11-18-11 LETTING ITEM 078

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	1
FED ROAD DIST No. 1	ILLINOIS	CONTRACT No. 60135		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

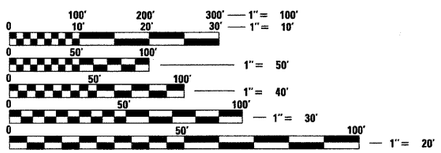
FAP 339 – IL ROUTE 62 (ALGONQUIN ROAD)
SECTION: 116 Y–1–R–1
PROJECT NO: ACNHF-0339(029)
EASTINGS WAY TO PENNY ROAD
ADDITIONAL LANES, RETAINING WALLS, RECONSTRUCTION & VERTICAL REALIGNMENT
COOK COUNTY
C–91–022–10

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA:

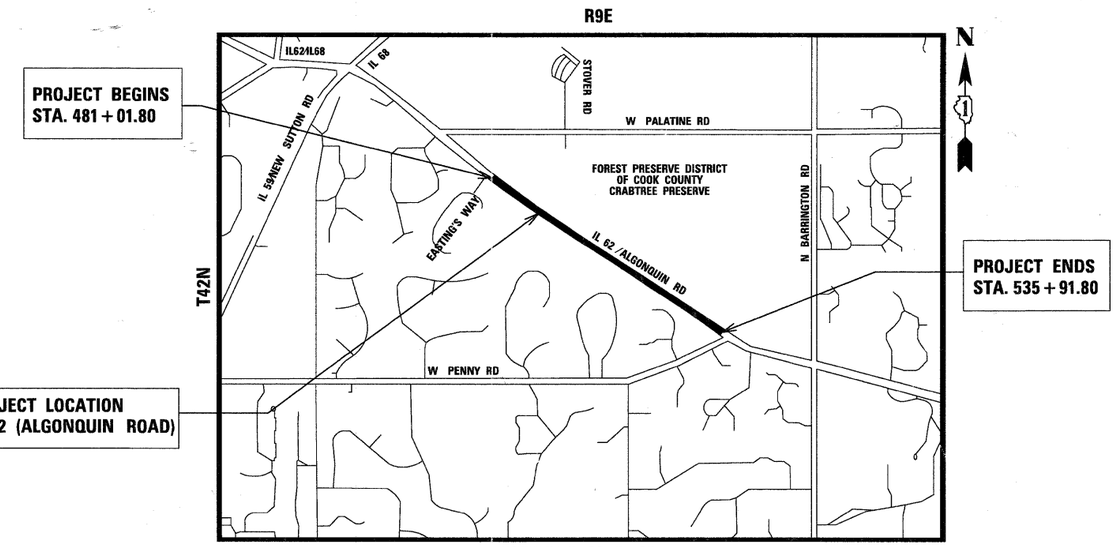
EXISTING ADT IL 62 (ALGONQUIN ROAD) 25000 (2003)
POSTED SPEED = 45 MPH

PROJECT IS LOCATED IN THE VILLAGE OF SOUTH BARRINGTON



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.

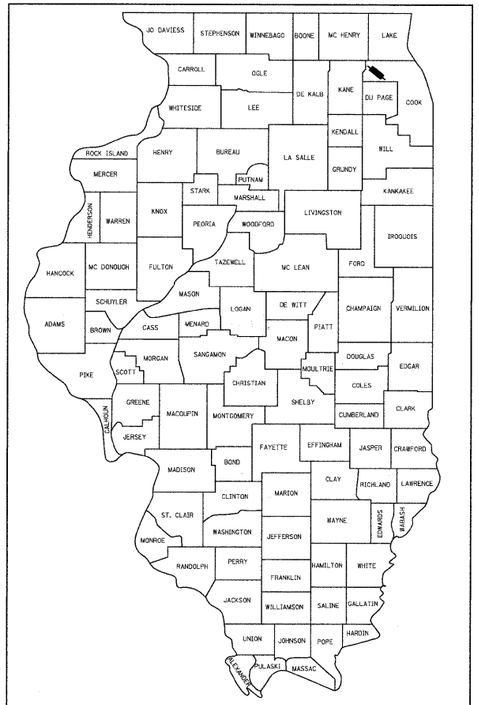
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1–800–892–0123 OR 811



SECTIONS 22 & 23
BARRINGTON TOWNSHIP
LOCATION MAP
NOT TO SCALE

GROSS AND NET LENGTH OF PROJECT = 5490.00 FEET = 1.04 MILES

D–91–022–10



LOCATION OF SECTION INDICATED THUS: –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 23 20 11
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 14 20 11
Scott E. Stitt, P.E. /a
acting ENGINEER OF DESIGN AND ENVIRONMENT
October 14 20 11
Christine M. Reed /a
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT MANAGER KIM HARVEY (847) 705–4055
PROJECT ENGINEER SUNG BYUN (847) 705–4288

CONTRACT NO. 60I35

TED W. LACHUS 062-040941 LICENSED PROFESSIONAL ENGINEER STATE OF ILLINOIS

Ted W. Lachus 6-24-2011
TED W. LACHUS, P.E. DATE
EXPIRES 11–30–2011

Primera
100 S. WACKER DRIVE SUITE 700 CHICAGO IL 60606.
P:312–606–0910 F:312–606–0415

INDEX OF SHEETS

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS, WATER, SEWER AND CABLE TELEVISION FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED.)

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ABOVE AND BELOW GROUND UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY, PUBLIC OR PRIVATE, THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

4. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

5. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

6. THE ENGINEER SHALL CONTACT WALTER CZARNY, THE AREA TRAFFIC FIELD ENGINEER, AT (847) 715-8419 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

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

8. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

9. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED THEIR LOCATION.

10. WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED.

11. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGE OF SOUTH BARRINGTON.

12. ALL UTILITY COMPANIES, SCHOOL DISTRICTS, AND LOCAL POLICE AND FIRE DEPARTMENTS SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION.

13. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.

14. ALL RADII ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

15. THE CONTRACTOR SHALL ADHERE TO LIMITS OF RESTORATION SHOWN. AREAS OUTSIDE THESE LIMITS THAT ARE DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE RESTORED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

16. CONCRETE TRUCK WASHOUT SHALL NOT BE DISCHARGED INTO THE SURROUNDING AREAS. THE WASHOUT SHALL BE COLLECTED ONSITE AND TREATED OR DISPOSED OF AT AN APPROVED LOCATION (I.E. THE BATCH PLANT)

17. CONCRETE TRUCK WASHOUT LOCATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR AT THE PRECONSTRUCTION MEETING FOR THE APPROVAL OF THE OWNER AND THE ENGINEER.

18. THIS PROJECT REQUIRES A US ARMY CORPS OF ENGINEERS 404 PERMIT. THE PERMIT ISSUED TO THE DEPARTMENT DOES NOT COVER IN STREAM WORK BY THE CONTRACTOR; THEREFORE AFTER AWARD, THE CONTRACTOR WILL NEED TO COORDINATE AND HAVE HIS WORK PLAN APPROVED BY THE CORPS. GUIDELINES ON ACCEPTABLE IN STREAM WORK TECHNIQUES CAN BE FOUND ON THE CORPS WEBSITE HTTP://WWW.LRC.USACE.ARMY.MIL/

19. POROUS GRANULAR EMBANKMENT, SUBGRADE AND GEOTECHNICAL FABRIC FOR GROUND STABILIZATION HAS BEEN PROVIDED TO REPLACE SOILS WHICH TEND TO BE UNSTABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER. IF UNSUITABLE SOILS ARE ENCOUNTERED THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. THESE LIMITS MAY BE ALTERED BY THE ENGINEER IF FIELD CONDITIONS SO WARRANT. REMOVAL OF THESE UNSUITABLE SOILS SHALL BE PAID FOR AS "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL."

20. THE STATION/OFFSET/ELEVATIONS NOTED FOR THE DRAINAGE STRUCTURES LOCATED WITHIN THE PAVEMENT LIMITS ARE DIMENSIONED TO THE EDGE OF PAVEMENT AND THE STATION/OFFSET/ELEVATIONS NOTED FOR ALL DRAINAGE STRUCTURES LOCATED OUTSIDE THE PAVEMENT ARE DIMENSIONED TO THE CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.

21. WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT.

22. THE CONTRACTOR SHALL DETERMINE WHEN FLAT SLAB TOPS ARE REQUIRED ON ANY CATCH BASINS OR MANHOLES. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE USE OF FLAT SLAB TOPS.

23. ANY TEMPORARY DAMMING OR PUMPING REQUIRED FOR THE EXCAVATIONS FOR THE STORM SEWER OR CULVERT CONNECTIONS SHALL BE INCLUDED IN THE COST OF THE STORM SEWER OR CULVERT BEING CONSTRUCTED.

24. PAY ITEMS FOR "MANHOLE" AND "REMOVE MANHOLE" ARE PROVIDED FOR CONSTRUCTION STAGING OF CULVERT REMOVAL AND REPLACEMENT. THE INTENT IS TO PROVIDE A TEMPORARY STRUCTURE TO PUMP FROM UNTIL TEMPORARY AND PERMANENT SHEET PILE WALLS ARE CONSTRUCTED. REFER TO MOT GENERAL NOTES FOR SUGGESTED CONSTRUCTION SEQUENCE. TWO (2) MANHOLE AND TWO (2) MANHOLE REMOVAL QUANTITIES HAVE BEEN ADDED TO THE PLANS TO ADDRESS THIS ISSUE.

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

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

FILE NAME = ...\D160135-sht-gennotes1.dgn	Primera	DESIGNED RJD	REVISED -
		DRAWN MHL	REVISED -
		CHECKED RJD	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES AND COMMITMENTS

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	2
		CONTRACT NO. 60135		
	ILLINOIS	FED. AID PROJECT		

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

STATE STANDARDS

000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02 AREAS OF REINFORCEMENT BARS
001006 DECIMAL OF AN INCH AND OF A FOOT
280001-05 TEMPORARY EROSION CONTROL SYSTEM
406201-01 MAILBOX TURNOUT
420001-07 PAVEMENT JOINTS
515001-03 NAME PLATE FOR BRIDGES
542101-02 REINFORCED CONCRETE END SECTIONS FOR PIPE CULVERTS 15" THRU 36" DIA. AT RIGHT ANGLES WITH ROADWAY
542301-02 PRECAST REINFORCED CONCRETE FLARED END SECTION
542311-02 GRATING FOR CONCRETE FLARED END SECTION (FOR 24" THRU 54" PIPE)
601101-01 CONCRETE HEADWALL FOR PIPE DRAINS
602001-02 CATCH BASIN TYPE A
602301-03 INLET TYPE A
602401-03 MANHOLE TYPE A
602601-02 FRAME AND LIDS TYPE 1
602701-02 MANHOLE STEPS
604001-02 PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604091-02 FRAME AND GRATE TYPE 24
606001-04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04 PC CONCRETE ISLANDS AND MEDIANS
630001-09 STEEL PLATE BEAM GUARDRAIL
631011-07 TRAFFIC BARRIER TERMINAL, TYPE 2
701006-03 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
701101-02 OFF-RD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
701426-04 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS > 45 MPH
701431-06 LANE CLOSURE, MULTILANE, UNDIVIDED WITH CROSSOVER, FOR SPEEDS > 45 MPH TO 55 MPH
701602-05 URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-07 URBAN LANE CLOSURE, MULTILANE INTERSECTIONS
701901-01 TRAFFIC CONTROL DEVICES
704001-06 TEMPORARY CONCRETE BARRIER
780001-02 TYPICAL PAVEMENT MARKINGS
814001-02 HANDHOLES
886001-01 DETECTOR LOOP INSTALLATIONS

COMMITMENTS

NONE

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

FILE NAME = ...\D160135-sht-gennotes2.dgn

Primera

DESIGNED	RJD	REVISED -
DRAWN	MHL	REVISED -
CHECKED	RJD	REVISED -
DATE	JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES AND COMMITMENTS

SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	3
		CONTRACT NO. 60135		
		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES

80% FED./ 20% STATE

	CODED PAY ITEM NUMBER	PAY ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
					ROADWAY 0003	MINOR STRUCTURES 0040	LANDSCAPING 0031
*	20101100	TREE TRUNK PROTECTION	EACH	13	13		
*	20101200	TREE ROOT PRUNING	EACH	50			50
*	20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	20			20
*	20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	20			20
	20200100	EARTH EXCAVATION	CU YD	15720	15720		
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	30897	30897		
	20400800	FURNISHED EXCAVATION	CU YD	20180	20180		
	20800150	TRENCH BACKFILL	CU YD	679	679		
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	10776	10776		
*	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	31466			31466
*	21101805	COMPOST FURNISH AND PLACE, 2"	SQ YD	16444			16444
*	25000210	SEEDING, CLASS 2A	ACRE	3.25			3.25
*	25000310	SEEDING, CLASS 4	ACRE	2.75			2.75
*	25000314	SEEDING, CLASS 4B	ACRE	0.75			0.75
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	585			585
*	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	585			585
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	585			585
*	25100115	MULCH, METHOD 2	ACRE	7.00			7.00
*	25100630	EROSION CONTROL BLANKET	SQ YD	31466	31466		
*	25200110	SODDING, SALT TOLERANT	SQ YD	490			490
*	25200200	SUPPLEMENTAL WATERING	UNIT	10			10
*	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	650	650		
*	28000305	TEMPORARY DITCH CHECKS	FOOT	868	868		
*	28000400	PERIMETER EROSION BARRIER	FOOT	9757	9757		
	28000510	INLET FILTERS	EACH	62	62		
	28100107	STONE RIPRAP, CLASS A4	SQ YD	124	119	5	

* INDICATES SPECIALTY ITEMS

80% FED./20% STATE

CODED PAY ITEM NUMBER	PAY ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
				ROADWAY 0003	MINOR STRUCTURES 0040	LANDSCAPING 0031
28200200	FILTER FABRIC	SQ YD	119	119		
31101400	SUB-BASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	651	651		
31200502	STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2"	SQ YD	40411	40411		
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	269	269		
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	115	115		
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	31	31		
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	43	43		
42000411	PORTLAND CEMENT CONCRETE PAVEMENT 9 1/2" (JOINTED)	SQ YD	36647	36647		
42001300	PROTECTIVE COAT	SQ YD	43673	43673		
44000100	PAVEMENT REMOVAL	SQ YD	23869	23869		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	339	339		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	515	515		
44003100	MEDIAN REMOVAL	SQ FT	8995	8995		
48101620	AGGREGATE SHOULDERS, TYPE B 10"	SQ YD	1074	1074		
50104400	CONCRETE HEADWALL REMOVAL	EACH	8	8		
50105220	PIPE CULVERT REMOVAL	FOOT	556	556		
50300225	CONCRETE STRUCTURES	CU YD	326.8		326.8	
50500505	STUD SHEAR CONNECTORS	EACH	3182		3182	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	30620		30620	
51500100	NAME PLATES	EACH	6		6	
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	4		4	
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	7		7	
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1		1	
54215424	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 24"	EACH	6		6	
54213666	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 21"	EACH	1		1	
54215436	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 36"	EACH	1		1	
542A0241	PIPE CULVERTS, CLASS A, TYPE 1 36"	FOOT	93		93	
542A1069	PIPE CULVERTS, CLASS A, TYPE 2 24"	FOOT	96		96	
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	48		48	
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	3210		3210	

* INDICATES SPECIALTY ITEMS

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

FILE NAME = ...\D160135-sht-SQ01.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUMMARY OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	4
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

80% FED./20% STATE

CODED PAY ITEM NUMBER	PAY ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
				ROADWAY 0003	MINOR STRUCTURES 0040	LANDSCAPING 0031
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	802		802	
550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	627		627	
550A0110	STORM SEWERS, CLASS A, TYPE 1 21"	FOOT	336		336	
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	71		71	
~~550A0140~~	~~STORM SEWERS, CLASS A, TYPE 1 30"~~	~~FOOT~~	~~98~~		~~98~~	
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	8		8	
~~550A0450~~	~~STORM SEWERS, CLASS A, TYPE 2 30"~~	~~FOOT~~	~~85~~		~~85~~	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	542		542	
60107600	PIPE UNDERDRAINS 4"	FOOT	840		840	
60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	29		29	
60205040	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	3		3	
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	21		21	
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	7		7	
~~60223600~~	~~MANHOLES, TYPE A, 6' DIAMETER, TYPE 1 FRAME, CLOSED LID~~	~~EACH~~	~~1~~		~~1~~	
~~60224140~~	~~MANHOLES, TYPE A, 7' DIAMETER, TYPE 1 FRAME, CLOSED LID~~	~~EACH~~	~~1~~		~~1~~	
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1		1	
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	34		34	
60250200	CATCH BASINS TO BE ADJUSTED	EACH	12		12	
60500040	REMOVING MANHOLES	EACH	2		2	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	10864	10864		
60608300	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12	FOOT	569	569		
60608521	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24	FOOT	187	187		
60618210	HOT-MIX ASPHALT MEDIAN SURFACE, 4 INCH	SQ FT	3093	3093		
60618740	CONCRETE MEDIAN, TYPE M-2.12	SQ FT	820	820		
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	3025.0	3025.0		
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	6	6		
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	6	6		
63200310	GUARDRAIL REMOVAL	FOOT	302	302		

* INDICATES SPECIALTY ITEMS

80% FED./20% STATE

CODED PAY ITEM NUMBER	PAY ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
				ROADWAY 0003	MINOR STRUCTURES 0040	LANDSCAPING 0031
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	18	18		
67100100	MOBILIZATION	L SUM	1	1		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	171	171		
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	16	16		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	16075	16075		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	3500.0	3500.0		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1612.5	1612.5		
* 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	255	255		
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	24606	24606		
* 78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	995	995		
* 78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	826	826		
* 78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	60	60		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	652	652		
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	372	372		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1006	1006		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	285	285		
* 81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	241	241		
* 81400100	HANDHOLE	EACH	1	1		
* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	241	241		
* 86200120	UNINTERRUPTIBLE POWER SUPPLY	EACH	1	1		
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	432	432		
* 87900200	DRILL EXISTING HANDHOLE	EACH	1	1		
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	3	3		
* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3	3		
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1	1		
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1	1		

* INDICATES SPECIALTY ITEMS

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

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

Rev.

FILE NAME = ...\D160135-sht-S002.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUMMARY OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	5

CONTRACT NO. 60135

ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES

80% FED./20% STATE

	CODED PAY ITEM NUMBER	PAY ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: ROADWAY 0003	CONSTRUCTION TYPE CODE: MINOR STRUCTURES 0040	CONSTRUCTION TYPE CODE: LANDSCAPING G 0031
*	88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1	1		
*	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4	4		
*	88600700	PREFORMED DETECTOR LOOP	FOOT	76	76		
*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1		
*	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	185	185		
*	89502380	REMOVE EXISTING HANDHOLE	EACH	1	1		
*	A2002520	TREE, CARPINUS CAROLINIANA (AMERICAN HORNBEAM), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	3			3
*	A2002566	TREE, CARPINUS CAROLINIANA (AMERICAN HORNBEAM), 6' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	5			5
*	A2005020	TREE, GYMNOCLADUS DIOICUS (KENTUCKY COFFEETREE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	4			4
*	A2005556	TREE, NYSSA SYLVATICA (BLACK TUPELO), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	3			3
*	A2005670	TREE, OSTRYA VIRGINIANA (AMERICAN HOPHORNBEAM), 8' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	3			3
*	A2006516	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	7			7
*	A2006568	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 7' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	3			3
*	A2006716	TREE, QUERCUS MACROCARPA (BUR OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	3			3
*	A2007620	TREE, TAXODIUM DISTICHUM (COMMON BALD CYPRESS), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	5			5
*	B2000766	TREE, AMELANCHIER X GRANDIFLORA AUTUMN BRILLIANCE (AUTUMN BRILLIANCE SERVICE BERRY), 6' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	7			7
*	B2001464	TREE, CORNUS MAS (CORNELIAN CHERRY DOG WOOD), 5' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	5			5
*	B2002216	TREE, CRATAEGUS VIRDIS WINTER KING (WINTER KING GREEN HAWTHORN), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	5			5
*	B2002364	TREE, HALESIA TETRAPTERA (CAROLINA SILVERBELL), 5' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	5			5
*	C2003248	SHRUB, HAMAMELIS VERNALIS (VERNAL WITCH HAZEL), 4' HEIGHT, BALLED AND BURLAPPED	EACH	19			19
*	C2003348	SHRUB, HAMAMELIS VIRGINIANA (COMMON WITCHHAZEL), 4' HEIGHT, BALLED AND BURLAPPED	EACH	5			5
*	C2C09636	SHRUB, SAMBUCUS CANADENSIS (AMERICAN ELDER), 3' HEIGHT, CONTAINER	EACH	14			14
*	D2002184	EVERGREEN, PICEA PUNGENS (COLORADO SPRUCE), 7' HEIGHT, BALLED AND BURLAPPED	EACH	15			15
*	D2002472	EVERGREEN, PINUS FLEXILIS VANDERWOLF'S PYRAMID (VANDERWOLF'S PYRAMID LIMBER PINE), 6' HEIGHT, BALLED AND BURLAPPED	EACH	6			6
*	D2002484	EVERGREEN, PINUS FLEXILIS VANDERWOLF'S PYRAMID (VANDERWOLF'S PYRAMID LIMBER PINE), 7' HEIGHT, BALLED AND BURLAPPED	EACH	6			6
*	D2002772	EVERGREEN, PINUS NIGRA (AUSTRIAN PINE), 6' HEIGHT, BALLED AND BURLAPPED	EACH	6			6

* INDICATES SPECIALTY ITEMS

80% FED./20% STATE

	CODED PAY ITEM NUMBER	PAY ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: ROADWAY 0003	CONSTRUCTION TYPE CODE: MINOR STRUCTURES 0040	CONSTRUCTION TYPE CODE: LANDSCAPING G 0031
*	D2002784	EVERGREEN, PINUS NIGRA (AUSTRIAN PINE), 7' HEIGHT, BALLED AND BURLAPPED	EACH	6			6
	X0301852	DEWATERING STRUCTURE NO. 1	EACH	1		1	
	X0301853	DEWATERING STRUCTURE NO. 2	EACH	1		1	
*	X0322453	WEED CONTROL, PRE-EMERGENT	POUND	300			300
	X0426200	DEWATERING	L SUM	1	1		
	X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	572		572	
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	6	6		
	X5121800	PERMANENT STEEL SHEET PILING	SQ FT	65504		65504	
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
	X7030025	WET REFLECTIVE TEMPORARY TAPE, TYPE III - LETTERS AND SYMBOLS	SQ FT	109	109		
	X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	47821	47821		
	X7030040	WET REFLECTIVE TEMPORARY TAPE TYPE III, 6 INCH	FOOT	966	966		
	X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	137	137		
	X5400100	BOX CULVERT REMOVAL	FOOT	51	51		
	Z0030352	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	6	6		
	Z0030251	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	6	6		
	Z0001070	AGGREGATE SUBGRADE (SPECIAL)	SQ YD	40411	40411		
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
	Z0022800	FENCE REMOVAL	FOOT	849	849		
	Z0026407	TEMPORARY SHEET PILING	SQ FT	12,895	12,895		
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	124	124		
*	Z0033060	PREFORMED DETECTOR LOOP	FOOT	76	76		
	Z0042002	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	9561	9561		
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	1919		1919	
	Z0055905	TEMPORARY CONSTRUCTION FENCE	FOOT	2817	2817		
	Z0062456	TEMPORARY PAVEMENT	SQ YD	8136	8136		
	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1		

* INDICATES SPECIALTY ITEMS

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ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
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RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
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FILE NAME = ...\D1601135-sht-S003.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUMMARY OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	6

CONTRACT NO. 60I35

ILLINOIS FED. AID PROJECT

ROADWAY REMOVALS SCHEDULE

LOCATION	OFFSET	PAVEMENT REMOVAL (SQ YD)	MEDIAN REMOVAL (SQ FT)	CURB&GUTTER REMOVAL (FOOT)
STA. 476+17 TO STA. 481+09	RT/LT		4035	
STA. 481+02 TO STA. 482+65	LT			165.54
STA. 481+02 TO STA. 495+00	RT/LT	7872.89		
STA. 482+18 TO STA. 483+04	RT			87.97
STA. 495+00 TO STA. 510+00	RT/LT	5196.78		
STA. 510+00 TO STA. 525+00	RT/LT	4932.17		
STA. 525+00 TO STA. 535+92	RT/LT	5811.93		
STA. 533+26 TO STA. 536+82	RT/LT		4960	
STA. 533+31 TO STA. 535+92	RT			261.14
TOTAL		23814	8995	515

TREE TRUNK PROTECTION SCHEDULE

LOCATION
STA. 499+62, 42'RT
STA. 518+75, 48' RT
STA. 518+75, 48' RT
STA. 521+74, 51' RT
STA. 521+77, 50' RT
STA. 523+32, 50' RT
STA. 524+18, 47' RT
STA. 526+29, 50' RT
STA. 526+38, 53' RT
STA. 526+97, 49' RT
STA. 530+16, 48' RT
STA. 530+35, 52' RT
STA. 530+84, 49' RT
TOTAL = 13 EACH

EARTHWORK SCHEDULE

ITEM (CY)	TOTAL	PRE-STAGE 1	STAGE 1	STAGE 2
EARTH EXCAVATION	15,719	1,337	4,067	10,315
ADJUSTED EARTH EXCAVATION *	13,360	1,136	3,457	8,767
FILL/FURNISHED EXCAVATION *	25,429	14,908	9,860	661
EARTHWORK BALANCE * EXCESS (+) OR SHORTAGE (-)	-20,176	-13,772	-6,404	+8,106
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (UNDERCUT)	30,897	12,987	16,751	1,159

*NOTES:

1. SHRINKAGE CALCULATED USING 15% SHRINKAGE FACTOR.
2. ALL TOPSOIL STRIPING SHALL BE PLACED AT THE TOE OF SLOPE AND BACK SLOPE.
3. STAGE 2 EARTHWORK BALANCE DOES NOT COUNT TOWARDS OVERALL BALANCE DUE TO STAGING.

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL SCHEDULE

LOCATION	DEPTH (EXISTING ROADWAY DEPTH)	DEPTH (IN EXIST. DRAINAGE DITCH AREAS)
STA. 489+88 TO STA. 490+56	-	2'
STA. 490+56 TO STA. 491+37	1'	2'
STA. 491+37 TO STA. 492+19	-	2'
STA. 493+68 TO STA. 496+18	0.5'	1'
STA. 496+18 TO STA. 497+38	-	1'
STA. 497+38 TO STA. 498+13	-	8' 2"
STA. 498+13 TO STA. 498+88	-	8' 2"
STA. 498+88 TO STA. 499+63	-	8' 2"
STA. 499+63 TO STA. 500+75	-	0.5'
STA. 500+75 TO STA. 502+25	-	0.5'
STA. 502+25 TO STA. 503+25	-	1'
STA. 505+00 TO STA. 506+99	1'	1'
STA. 506+99 TO STA. 508+25	1'	1'
STA. 508+25 TO STA. 509+13	0.5'	0.5'
STA. 509+13 TO STA. 509+95	0.5'	1'
STA. 516+37 TO STA. 516+87	0.5'	0.5'
STA. 516+87 TO STA. 517+37	0.5'	0.5'
STA. 517+37 TO STA. 519+50	0.5'	0.5'
STA. 524+88 TO STA. 525+62	-	6' 2"
STA. 525+62 TO STA. 526+20	-	6' 2"
STA. 526+20 TO STA. 527+00	-	8' 8"

THESE ARE THE AREAS AND DEPTHS OF THE EXPECTED UNDERCUTS IN ORDER TO REMOVE THE UNSUITABLE MATERIALS IN ADDITION TO THE NOMINAL 22" TO BE REMOVED THROUGHOUT THE PROJECT.

FINAL LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. SEE CROSS-SECTIONS FOR LOCATIONS OF EXPECTED UNDERCUTS.

DRIVEWAY REMOVAL SCHEDULE

LOCATION	DRIVEWAY MATERIAL	OFFSET	REMOVAL AREA (SQ YD)	
STA. 489+00	BIT	RT	58.4	PAID FOR AS DRIVEWAY PAVEMENT REMOVAL
STA. 494+80	BIT	RT	202.5	PAID FOR AS DRIVEWAY PAVEMENT REMOVAL
STA. 495+60	AGG	LT	78.8	PAID FOR AS EARTH EXCAVATION
STA. 500+05	BIT	RT	78.8	PAID FOR AS DRIVEWAY PAVEMENT REMOVAL
STA. 501+45	AGG	RT	46.1	PAID FOR AS EARTH EXCAVATION
STA. 503+90	AGG	RT	39.8	PAID FOR AS EARTH EXCAVATION
STA. 503+90	AGG	LT	23.2	PAID FOR AS EARTH EXCAVATION
STA. 514+50	AGG	LT	272.1	PAID FOR AS EARTH EXCAVATION
STA. 518+50	AGG	LT	33.0	PAID FOR AS EARTH EXCAVATION
TOTAL			753.9	

PLAN | SURVEYED | BY | DATE
NOTE BOOK | ALIGNMENT CHECKED | RT. OF WAY CHECKED
NO. | D&B FILE NAME

PLAN | SURVEYED | BY | DATE
NOTE BOOK | ALIGNMENT CHECKED | RT. OF WAY CHECKED
NO. | D&B FILE NAME

FILE NAME = ...\D160135-sht-schedule of quantity I.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SCHEDULE OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	7
		CONTRACT NO. 60135		
	ILLINOIS	FED. AID PROJECT		

CURB AND GUTTER SCHEDULE

LOCATION	OFFSET	CC&G, TYPE B-6.24 (FOOT)	CC&G, TYPE M-2.12 (FOOT)	CC&G, TYPE M-2.24 (FOOT)
STA. 478+20 TO STA. 480+00	RT		180	
STA. 478+20 TO STA. 480+00	LT		180	
STA. 480+00 TO STA. 480+94	RT		94	
STA. 480+00 TO STA. 480+94	LT		94	
STA. 480+94 TO STA. 480+94	RADIUS		20.5	
STA. 481+02 TO STA. 495+00	RT	1,398		
STA. 482+18 TO STA. 495+00	LT	1,282		
STA. 495+00 TO STA. 510+00	RT	1,500		
STA. 495+00 TO STA. 510+00	LT	1,500		
STA. 510+00 TO STA. 525+00	RT	1,500		
STA. 510+00 TO STA. 525+00	LT	1,500		
STA. 525+00 TO STA. 535+92	RT	1,092		
STA. 525+00 TO STA. 535+92	LT	1,092		
STA. 536+00 TO STA. 536+74	RT			73.90
STA. 536+00 TO STA. 536+74	LT			73.90
STA. 536+00 TO STA. 536+00	RT/LT			19.75
STA. 536+74 TO STA. 536+74	RT/LT			19.75
TOTAL		10,864	568.5	187

TEMPORARY/CONCRETE BARRIER SCHEDULE

LOCATION	TEMP. CONC. BARRIER (FOOT)	RELOCATE TEMP. CONC. BARRIER (FOOT)	TL 3 TEMP. IMPACT ATTENUATOR (EACH)	RELOCATE TL3 TEMP. IMPACT ATTENUATOR (EACH)
STA. 497+00			1	1
STA. 497+00 TO STA. 515+00	1,800	1,800		
STA. 514+00 TO STA. 517+00	300			
STA. 514+00			1	
STA. 515+00			1	1
STA. 517+00			1	
TOTAL	2,100	1,800	4	2

PAVEMENT, DRIVEWAY, AND MEDIAN SCHEDULE

LOCATION	OFFSET	10" TEMP. PAVEMENT (SQ YD)	PCC PAVEMENT, 9.5" (SQ YD)	HMA SURFACE MIX "C" N50 (TON)	HMA BASE COURSE 6" (SQ YD)	HMA BASE COURSE 8" (SQ YD)	4" HMA MEDIAN SURF. (SQ FT)	CONC. MEDIAN TYPE M-2.12 (SQ FT)
STA. 478+20 TO STA. 480+00	RT/LT						936	
STA. 480+00 TO STA. 481+00	RT/LT						1120	
STA. 476+15 TO STA. 478+20	RT							820
STA. 481+02 TO STA. 495+00	RT/LT		9,345					
STA. 483+52 TO STA. 495+00	RT	1,341						
STA. 494+80	RT			9	84			
STA. 495+00 TO STA. 510+00	RT/LT		10,000					
STA. 495+00 TO STA. 510+00	RT	2,366						
STA. 495+41 TO STA. 495+97	LT			9		76		
STA. 499+90 TO STA. 500+54	RT			8	69			
STA. 501+28 TO STA. 501+86	RT			6	57			
STA. 503+73 TO STA. 504+39	RT			7	59			
STA. 510+00 TO STA. 525+00	RT/LT		10,000					
STA. 510+00 TO STA. 525+00	RT	2,552						
STA. 514+25 TO STA. 514+60	LT			4		39		
STA. 525+00 TO STA. 535+92	RT/LT		7,302					
STA. 525+00 TO STA. 534+29	RT	880						
STA. 535+94 TO STA. 536+79	RT/LT						1,037	
TOTAL		7,139	36,647	34	269	115	3,093	820

EROSION AND SEDIMENT CONTROL SCHEDULE

LOCATION	INLET FILTERS (EACH)	PERIMETER EROSION BARRIER (FOOT)	TEMP. CONSTR. FENCE (FOOT)
STA. 481+02--50.0 LT TO STA. 495+26--50.0 LT		1,460	
STA. 481+92--50.0 RT TO STA. 488+78--60.0 RT		694	
STA. 483+70--30.9 LT	1		
STA. 483+70--30.4 RT	1		
STA. 484+54--52.0 LT TO STA. 485+48--52.0 LT			127
STA. 485+00--37.5 RT		20	
STA. 485+09--70.7 RT TO STA. 488+77--69.0 RT	1		369
STA. 485+25--30.7 RT	1		
STA. 485+25--30.5 LT	1		
STA. 486+80--31.0 RT	1		
STA. 486+80--29.7 LT	1		
STA. 488+35--31.1 RT	1		
STA. 488+35--29.5 LT	1		
STA. 489+45--58.0 LT TO STA. 493+09--66.0 LT			364
STA. 489+90--31.1 RT	1		
STA. 489+90--30.3 LT	1		
STA. 490+75--40.7 RT		20	
STA. 491+45--31.1 RT	1		
STA. 491+45--30.2 LT	1		
STA. 493+00--30.8 RT	1		
STA. 493+00--29.9 LT	1		
STA. 494+55--30.2 RT	1		
STA. 494+55--30.2 LT	1		
STA. 494+95--42.3 RT		20	
STA. 495+95--47.0 LT TO STA. 510+97--45.0 LT		1,512	
STA. 496+10--31.0 RT	1		
STA. 496+10--29.2 LT	1		
STA. 497+36--68.0 LT TO STA. 504+65--65.0 LT			729
STA. 497+65--31.0 LT	1		
STA. 497+65--29.9 LT	1		
STA. 498+50--42.2 RT		20	
STA. 499+20--31.0 RT	1		
STA. 499+20--31.0 LT	1		
STA. 499+47--30.0 RT	1		
STA. 499+47--30.0 LT	1		
STA. 499+75--31.2 RT	1		
STA. 499+75--31.0 LT	1		
STA. 500+40--41.8 RT		20	
STA. 501+30--31.2 RT	1		
STA. 501+30--31.2 RT	1		
STA. 501+78--42.2 RT		20	
STA. 502+95--31.0 RT	1		
STA. 502+95--31.0 RT	1		
STA. 502+95--30.0 LT	1		
STA. 504+00--60.0 RT TO STA. 518+98--60.0 RT		1,525	
STA. 504+24--43.9 RT		20	
STA. 504+60--31.2 RT	1		
STA. 504+60--30.0 LT	1		
STA. 506+25--31.2 RT	1		
STA. 506+25--29.8 LT	1		
STA. 506+68--66.0 RT TO STA. 511+00--80.0 RT			432
STA. 508+80--66.0 RT TO STA. 510+52--80.0 RT			172
STA. 508+75--31.0 RT	1		
STA. 508+75--30.0 LT	1		
STA. 511+25--31.1 RT	1		
STA. 511+25--30.0 LT	1		
STA. 514+21--42.7 LT			
STA. 514+76--60.0 LT TO STA. 525+00--60.0 LT		1,025	
STA. 515+11--65.0 LT TO STA. 516+15--64.0 LT			105
STA. 515+15--50.0 LT		20	
STA. 516+25--30.6 RT	1		
STA. 516+25--30.0 LT	1		
STA. 518+75--29.8 RT	1		
STA. 518+75--30.0 LT	1		
STA. 520+40--30.4 RT	1		
STA. 520+40--30.0 LT	1		
STA. 522+05--31.0 RT	1		
STA. 522+05--30.0 LT	1		
STA. 523+70--30.8 RT	1		
STA. 523+70--30.0 LT	1		
STA. 523+99--64.0 LT TO STA. 527+84--64.0 LT			385
STA. 525+00--60.0 LT TO STA. 535+92--53.0 LT		1,102	
STA. 525+35--30.5 RT	1		
STA. 525+35--30.0 LT	1		

EROSION AND SEDIMENT CONTROL SCHEDULE

LOCATION	INLET FILTERS (EACH)	PERIMETER EROSION BARRIER (FOOT)	TEMP. CONSTR. FENCE (FOOT)
STA. 526+00--46.4 RT		20	
STA. 526+83--30.1 RT	1		
STA. 526+83--30.0 LT	1		
STA. 526+85--60.0 RT TO STA. 535+92--60.0 RT		918	
STA. 528+50--31.0 RT	1		
STA. 528+50--30.0 LT	1		
STA. 528+51--66.0 RT TO STA. 529+72--54.0 RT			134
STA. 530+90--29.3 RT	1		
STA. 530+90--30.0 LT	1		
STA. 532+55--29.3 RT	1		
STA. 532+55--30.8 LT	1		
STA. 534+20--30.9 RT	1		
STA. 534+20--30.1 LT	1		
STA. 535+85--30.9 RT	1		
STA. 535+85--30.9 LT	1		
TOTAL	62	8,236	2,817

GUARDRAIL SCHEDULE

LOCATION	OFFSET	STEEL PLATE BEAM RAIL, TYPE A (FOOT)	TRAFFIC BARRIER TERMINAL	
			TYPE 1 (SPEC.) TANGENT	TYPE 2
STA. 496+70.00 TO STA. 504+32.50	LT	762.5	1	1
STA. 507+10.00 TO STA. 512+60.00	LT	550.0	1	1
STA. 512+32.50 TO STA. 516+95.00	RT	462.5	1	1
STA. 514+74.00 TO STA. 519+49.00	LT	475.0	1	1
STA. 524+09.00 TO STA. 529+59.00	LT	550.0	1	1
STA. 533+50.00 TO STA. 535+75.00	RT	225.0	1	1
TOTAL		3025.0	6	6

AGGREGATE SHOULDER SCHEDULE

LOCATION	OFFSET	AGGREGATE SHOULDERS, TYPE B 10" (SQ YD)
STA. 496+57.50 TO STA. 505+09.00	LT	257.7
STA. 506+97.50 TO STA. 513+36.50	LT	192.7
STA. 511+56.00 TO STA. 517+07.50	RT	166.0
STA. 514+61.50 TO STA. 520+25.50	LT	169.8
STA. 523+96.50 TO STA. 530+35.50	LT	192.7
STA. 532+73.50 TO STA. 535+91.80	RT	94.7
TOTAL		1073.6

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

FILE NAME = ...\D160135-sht-schedule of quantity 2.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

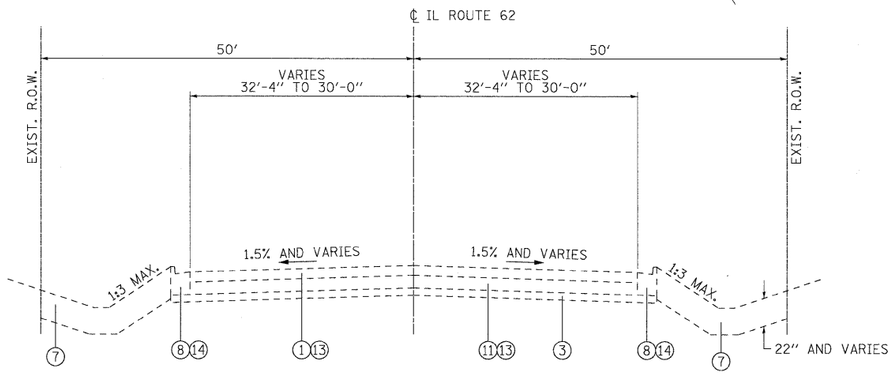
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SCHEDULE OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

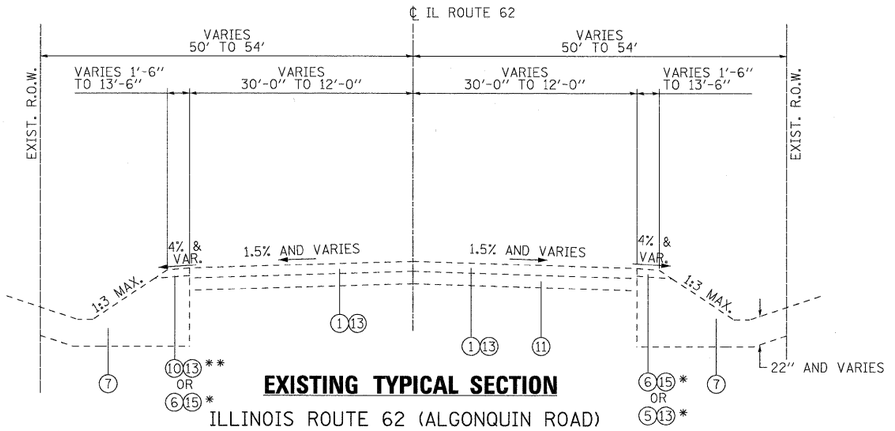
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	8
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

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



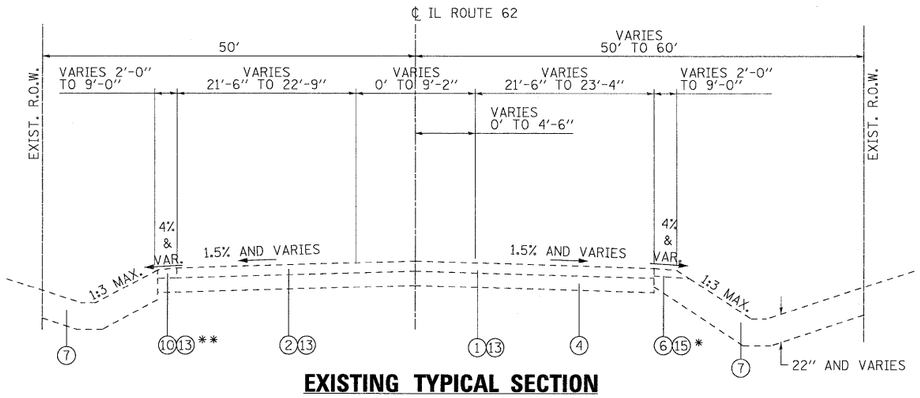
EXISTING TYPICAL SECTION

ILLINOIS ROUTE 62 (ALGONQUIN ROAD)
STA. 481+01.80 TO STA 482+00



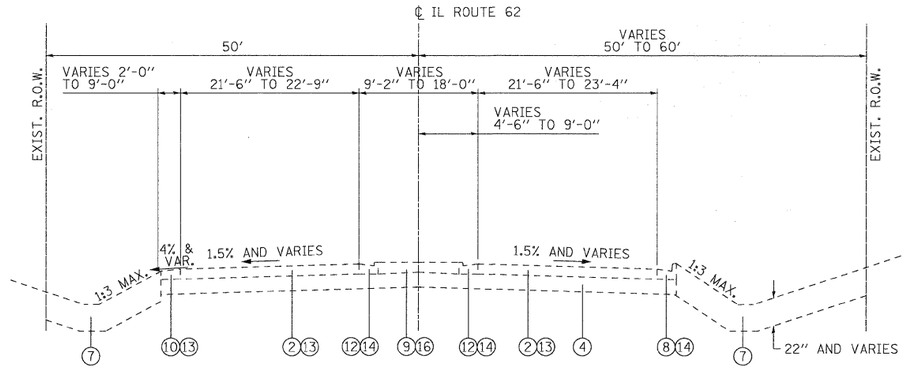
EXISTING TYPICAL SECTION

ILLINOIS ROUTE 62 (ALGONQUIN ROAD)
STA. 482+00 TO STA 526+01



EXISTING TYPICAL SECTION

ILLINOIS ROUTE 62 (ALGONQUIN ROAD)
STA. 526+01 TO STA 533+26



EXISTING TYPICAL SECTION

ILLINOIS ROUTE 62 (ALGONQUIN ROAD)
STA. 533+26 TO STA 535+91.80

EXISTING LEGEND

1. HMA SURFACE/BINDER, 4″ AND VARIES
2. PCC PAVEMENT, 9 1/4″
3. GRANULAR SUB-BASE, 4″
4. AGGREGATE SUB-GRADE, 12″
5. HMA SHOULDER, 6″ AND VARIES
6. AGGREGATE SHOULDER
7. REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
8. CONC. CURB & GUTTER, B-6.24
9. HMA MEDIAN
10. PCC SHOULDER
11. PCC BASE COURSE (7 1/4″ TO 10 1/4″)
12. CONC. CURB & GUTTER, M2-24
13. PAVEMENT REMOVAL
14. CONC. CURB & GUTTER REMOVAL
15. EARTH EXCAVATION
16. MEDIAN REMOVAL

NOTES

* SHOULDER MATERIAL FROM STA. 482+00 TO STA. 522+18 IS HOT-MIX ASPHALT. SHOULDER MATERIAL FROM STA. 522+18 TO STA. 533+24 IS AGGREGATE.

** SHOULDER MATERIAL FROM STA. 482+00 TO STA. 495+32 IS HOT-MIX ASPHALT, SHOULDER MATERIAL FROM STA. 495+32 TO STA 520+01 IS AGGREGATE, AND SHOULDER MATERIAL FROM STA. 520+01 TO STA. 535+92 IS PCC.

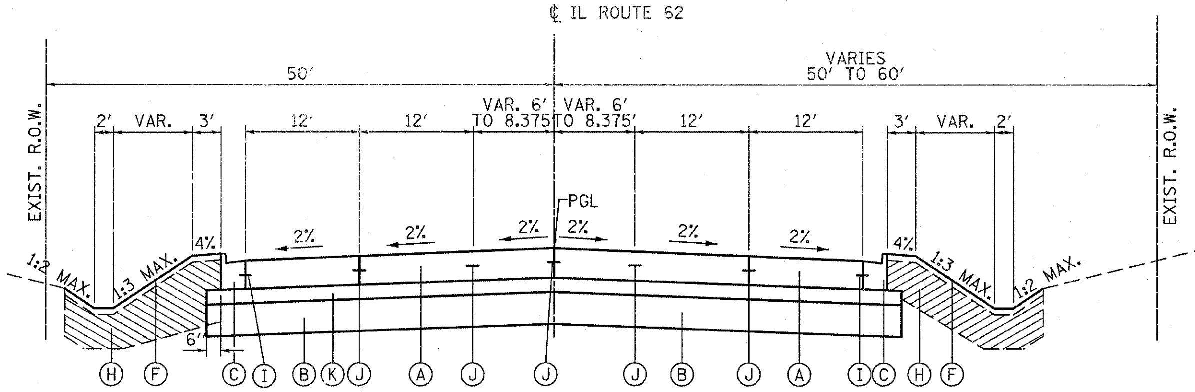
FILE NAME = ...\D160135-sht-typical01.dgn	Primera	DESIGNED ADW	REVISED -
		DRAWN MHL	REVISED -
		CHECKED RJD	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
TYPICAL SECTIONS

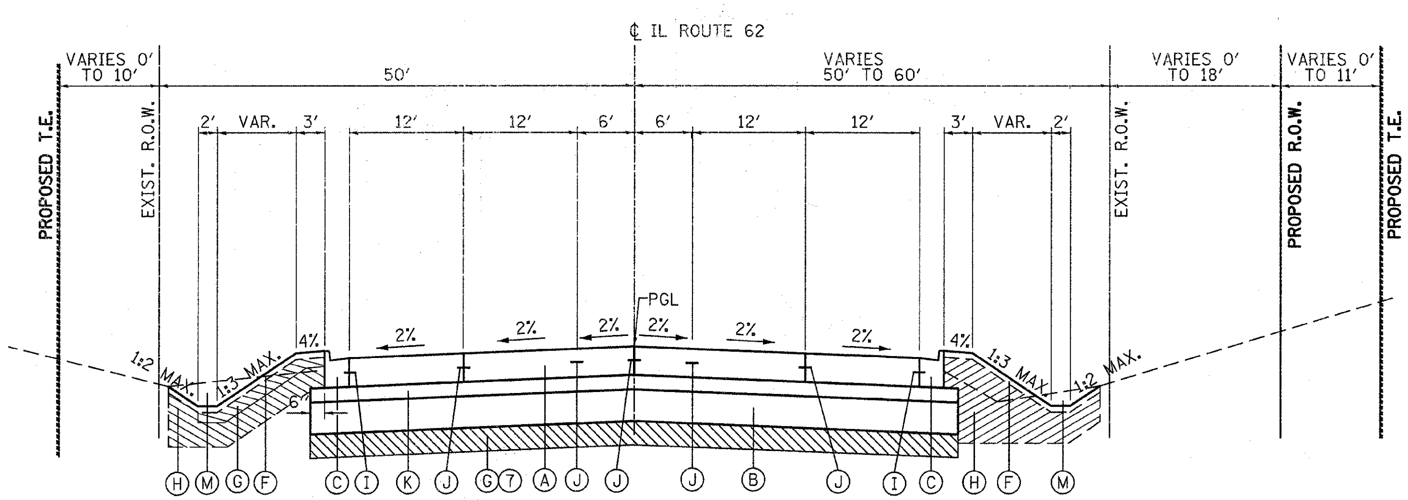
SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	9
		CONTRACT NO. 60135		
		ILLINOIS FED. AID PROJECT		



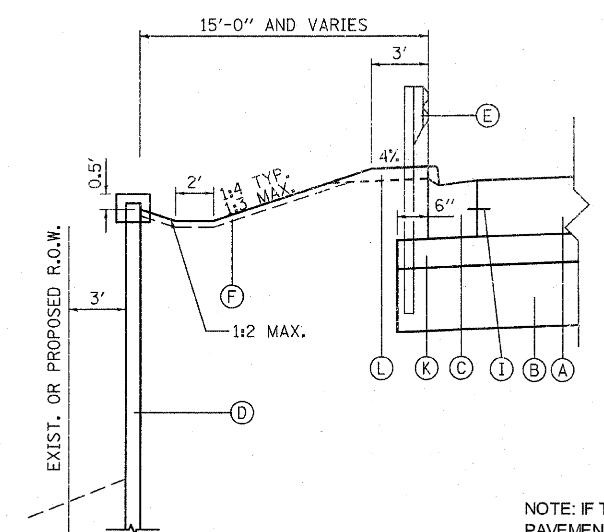
PROPOSED TYPICAL SECTION

ILLINOIS ROUTE 62 (ALGONQUIN ROAD)
STA. 481+01.80 TO STA 482+00
STA. 534+40 TO STA 535+91.80



PROPOSED TYPICAL SECTION

ILLINOIS ROUTE 62 (ALGONQUIN ROAD)
STA. 482+00 TO STA 534+40



TYPICAL SECTION
DETAIL FOR PROPOSED
RETAINING WALL AND GUARDRAIL

PROPOSED LEGEND

- (A) PCC PAVEMENT 9 1/2″ (JOINTED) (EXTENDED LIFE PAVEMENT)
- (B) AGGREGATE SUBGRADE, SPECIAL (12″ THICKNESS, EXTENDED LIFE PAVEMENT)
- (C) COMB. CURB & GUTTER B-6.24 (FOR LOCATIONS OF DEPRESSED CURB AT TRAFFIC BARRIER TERMINALS TYPE 1A SPECIAL, SEE PLANS)
- (D) PROPOSED PERMANENT STEEL RETAINING WALL W/ CONCRETE CAP (SEE STRUCTURAL PLANS)
- (E) STEEL PLATE BEAM GUARDRAIL, TYPE A
- (F) RESTORATION LANDSCAPING:
  - EROSION CONTROL BLANKET
  - SEEDING CLASS 2A, 4 OR 4B (SEE PLANS)
  - TOPSOIL 4″ AND/OR COMPOST 2″
  - PLANTING
- (G) POROUS GRANULAR EMBANKMENT, SUBGRADE WITH GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (H) FILL EMBANKMENT (EXCESS EARTH EXCAVATION/FURNISHED EXCAVATION (PRE-STAGE))
- (I) #6 TIE BARS, 24″ LONG @ 24″ C-C (INCIDENTAL)
- (J) #8 TIE BARS
- (K) STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2″ (EXTENDED LIFE PAVEMENT)
- (L) AGGREGATE SHOULDERS, TYPE B 10″
- (M) EARTH EXCAVATION

NOTE: IF THE CONTRACTOR CHOOSES TO USE CONCRETE FOR THE TEMPORARY PAVEMENT THE THICKNESS SHALL BE 10".

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	**AIR VOIDS**
STABILIZED SUBBASE **	
STABILIZED SUBBASE - HOT-MIX ASPHALT, 4-1/2" (N50) (IL-19mm)	3% @ 50 Gyr.
DRIVEWAY PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 2" (IL-9.5mm)	4% @ 50 Gyr.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19mm): PE-6"; CE-8"	4% @ 50 Gyr.
TEMPORARY PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5MM) 1-1/2"	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER IL-19MM 8-1/2"	4% @ 50 Gyr.
MEDIAN	
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 4" (IL-9.5mm)	4% @ 50 Gyr.

** SEE SPECIAL PROVISION

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

The "AC Type" for Polymerized HMA Mixes SHALL BE "SBS/SBR PG 70 -22" AND

FOR NON-POLYMERIZED HMA THE "AC TYPE" shall be "PG 64 -22" UNLESS modified by District ONE Special Provisions.

FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

PAVEMENT DESIGN

ITEM	IL-62
STRUCTUAL DESIGN TRAFFIC (2020)	33,500
ROAD CLASSIFICATION	I
PASSENGER CARS	32,060
SINGLE UNITS	705
MULTIPLE UNITS	735
TRAFFIC FACTOR	IL-62
DESIGN THICKNESS	9.5+4.5+12

THICKNESS: PCC PAVEMENT, STAB SUBBASE-HMA & AGGREGATE SUBGRADE

FILE NAME = ...\D160I35-sht-typical02.dgn	Primera	DESIGNED ADW	REVISED - ADW; 9/28/11
		DRAWN MHL	REVISED -
		CHECKED RJD	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

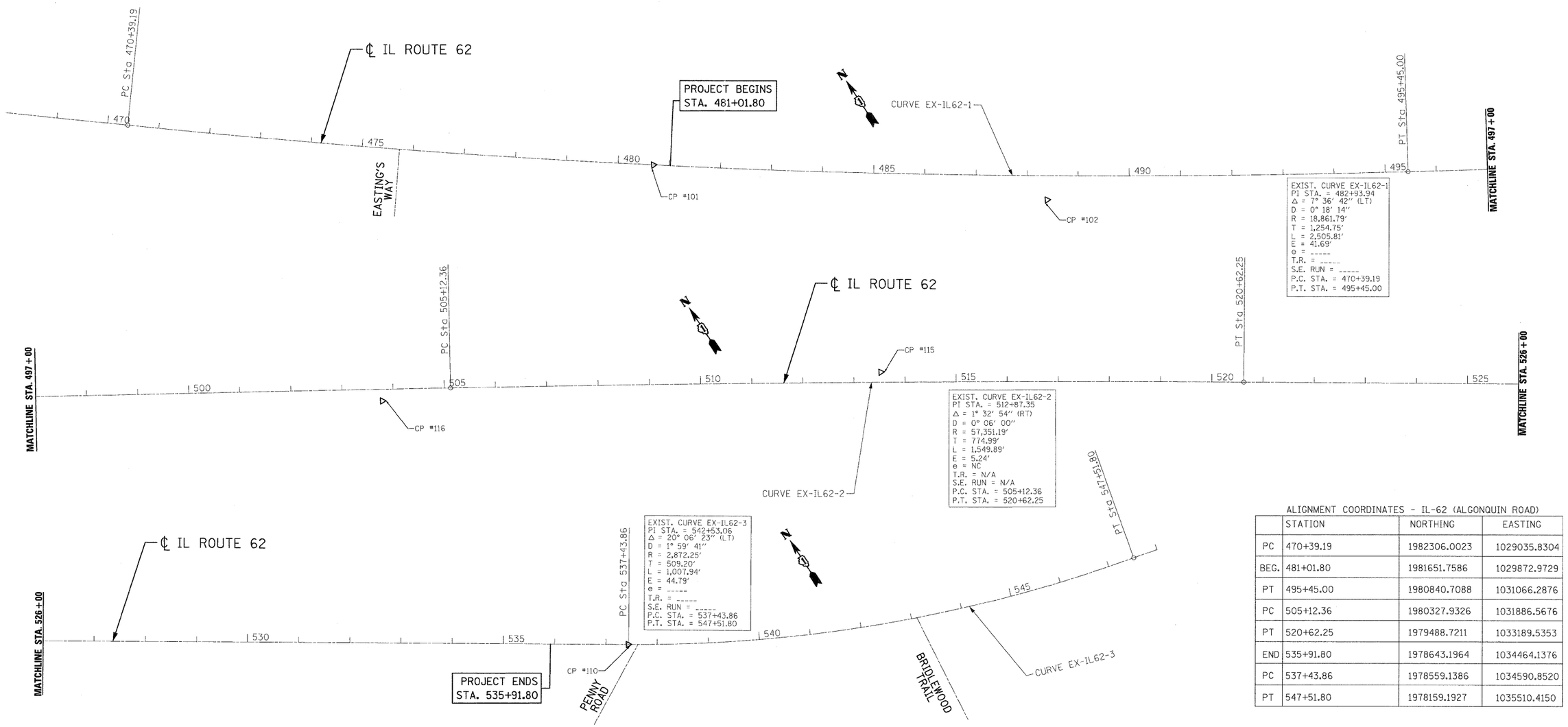
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	10
		CONTRACT NO. 60I35		

ILLINOIS FED. AID PROJECT

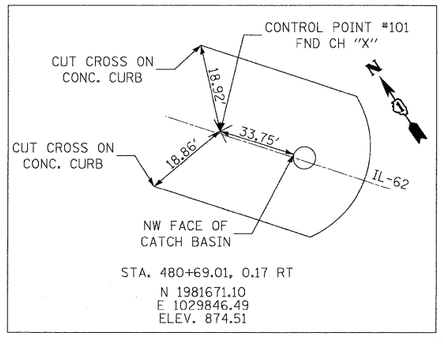
PLAN
SURVEYED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
CADD FILE NAME
BY
DATE



ALIGNMENT COORDINATES - IL-62 (ALGONQUIN ROAD)

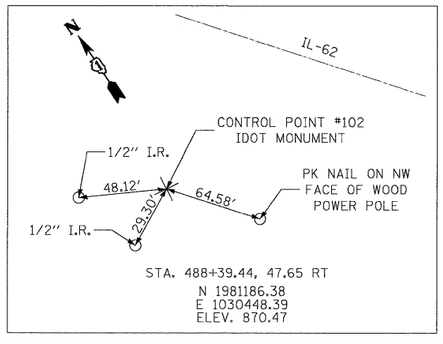
	STATION	NORTHING	EASTING
PC	470+39.19	1982306.0023	1029035.8304
BEG.	481+01.80	1981651.7586	1029872.9729
PT	495+45.00	1980840.7088	1031066.2876
PC	505+12.36	1980327.9326	1031886.5676
PT	520+62.25	1979488.7211	1033189.5353
END	535+91.80	1978643.1964	1034464.1376
PC	537+43.86	1978559.1386	1034590.8520
PT	547+51.80	1978159.1927	1035510.4150

CONTROL POINT #101



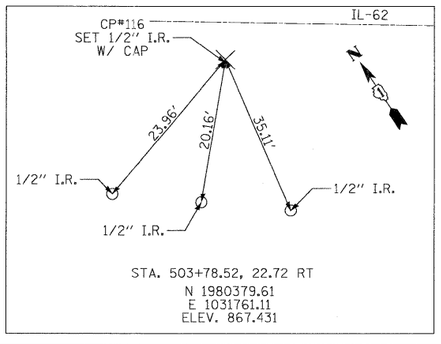
STA. 480+69.01, 0.17 RT
N 1981671.10
E 1029846.49
ELEV. 874.51

CONTROL POINT #102



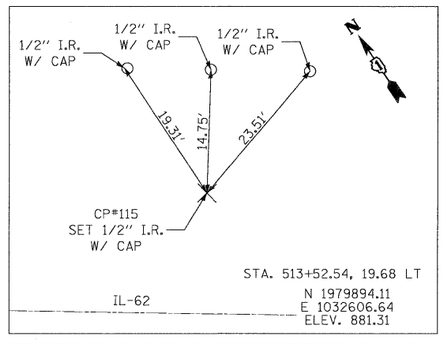
STA. 488+39.44, 47.65 RT
N 1981186.38
E 1030448.39
ELEV. 870.47

CONTROL POINT #116



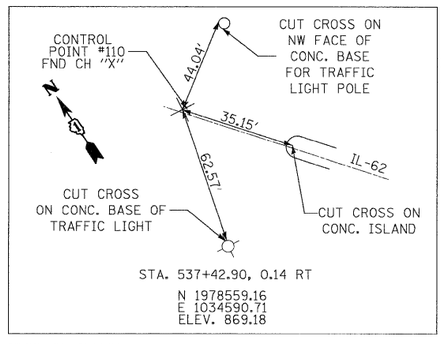
STA. 503+78.52, 22.72 RT
N 1980379.61
E 1031761.11
ELEV. 867.431

CONTROL POINT #115



STA. 513+52.54, 19.68 LT
N 1979894.11
E 1032606.64
ELEV. 881.31

CONTROL POINT #110



STA. 537+42.90, 0.14 RT
N 1978559.16
E 1034590.71
ELEV. 869.18

FILE NAME = ...\D1601135-sht-atb_01.dgn

Primera

DESIGNED	ADW	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

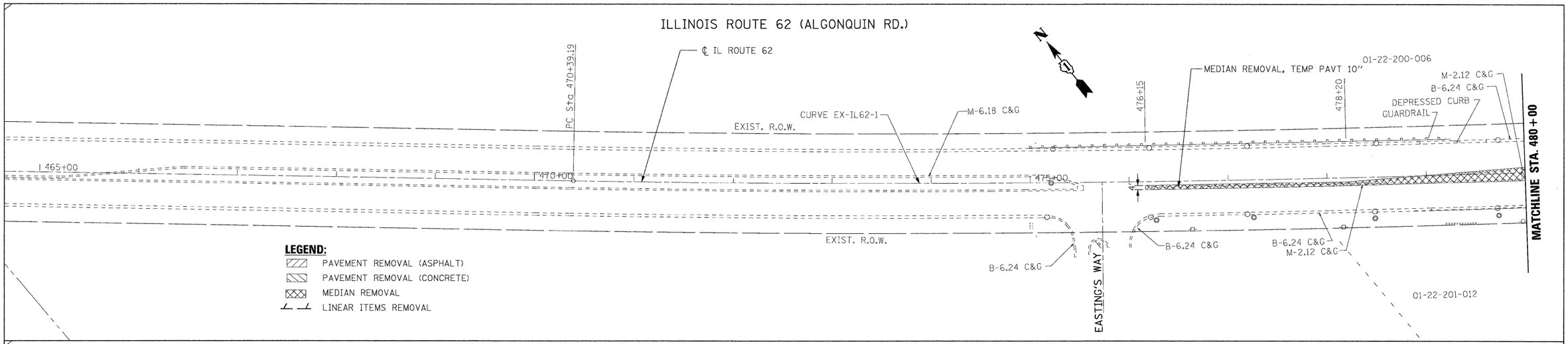
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
ALIGNMENT & TIES

SCALE: 1" = 100' | SHEET NO. 1 OF 1 SHEETS | STA. 481+01.80 TO STA. 535+91.80

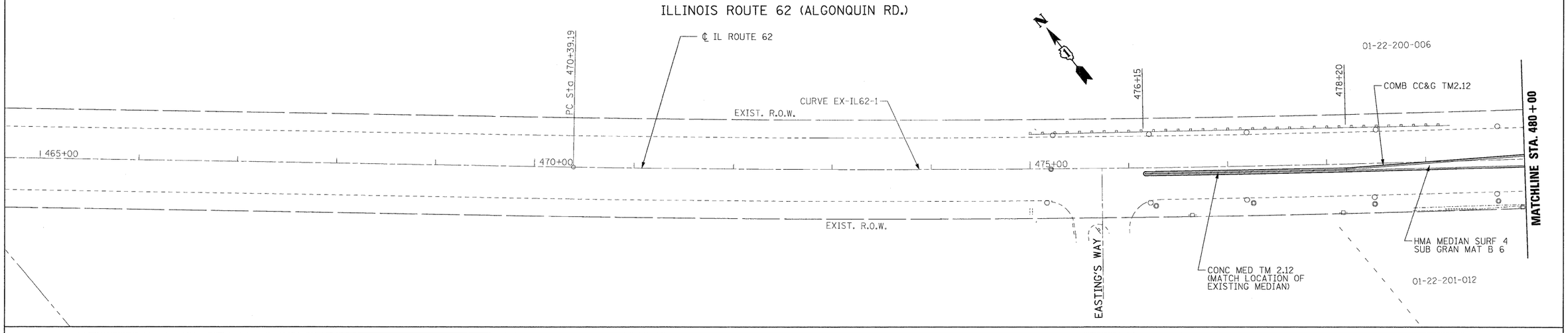
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	11
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

PLAN
SURVEYED
PLOTTED
DRAWN
CHECKED
R.O.W. OBTAINED
R.O.W. CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

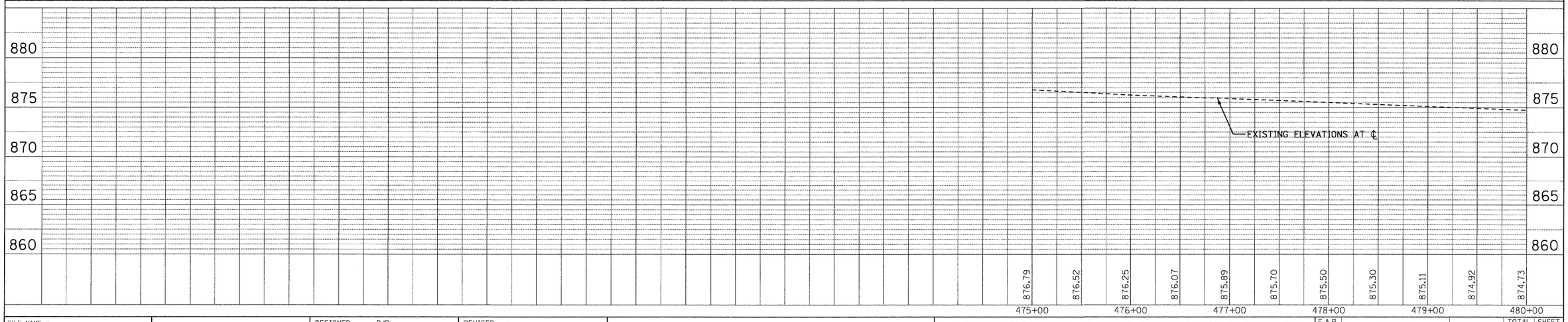
ILLINOIS ROUTE 62 (ALGONQUIN RD.)



ILLINOIS ROUTE 62 (ALGONQUIN RD.)



PROFILE
SURVEYED
PLOTTED
DRAWN
CHECKED
R.O.W. OBTAINED
R.O.W. CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE



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DESIGNED RJD	REVISED -	
DRAWN ADW	REVISED -	
CHECKED TWL	REVISED -	
DATE JUNE 30, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONGQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
EXISTING & PROPOSED PLAN AND PROFILE

SCALE: 1"=50' | SHEET NO. 1 OF 5 SHEETS | STA. 475+00 | TO STA. 480+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	12
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

ILLINOIS ROUTE 62 (ALGONQUIN RD.)

PROJECT BEGINS STA. 481+01.80

MATCHLINE STA. 480+00

MATCHLINE STA. 495+00

481+10

482+65

MEDIAN REMOVAL, TEMP PAVT 10

COMB CURB & GUTTER REM

482+00 SOLID MEDIAN

MH W/ OVERFLOW WEIR

EXIST. R.O.W.

483+04

COMB CURB & GUTTER REM

01-22-201-010

E CULV.

FES W/ GRATE

485+00

24" RCP

01-22-201-014

CURVE EX-IL62-1

EXIST. R.O.W.

01-22-200-007

℄ IL ROUTE 62

DRIVEWAY TO BE REMOVED AND NOT REPLACED (PAID FOR AS DRIVE PAVEMENT REM)

01-22-201-015

BIT. DRIVEWAY

490+00

FES W/ GRATE

BIT. SHLDR.

24" RCP

FES W/ GRATE

BIT. SHLDR.

460' DRIVEWAY

12" PIPE CULV W/TRANSITION

SIGN REMOVAL

MAILBOX TO BE RELOCATED (INCIDENTAL)

DRIVE PAVEMENT REM

FENCE REMOVAL

LEGEND:

- PAVEMENT REMOVAL (ASPHALT/CONCRETE)
- PAVEMENT REMOVAL (CONCRETE)
- MEDIAN REMOVAL
- LINEAR ITEMS REMOVAL

01-22-201-013

ILLINOIS ROUTE 62 (ALGONQUIN RD.)

PROJECT BEGINS STA. 481+01.80

MATCHLINE STA. 480+00

MATCHLINE STA. 495+00

COMB CC&G TB 6.24

HMA MEDIAN SURF 4
SUB GRAN MAT B 6
COMB CC&G TM2.12

480+00

482+00

32'

30'

PGL

485+00

CURVE EX-IL62-1

EXIST. R.O.W.

℄ IL ROUTE 62

490+00

30'

+25.00
50.00 RT

8'R

W/TRANSITION

PROP. R.O.W.

+54

+77

25'R

EXIST. R.O.W.

+98.30
50.00 RT

+05.57
60.00 RT

+22.22
50.00 RT

+29.30
60.00 RT

PCC PVT 9 1/2
STAB SUBBASE HMA 4.5
AGG SUBGRADE, SPL

+41.07
50.00 RT

+47.82
60.00 RT

PROP. R.O.W.

+50.00
60.00 RT

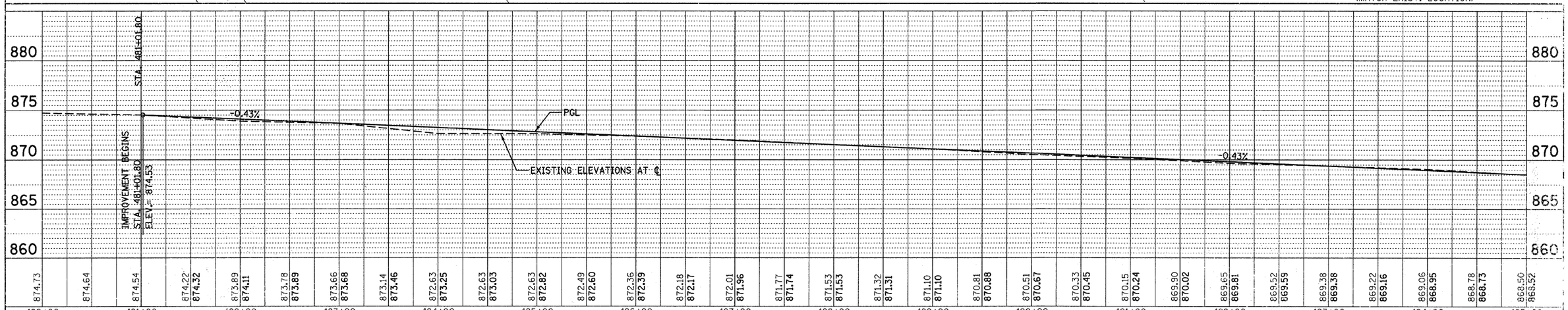
+50.00
65.00 RT

+50.00
70.00 RT

PROP. MAILBOX TURNOUT
(SEE STD. DETAIL)

+25.00
65.00 RT

DRIVEWAY:
HMA SC "C" N50, 2"
HMA BASE CSE 6"
(MATCH EXIST. LOCATION)



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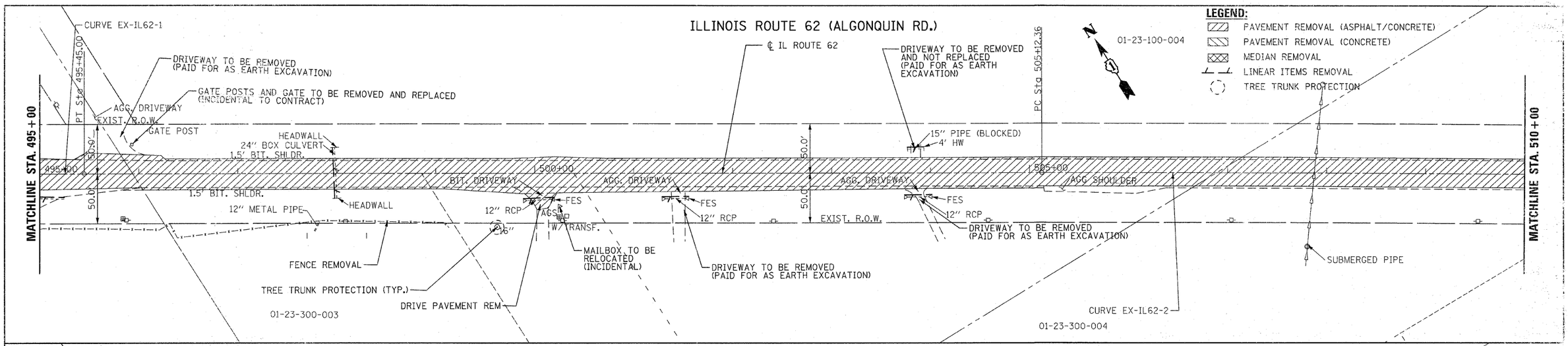
Primera	DRAWN ADW	REVISED -	
	CHECKED TWL	REVISED -	
	DATE JUNE 30, 2011	REVISED -	

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
EXISTING & PROPOSED PLAN AND PROFILE

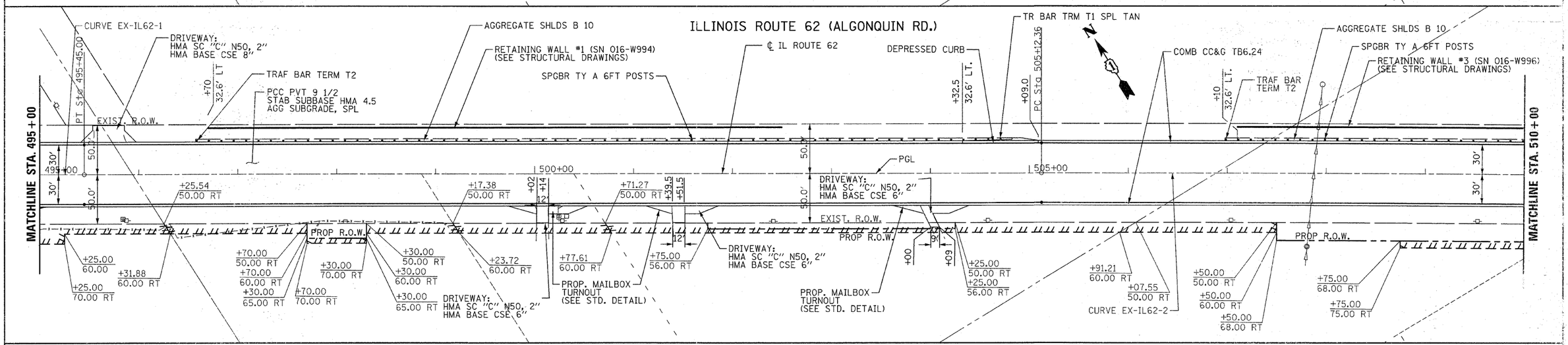
SCALE: 1"=50' | SHEET NO. 2 OF 5 SHEETS | STA. 480+00 | TO STA. 495+00

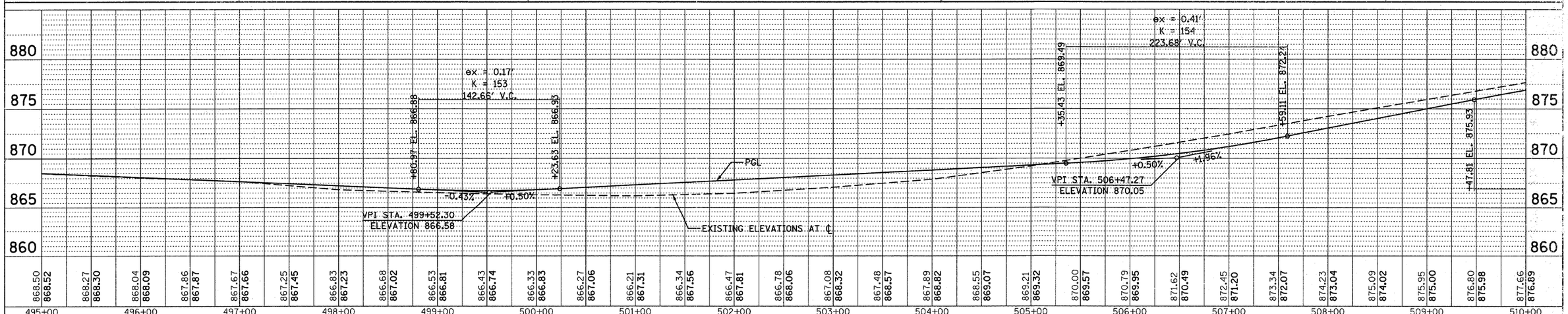
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	13
		CONTRACT NO. 60135		
		ILLINOIS FED. AID PROJECT		

ILLINOIS ROUTE 62 (ALGONQUIN RD.)



ILLINOIS ROUTE 62 (ALGONQUIN RD.)





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Primera	DRAWN ADW	REVISED -	
	CHECKED TWL	REVISED -	
	DATE JUNE 30, 2011	REVISED -	

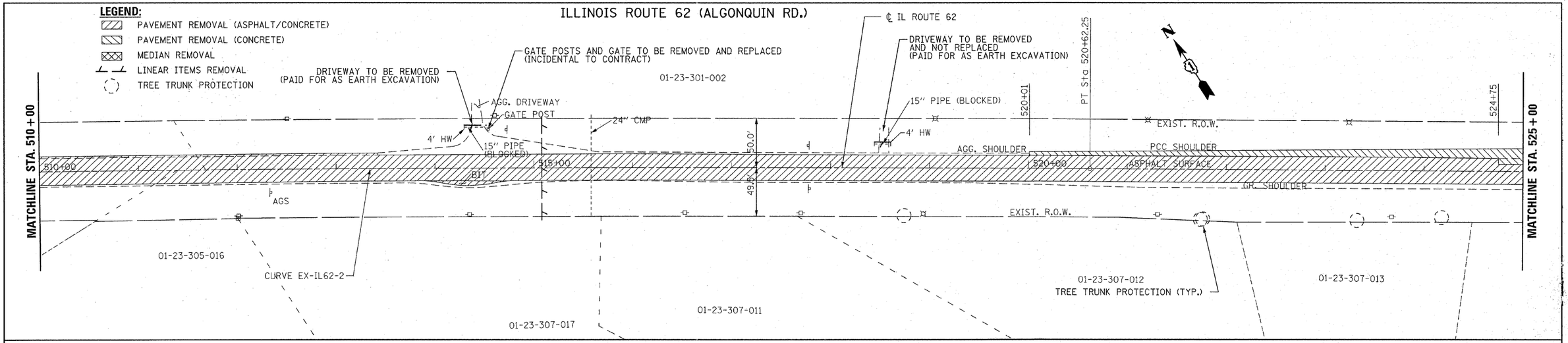
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
EXISTING & PROPOSED PLAN AND PROFILE

SCALE: 1"=50' | SHEET NO. 3 OF 5 SHEETS | STA. 495+00 TO STA. 510+00

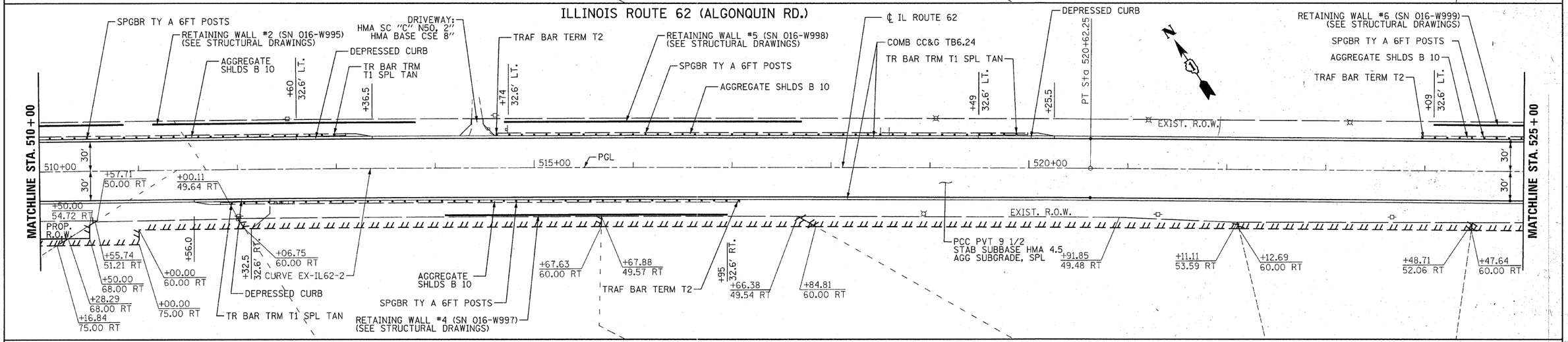
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	14
		CONTRACT NO. 60I35		
		ILLINOIS FED. AID PROJECT		

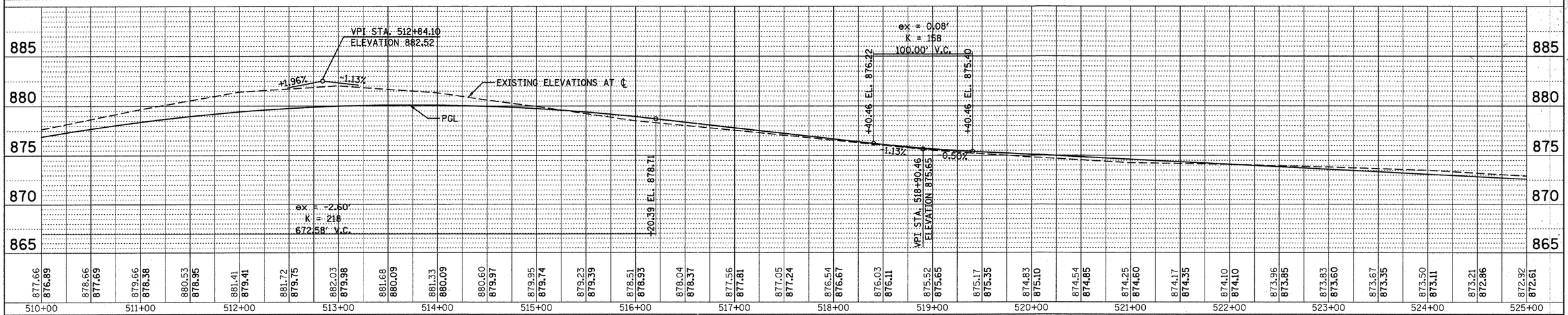
LEGEND:
- PAVEMENT REMOVAL (ASPHALT/CONCRETE)
- PAVEMENT REMOVAL (CONCRETE)
- MEDIAN REMOVAL
- LINEAR ITEMS REMOVAL
- TREE TRUNK PROTECTION

ILLINOIS ROUTE 62 (ALGONQUIN RD.)



ILLINOIS ROUTE 62 (ALGONQUIN RD.)





PLAN — SURVEYED; PLOTTED; DRAWN / CHECKED; ALIGNMENT / ELEV. OK'D; STRUCTURE NOTATNS OK'D; NOTE BOOK; NO.; BY; DATE

PROFILE — SURVEYED; PLOTTED; DRAWN / CHECKED; ALIGNMENT / ELEV. OK'D; STRUCTURE NOTATNS OK'D; NOTE BOOK; NO.; BY; DATE

FILE NAME = ...\D160135-sht-plan_04.dgn

Primera

DESIGNED	RJD	REVISED -	ADW; 9/28/11
DRAWN	ADW	REVISED -	
CHECKED	TWL	REVISED -	
DATE	JUNE 30, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
EXISTING & PROPOSED PLAN AND PROFILE

SCALE: 1"=50' | SHEET NO. 4 OF 5 SHEETS | STA. 510+00 TO STA. 525+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	15
		CONTRACT NO. 60I35		
		ILLINOIS FED. AID PROJECT		

LEGEND:
- PAVEMENT REMOVAL (ASPHALT/CONCRETE)
- PAVEMENT REMOVAL (CONCRETE)
- MEDIAN REMOVAL
- LINEAR ITEMS REMOVAL
- TREE TRUNK PROTECTION

ILLINOIS ROUTE 62 (ALGONQUIN RD.)

MATCHLINE STA. 525+00

℄ IL ROUTE 62

01-23-400-001

24" CMP

ASPHALT SURFACE

PCC SURFACE

PCC SHOULDER

CR. SHOULDER

AGG.

528+00

530+00

527+01

TREE TRUNK PROTECTION (TYP.)

TREE TRUNK PROTECTION (TYP.)

EXIST. R.O.W.

533+26

EXIST. R.O.W.

12" RCP

BIT. SHOULDER UNDER G.R.

GUARDRAIL REMOV

532+96

533+31

533+88

B-6.24 C&G

M-2.24 C&G

M-2.24 C&G

B-6.24 C&G

EXIST. R.O.W.

MEDIAN REMOVAL, TEMP PAVT 10

COMB CURB GUTTER REM

01-23-402-009

536+82

S.W.

PC Sta 537+43.86

CURVE EX-IL62-3

535+92

536+66.82
60.00 RT

536+80.41
80.99 RT

PENNY ROAD

83.0'

EXIST. R.O.W.

537+75.82
76.37 RT

538+50.00
60.00 RT

539+70.23
60.00 RT

PROJECT ENDS
STA. 535+91.80

01-23-307-014

01-23-308-005

01-23-402-015

N

ILLINOIS ROUTE 62 (ALGONQUIN RD.)

MATCHLINE STA. 525+00

SPGBR TY A 6FT POSTS

AGGREGATE SHLDS B 10

RETAINING WALL #6 (SN 016-W999)
(SEE STRUCTURAL PLANS)

COMB CC&G TB6.24

℄ IL ROUTE 62

DEPRESSED CURB

TR BAR TRM T1 SPL TAN

01-23-400-001

+59
32.6' LT.

+35.5

525+00

30'

30'

PGL

+91.90
49.88 RT

530+00

PCC PVT 9 1/2
STAB SUBBASE HMA 4.5
AGG SUBGRADE, SPL

EXIST. R.O.W.

+73.5

+72.24
50.88 RT

+67.75
60.00 RT

+98.66
60.00 RT

+00.00
60.00 RT

+00.00
50.00 RT

TR BAR TRM T1 SPL TAN

DEPRESSED CURB

SPGBR TY A 6FT POSTS

AGGREGATE SHLDS B 10

+50
+94.18
48.84 RT

+50.00
60.00 RT

TR BAR TERM T2

EXIST. R.O.W.

534+40

30'

30'

535+00

+75.0

HMA MEDIAN SURF 4
SUB GRAN MAT B 6

COMB CC&G TM2.24

PC Sta 537+43.86

CURVE EX-IL62-3

EXIST. R.O.W.

PENNY ROAD

8"

PROJECT ENDS
STA. 535+91.80

01-23-307-014

01-23-308-005

01-23-402-015

01-23-402-009

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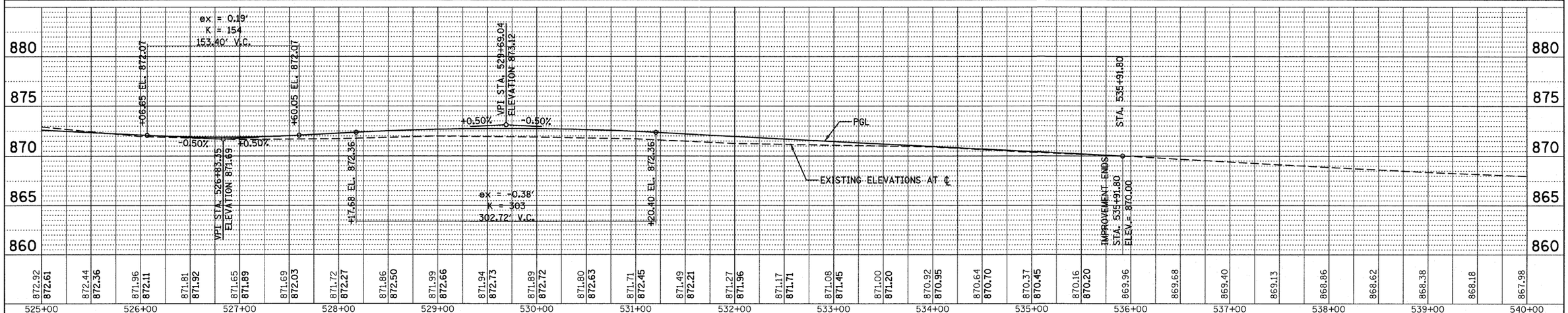

PLAN / PROFILE

SURVEYED
PLOTTED
DRAWN
CHECKED
NOTE BOOK
NO.
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
STRUCTURE NOTATNS CHKD

DATE | BY

FILE NAME = ...\0160135-sht-plan_25.dgn

Primera

DESIGNED	RJD	REVISED -	ADW; 9/28/11
DRAWN	ADW	REVISED -	
CHECKED	TWL	REVISED -	
DATE	JUNE 30, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
EXISTING & PROPOSED PLAN AND PROFILE

SCALE: 1"=50' | SHEET NO. 5 OF 5 SHEETS | STA. 525+00 | TO STA. 535+91.80

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	16
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
DTM FILE CHECKED
CADD FILE NAME
BY
DATE

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
DTM FILE CHECKED
CADD FILE NAME
BY
DATE

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE MAINTENANCE OF TRAFFIC CONTROL (MOT) PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

2. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE MOT PLANS.

3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

4. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE MAINTENANCE OF TRAFFIC STRIPING SHALL BE REMOVED. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "PAVEMENT MARKING REMOVAL".

5. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY PAVEMENT MARKING TAPE WHICH CONFLICTS WITH THE NEXT STAGE OR FINAL STRIPING. REMOVAL OF TEMPORARY PAVEMENT MARKING TAPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "WORK ZONE PAVEMENT MARKING REMOVAL".

6. ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC, AS DETAILED ON THE PLANS, OR HIGHWAY STANDARD SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

7. ALL DRUMS, VERTICAL PANELS AND BARRICADES ADJACENT TO THE EDGE OF TRAVELED WAY SHALL BE EQUIPPED WITH STEADY-BURNING LIGHTS.

8. DRUMS SHALL HAVE ALTERNATING REFLECTORIZED TYPE AA OR TYPE AP FLUORESCENT ORANGE AND REFLECTORIZED WHITE HORIZONTAL, CIRCUMFERENTIAL STRIPES.

9. DRUMS AND BARRICADES SHALL MEET THE REQUIREMENTS OF THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 AND THE SPECIAL PROVISION "WORK ZONE TRAFFIC CONTROL DEVICES".

10. ALL EXISTING SIGNS WITHIN THE LIMITS OF MAINTENANCE OF TRAFFIC WHICH ARE OBSCURED BY OR OTHERWISE INTERFERED WITH BY THE CONSTRUCTION OPERATIONS AND MAINTENANCE OF TRAFFIC, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25 OF THE IDOT STANDARD SPECIFICATIONS.

11. TEMPORARY, OFF-PEAK HOUR LANE CLOSURES MUST BE REQUESTED THROUGH THE ENGINEER AND AS SPECIFIED IN THE SPECIAL PROVISIONS, WHEN OFF-PEAK HOUR OR WEEKEND LANE CLOSURES ARE REQUIRED, A PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE WEEK PRIOR TO THE CLOSURE. THE MESSAGE SIGN WORDING AND LOCATION WILL BE DETERMINED BY THE ENGINEER.

12. THE CONTRACTOR SHALL PLACE A CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR MONTH, "CHANGEABLE MESSAGE SIGN".

13. ALL TEMPORARY INFORMATION SIGNS SHALL BE PAID FOR SEPARATELY AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR "TEMPORARY INFORMATION SIGNING".

14. THE COST OF SUPPLYING, ERECTING, AND MAINTAINING BARRICADES, DRUMS, WARNING LIGHTS, AND SIGNS SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION (SPECIAL)." QUANTITIES FOR TEMPORARY PAVEMENT MARKINGS ARE NOT INCLUDED IN "TRAFFIC CONTROL AND PROTECTION (SPECIAL)" AND SHALL BE MEASURED SEPARATELY FOR PAYMENT.

15. ALL BARRICADES SHALL BE PLACED AT THE CORRECT DISTANCE PER THE APPROPRIATE STANDARD.

16. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISION OF THE STAGE OF ILLINOIS "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007, AND THE LATEST VERSION OF THE STATE OF ILLINOIS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS AND OTHERS DEVICES INSTALLED ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME CONSTRUCTION IS IN EFFECT.

18. AS MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED SHALL MEET THE REQUIREMENTS FOR A LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1084.01 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING HOURS OF DARKNESS. ONLY LIGHTS THAT BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.

19. THE COST OF ARROW BOARDS (FURNISHING, INSTALLING, RELOCATING AND REMOVAL) SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION (SPECIAL).

SUGGESTED CONSTRUCTION SEQUENCING

PRESTAGE

REMOVE EXISTING CROSS-ROAD CULVERTS AND INSTALL NEW CROSS-ROAD CULVERTS (PIPE CULVERT NO. 7, 21, 60, 62, & 91)
INSTALL 10-INCH TEMPORARY HMA IN CROSS-ROAD TRENCH.
REMOVE EXISTING CONCRETE MEDIAN, CONSTRUCT TEMPORARY PAVEMENT AND WEST SIDE EMBANKMENT.
INSTALL TEMPORARY TRAFFIC SIGNAL.
INSTALL TEMPORARY MANHOLES FOR PUMPING TO MAINTAIN DRAINAGE.
INSTALL STORM SEWER TRUNK LINE AND LATERALS ON SOUTH SIDE OF IL ROUTE 62 FROM STA. 516+00 TO 529+00.
PLACE STEEL PLATES OVER THE FLAT SLAB TOPS OF THE NEW STORM SEWER STRUCTURES ON THE SOUTH SIDE OF IL ROUTE 62 FROM STA. 516+00 TO 529+00 PRIOR TO PLACING TEMPORARY PAVEMENT.

MAINTENANCE OF TRAFFIC:
THE CROSS-ROAD CULVERT REMOVAL AND REPLACEMENT WILL BE DONE ACROSS ONLY ONE-LANE AT A TIME. UTILIZE STANDARDS 701201-04 AND 701326-04.

STAGE 1

CONSTRUCTION:
WESTBOUND LANES: REMOVE EXISTING PAVEMENT, INSTALL TEMPORARY SHEET PILING, AND INSTALL NEW RETAINING WALLS. INSTALL PORTION OF STORM SEWER SYSTEM ON NORTH SIDE OF IL ROUTE 62 AND CONSTRUCT NEW WESTBOUND LANES.

MAINTENANCE OF TRAFFIC:
UTILIZE MAINTENANCE OF TRAFFIC DETAILS IN THE PLANS AND STANDARDS 701431-06 AND 701606-07.

STAGE 2

CONSTRUCTION:
EASTBOUND LANES: REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW EASTBOUND LANES. INSTALL NEW RETAINING WALLS AND REMAINING PORTION OF STORM SEWER SYSTEM.

MAINTENANCE OF TRAFFIC:
UTILIZE MAINTENANCE OF TRAFFIC DETAILS IN THE PLANS AND STANDARDS 701431-06 AND 701606-07.

STAGE 3

CONSTRUCTION:
REMOVE TEMPORARY PAVEMENT AND CONSTRUCT MEDIANS AT PENNY ROAD AND EASTINGS WAY. PLACE FINAL PAVEMENT MARKINGS, RAISED REFLECTIVE MARKERS, AND LANDSCAPING.

MAINTENANCE OF TRAFFIC:
UTILIZE AND STANDARDS 701311-03 AND 701701-07.

FILE NAME = ...\D160135-sht-MOT_ Notes.dgn	Primera	DESIGNED ADW	REVISED - 10/21/2011 A.D.W.
		DRAWN MHL	REVISED -
		CHECKED RJD	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
MOT GENERAL NOTES AND SUGGESTED CONSTRUCTION SEQUENCING
SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	17
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

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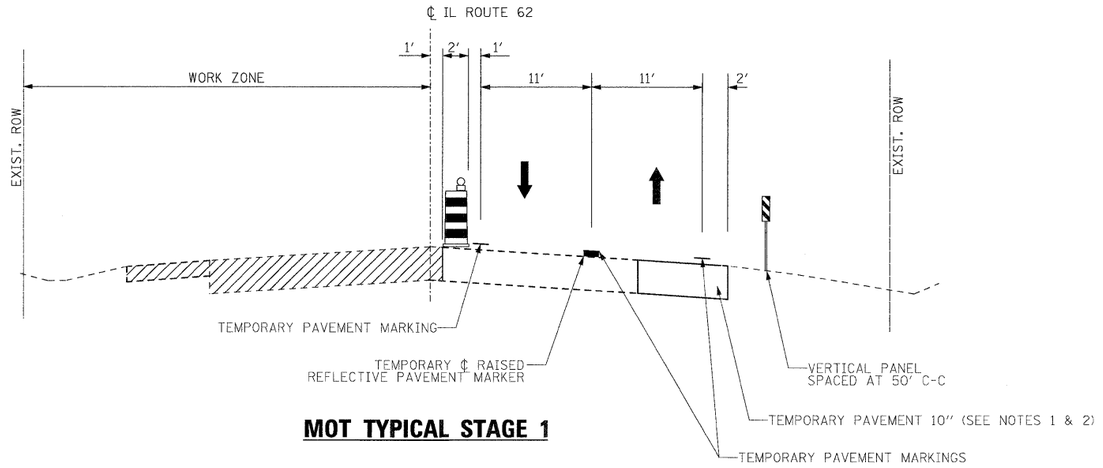
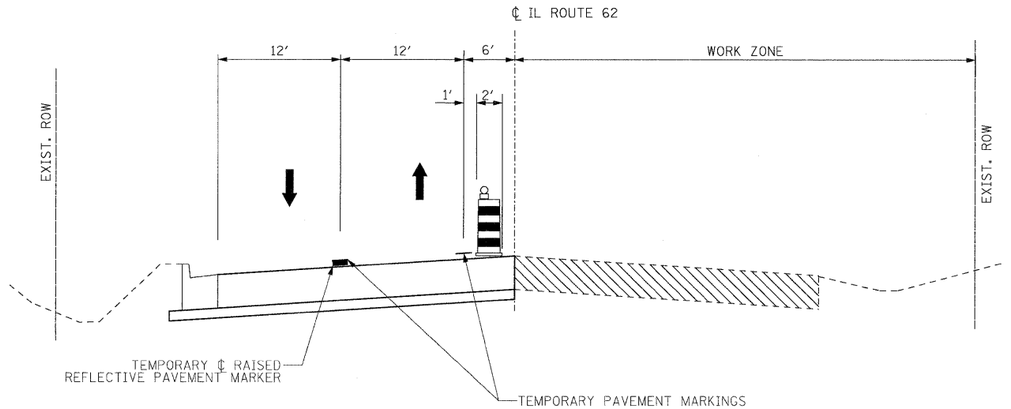


MOT TYPICAL STAGE 1



MOT TYPICAL STAGE 2

NOTES

1. THE CROSS SLOPE OF THE TEMPORARY PAVEMENT SHALL MATCH THE CROSS SLOPE OF THE EXISTING PAVEMENT (OR AS DIRECTED BY THE ENGINEER).
2. THE TEMPORARY PAVEMENT 10″ WILL BE COMPRISED OF:
   8 1/2″ HOT-MIX ASPHALT BINDER IL-19, N50 &
   1 1/2″ HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50

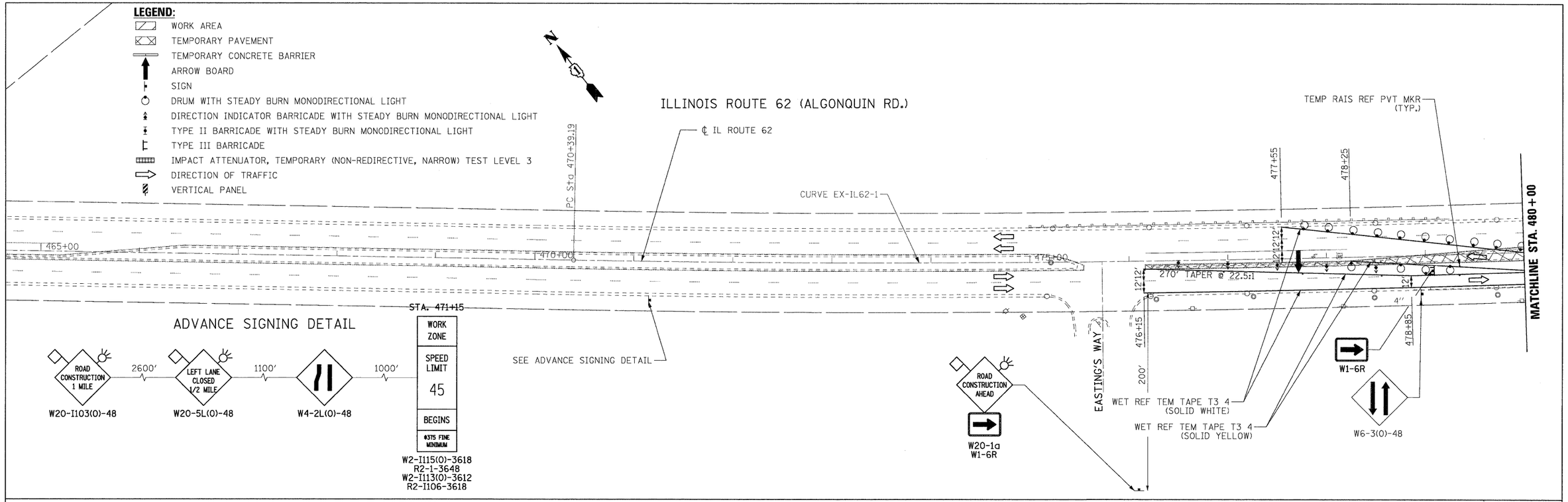
FILE NAME = ...\D1601135-sht-mot.typicals.dgn	Primera	DESIGNED ADW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD. MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
		DRAWN ADW	REVISED -		
		CHECKED RJD	REVISED -		
		DATE JUNE 30, 2011	REVISED -		SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	18
		CONTRACT NO. 60135		
		ILLINOIS | FED. AID PROJECT		

LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- TEMPORARY CONCRETE BARRIER
- ARROW BOARD
- SIGN
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE, NARROW) TEST LEVEL 3
- DIRECTION OF TRAFFIC
- VERTICAL PANEL

PLAN — SURVEYED / DATE / ALIGNMENT CHECKED / DATE / P.I. MARKED / CADD FILE NAME / NOTE BOOK / NO. / BY / DATE



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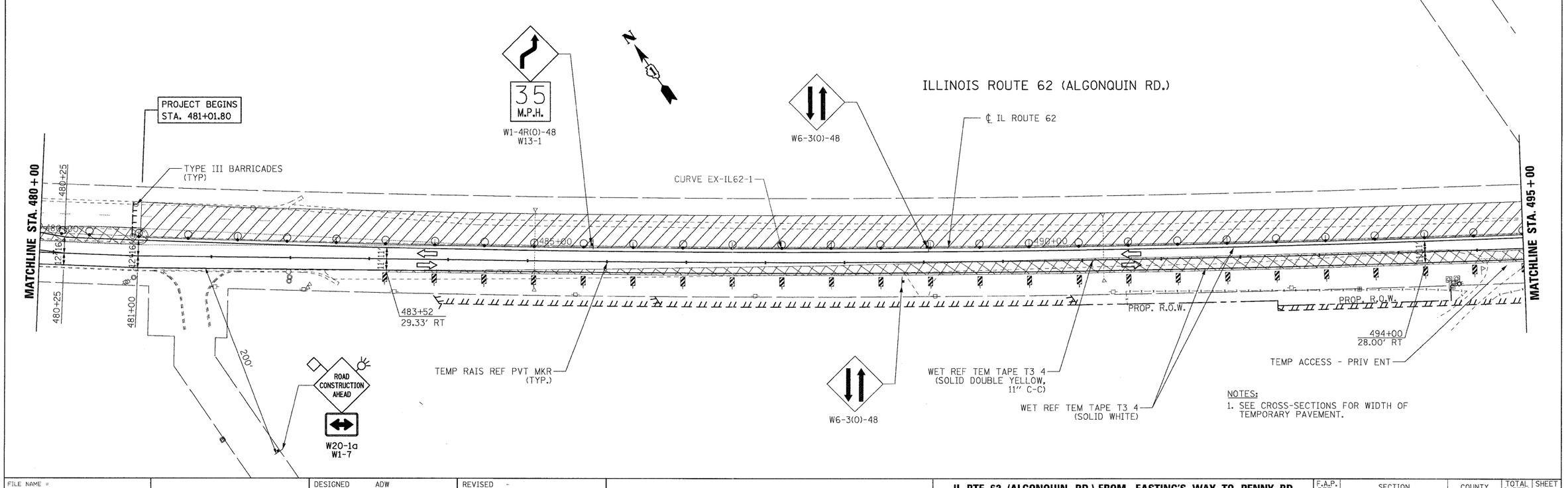


NOTES:

1. SEE CROSS-SECTIONS FOR WIDTH OF TEMPORARY PAVEMENT.

FILE NAME = ...\D160135-sht-staging1_01.dgn

Primera

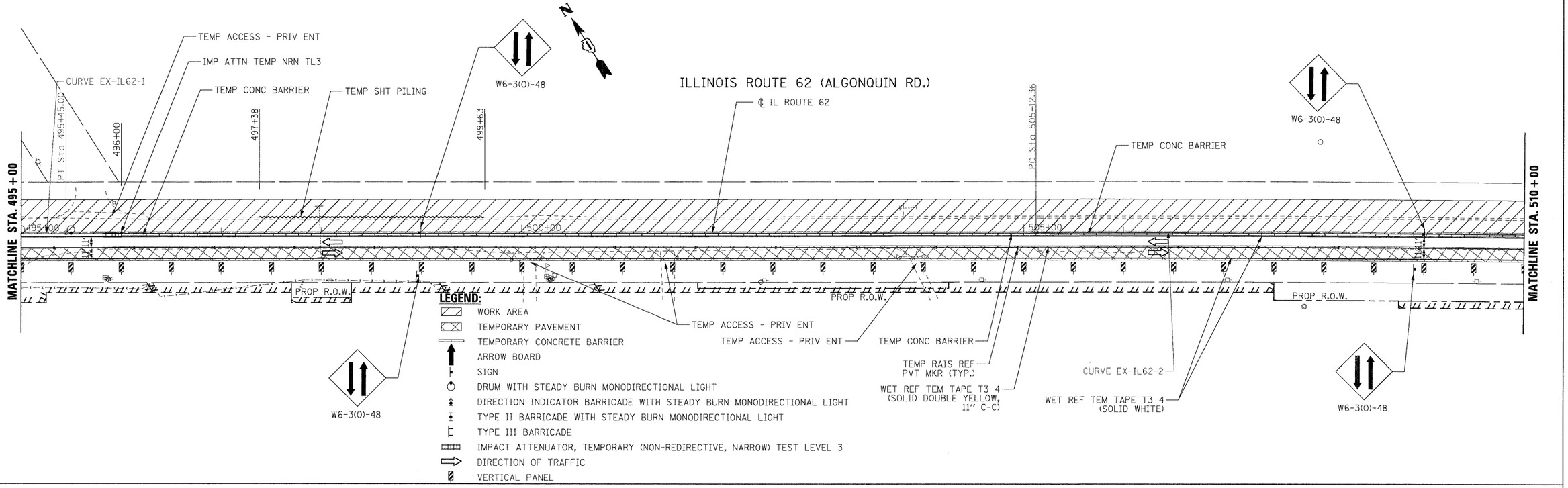
DESIGNED	ADW	REVISED	-
DRAWN	ADW	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

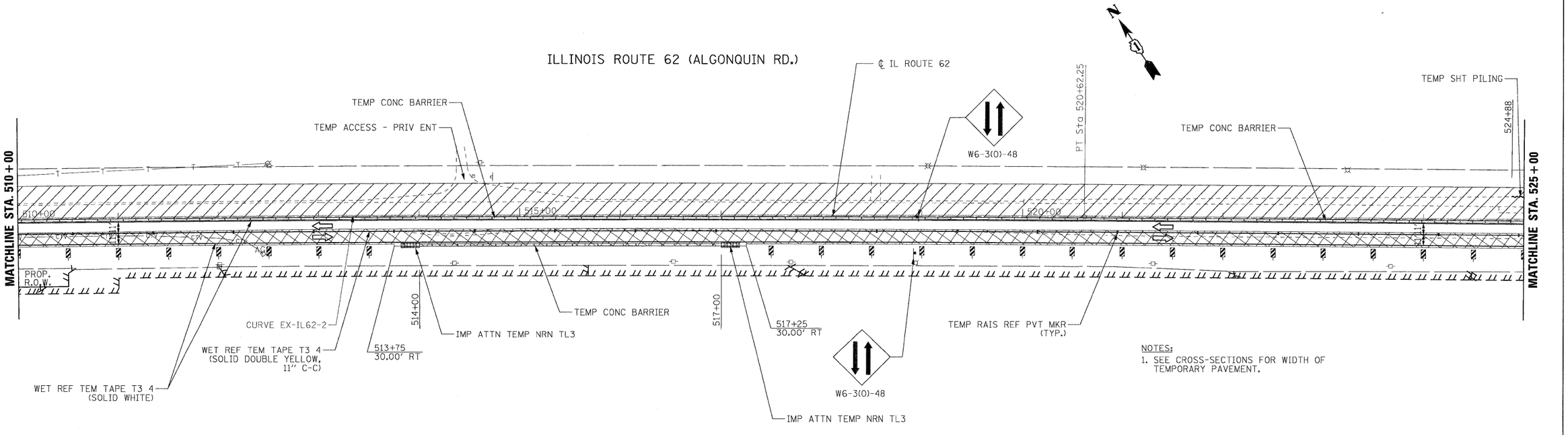
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL – STAGE 1

SCALE: 1"=50' | SHEET NO. 1 OF 6 SHEETS | STA. 465+00 TO STA. 495+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	19
		CONTRACT NO. 60135		
	ILLINOIS	FED. AID PROJECT		





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	CHECKED RJD	REVISED -	
	DATE JUNE 30, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL – STAGE 1

SCALE: 1"=50' | SHEET NO. 2 OF 6 SHEETS | STA. 495+00 TO STA. 525+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	20
		CONTRACT NO. 6OI35		
	ILLINOIS FED. AID PROJECT			

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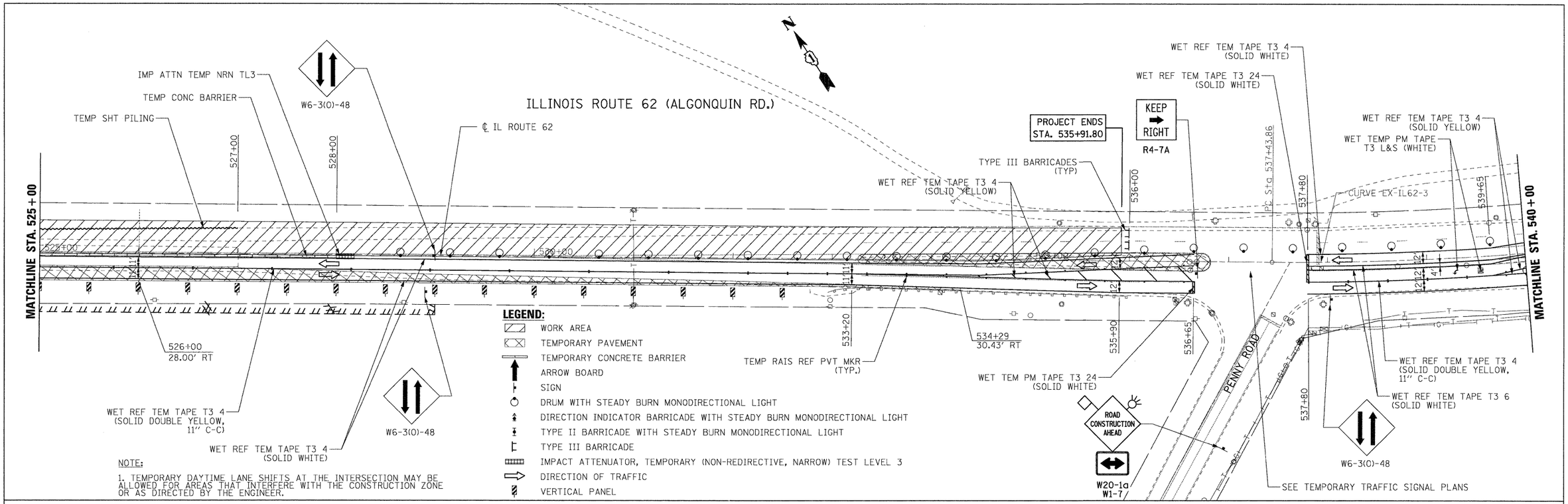

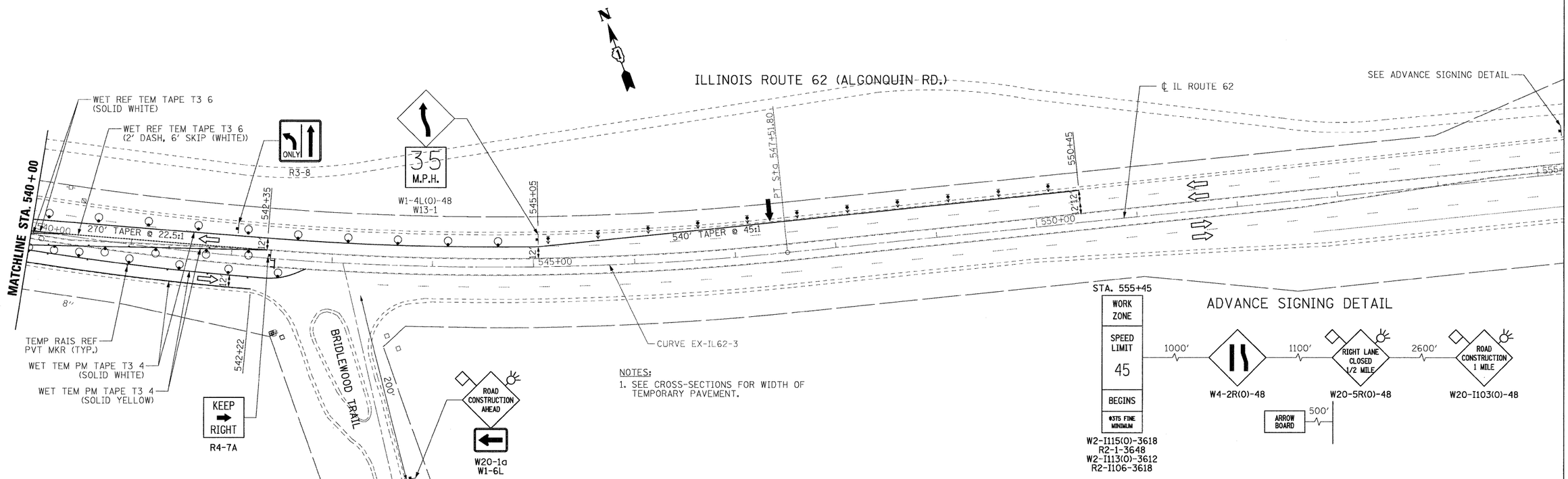

PLAN
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BY
DATE

FILE NAME = ...\D160135-sht-staging1_03.dgn

Primera

DESIGNED	ADW	REVISED	-
DRAWN	ADW	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

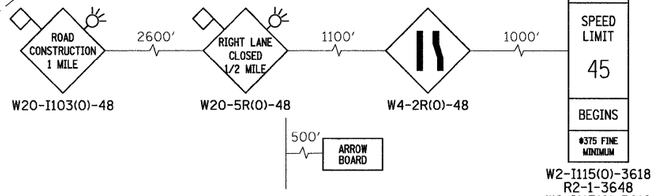
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

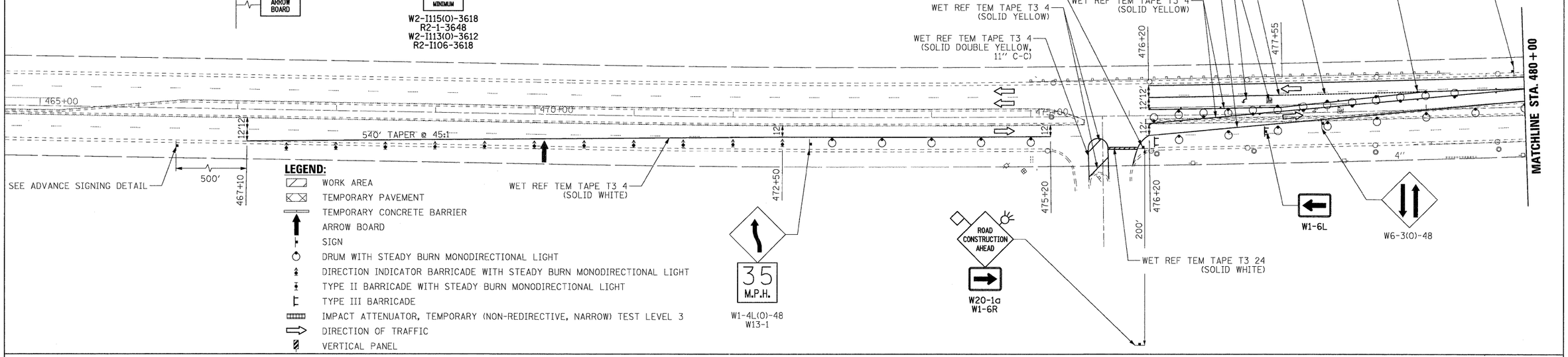
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL – STAGE 1

SCALE: 1"=50' | SHEET NO. 3 OF 6 SHEETS | STA. 525+00 TO STA. 550+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	21
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

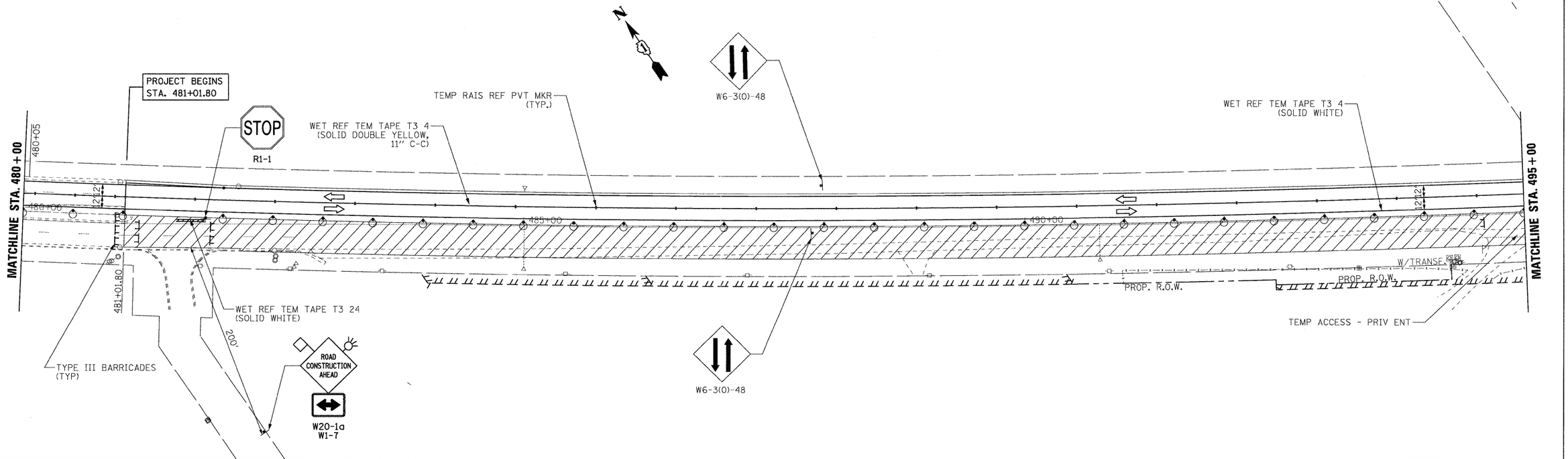
ADVANCE SIGNING DETAIL





LEGEND:

- WORK AREA
- TEMPORARY PAVEMENT
- TEMPORARY CONCRETE BARRIER
- ARROW BOARD
- SIGN
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE, NARROW) TEST LEVEL 3
- DIRECTION OF TRAFFIC
- VERTICAL PANEL



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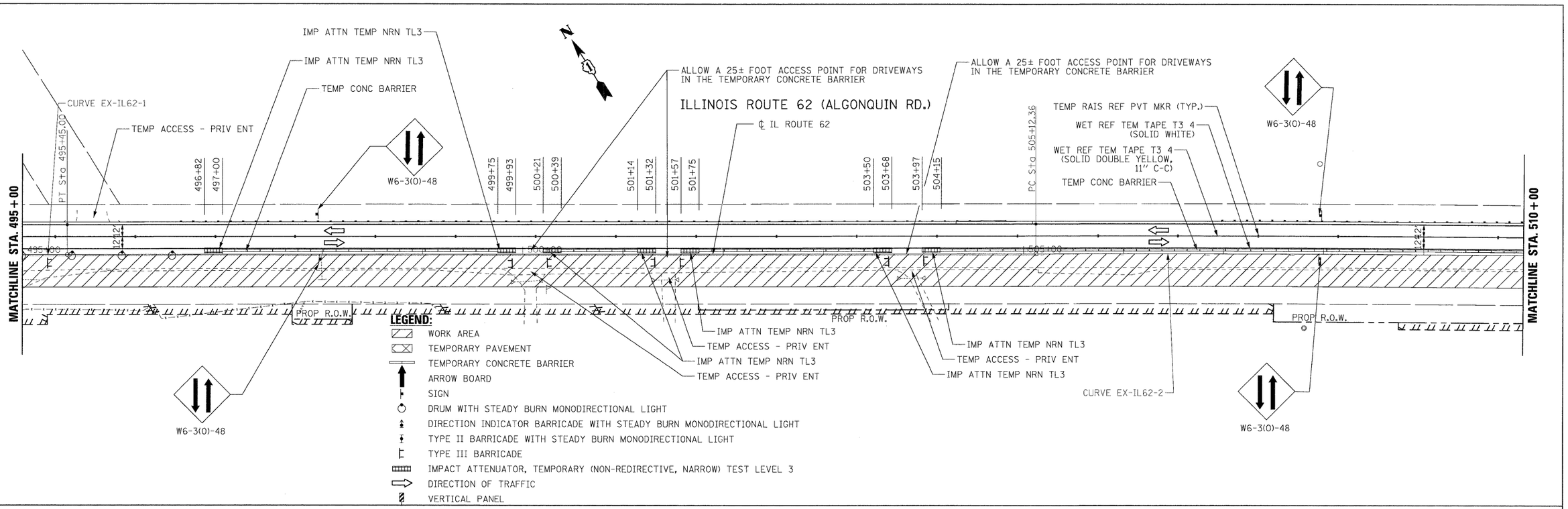
Primera	DRAWN ADW	REVISED -	
	CHECKED RJD	REVISED -	
	DATE JUNE 30, 2011	REVISED -	

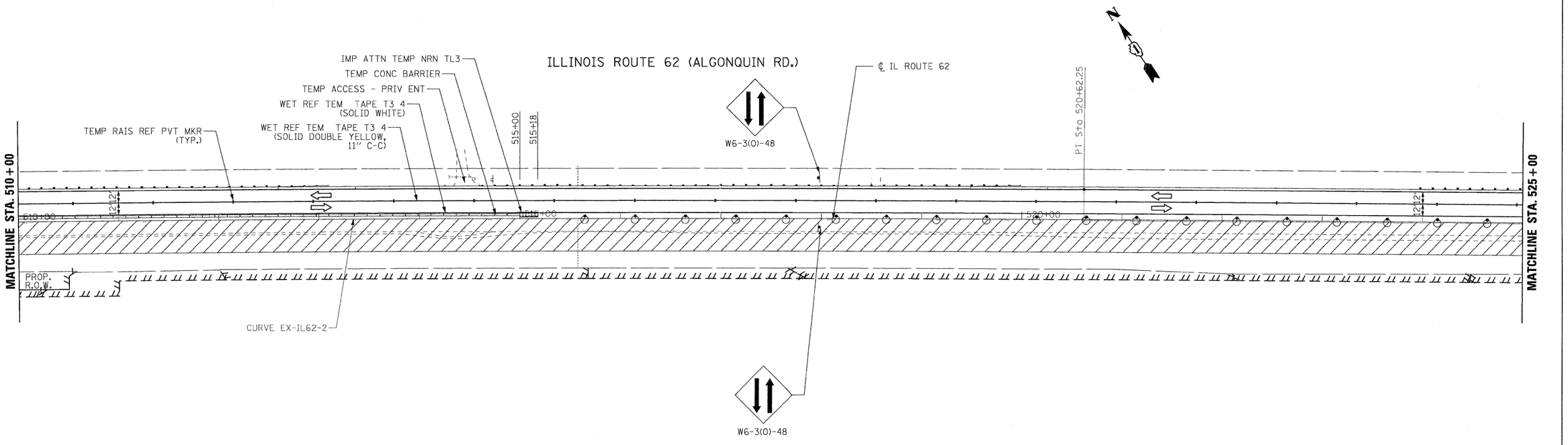
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL – STAGE 2

SCALE: 1"=50' | SHEET NO. 4 OF 6 SHEETS | STA. 465+00 TO STA. 495+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	22
		CONTRACT NO. 60I35		
		ILLINOIS FED. AID PROJECT		

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





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		DRAWN ADW	REVISED -		SCALE: 1"=50' | SHEET NO. 5 OF 6 SHEETS | STA. 495+00 TO STA. 525+00
		CHECKED RJD	REVISED -		
		DATE JUNE 30, 2011	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	23
		CONTRACT NO. 60I35		
	ILLINOIS	FED. AID PROJECT		

PLAN
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DRAWN
ALIGNMENT CHECKED
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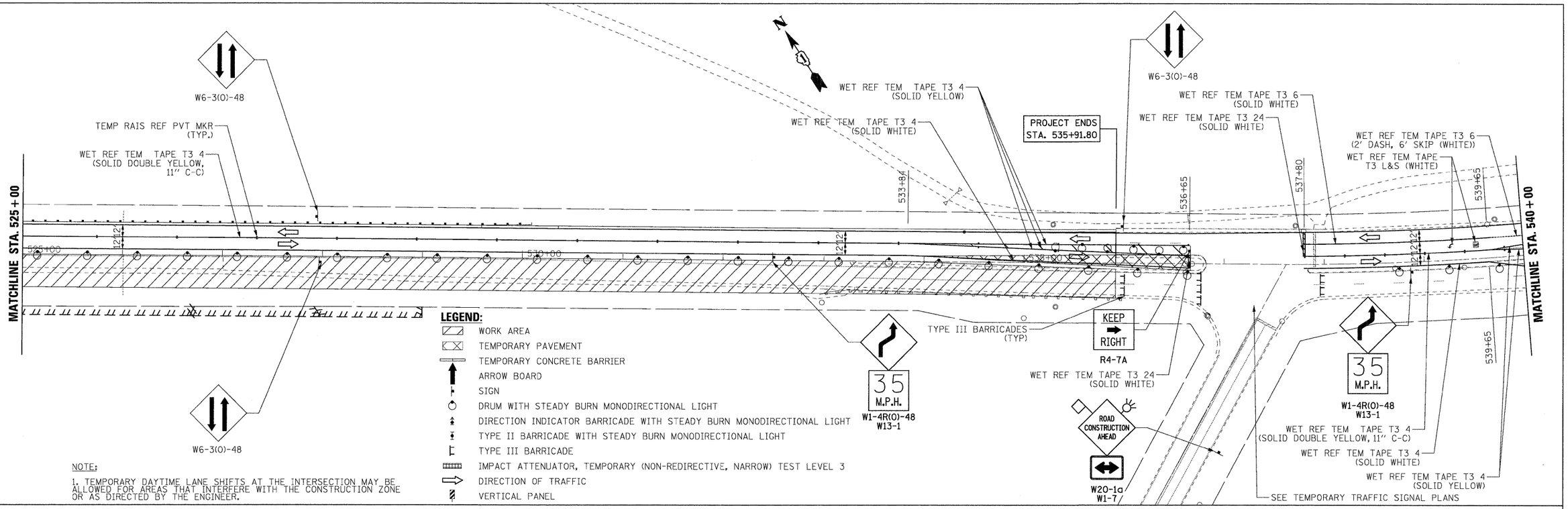

PLAN | SURVEYED | BY | DATE
NOTE BOOK | ALIGNMENT CHECKED
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FILE NAME = ...\D162I35-sht staging2_03.dgn

Primera

DESIGNED	ADW	REVISED	-
DRAWN	ADW	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL – STAGE 2

SCALE: 1"=50' | SHEET NO. 6 OF 6 SHEETS | STA. 525+00 | TO STA. 549+75

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	24
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

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

EROSION CONTROL NOTES

1. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER.
2. CONTRACTOR TO PREPARE AN EROSION AND SEDIMENT CONTROL STAGING PLAN FOR ALL DRAINAGE CROSSINGS, TO BE APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT POLLUTION OF STORM WATER AND SHALL FOLLOW IEPA & IDOT CONSTRUCTION MEMORANDUM NO. 02-60.
4. ALL VEGETATIVE AND STRUCTURAL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL" AND THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.
5. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
6. THE MAINTENANCE AND REPAIR OR REPLACEMENT OF EROSION CONTROL ITEMS, WHEN DIRECTED BY THE ENGINEER, WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED PAY ITEMS.
7. ALL STORM SEWER FACILITIES THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT. MUD AND SEDIMENT DEPOSITS SHALL BE REMOVED FROM THE ROADWAY AT THE END OF EACH WORK DAY BY SHOVELING AND/OR SWEEPING.
8. INLET FILTERS SHALL BE PLACED ON ALL CATCH BASINS, INLETS, AND MANHOLES WITH OPEN GRATES.
9. THE CONTRACTOR SHALL APPLY TEMPORARY EROSION CONTROL SEEDING TO ALL ERODIBLE BARE EARTH AREAS EVERY 7 DAYS AFTER THE EARTH IS EXPOSED.
   APPLICATION RATE USED: 100 LB/ACRE
10. BROADCASTING OF THE SEED BY MACHINE, HAND METHODS, HYDRAULIC SEEDING OR OTHER METHODS APPROVED BY THE ENGINEER WILL BE ALLOWED FOR TEMPORARY EROSION CONTROL SEEDING.

EROSION CONTROL NOTES (CONT.)

11. TOPSOIL AND FERTILIZER NUTRIENTS ARE NOT REQUIRED FOR TEMPORARY EROSION CONTROL SEEDING.
12. SEED BED PREPARATION WILL NOT BE REQUIRED FOR TEMPORARY EROSION CONTROL SEEDING IF THE SOIL IS IN A LOOSE CONDITION. LIGHT DISKING SHALL BE DONE IF THE SOIL IS HARD PACKED OR CAKED.
13. MULCH WILL NOT BE REQUIRED ON AREAS WHERE VEGETATIVE COVER PROVIDES ADEQUATE EROSION CONTROL.
14. MULCH, METHOD 2 (PROCEDURE 2) SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENT OF THE STANDARD SPECIFICATIONS AFTER TEMPORARY EROSION CONTROL SEEDING HAS BEEN COMPLETED ON AREAS WITH SLOPES STEEPER THAN 1:3 (V:H) THAT ARE TEMPORARY SEEDED BEFORE NOVEMBER 2.
15. EROSION CONTROL BLANKET SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AFTER TEMPORARY EROSION CONTROL SEEDING HAS BEEN COMPLETED ON ALL AREAS THAT ARE TEMPORARY SEEDED IN AREAS OF CONCENTRATED FLOW AS DIRECTED BY THE ENGINEER AT ANY TIME OF YEAR.
16. ALL TEMPORARY INFORMATION SIGNS, PERIMETER EROSION BARRIER AND TEMPORARY FENCE SHALL BE INSTALLED WITHIN THE TEMPORARY EASEMENT, PROPOSED RIGHT-OF-WAY OR EXISTING RIGHT-OF-WAY.
17. 'WETLANDS' SIGNS SHALL BE ATTACHED TO THE PERIMETER EROSION BARRIER POST AT EACH WETLAND. SIGNS ARE AVAILABLE FROM THE IDOT ROADSIDE DEVELOPMENT UNIT (847) 705-4171, AND INSTALLATION SHALL BE INCIDENTAL TO "TEMPORARY CONSTRUCTION FENCE".
18. EROSION CONTROL BLANKET SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AFTER TEMPORARY EROSION CONTROL SEEDING HAS BEEN COMPLETED ON ALL AREAS WITH SLOPES STEEPER THAN 1:3 (V:H) THAT ARE TEMPORARY SEEDED ON OR AFTER NOVEMBER 2.
19. PER ARTICLE 542 OF THE STANDARD SPECIFICATIONS THE WATER DIVERSION METHOD USED BY THE CONTRACTOR FOR CONSTRUCTING CULVERTS SHALL BE
    APPROVED BY THE ENGINEER PRIOR TO WORK BEING PERFORMED.

EROSION CONTROL LEGEND

PERIMETER EROSION BARRIER

TEMPORARY CONSTRUCTION FENCE — xxx — xxx — xxx — xxx

TEMPORARY INFORMATION SIGNING (FOR WETLAND AREAS) — 24" WETLAND AREA DO NOT ENTER 15"

TEMPORARY EROSION CONTROL SEEDING

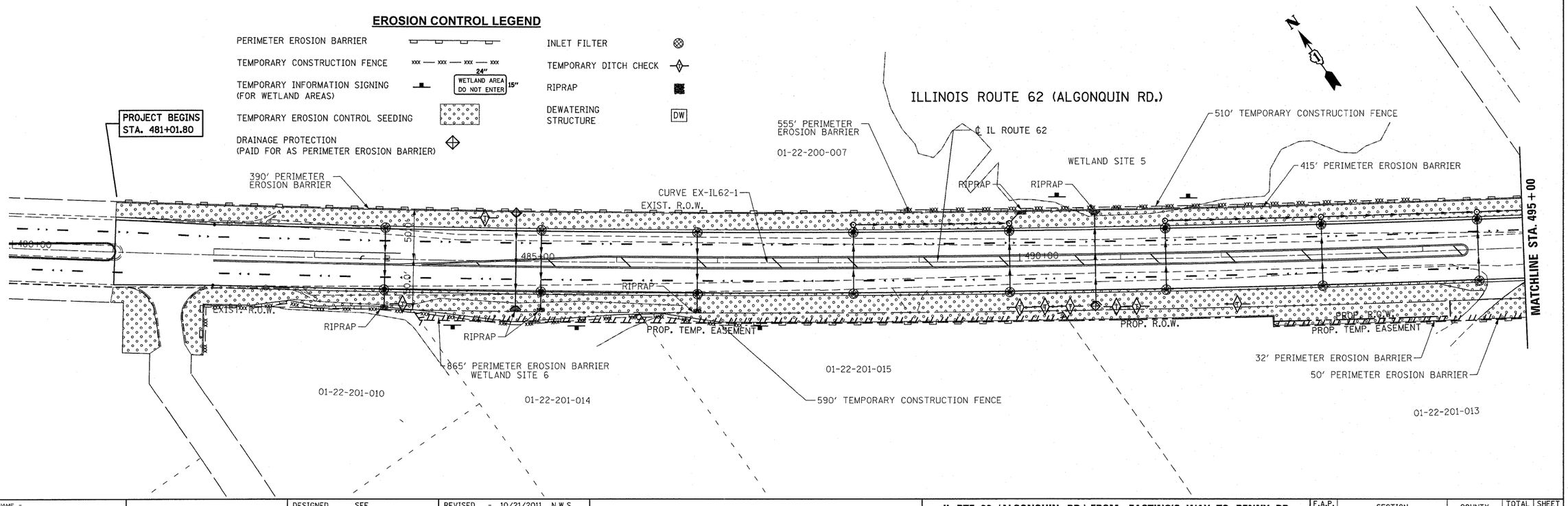
DRAINAGE PROTECTION (PAID FOR AS PERIMETER EROSION BARRIER)

INLET FILTER

TEMPORARY DITCH CHECK

RIPRAP

DEWATERING STRUCTURE — DW



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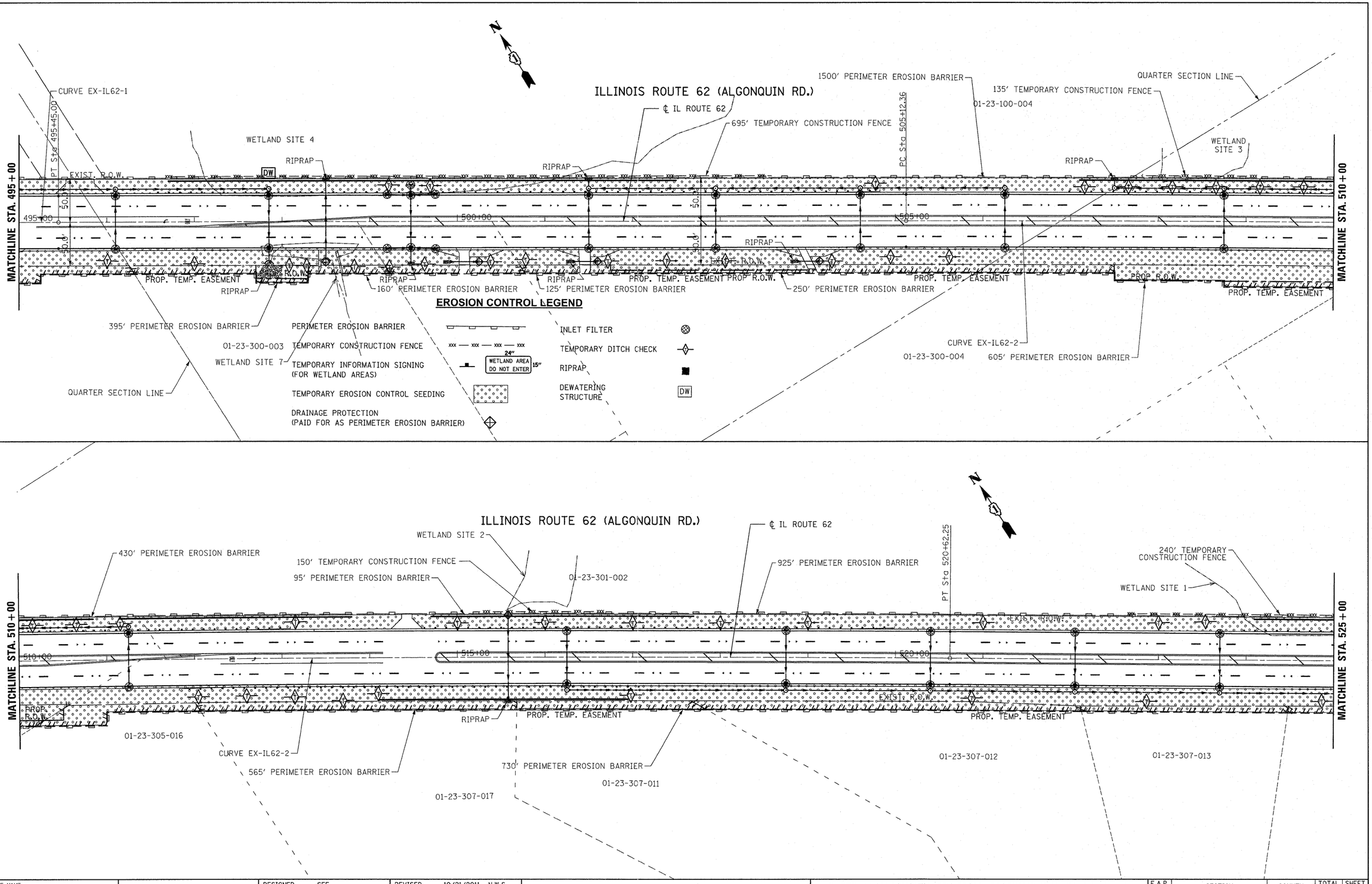
		DRAWN SMQ	REVISED -		SCALE: 1"=50' | SHEET NO. 1 OF 3 SHEETS | STA. 481+01.80 TO STA. 495+00
		CHECKED RJD	REVISED -		
		DATE JUNE 30, 2011	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	25
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			



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		DRAWN SMQ	REVISED -		SCALE: 1"=50' | SHEET NO. 2 OF 3 SHEETS | STA. 495+00 TO STA. 525+00
		CHECKED RJD	REVISED -		
		DATE JUNE 30, 2011	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	26
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

EROSION CONTROL LEGEND

PERIMETER EROSION BARRIER

TEMPORARY CONSTRUCTION FENCE xxx — xxx — xxx — xxx

TEMPORARY INFORMATION SIGNING (FOR WETLAND AREAS) — WETLAND AREA DO NOT ENTER (24" x 15")

TEMPORARY EROSION CONTROL SEEDING

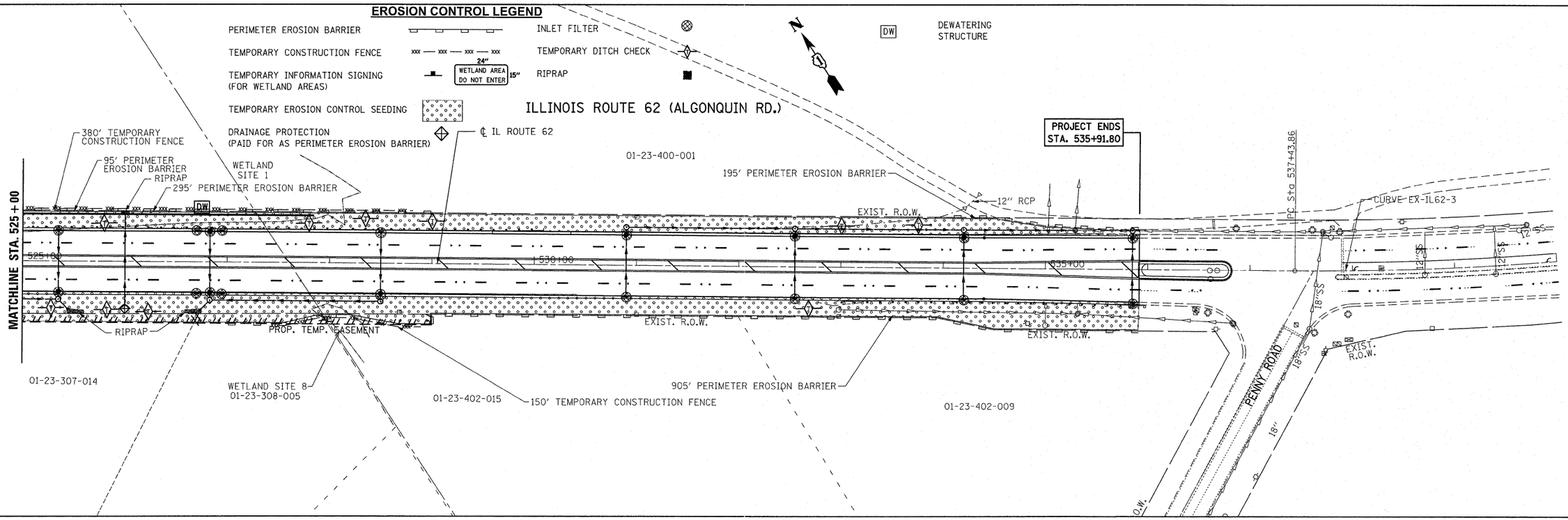
DRAINAGE PROTECTION (PAID FOR AS PERIMETER EROSION BARRIER)

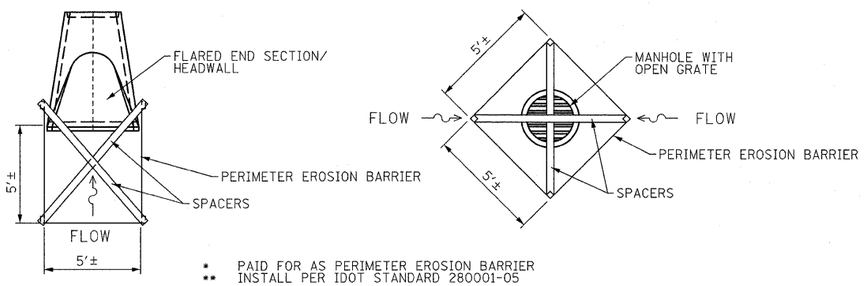
INLET FILTER

TEMPORARY DITCH CHECK

RIPRAP

DW DEWATERING STRUCTURE





* PAID FOR AS PERIMETER EROSION BARRIER
** INSTALL PER IDOT STANDARD 280001-05

DRAINAGE PROTECTION DETAILS
N.T.S.

FILE NAME = ...\D160135-sht-eros_03.dgn	Primera	DESIGNED SEF	REVISED - 10/21/2011 N.W.S.
		DRAWN SMQ	REVISED -
		CHECKED RJD	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
EROSION & SEDIMENT CONTROL PLAN

SCALE: 1"=50' | SHEET NO. 3 OF 3 SHEETS | STA. 525+00 | TO STA. 535+91.80

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	27
		CONTRACT NO. 60135		
	ILLINOIS	FED. AID PROJECT		

PLAN
SURVEYED
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NOTE BOOK
NO.
BY
DATE
ALL ITEM MAY CHECKED
CADD FILE NAME

STRUCTURE TABLE										
NO.	STATION	OFFSET	TYPE	FRAME	FST	RIM	N. INV.	E. INV.	S. INV.	W. INV.
1	483+70	30.0'LT	INL-A	T-24		872.77			869.24	
2	483+70	30.0'RT	CB-A4	T-24	*	872.77	868.95		868.95	
3	483+70	48.0'RT	FES 12	--		--	868.90			
4	485+00	48.0'LT	ES D24-1.5	--		--			867.26	
~~5~~	~~485+00~~	~~37.5'RT~~	~~MH-A5~~	~~1-CL~~	~~*~~	~~871.3~~	~~867.13~~	~~867.13~~	~~867.13~~	~~867.13~~
6	485+00	48.0'RT	ES D24-1.5	--		--	867.11			
7	485+25	30.0'LT	INL-A	T-24		872.11			868.79	
8	485+25	30.0'RT	CB-A4	T-24	*	872.11	868.50		867.28	
9	485+25	48.0'RT	FES 12	--		--	867.23			
10	486+80	30.0'LT	INL-A	T-24		871.44			868.34	
11	486+80	30.0'RT	CB-A4	T-24	*	871.44	868.05		868.05	
12	486+80	48.0'RT	FES 12	--		--	868.00			
13	488+35	30.0'RT	INL-A	T-24		870.78	866.92			
14	488+35	30.0'LT	CB-A4	T-24	*	870.78	866.63		866.63	
15	488+35	37.5'LT	MH-A4	1-CL	*	870.0		866.61	866.61	

STRUCTURE TABLE										
NO.	STATION	OFFSET	TYPE	FRAME	FST	RIM	N. INV.	E. INV.	S. INV.	W. INV.
16	489+90	30.0'RT	INL-A	T-24		870.11	866.14			
17	489+90	30.0'LT	CB-A4	T-24	*	870.11	865.85		865.85	
18	489+90	37.5'LT	MH-A4	1-CL	*	869.4		865.83	865.83	865.83
19	490+00	48.0'LT	FES 12	--		--				865.80
20	490+75	45.0'RT	ES D24-1.5	--		--	865.25			
21	490+75	48.0'LT	ES D24-1.5	--		--			863.70	
22	491+45	30.0'RT	INL-A	T-24		869.44	865.01			
23	491+45	30.0'LT	CB-A4	T-24	*	869.44	864.72		864.72	
24	491+45	37.5'LT	MH-A4	1-CL	*	868.7		864.70	864.70	
25	493+00	30.0'RT	INL-A	T-24		868.78	864.28			
26	493+00	30.0'LT	CB-A4	T-24	*	868.78	863.98		863.98	
27	493+00	37.5'LT	MH-A4	1-CL	*	868.9		863.94	863.94	863.94
28	494+55	30.0'RT	INL-A	T-24		868.11	863.61			
29	494+55	30.0'LT	CB-A4	T-24	*	868.11	863.31		863.31	
30	494+55	37.5'LT	MH-A4	1-CL	*	867.4		863.27	863.27	863.27
~~120~~	~~494+45~~	~~46.0'RT~~	~~FES 15~~							~~866.26~~
~~121~~	~~494+95~~	~~46.0'RT~~	~~FES 15~~					~~865.96~~		

PIPE TABLE								
NO.	TYPE	UPSTREAM STATION	DOWNSTREAM STATION	MAT.	SIZE	SLOPE	LIN. FT.	TBF (CYD)
1	SS-T1-A	483+70 30.0 LT	483+70 30.0 RT	RCP	12"	0.50%	57'	8
2	SS-T1-A	483+70 30.0 RT	483+70 48.0 RT	RCP	12"	0.50%	10'	1
~~3~~	~~SS-T1-A~~	~~483+70 37.5 RT~~	~~485+00 37.5 RT~~	~~RCP~~	~~12"~~	~~0.62%~~	~~126'~~	
4	SS-T1-A	485+25 30.0 LT	485+25 30.0 RT	RCP	12"	0.50%	57'	8
5	SS-T1-A	485+25 30.0 RT	485+25 48.0 RT	RCP	12"	0.50%	10'	1
~~6~~	~~SS-T1-A~~	~~485+25 37.5 RT~~	~~485+00 37.5 RT~~	~~RCP~~	~~12"~~	~~0.56%~~	~~21'~~	
7	PC-T1-A	485+00 48.0 LT	485+00 48.0 RT	RCP	24"	0.17%	92'	23
~~8~~	~~SS-T1-A~~	~~485+00 37.5 RT~~	~~485+00 48.0 RT~~	~~RCP~~	~~24"~~	~~0.18%~~	~~6'~~	
9	SS-T1-A	486+80 30.0 LT	486+80 30.0 RT	RCP	12"	0.50%	57'	8
10	SS-T1-A	486+80 30.0 RT	486+80 48.0 RT	RCP	12"	0.50%	10'	1
~~11~~	~~SS-T1-A~~	~~486+80 37.5 LT~~	~~488+35 37.5 LT~~	~~RCP~~	~~12"~~	~~0.43%~~	~~151'~~	
12	SS-T1-A	488+35 30.0 RT	488+35 30.0 LT	RCP	12"	0.50%	57'	9
13	SS-T1-A	488+35 30.0 LT	488+35 37.5 LT	RCP	12"	0.60%	4'	1
14	SS-T1-A	488+35 37.5 LT	489+90 37.5 LT	RCP	12"	0.50%	151'	--

PIPE TABLE								
NO.	TYPE	UPSTREAM STATION	DOWNSTREAM STATION	MAT.	SIZE	SLOPE	LIN. FT.	TBF (CYD)
15	SS-T1-A	489+90 30.0 RT	489+90 30.0 LT	RCP	12"	0.50%	57'	9
16	SS-T1-A	489+90 30.0 LT	489+90 37.5 LT	RCP	12"	0.60%	4'	1
17	SS-T1-A	489+90 37.5 LT	490+00 48.0 LT	RCP	12"	0.50%	6'	--
18	SS-T1-A	491+45 30.0 RT	491+45 30.0 LT	RCP	12"	0.50%	57'	12
19	SS-T1-A	491+45 30.0 LT	491+45 37.5 LT	RCP	12"	0.60%	4'	1
20	SS-T1-A	491+45 37.5 LT	493+00 37.5 LT	RCP	12"	0.50%	151'	--
21	PC-T1-A	490+75 45.0 RT	490+75 48.0 LT	RCP	24"	1.74%	89'	25
~~22~~	~~SS-T1-A~~	~~490+75 37.5 LT~~	~~490+75 48.0 LT~~	~~RCP~~	~~24"~~	~~0.91%~~	~~6'~~	
23	SS-T1-A	493+00 30.0 RT	493+00 30.0 LT	RCP	12"	0.50%	57'	13
24	SS-T1-A	493+00 30.0 LT	493+00 37.5 LT	RCP	12"	1.10%	4'	1
25	SS-T1-A	493+00 37.5 LT	494+55 37.5 LT	RCP	15"	0.44%	151'	--
26	SS-T1-A	494+55 30.0 RT	494+55 30.0 LT	RCP	12"	0.50%	57'	13
27	SS-T1-A	494+55 30.0 LT	494+55 37.5 LT	RCP	12"	1.10%	4'	1
28	SS-T1-A	494+55 37.5 LT	496+10 37.5 LT	RCP	18"	0.44%	151'	--
~~120~~	~~PC-T1-D~~	~~494+45 46.0 RT~~	~~494+95 46.0 RT~~	~~RCP~~	~~15"~~	~~0.60%~~	~~38'~~	~~5~~

ABBREVIATIONS

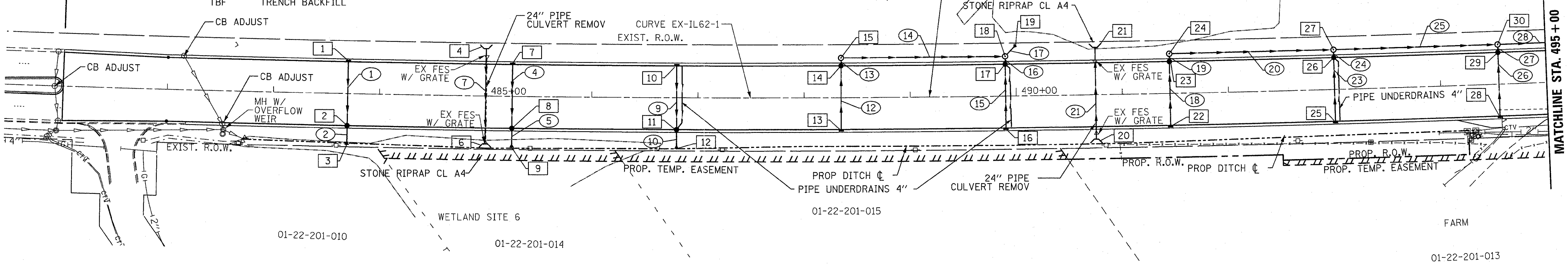
1-CL	FRAMES & LIDS, TYPE 1, CLOSED LID
CB-A4	CATCH BASINS, TYPE A, 4' DIA
FES 15	PRECAST REINFORCED CONCRETE FLARED END SECTION, 15"
FST	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
ES D#-1.5	REINFORCED CONCRETE END SECTIONS FOR #" PIPE CULVERTS, WITH 1:1.5 WINGWALL SLOPE (D#-1 1/2)
INL-A	INLET, TYPE A
MH-A#	MANHOLES, TYPE A, #' DIA
PC-T1-D	PIPE CULVERT, TYPE 1, CLASS D
PC-T2-A	PIPE CULVERT, TYPE 2, CLASS A
RCP	PRECAST REINFORCED CONCRETE PIPE
RWALL	PIPE OUTLETS THROUGH RETAINING WALL
SS-T1-A	STORM SEWER, TYPE 1, CLASS A
SS-T2-A	STORM SEWER, TYPE 2, CLASS A
T-24	FRAMES & GRATES, TYPE 24
TBF	TRENCH BACKFILL

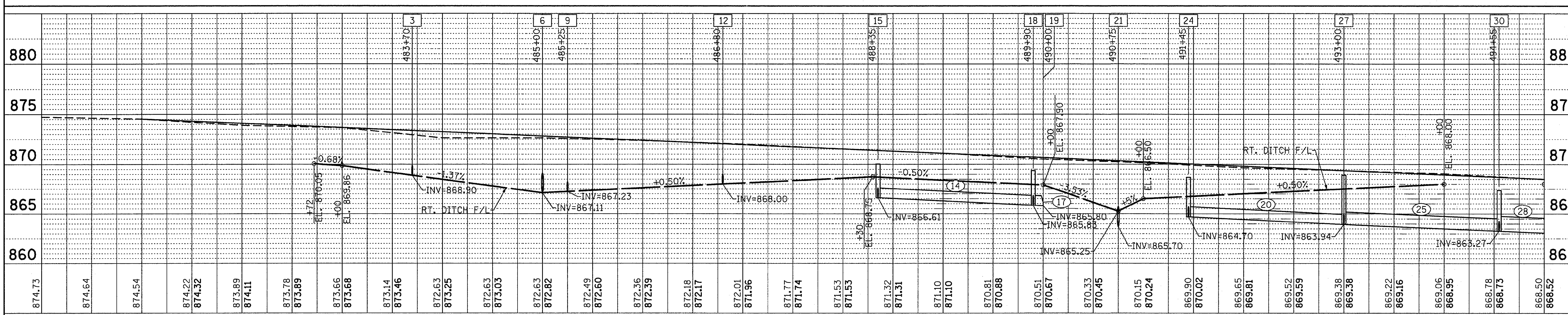
STORM SEWER KEY

[10] DRAINAGE STRUCTURE NUMBER

(10) STORM SEWER NUMBER

ILLINOIS ROUTE 62 (ALGONQUIN RD.)





FILE NAME = ...\D160I35-sht-drain_01.dgn	Primera	DESIGNED NS	REVISED - 10/21/2011 N.W.S.
		DRAWN NS	REVISED -
		CHECKED SF	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
DRAINAGE & UTILITIES PLAN AND PROFILE

SCALE: 1"=50' | SHEET NO. 1 OF 4 SHEETS | STA. 481+00 TO STA. 495+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	28

CONTRACT NO. 60I35

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

STRUCTURE TABLE

NO.	STATION	OFFSET	TYPE	FRAME	FST	RIM	N. INV.	E. INV.	S. INV.	W. INV.
31	496+10	30.0'RT	INL-A	T-24		867.45	862.95			
32	496+10	30.0'LT	CB-A4	T-24	*	867.45	862.65		862.65	
33	496+10	37.5'LT	MH-A5	1-CL	*	866.7		862.61	862.61	862.61
34	497+85	48.0'RT	ES D24-1.5	--		--	861.00			
35	497+85	30.0'RT	CB-A5	T-24	*	866.78	861.03		861.03	
36	497+85	30.0'LT	CB-A5	T-24	*	866.78	861.14		861.14	
37	497+85	37.5'LT	MH-A5	1-CL	*	866.0			861.15	861.15
38	498+50	48.0'RT	ES D36-1.5	--		--	860.91			
39	498+50	48.0'LT	RWALL	--		--			860.65	
40	499+20	30.0'RT	INL-A	T-24		866.16		862.58		
41	499+20	30.0'LT	INL-A	T-24		866.16		862.86		
42	499+47	30.0'RT	CB-A5	T-24	*	866.14	862.46	862.46	862.46	862.46
42A	499+47	48.0'RT	FES 15	--		--	862.43			
43	499+47	30.0'LT	CB-A4	T-24	*	866.14	862.74	862.74	862.74	862.74
44	499+47	42.0'LT	INL-A	1-OL		864.75			862.79	
45	499+75	30.0'RT	INL-A	T-24		866.17				862.59
46	499+75	30.0'LT	INL-A	T-24		866.17				862.87

STRUCTURE TABLE

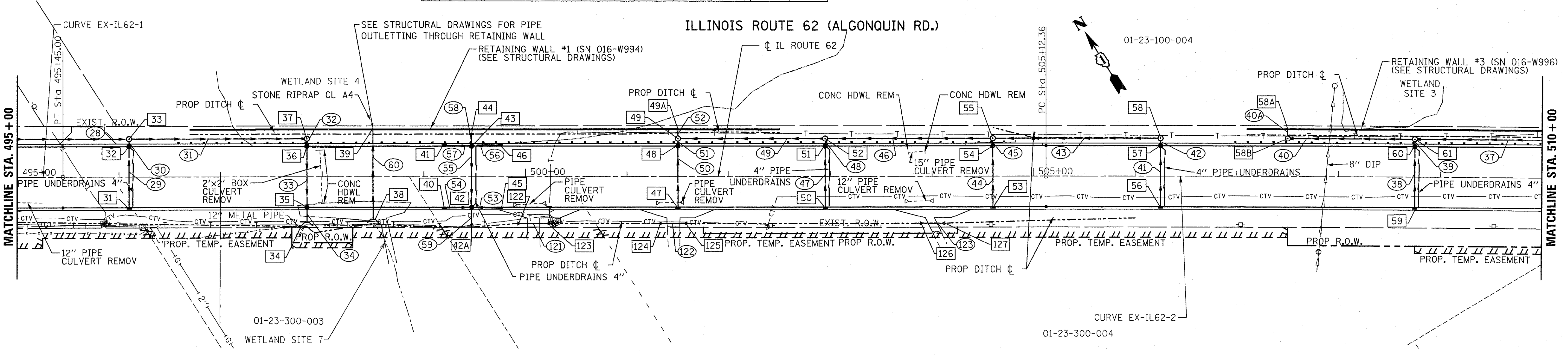
NO.	STATION	OFFSET	TYPE	FRAME	FST	RIM	N. INV.	E. INV.	S. INV.	W. INV.
47	501+50	30.0'RT	INL-A	T-24		866.86	863.13			
48	501+50	30.0'LT	CB-A4	T-24	*	866.86	862.85		862.85	
49	501+50	37.5'LT	MH-A5	1-CL	*	866.0	862.83	862.83	862.83	
49A	501+50	48.0'LT	RWALL	--		866.0			862.80	
50	502+95	30.0'RT	INL-A	T-24		867.69	863.56			
51	502+95	30.0'LT	CB-A4	T-24	*	867.69	863.27		863.27	
52	502+95	37.5'LT	MH-A4	1-CL	*	866.8		863.25	863.25	863.25
53	504+60	30.0'RT	INL-A	T-24		868.52	864.12			
54	504+60	30.0'LT	CB-A4	T-24	*	868.52	863.83		863.83	
55	504+60	37.5'LT	MH-A4	1-CL	*	867.8		863.81	863.81	863.81
56	506+25	30.0'RT	INL-A	T-24		869.60	865.10			
57	506+25	30.0'LT	CB-A4	T-24	*	869.60	864.80		864.80	
58	506+25	37.5'LT	MH-A4	1-CL	*	868.9			864.76	864.76
58A	507+50	48.0'LT	RWALL	--		869.9			866.00	
58B	507+50	37.5'LT	MH-A4	1-CL	*	869.9	866.05	866.05		
59	508+75	30.0'RT	INL-A	T-24		873.91	869.41			
60	508+75	30.0'LT	CB-A4	T-24	*	873.91	869.11		869.11	
61	508+75	37.5'LT	MH-A4	1-CL	*	873.2		869.07	869.07	869.07
122	499+92	46.0'RT	FES 15	--		--		862.92		
123	500+24	46.0'RT	FES 15	--		--				863.24
124	501+32	46.0'RT	FES 15	--		--		864.32		
125	501+59	46.0'RT	FES 15	--		--				864.59
126	503+88	46.0'RT	FES 15	--		--		866.88		
127	504+13	46.0'RT	FES 15	--		--				867.13

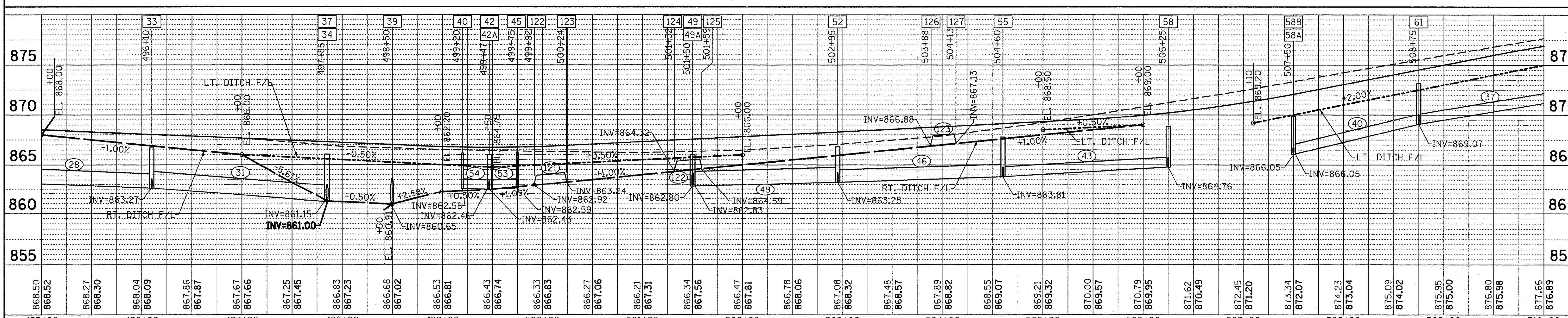
PIPE TABLE

NO.	TYPE	UPSTREAM STATION	DOWNSTREAM STATION	MAT.	SIZE	SLOPE	LIN. FT.	TBF (CYD)
28	SS-T1-A	494+55 37.5 LT	496+10 37.5 LT	RCP	18"	0.44%	151'	--
29	SS-T1-A	496+10 30.0 RT	496+10 30.0 LT	RCP	12"	0.50%	57'	13
30	SS-T1-A	496+10 30.0 LT	496+10 37.5 LT	RCP	12"	1.30%	3'	1
31	SS-T1-A	496+10 37.5 LT	497+85 37.5 LT	RCP	21"	0.86%	170'	29
32	SS-T1-A	497+85 37.5 LT	497+85 30.0 LT	RCP	24"	0.40%	3'	1
33	SS-T1-A	497+85 30.0 LT	497+85 30.0 RT	RCP	24"	0.20%	55'	18
34	SS-T1-A	497+85 30.0 RT	497+85 48.0 RT	RCP	24"	0.22%	13'	1
37	SS-T1-A	511+25 37.5 LT	508+75 37.5 LT	RCP	12"	1.70%	246'	--
38	SS-T1-A	508+75 30.0 RT	508+75 30.0 LT	RCP	12"	0.50%	57'	13
39	SS-T1-A	508+75 30.0 LT	508+75 37.5 LT	RCP	12"	1.14%	4'	1
40	SS-T1-A	508+75 37.5 LT	507+50 37.5 LT	RCP	12"	2.50%	121'	--
40A	SS-T1-A	507+50 37.5 LT	507+50 48.0 LT	RCP	12"	0.60%	9'	--
41	SS-T1-A	506+25 30.0 RT	506+25 30.0 LT	RCP	12"	0.50%	57'	13
42	SS-T1-A	506+25 30.0 LT	506+25 37.5 LT	RCP	12"	1.10%	4'	1
43	SS-T1-A	506+25 37.5 LT	504+60 37.5 LT	RCP	12"	0.60%	161'	--
44	SS-T1-A	504+60 30.0 RT	504+60 30.0 LT	RCP	12"	0.50%	57'	12
45	SS-T1-A	504+60 30.0 LT	504+60 37.5 LT	RCP	12"	0.60%	4'	1

PIPE TABLE

NO.	TYPE	UPSTREAM STATION	DOWNSTREAM STATION	MAT.	SIZE	SLOPE	LIN. FT.	TBF (CYD)
46	SS-T1-A	504+60 37.5 LT	502+95 37.5 LT	RCP	15"	0.35%	161'	--
47	SS-T1-A	502+95 30.0 RT	502+95 30.0 LT	RCP	12"	0.50%	57'	10
48	SS-T1-A	502+95 30.0 LT	502+95 37.5 LT	RCP	12"	0.60%	4'	1
49	SS-T1-A	502+95 37.5 LT	501+50 37.5 LT	RCP	18"	0.30%	141'	--
50	SS-T1-A	501+50 30.0 RT	501+50 30.0 LT	RCP	12"	0.50%	57'	8
51	SS-T1-A	501+50 30.0 LT	501+50 37.5 LT	RCP	12"	0.70%	3'	1
52	SS-T1-A	501+50 37.5 LT	501+50 48.0 LT	RCP	18"	0.38%	8'	--
53	SS-T1-A	499+75 30.0 RT	499+47 30.0 RT	RCP	12"	0.50%	25'	4
54	SS-T1-A	499+20 30.0 RT	499+47 30.0 RT	RCP	12"	0.50%	24'	4
55	SS-T1-A	499+47 30.0 LT	499+47 30.0 RT	RCP	12"	0.50%	56'	8
56	SS-T1-A	499+75 30.0 LT	499+47 30.0 LT	RCP	12"	0.50%	25'	4
57	SS-T1-A	499+20 30.0 LT	499+47 30.0 LT	RCP	12"	0.50%	24'	4
58	SS-T1-A	499+47 42.0 LT	499+47 30.0 LT	RCP	12"	0.60%	9'	1
59	SS-T1-A	499+47 30.0 RT	499+47 48.0 RT	RCP	15"	0.32%	9'	1
60	PC-T1-A	498+50 48.0 RT	498+50 48.0 LT	RCP	36"	0.28%	93'	37
~~61~~	~~SS-T2-A~~	~~498+50 37.5 LT~~	~~498+50 48.0 LT~~	~~RCP~~	~~36"~~	~~0.27%~~	~~8'~~	
121	PC-T1-D	500+24 46.0 RT	499+92 46.0 RT	RCP	15"	1.00%	20'	4
122	PC-T1-D	501+59 46.0 RT	501+32 46.0 RT	RCP	15"	1.00%	15'	2
123	PC-T1-D	504+13 46.0 RT	503+88 46.0 RT	RCP	15"	1.00%	13'	2





FILE NAME = ...\D160I35-sht-drain_02.dgn	Primera	DESIGNED NS	REVISED - 10/21/2011 N.W.S.
		DRAWN NS	REVISED -
		CHECKED SF	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
DRAINAGE & UTILITIES PLAN AND PROFILE

SCALE: 1"=50' | SHEET NO. 2 OF 4 SHEETS | STA. 495+00 TO STA. 510+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	29

CONTRACT NO. 60I35

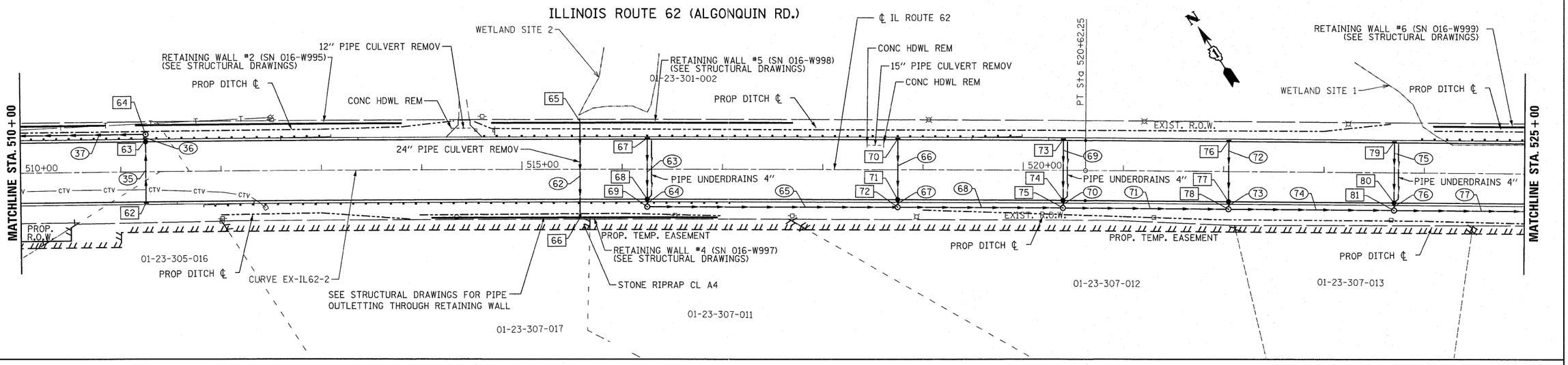
ILLINOIS FED. AID PROJECT

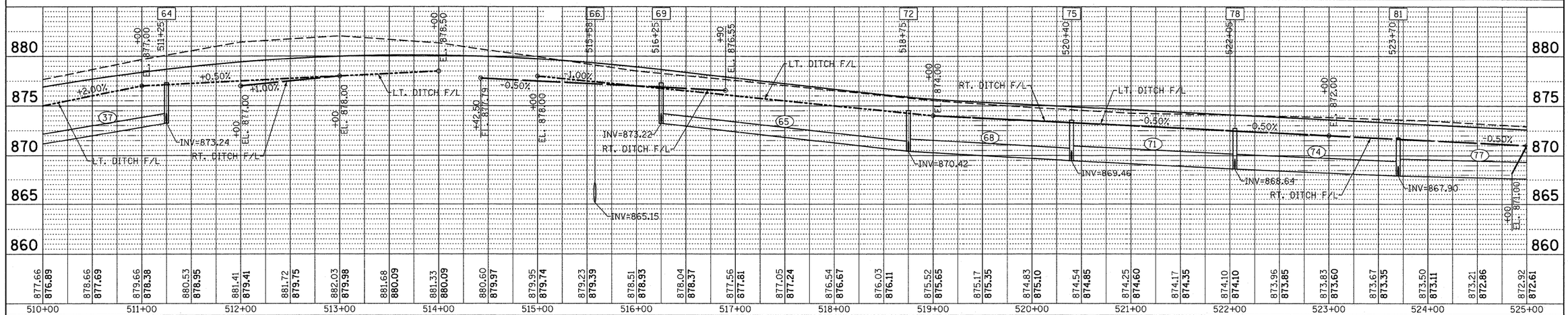
STRUCTURE TABLE										
NO.	STATION	OFFSET	TYPE	FRAME	FST	RIM	N. INV.	E. INV.	S. INV.	W. INV.
62	511+25	30.0'RT	INL-A	T-24		878.08	873.58			
63	511+25	30.0'LT	CB-A4	T-24	*	878.08	873.28		873.28	
64	511+25	37.5'LT	MH-A4	1-CL	*	877.3			873.24	873.24
65	515+58	48.0'LT	RWALL	--		--			865.46	
66	515+58	48.0'RT	RWALL	--		--	865.15			
67	516+25	30.0'LT	INL-A	T-24		878.06			873.56	
68	516+25	30.0'RT	CB-A4	T-24	*	878.06	873.26		873.26	
69	516+25	37.5'RT	MH-A4	1-CL	*	877.3	873.22	873.22		
70	518+75	30.0'LT	INL-A	T-24		875.26			870.76	
71	518+75	30.0'RT	CB-A4	T-24	*	875.26	870.46		870.46	

STRUCTURE TABLE										
NO.	STATION	OFFSET	TYPE	FRAME	FST	RIM	N. INV.	E. INV.	S. INV.	W. INV.
72	518+75	37.5'RT	MH-A4	1-CL	*	874.5	870.42	870.42		870.42
73	520+40	30.0'LT	INL-A	T-24		874.30			869.80	
74	520+40	30.0'RT	CB-A4	T-24	*	874.30	869.50		869.50	
75	520+40	37.5'RT	MH-A4	1-CL	*	873.6	869.46	869.46		869.46
76	522+05	30.0'LT	INL-A	T-24		873.48			868.98	
77	522+05	30.0'RT	CB-A4	T-24	*	873.48	868.68		868.68	
78	522+05	37.5'RT	MH-A4	1-CL	*	872.7	868.64	868.64		868.64
79	523+70	30.0'LT	INL-A	T-24		872.66			868.20	
80	523+70	30.0'RT	CB-A4	T-24	*	872.66	867.92		867.92	
81	523+70	37.5'RT	MH-A5	1-CL	*	871.8	867.90	867.90		867.90

PIPE TABLE								
NO.	TYPE	UPSTREAM STATION	DOWNSTREAM STATION	MAT.	SIZE	SLOPE	LIN. FT.	TBF (CYD)
35	SS-T1-A	511+25 30.0 RT	511+25 30.0 LT	RCP	12"	0.50%	57'	13
36	SS-T1-A	511+25 30.0 LT	511+25 37.5 LT	RCP	12"	1.10%	4'	1
37	SS-T1-A	511+25 37.5 LT	508+75 37.5 LT	RCP	12"	1.70%	246'	--
62	PC-T2-A	515+58 48.0 LT	515+58 48.0 RT	RCP	24"	0.32%	96'	142
63	SS-T1-A	516+25 30.0 LT	516+25 30.0 RT	RCP	12"	0.50%	57'	13
64	SS-T1-A	516+25 30.0 RT	516+25 37.5 RT	RCP	12"	1.10%	4'	1
65	SS-T1-A	516+25 37.5 RT	518+75 37.5 RT	RCP	12"	1.10%	246'	--
66	SS-T1-A	518+75 30.0 LT	518+75 30.0 RT	RCP	12"	0.50%	57'	13
67	SS-T1-A	518+75 30.0 RT	518+75 37.5 RT	RCP	12"	1.10%	4'	1
68	SS-T1-A	518+75 37.5 RT	520+40 37.5 RT	RCP	15"	0.60%	161'	--

PIPE TABLE								
NO.	TYPE	UPSTREAM STATION	DOWNSTREAM STATION	MAT.	SIZE	SLOPE	LIN. FT.	TBF (CYD)
69	SS-T1-A	520+40 30.0 LT	520+40 30.0 RT	RCP	12"	0.50%	57'	13
70	SS-T1-A	520+40 30.0 RT	520+40 37.5 RT	RCP	12"	1.10%	4'	1
71	SS-T1-A	520+40 37.5 RT	522+05 37.5 RT	RCP	18"	0.50%	161'	--
72	SS-T1-A	522+05 30.0 LT	522+05 30.0 RT	RCP	12"	0.50%	57'	13
73	SS-T1-A	522+05 30.0 RT	522+05 37.5 RT	RCP	12"	1.10%	4'	1
74	SS-T1-A	522+05 37.5 RT	523+70 37.5 RT	RCP	18"	0.46%	161'	--
75	SS-T1-A	523+70 30.0 LT	523+70 30.0 RT	RCP	12"	0.50%	57'	13
76	SS-T1-A	523+70 30.0 RT	523+70 37.5 RT	RCP	12"	0.70%	3'	1
77	SS-T1-A	523+70 37.5 RT	525+35 37.5 RT	RCP	21"	0.25%	160'	--





PLAN — SURVEYED; PLOTTED; GRADES CHECKED; ALIGNMENT CHECKED; CADD FILE NAME; NOTE BOOK; NO.; BY; DATE

PROFILE — SURVEYED; PLOTTED; GRADES CHECKED; ALIGNMENT CHECKED; NOTE BOOK; NO.; STRUCTURE NOYAPMS CHRO; BY; DATE

FILE NAME = ...\D1602135-sht-drain_03.dgn	DESIGNED NS	REVISED - 10/21/2011 N.W.S.	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
Primera	DRAWN NS	REVISED -	
	CHECKED SF	REVISED -	
	DATE JUNE 30, 2011	REVISED -	

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
DRAINAGE & UTILITIES PLAN AND PROFILE

SCALE: 1"=50' | SHEET NO. 3 OF 4 SHEETS | STA. 510+00 | TO STA. 525+00

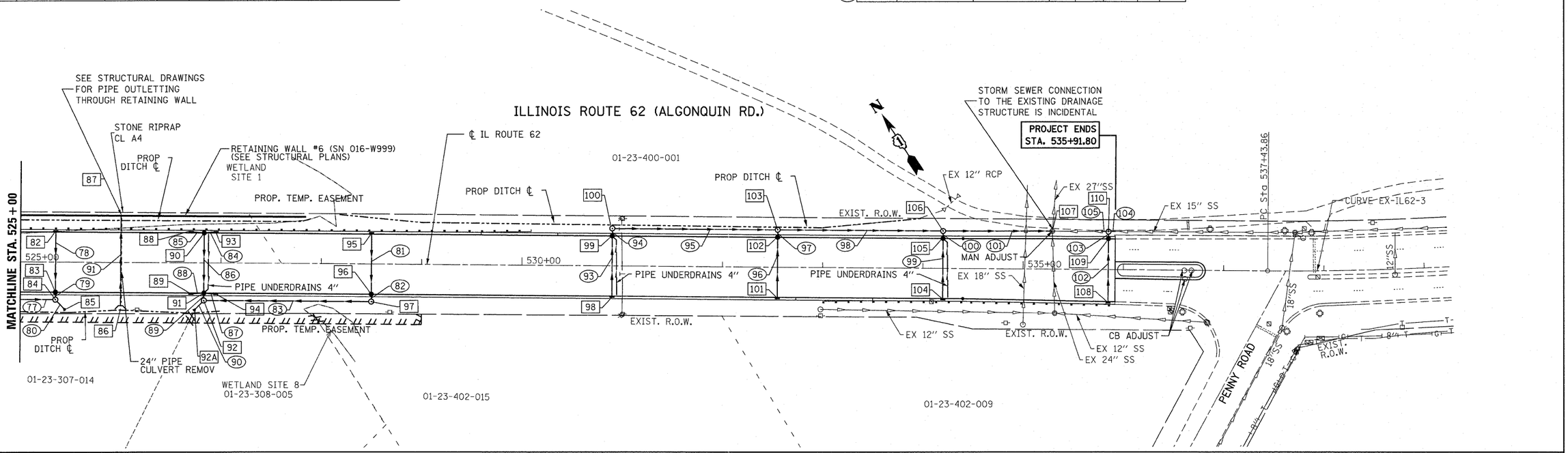
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	30
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

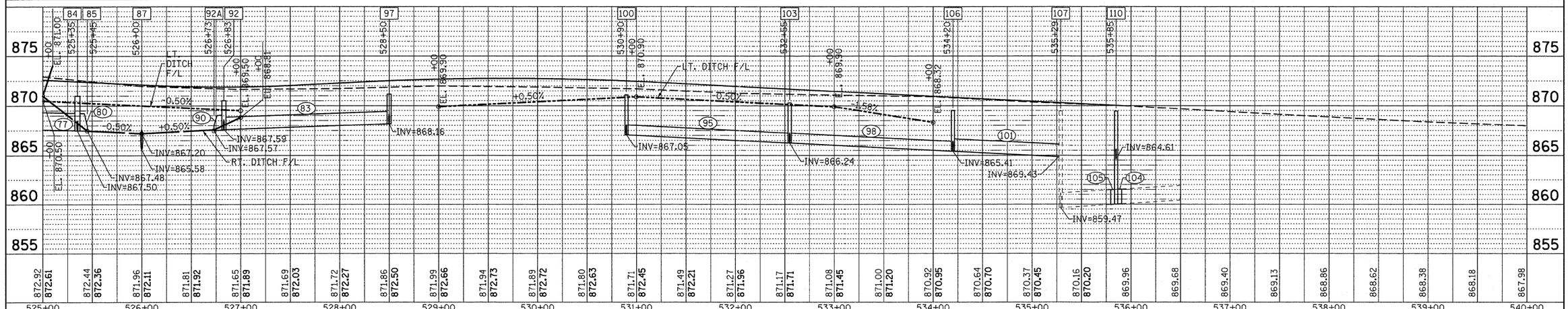
STRUCTURE TABLE										
NO.	STATION	OFFSET	TYPE	FRAME	FST	RIM	N. INV.	E. INV.	S. INV.	W. INV.
82	525+35	30.0'LT	INL-A	T-24		871.83			867.80	
83	525+35	30.0'RT	CB-A4	T-24	*	871.83	867.52		867.52	
84	525+35	37.5'RT	MH-A5	1-CL	*	871.0	867.50		867.50	867.50
85	525+45	48.0'RT	FES 21	--		--	867.48			
86	526+00	48.0'RT	ES D24-1.5	--		--	867.20			
87	526+00	48.0'LT	RWALL	--		--			865.58	
88	526+70	30.0'LT	INL-A	T-24		871.29		867.85		
89	526+70	30.0'RT	INL-A	T-24		871.29		867.66		
90	526+83	30.0'LT	CB-A4	T-24	*	871.28		867.80	867.80	867.80
91	526+83	30.0'RT	CB-A4	T-24	*	871.28	867.61	867.61	867.61	867.61
92	526+83	37.5'RT	MH-A4	1-CL	*	870.5	867.59	867.59		867.59
92A	526+73	48.0'RT	FES 18	--		--		867.57		
93	526+95	30.0'LT	INL-A	T-24		871.29				867.85
94	526+95	30.0'RT	INL-A	T-24		871.29				867.66
95	528+50	30.0'LT	INL-A	T-24		871.90			868.47	
96	528+50	30.0'RT	CB-A4	T-24	*	871.90	868.18		868.18	

STRUCTURE TABLE										
NO.	STATION	OFFSET	TYPE	FRAME	FST	RIM	N. INV.	E. INV.	S. INV.	W. INV.
97	528+50	37.5'RT	MH-A4	1-CL	*	871.2	868.16			868.16
98	530+90	30.0'RT	INL-A	T-24		871.89	867.39			
99	530+90	30.0'LT	CB-A4	T-24		871.89	867.09		867.09	
100	530+90	37.5'LT	MH-A4	1-CL	*	871.1		867.05	867.05	
101	532+55	30.0'RT	INL-A	T-24		871.08	866.58			
102	532+55	30.0'LT	CB-A4	T-24		871.08	866.28		866.28	
103	532+55	37.5'LT	MH-A4	1-CL	*	870.3		866.24	866.24	866.24
104	534+20	30.0'RT	INL-A	T-24		870.25	865.75			
105	534+20	30.0'LT	CB-A4	T-24		870.25	865.45		865.45	
106	534+20	37.5'LT	MH-A4	1-CL	*	869.5		865.41	865.41	865.41
107	535+29	38.0'LT	EX	EX		869.47	859.47	859.47	859.47	864.86
108	535+85	32.0'RT	INL-A	T-24		869.43	864.93			
109	535+85	30.5'LT	CB-A4	T-24		869.43	864.61		864.61	
110	535+85	38.0'LT	MH-A4	1-CL	*	869.3		859.9±	864.58	859.9±

PIPE TABLE								
NO.	TYPE	UPSTREAM STATION	DOWNSTREAM STATION	MAT.	SIZE	SLOPE	LIN. FT.	TBF (CYD)
77	SS-T1-A	523+70 37.5 RT	525+35 37.5 RT	RCP	21''	0.25%	160'	--
78	SS-T1-A	525+35 30.0 LT	525+35 30.0 RT	RCP	12''	0.50%	57'	9
79	SS-T1-A	525+35 30.0 RT	525+35 37.5 RT	RCP	12''	0.70%	3'	1
80	SS-T1-A	525+35 37.5 RT	525+45 48.0 RT	RCP	21''	0.34%	6'	--
81	SS-T1-A	528+50 30.0 LT	528+50 30.0 RT	RCP	12''	0.50%	57'	8
82	SS-T1-A	528+50 30.0 RT	528+50 37.5 RT	RCP	12''	0.60%	4'	1
83	SS-T1-A	528+50 37.5 RT	526+83 37.5 RT	RCP	15''	0.35%	163'	--
84	SS-T1-A	526+95 30.0 LT	526+83 30.0 LT	RCP	12''	0.60%	9'	2
85	SS-T1-A	526+70 30.0 LT	526+83 30.0 LT	RCP	12''	0.50%	10'	2
86	SS-T1-A	526+83 30.0 LT	526+83 30.0 RT	RCP	15''	0.34%	56'	7
87	SS-T1-A	526+95 30.0 RT	526+83 30.0 RT	RCP	12''	0.60%	9'	2
88	SS-T1-A	526+70 30.0 RT	526+83 30.0 RT	RCP	12''	0.50%	10'	2
89	SS-T1-A	526+83 30.0 RT	526+83 37.5 RT	RCP	15''	0.60%	4'	1
90	SS-T1-A	526+83 37.5 RT	526+73 48.0 RT	RCP	18''	0.31%	6'	--
91	PC-T1-A	526+00 48.0 RT	526+00 48.0 LT	RCP	24''	1.72%	94'	23

PIPE TABLE								
NO.	TYPE	UPSTREAM STATION	DOWNSTREAM STATION	MAT.	SIZE	SLOPE	LIN. FT.	TBF (CYD)
~~92~~	~~SS-T1-A~~	~~526+00 37.5 LT~~	~~526+00 48.0 LT~~	~~RCP~~	~~30''~~	~~1.65%~~	~~8'~~	
93	SS-T1-A	530+90 30.0 RT	530+90 30.0 LT	RCP	12''	0.50%	58'	12
94	SS-T1-A	530+90 30.0 LT	530+90 37.5 LT	RCP	12''	0.50%	4'	1
95	SS-T1-A	530+90 37.5 LT	532+55 37.5 LT	RCP	12''	0.50%	161'	--
96	SS-T1-A	532+55 30.0 RT	532+55 30.0 LT	RCP	12''	0.50%	58'	12
97	SS-T1-A	532+55 30.0 LT	532+55 37.5 LT	RCP	12''	0.50%	4'	1
98	SS-T1-A	532+55 37.5 LT	534+20 37.5 LT	RCP	12''	0.50%	161'	--
99	SS-T1-A	534+20 30.0 RT	534+20 30.0 LT	RCP	12''	0.50%	58'	12
100	SS-T1-A	534+20 30.0 LT	534+20 37.5 LT	RCP	12''	0.50%	4'	1
101	SS-T1-A	534+20 37.5 LT	535+29 38.0 LT	RCP	15''	0.50%	97'	--
102	SS-T1-A	535+85 32.0 RT	535+85 30.5 LT	RCP	12''	0.50%	61'	13
103	SS-T1-A	535+85 30.5 LT	535+85 38.0 LT	RCP	12''	0.43%	3'	1
104	SS-T2-A	535+79 38.0 LT	535+85 38.0 LT	RCP	15''	EX	4'	--
105	SS-T2-A	535+91 38.0 LT	535+85 38.0 LT	RCP	15''	EX	4'	--



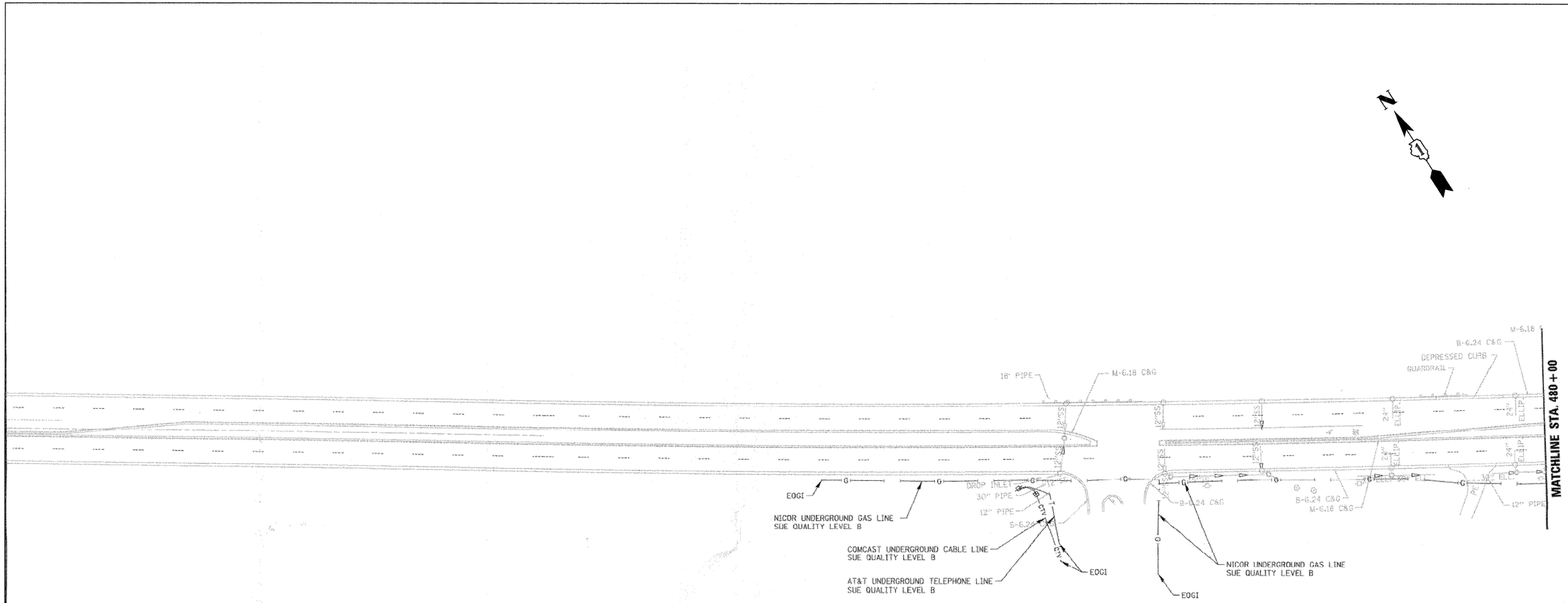


FILE NAME = ...\D160135-sht-drain_04.dgn	Primera	DESIGNED NS	REVISED - 10/21/2011 N.W.S.	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD. DRAINAGE & UTILITIES PLAN AND PROFILE
		DRAWN NS	REVISED -		SCALE: 1"=50' | SHEET NO. 4 OF 4 SHEETS | STA. 525+00 TO STA. 535+91.80
		CHECKED SF	REVISED -		
		DATE JUNE 30, 2011	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	31
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

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

BY	DATE



STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

UTILITY(IES) SHOWN HEREON HAVE BEEN INVESTIGATED BY ASE IN ACCORDANCE WITH SUE INDUSTRY STANDARDS QUALITY LEVEL B (QLB). ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED BY OTHERS.

FIELD WORK WAS PERFORMED BETWEEN THE 7TH OF JULY AND 14TH DAY OF JULY, A.D., 2010.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL THIS 5TH DAY OF AUGUST A.D., 2010. CHICAGO, IL.

STEVEN M. RIENKS 062-044619 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

STEVEN M. RIENKS - ILLINOIS PROFESSIONAL
ENGINEER NUMBER 62-044619
MY LICENSE EXPIRES 11/30/2011

LEGEND

T	EXISTING UNDERGROUND TELEPHONE
W	EXISTING UNDERGROUND WATER
E	EXISTING UNDERGROUND ELECTRIC
G	EXISTING UNDERGROUND GAS
CTV	EXISTING UNDERGROUND CABLE TV
EOGI	END OF GEOPHYSICAL INFORMATION

AMERICAN
SURVEYING & ENGINEERING, P.C.
SURVEYORS - ENGINEERS
GEODESISTS MAPPING SCIENTISTS
Chicago: 312-277-2000 / Fax 312-277-2002
Dixon: 815-288-6231 / Fax 815-288-6277
Aurora: 603-897-4105 / Fax 630-897-4121
Illinois Professional Design Firm No. 184-003192

FILE NAME = ...\D160135-IDOT SUE_01.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	GEW	REVISED	-
CHECKED	TWL	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

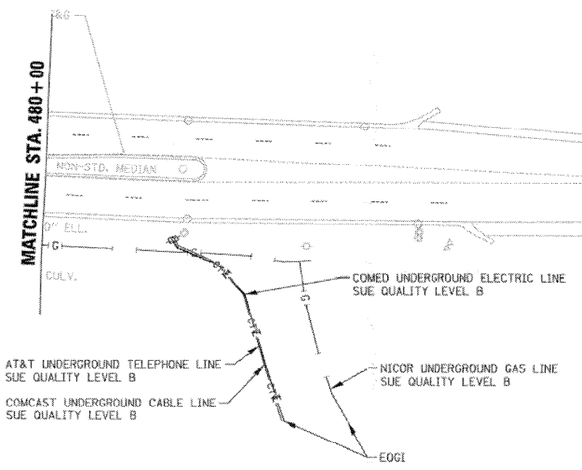
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

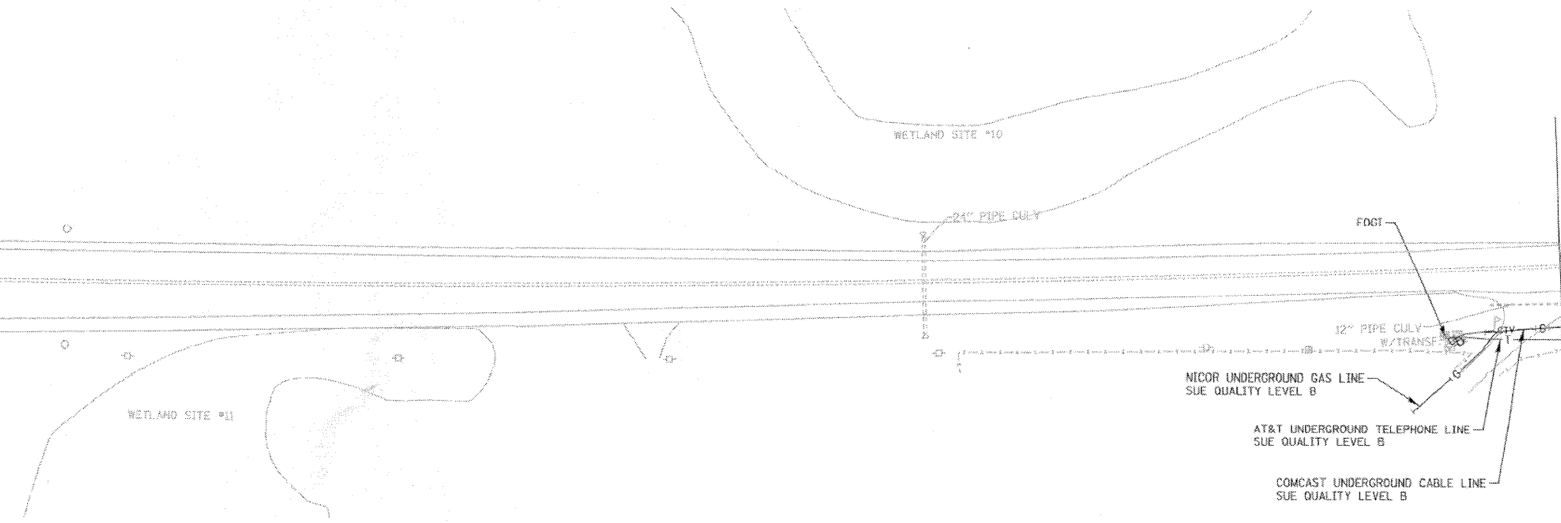
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUE INVESTIGATION OF UNDERGROUND UTILITIES

SCALE: 1"=50' | SHEET NO. 1 OF 6 SHEETS | STA. TO STA. 480+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	32
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

PLAN	SURVEYED	BY	DATE
	DRAWN		
NOTE BOOK	ALIGNMENT CHECKED		
NO.	RT. OF WAY CHECKED		
	CAD FILE NAME		





PLAN	SURVEYED	BY	DATE
	DRAWN		
NOTE BOOK	ALIGNMENT CHECKED		
NO.	RT. OF WAY CHECKED		
	CAD FILE NAME		

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

UTILITY(IES) SHOWN HEREON HAVE BEEN INVESTIGATED BY ASE IN ACCORDANCE WITH SUE INDUSTRY STANDARDS QUALITY LEVEL B (QLB). ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED BY OTHERS.

FIELD WORK WAS PERFORMED BETWEEN THE 7TH OF JULY AND 14TH DAY OF JULY, A.D., 2010.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL THIS 5TH DAY OF AUGUST A.D., 2010. CHICAGO, IL.

STEVEN M. RIENKS
062-044619
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

STEVEN M. RIENKS - ILLINOIS PROFESSIONAL
ENGINEER NUMBER 62-044619
MY LICENSE EXPIRES 11/30/2011

LEGEND

T	EXISTING UNDERGROUND TELEPHONE
W	EXISTING UNDERGROUND WATER
E	EXISTING UNDERGROUND ELECTRIC
G	EXISTING UNDERGROUND GAS
CTV	EXISTING UNDERGROUND CABLE TV
EOGI	END OF GEOPHYSICAL INFORMATION

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Aurora: 603-897-4105 / Fax 630-897-4121
Illinois Professional Design Firm No. 184-003192

FILE NAME =
...\D160135-IDOT SUE_02.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	GEW	REVISED	-
CHECKED	TWL	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

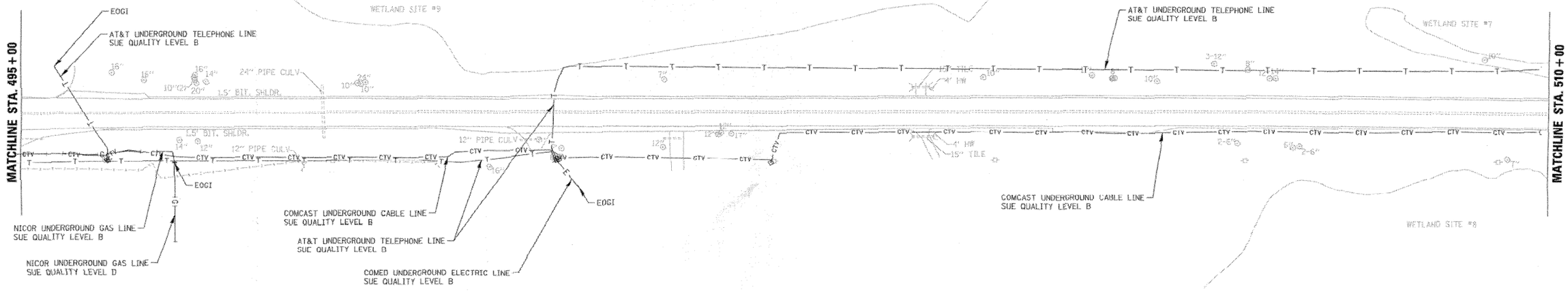
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUE INVESTIGATION OF UNDERGROUND UTILITIES

SCALE: 1"=50' | SHEET NO. 2 OF 6 SHEETS | STA. 480+00 TO STA. 495+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	33
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

PLAN | SURVEYED | DATE | ALIGNMENT CHECKED | RT. OF W.A. CHECKED | NOTE BOOK | NO. | QUAD FILE NAME



STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

UTILITY(IES) SHOWN HEREON HAVE BEEN INVESTIGATED BY ASE IN ACCORDANCE WITH SUE INDUSTRY STANDARDS QUALITY LEVEL B (QLB). ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED BY OTHERS.

FIELD WORK WAS PERFORMED BETWEEN THE 7TH OF JULY AND 14TH DAY OF JULY, A.D., 2010.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL THIS 5TH DAY OF AUGUST A.D., 2010. CHICAGO, IL.

STEVEN M RIENKS 062-044619 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

STEVEN M. RIENKS - ILLINOIS PROFESSIONAL
ENGINEER NUMBER 62-044619
MY LICENSE EXPIRES 11/30/2011

LEGEND

T	EXISTING UNDERGROUND TELEPHONE
W	EXISTING UNDERGROUND WATER
E	EXISTING UNDERGROUND ELECTRIC
G	EXISTING UNDERGROUND GAS
CTV	EXISTING UNDERGROUND CABLE TV
EOGI	END OF GEOPHYSICAL INFORMATION

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Aurora: 603-897-4105 / Fax 630-897-4121
Illinois Professional Design Firm No. 184-003132

FILE NAME = ...\D160135-IDOT SUE_03.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	GEW	REVISED	-
CHECKED	TWL	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

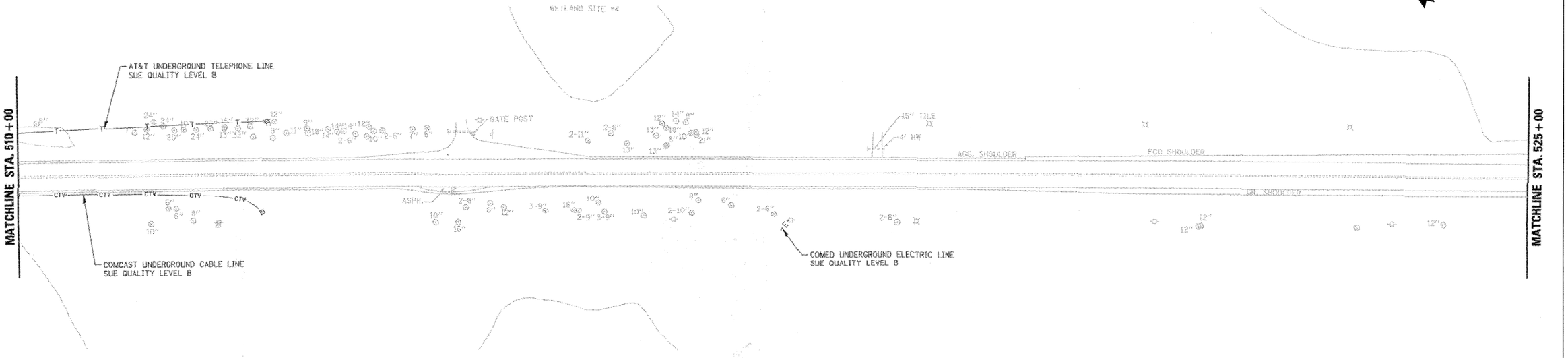
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUE INVESTIGATION OF UNDERGROUND UTILITIES

SCALE: 1"=50' | SHEET NO. 3 OF 6 SHEETS | STA. 495+00 | TO STA. 510+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	34
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

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



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

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

UTILITY(IES) SHOWN HEREON HAVE BEEN INVESTIGATED BY ASE IN ACCORDANCE WITH SUE INDUSTRY STANDARDS QUALITY LEVEL B (QLB). ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED BY OTHERS.

FIELD WORK WAS PERFORMED BETWEEN THE 7TH OF JULY AND 14TH DAY OF JULY, A.D., 2010.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL THIS 5TH DAY OF AUGUST A.D., 2010. CHICAGO, IL.

STEVEN M. RIENKS 062-044619 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

STEVEN M. RIENKS - ILLINOIS PROFESSIONAL
ENGINEER NUMBER 62-044619
MY LICENSE EXPIRES 11/30/2011

LEGEND

T	EXISTING UNDERGROUND TELEPHONE
W	EXISTING UNDERGROUND WATER
E	EXISTING UNDERGROUND ELECTRIC
G	EXISTING UNDERGROUND GAS
CTV	EXISTING UNDERGROUND CABLE TV
EOGI	END OF GEOPHYSICAL INFORMATION

AMERICAN
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Aurora: 603-897-4105 / Fax 630-897-4121
Illinois Professional Design Firm No. 184-003192

FILE NAME = ...\D160135-IDOT SUE_04.dgn	DESIGNED RJD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
Primera	DRAWN GEW	REVISED -	
	CHECKED TWL	REVISED -	
	DATE JUNE 30, 2011	REVISED -	

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUE INVESTIGATION OF UNDERGROUND UTILITIES

SCALE: 1"=50' | SHEET NO. 4 OF 6 SHEETS | STA. 510+00 TO STA. 525+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	35
		CONTRACT NO. 60135		
		ILLINOIS FED. AID PROJECT		

PLAN | SURVEYED | BY | DATE
NOTE BOOK | DRAWN
NO. | ALIGNMENT CHECKED
R.T. OF W.A.Y. CHECKED
ROAD FILE NAME

N

MATCHLINE STA. 525+00

MATCHLINE STA. 540+00

24" CMP

AT&T UNDERGROUND TELEPHONE LINE
SUE QUALITY LEVEL B

RESURF. ASPH.
PCC DATE

M-6.24 C&G

S.W.

WETLAND SITE #1

WETLAND SITE #2

EOGI

AT&T UNDERGROUND TELEPHONE LINE
SUE QUALITY LEVEL B

NICOR UNDERGROUND GAS LINE
SUE QUALITY LEVEL B

EOGI

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

UTILITY(IES) SHOWN HEREON HAVE BEEN INVESTIGATED BY ASE IN ACCORDANCE WITH SUE INDUSTRY STANDARDS QUALITY LEVEL B (QLB). ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED BY OTHERS.

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IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL THIS 5TH DAY OF AUGUST A.D., 2010. CHICAGO, IL.

STEVEN M. RIENKS
062-044619
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Steven M. Rienks

STEVEN M. RIENKS - ILLINOIS PROFESSIONAL ENGINEER NUMBER 62-044619
MY LICENSE EXPIRES 11/30/2011

LEGEND

T	EXISTING UNDERGROUND TELEPHONE
W	EXISTING UNDERGROUND WATER
E	EXISTING UNDERGROUND ELECTRIC
G	EXISTING UNDERGROUND GAS
CTV	EXISTING UNDERGROUND CABLE TV
EOGI	END OF GEOPHYSICAL INFORMATION

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Aurora: 603-897-4105 / Fax 630-897-4121
Illinois Professional Design Firm No. 184-003192

FILE NAME = ...\D1601351DOT SUE_05.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	GEW	REVISED	-
CHECKED	TWL	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

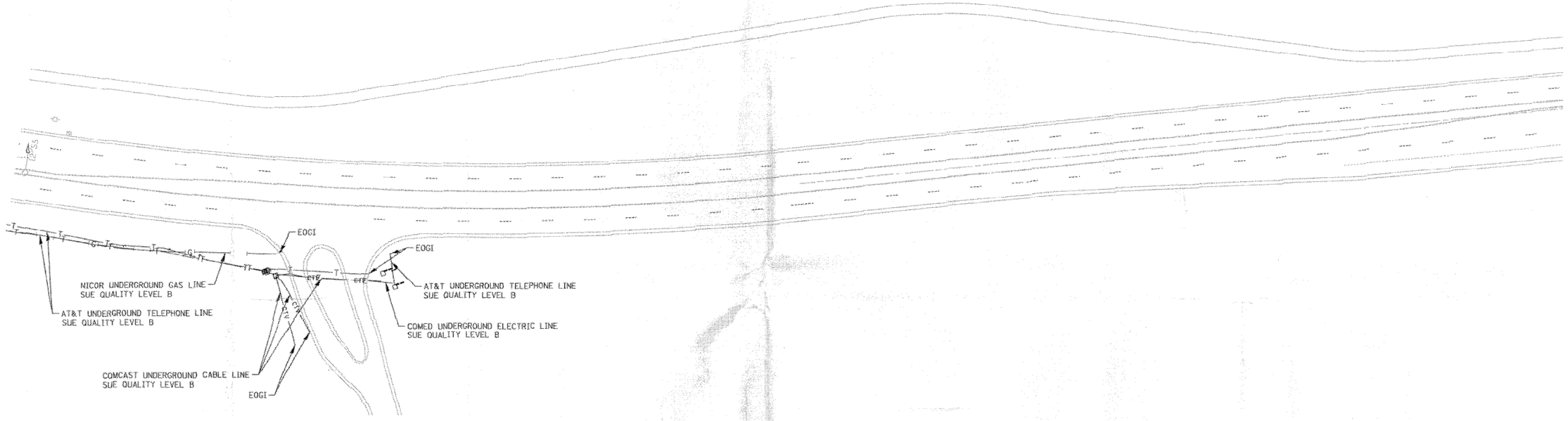
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUE INVESTIGATION OF UNDERGROUND UTILITIES

SCALE: 1"=50' | SHEET NO. 5 OF 6 SHEETS | STA. 525+00 | TO STA. 540+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	36
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

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



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

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

UTILITY(IES) SHOWN HEREON HAVE BEEN INVESTIGATED BY ASE IN ACCORDANCE WITH SUE INDUSTRY STANDARDS QUALITY LEVEL B (QLB). ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED BY OTHERS.

FIELD WORK WAS PERFORMED BETWEEN THE 7TH OF JULY AND 14TH DAY OF JULY, A.D., 2010.

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STEVEN M. RIENKS
062-044619
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

STEVEN M. RIENKS - ILLINOIS PROFESSIONAL
ENGINEER NUMBER 62-044619
MY LICENSE EXPIRES 11/30/2011

AMERICAN
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Aurora: 603-897-8105 / Fax 630-897-4121
Illinois Professional Design Firm No. 184-003192

LEGEND

T	EXISTING UNDERGROUND TELEPHONE
W	EXISTING UNDERGROUND WATER
E	EXISTING UNDERGROUND ELECTRIC
G	EXISTING UNDERGROUND GAS
CTV	EXISTING UNDERGROUND CABLE TV
EOGI	END OF GEOPHYSICAL INFORMATION

FILE NAME = ...\D1601135-100T SUE..26.dgn	Primera	DESIGNED RJD	REVISED -
		DRAWN GEW	REVISED -
		CHECKED TWL	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
SUE INVESTIGATION OF UNDERGROUND UTILITIES

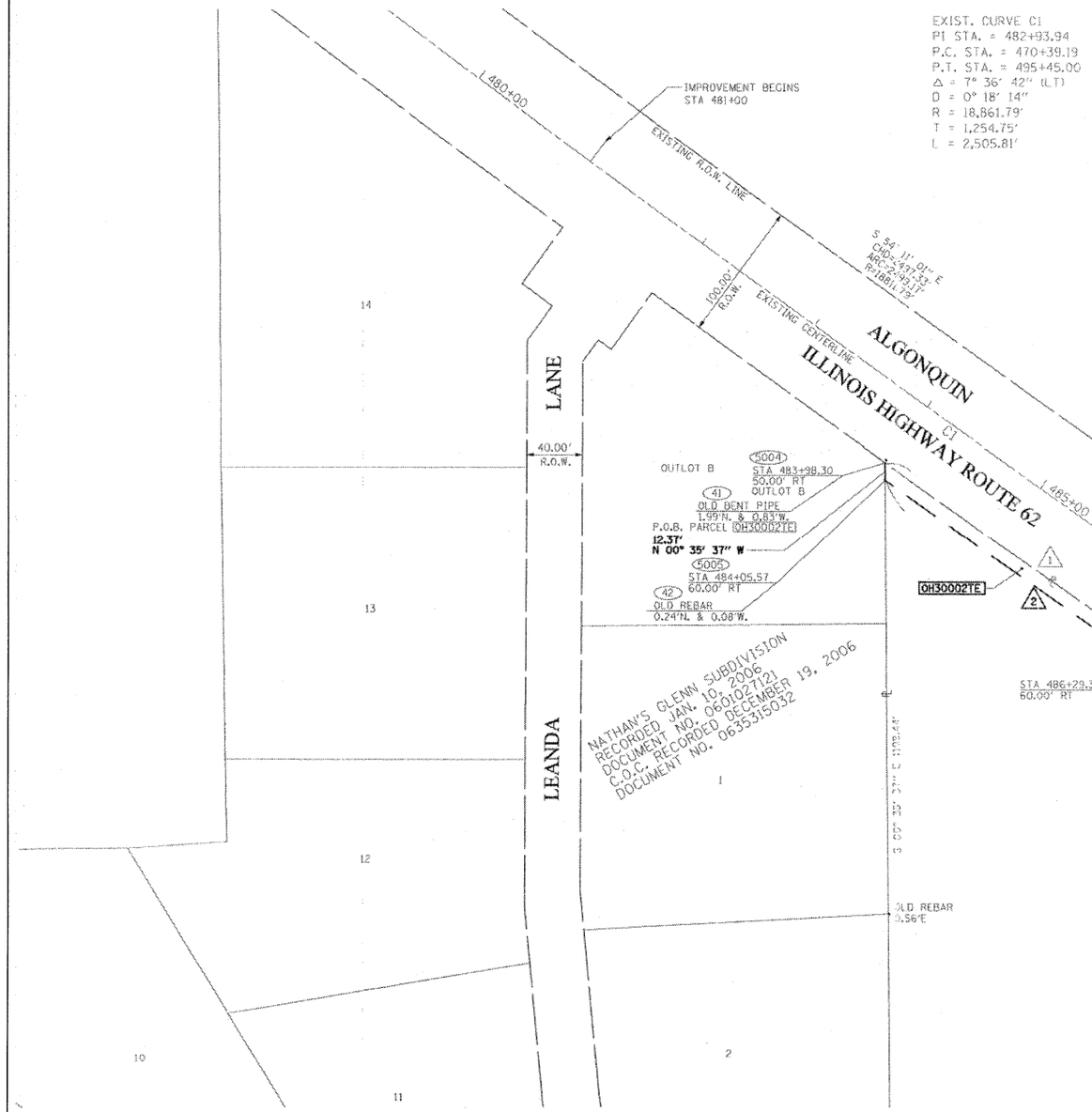
SCALE: 1"=50' | SHEET NO. 6 OF 6 SHEETS | STA. 540+00 TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	37
		CONTRACT NO. 60135		
		ILLINOIS FED. AID PROJECT		

PART OF THE NE 1/4 OF SECTION 22, T.42N., R.9E., OF THE 3rd. P.M. COOK COUNTY, ILLINOIS

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREVIOUSLY DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT ID. NO.	PROPERTY ACQUIRED BY
*0H30002	HENRY G. DEMLOW JR.	4.743	N/A	4.743	N/A	0.051	CONSTRUCTION	01-22-201-014	
*0H30003	HOLLY A. HUGHES, AS TRUSTEE OF THE DEMLOW HUGHES TRUST	7.516	N/A	7.516	N/A	0.096	CONSTRUCTION	01-22-201-015	

* SEE SHEET 7 FOR TOTAL HOLDINGS OF PARCEL 0H30002 & 0H30003



LEGEND

- SECTION CORNER
- 16 / 5 QUARTER SECTION CORNER
- (85) COORDINATE POSITION NUMBER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- (129.32) MEASURED ENGLISH DIMENSION
- 129.32 (COMP) COMPUTED DIMENSION
- (129.32) RECORDED DIMENSION
- 129.322m METRIC DIMENSION
- + CUT CROSS FOUND OR SET
- EXISTING BUILDING

N

SCALE: 1"= 50'

- ● IRON OR PIPE FOUND ○ IRON SET
- ● T1 T2 T3 THESE STAKES REFERENCE FOUND MONUMENTATION. SET 9/16 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ● BT1 BT2 BT3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND MONUMENTATION. BURIED 9/16 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE TP FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 9/16 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY DISK POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ◉ PERMANENT SURVEY MARKER, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET.

ALL DISTANCES ARE MEASURED UNLESS OTHERWISE NOTED.

TREES EVERGREEN TREES

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, ROBERT A. ROGINA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HERE ON BETWEEN SECTION 22, TOWNSHIP 42 NORTH, AND RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT MINIMUM ILLINOIS STANDARDS FOR A BOUNDARY SURVEY.
DATED AT JOLIET, ILLINOIS THIS DAY OF , 2011 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2017
LICENSE EXPIRES 11/30/12
NOTE:

BASIS OF BEARINGS IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83

SHEET ONE IS A COVER SHEET AND IS NOT RECORDED

ROBERT A. ROGINA 2017 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS JOLIET, ILLINOIS

RECEIVED
APR 29 2011
PLATS & LEGALS

PREPARED BY: ROGINA & ASSOCIATES, LTD. ENGINEERS SURVEYORS PLANNERS
93 Caterpillar Drive Joliet, Illinois 815/729-0777 FAX 815/725-0788

REVISION	
DATE	DESCRIPTION
10/07/09	PER REVIEW
05/19/10	PER IDOT
12/02/10	PER IDOT
04/21/11	REMOVE PARCEL

ILLINOIS DEPT. OF TRANSPORTATION
PLAT OF HIGHWAYS
ROUTE FAP 339 IL. ROUTE 62
SECTION PENNY ROAD TO EASTINGS WAY
COUNTY COOK
JOB# R-90-003-04 PROJECT#
SEC 22 T42N , R 9E OF 3rd P.M.
STA 481+00 TO STA 490+50
DRAWN M.MILTON CHECKED J.KELLA
SCALE: 1"=50' SHEET NO. 2 OF 8

PLAN | SURVEYED | PLOTTED | NOTE BOOK | NO. | ALIGNMENT CHECKED | R.O.W. LINE CHECKED | CAD FILE NAME | BY | DATE

FILE NAME = ..\D160135-sht-parcel_01.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

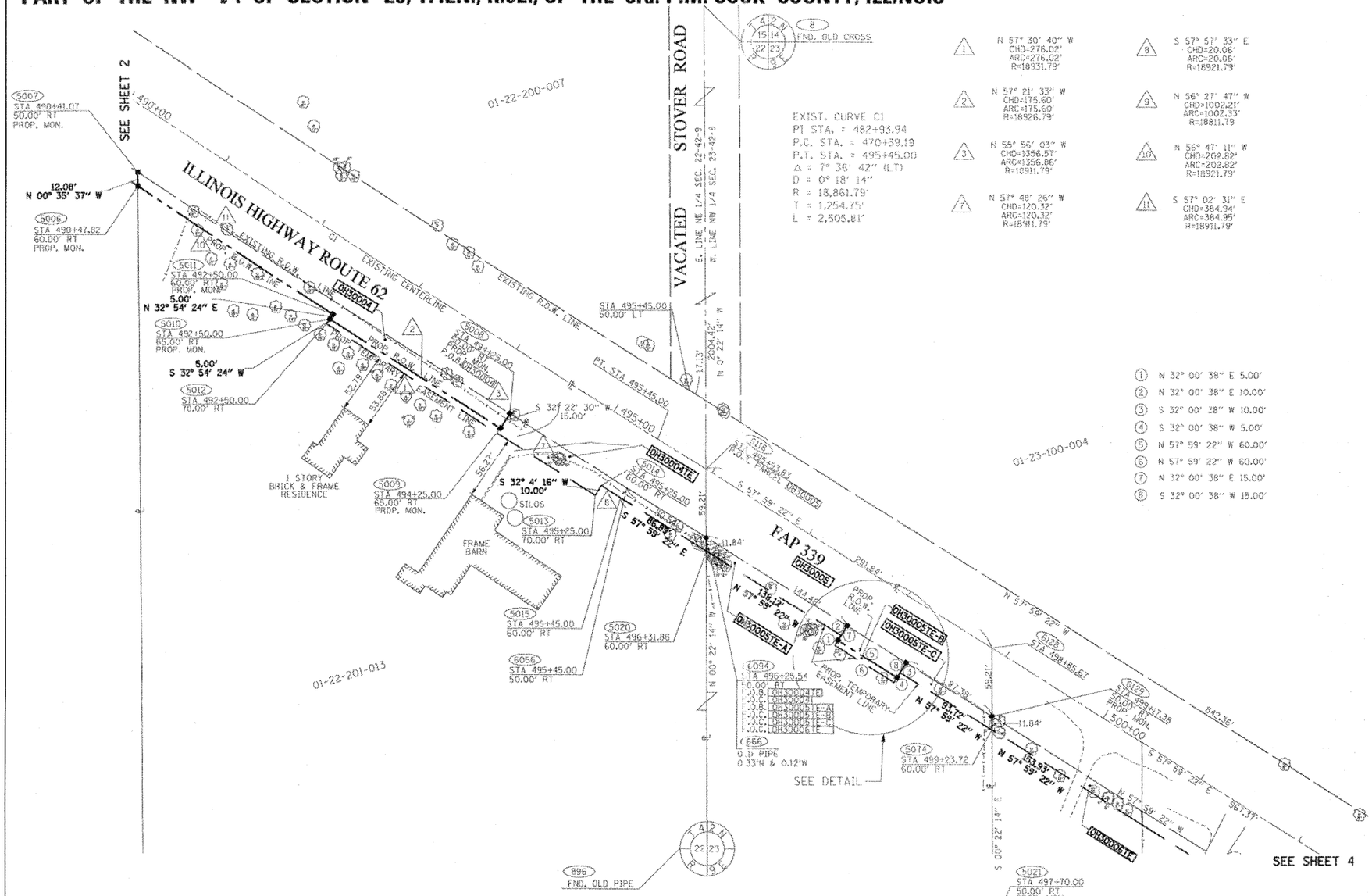
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PLAT OF HIGHWAYS

SCALE: N.T.S. | SHEET NO. 1 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	38
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

PART OF THE NE 1/4 OF SECTION 22, T.42N., R.9E., OF THE 3rd. P.M. COOK COUNTY, ILLINOIS
PART OF THE NW 1/4 OF SECTION 23, T.42N., R.9E., OF THE 3rd. P.M. COOK COUNTY, ILLINOIS



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- (B5) COORDINATE POSITION NUMBER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- [129.32] MEASURED ENGLISH DIMENSION
- 129.32 (COMP) COMPUTED DIMENSION
- (129.32) RECORDED DIMENSION
- 129.322m METRIC DIMENSION
- + CUT CROSS FOUND OR SET
- EXISTING BUILDING

N

SCALE: 1"=50'

- ● IRON OR PIPE FOUND ○ IRON SET
- ● T1 T2 T3 THESE STAKES REFERENCE FOUND MONUMENTATION. SET 9/16 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ● BT1 BT2 BT3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND MONUMENTATION. BURIED 9/16 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE TP FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 9/16 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY DISK POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ⊕ PERMANENT SURVEY MARKER, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET.

ALL DISTANCES ARE MEASURED UNLESS OTHERWISE NOTED.

TREES EVERGREEN TREES

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, ROBERT A. ROGINA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HERE ON BETWEEN SECTION 22, TOWNSHIP 42 NORTH, AND RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT MINIMUM ILLINOIS STANDARDS FOR A BOUNDARY SURVEY.
DATED AT JOLIET, ILLINOIS THIS DAY OF , 2011 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2017
LICENSE EXPIRES 11/30/12
NOTE:

BASIS OF BEARINGS IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83

SHEET ONE IS A COVER SHEET AND IS NOT RECORDED

ROBERT A. ROGINA 2017 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS JOLIET, ILLINOIS

RECEIVED
APR 29 2011
PLATS & LEGALS

PREPARED BY: ROGINA & ASSOCIATES, LTD.
ENGINEERS SURVEYORS PLANNERS
93 Caterpillar Drive Joliet, Illinois 815/729-0777 FAX 815/729-0782

REVISION	
DATE	DESCRIPTION
10/07/09	PER REVIEW
08/12/10	PER REVIEW
04/21/11	REMOVE PARCEL

ILLINOIS DEPT. OF TRANSPORTATION
PLAT OF HIGHWAYS
ROUTE FAP 339 IL. ROUTE 62
SECTION PENNY ROAD TO EASTINGS WAY
COUNTY COOK
JOB# R-90-003-04 PROJECT#
SECS 22&23 T42N , R9E OF 3rd P.M.
STA 490+00 TO STA 502+00
DRAWN M.MILTON CHECKED J.KELLA
SCALE: 1"=50' SHEET NO. 3 OF 8

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREVIOUSLY DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT ID. NO.	PROPERTY ACQUIRED BY
OH30004	R & R FARMS LIMITED PARTNERSHIP	7.519	0.108	7.411	N/A	0.090	CONSTRUCTION	01-22-201-013	
OH30005	RONALD J. DIMONTE FAMILY LIMITED PARTNERSHIP	4.950	0.357	4.593	0.335	A=0.032 B=0.007 300 S.F. C=0.021	CONSTRUCTION	01-23-300-003	

* SEE SHEET 7 FOR TOTAL HOLDINGS OF PARCELS OH30004 & OH30005

FILE NAME = ...\0160135-sht-parcel_02.dgn	DESIGNED RJD	REVISED -	
Primera	DRAWN MHL	REVISED -	
	CHECKED RJD	REVISED -	
	DATE JUNE 30, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PLAT OF HIGHWAYS

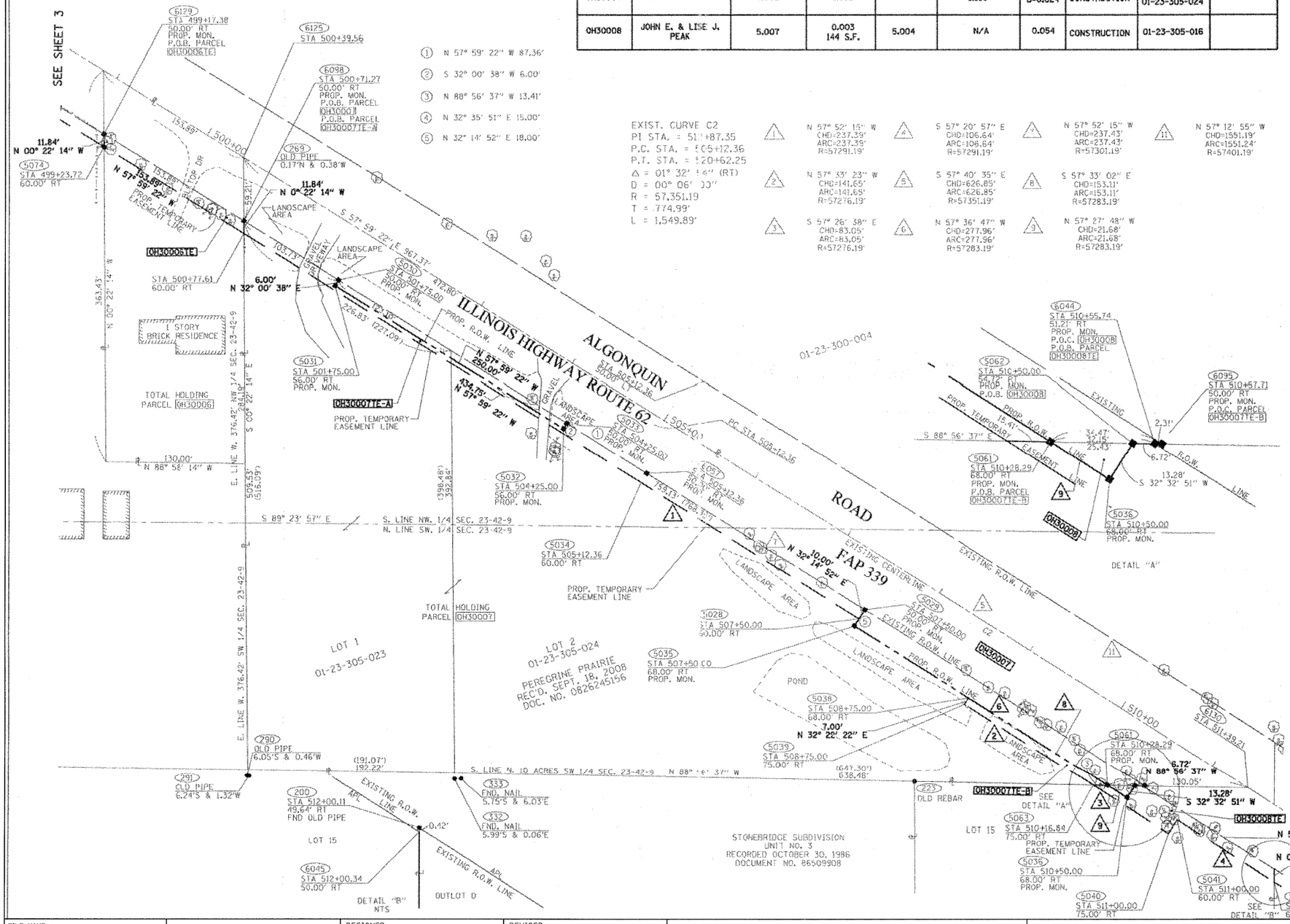
SCALE: N.T.S. | SHEET NO. 2 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	39
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

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

PART OF THE NW 1/4 OF SECTION 23, T.42N., R.9E., OF THE 3rd. P.M. COOK COUNTY, ILLINOIS
PART OF THE SW 1/4 OF SECTION 23, T.42N., R.9E., OF THE 3rd. P.M. COOK COUNTY, ILLINOIS

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREVIOUSLY DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT ID. NO.	PROPERTY ACQUIRED BY
0H30006	RINALDO & JEAN ANN DIMONTE	0.966	N/A	0.966	N/A	0.035	CONSTRUCTION	01-23-300-003	
0H30007	GEORGE V. KANAGIN	6.072	1.352	4.720	1.196	A=0.121 B=0.024	CONSTRUCTION	01-23-305-023 01-23-305-024	
0H30008	JOHN E. & LISE J. PEAK	5.007	0.003 144 S.F.	5.004	N/A	0.054	CONSTRUCTION	01-23-305-016	



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- (35) COORDINATE POSITION NUMBER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- (129.32) MEASURED ENGLISH DIMENSION
- 129.32 (COMP) COMPUTED DIMENSION
- (129.32) RECORDED DIMENSION
- 129.322m METRIC DIMENSION
- + CUT CROSS FOUND OR SET
- EXISTING BUILDING

N

SCALE: 1"= 50'

- ● IRON OR PIPE FOUND ○ IRON SET
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- ▪ BT1 BT2 BT3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND MONUMENTATION. BURIED 9/16 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE TP FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
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(4) TREES EVERGREEN TREES

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

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DATED AT JOLIET, ILLINOIS THIS DAY OF , 2011 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2017
LICENSE EXPIRES 11/30/12
NOTE:

BASIS OF BEARINGS IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83

SHEET ONE IS A COVER SHEET AND IS NOT RECORDED

ROBERT A. ROGINA 2017 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS JOLIET, ILLINOIS

RECEIVED
APR 29 2011
PLATS & LEGALS

PREPARED BY: ROGINA & ASSOCIATES, LTD. ENGINEERS SURVEYORS PLANNERS
53 Caterpillar Drive Joliet, Illinois 815/729-0777 FAX 815/729-0782

REVISION	
DATE	DESCRIPTION
10/07/09	PER REVIEW
10/15/09	PER REVIEW
10/18/10	PARCEL 0H30007
12/08/10	PARCEL 0H30006
04/21/11	REMOVE PARCEL

ILLINOIS DEPT. OF TRANSPORTATION
PLAT OF HIGHWAYS
ROUTE FAP 339 IL. ROUTE 62
SECTION PENNY ROAD TO EASTINGS WAY
COUNTY COOK
JOB# R-90-003-04 PROJECT#
SEC 23 T42N , R 9E OF 3rd P.M.
STA 498+50 TO STA 511+50
DRAWN M.MILTON CHECKED J.KELLA
SCALE: 1"=50' SHEET NO. 4 OF 8

PLAN: SURVEYED | DRAWN | ALIGNMENT CHECKED | R.O.W. CHECKED | NOTE BOOK | NO. | PLAT FILE NAME | DATE | BY

PLAT: SURVEYED | DRAWN | ALIGNMENT CHECKED | R.O.W. CHECKED | NOTE BOOK | NO. | PLAT FILE NAME | DATE | BY

FILE NAME = ...\D16Ø135-sht-parcel_Ø3.dgn	DESIGNED RJD	REVISED -	
Primera	DRAWN MHL	REVISED -	
	CHECKED RJD	REVISED -	
	DATE JUNE 30, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

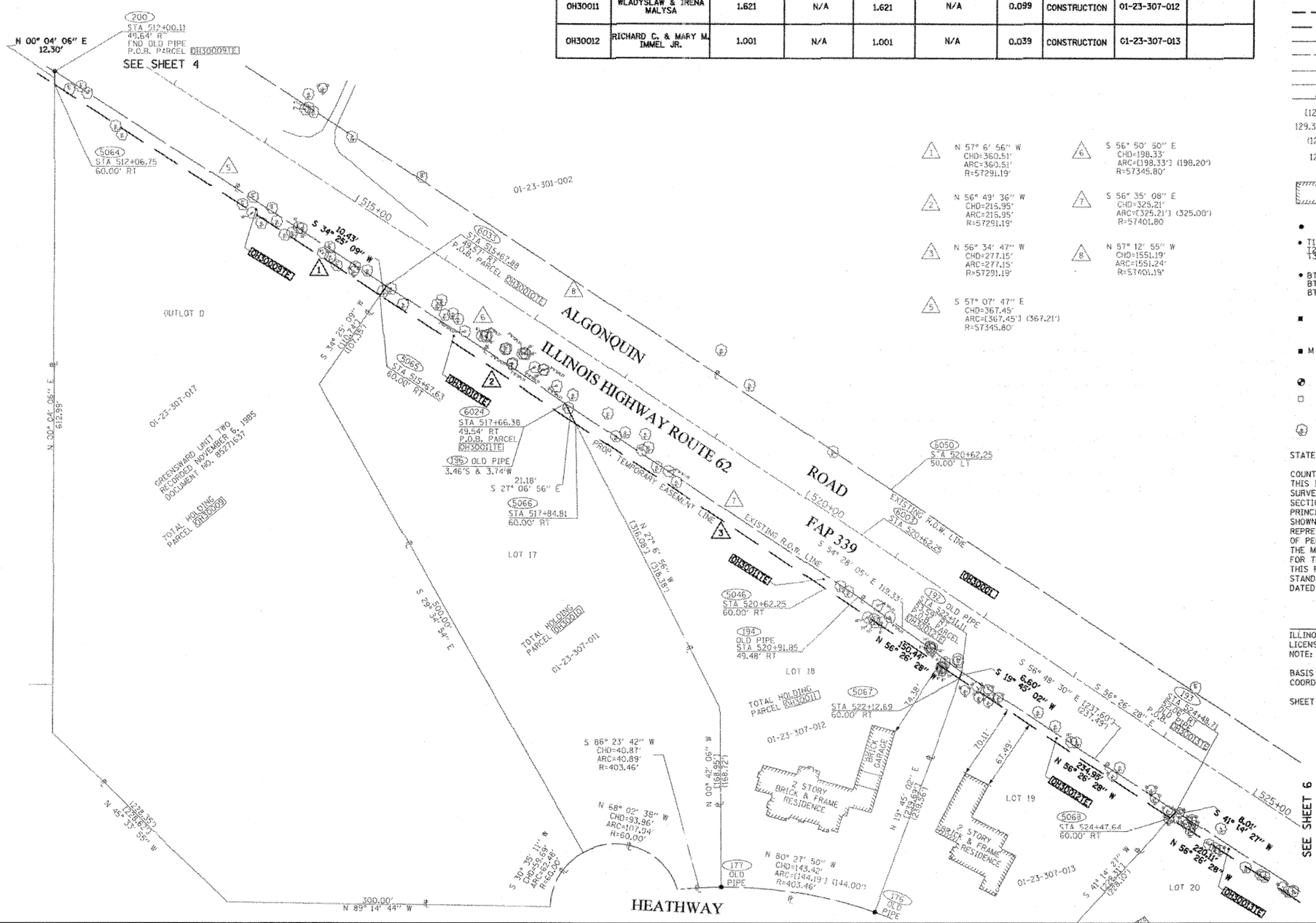
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PLAT OF HIGHWAYS

SCALE: N.T.S. | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	40
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

PART OF THE SW 1/4 OF SECTION 23, T.42N., R.9E., OF THE 3rd. P.M. COOK COUNTY, ILLINOIS

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREVIOUSLY DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT ID. NO.	PROPERTY ACQUIRED BY
OH30009	GREENSWARD HOMEOWNERS ASSOC.	5.213	N/A	5.213	N/A	0.087	CONSTRUCTION	01-23-307-017	
OH30010	ROOP R. SHIVPURI TRUST	2.211	N/A	2.211	N/A	0.050	CONSTRUCTION	01-23-307-011	
OH30011	WLADYSLAW & IRENA MALYSA	1.621	N/A	1.621	N/A	0.099	CONSTRUCTION	01-23-307-012	
OH30012	RICHARD C. & MARY M. IMMEL JR.	1.001	N/A	1.001	N/A	0.039	CONSTRUCTION	01-23-307-013	



1 N 57° 6' 56" W CHD=360.51' ARC=360.51' R=57291.19'

2 N 56° 49' 36" W CHD=215.95' ARC=215.95' R=57291.19'

3 N 56° 34' 47" W CHD=277.15' ARC=277.15' R=57291.19'

5 S 57° 07' 47" E CHD=367.45' ARC=(367.45') (367.21') R=57345.80'

6 S 56° 50' 30" E CHD=198.33' ARC=(198.33') (198.20') R=57345.80'

7 S 56° 35' 08" E CHD=325.21' ARC=(325.21') (325.00') R=57401.80

8 N 57° 12' 55" W CHD=1551.19' ARC=1551.24' R=57401.19'

LEGEND

SECTION CORNER

QUARTER SECTION CORNER

(85)	COORDINATE POSITION NUMBER
	SECTION LINE
	QUARTER SECTION LINE
	QUARTER, QUARTER SECTION LINE
	PROPOSED RIGHT OF WAY LINE
	PROPOSED EASEMENT
	EXISTING RIGHT OF WAY LINE
	CENTERLINE
	PLATTED LOT LINES
	PROPERTY (DEED) LINE
APL	APPARENT PROPERTY LINE
(129.32)	MEASURED ENGLISH DIMENSION
129.32 (COMP)	COMPUTED DIMENSION
(129.32)	RECORDED DIMENSION
129.322m	METRIC DIMENSION
+	CUT CROSS FOUND OR SET
	EXISTING BUILDING

N

1

50 25 0 50 100

SCALE: 1"= 50'

- IRON OR PIPE FOUND ○ IRON SET
- T1 T2 T3 THESE STAKES REFERENCE FOUND MONUMENTATION. SET 9/16 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1 BT2 BT3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND MONUMENTATION. BURIED 9/16 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE TP FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
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- ⊕ PERMANENT SURVEY MARKER, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET.

ALL DISTANCES ARE MEASURED UNLESS OTHERWISE NOTED.

TREES EVERGREEN TREES

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, ROBERT A. ROGINA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HERE ON BETWEEN SECTION 22, TOWNSHIP 42 NORTH, AND RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT MINIMUM ILLINOIS STANDARDS FOR A BOUNDARY SURVEY.
DATED AT JOLIET, ILLINOIS THIS DAY OF , 2011 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2017
LICENSE EXPIRES 11/30/12
NOTE:

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ROBERT A. ROGINA 2017 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS JOLIET, ILLINOIS

RECEIVED
APR 29 2011
PLATS & LEGALS

REVISION	
DATE	DESCRIPTION
10/07/09	PER REVIEW
10/15/09	PER REVIEW
04/21/11	REMOVE PARCEL

PREPARED BY: ROGINA & ASSOCIATES, LTD. ENGINEERS SURVEYORS PLANNERS
93 Caterpillar Drive Joliet, Illinois 815/729-0777 FAX 815/729-0282

ILLINOIS DEPT. OF TRANSPORTATION
PLAT OF HIGHWAYS
ROUTE FAP 339 IL. ROUTE 62
SECTION PENNY ROAD TO EASTINGS WAY
COUNTY COOK
JOB# R-90-003-04 PROJECT#
SEC 23 T42N , R9E OF 3rd P.M.
STA 512+00 TO STA 525+00
DRAWN M.MILTON CHECKED J.KELLA
SCALE: 1"=50' SHEET NO. 5 OF 8

PLAN SURVEYED / PLOTTED / NOTE BOOK / NO. / ALIGNMENT CHECKED / R.O.W. CHECKED / CAD FILE NAME / DATE / BY

FILE NAME = ...\D160135-sht-parcel_04.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

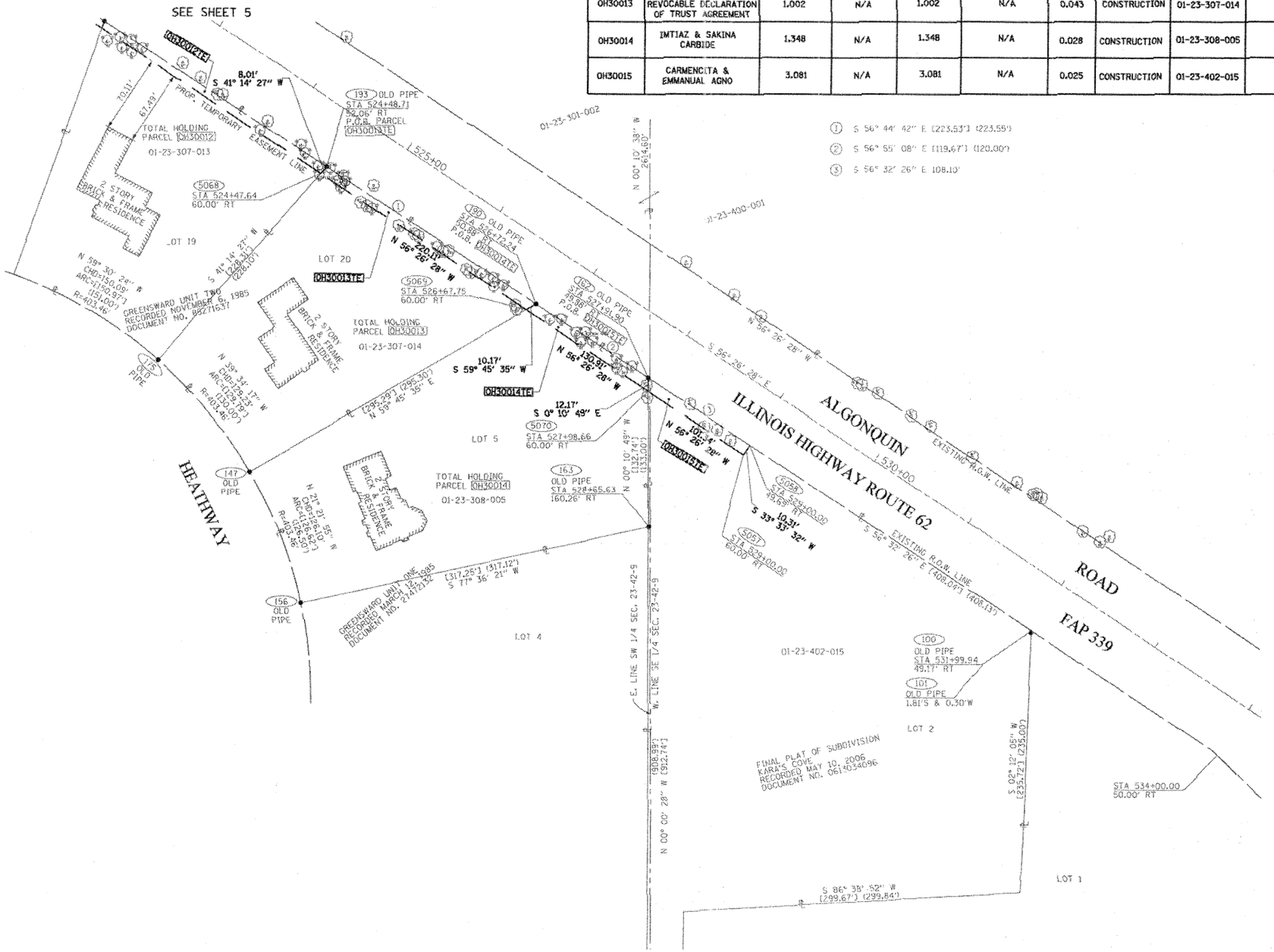
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PLAT OF HIGHWAYS

SCALE: N.T.S. | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	41
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

PART OF THE SW 1/4 OF SECTION 23, T.42N., R.9E., OF THE 3rd. P.M. COOK COUNTY, ILLINOIS
PART OF THE SE 1/4 OF SECTION 23, T.42N., R.9E., OF THE 3rd. P.M. COOK COUNTY, ILLINOIS

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREVIOUSLY DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT ID. NO.	PROPERTY ACQUIRED BY
0H30012	RICHARD C. & MARY M. IMMEL JR.	1.001	N/A	1.001	N/A	0.039	CONSTRUCTION	01-23-307-013	
0H30013	CRAIG E. HARRIS REVOCABLE DECLARATION OF TRUST AGREEMENT	1.002	N/A	1.002	N/A	0.043	CONSTRUCTION	01-23-307-014	
0H30014	IMTIAZ & SAKINA CARBIDE	1.348	N/A	1.348	N/A	0.028	CONSTRUCTION	01-23-308-005	
0H30015	CARMENCITA & EMMANUAL AGNO	3.081	N/A	3.081	N/A	0.025	CONSTRUCTION	01-23-402-015	



1 S 56° 44' 42" E (223.53') (223.55')
2 S 56° 55' 08" E (119.67') (120.00')
3 S 56° 32' 26" E 108.10'

LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- 87 COORDINATE POSITION NUMBER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- [129.32] MEASURED ENGLISH DIMENSION
- 129.32 (COMP) COMPUTED DIMENSION
- (129.32) RECORDED DIMENSION
- 129.322m METRIC DIMENSION
- + CUT CROSS FOUND OR SET
- EXISTING BUILDING
- ● IRON OR PIPE FOUND ○ IRON SET
- ● T1 T2 T3 THESE STAKES REFERENCE FOUND MONUMENTATION. SET 9/16 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
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- ◆ PERMANENT SURVEY MARKER, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET.
- ALL DISTANCES ARE MEASURED UNLESS OTHERWISE NOTED.
- TREES
- EVERGREEN TREES

N

SCALE: 1"= 50'

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

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DATED AT JOLIET, ILLINOIS THIS DAY OF , 2011 A.D.

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NOTE:

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ROBERT A. ROGINA 2017 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS JOLIET, ILLINOIS

RECEIVED
APR 29 2011
PLATS & LEGALS

PREPARED BY: ROGINA & ASSOCIATES, LTD.
ENGINEERS SURVEYORS PLANNERS
93 Caterpillar Drive Joliet, Illinois 815/729-0717 FAX 815/729-0782

REVISION	
DATE	DESCRIPTION
10/07/09	PER REVIEW
10/15/09	PER REVIEW
04/21/11	REMOVE PARCEL

ILLINOIS DEPT. OF TRANSPORTATION
PLAT OF HIGHWAYS
ROUTE FAP 339 IL. ROUTE 62
SECTION PENNY ROAD TO EASTINGS WAY
COUNTY COOK
JOB# R-90-003-04 PROJECT#
SEC 23 T42N , R 9E OF 3rd P.M.
STA 525+00 TO STA 534+00
DRAWN M.MILTON CHECKED J.KELLA
SCALE: 1"=50' SHEET NO. 6 OF 8

PLAN: SURVEYED, DRAWN, ALIGNMENT CHECKED, RT. OF WAY CHECKED, NOTE BOOK, NO., DGN FILE NAME, BY, DATE

FILE NAME = ...\D160135-sht-parcel_05.dgn

Primera

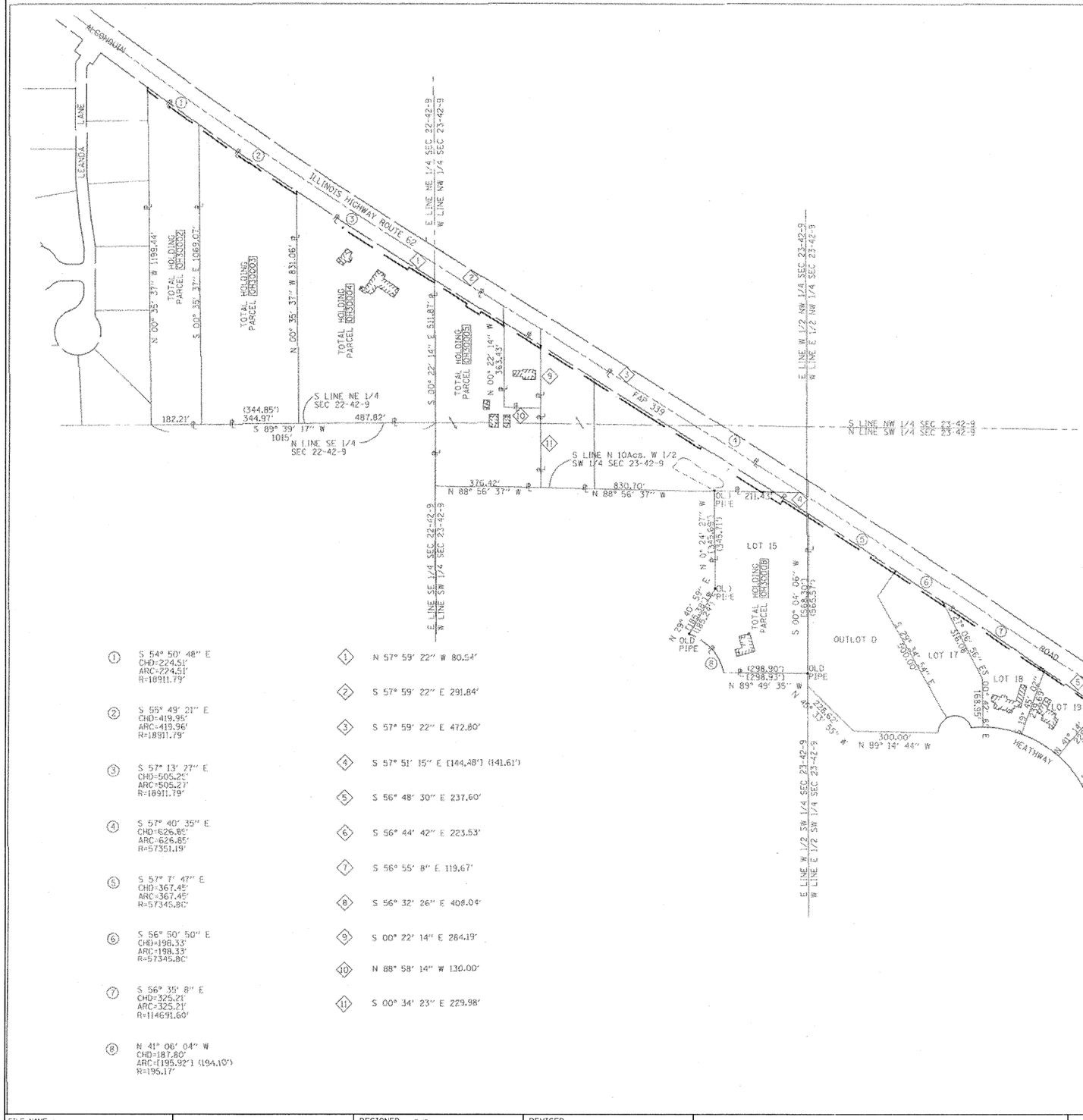
DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PLAT OF HIGHWAYS

SCALE: N.T.S. | SHEET NO. 5 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	42
			CONTRACT NO. 60135	
	ILLINOIS	FED. AID PROJECT		



LEGEND

SECTION CORNER

16 — 5 QUARTER SECTION CORNER

(85)	COORDINATE POSITION NUMBER
	SECTION LINE
	QUARTER SECTION LINE
	QUARTER, QUARTER SECTION LINE
	PROPOSED RIGHT OF WAY LINE
	PROPOSED EASEMENT
	EXISTING RIGHT OF WAY LINE
	CENTERLINE
	PLATTED LOT LINES
	PROPERTY (DEED) LINE
APL	APPARENT PROPERTY LINE
(129.32)	MEASURED ENGLISH DIMENSION
129.32 (COMP)	COMPUTED DIMENSION
(129.32)	RECORDED DIMENSION
129.322m	METRIC DIMENSION
+	CUT CROSS FOUND OR SET
	EXISTING BUILDING

N

1

200 100 0 200 400

SCALE: 1"= 200'

- IRON OR PIPE FOUND O IRON SET
- T1, T2, T3 — THESE STAKES REFERENCE FOUND MONUMENTATION. SET 9/16 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1, BT2, BT3 — THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND MONUMENTATION. BURIED 9/16 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE TP FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 9/16 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY DISK POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET.

ALL DISTANCES ARE MEASURED UNLESS OTHERWISE NOTED.

(4) TREES (7) EVERGREEN TREES

1	S 54° 50' 48" E	CHD=224.51' ARC=224.51' R=18911.79'
2	S 55° 49' 21" E	CHD=419.95' ARC=419.96' R=18911.79'
3	S 57° 13' 27" E	CHD=505.26' ARC=505.27' R=18911.79'
4	S 57° 40' 35" E	CHD=626.85' ARC=626.85' R=57351.19'
5	S 57° 7' 47" E	CHD=367.45' ARC=367.45' R=57345.80'
6	S 56° 50' 50" E	CHD=198.33' ARC=198.33' R=57345.80'
7	S 56° 35' 8" E	CHD=325.21' ARC=325.21' R=114691.60'
8	N 41° 06' 04" W	CHD=187.80' ARC=(195.92') (194.10') R=195.17'

1	N 57° 59' 22" W 80.54'
2	S 57° 59' 22" E 291.84'
3	S 57° 59' 22" E 472.80'
4	S 57° 51' 15" E (144.48') (141.61')
5	S 56° 48' 30" E 237.60'
6	S 56° 44' 42" E 223.53'
7	S 56° 55' 8" E 119.67'
8	S 56° 32' 26" E 408.04'
9	S 00° 22' 14" E 284.19'
10	N 88° 58' 14" W 130.00'
11	S 00° 34' 23" E 229.98'

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, ROBERT A. ROGINA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HERE ON BETWEEN SECTION 22, TOWNSHIP 42 NORTH, AND RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY. THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT MINIMUM ILLINOIS STANDARDS FOR A BOUNDARY SURVEY.
DATED AT JOLIET, ILLINOIS THIS DAY OF , 2011 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2017
LICENSE EXPIRES 11/30/12
NOTE:

BASIS OF BEARINGS IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83

SHEET ONE IS A COVER SHEET AND IS NOT RECORDED

ROBERT A. ROGINA 2017 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS JOLIET, ILLINOIS

RECEIVED
APR 29 2011
PLATS & LEGALS

PREPARED BY: ROGINA & ASSOCIATES, LTD. ENGINEERS SURVEYORS PLANNERS
93 Caterpillar Drive Joliet, Illinois 815/729-0777 FAX 815/729-0782

REVISION	
DATE	DESCRIPTION
05/19/10	PER IDOT
08/12/10	PER IDOT
12/02/10	PER IDOT
04/21/11	REMOVE PARCEL

ILLINOIS DEPT. OF TRANSPORTATION
PLAT OF HIGHWAYS
ROUTE FAP 339 IL. ROUTE 62
SECTION PENNY ROAD TO EASTINGS WAY
CCUNTY COOK
JOB# R-90-003-04 PROJECT#
SECS 22&23 T42N , R9E OF 3rd P.M.
STA TO STA
DRAWN M.MILTON CHECKED J.KELLA
SCALE: 1"=200' SHEET NO. 7 OF 8

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, R/T. OF WAY CHECKED, NOTE BOOK, NO., CADD FILE NAME, BY, DATE

FILE NAME = ...\D160135-sht-parcel_26.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

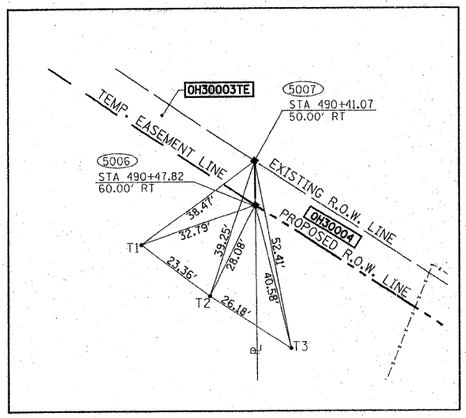
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

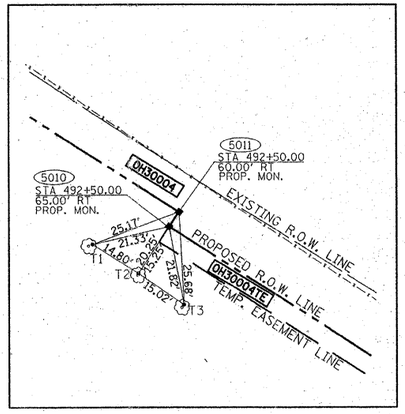
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PLAT OF HIGHWAYS

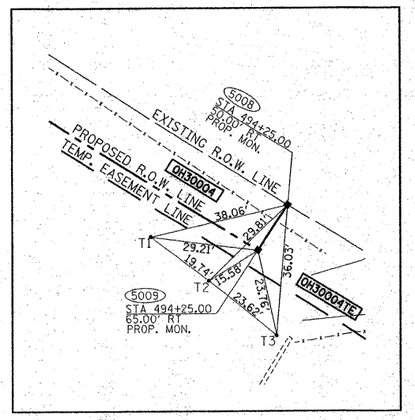
SCALE: N.T.S. | SHEET NO. 6 OF 7 SHEETS | STA. | TO STA.

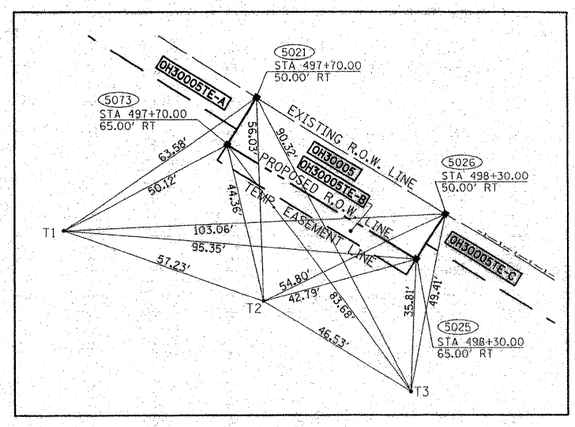
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	43
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

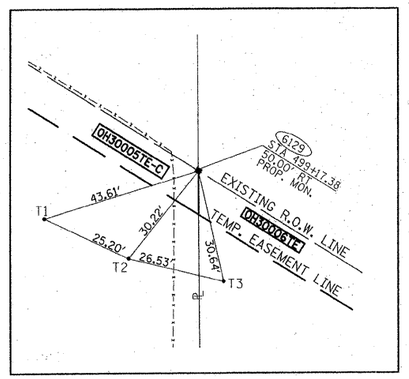
41	1981438.99687	1030084.81966
42	1981424.87120	1030084.03190
100	1978818.83797	1034110.40843
101	1978817.02664	1034110.10638
147	1978960.40678	1033414.61756
156	1978842.97635	1033460.55606
162	1979043.80731	1033769.99398
163	1978911.06973	1033770.41195
175	1979059.96582	1033332.23983
176	1979136.27088	1033202.99479
177	1979159.94334	1033061.52584
190	1979109.12385	1033669.72639
192	1979361.77688	1033283.96170
193	1979231.70215	1033482.79968
194	1979431.12717	1033186.85114
196	1979606.75758	1032911.65129
200	1979918.10948	1032440.72677
223	1979998.46103	1032107.00039
269	1980519.52266	1031485.66072
290	1980003.79036	1031489.68558
291	1980003.59911	1031491.46924
666	1980755.29161	1031108.20304
896	1980243.75322	1031111.39271
5004	1981437.00609	1030083.98524
5006	1981059.75119	1030615.09708
5007	1981071.83046	1030614.97193
5008	1980862.41125	1030937.96610
5009	1980849.74282	1030929.93423
5010	1980944.45752	1030782.06489
5011	1980948.65531	1030784.78124
5012	1980940.25973	1030779.34853
5013	1980792.00046	1031012.16864
5014	1980800.47435	1031017.47837
5015	1980789.83162	1031034.48331
5020	1980743.77604	1031108.15771
5028	1980150.80601	1032055.79491
5029	1980159.26349	1032061.13074
5030	1980464.36298	1031573.99576
5031	1980459.27527	1031570.81532
5033	1980331.84446	1031785.98359
5034	1980277.05537	1031854.76356
5035	1980144.04003	1032051.52624
5036	1979983.49283	1032304.53039
5038	1980077.30621	1032157.04667
5039	1980071.39413	1032153.29870
5040	1979950.70906	1032342.84480
5041	1979963.34619	1032350.92582
5045	1979538.72026	1033222.70290
5046	1979438.72204	1033156.36771
5057	1978975.61955	1033854.48027
5058	1978984.20786	1033860.17745
5061	1979995.15562	1032286.24934
5063	1979995.40289	1032272.84060
5064	1979905.81314	1032440.71208
5065	1979710.07727	1032743.45388
5066	1979591.36783	1032925.04629
5067	1979355.56125	1033281.73001
5068	1979225.68077	1033477.52078
5069	1979104.00428	1033660.94429
5070	1979031.63927	1033770.03230
5071	1981307.74341	1030267.54423
5072	1981295.47493	1030267.67133
5073	1980666.32400	1031222.62400
5074	1980589.08000	1031355.62250
5075	1980507.50670	1031486.11420
6003	1979488.72115	1033189.53530
6024	1979610.21871	1032915.39329
6033	1979718.68031	1032749.34874
6050	1979530.38707	1033217.17496
6056	1980798.31114	1031039.78405
6057	1980285.53488	1031860.06430
6094	1980755.61706	1031108.08110
6098	1980519.34770	1031486.03760
6118	1980814.82216	1031107.69806
6125	1980578.55280	1031485.65450
6128	1980660.12620	1031355.16290
6129	1980600.92110	1031355.54590
6130	1979992.75784	1032416.27898

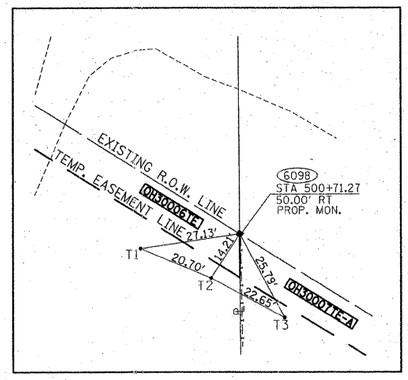


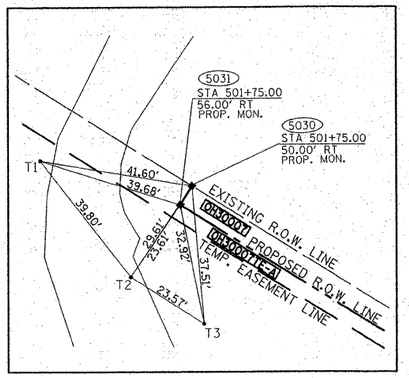


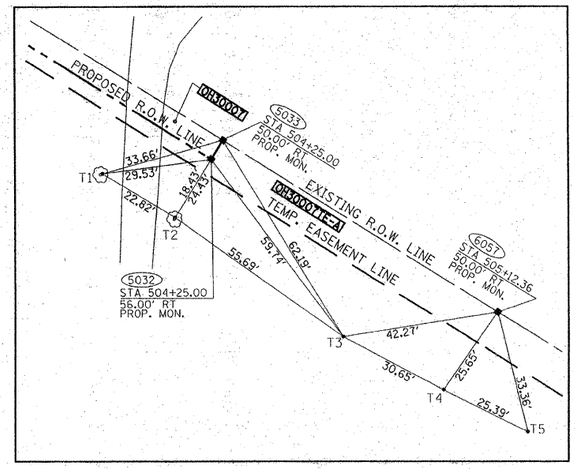


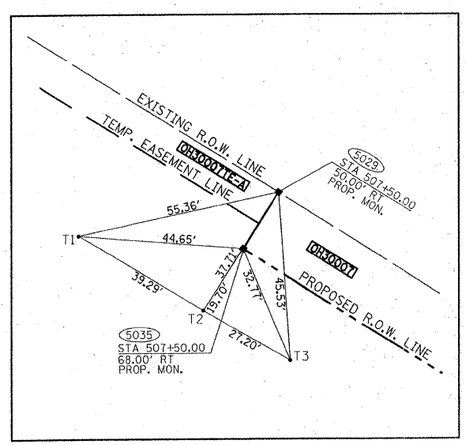


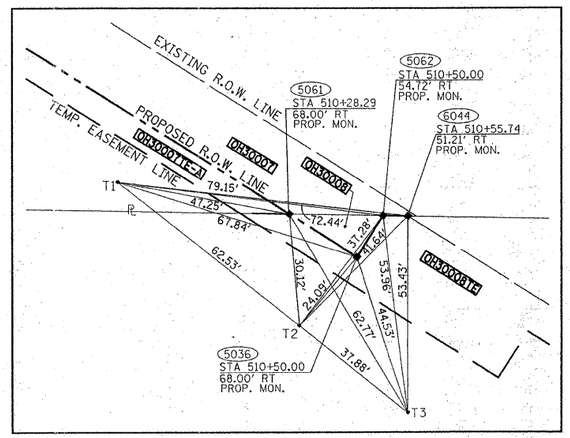












RECEIVED
JUL 12 2011
PLATS & LEGALS

PREPARED BY:
ROGINA & ASSOCIATES, LTD.
ENGINEERS SURVEYORS PLANNERS
93 Caterpillar Drive Joliet, Illinois 815/729-0777 FAX 815/729-0782

REVISION	
DATE	DESCRIPTION
04/21/11	REMOVE PARCEL
07/11/11	ADD TIES

ILLINOIS DEPT. OF TRANSPORTATION
PLAT OF HIGHWAYS
ROUTE FAP 339 IL. ROUTE 62
SECTION PENNY ROAD TO EASTINGS WAY
COUNTY COOK
JOB# R-90-003-04 PROJECT#
SEC T42N , R 9E OF 3rd P.M.
STA TO STA
DRAWN J.P.S. CHECKED J.KELLA
SCALE: 1"=20' SHEET NO. 8 OF 8

PLAN | SURVEYED | PLOTTED | ALIGNMENT CHECKED | REF. NAME PROCESSED | CADD FILE NAME | NOTE BOOK | NO. | DATE | BY

PLAN | SURVEYED | PLOTTED | ALIGNMENT CHECKED | REF. NAME PROCESSED | CADD FILE NAME | NOTE BOOK | NO. | DATE | BY

FILE NAME =
...\D160135-sht-parcel_07.dgn

Primera

DESIGNED	RJD	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PLAT OF HIGHWAYS

SCALE: N.T.S. | SHEET NO. 7 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	44
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

LANDSCAPING LEGEND

- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- SODDING, SALT TOLERANT
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN
- PROPOSED SHRUB

NOTES:

1. REFER TO DISTRICT 1 DETAILS "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" AND "TYPICAL PAVEMENT MARKING" FOR ADDITIONAL INFORMATION.
2. POLYUREA PAVEMENT MARKINGS SHALL BE USED ON ALL CONCRETE SURFACES.

ILLINOIS ROUTE 62 (ALGONQUIN RD.)

℄ IL ROUTE 62

PC Sta 470+39.19

CURVE EX-IL62-1

465+00

470+00

475+00

478+20

01-22-200-006

BEGIN WB & MEDIAN PAVEMENT MARKING 476+20

RAISED REFL PAVT MKR (ONE-WAY CRYSTAL @ 40' O.C.) (TYP)

POLYUREA PM T1 LN 6 (WHITE) (TYP)

BEGIN EB PAVEMENT MARKING 467+10

POLYUREA PM T1 LN 4 (TYP) (30' SKIP-10' DASH, WHITE)

RAISED REFL PAVT MKR (ONE WAY CRYSTAL MARKER 2 @ 80' O.C.)

EASTING'S WAY

475+29

476+20

200' STORAGE

282' TAPER

POLYUREA PM T1 LN 4 (YELLOW) (TYP)

POLYUREA PM T1 LTR-SY (WHITE) (TYP)

01-22-201-012

MATCHLINE STA. 480 + 00

PROJECT BEGINS STA. 481+01.80

POLYUREA PM T1 LN 6 (WHITE) (TYP)

POLYUREA PM T1 LTR-SY (WHITE) (TYP)

482+00

483+85

485+85

90' TAPER

185' STORAGE

200' TAPER

480+00

485+00

490+00

481+09

482+63

RAISED REFL PAVT MKR (TWO-WAY AMBER MARKER @ 40' O.C.) (TYP)

01-22-201-010

POLYUREA PM T1 LN 4 (TYP) (30' SKIP-10' DASH, WHITE)

WETLAND SITE 6

01-22-201-014

POLYUREA PM T1 LN 4 (YELLOW) (TYP)

01-22-200-007

RAISED REFL PAVT MKR (ONE-WAY AMBER MARKER @ 40' O.C.) (TYP)

CURVE EX-IL62-1

ILLINOIS ROUTE 62 (ALGONQUIN RD.)

℄ IL ROUTE 62

(3) BALD CYPRESS MULCHED RINGS

WETLAND SITE 5

(3) AMERICAN HOPHORNBEAM 40' O.C., STAGGERED, MULCHED RINGS

494+45

PROP. R.O.W.

490+97

01-22-201-015

POLYUREA PM T1 LN 12 (45° @ 75' C-C) (YELLOW) (TYP)

RAISED REFL PAVT MKR (ONE-WAY CRYSTAL MARKER 2 @ 80' O.C.) (TYP)

POLYUREA PM T1 LN 4 (2 @ 11" C-C) (YELLOW) (TYP)

01-22-201-013

MATCHLINE STA. 495 + 00

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

FILE NAME = ...\D160135-sht-pmk_01.dgn	Primera	DESIGNED ADW	REVISED -
		DRAWN MHL	REVISED -
		CHECKED RJD	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PAVEMENT MARKING & LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 1 OF 3 SHEETS | STA. 467+10 TO STA. 495+00

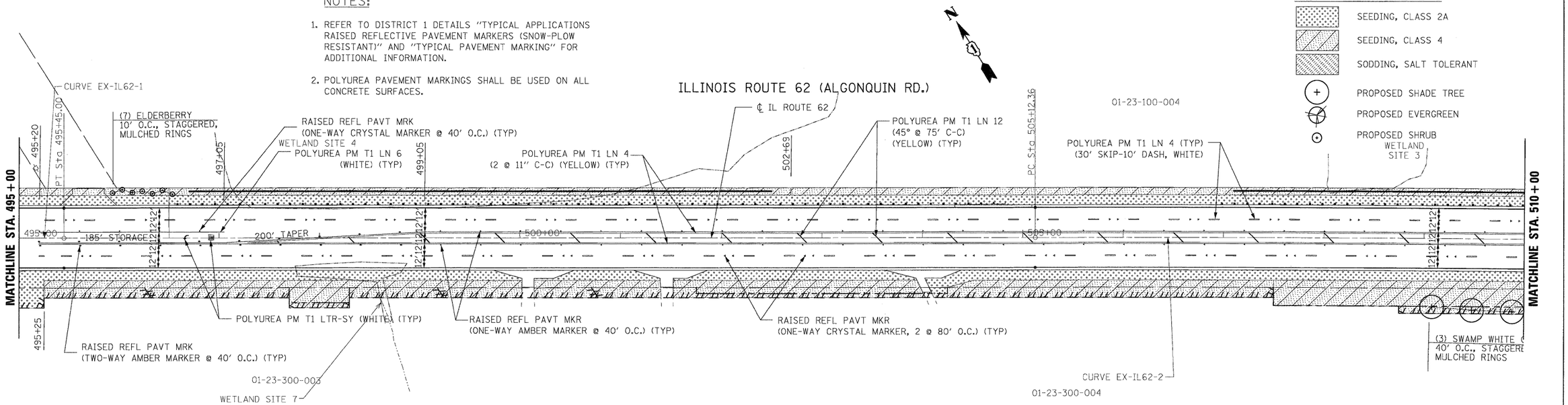
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	45
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

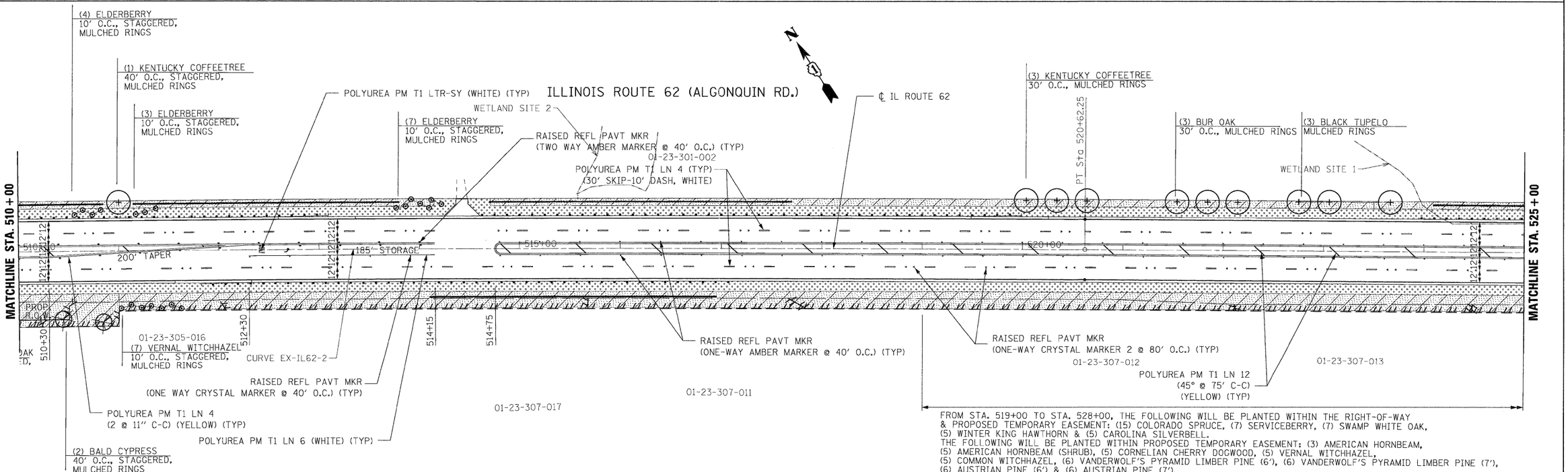
NOTES:

1. REFER TO DISTRICT 1 DETAILS "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" AND "TYPICAL PAVEMENT MARKING" FOR ADDITIONAL INFORMATION.
2. POLYUREA PAVEMENT MARKINGS SHALL BE USED ON ALL CONCRETE SURFACES.

LANDSCAPING LEGEND

- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- SODDING, SALT TOLERANT
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN
- PROPOSED SHRUB





FROM STA. 519+00 TO STA. 528+00, THE FOLLOWING WILL BE PLANTED WITHIN THE RIGHT-OF-WAY & PROPOSED TEMPORARY EASEMENT: (15) COLORADO SPRUCE, (7) SERVICEBERRY, (7) SWAMP WHITE OAK, (5) WINTER KING HAWTHORN & (5) CAROLINA SILVERBELL.
THE FOLLOWING WILL BE PLANTED WITHIN PROPOSED TEMPORARY EASEMENT: (3) AMERICAN HORNBEAM, (5) AMERICAN HORNBEAM (SHRUB), (5) CORNELIAN CHERRY DOGWOOD, (5) VERNAL WITCHHAZEL, (5) COMMON WITCHHAZEL, (6) VANDERWOLF'S PYRAMID LIMBER PINE (6'), (6) VANDERWOLF'S PYRAMID LIMBER PINE (7'), (6) AUSTRIAN PINE (6') & (6) AUSTRIAN PINE (7').
FINAL LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

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

FILE NAME = ...\D160135-sht-pmk_02.dgn

Primera

DESIGNED	ADW	REVISED	-
DRAWN	MHL	REVISED	-
CHECKED	RJD	REVISED	-
DATE	JUNE 30, 2011	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
PAVEMENT MARKING & LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 2 OF 3 SHEETS | STA. 495+00 TO STA. 525+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	46

CONTRACT NO. 60I35

ILLINOIS | FED. AID PROJECT

LANDSCAPING LEGEND

- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- SODDING, SALT TOLERANT
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN
- PROPOSED SHRUB

NOTES:

1. REFER TO DISTRICT 1 DETAILS "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" AND "TYPICAL PAVEMENT MARKING" FOR ADDITIONAL INFORMATION.
2. POLYUREA PAVEMENT MARKINGS SHALL BE USED ON ALL CONCRETE SURFACES.

ILLINOIS ROUTE 62 (ALGONQUIN RD.)

MATCHLINE STA. 525+00

MATCHLINE STA. 540+00

℄ IL ROUTE 62

WETLAND SITE 1

POLYUREA PM T1 LN 4(TYP)
(30' SKIP-10' DASH, WHITE)

01-23-400-001

POLYUREA PM T1 LN 4
(2 @ 11" C-C) (YELLOW) (TYP)

01-23-307-014

WETLAND SITE 8
01-23-308-005

01-23-402-015

RAISED REFL PAVT MKR
(ONE-WAY CRYSTAL MARKER 2 @ 80' O.C.) (TYP)

POLYUREA PM T1 LN 12
(45° @ 75' C-C)
(YELLOW) (TYP)

RAISED REFL PAVT MKR
(ONE-WAY AMBER MARKER @ 40' O.C.) (TYP)

01-23-402-009

PROJECT ENDS
STA. 535+91.80

END MEDIAN
PAVEMENT MARKING
536+74

POLYUREA PM T1 LN 24 (WHITE) (TYP)

536+55

POLYUREA PM T1 LN 6 (WHITE) (TYP)

RAISED REFL PAVT MKR
(ONE WAY CRYSTAL MARKER @ 40' O.C.) (TYP)

PC Sta 537+43.86

537+90

CURVE EX-IL62-3

240' STORAGE

152' TAPER

PENNY ROAD

POLYUREA PM T1 LTR- SY
(WHITE) (TYP)

FROM STA. 519+00 TO STA. 528+00, THE FOLLOWING WILL BE PLANTED WITHIN THE RIGHT-OF-WAY & PROPOSED TEMPORARY EASEMENT: (15) COLORADO SPRUCE, (7) SERVICEBERRY, (7) SWAMP WHITE OAK, (5) WINTER KING HAWTHORN & (5) CAROLINA SILVERBELL. THE FOLLOWING WILL BE PLANTED WITHIN PROPOSED TEMPORARY EASEMENT: (3) AMERICAN HORNBEAM, (5) AMERICAN HORNBEAM (SHRUB), (5) CORNELIAN CHERRY DOGWOOD, (5) VERNAL WITCHHAZEL, (5) COMMON WITCHHAZEL, (6) VANDERWOLF'S PYRAMID LIMBER PINE (6'), (6) VANDERWOLF'S PYRAMID LIMBER PINE (7'), (6) AUSTRIAN PINE (6') & (6) AUSTRIAN PINE (7'). FINAL LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

ILLINOIS ROUTE 62 (ALGONQUIN RD.)

MATCHLINE STA. 540+00

RAISED REFL PAVT MRK
(ONE-WAY CRYSTAL MARKER @ 40' O.C.) (TYP)

RAISED REFL PAVT MRK
(ONE-WAY CRYSTAL MARKER 2 @ 80' O.C.) (TYP)

POLYUREA PM T1 LN 4(TYP)
(30' SKIP-10' DASH, WHITE)

PT Sta 547+51.80

END WB
PAVEMENT MARKING
550+45

℄ IL ROUTE 62

540+30

545+00

550+00

POLYUREA PM T1 LTR-SY
(WHITE) (TYP)

POLYUREA PM T1 LN 6
(WHITE) (TYP)

END EB
PAVEMENT MARKING
542+00

BRIDLEWOOD TRAIL

CURVE EX-IL62-3

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

FILE NAME = ...\D160135-sht-pmk_03.dgn	Primera		
DESIGNED ADW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD. PAVEMENT MARKING & LANDSCAPING PLAN
DRAWN MHL	REVISED -		SCALE: 1"=50' | SHEET NO. 3 OF 3 SHEETS | STA. 525+00 TO STA. 550+45
CHECKED RJD	REVISED -		
DATE JUNE 30, 2011	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	47
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

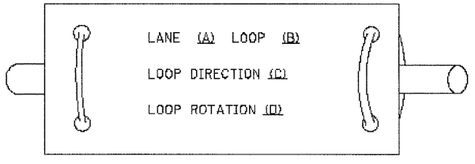
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

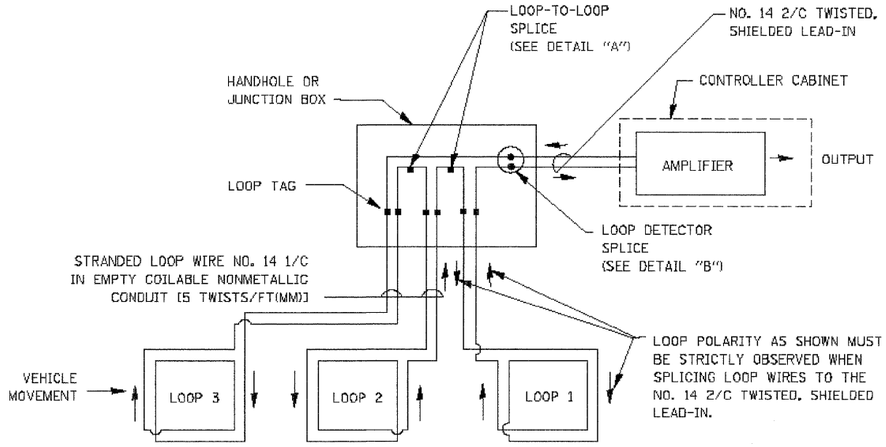


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

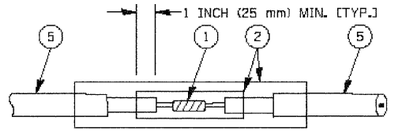
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

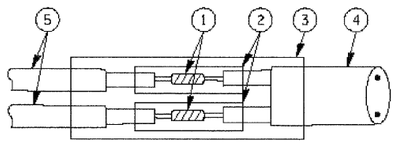


DETECTOR LOOP WIRING SCHEMATIC

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

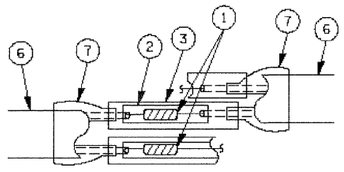


DETAIL "A"
LOOP-TO-LOOP SPLICE



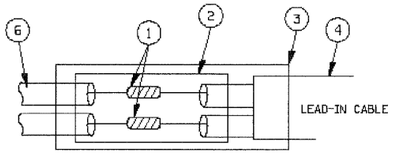
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

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

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

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		DRAWN - BCK	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

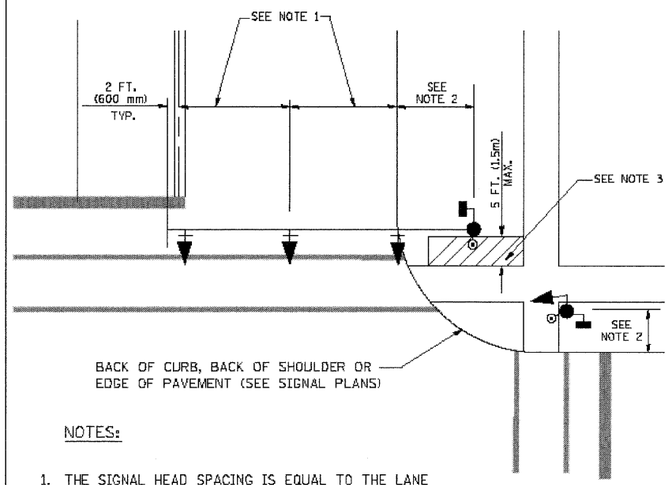
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	48
		CONTRACT NO. 60135		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

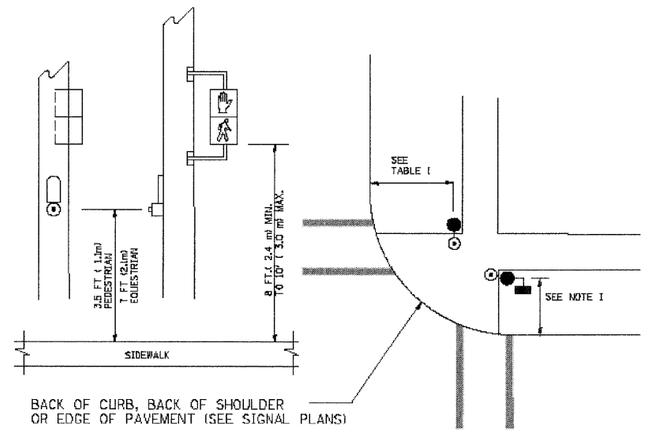
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

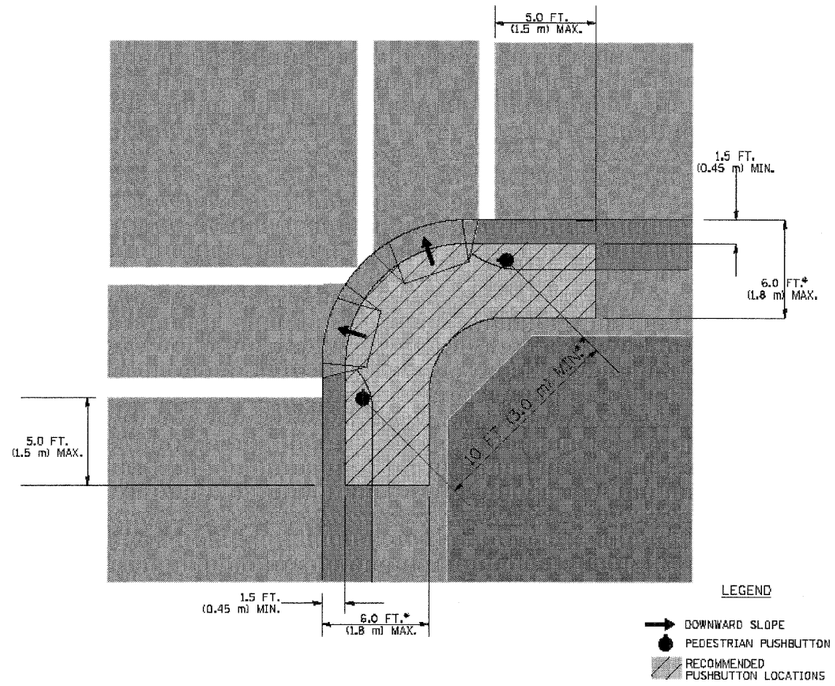
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT. IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

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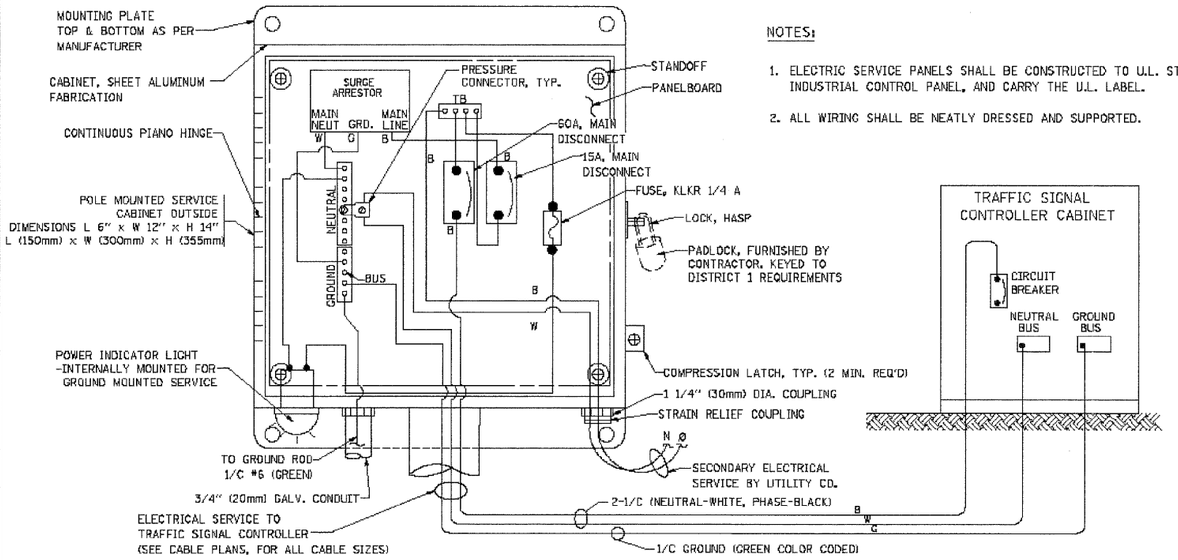
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 10/8/2009	DATE - 10/28/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 2 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	49
		CONTRACT NO. 60135		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

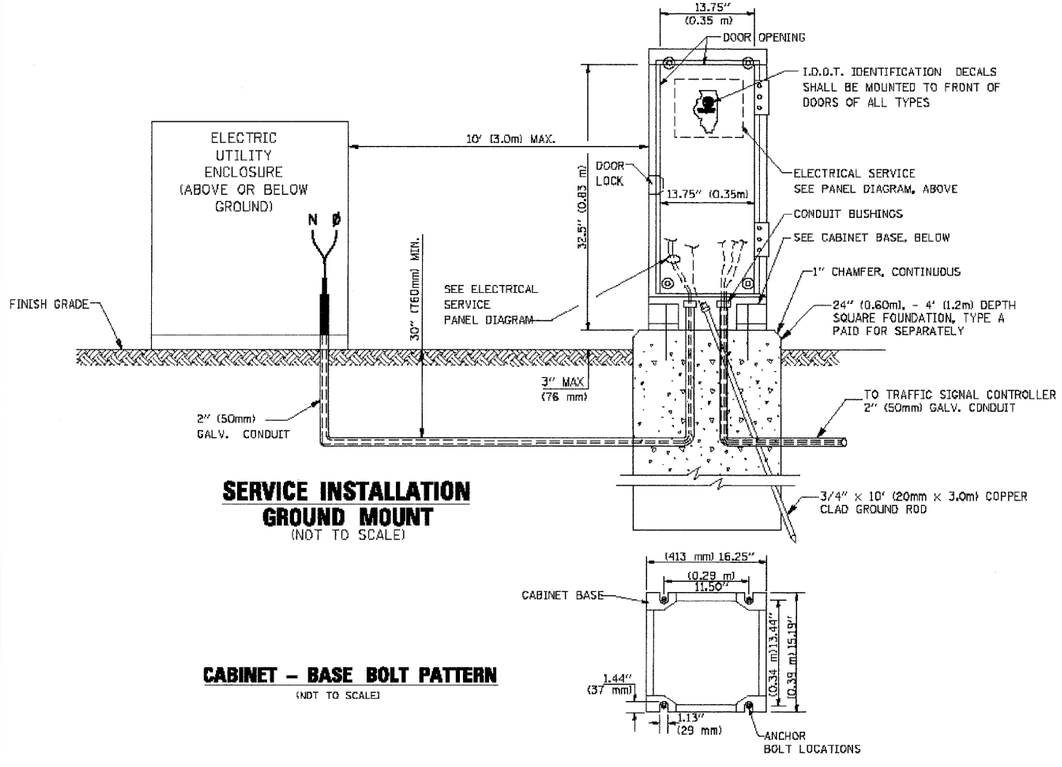


NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

(NOT TO SCALE)

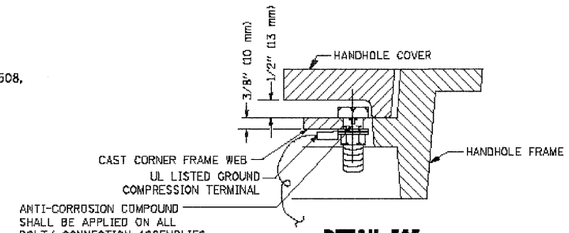


SERVICE INSTALLATION GROUND MOUNT

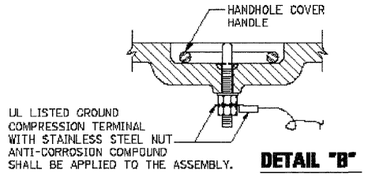
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

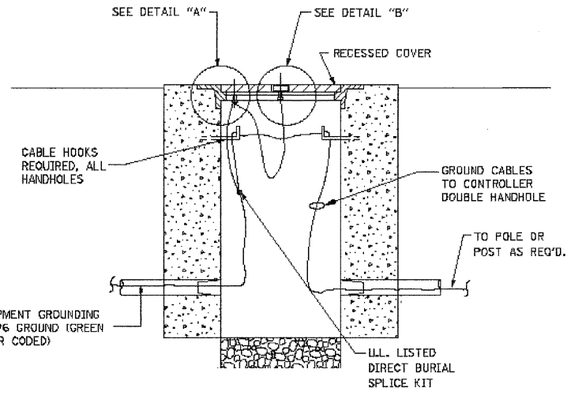
(NOT TO SCALE)



DETAIL "A"

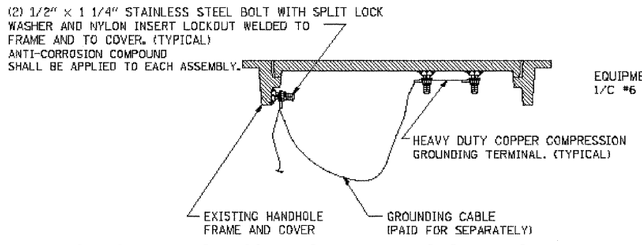


DETAIL "B"



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



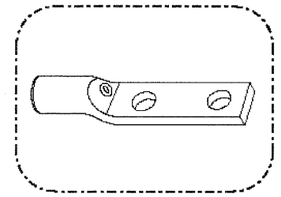
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

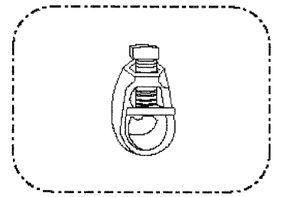
NOTES:

GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



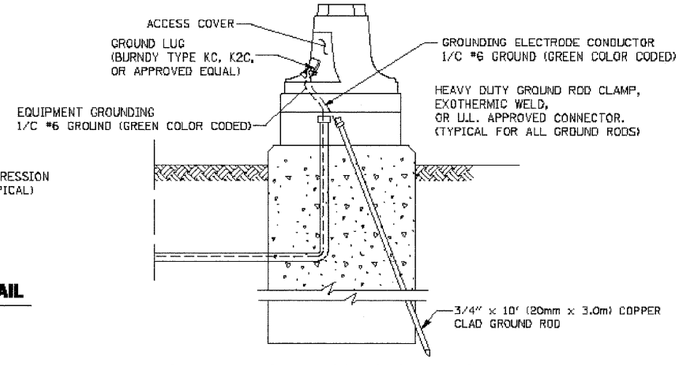
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST–GROUNDING DETAIL

(NOT TO SCALE)

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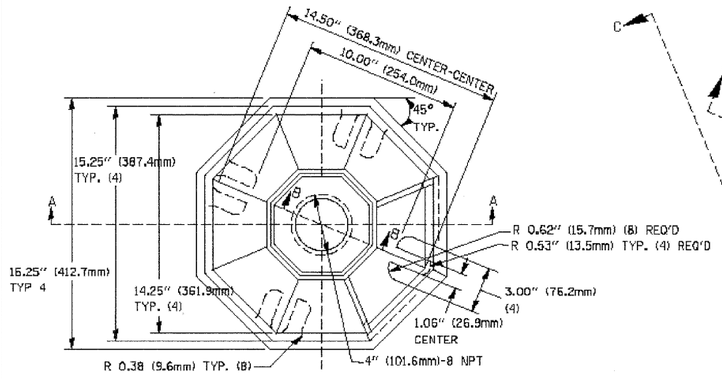
	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

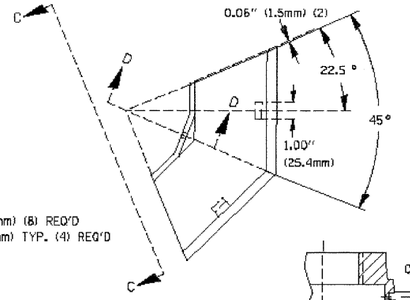
DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

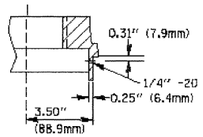
SCALE: | SHEET NO. 3 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	50
		CONTRACT NO. 60135		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

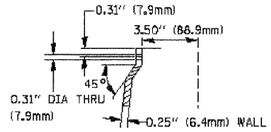


TOP VIEW

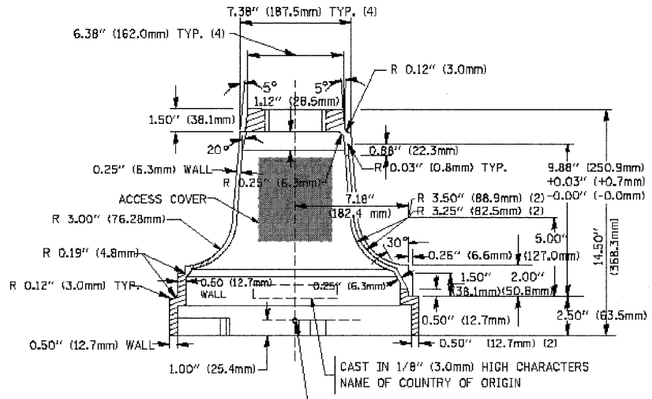




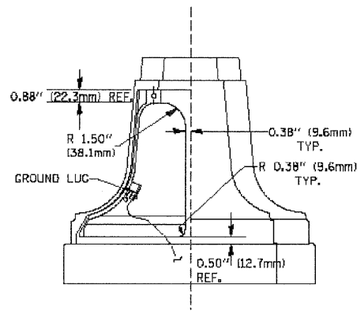
SECTION B-B



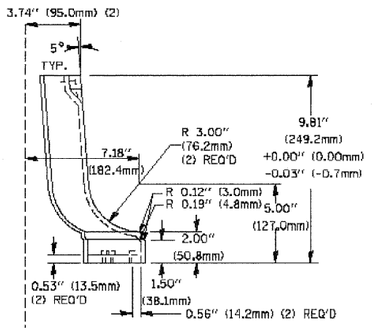
SECTION D-D



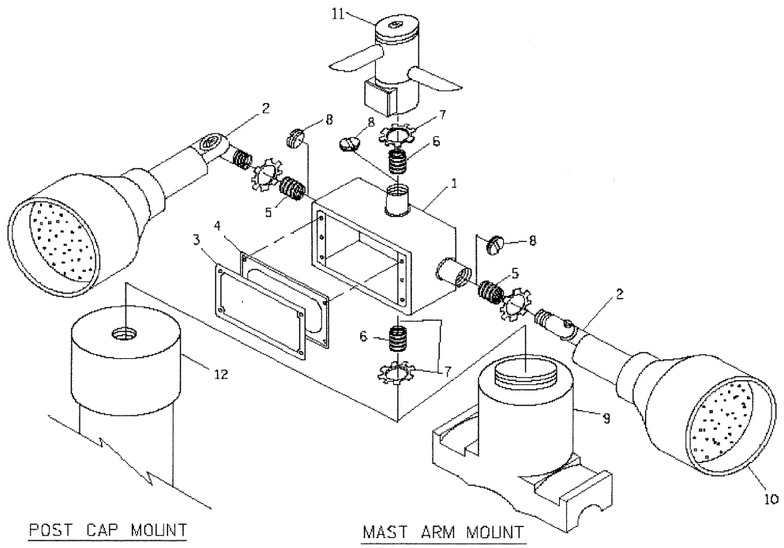
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

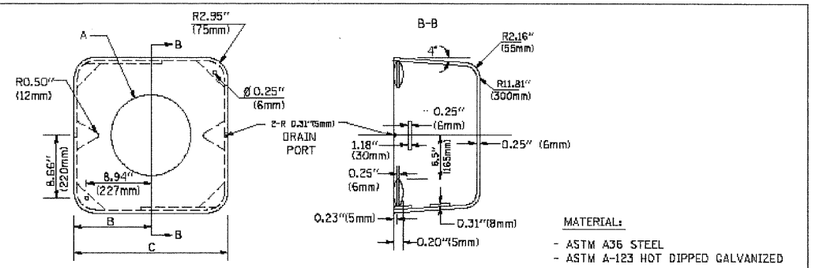


EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP (18 FT. (5.4 m) POST MIN.)

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ¾"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

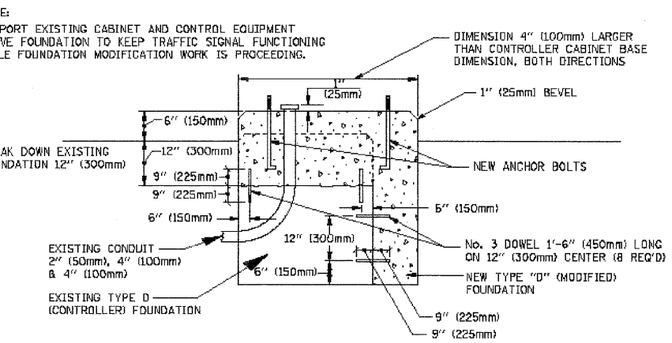
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

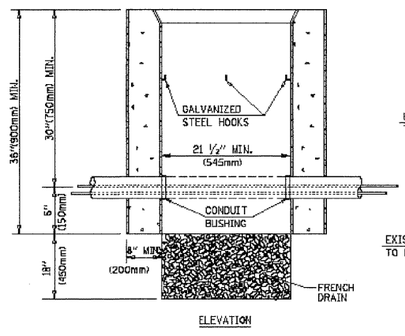
NOTES:

1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

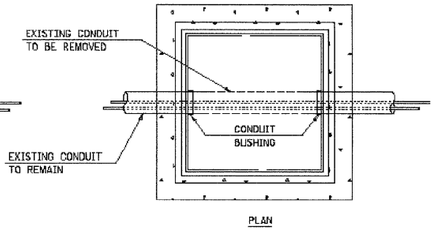
NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



ELEVATION



PLAN

NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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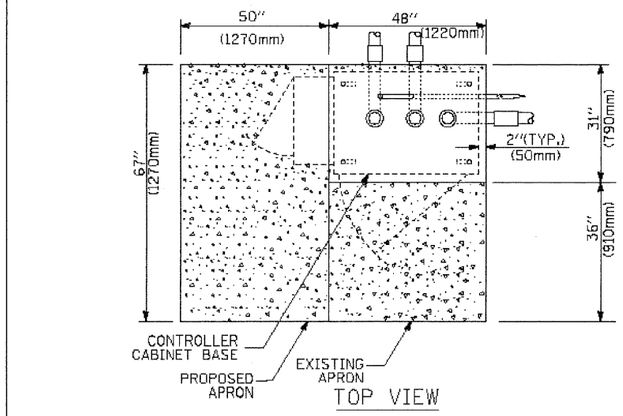
	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

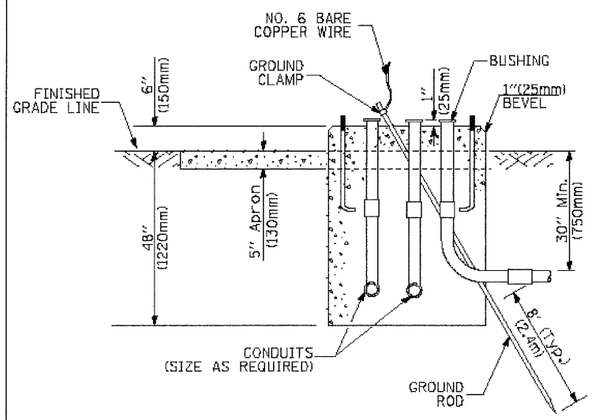
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

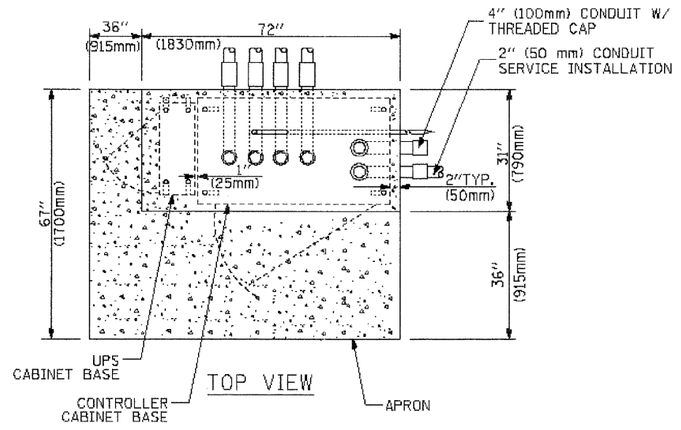
SCALE: | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

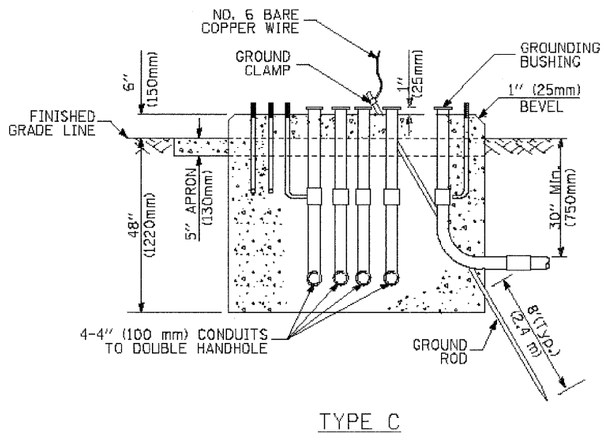
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116-Y-1-R-1	COOK	122	51
		CONTRACT NO. 60135		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



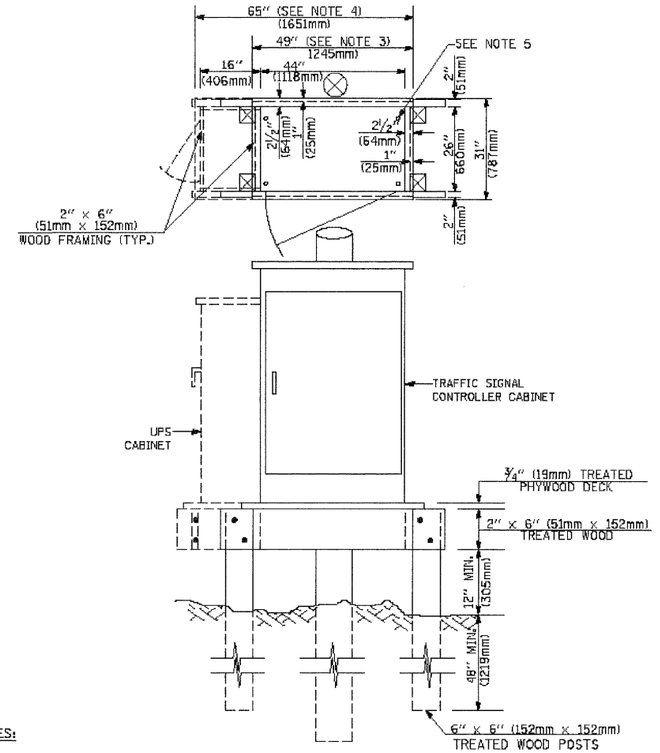


TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET





TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE:	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	52
		CONTRACT NO. 60135		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R		
RAILROAD CONTROL CABINET			
COMMUNICATIONS CABINET	R CC	ECC	CC
MASTER CONTROLLER		EMC	MC
MASTER MASTER CONTROLLER		EMMC	MMC
UNINTERRUPTIBLE POWER SUPPLY	R UPS	EUPS	UPS
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	R	P	P
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P T	P T
STEEL MAST ARM ASSEMBLY AND POLE	R		
ALUMINUM MAST ARM ASSEMBLY AND POLE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R PTZ	PTZ	PTZ
SIGNAL POST	R		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R		
GUY WIRE	R		
SIGNAL HEAD	R		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			2
SIGNAL HEAD WITH BACKPLATE	R		
SIGNAL HEAD OPTICALLY PROGRAMMED	R "P"	"P"	"P"
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R "F"	"F"	"F"
PEDESTRIAN SIGNAL HEAD	R		
PEDESTRIAN PUSHBUTTON DETECTOR	R		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	APS	APS
ILLUMINATED SIGN "NO LEFT TURN"	R		
ILLUMINATED SIGN "NO RIGHT TURN"	R		
DETECTOR LOOP, TYPE I			
PREFORMED DETECTOR LOOP		P	P
MICROWAVE VEHICLE SENSOR	R M	M	M
VIDEO DETECTION CAMERA	R V	V	V
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA	R PTZ	PTZ	PTZ
WIRELESS DETECTOR SENSOR	R W	W	W
WIRELESS ACCESS POINT	R		

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR	R		
CONFIRMATION BEACON	R		
HANDHOLE	R		
HEAVY DUTY HANDHOLE	R H	H	H
DOUBLE HANDHOLE	R		
JUNCTION BOX	R		
GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION		R	R
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y G	
SIGNAL FACE		R Y G Y G	R Y G Y G
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		R Y G Y G "P"	R Y G Y G "P"
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		C D	C D
RADIO INTERCONNECT	R		
RADIO REPEATER	R ERR	ERR	RR
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		5	5
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	1

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		1	1
COAXIAL CABLE		C	C
VENDOR CABLE FOR CAMERA		V	V
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
FIBER OPTIC CABLE NO. 62.5/125, MM12F		12F	
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		24F	24F
FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		C	C
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR		IS	IS
SAMPLING (SYSTEM) DETECTOR		S	S
EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		P	
EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PP	
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
PREFORMED SAMPLING (SYSTEM) DETECTOR		PS	PS

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

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	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	53
		CONTRACT NO. 60135		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.

2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.

3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.

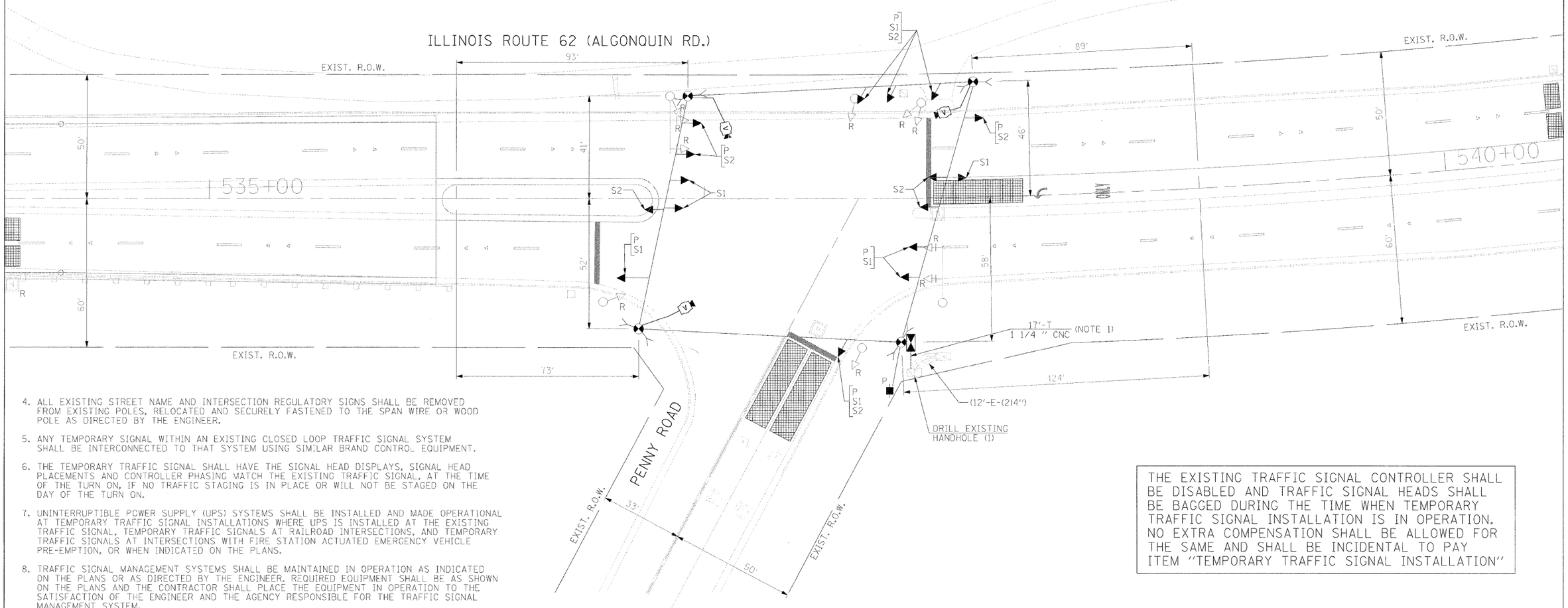
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3 SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED

CONSTRUCTION NOTES:

NOTE 1: INSTALL TEMPORARY INTERCONNECT CABLE NO. 62.5/125 12F BETWEEN THE EXISTING CONTROLLER CABINET AND THE TEMPORARY CONTROLLER CABINET. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

NOTE 2: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR PRE-CONSTRUCTION STAGE AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.



PRE-CONSTRUCTION STAGE, STAGE 1, AND STAGE 2

4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.

5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.

6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.

9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

THE EXISTING TRAFFIC SIGNAL CONTROLLER SHALL BE DISABLED AND TRAFFIC SIGNAL HEADS SHALL BE BAGGED DURING THE TIME WHEN TEMPORARY TRAFFIC SIGNAL INSTALLATION IS IN OPERATION. NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE SAME AND SHALL BE INCIDENTAL TO PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION"

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - PKG	REVISED -
		DRAWN - EA	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - PKG	REVISED -
	PLOT DATE = $DATE$	DATE - 6/24/2011	REVISED -

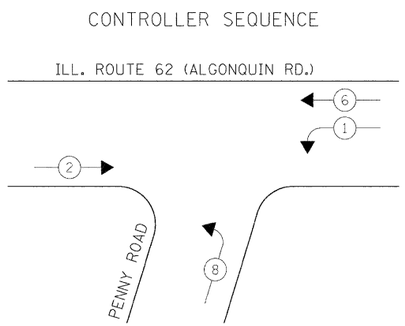
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL (PARTIAL) PLAN
ILLINOIS ROUTE 62 (ALGONQUIN ROAD) AT PENNY ROAD
STAGE 1 AND STAGE 2 (SHEET 1 OF 2).

SCALE: 1"=20' | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	54
		CONTRACT NO. 60I35		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

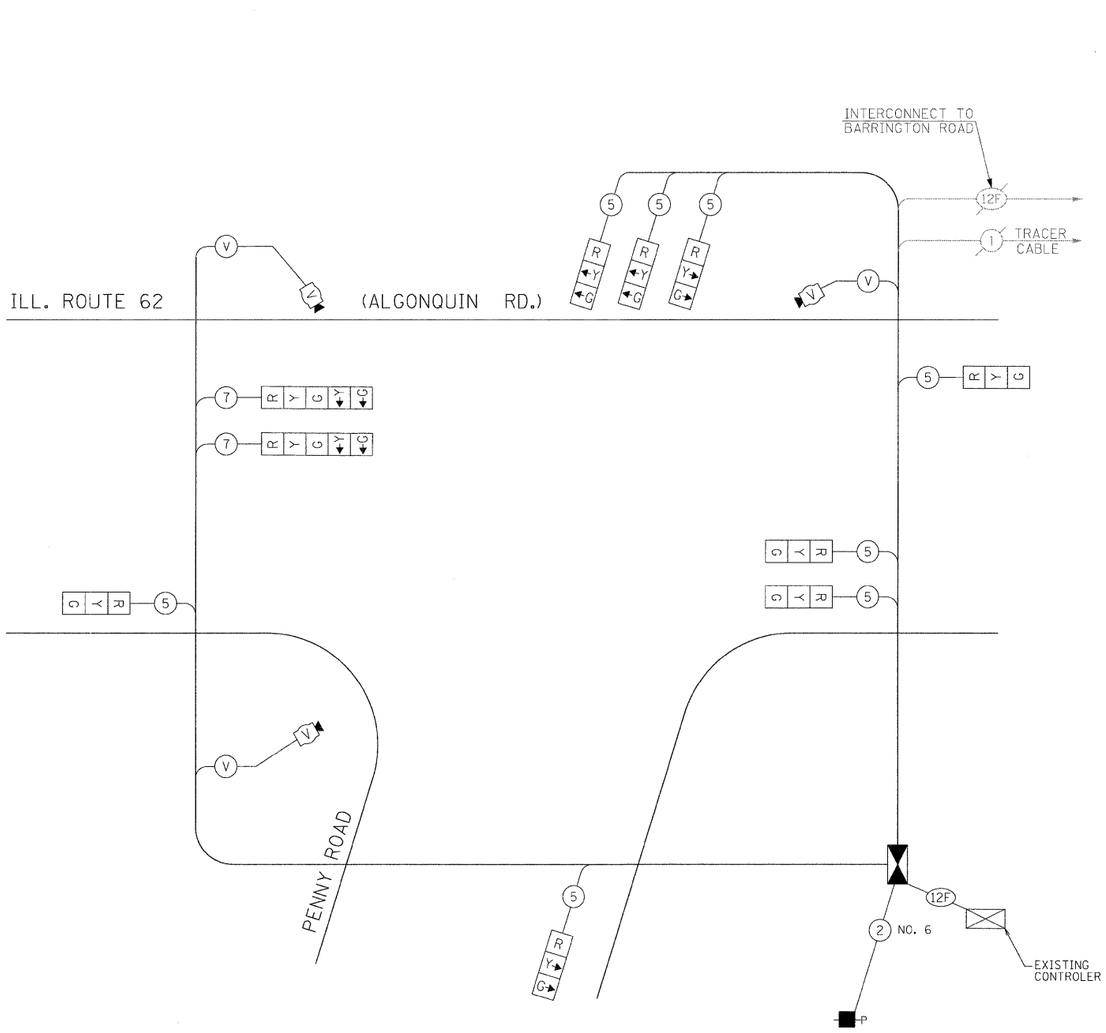


LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- O.L. OVERLAP
- PEDESTRIAN PHASE

* NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM



TEMPORARY CABLE PLAN

(NOT TO SCALE)

STAGE 1 AND STAGE 2

I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	439.8

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: CURTIS TOPPS
PHONE: (630) 691-4356
COMPANY: COMMONWEALTH EDISON

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

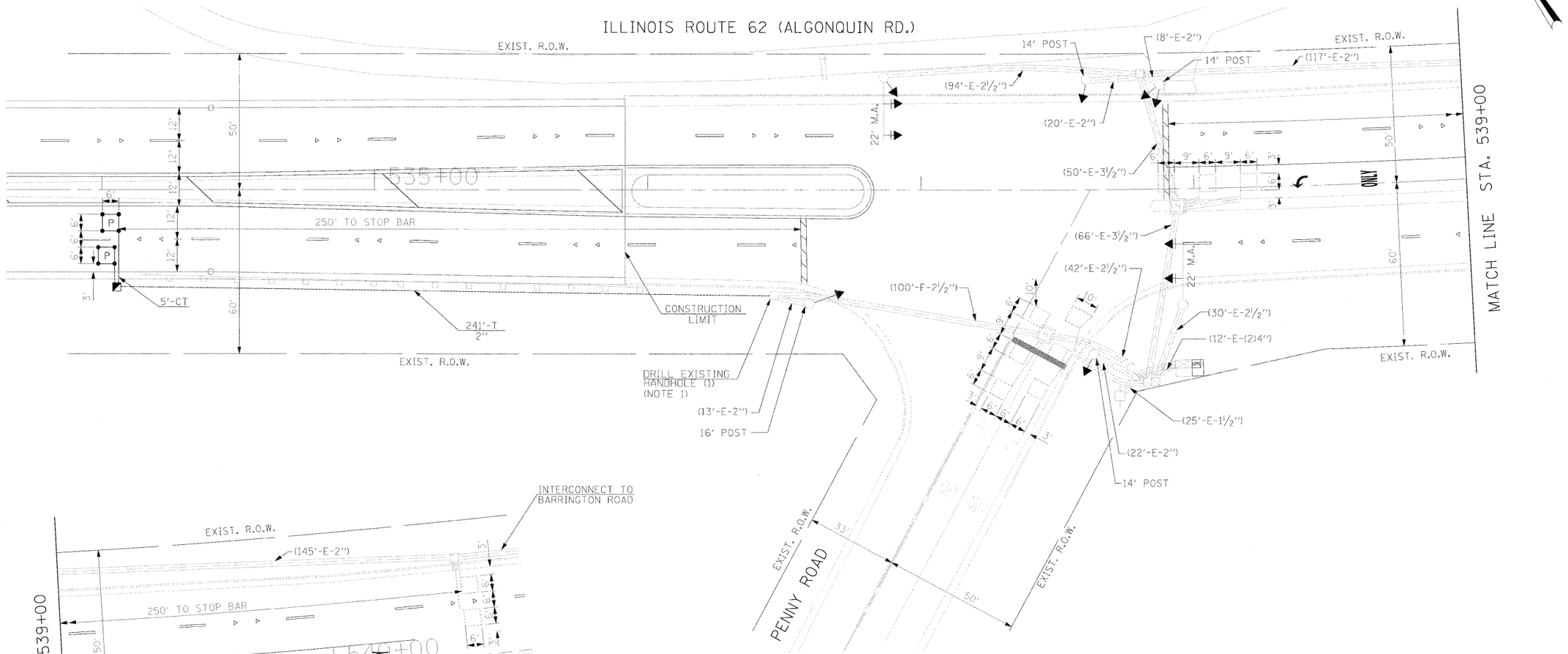
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - PKG	REVISED -
		DRAWN - EA	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - PKG	REVISED -
	PLOT DATE = $DATE$	DATE - 6/24/201	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM
ILLINOIS ROUTE 62 (ALGONQUIN ROAD) AT PENNY ROAD (SHEET 2 OF 2).

SCALE: NONE | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	55
		CONTRACT NO. 60135		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



NOTE 1: REMOVE EXISTING ELECTRIC CABLE, 1 PAIR, BETWEEN THIS HANDHOLE IN THE SOUTHWEST CORNER OF THE INTERSECTION AND THE CONTROLLER CABINET (185 FEET).

NOTE 2: THE NEW PREFORMED LOOPS SHALL BE INSTALLED ON THE WEST APPROACH OF THE INTERSECTION TO REPLACE THE EXISTING FAR OUT DETECTOR LOOPS, WHICH WILL BE AFFECTED BY THE PROPOSED IMPROVEMENT. THE WORK SHALL ALSO INCLUDE REMOVAL OF EXISTING HANDHOLE, NEW HANDHOLE, CONDUIT, AND CABLE WHICH WILL BE PAID FOR SEPARATELY AS SHOWN IN THE QUANTITIES ON TEMPORARY CABLE DIAGRAM PLAN.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = $FILE1$	USER NAME = $USER$	DESIGNED - PKG	REVISED -
		DRAWN - EA	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - PKG	REVISED -
	PLOT DATE = $DATE$	DATE - 6/24/2011	REVISED -

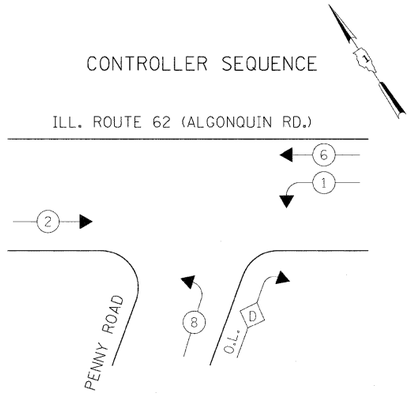
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
ILLINOIS ROUTE 62 (ALGONQUIN ROAD) AT PENNY ROAD

SCALE: 1"=20' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	56
		CONTRACT NO. 60135		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE



LEGEND

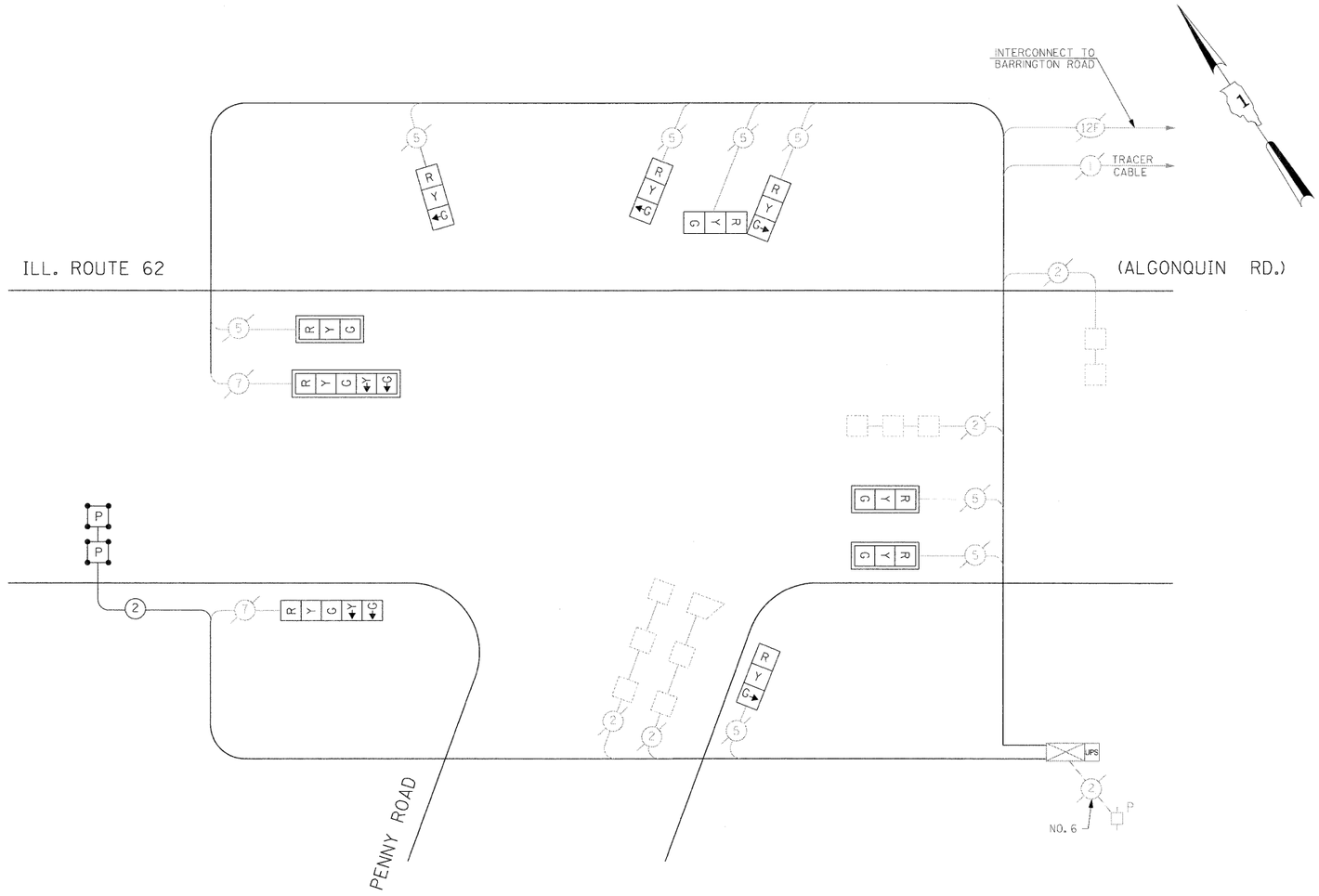
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- O.L. OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

EXISTING PHASE DESIGNATION DIAGRAM

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
241	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
1	EACH	HANDHOLE
241	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
432	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
1	EACH	DRILL EXISTING HANDHOLE
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
76	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
185	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
1	EACH	REMOVE EXISTING HANDHOLE
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING



MODIFIED CABLE PLAN

(NOT TO SCALE)

I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO LAMPS	X WATTAGE INCAND.	WATTAGE LED	X %OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	289.8

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: CURTIS TOPPS
PHONE: (630) 691-4356
COMPANY: COMMONWEALTH EDISON

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - PKG	REVISED -
		DRAWN - EA	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - PKG	REVISED -
	PLOT DATE = $DATE$	DATE - 6/24/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

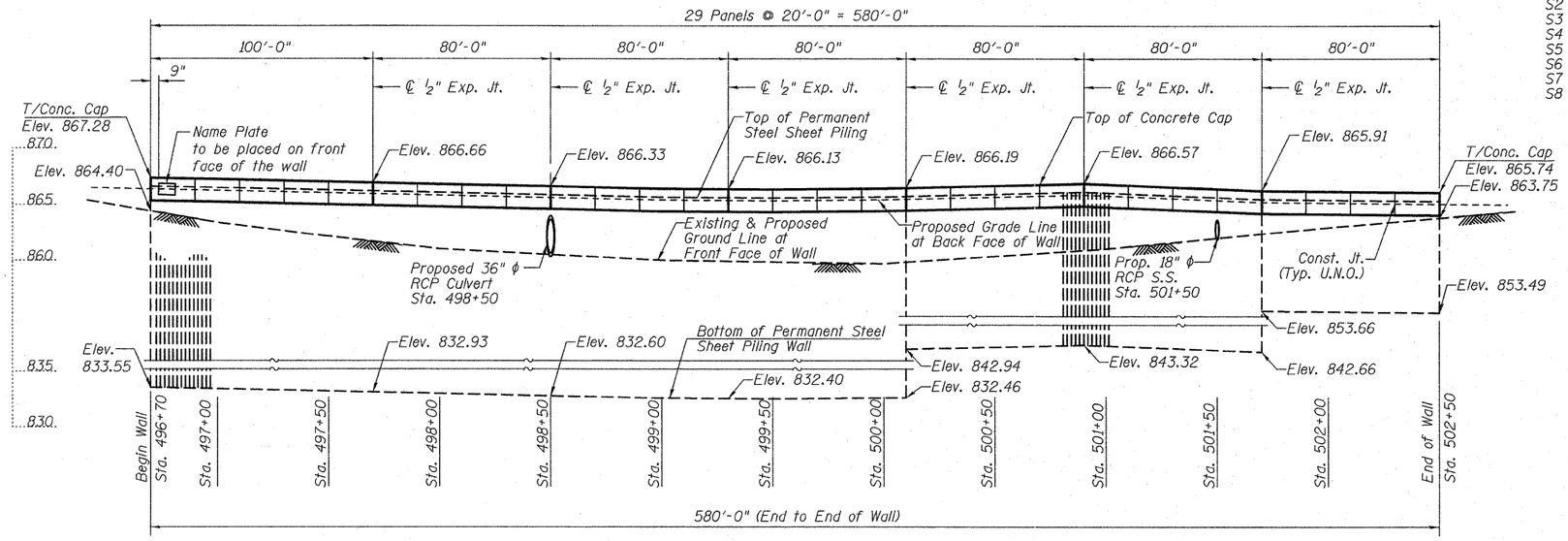
MODIFIED CABLE PLAN, EXISTING PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES
ILLINOIS ROUTE 62 (ALGONQUIN ROAD) AT PENNY ROAD (SHEET 2 OF 2).

SCALE: NONE | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	57
		CONTRACT NO. 60135		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

Bench Mark: IDOT Monument Number C0062-1B, Sta. 488+40, Elev. 870.47, 47.5' Rt.

Existing Structure: None



ELEVATION

(Back Face View)

INDEX OF SHEETS

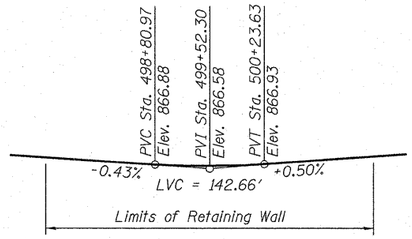
DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications, 17th Edition.

DESIGN STRESSES

Design Soil Equivalent Fluid Pressure = 40 pcf
fy = 38,500 psi (Steel Sheet Pile)
fy = 60,000 psi (Reinforcement)
f'c = 3,500 psi

Permanent Steel Sheet Piling Z Shape
Minimum Effective Section Modulus = 15.3 in.³/ft. wall

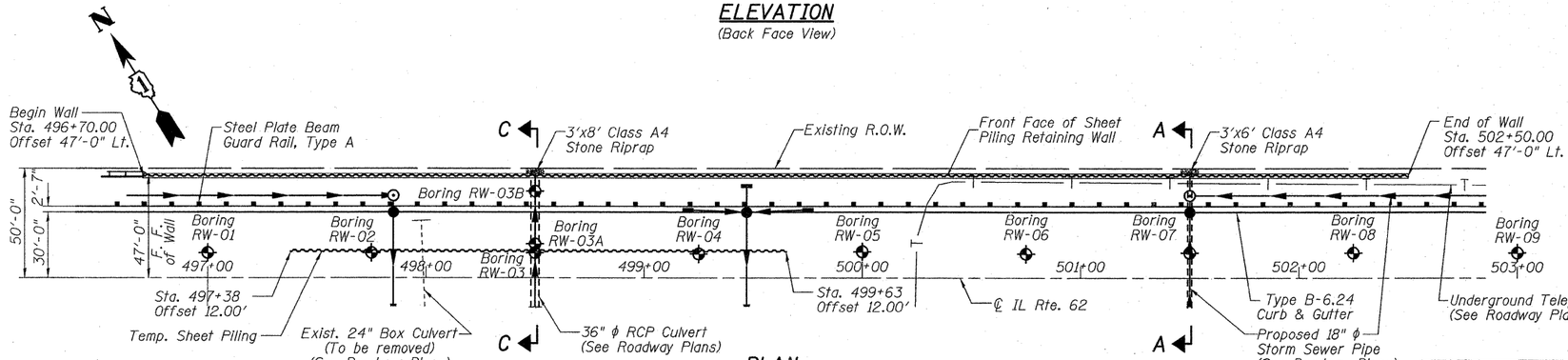


PROFILE GRADE

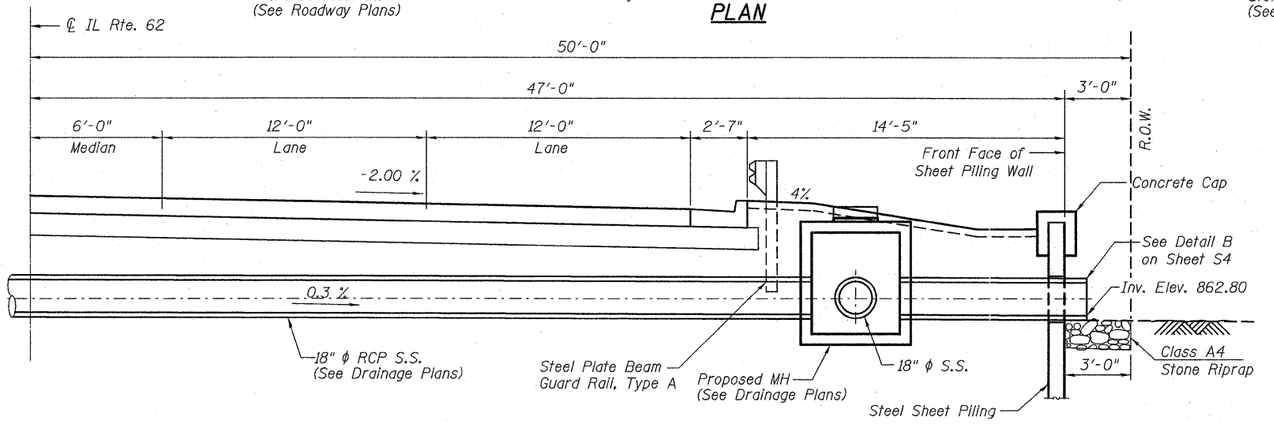
(Along ℄ IL 62)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Porous Granular Embankment, Special	Cu. Yd.	150
Stone Riprap, Class A4	Sq. Yd.	5
Concrete Structures	Cu. Yd.	75.3
Stud Shear Connectors	Each	640
Reinforcement Bars, Epoxy Coated	Pound	6,610
Name Plates	Each	1
Geocomposite Wall Drain	Sq. Yd.	225
Permanent Steel Sheet Piling	Sq. Ft.	15,879
Temporary Sheet Piling	Sq. Ft.	7,595
Pipe Underdrains for Structures 4"	Foot	580



PLAN

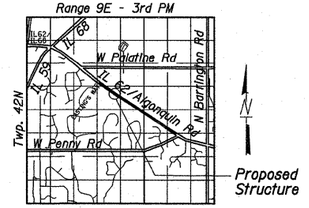


SECTION A-A

STA. 496+70 TO STA. 502+50 (LT)
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 339
SEC. 116 Y-1-R-1
STRUCTURE NO. 016-W994

NAME PLATE

See Std. 515001



LOCATION SKETCH

GENERAL NOTES

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

Reinforcement bars designated (E) shall be epoxy coated.

It shall be the Contractor's responsibility to verify the location of the existing underground utilities prior to starting construction.

Backfill shall be in place prior to pouring of Concrete Cap.

U. N. O. - denotes Unless Noted Otherwise

See Sheet S4 for Section C-C.

THEODORE P. GEORGAS
081-004609
REGISTERED
STRUCTURAL
ENGINEER
STATE OF ILLINOIS

10-21-2011

Theodore P. Georgas — Date
Licensed Structural Engineer
State of Illinois 081-4609
Expires 11/30/2012

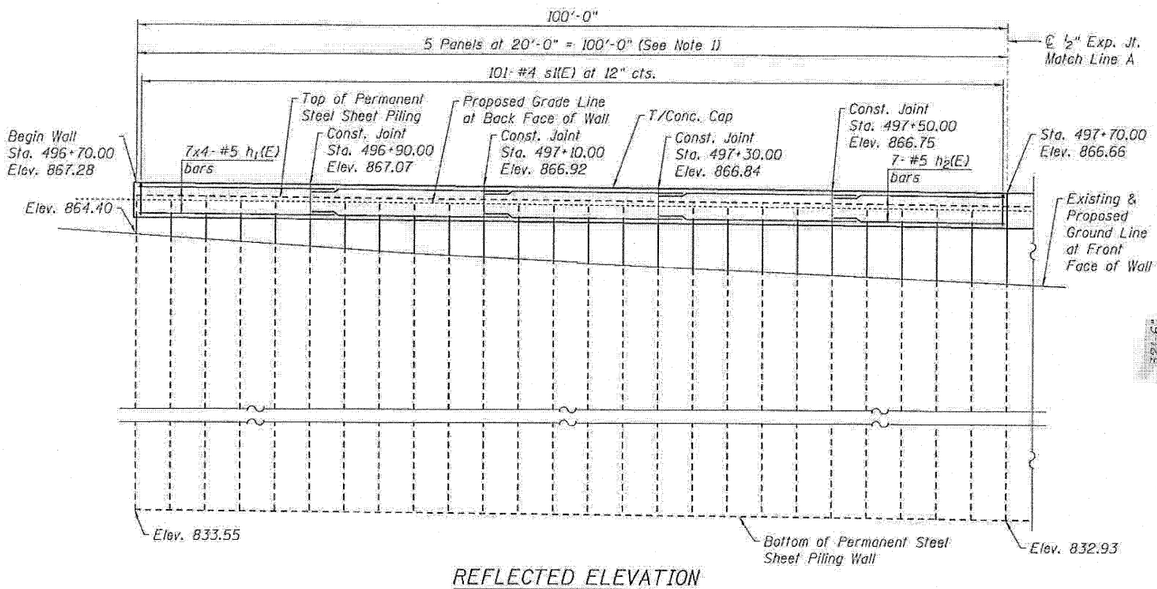
RETAINING WALL NO. 1
STA. 496+70 TO STA. 502+50

Primera
180 S. WACKER DRIVE SUITE 700 .CHICAGO IL 60606 .(312)-686-0100 F(312)-686-0425

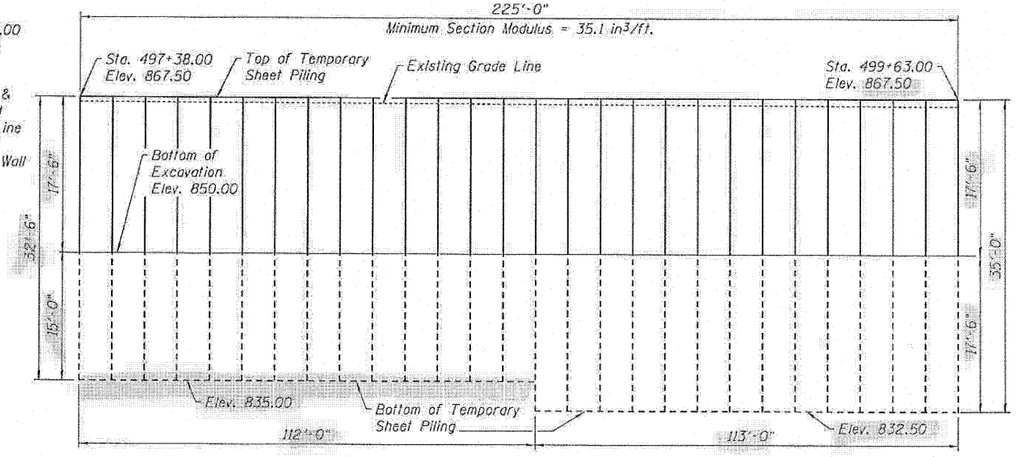
USER NAME =	DESIGNED - JPM	REVISED - 10/21/2011 J.P.M.	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - JXH	REVISED -	
PLOT SCALE =	DRAWN - JPM	REVISED -	
PLOT DATE =	CHECKED - JXH/TPG	REVISED -	

GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-W994
SHEET NO. S1 OF S8 SHEETS

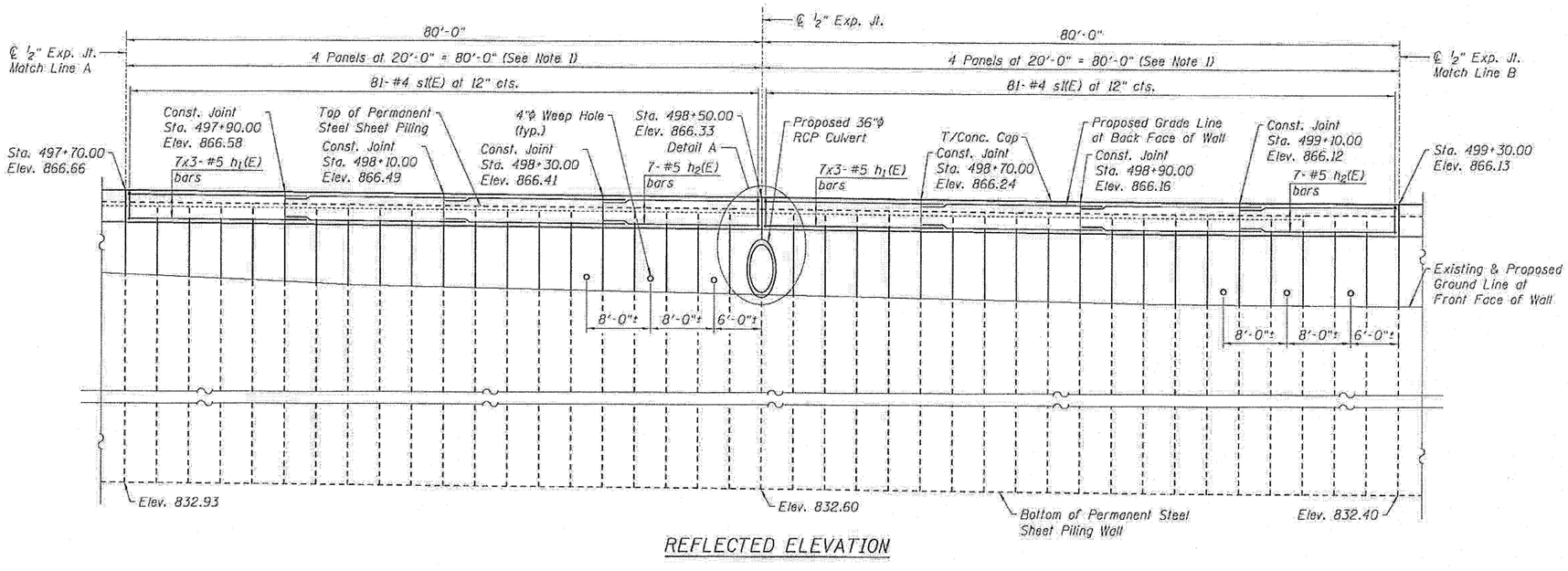
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	58
		CONTRACT NO. 60I35		
		ILLINOIS FED. AID PROJECT		



REFLECTED ELEVATION



TEMPORARY SHEET PILING



REFLECTED ELEVATION

Notes:
1. The Expansion Joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.
2. See Sheet S4 for Detail A.
3. Reinforcement bars designated thus 7x3- #5, etc indicates 7 lines of bars with 3 lengths per line.

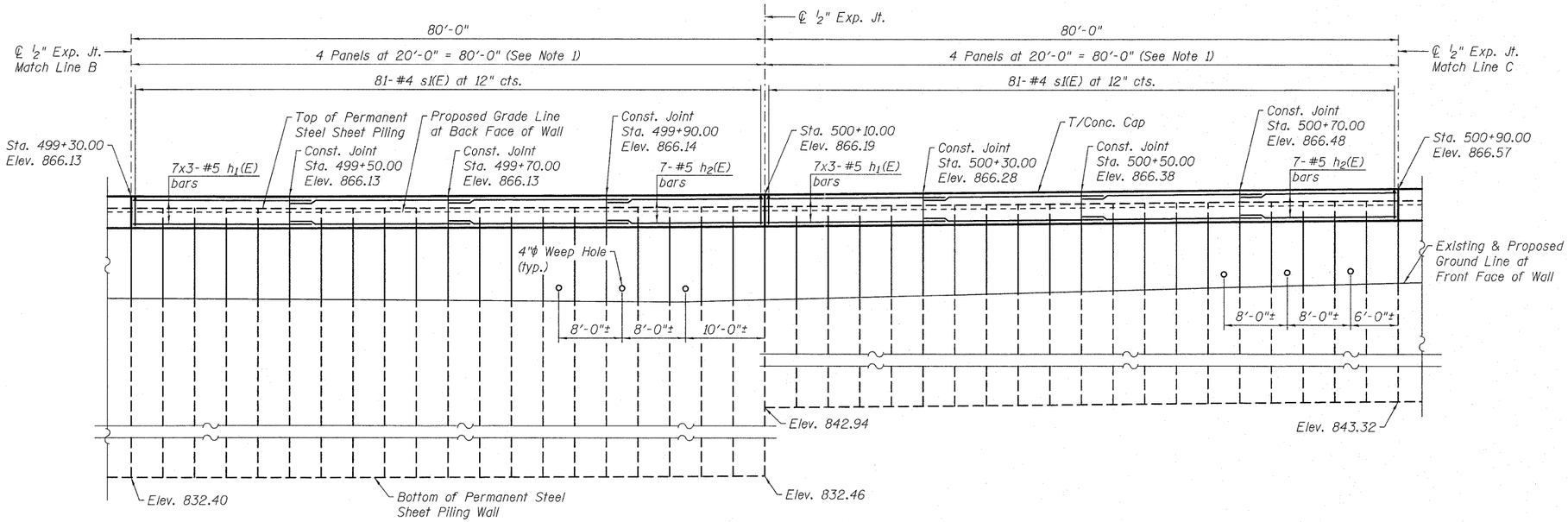
Primera

USER NAME =	DESIGNED - JPM	REVISED -	
	CHECKED - JXH	REVISED -	
PLOT SCALE =	DRAWN - JPM	REVISED -	
PLOT DATE =	CHECKED - JXH/TPG	REVISED -	

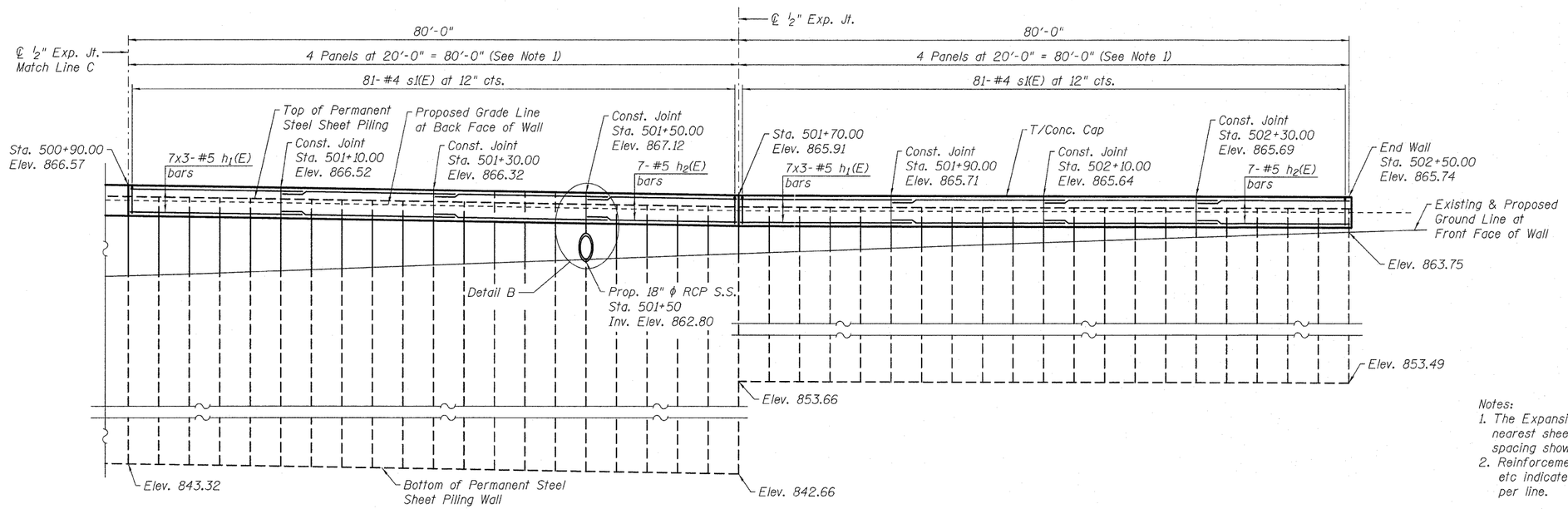
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL ELEVATIONS
STRUCTURE NO. 016-W994
SHEET NO. S2 OF S8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	59
		CONTRACT NO. 60135		
		ILLINOIS FED. AID PROJECT		



REFLECTED ELEVATION



REFLECTED ELEVATION

Notes:
1. The Expansion Joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.
2. Reinforcement bars designated thus 7x3-#5, etc indicates 7 lines of bars with 3 lengths per line.

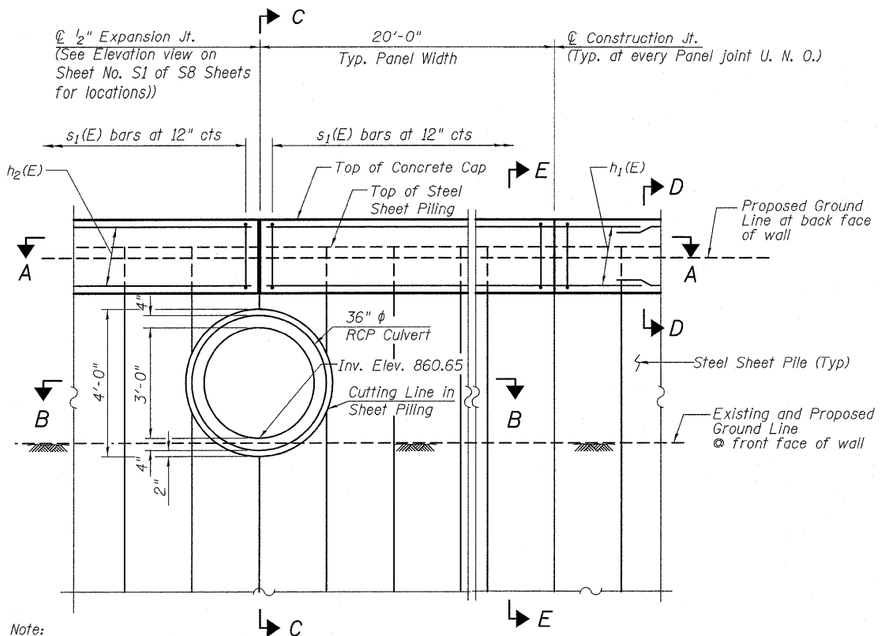
Primera
180 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P.312-606-0700 F.312-606-0445

USER NAME =	DESIGNED - JPM	REVISED - 10/21/2011 J.P.M.
	CHECKED - JXH	REVISED -
PLOT SCALE =	DRAWN - JPM	REVISED -
PLOT DATE =	CHECKED - JXH/TPG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL ELEVATIONS
STRUCTURE NO. 016-W994
SHEET NO. S3 OF S8 SHEETS

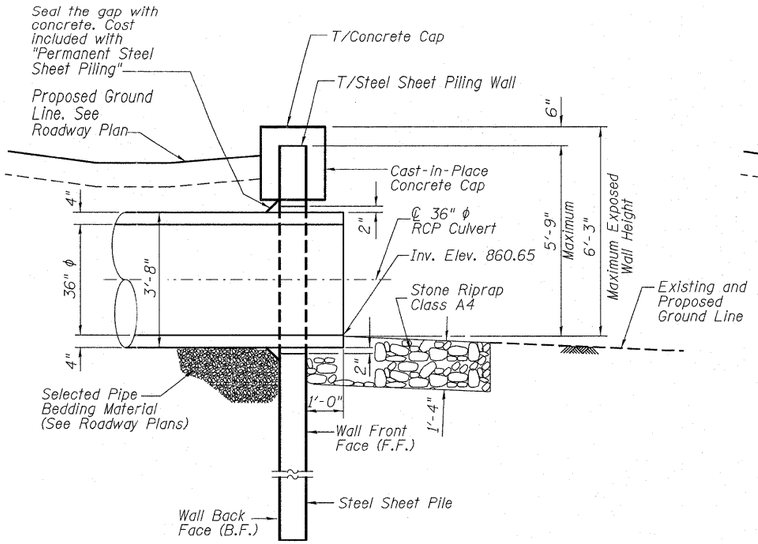
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	60
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			



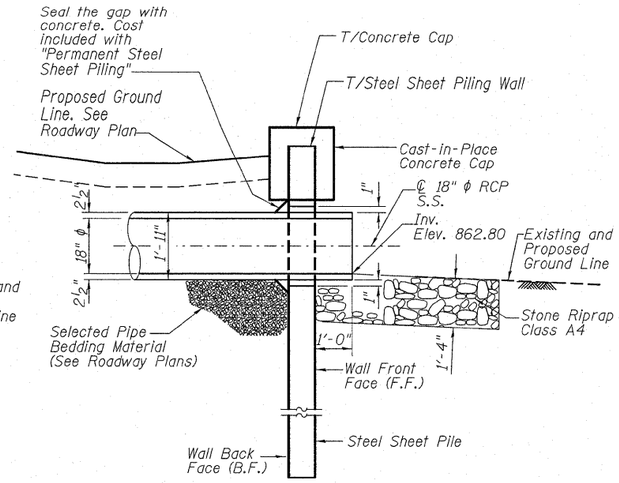
Note:
The cost of cutting 48" ϕ opening in Sheet Pile Wall is included in the cost of "Permanent Steel Sheet Piling".

DETAIL A

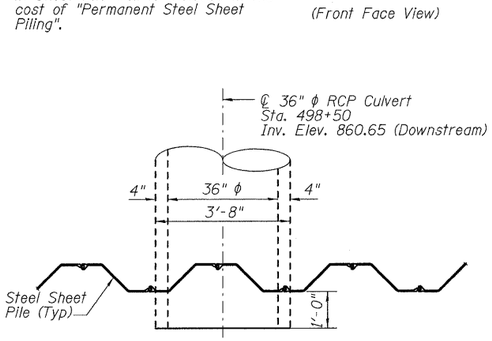
(Front Face View)



SECTION C-C



SECTION F-F



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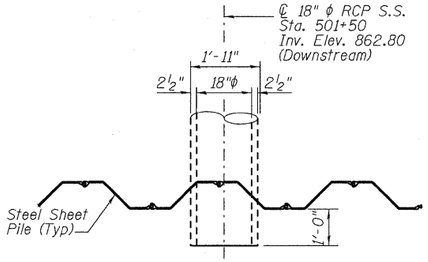
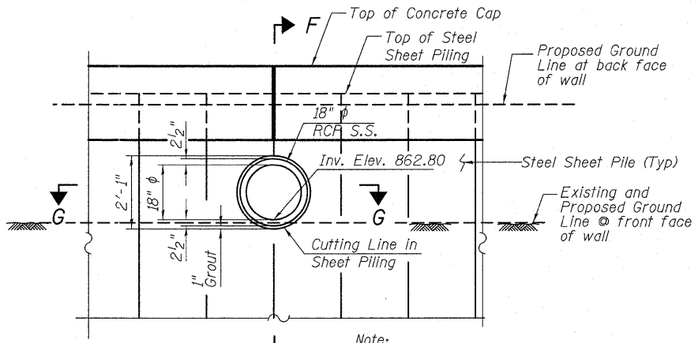
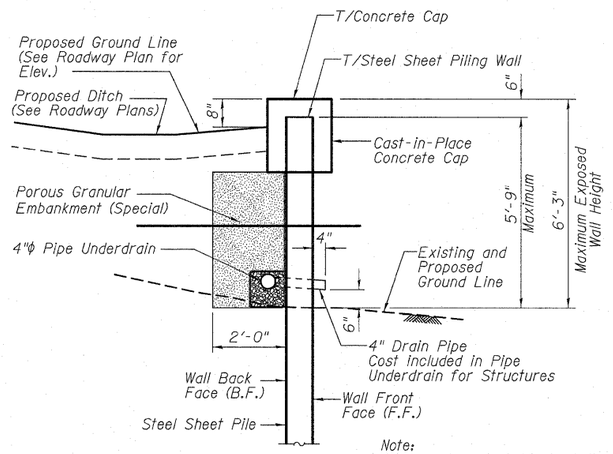


SECTION G-G



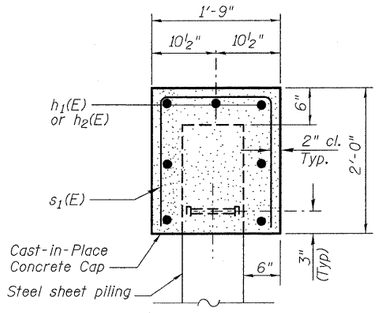
DETAIL B

Note:
The cost of cutting 25" ϕ opening in Sheet Pile Wall is included in the cost of "Permanent Steel Sheet Piling".

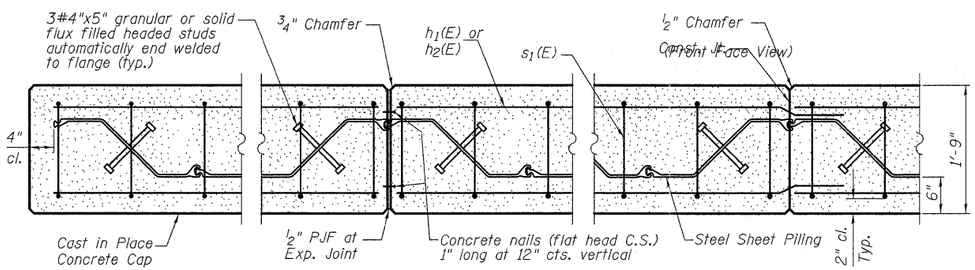


SECTION E-E

Note:
A concrete splash block shall be installed at each weep hole location. Cost included in Pipe Underdrain for Structures



SECTION D-D



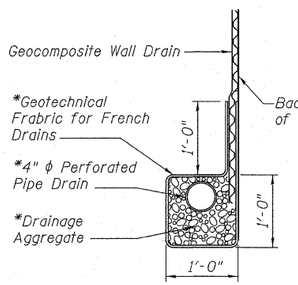
AT WALL END

AT EXPANSION JOINT

AT CONSTRUCTION JOINT

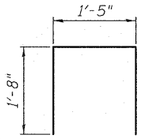
SECTION A-A

Note:
The details for the concrete cap and reinforcement, and the required number of studs shear connectors are based on Section P2-22 Sheet Piling. If the Contractor chooses to use any other section, then the Contractor shall submit revised concrete cap and reinforcement configuration for approval by Engineer. Such changes shall not be cause for additional compensation.



PIPE UNDERDRAIN DETAIL

* Included in the cost of Pipe Underdrains for Structures.



BAR s1(E)

Min. Bar Lap

#5 = 3'-3"

BAR LIST

Bar	No.	Size	Length	Shape
$h_1(E)$	154	#5	23'-3"	——
$h_2(E)$	49	#5	19'-9"	——
$s_1(E)$	587	#4	4'-9"	⊓

Primera
180 S. WACKER DRIVE SUITE 700 . CHICAGO, IL 60606 . (312) 686-9700 FAX: (312) 686-9405

USER NAME =	DESIGNED - JPM	REVISED - 10/21/2011 M.P.S.
	CHECKED - JXH	REVISED -
PLOT SCALE =	DRAWN - JPM	REVISED -
PLOT DATE =	CHECKED - JXH/TPG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL DETAILS
STRUCTURE NO. 016-W994
SHEET NO. S4 OF S8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	61
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

RW-01

PAGE 1 of 1

SOIL BORING LOG

DATE 4/8/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-01
Station 497+00
Offset 11.5' Left
Ground Surface Elev. *867.2*

Surface Water Elev. *n/a*
Stream Bed Elev. *n/a*
Groundwater Elevation:
First Encounter *n/a*
Upon Completion *n/a*
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				8.0" ASPHALT, 2.0" CRUSHED STONE, 6.0" CONCRETE
				865.8
	AS	–	21	CLAY LOAM–brown & gray– stiff (A–6) Apparent Fill
	2		*93*	
	3			
–5	4	1.0B	25	
				861.7
	5		*105*	CLAY–gray–stiff to hard (A–6)
	7			
	9	4.25B	19	
				CLAY LOAM–brown & gray– hard (A–6)
	6		*110*	
	8			
–10	10	7.0B	18	
				856.7
	7		*109*	CLAY–gray–stiff to hard (A–6)
	14			
	16	6.9B	19	
	6		*105*	
	8			
–15	14	4.3B	22	
	5		*103*	
	7			
	13	4.0B	22	
	3		*102*	End Of Boring @ –40.0 Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer
	5			
–20	7	3.1B	24	*827.2*

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	7		*105*
	7	3.1B	23
	3		*123*
	6		
–25	8	2.75B	13
	6		*118*
	6		
–30	8	1.9B	16
	6		*105*
	8		
–35	12	2.6B	16
	6		*117*
	8		
–40	12	1.5P	28

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-02

PAGE 1 of 1

SOIL BORING LOG

DATE 4/8/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-02
Station 497+75
Offset 11.5' Left
Ground Surface Elev. *866.5*

Surface Water Elev. *n/a*
Stream Bed Elev. *n/a*
Groundwater Elevation:
First Encounter *n/a*
Upon Completion *n/a*
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				8.0" ASPHALT, 2.0" CRUSHED STONE, 6.0" CONCRETE
				865.1
	AS	–	17	CLAY LOAM–dark brown & gray– stiff (A–6) Fill
	3			
–5	3	1.75P	22	
				858.5
	3		*81*	TOPSOIL–black *Total Organic Conent=7.0%*
	5	1.5S@		
–10	7	12.7%	37	
				856.0
	2		*74*	Organic SILTY CLAY–dark brown– medium stiff (A–7) Wet
	2			
	2	0.5B	43	
				853.5
	2			SILTY CLAY–gray– soft to medium stiff (A–6)
	3			
–15	6	0.25P	24	
				848.5
	4		*106*	CLAY–gray–stiff to very stiff (A–6)
	4			
–20	6	2.5B	20	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	4		*110*
	4		
	8	2.75B	19
	3		*114*
	5		
–25	7	1.75P	17
	2		
	3		
	6	–	25
	4		*102*
	5		
–30	6	2.3B	24
	4		*103*
	6		
–35	6	2.0B	24
	4		*104*
	6		
–40	13	2.25P	11

End Of Boring @ –40.0
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer
826.5

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-03

PAGE 1 of 1

SOIL BORING LOG

DATE 4/8/2010
LOGGED BY MR
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-03
Station 498+50
Offset 11.5' Left
Ground Surface Elev. *866.1*

Surface Water Elev. *n/a*
Stream Bed Elev. *n/a*
Groundwater Elevation:
First Encounter *n/a*
Upon Completion *n/a*
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				8.0" ASPHALT, 2.0" CRUSHED STONE, 6.0" CONCRETE
				864.7
	AS	–	20	CLAY LOAM–brown & gray– very stiff (A–6) Fill
	3			
–5	4	2.25P	18	
				859.1
	3	–	52	TOPSOIL–black
				857.6
	2		*86*	SILTY CLAY–dark gray to black– stiff (A–7) Wet
–10	3	1.1B	32	
				855.6
	0			Fibrous PEAT– dark brown to black (A–8)
	0			
	1	–	73	
	0		*62*	
	0			
–15	1	0.6B	61	
				850.1
	2			SILTY CLAY–gray– medium stiff (A–6)
	2	0.5P	14	
				848.1
	2		*105*	CLAY–gray–stiff to very stiff (A–6)
	3			
–20	3	1.0B	21	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	3		*106*
	2		
	4	1.3B	21
	3		*106*
	5		
–25	8	2.75B	20
	4		*107*
	5		
	9	2.75B	19
	3		*105*
	6		
–30	9	3.2B	21
	5		
	6		
–35	8	1.0P	25
	5		
	7		
–40	20	1.0P	25

End Of Boring @ –40.0
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer
826.1

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-03A

PAGE 1 of 1

SOIL BORING LOG

DATE 4/29/2010
LOGGED BY MR
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-03A
Station 498+50
Offset 13.0' Left
Ground Surface Elev. ***866.1***

Surface Water Elev. *n/a*
Stream Bed Elev. *n/a*
Groundwater Elevation:
First Encounter *n/a*
Upon Completion *n/a*
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Blind Drill To –8.0'			
858.1			
SILTY CLAY–black– medium stiff (A–7) Wet			
–10	ST	0.5P	36
Vane Shear Test @ –11.0' Shear Strength=938 psf			
853.6			
Fibrous PEAT– dark brown to black (A–8)			
–15	ST	0.25P	58
Vane Shear Test @ –16.0' Shear Strength=451 psf			
850.1			
End Of Boring @ –16.0 Hollow Stem Augers CME Automatic Hammer			
–20			
–25			
–30			
–35			
–40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-03B

PAGE 1 of 1

SOIL BORING LOG

DATE 5/11/2010
LOGGED BY MR
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hand Auger HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-03B
Station 498+50
Offset 39.5' Left
Ground Surface Elev. ***861.0***

Surface Water Elev. *n/a*
Stream Bed Elev. *n/a*
Groundwater Elevation:
First Encounter *n/a*
Upon Completion *n/a*
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	AS	0.5P	49
	AS	<0.25P	69
ORGANIC CLAY– dark brown & black– soft to medium stiff (A–8) Wet			
–5	AS	0.75P	42
	AS	0.5P	55
	AS	0.5P	50
	AS	0.5P	36
846.0 –15	AS	0.5P	53
End Of Boring @ –15.0 Hand Auger			
–20			
–25			
–30			
–35			
–40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-04

PAGE 1 of 1

SOIL BORING LOG

DATE 4/8/2010
LOGGED BY MR
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-04
Station 499+25
Offset 11.0' Left
Ground Surface Elev. ***863.0***

Surface Water Elev. *n/a*
Stream Bed Elev. *n/a*
Groundwater Elevation:
First Encounter ***860.0***
Upon Completion *n/a*
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT, 2.0" CRUSHED STONE, 6.0" CONCRETE			
861.6			
	AS	–	15
CLAY LOAM–dark brown– stiff (A–6) Fill			***101***
		1.0B	21
856.0			
		–	47
TOPSOIL–black			
854.5			***76***
SILTY CLAY–dark gray & black– medium stiff (A–7) Wet		0.7B	42
–10			
852.5			
Woody PEAT–dark brown (A–8)			
850.5		–	167
SILTY CLAY–gray–soft (A–6)			***113***
–15		0.3B	18
847.5			
			102
CLAY–gray–stiff to very stiff (A–6)		1.2B	21
			102
–20		1.3B	21
CLAY–gray–stiff to very stiff (A–6)			***105***
		1.9B	20
			104
–25		1.7B	20
			102
		2.3B	24
			101
–30		3.1B	23
			100
–35		2.4B	24
End Of Boring @ –40.0 Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer			
823.0 –40		2.7B	18

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-05

PAGE 1 of 1

SOIL BORING LOG

DATE 4/6/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-05
Station 500+00
Offset 12.0' Left
Ground Surface Elev. 866.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	AS	1.75P	18
	2		107
	2		
–5	4	1.9B	20
	2		96
	3		
	4	1.2B	26
	3		104
	4		
–10	6	4.4B	19
	8		
	8		
	10	2.0P	21
	4		103
	7		
–15	10	4.0B	22
	4		101
	5		
	8	2.4B	24
	3		100
	5		
–20	7	1.9B	25
	4		98
	5		
	6	1.7B	25
	3		103
	4		
–25	6	1.9B	24
	3		104
	6		
	7	2.4B	23
	4		104
	5		
–30	7	2.0B	23
	8		
	14		
–35	17	–	9
	10		
	11		
–40	13	1.0P	14

8.0" ASPHALT, 2.0" CRUSHED STONE, 7.0" CONCRETE — 864.6
CLAY LOAM–dark brown & gray–stiff (A–6) Fill — 860.5
SILTY CLAY–dark brown & gray–stiff (A–6) Wet — 858.0
CLAY–brown & gray–very stiff to hard (A–6) — 850.5
CLAY–gray–stiff to very stiff (A–6)
CLAY–gray–stiff to very stiff (A–6) — 834.0
CLAY LOAM with Fractured Rock–gray–dense (A–2) — 829.0
CLAY–gray–stiff (A–6)
End Of Boring @ –40.0
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer — 826.0

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-06

PAGE 1 of 1

SOIL BORING LOG

DATE 4/6/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-06
Station 500+75
Offset 11.0' Left
Ground Surface Elev. 864.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	AS	1.25P	24
	4		109
	4		
–5	4	2.0B	19
	5		110
	9		
	11	6.6B	18
	9		110
	14		
–10	15	7.5B	18
	7		109
	11		
	14	7.7B	20
	7		108
	13		
–15	16	6.5B	21
	6		103
	7		
	11	3.1B	23
	4		102
	5		
–20	8	2.9B	23
	3		102
	5		
	9	2.75B	23
	4		107
	5		
–25	8	2.6B	20
	4		103
	6		
	9	3.1B	23
	4		112
	5		
–30	8	2.25B	17
	4		105
	6		
–35	9	2.9B	23
	5		
	7	2.4B	20
	4		110
	5		
–40	7	2.4B	20

8.0" ASPHALT, 2.0" GRAVEL, 6.0" CONCRETE — 862.6
SILTY CLAY–dark brown, gray & black–stiff (A–6) Possible Fill — 861.0
CLAY–brown & gray–very stiff to hard (A–6) — 851.0
CLAY–gray–very stiff to hard (A–6)
CLAY–gray–very stiff to hard (A–6)
End Of Boring @ –40.0
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer — 824.0

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-07

PAGE 1 of 1

SOIL BORING LOG

DATE 4/6/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-07
Station 501+50
Offset 11.5' Left
Ground Surface Elev. 865.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 862.2
Upon Completion n/a
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	AS	1.5P	20
	7		109
	7		
–5	12	6.4B	20
	8		105
	12		
	14	5.6B	22
	8		102
	12		
–10	16	4.3B	23
	9		106
	13		
	15	5.1B	22
	5		104
	9		
–15	12	5.4B	23
	5		105
	8		
	11	2.5B	22
	4		114
	6		
–20	11	3.4B	16
	4		119
	5		
	8	1.9B	15
	3		108
	6		
–25	9	2.7B	20
	5		124
	7		
–30	10	2.7B	13
	5		115
	8		
–35	12	2.0B	16
	4		106
	7		
–40	10	1.8B	19

CLAY–stiff to very stiff (A–6) — 844.7
9.0" ASPHALT, 3.0" GRAVEL, 6.0" CONCRETE — 863.7
CLAY–gray–stiff to very stiff (A–6)
CLAY–brown & gray–stiff to very stiff (A–6) — 839.7
SILTY CLAY LOAM–brown & gray–medium dense (A–4) — 837.2
CLAY–gray–stiff to very stiff (A–6)
End Of Boring @ –40.0
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer — 825.2

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-08

SOIL BORING LOG

PAGE 1 of 1
DATE 4/6/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-08
Station 502+25
Offset 11.5' Left
Ground Surface Elev. 866.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT, 2.0" GRAVEL, 6.0" CONCRETE 864.8			
	AS	2.0P	18
	5		*116*
–5	6 10	5.2B	17
CLAY–brown & gray– very stiff to hard (A-6)	5		*111*
	13 15	7.3B	18
	7		*111*
–10	14 16	7.7B	18
	8		*116*
	12 14	6.6B	17
	6		*110*
–15	8 10	4.7B	20
850.7			
CLAY–gray– stiff to very stiff (A-6)	6		
	9 13	2.75P	15
	6		*124*
–20	10 11	3.4B	13

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	5		*111*
	6 9	1.6B	16
	4		*126*
–25	7 9	1.75B	12
CLAY–gray– stiff to very stiff (A-6)	4		
	6 7	1.75P	23
	5		*107*
–30	7 10	2.2B	20
	5		
–35	8 11	–	20
End Of Boring @ –40.0 Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer 826.2	6 9		
–40	11	2.0P	22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-09

SOIL BORING LOG

PAGE 1 of 1
DATE 3/24/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-09
Station 503+00
Offset 11.5' Left
Ground Surface Elev. 866.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT, 3.0" GRAVEL, 6.0" CONCRETE 865.1			
	AS	NP	5
	4		*108*
–5	8 10	5.1B	18
CLAY–brown & gray–hard (A-6)	5		*104*
	10 13	5.0B	21
	8		*110*
–10	13 15	6.5B	18
855.5			
	8		*107*
	10 12	3.1B	20
	4		*118*
–15	7 10	3.4B	16
CLAY–gray– stiff to very stiff (A-6)	4		*107*
	8 10	3.4B	21
	6		*125*
–20	9 13	3.0B	10

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	4		*107*
	6 7	2.1B	21
	3		*103*
–25	5 8	2.7B	23
CLAY–gray– stiff to very stiff (A-6)	4		*104*
	5 8	1.7S@ 14.1%	23
	3		*104*
–30	6 8	2.2B	22
	7		
–35	9 10	4.0P	14
End Of Boring @ –40.0 Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer 826.5	5 8		*111*
–40	11	3.0B	16

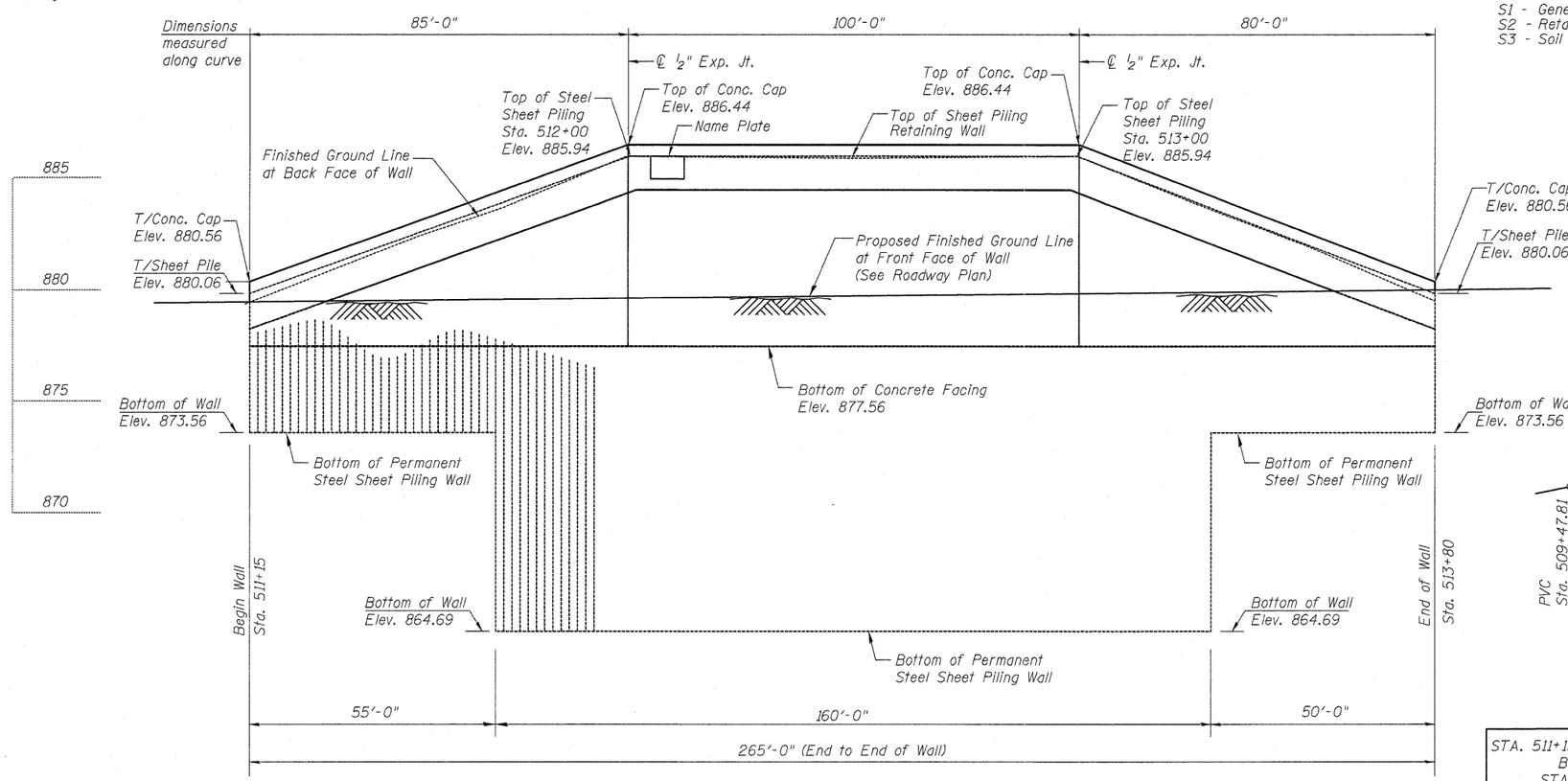
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

Bench Mark: IDOT Monument Number C0062-1B, Sta. 488+40, Elev. 870.47, 47.5' Rt.

Existing Structure: None



ELEVATION
(Front Face View)

Note:
It shall be the Contractor's responsibility to verify the location of the existing underground utilities prior to starting construction.

INDEX OF SHEETS

GENERAL NOTES

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

Reinforcement bars designated (E) shall be epoxy coated.

Reinforcement bars designated thus 7x3-#5, etc indicates 7 lines of bars with 3 lengths per line.

Concrete cap and facing shall be constructed after backfill is in place.

DESIGN SPECIFICATIONS

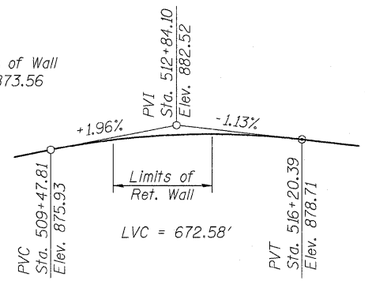
2002 AASHTO Standard Specifications, 17th Edition.

DESIGN STRESSES

Design Soil Equivalent Fluid Pressure = 40 pcf
fy = 38,500 psi (Steel Sheet Pile)
fy = 60,000 psi (Reinforcement)
f'c = 3,500 psi

TOTAL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_1(E)	39	#5	30'-6"	
h_2(E)	45	#5	35'-5"	
h_3(E)	39	#5	28'-10"	
s_1(E)	267	#4	4'-9"	
v_1(E)	43	#5	11'-2"	
v_2(E)	100	#5	8'-6"	
v_3(E)	40	#5	11'-2"	
Concrete Structures			Cu.Yd.	78.5
Reinforcement Bars Epoxy Coated			Pound	6,780
Permanent Steel Sheet Piling			Sq.Ft.	4,215
Stud Shear Connectors			Each	942
Name Plates			Each	1



PROFILE GRADE
(Along ℄ IL 62)

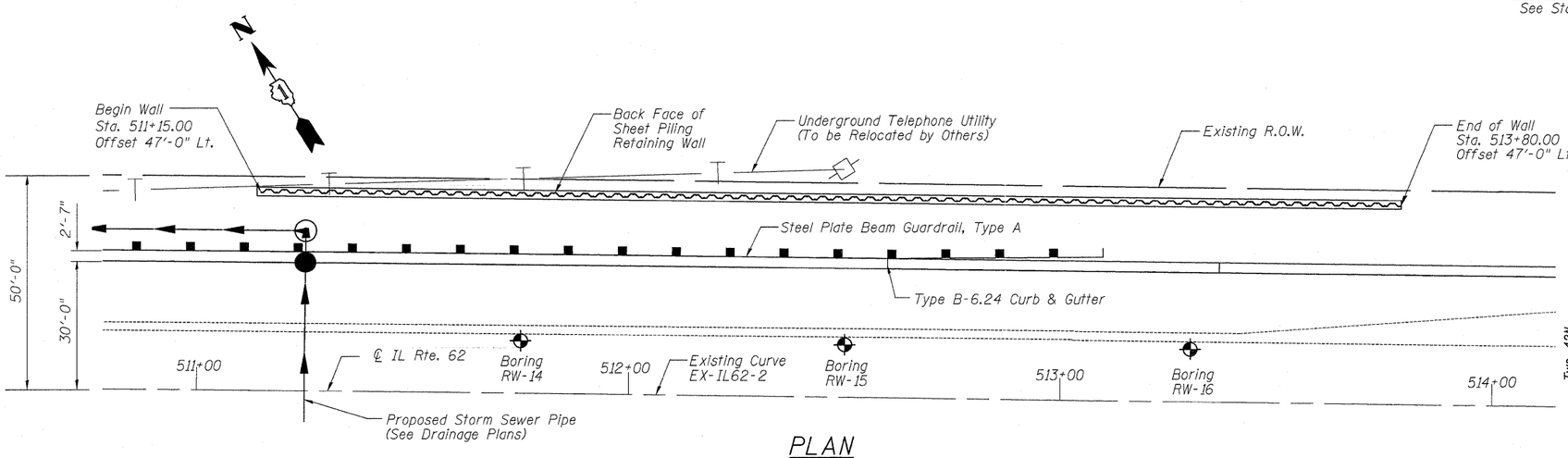
STA. 511+15 TO STA. 513+80 (LT)
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 339
SEC. 116 Y-1-R-1
STRUCTURE NO. 016-W995

NAME PLATE
See Std. 515001

Notes:

Permanent Steel Sheet Piling Z Shape
Minimum Effective Section Modulus = 15.3 in.^{3}/ft. wall

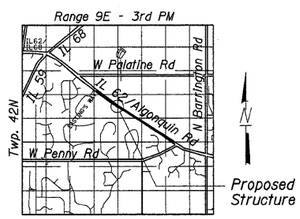
Work this sheet with Sheet No. S2 of S3 Sheets.



PLAN

CURVE EX-IL62-2

Δ = 1° 32' 54" (RT)
D = 0° 06' 00"
R = 57,351.19'
T = 774.99'
L = 1,549.89'
E = 5.24'
P.C. Sta. = 505+12.36
P.T. Sta. = 520+62.25
P.I. Sta. = 512+87.35



LOCATION SKETCH

THEODORE P. GEORGAS
081-004609
REGISTERED STRUCTURAL ENGINEER
STATE OF ILLINOIS

6-30-2011
Date

Theodore P. Georgas
Licensed Structural Engineer
State of Illinois 081-4609
Expires 11/30/2012

RETAINING WALL NO. 2
STA. 511+15 TO STA. 513+80

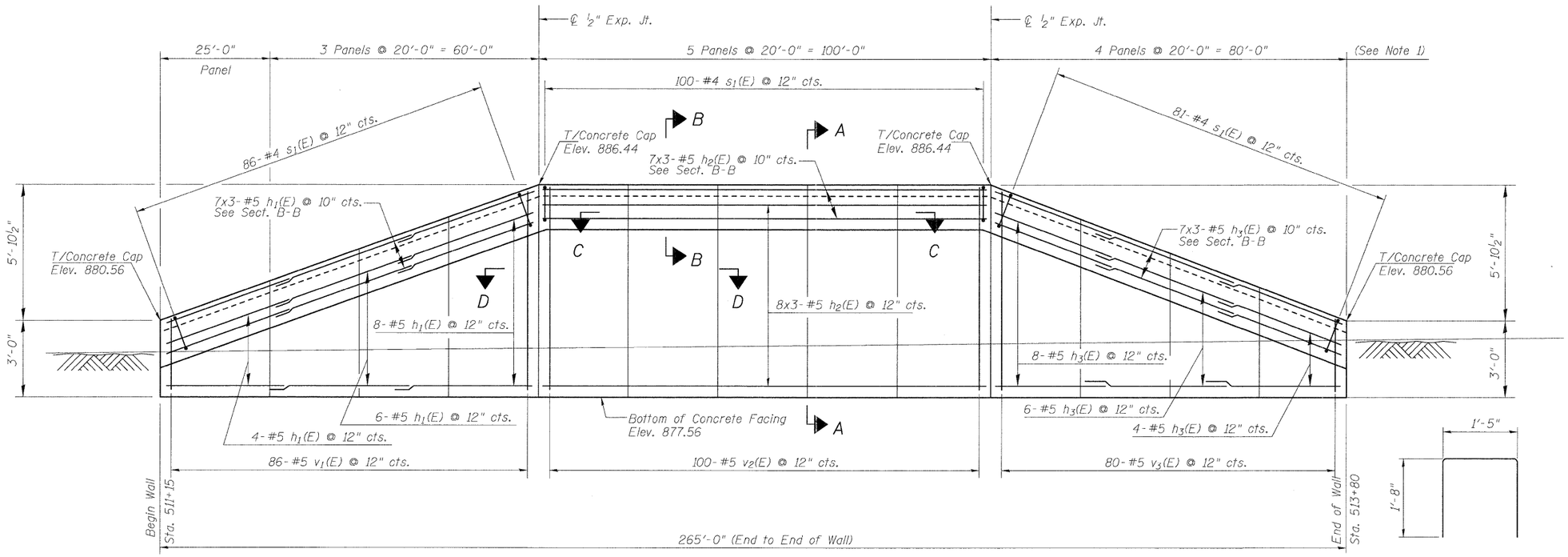
Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P:312-580-9160 F:312-580-9415

USER NAME =	DESIGNED - JPM	REVISED -
	CHECKED - JXH	REVISED -
PLOT SCALE =	DRAWN - JPM	REVISED -
PLOT DATE =	CHECKED - JXH/TPG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-W995
SHEET NO. S1 OF S3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	66
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

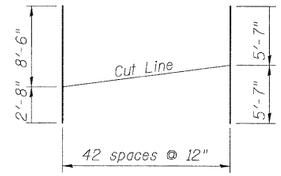


CONCRETE FACING ELEVATION

(Front Face View)

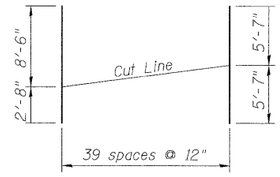
Min. Bar Lap

#5 = 3'-3"

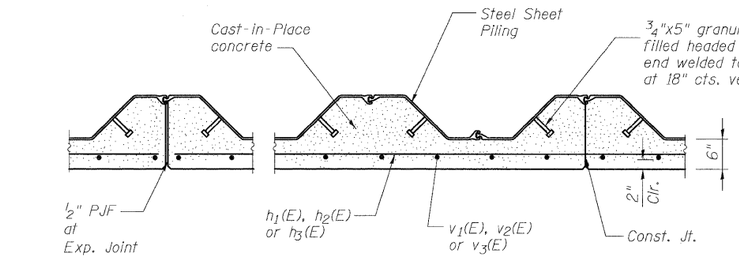


Bar v1(E) Cutting Diagram

BAR s1(E)



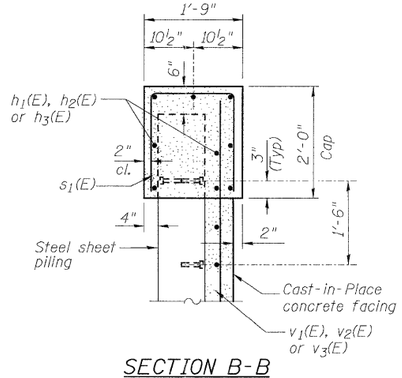
Bar v3(E) Cutting Diagram



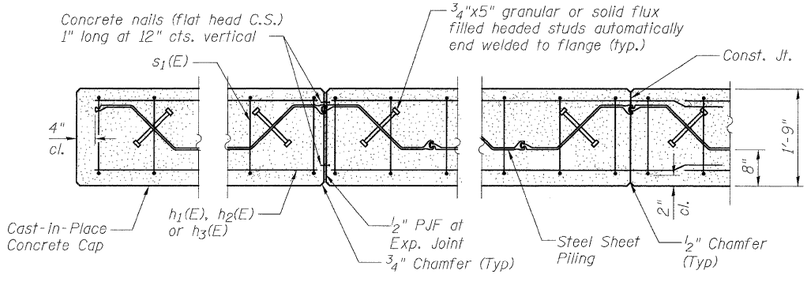
AT EXPANSION JOINT

AT CONSTRUCTION JOINT

SECTION D-D



SECTION B-B

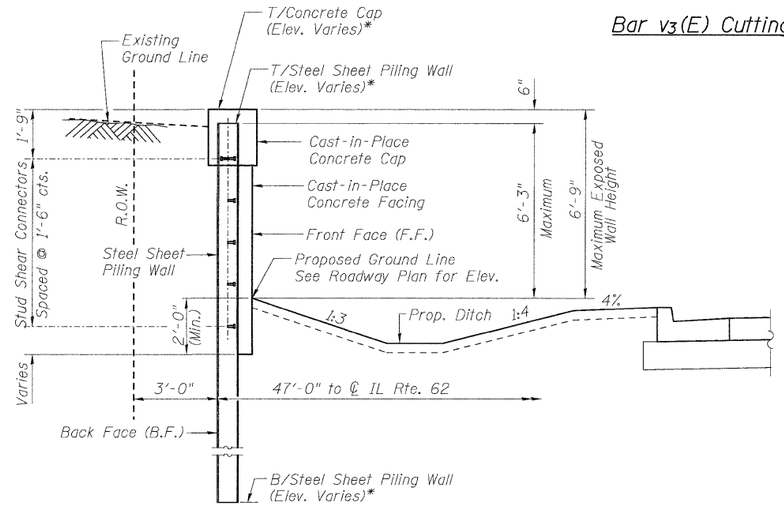


AT WALL END

AT EXPANSION JOINT

AT CONSTRUCTION JOINT

SECTION C-C



SECTION A-A

*See Sheet S1 of S3 Sheets for Elevations.

Notes:
1. The Expansion Joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.
2. Order bars v1(E) & v3(E) in full length. Cut in field and use the remainder in the other half of the wall.

Primera
180 S. WACKER DRIVE SUITE 700 CHICAGO IL 60606 PH312-685-9700 FAX312-685-9455

USER NAME =	DESIGNED - JPM	REVISED -
	CHECKED - JXH	REVISED -
PLOT SCALE =	DRAWN - JPM	REVISED -
PLOT DATE =	CHECKED - JXH/TPG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL DETAIL
STRUCTURE NO. 016-W995
SHEET NO. S2 OF S3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	67
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

RW-14

PAGE 1 of 1

SOIL BORING LOG

DATE 3/22/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-14
Station 511+75
Offset 12.0' Left
Ground Surface Elev. 880.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Material
				8.0" ASPHALT, 2.0" GRAVEL, 6.0" CONCRETE
878.8	AS	NP	1	
			105	
	5		114	
	8			
–5	10	5.6B	17	CLAY–gray–stiff to very stiff (A–6)
	6		106	CLAY–brown & gray– very stiff to hard (A–6)
	8			
	10	6.0B	19	
	6		104	
	8			
–10	9	4.6B	21	
	5		107	
	8			
	10	2.75B	21	
	5		109	
	10			
–15	11	3.4B	19	
	6		107	
	10			
862.2	13	4.0B	19	
	3		108	CLAY–gray–stiff to very stiff (A–6)
	6			
–20	7	2.4B	21	

End Of Boring @ –40.0
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer
840.2 –40

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	3		105
	6		
	7	2.4B	22
	4		104
–25	6	1.8B	20
	3		105
	4		
	5	1.75B	22
	3		114
–30	5	1.6B	17
	3		103
	4		
–35	6	1.8B	23
	3		106
	4		
	5	1.9B	22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-15

PAGE 1 of 1

SOIL BORING LOG

DATE 3/19/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-15
Station 512+50
Offset 12.0' Left
Ground Surface Elev. 881.3

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Material
				9.0" ASPHALT, 3.0" GRAVEL, 6.0" CONCRETE
879.8	AS	NP	4	
			106	
	5			
	6			
–5	10	5.5B	20	CLAY–brown & gray–hard (A–6)
	5		107	
	7			
	10	6.8B	19	
	7		110	
	50/3"			
–10		4.5B	18	
	50/4"			
	–		21	
868.3				
	5		110	CLAY–gray–stiff to hard (A–6)
	10			
–15	14	4.1B	20	
	4		104	
	5			
	6	2.0B	23	
	3			
	4			
–20	4	1.25P	19	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	3		103
	4		
	6	1.9B	23
	3		97
	4		
–25	6	2.1B	27
	3		113
	4		
	6	1.0B	18
	3		116
	4		
–30	6	1.0B	17
847.8	3		
	5		
SILTY CLAY–gray–stiff (A–6)			
846.3 –35	6	1.25P	23
CLAY–gray–stiff (A–6)			
	3		102
End Of Boring @ –40.0			
Hollow Stem Augers To –10.0'			
Rotary Drilling To Completion			
10' Of 4.0" Casing Used			
CME Automatic Hammer	4	1.0B	24
841.3 –40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

RW-16

PAGE 1 of 1

SOIL BORING LOG

DATE 3/19/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. RW-16
Station 513+30
Offset 12.0' Left
Ground Surface Elev. 881.3

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After _____ Hrs. _____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Material
				9.0" ASPHALT, 3.0" GRAVEL, 6.0" CONCRETE
879.8	17	NP	6	
	6			
	9			
			104	
	6			
–5	9	4.9B	20	CLAY–brown & gray– very stiff to hard (A–6)
	4		103	
	9			
	10	4.9B	21	
	6			
–10	10	3.5P	19	
	5		109	
	10			
868.8	13	3.7B	20	
	3		107	CLAY–gray–stiff to very stiff (A–6)
	5			
–15	8	2.4B	21	
	3		106	
	4			
	6	1.9B	22	
	3		105	
	4			
–20	6	1.5B	22	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	3		105
	4		
	6	1.9B	22
	3		104
CLAY–gray–stiff to very stiff (A–6)			
	6		
–25	6	1.6B	23
852.3	3		
	6		
SILTY CLAY LOAM–gray– stiff (A–4/A–6)			
850.3	7	1.75P	18
	3		111
	4		
–35	6	1.3B	19
End Of Boring @ –40.0	5		122
Hollow Stem Augers To –10.0'			
Rotary Drilling To Completion			
10' Of 4.0" Casing Used	8		
CME Automatic Hammer	11	2.2B	14
841.3 –40			

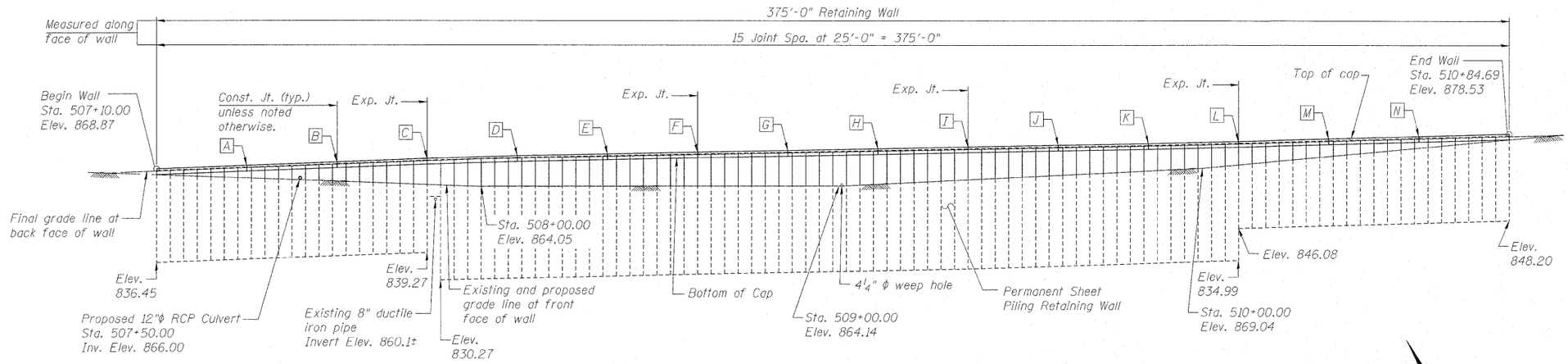
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
ST–Shelby Tube Sample VS=Vane Shear Test

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
The Unit Dry Weight (pcf) is noted in italics above moist (%)

NR–No Recovery

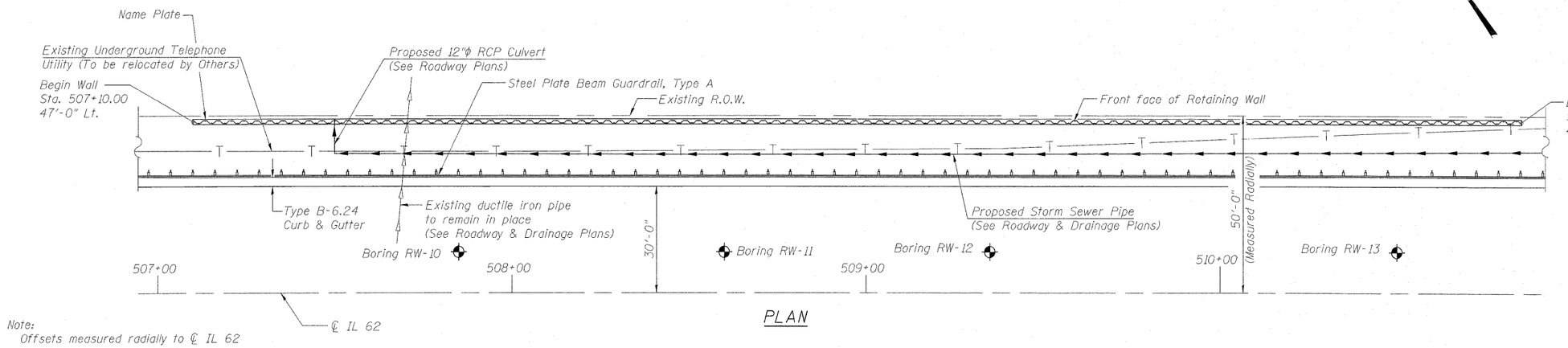
Bench Mark: ½" Iron rod with cap, Sta. 513+52.54, 19.68' Lt., Elev. 881.31.

Existing Structure: None.



ELEVATION

(Looking at front face of wall)



PLAN

Note:
Offsets measured radially to ℄ IL 62 from front face of sheet piling.

INDEX OF SHEETS

DESIGN STRESSES

FIELD UNITS

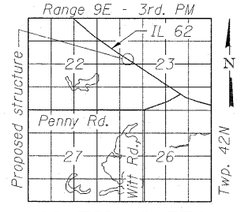
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 38,500 psi (Sheet Piling)
(Gr. 39, AASHTO M 202)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications, 17th Edition

CURVE DATA

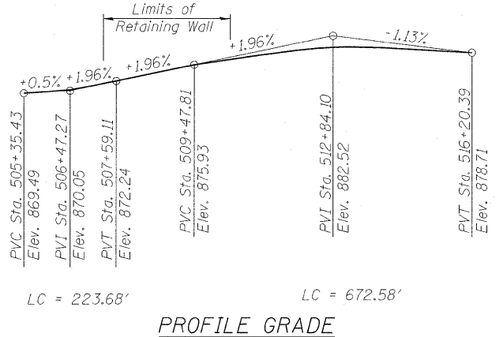
(Illinois Route 62)
Δ = 1°32'54" (RT)
D = 0°06'00"
T = 774.99'
L = 1,549.89'
E = 5.24'
R = 57,351.19'
P.C. = Sta. 505+12.36
P.T. = Sta. 520+62.25
P.I. = Sta. 512+87.35



LOCATION SKETCH

TOP OF CAP DATA

LOCATION	STATION	ELEVATION
A	507+34.98	869.78
B	507+59.96	870.72
C	507+84.94	871.69
D	508+09.92	872.46
E	508+34.90	872.95
F	508+59.88	873.44
G	508+84.85	873.93
H	509+09.83	874.42
I	509+34.81	874.91
J	509+59.79	875.39
K	509+84.77	875.85
L	510+09.75	876.41
M	510+34.73	877.15
N	510+59.71	877.85



PROFILE GRADE

(along ℄ IL 62)

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60. See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.
Concrete Cap shall be constructed after backfill is in place.
It shall be the Contractor's responsibility to verify the location of the existing underground utilities prior to starting construction.
The Contractor shall take precaution during pile driving operations so as not to damage any proposed and/or existing utilities.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	48.6
Stud Shear Connectors	Each	410
Reinforcement Bars, Epoxy Coated	Pound	4810
Permanent Steel Sheet Piling	Sq. Ft.	13840
Pipe Underdrains for Structures 4"	Foot	376
Geocomposite Wall Drain	Sq. Yd.	111
Porous Granular Embankment, Special	Cu. Yd.	148.0
Name Plates	Each	1

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

Michael T. Haley 10-21-2011
Michael T. Haley — Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2012

LT. STA. 507+10.00 TO STA. 510+84.69
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 339 SEC. 116 Y-1-R-1
STRUCTURE NO. 016-W996

NAME PLATE

See Std. 515001

RETAINING WALL NO. 3
STA. 507+10.00 TO STA. 510+84.69

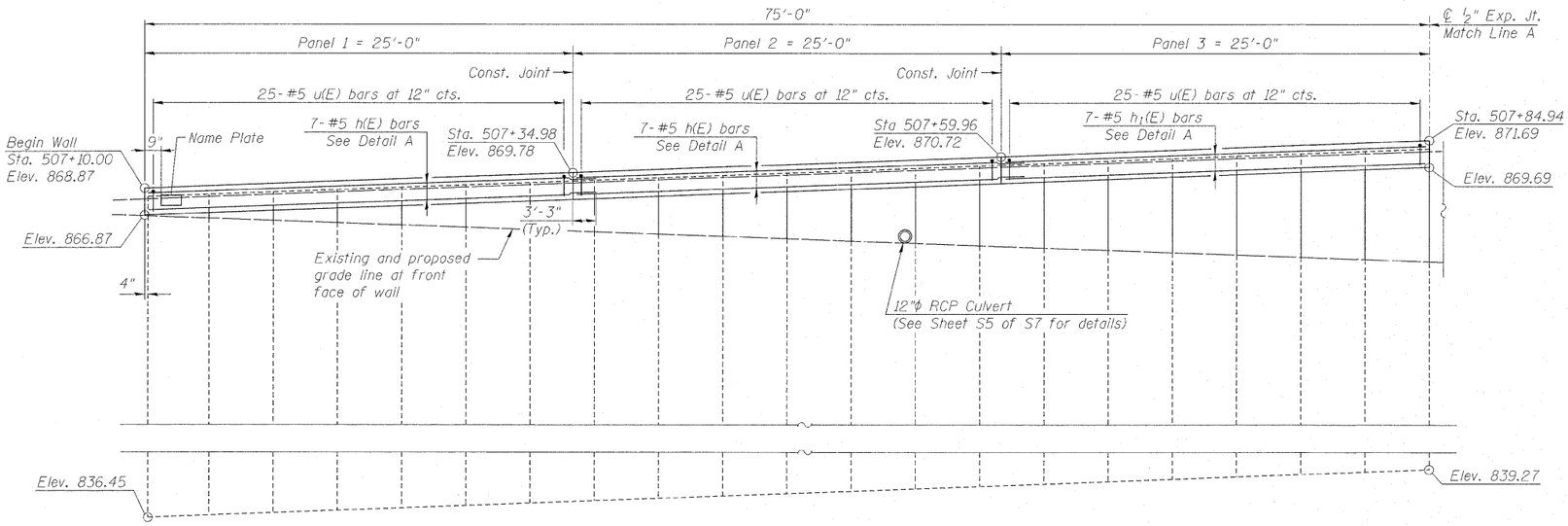
LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

USER NAME =	DESIGNED - ESH	REVISED - MTH 10/21/11
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - ESH	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

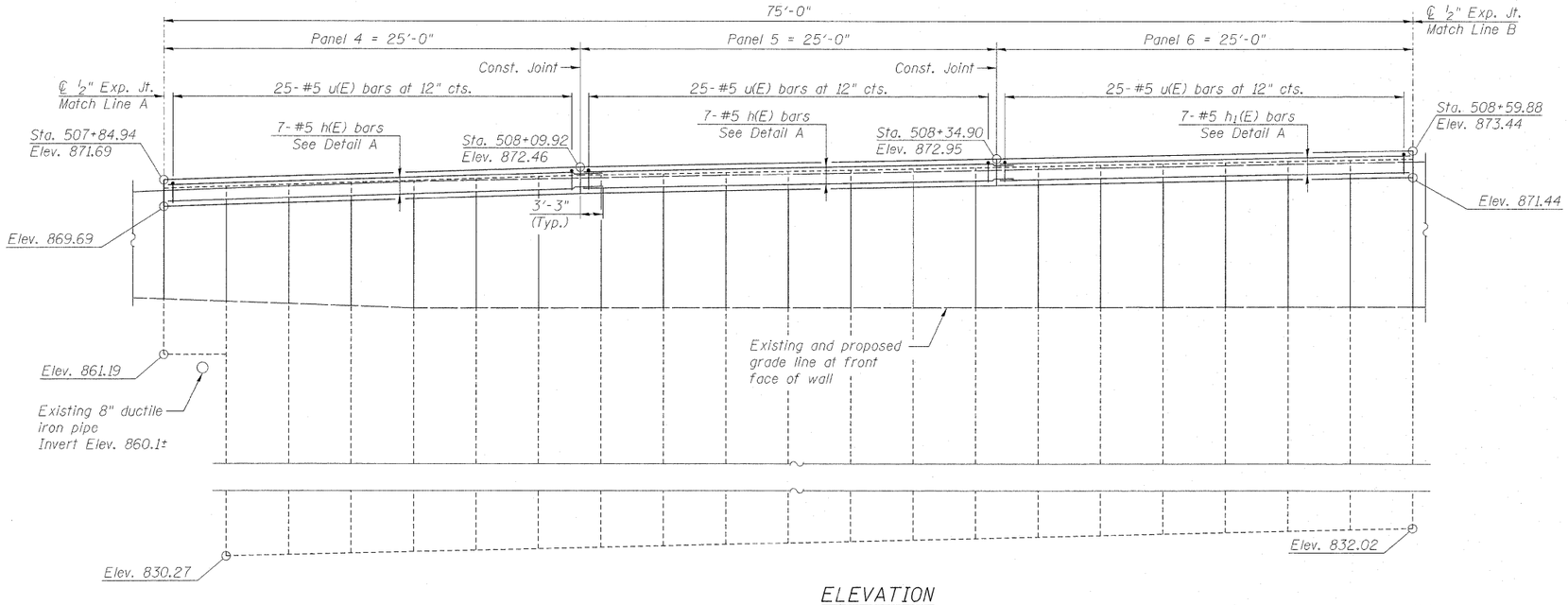
GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-W996
SHEET NO. 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	69
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			



ELEVATION

(Looking at Front Face of Wall)



ELEVATION

(Looking at Front Face of Wall)

Notes:

See sheet S5 of S7 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.

Horizontal dimensions measured along face of wall.

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

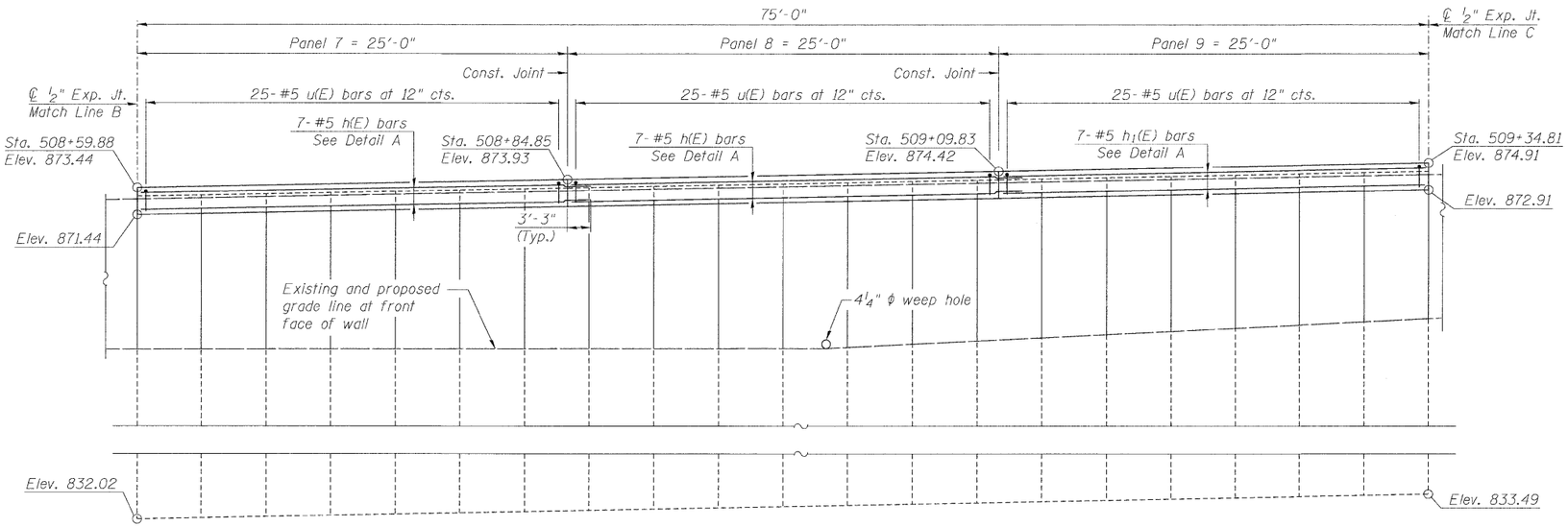
LIN ENGINEERING,LTD.
Consulting Engineers
Chatham, Illinois

USER NAME =	DESIGNED - ESH	REVISED - MTH 10/21/11
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - RH	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

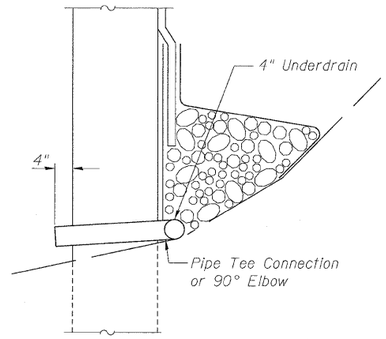
WALL DETAILS–1
STRUCTURE NO. 016–W996
SHEET NO. S2 OF S7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	70
		CONTRACT NO. 60I35		
	ILLINOIS	FED. AID PROJECT		



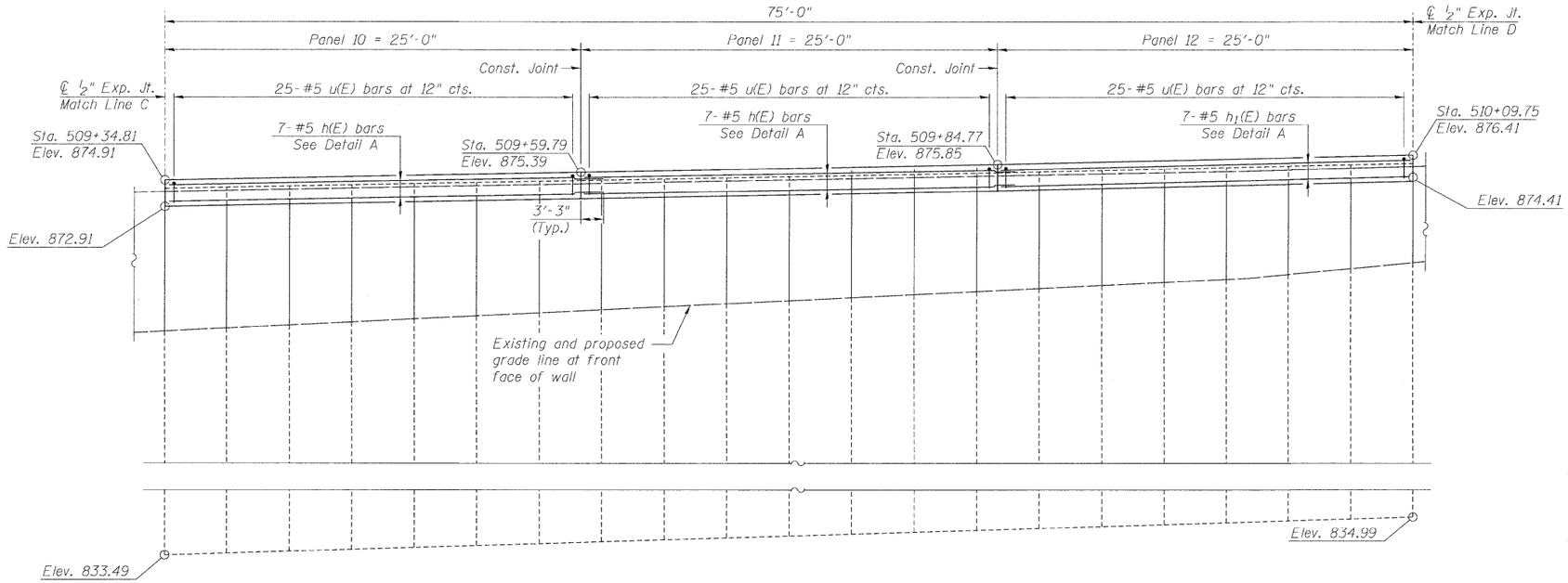
ELEVATION

(Looking at Front Face of Wall)



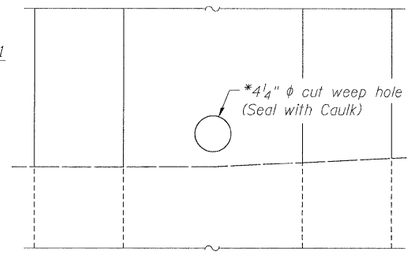
SECTION THRU WEEP HOLE

Note:
Contractor shall furnish and install a concrete splash block approved by the Engineer at the weep hole location. Cost is included with Pipe Underdrains for Structures 4".



ELEVATION

(Looking at Front Face of Wall)

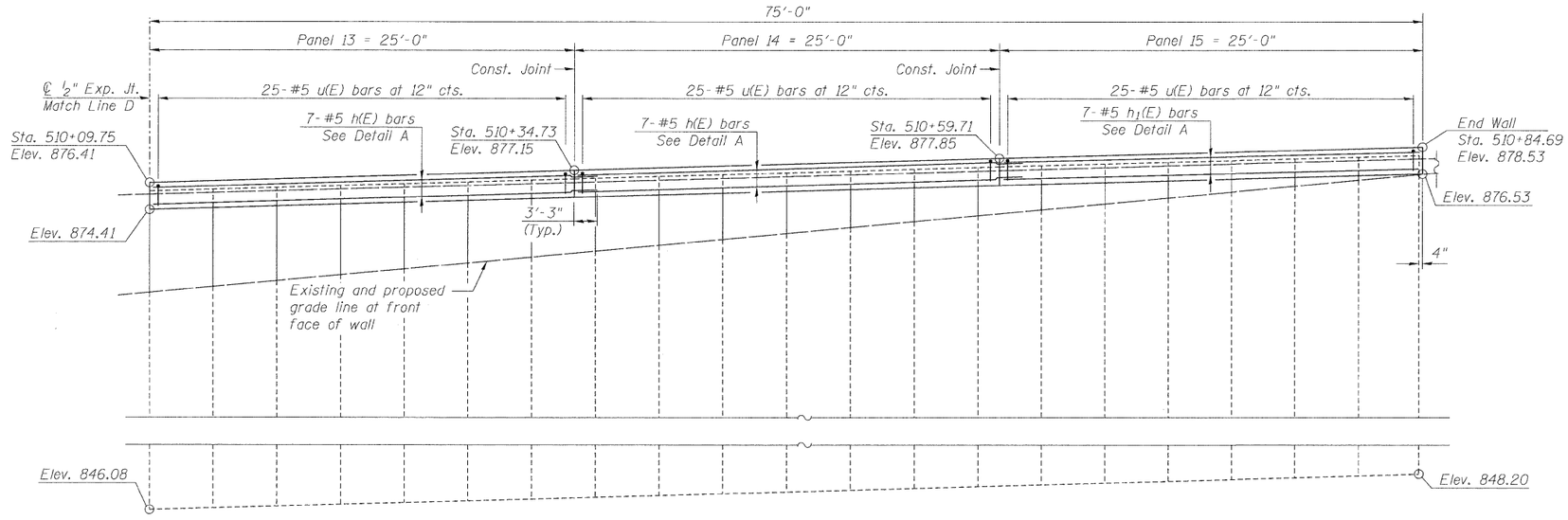


WEEP HOLE ELEVATION

**Caulk for drain shall be silicone caulking adhesive sealer, marketed for outdoor and underwater use, and listed by manufacturer as appropriate for use on PVC and steel surfaces. Surfaces shall be clean and dry prior to application. Cost is included with Pipe Underdrains for Structures 4".*

Notes:
See sheet S5 of S7 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.
Horizontal dimensions measured along face of wall.
Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**WALL DETAILS-2 STRUCTURE NO. 016-W996**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - ADB	REVISED -			339	116 Y-1-R-1	COOK	122	71
	PLOT SCALE =	DRAWN - RH	REVISED -						CONTRACT NO. 60135	
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S3 OF S7 SHEETS			ILLINOIS	FED. AID PROJECT	



ELEVATION

(Looking at Front Face of Wall)

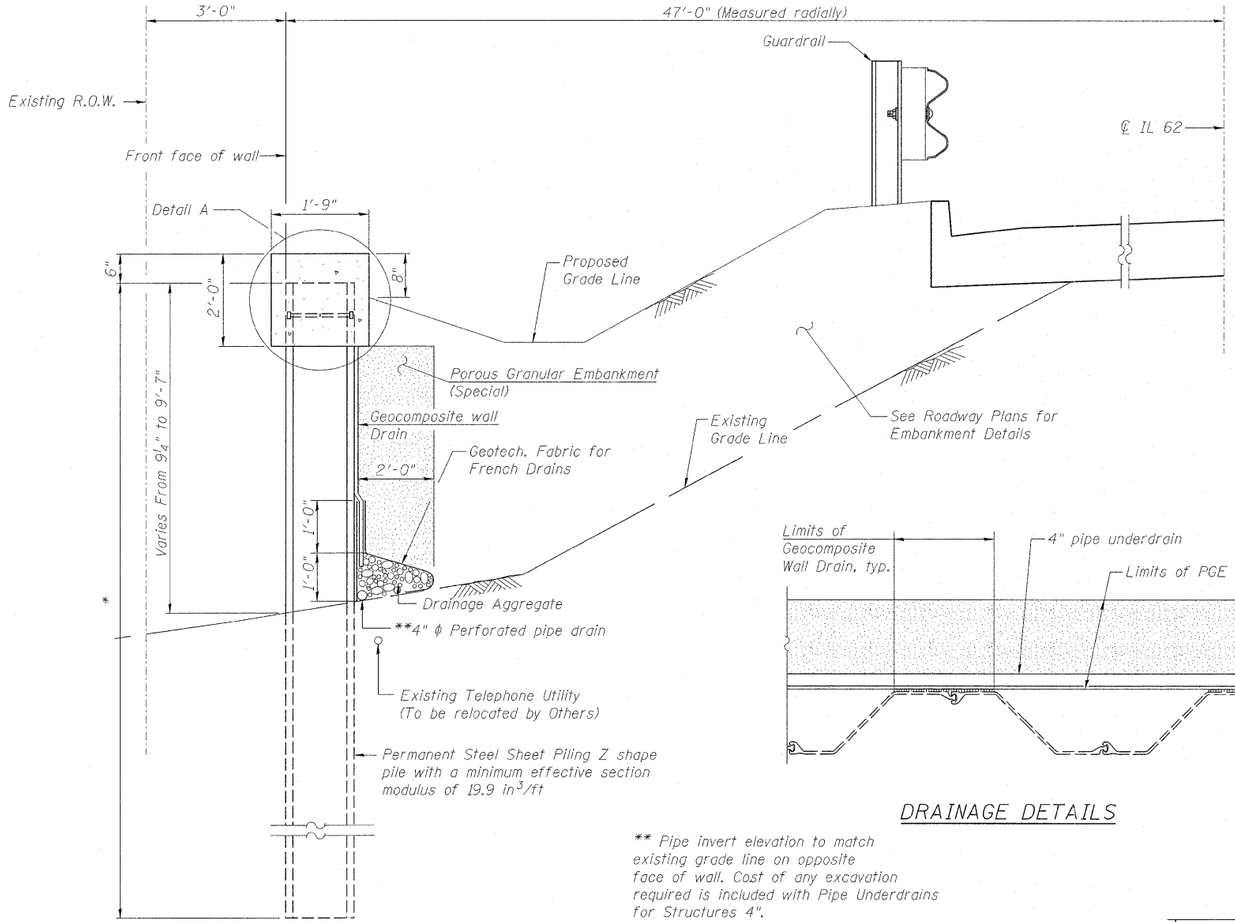
Notes:

See sheet S5 of S7 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.

Horizontal dimensions measured along face of wall.

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALL DETAILS–3 STRUCTURE NO. 016–W996	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - ADB	REVISED -			339	116 Y-1-R-1	COOK	122	72
	PLOT SCALE =	DRAWN - RH	REVISED -					CONTRACT NO. 60135		
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S4 OF S7 SHEETS			ILLINOIS FED. AID PROJECT		



SECTION THRU WALL

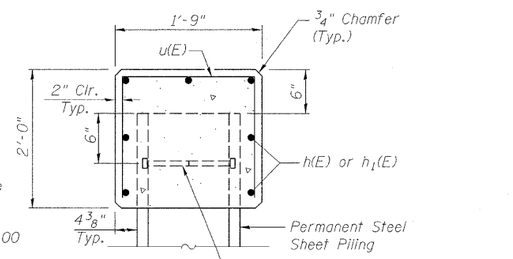
DRAINAGE DETAILS

** Pipe invert elevation to match existing grade line on opposite face of wall. Cost of any excavation required is included with Pipe Underdrains for Structures 4".

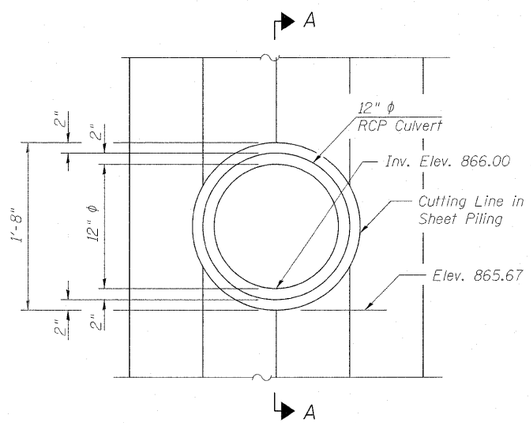
*MINIMUM SHEET PILE HEIGHT

Panel	Height
Panels 1 to 3	31'-11"
Panels 4 to 12	40'-11"
Panels 13 to 15	29'-10"

Notes:
Cost of Geotechnical Fabric and Drainage Aggregate are included in the cost of Pipe Underdrain for Structures 4".
Perforated pipe drain shall outlet near station 509+00 thru 4¼" cut hole in wall.
Cost of cutting 20" ϕ opening in sheet pile wall is included in the cost of Permanent Steel Sheet Piling.

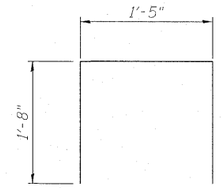


DETAIL A



SECTION THRU PERMANENT SHEET PILING AT PIPE CULVERT

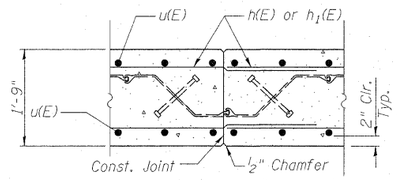
(Contractor shall seal the void around the RCP with approval by the Engineer. Cost included with Permanent Steel Sheet Piling.)



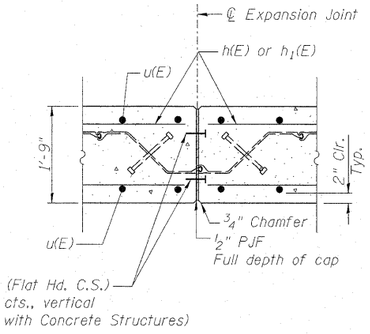
BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	70	#5	28'-1"	——
h_1(E)	35	#5	24'-8"	——
u(E)	375	#5	4'-9"	⊓
Concrete Structures			Cu. Yd.	48.6
Reinforcement Bars, Epoxy Coated			Pound	4810



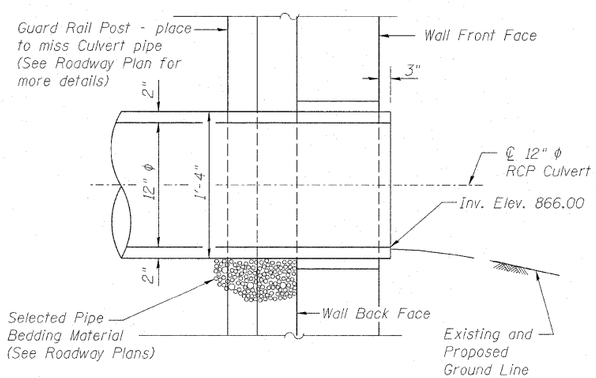
CONSTRUCTION JOINT DETAIL



EXPANSION JOINT DETAIL

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

Notes:
The details for the concrete cap and reinforcement, and the required number of stud shear connectors are based on section SZ-24 sheet piling. If the Contractor chooses to use any other section, then the Contractor shall submit revised concrete cap and reinforcement configuration for approval by engineer. Such changes shall not be cause for additional compensation.



SECTION A-A

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED - MTH 10/21/11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALL DETAILS–4 STRUCTURE NO. 016–W996
		CHECKED - ADB	REVISED -		
	PLOT SCALE =	DRAWN - RH	REVISED -		SHEET NO. S5 OF S7 SHEETS
	PLOT DATE =	CHECKED - ADB	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	73
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 3/24/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-W996
Station 507+25 to 510+35
BORING NO. **RW-10**
Station 507+85
Offset 11.5' Left
Ground Surface Elev. 873.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7.0" ASPHALT, 2.0" GRAVEL, 7.0" CONCRETE 872.1	AS	NP	7
CLAY LOAM–dark brown, gray & black–medium stiff to stiff (A–6) Fill, Wet	2		
	3 3	1.25P	27
	3		*89*
865.0	4 5	0.9B	27
CLAYEY TOPSOIL–black	4		*92*
863.5	5 6	1.9B	27
CLAY–dark brown & gray–stiff to very stiff (A–6)	3		*98*
	3 4	1.3B	25
	3		*104*
	4 –15 6	2.3B	22
857.5	4		*115*
CLAY–gray–stiff to very stiff (A–6)	5 10	2.6B	17
	4		*102*
	6 –20 10	3.5B	21

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	4		*106*
	6 9	2.2B	22
	5		*103*
	6 –25 9	2.4B	24
CLAY–gray–stiff to very stiff (A–6)	3		*102*
	4 7	1.2B	24
	4		*102*
	5 –30 6	2.4B	23
	4		*122*
	5 –35 8	1.1B	13
Some Fractured Rock from –38.5' to –40.0'.			
End Of Boring @ –40.0			
Hollow Stem Augers To –10.0'			
Rotary Drilling To Completion			
10' Of 4.0" Casing Used			
CME Automatic Hammer 833.5	10 –40	–	9

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

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(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 3/23/2010
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GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-W996
Station 507+25 to 510+35
BORING NO. **RW-11**
Station 508+60
Offset 11.5' Left
Ground Surface Elev. 875.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7.0" ASPHALT, 3.0" GRAVEL, 7.0" CONCRETE 873.6	AS	NP	12
CLAY LOAM–brown & gray spotted black–stiff (A–6) Fill, Wet	2		*98*
	3 –5 3	1.25B	22
	3		
866.5	4 5	1.5P	27
TOPSOIL–black	3		
864.0	6 –10 7	3.25P	26
SILTY CLAY–brown & gray–stiff to very stiff (A–6)	3		*110*
	5 7	2.7B	18
	2		
	3 –15 3	1.0P	22
859.0	6		*111*
CLAY–gray–stiff to very stiff (A–6)	12 16	3.2B	18
	4		*113*
	8 –20 12	3.25B	17

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	4		*110*
	5 9	2.4B	20
	5		
	8 –25 10	1.0P	19
CLAY–gray–stiff to very stiff (A–6)	3		*102*
	4 7	1.8B	23
	3		*104*
	4 –30 6	1.9B	23
	3		*103*
	4 –35 5	1.75B	22
End Of Boring @ –40.0			
Hollow Stem Augers To –10.0'			
Rotary Drilling To Completion			
10' Of 4.0" Casing Used			
CME Automatic Hammer 835.0	5 –40 6	2.5B	21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

USER NAME =	DESIGNED - ESH	REVISED -	
	CHECKED - ADB	REVISED -	
PLOT SCALE =	DRAWN - RH	REVISED -	
PLOT DATE =	CHECKED - ADB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS-1
STRUCTURE NO. 016-W996
SHEET NO. 56 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	74
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 3/23/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-W996
Station 507+25 to 510+35
BORING NO. **RW-12**
Station 509+35
Offset 11.5' Left
Ground Surface Elev. 876.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
0			
874.8			
8.0" ASPHALT, 3.0" GRAVEL, 5.0" CONCRETE	AS	NP	5
	3		100
CLAY LOAM-brown & gray spotted black-stiff to very stiff (A-6) Fill	4		
-5	5	1.3B	22
	3		94
	3		
	5	1.4B	26
	4		
-10	6		
	8	3.0P	21
865.2			
	3		86
	3		
TOPSOIL-black	4	1.25B	32
862.7			
	2		107
	3		
-15	6	2.7B	20
CLAY-brown & gray-very stiff (A-6)	4		110
	7		
	10	2.5B	19
	8		107
	10		
-20	11	3.4B	18

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-brown & gray-very stiff (A-6) 855.2	5		110
	8		
	10	3.0B	18
	4		
	7		
-25	10	2.0P	23
CLAY-gray-stiff to very stiff (A-6)	4		105
	7	1.85●	
	10	12.7%	23
	3		
	4		
-30	5	1.25P	27
	4		104
	5		
-35	7	2.3B	22
	4		104
	5		
-40	8	1.9B	23

End Of Boring @ -40.0
Hollow Stem Augers To -10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer
836.2

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 3/22/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-W996
Station 507+25 to 510+35
BORING NO. **RW-13**
Station 510+50
Offset 11.5' Left
Ground Surface Elev. 878.3

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
0			
876.9			
8.0" ASPHALT, 3.0" GRAVEL, 5.0" CONCRETE	AS	NP	7
	3		105
CLAY LOAM-dark brown & gray-very stiff (A-6) Fill	4		
-5	5	2.1B	18
	4		
	6		
	7	2.0P	27
870.3			
	4		99
	5		
-10	7	2.9B	25
	5		
CLAY-brown & gray-very stiff to hard (A-6)	9		
	9	-	27
	5		109
	9		
-15	12	4.3B	20
	6		105
	10		
	13	4.4B	22
	5		113
	10		
-20	12	4.3B	15

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY-brown & gray-very stiff to hard (A-6) 857.3	3		113
	6		
	7	2.0B	18
	4		110
	5		
-25	7	2.5B	20
	6		118
	6		
	7	2.2B	16
CLAY-gray-stiff to hard (A-6)	4		
	5		
-30	7	1.5P	12
	5		
	6		
-35	9	1.5P	11
Some Fractured Rock from -38.5' to -40.0'.			
	5		
	9		
-40	12	1.5P	13

End Of Boring @ -40.0
Hollow Stem Augers To -10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer
838.3

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

USER NAME =	DESIGNED - ESH	REVISED -	
	CHECKED - ADB	REVISED -	
PLOT SCALE =	DRAWN - RH	REVISED -	
PLOT DATE =	CHECKED - ADB	REVISED -	

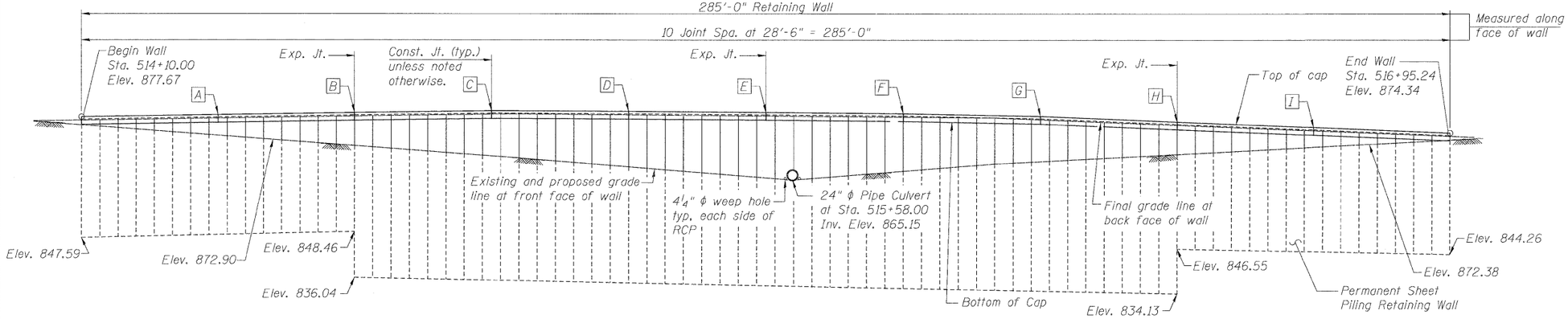
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS-2
STRUCTURE NO. 016-W996
SHEET NO. 57 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	75
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

Bench Mark: ½" Iron rod with cap, Sta. 513+52.54, 19.68' Lt., Elev. 881.31.

Existing Structure: None.



ELEVATION

(Looking at front face of wall)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications, 17th Edition

DESIGN STRESSES

FIELD UNITS

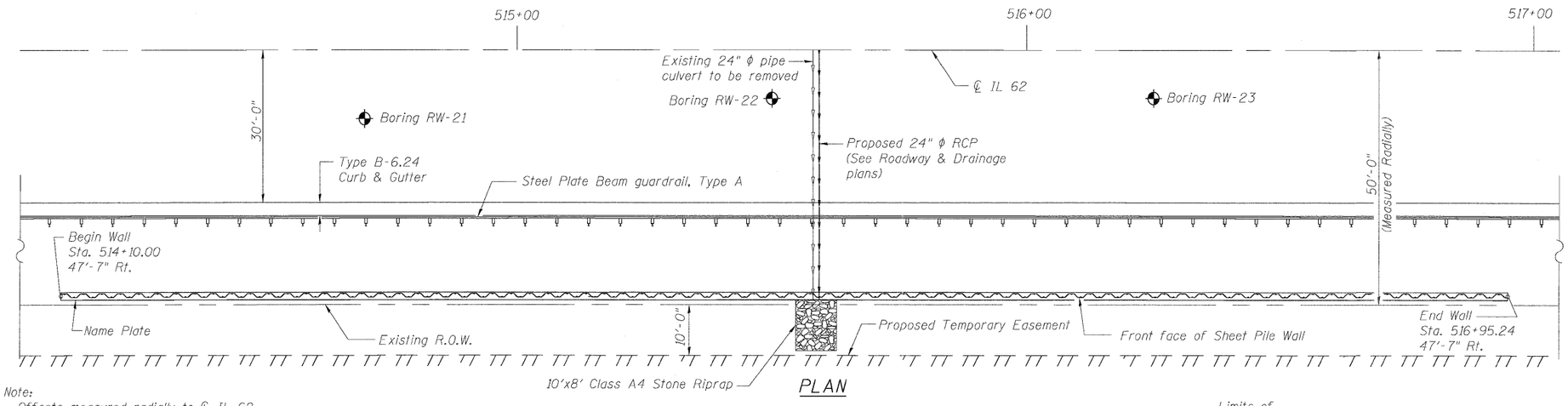
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 38,500 psi (Sheet Piling)
(Gr. 39 AASHTO M 202)

INDEX OF SHEETS

RT. STA. 514+10.00 TO STA. 516+95.24
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 339 SEC. 116 Y-1-R-1
STRUCTURE NO. 016-W997

NAME PLATE

See Std. 515001



PLAN

Note:
Offsets measured radially to ℄ IL 62 from back face of sheet piling.

TOP OF CAP DATA

LOCATION	STATION	ELEVATION
A	514+38.52	878.12
B	514+67.05	878.54
C	514+95.57	878.91
D	515+24.09	878.82
E	515+52.62	878.60
F	515+81.14	878.35
G	516+09.67	877.79
H	516+38.19	876.63
I	516+66.71	875.49

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

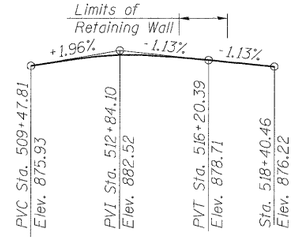
Concrete Cap shall be constructed after backfill is in place.

It shall be the Contractor's responsibility to verify the location of the existing underground utilities prior to starting construction.

The Contractor shall take precaution during pile driving operations so as not to damage any proposed and/or existing utilities.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	36.9
Stud Shear Connectors	Each	380
Reinforcement Bars, Epoxy Coated	Pound	3650
Permanent Steel Sheet Piling	Sq. Ft.	10560
Pipe Underdrains for Structures 4"	Foot	286
Geocomposite Wall Drain	Sq. Yd.	94
Porous Granular Embankment, Special	Cu. Yd.	125.7
Name Plates	Each	1

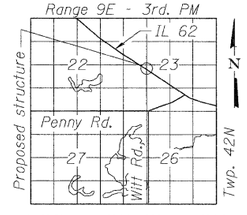


PROFILE GRADE

(along ℄ IL 62)

CURVE DATA

(Illinois Route 62)
Δ = 1°32'54" (RT)
D = 0°06'00"
T = 774.99'
L = 1,549.89'
E = 5.24'
R = 57,351.19'
P.C. = Sta. 505+12.36
P.T. = Sta. 520+62.25
P.I. = Sta. 512+87.35



LOCATION SKETCH

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

RETAINING WALL NO. 4

STA. 514+10.00 TO STA. 516+95.24

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

Michael T. Haley — 6-21-2011
Michael T. Haley — Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2012

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Consulting Engineers
Chatham, Illinois

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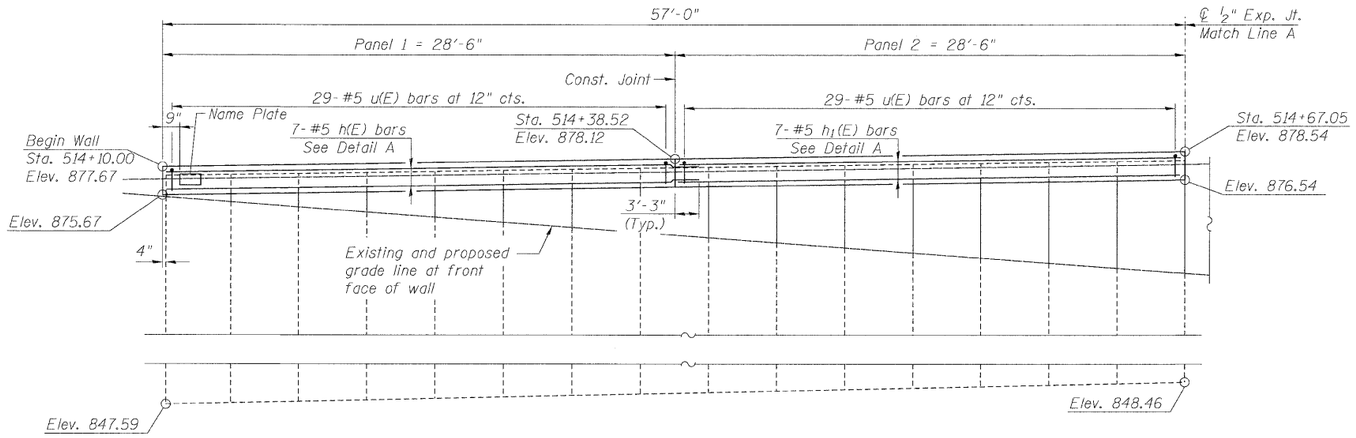
PLOT DATE =	CHECKED - ADB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

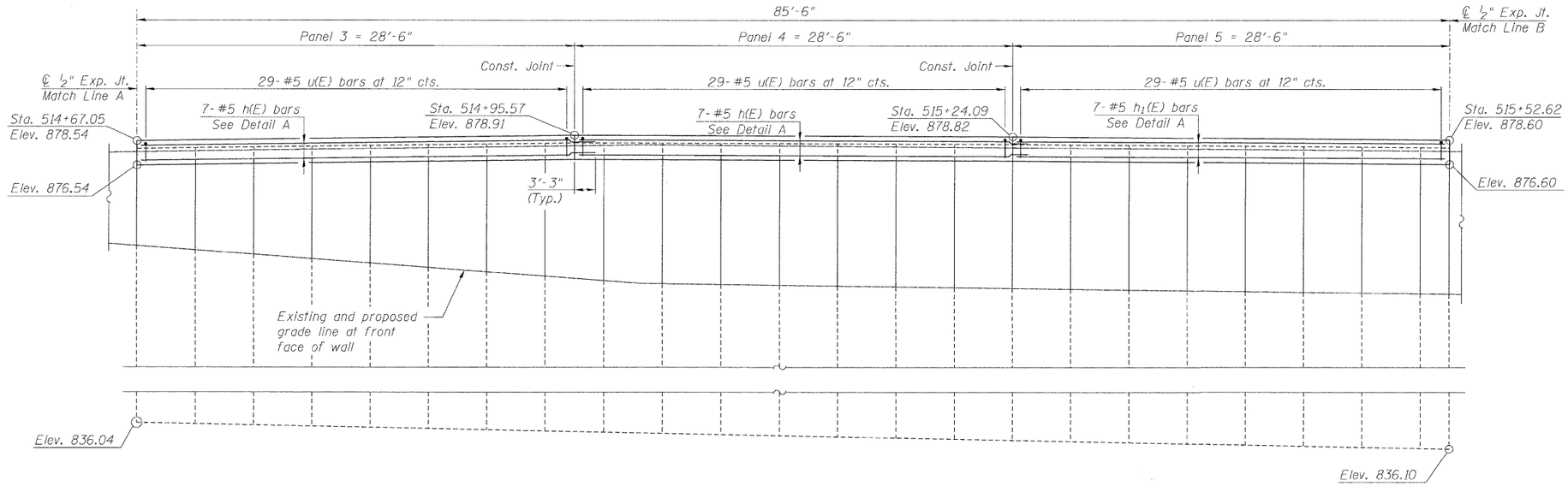
GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-W997
SHEET NO. S1 OF S6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	76
		CONTRACT NO. 60135		
		ILLINOIS FED. AID PROJECT		



ELEVATION

(Looking at Front Face of Wall)



ELEVATION

(Looking at Front Face of Wall)

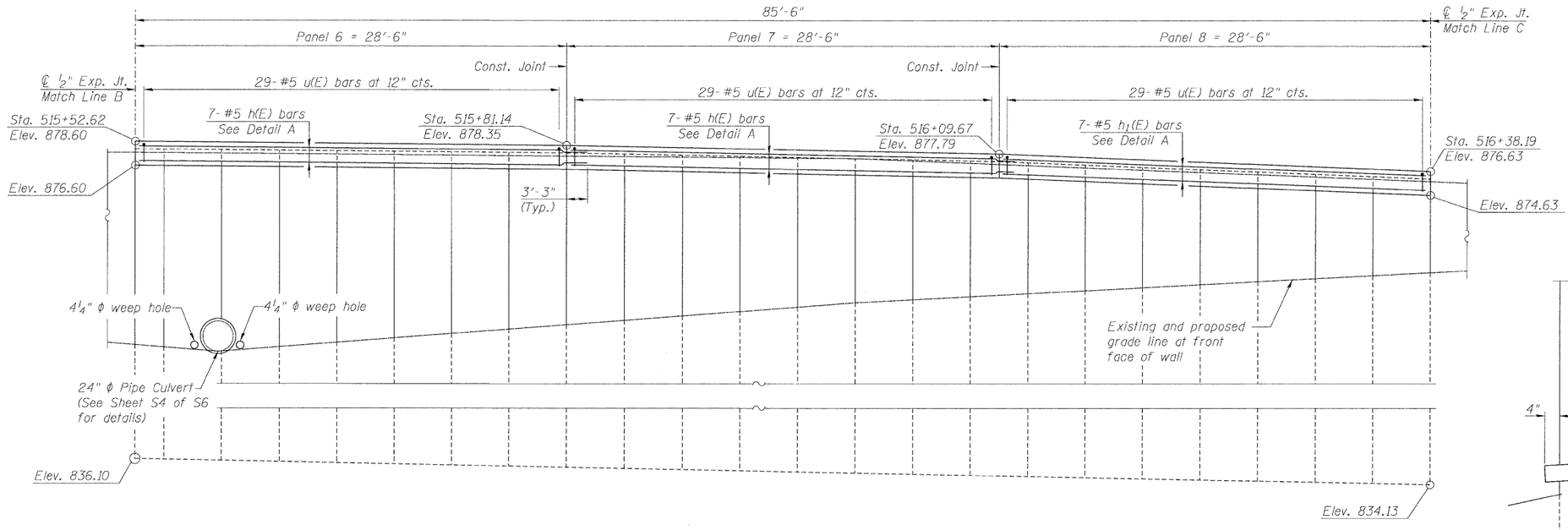
Notes:

See sheet S4 of S6 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.

Horizontal dimensions measured along face of wall.

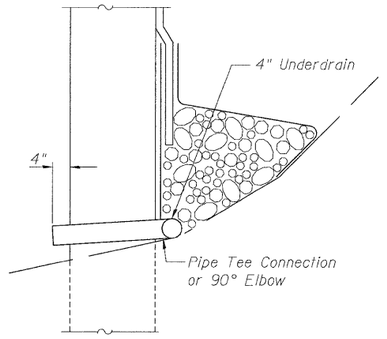
Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

LIN ENGINEERING,LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALL DETAILS–1 STRUCTURE NO. 016–W997	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FILE NAME =	CHECKED - ADB	REVISED -			339	116 Y-1-R-1	COOK	122	77
	PLOT SCALE =	DRAWN - RH	REVISED -					CONTRACT NO. 60135		
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S2 OF S6 SHEETS			ILLINOIS FED. AID PROJECT		



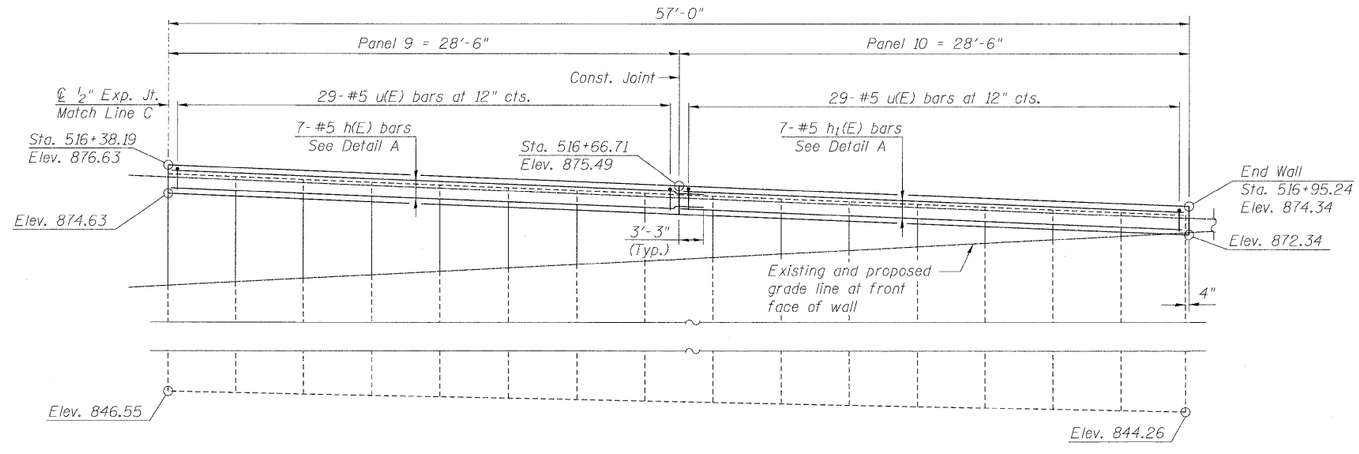
ELEVATION

(Looking at Front Face of Wall)



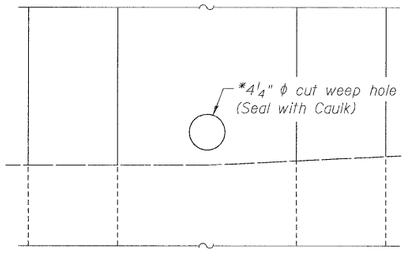
SECTION THRU WEEP HOLE

Note:
Contractor shall furnish and install a concrete splash block approved by the Engineer at the weep hole locations. Cost is included with Pipe Underdrains for Structures 4".



ELEVATION

(Looking at Front Face of Wall)



WEEP HOLE ELEVATION

*Caulk for drain shall be silicone caulking adhesive sealer, marketed for outdoor and underwater use, and listed by manufacturer as appropriate for use on PVC and steel surfaces. Surfaces shall be clean and dry prior to application. Cost is included with Pipe Underdrains for Structures 4".

Notes:
See sheet S4 of S6 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.
Horizontal dimensions measured along face of wall.
Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

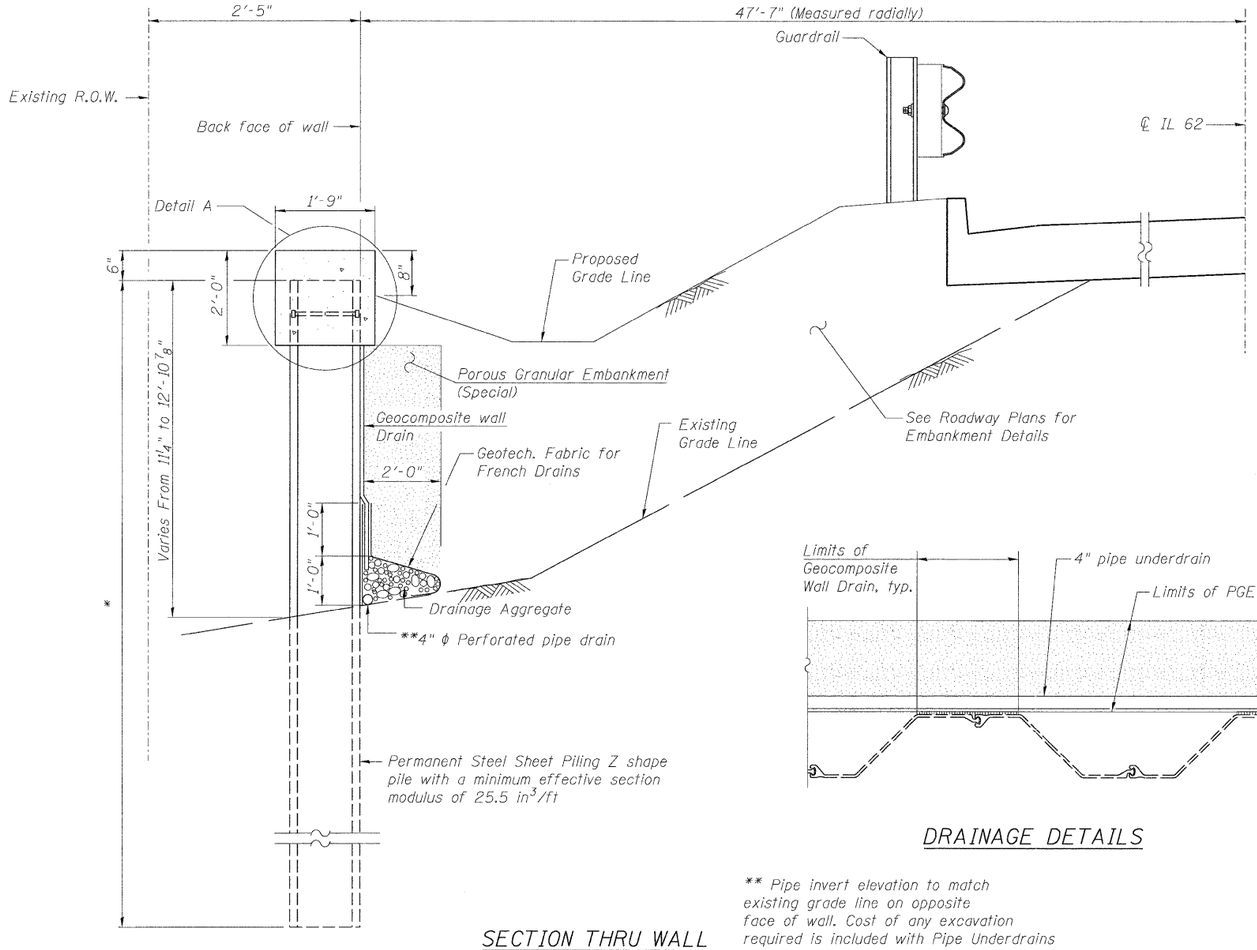
LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

USER NAME =	DESIGNED - ESH	REVISED -
FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - RH	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

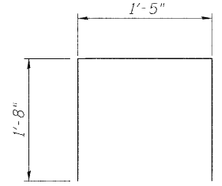
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL DETAILS-2
STRUCTURE NO. 016-W997
SHEET NO. S3 OF S6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	78
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			



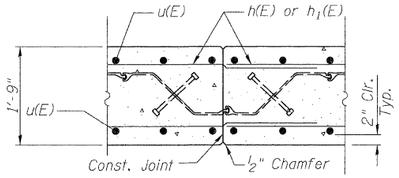
DRAINAGE DETAILS

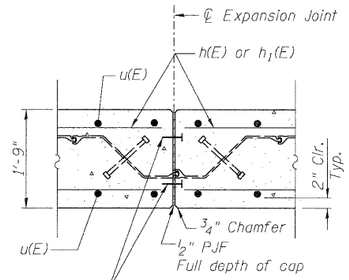


BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	42	#5	31'-7"	———
h_1(E)	28	#5	28'-2"	———
u(E)	290	#5	4'-9"	□
Concrete Structures			Cu. Yd.	36.9
Reinforcement Bars, Epoxy Coated			Pound	3650





CONSTRUCTION JOINT DETAIL

EXPANSION JOINT DETAIL

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

Notes:
The details for the concrete cap and reinforcement, and the required number of stud shear connectors are based on section PZ-27 sheet piling. If the Contractor chooses to use any other section, then the Contractor shall submit revised concrete cap and reinforcement configuration for approval by engineer. Such changes shall not be cause for additional compensation.

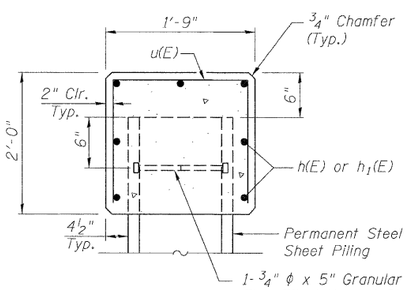
*MINIMUM SHEET PILE HEIGHT

Panel	Height
Panels 1 to 2	29'-7"
Panels 3 to 8	42'-0"
Panels 9 to 10	29'-7"

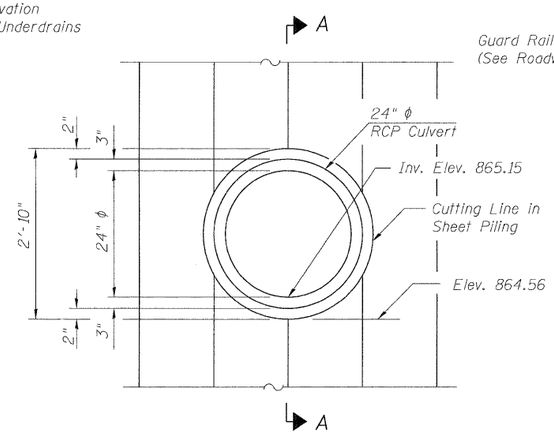
Notes:
Cost of Geotechnical Fabric and Drainage Aggregate are included in the cost of Pipe Underdrain for Structures 4".
Perforated pipe drains shall outlet near station 515+58 thru 4 1/4" cut hole in wall.
Cost of cutting 34" ϕ opening in sheet pile wall is included in the cost of Permanent Steel Sheet Piling.

SECTION THRU WALL

** Pipe invert elevation to match existing grade line on opposite face of wall. Cost of any excavation required is included with Pipe Underdrains for Structures 4".

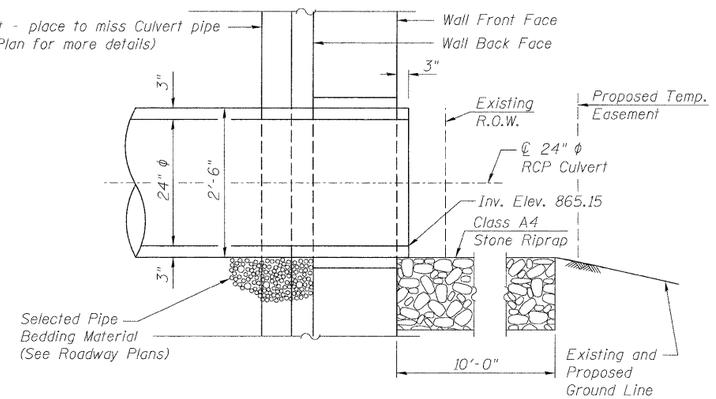


DETAIL A



SECTION THRU PERMANENT SHEET PILING AT PIPE CULVERT

(Contractor shall seal the void around the RCP with approval by the Engineer. Cost included with Permanent Steel Sheet Piling.)



SECTION A-A

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	FILE NAME =	CHECKED - ADB	REVISED -
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	PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL DETAILS-3
STRUCTURE NO. 016-W997
SHEET NO. 54 OF 56 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	79
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 4/15/2101
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-21**
Station 514+70
Offset 13.5' Right
Ground Surface Elev. 880.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				18.0" ASPHALT
878.5	2		105	
	2			
	4	3.6B	19	
				CLAY LOAM–dark brown & gray–
	2		89	stiff to very stiff (A–6) Fill
	2			
–5	4	1.5B	27	
	2		99	
872.0				
	2			
	2	1.0B	22	
	3			
				TOPSOIL–black
–10	5	2.0P	28	
869.5				
	3		95	
	4			
	6	2.0B	26	
				CLAY–brown & gray–
	9		112	very stiff to hard (A–6)
	11			
–15	16	7.25B	18	
	6			
	9			
	15	2.5P	21	
	5		111	
	9			
–20	16	6.5B	19	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				CLAY–very stiff to hard (A–6) 859.5
	7		110	
	8			
	12	3.9B	20	
	6			
	7			
–25	11	–	22	
	9		109	CLAY–gray–very stiff to hard (A–6)
	7			
	14	4.9B	18	
	6		112	
	11			
–30	13	6.4B	18	
	6		110	
	8			
–35	11	3.5B	20	
	6			
	9			
	11	–	22	End Of Boring @ –40.0
				Hollow Stem Augers To –10.0'
				Rotary Drilling To Completion
				10' Of 4.0" Casing Used
				CME Automatic Hammer
				840.0 –40

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS–Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 4/16/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-22**
Station 515+50
Offset 9.5' Right
Ground Surface Elev. 877.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				12.0" ASPHALT
876.0	1		105	
	2			
	2	1.9B	22	
	2			
				CLAY LOAM–dark brown & gray–
–5	3	1.0P	23	stiff to very stiff (A–6) Fill
	1			
	3			
	3	1.0P	21	
	2		92	
	3			
–10	5	1.25B	26	
	2		111	
	3			
	4	2.2B	19	
864.0				
	1		86	
	3			
–15	3	1.5B	36	
	3		86	
	3	0.9S@		
	3	12.7%	33	
859.0				
	3		114	
	4			
–20	5	2.2B	17	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	2		109	
	3			
	3	2.3B	19	CLAY–brown & gray–
	3		112	stiff to very stiff (A–6)
	4			
–25	4	1.6B	17	
851.5				
	4		114	
	6			
	10	3.8B	16	
	6		111	
	8			
–30	12	1.9B	19	CLAY–gray–stiff to very stiff (A–6)
	5		119	
	8			
–35	10	2.6B	14	
	6			
	8			End Of Boring @ –40.0
	15	–	18	Hollow Stem Augers To –10.0'
				Rotary Drilling To Completion
				10' Of 4.0" Casing Used
				CME Automatic Hammer
				837.0 –40

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS–Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2858

SOIL BORING LOG

PAGE 1 of 1
DATE 4/16/2010
LOGGED BY RJ
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. RW-23
Station 516+25
Offset 9.5' Right
Ground Surface Elev. 878.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
877.2			
10.0" ASPHALT			
	3		
	4		
	5	2.5P	17
	3		109
CLAY LOAM–brown & gray–stiff to very stiff (A-6) Fill	2	1.6S●	
–5	3	12.7%	21
	2		101
	2		
	3	1.0B	25
870.0			
	3		
	3		
–10	5	3.5P	19
	3		108
CLAY–brown & gray–very stiff to hard (A-6)	4		
	5	2.5B	20
	5		113
	7		
–15	7	5.1B	17
	6		109
	8		
	8	4.9B	19
	5		111
	5		
–20	9	5.5B	19
857.5			
CLAY–very stiff to hard (A-6)			
	6		
	6		
	8	2.25P	18
	4		110
	6		
–25	8	1.8B	19
	4		114
CLAY–gray–stiff to hard (A-6)	6		
	10	3.0B	18
	7		111
	10		
–30	17	6.0B	18
	4		114
	6		
–35	6	2.0B	18
	3		
	4		
838.0 –40	7	1.75P	20
End Of Boring @ –40.0			
Hollow Stem Augers To –10.0'			
Rotary Drilling To Completion			
10' Of 4.0" Casing Used			
CME Automatic Hammer			

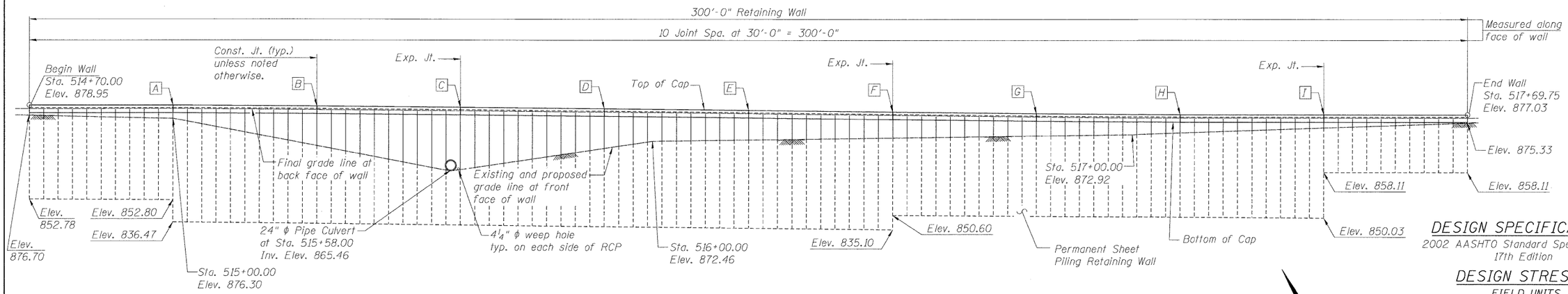
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

LIN ENGINEERING,LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORINGS-2 STRUCTURE NO. 016-W997
	FILE NAME =	CHECKED - ADB	REVISED -		
	PLOT SCALE =	DRAWN - RH	REVISED -		
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S6 OF S6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	81
		CONTRACT NO. 60135		
		ILLINOIS FED. AID PROJECT		

Bench Mark: ½" Iron rod with cap, Sta. 513+52.54, 19.68' Lt., Elev. 881.31.

Existing Structure: None.



ELEVATION

(Looking at front face of wall)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications, 17th Edition

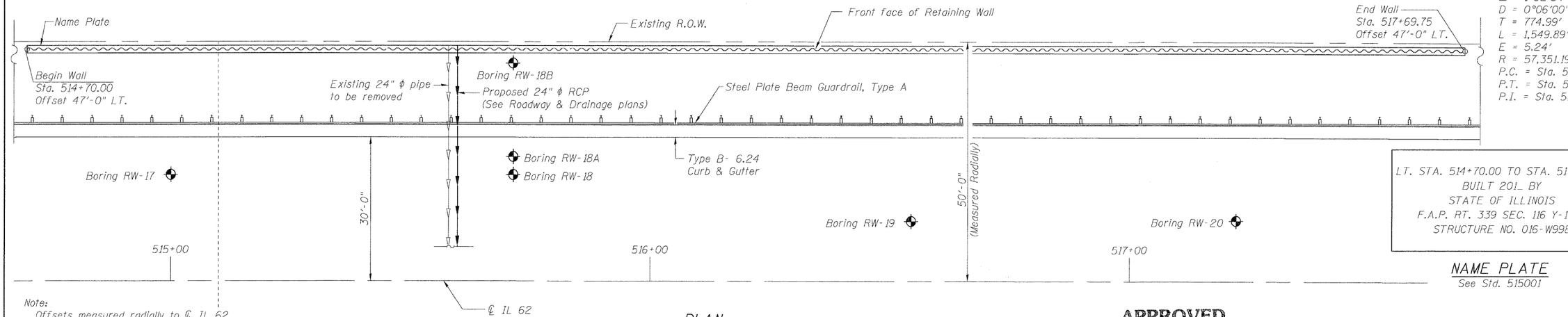
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 38,500 psi (Sheet Piling)
(Gr. 39 AASHTO M202)

CURVE DATA

(Illinois Route 62)
Δ = 1°32'54" (RT)
D = 0°06'00"
T = 774.99'
L = 1,549.89'
E = 5.24'
R = 57,351.19'
P.C. = Sta. 505+12.36
P.T. = Sta. 520+62.25
P.I. = Sta. 512+87.35



Note:
Offsets measured radially to ℄ IL 62 from front face of sheet piling.

PLAN

LT. STA. 514+70.00 TO STA. 517+69.75
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 339 SEC. 116 Y-1-R-1
STRUCTURE NO. 016-W998

NAME PLATE

See Std. 515001

TOP OF CAP DATA

LOCATION	STATION	ELEVATION
A	514+99.98	878.97
B	515+29.95	878.78
C	515+59.93	878.54
D	515+89.90	878.26
E	516+19.88	877.95
F	516+49.85	877.60
G	516+79.83	877.26
H	517+09.80	877.03
I	517+39.78	877.03

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A706 Gr. 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

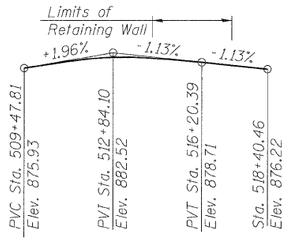
Concrete cap shall be constructed after backfill is in place.

It shall be the Contractor's responsibility to verify the location of the existing underground utilities prior to starting construction.

The Contractor shall take precaution during pile driving operations so as not to damage any proposed and/or existing utilities.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	38.9
Stud Shear Connectors	Each	400
Reinforcement Bars, Epoxy Coated	Pound	3960
Permanent Steel Sheet Piling	Sq. Ft.	10010
Pipe Underdrains for Structures 4"	Foot	301
Geocomposite Wall Drain	Sq. Yd.	46
Porous Granular Embankment, Special	Cu. Yd.	61.0
Name Plates	Each	1



LC = 672.58'

PROFILE GRADE

(along ℄ IL 62)

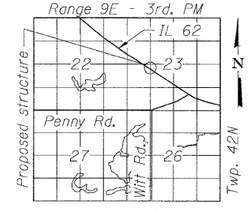
APPROVED
FOR STRUCTURAL ADEQUACY ONLY

D. Carl Pugsley (RD)
ENGINEER OF BRIDGES AND STRUCTURES

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

Michael T. Haley 6-21-2011
Michael T. Haley — Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2012

INDEX OF SHEETS



LOCATION SKETCH

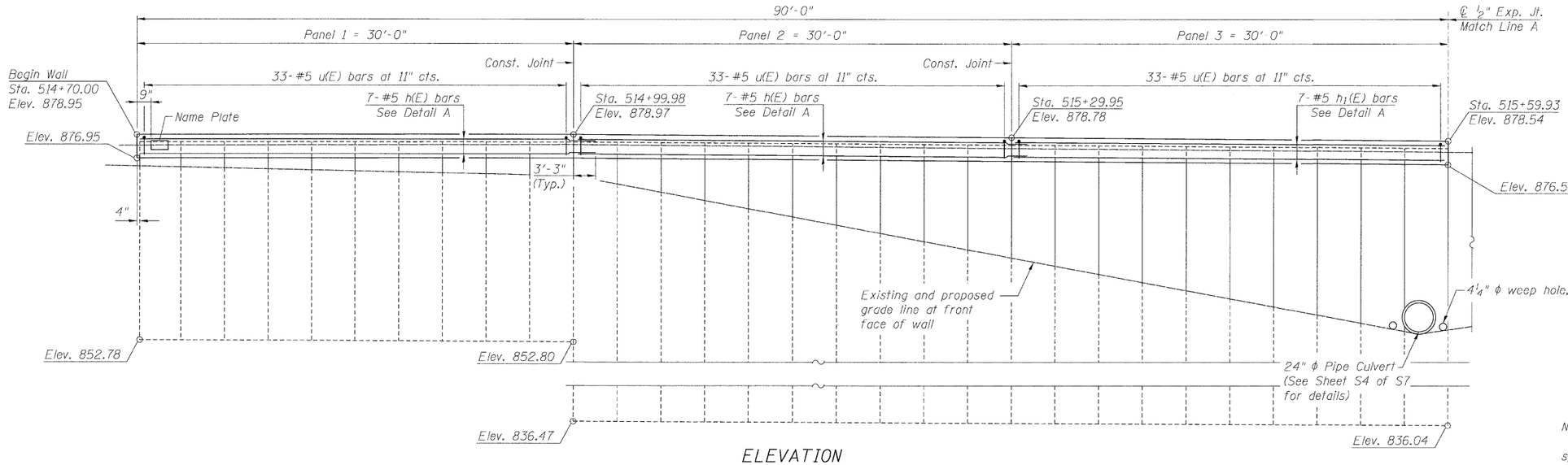
RETAINING WALL NO. 5
STA. 514+70.00 TO STA. 517+69.75

LIN ENGINEERING, LTD. Consulting Engineers, Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED -
		CHECKED - ADB	REVISED -
	PLOT SCALE =	DRAWN - RH	REVISED -
	PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

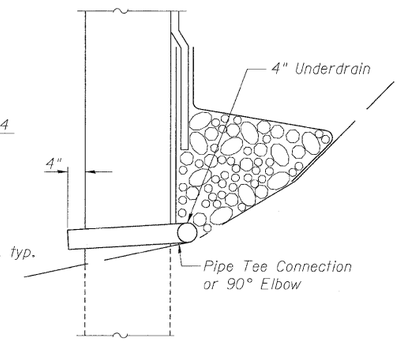
GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-W998
SHEET NO. S1 OF S7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	82
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			



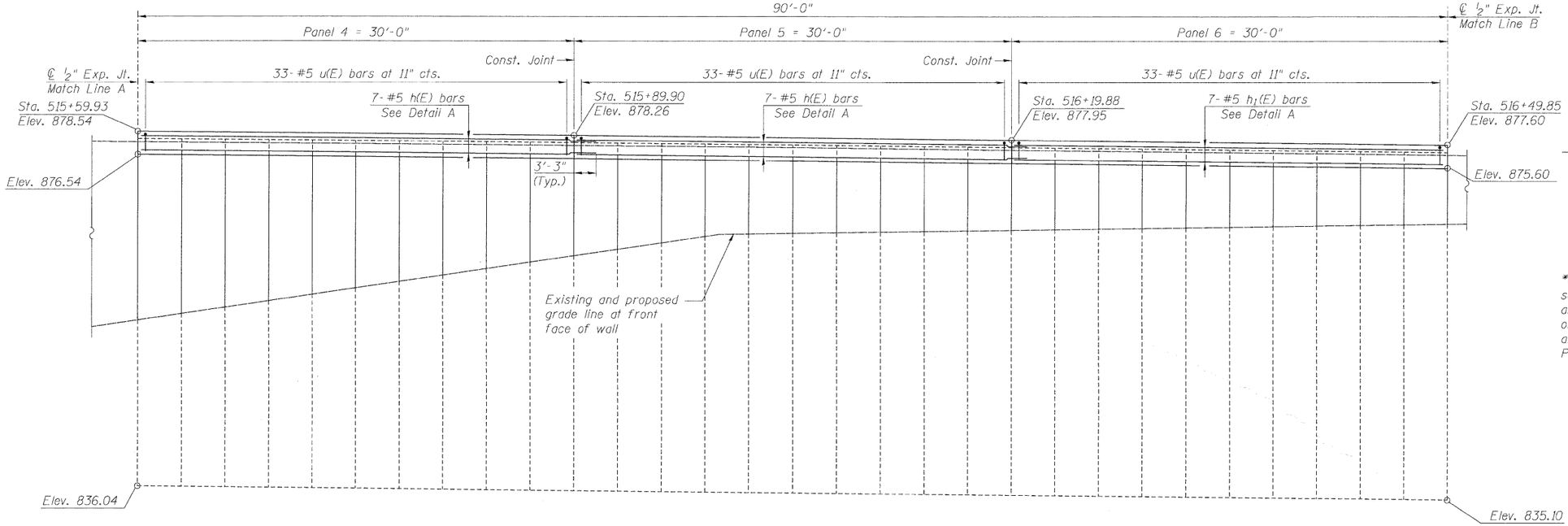
ELEVATION

(Looking at Front Face of Wall)



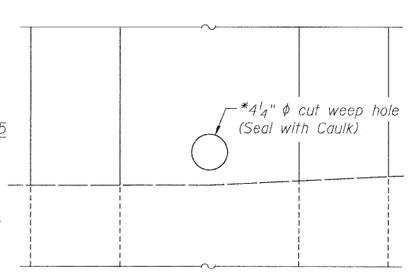
SECTION THRU WEEP HOLE

Note:
Contractor shall furnish and install a concrete splash block approved by the Engineer at the weep hole location. Cost is included with Pipe Underdrains for Structures 4".



ELEVATION

(Looking at Front Face of Wall)



WEEP HOLE ELEVATION

*Caulk for drain shall be silicone caulking adhesive sealer, marketed for outdoor and underwater use, and listed by manufacturer as appropriate for use on PVC and steel surfaces. Surfaces shall be clean and dry prior to application. Cost is included with Pipe Underdrains for Structures 4".

Notes:
See sheet S4 of S7 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.
Horizontal dimensions measured along face of wall.
Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

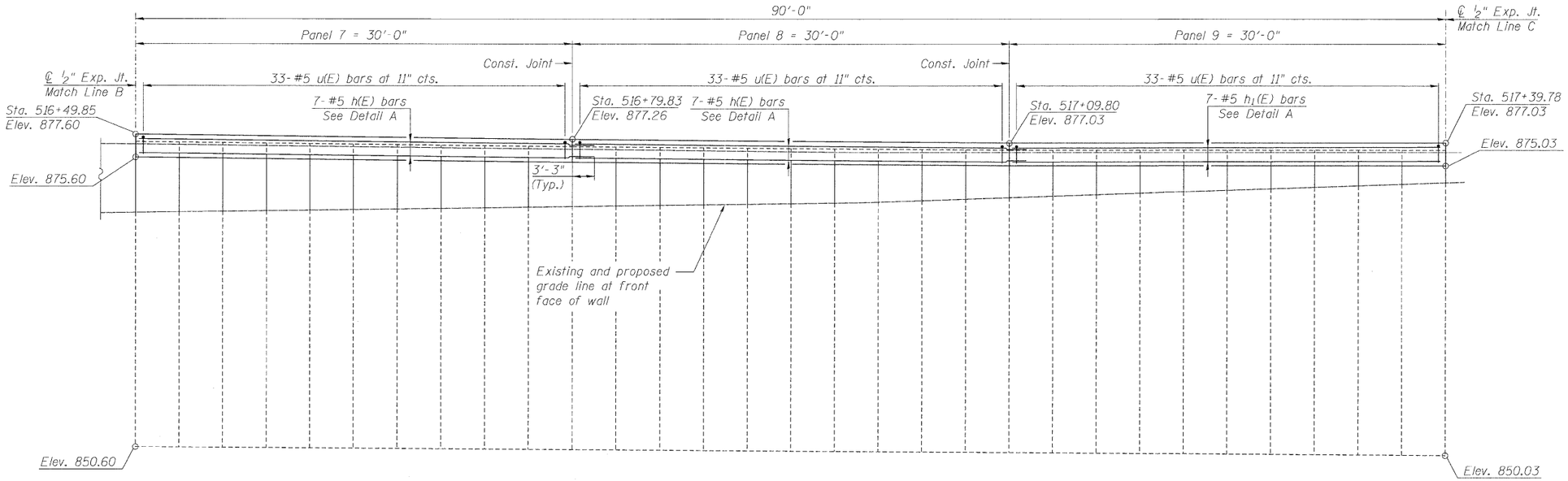
LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

USER NAME =	DESIGNED - ESH	REVISED -
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - RH	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

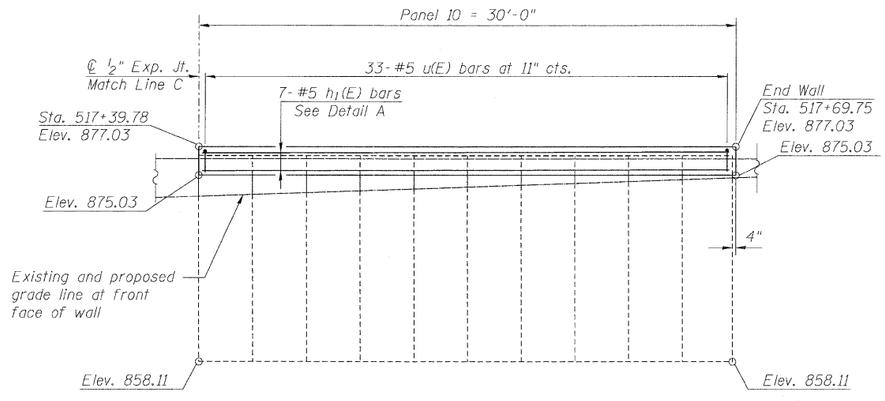
WALL DETAILS-1
STRUCTURE NO. 016-W998
SHEET NO. S2 OF S7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	83
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			



ELEVATION

(Looking at Front Face of Wall)



ELEVATION

(Looking at Front Face of Wall)

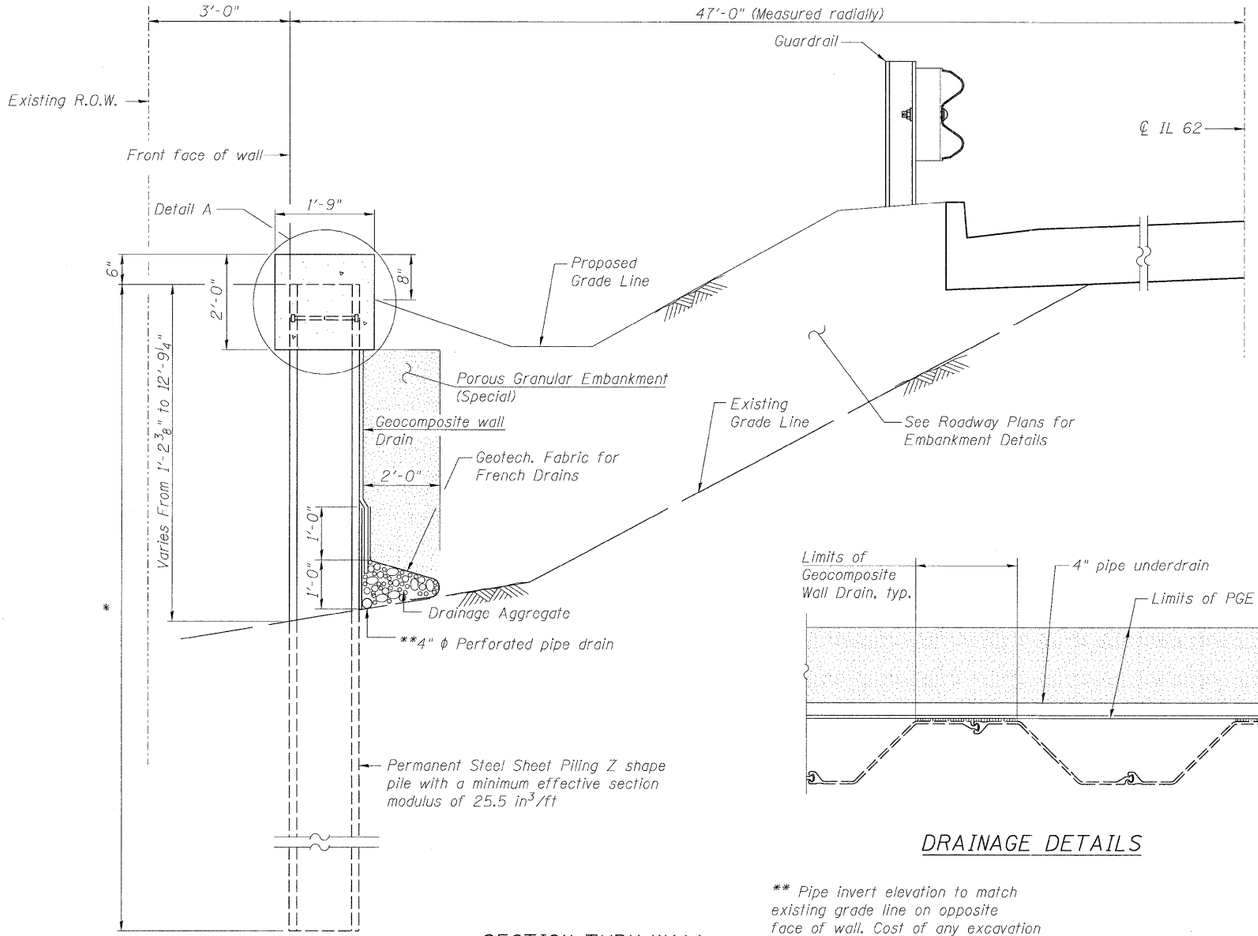
Notes:

See sheet S4 of S7 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.

Horizontal dimensions measured along face of wall.

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

LIN ENGINEERING,LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**WALL DETAILS-2 STRUCTURE NO. 016-W998**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - ADB	REVISED -			339	116 Y-1-R-1	COOK	122	84
	PLOT SCALE =	DRAWN - RH	REVISED -					CONTRACT NO. 60135		
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S3 OF S7 SHEETS			ILLINOIS FED. AID PROJECT		



SECTION THRU WALL

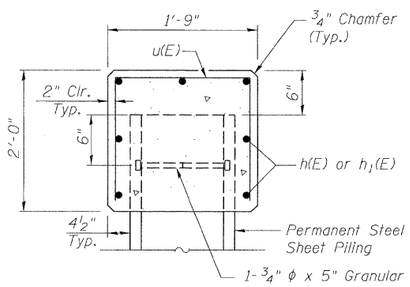
DRAINAGE DETAILS

** Pipe invert elevation to match existing grade line on opposite face of wall. Cost of any excavation required is included with Pipe Underdrains for Structures 4".

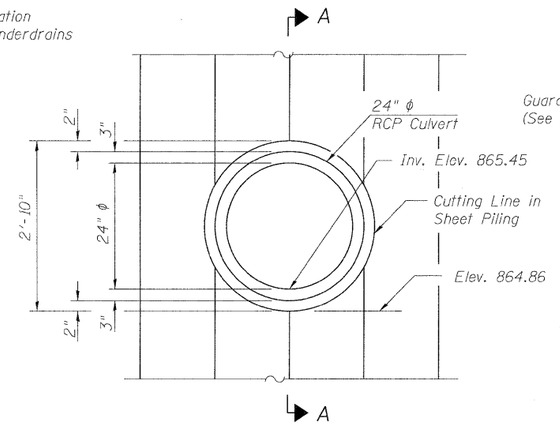
*MINIMUM SHEET PILE HEIGHT

Panel	Height
Panel 1	25'-8"
Panels 2 to 6	42'-0"
Panels 7 to 9	26'-6"
Panel 10	18'-5"

Notes:
Cost of Geotechnical Fabric and Drainage Aggregate are included in the cost of Pipe Underdrain for Structures 4".
Perforated pipe drain shall outlet near station 515+58 thru 4 1/4" cut hole in wall.
Cost of cutting 34" ϕ opening in sheet pile wall is included in the cost of Permanent Steel Sheet Piling.

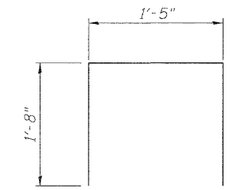


DETAIL A



SECTION THRU PERMANENT SHEET PILING AT PIPE CULVERT

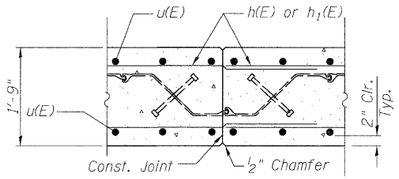
(Contractor shall seal the void around the RCP with approval by the Engineer. Cost included with Permanent Steel Sheet Piling.)



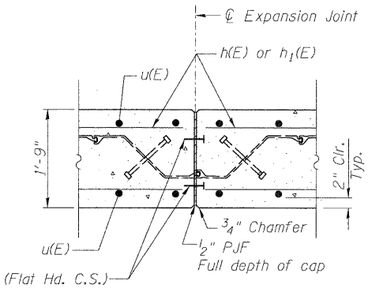
BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	42	#5	33'-1"	——
h_1(E)	28	#5	29'-8"	——
u(E)	330	#5	4'-9"	⊓
Concrete Structures			Cu. Yd.	38.9
Reinforcement Bars, Epoxy Coated			Pound	3960



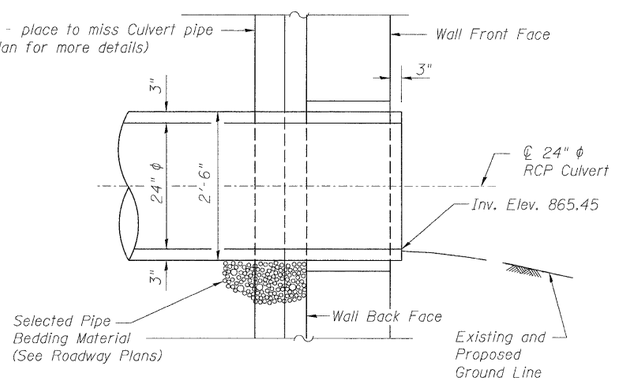
CONSTRUCTION JOINT DETAIL



EXPANSION JOINT DETAIL

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

Notes:
The details for the concrete cap and reinforcement, and the required number of stud shear connectors are based on section PZ-27 sheet piling. If the Contractor chooses to use any other section, then the Contractor shall submit revised concrete cap and reinforcement configuration for approval by engineer. Such changes shall not be cause for additional compensation.



SECTION A-A

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED -
		CHECKED - ADB	REVISED -
	PLOT SCALE =	DRAWN - RH	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL DETAILS-3
STRUCTURE NO. 016-W998
SHEET NO. S4 OF S7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	85
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Arthurst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 3/16/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-17**
Station 515+00
Offset 22.5' Left
Ground Surface Elev. 879.1

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				12.0" SAND & GRAVEL–brown
	4		*103*	878.1
	5			
	6	3.0B	17	
	2		*104*	
	3			CLAY LOAM–dark brown & gray–
–5	5	1.9B	20	stiff to very stiff (A-6) Fill
	3		*99*	
	5			
	6	2.2B	23	CLAY–gray–
				very stiff to hard (A-6)
	5		*104*	
	9			
–10	12	2.9B	20	
				868.6
	1		*90*	TOPSOIL–black–medium stiff
	2			867.1
	4	.075B	31	
	3		*112*	
	4			
–15	7	2.7B	19	CLAY–brown & gray–
				very stiff to hard (A-6)
	8		*113*	
	8			
	11	2.8B	18	
	6		*103*	
	10			
XX –20	14	4.8B	20	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	7			
	10			
	16	1.5P	18	
	4		*109*	
	6			
–25	9	2.3B	19	
	3		*112*	
	5			
	8	2.7B	19	
	3		*106*	
	5			
–30	8	2.3B	21	
	5		*107*	
	7			
–35	10	3.2B	20	
	4		*113*	
	6			
–40	7	2.25B	18	839.1

End Of Boring @ –40.0'
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Arthurst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 3/16/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-18**
Station 515+65
Offset 18.5' Left
Ground Surface Elev. 878.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				12.0" SAND & GRAVEL–brown
	3		*103*	877.2
	4			
	6	3.4B	18	
	3		*99*	
	4			
–5	4	1.4B	21	CLAY LOAM–dark brown & gray–
				stiff to very stiff (A-6) Fill
	3			
	5			
	6	2.25P	27	
	5			
	4			
–10	3	3.75P	18	
	2		*97*	
	3			
	3	1.1B	25	
				865.2
	2			
	2			
–15	3	0.75P	69	TOPSOIL–black–medium stiff
				Total Organic Conent=7.8%
	1			861.7
	1			
	1	0.75P	47	SILTY CLAY with organics–dark brown &
				gray–medium stiff (A-7) Wet
	1		*110*	859.2
	2			
–20	2	1.0B	20	CLAY–gray–stiff to very stiff (A-6)

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4		*112*	
	5			
	7	1.8B	19	
	3		*112*	
	5			
–25	7	1.9B	19	CLAY–gray–stiff to very stiff (A-6)
	4			
	6			
	8	2.0P	18	
	4		*112*	
	6			
–30	10	2.8B	18	
	8		*110*	
	7			
–35	7	2.0B	19	
	5		*109*	
	6			
–40	8	3.6B	20	838.2

End Of Boring @ –40.0'
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

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DATE 4/29/2010
LOGGED BY MR
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-18A**
Station 515+65
Offset 20.0' Left
Ground Surface Elev. 878.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Blind Drill To –13.0'
–5				
–10				
865.2				CLAY–brown & gray– medium stiff (A–6) Wet
–15	ST	0.75P	27	Vane Shear Test @ –16.0' Shear Strength=3517+ psf
859.2	ST		NR	
–20				
–25				
–30				
–35				
–40				End Of Boring @ –19.0 Hollow Stem Augers CME Automatic Hammer

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 5/11/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hand Auger HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-18B**
Station 515+65
Offset 47.0' Left
Ground Surface Elev. 876.1

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	AS	–	33	TOPSOIL–black
875.1				
	AS	1.5P	4	SAND & GRAVEL–brown (Fill)
873.1				
–5	AS	1.75P	20	SILTY CLAY–dark brown– stiff (A–6)
869.1				
–10	AS	1.75P	22	Auger Refusal @ –7.0' End Of Boring Hand Auger
–15				
–20				
–25				
–30				
–35				
XX –40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

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SOIL BORING LOG

PAGE 1 of 1
DATE 3/18/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-19**
Station 516+50
Offset 12.0' Left
Ground Surface Elev. 877.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 875.0 ▼
Upon Completion 870.5 ▽
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
15.0" ASPHALT 3.0" SAND & GRAVEL 6.0" CONCRETE			
875.5	26		
	50/0"		
▼		NP	4
	3		
	3		
–5	4	1.0P	23
CLAY LOAM–dark brown & gray– stiff (A–6) Fill, Wet	2		
▽	2		
	3	1.25P	26
	3		
–10	4 6	1.4B	29
867.0			
	4		
	6 7	2.3B	19
CLAY–brown & gray– very stiff to hard (A–6)	5		
–15	7 10	1.6B	21
	6		
	8 11	2.5B	20
859.5			
CLAY–gray–stiff to very stiff (A–6)	4		
–20	9 13	2.5B	19

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	6		109
	9		
	13	3.8B	20
	4		108
	5		
–25	8	2.2B	21
CLAY–gray–stiff to very stiff (A–6)	3		106
	5		
	6	2.25B	21
	3		106
	6		
–30	7	1.8B	22
	4		108
	6		
	7	2.5B	21
	4		108
	6		
–35	7	2.5B	21
End Of Boring @ –40.0' Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer 837.5	3		106
	5		
–40	7	1.8B	22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)
NR–No Recovery

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SOIL BORING LOG

PAGE 1 of 1
DATE 3/18/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-20**
Station 517+25
Offset 11.5' Left
Ground Surface Elev. 877.1

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a ▼
Upon Completion n/a ▽
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT 6.0" SAND & GRAVEL 10.0" CONCRETE			
875.1	50/2"		
		NP	7
CLAY LOAM–dark brown & gray– stiff (A–6) Fill	3	1.25P	
872.6			
–5	5	1.0P	28
TOPSOIL–black–stiff Wet			
871.1	4		113
	6		
	8	5.1B	18
	5		112
CLAY–brown & gray–hard (A–6)	11		
–10	14	5.2B	17
	7		115
	10		
	12	4.7B	17
	7		109
	9		
–15	14	4.5B	19
	7		112
	10		
	13	6.25B	19
859.1			
CLAY–gray–stiff to very stiff (A–6)	4		107
	6		
–20	8	2.5B	21

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	3		112
	5		
	7	2.4B	18
	4		102
	5	2.4S@	
–25	7	14.1%	23
CLAY–gray–stiff to very stiff (A–6)	3		104
	4		
	6	2.3B	22
	4		112
	5		
–30	7	1.4B	19
	10		
	17		
–35	17	2.0P	10
Gravel seams from –33.5' to –35.0'.			
End Of Boring @ –40.0' Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer 837.1	4		104
	5		
–40	6	1.7B	23

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)
NR–No Recovery

Bench Mark: ½" Iron rod with cap, Sta. 513+52.54, 19.68' Lt., Elev. 881.31.

Existing Structure: None.

DESIGN SPECIFICATIONS

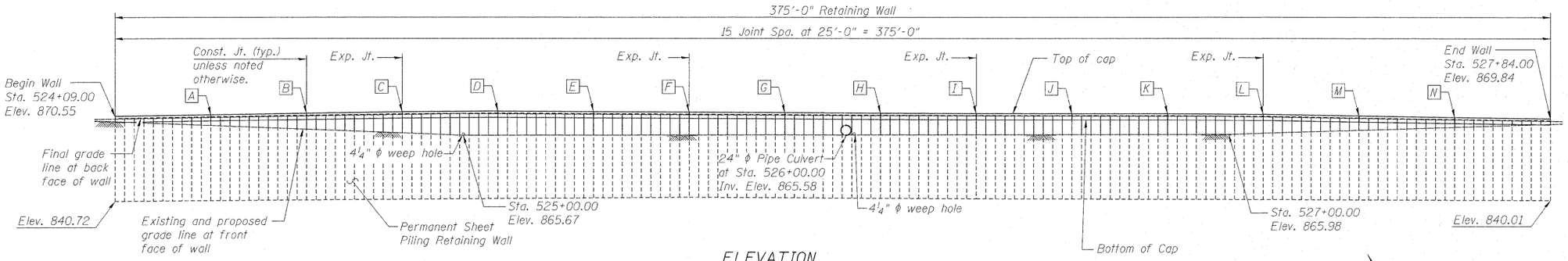
2002 AASHTO Standard Specifications, 17th Edition

DESIGN STRESSES

FIELD UNITS

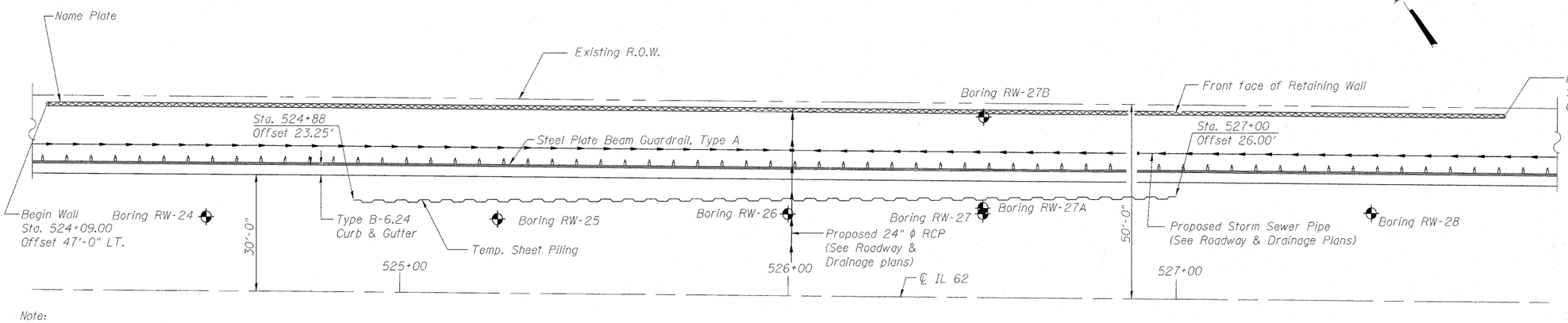
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 38,500 psi (Sheet Piling)
(Cr. 39 AASHTO M 202)

INDEX OF SHEETS



ELEVATION

(Looking at front face of wall)



Note:
Offsets measured to ℄ IL 62 from front face of sheet piling.

PLAN

LT. STA. 524+09.00 TO STA. 527+84.00
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 339 SEC. 116 Y-1-R-1
STRUCTURE NO. 016-W999

NAME PLATE

See Std. 515001

LOCATION SKETCH

TOP OF CAP DATA

LOCATION	STATION	ELEVATION
A	524+34.00	870.90
B	524+59.00	871.25
C	524+84.00	871.60
D	525+09.00	871.78
E	525+34.00	871.65
F	525+59.00	871.53
G	525+84.00	871.40
H	526+09.00	871.28
I	526+34.00	871.18
J	526+59.00	871.12
K	526+84.00	871.10
L	527+09.00	870.95
M	527+34.00	870.54
N	527+59.00	870.17

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Concrete Cap shall be constructed after backfill is in place.

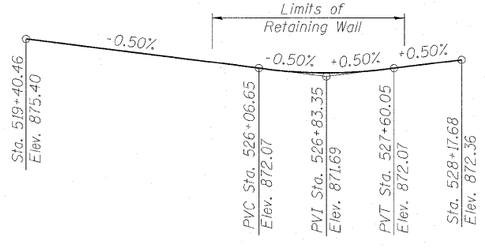
It shall be the Contractor's responsibility to verify the location of the existing underground utilities prior to starting construction.

The Contractor shall take precaution during pile driving operations so as not to damage any proposed and/or existing utilities.

Dewatering may be required behind sheet pile wall in order to install drainage material. Cost shall be included with Permanent Sheet Piling.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	48.6
Stud Shear Connectors	Each	410
Reinforcement Bars, Epoxy Coated	Pound	4810
Permanent Sheet Piling	Sq. Ft.	11000
Pipe Underdrains for Structures 4"	Foot	376
Geocomposite Wall Drain	Sq. Yd.	66
Porous Granular Embankment, Special	Cu. Yd.	87.7
Name Plates	Each	1
Temporary Sheet Piling	Sq. Ft.	5300



PROFILE GRADE

(along ℄ IL 62)

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

Michael J. Haley 10-21-2011
Michael T. Haley Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2012

RETAINING WALL NO. 6

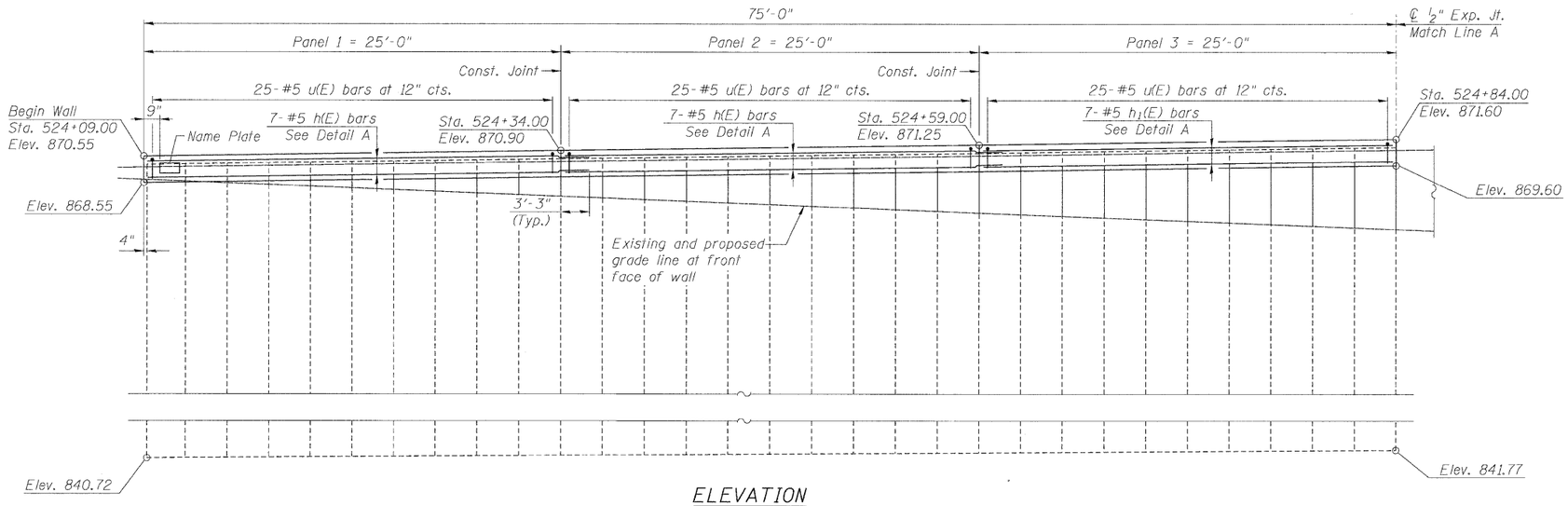
STA. 524+09.00 TO STA. 527+84.00

LIN ENGINEERING, LTD. Consulting Engineers, Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED - MTH 9/30/11	
		CHECKED - ADB	REVISED - MTH 10/21/11	
	PLOT SCALE =	DRAWN - ESH	REVISED -	
	PLOT DATE =	CHECKED - ADB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

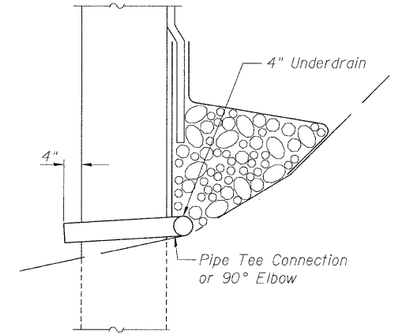
GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-W999
SHEET NO. S1 OF S9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	89
		CONTRACT NO. 60135		
	ILLINOIS FED. AID PROJECT			



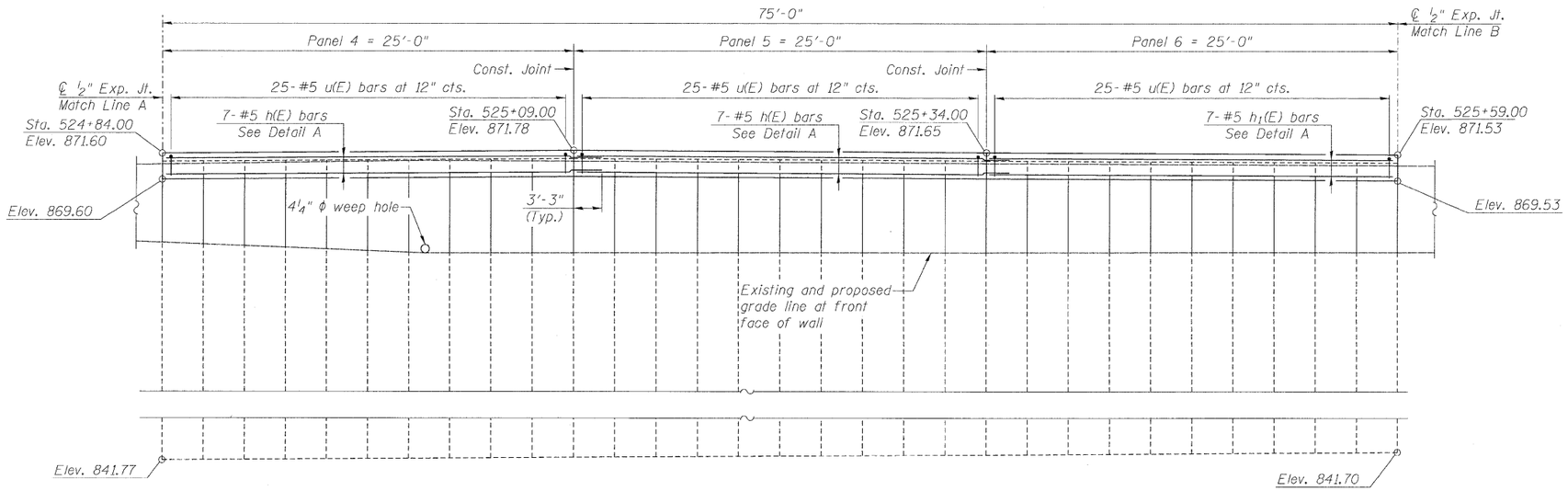
ELEVATION

(Looking at Front Face of Wall)



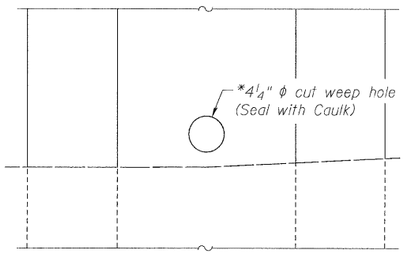
SECTION THRU WEEP HOLE

Note:
Contractor shall furnish and install a concrete splash block approved by the Engineer at the weep hole location, Cost is included with Pipe Underdrains for Structures 4".



ELEVATION

(Looking at Front Face of Wall)

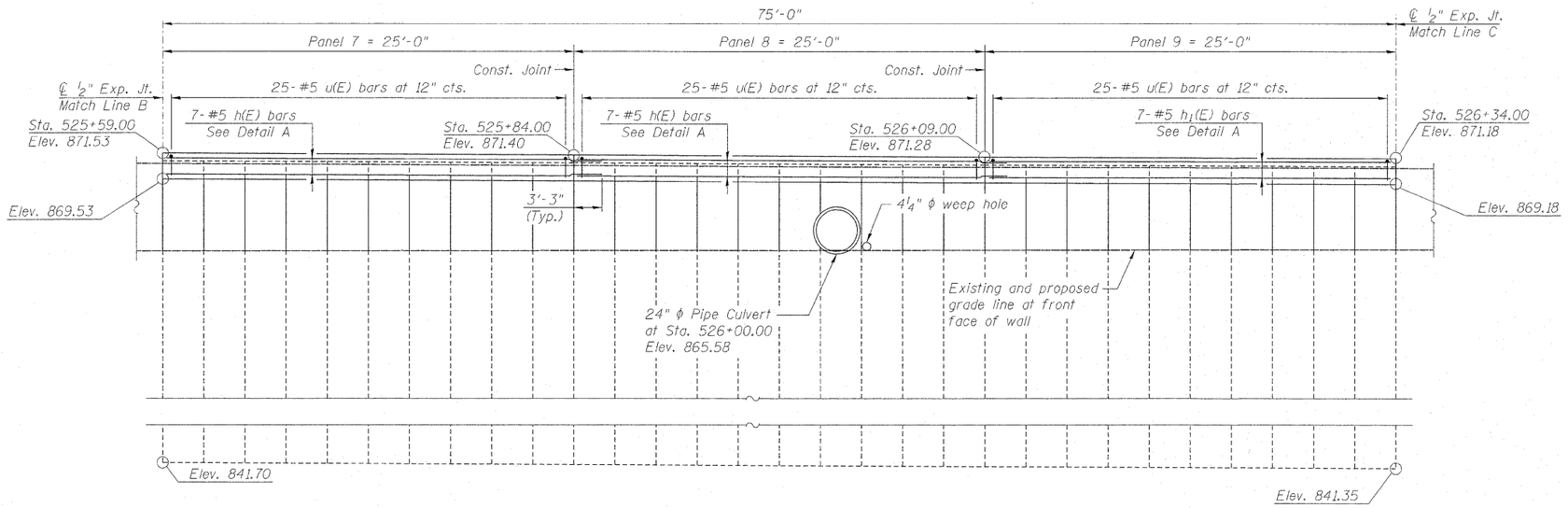


WEEP HOLE ELEVATION

*Caulk for drain shall be silicone caulking adhesive sealer, marketed for outdoor and underwater use, and listed by manufacturer as appropriate for use on PVC and steel surfaces. Surfaces shall be clean and dry prior to application. Cost is included with Pipe Underdrains for Structures 4".

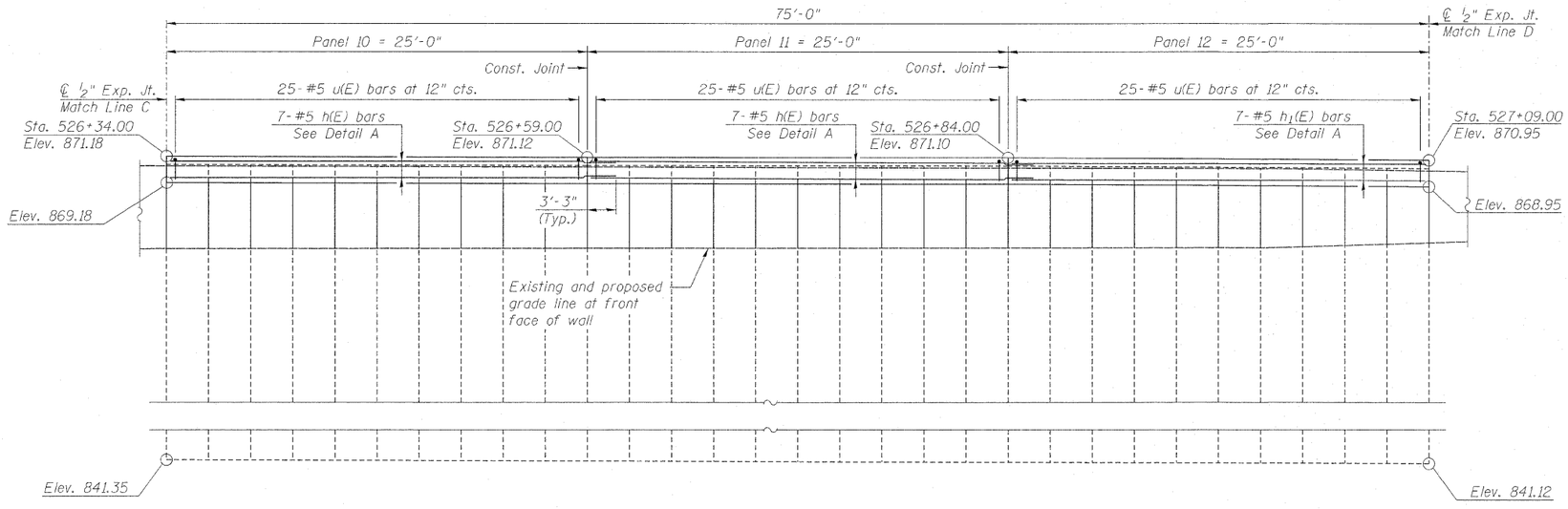
Notes:
See sheet S5 of S9 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.
Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALL DETAILS-1 STRUCTURE NO. 016-W999	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - ADB	REVISED -			339	116 Y-1-R-1	COOK	122	90
	PLOT SCALE =	DRAWN - RH	REVISED -					CONTRACT NO. 60135		
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S2 OF S9 SHEETS			ILLINOIS FED. AID PROJECT		



ELEVATION

(Looking at Front Face of Wall)



ELEVATION

(Looking at Front Face of Wall)

Notes:

See sheet S5 of S9 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.

See sheet S2 of S9 for weep hole details.

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

LIN ENGINEERING,LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED - MTH 10/21/11	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**WALL DETAILS–2 STRUCTURE NO. 016–W999**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - ADB	REVISED -			339	116 Y-1-R-1	COOK	122	91
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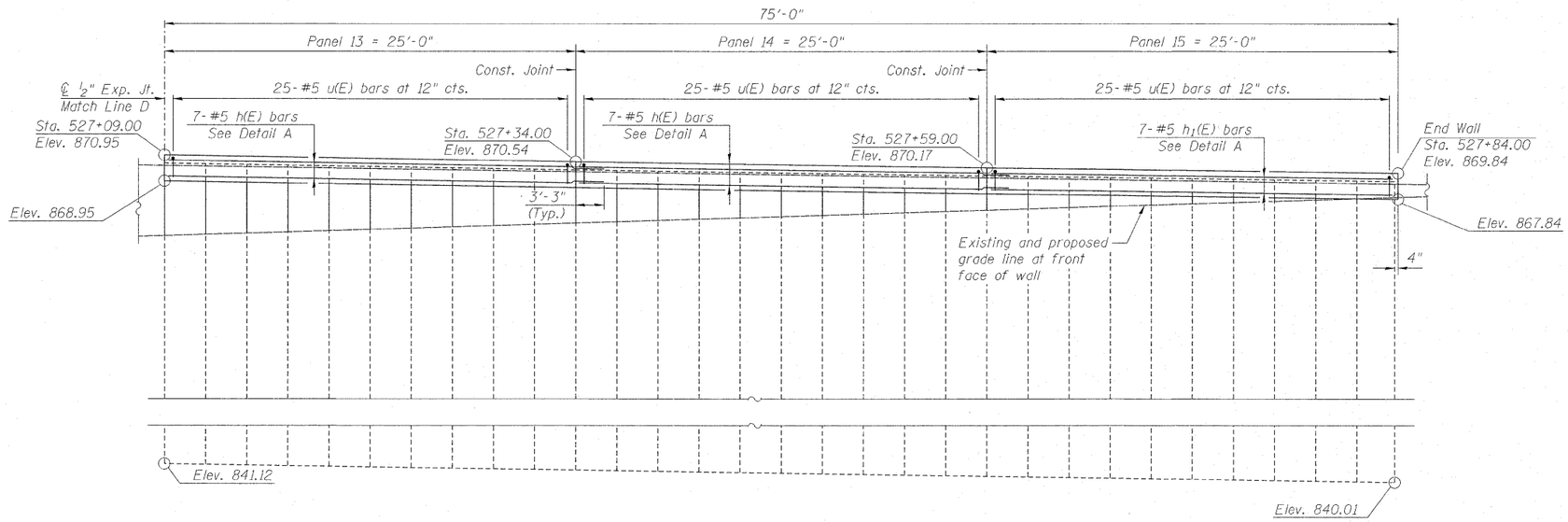
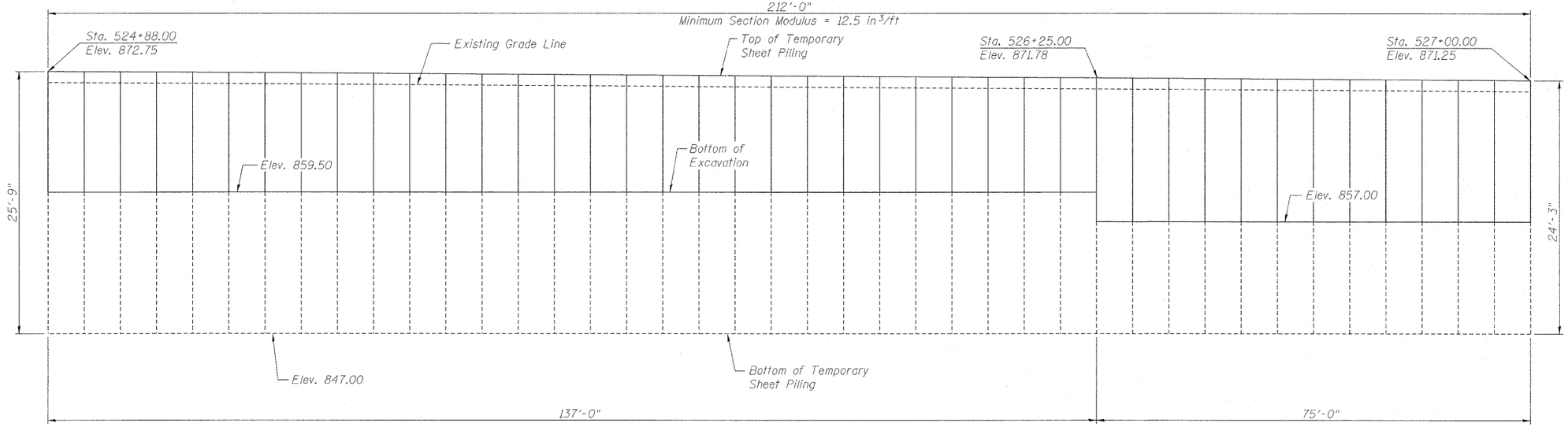
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S3 OF S9 SHEETS			ILLINOIS FED. AID PROJECT		



ELEVATION

(Looking at Front Face of Wall)



TEMPORARY SHEET PILING

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.

Notes:

See sheet S5 of S9 for Bill of Material, Section Thru Wall, Wall Joint Details and Detail A.

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED - MTH 9/30/11	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**WALL DETAILS-3 STRUCTURE NO. 016-W999**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - ADB	REVISED -			339	116 Y-1-R-1	COOK	122	92
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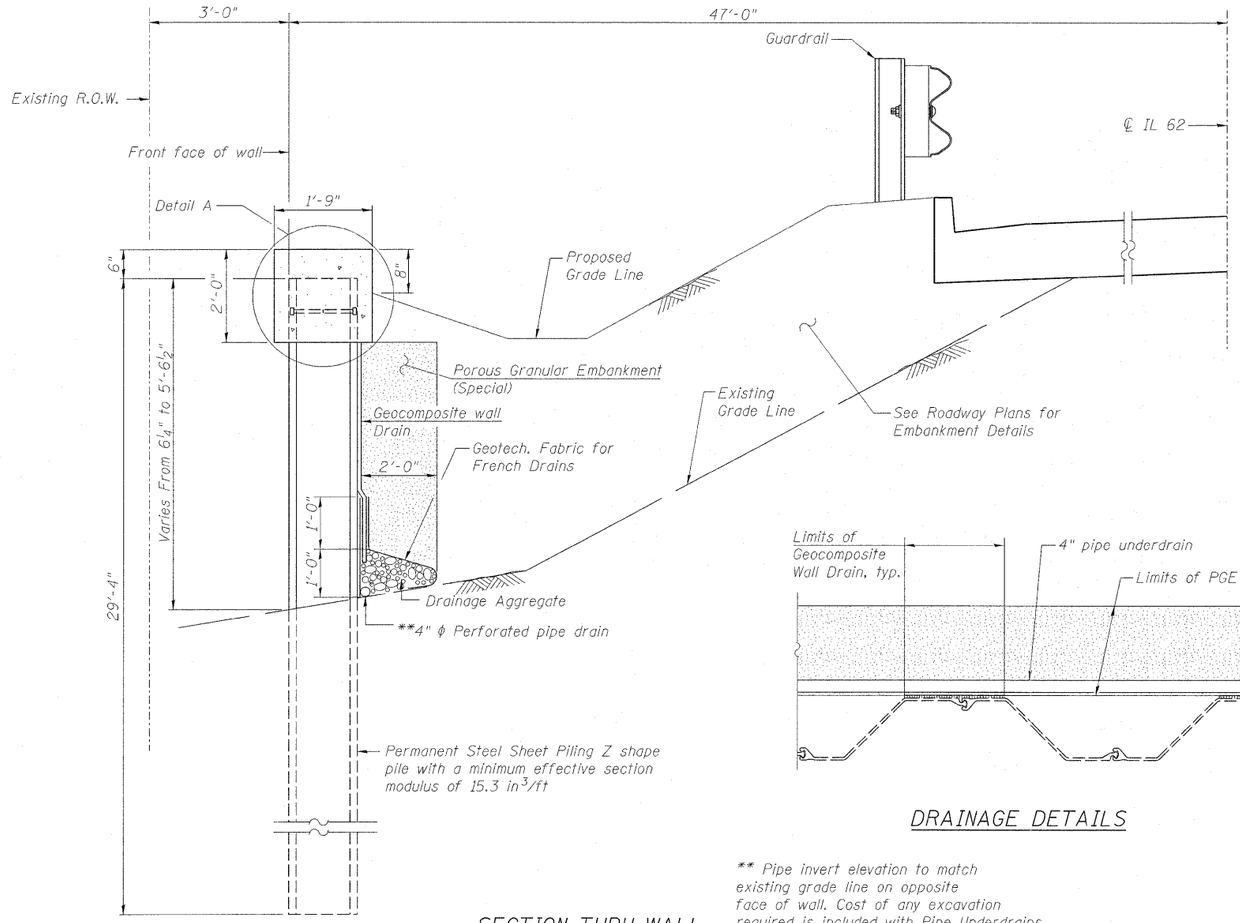
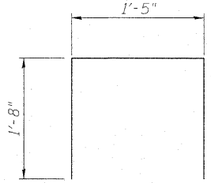
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S4 OF S9 SHEETS			ILLINOIS FED. AID PROJECT		



SECTION THRU WALL

DRAINAGE DETAILS

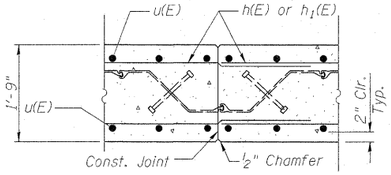
** Pipe invert elevation to match existing grade line on opposite face of wall. Cost of any excavation required is included with Pipe Underdrains for Structures 4".



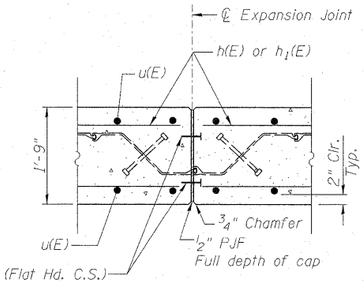
BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	70	#5	28'-1"	——
h_1(E)	35	#5	24'-8"	——
u(E)	375	#5	4'-9"	⊓
Concrete Structures			Cu. Yd.	48.6
Reinforcement Bars, Epoxy Coated			Pound	4810



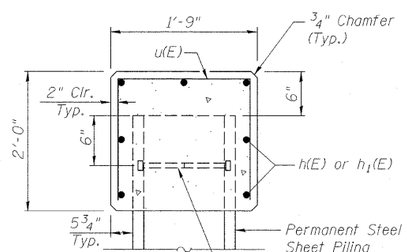
CONSTRUCTION JOINT DETAIL



EXPANSION JOINT DETAIL

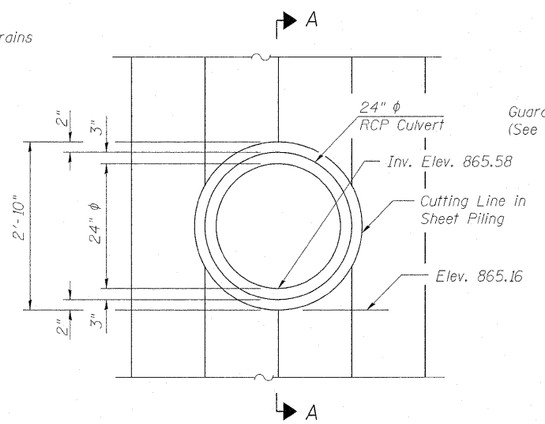
Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

Notes:
The details for the concrete cap and reinforcement, and the required number of stud shear connectors are based on section PZ-22 sheet piling. If the Contractor chooses to use any other section, then the Contractor shall submit revised concrete cap and reinforcement configuration for approval by engineer. Such changes shall not be cause for additional compensation.



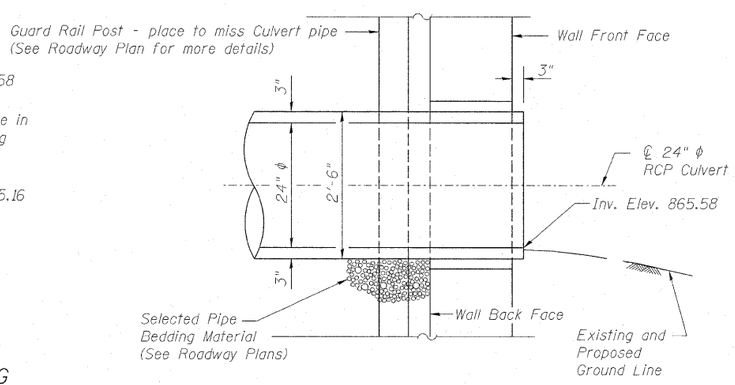
DETAIL A

Notes:
Cost of Geotechnical Fabric and Drainage Aggregate are included in the cost of Pipe Underdrain for Structures 4".
Perforated pipe drain shall outlet near stations 525+00 and 526+00 thru 4¼" cut hole in wall.
Cost of cutting 34" ϕ opening in sheet pile wall is included in the cost of Permanent Steel Sheet Piling.



SECTION THRU PERMANENT SHEET PILING AT PIPE CULVERT

(Contractor shall seal the void around the RCP with approval by the Engineer. Cost included with Permanent Steel Sheet Piling.)



SECTION A-A

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	USER NAME =	DESIGNED - ESH	REVISED - MTH 10/21/11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALL DETAILS–4 STRUCTURE NO. 016–W999	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - ADB	REVISED -			339	116 Y-1-R-1	COOK	122	93
	PLOT SCALE =	DRAWN - RH	REVISED -					CONTRACT NO. 60I35		
	PLOT DATE =	CHECKED - ADB	REVISED -		SHEET NO. S5 OF S9 SHEETS			ILLINOIS FED. AID PROJECT		

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(630) 355-2838

SOIL BORING LOG

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DATE 3/12/2010
LOGGED BY MD
GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-24**
Station 524+50
Offset 19.0' Left
Ground Surface Elev. 870.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 862.5 ▼
Upon Completion n/a ▽
After ____ Hrs. ▽

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
869.7				10.0" CONCRETE
	3		*113*	
	3			
	6	2.6B	18	CLAY to CLAY LOAM–dark brown & gray spotted black–stiff to very stiff (A–6) Fill
	2		*103*	
	3			
–5	5	1.9B	21	
865.0				
	2		*83*	TOPSOIL–black
	2			
	5	1.0B	32	
▼862.5				
	1		*88*	SILTY CLAY–dark brown & gray– medium stiff (A–6) Wet
	2			
–10	4	0.6B	32	
860.0				
	3		*107*	
	3			
	6	2.9B	20	CLAY–brown & gray– very stiff (A–6)
	2		*106*	
	4			
–15	6	2.1B	21	
855.0				
	3		*112*	
	5			
	8	2.3B	18	CLAY–gray–stiff to very stiff (A–6)
	4		*110*	
	6			
–20	8	3.5B	18	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	3		*110*	CLAY–gray–stiff to very stiff (A–6)
	5			
	8	2.2B	20	
	3		*106*	
	4			
–25	6	1.9B	22	
	2		*105*	
	3			
	5	2.0B	22	
	2		*112*	
	3			
–30	6	1.1B	19	
	3		*104*	
	4			
–35	7	1.5B	23	
	2		*106*	End Of Boring @ –40.0 Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer
	3			
830.5 –40	6	1.5B	22	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Arnherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

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GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-25**
Station 525+25
Offset 19.0' Left
Ground Surface Elev. 872.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a ▽
Upon Completion n/a ▽
After ____ Hrs. ▽

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
871.1				9.0" CONCRETE
	3		*107*	
	3			
	5	3.6B	18	CLAY to CLAY LOAM–dark brown & gray spotted black–stiff to very stiff (A–6) Fill
	5		*104*	
	5			
–5	5	3.0B	21	
	3		*96*	CLAY–gray–stiff to very stiff (A–6)
865.0				
	3			
	5	1.5B	24	
	2		*84*	SILTY CLAY–dark brown, gray & black– stiff (A–6) Wet
	2			
–10	4	1.7B	35	
861.5				
	2		*107*	CLAY–brown & gray– very stiff (A–6)
	5			
	7	2.5B	20	
859.0				
	4		*107*	
	6			
–15	6	1.9B	21	
	4		*112*	CLAY–gray–stiff to very stiff (A–6)
	6			
	8	3.5B	18	
	3		*108*	End Of Boring @ –40.0 Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer
	6			
–20	9	3.0B	20	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	3		*112*	
	4			
	6	1.8B	19	
	2		*108*	
	3			
–25	5	1.6B	22	
	3		*109*	
	3			
	6	1.9B	20	
	3			
–30	8	–	23	
	3		*104*	
	3			
–35	6	1.7B	23	
	3		*108*	
	3			
832.0 –40	6	1.6B	21	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

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SOIL BORING LOG

PAGE 1 of 1
DATE 3/9/2010
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GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. **RW-26**
Station 526+00
Offset 21.0' Left
Ground Surface Elev. 871.4

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
870.5				10.0" CONCRETE
	3		107	
	5			
	6	3.8B	19	CLAY to CLAY LOAM–brown–stiff to very stiff (A–6) Fill
	4		109	
	6			
–5	8	3.25P	23	Drillers Observation: Unknown Obstruction @ –5.0'.
	2		105	
	3			
	5	1.25P	24	
863.4				
	3		76	
	4			TOPSOIL–black
–10	5	1.8B	41	*Total Organic Conent=6.5%*
860.9				
	2		116	CLAY–brown & gray–very stiff (A–6)
	3			
	7	3.1B	15	
858.4				
	4		117	
	4			
–15	7	2.75B	16	
	7			CLAY–gray–stiff to very stiff (A–6)
	9			
	11	1.5P	22	
	6		115	
	9			
–20	13	3.0B	17	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	3			CLAY–gray–stiff to very stiff (A–6)
	4			
	8	3.5P	20	
	5		109	
	8			
–25	11	3.8B	20	
	3		105	
	4			
	5	1.6B	22	
	3		103	
	4			
–30	5	1.6B	23	
	3		104	
	4			
–35	6	1.7B	23	
	3		105	
	3			
–40	5	1.0B	22	End Of Boring @ –40.0' Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer
831.4				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

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SOIL BORING LOG

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GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. **RW-27**
Station 526+50
Offset 21.5' Left
Ground Surface Elev. 871.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
870.3				10.0" CONCRETE
	3		106	
	4			
	6	3.4B	19	CLAY to CLAY LOAM–brown–stiff to very stiff (A–6) Fill
	3		99	
	4			
–5	5	1.9B	24	
865.7				
	3		79	
	4			TOPSOIL–black
	7	1.6B	34	
863.2				
	3		76	
	3			SILTY CLAY–dark brown & gray–medium stiff (A–6/A–7) Wet
–10	3	0.7B	42	
860.2				
	4		112	CLAY–brown & gray–stiff (A–6)
	4			
	8	1.8B	18	
858.2				
	3		112	
	5			
–15	7	1.7B	18	
	4		112	CLAY–gray–stiff to hard (A–6)
	7			
	11	2.3B	19	
	5		116	
	8			
–20	11	2.25B	16	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	4		111	CLAY–gray–stiff to hard (A–6)
	6			
	9	2.25B	19	
	2		107	
	6			
–25	11	4.2B	20	
	4		109	
	6			
	9	2.3B	20	
	6			
	6			
–30	8	1.0P	24	
	3		106	
	4			
–35	6	1.7B	22	
	4		104	
	5			
–40	7	1.25B	23	End Of Boring @ –40.0' Hollow Stem Augers To –10.0' Rotary Drilling To Completion 10' Of 4.0" Casing Used CME Automatic Hammer
831.2				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

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SOIL BORING LOG

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GSI JOB No. 09177

ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-27A**
Station 526+50
Offset 23.0' Left
Ground Surface Elev. *871.2*

Surface Water Elev. *n/a*
Stream Bed Elev. *n/a*
Groundwater Elevation:
First Encounter *n/a*
Upon Completion *n/a*
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Blind Drill To –8.0'							
–5				–25			
863.2							
Vane Shear Test @ –9.0' Shear Strength=1581 psf							
SILTY CLAY–dark brown & gray– medium stiff (A-6/A-7) Wet							
–10				–30			
860.2	ST	0.5P	42				
End Of Boring @ –11.0 Hollow Stem Augers CME Automatic Hammer							
–15				–35			
–20				–40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR–No Recovery

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ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-27B**
Station 526+50
Offset 46.5' Left
Ground Surface Elev. *867.3*

Surface Water Elev. *n/a*
Stream Bed Elev. *n/a*
Groundwater Elevation:
First Encounter *n/a*
Upon Completion *n/a*
After ____ Hrs. ____

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL–black							
866.3	AS	0.5P	32				
	AS	2.25P	23				
SILTY CLAY–brown & gray– very stiff (A-6)							
–5	AS	2.25P	21	–25			
861.3							
	AS	0.75P	40				
ORGANIC CLAY–dark brown, gray & black–medium stiff (A-7/A-8) Wet							
–10	AS	0.5P	49	–30			
856.8							
SILTY CLAY–gray– medium stiff (A-6) Wet	AS	0.5P	26				
852.3 –15	AS	0.75P	24	–35			
End Of Boring @ –15.0' Hand Auger							
–20				–40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
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NR–No Recovery

LIN ENGINEERING,LTD.
Consulting Engineers
Chatham, Illinois

USER NAME =	DESIGNED - ESH	REVISED -
	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - RH	REVISED -
PLOT DATE =	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS-3
STRUCTURE NO. 016-W999
SHEET NO. 58 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	96
		CONTRACT NO. 60135		
	ILLINOIS	FED. AID PROJECT		

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SOIL BORING LOG

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GSI JOB No. 09177

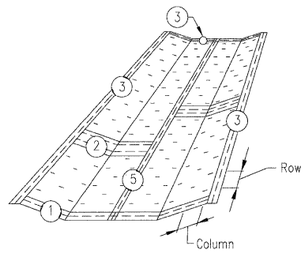
ROUTE FAP 339 (Il. Route 62) DESCRIPTION Il. Route 62 Widening (PTB 153-10) IDOT Job No. D-91-022-10
SECTION 116 Y-1-R-1 LOCATION S 1/2, SEC. 23, TWP. 42N, RNG. 9E, 3rd PM, Barrington Township
COUNTY COOK DRILLING METHOD Hollow Stem Auger/ Rotary HAMMER TYPE CME Automatic
STRUCT. NO. –
Station –
BORING NO. **RW-28**
Station 527+50
Offset 22.5' Left
Ground Surface Elev. 871.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 867.2 ▼
Upon Completion n/a ▽
After ____ Hrs. ____ ▽

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				16.0" CONCRETE, 8.0" CRUSHED STONE
	50/5"			
869.2				
		NP	6	CLAY to CLAY LOAM–dark brown–very stiff (A–6) Fill
	5		*109*	
	4			
–5	3	2.7B	18	
865.7				
	2		*88*	SILTY CLAY–dark brown & gray–stiff (A–6) Wet
	2			
	4	1.1B	32	
863.2				
	3		*118*	
	4			CLAY–brown & gray–hard (A–6)
–10	7	5.0B	18	
860.7				
	3		*109*	
	5			
	7	2.4B	20	
	3		*112*	CLAY–gray–stiff to very stiff (A–6)
	5			
–15	7	2.6B	19	
	3		*119*	
	4			
	6	1.1B	15	
	3		*119*	
	4			
–20	6	1.0B	15	
	2		*105*	
	3			
	4	1.1B	22	
	3			
	3			
–25	6	–	25	
	2		*114*	CLAY–gray–stiff to very stiff (A–6)
	4			
	5	1.2B	18	
	3		*107*	
	5			
–30	7	1.7B	21	
	4		*106*	
	4			
–35	6	1.4B	22	
	3		*107*	
	5			
831.2 –40	7	1.3B	21	

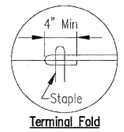
End Of Boring @ –40.0'
Hollow Stem Augers To –10.0'
Rotary Drilling To Completion
10' Of 4.0" Casing Used
CME Automatic Hammer

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer) ST–Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)
NR–No Recovery

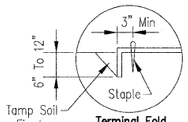


NOTES:

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 6r 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.

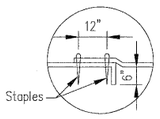


Terminal Fold
Jute Mesh Only

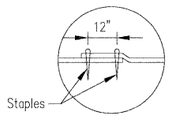


Terminal Fold
Excelsior Blanket
Erosion Control Paper

DETAIL 1

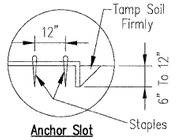


Junction Slot
Jute Mesh
Erosion Control Paper



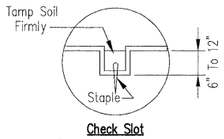
Junction Slot
Excelsior Blanket

DETAIL 2



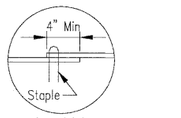
Anchor Slot
Jute Mesh
Excelsior Blanket
Erosion Control Paper

DETAIL 3



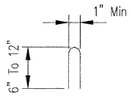
Check Slot
Erosion Control Paper

DETAIL 4



Lap Joint
Jute Mesh
Erosion Control Paper
Excelsior Blanket Shall Be Butted Together

DETAIL 5



STAPLE DETAIL

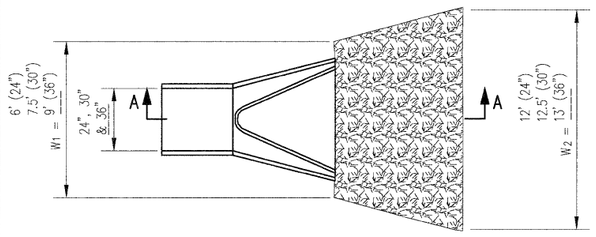
EROSION BLANKET INSTALLATION DETAILS

Date
Designed — M. GUNNARS — 2/05
Drawn —
Checked —
Approved —

NRCS Natural Resources Conservation Service, United States Department of Agriculture

File No. IL-ENG-61
Drawing No.
Sheet 1 of 1

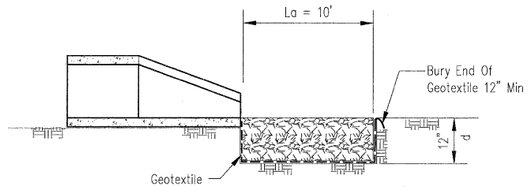
Pipe Outlet To Flat Area
No Well-Defined Channel



PLAN

NOTES:

1. The rock riprap shall meet IDOT requirements for Gradation No. __3___ , Quality Designation "A" or as designated by engineer.
2. Geotextile (non-woven) minimum criteria:
   - Weight of Geotextile (oz/sq.yd.)_____6
   - Tensile strength (lb) ASTM D 4632_____180
   - Elongation at failure (%) ASTM D 4632_____≥ 50
   - Puncture (lb) ASTM D 4833_____80
   - Ultraviolet light (% residual tensile strength) ASTM D 4355_____min 70
   - Apparent opening size (AOS) ASTM D 4751_____max 40 sieve
   - Permittivity sec^{-1} ASTM D 4491_____min 0.70
3. Any geotextile splices shall overlap a minimum of 18 inches, with upstream or upslope geotextile overlapping the abutting downslope geotextile.
4. Apron width W_1 shall be at least 3 times the culvert pipe diameter. Apron width W_2 shall be at least to L_a plus the pipe diameter.
5. Rock thickness d shall be at least 1.5 times the riprap D_{100} size.
6. Apron length L_a and rock riprap shall be sized according to Illinois Urban Manual Rock Outlet Protection standard 910 minimum L_a = 10 ft.



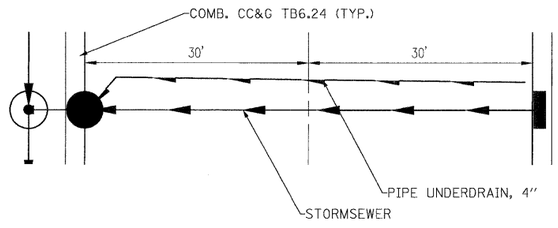
SECTION A–A

PIPE OUTLET TO FLAT AREA

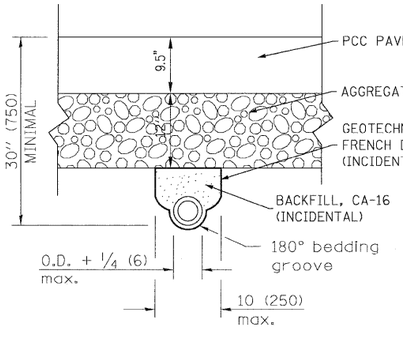
Date
Designed — M. GUNNARS — 3/10
Drawn —
Checked —
Approved —

NRCS Natural Resources Conservation Service, United States Department of Agriculture

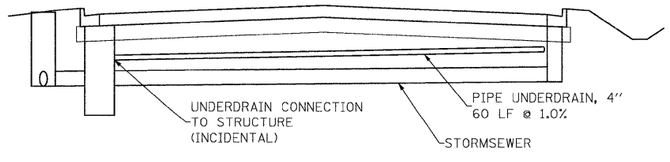
File No. IL-ENG-44
Drawing No.
Sheet 1 of 1



PLAN VIEW



TRENCH FOR PIPE UNDERDRAINS



SECTION VIEW

PIPE UNDERDRAINS

SCALE: N.T.S.

FILE NAME = ...\D160135-sht-details1.dgn	Primera	DESIGNED NS	REVISED -
		DRAWN RJD	REVISED -
		CHECKED RJD	REVISED -
		DATE JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
MISCELLANEOUS DETAILS

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

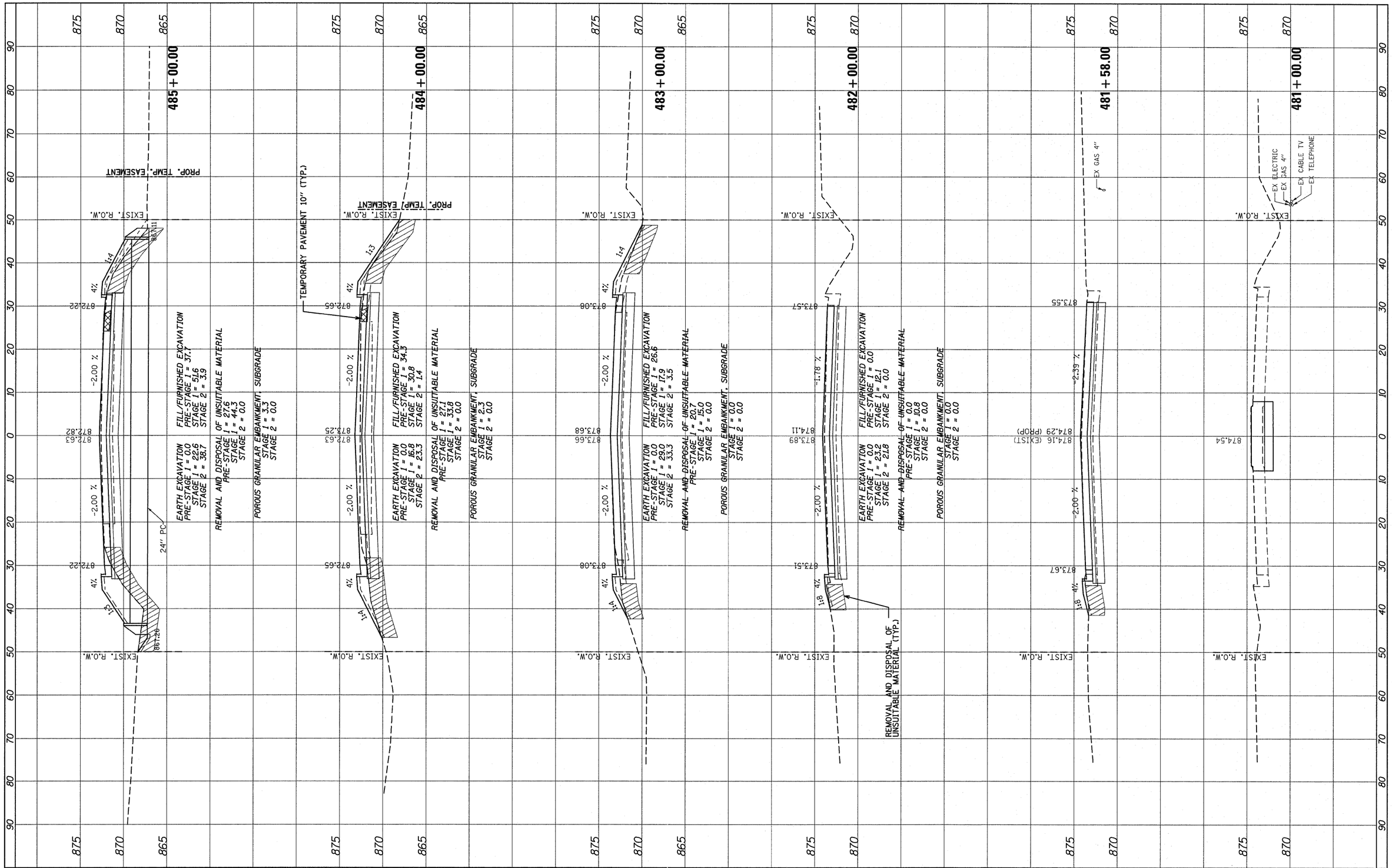
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	98
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			

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

AUTOCAD2005

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 = *SCALE*	CHECKED - RJD	REVISED -
	PLOT DATE = *DATE*	DATE - JUNE 30, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

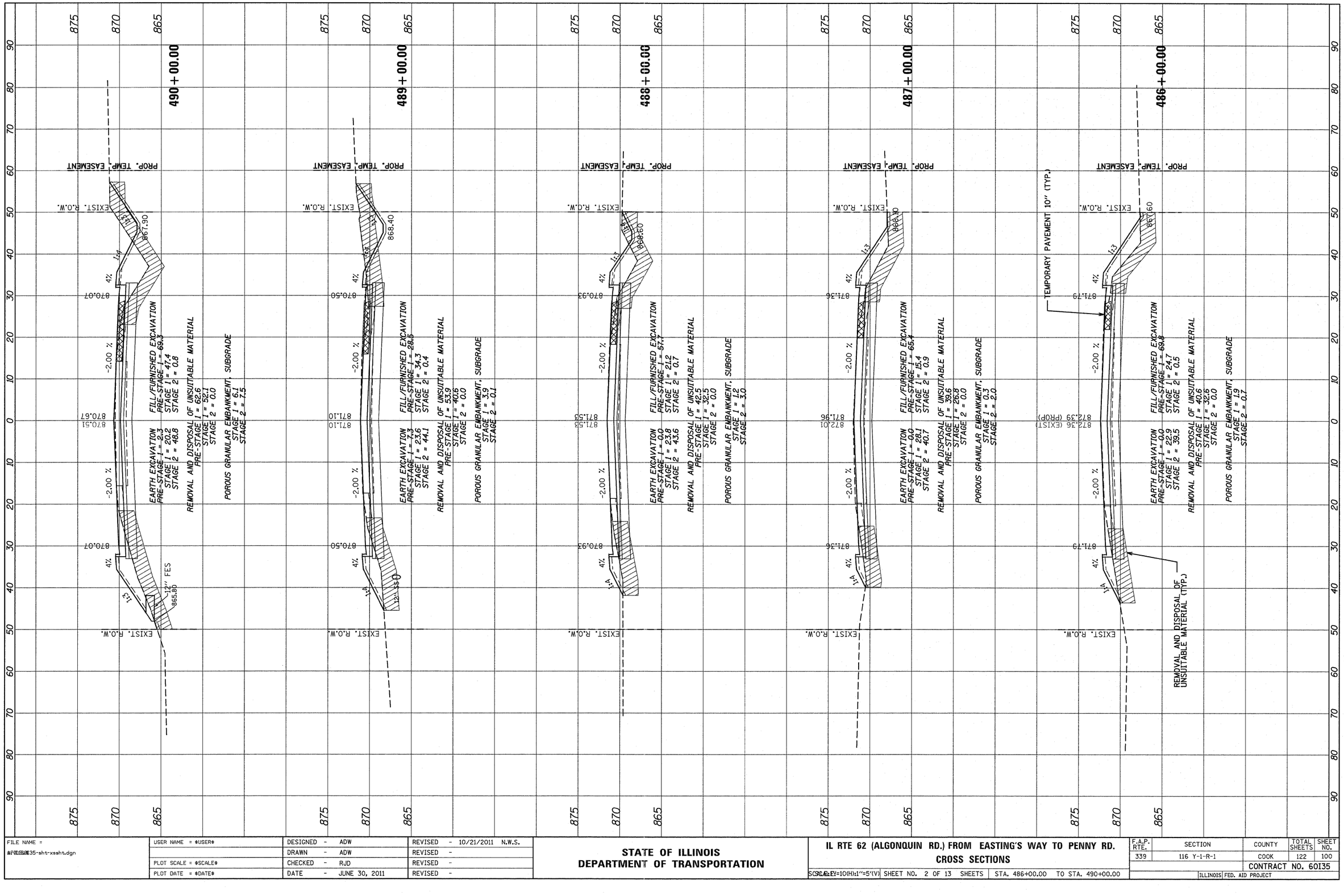
IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
CROSS SECTIONS

SCALE: H=10(H):1"=5'(V) | SHEET NO. 1 OF 13 SHEETS | STA. 481+00.00 TO STA. 485+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	99
		CONTRACT NO. 60135		
	ILLINOIS	FED. AID PROJECT		

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

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



FILE NAME = #NAME#	USER NAME = $USER$	DESIGNED - ADW	REVISED - 10/21/2011 N.W.S.	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		DRAWN - ADW	REVISED -	
	PLOT SCALE = $SCALE$	CHECKED - RJD	REVISED -	
	PLOT DATE = $DATE$	DATE - JUNE 30, 2011	REVISED -	

IL RTE 62 (ALGONQUIN RD.) FROM EASTING'S WAY TO PENNY RD.
CROSS SECTIONS

SCALE: V=10(H):1"=5'(V) | SHEET NO. 2 OF 13 SHEETS | STA. 486+00.00 TO STA. 490+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	100
		CONTRACT NO. 60I35		
	ILLINOIS FED. AID PROJECT			