6	3 8 11	3.3B	14
395.2				370.2			
Medium, very moist, grey mottled brown, Silty Clay A7-6	WH 1 1	0.8B	21	Hard, dry, grey, weathered Clay Shale	9 33 55		
392.7				367.7			
Stiff, very moist, grey mottled brown, Silty Clay A-6 with a Sandy Gravel Layer	WH 3 4	1.1B	17	Hard, dry, grey, Clay Shale	10	100/11"	
390.2				366.7			
Medium, very moist to wet, brown, Silt Loam A-6 with Sandy Gravel Layers	2 4 4	0.7B	23	Bottom of hole = 40.5 ft Free water observed at 17.0 ft. Elevation referenced to Center of Existing Structure Bk E. Abut Sta 45+86 Elev = 406.9 ft			
387.7							
Very stiff, moist, brown, Silty Clay A-6	4 8 13	3.7B	17	To convert "N" values to "N60" values multiply by 1.25.			
385.2							
Very stiff, moist, grey, Silty Clay A-6 with Coal Chips and Pea Gravel	3 7 9	2.6B	16				
	5						

N-Std Pentr Test: 2" OD Sampler,140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

Note:
Sheet 2 of 2 for borings 1-S and 2-S is not included because no relevant additional information concerning these borings is on Sheet 2.

SOIL BORINGS
STRUCTURE NO. 028-0084

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH | Checked By: MTH | Drawn By: TBP
Date: 2/2009 | File: 028-0084.dgn

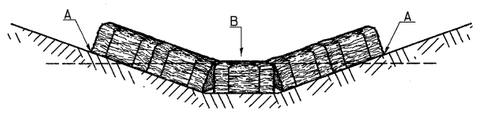
SHEET NO. 17
17 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	32
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

★ PG 33 NOT USED ★

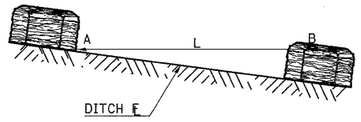
TEMPORARY DITCH CHECKS

PLACEMENT OF TEMPORARY STRAW BALE DITCH CHECK IN DRAINAGEWAY



POINTS A SHOULD BE HIGHER THAN POINT B

SPACING BETWEEN TEMPORARY DITCH CHECKS



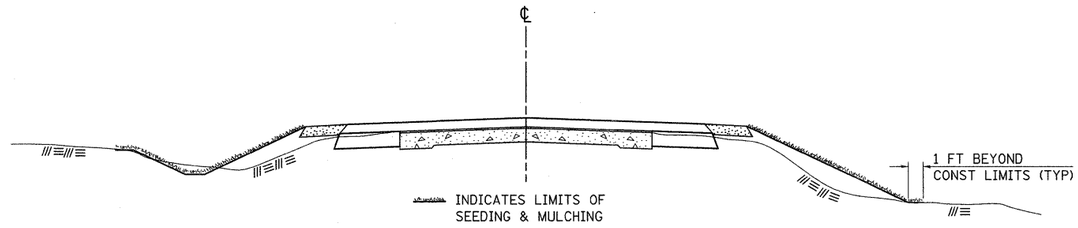
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

B = THE LOW POINT IN CENTER OF CHECK

REVISIONS	
DRAWN	9-01-99
REVISED	10-3-01
REVISED	
REVISED	

STD. 9-108

SEEDING & MULCHING



GENERAL NOTES

IN GENERAL, ALL EARTH SURFACES DISTURBED DURING CONSTRUCTION OPERATIONS SHALL BE SEEDED AND MULCHED UPON COMPLETION OF ALL GRADING OPERATIONS.

FERTILIZER NUTRIENTS AND LIMESTONE SHALL BE APPLIED TO ALL SEEDED AREAS.

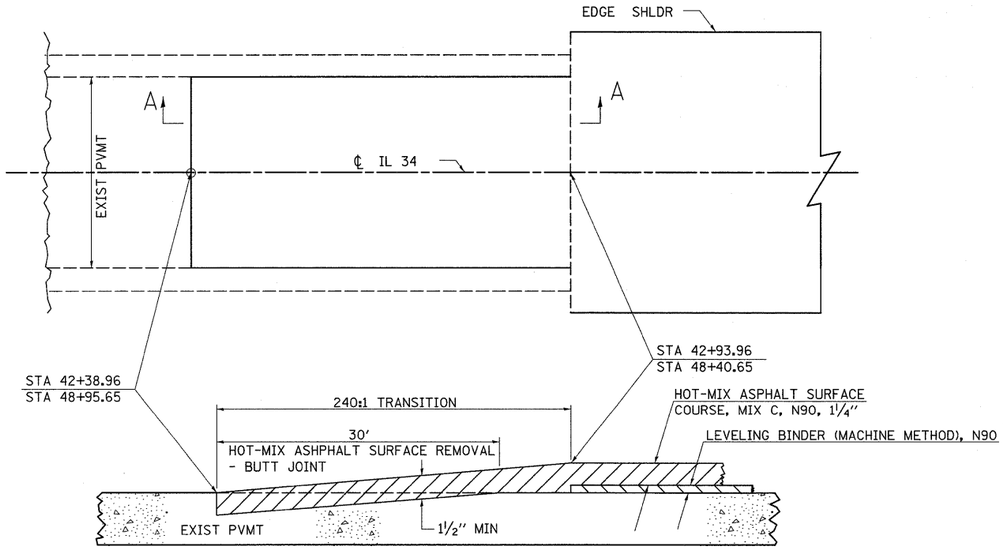
THE RATES OF APPLICATION OF FERTILIZER, MULCH AND LIMESTONE SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

SECTIONS 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK EXCEPT AS SPECIFIED HEREIN OR AS NOTED IN THE SPECIAL PROVISIONS.

REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
REVISED	6-3-99
REVISED	

STD. 9-12

BUTT JOINT

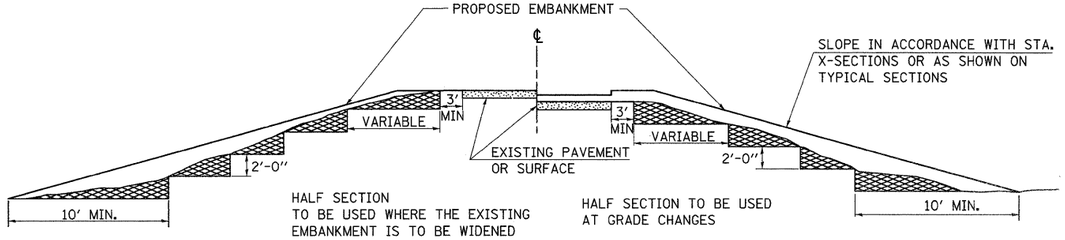


SECTION A-A

REVISIONS	
DRAWN	10-17-90
REVISED	
REVISED	
REVISED	

STD. 9-86

TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL



MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04 OF THE STANDARD SPECIFICATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
CHECKED	6-3-99
REVISED	

STD. 9-16

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

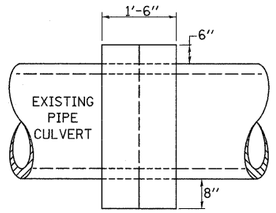
DETAILS
IL 34 OVER UNNAMED STREAM

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

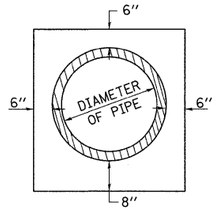
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	34
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DETAILS OF CONCRETE COLLAR

PIPE TO PIPE



SIDE VIEW



END VIEW

TABULATION

DIAMETER OF PIPE	CL SI CONC CU YDS EST
12"	0.24
15"	0.29
18"	0.32
24"	0.44
30"	0.56
36"	0.66
42"	0.80
48"	0.93
54"	1.07
60"	1.22
72"	1.55

THE CONCRETE COLLAR SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR **CONCRETE COLLAR,** AS SHOWN ON THE PLANS, WHICH PRICE SHALL INCLUDE THE REMOVAL OF SUCH PORTIONS THE EXISTING HEADWALLS AS MAY BE REQUIRED.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

REVISIONS	
DRAWN	7-13-90
REVISED	8-22-94
REVISED	3-26-08
REVISED	

STD. 9-79

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

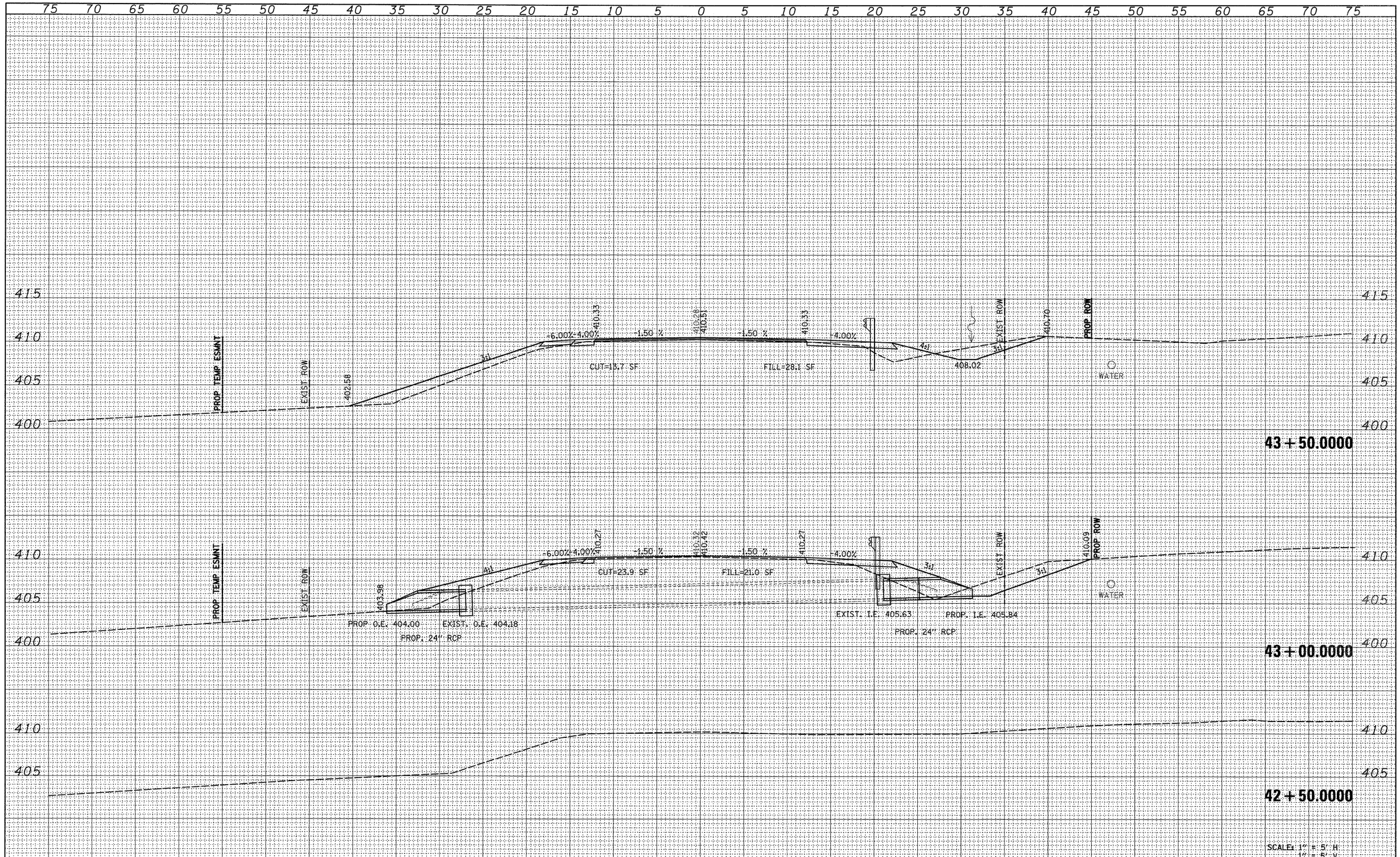
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS
IL 34 OVER UNNAMED STREAM

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	35
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

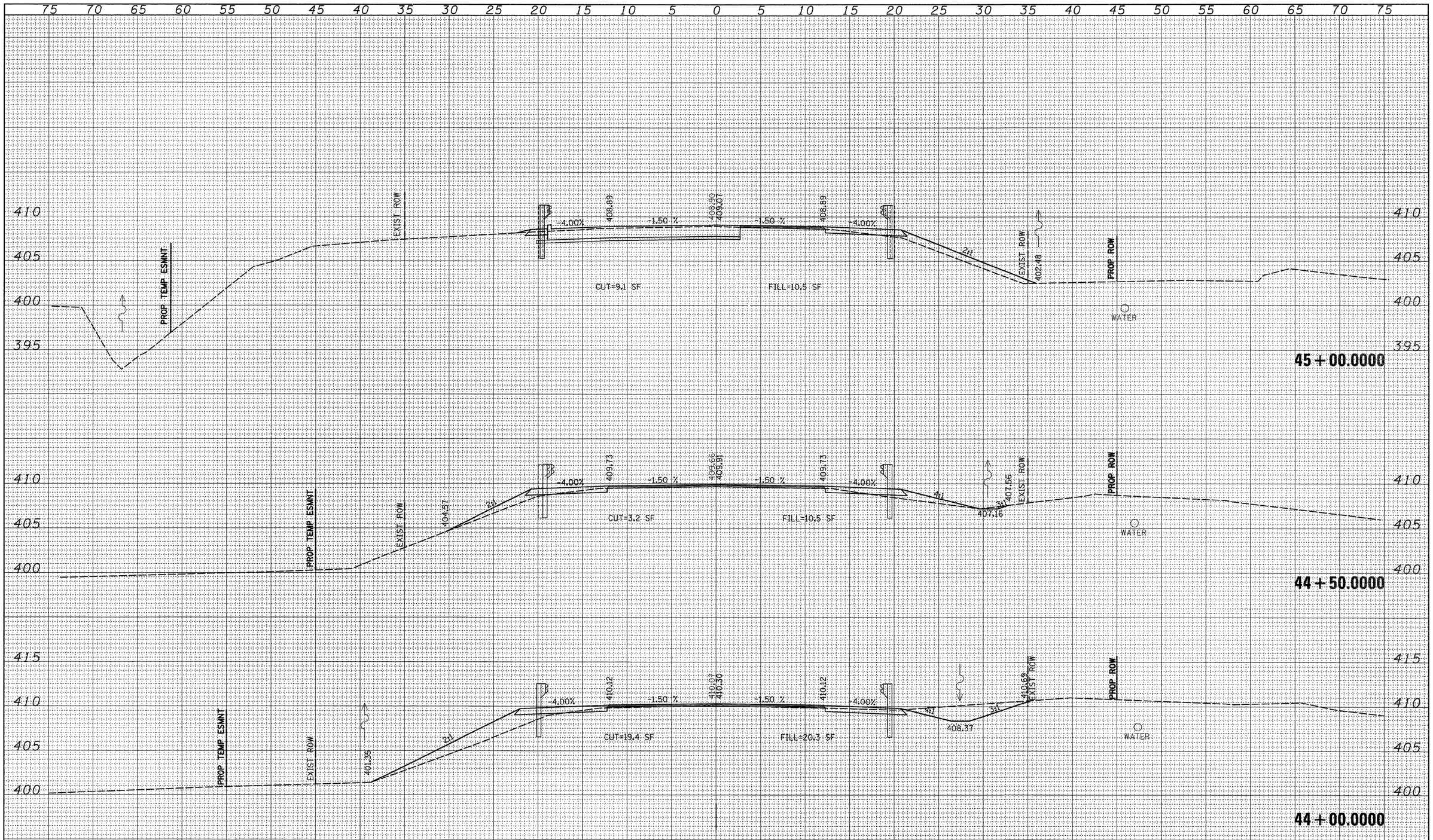
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. 42+50.0000 TO STA. 43+50.0000

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	36
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

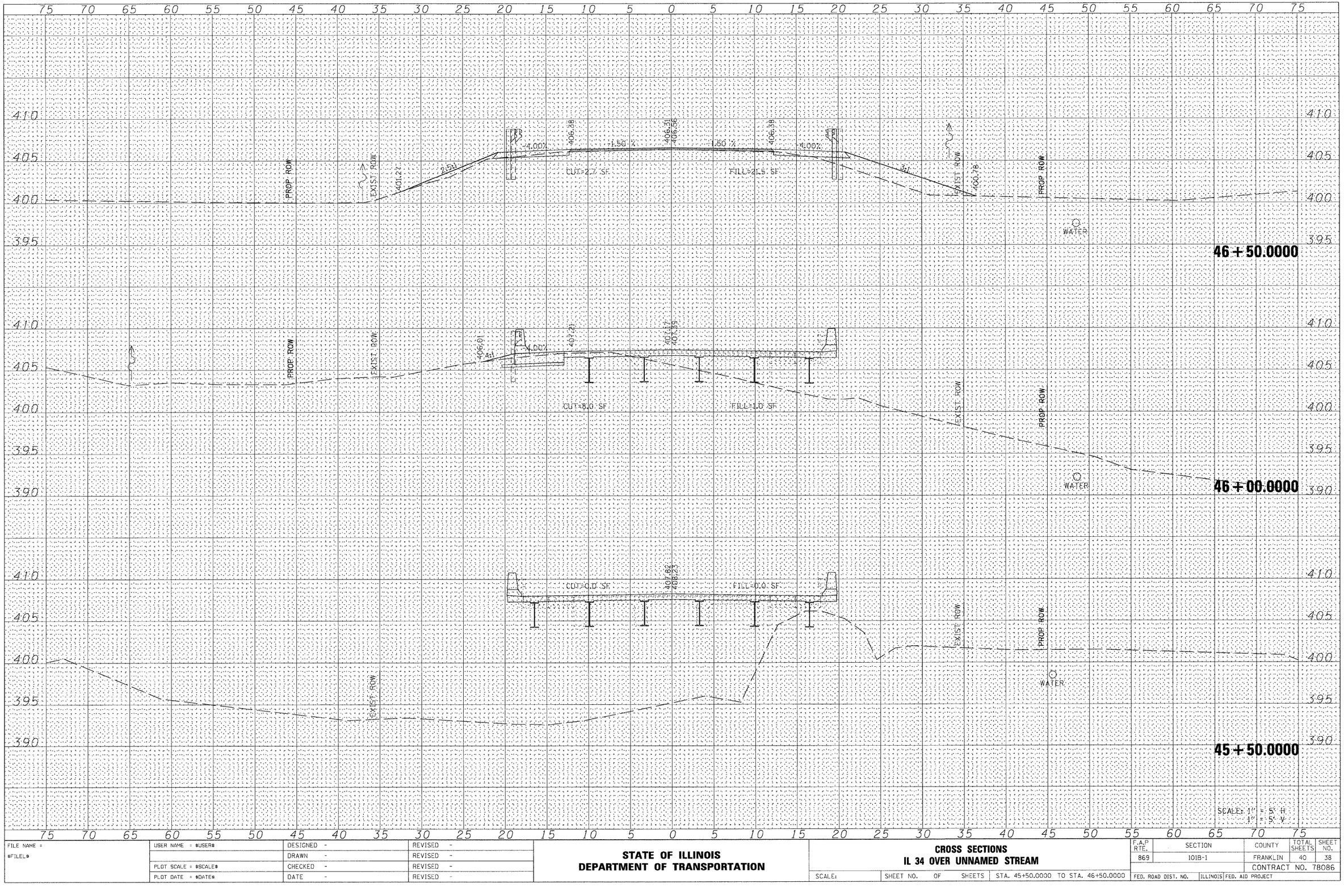
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. 44+00.0000 TO STA. 45+00.0000

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	37
		CONTRACT NO. 78086		
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	

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. 45+50.0000 TO STA. 46+50.0000

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	38
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

405 400 395

PROP. ROW

EXIST. ROW 399.51

3:1

4.00%

403.95

1.50 %

403.30 404.13

1.50 %

403.95

4.00%

6.00%

3:1

400.06 EXIST. ROW

PROP. ROW

CUT=1.4 SF

FILL=30.9 SF

WATER

48 + 00.0000

PROP. ROW

EXIST. ROW 399.70

3:1

4.00%

404.76

1.50 %

404.65 404.88

1.50 %

404.76

4.00%

3:1

400.19 EXIST. ROW

PROP. ROW

CUT=1.6 SF

FILL=42.2 SF

WATER

47 + 50.0000

PROP. ROW

EXIST. ROW 400.00

2.5:1

4.00%

405.54

1.50 %

405.41 405.72

1.50 %

405.54

4.00%

3:1

400.43 EXIST. ROW

PROP. ROW

CUT=1.5 SF

FILL=40.5 SF

WATER

47 + 00.0000

SCALE: 1" = 5' H
1" = 5' V

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

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

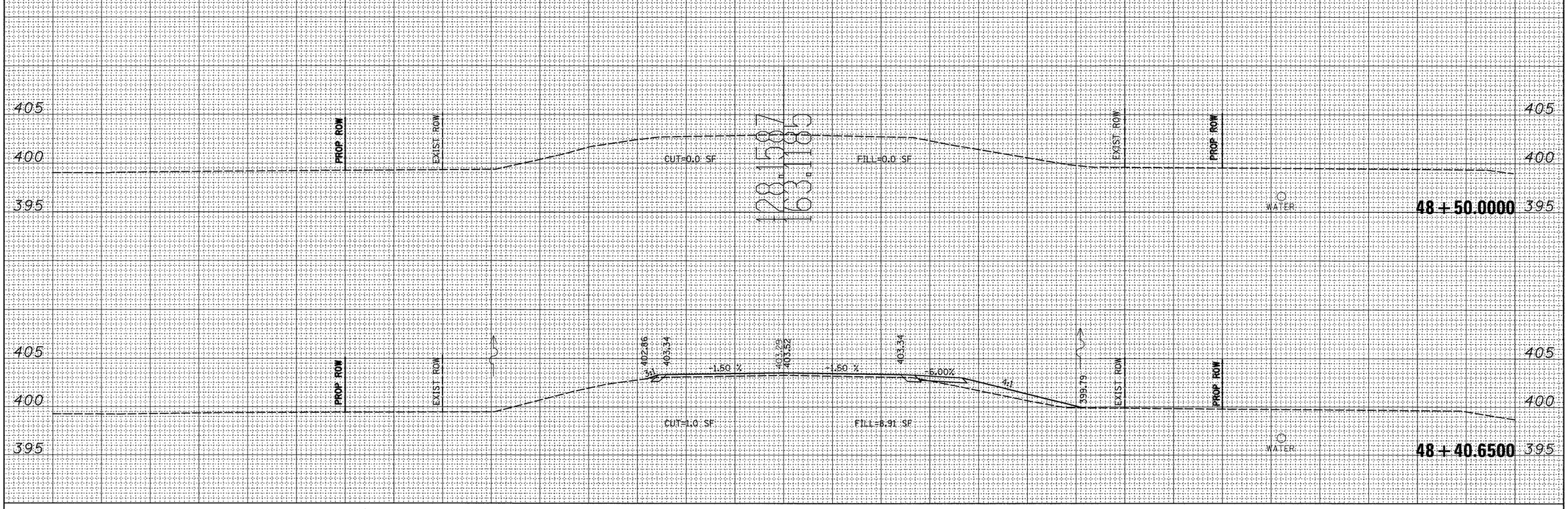
CROSS SECTIONS
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. 47+00.0000 TO STA. 48+50.0000

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	39
		CONTRACT NO. 78086		
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		



FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 34 OVER UNNAMED STREAM

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	101B-1	FRANKLIN	40	40
		CONTRACT NO. 78086		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		