MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	51	1
		ILLINOIS CONTRACT NO. 61E49		

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

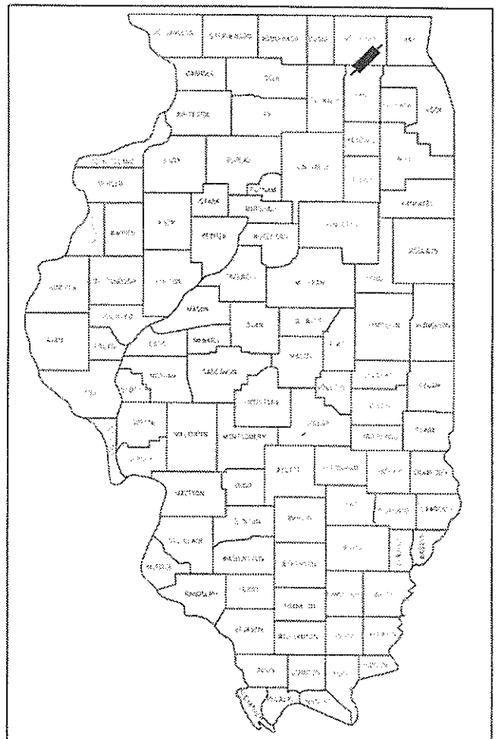
FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR STATE STANDARDS, SEE SHEET NO. 2

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

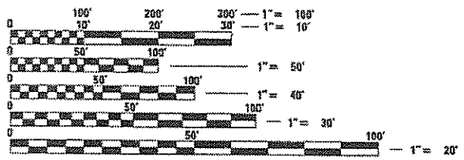
MUN 4560 (MAIN STREET)
OVER CRYSTAL CREEK
BRIDGE REPLACEMENT
SECTION 16-00090-01-BR
PROJECT 7KH9(868)
VILLAGE OF ALGONQUIN
McHENRY COUNTY

C-91-086-18



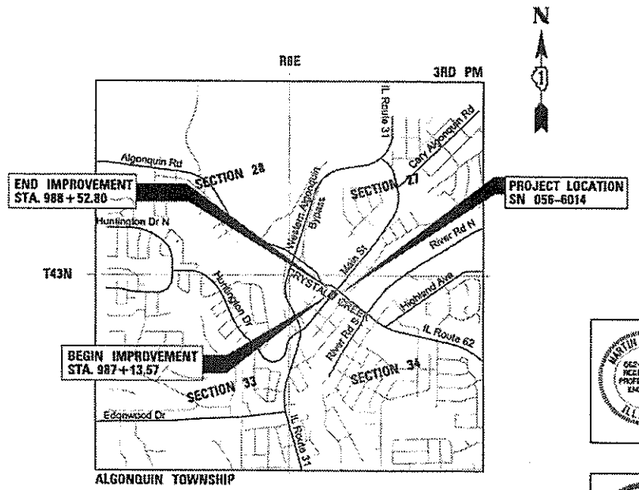
LOCATION OF SECTION INDICATED THUS:- ▬

TRAFFIC DATA:
2008 ADT = 7,300 VEHICLES
2040 ADT = 10,000 VEHICLES
POSTED SPEED LIMIT = 25 MPH
FUNCTIONAL CLASSIFICATION = MAJOR COLLECTOR



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

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



LOCATION MAP

SCALE - 1"=2,000'
GROSS LENGTH = 139 FT. = 0.03 MILE
NET LENGTH = 139 FT. = 0.03 MILE

MARTIN C. WORMAN
062-051360
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

ENGINEER — DATE 12/15/2017

MARTIN C. WORMAN
ILLINOIS REGISTRATION No. 062-051360
EXPIRATION DATE: 11/30/2019

MAJID MOBASSERI
081-005058
REGISTERED STRUCTURAL ENGINEER
STATE OF ILLINOIS

ENGINEER — DATE 12/15/17

MAJID MOBASSERI
ILLINOIS REGISTRATION No. 081-005058
STRUCTURAL ENGINEER
EXPIRATION DATE: 11/30/2019

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED 12/19/2017
VILLAGE OF ALGONQUIN DIRECTOR OF PUBLIC WORKS

PASSED DECEMBER 21, 2017
CHRISTOPHER HOLT
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASED FOR BID BASED ON LIMITED REVIEW DECEMBER 27, 2017
Anthony J. Quigley 1/2/18
REGIONAL ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406 SCHAMBURG, IL

CONTRACT NO. 61E49

INDEX OF SHEETS

HIGHWAY STANDARDS

STD 000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
STD 442201-03	CLASS C AND D PATCHES
STD 515001-03	NAME PLATE FOR BRIDGES
STD 701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE
STD 701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
STD 701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
STD 701502-08	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
STD 701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
STD 701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
STD 701901-07	TRAFFIC CONTROL DEVICES
STD 704001-08	TEMPORARY CONCRETE BARRIER
STD 782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2018; THE LATEST EDITIONS OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (IMUTCD) AND "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS"; THE "DETAILS" IN THE PLANS; AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

2. ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST IDOT STANDARD.

3. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS.

UTILITIES

4. THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND THE VILLAGE AND ENGINEER DO NOT GUARANTEE THEIR ACCURACY.

5. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 8-1-1 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES (48 HOURS NOTIFICATIONS IS REQUIRED). THE CONTRACTOR SHALL CONTACT IDOT'S BUREAU OF MATERIALS (PHONE 847-705-4337) AT LEAST 24 HOURS BEFORE PLACING HOT MIX ASPHALT OR PORTLAND CEMENT CONCRETE.

MAINTENANACE OF TRAFFIC

6. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

MISCELLANEOUS

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

8. ALL SAWCUTTING SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL.

9. LOCATIONS FOR PAVEMENT PATCHING WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

10. WHEN REMOVING PAVEMENT, CURB AND GUTTER, SHOULDER, AND/OR OTHER STRUCTURES, THE USE OF ANY TYPE OF CONCRETE BREAKERS, WHICH MIGHT DAMAGE UNDERGROUND PUBLIC OR PRIVATE UTILITIES, WILL NOT BE PERMITTED. UNDER NO CIRCUMSTANCES WILL THE USE OF A FROST BALL BE PERMITTED. THE CONTRACTOR IS PROHIBITED FROM BREAKING UP CONCRETE BY DROPPING IT ON THE PAVEMENT OR IN ANY OTHER MANNER, WHICH IN THE OPINION OF THE ENGINEER MAY DAMAGE EXISTING OR PROPOSED PAVEMENTS OR OTHER ROADWAY APPURTENANCES.

11. NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.

12. THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL TO AVOID INJURY TO THE ROOT SYSTEM OR TRUNKS. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR.

13. 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. IF EXISTING SIGNS ARE DAMAGED DURING THE REMOVAL AND REPLACEMENT PROCESS, THE SIGN SHALL BE REPLACED.

14. DURING THE CONSTRUCTION OPERATIONS WHEN ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS CAUSED BY THE CONSTRUCTION.

15. THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.

16. AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ASI WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE STANDARD SPECIFICATIONS AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

17. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENT IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.

18. TRENCH BACKFILL SHALL BE USED TO BACKFILL ALL TRENCHES WHERE THE EDGE OF THE TRENCH IS WITHIN 5 FEET OF THE PROPOSED EDGE OF PAVEMENT, CURB, CURB AND GUTTER OR SIDEWALK (BIKE PATH).

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	2
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

	CODE NUMBER	ITEM	UNIT	QUANTITY 0010	QUANTITY NON-PARTICIPATING 0043	TOTAL QUANTITY
Δ	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	16		16
Δ	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	18		18
	20101000	TEMPORARY FENCE	FOOT	560		560
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	107		107
	20200100	EARTH EXCAVATION	CU YD	185		185
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	100		100
	20300100	CHANNEL EXCAVATION	CU YD	570		570
	20700220	POROUS GRANULAR EMBANKMENT	CU YD	415		415
	20800150	TRENCH BACKFILL	CU YD	150	150	300
Δ	25000312	SEEDING, CLASS 4A	ACRE	0.1		0.1
Δ	25100630	EROSION CONTROL BLANKET	SQ YD	50		50
Δ	25200110	SODDING, SALT TOLERANT	SQ YD	81		81
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50		50
	28000400	PERIMETER EROSION BARRIER	FOOT	157		157
	28000510	INLET FILTERS	EACH	4		4
	28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	125		125
	28100109	STONE RIPRAP, CLASS A5	SQ YD	667		667
	28200200	FILTER FABRIC	SQ YD	667		667
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	45		45
	35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	60		60
	35102200	AGGREGATE BASE COURSE, TYPE B 10"	SQ YD	170		170
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	160		160
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	25		25
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	19		19
	42001300	PROTECTIVE COAT	SQ YD	104		104
	42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	49		49
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	26		26
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	444		444
	44000100	PAVEMENT REMOVAL	SQ YD	340		340
	44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	20		20
	44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	40		40
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	223		223
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	225		225
	44000600	SIDEWALK REMOVAL	SQ FT	700		700
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
	50200100	STRUCTURE EXCAVATION	CU YD	335		335
	50200300	COFFERDAM EXCAVATION	CU YD	205		205

	CODE NUMBER	ITEM	UNIT	QUANTITY 0010	QUANTITY NON-PARTICIPATING 0043	TOTAL QUANTITY
	50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1
	50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1
	50201123	COFFERDAM (TYPE 2) (LOCATION - 3)	EACH	1		1
	50201124	COFFERDAM (TYPE 2) (LOCATION - 4)	EACH	1		1
	50201125	COFFERDAM (TYPE 2) (LOCATION - 5)	EACH	1		1
	50201126	COFFERDAM (TYPE 2) (LOCATION - 6)	EACH	1		1
	50300225	CONCRETE STRUCTURES	CU YD	302.1		302.1
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	40.6		40.6
	50300260	BRIDGE DECK GROOVING	SQ YD	380		380
	50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	73.9		73.9
	50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	3,490		3,490
	50800105	REINFORCEMENT BARS	POUND	8,170		8,170
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	132,680		132,680
	50800515	BAR SPLICERS	EACH	430		430
Δ	50900805	PEDESTRIAN RAILING	FOOT	72		72
	51500100	NAME PLATES	EACH	1		1
	51603000	DRILLED SHAFT IN SOIL	CU YD	217.6		217.6
	52200010	TEMPORARY SHEET PILING	SQ FT	1,675		1,675
	550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	38		38
	550A2520	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 12"	FOOT	102		102
Δ	56100700	WATER MAIN 8"	FOOT	100		100
Δ	56100900	WATER MAIN 12"	FOOT		110	110
Δ	56101000	WATER MAIN 16"	FOOT		200	200
Δ	56105200	WATER VALVES 12"	EACH		1	1
Δ	56105300	WATER VALVES 16"	EACH		2	2
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	240		240
	60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1		1
	60206905	CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID	EACH	1		1
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1		1
	60248700	VALVE VAULTS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1		1
	60249010	VALVE VAULTS, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH		2	2
	60500040	REMOVING MANHOLES	EACH	1		1
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	225		225
	61000050	CONCRETE THRUST BLOCKS	EACH	7		7
Δ	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	200		200
Δ	66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1		1
Δ	66900530	SOIL DISPOSAL ANALYSIS	EACH	10		10

Δ SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
SUMMARY OF QUANTITIES

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	3
		CONTRACT NO. 61E49		
	ILLINOIS	FED. AID PROJECT		

	CODE NUMBER	ITEM	UNIT	QUANTITY 0010	QUANTITY NON-PARTICIPATING 0043	TOTAL QUANTITY
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8		8
	67100100	MOBILIZATION	LSUM	1		1
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	649		649
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	160		160
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	160		160
	70600235	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	2		2
	70600320	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	2		2
△	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	36		36
△	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	437		437
△	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	94		94
△	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	80		80
△	78008310	POLYUREA PAVEMENT MARKING TYPE II - LINE 4"	FOOT	200		200
△	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	16		16
△	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1		1
△	80400200	ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1		1
△	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	130		130
△	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	70		70
△	81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	350		350
△	81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	560		560
△	81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	2		2
△	81702100	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 12	FOOT	1,300		1,300
△	81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	3,000		3,000
△	81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	390		390
△	82500335	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 100AMP	EACH	1		1
△	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	6		6
△	84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	1		1
△	A2005824	TREE, PLATANUS OCCIDENTALIS (SYCAMORE), 3" CALIPER, BALLED AND BURLAPPED	EACH	1		1
△	A2006524	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 3" CALIPER, BALLED AND BURLAPPED	EACH	2		2
	X0322400	PILE EXTRACTION	EACH	6		6
△	X0323444	DECORATIVE STEEL RAILING	FOOT	166		166
	X0326806	WASHOUT BASIN	LSUM	1		1
	X0327750	FOUNDATION REMOVAL	CU YD	50		50
	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	145		145
	X0426200	DEWATERING	LSUM	1		1
	X5021510	COFFERDAMS (SPECIAL)	EACH	4		4
	X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	388		388
△	X5610004	DUCTILE IRON WATER MAIN FITTINGS	POUND	1,000	3250	4,250

	CODE NUMBER	ITEM	UNIT	QUANTITY 0010	QUANTITY NON-PARTICIPATING 0043	TOTAL QUANTITY
△	X5610708	WATER MAIN REMOVAL, 8"	FOOT	218		218
△	X5610748	WATER MAIN LINE STOP 8"	FOOT	2		2
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1		1
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	300		300
△	X6026055	SANITARY MANHOLE, SPECIAL	EACH	2		2
△	X6026622	VALVE VAULTS TO BE REMOVED	EACH	3		3
	XX007297	MASONRY COLUMN, LARGE	EACH	4		4
	XX007298	MASONRY COLUMN, SMALL	EACH	3		3
△	XX007329	RAISED URN SUPPLY	EACH	4		4
△	XX008033	DUPLEX WEATHERPROOF GFI RECEPTACLE AND COVER PLATE	EACH	4		4
	XX008034	SEATWALL 20" HT.	FOOT	24		24
	XX008202	PERGOLA	LSUM	1		1
	Z0013798	CONSTRUCTION LAYOUT	LSUM	1		1
	Z0017400	DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	EACH	5		5
△	Z0056800	SANITARY SEWER 6"	FOOT	105		105
△	Z0057100	SANITARY SEWER 12"	FOOT	24		24
△	Z0067900	STEEL CASINGS 24"	FOOT		65	65
#	Z0076600	TRAINEES	HOUR	500		500
#	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500		500
△	XX009217	COLUMN LIGHTING UNIT, COMPLETE IN PLACE	EACH	4		4
△	XX009218	CANOPY LIGHTING UNIT, COMPLETE IN PLACE	EACH	4		4
	XX009219	ARCHITECTURAL PEDESTAL	EACH	2		2
△	XX009220	DECORATIVE ILLUMINATED ARCH	EACH	1		1

△ SPECIALTY ITEMS

0042

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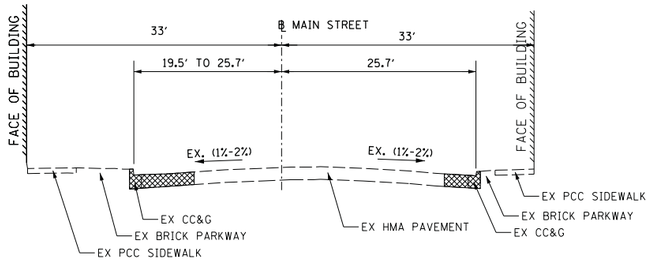
Default	PLOT DATE = 1/17/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
SUMMARY OF QUANTITIES

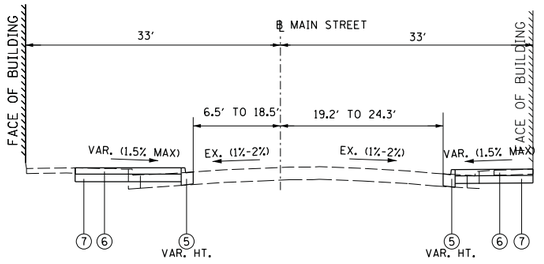
SCALE: | SHEET OF SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	4
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



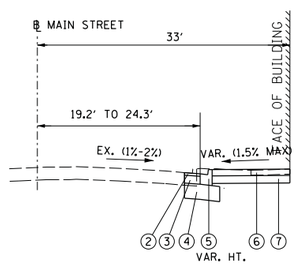
EXISTING CROSS SECTION

STA 988+11.00 TO STA 988+71.61, MAIN STREET



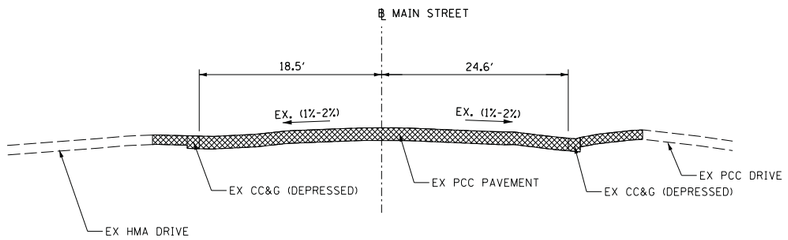
PROPOSED CROSS SECTION

STA. 988+29.89 TO STA. 988+71.61, MAIN STREET



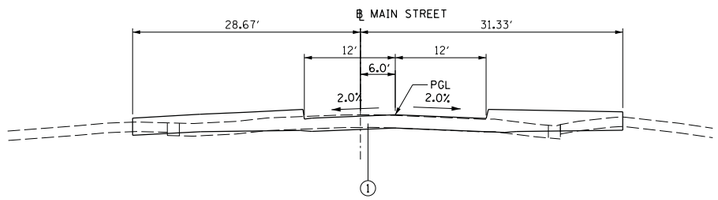
PROPOSED CROSS SECTION

STA. 988+39.62 TO STA. 988+61.02, MAIN STREET



EXISTING CROSS SECTION

STA. 987+13.57 TO STA. 988+11.00, MAIN STREET



PROPOSED CROSS SECTION

STA. 987+12.89 TO STA. 988+29.89, MAIN STREET

LEGEND:

1. BRIDGE DECK OR APPROACH PAVEMENT (SEE STRUCTURAL PLANS)
2. HOT MIX SURFACE COURSE, MIX D, N50 - 2"
3. HOT MIX BINDER COURSE IL 19.0, N50 - 6 1/4"
4. AGGREGATE SUBGRADE IMPROVEMENT 12"
5. COMBINATION CONCRETE CURB AND GUTTER, TY B-6.12
6. PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
7. AGGREGATE BASE COURSE, TYPE B 6 INCH

REMOVAL ITEMS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ NDES
ROADWAY HOT-MIX ASPHALT PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 2"	4% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19.0), N50; 6 1/4"	4% @ 50 GYR.
DRIVEWAY HOT-MIX ASPHALT PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 2"	4% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19.0), N50; 2 1/2"	4% @ 50 GYR.

HMA TABLE NOTES:

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT MATERIAL IS 112 LB/SQ YD/IN.

THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

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		DRAWN -	REVISED -
	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
TYPICAL SECTIONS

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	5
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		

ELEVATION BENCHMARKS
DATUM: NAVD '88 ('99 GEOID)

NO.	DESCRIPTION	ELEV.
AJ2945	NGS MONUMENT-METAL ROD WITH 6" LOGO CAP LOCATED AT THE NORTHEAST CORNER OF HARNISH DR. AND SAWMILL LN. EAST OF VILLAGE HALL ENTRANCE	897.16
OSBM	SQUARE CUT AT INTERSECTION WALKS AT	740.06
15-50	SOUTHEAST CORNER OF WASHINGTON ST. & MAIN ST.	
OSBM	SQUARE CUT ON NORTHEAST CORNER OF	742.47
16-1	STONE CAP OF SHELL GAS SIGN AT NORTHWEST CORNER OF ALGONQUIN RD. & MAIN ST.	

WASHINGTON STREET

MAIN STREET

ACCESS DR.

CRYSTAL CREEK

ALGONQUIN ROAD (IL 62)

PROJECT BEGINS
STA 987+09.89

PROJECT ENDS
STA 988+71.61

POT Sta 185+00.00

PI Sta 186+08.94

POT Sta 186+50.00

PI Sta 990+12.00

N 2003469.8485
E 995201.9252

N 2003399.5475
E 995285.1601

N 2003587.9344
E 995444.0182

OSBM 16-1

16" CUL VERT (H-0684)
NOT ACCESSIBLE

SKEW - 90° 00' 00"

N 2003365.9831
E 995310.6978

N 2003373.4510
E 995316.8463

N 2003443.1837
E 995374.2594

N 2003529.6482
E 995445.4483

N 2003211.5821
E 995183.5746

N 2003288.7826
E 995247.1362

OSBM 15-50

N 2002912.6939
E 994982.5951

STA. EQ.
STA. 988+09.67 MAIN STREET =
STA. 186+50.00 ACCESS DRIVE

982 983 984 985+00 986 987 988 989 990+00

N

0 30 60 90
SCALE IN FEET

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Default	PLOT DATE = 1/10/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
ALIGNMENT, TIES & BENCHMARKS

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	6
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

FOX RIVER OUTLET
(A.K.A. CRYSTAL CREEK)

STA. 987+94.29
106.09' LT

STA. 987+31.00
66.67' LT

STA. 987+20.39
66.67' LT

102-106 S. MAIN ST.
2-STORY
BRICK

STA. 987+20.39
39.17' LT

FF=736.44
FF=736.54
FF=736.57

STA. 987+09.89
28.67' LT

RELOCATE LIGHT POLE

LS=734.83
LS=734.88

CONC. WALL
W/ HANDRAIL

CONC.
18' CULVERT (N-0684)
NOT ACCESSIBLE

APPROXIMATE R.O.W. LINE

PROJECT BEGINS
STA 987+09.89

STAIRS
STA. 988+16.49
105.69' LT

STAIRS

"HANDICAPPED"(2)

PLANTER

PLANTER

STAIRS

CONC. PATIO

BENCH

LANDSCAPE AREA

FOUNTAIN

8 S. MAIN ST.
2-STORY
WOOD SIDED

CANOPY

ALGONQUIN SIGN

CONC. STEPS

CONC.

BIKE RACK

BRICK

ELEC

CONC.

FF=739.56

GAS

PLANTER

BRICK

CONC. PLANTER

DRAIN

2 S. MAIN ST.
2-STORY
BRICK

PLANTER

BRICK WALL

BRICK

STA. 988+47.10
22.51' LT

STA. 988+33.07
8.47' LT

STA. 988+28.89
8.11' LT

PROJECT ENDS
STA 988+71.61

STA. 988+28.89
22.94' RT

STA. 988+39.62
24.72' RT
ADJ

STA. 988+71.60
29.33' RT

STA. 988+71.60
36.58' RT

STA. 987+99.97
34.10' RT

STA. 988+13.39
34.99' RT

FF=738.08

7 S. MAIN ST
1-STORY
FRAME W/
VINYL SIDING

WOOD DECK

CONC. WALL W/
CHAIN LINK

WELL=736.98
SILL=735.23

S. MAIN STREET

987

988

989

BIT.

CONC.

REM MH

WV

VV REM

VV REM

4" COLUMN

CONC. APPROXIMATE R.O.W. LINE

CONC. WALL
RIPRAP

GV

B-BOX

"NO PARKING"

CANOPY

CONC. STEPS

FF=738.69

STA. 987+09.89
33.17' RT

FF=739.14

FF=739.07

FF=737.73

103-107 S. MAIN ST.
2-STORY
BRICK

101 S. MAIN ST.
1-STORY
BRICK

BUILDING REMOVAL BY OTHERS

BTM WINDOW SILL=733.62

TEL

POLE

TS

LEGEND:

- PAVEMENT REMOVAL (PCC)
- PAVEMENT REMOVAL (HMA)
- DRIVEWAY PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- CONC CURB AND GUTTER REMOVAL
- BRIDGE REMOVAL
- FOUNDATION REMOVAL
- CLASS D PATH
- 8 TREE REMOVAL W/ SIZE IN INCHES

0 10 20 30
SCALE IN FEET

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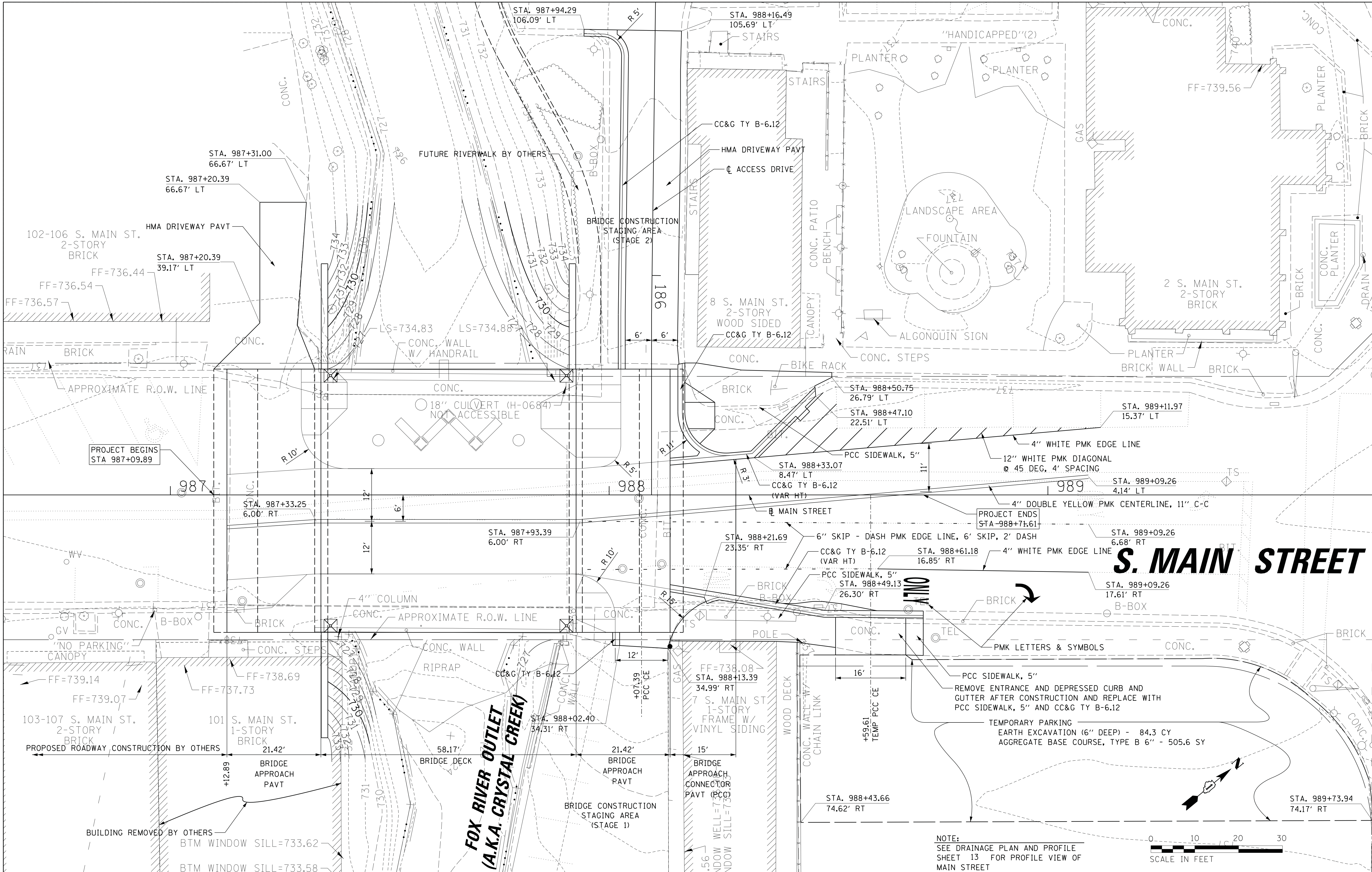
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
EXISTING CONDITIONS AND REMOVAL PLAN

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16+00090-01-BR	MCHENRY	58	7
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		



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Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
ROADWAY PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	8
		CONTRACT NO. 61E49		

ILLINOIS FED. AID PROJECT

①	W20-3-4848	ROAD CLOSED AHEAD
②	W20-2-4848	DETOUR AHEAD
③	W20-3-4848	ROAD CLOSED 500 FT
⑤	M3-1(O) 2412	NORTH
⑥	D3-1-3612	Main St
⑦	M4-9(MOD)-3021	DETOUR
⑧	M4-9L-3021	DETOUR
⑨	M4-9(MOD)-3021	DETOUR
⑩	M4-9R-3021	DETOUR
⑪	M4-9(MOD)-3021	DETOUR
⑫	R6-1R-3612	ONE WAY
⑬	R3-2-2424	
⑭	R6-1L-3612	ONE WAY
⑮	R3-1-2424	
⑯	R5-1-3030	
⑰	M4-10L-4818	DETOUR
⑱	R11-2-4830	ROAD CLOSED
⑲	SPECIAL (O) 6030	N.B. Main St CLOSED AT IL Rte 31 USE Algonquin Rd
⑳	M4-8A-2418	END DETOUR

LEGEND:

- NORTHBOUND DETOUR
- SOUTHBOUND ONE-WAY TRAFFIC
- DETOUR SIGN
- TYPE III BARRICADE
- (#) DETOUR SIGN TYPE
- DIRECTION OF TRAVEL

N

0 200 400 600
SCALE IN FEET

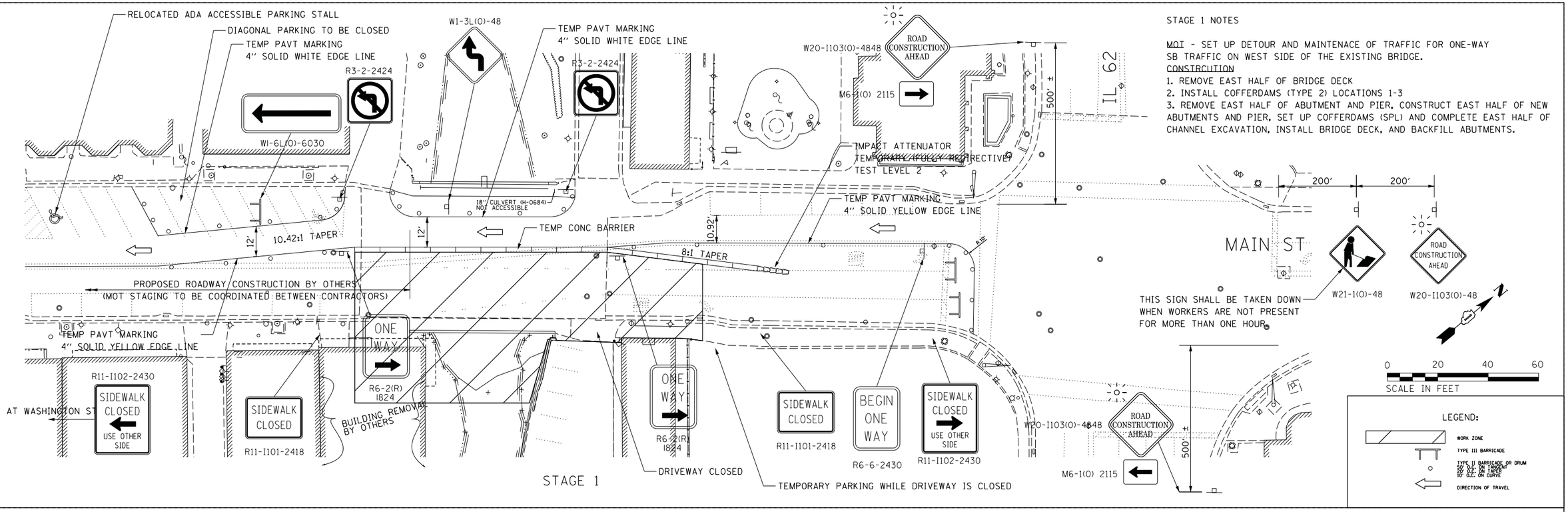
MEASURED FROM THE BEGINNING OF EXIT TAPER

PLACE SIGN AT BEGINNING OF EXIT TAPER

Western Algonquin Bypass (IL ROUTE 31)
Algonquin Rd
Huntington Dr
Railroad St
Jefferson St
Main St
Harrison St S
Front St
Lafox River Dr
Center St
Division St
Madison St
Washington St
Crystal Creek
IL Route 62

FILE NAME = N:\ALGONQUIN\070273\070273.000095B\CADD\Sheets\D161E49-sht-detour01.dgn	USER NAME = pnajarro	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAIN ST BRIDGE OVER CRYSTAL CREEK DETOUR PLAN			
	PLOT SCALE = 200'	DRAWN -	REVISED -					
Default	PLOT DATE = 1/10/2018	CHECKED -	REVISED -					
		DATE -	REVISED -		SCALE:	SHEET OF SHEETS	STA.	TO STA.

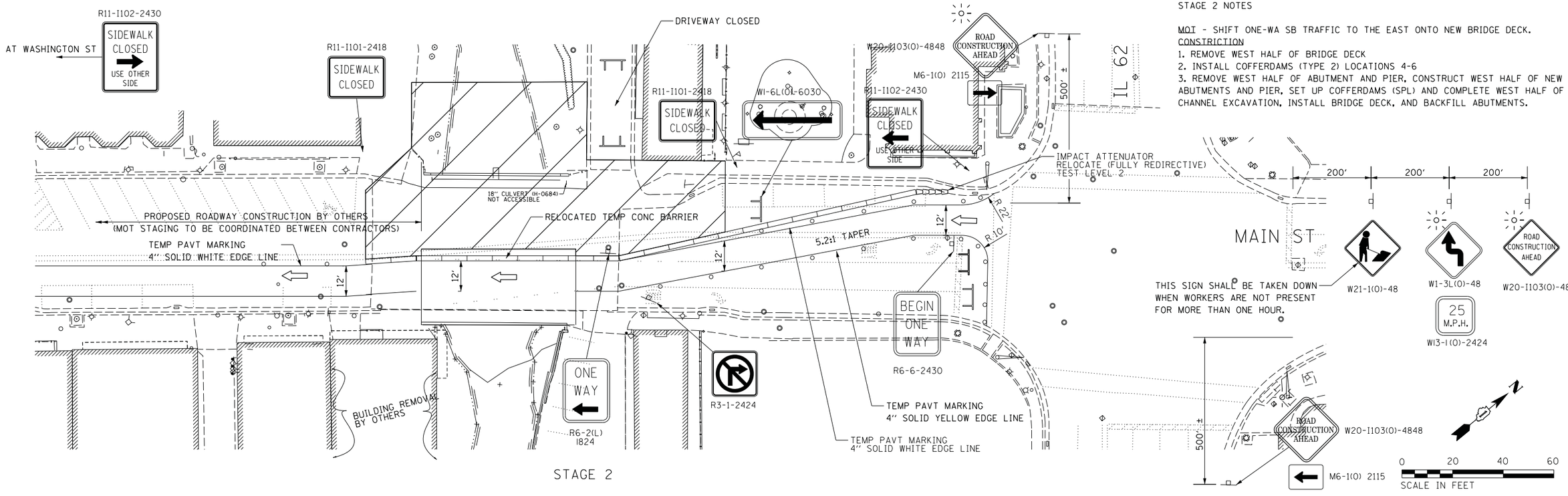
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	9
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



STAGE 1

STAGE 1 NOTES

MOI - SET UP DETOUR AND MAINTENACE OF TRAFFIC FOR ONE-WAY SB TRAFFIC ON WEST SIDE OF THE EXISTING BRIDGE.
CONSTRCUTION
1. REMOVE EAST HALF OF BRIDGE DECK
2. INSTALL COFFERDAMS (TYPE 2) LOCATIONS 1-3
3. REMOVE EAST HALF OF ABUTMENT AND PIER, CONSTRUCT EAST HALF OF NEW ABUTMENTS AND PIER, SET UP COFFERDAMS (SPL) AND COMPLETE EAST HALF OF CHANNEL EXCAVATION, INSTALL BRIDGE DECK, AND BACKFILL ABUTMENTS.



STAGE 2

STAGE 2 NOTES

MOI - SHIFT ONE-WA SB TRAFFIC TO THE EAST ONTO NEW BRIDGE DECK.
CONSTRICTION
1. REMOVE WEST HALF OF BRIDGE DECK
2. INSTALL COFFERDAMS (TYPE 2) LOCATIONS 4-6
3. REMOVE WEST HALF OF ABUTMENT AND PIER, CONSTRUCT WEST HALF OF NEW ABUTMENTS AND PIER, SET UP COFFERDAMS (SPL) AND COMPLETE WEST HALF OF CHANNEL EXCAVATION, INSTALL BRIDGE DECK, AND BACKFILL ABUTMENTS.

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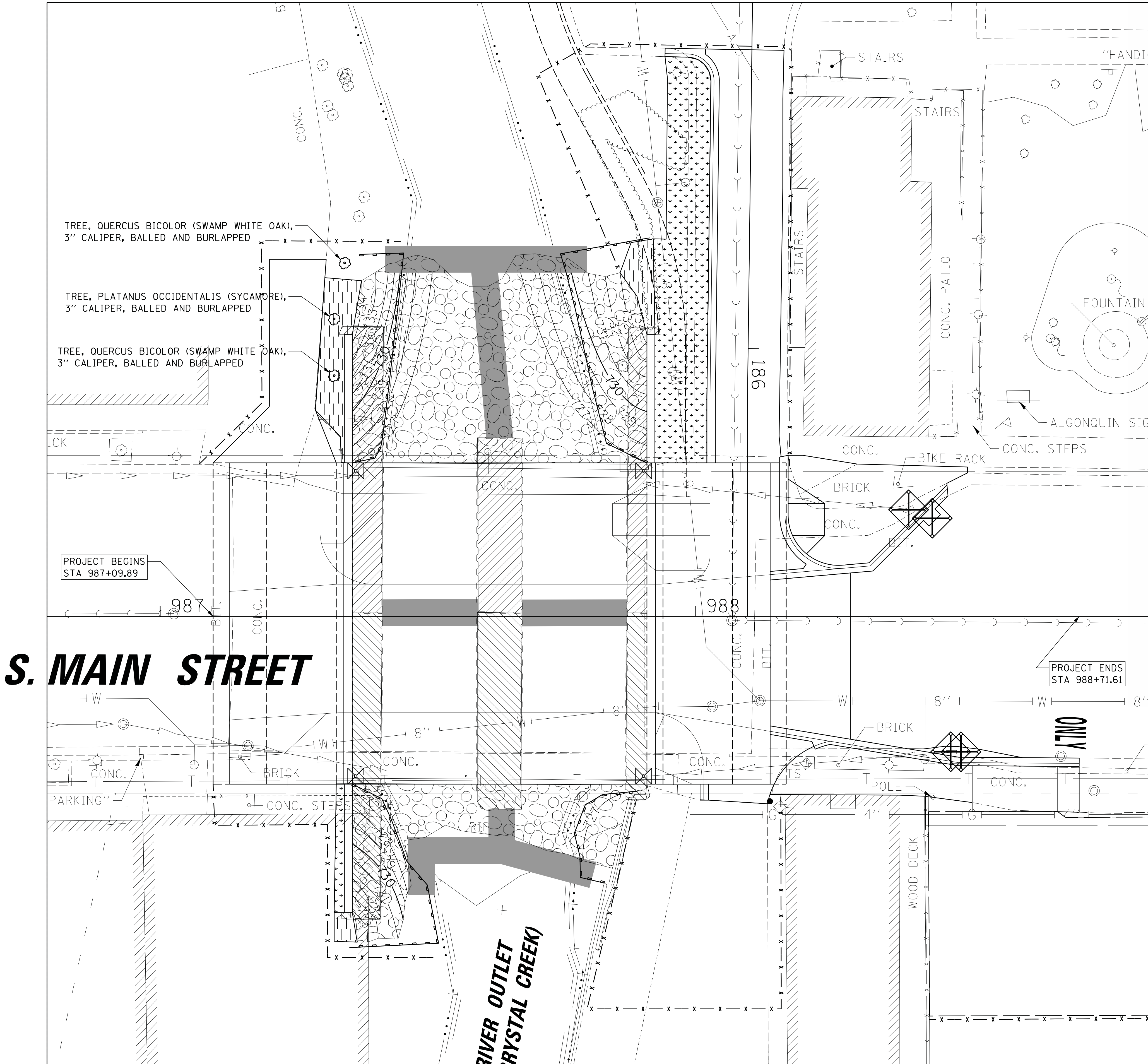
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
MAINTENANCE OF TRAFFIC PLAN

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	10
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		



Requirements for In-stream Construction Activities

The contractor shall contact the Corps with a proposed cofferdam plan that meets the standards listed below. The Corps will approve a cofferdam plan which meets these erosion and sediment control standards. Means and methods for completing work within a waterway must be approved by the Corps prior to the commencement of work. However, it is incumbent upon the contractor to ensure that all cofferdams are constructed to allow the passage of high flows, maintain downstream flows, and withstand anticipated erosive forces.

The following definitions apply to these notes:

Cofferdam: a temporary structure within a waterway or body of water designed to provide a dry work area for temporary construction activities and contain disturbed soil and/or suspended sediments.

In-stream work area: work occurring at or below the ordinary high water mark (OHWM) of a waterway or the normal water level (NWL) of abutting wetlands, including adjacent uplands.

Dewatering: the removal of water with the purpose of creating a dry work area for temporary construction activities.

Work within a waterway must meet the following standards:

1. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.

2. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile fabric, etc.). Earthen cofferdams are not permissible.

3. Work may not be performed in the water, except for the placement of the materials necessary for the construction of the cofferdam. The cofferdam must be constructed from the upland area and no equipment may enter the water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.

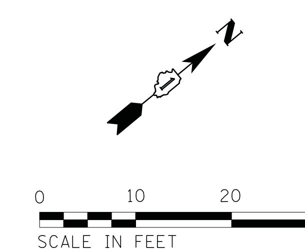
4. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.

5. During dewatering of the coffered area, all water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.

6. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to pre-construction conditions and fully stabilized prior to accepting flows.

LEGEND

- PERIMETER ERIOSION BARRIER
- INLET FILTER
- RIPRAP CLASS A5
- TOPSOIL F&P, 4″, SEEDING CLASS 4A & EROSION CONTROL BLANKET
- TOPSOIL F&P, 4″ & SODDING, SALT TOLERANT
- COFFERDAM (TYPE 2) FOR BRIDGE CONSTRUCTION
- ROCK PARTIAL COFFERDAM FOR CHANNEL EXCAVATION PAID FOR AS COFFERDAM (SPECIAL)
- TEMPORARY FENCE



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PLOT DATE = 1/10/2018
DESIGNED -
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DATE -
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REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
EROSION CONTROL AND LANDSCAPING PLAN

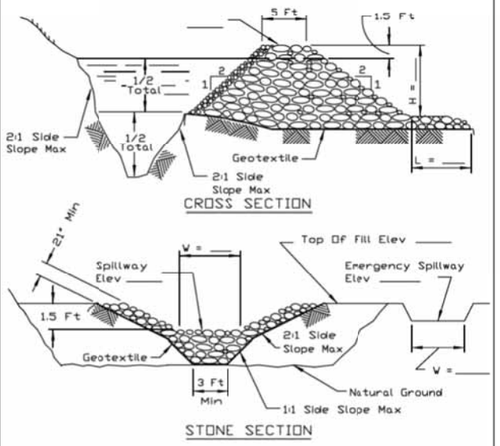
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	11

CONTRACT NO. 61E49

ILLINOIS FED. AID PROJECT

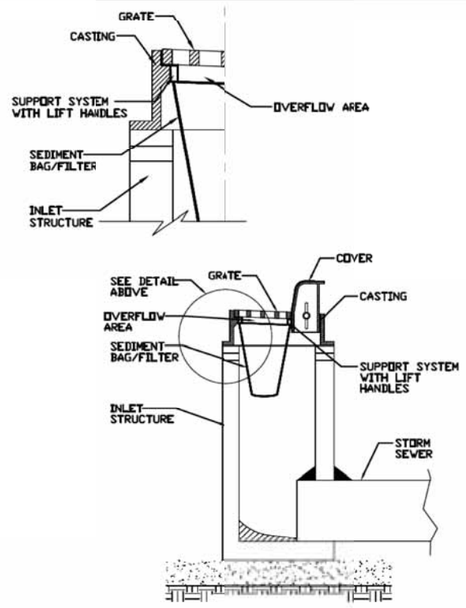
TEMPORARY SEDIMENT TRAP



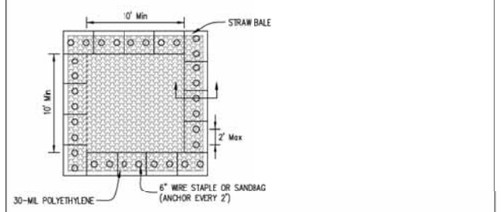
NOTES:
1. If the sediment pool is formed or enlarged the side slope will be 2:1 or flatter.
2. The fill shall be constructed using IDOT RR-4 stone size. A 1'layer of IDOT CA-2 should be placed on the inside face to reduce the flow rate.
3. The rock will be placed according to construction specification 25 ROCKFILL. Placement will be by Method 1 and compaction will be class III.
4. The geotextile shall meet the requirements in material specificatior 592 GEOTEXTILE table 1 or 2, class I , II or IV .

REFERENCE		STANDARD DWG. NO.
Project	NRCS Natural Resources Conservation Service	IL-660
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 11-20-01
Approved _____ Date _____		

INLET PROTECTION - PAVED AREAS
DROP-IN PROTECTION



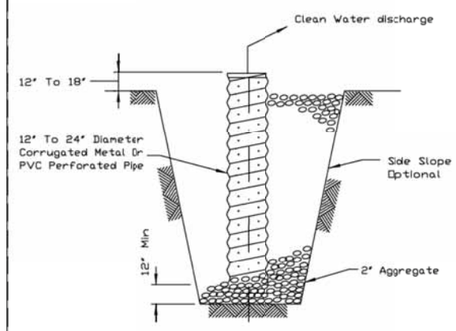
REFERENCE		STANDARD DWG. NO.
Project		IUM-561D
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 01-11-11
Approved _____ Date _____		



NOTES:
1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
3. Each straw bale is to be staked n place using (2) 2"x2"x4' wooden stakes.

TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE

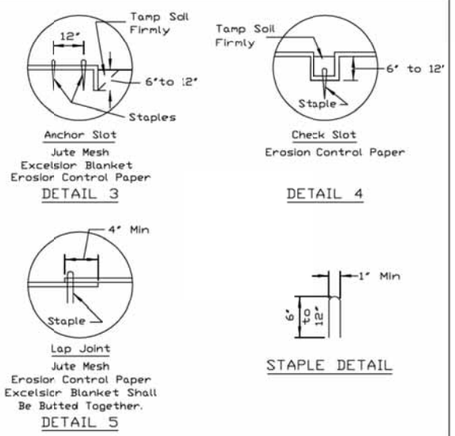
SUMP PIT PLAN



NOTES:
1. Pit dimensions are optional.
2. The standpipe will be constructed by perforating a 12"-24" diameter corrugated metal or PVC pipe.
3. A base of 2" aggregate 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.
4. The standpipe will extend 12" to 18" above the lip of the pit.
5. If discharge will be pumped directly to a storm drainage system, the standpipe will be wrapped with filter fabric before installation.
6. If desired, 1/4"-1/2" hardware cloth may be placed around the standpipe prior to attaching the filter fabric. This will increase the rate of water seepage into the pipe.

REFERENCE		STANDARD DWG. NO.
Project	NRCS Natural Resources Conservation Service	IL-650
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 8-11-94
Approved _____ Date _____		

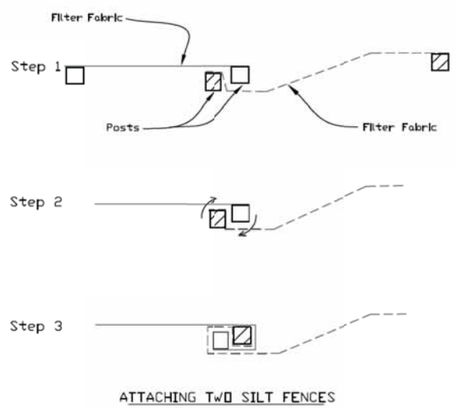
EROSION BLANKET PLAN



NOTES:
1. On erosion control paper, check slots, in ditch channel shall be spaced so that one occurs within each 50' on slopes of more than 4% and less than 6%. On slopes of 6% or more, they shall be spaced so that one occurs within each 25'.
2. Staples are to be placed alternately, in columns approximately 2' apart and in rows approximately 3' apart. Approximately 175 staples are required per 4'x 225' roll of material and 125 staples are required per 4'x 150' roll of material.
3. Erosion control material shall be placed loosely over ground surface Do not stretch.
4. All terminal ends and transverse laps shall be stapled at approximately 12' intervals.

REFERENCE		STANDARD DWG. NO.
Project	NRCS Natural Resources Conservation Service	IL-530
Designed _____ Date _____		SHEET 2 OF 2
Checked _____ Date _____		DATE 3-1-95
Approved _____ Date _____		

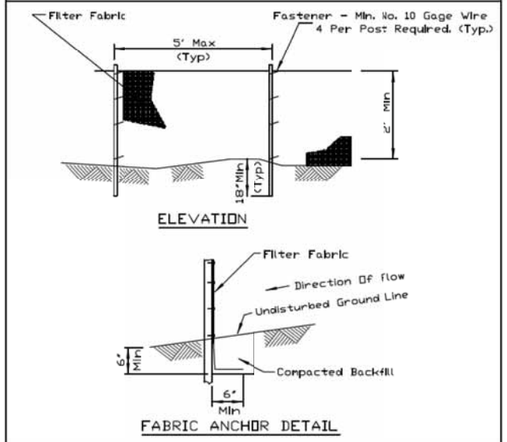
SILT FENCE - SPLICING TWO FENCES



1. Place the end post of the second fence inside the end post of the first fence.
2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
3. Cut the fabric near the bottom of the stakes to accomodate the 6" flap.
4. Drive both posts a minimum of 18 inches into the ground and bury the flap.
5. Compact backfill (particularly at splices) completely to prevent stormwatr piping.

REFERENCE		STANDARD DWG. NO.
Project		IUM-620B(W)
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 3-16-2012
Approved _____ Date _____		

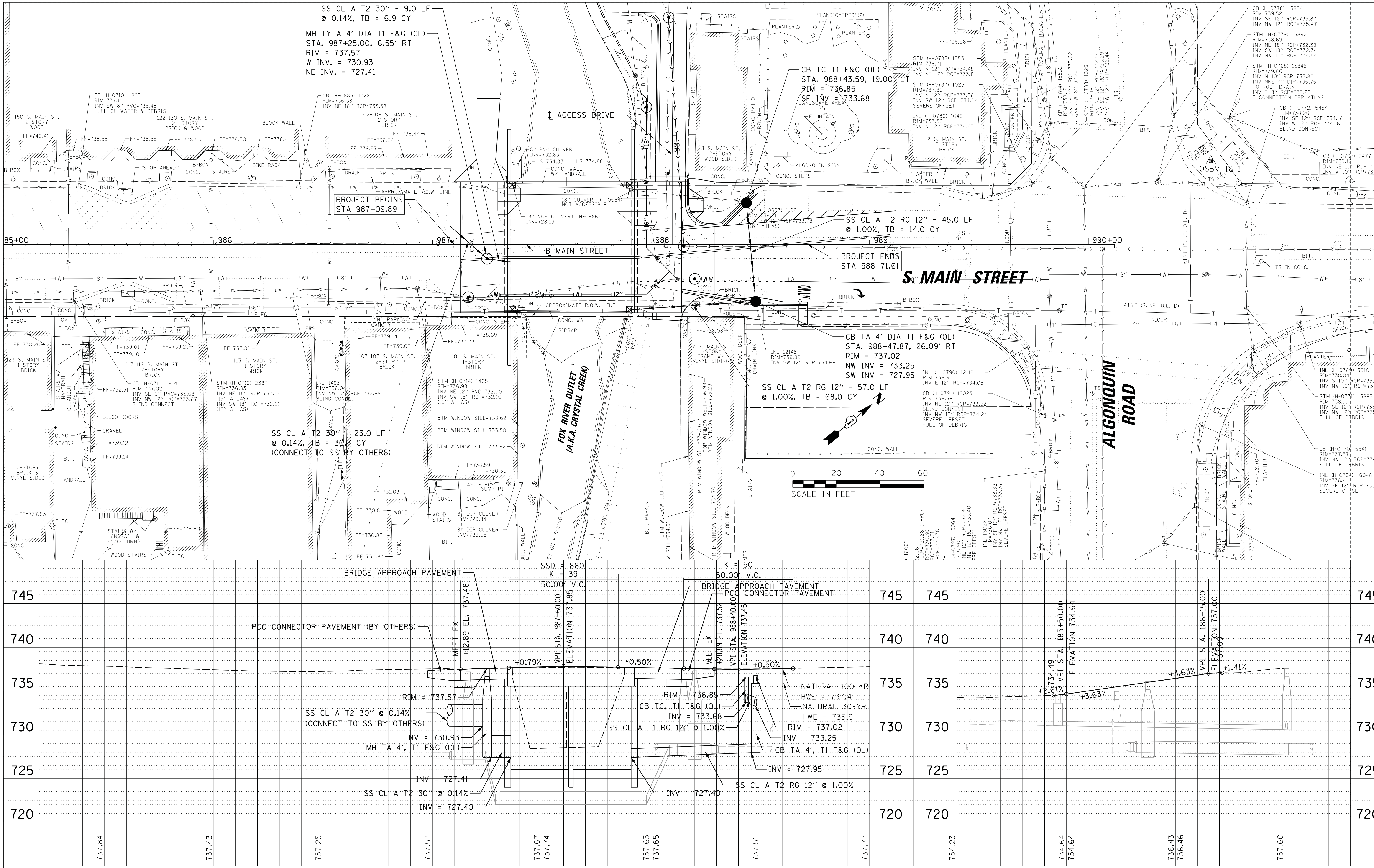
SILT FENCE PLAN



NOTES:
1. 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.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 40 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

REFERENCE		STANDARD DWG. NO.
Project		IUM-620A
Designed _____ Date _____		SHEET 1 OF 2
Checked _____ Date _____		DATE 3-16-12
Approved _____ Date _____		

FILE NAME =	USER NAME = mwarman	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAIN ST BRIDGE OVER CRYSTAL CREEK EROSION CONTROL DETAILS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\D161E49-sht-ecp02.dgn	PLOT SCALE = 10'	DRAWN -	REVISED -			4560	16-00090-01-BR	MCHENRY	58	12
Default	PLOT DATE = 1/11/2018	CHECKED -	REVISED -					CONTRACT NO. 61E49		
		DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		



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	PLOT SCALE = 20'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

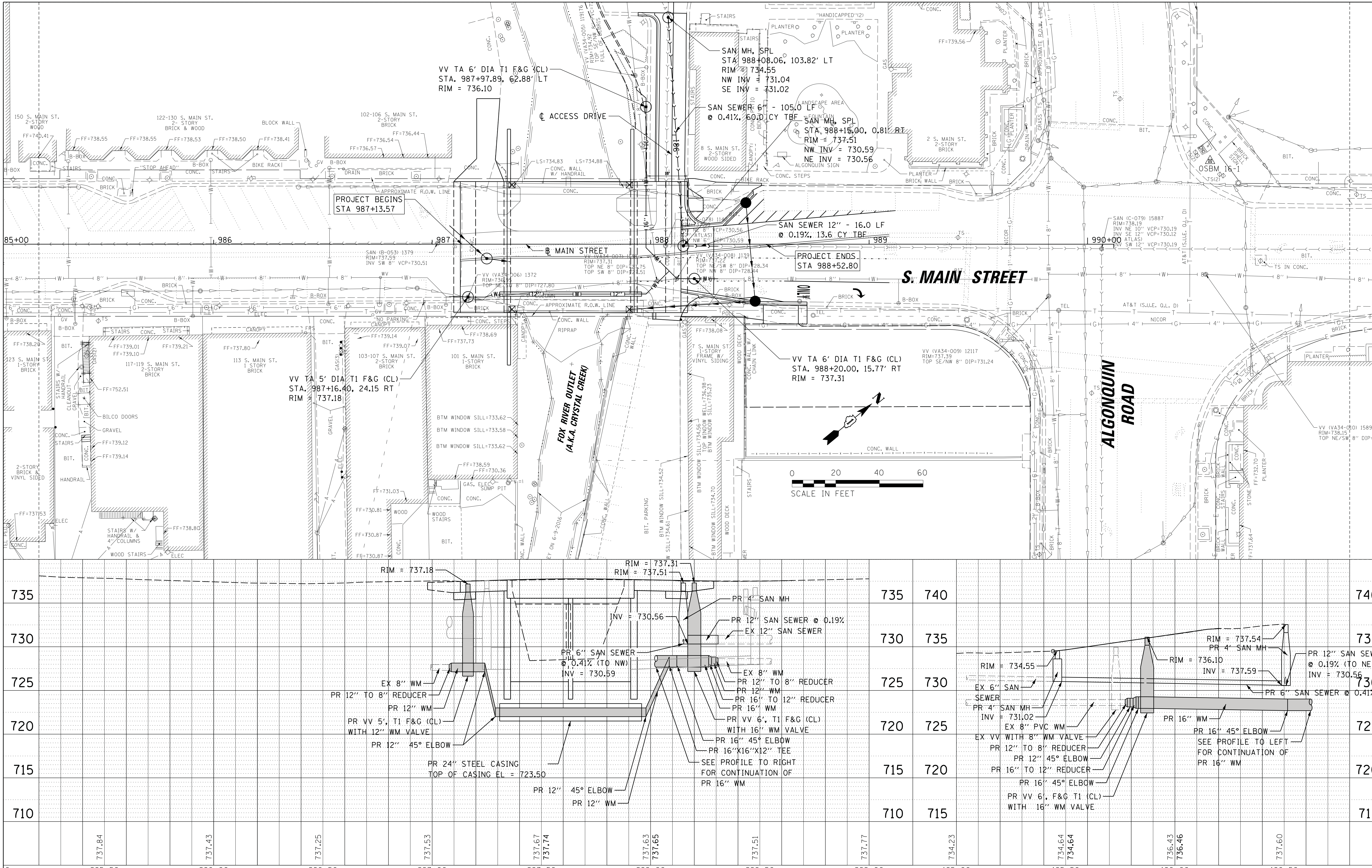
MAIN ST BRIDGE OVER CRYSTAL CREEK
DRAINAGE PLAN AND PROFILE

SCALE: SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR		58	13

CONTRACT NO. 61E49

ILLINOIS FED. AID PROJECT



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Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
UTILITY PLAN AND PROFILE

SCALE: SHEET OF SHEETS STA. TO STA.

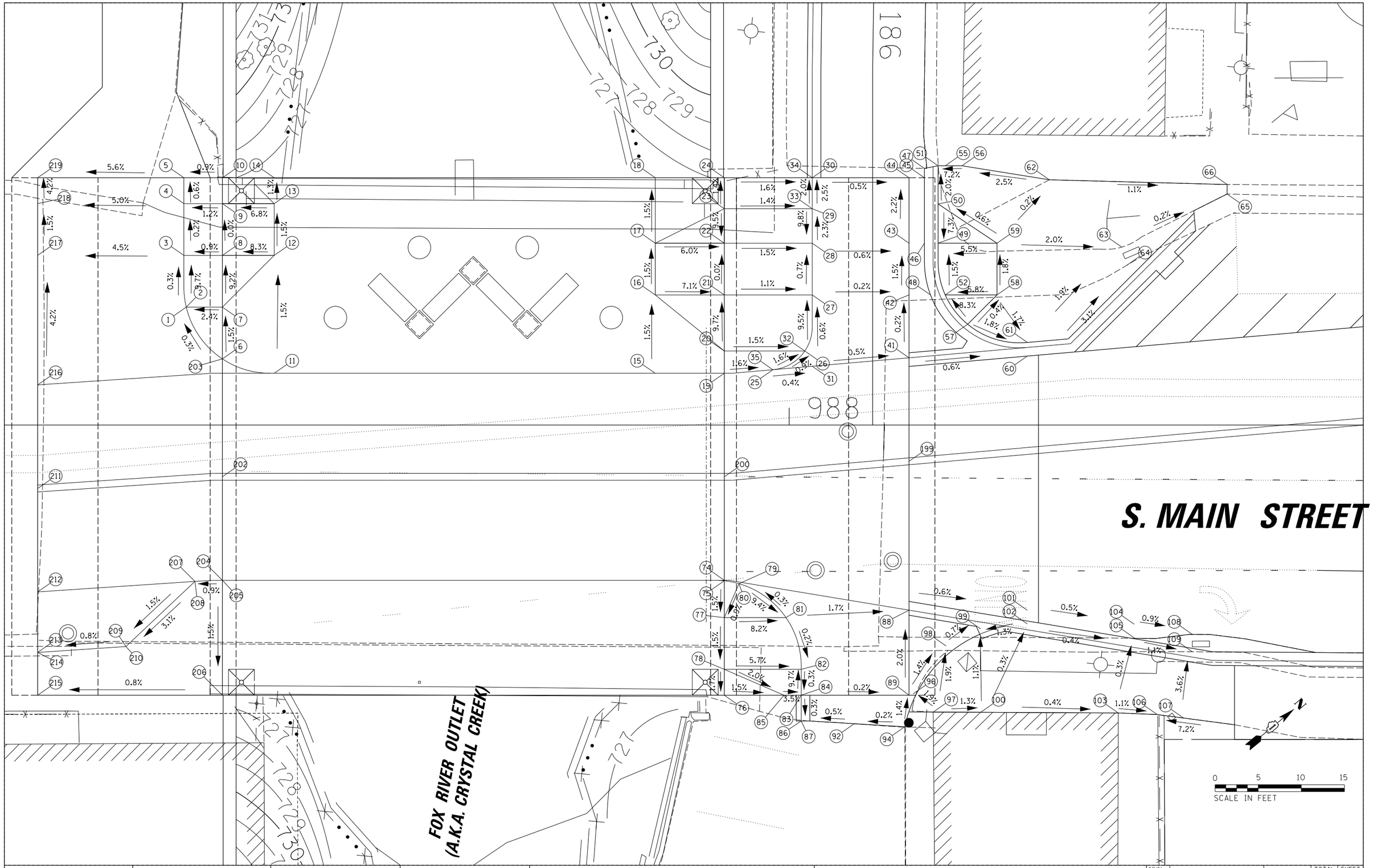
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR		58	14

CONTRACT NO. 61E49

ILLINOIS FED. AID PROJECT

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

PROFILE NOTE BOOK NO. SURVEYED PLOTTED GRADES CHECKED B.M. NOTED STRUCTURE NOTAT'NS CH'KD BY DATE



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Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
GRADING PLAN

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16+00090-01-BR	MCHENRY	58	15
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

POINT	MAIN ST STATION	OFFSET	LT/RT	ELEVATION
1	987+30.11	-13.67	LT	737.39
2	987+30.11	-13.67	LT	737.95
3	987+29.84	-19.67	LT	737.37
4	987+29.84	-25.67	LT	737.36
5	987+29.84	-28.67	LT	737.34
6	987+34.31	-7.67	LT	738.05
7	987+34.31	-13.67	LT	737.96
8	987+34.31	-19.67	LT	737.41
9	987+34.31	-25.67	LT	737.41
10	987+34.31	-28.67	LT	737.41
11	987+40.31	-6.00	LT	738.12
12	987+40.31	-19.67	LT	737.91
13	987+40.31	-25.67	LT	737.82
14	987+40.31	-28.67	LT	737.78
15	987+84.47	-6.00	LT	738.16
16	987+84.47	-15.09	LT	738.02
17	987+84.47	-21.09	LT	737.93
18	987+84.47	-28.67	LT	737.82
19	987+92.47	-7.45	LT	738.12
20	987+92.47	-8.59	LT	738.10
21	987+92.47	-15.09	LT	737.45
22	987+92.47	-21.09	LT	737.45
23	987+92.47	-25.09	LT	737.83
24	987+92.47	-28.67	LT	737.78
25	987+98.11	-6.41	LT	737.42
26	988+01.81	-8.59	LT	737.38
27	988+02.67	-15.09	LT	737.34
28	988+02.67	-21.09	LT	737.30
29	988+02.67	-25.09	LT	737.21
30	988+02.67	-28.67	LT	737.12
31	988+02.67	-6.81	LT	737.40
32	988+01.81	-8.59	LT	737.96
33	988+02.67	-25.09	LT	737.69
34	988+02.67	-28.67	LT	737.62
35	987+98.11	-6.41	LT	738.03
41	988+13.89	-7.79	LT	737.34
42	988+13.89	-15.09	LT	737.32
43	988+13.89	-21.09	LT	737.23
44	988+13.89	-28.67	LT	737.07
45	988+15.67	-28.67		737.05

POINT	MAIN ST STATION	OFFSET	LT/RT	ELEVATION
46	988+15.67	-21.09	LT	737.21
47	988+15.67	-29.76	LT	737.02
48	988+16.38	-15.09	LT	737.31
49	988+17.25	-21.09	LT	737.21
50	988+17.25	-25.64	LT	737.50
51	988+17.25	-30.06	LT	737.20
52	988+18.08	-15.09	LT	737.31
55	988+18.08	-30.06	LT	737.41
56	988+20.02	-30.06	LT	737.27
57	988+20.68	-11.68	LT	737.68
58	988+24.08	-15.09	LT	737.66
59	988+24.08	-21.09	LT	737.55
60	988+27.60	-7.99	LT	737.33
61	988+27.60	-9.58	LT	737.55
62	988+30.15	-28.04	LT	737.53
63	988+38.54	-20.63	LT	737.26
64	988+39.16	-18.54	LT	736.84
65	988+50.75	-26.79	LT	737.24
66	988+50.76	-27.89	LT	737.31
74	987+92.47	18.00	RT	737.45
75	987+92.47	18.06	RT	738.12
76	987+92.47	31.33	RT	737.92
77	987+92.47	22.33	RT	738.06
78	987+92.47	28.33	RT	737.97
79	987+94.18	18.39	RT	737.45
80	987+94.18	18.39	RT	738.10
81	987+99.63	22.33	RT	737.47
82	988+01.39	28.33	RT	737.46
83	988+01.39	31.33	RT	737.75
84	988+01.39	31.33	RT	737.45
85	987+99.39	31.33	RT	737.82
86	988+01.39	34.25	RT	737.90
87	988+01.39	34.25	RT	737.44
88	988+13.89	21.47	RT	737.23
89	988+13.89	31.33	RT	737.43
92	988+07.55	34.63	RT	737.47
93	988+10.56	19.25	RT	737.18
94	988+13.39	34.99	RT	737.48
95				
96	988+14.35	31.17	RT	737.40

POINT	MAIN ST STATION	OFFSET	LT/RT	ELEVATION
97	988+16.69	33.28	RT	737.46
98	988+18.08	25.62	RT	737.31
99	988+22.18	23.68	RT	737.28
100	988+22.18	33.31	RT	737.39
101	988+27.60	21.48	RT	737.08
102	988+27.60	23.06	RT	737.35
103	988+38.14	33.38	RT	737.33
104	988+40.00	23.11	RT	737.02
105	988+40.00	24.69	RT	737.3
106	988+42.66	33.57	RT	737.28
107	988+45.71	33.97	RT	737.5
108	988+46.72	24.27	RT	736.96
109	988+46.72	26.29	RT	737.22
199	988+13.89	4.21	RT	737.58
200	987+92.47	6.00	RT	737.69
202	987+34.31	6.00	RT	737.65
203	987+34.31	-7.67	LT	737.41
204	987+34.31	18.00	RT	737.41
205	987+34.31	18.00	RT	738.08
206	987+34.31	31.33	RT	737.88
207	987+31.13	18.14	RT	737.38
208	987+31.13	18.14	RT	738.05
209	987+23.13	25.68	RT	737.22
210	987+23.13	25.68	RT	737.72
211	987+12.89	7.36	RT	737.48
212	987+12.89	19.35	RT	737.24
213	987+12.89	26.37	RT	737.14
214	987+12.89	26.37	RT	737.64
215	987+12.89	31.33	RT	737.71
216	987+12.89	-4.65	LT	737.24
217	987+12.89	-19.67	LT	736.61
218	987+12.89	-25.67	LT	736.52
219	987+12.89	-28.67	LT	736.39

XXX.XX MEET EX GRADE ELEVATION

FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\D161E49-sht-grade_schedule-01.dgn	USER NAME = pnajarro	DESIGNED -	REVISED -
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Default	PLOT DATE = 1/10/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
GRADING SCHEDULE

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16+00090-01-BR	MCHENRY	58	16
		CONTRACT NO. 61E49		
	ILLINOIS	FED. AID PROJECT		

LIGHTING GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE VILLAGE OF ALGONQUIN BEFORE THE START OF WORK.
2. THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY EQUIPMENT. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT (800) 892-0123
3. BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD UTILITIES CALL COM ED FOR LOCATION APPROVAL AND MINIMUM CLEARANCE REQUIREMENTS.
4. THE WORK PERFORMED UNDER THIS CONTRACT SHALL IN NO WAY INTERFERE WITH THE NORMAL OPERATION OF ANY EXISTING UTILITY SERVICE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ITEMS OF EQUIPMENT REQUIRED TO MAINTAIN SUCH NORMAL OPERATION.
5. ALL REMOVAL OR EXCAVATION ITEMS BEING DISPOSED OF AT AN UNCONTAMINATED SOIL FILL OPERATION OR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) FILL SITE SHALL MEET THE REQUIREMENTS OF PUBLIC ACT 96-1416. ALL COSTS ASSOCIATED WITH MEETING THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE ASSOCIATED REMOVAL OR EXCAVATION ITEMS IN THE CONTRACT. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION BY A LICENSED PROFESSIONAL OWNER'S REPRESENTATIVE, AND STATE AND LOCAL TIPPING FEE.
6. ALL DISTURBED AREAS WHERE RESTORATION IS NOT COVERED BY THE CONTRACT DRAWINGS AND/OR APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS MUST BE RESTORED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
7. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
8. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
   A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", AS PREPARED BY IDOT.
   B. "THE NATIONAL ELECTRIC CODE."
   C. MUNICIPAL CODE & ORDINANCE.
9. THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE NOT INTENDED TO SHOW ALL DETAILS OF WORK TO BE PERFORMED OR EQUIPMENT TO BE SUPPLIED. THE INTENT OF THE CONTRACT DRAWINGS AND SPECIFICATIONS IS TO ILLUSTRATE THE CONCEPTUAL DESIGN AND LAYOUT. THE CONTRACTOR SHALL BE KNOWLEDGEABLE AND REGULARLY ENGAGED IN THE TYPE OF WORK DESCRIBED BY THESE CONTRACT DRAWINGS AND SPECIFICATIONS AND SHALL BE RESPONSIBLE FOR UNDERSTANDING THEIR INTENT. ANY WORK TO BE PERFORMED OR ITEM OF EQUIPMENT TO BE SUPPLIED WHICH IS NOT SPECIFICALLY CALLED FOR BY THESE CONTRACT DRAWINGS AND SPECIFICATIONS, BUT WHICH IS NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFUL WORKING SYSTEM SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK.
10. NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL ALL PERTINENT EQUIPMENT SUBMITTALS HAVE BEEN REVIEWED BY THE OWNER'S REPRESENTATIVE.
11. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT OR OTHER PIECE OF EQUIPMENT.
12. THE INSTALLATION OF BURIED WARNING TAPE, SPECIFIED AS PART OF TRENCH FOR UNDERGROUND CONDUITS, SHALL BE REVIEWED BY THE OWNER'S REPRESENTATIVE PRIOR TO BACKFILLING OR PLOWING OPERATIONS, AS APPLICABLE.
13. IT IS THE CONTRACTOR'S RESPONSIBILITY FOR TIMELY NOTIFICATION AND COORDINATION WITH COM ED AND THE VILLAGE OF ALGONQUIN.
14. THE CONTRACTOR SHALL LABEL ALL WIRES WITH WIRE MARKERS INDICATING THE CIRCUIT ID IN EVERY CONTROLLER, POLE BASE, HAND HOLE AND SPLICE/CONNECTION POINT. WIRE MARKERS SHALL BE MECHANICALLY FASTENED WHITE PLASTIC, TYPE "PLM" AS MANUFACTURED BY PANDUIT OR EQUAL.
15. ALL UNDERGROUND WIRING SHALL BE MINIMUM #10 COPPER (OR SIZE AS SHOWN ON THE PLANS) XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, INSTALLED IN CONDUIT A MINIMUM 30 INCHES BELOW FINISHED GRADE, FOLLOWING THE ROADWAY OR SIDEWALK EDGE.
16. ALL HANDHOLES SHALL FACE AWAY FROM TRAFFIC.
17. THE LIGHT LOCATIONS SHALL COMPLY WITH THE MINIMUM CLEAR WIDTH FOR AN ACCESSIBLE ROUTE FOR SIDEWALKS PER CURRENT AMERICAN WITH DISABILITIES ACT (ADA) REQUIREMENTS.

LIGHTING GENERAL NOTES (CONTINUED)

18. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHTS FOR EXAMINATION BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO MARKING LOCATIONS. THE EXACT LOCATIONS OF ALL PROPOSED ITEMS SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
19. THE ELECTRICAL CONTRACTOR SHALL FURNISH TWO FULL SIZE SETS OF RECORD DRAWINGS TO THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE LIGHTING AND ELECTRICAL IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATION OF ALL LIGHTS, UNDERGROUND CONDUIT & WIRING, HANDHOLES, CONTROLS & PANELBOARDS/ POWER SUPPLY.
20. UPON COMPLETION OF THE PROPOSED LIGHTING IMPROVEMENTS, THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING AND VERIFY THAT THE INSTALLATION COMPLIES WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS. ALL ELECTRICAL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND THE VILLAGE.
21. THE CONTRACTOR SHALL PROVIDE A GUARANTEE FOR ALL MATERIAL AND WORKMANSHIP FOR ONE YEAR AFTER THE DATE OF ACCEPTANCE.

    CONDUIT MUST BE POSITIONED IN THE TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES AND LANDSCAPING.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE.
23. CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS, DETECTORS AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS
24. DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST.
25. ALL CONDUITS SHALL BE INSTALLED BY DIRECTIONAL BORING METHOD. SOME LOCATIONS MAY REQUIRE TRENCHING AND/OR HAND DIGGING. CONTRACTOR SHALL PROVIDE PRIOR NOTICE TO ENGINEER BEFORE TRENCHING.

LEGEND

✱	PROPOSED 34W PEDESTRIAN AREA PERGOLA MOUNTED DOWNLIGHT (STERNBERG MODEL NO: 1521LED-F-2ARC-30-TF-MDL03-FG)
UD	PROPOSED WIRE IN SCH 40 HDPE CONDUIT AS SHOWN IN CONDUCTOR AND CONDUIT SCHEDULES
UD	PROPOSED RGS CONDUIT SLEEVE FOR HDPE CONDUIT UNDER PAVEMENT AS SHOWN ON PLANS
E	PROPOSED ELECTRIC SERVICE CABLE AND CONDUIT
	PROPOSED ELECTRIC SERVICE DROP LOCATION
	PROPOSED LIGHTING CONTROLLER
	PROPOSED 11" X 18" X 18" COMPOSITE CONCRETE HANDHOLE
CKT A	CIRCUIT IDENTIFIER
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
W	EXISTING WATERMAIN
A	EXISTING OVERHEAD WIRES
G	EXISTING GAS LINE
E	EXISTING ELECTRIC LINE
FO	EXISTING FIBER OPTIC LINE

ABBREVIATIONS

A	AMPS	HH	HAND HOLE
BOC	BACK OF CURB	HPS	HIGH PRESSURE SODIUM
CKT	CIRCUIT	PVC	POLYVINYL CHLORIDE
DIA	DIAMETER	RGS	RIGID GALVANIZED STEEL
FT	FOOT	ROW	RIGHT OF WAY
FOC	FACE OF CURB	STA	STATION
GND	GROUND	V	VOLTS
HD	HEAVY DUTY	W	WATTS
HDPE	HIGH DENSITY POLYETHYLENE		

CAUTION
NOTE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED TO THE LOCATION AND/OR ELEVATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THESE PLANS. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ENGINEER OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS.

BILL OF MATERIALS

Code No.	Description	Unit	Quantity
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
80400100	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL 2 1/2" DIA. ELECTRIC SERVICE	FOOT	130
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL 4" DIA.	FOOT	70
81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC, 1" DIA.	FOOT	350
81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC, 2" DIA.	FOOT	960
81400730	HANDHOLE COMPOSITE CONCRETE	EACH	2
81702100	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 12	FOOT	1300
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	2000
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	390
82500335	LIGHTING CONTROLLER PEDESTAL MOUNT, 240V, 100 AMP	EACH	1
*	COLUMN LIGHTING UNIT, COMPLETE IN PLACE	EACH	4
*	CANOPY LIGHTING UNIT, COMPLETE IN PLACE	EACH	4

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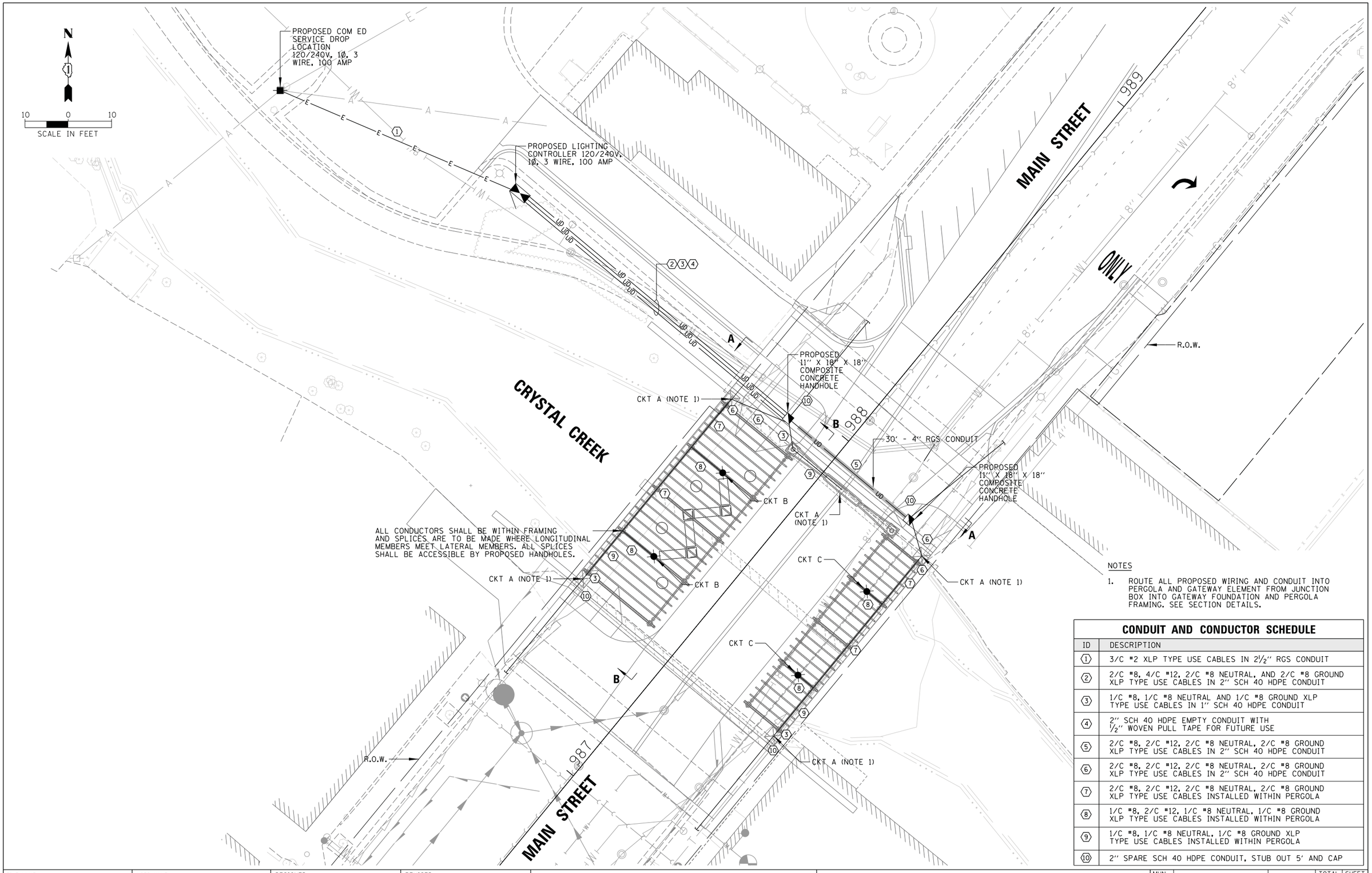
	PLOT SCALE = 20'	CHECKED -	REVISED -
	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DOWNTOWN STREETSCAPE STAGE 1A – PHASE 2
LIGHTING GENERAL NOTES

SCALE: N.T.S. | SHEET 17 OF 58 SHEETS | STA. - | TO STA. -

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-00-PV	McHenry	58	17
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



NOTES

1. ROUTE ALL PROPOSED WIRING AND CONDUIT INTO PERGOLA AND GATEWAY ELEMENT FROM JUNCTION BOX INTO GATEWAY FOUNDATION AND PERGOLA FRAMING. SEE SECTION DETAILS.

CONDUIT AND CONDUCTOR SCHEDULE

ID	DESCRIPTION
(1)	3/C #2 XLP TYPE USE CABLES IN 2½" RGS CONDUIT
(2)	2/C #8, 4/C #12, 2/C #8 NEUTRAL, AND 2/C #8 GROUND XLP TYPE USE CABLES IN 2" SCH 40 HDPE CONDUIT
(3)	1/C #8, 1/C #8 NEUTRAL AND 1/C #8 GROUND XLP TYPE USE CABLES IN 1" SCH 40 HDPE CONDUIT
(4)	2" SCH 40 HDPE EMPTY CONDUIT WITH ½" WOVEN PULL TAPE FOR FUTURE USE
(5)	2/C #8, 2/C #12, 2/C #8 NEUTRAL, 2/C #8 GROUND XLP TYPE USE CABLES IN 2" SCH 40 HDPE CONDUIT
(6)	2/C #8, 2/C #12, 2/C #8 NEUTRAL, 2/C #8 GROUND XLP TYPE USE CABLES IN 2" SCH 40 HDPE CONDUIT
(7)	2/C #8, 2/C #12, 2/C #8 NEUTRAL, 2/C #8 GROUND XLP TYPE USE CABLES INSTALLED WITHIN PERGOLA
(8)	1/C #8, 2/C #12, 1/C #8 NEUTRAL, 1/C #8 GROUND XLP TYPE USE CABLES INSTALLED WITHIN PERGOLA
(9)	1/C #8, 1/C #8 NEUTRAL, 1/C #8 GROUND XLP TYPE USE CABLES INSTALLED WITHIN PERGOLA
(10)	2" SPARE SCH 40 HDPE CONDUIT, STUB OUT 5' AND CAP

FILE NAME = N:\ALGONQUIN\070273\070273.00095B\Mech\02-LGT_070273_95B.sht	USER NAME = pnajarro	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

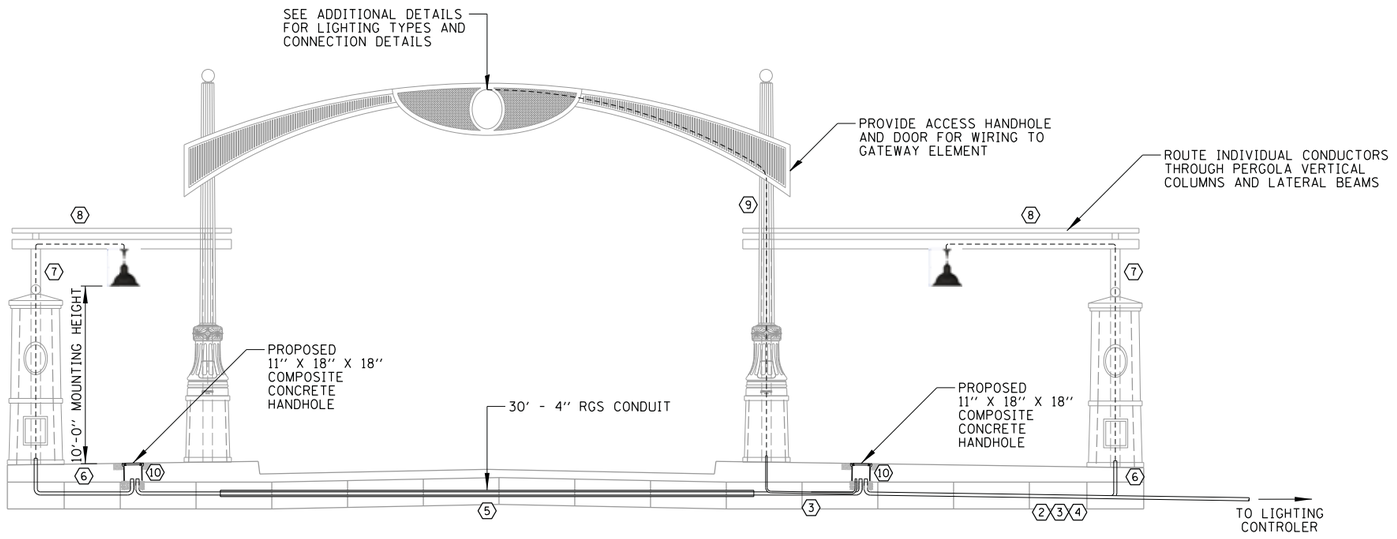
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DOWNTOWN STREETSCAPE STAGE 1A – PHASE 2
PROPOSED LIGHTING PLAN

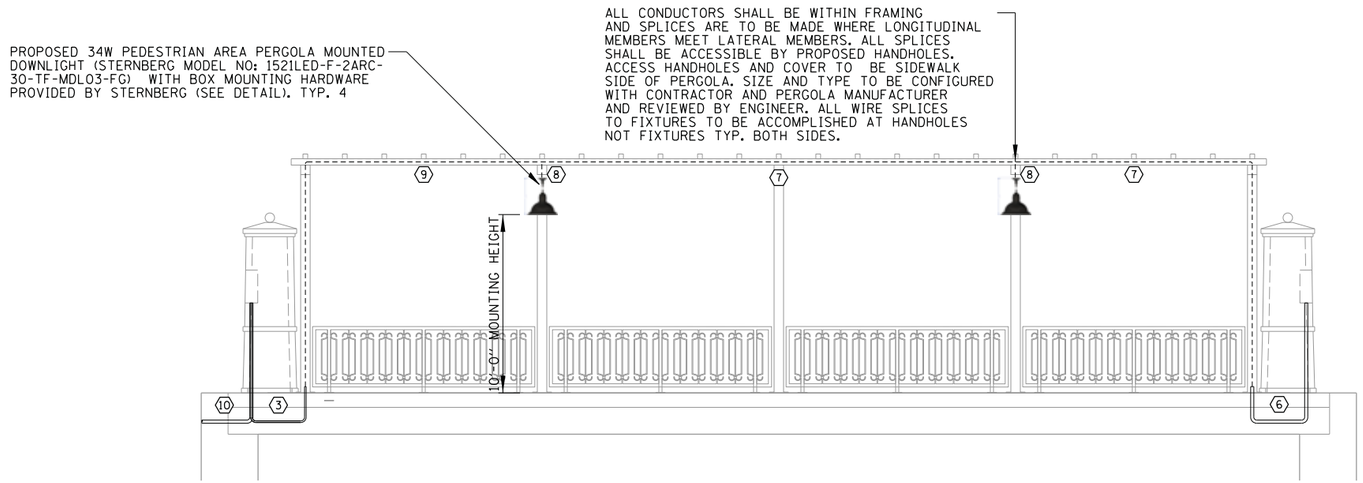
SCALE: 10' | SHEET 18 OF 58 SHEETS | STA.- | TO STA.-

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-00-PV	McHenry	58	18
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

CONDUIT AND CONDUCTOR SCHEDULE	
ID	DESCRIPTION
⑴	3/C #2 XLP TYPE USE CABLES IN 2½" RGS CONDUIT
⑵	2/C #8, 4/C #12, 2/C #8 NEUTRAL, AND 2/C #8 GROUND XLP TYPE USE CABLES IN 2" SCH 40 HDPE CONDUIT
⑶	1/C #8, 1/C #8 NEUTRAL AND 1/C #8 GROUND XLP TYPE USE CABLES IN 1" SCH 40 HDPE CONDUIT
⑷	2" SCH 40 HDPE EMPTY CONDUIT WITH ½" WOVEN PULL TAPE FOR FUTURE USE
⑸	2/C #8, 2/C #12, 2/C #8 NEUTRAL, 2/C #8 GROUND XLP TYPE USE CABLES IN 2" SCH 40 HDPE CONDUIT
⑹	2/C #8, 2/C #12, 2/C #8 NEUTRAL, 2/C #8 GROUND XLP TYPE USE CABLES IN 2" SCH 40 HDPE CONDUIT
⑺	2/C #8, 2/C #12, 2/C #8 NEUTRAL, 2/C #8 GROUND XLP TYPE USE CABLES INSTALLED WITHIN PERGOLA
⑻	1/C #8, 2/C #12, 1/C #8 NEUTRAL, 1/C #8 GROUND XLP TYPE USE CABLES INSTALLED WITHIN PERGOLA
⑼	1/C #8, 1/C #8 NEUTRAL, 1/C #8 GROUND XLP TYPE USE CABLES INSTALLED WITHIN PERGOLA
⑽	2" SPARE SCH 40 HDPE CONDUIT, STUB OUT 5' AND CAP

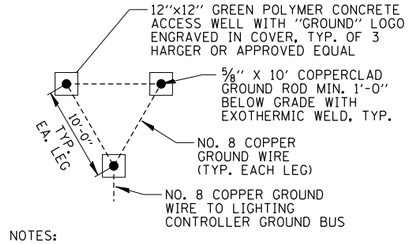


SECTION A–A



SECTION B–B

FILE NAME =	USER NAME = pnajarro	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DOWNTOWN STREETSCAPE STAGE 1A – PHASE 2 LIGHTING DETAILS (1 OF 4)			MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\ALGONQUIN\070273\070273.000958\Mech\03-LDT_070273_958.sht		DRAWN -	REVISED -					4560	16-00090-00-PV	McHenry	58	19
	PLOT SCALE = 4'	CHECKED -	REVISED -								CONTRACT NO. 61E49	
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -		SCALE: N.T.S.	SHEET 19 OF 58 SHEETS	STA.- TO STA.-			ILLINOIS	FED. AID PROJECT	

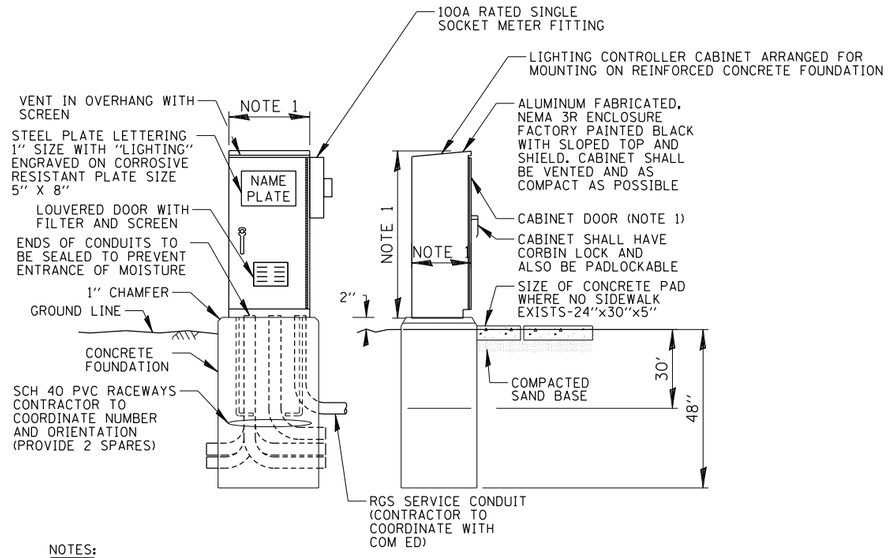


NOTES:

1. ACCESS WELLS SHALL BE INCLUDED IN THE LIGHTING CONTROLLER PAY ITEM.

GROUND FIELD DETAIL

N.T.S.

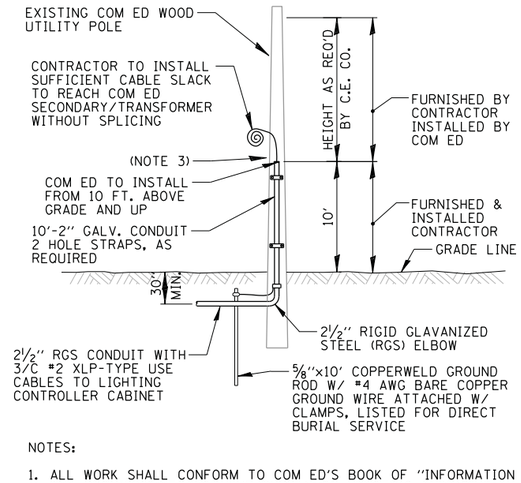


NOTES:

1. CABINET DIMENSIONS SHALL BE AS COMPACT AS POSSIBLE, CONTRACTOR TO COORDINATE

LIGHTING CONTROLLER CABINET AND FOUNDATION

N.T.S.



NOTES:

1. ALL WORK SHALL CONFORM TO COM ED'S BOOK OF ''INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE.''
2. FURNISHING AND INSTALLING ALL MATERIAL SHOWN ABOVE (EXCEPT FOR POLE) SHALL BE INCLUDED IN THE PRICE BID FOR ''ELECTRIC SERVICE INSTALLATION''. THE HORIZONTAL SERVICE CONDUIT AND WIRING FROM POLE TO CONTROLLER SHALL BE PAID FOR SEPARATELY.
3. CONTRACTOR TO PROVIDE A CONDUIT BUSHING AND SEALING COMPOUND AT TOP OF RISER.

COM ED OVERHEAD CONNECTION POLE

N.T.S.

FILE NAME = N:\ALGONQUIN\070273\070273.00095B\Mech\04-LDT_070273_95B.sht	USER NAME = pnajarro	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DOWNTOWN STREETSCAPE STAGE 1A – PHASE 2 LIGHTING DETAILS (2 OF 4)		MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -				4560	16-00090-00-PV	McHenry	58	20
	PLOT SCALE = 20'	CHECKED -	REVISED -						CONTRACT NO. 61E49		
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -		SCALE: N.T.S.	SHEET 20 OF 58 SHEETS	STA. -	TO STA. -	ILLINOIS	FED. AID PROJECT	

ITEM	SPECIFICATION	MFG./MODEL NO. OR APPROVED EQUAL
(1) MAIN CIRCUIT BREAKER (NOTE 2)	100 AMPERE, 2P, 240V RATING, 25KAIC, THERMAL MAGNETIC MOLDED CASE	SQUARE D NO. HDL26100
(2) CABINET HEATER	400W, 120V, WITH INTEGRAL ADJUSTABLE THERMOSTAT O F TO 100 F, ALUMINUM HOUSING, BALL BEARING FAN	HOFFMAN NO. DAH 4001B
(3) GROUND & NEUTRAL BUS	COPPER NEUTRAL BUS- MINIMUM 20 SPARE TERMINANATIONS (#1/0-#10), & COPPER GROUND BUS - MINIMUM 12 SPARE TERMINATIONS (#1/0-#10). BUSSES SHALL BE HORIZONTAL LOCATED 4" FROM BASE OF CABINET	ERICO NO. TCB
(4) PHOTOCELL	120V, MTD. ON CABINET, DELAY TYPE, SPST-NC	FISHER PIERCE NO. FPFA-105
(5) CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF DIE CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF FLAPPER TYPE COVER	RECEPTACLE: LEVITON NO. 8899, BOX: APPLETON NO. WSM150 COVER: APPLETON NO. WHG1
(6) CABINET LIGHT	5 WATT LED STRIP LIGHT, 60K HOUR RATING, 65K COLOR TEMPERATURE, DOOR SWITCH CONTROLLED, FASTENED TO TOP OF CABINET	PENTAIR NO. LEDA1S35
(7) NOT USED		
(8) LIGHTING PANELBOARD LP-A	120/240V-1Ø-100A MAIN LUG ONLY, 12 SPACE, 22KAIC, INTERIOR ONLY WITHOUT ENCLOSURE, BOLT ON BREAKERS (SEE PANELBOARD SCHEDULE)	N/A
(9) NOT USED		
(10) SERVICE CABLES	3-600V (XLP-TYPE USE) NO. 2 AWG	N/A
(11) LAMPHOLDER/RECEPTACLE WIRE	600V MTW NO. 12, MARKED WITH BRADY MARKERS	N/A
(12) CONTROL/PHOTOCELL WIRE	600V MTW NO. 12, MARKED WITH BRADY MARKERS	N/A
(13) SURGE ARRESTOR	40K AMPERE RATING PER PHASE	SQUARE D NO. SDSA 3650
(14) BACKBOARD	½" THICK, SOLID PHENOLIC LAMINATE	ARBORON
(15) DOOR SWITCH	20 AMPERE, 120 VOLT, MOUNTED IN DOOR, SNAP ACTION TYPE, PLUNGER SWITCH,	OMRON NO. A-20GO-K
(16) LIGHTING CONTROL RELAY/DIMMING PANEL	NEMA 1 8-SPACE DIMMING AND RELAY MODULE ENCLOSURE	LEVITON GREENMAX RO8TC-100
(17) PHOTOCELL TERMINAL BLOCK	3 TERMINAL, SCREW TYPE, #14-#10 WIRE SIZE RANGE, REMOTE PHOTOCELL	CINCH NO. 3-142
(18) TERMINAL BLOCKS	30 AMPERE, 240V, 30 CKTS, #12-#1/0 AWG, INSULATED, CKTS LABELED, BLOCKS INSTALLED HORIZONTAL LOCATED 10" FROM BASE OF CABINET	SQUARE D NO. GD6

NOTES:

1. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
2. THE MAIN CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT".
3. ALL SWITCHES AND CONTROLS SHALL BE IDENTIFIED USING TWO COLOR ENGRAVED NAMEPLATES.
4. THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.
5. ALL EXPOSED BUS BARS SHALL BE INSULATED.
6. ALL WIRING SHALL BE COPPER.
7. CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED".

LIGHTING CONTROLLER COMPONENT SCHEDULE

PANELBOARD SCHEDULE LP-A

FED FROM: TR-1
VOLTAGE: 120/240V, 1 PH, 3W
BUS SIZE: 125
MAINS: 100A - MLO
SPACES: 12
SHCRT CKT RATING: 22KAIC
BONDING JUMPER: YES
MOUNTING: IN LIGHTING CONTROLLER

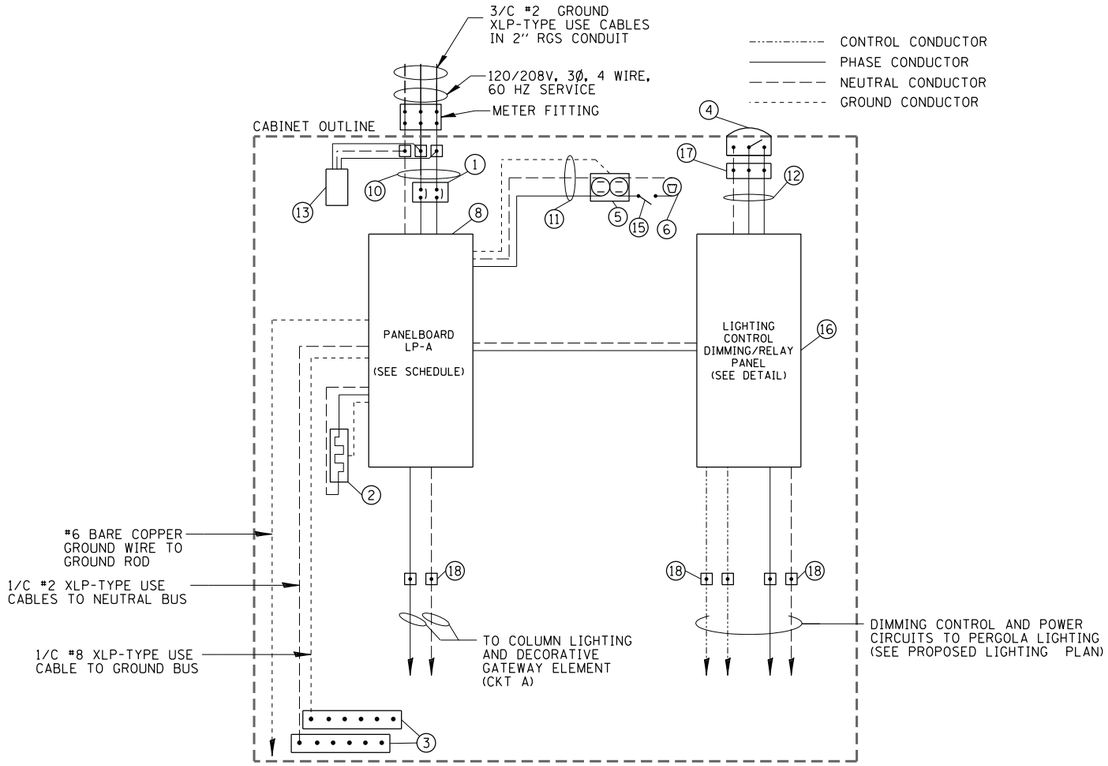
TOT. 'A' PHASE: 168 VA
TOT. 'B' PHASE: 68 VA
TOTAL 'A' + 'B': 236 VA
TOTAL AMPS: 1.0 A

CKT #	CB/ POLES	DESCRIPTION	A PH VA	B PH VA	A PH VA	B PH VA	DESCRIPTION	CB/ POLES	CKT #
A	20A/1P	COLUMN LIGHTING	100		68		WEST PERGOLA LIGHTING	20A/1P	B
C	20A/1P	EAST PERGOLA LIGHTING		68			SPARE	20A/1P	D
E	20A/1P	SPARE					SPARE	20A/1P	F
G									H
I									J
K									L
		SUBTOTALS:	100	68	68	0			

NOTES:

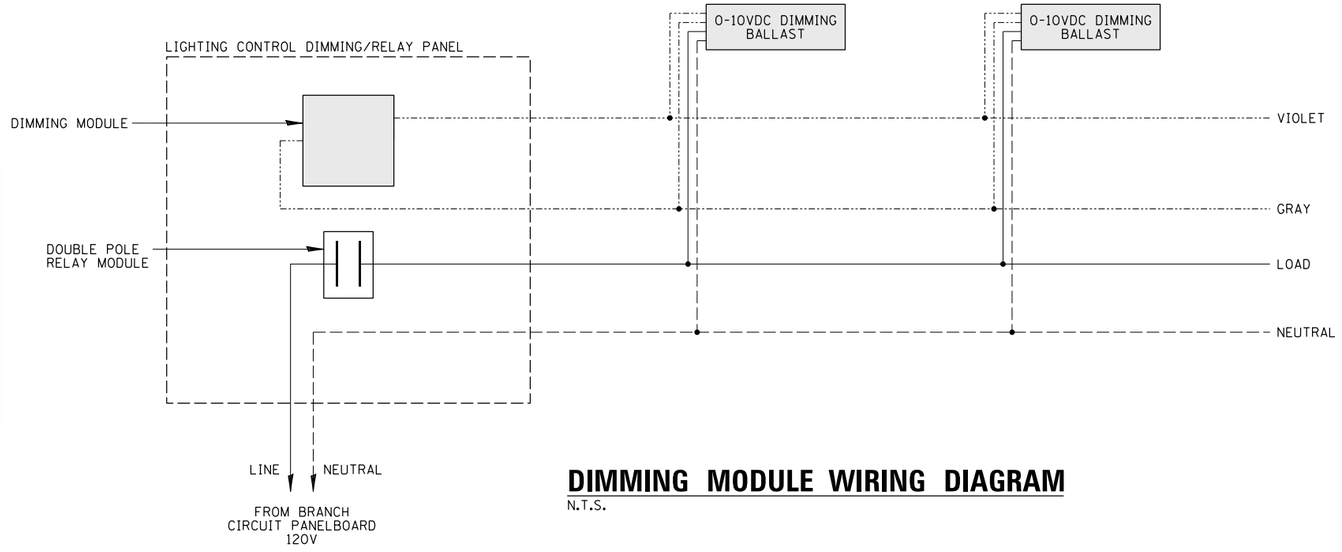
1. ALL CIRCUITS SHADED GRAY SHALL BE CONTROLLED THROUGH THEIR RESPECTIVE LIGHTING CONTROL RELAY/DIMMING PANEL

PANELBOARD LP-A SCHEDULE



LIGHTING CONTROLLER WIRING DIAGRAM

N.T.S.



DIMMING MODULE WIRING DIAGRAM

N.T.S.

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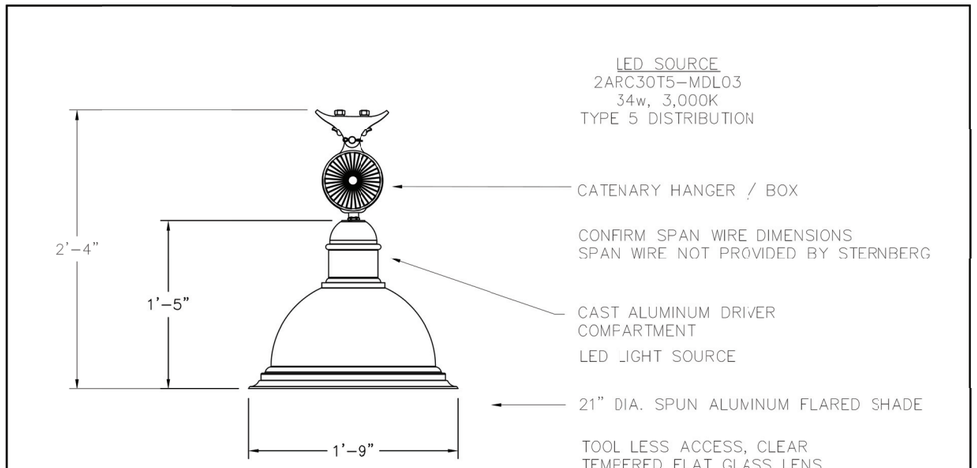
	PLOT SCALE = 20'	DRAWN -	REVISED -
Default	PLOT DATE = 1/10/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DOWNTOWN STREETSCAPE STAGE 1A – PHASE 2
LIGHTING DETAILS (3 OF 4)

SCALE: N.T.S. | SHEET 21 OF 58 SHEETS | STA. - | TO STA. -

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-00-PV	McHenry	58	21
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



REV	REVISIONS	DATE	RVSD
A	ORIGINAL	12/8/17	
B	CHANGED TO 1521 FIXTURE	1-8-18	SS

ALGONQUIN, IL
MAIN STREET
CAT-1521LED-F-6ARC30T5-MDL03-FG/BK

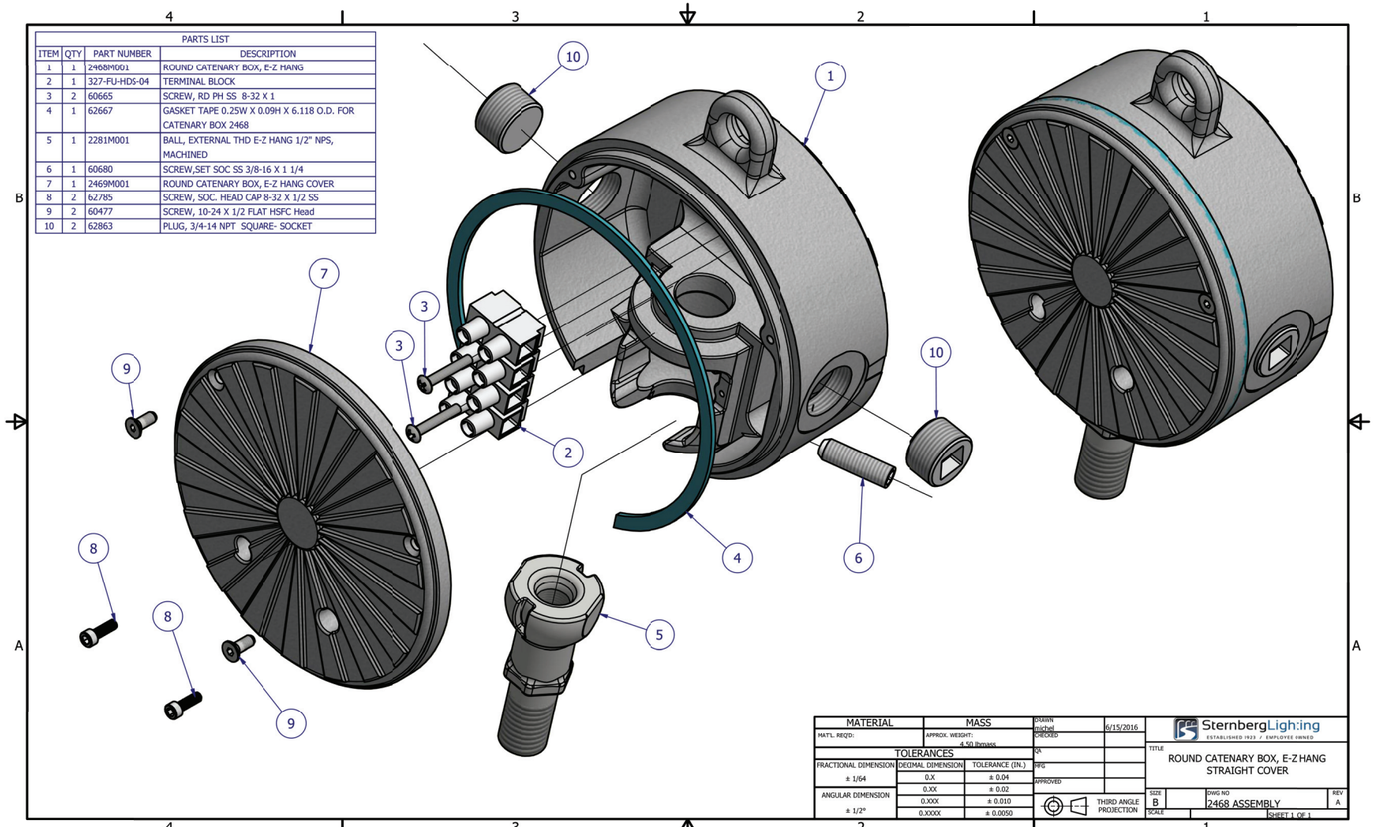
DRAWN JG
SCALE

SternbergLighting ESTABLISHED 1925 EMPLOYEE OWNED
POLE HEIGHTS HAVE A TOLERANCE OF + OR - 2"
DRAWING NUMBER SC29777

CANAPY LIGHTING UNIT

N.T.S.

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2468M001	ROUND CATENARY BOX, E-Z HANG
2	1	327-FU-HDS-04	TERMINAL BLOCK
3	2	60665	SCREW, RD PH SS 8-32 X 1
4	1	62667	GASKET TAPE 0.25W X 0.09H X 6.118 O.D. FOR CATENARY BOX 2468
5	1	2281M001	BALL, EXTERNAL THD E-Z HANG 1/2" NPS, MACHINED
6	1	60680	SCREW,SET SOC SS 3/8-16 X 1 1/4
7	1	2469M001	ROUND CATENARY BOX, E-Z HANG COVER
8	2	62785	SCREW, SOC. HEAD CAP 8-32 X 1/2 SS
9	2	60477	SCREW, 10-24 X 1/2 FLAT HSFC Head
10	2	62863	PLUG, 3/4-14 NPT SQUARE- SOCKET



MATERIAL	MASS	DRAWN	6/15/2016
MAT'L REQ'D:	APPROX. WEIGHT: 4.50 Pounds	CHECKED	
TOLERANCES		QA	
FRACTIONAL DIMENSION ± 1/64	DECIMAL DIMENSION: TOLERANCE (IN.) X: ± 0.04; .XX: ± 0.02; .XXX: ± 0.010; .XXXX: ± 0.0050	MFG	
ANGULAR DIMENSION ± 1/2°		APPROVED	
THIRD ANGLE PROJECTION			

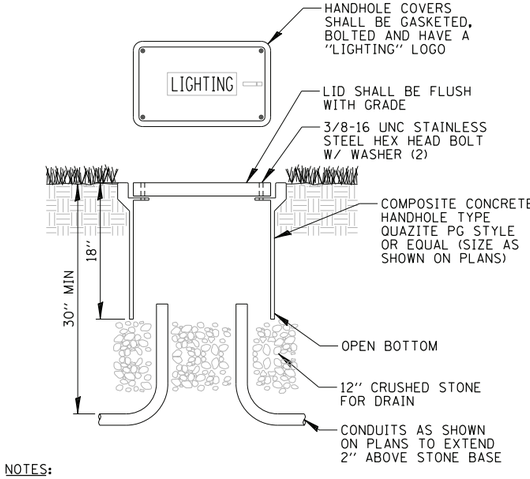
SternbergLighting ESTABLISHED 1925 / EMPLOYEE OWNED

TITLE: ROUND CATENARY BOX, E-Z HANG STRAIGHT COVER

SIZE B | DWG NO 2468 ASSEMBLY | REV A | SCALE | SHEET 1 OF 1

CANAPY LIGHTING CATENARY JUNCTION BOX

N.T.S.



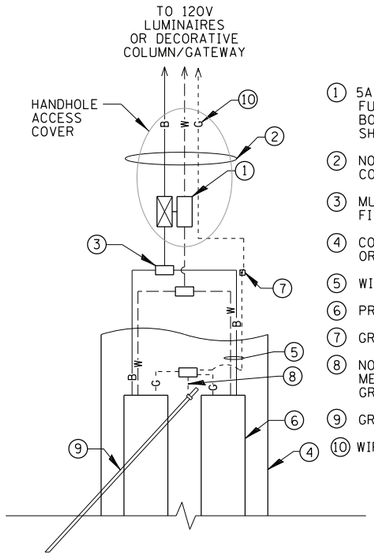
NOTES:

1. SPLICES SHALL BE WATERPROOF (SEE SPLICING ELECTRICAL CABLE DETAIL).
2. COMPOSITE CONCRETE HANDHOLE AND LID SHALL BE GREEN IN LANDSCAPE AREAS AND MATCH CONCRETE IN PAVED AREAS.
3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS, AND BE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND THE PROVISIONS OF PARAGRAPHS 5.2.3 AND 5.2.4 OF WESTERN UNDERGROUND COMMITTEE GUIDE 3.6.

COMPOSITE CONCRETE HANDHOLE

N.T.S.

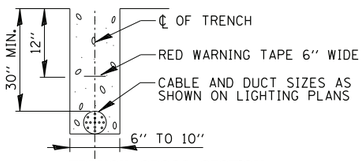
PHASE CONDUCTOR
GROUND CONDUCTOR
NEUTRAL CONDUCTOR



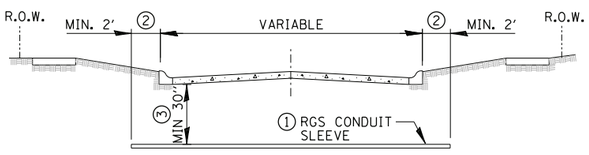
1. 5A FUSE IN 2-POLE BREAKAWAY FUSE HOLDER & INSULATING BOOTS FOR LUMINAIRES (NEUTRAL SHALL BE NON-FUSED)
2. NO. 10 XLP-TYPE USE POLE WIRES COLOR TO MATCH BRANCH WIRING
3. MULTIPLE COMPRESSION FITTINGS (SPLICE), TYP.
4. CONCRETE FOUNDATION OR PERGOLA FRAMING
5. WIRES AS SHOWN ON PLANS
6. PROPOSED PVC RACEWAY
7. GROUND LUG
8. NO. 6 GROUND WIRE MECHANICALLY CLAMPED TO GROUND ROD
9. GROUND ROD
10. WIRE COLOR R-RED B-BLACK W-WHITE G-GREEN

LIGHT POLE HANDHOLE WIRING DIAGRAM

N.T.S.



TRENCH CROSS SECTION

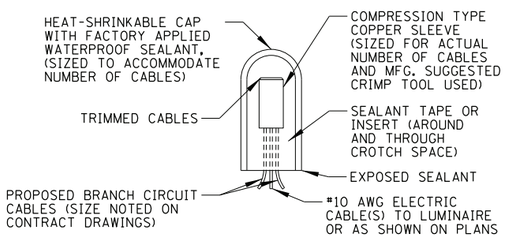


ROADWAY CROSSING

1. SLEEVE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) CONDUIT.
2. SLEEVE SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.
3. SLEEVE SHALL BE A MINIMUM OF 30" BELOW ROADWAY OR CURB BOTTOM.

ELECTRIC CONDUIT INSTALLATION

N.T.S.



SPLICING ELECTRIC CABLE

N.T.S.

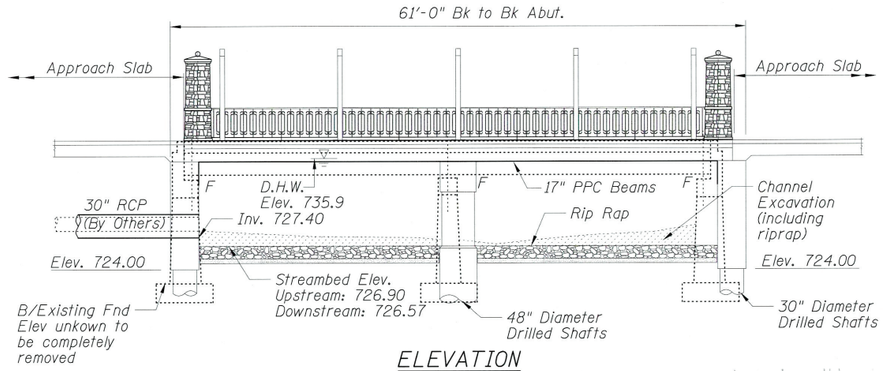
FILE NAME =	USER NAME = mwarman	DESIGNED -	REVISED -
N:\ALGONQUIN\070273\070273.00095B\Mech\06-LDT_070273.95B.sht		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
Default	PLOT DATE = 1/12/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

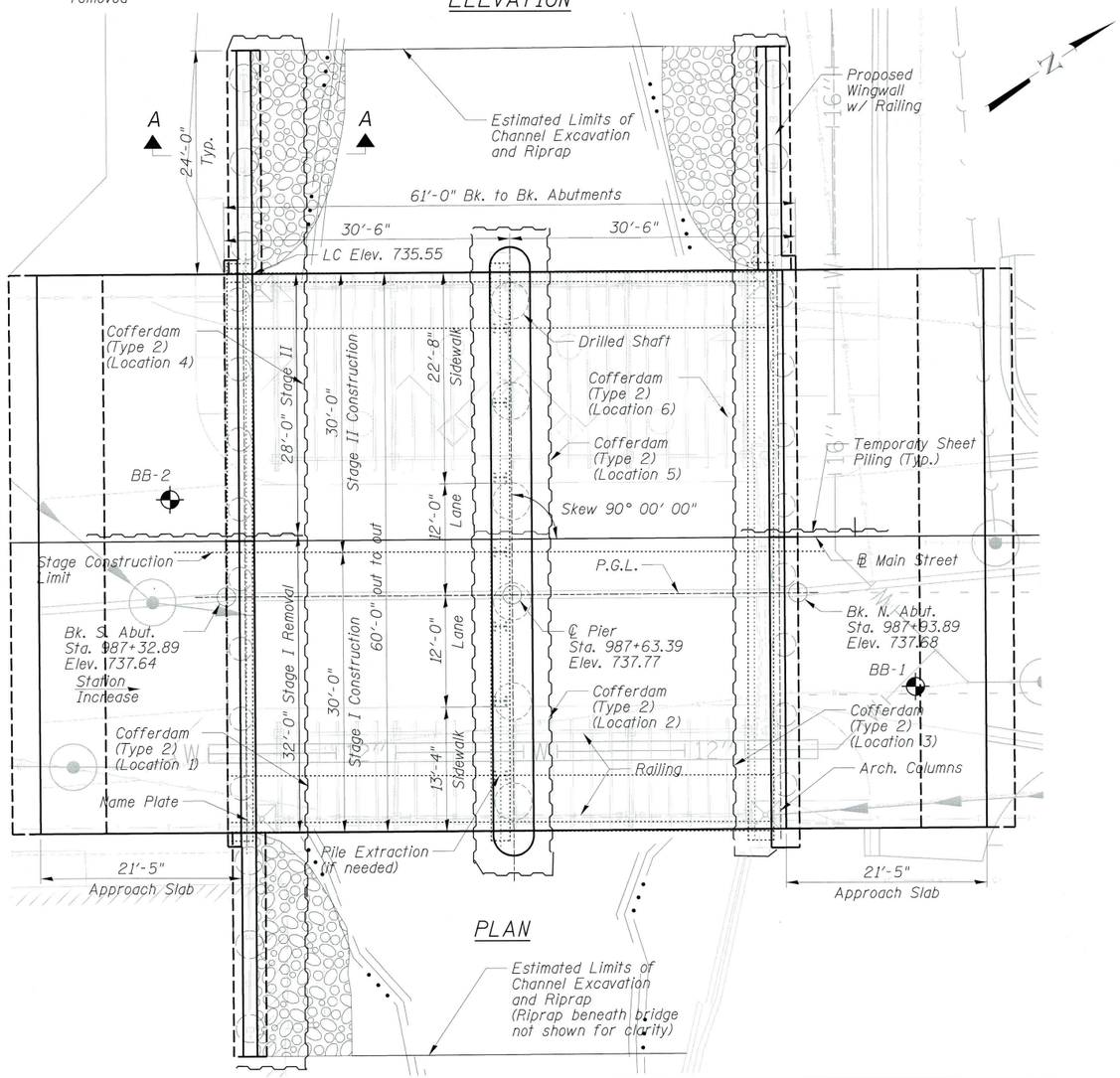
DOWNTOWN STREETSCAPE STAGE 1A – PHASE 2
LIGHTING DETAILS (4 OF 4)

SCALE: N.T.S. | SHEET 22 OF 58 SHEETS | STA. - | TO STA. -

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-00-PV	McHenry	58	22
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



ELEVATION



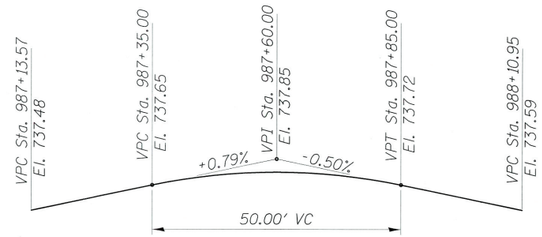
PLAN

Estimated Limits of
Channel Excavation
and Riprap
(Riprap beneath bridge
not shown for clarity)

Benchmark: OSBM 16-1 Square Cut on Northeast Corner of Stone Cap of Shell Gas Sign at Northwest Corner of Algonquin Road & Main Street. Elevation 742.47

Existing Structure: SN. 056-0015 was constructed in 1898 as S.B.I. Route 22, Section 18. The bridge is a 2-span structure with a length 58'-4" back to back of abutments and has no skew. The superstructure consists of 8 W21x62 wide flange steel beams and has a total deck width of 60'-0". The deck provides two lanes of traffic with a 5'-0" wide sidewalk with a 1'-0" parapet and is supported by two stacked stone abutments capped with cast in place concrete on spread footings and a pier with steel piles encased in concrete. Structure will be removed and replaced using stage construction.
Salvage: none

INDEX OF SHEETS



PROFILE GRADE

Crystal Lake Overflow
Built ____ by
Village of Algonquin
SEC 16-00090-00-PV
Sta. 987+63.39
STR NO. 056-6014
Loading HL-93

NAME PLATE

See Std. 515001

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'_{ci} = 5,000 psi
f_{pu} = 270,000 psi ($\frac{1}{2}$"ϕ low relax. strands)
f_{pbt} = 201,960 psi ($\frac{1}{2}$"ϕ low relax. strands)

SEISMIC DATA

Seismic Performance Zone (SPZ) = A
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.081g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.142g
Soil Site Class = D

LOADING HL-93

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

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications,
7th Edition with 2016 Interims

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)				Item 113
	N. Abut.	Pier	S. Abut.	
Q100	714.60	715.80	714.60	5
Q200	718.60	719.20	718.60	
Design	714.60	715.80	714.60	
Check	718.60	719.20	718.60	

WATERWAY INFORMATION

Drainage Area = 26.5 Sq. Miles Low Grade Elev. 737.12 @ Sta. 986+30.48

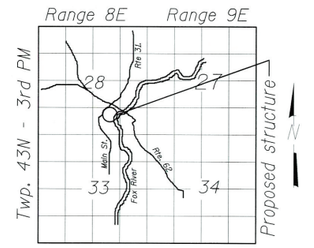
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1469	274	405	734.5	0.8	0.4	735.4	735.0
Design	30	2214	274	450	735.9	0.7	0.1	736.6	736.0
Base	100	3518	274	450	737.4	1.9	0.6	738.3	738.0
Overtopping	50	2647	274	450	736.5	1.0	0.3	737.5	736.8
Max. Calc.	500	5209	274	450	739.4	0.0	0.0	739.4	739.4

I Certify That To The Best Of My Knowledge, Information And Belief, This Bridge Design Is Structurally Adequate For The Design Loading Shown On The Plans. The Design Is An Economical One For The Style Of Structure And Complies With Requirements Of The Current "AASHTO Standard Specification For Highway And Bridges".

STATE OF ILLINOIS
MAJID MOBASSERI
081-005058
CHAMPAIGN, ILLINOIS
LICENSED STRUCTURAL ENGINEER

01/10/2018

MAJID MOBASSERI
ILLINOIS REGISTRATION No. 081-005058 STRUCTURAL ENGINEER
EXPIRATION DATE: 11/30/2018



LOCATION SKETCH

GENERAL PLAN
MAIN STREET OVER
CRYSTAL LAKE OVERFLOW
SECTION 16-00090-00-PV
MCHENRY COUNTY
STA. 987+63.39
STRUCTURE No. 056-6014

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Default	PLOT SCALE = 8'	DRAWN - CPF	REVISED -	
	PLOT DATE = 1/10/2018	CHECKED - MM	REVISED -	
		DATE -	REVISED -	

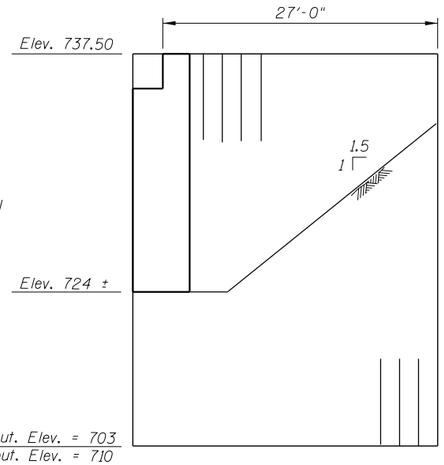
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
MAIN STREET OVER CRYSTAL LAKE OVERFLOW
STRCURE NO. 056-6014
SCALE: $SCALE$ | SHEET S-1 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	23
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Concrete Sealer shall be applied to the designated areas of the abutments and pier caps.
3. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
4. Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.
5. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
6. Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.
7. Utility company shall provide design plans of utility attachement to bridge. Plans shall be prepared by a Licensed Structural Engineer, stamped, and submitted for review.
8. If the contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
8. If a portion of the drilled shaft web walls or concrete encasement is under water, reinforcement may be placed 3 underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line a the time of construction.

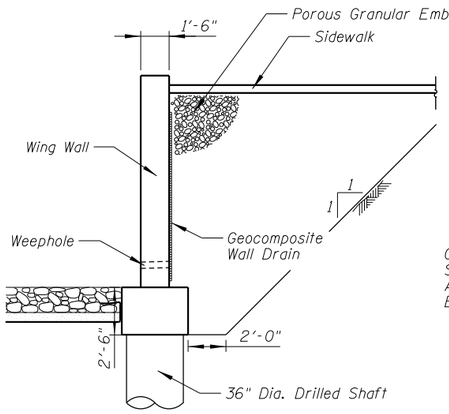


Min. Section Modulus — N. Abut. S=49.8 in^3/ ft. / S. Abut. S=21.3 in^3/ ft.

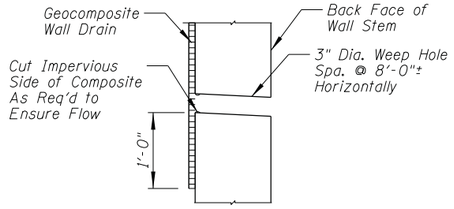
TEMPORARY SHEET PILING

TOTAL BILL OF MATERIAL

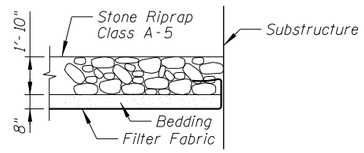
ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.	-	570	570
Porous Granular Embankment	Cu. Yd.	-	415	415
Stone Riprap, Class A5	Sq. Yd.	-	667	667
Filter Fabric	Sq. Yd.	-	667	667
Removal of Existing Structure	Each	-	1	1
Structure Excavation	Cu. Yd.	-	335	335
Cofferdam Excavation	Cu. Yd.	-	205	205
Cofferdam (Type 2) - Location 1	Each	-	1	1
Cofferdam (Type 2) - Location 2	Each	-	1	1
Cofferdam (Type 2) - Location 3	Each	-	1	1
Cofferdam (Type 2) - Location 4	Each	-	1	1
Cofferdam (Type 2) - Location 5	Each	-	1	1
Cofferdam (Type 2) - Location 6	Each	-	1	1
Concrete Structures	Cu. Yd.	-	302.1	302.1
Concrete Superstructure	Cu. Yd.	40.6	-	40.6
Concrete Superstructure (Approach Slab)	Cu. Yd.	73.9	-	73.9
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	3490	-	3490
Reinforcement Bars	Pound	-	8170	8170
Reinforcement Bars, Epoxy Coated	Pound	60430	72250	132680
Bridge Deck Grooving	Sq. Yd.	380	-	380
Bar Splicers	Each	226	204	430
Decorative Steel Railing	Foot	166	-	166
Name Plates	Each	1	-	1
Drilled Shaft in Soil	Cu. Yd.	-	217.6	217.6
Temporary Sheet Piling	Sq. Ft.	-	1675	1675
Geocomposite Wall Drain	Sq. Yd.	-	240	240
Concrete Wearing Surface 5"	Sq. Yd.	388	-	388
Pile Extraction	Each	-	6	6
Masonry Column, Large	Each	4	-	4
Architectual Pedestal	Each	2	-	2
Pergola	L. Sum	1	-	1
Decorative Illuminated Arch	Each	1	-	1



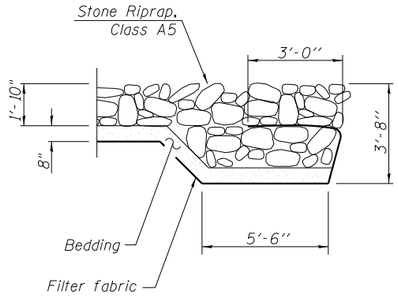
SECTION THRU WINGWALL



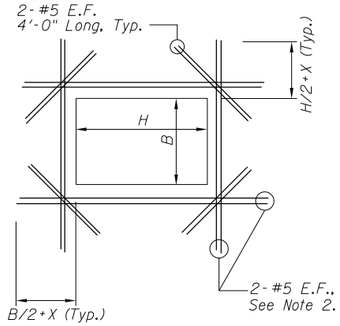
WEEP HOLE DRAIN DETAIL



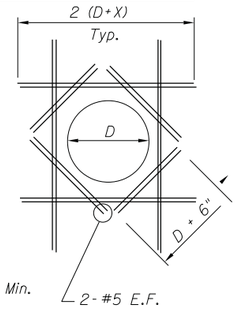
RIPRAP DETAIL



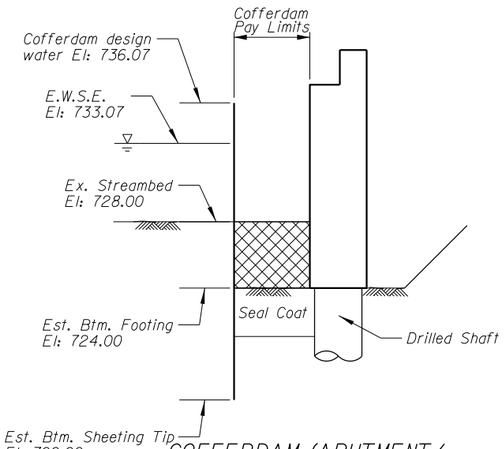
SECTION A-A



RECTANGULAR OPENING

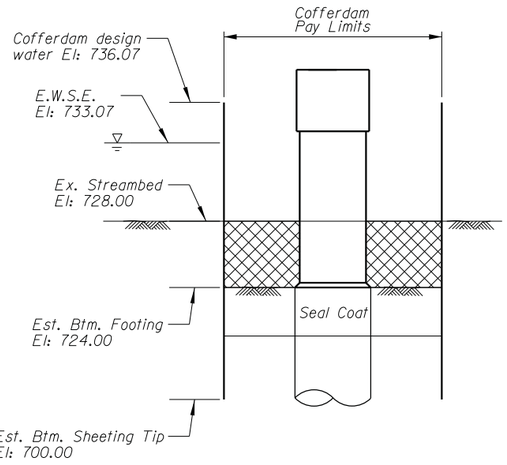


CIRCULAR OPENING

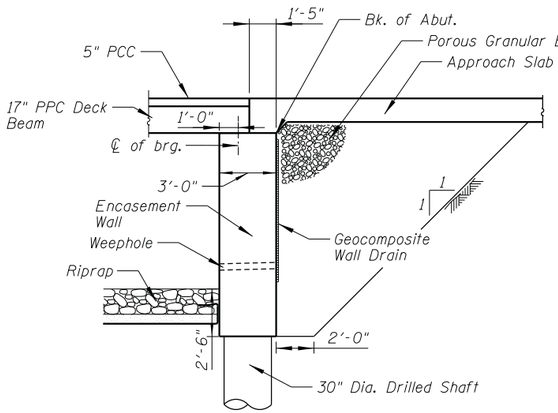


COFFERDAM (ABUTMENT/ WINGWALL)

Pay Limits of Cofferdam Excavation



COFFERDAM (PIER)



SECTION THRU ABUTMENT

ADDITIONAL REINFORCEMENT DETAILS AROUND OPENINGS IN WALLS & SLABS

NOTES:

1. These opening details apply when B, H or D exceed 12" or the thickness of wall or slab, whichever is less.
2. The area of additional reinforcing required in each face on each side of an opening shall equal or exceed one-half of the area of the intercepted bars in each face, in each direction, respectively. (unless otherwise shown.)
3. The added bars shall be placed in the same layers as the wall or slab reinforcing (i.e. all the bars in each face shall be within two layers except the diagonal bars.)
4. for "X" dimension see table "A" this sheet.

TABLE "A"

BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
X-INCHES	14	19	24	29	42	47	54	60	67
Y-INCHES	6	8	10	12	14	16	19	22	24

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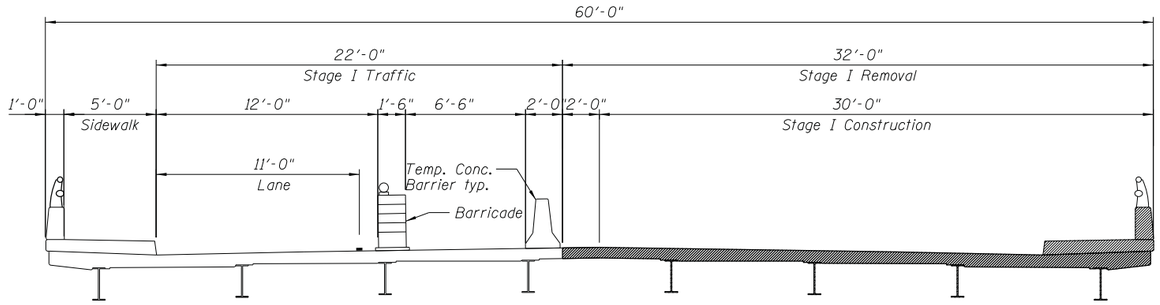
Default	PLOT DATE = 1/10/2018	CHECKED - MM	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

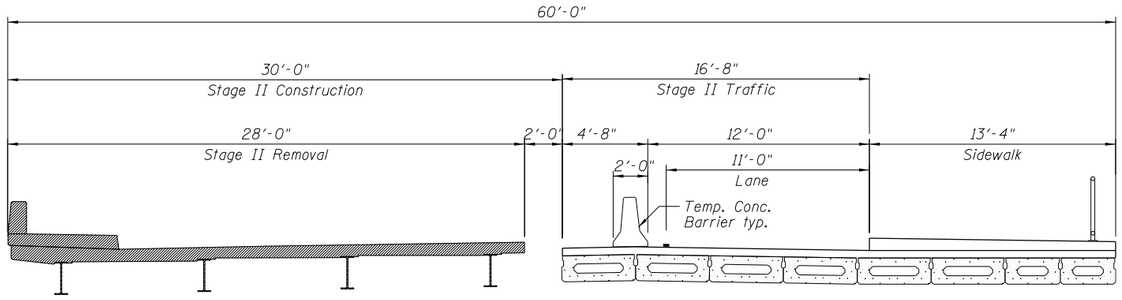
GENERAL NOTES AND DETAILS

SCALE: $SCALE$ | SHEET S-2 OF S-20 SHEETS | STA. | TO STA.

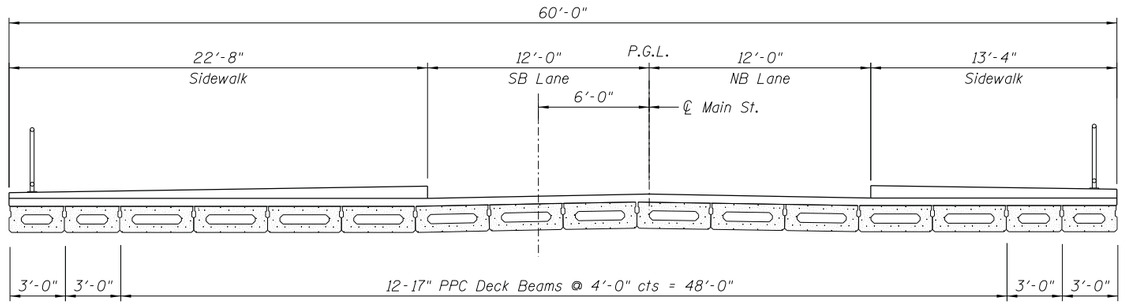
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	24
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



Stage I
(Looking North)



Stage II
(Looking North)



Final
(Looking North)

STAGED CONSTRUCTION

See Sheet S-11 through S-13 for Stage Construction of Abutments and Pier

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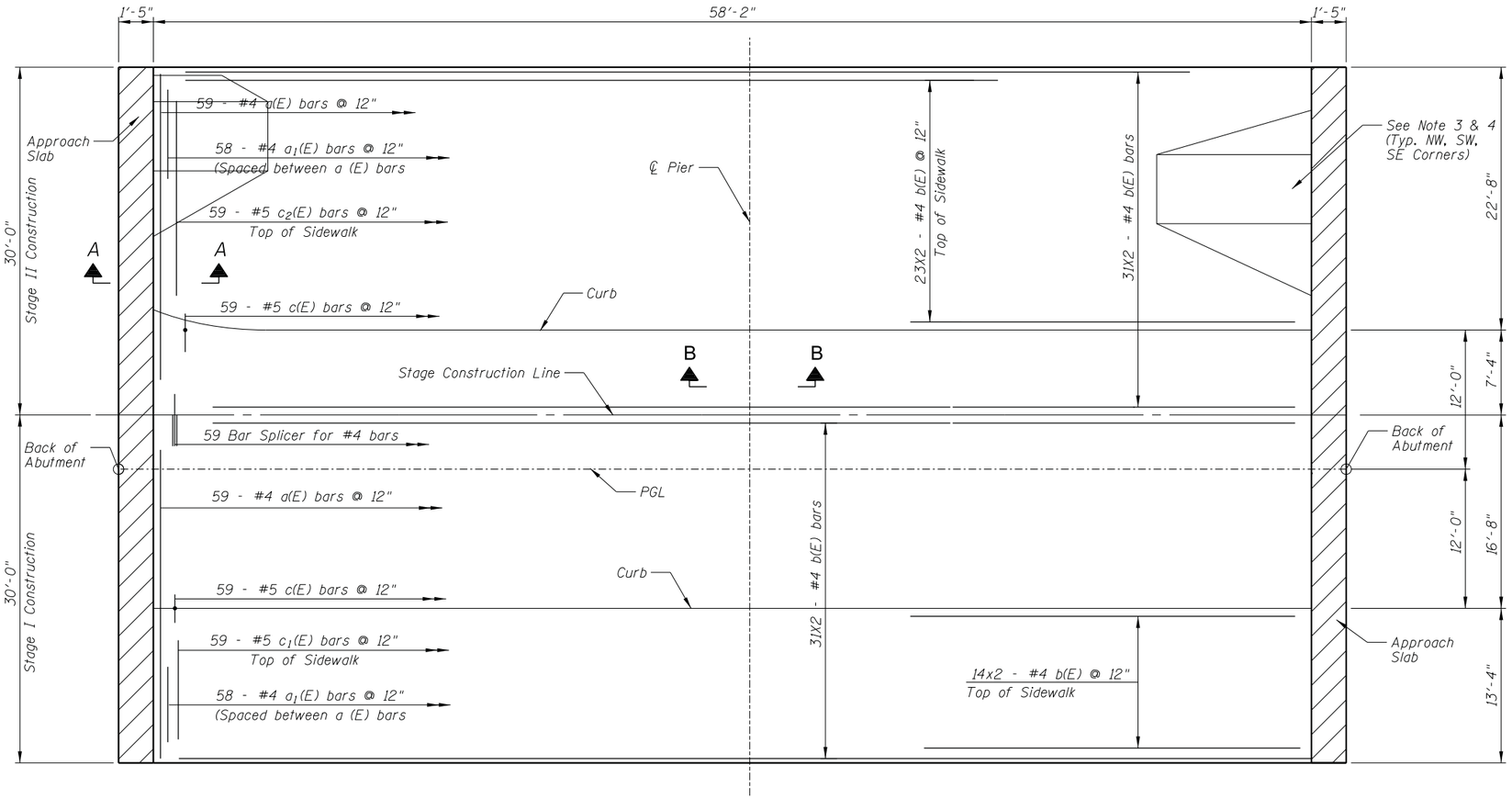
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

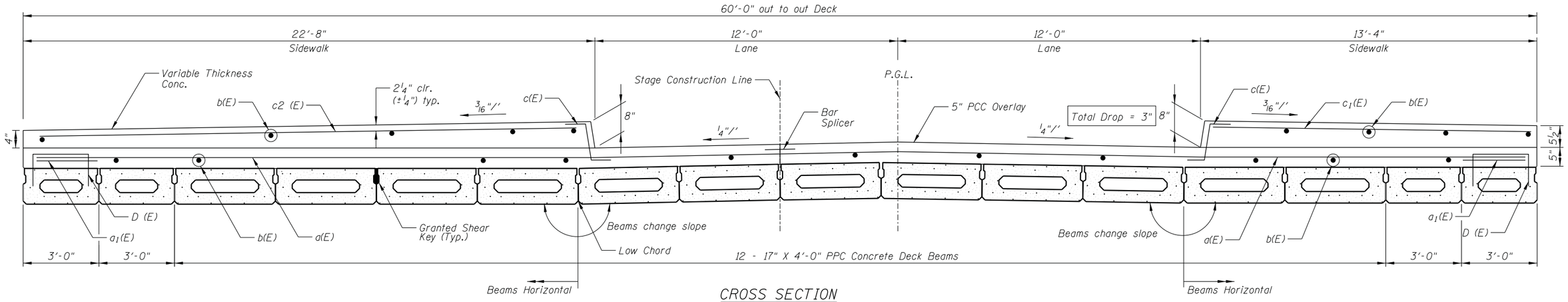
CONSTRUCTION STAGING

SCALE: $SCALE$ | SHEET S-3 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	25
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



PLAN



CROSS SECTION
(Looking North)

Notes:

1. See sheet S5 of S8 for Superstructure Details and Bill of Material.
2. Bars indicated thus 20 x 2-#4 etc. indicates 20 lines of bars with 2 lengths per line.
3. Reinforcement for ADA sidewalks shall be field cut to fit ramps.
4. For Top of Handicap Ramp Elevations, See Civil Plans.

MINIMUM BAR LAP

#4 bar = 2'-5"
#5 bar = 3'-0"

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE

SCALE: $SCALE$ | SHEET S-4 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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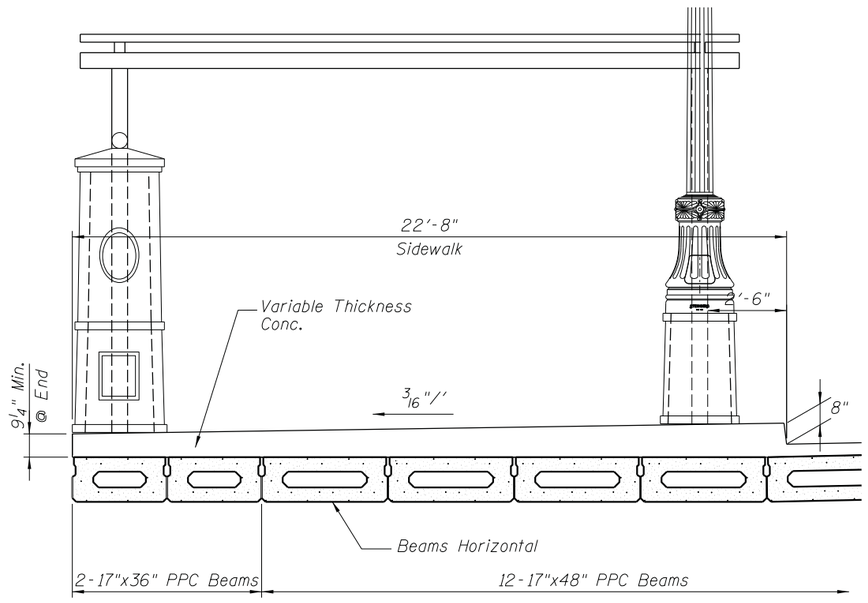
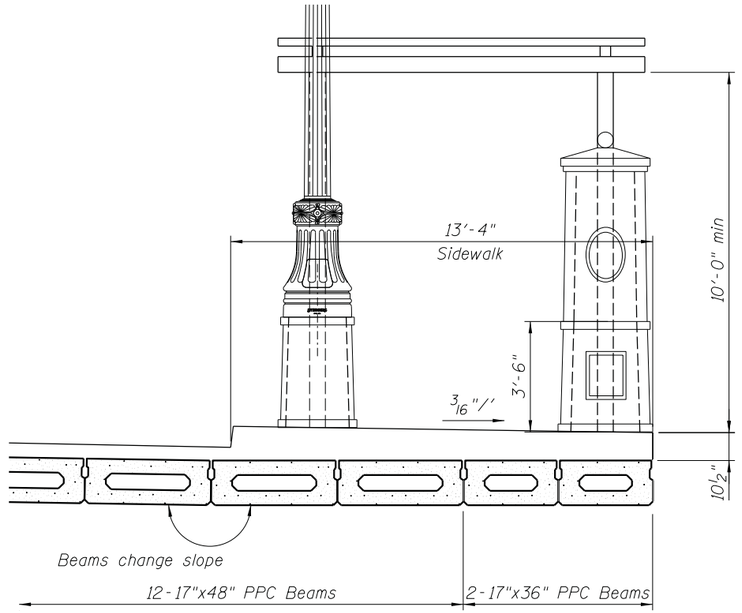
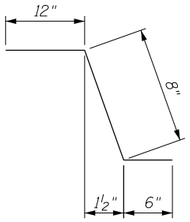
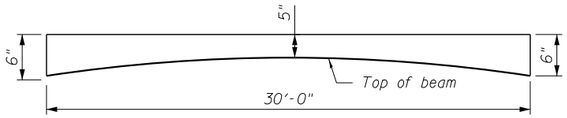
		CONTRACT NO. 61E49		
		ILLINOIS	FED. AID PROJECT	





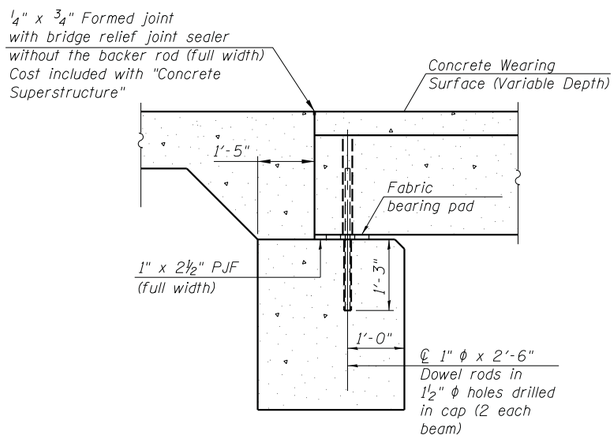


c(E) Bar



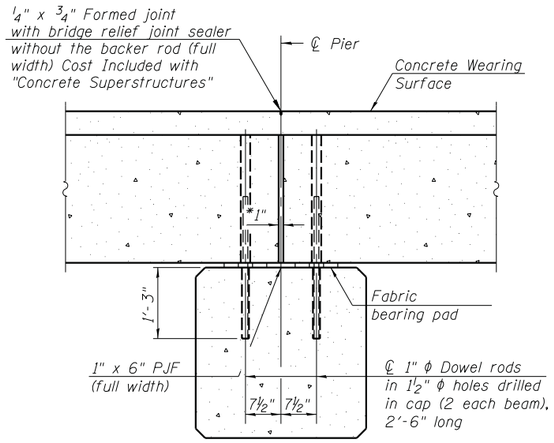
ANTICIPATED CONCRETE WEARING SURFACE PROFILE

(For information only)



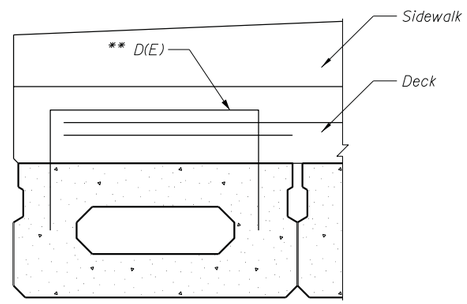
SECTION A - A

Notes:
1. All concrete wearing surfaces shall be placed prior to casting A backwall and/or approach slab.
2. See sheet S8 & S10 for fabric bearing pad details.



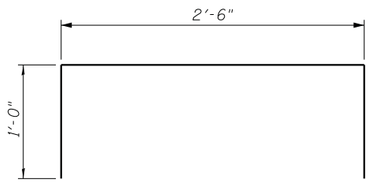
SECTION B - B

Notes:
* 1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accomodate tolerance in beam lengths. Cost included with Precast Prestressed Concrete Deck Beams (17" Depth)



SECTION THRU EDGE OF DECK

** Place #4 D(E) bars at 9" cts. in fascia beam. D(E) bar included in cost of beam.



BAR D(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	118	#4	29'-8"	———
a1(E)	116	#4	6'-0"	———
b(E)	198	#4	30'-2"	———
c(E)	118	#5	2'-2"	⌐¬
c1(E)	59	#5	13'-0"	———
c2(E)	59	#5	22'-4"	———
Reinforcement Bars, Epoxy Coated			Pound	9230
Concrete Superstructure			Cu. Yd.	40.6
Concrete Wearing Surface, 5"			Sq. Yd.	388
Bar Splicers			Ea.	59

Bars indicated thus 1 x 2 - #4 etc. indicates 1 line of bars with 2 lengths per line.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

SCALE: $SCALE$ | SHEET S-5 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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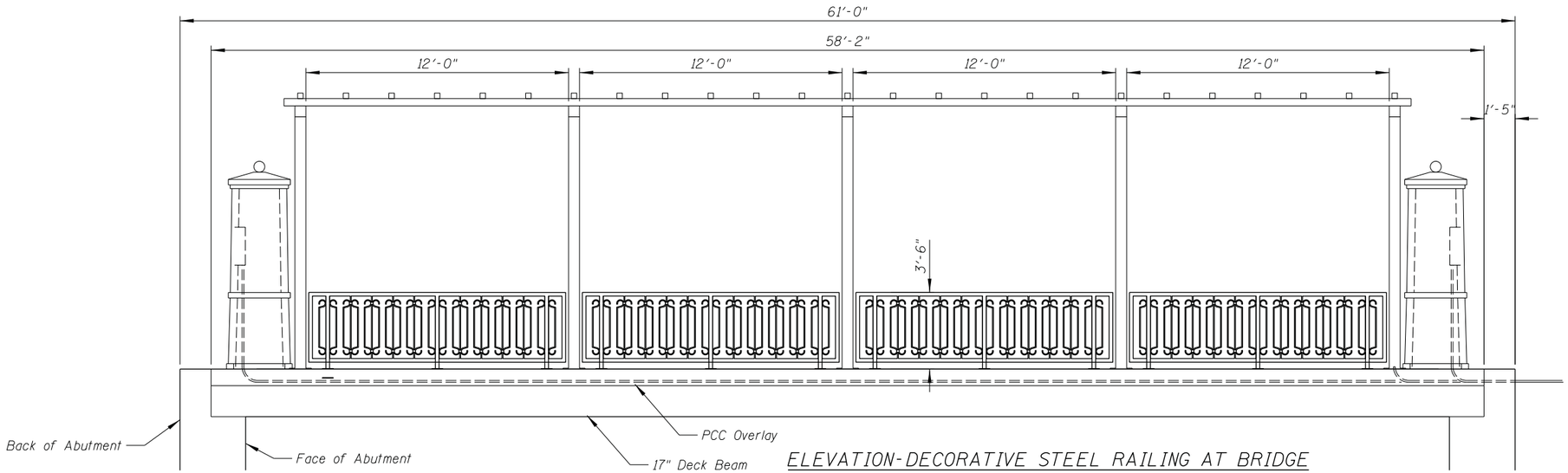
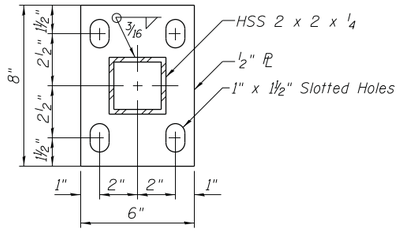
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



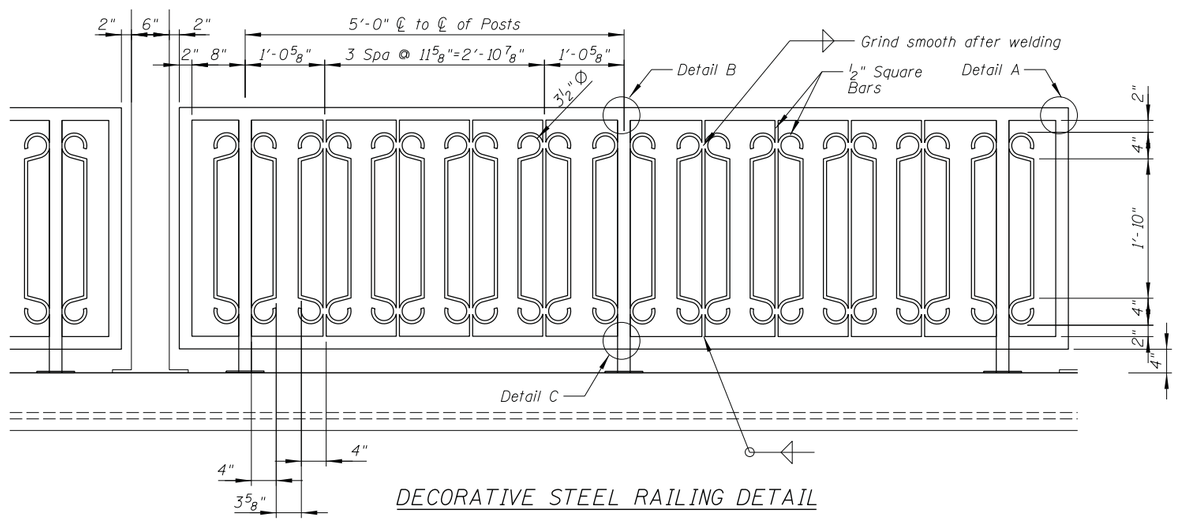
ELEVATION-DECORATIVE STEEL RAILING AT BRIDGE

Notes:

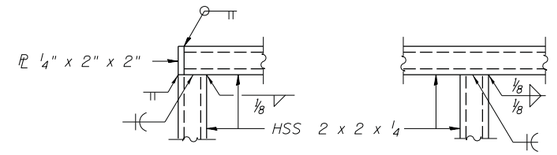
1. All post, railing, anchor devices, and bent plates shall be powder coated.
2. All Post and Pickets shall be Vertically Plumb.



BASE PL

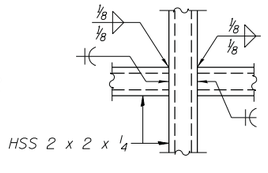


DECORATIVE STEEL RAILING DETAIL

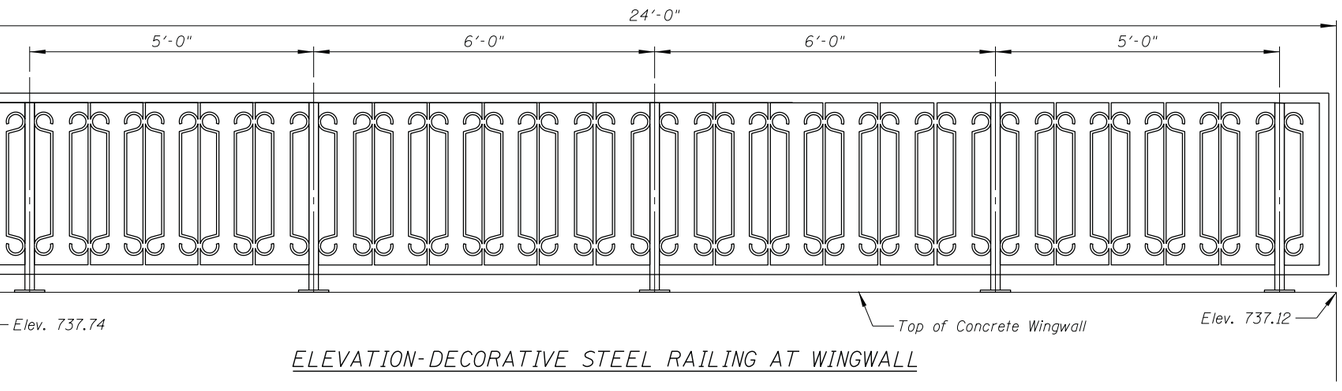


DETAIL A

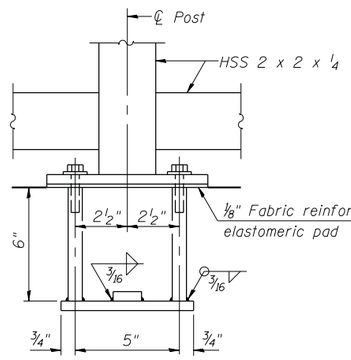
DETAIL B

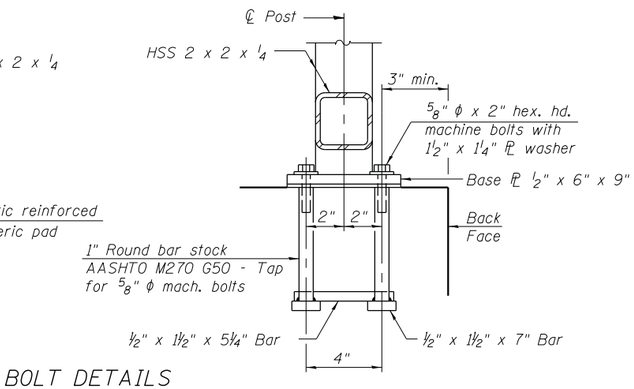


DETAIL C



ELEVATION-DECORATIVE STEEL RAILING AT WINGWALL





ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Φ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

BILL OF MATERIAL

Item	Unit	Quantity
Pedestrian Railing, Special	Foot	264

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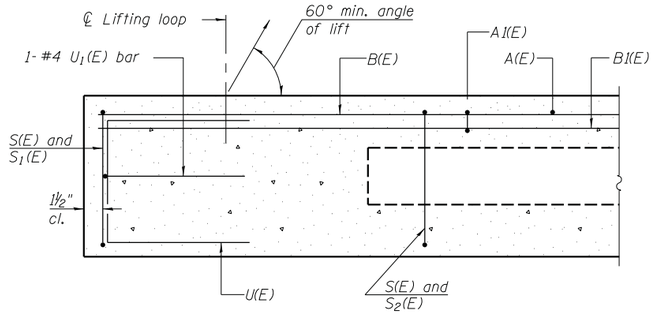
	PLOT SCALE = 1'	DRAWN - CPF	REVISED -
Default	PLOT DATE = 1/10/2018	CHECKED - MM	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

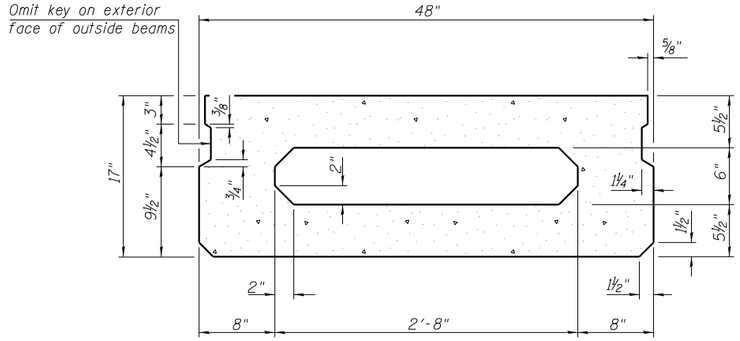
RAILING DETAILS

SCALE: $SCALE$ | SHEET S-6 OF S-20 SHEETS | STA. | TO STA.

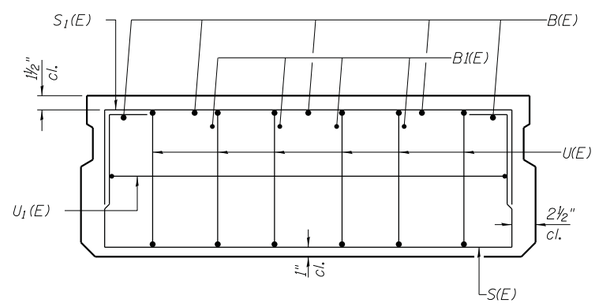
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	28
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



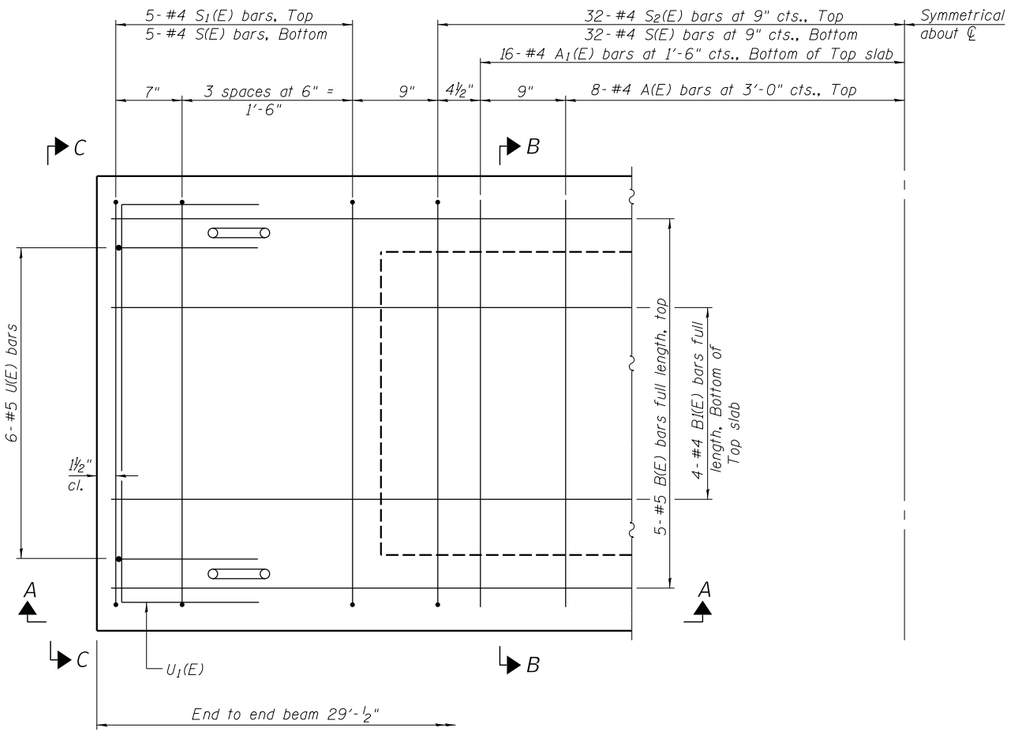
SECTION A-A



SECTION B-B
(Showing dimensions)

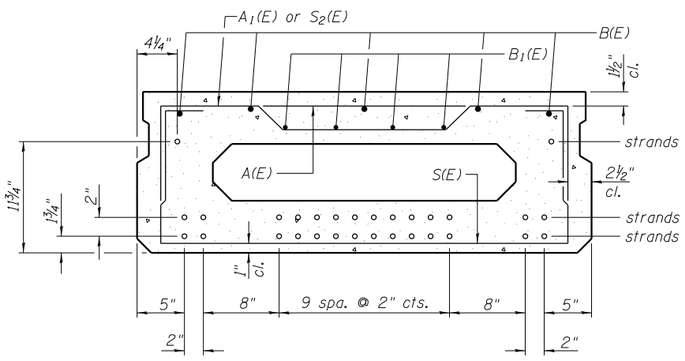


VIEW C-C



PLAN VIEW

Note: Spacing of S(E) and S_2(E) bars may be adjusted up to 4" 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)

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

6 Strands @ $1\frac{3}{4}$"
8 Strands @ $3\frac{3}{4}$"
2 Strands @ $11\frac{3}{4}$"

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	8	#4	3'-7"	—
A_1(E)	16	#4	3'-10"	⌒
B(E)	5	#5	28'-8"	—
B_1(E)	4	#4	28'-8"	—
S(E)	42	#4	6'-9"	⊔
S_1(E)	10	#4	5'-3"	⊓
S_2(E)	32	#4	5'-6"	⊓
U(E)	12	#5	3'-8"	⊏
U_1(E)	2	#4	6'-0"	⊓

Note:
See sheet S8 of S18 for additional details and Bill of Material.

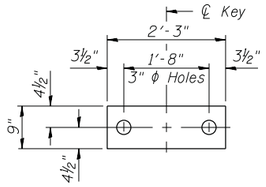
FILE NAME = N:\ALGONQUIN\070273\070273.000958\CADD\Sheets\07-17X48-BEAM_070273.000958-01.dgn	USER NAME = pnajarro	DESIGNED - CPF	REVISED -
	PLOT SCALE = 1'	DRAWN - CPF	REVISED -
Default	PLOT DATE = 1/10/2018	CHECKED - MM	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

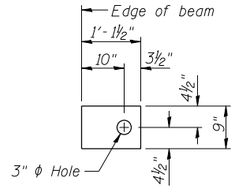
17" x 48" PPC DECK BEAM

SCALE: $SCALE$ | SHEET S-7 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	29
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



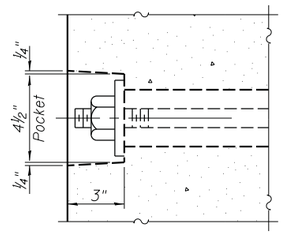
FABRIC BEARING PAD
(Interior)



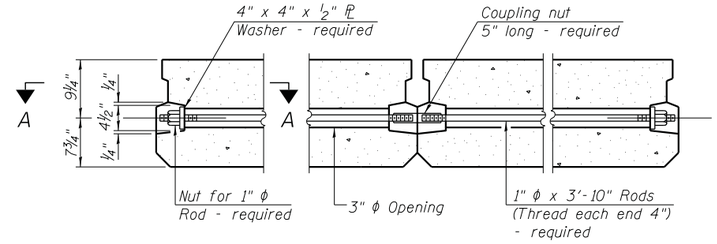
FABRIC BEARING PAD
(Exterior)

FIXED

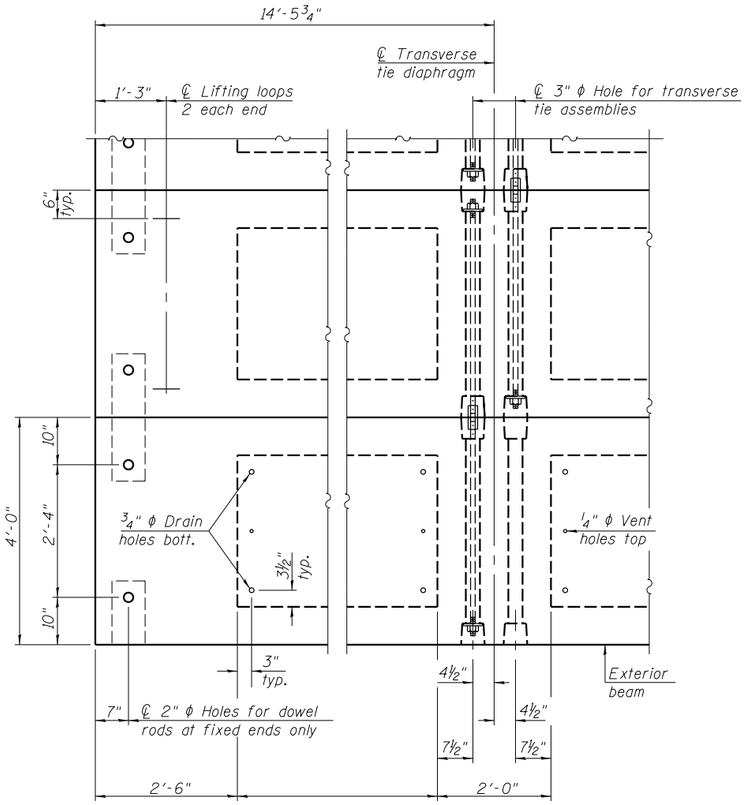
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A

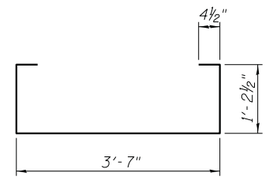


TYPICAL TRANSVERSE TIE ASSEMBLY

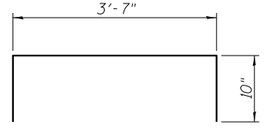


PLAN VIEW

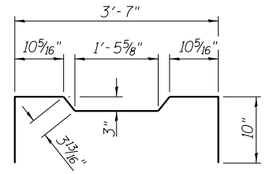
Note: Connect beams in pairs with the transverse tie configuration shown.



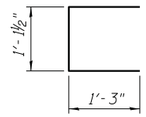
BAR S(E)



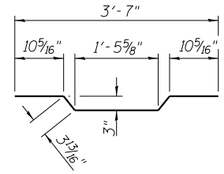
BAR S1(E)



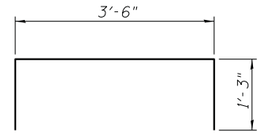
BAR S2(E)



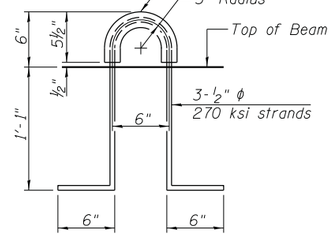
BAR U(E)



BAR A1(E)



BAR U1(E)



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand. Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1" ϕ 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 is in place.

Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	2792

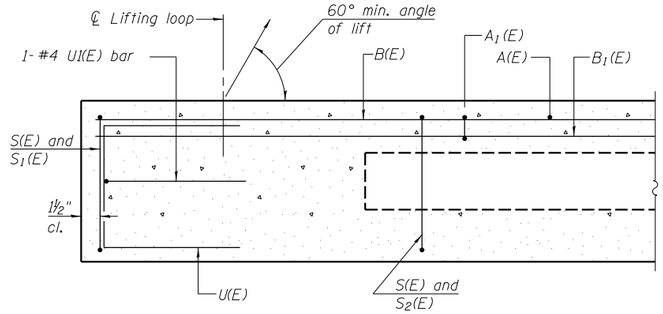
FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\08-17X48-BEAM_070273_00095B-02.dgn	USER NAME = pnajarro	DESIGNED - CPF	REVISED -
		DRAWN - CPF	REVISED -
	PLOT SCALE = 1'	CHECKED - MM	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

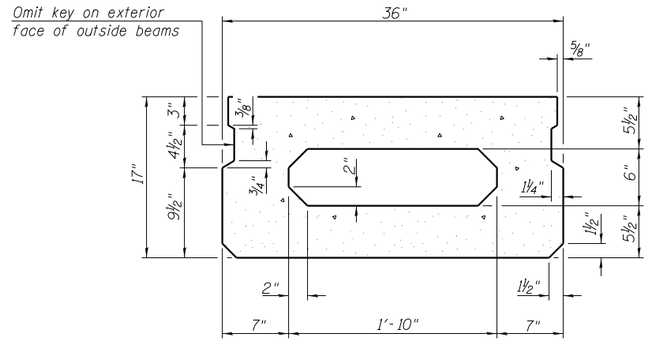
17" x 48" PPC DECK BEAM DETAILS

SCALE: $SCALE$ | SHEET S-8 OF S-20 SHEETS | STA. | TO STA.

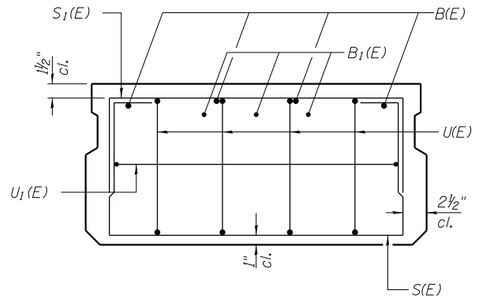
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	30
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		



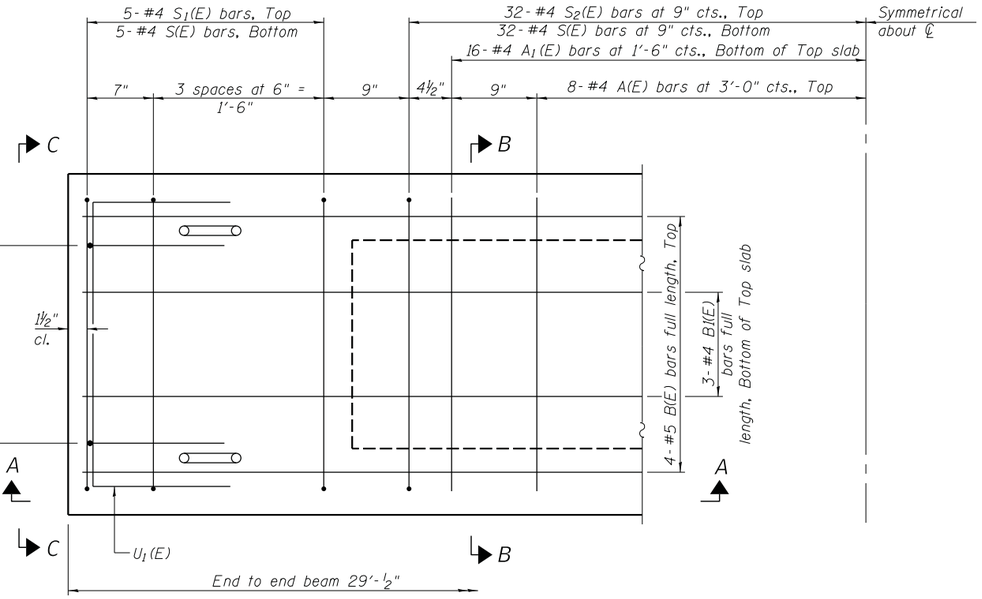
SECTION A-A



SECTION B-B
(Showing dimensions)

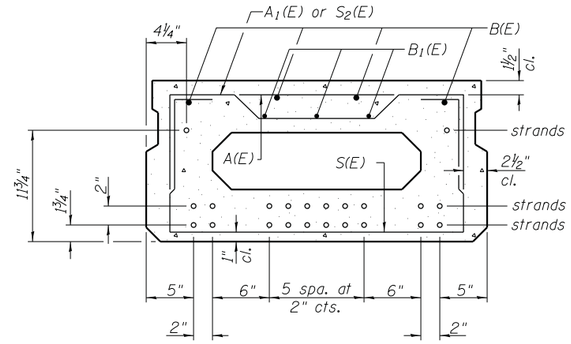


VIEW C-C



PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" 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)

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

4 Strands @ $1\frac{3}{4}$"
6 Strands @ $3\frac{3}{4}$"
2 Strands @ $11\frac{3}{4}$"

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	8	#4	2'-7"	—
$A_1(E)$	16	#4	2'-10"	~
B(E)	5	#5	28'-8"	—
$B_1(E)$	4	#4	28'-8"	—
S(E)	42	#4	5'-9"	⌊⌋
$S_1(E)$	10	#4	4'-3"	⌐¬
$S_2(E)$	32	#4	4'-6"	⌐~
U(E)	8	#5	3'-8"	⊏
$U_1(E)$	2	#4	5'-0"	⌐¬

Note: See sheet S10 of S18 for additional details and Bill of Material.

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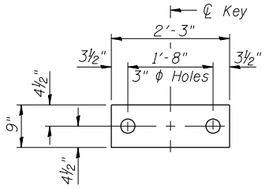
		DRAWN - CPF	REVISED -
	PLOT SCALE = 1'	CHECKED - MM	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

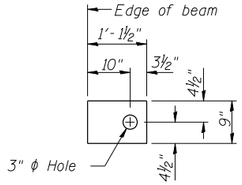
17" x 36" PPC DECK BEAM

SCALE: $SCALE$ | SHEET S-9 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	31
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		



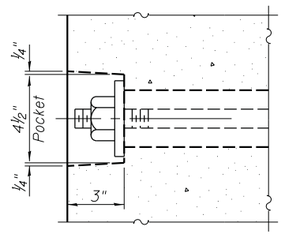
FABRIC BEARING PAD
(Interior)



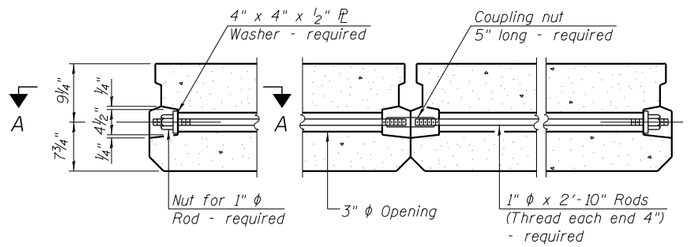
FABRIC BEARING PAD
(Exterior)

FIXED

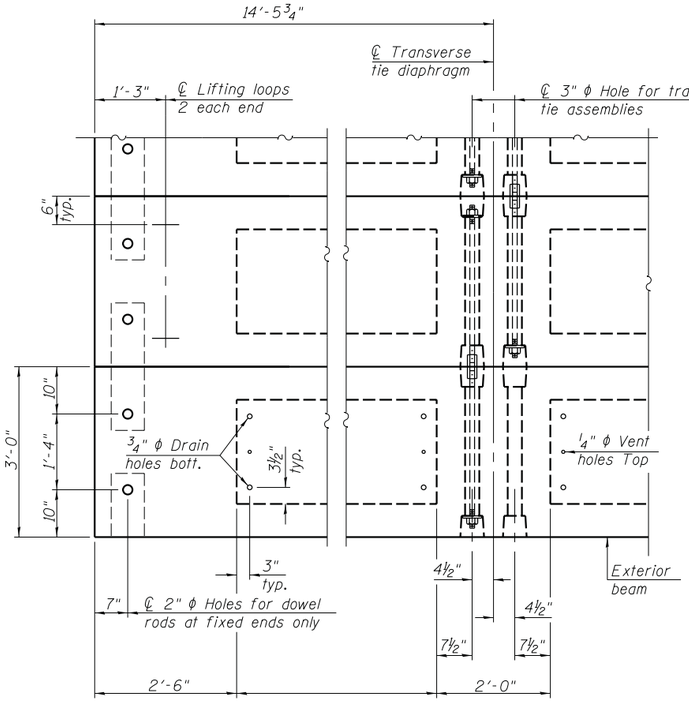
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A

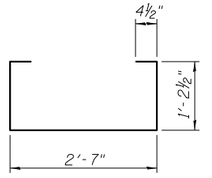


TYPICAL TRANSVERSE TIE ASSEMBLY

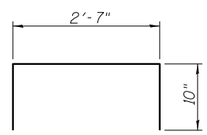


PLAN VIEW

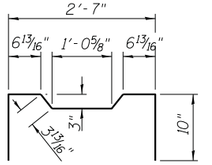
Note: Connect beams in pairs with the transverse tie configuration shown.



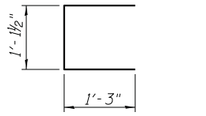
BAR S(E)



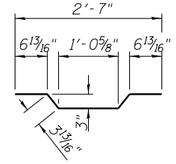
BAR S_1(E)



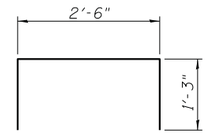
BAR S_2(E)



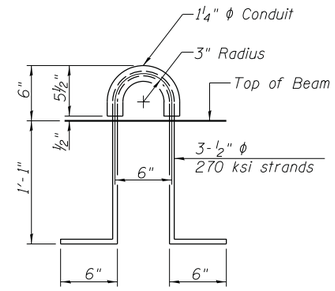
BAR U(E)



BAR A_1(E)



BAR U_1(E)



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1" ϕ 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 is in place.

Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	698

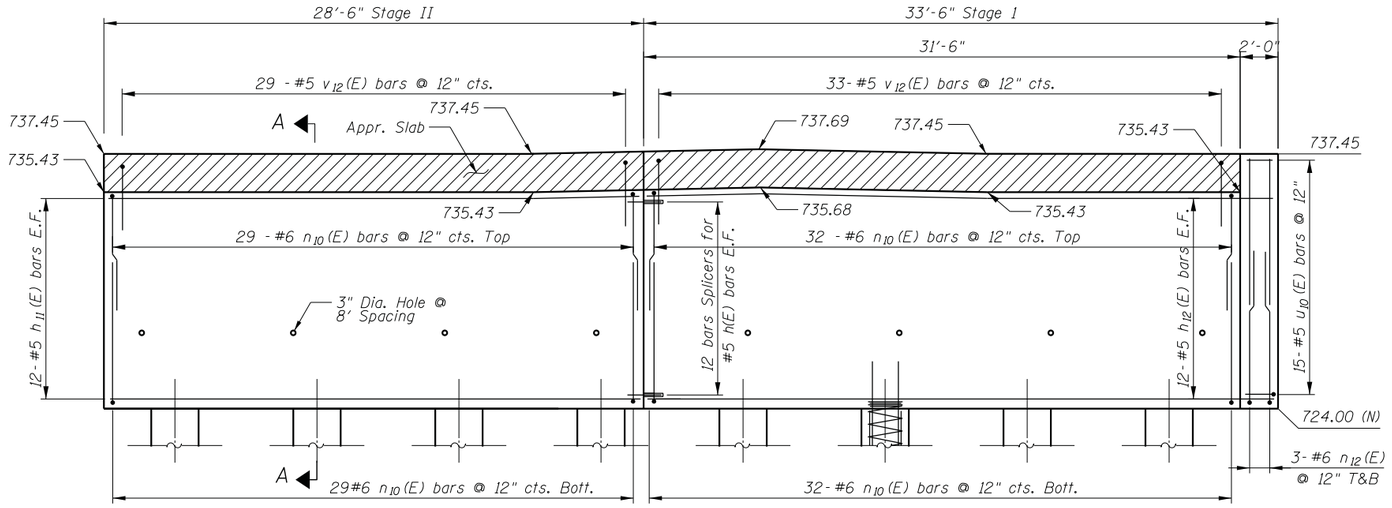
FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\10-17X36-BEAM.070273.00095B-02.dgn Default	USER NAME = pnajarro	DESIGNED - CPF	REVISED -
	PLOT SCALE = 1'	DRAWN - CPF	REVISED -
	PLOT DATE = 1/10/2018	CHECKED - MM	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

17" x 36" PPC DECK BEAM DETAILS

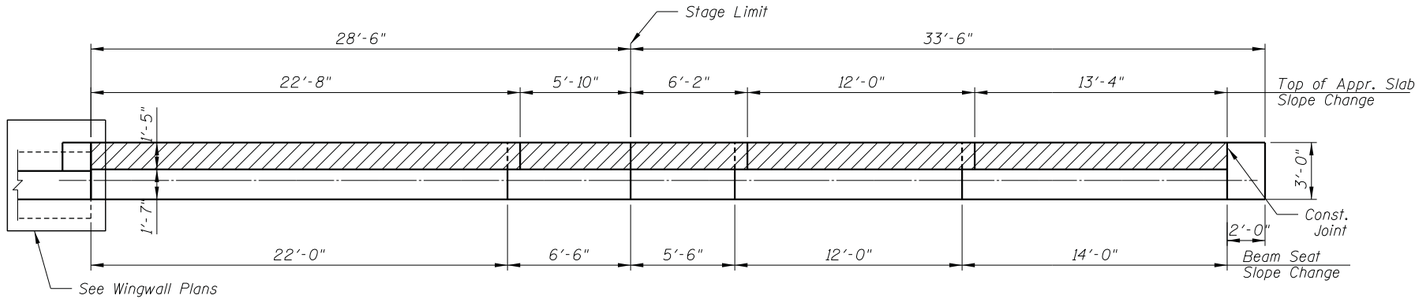
SCALE: $SCALE$ | SHEET S-10 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	32
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

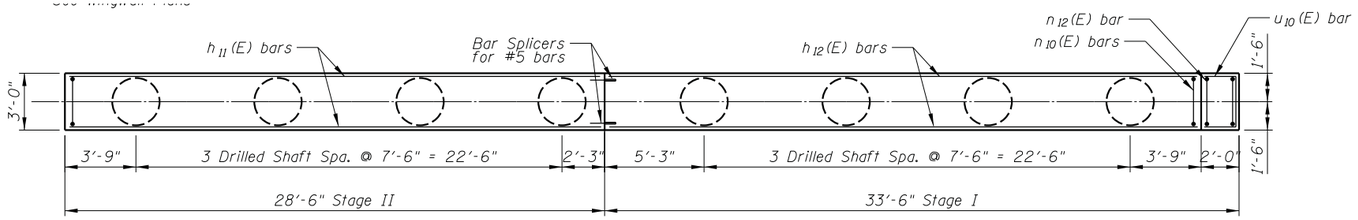


ELEVATION

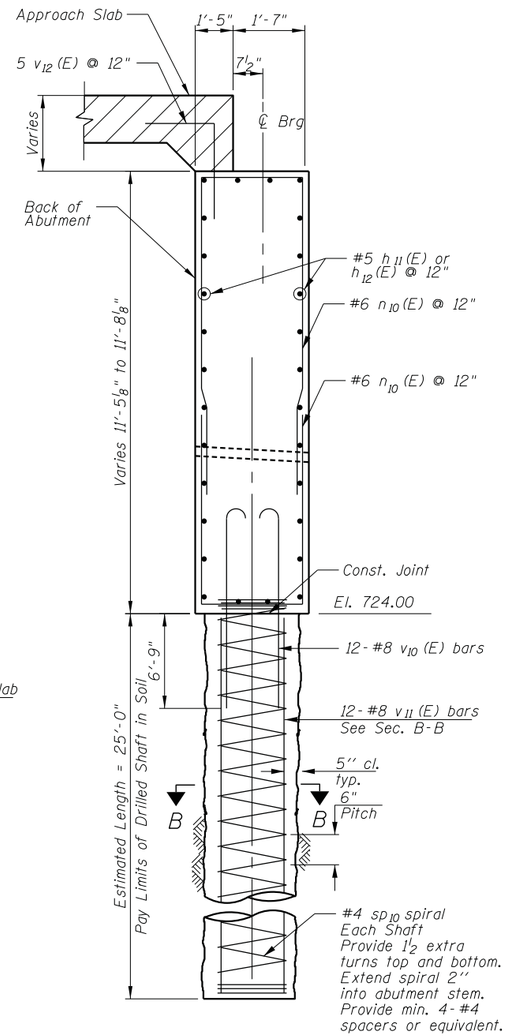
(Looking North)



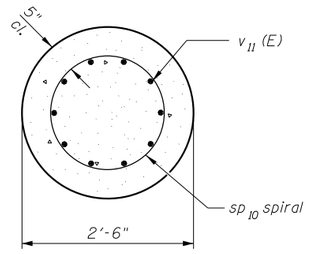
PLAN



FOOTING



SECTION A-A



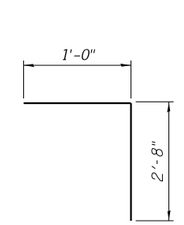
SECTION B-B

BILL OF MATERIAL

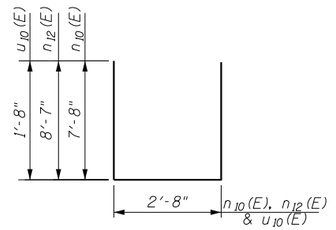
(North Abutment)

	Bar	No.	Size	Length	Shape
	h_{11}(E)	28	#5	28'-2"	
	h_{12}(E)	28	#5	33'-2"	
	n_{10}(E)	122	#6	18'-0"	
	n_{12}(E)	6	#6	19'-10"	
**	sp_{10}	8	#4	25'-0"	
	u_{10}(E)	15	#5	6'-0"	
	v_{10}(E)	96	#8	9'-6"	
	v_{11}(E)	96	#8	25'-0"	
	v_{12}(E)	62	#5	3'-8"	
	Structure Excavation			Cu. Yd.	128
	Concrete Structures			Cu. Yd.	79.5
	Reinforcement Bars, Epoxy Coated			Pound	14,410
	Reinforcement Bars			Pound	3,140
	Bar Splicers			Each	28
	Drilled Shaft in Soil			Cu. Yd.	36.4

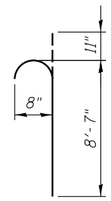
** Length is height of spiral.



BAR v_{12}(E)



BAR n_{10}(E), n_{12}(E) & u_{10}(E)



BAR v_{10}(E)

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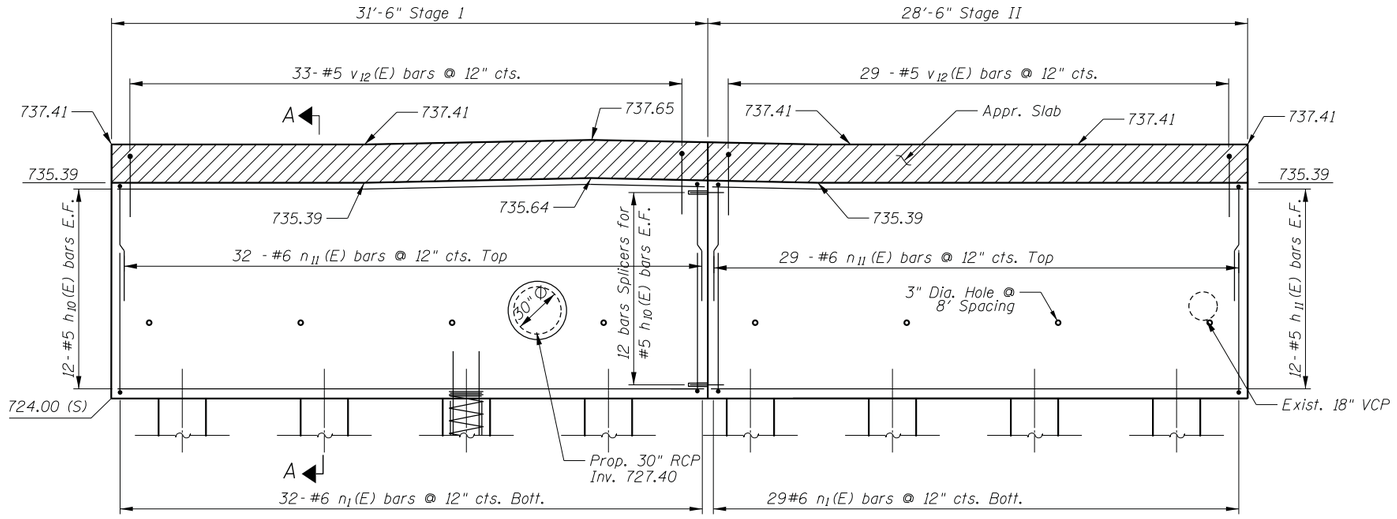
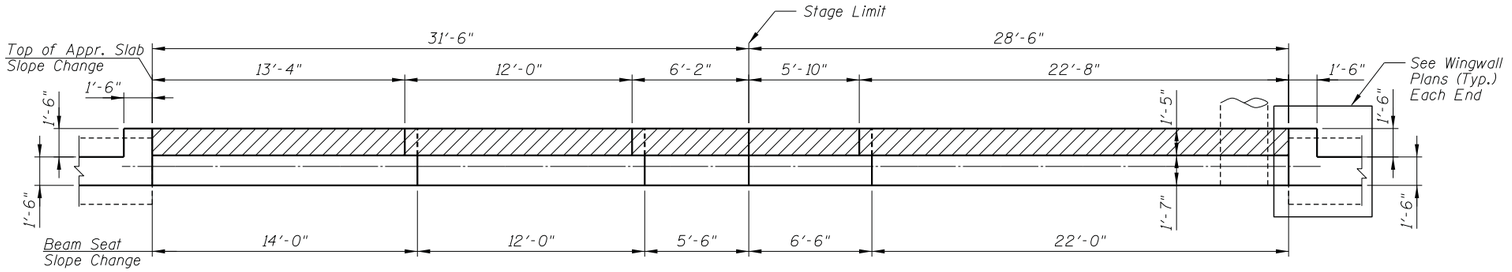
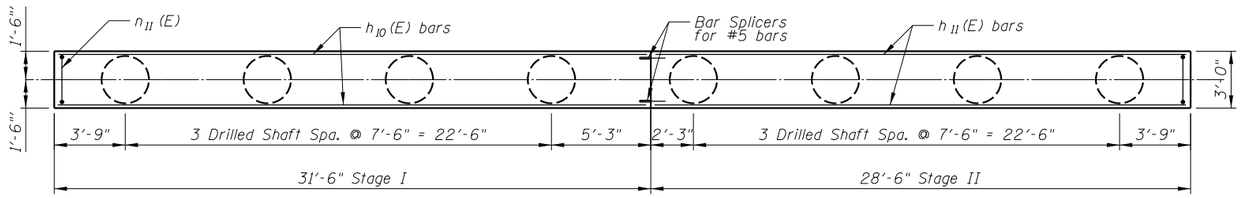
	PLOT SCALE = 1'	DRAWN - CPF	REVISED -			4560	16-00090-01-BR	MCHENRY	58	33
	PLOT DATE = 1/10/2018	CHECKED - MM	REVISED -					CONTRACT NO. 61E49		
Default		DATE -	REVISED -		SCALE: $SCALE$ SHEET S-11 OF S-20 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		



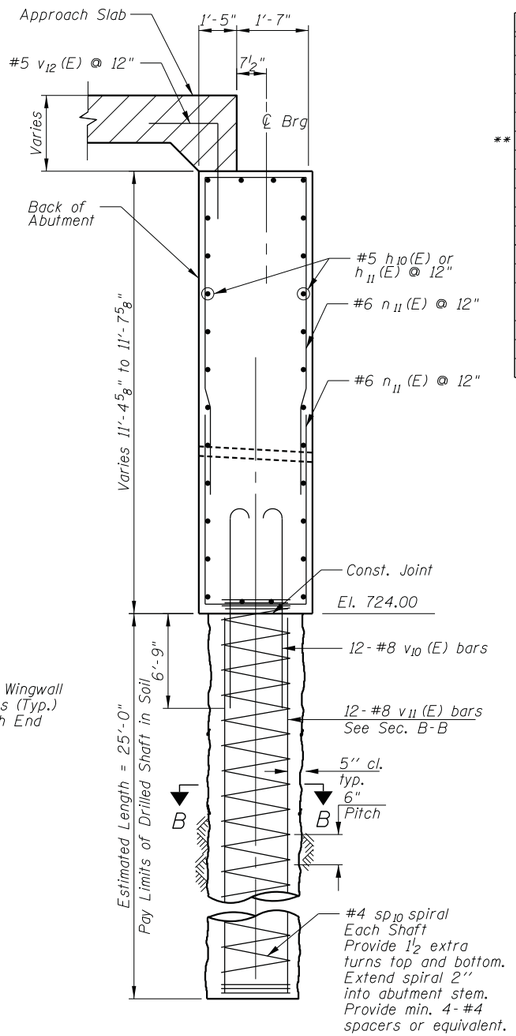
ELEVATION
(Looking South)



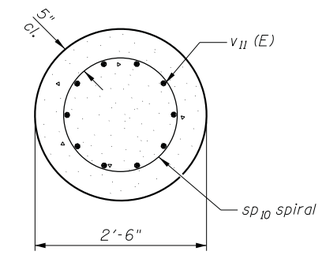
PLAN



FOOTING



SECTION A-A



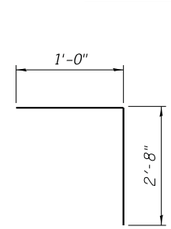
SECTION B-B

BILL OF MATERIAL

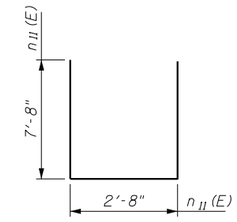
(South Abutment)

	Bar	No.	Size	Length	Shape
	h_{10}(E)	28	#5	31'-2"	
	h_{11}(E)	28	#5	28'-2"	
	n_{11}(E)	122	#6	18'-0"	
**	sp_{10}	8	#4	25'-0"	
	v_{10}(E)	96	#8	9'-6"	
	v_{11}(E)	96	#8	25'-0"	
	v_{12}(E)	62	#5	3'-8"	
	Structure Excavation			Cu. Yd.	150
	Concrete Structures			Cu. Yd.	76.3
	Reinforcement Bars, Epoxy Coated			Pound	14,110
	Reinforcement Bars			Pound	3,140
	Bar Splicers			Each	28
	Drilled Shaft in Soil			Cu. Yd.	36.4

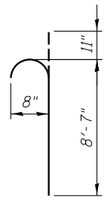
** Length is height of spiral.



BAR v_{12}(E)



BAR n_{11}(E)



BAR v_{10}(E)

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Default	PLOT DATE = 1/10/2018	CHECKED - MM	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT

SCALE: $SCALE$ | SHEET S-12 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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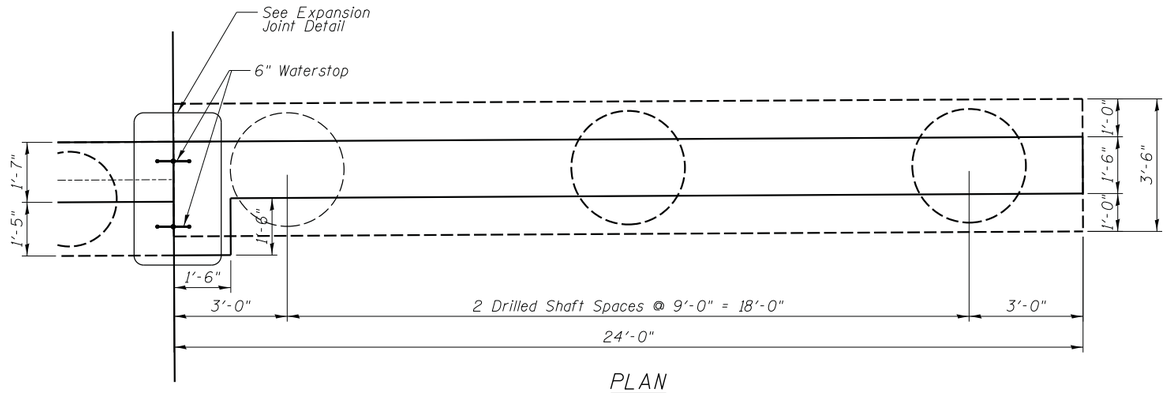
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



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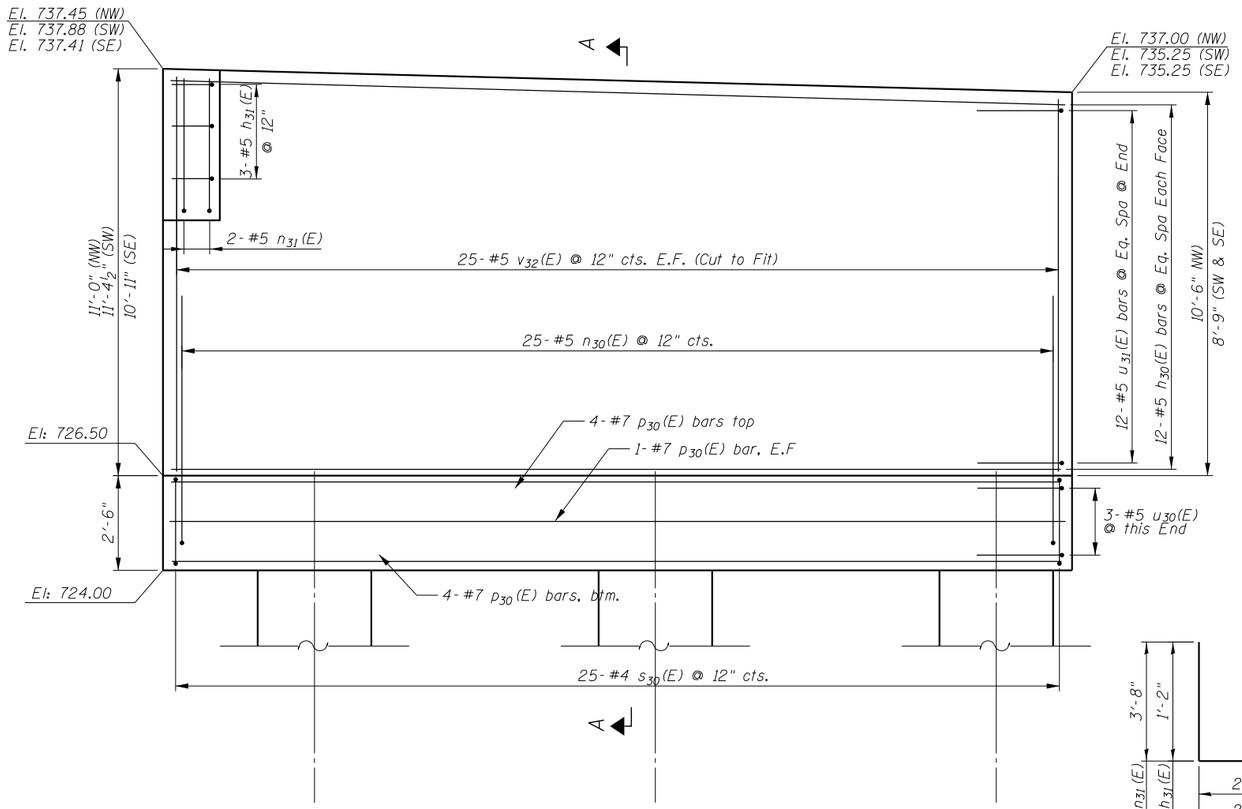
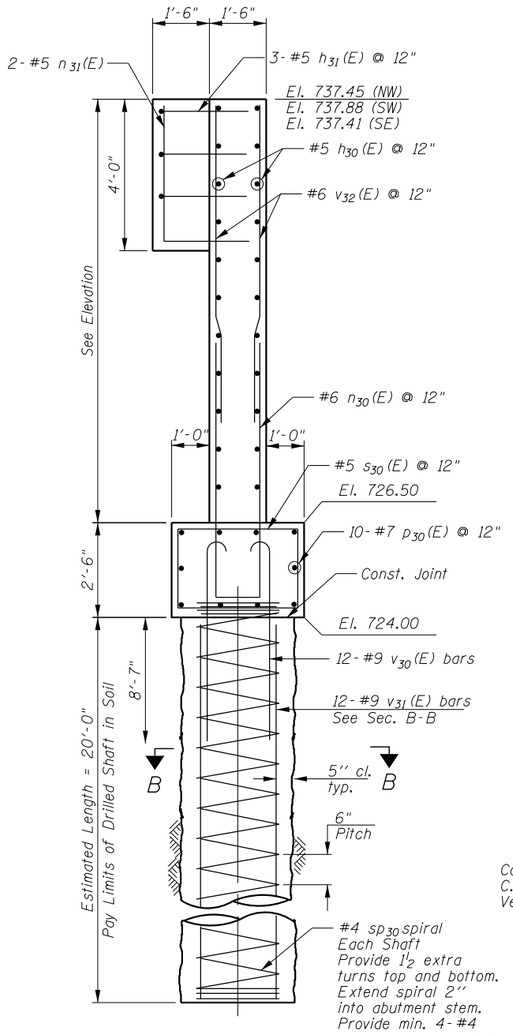


ELEVATION

Railing at the Top of Wingwalls are not Shown for Clarity.



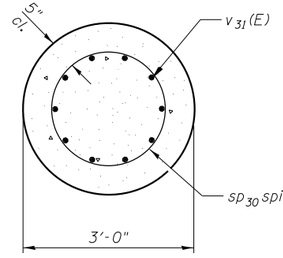
SECTION A-A

BILL OF MATERIAL

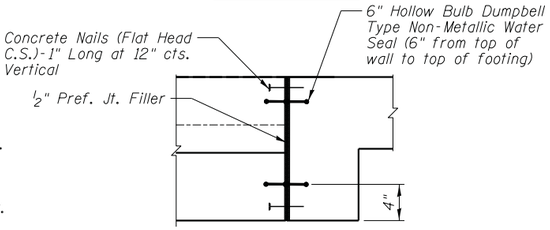
(3 Wingwalls)

	Bar	No.	Size	Length	Shape
	$h_{30}(E)$	72	#5	23'-8"	
	$h_{31}(E)$	9	#5	3'-5"	
	$n_{30}(E)$	75	#6	17'-8"	
	$n_{31}(E)$	6	#5	5'-11"	
	$p_{30}(E)$	30	#7	23'-8"	
	$s_{30}(E)$	75	#5	11'-7"	
**	sp_{30}	9	#4	20'-0"	
	$u_{30}(E)$	9	#5	7'-2"	
	$u_{31}(E)$	36	#5	5'-2"	
	$v_{30}(E)$	108	#9	11'-6"	
	$v_{31}(E)$	108	#9	20'-0"	
	$v_{32}(E)$	150	#6	8'-7"	
	Structure Excavation		Cu. Yd.	55.0	
	Concrete Structures		Cu. Yd.	65.1	
	Reinforcement Bars, Epoxy Coated		Pound	19,950	
	Reinforcement Bars		Pound	1,890	
	Drilled Shaft in Soil		Cu. Yd.	47.1	

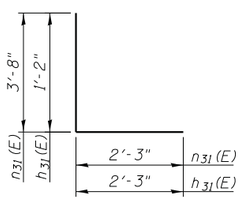
** Length is height of spiral.



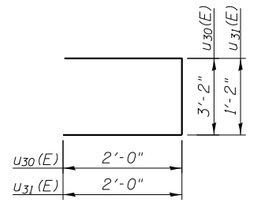
SECTION B-B



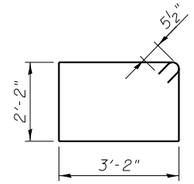
EXPANSION JOINT DETAIL



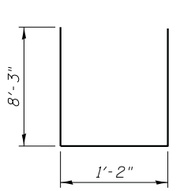
BAR $n_{31}(E)$ & $h_{31}(E)$



BARs $u_{30}(E)$ & $u_{31}(E)$



BAR $s_{30}(E)$



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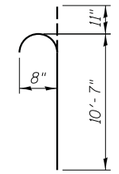

BAR $v_{30}(E)$

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Default	PLOT DATE = 1/10/2018	DATE -	REVISED -	

STATE OF ILLINOIS
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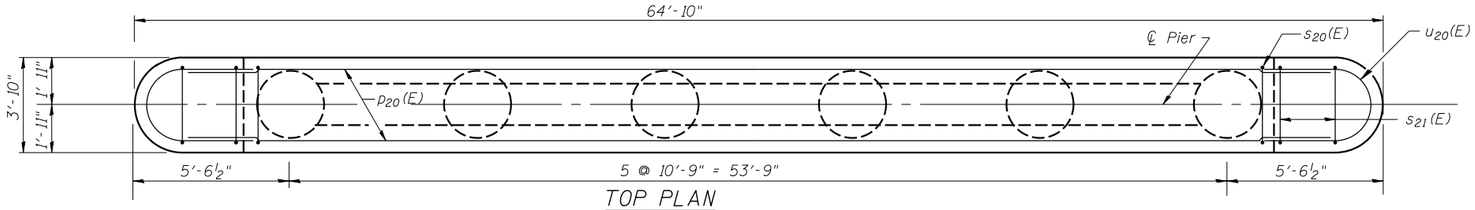
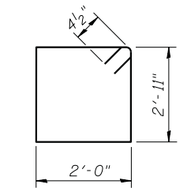
WINGWALL PLAN AND ELEVATION

SCALE: $SCALE$ | SHEET S-13 OF S-20 SHEETS | STA. | TO STA.

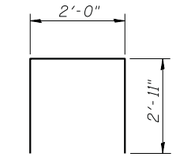
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	35
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		



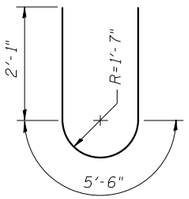
TOP PLAN



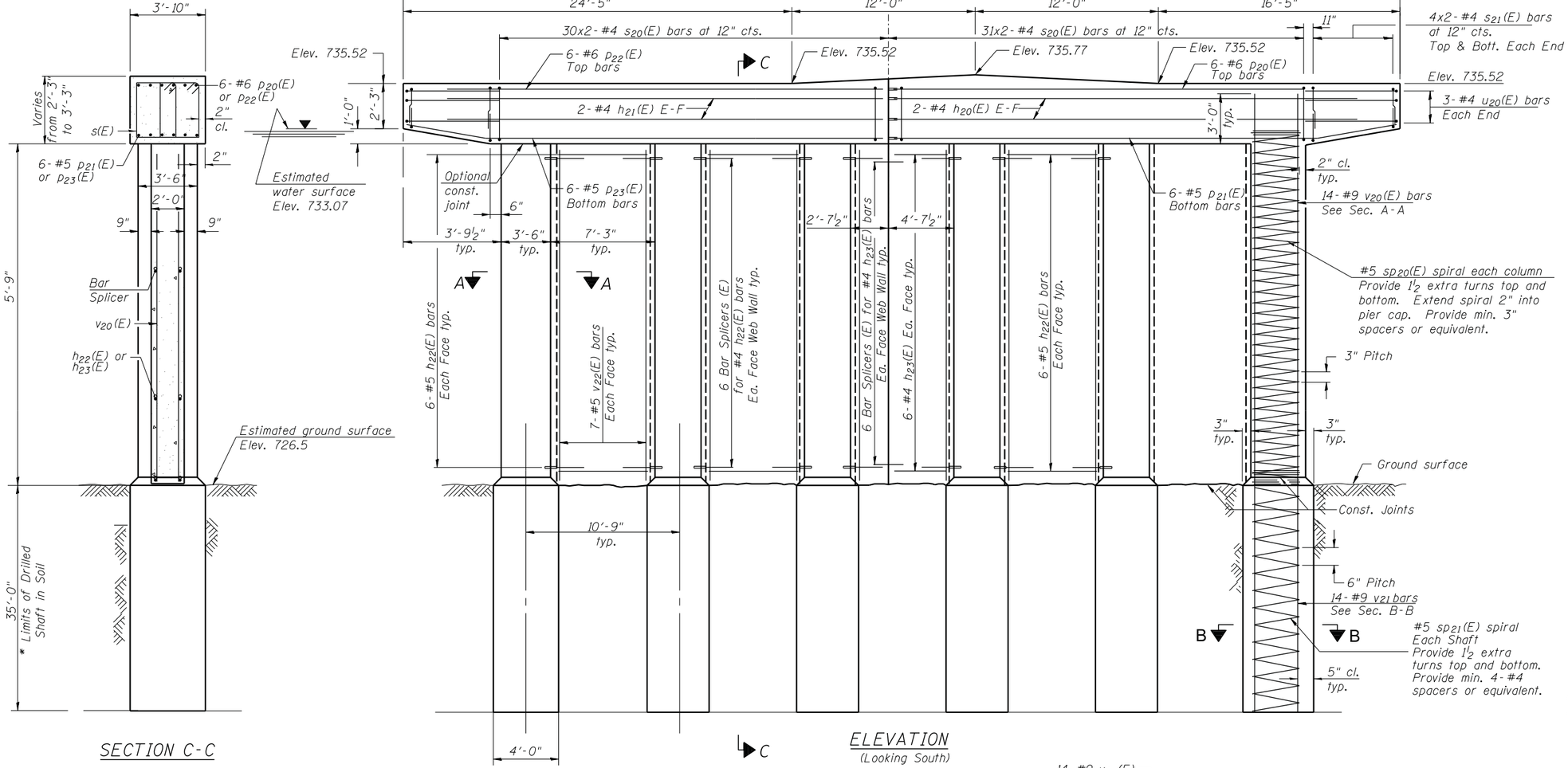
BAR $s_{20}(E)$



BARS $s_{21}(E)$
Cut bars to fit

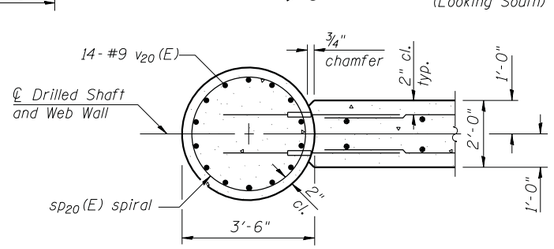


BAR $u_{20}(E)$

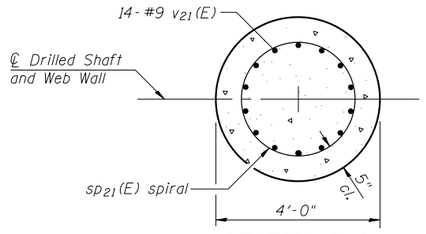


SECTION C-C

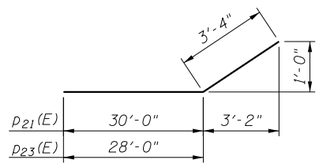
ELEVATION
(Looking South)



SECTION A-A



SECTION B-B



BARS $p_{21}(E)$ & $P_{23}(E)$

* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	$h_{20}(E)$	4	#4	33'-1"	——
	$h_{21}(E)$	4	#4	31'-1"	——
	$h_{22}(E)$	48	#5	7'-3"	——
	$h_{23}(E)$	12	#4	4'-4"	——
	$p_{20}(E)$	6	#6	33'-1"	——
	$p_{21}(E)$	6	#5	33'-4"	——
	$p_{22}(E)$	6	#6	31'-1"	——
	$p_{23}(E)$	6	#5	31'-4"	——
	$s_{20}(E)$	122	#4	10'-7"	□
	$s_{21}(E)$	32	#4	7'-10"	⊔
**	$sp_{20}(E)$	6	#5	6'-0"	∧∧∧
**	$sp_{21}(E)$	6	#5	35'-0"	∧∧∧
	$u_{20}(E)$	6	#4	9'-8"	⊃
	$v_{20}(E)$	70	#9	8'-9"	——
	$v_{21}(E)$	84	#9	43'-9"	——
	Concrete Structures			Cu. Yd.	62.7
	Reinforcement Bars, Epoxy Coated			Pound	23780
	Bar Splicers			Each	148
	Drilled Shaft in Soil			Cu. Yd.	97.7

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 3'-0"

** Length is height of spiral.

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Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER

SCALE: $SCALE$ | SHEET S-14 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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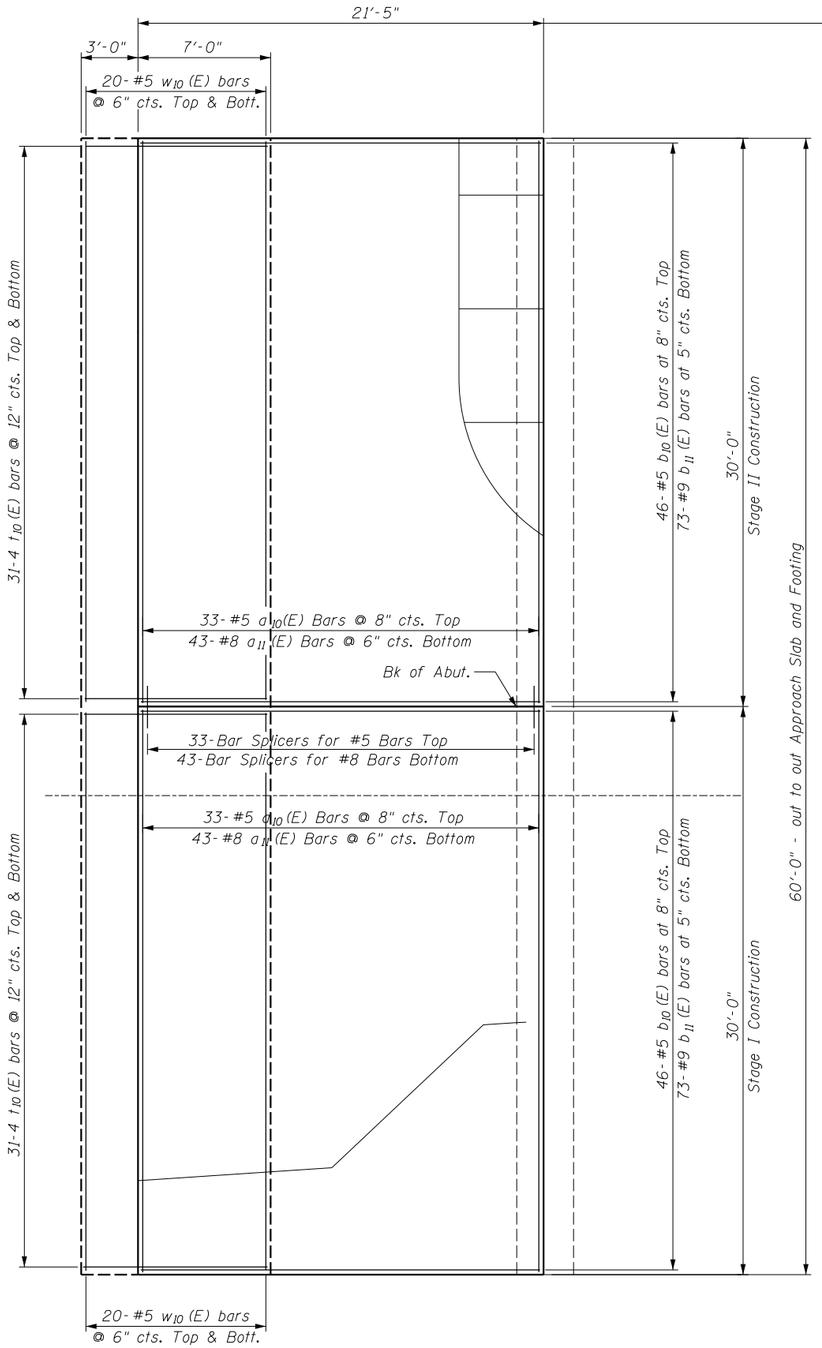
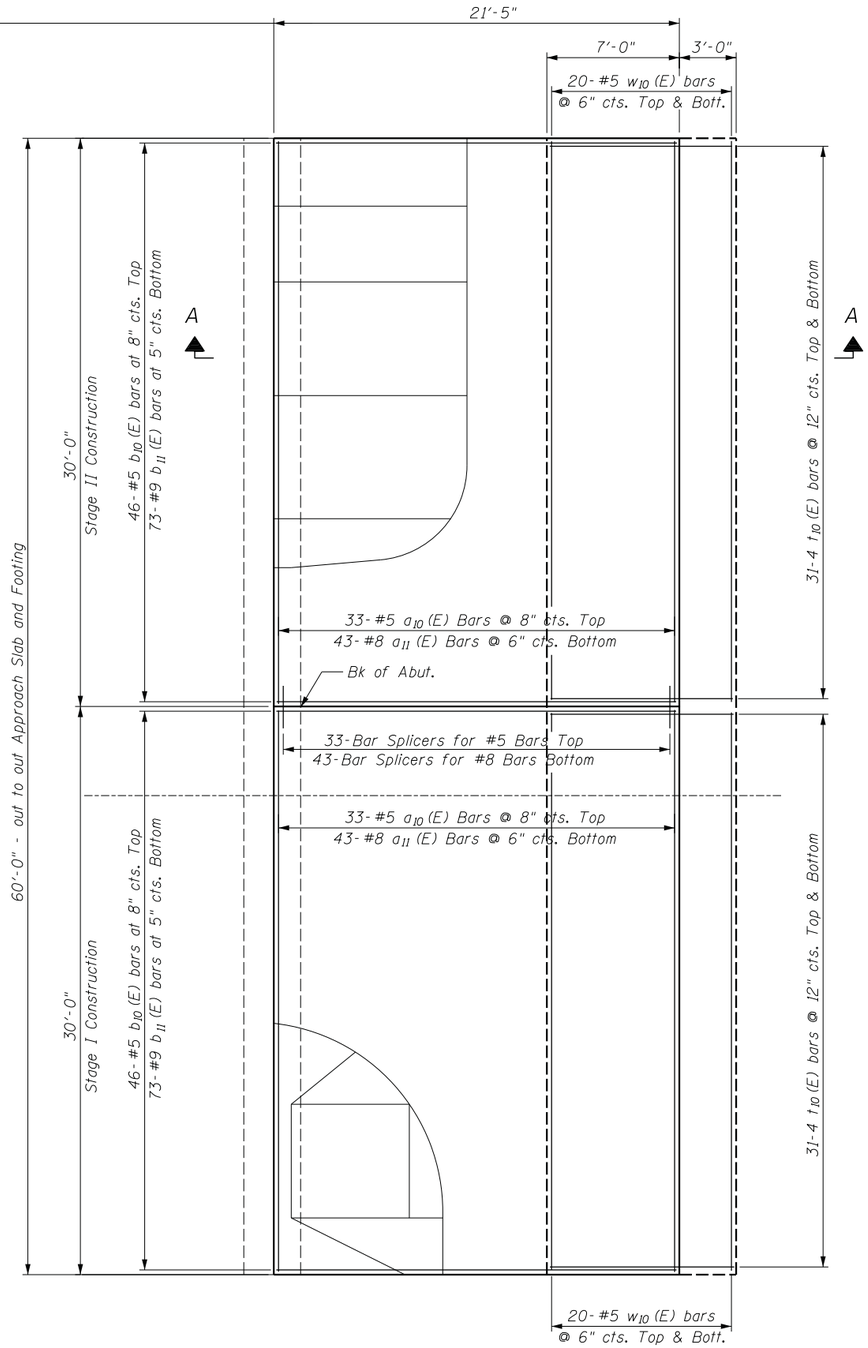
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		



SOUTH APPROACH SLAB PLAN



NORTH APPROACH SLAB PLAN

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		DRAWN -	REVISED -
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Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS

SCALE: $SCALE$ | SHEET S-15 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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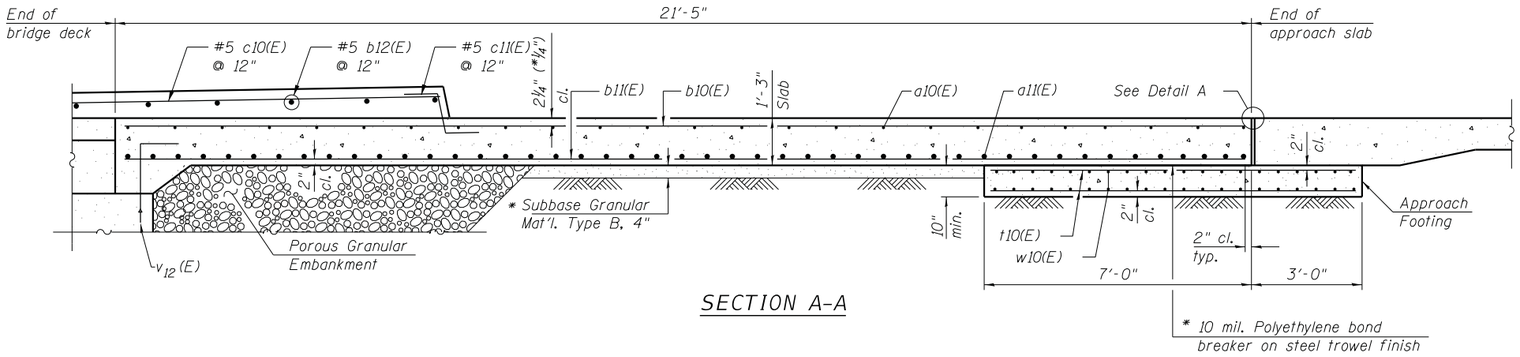
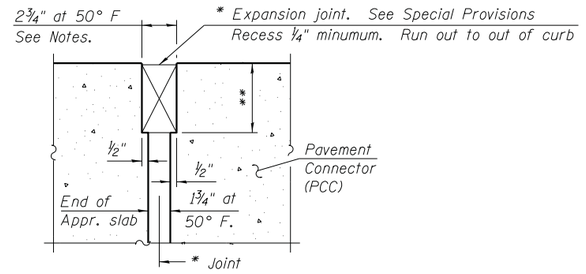
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



SECTION A-A



DETAIL A

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

Notes:

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach pavement.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment and drainage treatment details, see sheet S2 of S20. See Civil Drawings for sidewalk grading details.

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_{10}(E)	132	#5	29'-8"	———
a_{11}(E)	172	#8	29'-8"	———
b_{10}(E)	184	#5	21'-1"	———
b_{11}(E)	292	#9	21'-1"	———
b_{12}(E)*	44	#5	22'-4"	———
c_{10}(E)*	78	#5	10'-0"	———
c_{11}(E)	68	#5	2'-2"	⌐‾
t_{10}(E)	248	#4	9'-8"	———
w_{10}(E)	160	#5	29'-8"	———
Concrete Superstructure (Approach Slab)		Cu. Yd.	73.9	
Concrete Structures		Cu. Yd.	18.5	
Reinforcement Bars, Epoxy Coated		Pound	51,200	
Bar Splicers		Each	226	

* Bars may need to be field bent or cut to fit ADA sidewalk dimensions

FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\16-APPROACH_070273.00095B-02.dgn	USER NAME = pnajarro	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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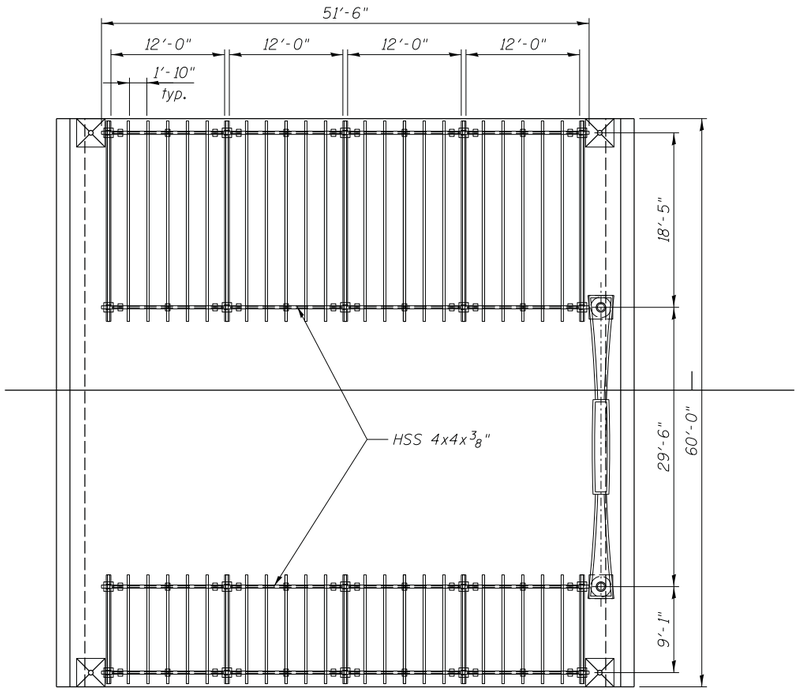
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

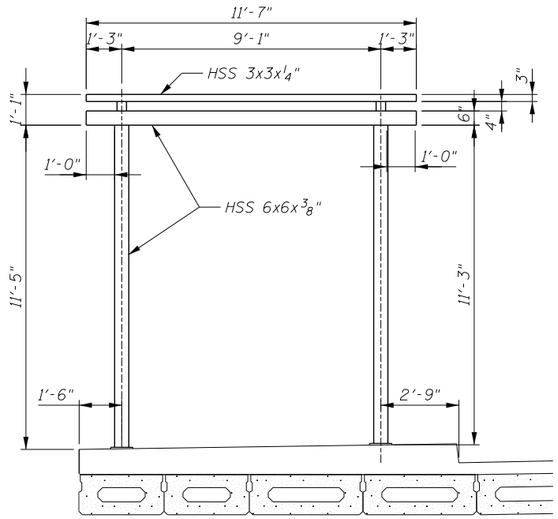
BRIDGE APPROACH SLAB DETAILS

SCALE: $SCALE$ | SHEET S-16 OF S-20 SHEETS | STA. | TO STA.

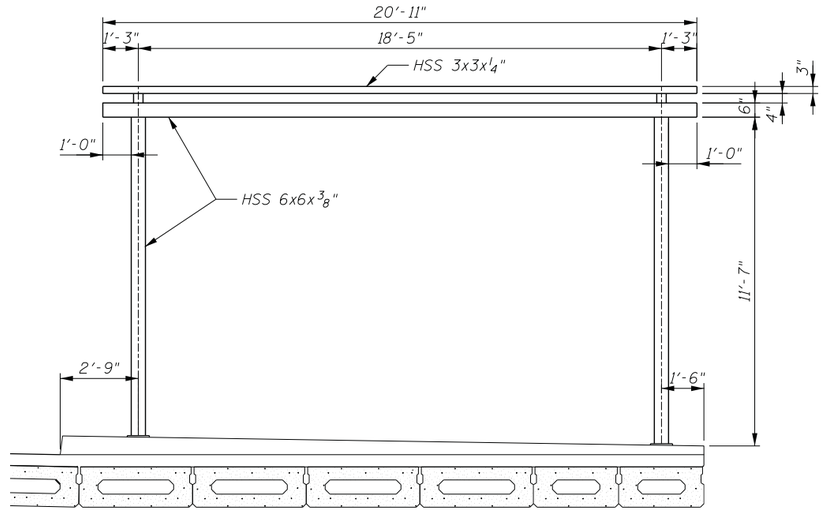
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	38
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		



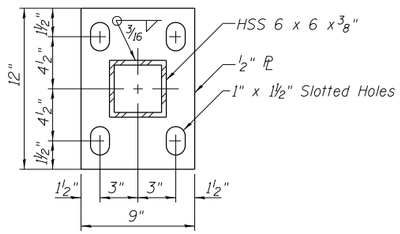
PLAN-PROPOSED PERGOLA



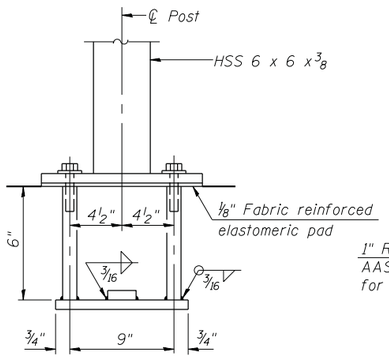
ELEVATION - EAST PERGOLA

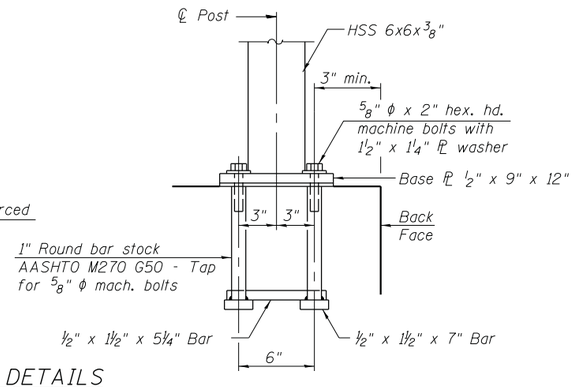


ELEVATION - WEST PERGOLA



BASE PL





ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

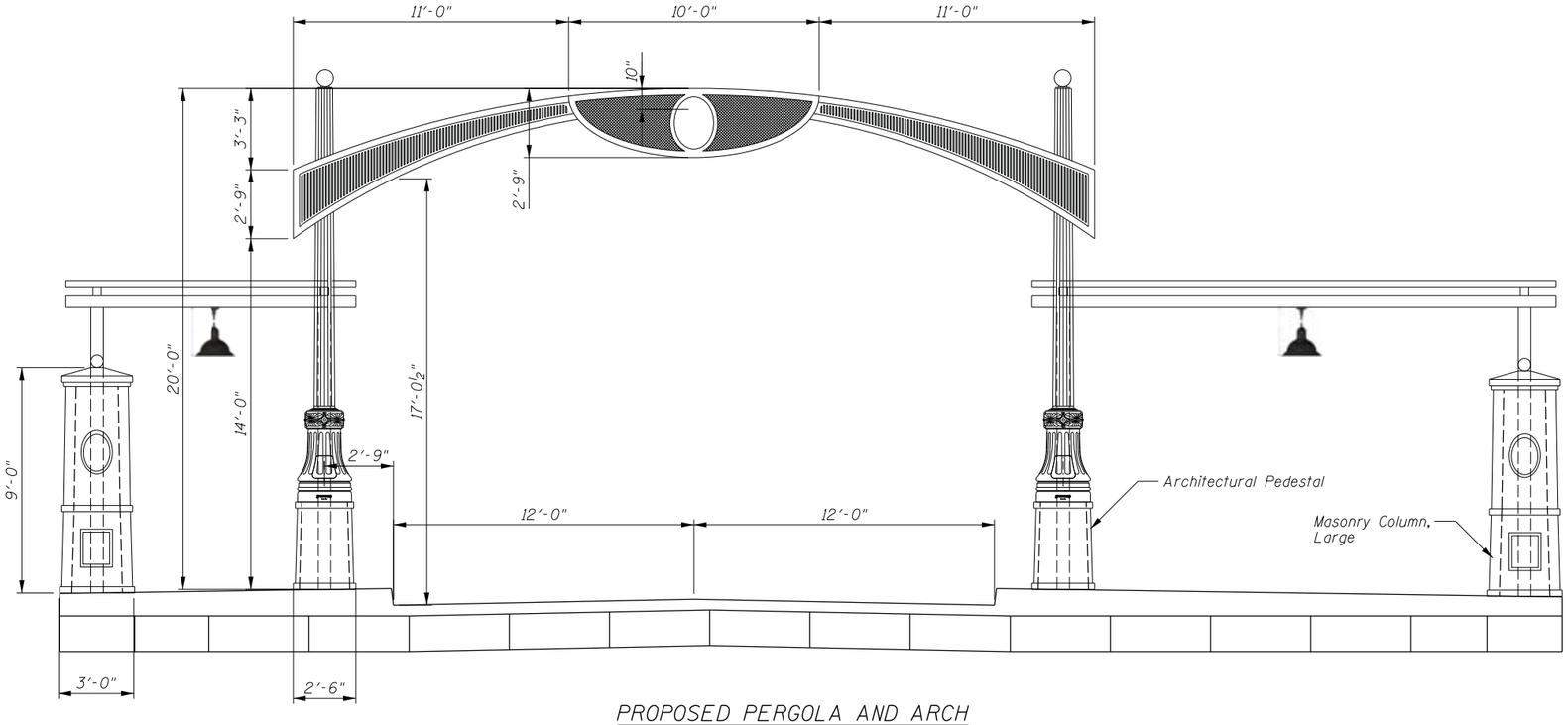
FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\17-PERGOLA.070273.00095B.dgn	USER NAME = pnajarro	DESIGNED -	REVISED -
	PLOT SCALE = 1'	DRAWN -	REVISED -
Default	PLOT DATE = 1/10/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

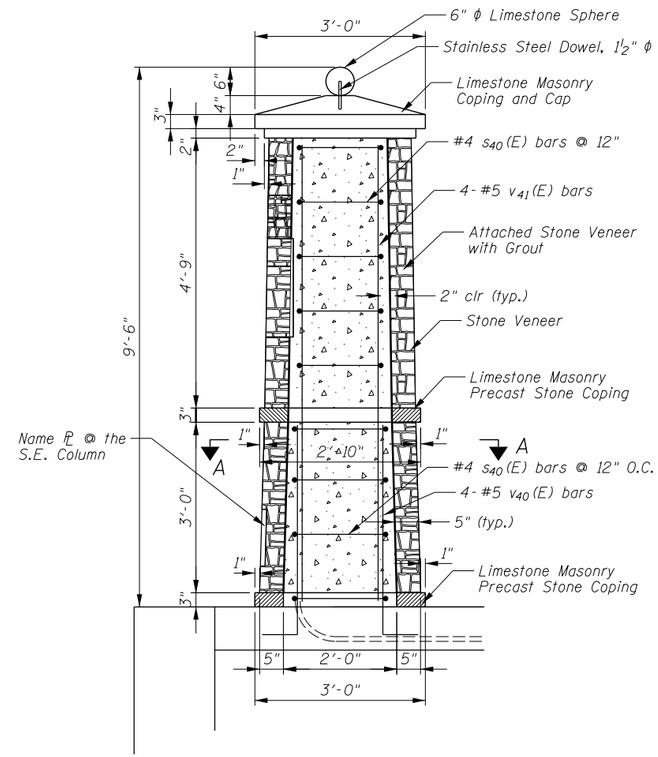
PERGOLA SUPPORT

SCALE: $SCALE$ | SHEET S-15 OF S-20 SHEETS | STA. | TO STA.

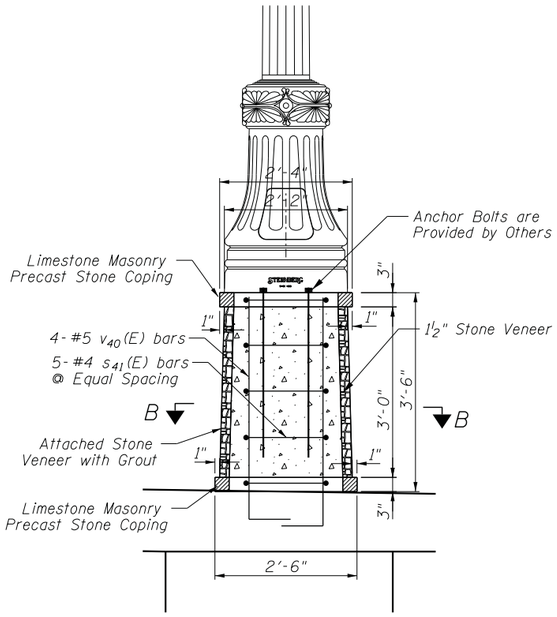
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	39
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



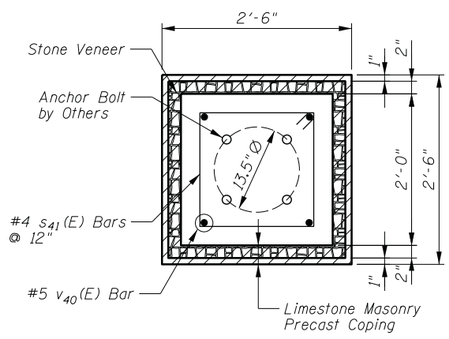
PROPOSED PERGOLA AND ARCH



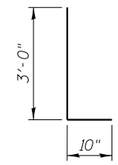
MASONRY COLUMN, LARGE



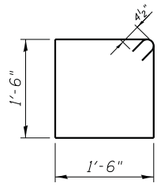
ARCHITECTURAL PEDESTAL



SECTION B-B



BAR v40(E)



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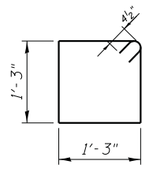

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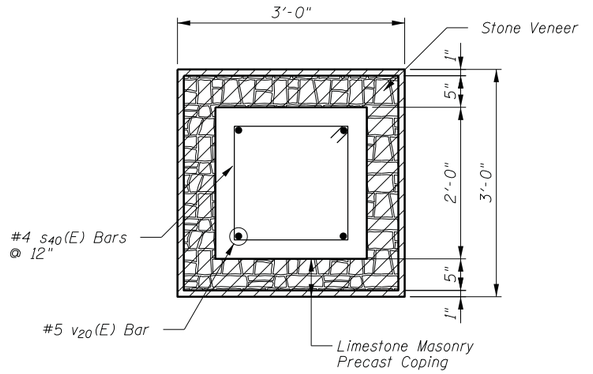

SECTION A-A

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	PLOT SCALE = 1'	CHECKED - MM	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARCHITECTURAL DETAILS

SCALE: $SCALE$ | SHEET S-18 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	40
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		

MSET PROJECT NO.: 16391 | **LOG OF BORING NO. BB-1** | Page 1 of 2

PROJECT: Streetscape Geotechnical Stage 1 (Part 1) | SITE LOCATION: Algonquin, Illinois

BORING LOCATION: North Abutment | CLIENT: Village of Algonquin

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/INTERVAL	SAMPLE NO.	SAMPLE N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0		Bituminous Concrete (1.75 inches)	737.2							
		Base Course - Grey SAND and Gravel, A-1-a (4 inches)	737.0	SS	1	4	5			
		FILL - Brown SAND and Gravel, A-1-a, 3 inch Coarse Gravel	736.7	SS	2	5	18			
6		FILL - Black and Brown Silty CLAY, some Sand, some Gravel, A-6	733.7	SS	3	5				No recovery
		FILL: Grey Crushed Stone, little Silt, A-1-a wet, medium dense	728.7	SS	4	19	9			
12				SS	5	18	12			
		Grey SAND, little Gravel, trace Silt, A-3, dense to medium dense	723.7	SS	6	28	15			
				SS	7	39	19			
18		Grey SAND, some Gravel, trace Silt, A-1- a, medium dense	719.2	SS	8	10	10			
				SS	9					drilled past sample due to boulder
		possible Boulder								
24		Grey CLAY, little Sand, trace Gravel A-6(7), hard to very stiff	714.2	SS	10	14	14		4.5+ Qp	
				SS	11	13	13		2.52	
				SS	12	9	15		2.60	
30										
				SS	13	12	15		2.33	
36										
		Bluish-Grey CLAY, some Sand, trace Gravel, A-6, very stiff	699.2	SS	14	12	21		3.0 Qp	
42		Light Grey Sandy LOAM, little Gravel, A-2-4, extremely dense, hard pan	694.2	SS	15	108	7			

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 9.5'
IMMEDIATELY AFTER DRILLING:
DELAYED READING AFTER

MSET

BORING STARTED: 7/18/16
BORING COMPLETED: 7/18/16
LOGGED BY: GPF
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 16391 | **LOG OF BORING NO. BB-1** | Page 2 of 2

PROJECT: Streetscape Geotechnical Stage 1 (Part 1) | SITE LOCATION: Algonquin, Illinois

BORING LOCATION: North Abutment | CLIENT: Village of Algonquin

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/INTERVAL	SAMPLE NO.	SAMPLE N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
48		Light Grey Silty LOAM, little Gravel, A-2-4, very to extremely dense, hard pan with cobbles, boulders		SS	16	73	8			
54				SS	17	65	8			
				SS	18	82	7	140		
60		Grey Dolomitic LIMESTONE, thin to medium bedded, intensly to slightly fractured, highly to slightly weathered, moderately hard, LS	675.7	SS	19	50/1"	7			
66				NX	1					REC = 100% RQD = 7%
72				NX	2					REC = 100% RQD = 53%
78				NX	3					REC = 100% RQD = 75%
		End of Boring at 79.5'	657.7							

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 9.5'
IMMEDIATELY AFTER DRILLING
DELAYED READING AFTER

MSET

BORING STARTED: 7/18/16
BORING COMPLETED: 7/18/16
LOGGED BY: GPF
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 16391 | **LOG OF BORING NO. BB-2** | Page 1 of 2

PROJECT: Streetscape Geotechnical Stage 1 (Part 1) | SITE LOCATION: Algonquin, Illinois

BORNG LOCATION: South Abutment | CLIENT: Village of Algonquin

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/INTERVAL	SAMPLE NO.	SAMPLE N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0		Portland Cement Concrete with #8 Rebar (10 inches)	737.1							
		VOID to 18 inches	736.5	SS	1					drilled past sample due to void
		Base Course - Brown SAND (f-c), A-3	735.6	SS	2A	4	6			
		FILL - Black Sandy CLAY to Clayey SAND, little Gravel, A-2-6	733.1	SS	2B	5	10		1.0 Qp	
6		FILL - Dark Brown SAND (f-c), some Gravel, trace Clay, A-3, slightly dense	731.1	SS	3	4	6			
		FILL - Reddish-Brown Silty CLAY, little Sand, trace Gravel, A-6, firm	728.6	SS	4	5	15	122	0.62	
		Black Sandy CLAY, trace fibers, A-7-6	726.1	SS	5	6	42		0.5 Qp	
12		Grey SAND (f-m), little Gravel, wet, A-3, dense	724.6	SS	6	31	18			
		Grey CLAY, trace Sand, trace Gravel, A-6(7), very stiff	721.1	SS	7	8	14	146	2.37	
18				SS	8	8	13	108	2.33	
				SS	9	12	14	117	2.44	
24				SS	10	20	14		1.5 Qp	
				SS	11	18	13	121	3.18	
				SS	12	14	13	121	3.65	
30										
				SS	13	16	13	127	4.66	
36										
		Bluish-Grey CLAY, little Sand, trace Gravel, A-6, hard	698.1	SS	14	19	16	123	4.15	
42		Grey SAND (f-c), little Gravel, wet, A- 3, medium dense	694.1	SS	15	20	10			

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 12.5'
IMMEDIATELY AFTER DRILLING: 11.0'
DELAYED READING AFTER

MSET

BORING STARTED: 7/15/16
BORING COMPLETED: 7/15/16
LOGGED BY: GPF
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

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		DRAWN - CPF	REVISED -	
Default	PLOT SCALE = 1'	CHECKED - MM	REVISED -	
	PLOT DATE = 1/10/2018	DATE -	REVISED -	

BORING LOGS

SCALE: $SCALE$ | SHEET S-19 OF S-20 SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	41
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		

MSET PROJECT NO.: 16391 | **LOG OF BORING NO. BB-2** | Page 2 of 2

PROJECT: Streetscape Geotechnical Stage 1 (Part 1) | SITE LOCATION: Algonquin, Illinois

BORING LOCATION: South Abutment | CLIENT: Village of Algonquin

DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE TYPE/INTERVAL	SAMPLE NO.	SAMPLE N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
48		Light Grey Sandy LOAM, little Gravel, A-2-4, medium dense hard pan with cobbles, boulders	689.1'	SS	16	19	10	141		
54		extremely dense		SS	17	80/11"	9			
				SS	18	41	8			
60		possible Boulder End of Boring at 60.5'	676.6	SS	19	82/11"	9	134		

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 12.5'
IMMEDIATELY AFTER DRILLING: 11.0'
DELAYED READING AFTER

MSET

BORING STARTED: 7/15/16
BORING COMPLETED: 7/15/16
LOGGED BY: GPF
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\20-BLOGS_070273.00095B.dgn	USER NAME = pnajarro	DESIGNED - CPF	REVISED -
		DRAWN - CPF	REVISED -
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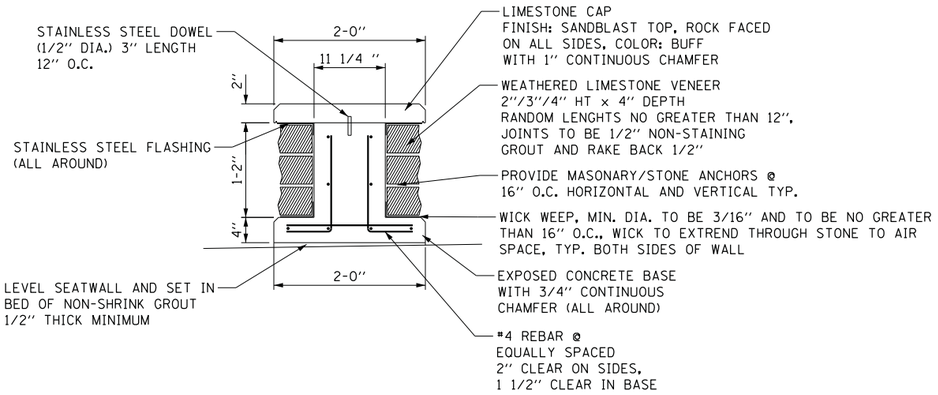
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

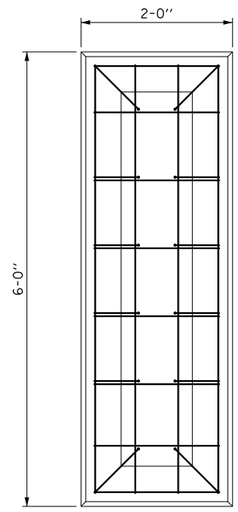
BORING LOGS

SCALE: $SCALE$ | SHEET S-20 OF S-20 SHEETS | STA. | TO STA.

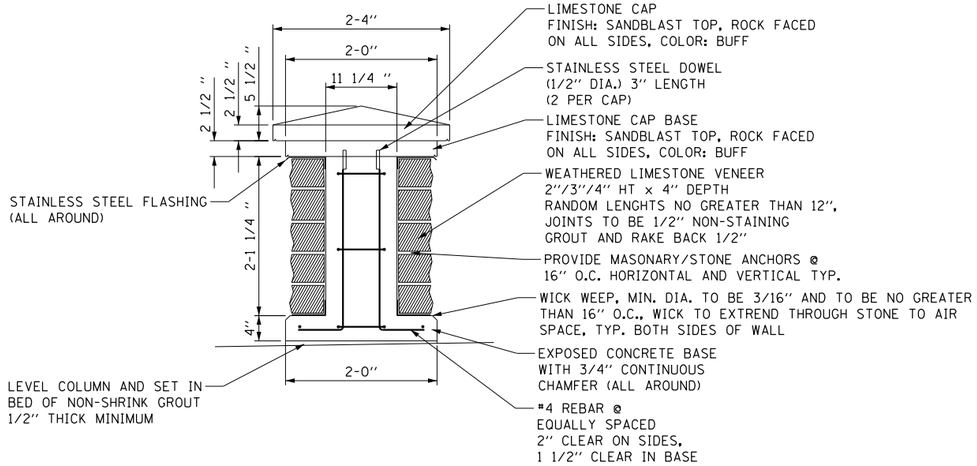
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	42
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			



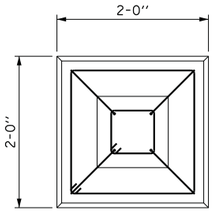
SEATWALL 20" HT - END ELEVATION



SEATWALL 20" HT - BASE PLAN



MASONRY COLUMN, SMALL - ELEVATION



MASONRY COLUMN, SMALL - BASE PLAN

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Default	PLOT DATE = 1/11/2018	DATE -	REVISED -

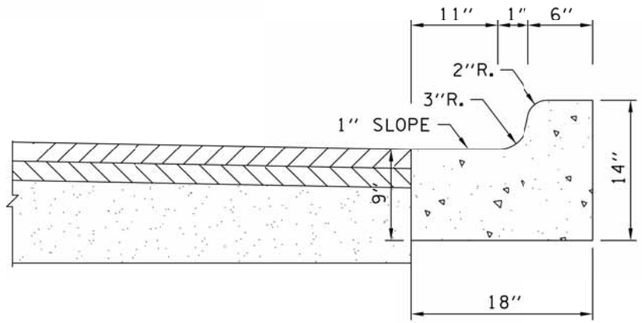
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN STREET BRIDGE OVER CRYSTAL CREEK
PROJECT DETAILS

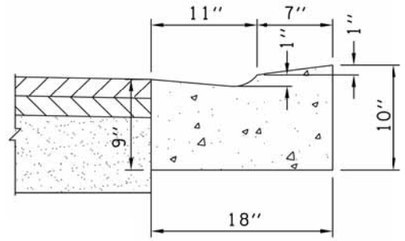
SCALE: | SHEET OF SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	43
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT
110 MEYER DRIVE
ALGONQUIN, IL 60102-2442
PH: 847-658-2754
FX: 847-658-2759
WWW.ALGONQUIN.ORG



BARRIER CURB



DEPRESSED CURB

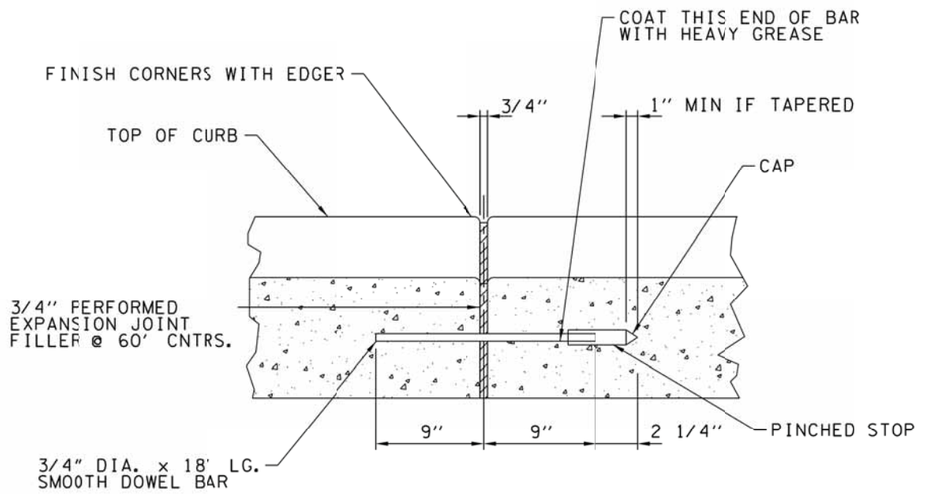
NOTES:

1. EXPANSION JOINTS SHALL BE CONSTRUCTED ACCORDING TO EXPANSION JOINT DETAIL.
2. CONSTRUCTION JOINTS SHALL BE SAWCUT TO A DEPTH OF $^1/_2$ THICKNESS OF CURB EVERY 10 FEET (MAXIMUM).
3. CONCRETE SHALL BE IDOT CLASS PV 3500 PSI@ 14 DAYS, 3" SLUMP, 6% AIR ENTRAINED.
4. PROTECTIVE COAT SHALL BE APPLIED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATION 420.18 AS DIRECTED BY THE VILLAGE.
5. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

CONTACT MR. SHAWN HURTIG, PROJECT MANAGER AT (847) 658-2700 X 4403
OR SHAWNHURTIG@ALGONQUIN.ORG FOR APPROVED PRODUCT LIST

B6.12 CURB & GUTTER	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 8/13/2015
Approved By: Shawn M. Hurtig	Effective Date 05/01/2015

VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT
110 MEYER DRIVE
ALGONQUIN, IL 60102-2442
PH: 847-658-2754
FX: 847-658-2759
WWW.ALGONQUIN.CRG



NOTES:

1. ALL EXPANSION JOINTS SHALL BE PROVIDED WITH (2) 3/4" DIA. X 18" LONG COATED SMOOTH DOWEL BAR CONFORMING TO ARTICLE 442.06 OF THE IDOT STANDARD SPECIFICATIONS. THE DOWEL BAR SHALL BE FITTED WITH A CAP HAVING A PINCHED STOP THAT WILL PROVIDE 1" OF EXPANSION.
2. EXPANSION JOINTS SHALL BE CONSTRUCTED AT 60 FOOT INTERVALS, AT ALL POINTS OF TANGENCY, AT THE END OF EACH DAYS PLACEMENT, OR 5' ON EITHER SIDE OF A STRUCTURE CASTING THAT FALLS WITHIN THE CURB LINE.

CURB EXPANSION JOINT	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 8/13/2015
Approved By: Shawn M. Hurtig	Effective Date 05/01/2015

FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\D161E49-sht-lad-01.dgn	USER NAME = pnajarro	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

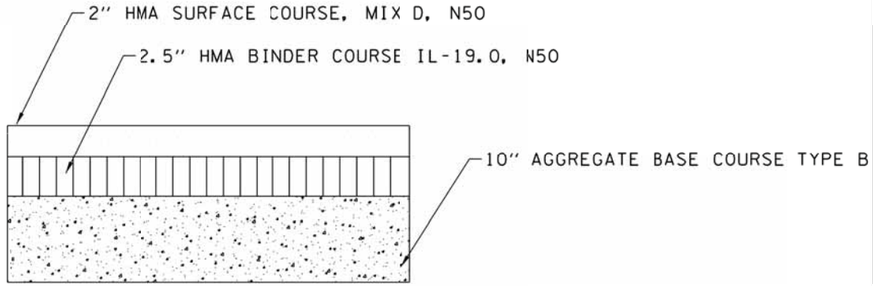
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
LOCAL AGENCY DETAILS

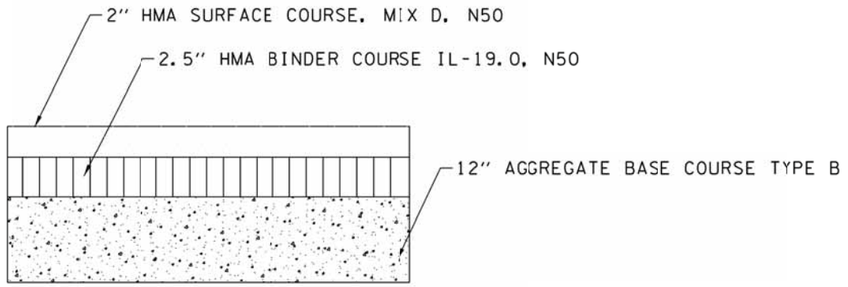
SCALE: | SHEET OF SHEETS | STA. | TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	44
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

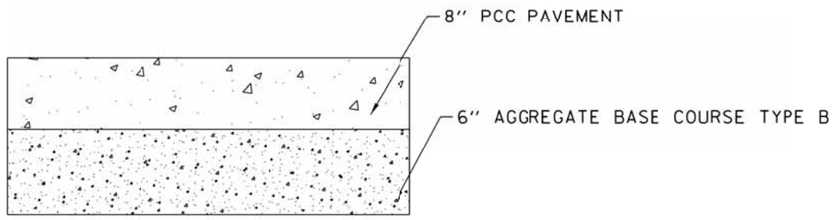
VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT
110 MEYER DRIVE
ALGONQUIN, IL 60102-2442
PH: 847-658-2754
FX: 847-658-2759
WWW.ALGONQUIN.ORG



TYPICAL LOT DESIGN



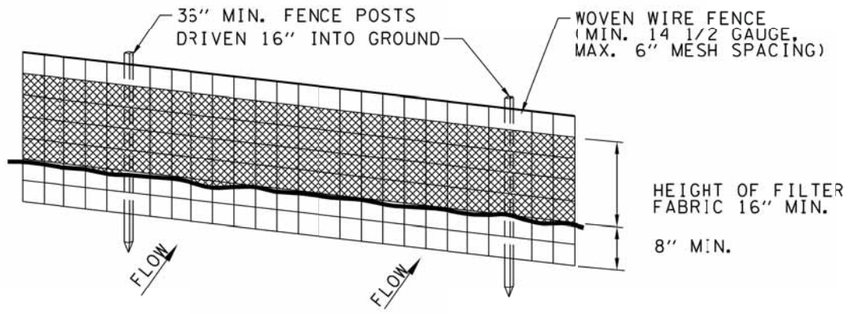
HEAVY DUTY/TRUCK TRAFFIC AREAS



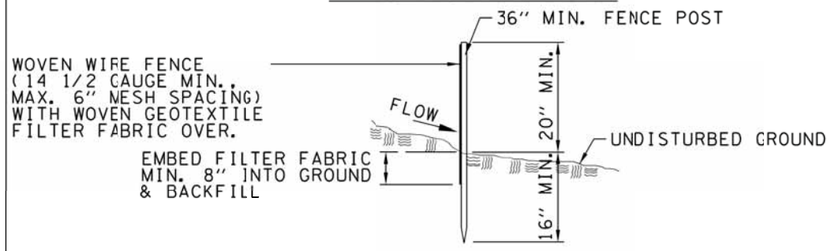
LOADING DOCK AREA

PARKING LOT PAVEMENTS	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 8/13/2015
Approved By: Shawn M. Hurtig	Effective Date 05/01/2015

VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT
110 MEYER DRIVE
ALGONQUIN, IL 60102-2442
PH: 847-658-2754
FX: 847-658-2759
WWW.ALGONQUIN.ORG



PERSPECTIVE VIEW



SECTION

NOTES:

1. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE OR WHEN COLLECTED SOIL HAS REACHED A DEPTH OF 1/2 THE FABRIC HEIGHT.
5. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

SILTATION CONTROL FENCE	
Village of Algonquin Specifications & Details Guide	
Drawn By: CBBEL	Revision Date 8/13/2015
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CONTACT MR. SHAWN HURTIG, PROJECT MANAGER AT (847) 658-2700 X 4403
OR SHAWNHURTIG@ALGONQUIN.ORG FOR APPROVED PRODUCT LIST

FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\D161E49-sht-lad-01.dgn	USER NAME = pnajarro	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
LOCAL AGENCY DETAILS

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	45
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

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110 MEYER DRIVE
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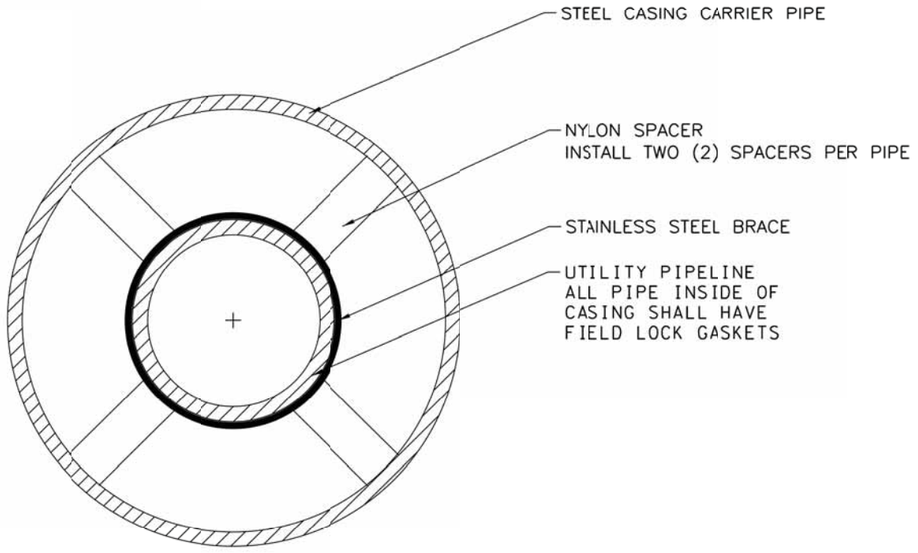

NOTES:

1. CASING PIPE SHALL BE MADE OF STEEL OF MINIMUM THICKNESS OF $^{1}/_{2}$ INCH WITH MINIMUM YIELD STRENGTH OF 35,000 PSI CONFORMING TO ASTM A139 GRADE A WITH CONTINUOUS FIELD WELDED BUTT JOINTS IN CONFORMANCE WITH AWWA C206.
2. ENDS OF CASING PIPE SHALL HAVE A PREFORMED RUBBER SEAL.
3. ALL CARRIER PIPES INSIDE OF CASING SHALL HAVE RESTRAINED JOINTS.
4. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

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CASING PIPE

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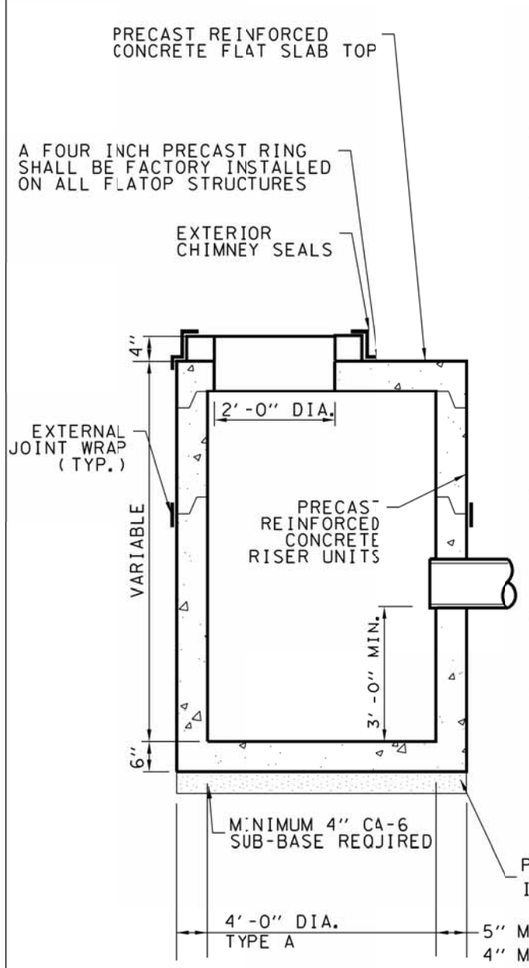

NOTES:

1. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 4".
2. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
3. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
4. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
5. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION EXCEPT FOR CATCH BASINS IN YARD AREAS USING TYPE 8 FRAMES.
6. MANUFACTURER AND MODEL NUMBER FOR FRAMES AND GRATES SHALL BE AS SPECIFIED IN THE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST.
7. PIPE CONNECTIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE WITH THE USE OF MACHINE-CORED OPENINGS. THE INTERNAL AND EXTERNAL PIPE PENETRATIONS SHALL BE TUCKPOINTED.

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CATCH BASIN TYPES A & B

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		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
LOCAL AGENCY DETAILS

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	46
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT
110 MEYER DRIVE
ALGONQUIN, IL 60102-2442
PH: 847-658-2754
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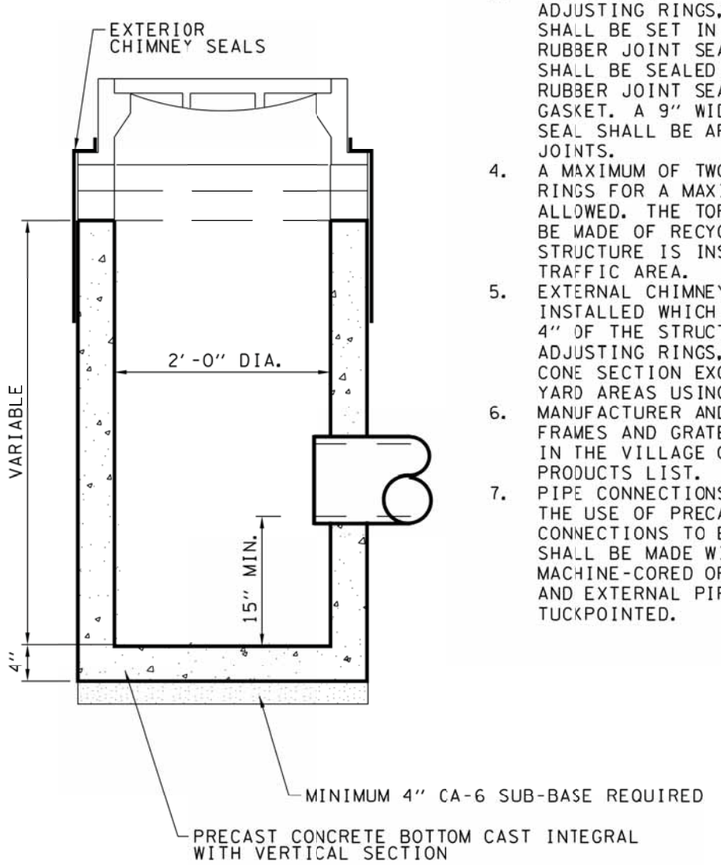

NOTES:

1. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 4".
2. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
3. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
4. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
5. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION EXCEPT FOR CATCH BASINS IN YARD AREAS USING TYPE 8 FRAMES.
6. MANUFACTURER AND MODEL NUMBER FOR FRAMES AND GRATES SHALL BE AS SPECIFIED IN THE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST.
7. PIPE CONNECTIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE WITH THE USE OF MACHINE-CORED OPENINGS. THE INTERNAL AND EXTERNAL PIPE PENETRATIONS SHALL BE TUCKPOINTED.

CONTACT MR. SHAWN HURTIG, PROJECT MANAGER AT (847) 658-2700 X 4403
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SPECIAL USE ONLY	
CATCH BASIN TYPE C	
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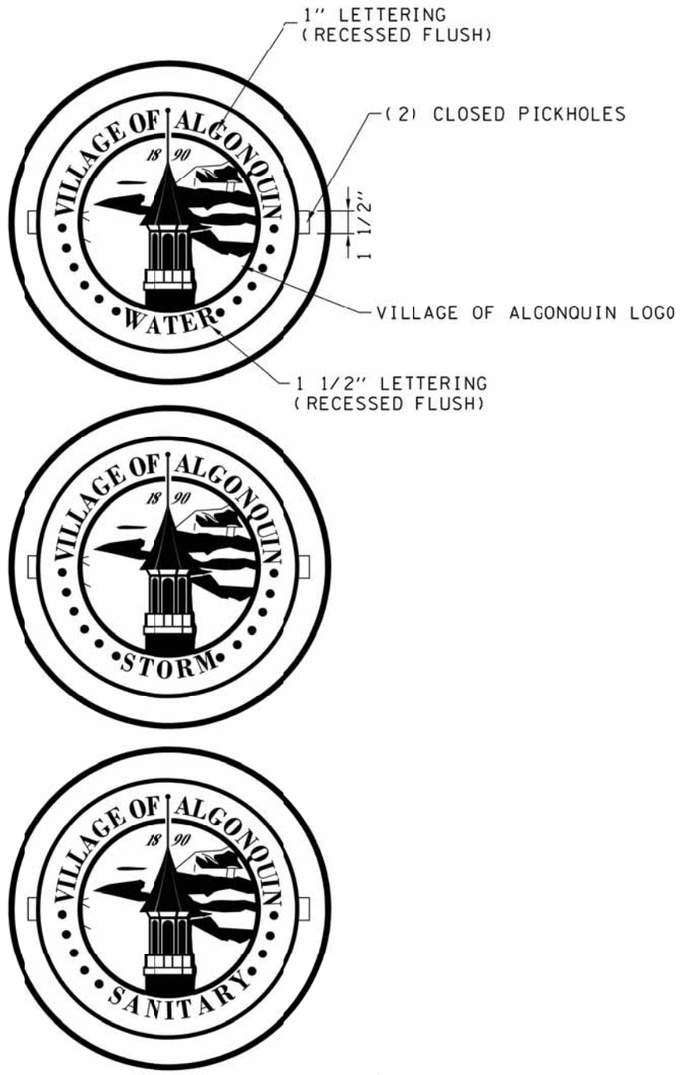

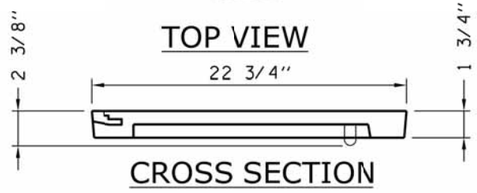

NOTES:

1. ALL LIDS SHALL HAVE SELF-SEALING GASKETS.
2. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

CONTACT MR. SHAWN HURTIG, PROJECT MANAGER AT (847) 658-2700 X 4403
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MANHOLE COVER W/LOGO	
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Approved By: Shawn M. Hurtig	Effective Date 05/01/2015

FILE NAME = N:\ALGONQUIN\070273\070273.00095B\CADD\Sheets\D161E49-sht-lad-01.dgn	USER NAME = pmajerra	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
LOCAL AGENCY DETAILS

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	47
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

VILLAGE OF ALGONQUIN
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110 MEYER DRIVE
ALGONQUIN, IL 60102-2442
PH: 847-658-2754
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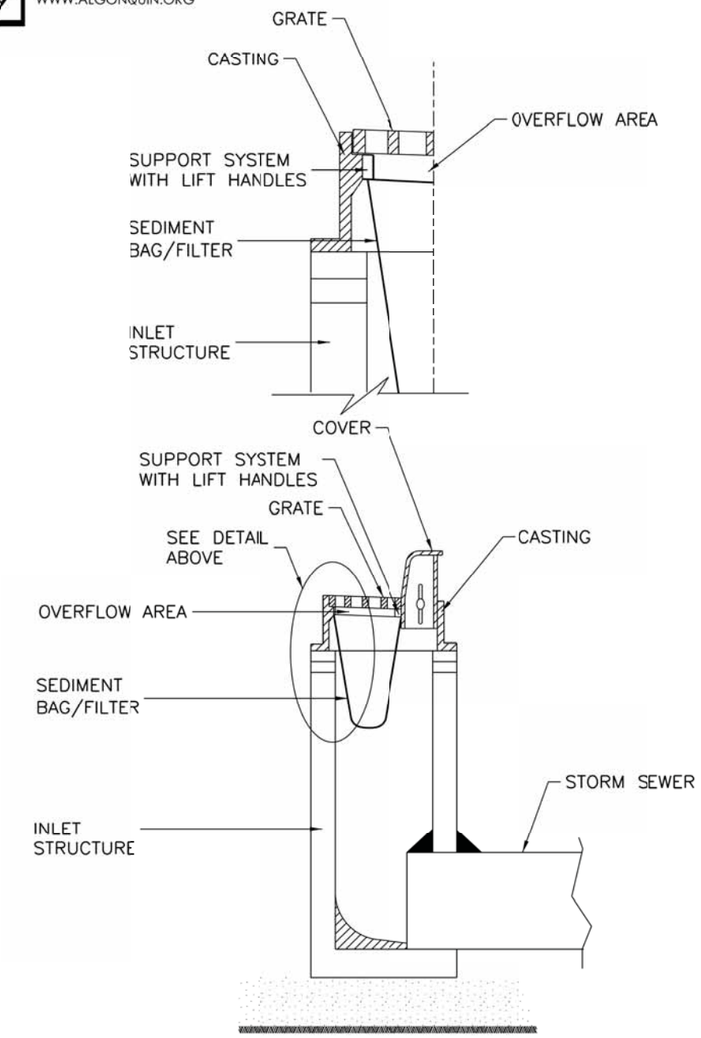

NOTE:

1. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

INLET FILTER PROTECTION

Village of Algonquin Specifications & Details Guide

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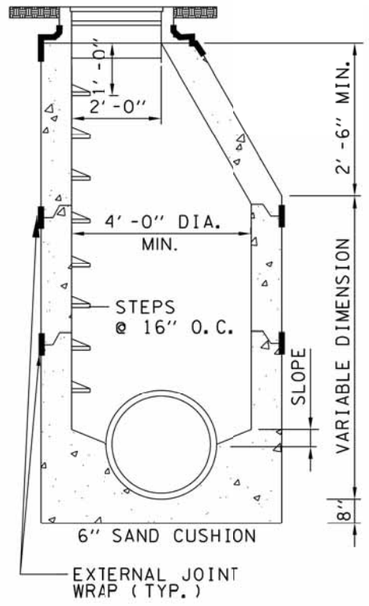
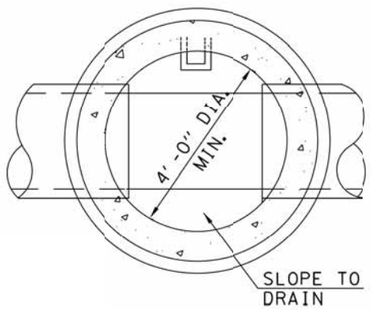


PROFILE VIEW



PLAN VIEW

NOTES:

1. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 5" FOR 4'-0" INSIDE DIAMETER AND 6" FOR 5'-0" INSIDE DIAMETER STRUCTURES.
2. STRUCTURES SHALL BE 4'-0" INSIDE DIAMETER FOR MAIN SEWER 18" DIAMETER AND LESS, AND STRUCTURE DEPTH OF 20' OR LESS. STRUCTURES SHALL BE 5'-0" INSIDE DIAMETER FOR MAIN SEWER 21" DIAMETER AND LARGER, AND STRUCTURE DEPTH MORE THAN 20'.
3. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
4. ALL EXTERIOR SURFACES OF STRUCTURE SHALL HAVE A FACTORY APPLIED BITUMINOUS COATING.
5. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER GASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
6. STRUCTURE STEPS SHALL BE MADE OF STEEL REINFORCED PLASTIC USING AN APPROVED PLASTIC MEETING ASTM D4101, TYPE 11, GRADE 49108, OVER #3 GRADE 60, ASTM AG15 REINFORCING BAR. STEPS SHALL BE AT 16" CENTERS.
7. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
8. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION.
9. STRUCTURE LID SHALL HAVE A 1" CONCEALED PICKHOLE AND HAVE THE WORD "SANITARY" AND VILLAGE LOGO CAST INTO IT.
10. THE RIM ELEVATION FOR STRUCTURES WITHIN THE FLOODPLAIN MUST BE SET 24" ABOVE THE BASE FLOOD ELEVATION. FRAME AND LID MUST BE WATER-TIGHT LOCK DOWN.
11. PIPE CONNECTIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS AND FLEXIBLE MANHOLE COUPLINGS. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE WITH THE USE OF MACHINE-CORED OPENINGS AND FLEXIBLE MANHOLE COUPLINGS.
12. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND MODEL NUMBERS.

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SANITARY MANHOLE

Village of Algonquin Specifications & Details Guide

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		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
LOCAL AGENCY DETAILS

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	48
		CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

VILLAGE OF ALGONQUIN
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PH: 847-658-2754
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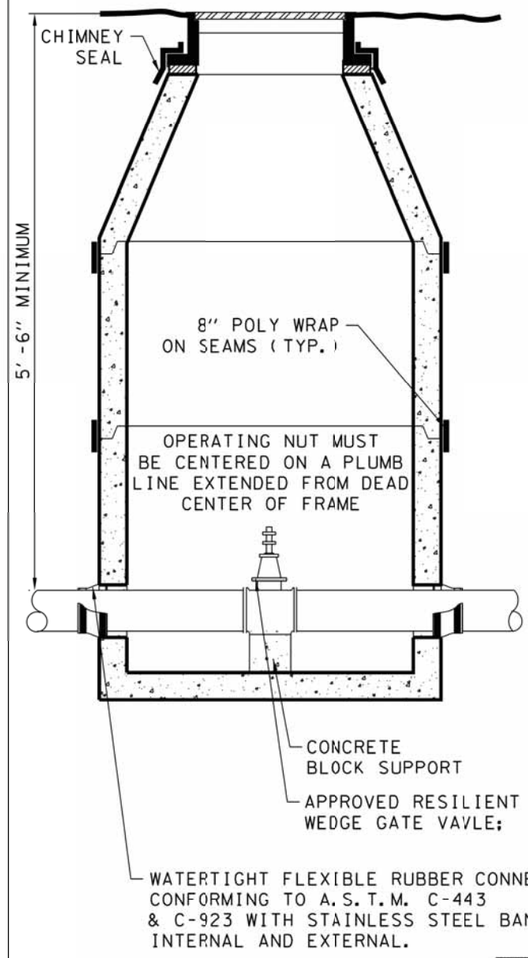

NOTES:

1. ALL VALVES MUST BE ENCLOSED IN A VAULT UNLESS OTHERWISE SPECIFIED.
2. STRUCTURE SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM WALL THICKNESS OF 5" FOR 4'-0" INSIDE DIAMETER AND 6" FOR 5'-0" INSIDE DIAMETER STRUCTURES.
3. STRUCTURE SHALL BE 4'-0" INSIDE DIAMETER FOR 8" VALVES AND LESS. STRUCTURE SHALL BE 5'-0" INSIDE DIAMETER FOR 10" VALVES AND LARGER.
4. STRUCTURE BOTTOMS SHALL BE PRECAST REINFORCED CONCRETE WITH FIRST VERTICAL SECTION PRECAST INTEGRALLY WITH IT.
5. ALL EXTERIOR SURFACES OF STRUCTURE SHALL HAVE A FACTORY APPLIED BITUMINOUS COATING.
6. ALL JOINTS BETWEEN PRECAST ELEMENTS, ADJUSTING RINGS, AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT. BARREL SECTIONS SHALL BE SEALED USING EITHER A BUTYL RUBBER JOINT SEALANT OR A RUBBER CASKET. A 9" WIDE POLYETHYLENE EXTERNAL SEAL SHALL BE APPLIED TO ALL STRUCTURE JOINTS.
7. OPERATING NUT OF VALVE MUST BE CENTERED ON A PLUMB LINE EXTENDED FROM CENTER OF FRAME OPENING.
8. A MAXIMUM OF TWO (2) ADJUSTMENT RINGS FOR A MAXIMUM ADJUSTMENT OF 8" IS ALLOWED. THE TOP ADJUSTMENT RING SHALL BE MADE OF RECYCLED RUBBER WHEN THE STRUCTURE IS INSTALLED IN A PAVED TRAFFIC AREA.
9. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED WHICH SHALL CAPTURE AT LEAST 4" OF THE STRUCTURE FRAME, ALL OF THE ADJUSTING RINGS, AND 4" OF THE UPPER CONE SECTION.
10. STRUCTURE LID SHALL HAVE A TWO, 1" CONCEALED PICKHOLES AND HAVE THE WORD "WATER" AND VILLAGE LOGO CAST INTO IT.
11. THE RIM ELEVATION FOR STRUCTURES WITHIN THE FLOODPLAIN MUST BE SET 24" ABOVE THE BASE FLOOD ELEVATION. FRAME AND LID NUST BE WATER-TIGHT LOCK DOWN.
12. PIPE PENETRATIONS SHALL BE MADE WITH THE USE OF PRECAST OPENINGS AND FLEXIBLE RUBBER CONNECTORS.
13. SEE VILLAGE OF ALGONQUIN APPROVED PRODUCTS LIST FOR MANUFACTURER AND NODEL NUMBERS.

VALVE AND VAULT

Village of Algonquin Specifications & Details Guide

Drawn By: CBBEL	Revision Date 8/13/2015
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		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN ST BRIDGE OVER CRYSTAL CREEK
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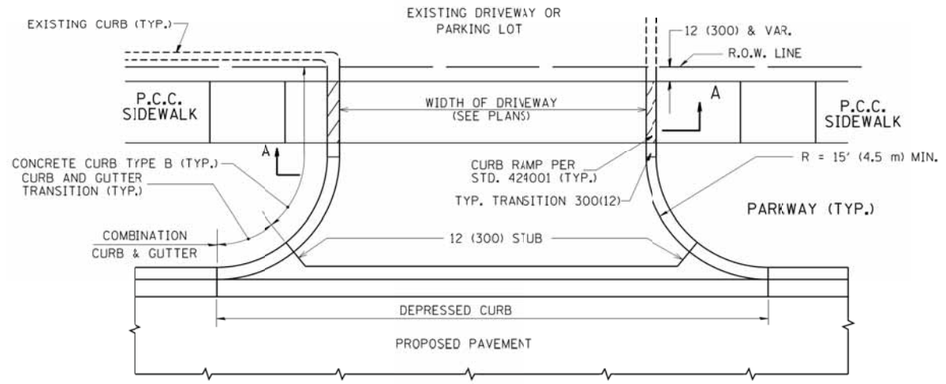
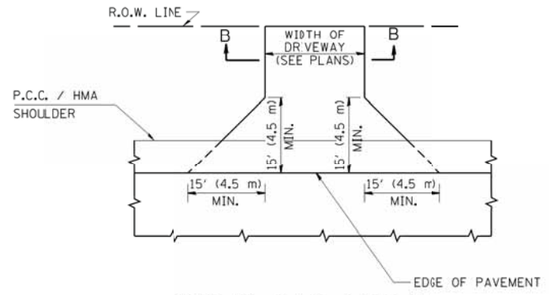
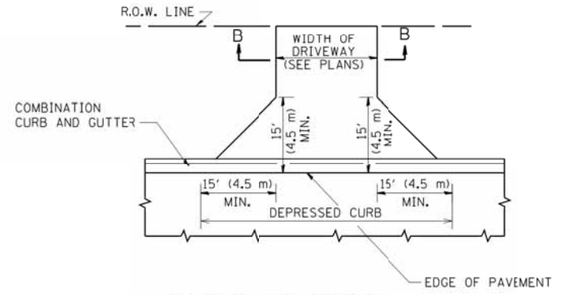
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	49
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		



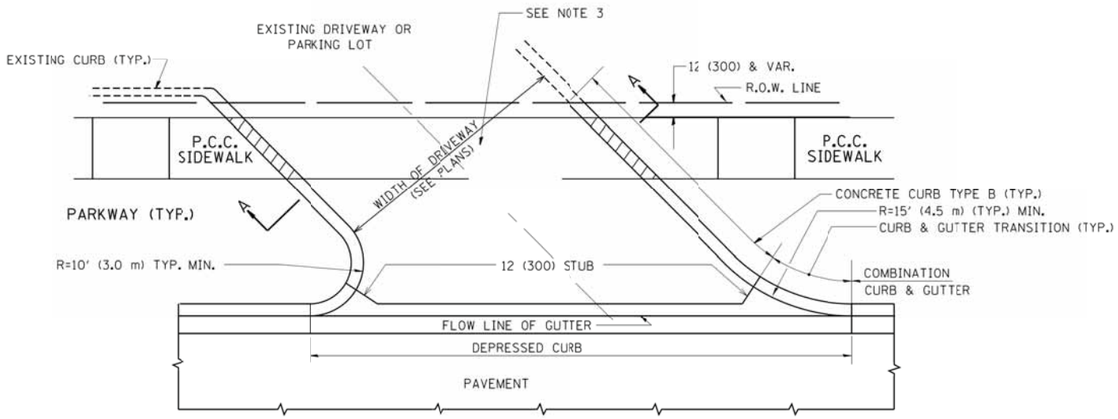
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



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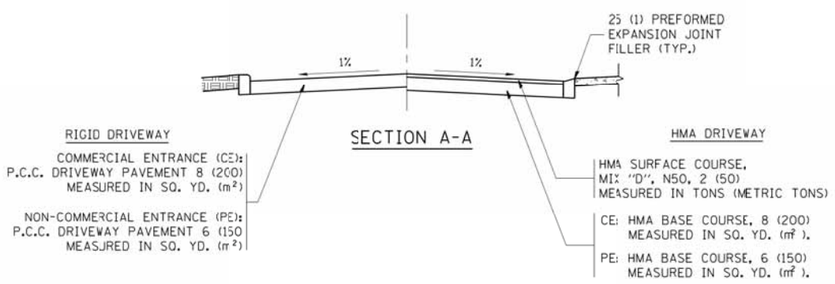
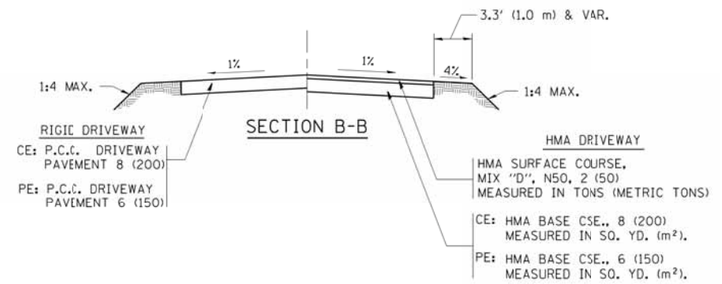


SECTION A-A



SECTION B-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. (m^2).

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 EACK 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.

FILE NAME = c:\pw_work\pwidot\leysa\d0108315\bd01.dgn	USER NAME = leysa	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

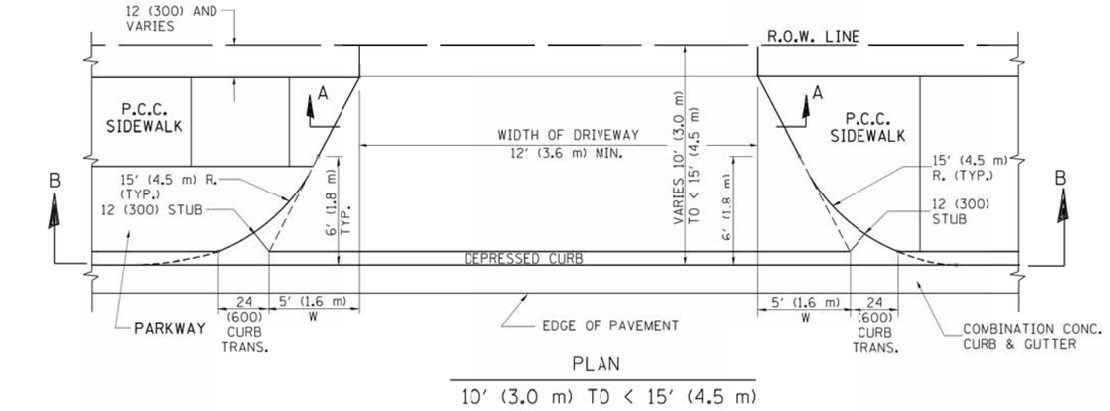
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

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

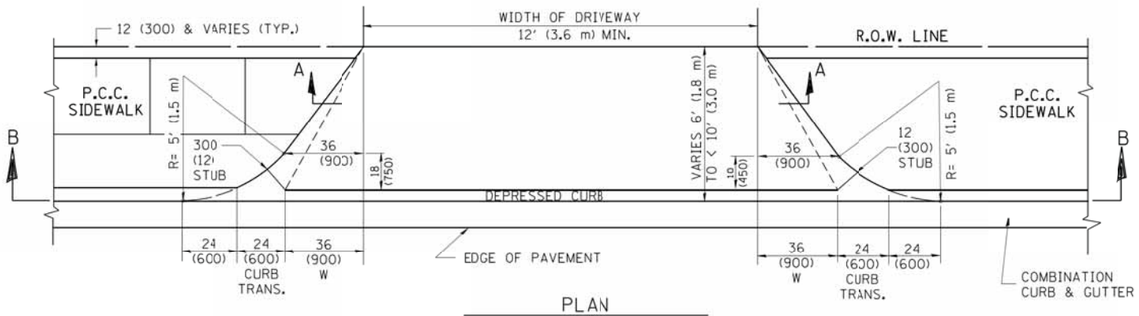
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	50
	BD0156-07 (BD-01)	CONTRACT NO. 61E49		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

bd01.dgn 9/6/2011 11:50:24 AM User=leysa



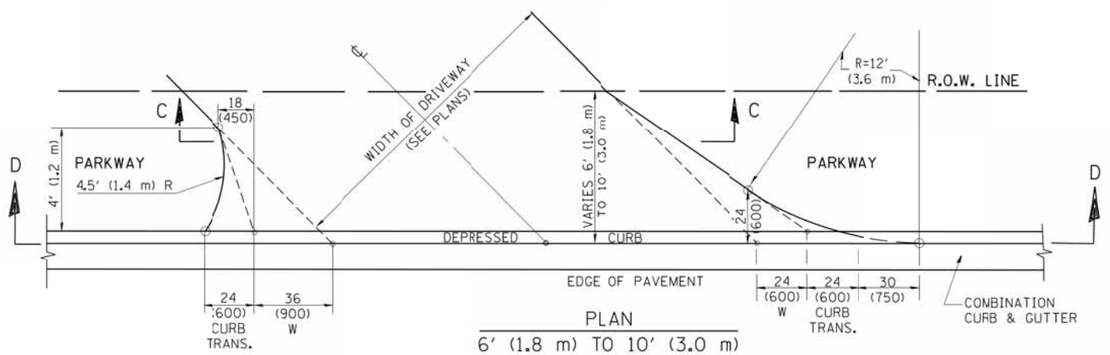
PLAN

10' (3.0 m) TO < 15' (4.5 m)



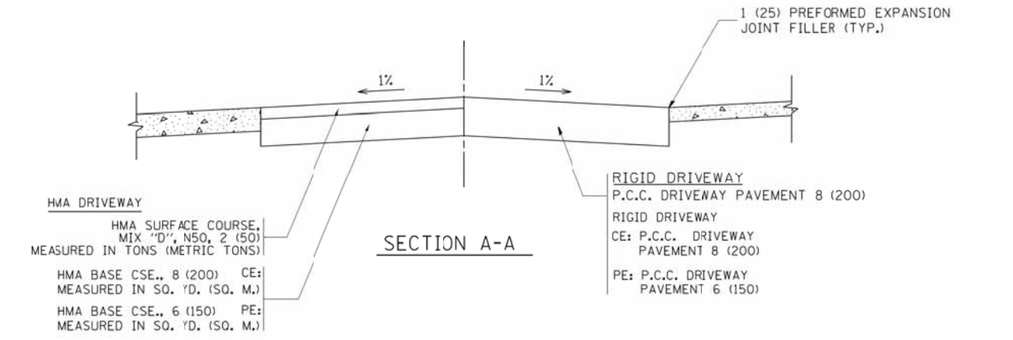
PLAN

6' (1.8 m) TO < 10' (3.0 m)

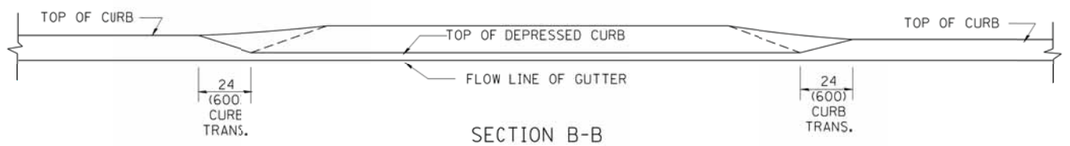


PLAN

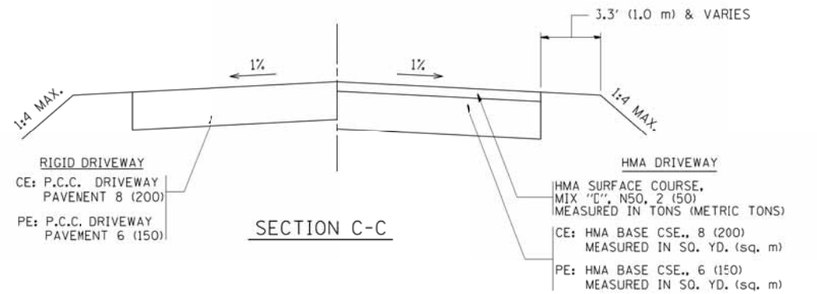
6' (1.8 m) TO 10' (3.0 m)



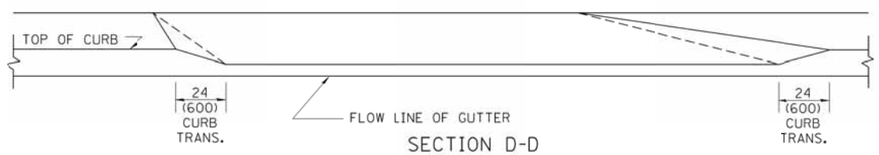
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

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 ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF 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.

THE 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.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

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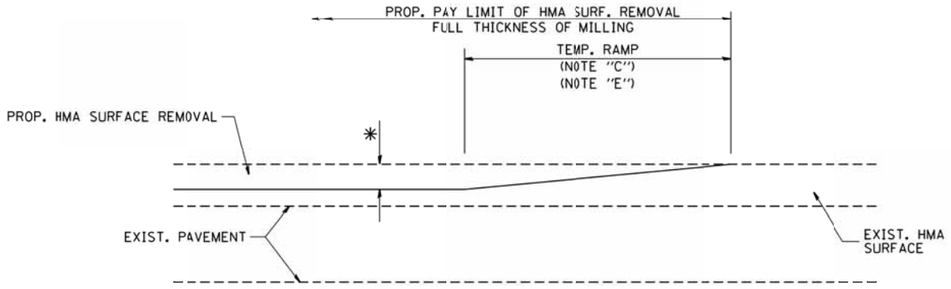
		DRAWN -	REVISED - P. LaFLEUR 04-15-03
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 10/28/2011	DATE - 11-06-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

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

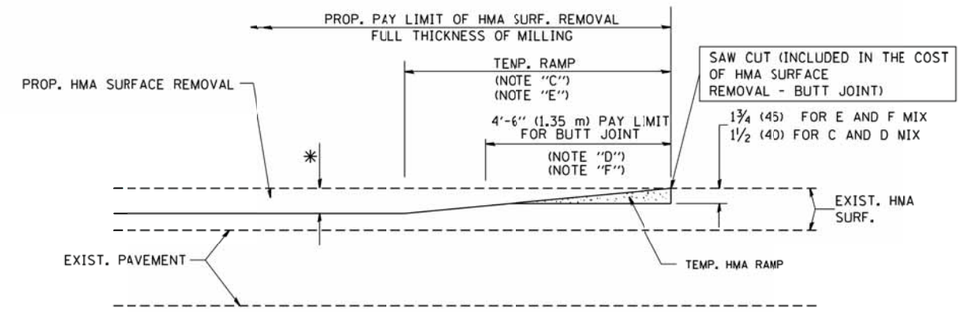
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	51
	BD400-02 (BD-02)	CONTRACT NO. 61E49		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

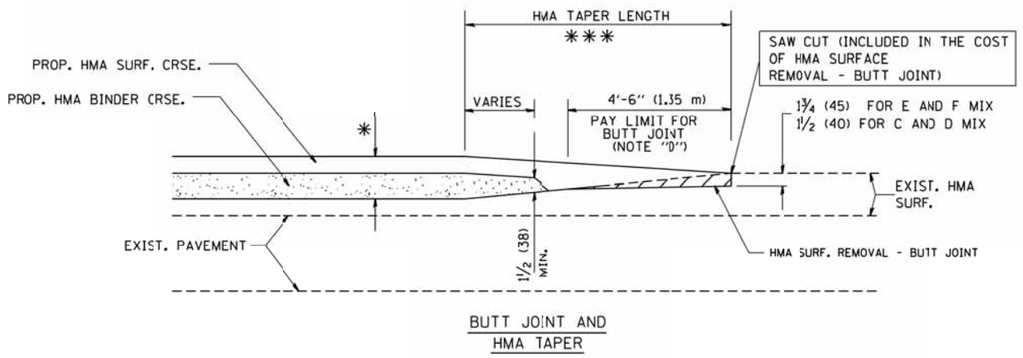


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

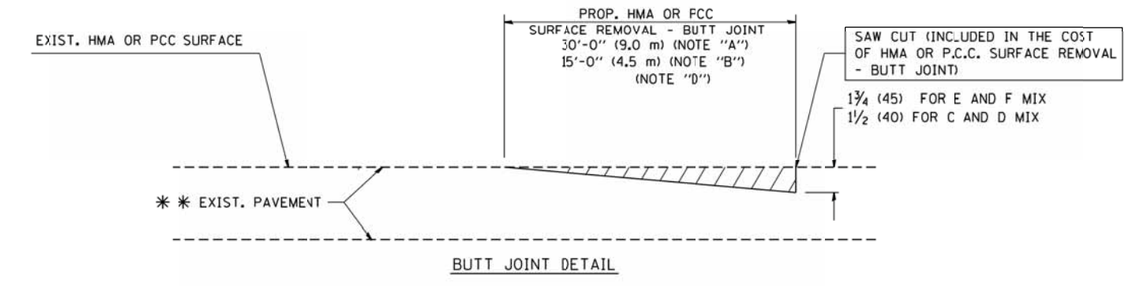
OPTION 2

TYPICAL TEMPORARY RAMP

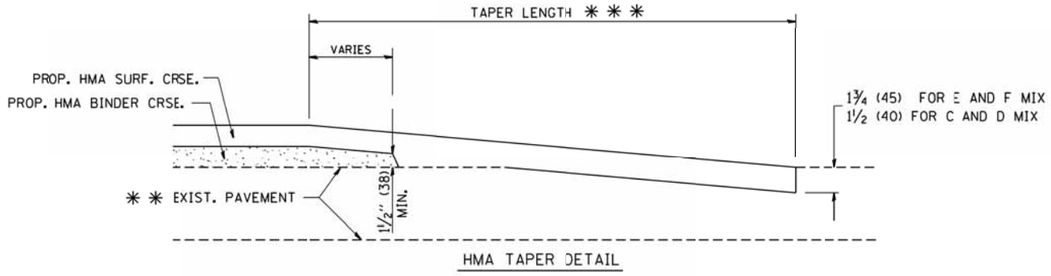


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER 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.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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".

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

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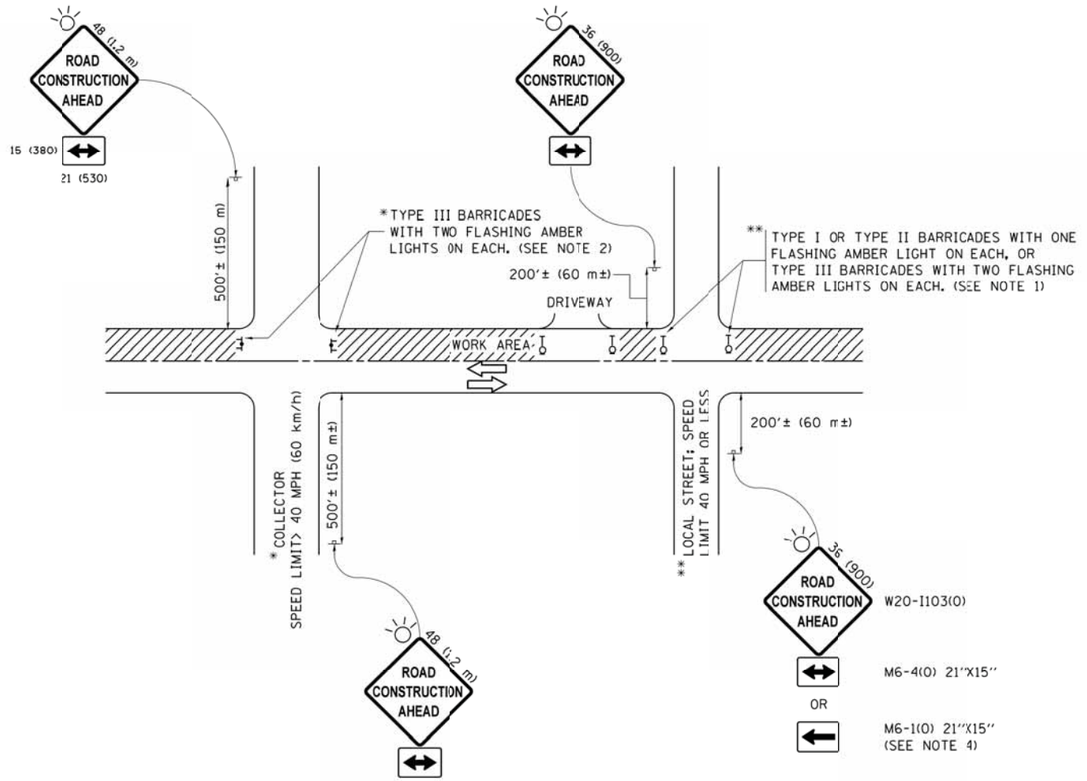
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

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

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	52
	BD400-05 BD32	CONTRACT NO. 61E49		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

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

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\CADData\CADsheets\tc10.dgn	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
		DRAWN	REVISED -T. RAMMACHER 01-06-00
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

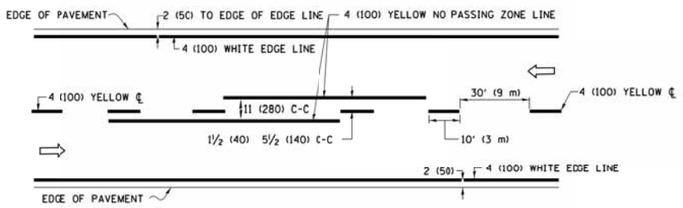
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

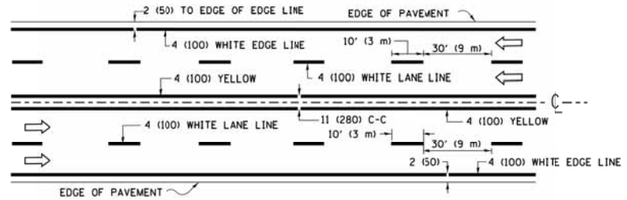
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	53
	TC-10	CONTRACT NO. 61E49		
	ILLINOIS FED. AID PROJECT			

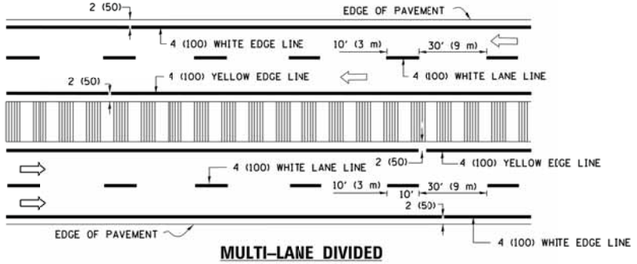
tc10.dgn 9/15/2016 12:40:48 PM Users\footemj



2–LANE ROADWAY

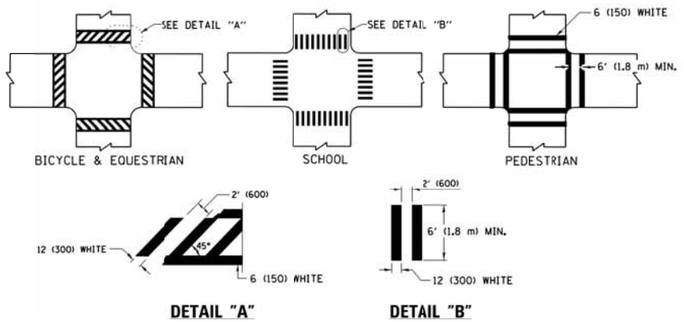


MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

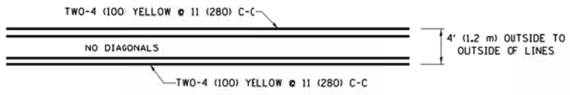
TYPICAL LANE AND EDGE LINE MARKING



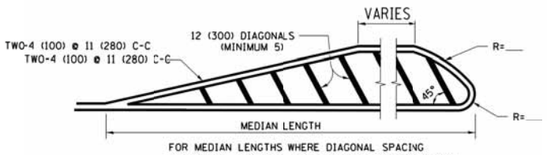
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

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



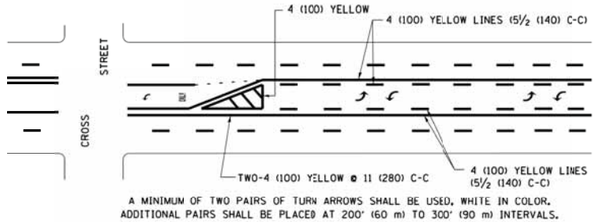
4' (1.2 m) WIDE MEDIANS ONLY



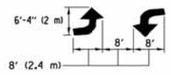
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

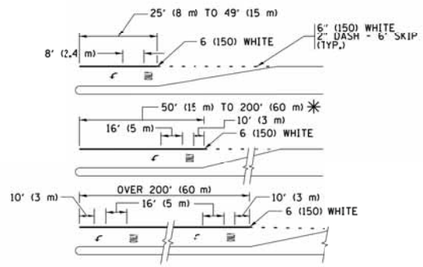


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

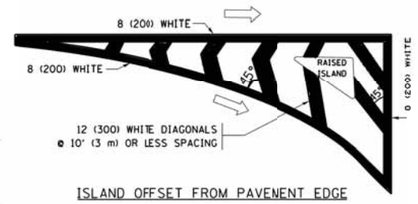


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m²) ⮈ AREA = 20.8 SQ. FT. (1.9 m²)

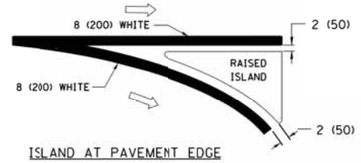
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

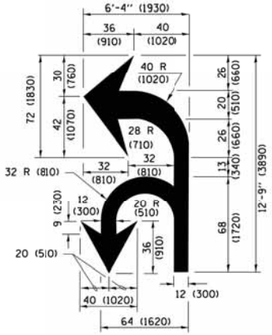


ISLAND OFFSET FROM PAVEMENT EDGE

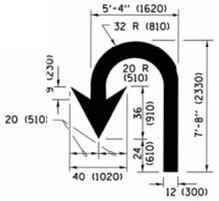


ISLAND AT PAVEMENT EDGE

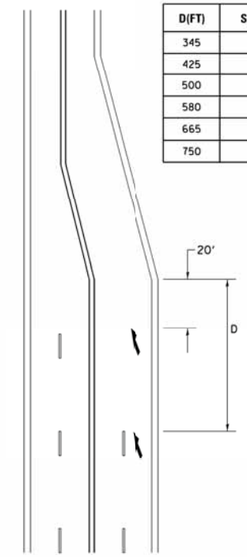
TYPICAL ISLAND MARKING



COMBINATION LEFT AND U–TURN



U–TURN



LANE REDUCTION TRANSITION

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

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 ⊘ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ⊘ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 ⊘ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⊘ 6 (150) 12 (300) ⊘ 45° 12 (300) ⊘ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK. IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⊘ 4 (100) WITH 12 (300) DIAGONALS ⊘ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⊘ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m2)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) ⊘ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\DRAWN\CADData\CADsheets\c13.dgn Default	USER NAME = footemj PLOT SCALE = 50.000 ' / in. PLOT DATE = 4/13/2016	DESIGNED - EVERS CHECKED - DATE - 03-19-90	REVISED - C. JUCIUS 09-09-09 REVISED - C. JUCIUS 07-01-13 REVISED - C. JUCIUS 12-21-15 REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	54
	TC-13	CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		

c13.dgn 4/13/2016 2:04:04 PM User=footemj

ROUTE MARKERS

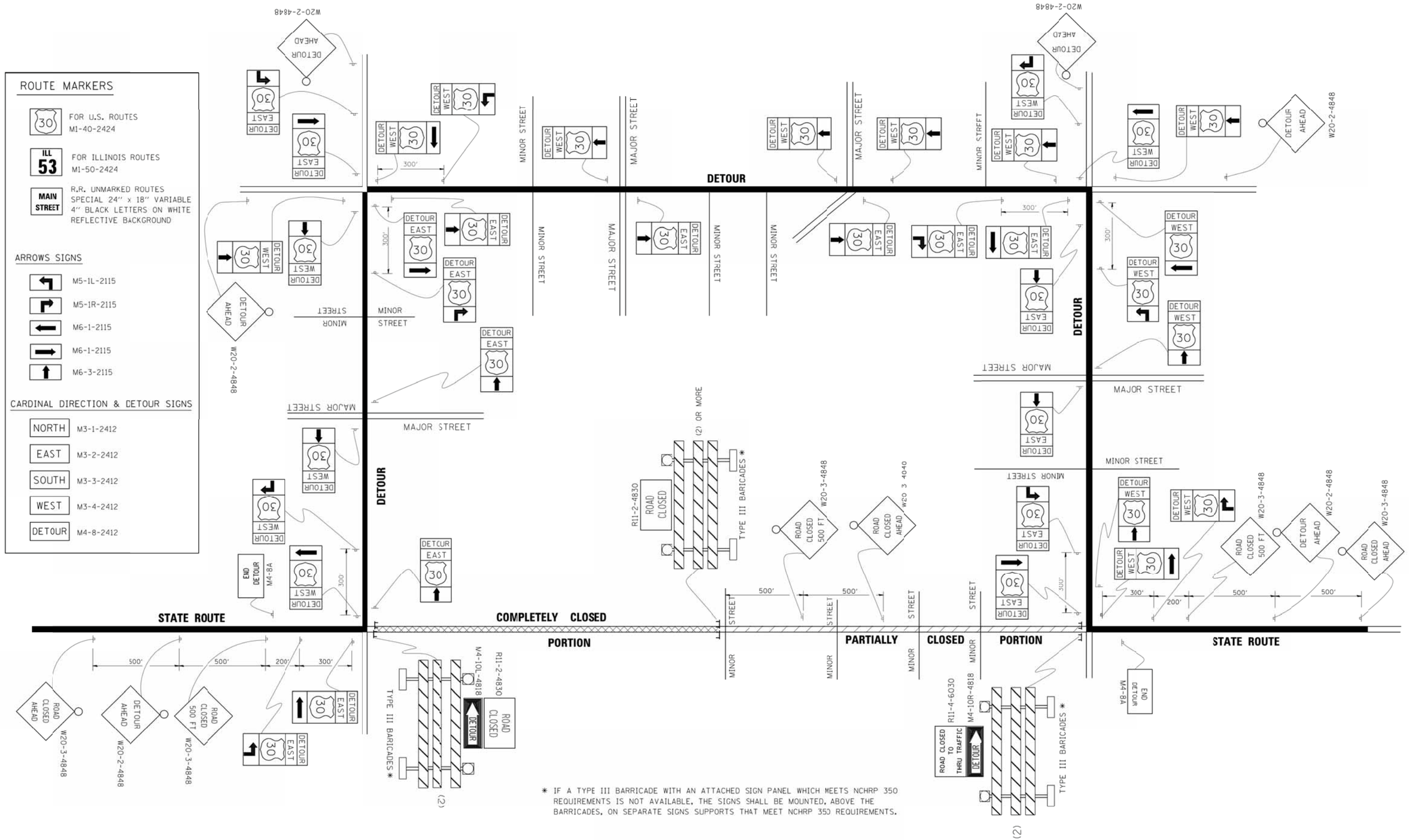
- 30 — FOR U.S. ROUTES M1-40-2424
- ILL 53 — FOR ILLINOIS ROUTES M1-50-2424
- MAIN STREET — R.R. UNMARKED ROUTES SPECIAL 24" x 18" VARIABLE 4" BLACK LETTERS ON WHITE REFLECTIVE BACKGROUND

ARROWS SIGNS

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

CARDINAL DIRECTION & DETOUR SIGNS

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



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

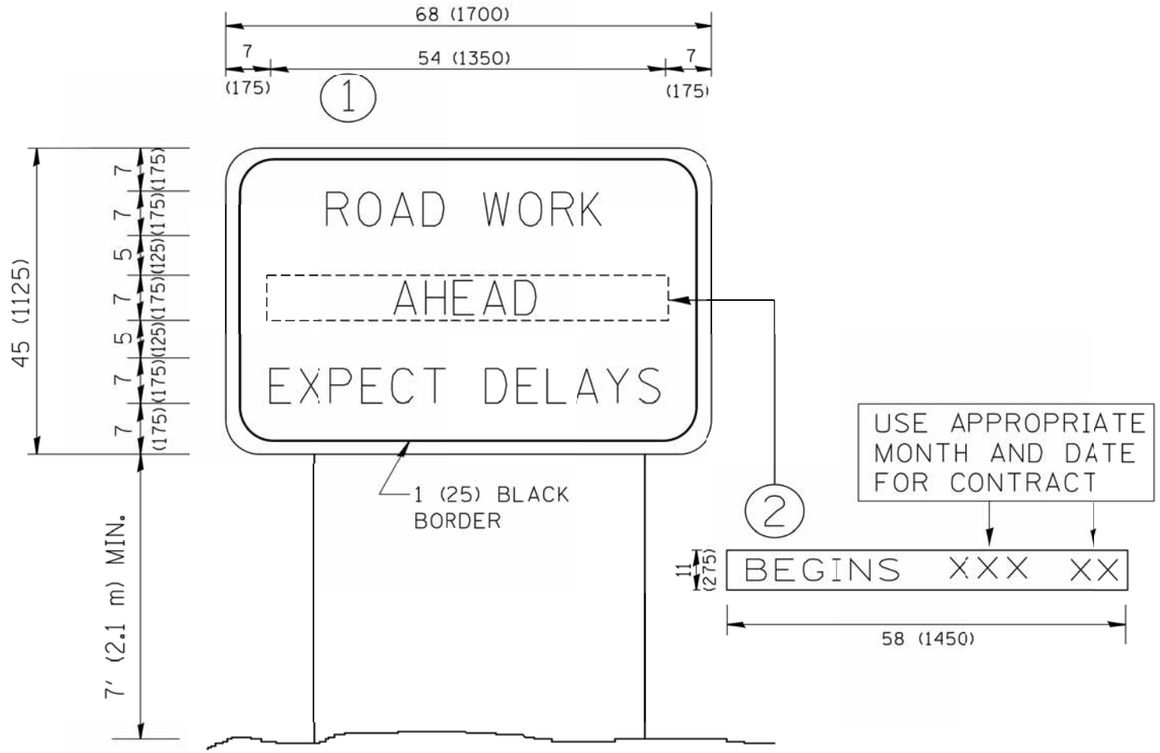
FILE NAME = c:\pw_work\PWIDOT\DRIVAKOSGN\d0108315\tc21.dgn	USER NAME = drivakosgn	DESIGNED -	REVISED - 10-18-02
		DRAWN -	REVISED - R. BORO 09-14-09
	PLOT SCALE = 49.9999 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/14/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING FOR CLOSING STATE HIGHWAYS

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

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	55
	TC-21	CONTRACT NO. 61E49		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

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

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

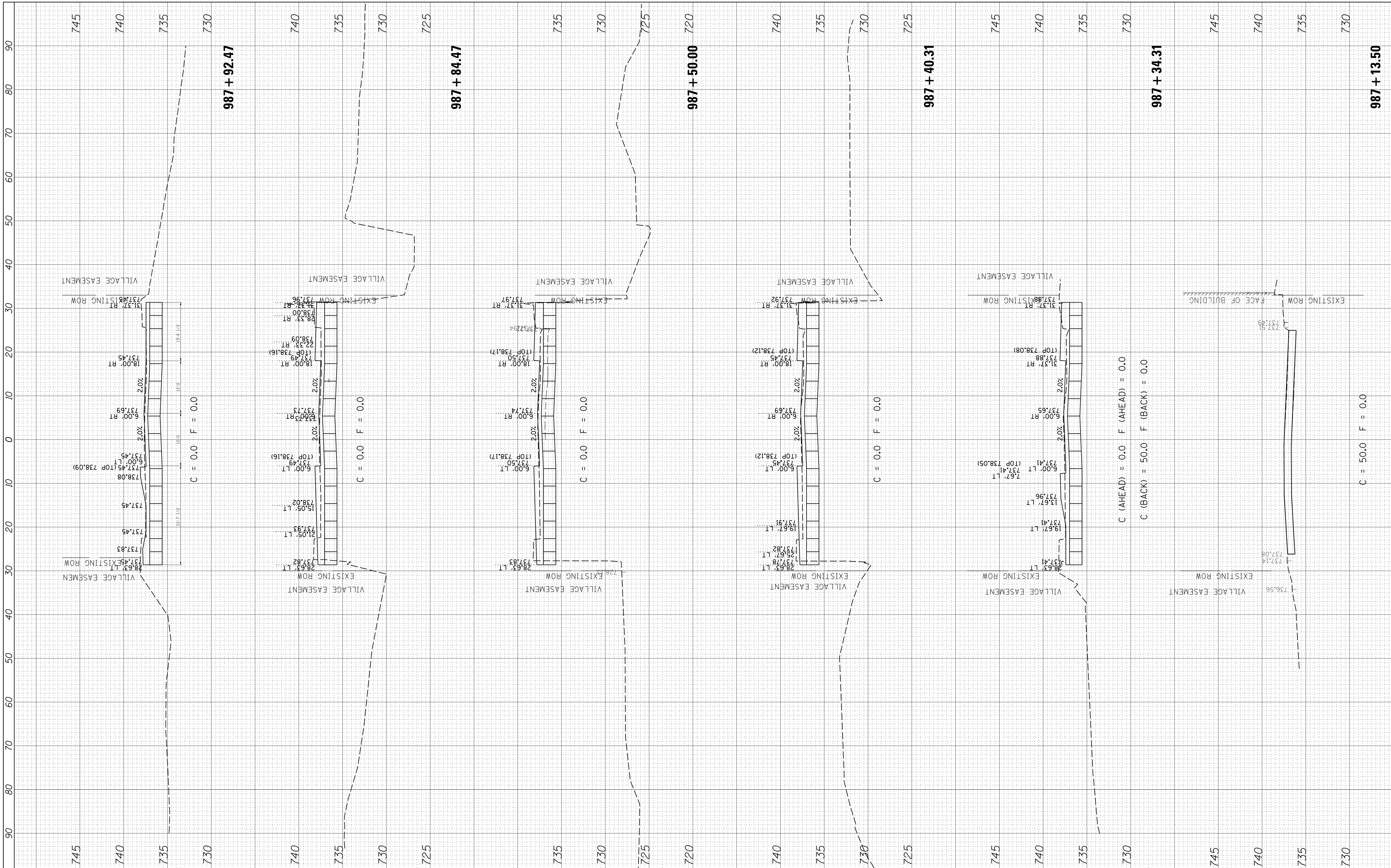
FILE NAME = W:\diststd\22x34\ts22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

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

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	56
	TC-22	CONTRACT NO. 61E49		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

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

FILE NAME =	USER NAME = pnajarro	DESIGNED -	REVISED -
N:\ALGONQUIN\070273\070273.00095B\CADD_Sheets\	D161E49-sht-xs-01.dgn	DRAWN -	REVISED -
	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN STREET – CROSS SECTIONS

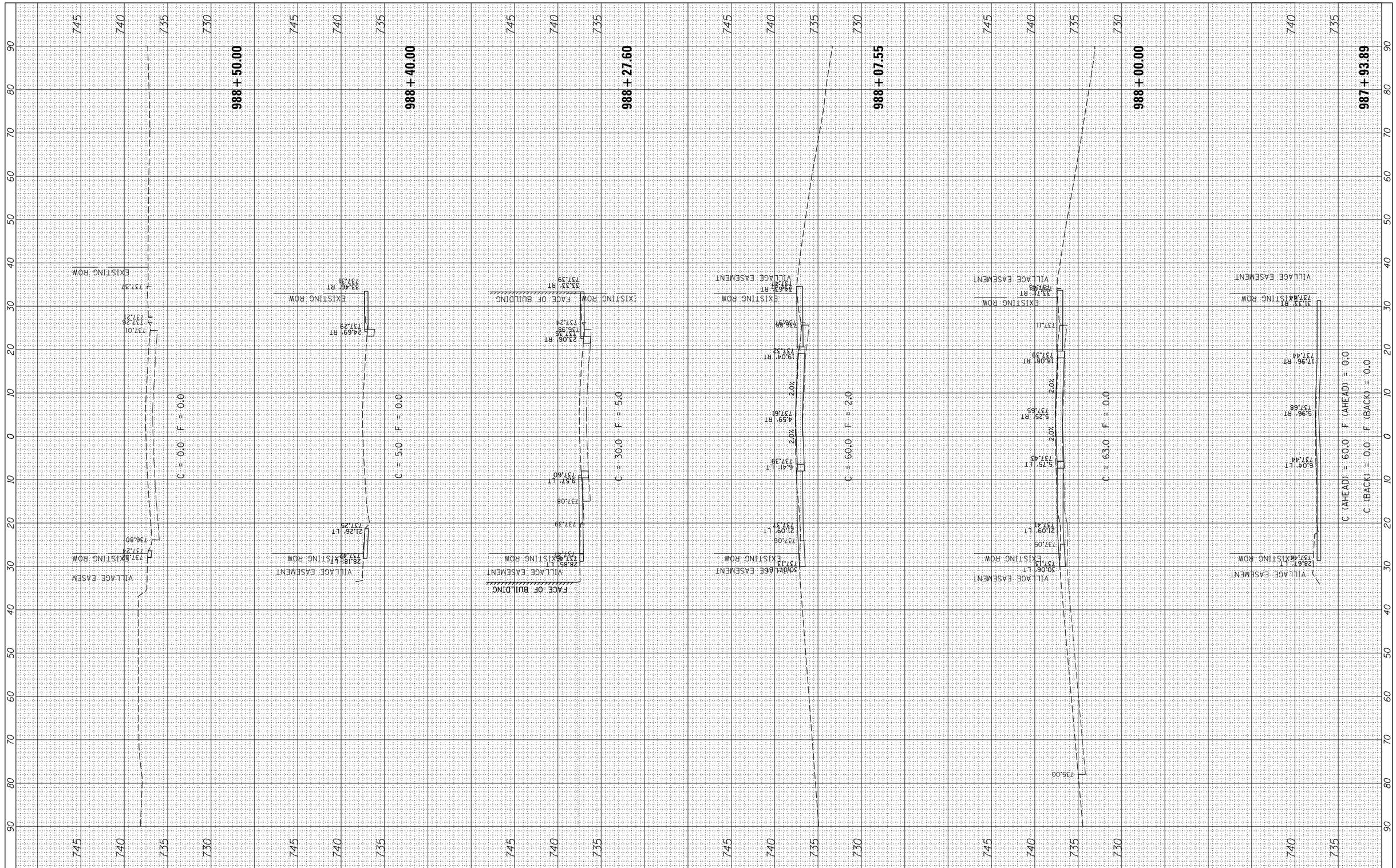
SCALE: 10' | SHEET OF SHEETS | STA. 987+34.31 TO STA. 987+93.89

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	57
		CONTRACT NO. 61E49		

ILLINOIS FED. AID PROJECT

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

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



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	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 1/10/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN STREET – CROSS SECTIONS

SCALE: 10' | SHEET OF SHEETS | STA. 988+00.00 | TO STA. 988+50.00

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4560	16-00090-01-BR	MCHENRY	58	58
		CONTRACT NO. 61E49		
		ILLINOIS FED. AID PROJECT		