

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	0102.5-T	COOK	41	1
ILLINOIS CONTRACT NO. 60F90				

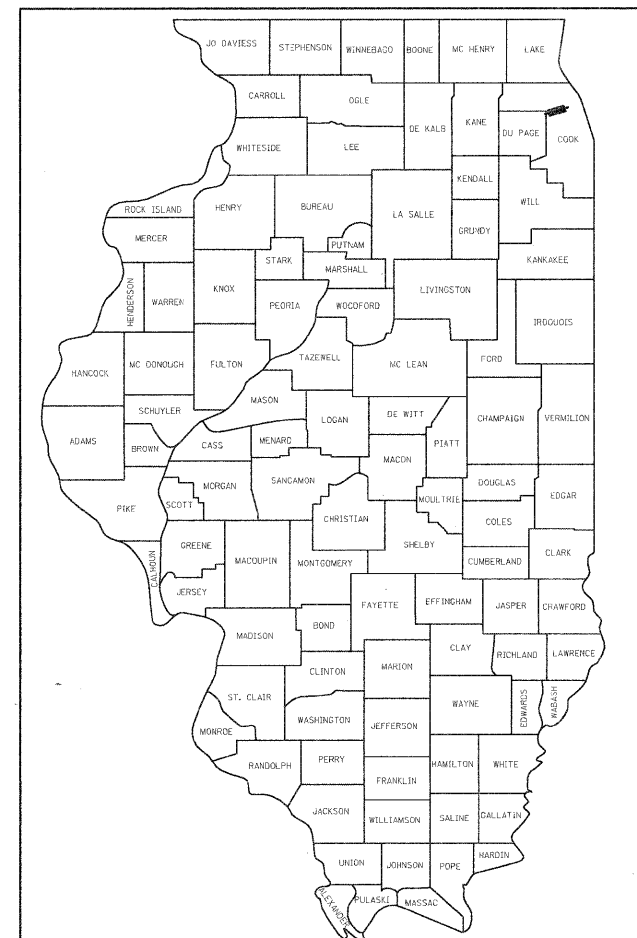
D-91-287-09

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

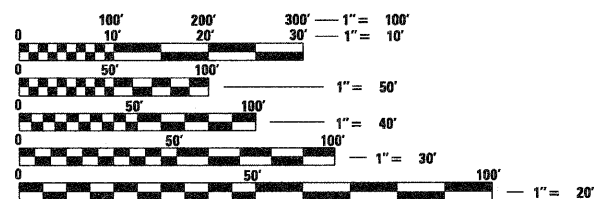
PROPOSED HIGHWAY PLANS

FAI ROUTE 190 (I-190)
AT I-190 / FAI ROUTE 294 (TRI-STATE TOLLWAY)
(FROM CANADIAN NATIONAL RAILROAD TO DES PLAINES RIVER)
SECTION 0102.5-T
COOK COUNTY
NEW STORM SEWER
C-91-287-09



LOCATION OF SECTION INDICATED THUS: —■—

IMPROVEMENT IS LOCATED IN THE CITY OF CHICAGO
AND VILLAGE OF ROSEMONT



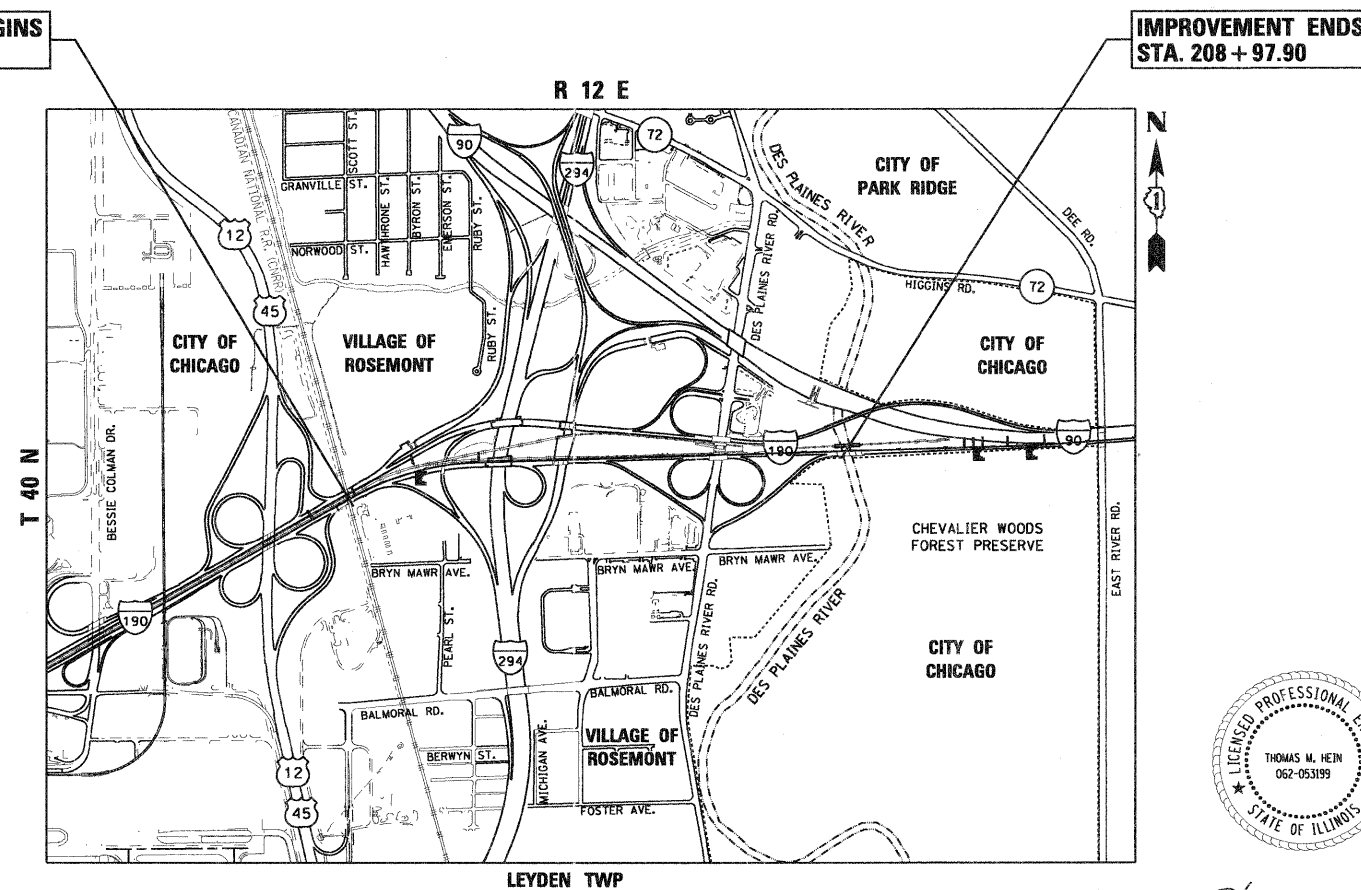
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

D.I.G.G.E.R.
CHICAGO UTILITY ALERT NETWORK (C.U.A.N.)
1-312-744-7000
CALL 72 HOURS PRIOR TO DIGGING

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

PROJECT ENGINEER ROBERT BORO T: 847-705-4237
PROJECT MANAGER ISSAM RAYYAN

CONTRACT NO. 60F90



LEYDEN TWP

LOCATION MAP

NOT TO SCALE

GROSS LENGTH = 5230.14 FT. = 0.991 MILE

NET LENGTH = 5230.14 FT. = 0.991 MILE

ENTRAN
5440 N. CUMBERLAND AVE, SUITE 111
CHICAGO, IL 60656



Thomas M. Hein
THOMAS M. HEIN, P. E.
IL. LIC. NO. 062-053199
EXP 11-30-11
DATE 9-9-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED SEPTEMBER 9, 20 11
Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 14 20 11
Scott E. Stitt, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT
October 14 20 11
William R. Frey, Jr.
Interim DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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INDEX OF SHEETS

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HIGHWAY STANDARDS

280001-05 TEMPORARY EROSION CONTROL SYSTEMS

442201-03	CLASS C AND D PATCHES
602001-02	CATCH BASIN, TYPE A
602006-03	CATCH BASIN, TYPE B
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS, TYPE 1
604031-02	GRATE, TYPE 7
604036-02	GRATE, TYPE 8
701601-07	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

GENERAL NOTES - MISCELLANEOUS

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 AND "DIGGER" AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE RESPECTIVE UTILITY COMPANIES, THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY, THE CITY OF CHICAGO, AND THE VILLAGE OF ROSEMONT.

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

ALL DAMAGE TO EXISTING PAVEMENT, PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKINGS OUTSIDE THE REMOVAL LIMITS SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES, RAISED REFLECTIVE PAVEMENT MARKERS, TREES, AND LANDSCAPING ELEMENTS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS AND LANDSCAPING SHALL BE AS DIRECTED BY THE ENGINEER.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND CONSTRUCTION.

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

THE RESIDENT ENGINEER SHALL CONTACT THE EXPRESSWAYS SECTION IN THE BUREAU OF TRAFFIC REGARDING PAVEMENT MARKINGS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

SAW CUTS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE DEPARTMENT AS SHOWN.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS. THE ENGINEER, OR AN AUTHORIZED SURVEYOR OR AGENT WILL WITNESS OR OTHERWISE REFERENCE AND RESET MONUMENTS AS NECESSARY. ALL PROPERTY CORNERS EXCEPT THOSE WITHIN AREAS WHERE THE SCHEDULE SHOWS PLACEMENT OF R.O.W. MARKERS SHALL REMAIN UNDISTURBED.

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

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH STATE OR LOCAL REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION.

THE CONTRACTORS OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS. ANY ADDITIONAL STAGING AREAS ADJACENT TO THE PROJECT ARE SUBJECT TO PRIOR APPROVAL BY THE ENGINEER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THE ABOVE REQUIREMENTS.

THE CONTRACTORS PERSONNEL SHALL PARK ONLY IN THE DESIGNATED AREAS AND AT THE DISCRETION OF THE ENGINEER.

ACCESS SHALL BE PROVIDED AT ALL TIMES TO PROPERTIES ABUTTING THE PROPOSED IMPROVEMENT.

ALL ELEVATIONS IN THE PLANS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

ALL JACKING / RECEIVING PITS ON STATE OR TOLLWAY PROPERTY MUST BE FENCED AND PROTECTED AGAINST THE ENTRY OF VEHICLES.

JACKING / RECEIVING PITS AND THE RIGHT-OF-WAY FENCE MUST BE TEMPORARILY FENCED WHEN THE CONTRACTOR IS NOT WORKING.

GENERAL NOTES - DRAINAGE

THE COST OF MAKING ANY CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.

LENGTHS AND SIZES OF STORM SEWERS AS SHOWN ON THE PLANS AND DRAINAGE STRUCTURE ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO ORDERING AND INSTALLATION OF DRAINAGE ITEMS. THE INVERTS OF THE PROPOSED DRAINAGE STRUCTURES MAY REQUIRE REVISIONS TO MEET EXISTING FIELD CONDITIONS. ANY ADJUSTMENTS SHALL BE AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF THE ROAD, STORM SEWER FLOWS FROM THE PUMP STATION, AND ADJACENT WORK AREAS DURING CONSTRUCTION OF THIS PROJECT. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED IN THE COST OF THE CONTRACT.

STORM SEWER SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 550.07 METHOD 1 ONLY.

ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS, CROSSROAD PIPES, OR DRAINAGE STRUCTURES DUE TO CONSTRUCTION OPERATIONS SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED IN THE COST OF THE CONTRACT.

GENERAL NOTES - UTILITIES

THE CONTRACTOR SHALL PROTECT EXISTING AND NEW UTILITIES. WHEN REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BRACE AND SUPPORT THE UTILITIES PROPERLY IN ORDER TO PREVENT SETTLEMENT, DISPLACEMENT, OR DAMAGE TO THE UTILITIES. THE PROTECTION OF THE UTILITIES AS SPECIFIED HEREIN WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

GENERAL NOTES - LANDSCAPING

FERTILIZER NUTRIENTS SHALL BE APPLIED AT THE FOLLOWING RATES PER ACRE:

	SEEDING	SODDING
NITROGEN FERTILIZER NUTRIENT -	90 LBS./ACRE	60 LBS./ACRE
PHOSPHORUS FERTILIZER NUTRIENT -	90 LBS./ACRE	60 LBS./ACRE
POTASSIUM FERTILIZER NUTRIENT -	90 LBS./ACRE	60 LBS./ACRE

GENERAL NOTES - ILLINOIS STATE TOLL HIGHWAY AUTHORITY

THE CONTRACTOR SHALL LOCATE AND EXPOSE THE TOLLWAYS FIBER OPTIC LINE PRIOR TO COMMENCING CONSTRUCTION.

THE CONTRACTOR SHALL PROVIDE A SIGN NEAR THE PROJECT LOCATION WHICH SHOWS THE TYPE OF FACILITY AND PERMIT NUMBER.

BEFORE CONSTRUCTION BEGINS, THE CONTRACTOR MUST OBTAIN A CONSTRUCTION PERMIT FROM THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY FOR WORK UNDER I-294 (TRI-STATE TOLLWAY) FROM STATION 163+43 TO STATION 180+25.

COMMITMENTS

NONE

STORM SEWER INSTALLATION UPSTREAM OF PUMP STATION #24

COORDINATE SEQUENCING OF ELECTRICAL SUB-STATION POWER DOWN AND REMOVAL OF EXISTING EQUIPMENT PRIOR TO COMMENCING EXCAVATION AND STORM SEWER INSTALLATION.

INSTALL STORM SEWER, FITTINGS, AND MANHOLE RISERS FROM THE PUMP STATION INTAKE TO THE EXISTING STORM SEWER.

REMOVE CONFLICTING SECTION OF EXISTING STORM SEWER AND MAINTAIN SEWER FLOW TO THE EXISTING PUMP STATION.

COMPLETE INSTALLATION OF PROPOSED STORM SEWER AND FINALIZE CONNECTION TO EXISTING SEWER. COORDINATE TIMING OF STORM SEWER CONNECTION FOR AN EXTENDED PERIOD OF DRY WEATHER AND LOW FLOW CONDITIONS.

MAINTAIN FLOW DIVERSION TO THE EXISTING PUMP STATION UNTIL SUCH TIME THAT THE NEW PUMP STATION IS OPERATIONAL.

STORM SEWER, JACKED IN PLACE THROUGH EXISTING LATERAL

COMPLETE STORM SEWER REMOVAL AS SPECIFIED IN THE PLANS AT LOCATION OF STORM SEWER CROSSING.

MAINTAIN FLOW OF EXISTING STORM SEWER TO DOWNSTREAM LOCATION (COST IS CONSIDERED INCIDENTAL TO CONTRACT).

JACK STORM SEWER IN PLACE.

UPON COMPLETION AND ACCEPTANCE OF DOWNSTREAM MAINLINE SEWER, CONTINUE INSTALLATION OF STORM SEWER LATERAL AND PREPARE DIRECT CONNECTION.



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PLOT DATE = 10/13/2011	DATE - 09/07/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PUMP STATION 24 STORM SEWER IMPROVEMENTS
INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES

SCALE: 50.00 ' / IN. SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	0102.5-T	COOK	41	2
CONTRACT NO. 60F90				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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ENTRAN

PLOT DATE = 9/7/201

DATE - 09/07/

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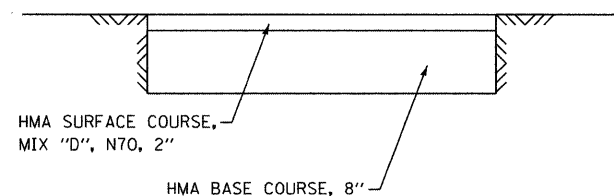
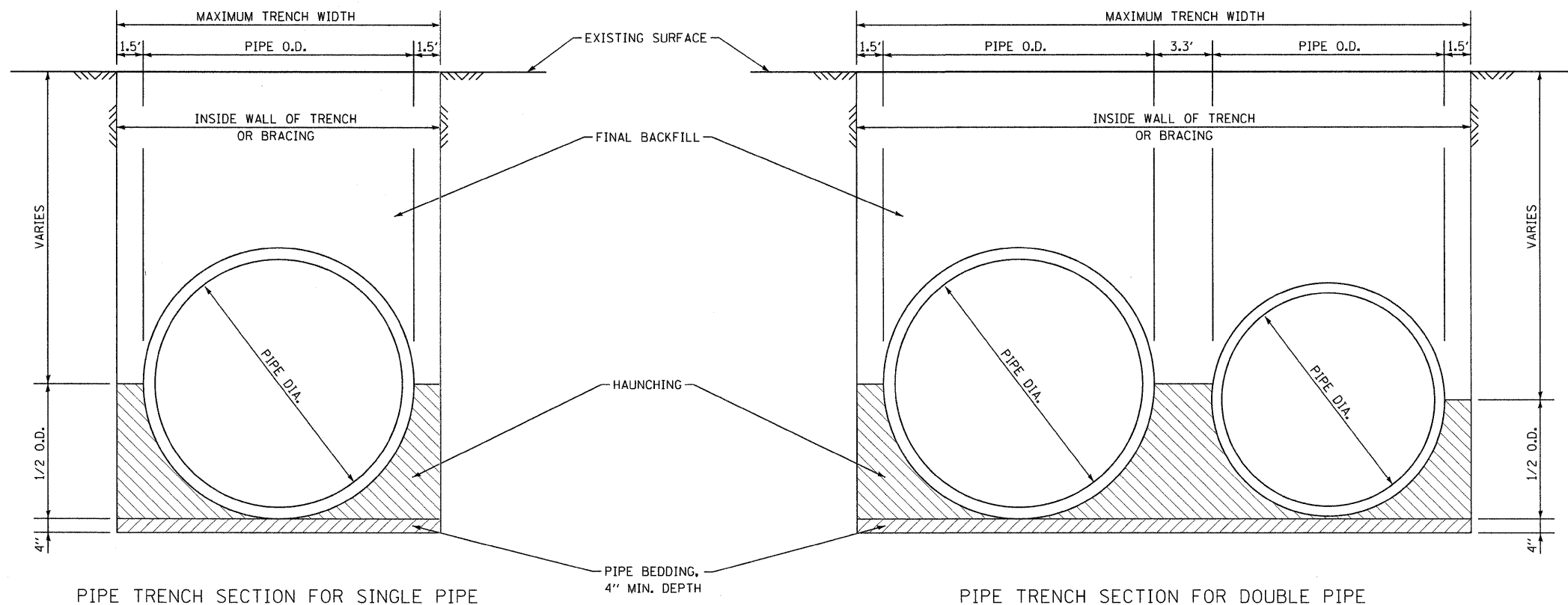
FED. RO

NO. 1 ILLIN

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AL	SHEET
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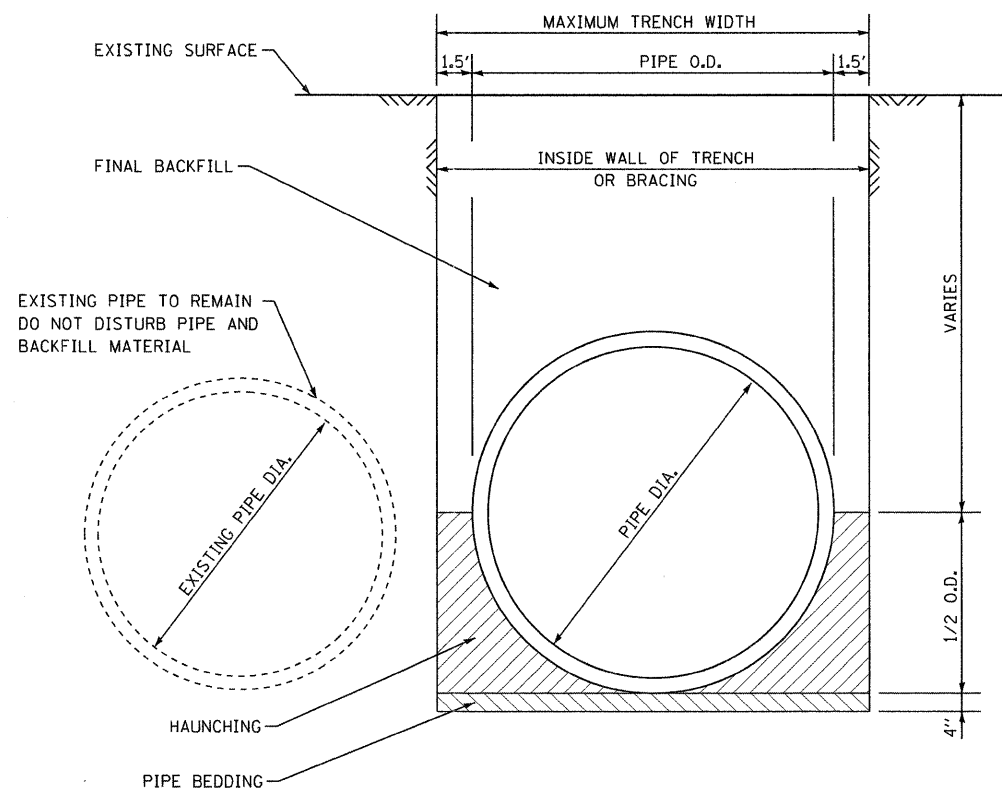
CTA PARKING LOT SECTION

HMA MIXTURE REQUIREMENTS

MIX DESIGNS	AIR VOIDS
CTA PARKING LOT	
HMA SURFACE COURSE, MIX "D", N70, (IL-9.5mm); 2"	4% @ 70 GYRATIONS
HMA BASE COURSE (HMA BINDER IL-19 mm); 8"	4% @ 70 GYRATIONS
PATCHING	
HMA SURFACE COURSE, MIX "D", N70, (IL-9.5mm); 2"	4% @ 70 GYRATIONS
CLASS D PATCH (HMA BINDER IL-19mm)	4% @ 70 GYRATIONS

NOTE:
 THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SY/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



THE MATERIAL FOR PIPE BEDDING AND HAUNCHING SHALL BE WET COARSE AGGREGATE OR MOIST FINE AGGREGATE AND SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. THE AGGREGATE GRADATION SHALL BE CA-6, CA-9, CA-10, CA-18, FA-1, FA-2, FA-5, FA-6, FA-10, OR FA-21.

THE MATERIAL FOR FINAL BACKFILL SHALL BE SUITABLE MATERIAL EXCAVATED FROM THE TRENCH OR SELECTED GRANULAR MATERIAL MEETING THE REQUIREMENTS OUTLINED FOR HAUNCHING. BACKFILL MATERIAL SHALL BE DEPOSITED AND COMPACTED AS SPECIFIED IN METHOD 1 IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

FINAL BACKFILL SHALL EXTEND TO THE EXISTING OR FINISHED SURFACE.

THE BACKFILL MATERIAL FOR TRENCHES WHERE THE INNER EDGE OF THE TRENCH IS FOUND WITHIN 2 FT OF THE EDGE OF PAVEMENT, CURB, GUTTER, STABILIZED SHOULDER, OR SIDEWALK, SHALL BE TRENCH BACKFILL IN ACCORDANCE WITH ARTICLE 208 OF THE STANDARD SPECIFICATIONS.

GENERAL NOTES

- THE WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS
- THE EXCAVATION, BEDDING, BACKFILL, AND DISPOSAL OF MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE OF STORM SEWERS OF THE TYPE AND CLASS SPECIFIED.
- IF A WATERMAIN IS ENCOUNTERED DURING STORM SEWER CONSTRUCTION, THE REQUIREMENTS OF THE IEPA SHALL GOVERN THE HORIZONTAL AND VERTICAL SEPERATION OF THE WATERMAIN AND STORM SEWER.
- ALL EXCAVATED MATERIAL NOT NEEDED FOR THE WORK SHALL BE DISPOSED OF ACCORDING TO ARTICLE 202.03 AND IS INCLUDED IN THE COST FOR STORM SEWER.
- REFER TO THE PLANS AND SPECIFICATIONS FOR SURFACE RESTORATION.

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SCHEDULE OF QUANTITIES

20100110 TREE REMOVAL (6 TO 15 UNITS DIAMETER)

STATION	OFFSET(FT)	UNIT

160+61.3	215.0 RT	15.00
180+69.1	217.0 RT	15.00
180+69.1	217.0 RT	15.00
180+75.6	201.5 RT	15.00
180+89.3	222.3 RT	15.00
181+09.6	215.5 RT	12.00
181+09.6	215.5 RT	13.00
181+37.0	220.3 RT	6.00
181+37.0	220.3 RT	6.00
181+37.0	220.3 RT	6.00
181+37.0	220.3 RT	6.00
185+74.8	209.9 RT	6.00
185+74.8	209.9 RT	7.00
185+74.8	209.9 RT	7.00
186+11.3	223.5 RT	8.00
186+11.3	223.5 RT	10.00
186+41.1	232.4 RT	8.00
186+41.1	232.4 RT	8.00
192+64.9	112.2 RT	8.00
192+67.7	125.1 RT	8.00
192+78.0	129.4 RT	7.00
192+93.1	127.7 RT	10.00
193+12.4	125.7 RT	14.00
197+08.2	110.5 RT	8.00
197+08.2	110.5 RT	8.00
198+06.7	100.1 RT	11.00
198+35.3	101.0 RT	6.00
198+35.3	101.0 RT	6.00
198+35.3	101.0 RT	6.00
198+53.9	105.1 RT	14.00
198+53.9	105.1 RT	14.00
198+79.0	128.6 RT	8.00
201+27.6	88.8 RT	8.00
203+99.3	87.4 RT	8.00
=====		
TOTAL =		316

20100210 TREE REMOVAL (OVER 15 UNITS DIAMETER)

STATION	OFFSET(FT)	UNIT

160+19.6	203.2 RT	18.00
160+60.2	200.2 RT	24.00
190+39.5	139.9 RT	16.00
190+27.2	194.6 RT	16.00
190+47.7	168.1 RT	16.00
192+48.8	127.2 RT	17.00
208+32.2	73.9 RT	16.00
=====		
TOTAL =		123

20101100 TREE TRUNK PROTECTION

STATION	OFFSET(FT)	EACH

160+66.7	239.7 RT	1.0
160+77.0	229.8 RT	1.0
181+94.4	132.2 RT	1.0
186+48.4	244.6 RT	1.0
186+98.7	234.9 RT	1.0
189+86.7	91.3 RT	1.0
190+11.1	84.6 RT	1.0
190+25.7	261.5 RT	1.0
190+43.1	229.5 RT	1.0
192+68.5	146.5 RT	1.0
192+99.6	140.8 RT	1.0
193+81.3	124.4 RT	1.0
194+12.7	121.7 RT	1.0
194+19.7	123.3 RT	1.0
194+73.3	104.3 RT	1.0
194+74.9	82.0 RT	1.0
197+25.5	139.2 RT	1.0
197+36.1	68.8 RT	1.0

197+54.1	130.0 RT	1.0
198+13.3	151.0 RT	1.0
201+41.1	115.0 RT	1.0
202+17.7	117.1 RT	1.0

20800150 TRENCH BACKFILL

STATION	OFFSET(FT)	STATION	OFFSET(FT)	CU YD

CTA PARKING LOT

184+23.9	223.1 RT	-	185+01.6	220.6 RT	323.1
DIA. = 84" AVG. DEPTH = 15.8' TABLE, CU YD/FT = 4.153					

SB RIVER ROAD - ADJUSTING WATER MAIN 12

195+70.8	62.9	-	195+58.3	122.3	42.2
DIA. = 12" AVG. DEPTH = 5.0' TABLE, CU YD/FT = 0.696					

NB RIVER ROAD - STORM SEWER, 30"

196+20.2	77.3 RT	-	196+20.2	93.0 RT	26.1
DIA. = 30" AVG. DEPTH = 9.2' TABLE, CU YD/FT = 1.653					
TOTAL =					391

21101615 TOPSOIL FURNISH AND PLACE, 4"

STATION	WIDTH(FT)	STATION	WIDTH(FT)	SQ YD

REFER TO "25000200 SEEDING CL 2" FOR QUANTITY

REFER TO "25200100 SODDING" FOR QUANTITY

TOTAL =				21,741
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21301072 EXPLORATION TRENCH 72" DEPTH

STATION	OFFSET(FT)	STATION	OFFSET(FT)	FOOT

171+53.8 273.3 RT - 171+54.7 288.3 RT 15.0

173+86.0 256.0 RT - 173+87.0 271.0 RT 15.0

179+81.2 211.9 RT - 179+82.1 226.9 RT 15.0

ADDITIONAL PROVISIONAL QUANTITY 60.0

TOTAL =				105
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25000200 SEEDING, CLASS 2

STATION	WIDTH(FT)	STATION	WIDTH(FT)	ACRE

157+45.0 VARIES - 163+40.5 VARIES 0.87

164+54.5 VARIES - 165+03.7 VARIES 0.02

165+10.5 VARIES - 165+47.2 VARIES 0.02

170+88.0 VARIES - 171+05.9 VARIES 0.01

174+42.7 VARIES - 174+63.6 VARIES 0.01

178+25.6 VARIES - 178+57.5 VARIES 0.02

180+14.5 VARIES - 184+20.6 VARIES 0.62

185+00.0 VARIES - 186+78.4 VARIES 0.23

205+67.0 VARIES - 209+20.3 VARIES 0.56

STABILIZED CONSTRUCTION ENTRANCE #1 0.01

STABILIZED CONSTRUCTION ENTRANCE #2 0.01

STABILIZED CONSTRUCTION ENTRANCE #8 0.01

TOTAL =				2.40
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25100630 EROSION CONTROL BLANKET

STATION	WIDTH(FT)	STATION	WIDTH(FT)	SQ YD

REFER TO "25000200 SEEDING CL 2" FOR QUANTITY

TOTAL =				11,602
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25200100 SODDING

STATION	WIDTH(FT)	STATION	WIDTH(FT)	SQ YD

188+44.2 VARIES - 190+35.8 VARIES 2,496.7

191+90.2 VARIES - 194+80.5 VARIES 2,089.9

196+71.9 VARIES - 199+74.8 VARIES 2,187.4

200+29.3 VARIES - 205+09.6 VARIES 3,031.9

STABILIZED CONSTRUCTION ENTRANCE #3 66.7

STABILIZED CONSTRUCTION ENTRANCE #4 66.7

STABILIZED CONSTRUCTION ENTRANCE #5 66.7

STABILIZED CONSTRUCTION ENTRANCE #6 66.7

STABILIZED CONSTRUCTION ENTRANCE #7 66.7

TOTAL =				10,139
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28000305 TEMPORARY DITCH CHECKS

STATION	OFFSET(FT)	STATION	OFFSET(FT)	FOOT

162+07.3 152.3 RT 15.0

162+96.7 207.3 RT 15.0

171+33.1 299.6 RT 15.0

174+00.0 280.6 RT 15.0

TOTAL =				60
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28000400 PERIMETER EROSION BARRIER

STATION	OFFSET(FT)	STATION	OFFSET(FT)	FOOT

157+44.2 261.7 RT - 158+73.4 295.9 RT 133.7

158+73.4 295.9 RT - 160+34.3 187.4 RT 194.0

160+34.3 187.4 RT - 162+15.8 221.7 RT 184.7

162+31.7 224.1 RT - 163+46.8 239.4 RT 116.2

157+32.6 307.7 RT - 159+11.0 340.4 RT 181.4

159+11.0 340.4 RT - 160+58.0 242.1 RT 176.9

160+58.0 242.1 RT - 160+82.8 247.2 RT 25.3

160+82.8 247.2 RT - 163+10.1 364.8 RT 255.9

164+53.8 253.1 RT - 164+67.0 244.1 RT 15.9

164+67.0 244.1 RT - 165+05.3 289.3 RT 59.3

165+05.3 289.3 RT - 164+92.1 298.5 RT 16.1

170+86.9 279.1 RT - 171+06.9 277.5 RT 20.0

171+06.9 277.5 RT - 171+08.4 297.5 RT 20.0

171+08.4 297.5 RT - 170+88.5 299.0 RT 20.0

174+61.5 245.8 RT - 174+41.6 247.3 RT 20.0

174+41.6 247.3 RT - 174+43.8 275.6 RT 28.3

174+43.8 275.6 RT - 174+63.7 274.0 RT 20.0

178+25.5 207.5 RT - 178+47.8 205.8 RT 22.3

178+47.8 205.8 RT - 178+58.8 244.4 RT 40.2

178+58.8 244.4 RT - 178+28.6 247.5 RT 30.3

180+86.7 121.3 RT - 180+13.5 207.3 RT 112.9

180+13.5 207.3 RT - 180+15.5 233.3 RT 26.1

180+15.5 233.3 RT - 181+16.2 227.4 RT 100.9

181+16.2 227.4 RT - 183+46.6 254.4 RT 232.0

181+85.7 114.0 RT - 181+91.5 188.5 RT 74.7

181+91.5 188.5 RT - 183+35.2 204.0 RT 144.5

183+35.2 204.0 RT - 184+21.6 198.9 RT 86.6

183+68.3 254.1 RT - 184+21.1 253.3 RT 52.8

184+99.4 245.2 RT - 186+79.4 234.7 RT 180.4

185+46.7 163.5 RT - 186+33.7 202.5 RT 95.3

186+33.7 202.5 RT - 186+78.3 201.1 RT 44.7

188+47.2 217.8 RT - 189+01.9 274.3 RT 78.7

189+01.9 274.3 RT - 190+16.2 273.1 RT 114.2

191+89.2 117.8 RT - 191+93.5 149.9 RT 32.4

191+93.5 149.9 RT - 193+55.6 138.0 RT 162.6

193+55.6	138.0 RT	-	193+69.2	122.3 RT	20.8
193+69.2	122.3 RT	-	194+80.5	121.5 RT	111.3
194+80.5	121.5 RT	-	195+18.3	112.9 RT	38.9

196+70.8	62.3 RT	-	196+71.2	112.7 RT	50.5
196+71.2	112.7 RT	-	197+19.3	160.2 RT	67.5
197+19.3	160.2 RT	-	199+50.1	157.8 RT	230.9
199+50.1	157.8 RT	-	199+75.6	120.3 RT	45.3

200+01.6	90.8 RT	-	200+27.1	90.5 RT	25.5
200+27.1	90.5 RT	-	200+64.3	126.9 RT	52.0
200+64.3	126.9 RT	-	204+98.6	124.1 RT	434.4
204+98.6	124.1 RT	-	205+34.4	87.6 RT	51.1
205+34.4	87.6 RT	-	205+79.8	87.1 RT	45.4

205+66.0	160.8 RT	-	205+66.8	243.9 RT	83.1
205+66.8	243.9 RT	-	206+68.2	242.8 RT	101.4
206+68.2	242.8 RT	-	206+67.3	157.9 RT	84.9
206+67.3	157.9 RT	-	207+02.7	128.4 RT	46.0
207+02.7	128.4 RT	-	208+52.1	126.9 RT	149.4
208+52.1	126.9 RT	-	208+52.1	133.0 RT	6.1
208+52.1	133.0 RT	-	209+21.8	132.3 RT	69.7
209+21.8	132.3 RT	-	209+21.0	53.9 RT	78.3

TOTAL =				4,912
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28000510 INLET FILTERS

STATION	OFFSET(FT)	STATION	OFFSET(FT)	EACH

162+65.2 181.0 RT 1.0

163+13.4 339.6 RT 1.0

163+38.1 266.5 RT 1.0

1

SCHEDULE OF QUANTITIES

44201765 CLASS D PATCHES, TYPE II, 10 INCH

STATION	WIDTH(FT)	-	STATION	WIDTH(FT)	SQ YD
195+77.5	15.0	-	195+82.5	15.0	8.3
196+31.5	15.0	-	196+36.5	15.0	8.3
					=====
TOTAL =					17

44201771 CLASS D PATCHES, TYPE IV, 10 INCH

STATION	WIDTH(FT)	-	STATION	WIDTH(FT)	SQ YD
195+54.8	6.0	-	195+72.8	6.0	42.6
196+15.4	35.0	-	196+27.4	35.0	46.9
					=====
TOTAL =					89

54248510 CONCRETE COLLAR

STATION	OFFSET(FT)	CU YD
156+67.8	112.7 RT	2.5
157+32.4	271.6 RT	2.5
157+29.6	182.3 RT	2.1
160+52.7	221.5 RT	2.1
182+68.9	219.7 RT	2.1
186+76.2	214.9 RT	2.5
188+75.9	179.5 RT	2.5
190+38.9	147.0 RT	3.0
		=====
TOTAL =		19.3

55102300 STORM SEWER REMOVAL 72"

STATION	OFFSET(FT)	-	STATION	OFFSET(FT)	FOOT
157+59.4	142.8 RT	-	160+53.2	221.7 RT	304.2
182+69.8	219.6 RT	-	183+66.0	214.0 RT	96.4
					=====
TOTAL =					401

55102500 STORM SEWER REMOVAL 84"

STATION	OFFSET(FT)	-	STATION	OFFSET(FT)	FOOT
156+67.8	112.7 RT	-	157+24.4	131.3 RT	59.6
188+75.9	179.5 RT	-	190+20.5	167.6 RT	145.1
208+80.1	107.6 RT	-	208+90.1	107.4 RT	10.0
					=====
TOTAL =					215

60257900 MANHOLES TO BE RECONSTRUCTED

STATION	OFFSET(FT)	EACH
163+32.5	267.9 RT	1.0
		=====
TOTAL =		1

60500040 REMOVING MANHOLES

STATION	OFFSET(FT)	EACH
165+38.8	280.2 RT	1.0
189+87.8	142.8 RT	1.0
		=====
TOTAL =		2

66400105 CHAIN LINK FENCE, 4'

STATION	OFFSET(FT)	-	STATION	OFFSET(FT)	FOOT
183+49.9	251.7 RT	-	183+73.9	251.5 RT	24.0
184+23.4	197.1 RT	-	184+23.4	251.0 RT	54.0
185+02.2	196.5 RT	-	185+01.7	247.8 RT	51.2
208+71.8	49.6 RT	-	208+73.5	117.4 RT	67.8
208+73.5	117.4 RT	-	208+82.3	117.4 RT	8.7
					=====
TOTAL =					206

66400305 CHAIN LINK FENCE, 6'

STATION	OFFSET(FT)	-	STATION	OFFSET(FT)	FOOT
160+15.2	219.0 RT	-	160+36.0	226.6 RT	22.2
160+36.0	226.6 RT	-	160+50.0	234.9 RT	16.2
					=====
TOTAL =					38

56106600 ADJUSTING WATER MAIN 12"

STATION	OFFSET(FT)	-	STATION	OFFSET(FT)	FOOT
195+70.4	64.9 RT	-	195+58.3	123.6 RT	60.0
					=====
TOTAL =					60

X0323389 STORM SEWER CONNECTION

STATION	OFFSET(FT)	EACH
163+39.9	273.0 RT	1.0
164+77.3	265.7 RT	1.0
165+39.5	272.8 RT	1.0
178+44.4	224.7 RT	1.0
189+82.6	149.4 RT	1.0
196+20.2	93.0 RT	1.0
198+44.5	88.6 RT	1.0
201+94.5	89.4 RT	1.0
207+91.6	84.7 RT	1.0
		=====
TOTAL =		9

X6022402 MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID, SPECIAL

STATION	OFFSET(FT)	EACH
INSTALLED ON PIPE TEE		
156+71.6	113.9 RT	1.0
157+05.4	159.5 RT	1.0
158+95.3	302.3 RT	1.0
158+98.2	314.0 RT	1.0
160+41.6	225.5 RT	1.0
160+47.2	207.6 RT	1.0
163+27.0	248.1 RT	1.0
182+27.4	203.1 RT	1.0
182+72.9	219.5 RT	1.0
186+68.2	215.2 RT	1.0
188+79.9	179.2 RT	1.0
188+83.1	197.6 RT	1.0
198+36.6	96.4 RT	1.0
201+86.5	94.1 RT	1.0
205+00.0	91.3 RT	1.0
207+83.7	88.4 RT	1.0
INSTALLED OVER STORM SEWER JACKED-IN-PLACE		
165+30.2	276.0 RT	1.0
171+00.0	285.1 RT	1.0
174+55.0	258.3 RT	1.0
178+36.7	229.4 RT	1.0
		=====
TOTAL =		20

X6640300 CHAIN LINK FENCE REMOVAL

STATION	OFFSET(FT)	-	STATION	OFFSET(FT)	FOOT
REFER TO "66400105 CH LK FENCE 4" FOR QUANTITY					205.7
REFER TO "66400305 CH LK FENCE 6" FOR QUANTITY					38.4
					=====
TOTAL =					244

Z0013797 STABILIZED CONSTRUCTION ENTRANCE

STATION	WIDTH(FT)	-	STATION	WIDTH(FT)	SQ YD
STABILIZED CONSTRUCTION ENTRANCE #1					70.0
STABILIZED CONSTRUCTION ENTRANCE #2					70.0
STABILIZED CONSTRUCTION ENTRANCE #3					70.0
STABILIZED CONSTRUCTION ENTRANCE #4					70.0
STABILIZED CONSTRUCTION ENTRANCE #5					70.0
STABILIZED CONSTRUCTION ENTRANCE #6					70.0
STABILIZED CONSTRUCTION ENTRANCE #7					70.0
STABILIZED CONSTRUCTION ENTRANCE #8					70.0
					=====
TOTAL =					560

REINFORCED CONCRETE PIPE TEE, 84" PIPE WITH 48" RISER

STATION	OFFSET(FT)	EACH
156+71.6	113.9 RT	1.0
157+05.4	159.5 RT	1.0
158+95.3	302.3 RT	1.0
160+47.2	207.6 RT	1.0
163+27.0	248.1 RT	1.0
182+27.4	203.1 RT	1.0
186+68.2	215.2 RT	1.0
188+83.1	198.0 RT	1.0
188+79.9	179.2 RT	1.0
		=====
TOTAL =		9

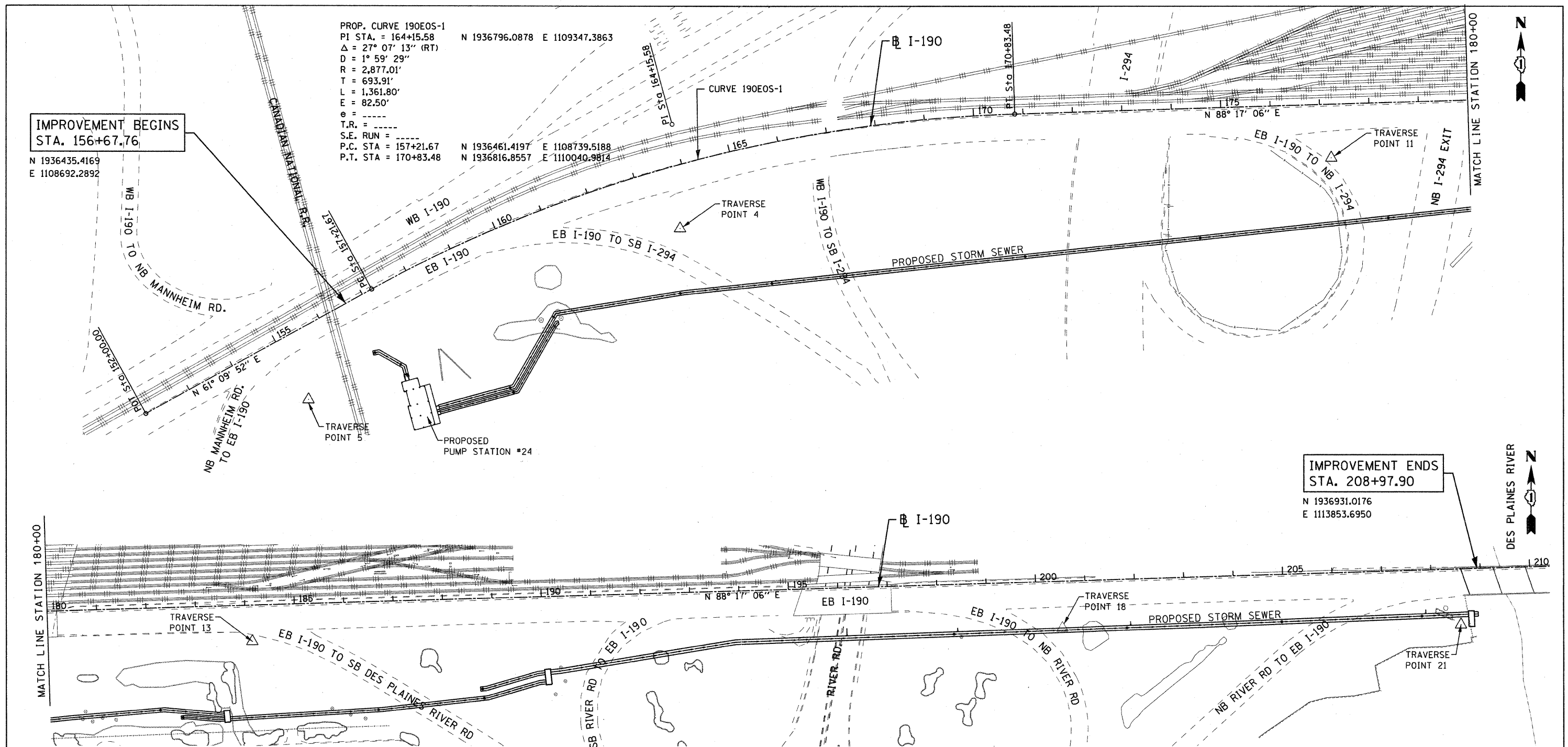
REINFORCED CONCRETE PIPE TEE, 96" PIPE WITH 48" RISER

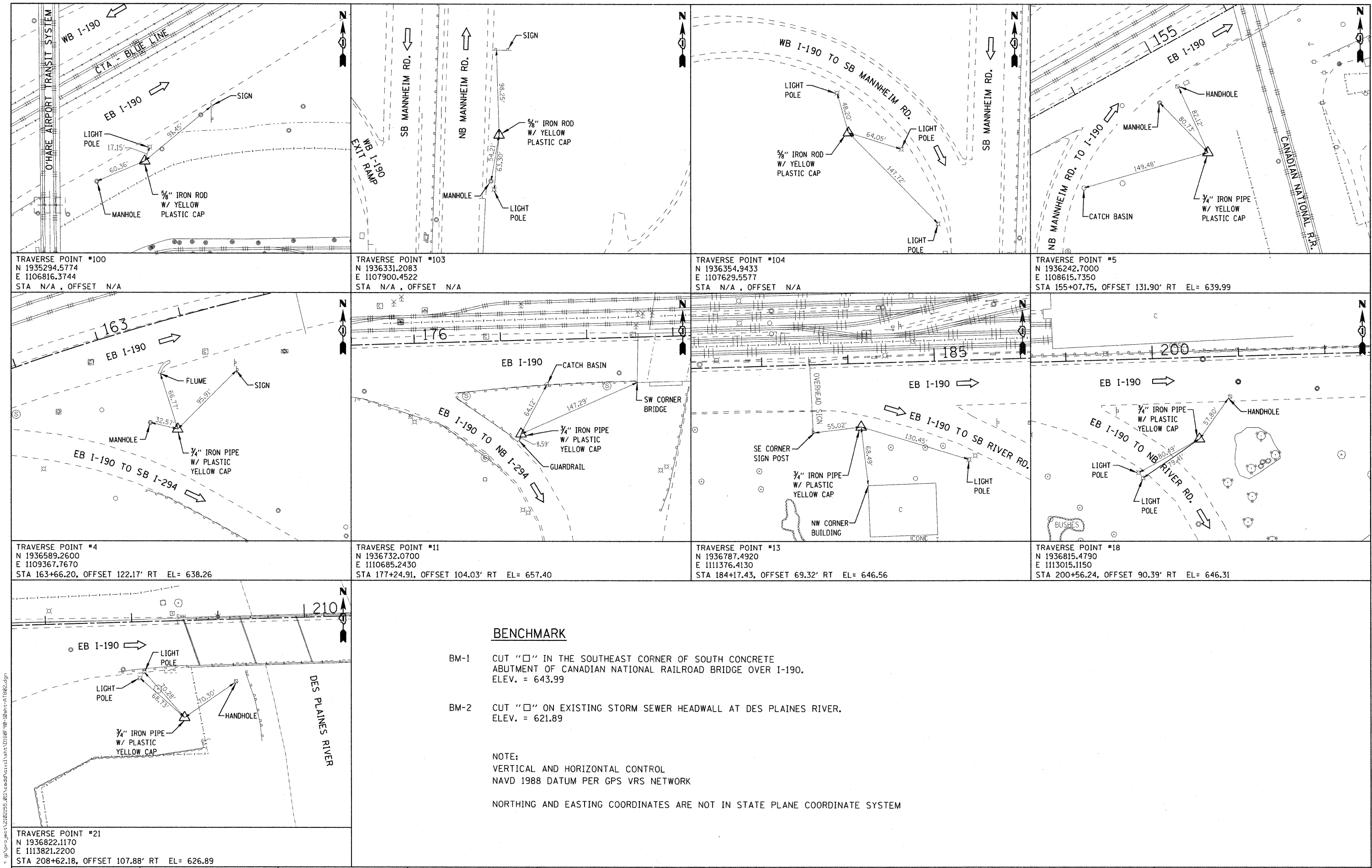
STATION	OFFSET(FT)	EACH
198+36.6	96.4 RT	1.0
201+86.5	94.1 RT	1.0
205+00.0	91.3 RT	1.0
207+83.7	88.4 RT	1.0
		=====
TOTAL =		4

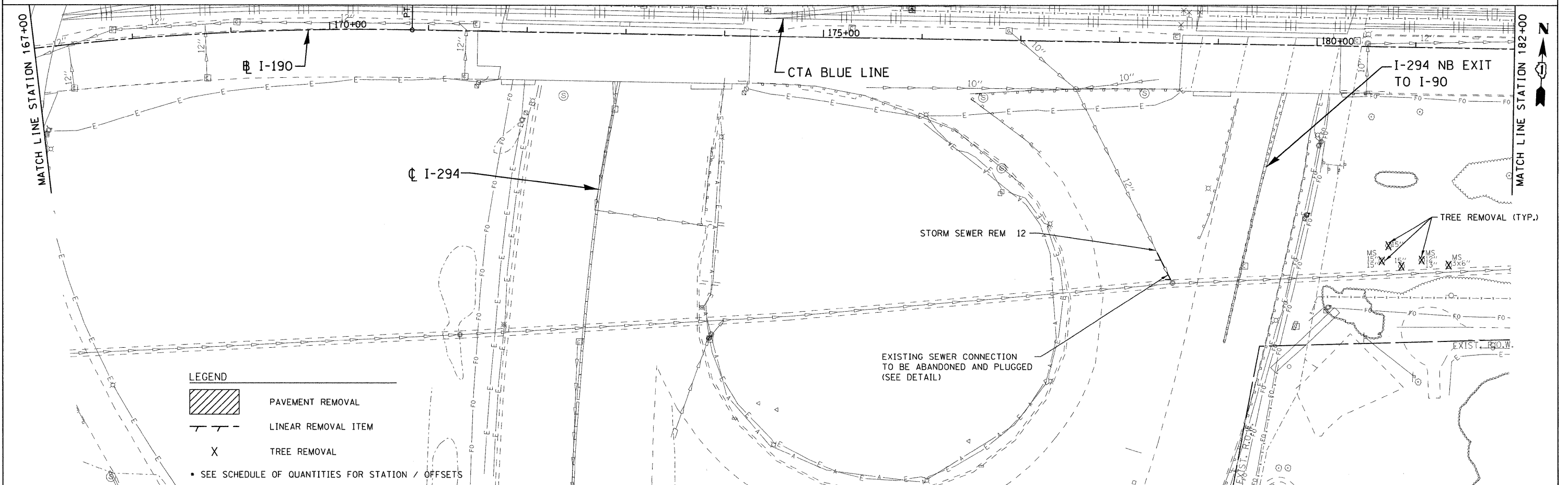
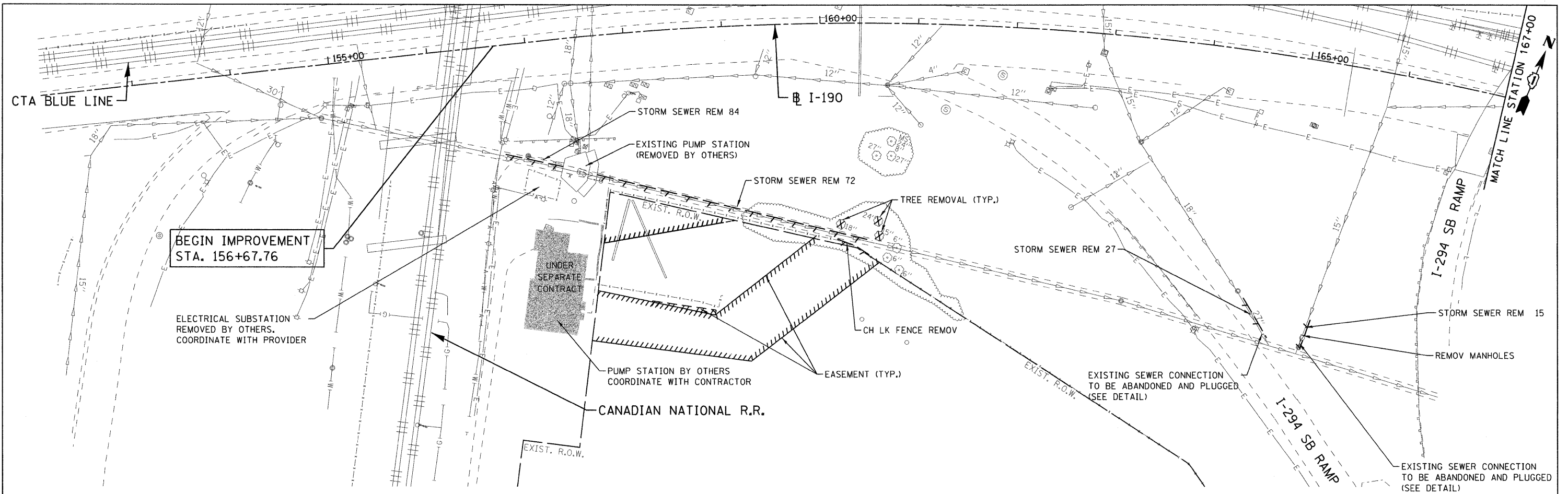
REINFORCED CONCRETE PIPE TEE, 72" PIPE WITH 48" RISER

STATION	OFFSET(FT)	EACH
158+98.2	314.0 RT	1.0
160+41.6	225.5 RT	1.0
182+72.9	219.5 RT	1.0
		=====
TOTAL =		3

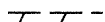
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LEGEND

-  PAVEMENT REMOVAL
-  LINEAR REMOVAL ITEM
-  TREE REMOVAL

• SEE SCHEDULE OF QUANTITIES FOR STATION / OFFSETS



USER NAME = 2bookd	DESIGNED - DJB	REVISED -
PLOT SCALE = 50.00' / IN.	DRAWN - ENTRAN	REVISED -
PLOT DATE = 10/11/2011	CHECKED - DAK	REVISED -
	DATE - 09/07/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PUMP STATION 24 STORM SEWER IMPROVEMENTS
REMOVAL PLAN

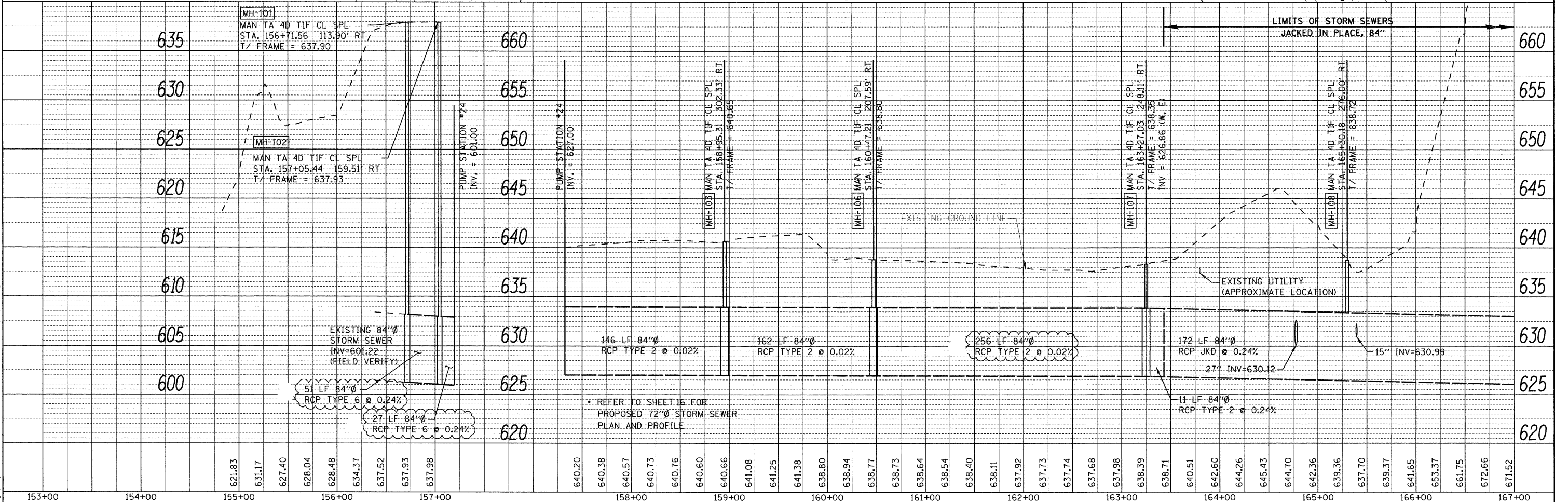
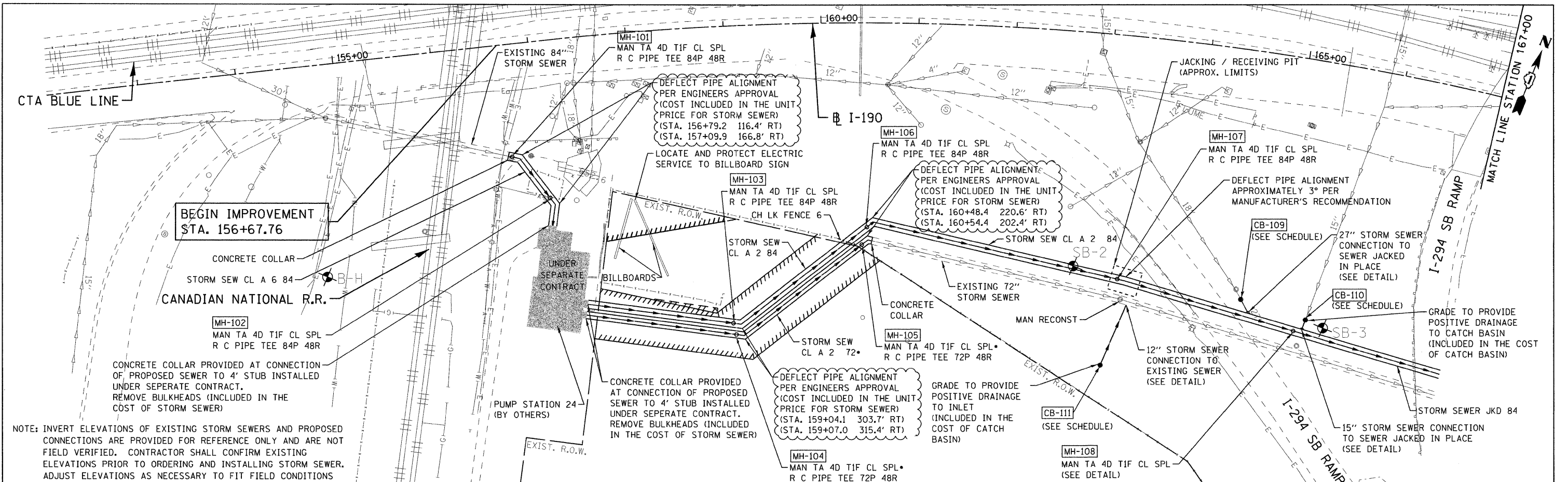
SCALE: 50.00' / IN. SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	0102.5-T	COOK	41	10
CONTRACT NO. 60F90				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTES	BY
	NO.	BY

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTES	BY
	NO.	BY

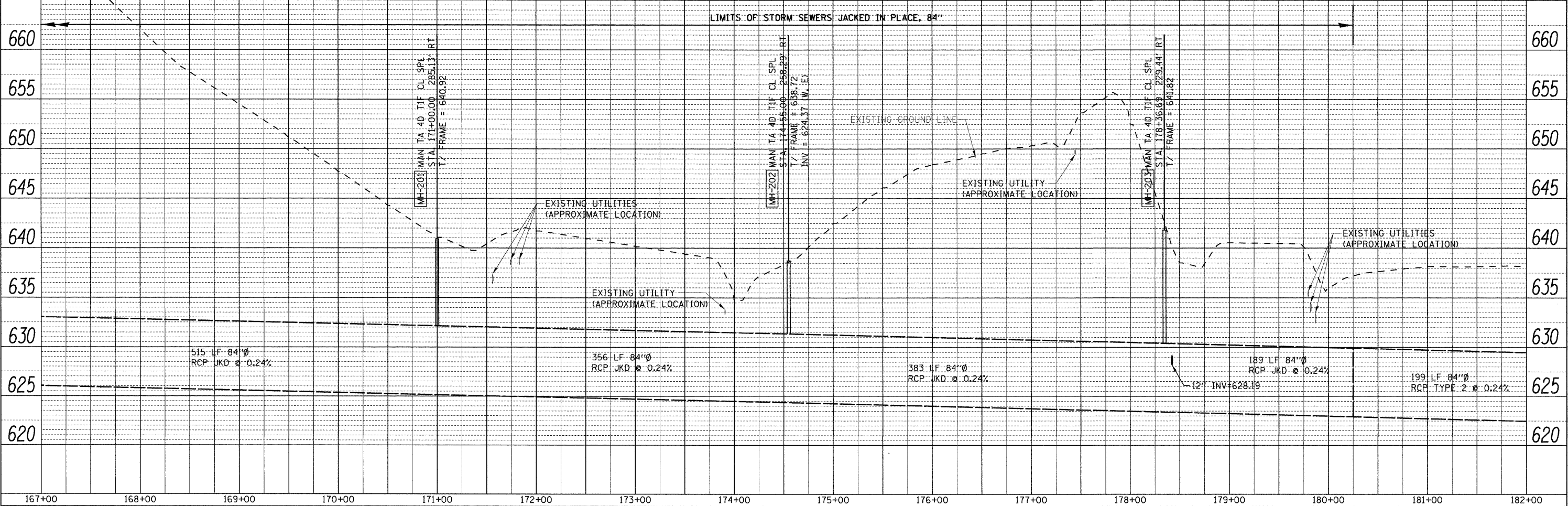
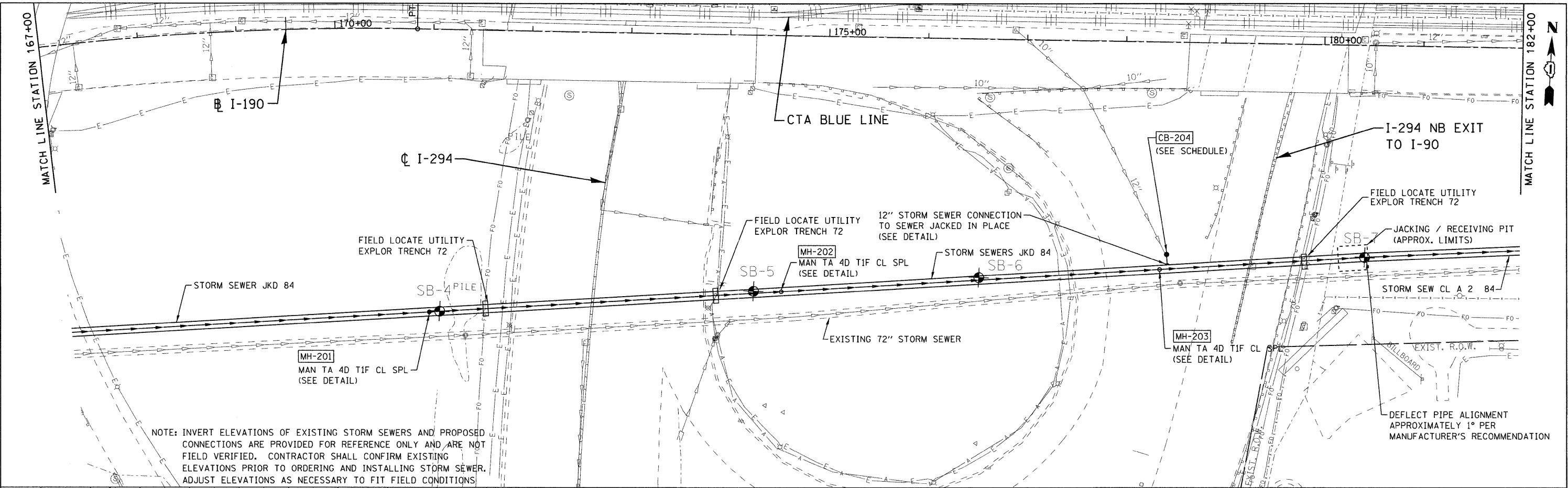
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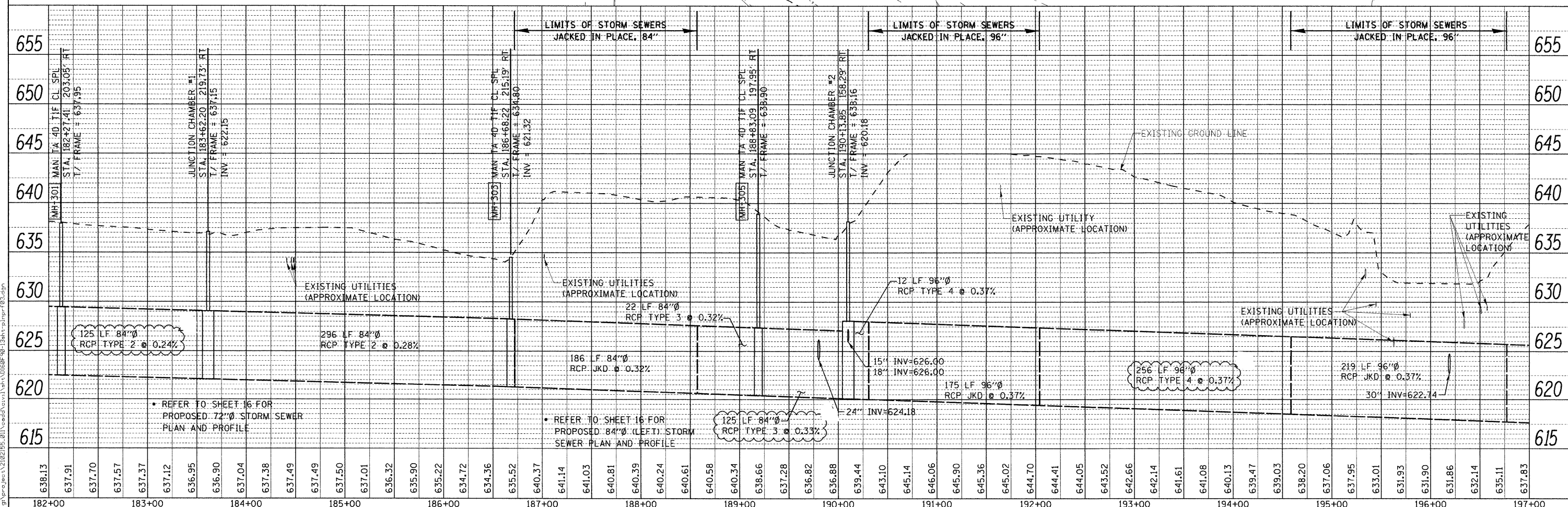
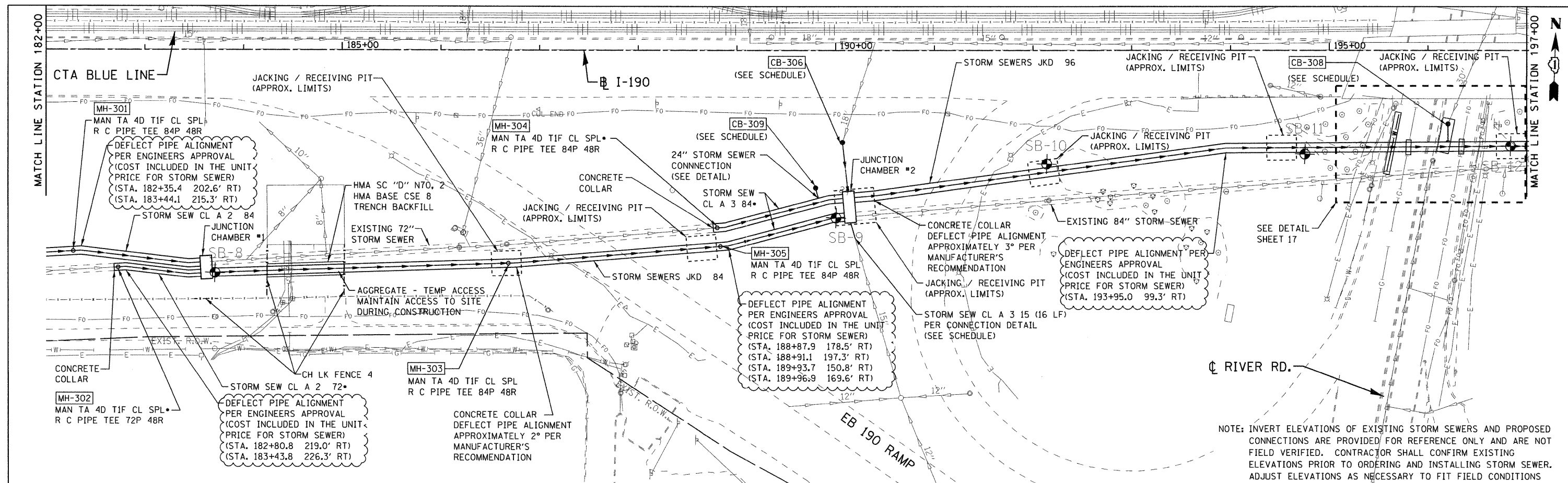
PLAN	DATE
DESIGNED	BY
CHECKED	DATE
NOTED	
NO.	

PROFILE	DATE
DESIGNED	BY
CHECKED	DATE
NOTED	
NO.	

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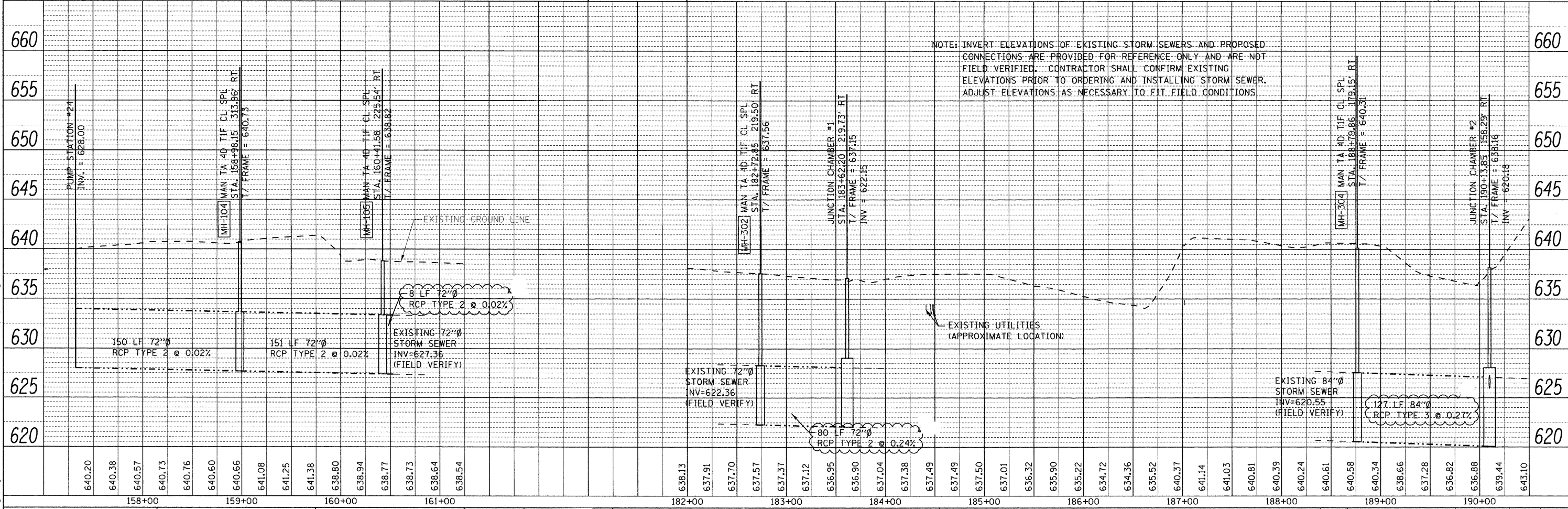
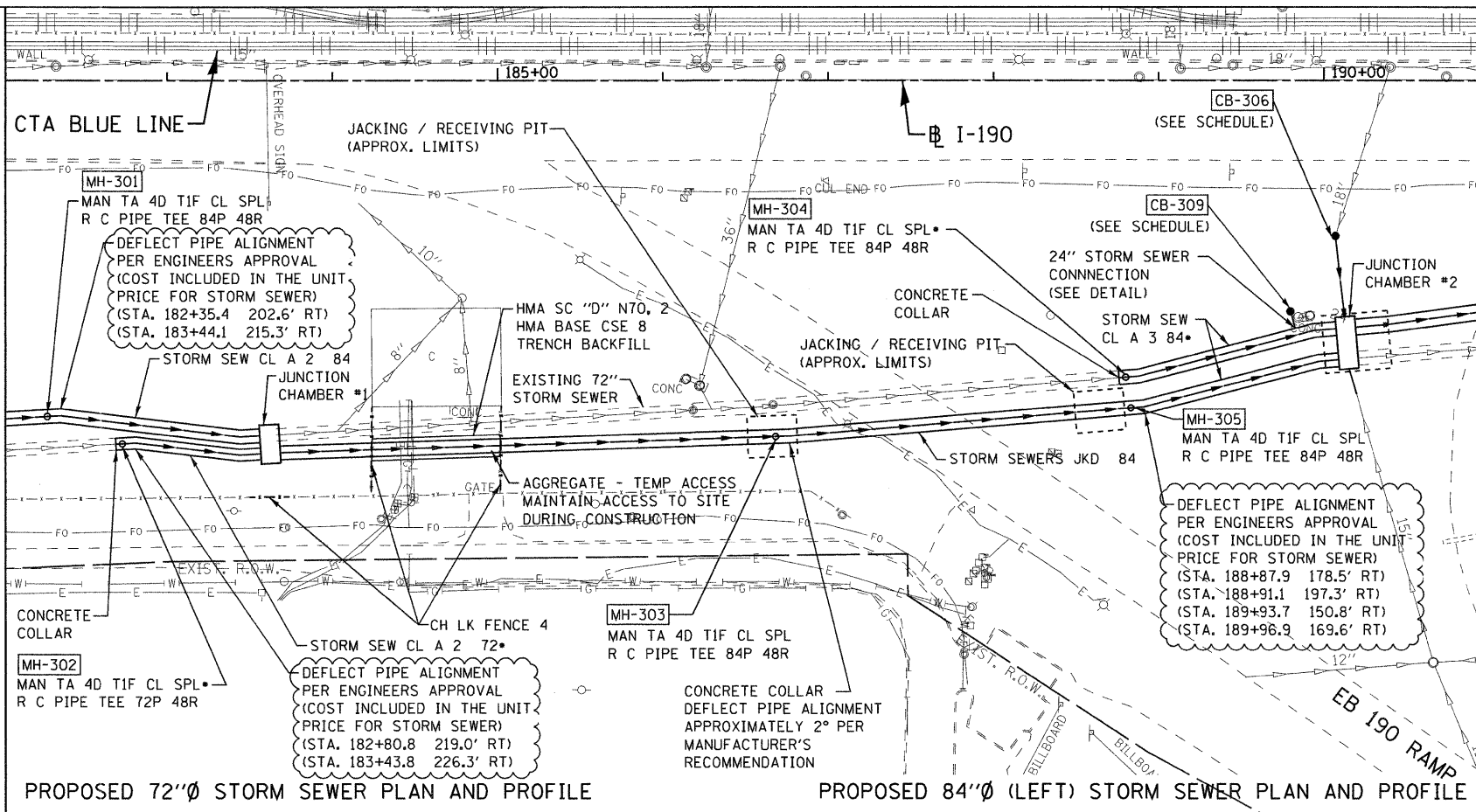
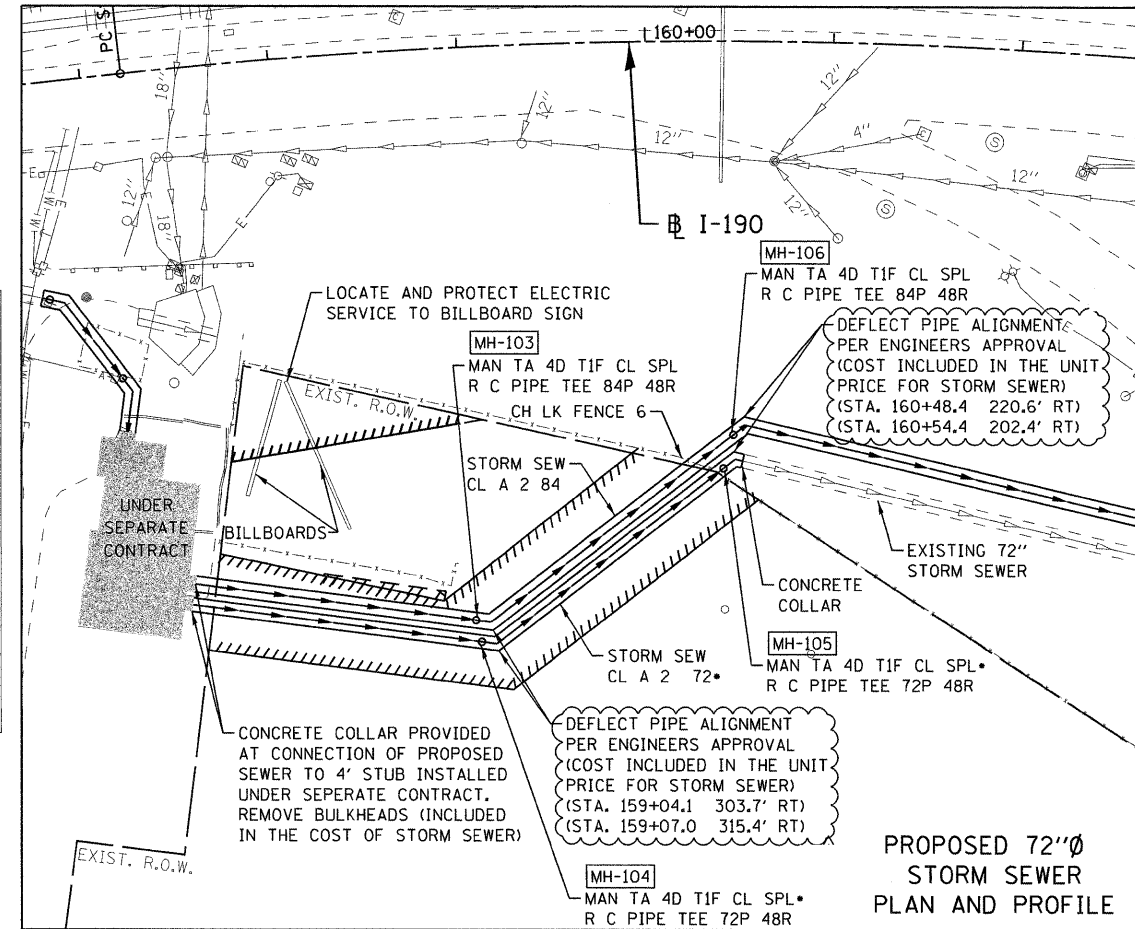


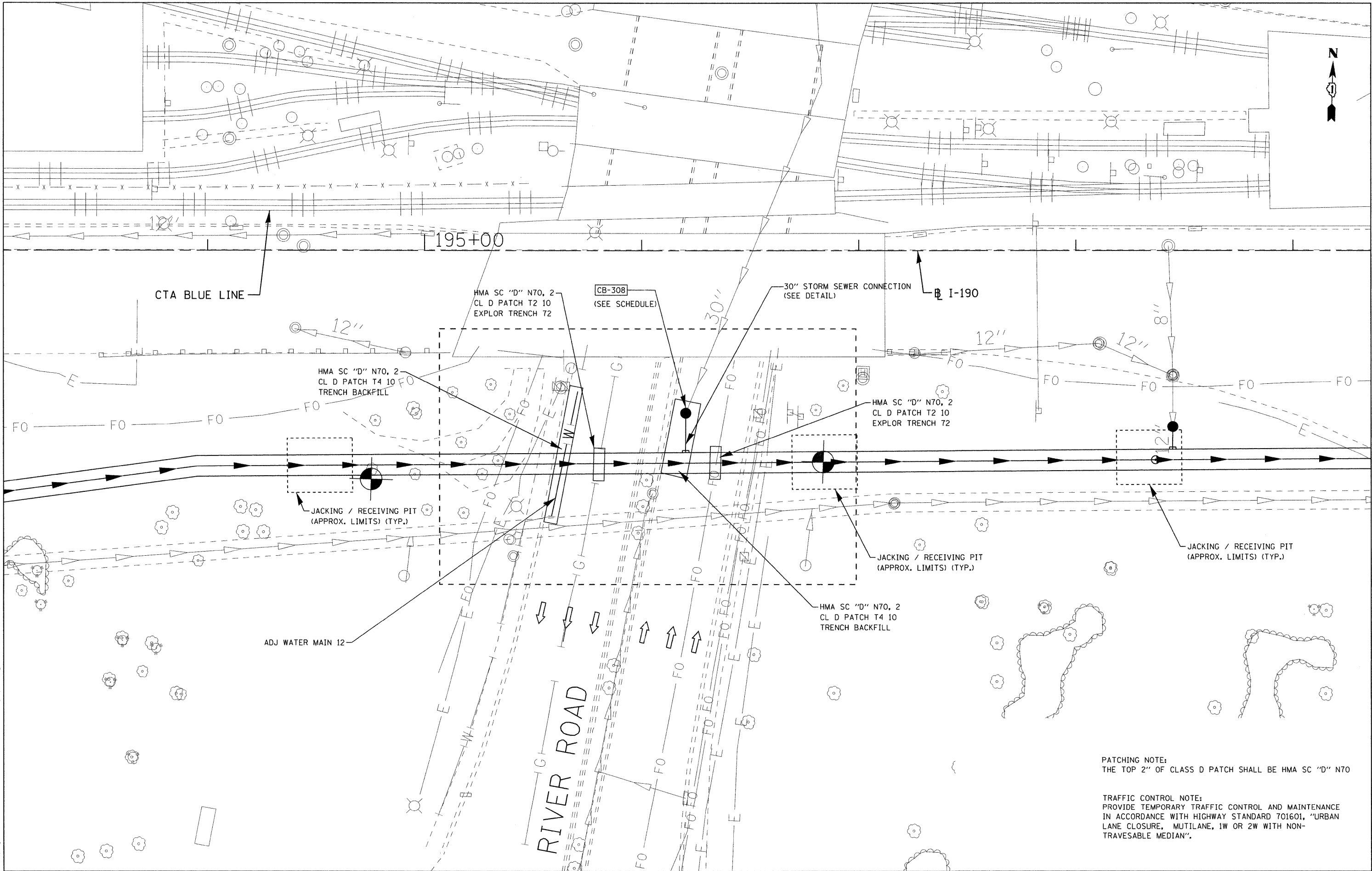
167+00	168+00	169+00	170+00	171+00	172+00	173+00	174+00	175+00	176+00	177+00	178+00	179+00	180+00	181+00	182+00
ENTRAN USER NAME = 2bookd PLOT SCALE = 50.00 ft / IN. PLOT DATE = 10/11/2011			DESIGNED - DJB DRAWN - ENTRAN CHECKED - DAK DATE - 09/07/11			REVISED - REVISED - REVISED - REVISED -			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			PUMP STATION 24 STORM SEWER IMPROVEMENTS STORM SEWER PLAN AND PROFILE SCALE: 50.00 ft / IN. SHEET NO. OF SHEETS STA. TO STA.			F.A.I. RTE. 190 SECTION 0102.5-T COUNTY COOK TOTAL SHEETS 41 SHEET NO. 13 CONTRACT NO. 60F90



PLAN	SURVEYED	DATE
	BY	
	NOTED	
	NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	BY	
	NOTED	
	NO.	
	FILE NAME	

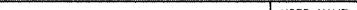




PATCHING NOTE:
THE TOP 2" OF CLASS D PATCH SHALL BE HMA SC "D" N70

TRAFFIC CONTROL NOTE:
PROVIDE TEMPORARY TRAFFIC CONTROL AND MAINTENANCE
IN ACCORDANCE WITH HIGHWAY STANDARD 701601, "URBAN
LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON-
TRAVESABLE MEDIAN".

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	USER NAME = 2bookd	DESIGNED - DJB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PUMP STATION 24 STORM SEWER IMPROVEMENTS RIVER ROAD PLAN DETAIL				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ENTRAN	REVISED -						190	0102.5-T	COOK	41	17
	PLOT SCALE = 20.00 ft / IN.	CHECKED - DAK	REVISED -						CONTRACT NO. 60F90				
	PLOT DATE = 10/11/2011	DATE = 09/07/11	REVISED -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
SCALE: 20.00 ft / IN. SHEET NO. OF SHEETS STA. TO STA.													

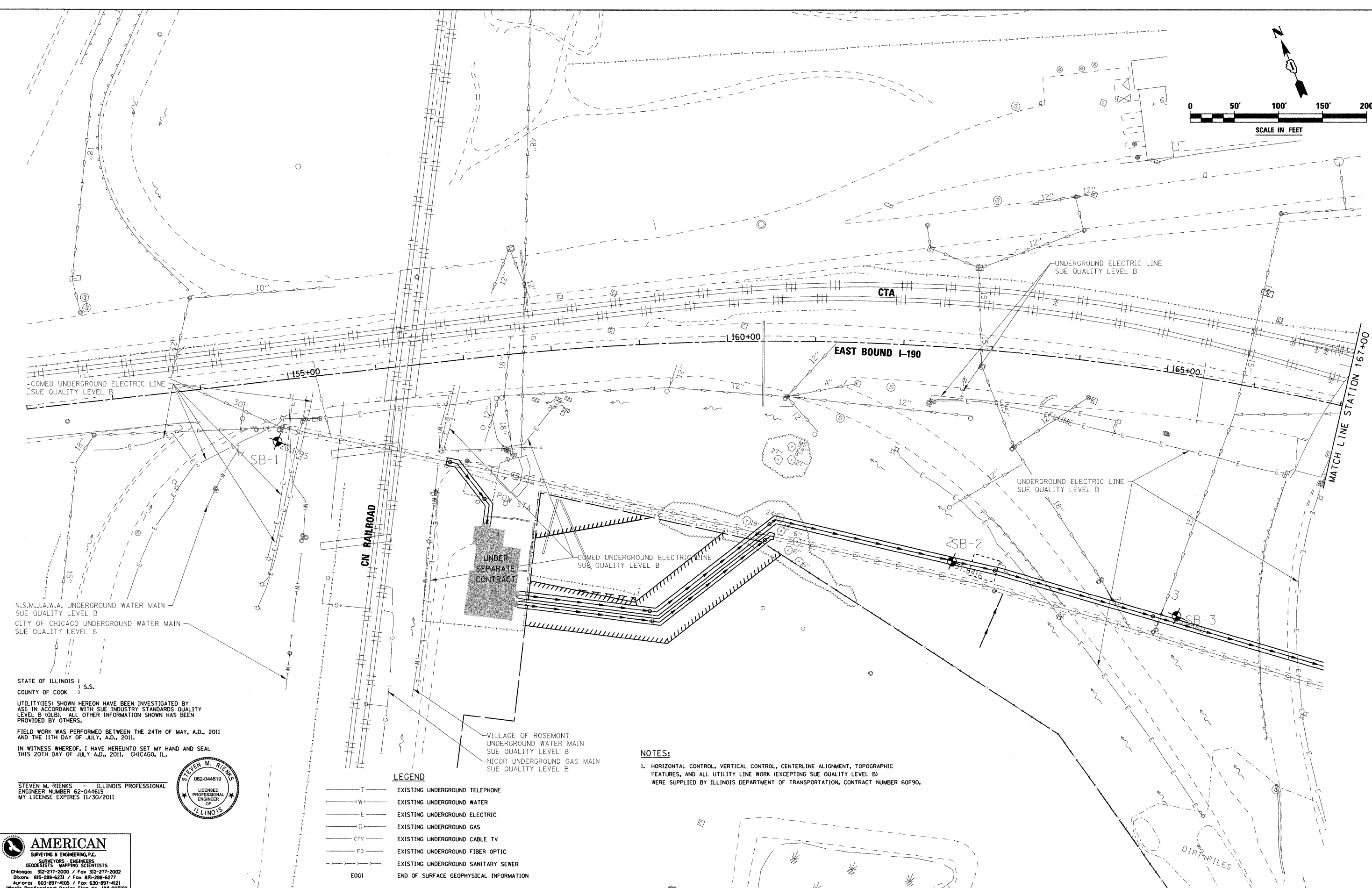
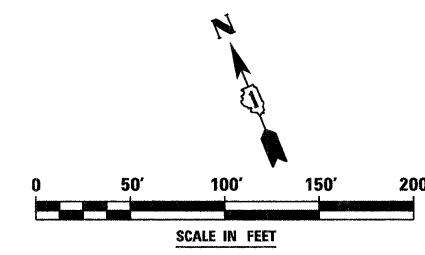
SCHEDULE OF STORM SEWERS

UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	SLOPE	SEWER INVERTS		STORM SEWER REMOVAL, 12"	STORM SEWER REMOVAL, 15"	STORM SEWER REMOVAL, 18"	STORM SEWER REMOVAL, 24"	STORM SEWER REMOVAL, 27"	STORM SEWER REMOVAL, 30"	STORM SEWER CLASS A, TYPE 3, 12"	STORM SEWER CLASS A, TYPE 3, 15"	STORM SEWER CLASS A, TYPE 3, 18"	STORM SEWER CLASS A, TYPE 3, 24"	STORM SEWER CLASS A, TYPE 3, 27"	STORM SEWER CLASS A, TYPE 3, 30"	UPSTREAM DRAINAGE STRUCTURE								
																	CATCH BASINS, TYPE A, 4' DIA, WITH TYPE 1 FRAME, CLOSED LID	CATCH BASINS, TYPE A, 4' DIA, WITH TYPE 8 GRATE	CATCH BASINS, TYPE A, 5' DIA, WITH TYPE 1 FRAME, CLOSED LID	CATCH BASINS, 6'-DIAMETER TYPE B, TYPE 7 GRATE	GRATE ELEV.	STATION	OFFSET		
			EACH	EACH													EACH	EACH							
CB-109	PR 84" SS	2.00%	630.48	630.12					52						15					1		642.28	164+66.56	252.87'	RT
CB-110	PR 84" SS	2.00%	631.15	630.99		32						8						1			638.39	165+41.52	262.83'	RT	
CB-111	EX 72" SS	1.08%	632.05	631.35							65							1			638.55	163+17.12	336.57'	RT	
CB-204	PR 84" SS	2.00%	628.35	628.19	31						8						1				639.35	178+43.54	214.22'	RT	
CB-306	J.C. #2	2.00%	626.56	626.00			54	38					47						1		642.34	190+06.82	93.44'	RT	
EX 15" SS	J.C. #2	2.00%	626.32	626.00		16						16													
CB-308	PR 96" SS	2.00%	622.90	622.74					43							16			1		631.73	196+20.20	74.78'	RT	
CB-309	PR 84" SS	2.00%	624.34	624.18										8						1	635.26	189+79.58	139.29'	RT	
CB-402	PR 96" SS	2.00%	622.87	622.71	34						8						1				645.63	198+44.53	81.07'	RT	
CB-404	PR 96" SS	2.00%	620.78	620.62				37						8					1		645.03	201+94.30	78.87'	RT	
CB-407	PR 96" SS	2.00%	619.40	619.24	33						8						1				635.46	207+92.03	73.06'	RT	
TOTALS					98	48	54	75	52	43	89	24	47	16	15	16	3	2	4	1					

UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	SLOPE	SEWER INVERTS		STORM SEWER, CLASS A, TYPE 2, 72" LF	STORM SEWER, CLASS A, TYPE 2, 84" LF	STORM SEWER, CLASS A, TYPE 3, 84" LF	STORM SEWER, CLASS A, TYPE 4, 96" LF	STORM SEWER, CLASS A, TYPE 6, 84" LF	STORM SEWERS, JACKED IN PLACE, 84" LF	STORM SEWERS, JACKED IN PLACE, 96" LF
			UPSTREAM	DOWNSTREAM							
MH-101	MH-102	0.24%	601.22	601.07					51		
MH-102	PS #24	0.24%	601.07	601.00					27		
PS #24	MH-103	0.02%	627.00	626.96		146					
MH-103	MH-106	0.02%	626.96	626.92		162					
MH-106	MH-107	0.02%	626.92	626.86		256					
MH-107	MH-108	0.24%	626.86	626.41		11				172	
MH-108	MH-201	0.24%	626.41	625.17						515	
MH-201	MH-202	0.24%	625.17	624.31						356	
MH-202	MH-203	0.24%	624.31	623.39						383	
MH-203	MH-301	0.24%	623.39	622.45		199				189	
MH-301	J.C. #1	0.24%	622.45	622.15		125					
J.C. #1	MH-303	0.28%	622.15	621.32		296					
MH-303	MH-305	0.32%	621.32	620.61			22			186	
MH-305	J.C. #2	0.33%	620.61	620.18			125				
J.C. #2	MH-401	0.37%	620.18	617.15			423				394
MH-401	MH-403	0.37%	617.15	615.86			123				219
MH-403	MH-405	0.37%	615.86	614.70			306				
MH-405	MH-406	0.37%	614.70	613.65			13				263
MH-406	J.C. #3	0.37%	613.65	613.30			91				
J.C. #3	OUTLET	0.35%	613.30	613.27			8				
PS #24	MH-104	0.02%	628.00	627.70	150						
MH-104	MH-105	0.02%	627.70	627.39	151						
MH-105	EX 72" SS	0.02%	627.39	627.36	8						
MH-302	J.C. #1	0.24%	622.36	622.15	80						
MH-304	J.C. #2	0.27%	620.55	620.18			127				
TOTALS					389	1195	274	964	78	1801	876

NOTE: INVERT ELEVATIONS OF EXISTING STORM SEWERS AND PROPOSED CONNECTIONS ARE PROVIDED FOR REFERENCE ONLY AND ARE NOT FIELD VERIFIED. CONTRACTOR SHALL CONFIRM EXISTING ELEVATIONS PRIOR TO ORDERING AND INSTALLING STORM SEWER. ADJUST ELEVATIONS AS NECESSARY TO FIT FIELD CONDITIONS

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N.S.M.J.A.W.A. UNDERGROUND WATER MAIN
SUE QUALITY LEVEL B
CITY OF CHICAGO UNDERGROUND WATER MAIN
SUE QUALITY LEVEL B

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

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 24TH OF MAY, A.D., 2011
AND THE 11TH DAY OF JULY, A.D., 2011.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL
THIS 20TH DAY OF JULY A.D., 2011. CHICAGO, IL.

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



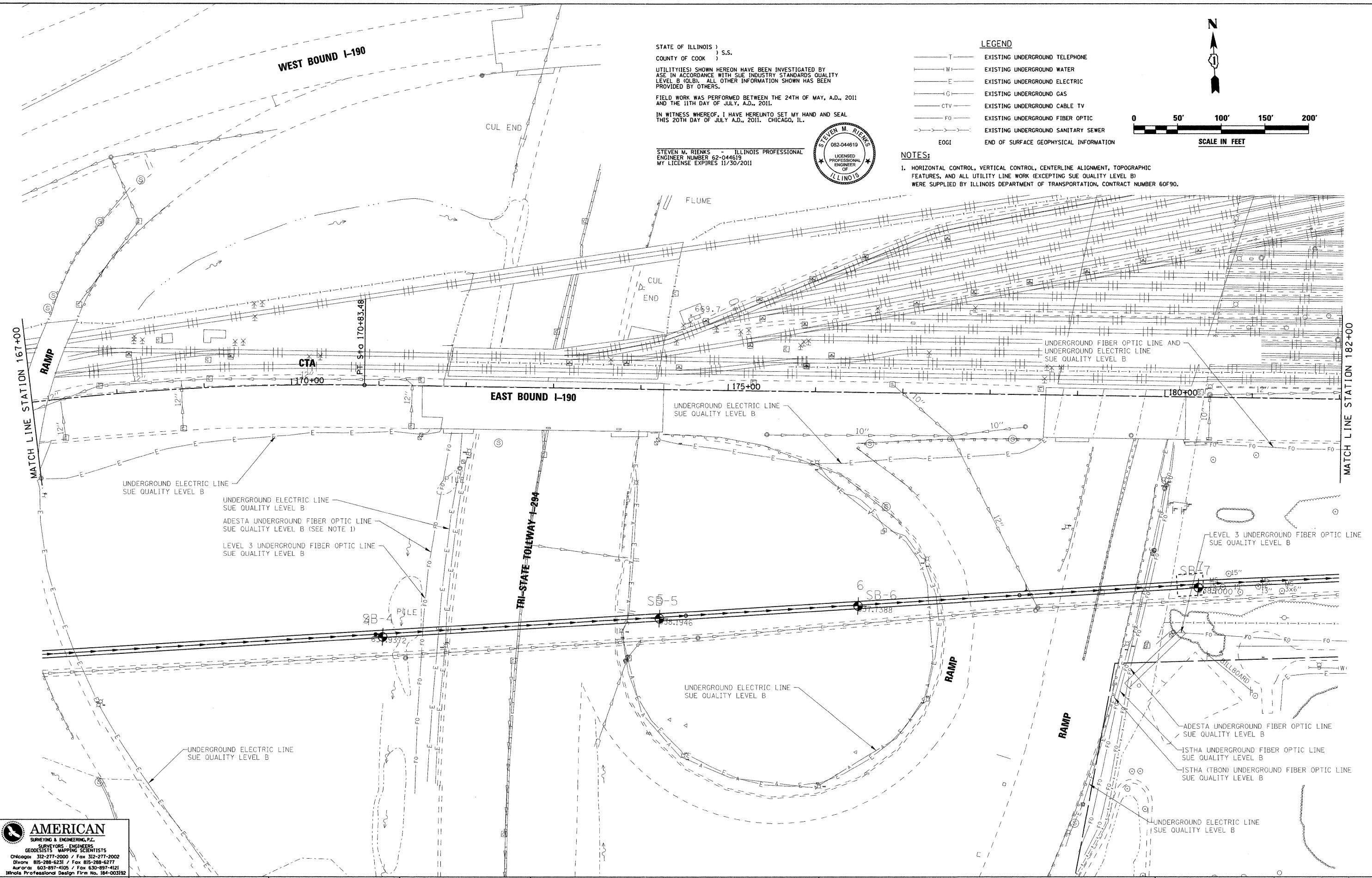
- LEGEND**
- T — EXISTING UNDERGROUND TELEPHONE
 - W — EXISTING UNDERGROUND WATER
 - E — EXISTING UNDERGROUND ELECTRIC
 - G — EXISTING UNDERGROUND GAS
 - CTV — EXISTING UNDERGROUND CABLE TV
 - FO — EXISTING UNDERGROUND FIBER OPTIC
 - EOGI — EXISTING UNDERGROUND SANITARY SEWER
 - — — — — END OF SURFACE GEOPHYSICAL INFORMATION

NOTES:

1. HORIZONTAL CONTROL, VERTICAL CONTROL, CENTERLINE ALIGNMENT, TOPOGRAPHIC
FEATURES, AND ALL UTILITY LINE WORK (EXCEPTING SUE QUALITY LEVEL B)
WERE SUPPLIED BY ILLINOIS DEPARTMENT OF TRANSPORTATION, CONTRACT NUMBER 60F90.

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

FILE NAME = G:\project\2102155_01\1\CADD\Civil\Sheet\DI6	USER NAME = 2baokd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUE INVESTIGATION OF UNDERGROUND UTILITIES I-190 AT PUMP STATION #24 TO DES PLAINES RIVER			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	98-17ht-SUE01.dgn	DRAWN -	REVISED -					190	0102.5-T	COOK	41	19
	PLOT SCALE = 50.00' / IN.	CHECKED -	REVISED -					CONTRACT NO. 60F90				
	PLOT DATE = 9/9/2011	DATE -	REVISED -					ILLINOIS FED. AID PROJECT				
SCALE: 1"=50'				SHEET NO. 1 OF 4 SHEETS		STA. 152+00 TO STA. 167+00						



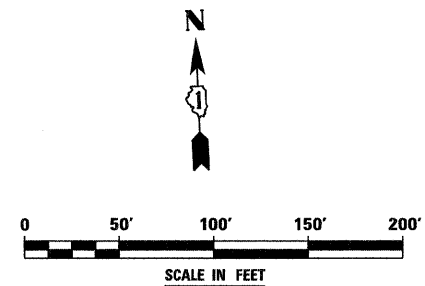
STATE OF ILLINOIS } S.S.
COUNTY OF COOK }
UTILITIES SHOWN HEREON HAVE BEEN INVESTIGATED BY
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STEVEN M. RIENKS - ILLINOIS PROFESSIONAL
ENGINEER NUMBER 62-044619
MY LICENSE EXPIRES 11/30/2011



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 - EOGI — END OF SURFACE GEOPHYSICAL INFORMATION

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Darien 815-288-6231 / Fax 815-288-6277
Aurora 630-897-4105 / Fax 630-897-4121
Mobile Professional Design Firm No. 184-003192

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PLOT DATE = 9/7/2011	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUE INVESTIGATION OF UNDERGROUND UTILITIES
I-190 AT PUMP STATION #24 TO DES PLAINES RIVER
SCALE: 1"=50' SHEET NO. 2 OF 4 SHEETS STA. 167+00 TO STA. 182+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	0102.5-T	COOK	41	20
CONTRACT NO. 60F90				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS }
COUNTY OF COOK } S.S.

UTILITY(IES) SHOWN HEREON HAVE BEEN INVESTIGATED BY
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FIELD WORK WAS PERFORMED BETWEEN THE 24TH OF MAY, A.D., 2011
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IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL
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STEVEN M. RIENKS - ILLINOIS PROFESSIONAL
ENGINEER NUMBER 62-044619
MY LICENSE EXPIRES 11/30/2011

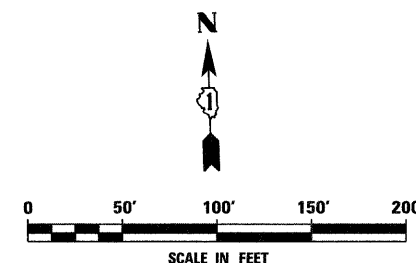


LEGEND

- T— EXISTING UNDERGROUND TELEPHONE
- W— EXISTING UNDERGROUND WATER
- E— EXISTING UNDERGROUND ELECTRIC
- G— EXISTING UNDERGROUND GAS
- CTV— EXISTING UNDERGROUND CABLE TV
- FO— EXISTING UNDERGROUND FIBER OPTIC
- SS— EXISTING UNDERGROUND SANITARY SEWER
- EOGI END OF SURFACE GEOPHYSICAL INFORMATION

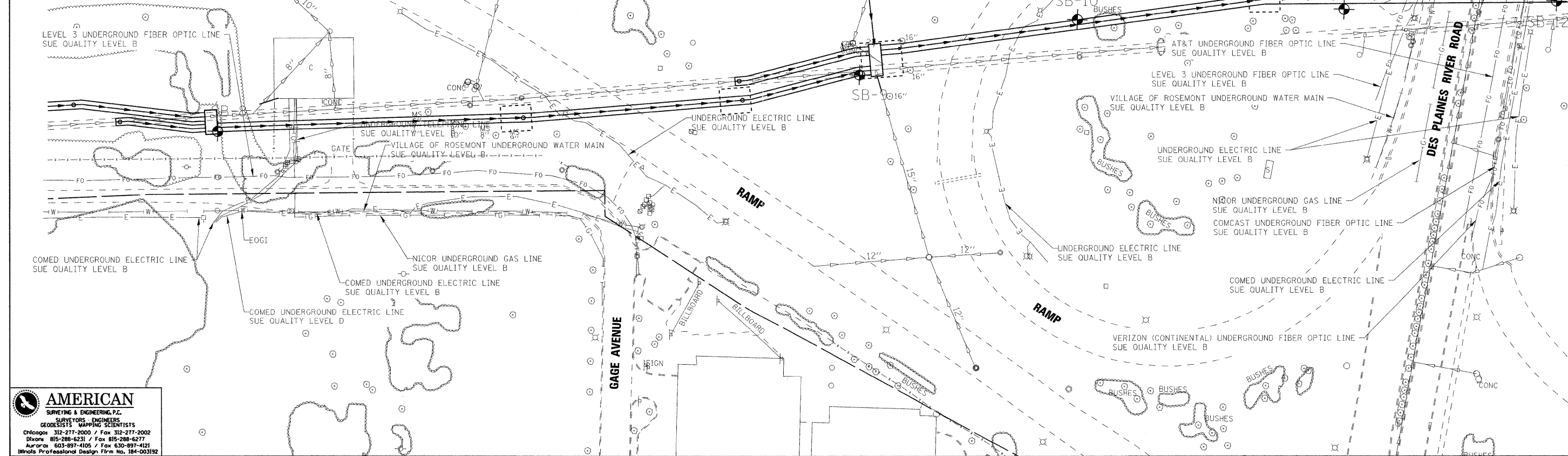
NOTES:

1. HORIZONTAL CONTROL, VERTICAL CONTROL, CENTERLINE ALIGNMENT, TOPOGRAPHIC
FEATURES, AND ALL UTILITY LINE WORK (EXCEPTING SUE QUALITY LEVEL B)
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MATCH LINE STATION 182+00

MATCH LINE STATION 197+00



AMERICAN
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SURVEYORS - ENGINEERS
GEODETISTS - MAPPING SCIENTISTS
Chicago 312-277-2000 / Fax 312-277-2002
Diverse 815-288-6231 / Fax 815-288-6277
Aurora 630-897-4105 / Fax 630-897-4121
Illinois Professional Design Firm No. 184-003192

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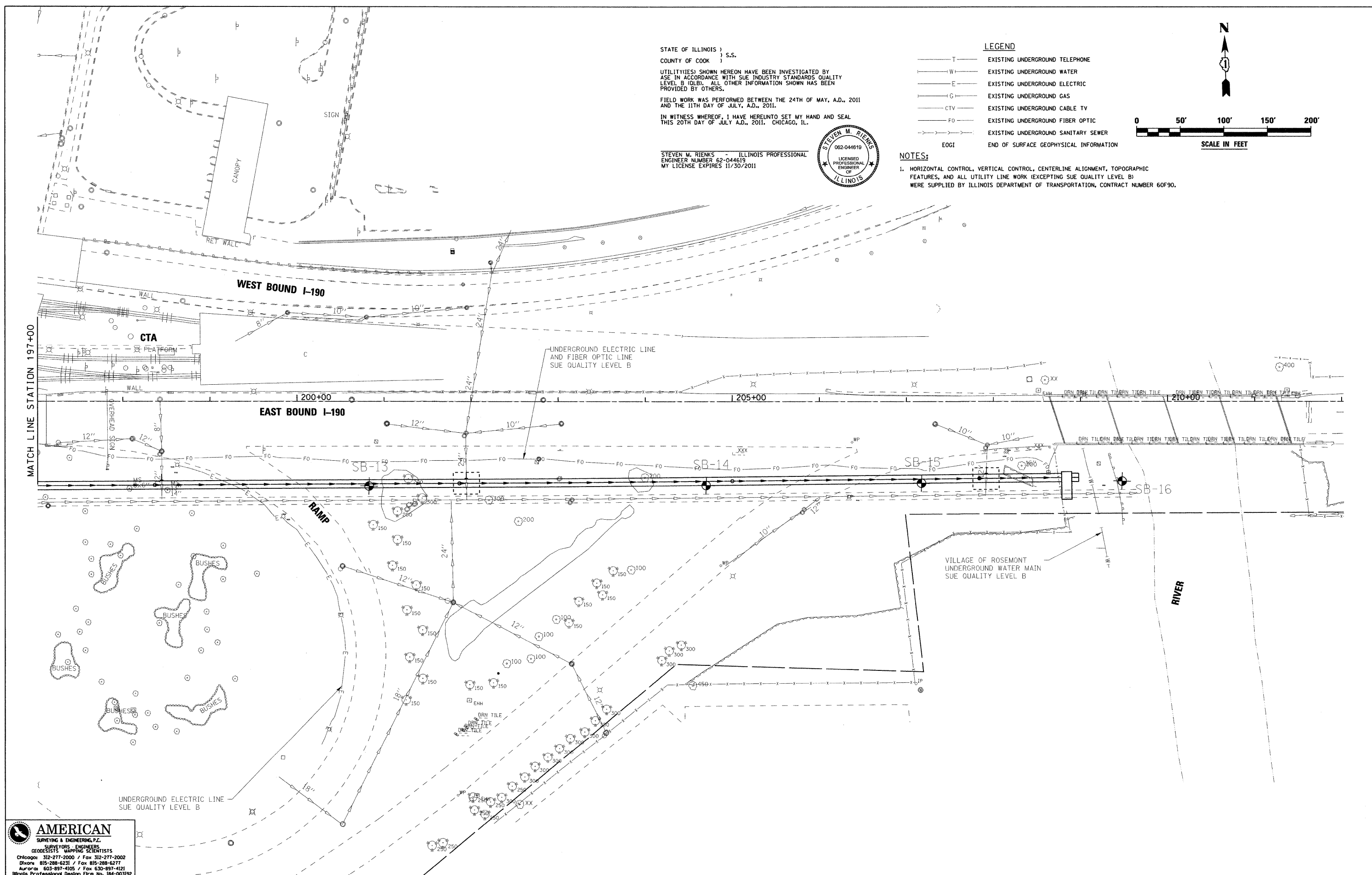
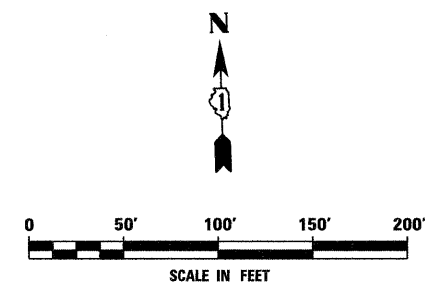
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUE INVESTIGATION OF UNDERGROUND UTILITIES
I-190 AT PUMP STATION #24 TO DES PLAINES RIVER
SCALE: 1"=50' SHEET NO. 3 OF 4 SHEETS STA. 182+00 TO STA. 197+00

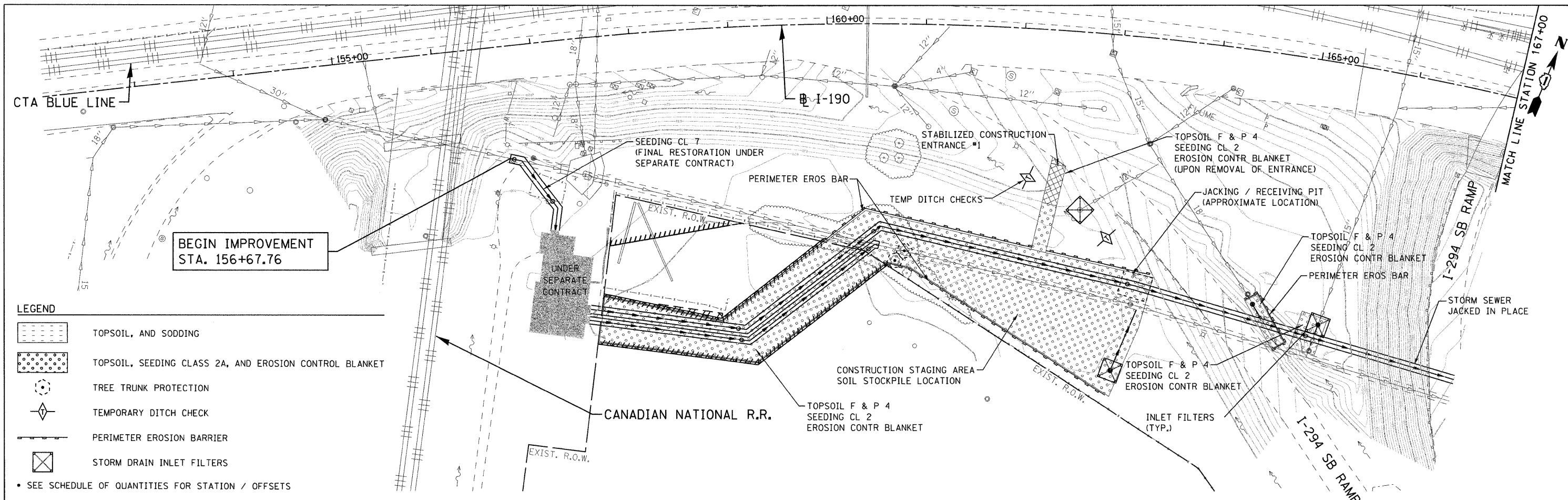
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	0102.5-T	COOK	41	21
CONTRACT NO. 60F90				
ILLINOIS FED. AID PROJECT				

— T —	EXISTING UNDERGROUND TELEPHONE
— W —	EXISTING UNDERGROUND WATER
— E —	EXISTING UNDERGROUND ELECTRIC
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— CTV —	EXISTING UNDERGROUND CABLE TV
— FO —	EXISTING UNDERGROUND FIBER OPTIC
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EOG	END OF SURFACE GEOPHYSICAL INFORMATION

1. HORIZONTAL CONTROL, VERTICAL CONTROL, CENTERLINE ALIGNMENT, TOPOGRAPHIC FEATURES, AND ALL UTILITY LINE WORK (EXCEPTING SUE QUALITY LEVEL B) WERE SUPPLIED BY ILLINOIS DEPARTMENT OF TRANSPORTATION, CONTRACT NUMBER 60F90.



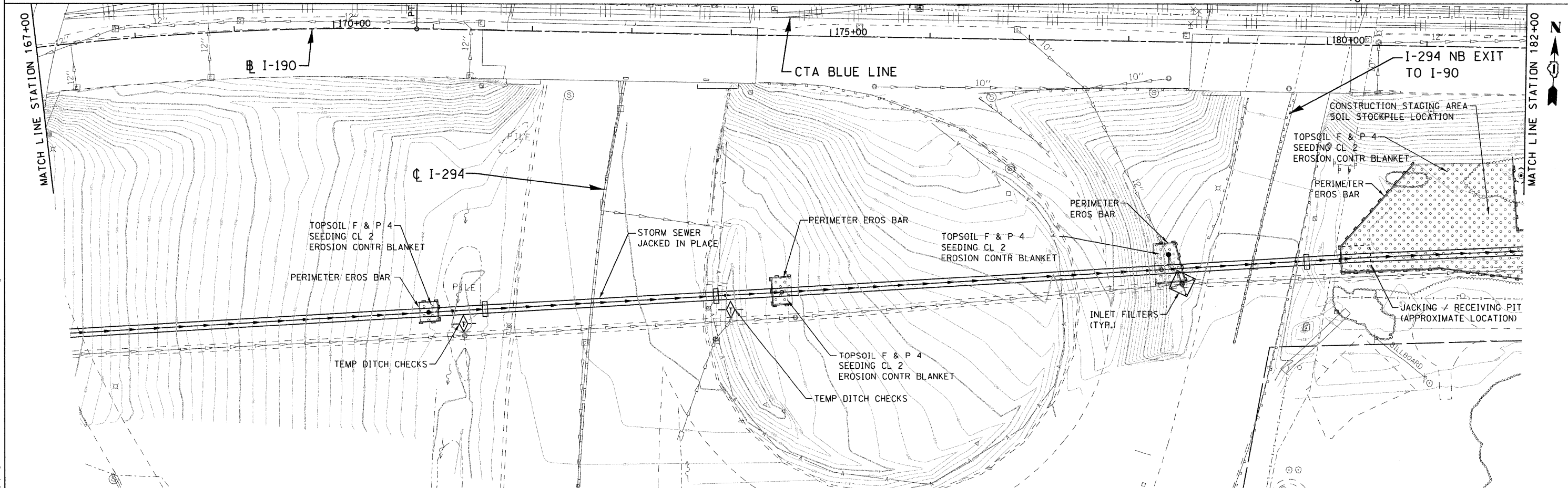
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PLOT DATE = 9/7/2011	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				
					SCALE: 1"=50'	SHEET NO. 4 OF 4 SHEETS		STA. 197+00 TO STA. 210+00		



LEGEND

- TOPSOIL, AND SODDING
- TOPSOIL, SEEDING CLASS 2A, AND EROSION CONTROL BLANKET
- TREE TRUNK PROTECTION
- TEMPORARY DITCH CHECK
- PERIMETER EROSION BARRIER
- STORM DRAIN INLET FILTERS

• SEE SCHEDULE OF QUANTITIES FOR STATION / OFFSETS



	USER NAME = 2bookd	DESIGNED - DJB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PUMP STATION 24 STORM SEWER IMPROVEMENTS EROSION AND SEDIMENT CONTROL PLAN	F.A.I. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.00 ' / IN.	DRAWN - ENTRAN	REVISED -			190	0102.5-T	COOK	41	23
	PLOT DATE = 10/11/2011	CHECKED - DAK	REVISED -			CONTRACT NO. 60F90				
	DATE - 09/07/11	REVISED -	SCALE: 50.00 ' / IN. SHEET NO. OF SHEETS STA. TO STA.							
					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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SOIL EROSION AND SEDIMENT CONTROL NOTES

J-HOOKS SHALL BE UTILIZED AT THE END OF PERIMETER EROSION BARRIER (SILT FENCE) PLACED ALONG SLOPES EXCEEDING 10% IN ACCORDANCE WITH STANDARD 280001.

ALL MATERIALS USED FOR TEMPORARY CONSTRUCTION ACTIVITIES WILL BE REMOVED TO UPLAND AREAS IMMEDIATELY FOLLOWING COMPLETION OF THE CONSTRUCTION ACTIVITY.

ANY MECHANIZED CLEARING OF VEGETATION IN THE UTILITY CORRIDOR SHALL BE SCHEDULED NO MORE THAN SEVEN (7) CALENDAR DAYS PRECEDING INSTALLATION OF THE UTILITY LINE IN THAT SEGMENT OF THE CORRIDOR. IN NO CASE SHALL VEGETATION IN THE ENTIRE CORRIDOR BE CLEARED PRIOR TO INSTALLATION OF THE UTILITY LINE.

THE WORK DESCRIBED ON THESE DRAWINGS IS AN INTEGRAL PART OF THE STORM WATER POLLUTION PREVENTION PLAN USED TO OBTAIN AN NPDES PERMIT FOR THE CONSTRUCTION OF THE PROJECT.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST REVISION. ALL SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSTALLED PER IDOT STANDARD 280001 OR AS SPECIFIED HEREIN AND PAID FOR IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS. ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER PERMIT NO 1LR10, AND THE ILLINOIS URBAN MANUAL REVISED JANUARY, 2010.

SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES.

WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED INTO A SILT BAG PROTECTED WITH SECONDARY MEASURES TO THE SATISFACTION OF THE ENGINEER. DEWATERING DIRECTLY INTO THE DES PLAINES RIVER IS PROHIBITED.

A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURES) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION-SITE OF A MAJOR DEVELOPMENT TO OR FROM A PUBLIC RIGHT-OF-WAY OR ROADWAY. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY OR ROADWAY AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER OR EQUIVALENT SNOWMELT. STRUCTURAL CONTROL MEASURES, LOCATIONS WHERE VEHICLES ENTER OR EXIT, AND ALL DISTURBED AREAS SHOULD ALSO BE INSPECTED AFTER SIGNIFICANT SNOWMELT.

ALL CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.

THE EROSION CONTROL MEASURES SHOWN ARE BUT A GRAPHICAL REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THIS PLAN ARE TO BE EXPECTED AND SHOULD ADDRESS SPECIFIC PROJECT AREA CONCERNS AS DIRECTED BY THE ENGINEER.

ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NOT LONGER NEEDED. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS SHALL BE PERMANENTLY STABILIZED.

THE USE OF STRAW OR HAY BALES IS NOT PERMITTED FOR USE IN INLET AND PIPE PROTECTION.

WHERE CONCENTRATED FLOW LEAVES THE PROJECT SITE, THE PERIMETER EROSION BARRIER SHALL CONSIST OF ROLLED EXCELSIOR.

STOCKPILES OF SOIL AND OTHER CONSTRUCTION MATERIALS TO REMAIN IN PLACE FOR MORE THAN THREE (3) DAYS SHALL BE BORDERED WITH PERIMETER EROSION BARRIER. STOCKPILES TO REMAIN IN PLACE FOR 30 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.

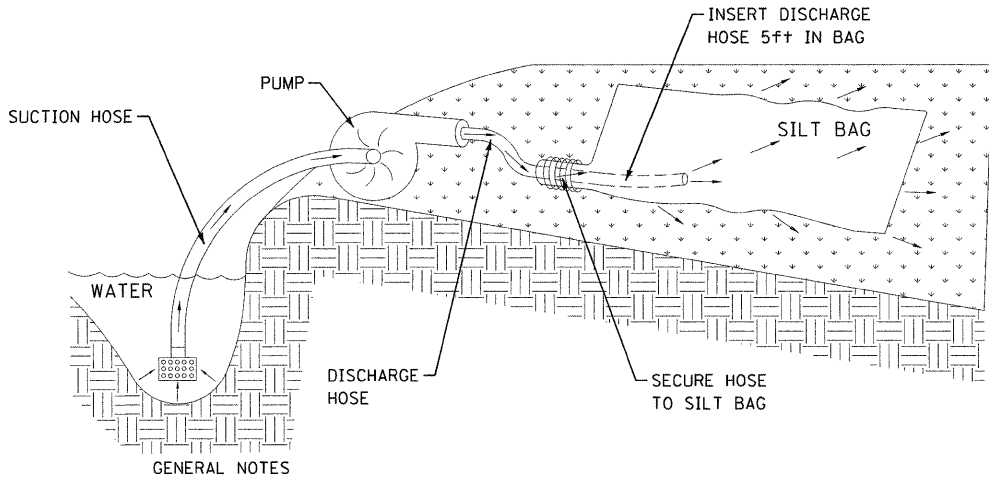
TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE PROVIDED ON-SITE AND SHALL LOCATED AT THE DIRECTION OF THE ENGINEER. THE INSTALLATION, MAINTENANCE, AND PROPER DISPOSAL SHALL BE CONSIDERED IN THE COST OF THE CONTRACT.

TEMPORARY EROSION CONTROL SEEDING SHALL BE PROVIDED AT ALL ERODIBLE BARE EARTH AREAS.

ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND OF THE APPLICABLE STATE STANDARDS FOR THE ENTIRE DURATION OF THE CONTRACT, OR UNTIL SUCH A TIME AS DIRECTED BY THE ENGINEER.

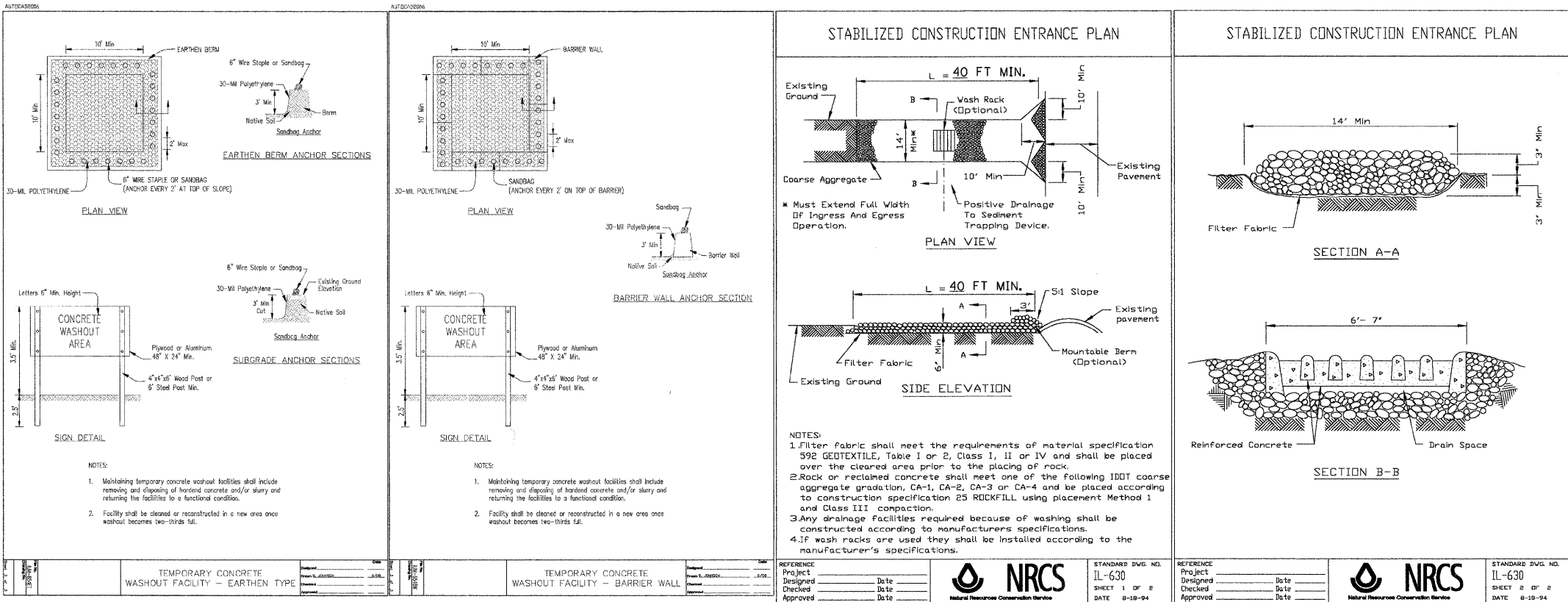
AT ANY AREA WHERE THERE IS NO PROPOSED GRADING, THE EXISTING GROUND COVER SHALL REMAIN.

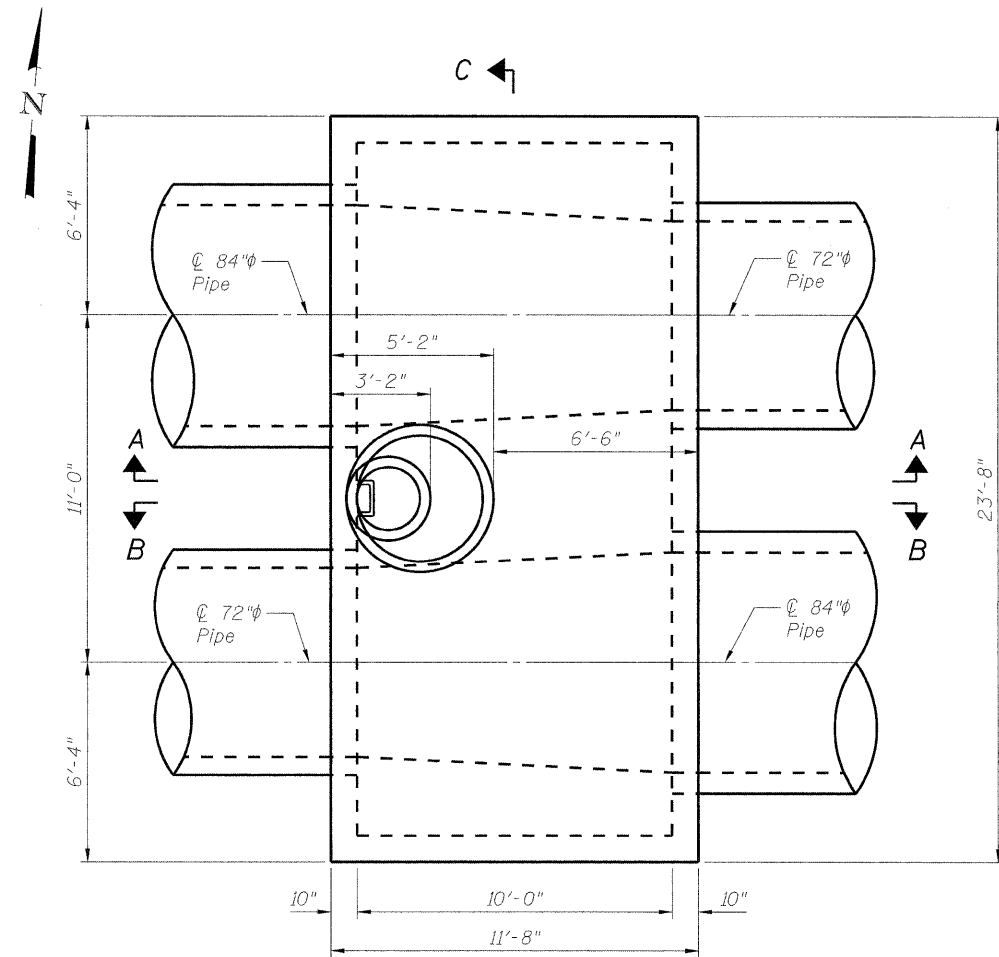
THIS PROJECT WILL REQUIRE AUTHORIZATION UNDER (SWPPP) PERMIT



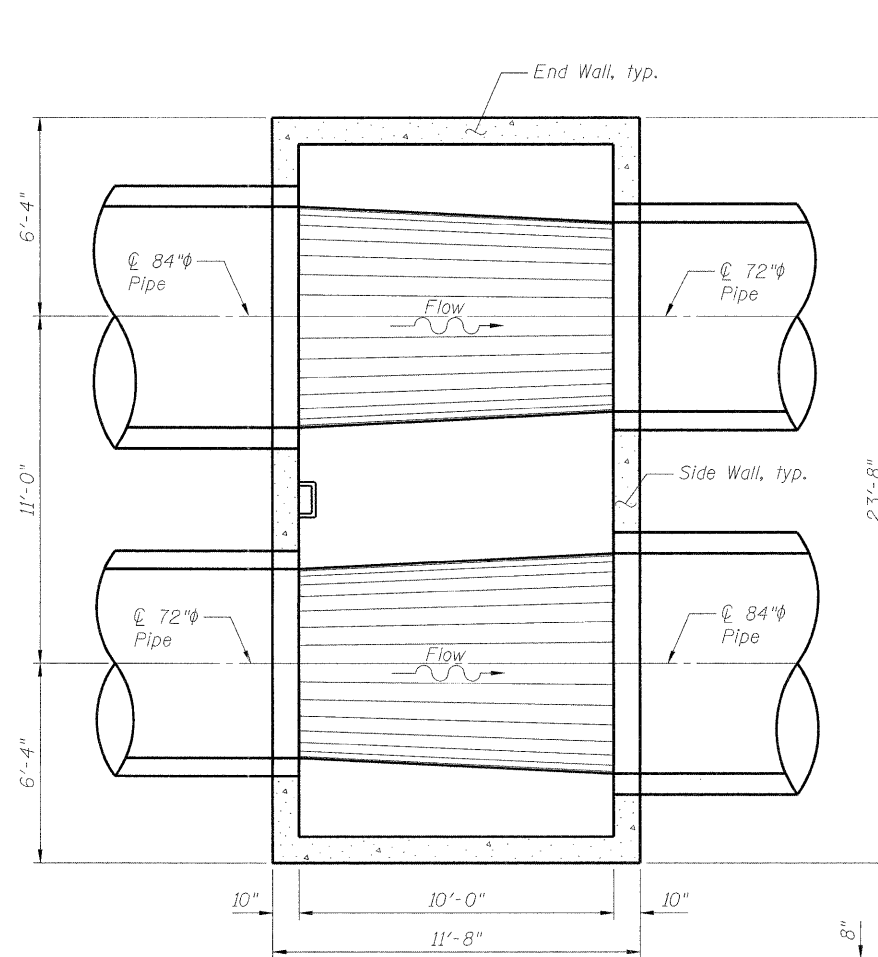
1. SILT BAGS SHALL BE PROVIDED AT EACH LOCATION WHERE WATER IS PUMPED ON SITE. THE SILT BAG SYSTEM IS USED TO COLLECT SEDIMENT CONTAINED IN THE DISCHARGED WATER, TO PREVENT THE SCOUR AND EROSION FROM WATER EXITING A PIPE AT HIGH VELOCITY, TO DEFUSE THE WATER OVER A WIDER AREA TO MINIMIZE EROSION AS THE WATER DRAINS AWAY, AND TO RETAIN OIL CONTAINED WITHIN EFFLUENT.
2. THE SILT BAG SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND SHALL BE LOCATED ON THE GROUND OR ON A TRAILER OVER A RELATIVELY LEVEL AND STABILIZED AREA.
3. THE SILT BAG SHALL BE REPLACED WHEN HALF FULL OF SEDIMENT OR WHEN THE SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL AMOUNT. ACCUMULATED SEDIMENT SHALL BE PROPERLY DISPOSED AND SHALL NOT OCCUR NEAR WATERWAYS AND/OR ENVIRONMENTALLY SENSITIVE AREAS.
4. THE COST OF LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO INSTALL, MAINTAIN, AND DISPOSE OF SILT BAG SHALL BE INCLUDED IN THE COST OF THE EROSION CONTROL PAY ITEMS.

SILT BAG FOR DEWATERING

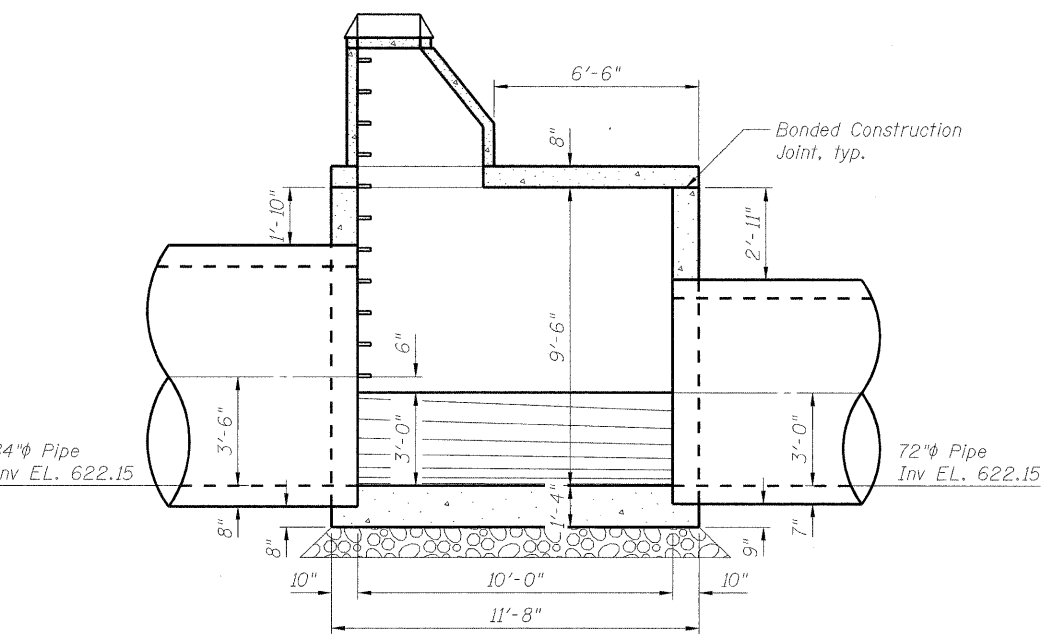




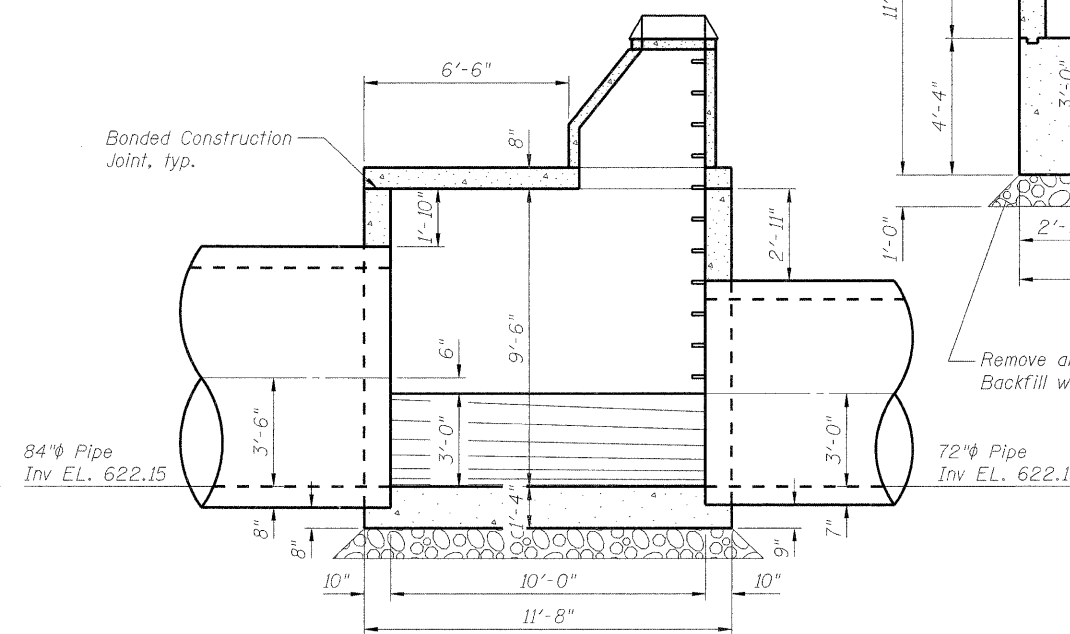
TOP PLAN



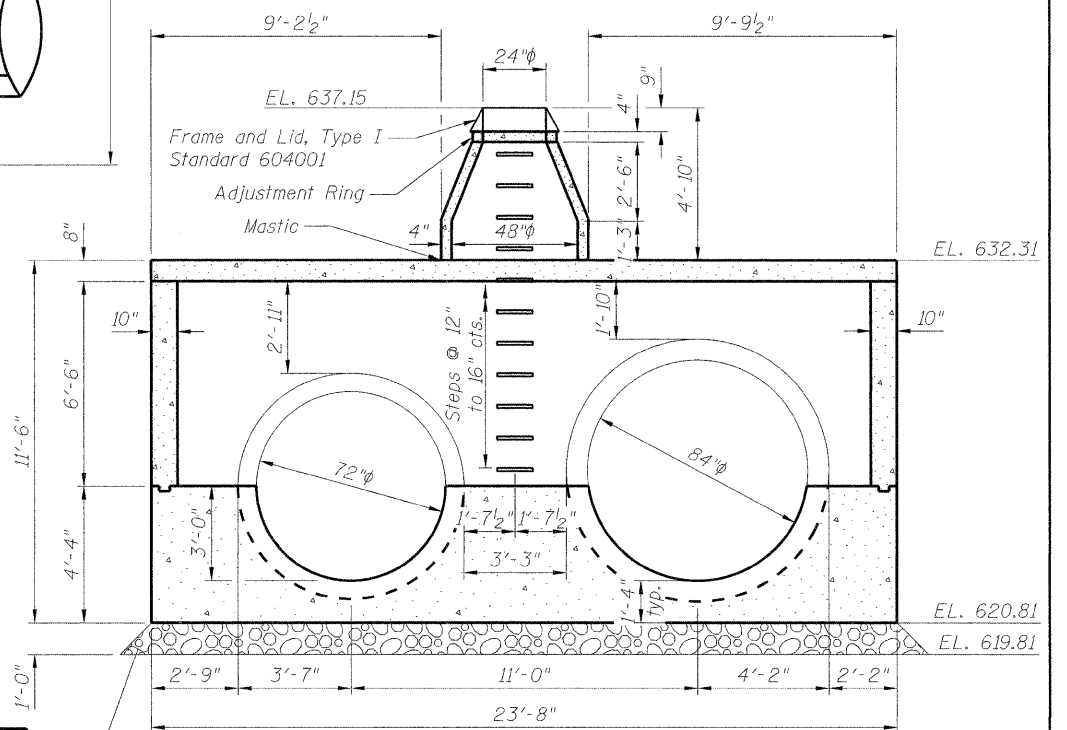
SECTIONAL PLAN



SECTION A-A



SECTION B-B



SECTION C-C

NOTES

For additional information, see Standard Specifications.
For reinforcement details, see Sheets 27-28.
For Station and Offset, see Proposed Storm Sewer Plan and Profile.

The maximum width of excavation is the width of the junction chamber plus 4 feet, and the maximum length is the length of the junction chamber plus 4 feet. Excavation outside the maximum dimensions specified will not be measured for payment.

The design of the braced excavation is the responsibility of the Contractor. The Contractor shall submit drawings and design for the braced excavation to the Engineer for approval. The braced excavation design and drawings shall be signed and sealed by an Illinois licensed Structural Engineer, submitted and approved prior to the start of any work. The Engineer's approval shall not relieve the Contractor from the sole responsibility of the structural integrity of the braced excavation system.

All dimensions and elevations shall be verified prior to construction.

Concrete pipe sizes shall be coordinated with openings provided into junction chambers before pouring concrete.

Concrete cover for reinforcement steel to be 2" unless otherwise noted.

All concrete edges shall be chamfered 1 inch.
Concrete Compressive Strength f'_c = 3,500 psi.
Steel Yield Strength = 60,000 psi.

JUNCTION CHAMBER #1 BILL OF MATERIAL

Item	Unit	Total
Removal and Disposal of Unsuitable Material	Cu. Yds.	12
Porous Granular Embankment	Cu. Yds.	12
Concrete Structures	Cu. Yds.	47.4
Reinforcement Bars	Pound	5,440
Manholes, Type A, 4'-Diameter, Type 1 Frame, Closed Lid	Each	1
Braced Excavation	Cu. Yds.	278



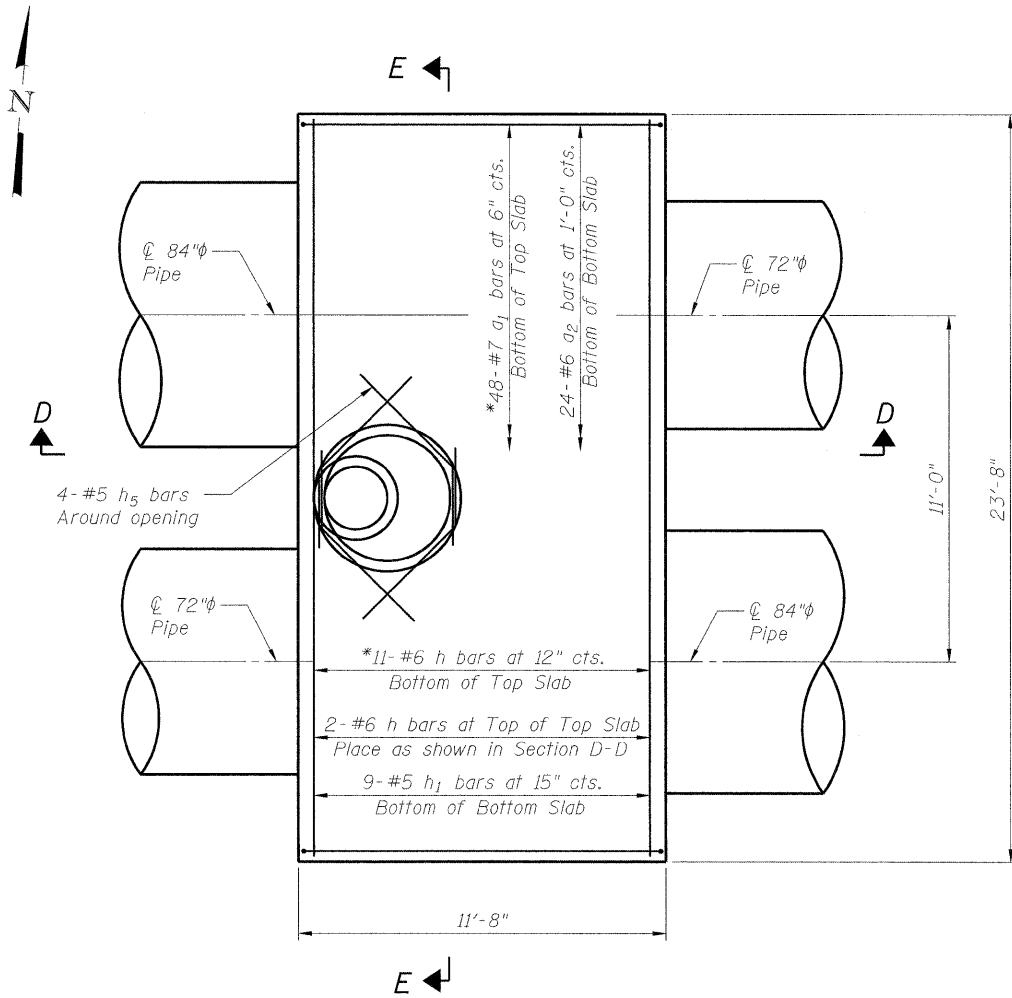
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PLOT DATE = 9/7/2011	DRAWN - TWO	REVISED -
	CHECKED - GSP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

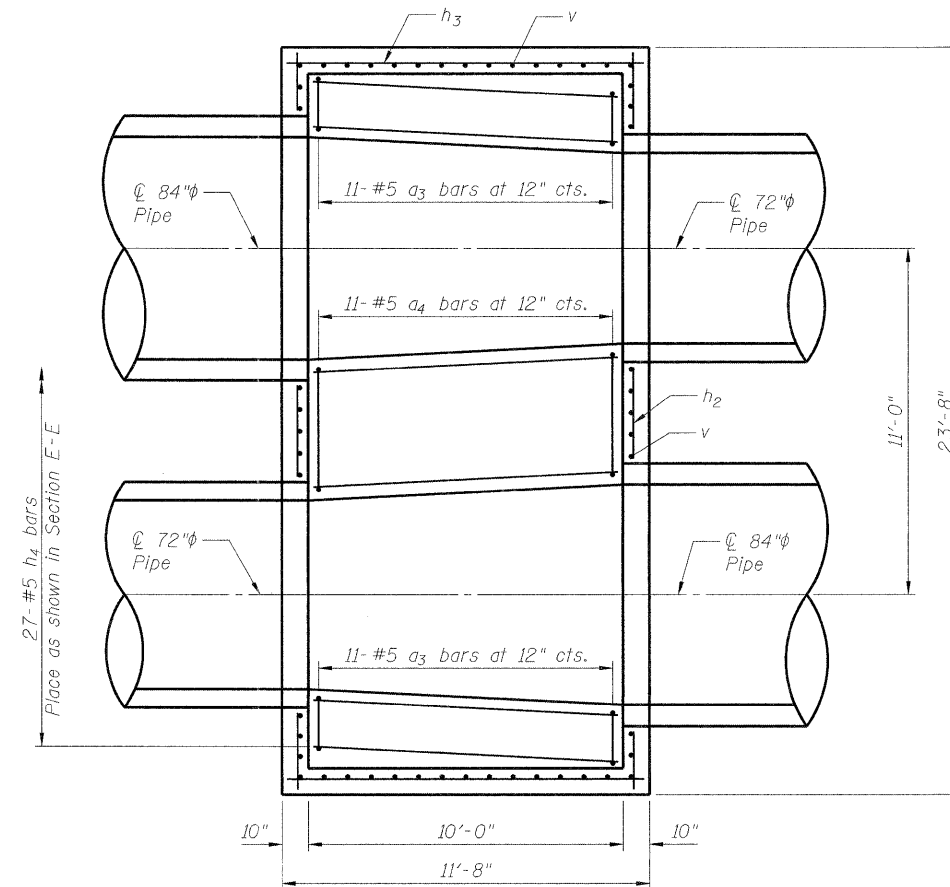
JUNCTION CHAMBER #1
GENERAL PLAN AND ELEVATION

SHEET NO. OF SHEETS

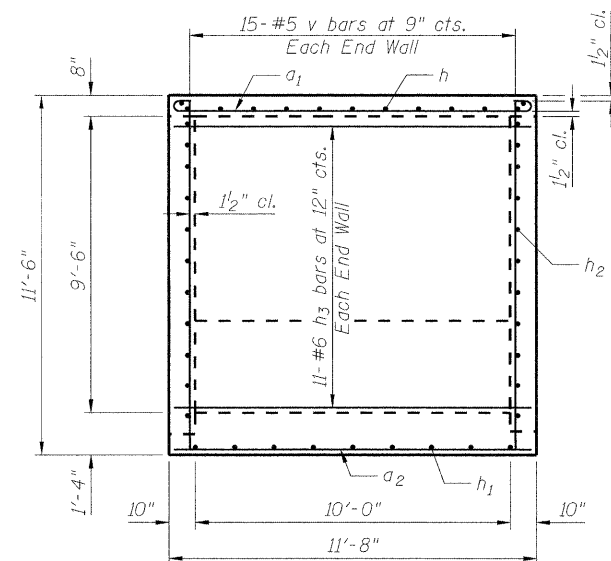
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CONTRACT NO. 60F90				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



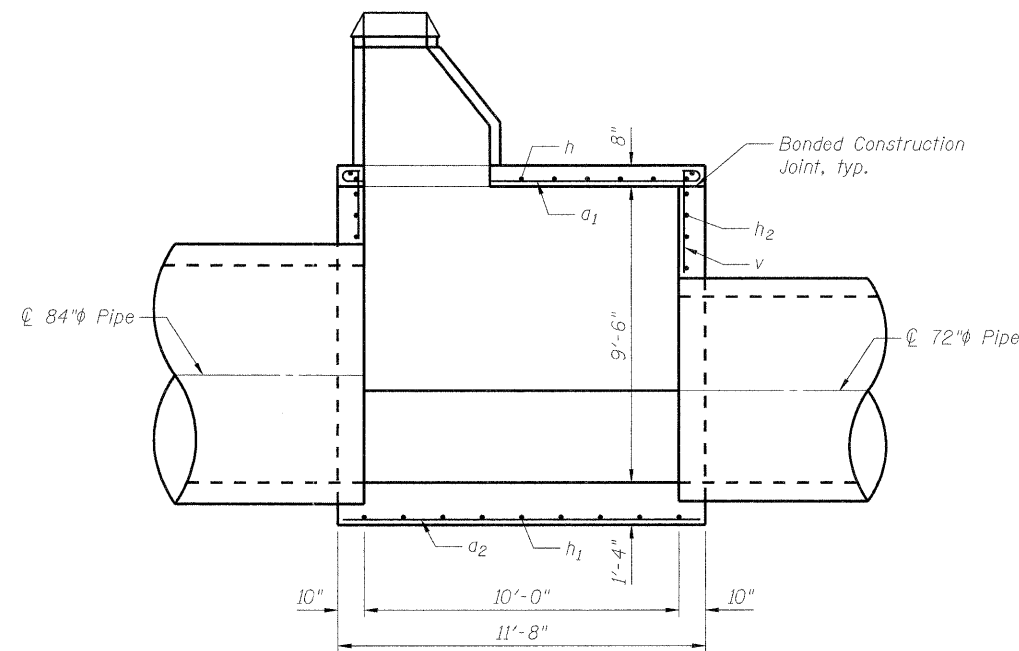
TOP PLAN



SECTIONAL PLAN



END WALL SECTION

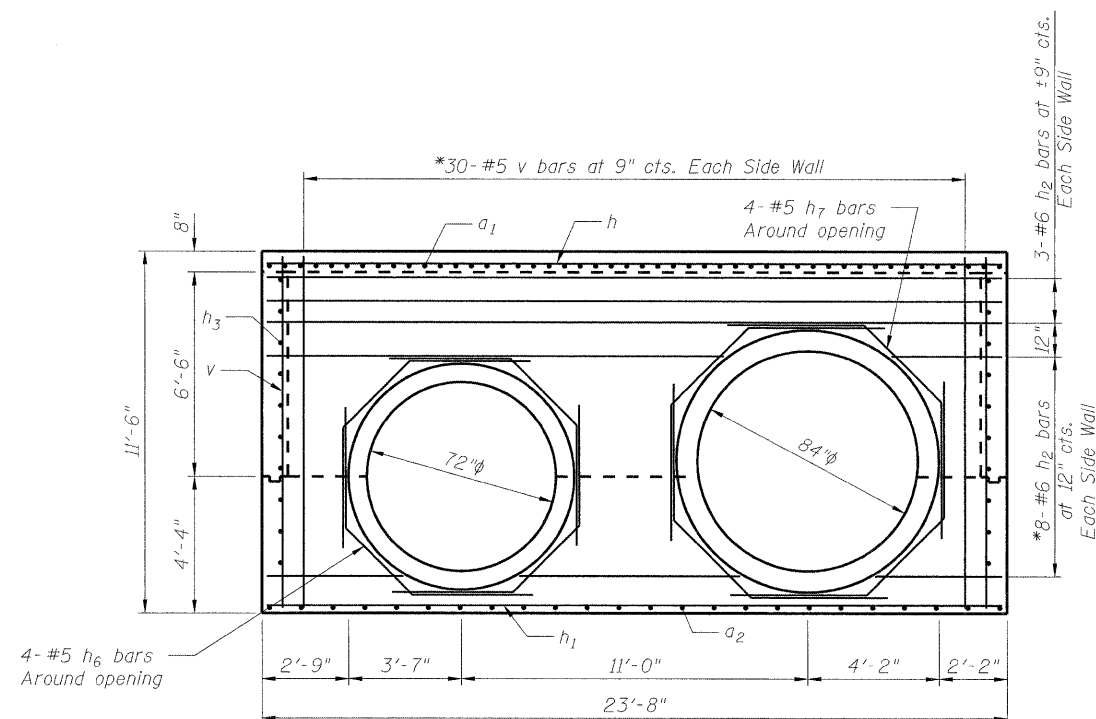


SECTION D-D

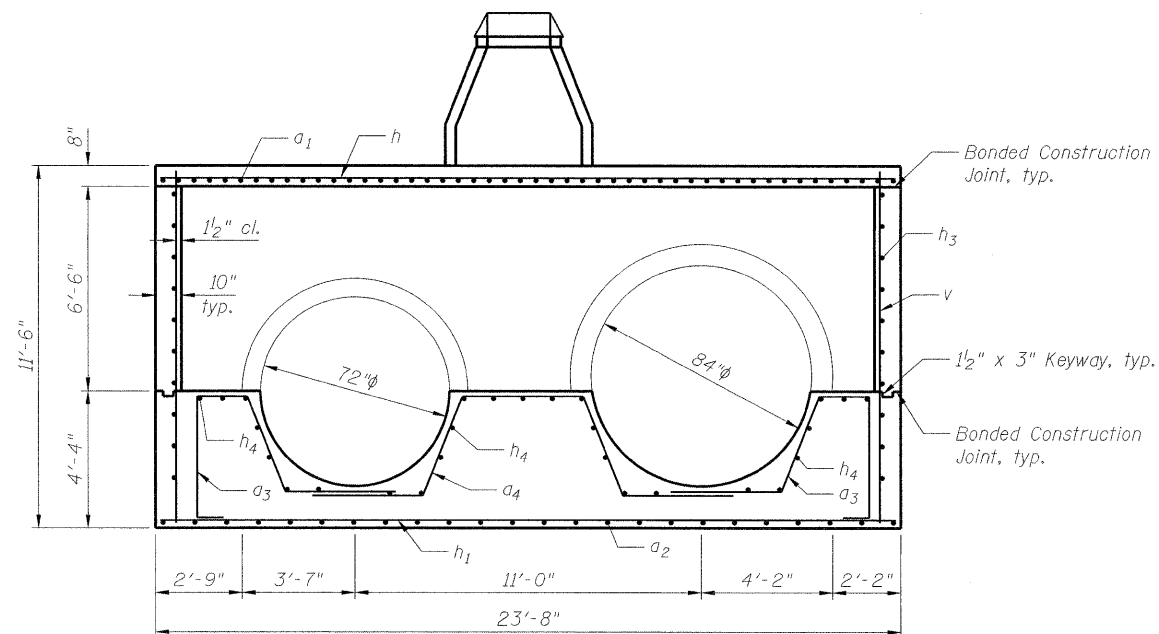
*Cut bars to fit as required

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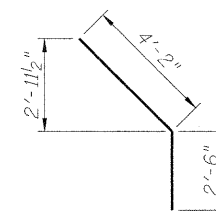
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	PLOT DATE = 9/7/2011	CHECKED - GSP	REVISED -							
SHEET NO. OF SHEETS						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
						CONTRACT NO. 60F90				



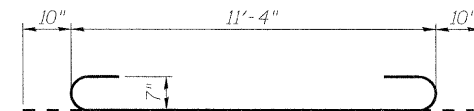
SIDE WALL SECTION



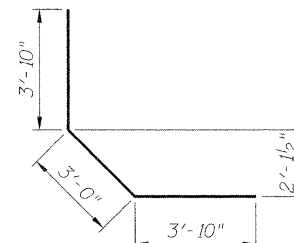
SECTION E-E



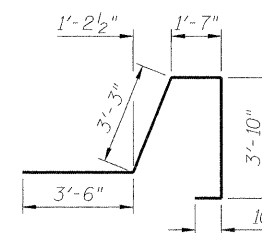
BAR h5



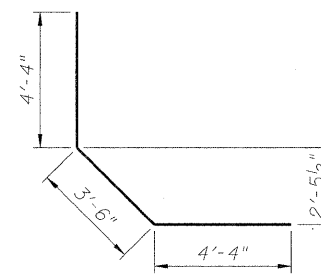
BAR a1



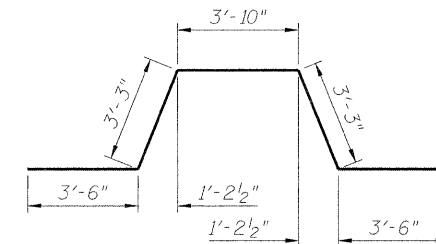
BAR h6



BAR a3



BAR h7



BAR a4

*Cut bars to fit as required

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	48	#7	13'-0"	U
a2	24	#6	11'-4"	U
a3	22	#5	13'-0"	U
a4	11	#5	17'-4"	U
h	13	#6	23'-4"	U
h1	9	#5	23'-4"	U
h2	22	#6	23'-4"	U
h3	22	#6	11'-4"	U
h4	27	#5	9'-8"	U
h5	4	#5	6'-8"	U
h6	4	#5	10'-8"	U
h7	4	#5	12'-2"	U
v	90	#5	11'-2"	U

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USER NAME = 2bookd
PLOT SCALE = N/A
PLOT DATE = 9/7/2011

DESIGNED - TWO
CHECKED - BHS
DRAWN - TWO
CHECKED - GSP

REVISED -
REVISED -
REVISED -
REVISED -

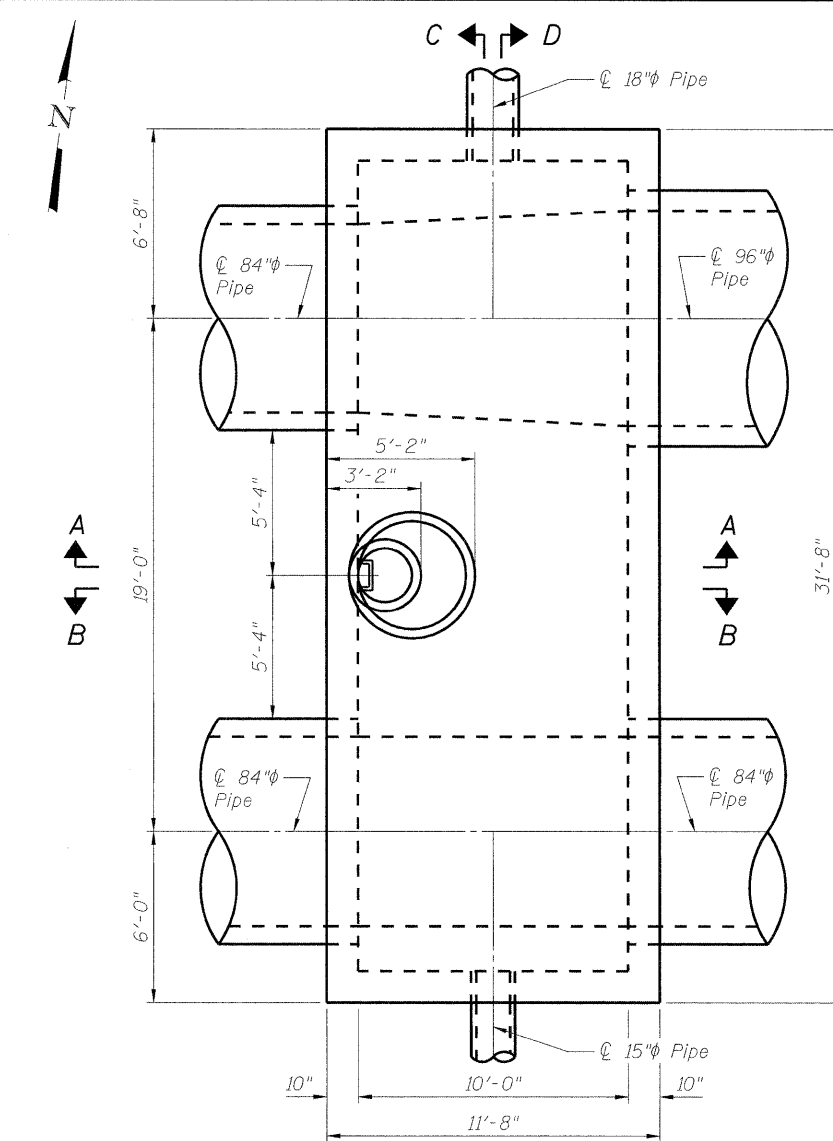
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JUNCTION CHAMBER #1
REINFORCEMENT DETAILS (2 OF 2)

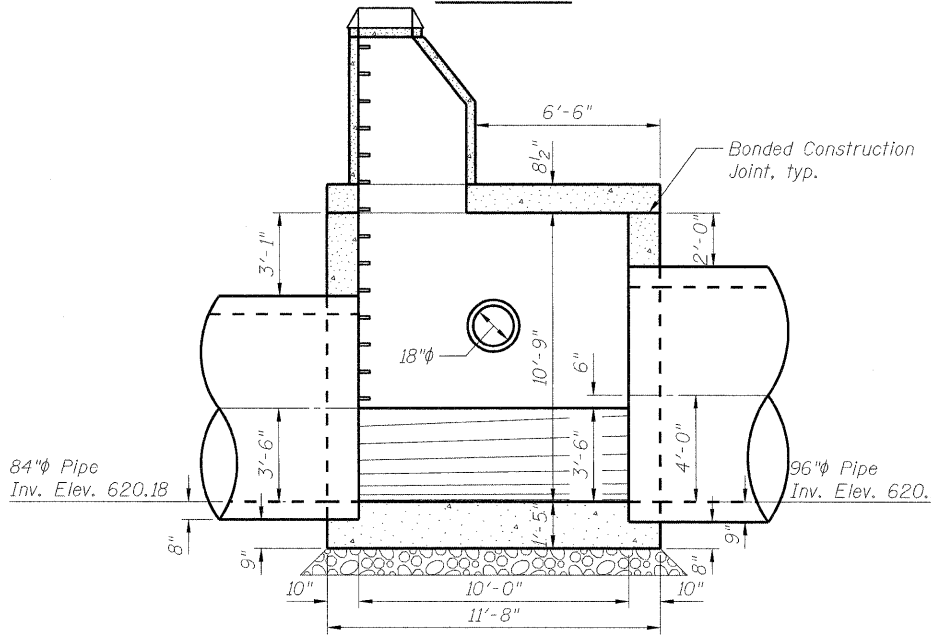
SHEET NO. OF SHEETS

F.A.I. RTE. 190	SECTION 0102.5-T	COUNTY COOK	TOTAL SHEETS 41	SHEET NO. 28
CONTRACT NO. 60F90				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

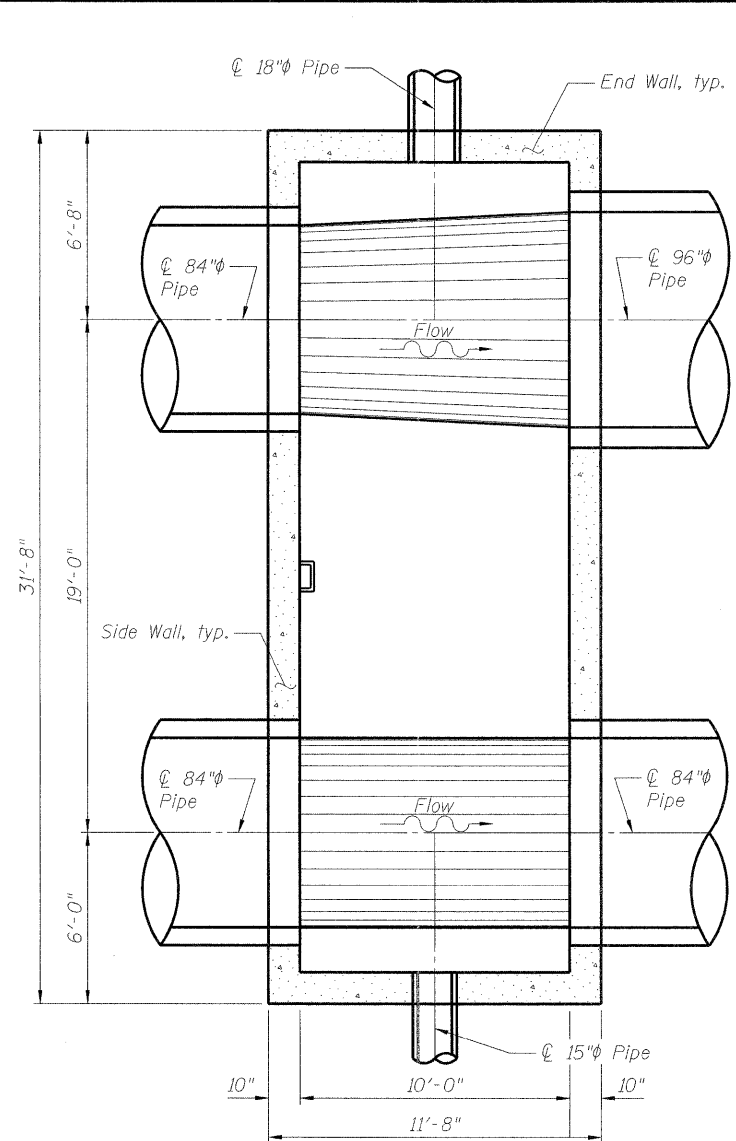
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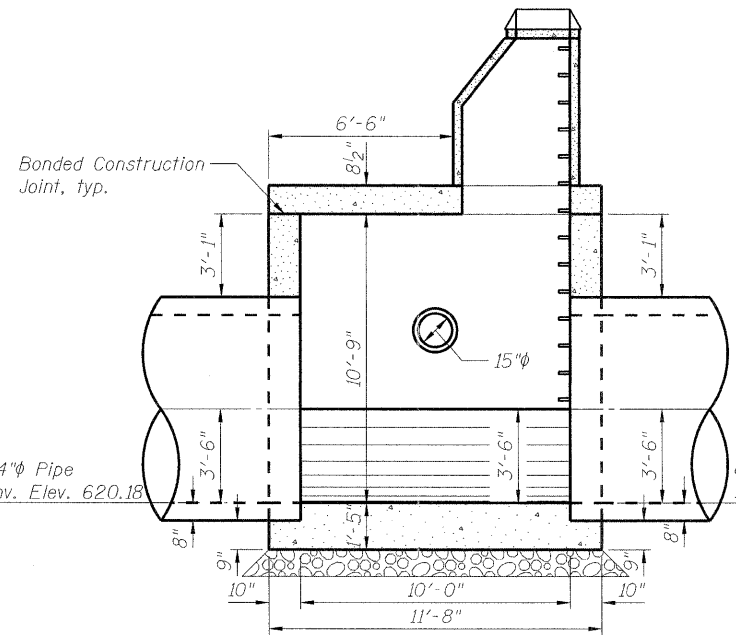
TOP PLAN



SECTION A-A



SECTIONAL PLAN



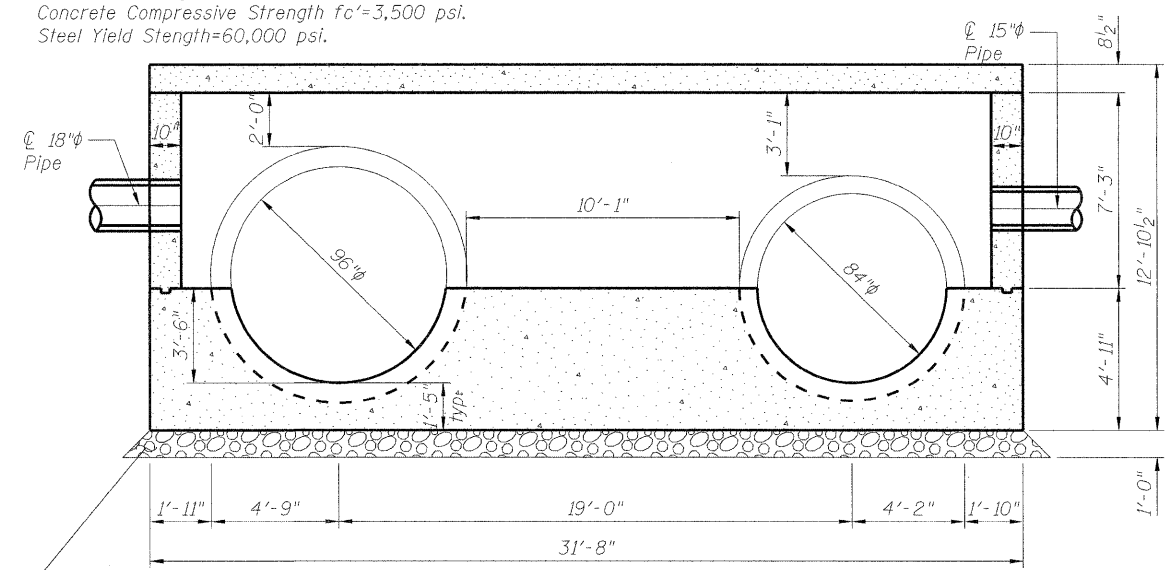
SECTION B-B

NOTES

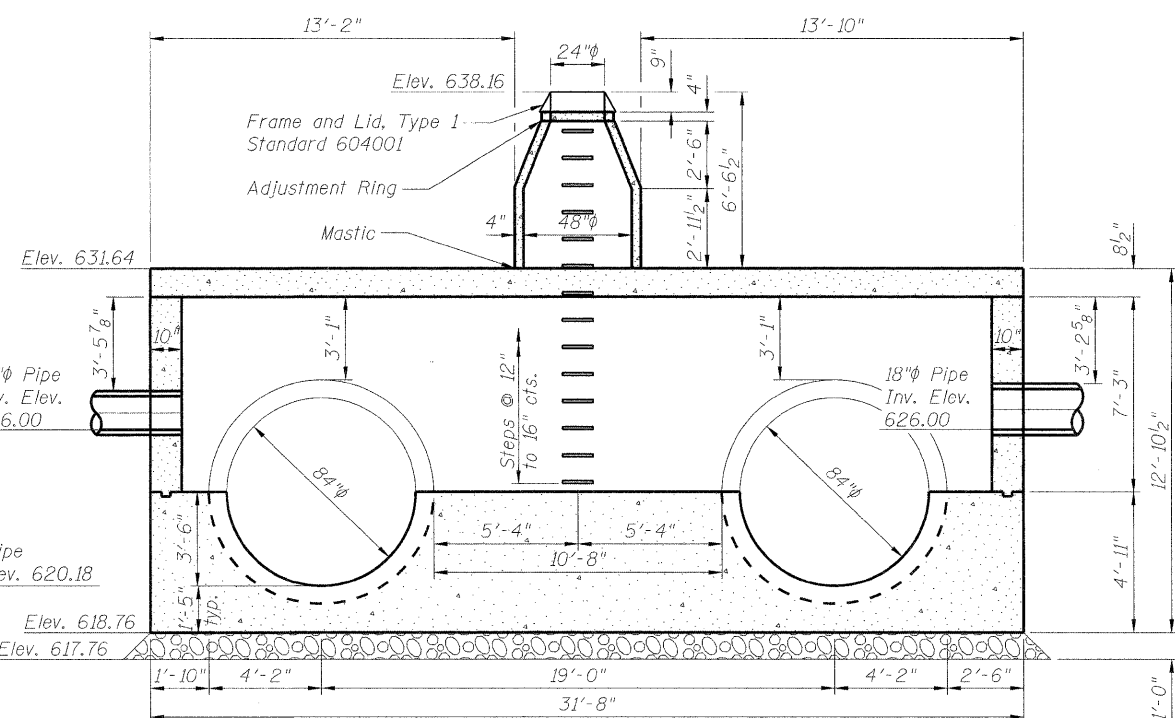
For additional information, see Standard Specifications.
For reinforcement details, see Sheets 30-31.
For Station and Offset, see Proposed Storm Sewer Plan and Profile.
The maximum width of excavation is the width of the junction chamber plus 4 feet, and the maximum length is the length of the junction chamber plus 4 feet. Excavation outside the maximum dimensions specified will not be measured for payment.
The design of the braced excavation is the responsibility of the Contractor. The Contractor shall submit drawings and design for the braced excavation to the Engineer for approval. The braced excavation design and drawings shall be signed and sealed by an Illinois licensed Structural Engineer, submitted and approved prior to the start of any work. The Engineer's approval shall not relieve the Contractor from the sole responsibility of the structural integrity of the braced excavation system.
All dimensions and elevations shall be verified prior to construction.
Concrete pipe sizes shall be coordinated with openings provided into junction chambers before pouring concrete.
Concrete cover for reinforcement steel to be 2" unless otherwise noted.
All concrete edges shall be chamfered 1 inch.
Concrete Compressive Strength $f_c' = 3,500$ psi.
Steel Yield Strength = 60,000 psi.

JUNCTION CHAMBER #2
BILL OF MATERIAL

Item	Unit	Total
Removal and Disposal of Unsuitable Material	Cu. Yds.	15
Porous Granular Embankment	Cu. Yds.	15
Concrete Structures	Cu. Yds.	73.4
Reinforcement Bars	Pound	7,550
Manholes, Type A, 4'-Diameter, Type 1 Frame, Closed Lid	Each	1
Braced Excavation	Cu. Yds.	42.3



SECTION D-D



SECTION C-C



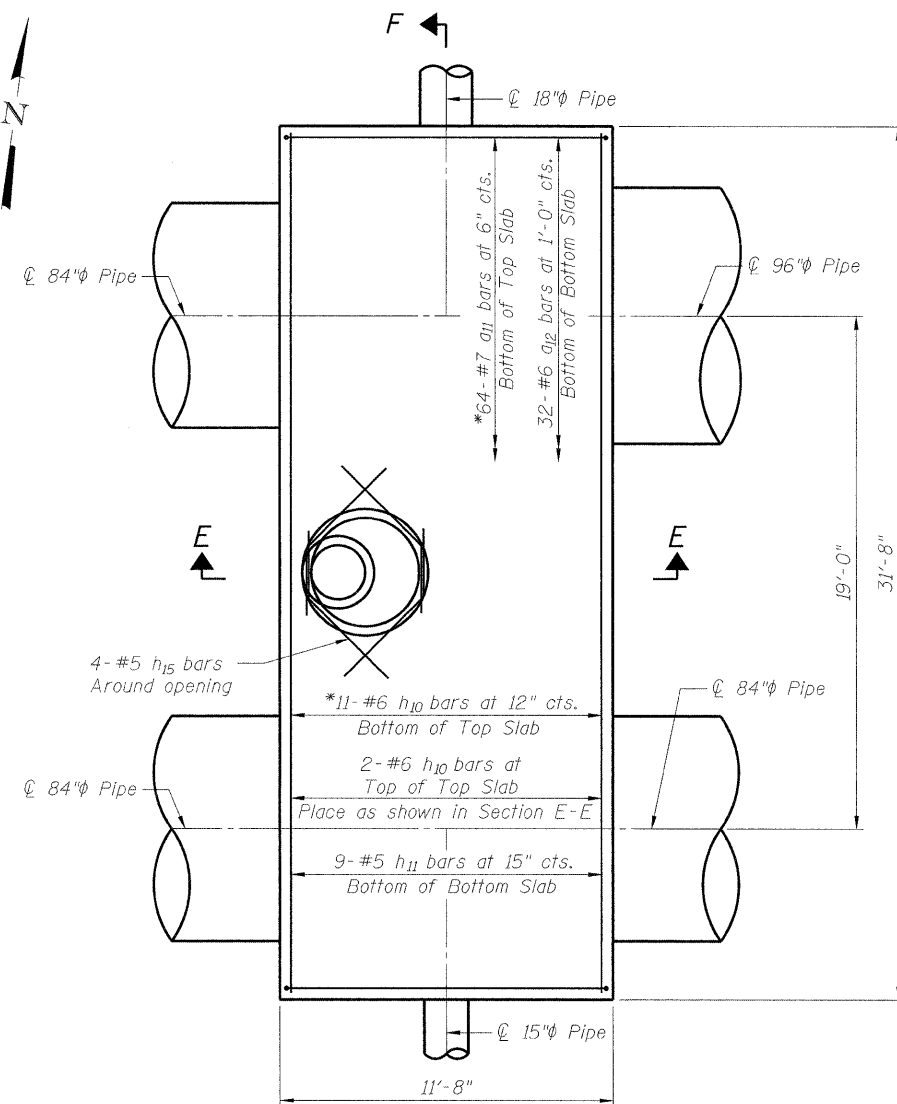
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PLOT SCALE = N/A	CHECKED - BHS	REVISED -
PLOT DATE = 9/7/2011	DRAWN - TWO	REVISED -
	CHECKED - GSP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

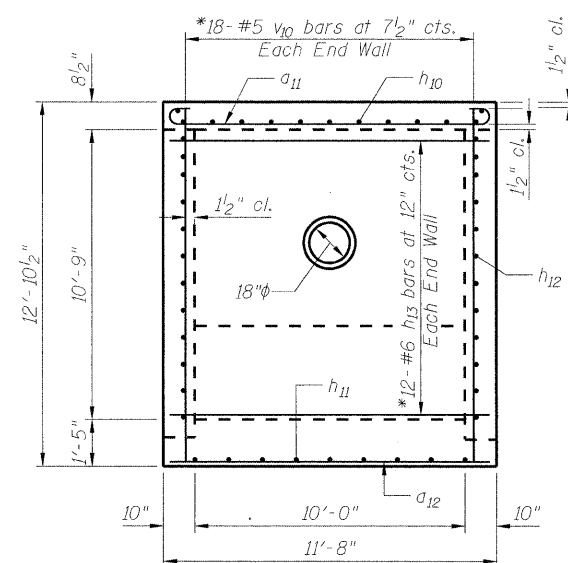
JUNCTION CHAMBER #2
GENERAL PLAN AND ELEVATION

SHEET NO. OF SHEETS

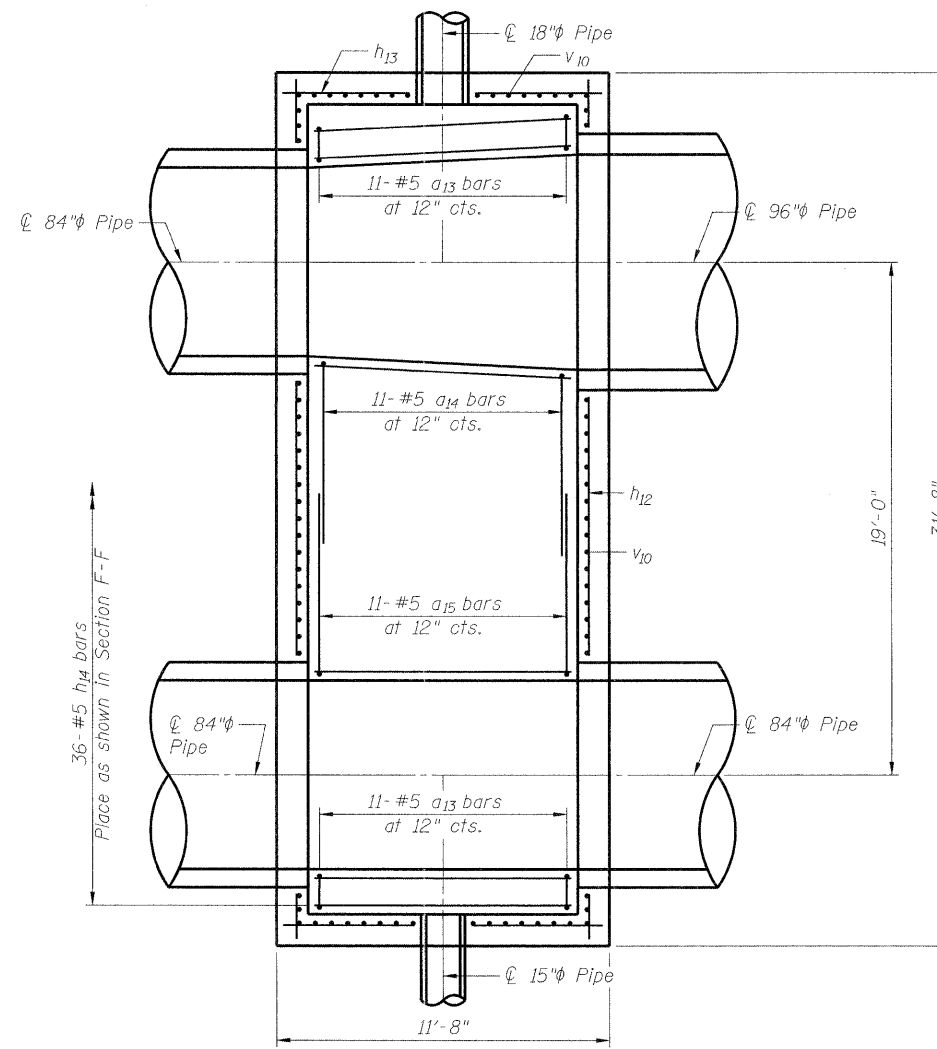
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	0102.5-T	COOK	41	29
CONTRACT NO. 60F90				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



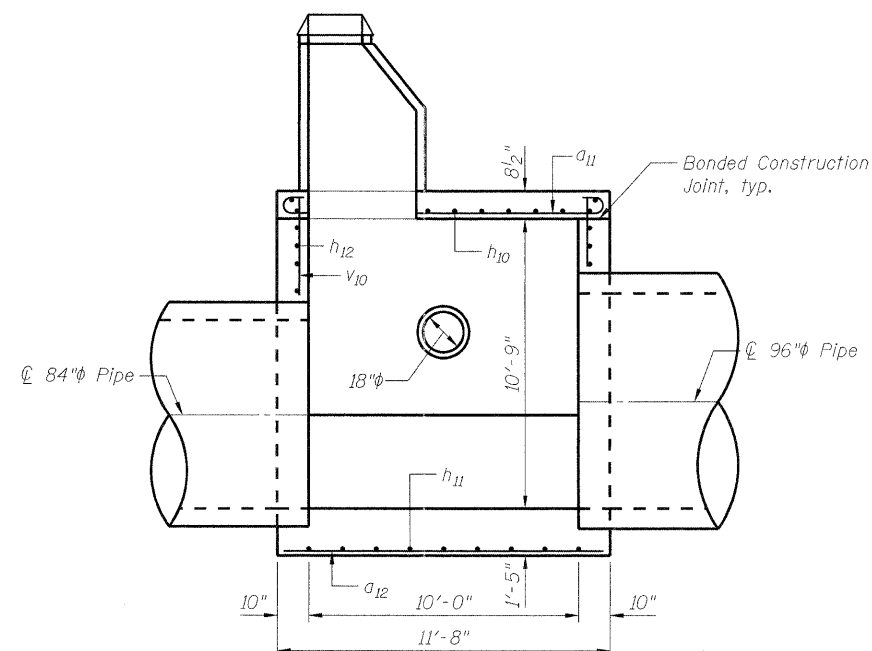
TOP PLAN



END WALL SECTION



SECTIONAL PLAN



SECTION E-E

*Cut bars to fit as required

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USER NAME = 2bbookd
PLOT SCALE = N/A
PLOT DATE = 9/7/2011

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CHECKED - BHS
DRAWN - TWO
CHECKED - GSP

REVISED -
REVISED -
REVISED -
REVISED -

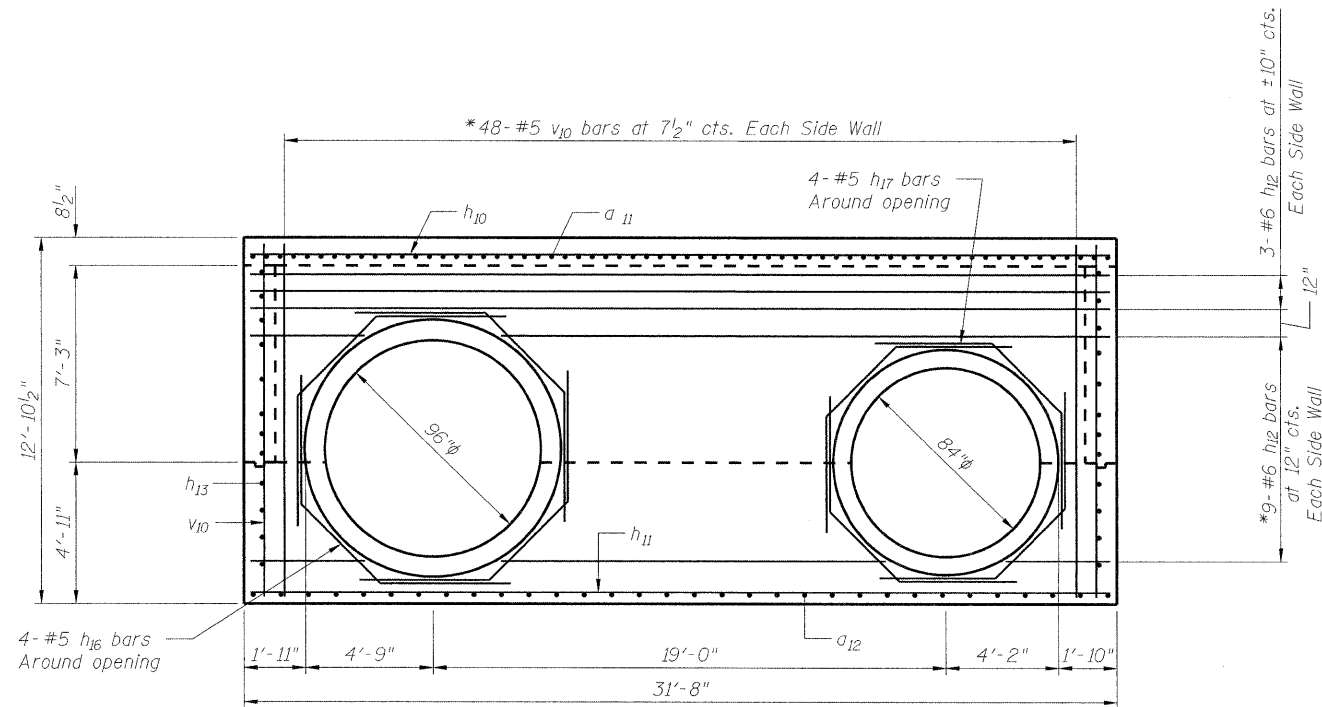
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JUNCTION CHAMBER #2
REINFORCEMENT DETAILS (1 OF 2)

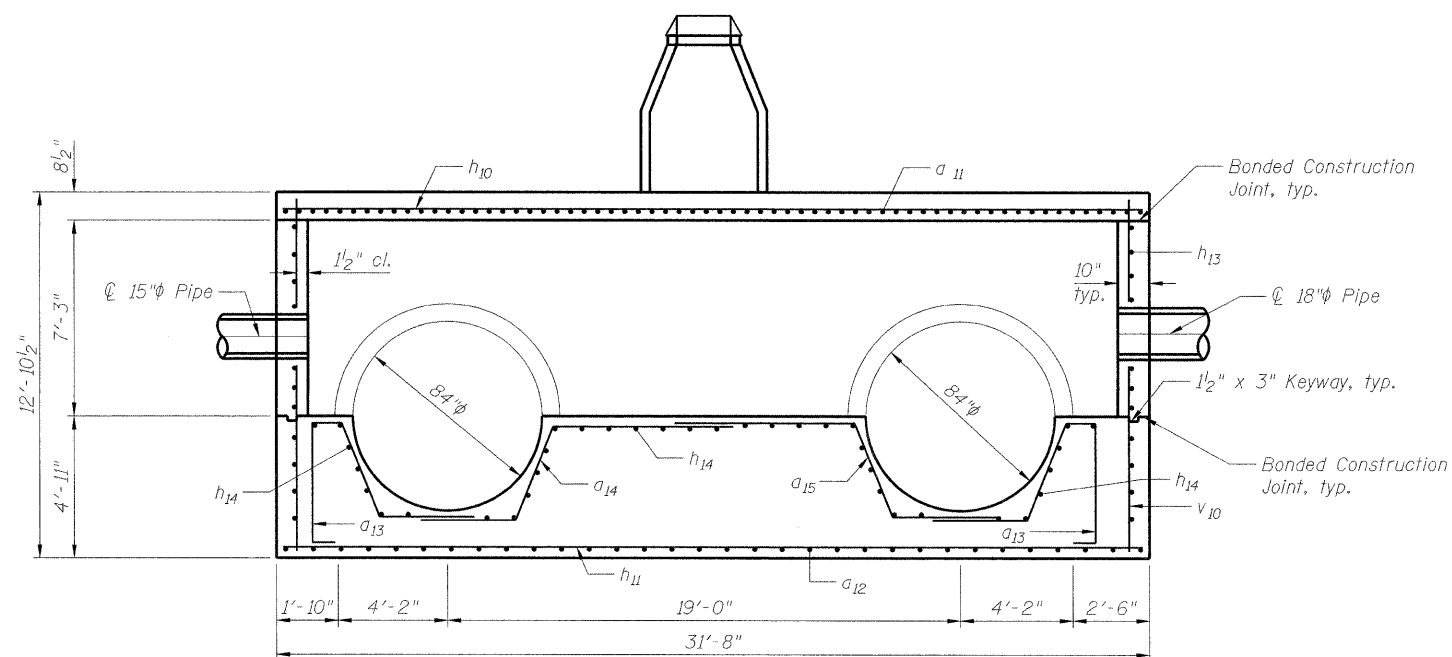
SHEET NO. OF SHEETS

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190	0102.5-T	COOK	41	30
CONTRACT NO. 60F90				

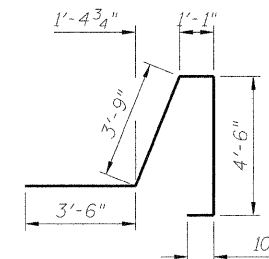
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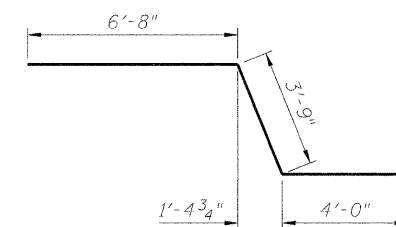
SIDE WALL SECTION



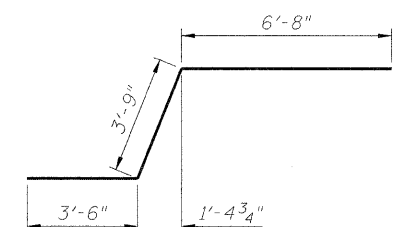
SECTION F-F



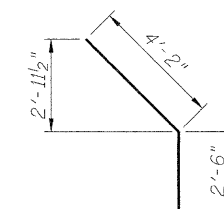
BAR a13



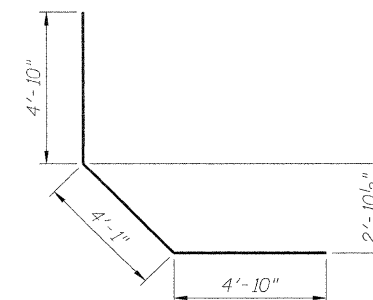
BAR a14



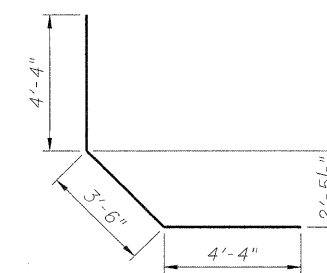
BAR a15



BAR h15



BAR h16



BAR h17

*Cut bars to fit as required

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a11	64	#7	13'-0"	
a12	32	#6	11'-4"	
a13	22	#5	13'-8"	
a14	11	#5	14'-5"	
a15	11	#5	13'-11"	
h10	13	#6	31'-4"	
h11	9	#5	31'-4"	
h12	24	#6	31'-4"	
h13	24	#6	11'-4"	
h14	36	#5	9'-8"	
h15	4	#5	6'-8"	
h16	4	#5	13'-9"	
h17	4	#5	12'-2"	
v10	132	#5	12'-6"	

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	CHECKED - BHS	REVISED -
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PLOT DATE = 9/7/2011	CHECKED - GSP	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**JUNCTION CHAMBER #2
REINFORCEMENT DETAILS (2 OF 2)**

SHEET NO. OF SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	0102.5-T	COOK	41	31
CONTRACT NO. 60F90				
FED. ROAD DIST. NO. 1 ILLINOIS/FED. AID PROJECT				

JUNCTION CHAMBER #3

BILL OF MATERIAL

Item	Unit	Total
Removal and Disposal of Unsuitable Material	Cu. Yds.	15
Porous Granular Embankment	Cu. Yds.	15
Concrete Structures	Cu. Yds.	75.4
Reinforcement Bars	Pound	7,030
Grates, Type 7	Each	4
Frames and Lids, Type 1, Closed Lid	Each	1
Braced Excavation	Cu. Yds.	334

NOTES

For additional information, see Standard Specifications.

For reinforcement details, see Sheets 33-34.

For Station and Offset, see Proposed Storm Sewer Plan and Profile.

The maximum width of excavation is the width of the junction chamber plus 4 feet, and the maximum length is the length of the junction chamber plus 4 feet. Excavation outside the maximum dimensions specified will not be measured for payment.

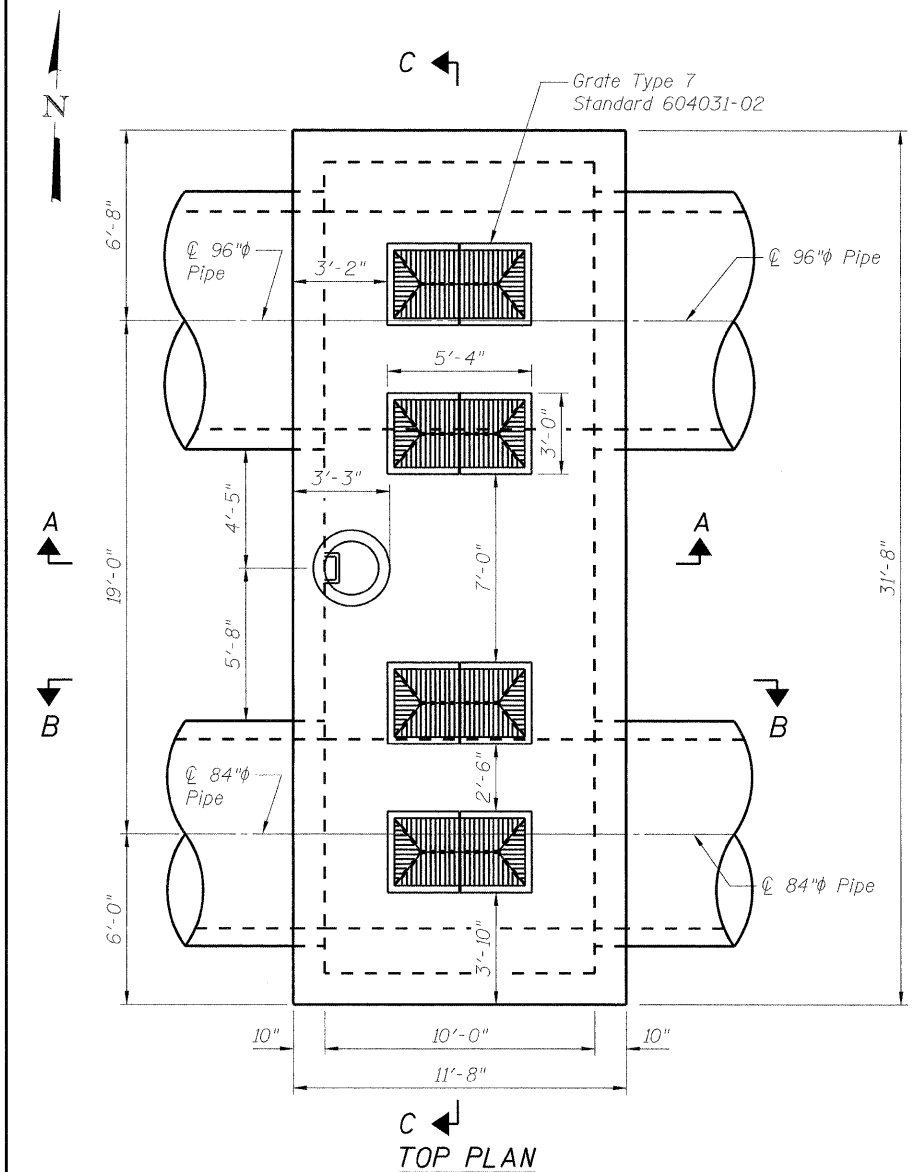
The design of the braced excavation is the responsibility of the Contractor. The Contractor shall submit drawings and design for the braced excavation to the Engineer for approval. The braced excavation design and drawings shall be signed and sealed by an Illinois licensed Structural Engineer, submitted and approved prior to the start of any work. The Engineer's approval shall not relieve the Contractor from the sole responsibility of the structural integrity of the braced excavation system.

All dimensions and elevations shall be verified prior to construction.

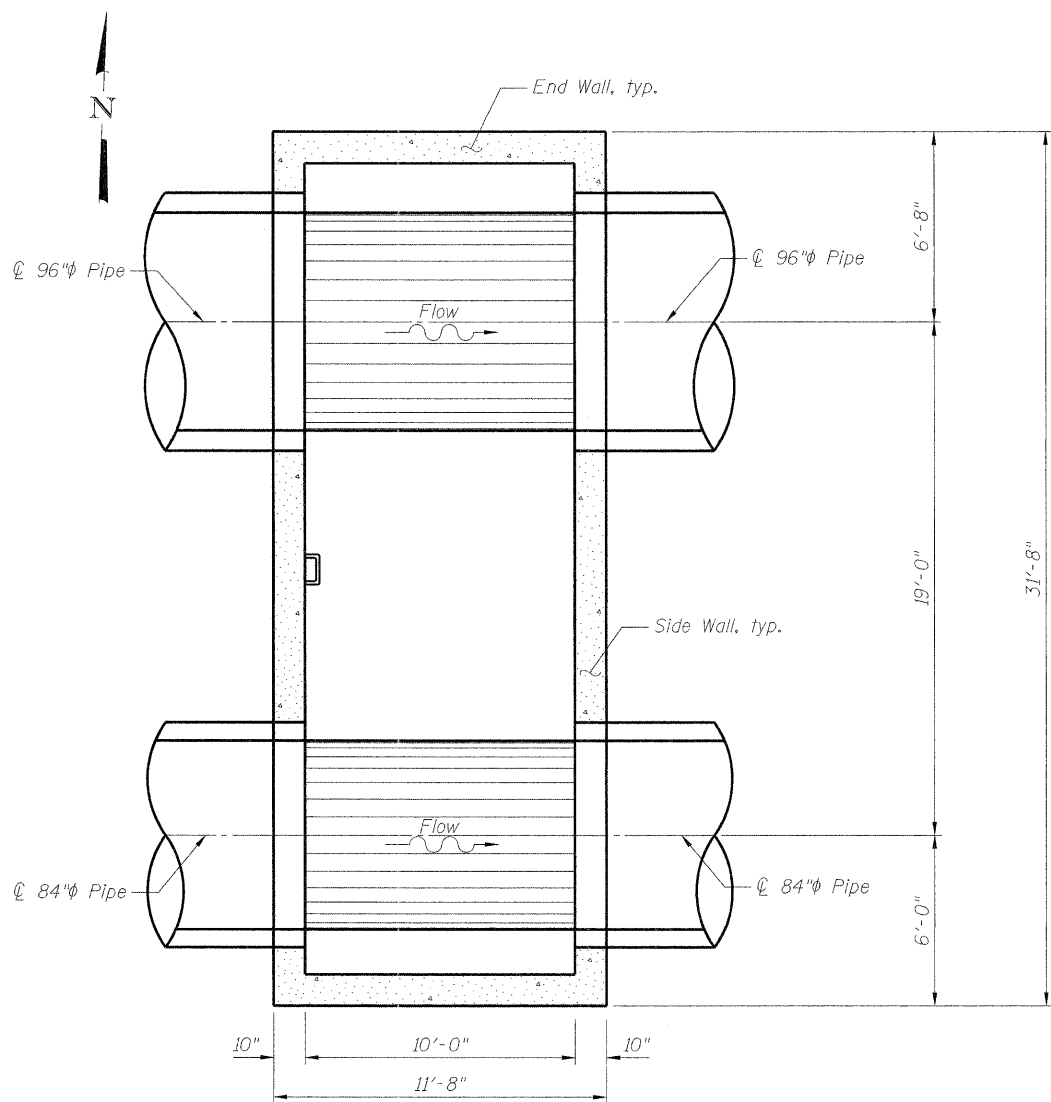
Concrete pipe sizes shall be coordinated with openings provided into junction chambers before pouring concrete.

Concrete cover for reinforcement steel to be 2" unless otherwise noted.

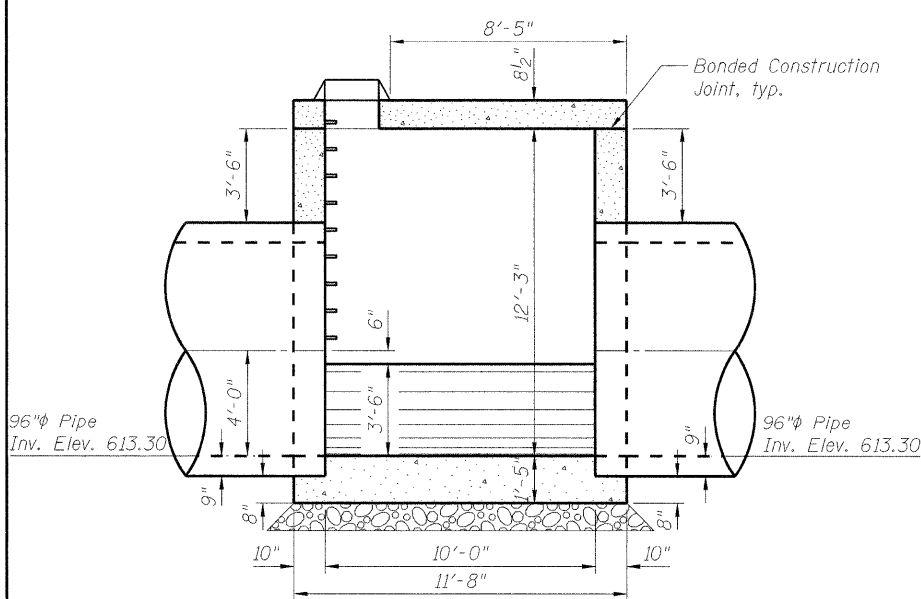
All concrete edges shall be chamfered 1 inch.
Concrete Compressive Strength f'_c = 3,500 psi.
Steel Yield Strength = 60,000 psi.



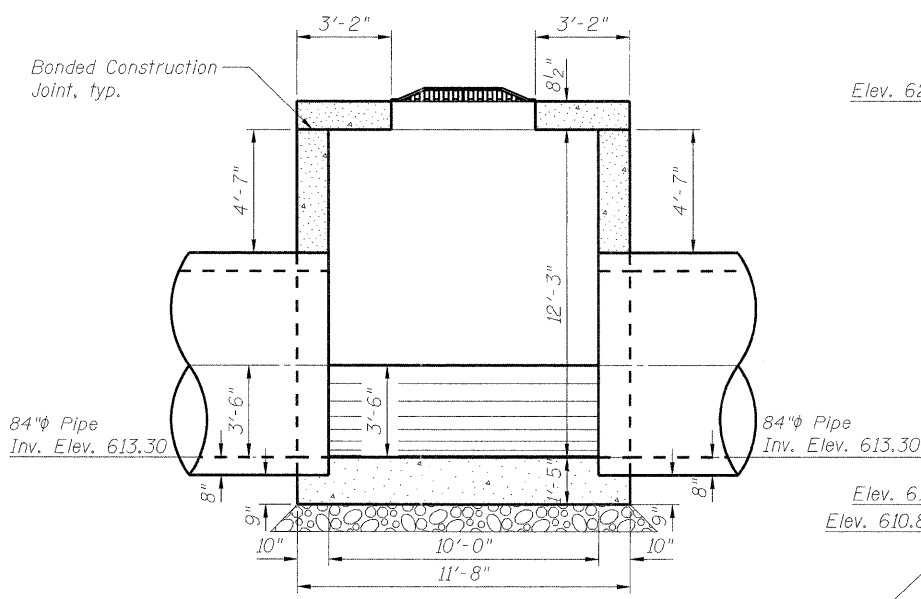
TOP PLAN



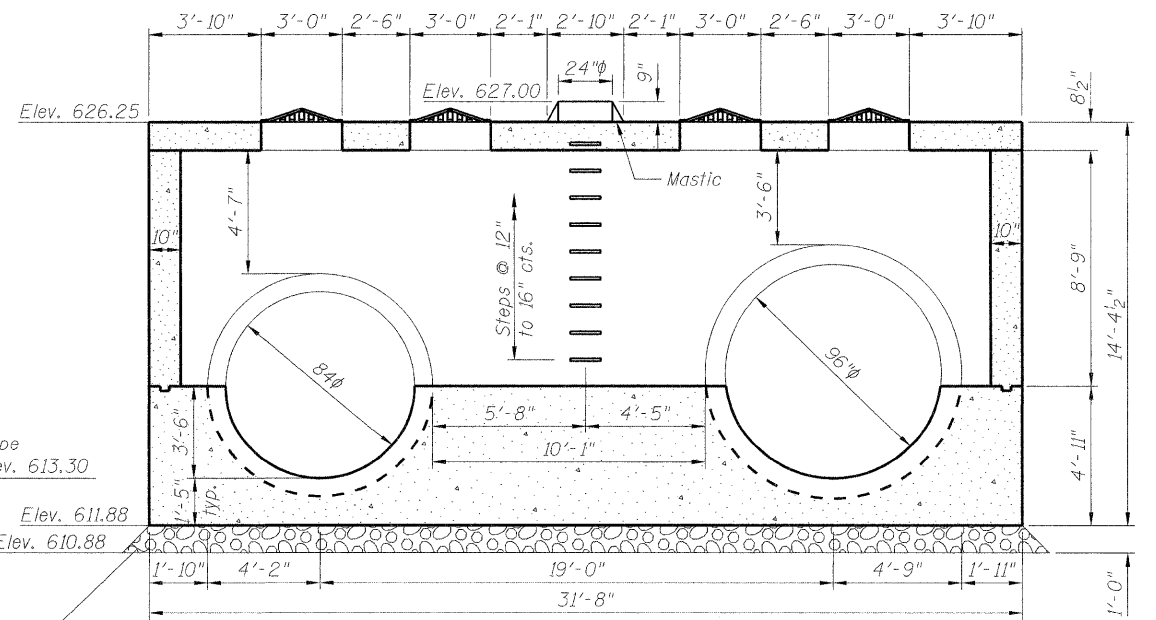
SECTIONAL PLAN



SECTION A-A

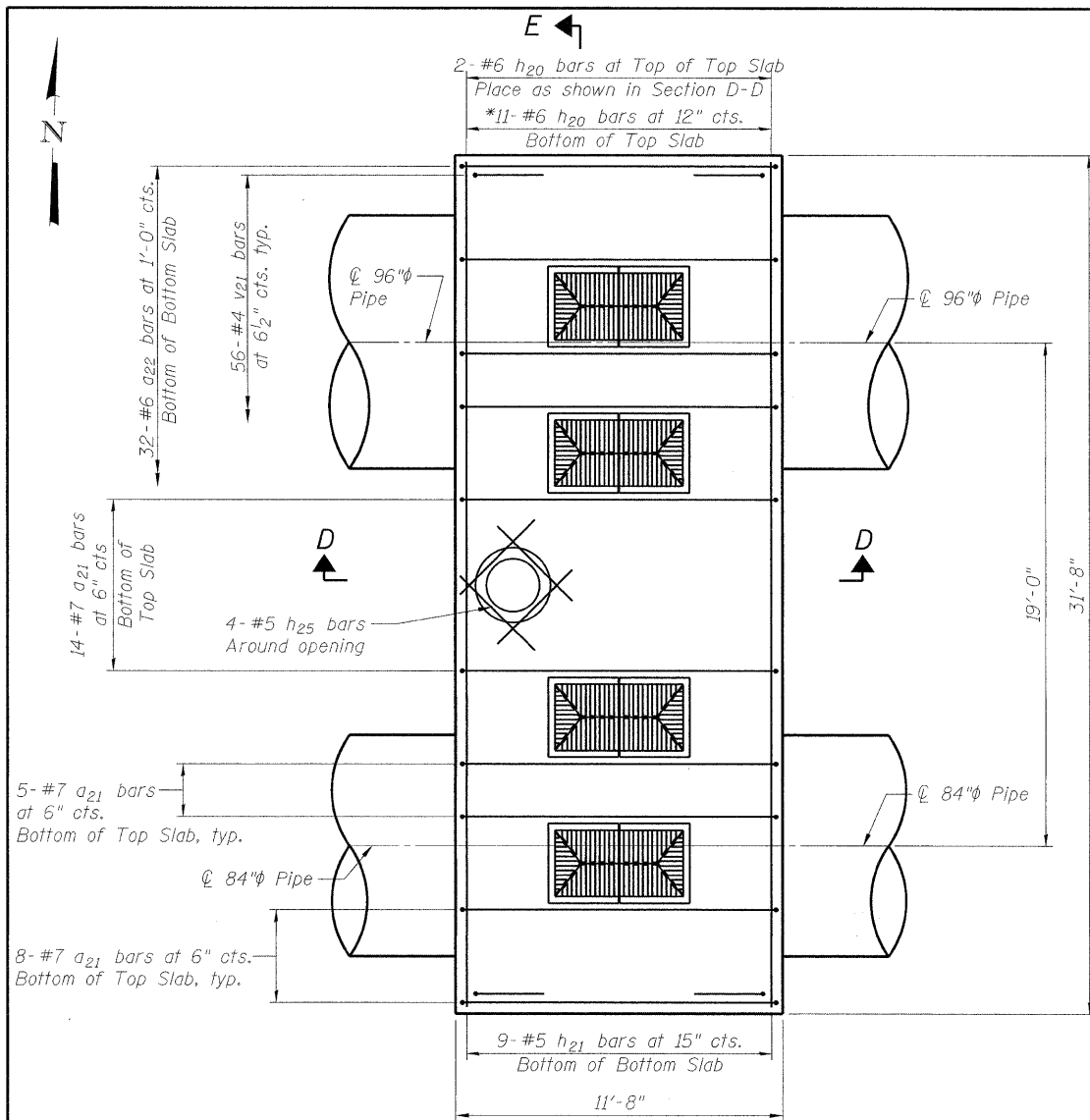


SECTION B-B

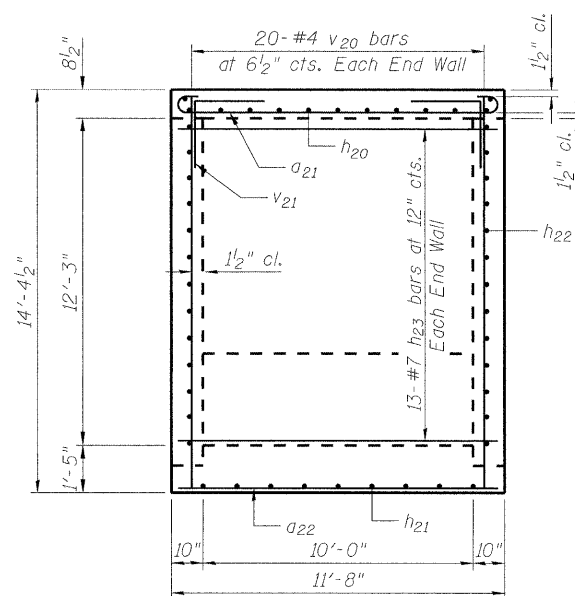


SECTION C-C

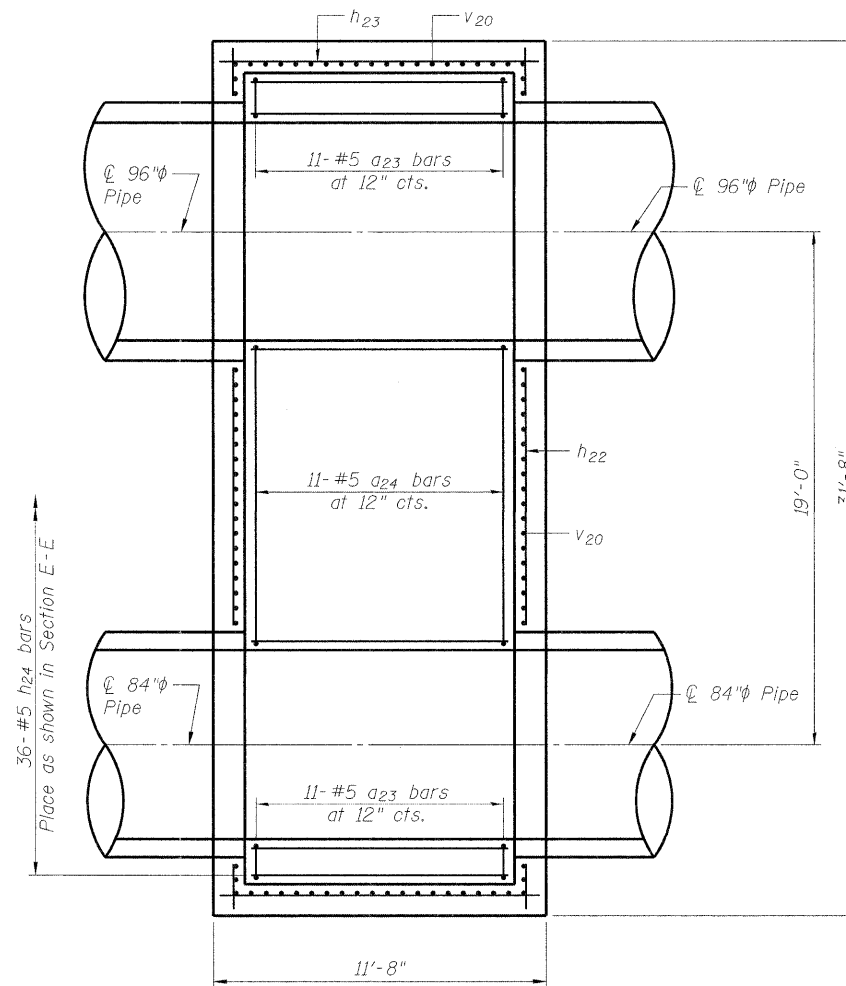
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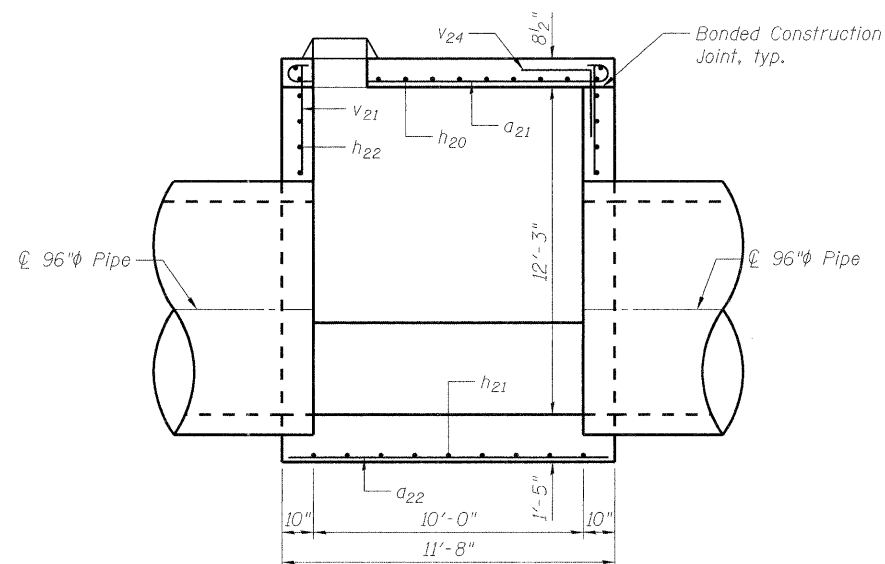
TOP PLAN



END WALL SECTION



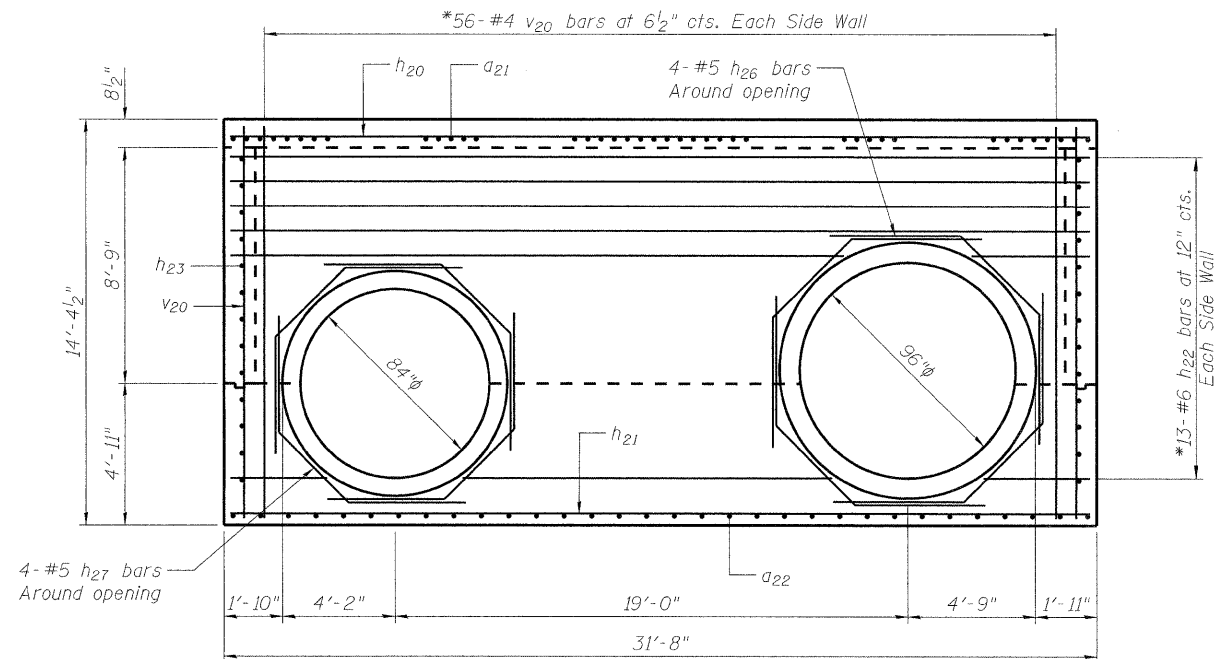
SECTIONAL PLAN



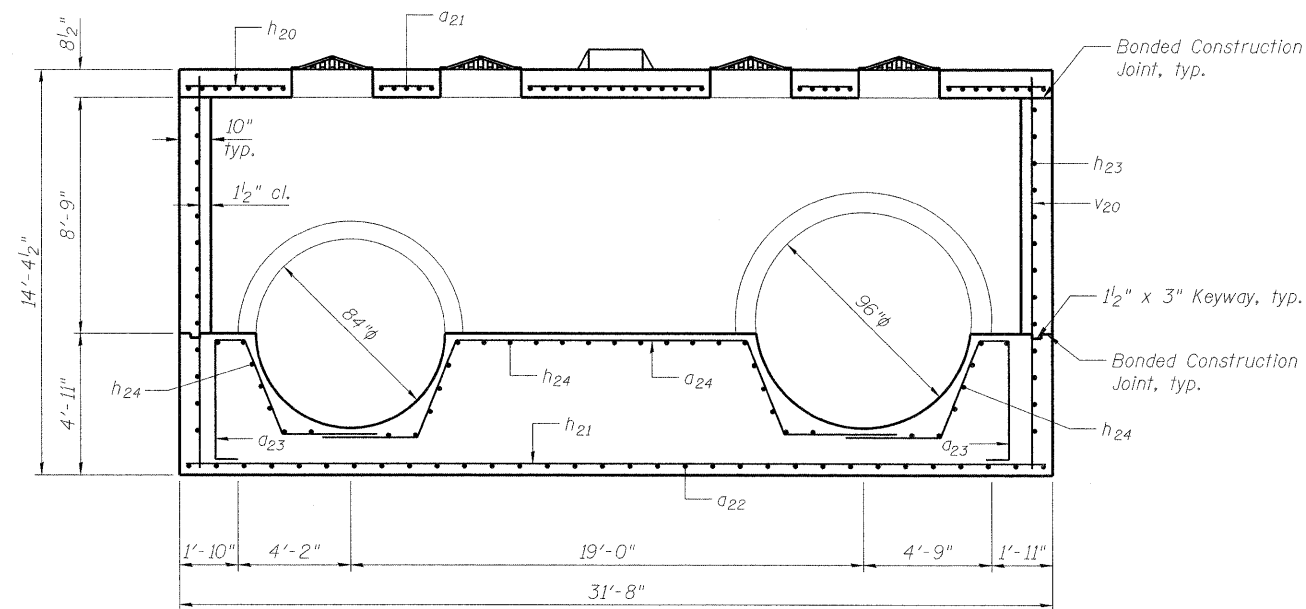
SECTION D-D

*Cut bars to fit as required

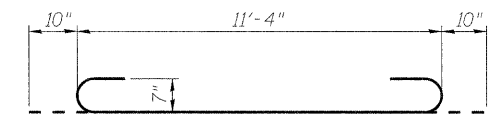
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		CHECKED - BHS	REVISED -							
	PLOT SCALE = N/A	DRAWN - TWO	REVISED -							
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SHEET NO. OF SHEETS						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



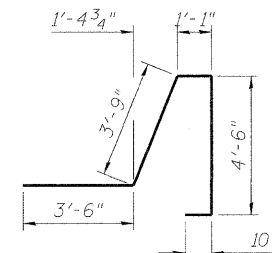
SIDE WALL SECTION



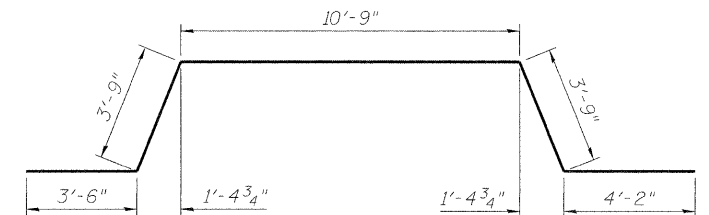
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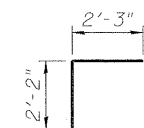
BAR a21



BAR a23



BAR a24

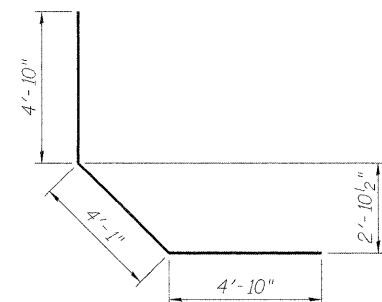


BAR v24

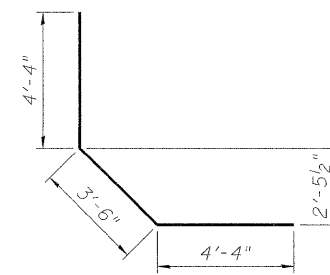
*Cut bars to fit as required

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a21	40	#7	13'-0"	U
a22	32	#6	11'-4"	—
a23	22	#5	13'-8"	∩
a24	11	#5	25'-11"	∩
h20	13	#6	31'-4"	—
h21	9	#5	31'-4"	—
h22	26	#6	31'-4"	—
h23	26	#6	11'-4"	—
h24	36	#5	9'-8"	—
h25	4	#5	4'-0"	—
h26	4	#5	13'-9"	∩
h27	4	#5	12'-2"	∩
v20	152	#4	14'-0"	—
v21	112	#4	4'-5"	∩



BAR h26



BAR h27

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SOIL BORING LOG

Geo Services Inc. DATE 5/8/2011

ROUTE F.A. 122 (IL 394) DESCRIPTION Wing Wall Repair - Illinois 394 South Of Barnes Road

SECTION 2010-67-T LOCATION SEC. 27, T34 N., R 14 E., CRETE TOWNSHIP, 3rd P.M.

COUNTY Will DRILLING METHOD 2.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 099-0517

Station 182+73

BORING NO. SB-02

Station 182+73

Offset 241.6' Right

Ground Surface Elev. 637.8

10.0' TOPSOIL-black

CLAY to CLAY LOAM-gray-stiff to hard (A-6)

CLAY-brown & gray-stiff to hard (A-6)

CLAY to CLAY LOAM-gray-stiff to hard (A-6)

SOIL BORING LOG

Geo Services Inc. DATE 5/8/2011

ROUTE F.A. 122 (IL 394) DESCRIPTION Wing Wall Repair - Illinois 394 South Of Barnes Road

SECTION 2010-67-T LOCATION SEC. 27, T34 N., R 14 E., CRETE TOWNSHIP, 3rd P.M.

COUNTY Will DRILLING METHOD 2.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 099-0517

Station 185+59

BORING NO. SB-03

Station 185+59

Offset 271.1' Right

Ground Surface Elev. 638.8

6.0' TOPSOIL-black

SILTY CLAY-dark gray to black-very stiff (A-6) Wet

CLAY to CLAY LOAM-gray-very stiff to hard (A-6)

CLAY-brown & gray-hard (A-6)

CLAY to CLAY LOAM-gray-very stiff to hard (A-6)

SOIL BORING LOG

Geo Services Inc. DATE 5/8/2011

ROUTE F.A. 122 (IL 394) DESCRIPTION Wing Wall Repair - Illinois 394 South Of Barnes Road

SECTION 2010-67-T LOCATION SEC. 27, T34 N., R 14 E., CRETE TOWNSHIP, 3rd P.M.

COUNTY Will DRILLING METHOD 2.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 099-0517

Station 170+85

BORING NO. SB-04

Station 170+85

Offset 287.6' Right

Ground Surface Elev. 638.8

10.0' TOPSOIL-black

SILTY CLAY-dark gray to black-very stiff (A-6) Wet

CLAY to CLAY LOAM-gray-stiff to hard (A-6)

CLAY-brown & gray-very stiff to hard (A-6)

CLAY to CLAY LOAM-gray-stiff to hard (A-6)

SOIL BORING LOG

Geo Services Inc. DATE 4/28/2011

ROUTE F.A. 122 (IL 394) DESCRIPTION Wing Wall Repair - Illinois 394 South Of Barnes Road

SECTION 2010-67-T LOCATION SEC. 27, T34 N., R 14 E., CRETE TOWNSHIP, 3rd P.M.

COUNTY Will DRILLING METHOD 2.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 099-0517

Station 174+24

BORING NO. SB-05

Station 174+24

Offset 262.1' Right

Ground Surface Elev. 638.8

8.0' TOPSOIL-black

CLAY-gray-very stiff to hard (A-6)

CLAY-brown & gray-very stiff to hard (A-6)

CLAY-gray-very stiff to hard (A-6)

SOIL BORING LOG

Geo Services Inc. DATE 4/28/2011

ROUTE F.A. 122 (IL 394) DESCRIPTION Wing Wall Repair - Illinois 394 South Of Barnes Road

SECTION 2010-67-T LOCATION SEC. 27, T34 N., R 14 E., CRETE TOWNSHIP, 3rd P.M.

COUNTY Will DRILLING METHOD 2.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 099-0517

Station 178+52

BORING NO. SB-06

Station 178+52

Offset 244.4' Right

Ground Surface Elev. 637.2

10.0' TOPSOIL-black

SANDY CLAY LOAM-black-medium dense (Fill)

CLAY-brown & gray (A-6)

CLAY-gray-very stiff to hard (A-6)

CRUSHED ASPHALT-dense (Fill)

CLAY-brown & gray-very stiff to hard (A-6)

SOIL BORING LOG

Geo Services Inc. DATE 4/28/2011

ROUTE F.A. 122 (IL 394) DESCRIPTION Wing Wall Repair - Illinois 394 South Of Barnes Road

SECTION 2010-67-T LOCATION SEC. 27, T34 N., R 14 E., CRETE TOWNSHIP, 3rd P.M.

COUNTY Will DRILLING METHOD 2.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 099-0517

Station 180+14

BORING NO. SB-07

Station 180+14

Offset 217.7' Right

Ground Surface Elev. 638.1

12.0' TOPSOIL-black

SILTY CLAY to CLAY-brown & gray-stiff (A-6)

CLAY LOAM-brown & gray-hard (A-6)

CLAY-gray-stiff to hard (A-6)

SOIL BORING LOG

Geo Services Inc. DATE 4/28/2011

ROUTE F.A. 122 (IL 394) DESCRIPTION Wing Wall Repair - Illinois 394 South Of Barnes Road

SECTION 2010-67-T LOCATION SEC. 27, T34 N., R 14 E., CRETE TOWNSHIP, 3rd P.M.

COUNTY Will DRILLING METHOD 2.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 099-0517

Station 228.7' Right

BORING NO. SB-08

Station 228.7' Right

Offset 228.7' Right

Ground Surface Elev. 636.6

6.0' TOPSOIL with Gravel-black

SAND & GRAVEL-dark brown-loose to medium dense (Fill)

CLAY-brown & gray-hard (A-6)

CLAY-gray-stiff to hard (A-6)

SOIL BORING LOG

Geo Services Inc. DATE 4/28/2011

ROUTE F.A. 190 DESCRIPTION Pump Station 24 - Discharge Sewer Pipe Work Order No. 2

SECTION 0102.5-T LOCATION SEC. 3 & 4, T 40 N., R 12 E., LEYDEN TOWNSHIP, 3rd P.M.

COUNTY Cook DRILLING METHOD 2.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. ---

Station ---

BORING NO. SB-09

Station ---

Offset ---

Ground Surface Elev. 636.3

8.0' TOPSOIL-black

CLAY-brown & gray-very stiff (A-6)

SANDY LOAM-dark brown-very loose (A-2)

CLAY-brown & gray-very stiff to hard (A-6)

CLAY LOAM-brown & gray-stiff (A-6)

CLAY LOAM-gray-very stiff to hard (A-6)

FILE NAME = g:\project\20102155_01\Need\Nash\Nash\0160F90-3\shl-4blg01.dgn



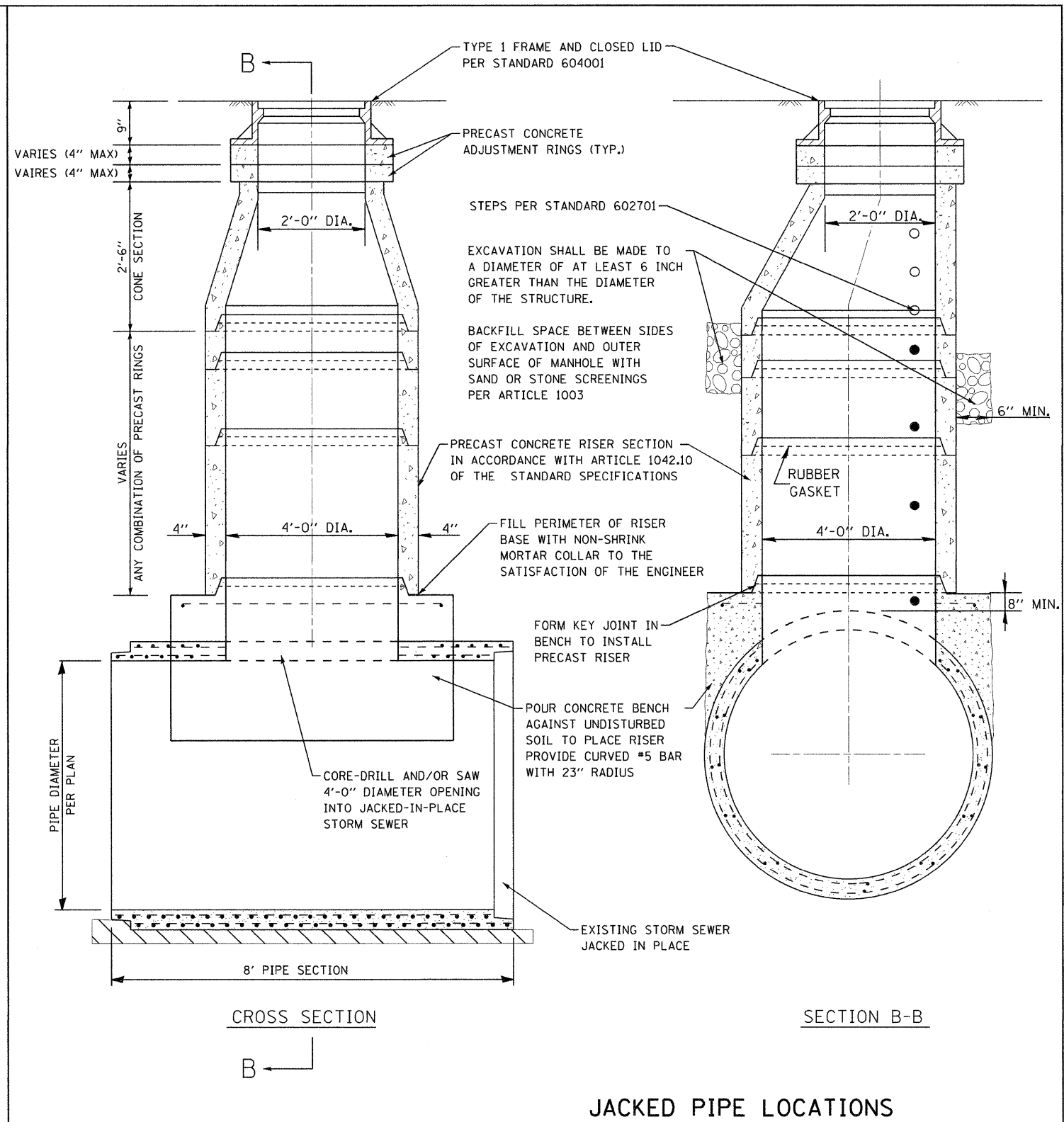
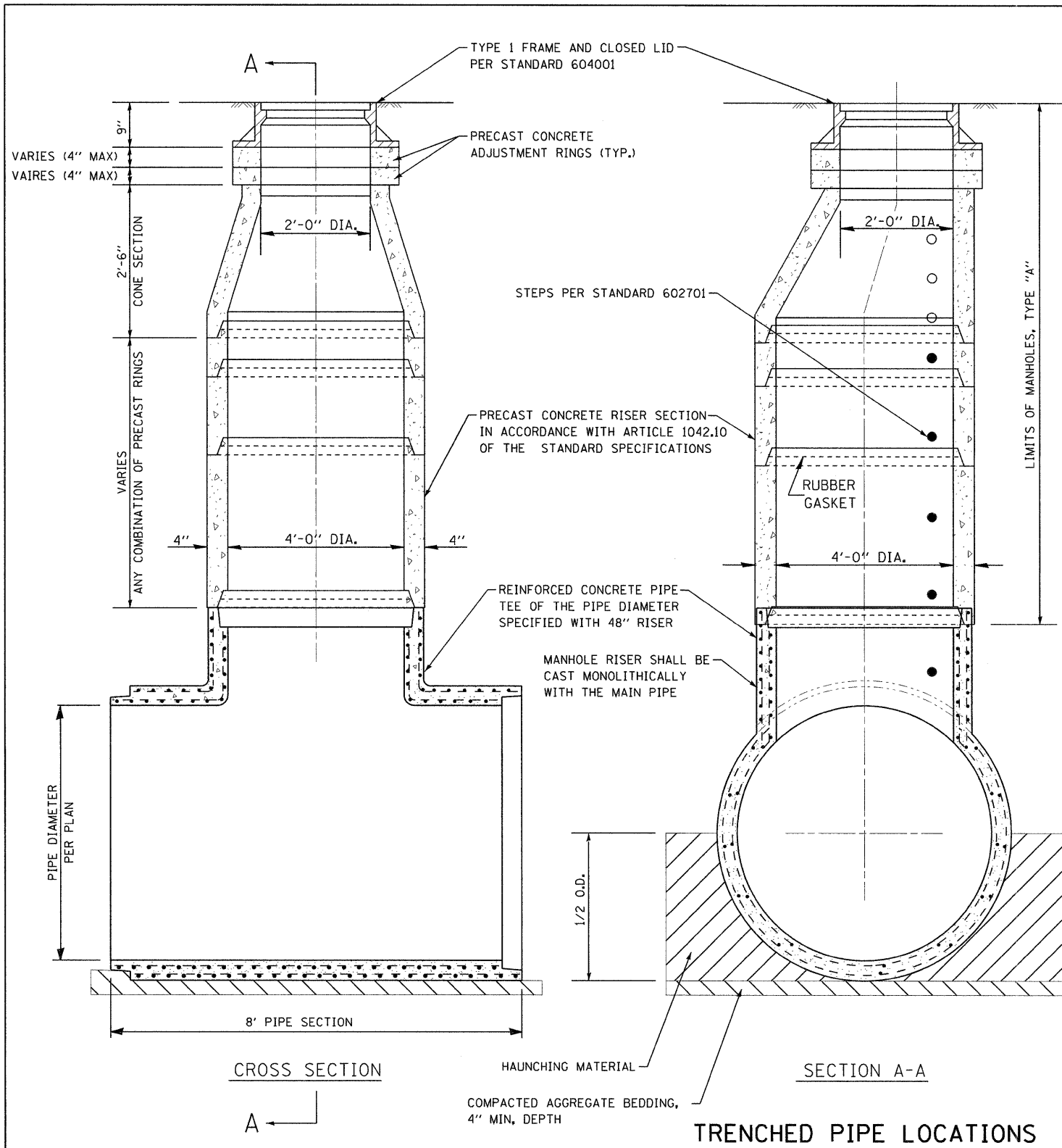
USER NAME = 2bookd	DESIGNED - DJB	REVISED -
PLOT SCALE = 20.00' / IN.	DRAWN - ENTRAN	REVISED -
PLOT DATE = 9/7/2011	CHECKED - DAK	REVISED -
	DATE - 09/07/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PUMP STATION 24 STORM SEWER IMPROVEMENTS
SOIL BORING LOGS

SCALE: 20.00' / IN. SHEET NO. OF SHEETS STA. TO STA.

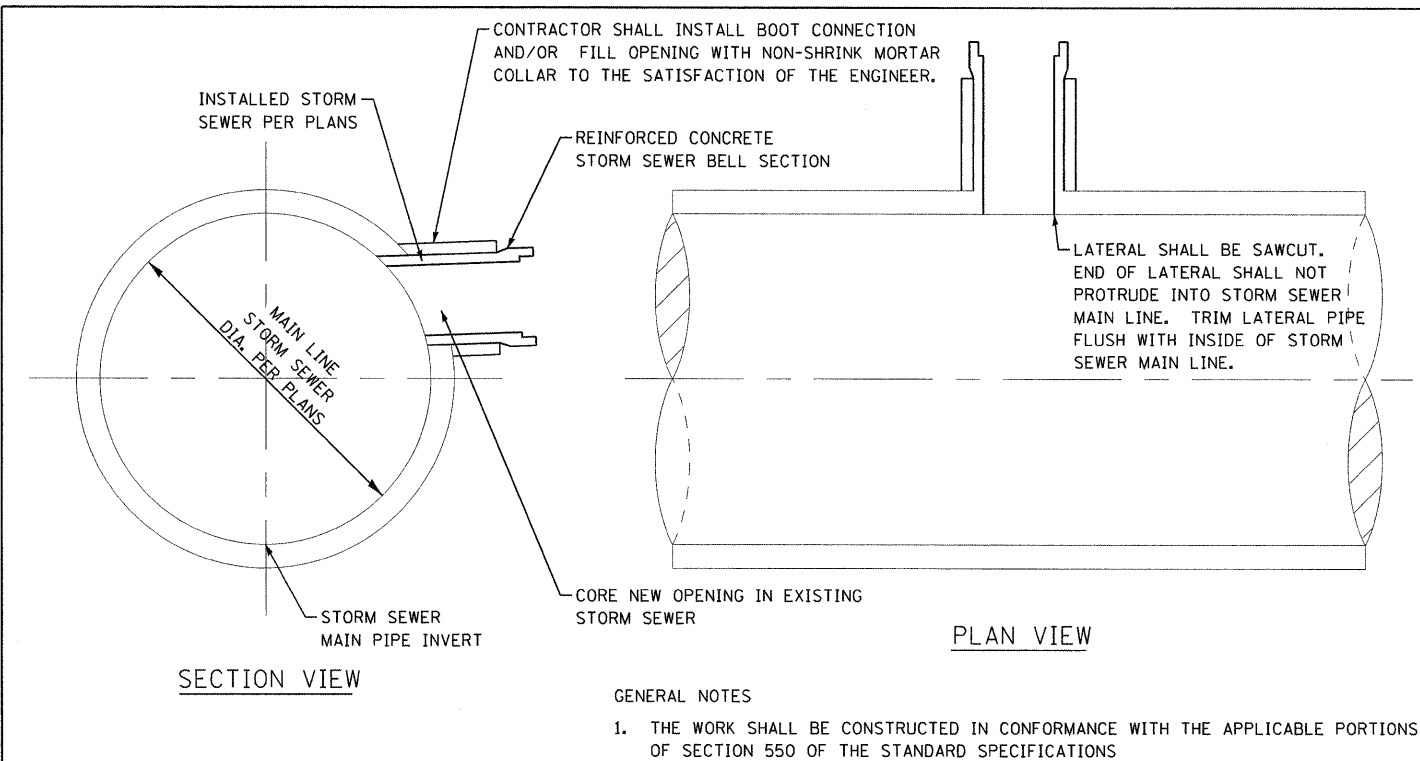
F.A.I. RTE. 190	SECTION 0102.5-T	COUNTY COOK	TOTAL SHEETS 41	SHEET NO. 35
CONTRACT NO. 60F90				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



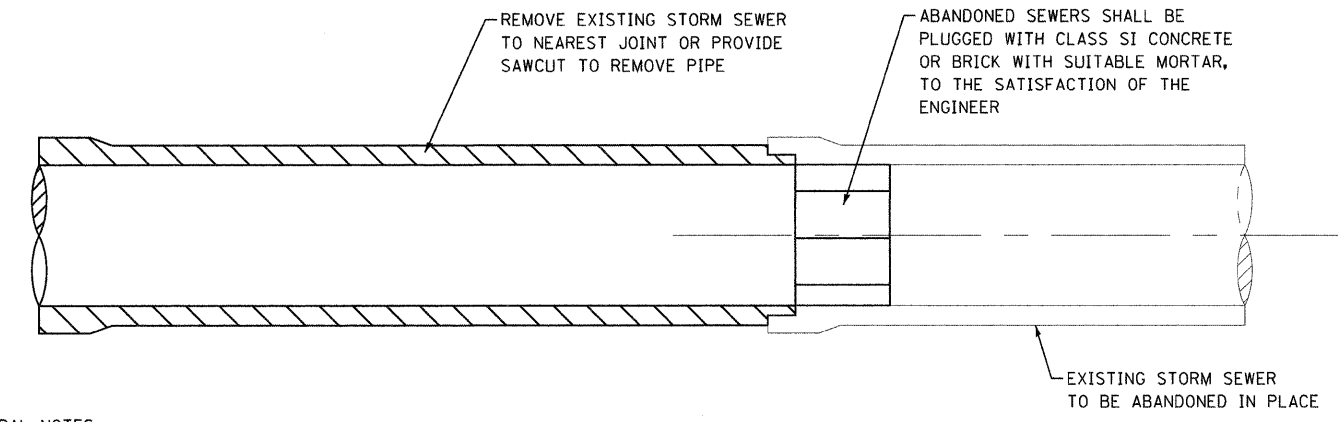
**MANHOLES, TYPE A, 4'-DIAMETER,
TYPE 1 FRAME, CLOSED LID, SPECIAL
DETAIL**

- GENERAL NOTES:
1. INSTALLATION SHALL CONFORM WITH THE APPLICABLE SECTION OF ARTICLES 550 AND 602 OF THE STANDARD SPECIFICATIONS.
 2. IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN, OR OTHERWISE DAMAGED DURING THE REMOVAL, THE CONTRACTOR SHALL REPLACE THE DAMAGED SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER WITHOUT ADDITIONAL COMPENSATION.
 3. TRENCH BACKFILL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPERATELY.
 4. ANY MATERIAL OR DEBRIS DEPOSITED IN THE FLOW LINE OF THE STORM SEWER DUE TO THE CONSTRUCTION OPERATIONS SHALL BE REMOVED UPON COMPLETION OF THE WORK.

	USER NAME = 2baokd	DESIGNED - DJB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PUMP STATION 24 STORM SEWER IMPROVEMENTS DRAINAGE DETAILS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1.00' / IN.	DRAWN - ENTRAN	REVISED -						190	01025-T	COOK	41	37
	PLOT DATE = 10/11/2011	CHECKED - DAK	REVISED -		CONTRACT NO. 60F90								
	DATE - 09/07/11	REVISED -											
SCALE: 1.00' / IN.				SHEET NO. OF SHEETS STA. TO STA.				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

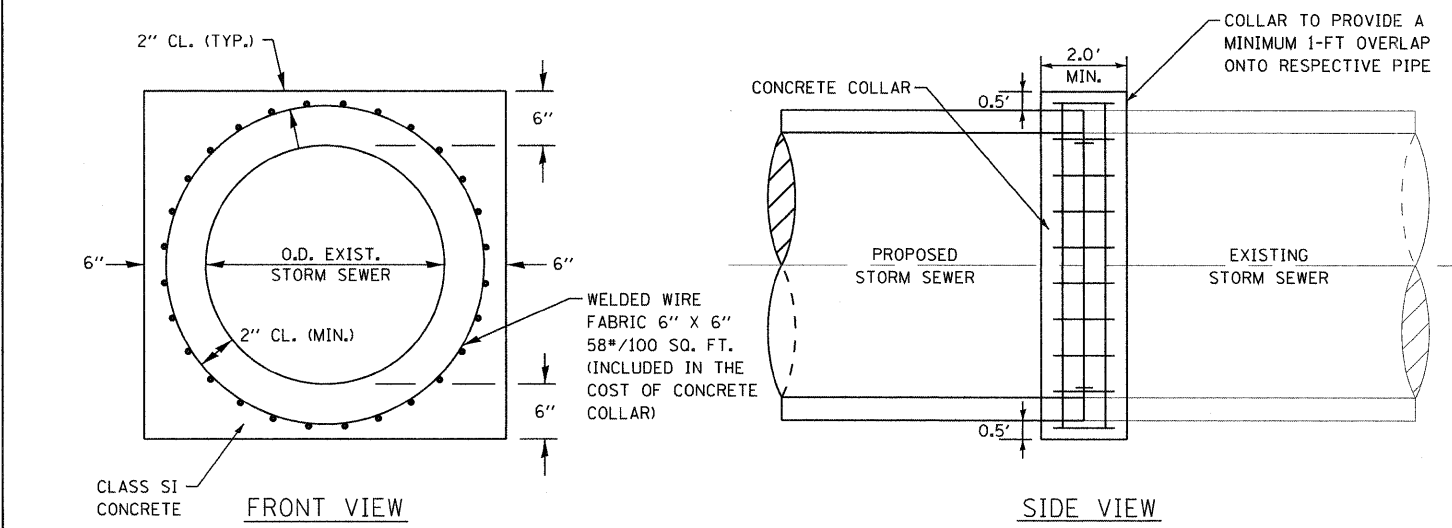


STORM SEWER CONNECTION DETAIL



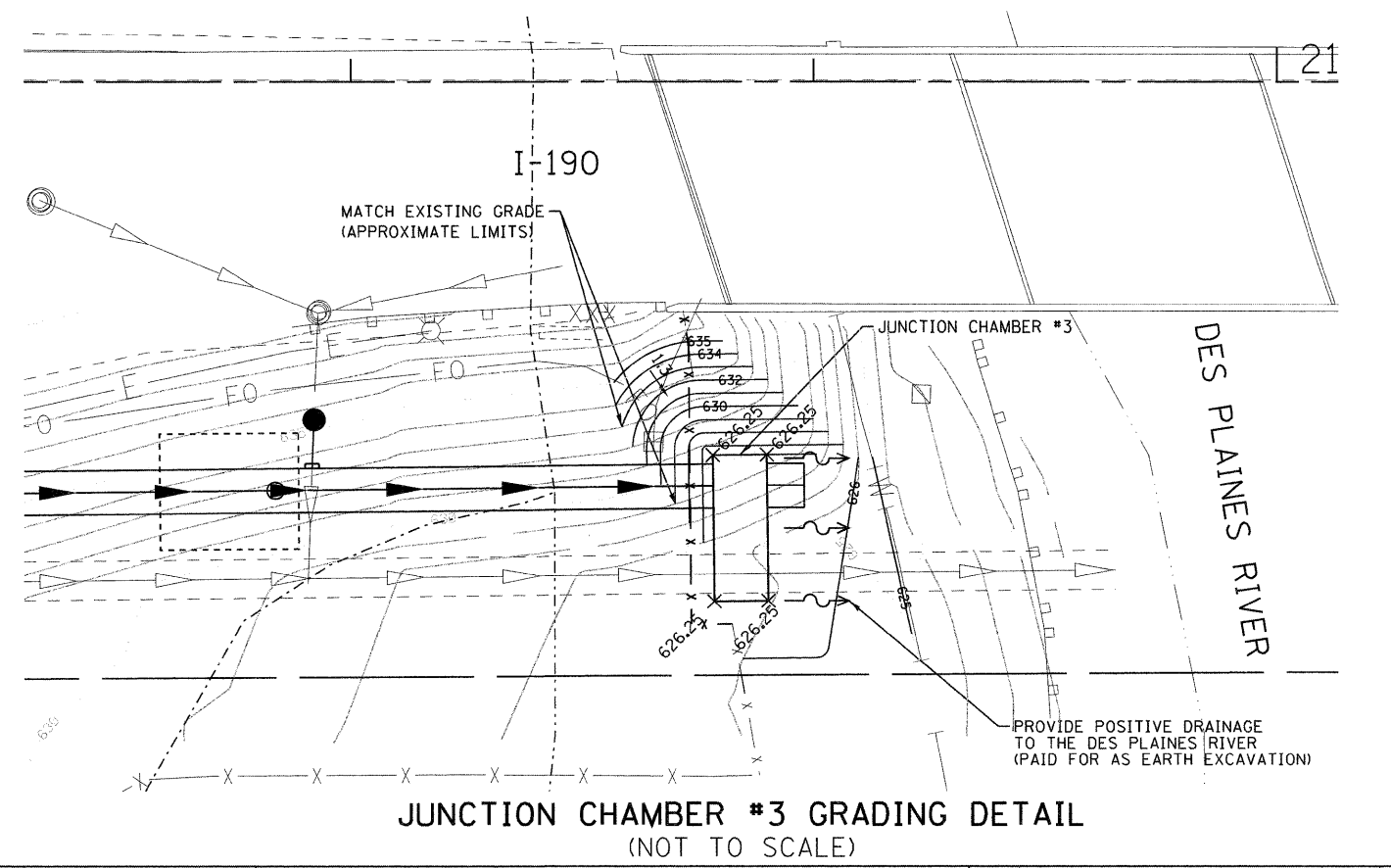
- GENERAL NOTES
1. THE WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS
2. IF THE EXISTING SEWER PIPE TO REMAIN IS CRACKED, BROKEN, OR OTHERWISE DAMAGED DURING THE REMOVAL, THE CONTRACTOR SHALL REPLACE THE DAMAGED SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER WITHOUT ADDITIONAL COMPENSATION.

PIPE REMOVAL AND PLUG DETAIL

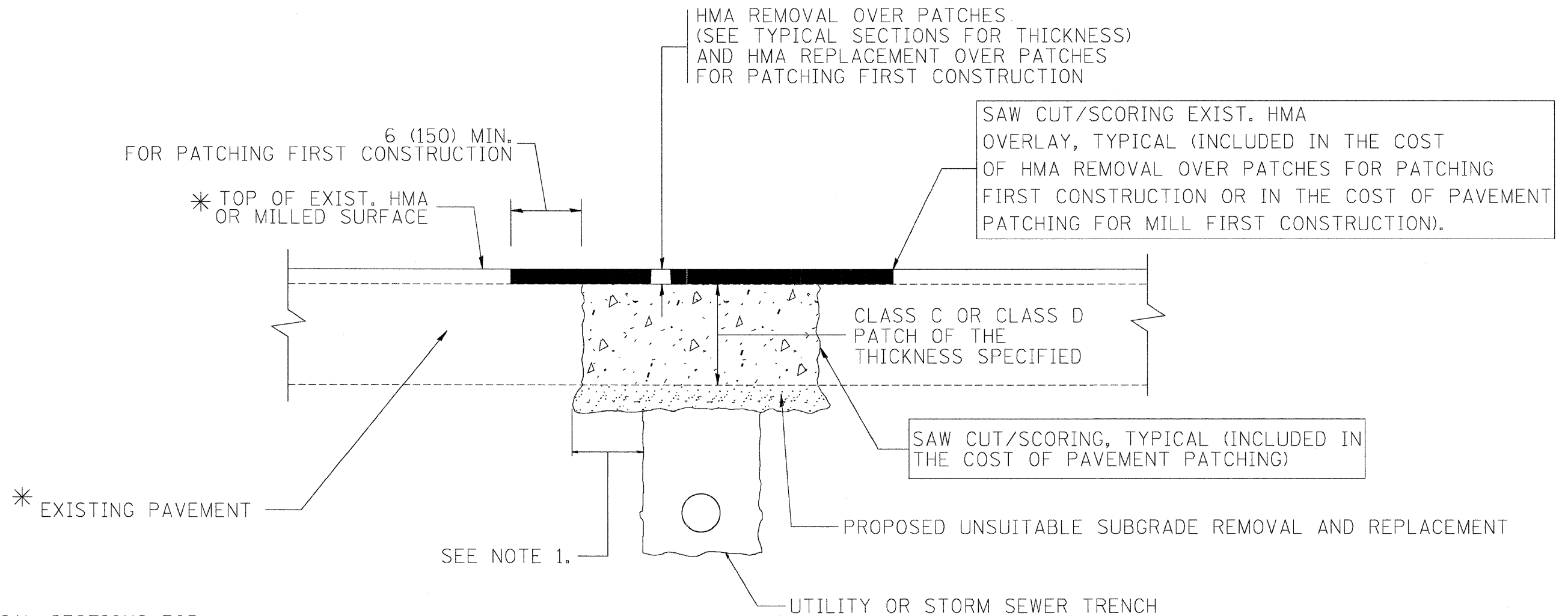


CONCRETE COLLAR DETAIL

INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE REQUIRED / EACH
INCH	CU YD
72	2.10
84	2.50
96	3.00



FILE NAME = g:\projects\202105-01\road\civil\shh\01606\30-35\shh-dp-tail3.dgn



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

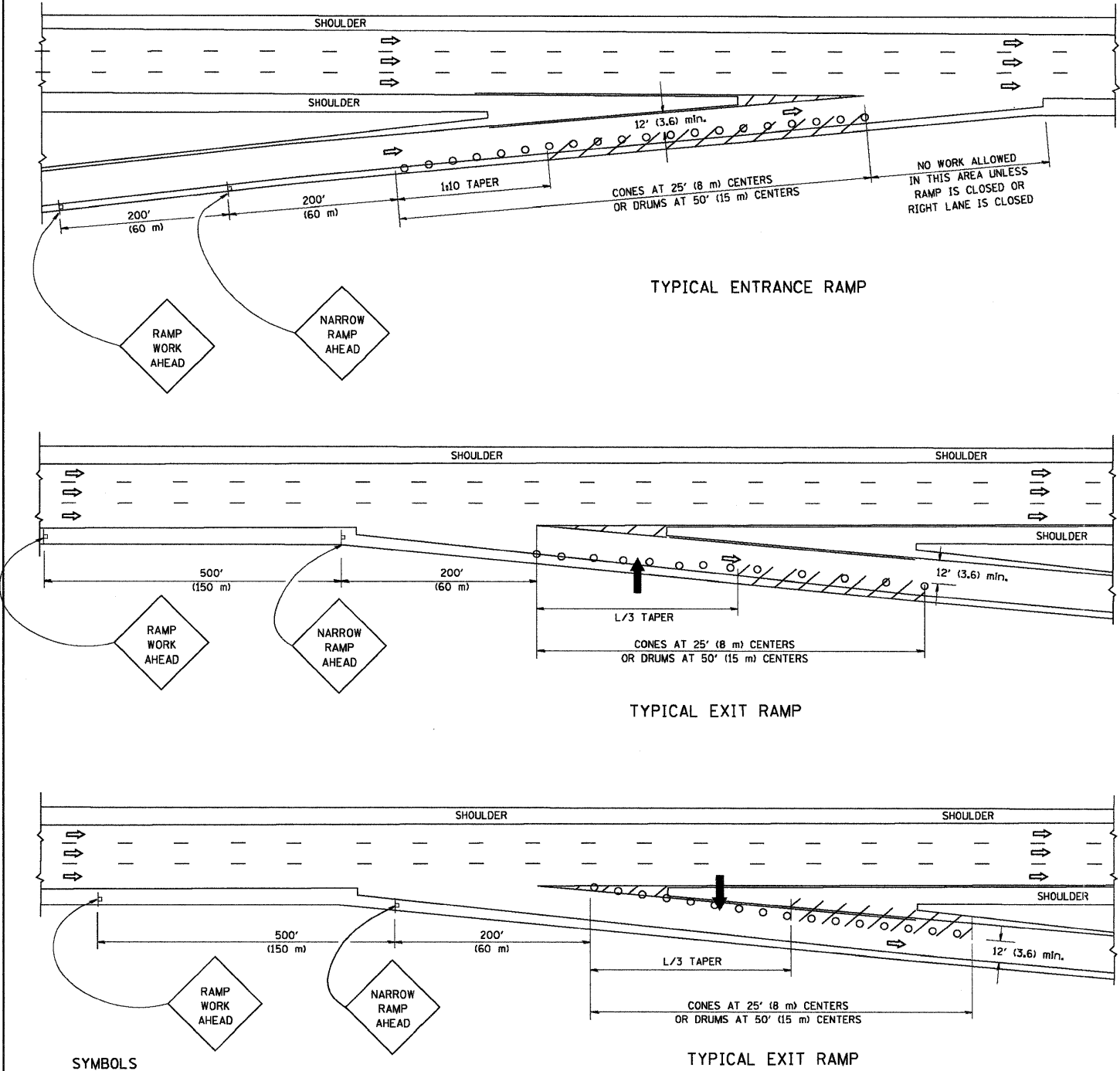
1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME = g:\projects\2102155_01\roaddev\shah\010608-90-36shd-detailed.dgn

FILE NAME = c:\projects\diststd\22x34\bd22.dgn	USER NAME = bouerd1	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.I. RTE. 190	SECTION 0102.5-T	COUNTY COOK	TOTAL SHEETS 41	SHEET NO. 39
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISIED - R. BORO 01-01-07	REVISIED - R. BORO 09-04-07					BD400-04 (BD-22)				CONTRACT NO. 60F90
PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISIED - K. ENG 10-27-08			SCALE: NONE			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
					SHEET NO. 1 OF 1 SHEETS			STA. TO STA.				

PARTIAL RAMP CLOSURE DETAILS



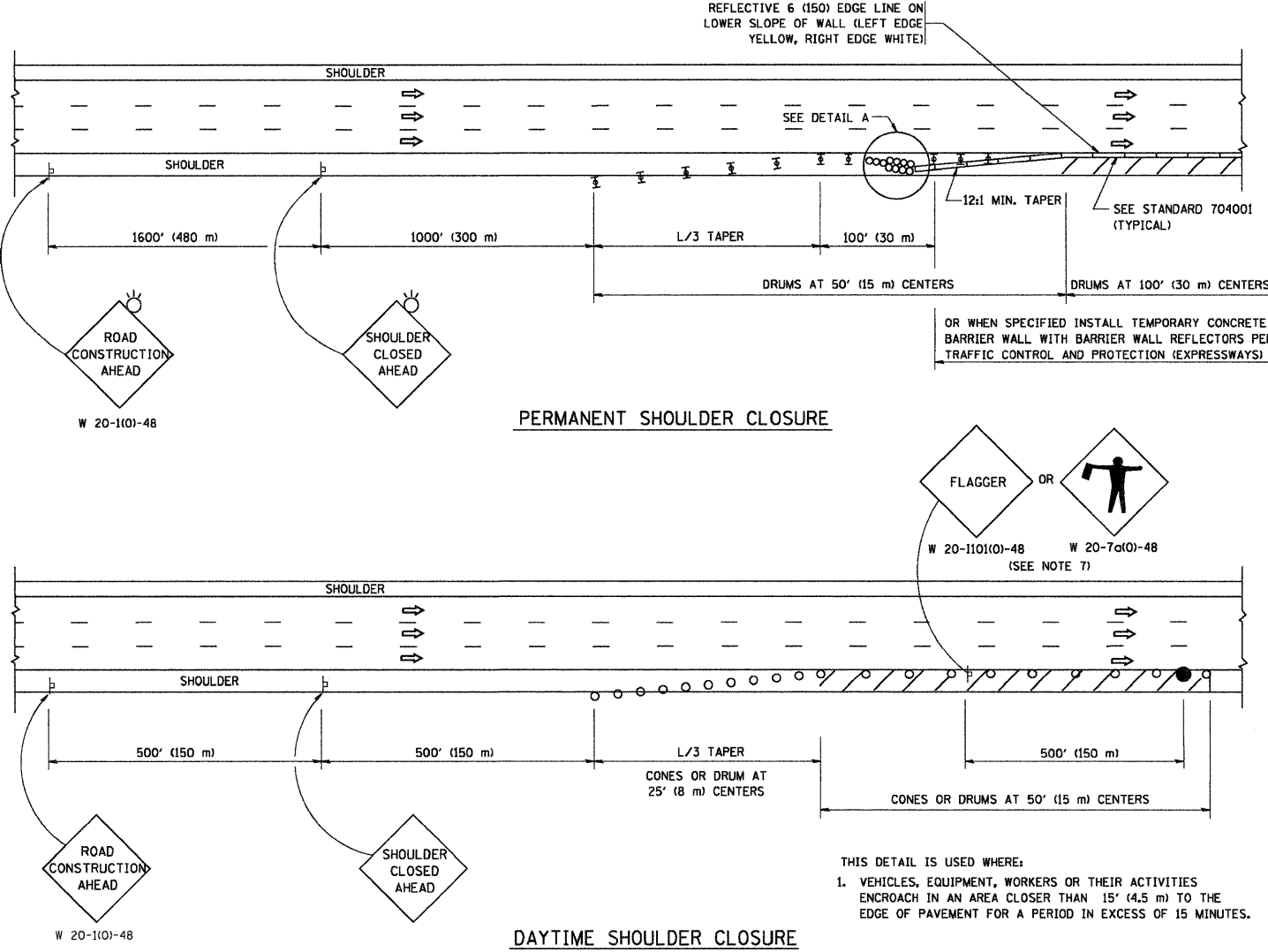
SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

- THE "L" DISTANCE EQUALS:
SPEED LIMIT FORMULAS
45 mph (80 km/h) METRIC ENGLISH
OR GREATER: $L = 0.65(W)(S)$ $L = (W)(S)$
W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS



THIS DETAIL IS USED WHERE:
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.

DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

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

FILE NAME = W:\diststd\22x34\tol7.dgn	USER NAME = geglionabt	DESIGNED -	REVISED - J.A.F. 12-02	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - D.W.S.	REVISED - 04-03						190	0102.5-T	COOK	41	40
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - J.A.F. 12-06		TC-17		CONTRACT NO.60F90						
	PLOT DATE = 1/4/2008	DATE - 11-96	REVISED - S.P.B. 01-07		SCALE: NONE		SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS/FED. AID PROJECT			

