03-09-2018 LETTING ITEM 006

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	1
	ILLINOIS	CONTRACT NO. 60X51		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAP 334: (US ROUTE 12) OVER IL ROUTE 59 (SB)
SECTION: 106–2HB–B
BRIDGE REPLACEMENT
PROJECT: NHPP–70E2 (038)
LAKE COUNTY
C–91–116–14

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

TRAFFIC DATA

ADT 2013: US ROUTE 12 – 9,900 CARS: 95% TRUCKS: 5%
IL ROUTE 59 – 11,300 CARS: 97% TRUCKS: 3%

ADT 2032: US ROUTE 12 – 11,019 CARS: 95% TRUCKS: 5%
IL ROUTE 59 – 12,577 CARS: 97% TRUCKS: 3%

SPEED LIMIT:
US ROUTE 12 – 50 MPH
IL ROUTE 59 – 45 MPH

CLASSIFICATION:
US ROUTE 12 – STRATEGIC REGIONAL ARTERIAL
IL ROUTE 59 – OTHER PRINCIPAL ARTERIAL

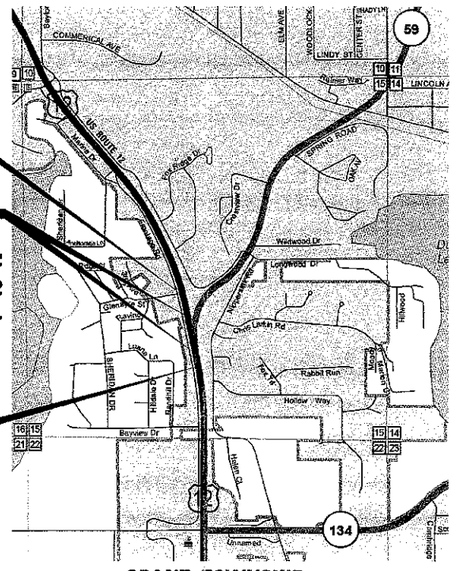
PROJECT LOCATED IN THE VILLAGE OF FOX LAKE

END IMPROVEMENTS
STA. 114 + 14.74

BRIDGE REPLACEMENT
PROPOSED SINGLE SPAN – STEEL PLATE GIRDER BRIDGE ON SEMI–INTEGRAL ABUTMENTS
125'–1" BK–BK ABUTMENTS
45'–8" O. TO O. DECK WIDTH
45 SKEW
EXIST. SN 049–0020
PROP. SN 049–0601
STA. 105 + 79.40

BEGIN IMPROVEMENTS
STA. 100 + 56.44

R 9 E



GRANT TOWNSHIP

LOCATION MAP
(NOT TO SCALE)

GROSS LENGTH = 1359 FT. = 0.257 MILE
NET LENGTH = 1359 FT. = 0.257 MILE

100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

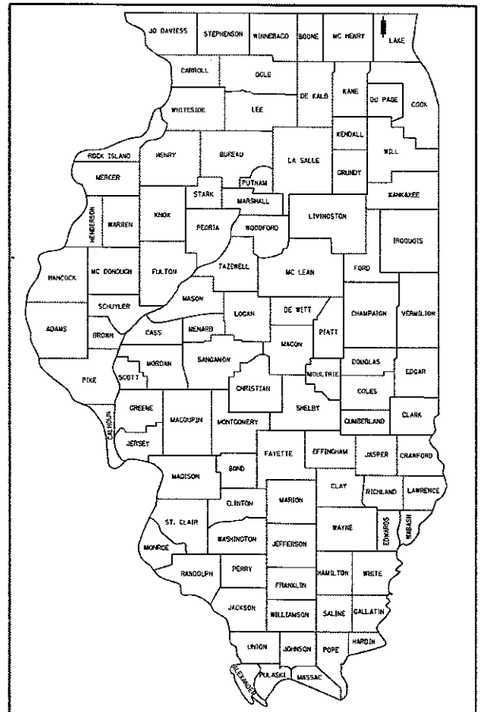
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
1–800–892–0123
OR 811

PROJECT MANAGER: LONG TRAN (847) 705–4232
PROJECT ENGINEER: CRAIG BAUER (847) 705–4265

CONTRACT NO. 60X51

D–91–116–14



LOCATION OF SECTION INDICATED THUS: –

NABI FAKRODDIN
OBI-03377
ST CHARLES
STATE OF ILLINOIS
LICENSED STRUCTURAL ENGINEER

NABI R. FAKRODDIN, SE DATE: 12-1-17
EXPIRES 11–30–18
SHEETS 47–80

MICHAEL A. MAY
062-059494
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

MICHAEL MAY, PE DATE: 12-1-17
EXPIRES 11–30–18
SHEETS 1–27, 31–32 & 81–105

BRENDA D. LOWERY
062-065244
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

BRENDA LOWERY, PE DATE: 12-1-17
EXPIRES 11–30–19
SHEETS 38–46

GINA K. FUHRMANN
062-052331
REGISTERED PROFESSIONAL ENGINEER
SPRINGFIELD, IL

GINA FUHRMANN, PE DATE: 11/30/17
EXPIRES 11–30–19
SHEETS 28–30 & 33–37

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 12-4 20 17
REGIONAL ENGINEER
Feb 2 20 18
ENGINEER OF DESIGN AND ENVIRONMENT
Feb 2 20 18
DIRECTOR OF PROGRAM DEVELOPMENT

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: caddd@cemcon.com Website: www.cemcon.com

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GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

2. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 72 HOURS IN ADVANCE OF BEGINNING WORK.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

4. IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

5. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

6. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

7. THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW, WASTE, USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTORS RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION II.G.1 AND 2 OF THE SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

8. PIPE UNDERDRAINS SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD 601001-5. TOP OF PIPE OF UNDERDRAINS SHALL BE PLACED A MINIMUM 6" BELOW THE AGGREGATE SUBGRADE IMPROVEMENT LAYER. THE COST OF MAKING PIPE UNDERDRAIN CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PIPE UNDERDRAINS.

9. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, ARTERIAL TRAFFIC FIELD ENGINEER AT WALTER.CZARNY@ILLINOIS.GOV AT LEAST (2) WEEKS PRIOR TO PERMANENT PAVEMENT MARKING PLACEMENT.

LANDSCAPING

1. THE CONTRACTOR SHALL ERECT A TEMPORARY FENCE AROUND ALL TREES WITHIN THE CONSTRUCTION AREA TO ESTABLISH A "TREE PROTECTION ZONE" BEFORE ANY WORK BEGINS OR MATERIAL IS DELIVERED TO THE JOBSITE. NO WORK IS TO BE PERFORMED (OTHER THAN ROOT PRUNING), MATERIALS STORED OR VEHICLES DRIVEN OR PARKED WITHIN THE "TREE PROTECTION ZONE". REMOVE PROTECTIVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED.

2. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMSWHICH WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.

COMMITMENTS

NONE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
GENERAL NOTES AND COMMITMENTS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	2
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

REV

FUNDING: 80% FEDERAL, 20% STATE

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE 0004 ROADWAY	CONSTRUCTION CODE 0010 BRIDGE SN 049-0601	CONSTRUCTION CODE 0021 SAFTEY
*	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	258	258		
	20101000	TEMPORARY FENCE	FOOT	850	850		
*	20101100	TREE TRUNK PROTECTION	EACH	5	5		
*	20101700	SUPPLEMENTAL WATERING	UNIT	30	30		
	20200100	EARTH EXCAVATION	CU YD	900	900		
	20400800	FURNISHED EXCAVATION	CU YD	2740	2740		
	20800150	TRENCH BACKFILL	CU YD	62	62		
	21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	1705	1705		
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45		
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45		
*	25000700	AGRICULTURAL GROUND LIMESTONE	TON	1	1		
*	25100115	MULCH METHOD 2	ACRE	0.5	0.5		
*	25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	4317	4317		
*	25200200	SUPPLEMENTAL WATERING	UNIT	12	12		
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50	50		
	28000400	PERIMETER EROSION BARRIER	FOOT	4358	4358		

* SPECIALTY ITEMS

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	PLOT DATE = 12/2/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	3
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

FUNDING: 80% FEDERAL, 20% STATE

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 0004 ROADWAY	CONSTRUCTION CODE 0010 BRIDGE SN 049-0601	CONSTRUCTION CODE 0021 SAFETY
28000500	INLET AND PIPE PROTECTION	EACH	2	2		
28100105	STONE RIPRAP, CLASS A3	SQ YD	97	97		
28100109	STONE RIPRAP, CLASS A5	SQ YD	1100	1100		
28200200	FILTER FABRIC	SQ YD	1197	1197		
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	1660	1660		
31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	196	196		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	3184	3184		
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	157	157		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	182	182		
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	594	594		
40603565	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70	TON	251	251		
40701901	HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 11"	SQ YD	910	910		
44000100	PAVEMENT REMOVAL	SQ. YD	729	729		
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2-1/4"	SQ YD	3551	3551		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1200	1200		
44004000	PAVED DITCH REMOVAL	FOOT	1755	1755		
44004250	PAVED SHOULDER REMOVAL	SQ YD	418	418		

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	4
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

REV

FUNDING: 80% FEDERAL, 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE 0004 ROADWAY	CONSTRUCTION CODE 0010 BRIDGE SN 049-0601	CONSTRUCTION CODE 0021 SAFETY
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	43.1	43.1		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	2353	2353		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1	
50104400	CONCRETE HEADWALL REMOVAL	EACH	4	4		
50104650	SLOPE WALL REMOVAL	SQ YD	657		657	
50105220	PIPE CULVERT REMOVAL	FOOT	365	365		
50200100	STRUCTURE EXCAVATION	CU YD	2160		2160	
50300225	CONCRETE STRUCTURES	CU YD	148		148	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	245.3		245.3	
50300260	BRIDGE DECK GROOVING	SQ YD	820		820	
50300300	PROTECTIVE COAT	SQ YD	1077		1077	
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	140.8		140.8	
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1	
50500505	STUD SHEAR CONNECTORS	EACH	3906		3906	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	124,700		124,700	
51200959	FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	864		864	

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	5
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

FUNDING: 80% FEDERAL, 20% STATE

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 0004 ROADWAY	CONSTRUCTION CODE 0010 BRIDGE SN 049-0601	CONSTRUCTION CODE 0021 SAFETY
51202305	DRIVING PILES	FOOT	864		864	
51203200	TEST PILE METAL SHELLS	EACH	2		2	
51204650	PILE SHOES	EACH	18		18	
51500100	NAME PLATES	EACH	1		1	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	7		7	
52100520	ANCHOR BOLTS, 1"	EACH	14		14	
52100530	ANCHOR BOLTS, 1 1/4"	EACH	14		14	
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2	2		
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	2	2		
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	140	140		
550A0160	STORM SEWERS, CLASS A, TYPE 1 36"	FOOT	176	176		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	129		129	
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	2	2		
60108254	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	200	200		
60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	40	40		
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
60260100	INLETS TO BE ADJUSTED	EACH	1	1		

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	6
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

REV

FUNDING: 80% FEDERAL, 20% STATE

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE 0004 ROADWAY	0010 BRIDGE SN 049-0601	0021 SAFETY
	60500060	REMOVING INLETS	EACH	1	1		
	60608300	COMBINATION CONCRETE CURB & GUTTER, TYPE M-2.12	FOOT	1200	1200		
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	587.5	587.5		
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1		
*	63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1	1		
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2		
*	63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	2	2		
	63200310	GUARDRAIL REMOVAL	FOOT	912	912		
	63800920	MODULAR GLARE SCREEN SYSTEM, TEMPORARY	FOOT	2530	2530		
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	680	680		
*	66900450	SPECIAL WASTE PLANS & REPORTS	L SUM	1	1		
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2		
	67100100	MOBILIZATION	L SUM	1	1		
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	3790	3790		
	70600251	IMPACT ATTENUATORS, TEMPORARY, (NON-REDIRECTIVE, NARROW) TEST LEVEL 3	EACH	1	1		
	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	1		
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2		

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	7
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

REV

FUNDING: 80% FEDERAL, 20% STATE

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE 0004 ROADWAY	CONSTRUCTION CODE 0010 BRIDGE SN 049-0601	CONSTRUCTION CODE 0021 SAFETY
*	73000100	WOOD SIGN SUPPORT	FOOT	16	16		
*	78000200	THERMOPLASTIC PAVEMENT MARKING LINE 4"	FOOT	15103	15103		
*	78000400	THERMOPLASTIC PAVEMENT MARKING LINE 6"	FOOT	2237	2237		
*	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1618	1618		
*	78000600	THERMOPLASTIC PAVEMENT MARKING LINE 12"	FOOT	333	333		
*	X2700004	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 7"	FOOT	50	50		
*	78008310	POLYUREA PAVEMENT MARKING TYPE II - LINE 4"	FOOT	420	420		
*	78008350	POLYUREA PAVEMENT MARKING TYPE II - LINE 12"	FOOT	60	60		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	276	276		
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	10	10		
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	16	16		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	70	70		
*	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1			1
*	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1			1
*	81800300	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	5735			5735
*	83057355	LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	33			33

* SPECIALTY ITEMS

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	PLOT DATE = 12/4/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	8
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

REV

FUNDING: 80% FEDERAL, 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0004 ROADWAY	CONSTRUCTION CODE 0010 BRIDGE SN 049-0601	CONSTRUCTION CODE 0021 SAFETY
X0326691	REMOVAL OF TEMPORARY LIGHTING UNIT, NO SALVAGE	EACH	33			33
* X0327004	TEMPORARY WOOD POLE, 60FT, CLASS 4	EACH	1			1
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	808	808		
* X2501800	SEEDING, CLASS 4 (MODIFIED)	ACRE	1.1	1.1		
* X2501820	SEEDING, CLASS 5 (MODIFIED)	ACRE	1.1	1.1		
X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	1780	1780		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
X7010240	TRAFFIC CONTROL SURVEILLANCE (SPECIAL)	CAL DAY	214	214		
X7010410	SPEED DISPLAY TRAILER	CAL MO	8	8		
X7015005	CHANGEABLE MESSAGE SIGN	CAL DAY	214	214		
X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	39550	39550		
X7240207	REMOVE EXISTING SIGN COMPLETE	EACH	1	1		
X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	8	8		
X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	420	420		
X2700603	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	50	50		
X7830078	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	60	60		
* X8210040	TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	33			33

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	9
		CONTRACT NO. 60X51		
	ILLINOIS	FED. AID PROJECT		

FUNDING: 80% FEDERAL, 20% STATE

				CONSTRUCTION CODE		
				0004	0010	0021
			URBAN	ROADWAY	BRIDGE SN 049-0601	SAFETY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY			
X8250065	TEMPORARY LIGHTING CONTROLLER, 240 VOLT, POLE MOUNTED	EACH	1			1
Z0004552	APPROACH SLAB REMOVAL	SQ YD	170.6	170.6		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4		
Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	12			12
52200500	MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ FT	4026		4026	
Z0062456	TEMPORARY PAVEMENT	SQ YD	1780	1780		
Z0064800	SELECTIVE CLEARING	UNIT	10	10		
Z0065704	BITUMINOUS COATED AGGREGATE SLOPEWALL 6"	SQ YD	376		376	
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	4	4		
Ø Z0076600	TRAINEES	HOUR	500	500		
Ø Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500		
X1400279	REMOVAL OF TEMPORARY LIGHTING CONTROLLER, NO SALVAGE	EACH	1			1
* A2002920	TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	4	4		
* A2006520	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	2	2		
* A2007616	TREE, TAXODIUM DISTICHUM (COMMON BALD CYPRESS), 2" CALIPER, BALLED AND BURLAPPED	EACH	5	5		
* C3006024	SHRUB, RHUS TYPHINA (STAGHORN SUMAC), 2' HEIGHT, BARE ROOT	EACH	600	600		
* K0029624	WEED CONTROL, TEASEL	GALLON	6	6		

* SPECIALTY ITEMS Ø 0042

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	PLOT DATE = 12/4/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	10
		CONTRACT NO. 60X51		
		ILLINOIS	FED. AID PROJECT	

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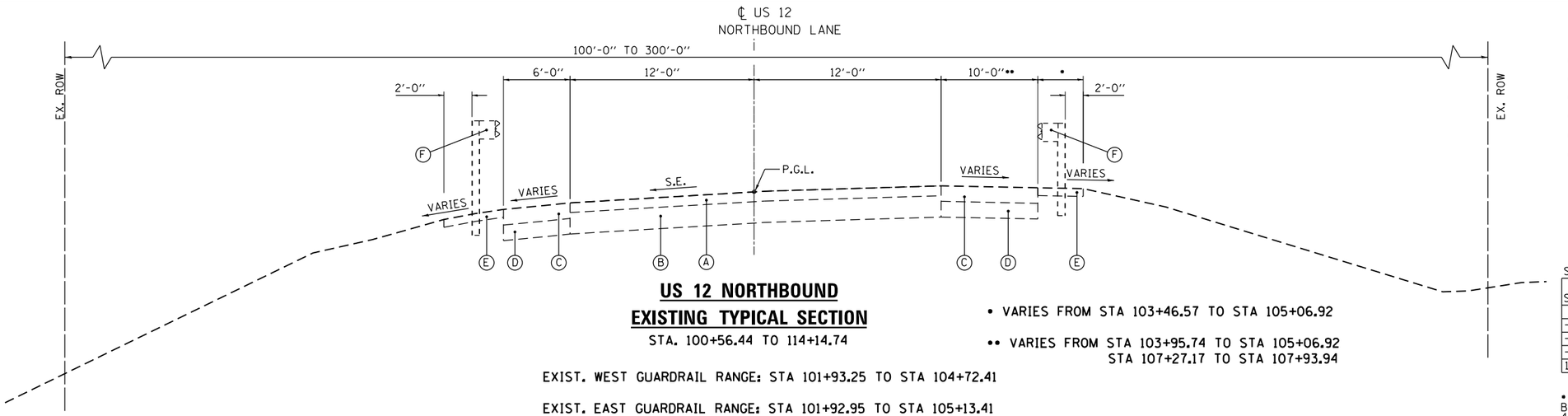


US 12 NORTHBOUND
EXISTING TYPICAL SECTION

STA. 100+56.44 TO 114+14.74

EXIST. WEST GUARDRAIL RANGE: STA 101+93.25 TO STA 104+72.41

EXIST. EAST GUARDRAIL RANGE: STA 101+92.95 TO STA 105+13.41
STA 107+27.17 TO STA 110+39.50

• VARIES FROM STA 103+46.57 TO STA 105+06.92

•• VARIES FROM STA 103+95.74 TO STA 105+06.92
STA 107+27.17 TO STA 107+93.94

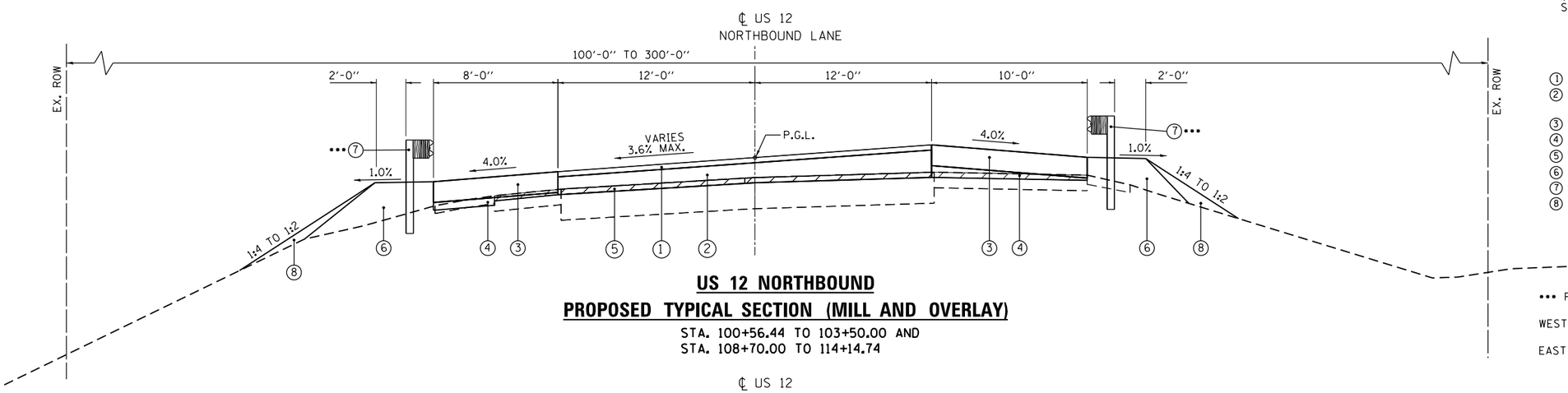
EXISTING LEGEND

- (A) HMA SURFACE AND BINDER COURSE
- (B) PCC PAVEMENT
- (C) HMA SHOULDERS
- (D) AGGREGATE SHOULDER SUBBASE
- (E) AGGREGATE SHOULDERS, TYPE B
- (F) GUARDRAIL

SUPERELEVATION SCHEDULE

SLOPE	BEGIN STATION	END STATION
-VARIABLE SE	100+56.44	101+16.44
-3.6% SE	101+16.44	110+68.38
-VARIABLE SE	110+68.38	112+68.38
1.5% NORM CROWN	112+68.38	114+14.74

• WHEN THE SUPERELEVATION RATE OF THE PAVEMENT IS BETWEEN 0% AND 4%, THE SHOULDER SHALL BE SLOPED AT 4%. WHEN THE SUPERELEVATION RATE OF THE PAVEMENT EXCEEDS 4%, THE SHOULDER SHALL BE SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT AND SHOULDER WILL NOT BE GREATER THAN 8%



US 12 NORTHBOUND
PROPOSED TYPICAL SECTION (MILL AND OVERLAY)

STA. 100+56.44 TO 103+50.00 AND
STA. 108+70.00 TO 114+14.74

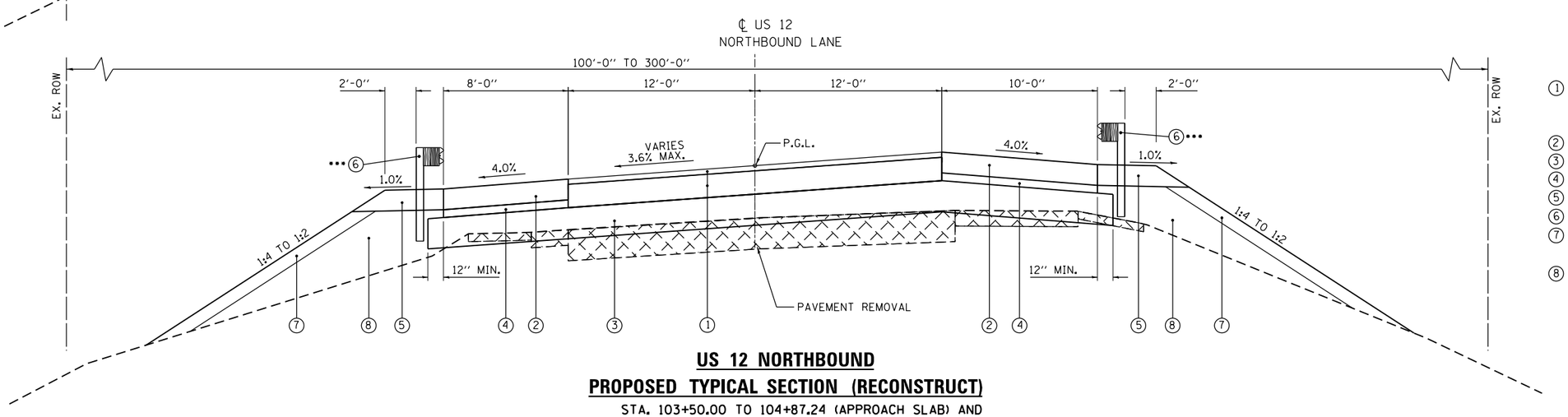
PROPOSED MILL AND OVERLAY LEGEND

1. POLYMERIZED HMA SURFACE COURSE MIX "E", N70, 2"
2. LEVELING BINDER (MACHINE METHOD) N70 (¾" TO 2¼")
   HMA BINDER COURSE, IL-19.0, N70, (2¼" AND ABOVE)
3. HMA SHOULDERS, 8"
4. SUBBASE GRANULAR MATERIAL, TYPE B, 3"
5. HMA SURFACE REMOVAL, 2¼"
6. AGGREGATE WEDGE SHOULDERS, TYPE B
7. STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
8. TOPSOIL EXCAVATION AND PLACEMENT (4" TYP) AND SEEDING, CLASS 4 (MOD) AND CLASS 5 (MOD)

••• PROPOSED GUARDRAIL:

WEST GUARDRAIL RANGE: STA 103+43.31 TO STA 104+81.00

EAST GUARDRAIL RANGE: STA 104+39.78 TO STA 105+25.79
STA 106+76.71 TO STA 111+29.81



US 12 NORTHBOUND
PROPOSED TYPICAL SECTION (RECONSTRUCT)

STA. 103+50.00 TO 104+87.24 (APPROACH SLAB) AND
STA. 106+69.23 (APPROACH SLAB) TO 108+70.00

PROPOSED RECONSTRUCT LEGEND

1. HMA PAVEMENT (FD) 11"
   POLYMERIZED HMA SURFACE COURSE, MIX "E", N70, 2"
   HMA BASE COURSE, IL-19.0, N70, 9"
2. HMA SHOULDERS, 8"
3. AGGREGATE SUBGRADE IMPROVEMENTS, 12"
4. SUBBASE GRANULAR MATERIAL. TYPE B, 3"
5. AGGREGATE WEDGE SHOULDERS, TYPE B
6. STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
7. TOPSOIL EXCAVATION AND PLACEMENT (4" TYP) AND SEEDING, CLASS 4 (MOD) AND CLASS 5 (MOD)
8. EMBANKMENT

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	Drafting\ROADWAY\D160X51-SHT-TYPICAL01.dgn	DRAWN - RDS	REVISED -			334	106-2HB-B	LAKE	105	11
	PLOT SCALE = 2.0000 ' / in.	CHECKED - MAM	REVISED -					CONTRACT NO. 60X51		
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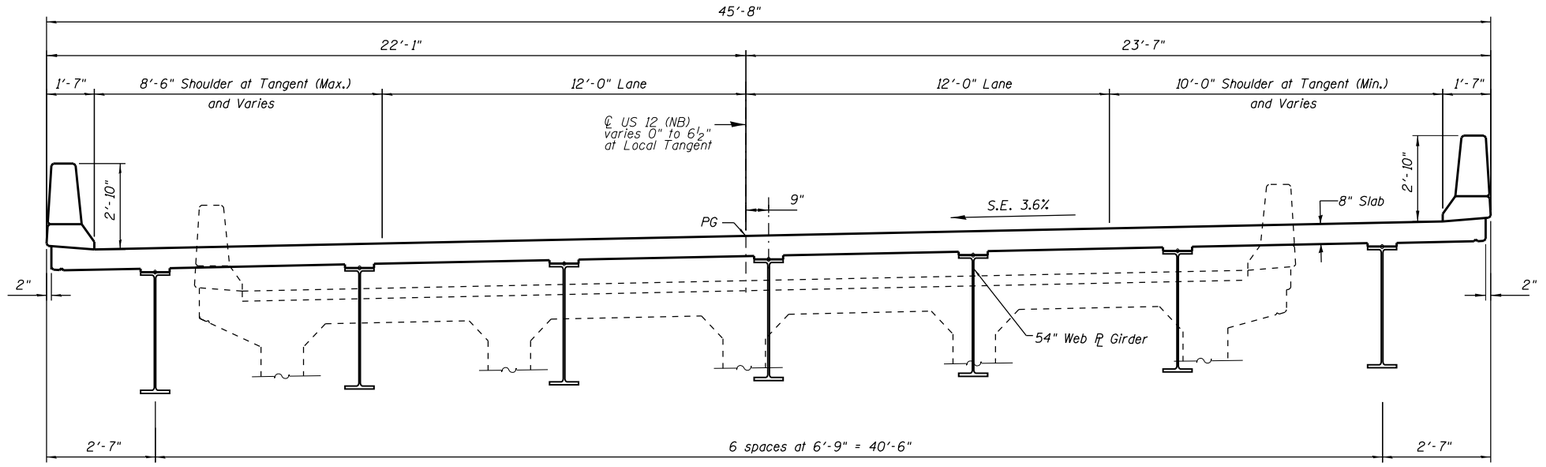
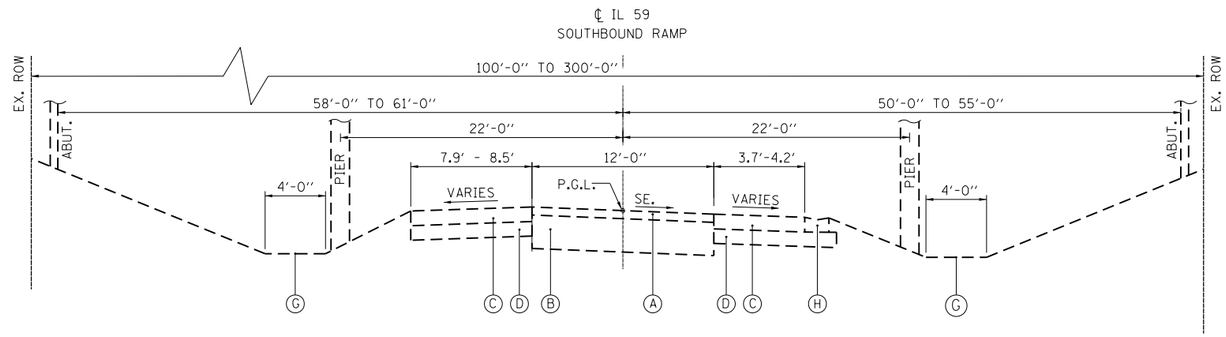


US 12 NORTHBOUND
PROPOSED TYPICAL SECTION

STA 105+16.29 (BK. OF ABUT.) TO STA 106+41.41 (BK. OF ABUT.)



EXISTING LEGEND

- (A) HMA SURFACE AND BINDER COURSE
- (B) PCC PAVEMENT
- (C) HMA SHOULDERS
- (D) AGGREGATE SHOULDER SUBBASE
- (E) AGGREGATE SHOULDERS, TYPE B
- (F) GUARDRAIL
- (G) SWALE / DITCH
- (H) CONCRETE GUTTER, TYPE B

HOT–MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE TYPE	AIR VOIDS @ Ndes	
HMA PAVEMENT (FD) 11"		
POLYMERIZED HMA SURFACE COURSE, MIX "E", N70, (IL-9.5mm), 2"	4% @ 70 GYR.	QC/QA
HMA BASE COURSE, IL-19.0, N70, 9"	4% @ 70 GYR.	QCP
RESURFACING		
POLYMERIZED HMA SURFACE COURSE, MIX "E", N70, (IL-9.5mm), 2"	4% @ 70 GYR.	QC/QA
LEVELING BINDER (MACHINE METHOD) N70, (IL-9.5mm), (2¼" MAX.)	4% @ 70 GYR.	QC/QA
HMA BINDER COURSE, IL-19.0, N70 (2¼" MIN.)	4% @ 70 GYR.	QC/QA
HMA SHOULDERS, 8"		
HMA SURFACE COURSE, MIX "D", N70, (IL-9.5mm), 2"	4% @ 70 GYR.	QC/QA
HMA BINDER COURSE, IL-19.0, N70, 6"	4% @ 70 GYR.	QCP
TEMPORARY PAVEMENT (HMA), 10"		
HMA SURFACE COURSE, MIX "D", N70, (IL-9.5mm), 2"	4% @ 70 GYR.	QC/QA
HMA BINDER COURSE, IL-19.0, N70, 8"	4% @ 70 GYR.	QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP)		

IL 59 SOUTHBOUND RAMP
EXISTING TYPICAL SECTION

STA. 300+00.00 TO 315+76.78

NOTES:

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
2. THE "AC" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON -POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
3. FOR HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS.
4. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
5. QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.
6. PCC TEMPORARY PAVEMENT SHALL CONSIST OF CLASS PV CONCRETE MEETING THE REQUIREMENTS OF ARTICLE 1020 OF THE STANDARD SPECIFICATIONS; THICKNESS SHALL BE 8".
7. ALL TEMPORARY PAVEMENT SHALL BE PROVIDED OVER A 4" SUBBASE GRANULAR MATERIAL.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE		12
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

TREE SCHEDULE

LOCATION	20100110 TREE REMOVAL 6-15	20101100 TREE TRUNK PROTECTION	A2002920 T-CELTIS OCCID - 2½" TREE	A2006520 T-QUERCUS BICOL - 2½" TREE	A2007616 T-TAXODIUM DIS - 2" TREE	C-3006024 S-RHUS TYPHINA 2' BR TREE
	UNIT	EACH	EACH	EACH	EACH	EACH
STA. 104+12 41.4' LT	15					
STA. 104+41 36.2' LT	14					
STA. 104+45 52.8' LT	11					
STA. 104+51 33.1' LT	13					
STA. 104+56 46.8' LT	12					
STA. 104+72 35.6' LT	20					
STA. 104+75 28.5' LT	16					
STA. 106+09 51.1' LT	12					
STA. 106+11 52.6' LT	7					
STA. 106+12 49.4' LT	7					
STA. 106+13 46.2' LT	6					
STA. 106+15 36.4' LT	22					
STA. 106+17 49.1' LT	6					
STA. 106+19 37.4' LT	6					
STA. 106+21 50.1' LT	6					
STA. 106+01 71' LT		1				
STA. 106+25 34.9' LT	8					
STA. 106+25 55.9' LT	9					
STA. 106+25 56' LT		1				
STA. 106+33 49.1' LT	8					
STA. 106+35 44.8' LT	8					
STA. 106+38 39.8' LT	16					
STA. 106+50 33.7' LT	9					
STA. 106+56 48.7' LT	7					
STA. 106+86 34.8' LT	12					
STA. 106+93 37.3' LT	8					
STA. 106+93, 37' LT		1				
STA. 107+48, 38' LT		1				
STA. 109+08, 35' LT		1				
STA. 103+80 TO 104+35 LT			4			
STA. 105+90 TO 106+20 RT				2		
STA. 104+60 TO 105+50 RT					5	
STA. 106+80 TO 107+50 RT						600
TOTALS =	258	5	4	2	5	600

REMOVAL SCHEDULE

LOCATION	44000100 PAVEMENT REM	44000500 COMB CURB GUTTER REM	44004000 PAVED DITCH REMOVAL	44004250 PAVED SHLD REMOVAL	50104400 CONC HDWL REM	50104650 SLOPE WALL REMOV	50105220 PIPE CULVERT REMOV	60500060 REMOV INLETS	Z0004552 APPROACH SLAB REM
	SQ YD	FOOT	FOOT	SQ YD	EACH	SQ YD	FOOT	EACH	SQ YD
STA. 103+45 TO STA. 307+09			313						
STA. 103+50 TO STA. 104+66	322			174					
STA. 104+57 LT								1	
STA. 104+66 TO STA. 104+97.4									87.2
STA. 105+95 TO STA. 109+92			440						
STA. 106+93.5 TO STA. 107+23.5									83.4
STA. 107+23.5 TO STA. 108+70	407			244					
STA. 303+46 TO STA. 304+84			133						
STA. 304+84 TO STA. 306+53 RT							165		
STA. 304+84 RT					1				
STA. 305+04 TO STA. 305+87			91						
STA. 305+99 LT					1				
STA. 305+99 TO STA. 307+63 LT							170		
STA. 306+31 TO STA. 309+50			286						
STA. 306+53 RT					1				
STA. 307+63 LT					1				
STA. 307+64 TO STA. 309+51			194						
STA. 308+81 TO STA. 110+37			298						
STA. 114+38 TO STA. 120+38		1200							
STA. 104+74 TO STA. 106+03						348			
STA. 105+99 TO STA. 107+13						309			
TOTALS =	729	1200	1755	418	4	657	335	1	170.6

US 12 EARTHWORK SCHEDULE

STATION	LENGTH (FT)	20200100 EARTH EXCAVATION (SF)	20200100 EARTH EXCAVATION (CF)	20200100 EARTH EX. - 15% SHRINKAGE (CF)	21101505 TOPSOIL PLACE, 4" (SF)	20400800 EMBANKMENT (SF)	21101505 TOPSOIL PLACE, 4" (CF)	20400800 EMBANKMENT (CF)
100+56.44	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101+00	43.56	1.9	41.4	35.2	0.0	0.0	0.0	0.0
101+50	50	1.7	90.0	76.5	2.4	0.0	60.0	0.0
102+00	50	0.6	57.5	48.9	3.2	0.2	140.0	5.0
102+50	50	0.0	15.0	12.8	3.3	2.5	162.5	67.5
103+00	50	0.0	0.0	0.0	4.3	2.8	190.0	132.5
103+50	50	24.4	610.0	518.5	4.8	4.4	227.5	180.0
104+00	50	30.8	1380.0	1173.0	7.0	17.2	295.0	540.0
104+50	50	20.8	1290.0	1096.5	18.8	38.5	645.0	1392.5
104+87.06	37.73	10.4	588.6	500.3	19.6	125.5	724.4	3093.9
105+00	12.27	10.5	128.2	109.0	6.2	124.5	158.3	1533.8
105+16.29	16.47	22.0	267.6	227.5	13.8	155.0	164.7	2301.7
105+24.54	8.07	23.8	184.8	157.1	14.6	151.0	114.6	1234.7
105+50	24.56	26.8	621.4	528.2	13.0	70.9	338.9	2724.9
105+79.40	29.4	29.6	829.1	704.7	7.7	0.0	304.3	1042.2
106+00	20.6	38.7	703.5	598.0	2.3	1.5	103.0	15.5
106+33.44	33.44	34.2	1218.9	1036.1	21.3	450.9	394.6	7564.1
106+41.41	7.8	29.7	249.2	211.8	21.9	526.6	168.5	3812.3
106+50	8.76	19.1	213.7	181.6	17.4	556.1	172.1	4742.2
106+69.40	19.23	9.2	272.1	231.3	12.7	638.9	289.4	11489.9
107+00	30.77	10.6	304.6	258.9	30.7	492.2	667.7	17402.0
107+50	50	10.3	522.5	444.2	23.2	65.6	1347.5	13945.0
108+00	50	10.9	530.0	450.5	12.1	33.0	882.5	2465.0
108+50	50	13.1	600.0	510.0	10.3	23.4	560.0	1410.0
109+00	50	20.4	837.5	711.9	6.3	6.5	415.0	747.5
109+50	50	20.5	1022.5	869.1	5.7	2.7	300.0	230.0
110+00	50	21.0	1037.5	881.9	3.9	0.9	240.0	90.0
110+50	50	1.4	560.0	476.0	7.6	1.2	287.5	52.5
111+00	50	1.3	67.5	57.4	7.3	6.8	372.5	200.0
111+50	50	0.8	52.5	44.6	4.5	1.3	295.0	202.5
112+00	50	0.0	20.0	17.0	0.0	0.0	112.5	32.5
			EARTH EXCAVATION	EARTH EX. - 15% SHRINK			TOPSOIL PLACE, 4"	EMBANKMENT
TOTAL (CF)			14,315.6	12,168.5			10,133.0	78,649.6
TOTAL (CY)			530	451			375	2,913

IL RT 59 EARTHWORK SCHEDULE

STATION	LENGTH (FT)	20200100 EARTH EXCAVATION (SF)	20200100 EARTH EXCAVATION (CF)	20200100 EARTH EX. - 15% SHRINKAGE (CF)	21101505 TOPSOIL PLACE, 4" (SF)	20400800 EMBANKMENT (SF)	21101505 TOPSOIL PLACE, 4" (CF)	20400800 EMBANKMENT (CF)
304+50	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0
304+83.34	33.34	5.1	85.0	72.3	0.0	12.5	0.0	208.4
305+00	16.66	23.2	235.7	200.4	0.0	0.0	0.0	104.1
305+10.77	10.77	22.8	247.7	210.6	9.2	0.0	49.5	0.0
305+50	39.23	52.4	1475.0	1253.8	1.0	0.0	200.1	0.0
305+90.63	40.63	119.9	3500.3	2975.3	0.0	0.6	20.3	12.2
306+00	9.37	126.8	1155.8	982.5	7.0	9.2	32.8	45.9
306+09.14	9.14	118.7	1121.9	953.6	4.3	0.9	51.6	46.2
306+33.11	23.97	21.3	1677.9	1426.3	13.8	0.0	216.9	10.8
306+50	16.89	4.7	219.6	186.7	0.0	0.0	116.5	0.0
306+81.58	31.58	2.5	113.7	96.7	1.3	0.0	20.5	0.0
307+00	18.42	1.6	37.8	32.2	0.0	0.0	12.0	0.0
307+50	50	3.9	137.5	116.9	6.9	1.2	172.5	30.0
307+53.58	3.58	0.0	7.0	5.9	3.2	5.3	18.1	11.6
308+00	46.42	0.0	0.0	0.0	0.0	0.0	74.3	123.0
			EARTH EXCAVATION	EARTH EX. - 15% SHRINK			TOPSOIL PLACE, 4"	EMBANKMENT
TOTAL (CF)			10,014.9	8,513.2			985.2	592.2
TOTAL (CY)			371	315			36	22

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	PLOT SCALE = 2.0000 ' / in.	CHECKED - MAM	REVISED -
Default	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SCHEDULES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	13
		CONTRACT NO. 60X51		
	ILLINOIS	FED. AID PROJECT		

PAVEMENT MARKINGS AND SIGNING SCHEDULE

LOCATION	72400500 RELOCATE SIGN PANEL ASSEMBLY - TYPE A	73000100 WOOD SIGN SUPPORT	78000200 THERMOPLASTIC PAVEMENT MARKING LINE 4"	78000400 THERMOPLASTIC PAVEMENT MARKING LINE 6"	78000500 THERMOPLASTIC PAVEMENT MARKING LINE 8"	78000600 THERMOPLASTIC PAVEMENT MARKING LINE 12"	78100100 RAISED REFLECTIVE PAVEMENT MARKER	78200011 BARRIER WALL REFLECTORS TYPE C	X7240207 REMOVE EXISTING SIGN COMPLETE	XXXXXXXX PREF PL PM TB LINE 7"	78008310 POLYUREA PAVEMENT MARKING TYPE II LINE 4"	78008350 POLYUREA PAVEMENT MARKING TYPE II LINE 12"
	EACH	FOOT	FOOT	FOOT	FOOT	EACH	EACH	EACH	EACH	FOOT	FOOT	FOOT
STA. 75+08 TO STA. 85+00 WB				248			12					
STA. 80+83 TO STA. 85+00 WB			834									
STA. 82+43 TO STA. 85+00 EB			514	64			8					
STA. 85+00 TO STA. 99+00 EB			2800	350			36					
STA. 85+00 TO STA. 99+00 WB			2800	350			36					
STA. 92+11 TO STA. 99+00 EB			85									
STA. 93+52 TO STA. 96+21 WB			68									
STA. 96+21 TO STA. 99+00 WB					558	153	14					
STA. 99+00 TO STA. 100+24 WB					248	100	8					
STA. 99+00 TO STA. 113+00 WB			1400	350			32	4				
STA. 99+00 TO STA. 99+22 EB			6									
STA. 99+00 TO STA. 113+00 EB			1400	350			36					
STA. 99+22 TO STA. 103+28 EB					812	80						
STA. 100+24 TO STA. 113+00 WB			1276									
STA. 103+28 TO STA. 113+00 EB			972									
STA. 104+35 WB	1	16										
STA. 113+00 TO STA. 120+37 WB			2948	184			20					
STA. 113+00 TO STA. 126+63 EB				341			34					
STA. 102+00 WB									1			
STA. 104+90 TO STA. 106+70 EB										50	420	60
TOTALS =	1	16	15103	2237	1618	333	236	4	1	50	420	60

DRAINAGE SCHEDULE

LOCATION	54213669 PRC FLAR END SEC 24	54213681 PRC FLAR END SEC 36	550A0120 STORM SEW CL A 1 24	550A0160 STORM SEW CL A 1 36	60100060 CONC HDWL FOR P DRAIN	60108204 PIPE UNDERDRAINS TYPE 2, 4	60108100 PIPE UNDERDRAIN 4 SP	60218400 MAN TA 4 DIA T1F CL	60260100 INLETS TO BE ADJUSTED
	EACH	EACH	FOOT	FOOT	EACH	FOOT	FOOT	EACH	EACH
STA. 102+80					1	100	25		
STA. 106+90.1 LT									1
STA. 107+50					1	100	15		
STA. 304+83.7 RT	1								
STA. 304+83.7 TO STA. 306+53.6			166						
STA. 305+05.9 RT								1	
STA. 305+98.7 LT		1							
STA. 305+98.7 TO STA. 307+70				176					
STA. 306+53.6 RT	1								
STA. 307+70 LT		1							
TOTALS =	2	2	166	176	2	200	40	1	1

SEEDING SCHEDULE

LOCATION	X2501800 SEEDING CL 4 MOD.	X2501820 SEEDING CL 5 MOD.	25100635 HEAVY DUTY EROSION CONTROL BLANKET
	ACRE	ACRE	SQ YD
STA 100+56 TO STA 104+50 LT	0.093	0.093	898
STA 100+56 TO STA 104+50 RT	0.078	0.078	757
STA 104+50 TO STA 110+00 LT	0.062	0.062	597
STA 104+50 TO STA 110+00 RT	0.172	0.172	1668
STA 110+00 TO STA 114+15 LT	0.011	0.011	108
STA 110+00 TO STA 114+15 RT	0.030	0.030	289
TOTALS =	0.446	0.446	4317

GUARDRAIL SCHEDULE

LOCATION	63200310 GUARDRAIL REMOV	63000001 SPBGR TY A 6FT POSTS	63100045 TRAF BAR TERM T2	63100070 TRAF BAR TERM T5	63100085 TRAF BAR TERM T6	63100169 TRAF BAR TERM T1 SPL FLR	78200005 GRDRAIL REF TYPE A
	FOOT	FOOT	EACH	EACH	EACH	EACH	EACH
STA. 101+93 TO STA. 104+72 LT	279						
STA. 101+93 TO STA. 105+13 RT	320						
STA. 102+62 TO STA. 103+12 LT						1	
STA. 103+12 TO STA. 104+37 LT		125					
STA. 104+07 TO STA. 104+57 RT						1	
STA. 104+37 TO STA. 104+81 LT					1		
STA. 104+57 TO STA. 104+82 RT		25					
STA. 104+57 TO STA. 105+26 RT					1		
STA. 106+77 TO STA. 106+90 RT				1			
STA. 106+90 TO STA. 111+28 RT		437.5					
STA. 107+27 TO STA. 110+40 RT	313						
STA. 111+28 TO STA. 111+42 RT			1				
STA. 103+04 TO STA. 104+65 LT							3
STA. 104+44 TO STA. 105+11 RT							1
STA. 106+93 TO STA. 111+41 RT							6
TOTALS =	912	587.5	1	1	2	2	10

EROSION CONTROL SCHEDULE

LOCATION	28000400 PERIMETER EROS BAR	2800050 INLET AND PIPE PROTECT	28100105 STONE RIPRAP CL A3	28100109 STONE RIPRAP CL A5	28200200 FILTER FABRIC
	FOOT	EACH	SQ YD	SQ YD	SQ YD
STA. 104+57 LT		1			
STA. 106+90 LT		1			
STA. 100+56 TO STA. 103+87 LT	314				
STA. 100+56 TO STA. 104+50 RT	437				
STA. 104+50 TO STA. 309+72 RT	432				
STA. 105+21 TO STA. 110+00 LT	1282				
STA. 309+25 TO STA. 110+00 RT	989				
STA. 110+00 TO STA. 114+15 LT	414				
STA. 110+00 TO STA. 114+15 RT	490				
STA. 104+50 TO STA. 105+00 LT			97		97
STA. 103+45 TO STA. 307+09				196	196
STA. 105+95 TO STA. 109+92				276	276
STA. 303+46 TO STA. 304+84				83	83
STA. 305+04 TO STA. 305+87				57	57
STA. 306+31 TO STA. 309+50				179	179
STA. 307+64 TO STA. 309+51				122	122
STA. 308+81 TO STA. 110+37				187	187
TOTALS =	4358	2	97	1100	1197

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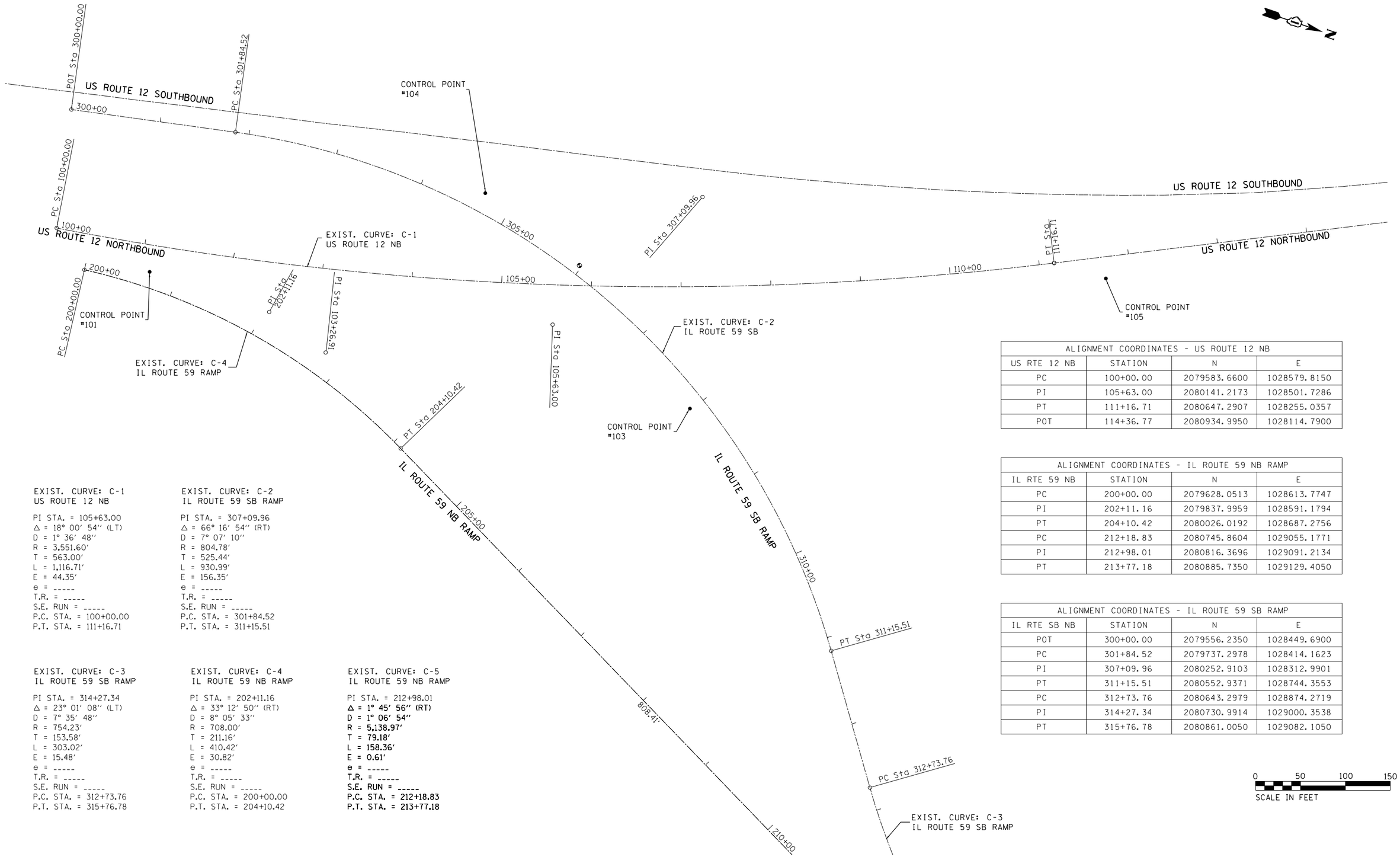
	PLOT DATE = 1/4/2018	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SCHEDULES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	14
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



ALIGNMENT COORDINATES - US ROUTE 12 NB			
US RTE 12 NB	STATION	N	E
PC	100+00.00	2079583.6600	1028579.8150
PI	105+63.00	2080141.2173	1028501.7286
PT	111+16.71	2080647.2907	1028255.0357
POT	114+36.77	2080934.9950	1028114.7900

ALIGNMENT COORDINATES - IL ROUTE 59 NB RAMP			
IL RTE 59 NB	STATION	N	E
PC	200+00.00	2079628.0513	1028613.7747
PI	202+11.16	2079837.9959	1028591.1794
PT	204+10.42	2080026.0192	1028687.2756
PC	212+18.83	2080745.8604	1029055.1771
PI	212+98.01	2080816.3696	1029091.2134
PT	213+77.18	2080885.7350	1029129.4050

ALIGNMENT COORDINATES - IL ROUTE 59 SB RAMP			
IL RTE SB NB	STATION	N	E
POT	300+00.00	2079556.2350	1028449.6900
PC	301+84.52	2079737.2978	1028414.1623
PI	307+09.96	2080252.9103	1028312.9901
PT	311+15.51	2080552.9371	1028744.3553
PC	312+73.76	2080643.2979	1028874.2719
PI	314+27.34	2080730.9914	1029000.3538
PT	315+76.78	2080861.0050	1029082.1050

EXIST. CURVE: C-1
US ROUTE 12 NB

PI STA. = 105+63.00
Δ = 18° 00′ 54″ (LT)
D = 1° 36′ 48″
R = 3,551.60′
T = 563.00′
L = 1,116.71′
E = 44.35′
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 100+00.00
P.T. STA. = 111+16.71

EXIST. CURVE: C-2
IL ROUTE 59 SB RAMP

PI STA. = 307+09.96
Δ = 66° 16′ 54″ (RT)
D = 7° 07′ 10″
R = 804.78′
T = 525.44′
L = 930.99′
E = 156.35′
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 301+84.52
P.T. STA. = 311+15.51

EXIST. CURVE: C-3
IL ROUTE 59 SB RAMP

PI STA. = 314+27.34
Δ = 23° 01′ 08″ (LT)
D = 7° 35′ 48″
R = 754.23′
T = 153.58′
L = 303.02′
E = 15.48′
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 312+73.76
P.T. STA. = 315+76.78

EXIST. CURVE: C-4
IL ROUTE 59 NB RAMP

PI STA. = 202+11.16
Δ = 33° 12′ 50″ (RT)
D = 8° 05′ 33″
R = 708.00′
T = 211.16′
L = 410.42′
E = 30.82′
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 200+00.00
P.T. STA. = 204+10.42

EXIST. CURVE: C-5
IL ROUTE 59 NB RAMP

PI STA. = 212+98.01
Δ = 1° 45′ 56″ (RT)
D = 1° 06′ 54″
R = 5,138.97′
T = 79.18′
L = 158.36′
E = 0.61′
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 212+18.83
P.T. STA. = 213+77.18

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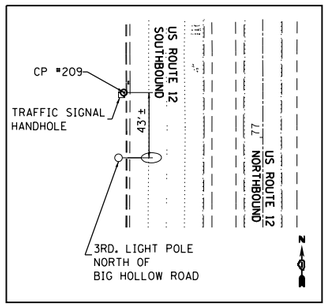
	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NORTHBOUND
ALIGNMENTS AND TIES

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

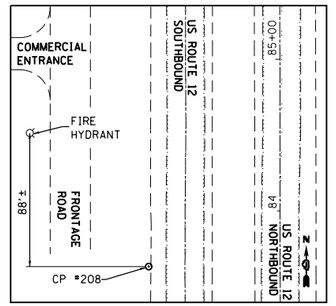
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	15
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



CONTROL POINT #209

CUT "X" IN TRAFFIC SIGNAL HANDHOLE

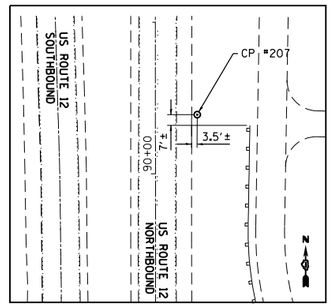
STA. 77+29.61, 91.80' LT
N. 2077314.791
E. 1028523.971
ELEV: 787.42



CONTROL POINT #208

¾" IRON PIPE W/CAP

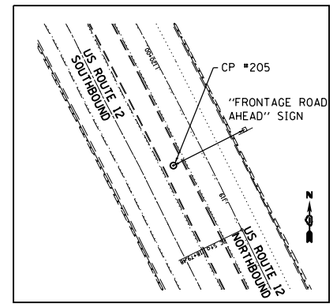
STA. 83+63.31, 86.78' LT
N. 2077948.469
E. 1028528.426
ELEV: 811.445



CONTROL POINT #207

¾" IRON PIPE W/CAP

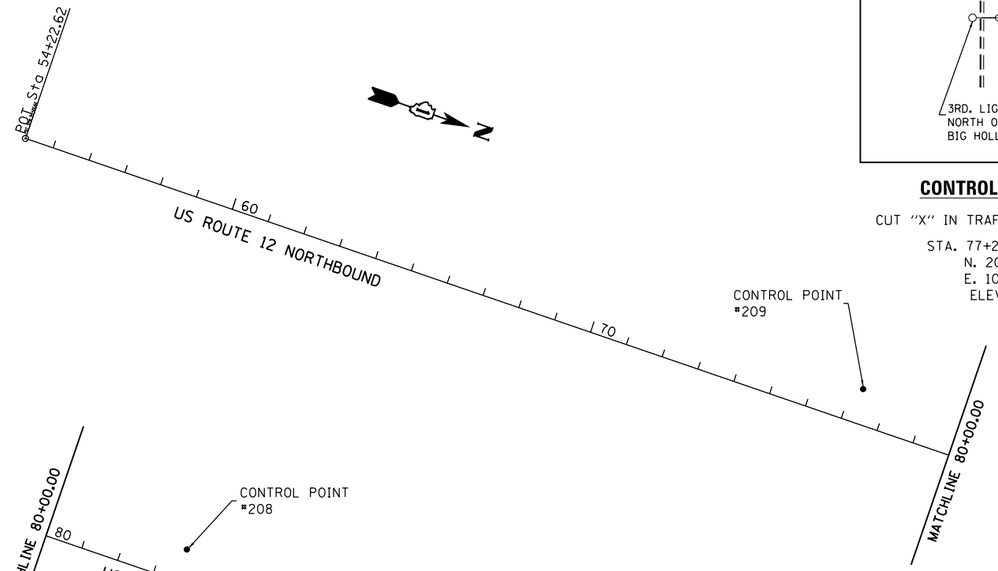
STA. 90+38.94, 57.55' RT
N. 2078624.2167
E. 1028642.1188
ELEV: 813.625

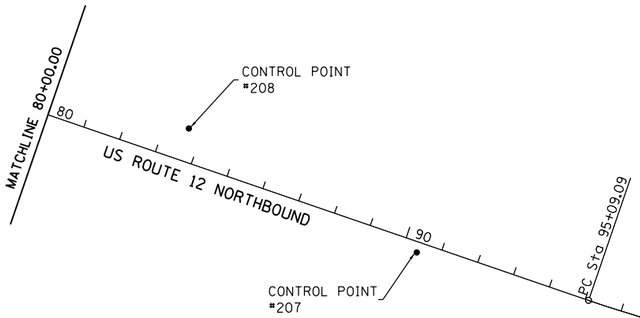


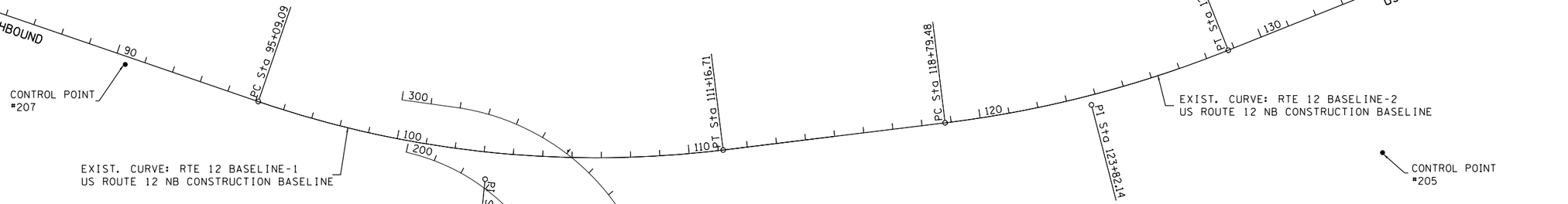
CONTROL POINT #207

MAG. NAIL IN ASPHALT MEDIAN

STA. 119+37.77, 21.67' LT
N. 2081375.3500
E. 1027875.5380
ELEV: 784.67







ALIGNMENT COORDINATES - US ROUTE 12 NB CONSTRUCTION BASELINE			
US RTE 12 NB	STATION	N	E
POT	54+22.62	2075007.8722	1028617.9063
PC	95+09.09	2079094.3356	1028614.1404
PI	103+26.91	2079912.1585	1028613.3867
PT	111+16.71	2080647.2907	1028255.0357
PC	118+79.48	2081332.9409	1027920.8055
PI	123+82.14	2081784.7732	1027700.5531
PT	128+79.16	2082165.3084	1027372.1379
POT	141+01.75	2083090.8395	1026573.3718

EXIST. CURVE RTE12BASELINE-1
PI STA. = 103+26.91
Δ = 25° 56' 05" (LT)
D = 1° 36' 48"
R = 3,551.60'
T = 817.82'
L = 1,607.62'
E = 92.94'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 95+09.09
P.T. STA. = 111+16.71

EXIST. CURVE RTE12BASELINE-2
PI STA. = 123+82.14
Δ = 14° 48' 28" (LT)
D = 1° 28' 52"
R = 3,868.19'
T = 502.66'
L = 999.71'
E = 32.52'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 118+79.48
P.T. STA. = 128+79.19

0 100 200 300
SCALE IN FEET

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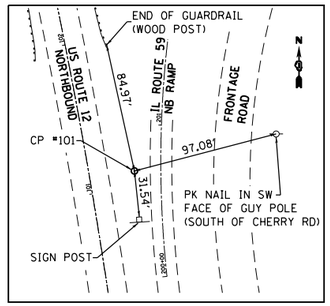
	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NORTHBOUND
US ROUTE 12 CONSTRUCTION BASELINE

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

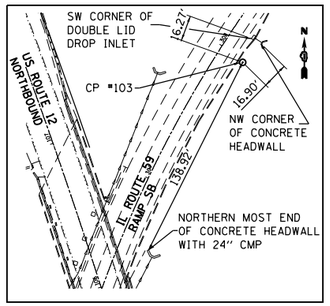
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	16
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



CONTROL POINT #101

24" "4 REBAR

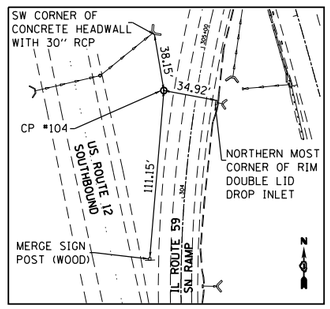
STA. 101+10.17, 29.89' RT
N. 2079697.5719
E. 1028592.2986
ELEV: 784.24



CONTROL POINT #103

24" "4 REBAR

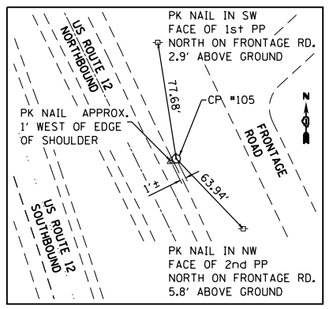
STA. 307+98.16, 17.40' RT
N. 2080316.3192
E. 1028540.4546
ELEV: 758.70



CONTROL POINT #104

24" "4 REBAR

STA. 304+67.95, 21.72' LT
N. 2080022.6561
E. 1028387.7331
ELEV: 768.88



CONTROL POINT #105

24" "5 REBAR

STA. 111+71.81, 24.13' RT
N. 2080707.4009
E. 1028252.5830
ELEV: 790.18

BENCHMARK 1

R.R. SPIKE 1' ABOVE FINISHED GRADE IN WEST FACE OF 1ST UTILITY POLE NORTH OF WILLOW ROAD ON EAST SIDE OF EAST FRONTAGE ROAD.
ELEVATION=786.05 (NAVD 88)

BENCHMARK 2

R.R. SPIKE 1' ABOVE FINISHED GRADE IN WEST FACE OF 1ST UTILITY POLE SOUTH OF WILLOW ROAD ON WEST SIDE OF EAST FRONTAGE ROAD.
ELEVATION=818.33 (NAVD 88)

BENCHMARK 3

BOLT BETWEEN "MUE • LLER" ON 2nd HYDRANT SOUTH OF MERLIN MUFFLER SHOP SOUTH ENTRANCE ON WEST SIDE OF WEST FRONTAGE ROAD
ELEVATION=805.05 (NAVD 88)

BENCHMARK 4

BOLT BETWEEN "MUE • LLER" ON 3rd HYDRANT SOUTH OF MERLIN MUFFLER SHOP SOUTH ENTRANCE ON WEST SIDE OF WEST FRONTAGE ROAD
ELEVATION=792.28 (NAVD 88)

BENCHMARK 7

R.R. SPIKE 1' ABOVE FINISHED GRADE IN WEST FACE OF 1ST UTILITY POLE SOUTH OF WINDSOR DRIVE ON WEST SIDE OF EAST FRONTAGE ROAD.
ELEVATION=790.08 (NAVD 88)

FILE NAME = J:\Microst\352110\Dgn\Eng\Drawings\Final Default	USER NAME = RICH	DESIGNED - BPT	REVISED -
	Drafting\ROADWAY\D160X51-SHT-ATB 03.dgn	DRAWN - RDS	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MAM	REVISED -
	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NORTHBOUND
CONTROL POINTS AND BENCHMARK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	17
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

REMOVAL LEGEND

- HOT-MIX ASPHALT SURFACE REMOVAL- BUTT JOINT
- HOT-MIX ASPHALT SURFACE REMOVAL, 2¼"
- PAVEMENT REMOVAL AND RECONSTRUCTION
- APPROACH SLAB REMOVAL
- TREE REMOVAL (OVER 6 UNITS DIAMETER)

HOT-MIX ASPHALT SURFACE REMOVAL, 2¼"
PR LEVELING BINDER (MACHINE METHOD) N70, (2¼" MAX.)/
PR HMA BC IL-19.0, N70 (MIN 2 1/4")
PR POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70, 2"

10' TAPER TO MATCH EXISTING

PR HOT-MIX ASPHALT SHOULDERS, 8" ON SUBBASE GRANULAR MATERIAL, TYPE B, 3"

PR AGGRGATE WEDGE SHOULDERS, TYPE B

BEGIN PROJECT MATCH EXISTING STA 100+56.44

CONSTRUCTION LIMITS

PC Sta 100+00.00

100+00

℄ US ROUTE 12 NB

GUARDRAIL REMOVAL

+30.90 20.00' LT

+53.49 30.00' LT

+78.71 30.00' LT

+03.85 23.75' LT

PR TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) FLARED

PR HOT-MIX ASPHALT SHOULDERS, 8" ON SUBBASE GRANULAR MATERIAL, TYPE B, 3"

PR AGGREGATE WEDGE SHOULDERS, TYPE B

PR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS

℄ IL ROUTE 59 SB

RELOCATE SIGN AND SUPPORT

200+00

PC Sta 200+00.00

201

℄ IL ROUTE 59 NB RAMP

202

PC Sta 202+11.16

CONSTRUCTION LIMITS

PR HMA PAVEMENT (FD) 11" ON AGGREGATE SUBGRADE IMPROVEMENT, 12"

+72.03 22.00' RT

+94.51 32.00' RT

+19.21 32.00' RT

+44.03 32.00' RT

PR TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) FLARED

PR HOT-MIX ASPHALT SHOULDERS, 8" ON SUBBASE GRANULAR MATERIAL, TYPE B, 3"

RELOCATE SIGN PANEL - TYPE 1

MATCHLINE STA. 104+50.00

0 20 40 60
SCALE IN FEET

BUTT JOINT +76.44

MILL AND OVERLAY

+50.00

PAVEMENT REMOVAL AND RECONSTRUCTION

350.00' V.C.
ex = 1.31'
K = 117

ASPHALT SURFACE COURSE

LEVELING BINDER (MACHINE METHOD) N70, (2¼" MAX.)

HMA BINDER COURSE, IL-19.0, N70, (2¼" MIN.)

VPC STA. 101+63.74
ELEV. 785.20

+85.19

+37.02

VPT STA. 104+13.74
ELEV. 784.15

PROPOSED PGL

EXISTING PGL

-1.80%

+1.20%

+1.20%

VPI STA. 102+38.74
ELEVATION 782.05

STA. 100+56.44 BEGIN IMPROVEMENTS
ELEV. 785.33

STA. 101+16.44 BEGIN FULL SUPER ELEVATION

PROPOSED SURFACE COURSE
BUTT JOINT
PROPOSED PGL
EXISTING PGL
PROPOSED LEVELING BINDER
PROPOSED MILLING
1¾"
2¼"
¾"
2"
2"
2¼"

100+00	100+50	101+00	101+50	102+00	102+50	103+00	103+50	104+00	104+50	105+00
786.64	786.17	785.69	785.26 / 785.27	784.89 / 784.92	784.51 / 784.60	784.20 / 784.32	783.90 / 784.08	783.62 / 783.86	783.37 / 783.69	783.12 / 783.54
782.95 / 783.43	782.78 / 783.36	782.64 / 783.32	782.54 / 783.31	782.43 / 783.34	782.39 / 783.40	782.36 / 783.50	782.38 / 783.63	782.47 / 783.79	782.55 / 783.99	782.68 / 784.22
782.80 / 784.46	782.95 / 784.70	783.13 / 784.94	783.30 / 785.18							

PLAN: SURVEYED; PLOTTED; ALIGNMENT CHECKED; RT. OF WAY CHECKED; CADD FILE NAME; NOTE BOOK; NO.; BY; DATE

PROFILE: SURVEYED; PLOTTED; PROFILE CHECKED; BM. NOTED; STRUCTURE NO(ATNS CHKD; NOTE BOOK; NO.; BY; DATE

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Default	PLOT SCALE = 40.0000 ' / in.	DRAWN - RDS	REVISED -
	PLOT DATE = 12/7/2017	CHECKED - BPT	REVISED -
		DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NORTHBOUND
PLAN AND PROFILE

SCALE: 20'H, 5'V | SHEET OF SHEETS | STA. 100+56.44 TO STA. 104+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	18
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

PR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS

PR TRAFFIC BARRIER TERMINAL, TYPE 6

℄ PROPOSED SN 049-0601
STA. 105+79.40

℄ IL ROUTE 59 SB

305+00

24" CMP

+65.27
23.75' LT

MATCHLINE STA. 104+50.00

TREE REMOVAL (TYP)

15" CMP

PR HMA PAVEMENT (FD) 11" ON AGGREGATE SUBGRADE IMPROVEMENT, 12"

CONSTRUCTION LIMITS

PR HOT-MIX ASPHALT SHOULDERS, 8" ON SUBBASE GRANULAR MATERIAL. TYPE B, 3"

306

105+00

106

107

108

109

℄ US ROUTE 12 NB

MATCHLINE STA. 110+00.00

GUARDRAIL REMOVAL

+11.56
25.75' RT

PR AGGREGATE WEDGE SHOULDERS, TYPE B

30" CMP

+92.80
27.96' RT

PR TRAFFIC BARRIER TERMINAL, TYPE 5

PR AGGREGATE WEDGE SHOULDERS, TYPE B

PR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS

GUARDRAIL REMOVAL

CONSTRUCTION LIMITS

PR HOT-MIX ASPHALT SHOULDERS, 8" ON SUBBASE GRANULAR MATERIAL. TYPE B, 3"

HOT-MIX ASPHALT SURFACE REMOVAL, 2¼"
PR LEVELING BINDER (MACHINE METHOD) N70, (2¼" MAX.)/
PR HMA BC IL-19.0, N70 (MIN 2 1/4")
PR POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70, 2"

307

southbound ramp

0 20 40 60
SCALE IN FEET

REMOVAL LEGEND

- HOT-MIX ASPHALT SURFACE REMOVAL- BUTT JOINT
- HOT-MIX ASPHALT SURFACE REMOVAL, 2¼"
- PAVEMENT REMOVAL AND RECONSTRUCTION
- APPROACH SLAB REMOVAL
- TREE REMOVAL

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
BAR. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

PAVEMENT REMOVAL & RECONSTRUCTION | +66.02 APPROACH SLAB REMOVAL | +97.44 EXISTING STRUCTURE REMOVAL (S.N. 049-0020) | +93.51 APPROACH SLAB REMOVAL | +23.51 PAVEMENT REMOVAL AND RECONSTRUCTION | +70.00 MILL AND OVERLAY

HMA BINDER COURSE, IL-19.0, N70, (2¼" MIN.)

STA. 105+79.40
℄ PROPOSED SN 049-0601
SINGLE SPAN-STEEL PLATE GIRDER BRIDGE
SPAN = 125'-1"
WIDTH = 45'-8"
SKEW = 45°

+16.29 BK. OF ABUTMENT

+41.41 BK. OF ABUTMENT

PROPOSED PGL

EXISTING PGL

+1.20%

+1.20%

+0.50%

VPT STA. 108+44.19
ELEVATION 789.31

VPC STA. 107+61.69
ELEV. 788.32

VPT STA. 109+26.69
ELEV. 789.73

165.00' V.C.
ex = -0.14'
K = 236

PROPOSED LOW STEEL ELEV. 779.9

EXISTING LOW STEEL ELEV. 780.3

795 790 785 780 775 770 765 760

104+50	105+00	105+50	106+00	106+50	107+00	107+50	108+00	108+50	109+00	109+50	110+00
784.22	782.80 / 784.46	782.95 / 784.70	783.13 / 784.94	783.30 / 785.18	783.47 / 785.42	783.64 / 785.66	783.86 / 785.90	784.13 / 786.14	784.39 / 786.38	784.67 / 786.62	784.95 / 786.86	785.22 / 787.10	785.48 / 787.34	785.75 / 787.58	786.04 / 787.82	786.34 / 788.06	786.64 / 788.30	786.94 / 788.54	787.24 / 788.75	787.51 / 788.95	787.77 / 789.13	788.03 / 789.30	788.28 / 789.45	788.53 / 789.58	788.76 / 789.69	788.99 / 789.79	789.21 / 789.89	789.43 / 789.99	789.64 / 790.09	789.84 / 790.19

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	PLOT DATE = 12/7/2017	CHECKED - BPT	REVISED -
		DATE - 12-04-17	REVISED -

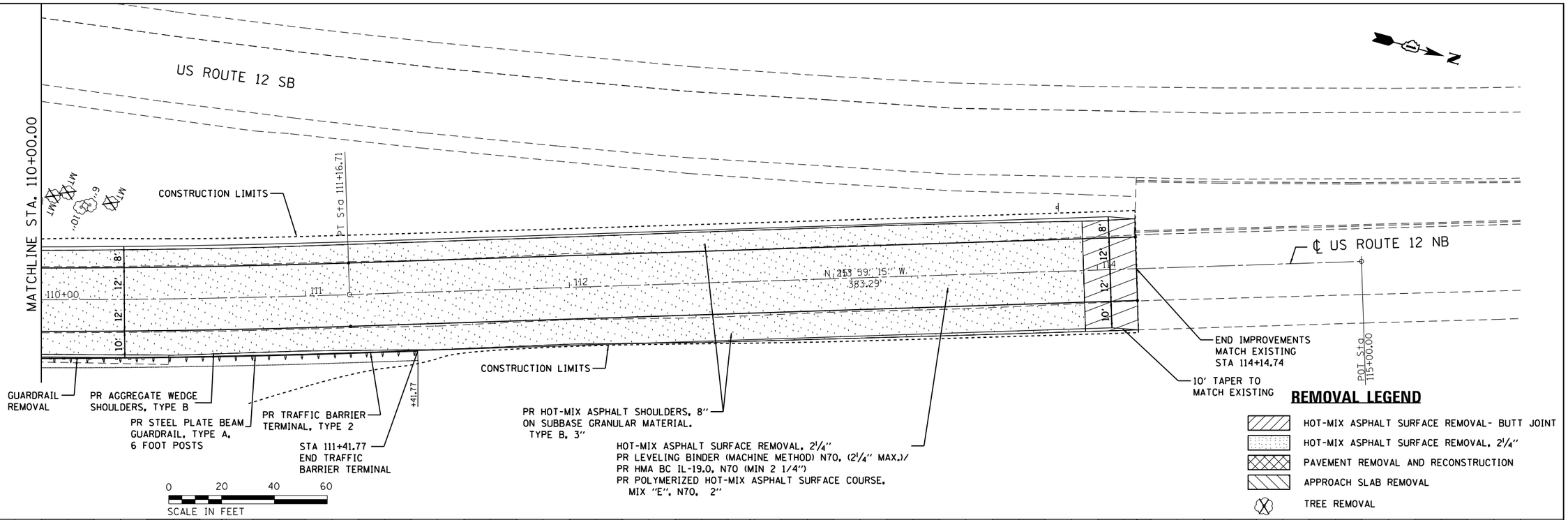
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NORTHBOUND
PLAN AND PROFILE

SCALE: 20'H, 5'V | SHEET OF SHEETS | STA. 104+50.00 TO STA. 110+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	19
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

PLAN — SURVEYED | PLOTTED | DESIGN CHECKED | ALIGNMENT CHECKED | RT. OF WAY CHECKED | CADD FILE NAME | NOTE BOOK | NO. | BY | DATE



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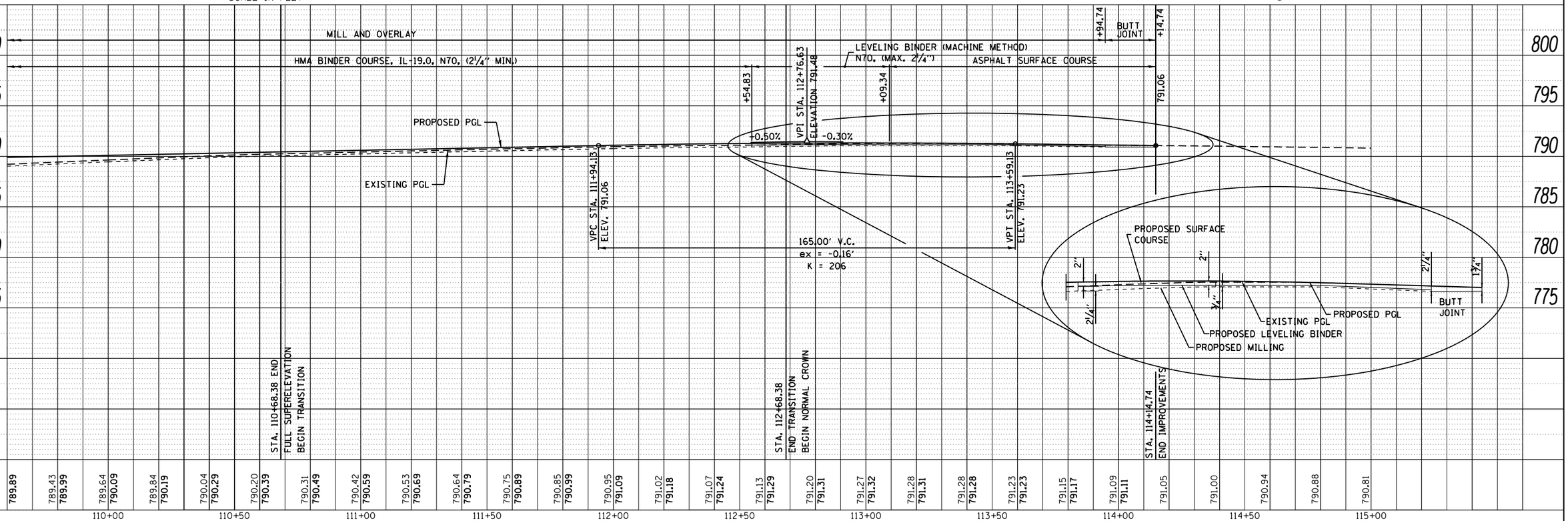

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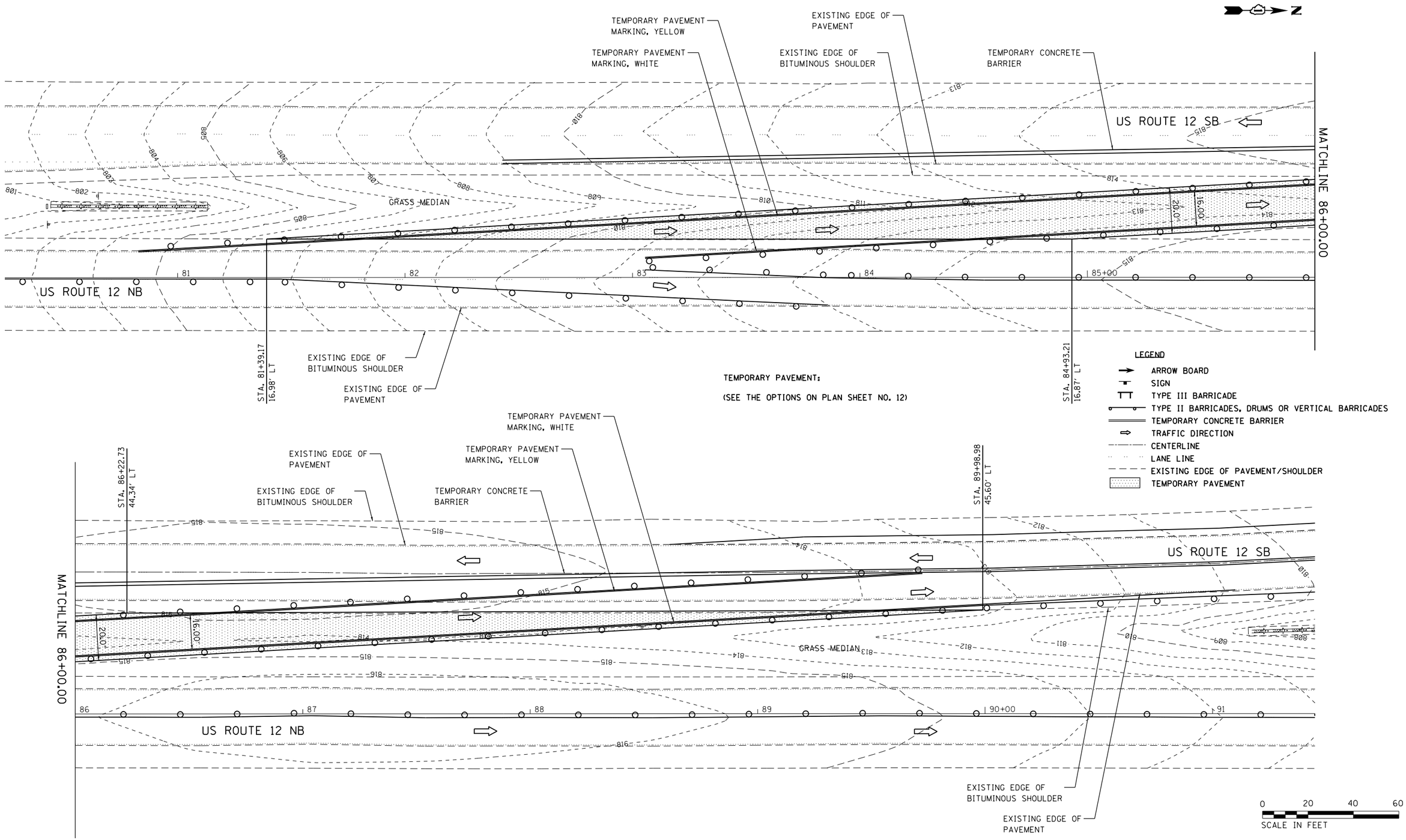
	PLOT DATE = 12/7/2017	CHECKED - BPT	REVISED -
		DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NORTHBOUND
PLAN AND PROFILE

SCALE: 20'H, 5'V | SHEET OF SHEETS | STA. 110+00.00 TO STA. 114+14.74

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	20
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



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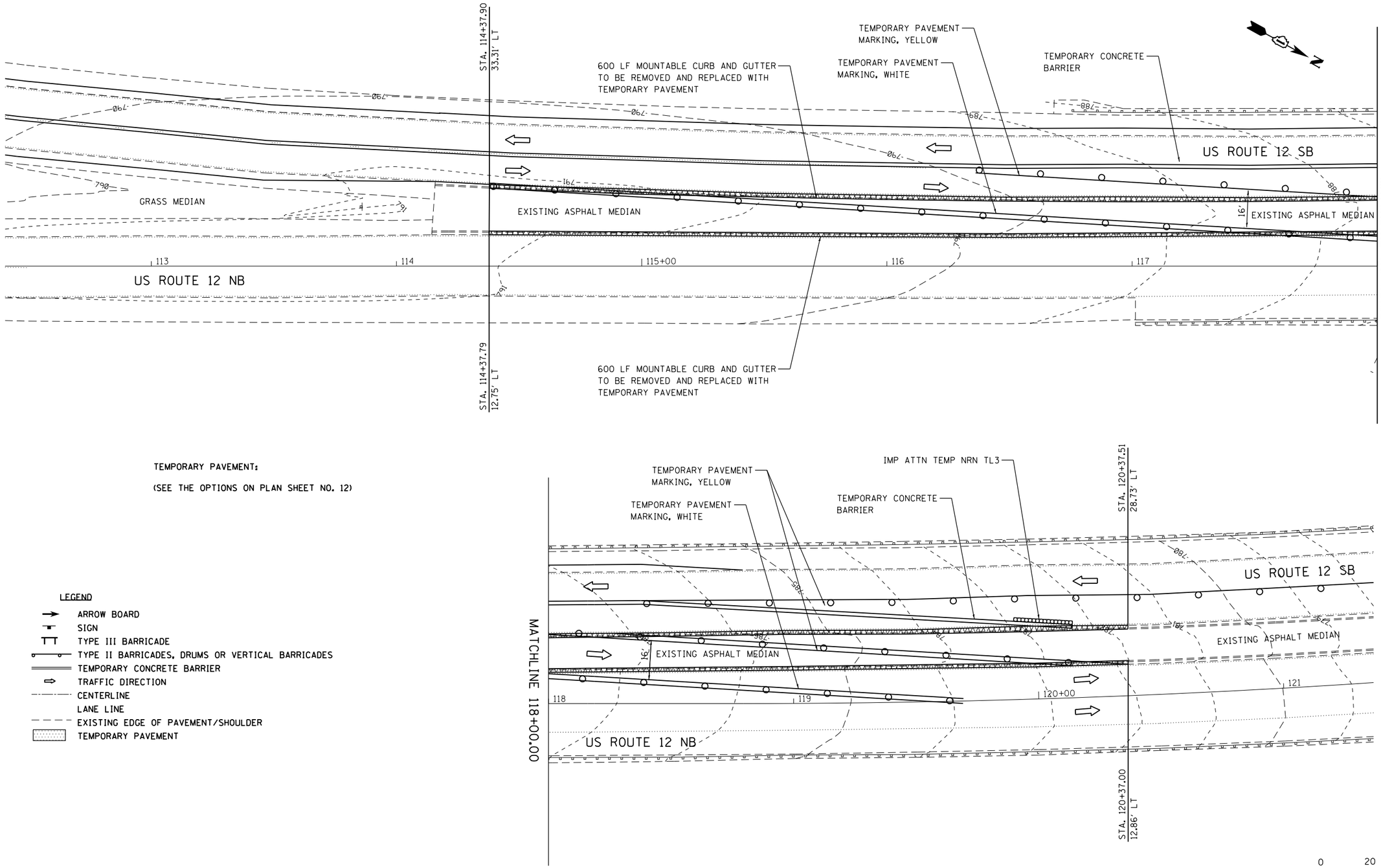
	PLOT SCALE = 40.0000 ' / in.	CHECKED - MAM	REVISED -
	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NORTHBOUND
SOUTH CROSSOVER TEMPORARY PAVEMENT

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	21
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



TEMPORARY PAVEMENT:

(SEE THE OPTIONS ON PLAN SHEET NO. 12)

LEGEND

- ARROW BOARD
- SIGN
- TYPE III BARRICADE
- TYPE II BARRICADES, DRUMS OR VERTICAL BARRICADES
- TEMPORARY CONCRETE BARRIER
- TRAFFIC DIRECTION
- CENTERLINE
- LANE LINE
- EXISTING EDGE OF PAVEMENT/SHOULDER
- TEMPORARY PAVEMENT

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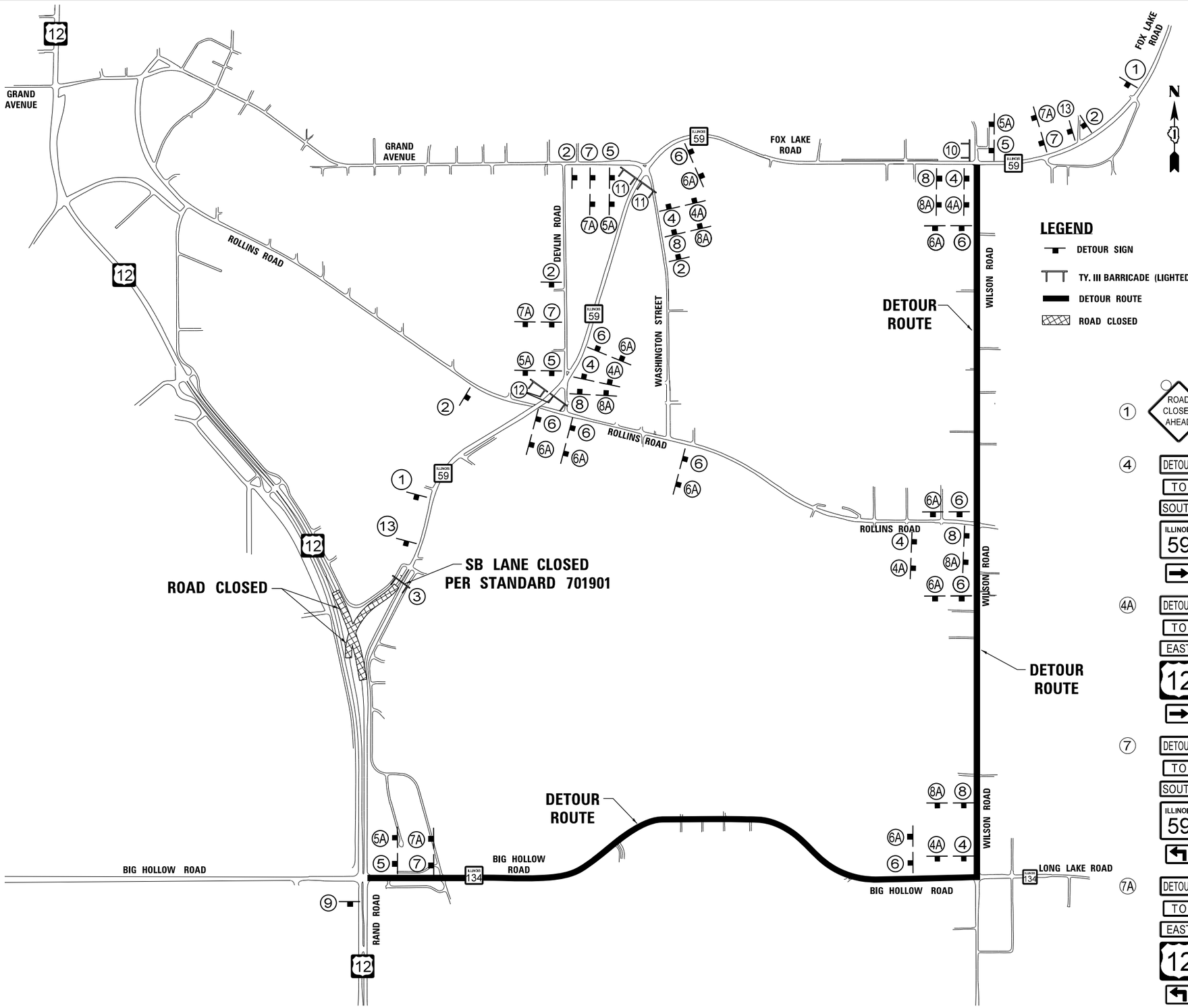
	PLOT DATE = 1/10/2018	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NORTHBOUND
NORTH CROSSOVER TEMPORARY PAVEMENT

SCALE: 1"=20' | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	22
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



NOTES

PRIOR TO INSTALLING POST MOUNTED SIGNS, THE CONTRACTOR SHALL CONTACT J.U.L.I.E. AT (800) 892-0123

ALL SIGNS SHALL BE SUPPLIED BY THE CONTRACTOR.

ANY EXISTING IDOT SIGN THAT IS COVERED OR CHANGED SHALL BE DONE IN A MANNER WHICH DOES NOT DAMAGE ANY SIGNS OR POSTS. ANY SIGN OR POST WHICH THE ENGINEER DETERMINES HAS BEEN DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S OWN EXPENSE.

THE DETOUR IS REQUIRED TO REMAIN IN PLACE UNTIL THE WORK NECESSARY TO REMOVE STRUCTURE NO. 049-0020 AND CONSTRUCT STRUCTURE NO. 049-0601 HAS BEEN COMPLETED.

ALL SIGN DIMENSIONS ARE SHOWN IN INCHES.

SEE TRAFFIC CONTROL SHEETS FOR ADDITIONAL SIGNING.

ALL W20-3 SIGNS WITH "ROAD CLOSED AHEAD" AND "DETOUR AHEAD" WILL BE AFFIXED WITH FLASHING AMBER LIGHT.

LEGEND

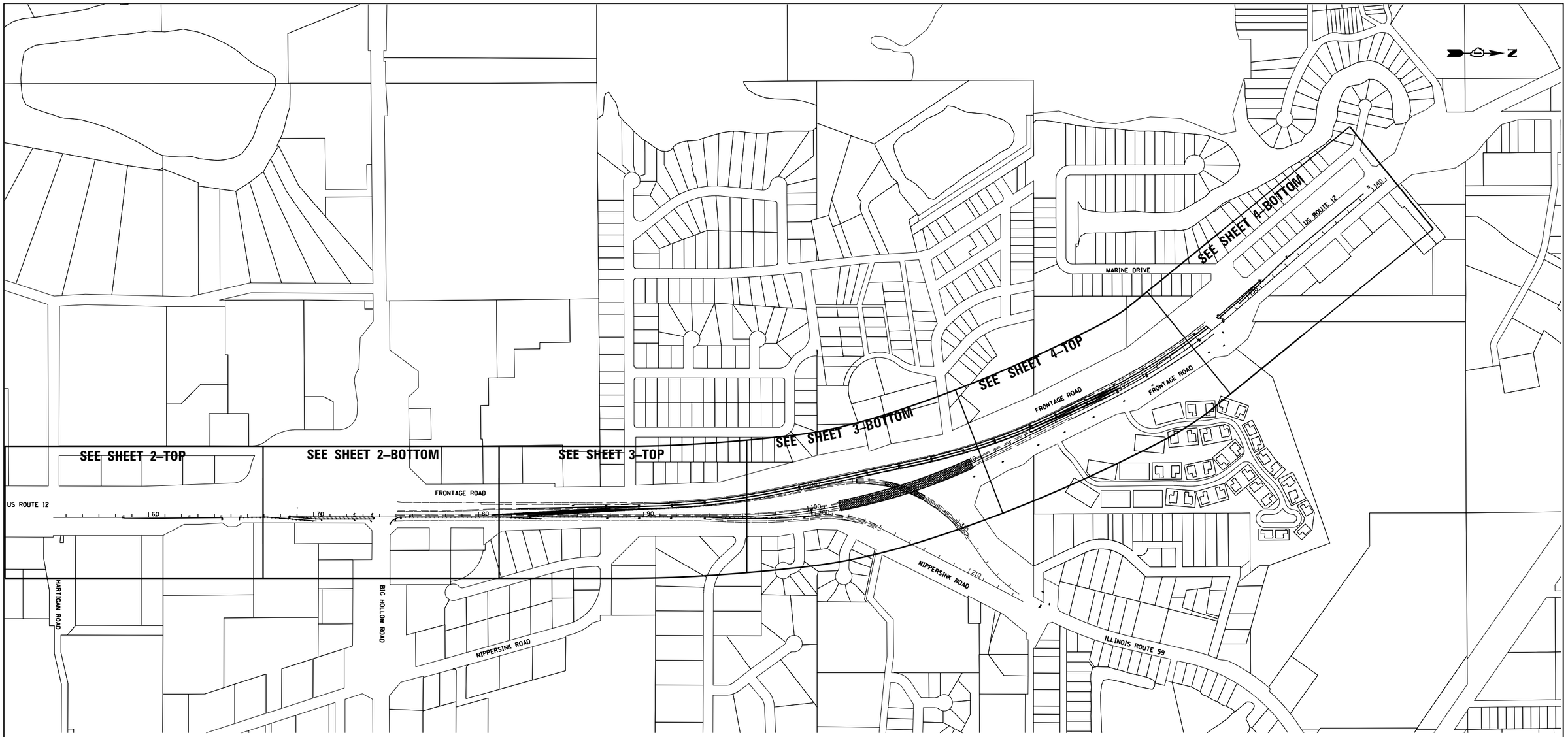
- DETOUR SIGN
- TY. III BARRICADE (LIGHTED)
- DETOUR ROUTE
- ROAD CLOSED

LEGEND

1	ROAD CLOSED AHEAD	W20-3 48 x 48	2	DETOUR AHEAD	W20-3 48 x 48	3	ROAD CLOSED	R11-2 48 x 30
4	DETOUR	M4-8 24 x 12	5	DETOUR	M4-8 24 x 12	6	DETOUR	M4-8 24 x 12
	TO	M4-5 24 x 12		TO	M4-5 24 x 12		TO	M4-5 24 x 12
	SOUTH	M3-3 24 x 12		SOUTH	M3-3 24 x 12		SOUTH	M3-3 24 x 12
	ILLINOIS 59	M1-5 24 x 24		ILLINOIS 59	M1-5 24 x 24		ILLINOIS 59	M1-5 24 x 24
	→	M6-1 21 x 15		←	M6-1 21 x 15		↑	M6-3 21 x 15
4A	DETOUR	M4-8 24 x 12	5A	DETOUR	M4-8 24 x 12	6A	DETOUR	M4-8 24 x 12
	TO	M4-5 24 x 12		TO	M4-5 24 x 12		TO	M4-5 24 x 12
	EAST	M3-3 24 x 12		EAST	M3-3 24 x 12		EAST	M3-3 24 x 12
	12	M1-5 24 x 24		12	M1-5 24 x 24		12	M1-5 24 x 24
	→	M6-1 21 x 15		←	M6-1 21 x 15		↑	M6-3 21 x 15
7	DETOUR	M4-8 24 x 12	8	DETOUR	M4-8 24 x 12	9	END DETOUR	M4-8A 24 x 18
	TO	M4-5 24 x 12		TO	M4-5 24 x 12			
	SOUTH	M3-3 24 x 12		SOUTH	M3-3 24 x 12	10	ROAD CLOSED 2 MILES AHEAD LOCAL TRAFFIC ONLY	R11-3 60 x 30
	ILLINOIS 59	M1-5 24 x 24		ILLINOIS 59	M1-5 24 x 24		DETOUR	M4-10L 48 x 18
	↰	M5-1 21 x 15		↱	M5-1 21 x 15	11	ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY	R11-3 60 x 30
7A	DETOUR	M4-8 24 x 12	8A	DETOUR	M4-8 24 x 12	12	ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY	R11-3 60 x 30
	TO	M4-5 24 x 12		TO	M4-5 24 x 12			
	EAST	M3-3 24 x 12		EAST	M3-3 24 x 12	13	ROAD CLOSED 500 FT	W20-3 48 x 48
	12	M1-5 24 x 24		12	M1-5 24 x 24			
	↰	M5-1 21 x 15		↱	M5-1 21 x 15			

FILE NAME = J:\Microst\352110\Dgn\Eng\Drawings\Final\Default	USER NAME = RICH	DESIGNED - MK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US ROUTE 12 (NB) OVER ILLINOIS ROUTE 59 (SB) DETOUR PLAN
	Drafting\ROADWAY\D160X51-SHT-DETOUR.dgn	DRAWN - RDS	REVISED -		
	PLOT SCALE = 2.0000 ' / in.	CHECKED - BPT	REVISED -		
	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	23
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



LEGEND

- ARROW BOARD
- SIGN
- TYPE III BARRICADE
- DRUMS W/STEADY BURN LIGHTS @ 50' C-C
- DIRECTION INDICATOR BARRICADES W/STEADY BURN LIGHTS @ 50' C-C
- TEMPORARY CONCRETE BARRIER
- TRAFFIC DIRECTION
- CENTERLINE
- LANE LINE
- EXISTING EDGE OF PAVEMENT/SHOULDER
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING AMBER LIGHT

CONSTRUCTION STAGING NOTES:

1. POSTED SPEED LIMIT: 50mph
2. CONSTRUCTION SPEED LIMIT: 45mph
3. TRANSITION LENGTH = ws/60
4. APPLICABLE STANDARDS
   - STANDARD 701101-05 - OFF-RD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600 mm) FROM PAVEMENT EDGE
   - STANDARD 701411-09 - LANE CLOSURE, MULTILANE AT EXIT RAMP
   - STANDARD 701421-08 - LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
   - STANDARD 701426-09 - LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
   - STANDARD 701901-07 - TRAFFIC CONTROL DEVICES
   - STANDARD 704001-08 - TEMPORARY CONCRETE BARRIER
5. SEE DETOUR PLAN FOR SIGNS AND ROUTES

0 300 600 900
SCALE IN FEET

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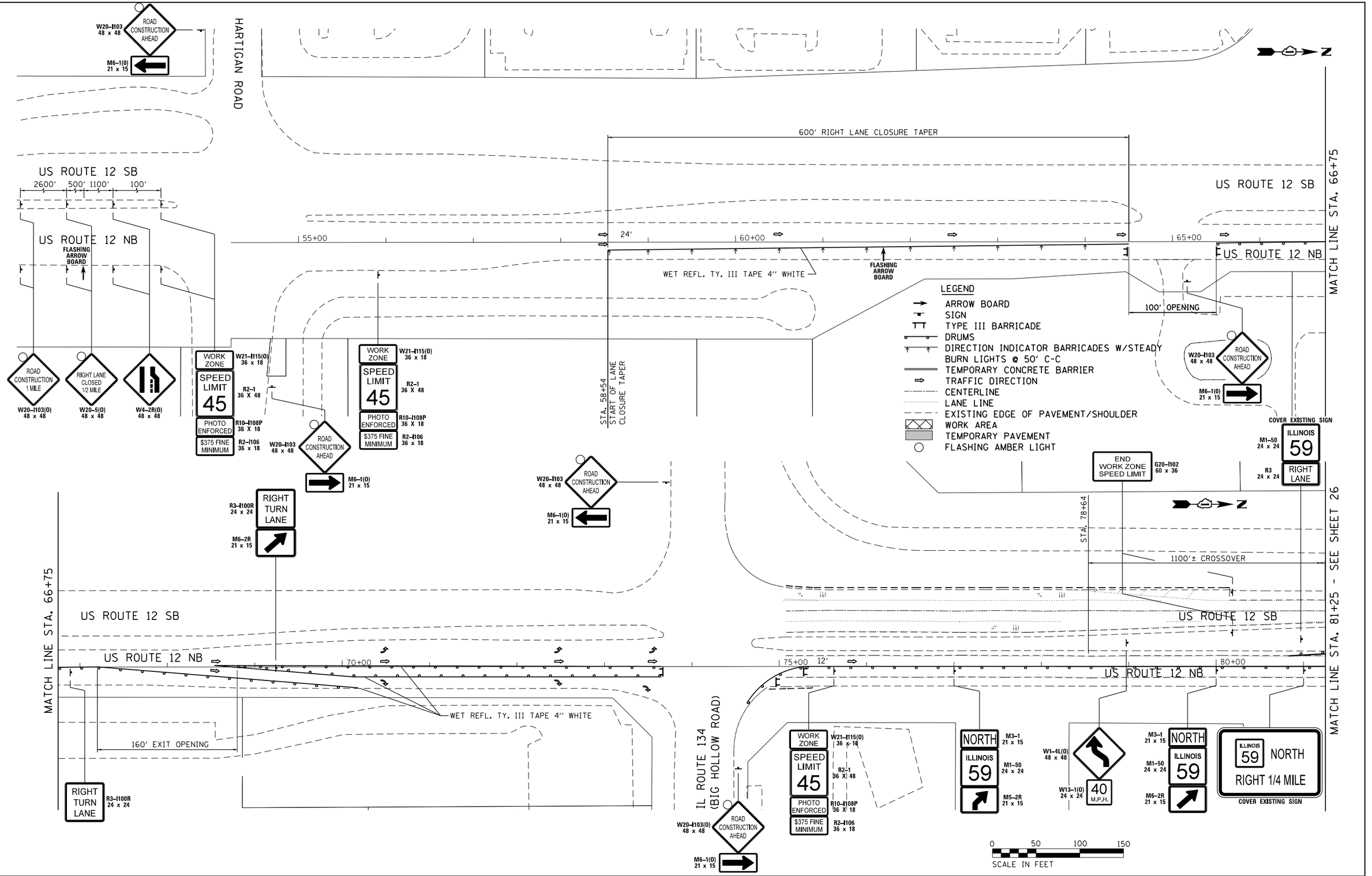
	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 (NB) OVER ILLINOIS ROUTE 59 (SB)
MAINTENANCE OF TRAFFIC

SCALE: 300' | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	24
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		



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Default	PLOT DATE = 1/10/2018	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 (NB) OVER ILLINOIS ROUTE 59 (SB)
MAINTENANCE OF TRAFFIC

SCALE: 1″=50′ | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	25
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

MOUNTED ABOVE TY. III BARRICADE
W1-6L(0) 60 x 30

MOUNTED ABOVE TY. III BARRICADE
W1-6L(0) 60 x 30

M3-4 36 x 18 WEST
M1-40 36 x 36 12

2 WAY TRAFFIC WITH CONCRETE BARRIER SEPARATION AND TEMPORARY GLARE SCREEN (SEE SECTION A-A)

MATCH LINE STA. 81+25 - SEE SHEET 25

1067' CROSSOVER

FRONTAGE ROAD

WET REFL. TY. III TAPE 4" YELLOW

677' CONCRETE BARRIER TAPER

US ROUTE 12 SB

16'

12'

85+00

US ROUTE 12 NB

WET REFL. TY. III TAPE 4" WHITE

WET REFL. TY. III TAPE 4" YELLOW

90+00

REMOVE EXISTING EDGE LINE PAVMT MARKING VIA WATER BLASTING

FRONTAGE ROAD

WET REFL. TY. III TAPE 4" YELLOW

US ROUTE 12 SB

12'

12'

A

A

WET REFL. TY. III TAPE 4" WHITE

95+00

US ROUTE 12 NB

REMOVE EXISTING SKIP DASH PAVMT MARKING VIA WATER BLASTING

MATCH LINE STA. 96+25

180' EXIT OPENING

240' EXIT RAMP TAPER

FRONTAGE ROAD

M3-4 36 x 18 WEST | NORTH M3-1 36 x 18
M1-40 36 x 36 12 | ILLINOIS 59 M1-50 36 x 36
M6-2L 30 x 21 M6-2R 30 x 21

℄

12' 2' 2' 12'

WET REFL. TY. III TAPE (TYP)

10' 24' 6'

SECTION A-A

LEGEND

- ARROW BOARD
- SIGN
- TYPE III BARRICADE
- DRUMS
- DIRECTION INDICATOR BARRICADES W/STEADY BURN LIGHTS @ 50' C-C
- TEMPORARY CONCRETE BARRIER
- TRAFFIC DIRECTION
- CENTERLINE
- LANE LINE
- EXISTING EDGE OF PAVEMENT/SHOULDER
- WORK AREA
- TEMPORARY PAVEMENT
- FLASHING AMBER LIGHT
- VERTICAL PANEL AT 50' C-C W/STEADY BURN LIGHT

DO NOT ENTER

COVER EXISTING SIGNS

FRONTAGE ROAD

2 WAY TRAFFIC WITH CONCRETE BARRIER SEPARATION

FRONTAGE ROAD

MATCH LINE STA. 96+25

US ROUTE 12 SB

12'

12'

WET REFL. TY. III TAPE 4" YELLOW

R11-3 48 x 30 BRIDGE OUT

R11-2 48 x 30 ROAD CLOSED

IL ROUTE 59 SB

WET REFL. TY. III TAPE 4" WHITE

R11-3 48 x 30 BRIDGE OUT

110+00

US ROUTE 12 NB

R11-2 48 x 30 ROAD CLOSED

R11-3 48 x 30 BRIDGE OUT

100+00

105+00

R11-2 48 x 30 ROAD CLOSED

R11-3 48 x 30 BRIDGE OUT

R11-2 48 x 30 ROAD CLOSED

FRONTAGE ROAD

LANE CLOSURE

MATCH LINE STA. 110+75 - SEE SHEET 27

0 50 100 150

SCALE IN FEET

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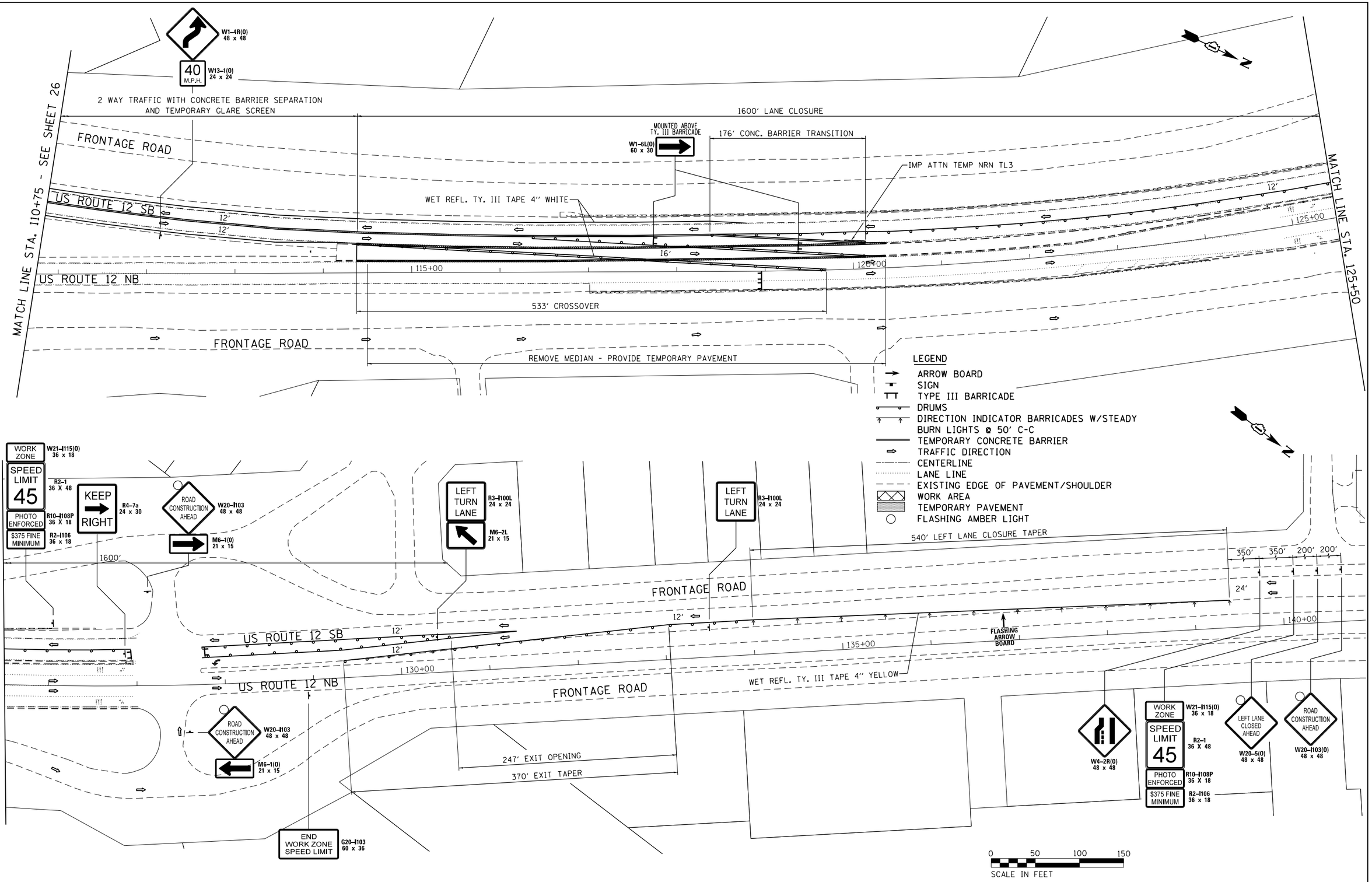
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 (NB) OVER ILLINOIS ROUTE 59 (SB)
MAINTENANCE OF TRAFFIC

SCALE: 1"=50' | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	26
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



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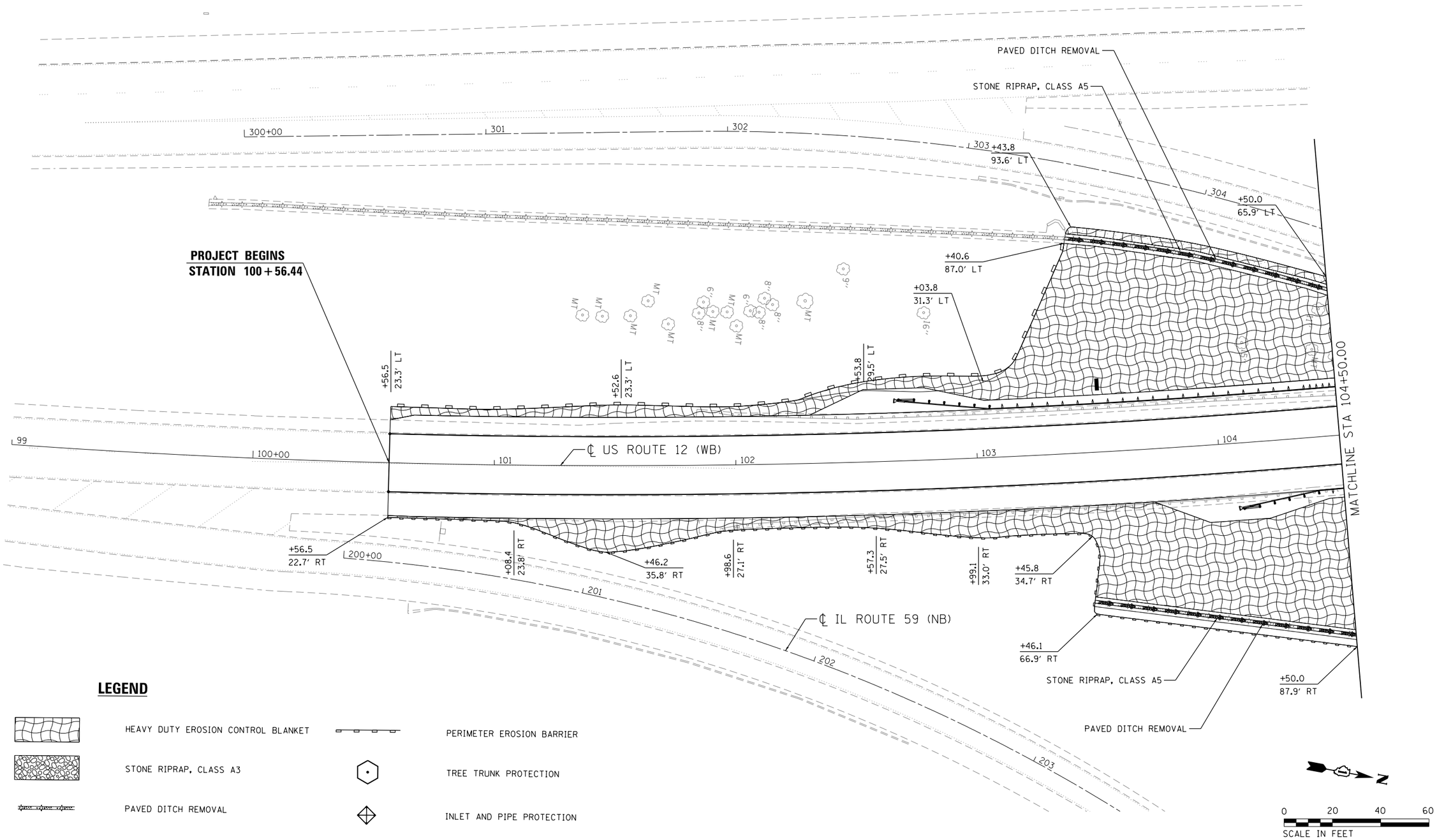
	Drafting\ROADWAY\D160X51-SHT-MOT 04.dgn	DRAWN - RDS	REVISED -			334	106-2HB-B	LAKE	105	27
	PLOT SCALE = 100.0000 ′ / in.	CHECKED - BPT	REVISED -						CONTRACT NO. 60X51	
	PLOT DATE = 1/10/2018	DATE - 12-04-17	REVISED -		SCALE: 1″=50′ SHEET 4 OF 4 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	



LEGEND

- HEAVY DUTY EROSION CONTROL BLANKET
- STONE RIPRAP, CLASS A3
- PAVED DITCH REMOVAL
- STONE RIPRAP, CLASS A5
- PERIMETER EROSION BARRIER
- TREE TRUNK PROTECTION
- INLET AND PIPE PROTECTION

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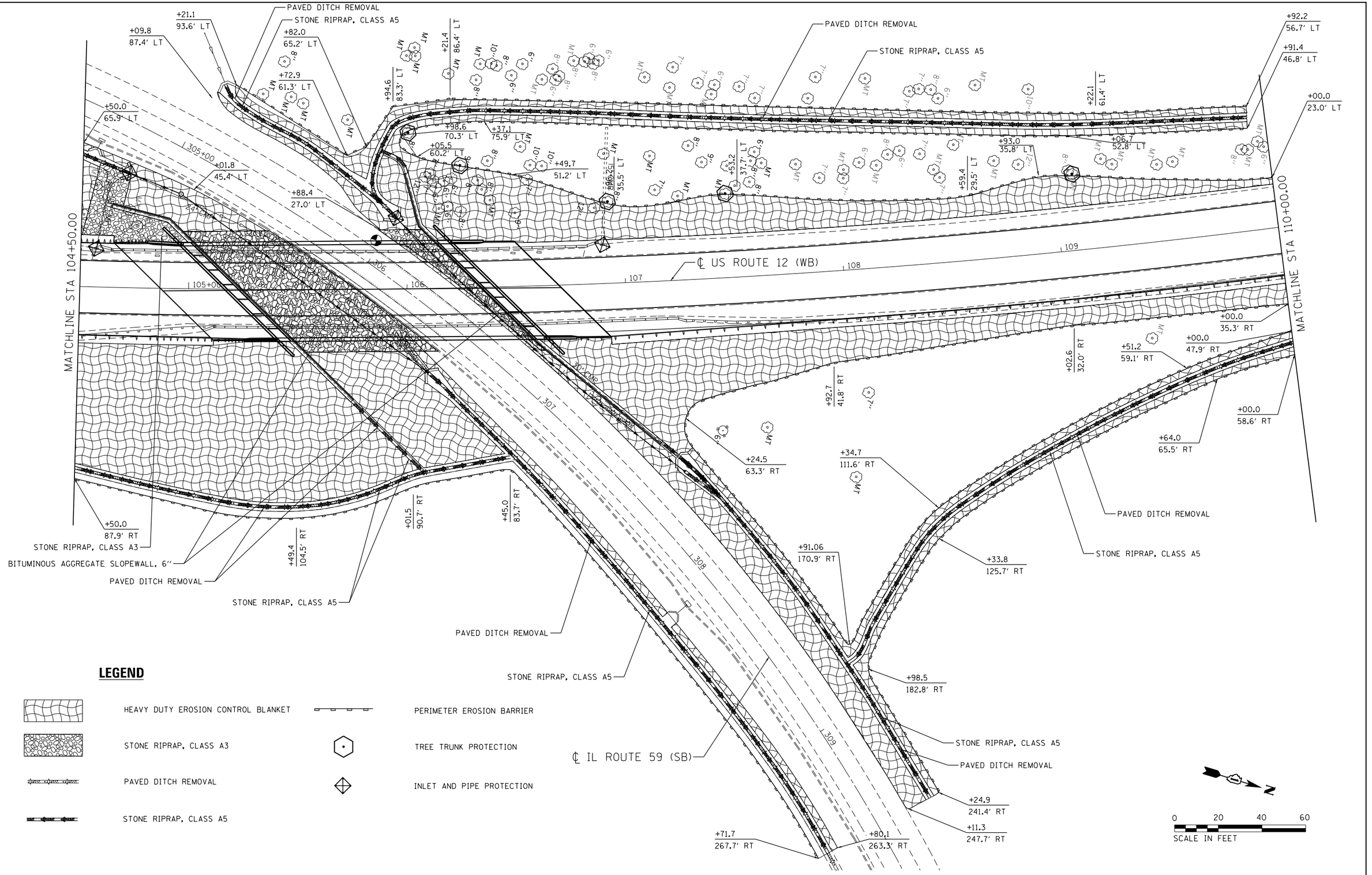
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 WESTBOUND
EROSION CONTROL PLAN

SCALE: 1" = 20' | SHEET 1 OF 3 SHEETS | STA. 100+56.44 | TO STA. 104+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	28
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



LEGEND

- HEAVY DUTY EROSION CONTROL BLANKET
- STONE RIPRAP, CLASS A3
- PAVED DITCH REMOVAL
- STONE RIPRAP, CLASS A5
- PERIMETER EROSION BARRIER
- TREE TRUNK PROTECTION
- INLET AND PIPE PROTECTION

0 20 40 60
SCALE IN FEET

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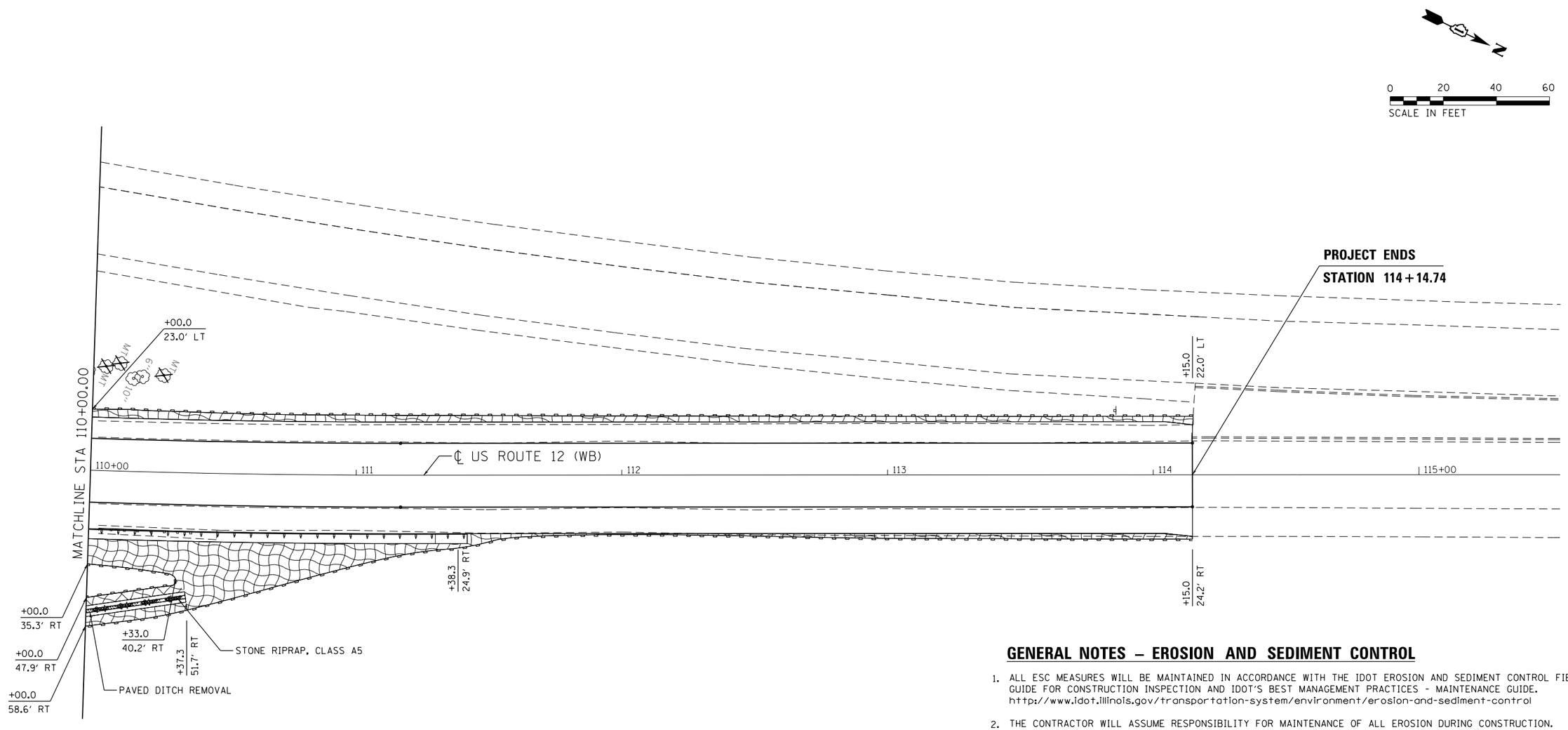
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 WESTBOUND
EROSION CONTROL PLAN

SCALE: 1'' = 20' | SHEET 2 OF 3 SHEETS | STA. 104+50.00 TO STA. 110+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	29
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



LEGEND

- HEAVY DUTY EROSION CONTROL BLANKET
- STONE RIPRAP, CLASS A3
- PAVED DITCH REMOVAL
- STONE RIPRAP, CLASS A5
- PERIMETER EROSION BARRIER
- TREE TRUNK PROTECTION
- INLET AND PIPE PROTECTION

GENERAL NOTES – EROSION AND SEDIMENT CONTROL

1. ALL ESC MEASURES WILL BE MAINTAINED IN ACCORDANCE WITH THE IDOT EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION AND IDOT'S BEST MANAGEMENT PRACTICES - MAINTENANCE GUIDE. http://www.idot.illinois.gov/transportation-system/environment/erosion-and-sediment-control
2. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL EROSION DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL CHECK A ESC MEASURES WEEKLY AND AFTER EACH RAINFALL, 0.5 INCHES OR GREATER IN A 24 HOUR PERIOD, OR EQUIVALENT SNOWFALL. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED BY THE CONTRACTOR AFTER EACH SIGNIFICANT SNOW MELT.
4. THE CONTRACTOR SHALL PROVIDE TO THE RE A PLAN TO ENSURE THAT A STABILIZED FLOW LINE WILL BE PROVIDED DURING STORM SEWER CONSTRUCTION. THE USE OF A STABILIZED FLOW LINE BETWEEN INSTALLED STORM SEWER AND OPEN DISTURBANCE WILL REDUCE THE POTENTIAL FOR THE OFF SITE DISCHARGE OF SEDIMENT BEARING WATERS, ESPECIALLY WHEN RAIN IS FORECASTED, SO THAT FLOW WILL NOT ERODE. LACK OF APPROVED PLAN OR FAILURE TO COMPLY WILL RESULT IN AN ESC DEFICIENCY DEDUCTION.
5. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THE WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCIDENTAL.
6. TEMPORARY OF PERMANENT STABILIZATION SHALL BE INITIATED IMMEDIATELY UPON COMPLETION OF DISTURBANCE OR IF THE WORK AREA IS TO BE LEFT UNDISTURBED FOR 14 DAYS OR MORE.
7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ON TIME.
8. EROSION CONTROL ITEMS ARE CONSIDERED TO BE HIGH PRIORITY ON THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE RE.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 WESTBOUND
EROSION CONTROL PLAN

SCALE: 1" = 20' | SHEET 3 OF 3 SHEETS | STA. 110+00.00 TO STA. 114+14.74

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	30
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

APPROXIMATE CONSTRUCTION LIMITS

STA. 305+98.7, 24.2' LT.
PRC 36" FLARED END SECTION
W. INV. = 760.0

STORM SEWER - 80 LF - 36"
CL. A, TY. 1 @ 2.50%

STORM SEWER - 96 LF - 36"
CL. A, TY. 1 @ 1.04%

STA. 307+70.0, 24.4' LT.
PRC 36" FLARED END SECTION
E. INV. = 757.0

STA. 305+09.9, 19.0' RT.
MANHOLE TY. A, 4' DIA.
W/TY. 1 FR. & CL
RIM = 768.5
INV = 764.43 S
INV = 760.39 N

IL ROUTE 59

US ROUTE 12 NB

24" CMP

15" CMP

30" CMP

STA. 304+83.7, 21.6' RT.
PRC 24" FLARED END SECTION
W. INV. = 764.8

STORM SEWER - 26 LF - 24"
CL. A, TY. 1, RCP @ 1.62%

STA. 104+57.3, 17.6' LT.
REMOVE INLET

STORM SEWER - 140 LF - 24"
CL. A, TY. 1, RCP @ 1.60%

STA. 306+53.6, 23.5' RT.
PRC 24" FLARED END SECTION
W. INV. = 758.15

APPROXIMATE CONSTRUCTION LIMITS

SCALE IN FEET
0 20 40 60

PROFILE
SURVEYED
PLOTTED
CROSS SECTIONS CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

EXISTING PGL

INV=764.88
26 LF - 24"
CL. A, TY. 1, RCP @ 1.62%
INV=764.43

INV=760.39
140 LF - 24"
CL. A, TY. 1, RCP @ 1.60%

INV=760.00

STA. 306+78.74
INV=758.00
80 LF - 36"
CL. A, TY. 1 @ 2.50%

INV=758.15

96 LF - 36"
CL. A, TY. 1 @ 1.04%

INV=757.00

780 775 770 765 760 755 750 745 740

772.34 771.65 770.91 770.14 769.34 768.54 767.71 766.96 766.18 765.49 764.90 764.31 763.81 763.33 762.87 762.39 761.85 761.42 760.96 760.51 760.08 759.62 759.21 758.78 758.37 757.98 757.56 757.23 756.87 756.56

304+00 304+50 305+00 305+50 306+00 306+50 307+00 307+50 308+00 308+50 309+00 309+50

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

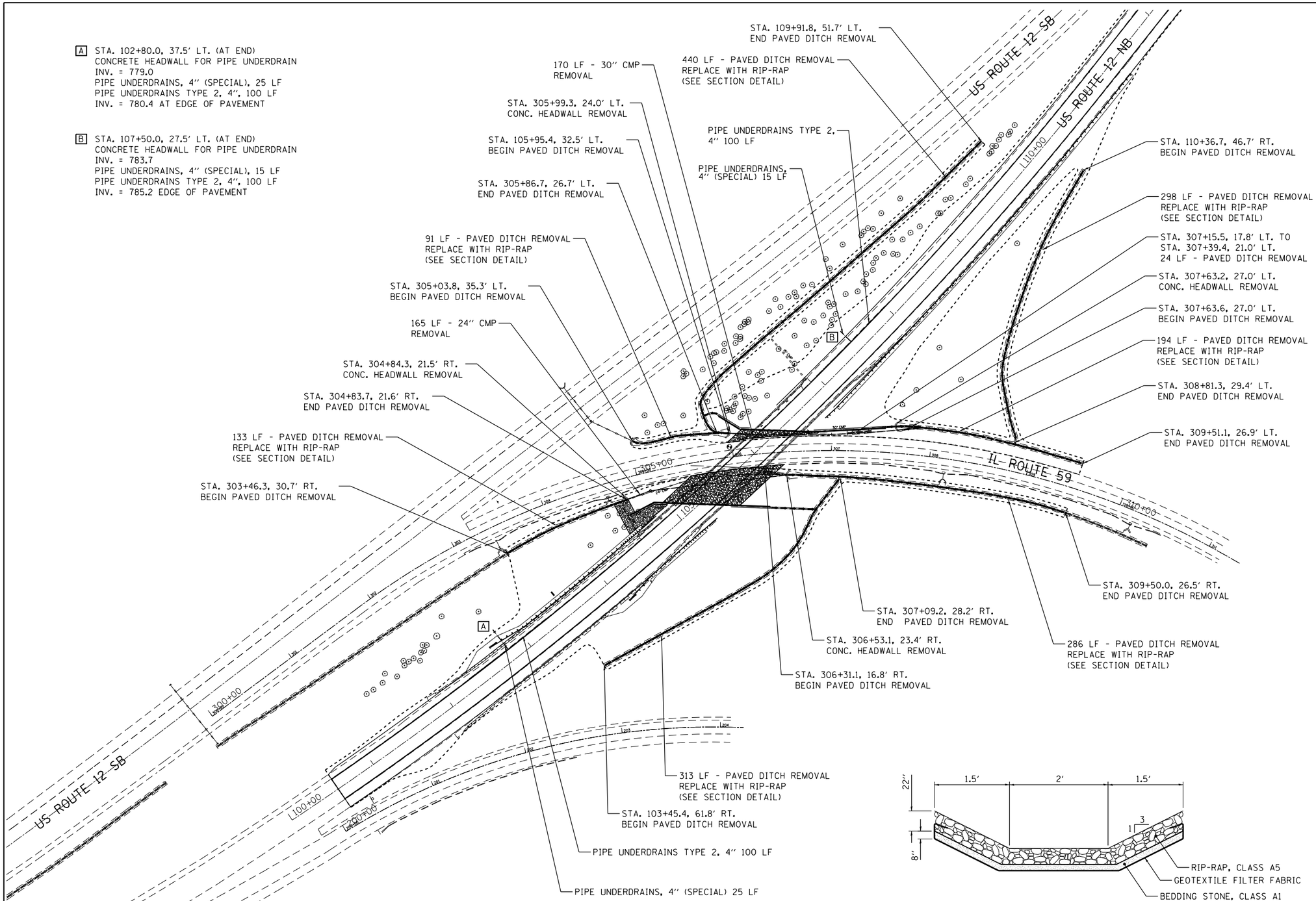
ILLINOIS ROUTE 59
DRAINAGE PLAN AND PROFILE

SCALE: 1"=20' | SHEET OF SHEETS | STA. 110+00.00 TO STA. 114+14.74

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	31
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

A STA. 102+80.0, 37.5' LT. (AT END)
CONCRETE HEADWALL FOR PIPE UNDERDRAIN
INV. = 779.0
PIPE UNDERDRAINS, 4" (SPECIAL), 25 LF
PIPE UNDERDRAINS TYPE 2, 4", 100 LF
INV. = 780.4 AT EDGE OF PAVEMENT

B STA. 107+50.0, 27.5' LT. (AT END)
CONCRETE HEADWALL FOR PIPE UNDERDRAIN
INV. = 783.7
PIPE UNDERDRAINS, 4" (SPECIAL), 15 LF
PIPE UNDERDRAINS TYPE 2, 4", 100 LF
INV. = 785.2 EDGE OF PAVEMENT



0 50 100 150
SCALE IN FEET

RIP-RAP DITCH CROSS SECTION

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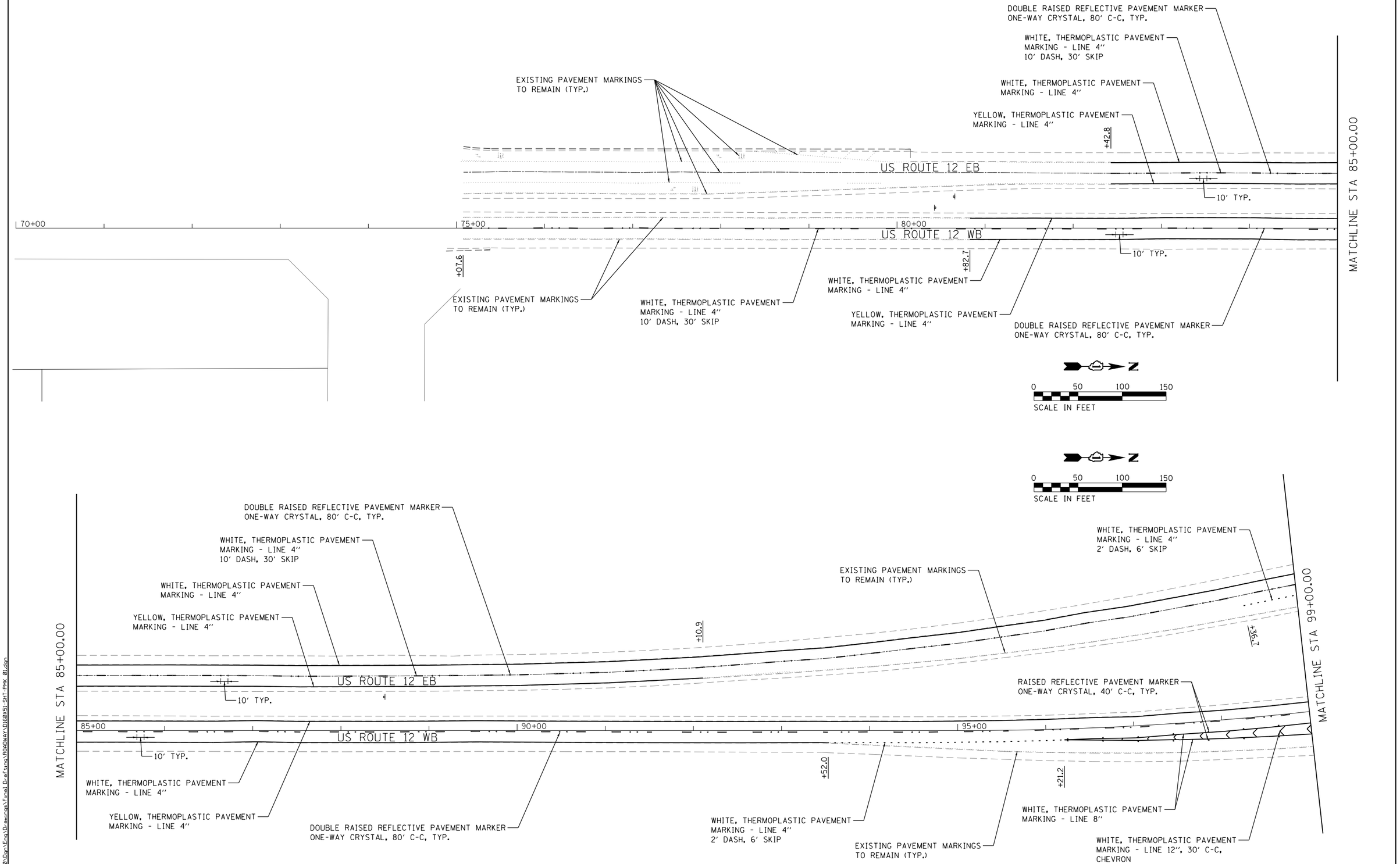
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
DRAINAGE PLAN

SCALE: 1"=50' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-1	LAKE	105	32
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



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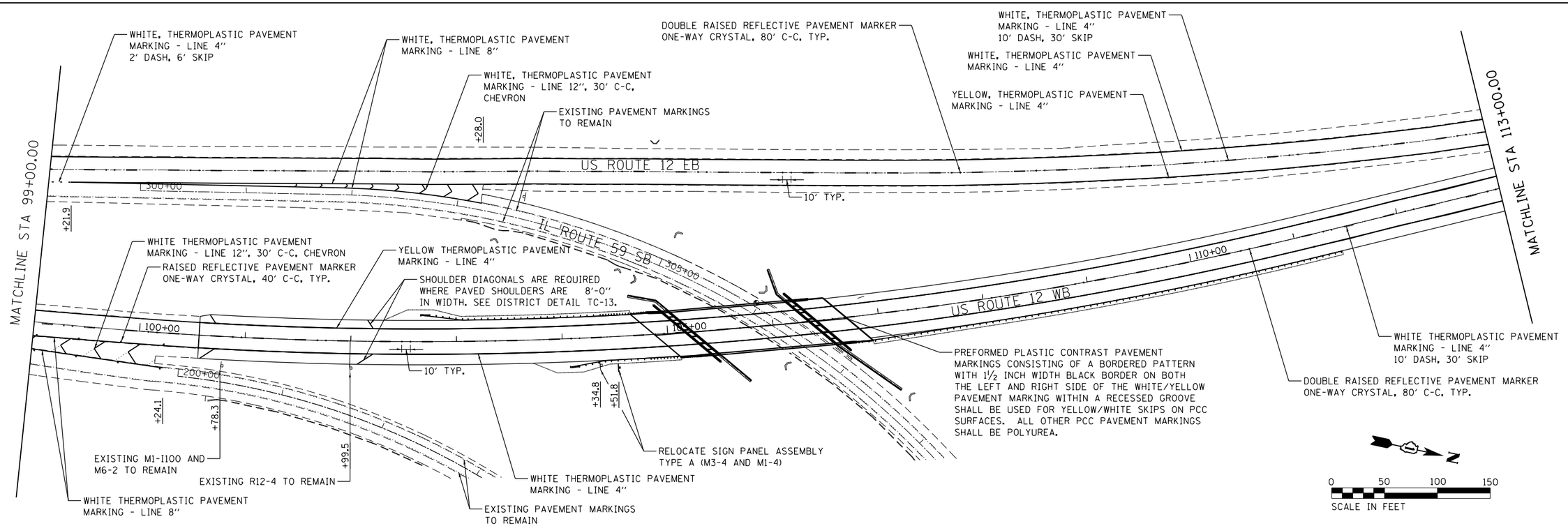
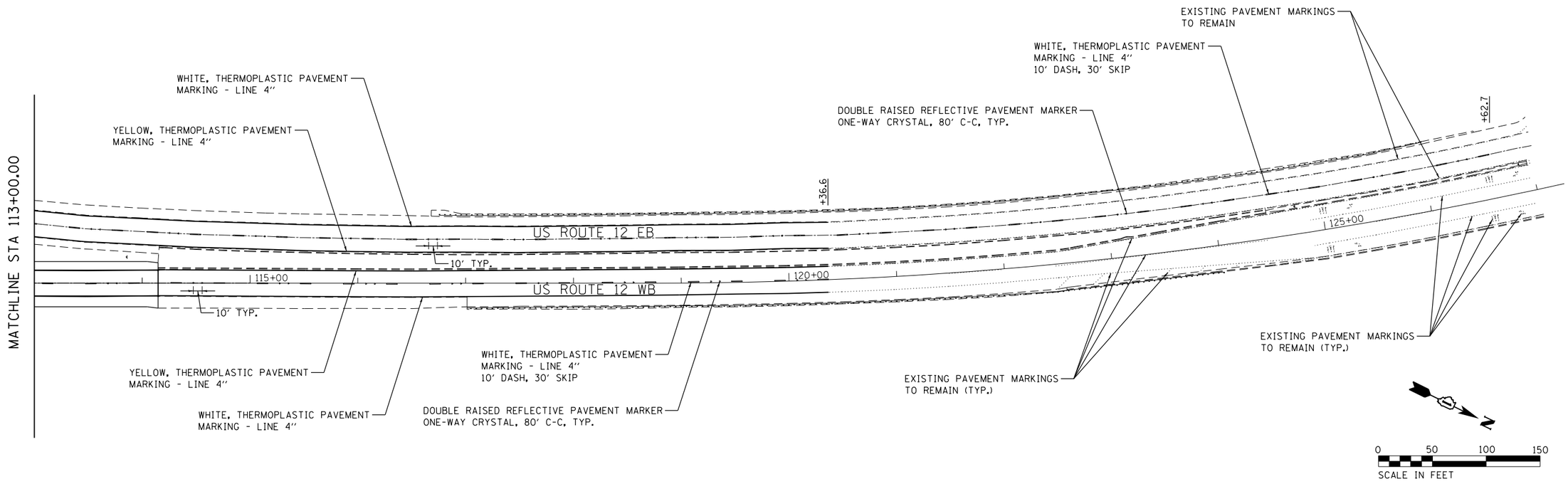
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 WESTBOUND
PAVEMENT MARKING AND SIGNAGE

SCALE: 1" = 50' | SHEET 1 OF 2 SHEETS | STA. 75+00.00 | TO STA. 99+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	33
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			





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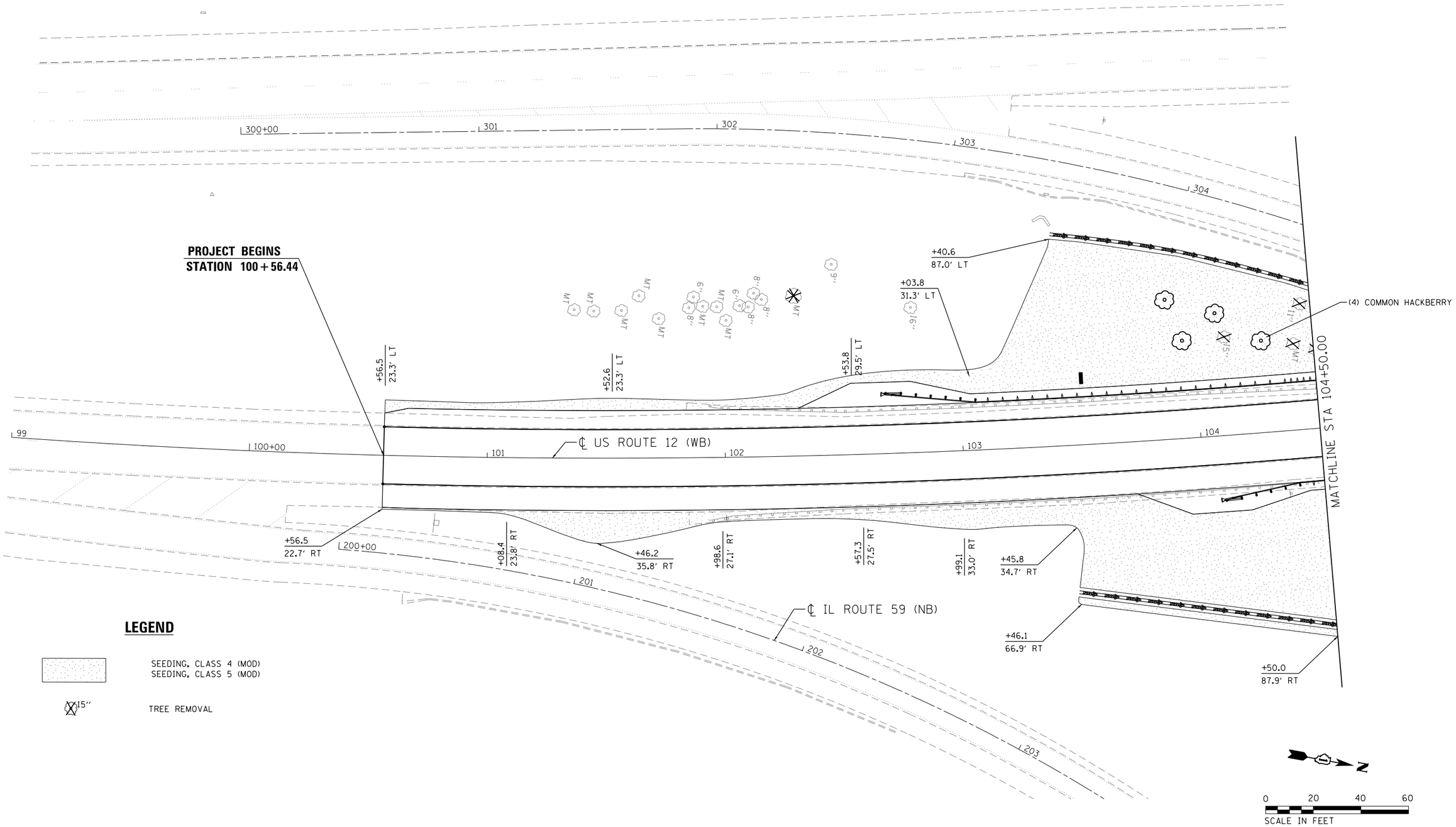
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 WESTBOUND
PAVEMENT MARKINGS AND SIGNAGE

SCALE: 1" = 50' | SHEET 2 OF 2 SHEETS | STA. 99+00.00 | TO STA. 127+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	34
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 WESTBOUND
LANDSCAPE PLAN

SCALE: 1" = 20' | SHEET 1 OF 3 SHEETS | STA. 100+56.44 TO STA. 104+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	35
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

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MATCHLINE STA 104+50.00

MATCHLINE STA 110+00.00

℄ US ROUTE 12 (WB)

℄ IL ROUTE 59 (SB)

+21.1
93.6′ LT

+82.0
65.2′ LT

+72.9
61.3′ LT

+94.6
83.3′ LT

+21.4
86.4′ LT

+50.0
65.9′ LT

305+00

+01.8
45.4′ LT

24" CMP

+88.4
27.0′ LT

+98.6
70.3′ LT

+37.1
75.9′ LT

+05.5
60.2′ LT

+49.7
51.2′ LT

+96.2
35.5′ LT

+53.2
37.7′ LT

+22.1
61.4′ LT

+92.2
56.7′ LT

+91.4
46.8′ LT

+00.0
23.0′ LT

+93.0
35.8′ LT

+06.7
52.8′ LT

+59.4
29.5′ LT

105+00

106

107

108

109

+00.0
35.3′ RT

+00.0
47.9′ RT

+02.6
32.0′ RT

+51.2
59.1′ RT

+92.7
41.8′ RT

(3) GROUPS OF (200) STAGHORN SUMAC,
3′ O.C. (3) MULCHED BEDS

+00.0
58.6′ RT

+64.0
65.5′ RT

+24.5
63.3′ RT

+34.7
111.6′ RT

+50.0
87.9′ RT

+49.4
104.5′ RT

+01.5
90.7′ RT

+45.0
83.7′ RT

(2) SWAMP WHITE OAK

(5) BALD CYPRESS

306

307

308

309

+91.06
170.9′ RT

+33.8
125.7′ RT

+98.5
182.8′ RT

+24.9
241.4′ RT

+11.3
247.7′ RT

+71.7
267.7′ RT

+80.1
263.3′ RT

LEGEND

SEEDING, CLASS 4 (MOD)
SEEDING, CLASS 5 (MOD)

15" TREE REMOVAL

GENERAL LOCATIONS OF TEMPORARY FENCE FOR TREE PROTECTION

N

0 20 40 60
SCALE IN FEET

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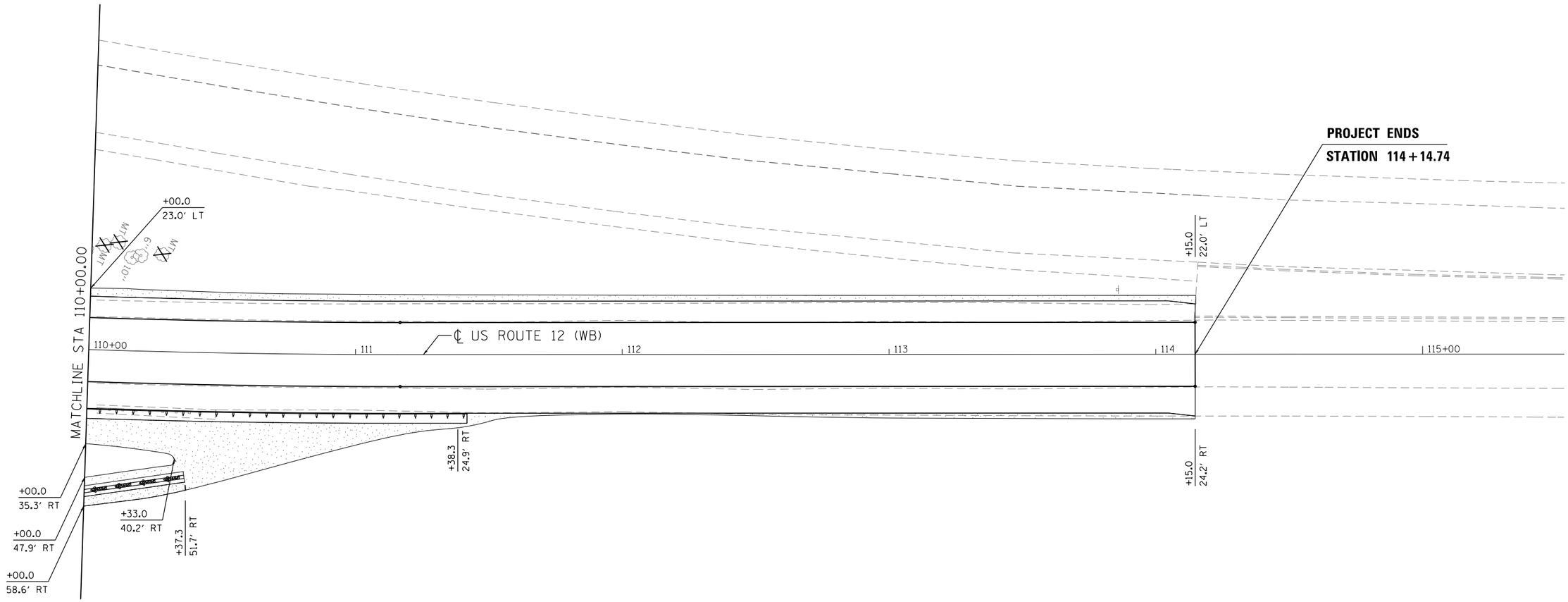
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 WESTBOUND
LANDSCAPING PLAN

SCALE: 1" = 20′ | SHEET 2 OF 3 SHEETS | STA. 104+50.00 TO STA. 110+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	36
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



LEGEND

SEEDING, CLASS 4 (MOD)
SEEDING, CLASS 5 (MOD)

15" TREE REMOVAL

N

0 20 40 60
SCALE IN FEET

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		DRAWN - MRS	REVISED -
Default	PLOT SCALE = 40.0000 ' / in.	CHECKED - CGF	REVISED -
	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 WESTBOUND
LANDSCAPING PLAN

SCALE: 1" = 20' | SHEET 3 OF 3 SHEETS | STA. 110+00.00 TO STA. 114+14.74

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	37
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES:

1. THIS PROJECT INCLUDES THE INSTALLATION OF TEMPORARY LIGHTING FOR CROSSOVERS DUE TO BRIDGE WORK AT US ROUTE 12 OVER IL ROUTE 59.

2. THE CONTRACTOR SHALL REQUEST A FORMAL MAINTENANCE TRANSFER OF EXISTING LIGHTING FROM THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION BEFORE ANY WORK, LIGHTING OR OTHERWISE, BEGINS. THE EXISTING LIGHTING CONTROLLER SHALL BE USED TO POWER TEMPORARY LIGHTING FOR THE ADJACENT CROSSOVER.

3. THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY COMPANY TO COORDINATE THE ELECTRIC SERVICE WORK. THE CONTACT PERSON IS THERESA SIERZGEA OF ComEd AT (815) 434-6131.

4. THE CONTRACTOR SHALL SUBMIT FOR THE RESIDENT ENGINEER'S REVIEW WITHIN 30 DAYS AFTER CONTRACT EXECUTION, EIGHT COPIES OF APPROVED MANUFACTURER'S PRODUCT DATA AND DETAILED SHOP DRAWINGS TO THE RESIDENT ENGINEER.

5. THE QUANTITIES OF AERIAL CABLE WHERE INDICATED ON THESE PLANS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL AERIAL CABLE IN COMPLETE COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.

6. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.

7. THE CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND/OVERHEAD UTILITIES PRIOR TO INSTALLATION OF TEMPORARY LIGHT POLES. IF THERE IS A CONFLICT WITH THE LIGHT POLES AS SHOWN ON PLANS, THE CONTRACTOR SHALL SUGGEST ALTERNATIVE LOCATIONS AND COORDINATE WITH THE ENGINEER PRIOR TO PERFORMING WORK.

8. THE CLEARANCE OF AERIAL CABLES CROSSING ROADWAYS SHALL CONFORM TO NEC ART. 225.18(4) BUT SHALL NOT BE LESS THAN 18 FT.

9. LIGHTING SYSTEM INSTALLATION SHALL CONFORM TO THE LATEST IDOT STANDARDS, NEC AND LOCAL CODES.

10. ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE U/L LISTED AND LABELED.

11. GROUND RODS SHALL BE FURNISHED AND INSTALLED AS REQUIRED PER IDOT STANDARD DWG. BE-800 FOR TEMPORARY LIGHTING UNITS. THE COST SHALL BE INCLUDED WITH PAY ITEM(S) "LIGHT POLE WOOD, 60 FOOT, CLASS 4, WITH 15 FT MAST ARM".

12. THE ELECTRIC SERVICE SHALL BE CONNECTED AERIALLY TO THE PROPOSED TEMPORARY LIGHTING CONTROLLER.

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	3910
AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE	EACH	2040
LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15 FT MAST ARM	EACH	33
TEMPORARY WOOD POLE, 60 FT, CLASS 4	EACH	2
TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	33
TEMPORARY LIGHTING CONTROLLER, 240 VOLT, POLE MOUNTED	EACH	1
REMOVAL OF TEMPORARY LIGHTING UNIT, NO SALVAGE	EACH	33
REMOVAL OF TEMPORARY LIGHTING CONTROLLER, NO SALVAGE	EACH	1
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	12

LEGEND

- TEMPORARY WOOD POLE, 50 FT. MH, 15 FT. MAST ARM WITH 400W, 240V MCIII HPS LUMINAIRE
- EXISTING LIGHTING UNIT, 47.5 FT. MH, 15 FT. MAST ARM WITH 400W, 240V MCIII HPS LUMINAIRE
- A/C — AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE OR 3-1/C NO. 4 WITH MESSENGER WIRE (AS INDICATED)
- GROUND ROD 5/8" DIA. X 8 FT
- ComEd ELECTRICAL SERVICE 240/480V, 1 PHASE 3 WIRE
- T — TEMPORARY LIGHTING CONTROLLER "T" POLE MOUNTED, 240V, 1 PHASE, 100 AMP
- TEMPORARY WOOD POLE, 60 FT. CLASS 4

LT-1

FILE NAME = #FILE$
#MODELNAME$

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Unit 4B
Downers Grove, IL 60516

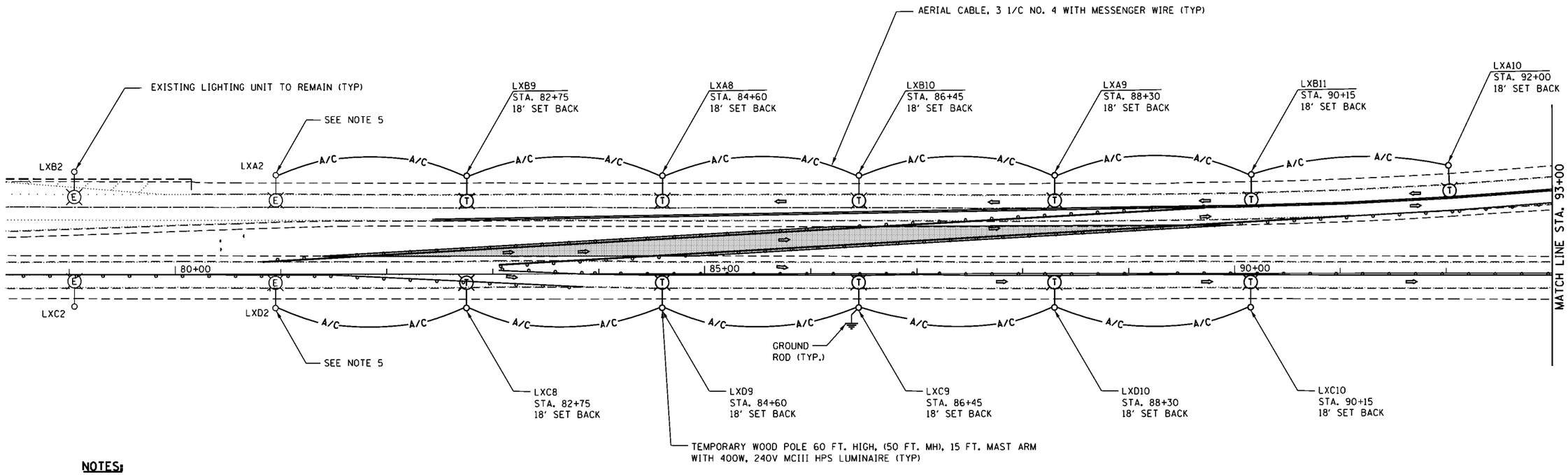
USER NAME = #USER$	DESIGNED - BL	REVISED -
	DRAWN - RV	REVISED -
PLOT SCALE = #SCALE$	CHECKED - MB	REVISED -
PLOT DATE = #DATE$	DATE - 12-4-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
GENERAL NOTES, LEGEND AND SCHEDULE OF QUANTITIES

SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	38
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR GENERAL NOTES AND LEGEND, SEE SHEET LT-1.
2. SET BACK IS FROM EDGE OF PAVEMENT TO CENTER OF POLE.
3. EXISTING LIGHTING CONTROLLER "LX" SHALL REMAIN IN USE TO PROVIDE POWER FEED TO TEMPORARY LIGHTING. IT IS LOCATED IN THE NE QUADRANT OF THE INTERSECTION OF US ROUTE 12 AND BIG HOLLOW ROAD.
4. TEMPORARY LIGHTING UNITS SHALL BE INSTALLED AND OPERATIONAL PRIOR TO OPENING THE CROSSOVER TO TRAFFIC. THIS TEMPORARY LIGHTING SHALL REMAIN IN USE UNTIL THE BRIDGE HAS BEEN OPENED FOR TRAFFIC AND THE CROSSOVER HAS BEEN CLOSED.
5. THE AERIAL CABLE SHALL BE CONNECTED TO THE EXISTING LIGHTING UNIT CIRCUIT AS SHOWN ON DETAIL LT-9. NEW FUSE KITS SHALL BE PROVIDED, AND THE COST OF THE FUSE KITS SHALL BE INCLUDED WITH PAY ITEM "AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE".

0 50 100 150

HORIZONTAL SCALE IN FEET

LT-2

FILE NAME = #FILE$ #MODEL_NAME$

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Unit 4B
Downers Grove, IL 60516

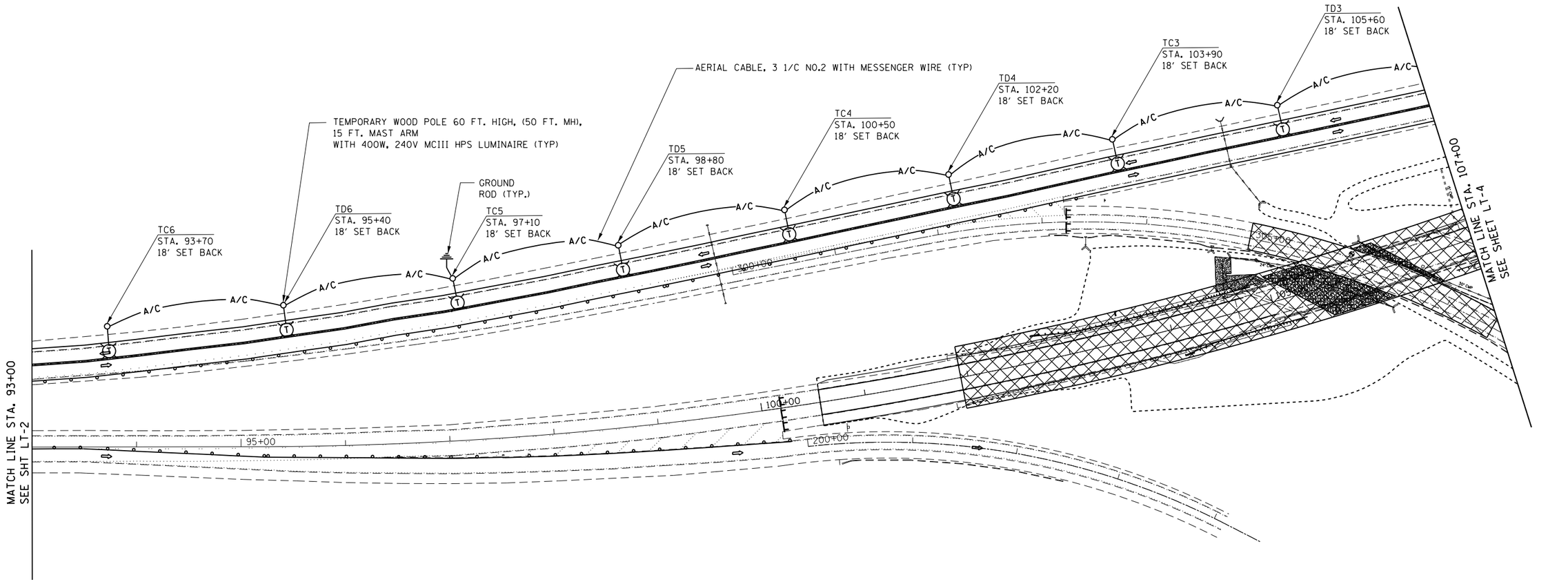
USER NAME = #USER$	DESIGNED - BL	REVISED -
	DRAWN - RV	REVISED -
PLOT SCALE = #SCALE$	CHECKED - MB	REVISED -
PLOT DATE = #DATE$	DATE - 12-4-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
TEMPORARY LIGHTING PLAN

SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	39
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR GENERAL NOTES AND LEGEND, SEE SHEET LT-1.
2. SET BACK IS FROM EDGE OF PAVEMENT TO CENTER OF POLE.
3. TEMPORARY LIGHTING UNITS SHALL BE INSTALLED AND OPERATIONAL PRIOR TO OPENING THE CROSSOVER TO TRAFFIC. THIS TEMPORARY LIGHTING SHALL REMAIN IN USE UNTIL THE BRIDGE HAS BEEN OPENED FOR TRAFFIC AND THE CROSSOVER HAS BEEN CLOSED.

0 50 100 150

HORIZONTAL SCALE IN FEET

LT-3

FILE NAME = i:\Microst\352100\Dgn\Eng\Drawings\Final Drafting\ROADWAY\D160X51-SHT-LT-03.dgn
Default

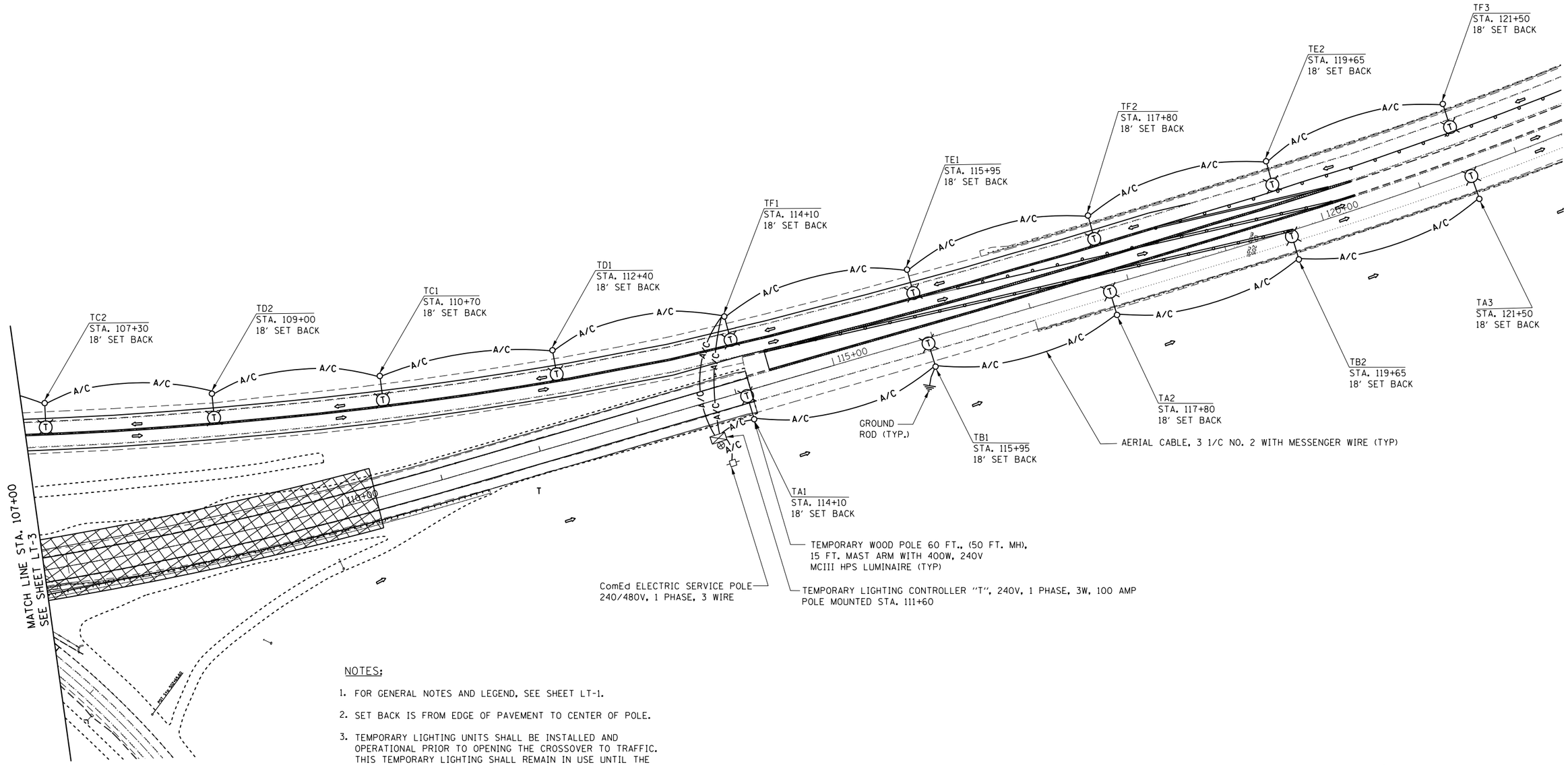
AMES Engineering, Inc. CONSULTING ENGINEERS 6330 Belmont Road, Unit 4B Downers Grove, IL 60516	USER NAME = RICH	DESIGNED - BL	REVISED -
		DRAWN - RV	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MB	REVISED -
	PLOT DATE = 12/5/2017	DATE - 12-4-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
TEMPORARY LIGHTING PLAN

. SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	40
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR GENERAL NOTES AND LEGEND, SEE SHEET LT-1.
2. SET BACK IS FROM EDGE OF PAVEMENT TO CENTER OF POLE.
3. TEMPORARY LIGHTING UNITS SHALL BE INSTALLED AND OPERATIONAL PRIOR TO OPENING THE CROSSOVER TO TRAFFIC. THIS TEMPORARY LIGHTING SHALL REMAIN IN USE UNTIL THE BRIDGE HAS BEEN OPENED FOR TRAFFIC AND THE CROSSOVER HAS BEEN CLOSED.

LT-4

FILE NAME = I:\Microst\352110\Dgn\Eng\Drawings\Final Drafting\ROADWAY\D160X51-SHT-LT-04.dgn
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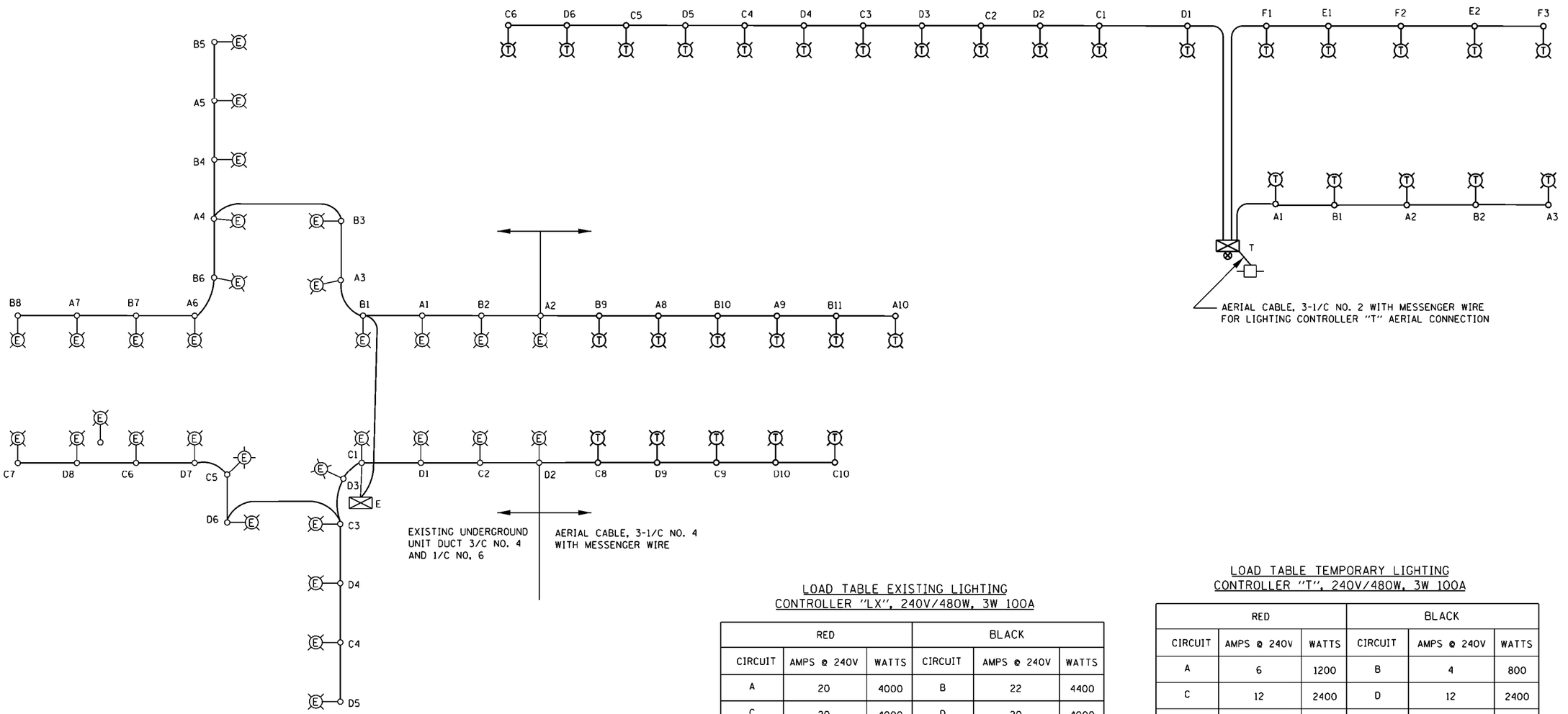
AMES Engineering, Inc. CONSULTING ENGINEERS 6330 Belmont Road, Unit 4B Downers Grove, IL 60516	USER NAME = RICH	DESIGNED - BL	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**US ROUTE 12 NB OVER IL ROUTE 59 TEMPORARY LIGHTING PLAN**
		DRAWN - RV	REVISED -		
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MB	REVISED -		
	PLOT DATE = 12/5/2017	DATE - 12-4-17	REVISED -		. SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	41
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

LEGEND

- TEMPORARY LUMINAIRE 400W HPS, 240V, CURRENT 2A
- EXISTING LUMINAIRE 400W HPS, 240V, CURRENT 2A
- AERIAL CABLE 3 1/C #2 WITH MESSENGER WIRE (UNLESS OTHERWISE INDICATED)
- T — TEMPORARY LIGHTING CONTROLLER "T" POLE MOUNTED
- E — EXISTING LIGHTING CONTROLLER "LX" PEDESTAL MOUNTED
- ELECTRIC SERVICE 240/480V SINGLE PHASE, 3 WIRE



LOAD TABLE EXISTING LIGHTING CONTROLLER "LX", 240V/480W, 3W 100A

RED			BLACK		
CIRCUIT	AMPS @ 240V	WATTS	CIRCUIT	AMPS @ 240V	WATTS
A	20	4000	B	22	4400
C	20	4000	D	20	4000
E	SPARE	SPARE	F	SPARE	SPARE
TOTAL	40	8000	TOTAL	42	8400
TOTAL AMPS "LX" 82A @ 240V 16400W					

LOAD TABLE TEMPORARY LIGHTING CONTROLLER "T", 240V/480W, 3W 100A

RED			BLACK		
CIRCUIT	AMPS @ 240V	WATTS	CIRCUIT	AMPS @ 240V	WATTS
A	6	1200	B	4	800
C	12	2400	D	12	2400
E	4	800	F	6	1200
G	SPARE	SPARE	H	SPARE	SPARE
TOTAL	22	4400	TOTAL	22	4400
TOTAL AMPS "T" 44A @ 240V 8800W					

LT-5

FILE NAME = $FILEL$
$MODELNAME$

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Unit 4B
Downers Grove, IL 60516

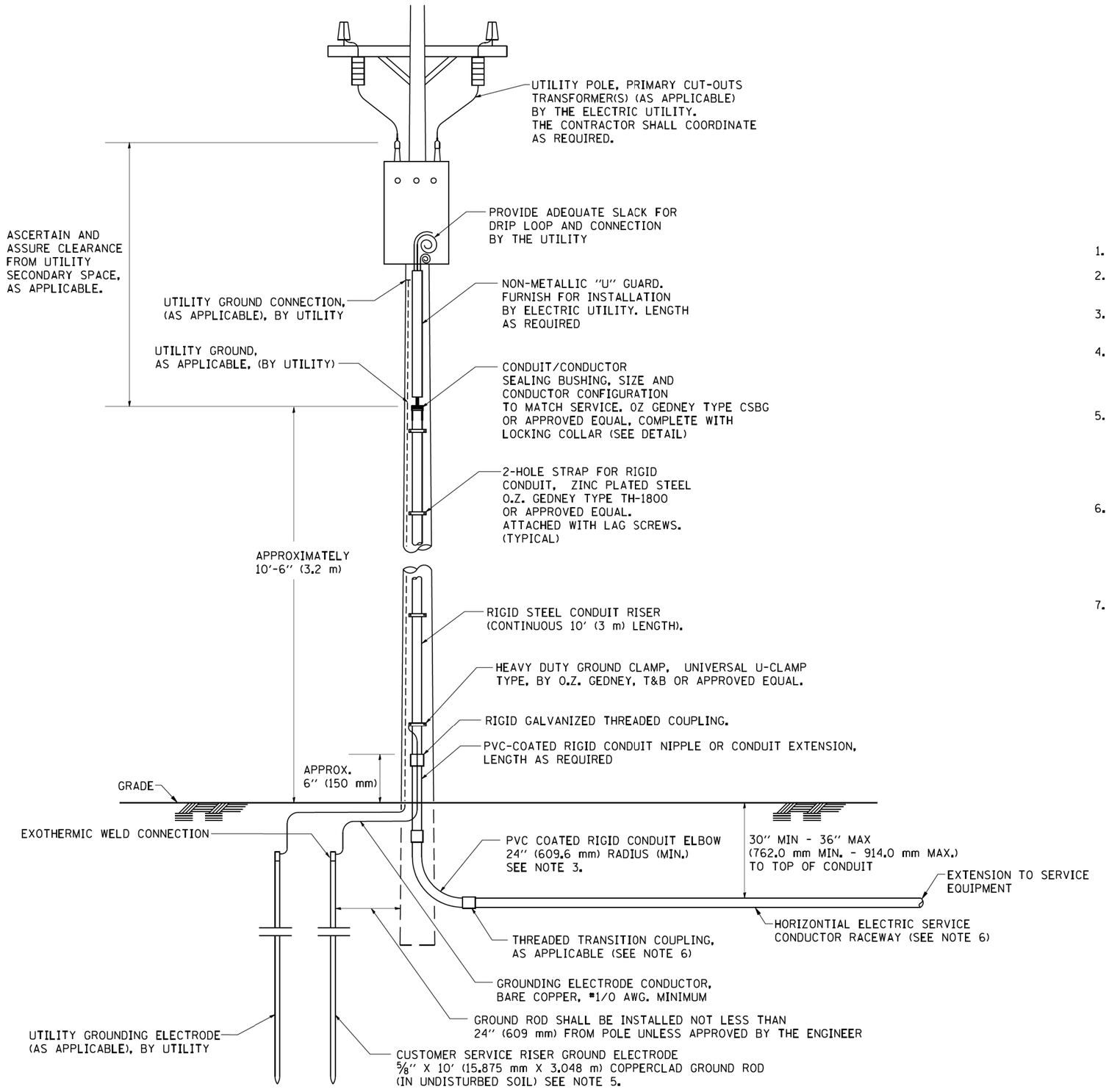
USER NAME = $USER$	DESIGNED - BL	REVISED -
	DRAWN - RV	REVISED -
PLOT SCALE = $SCALE$	CHECKED - MB	REVISED -
PLOT DATE = $DATE$	DATE - 12-4-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 NB OVER IL ROUTE 59
SINGLE LINE WIRING DIAGRAM

SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	42
		CONTRACT NO. 60X51		
	ILLINOIS	FED. AID PROJECT		

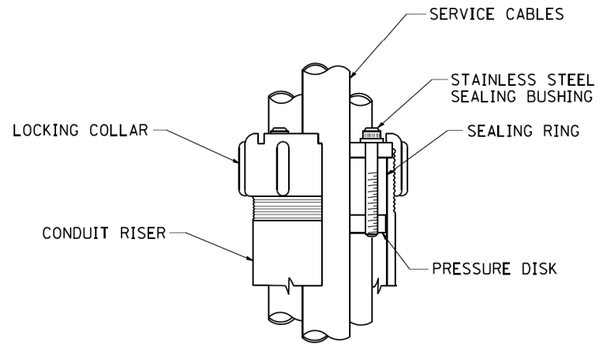


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPARATELY-MOUNTED SERVICE EQUIPMENT.

NOTES

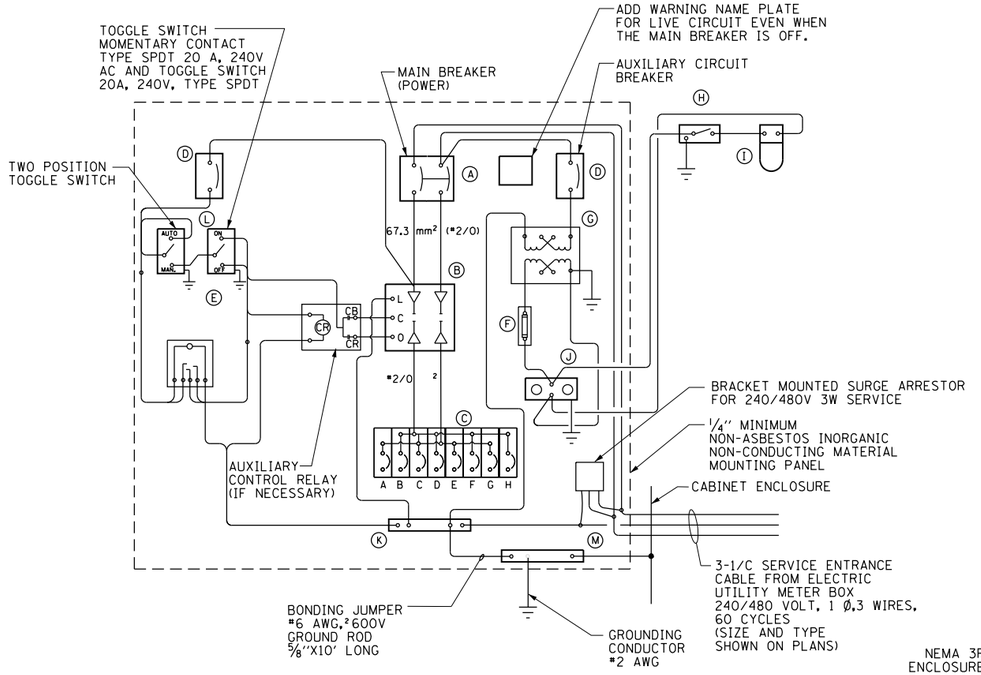
1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



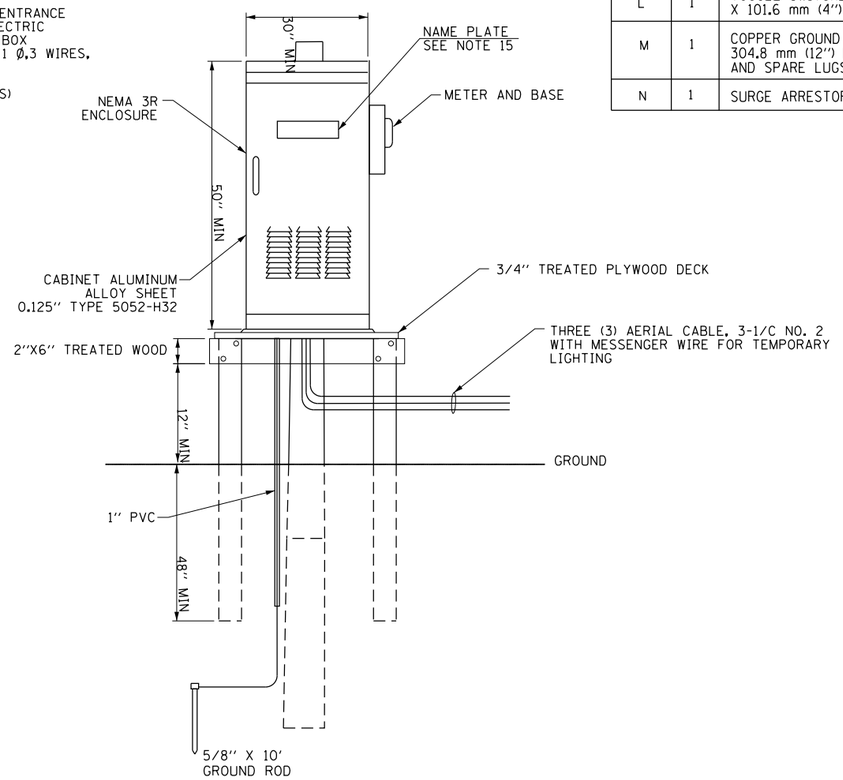
SEALING BUSHING DETAIL

LT-6

AMES Engineering, Inc. CONSULTING ENGINEERS 6330 Belmont Road, Unit 4B Downers Grove, IL 60516	USER NAME = gaglianobt	DESIGNED -	REVISED - 03-03-06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -					334	106-2HB-B	LAKE	105	43
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - MEA	REVISED -						BE-220	CONTRACT NO. 60X51		
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



WIRING DIAGRAM



PANEL EQUIPMENT

BILL OF MATERIAL

ITEM	QTY.	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100AMP. FRAME, 100AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUITS 240 VOLT, ASCO 920.
C	8	CIRCUIT BREAKERS, 1 POLE, 240V., 100AMP. FRAME 50AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100AMP. FRAME, 15AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22,000 AMP. AT 240 V.
E	1	A STRONOMIC MICRO PROCESSOR BASED 2 CHANNEL CONTROLLER [TIME SWITCH]
F	1	20A., 120V FUSE
G	1	1.5KVA. SINGLE PHASE, ENCAPSULATED TRANSFORMER 240X480/120X240 VOLT, 60 HZ
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN.
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER NEUTRAL BUS 6.35 mm (1/4") X 25.4 mm (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS.
L	1	TOGGLE SWITCHES MOUNTED IN 101.6 mm (4") X 101.6 mm (4") BOX.
M	1	COPPER GROUND BUS 6.35 mm (1/4") X 25.4 (1") 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS.
N	1	SURGE ARRESTOR

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.
2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
3. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
4. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
5. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 6.35 mm (1/4") DIA. STAINLESS STEEL HINGE PIN.
6. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
7. CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
8. METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
9. CABINETS SHALL SHALL HAVE AN ALUMINUM FINISH.
10. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
11. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
    R = RED BL = BLUE W = WHITE
    B = BLACK Y = YELLOW G = GREEN
12. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
13. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
14. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
15. 304.8 mm (12") X 406.4 mm (16") STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
16. SERVICE DISCONNECT SHOULD HAVE UL LABEL AND THE EQUIPMENT SHOULD BE SUITABLE FOR SERVICE ENTRANCE EQUIPMENT.
17. BASED ON LIGHTING CONTROLLER CABINET, ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS.
18. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
19. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

LT-7

FILE NAME = $FILE1$
$MODELNAME$

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Unit 4B
Downers Grove, IL 60516

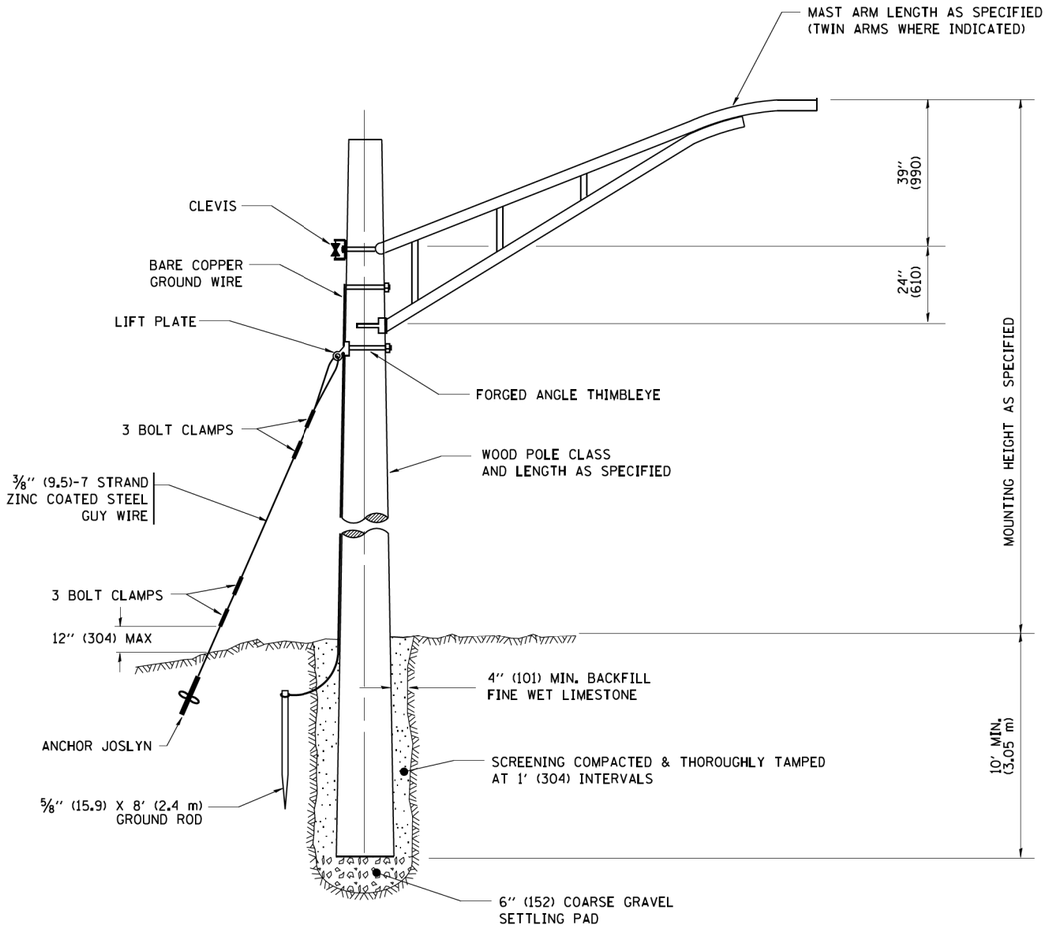
USER NAME = $USER$	DESIGNED - BL	REVISED -	
	DRAWN - RV	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - MB	REVISED -	
PLOT DATE = $DATE$	DATE - 12-4-17	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

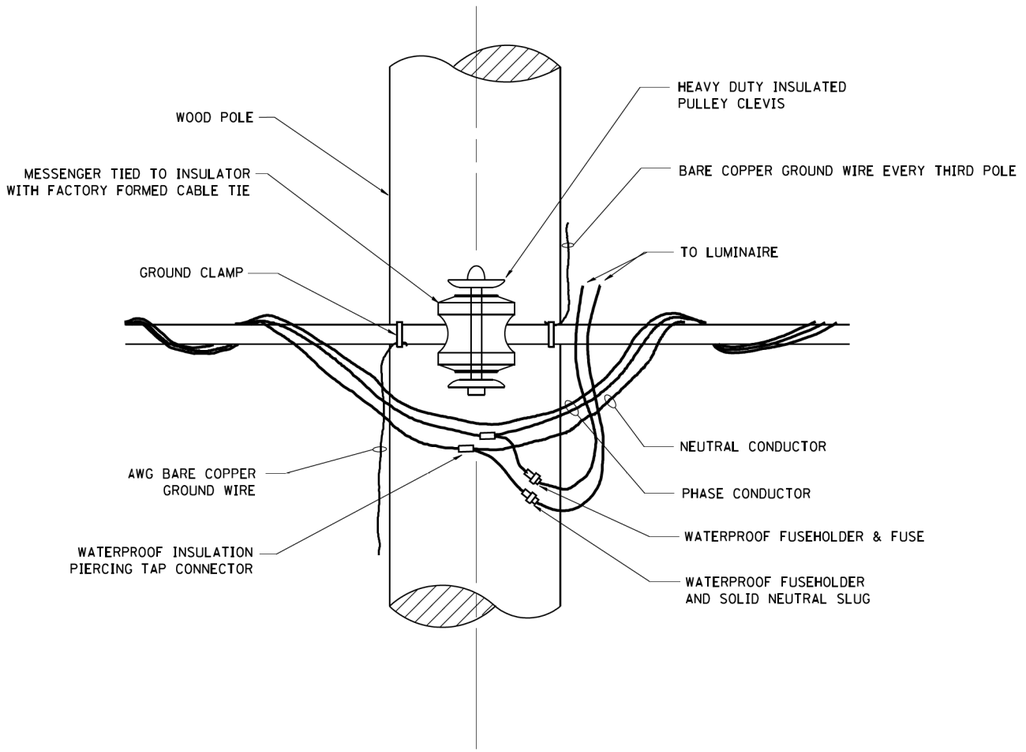
TEMPORARY LIGHTING CONTROLLER DETAILS

SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	44
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		



TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

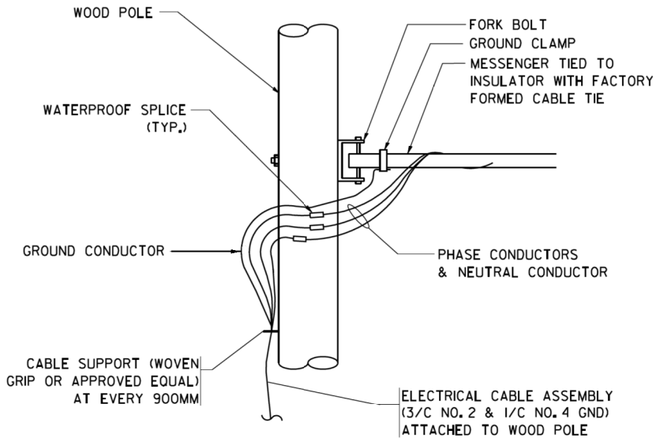
NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

LT-8

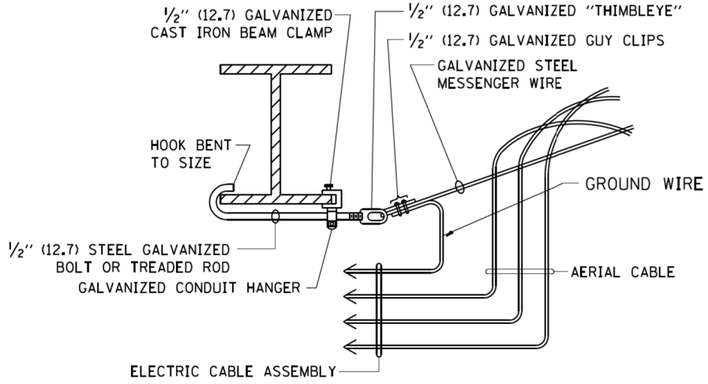
AMES Engineering, Inc. CONSULTING ENGINEERS 6330 Belmont Road, Unit 4B Downers Grove, IL 60516	USER NAME = geglianobt	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHT POLE DETAILS
		DRAWN -	REVISED -		
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.
	PLOT DATE = 1/4/2008	DATE -	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	45
	BE-800	CONTRACT NO. 60X51		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



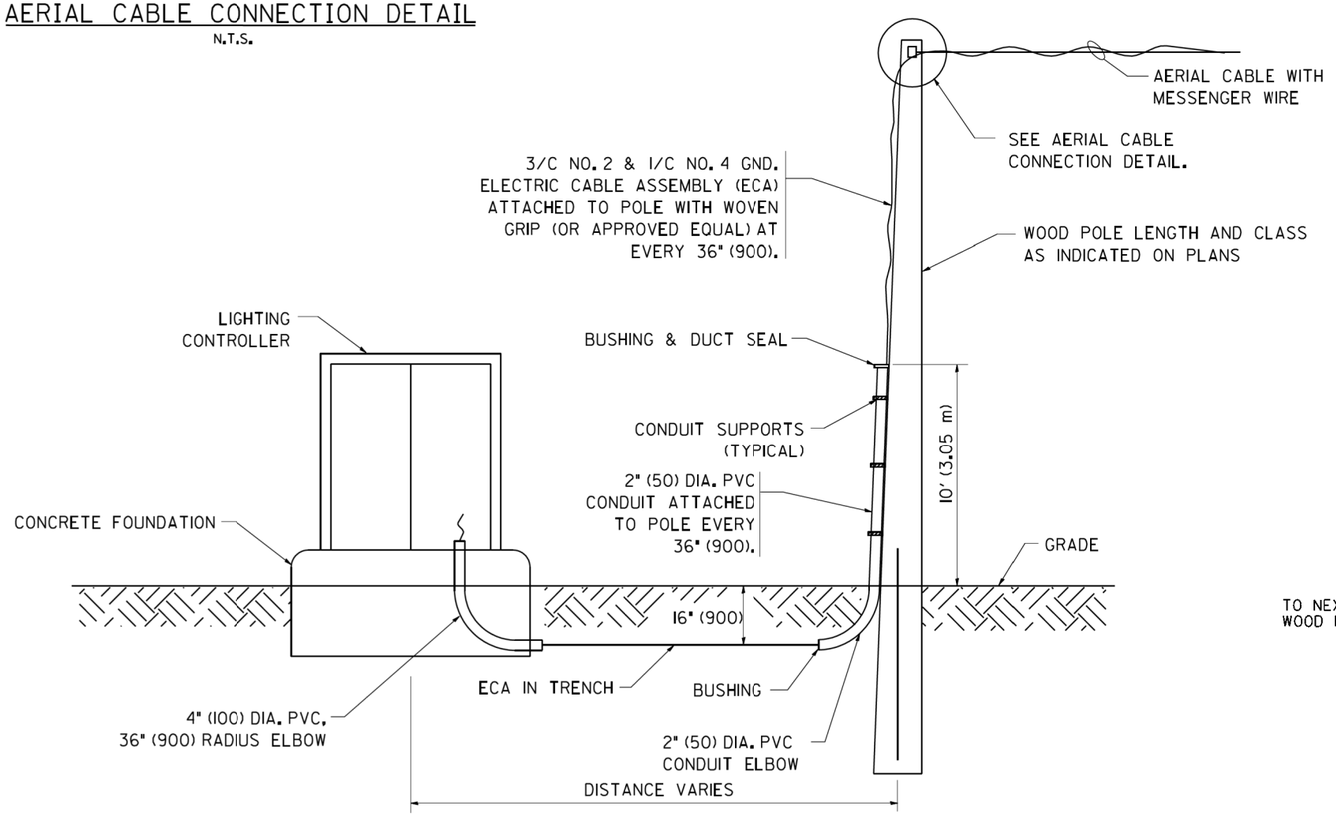
AERIAL CABLE CONNECTION DETAIL

N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE

NOT TO SCALE

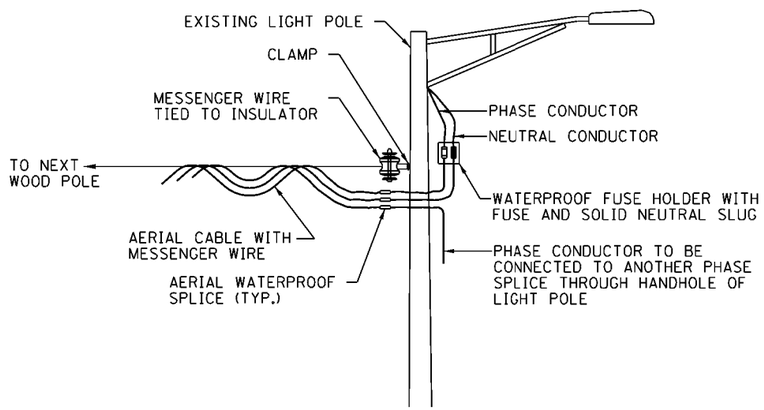


WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL

N.T.S.

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



AERIAL CABLE CONNECTION TO EXISTING LIGHT POLE

LT-9

AMES Engineering, Inc.
CONSULTING ENGINEERS
5413 Walnut Avenue, Suite 2F
Downers Grove, IL 60515

USER NAME = gaglianobt	DESIGNED -	REVISED - 08-08-03	
	DRAWN -	REVISED -	
PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -	
PLOT DATE = 1/4/2008	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY AERIAL CABLE INSTALLATION

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	46
	BE-801	CONTRACT NO. 60X51		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

Benchmark:
TBM1 R.R. Spike 1' above finished grade in west face of 1st utility pole north of Willow Road on east side of east Frontage Road.
Elevation=786.05 (NAVD 88)

TBM7 R.R. Spike 1' above finished grade in west face of 1st utility pole south of Windsor Drive on west side of east Frontage Road.
Elevation=790.08 (NAVD 88)

Existing Structure No. 049-0020, Built in 1966 as SBI Rt. 59
3-Span reinforced concrete haunched girder bridge on 3 column hammerhead piers and pile bent abutments supported on concrete piles.
The Structure is 200'-6" Bk.-Bk. and overall deck width is 36'-0".
Traffic Maintenance: Traffic to be detoured while structure is removed and replaced.
Salvage: None

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition

DESIGN STRESSES

FIELD UNITS

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

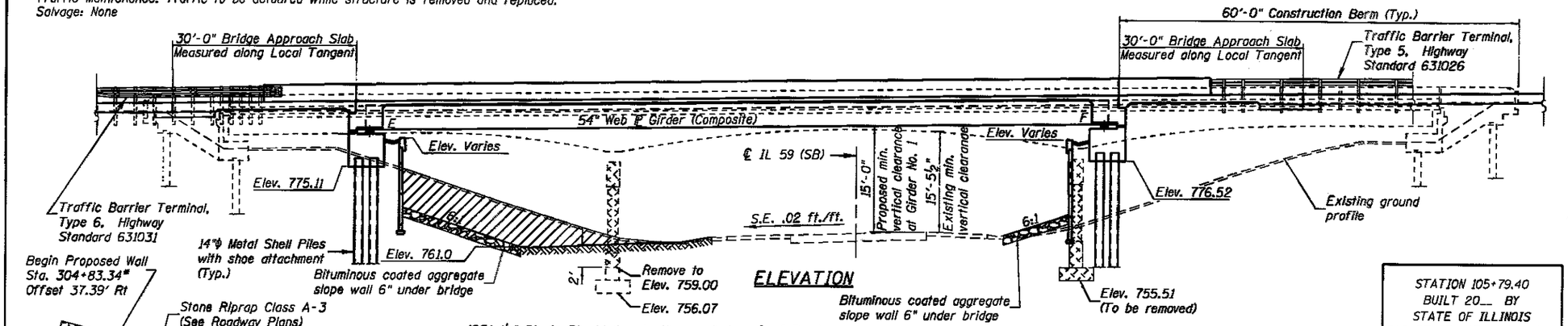
LOADING HL-93

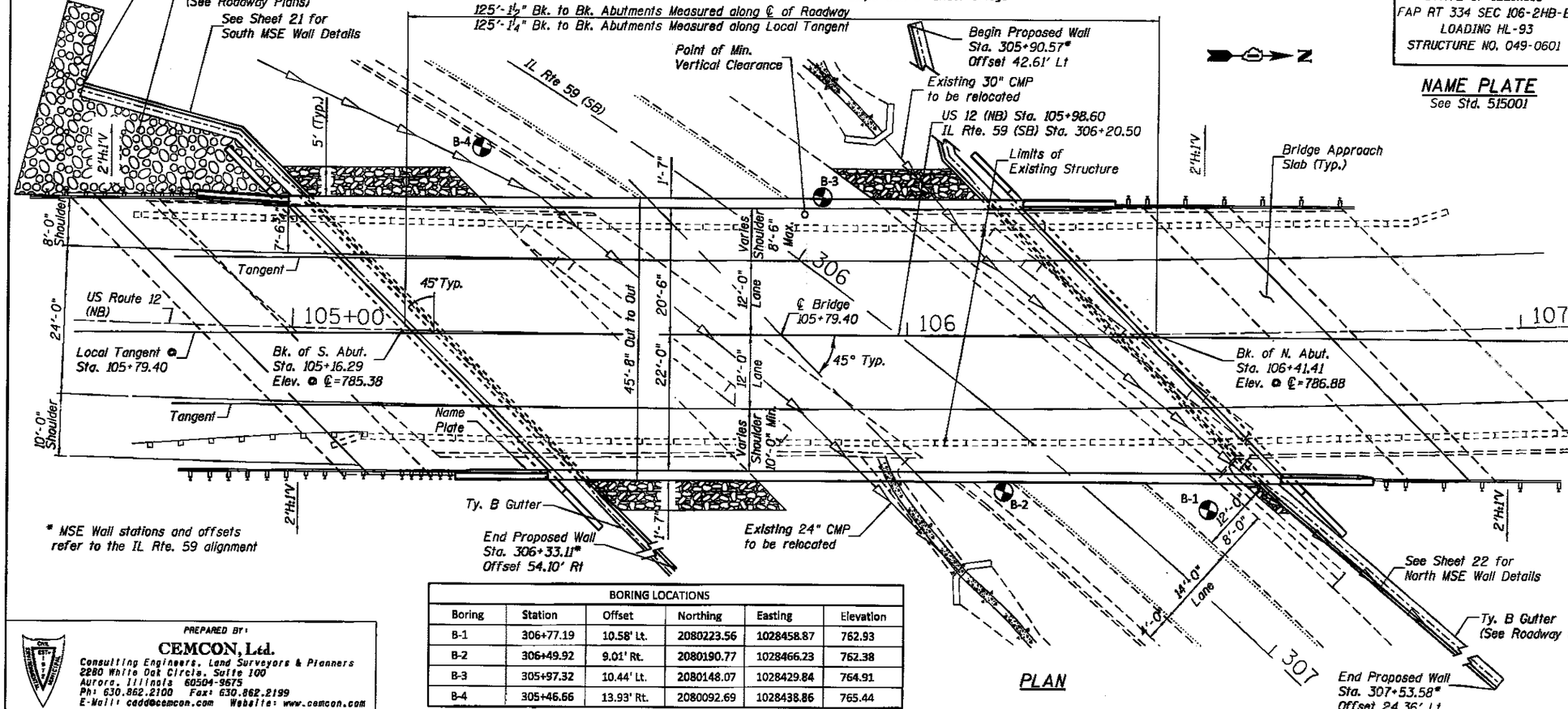
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.076g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.127g
Soil Site Class = D

INDEX OF SHEETS



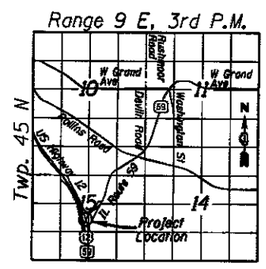


* MSE Wall stations and offsets refer to the IL Rte. 59 alignment

BORING LOCATIONS					
Boring	Station	Offset	Northing	Easting	Elevation
B-1	306+77.19	10.58' Lt.	2080223.56	1028458.87	762.93
B-2	306+49.92	9.01' Rt.	2080190.77	1028466.23	762.38
B-3	305+97.32	10.44' Lt.	2080148.07	1028429.84	764.91
B-4	305+46.66	13.93' Rt.	2080092.69	1028438.86	765.44

STATION 105+79.40
BUILT 20__ BY
STATE OF ILLINOIS
FAP RT 334 SEC 106-2HB-B
LOADING HL-93
STRUCTURE NO. 049-0601

NAME PLATE
See Std. 515001



LOCATION SKETCH

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

NABI FAKRODDIN 081-03377 ST CHARLES STRUCTURAL ENGINEER

Nabi Fakroddin DATE: 12-1-17
Nabi Fakroddin, SE (081-03377)
Expires 11-30-18

GENERAL PLAN AND ELEVATION
US 12 (NB) OVER IL 59 (SB)
FAP RTE 334 SEC. 106-2HB-B
LAKE COUNTY
STATION 105+79.40
STRUCTURE NO. 049-0601

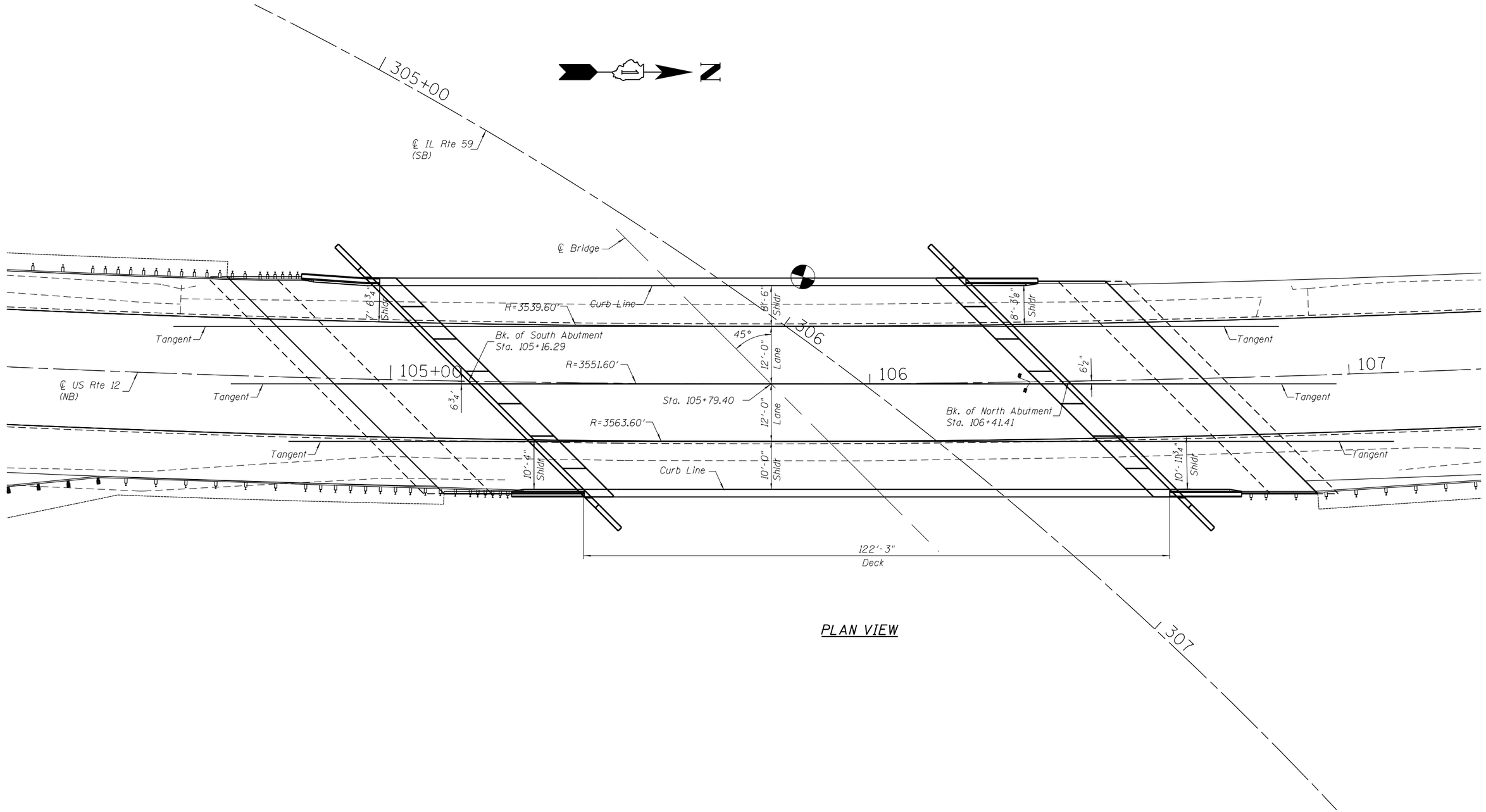
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 049-0601
SHEET NO. 1 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	47
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		



PLAN VIEW

PREPARED BY:
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Ph: 630.862.2100 Fax: 630.862.2199
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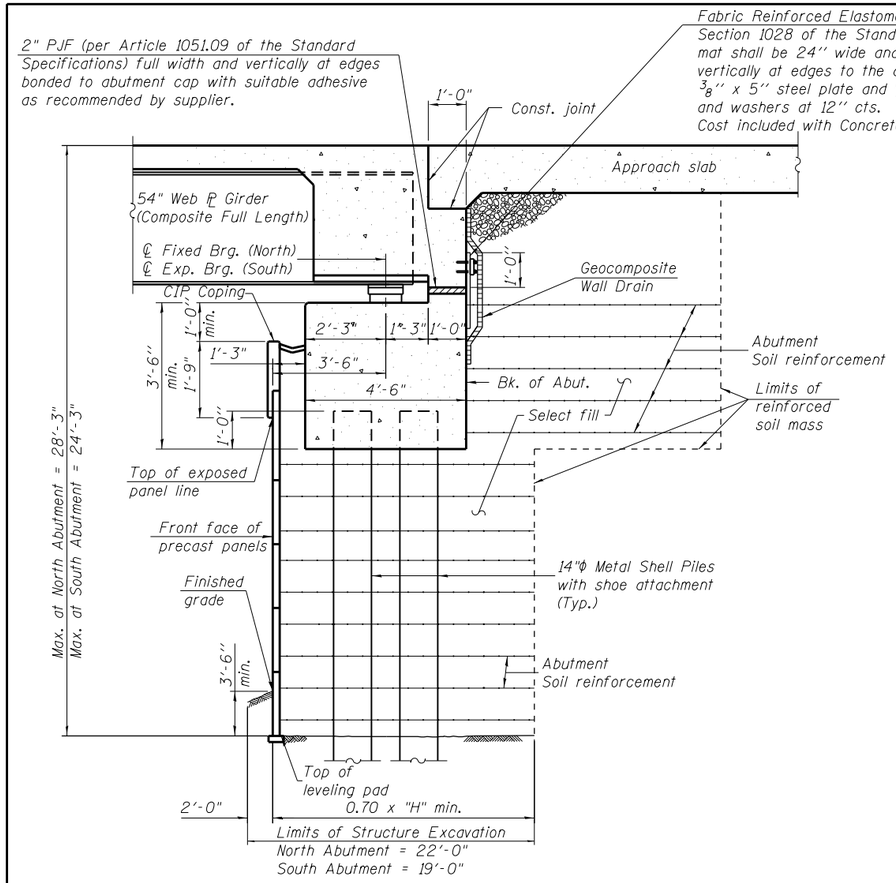
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN LAYOUT
STRUCTURE NO. 049-0601
SHEET NO. 2 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	48
		CONTRACT NO. 60X51		
	ILLINOIS	FED. AID PROJECT		



SECTION THRU SEMI-INTEGRAL ABUTMENT

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

Note: The MSE Wall Supplier shall design the abutment soil reinforcement to resist a horizontal force of 1.7 k/ft. of abutment.

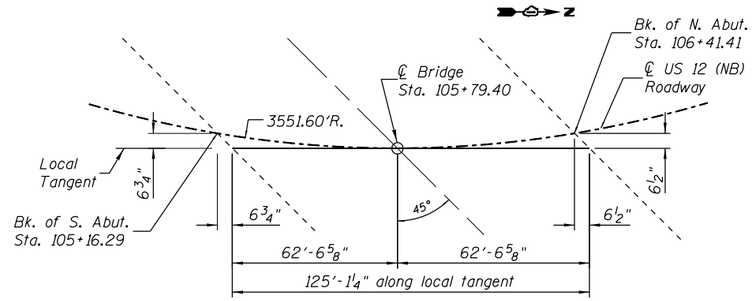
GENERAL NOTES

1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3, in unpainted areas. Bolts $\frac{3}{4}$" in ϕ, holes $\frac{15}{16}$" in ϕ. Unless otherwise noted.
2. Calculated weight of Structural Steel = 274,490 lbs.
3. All Structural steel shall be AASHTO M270, Grade 50W.
4. No field welding is permitted except as specified in the contract documents.
5. The embankment configuration shown shall be the minimum that must be placed and compacted prior to the construction of the abutments.
6. Reinforcement bars designated (E) shall be epoxy coated.
7. Structural steel shall only be painted, for a distance equal to the depth of embedment into the concrete cap plus 1'-6". Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.
8. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
9. Slipforming of the parapet is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each	--	--	1
Structure Excavation	Cu. Yd.	--	2,160	2,160
Concrete Structures	Cu. Yd.	--	148	148
Concrete Superstructure	Cu. Yd.	245.3	--	245.3
Concrete Superstructure (Approach Slab)	Cu. Yd.	140.8	--	140.8
*Bridge Deck Grooving	Sq. Yd.	820	--	820
*Protective Coat	Sq. Yd.	1,077	--	1,077
Furnishing and Erecting Structural Steel	L. Sum	1	--	1
Stud Shear Connectors	Each	3,906	--	3,906
Reinforcement Bars, Epoxy Coated	Pound	109,880	14,820	124,700
Furnishing Metal Shell Piles, 14" x 0.312"	Foot	--	864	864
Driving Piles	Foot	--	864	864
Test Pile Metal Shells	Each	--	2	2
Pile Shoes	Each	--	18	18
Name Plates	Each	1	--	1
Anchor Bolts, 1" ϕ x 12"	Each	--	14	14
Anchor Bolts, 1 1/4" ϕ x 15"	Each	--	14	14
Elastomeric Bearing Assembly, Type I	Each	--	7	7
Geocomposite Wall Drain	Sq. Yd.	--	129	129
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	--	4,026	4,026
Bituminous Coated Aggregate Slope Wall 6"	Sq. Yd.	--	376	376

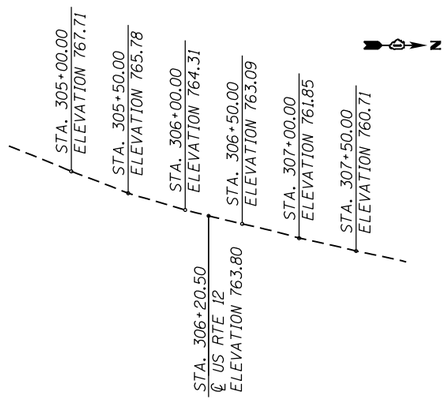
* Includes Bridge Approach Slabs



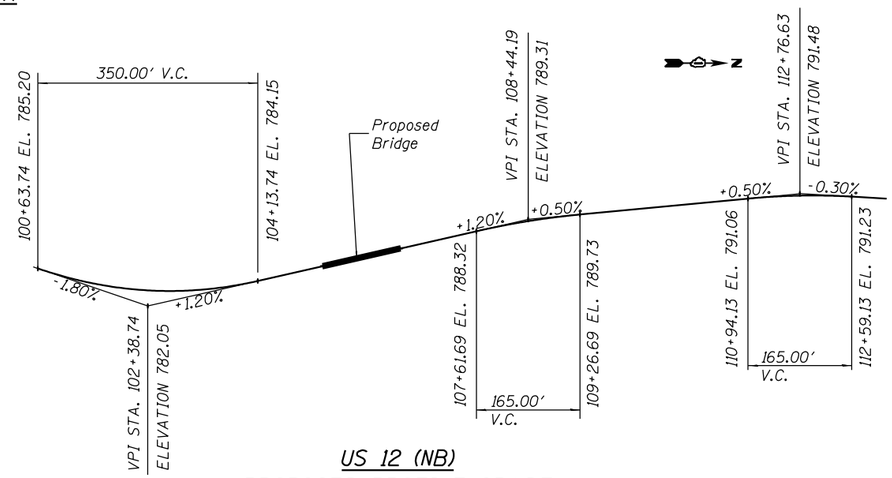
OFFSET SKETCH

HORIZONTAL CURVE DATA

US 12 NORTHBOUND	IL 59 SOUTHBOUND
PI STA. = 105+63.00	PI STA. = 307+09.96
Δ = 18° 00' 54" (LT)	Δ = 66° 16' 54" (RT)
D = 1° 36' 48"	D = 7° 07' 10"
R = 3,551.60'	R = 804.78'
T = 563.00'	T = 525.44'
L = 1,116.71'	L = 930.99'
E = 44.35'	E = 156.35'
P.C. STA. = 100+00.00	P.C. STA. = 301+84.52
P.T. STA. = 111+16.71	P.T. STA. = 311+15.51
S.E. = 3.6%	S.E. = 0.02 ft./ft.



IL RTE 59 (SB) EXISTING PROFILE GRADE



US 12 (NB) PROPOSED PROFILE GRADE

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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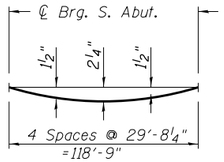
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 049-0601
SHEET NO. 3 OF 34 SHEETS

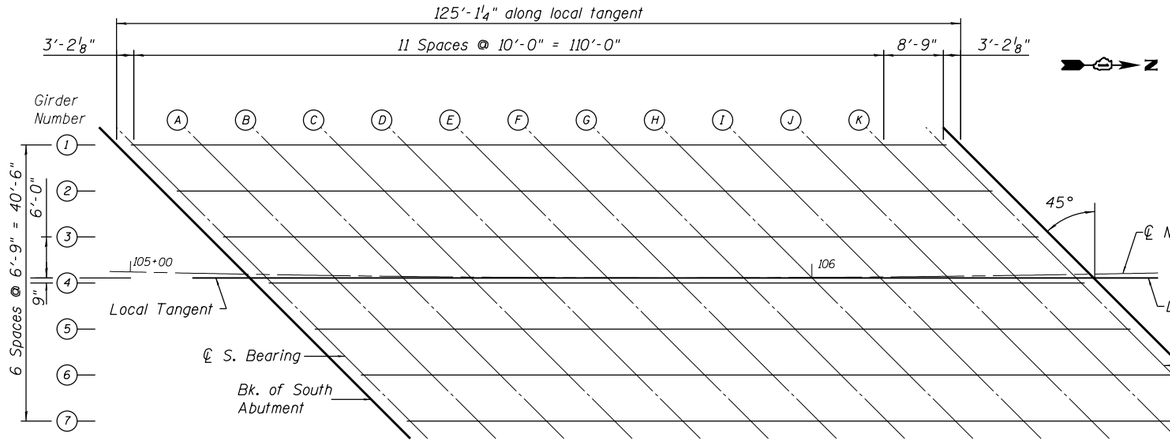
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	49
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		



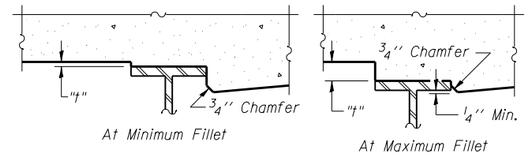
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on Sheet 5 of 34.



PLAN



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below and on Sheet 5 of 34, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

GIRDER NO. 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	104+96.91	-18.56	784.48	784.48
℄ of S. Bearing	105+00.11	-18.63	784.51	784.51
A	105+10.16	-18.84	784.62	784.67
B	105+20.21	-19.02	784.74	784.83
C	105+30.27	-19.17	784.85	784.98
D	105+40.32	-19.29	784.97	785.13
E	105+50.37	-19.39	785.09	785.26
F	105+60.43	-19.45	785.20	785.39
G	105+70.48	-19.49	785.32	785.50
H	105+80.54	-19.50	785.44	785.60
I	105+90.59	-19.48	785.57	785.69
J	106+00.65	-19.43	785.69	785.77
K	106+10.70	-19.36	785.81	785.85
℄ of N. Bearing	106+19.50	-19.27	785.92	785.92
Bk. of N. Abut.	106+22.70	-19.23	785.96	785.96

GIRDER NO. 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	105+03.84	-11.96	784.80	784.80
℄ of S. Bearing	105+07.03	-12.03	784.83	784.83
A	105+17.06	-12.21	784.95	784.99
B	105+27.10	-12.37	785.06	785.15
C	105+37.13	-12.51	785.18	785.30
D	105+47.17	-12.61	785.29	785.45
E	105+57.20	-12.68	785.41	785.58
F	105+67.24	-12.73	785.53	785.71
G	105+77.27	-12.75	785.65	785.82
H	105+87.31	-12.74	785.77	785.92
I	105+97.35	-12.70	785.89	786.02
J	106+07.38	-12.64	786.01	786.10
K	106+17.42	-12.54	786.14	786.18
℄ of N. Bearing	106+26.20	-12.44	786.25	786.25
Bk. of N. Abut.	106+29.39	-12.40	786.29	786.29

GIRDER NO. 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	105+10.74	-5.35	785.12	785.12
℄ of S. Bearing	105+13.93	-5.41	785.15	785.15
A	105+23.94	-5.58	785.27	785.31
B	105+33.96	-5.72	785.38	785.47
C	105+43.97	-5.83	785.50	785.63
D	105+53.99	-5.91	785.62	785.77
E	105+64.00	-5.97	785.73	785.91
F	105+74.02	-6.00	785.85	786.03
G	105+84.04	-6.00	785.97	786.15
H	105+94.05	-5.97	786.09	786.25
I	106+04.07	-5.91	786.22	786.34
J	106+14.09	-5.83	786.34	786.43
K	106+24.10	-5.71	786.46	786.51
℄ of N. Bearing	106+32.87	-5.59	786.57	786.57
Bk. of N. Abut.	106+36.05	-5.54	786.61	786.61

Note: See sheet 5 of 34 for Girders 4-7

PREPARED BY:
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Ph: 630.862.2100 Fax: 630.862.2199
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		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 049-0601
SHEET NO. 4 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	50
		CONTRACT NO. 60X51		
	ILLINOIS	FED. AID PROJECT		

℄ Roadway

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	105+16.29	0.00	785.38	785.38
℄ of S. Bearing	105+19.53	0.00	785.41	785.41
A	105+29.69	0.00	785.54	785.59
B	105+39.81	0.00	785.66	785.75
C	105+49.91	0.00	785.78	785.91
D	105+59.98	0.00	785.90	786.05
E	105+70.02	0.00	786.02	786.19
F	105+80.03	0.00	786.14	786.32
G	105+90.01	0.00	786.26	786.43
H	105+99.97	0.00	786.38	786.53
I	106+09.89	0.00	786.50	786.63
J	106+19.79	0.00	786.62	786.70
K	106+29.67	0.00	786.74	786.78
℄ of N. Bearing	106+38.29	0.00	786.84	786.84
Bk. of N. Abut.	106+41.41	0.00	786.88	786.88

GIRDER NO. 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	105+17.62	1.28	785.44	785.44
℄ of S. Bearing	105+20.80	1.23	785.47	785.47
A	105+30.79	1.08	785.59	785.64
B	105+40.79	0.95	785.70	785.79
C	105+50.79	0.86	785.82	785.95
D	105+60.78	0.80	785.94	786.09
E	105+70.78	0.76	786.06	786.23
F	105+80.78	0.75	786.18	786.36
G	105+90.78	0.77	786.30	786.47
H	106+00.77	0.82	786.42	786.57
I	106+10.77	0.88	786.54	786.67
J	106+20.77	1.00	786.67	786.75
K	106+30.76	1.13	786.79	786.83
℄ of N. Bearing	106+39.51	1.27	786.90	786.90
Bk. of N. Abut.	106+42.69	1.32	786.94	786.94

GIRDER NO. 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	105+24.47	7.92	785.76	785.76
℄ of S. Bearing	105+27.64	7.87	785.80	785.80
A	105+37.62	7.74	785.91	785.96
B	105+47.60	7.64	786.03	786.12
C	105+57.57	7.56	786.14	786.27
D	105+67.55	7.52	786.26	786.42
E	105+77.53	7.50	786.38	786.55
F	105+87.51	7.51	786.50	786.68
G	105+97.49	7.55	786.62	786.79
H	106+07.47	7.61	786.74	786.90
I	106+17.45	7.71	786.87	786.99
J	106+27.42	7.98	787.00	787.08
K	106+37.40	7.98	787.12	787.16
℄ of N. Bearing	106+46.13	8.14	787.23	787.23
Bk. of N. Abut.	106+49.30	8.20	787.27	787.27

Note: For Dead Load Deflection Diagram and Fillet Heights, See Sheet 4 of 34.

GIRDER NO. 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	105+31.29	14.57	786.08	786.08
℄ of S. Bearing	105+34.46	14.53	786.12	786.12
A	105+44.42	14.42	786.23	786.28
B	105+54.38	14.34	786.35	786.44
C	105+64.34	14.28	786.47	786.59
D	105+74.30	14.25	786.58	786.74
E	105+84.26	14.25	786.70	786.88
F	105+94.22	14.28	786.82	787.00
G	106+04.18	14.74	786.96	787.13
H	106+14.14	14.43	787.07	787.22
I	106+24.10	14.54	787.19	787.32
J	106+34.05	14.68	787.32	787.40
K	106+44.01	14.85	787.44	787.48
℄ of N. Bearing	106+52.72	15.02	787.55	787.55
Bk. of N. Abut.	106+55.89	15.08	787.59	787.59

GIRDER NO. 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	105+38.09	21.23	786.40	786.40
℄ of S. Bearing	105+41.25	21.20	786.44	786.44
A	105+51.19	21.11	786.55	786.60
B	105+31.13	21.04	786.31	786.40
C	105+71.08	21.00	786.79	786.92
D	105+81.02	21.00	786.91	787.06
E	105+90.96	21.02	787.03	787.20
F	106+00.90	21.07	787.15	787.33
G	106+10.84	21.14	787.27	787.44
H	106+20.78	21.25	787.39	787.55
I	106+30.72	21.38	787.52	787.64
J	106+40.66	21.54	787.64	787.73
K	106+50.60	21.73	787.77	787.81
℄ of N. Bearing	106+59.29	21.91	787.88	787.88
Bk. of N. Abut.	106+62.45	21.98	787.92	787.92

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 049-0601
SHEET NO. 5 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	51
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

West Edge of Shoulder

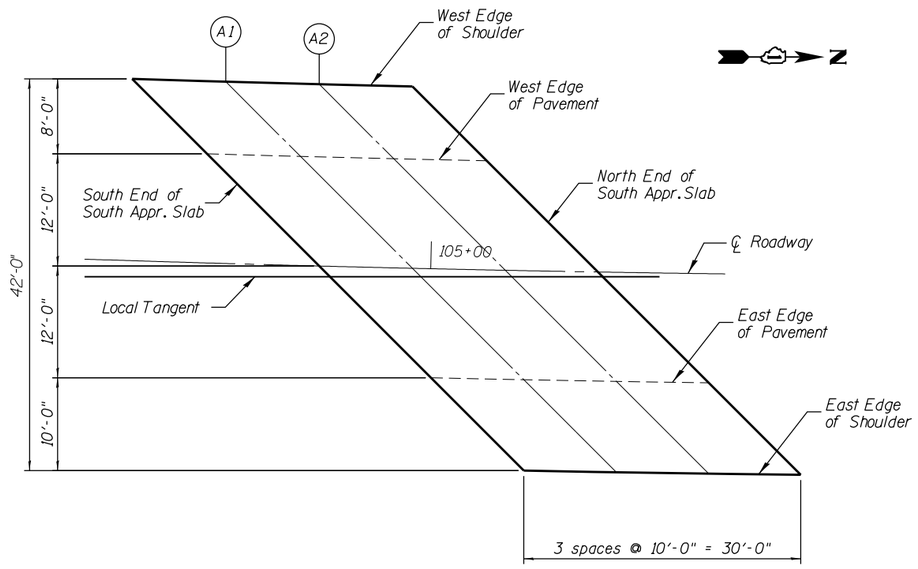
Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Slab	104+65.82	-20.00	784.05
A1	104+76.19	-20.00	784.17
A2	104+86.54	-20.00	784.30
N. End South Appr. Slab	104+96.85	-20.00	784.42

West Edge of Pavement

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Slab	104+74.36	-12.00	784.44
A1	104+84.69	-12.00	784.56
A2	104+94.98	-12.00	784.69
N. End South Appr. Slab	105+05.25	-12.00	784.81

℄ Roadway & PG

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Slab	104+87.07	0.00	785.02
A1	104+97.32	0.00	785.15
A2	105+07.54	0.00	785.27
N. End South Appr. Slab	105+17.73	0.00	785.39



PLAN

East Edge of Pavement

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Slab	104+99.64	12.00	785.61
A1	105+09.82	12.00	785.73
A2	105+19.97	12.00	785.85
N. End South Appr. Slab	105+30.09	12.00	785.97

East Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Slab	104+99.64	22.00	785.97
A1	105+09.82	22.00	786.09
A2	105+19.97	22.00	786.21
N. End South Appr. Slab	105+30.09	22.00	786.33

E-AS 7-1-10

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: caddd@cemcon.com Website: www.cemcon.com

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 049-0601
SHEET NO. 6 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	52
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

West Edge of Shoulder

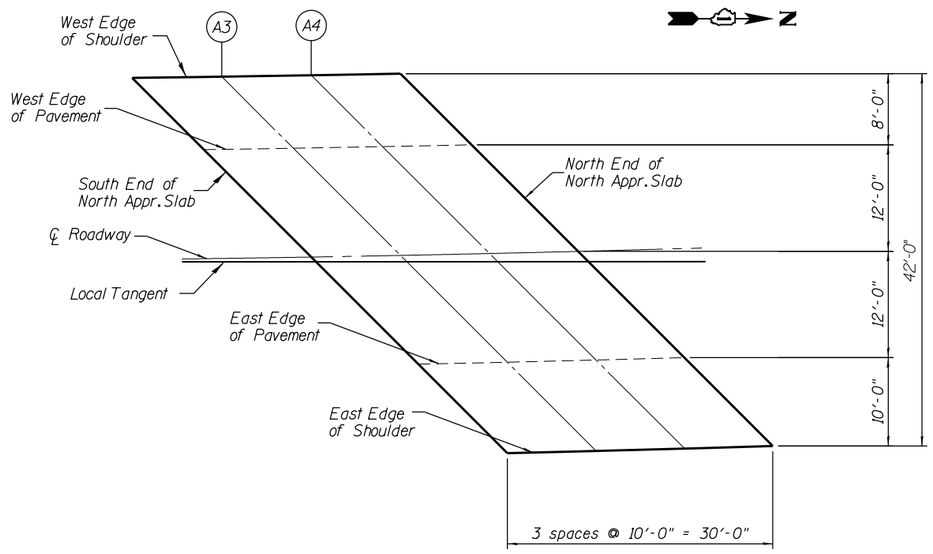
Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Slab	106+20.54	-20.00	785.91
A3	106+30.47	-20.00	786.03
A4	106+40.37	-20.00	786.14
N. End North Appr. Slab	106+50.24	-20.00	786.26

West Edge of Pavement

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Slab	106+28.38	-12.00	786.29
A3	106+38.26	-12.00	786.41
A4	106+48.12	-12.00	786.53
N. End North Appr. Slab	106+57.95	-12.00	786.64

℄ Roadway & PG

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Slab	106+40.03	0.00	786.86
A3	106+49.85	0.00	786.98
A4	106+59.64	0.00	787.10
N. End North Appr. Slab	106+69.41	0.00	787.21



PLAN

East Edge of Pavement

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Slab	106+51.56	12.00	787.43
A3	106+61.32	12.00	787.55
A4	106+71.05	12.00	787.66
N. End North Appr. Slab	106+80.75	12.00	787.78

East Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Slab	106+61.09	22.00	787.91
A3	106+70.80	22.00	788.02
A4	106+80.47	22.00	788.14
N. End North Appr. Slab	106+90.13	22.00	788.25

E-AS 7-1-10

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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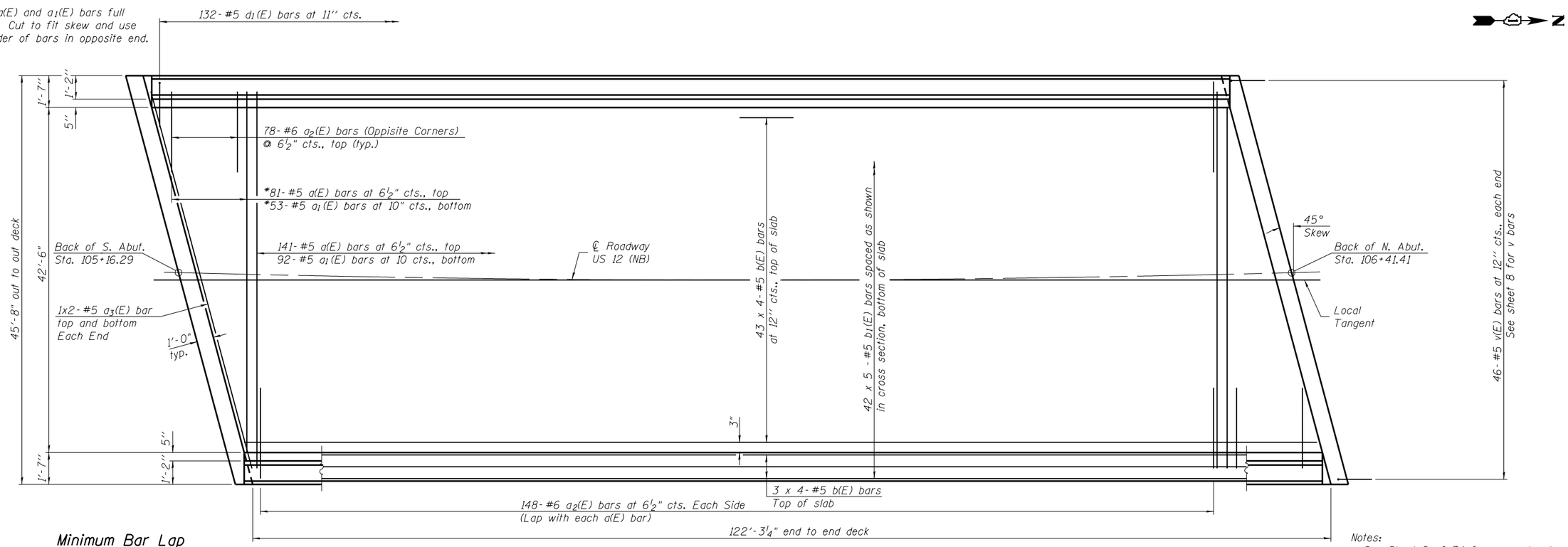
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 049-0601
SHEET NO. 7 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	53
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		



PLAN

Minimum Bar Lap

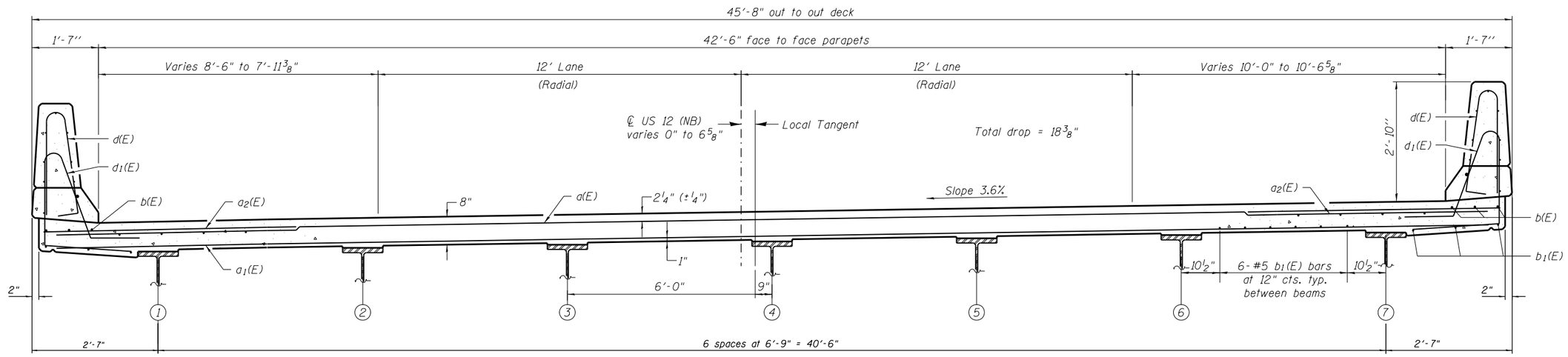
#5 bar = 2'-7"

Notes:

See Sheet 9 of 34 for superstructure details and Bill of Material.

Bars indicated thus 43 x 4-#5 etc. indicates 43 lines of bars with 4 lengths per line.

See Sheet 9 of 34 for parapet reinforcement.



CROSS SECTION

(Looking North)

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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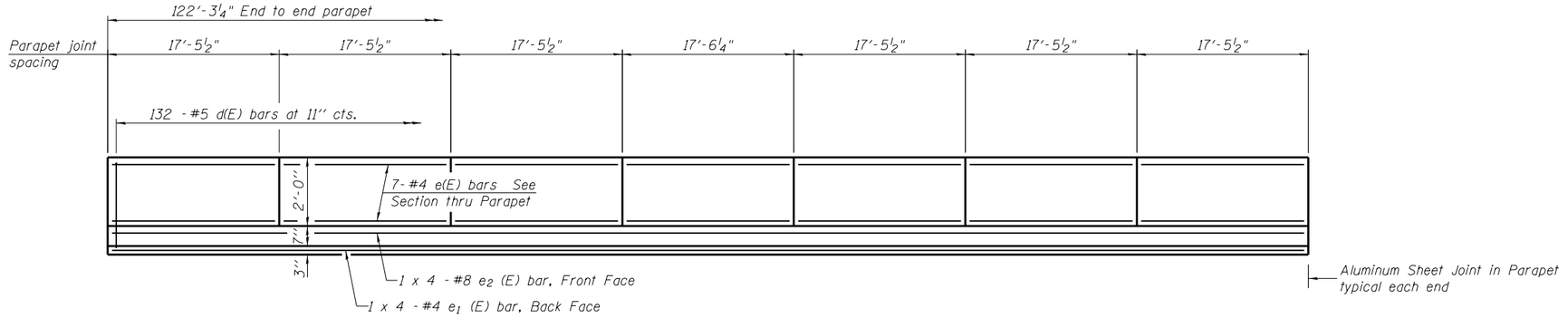
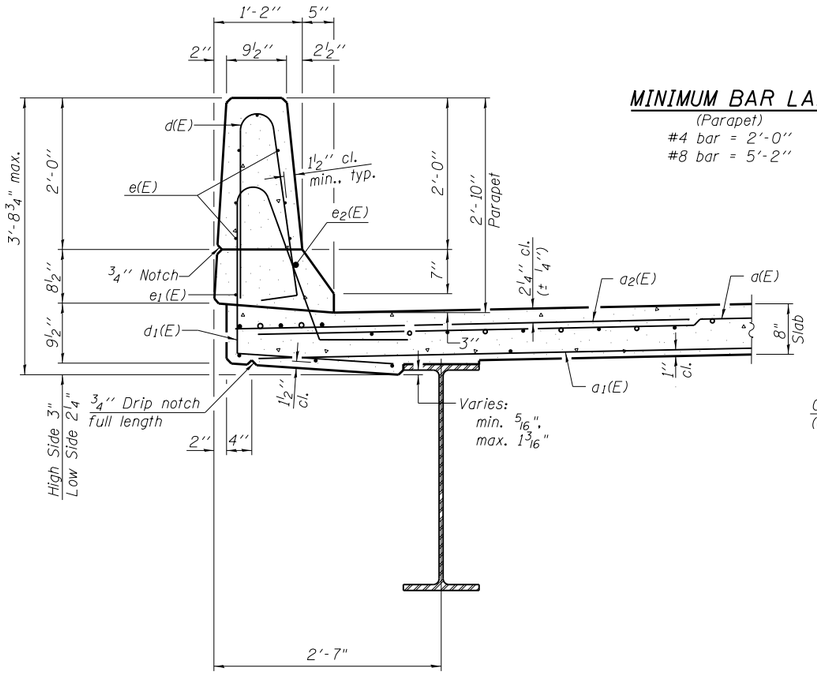
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DECK
STRUCTURE NO. 049-0601
SHEET NO. 8 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	54
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



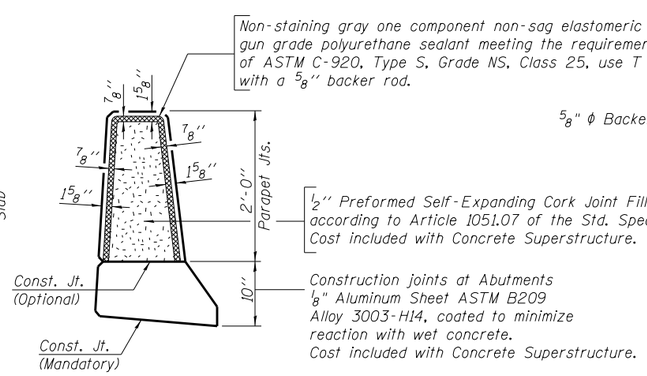
INSIDE ELEVATION OF PARAPET



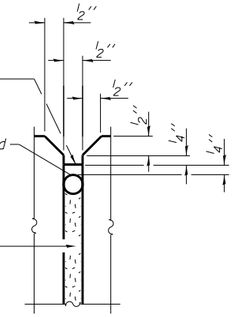
SECTION THRU PARAPET

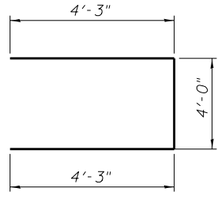
MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"



PARAPET JOINT DETAILS





BAR s(E)

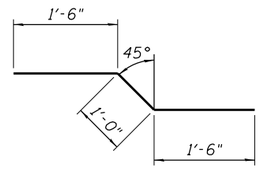
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	222	#5	44'-6"	
a1(E)	145	#5	44'-6"	
a2(E)	452	#6	6'-6"	
a3(E)	8	#5	32'-6"	
b(E)	196	#5	33'-0"	
b1(E)	210	#5	27'-0"	
d(E)	264	#5	5'-7"	
d1(E)	264	#5	7'-1"	
e(E)	98	#4	17'-0"	
e1(E)	8	#4	32'-6"	
e2(E)	8	#8	34'-3"	
m(E)	24	#6	35-0"	
m1(E)	48	#6	6'-6"	
m2(E)	16	#6	2'-3"	
m3(E)	70	#5	4'-0"	
s(E)	80	#5	12'-6"	
s1(E)	80	#5	14'-1"	
u(E)	130	#5	7'-1"	
v(E)	92	#5	4'-2"	
Reinforcement Bars, Epoxy Coated		Pound	45,540	
Concrete Superstructure		Cu. Yds.	245.3	

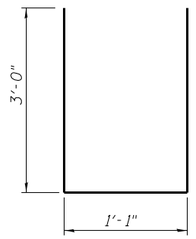
Bars indicated thus 1 x 4 - #8 etc. indicates 1 line of bars with 4 lengths per line.

Notes:

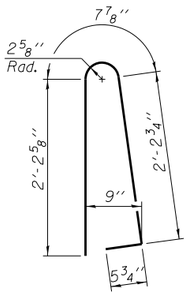
See sheet 10 for location of bars m3(E), s(E), s1(E), u(E) & v(E).



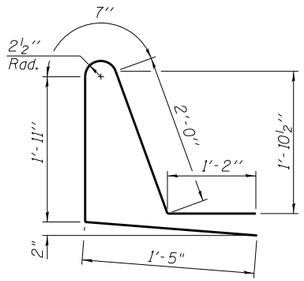
BAR m3(E)



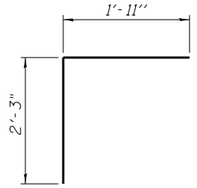
BAR u(E)



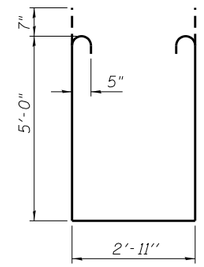
BAR d(E)



BAR d1(E)



BAR v(E)



BAR s1(E)

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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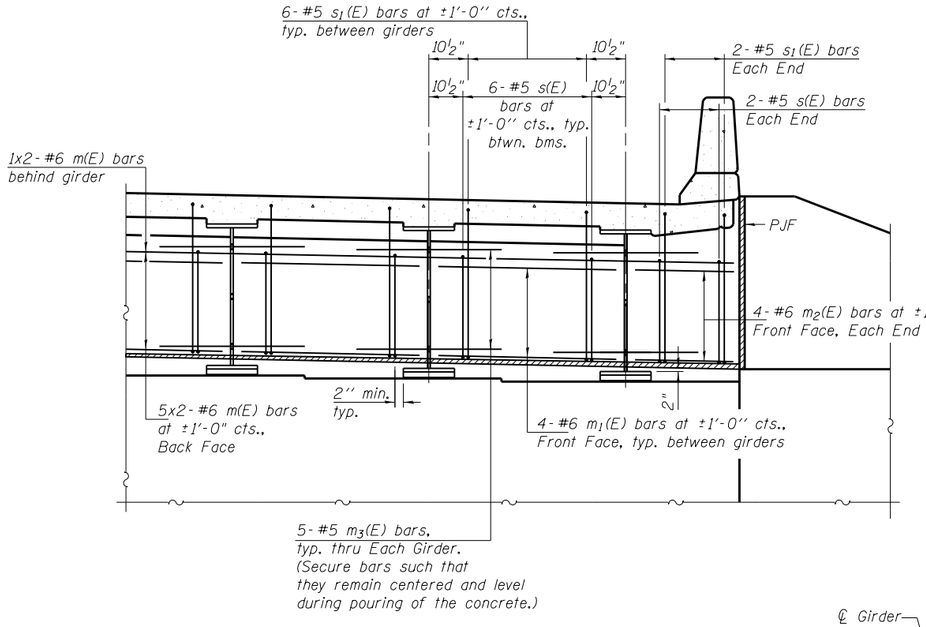
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

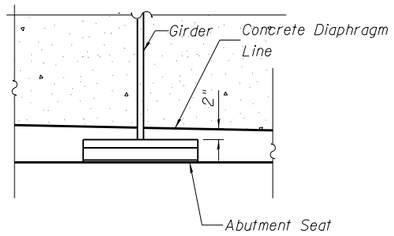
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 049-0601
SHEET NO. 9 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	55
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

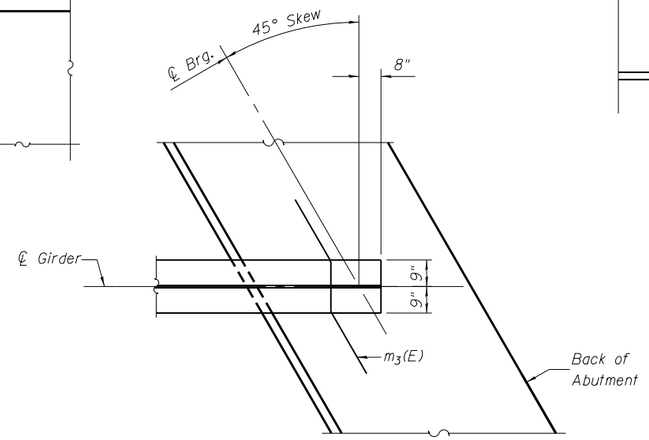


DIAPHRAGM ELEVATION

North Abutment - Looking North
South Abutment - Looking South

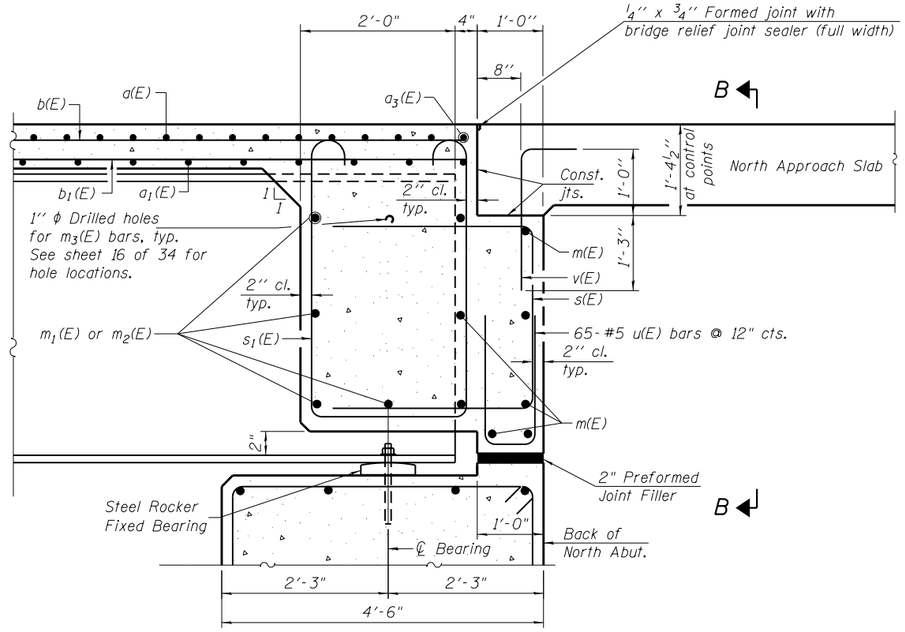


DIAPHRAGM AT GIRDER



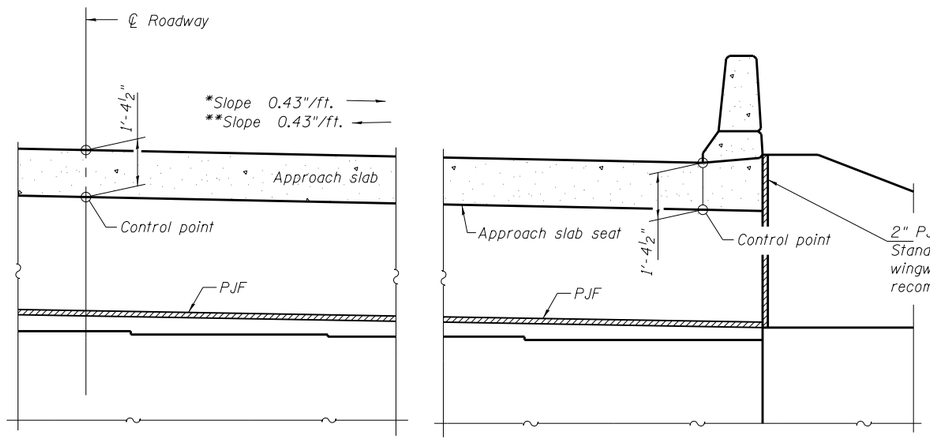
PARTIAL PLAN AT NORTH ABUTMENT

(Showing bottom flange of girder)
For partial plan at South Abutment rotate 180°



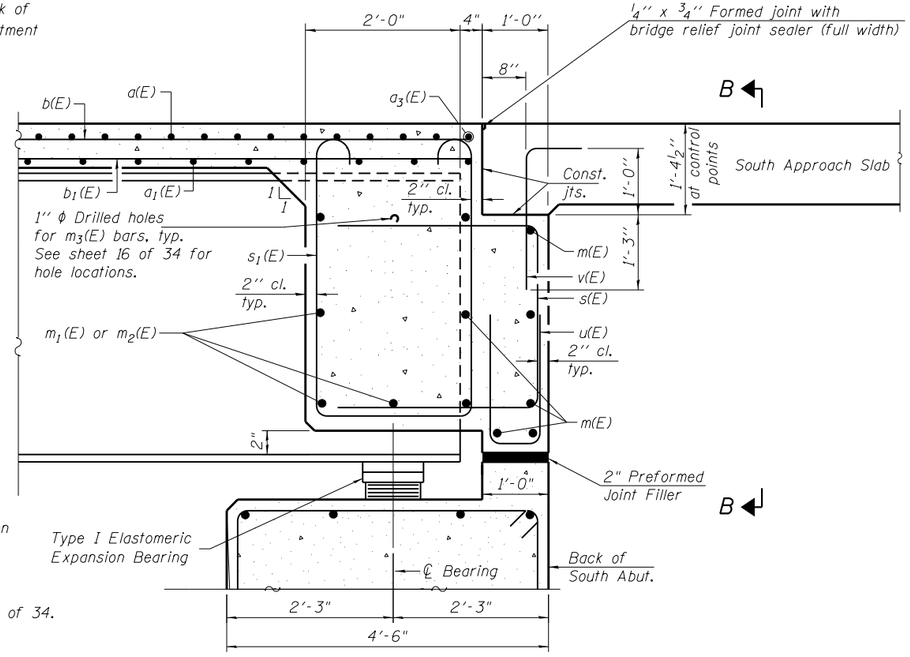
SECTION THRU NORTH ABUTMENT-LOOKING WEST

(at Rt. L's)



SECTION B-B

*North approach Slab-Looking South
**South Approach Slab-Looking North



SECTION THRU SOUTH ABUTMENT-LOOKING EAST

(at Rt. L's)

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 34.

Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 34.

For details of bars m_3(E), s(E), s_1(E), u(E) and v(E) see sheet 9 of 34.

The s(E) and s_1(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.

The approach slab seat shall have a constant slope determined from the control points shown.

For bearing details see sheet 17 of 34.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 049-0601
SHEET NO. 10 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	56
		CONTRACT NO. 60X51		
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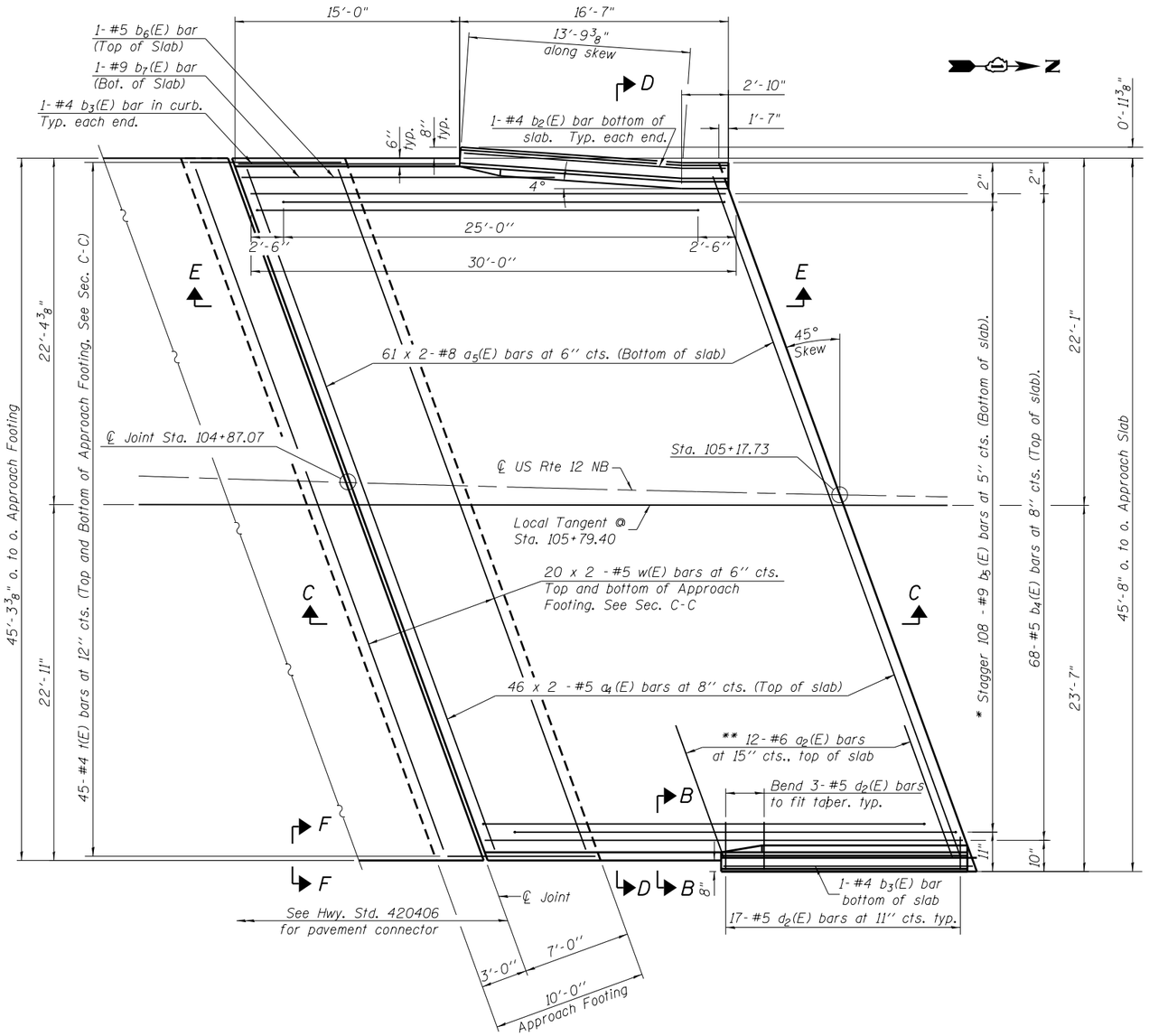


PLAN

* Tilt #9 b_5(E) bars as required to maintain clearance.
** Space between a_4(E) bars, typ. each parapet.

Bars indicated this 20 x 2 - #5 etc indicates 20 lines of bars with 2 lengths per line.

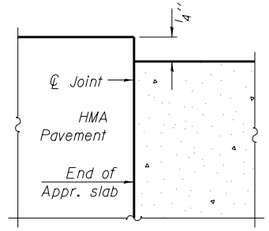
Notes:

See sheet 12 of 34 for Sections C-C & D-D and View E-E.
a_4(E) and a_5(E) bar spacings measured along ℄ Rdwy.

The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2" for installation purposes.

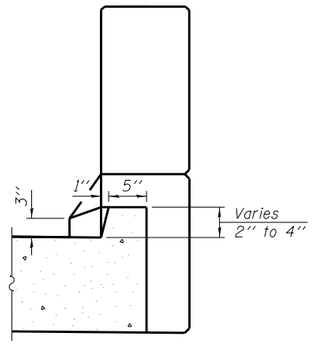
MINIMUM BAR LAP

#5 bar = 3'-4"
#8 bar = 5'-1"

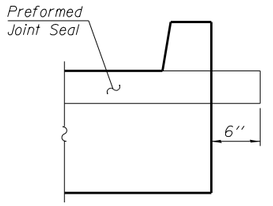


FLEXIBLE PAVEMENT

DETAIL A



VIEW B-B



VIEW F-F

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

BA-R 12-12-12

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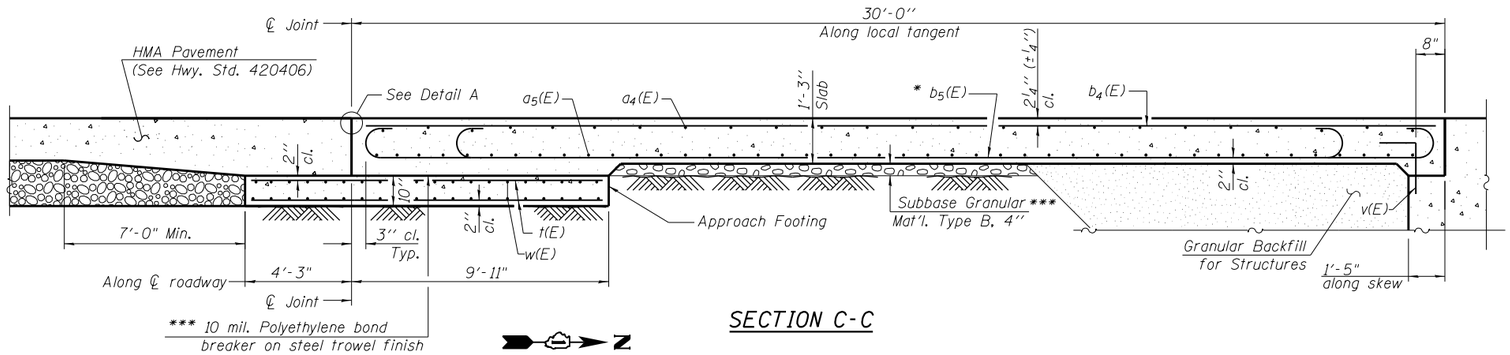
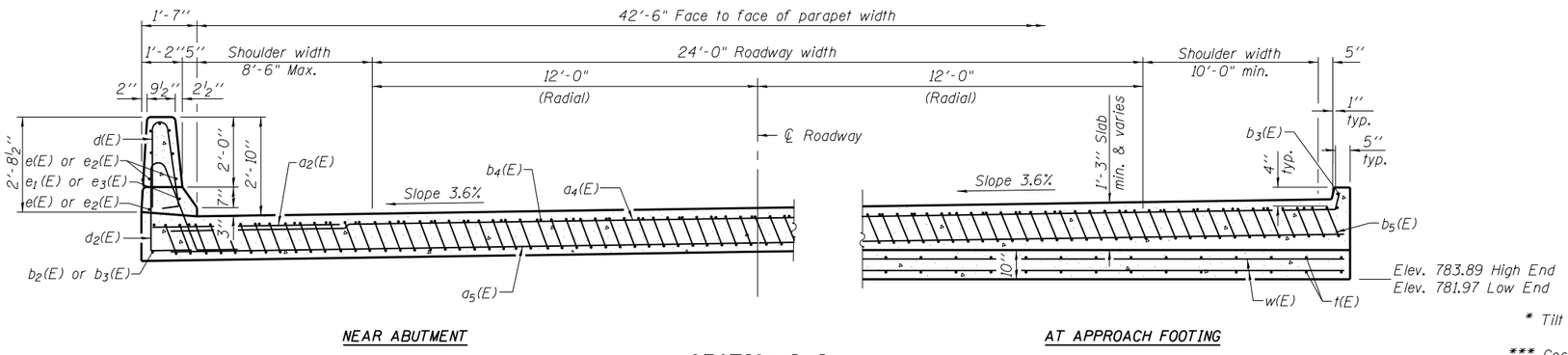
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH BRIDGE APPROACH SLAB PLAN
STRUCTURE NO. 049-0601
SHEET NO. 11 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	57
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		



SECTION C-C

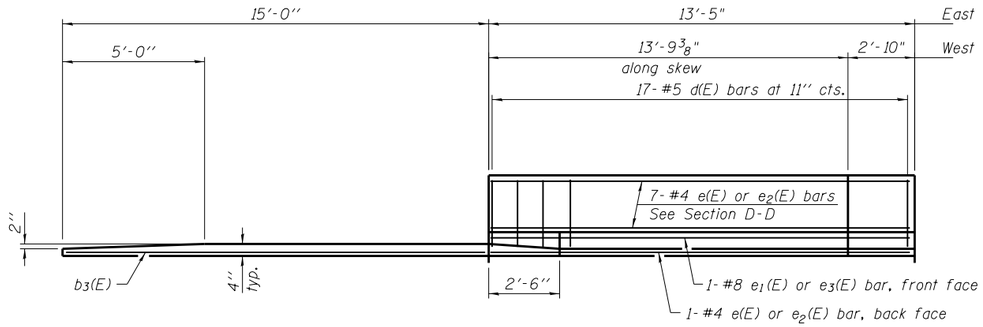


NEAR ABUTMENT

AT APPROACH FOOTING

SECTION D-D

Looking North
(See Plan for dimensions not shown)

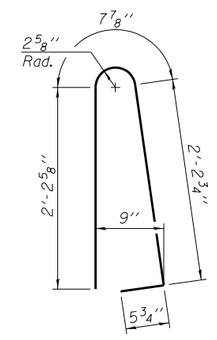


VIEW E-E

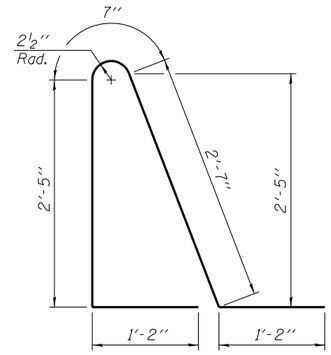
Note: e(E) and e1(E) bars (West Parapet)
e2(E) and e3(E) bars (East Parapet)

Looking North
(See Plan for dimensions not shown)

Notes:
See sheet 11 of 34 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure (Approach Slab).
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 9 of 34.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet 3 of 34.
For additional parapet details, see sheet 9 of 34.



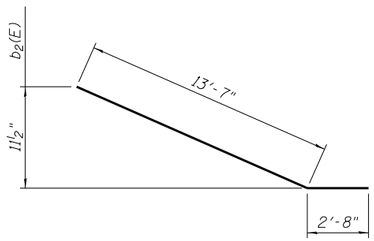
BAR d(E)



BAR d2(E)

* Tilt #9 b5(E) bars as required to maintain clearance.

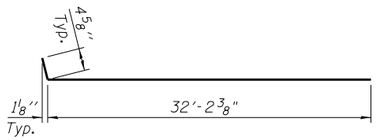
*** Cost included with Concrete Superstructure (Approach Slab).



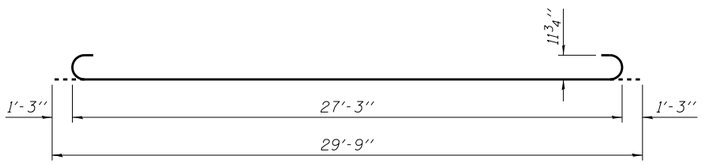
BAR b2(E), e(E) & e1(E)

SOUTH APPROACH SLAB BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	24	#6	6'-6"	
a4(E)	92	#5	32'-7"	
a5(E)	122	#8	35'-4"	
b2(E)	1	#4	16'-3"	
b3(E)	3	#4	14'-8"	
b4(E)	68	#5	29'-8"	
b5(E)	108	#9	29'-9"	
b6(E)	1	#5	22'-0"	
b7(E)	1	#9	22'-0"	
d(E)	34	#5	5'-7"	
d2(E)	34	#5	7'-11"	
e(E)	8	#4	16'-3"	
e1(E)	1	#8	16'-3"	
e2(E)	8	#4	13'-1"	
e3(E)	1	#8	13'-1"	
t(E)	90	#4	13'-10"	
w(E)	80	#5	33'-6"	
Concrete Superstructure (Approach Slab)			Cu. Yd.	70.4
Concrete Structures			Cu. Yd.	19.9
Reinforcement Bars, Epoxy Coated			Pound	32,390



BAR a4(E)



BAR b5(E)

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

BA-R 12-12-12

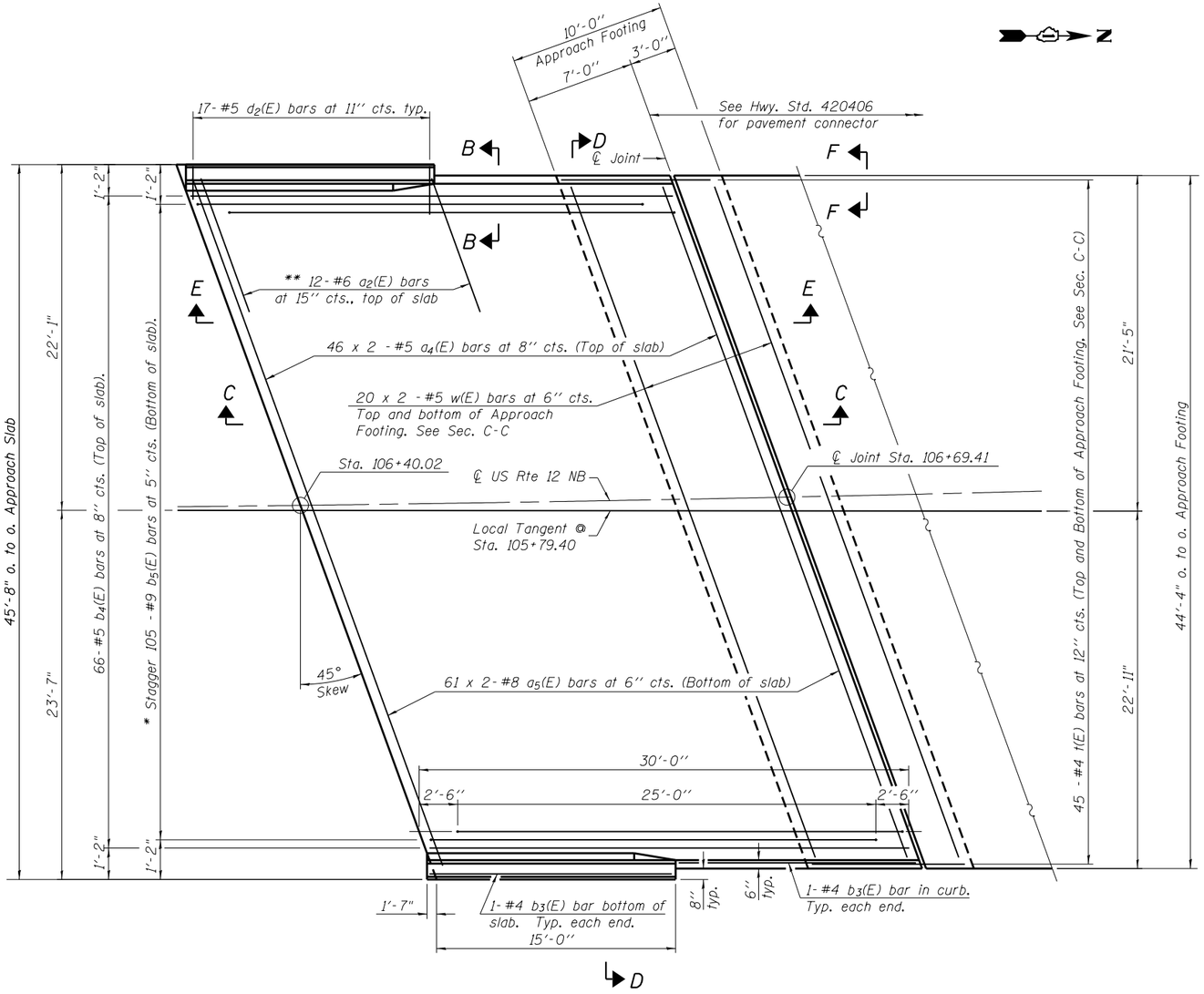
FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 049-0601
SHEET NO. 12 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	58
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

Notes:
See sheet 14 of 34 for Sections C-C & D-D and View E-E.
a_4(E) and a_5(E) bar spacings measured along ℄ Rdwy.
The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1½" for installation purposes.



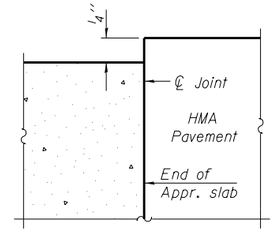
PLAN

* Tilt #9 b_5(E) bars as required to maintain clearance.
** Space between a_4(E) bars, typ. each parapet.

Bars indicated thus 20 x 2 - #5 etc indicates 20 lines of bars with 2 lengths per line.

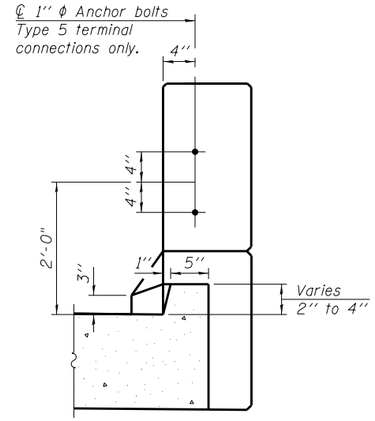
MINIMUM BAR LAP

#5 bar = 3'-4"
#8 bar = 5'-1"

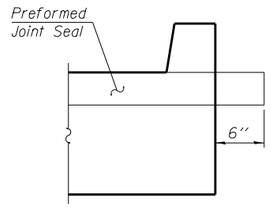


FLEXIBLE PAVEMENT

DETAIL A



VIEW B-B

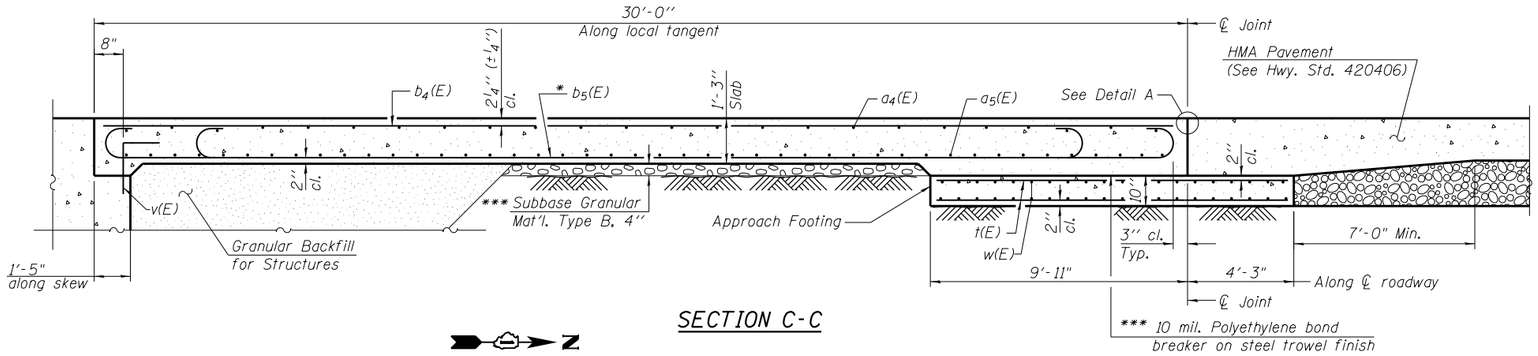


VIEW F-F

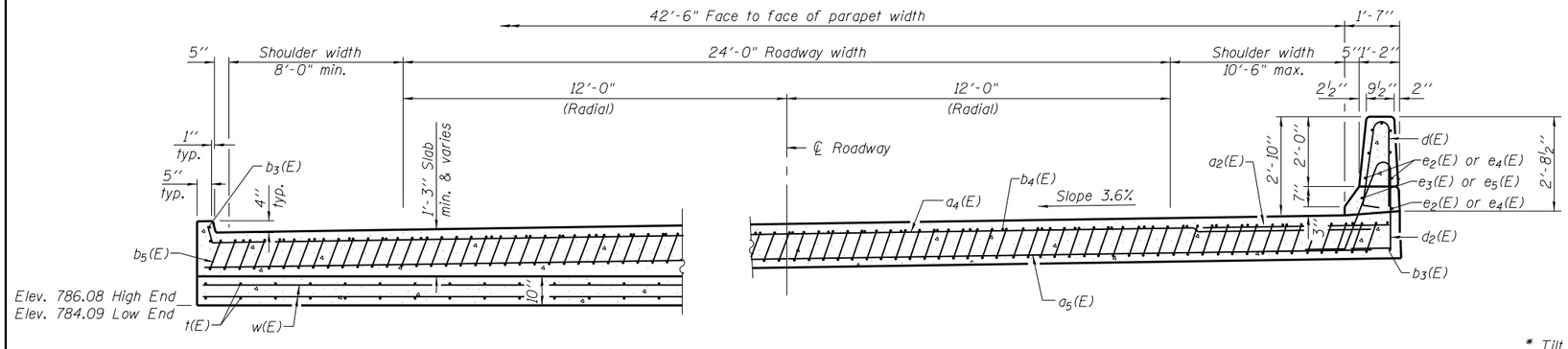
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

BA-R 12-12-12

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH BRIDGE APPROACH SLAB PLAN STRUCTURE NO. 049-0601	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - MAM	REVISED			334	106-2HB-B	LAKE	105	59
	PLOT SCALE =	DRAWN - RDS	REVISED						CONTRACT NO. 60X51	
	PLOT DATE =	CHECKED - 12-04-17	REVISED		SHEET NO. 13 OF 34 SHEETS			ILLINOIS	FED. AID PROJECT	



SECTION C-C

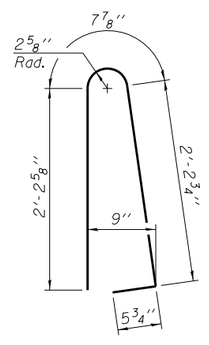


AT APPROACH FOOTING

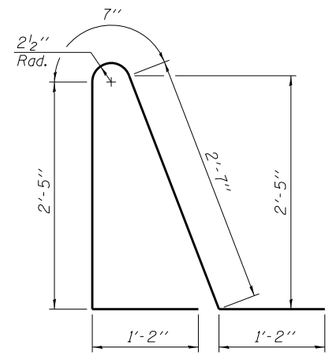
SECTION D-D
Looking North
(See Plan for dimensions not shown)

NEAR ABUTMENT

Notes:
See sheet 13 of 34 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure (Approach Slab).
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 9 of 34.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet 3 of 34.
For additional parapet details, see sheet 9 of 34.



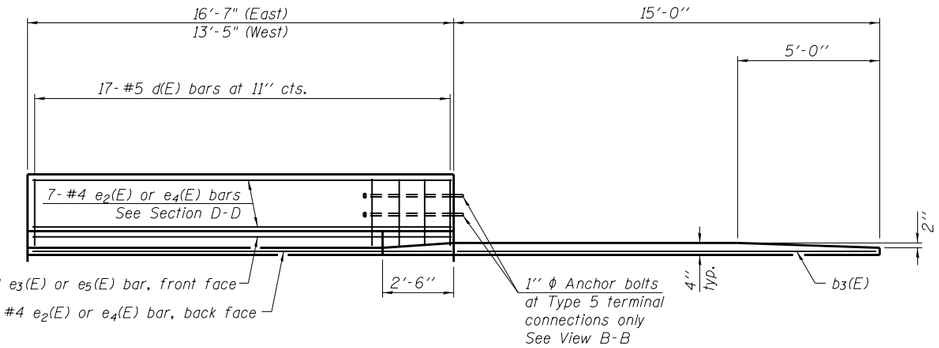
BAR d(E)



BAR d_2(E)

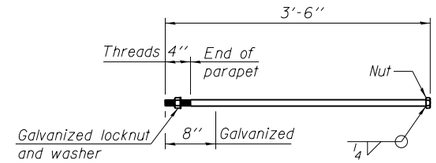
* Tilt #9 b_5(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure (Approach Slab).



Note: e_2(E) and e_3(E) bars (West Parapet)
e_4(E) and e_5(E) bars (East Parapet)

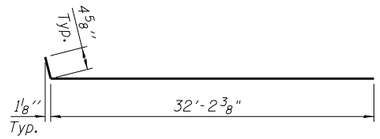
VIEW E-E



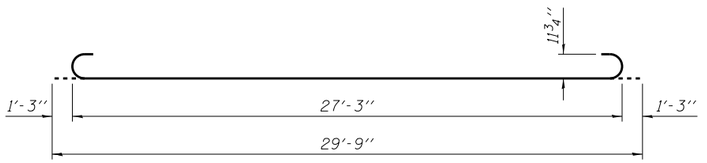
1"ϕ ANCHOR BOLT
(Cost included with
Concrete Superstructure)

NORTH APPROACH SLAB
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2(E)	24	#6	6'-6"	
a_4(E)	92	#5	32'-7"	
a_5(E)	122	#8	35'-4"	
b_3(E)	4	#4	14'-8"	
b_4(E)	67	#5	29'-8"	
b_5(E)	105	#9	29'-9"	
d(E)	34	#5	5'-7"	
d_2(E)	34	#5	7'-11"	
e_2(E)	8	#4	13'-1"	
e_3(E)	1	#8	13'-1"	
e_4(E)	8	#4	16'-3"	
e_5(E)	1	#8	16'-3"	
t(E)	90	#4	13'-10"	
w(E)	80	#5	33'-6"	
Concrete Superstructure (Approach Slab)		Cu. Yd.	70.4	
Concrete Structures		Cu. Yd.	19.9	
Reinforcement Bars, Epoxy Coated		Pound	31,950	



BAR a_4(E)



BAR b_5(E)

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: caddo@cemcon.com Website: www.cemcon.com

BA-R 12-12-12

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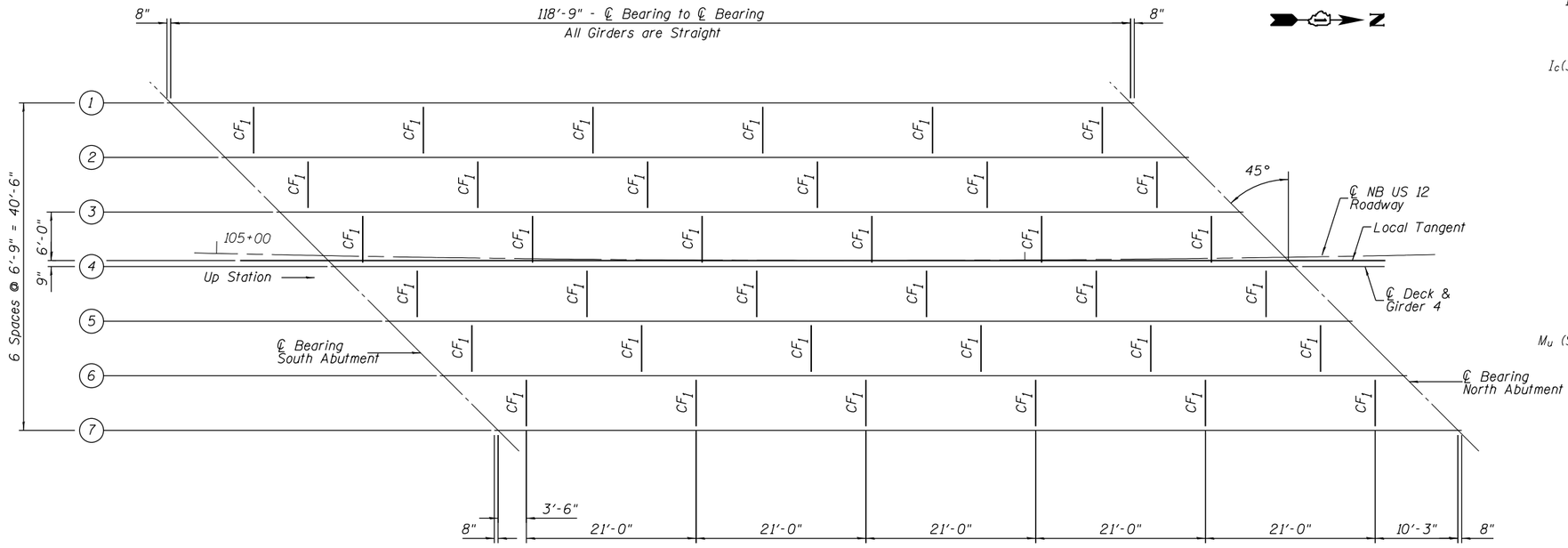
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 049-0601
SHEET NO. 14 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	60
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



FRAMING PLAN

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) in uncracked sections 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) in uncracked sections, 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 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(n)$ or $M_{L+IM} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(M_{L+IM})$

$0.95R_hF_yf$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L+IM)$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_f: Maximum factored shear range in span computed according to Article 6.10.10.

Note:
M_{L+IM} and R_{L+IM} include the effects of centrifugal force and superelevation.

LEGEND

◯ Denotes Girder Designation

NTR Denotes Notch Toughness Requirements

NOTES

For Top of Web Elevations, see Sheet No. 16 of 34.

For Bearing Details, see Sheet No. 17 of 34.

For Cross Frame Details, see Sheet No. 16 of 34.

INTERIOR GIRDER REACTION TABLE		
		Abut.
R_{DC1}	(k)	117.1
R_{DC2}	(k)	8.9
R_{DW}	(k)	18.0
R_{L+IM}	(k)	100.3
R_{Total}	(k)	244.3

INTERIOR GIRDER MOMENT TABLE		
		0.5 Sp. 1
I_s	(in^4)	48,259
$I_c(n)$	(in^4)	99,806
$I_c(3n)$	(in^4)	72,995
S_s	(in^3)	1,877
$S_c(n)$	(in^3)	2,353
$S_c(3n)$	(in^3)	2,163
DC1	(k/')	1.033
M_{DC1}	('k)	1,821
DC2	(k/')	0.150
M_{DC2}	('k)	264
DW	(k/')	0.304
M_{DW}	('k)	535
M_{L+IM}	('k)	1,955
M_u (Strength I)	('k)	6,830
$\phi_f M_n$	('k)	11,139
f_s DC1	(ksi)	11.6
f_s DC2	(ksi)	1.4
f_s DW	(ksi)	3.0
f_s (L+IM)	(ksi)	10.0
f_s (Service II)	(ksi)	29.0
$0.95R_hF_{yf}$	(ksi)	47.5
f_s (Total)(Strength I)	(ksi)	---
$\phi_f F_n$	(ksi)	---
V_f	(k)	27.6

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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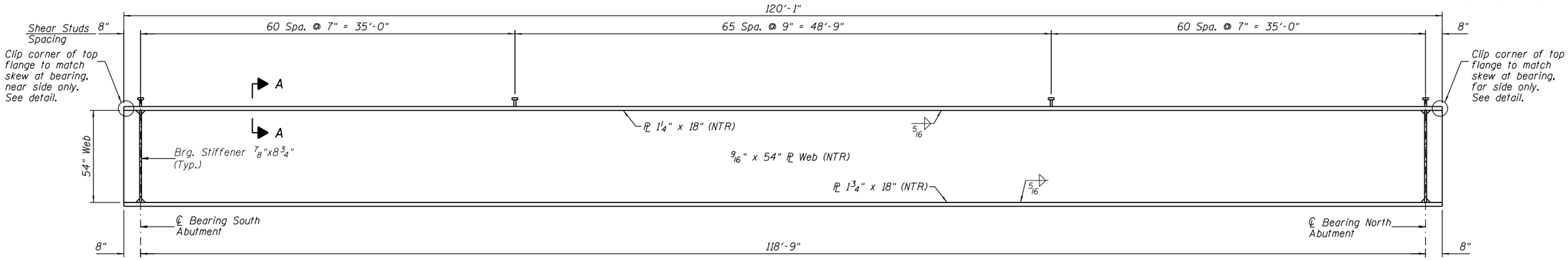
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

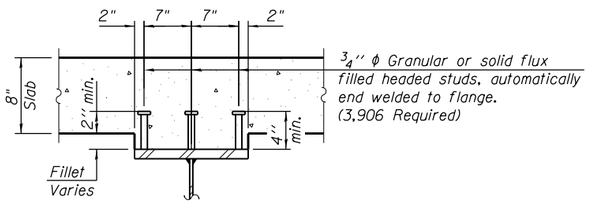
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 049-0601
SHEET NO. 15 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	61
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

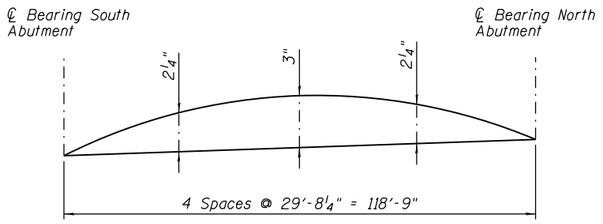


GIRDER ELEVATION



SECTION A-A

(Stud Shear Connectors)



CAMBER DIAGRAM

Top of Web Elevations (For Fabrication Only)		
Girder	℄ Bearing S. Abut.	℄ Bearing N. Abut.
1	783.68	785.09
2	784.00	785.42
3	784.32	785.74
4	784.64	786.07
5	784.97	786.40
6	785.29	786.72
7	785.61	787.05

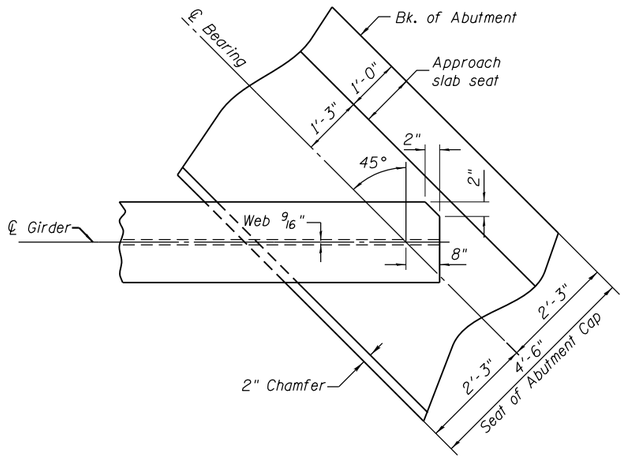
NOTES

See Sheet No. 17 of 34 for Bearing Details.

NTR Denotes Notch Toughness Requirement.

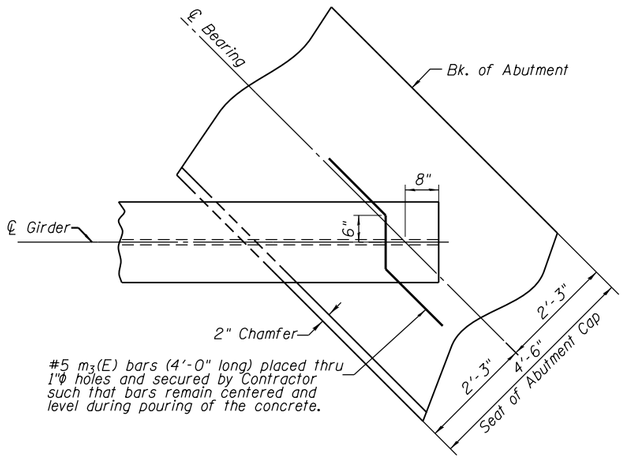
Load carrying components designated "NTR" shall conform to the impact testing requirements, Zone 2.

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.



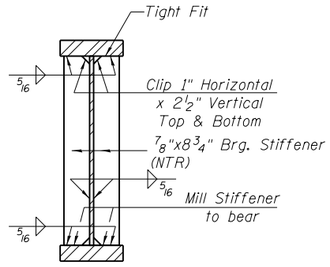
TOP FLANGE PLAN - CLIPPED

(Showing top flange of steel girder at semi-integral abutment)

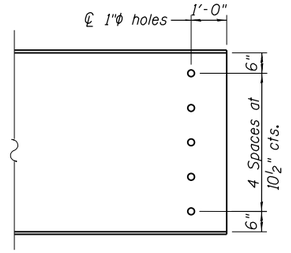


STEEL GIRDER TO DIAPHRAGM CONNECTION DETAIL

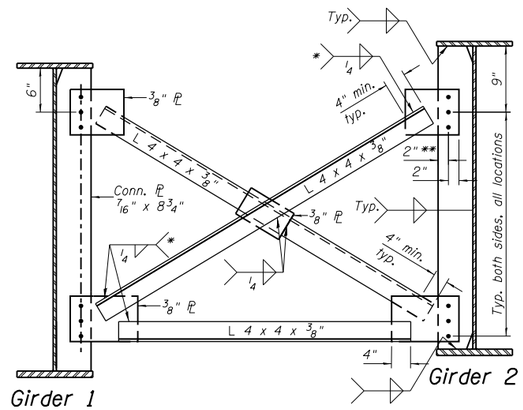
(Showing bottom flange of girder at semi-integral abutment)



SECTION AT ABUTMENT



END ELEVATION



TYPICAL INTERIOR CROSS FRAME

* Fillet weld angles along 3 sides on one face of gusset plate.

Notes:
Detail 15/16"ϕ holes for all 3/4" ϕ bolts

Two hardened washers required for each set of oversized holes.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: caddo@cemcon.com Website: www.cemcon.com

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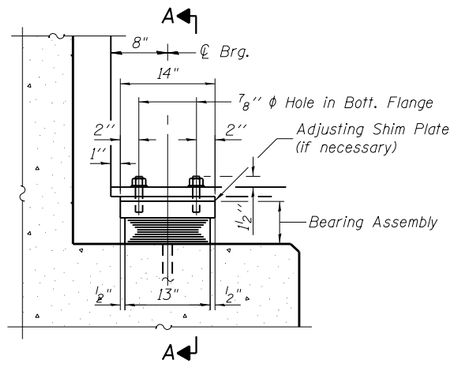
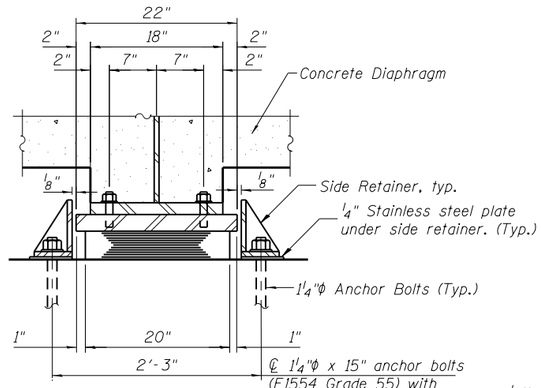
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL
STRUCTURE NO. 049-0601
SHEET NO. 16 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	62
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

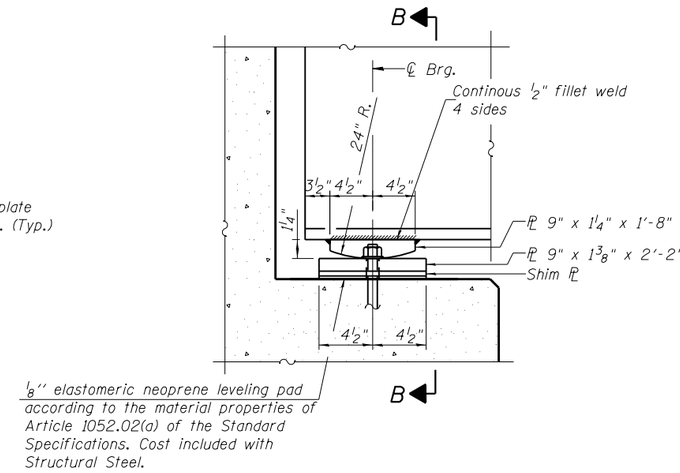


ELEVATION AT SOUTH ABUTMENT



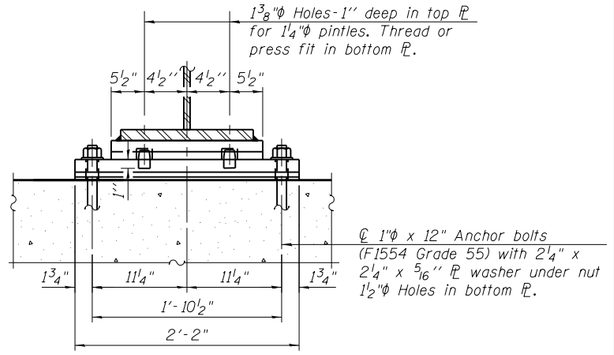
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



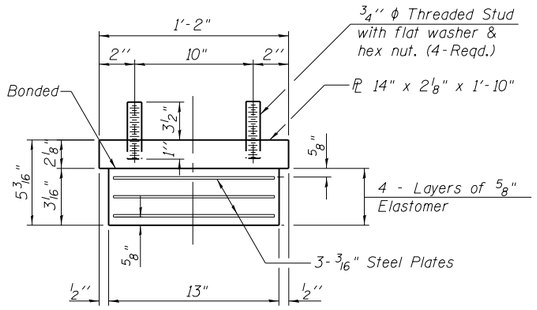
1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Structural Steel.

ELEVATION AT NORTH ABUTMENT



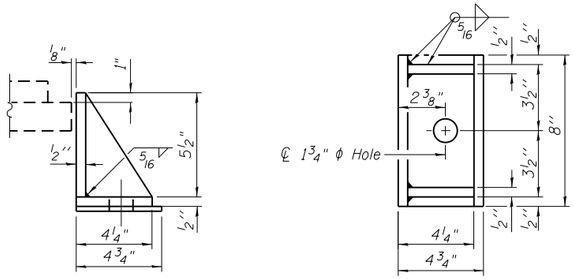
SECTION B-B

FIXED BEARING



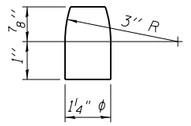
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PINTLE

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

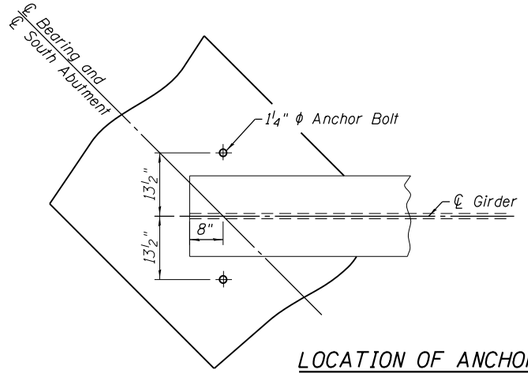
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

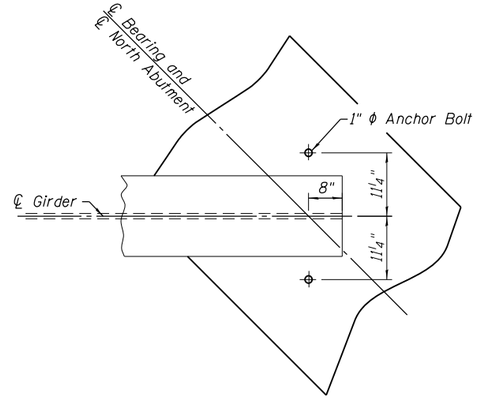
Side retainers, pintels, anchor bolts, nuts, washers and bearing plates may be galvanized according to AASHTO M111 or M232 (as applicable).

The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50W.

Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims placed as shown on bearing details.



LOCATION OF ANCHOR BOLTS ON SOUTH ABUTMENT



LOCATION OF ANCHOR BOLTS ON NORTH ABUTMENT

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Elastomeric Bearing Assembly Type 1	Each	7
Anchor Bolts 1" ϕ x 12"	Each	14
Anchor Bolts 1 1/4" ϕ x 15"	Each	14

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

I-2E-1 1-27-12

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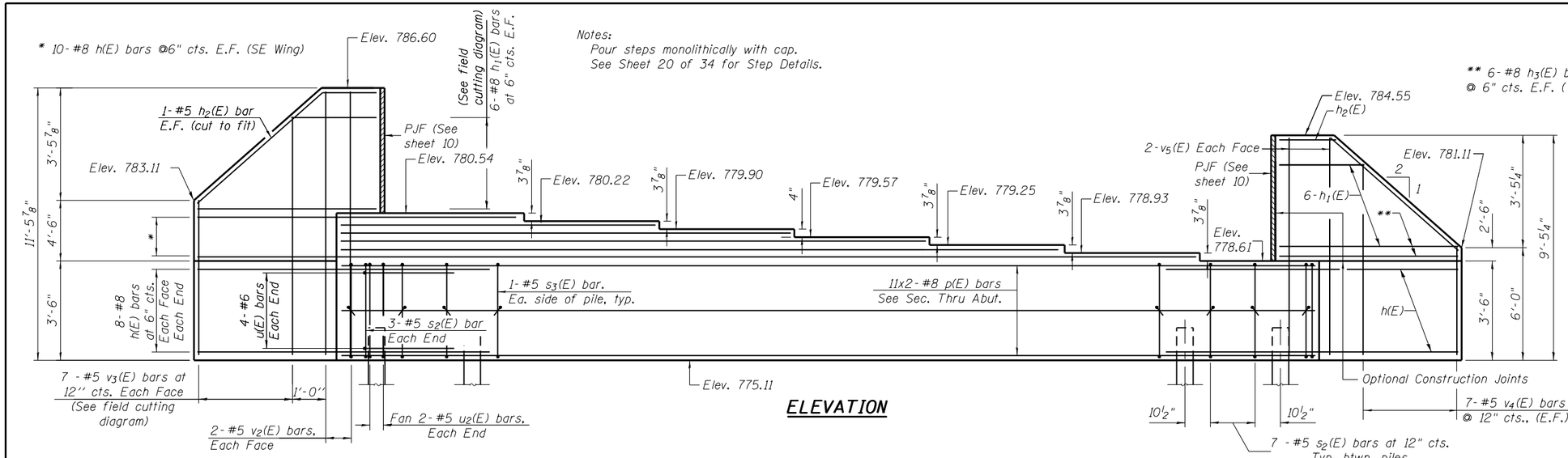
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 049-0601
SHEET NO. 17 OF 34 SHEETS

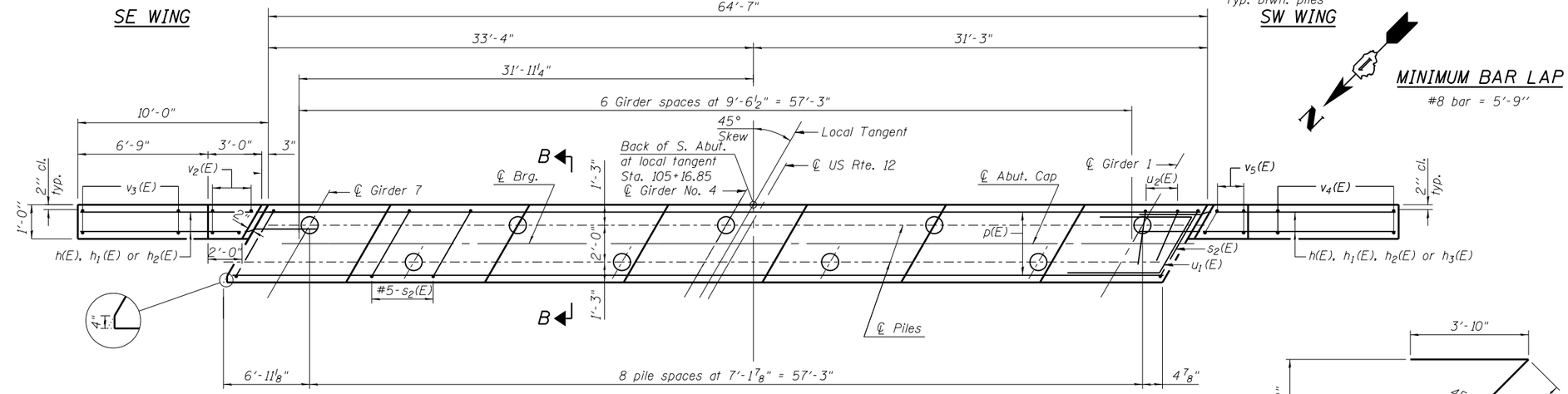
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	63
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		



ELEVATION

SE WING

SW WING



PLAN

(Looking South)

PILE DATA

Type: Metal Shell - 14"ϕ x 0.312" Walls with pile shoes.
Nominal Required Bearing: 513 kips
Factored Resistance Available: 282kips
Est. Length: 54 ft.
No. Production Piles: 8
No. Test Piles: 1

SE WING

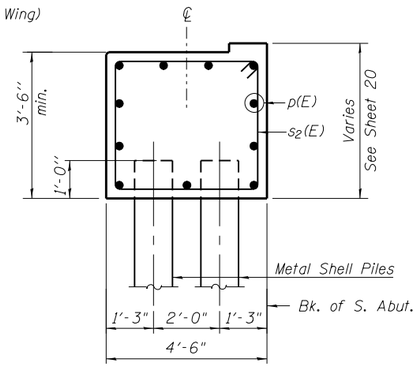
SW WING

FIELD CUTTING DIAGRAM

Order $h_1(E)$, $v_3(E)$ and $v_4(E)$ full length. Cut as shown and use remainder of bars in opposite face.

MINIMUM BAR LAP

#8 bar = 5'-9"



SECTION B-B SEMI-INTEGRAL ABUTMENT

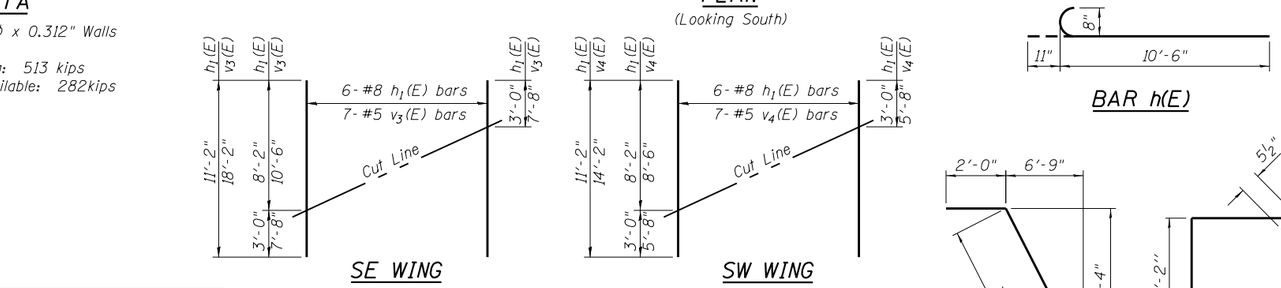
(Horiz. dim. @ Rt. L's)

BILL OF MATERIAL

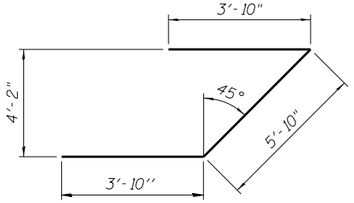
Bar	No.	Size	Length	Shape
h(E)	52	#8	11'-5"	
$h_1(E)$	12	#8	11'-2"	
$h_2(E)$	4	#5	9'-6"	
$h_3(E)$	12	#8	8'-8"	
p(E)	22	#8	35'-0"	
$s_2(E)$	62	#5	18'-11"	
$s_3(E)$	18	#5	4'-2"	
$u_1(E)$	8	#6	13'-6"	
$u_2(E)$	4	#5	13'-6"	
$v_2(E)$	4	#5	11'-0"	
$v_3(E)$	7	#5	18'-2"	
$v_4(E)$	7	#5	14'-2"	
$v_5(E)$	4	#5	9'-1"	
Concrete Structures		Cu. Yd.	54.1	
Reinforcement Bars, Epoxy Coated		Pound	6,160	
Furnishing Metal Shell Piles, 14" x 0.312"		Foot	432	
Driving Piles		Foot	432	
Test Pile, Metal Shell		Each	1	
Pile Shoes		Each	9	

For details of piles see sheet 23 of 34.

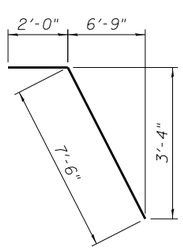
Bars indicated thus 11 x 2-#8 etc. indicates 11 lines of bars with 2 lengths per line



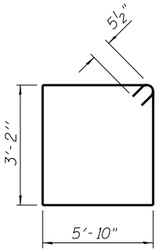
BAR h(E)



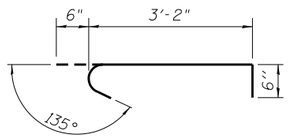
BAR $u_1(E)$



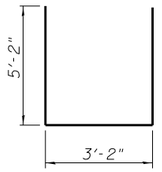
BAR $h_2(E)$



BAR $s_2(E)$



BAR $s_3(E)$



BAR $u_2(E)$

PREPARED BY:
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2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

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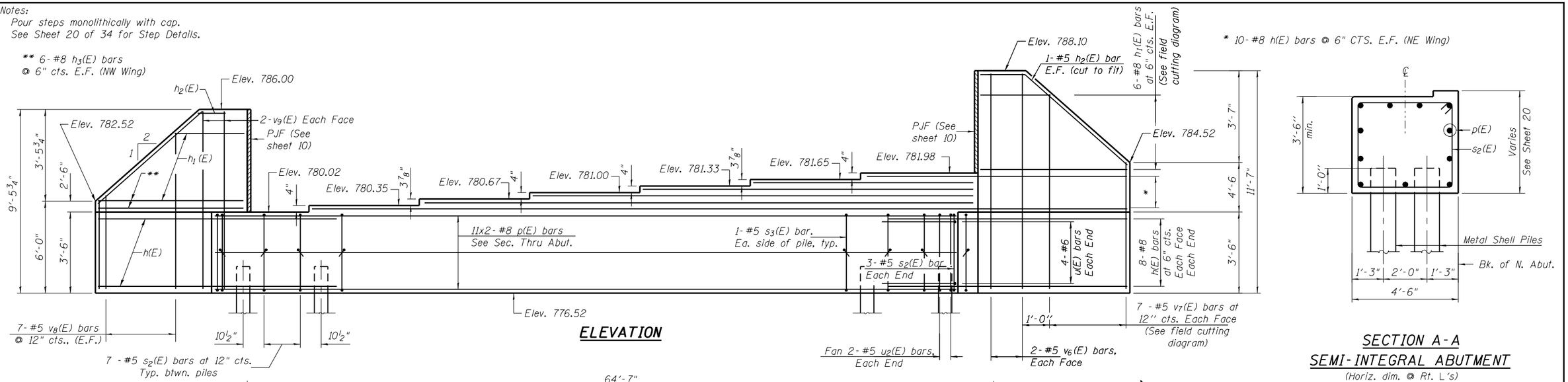
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT
STRUCTURE NO. 049-0601
SHEET NO. 18 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	64
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

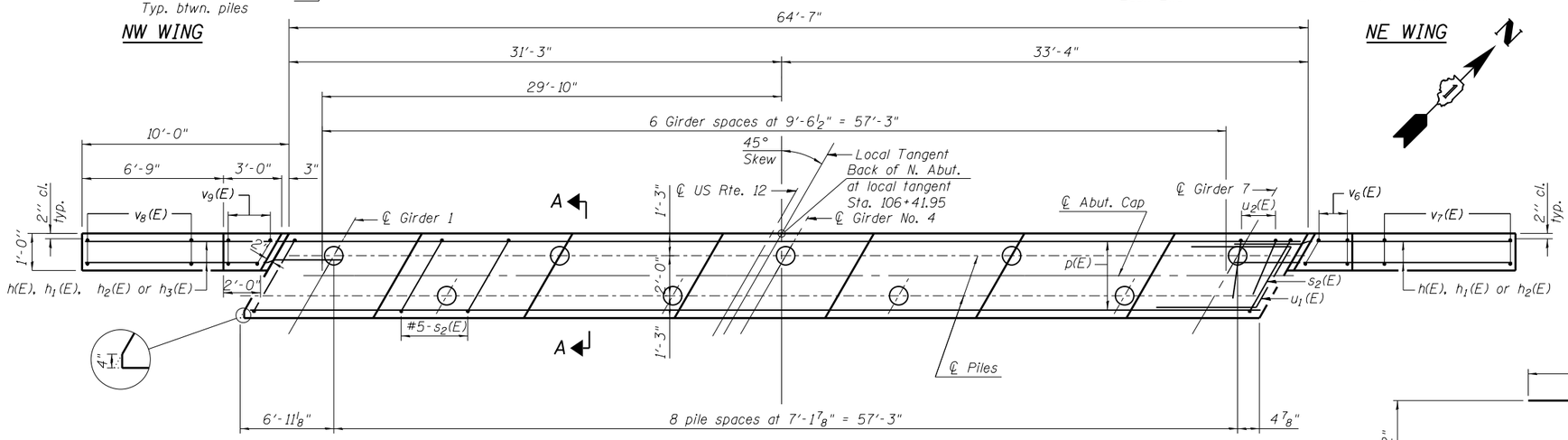
Notes:
Pour steps monolithically with cap.
See Sheet 20 of 34 for Step Details.



ELEVATION

SECTION A-A
SEMI-INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

NW WING

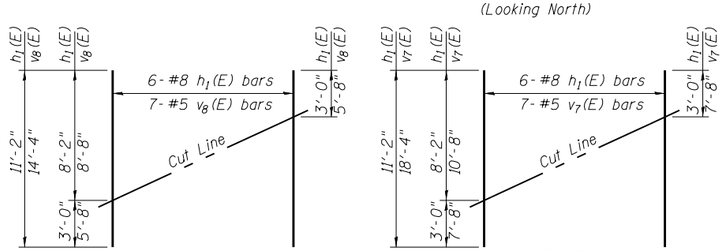


NE WING

PILE DATA

Type: Metal Shell - 14"ϕ x 0.312" Walls with pile shoes.
Nominal Required Bearing: 513 kips
Factored Resistance Available: 282kips
Est. Length: 54 ft.
No. Production Piles: 8
No. Test Piles: 1

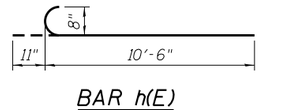
PLAN
(Looking North)



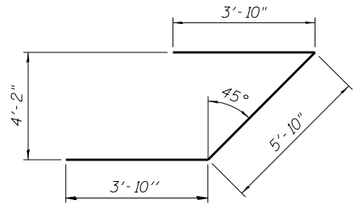
NW WING NE WING

FIELD CUTTING DIAGRAM

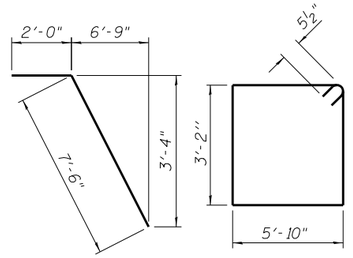
Order $h_1(E)$, $v_7(E)$ and $v_8(E)$ full length.
Cut as shown and use remainder of bars in opposite face.



BAR h(E)

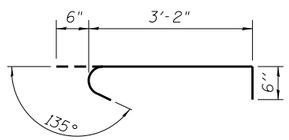


BAR $u_1(E)$

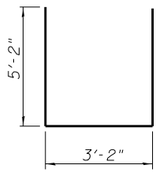


BAR $h_2(E)$

BAR $s_2(E)$



BAR $s_3(E)$



BAR $u_2(E)$

MINIMUM BAR LAP

#8 bar = 4'-9"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	52	#8	11'-5"	
$h_1(E)$	12	#8	11'-2"	
$h_2(E)$	4	#5	9'-6"	
$h_3(E)$	12	#8	8'-8"	
p(E)	22	#8	35'-0"	
$s_2(E)$	62	#5	18'-11"	
$s_3(E)$	18	#5	4'-2"	
$u_1(E)$	8	#6	13'-6"	
$u_2(E)$	4	#5	13'-6"	
$v_6(E)$	4	#5	11'-3"	
$v_7(E)$	7	#5	18'-4"	
$v_8(E)$	7	#5	14'-4"	
$v_9(E)$	4	#5	9'-3"	
Concrete Structures		Cu. Yd.	54.1	
Reinforcement Bars, Epoxy Coated		Pound	6,170	
Furnishing Metal Shell Piles, 14" x 0.312"		Foot	432	
Driving Piles		Foot	432	
Test Pile, Metal Shell		Each	1	
Pile Shoes		Each	9	

For details of piles see sheet 23 of 34.

Bars indicated thus 11 x 2-#8 etc. indicates 11 lines of bars with 2 lengths per line

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Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
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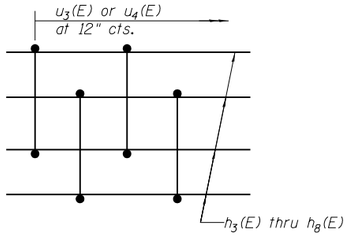
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

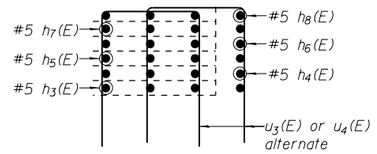
NORTH ABUTMENT
STRUCTURE NO. 049-0601
SHEET NO. 19 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	65
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

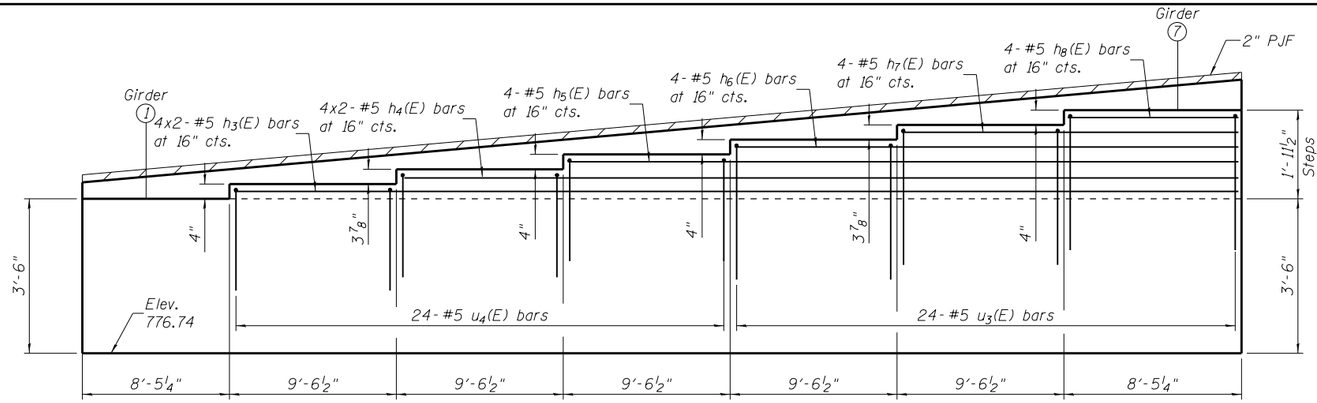
Notes:
Pour steps monolithically with cap.



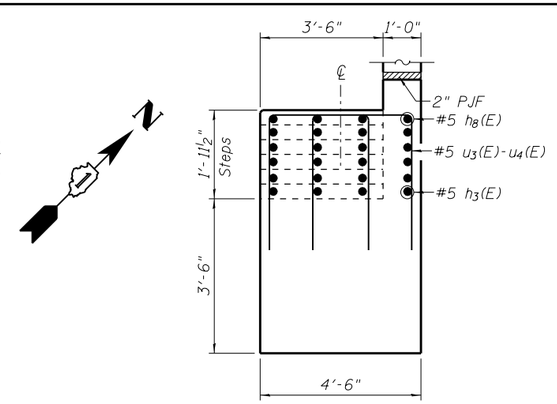
TYPICAL STEP REINFORCEMENT



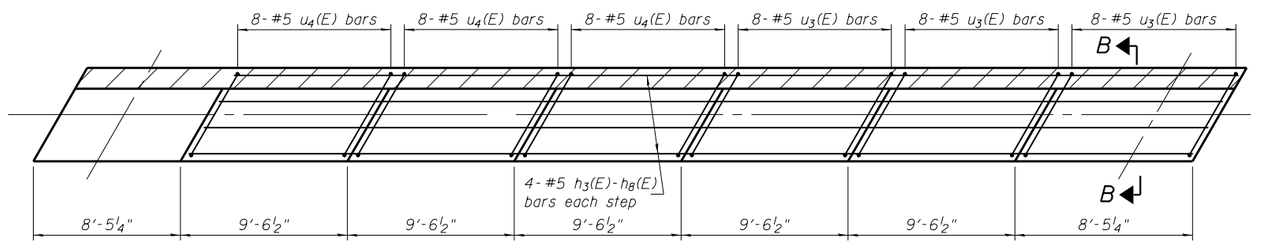
DETAIL



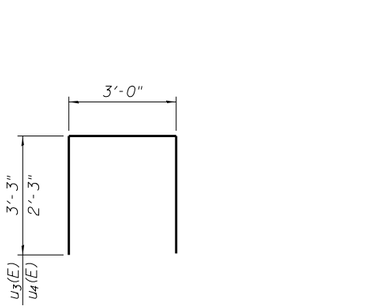
NORTH ABUTMENT ELEVATION
(Looking North)



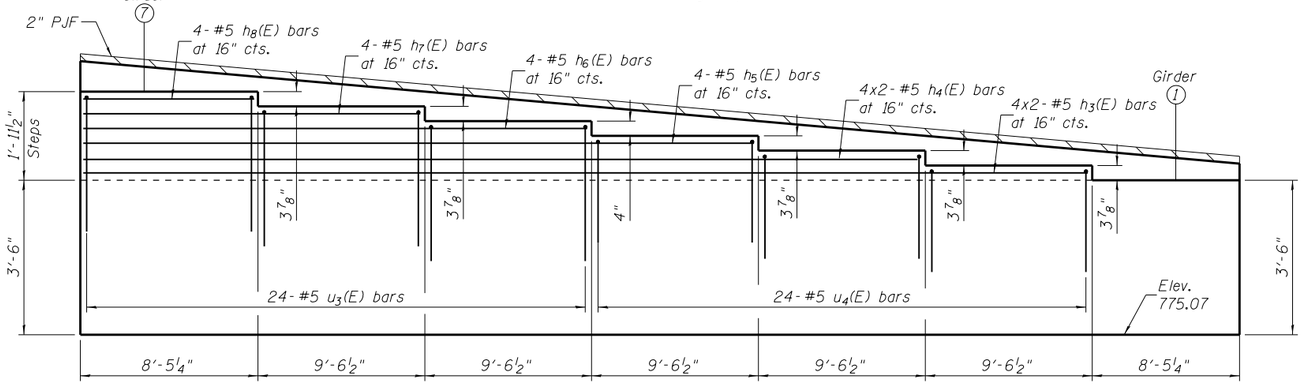
SECTION B-B
SEMI-INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)



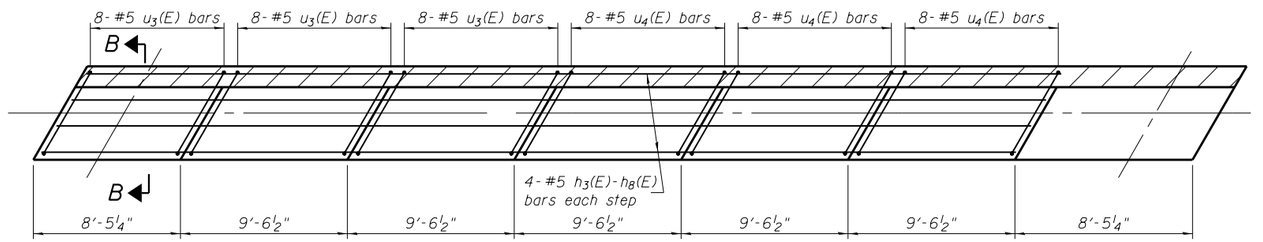
NORTH ABUTMENT PLAN
(Showing Steps)



BAR $u_3(E)$-$u_4(E)$



SOUTH ABUTMENT ELEVATION
(Looking South)



SOUTH ABUTMENT PLAN
(Showing Steps)

BAR LIST

Bar	No.	Size	Length	Shape
$h_3(E)$	16	#5	29'-3"	——
$h_4(E)$	16	#5	24'-6"	——
$h_5(E)$	8	#5	36'-6"	——
$h_6(E)$	8	#5	27'-0"	——
$h_7(E)$	8	#5	17'-6"	——
$h_8(E)$	8	#5	8'-0"	——
$u_3(E)$	48	#5	9'-6"	⊓
$u_4(E)$	48	#5	7'-6"	⊓

BILL OF MATERIAL

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	2,490

Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line

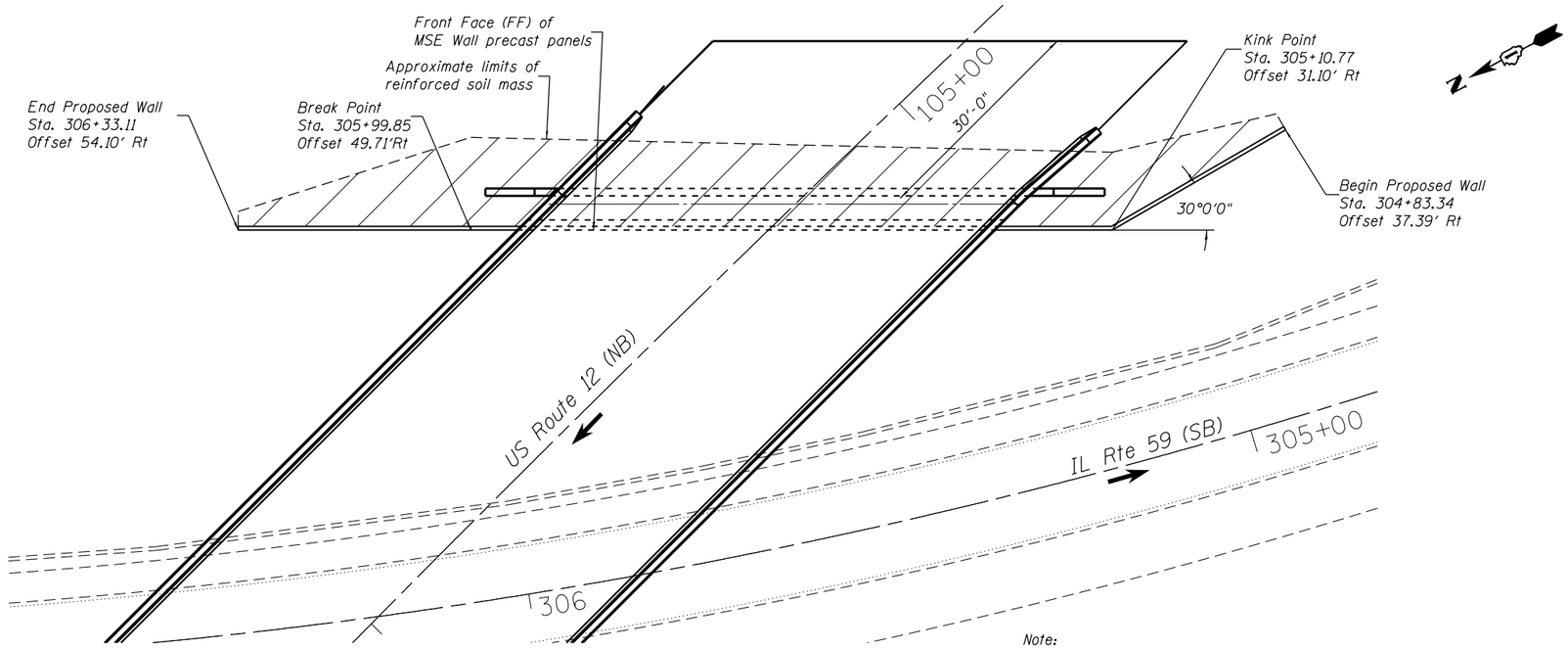
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH AND SOUTH ABUTMENT STEP REINFORCEMENT
STRUCTURE NO. 049-0601
SHEET NO. 20 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	66
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			



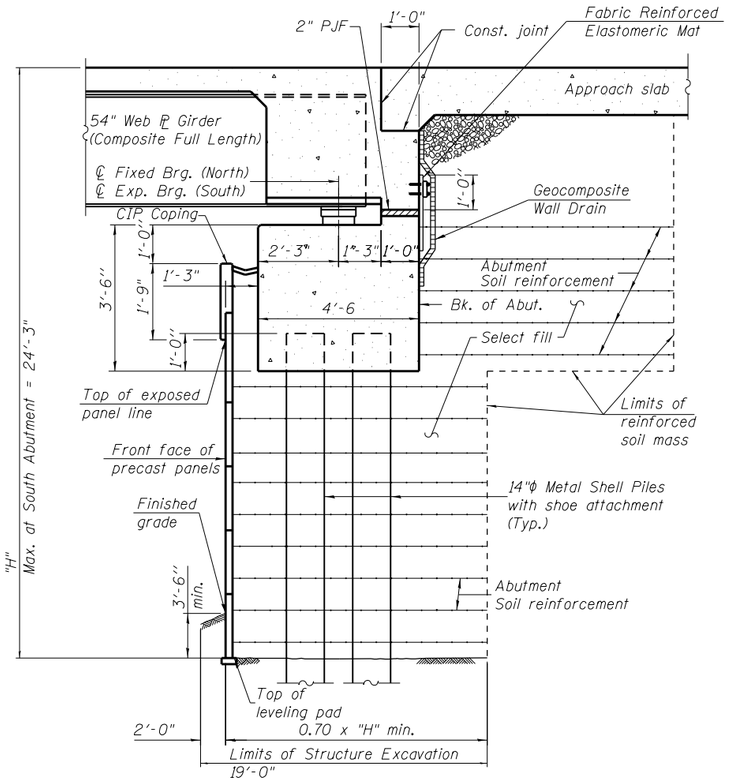
PLAN
(Looking South)

Note:

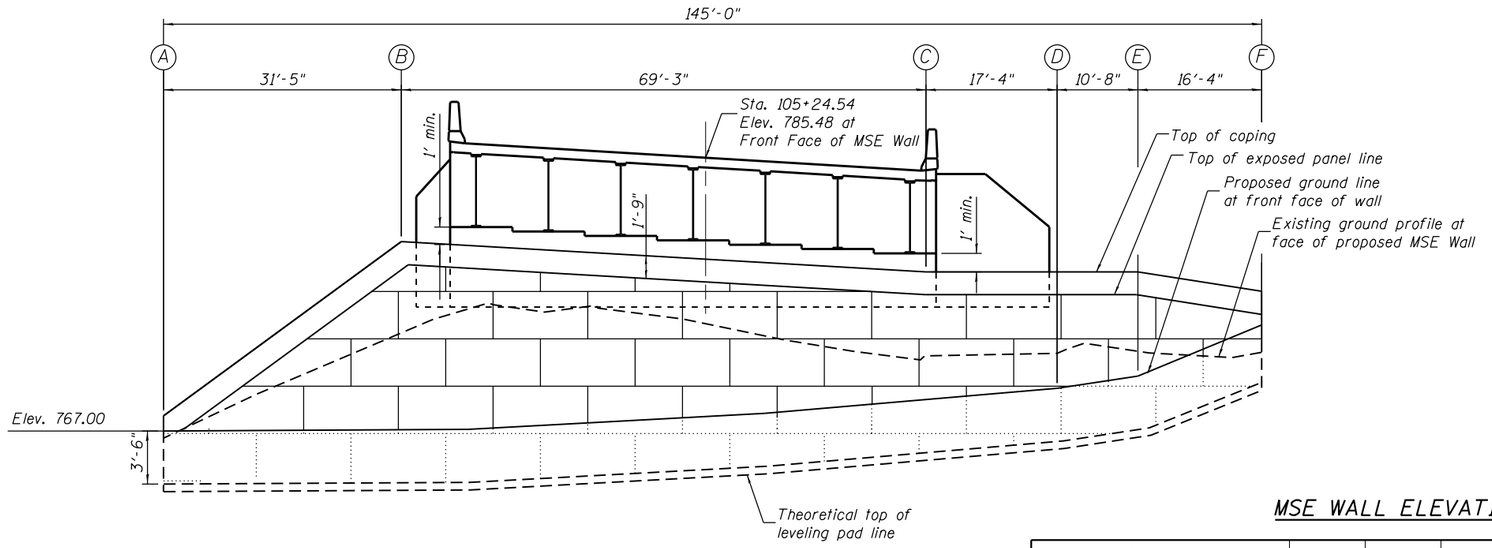
All offsets are measured from the ℄ of Illinois Route 59 to the front face of the precast panels

4-#4 $h_9(E)$ bars 5 lengths each required.

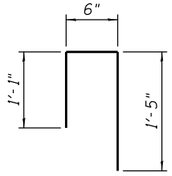
Bend $h_9(E)$ bars along the coping length as needed minimum lap = 2'-0".



SECTION THRU SEMI-INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)



SOUTH MSE WALL ELEVATION
(Looking South)



BAR $u_5(E)$

BAR LIST (COPING BOTH MSE WALLS)
(FOR INFORMATION ONLY)

Bar	No. N. Wall	No. S. Wall	Size	Length	Shape
$d_3(E)$	90	74	#4	1'-5"	——
$h_9(E)$	25	20	#4	38'-0"	——
$u_5(E)$	90	74	#4	3'-0"	⊏

*BILL OF MATERIAL

Item	Unit	Quantity
Structure Excavation	C.Y.	2,160
MSE Retaining Wall	S.Y.	4,026

*Quantities shown above are for both MSE Walls

MSE WALL ELEVATIONS

Location	A	B	C	D	E	F
Top of Coping	768.00	779.50	777.50	777.50	777.50	776.22
Top of Exposed Panel	766.25	777.75	775.75	775.75	775.75	774.47
Proposed Grade	767.00	767.00	769.25	770.00	771.00	774.00
Theoretical top of Leveling Pad	763.50	763.50	765.75	766.50	767.50	770.50

Note: For coping detail see sheet 22 of 34.
Bar List shown above are for coping on both MSE Walls.
Cost of coping included with MSE Retaining Walls.

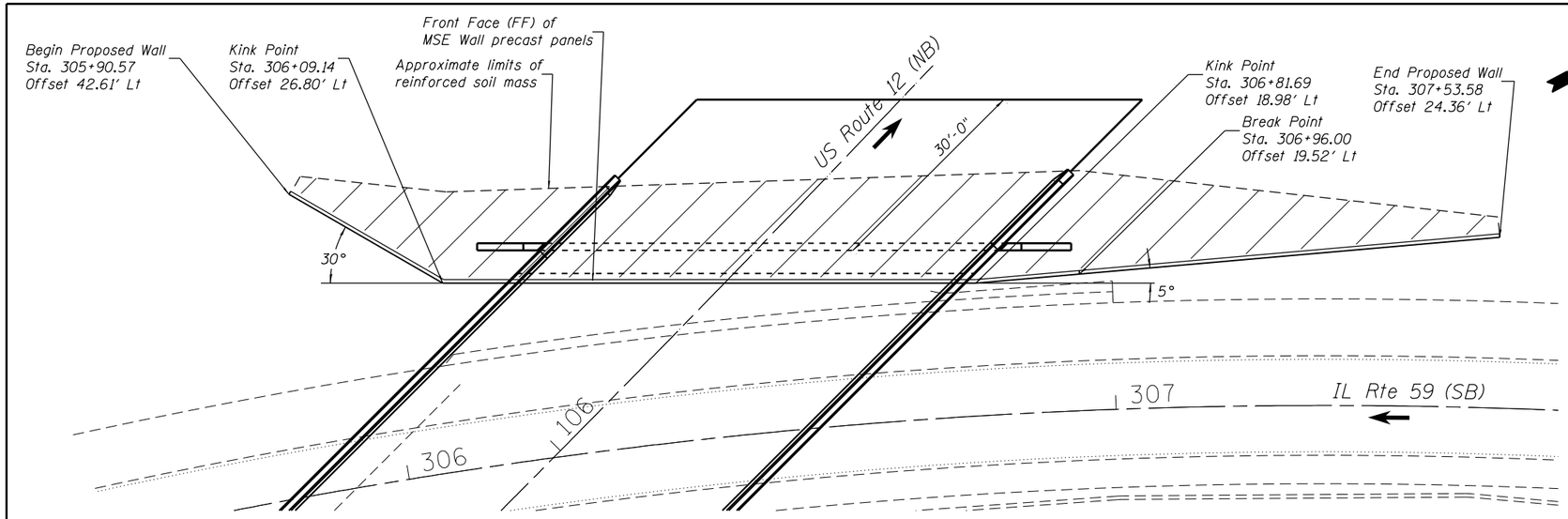
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MSE SOUTH WALL DETAILS
STRUCTURE NO. 049-0601
SHEET NO. 21 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	67
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		



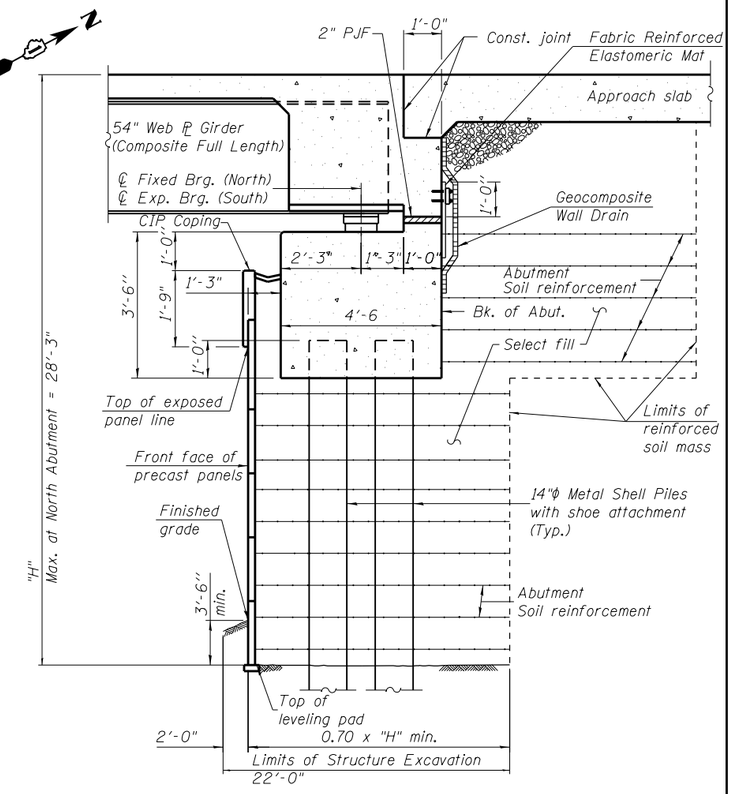
PLAN
(Looking North)

Note:

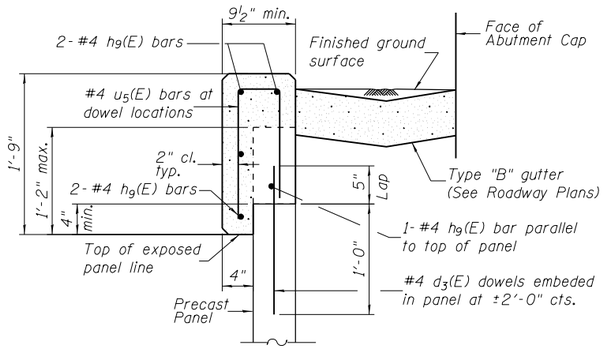
All offsets are measured from the ℄ of Illinois Route 59 to the front face of the precast panels

5-#4 $h_9(E)$ bars 5 lengths each required.

Bend $h_9(E)$ bars along the coping length as needed minimum lap = 2'-0".

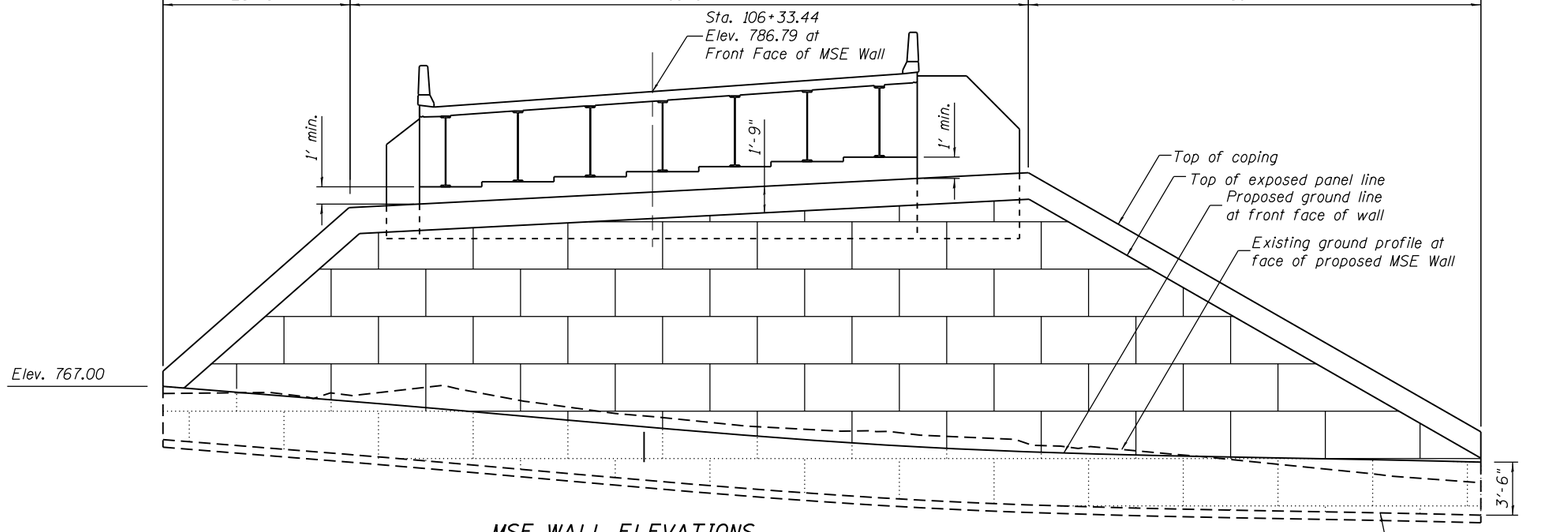


SECTION THRU SEMI-INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)



CAST IN PLACE COPING
FOR M.S.E. WALL PANELS

Cost of coping included with MSE Retaining Walls.



MSE WALL ELEVATIONS

Location	G	H	I	J
Top of Coping	768.00	778.80	781.10	764.00
Top of Exposed Panel	766.25	777.05	779.35	762.25
Proposed Grade	767.00	765.50	762.00	762.00
Theoretical top of Leveling Pad	763.50	762.00	758.50	758.50

NORTH MSE WALL ELEVATION
(Looking North)

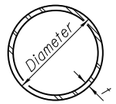
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

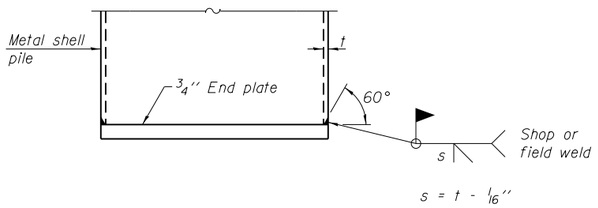
MSE NORTH WALL DETAILS
STRUCTURE NO. 049-0601
SHEET NO. 22 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	68
		CONTRACT NO. 60X51		
	ILLINOIS	FED. AID PROJECT		

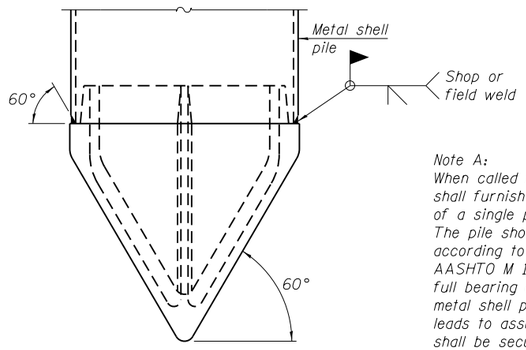


METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd.³ /ft.)
PP12	0.179″	22.60	0.0274
PP12	0.250″	31.37	0.0267
PP14	0.250″	36.71	0.0368
PP14	0.312″	45.61	0.0361



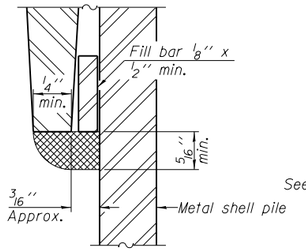
END PLATE ATTACHMENT



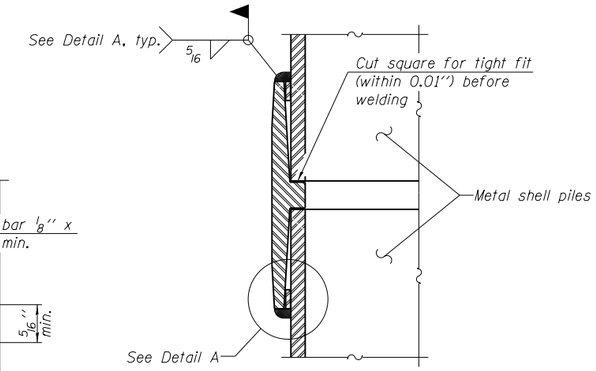
Note A:
When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

METAL SHELL PILE SHOE ATTACHMENT

(See Note A)

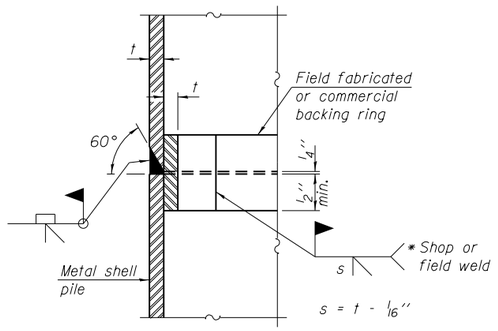


DETAIL A



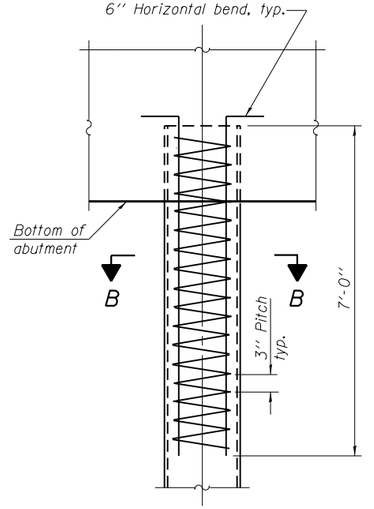
Notes:
The 1/8″ x 1/2″ min. fill bar may be constructed of 2 bars with a 1/8″ max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE

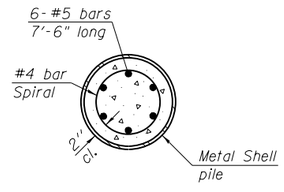


COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION



SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS

Note:
The metal shell piles shall be according to ASTM A 252 Grade 3.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F-MS 1-27-12

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

METAL SHELL PILE DETAILS
STRUCTURE NO. 049-0601
SHEET NO. 23 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	69
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

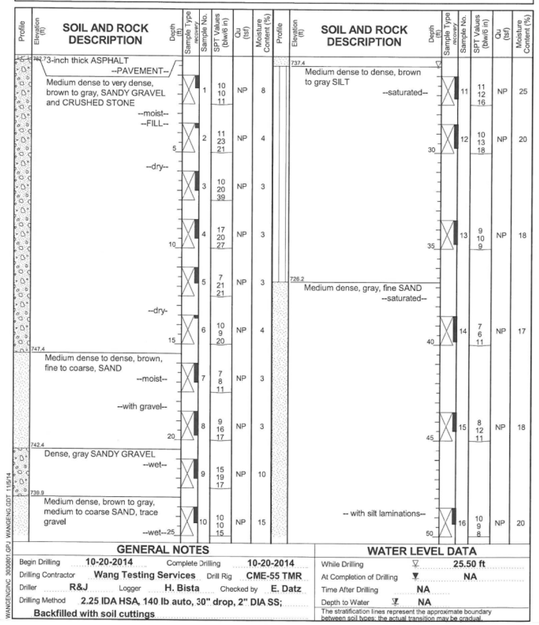
BORING LOG B-01

Page 1 of 2

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 303-08-01
Client: CEMCON, Ltd.
Project: US Route 12 over IL Route 59
Location: Fox Lake, IL

Datum: NGVD
Elevation: 762.93 ft
North: 2080235.54 ft
East: 1028448.52 ft
Station: 306+77.19
Offset: 10.58 LT



GENERAL NOTES

Begin Drilling: 10-20-2014 Complete Drilling: 10-20-2014
Drilling Contractor: Wang Testing Services Drill Rig: CME-55 TMR
Driller: R&J Logger: H. Bista Checked by: E. Datz
Drilling Method: 2.25 IDA HSA, 140 lb auto, 30" drop, 2" DIA SS;
Backfilled with soil cuttings

WATER LEVEL DATA

While Drilling: 25.50 ft
At Completion of Drilling: NA
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 303081.GPJ WANGENG.GDT 11/6/14

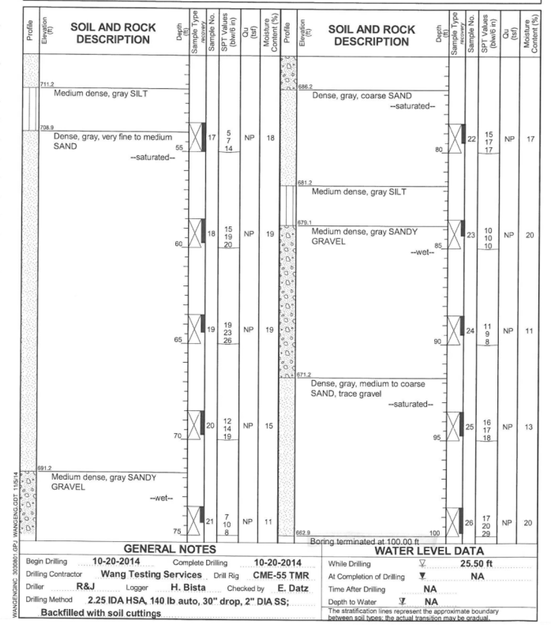
BORING LOG B-01

Page 2 of 2

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 303-08-01
Client: CEMCON, Ltd.
Project: US Route 12 over IL Route 59
Location: Fox Lake, IL

Datum: NGVD
Elevation: 762.93 ft
North: 2080235.54 ft
East: 1028448.52 ft
Station: 306+77.19
Offset: 10.58 LT



GENERAL NOTES

Begin Drilling: 10-20-2014 Complete Drilling: 10-20-2014
Drilling Contractor: Wang Testing Services Drill Rig: CME-55 TMR
Driller: R&J Logger: H. Bista Checked by: E. Datz
Drilling Method: 2.25 IDA HSA, 140 lb auto, 30" drop, 2" DIA SS;
Backfilled with soil cuttings

WATER LEVEL DATA

While Drilling: 25.50 ft
At Completion of Drilling: NA
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 303081.GPJ WANGENG.GDT 11/6/14

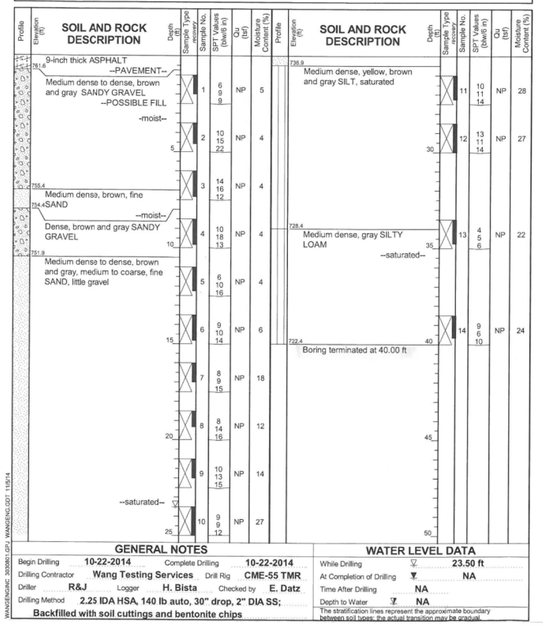
BORING LOG B-02

Page 1 of 1

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 303-08-01
Client: CEMCON, Ltd.
Project: US Route 12 over IL Route 59
Location: Fox Lake, IL

Datum: NGVD
Elevation: 762.38 ft
North: 2080185.35 ft
East: 1028472.57 ft
Station: 306+49.92
Offset: 9.01 RT



GENERAL NOTES

Begin Drilling: 10-22-2014 Complete Drilling: 10-22-2014
Drilling Contractor: Wang Testing Services Drill Rig: CME-55 TMR
Driller: R&J Logger: H. Bista Checked by: E. Datz
Drilling Method: 2.25 IDA HSA, 140 lb auto, 30" drop, 2" DIA SS;
Backfilled with soil cuttings and bentonite chips

WATER LEVEL DATA

While Drilling: 23.50 ft
At Completion of Drilling: NA
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 303081.GPJ WANGENG.GDT 11/6/14

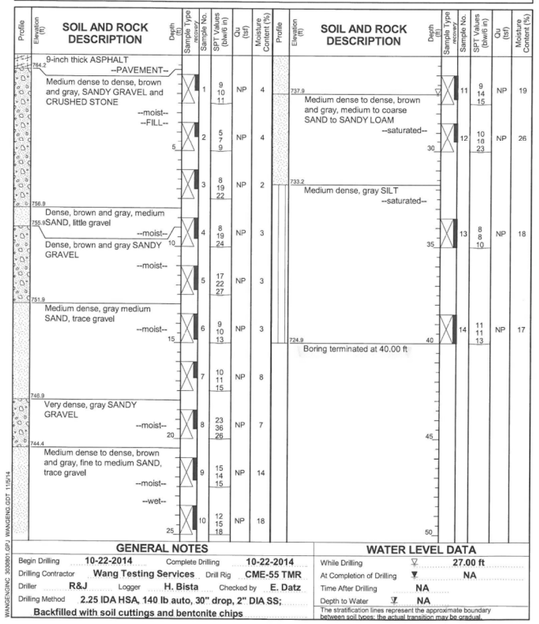
BORING LOG B-03

Page 1 of 1

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 303-08-01
Client: CEMCON, Ltd.
Project: US Route 12 over IL Route 59
Location: Fox Lake, IL

Datum: NGVD
Elevation: 764.91 ft
North: 2080158.21 ft
East: 1028421.81 ft
Station: 305+97.32
Offset: 10.44 LT



GENERAL NOTES

Begin Drilling: 10-22-2014 Complete Drilling: 10-22-2014
Drilling Contractor: Wang Testing Services Drill Rig: CME-55 TMR
Driller: R&J Logger: H. Bista Checked by: E. Datz
Drilling Method: 2.25 IDA HSA, 140 lb auto, 30" drop, 2" DIA SS;
Backfilled with soil cuttings and bentonite chips

WATER LEVEL DATA

While Drilling: 27.00 ft
At Completion of Drilling: NA
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 303081.GPJ WANGENG.GDT 11/6/14

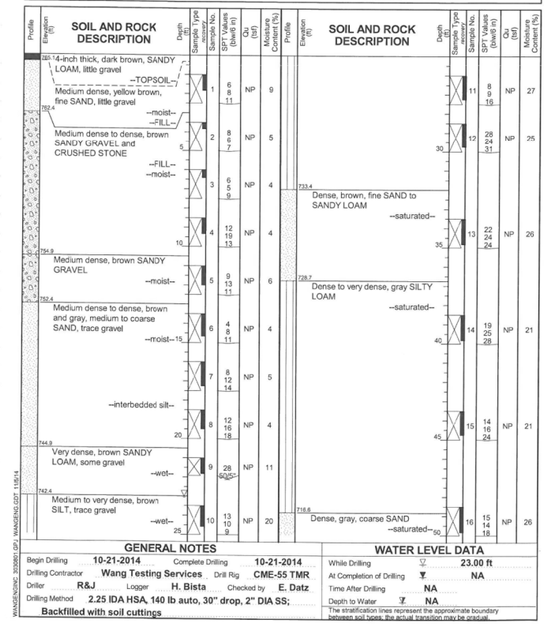
BORING LOG B-04

Page 1 of 2

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 303-08-01
Client: CEMCON, Ltd.
Project: US Route 12 over IL Route 59
Location: Fox Lake, IL

Datum: NGVD
Elevation: 765.44 ft
North: 2080089.60 ft
East: 1028442.45 ft
Station: 305+46.66
Offset: 13.93 RT



GENERAL NOTES

Begin Drilling: 10-21-2014 Complete Drilling: 10-21-2014
Drilling Contractor: Wang Testing Services Drill Rig: CME-55 TMR
Driller: R&J Logger: H. Bista Checked by: E. Datz
Drilling Method: 2.25 IDA HSA, 140 lb auto, 30" drop, 2" DIA SS;
Backfilled with soil cuttings

WATER LEVEL DATA

While Drilling: 23.00 ft
At Completion of Drilling: NA
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 303081.GPJ WANGENG.GDT 11/6/14

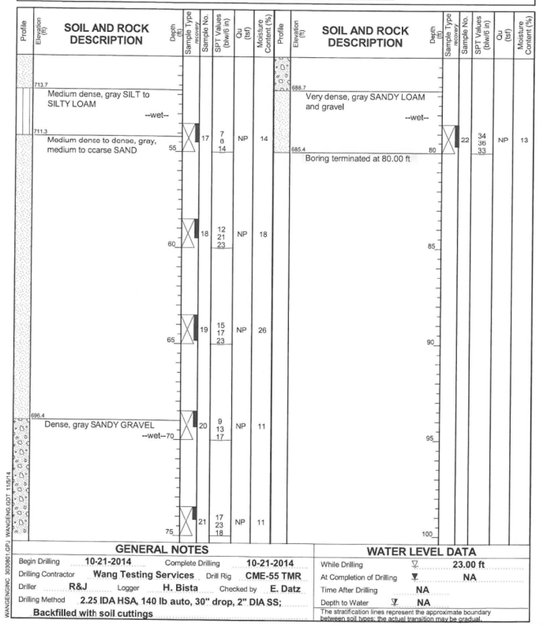
BORING LOG B-04

Page 2 of 2

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 303-08-01
Client: CEMCON, Ltd.
Project: US Route 12 over IL Route 59
Location: Fox Lake, IL

Datum: NGVD
Elevation: 765.44 ft
North: 2080089.60 ft
East: 1028442.45 ft
Station: 305+46.66
Offset: 13.93 RT



GENERAL NOTES

Begin Drilling: 10-21-2014 Complete Drilling: 10-21-2014
Drilling Contractor: Wang Testing Services Drill Rig: CME-55 TMR
Driller: R&J Logger: H. Bista Checked by: E. Datz
Drilling Method: 2.25 IDA HSA, 140 lb auto, 30" drop, 2" DIA SS;
Backfilled with soil cuttings

WATER LEVEL DATA

While Drilling: 23.00 ft
At Completion of Drilling: NA
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 303081.GPJ WANGENG.GDT 11/6/14

PREPARED BY:
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2280 White Oak Circle, Suite 100
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Ph: 630.862.2100 Fax: 630.862.2199
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		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 049-0601
SHEET NO. 24 OF 34 SHEETS

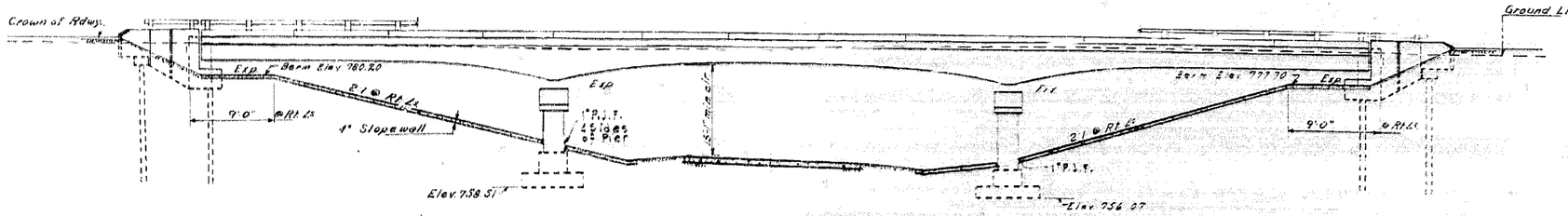
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	70
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

BM #1 Bin end of concrete pump base 103'11 Sta 114+68 Elev 780.66
No Existing Structure

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET No.
S.B.I. Rt. 60	106-2HB	LAKE	85	28
I.D. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	F-172(28)	

SHEET NO. 1
10 SHEETS



ELEVATION
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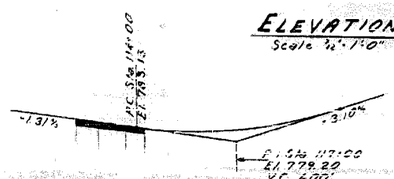
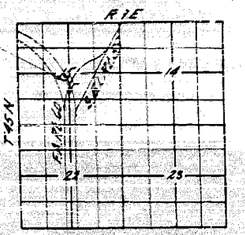


PROFILE OF N.B. LANE

Proposed Structure
STATION 113+20.70
BUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 60 · SEC. 106-2HB
F.A. PROJ. F-172 (28)
LOADING HS20

NAME PLATE
See Std. 2.13-1



LOCATION PLAN

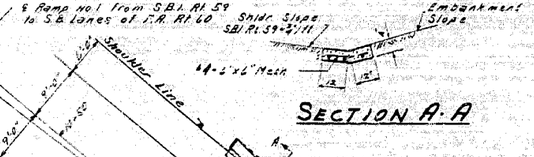
GENERAL NOTES

Class X Concrete shall be used throughout
The Concrete floor slab shall be poured in one continuous operation between construction joints shown
The concrete floor slab shall be finished in accordance with Article 5.19 of the Standard Specifications
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh. 4 wires, weighing 58# per 100 sq ft.

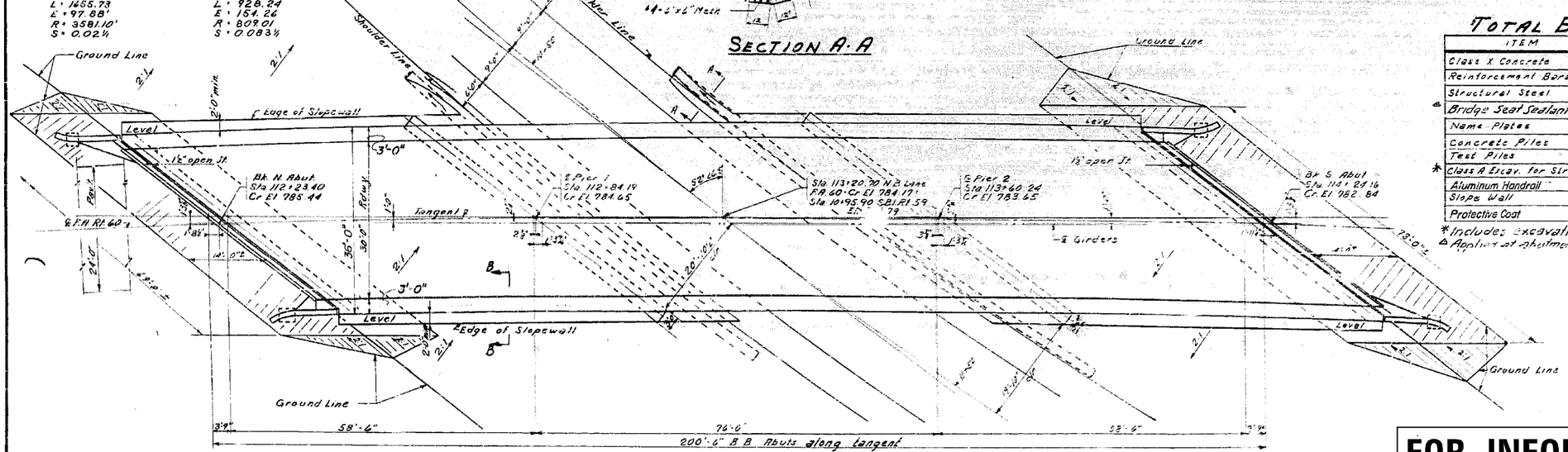
All rockers, bearing plates, load plates, pintles and anchor bolts shall be fabricated and set in accordance with Article 5.14 of the Standard Specifications, and are included for payment as Structural Steel.
Unless otherwise noted, all structural steel shall receive one shop coat of red lead paint and two field coats of Aluminum paint. See Article 561 to 565 of the Std. Specifications.
All paint shall be furnished and applied by the Contractor.
The Contractor shall drive test piles in permanent locations as directed by the Engineer before ordering or casting remainder of piles. Drive one test pile at each Abutment.
Coarse aggregate to be used in parapet handrails must be absolutely free of chert, flint, limonite, lignite and soft sandstone.
Permanent forms will not be permitted in forming the concrete slab.
Exposed surfaces of expansion devices, inaccessible after erection, shall be given two shop coats of red lead paint.

Curve Data North Bound Lane	
P.I.	Sta 114+13.48
Δ	26°-29.5'
D	1°-36'
T	842.96
L	1655.73
E	97.88'
R	3581.10'
S	0.02½

Curve Data Proposed Ramp No.1	
P.I.	Sta 111+17.52
Δ	45°-45'
D	7°-05'
T	522.87
L	928.24
E	154.26
R	809.01
S	0.083¾



SECTION A-A



PLAN
Scale ⅛"=1'0"

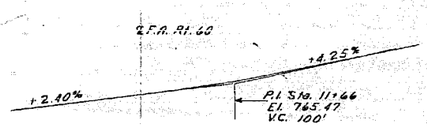
TOTAL BILL OF MATERIAL

ITEM		SUPER	SUB	TOTAL
Class X Concrete	Cu. Yds	417.2	241.3	658.5
Reinforcement Bars	Lbs.	112040	25390	137430
Structural Steel	Lbs.	11,780		11,780
Bridge Seat Sealant	L Sum			1
Name Plates	Each	1		1
Concrete Piles	Lin. Ft.		354	354
Test Piles	Each		2	2
* Class A Excav. for Struct.	Cu. Yds.		442	442
Aluminum Handrail	Lin. Ft.	426		426
Slope Wall	Sq. Yds.		650	650
Protective Coat	Sq. Yds.	902		902

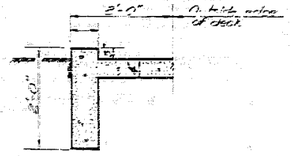
*Includes excavation for Slope Walls
△ Applies at Abutments

FOR INFORMATION ONLY

DESIGNED	James T. Rydstedt	EXAMINED	DEC. 11 19 58
CHECKED	H.L.O.	PASSED	
DRAWN	J.T.R. J.L.P. Plotter	APPROVED	
CHECKED			



PROFILE OF PROPOSED RAMP No.1



SECTION B-B

DESIGN STRESSES
fc Superstructure 1400 p.s.i.
fc Substructure 1400 p.s.i.
fs Reinforcement Bar 20,000 p.s.i.
n = 10
Loading HS20-44
V = 75 p.s.i. Pier Flgs.
Max. Footing Pressure = 4000 p.s.f.

GENERAL PLAN & ELEVATION
PROJ. F-172(28)
N.B. LANE OVER S.B.I. RT. 59 (RAMP)
F.A. RT. 60 - SEC. 106-2HB
LAKE COUNTY
STA. 113+20.70 (N.B. LANE)

Revised 10-15-64 E.M. - Metal Handrail 427 Lin. Ft. Changed to Aluminum Handrail 426 Lin. Ft. - Class X Concrete Changed From 633.4 Cu. Yds. to 658.5 Cu. Yds. - Reinforcement Bars Changed From 133,150 Lbs. to 137,430 Lbs. - Protective Coat 902 Sq. Yds. Added.

Revised Articles in general notes 7-10-59 converted to 1959 Specs.

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

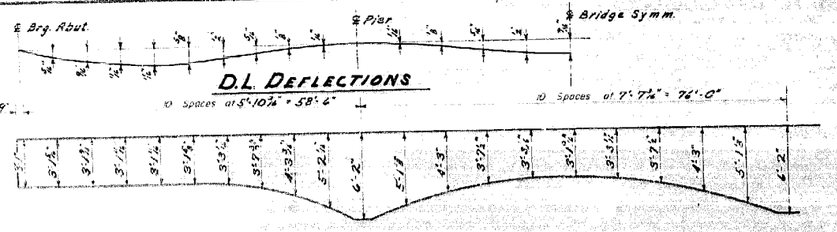
EXISTING STRUCTURE
STRUCTURE NO. 049-0020
SHEET NO. 25 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	71
		CONTRACT NO. 60X51		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

					SHEET NO 2
S.N. 049-0020	F.A.P. RTE. 334	SECTION 106-2HB	LAKE	85	29	10 SHEETS
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			

D.L. DEFLECTIONS



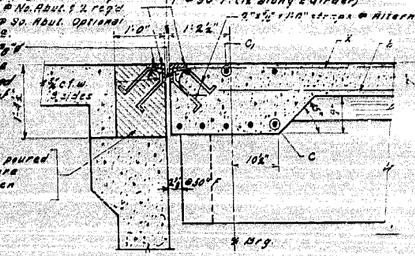
GIRDER ORDINATES (ALL GIRDERS)

Ordinates include Dead Load Deflection. Contractor shall allow for settlement of Forms and shrinkage.

BAR-X

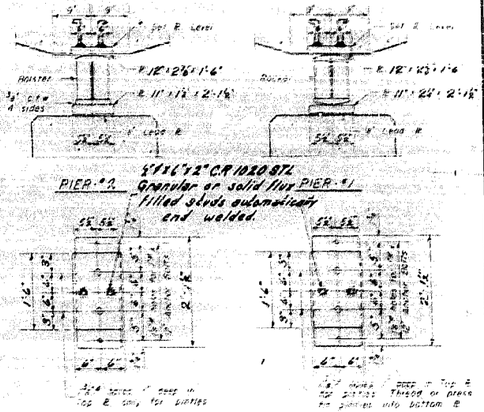
¾"d holes at 12" cts. for ¾"d bolts. All bolts shall be burned, sawed or clipped off flush with back of angles after forms are removed.

STRAP DETAIL



Shaded area to be poured after Superstructure falsework has been removed

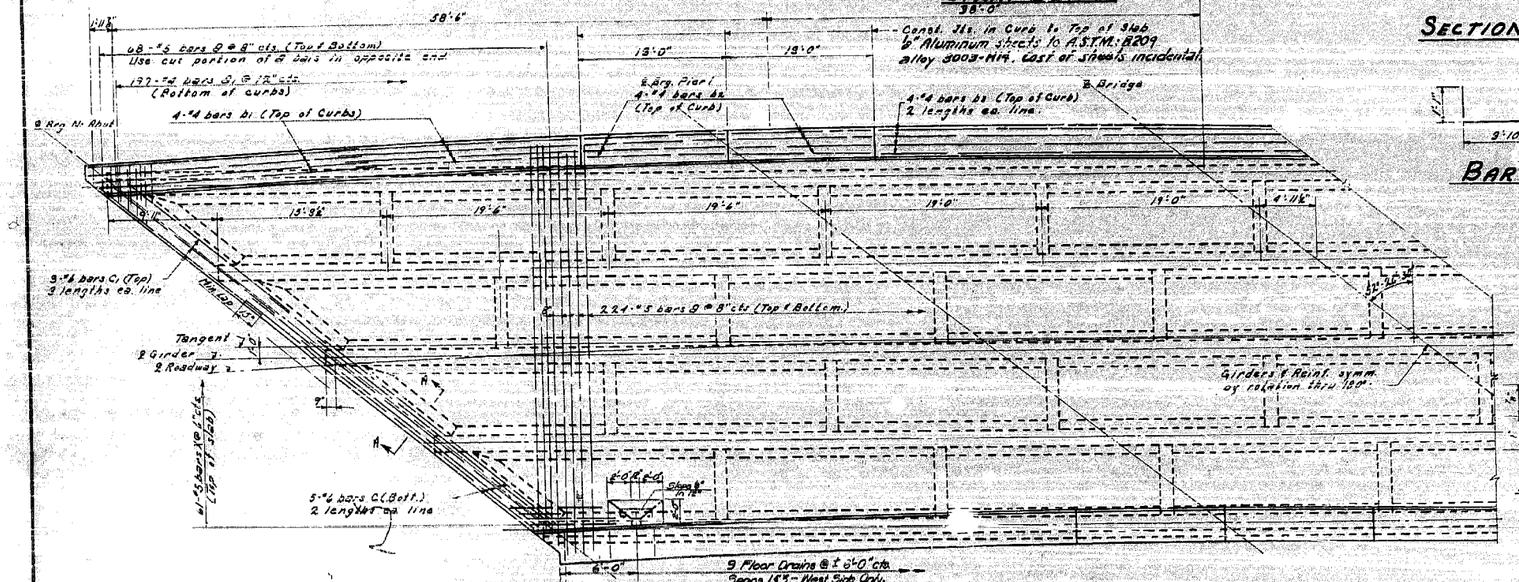
SECTION A-A



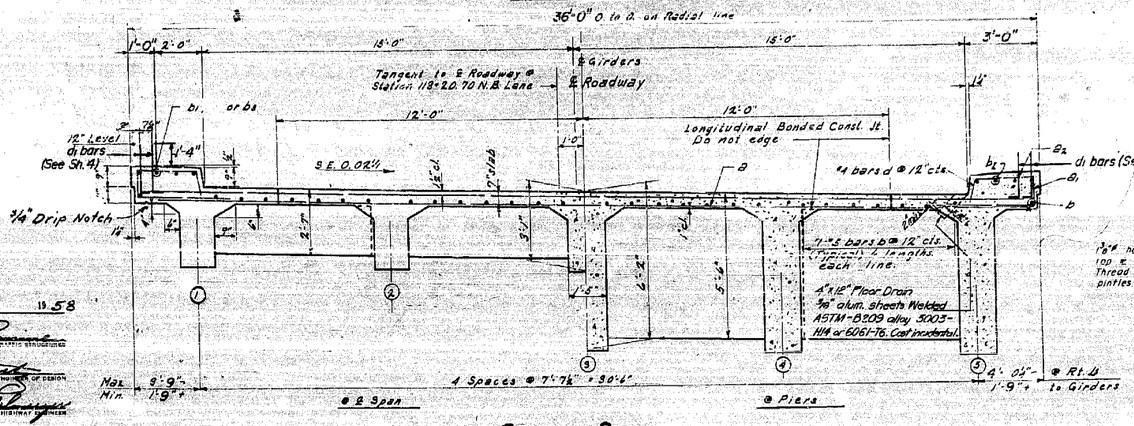
5"x16"x2'-6" CR 1020 STL Granular or Solid Flux Filled Studs automatically end welded.

PLAN - PLATES

PLAN - PLATES

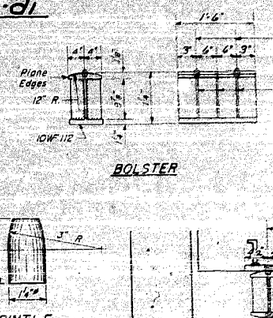


PLAN OF SLAB



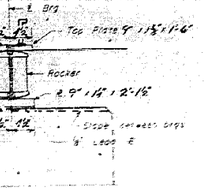
CROSS SECTION

BAR-d1

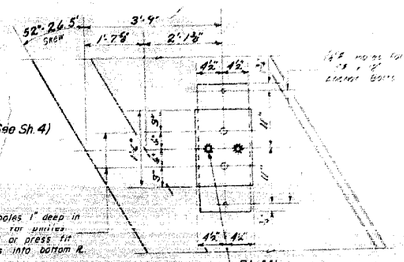


BOLSTER

ROCKER



ELEVATION



PLAN

½"x6"x2" CR 1020 STL Granular or solid flux filled studs automatically end welded.

BILL OF MATERIAL - SUPER

BAR	No	SIZE	LENGTH	SHAPE
B	534	#5	35'-8"	
B'	394	#4	4'-1"	L
B₂	100	#4	2'-6"	
b	180	#5	23'-6"	
b₁	32	#4	23'-9"	
b₂	32	#4	2'-5"	
b₃	16	#4	23'-5"	
C	20	#4	25'-8"	
C₁	13	#4	17'-5"	
d	394	#4	1'-2"	
X	122	#5	4'-1"	C
Class X Concrete			CU. YDS	395.3
*Reinforcement Bars			LBS.	107,760
Structural Steel			LBS.	11780

* Includes Weight of Girder Reinforcement Shown on Sheet 3

DESIGNED James J. Rathsam W.L.O.
CHECKED Jonathan O'Brien
DRAWN W. A. Sausaman, Rawlins
CHECKED Jonathan O'Brien

DEC. 11 19 58
EXAMINED
PASSED
APPROVED
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
ENGINEER OF DESIGN
CHIEF HIGHWAY ENGINEER

D-3-H DRAWN 5-2-57

Revised 10-15-64 E.M.: Class X Concrete Changed From 392.1 Cu. Yds. to 395.3 Cu. Yds.

SUPERSTRUCTURE
N.B. LANE OVER S.B.I. RT. 59 (RAMP)
F.A. RT. 60 - SEC. 106-2HB
LAKE COUNTY
STA. 113+20.70 (N.B. LANE)

FOR INFORMATION ONLY

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE
STRUCTURE NO. 049-0020
SHEET NO. 26 OF 34 SHEETS

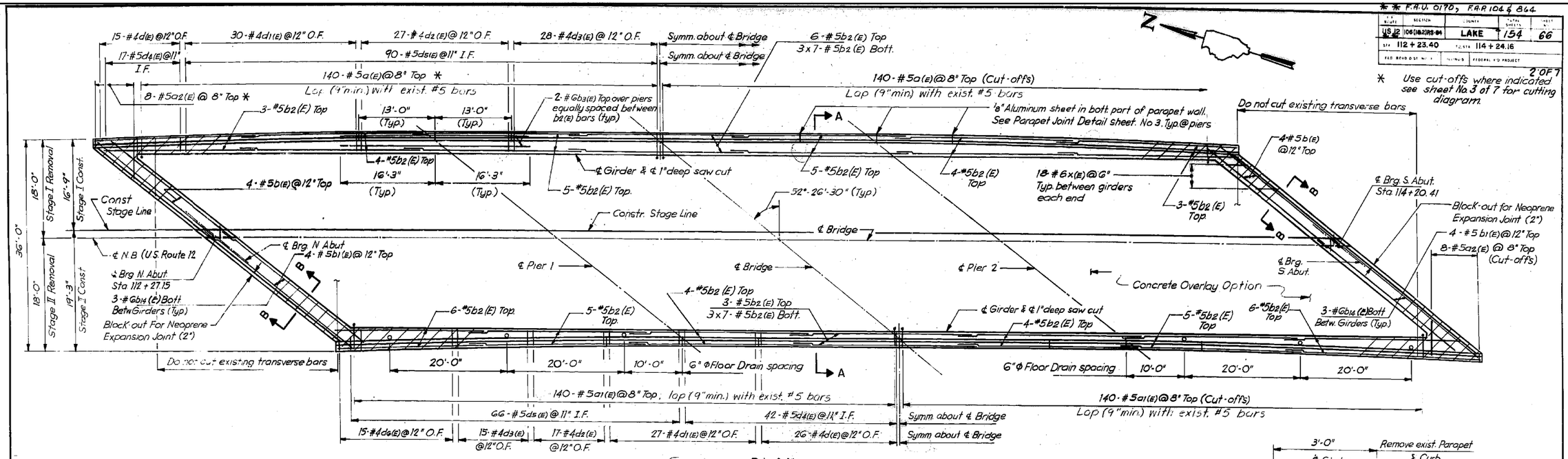
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	72
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

F.A.U. 0170, F.A.R 104 & 864

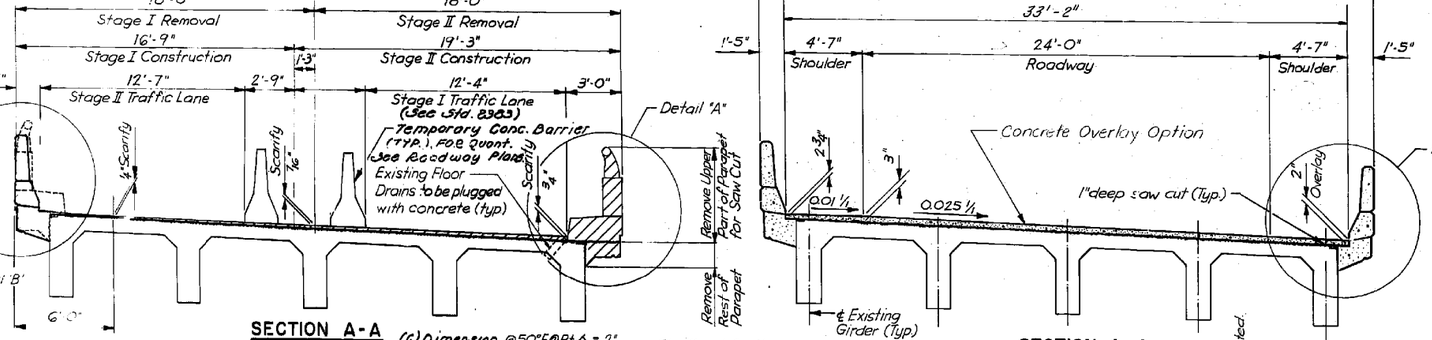
SEC. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 12	106(182)RS-84	LAKE	154	66
STA. 112 + 23.40		STA. 114 + 24.16		
FED. ROAD DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		

2 OF 7

* Use cut-offs where indicated see sheet No. 3 of 7 for cutting diagram.



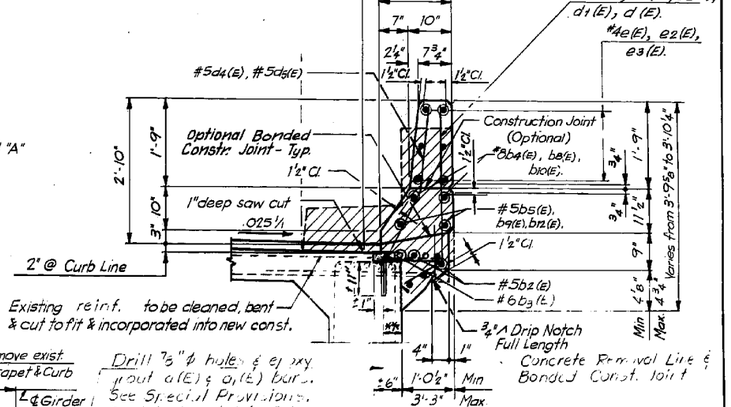
PLAN



SECTION A-A
(Showing Staging)

(c) Dimension @ 50°F @ Rt △ = 2"

SECTION A-A
(Showing New Construction)

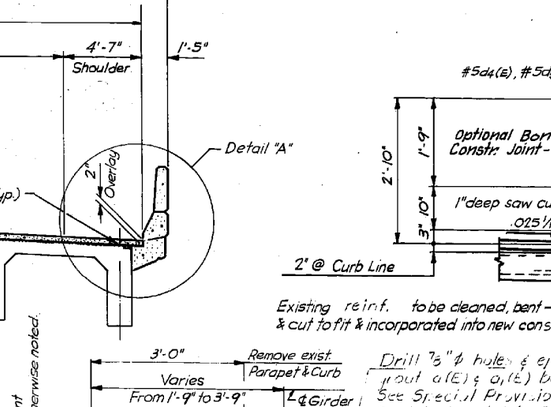


DETAIL "A"

Apply Class X Concrete with ¾" max. agg. size to this area (6" x 2") ±

Hatched area to be poured after Superstructure falsework has been removed. Quantity of Concrete included with Class X Concrete Superstructure.

SECTION B-B



DETAIL "B"

Drill ⅞" ϕ holes & epoxy (put a(E) & a1(E) bars. See Special Provisions. Cost incidental to reinf. Bars, Epoxy Coated.
** ±5" (space to miss exist. reinf.)

Exist. reinf. to be cleaned, bent & cut to fit & incorporated into new const.

For Bill of Materials see Sht No. 3

NOTES:

1) Bars indicated thus 5 x 7-#5 etc indicates 5 lines of bars with 7 lengths.
2) Reinforcement bars designated (E) shall be epoxy coated.
3. For Parapet, Floor Drain details & Bill of Materials see Sht No. 3
4. For Neoprene Expansion Joint see Sht. No. 7.

LEGEND

▨ Indicates concrete removal, existing transverse & vertical reinforcement extending into the removal area shall be cleaned & incorporated into the new construction.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DECK DETAILS - I
N.B. U.S. 12 OVER S.B. ILL 59 (FAU 0107)
SECTION 106 (182) RS-84 LAKE COUNTY
STRUCTURE No. 049-0020
STA. 113 + 20.70

SCALE
DRAWN BY E.B.P.
DATE AUG. 4, 1986
CHECKED BY L.M.

SHEET 66 OF 154

FOR INFORMATION ONLY

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

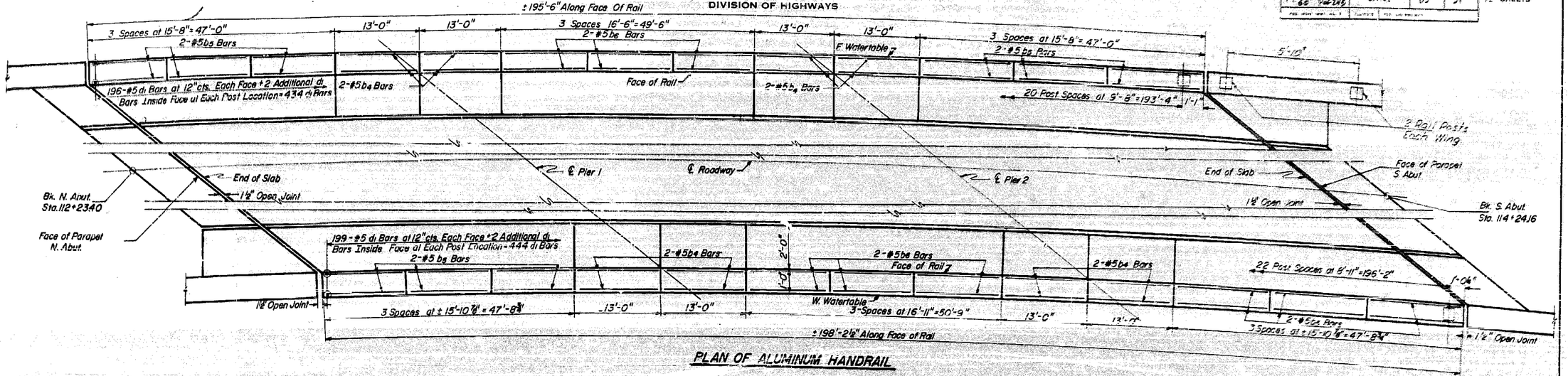
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE – MODIFIED BRIDGE DECK – 1986
STRUCTURE NO. 049-0020
SHEET NO. 27 OF 34 SHEETS

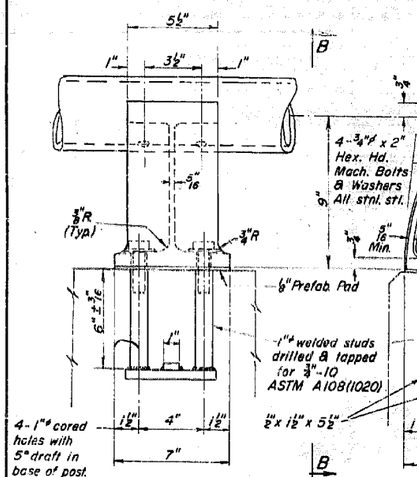
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	73
		CONTRACT NO. 60X51		
		ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

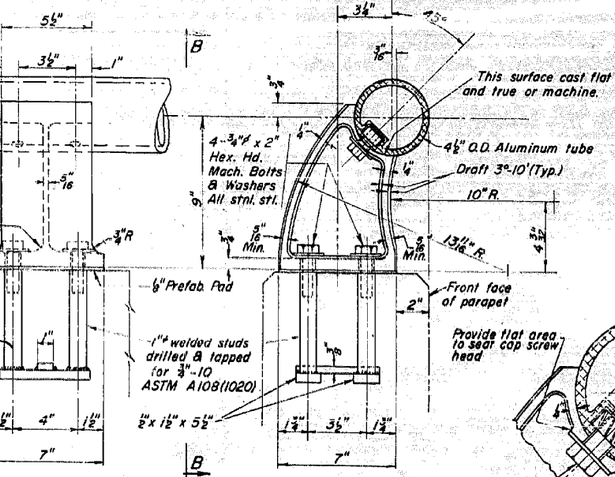
		COUNTY		SHEET NO. 4
66	106-2 HB-2	LAKE	85	31 SHEETS



PLAN OF ALUMINUM HANDRAIL

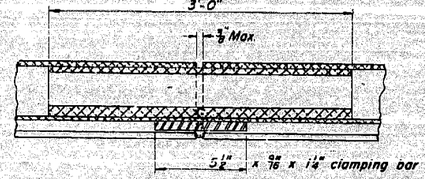


VIEW B-B

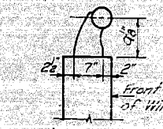


SECTION A-A

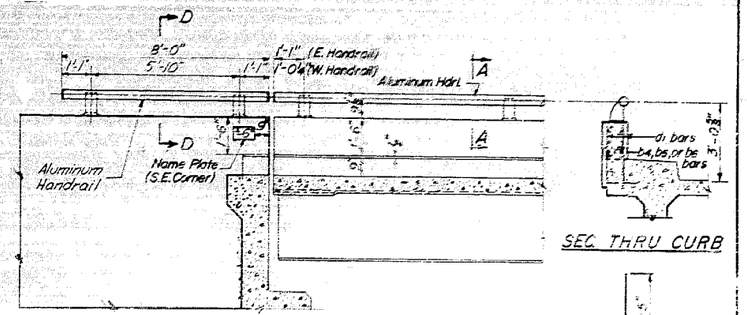
RAIL POST DETAILS



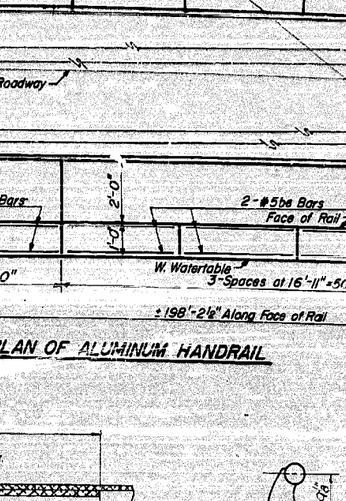
SECTION C-C



SECTION D-D



DETAIL of RAIL ATTACHMENT to POST



PARAPET JOINT DETAIL

NOTES:

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded rail shall conform to ASTM specification B-235 alloy 6061-T6, or 6062-T6, and shall extend a minimum of 2 panel lengths (attached to a minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.

See Special Provisions for following Material Specifications.

Cast Aluminum Alloy Bridge Post Alloy 344-T4.
Stainless Steel Machine Bolts, Washers, and Bars.

For material composition of Prefabricated Pad, see Article 54.9(f) (Bearing and Anchorage), of the Standard Specifications.

METHOD of MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS of PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

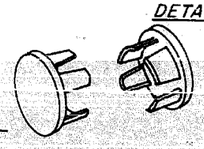
BAR di

BILL of MATERIAL

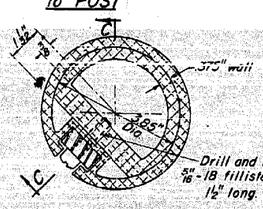
Item	Unit	Quantity
ALUMINUM HANDRAIL	L.F. Ft.	436
Class X Concrete	Cu. Yds.	2.3
Reinforcement Bars	Lbs.	4280
Name Plates	Each	1

Bar	No.	Size	Length	Shape
b4	32	#5	12'-3"	
b5	48	#5	15'-5"	
b6	24	#5	16'-3"	
di	878	#5	2'-11"	

ALUMINUM HANDRAIL
HANDRAIL DETAILS
N.B. LANE OVER S.B.I RT 59 (RAMP #1)
F.A. RT. 60 SEC. 106-2HB
LAKE COUNTY
STA. 113+20.70 (N.B. LANE)



CAST END CAP
DRIVE FIT TYPE
12 REQUIRED



RAILING SPLICE DETAIL

DESIGNED	Eugene McCormick	10
CHECKED	Fred Stone	EXAMINED — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
DRAWN	Wm. M. Bast / Joseph L. Putnam	PASSED — ENGINEER OF DESIGN
CHECKED	E.M.	APPROVED — CHIEF HIGHWAY ENGINEER

R-19 Dwn. 6-26-64

FOR INFORMATION ONLY

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

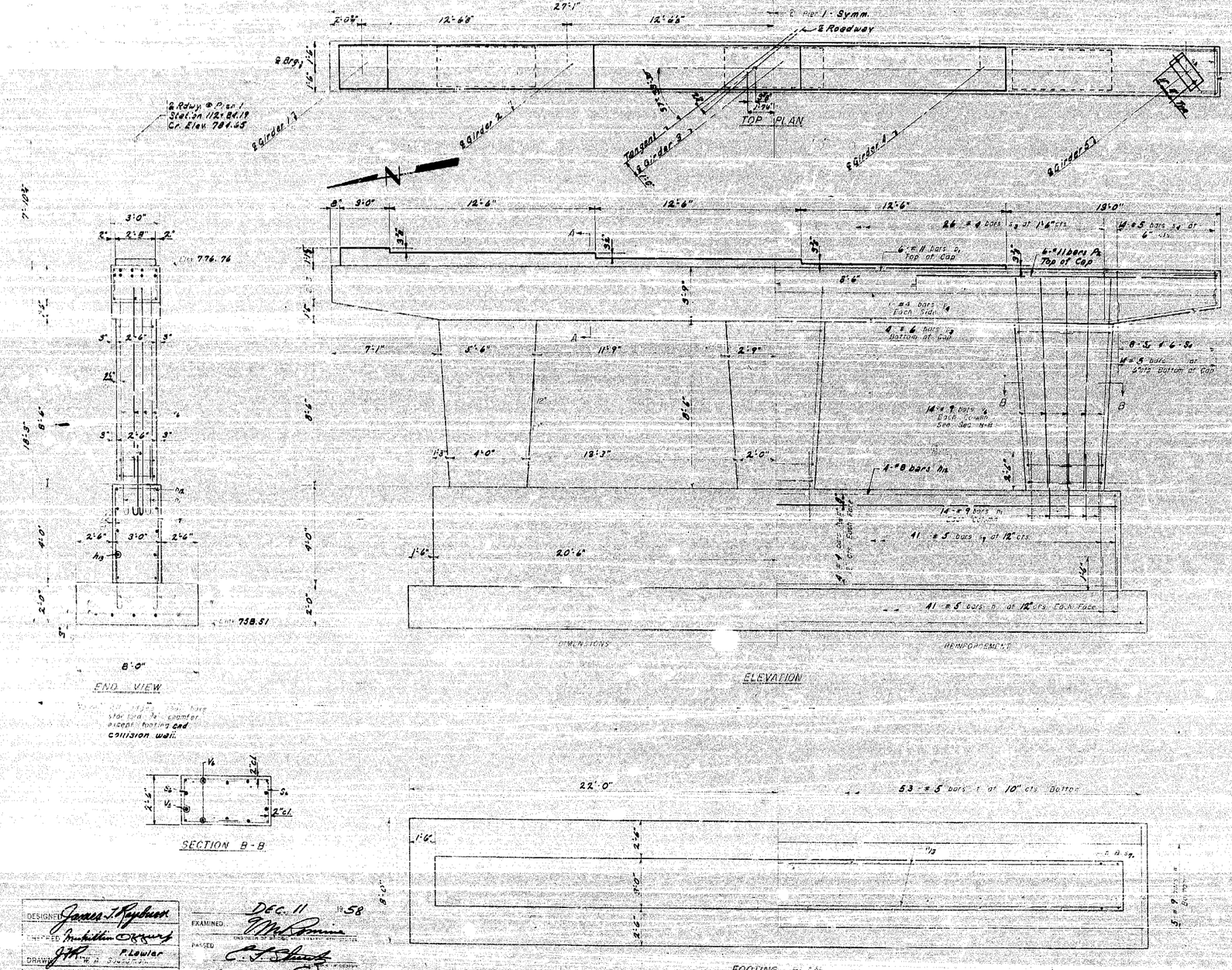
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE
STRUCTURE NO. 049-0020
SHEET NO. 28 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	74
		CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

60	106-2 HBRMB	LAKE	85	32	SHEET NO. 5	10 SHEETS



PIER 1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h2	4	#8	40'-6"	
h3	16	#11	20'9"	
a	82	#5	3'-7"	
f1	42	#9	6'-3"	
B1	6	#11	53'10"	
h4	12	#11	18'5"	
h3	1	#6	40'-0"	
P1	1	#9	27'-6"	
P2	6	#4	7'-3"	
h3	26	#9	12'-10"	
4	40	#5	4'-2"	
5	16	#5	7'-2"	
5A	34	#4	8'-2"	
57	41	#5	10'-5"	
.	53	#5	7'-9"	
2	6	#6	9'-7"	
1	42	#9	11'-6"	
*	5	#9	43'-6"	
Class X Concrete		Cy	77.3	
Reinforcement Bars		Lb	9320	

DESIGNED James T. Rayhawk
RECOMMENDED Rudolph O'Brien
DRAWN J.H.K. P. Lawler
CHECKED Rudolph O'Brien
EXAMINED DEC. 11 1958
PASSED C. F. Schaub
APPROVED R. R. Bartelmeyer

PIER 1
N.B. LANE OVER S.B.I. RT. 59 (RAMP "I")
F.A. RT. 60 - SEC. 106-2HB
LAKE COUNTY
STA. 113+20.70 (N.B. LANE)

FOR INFORMATION ONLY

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

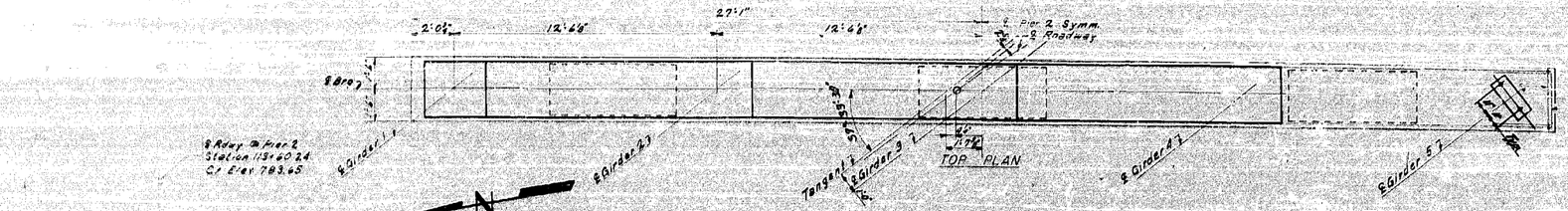
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

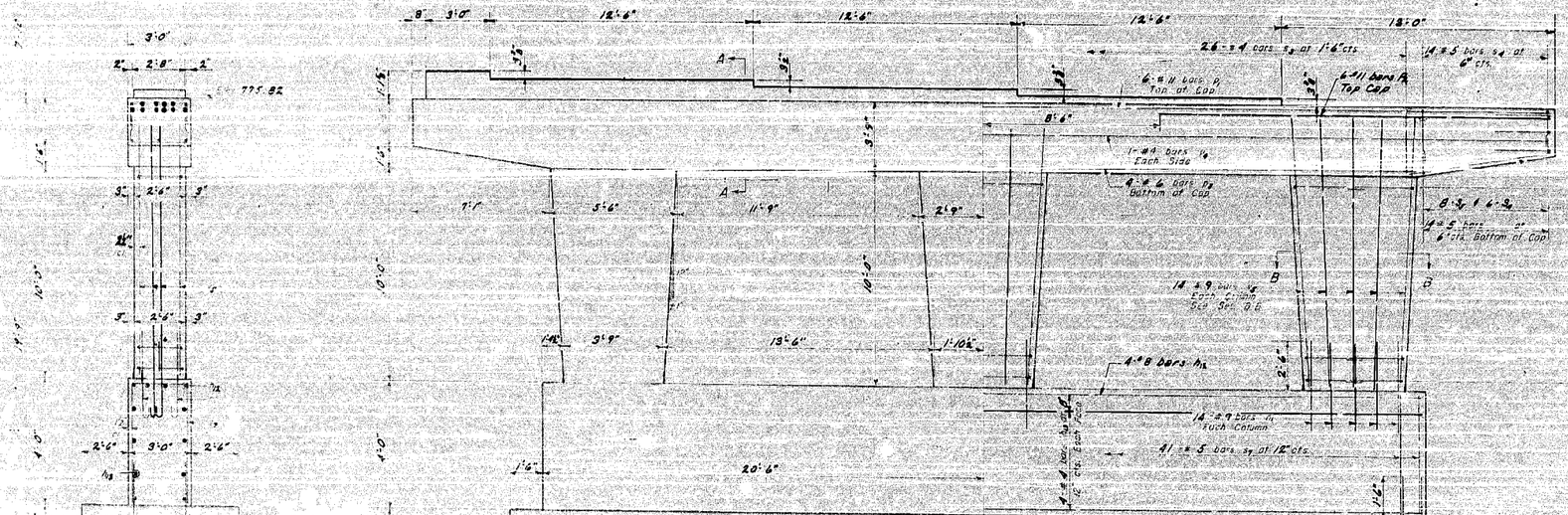
EXISTING STRUCTURE
STRUCTURE NO. 049-0020
SHEET NO. 29 OF 34 SHEETS

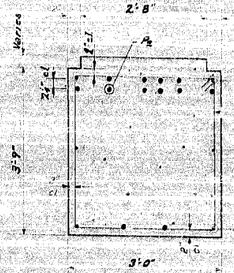
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	75
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

60	106-2 106-2HB	LAKE	55	33	SHEET NO. 6 10 SHEETS

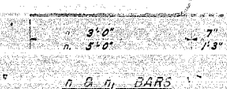






A & B DIMENSIONS

Bar	A	B
s_4	2'-8"	1'-7"
s_1	2'-8"	2'-3"
s_2	2'-2"	3'-0"
s_3	2'-9"	3'-10"



PIER 2
BILL OF MATERIAL

Bar	No	Size	Length	Shape
h_{11}	4	#8	10'-2"	
s_{13}	14	#4	20'-9"	
n	62	#5	3'-7"	
s_{12}	42	#9	4'-3"	
h_1	6	#11	53'-10"	
h_2	12	#11	18'-5"	
h_3	4	#6	10'-0"	
h_4	4	#8	27'-6"	
h_5	6	#4	7'-3"	
s_3	26	#4	12'-10"	
s_4	40	#5	6'-2"	
s_5	14	#5	7'-2"	
s_6	60	#4	8'-2"	
s_7	41	#5	10'-5"	
s_1	53	#5	7'-9"	
s_2	6	#6	9'-7"	
s_3	42	#9	13'-0"	
s_4	5	#9	15'-6"	
Class X Concrete				80.7
Reinforcement Bars				9570

DESIGNED James T. Rayhouse
CHECKED Mahallon O'Regan
DRAWN J.T.R. W.A. Sweetman P.Lawler
CHECKED Mahallon O'Regan

DEC 11 1958
EXAMINED M. McKenna
PASSED E.J. Stanley
APPROVED A.R. Bartholomew
CHIEF ENGINEER

PIER 2
N.B. LANE OVER S.B.I. RT. 59 (RAMP #1)
F.A. RTE. 60 - SEC. 106-2HB
LAKE COUNTY
STA. 113+20.70 (N.B. LANE)

FOR INFORMATION ONLY

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

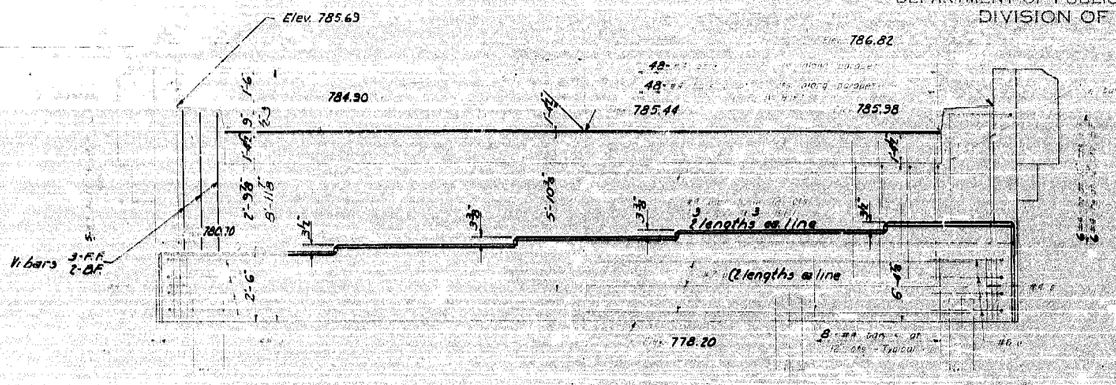
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE
STRUCTURE NO. 049-0020
SHEET NO. 30 OF 34 SHEETS

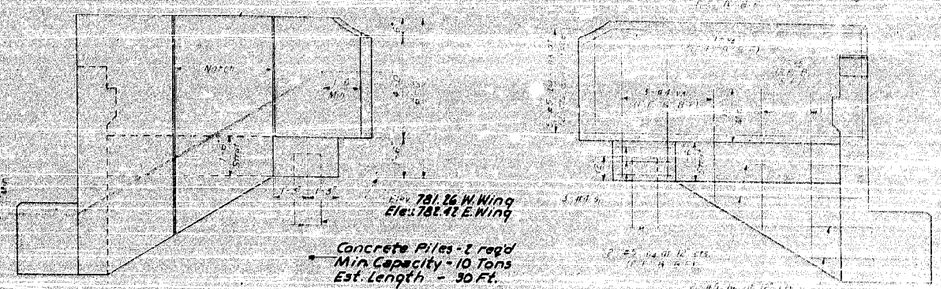
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	76
		CONTRACT NO. 60X51		
		ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

60	106-2 19 mi HB	LAKE	85	34	10

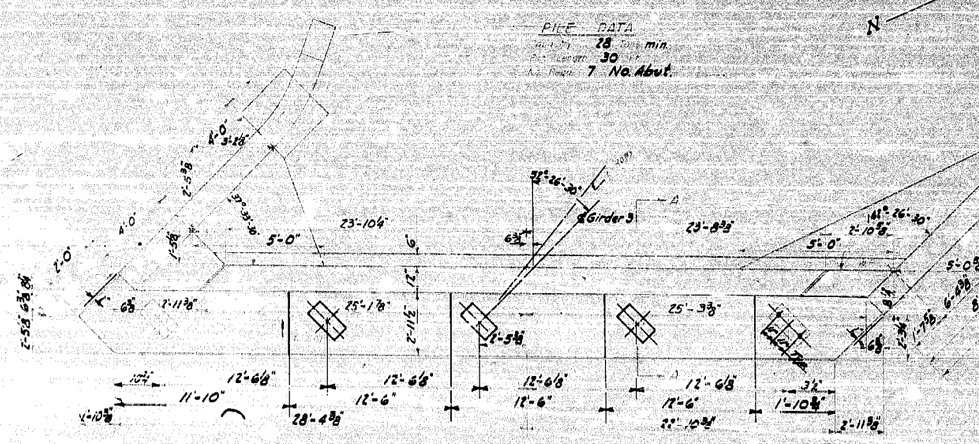


ELEVATION

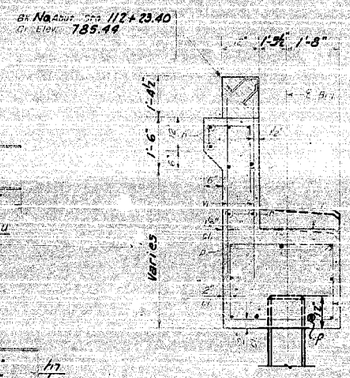


SIDE ELEVATION

INSIDE ELEVATION OF BRACKET



PLAN OF ABUTMENT



MATCH DETAIL

DETAIL "A"

PLAN OF ABUTMENT
REINFORCEMENT & BILL OF BARS

BILL OF MATERIAL - NO. ABUTMENT

Size	No.	Type	Length	Spacing	Mark	No.	Length
h1	16	#9	27'-0"		h1	18	26'-6"
h2	5	#4	5'-0"		h2	54	12'-2"
h3					h3	6	11'-6"
h4	20	#5	Ea. 8		h4	8	11'-6"
h5	8	#5	7'-0"				
h6	8	#5	Ea. 8				
h7	5	#9	3'-6"				
h8	6	#4	5'-3"		h8	48	
h9	6	#4	6'-0"		u	107	6'-3"
h10	8	#6	7'-6"		v	28	
h11	2	#6	6'-6"			12	
h12	2	#6	4'-0"			4	
						4	

Class "X" Concrete	Cu. Yd.	39.7	Concrete Piles	Lin. Ft.	240
Reinforcement Bars	Lbs.	3190	Test Piles	Each	1

DESIGNED James T. Rayburn
CHECKED Jonathan O'Grant
DRAWN J. SANDOVAL
CHECKED Jonathan O'Grant
EXAMINED DEC. 11 '58
PASSED
APPROVED

FOR INFORMATION ONLY

No. ABUTMENT N.B. LANE OVER S.B.I RT. 59 (RAMP #1) F.A.RT. 60 SEC. 106-2HB LAKE COUNTY STA. 113+20.70 (N.B. LANE)

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE
STRUCTURE NO. 049-0020
SHEET NO. 31 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	77
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

60	106-2 HB	LAKE	85	35	10 SHEETS

ELEVATION

Elev. 784.17
783.07
783.38
782.84
782.91
778.24
775.74
Vibers 3-R.P. 2-B.P.
3 @ 2'lengths eq'line
6 @ (2'lengths eq'line)
Bench Mark Spike in Tree
46.0

Elev. 778.50 W. Wing
Elev. 779.63 E. Wing
Concrete Piles - 2 reqd.
Min. Capacity - 10 Tons
Est. Length - 12' Ft.

SIDE ELEVATION

INSIDE ELEVATION OF BRACKET

PILE DATA
- 29
- 13 Min
- 7 36

N

PLAN OF ABUTMENT

Sta. 30 Ahead Bk 114+24.16
Elev. 782.84

BAR h6
BAR v
BAR u
BARS s & t
BARS h2 & h3
BARS h7 & h8

Varies
Slope of bearing bars
Pedestal to N. End

SECTION A-A

PLAN OF ABUTMENT

7 Concrete Piles @ 8'-4" ctrs. = 50'-0"

BILL OF MATERIAL - 30. ABUTMENT

Bar	No.	Size	Length	Shape No.	Bar	No.	Length
h4	16	#4	29'-0"		6	18	28'-6"
h5	6	#3	5'-0"			54	12'-2"
						6	
h6	20	#5	12'-3			8	11'-6"
h3	8	#3	7'-0"				
h2	8	#5	5'-6"				
h1	6	#4	5'-6"				
h7	5	#3	5'-3"			51	
u	5	#4	6'-0"			113	6'-8"
h8	8	#6	7'-6"			28	
h10	2	#6	6'-6"			12	
h9	2	#6	4'-0"			4	
						4	

Class X Concrete	41.4	Concrete Piles	Lin.Ft.	114
Reinforcement Bars	1661 3310	Test Piles	Each	1

30. ABUTMENT
N.B. LANE OVER
S.B.I. RT. 59 (RAMP #1)
F.A. RT. 60 SEC. 106-2HB
LAKE COUNTY
STA. 113+20.70 (N.B. LANE)

George S. Rayburn — DEC. 11 '58
Mathias O'Leary — W. McKenna
J.F.K. Sandvel — E.J. Shuey
Mathias O'Leary — R.R. Bartholomew

FOR INFORMATION ONLY

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE
STRUCTURE NO. 049-0020
SHEET NO. 32 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	78
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

** FAU 0182, F.A.P. 104 & 866

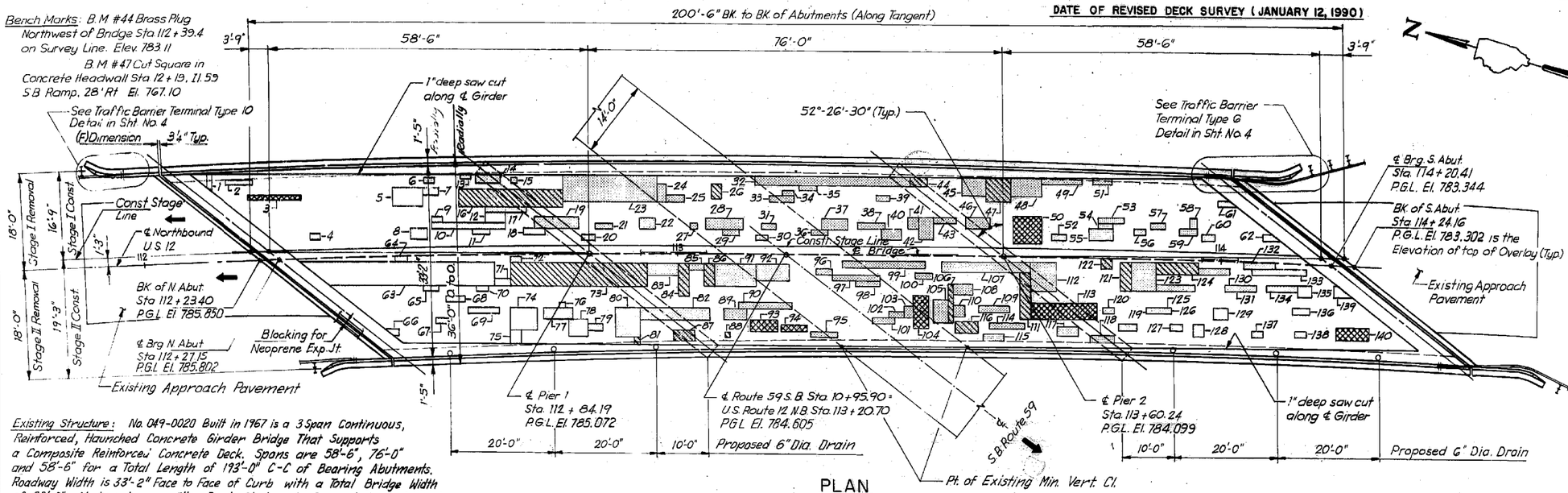
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 12 & SB IL 59	*	LAKE	154	65
STR.	112+23.40	TO STR.	114+24.16	
FED. ROAD DIST. NO. 7		ILLINOIS	FEDERAL AID PROJECT	

* 106(182)RS-84 1 OF 7

Bench Marks: B.M #44 Brass Plug Northwest of Bridge Sta. 112+39.4 on Survey Line. Elev. 783.11
B.M #47 Cut Square in Concrete Headwall Sta 12+19, 11.59 S.B. Ramp, 28' Rt Elev. 767.10

200'-6" BK. to BK. of Abutments (Along Tangent)

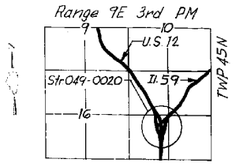
DATE OF REVISED DECK SURVEY (JANUARY 12, 1990)



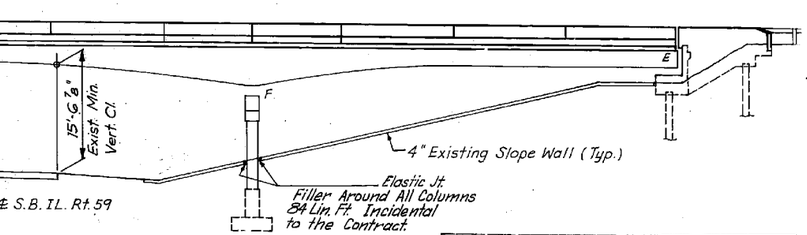
PLAN

DATE OF REVISED DECK SURVEY (JANUARY 12, 1990)

Existing Structure: No. 049-0020 Built in 1967 is a 3 Span Continuous, Reinforced, Haunched Concrete Girder Bridge That Supports a Composite Reinforced Concrete Deck. Spans are 58'-6", 76'-0" and 58'-6" for a Total Length of 193'-0" C-C of Bearing Abutments. Roadway Width is 33'-2" Face to Face of Curb with a Total Bridge Width of 36'-0". Abutments are Pile Bent Abutments Supported on Concrete Piles. Piers are Concrete 3 Column Piers with Caps, Collision Walls and Spread Footings.



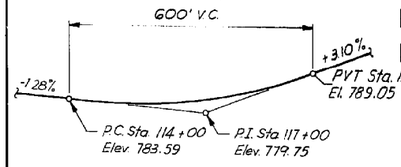
LOCATION MAP



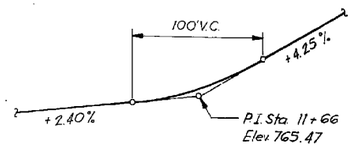
ELEVATION
(Looking East)

LEGEND

- Visible Areas
- Delaminations } Partial Depth Slab Repair See Sht. 6 of 7 For Details
- Full Depth



VERTICAL ALIGNMENT (Top of Proposed Overlay)
NORTHBOUND U. S. 12



VERTICAL ALIGNMENT
SOUTHBOUND IL. ROUTE 59

Northbound U.S. 12
P.I. = Sta. 116+13.48
Δ = 26°-29.5'
D = 1°-36'
T = 842.96'
L = 1655.73'
E = 97.88'
R = 3581.10'
S = 0.025%

Southbound Il. Rte. 59
P.I. = Sta. 11+17.52
Δ = 65°-45'
D = 7°-05'
T = 522.87'
L = 928.24'
E = 154.26'
R = 809.01'
S = 0.083%

HORIZONTAL ALIGNMENT

SUMMARY OF REPAIRS

No.	SIZE	SQ.YD.	No.	SIZE	SQ.YD.	No.	SIZE	SQ.YD.	No.	SIZE	SQ.YD.	No.	SIZE	SQ.YD.	No.	SIZE	SQ.YD.	No.	SIZE	SQ.YD.
1	1 x 3	.3	21	3 x 1	.3	41	2 x 2	.4	G1	3 x 1	.3	81	1 x 1	.1	101	4 x 1	.4	121	2 x 5	1.1
2	5 x 1	.6	22	3 x 2	.7	42	2 x 4	.9	G2	3 x 1	.3	82	13 x 2	2.9	102	3 x 1	.3	122	2 x 2	.4
3	10 x 1	1.1	23	17 x 5	9.4	43	4 x 1	.4	G3	36 x 4	16	83	7 x 2	1.6	103	2 x 2	.4	123	5 x 5	2.8
4	1 x 2	.2	24	2 x 3	.7	44	3 x 2	.7	G4	2 x 1	.2	84	2 x 6	1.3	104	3 x 6	2.0	124	8 x 2	1.8
5	6 x 3	2.0	25	3 x 1	.3	45	4 x 3	1.3	G5	3 x 1	.3	85	3 x 1	.3	105	2 x 4	.9	125	7 x 1	.8
6	2 x 1	.2	26	2 x 3	.7	46	5 x 2	1.1	G6	2 x 1	.2	86	2 x 4	.9	106	1 x 6	.7	126	5 x 1	.6
7	3 x 2	.7	27	1 x 1	.1	47	4 x 4	1.8	G7	2 x 1	.2	87	4 x 2	.9	107	16 x 2	3.6	127	2 x 1	.2
8	3 x 2	.7	28	7 x 2	1.6	48	6 x 3	2.0	G8	4 x 1	.4	88	1 x 1	.1	108	4 x 2	.9	128	2 x 2	.4
9	2 x 1	.2	29	3 x 1	.3	49	8 x 1	.9	G9	6 x 1	.7	89	4 x 2	.9	109	5 x 1	.6	129	3 x 2	.7
10	14 x 1	1.6	30	2 x 1	.2	50	5 x 5	2.8	70	2 x 1	.2	90	10 x 1	1.1	110	2 x 2	.4	130	6 x 1	.7
11	3 x 1	.3	31	3 x 1	.3	51	3 x 1	.3	71	3 x 1	.3	91	8 x 4	3.6	111	2 x 8	1.8	131	6 x 1	.7
12	4 x 2	.9	32	29 x 2	6.4	52	3 x 1	.3	72	2 x 1	.2	92	6 x 3	2.0	112	5 x 5	2.8	132	6 x 1	.7
13	2 x 1	.2	33	5 x 1	.6	53	4 x 1	.4	73	25 x 4	11.1	93	5 x 2	1.1	113	25 x 3	4.0	133	10 x 1	1.1
14	4 x 2	.9	34	2 x 1	.2	54	3 x 1	.3	74	5 x 4	2.2	94	5 x 1	.6	114	7 x 1	.8	134	6 x 1	.7
15	1 x 1	.1	35	3 x 1	.3	55	4 x 2	.9	75	2 x 3	.7	95	5 x 1	.6	115	4 x 1	.4	135	2 x 2	.4
16	19 x 3	6.3	36	3 x 1	.3	56	2 x 1	.2	76	1 x 1	.1	96	3 x 1	.3	116	4 x 2	.9	136	3 x 1	.3
17	8 x 1	.9	37	5 x 2	1.1	57	3 x 1	.3	77	5 x 2	1.1	97	9 x 1	1.0	117	4 x 2	.9	137	2 x 1	.2
18	4 x 1	.4	38	5 x 1	.6	58	1 x 2	.2	78	4 x 3	1.3	98	4 x 1	.4	118	4 x 1	.4	138	2 x 1	.2
19	8 x 2	1.8	39	2 x 1	.2	59	3 x 1	.3	79	3 x 1	.3	99	15 x 1	1.7	119	3 x 1	.3	139	2 x 2	.4
20	2 x 1	.2	40	4 x 2	.9	60	2 x 1	.2	80	5 x 5	2.8	100	3 x 1	.3	120	2 x 1	.2	140	6 x 2	1.3

GENERAL NOTES

DESIGN SPECIFICATIONS:

AASHTO 1989 - Standard Specifications for highway bridges,

DESIGN CRITERIA:

Live Load: HS 20

DESIGN STRESSES:

New Construction	f'c	3,500 psi
	fy	60,000 psi (reinforcement bars)
Existing Construction	fc	superstructure 1,400 psi
	fc	substructure 1,400 psi
	fs	reinforcing steel 20,000 psi

DESCRIPTION OF SCOPE OF WORK:

The bridge rehabilitation project includes; removal of existing safety curb and parapet and replacement with a "jersey" parapet, remodeling of existing abutment wings to the "jersey" configuration, full depth and partial depth concrete slab repair areas, placement of a dense concrete overlay, reconstruction of expansion joints, and miscellaneous substructure repairs.

Bridge rehabilitation shall be staged to allow one lane of traffic during construction at all times.

GEOMETRY:

Horizontal alignment data taken from existing plans. Field survey indicates that existing alignment closely agrees with the data. Vertical alignment was developed from survey information.

GENERAL NOTES:

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42, or M-53 Grade 60.

- Plan dimensions and details relative to existing structure 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 cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- ~~Expansion bolts shall consist of approved expansion anchors, providing minimum specified proof load = 4,800 lbs., and 3/4" ø x 12" hooked bolts.~~

TOTAL BILL OF MATERIAL

Reinforcement Bars	LBS	2,010
Reinforcement Bars Epoxy Coated	LBS	15,640
Class X Concrete	Cu. Yd.	11.7
Concrete Removal	Cu. Yd.	97.3
Protective Coat	Sq. Yd	884 *
Neoprene Expansion Joint 2"	L. FT	121
Epoxy Crack Sealing	L. FT	136
Repair Concrete Structures	SQ. FT.	2
Floor Drains	Each	6
Bridge Deck Concrete Overlay Option	SQ. Yd.	725
Deck Slab Repair (Full Depth, Type D)	SQ. Yd.	10
Deck Slab Repair (Partial)	SQ. Yd.	150
Concrete Bridge Deck Scarification ½"	SQ. Yd.	600
Class X Concrete Superstructure	Cu. Yd.	82.4

* Quantity includes Bridge Deck Surface

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
N.B. U.S. 12 OVER S.B. ILL. 59 (FAU 0107)
SECTION 106(182)RS-84 LAKE COUNTY
STRUCTURE No. 049-0020
STA. 113+20.70
SCALE
DRAWN BY EBP
DATE AUG. 4, 1986
CHECKED BY L.M.

FOR INFORMATION ONLY

SHEET 65 OF 154

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE - MODIFIED 1986
STRUCTURE NO. 049-0020
SHEET NO. 33 OF 34 SHEETS

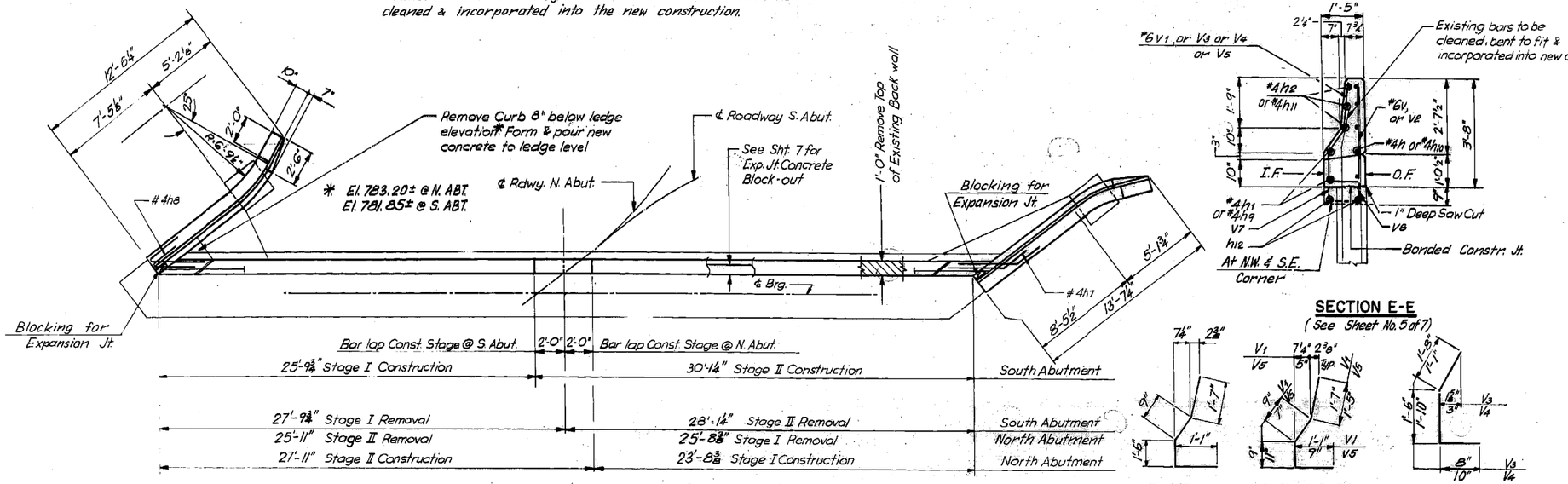
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	79
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 12	*	LAKE	154	68
STA. 112+23.40		STA. 114+24.16		
FED. ROAD DIST. NO. 7	ILLINOIS	FEDERAL AID PROJECT		

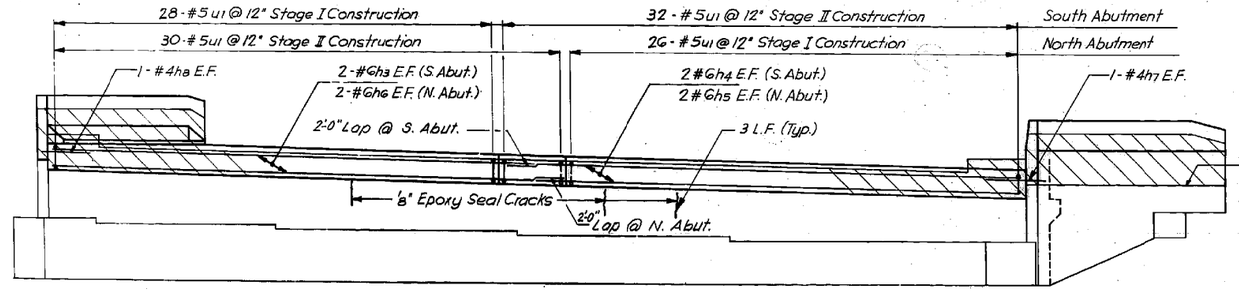
* 106 (182) RS-84 4 OF 7
** F.A.U. 0170, F.A.P. 104 & 864

LEGEND

Indicates concrete removal, existing transverse & vertical reinforcement extending into the removal area shall be cleaned & incorporated into the new construction.

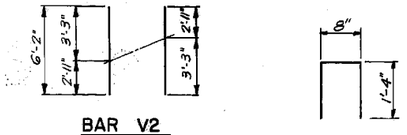


ABUTMENT PLAN - TYPICAL



SECTION E-E
(See Sheet No. 5 of 7)

BAR V7 | BAR V1 & V5 | BAR V3 & V4

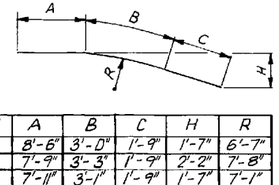


BAR V2

BAR U1

BAR h8

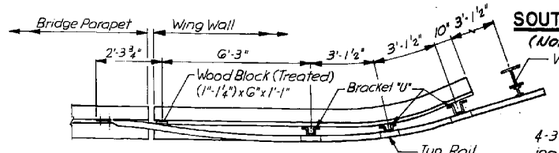
BAR h7



BAR	A	B	C	H	R
h	8'-6"	3'-0"	1'-9"	1'-7"	6'-7"
h1	7'-9"	3'-3"	1'-9"	2'-2"	7'-8"
h2	7'-11"	3'-1"	1'-9"	1'-7"	7'-1"
h9	6'-9"	3'-3"	1'-9"	2'-2"	7'-8"
h10	7'-6"	3'-0"	1'-9"	1'-7"	6'-7"
h11	7'-2"	3'-1"	1'-9"	1'-7"	7'-1"

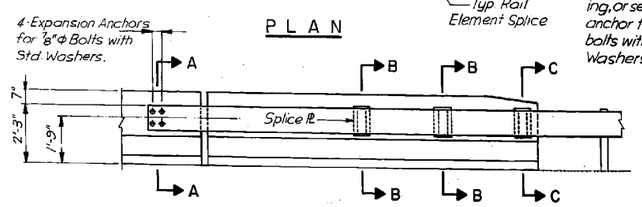
BILL OF MATERIALS

BAR	No. N.Abut.	No. S.Abut.	SIZE	LENGTH	SHAPE
h12	2	2	# 4	3'-2"	—
h	5	5	#4	13'-3"	⌒
h1	2	2	#4	12'-9"	⌒
h2	3	3	#4	12'-9"	⌒
h3	—	4	#6	28'-4"	—
h4	—	4	#6	30'-7"	—
h5	4	—	#6	26'-3"	—
h6	4	—	#6	28'-5"	—
h7	2	2	#4	4'-0"	⌐
h8	2	2	#4	4'-0"	L
h9	2	2	#4	11'-9"	⌒
h10	5	5	#4	12'-3"	⌒
h11	3	3	#4	12'-0"	—
V	24	24	#6	3'-4"	⌐
V1	18	18	#6	4'-2"	L
V2	3	3	#6	6'-2"	—
V3	2	2	# 6	3'-7"	L
V4	2	2	#6	4'-0"	L
V5	2	2	#6	3'-8"	L
V6	4	4	#6	4'-1"	—
V7	4	4	#6	4'-11"	L
U1	56	60	#4	3'-4"	⊓
Reinforcement Bars				lbs.	2010
Concrete Removal				C.Y.	8.3
Class X Concrete				C.Y.	11.7
Epoxy Crack Sealing				L.F.	9

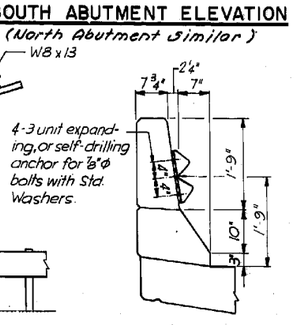


PLAN

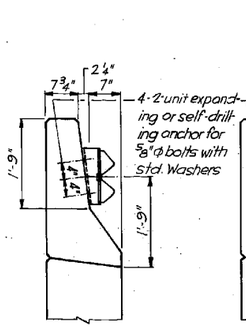
SOUTH ABUTMENT ELEVATION
(North Abutment Similar)



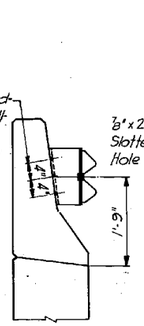
ELEVATION
TRAFFIC BARRIER TERMINAL TYPE 6
AT APPROACH END



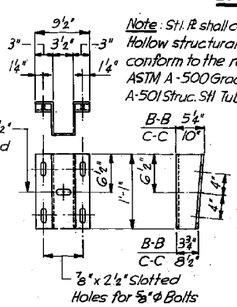
SECTION A-A



SECTION B-B

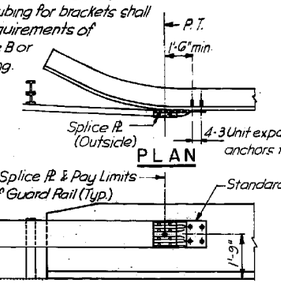


SECTION C-C



BRACKET "U" - (3 Ea.)
(¼" Thick Steel ℓ or section of rectangular tubing with flanges welded on.)

Note: Stl. ℓ shall conform to AASHTO M-183. Hollow structural tubing for brackets shall conform to the requirements of ASTM A-500 Grade B or A-501 Struc. Stl Tubing.



ELEVATION
TRAFFIC BARRIER TERMINAL
TYPE 10 AT DEPARTURE END

GENERAL NOTES FOR TRAFFIC BARRIER:

When a bridge expansion joint exists between the End Shoe and the first post, all splice bolts at the End Shoe of post bolts of the brackets shall be fitted with a locknut or double nuts tightened only to a point that will allow guardrail movement.

See Roadway Plans For Quantities of Traffic Barrier Terminal Type 6 & 10.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ABUTMENT MODIFICATION
N.B. U.S. 12 OVER S.B. ILL. 59 (FAU 0107)
SECTION 106 (182) RS-84 LAKE COUNTY
STRUCTURE No. 049-0020
STA. 113 + 20.70
SCALE
DRAWN BY EBP
DATE AUG 4, 1986
CHECKED BY L.M.

SHEET 68 OF 154

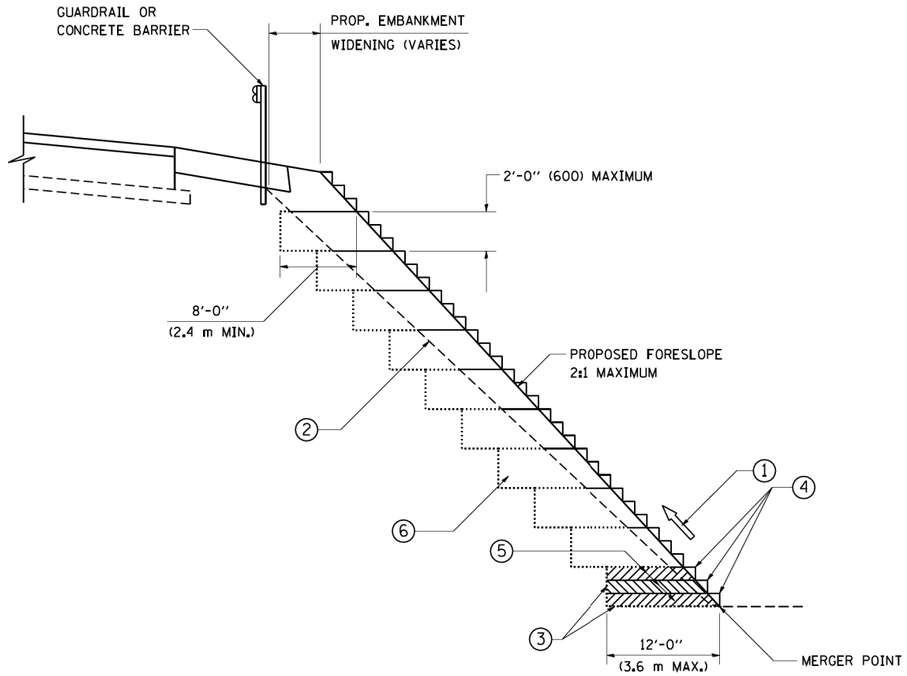
FOR INFORMATION ONLY

FILE NAME =	USER NAME =	DESIGNED - NRF	REVISED
		CHECKED - MAM	REVISED
	PLOT SCALE =	DRAWN - RDS	REVISED
	PLOT DATE =	CHECKED - 12-04-17	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE – MODIFIED 1986
STRUCTURE NO. 049-0020
SHEET NO. 34 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	80
			CONTRACT NO. 60X51	
		ILLINOIS	FED. AID PROJECT	



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
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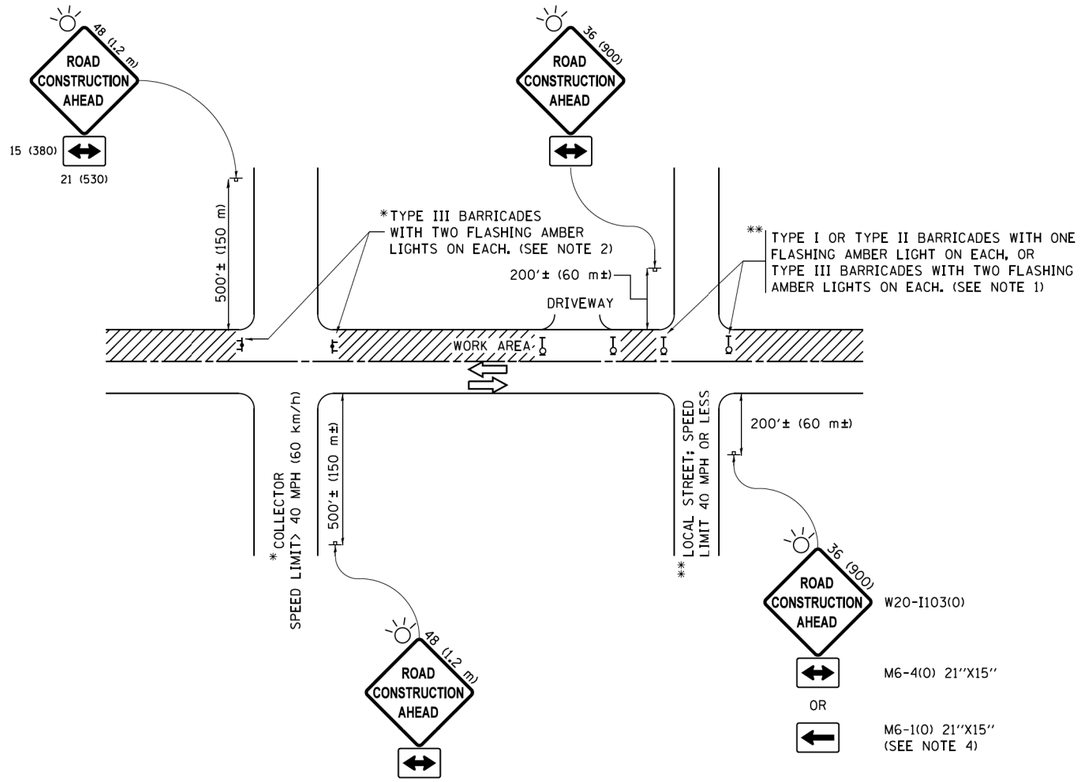
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT WIDENING

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	81
	BD-51	CONTRACT NO. 60X51		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE ''ROAD CONSTRUCTION AHEAD'' SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE ''ROAD CONSTRUCTION AHEAD'' SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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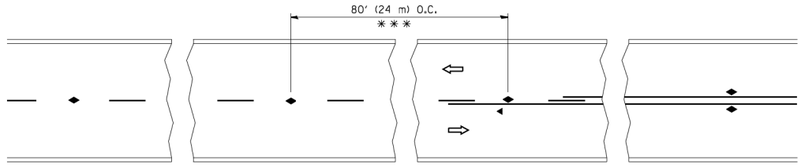
		DRAWN	REVISED -T. RAMMACHER 01-06-00
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

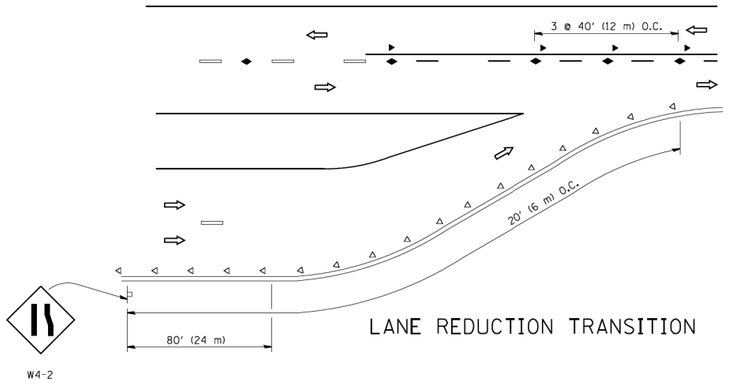
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	82
	TC-10	CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

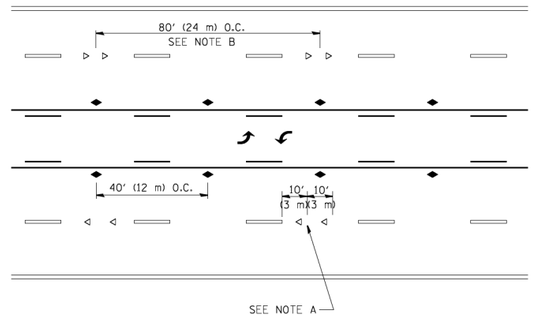


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

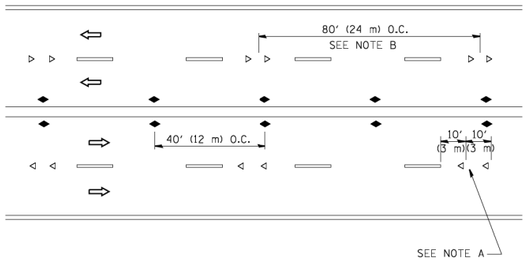
TWO-LANE/TWO-WAY



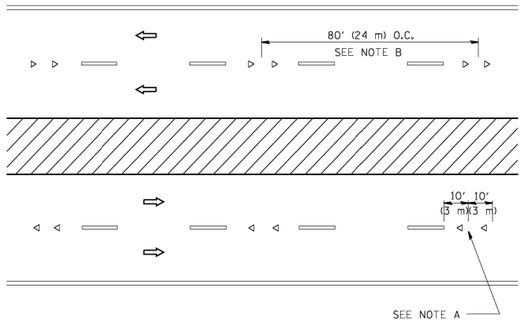
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER

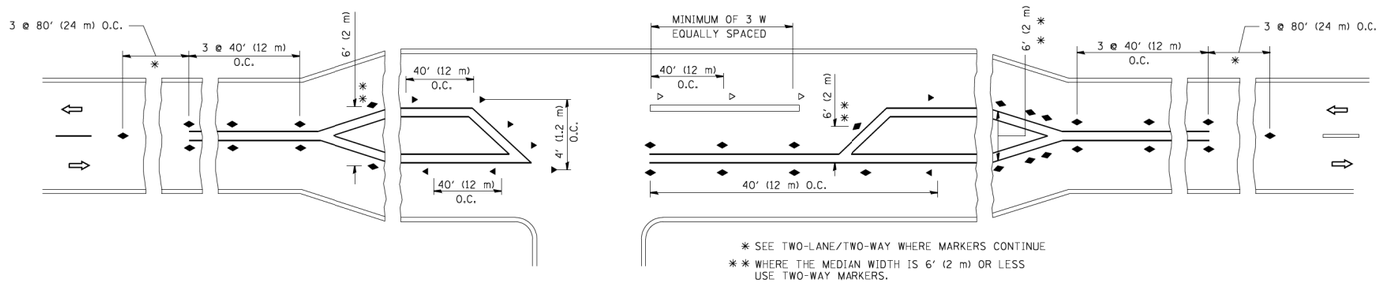
LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

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

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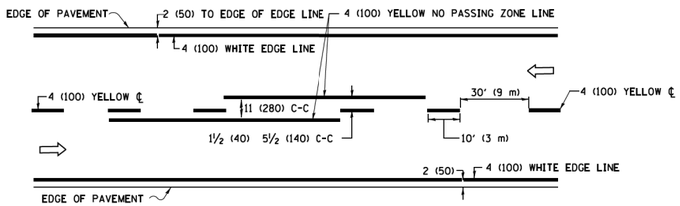
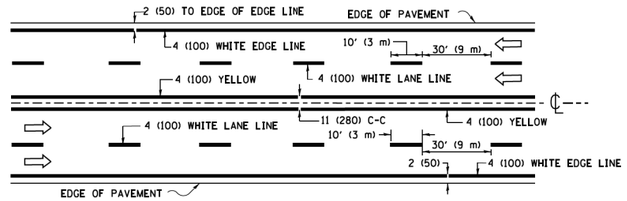
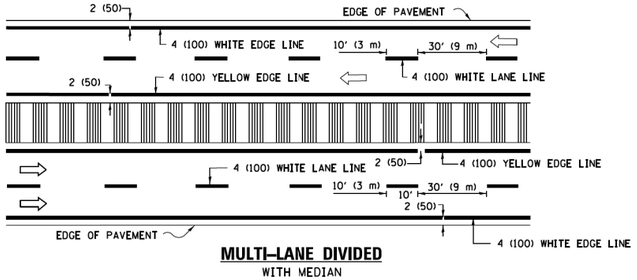
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	



2–LANE ROADWAY

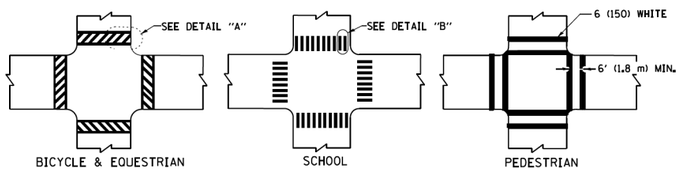


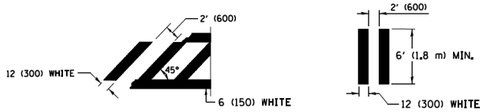
MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

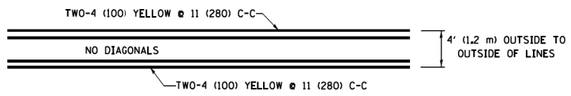




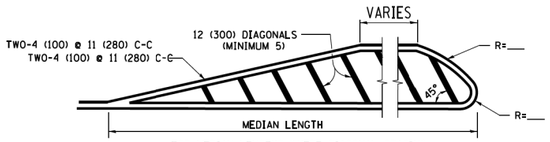
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

✳ MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



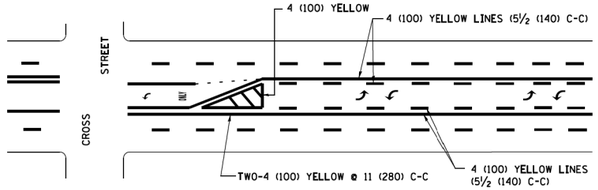
4' (1.2 m) WIDE MEDIANS ONLY



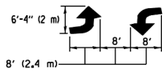
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

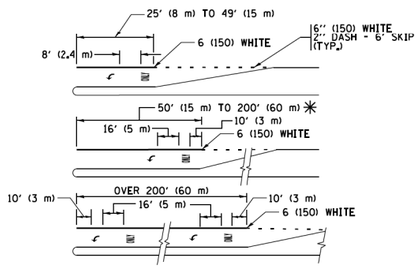


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

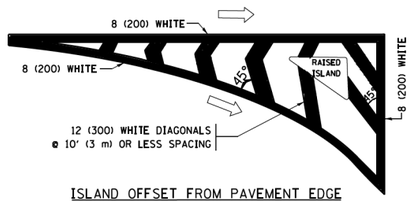


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

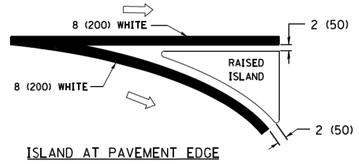
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

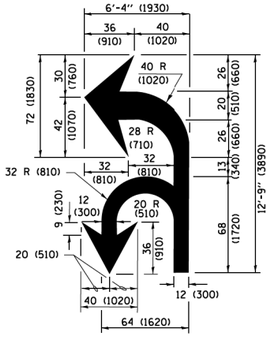


ISLAND OFFSET FROM PAVEMENT EDGE

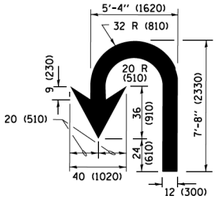


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

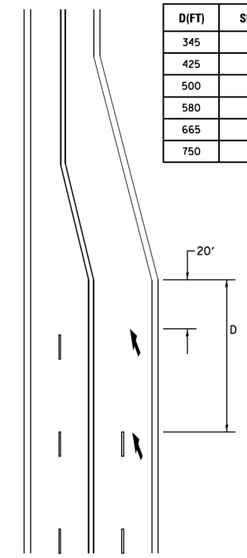


COMBINATION LEFT AND U–TURN



U–TURN

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55



LANE REDUCTION TRANSITION

✳ LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 ⌀ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ⌀ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 ⌀ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⌀ 6 (150) 12 (300) ⌀ 45° 12 (300) ⌀ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⌀ 4 (100) WITH 12 (300) DIAGONALS ⌀ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⌀ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) ⌀ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

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Default	PLOT DATE = 4/13/2016	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
			REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	84
	TC-13	CONTRACT NO. 60X51		
		ILLINOIS FED. AID PROJECT		

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

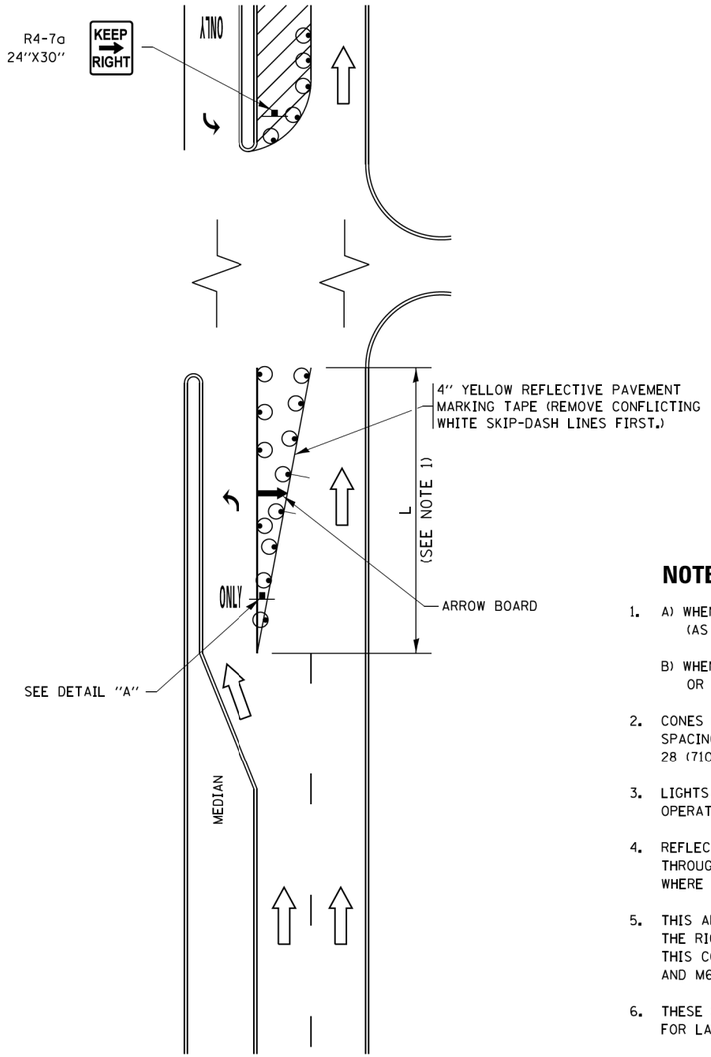


FIGURE 1

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.

   B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE. USE FIGURE 2.

2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.

3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.

4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.

5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I10OR 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.

6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.

7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.

8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

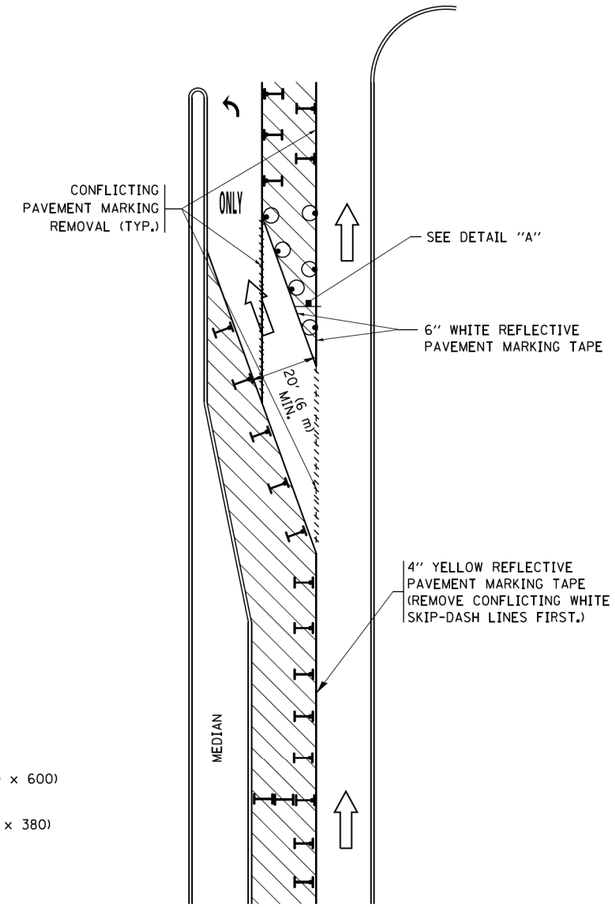
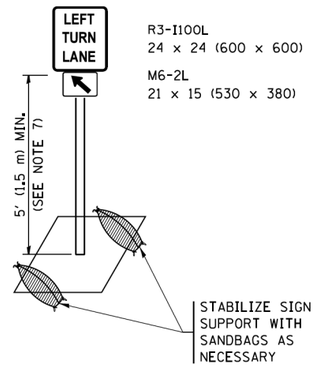


FIGURE 2



DETAIL A

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

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		REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13				334	106-2HB-B	LAKE	105	85
	PLOT SCALE = 50.0000 ' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16					TC-14	CONTRACT NO. 60X51		
Default	PLOT DATE = 9/15/2016	REVISED -T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE	SHEET 1 OF 1 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

ROUTE MARKERS

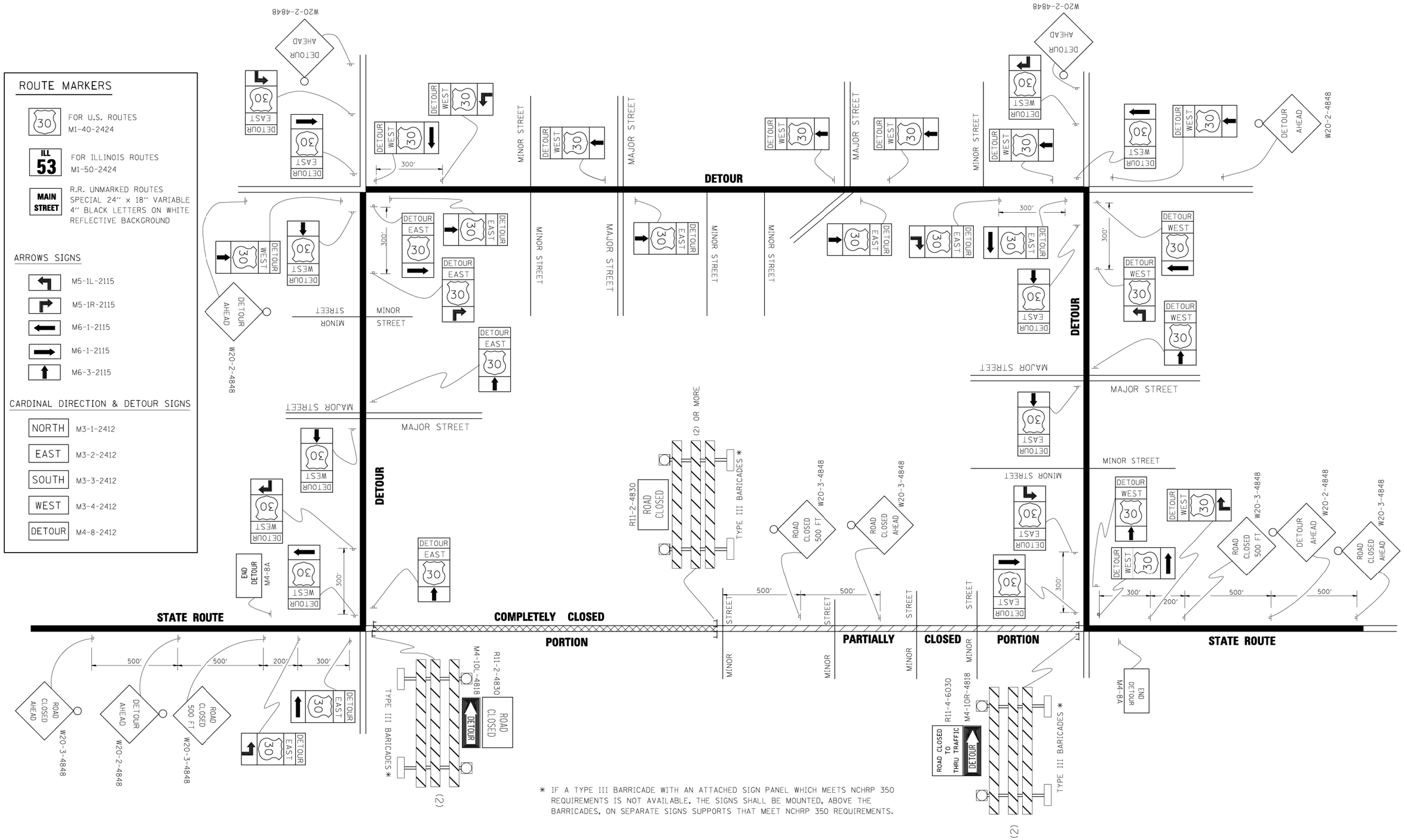
- 30 — FOR U.S. ROUTES M1-40-2424
- ILL 53 — FOR ILLINOIS ROUTES M1-50-2424
- MAIN STREET — R.R. UNMARKED ROUTES SPECIAL 24" x 18" VARIABLE 4" BLACK LETTERS ON WHITE REFLECTIVE BACKGROUND

ARROWS SIGNS

- M5-1L-2115
- M5-1R-2115
- M6-1-2115
- M6-1-2115
- M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

- NORTH M3-1-2412
- EAST M3-2-2412
- SOUTH M3-3-2412
- WEST M3-4-2412
- DETOUR M4-8-2412



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

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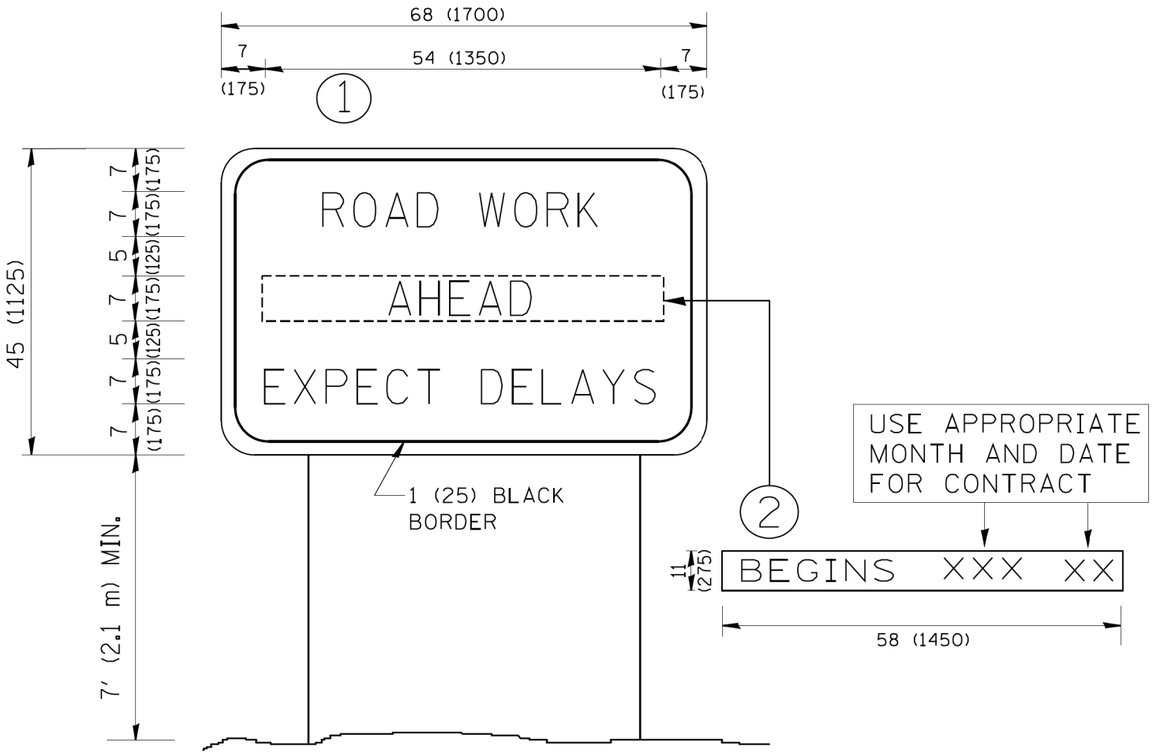
	PLOT SCALE = 49.9999 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/14/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING FOR CLOSING STATE HIGHWAYS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	86
	TC-21	CONTRACT NO. 60X51		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
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	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	87
	TC-22	CONTRACT NO. 60X51		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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

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

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USER NAME = brandon

PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 12/1/2017

Default

	DESIGNED	-	MAM
	DRAWN	-	RDS
	CHECKED	-	BPT
	DATE	-	12-04-17

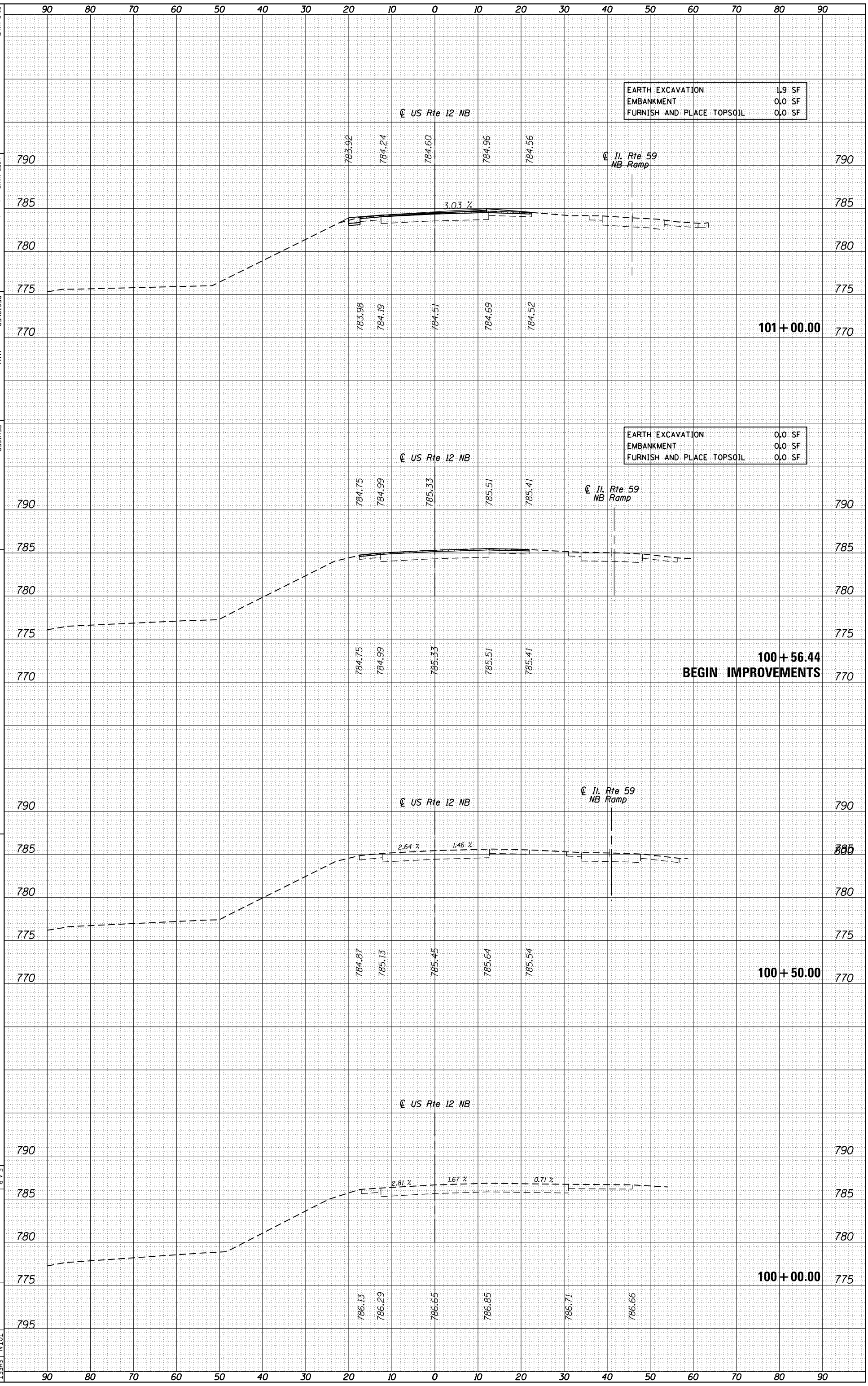
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

SCALE: 10'H, 5'V

SHEET 0F SHEETS STA. 100+00.00 TO STA. 101+00.00



F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	88

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51

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NO.	AREAS CHECKED		

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PLOT DATE = 12/1/2017

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DRAWN	-	RDS
CHECKED	-	BPT
DATE	-	12-04-17

REVISED	-	
REVISED	-	
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REVISED	-	

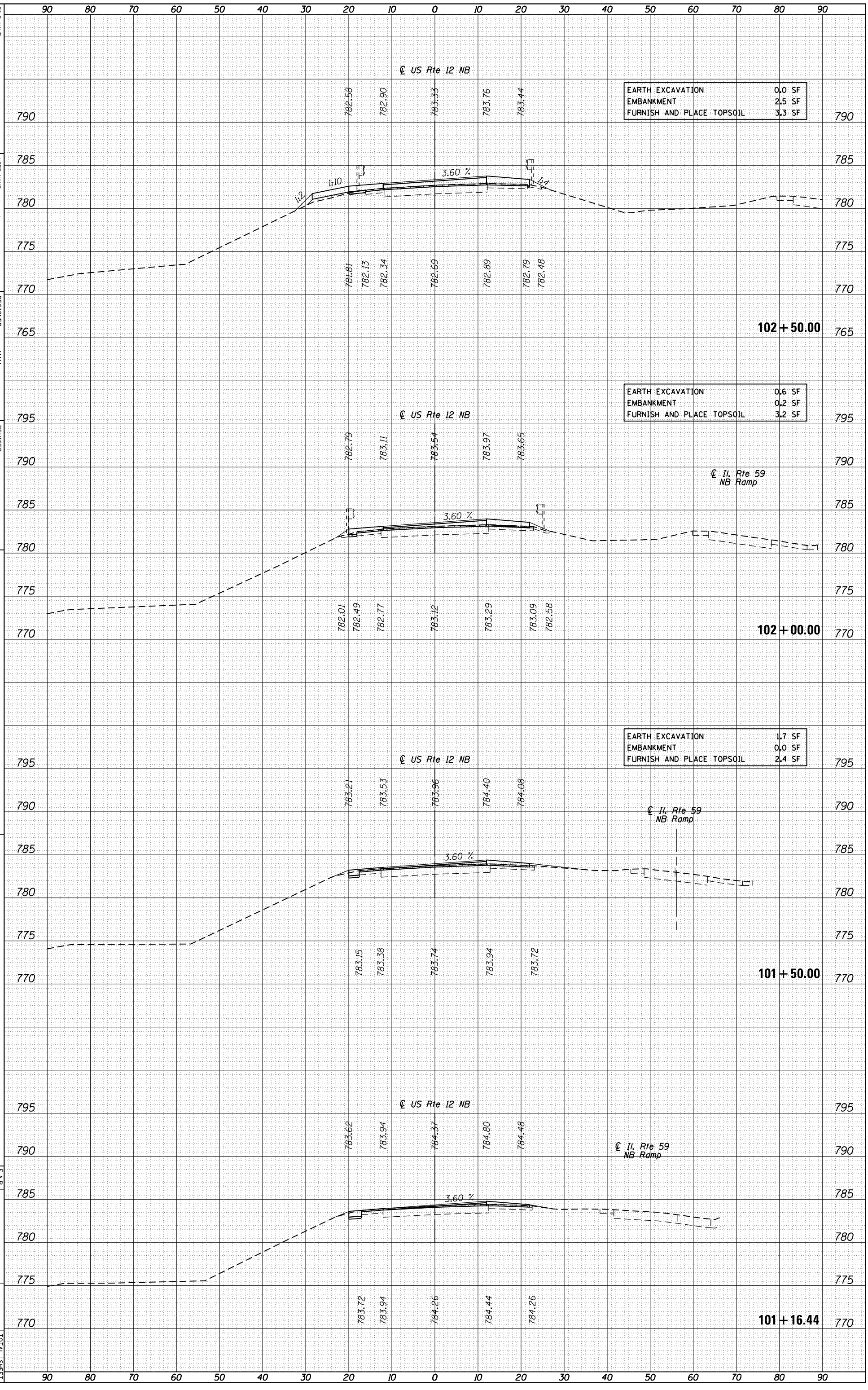
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

SCALE: 10'H, 5'V

SHEET OF SHEETS

STA. 101+16.44 TO STA. 102+50.00



F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	89

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51

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

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

104+50.00

EARTH EXCAVATION	20.8 SF
EMBANKMENT	38.5 SF
FURNISH AND PLACE TOPSOIL	18.8 SF

104+00.00

EARTH EXCAVATION	30.8 SF
EMBANKMENT	17.2 SF
FURNISH AND PLACE TOPSOIL	7.0 SF

103+50.00

EARTH EXCAVATION	24.4 SF
EMBANKMENT	4.4 SF
FURNISH AND PLACE TOPSOIL	4.8 SF

103+00.00

EARTH EXCAVATION	0.0 SF
EMBANKMENT	2.8 SF
FURNISH AND PLACE TOPSOIL	4.3 SF

℄ US Rte. 12 NB

℄ IL Rte. 59 SB Ramp

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Default	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

SCALE: 10'H, 5'V | SHEET OF SHEETS | STA. 103+00.00 TO STA.104+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	90
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

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

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
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	AREAS		
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PLOT DATE = 12/1/2017

Default

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DRAWN	-	RDS
CHECKED	-	BPT
DATE	-	12-04-17

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

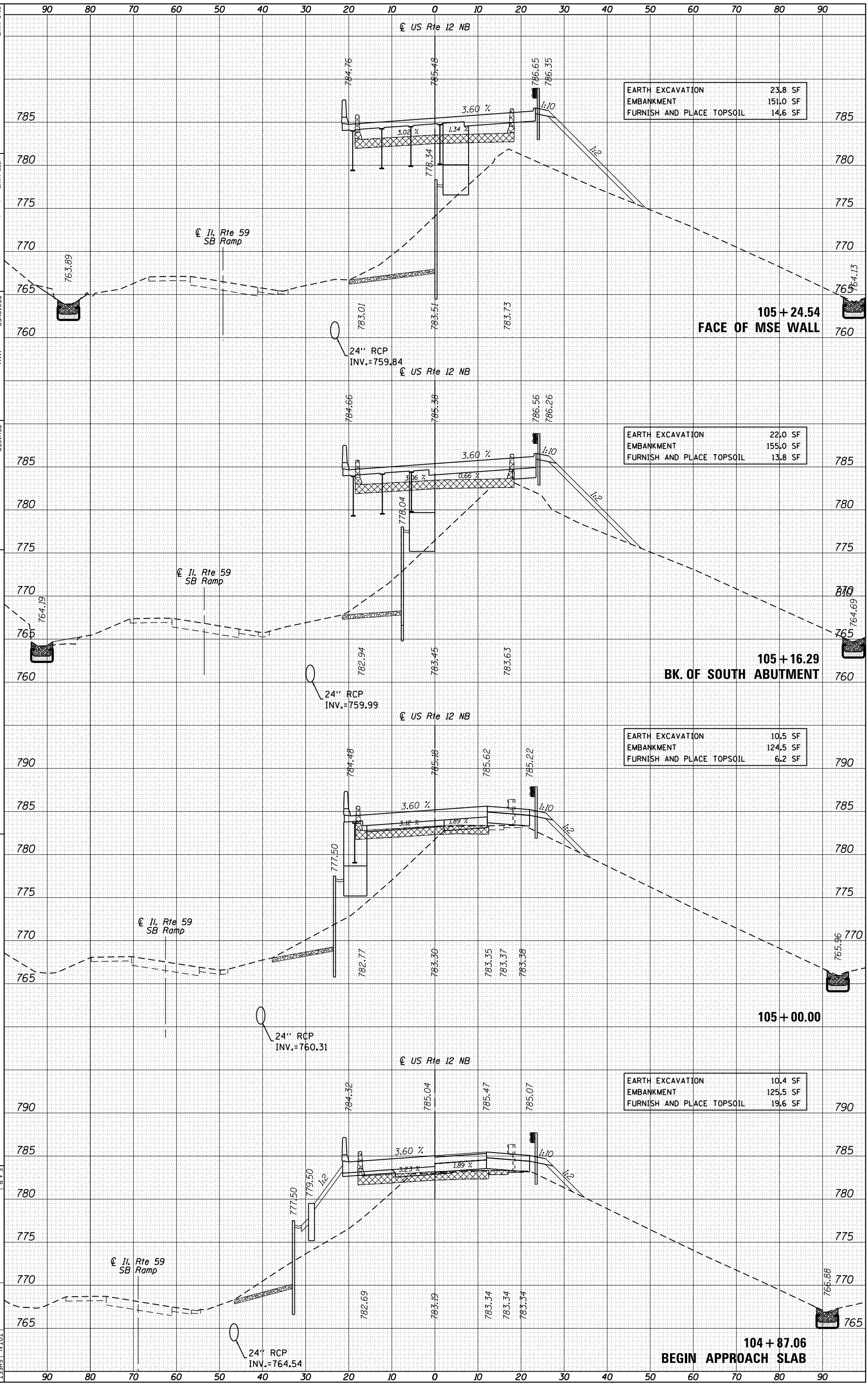
SCALE: 10'H, 5'V

SHEET OF SHEETS STA. 104+87.06 TO STA.105+24.54

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	91

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51



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

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PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 12/1/2017

Default

DESIGNED	-	MAM
DRAWN	-	RDS
CHECKED	-	BPT
DATE	-	12-04-17

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

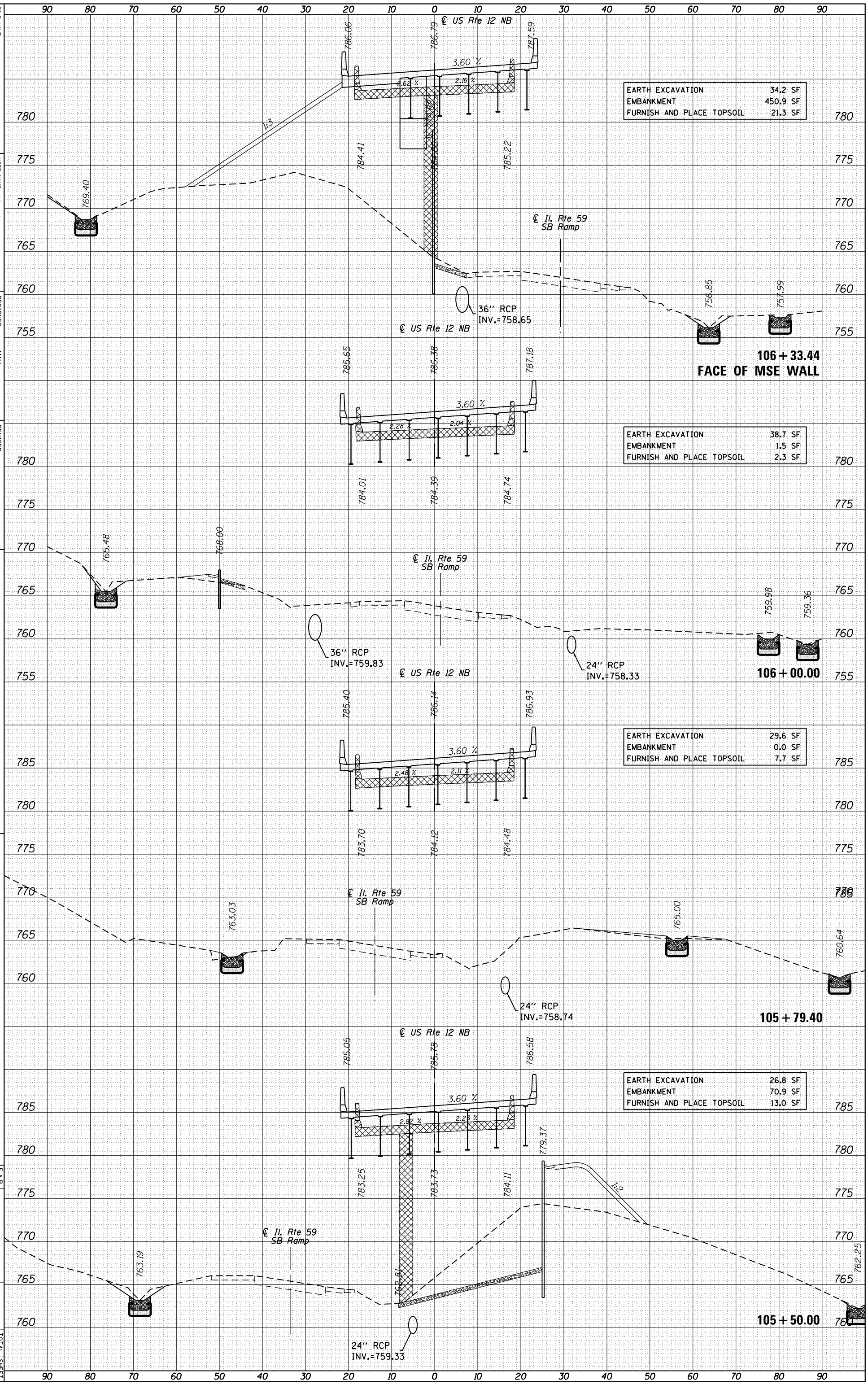
SCALE: 10'H, 5'V

SHEET OF SHEETS STA. 105+50.00 TO STA.106+33.44

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	92

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51



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

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

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USER NAME = brandon

PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 12/1/2017

Default

DESIGNED	-	MAM
DRAWN	-	RDS
CHECKED	-	BPT
DATE	-	12-04-17

REVISED	-	
REVISED	-	
REVISED	-	
REVISED	-	

SCALE: 10'H, 5'V

SHEET OF SHEETS

STA. 106+40.78 TO STA. 107+00.00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	93

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51

107+00.00

EARTH EXCAVATION	10.6 SF
EMBANKMENT	492.2 SF
FURNISH AND PLACE TOPSOIL	30.7 SF

106+69.40 END APPROACH SLAB

EARTH EXCAVATION	9.2 SF
EMBANKMENT	638.9 SF
FURNISH AND PLACE TOPSOIL	12.7 SF

106+50.00

EARTH EXCAVATION	19.1 SF
EMBANKMENT	556.1 SF
FURNISH AND PLACE TOPSOIL	17.4 SF

106+41.41 BK. OF NORTH ABUTMENT

EARTH EXCAVATION	29.7 SF
EMBANKMENT	526.6 SF
FURNISH AND PLACE TOPSOIL	21.9 SF

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

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
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USER NAME = brandon

PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 12/1/2017

Default

DESIGNED	-	MAM
DRAWN	-	RDS
CHECKED	-	BPT
DATE	-	12-04-17

REVISED	-	
REVISED	-	
REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

SCALE: 10'H, 5'V

SHEET OF SHEETS STA. 107+50.00 TO STA.109+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	94

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

℄ US Rte 12 NB

EARTH EXCAVATION 20.36 SF
EMBANKMENT 6.5 SF
FURNISH AND PLACE TOPSOIL 6.3 SF

788.81 789.13 789.58 789.99 789.61 789.23
3.60 %
1.94 % 1.75 %
1:3 1:10 1:2
778.30
788.00 788.30 788.53 788.75 788.48 788.20
769.37
109+00.00

788.47 788.79 789.22 789.65 789.25 788.87
3.60 %
2.29 % 1.38 %
776.96
787.36 787.64 787.90 788.08 787.70 787.44
108+50.00

EARTH EXCAVATION 13.1 SF
EMBANKMENT 23.4 SF
FURNISH AND PLACE TOPSOIL 10.3 SF

787.99 788.31 788.75 789.17 788.78 788.40
3.60 %
3.11 % 1.99 %
775.60
786.67 786.85 787.24 787.49 787.10 786.90
108+00.00

EARTH EXCAVATION 10.9 SF
EMBANKMENT 33.0 SF
FURNISH AND PLACE TOPSOIL 12.1 SF

787.43 787.75 788.18 788.62 788.22 787.77
3.60 %
2.56 % 2.16 %
773.69
785.92 786.17 786.48 786.75 786.45 786.30
107+50.00

EARTH EXCAVATION 10.3 SF
EMBANKMENT 65.6 SF
FURNISH AND PLACE TOPSOIL 23.2 SF

1:3 1:10 1:2

755 760 765 770 775 780 785 790

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

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

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USER NAME = brandon

PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 12/1/2017

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DESIGNED	-	MAM
DRAWN	-	RDS
CHECKED	-	BPT
DATE	-	12-04-17

REVISED	-	
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REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

SCALE: 10'H, 5'V

SHEET OF SHEETS STA. 109+50.00 TO STA.110+68.38

ILLINOIS FED. AID PROJECT

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	95
		CONTRACT NO. 60X51		

110 + 68.38

℄ US Rte 12 NB

789.68 790.00 790.44 790.87 790.47 790.08

℄ US Rte 12 SB

789.71 790.05 790.46 790.46

3.60 %

1:10 1:2

EARTH EXCAVATION	1.4 SF
EMBANKMENT	1.2 SF
FURNISH AND PLACE TOPSOIL	7.6 SF

110 + 50.00

℄ US Rte 12 NB

789.59 789.91 790.34 790.77 790.37 790.37

℄ US Rte 12 SB

783.30 781.17

1.17 % 1.67 % 3.60 %

1:10 1:2

789.65 789.99 790.14 790.33 789.96

EARTH EXCAVATION	21.0 SF
EMBANKMENT	0.9 SF
FURNISH AND PLACE TOPSOIL	3.9 SF

110 + 00.00

℄ US Rte 12 NB

789.34 789.66 790.09 790.52 790.12 789.74

781.02 778.58

2.84 % 1.67 % 3.60 %

1:3 1:10 1:2

789.11 789.29 789.64 789.84 789.59 789.34

EARTH EXCAVATION	20.5 SF
EMBANKMENT	2.7 SF
FURNISH AND PLACE TOPSOIL	5.7 SF

109 + 50.00

℄ US Rte 12 NB

789.07 789.39 789.84 790.25 789.87 789.49

779.55 774.69

2.02 % 1.49 % 3.60 %

1:3 1:10 1:6

788.55 788.87 789.10 789.28 788.98 788.67

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

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

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USER NAME = brandon

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PLOT DATE = 12/1/2017

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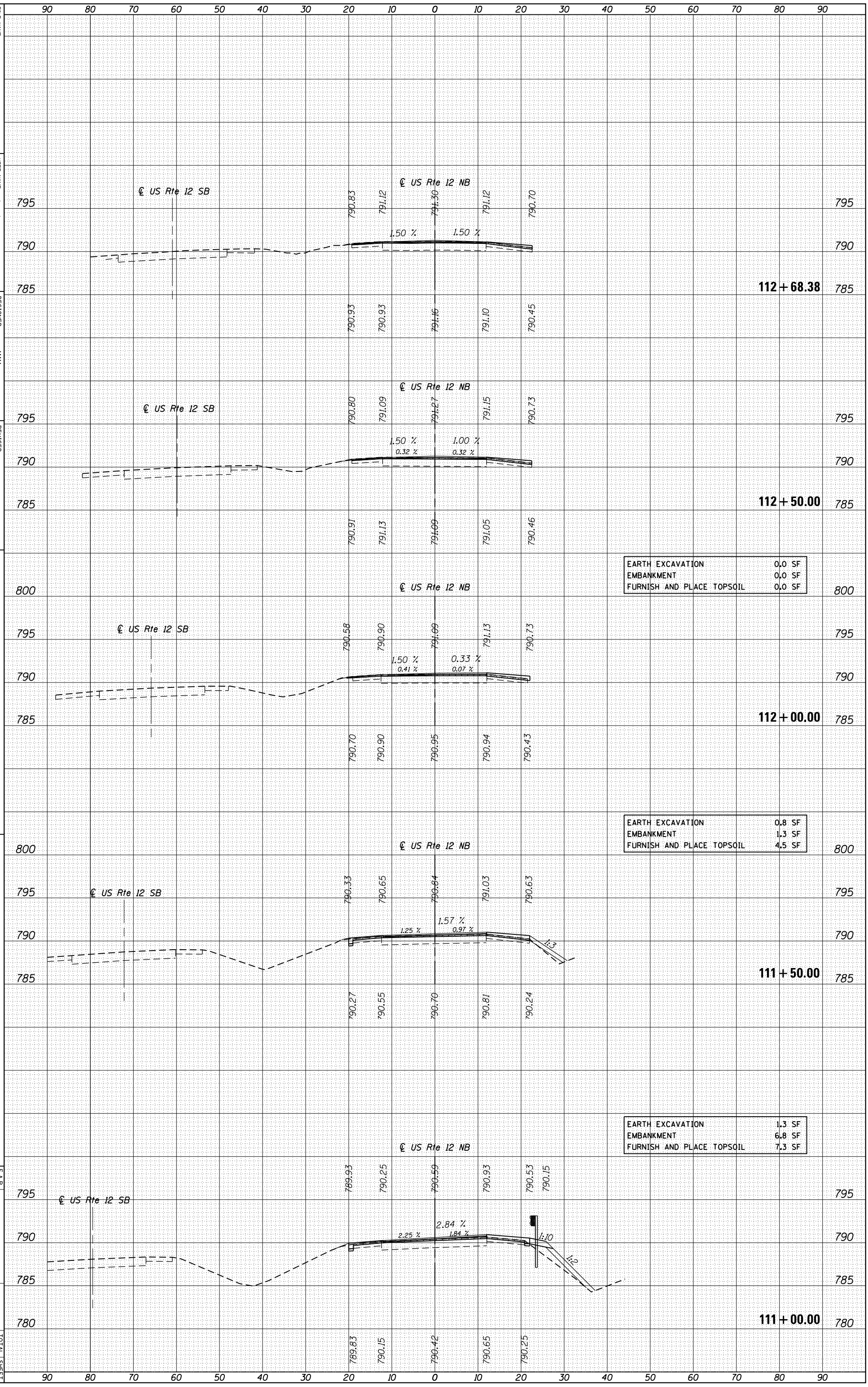
REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

SCALE: 10'H, 5'V

SHEET OF SHEETS STA. 111+00.00 TO STA.112+68.38



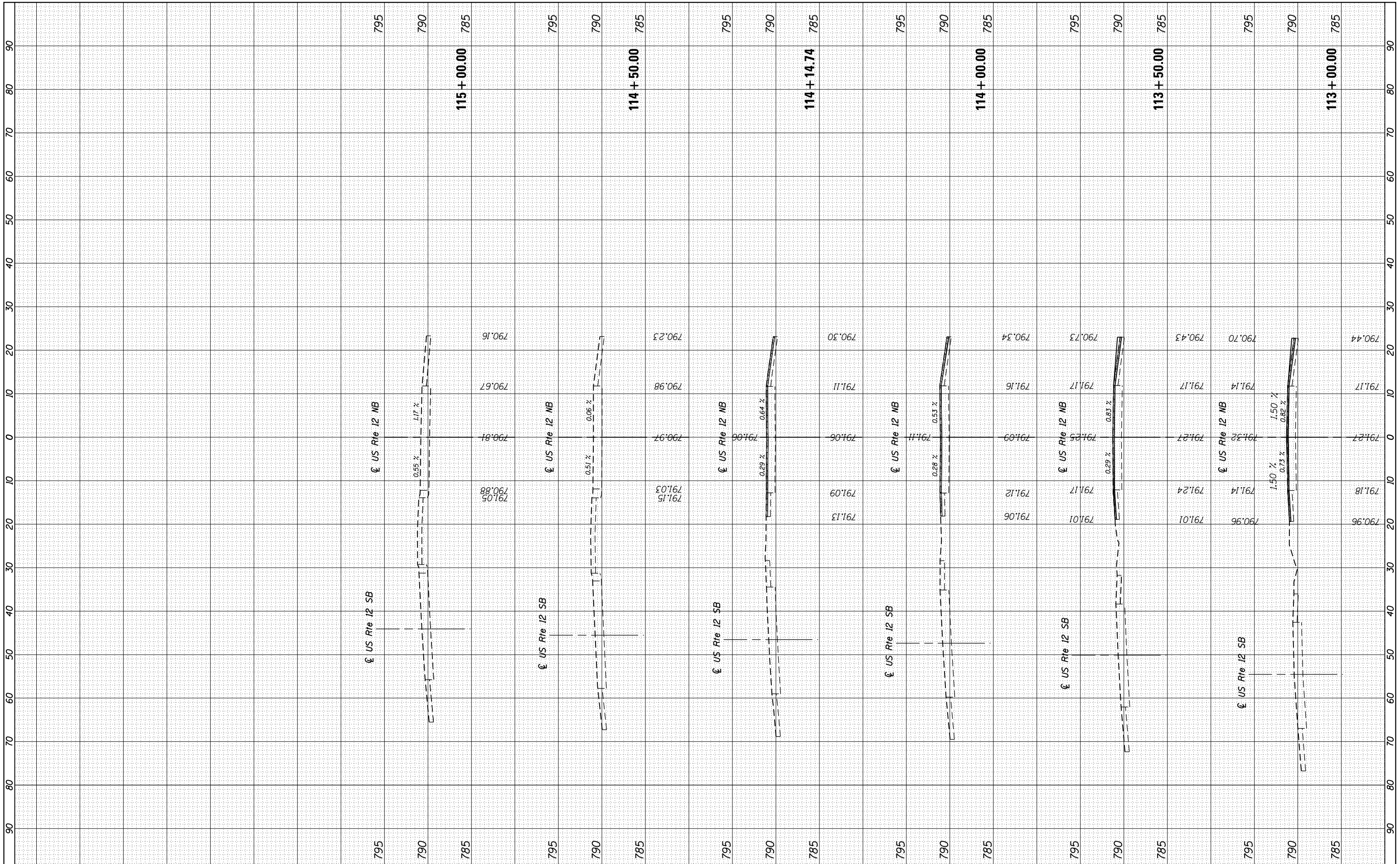
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	96

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51

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		



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		DRAWN - RDS	REVISED -
	PLOT SCALE = 20.0000 ' / in.	CHECKED - BPT	REVISED -
Default	PLOT DATE = 12/1/2017	DATE - 12-04-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US ROUTE 12 NORTHBOUND

SCALE: 10'H, 5'V | SHEET OF SHEETS | STA. 113+00.00 TO STA. 115+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	97
		CONTRACT NO. 60X51		
	ILLINOIS FED. AID PROJECT			

ORIGINAL SURVEY		BY	DATE
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	PLOTTED		
	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
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NO.	AREAS		
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USER NAME = brandon

PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 12/1/2017

Default

DESIGNED - MAM

DRAWN - RDS

CHECKED - BPT

DATE - 12-04-17

REVISED -

REVISED -

REVISED -

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 59
CROSS SECTIONS

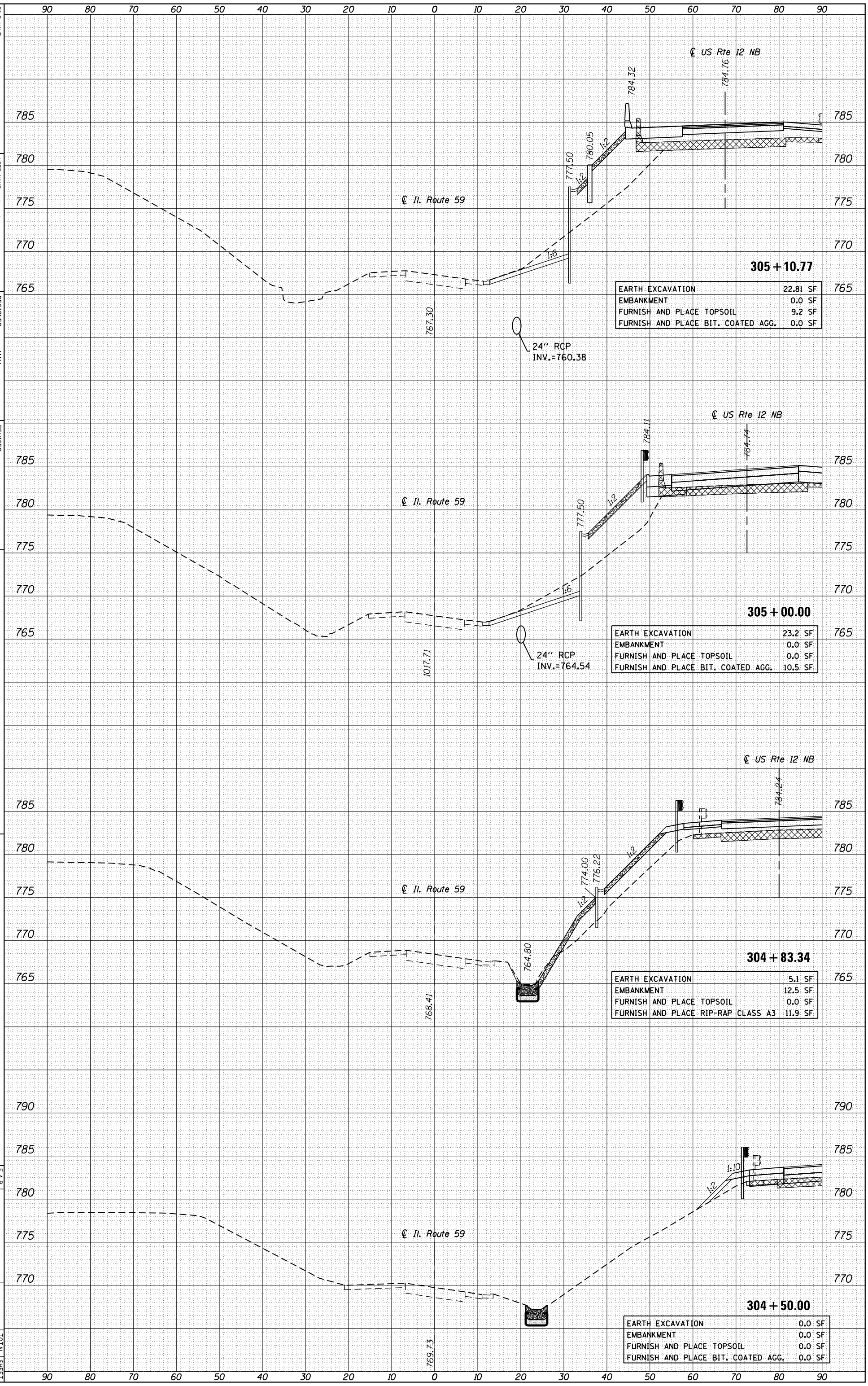
SCALE: 10'H. 5'V.

SHEET OF SHEETS STA. 304+50.00 TO STA. 305+10.77

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	22-2HB-1	LAKE	105	98

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51



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FINAL SURVEY		BY	DATE
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PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 12/1/2017

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REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 59
CROSS SECTIONS

SCALE: 10'H, 5'V.

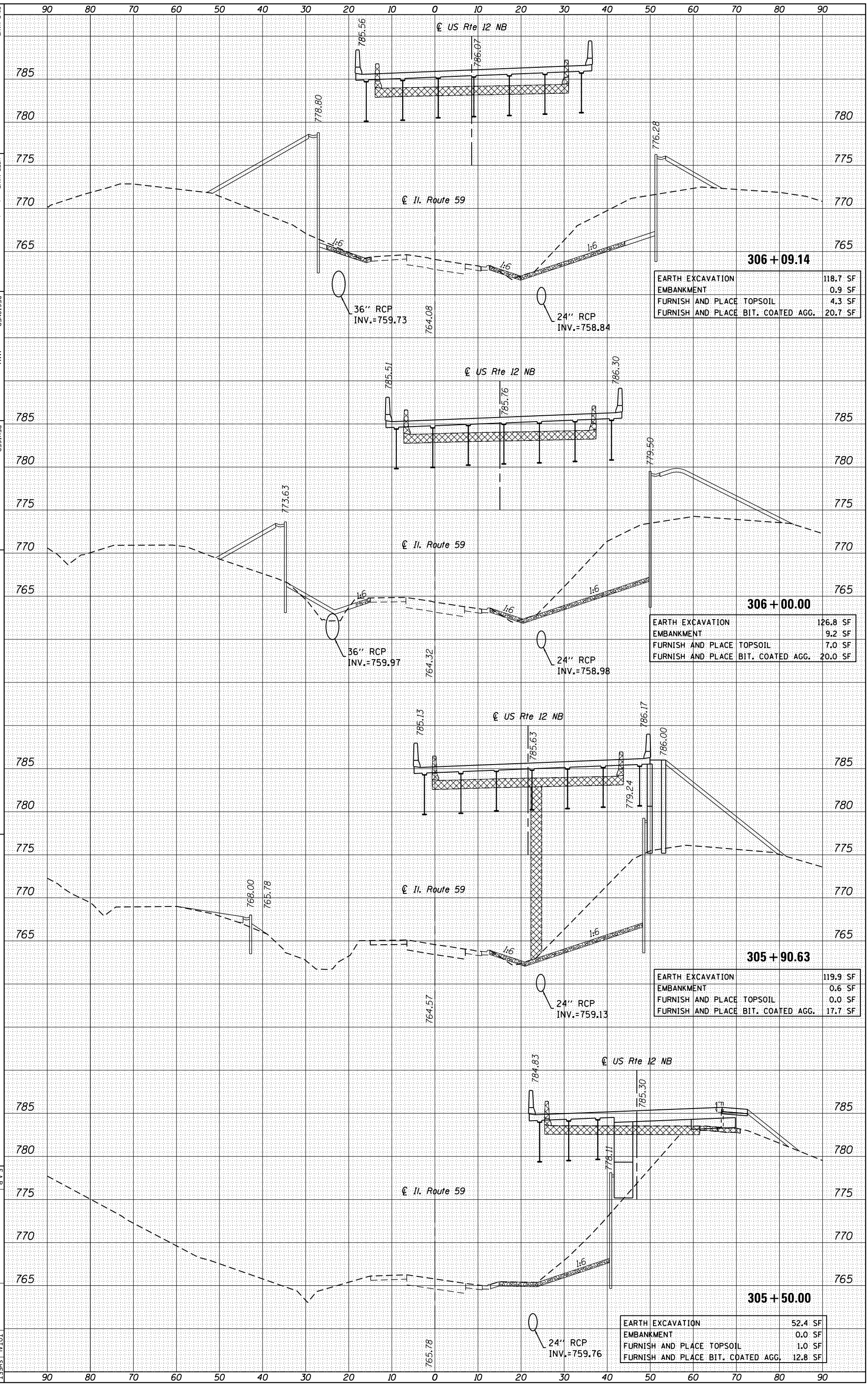
SHEET OF SHEETS

STA. 305+50.00 TO STA. 306+09.14

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	22-2HB-1	LAKE	105	99

ILLINOIS | FED. AID PROJECT

CONTRACT NO. 60X51



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

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REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 59
CROSS SECTIONS

SCALE: 10'H, 5'V.

SHEET 0F SHEETS STA. 306+33.11 TO STA. 307+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	22-2HB-1	LAKE	105	100

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

780 775 770 765 760 785

℄ US Rte 12 NB

787.39 781.81 786.29 786.73 787.06 787.69 780.73 786.01 786.53 787.11 779.89 785.55 786.06 786.59 779.44 786.00 767.86 768.00

℄ Il. Route 59

1:6

36" RCP
INV.=757.75

761.85

762.35

763.09

763.50

36" RCP
INV.=759.11

24" RCP
INV.=758.21

24" RCP
INV.=758.47

307+00.00

EARTH EXCAVATION	1.6 SF
EMBANKMENT	0.0 SF
FURNISH AND PLACE TOPSOIL	0.0 SF
FURNISH AND PLACE BIT. COATED AGG.	1.0 SF

306+81.58

EARTH EXCAVATION	2.5 SF
EMBANKMENT	0.0 SF
FURNISH AND PLACE TOPSOIL	1.3 SF
FURNISH AND PLACE BIT. COATED AGG.	0.0 SF

306+50.00

EARTH EXCAVATION	4.7 SF
EMBANKMENT	0.0 SF
FURNISH AND PLACE TOPSOIL	0.0 SF
FURNISH AND PLACE BIT. COATED AGG.	2.6 SF

306+33.11

EARTH EXCAVATION	21.3 SF
EMBANKMENT	0.0 SF
FURNISH AND PLACE TOPSOIL	13.8 SF
FURNISH AND PLACE BIT. COATED AGG.	9.7 SF

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
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	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
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	AREAS CHECKED		

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DATE	-	12-04-17

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 59
CROSS SECTIONS

SCALE: 10'H, 5'V.

SHEET OF SHEETS STA. 307+50.00 TO STA. 308+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	22-2HB-1	LAKE	105	101

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60X51

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

775 770 765 760 755

℄ Il. Route 59

759.62

308 + 00.00

780 775 770 765 760

℄ Il. Route 59

764.00

36" RCP
INV.=757.18

760.63

307 + 53.58

EARTH EXCAVATION	0.0 SF
EMBANKMENT	5.3 SF
FURNISH AND PLACE TOPSOIL	3.2 SF
FURNISH AND PLACE BIT. COATED AGG.	0.0 SF

780 775 770 765 760

℄ Il. Route 59

765.06

1:6

36" RCP
INV.=757.22

760.71

307 + 50.00

EARTH EXCAVATION	3.9 SF
EMBANKMENT	1.2 SF
FURNISH AND PLACE TOPSOIL	6.9 SF
FURNISH AND PLACE BIT. COATED AGG.	0.0 SF

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

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

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
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USER NAME = brandon
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PLOT DATE = 12/1/2017
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DESIGNED	-	MAM
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CHECKED	-	BPT
DATE	-	12-04-17

REVISED	-
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REVISED	-
REVISED	-

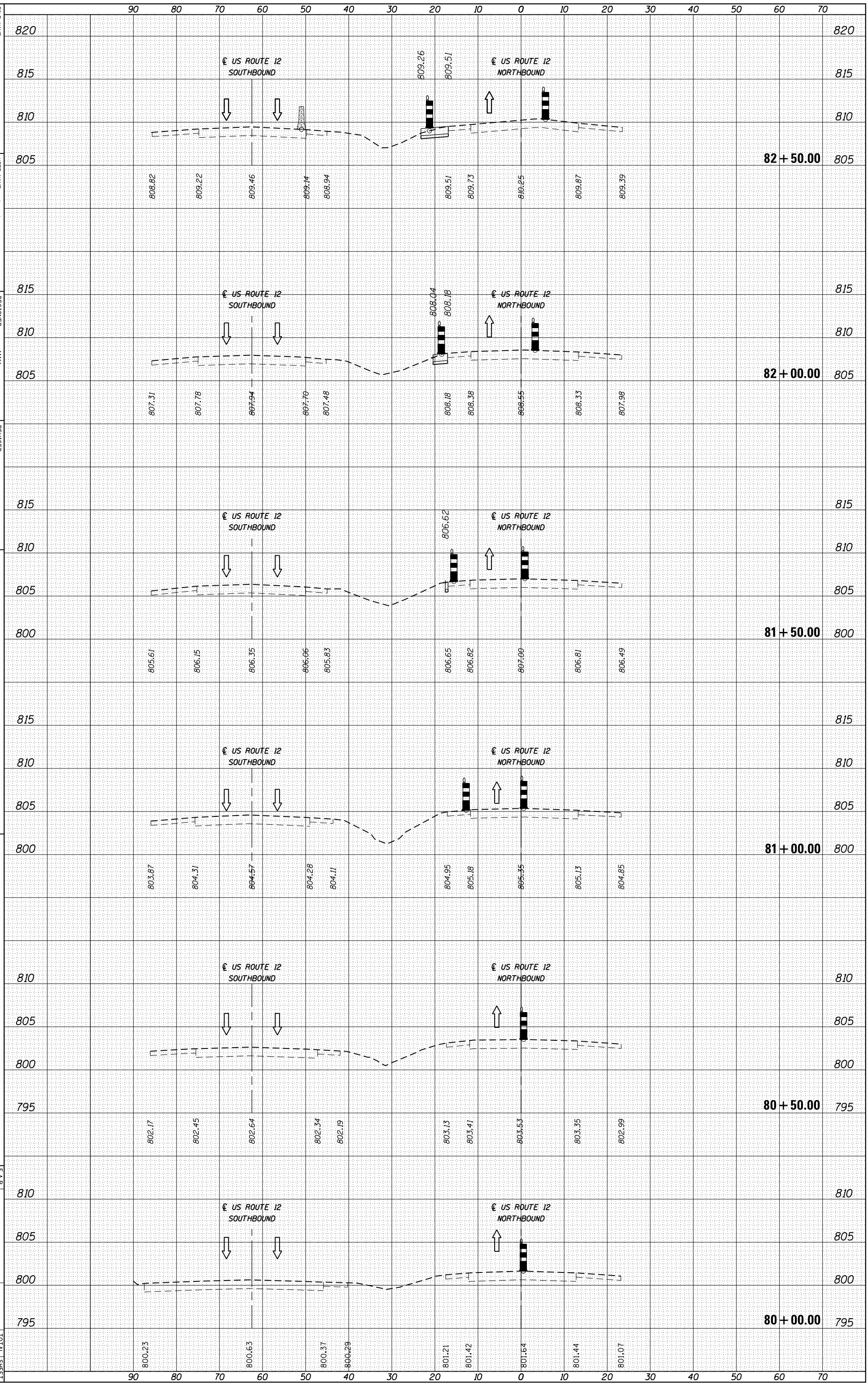
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - SOUTH CROSSOVER
US ROUTE 12 AT ILLINOIS ROUTE 59

SCALE: 10'H,5'V
SHEET OF SHEETS STA. 80+00.00 TO STA. 82+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	102

ILLINOIS FED. AID PROJECT
CONTRACT NO. 60X51



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - SOUTH CROSSOVER
US ROUTE 12 AT ILLINOIS ROUTE 59

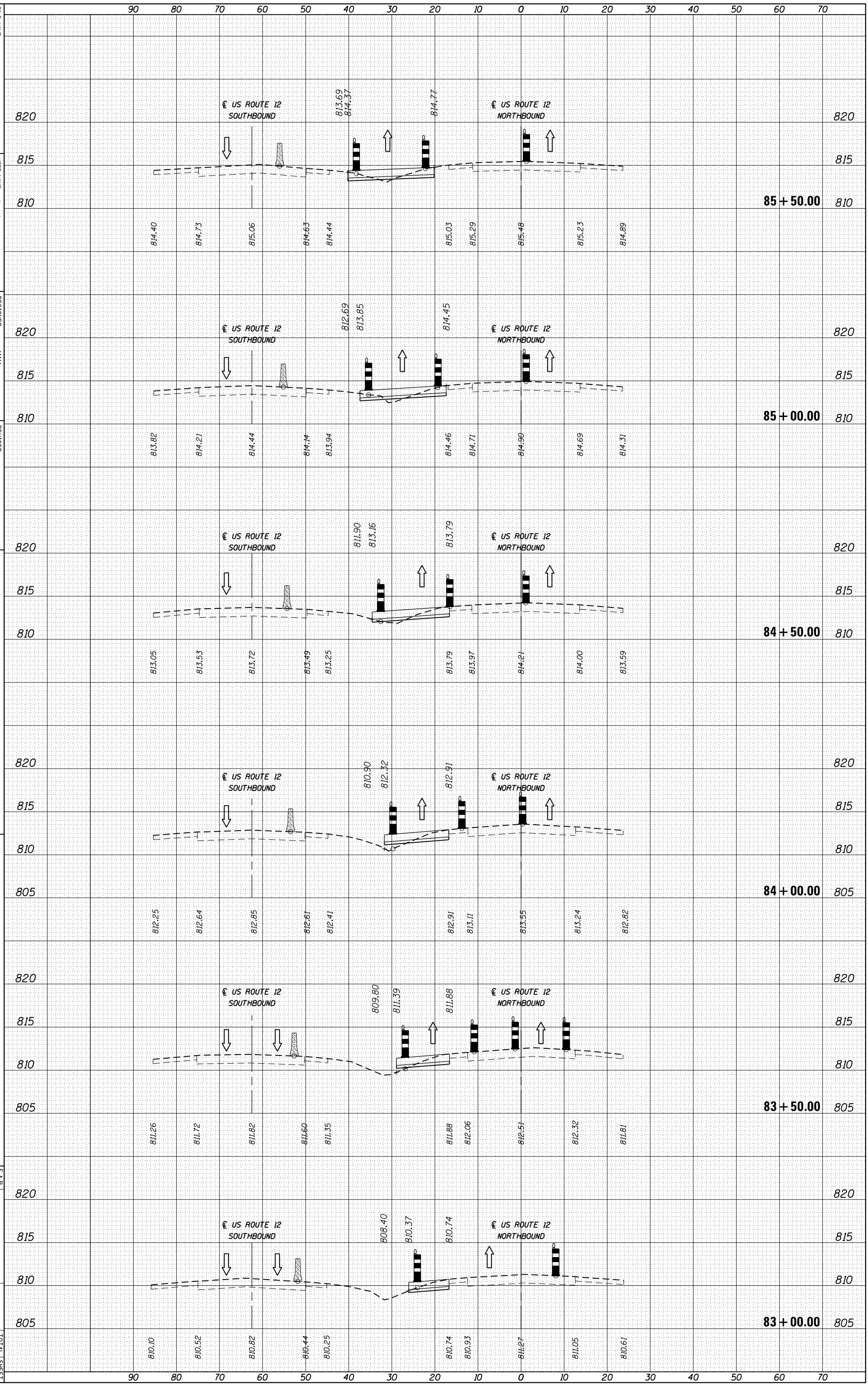
SCALE: 10'H:5'V

SHEET OF SHEETS STA. 83+00.00 TO STA. 85+50.00

ILLINOIS FED. AID PROJECT

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	103

CONTRACT NO. 60X51



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REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

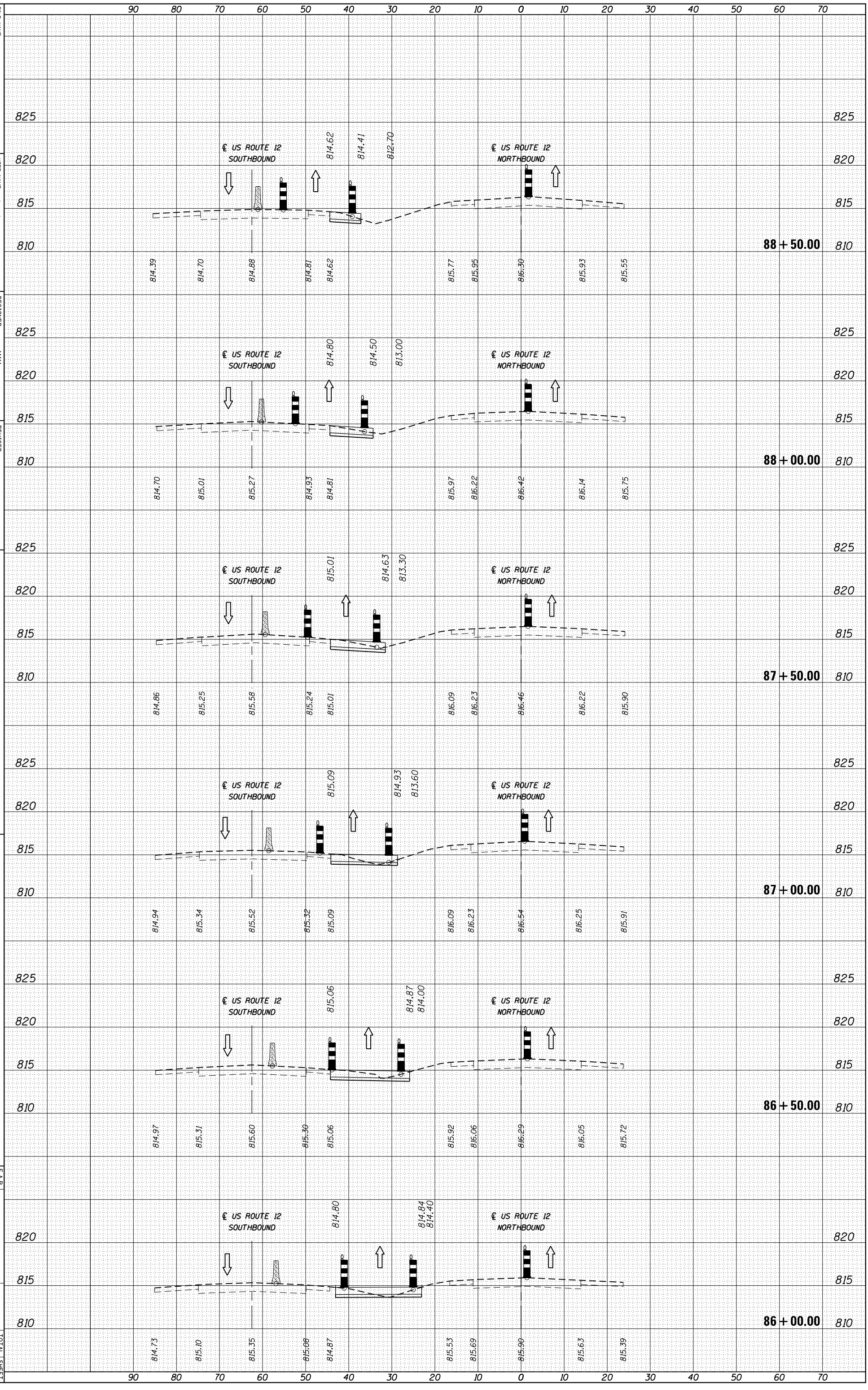
CROSS SECTIONS – SOUTH CROSSOVER
US ROUTE 12 AT ILLINOIS ROUTE 59

SCALE: 10'H,5'V

SHEET OF SHEETS STA. 86+00.00 TO STA. 88+50.00

ILLINOIS FED. AID PROJECT

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	104
		CONTRACT NO. 60X51		



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REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - SOUTH CROSSOVER
US ROUTE 12 AT ILLINOIS ROUTE 59

SHEET OF SHEETS STA. 89+00.00 TO STA. 91+00.00
SCALE: 10'H:5'V

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	106-2HB-B	LAKE	105	105

ILLINOIS FED. AID PROJECT
CONTRACT NO. 60X51