08-03-2018 LETTING ITEM 001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	1
	ILLINOIS	CONTRACT NO. 46904		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

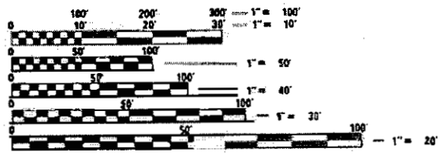
PROPOSED
HIGHWAY PLANS

ELDON HAZLET STATE PARK ENTRANCE ROAD
SECTION ELDON HAZLET 2018
CULVERT REPLACEMENTS
CLINTON COUNTY

C-30-019-18
IDNR PROJECT 4-18-030

INDEX OF SHEETS

FOR LIST OF STANDARDS, SEE SHEET NO. 2

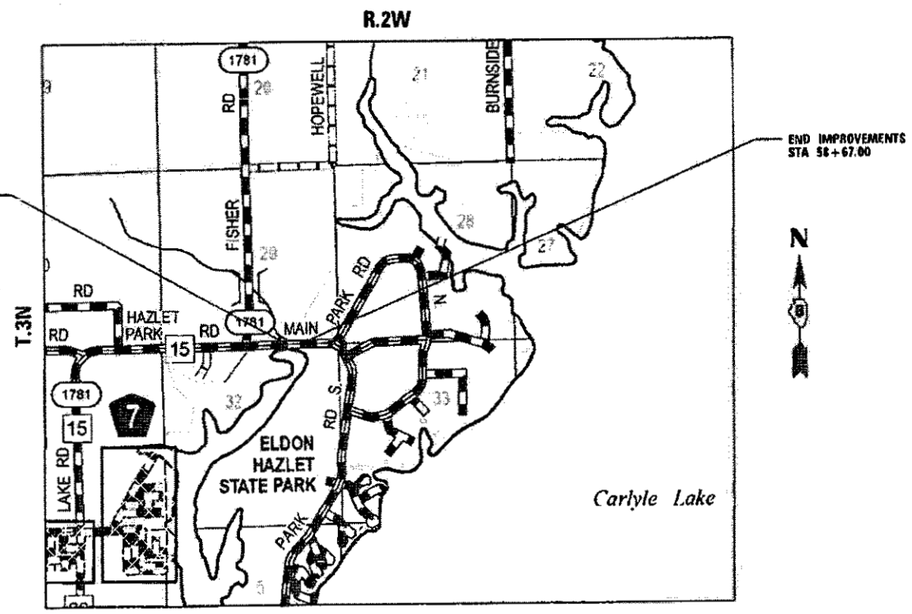


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: VINCE MADONIA, PE

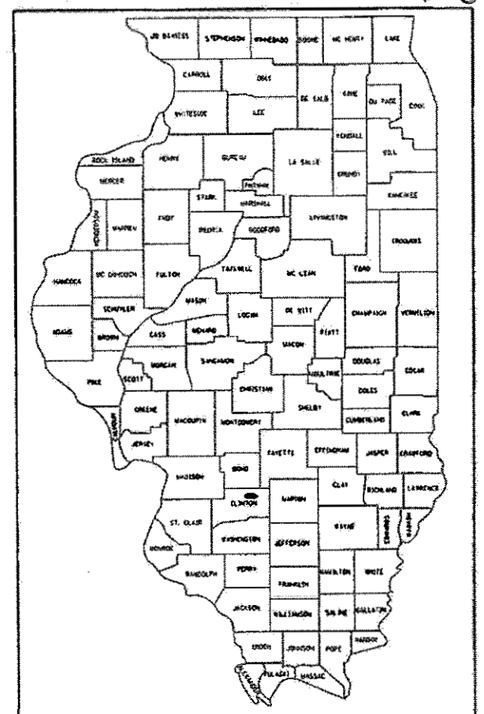
CONTRACT NO. 46904



LOCATION MAP
N.T.S.

GROSS LENGTH = 814.00 FT. = 0.154 MILE
NET LENGTH = 814.00 FT. = 0.154 MILE

P-30-002-18



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED MAY 29 2018
DEPUTY DIRECTOR OF HIGHWAYS REGION ENGINEER

June 29 2018
cc E.A.C.
ENGINEER OF DESIGN AND ENVIRONMENT

June 29 2018
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. GRIMM
062-065119
STATE OF ILLINOIS

5/11/18
DATE

JOSEPH G. GRIMM, P.E.
LICENSED PROFESSIONAL ENGINEER
ILLINOIS NO. 062-065119 EXPIRES 11-30-19
SHEETS: 1-10, 20-21

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016, THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

2. UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY AGENCIES INVOLVED AND THEIR ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

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

4. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES AND SHALL BE LIABLE FOR ANY DAMAGE TO THEM RESULTING FROM HIS OPERATIONS.

5. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

6. ANY STANDARDS REFERENCED THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST HIGHWAY STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AS SHOWN ON THE SCHEDULE OF HIGHWAY STANDARDS ON THIS SHEET.

7. THE CONTRACTOR SHALL NOTIFY IDOT AT LEAST 48 HOURS IN ADVANCE OF THE START OR RESTART OF CONSTRUCTION.

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

9. ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

10. HORIZONTAL COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 (1983).

11. ALL AREAS DISTURBED FOR ANY REASON SHALL BE PERMANENTLY SEEDED AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AT THE CONTRACTOR'S EXPENSE.

12. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

13. ILLINOIS STATE LAW REQUIRES A 48 HOUR NOTICE TO BE GIVEN TO ALL UTILITIES BEFORE DIGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

	BELOW GROUND	ABOVE GROUND
* ATT DISTRIBUTION ATTN: TODD ISACK 618-402-9849	X	
* CLINTON COUNTY ELECTRIC COOPERATIVE 475 NORTH MAIN ST. BREESE, IL 62230 ATTN: AHREN LANGHAUSER 618-526-3607		X
* CLINTON COUNTY PUBLIC WATER DISTRICT CENTRALIA, IL 62801 ATTN: JASON GREEN 618-292-7622		X

MEMBERS OFJ.U.L.I.E. (800)-892-0123 ARE INDICATED BY *.
NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY. (NONE KNOWN)

CONTRACTOR SHALL NOTIFY CLINTON COUNTY PUBLIC WATER DISTRICT 24 HOURS IN ADVANCE OF THE RECONNECTION OF THE WATER SERVICE.

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
542001-06	CONCRETE END SECTIONS FOR PIPE CULVERTS, 15" THRU 84" DIA.
701006-05	LANE CLOSURE, MULTILANE, WITH BARRIER FOR SPEEDS ≥ 45 MPH TO 55 MPH
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
701321-17	LANE CLOSURE 2L, 2W BRIDGE REPAIR WITH BARRIER
701901-07	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER

COMMITMENTS

1. NONE

RATES OF APPLICATION TABLE

AGGREGATE (SURFACE, BASE, SUBBASE OR BACKFILL)	2.05 TON / CU YD
SUBBASE GRANULAR MATERIAL, TYPE B	2.05 TON / CU YD
HOT-MIX ASPHALT	
BITUMINOUS MATERIAL (TACK COAT) (ON PAVEMENT)	0.025 LB / SQ FT
BITUMINOUS MATERIAL (PRIME COAT) (ON AGGREGATE)	0.25 LB / SQ FT
HOT-MIX ASPHALT SURFACE/ BINDER (112 lbs.)	0.056 TON / SQ YD * IN
SEEDING AREAS:	
NITROGEN FERTILIZER NUTRIENT	90 LBS / ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	90 LBS / ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS / ACRE

HMA MIXTURE REQUIREMENTS TABLE

LOCATION	PARK ENTRANCE ROAD	PARK ENTRANCE ROAD
MIXTURE USE:	PATCH BINDER CSE LIFTS	PATCH SURFACE CSE LIFT (2")
PG	PG 64-22	PG 70-22
DESIGN AIR VOIDS	4.0% @ N_{DES} = 70	4.0% @ N_{DES} = 70
MIXTURE COMPOSITION (GRADATION)	IL 19.0	IL 9.5
FRICTION AGGREGATE	N/A	MIX C

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PLOT DATE = 5/25/2018	DATE - 05/11/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, HIGHWAY STANDARDS, AND COMMITMENTS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	2
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BOX CULVERT 0004 S.N.	PIPE CULVERT 0004 NONE
20700220	POROUS GRANULAR EMBANKMENT	CU YD	491	299	192
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	27	15	12
25000210	SEEDING, CLASS 2A	ACRE	0.05	0.03	0.02
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	5	3	2
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	5	3	2
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	5	3	2
25100115	MULCH, METHOD 2	ACRE	0.05	0.03	0.02
28100107	STONE RIPRAP, CLASS A4	SQ YD	534	326	208
28200200	FILTER FABRIC	SQ YD	534	326	208
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	460	260	200
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	46	26	20
44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	205	116	89
50105220	PIPE CULVERT REMOVAL	FOOT	271	178	93
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	1069	624	445
52200600	GEOTEXTILE RETAINING WALL	SQ FT	200	124	76
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2	
54011005	PRECAST CONCRETE BOX CULVERTS 10' X 5'	FOOT	66	66	
542A1083	PIPE CULVERTS, CLASS A, TYPE 2 48"	FOOT	64		64
54261248	CONCRETE END SECTION, STANDARD 542001, 48", 1:2	EACH	2		2
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DAY	20	20	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70106709	TEMPORARY RUMBLE STRIPS	EACH	12	12	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BOX CULVERT 0004 S.N.	PIPE CULVERT 0004 NONE
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2237	2237	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	40	40	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	412.5	412.5	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	375	375	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
X0301852	DEWATERING STRUCTURE NO. 1	EACH	1	1	
X0301853	DEWATERING STRUCTURE NO. 2	EACH	1		1
X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	487	487	
X5610010	REMOVE AND REINSTALL EXISTING WATER MAIN	FOOT	92	52	40
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	826	826	
Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	92	52	40
Z0062456	TEMPORARY PAVEMENT	SQ YD	487	487	

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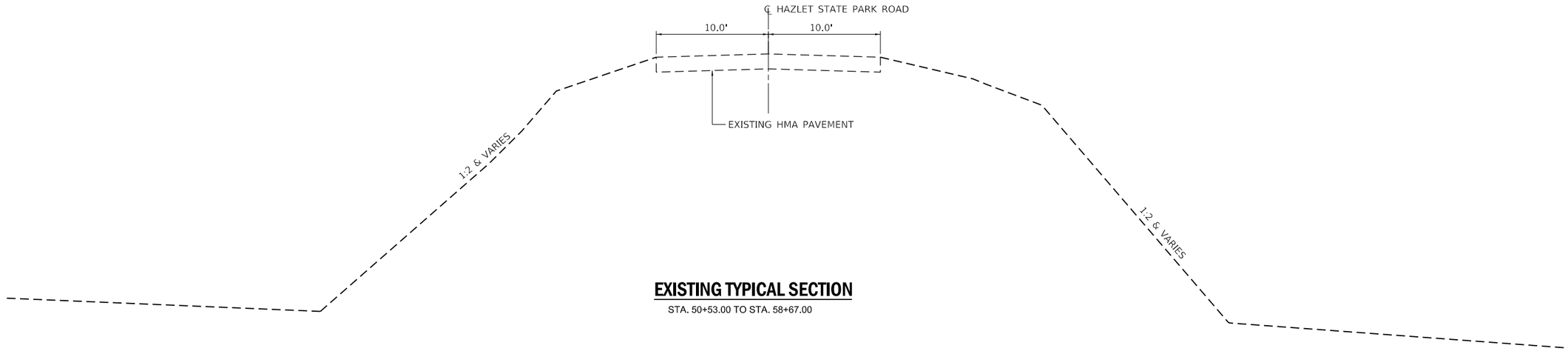
SUMMARY OF QUANTITIES

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

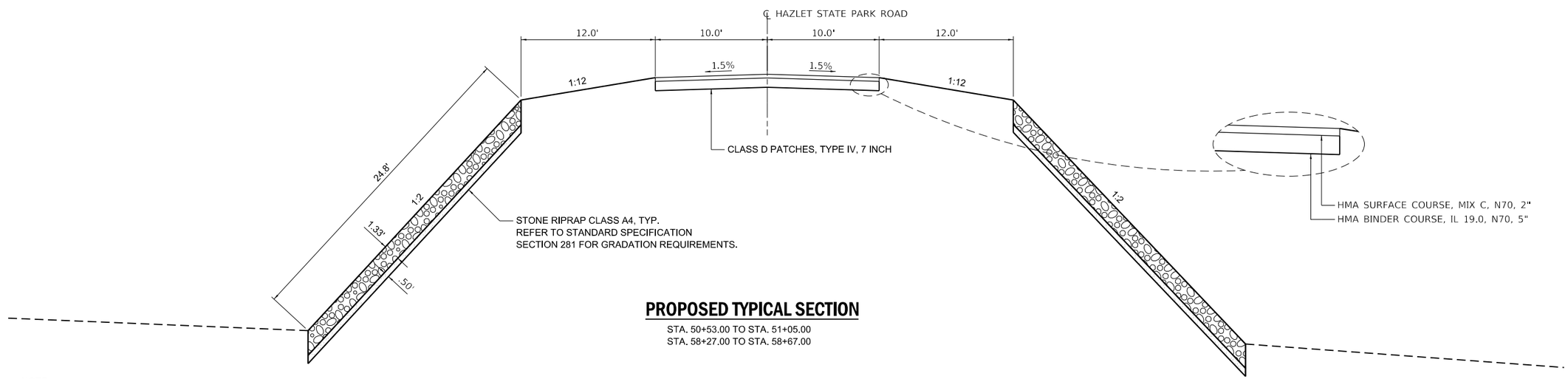
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	3
		CONTRACT NO. 46904		
	ILLINOIS FED. AID PROJECT			

REV. - MS



EXISTING TYPICAL SECTION

STA. 50+53.00 TO STA. 58+67.00



PROPOSED TYPICAL SECTION

STA. 50+53.00 TO STA. 51+05.00
STA. 58+27.00 TO STA. 58+67.00

NOTE:
LONGITUDINAL JOINT SEALANT SHALL BE APPLIED UNDER THE SURFACE LIFT AND UNDER THE TOP BINDER LIFT WITH AN APPLICATION RATE OF 1.80 LB/FT.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	4
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		

PAVEMENT

LOCATION			BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	CLASS D PATCHES, TYPE IV, 7 INCH	LONGITUDINAL JOINT SEALANT
STATION	TO	STATION	POUND	POUND	SQ YD	FOOT
50+53.00		51+05.00	260	26	116	52
58+27.00		58+67.00	200	20	89	40
TOTAL			460	46	205	92

DRAINAGE

LOCATION		POROUS GRANULAR EMBANKMENT	PIPE CULVERT REMOVAL	BOX CULVERT END SECTIONS, CULVERT NO. 1	PRECAST BOX CULVERTS 10'X5'	CONCRETE END SECTION, STANDARD 542001, 48", 1:2	PIPE CULVERTS, CLASS A, TYPE 2 48"
STATION	OFFSET	CU YD	FOOT	EACH	FOOT	EACH	FOOT
50+73.31	RT/LT		89				
50+79.00	RT/LT	299			66		
50+79.00	RT			1			
50+79.00	LT			1			
50+81.53	RT/LT		89				
58+47.00	RT/LT	192					64
58+47.00	RT					1	
58+47.00	LT					1	
58+47.34	RT/LT		93				
TOTAL		491	271	2	66	2	64

RETENTION

LOCATION		DEWATERING STRUCTURE NO. 1	DEWATERING STRUCTURE NO. 2	TEMPORARY SOIL RETENTION SYSTEM	GEOTEXTILE RETAINING WALL
STATION	OFFSET	EACH	EACH	SQ FT	SQ FT
50+79.00	RT/LT	1		624	124
58+47.00	RT/LT		1	445	76
TOTAL		1	1	1,069	200

NOTE:
DEWATERING STRUCTURES ARE INCLUDED IN THE CONTRACT AS A CONTINGENCY ITEM IN CASE THEY ARE REQUIRED FOR CULVERT CONSTRUCTION. THE CONTRACTOR MAY BE ALLOWED TO OMIT THE USE OF DEWATERING STRUCTUES AT HIS OR HER OWN RISK. HOWEVER, THE CONTRACTOR SHALL USE THE DEWATERING STRUCTURES PAY ITEM IF THE ENGINEER DETERMINES THEY ARE NEEDED. THE CONTRACTOR WILL ONLY BE PAID FOR DEWATERING STRUCTURES ITEM IF THE DEWATERING SYSTEM IS USED.

RIPRAP

LOCATION			STONE RIPRAP, CLASS A4	FILTER FABRIC
STATION	TO	STATION	SQ YD	SQ YD
50+53.00		51+05.00	326	326
58+27.00		58+67.00	208	208
TOTAL			534	534

TRAFFIC CONTROL

LOCATION		TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	TRAFFIC CONTROL SURVEILLANCE	TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3
STATION	OFFSET	EACH	CAL DAY	EACH	EACH	EACH	EACH
STAGE I CONSTRUCTION					6		
49+34.9	RT					1	
59+60.3	RT					1	
STAGE II CONSTRUCTION					6		
49+64.5	LT						1
59+67.6	LT						1
TOTAL		1	20	1	12	2	2

STAGING

LOCATION					TEMPORARY PAVEMENT MARKING - LINE 4"	TEMPORARY PAVEMENT MARKING - LINE 24"	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	TEMPORARY PAVEMENT REMOVAL	TEMPORARY PAVEMENT MARKING REMOVAL	TEMPORARY PAVEMENT
STATION	OFFSET	TO	STATION	OFFSET	FOOT	FOOT	FOOT	FOOT	SQ YD	SQ FT	SQ YD
STAGE I											
47+23.50	RT					10				20	
47+33.50	10.0' RT		50+28.00	5.5' LT	295					99	
49+06.20	10.0' LT		52+14.00	10.0' LT					148		148
49+34.90	5.0' RT		51+55.00	5.5' LT			225				
51+55.00	5.5' LT		57+77.00	5.5' LT	622					207	
57+00.00	10.0' LT		59+98.60	10.0' LT					142		142
57+77.00	5.5' LT		59+60.30	5.0' RT			187.5				
58+92.00	5.5' LT		61+00.50	10.0' RT	210					70	
61+60.70	LT					10				20	
STAGE II											
47+64.50	RT					10				20	
48+24.60	10.0' LT		50+28.00	4.0' RT	204					68	
49+64.40	5.0' LT		51+55.00	4.0' RT				187.5			
49+36.40	10.0' RT		52+13.70	10.0' RT					101		101
51+55.00	4.0' RT		57+77.00	4.0' RT	623					208	
57+33.80	10.0' RT		60+00.30	10.0' RT					96		96
57+77.00	4.0' RT		59+66.50	5.0' LT				187.5			
58+92.00	4.0' RT		61+74.80	10.0' LT	283					94	
61+84.80	LT					10				20	
TOTAL					2,237	40	412.5	375	487	826	487

LANDSCAPING

LOCATION			TOPSOIL EXCAVATION AND PLACEMENT	SEEDING, CLASS 2A	MULCH METHOD 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
STATION	TO	STATION	CU YD	ACRE	ACRE	POUND	POUND	POUND
50+53.00		51+05.00	15	0.03	0.03	3	3	3
58+27.00		58+67.00	12	0.02	0.02	2	2	2
TOTAL			27	0.05	0.05	5	5	5

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	DRAWN - JDK	REVISED -	
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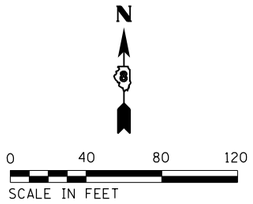
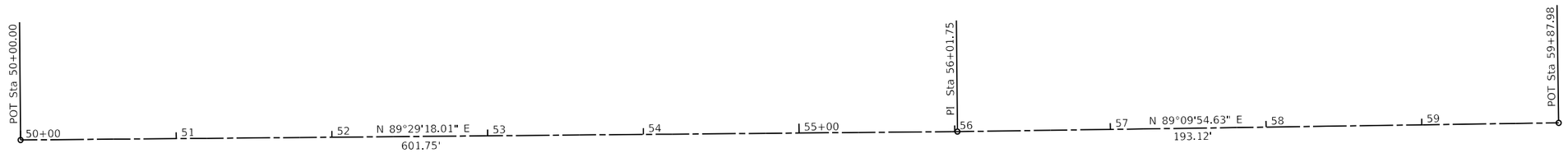
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	5
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		



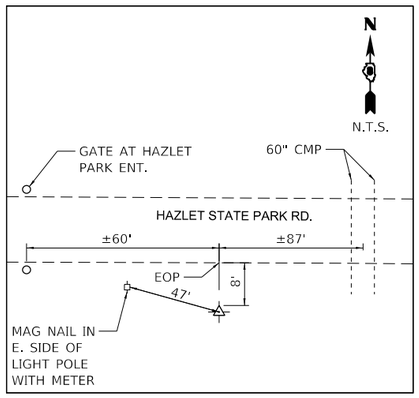


ALIGNMENT COORDINATES

	STATION	NORTHING	EASTING
POT	50+00	170716.50	112717.95
PI	56+01.75	170700.91	111817.41
POT	59+78.98	170744.00	113219.00

BENCHMARK DATA

B.M. NO.	NORTHING	EASTING	DESCRIPTION	ELEVATION NAVD 88
1	170716.50	112717.95	PK NAIL IN SW CORNER OF CONCRETE METER PIT FOR TRAFFIC COUNT	455.75
2	170700.91	111817.41	PK NAIL SET IN THE NE CORNER OF A CONC FOUNDATION OF AN ELECTRICAL CABINET AT THE NE CORNER OF AN AGG PARKING LOT ON THE S SIDE OF HAZLET STATE PARK RD. AT THE GATED ENT. TO HAZLET PARK. ±2.1 MILES E. FROM THE INT. OF IL 127 & HAZLET STATE PARK ROAD.	455.52
3	170744.00	113219.00	CUT SQUARE ON THE SE CORNER OF A CONC FOUNDATION OF AN ELECTRICAL CABINET AT THE "Y" INT. IN HAZLET STATE PARK RD. ±2.35 MI E. OF THE INT IL 127 & HAZLET STATE PARK RD.	456.64



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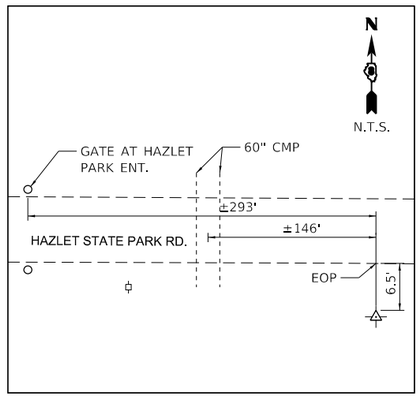

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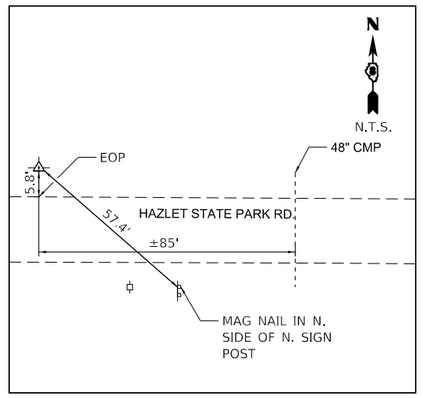

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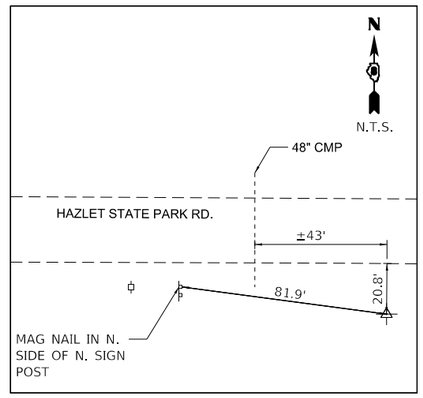

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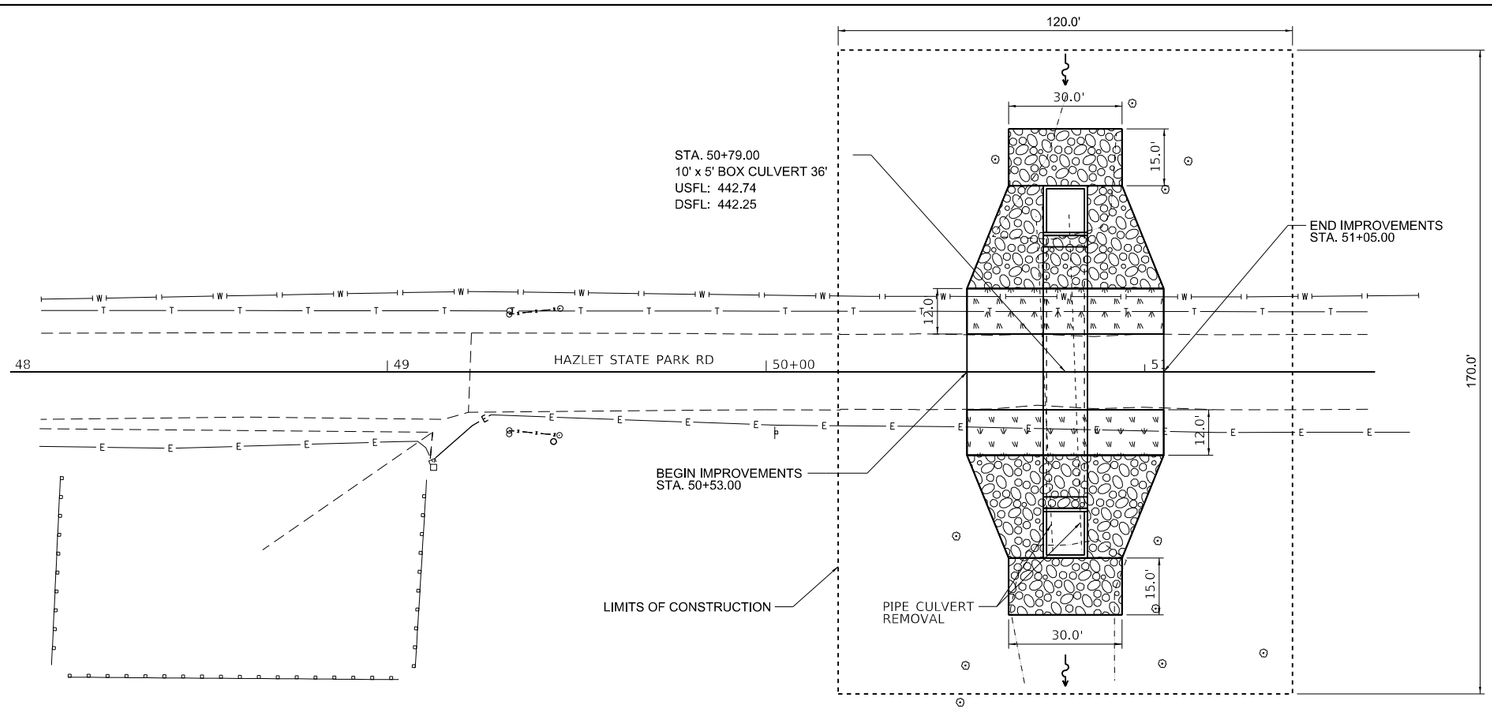
PLOT DATE = 5/25/2018	DATE - 05/11/2018	REVISED -	

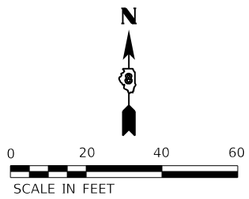
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, SURVEY TIES, AND BENCHMARKS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	6
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		

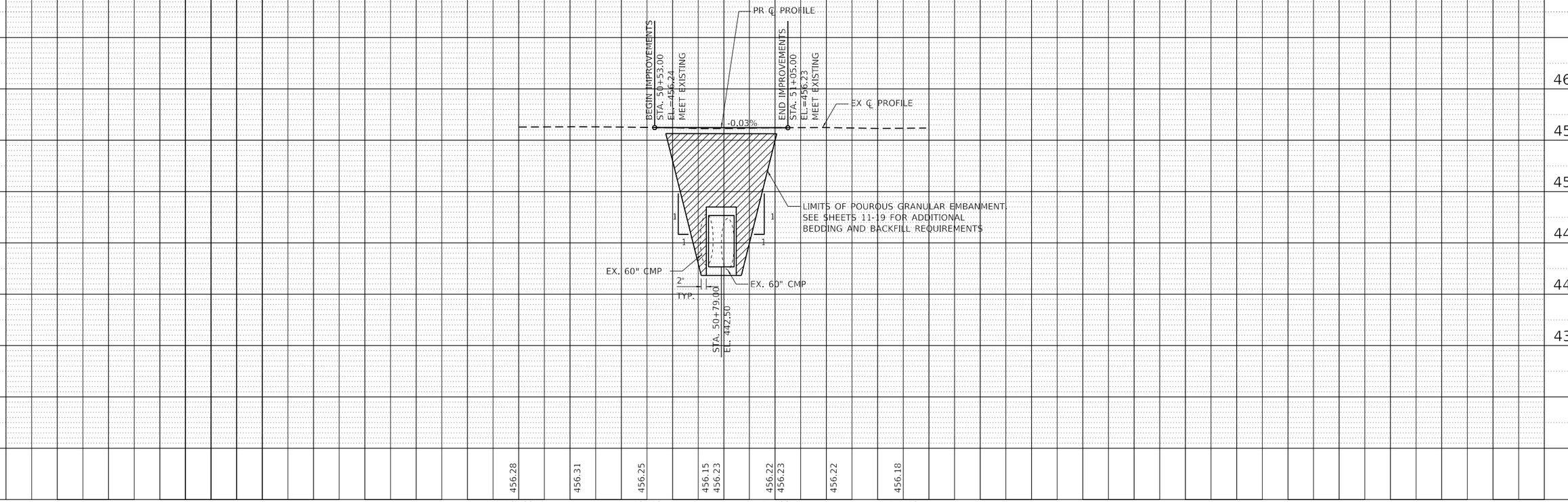




LEGEND

SEEDING CLASS 2A AND MULCH METHOD 2

STONE RIPRAP, CLASS A4 AND FILTER FABRIC



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PROFILE — SURVEYED / PLOTTED / AUTOMATED / R.O.W. CHECKED / B.M. NOTED / STRUCTURE NOTATNS CHKD / NOTE BOOK / NO. / BY / DATE

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PLOT DATE = 5/25/2018	DATE - 05/11/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT STA. 50+79.00
PLAN & PROFILE

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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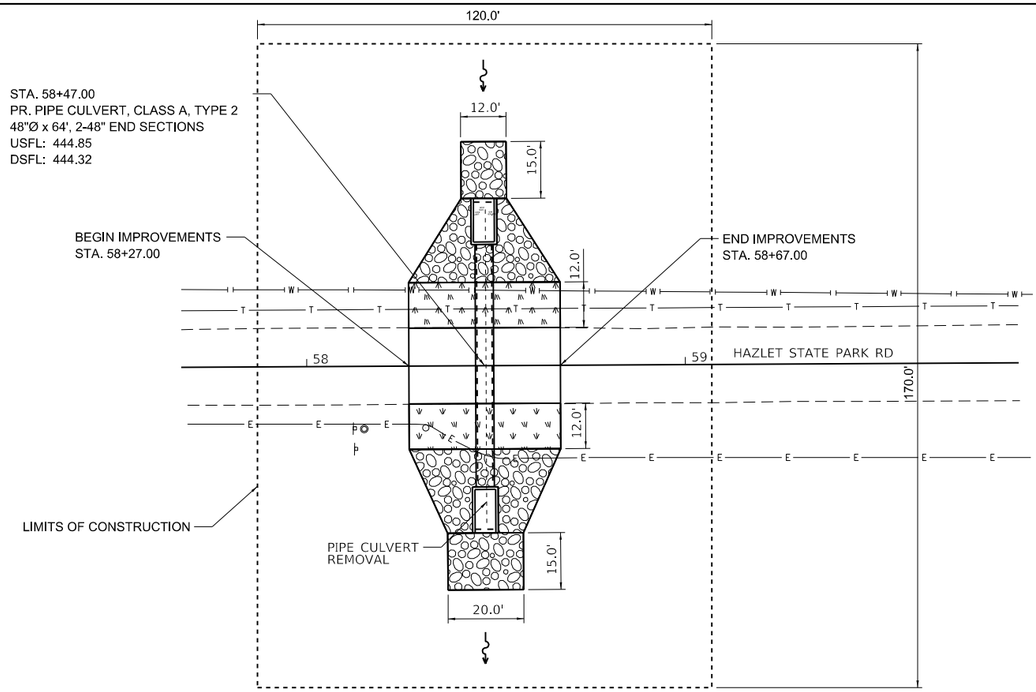
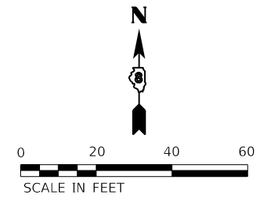
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		

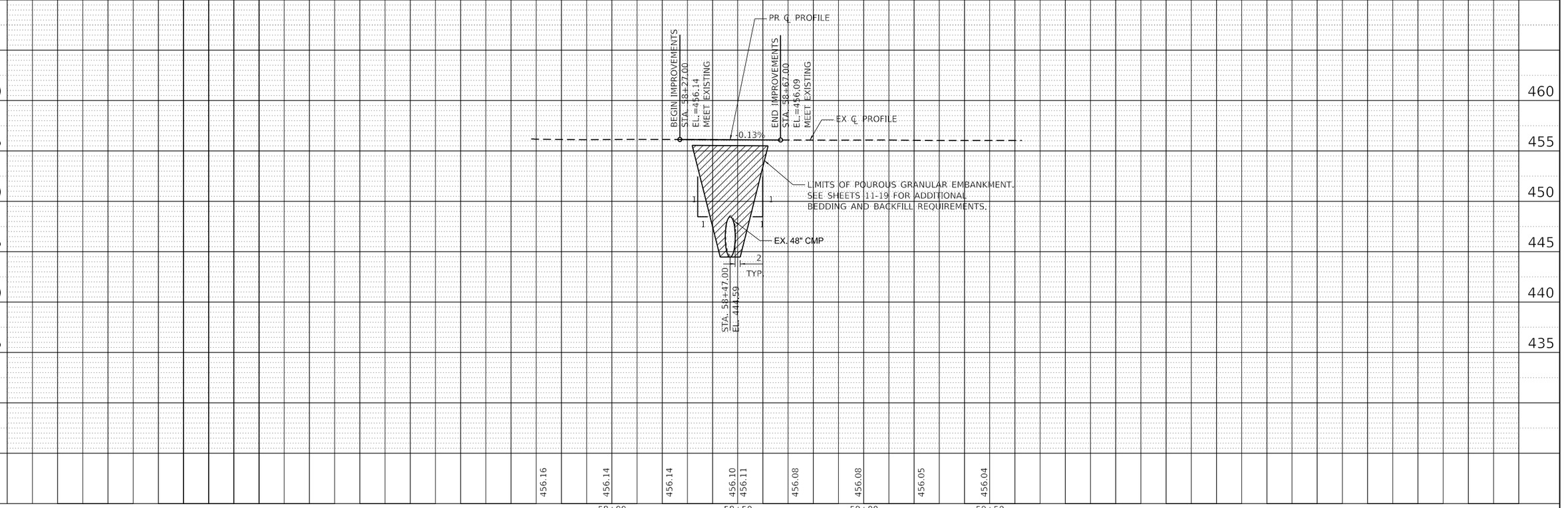




LEGEND

SEEDING CLASS 2A AND MULCH METHOD 2

STONE RIPRAP, CLASS A4 AND FILTER FABRIC



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PLOT DATE = 5/25/2018	DATE - 05/11/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIPE CULVERT STA. 58+47.00
PLAN & PROFILE

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	8
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		

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PROFILE: SURVEYED, PLOTTED, DRAWN, CHECKED, I.S.M. NOTED, STRUCTURE NO., BY, DATE, QUANTITIES CHKD, STRUCTURE NO.

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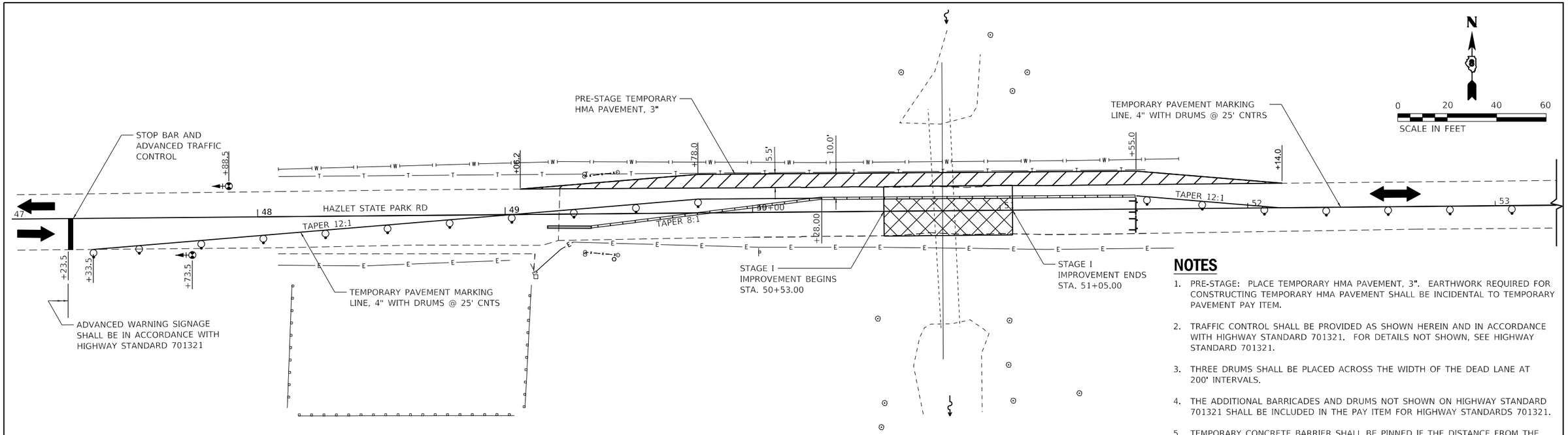
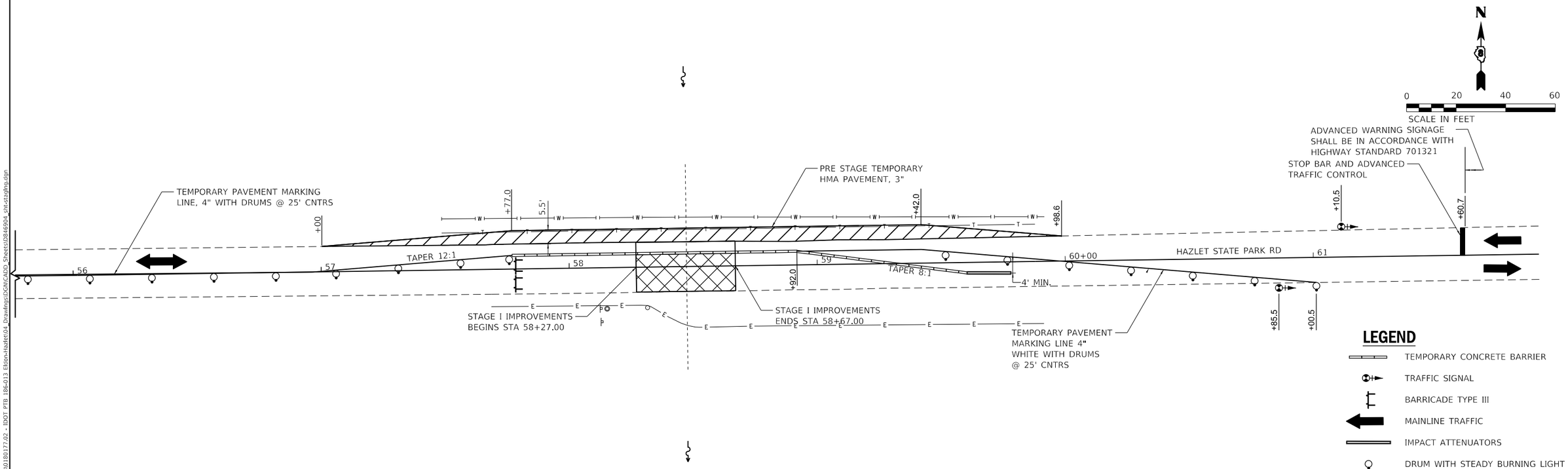


NOTES

1. PRE-STAGE: PLACE TEMPORARY HMA PAVEMENT, 3". EARTHWORK REQUIRED FOR CONSTRUCTING TEMPORARY HMA PAVEMENT SHALL BE INCIDENTAL TO TEMPORARY PAVEMENT PAY ITEM.
2. TRAFFIC CONTROL SHALL BE PROVIDED AS SHOWN HEREIN AND IN ACCORDANCE WITH HIGHWAY STANDARD 701321. FOR DETAILS NOT SHOWN, SEE HIGHWAY STANDARD 701321.
3. THREE DRUMS SHALL BE PLACED ACROSS THE WIDTH OF THE DEAD LANE AT 200' INTERVALS.
4. THE ADDITIONAL BARRICADES AND DRUMS NOT SHOWN ON HIGHWAY STANDARD 701321 SHALL BE INCLUDED IN THE PAY ITEM FOR HIGHWAY STANDARDS 701321.
5. TEMPORARY CONCRETE BARRIER SHALL BE PINNED IF THE DISTANCE FROM THE BACK SIDE OF THE BARRIER TO THE DROP OFF IS LESS THEN 3'-6". COST SHALL BE INCLUDED IN THE TEMPORARY CONCRETE BARRIER PAY ITEM
6. TEMPORARY HMA PAVEMENT, 3" FOR STAGE II SHALL BE PLACED PRIOR TO SWITCHING OVER TO STAGE II TRAFFIC CONTROL.



LEGEND

- TEMPORARY CONCRETE BARRIER
- TRAFFIC SIGNAL
- BARRICADE TYPE III
- MAINLINE TRAFFIC
- IMPACT ATTENUATORS
- DRUM WITH STEADY BURNING LIGHT

USER NAME = jkofoot	DESIGNED - JGG	REVISED -	
	DRAWN - JDK	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - GAC	REVISED -	
PLOT DATE = 5/25/2018	DATE - 05/11/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS
STAGE I - DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	9
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		

MODEL: STAGE 1
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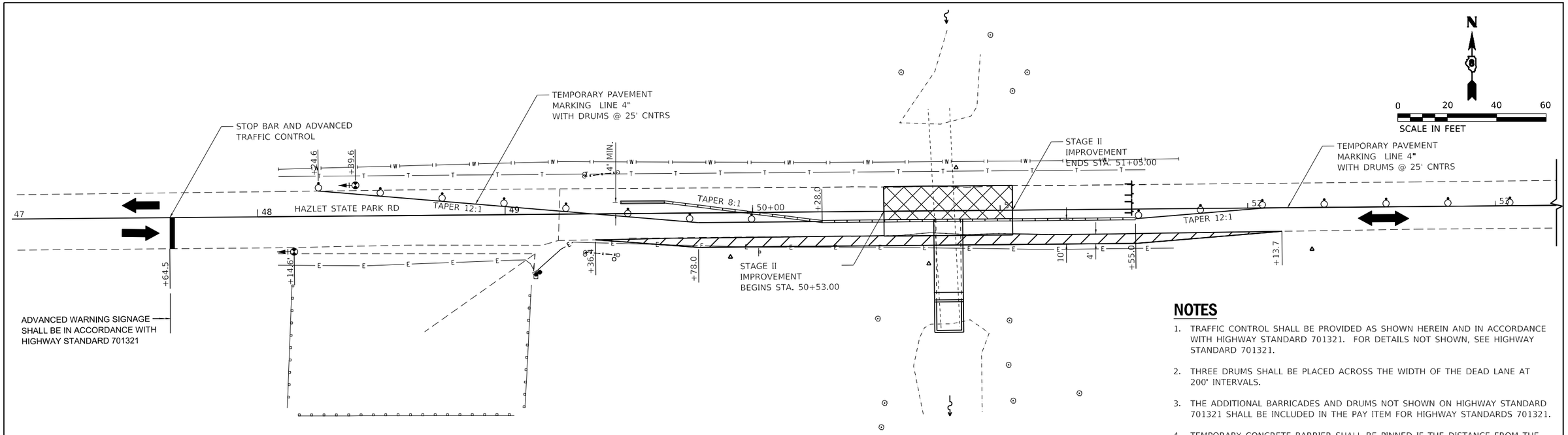
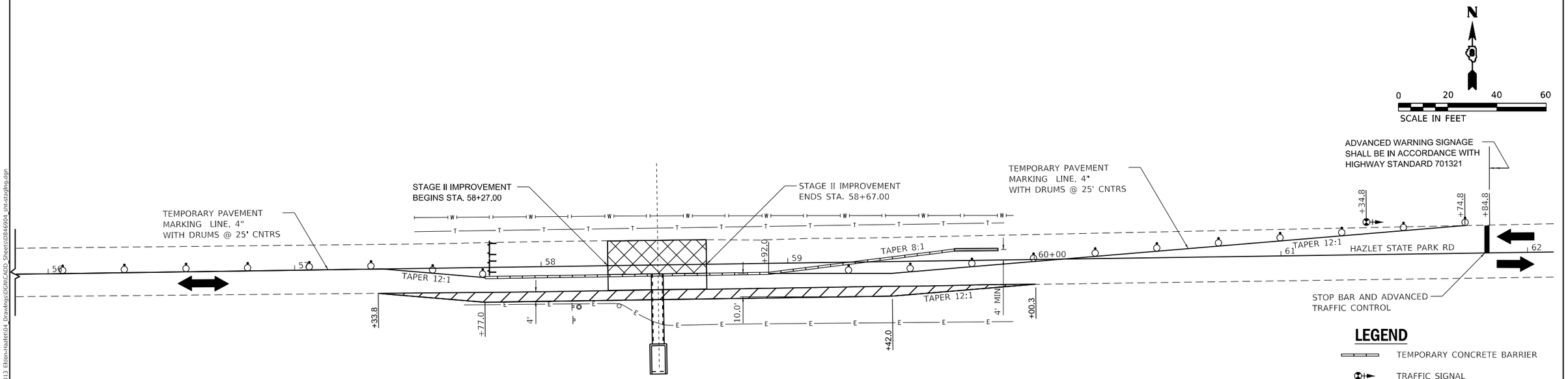


NOTES

1. TRAFFIC CONTROL SHALL BE PROVIDED AS SHOWN HEREIN AND IN ACCORDANCE WITH HIGHWAY STANDARD 701321. FOR DETAILS NOT SHOWN, SEE HIGHWAY STANDARD 701321.
2. THREE DRUMS SHALL BE PLACED ACROSS THE WIDTH OF THE DEAD LANE AT 200' INTERVALS.
3. THE ADDITIONAL BARRICADES AND DRUMS NOT SHOWN ON HIGHWAY STANDARD 701321 SHALL BE INCLUDED IN THE PAY ITEM FOR HIGHWAY STANDARDS 701321.
4. TEMPORARY CONCRETE BARRIER SHALL BE PINNED IF THE DISTANCE FROM THE BACK SIDE OF THE BARRIER TO THE DROP OFF IS LESS THEN 3'-6". COST SHALL BE INCLUDED IN THE TEMPORARY CONCRETE BARRIER PAY ITEM.
5. EARTHWORK REQUIRED FOR CONSTRUCTING TEMPORARY HMA PAVEMENT SHALL BE INCIDENTAL TO TEMPORARY PAVEMENT PAY ITEM.



LEGEND

- TEMPORARY CONCRETE BARRIER
- TRAFFIC SIGNAL
- BARRICADE TYPE III
- MAINLINE TRAFFIC
- IMPACT ATTENUATORS
- DRUM WITH STEADY BURNING LIGHT

USER NAME = jkofoot	DESIGNED - JGG	REVISED -	
	DRAWN - JDK	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - GAC	REVISED -	
PLOT DATE = 5/25/2018	DATE - 05/11/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS
STAGE II - DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	10
		CONTRACT NO. 46904		
	ILLINOIS FED. AID PROJECT			

MODEL: STAGE 2
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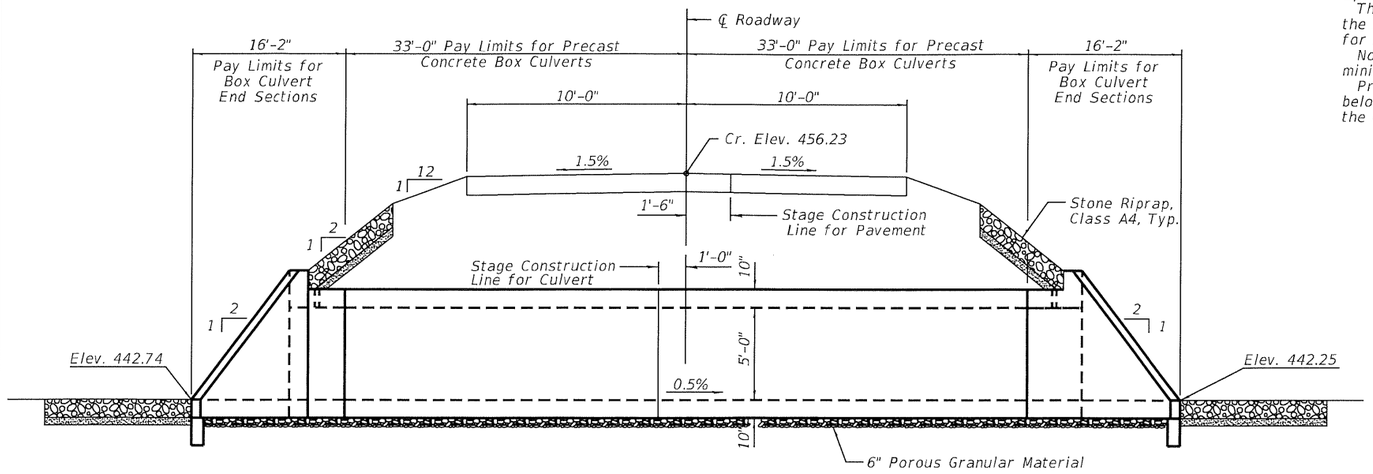
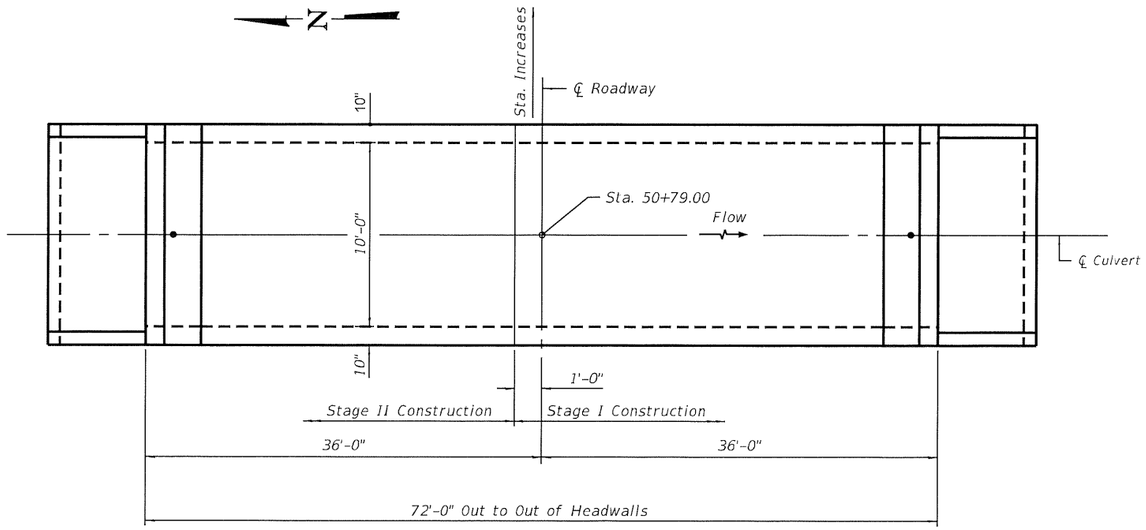
Benchmark: BM #1 PK nail in SW corner of a concrete meter pit for traffic count. Station 58+14.29, 17.01' RT. Elevation = 455.75
BM #2 PK nail set in the NE corner of a concrete foundation of an electrical cabinet at the NE corner of an aggregate parking lot on the S side of Hazlet Park Road at the gated entrance to Hazlet Park. Elevation = 455.52

Existing Structure: The structure consists of two 60" diameter CMP culverts.



ELEVATION



PLAN

GENERAL NOTES

The design fill height for this box is 7.7 ft. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification. A cubical 2' x 2' x 2' min. deposit of CA 5, 7, or 11 in fabric envelope shall be placed over drain holes in accordance with Article 502.10 of the Standard Specifications.

The 6 in. thick layer of porous granular material required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections. Cost of the porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.

Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment below the top of subgrade extending to a vertical plane 2 ft from the exterior sides of the culvert, 2 ft from the back face of the end sections, and not closer than 2 ft from the face of embankment.

INDEX OF SHEETS

BOX CULVERT BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. Yd.	326
Filter Fabric	Sq. Yd.	326
Temporary Soil Retention System	Sq. Ft.	624
Geotextile Retaining Wall	Sq. Ft.	124
Box Culvert End Sections, Culvert No. 1	Each	2
Precast Concrete Box Culverts, 10' x 5'	Foot	66
Dewatering Structure No. 1	Each	1

DESIGN SPECIFICATIONS

2016 Interim to AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 7th Edition

LOADING HL-93

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

DESIGN STRESSES

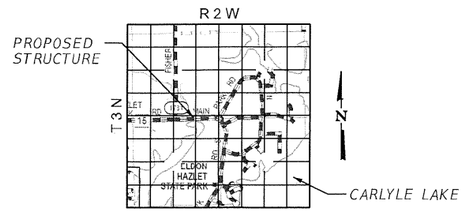
PRECAST UNITS

f'c = 5,000 psi @ 28 days
fy = 65,000 psi (Welded Wire Reinforcement)

LICENSED STRUCTURAL ENGINEER
JOHN C. ZEMAN
081-007515
STATE OF ILLINOIS

Date 7/3/18

JOHN C. ZEMAN
ILLINOIS STRUCTURAL ENGINEER
NO. 081-007515
Exp. Date 11/30/18



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
PARK ENTRANCE ROAD
OVER LUEBBERS BRANCH
CLINTON COUNTY
STATION 50+79.00

Farnsworth GROUP 2709 McGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / info@f-w.com		DESIGNED - JGG	REVISED
		CHECKED - JCZ	REVISED
		DRAWN - JDK	REVISED
	DATE - 07/03/18	CHECKED - JCZ	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION OF BOX CULVERT
CULVERT DETAILS
SHEET NO. 1 OF 9 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	11
		CONTRACT NO. 46904		
	ILLINOIS FED. AID PROJECT			

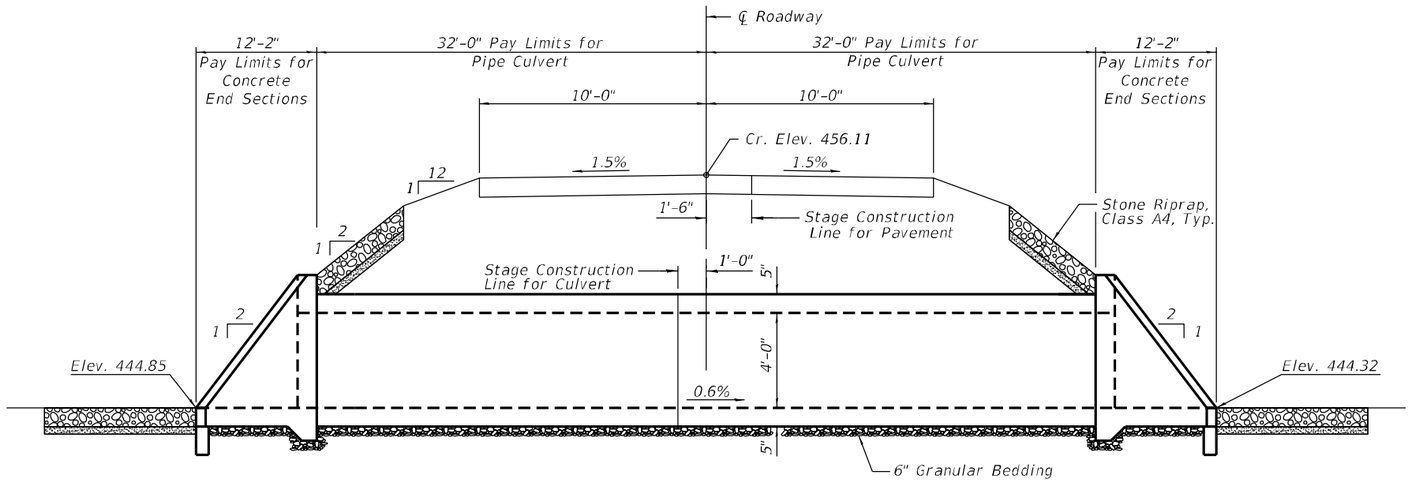
Benchmark: BM #1 PK nail in SW corner of a concrete meter pit for traffic count. Station 58+14.29, 17.01' RT. Elevation = 455.75
BM #2 PK nail set in the NE corner of a concrete foundation of an electrical cabinet at the NE corner of an aggregate parking lot on the S side of Hazlet Park Road at the gated entrance to Hazlet Park. Elevation = 455.52

Existing Structure: The structure consists of a 48" diameter CMP culvert.

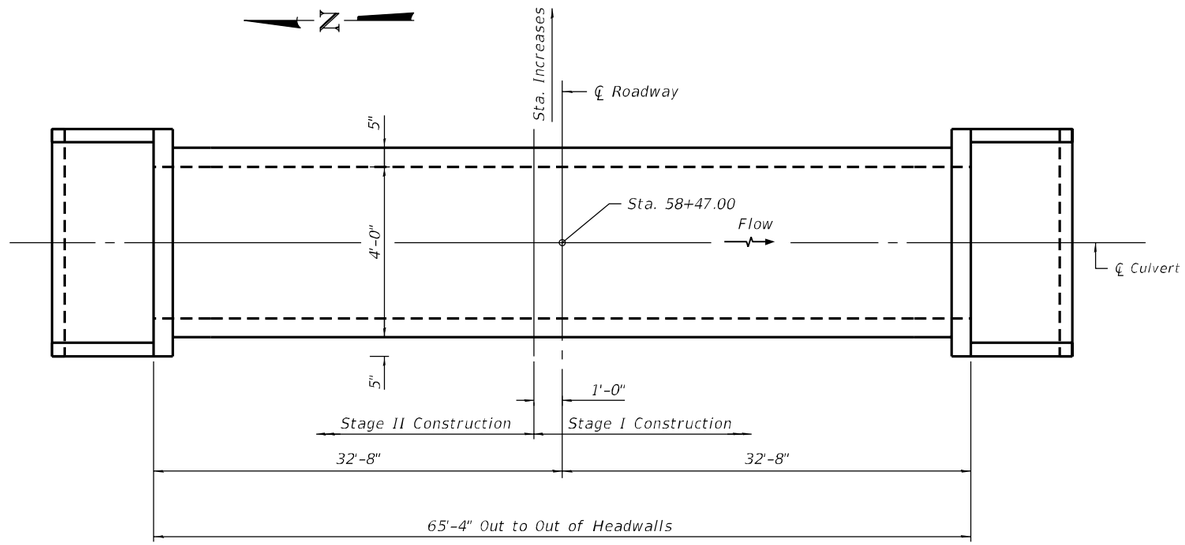
GENERAL NOTES

The 6 in. thick layer of granular bedding required for the precast concrete pipe culvert end section per standard 542001-06 shall also apply to the pipe culvert. Cost of the granular bedding will not be paid for separately but shall be included in the unit price of the work for which it is required.

Precast concrete pipe culvert and pipe culvert end sections shall be backfilled with Porous Granular Embankment below the top of the subgrade extending to a vertical plane 2 ft from the exterior sides of the culvert, 2 ft from the back face of the end sections, and not closer than 2 ℄ ft from the face of embankment.



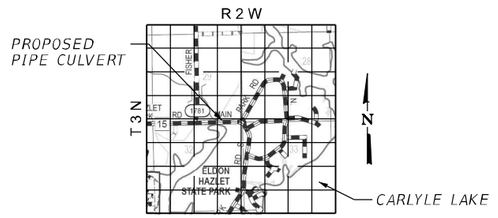
ELEVATION



PLAN

PIPE CULVERT BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. Yd.	208
Filter Fabric	Sq. Yd.	208
Temporary Soil Retention System	Sq. Ft.	445
Geotextile Retaining Wall	Sq. Ft.	76
Pipe Culverts, Class A, Type 2, 48"	Foot	64
Concrete End Section, Standard 542001, 48", 1:2	Each	2
Dewatering Structure No. 2	Each	1



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
PARK ENTRANCE ROAD
OVER BACKWATER CHANNEL
CLINTON COUNTY
STATION 58+47.00

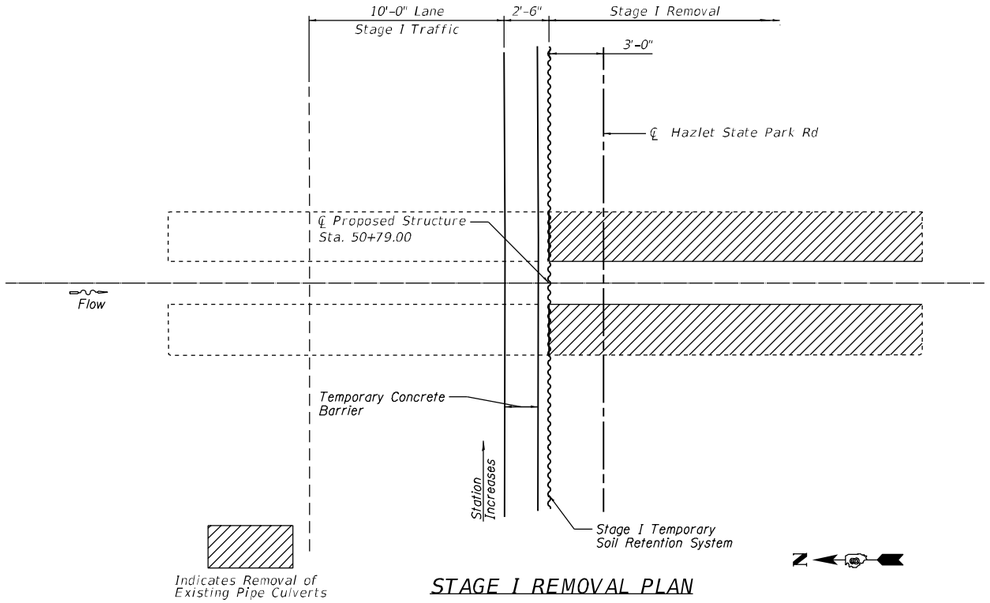
Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

	DESIGNED - JGG	REVISED	
	CHECKED - JCZ	REVISED	
	DRAWN - JDK	REVISED	
DATE - 07/03/18	CHECKED - JCZ	REVISED	

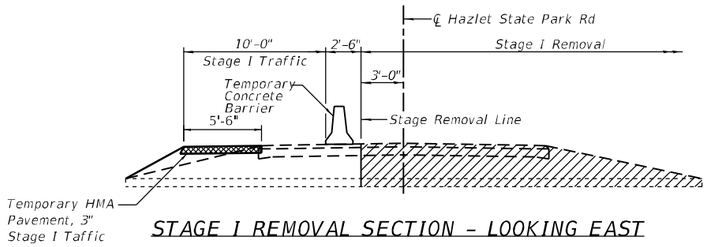
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION OF PIPE CULVERT
CULVERT DETAILS
SHEET NO. 2 OF 9 SHEETS

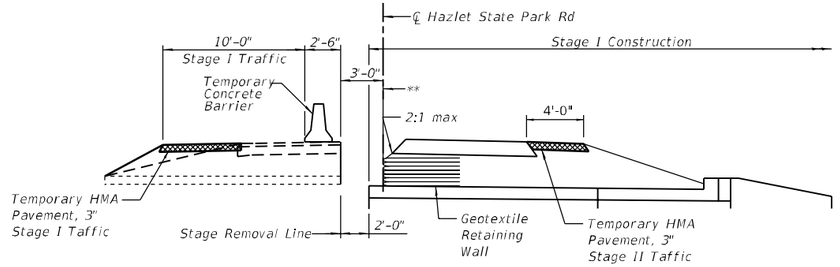
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	12
		CONTRACT NO. 46904		
	ILLINOIS FED. AID PROJECT			



STAGE I REMOVAL PLAN

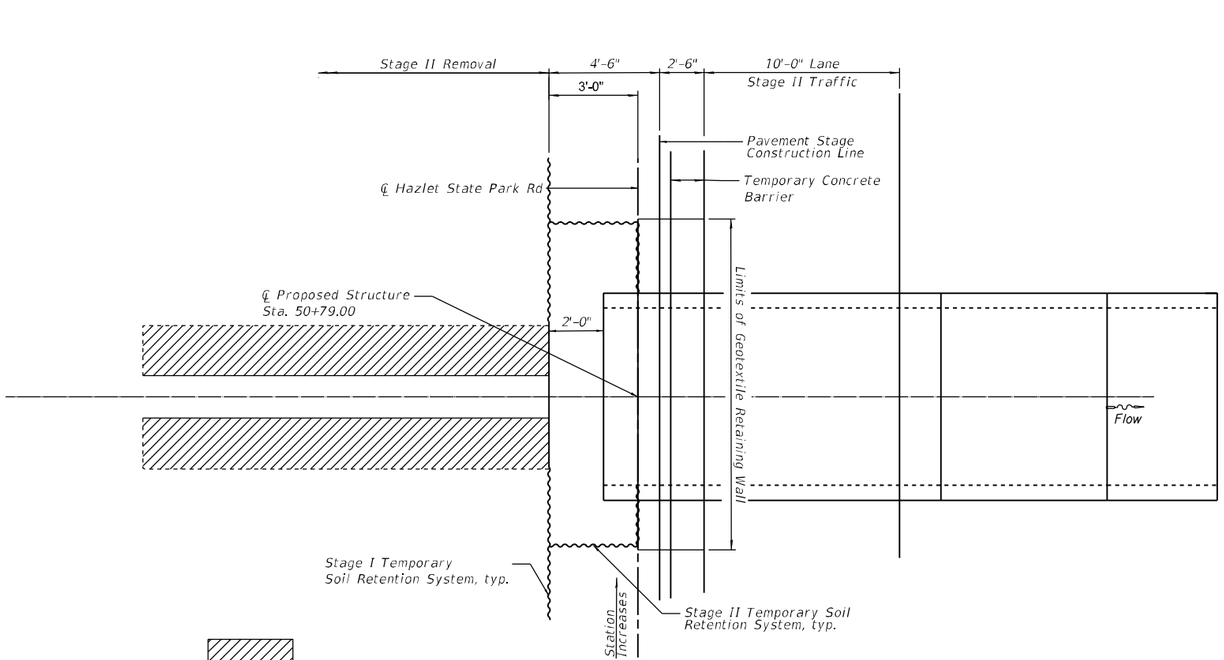


STAGE I REMOVAL SECTION - LOOKING EAST

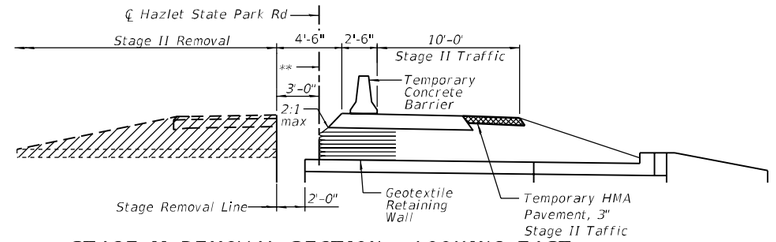


STAGE I CONSTRUCTION SECTION - LOOKING EAST

**Edge of Geotextile Retaining Wall

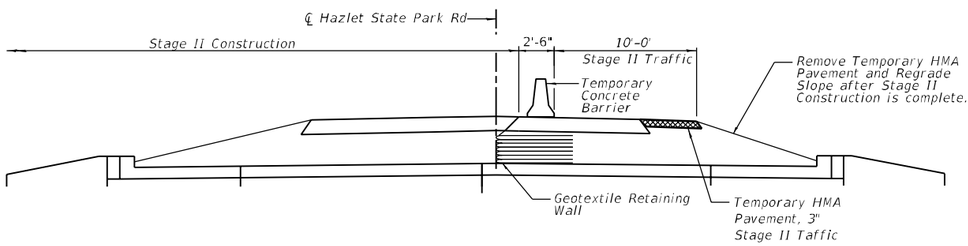


STAGE II REMOVAL PLANS



STAGE II REMOVAL SECTION - LOOKING EAST

**Edge of Geotextile Retaining Wall



STAGE II CONSTRUCTION SECTION - LOOKING EAST

NOTE:

This sheet should be utilized in conjunction with the Roadway Stage Construction Plans for both culverts locations.
Details are shown for box culvert. Details for pipe culvert are similar.

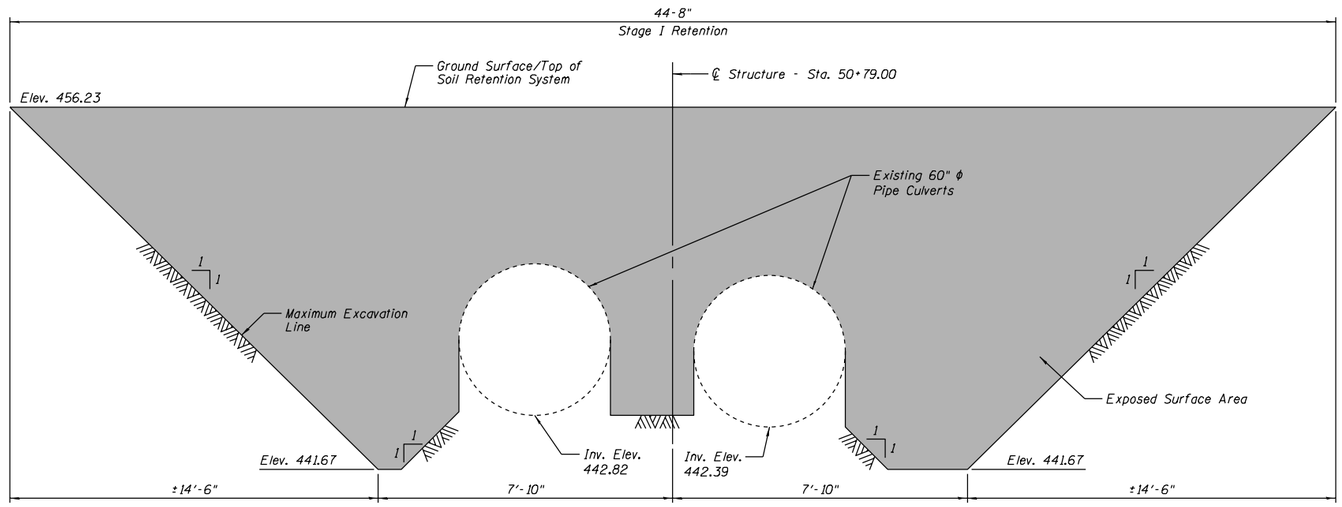
Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

	DESIGNED - JGG	REVISED
	CHECKED - JCZ	REVISED
	DRAWN - JDK	REVISED
DATE - 07/03/18	CHECKED - JCZ	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

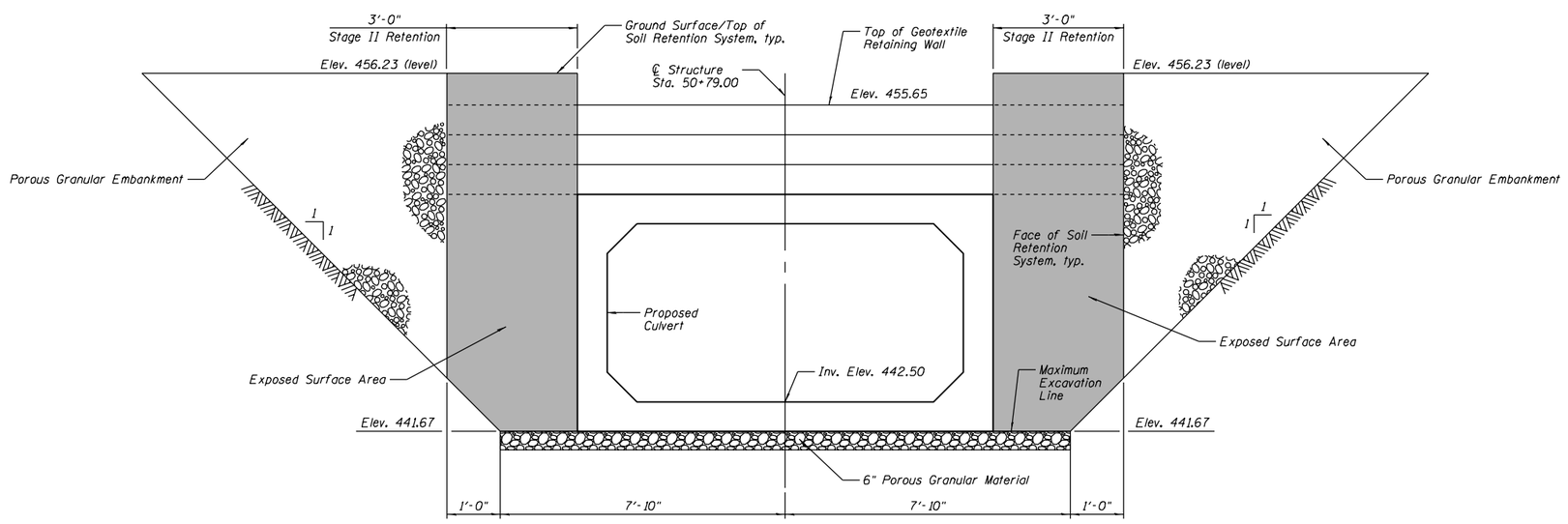
STAGE CONSTRUCTION DETAILS
CULVERT DETAILS
SHEET NO. 3 OF 9 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	13
		CONTRACT NO. 46904		
	ILLINOIS FED. AID PROJECT			



STAGE I SOIL RETENTION ELEVATION - BOX CULVERT

(Looking North)



STAGE II SOIL RETENTION ELEVATION - BOX CULVERT

(Looking South)

NOTE:

Cantilevered sheet piling by itself does not appear sufficient for this situation and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

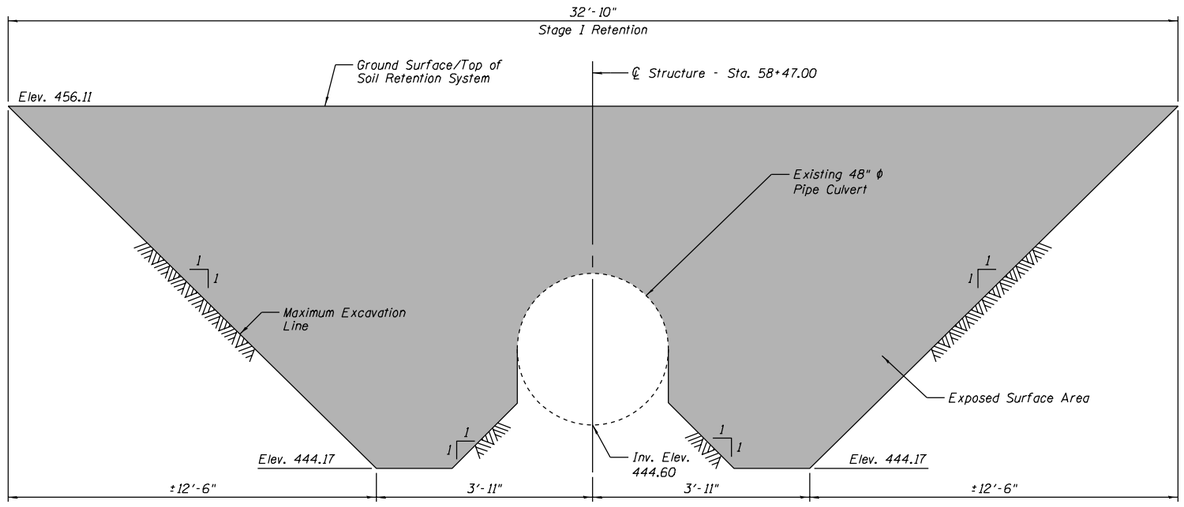
	DESIGNED - JGG	REVISED
	CHECKED - JCZ	REVISED
	DRAWN - JDK	REVISED
DATE - 07/03/18	CHECKED - JCZ	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SOIL RETENTION SYSTEM
CULVERT DETAILS

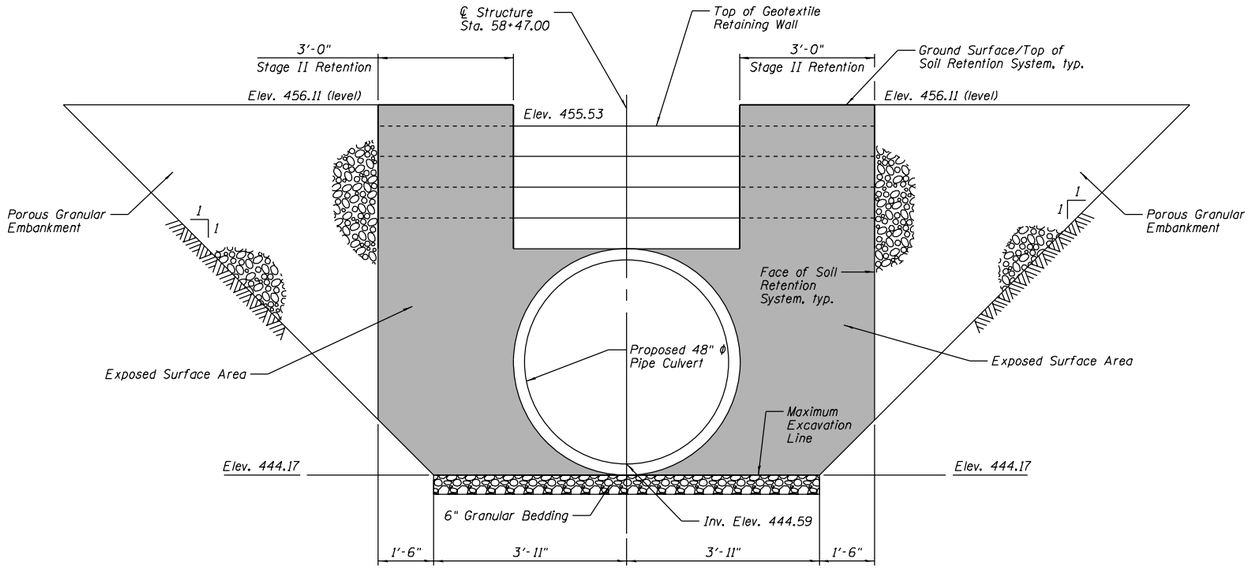
SHEET NO. 4 OF 9 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	14
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		



STAGE I SOIL RETENTION ELEVATION - PIPE CULVERT

(Looking North)



STAGE II SOIL RETENTION ELEVATION - PIPE CULVERT

(Looking South)

NOTE:

Cantilevered sheet piling by itself does not appear sufficient for this situation and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soilretention system design including plan details and calculations for review and acceptance by the Engineer.

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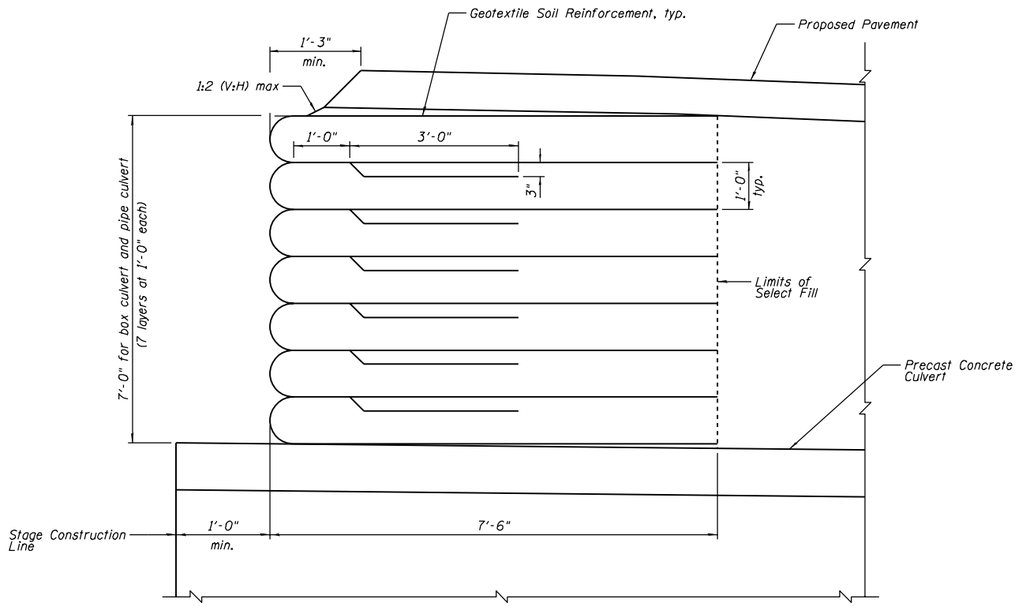
	DESIGNED - JGG	REVISED
	CHECKED - JCZ	REVISED
	DRAWN - JDK	REVISED
DATE - 07/03/18	CHECKED - JCZ	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

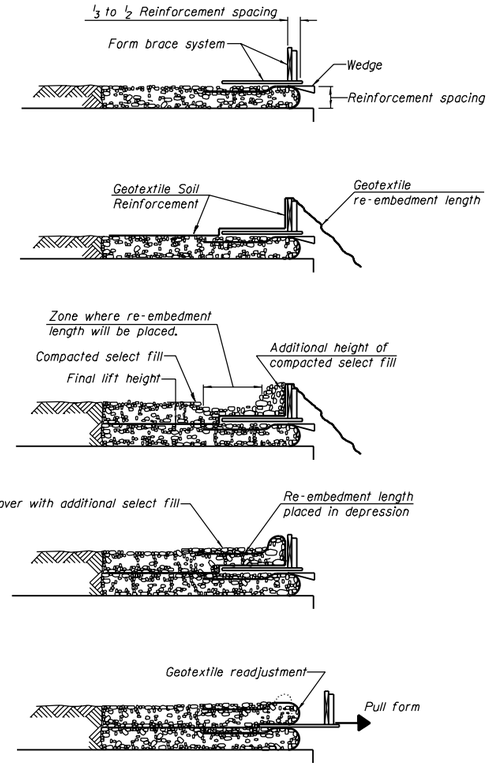
TEMPORARY SOIL RETENTION SYSTEM
CULVERT DETAILS

SHEET NO. 5 OF 9 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	15
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		



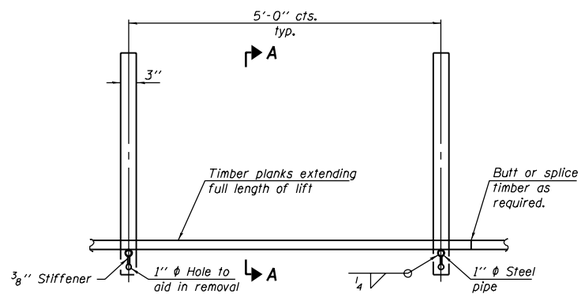
TYPICAL SECTION



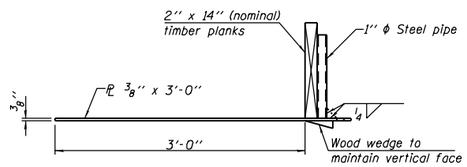
1. Place form brace system on completed reinforcement level; back from the finished fabric face a distance of 1/3 to 1/2 the geotextile reinforcement spacing.
2. Position fabric so that the required geotextile re-embedment length extends over the top of the form brace and the design reinforcement width is placed with no slack against the previous level.
3. Compact select fill material in lifts to final lift height, create (±3") depression in zone where re-embedment length will be located and place additional height of compacted select fill against form brace.
4. Fold geotextile re-embedment length back over form brace into zone where depression was made in select fill and place additional select fill (±3") to embed geotextile and bring to final lift height.
5. Pull form brace outward allowing geotextile face to slightly readjust to form tight round face level with plan reinforcement spacing.

GEOTEXTILE WALL CONSTRUCTION SEQUENCE

Note:
The geotextile soil reinforcement shall have a minimum allowable tensile strength (T min.) of 31 lb./in. as determined by the procedure described in Article 522.11(a) of the Standard Specifications. The computations supporting the determination of (T min.) shall be submitted to the engineer for approval.



PLAN



SECTION A-A

GEOTEXTILE FORM BRACE DETAIL

Note:
This is a suggested detail, the Contractor is responsible for the design of the form brace system to be used.

NOTE:

This sheet should be utilized in conjunction with the Roadway Stage Construction Plans for both culverts locations.
Details are shown for box culvert. Details for pipe culvert are similar.

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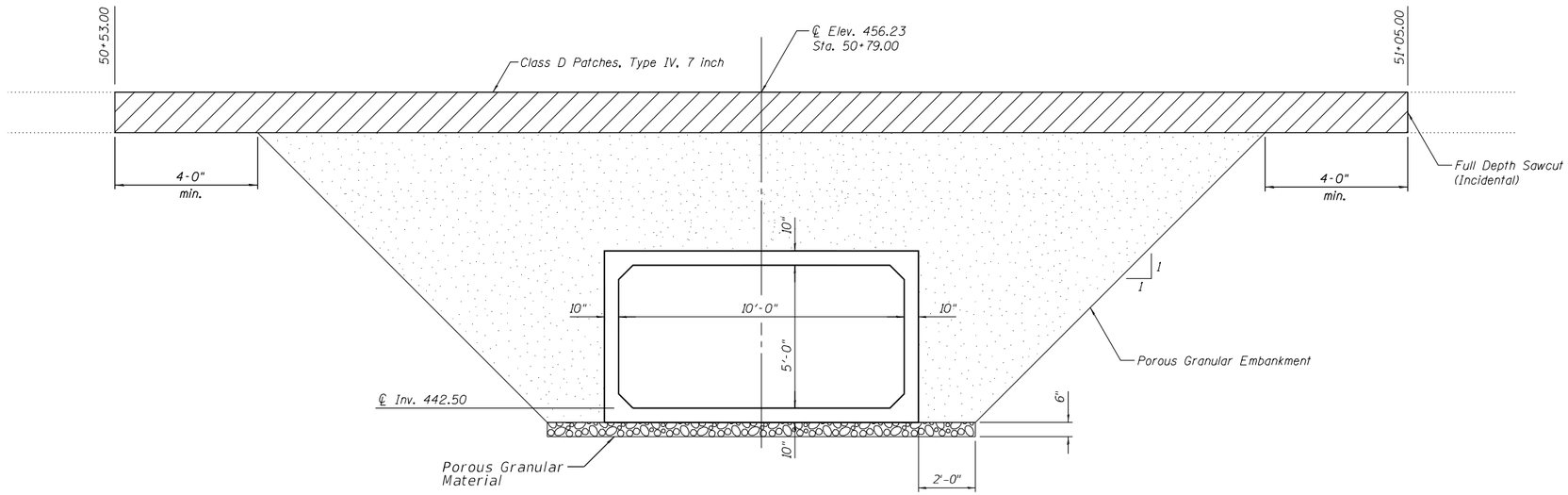
	DRAWN - JDK	REVISED
DATE - 07/03/18	CHECKED - JCZ	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY GEOTEXTILE RETAINING WALL CULVERT DETAILS

SHEET NO. 6 OF 9 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	16
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		



SECTION THRU BARREL

(Stations along ℄ Roadway)

GENERAL NOTES

Work shown in this detail shall be performed in accordance with applicable portions of sections 207 and 540 of the Standard Specifications.

Porous Granular Embankment shall extend 2 feet beyond the outside shoulder.

This work shall be paid for at the contract unit price per cubic yard for Porous Granular Embankement.

Excavation for the proposed Box Culvert and Box Culvert End Sections shall be considered included in the pay item "Precast Concrete Box Culverts 10' x 5' ".

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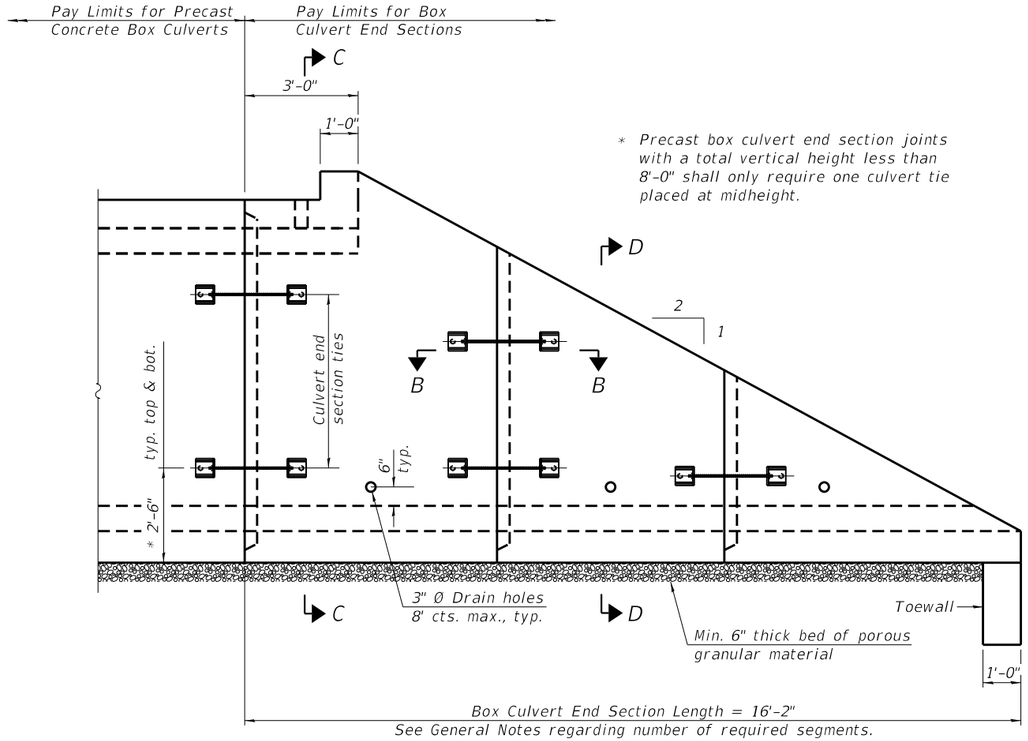
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

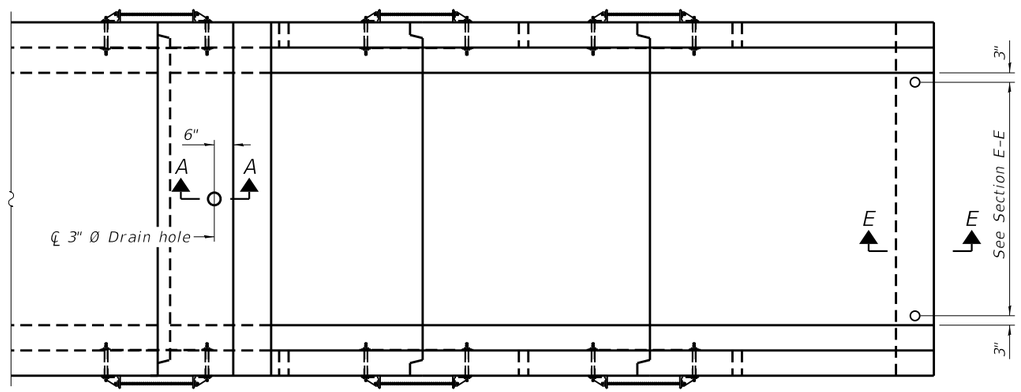
SECTION THRU BOX CULVERT
CULVERT DETAILS

SHEET NO. 7 OF 9 SHEETS

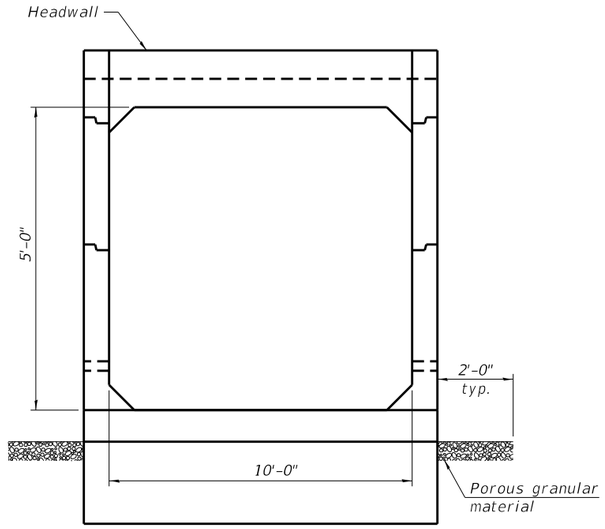
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	17
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		



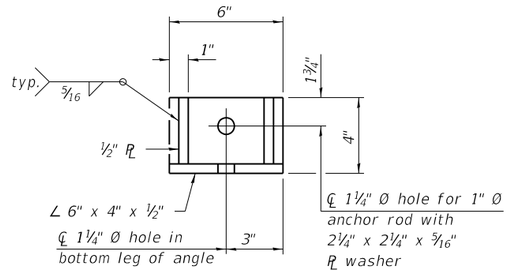
ELEVATION



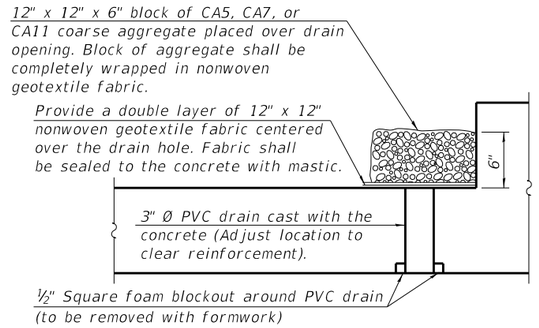
PLAN



END VIEW

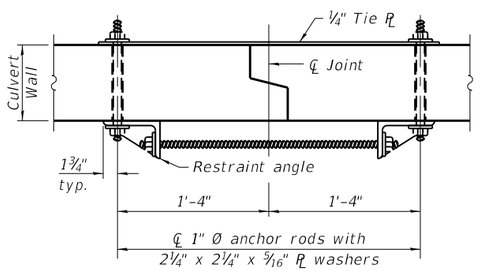


RESTRAINT ANGLE DETAIL



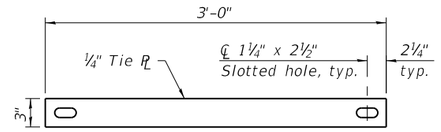
SECTION A-A

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)



SECTION B-B

(Showing end section tie details)



TIE PLATE DETAIL

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. This work will be measured for payment as each, with each end of each culvert being one each. End sections will be paid for at the contract unit price per each for Box Culvert End Sections of the culvert number specified.

Typical box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements of ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

Number of segments shown in Elevation is for example only. Length and number of precast box sections required to construct Box Culvert End Sections shall be determined by the Contractor.

1" Ø anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2¼" x 2¼" x 5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional ½ turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the contract unit price for Box Culvert End Sections of the culvert number specified.

Drain holes shall conform to the requirements of Article 503.11 of the Standard Specifications unless noted otherwise.

Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01. The minimum weight of the fabric shall be 6 oz. / sq. yd..

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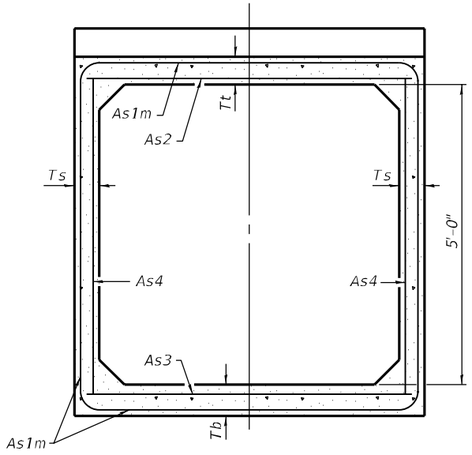
	DRAWN - JDK	REVISED
DATE - 05/11/18	CHECKED - JCZ	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SINGLE CELL PRECAST BOX CULVERT TAPERED END SECTIONS
CULVERT DETAILS

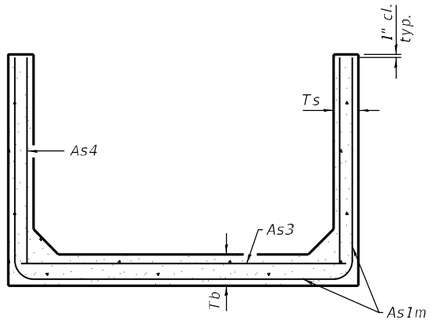
SHEET NO. 8 OF 9 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	18
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		

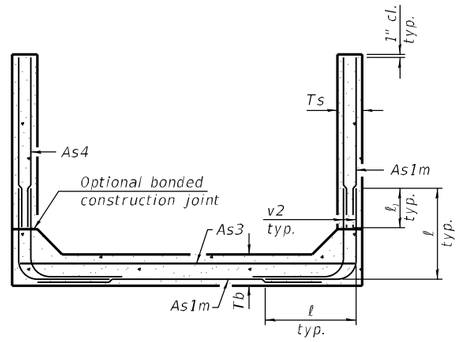


(Design Earth Cover ≥ 2 ft)

SECTION C-C



SECTION D-D



ALTERNATE SECTION D-D

As1m REINFORCEMENT
(in.²/ ft)

Ts (in.) \ Rise (ft)	2	3	4	5	6	7	8	9	10	11	12
4	0.19	0.17									
5	0.26	0.21	0.18								
6	0.22	0.26	0.23	0.22							
7	0.25	0.33	0.59	0.27	0.28						
8	0.40	0.35	0.43	0.39	0.36	0.34	0.40				
9	0.44	0.39	0.35	0.43	0.40	0.37	0.36	0.48			
10	0.48	0.42	0.38	0.47	0.44	0.41	0.38	0.42	0.56		
11	0.52	0.45	0.54	0.50	0.46	0.44	0.41	0.46	0.50	0.65	
12	0.55	0.49	0.58	0.54	0.50	0.48	0.45	0.46	0.46	0.61	0.75

(As1m reinforcement based upon welded wire reinforcement conforming to AASHTO M 55 or M 221).

ℓ_1 DIMENSION

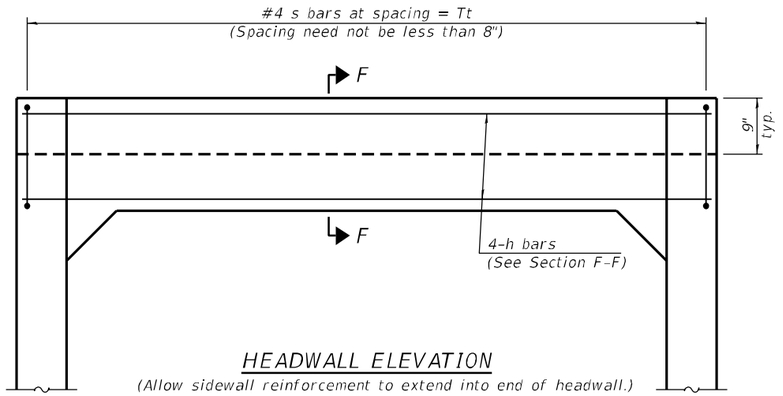
#3 bar = 2'-0"
#4 bar = 2'-8"
#5 bar = 3'-4"
#6 bar = 3'-11"

Notes:

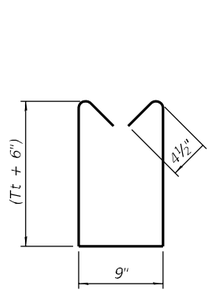
Alternate Section D-D is provided to allow the Contractor the option of casting the bottom slab of the end section first followed by construction of the sidewalls using conventional forming methods. Shop drawings that detail slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval when using Alternate Section D-D.

The size and spacing of the v2 bars shall provide a minimum reinforcement area along each face of the walls (in.²/ft.) equal to 1.10*(As1m). v2 bars may consist of #3 thru #6 size reinforcement bars and the longitudinal spacing shall not exceed the lesser of the wall thickness or 8 inches.

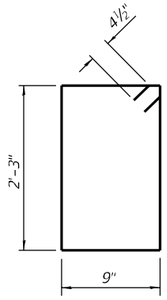
Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.



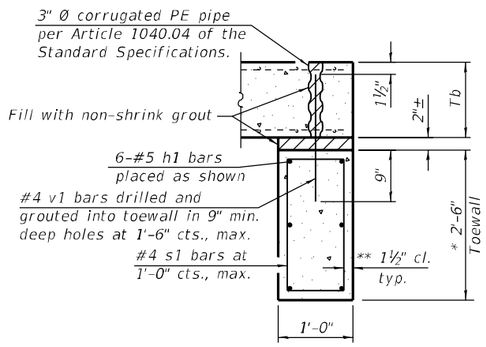
HEADWALL ELEVATION
(Allow sidewall reinforcement to extend into end of headwall.)



BAR s



BAR s1



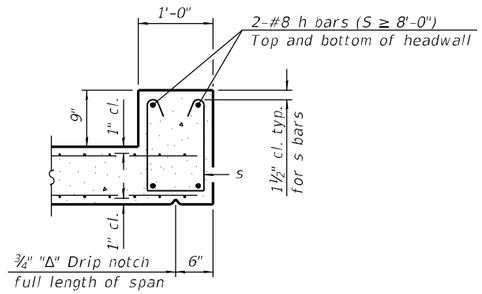
SECTION E-E

TOEWALL CONSTRUCTION SEQUENCE

1. Perform excavation and construct toewall.
2. Backfill according to the applicable paragraphs of Article 502.10 of the Standard Specifications and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling the method.

** If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.



SECTION F-F

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	DRAWN - JDK	REVISED
DATE - 07/03/18	CHECKED - JCZ	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SINGLE CELL PRECAST BOX CULVERT TAPERED END SECTIONS
CULVERT DETAILS
SHEET NO. 9 OF 9 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	19
		CONTRACT NO. 46904		
	ILLINOIS	FED. AID PROJECT		

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

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

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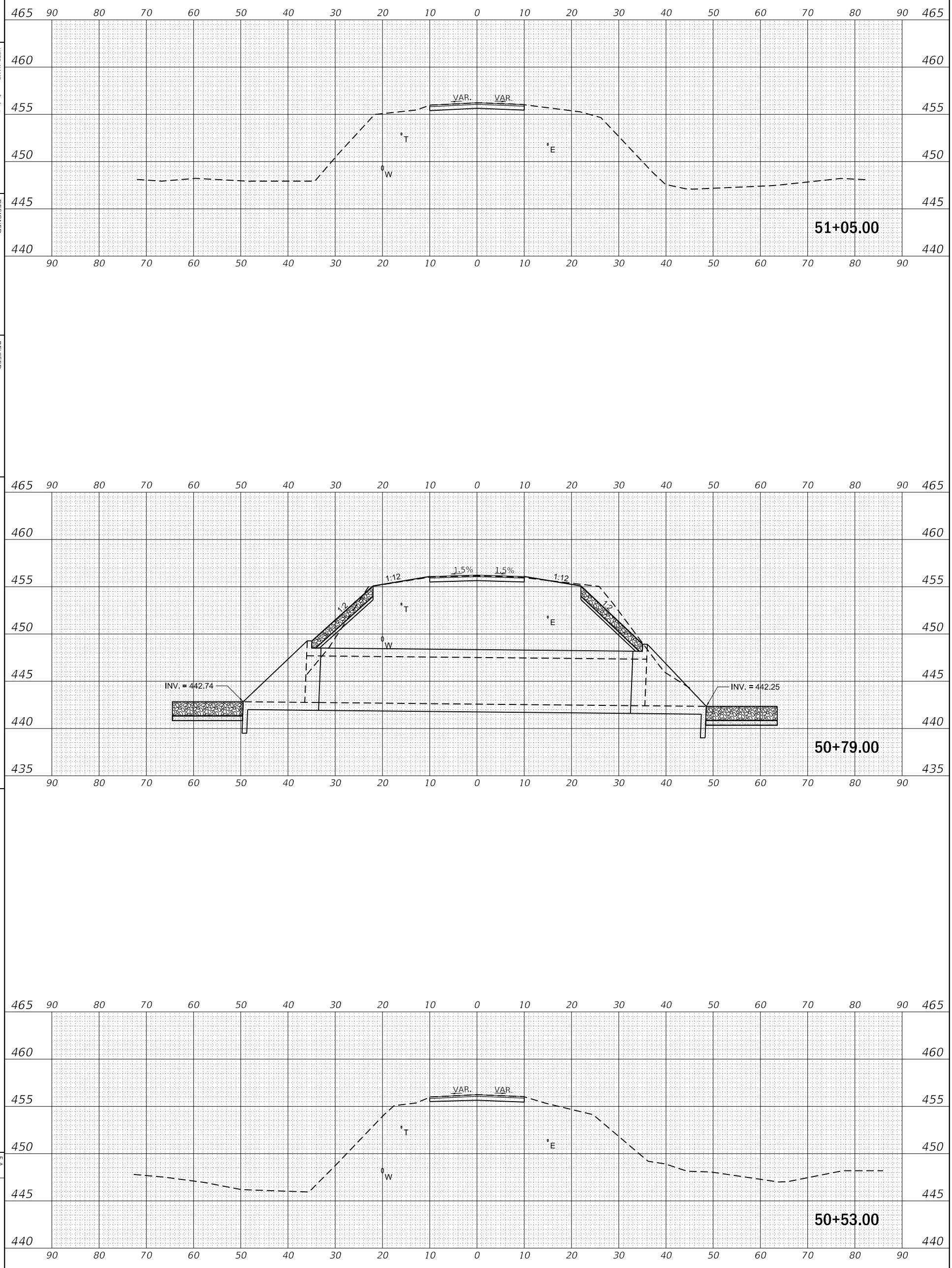

USER NAME = jkofoot
PLOT SCALE = 20.0000 ' / in.
PLOT DATE = 5/25/2018

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - BOX CULVERT

STA. 50+53.03 TO STA. 50+80.00

SCALE:

SHEET OF SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	20

ILLINOIS FED. AID PROJECT

CONTRACT NO. 46904

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

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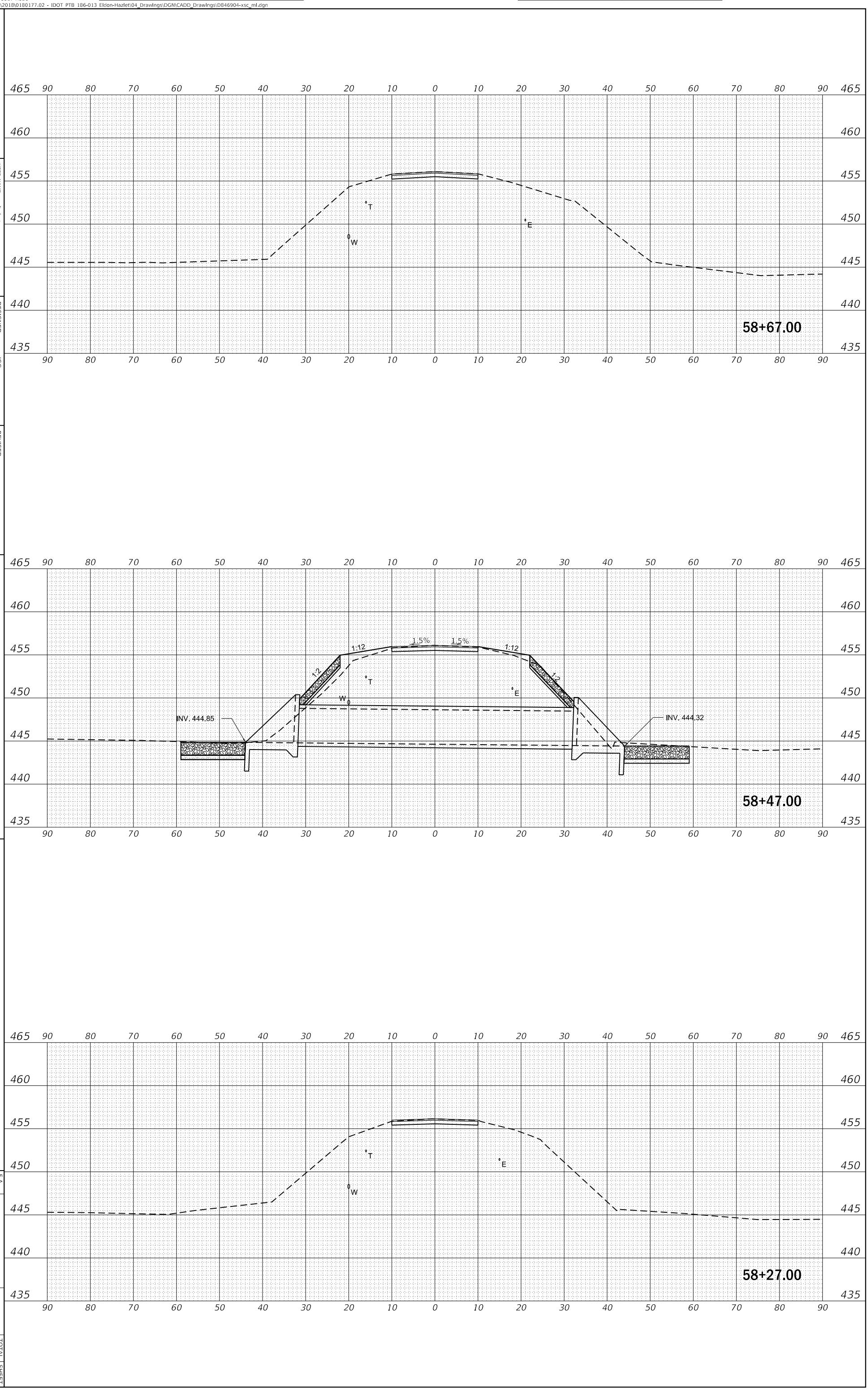

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PLOT DATE = 5/25/2018

DESIGNED - JGG
DRAWN - JDK
CHECKED - JCZ
DATE - 05/11/2018

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - PIPE CULVERT

STA. 58+27.00 TO STA. 58+67.00

SCALE:

SHEET OF SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ELDON HAZLET 2018	CLINTON	21	21

ILLINOIS FED. AID PROJECT

CONTRACT NO. 46904