FOR INDEX OF SHEETS, SEE SHEET NO. 2

**AURORA TOWNSHIP (EAST OF THE BRIDGE)** 

CITY OF AURORA (WEST LIMITS, INCLUDING BRIDGE)

PROJECT LOCATED:

TRAFFIC DATA 2010 ADT = 1,100

2040 ADT = 7,000

DESIGN/POSTED SPEED

POSTED SPEED: 30 MPH **DESIGN SPEED: 35 MPH** 

**DESIGN DESIGNATION** 

MINOR COLLECTOR (URBAN)

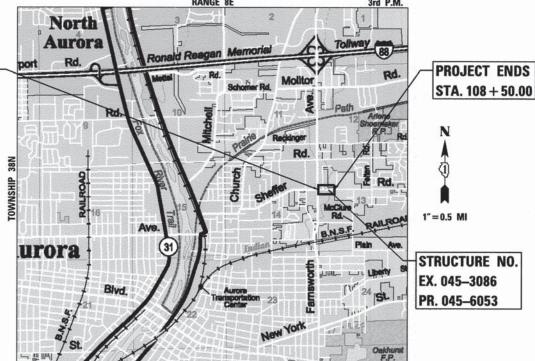
# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

**OVER INDIAN CREEK BRIDGE REPLACEMENT** SECTION 11-00298-00-BR PROJECT BRM-9003(992) CITY OF AURORA **KANE COUNTY** JOB NO. C-91-252-12

F.A.U. 2421 (SHEFFER ROAD)

**PROJECT BEGINS** STA. 100 + 44.00



PROJECT NET AND GROSS LENGTH = 806 FT (0.153 MILE) PROJECT LOCATED IN:

PARTS OF NW 1/4 OF SECTION 13 IN TOWNSHIP 38N, RANGE 8E. IRD PRINCIPAL MERIDIAN, KANE COUNTY, ILLINOIS

WILLS BURKE KELSEY ASSOCIATES LTD

ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

OR 811

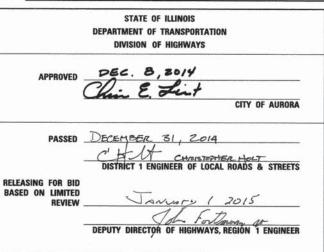
ILLINOIS REG PROFESSIONAL ENGINEER NO 081\_005861

**EXPIRATION DATE 11-30-2016** 

MATTHEW N. BALDWIN ILLINOIS REG. PROFESSIONAL ENGINEER NO. 062-003297 EXPIRATION DATE 11-30-2015 SHEETS 1-42, 61-85

KANE 85 1 ILLINOIS CONTRACT NO. 61B08





**CONTRACT NO. 61B08** 

**FAWAD** PROGRAM

AID

0

0

0

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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# HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
406201-01	MAILBOX TURNOUT
420401-11	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542301-0-3	PRECAST REINFORCED CONCRETE FLARED END SECTION
601001-04 -	SUB-SURFACE DRAINS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
602001-02	CATCH BASIN, TYPE A
602301-04	INLET, TYPE A
602401-03	MANHOLE, TYPE A
602406-06	MANHOLE, TYPE A, 6' DIAMETER
602601-03	
602701-02	
604001-04	
604011-05	FRAME AND GRATE, TYPE 3V
604036-03	GRATE, TYPE 8
604046-03	FRAME AND GRATE, TYPE 10
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701001-02	OFF-RD OPERATION 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATION 2L, 2W, 4.5 M 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701301-04 701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701427-03	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS <= 45 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-09	UBRAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-04	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

# DISTRICT STANDARDS

SCALE:

STANDARD NO.	DESCRIPTION
BD-01	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND CURB OR EDGE
	GREATER THAN OR EQUAL TO 15'
BD-32	BUTT JOINTS AND HMA TAPER
BD-36	FIRE HYDRANT TO BE MOVED
BD-51	BENCHING DETAIL FOR EMBANKMENT WIDENING
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,
	INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS
TS-05b	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY
	RESURFACING

WILLS BURKE KELSEY ASSOCIATES LTD.
116 Wost Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nperris	DESIGNED -	MNB	REVISED -
	DRAWN -	NDP	REVISED -
PLOT SCALE = 1:20	CHECKED -	SBP	REVISED -
PLOT DATE = 12/15/2014	DATE -	12/15/2014	REVISED -

	INDEX	0F	SH	EETS &	STANDARD	os	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEE NO.
				2421	11-00298-00-BR	KANE	85	2			
_	Tarana da d								CONTRACT	NO.618	308
	SHEET NO. 1	OF	1	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		_

#### GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPLICABLE REQUIREMENTS SET FORTH IN "THE CONSTRUCTION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADDPTED JANUARY 1, 2012 THEREINAFTER REFERRED TO AS STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM MANUAL TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" IN EFFECT ON THE DATE OF INVITATION FOR BIDS; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" LATEST EDITION; INTERIM SPECIAL PROVISIONS AS INCLUDED IN THE CONTRACT DOCUMENTS; AND THE DETAILS AND STANDARDS CONTAINED IN THESE PLANS.
- BEFORE STARTING ANY EXCAVATIONS, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- THE LOCATIONS OF THE EXISTING UTILITIES AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES, IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST IN ACCORDANCE WITH ARTICLE 105.07.
- 4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 5. ALL WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE PROJECT SHOWN, NO EQUIPMENT, MATERIAL YARD OR FIELD OFFICE SHALL BE SET UP OR STORED ON CITY, TOWNSHIP OR PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION OF THE ENGINEER.
- MAINTENANCE OF TRAFFIC GENERAL: TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS, THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES OF THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
- 7. TRAFFIC CONTROL DEFICIENCY DEDUCTION: TRAFFIC CONTROL DEFICIENCY WILL APPLY FOR THIS PROJECT. THE DEDUCTION WILL BE AS REQUIRED IN ARTICLE 105.03 OF THE STANDARD SPECIFICATIONS EXCEPT THE AMOUNT OF DEDUCTION WILL BE AS MODIFIED BY BDE SPECIAL PROVISIONS.
- 8. TRAFFIC CONTROL DEVICES: ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC AS DETAILED ON THE PLANS SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS NECESSARY THROUGHOUT THE DURATION OF THE CONTRACT.
- BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED- ONE (I) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.

#### DRAINAGE NOTES

- DURING CONSTRUCTION OPERATIONS ALL LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES AND TEMPORARY DITCHES THAT OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY, AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE CLEANED AS NECESSARY TO INSURE THAT THEY ARE FREE FROM ALL DIRT AND DEBRIS PRIOR TO THE FINAL INSPECTION OF THE PROJECT. THIS WORK WILL NOT BE MEASURED SEPARATELY FOR PAYMENT, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF EARTH EXCAVATION.
- THE COST OF RESHAPING PROPOSED AND EXISTING DITCHES (IF REQUIRED) SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

#### KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT

- THE CONTRACTOR AND ENGINEER SHALL MEET WITH THE KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT TO COORDINATE ALL IN-STREAM WORK ACTIVITIES.
- THE CONTRACTOR'S IN-STREAM WORK PLAN SHALL BE SUBMITTED TO THE SOIL & WATER CONSERVATION DISTRICT
  AND KANE COUNTY FOR REVIEW AND APPROVAL PRIOR TO STARTING ANY WORK. THERE WILL NO ADDITIONAL
  COMPENSATION FOR PROVIDING THE COORDINATION AND WORK PLAN.
- 3. SEE EROSION CONTROL PLAN SHEETS FOR ADDITIONAL DETAILS, CONDITIONS AND NOTES,

#### TREES AND SHRUBS

- THE CONTRACTOR SHALL REMOVE ONLY THOSE TREES AND SHRUBS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, OR THOSE, WHICH DIRECTLY INTERFERE WITH THE SAFETY OR OUALITY OF CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN WORKING NEAR EXISTING TREES AND SHRUBS TO AVOID DAMAGING THOSE NOT SCHEDULED FOR REMOVAL AND SHALL REPLACE IN-KIND ANY DAMAGED PLANTS AT HIS OWN EXPENSE.
- 2. THE AREA TO BE PLANTED SHALL BE FINISHED TO LINE AND GRADE BEFORE PLANTING OPERATIONS ARE BEGUN. THE CONTRACTOR SHALL FURNISH ALL MARKING FLAGS (OR OTHER APPROVED MARKING APPROVED BY THE ENGINEER) FOR LOCATING SEED AREAS, PLANTINGS (I.E. SHRUBS, TREES) AND FIXED LANDSCAPE FEATURES. FLAGGING FOR PLANTINGS SHALL BE MARKED WITH THE COMMON NAME OF PLANTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL LANDSCAPING AND THE OUTLINING OF EACH AREA FOR MASS OR INDIVIDUAL PLANTING. THE ENGINEER WILL APPROVE THELAYOUT OF ALL LANDSCAPING. WHERE SEEDLINGS ARE TO BE PLANTED THE PLANTING AREAS SHALL BE STEEL POSTS AS DESCRIBED IN ARTICLE 1081.13 AND DETAILED IN THE PLANS. LAYOUT FOR PLANTINGS AND OTHER LANDSCAPE FEATURES WILL NOT BE MEASURED SEPARATELY FOR PAYMENT, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF CONSTRUCTION LAYOUT.

#### EARTHWORK AND ROADWAY

- EARTHWORK SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING. STOCK PILING OF MATERIALS FOR LATER USE AND
  REDISTRIBUTION SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. STOCK PILING NECESSARY FOR RESPREADING IN
  SHOULDERS, CONSTRUCTING EMBANKMENTS, CUT OR BORROW AREAS SHALL BE CONSIDERED INCLUDED IN THE
  UNIT PRICE OF FARTH EXCAVATION.
- 2. ALL AGGREGATE AND BITUMINOUS BASE COURSES SHALL BE PRIMED, THIS WORK SHALL CONFORM TO THE APPROPRIATE ARTICLES OF SECTION 406 OF THE STANDARD SPECIFICATIONS. THE PRIME COAT FOR AGGREGATE SURFACES SHALL BE MC-30 APPLIED AT A RATE OF 0.25 LBS/SO FT AND SS-I APPLIED AT THE RATE OF 0.05 LBS/SO FT FOR HMA BASES. THIS ITEM WILL BE PAID FOR SEPARATELY AS BITUMINOUS MATERIALS (PRIME COAT).
- 3. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION: ITEM NO. 21001000 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION WILL ONLY BE UTILIZED IN AREAS THAT HAVE BEEN IDENTIFIED AS SUBGRADE UNDERCUTS AREAS OR WHERE DETERMINED IN THE FIELD BY A GEOTECHNICAL ENGINEER, THE FABRIC WILL BE USED IN COMBINATION WITH AGGREGATE SUBGRADE IMPROVEMENT. THE QUANTITY INCLUDED IN THE PLANS IS BASED ON THE SUBSURFACE INVESTIGATION PREPARED BY TESTING SERVICE CORPORATION DECOMMENDATIONS FOR UNDERPOLL ADEAS.
- ALL EXCAVATION AND EMBANKMENT LOCATIONS REQUIRING SEEDING OR SODDING SHALL BE CONSTRUCTED TO 6 INCHES
  BELOW FINISHED GRADE LINE TO ALLOW TOPSOIL PLACEMENT.
- PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES FOR THE PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

#### REMOVAL NOTES

MAILBOXES:
THE WORK REQUIRED FOR THE REMOVAL AND REPLACEMENT OF PERMANENT MAILBOXES IS SPECIFIED IN THE STANDARD
SPECIFICATIONS ARTICLE 107.20. MAILBOX REMOVAL AND REPLACEMENT WILL NOT BE PAID FOR SEPARATELY BUT SHALL
BE INCLUDED IN THE PAY ITEM FOR MOBILIZATION.

MAILBOXES ARE ANTICIPATED TO BE TEMPORARILY MOVED BECAUSE OF CONSTRUCTION OPERATIONS. MAILBOXES MAY HAVE TO BE MOVED MORE THAN ONCE. THE CONTRACTOR SHALL TEMPORARILY PLACE AND SUPPORT THE MAILBOX SO THAT IT IS SUITABLE FOR MAIL DELIVERY, MAINTAINING THE MAILBOX DURING CONSTRUCTION WILL BE NOT BE MEASURED SEPARATELY FOR PAYMENT. IF THE EXISTING MAILBOX AND/OR SUPPORT ARE DAMAGED BY THE CONSTRUCTION OPERATIONS, THEY WILL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE PROJECT.

- 2. SAW CUTS:

  ALL LOCATIONS WHERE A SAW CUT IS REQUIRED FOR THE REMOVAL OF PAVEMENT, CURB, GUTTER, MEDIANS.

  DRIVEWAYS, SIDEWALK, BUTT JOINTS, PATCHES OR ANY OTHER STRUCTURE WHICH ARE ALL ONE PIECE WITH NO
  CONSTRUCTION JOINTS. THIS SAW CUT SHALL BE MADE AT THE LIMITS OF CONSTRUCTION OR OTHER AREAS AS
  REQUIRED TO PERFORM THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE SAW CUT SHALL BE
  ACCOMPLISHED WITH A "PAVEMENT SAW". VERMEER TYPE TRENCHERS WILL NOT BE ALLOWED FOR FINAL SAW CUT
  AT THE LIMITS OF CONSTRUCTION, SAW CUTTING SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED
  INCLUDED IN THE UNIT CONTRACT PRICE OF THE RELATED REMOVAL ITEM.
- DEBRIS REMOVAL:
  IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND DISPOSE OF ALL MATERIAL AND DEBRIS
  RESULTING FOR CONSTRUCTION ACTIVITIES OR AS NOTED ON THE PLANS. THE CONSTRUCTION DEBRIS SHALL BE
  DISPOSED OF OFF SITE AT AN APPROVED FACILITY OR AS DIRECTED BY THE ENGINEER, THE COST OF REMOVAL
  AND DISPOSAL OF ALL CONSTRUCTION RELATED DEBRIS SHALL BE INCLUDED IN THE COST OF THE RELATED
  WORK ITEMIS).
- 4. AN HMA BUTT JOINT SHALL BE PLACED AT THE LIMITS OF THE PROJECT IN ACCORDANCE WITH DISTRICT DETAIL BD-32. HOWEVER, THE SURFACE REMOVAL DEPTH SHALL BE 2" TO MATCH THE DEPTH OF THE PROPOSED SURFACE COURSE. THIS ITEM WILL BE PAID FOR AS HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT, AND MEASURED IN SO YD.

#### ROADWAY SIGNAGE

THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS, AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS, UNLESS THEY ARE WITHIN THE LIMITS OF THE DETOUR CLOSURE. THIS WORK WILL BE INCLUDED IN THE PAY ITEM TRAFFIC CONTROL AND PROTECTION. (SPECIAL).

ROADWAY SIGNAGE DESCRIBED ABOVE DOES NOT APPLY TO ANY SIGNAGE USED FOR CONSTRUCTION OPERATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPLYING AND MAINTAINING ALL SIGNS REQUIRED FOR THE MAINTENANCE OF TRAFFIC OF THE VARIOUS STAGES OF CONSTRUCTION AND DETOURS.

#### OWNER OF RECORD

THE CITY OF AURORA IS THE OWNER OF RECORD FOR THIS BRIDGE, EXISTING BRIDGE PLANS DO NOT EXIST FOR THIS STRUCTURE, LINEWORK FOR THE EXISTING BRIDGE IS BASED ON TOPOGRAPHIC SURVEY, ANY EXISTING FOUNDATIONS SHOWN IN THE PLANS WERE DRAWN BASED ON ENGINEERING JUDGEMENT. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING TYPE OF FOUNDATIONS IN THE FIELD.

#### SURVEY DATUM

THE HORIZONTAL DATUM IS NAD 83 AND THE VERTICAL DATUM IS NAVD 88. THE CITY OF AURORA BENCHMARK WAS USED TO ESTABLISH VERTICAL CONTROL AND IS REFERENCED ON THE ALIGNMENT, TIES & BENCHMARKS SHEET.

### DEMOLITION PLAN

INDIAN CREEK IS CONSIDERED WATERS OF THE U.S. OR "PUBLIC WATERS". THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DEMOLITION PLAN IN ACCORDANCE WITH ARTICLE 501.02 TO THE ENGINEER FOR APPROVAL, PREPARATION OF THE DEMOLITION PLAN WILL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF THE REMOVAL OF THE EXISTING BRIDGE STRUCTURE.

#### UTILITY CONTACTS

G

SHEET NO. 1 OF

SCALE:

UTILITY	CONTACT PERSON	NUMBER
CITY OF AURORA AT&T LOCAL COMCAST COMED FOX METRO MCI NICOR	JOB DELGADO BOBBY AKHTER THOMAS MUNAR PETER KRATZER ZACHARY BONESZ JIM TODD CONNIE LANE	630-256-3710 630-719-1483 630-600-6352 708-518-6209 630-301-6822 708-458-6410 630-388-3830

WILLS BURKE KELSEY ASSOCIATES LTD.

WBK 116 West Main Street, State 201
St. Charfes, life/as 50174

USER NAME = nparris	DESIGNED	~	MNB	REVISED -	750
	DRAWN	723	NDP	REVISED -	
PLOT SCALE = 1:20	CHECKED		SBP	REVISED -	
PLOT DATE = 12/12/2014	DATE		12/15/2014	REVISED -	

SENE	RAL NO	TES	JA - 11100 L - 18111-000	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEE NO.
				2421	11-00298-00-BR	KANE	85	3
						CONTRACT	NO.61E	308
- 1	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

			SUMMARY OF QUANT	ITIES				TION CODE	
							20%	EDERAL LOCAL	
SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL	ROADWAY 0004	BRIDGE 0011	TRAINEES 0042	UTILITIE 0043
TIEM	PROVISION		TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	QUANTITY -	URBAN 91	URBAN	URBAN	URBAN
		20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	40	40			
	S		EARTH EXCAVATION	CU YD	530	530			
			REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	266	266			
			CHANNEL EXCAVATION	CU YD	175	175			
			TRENCH BACKFILL						
				CU YD	50	50			
			GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SO YD	797	797			
			TOPSOIL EXCAVATION AND PLACEMENT	CU YD	385	385			
			SEEDING, CLASS 2A	ACRE	0.5	0.5			
		25000312	SEEDING, CLASS 4A	ACRE	0.25	0.25			
		25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45			
		25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45			
		25100630	EROSION CONTROL BLANKET	SQ YD	3,001	3,001			
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	232	232			
		28000305	TEMPORARY DITCH CHECKS	FOOT	100	100			
		28000400	PERIMETER EROSION BARRIER	FOOT	1,039	1,039			
-		28000500	INLET AND PIPE PROTECTION	EACH	6	6			
		28000510	INLET FILTERS	EACH	12	12			
		28001100	TEMPORARY EROSION CONTROL BLANKET	SO YD	2,801	2,801			
		28100105	STONE RIPRAP, CLASS A3	SO YD	11	11			
		28100107	STONE RIPRAP, CLASS A4	SO YD	454	91	363		
			FILTER FABRIC	SO YD	465	102	363		
	S		AGGREGATE SUBGRADE IMPROVEMENT	CU YD		266			
	S		AGGREGATE SUBGRADE IMPROVEMENT 12"	SO YD	1,997	1,997			
			SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	44	44			
			BITUMINOUS MATERIALS (PRIME COAT)						
				POUND	6,445	6,445			
			HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	30	30			
			TEMPORARY RAMP	SO YD	136	136			
			HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	648	648			
		40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	381	381			
		42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SO YD	67	67			
		42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SO YD	109	109			
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	126	126			
		44000100	PAVEMENT REMOVAL	SQ YD	1,512	1,512			
		44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	394	394			

IAME = WilProjects/201

WILLS BURKE KELSEY ASSOCIATES LTD.

WBK 116 West Mein Street, Sulle 201
St. Charles, Illinois 60174

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: SHEET NO. 1 OF 4 SHEETS STA.

TO STA.

			SUMMARY OF QUANT	ITIES	-		CONSTRUCT 80% FE 20% L	DERAL	
SPECIALTY	SPECIAL	CODE			TOTAL	ROADWAY	BRIDGE	TRAINEES	UTILITIES
ITEM	PROVISION	NO.	ITEM	UNIT	QUANTITY	0004 URBAN	0011 URBAN	0042 URBAN	0043 URBAN
		44000300	CURB REMOVAL	FOOT	133	133			
-		44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	191	191			
		44000600	SIDEWALK REMOVAL	SO FT	333	333			
		44201725	CLASS D PATCHES, TYPE I, 7 INCH	SO YD	5	5			
		44201729	CLASS D PATCHES, TYPE II, 7 INCH	SO YD	6	6			
		44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	29	29			
		44201761	CLASS D PATCHES, TYPE I, 10 INCH	SO YD	2	2			
		48101500	AGGREGATE SHOULDERS, TYPE B 6"	SO YD	7	7			
		48203017	HOT-MIX ASPHALT SHOULDERS, 5"	SQ YD	244	244			
		50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1		
545 W 23		50105220	PIPE CULVERT REMOVAL	FOOT	227	227			
		50200300	COFFERDAM EXCAVATION	CU YD	714		714		
		50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1		
		50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1		
		J	CONCRETE STRUCTURES	CU YD	216.3		216.3		
			CONCRETE SUPERSTRUCTURE	CU YD	146.0		146.0		
			BRIDGE DECK GROOVING	SQ YD	423		423		
			CONCRETE ENCASEMENT	CU YD	12.6		12.6		
			PROTECTIVE COAT	SO YD	474		474		
			PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	1,647		1,647		
			REINFORCEMENT BARS, EPOXY COATED	POUND	54,950		54,950		
			FURNISHING STEEL PILES HP12X53	FOOT	1,054		1,054		
			DRIVING PILES	FOOT			1,054		
					2				
			TEST PILE STEEL HP12X53	EACH			2		
			PILE SHOES	EACH	36		36		
			NAME PLATES	EACH	1		1		
	S		PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	4	4			
	S	54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1	1			
	S		PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	4	4			
		542A0220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	40	40			
		542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	32	32			
		550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	227	227			
		550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	73	73			
		55100500	STORM SEWER REMOVAL 12"	FOOT	30	30			
*		56100050	DUCTILE IRON WATER MAIN TEE, 12" X 6"	EACH	1	- 0.57%			1

WILLS BURKE KELSEY ASSOCIATES LTD.

WBK 116 West Main Street, Guille 201
St. Charles, Bisnots 60174

	SUMMARY OF QU	ANTITIES		RTE.	SECTION	COUNTY	SHEETS	NO.
				2421	11-00298-00-BR	KANE	85	5
						CONTRACT	NO.61E	308
SCALE:	SHEET NO. 2 OF 4 SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

			SUMMARY OF QUAN	TITIES				TION CODE	
							80% FF	EDERAL LOCAL	
SPECIALTY	SPECIAL	CODE	ITEM	UNIT	TOTAL -	ROADWAY 0004	BRIDGE 0011	TRAINEES 0042	UTILITIES 0043
I TEM	PROVISION	NO. 56100900	WATER MAIN 12"	FOOT	QUANTITY 236	URBAN	URBAN	URBAN	URBAN 236
	S		WATER VALVES 12"	EACH	2				2
	S		DUCTILE IRON WATER MAIN FITTINGS 12" 22.50 DEGREE BEND	EACH	2				2
•	S		DUCTILE IRON WATER MAIN FITTINGS 12" 45.00 DEGREE BEND	EACH	4				4
*	S		FIRE HYDRANTS TO BE REMOVED AND REPLACED	EACH	2				2
*	S	56400825	FIRE HYDRANT WITH AUXILIARY VALVE, VALVE BOX AND TEE	EACH	1				1
			GEOCOMPOSITE WALL DRAIN	SQ YD	69		69		
			CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	03		
	S		CATCH BASINS, TYPE A, 5'-DIAMETER	EACH		1			
			MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1			
			MANHOLES, TYPE A, 4'-DIAMETER, TYPE 10 FRAME AND GRATE	EACH	1				
			MANHOLES, TYPE A, 4'-DIAMETER, TYPE 3V FRAME AND GRATE			1			
			INLETS, TYPE A, TYPE 8 GRATE	EACH	1	1			
				EACH		1			
			INLETS, TYPE A, TYPE 10 FRAME AND GRATE	EACH	1	1			
			VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2				2
			MANHOLES TO BE ADJUSTED	EACH	1	1			
			INLETS TO BE ADJUSTED WITH NEW TYPE 3V FRAME AND GRATE	EACH	1	1			
*			VALVE VAULTS TO BE ADJUSTED	EACH	1				1
•			VALVE BOXES TO BE ADJUSTED	EACH	2				2
	S		FRAMES AND GRATES, TYPE 3V	EACH	1	1			
			REMOVING CATCH BASINS	EACH	1	1			
			COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	797	797			
•		63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2			
•		63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2	2			
		67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	5	5			
		67100100	MOBILIZATION	L SUM	1	1			
		70300100	SHORT TERM PAVEMENT MARKING	FOOT	200	200			
		70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	100	100			
		72000100	SIGN PANEL - TYPE 1	SQ FT	18	18			
		72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	7	7			
		72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	55	55			
•		78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	42	42			
•		78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3,087	3,087			
•		78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	168	168			
		78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	51	51			

WILLS BURKE KELSEY ASSOCIATES LTD.

WBK 116 West Main Street, Suite 201
St. Chaefee, Illinois 60174

USER NAME = nparris DESIGNED -REVISED -DRAWN -REVISED -PLOT SCALE = 1:1 CHECKED -REVISED -PLOT DATE = 12/15/2014 DATE - 12/15/2014 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE. 2421 SECTION SUMMARY OF QUANTITIES 11-00298-00-BR SCALE: SHEET NO. 3 OF 4 SHEETS STA. TO STA.

			SUMMARY OF QUA	ANTITIES	[			TION CODE	
SPECIALTY		CODE	ITEM	UNIT	TOTAL	ROADWAY 0004		TRAINEES 0042	UTILITIES 0043
I TEM	PROVISION	NO. 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	QUANTITY 43	URBAN 43	URBAN	URBAN	URBAN
	S		GUARDRAIL MARKERS, TYPE A		4				
				EACH	4	4			
•	S		BARRIER WALL MARKERS, TYPE B	EACH	4	4			
•	S		TERMINAL MARKER - DIRECT APPLIED	EACH	2	2			
*	S		DETECTOR LOOP REPLACEMENT	FOOT	220	220			
	S	X0326806	WASHOUT BASIN	L SUM	1	1			
	S	X0350810	BOLLARD REMOVAL	EACH	2	2			
•	S	X2090215	SELECT GRANULAR BACKFILL, SPECIAL	CU YD	17				17
	S	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	100	100			
	S	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	4	4			
	S	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	2	2			
	S		HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SO YD	1,094	1,094			
	S		CONCRETE WEARING SURFACE, 5"			1,094			
				SO YD	184		184		
•	S		WATER MAIN TO BE ABANDONED, 12"	FOOT	211				211
	S		GRANULAR BACKFILL FOR STRUCTURES	CU YD	97		97		
	S	X6020074	INLETS, TYPE A, TYPE 3V FRAME AND GRATE	EACH	3	3			
	S	X6020116	CONTROL STRUCTURES, 6' DIAMETER (SPECIAL)	EACH	1	1			
•	S	X6310195	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT), MODIFIED	EACH	2	2			
•	S	X6310214	TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)	EACH	2	2			
	S	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
	S	X7010237	CHANGEABLE MESSAGE SIGN, SPECIAL	CAL DA	28	28			
	S	XX002895	SANITARY MANHOLES TO BE RECONSTRUCTED WITH NEW FRAME & LID	EACH	3	3			
	S		NON-PRESSURE CONNECTION	EACH					
	S		WATER VALVES TO BE REMOVED						1
	S			EACH					1
			STABILIZED CONSTRUCTION ENTRANCE	SO YD	150	150			
- '^	S		CONSTRUCTION LAYOUT	L SUM	1	1			
18.8 *	S	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	68	68			
*	S	Z0041900	POLYETHYLENE ENCASEMENT	FOOT	236				236
*	S	Z0045100	PRESSURE CONNECTION 12" X 12"	EACH	1				1
	S	Z0055905	TEMPORARY CONSTRUCTION FENCE	FOOT	200	200			
	S	Z0056608	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	53	53			
	S	Z0056612	STORM SEWER (WATER MAIN REQUIREMENTS) 18 INCH	FOOT	45	45			
	S	Z0076600	TRAINEES	HOUR	500			500	
			TRAINEES TRAINING PROGRAM GRADUATE						
			Pipe Underdrains "4"	HOUR	500 Zoo			500	

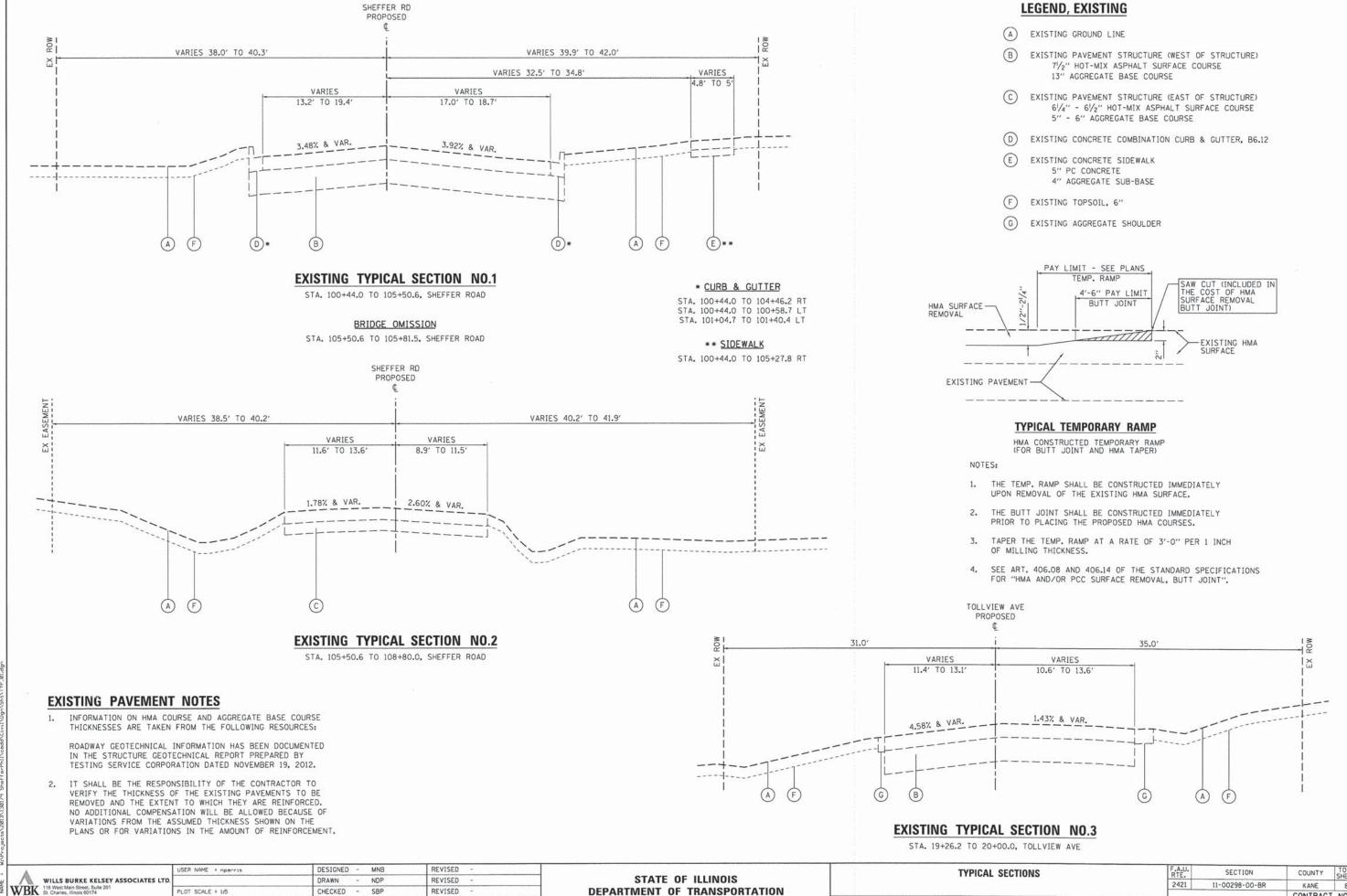
WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris DESIGNED -REVISED -DRAWN -REVISED -PLOT SCALE = 1:1 CHECKED -REVISED -DATE - 12/15/2014 REVISED PLOT DATE = 12/15/2014

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES SHEET NO. 4 OF 4 SHEETS STA. TO STA.

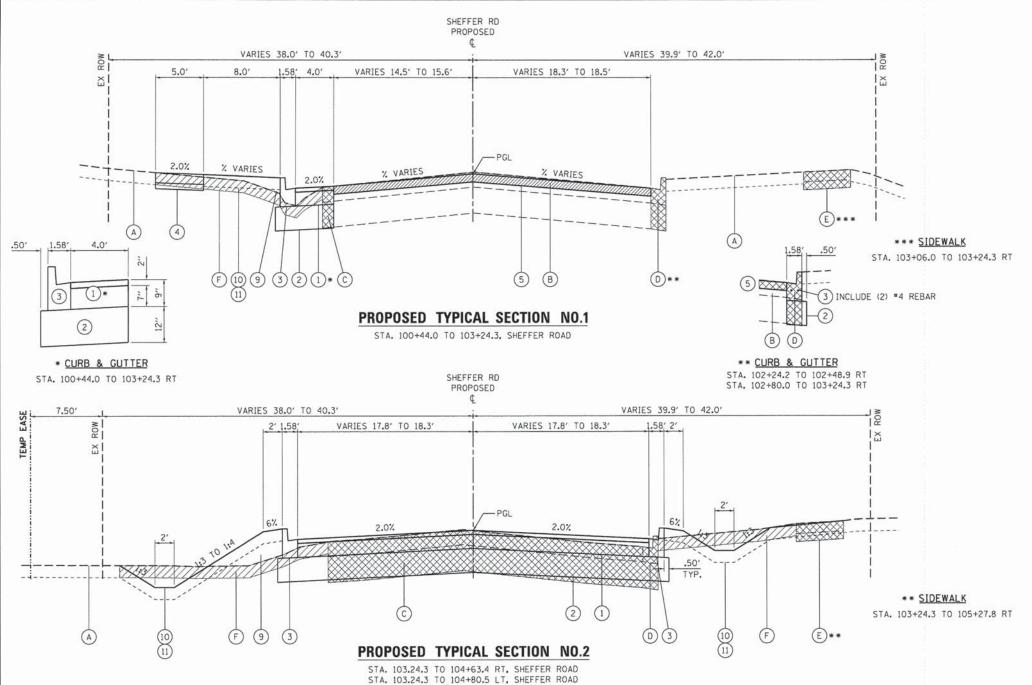
F.A.U. RTE. 2421 SECTION 11-00298-00-BR



CHECKED - SBP REVISED PLOT SCALE = 1:5 PLOT DATE = 12/12/2014 DATE 12/15/2014 REVISED

DEPARTMENT OF TRANSPORTATION

	TYPIC	AL SECT	IONS		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
					2421	11-00298-00-BR	KANE	85	8
 							CONTRACT	NO.61E	308
SHEET NO. 1	OF 3	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		



### LEGEND, EXISTING

- A EXISTING GROUND LINE
- (B) EXISTING SURFACE COURSE REMOVAL, VARIABLE DEPTH (XX4401198)
- (C) EXISTING PAVEMENT REMOVAL, FULL DEPTH (44000100)
- D) EXISTINT CONCRETE COMBINATION CURB & GUTTER REMOVAL (44000500)
- E EXISTING CONCRETE SIDEWALK REMOVAL (44000600)
  (INCLUDES AGG SUB-GRADE)
- (F) EXISTING TOPSOIL STRIPPING, 6" (20201200)

## LEGEND, PROPOSED

- 7" PROPOSED PAVEMENT STRUCTURE
  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (40603335)
  HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5" (40603080)
- 2) AGGREGATE SUBGRADE IMPROVEMENT, 12" (30300112)
- CONCRETE COMBINATION CURB & GUTTER, TYPE B-6.12 (60603800)
- PORTLAND CEMENT CONCRETE SIDEWALK, 5
  PC CONCRETE, 5" (42400200)
  SUBBASE GRANULAR MATERIAL, TY B. 4" (31101100)
- PROPOSED PAVEMENT OVERLAY

  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (40603335)

  HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 21/4" & VARIES (40603080)
- 6) 7" PROPOSED HOT-MIX ASPHALT SHOULDER
  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (40603335)
  HOT-MIX ASPHALT SHOULDERS, 5" (48203017)
- HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, VARIABLE DEPTH (40603080)
- 8) GUARDRAIL (TYPE AS SPECIFIED)
- (9) STRUCTURAL EMBANKMENT
- (10) 6" TOPSOIL EXCAVATION AND PLACEMENT (21101505)
- (11) SEEDING (TYPE AS SPECIFIED) W/ EROSION CONTROL BLANKET

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ITEM	AIR VOIDS @ Ndes
SHEFFER ROAD - PAVEMENT STRUCTURE, 7"	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% <b>©</b> 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0. N50; 5" (2-1/4" MIN 4" MAX.).	4% <b>₽</b> 50 GYR.
SHEFFER ROAD - APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% № 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (2-1/4" MIN 4" MAX.).	4% @ 50 GYR.
HMA SHOULDERS 7"	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% <b>©</b> 50 GYR.
HOT-MIX ASPHALT SHOULDER (HMA BINDER IL-19 mm), 5" (2-1/4" MIN 4" MAX.)*	4% <b>©</b> 50 GYR.
DRIVEWAY PAVEMENT (P.E.)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% € 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 6" (2-1/4" MIN 4" MAX.)*	4% € 50 GYR.
HMA OVERLAY	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% € 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; VAR. DEPTH (2-1/4" MIN 4" MAX.).	4% @ 50 GYR.

### STRUCTURAL PAVEMENT DESIGN

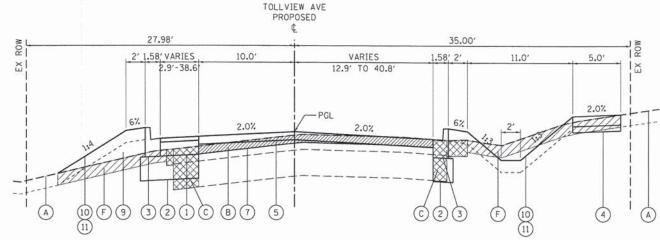
STRUCTURAL DESIGN TRAFFIC: Year 2025
PV = 3852 SU = 162 MU = 41
ROAD/STREET CLASSIFICATION: Class 2
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P = 95 S = 4 M = 1
TRAFFIC FACTOR: Actual TF = 0.345 AC Type = PG 64-22
Minimum TF = NA

PG GRADE: Binder = PG 64-22 / 58-22 Surface = PG 64-28 SUBGRADE SUPPORT RATING: SSR = POOR

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQYD/IN.

THE AC TYPE FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS, FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

\*NUMBER OF LIFTS TO BE DETERMINED BY THE ENGINEER.



## PROPOSED TYPICAL SECTION NO.3

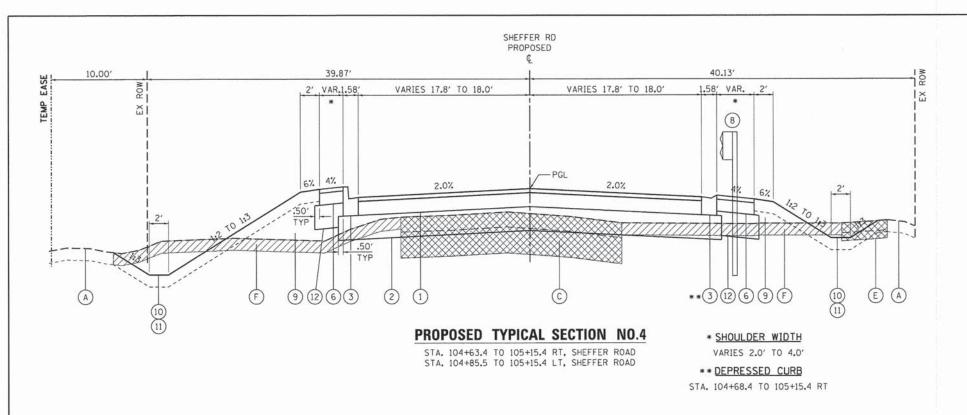
STA. 19+26.2 TO 20+00.0. TOLLVIEW AVENUE

ì	A	1
ų.	WILLS BURKE KELSEY ASSOCIATES LTD.	Г
NA P	WBK 116 West Main Street, Suite 201 St. Charles, Illinois 60174	1
E		1

	USER NAME = nparris	DESIGNED	-	MNB	REVISED -	
TD.		DRAWN	-	NDP	REVISED -	
	PLOT SCALE = 1:5	CHECKED	-	SBP	REVISED -	
	PLOT DATE = 12/12/2014	DATE	-	12/15/2014	REVISED -	

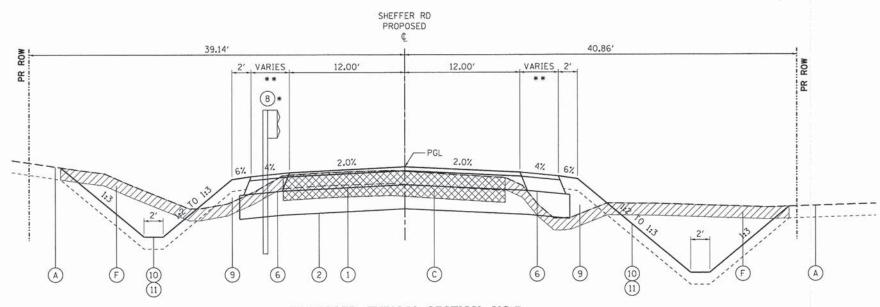
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	TYP	IC/	AL SECT	IONS		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
						2421	11-00298-00-BR	KANE	85	9
								CONTRACT	NO.61E	308
HEET NO. 2 OF 3	SHEETS	STA.	TO STA.		TILLINGIS FED.	The state of the s				



#### BRIDGE OMISSION

STA. 105+15.4 TO 106+16.6, SHEFFER ROAD



### \* GUARDRAIL

STA. 106+16.6 TO 106+34.6 LT

### \*\* SHOULDER WIDTH

VARIES 2.0' TO 10.4', RT VARIES 2.0' TO 11.4', LT

## PROPOSED TYPICAL SECTION NO.5

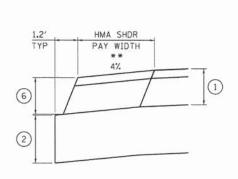
STA. 106+16.6 TO 108+50.0, SHEFFER ROAD

# LEGEND, EXISTING

- EXISTING GROUND LINE
- EXISTING SURFACE COURSE REMOVAL, VARIABLE DEPTH (XX4401198)
- EXISTING PAVEMENT REMOVAL, FULL DEPTH (44000100)
- (D) EXISTINT CONCRETE COMBINATION CURB & GUTTER REMOVAL (44000500)
- E EXISTING CONCRETE SIDEWALK REMOVAL (44000600) (INCLUDES AGG SUB-GRADE)
- EXISTING TOPSOIL STRIPPING, 6" (20201200)

### LEGEND, PROPOSED

- 1) 7" PROPOSED PAVEMENT STRUCTURE HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (40603335) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5" (40603080)
- AGGREGATE SUBGRADE IMPROVEMENT, 12" (30300112)
- CONCRETE COMBINATION CURB & GUTTER, TYPE B-6.12 (60603800)
- PORTLAND CEMENT CONCRETE SIDEWALK, 5" PC CONCRETE, 5" (42400200) SUBBASE GRANULAR MATERIAL, TY B, 4" (31101100)
- PROPOSED PAVEMENT OVERLAY HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (40603335) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 21/4" & VARIES (40603080)
- 7" PROPOSED HOT-MIX ASPHALT SHOULDER HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (40603335) HOT-MIX ASPHALT SHOULDERS, 5" (48203017)
- HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, VARIABLE DEPTH (40603080)
- GUARDRAIL (TYPE AS SPECIFIED)
- 9 STRUCTURAL EMBANKMENT
- 6" TOPSOIL EXCAVATION AND PLACEMENT (21101505)
- SEEDING (TYPE AS SPECIFIED) W/ EROSION CONTROL BLANKET
- SUBBASE GRANULAR MATERIAL, TYPE B (31101100)



# HMA SHOULDER DETAIL

# - GUARDRAIL POST GROUT (2) XX XX XX XX HOLE BACKFILLED WITH AGGREGATE AND CAPPED WITH

STA. 106+01.6 TO 108+50.0 LT/RT

**GUARDRAIL GROUT DETAIL** SEE STD. 630201 FOR ADDITIONAL DETAILS

	A	WILLS BURKE KELSEY	ACCOCIATES	ıTD
	WIDIZ		ASSOCIATES	LID
	MRK	116 West Main Street, Suite 201 St. Charles, Illinois 60174		
1	W			

USER NAME = nperris	DESIGNED -	MNB	REVISED -	
	DRAWN -	NDP	REVISED -	
PLOT SCALE = 1:5	CHECKED -	SBP	REVISED -	
PLOT DATE = 12/12/2014	DATE -	12/15/2014	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TYPICAL SECTIO	NS	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
		2421	11-00298-00-BR	KANE	85	10
Tarana a sa				CONTRACT	NO.61E	308
SHEET NO. 3 OF 3 SHEETS   S	STA. TO STA.		THE INOIS CED	AID DOO IECT		

# SCHEDULE OF QUANTITIES

20100110	TREE REMOV	AL (6 TO 15 UN	IITS DIAMETER	2)				542A0220	PIPE CULVERTS, CL	ASS A, TYPE 1 15	•			6	60219570	MANHOLES,	TYPE A, 4'-DIAN	METER, TYPE 3	V FRAME AN	D GRATE
	UNIT 6 6 14	LOCATION 105+53.6 105+83.3 105+88.4	O/S (LT) 22.6 31.6 31.0	O/S (RT)	COMMENTS				24 108+	47.70 LT -26.20 LT	COMMENTS AT DRIVEWA AT DRIVEWA					EACH 1	LOCATION 104+72.90 TOTAL	O/S (LT) 17.9	<u>O/S (RT)</u>	COMMENTS
	11 6	105+56.8 105+79.3		19.7 19.2	MULTI-STEM				40 TO	TAL				6	60236200	INLETS, TYP	E A, TYPE 8 GR	ATE		
	12 6	105+83.1 105+85.4		25.3 38.7				542A0229	PIPE CULVERTS, CL	ASS A, TYPE 1 24						EACH	LOCATION	O/S (LT)	O/S (RT)	COMMENTS
	12 12	106+01.8 106+07.5		34.5 28.5					FOOT LOCAT	TION <u>O/S</u> -12.70 RT	AT DRIVEWA	Y				1	102+53.20	52.0	10.72	
	6	107+79.3		29.2						-08.70 RT						1	TOTAL			
	91	TOTAL							32 TO	TAL				6	30236700	INLETS, TYP	PE A, TYPE 10 FF	RAME AND GRA	ATE	
20100210	TREE REMOV	AL (OVER 15 U	NITS DIAMETE	R)				550A0050	STORM SEWERS, CL	LASS A, TYPE 1 1	2"					EACH 1	LOCATION 104+92.00	O/S (LT)	O/S (RT) 17.9	COMMENTS
	<u>UNIT</u> 22.0	LOCATION 105+17.2	O/S (LT) 24.2	0/S (RT)	COMMENTS					A. UP STA. D +45.9 103+30		O/S DN. 28.1 RT	COMMENTS			1	TOTAL			
	18.0	105+19.2	22.1						20 102-	+53.2 102+45	.9 52.0 LT	24.2 LT								
	40.0	TOTAL							4 104-	+30.0 102+45 +27.6 104+27	.5 18.1 RT	24.2 LT 26.0 RT		6	60248900	VALVE VAU	LTS, TYPE A, 5'-	DIAMETER, TY	PE 1 FRAME,	CLOSED LID
20800150	TRENCH BAC	KFILL								+19.5 104+27 +27.5 104+27		26.0 RT 34.0 RT				EACH 1	104+51.80	O/S (LT) 31.6	O/S (RT)	COMMENTS VALVE VAULT NO. 1
	VOLUME		PIPE DIA.	LENGTH	DEPTH	COEFF.				+87.0 107+72 +72.9 104+72		17.9 LT 17.9 RT				1	106+32.00		24.3	VALVE VAULT NO. 2
	CU YD	LOCATION 102+45.90	INCH 12	<u>FT</u> 44.0	<u>FT</u> 2.5	CU YD/LF 0.184	COMMENTS STORM SEWER			+92.0 104+72 +72.9 104+72		17.9 RT 26.6 RT				2	TOTAL			
	2	102+37.90	12	12.0 32.0	1.2	0.132	STORM SEWER STORM SEWER		(10) S200	TAL	SA CAPACES	2000 000		6	60255500	MANHOLES	TO BE ADJUSTE	ED.		
	2	104+72.90 104+79.90	12 12	10.0	2.3	0.163	STORM SEWER									EACH	LOCATION	O/S (LT)	0/S (RT)	COMMENTS
	2	104+79.90 104+72.90	12 12	15.0 4.0	2.3 3.3	0.163 0.268	STORM SEWER STORM SEWER	550A0090	STORM SEWERS, CL	PADAZON BOLDAN BO						1	103+30.70		28.1	STORM MANHOLE
	2 2	106+47.75 107+12.73	15 24	14.0 14.0	1.7 2.4	0.121 0.116	DRIVEWAY CULVERT DRIVEWAY CULVERT			A. UP STA. D +72.9 105+53		<u>O/S DN.</u> 34.1 RT	COMMENTS			1	TOTAL			
	2 2	108+08.73 108+26.24	24 15	14.0 14.0	2.2 1.4	0.116 0.121	DRIVEWAY CULVERT DRIVEWAY CULVERT			TAL				6	60260505	INLETS TO	BE ADJUSTED W	ITH NEW TYPE	3V FRAME	AND GRATE
	16	106+32.02	12	48.0	3.8	0.320	WATER MAIN	56400510	FIRE HYDRANTS TO	BE REMOVED AN	D REPLACED					EACH 1	LOCATION 103+29.78	O/S (LT)	O/S (RT) 18.7	COMMENTS
	50	TOTAL							EACH LOCAT			COMMENTS				1.0	TOTAL		10.7	
50105220	PIPE CULVE	RT REMOVAL							1 102-	+35.9 26.2 +36.3										
	FOOT	LOCA	11 Sept 1 19 Sept 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0/5	COMMENTS				100		21.2			6	60265700	VALVE VAU	LTS TO BE ADJI	JSTED		
	93 21	STA. 102+09.3 STA. 105+82.4	TO 106+03.6	LT LT	15" CMP 15" CMP					TAL						EACH 1	104+38.00	O/S (LT) 27.9	O/S (RT)	COMMENTS VALVE VAULT
	26 31	STA. 106+31.9 STA. 106+89.1	TO 107+20.2	RT RT	15" CMP 12" CMP			56400825	FIRE HYDRANT WITH	H AUXILIARY VAL	VE, VALVE BOX	AND TEE				1	TOTAL			
	29 27	STA. 107+92.7 STA. 108+13.2		RT LT	12" CMP				1 10CAT	TION O/S (L +52.80 23.1		COMMENTS	1		60266600		ES TO BE ADJU	OTED.		
	227	TOTAL							то	TAL					30200000				0/0/07	
54213660	PRECAST RE	INFORCED CON	NCRETE FLARE	D END SECT	TONS 15"			60203905	CATCH BASINS, TYP		TVDE 1 EDAME	CLOSED LID				EACH 1	102+54.50	0/S (LT) 18.2	O/S (RT)	COMMENTS
	EACH	LOCATION	O/S (LT)	O/S (RT)				00203303								1	102+58.50	16.5		
	1	106+33.70 106+61.80	35.6 32.4	0.0 (11.1)	AT END AT END				1 104+	TION O/S (L +77.90	O/S (RT) 34.7	COMMENTS	•			2	TOTAL			
	1	108+07.70	23.8		AT END				1 то	TAL				6	60404305	FRAMES AN	D GRATES, TYP	E 3V		
	1	108+43.80	24.1		AT END			60205605	CATCH BASINS, TYP	PE A, 5'-DIAMETER	į.					EACH 1	LOCATION 102+45.90	O/S (LT) 24.2	O/S (RT)	COMMENTS
	4	TOTAL			44000				EACH LOCAT			COMMENTS	1			1				
54213663	77000000	INFORCED CON								+45.90 24.2				6	60500050	REMOVING	CATCH BASINS			
	EACH 1	105+53.20	O/S (LT)		AT END				1 TO	TAL						EACH	LOCATION	O/S (LT)	O/S (RT)	COMMENTS
	1	TOTAL						60218400	MANHOLES, TYPE A	, 4'-DIAMETER, T	PE 1 FRAME, CL	OSED LID				1	104+27.50		26.0	2 <del>000 000 000 000 000</del> 0
54213669	PRECAST RE	INFORCED COM	NCRETE FLARE	ED END SECT	TIONS 24"				1 102+	TION O/S (L +49.50	O/S (RT) 28.8	COMMENTS	1			1	TOTAL			
	EACH	LOCATION	O/S (LT)		COMMENTS				TO	OTAL										
	1	106+96.60 107+27.90		28.8	AT END AT END			60219200	MANHOLES, TYPE A	, 4'-DIAMETER, T	PE 10 FRAME AN	D GRATE								
	1	107+94.60 108+22.90		29.1 29.3	AT END AT END			71. det 2000 10 OCT.	EACH LOCA			COMMENTS	,							
	4	TOTAL								+72.90	17.9									

MAME = Wi\Projects\2013\130179 ShefferPhil\codd\Civil\Ogn\S

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

TOTAL

# SCHEDULE OF QUANTITIES

72000100	SIGN PANEL	TYPE 1				X2090215	SELECT GRA	ANULAR BACKFI	LL, SPECIAL					XX008945	WATER VAL	VES TO BE REM	MOVED		
	SQ FT 6 2 3	LOCATION 102+54.1 102+97.9 102+97.9 105+28.9	O/S (LT) 40.1 39.4 39.4 20.1	O/S (RT)	COMMENTS R1-1 (STOP) STREET NAME SIGN (SHEFFER RD) STREET NAME SIGN (TOLLVIEW RD) OM-3L (OBJECT MARKER)		VOLUME CU YD 17	LOCATION 106+32.02	PIPE DIA. INCH 12	LENGTH FT 48.0	<b>DEPTH FT</b> 3.8	WIDTH ET 2.5	COMMENTS WATER MAIN		1 1	LOCATION 104+48.6 TOTAL	O/S (LT) 33.8	O/S (RT)	COMMENTS
	3	106+03.1	20.1	20.1	OM-3L (OBJECT MARKER)		- 7.7							Z0017400	DRAINAGE 8	& UTILITY STRU	CTURES TO BE	ADJUSTED	
		2222				X6020074	INLETS, TYP	PE A, TYPE 3V FF	RAME AND GR	ATE					1207200	100000000	-242131201	0.002.002.00	F-C-92109-D-DWW-021
	18	TOTAL					EACH	LOCATION	O/S (LT)	O/S (RT)	COMMENTS				EACH	103+30,70	O/S (LT)	O/S (RT) 28.1	COMMENTS STORM MANHOLE
72400100	REMOVE SIG	GN PANEL ASSE	MBLY - TYPE	A			1	102+30.00 104+27.60	18.5	18.1	COMMENTS				1	104+38.00 105+27.80	27.9 37.0	20.1	VALVE VAULT SANITARY MANHOLE
	EACH 1	102+39.10	O/S (LT) 28.4	O/S (RT)	COMMENTS R1-1 (STOP SIGN)		1 3	104+87.00 — TOTAL	17.9						2	RDWY WATERMAIN			
	1	102+92.10 104+78.00	28.4	14.6	STREET SIGN (TOLLVIEW) W1-8		3	TOTAL								WATERWAIN			
	i	105+11.70		12.4	W1-8	X6020116	CONTROL S	TRUCTURES, 6'	DIAMETER (SF	PECIAL)					3	TOTAL			
	1	105+46.90	14.6		OM-3L														
	1	105+49.30		10.4	OM-3R		EACH	LOCATION	O/S (LT)	O/S (RT) 26.0	COMMENTS	DETAIL C. (	CHEETC	Z0045100	PRESSURE	CONNECTION 1:	2" X 12"		
	1	105+83.10		10.4	OM-3R		-1	104+27.50		26.0	SEE DETAIL ON D	JE IAILS S	SHEETS		EACH	LOCATION	O/S (LT)	O/S (RT)	COMMENTS
	7	TOTAL					1	TOTAL							1	106+32.00	0/0 (21)	24.3	OGMMENTO
72800100	TELESCOPII	NG STEEL SIGN	SUPPORT			XX002895	SANITARY N	MANHOLES TO B	E RECONSTRI	UCTED WITH	NEW FRAME & LID	•			1	TOTAL			
	FOOT	LOCATION	O/S (LT)	0/S (RT)	COMMENTS		EACH	LOCATION	O/S (LT)	O/S (RT)	COMMENTS			Z0056608	STORM SEV	VER (WATER MA	AIN REQUIREM	NTS) 12 INC	н
	13	102+54.1	40.5		R1-1 (STOP)		1	102+53.20		12.7					5007	STA UD	074 811	010.110	
	18 12	102+97.9 105+28.9	39.4 20.1		STREET NAME SIGN OBJECT MARKER		1	105+19.10 105+27.80	37.0	10.6					FOOT 53	STA. UP 102+45.9	STA. DN. 102+45.9	O/S UP 24.2 LT	O/S DN. COMMENTS 28.8 RT LABEL P2
	12	105+28.9	20.1		OBJECT MARKER		:1	105+27.00	37.0						55	102743.9	102+45.9	24.2 LI	20.0 KT LABEL P2
	12	100.00.1	20.1		ODDEST INTOTES		3	TOTAL							53	TOTAL			
	55	TOTAL																	
						XX007169	NON-PRESS	URE CONNECTION	N					Z0056612	STORM SEV	VER (WATER MA	AIN REQUIREM	ENTS) 18 INC	н
X0350810	BOLLARD R	EMOVAL					E4.011	LOCATION	0/0 // 7)	0/0 (DT)	COMMENTS				FOOT	OTA UD	OTA DU	0/0 ///	0.0 0.0
	EACH 1	LOCATION 101+36.60	O/S (LT)	O/S (RT)	COMMENTS		EACH 1	104+48.6	O/S (LT) 33.8	O/S (RT)	COMMENTS				<u>FOOT</u> 45	STA. UP 104+27.5	STA. DN. 104+72.9	<u>O/S UP</u> 26.0 RT	O/S DN. COMMENTS 26.6 RT
	1	101+89.40	32.5				1	TOTAL							45	TOTAL			

# **REMOVAL SCHEDULE**

		40600982	40600990	44000100	44000200	44000300	44000500	44000600	4420175	44201729	44201733	44201761	X4401198
LOCA	ATION	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	TEMPORARY RAMP	PAVEMENT REMOVAL	DRIVEWAY PAVEMENT REMOVAL	CURB REMOVAL	COMBINATION CURB AND GUTTER REMOVAL	SIDEWALK REMOVAL	CLASS D PATCHES, TY I, 7 INCH	CLASS D PATCHES, TY II, 7 INCH	CLASS D PATCHES, TY III, 7 INCH	CLASS D PATHCES, TY I, 10 INCH	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPT
		(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(FOOT)	(FOOT)	(SQ FT)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)
SHEFFE	ER ROAD						0,000						
100+00.00	100+44.00												
100+44.00	101+25.00	17.0	75.0	38.3	90.7	87.0	5.0					1.0	223.7
101+25.00	102+00.00		16.0	22.0	121.0	46.0						0.6	275.0
102+00.00	102+50.00		16.0	13.8			25.0		2.0	325-225	28.5		166.4
102+50.00	103+00.00	13.0	29.0	27.9			14.1		2.8	5.3			340.3
103+00.00	103+50.00			97.8			50.0						87.7
103+50.00	104+00.00			180.5			50.0						
104+00.00	104+50.00		1	174.5			46.3						
104+50.00	105+00.00			143.1				87.9					
105+00.00	105+30.40			75.3				244.6					
BRI	IDGE			91.5									
106+01.60	106+75.00			190.0	37.2								
106+75.00	107+50.00			192.9	51.6								
107+50.00	108+08.70			152.1	34.2								
108+08.70	108+50.70			111.8	58.5								
108+50.70	109+00.00												
OTAL		30.0	136.0	1511.5	393.2	133.0	190.4	332.5	4.8	5.3	28.5	1.6	1093.1
DJUSTED TOT	ΓAL	30.0	136.0	1512.0	394.0	133.0	191.0	333.0	5.0	6.0	29.0	2.0	1094.0

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

2 TOTAL

USER NAME = nparris	DESIGNED -	MNB	REVISED -
	DRAWN -	NDP	REVISED -
PLOT SCALE = 1:1	CHECKED -	SBP	REVISED -
PLOT DATE = 12/15/2014	DATE -	12/15/2014	REVISED -

	SCHEDULE OF QUANTITIES				F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
					2421	11-00298-00-BR	KANE	85	12
_	100000000000000000000000000000000000000						CONTRACT	NO.61E	308
	SHEET NO. 2 OF	6 SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

# **EARTHWORK SCHEDULE**

			END AREAS				TOPSOIL			EARTH	IWORK		SUB	GRADE IMPROVE	MENT
LOCATION	TOPSOIL	TOPSOIL	EXCAVATION	EMBANKMENT	UNDERCUT	21101505			20200100		20400800	20300100	20201200	30300001	21001000
	STRIPPING EMBANKMENT (C) (F)			TOPSOIL EXCAVATION & PALCEMENT	TOPSOIL EMBANKMENT	BALANCE WASTE(+) OR SHORTAGE (-) (NO SHRINKAGE)	EARTH EXCAVATION	EMBANKMENT	BALANCE WASTE (+) or SHORTAGE (-)	CHANNEL EXCAVATION	REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	AGGREGATE SUBGRADE IMPROVEMENT	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION		
	(SQ FT)	(SQ FT)	(SQ FT)	(SQ FT)	(SQ FT)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(SQ YD)
MAINLINE															
100+00.00	0.0	0.0	0.0	0.0	0.0		Sec. 1		92734-T.	II.	NAME:			9555	
100+44.00	5.5	3.2	2.2	0.0	0.0	4.5	2.6	1.9	1.8	0.0	1.5		0.0	0.0	0.0
100+87.02	0.0	0.0	10.9	0.0	0.0	4.4	2.5	1.9	10.4	0.0	8.8		0.0	0.0	0.0
101+25.00	10.3	5.7	9.9	0.7	0.0	7.3	4.0	3.3	14.6	0.5	11.9		0.0	0.0	0.0
101+66.93	0.0	0.0	10.2	0.0	0.0	8.0	4.4	3.6	15.7	0.6	12.7		0.0	0.0	0.0
102+00.00	8.7	4.0	3.6	3.1	0.0	5.3	2.5	2.9	8.5	1.9	5.3		0.0	0.0	0.0
102+50.00	0.0	0.0	0.0	0.0	0.0	8.1	3.7	4.4	3.3	2.9	0.0		0.0	0.0	0.0
102+75.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
103+00.00	2.1	1.0	2.5	0.2	0.0	0.9	0.5	0.5	1.1	0.1	0.9		0.0	0.0	0.0
103+50.00	16.7	14.0	15.2	10.7	43.9	17.4	13.9	3.4	16.4	10.1	3.9		40.7	40.7	122.0
104+00.00	15.8	12.9	9.6	23.9	9.8	30.1	24.9	5.2	23.0	32.1	-12.5		49.8	49.8	149.3
104+50.00	17.4	13.4	6.5	39.6	13.4	30.7	24.3	6.4	14.9	58.8	-46.1		21.5	21.5	64.5
105+00.00	24.5	15.0	8.4	40.4	25.1	38.8	26.3	12.5	13.8	74.1	-62.4		35.7	35.7	107.0
105+15.41	26.1	16.3	26.8	25.2	19.3	14.4	8.9	5.5	10.1	18.7	-10.2		12.7	12.7	38.0
105+30.41	28.8	16.6	28.5	37.5	0.0	15.2	9.1	6.1	15.4	17.4	-4.4		5.4	5.4	16.1
BRIDGE	20.0	10.0													
106+01.58	31.0	19.0	17.8	94.7	0.0					7				0.0	0.0
106+16.58	28.2	16.8	16.8	70.1	0.0	16.5	10.0	6.5	9.6	45.8	-37.6		0.0	0.0	0.0
106+47.75	18.4	10.3	16.2	38.2	0.0	26.9	15.6	11.3	19.1	62.5	-46.3		0.0	0.0	0.0
106+75.00	28.1	21.9	40.7	27.1	0.0	23.5	16.3	7.2	28.7	33.0	-8.6		0.0	0.0	0.0
107+12.73	10.1	9.5	24.0	5.2	0.0	26.7	21.9	4.8	45.2	22.6	15.8		0.0	0.0	0.0
107+50.00	23.9	21.2	56.7	7.3	0.0	23.5	21.1	2.3	55.7	8.6	38.7		0.0	0.0	0.0
107+30.00	8.5	6.9	22.1	9.0	0.0	35.2	30.6	4.7	85.7	17.8	55.1		0.0	0.0	0.0
108+26.24	17.6	12.8	69.2	5.1	0.0	8.5	6.4	2.1	29.6	4.6	20.6		0.0	0.0	0.0
108+50.00	21.6	19.2	55.8	8.0	0.0	17.2	14.1	3.2	55.0	5.8	41.0		0.0	0.0	0.0
109+00.00	0.0	0.0	0.0	0.0	0.0	20.0	17.7	2.3	51.7	7.4	36.6		0.0	0.0	0.0
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CHANNEL EX.										ii.			F 92		
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0+10.00			0.0							V.		0.0			
0+16.99			36.7							1		4.8			
0+30.72			69.9									27.1			
0+49.72			88.1									55.6			
0+49.72			50.8									48.9			
0+80.13			59.0									23.2			
0+89.80			0.0							3		10.6			
			(7.54)							ĺ		ERSSN:			
SHRINKAGE FACT	TOR	1	15%		TOTAL	383.2	281.3	101.8	529.0	425.0	24.6	170.2	165.6	165.6	496.7
		T. West, and the second			ADJ. TOTAL	385.0	285.0	105.0	530.0	430.0	+25.0	175.0	166.0	166.0	497.0

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A	WILLS BURKE KELSEY ASSOCIATES LTD.	
WBK	116 West Main Street, Suite 201 St. Charles, Illinois 60174	
V	<b>\</b>	Г

	USER NAME = nperris	DESIGNED - MNB	REVISED -	
D.		DRAWN - NDP	REVISED -	1
	PLOT SCALE = 1:1	CHECKED - SBP	REVISED -	]
	PLOT DATE = 12/15/2014	DATE - 12/15/2014	REVISED -	1

STATI	E 01	FILLINOIS
DEPARTMENT	0F	TRANSPORTATION

	SCHEDULE OF		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
				2421	11-00298-00-BR	KANE	85	13
i					V	CONTRAC	T NO.61E	308
SCALE:	SHEET NO. 3 OF 6 SHEE	S STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

# **EARTHWORK SUMMARY**

		EARTH	WORK			TOPSOIL		SUBGRADE IMPROVEMENT		
	20200100		20400800	20300100	21101505			20201200	30300001	21001000
LOCATION	EARTH EXCAVATION	EMBANKMENT	FURNISHED EXCAVATION BALANCE WASTE (+) or SHORTAGE (-)	CHANNEL EXCAVATION	TOPSOIL EXCAVATION & PLACEMENT	TOPSOIL EMBANKMENT	BALANCE WASTE(+) OR SHORTAGE (-) (NO SHRINKAGE)	REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	AGGREGATE SUBGRADE IMPROVEMENT	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(SQ YD)
MAINLINE	530.0	430.0	25.0	175.0	385.0	285.0	105.0	166.0	166.0	497.0
R.E. DESCRETION								100.0	100.0	300.0
SUB-TOTAL	530.0	430.0	+25	175.0	385.0	285.0	+105.0	266.0	266.0	797.0
TOTAL	530.0		+25	175.0	385.0			266.0	266.0	797.0

### EARTHWORK GENERAL NOTES

ALL EARTHWORK QUANTITIES ARE CALCULATED BY THE METHOD OF AVERAGE END AREAS USING THE PLAN CROSS SECTIONS.

SHRINKAGE FACTOR, ASSUMED TO BE 15% FOR THIS PROJECT IS ESTIMATED FOR THE PURPOSE OF DETERMINING A BALANCE OF EARTHWORK, THE CONTRACTOR SHALL ESTIMATE HIS OWN SHRINKAGE FACTORS IN DETERMINING HIS EARTHWORK, NO PAYMENT WILL BE MADE ON EARTHWORK QUANTITIES DUE TO VARIATION IN THE SHRINKAGE FACTOR SINCE EARTHWORK IS MEASURED IN ITS FINAL POSITION.

NO SHRINKAGE FACTOR WAS APPLIED WHEN CALCULATING TOPSOIL QUANTITIES.

RECOMMENDATIONS OUTLINED IN THE STRUCTURE GEOTECHNICAL REPORT PREPARED BY TESTING SERVICE CORPORATION DATED JULY 17, 2012 AND ADDITIONAL LPC-663 SAMPLING & ANALYSIS REPORT DATED MAY 22, 2014 WERE USED IN PREPARATION OF THE ROADWAY PLANS AND RELATED QUANTITY CALCULATIONS.

SIX (6) INCHES OF TOPSOIL WAS ASSUMED ON THIS PROJECT FOR THE PURPOSE OF CALCULATING TOPSOIL STRIPPING QUANTITIES.

UNDERCUTS WILL BE PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL. AFTER TOPSOIL STRIPPING AND VEGATATION CLEARING AND PRIOR TO UNDERCUTTING, THE SUBGRADE WILL BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER IN ACORDANCE WITH THE IDOT SUBGRADE STABILITY MANUAL TO DETERMINE REMEDIAL TREATMENT.

TESTING OF SUBGRADES AND EMBANKMENTS WILL BE REQUIRED. TESTING REQUIRMENTS WILL BE PER THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND THE SUBGRADE STABILITY MANUAL. IF PROOF ROLLS ARE REQUIRED BY THE ENGINEER, THE COST SHALL BE CONSIDERED INCLUDED IN THE COST OF EXCAVATION.

IN ADDITION TO ANY AREAS SHOWN ON THE PLANS, 100 CY OF ADDITIONAL AGGREGATE SUBGRADE IMPROVEMENT (ASI) HAS BEEN PROVIDED FOR LOCATIONS WHERE SOILS ARE DETERMINED TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ASI WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE SOILS ENGINEER (BY USE OF A CONE PENETROMETER IN CONJUNCTION WITH THE IDOT SUBGRADE STABILITY MANUAL AND ROLL USING FULL LOAD SEMI), IF UNSUITABLE AND/OR UNSTABLE MATERIALS ARE NOT ENCOUNTERED, THEN THE OUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

EARTH AND TOPSOIL EXCAVATION SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING OR SEQUENCING OF CONTRACTORS OPERATIONS THAT REQUIRE STOCKPILING OF MATERIALS FOR LATER USE FOR REDISTRIBUTION AND RESPREADING IN SHOULDERS AND CONSTRUCTING OF EMBANKMENTS.

SCALE:

TOPSOIL EXCAVATION AND PLACEMENT INCLUDES EXCAVATION, TRANSPORTING, AND TEMPORARILY STOCKPILING, TRANSPORTING FROM THE STOCKPILE AND PLACING THE TOPSOIL TO THE THICKNESS SPECIFIED IN ITS FINAL POSITION.

WILLS BURKE KELSEY ASSOCIATES LTD. WBK 116 West Main Street, Suite 201 St. Charles, Illinois 60174

USER NAME = nperris	DESIGNED	-	MNB	REVISED -	
	DRAWN	=	NDP	REVISED -	
PLOT SCALE = 1:1	CHECKED	-	SBP	REVISED -	1-1-1
PLOT DATE = 12/15/2014	DATE	2	12/15/2014	REVISED -	

STATI	E 01	FILLINOIS
DEPARTMENT	OF	TRANSPORTATION

SCHEDULE OF QUANTITIES				F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
				2421	11-00298-00-BR	KANE	85 14	14	
							CONTRAC	T NO.61E	308
EET NO. 4 OF 6 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT						

# **PAVEMENT SCHEDULE**

		30300112	31101100	40600275	40603080	40603335	42001430	42300400	42400200	48101500	48203017	60603800
LOCATION		AGGREGATE SUBGRADE IMPROVEMENT 12"	SUBBASE GRANULAR MATERIAL, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT BINDER COURSE, MIX D, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8"	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	AGGREGATE SHOULDERS, TYPE B 6"	HOT-MIX ASPHALT SHOULDERS, 5"	COMBINATION CONCRETE CUR AND GUTTER, TYPE B-6.12
		(SQ YD)	(SQ YD)	(POUND)	(TON)	(TON)	(SQ YD)	(SQ YD)	(SQ FT)	(SQ YD)	(SQ YD)	(FOOT)
SHEFFE	R ROAD									-		
100+00.00	100+44.00		0.2						1.6			
100+44.00	101+25.00	137.9	8.6	462.0	61.0	37.8		50.3	43.2			134.0
101+25.00	102+00.00	142.1	9.0	458.5	55.5	34.5		58.1	39.7			80.5
102+00.00	102+50.00	33.6	4.6	171.3	37.5	23.8			41.3	7.0		76.5
102+50.00	103+00.00	71.0		347.2	75.1	46.6						71.9
103+00.00	103+50.00	147.2		426.6	49.5	23.8						102.9
103+50.00	104+00.00	225.6		598.8	56.7	22.7						100.0
104+00.00	104+50.00	224.1		594.6	56.3	22.5						100.0
104+50.00	105+00.00	234.7		623.3	55.8	23.7					12.2	100.0
105+00.00	105+30.40	88.6		236.5	17.1	9.2	39.7				21.4	30.9
BRI	DGE	100000000		2.3		0.6				12	5.2	
106+01.60	106+75.00	126.3	3.1	494.4	45.8	37.0	26.7				119.3	
106+75.00	107+50.00	247.4	6.1	836.8	58.8	39.2					41.1	
107+50.00	108+08.70	188.1	3.1	592.3	46.0	26.6					26.1	
108+08.70	108+50.70	129.8	8.8	599.5	32.3	32.2					18.3	
108+50.70	109+00.00	CANCEL CONTRACTOR										
TOTAL		1996.40	43.11	6444.10	647.53	380.21	66.40	108.40	124.20	7.00	243.60	796.70
ADJUSTED TOT	AL	1997.0	44.0	6445.0	648.0	381.0	67.0	109.0	126.0	7.0	244.0	797.0

# PAVEMENT MARKING & GUARDRAIL SCHEDULE

		63100045	63100070	78000100	78000200	78000400	78000600	78000650	78200140	78200520	78201000	X6310195	X6310214
LOCATION		TRAFFIC BARRIER TERMINAL, TY 2	TRAFFIC BARRIER TERMINAL, TY 5	THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS	THERMOPLASTIC PAVEMENT MARKING LINE 4"	THERMOPLASTIC PAVEMENT MARKING LINE 6"	THERMOPLASTIC PAVEMENT MARKING LINE 12"	THERMOPLASTIC PAVEMENT MARKING LINE 24"	GUARDRAIL MARKERS, TYPE A	BARRIER WALL MARKERS, TYPE B	TERMINAL MARKER - DIRECT APPLIED	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT), MODIFIED	TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)
		(EACH)	(EACH)	(SQ FT)	(FOOT)	(FOOT)	(FOOT)	(FOOT)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)
SHEFFE	R ROAD												
100+00.00	100+44.00			1	(27.25-25)	09070							
100+44.00	101+25.00			20.8	148.0	78.0		26.1					
101+25.00	102+00.00				152.4	41.7							
102+00.00	102+50.00			20.8	96.0	48.0							
102+50.00	103+00.00	1			66.6			16.0					
103+00.00	103+50.00				292.8		16.6						
103+50.00	104+00.00				300.0		23.9						
104+00.00	104+50.00				300.0		6.7						
104+50.00	105+00.00				300.0		3.2						
105+00.00	105+30.40	1.0			152.4				2.0		1.0	1.0	
BRII	DGE		2.0		284.8					4.0			2.0
106+01.60	106+75.00	1.0			293.6				2.0		1.0	1.0	
106+75.00	107+50.00				300.0						18/28/		
107+50.00	108+08.70				234.8								
108+08.70	108+50.70				164.8								
108+50.70	109+00.00												
OTAL		2.0	2.0	41.6	3086.2	167.7	50.4	42.1	4.0	4.0	2.0	2.0	2.0
ADJUSTED TOT	AL	2.0	2.0	42.0	3,087.0	168.0	51.0	43.0	4.0	4.0	2.0	2.0	2.0

WILLS BURKE KELSEY ASSOCIATES LTD.

WBK 116 West Mein Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nperris	DESIGNED	-	MNB	REVISED -	
	DRAWN	-	NDP	REVISED -	
PLOT SCALE = 1:1	CHECKED	-	SBP	REVISED -	
PLOT DATE = 12/15/2014	DATE	-	12/15/2014	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	SCHEDULE OF QUANTITIES							F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET
	3	SCHEDULE OF GOANTHIES							SECTION	COUNTY	SHEETS	NO.
								2421	11-00298-00-BR	KANE	85	15
				_						CONTRACT	NO.61E	308
.1	SHEET NO.	5	OF	6	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

3\130179 ShefferPhII\cadd\Civil\Dgn\Sht\SCHEDULE.05.dg

# WATER MAIN SCHEDULE

		56100050	56100900	5610520	56109412	56109424	X5610662	Z0041900
LOCA	LOCATION		WATER MAIN 12"	WATER VALVES, 12"	D.I.P. WATER MAIN FITTINGS 12" 22.5^ BEND	D.I.P. WATER MAIN FITTINGS 12" 45^ BEND	WATER MAIN TO BE ABONDANED, 12"	POLYETHY- LENE ENCASEMENT
		(EACH)	(FOOT)	(EACH)	(EACH)	(EACH)	(FOOT)	(FOOT)
SHEFFE	R ROAD							
100+00.00	100+44.00							
100+44.00	101+25.00							
101+25.00	102+00.00							
102+00.00	102+50.00							
102+50.00	103+00.00							
103+00.00	103+50.00							
103+50.00	104+00.00							
104+00.00	104+50.00	1.0	1.5	1.0		1	1	2
104+50.00	105+00.00		52.0			1	64	52
105+00.00	105+30.40		30.4				44	30
BRI	DGE	1	71.2		2.0		71	71
106+01.60	106+75.00		80.0	1.0		2	30	80
106+75.00	107+50.00							
107+50.00	108+08.70							
108+08.70	108+50.70	1						
108+50.70	109+00.00							
TOTAL		1.0	235.1	2.0	2.0	4	210	235
ADJUSTED TOT	AL	1	236	2	2	4	211	236

# **SEEDING SCHEDULE**

		25000210	25000312	25000400	25000600
LOCA	TION	SEEDING, CLASS 2A	SEEDING, CLASS 4A	NITROGEN FERTILIZER NUTRIENT (SEE NOTE)	POTASSIUM FERTILIZER NUTRIENT (SEE NOTE)
		(ACRE)	(ACRE)	(POUND)	(POUND)
SHEFFE	R ROAD				
100+00.00	100+44.00	0.001		0.1	0.1
100+44.00	101+25.00	0.038		3.4	3.4
101+25.00	102+00.00	0.033		3.0	3.0
102+00.00	102+50.00	0.033		2.9	2.9
102+50.00	103+00.00	0.027		2.4	2.4
103+00.00	103+50.00	0.018		1.7	1.7
103+50.00	104+00.00	0.037		3.4	3.4
104+00.00	104+50.00	0.038		3.4	3.4
104+50.00	105+00.00	0.021	0.019	1.8	1.8
105+00.00	105+30.40		0.024		
BRII	DGE		0.014		
106+01.60	106+75.00	0.041	0.024	3.7	3.7
106+75.00	107+50.00	0.076		6.9	6.9
107+50.00	108+08.70	0.063		5.7	5.7
108+08.70	108+50.70	0.033		3.0	3.0
108+50.70	109+00.00	0.039		3.5	3.5
OTAL		0.497	0.081	44.80	44.80
ADJUSTED TOT	AL	0.50	0.25	45.00	45.00

NOTE: ONLY CLASS 2A SEED REQUIRES FERTILIZER NUTRIENTS

# **EROSION CONTROL SCHEDULE**

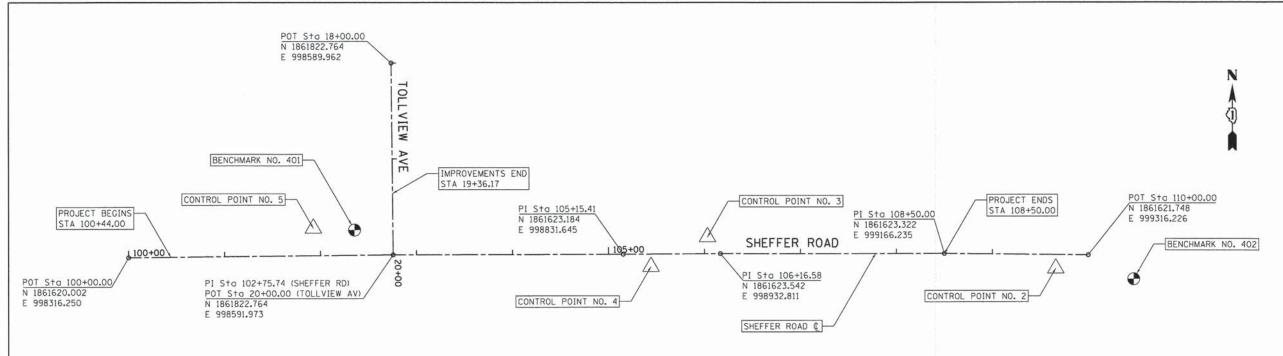
	Γ	25100630	28000250	28000305	28000400	28000500	28000510	28001100	28100105	28100107	28200200
LOCA	ATION	EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING (SEE NOTE)	TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER	INLET AND PIPE PROTECTION	INLET FILTERS	TEMPORARY EROSION CONTROL BLANKET	STONE RIPRAP, CLASS A3	STONE RIPRAP, CLASS A4	FILTER FABRIC
		(SQ YD)	(POUND)	(FOOT)	(FOOT)	(EACH)	(EACH)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)
SHEFFE	R ROAD										
100+00.00	100+44.00	6.50	0.50					6.50			
100+44.00	101+25.00	182.80	15.10					182.80			
101+25.00	102+00.00	158.90	13.10		13.50			158.90			
102+00.00	102+50.00	157.80	13.00		66.60		2.00	157.80			
102+50.00	103+00.00	131.00	10.80				1.00	131.00			
103+00.00	103+50.00	88.90	7.40	20.0	69.40		1.00	88,90			
103+50.00	104+00.00	181.10	15.00		50.00			181.10			
104+00.00	104+50.00	183.00	15.10	20.0	50.00		1.00	183.00			
104+50.00	105+00.00	189.70	15.70		68.90		5.00	189.70			
105+00.00	105+30.40	117.70	9.70		60.80			117.70			
BRI	DGE	66.70	5.50		49.80			66.70		90.60	90.60
106+01.60	106+75.00	312.60	25.80	20.0	135.90	1.00		312.60	2.70	1	2.70
106+75.00	107+50.00	368.60	30.50	10.0	138.00	1.00		368.60	2.70		2.70
107+50.00	108+08.70	306.40	25.30	10.0	111.40			306.40	5.30		5.30
108+08.70	108+50.70	159.40	13.20		64.60	2.00		159.40			
108+50.70	109+00.00	189.80	15.70		59.90			189.80			
MAINTE	ENANCE	200.00		20.0	100.00	2.00	2.00				
STRUC	TURAL									363.00	363.00
TOTAL		3000.90	231.40	100.00	1038.80	6.00	12.00	2800.90	10.70	453.60	464.30
ADJUSTED TOT	AL	3001.0	232.0	100.0	1039.0	6.0	12.0	2801.0	11.0	454.0	465.0

NOTE: CALCULATIONS BASED ON 4 APPLICATIONS TO ALL SEEDING AREAS

*			
ILE NAME =	WBK	WILLS BURKE KELSEY 116 West Main Street, Suite 201 St. Charles, Illinois 60174	ASSOCIATES LTD

USER NAME = nperris	DESIGNED	-	MNB	REVISED -	
	DRAWN	-	NDP	REVISED -	
PLOT SCALE = 1:1	CHECKED	-	SBP	REVISED -	
PLOT DATE = 12/15/2014	DATE	*	12/15/2014	REVISED -	

		SCI	HED	ULE	OF QU	ANTITIES		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
								2421	11-00298-00-BR	KANE	85	16
 	_	_		-					3	CONTRAC	NO.61E	308
SHEET	NO	. 6	OF	6	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		



# REFERENCE MARK

CITY OF AURORA CONTROL MONUMENT \*20 SOUTH
BRASS DISK LOCATED AT THE SOUTHWEST CORNER OF
INDIAN TRAIL ROAD AND FARNSWORTH AVE, APPROXIMATELY
1 FOOT SOUTH AND 1 FOOT EAST OF KEY OF WALK.
NORTHING 1863244.718
EASTING 998250.965 ELEVATION 709.91

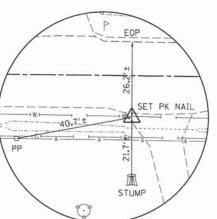
## LEGEND

= BENCH MARK LOCATION

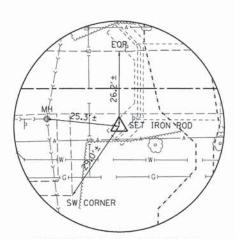
= HORIZONTAL CONTROL POINT LOCATION

HORIZONTAL CONTROL POINTS											
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION				
2	1861607.551	999282.398	706.100	PR_SHEFFER	109+66.32	14.552' RT	SET PK NAIL				
3	1861640.929	998919.366	697.740	PR_SHEFFER	106+03.19	17.434' LT	SET IRON ROD				
4	1861610.052	998860.483	698.330	PR_SHEFFER	105+44.20	13.234' RT	SET IRON ROD				
5	1861650.440	998508.810	706.090	PR_SHEFFER	101+92.86	28.500' LT	SET IRON ROD				

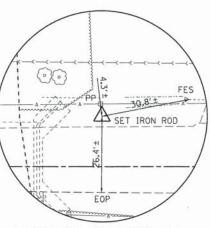
	BENCH MARKS (NAVD 88)										
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION				
401	1861648.656	998551.708	706.231	PR_SHEFFER	102+35.73	26.285' LT	NE FLANGE BOLT ON FIRE HYDRANT				
402	1861596.709	999363.626	707.885	N/A	N/A	N/A	SE FLANGE BOLT ON FIRE HYDRANT				



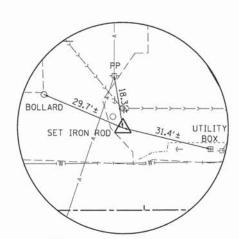
HORIZONTAL CONTROL POINT NO. 2



HORIZONTAL CONTROL POINT NO. 4



HORIZONTAL CONTROL POINT NO. 3



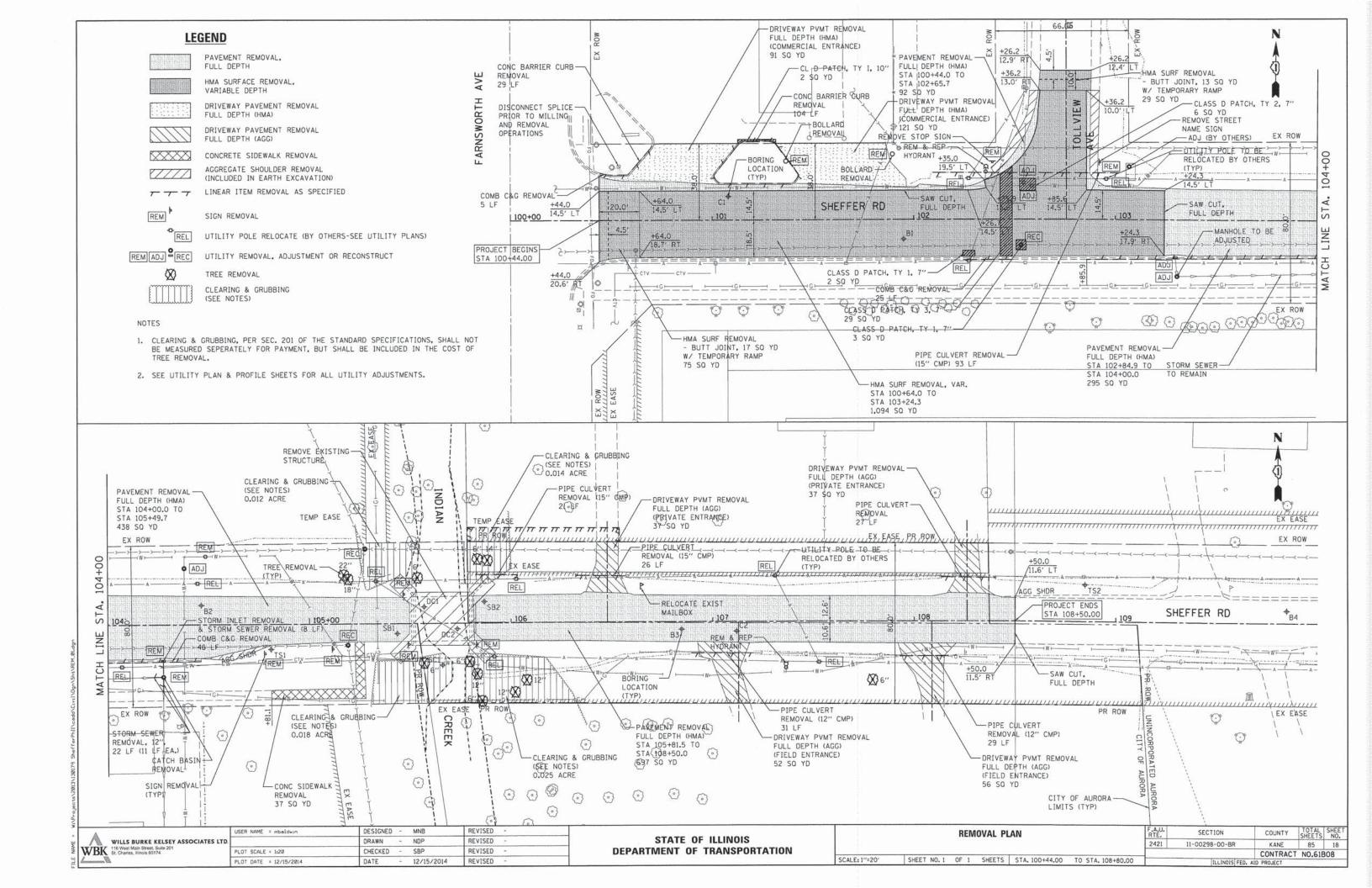
HORIZONTAL CONTROL POINT NO. 5

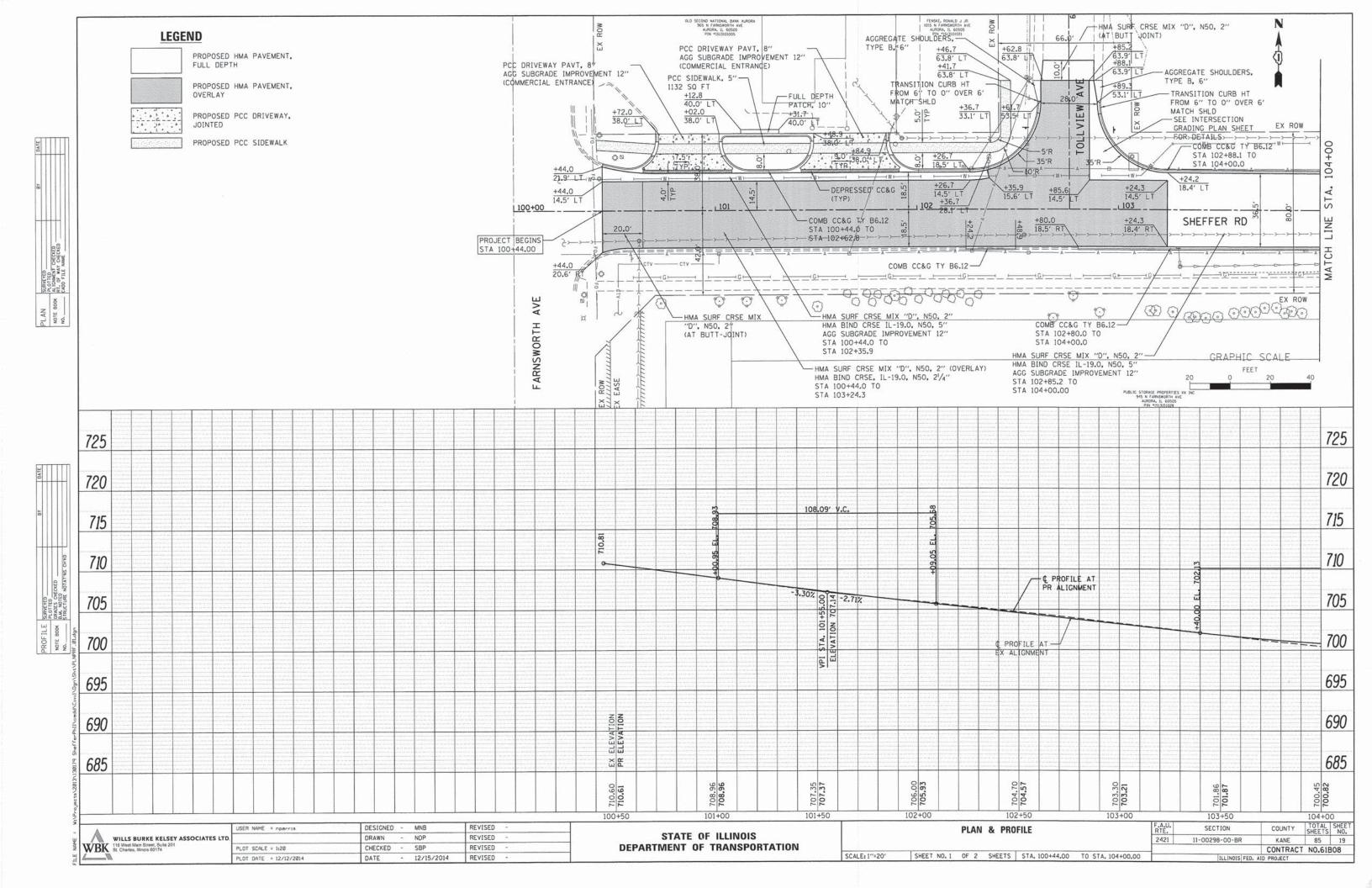
	Α.		U
1		WILLS BURKE KELSEY ASSOCIATES LTD.	
	WBK	116 West Main Street, Suite 201 St. Charles, Illinois 60174	P
	<b></b>	<b>\</b>	P

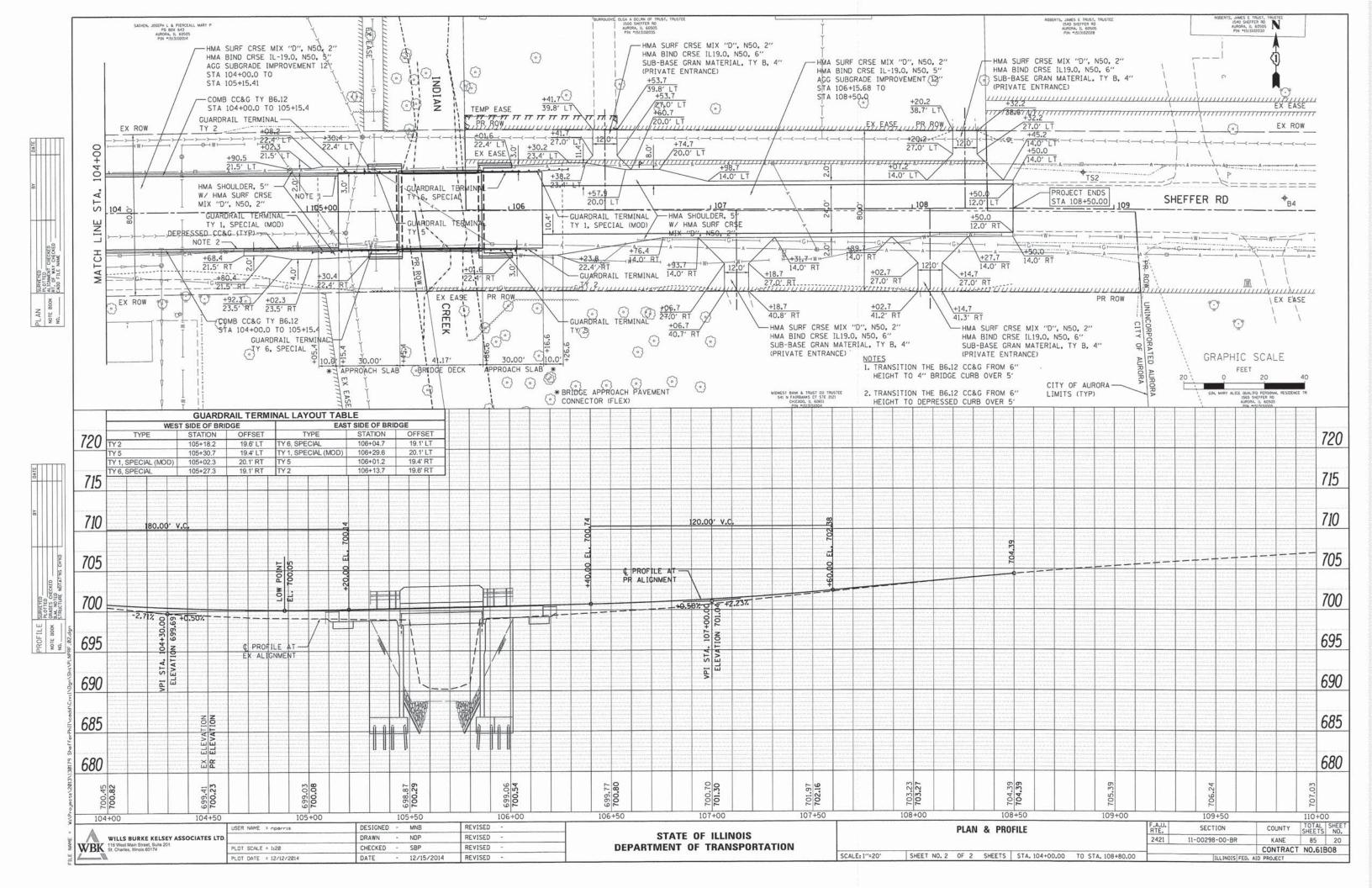
	USER NAME = nperris	DESIGNED	-	MNB	REVISED -	
TD.		DRAWN	-	NDP	REVISED -	
1	PLOT SCALE = 1:50	CHECKED	-	SBP	REVISED -	
	PLOT DATE = 12/12/2014	DATE	-	12/15/2014	REVISED -	

STATE	E 0	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

ALIGNMENT, TIES & BENCHMARKS	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
		11-00298-00-BR	KANE	85	17
			CONTRACT	NO.618	308
SHEET NO. 1 OF 1 SHEETS STA. TO ST		ILLINOIS FED. AID PROJECT			







2. AGGREGATE SURFACE FOR TEMPORARY ACCESS WILL BE MEASURED FOR PAYMENT FOR EACH FIELD ENTRANCE CONSTRUCTED FOR THE PURPOSE OF TEMPORARY ACCESS. TEMPORARY AGGREGATE SURFACE COURSE SHALL BE PAID FOR AT THE CONTRACT UNIT COST EACH FOR TEMPORARY ACCESS (PRIVATE ENTRANCE).

3. THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES, AS SPECIFIED BY THE SPECIAL PROVISIONS, SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, ALL TRAFFIC CONTROL DEVICES, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS, SHALL BE INCLUDED IN THE COST OF THE PAY ITEM TRAFFIC CONTROL AND

#### MILLING OPERATION NOTES:

- 1. CHANNELIZING DEVICES MAY BE PLACED AT THE DROP-OFF ELEVATION TO PRESERVE LANE WIDTH, RAISE THE RETROREFLECTIVE AREA AND WARNING LIFT TO THE ELEVATION ABOVE THE TRAVELING LANE OR SHOULDER PROFILE PER HIGHWAY STANDARD 701901.
- 2. DURING FULL-DEPTH PAVEMENT WIDENING OPERATIONS, CHANNELIZING DEVICES SHALL BE SPACED AT 50' INTERVALS PER HIGHWAY STANDARD 701006.
- 3. AT LOCATIONS WHERE THE DIFFERENCE BETWEEN LANES IN VERTICAL LIFTS OR MILLED EDGE IS GREATER THAN 21/2" FOR MORE THAN 48 HOURS, A LONGITUDINAL HMA WEDGE SLOPED AT 1H:3V WILL BE REQUIRED. THE CONTRACTOR SHALL PLACE "UNEVEN LANE SIGNS" 100' PRIOR TO THIS LOCATION. COST OF THE LONGITUDINAL HMA WEDGE SHALL BE INCLUDED IN THE UNIT COST OF HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH, AND SHALL NOT BE PAID FOR SEPARATELY. THE UNEVEN LANE SIGNS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL). IF THE DIFFERENCE IN LIFTS/MILLING IS BETWEEN 21/2" AND 4" FOR LESS THAN 48 HOURS, THE LONGITUDINAL WEDGE WILL NOT BE REQUIRED.
- 4. IF THE VERTICAL DIFFERENCE BETWEEN LANES IS GREATER THAN 4". THE LANE WILL NEED TO BE TEMPORARILY CLOSED UNTIL IT IS REDUCED TO 4" OR LESS.
- 5. TEMPORARY RAMPS SHALL BE USED AT ALL ENTRANCES IN SERVICE DURING MILLING OPERATIONS, PAID AS TEMPORARY RAMP.

#### TEMPORARY DETOUR DURATION

THE CONTRACT DOCUMENTS WILL ALLOW THE ROADWAY CLOSURE AND TEMPORARY DETOUR DETAILED ON THIS SHEET TO REMAIN IN PLACE UNTIL SEPTEMBER 21, 2015. THE CONTRACTOR WILL BE EXPECTED TO COMPLETE ALL THE PROPOSED WORK RELATED TO THE CONSTRUCTION OF THE PROPOSED BRIDGE AND ROADWAY DURING THIS CLOSURE. THE ROADWAY MUST HAVE THE HMA SURFACE COURSE PLACED AND THE GUARDRAIL INSTALLED BEFORE THE ROADWAY IS OPENED TO TRAFFIC. IF THE SURFACE COURSE AND GUARDRAIL ARE NOT COMPLETED IN THE ALLOWED TIME, ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED FOR THE COMPLETION OF REMAINING CONSTRUCTION OPERATIONS WILL BE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL PLACE ELECTRONIC CHANGEABLE MESSAGE SIGNS ON THE EAST AND WEST SIDES OF THE PROJECT TO WARN THE PUBLIC OF THE PENDING CLOSURE. THE MESSAGE BOARDS WILL NEED TO BE PLACED AND SET OUT FOR SEVEN (7) DAYS IN ADVANCE OF THE ANTICIPATED FIRST DAY OF CONSTRUCTION. THE SIGNS SHALL REMAIN IN PLACE FOR AN ADDITIONAL SEVEN (7) AFTER THE FIRST DAY OF CONSTRUCTION. THE CONTRACTOR WILL COORDINATE WITH THE ENGINEER ON THE EXACT PLACEMENT OF THE MESSAGE BOARDS AND THE MESSAGE THAT IS TO BE DISPLAYED. THE MESSAGE MAY PERIODICALLY BE CHANGED BY THE COUNTY AND/OR ENGINEER. THERE WILL BE NO ADDITIONAL COMPENSATION FOR CHANGING OF THE MESSAGE(S). THE MESSAGE BOARDS WILL BE PAID FOR AS CHANGEABLE MESSAGE SIGN. SPECIAL PER CALENDAR DAY FOR EACH MESSAGE SIGN UTILIZED.

#### TEMPORARY INFORMATION SIGN

THE CONTRACTOR SHALL ERECT ON THE EAST AND WEST SIDE OF THE PROJECT TO INFORM THE PUBLIC OF THE CONSTRUCTION DURATION. THE CONTRACTOR WILL COORDINATE WITH THE ENGINEER ON THE EXACT PLACEMENT OF THE SIGN. THE SIGN SHALL BE IN PLACE FOR THE ENTIRE DURATION OF THE CONTRACT OR AS DIRECTED BY THE ENGINEER. THE TEMPORARY SIGN WILL BE AS DIMENSIONED ON STD. TC22 EXCEPT THE MESSAGE SHALL BE AS DETAILED ON THE DETOUR PLAN. THE SIGNING, WHICH INCLUDES POST AND MOUNTING, WILL BE PAID AS TEMPORARY INFORMATION SIGNING, PER SQ FT FOR EACH SIGN ERECTED.

THE CONTRACTOR WILL BE REQUIRED TO COORDINATE ALL MAINTENANCE OF TRAFFIC OPERATIONS WITH ALL MUNICIPALITIES, TOWNSHIP, AND COUNTY ENTITIES WITHIN THE PROJECT LIMITS. THE FOLLOWING IS THE APPLICABLE

KANE COUNTY DIVISION OF TRANSPORTATION
KANE COUNTY SHERIFF
KANE CO. OFFICE OF EMERGENCY MANAGEMEN
CITY OF AURORA PUBLIC WORKS
CITY OF AURORA POLICE DEPARTMENT
CITY OF AURORA FIRE DEPARTMENT
AURORA EAST SCHOOL DISTRICT 131
MARYWOOD FIRE PROTECTION DISTRICT

DAVE BOESCH, CHIEF OF CNSTR.	630-584-1170
PATRICK PEREZ, SHERIFF	630-232-6840
DONALD BRYANT, DIRECTOR	630-232-5985
KEN SCHROTH, DIRECTOR	630-256-3200
GREGORY S. THOMAS, CHIEF OF POLICE	630-256-5001
JOHN LEHMAN, FIRE CHIEF	630-256-4000
MICHAEL POPP, SUPERINTENDENT	630-299-5510
ROBERT WATERMAN	630-898-2421
Locatoura Man	DEVICED

#### LIMITATIONS OF CONSTRUCTION

THE CONTRACTOR SHALL COORDINATE THE ITEMS OF WORK IN ORDER TO KEEP HAZARDS AND TRAFFIC INCONVENIENCES TO A MINIMUM, AS SPECIFIED BELOW:

- 1. IF THERE ARE CONSTRUCTION OPERATIONS COMPLETED OUTSIDE OF THE DURATION OF THE ROADWAY CLOSURE. THOSE CONSTRUCTION OPERATIONS WILL BE CONDUCTED SO ONE LANE IN EACH DIRECTION ON SHEFFER ROAD REMAIN OPEN AT ALL TIMES.
- 2. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ALL THE NECESSARY SIGNS, BARRICADES, CONES, DRUMS, AND LIGHTS FOR THE WARNING AND PROTECTION OF TRAFFIC, AS REQUIRED BY SECTIONS 107 AND 701 THROUGH 703 OF THE STANDARD SPECIFICATIONS, AND AS MODIFIED.
- 3. THE CONTRACTOR SHALL FURNISH AND ERECT "ROAD CONSTRUCTION AHEAD" SIGNS (W20-1 (0)-48) AT BOTH ENDS OF THE PROJECT AND AT ALL SIDE ROADS WITHIN THE LIMITS OF THIS SECTION WHEN WORKING IN THE VICINITY OF THE SIDE ROAD INTERSECTION, AS DETAILED IN TC-10.

#### OFF- PEAK HOURS

FOR CONSTRUCTION OPERATIONS OUTSIDE THE DESIGNATED DETOUR PERIOD, THE "OFF- PEAK" HOURS ARE DEFINED AS THE DAYTIME HOURS FROM 9:00 A.M. TO 3:00 P.M. AND NIGHT TIME HOURS FROM 9:00 P.M. TO 6:00 A.M., MONDAY THROUGH FRIDAY. THE CONTRACTOR MAY REQUEST IN WRITING FOR THESE HOURS TO BE EXTENDED.

#### KEEPING ROADS OPEN TO TRAFFIC

THE CONTRACTOR SHALL SCHEDULE HIS SEQUENCE OF OPERATIONS TO PERMIT THE CONSTRUCTION OF THIS SECTION WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. THE CONTRACTOR'S SCHEDULE SHALL REFLECT THE FOLLOWING REQUIREMENTS AND SEQUENCE OF CONSTRUCTION. THESE REQUIREMENTS FOLLOW THE SUGGESTED TRAFFIC CONTROL PLAN INCLUDED IN THE DRAWINGS.

- 1. SHEFFER ROAD MAY BE COMPLETELY CLOSED TO TRAFFIC FOR THE DURATION SPECIFIED IN THE CONTRACT DOCUMENTS, FROM EAST OF TOLLVIEW AVENUE TO WEST OF THE PRIVATE ENTRANCE IMMEDIATELY EAST OF THE BRIDGE.
- 2. ACCESS TO PRIVATE AND COMMERCIAL ENTRANCES SHALL REMAIN OPEN AT ALL TIMES. ON PROPERTIES THAT HAVE MORE THAN ONE ACCESS, ONE ENTRANCE MAY BE TEMPORARILY CLOSED. HOWEVER, VEHICULAR ACCESS MUST REMAIN OPEN TO TRAFFIC FOR THE OPPOSITE ENTRANCE, WHEN IT IS NECESSARY TO CLOSE AN ENTRANCE, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND THE PROPERTY OWNER FORTY-EIGHT (48) HOURS IN ADVANCE OF THE WORK, IN ALL CASES, THE ENTRANCE SHALL BE OPEN AT THE END OF THE WORKDAY.

#### TRAILER MOUNTED ARROW BOARD

UNLESS OTHERWISE REQUIRED BY A SPECIFIED TRAFFIC CONTROL STANDARD, THE USE OF A TRAILER MOUNTED ARROW BOARD(S) ARE NOT ANTICIPATED FOR THIS PROJECT.

#### SEQUENCE OF CONSTRUCTION

IN GENERAL, THE STAGING OF CONSTRUCTION FOR THIS SECTION SHALL BE AS FOLLOWS:

#### STAGE 1 - DETOUR FOR BRIDGE CONSTRUCTION

NOTES: THE KANE-DUPAGE STORMWATER CONSERVATION DISTRICT SHALL BE PRESENT FOR ALL WORK WITHIN THE WATERWAY

- SET-UP DETOUR FOR SHEFFER ROAD
- REMOVE THE EXISTING BRIDGE STRUCTURE AND TREES AT LOCATIONS SHOWN IN PLANS
- INSTALL THE PROPOSED COFFERDAMS
- EXCAVATE AND CONSTRUCT THE PROPOSED ABUTMENTS, INCLUDING FOUNDATIONS AND CORRESPONDING WINGWALLS
- REMOVE THE COFFERDAMS
- INSTALL RIPRAP FOR BRIDGE AND FINALIZE CHANNEL GRADING
- INSTALL THE BRIDGE DECK BEAMS
- BUILD THE PARAPET WALLS AND BRIDGE WEARING SURFACE
- REMOVE THE EXISTING PAVEMENT, CURBS AND GUTTERS
- GRADE EARTHWORK TO FINAL ELEVATION, INCLUDING ALL DITCH WORK - INSTALL 12" WATER MAIN AND COMPONENTS AS SHOWN IN THE PLANS
- INSTALL STORM SEWERS, CULVERT PIPES AND DRAINAGE STRUCTURES
- PLACE AGGREGATE SUBGRADE IMPROVEMENT 12", INCLUDING AGGREGATE FOR TEMPORARY ACCESS AT RESIDENTIAL DRIVEWAY

SCALE

- ADJUST STRUCTURES AND RIMS TO PROPOSED ELEVATION
- INSTALL CURB AND GUTTER
- PLACE HOT-MIX ASPHALT BINDER COURSES AND HMA SHOULDERS
- INSTALL PROPOSED DRIVEWAYS
- CONNECT GUARDRAIL TERMINALS TO BRIDGE PARAPET AND INSTALL GUARDRAIL IN HMA

### STAGE 2 - DAY-TIME OPERATIONS FOR WEST LIMIT RESURFACING

NOTES: THE DETOUR FOR THE BRIDGE SHALL BE MAINTAINED UNTIL THE COMPLETION OF STAGE 2. IMPROVEMENTS AT THE WESTERN PROJECT LIMITS SHALL BE COMPLETED 1-LANE AT A TIME WHILE USING DAY ONLY LANE CLOSURES. ANY NIGHT TIME WORK SHALL REQUIRE APPROVAL OF THE ENGINEER AND THE CITY OF AURORA, AT LEAST 1-LANE OF TRAFFIC SHALL BE MAINTAINED IN EACH DIRECTION DURING STAGING OPERATIONS WITHIN 100 FT OF THE INTERSECTION AT FARNSWORTH AVENUE, UNLESS APPROVED BY THE ENGINEER.

- REMOVE CURB AND GUTTER AND FULL-DEPTH PAVEMENT AT LOCATIONS INDICATED
- INSTALL PROPOSED STORM SEWER, DRAINAGE STRUCTURES, AND END SECTIONS
- PLACE ALL FULL-DEPTH PATCHES
- PERFORM VARIABLE DEPTH MILLING OF EXISTING PAVEMENT AND BUTT JOINTS
- INSTALL CURB AND GUTTER AND SIDEWALK
- PLACE HOT-MIX ASPHALT BINDER COURSES
- PLACE HOT-MIX ASPHALT SURFACE COURSES THROUGHOUT ENTIRE PROJECT LIMITS
- FINALIZE ALL GRADING AND STRUCTURE ADJUSTMENTS
- PLACE FINAL PAVEMENT MARKINGS AND SIGNAGE
- REMOVE THE DETOUR (SIGNIFIES END OF STAGE)

#### STAGE 3 - LANDSCAPING AND PUNCHLIST ITEMS

NOTES: THESE ITEMS CAN ALL BE COMPLETED AS PART OF STAGE 2.

- FINALIZE ALL LANDSCAPING ITEMS, INCLUDING PLANTING OF TREES
- REMOVE ANY REMAINING TEMPORARY EROSION CONTROL ITEMS
- FINALIZE ANY REMAINING PUNCHLIST ITEMS
- IF CONTRACTOR ELECTS TO COMPLETE PERMANENT PAVEMENT MARKING OUTSIDE OF THE CLOSURE PERIOD, THEN THE CONTRACTOR SHALL PLACE THE APPROPRIATE TEMPORARY PAVEMENT MARKINGS. ALL TEMPORARY MARKINGS ON THE PERMANENT SURFACES SHALL BE TAPE. THERE WILL BE NO ADDITIONAL COMPENSATION FOR THE TEMPORARY PAVEMENT MARKINGS.

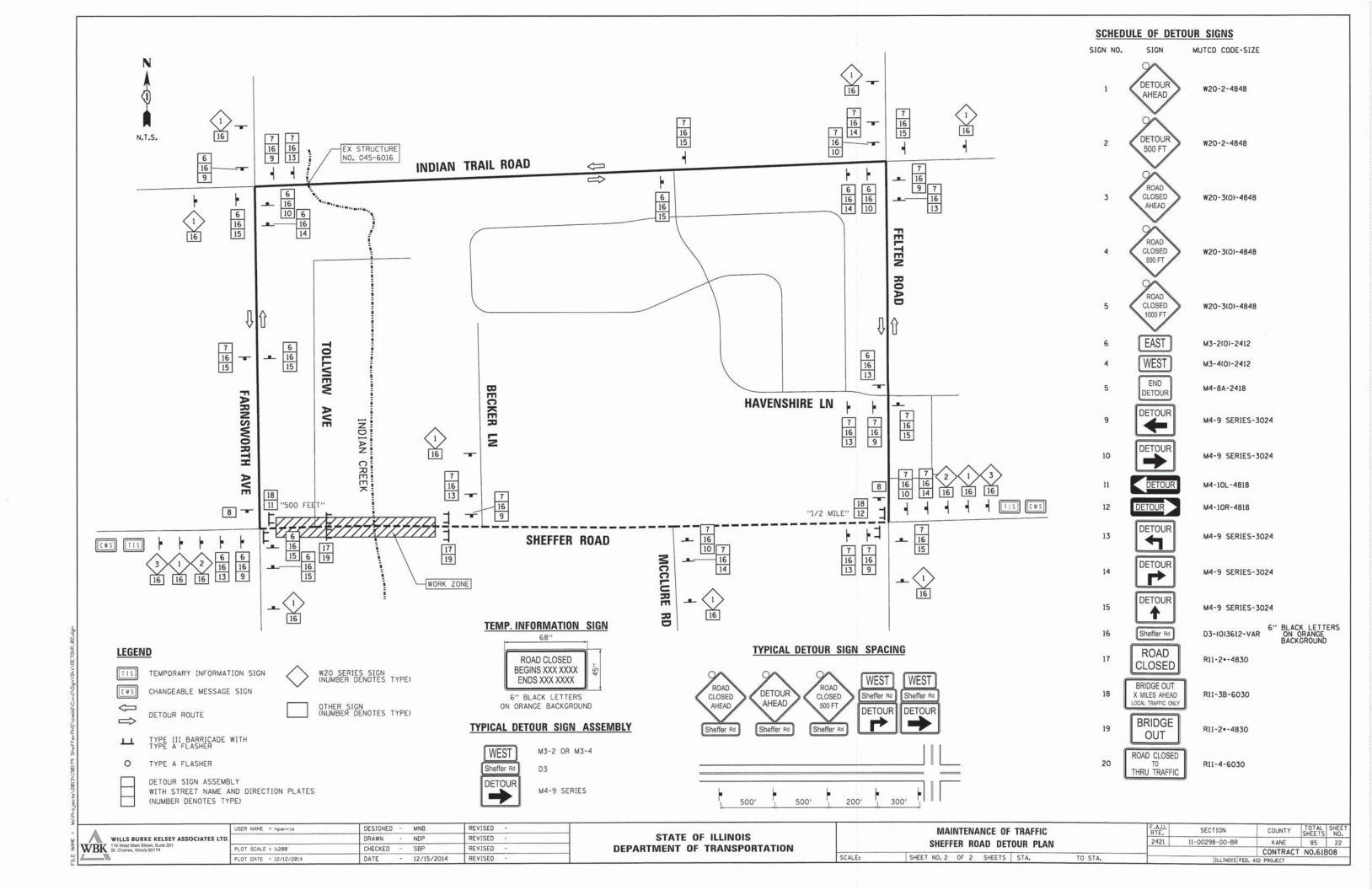


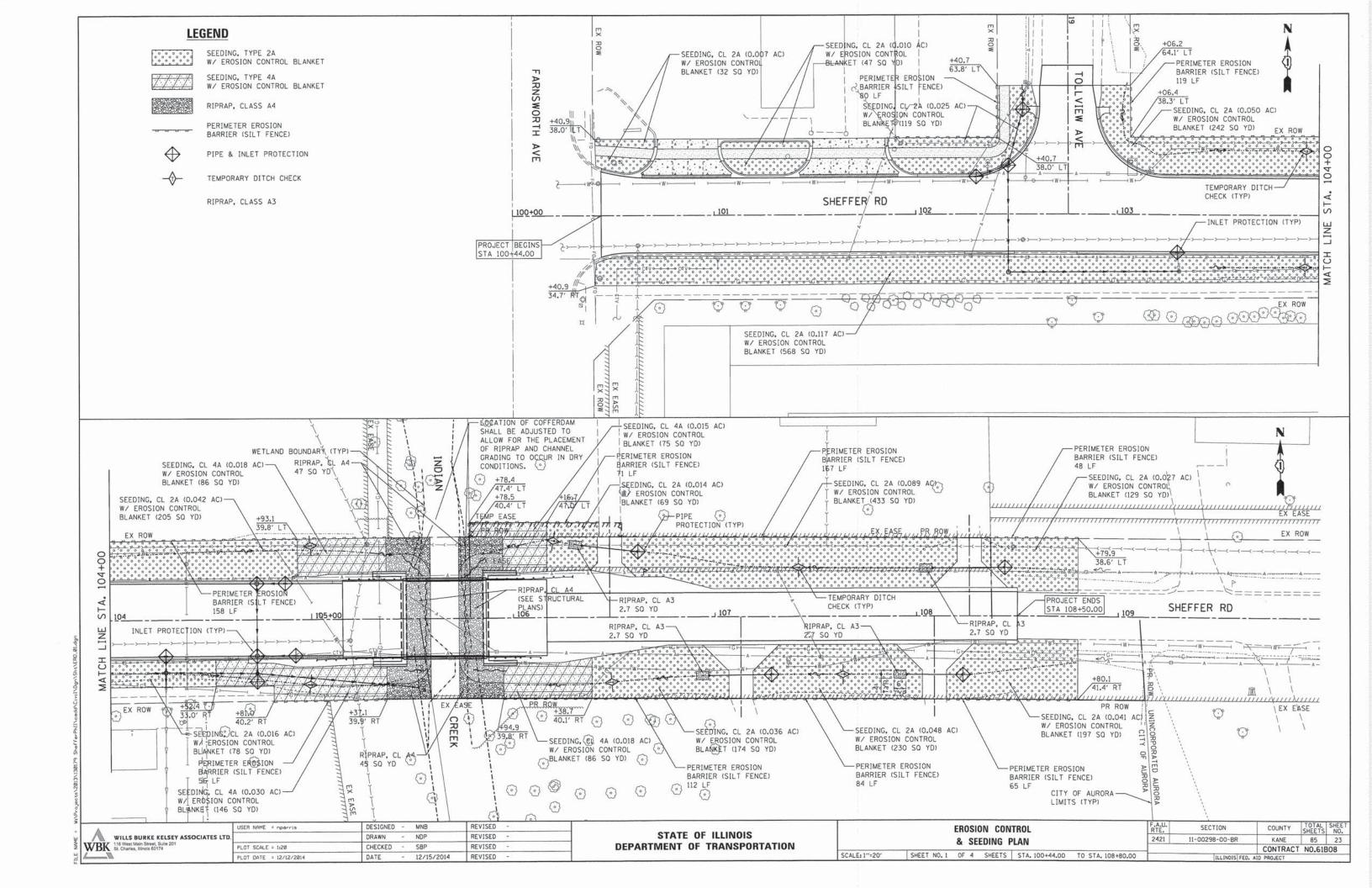
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	MAI	F.A.U. RTE.				
	SHEFF	ER RO	AD DET	OUR NOTE	S	2421
_		7				
	SHEET NO. 1	OF 2	SHEETS	STA.	TO STA.	

COUNTY SECTION KANE 85 21 11-00298-00-BR CONTRACT NO.61B08





#### WINTER SHUT DOWN

A WINTER SHUT DOWN IS NOT ANTICIPATED FOR THIS PROJECT, BUT IN THE EVENT THAT UNAVOIDABLE CIRCUMSTANCE REQUIRE A WINTER SHUT DOWN, THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.

#### TEMPORARY DITCH CHECKS

TEMPORARY DITCH CHECKS WILL BE REQUIRED AT THOSE LOCATIONS WHERE THE CONTRACTORS OPERATIONS REQUIRE TEMPORARY OR PERMANENT DITCHES. THE LOCATION OF TEMPORARY DITCH CHECKS ARE SHOWN ON THE PLANS, THE EXACT LOCATION MAY REQUIRE FIELD ADJUSTMENT AND WILL BE COORDINATED IN THE FIELD WITH THE ENGINEER. THE QUANTITIES INCLUDE A PLAN ALLOWANCE OF FIVE (5) ADDITIONAL TEMPORARY DITCH CHECKS FOR MAINTENANCE PURPOSES, TEMPORARY DITCH CHECKS SHALL BE CONSTRUCTED AS SPECIFIED IN SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

#### PERIMETER EROSION BARRIER (SILT FENCE)

PERIMETER EROSION CONTROL BARRIER (SILT FENCE) SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS. THE PERIMETER EROSION CONTROL BARRIER SHALL BE CONSTRUCTED AS DETAIL ON IDOT STANDARD 280001 AND AS SPECIFIED IN SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

### STOCK PILE LOCATIONS AND PROTECTING STOCK PILE AREAS

STOCK PILES SHOULD NOT BE PLACED IN OR NEAR CRITICAL AREAS, OR AREAS THAT HAVE HIGH POTENTIAL FOR CONTRIBUTING SEDIMENTS

CONTRACTOR MAY OPT TO STOCK PILE MATERIAL. STAGING OF THE PROJECT IS AT HIS DISCRETION OF THE CONTRACTOR AND COORDINATION OF STOCK PILES WILL BE WITH KANE COUNTY DIVISION OF TRANSPORTATION (KDOT) AND KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD). STOCKPILES OF SOIL AND OTHER CONSTRUCTION MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES, NOT BEING ACTIVELY WORKED AND TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.

#### STABILIZED CONSTRUCTION AREA

STABILIZATION OF THE CONSTRUCTION AREA SHOULD TAKE PLACE AT THE END OF EACH WORK DAY.

#### WORK IN FLOWING WATER

NO WORK SHALL BE PERFORMED IN FLOWING WATER. WORK IN AND NEAR THE CRITICAL AREAS SHOULD BE ISOLATED FROM CONCENTRATED FLOWS OR STREAM FLOW, ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS.

WHEN DEWATERING THE CONSTRUCTION AREA IS NECESSARY, ALL WATERS SHALL BE FILTERED BY USING FILTER BAGS OR AN ALTERNATIVE MEASURE APPROVED BY THE KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT, ALL FILTER BAGS MUST HAVE SECONDARY CONTAINMENT DEVICES, AND SHOULD BE PLACED ON LEVEL GROUND. WATER MUST HAVE SEDIMENT REMOVED BEFORE BEING ALLOWED TO RETURN TO THE ORIGINAL CREEK. THE DISCHARGE SHALL BE DESIGNED SO THAT RETURNING WATERS DO NOT CAUSE EROSION. THE CONTRACTOR WILL COORDINATE THE METHOD, DESIGN AND LOCATION OF THE DEWATERING PLAN AND FILTER BAG(S) WITH KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT AT THE PRE-CONSTRUCTION MEETING.

#### KEEPING PAVEMENTS CLEAN

THE CONTRACTOR WILL KEEP ALL PERMANENT PAVEMENT SURFACES CLEAN OF DIRT OR CONSTRUCTION DEBRIS. THE PAVEMENT SHALL BE CLEANED AT THE END OF EACH DAYS OPERATION OR MORE FREQUENTLY AS REQUIRED BY THE ENGINEER IF THE DEBRIS IS DEEMED TO BE A HAZARD TO THE MOTORING PUBLIC.

- A) UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL, LATEST EDITION.
- THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- C) A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO. ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW BY THE KDSWCD.
- E) THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KDSWCD.
- F) DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. DEWATERING DIRECTLY INTO FIELD TILES, STORMWATER STRUCTURES, OR INDIAN CREEK IS PROHIBITED.
- IT IS THE RESPONSIBILITY OF THE OWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	ост.	NOV.	DEC.
PERMANENT				A				А				
SEEDING				İ	+B	•		İ		+B		
DORMANT	С										c	
SEEDING												
TEMPORARY			,D									
SEEDING												
EROSION	E											
CONTROL										-1.1		

- A. CLASS 2A
- B. CLASS 4A
- C. INCREASE SEEDING RATES BY 25% WHEN DORMANT SEEDING (NOT ANTICIPATED)
- D. TEMPORARY SEEDING (PERENNIAL RYE GRASS, SPRING OATS)
- E. EROSION CONTROL BLANKET (EXCELSIOR) (PERMANENT SEED AREAS ONLY)
- . IRRIGATION MAY BE NEEDED DURING JUNE AND JULY (INCLUDED IN SEEDING) NOTE: SEEDING TO BE COMPLETED PER REQUIREMENTS OF SECTION 250 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGES AND THE SPECIAL PROVISIONS.

- H) WHERE WORK IS COMPLETE, PERMANENT STABILIZATION SHALL OCCUR WITHIN SEVEN (7) DAYS OF COMPLETION. WHERE WORK HAS TEMPORARILY CEASED FOR FOURTEEN (14) DAYS OR MORE, TEMPORARY STABILIZATION SHALL OCCUR BY THE SEVENTH DAY AFTER WORK HAS CEASED.
- I) THE CONTRACTOR IS RESPONSIBLE FOR INDICATING THE CURRENT LOCATION OF THE CONCRETE WASHOUT AND ANY MODIFICATIONS TO THE LOCATIONS OR DETAILS OF EROSION AND SEDIMENT CONTROLS ON THESE PLANS.

### STABILIZED CONSTRUCTION ENTRANCE

A STABILIZED CONSTRUCTION ENTRANCE IS NOT ANTICIPATED FOR THIS PROJECT. HOWEVER, IF IT IS DETERMINED BY THE ENGINEER OR THE KANE-DUPAGE SOIL AND WATER CONVERSATION DISTRICT THAT THE CONTRACTOR OPERATIONS REQUIRE A STABILIZED ENTRANCE. QUANTITY HAS BEEN INCLUDED IN THE PROJECT TO COMPLETE THIS WORK. THERE WILL BE NO ADJUSTMENT TO THE CONTRACT IF THE ENTRANCE IS NOT CONSTRUCTED. IF REQUIRED, THE CONTRACTOR WILL SUBMIT THE LOCATION AND DETAILS TO KDSWCD FOR APPROVAL.

#### CONSTRUCTION SEQUENCE NOTES

- A) TURBIDITY CURTAINS SHOULD BE PLACED IN THE CREEK PRIOR TO ANY DEMOLITION TO THE BRIDGE DECK AND/OR ABUTMENTS.
- CONSTRUCTION OF ABUTMENTS, EMBANKMENT AND RIP RAP ARE ANTICIPATED TO REQUIRE WORK WITHIN THE CREEK, WORK MUST BE TIMED TO TAKE PLACE DURING LOW FLOW CONDITIONS.
- C) BYPASS IS NOT ANTICIPATED FOR THIS PROJECT. HOWEVER, IF BYPASS IS NECESSARY, THE INLET OF THE HOSE SHALL BE PLACED IN A SUMP PIT AND THE OUTLET PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINING THE CREEK FLOW.
- D) THE SIDE SLOPES MUST BE RESEEDED AND STABILIZED WITH AN APPROPRIATE EROSION CONTROL BLANKET PRIOR TO ACCEPTING FLOWS. THE BOTTOM OF THE SWALE MUST BE BROUGHT BACK TO ITS ORIGINAL GRADE AND STABLE ENOUGH TO ACCEPT FLOWS.

### DEWATERING - BASIS OF PAYMENT

SCALE.

DEWATERING FOR ALL CONSTRUCTION OPERATIONS WILL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF THE RELATED WORK ITEM REQUIRING DEWATERING, DEWATERING WILL INCLUDE MEANS, METHODS AND ALL MATERIALS TO DEWATER AND TO PROVIDE FILTRATION OF WATERS BEFORE RE-ENTERING THE CREEK.



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ı	PLOT DATE = 12/12/2014	DATE -	12/15/2014	REVISED -

	EROSION C	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.		
	& SEEDING	NOTES		2421	11-00298-00-BR	KANE 85		24
						CONTRAC	T NO.618	308
	SHEET NO. 2 OF 4 SHEE	S STA.	TO STA.	ILLINOIS FED. AID PROJECT				

THE SUMP PIT WILL NOT BE MEASURED SEPERATELY FOR PAYMENT BUT SHALL BE CONSIDERED PART OF THE DEWATERING OPERATIONS.

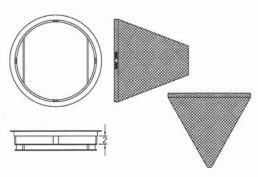
#### NOTES:

- PIT DIMENSIONS ARE OPTIONAL.
- THE STANDPIPE WILL BE CONSTRUCTED BY PERFORATING A 12"-24" DIAMETER CORRUGATED METAL OR PVC PIPE.
- A BASE OF 2" AGGREGATED WILL BE PLACED IN THE PIT TO A MINIMUM DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE WILL THEN BE BACKFILLED WITH 2" AGGREGATE.
- THE STANDPIPE WILL EXTEND 12" TO 18" ABOVE THE LIP OF THE PIT. IF DISCHARGE WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE
- STANDPIPE WILL BE WRAPPED WITH FILTER FABRIC BEFORE INSTALLATION. IF DESIRED,  $\frac{1}{4}$ "- $\frac{1}{2}$ " HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE PRIOR TO ATTACHING THE FILTER FABRIC. THIS WILL INCREASE

# SUMP PIT PLAN

THE RATE OF WATER SEEPAGE INTO THE PIPE.

(SUMP PIT PLAN)



ROUND CATCH ALL

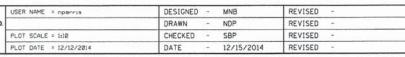
#### GENERAL NOTES

WBK 116 West Main Street, Suite 20 St. Charles, Illinois 60174

FRAME: TOP FLANGE FABRICATED FROM 11/4"x11/4"x1/8" ANGLE. BASE RIM FABRICATED FROM 11/2"x1/2"x1/8" CHANNEL. HANDELS AND SUSPENSION BRACKETS FABRICATED FROM 11/4"x1/4" FLAT STOCK. ALL STEEL CONFORMING TO ASTM-A36.

SEDIMENT BAG: BAG FABRICATED FROM 4 OZ./SO.YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. BAG SECURED TO BASE RIM WITH A STAINLESS STEEL BAND AND LOCK.

## INLET PROTECTION DETAIL



OF BLANKET IN OVERLAP BLANKETS SIDE TRENCH 6" WIDE BY BY SIDE USING A 4" OVERLAP WITH UPSLOPE BLANKET LAID OVER DOWNSLOPE BLANKET STAPLE DETAIL 1.5" Min -OVERLAP END OF LIPSLOPE BLANKET 4" OVER DOWNSLOPE BLANKET AND SECURE WITH STAPLES PUSH PIN DETAIL - BURY TOF OF BLANKET IN TRENCH 6" WIDE BY 6" DEEP Parallel Overlaps Single Join! DETAIL 3 DETAIL 1 DETAIL 2

#### NOTES:

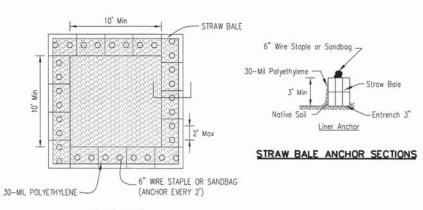
BURY UPSLOPE END

- STAPLES SHALL BE PLACED IN A DIAMOND PATTERN AT 2 PER S.Y. FOR STITCHED BLANKETS. NON-STICHED SHALL USE 4 STAPLES PER S.Y. OF MATERIAL. THIS EQUATES TO 200 STAPLES WITH STITCHED BLANKET AND 400 STAPLES WITH NON-STICHED BLANKET PER 100 S.Y. OF MATERIAL
- STAPLE OR PUSH PIN LENGTHS SHALL BE SELECTED BASED ON SOIL TYPE AND CONDITIONS. (MINIMUM STAPLE LENGTH IS 6")
- EROSION CONTROL MATERIAL SHALL BE PLACED IN CONTACT WITH THE SOIL OVER A PREPARED SEEDBED.
- 4. ALL ANCHOR SLOTS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

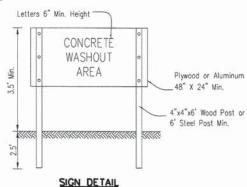
# **EROSION CONTROL**

## BLANKET INSTALLATION DETAILS

STD. IL-530A, IL-530B, IUM-531 (EROSION CONTROL BLANKET)



#### PLAN VIEW



#### NOTES:

- MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION
- FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.
- EACH STRAW BALE IS TO BE STAKED IN PLACE USING (2) 2"X2"X4" WOODEN STAKES.

# **TEMPORARY CONCRETE**

# WASHOUT FACILITY - STRAW BALE

STD. IUM-654SB (TEMPORARY CONCRETE WASHOUT)

**EROSION CONTROL** SECTION 2421 11-00298-00-BR KANE 85 25 & SEEDING DETAILS CONTRACT NO.61B08 SCALE: SHEET NO. 1 OF 4 SHEETS STA. TO STA.

WILLS BURKE KELSEY ASSOCIATES LTD.

DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS

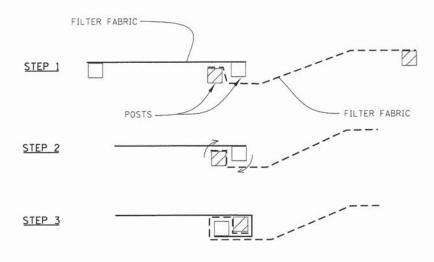
NOTES:

- TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
- FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND
- FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.

## PERIMETER EROSION BARRIER

# (SILT FENCE)

STD. IUM-620A (SILT FENCE PLAN)



### ATTACHING TWO SILT FENCES

#### NOTES:

- 1. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
- ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
- CUT THE FABRIC NEAR THE BOTTOM OF THE STAKES TO ACCOMMODATE THE 6" FLAP.
- 4. DRIVE BOTH POSTS A MINIMUM OF 18 INCHES INTO THE GROUND AND BURY THE FLAP.

USER NAME = nparris

PLOT DATE = 12/12/2014

PLOT SCALE = 1:10

5. COMPACT BACKFILL (PARTICULARLY AT SPLICES) COMPLETELY TO PREVENT STORMWATER PIPING.

# PERIMETER EROSION BARRIER

# (SILT FENCE) - SPLICING TWO FENCES

STD. TUM-620B(W) (SILT FENCE - SPLICING TWO FENCES)

#### DESIGNED - MNB REVISED NDP REVISED DRAWN CHECKED SBP REVISED DATE 12/15/2014 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

Existing

Coarse Aggregate

Operation.

\* Must Extend Full Width

Of Ingress And Egress

- Existing Ground

PLAN VIEW

A -

SIDE ELEVATION

Ground

**EROSION CONTROL** 

SECTION COUNTY SHEETS NO. 11-00298-00-BR KANE CONTRACT NO.61B08 ILLINOIS FED. AID PROJECT

Filter Fabric SECTION A-A

#### NOTES:

- 1. FILTER FABRIC SHALL MEE THE REQUIREMENTS OF ARTICLE 1080.03 OF THE STANDARD SPECIFICATIONS AND SHALL BE PALCED OVER THE CLEARED SUBGRADE AREA PRIOR TO PLACING THE ROCK.
- 2. AGGREGATE FILL SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3 OR CA-4 AND BE PLACED ACCORDING TO SPECIAL PROVISION " STABILIZED CONSTRUCTION ENTRANCE.
- 3. ANY DRAINAGE FACILTIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
- 4. IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

## STABILIZED CONSTRUCTION ENTRANCE PLAN

Existing

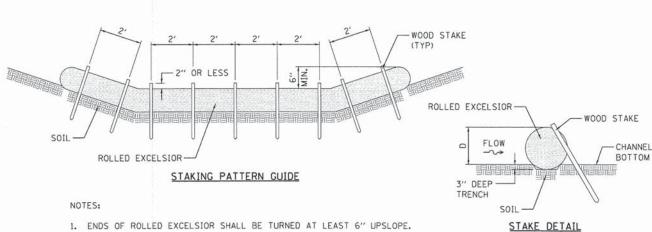
Existing

STD. IL-630(A), IL-630(B (STABILIZED CONTRUCTION ENTRANCE PLAN)

Mountable Berm

(Optional)

r 5:1 Slope



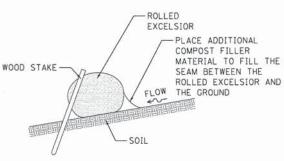
- 1. ENDS OF ROLLED EXCELSIOR SHALL BE TURNED AT LEAST 6" UPSLOPE.
- 2. RECOMMENDED STAKES ARE 11/8" WIDE x 11/8" THICK x 30" LONG.
- 3. STAKES SHALL NOT EXTEND ABOVE THE ROLLED EXCELSIOR MORE THAN 2".
- 4. SPACING: THE TOE OF THE UPSTREAM DITCH CHECK SHALL CREATE A HORIZONTAL LINE WITH THE TOP OF THE DOWNSTREAM DITCH CHECK.
- 5. WHEN COMPOST FILTER SOCK DITCH CHECK IS USED, PLACE A COMPOST BERM UPSTREAM OF THE FILTER SOCK (SEE IUM 805). A TRENCH IS NOT
- 6. OVERLAP MINIMUM IS THE DIAMETER OF THE ROLL.

SCALE:

7. STAKES SHALL BE PLACED EVERY 2' FOR ROLLED EXCELSIOR, OR AS SPECIFIED BY THE MANUFACTURER.

# TEMPORARY DITCH CHECK ROLLED EXCELSIOR

STD. IUM-514 (ROLLED EROSION CONTROL PRODUCTS)

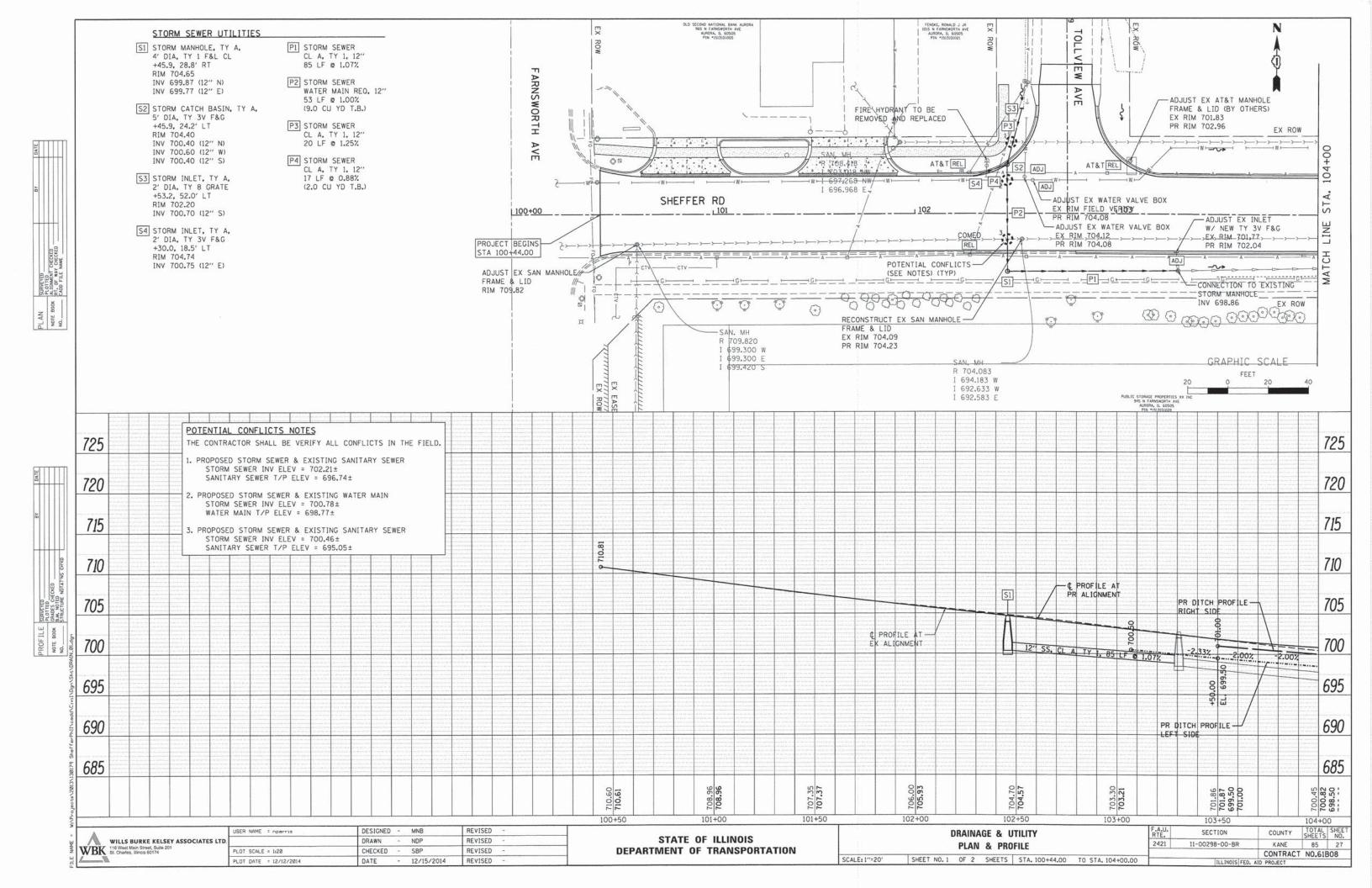


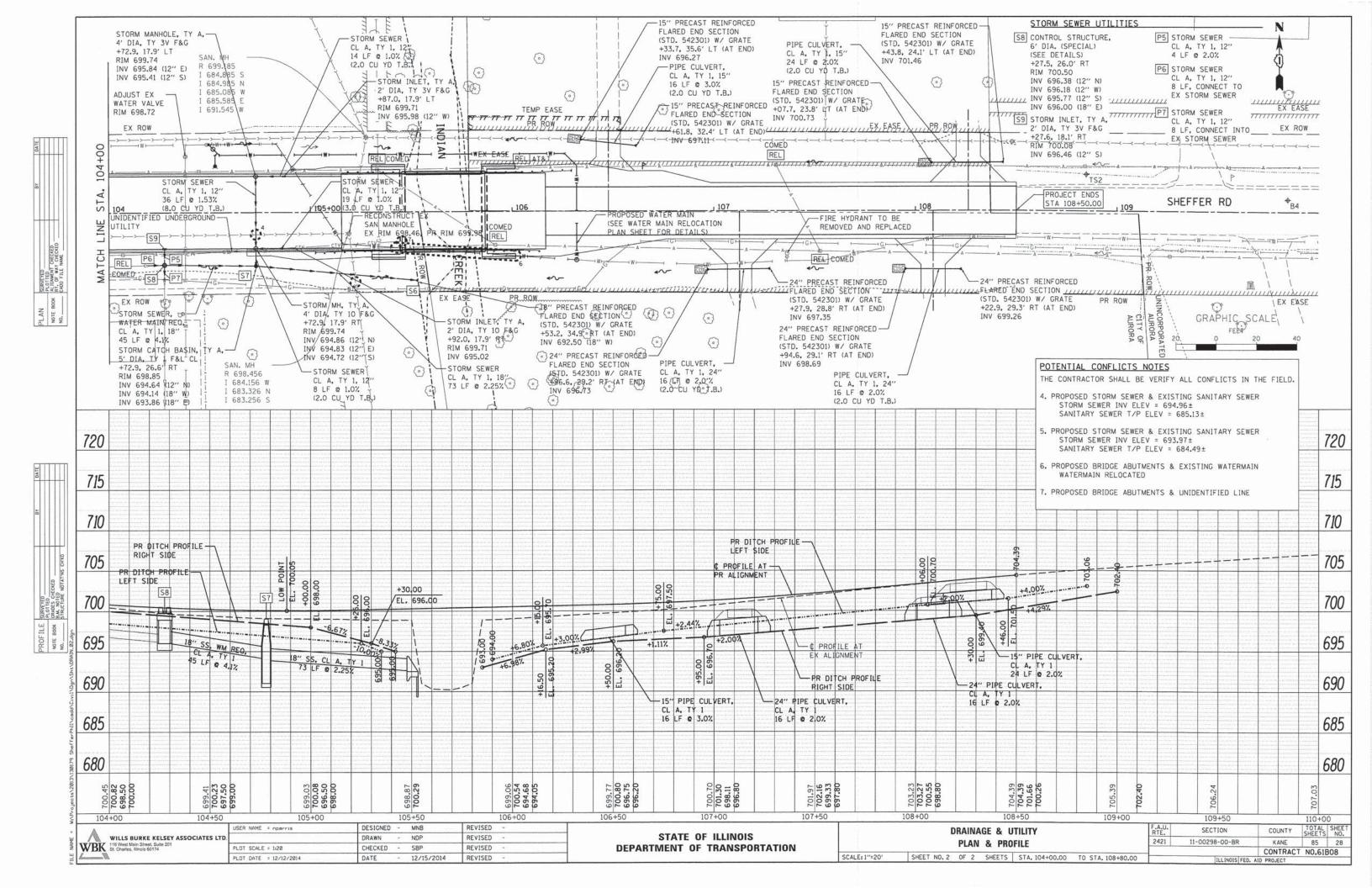
COMPOST FILTER SOCK DETAIL

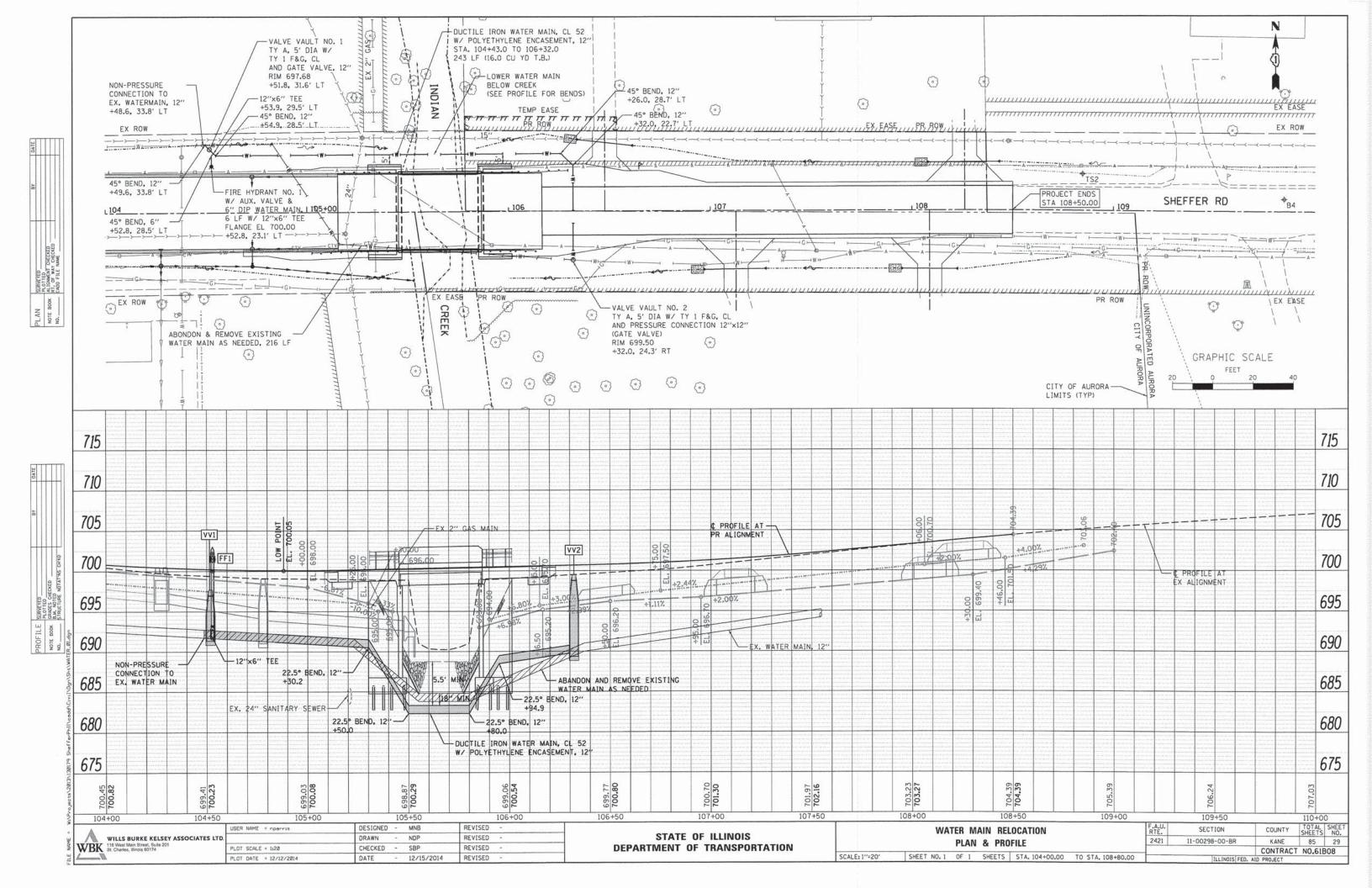
TO STA.

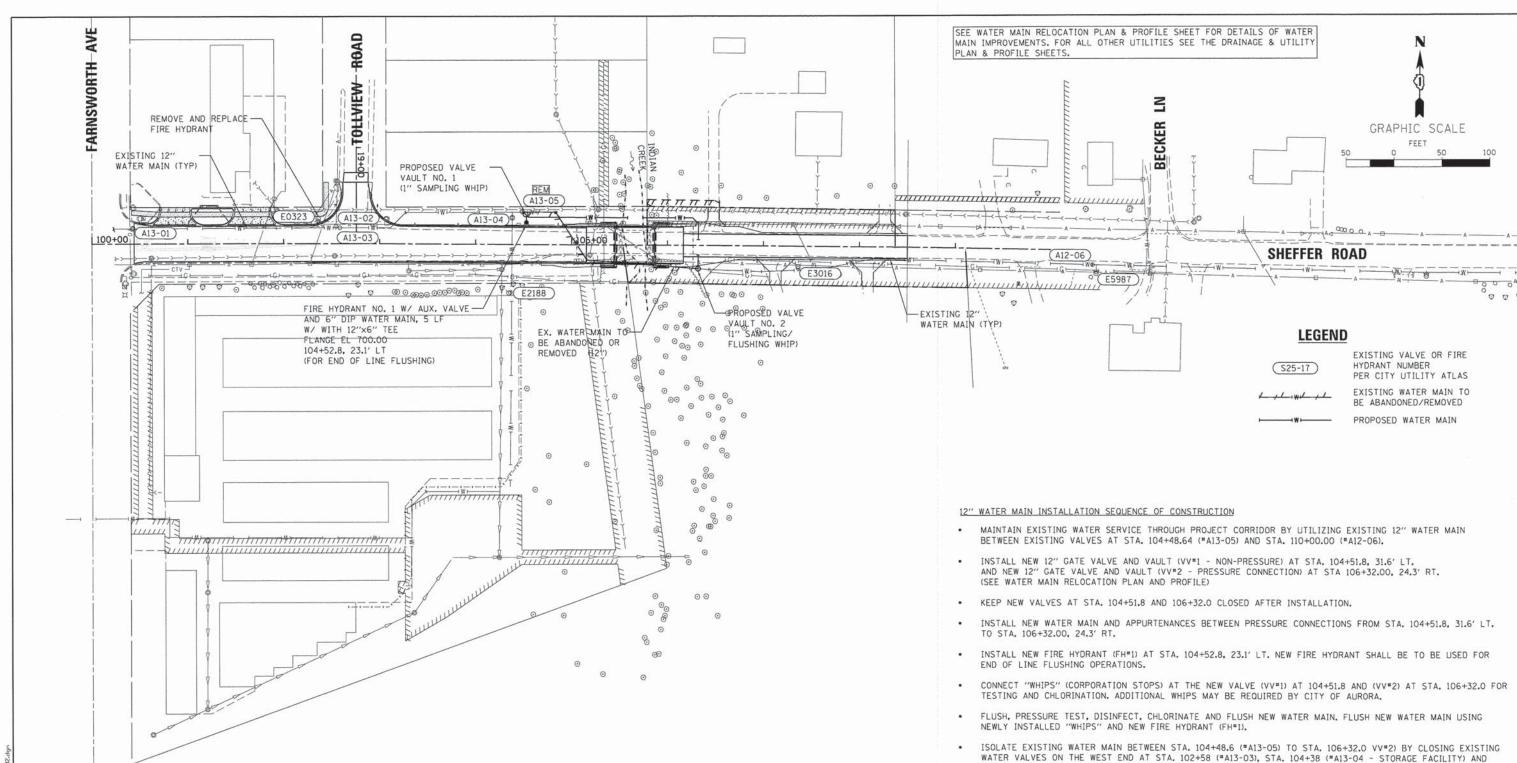
WILLS BURKE KELSEY ASSOCIATES LTD WBK 116 West Main Street, Suite St. Charles, Illinois 60174

& SEEDING DETAILS SHEET NO. 4 OF 4 SHEETS STA.









### FIRE HYDRANT TO BE REMOVED AND REPLACED

- THE EXISTING FIRE HYDRANT AT STA. 102+35.9, 26.2' LT (#E0323) WILL BE REMOVED AND A NEW FIRE HYDRANT ASSEMBLY WILL BE CONSTRUCTED AT THE SAME LOCATION. THE NEW FIRE HYDRANT SHALL BE SET TO THE PROPOSED ELEVATION SHOWN IN THE PLANS.
- ISOLATE EXISTING WATER MAIN BY CLOSING WATER VALVES AT STA. 100+42.5 (#A13-01), STA. 102+58.5 (A13-03) AND STA. 102+54.5 (A13-02).
- INSTALL NEW FIRE HYDRANT AT STA. 102+35.9, 26.2' LT. FLUSH FIRE HYDRANT BEFORE OPENING ALL VALVES.
- PUT EXISTING WATER MAIN INTO SERVICE BY OPENING ALL PREVIOUSLY CLOSED VALVES.

- WATER VALVES ON THE WEST END AT STA. 102+58 (#A13-03), STA. 104+38 (#A13-04 STORAGE FACILITY) AND THE EAST END AT STA. 110+00 (#A12-06).
- DISCONNECT EXISTING WATER MAIN AT PRESSURE CONNECTION AT STA. 106+32.0. PROVIDE PLUG AND RESTRAINED JOINTING. REMOVE EXISTING VALVE AT STA, 104+48.6 (#A13-05) AND MAKE NON-PRESSURE CONNECTION TO THE EXISTING WATER MAIN, PROVIDE RESTRAINED JOINTING, THIS WORK SHALL BE COMPLETED WITHIN 1 HOUR TIME PERIOD AND COMPLETED SIMULTANEOUSLY.
- RE-FLUSH SYSTEM BY OPENING EXISTING WATER VALVES ON THE WEST END AT STA. 102+58 (\*A13-03) AND THE EAST END AT STA. 110+00 (#A12-06). OPEN NEW VALVES AT STA. 104+51.8 (VV\*1) AND STA. 106+32.0 (VV\*2). KEEP EXISTING VALVE (#A13-04 - STORAGE FACILITY) CLOSED. FLUSH USING NEW FIRE HYDRANT (FH#1) AT STA. 104+52.8 AND EXISTING FIRE HYDRANT AT STA. 107+36 (E3016).
- OPEN EXISTING VALVE AT STA. 104+38 (#A13-04 STORAGE FACILITY) AND FLUSH LATERAL USING EXISTING FIRE HYDRANT AT STA. 104+35, 51' RT. (E2188).
- . REMOVE OR ABANDON EXISTING 12" WATER MAIN AS NEEDED TO CONSTRUCT BRIDGE AND ROADWAY IMPROVEMENTS.

	Α.		US
1		WILLS BURKE KELSEY ASSOCIATES LTD.	
	WBK	116 West Main Street, Suite 201 St. Charles, Illinois 60174	PL
2	A 200		

SEQUENCE OF OPERATION NOTES

THE WATER MAIN INSTALLATION SEQUENCE OF CONSTRUCTION LISTED BELOW IS A SUGGESTED

REQUIRED BY THE CONTRACTOR TO CONSTRUCT THE NEW WATER MAIN AND APPURTENANCES AS

SEQUENCE OF OPERATIONS AND DOES NOT, NOR IS IT INTENDED, TO DEPICT ALL THE WORK

SHOWN IN THE PLANS. THE SEQUENCE OF OPERATION IS GIVEN AS AN AIDE AND GUIDE FOR

THE CONTRACTOR'S USE TO ESTABLISH NECESSARY GUIDELINES REQUIRED BY THE CITY OF

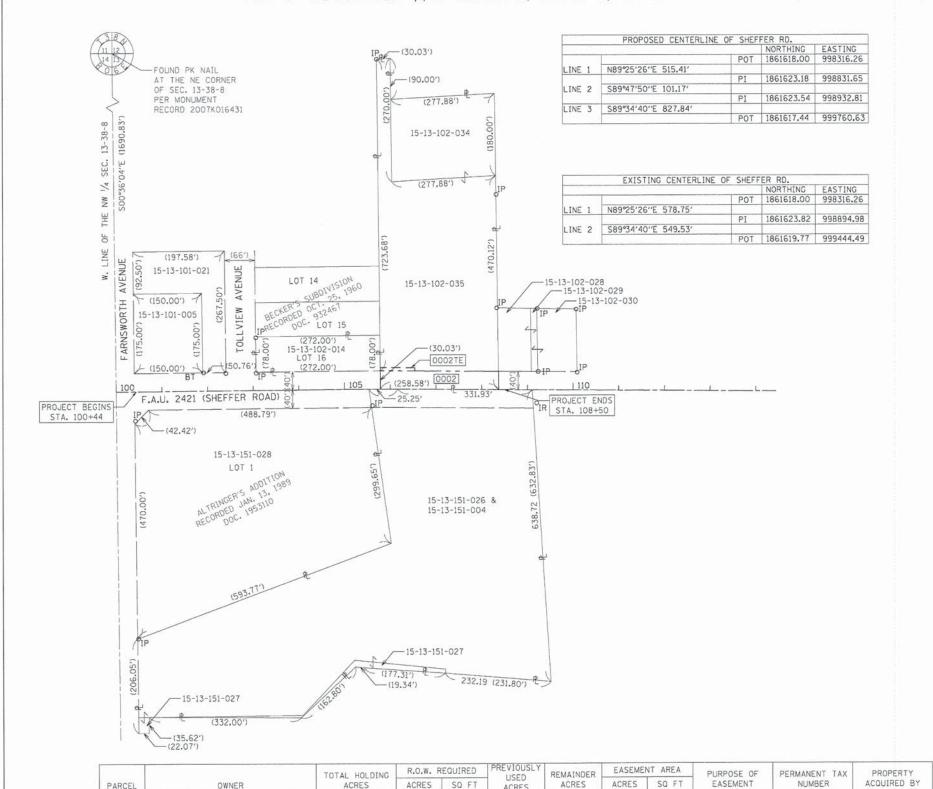
AURORA FOR SHUTTING DOWN OF EXISTING WATER MAINS. THE CONTRACTOR MAY WISH TO MAKE REVISIONS OR MODIFICATIONS TO THE SEQUENCE OF OPERATION AND/OR CONSTRUCTION METHODS. THE CONTRACTOR WILL COORDINATE AND FINALIZE THE SEQUENCE OF CONSTRUCTION OPERATIONS WITH THE ENGINEER AND CITY OF AURORA WATER PRODUCTION DIVISION.

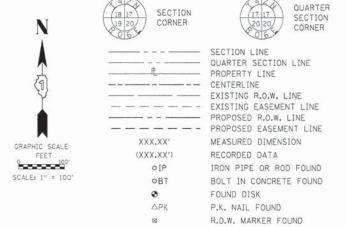
	USER NAME = nporris	DESIGNED	-	SBP	REVISED -	
rd.		DRAWN	-	SBP	REVISED -	
	PLOT SCALE = 1:50	CHECKED	-	MNB	REVISED -	
	PLOT DATE = 12/12/2014	DATE		12/15/2014	REVISED -	

STATE	OF	ILLINOIS
DEPARTMENT	OF 1	TRANSPORTATION

	WAT	ER M	AIN REL	OCATION		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	SEOUI	ENCE	OF CONS	STRUCTION	2421	11-00298-00-BR	KANE	85	85 30	
DEEDERGE OF CONTINUOUS						CONTRACT				NO.61B08
05556	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

# **LEGEND**





THESE STAKES REFERENCE FOUND OR SET MONUMENTATION, SET % INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS T3

●RT1 THESE STAKES IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION, BURIED 56 INCH IRON ROD 20 INCHES BELOW TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 (2007 ADJESTMENT), EAST ZONE.

STATE OF ILLINOIS ) COUNTY OF KANE

WE, WILLS BURKE KELSEY ASSOCIATES, ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002097, DO HEREBY DECLARE THAT THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 13, TOWNSHIP 38 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR KANE COUNTY DEPARTMENT OF TRANSPORTATION.

GIVEN UNDER MY HAND AND SEAL THIS \_\_\_\_\_ AT ST. CHARLES, ILLINOIS.

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY. STANDARDS FOR A BOUNDARY SURVEY.
RUDY P. DIXON
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3832
MY LICENSE EXPIRES NOVEMBER 30, 2016
DESIGN FIRM LICENSE EXPIRES APRIL 30, 2015



PLAT OF HIGHWAYS STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.U. 2421 (SHEFFER ROAD)

LIMITS: SEE STA. RANGE COUNTY: KANE SECTION: 11-00298-00-BR JOB NO.: R-55-001-97 STATION 100+44 TO STATION 108+50 SCALE: 1" = 100' SHEET 2 OF 4

> BUREAU OF LAND ACQUISITION 201 WEST CENTER COURT

MADE BY

SCHAUMBURG, ILLINOIS 60196

REVISED DESIGNED USER NAME = nparris WILLS BURKE KELSEY ASSOCIATES LTD REVISED DRAWN WBK 116 West Main Street, Suit St. Charles, Illinois 60174 PLOT SCALE = 1:50 CHECKED REVISED PLOT DATE = 12/12/2014 DATE 12/15/2014 REVISED

3.863

0.237

10,341.84

0.237

3.626

N/A

0.012

N/A

528.56

OLGA A. BURROUGHS AS TRUSTEE OF

OLGA A. BURROUGHS DECLARATION OF

TRUST DATED AUGUST 10, 2007

0002

0002TE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

CONSTRUCTION

15-13-102-035

15-13-102-034

SCALE: N.T.S.

PLAT OF HIGHWAYS FOR REFERENCE ONLY SHEET NO. 1 OF 3 SHEETS STA.

COUNTY TOTAL SHEE NO. SECTION KANE 85 31 11-00298-00-BR 2421 CONTRACT NO.61B08

TO STA.

LLINOIS FED. AID PROJECT

### **LEGEND**



- THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET  $\frac{5}{8}$  INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS
- •BT1 THESE STAKES IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION, BURIED % INCH IRON ROD 20 INCHES BELOW TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 (2007 ADJESTMENT), EAST ZONE.

STATE OF ILLINOIS ) COUNTY OF KANE

WE, WILLS BURKE KELSEY ASSOCIATES, ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002097, DO HEREBY DECLARE THAT THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 13, TOWNSHIP 38 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR KANE COUNTY DEPARTMENT OF TRANSPORTATION.

GIVEN UNDER MY HAND AND SEAL THIS \_\_\_\_\_\_ DAY OF JANUARY A.D., 2015 AT ST. CHARLES, ILLINOIS.

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.
RUDY P. DIXON
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3832
MY LICENSE EXPIRES NOVEMBER 30, 2016
DESIGN FIRM LICENSE EXPIRES APRIL 30, 2015



PLAT OF HIGHWAYS STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION F.A.U. 2421 (SHEFFER ROAD)

SECTION: 11-00298-00-BR JOB NO.: R-55-001-97 STATION 100+44 TO STATION 108+50

> BUREAU OF LAND ACQUISITION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196

15-13-101-021 RONALD J. FENSKE JR. 34.41 34.41' (66") 74 7.16 FND. IP 2.09 SOUTH & 0.43' EAST 15-13-102-014 LOT 16 JOSEPH L. SACHEN & 15.33' MARY P. PIERCEALL 15-13-101-005 OLD SECOND NATIONAL 26.12 BANK AURORA EXISTING R.O.W. EXISTING R.O.W. FND. BOLT IN EXISTING NORTHERLY CONCRETE ONLINE FND. IP ONLINE & ROJECT BEGINS R.O.W LINE STA. 100+44 & 1.89' EAST 2.00' SOUTH PER DOCUMENT 932467 FND. IP ONLINE &-100 1.80' SOUTH PROPOSED & EXISTING EXISTING SOUTHERLY F.A.U. 2421 (SHEFFER ROAD) CENTERLINE OF SEE R.O.W. LINE SHEFFER ROAD PER DOCUMENT 1953110 (SEE SHEET 2 OF 4) EXISTING R.O.W. FND. IR 6.25' NORTH & 1.50' EAST 32.60' 299.82 15-13-151-028 PUBLIC STORAGE PROPERTIES XX INC. JSER NAME = nparris DESIGNED REVISED STATE OF ILLINOIS WILLS BURKE KELSEY ASSOCIATES LTD REVISED DRAWN WBK 116 West Main Street, Suite 20' St. Charles, Illinois 60174 PLOT SCALE = 1:50 CHECKED REVISED

PLOT DATE = 12/12/2014

DATE

12/15/2014

REVISED

DEPARTMENT OF TRANSPORTATION

PLAT OF HIGHWAYS FOR REFERENCE ONLY SHEET NO. 2 OF 3 SHEETS STA.

SCALE: N.T.S.

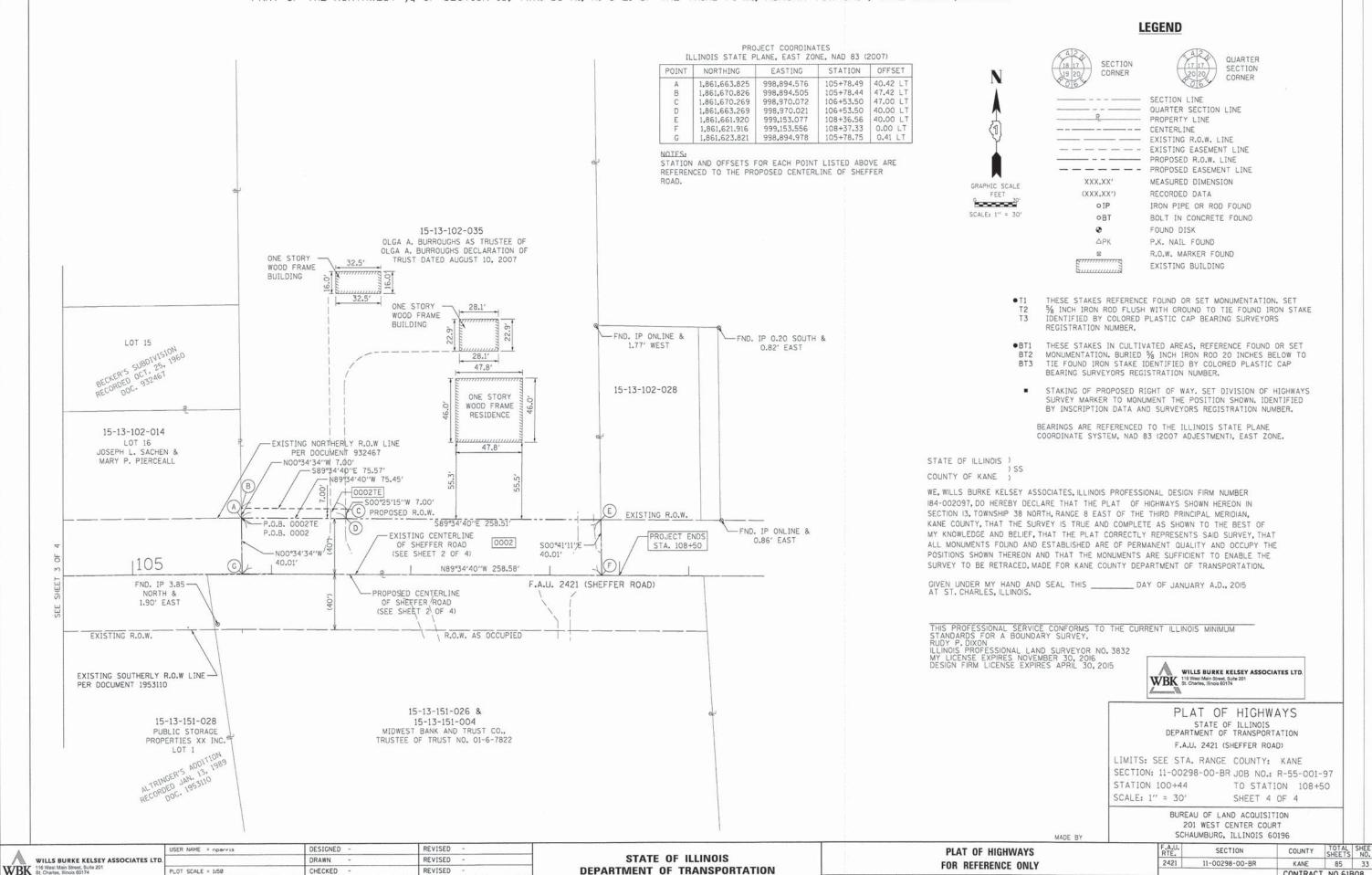
SECTION COUNTY TOTAL SHEE 2421 11-00298-00-BR KANE 85 32 CONTRACT NO.61B08

LIMITS: SEE STA. RANGE COUNTY: KANE

SCALE: 1" = 30' SHEET 3 OF 4

MADE BY

TO STA.



SCALE: N.T.S.

SHEET NO. 3 OF 3 SHEETS STA.

TO STA.

CONTRACT NO.61B08

ILLINOIS FED. AID PROJECT

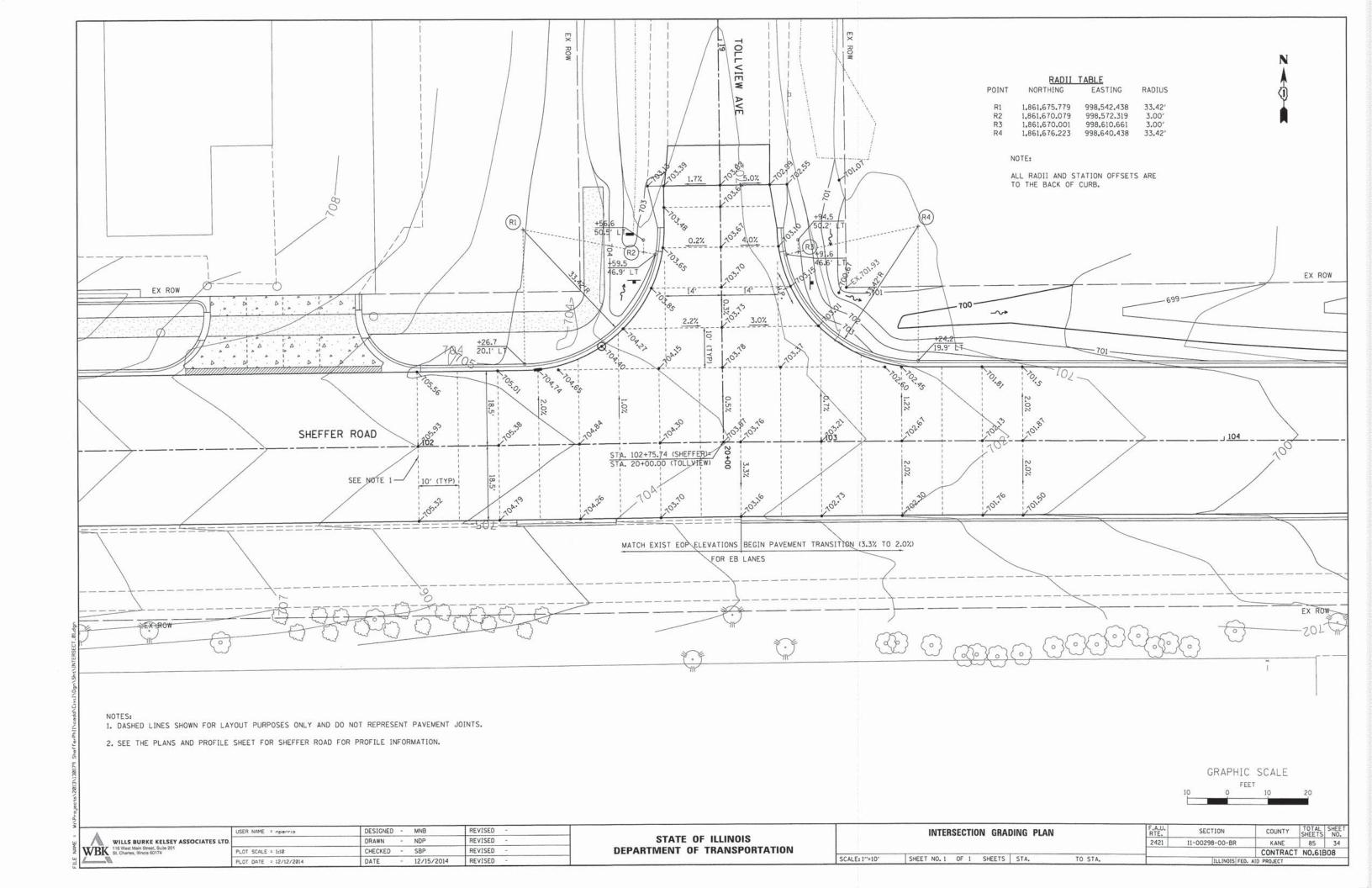
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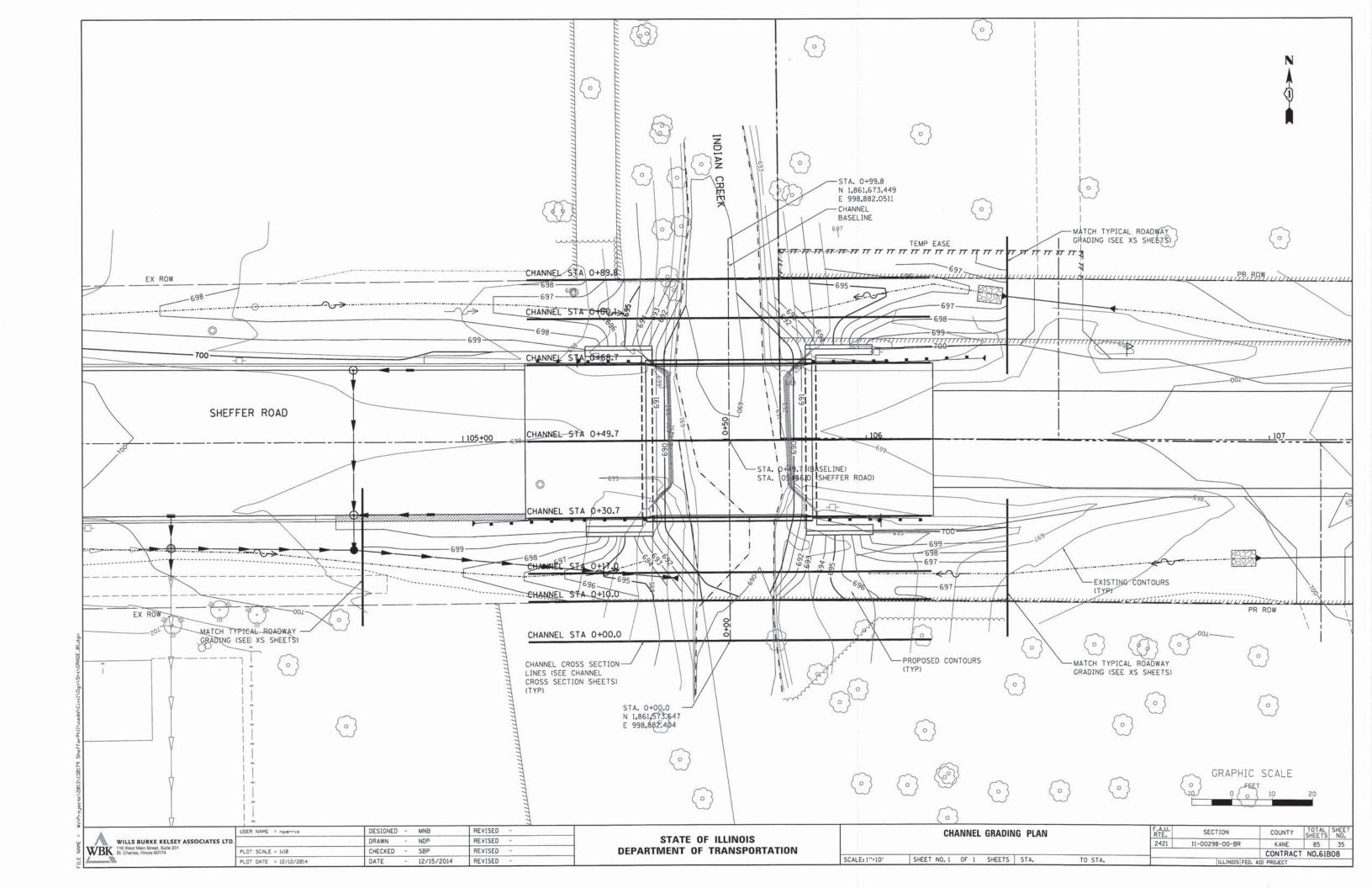
PLOT DATE = 12/12/2014

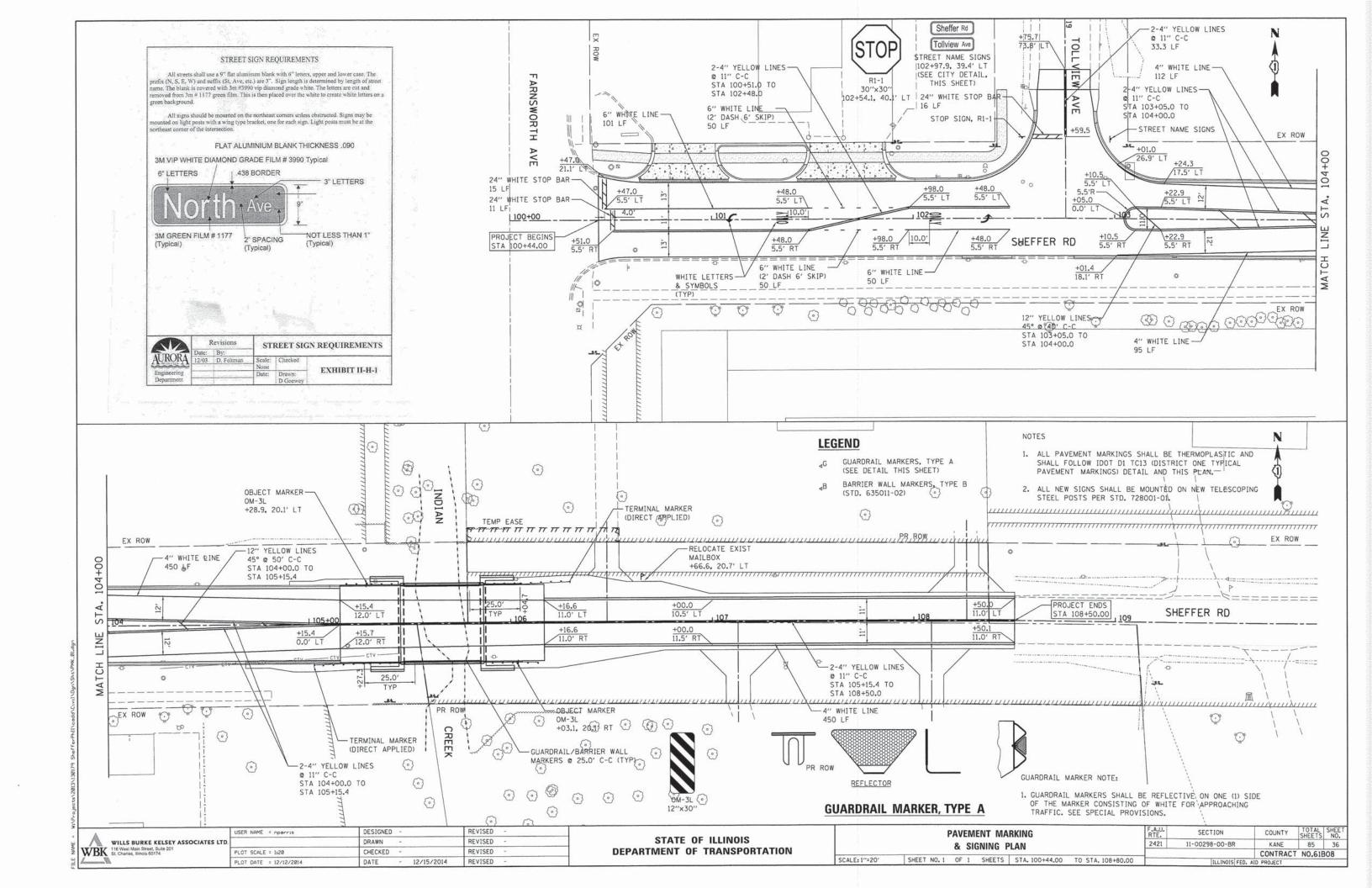
DATE

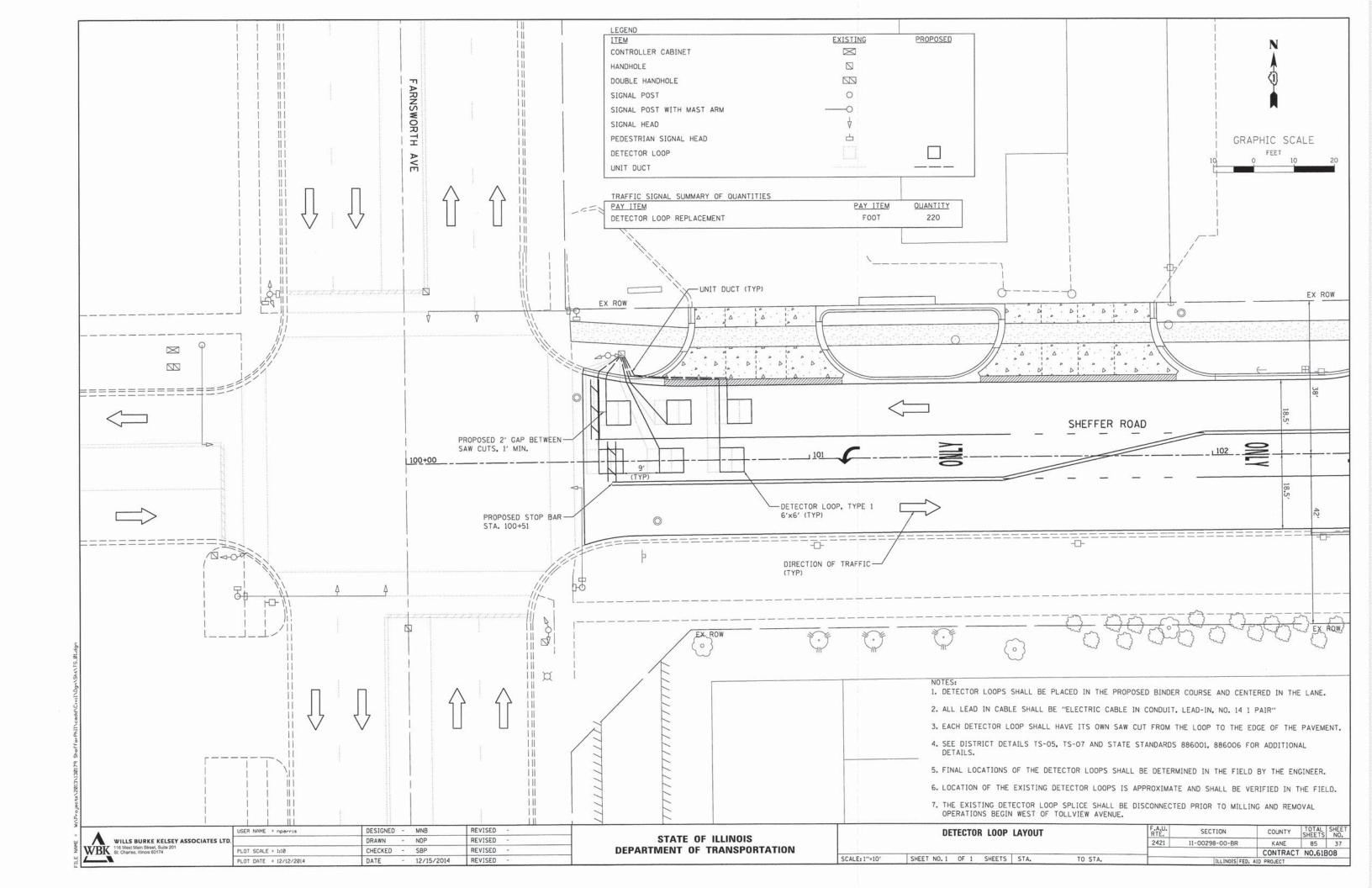
12/15/2014

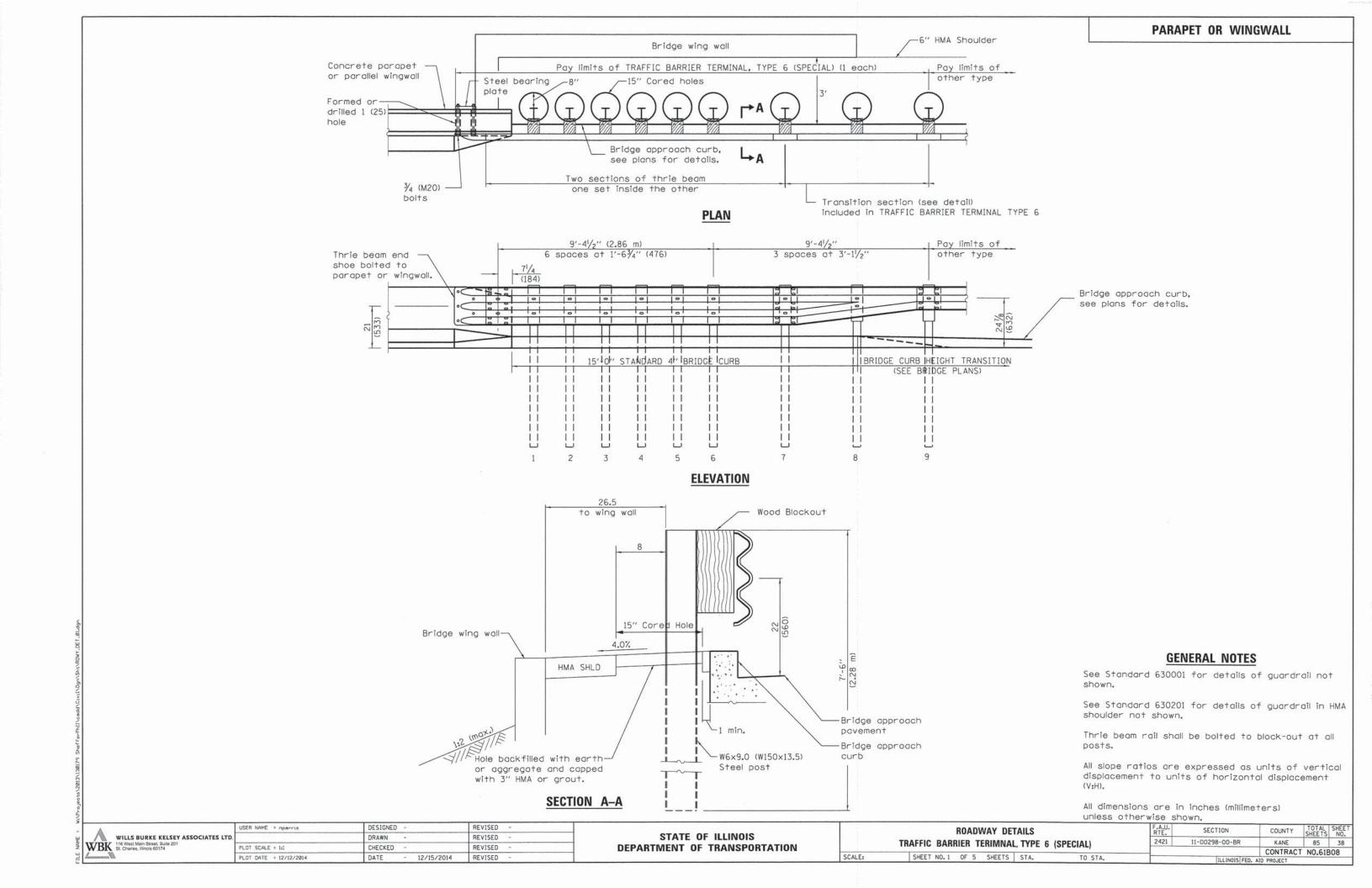
REVISED

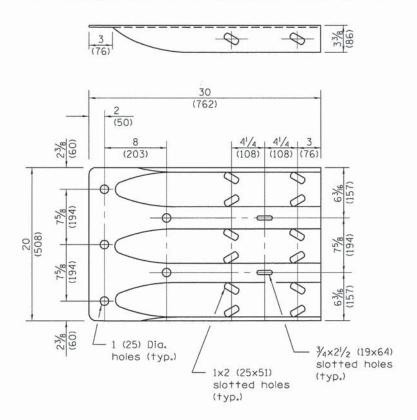




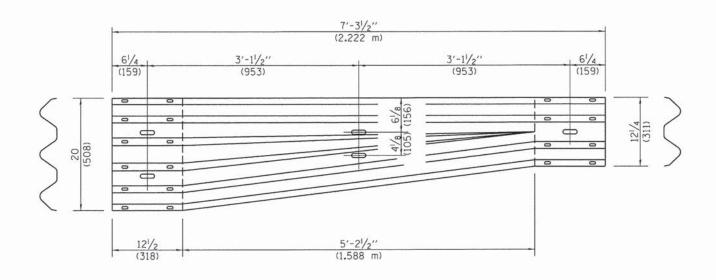




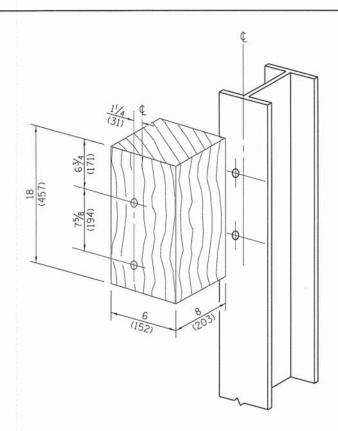




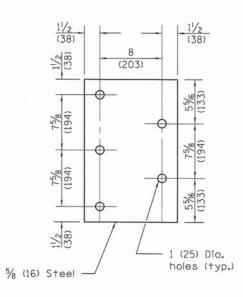
## THRIE BEAM END SHOE DETAIL



## TRANSITION SECTION (10 gauge (3.4) rail element)



## POSTS 1-9 WOOD BLOCKOUT DETAIL



## PARAPET STEEL BEARING PLATE DETAIL

(5 each individual  $5x5x\frac{5}{8}$  (125x125x16) steel plates with centered 1 (25) holes may be substituted for the plate shown.)

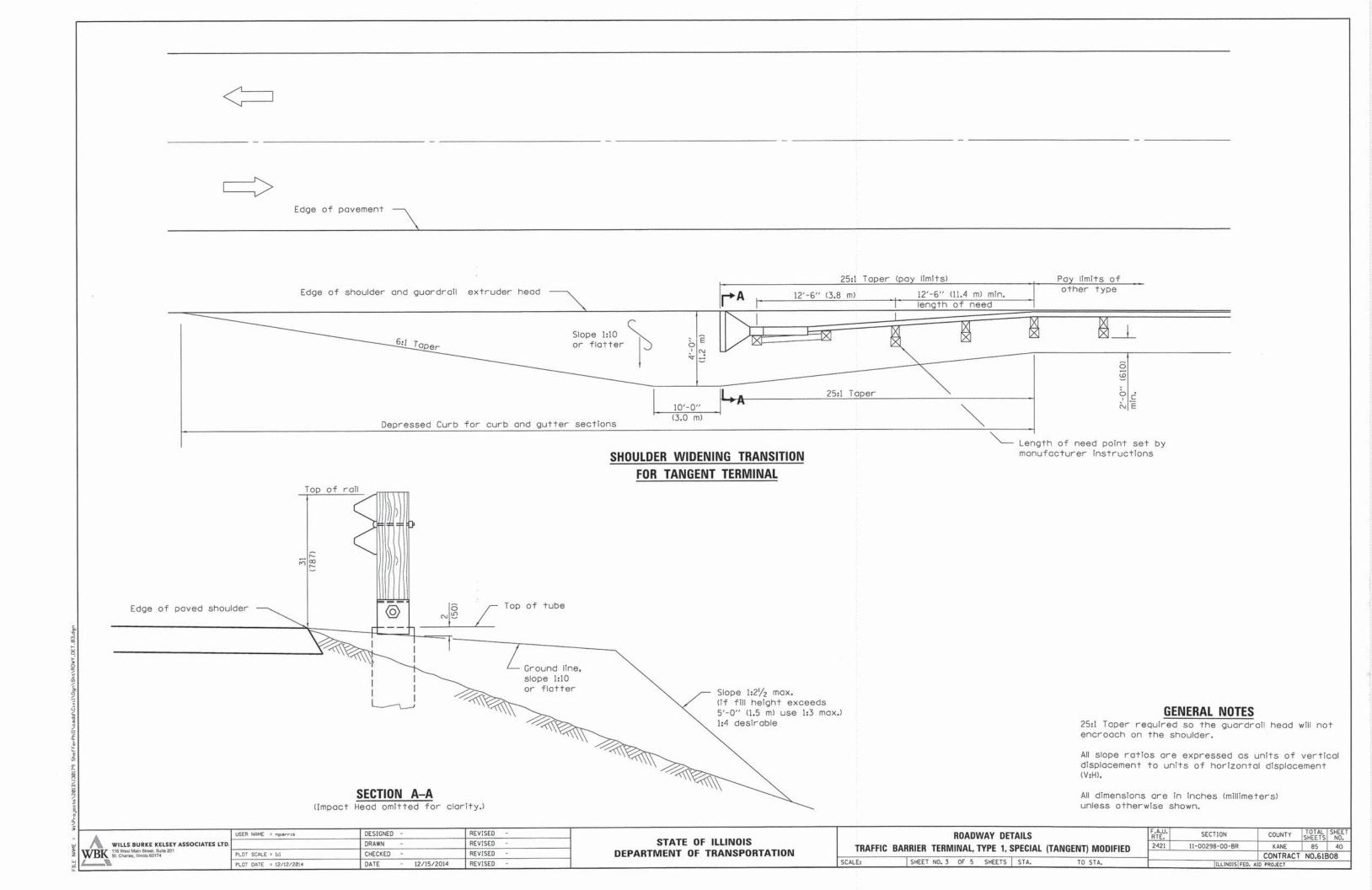
WBK	WILLS BURKE 116 West Main Stree St. Charles, Illinois 60	KELSEY , Suite 201 1174	ASSOCIATES	LTD
WBK	WILLS BURKE 116 West Main Stree St. Charles, Illinois 60	KELSEY , Suite 201 1174	ASSOCIATES	L

USER NAME = nperris	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 1:1	CHECKED -	REVISED -	
PLOT DATE = 12/12/2014	DATE - 12/15/2014	REVISED -	

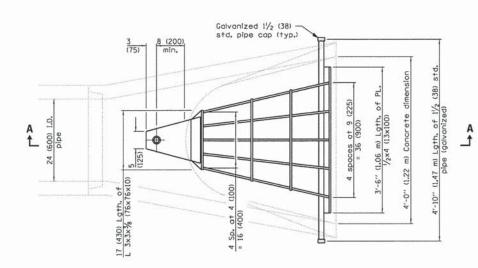
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

		RO/	DV	VAY DE	TAILS	
TRAFFIC	BAR	RIER	Т	ERIMNAI	., TYPE	6 (SPECIAL)
SHEET	NO. 2	OF	5	SHEETS	STA.	TO STA.



#### SECTION A-A



#### **GENERAL NOTES**

Grating details shown are intended for use with particular sizes of precast reinforced concrete flored end sections as shown on standards 542301 and 542306.

Approximate quantity of steel shown includes total quantity of grating, bolts, nuts, washers and steel pipe.

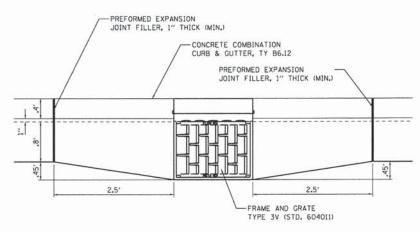
Holes in the precast concrete flared end sections shall be cored to the diameters noted. If cone-out on the other end of the hole occurs, the hole shall be filled with grout to correct the diameter of the hole.

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

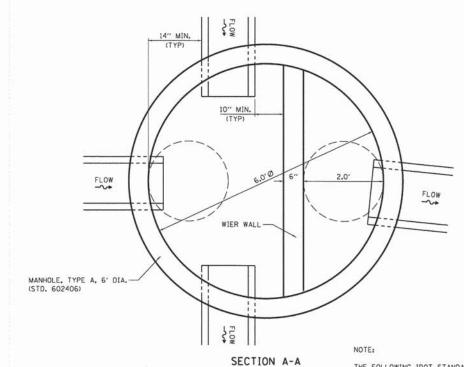
#### **PLAN**

## Quantity of steel = 150 lbs. (68 kg)

### **GRATING FOR CONCRETE** FLARED END SECTION

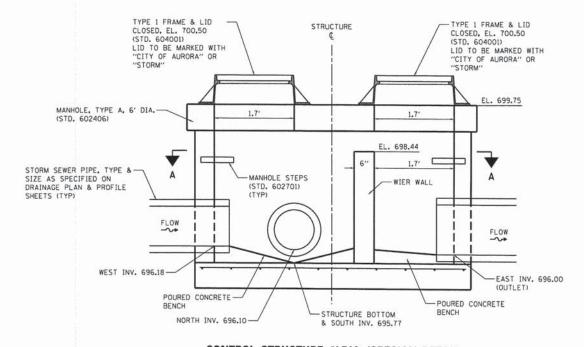


## **CURB DETAIL** FOR FRAME AND GRATE TYPE 3V



THE FOLLOWING IDOT STANDARDS SHALL BE USED IN THE CONSTRUCTION OF "CONTROL STRUCTURE, 6' DIA. (SPECIAL)"

605406-06 602701-02 MANHOLE, TYPE A, 6' DIAMETER MANHOLE STEPS 604001-04 FRAME AND LIDS TYPE 1



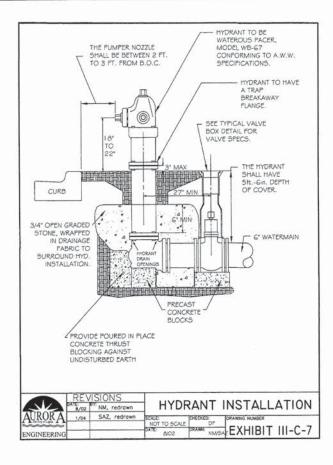
#### CONTROL STRUCTURE, 6' DIA. (SPECIAL) DETAIL STA. 104+27.5, 26.0' RT

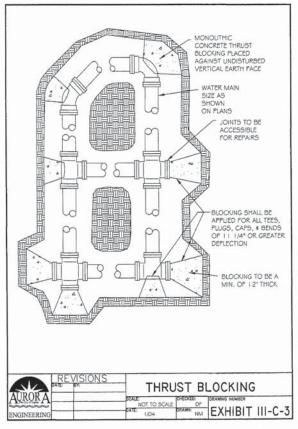
	USER NAME = nperris	DESIGNED	-		REVISED		
LTD.		DRAWN	T.		REVISED	5	
	PLOT SCALE = 1:1	CHECKED			REVISED	-	
	PLOT DATE = 12/12/2014	DATE	-	12/15/2014	REVISED	-	

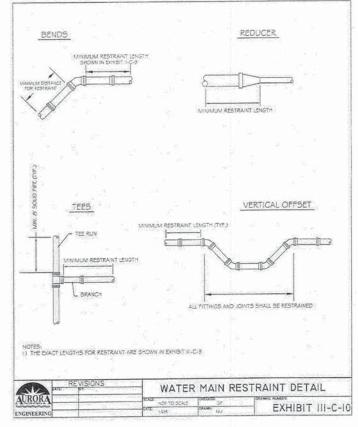
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

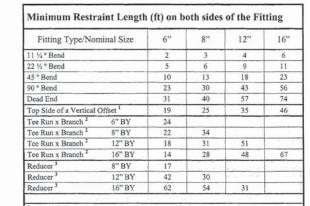
	DRAINAGE DETAILS					SECTION	COUNTY	TOTAL	SHEET NO.
						11-00298-00-BR	KANE	85 4	41
CON 5	Tours up 4 or 5	C. FETTO					CONTRACT	NO.61E	308
SCALE:	SHEET NO. 4 OF 5	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

WILLS BURKE KELSEY ASSOCIATES L WBK 116 West Main Street, Suite 20' St. Charles, Illinois 60174









All joints within the lowered section of the watermain shall be restrained or shall be solid pipe. The above distances reflect the required restraint distance on the normally elevated watermain either side of the 45° Fitting of the vertical offset (or lowering).

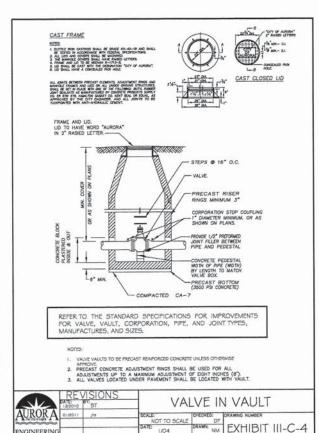
 $^2$  Minimum of 8 ft of solid pipe is required on both sides of the fitting on the run side. Distance indicates the length of restraint on the branch side or the side perpendicular to the tee run watermain.

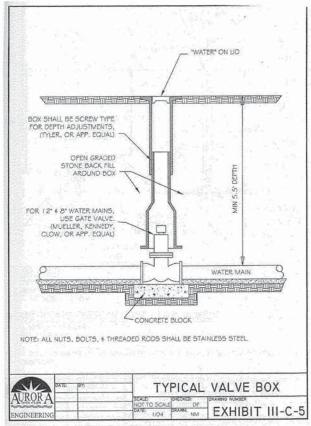
Indicates the distance from the larger end of the reducer.

Notes: 1) All nuts and bolts shall be stainless steel,

2) The <u>Entire restraint system</u> from the fitting to the minimum restraint distance must be Inspected by The City of Aurora or it's representative prior to backfilling.

	R	evisions		Watermain 1	Restraint Length Table
AT TOOP A	Date:	By:	J.,		
AUKUKA			Scale: None	Checked PJH	EXHIBIT III-C-9
Engineering Department			Date: 2/04	Drawn: DF	EXHIBIT III-C-9



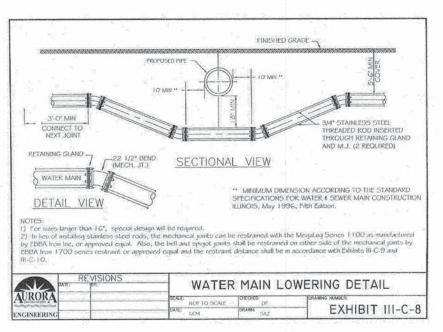


REVISED

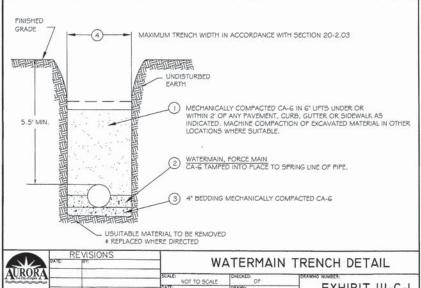
REVISED

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REVISED



SCALE:



AURORA					
Tarich Music Ta	SCALE	NOT TO SCALE	CHECKED	OF	DRAWING NUMBER:
ENGINEERING	DATE:	1/04	DRAWN	NM	EXHIBIT III-C-

WILLS BURKE KELSEY ASSOCIATES LT: WBK 116 West Main Street, Suide 201 St. Charles, Illinois 60174	USER NAME = nperris	DESIGNED -
	rD.	DRAWN -
	PLOT SCALE = 1:1	CHECKED -
	PLOT DATE = 12/12/2014	DATE - 12/15/2014

CITY OF AURORA		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
WATER MAIN DETAILS		2421	11-00298-00-BR	KANE	85	42
				CONTRAC	T NO.61E	808
SHEET NO. 5 OF 5 SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	V	

## DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition

## DESIGN STRESSES

### FIELD UNITS

f'c = 3,500 psi

fy = 60,000 psi (Reinforcement)

f'c = 5,000 psi (Concrete Wearing Surface)

#### PRECAST PRESTRESSED UNITS

f'c = 6,000 psi

f'ci = 5.000 psi

 $fpu = 270,000 psi (\frac{1}{2}) \phi low lax. Strands)$ 

 $fpbt = 201,960 psi (\frac{1}{2})^{\circ} low lax Strands)$ 

## 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. (Sp1) = 0.090g Design Spectral Acceleration at 0.2 sec.  $(S_{DS})$  = 0.164g Soil Site Class = D

### INDEX OF SHEETS

- 1. General Plan & Elevation
- 2. General Notes & Bill of Material
- 3. Substructure Layout & Cofferdam Details
- 4. Top of West Approach Slab Elevations
- 5. Top of East Approach Slab Elevations
- 6. Superstructure
- 7. Superstructure Details I
- 8. Superstructure Details II
- 9. West Bridge Approach Slab Details
- 10. East Bridge Approach Slab Details
- 11. Bridge Approach Slab Details
- 12. 17" x 48" PPC Deck Beam 13. 17" x 48" PPC Deck Beam Details
- 14. Abutments
- 15. Abutment/Wingwall Details
- 16. HP Pile Details
- 17. Soil Borings I
- 18. Soil Borings II



GENERAL PLAN & ELEVATION SHEFFER ROAD OVER INDIAN CREEK SEC. 11-00298-00-BR KANE COUNTY STA. 105+66.00 STRUCTURE NO. 045-6053

316 698.00 1.12 0.13 699.12 698.13 319 698.87 1.21 1.01 700.08 699.88 Base 100 1.743 192 500 2,401 192 Max. Calc.

DESIGNED -DLS REVISED WILLS BURKE KELSEY ASSOCIATES LTD CHECKED -REVISED WBK 116 West Main Street, Suite 20 St. Charles, Illinois 60174 DLS PLOT SCALE = #SCALE# DRAWN REVISED PLOT DATE = 12/3/2014 CHECKED AEU REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  **GENERAL PLAN AND ELEVATION** STRUCTURE NO. 045-6053 SHEET NO. 1 OF 18 SHEETS

SECTION 2421 11-00298-00-BR KANE 85 43 CONTRACT NO. 61B08

INDIAN CREEK
BUILT 20XX
CITY OF AURORA
SEC. 11-00298-00-BR
F.A.U. RTE. 2421 STA. 105+66
STR. NO. 045-6053 LOADING HL-93

NAME PLATE

See Std. 515001

## GENERAL NOTES

- 1. Reinforcement bars designated (E) shall be epoxy coated.
- 2. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 3. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- 4. The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load-carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal or replacement of the structure

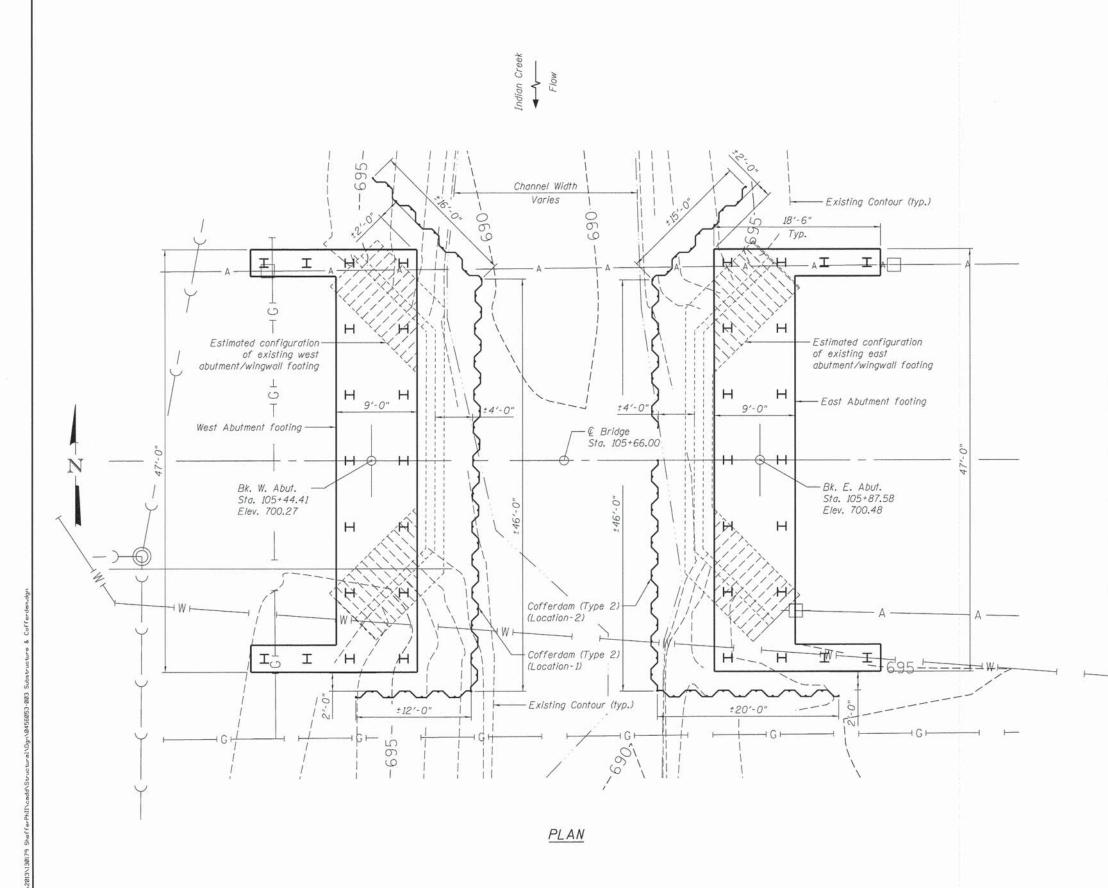
## TOTAL BILL OF MATERIAL

	Item	Unit	Superstructure	Substructure	Total
F	Stone Riprap, Class A4	Sq. Yd.		363	363
Ī	Filter Fabric	Sq. Yd.	****	363	363
ľ	Removal of Existing Structures	Each		(4) (4, 4)	1
Ī	Cofferdam Excavation	Cu. Yd.		714	714
Ī	Cofferdam (Type 2) (Location -1)	Each		1	1
	Cofferdam (Type 2) (Location -2)	Each		1	1
	Concrete Structures	Cu. Yd.		216.3	216.3
	Concrete Superstructure	Cu. Yd.	146.0		146.0
	Bridge Deck Grooving	Sq. Yd.	423		423
	Concrete Encasement	Cu. Yd.		12.6	12.6
	Protective Coat	Sq. Yd.	474		474
	Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1.647		1,647
l	Reinforcement Bars, Epoxy Coated	Pound	34,900	20,050	54,950
ľ	Furnishing Steel Piles HP 12x63	Foot		1,054	1,054
ľ	Driving Piles	Foot	#.#.#.#	1,054	1,054
ľ	Test Pile Steel HP 12x63	Each		2	2
ľ	Pile Shoes	Each		36	36
	Name Plates	Each			1
	Geocomposite Wall Drain	Sq. Yd.		69	69
	Concrete Wearing Surface, 5"	Sq. Yd.	184		184
r	Granular Backfill for Structures	Cu. Yd.		97	97

\* Indicates a Special Provision

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FED. RO	DAD DIST. NO.	ILLINOIS	FED. AIC	PROJECT					
				CONTRACT	NO. 6	1B08			
2421	11-002	98-00-BR		-00298-00-BR		KANE	85	44	
RTE. SECTION				COUNTY	TOTAL SHEETS	SHEE?			



## <u>NOTES</u>

- Cofferdam (Type 2) (Location-1) and Cofferdam (Type 2) (Location-2) will be required for the removal of the existing abutment footings and for the construction of the new abutments.
- The design, construction and required submittals for Cofferdam (Type 2) (Location-1) and Cofferdam (Type 2) (Location-2) shall conform to the special provision "Cofferdams".
- The Cofferdam Water Elevation 694.45 is taken as 3 feet above the Estimated Water Surface Elevation 691.45. The top of cofferdam shall be set at or above Elevation 694.45.
- Existing plans are not available for the existing bridge. Therefore, the foundation and footing geometry are not known, as is whether the foundation is supported on piles.
- 5. The construction of the new abutments and the installation of piles may interfere with the existing abutment foundations. After construction of the cofferdams, the Contractor is required to determine the extent and depth of the existing abutment and wingwall foundations and remove portions of the existing foundations for the construction of the new abutments.

## BILL OF MATERIAL

Item	Unit	Quantity		
Cofferdam (Type 2) (Location - 1)		Each	1	
Cofferdam (Type 2) (Location -	2)	Each	1	

WILLS BURKE KELSEY ASSOCIATES LTD.
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE LAYOUT AND COFFERDAM DETAILS
STRUCTURE NO. 045-6053

SHEET NO. 3 OF 18 SHEETS

## NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	105+15.41	-18.92	699.82
AI A2	105+25.41 105+35.41	-18.92 -18.92	699.87 699.92
E. End W. Appr. Slab	105+45.41	-18.92	699.97

## NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	105+15.41	-12.00	699.93
A1 A2	105+25.41 105+35.41	-12.00 -12.00	699.98 700.03
E. End W. Appr. Slab	105+45.41	-12.00	700.08

- North Curb Line

## @ ROADWAY & P.G.

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	105+15.41	0.00	700.12
A1 A2	105+25.41 105+35.41	0.00	700.17 700.22
E. End W. Appr. Slab	105+45.41	0.00	700.27

## SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	105+15.41	12.00	699.93
A1 A2	105+25.41 105+35.41	12.00 12.00	699.98 700.03
E. End W. Appr. Slab	105+45.41	12.00	700.08

# North Edge of Pavement East End of -West End of West Appr. Slab West Appr. Slab \_ € Roadway and P.G. - South Edge of Pavement - South Curb Line

(A1)

_	_
W.	l

#### Elevations End W. Appr. Slab 105+15.41 18.92 699.82 105+25.41 105+35.41 699.87 18.92 18.92 699.92

105+45.41

FAU RTE. 2421

Station

SOUTH CURB LINE

## PLAN

3 Spaces at 10'-0" = 30'-0"

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Location

E. End W. Appr. Slab

SE	CTION	COUNTY	TOTAL	SHEE'
11-00298-00-BR		KANE	85	46
		CONTRACT	NO. 6	B08
AD DIST. NO.	ILLINOIS FED. A	ID PROJECT		

Theoretical

Grade

699.97

Offset

18.92

## NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	105+86.58	-18.92	700.18
A3 A4	105+96.58 106+06.58	-18.92 -18.92	700.23 700.28
E. End E. Appr. Slab	106+16.58	-18.92	700.33

## NORTH EDGE OF PAVEMENT

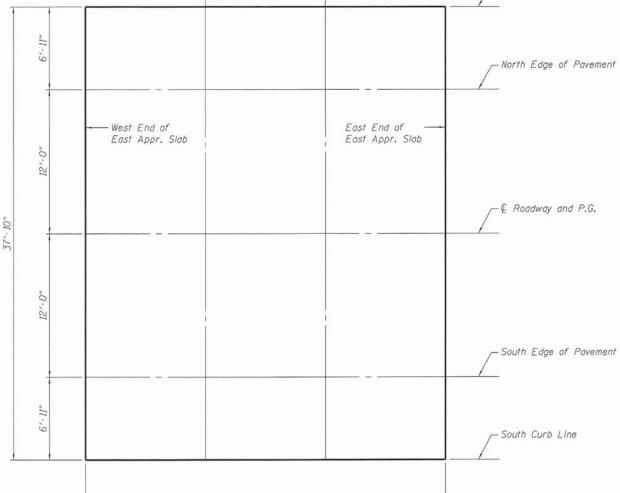
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	105+86.58	-12.00	700.29
A3 A4	105+96.58 106+06.58	-12.00 -12.00	700.34 700.39
E. End E. Appr. Slab	106+16.58	-12.00	700.44

North Curb Line

## @ ROADWAY & P.G.

Location					Station	Offset	Theoretical Grade Elevations
W .	End	Ε.	Appr.	Slab	105+86.58	0.00	700.48
				A3 A4	105+96.58 106+06.58	0.00	700.53 700.58
Ε.	End	Ε.	Appr.	Slab	106+16.58	0.00	700.63

(A3)



## SOUTH EDGE OF PAVEMENT

Location				Station	Offset	Theoretical Grade Elevations	
W.	End	Ε.	Appr.	Slab	105+86.58	12.00	700.29
				A3 A4	105+96.58 106+06.58	12.00 12.00	700.34
Ε.	End	Ε.	Appr.	Slab	106+16.58	12.00	700.44

## SOUTH CURB LINE

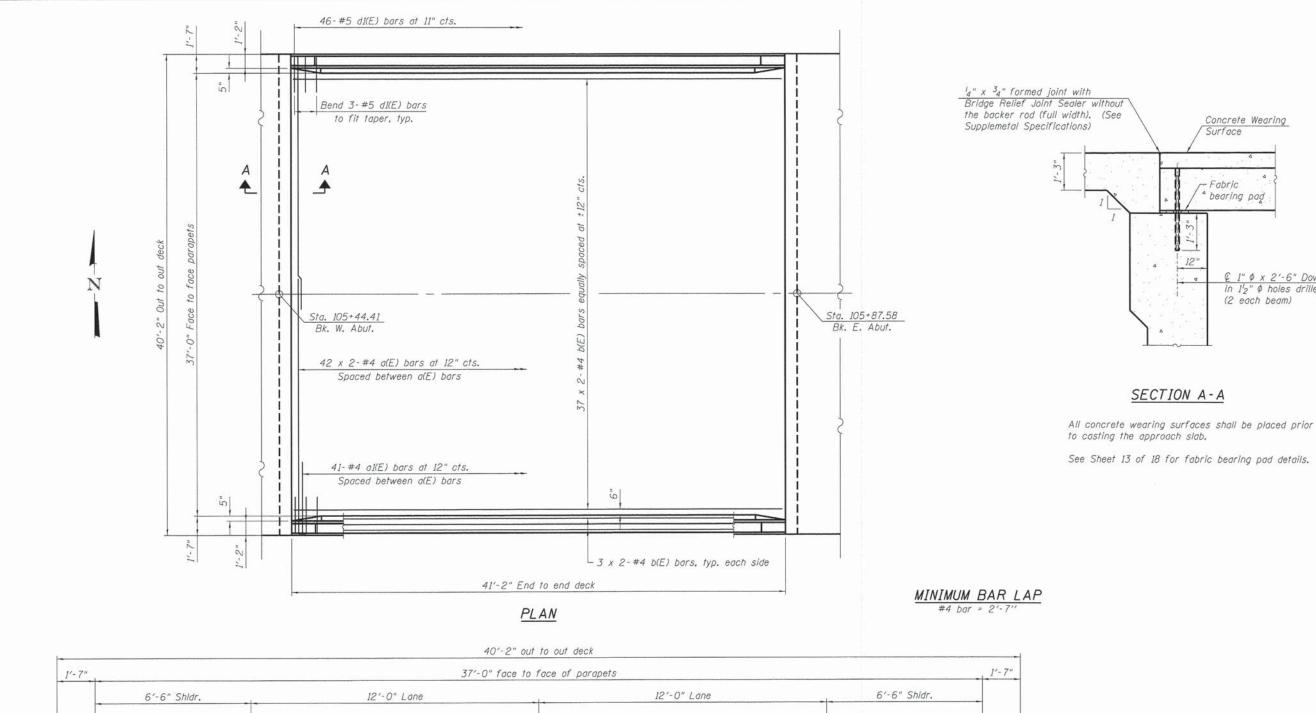
		Loc	cation		Station	Offset	Theoretical Grade Elevations
W.	End	Ε.	Appr.	Slab	105+86.58	18.92	700.18
				A3 A4	105+96.58 106+06.58	18.92 18.92	700.23 700.28
Ε.	End	Ε.	Appr.	Slab	106+16.58	18.92	700.33

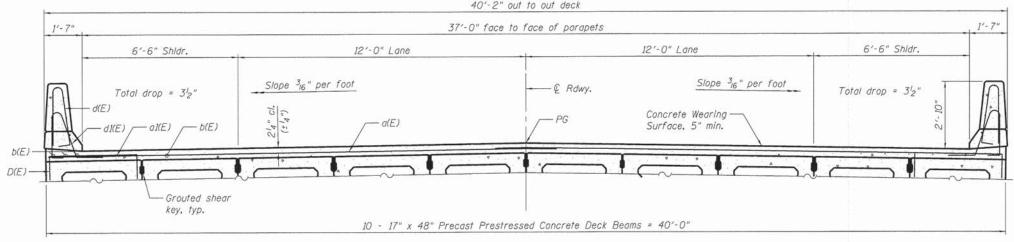
## PLAN

3 Spaces at 10'-0" = 30'-0"

Α.		USE
$\Lambda$	WILLS BURKE KELSEY ASSOCIATES LTD.	
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/		PLO

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PLOT DATE = 12/15/2014	CHECKED - AEU	REVISED -	





## <u>NOTES</u>

1. See Sheets 7 & 8 of 18 for Superstructure Details and Bill of Material.

Concrete Wearing

② 1" 
Ø x 2'-6" Dowel rods in  $I_2''$   $\phi$  holes drilled in cap (2 each beam)

Surface

Fabric bearing pad

2. Bars indicated thus 42 x 2-#4 etc. indicates 42 lines of bars with 2 lengths per line.

### CROSS SECTION

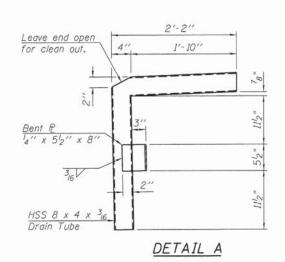
WBK 116 West Main Street, Suite 201 St. Charles, Illinois 60174

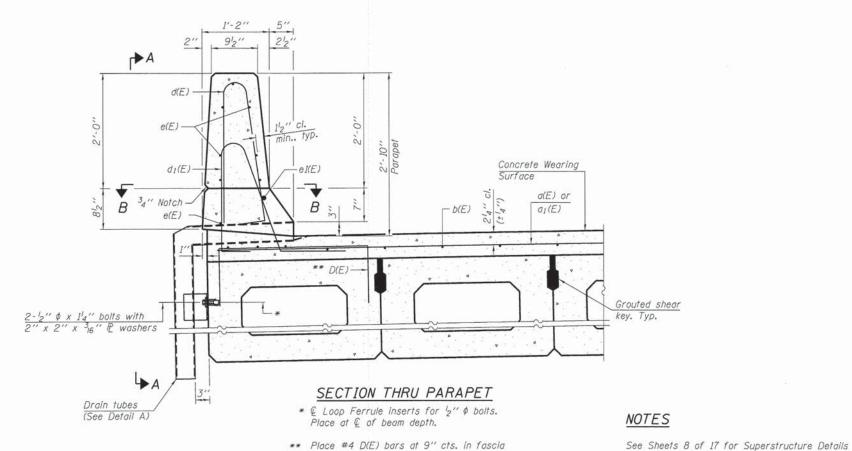
DESIGNED - DLS REVISED -SECTION SUPERSTRUCTURE COUNTY TOTAL SHEET NO. STATE OF ILLINOIS WILLS BURKE KELSEY ASSOCIATES LTD. CHECKED - AEU REVISED 2421 11-00298-00-BR KANE STRUCTURE NO. 045-6053 REVISED **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = #SCALE# DRAWN - DLS CONTRACT NO. 61B08 SHEET NO. 6 OF 18 SHEETS REVISED FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT PLOT DATE = 12/15/2014 CHECKED - AEU

All drain tubes and accessories shall be galvanized according to

AASHTO MIII or M232. (as applicable).

The cost of the drain tube assemblies and everything necessary for their installation is included with Concrete Superstructure.





beam. D(E) bar included in cost of beam.

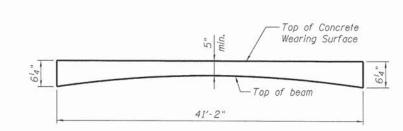
Slope to drain

SECTION B-B

@ Drain

Bent F

insert. (Typ.)

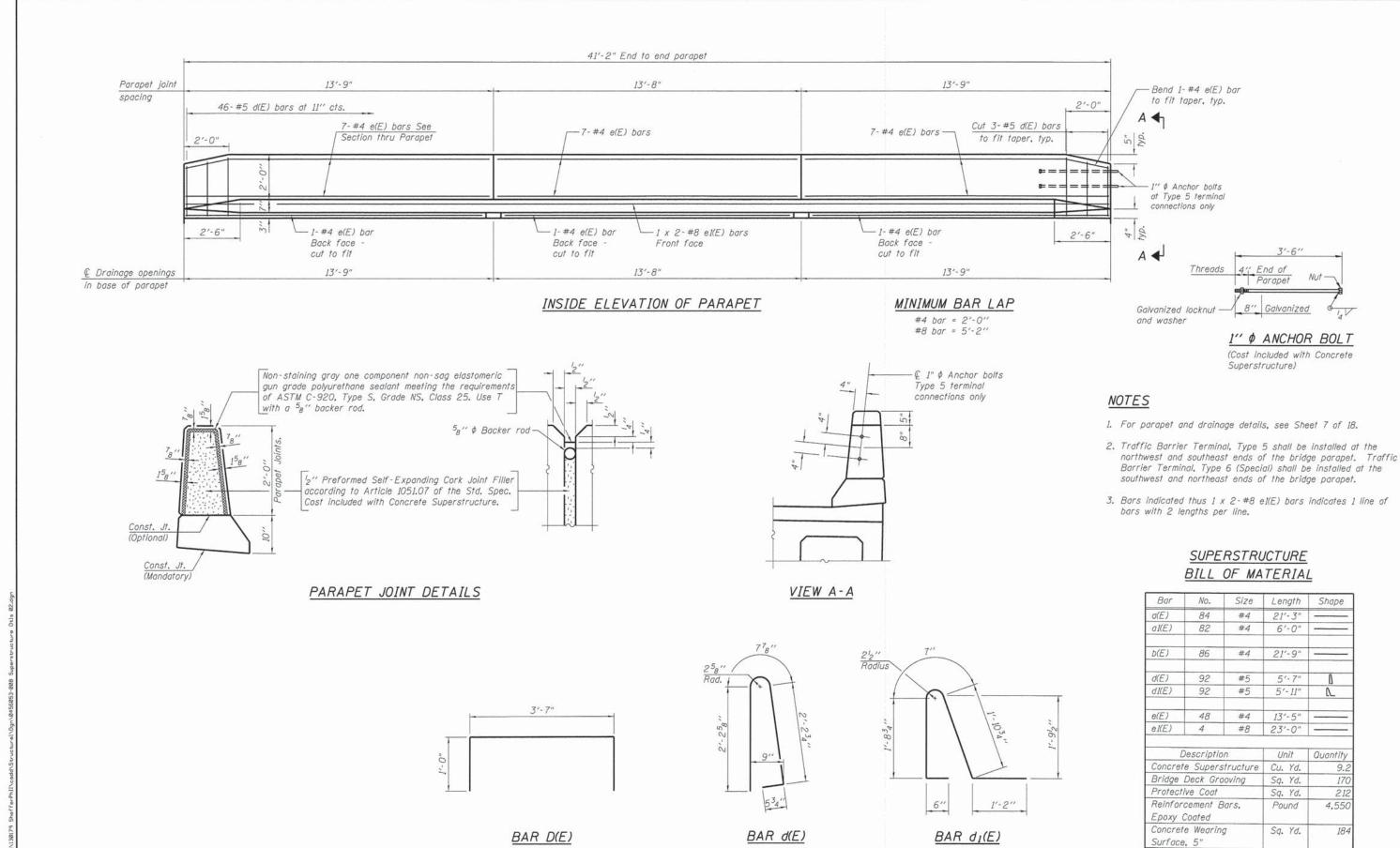


and Bill of Material.

ANTICIPATED CONCRETE WEARING SURFACE PROFILE (For information only)

Δ.			
WBK	WILLS BURKE KELSEY 116 West Main Street, Suite 201 St. Charles, Illinois 60174	ASSOCIATES	LTD.

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PLOT DATE = 12/15/2014	CHECKED - AEU	REVISED -



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\(\text{}\)	USER NAME = nperris	DESIGNED - DLS	REVISED -		SUPERSTRUCTURE DETAILS II	FAU	SECTION	COUNTY	TOTAL SE	ET
WILLS BURKE KELSEY ASSOCIATES LTD 118 West Main Street, Suite 201		CHECKED - AEU	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 045-6053	2421	11-00298-00-BR	KANE	85 N	·
St. Charles, Illinois 60174	PLOT SCALE = #SCALE# PLOT DATE = 12/15/2014	DRAWN - DLS CHECKED - AEU	REVISED -	DEPARTMENT OF TRANSPORTATION	SHEET NO. 8 OF 18 SHEETS	FED. ROAD	DIST. NO.   ILLINOIS FED.	CONTRACT	T NO. 61BC	3

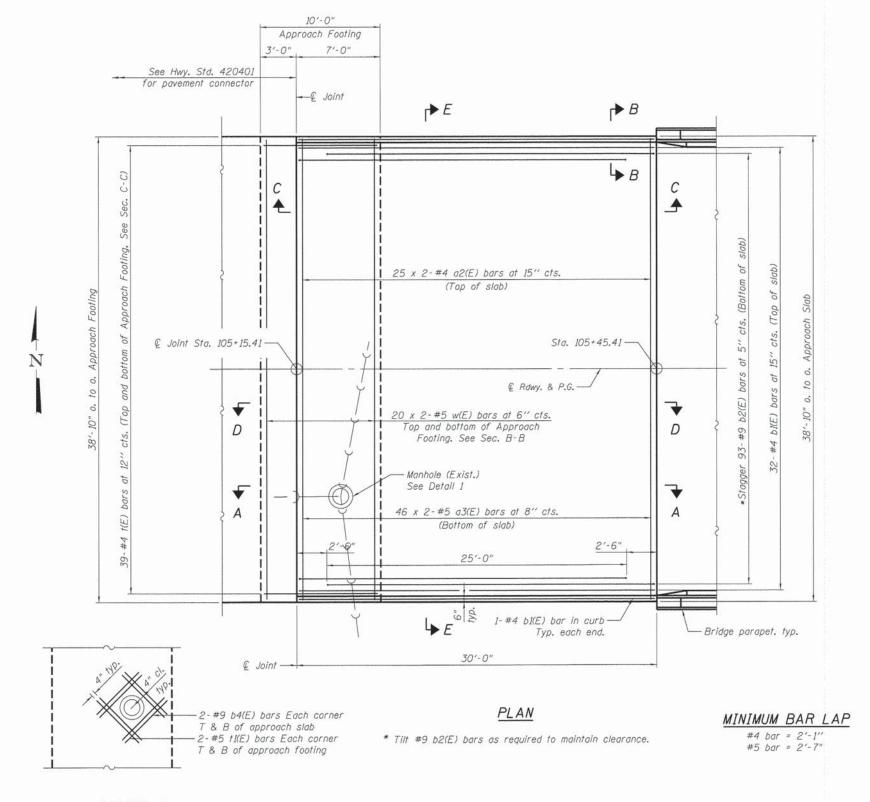
9.2

170

212

184

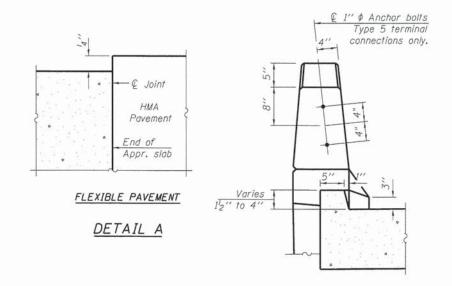
4,550



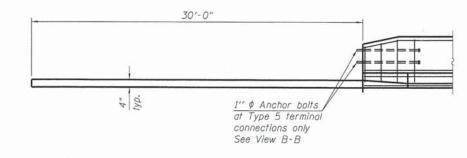
## DETAIL 1

## NOTES

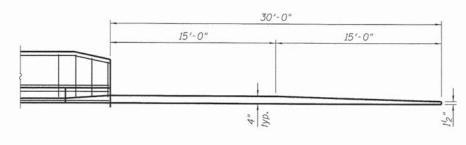
- 1. See Sheet 11 of 18 for Sections D-D & E-E.
- 2. a2(E) and a3(E) bar spacings measured along € Rdwy.



VIEW B-B



## VIEW C-C



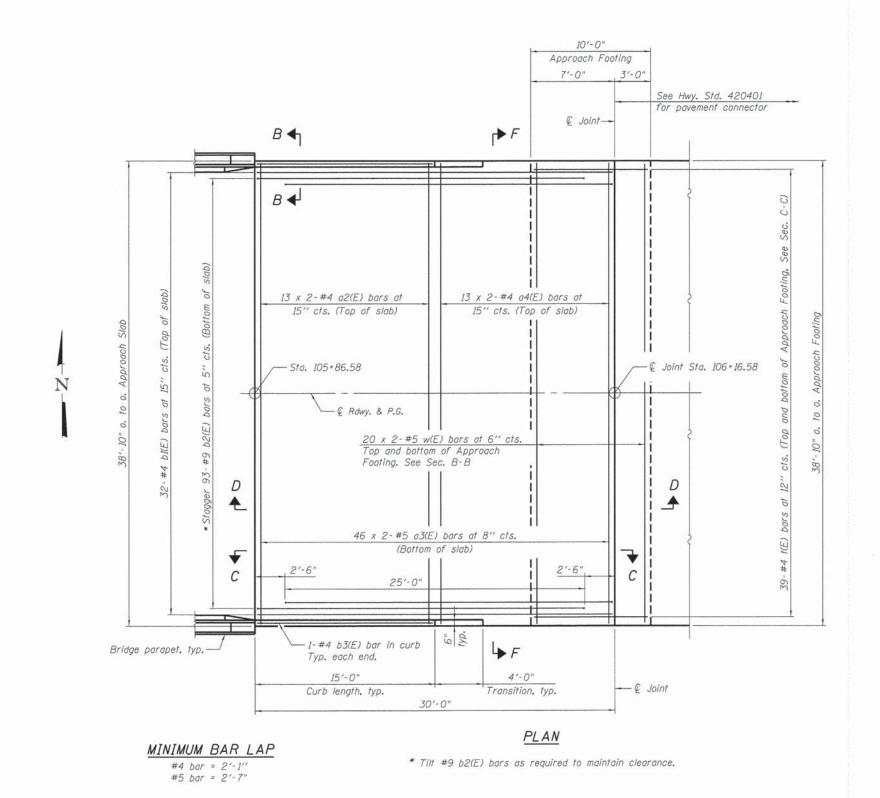
VIEW A-A

Reinforcement around manhole penetration

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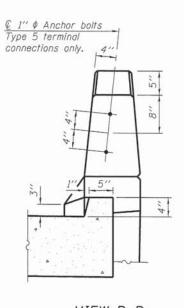
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  WEST BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 045-6053 SHEET NO. 9 OF 18 SHEETS

COUNTY TOTAL SHEET NO. SECTION 2421 KANE 85 51 11-00298-00-BR CONTRACT NO. 61B08 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

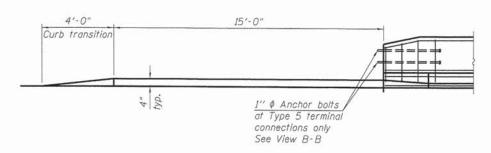


## NOTES

- 1. See Sheet 11 of 18 for Sections D-D & F-F.
- 2. a2(E) and a3(E) bar spacings measured along @ Rdwy.



VIEW B-B

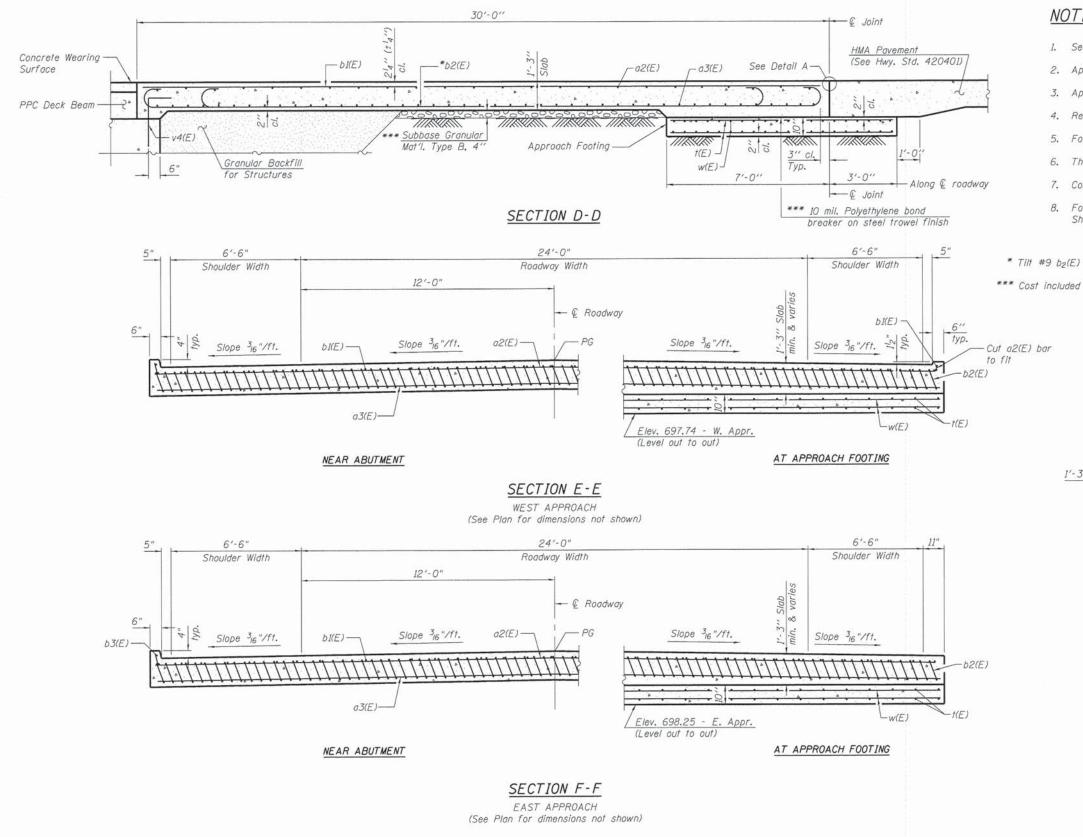


VIEW C-C

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 045-6053
SHEET NO. 10 OF 18 SHEETS



## NOTES

- 1. See Sheet 9 of 18 for Detail A.
- 2. Approach slab shall be paid for as Concrete Superstructure.
- 3. Approach footing concrete shall be paid for as Concrete Structures.
- 4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
- 5. For v4(E) bar details, see Sheets 14 & 15 of 18.
- 6. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- 7. Cost of excavation for approach footing included with Concrete Structures.
- 8. For Granular Backfill for Structures and drainage treatment details, see Sheet 14 of 18.
- \* Tilt #9 b2(E) bars as required to maintain clearance.
- \*\*\* Cost included with Concrete Superstructure.



### BAR a2(E)



### BAR b2(E)

## TWO APPROACHES BILL OF MATERIAL

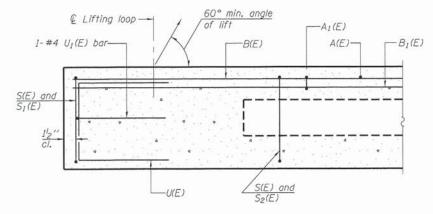
Bar	No.	Size	Length	Shape
o2(E)	76	#4	20'-8"	
a3(E)	184	#5	20'-7"	
a4(E)	26	#4	20'-6"	-
b1(E)	66	#4	29'-8"	
b2(E)	186	#9	29'-9"	
b3(E)	2	#4	14'-8"	
b4(E)	16	#9	6'-0"	-
t(E)	156	#4	9'-8"	
†1(E)	16	#5	5′-0"	
w(E)	160	#5	20'-7"	-
Di	escription		Unit	Quantity
Concrete	Structur	es	Cu. Yd.	24.0
Concrete	Supersti	ructure	Cu. Yd.	136.8
Bridge D	eck Groo	ving	Sq. Yd.	253
Protectiv	e Coat		Sq. Yd.	262
Reinforce Epoxy Co	ement Ba pated	rs.	Pound	30,350

WILLS BURKE KELSEY ASSOCIATES LTD WBK 116 West Main Street, Suite 20 St. Charles, Illinois 60174

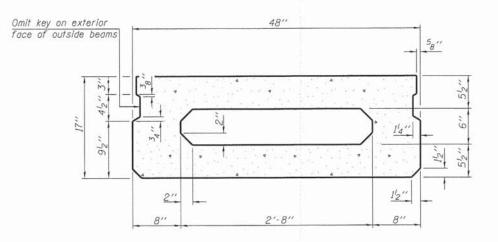
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D.		CHECKED - AEU	REVISED -	
	PLOT SCALE = \$SCALE\$	DRAWN - DLS	REVISED -	
	PLOT DATE = 12/15/2014	CHECKED - AEU	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 045-6053 SHEET NO. 11 OF 18 SHEETS

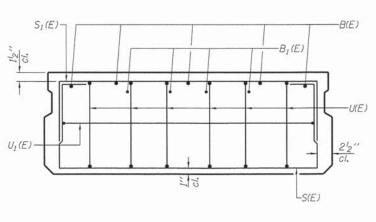
SECTION COUNTY 2421 11-00298-00-BR KANE CONTRACT NO. 61B08 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT



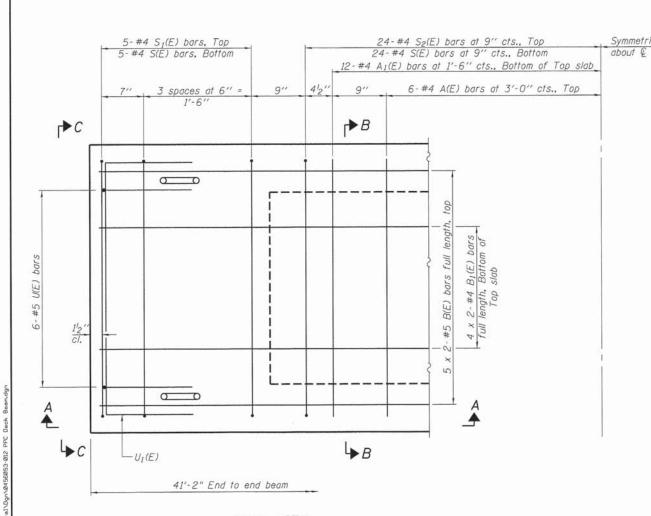
SECTION A-A



SECTION B-B (Showing dimensions)

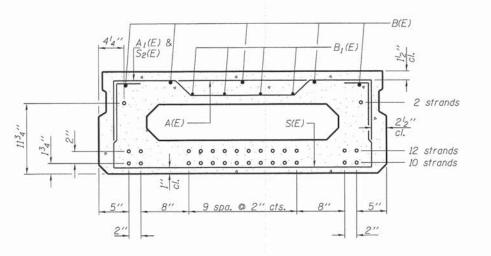


VIEW C-C



## PLAN VIEW

Note: Spacing of S(E) and  $S_2(E)$  bars may be adjusted up to  $4^{\prime\prime}$  in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

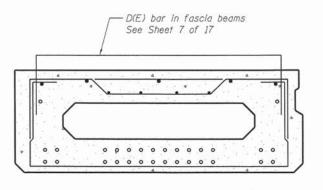


## SECTION B-B

(Showing reinforcement and permissible strand locations)  $24 - {}^{l}_{2}{}^{u} \phi \ Strands$  (10 strands  $1{}^{3}_{4}{}^{u}$  up, 12 strands  $3{}^{3}_{4}{}^{u}$  up & 2 strands  $11{}^{3}_{4}{}^{u}$  up)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

## #4 bar = 2'-0" #5 bar = 2'-6"



### SECTION THRU FASCIA BEAM

## BAR LIST ONE BEAM ONLY

(For information only)

Bar	No.	Size	Length	Shape
A(E)	12	#4	3'-7"	
A1(E)	24	#4	3'-10"	~
B(E)	10	#5	21'-8"	-
$B_1(E)$	8	#4	21'-5"	-
S(E)	58	#4	6'-9"	
S1(E)	10	#4	5'-3"	
S <sub>2</sub> (E)	48	#4	5'-6"	7
U(E)	12	#5	3'-8"	
$U_1(E)$	2	#4	6'-0"	

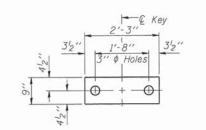
Note: See Sheet 13 of 18 for additional details and Bill of Material.

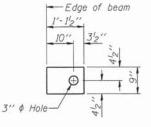
Α.		U
$\Lambda$	WILLS BURKE KELSEY ASSOCIATES LTD.	
<b>WBK</b>	116 West Main Street, Suite 201 St. Charles, Illinois 60174	F
W-	V.	р

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	CHECKED - AEU	REVISED -	
PLOT SCALE = SSCALES	DRAWN - DLS	REVISED -	
PLOT DATE = 12/15/2014	CHECKED - AEU	REVISED -	

7" x	18" l	PPC	; D	EC	K	BEAN
STRU	CTU	RE	NO	. 0	45	-6053
SHEET	NO.	12	OF	18	SH	EETS

	FAU RTE.	SEC	TION	COUNTY	TOTAL	SHEET NO.
	2421	11-002	98-00-BR	KANE	85	54
_				CONTRACT	NO. 6	1B08
	FED. RO	DAD DIST. NO.	ILLINOIS FED.	AID PROJECT	- 20-07	





### FABRIC BEARING PAD (Interior)

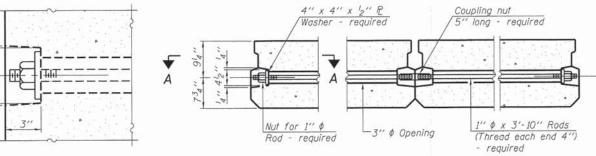
FABRIC BEARING PAD

FIXED Notes:

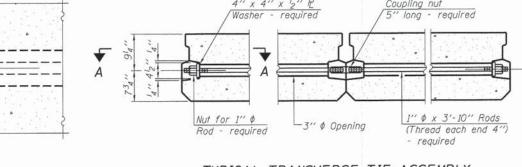
All bearing pads shall be I" thick. Omit holes when using expansion bearings. Expansion bearing pad shall be bonded to the substructure.

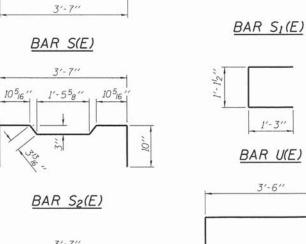
SECTION A-A

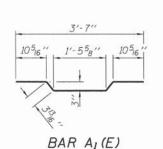
TYPICAL TRANSVERSE TIE ASSEMBLY

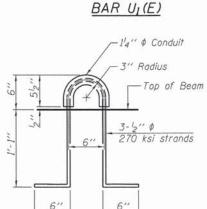














## BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth) Sq. Ft. 1,647

## 20'-7" tie diaphragm 1'-3" & Lifting loops 2 each end tie assemblies IIII 0 IIII IIII IIII IIII Ш IIII IIII 0 iiii IIII -0 ³₄′′ ¢ Drain 4" Ø Vent holes top holes bott. -0 4 Exterior typ. € 2" \$ Holes for dowel rods at fixed ends only

PLAN VIEW

### NOTES

- 1. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be  $\frac{1}{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in.
- 2. The 1"  $\phi$  rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly
- 3. Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
- 4. Two 'g" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- 5. A minimum  $2'_2$ "  $\phi$  lifting pin shall be used to engage the lifting loops during handling.
- 6. Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- 7. Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- 8. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

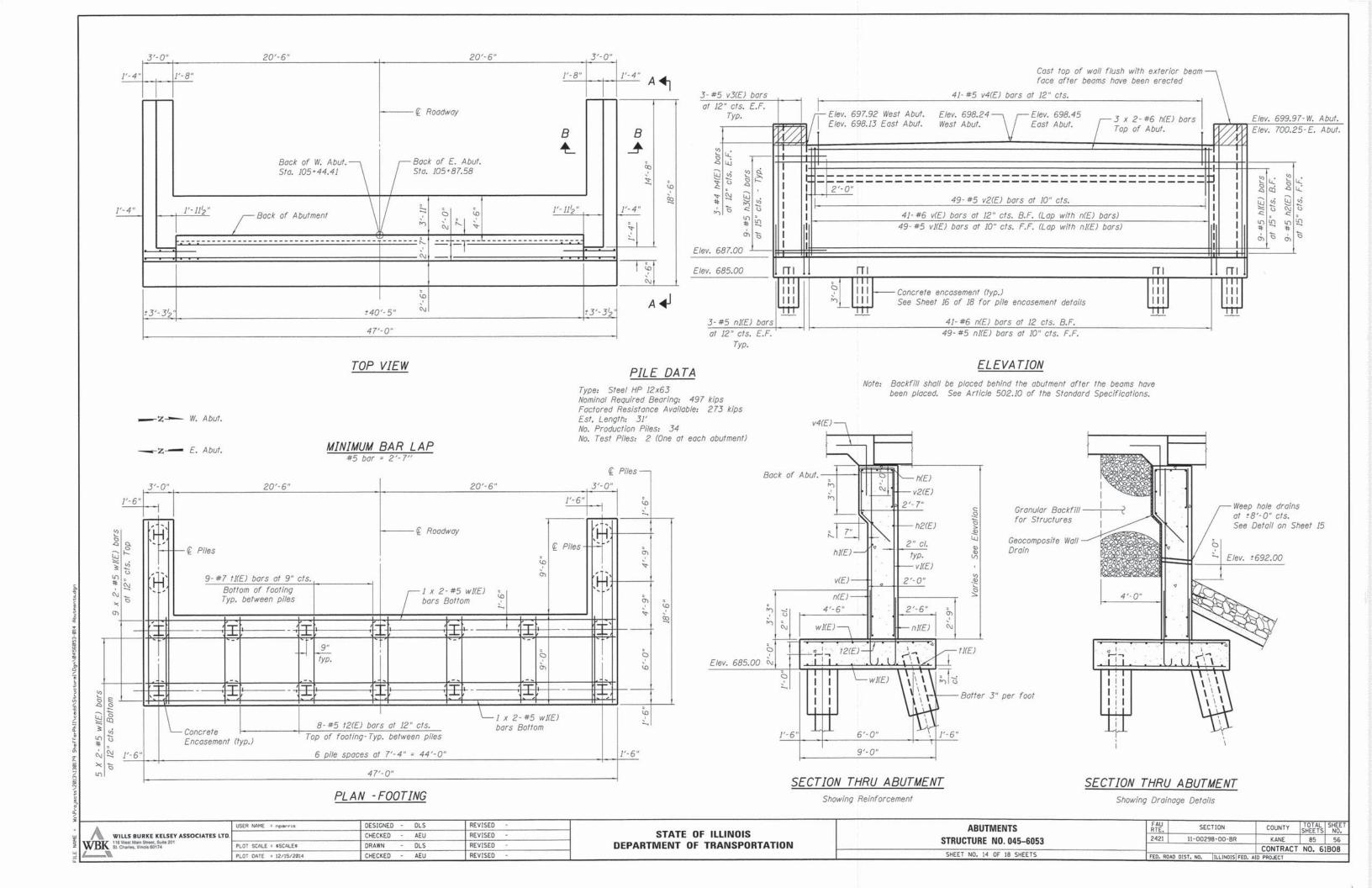
WILLS BURKE KELSEY ASSOCIATES LTD. WBK 116 West Main Street, Suite 201
St. Charles, Illinois 60174

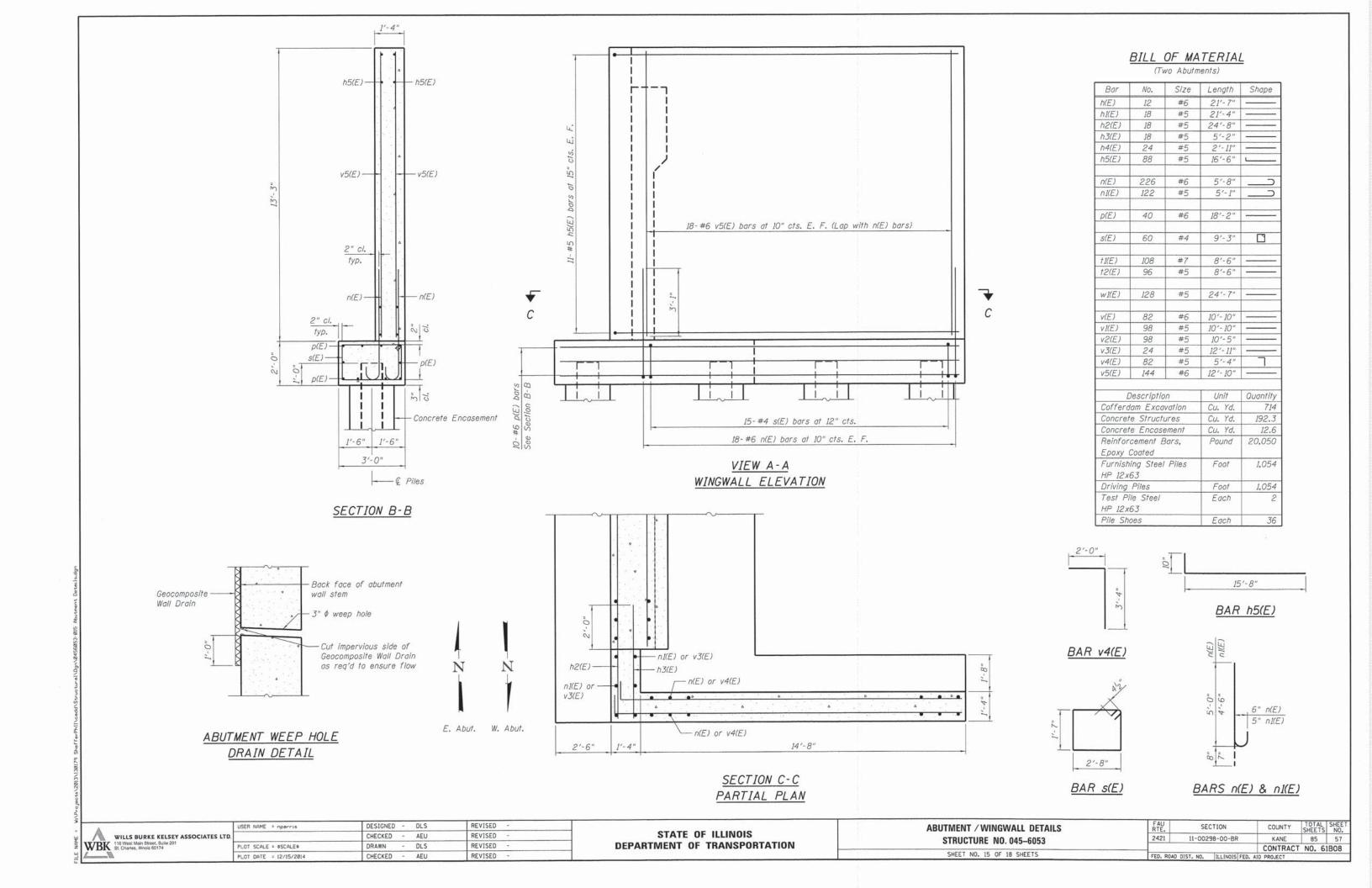
Note: Connect beams in pairs with the transverse tie configuration shown.

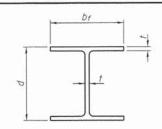
USER	NAME = nperris	DESIGNED - DLS	REVISED -	
		CHECKED - AEU	REVISED -	
PLOT	SCALE = \$SCALE\$	DRAWN - DLS	REVISED -	2 5 7 7
PLOT	DATE = 12/15/2014	CHECKED - AEU	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  17" x 48" PPC DECK BEAM DETAILS STRUCTURE NO. 045-6053 SHEET NO. 13 OF 18 SHEETS

FFD DOA	D DIST. NO.	ILLINOIS FED.	CONTRACT	NO. 6	1B08
2421	11-002	98-00-BR	KANE	85	55
FAU RTE.	SE	CTION	COUNTY	TOTAL	SHEE NO.

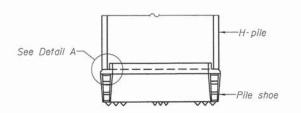




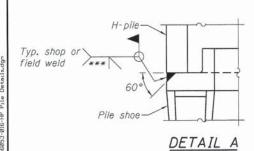


### STEEL PILE TABLE

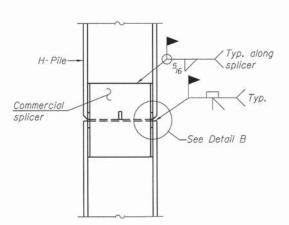
Designation	Depth d	Flange width b <sub>f</sub>	Web and Flange thickness t	Encasement diameter A
HP 14x117	1414''	14 78"	1316 ''	30''
x102	14''	1434"	116''	30''
x89	1378"	1434"	58"	30''
x73	1358"	1458"	2"	30''
HP 12x84	124"	124"	116''	24"
x74	1218"	124"	58"	24"
x63	12"	12'8"	2"	24"
x53	1134"	12"	716 "	24"
HP 10x57	10''	104"	916 ''	24"
x42	934"	10'8"	716 "	24"
HP 8x36	8"	88"	716 ''	18''

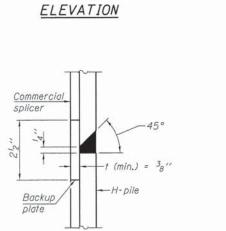


## ELEVATION

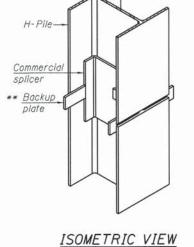


## H-PILE SHOE ATTACHMENT

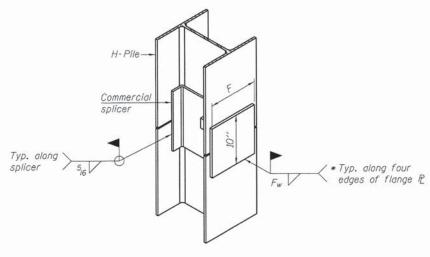




DETAIL "B"



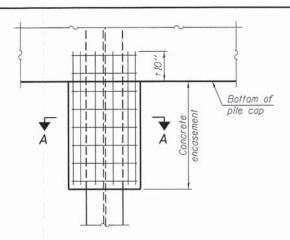
## WELDED COMMERCIAL SPLICE

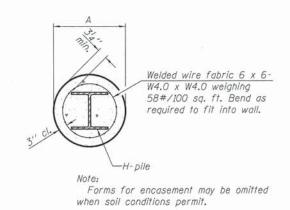


ISOMETRIC VIEW

## WELDED COMMERCIAL SPLICE ALTERNATE

- \* Interrupt welds 4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (516" min.).

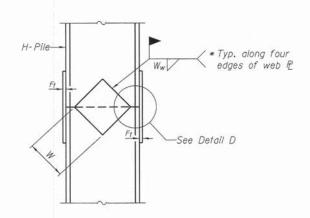


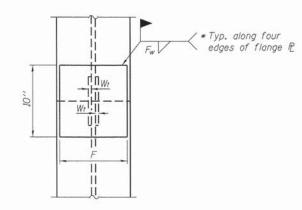


ELEVATION

## SECTION A-A

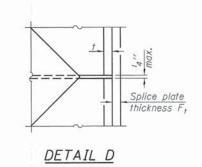
### PILE ENCASEMENT





ELEVATION

END VIEW



Designation	F	$F_t$	F <sub>w</sub>	W	W <sub>f</sub>	Ww
HP 14x117	1212"	1''	78"	734"	58"	2"
x102	12'2"	78"	34''	734"	58''	2"
x89	12'2"	34"	1/6 ''	734"	58"	2"
x73	12'2"	58"	916 ''	734"	58''	2"
HP 12x84	10''	78"	116''	6'2"	58''	2"
x74	10''	78"	116''	612"	58"	2"
x63	10''	58"	2"	612"	2"	38''
x53	10''	58"	2"	6'2"	2"	38"
HP 10x57	8"	34"	916"	54"	2"	38''
x42	8"	58"	916"	54"	2"	38"
HP 8x36	7''	58"	7,6''	414"	2"	38"

### WELDED PLATE FIELD SPLICE

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

F-HP

1-27-12

	A	USER	NAME	1	
- July	WILLS BURKE KELSEY ASSOCIATES LTD.	-			_
ž	WBK St. Charles, Illinois 60174	PLOT	SCALE	:	
5	Annual Marian	PLOT	DATE	=	

USER NAME = nperris	DESIGNED - DLS	REVISED -
	CHECKED - AEU	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - DLS	REVISED -
PLOT DATE = 12/15/2014	CHECKED - AEU	REVISED -

HP PILE DETAILS	FAU RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
STRUCTURE NO. 045-6053	2421	11-00298-00-BR	KANE	85	58
			CONTRAC	T NO. 6	B08
SHEET NO. 16 OF 18 SHEETS	FED. ROAD	DIST. NO. HILINOIS FED.	The state of the s		

## Testing Service Corporation

			STRUC	TURE	BORING LOG		Started		16/12
ROUTE 2421 DES	SCRIPTION	Sc	heffer	Road B	ridge Replacement	Date Co	mpleted	//1	6/12
SECT. 11-00258-00-BR	STRUCT	. NO.	04	5-6053	DRILLED BY	TSC I	-78,615	<u> </u>	
COUNTY Kane L	OCATION	West	Abutm	nent	S13NW	, TWP.	_38N_	, RNG.	_8E
Boring No. SB-1 Station 105+44 Offset 5.10ft RT Surface Elev. 698.90 ft	D E P T H	B L O W S	Qu tsf	W %	Surface Water Elev.: Groundwater Elev.: when drilling 680.9 at Completion 683.9 after Hrs.		B L O W S	Qu tsf	W %
6" Bituminous Concrete 10" Sand and Gravel Base	98.40				Medium stiff to stiff gray				
FILL - Brown, gray and black CLAY, trace	97.60	5 4 3	P 1.5*	22.7	CLAY, little gravel, very moist to moist A-6	_	4 4 6	B 1.57	18.1
gravel, moist A-6					Medium dense SANDY	.90			
	-5	4 5 6	P 1.75*	19.7	LOAM, some gravel, wet A-2-4 LL/PL/PI = 20/11/9		5 7 7		15.5
		3	P	10.1		_			
	90.90	3 3 3	2.75*	19.1					
Very stiff gray CLAY, little gravel, moist A-6		4 5 8	B 2.81	16.5	Medium dense SAND, trace gravel, saturated A-1-b	.90	8 9 7	1100000	22.2 17.5
	=	7 8 8	B 3.51	13.9	661	.90			
6	85.90	U			Stiff gray CLAY, trace to little gravel, moist	-			
Medium stiff to stiff gray CLAY, little gravel, very moist to moist A-6	-15	5 4 4	B 0.86	12.4	A-6	-40	8 10 12	B 0.82	20.4
		3 4	B	12.5		=			
	-	6	1,55	12.5		=			
	-				Weathered/Fractured 655	.90			
	-20	4 5 8	B 1.9	10.8	Bedrock or Possible Boulder Zone [Hard Drilling]		50/3"		5.8
	_				652	.90			
		3 3 4	1.03	11.4		_			
SPT. (N) = Sum of last two blow Stations, Depths, Offset, and Elev		3 4 5	B 1.44	16.0	Auger Refusal @ 46'				

## Testing Service Corporation

STRUCTURE BORING LOG

	STRUCT	. NO.	04	5-6053	DRILLED BY		TSC L	-78,615		
LOCATIO	N	East	Abutm	ent	S13NW	_,	TWP.	_38N_	, RNG.	_88
	D E P T H	B L O W S	Qu tsf	W %	at Completion		D E P T H	B L O W S	Qu tsf	W %
698.30	1				Stiff gray CLAY, little gravel,		1			
697.70	$\equiv$	3 3 4		9.7	A-6			6 7 9	B 1.82	17.6
	_					70.80				
		5 6 6		22.8	and GRAVEL, saturated		-30	9 9 11		17.6 14.5 19.6 11.4
693.30	-	4 7	B 1.76	10.5	1		_			
500.80	1	8	1.70	13.5	Stiff gray CLAY, trace	66.80				
690.00	1	4	R		Ã-6			0	D	10
-	-10	6 8	3.64	16.7	Medium dense gray SAND, saturated A-1-b	04.80	-35	10 13	1.69	
	=	5 7 9	B 4.43	16.7		61.80				
685.80	_				LOAM, very moist					
694 70	_	4 2	Р	11.6	A-4		=	3		20.
684.30	-15	3	0.75*	12.3			-40	4		
	=	6 5 8	0.83	13.3			Ξ			
680.80					Weathered/Fractured Rock	55.80	$\exists$			
	-20	8 8 10	1.70	11.2		54.80		Run	1: 44'-	-54'
-	-20				DOLOMITE, Medium gray, silty, medium bedded with			Reco	very = 28	75% 3%
	_	8 9	1.66	11.0	dense		_			
675.80	_									
673.80		5 7 8	B 1.16	16.7	49' — 49.5' Moderate Fracture					
	698.30 697.70 693.30 690.80 684.30	698.30 697.70 693.30 693.30 693.30 684.30 -10 -10 -10 -15 -15 -15 -15 -15 -15 -15 -15 -15 -15	698.30 697.70  697.70  334	B L Qu H S Isf  698.30 697.70	B L Qu W H S Isf %  698.30 697.70	D   B   E   L   P   O   T   W   Qu   W   at Completion after   Hrs.	D	D	D   B   L   P   O   T   W   Qu   W   H   S   tsf   %   %   dism dense gray SAND   Stiff gray CLAY, trace gravel, moist A-6   Stiff gravel, moist A-6   Stif	D

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174 USER NAME = nparris DESIGNED - DLS REVISED -REVISED -CHECKED - AEU PLOT SCALE = \$SCALE\$ - DLS REVISED DRAWN PLOT DATE = 12/15/2014 CHECKED - AEU REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS I STRUCTURE NO. 045-6053 SHEET NO. 17 OF 18 SHEETS

FAU RTE. 2421

## Testing Service Corporation

STRUCTURE BORING LOG

Boring No. SB-2 Station 105+87		D E	B L			
Offset 10.30ft LT  Elevation 648.80 ft		P T H	0 W S	Qu tsf	W %	
See Page 1		-				
	646.80	-				
DOLOMITE, Dark gray, silty medium bedded with dark gray clay partings, occasional vugs up to 1"		=				
End of Boring at 54.0'	644.80	_				
		-55 				
		=				
		-60				
		-				
		-				
		-65				
		-65				
		-65				

	BORING	SC	-1		DATE	STARTE	_	7-31-	12	DATE COMPLETED 7-31-12 JOB L-	78,6
	GROUND SI		_	689 674	9.9					WATER LEVEL OBSERVATION  WHILE DRILLING IN Standing Creek V  ✓ AT END OF BORING	
			-			5+66;	21.2'	RT		▼ 24 HOURS	
	LENGTH	SA	MPLE	N	wc	Qu	YDRY	DEPTH	ELEV.	SOIL DESCRIPTIONS	
0-		NO.	TYPE								
		1	SS		11.9			10	505.0	FILL — Brown SAND and GRAVEL, trace silt and clay, saturated A—1—a	
		2	SS		15.4	2.15 3.0*		3.0	686.9	Sample 2: LL/PL/PI = 27/14/13	
5-					-0.70/0	occupation of the second				Very stiff gray CLAY, little gravel, occasional sand seams, moist A-6	
		3	SS		16.3	2.5*					
ā								8.0	681.9		
10-		4	SS		17.2	3.60 3.5*					
2		5	SS		16.7	2.5*				Very stiff gray CLAY LOAM, trace gravel, mois A-6	t
15-		6	SS		16.6	2.5*					
13-										End of Boring at 15.0'	
										<ul> <li>Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.</li> </ul>	
20-											
	-										
25-								osits repres			

WILLS BURKE KELSEY ASSOCIATES LTD.

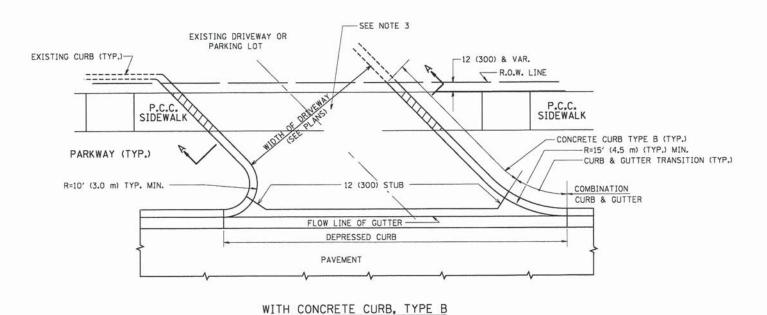
WBK 116 West Main Street, Suite 201

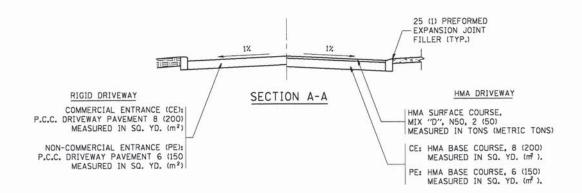
St. Charles, Illinois 60174

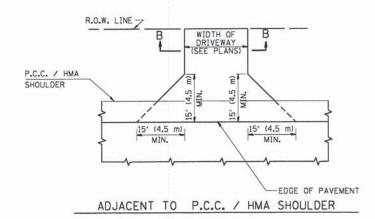
	USER NAME = nperris	DESIGNED - DLS	REVISED -	
D.		CHECKED - AEU	REVISED -	
	PLOT SCALE = \$SCALE\$	DRAWN - DLS	REVISED -	
	PLOT DATE = 12/15/2014	CHECKED - AEU	REVISED -	

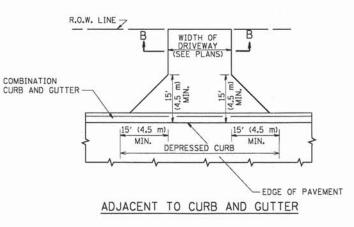
SOIL BORING LOGS II	FAU RTE.	SE	CTION	COUNTY	SI
STRUCTURE NO. 045-6053	2421	11-002	98-00-BR	KANE	
				CONTRACT	1
SHEET NO. 18 OF 18 SHEETS	FED. ROAD	DIST. NO.	ILLINOIS FED.	AID PROJECT	

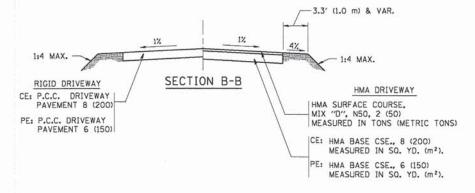
WITH CONCRETE CURB, TYPE B











## RURAL FIELD ENTRANCE (FE) HMA SURFACE COURSE,

MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m2).

#### GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

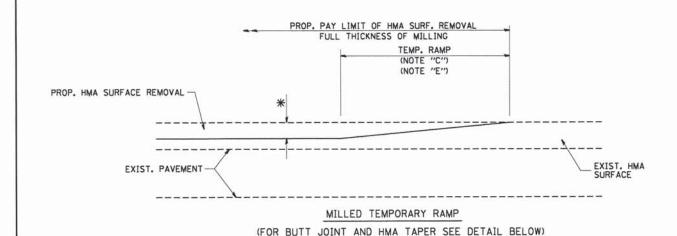
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

SCALE: NONE

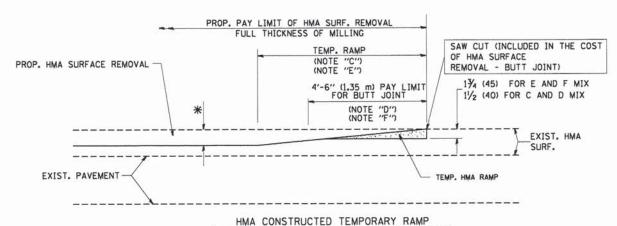
FILE NAME =	USER NAME = legeo	DESIGNED - R. SHAH	REVISED - P. LoFLUER 04-15-03
c:\pw_work\pwidot\leyso\d0106315\bd01.dg		DRAWN -	REVISED - R. BORO 01-01-07
o, paradici paradici regge delecere deserreg	PLOT SCALE = 50.0000 1/ in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
AND FACE OF CURB & EDGE OF SHOULDER > = 15' (4.5 m)	2421	11-00298-00-BR	KANE	85	61
	BC	0156-07 (BD-01)	CONTRAC	T NO.61E	308
NE SHEET NO. 1 OF 9 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1   ILLINOIS FED.	AID PROJECT		



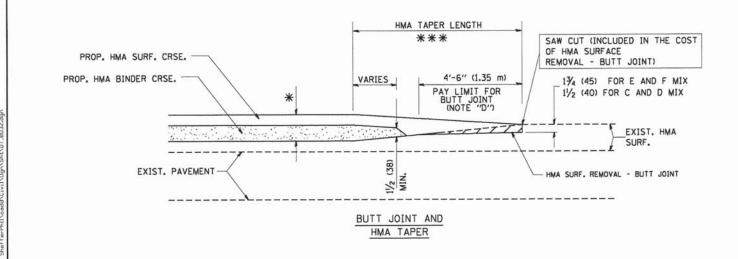
## OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

## OPTION 2

## TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

PROP. HMA OR PCC

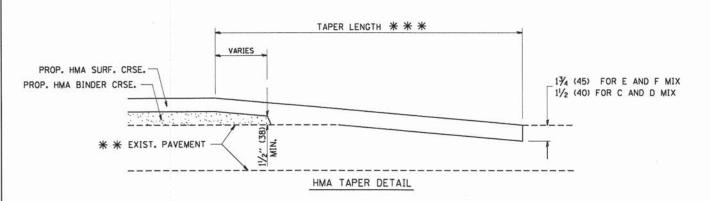
SURFACE REMOVAL - BUTT JOINT
30'-0" (9.0 m) (NOTE "A")

15'-0" (4.5 m) (NOTE "B")

(NOTE "D")

\*\* \* EXIST. PAVEMENT

BUTT JOINT DETAIL



# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

#### BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER)
FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

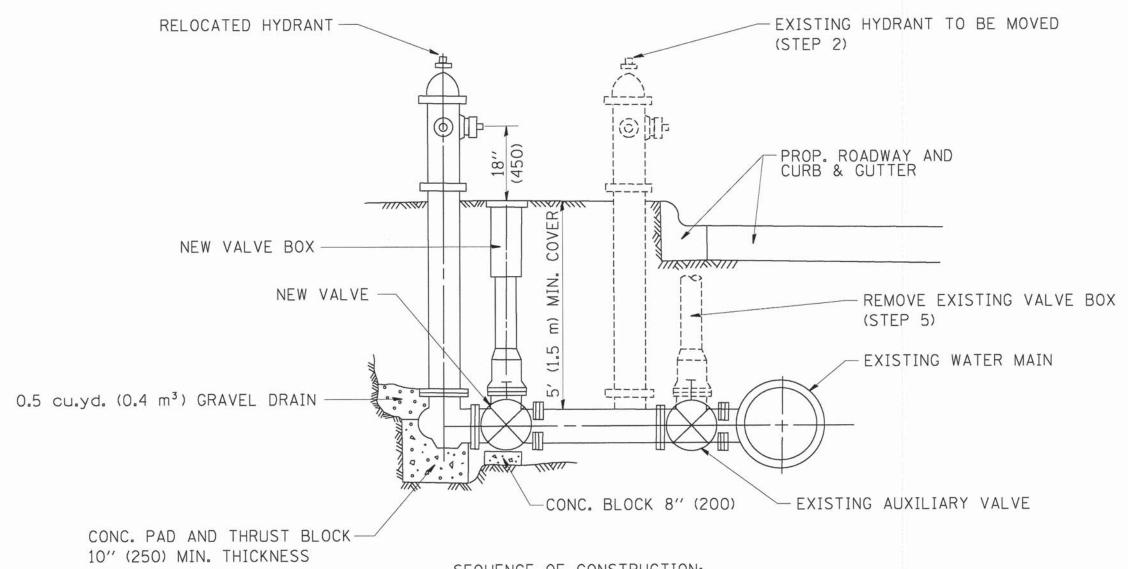
SCALE: NONE

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

FILE NAME = USER NAME = gaglianobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94
Wi\distatd\22x34\bd32.dgn

DRAWN - REVISED - A. ABBAS 03-21-97
PLOT SCALE = 58.0000 '/ IN. CHECKED - REVISED - M. GOMEZ 04-06-01
PLOT DATE = 1/4/2000 DATE - 06-13-90 REVISED - R. BORO 01-01-07

BUTT JOINT AND		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEE'			
	HMA TAPER DETAILS		2421	11-00298-00-BR	KANE	85	62		
	IIIIII	IAI LII DE	IAILO			BD400-05 BD32	CONTRACT	NO.61E	308
SHEET NO. 2	OF 9	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED.			



SEQUENCE OF CONSTRUCTION:

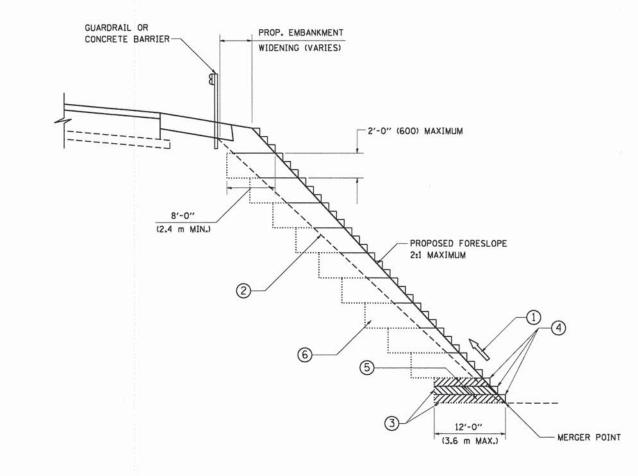
- 1. CLOSE EXISTING VALVE.
- 2. REMOVE EXISTING HYDRANT.
- 3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
- 4. RELOCATE EXISTING HYDRANT.
- 5. OPEN EXISTING VALVE, REMOVE BOX.
- 6. BACKFILL.
- 7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

## FIRE HYDRANT TO BE MOVED

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

REVISED - R. SHAH 09-09-94 DESIGNED -USER NAME = geglianobt SECTION FIRE HYDRANT TO BE MOVED STATE OF ILLINOIS DRAWN REVISED R. SHAH 10-25-94 KANE 85 63 \distatd\22x34\bd36.dgr 11-00298-00-BR **DEPARTMENT OF TRANSPORTATION** REVISED CHECKED PLOT SCALE = 50.0000 '/ IN. BD-36 CONTRACT NO.61B08 SHEET NO. 3 OF 9 SHEETS STA. TO STA. PLOT DATE = 1/4/2008 DATE REVISED



# TYPICAL BENCHING DETAIL FOR EMBANKMENT

## NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
  - EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- TRIM TO FINAL SLOPE
- 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.
- 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).

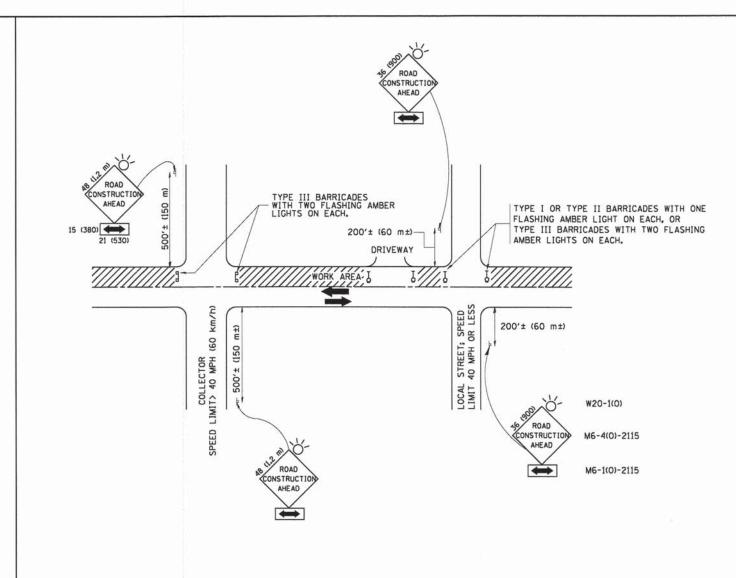
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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PLOT DATE = 1/4/2008 DATE - 06-16-04 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| BENCHING DETAIL | F.A.U. | SECTION | COUNTY | SHEET | SNEE | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET | SNEET |



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

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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;
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG 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 1. 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:
- O) 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. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

#### B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

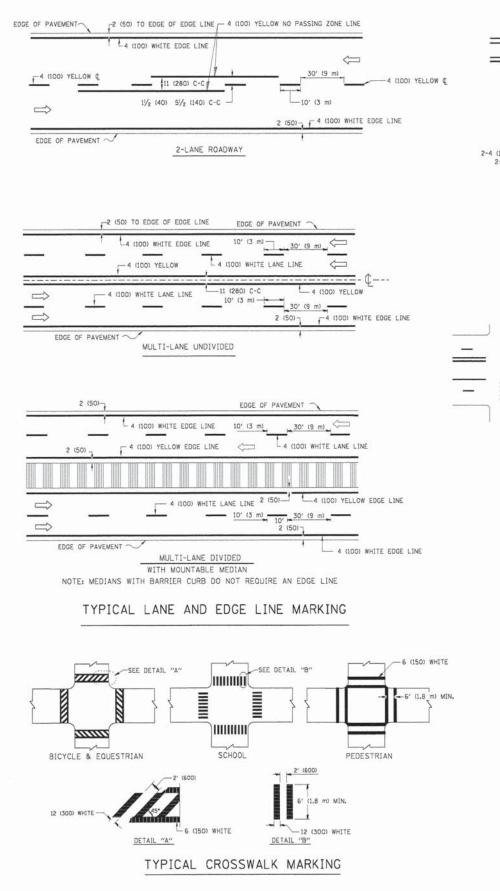
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

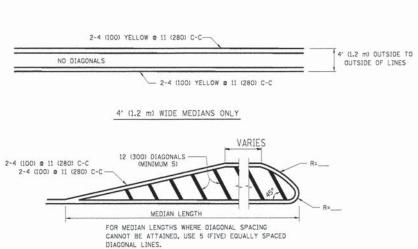
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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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))

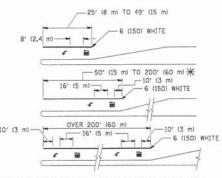
## MEDIANS OVER 4' (1.2 m) WIDE -4 (100) YELLOW LINES (51/2 (140) C-C) 4 (100) YELLOW LINES (51/2 (140) C-C) -2-4 (100) YELLOW @ 11 (280) C-C

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

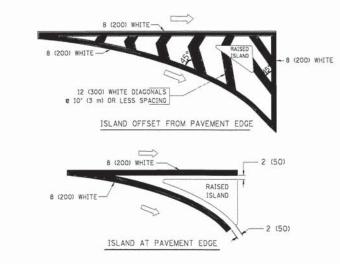


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m² )  $0 M_{\star}^{\rm M}$  AREA = 20.8 SQ. FT. (1.9 m²)

\* 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



### TYPICAL ISLAND MARKING

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 PAYEMENT	2 2 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: OR ONE DIRECTION OR BOTH DIRECTIONS	4 (100) 2 <b>a</b> 4 (100)	SOLID SOLID	YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
ANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
OOTTED LINES EXTENSIONS OF CENTER, LANE OR FURN 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 MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
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	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 51/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	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' (500) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERRISE, 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: "M"=3.6 SO. FT. (0.33 m²) EACH "X"=54,0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>p</b> 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) T0 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

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

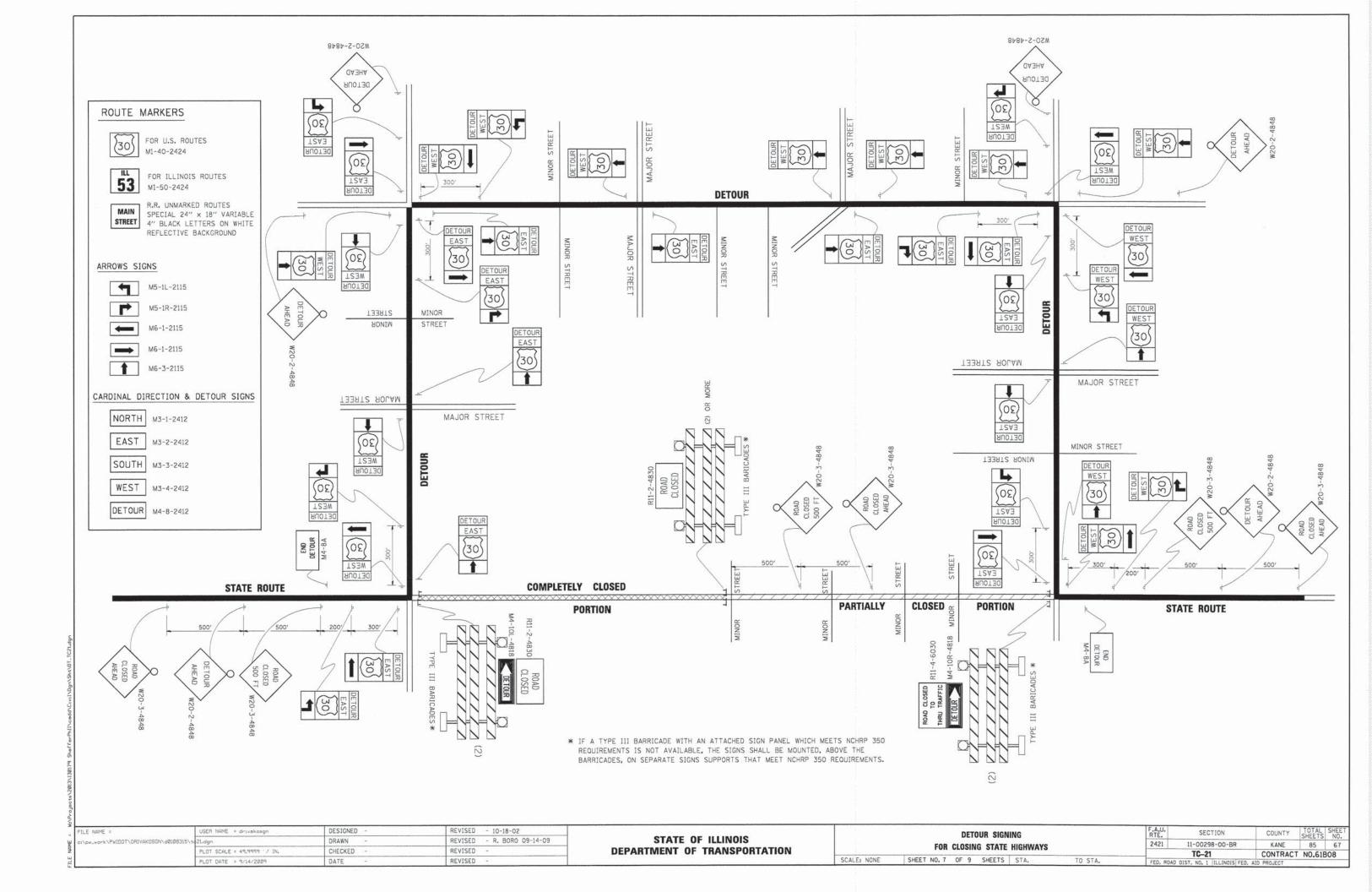
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All dimensions are in inches (millimeters) unless otherwise shown.

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DEPARTMENT	OF	TRANSPORTATION

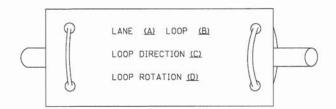
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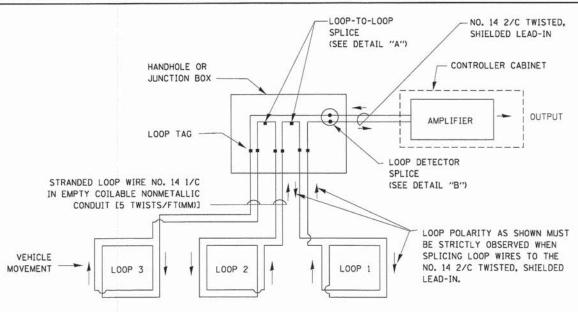
#### LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

#### LOOP LEAD-IN CABLE TAG

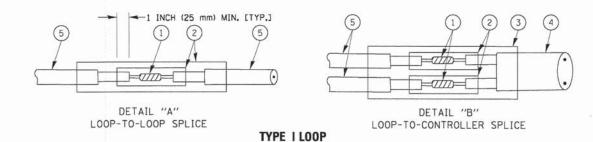


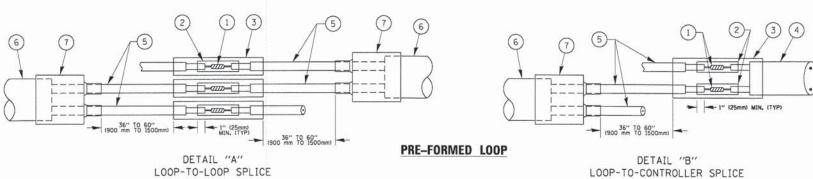
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### **DETECTOR LOOP WIRING SCHEMATIC**

- . LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
   THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.





#### LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

SCALE

4 NO. 14 2/C TWISTED, SHIELDED CABLE.

- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

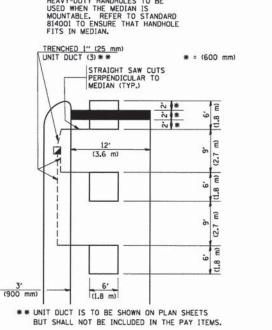
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## LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. NON-PAVED SHOULDER (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNIT DUCT-TRENCHED (3.0 m) (3.0 m) TO E/P .. \* = (600 mm) \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

#### LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING) HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE

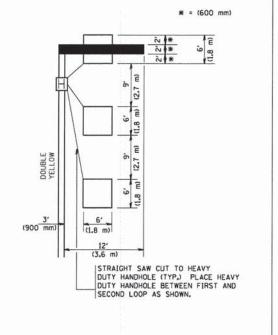


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

#### LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



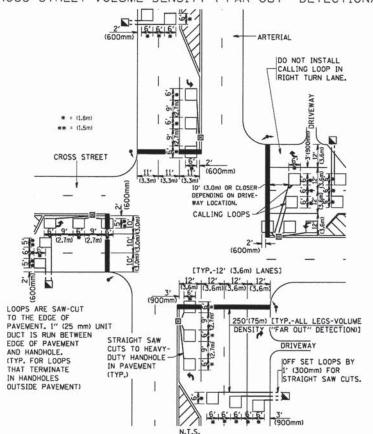
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

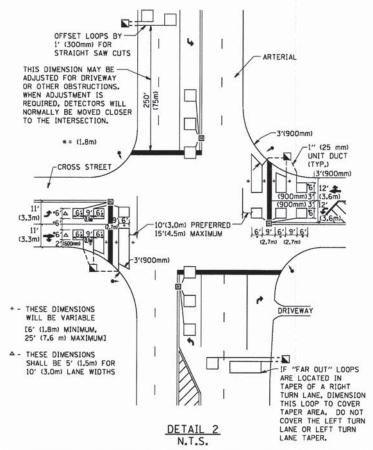
SHEET

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



N.T.S.



#### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

#### NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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USER NAME = gaglianobt	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -
PLOT DATE = 1/4/2008	DATE -	REVISED -

DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING				F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEE'				
				2421	11-00298-00-BR	KANE	85	69				
				TS-07		CONTRACT NO.61BOS						
SHEET	NO. 9	(	OF	9	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

