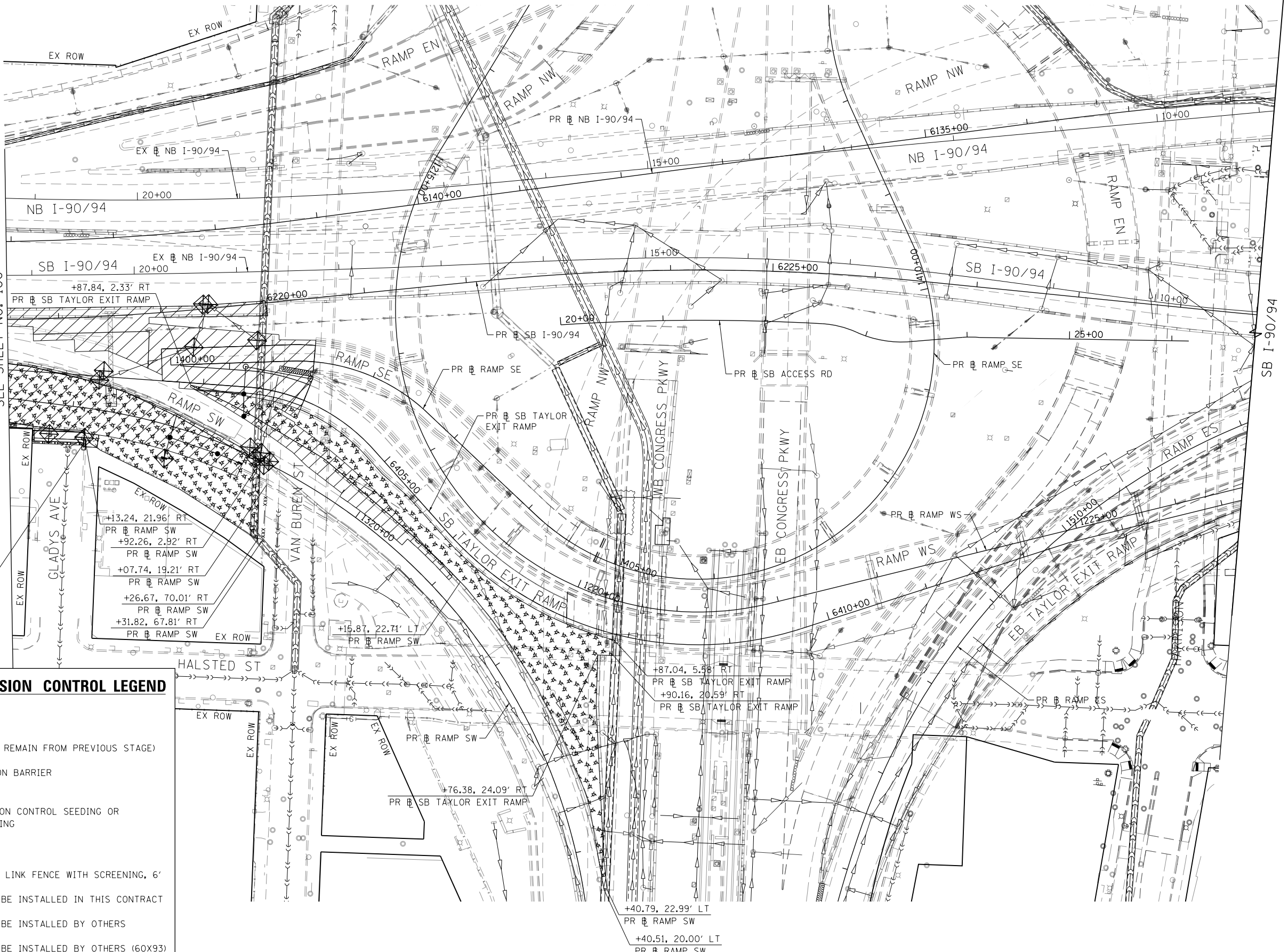


MATCH LINE STA 6217+50.00 (PR) SB I-90/94
SEE SHEET NO. 100



TEMPORARY EROSION CONTROL LEGEND

- INLET FILTER
- INLET FILTER (TO REMAIN FROM PREVIOUS STAGE)
- PERIMETER EROSION BARRIER
- MULCH, METHOD 2
- TEMPORARY EROSION CONTROL SEEDING OR SURFACE ROUGHENING
- WORK ZONE
- TEMPORARY CHAIN LINK FENCE WITH SCREENING, 6'
- STORM SEWER TO BE INSTALLED IN THIS CONTRACT
- STORM SEWER TO BE INSTALLED BY OTHERS
- STORM SEWER TO BE INSTALLED BY OTHERS (60X93)

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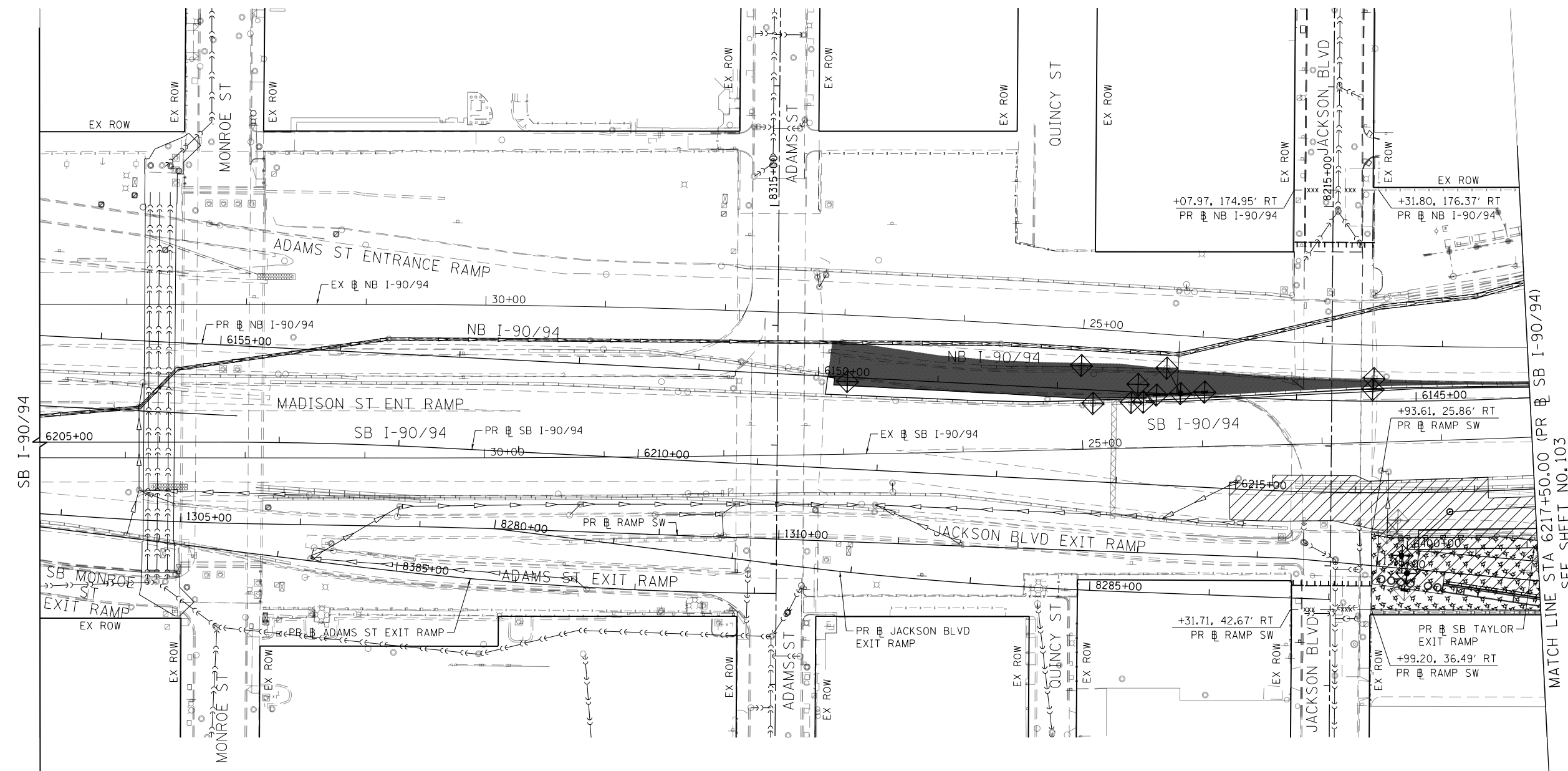
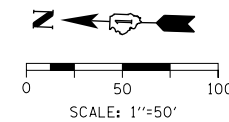
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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION AND SEDIMENTATION CONTROL
RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP - STAGE 1**

SCALE: 1"=50' SHEET 2 OF 2 SHEETS STA. 6217+50(SB) TO STA. 6229+75(SB)

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 101
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62J31	



MATCH LINE STA 6217+50.00 (PR SB I-90/94) SEE SHEET NO. 103

TEMPORARY EROSION CONTROL LEGEND

- INLET FILTER
- INLET FILTER (TO REMAIN FROM PREVIOUS STAGE)
- PERIMETER EROSION BARRIER
- MULCH, METHOD 2
TEMPORARY EROSION CONTROL SEEDING OR
SURFACE ROUGHENING
- WORK ZONE
- TEMPORARY CHAIN LINK FENCE WITH SCREENING, 6'
- STORM SEWER TO BE INSTALLED IN THIS CONTRACT
- STORM SEWER TO BE INSTALLED BY OTHERS
- STORM SEWER TO BE INSTALLED BY OTHERS (60X93)

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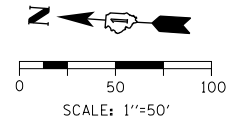
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DATE - 8/16/2019	REVISED -

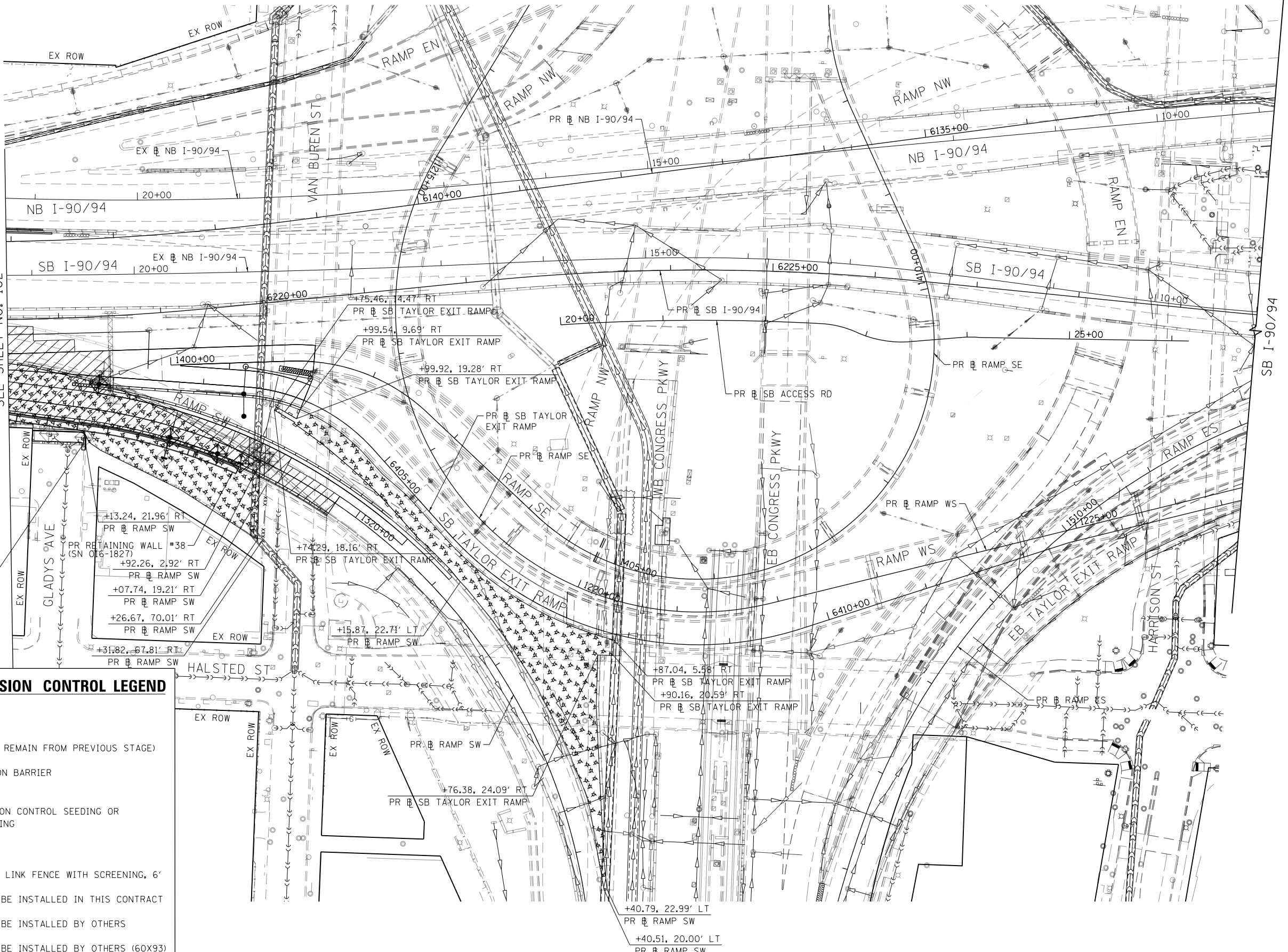
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EROSION AND SEDIMENTATION CONTROL RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP - STAGE 2	
SCALE: 1"=50'	SHEET 1 OF 2 SHEETS
STA. 6205+00(SB) TO STA. 6217+50(SB)	










F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 102
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT



MATCH LINE STA 6217+50.00 (PR) SB I-90/94
SEE SHEET NO. 102



TEMPORARY EROSION CONTROL LEGEND

-  INLET FILTER
-  INLET FILTER (TO REMAIN FROM PREVIOUS STAGE)
-  PERIMETER EROSION BARRIER
-  MULCH, METHOD 2
TEMPORARY EROSION CONTROL SEEDING OR
SURFACE ROUGHENING
-  WORK ZONE
-  TEMPORARY CHAIN LINK FENCE WITH SCREENING, 6'
-  STORM SEWER TO BE INSTALLED IN THIS CONTRACT
-  STORM SEWER TO BE INSTALLED BY OTHERS
-  STORM SEWER TO BE INSTALLED BY OTHERS (60X93)

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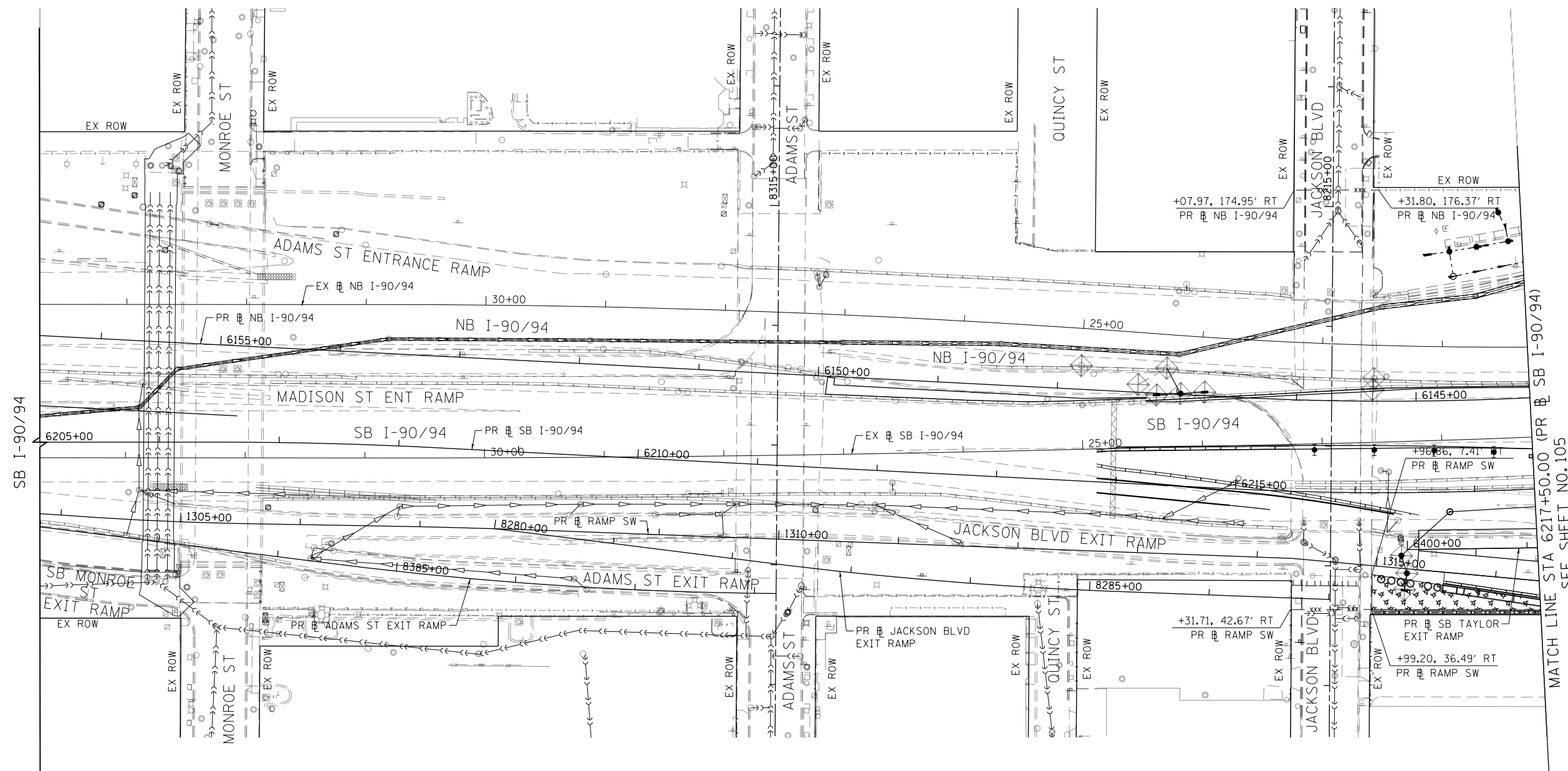
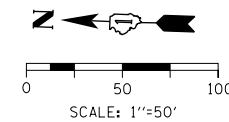
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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

DESIGNED - MRC	REVISED -
DRAWN - MRC	REVISED -
CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**











EROSION AND SEDIMENTATION CONTROL	
RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP - STAGE 2	
SCALE: 1"=50'	SHEET 2 OF 2 SHEETS
STA. 6217+50(SB) TO STA. 6229+75(SB)	

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 103
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	



MATCH LINE STA 6217+50.00 (PR SB I-90/94) SEE SHEET NO.105

TEMPORARY EROSION CONTROL LEGEND

-  INLET FILTER
-  INLET FILTER (TO REMAIN FROM PREVIOUS STAGE)
-  PERIMETER EROSION BARRIER
-  MULCH, METHOD 2
-  TEMPORARY EROSION CONTROL SEEDING OR SURFACE ROUGHENING
-  WORK ZONE
-  TEMPORARY CHAIN LINK FENCE WITH SCREENING, 6'
-  STORM SEWER TO BE INSTALLED IN THIS CONTRACT
-  STORM SEWER TO BE INSTALLED BY OTHERS
-  STORM SEWER TO BE INSTALLED BY OTHERS (60X93)

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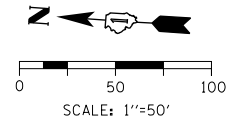
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DATE - 8/16/2019	REVISED -

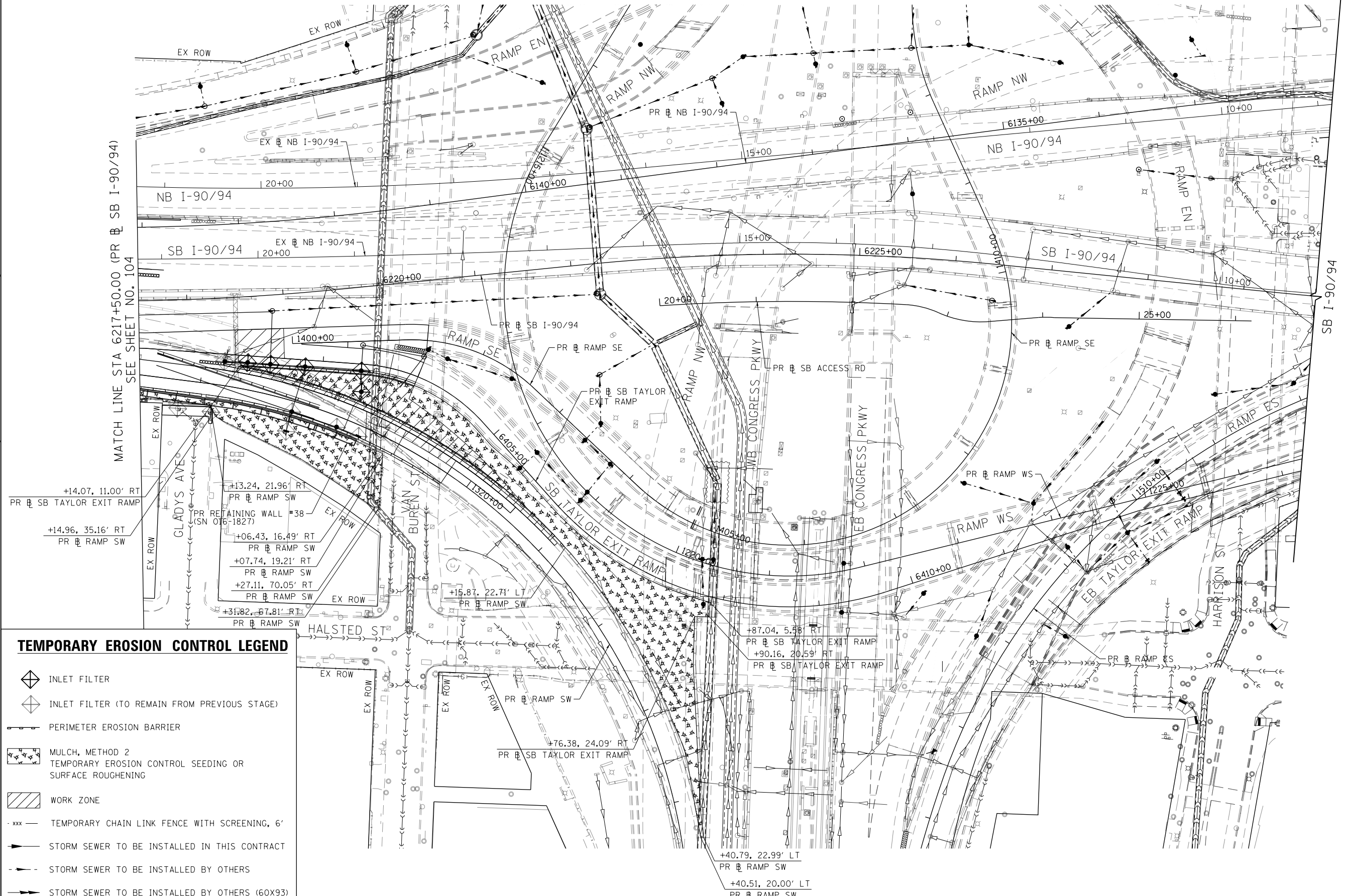
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EROSION AND SEDIMENTATION CONTROL RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP - STAGE 3	
SCALE: 1"=50'	SHEET 1 OF 2 SHEETS
STA. 6205+00(SB) TO STA. 6217+50(SB)	

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 104
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				



MATCH LINE STA 6217+50.00 (PR) SB I-90/94
SEE SHEET NO. 104



TEMPORARY EROSION CONTROL LEGEND

- INLET FILTER
- INLET FILTER (TO REMAIN FROM PREVIOUS STAGE)
- PERIMETER EROSION BARRIER
- MULCH, METHOD 2
- TEMPORARY EROSION CONTROL SEEDING OR SURFACE ROUGHENING
- WORK ZONE
- TEMPORARY CHAIN LINK FENCE WITH SCREENING, 6'
- STORM SEWER TO BE INSTALLED IN THIS CONTRACT
- STORM SEWER TO BE INSTALLED BY OTHERS
- STORM SEWER TO BE INSTALLED BY OTHERS (60X93)



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 PLOT DATE = 8/13/2019

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 DRAWN - MRC
 CHECKED - JMG
 DATE - 8/16/2019

REVISED -
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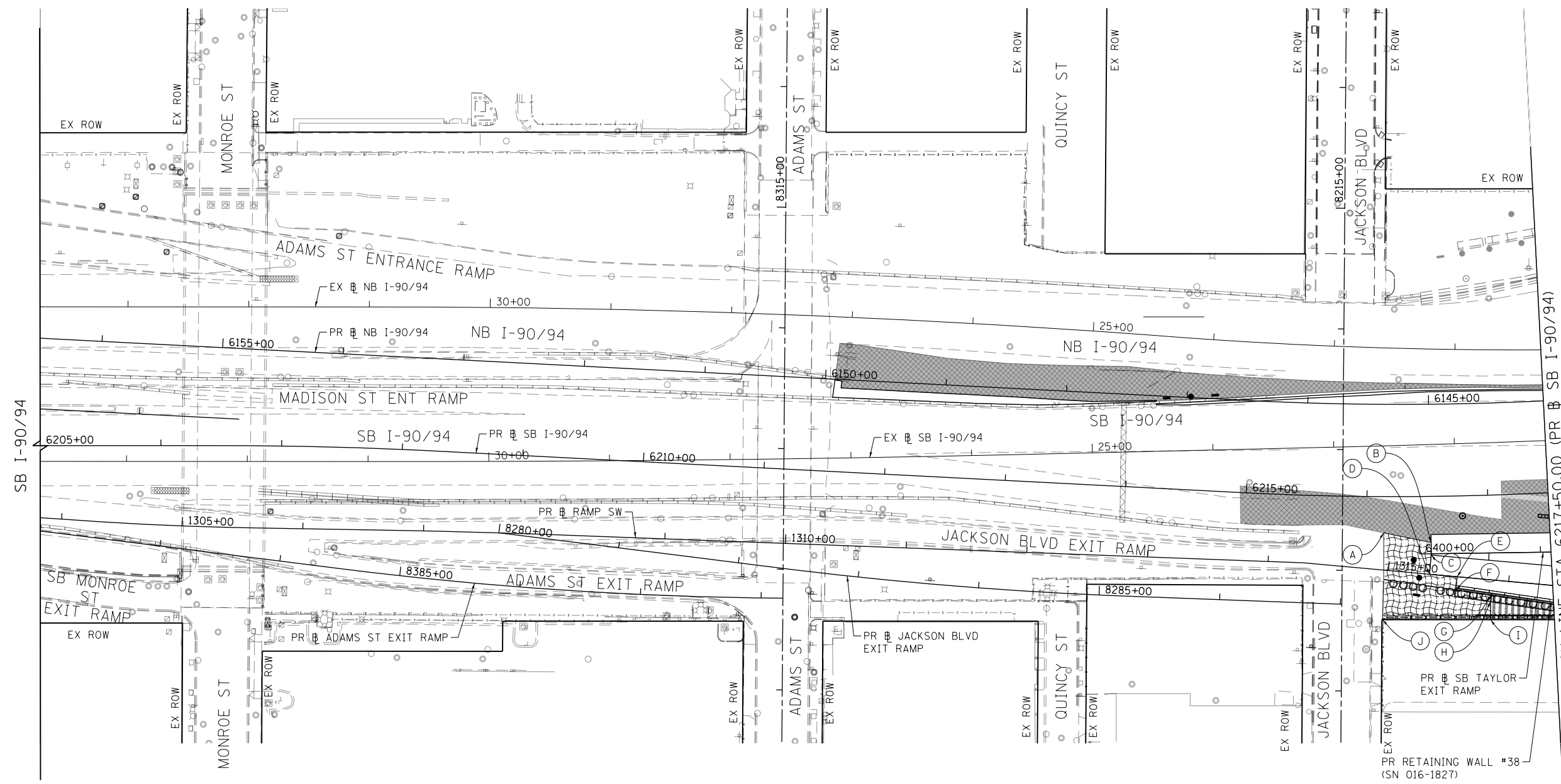
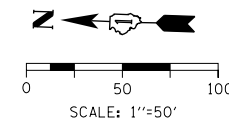
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EROSION AND SEDIMENTATION CONTROL
 RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP - STAGE 3**

SCALE: 1"=50' SHEET 2 OF 2 SHEETS STA. 6217+50(SB) TO STA. 6229+75(SB)

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 105
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	

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- (A) +93.20, 30.83' LT
PR RAMP SW
- (B) +09.57, 9.32' LT
PR SB TAYLOR EXIT RAMP
- (C) +34.11, 16.00' LT
PR RAMP SW
- (D) +34.11, 00.00' RT
PR RAMP SW
- (E) +57.12, 00.00' RT
PR RAMP SW
- (F) +56.92, 10.86' RT
PR RAMP SW
- (G) +86.88, 12.58' RT
PR RAMP SW
- (H) +86.58, 18.07' RT
PR RAMP SW
- (I) +87.92, 32.95' RT
PR RAMP SW
- (J) +98.79, 40.98' RT
PR RAMP SW

MATCH LINE STA 6217+50.00 (PR SB I-90/94) SEE SHEET NO.107

PERMANENT EROSION CONTROL LEGEND

- EROSION CONTROL BLANKET
SEEDING, CLASS 2A
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
TOPSOIL FURNISH AND PLACE, 4"
- EROSION CONTROL BLANKET
SEEDING, CLASS 2A
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
TOPSOIL FURNISH AND PLACE, 24"
- SODDING, SALT TOLERANT
TOPSOIL FURNISH AND PLACE, 4"
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
SUPPLEMENTAL WATERING
- AGGREGATE SURFACE COURSE, TYPE B - 4"

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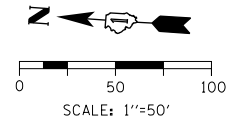


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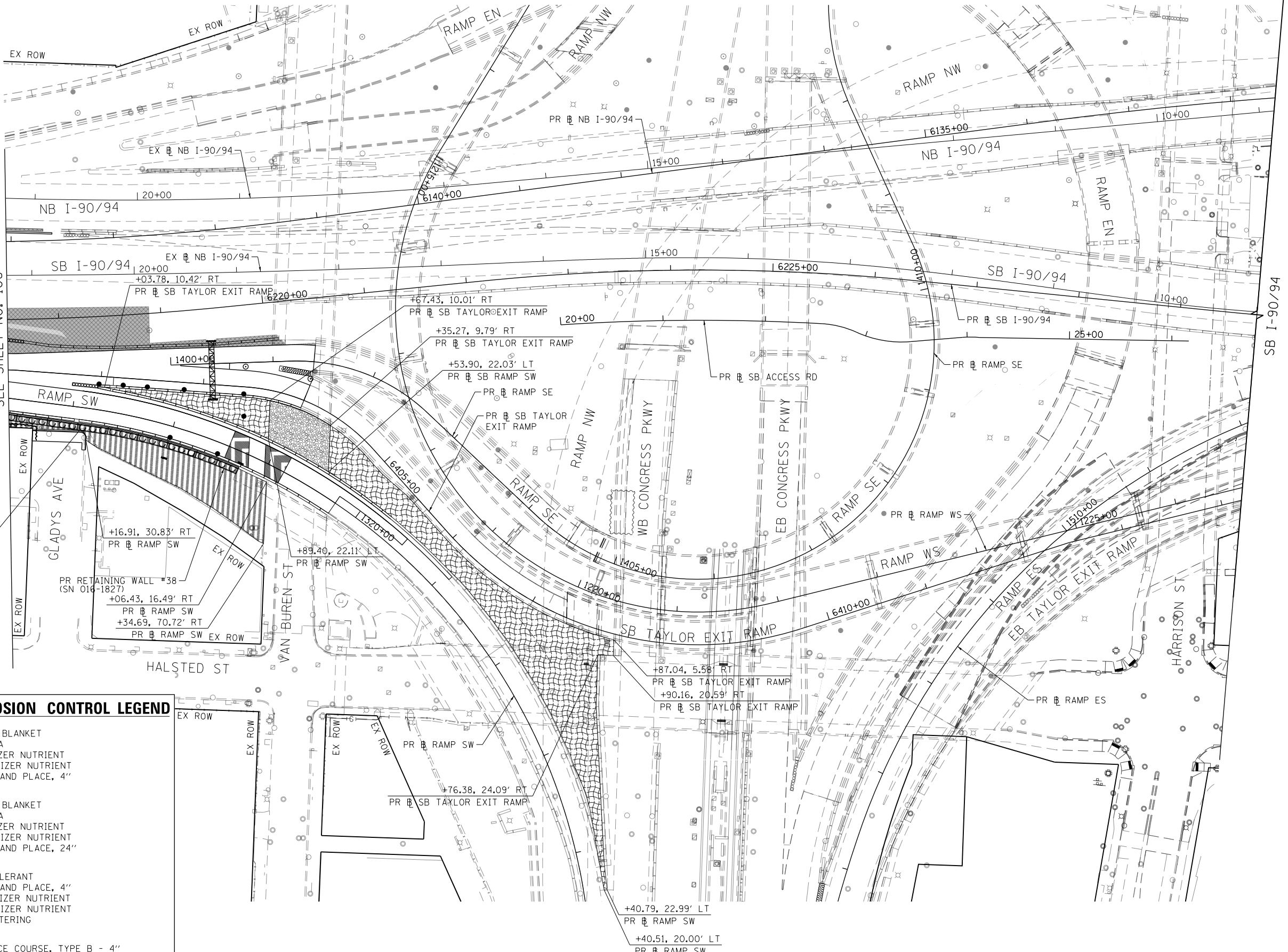
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PERMANENT EROSION AND SEDIMENTATION CONTROL	
RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP	
SCALE: 1"=50'	SHEET 1 OF 2 SHEETS
STA. 6205+00(SB) TO STA. 6217+50(SB)	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	106
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	



MATCH LINE STA 6217+50.00 (PR) SB I-90/94
SEE SHEET NO. 106



PERMANENT EROSION CONTROL LEGEND

- EROSION CONTROL BLANKET
SEEDING, CLASS 2A
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
TOPSOIL FURNISH AND PLACE, 4"
- EROSION CONTROL BLANKET
SEEDING, CLASS 2A
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
TOPSOIL FURNISH AND PLACE, 24"
- SODDING, SALT TOLERANT
TOPSOIL FURNISH AND PLACE, 4"
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
SUPPLEMENTAL WATERING
- AGGREGATE SURFACE COURSE, TYPE B - 4"

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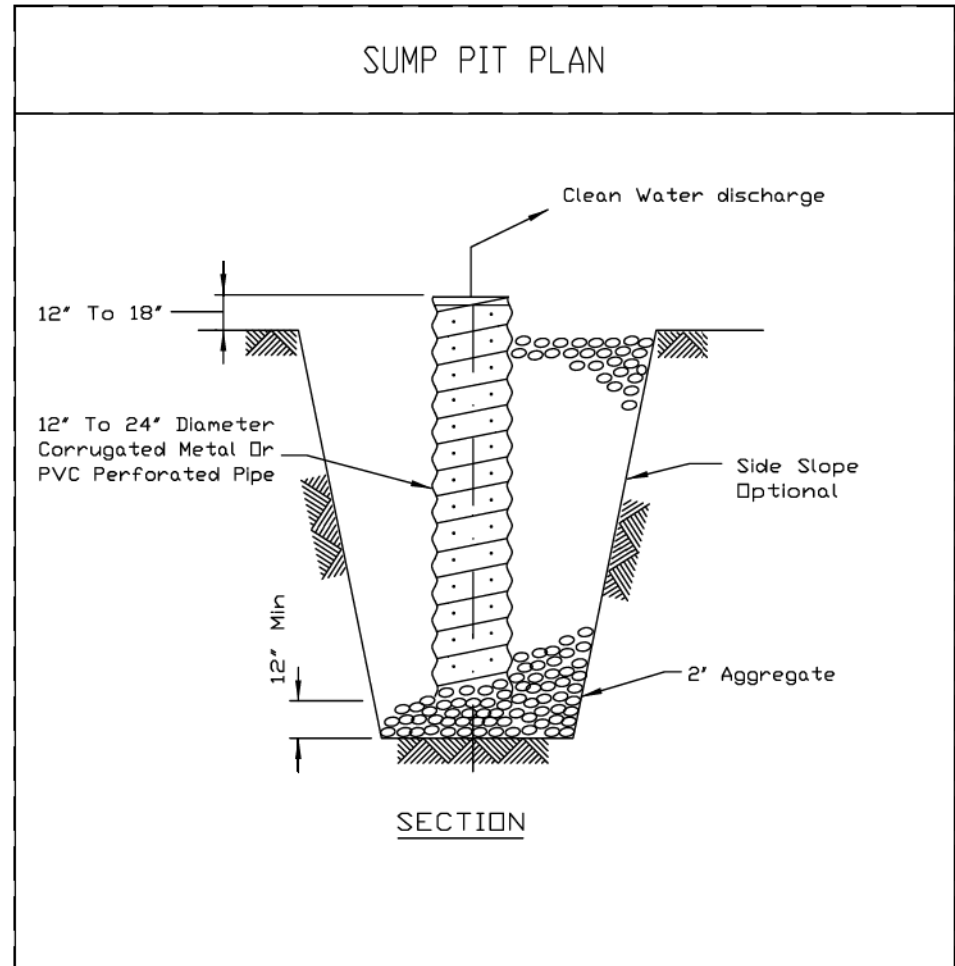
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CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PERMANENT EROSION AND SEDIMENTATION CONTROL	
RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP	
SCALE: 1"=50'	SHEET 2 OF 2 SHEETS
STA. 6217+50(SB)	TO STA. 6229+75(SB)

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 107
ILLINOIS FED. AID PROJECT				CONTRACT NO. 62J31

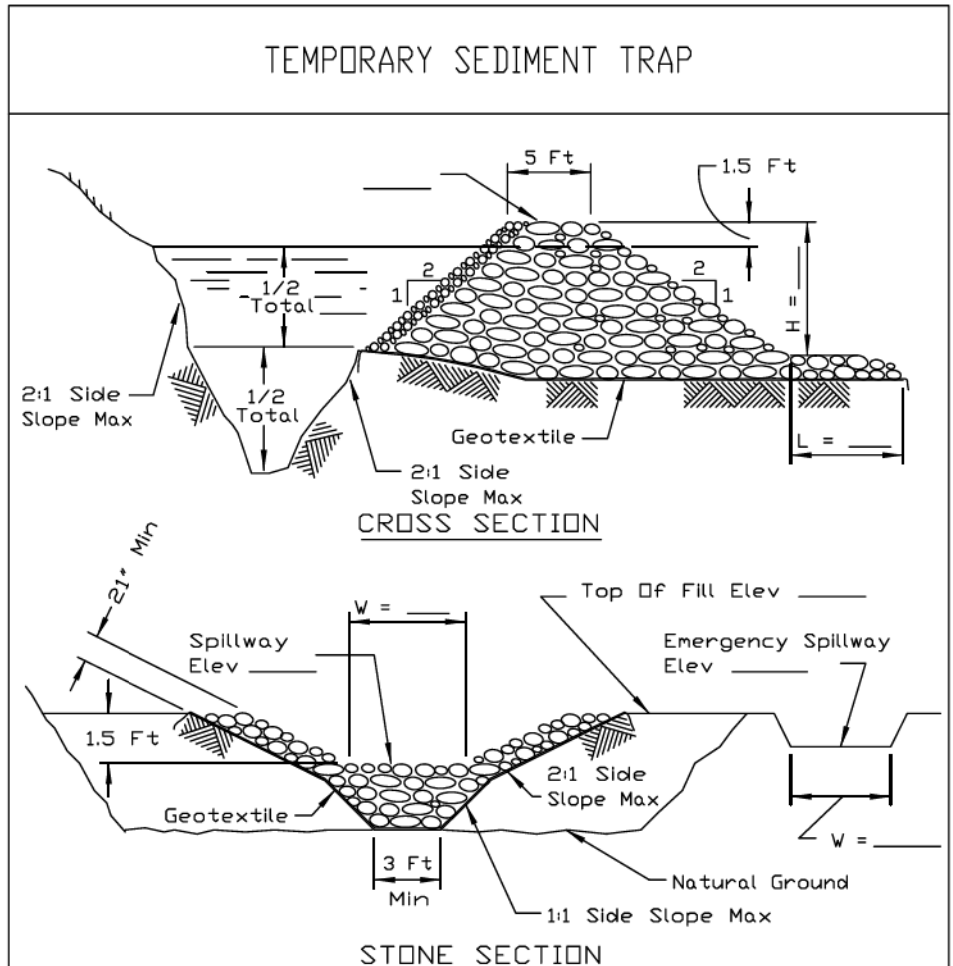
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NOTES:

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

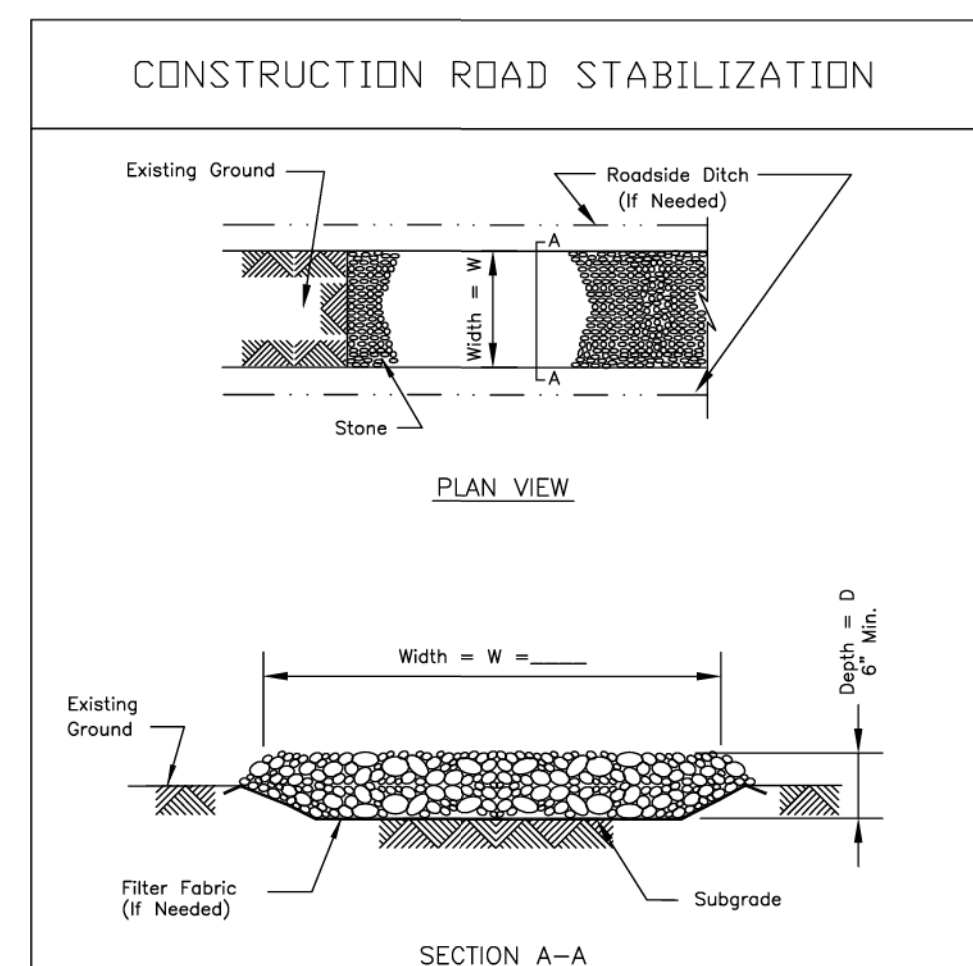
REFERENCE Project _____	 NRCS Natural Resources Conservation Service	STANDARD DWG. NO. IL-650
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 8-11-94
Approved _____ Date _____		



NOTES:

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

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



NOTES:

1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Stone shall meet one of the following IDOT coarse aggregate gradations, CA-1, CA-2, CA-3, or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. See plans for construction road location, D and W dimensions.
4. Minimum width is 14 feet for one-way traffic and 20 feet for two-way traffic. Two-way traffic widths shall be increased a minimum of 4 feet for trailer traffic. Depending on the type of vehicle or equipment, speed, loads, climatic and other conditions under which vehicles and equipment operate an increase in the minimum widths may be required.
5. Roadway shall follow the contour of the natural terrain to the extent possible.

REFERENCE Project _____	 NRCS Natural Resources Conservation Service	STANDARD DWG. NO. IL-506
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 1-29-99
Approved _____ Date _____		



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PLOT DATE = 8/14/2019	DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EROSION AND SEDIMENTATION CONTROL PLAN DETAILS	
SCALE: NONE	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 108
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

EXISTING DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STATION	OFFSET	BASELINE	CATCH BASINS TO BE ADJUSTED	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	CATCH BASINS TO BE RECONSTRUCTED	REMOVING MANHOLES	REMOVING CATCH BASINS	REMOVING INLETS	COMMENTS
				EACH	EACH	EACH	EACH	EACH	EACH	
EXISTING DRAINAGE AND UTILITY PLANS - SHEET 1										
ES100	6148+07.66	9.81' LT	PR NB I-90/94				1			
ES101	6149+75.55	3.53' LT	PR NB I-90/94					1		
ES102	6147+80.91	19.94' RT	PR NB I-90/94		1					EX RIM ELEV: 575.18 PR RIM ELEV: 575.18
ES103	6147+09.47	21.41' RT	PR NB I-90/94		1					EX RIM ELEV: 575.07 PR RIM ELEV: 575.07
ES104	6147+32.80	6.57' RT	PR NB I-90/94			1				EX RIM ELEV: 579.04 PR RIM ELEV: 574.97
SHEET 1 TOTAL				0	2	1	1	1	0	
EXISTING DRAINAGE AND UTILITY PLANS - SHEET 2										
ES200	6401+98.59	3.65' RT	PR SB TAYLOR EXIT RAMP					1		
ES201	6402+01.91	5.54' LT	PR SB TAYLOR EXIT RAMP						1	
ES202	1400+23.03	16.79' LT	PR RAMP SE					1		
ES205	1400+85.08	21.30' LT	PR RAMP SE						1	
ES207	6403+70.29	18.02' LT	PR SB TAYLOR EXIT RAMP				1			
ES208	6145+35.37	18.99' RT	PR NB I-90/94	1						EX RIM ELEV: 576.06 PR RIM ELEV: 576.06
ES209	6145+36.20	9.82' RT	PR NB I-90/94	1						EX RIM ELEV: 576.84 PR RIM ELEV: 576.84
ES212	1318+77.20	6.96' LT	PR RAMP SW					1		
ES213	1318+90.07	0.12' RT	PR RAMP SW						1	
ES214	1318+96.86	2.92' RT	PR RAMP SW					1		
ES215	1318+99.49	2.87' LT	PR RAMP SW					1		
ES216	1318+98.92	10.34' LT	PR RAMP SW				1			
ES217	1318+88.72	6.59' LT	PR RAMP SW					1		
ES220	1315+14.43	39.59' LT	PR RAMP SW					1		
ES221	1315+06.43	28.44' LT	PR RAMP SW					1		
ES222	1316+80.00	29.61' RT	PR RAMP SW	1						EX RIM ELEV: 592.65 PR RIM ELEV: 593.25
ES223	1317+14.99	28.94' RT	PR RAMP SW	1						EX RIM ELEV: 592.52 PR RIM ELEV: 592.49
SHEET 2 TOTAL:				4	0	0	2	8	3	
TOTAL				4	2	1	3	9	3	

EXISTING PIPE SCHEDULE

PIPE	UPSTREAM	DOWNSTREAM	UPSTREAM INVERT ELEVATION	DOWNSTREAM INVERT ELEVATION	PIPE SLOPE (%)	STORM SEWER REMOVAL 8"	STORM SEWER REMOVAL 10"	STORM SEWER REMOVAL 12"	TRENCH BACKFILL
						FOOT	FOOT	FOOT	
EXISTING DRAINAGE AND UTILITY PLANS - SHEET 1									
SHEET 1 TOTAL:						0	0	0	0.0
EXISTING DRAINAGE AND UTILITY PLANS - SHEET 2									
R200	ES201	ES200	572.57	572.52	0.50%		10		2.2
R201	ES200	ES202	572.52	572.03	0.50%		97		29.9
R202	ES202	ES204	571.95	571.73	0.50%			44	16.9
R203	ES207	ES202	572.39	571.95	0.50%			87	24.2
R204	EX SCUPPER	ES207	572.58	572.39	0.50%	38			8.7
R207	ES217	ES207	572.56	572.34	0.27%		80		33.7
R212	ES212	ES217	572.40	572.35	0.50%		11		0.1
R214	ES213	ES214	572.10	572.00	0.91%			11	5.0
R215	ES214	ES215	572.00	571.97	0.50%			7	3.3
R216	ES215	ES216	571.97	571.93	0.50%			8	2.3
R217	ES216	ES217	571.93	571.86	0.50%			13	1.2
R219	ES205	ES204	572.98	572.47	0.50%		60		13.9
R220	ES220	ES221	573.73	573.66	0.50%		14		0.7
SHEET 2 TOTAL:						38	272	170	142.0
TOTALS						38	272	170	142.0

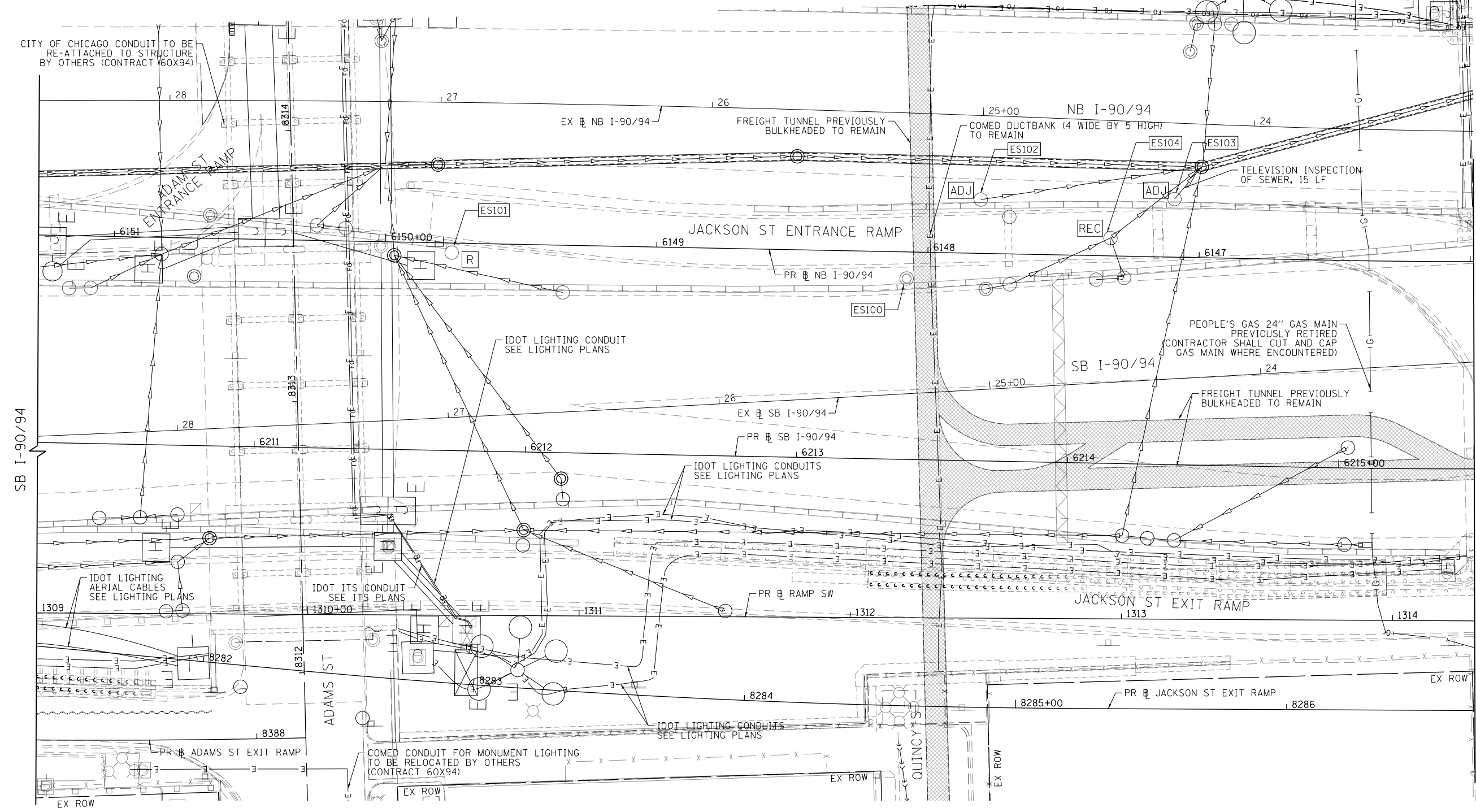
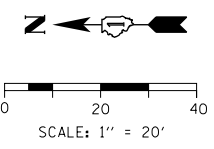
EXISTING PIPE ABANDON AND FILL SCHEDULE

PIPE	UPSTREAM STATION	UPSTREAM OFFSET	DOWNSTREAM STATION	DOWNSTREAM OFFSET	PIPE LENGTH	PIPE DIAMETER	CONTROLLED LOW STRENGTH MATERIAL
							CU YD
EXISTING DRAINAGE AND UTILITY PLANS - SHEET 1							
SHEET 1 TOTAL:							0.0
EXISTING DRAINAGE AND UTILITY PLANS - SHEET 2							
A201	1315+06.43	28.44' LT	1315+03.11	79.25' LT	51.0	12	2.0
SHEET 2 TOTAL:							2.0
TOTALS							2.0

NOTES:
1. STRUCTURE AND PIPE NUMBERS NOT INCLUDED IN SCHEDULES ARE NOT USED.

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	DI62J31-sht-Drain-Schedule-01.dgn	DESIGNED - MRC	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">DRAINAGE AND UTILITY SCHEDULES</p>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 20.0000' / in.	CHECKED - JMG	REVISED -		SCALE: NONE		SHEET 1 OF 1 SHEETS		STA.	TO STA.	
PLOT DATE = 8/15/2019	DATE - 8/16/2019	REVISED -		ILLINOIS FED. AID PROJECT						
						CONTRACT NO. 62J31				



EXISTING DRAINAGE AND UTILITIES LEGEND

- | | | | | | |
|---|---------------------------------------|-----|---|---|--|
| ⊙ | EXISTING MANHOLE | ADJ | DRAINAGE STRUCTURE TO BE ADJUSTED | — | STORM SEWER TO BE REMOVED BY OTHERS |
| ○ | EXISTING CATCH BASIN | REC | DRAINAGE STRUCTURE TO BE RECONSTRUCTED | — | COMBINED SEWER TO BE REMOVED BY OTHERS |
| □ | EXISTING INLET | A | DRAINAGE STRUCTURE TO BE ADJUSTED WITH NEW FRAME AND/OR LID | — | STORM SEWER TO BE FILLED AND ABANDONED BY OTHERS |
| ⊙ | MANHOLE TO BE INSTALLED BY OTHERS | R | DRAINAGE STRUCTURE TO BE REMOVED | — | STORM SEWER TO BE INSTALLED BY OTHERS |
| ● | CATCH BASIN TO BE INSTALLED BY OTHERS | RF | DRAINAGE STRUCTURE TO BE REMOVED TO MAINTAIN FLOW | — | STORM SEWER REMOVAL |
| — | INLET TO BE INSTALLED BY OTHERS | | | — | ABANDON AND FILL EXISTING STORM SEWER |

NOTES

- STORM SEWERS TO BE INSTALLED BY OTHERS ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR COOPERATION IS REQUIRED.

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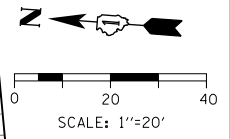
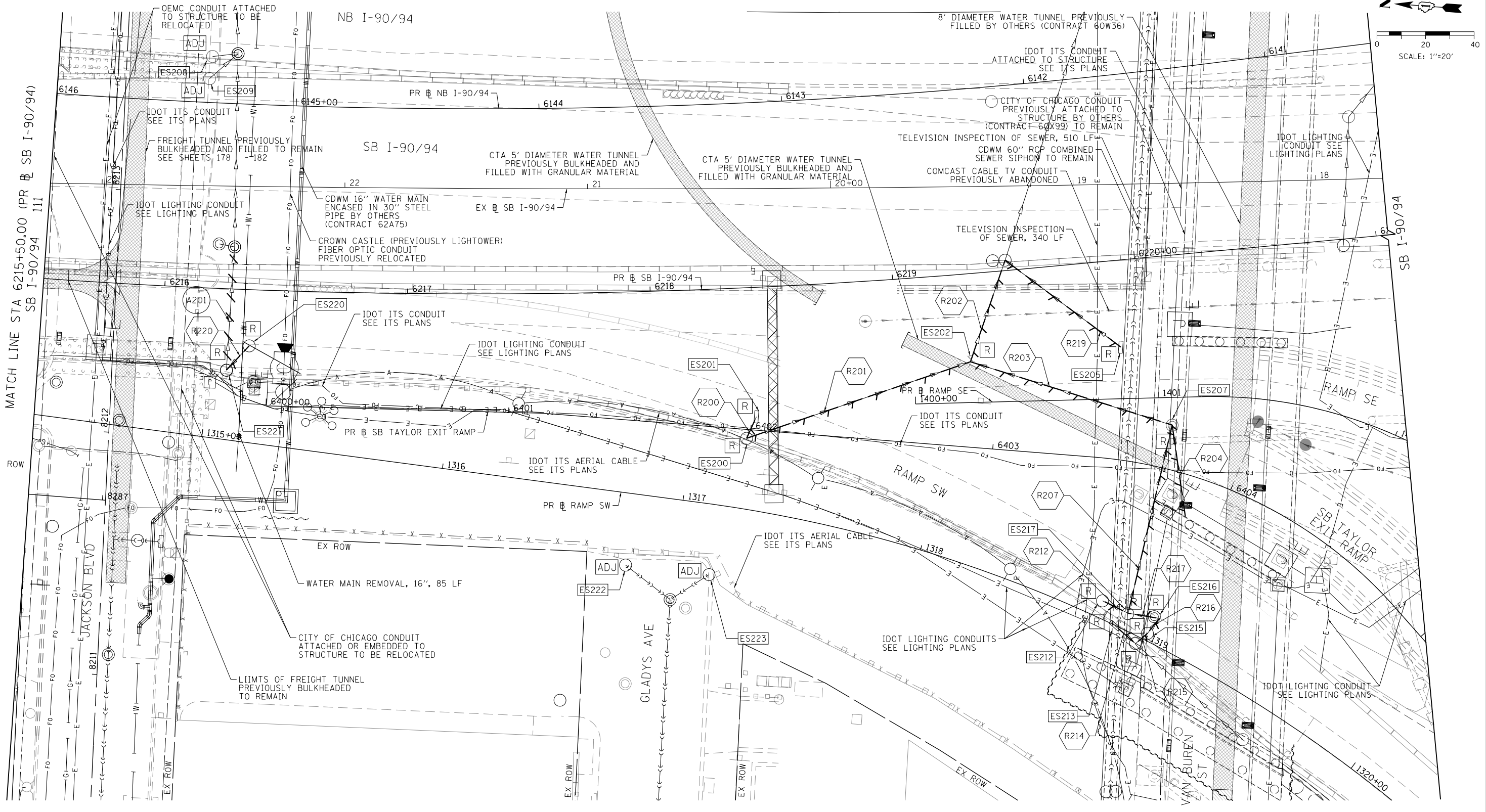


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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING DRAINAGE AND UTILITIES PLAN RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP		
SCALE: 1"=20'	SHEET 1 OF 2 SHEETS	STA. 6210+20.00 TO STA. 6215+50.00

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 111
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				



EXISTING DRAINAGE AND UTILITIES LEGEND

- | | | | | | |
|---|---------------------------------------|-----|---|---|--|
| ⊙ | EXISTING MANHOLE | ADJ | DRAINAGE STRUCTURE TO BE ADJUSTED | — | STORM SEWER TO BE REMOVED BY OTHERS |
| ○ | EXISTING CATCH BASIN | REC | DRAINAGE STRUCTURE TO BE RECONSTRUCTED | — | COMBINED SEWER TO BE REMOVED BY OTHERS |
| □ | EXISTING INLET | A | DRAINAGE STRUCTURE TO BE ADJUSTED WITH NEW FRAME AND/OR LID | — | STORM SEWER TO BE FILLED AND ABANDONED BY OTHERS |
| ⊙ | MANHOLE TO BE INSTALLED BY OTHERS | R | DRAINAGE STRUCTURE TO BE REMOVED | — | STORM SEWER TO BE INSTALLED BY OTHERS |
| ● | CATCH BASIN TO BE INSTALLED BY OTHERS | RF | DRAINAGE STRUCTURE TO BE REMOVED TO MAINTAIN FLOW | — | STORM SEWER REMOVAL |
| ■ | INLET TO BE INSTALLED BY OTHERS | | | — | ABANDON AND FILL EXISTING STORM SEWER |

NOTES

1. STORM SEWERS TO BE INSTALLED BY OTHERS ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR COOPERATION IS REQUIRED.



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 PLOT DATE = 8/14/2019

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DRAWN -	NLD	REVISED -	
CHECKED -	JMG	REVISED -	
DATE -	8/16/2019	REVISED -	

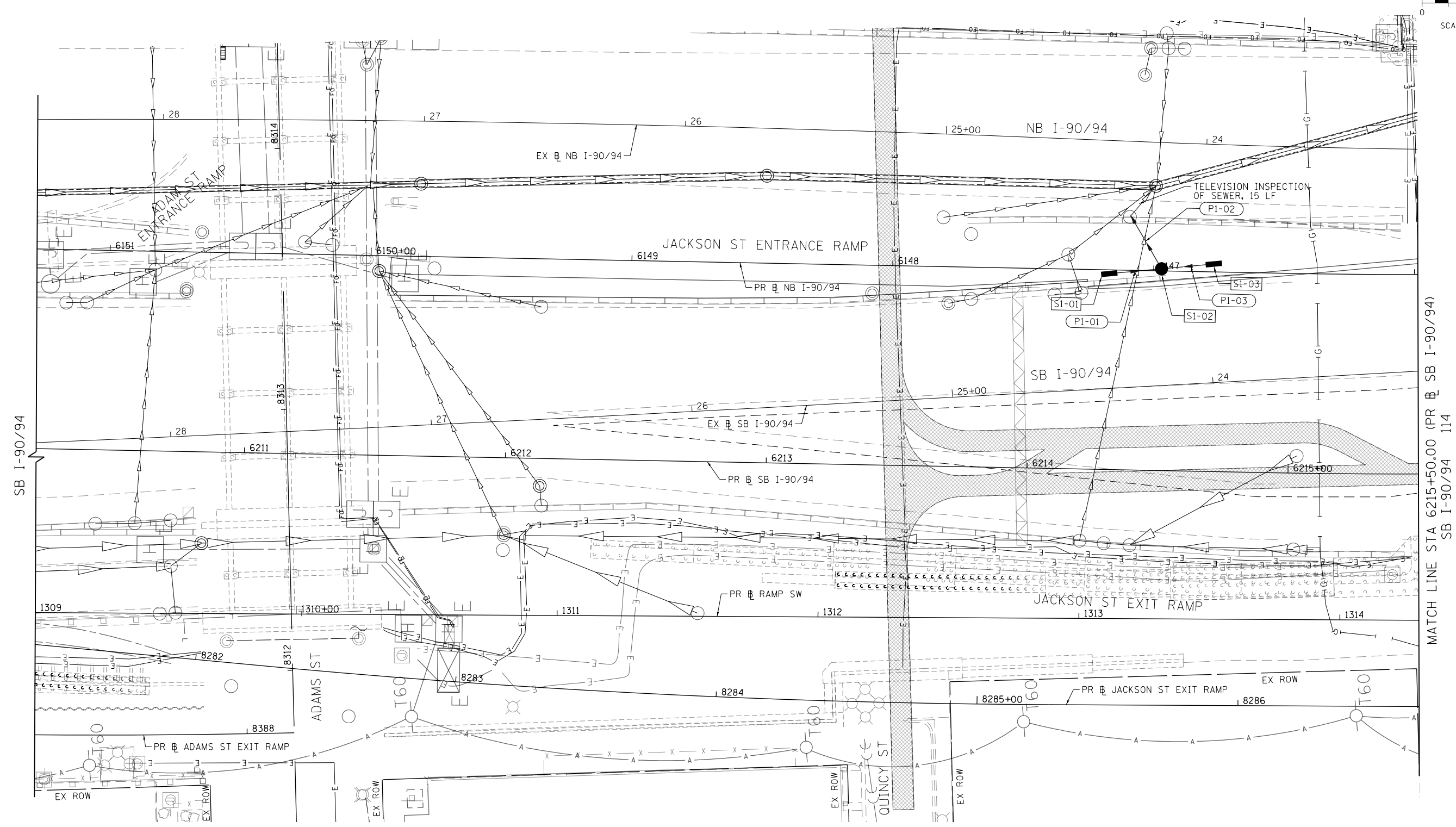
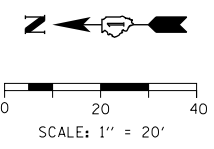
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EXISTING DRAINAGE AND UTILITIES PLAN
 RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP**

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 6215+50.00 TO STA. 6221+05.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	112
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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PROPOSED DRAINAGE AND UTILITIES LEGEND	
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
	EXISTING INLET
	PROPOSED INLET
	MANHOLE TO BE INSTALLED BY OTHERS
	CATCH BASIN TO BE INSTALLED BY OTHERS
	INLET TO BE INSTALLED BY OTHERS
	STORM SEWER TO BE INSTALLED BY OTHERS
	ABANDON AND FILL EXISTING STORM SEWER
	PROPOSED STORM SEWER
	PROPOSED STORM SEWER TO BE INSTALLED BY OTHERS (62A76, 62A78, 60X94)
	EXISTING BRIDGE SCUPPER

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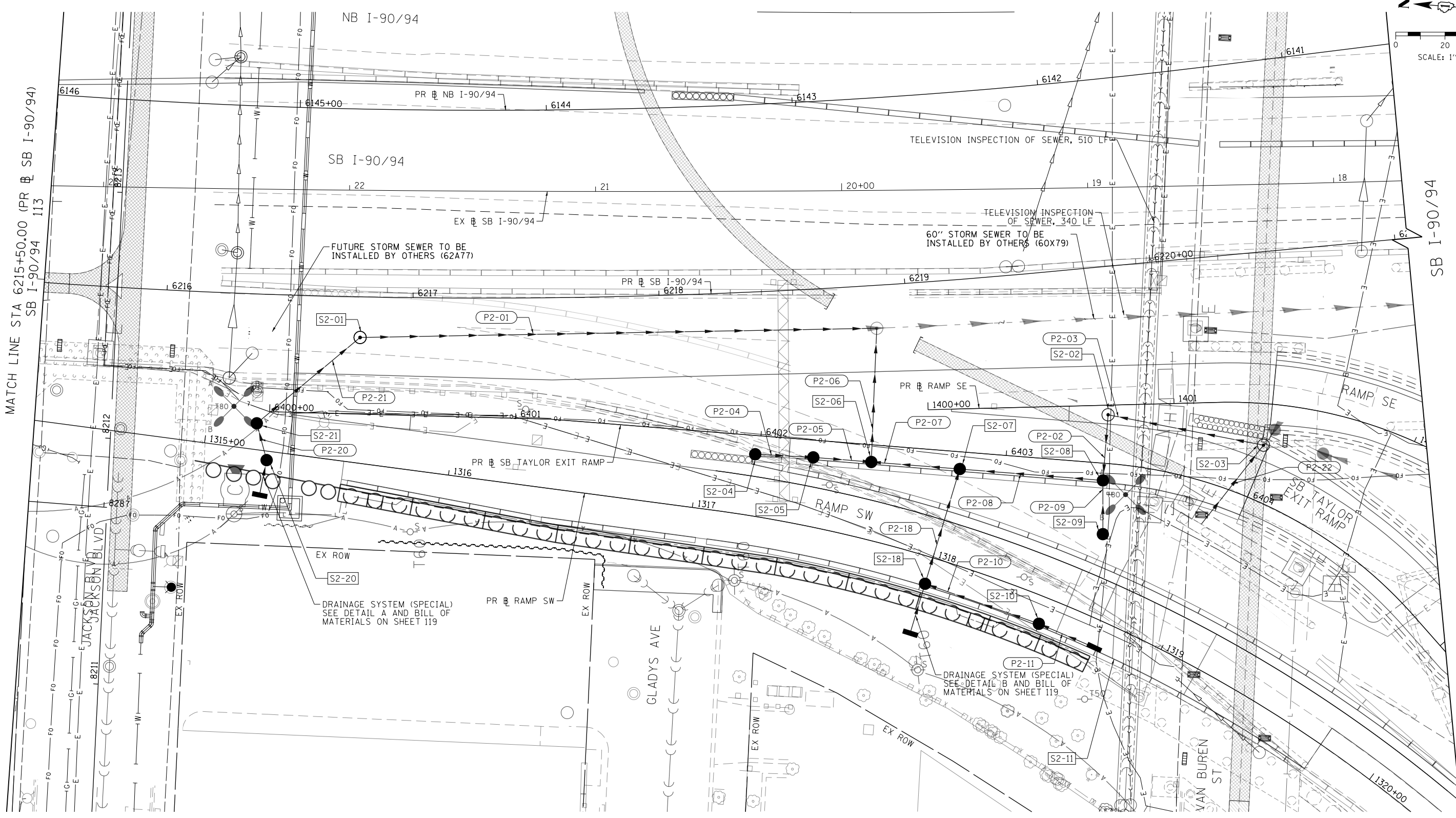
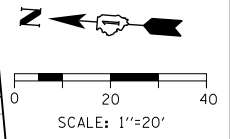
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DRAWN - NLD	REVISED -
CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED DRAINAGE PLAN
RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP**

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. 6210+20.00 TO STA. 6215+50.00

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 113
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT



PROPOSED DRAINAGE AND UTILITIES LEGEND

- | | | | | | |
|---|---------------------------------------|---|-------------------------|-----|--|
| ⊙ | EXISTING MANHOLE | ⊙ | PROPOSED MANHOLE | --- | STORM SEWER TO BE INSTALLED BY OTHERS |
| ○ | EXISTING CATCH BASIN | ● | PROPOSED CATCH BASIN | /// | ABANDON AND FILL EXISTING STORM SEWER |
| □ | EXISTING INLET | ▬ | PROPOSED INLET | → | PROPOSED STORM SEWER |
| ⊙ | MANHOLE TO BE INSTALLED BY OTHERS | ▬ | EXISTING BRIDGE SCUPPER | → | PROPOSED STORM SEWER TO BE INSTALLED BY OTHERS (62A76, 62A77, 60X94) |
| ● | CATCH BASIN TO BE INSTALLED BY OTHERS | | | | |
| ▬ | INLET TO BE INSTALLED BY OTHERS | | | | |



D162J31-SHT-DRAIN-01.dgn
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 PLOT SCALE = 40.0017' / 1" IN.
 PLOT DATE = 8/13/2019

DESIGNED - MRC
 DRAWN - NLD
 CHECKED - JMG
 DATE - 8/16/2019

REVISED -
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 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

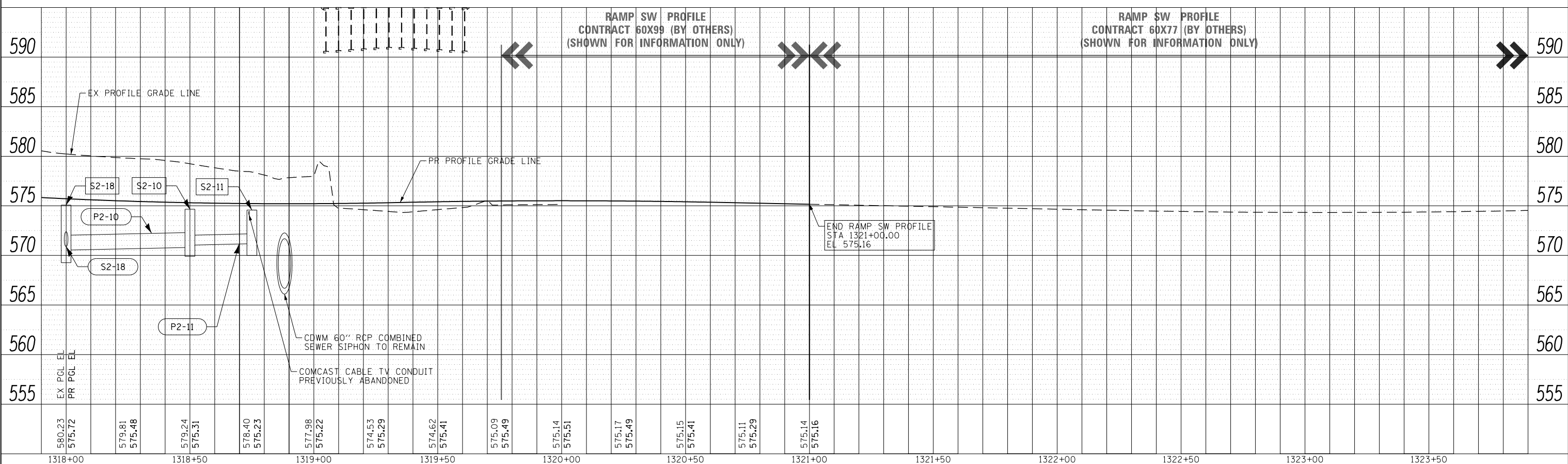
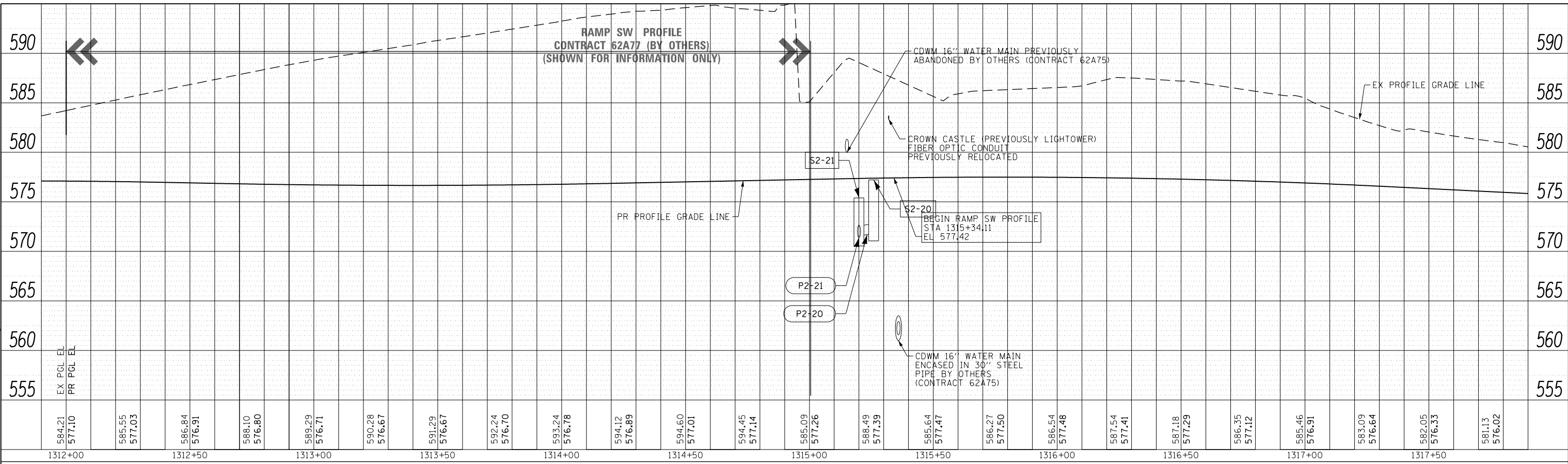
**PROPOSED DRAINAGE PLAN
 RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP**

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 6215+50.00 TO STA. 6221+05.00

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 114
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT

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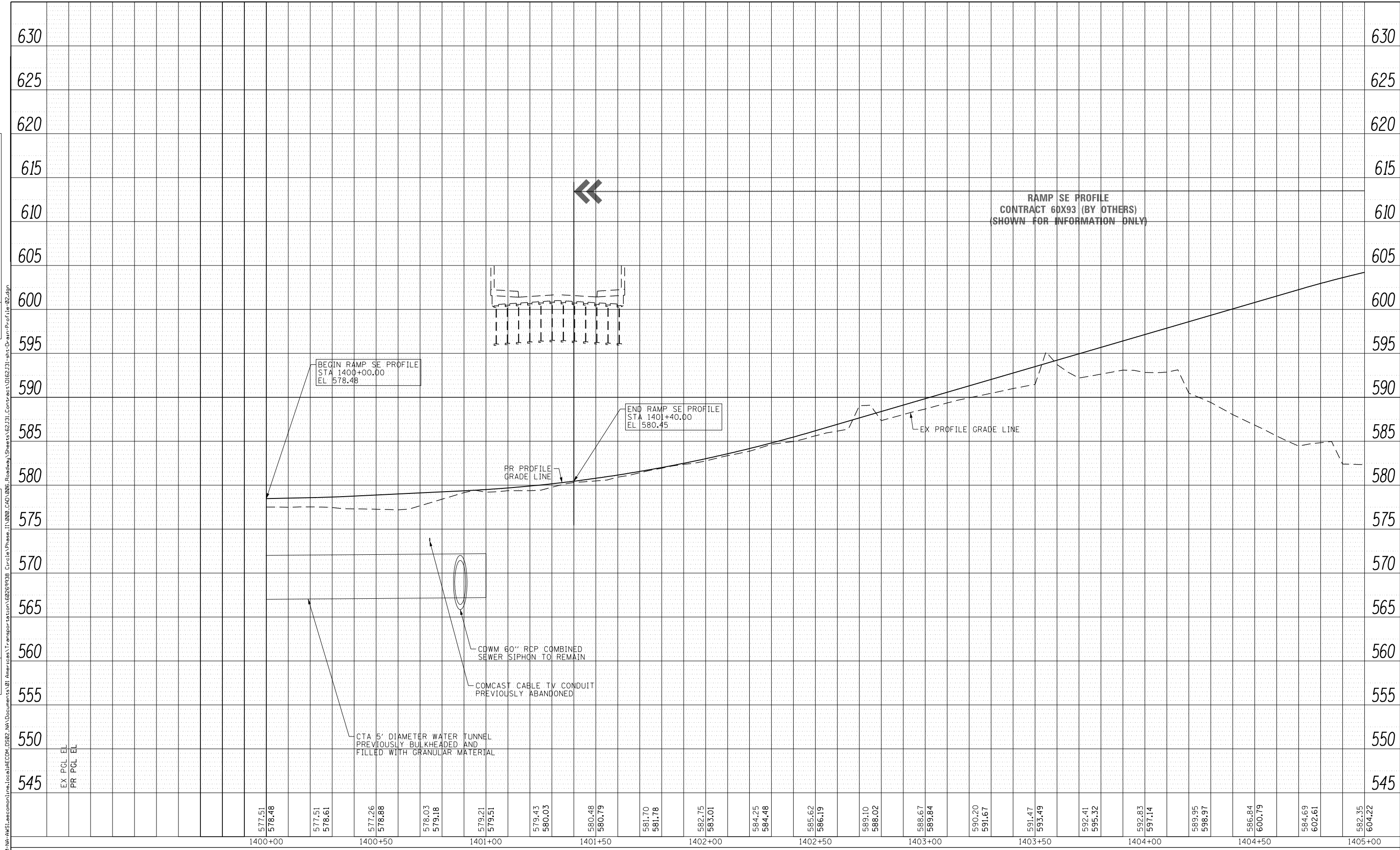
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PROFILE
RAMP SW
 SCALE: 1"=20' SHEET 1 OF 3 SHEETS STA. 1311+90.00 TO STA. 1323+90.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	115
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62J31	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
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	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
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	FILE NAME	



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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PROFILE
RAMP SE**

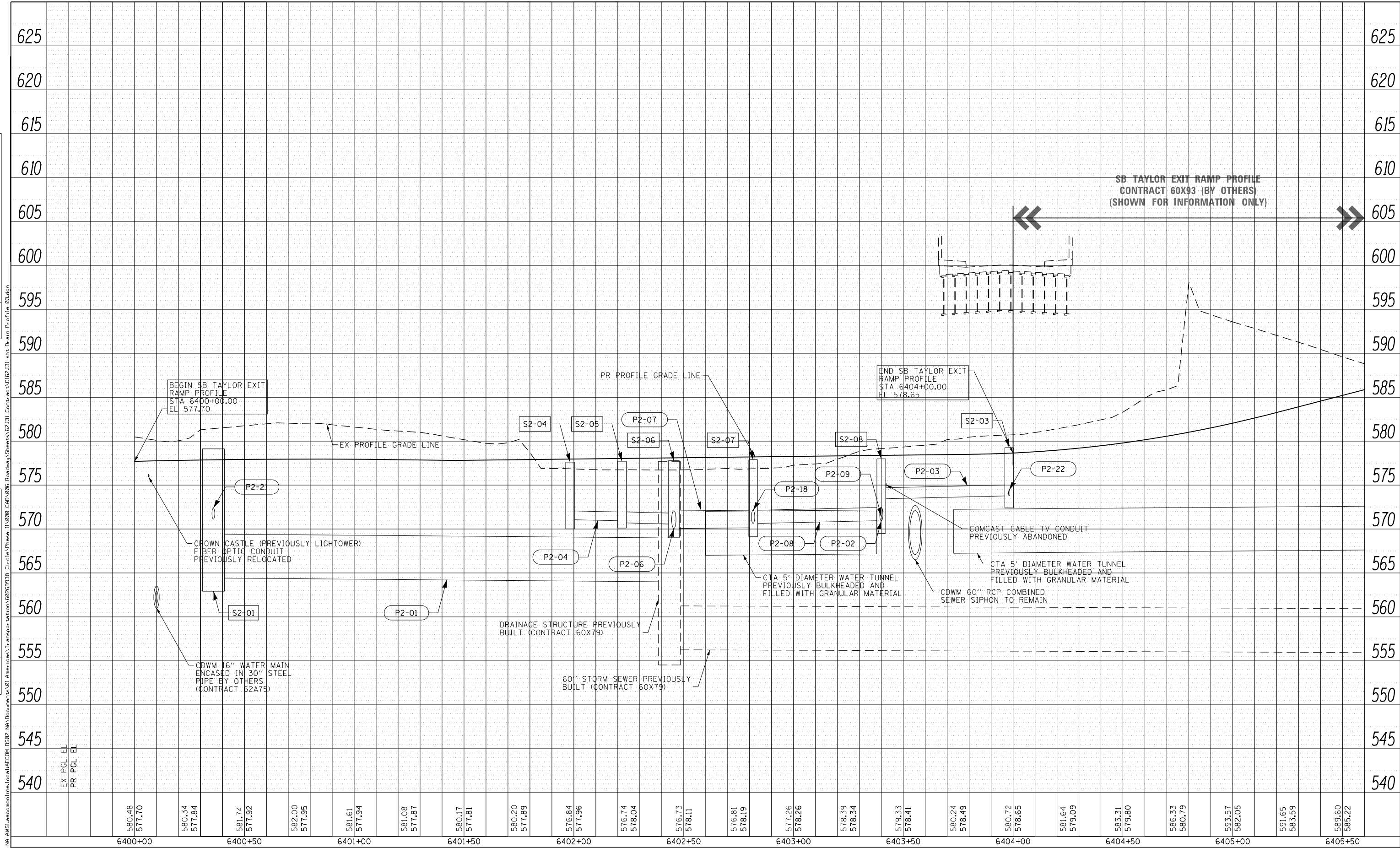
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	116
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	

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	PLOTTED	
	CHECKED	
	BY	
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PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
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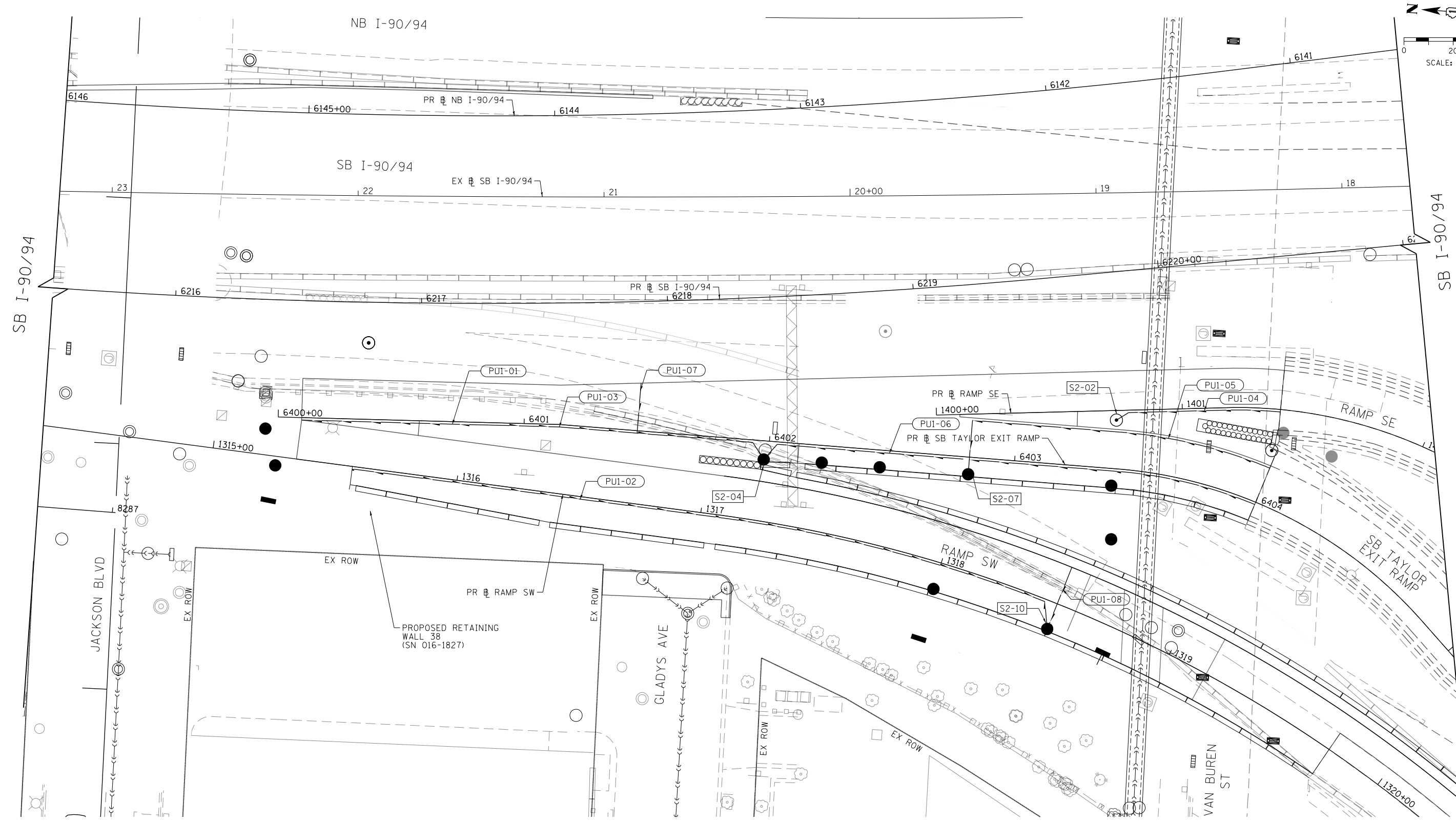
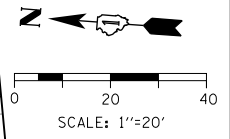


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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DRAINAGE PROFILE SB TAYLOR EXIT RAMP	
SCALE: 1"=20'	SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 117
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				



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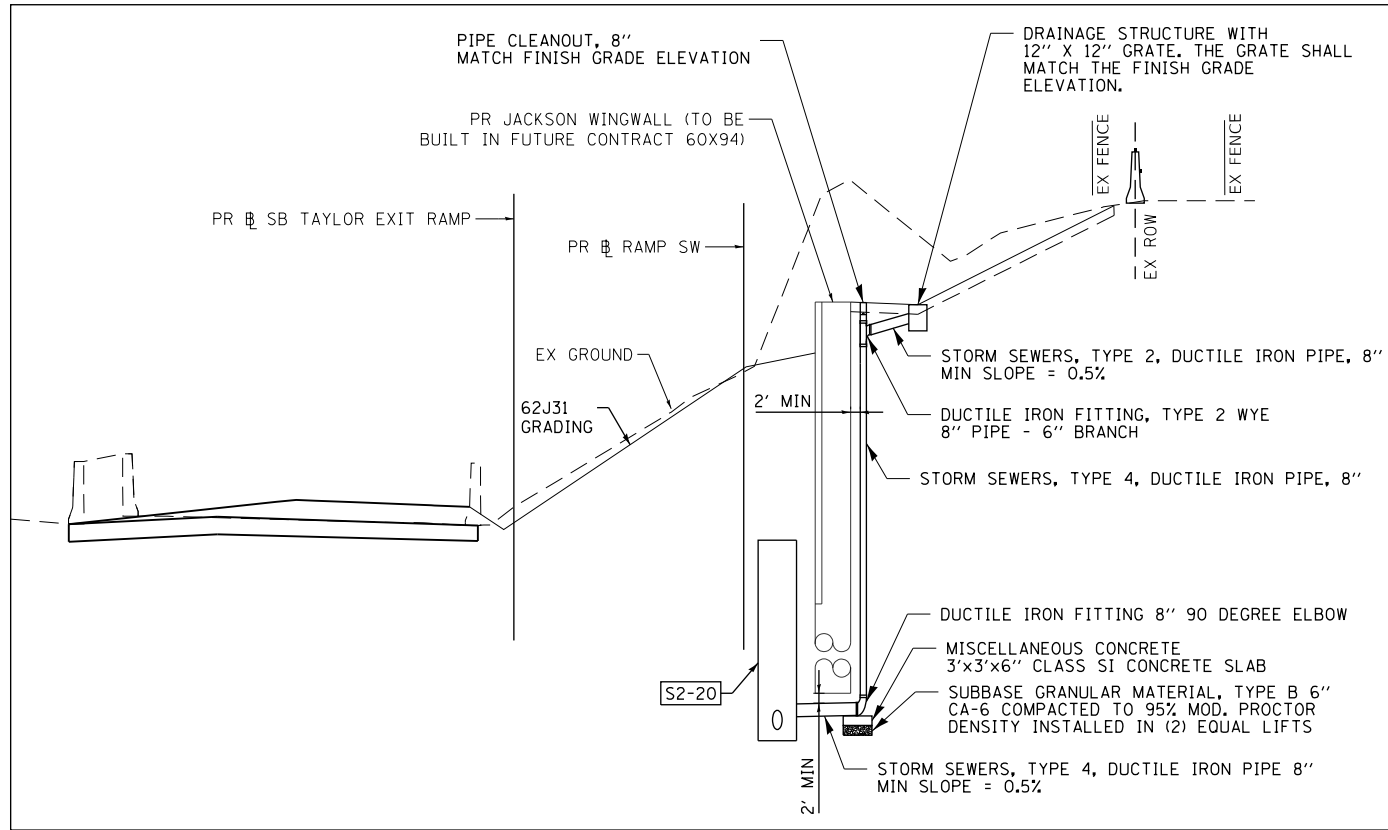
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DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUBSURFACE DRAINAGE PLAN	
RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP	
SCALE: 1"=20'	SHEET 1 OF 1 SHEETS
STA. 6215+50.00 TO STA. 6221+05.00	

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 118
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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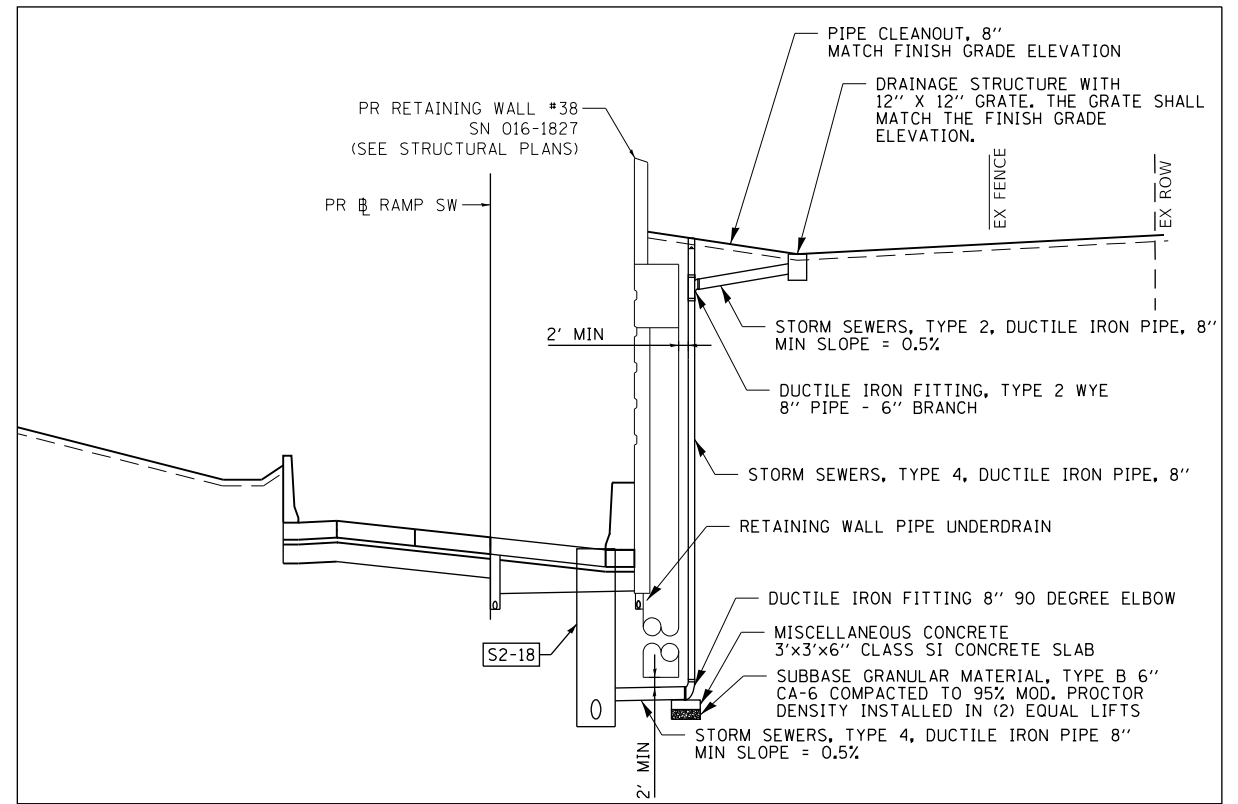
DETAIL A

BILL OF MATERIALS - DETAIL A		
ITEM	UNIT	QUANTITY
DUCTILE IRON FITTING, TYPE 2 WYE 8" PIPE - 6" BRANCH	EACH	1
DUCTILE IRON FITTING 8" 90 DEGREE ELBOW	EACH	1
PIPE CLEANOUT, 8"	EACH	1
STORM SEWERS, TYPE 4, DUCTILE IRON PIPE 8"	FOOT	51
DRAINAGE STRUCTURE	EACH	1
SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	1
MISCELLANEOUS CONCRETE	CU YD	4.5

NOTE: ALL ITEMS INCLUDED IN THE COST OF DRAINAGE SYSTEM (SPECIAL)

BILL OF MATERIALS - DETAIL B		
ITEM	UNIT	QUANTITY
DUCTILE IRON FITTING, TYPE 2 WYE 8" PIPE - 6" BRANCH	EACH	1
DUCTILE IRON FITTING 8" 90 DEGREE ELBOW	EACH	1
PIPE CLEANOUT, 8"	EACH	1
STORM SEWERS, TYPE 4, DUCTILE IRON PIPE 8"	FOOT	61
DRAINAGE STRUCTURE	EACH	1
SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	1
MISCELLANEOUS CONCRETE	CU YD	4.5

NOTE: ALL ITEMS INCLUDED IN THE COST OF DRAINAGE SYSTEM (SPECIAL)



DETAIL B



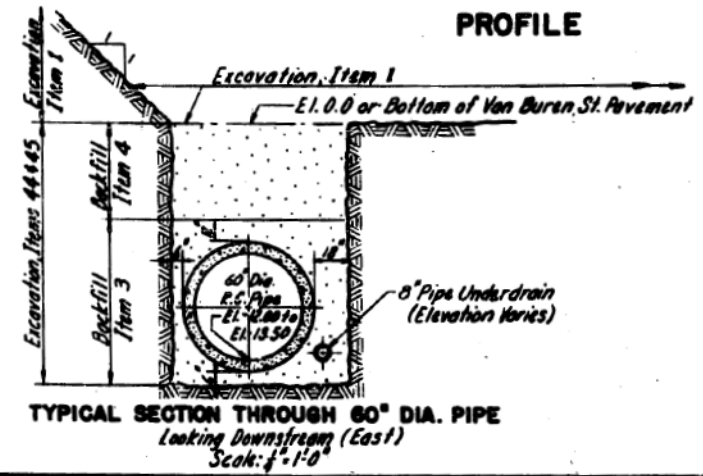
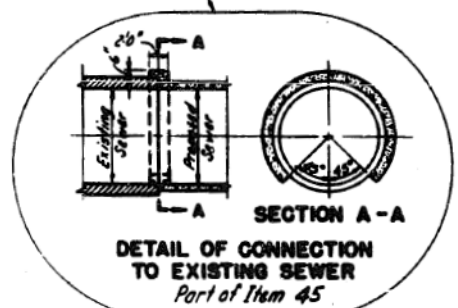
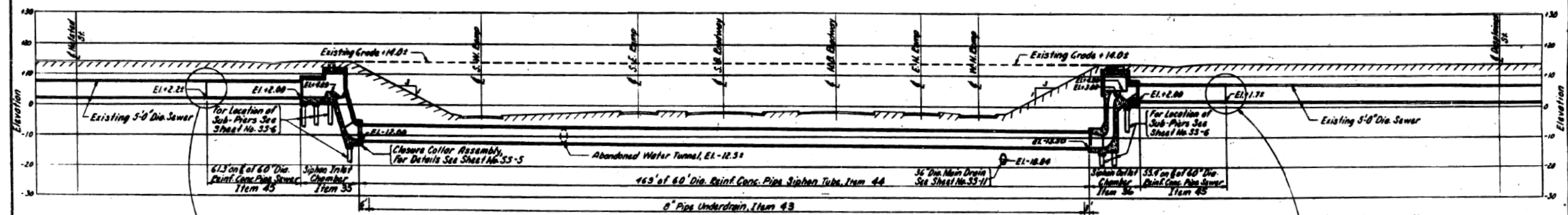
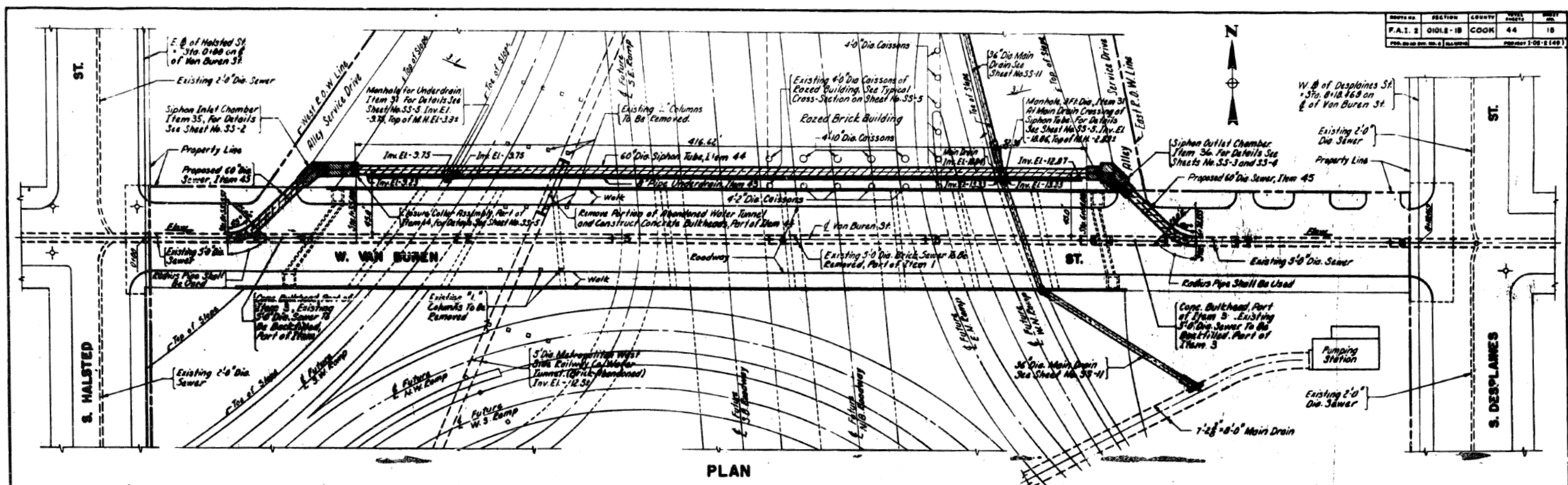
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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

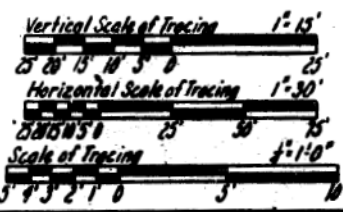
DRAINAGE DETAILS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	119
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	



NOTES:
 For Existing Utilities and Topography See Sheet No. G-4.
 For Excavation Cross-Sections, See Sheets Identified By the Prefix Letter "G".
 For Details of Manholes, See Sheet No. SS-5.
 General Notes for Sewer Siphon
 All Elevations Are Measured From Chicago City Datum.
 For Location of Sub-Piers, Keyways, and Reinforcement Steel Details See Sewer Structure Sheets.



REVISIONS	
DATE	DESCRIPTION

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 SEWER PLANNING DIVISION
**NORTHWEST ROUTE SUPERHIGHWAY
 VAN BUREN ST BRIDGE - SECTION 010L2-1B**
**SEWER SIPHON
 GENERAL PLAN & PROFILE**
 SCALE: AS SHOWN
 DATE: APRIL 1957
 SHEET NO. 98-1 OF 44 SHEETS

DRAWN BY O.R. Jonsson
 TRACED BY O.R. Jonsson
 CHECKED BY E.L. Miller
 EXAMINED BY J.M. Chasler
 Engineer of Sewer Design

D162J31-SHT-Siphon-01.dgn	DESIGNED -	REVISED -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

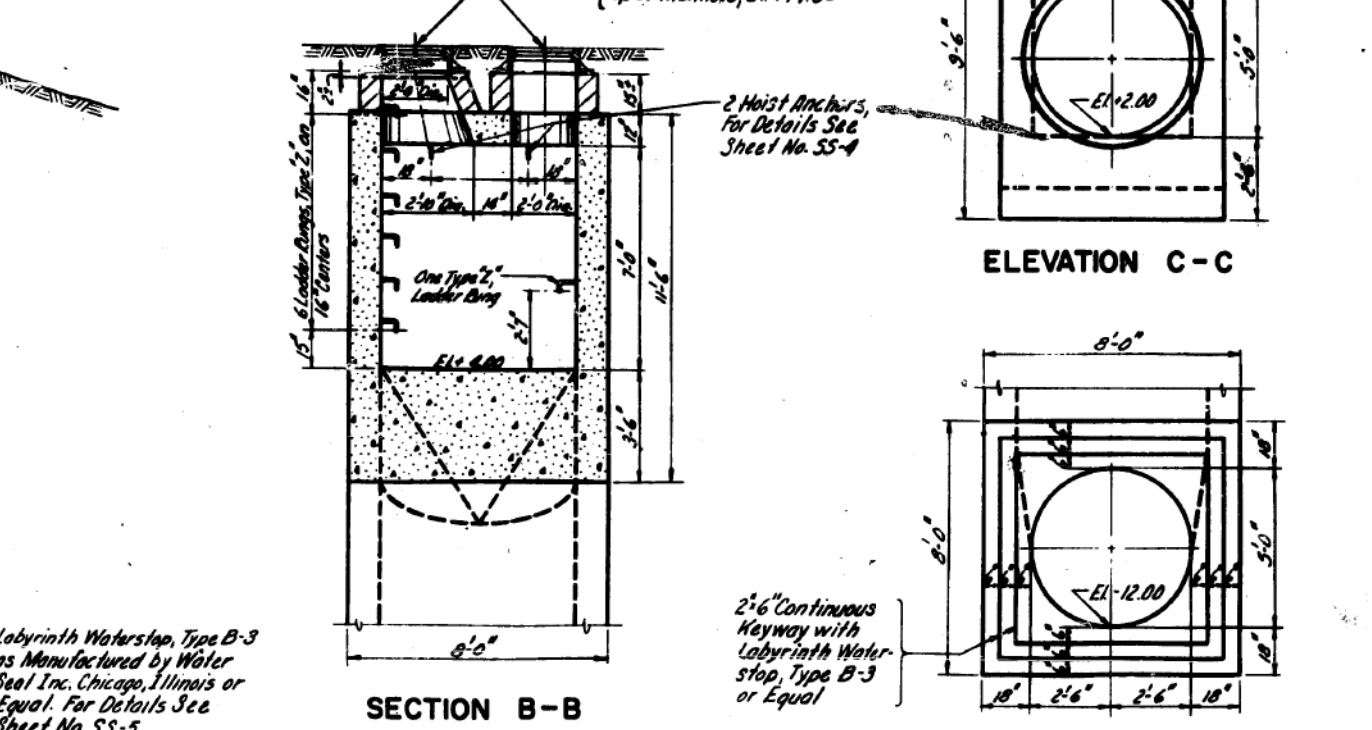
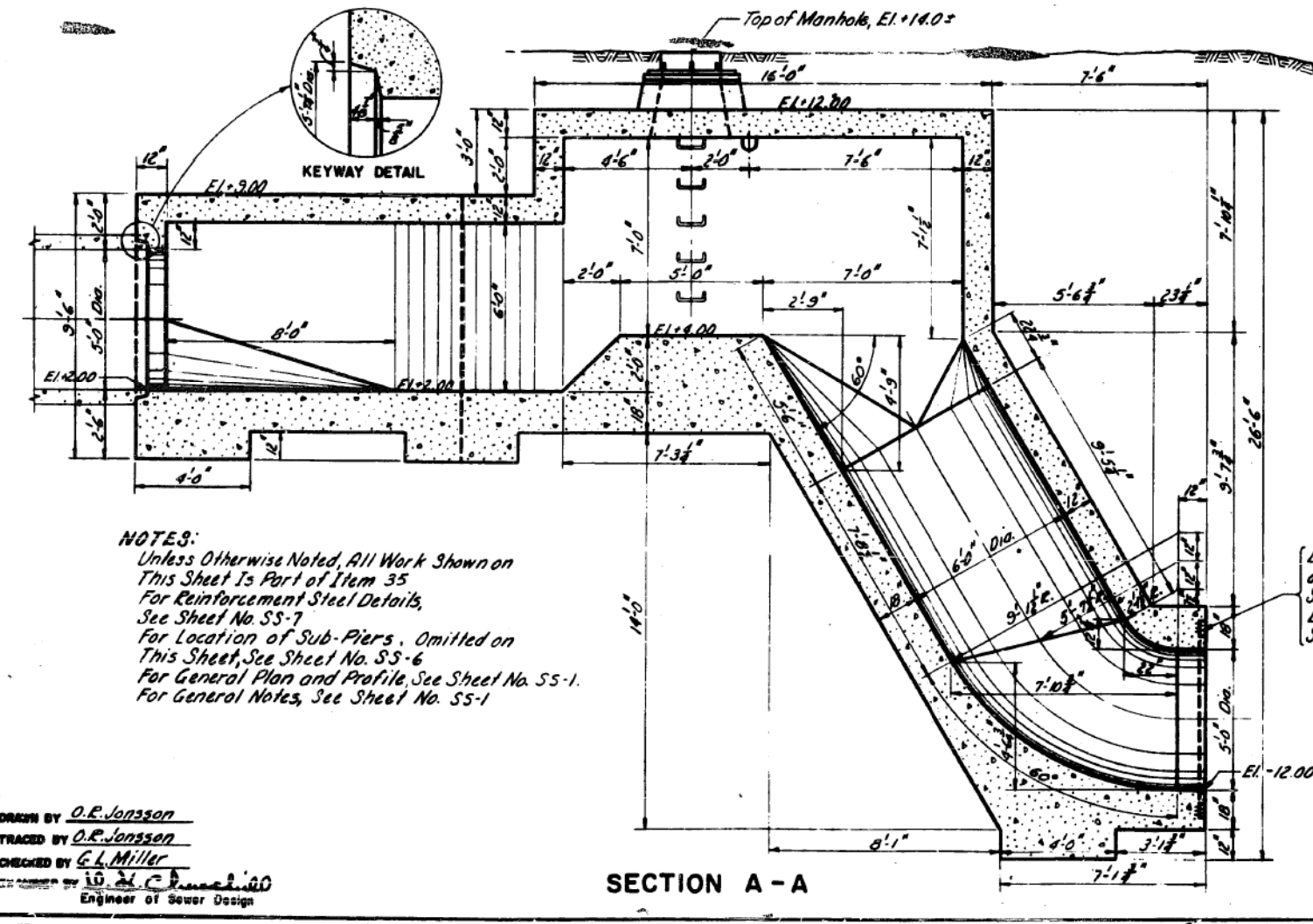
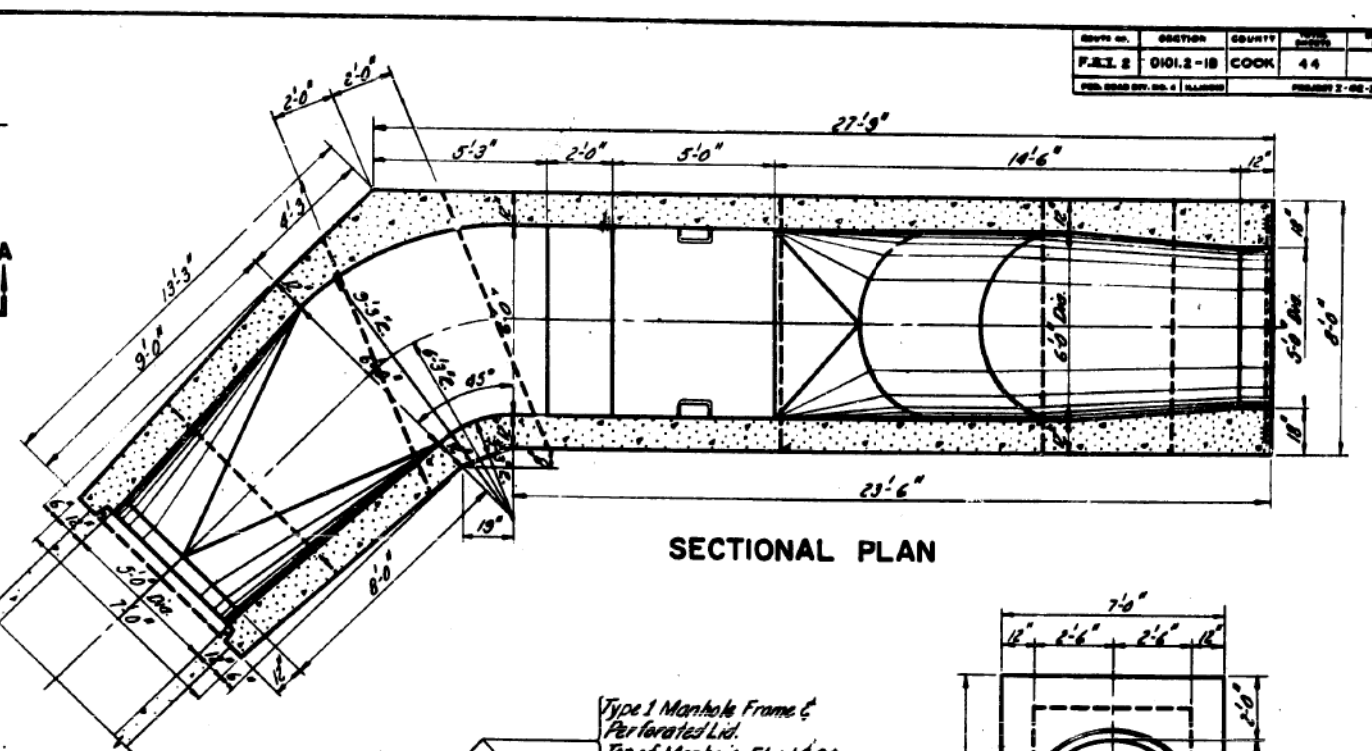
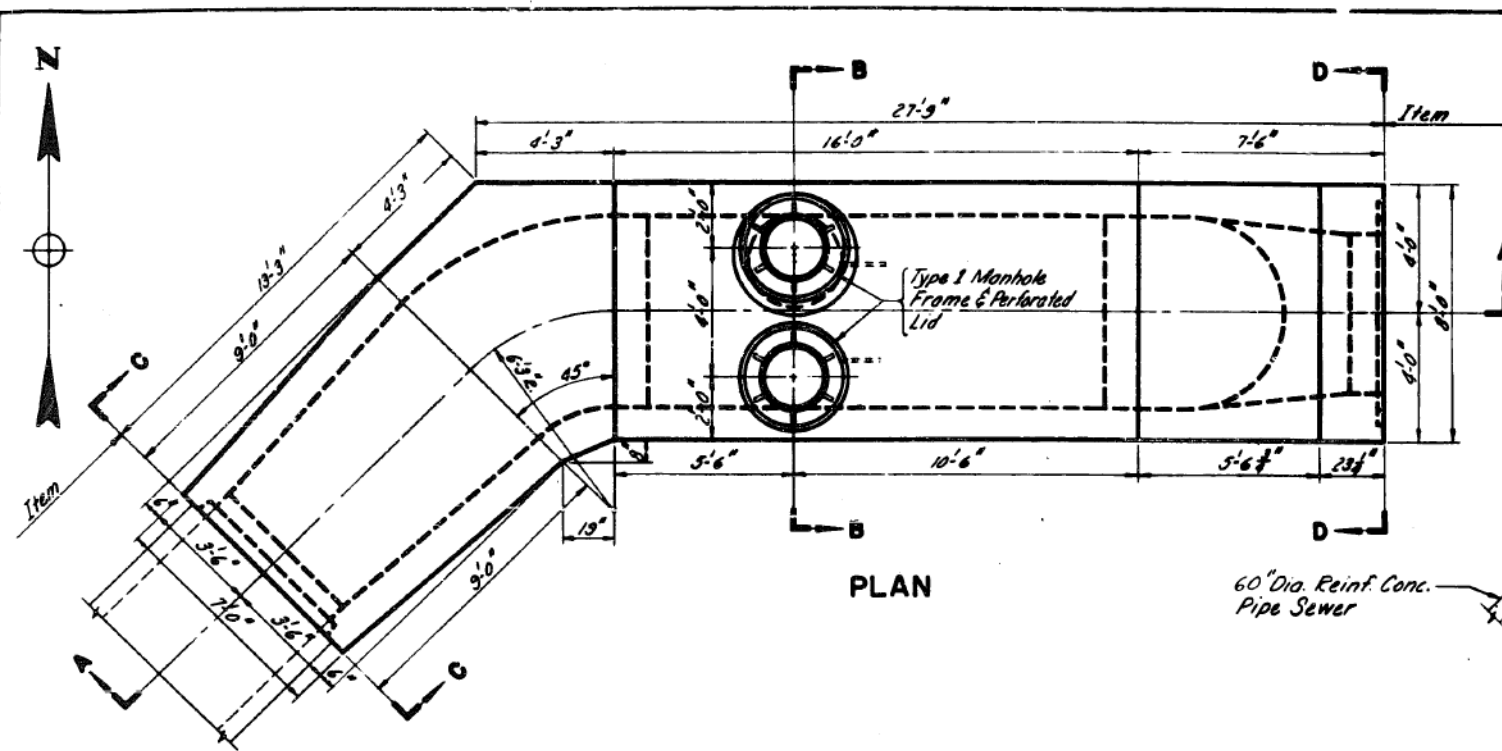
EXISTING SIPHON PLANS
 VAN BUREN STREET
 SCALE: NONE SHEET 1 OF 12 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 120
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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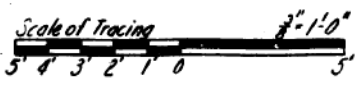


DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 2	0101.2-1B	COOK	44	16
FED. ROAD DIST. NO. 1 (ILLINOIS)		PROJECT 2-02-2(4A)		



NOTES:
 Unless Otherwise Noted, All Work Shown on This Sheet is Part of Item 35
 For Reinforcement Steel Details, See Sheet No. SS-7
 For Location of Sub-Piers, Omitted on This Sheet, See Sheet No. SS-6
 For General Plan and Profile, See Sheet No. SS-1
 For General Notes, See Sheet No. SS-1

DRAWN BY O.R. Jonsson
 TRACED BY O.R. Jonsson
 CHECKED BY G.L. Miller
 DESIGNED BY J.M.G.
 ENGINEER OF SEWER DESIGN



REVISIONS	
DATE	DESCRIPTION

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 SEWER PLANNING DIVISION
 NORTHWEST ROUTE SUPERHIGHWAY
 VAN BUREN ST. BRIDGE - SECTION 0101.2-1B
**SIPHON INLET CHAMBER
 PLANS & SECTIONS**
 SCALE: AS SHOWN
 DATE: APRIL 1957
 SHEET NO. SS-2 OF 44 SHEETS



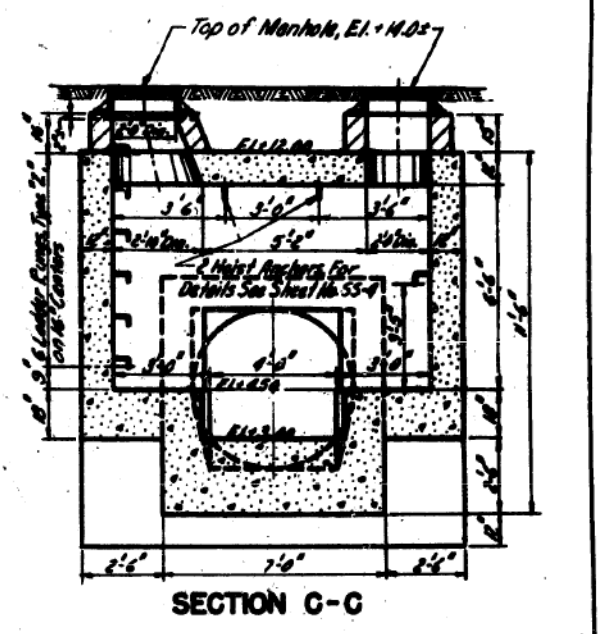
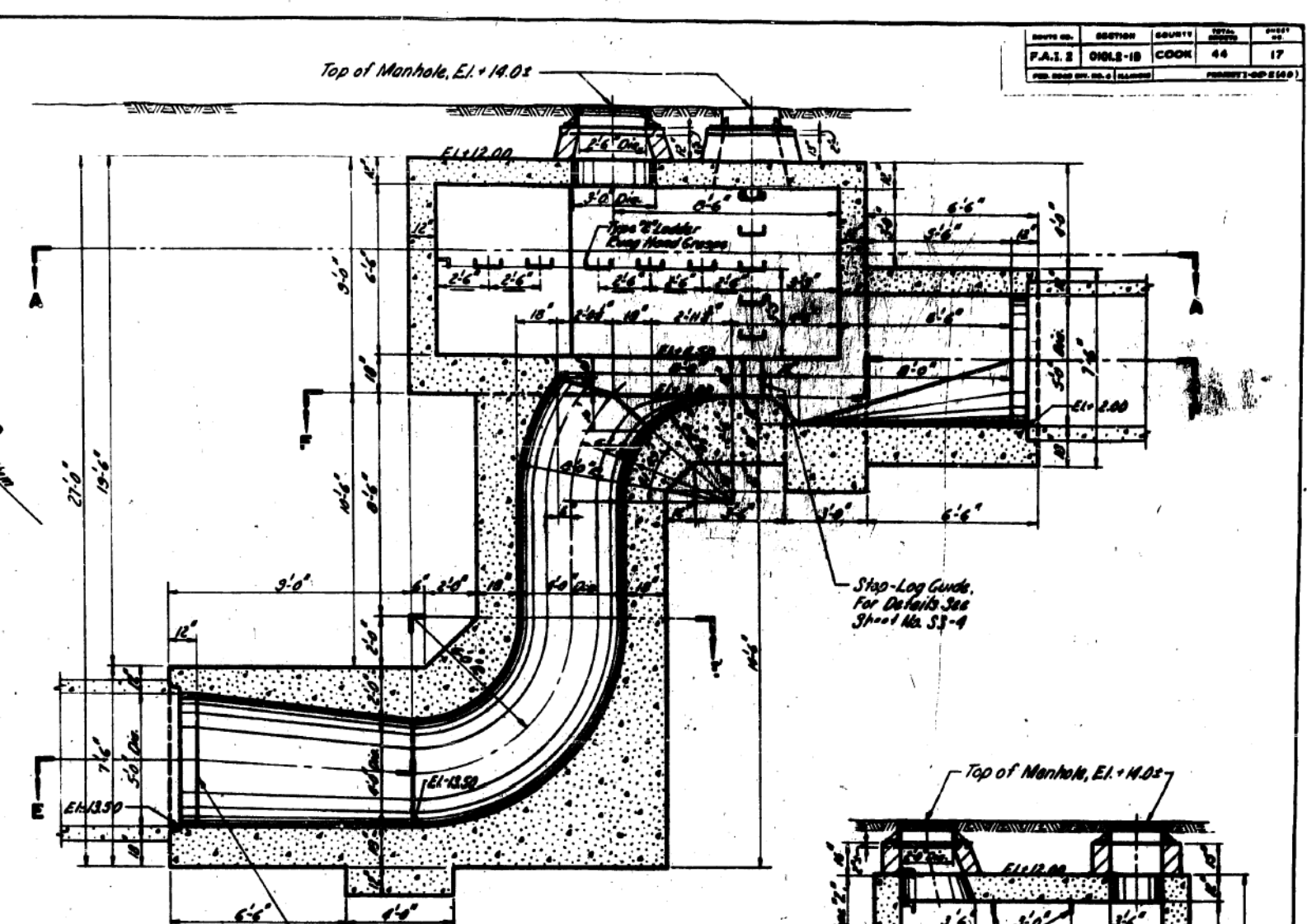
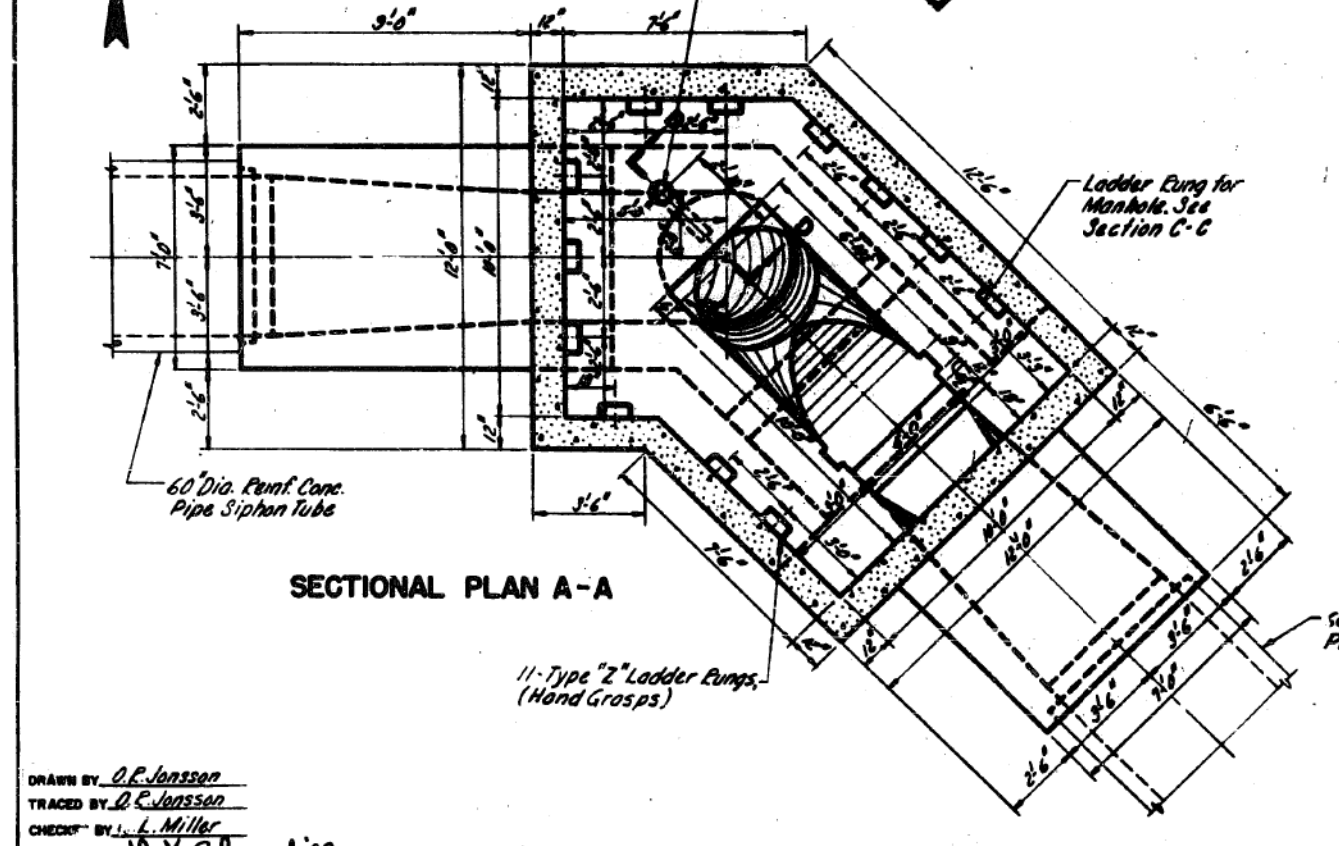
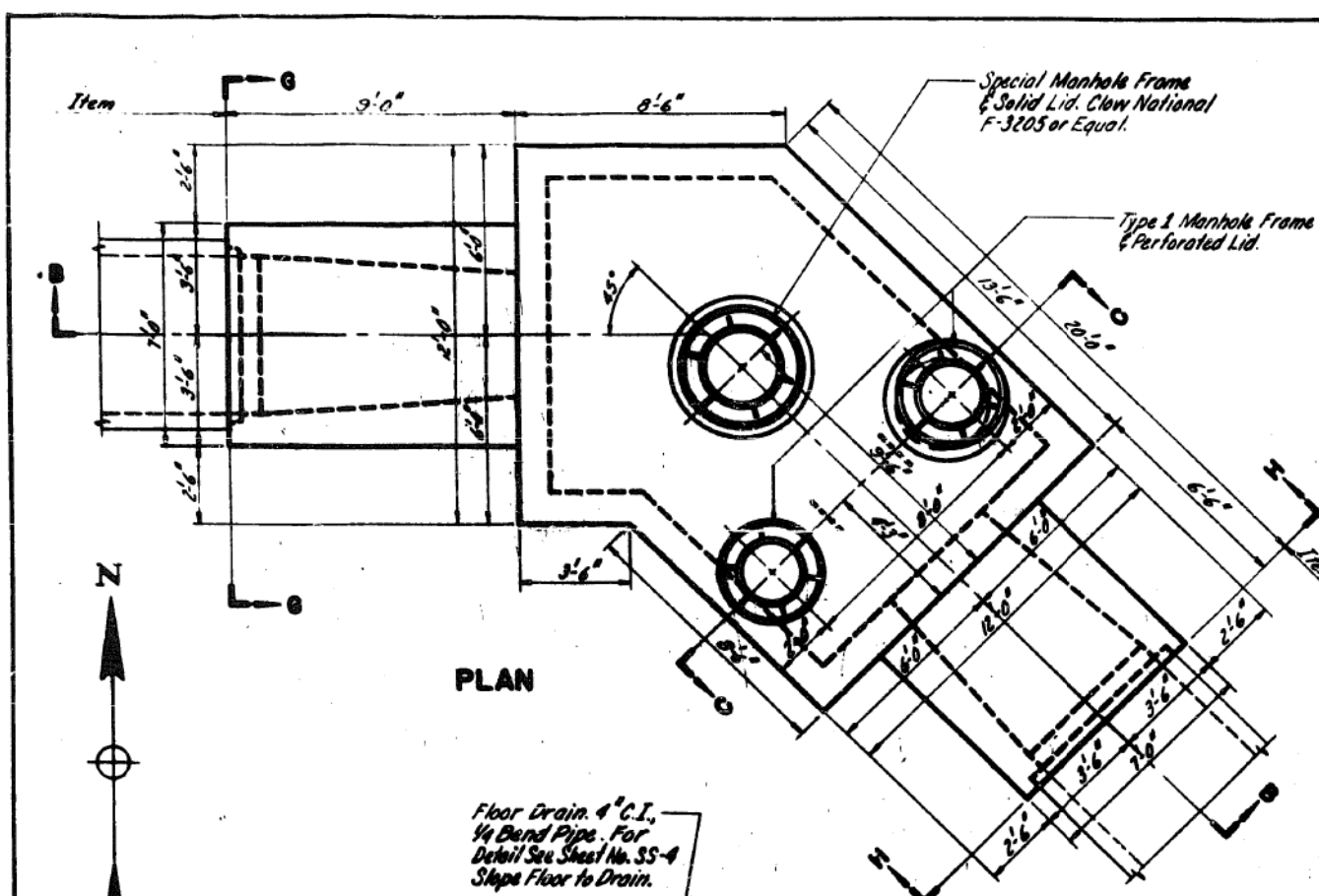
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PLOT SCALE = 100.0000' / in.	CHECKED - JMG	REVISED -
PLOT DATE = 8/13/2019	DATE = 8/16/2019	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING SIPHON PLANS VAN BUREN STREET		
SCALE: NONE	SHEET 2 OF 12 SHEETS	STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 121
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 2	0102-1B	COOK	44	17
FED. ROAD DIST. NO. 1 (ILLINOIS) PROJECT: GP 2140				



NOTES:
 For Additional Sections and Details See Sheet No. SS-4.
 Unless Otherwise Noted, All Work Shown on Sheets SS-3 and SS-4 is Part of Item 36.
 For Reinforcement Steel Details See Sheet No. SS-8.
 For Location of Sub-Piers, Omitted on This Sheet, See Sheet No. SS-6.
 For General Plan and Profile, See Sheet No. SS-1.
 For General Notes, See Sheet No. SS-1.



REVISED	
DATE	DESCRIPTION

DRAWN BY: O.P. Jansson
 TRACED BY: O.P. Jansson
 CHECKED BY: L. Miller
 EXAMINED BY: D.H. Chumley
 Engineer of Sewer Design

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 SEWER PLANNING DIVISION
 NORTHWEST ROUTE SUPERHIGHWAY
 VAN BUREN ST. BRIDGE - SECTION 0102-1B
SIPHON OUTLET CHAMBER
PLANS & SECTIONS
 SCALE: AS SHOWN
 DATE: APRIL 1987
 SHEET NO. 28-3 OF 44 SHEETS

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D162J31-SHT-Siphon-03.dgn
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 PLOT SCALE = 100.0000' / 1"
 PLOT DATE = 8/13/2019

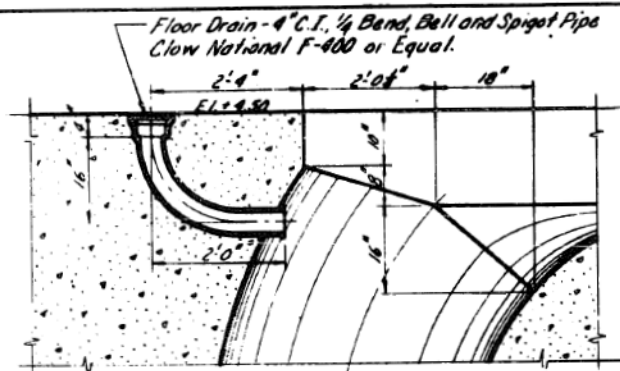
DESIGNED -	REVISOR -
DRAWN - NLD	REVISION -
CHECKED - JMG	REVISION -
DATE - 8/16/2019	REVISION -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

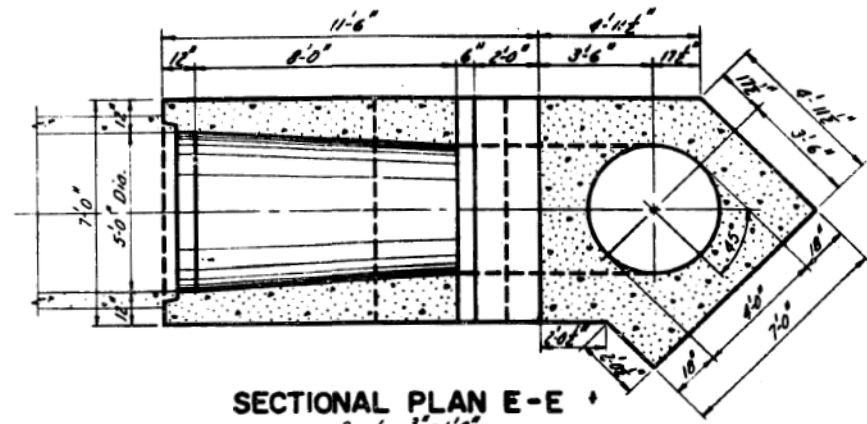
EXISTING SIPHON PLANS
 VAN BUREN STREET
 SCALE: NONE SHEET 3 OF 12 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	122
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

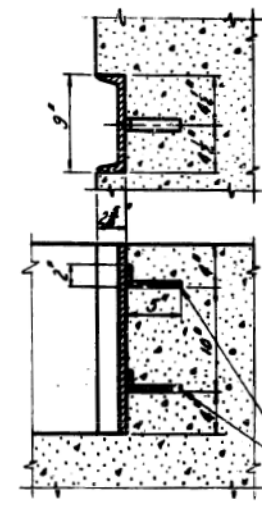
Sheet No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 2	0101.2-1B	COOK	44	18
Siphon Outlet Chamber Sections & Misc. Details				



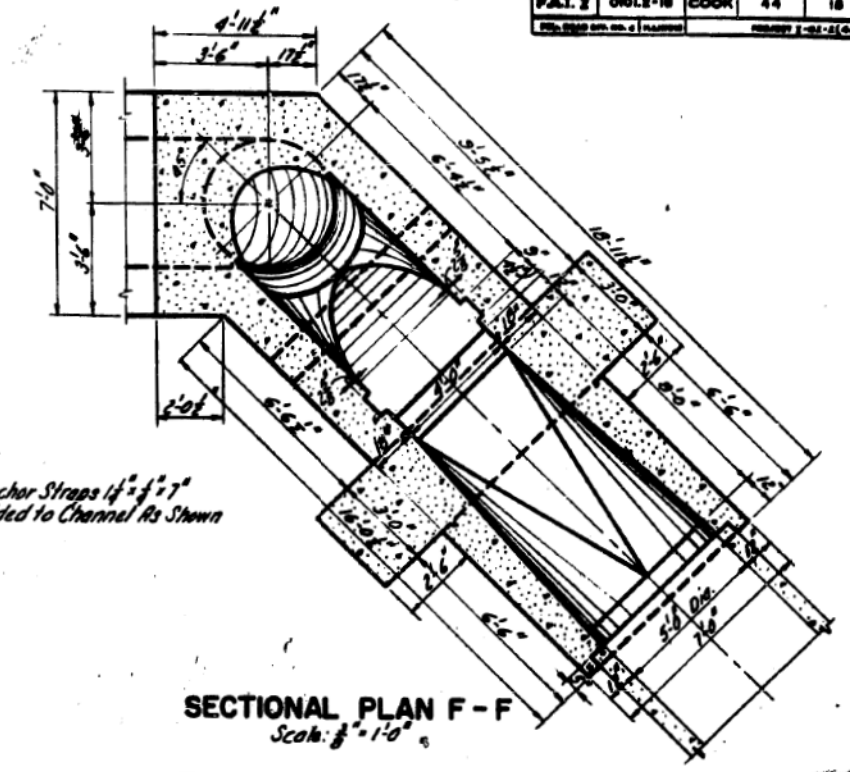
**SECTION D-D
FLOOR DRAIN DETAIL**
Scale: 3/4" = 1'-0"
1 Required



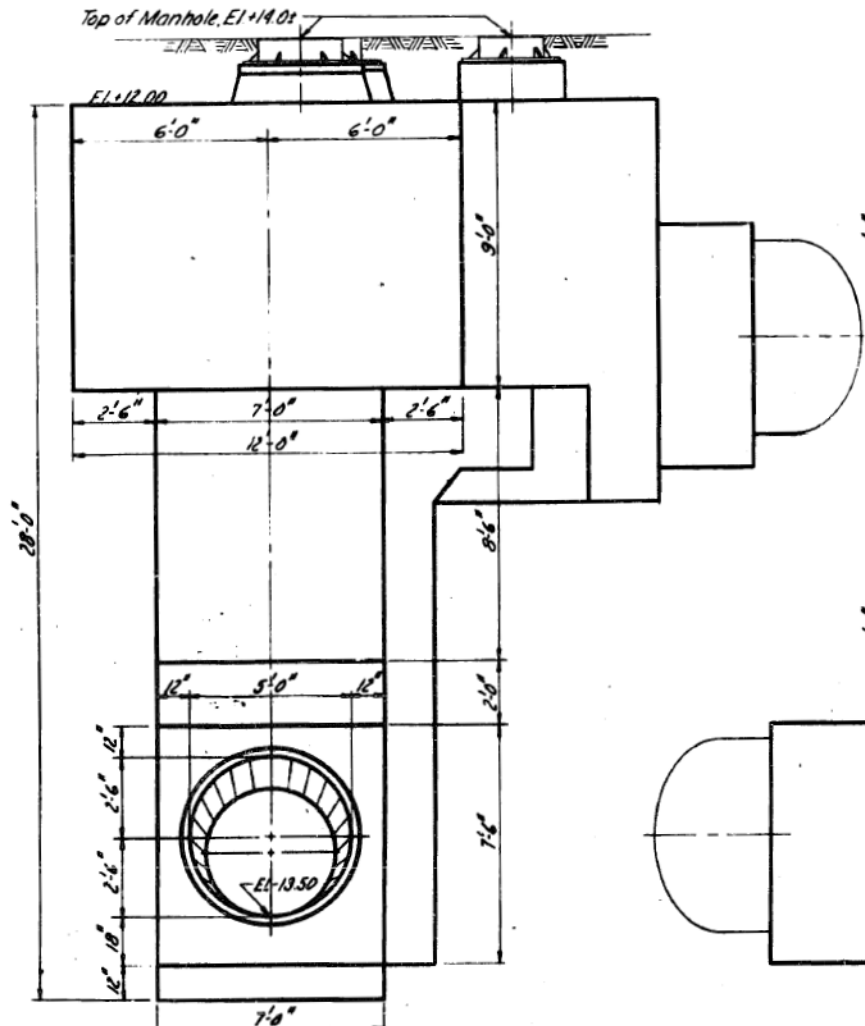
SECTIONAL PLAN E-E
Scale: 3/8" = 1'-0"



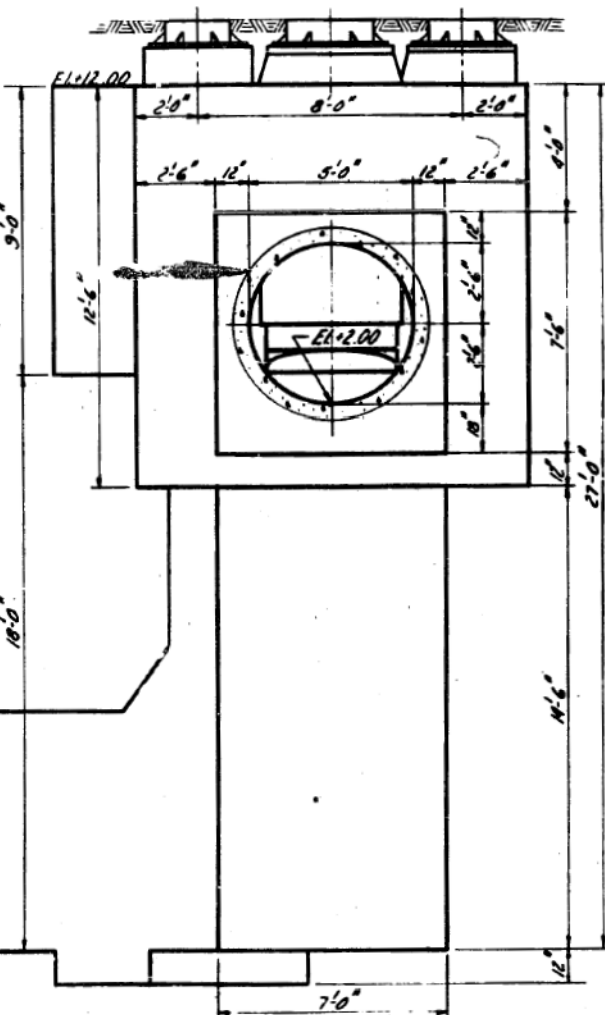
STOP-LOG GUIDE DETAIL
Material: 9" Channel @ 20"
Heavily Galvanized after Fabrication
Scale: 1 1/2" = 1'-0"
2 Required



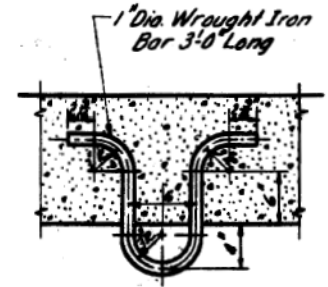
SECTIONAL PLAN F-F
Scale: 3/8" = 1'-0"



ELEVATION G-G
Scale: 3/8" = 1'-0"

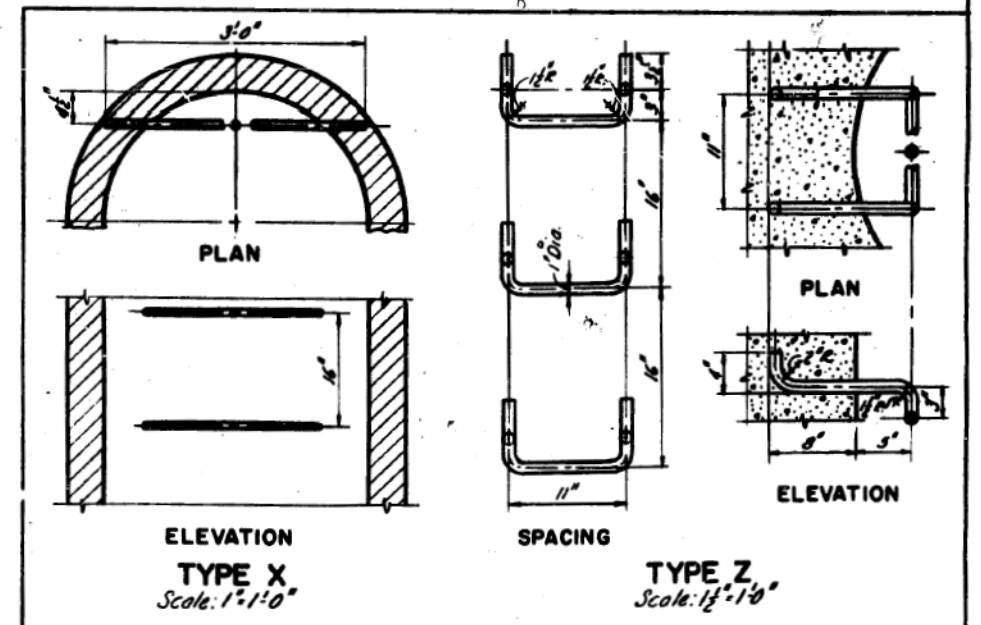


ELEVATION H-H
Scale: 3/8" = 1'-0"



HOIST ANCHOR
Material: Wrought Iron
Heavily Galvanized after fabrication
Scale: 1 1/2" = 1'-0"
4 Required
Part of Items 35 and 36

NOTES:
Unless Otherwise Noted, All Work Shown on Sheets SS-3 and SS-4 is Part of Item 36 For Reinforcement Steel Details See Sheet No. SS-8.
For Location of Sub-Piers, Omitted on This Sheet, See Sheet No. SS-6.
For General Notes See Sheet No. SS-1.



STANDARD LADDER RUNGS
TYPE X Scale: 1" = 1'-0"
TYPE Z Scale: 1 1/2" = 1'-0"

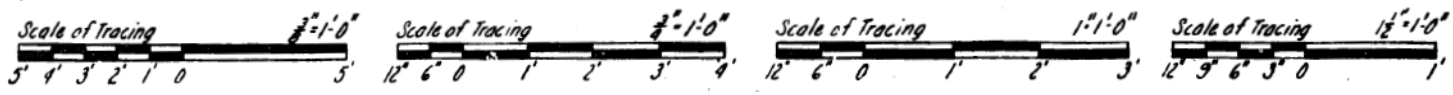
All Ladder Rungs Shall Be of 1" Dia. Galvanized Wrought Iron

REVISIONS	
DATE	DESCRIPTION

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SEWER PLANNING DIVISION
NORTHWEST ROUTE SUPERHIGHWAY
VAN BUREN ST. BRIDGE - SECTION 0101.2-1B
**SIPHON OUTLET CHAMBER
SECTIONS & MISC. DETAILS**

SCALE: As Shown
DATE: APRIL 1957
SHEET NO. SS-4 OF 44 SHEETS

DRAWN BY O.P. Jonsson
TRACED BY O.P. Jonsson
CHECKED BY G.L. Miller
EXAMINED BY J.H. Chasick
Engineer of Sewer Design



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D162J31-SHT-Siphon-04.dgn	DESIGNED -	REVISED -
USER NAME = mrc155	DRAWN - NLD	REVISED -
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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

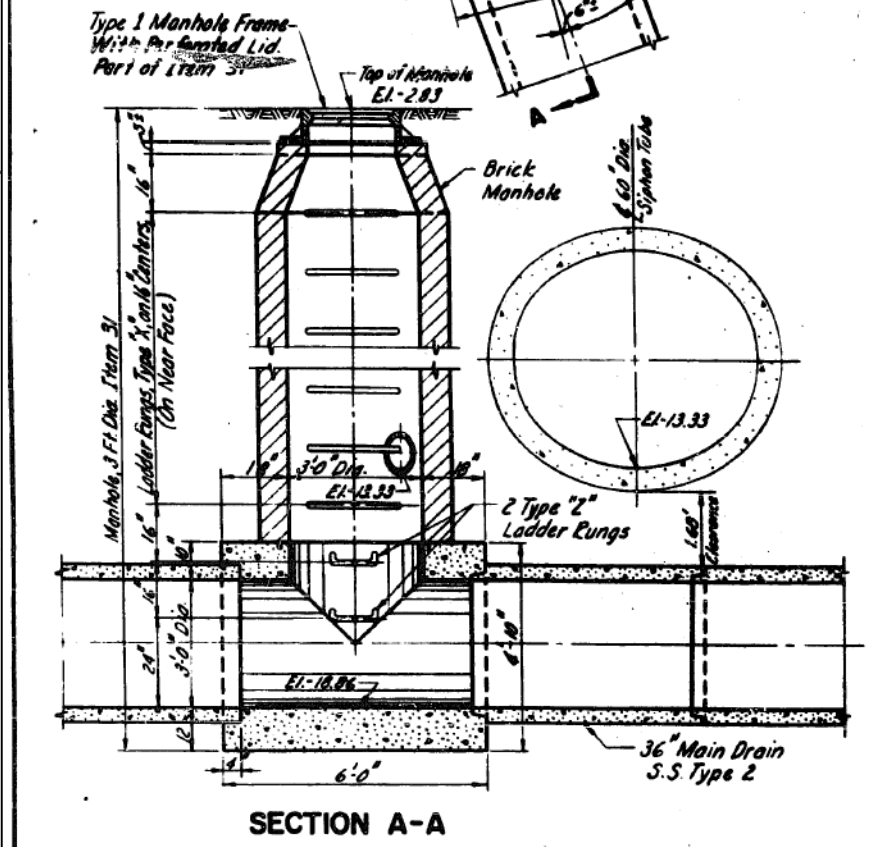
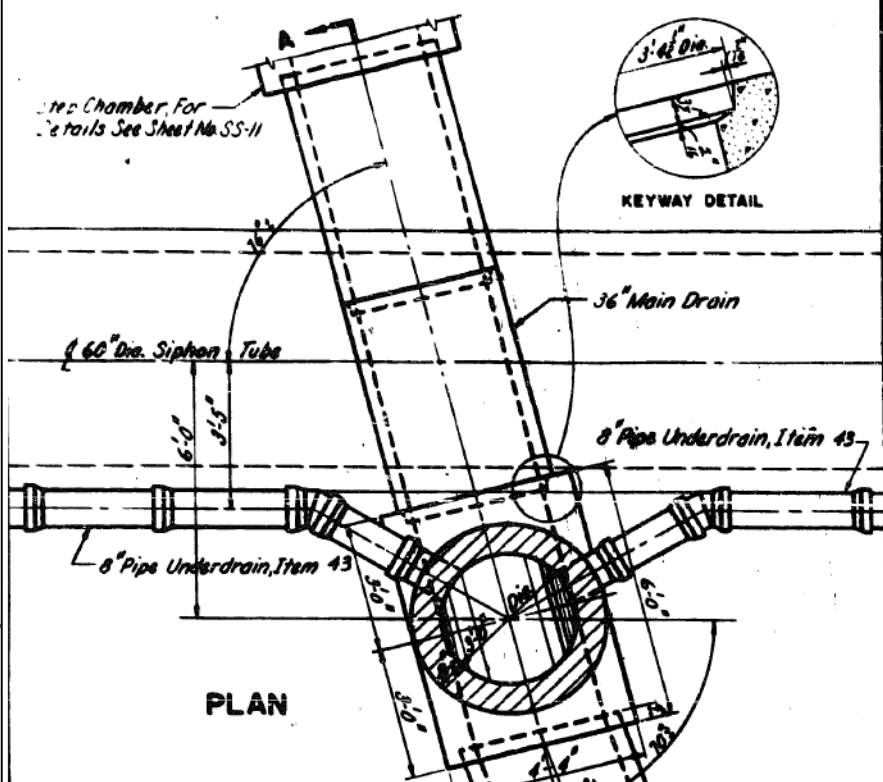
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING SIPHON PLANS VAN BUREN STREET	F.A.I. RTE. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 123
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SCALE: NONE	SHEET 4 OF 12 SHEETS	STA. TO STA.
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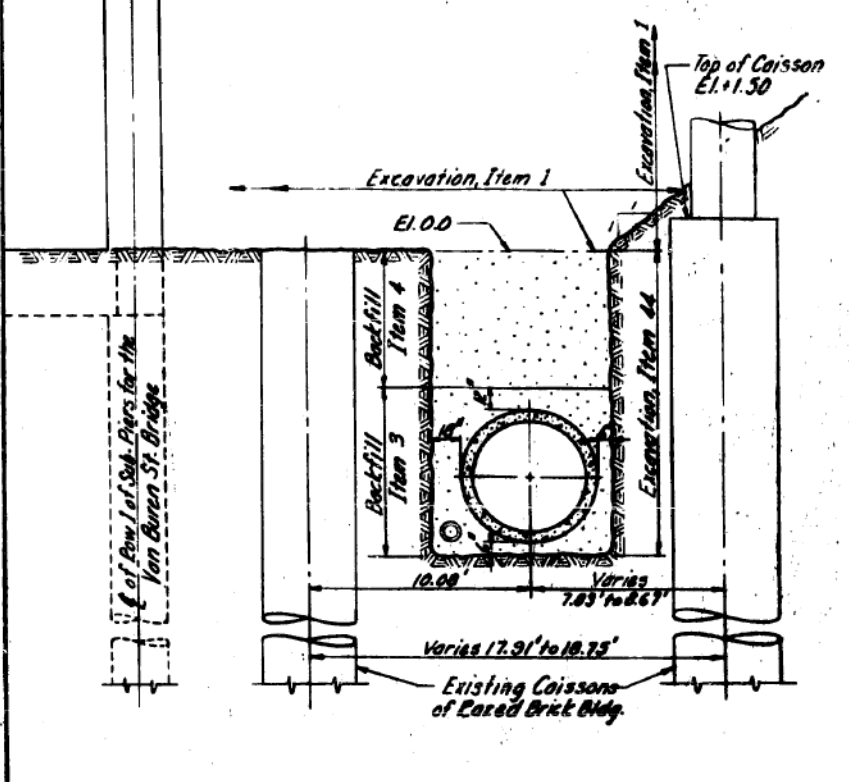
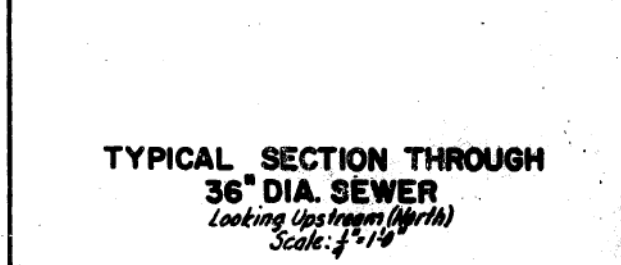
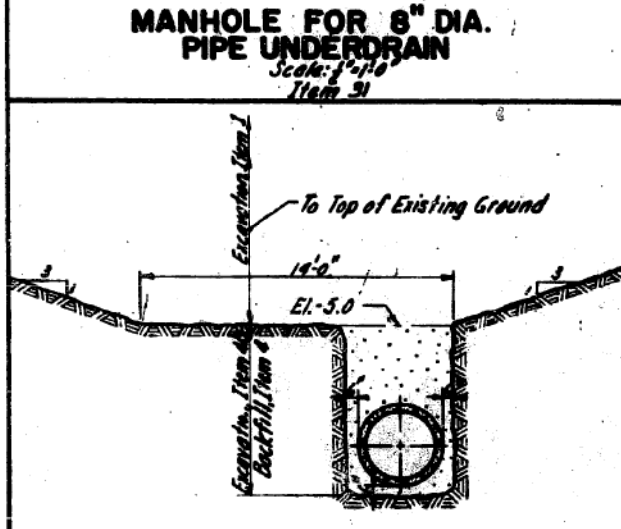
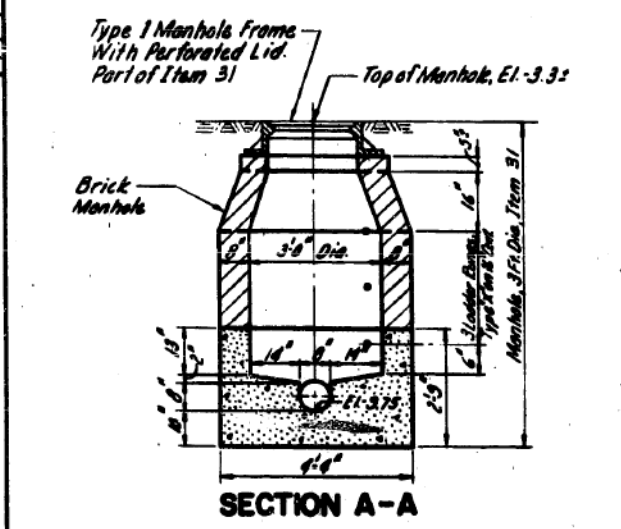
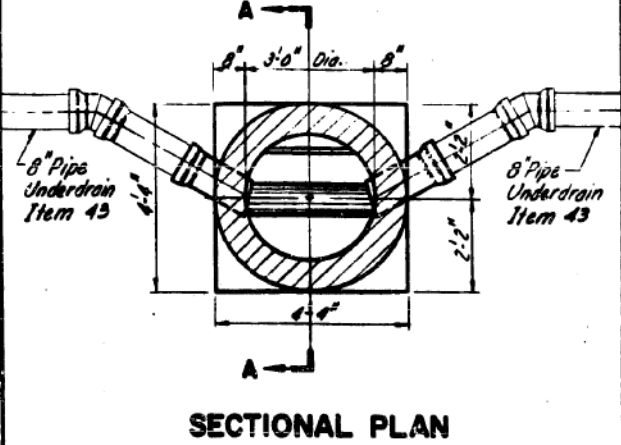
ILLINOIS	FED. AID PROJECT
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ILLINOIS	FED. AID PROJECT
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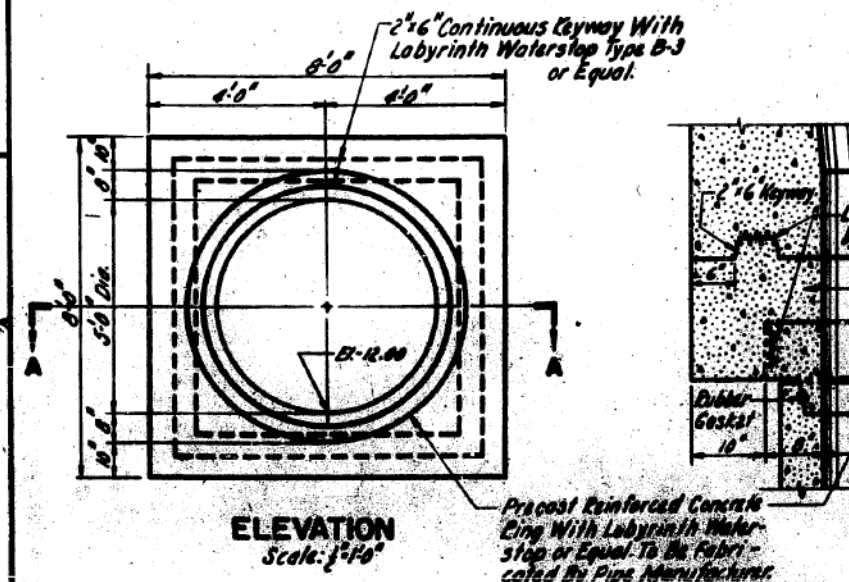
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 2	01012-18	COOK	44	18
F.A.I. DRAWING NO. 8 (ILLINOIS)		PROJECT 05-08-18 (199)		



DRAWN BY C.R. Jonsson
 TRACED BY D.P. Jonsson
 CHECKED BY G.L. Miller
 EXAMINED BY W.H. Chubb
 Engineer of Sewer Design



TYPICAL SECTION THROUGH 60" DIA. SIPHON TUBE BETWEEN STA. 3+98 AND STA. 5+10
Looking Upstream (West)
Scale: 1/2" = 1'-0"



CLOSURE COLLAR ASSEMBLY
Part of Item 44

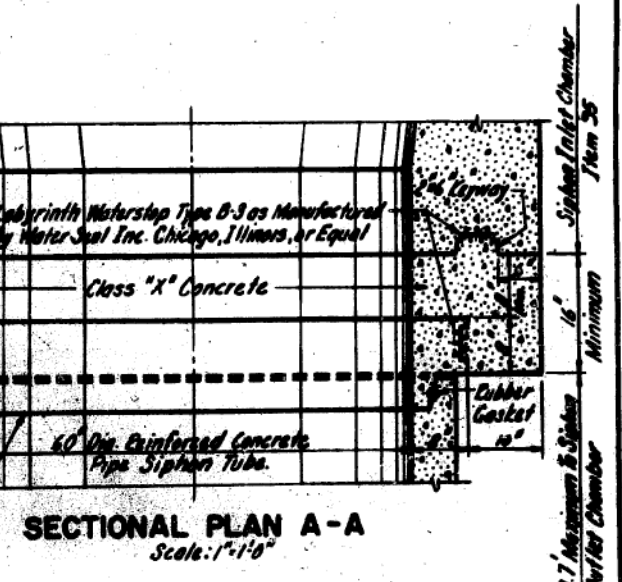
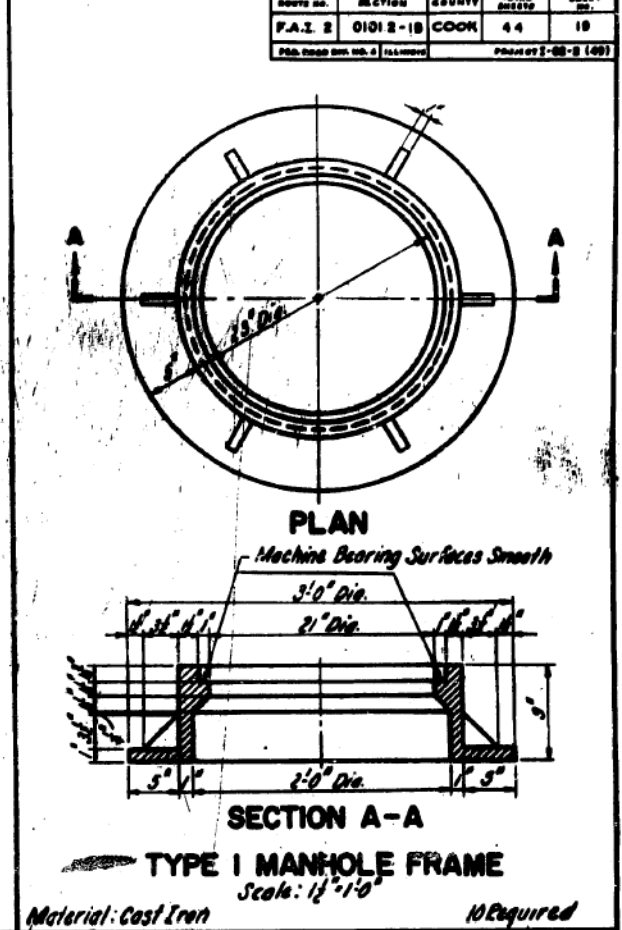
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Scale of Pricing: 1" = 1'-0"

Scale of Pricing: 1/2" = 1'-0"

Scale of Pricing: 1" = 1'-0"

REVISIONS	
DATE	DESCRIPTION



CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 SEWER PLANNING DIVISION
 NORTHWEST ROUTE SUPERHIGHWAY
 VAN BUREN ST BRIDGE - SECTION 01012-18
 SEWER SIPHON MISCELLANEOUS DETAILS
 SCALE: AS SHOWN
 DATE: APRIL 1997
 SHEET NO. 88-B OF 44 SHEETS



D162J31-SHT-Siphon-05.dgn
 USER NAME = mrc155
 PLOT SCALE = 100.0000 / in.
 PLOT DATE = 8/13/2019

DESIGNED -	REVISED -
DRAWN - NLD	REVISED -
CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

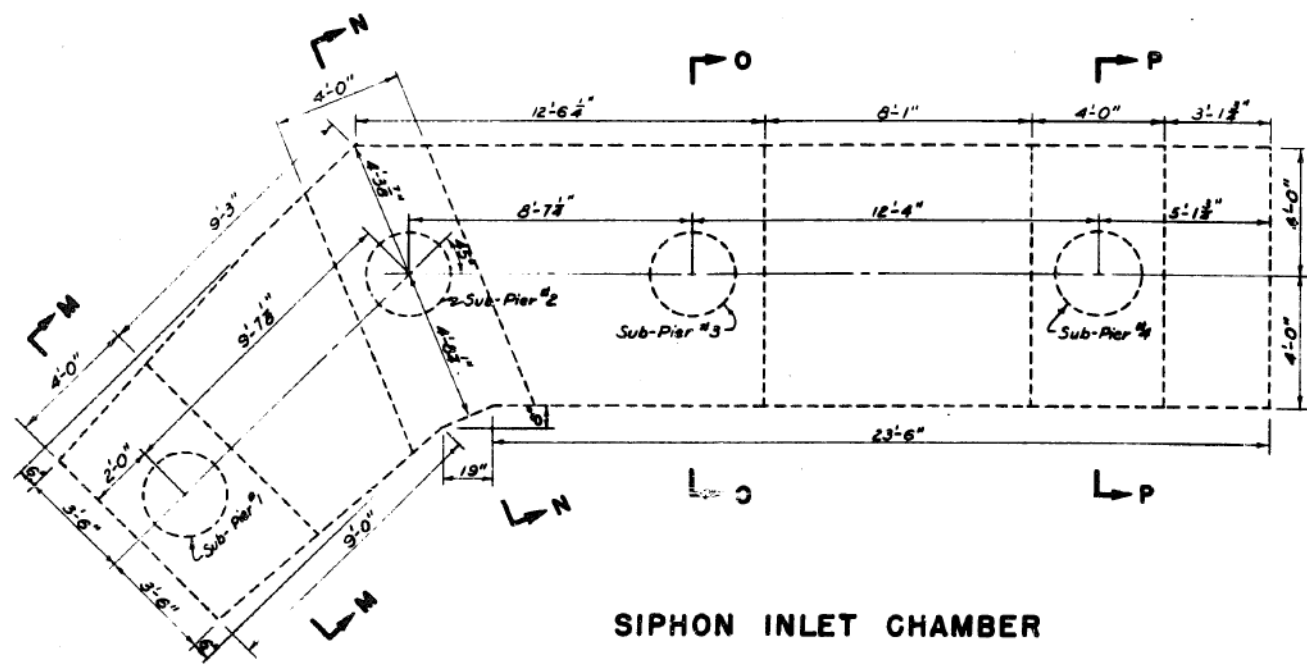
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING SIPHON PLANS
 VAN BUREN STREET

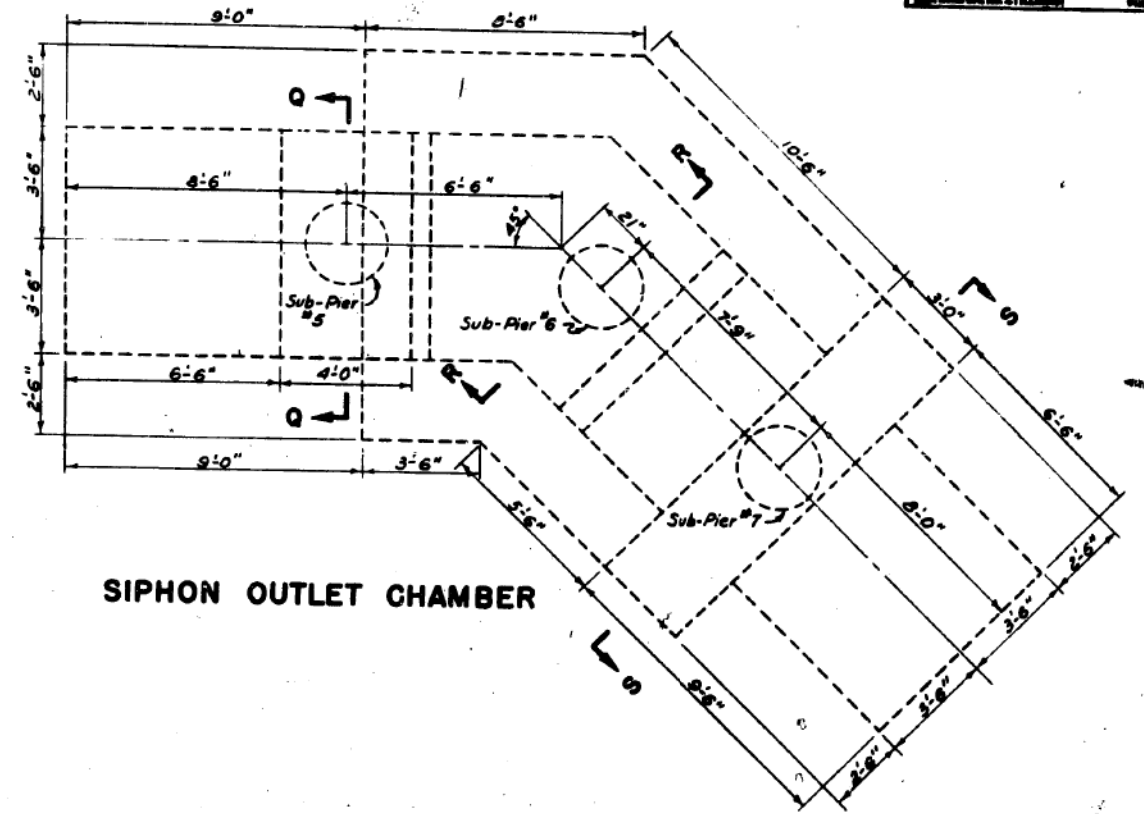
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 SHEET 5 OF 12 SHEETS
 STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	124
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT

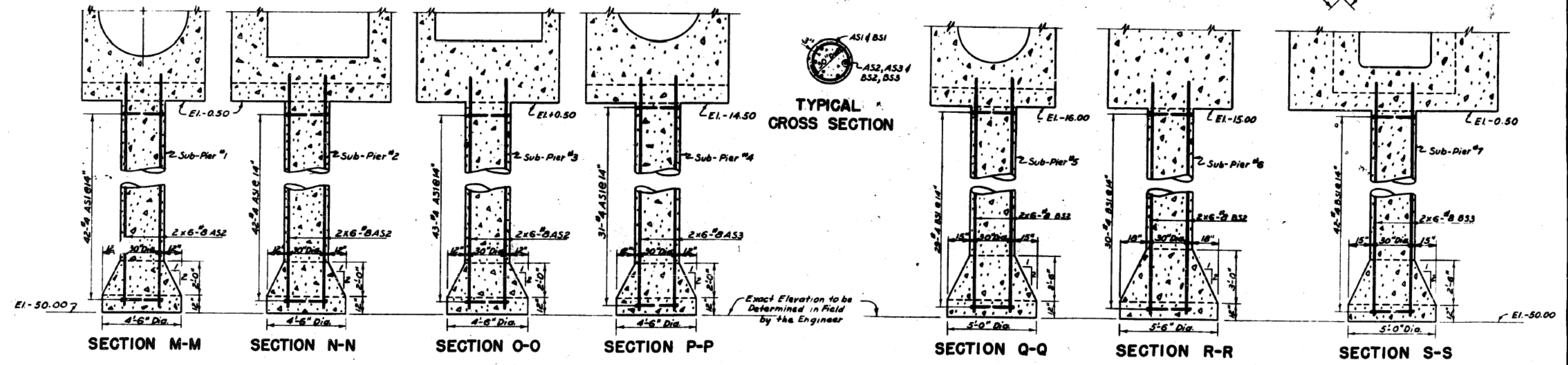
Project No.	Division	County	Sheet No.	Scale
F.A.I. 2	0102-1B	COOK	44	80
Date: August 20, 1957				Number: 1-01-2-49



SIPHON INLET CHAMBER



SIPHON OUTLET CHAMBER



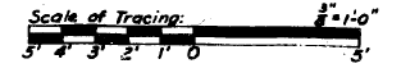
TYPICAL CROSS SECTION

General Notes:
 All Monolithic Concrete Work in this Contract is to be Carried Out in Accordance with the Rules Outlined Below:
 1. All Abbreviations are in Accordance with A.C.I. Standards;
 2. Concrete Protection for Reinforcement Shall be:
 At Interior Surfaces _____ 2 1/2"
 At Exterior Surfaces { Roof and Walls _____ 2"
 { Bottom Face of Floor _____ 3"
 3. All Laps in Continuous Reinforcement Shall be Not Less than 24 Diameters.
 4. Construction Joints May not be Changed Without the Approval of the Engineer.

Note:
 For Additional Details of the Siphon See Sheets No 557 to 5510
 For Bar List See Sheet No. 5510

DRAWN BY R. CORRADO
 TRACED BY H. ONO
 CHECKED BY G. RATHLING
 EXAMINED BY S. RATHLING
 Engineer of Sewer Structures

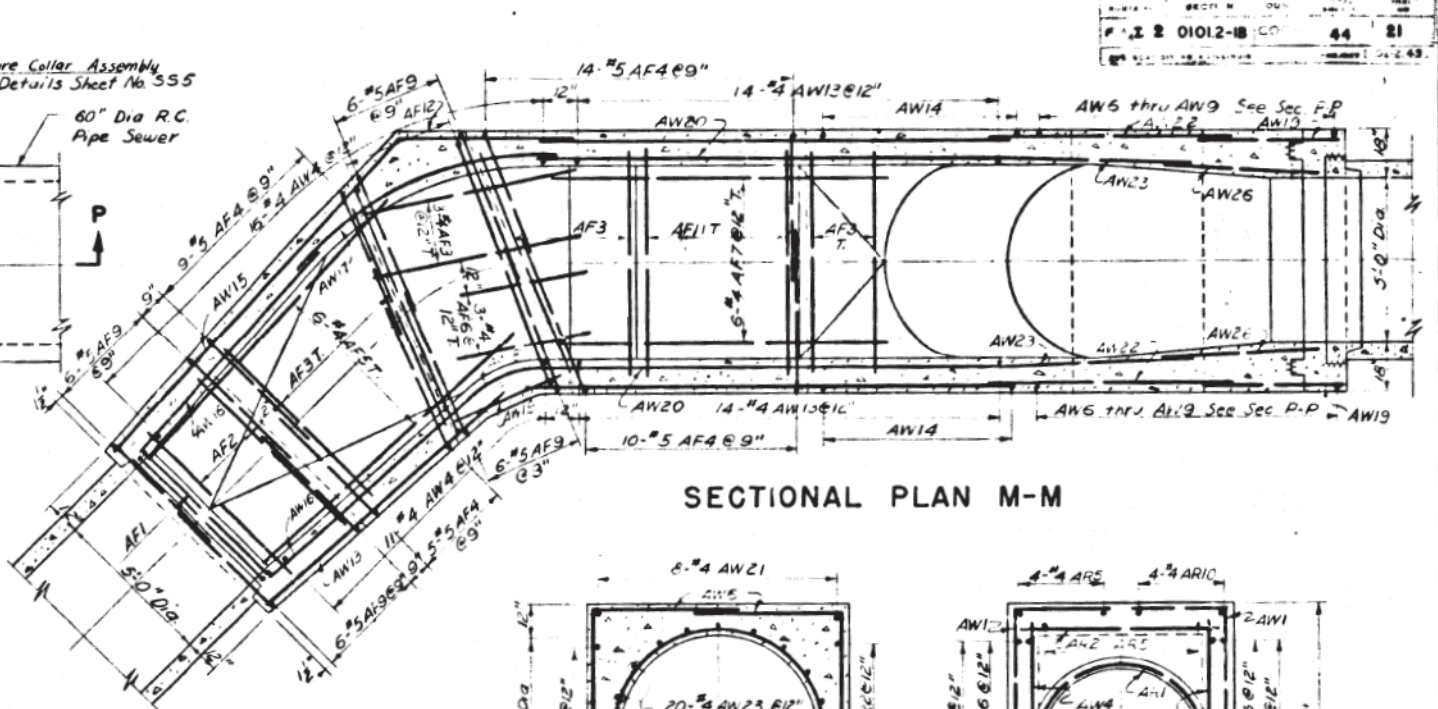
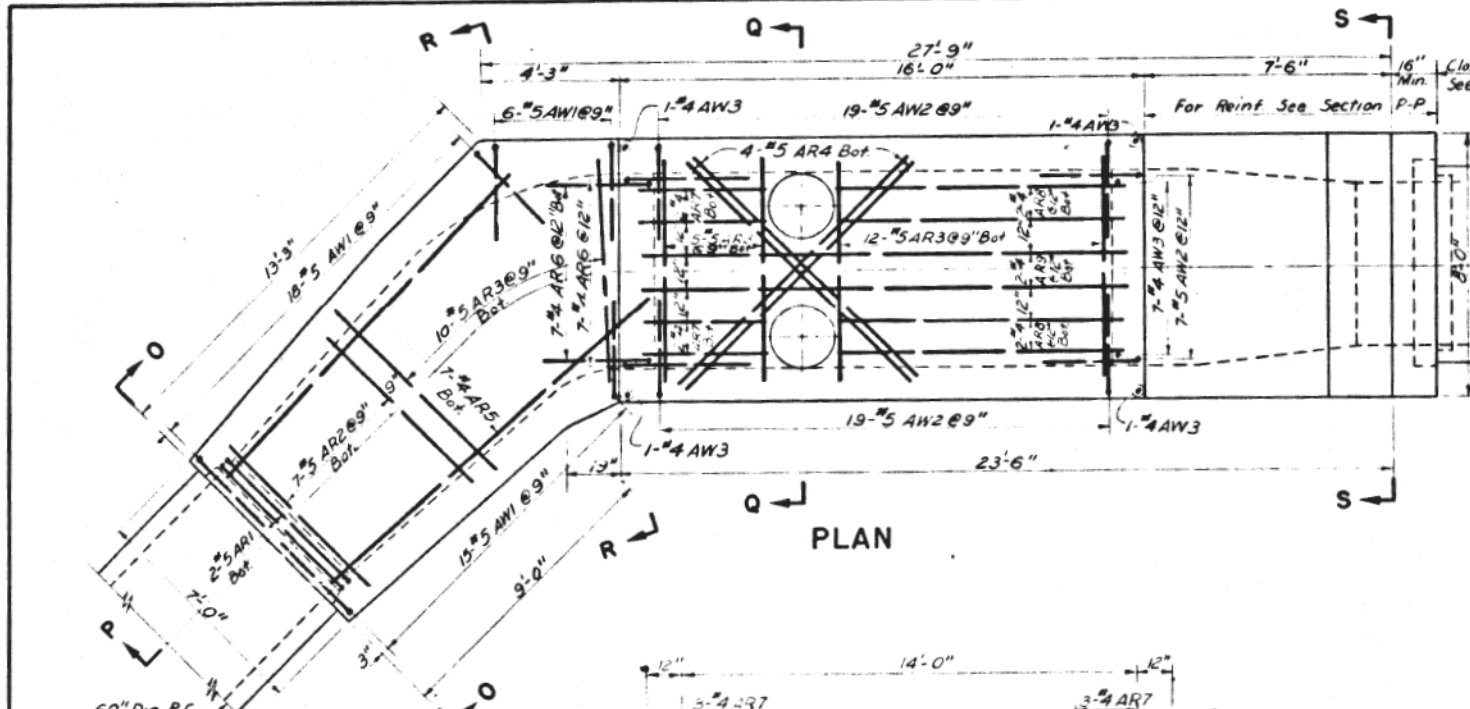
REVISIONS	
DATE	DESCRIPTION



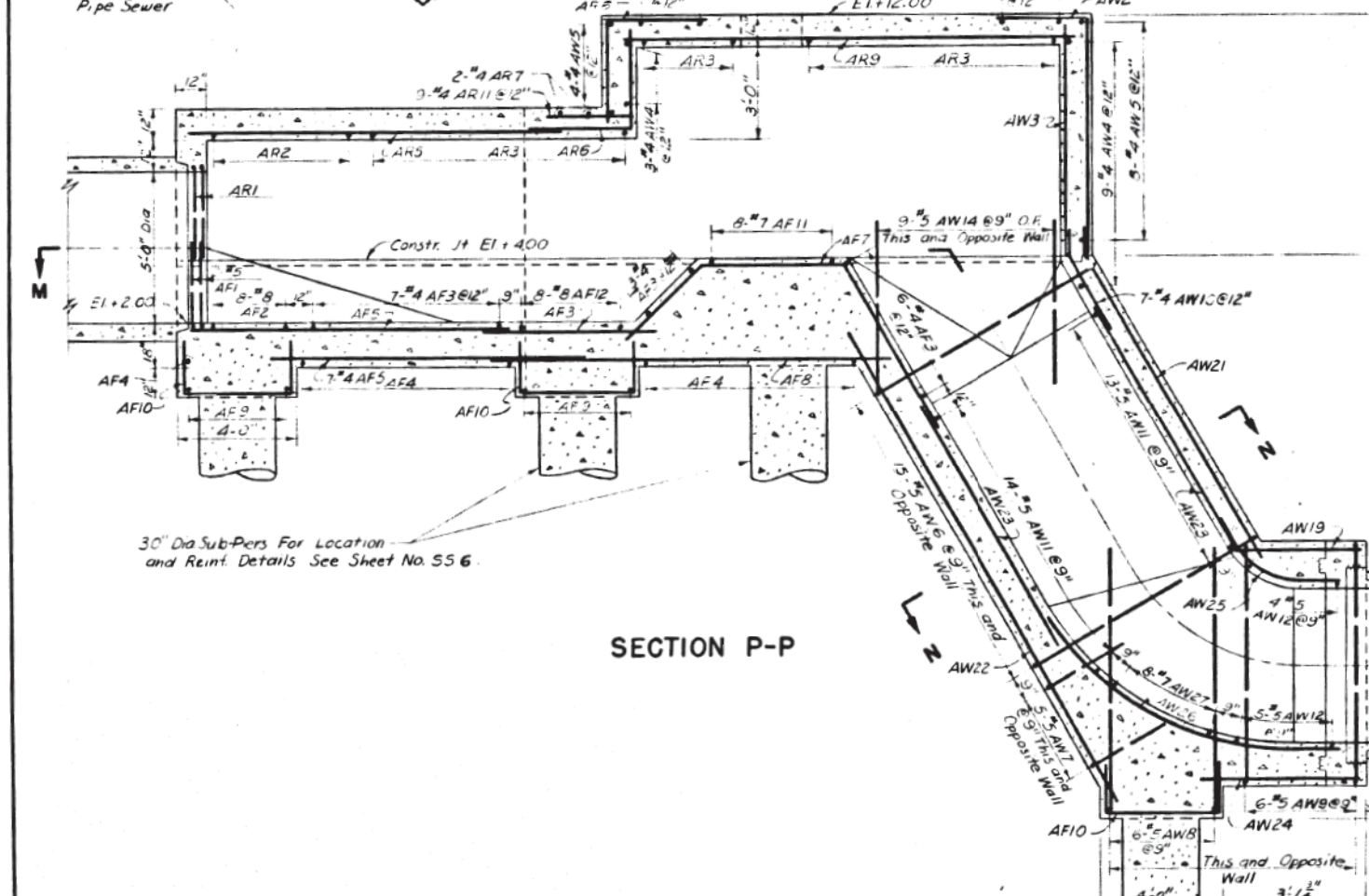
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 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 SEWER PLANNING DIVISION
NORTHWEST ROUTE SUPERHIGHWAY
VAN BUREN ST. BRIDGE - SECTION 0102-1B
INLET CHAMBER & OUTLET CHAMBER
SUB-PIER PLAN
 SCALE: AS SHOWN
 DATE: APRIL 1957 SHEET NO. 44 OF 44 SHEETS

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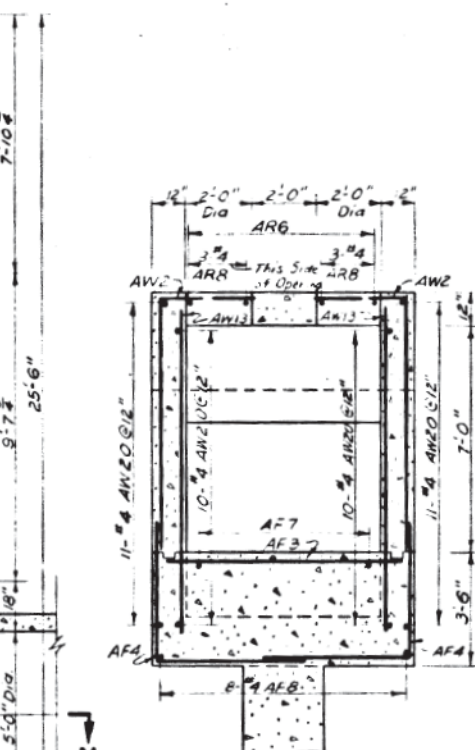
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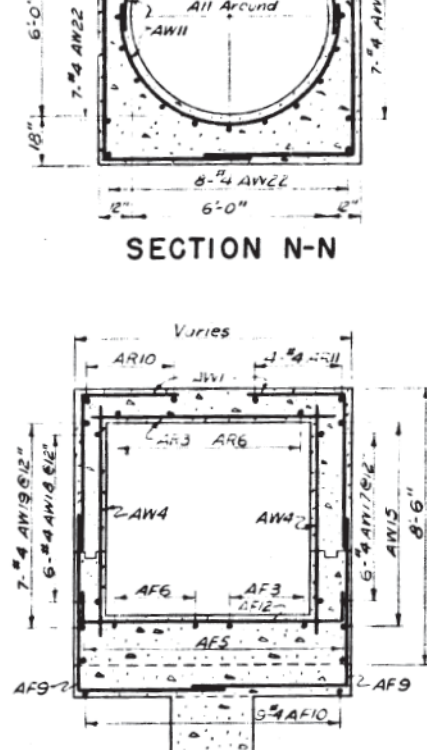
SECTIONAL PLAN M-M



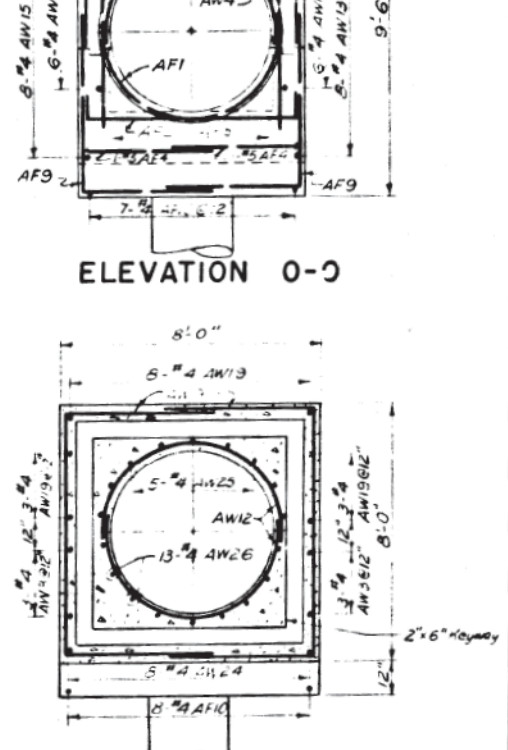
SECTION P-P



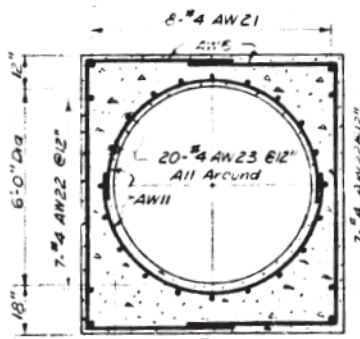
SECTION Q-Q



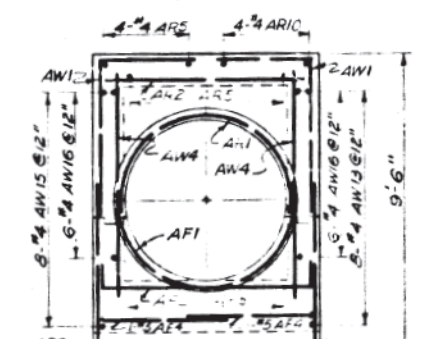
SECTION R-R



SECTION S-S



SECTION N-N



ELEVATION O-O

Note:
 For Additional Details of the Structure See Sheet No. 552
 For General Notes See Sheet No. 556
 For Bar List See Sheet No. 5510

DRAWN BY P. Corrado
 TRACED BY H. Cuo
 CHECKED BY G. Rathling
 EXAMINED BY S. Rathling
 Engineer of Sewer Structures



REVISIONS	
DATE	DESCRIPTION

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 SEWER PLANNING DIVISION
 NORTHWEST ROUTE SUPERHIGHWAY
 VAN BUREN ST. BRIDGE - SECTION 01012-IB
 SIPHON INLET CHAMBER
 REINFORCEMENT
 SCALE: AS SHOWN
 DATE: SHEET NO. SS-7 OF 44 SHEETS



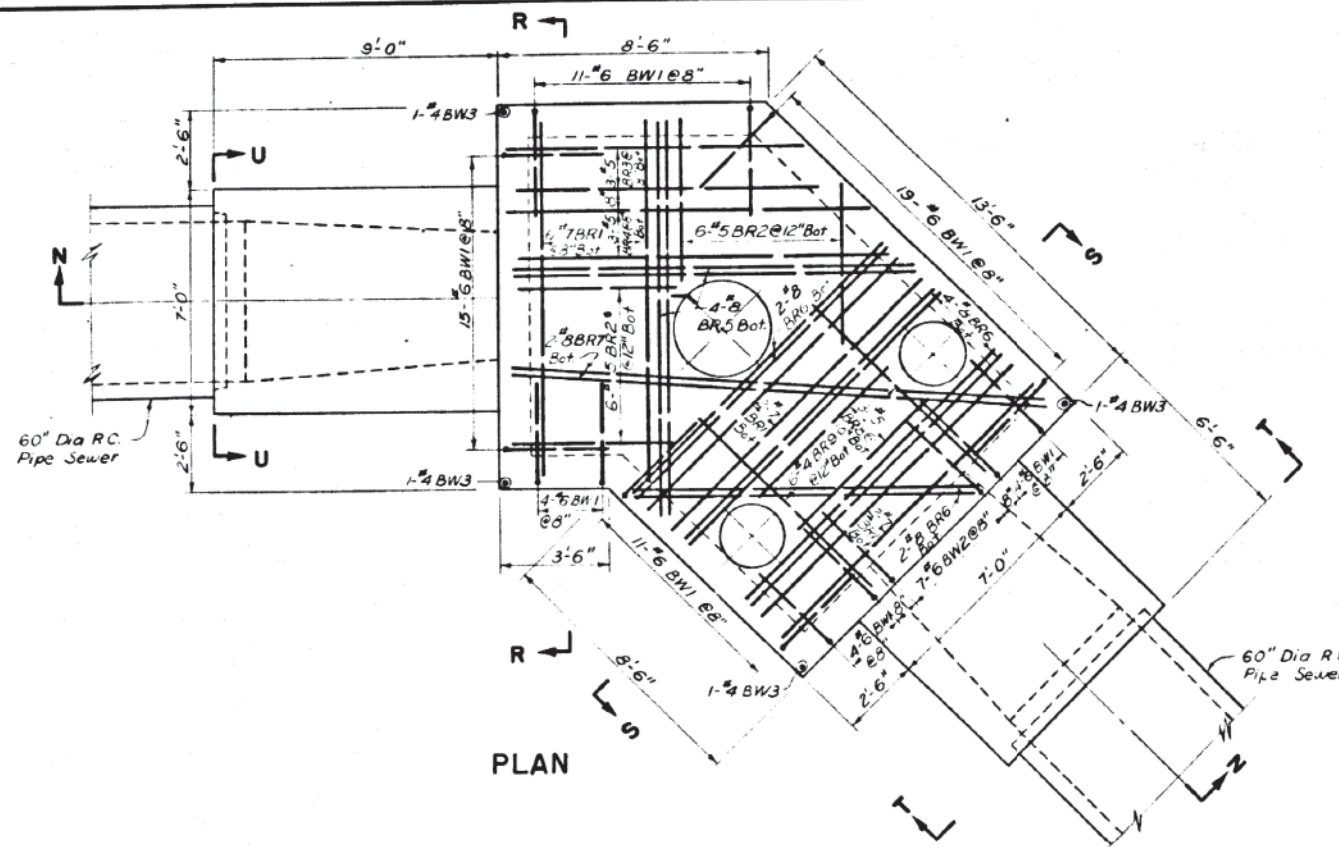
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PLOT SCALE = 100.0000' / 1"	CHECKED - JMG	REVISED -
PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

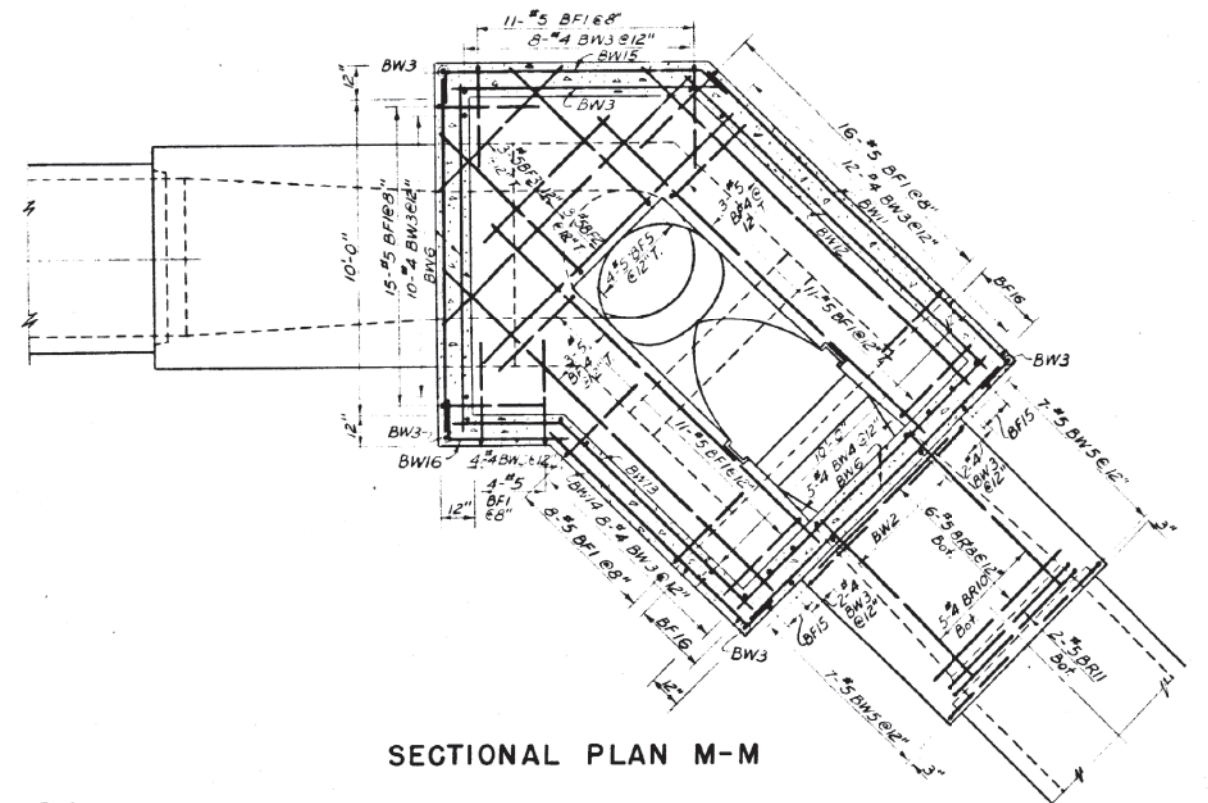
EXISTING SIPHON PLANS
 VAN BUREN STREET

SCALE: NONE SHEET 7 OF 12 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 126
ILLINOIS FED. AID PROJECT				CONTRACT NO. 62J31



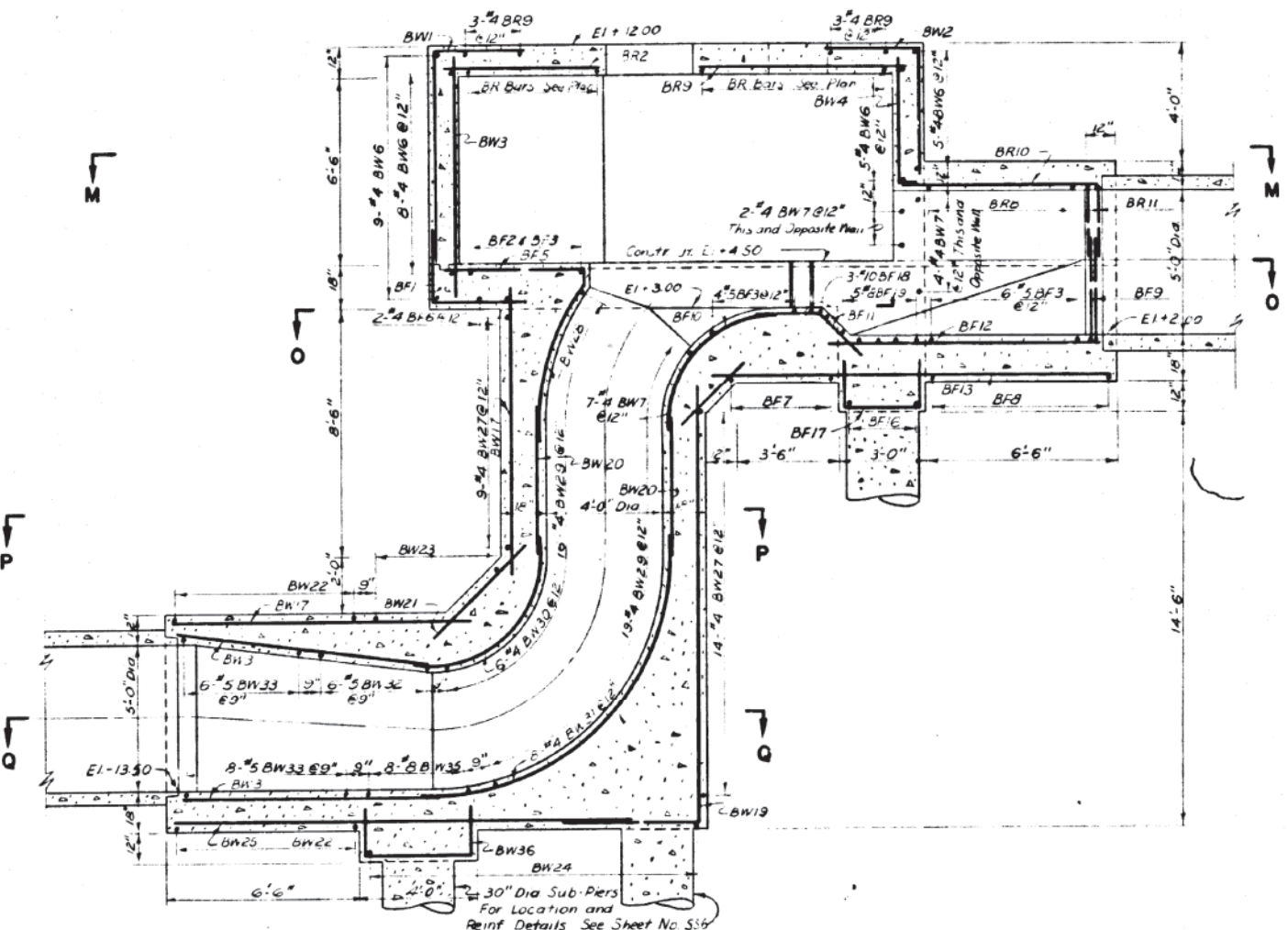
PLAN



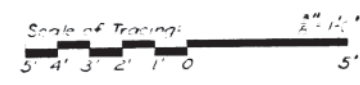
SECTIONAL PLAN M-M

DRAWN BY P. COLLARD
 TRACED BY H. QAO
 CHECKED BY S. FATHLINS
 EXAMINED BY S. RATHLING
 Engineer of Sewer Structures

Note:
 For Additional Details of the Structure See Sheets No. 553 & 554
 For General Notes See Sheet No. 556
 For Sections O-O Thru U-U See Sheet No. 559
 For Bar List See Sheet No. 5510



SECTION N-N



REVISIONS	
DATE	DESCRIPTION

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 SEWER PLANNING DIVISION
 NORTHWEST ROUTE SUPERHIGHWAY
 VAN BUREN ST BRIDGE - SECTION 01012-1B
 SIPHON OUTLET CHAMBER
 REINFORCEMENT
 SCALE: AS SHOWN
 DATE: SHEET NO 55-8 OF 44 SHEETS

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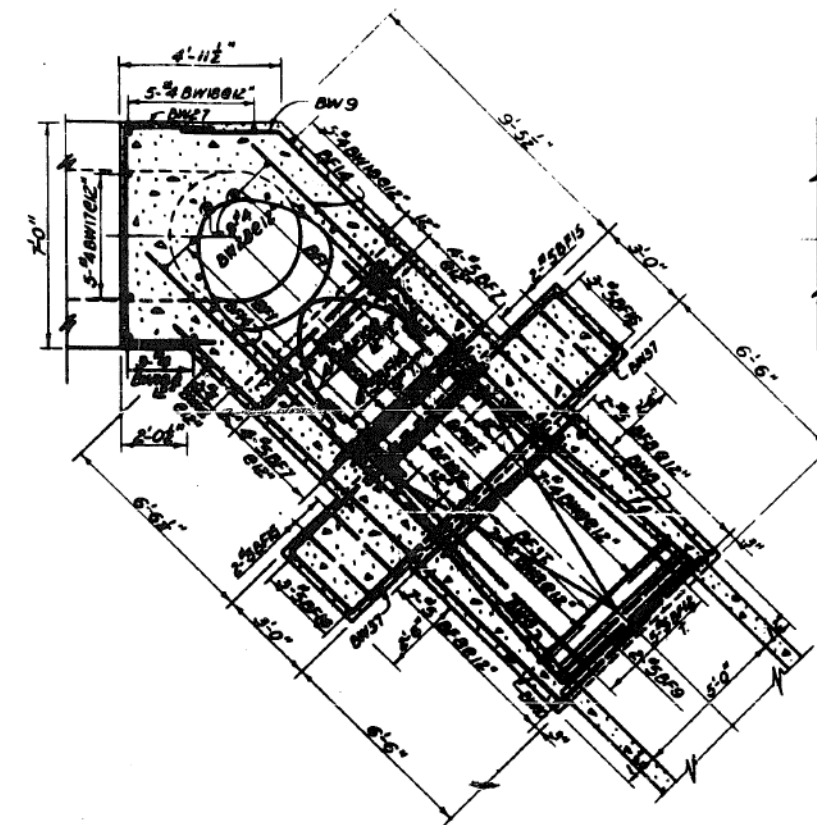
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CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

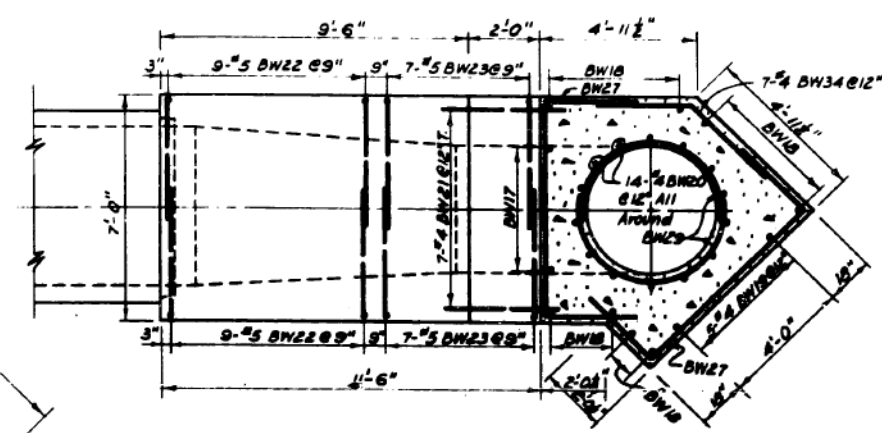
EXISTING SIPHON PLANS	
VAN BUREN STREET	
SCALE: NONE	SHEET 8 OF 12 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 127
ILLINOIS FED. AID PROJECT				CONTRACT NO. 62J31

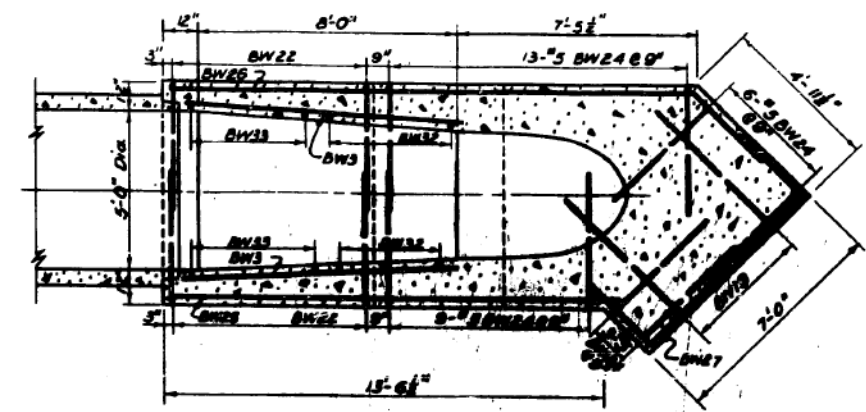
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R.A.I. 2 01012-1B	COOK	44	23
F.A.I. R.T.E. 90/94/290		SECTION 2019-054-1	
COUNTY		TOTAL SHEETS	SHEET NO.
COOK		400	128
CONTRACT NO. 62J31			



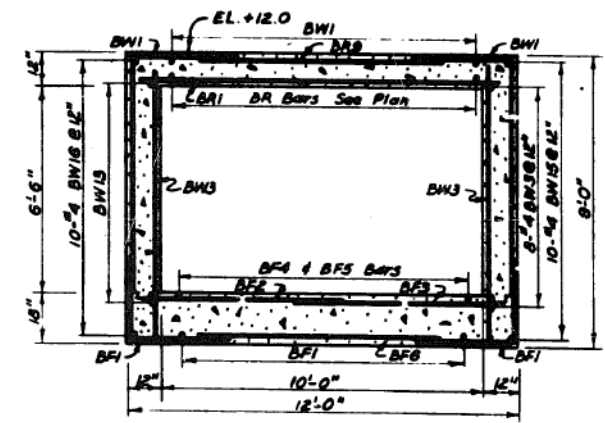
SECTIONAL PLAN O-O



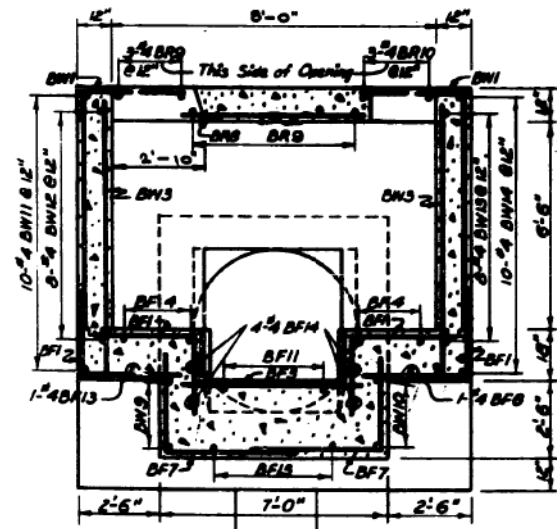
SECTIONAL PLAN P-P



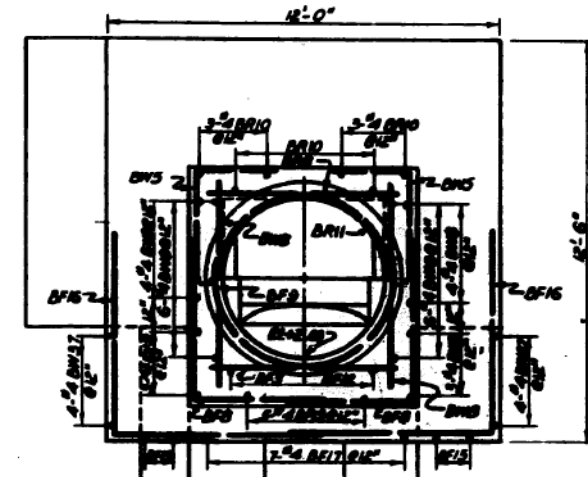
SECTIONAL PLAN Q-Q



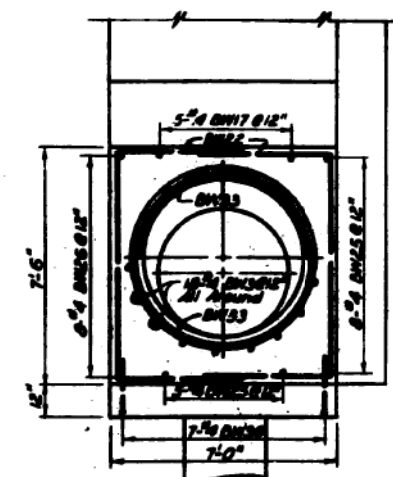
SECTION R-R



SECTION S-S



ELEVATION T-T



ELEVATION U-U

DRAWN BY R. Carrada
 TRACED BY H. Oda
 CHECKED BY G. RATNICK
 EXAMINED BY J. Ratnack
 Engineer of Sewer Structures

Note:
 For Location of Sections O-O Thru U-U and
 Additional Notes See Sheet No. 55D



REVISIONS	
NO.	DESCRIPTION

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 SEWER PLANNING DIVISION
 NORTHWEST ROUTE SUPERHIGHWAY
 VAN BUREN ST BRIDGE - SECTION 01012-1B
 SIPHON OUTLET CHAMBER
 REINFORCEMENT
 SCALE: AS SHOWN
 DATE: APRIL 1967 SHEET NO. 88-9 OF 44 SHEETS



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 PLOT SCALE = 100.0000 / 1 in.
 PLOT DATE = 8/13/2019

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CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

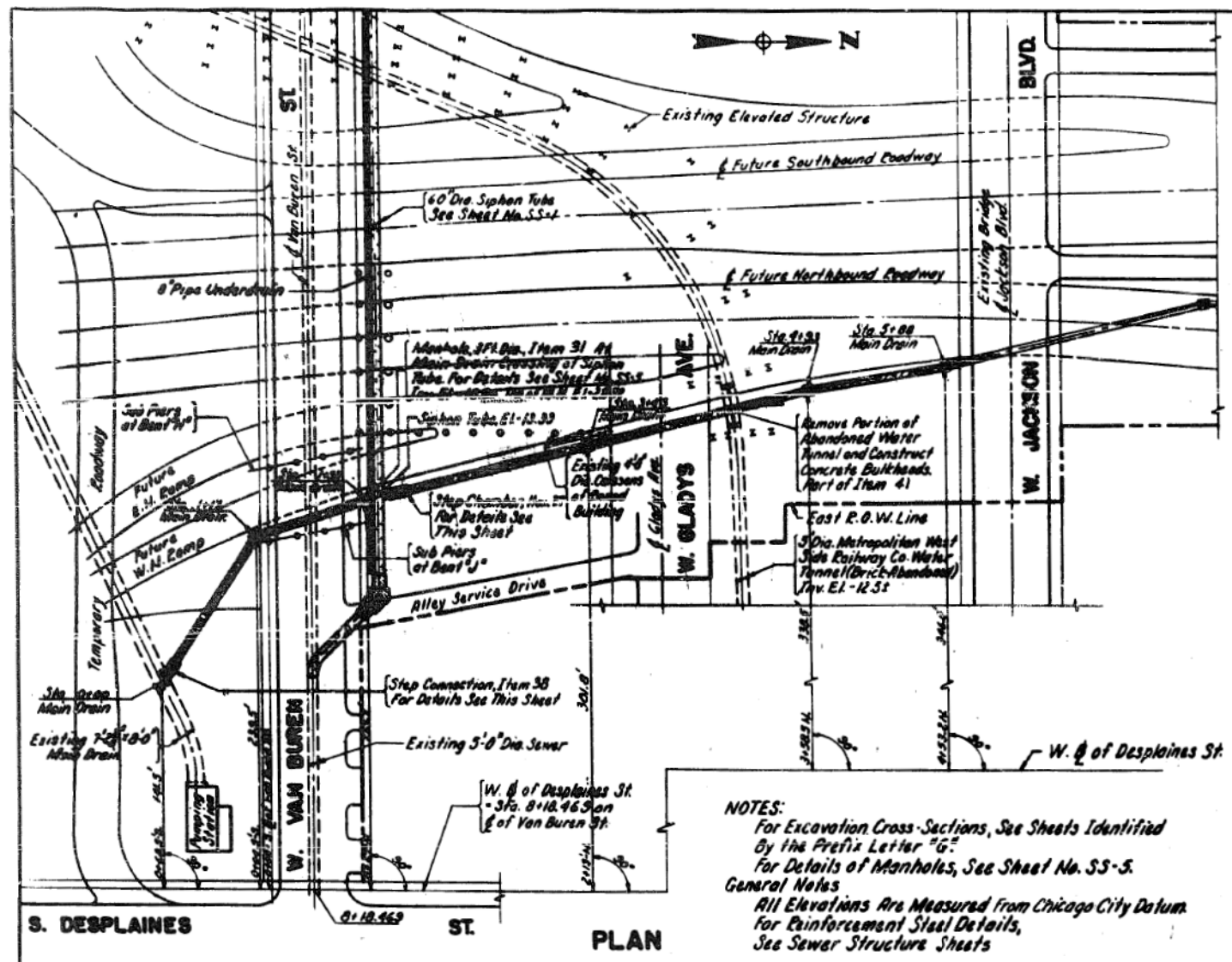
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING SIPHON PLANS
 VAN BUREN STREET

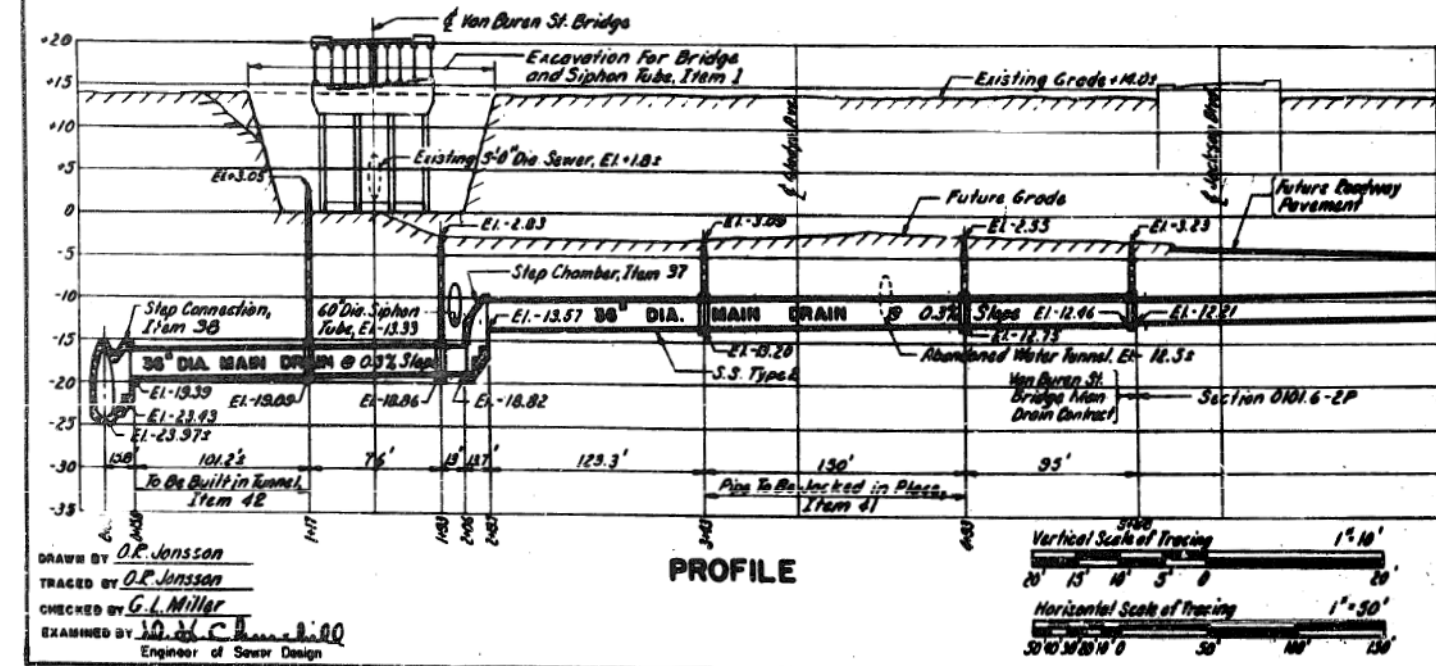
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F.A.I. R.T.E. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 128
ILLINOIS FED. AID PROJECT				

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.L. 2	DIOL 2	COOK	44	22

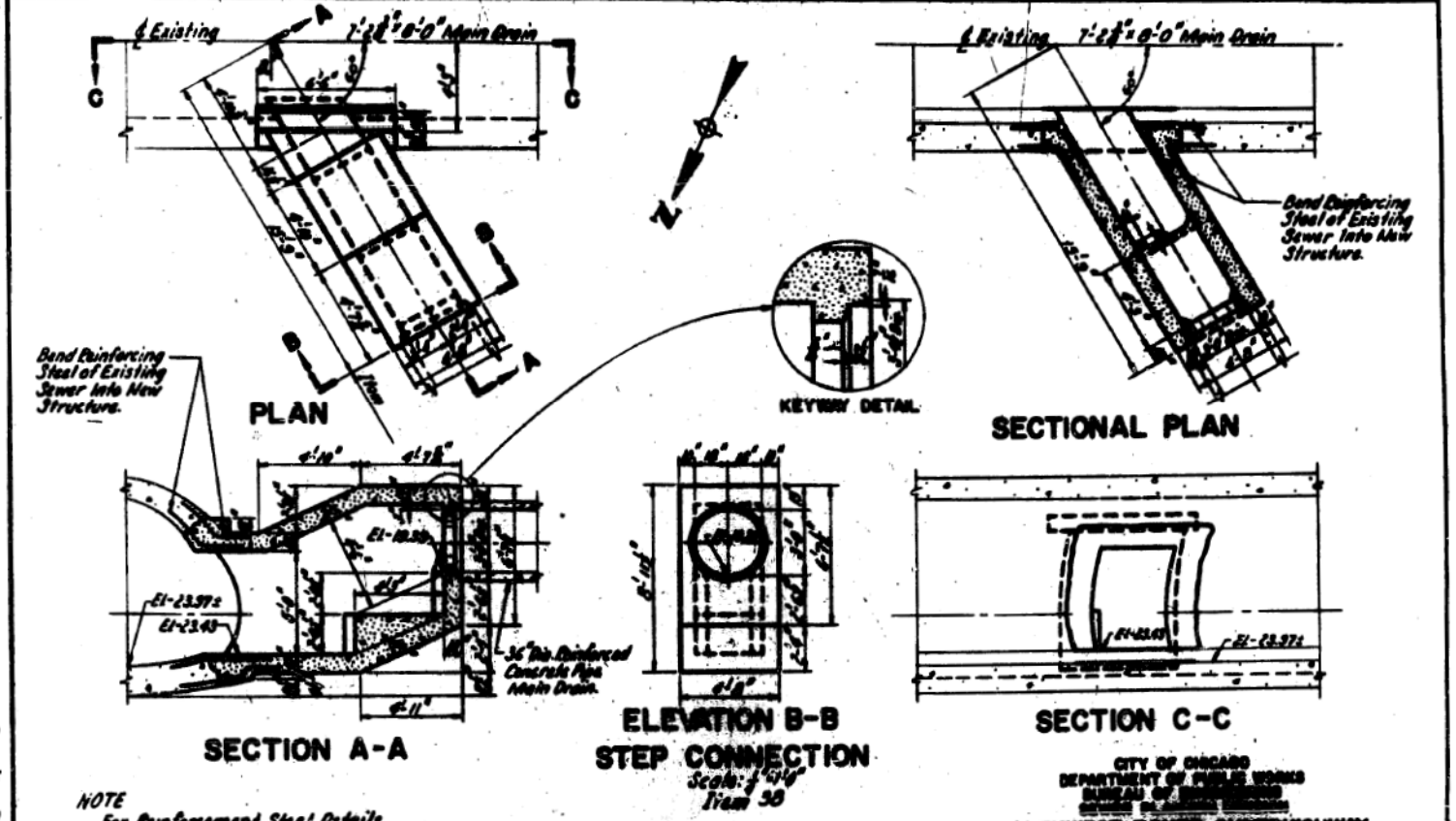
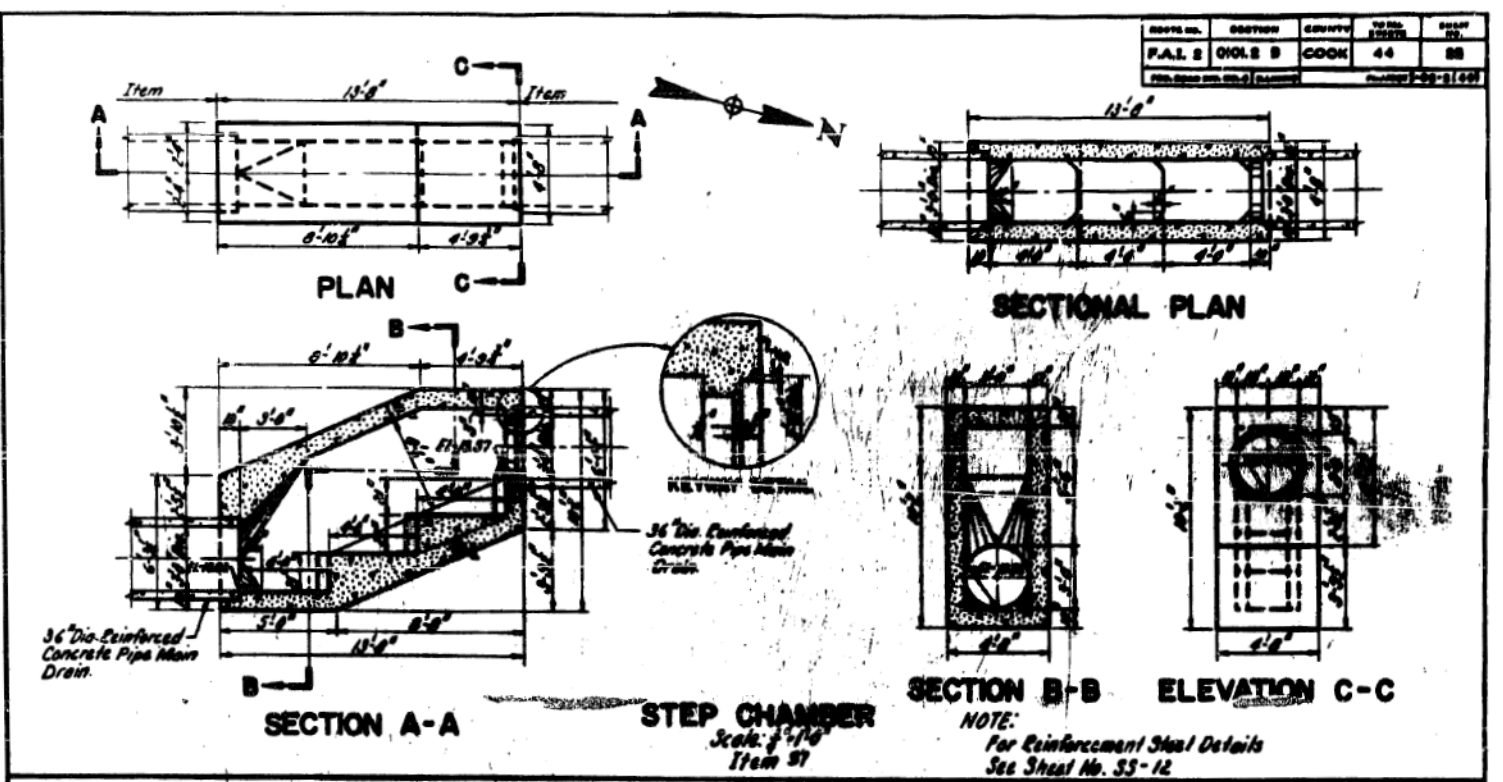


NOTES:
 For Excavation Cross Sections, See Sheets Identified by the Prefix Letter "G"
 For Details of Manholes, See Sheet No. SS-5.
 General Notes
 All Elevations Are Measured from Chicago City Datum
 For Reinforcement Steel Details, See Sewer Structure Sheets



Vertical Scale of Tracing 1" = 10'
 Horizontal Scale of Tracing 1" = 50'

DRAWN BY: D.R. Jonsson
 TRACED BY: D.R. Jonsson
 CHECKED BY: G.L. Miller
 EXAMINED BY: J.D. C. [Signature]
 Engineer of Sewer Design



NOTE:
 For Reinforcement Steel Details See Sheet No. SS-12

Scale of Tracing 1" = 10'
 5' 4' 3' 2' 1' 0'

REVISIONS	
DATE	DESCRIPTION

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 NORTHWEST ROUTE SUPERHIGHWAY
 VAN BUREN ST. BRIDGE - SECTION DIOL2-1B
**MAIN DRAIN
 PLAN & PROFILE AND
 CONNECTING STRUCTURES**
 SCALE: AS SHOWN
 DATE: APRIL 1967
 SHEET NO. 22-11 OF 44 SHEETS

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D162J31-SHT-Siphon-11.dgn
 USER NAME = mrc155
 PLOT SCALE = 100.0000 / in.
 PLOT DATE = 8/13/2019

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 DRAWN - NLD
 CHECKED - JMG
 DATE - 8/16/2019

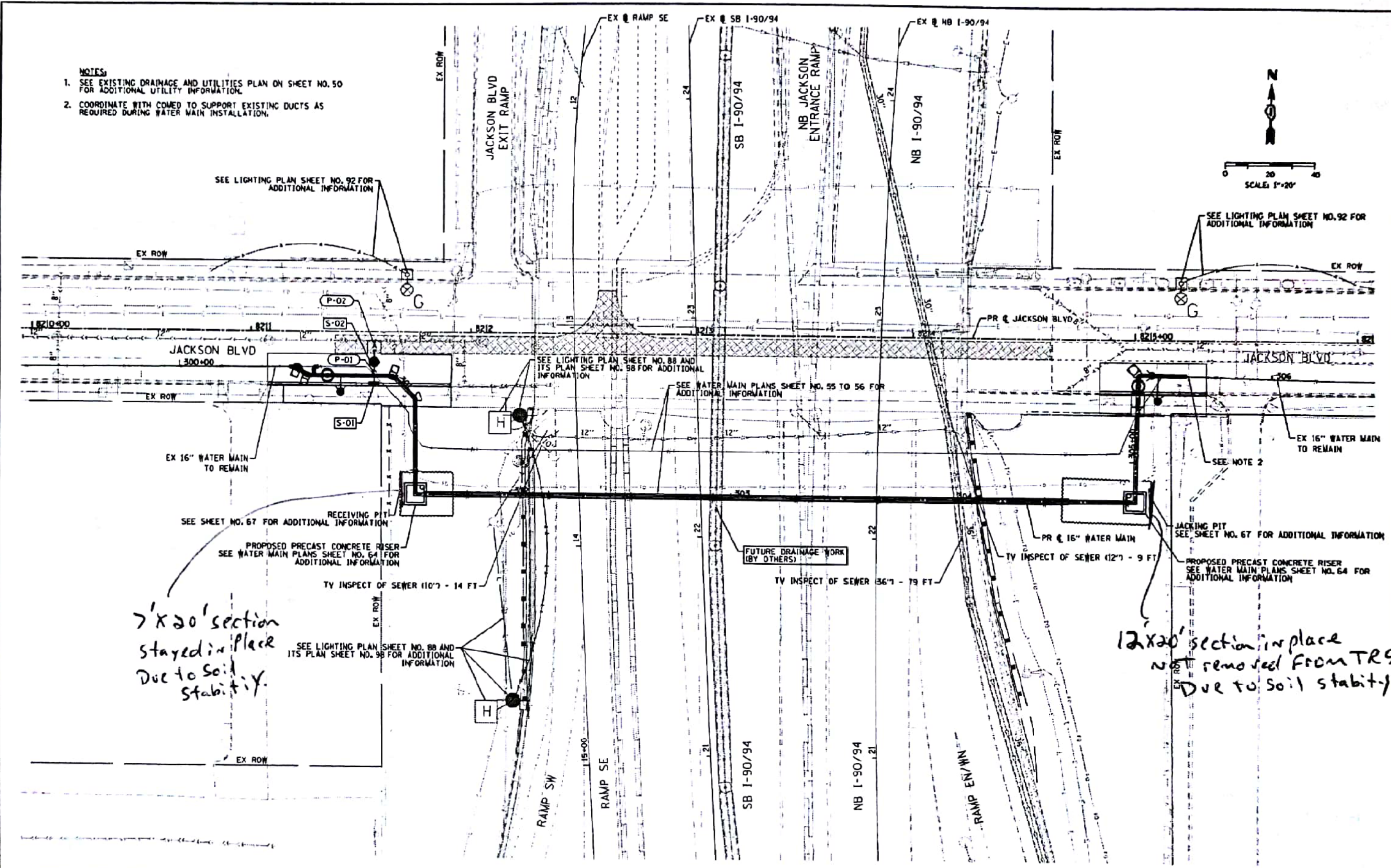
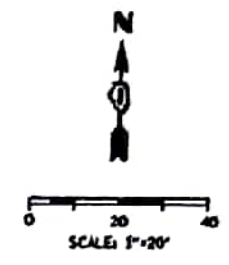
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING SIPHON PLANS
 VAN BUREN STREET

SCALE: NONE SHEET 11 OF 12 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	130
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT

- NOTES:**
1. SEE EXISTING DRAINAGE AND UTILITIES PLAN ON SHEET NO. 50 FOR ADDITIONAL UTILITY INFORMATION.
 2. COORDINATE WITH COMED TO SUPPORT EXISTING DUCTS AS REQUIRED DURING WATER MAIN INSTALLATION.



7'x20' section stayed in place due to soil stability.

12'x20' section in place not removed from TRS due to soil stability.



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DRAWN - AFC	REVISED -
CHECKED - WJE	REVISED -
DATE - 03/21/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED DRAINAGE AND UTILITIES PLAN
JACKSON BOULEVARD
SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-021-1	COOK	193	51
CONTRACT NO. 62AT5				



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DRAWN - NLD	REVISED -
CHECKED - JMG	REVISED -
DATE - 8/13/2019	REVISED -

DESIGNED -	REVISED -
DRAWN - NLD	REVISED -
CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS
JACKSON BOULEVARD
SCALE: NONE SHEET 1 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	132
CONTRACT NO. 62J31				

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WATER MAIN GENERAL NOTES:



1. LOCATION OF UTILITIES AND PROPERTY LINES ARE FROM THE BEST INFORMATION AVAILABLE. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES WITH THE UTILITY OWNERS PRIOR TO DOING ANY WORK IN THE VICINITY. THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF UTILITY OWNERS REGARDING NOTICE OF WORK AND PROTECTION OF UTILITIES. THE CONTRACTOR SHALL COMPLY WITH THE CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION DAMAGE PREVENTION PROTOCOL CITY INFRASTRUCTURE DEPARTMENTS. ALL UTILITIES SHALL BE NOTIFIED AT LEAST 48 HOURS BEFORE CONSTRUCTION. (CALL DIGGER 312-744-7000)
3. IF ANY PUBLIC OR PRIVATE UTILITIES CROSS THE WATER MAIN TRENCH AND SHALL REMAIN IN PLACE, THE CONTRACTOR SHALL PROTECT SAID UTILITY IN CONFORMANCE WITH THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
4. TEST PITS SHALL BE EXCAVATED IN ADVANCE OF PIPELINE CONSTRUCTION IN ORDER TO CONFIRM DEPTH AND LOCATION OF EXISTING UTILITIES AND WHEN DIRECTED BY THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR TEST PIT EXCAVATION.
5. WORK INDICATED ON THE PLANS AND NOT REFERENCED TO A BID ITEM SHALL BE CONSIDERED INCLUDED WITHIN THE BID ITEM TO THE WORK TO WHICH IT APPLIES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
6. WATER MAIN AND FITTINGS LOCATIONS SHOWN ON THE DRAWINGS FOR THE NEW WATER MAINS AND APPURTENANCES MAY BE CHANGED BY THE ENGINEER DUE TO FIELD CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR SUCH CHANGES, UNLESS PREVIOUSLY APPROVED BY THE ENGINEER.
7. THE OPERATION OF ALL VALVES REQUIRED FOR SHUTDOWN SHALL BE PERFORMED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT (CDWM) FORCES PURSUANT TO A 72 HOUR ADVANCE NOTIFICATION TO THE DEPARTMENT. ANY VALVE FOUND NOT OPERABLE WILL BE REPAIRED OR REPLACED BY CDWM.
8. REMOVE AND PROPERLY DISPOSE OF ALL WATER ENTERING ANY EXCAVATION INCLUDING LEAKAGE FROM EXISTING WATER MAINS. ALL EXCAVATIONS ASSOCIATED WITH THE WATER MAIN WORK SHALL BE KEPT DRY.
9. ALL OPENINGS IN EXISTING WATER MAINS SHALL BE PLUGGED OR CAPPED WITH DUCTILE IRON FITTINGS UNTIL THE MAIN IS ABANDONED OR RECONNECTED.
10. ALL VALVE BASINS SHALL BE CONSTRUCTED OF PRE-CAST REINFORCED CONCRETE UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
11. NOTES INDICATING S.N.L., E.W.L., ETC. MEAN SOUTH OF THE NORTH PROPERTY LINE, EAST OF THE WEST PROPERTY LINE, ETC. AND ARE MEASURED FROM THE NEAREST STREET.
12. IF A STANDARD MECHANICAL JOINT SLEEVE DOES NOT FIT TO MAKE CONNECTION OF THE NEW PIPE TO THE EXISTING PIPE, A TRANSITION SLEEVE MUST BE USED. NO GRINDING OF THE EXISTING PIPE IS PERMITTED.
13. ALL PIPE AND FITTINGS SHALL BE RESTRAINED MECHANICAL JOINT.
14. USE FILLER PIECES OF PIPE TO FILL THE AREA BETWEEN PIPE ENDS WHEN INSTALLING SLEEVE FITTINGS.
15. ON CONNECTIONS TO EXISTING CAST IRON PIPES, USE CAUTION WHEN INSTALLING MJ SLEEVES. SET SCREW TYPE RESTRAINT GLANDS (E.G. RETAINER GLANDS) ARE NOT ACCEPTABLE. CONSULT THE SPECIAL PROVISIONS FOR JOINT RESTRAINT REQUIREMENTS.

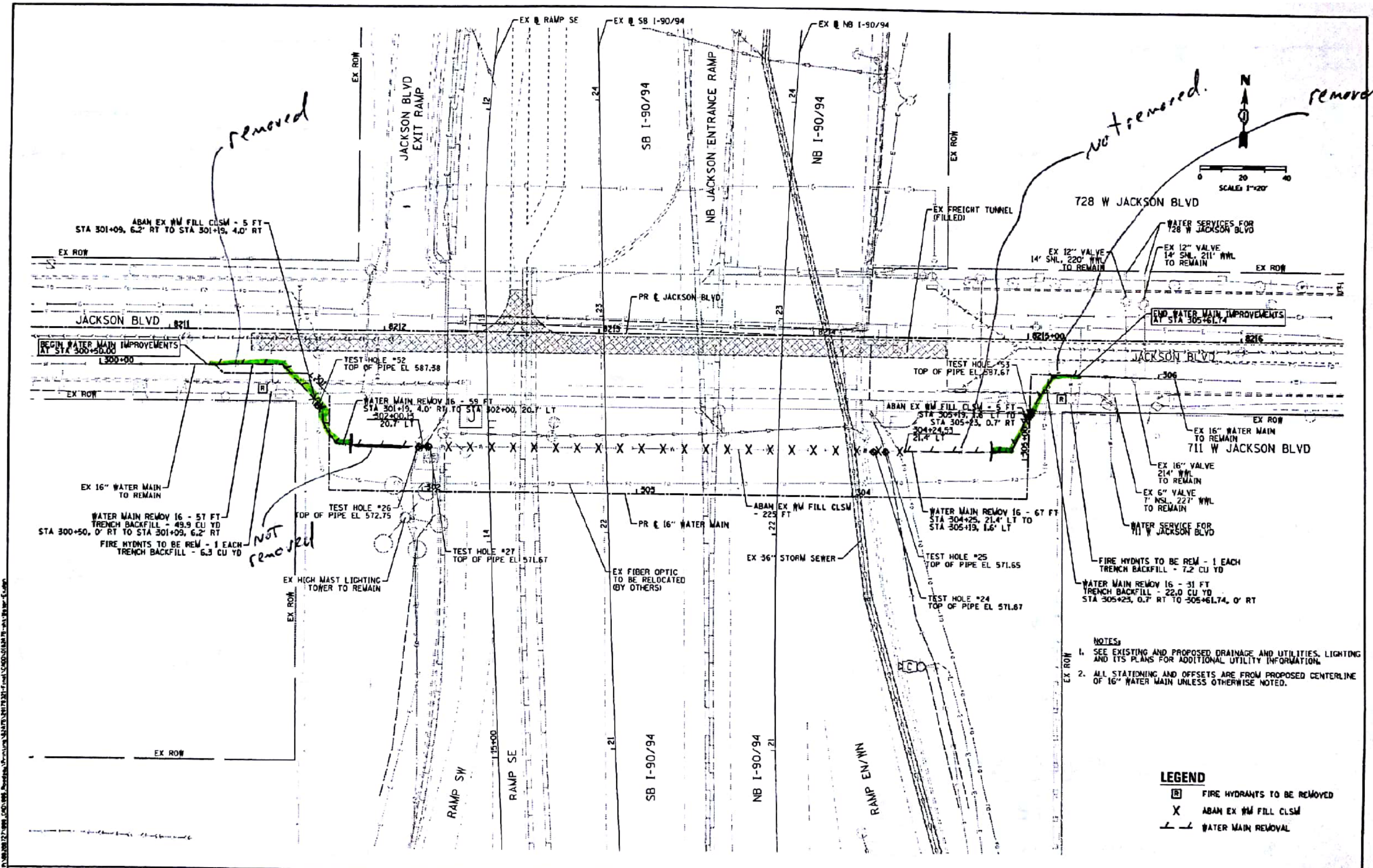
16. SWAB ALL PIPE AND FITTINGS WITH CHLORINE SOLUTION DURING INSTALLATION AND USE EXTRA PRECAUTION TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE. COMPLY WITH ALL STANDARDS AND REQUIREMENTS OF THE CDWM BUREAU OF WATER QUALITY. (312) 744-8190.
17. DE-CHLORINATION OF HEAVILY CHLORINATED WATER IS REQUIRED. THE CONTRACTOR OR SUBCONTRACTED CHLORINATOR SHALL DE-CHLORINATE AS LISTED FOR "INFORMATIONAL PURPOSES ONLY" IN APPENDIX C OF THE ANSI/AWWA STANDARD C-651-05, JUNE 1, 2005. THE CHLORINE LEVEL SHALL BE BROUGHT TO POTABLE WATER LEVELS.
18. ELEVATIONS ARE SHOWN IN THE CITY OF CHICAGO DATUM AND NAVD 88. THE CONVERSION FACTOR FROM CCD TO NAVD88 IS: NAVD 88 ELEVATION = CCD + 579.19.
19. CONTRACTOR SHALL CONSTRUCT THE IMPROVEMENTS ONLY WITHIN THE RIGHT-OF-WAY OR PERMANENT EASEMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO PRIVATE PROPERTY AND SHALL REPAIR SAID DAMAGE AT OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.
20. ALL HORIZONTAL AND VERTICAL BENDS, TEES, VALVES AND OTHER FITTINGS MUST BE RECORDED ON THE AS-BUILTS PREPARED BY THE CONTRACTOR AND SUBMITTED TO CDWM. LOCATIONS SHALL BE REFERENCED FROM THE RIGHT-OF-WAY LINES MEASURED FROM THE NEAREST STREETS.
21. THERE ARE SEVERAL VALVE BASIN FRAMES AND COVERS AND WATER SHUT-OFF/VALVE BOXES WITHIN THE PROPOSED IMPROVEMENT LIMITS. IT IS REQUESTED THAT ANY VERTICAL ADJUSTMENT THAT MAY BE REQUIRED TO THESE FACILITIES BE INCORPORATED INTO THE CONTRACT PLANS AND SPECIFICATIONS, AND THAT THE WORK BE PERFORMED BY IDOT'S CONTRACTOR. ADDITIONALLY, ALL CURB INSTALLATION ADJACENT TO FIRE HYDRANTS MUST BE PAINTED 'SAFETY YELLOW' FOR 15 FEET ON EACH SIDE OF THE FIRE HYDRANT EXCEPT WHERE THE 15 FOOT DIMENSION INTERSECT A CROSSWALK, DRIVEWAY OR SIMILAR FEATURE. IT IS ALSO REQUESTED THAT THE FINAL PAYMENT TO THE CONTRACTOR BE WITHHELD UNTIL THE DEPARTMENT OF WATER MANAGEMENT HAS INSPECTED AND FOUND THE ADJUSTED FACILITIES ACCEPTABLE. PLEASE CONTACT MR. ALBERT WTORKOWSKI OF THE DEPARTMENT OF WATER MANAGEMENT AT aworkowski@cityofchicago.org OR BY PHONE AT (312) 744-5070 IN ORDER TO SCHEDULE THE FINAL INSPECTION OF ANY ADJUSTED WATER FACILITIES.
22. A REPRESENTATIVE OF THE DWM MUST BE ON SITE DURING EXCAVATION AROUND THE EXISTING 16-INCH WATER MAIN AS WELL AS THE CONSTRUCTION OF THE PROPOSED 16-INCH WATER MAIN. CONTACT JOHN BARBARO AT JOHN.BARBARO@CDWRWATER.NE.I TWO WEEKS PRIOR TO THE ANTICIPATED CONSTRUCTION DATE SO A DWM REPRESENTATIVE CAN BE ASSIGNED TO THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT MAY RESULT IN ADDITIONAL EXPENSES TO THE PROPOSED PROJECT TO VERIFY THAT ALL WORK CONFORMS TO DWM'S STANDARDS.
23. DWM REQUIRES 5 FEET OF COVER ON ALL PROPOSED WATER MAINS WHERE POSSIBLE. INSULATION MAY BE REQUIRED IN AREAS WHERE MINIMUM COVER CANNOT BE MET.
24. WATER MAIN CONTROL VALVE-48 INCH BUTTERFLY VALVE SHALL BE AN ADVANCE PROCUREMENT FOR CONTRACT 62A74. SEE SPECIAL PROVISIONS AND SHEET NO. 63 FOR ADDITIONAL INFORMATION.

TOTAL BILL OF MATERIALS:

TRENCH BACKFILL	CU YD	207,6
CONCRETE STRUCTURES	CU YD	12
REINFORCEMENT BARS, EPOXY COATED	POUND	10890
DRILLED SHAFT IN SOIL	CU YD	56
DUCTILE IRON WATER MAIN, MECHANICAL JOINT 8"	FOOT	20
DUCTILE IRON WATER MAIN, MECHANICAL JOINT 16"	FOOT	271
WATER MAIN CONTROL VALVE-16 INCH	EACH	2
FIRE HYDRANTS TO BE REMOVED	EACH	2
FIRE HYDRANTS	EACH	2
PRECAST CONCRETE RISER	EACH	2
SLOPE INCLINOMETER	EACH	2
STEEL CASING PIPE AUGERED AND JACKED 30"	FOOT	291
CITY OF CHICAGO DEPARTMENT OF WATER MANAGEMENT ENGINEERING SERVICES	L SUM	1
CONCRETE REMOVAL (SPECIAL)	CU YD	20
ABANDON EXISTING WATER MAIN, FILL WITH CLSM	FOOT	235
WATER MAIN REMOVAL, 16"	FOOT	214
DUCTILE IRON WATER MAIN, MECHANICAL JOINT 16" IN CASING	FOOT	291
WATER MAIN CONTROL VALVE-48 INCH BUTTERFLY VALVE	EACH	1

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PLOT SCALE = 48.0000' / 1" =	CHECKED - MJE	REVISED -	CONTRACT NO. 62A75							
PLOT DATE = 3/20/2017	DATE - 03/21/2017	REVISED -	ILLINOIS FED. AID PROJECT							
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.										
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	USER NAME = mrc155	DRAWN - NLD	REVISED -			90/94/290	2019-054-I	COOK	400	133
PLOT SCALE = 100.0000' / 1" =	CHECKED - JMG	REVISED -	CONTRACT NO. 62J31							
PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -	ILLINOIS FED. AID PROJECT							
SCALE: NONE SHEET 2 OF 17 SHEETS STA. TO STA.										



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CHECKED - WJE	REVISED -
DATE - 03/21/2017	REVISED -

DESIGNED - RDB	REVISED -
DRAWN - AFC	REVISED -
CHECKED - WJE	REVISED -
DATE - 03/21/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLAN
JACKSON BOULEVARD

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-021-1	COOK	193	98
CONTRACT NO. 62J31				



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DRAWN - NLD	REVISED -
CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

DESIGNED -	REVISED -
DRAWN - NLD	REVISED -
CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS
JACKSON BOULEVARD

SCALE: NONE SHEET 3 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	134
CONTRACT NO. 62J31				

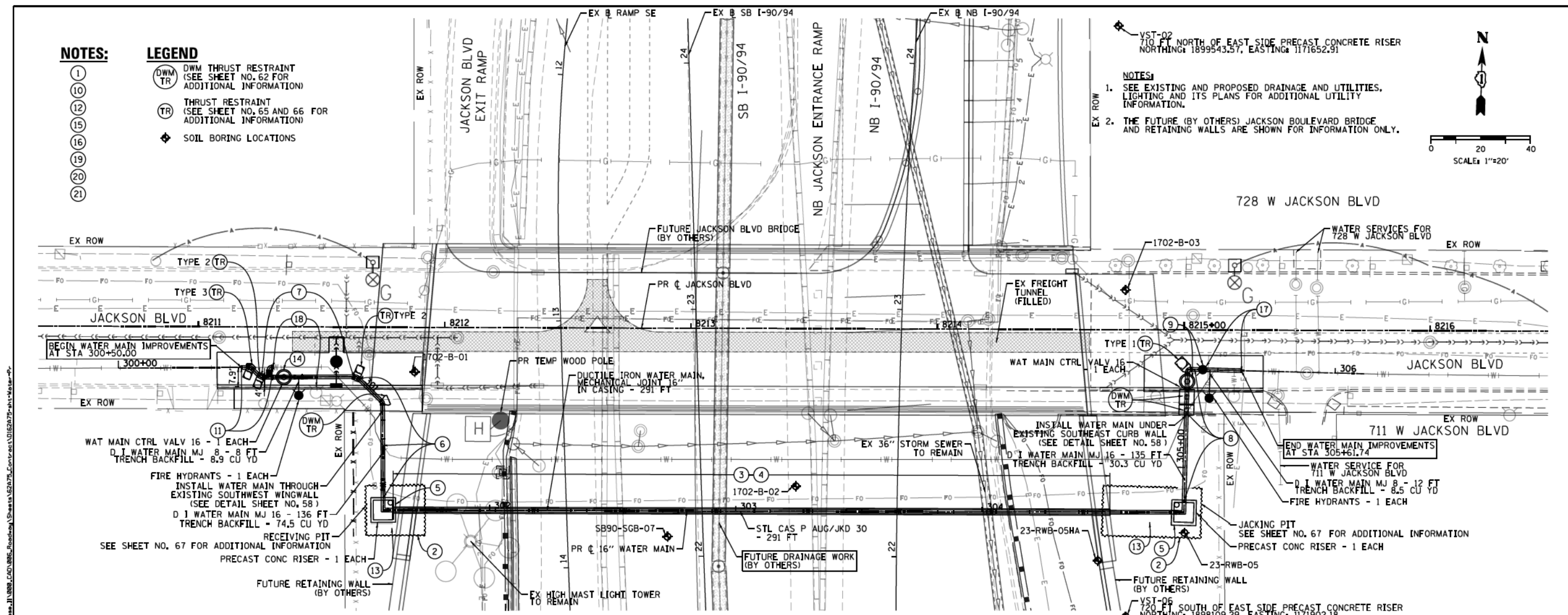
ILLINOIS FED. AID PROJECT

NOTES:

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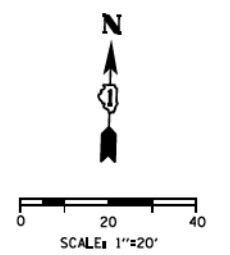
LEGEND

- (DWM TR) DWM THRUST RESTRAINT (SEE SHEET NO. 62 FOR ADDITIONAL INFORMATION)
- (TR) THRUST RESTRAINT (SEE SHEET NO. 65 AND 66 FOR ADDITIONAL INFORMATION)
- ◆ SOIL BORING LOCATIONS



VST-02
710 FT NORTH OF EAST SIDE PRECAST CONCRETE RISER
NORTHING: 1899543.57, EASTING: 1171652.91

- NOTES:**
- SEE EXISTING AND PROPOSED DRAINAGE AND UTILITIES, LIGHTING AND ITS PLANS FOR ADDITIONAL UTILITY INFORMATION.
 - THE FUTURE (BY OTHERS) JACKSON BOULEVARD BRIDGE AND RETAINING WALLS ARE SHOWN FOR INFORMATION ONLY.



CONSTRUCTION SEQUENCING NOTES:

- THE EXISTING 16" WATER MAIN CROSSING MUST BE KEPT IN SERVICE DURING CONSTRUCTION OF THE NEW 16" WATER MAIN CROSSING IN ORDER TO MAINTAIN THE WATER SUPPLY FROM EITHER DIRECTION TO THE DUAL WATER SERVICES FOR THE BUILDING LOCATED AT 728 W JACKSON BLVD. INTERRUPTIONS TO SERVICE SHALL ONLY BE PERMITTED FOR THE CONNECTION WORK SEQUENCES AS DESCRIBED BELOW. THE CONTRACTOR SHALL LIMIT THE SERVICE INTERRUPTIONS TO THE SPECIFIED TIME PERIODS. IF THE WORK CANNOT BE COMPLETED WITHIN THE SPECIFIED TIME PERIOD, THE CONTRACTOR SHALL WORK CONTINUOUSLY FOR AS LONG AS NECESSARY TO COMPLETE THE WORK AND RESTORE THE WATER SUPPLY TO THE SATISFACTION OF CDWM.
- INSTALL EXCAVATION AREAS ON THE EAST AND WEST SIDES REQUIRED FOR AUGERING AND JACKING OF THE CASING PIPE AND FOR CONSTRUCTION OF THE RISER SHAFTS. PROTECT THE EXISTING ADJACENT 16" WATER MAIN SO IT IS NOT DAMAGED DURING CONSTRUCTION.
- INSTALL 291-30" STEEL CASING PIPE BETWEEN STATIONS 301+61 AND 304+52.
- INSTALL 16" WATER MAIN IN CASING PIPE USING CASING SPACERS.
- CONSTRUCT BASE AND WALLS OF NEW PRE-CAST RISER SHAFTS. SEE SHEET NO. 64. INSTALL 16" PIPE AND FITTINGS AS SHOWN IN THE RISER SHAFTS. RESTRAIN TOP AND BOTTOM BASE BENDS. CONNECT RISER PIPING TO 16" WATER MAIN IN CASING PIPE WITH 16" PIPE AND 1-16" MJ SLEEVE AT EACH LOCATION. INSTALL ROOF SLAB.
- INSTALL 16" PIPE AS SHOWN FROM THE RISER SHAFT TO THE NORTH AND WEST IN JACKSON BLVD. INSTALL 2-16" X 1/8 BENDS AT APPROXIMATELY STATIONS 300+98 AND 301+13. THE CONTRACTOR SHALL CONFIRM THE ACTUAL ELEVATION IN THE FIELD OF THE EXISTING WATER MAIN WHERE IT CROSSES THE PROPOSED WATER MAIN. THE ELEVATION OF THE PROPOSED WATER MAIN SHALL BE ADJUSTED AS NECESSARY TO CROSS OVER OR UNDER THE EXISTING WATER MAIN TO MAINTAIN A MINIMUM OF 5' OF COVER ON THE PROPOSED WATER MAIN. INSTALL ADDITIONAL BENDS AS REQUIRED TO ADJUST THE HORIZONTAL AND VERTICAL ALIGNMENT. SUPPORT AND PROTECT THE EXISTING WATER MAIN WHEN CROSSING UNDERNEATH WITH THE PROPOSED WATER MAIN. CORE THROUGH EXISTING WING WALL TO FACILITATE PIPE ROUTING (SEE DETAIL ON SHEET NO. 58). BUILD THRUST RESTRAINT.
- INSTALL 16" PIPE AS SHOWN TO THE WEST IN JACKSON BLVD. INSTALL 1-16" X 8" MJ TEE, 8" MJ PIPE AND FIRE HYDRANT. INSTALL 1-16" MJ GATE VALVE AND 2-2" TEST TAPS AT STA 300+69. BUILD VALVE BASIN (SEE DETAILS). INSTALL 1-16" X 16" MJ TEE AT STA 300+63 FOR TEMPORARY CONNECTION TO EXISTING 16" WATER MAIN. INSTALL 1-16" X 1/8 MJ BEND AT STA 300+59 FOR PERMANENT CONNECTION. BUILD THRUST RESTRAINTS.
- INSTALL 16" PIPE AS SHOWN FROM THE RISER SHAFT TO THE NORTH AND EAST IN JACKSON BLVD. INSTALL 1-16" X 1/4 BEND AT APPROXIMATELY STATION 305+40. THE CONTRACTOR SHALL CONFIRM THE ACTUAL ELEVATION IN THE FIELD OF THE EXISTING WATER MAIN WHERE IT CROSSES THE PROPOSED WATER MAIN. THE ELEVATION OF THE PROPOSED WATER MAIN SHALL BE ADJUSTED AS NECESSARY TO CROSS OVER OR UNDER THE EXISTING WATER MAIN TO MAINTAIN A MINIMUM OF 5' OF COVER ON THE PROPOSED WATER MAIN. INSTALL 2-16" X 1/16 MJ BEND AT STA 305+23 AND 305+29 TO ADJUST VERTICAL ALIGNMENT. INSTALL ADDITIONAL BENDS AS REQUIRED TO ADJUST THE HORIZONTAL AND VERTICAL ALIGNMENT. SUPPORT AND PROTECT THE EXISTING WATER MAIN WHEN CROSSING UNDERNEATH WITH THE PROPOSED WATER MAIN. BUILD THRUST RESTRAINTS.
- INSTALL 1-16" GATE VALVE AND 2-2" TEST TAPS AT STA 305+35. INSTALL TEMPORARY FLUSHING HYDRANT AT END OF PIPE AND BRACE. BUILD VALVE BASIN (SEE DETAILS).
- CONTACT CHICAGO DEPARTMENT OF WATER MANAGEMENT (CDWM) TO ARRANGE FOR THE SHUTDOWN OF THE EXISTING 16" WATER MAIN (312-744-5070). NOTE: THERE ARE ACTIVE WATER SERVICES ON THE SECTION OF WATER MAIN TO BE SHUTDOWN. THE CONNECTION WORK DESCRIBED IN THE FOLLOWING NOTE MUST BE COMPLETED WITHIN 4 HOURS OF THE SHUTDOWN.
- CUT OUT AND REMOVE SECTION OF EXISTING 16" WATER MAIN. MAKE PERMANENT CONNECTION TO EXISTING 16" PIPE WITH 16" PIPE, 1-16" X 1/8 BEND AND 1-16" MJ SLEEVE OR TRANSITION SLEEVE IF REQUIRED. MAKE TEMPORARY CONNECTION TO EXISTING 16" WATER MAIN CROSSING WITH 16" PIPE, 1-16" X 1/4 BEND AND 1-16" MJ SLEEVE OR TRANSITION SLEEVE IF REQUIRED AND TEMPORARILY BRACE.
- CONTACT CHICAGO DEPARTMENT OF WATER MANAGEMENT (CDWM) TO ARRANGE FOR OPENING CLOSED VALVES TO FILL, FLUSH AND RESTORE SERVICE TO THE EXISTING 16" WATER MAIN (312-744-5070).
- BEFORE THE NEW 16" WATER MAIN CAN BE FILLED, FLUSHED, AND PRESSURE TESTED, THE EXCAVATION AREA MUST BE BACKFILLED AROUND THE RISER SHAFT AND ALL PIPE STRUCTURAL RESTRAINT SYSTEMS MUST BE IN PLACE.
- SLOWLY OPEN NEW 16" MJ GATE VALVE (NOTE 7) AND THOROUGHLY FLUSH THE NEW 16" WATER MAIN FROM WEST TO EAST TO REMOVE ALL AIR.
- PRESSURE TEST AND DISINFECT THE NEW 16" WATER MAIN IN ACCORDANCE WITH CDWM REQUIREMENTS AND THE CONTRACT DOCUMENTS.
- AFTER APPROVAL OF THE PRESSURE TEST AND DISINFECTION BY CDWM, MAKE FINAL CONNECTIONS. CONTACT CDWM TO ARRANGE FOR THE SHUTDOWN OF THE EXISTING 16" WATER MAIN (312-744-5070). NOTE: THERE ARE ACTIVE WATER SERVICES ON THE SECTION OF WATER MAIN TO BE SHUTDOWN. THE CONNECTION WORK DESCRIBED IN THE FOLLOWING NOTES MUST BE COMPLETED WITHIN 4 HOURS OF THE SHUTDOWN.
- REMOVE TEMPORARY FLUSHING HYDRANT (NOTE 9), CUT OUT EXISTING 16" PIPE AND REMOVE EXISTING FIRE HYDRANT. INSTALL 1-16" X 8" MJ TEE, 8" MJ PIPE AND FIRE HYDRANT. CONNECT WITH 16" PIPE AND 1-16" MJ SLEEVE OR TRANSITION SLEEVE IF REQUIRED.
- REMOVE AND SALVAGE 16" X 1/4 BEND AND 1-16" MJ SLEEVE OR TRANSITION SLEEVE INSTALLED ON THE TEMPORARY CONNECTION TO THE EXISTING 16" MAIN (NOTE 11). PLUG THE 16" X 16" TEE WITH 1-16" MJ PLUG. REMOVE EXISTING FIRE HYDRANT.
- CONTACT CHICAGO DEPARTMENT OF WATER MANAGEMENT (CDWM) TO ARRANGE FOR OPENING ANY REMAINING VALVES THAT WERE SHUTDOWN (312-744-5070). CONTRACTOR TO ASSIST WITH FLUSHING AS NECESSARY.
- REMOVE OR ABANDON THE EXISTING 16" WATER MAIN AS SHOWN ON THE DRAWINGS ON SHEET NO. 55.
- RESTORE ALL WATER MAIN TRENCHES PER THE DETAILED DRAWINGS.



DESIGNED - RBB	REVISED -
DRAWN - AFC	REVISED -
CHECKED - MJE	REVISED -
DATE - 4/21/2017	REVISED -

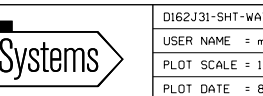
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED WATER MAIN PLAN
JACKSON BOULEVARD

SCALE: 1" = 20'

SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-021-1	COOK	153	56
CONTRACT NO. 62A75				
ILLINOIS FED. AID PROJECT				



DESIGNED -	REVISED -
DRAWN - NLD	REVISED -
CHECKED - JMG	REVISED -
DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS
JACKSON BOULEVARD

SCALE: NONE

SHEET 4 OF 17 SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	135
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

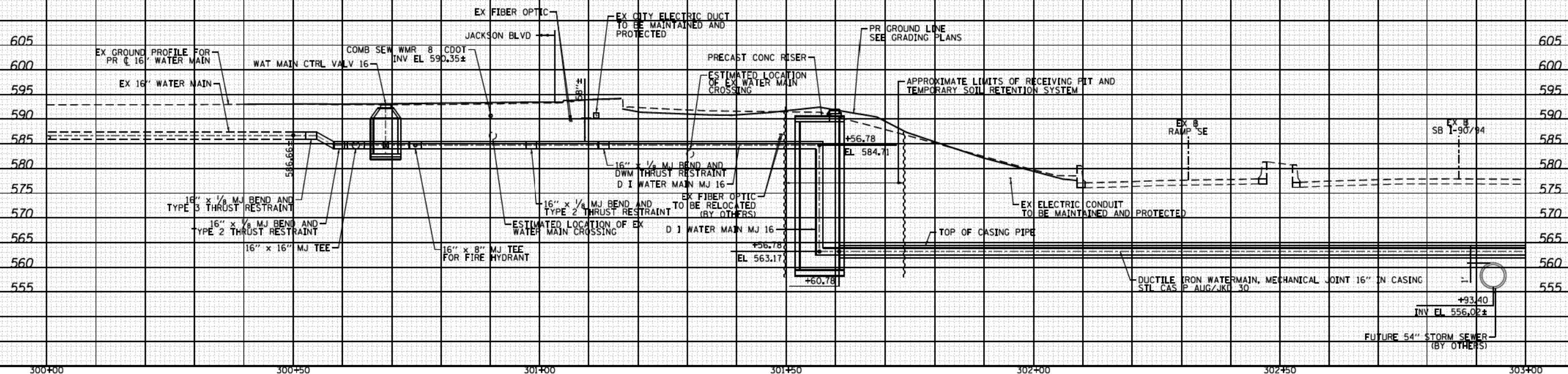
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NOTES

EXISTING UTILITIES ARE BASED UPON SURVEY LOCATION INFORMATION. DEPTHS OF UTILITIES ARE BASED UPON ASSUMED DEPTHS OR RECORD INFORMATION IF AVAILABLE. EXTENTS OF UNDERGROUND STRUCTURES ARE ESTIMATED UPON UTILITY ATLAS INFORMATION. EXISTING AND PROPOSED SEWER IS SHOWN BASED UPON SURVEY DATA, ATLAS INFORMATION AND THE PROPOSED PLANS.

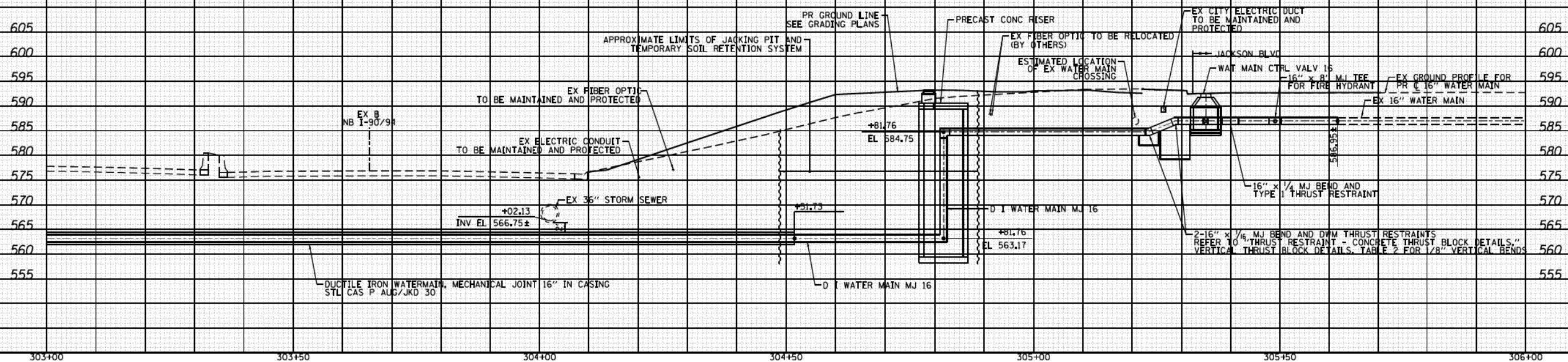
DATE	
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REVISION	
NO.	
DATE	
BY	
REVISION	
NO.	



NOTES

EXISTING UTILITIES ARE BASED UPON SURVEY LOCATION INFORMATION. DEPTHS OF UTILITIES ARE BASED UPON ASSUMED DEPTHS OR RECORD INFORMATION IF AVAILABLE. EXTENTS OF UNDERGROUND STRUCTURES ARE ESTIMATED UPON UTILITY ATLAS INFORMATION. EXISTING AND PROPOSED SEWER IS SHOWN BASED UPON SURVEY DATA, ATLAS INFORMATION AND THE PROPOSED PLANS.

DATE	
BY	
REVISION	
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DATE	
BY	
REVISION	
NO.	



<p>303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-3776 PHONE (312) 373-7700 FAX (312) 373-8800</p>	DESIGNED - RBB	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p align="center">WATER MAIN PROFILE JACKSON BOULEVARD</p> <p>SCALE: 1" = 10' SHEET 1 OF 1 SHEETS STA. TO STA.</p>	F.A.I. R.T.E. 90/94/290	SECTION 2015-021-1	COUNTY COOK	TOTAL SHEETS 153	SHEET NO. 57
	USER NAME = ChauA	DRAWN - AFC		REVISED -	CONTRACT NO. 62A75			
	PLOT SCALE = 28.0000' / 1"	CHECKED - MJE		REVISED -	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 3/28/2017	DATE = 03/21/2017		REVISED -				



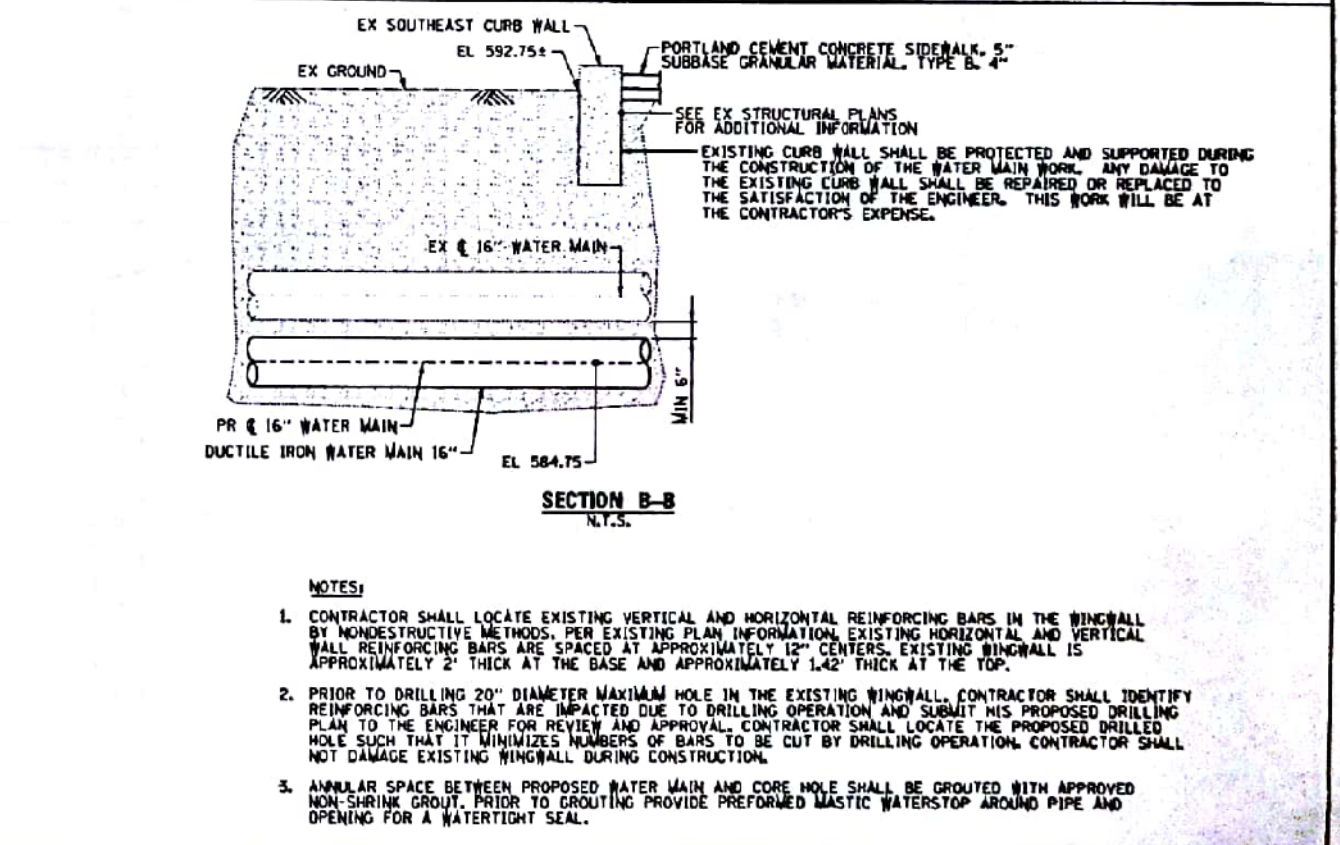
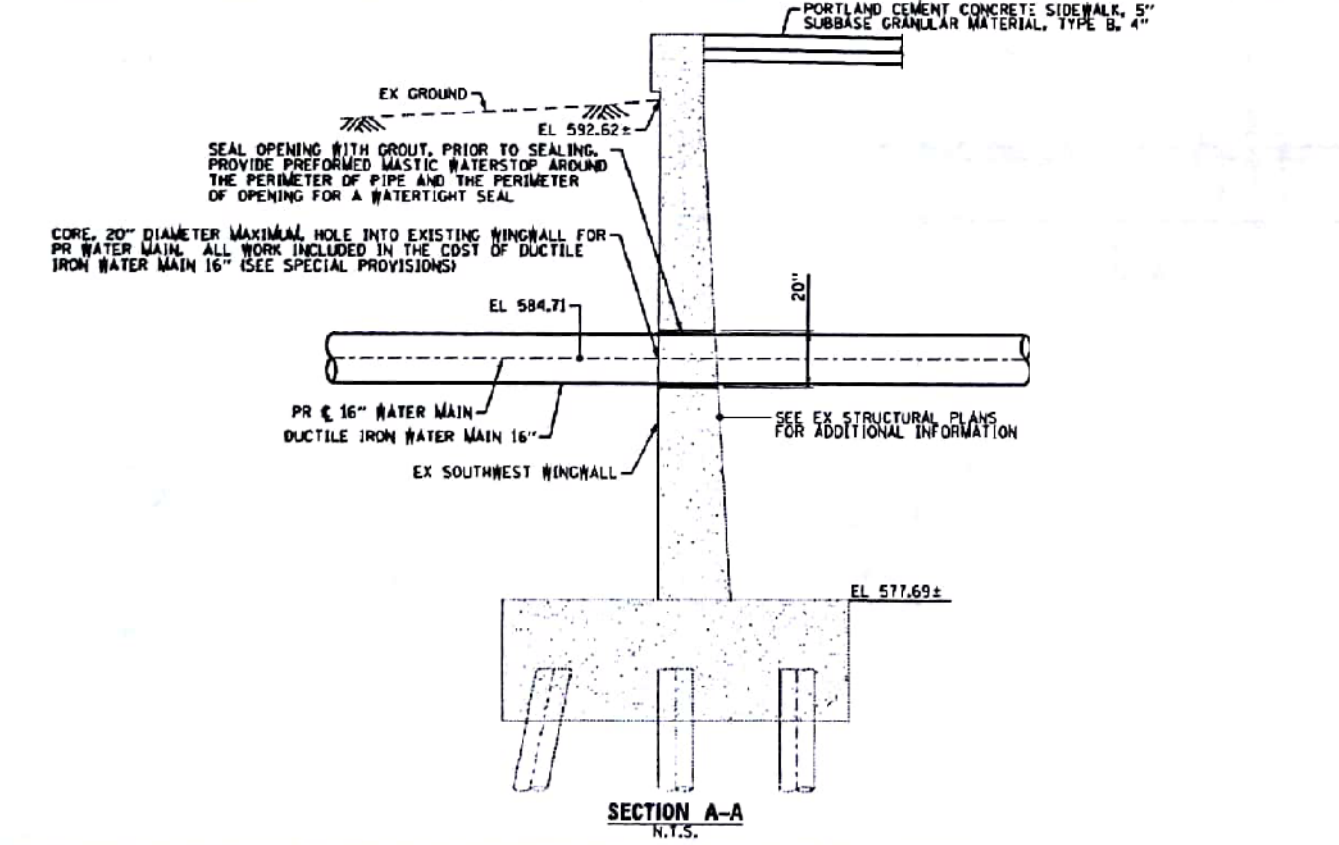
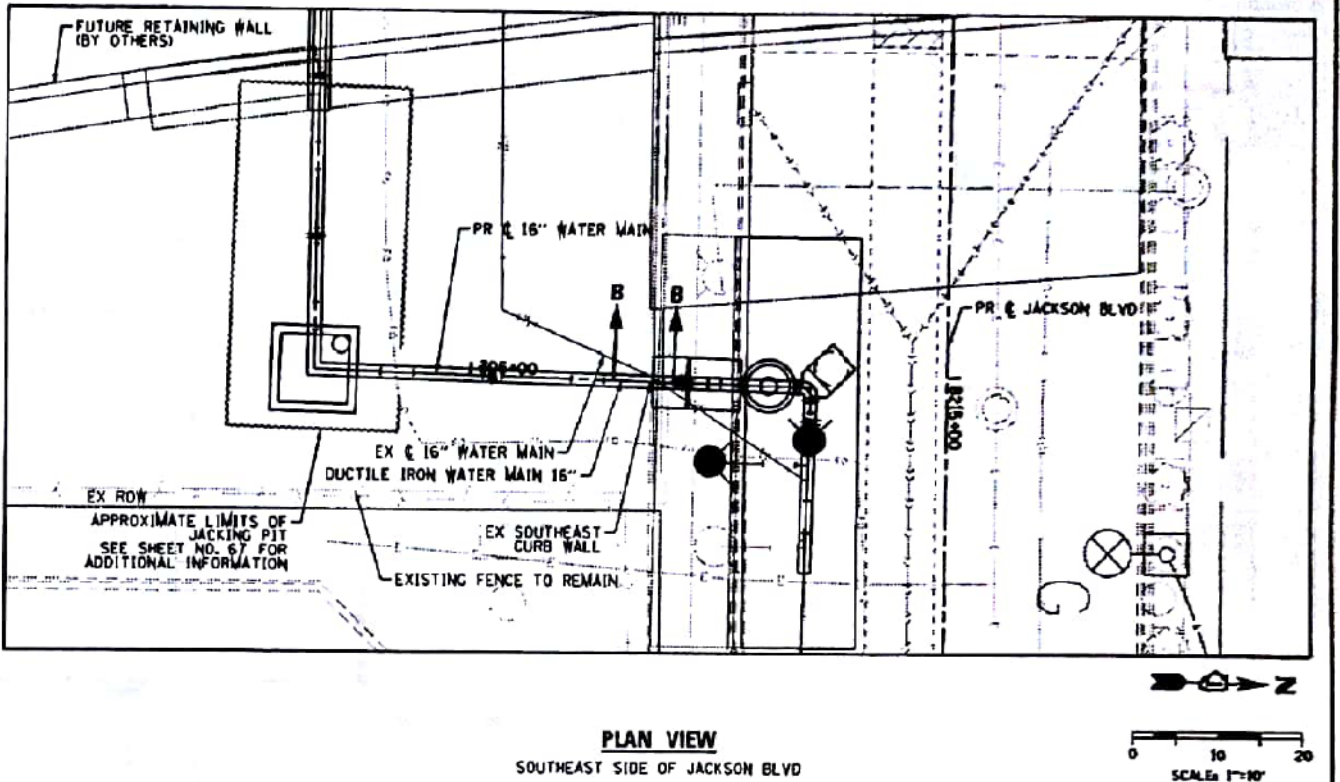
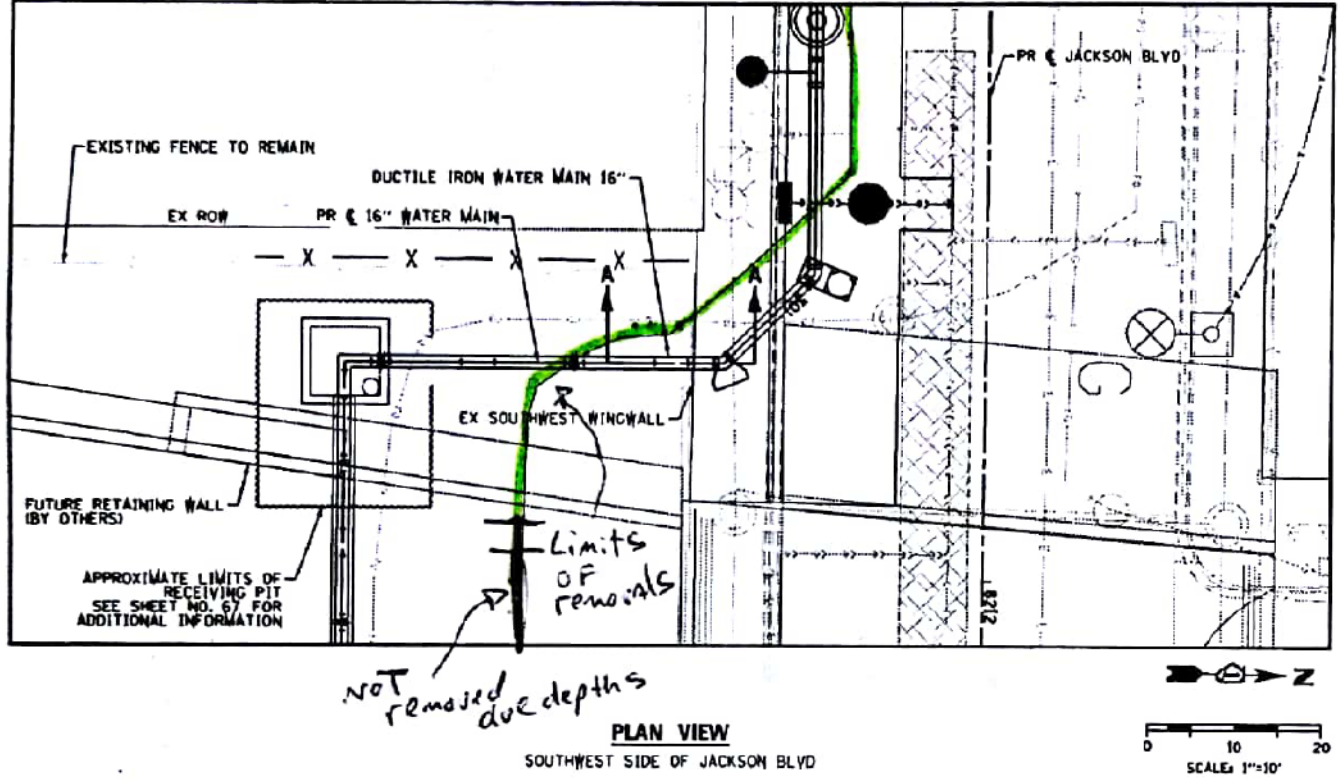
DESIGNED -	RBB	REVISED -
DRAWN -	NLD	REVISED -
CHECKED -	JMG	REVISED -
DATE -	8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: NONE	SHEET 5	OF 17	SHEETS	STA. TO STA.
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**EXISTING WATER MAIN PLANS
JACKSON BOULEVARD**

F.A.I. R.T.E. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 136
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT



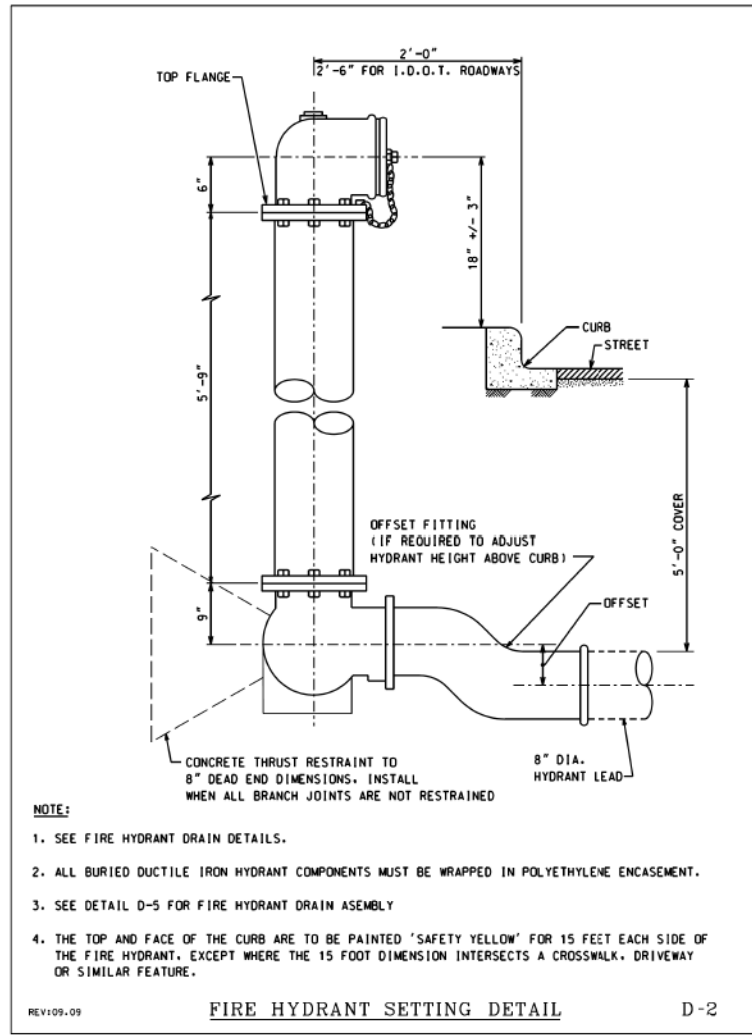
- NOTES:**
1. CONTRACTOR SHALL LOCATE EXISTING VERTICAL AND HORIZONTAL REINFORCING BARS IN THE WINGWALL BY NONDESTRUCTIVE METHODS, PER EXISTING PLAN INFORMATION. EXISTING HORIZONTAL AND VERTICAL WALL REINFORCING BARS ARE SPACED AT APPROXIMATELY 12" CENTERS. EXISTING WINGWALL IS APPROXIMATELY 2' THICK AT THE BASE AND APPROXIMATELY 1.42' THICK AT THE TOP.
 2. PRIOR TO DRILLING 20" DIAMETER MAXIMUM HOLE IN THE EXISTING WINGWALL, CONTRACTOR SHALL IDENTIFY REINFORCING BARS THAT ARE IMPACTED DUE TO DRILLING OPERATION AND SUBMIT HIS PROPOSED DRILLING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL. CONTRACTOR SHALL LOCATE THE PROPOSED DRILLED HOLE SUCH THAT IT MINIMIZES NUMBERS OF BARS TO BE CUT BY DRILLING OPERATION. CONTRACTOR SHALL NOT DAMAGE EXISTING WINGWALL DURING CONSTRUCTION.
 3. ANNULAR SPACE BETWEEN PROPOSED WATER MAIN AND CORE HOLE SHALL BE GROUTED WITH APPROVED NON-SHRINK GROUT. PRIOR TO GROUTING PROVIDE PREFORMED MASTIC WATERSTOP AROUND PIPE AND OPENING FOR A WATERTIGHT SEAL.

	0162J31-SHT-WATERMAIN-06.dgn USER NAME = mrc155 PLOT SCALE = 20.0000' / in. PLOT DATE = 8/13/2019	DESIGNED - RBB/ATB DRAWN - AFC CHECKED - JMG DATE - 05/21/2017	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JACKSON BOULEVARD - WATER MAIN DETAILS WATER MAIN CROSSING AT WINGWALL/CURB WALL	F.A.I. R.T.E. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 137			
						SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT						

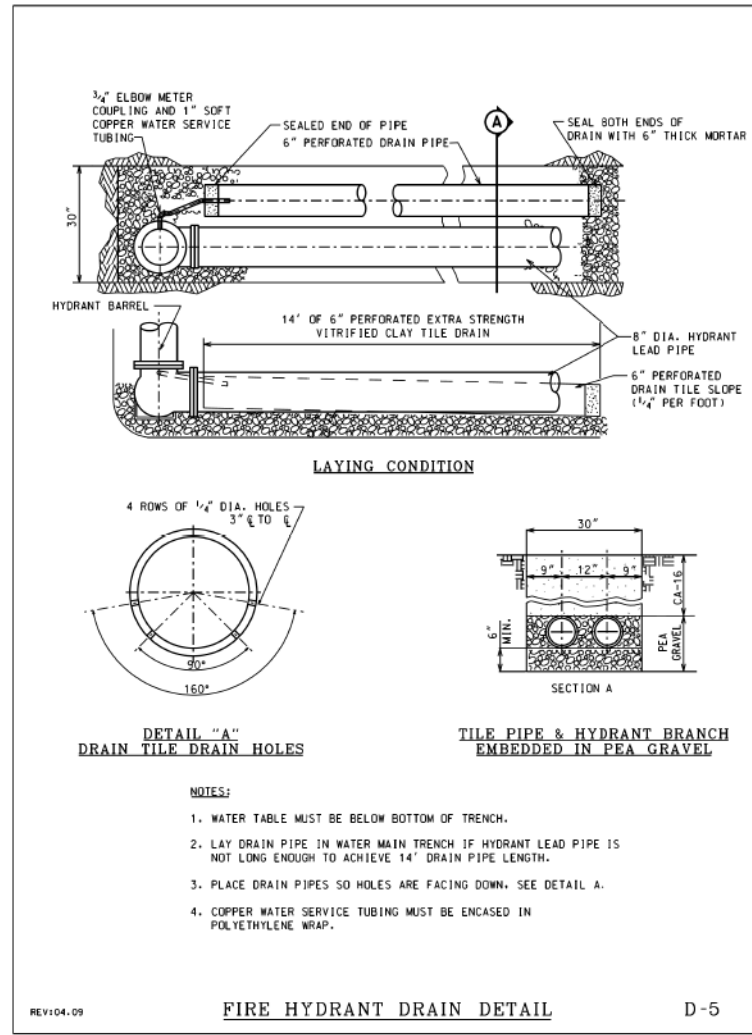
	0162J31-SHT-WATERMAIN-06.dgn USER NAME = mrc155 PLOT SCALE = 20.0000' / in. PLOT DATE = 8/13/2019	DESIGNED - DRAWN - NLD CHECKED - JMG DATE - 8/16/2019	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING WATER MAIN PLANS JACKSON BOULEVARD	F.A.I. R.T.E. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 137		
						SCALE: NONE SHEET 6 OF 17 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT					

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REV109.09 FIRE HYDRANT SETTING DETAIL D-2



REV104.09 FIRE HYDRANT DRAIN DETAIL D-5

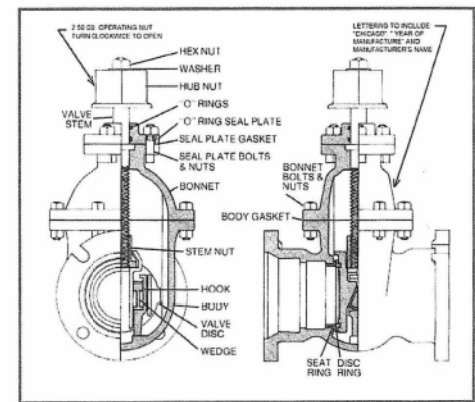
EJIW Gate Valves, Series N

City of Chicago Specification

engineered designed constructed for a position of trust

SERIES N GATE VALVES:

The Chicago Gate Valve is manufactured according to City of Chicago specifications in sizes 3" to 16" inclusive. It has double disc construction with parallel seats; a V-type gate spreading mechanism which is actuated when the wedging piece comes in contact with a lug at the bottom of the valve body. The wedge is thus restrained from further movement and the discs being forced downward over the wedges are forced to spread.



SIZE	CAT #
3"	3N22
4"	4N22
6"	6N22
8"	8N22
12"	12N22
16"	16N22

	DIMENSIONAL INFORMATION					
	3"	4"	6"	8"	12"	16"
Mechanical Joint End						
Overall Length	10 5/8	13 1/8	13 3/4	15 1/4	16 1/2	23 1/4
Laying Length	6 5/8	8 1/8	8 3/4	10 1/4	11 1/2	16 1/4
Centerline to Top of Stem	13 1/8	15 3/8	20	23 1/4	31	36 5/8
Number of Turns to Open	7	9	14	18	43	50

EJIW products are available throughout the United States. Call 800-344-3549 for information or service requests. email: ejwsales@ejw.com website: www.ejw.com

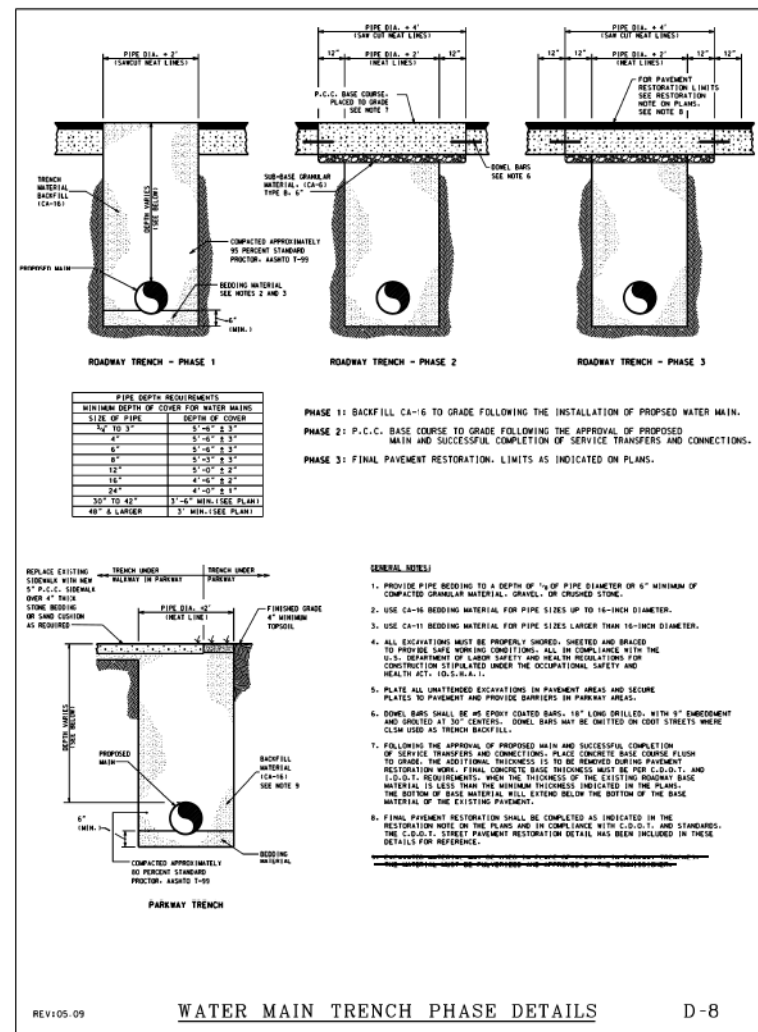
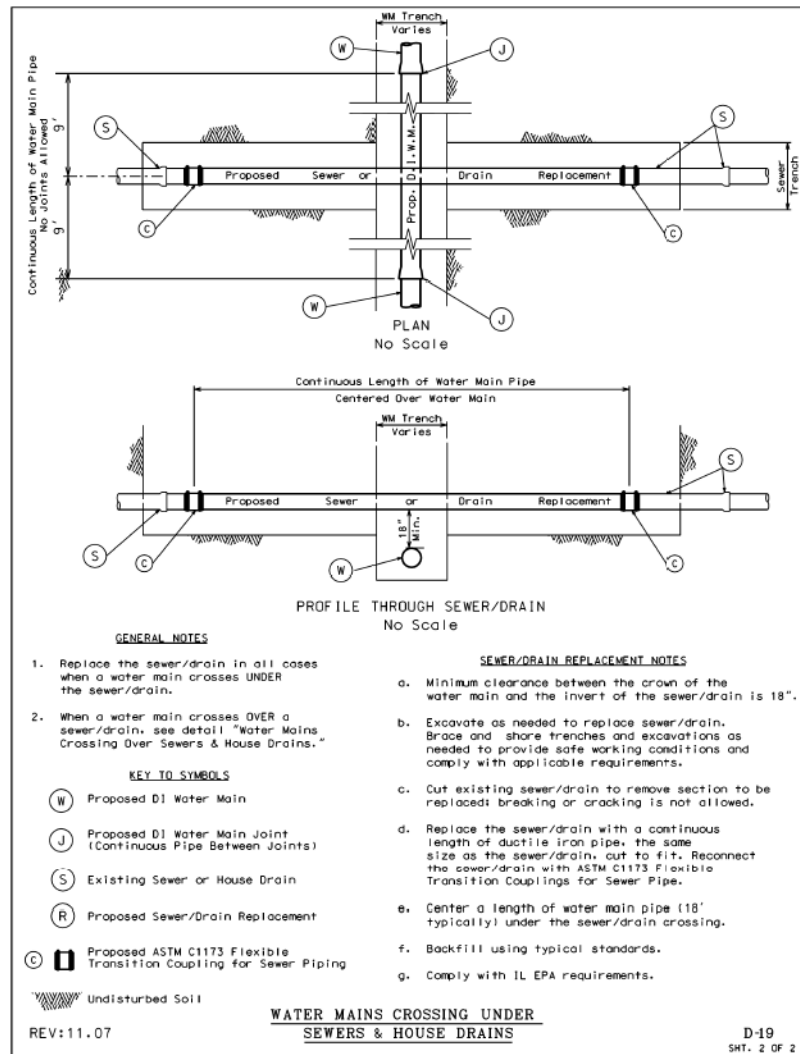
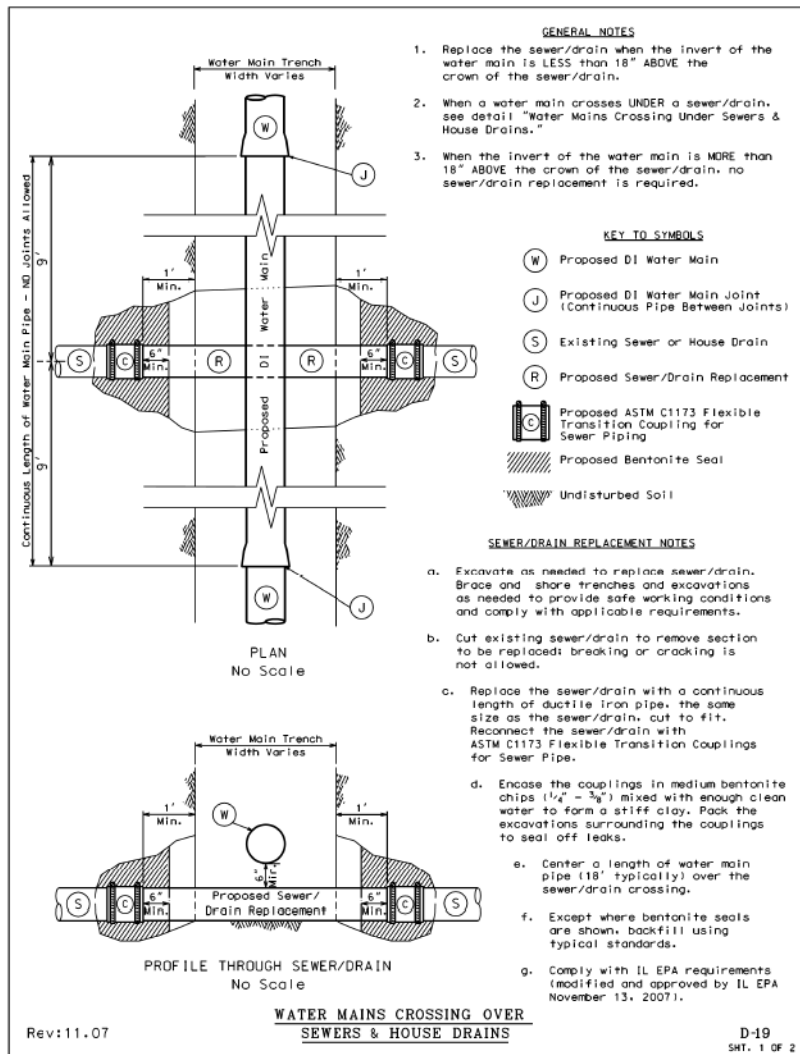


We Cover the Infrastructure®

AECOM <small>303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-3978 PHONE 312 375-1700 FAX 312 375-6800</small>	D16275-SHT-WH-DET-01.dgn	DESIGNED - RBB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WATER MAIN DETAILS	F.A.I. RTE. 90/94/290	SECTION 2015-021-I	COUNTY COOK	TOTAL SHEETS 153	SHEET NO. 59	CONTRACT NO. 62A75 ILLINOIS FED. AID PROJECT
	USER NAME = dshevez PLOT SCALE = 48.0000' / in. PLOT DATE = 3/28/2017	DRAWN - AFC CHECKED - MJE DATE - 03/21/2017	REVISED - REVISED - REVISED -			SCALE: TO STA.					

TranSystems	D162J31-SHT-WATERMAIN-07.dgn	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING WATER MAIN PLANS JACKSON BOULEVARD	F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 138	CONTRACT NO. 62J31 ILLINOIS FED. AID PROJECT
	USER NAME = mrc155 PLOT SCALE = 100.0000' / in. PLOT DATE = 8/13/2019	DRAWN - NLD CHECKED - JMG DATE - 8/16/2019	REVISED - REVISED - REVISED -			SCALE: NONE SHEET 7 OF 17 SHEETS STA. TO STA.					

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D162A75-SHT-WM-DET-02.dgn
 USER NAME = dshevez
 PLOT SCALE = 48.0000' / in.
 PLOT DATE = 3/28/2017

DESIGNED - RBB
 DRAWN - AFC
 CHECKED - MJE
 DATE - 03/21/2017

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS

F.A.I. RTE. 90/94/290	SECTION 2015-021-I	COUNTY COOK	TOTAL SHEETS 153	SHEET NO. 60
CONTRACT NO. 62A75				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.



D162J31-SHT-WATERMAIN-08.dgn
 USER NAME = mrc155
 PLOT SCALE = 100.0000' / in.
 PLOT DATE = 8/13/2019

DESIGNED -
 DRAWN - NLD
 CHECKED - JMG
 DATE - 8/16/2019

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS
 JACKSON BOULEVARD

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 139
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET 8 OF 17 SHEETS STA. TO STA.

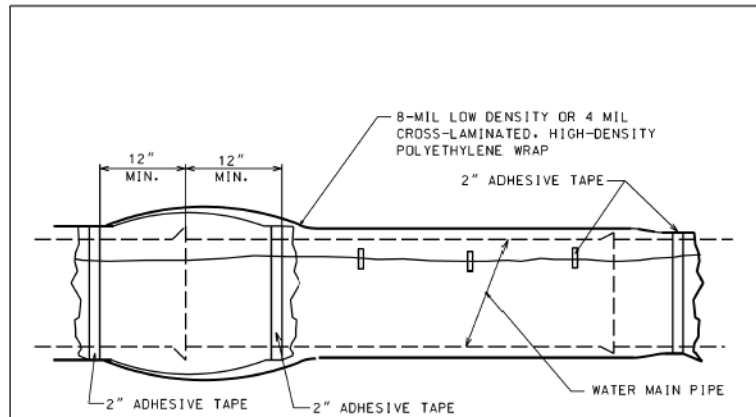


CHART "A" POLYWRAP FLAT TUBE WIDTHS

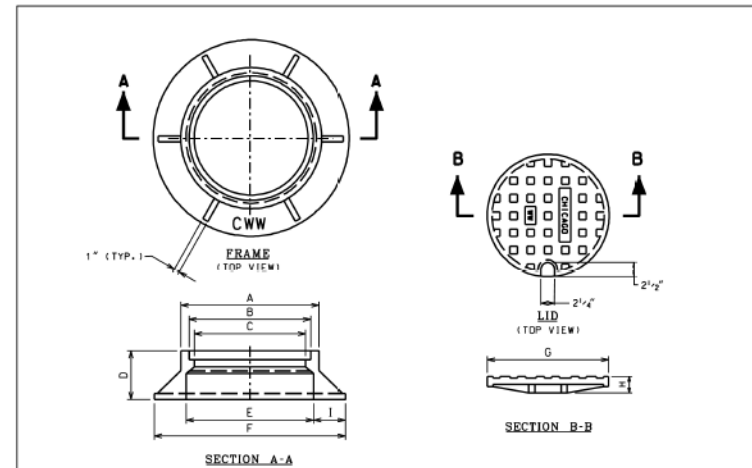
PIPE DIAMETER (IN.)	D.I.P. WITH PUSH-ON JOINTS (IN.)	D.I.P. WITH MECHANICAL JOINTS (IN.)
4	14	16
6	17	20
8	21	24
12	29	30
16	37	37
24	53	53

- NOTES:
- USE ONE LENGTH OF POLYETHYLENE TUBE WRAP FOR EACH LENGTH OF PIPE, OVERLAPPED AT PIPE JOINTS AND FOLD EXCESS OVER TOP OF TUBE FOR SLACK REDUCTION.
 - USE CHART "A" TO SELECT SIZE OF WRAP.

WATER MAIN
POLYETHYLENE WRAP DETAIL

REV104.09

D-10



- NOTES:
- LETTERING FOR CHICAGO W.W. ON THE LID SHALL BE 1" SHARP FACE GOTHIC LETTERS, 3/16" WIDE AND RAISED 1/8" FROM 1/2" RECESS AS MEASURED FROM THE TOP SURFACE OF THE LID.
- LETTERING FOR C.W.W. ON THE FRAME SHALL BE LOCATED ON THE TOP SURFACE OF THE HORIZONTAL FLANGE AND SHALL BE 1" SHARP FACE GOTHIC, 3/16" WIDE AND RAISED 1/4" AS MEASURED FROM THE FLANGE SURFACE. LOCATION OF LETTERING SHALL BE AS INDICATED ON DRAWING.

FRAME AND LID DIMENSIONS

DIMENSION	FRAME AND LID TYPES	
	STANDARD	36" SPECIAL F&L
A	26	-
B	23	36
C	21	34
D	9	8 1/2
E	24	36
F	36	45
G	22 3/4	36
H	3	1 1/2
I	6	4 1/2

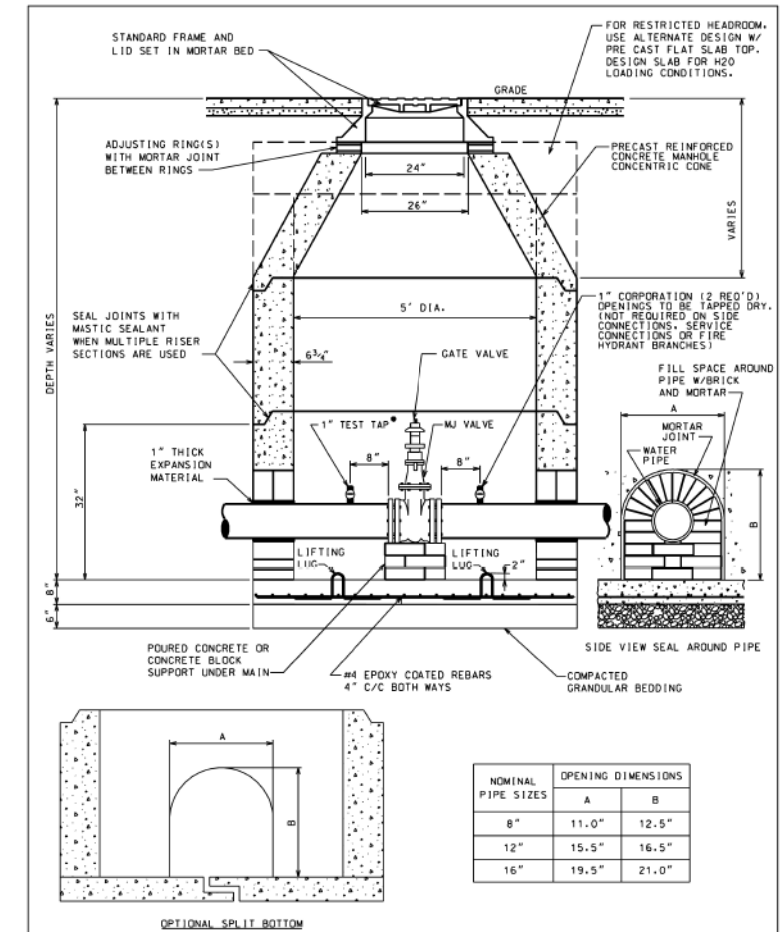
FRAME AND LID WEIGHTS

	FRAME AND LID TYPES	
	STANDARD	36" SPECIAL F&L
LID	152	-
FRAME	395	-
TOTAL	547	720

REV104.07

FRAME & LID

D-15



NOMINAL PIPE SIZES

NOMINAL PIPE SIZES	OPENING DIMENSIONS	
	A	B
8"	11.0"	12.5"
12"	15.5"	16.5"
16"	19.5"	21.0"

• USE TWO 2" TEST TAPS FOR 16" GATE VALVE

PRECAST VALVE BASIN
FOR PIPES UP TO 16" DIA.

REV105.09

D-13



D162A75-SHT-WM-DET-03.dgn
USER NAME = dshaheavaz
PLOT SCALE = 40.0000' / 1" / 1" / 1"
PLOT DATE = 3/28/2017

DESIGNED - RBB
DRAWN - AFC
CHECKED - MJE
DATE - 03/21/2017

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS

SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.I. R.T.E. 90/94/290
SECTION 2015-021-I
COUNTY COOK
TOTAL SHEETS 153
SHEET NO. 61
CONTRACT NO. 62A75
ILLINOIS FED. AID PROJECT



D162J31-SHT-WATERMAIN-09.dgn
USER NAME = mrc155
PLOT SCALE = 100.0000' / 1" / 1" / 1"
PLOT DATE = 8/13/2019

DESIGNED -
DRAWN - NLD
CHECKED - JMG
DATE - 8/16/2019

REVISED -
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REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

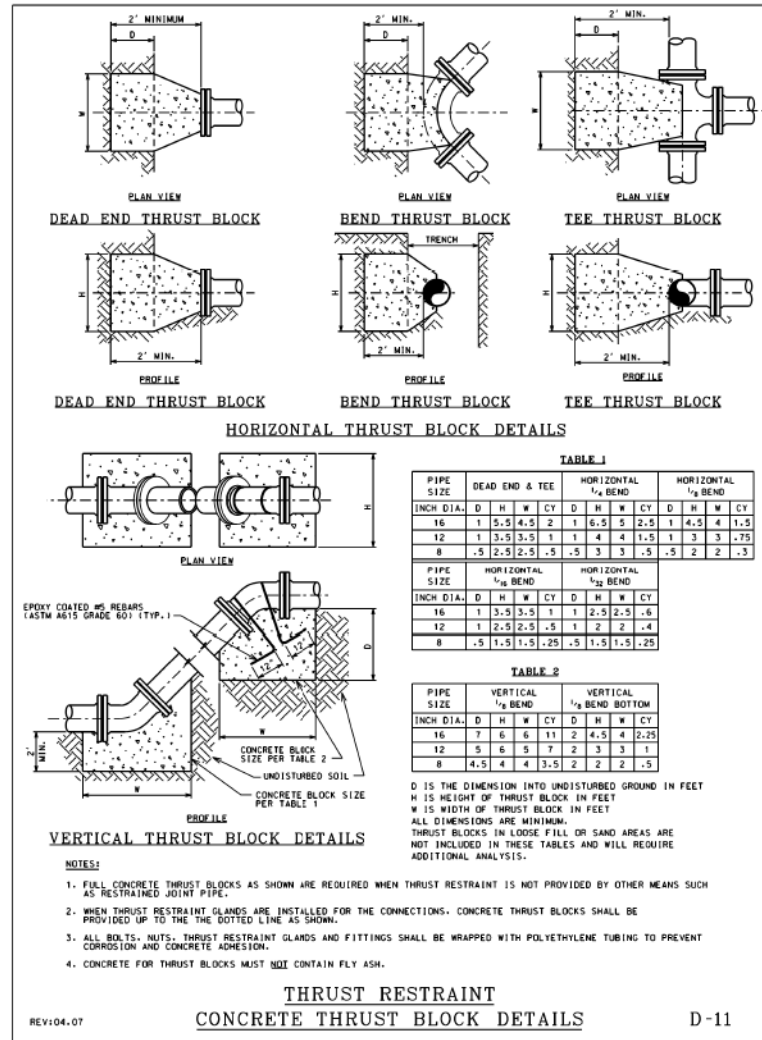
EXISTING WATER MAIN PLANS
JACKSON BOULEVARD

SCALE: NONE SHEET 9 OF 17 SHEETS STA. TO STA.

F.A.I. R.T.E. 90/94/290
SECTION 2019-054-I
COUNTY COOK
TOTAL SHEETS 400
SHEET NO. 140
CONTRACT NO. 62J31
ILLINOIS FED. AID PROJECT

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- NOTES:**
- PAYMENT FOR DWM STANDARD THRUST BLOCKS TO BE CONSTRUCTED PER DETAIL DRAWING D-11 IS INCLUDED IN THE COST OF DUCTILE IRON WATER MAIN, MECHANICAL JOINT 16". SEE SPECIAL PROVISIONS.



D162A75-SHT-WM-DET-04.dgn
 USER NAME = dshavez
 PLOT SCALE = 48,0000' / in.
 PLOT DATE = 3/28/2017

DESIGNED - RBB
 DRAWN - AFC
 CHECKED - MJE
 DATE - 03/21/2017

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-021-1	COOK	153	62
CONTRACT NO. 62A75				
ILLINOIS FED. AID PROJECT				



D162J31-SHT-WATERMAIN-10.dgn
 USER NAME = mrc155
 PLOT SCALE = 100,0000' / in.
 PLOT DATE = 8/13/2019

DESIGNED -
 DRAWN - NLD
 CHECKED - JMG
 DATE - 8/16/2019

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS
 JACKSON BOULEVARD

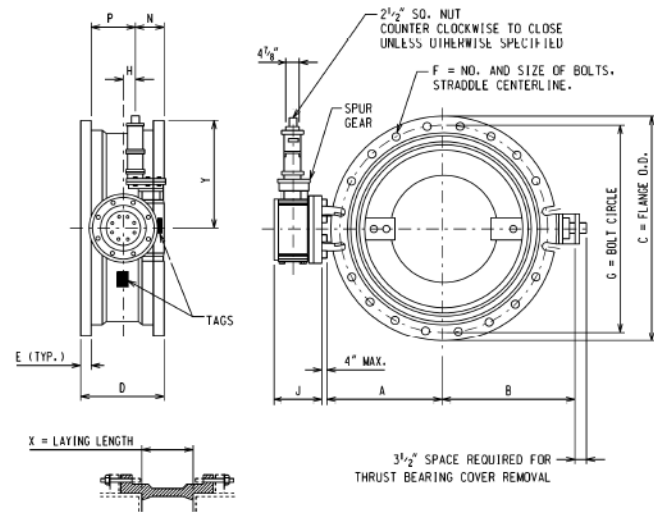
SCALE: NONE SHEET 10 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	141
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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VALVE SIZE	A	B	C	D	E	F	G	X
24-INCH	18 1/2"	18 1/2"	31 1/2"	13 1/2"	1 1/2"	16	3 1/2"	30"
30-INCH	21 1/2"	24 1/2"	39"	18"	1 1/2"	20	1"	36 1/2"
36-INCH	25 1/2"	28 1/2"	45 1/2"	22"	2"	24	1"	43 1/2"
42-INCH	29 1/2"	32 1/2"	53"	22"	2"	28	1 1/2"	50 1/2"
48-INCH	34 1/2"	37 1/2"	59 1/2"	24"	2"	32	1 1/2"	57 1/2"

OPERATOR SIZE	J	L	M	N	P	O	Y	VALVE	NO. OF TURNS
T-425	7 1/2"	6"	7 1/2"	6 1/2"	9 1/2"	6 3/4"	24"	36"	75
T-425	8"	6 3/4"	7 1/2"	6 3/4"	9 1/2"	6 3/4"	24"	48"	127

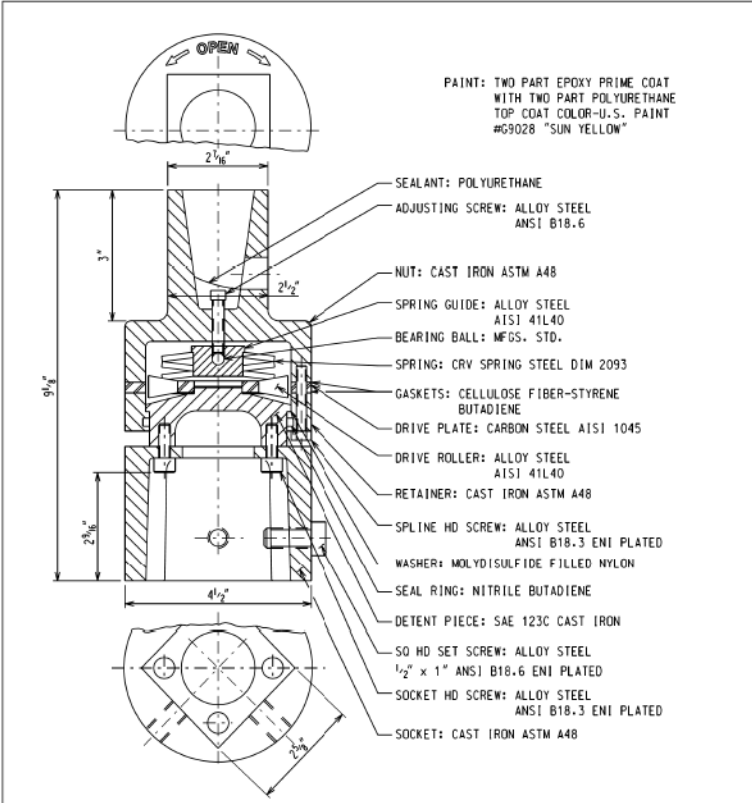


INSTALLATION DIAGRAM

NOTE:

- BUTTERFLY VALVES SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA SPECIFICATION C-504-10 OR LATEST EDITION, CLASS 150B, SHORT BODY VALVE WITH MECHANICAL JOINT ACCESSORIES.
- OPERATORS ARE EQUIPPED WITH OPEN/CLOSE INDICATING ARROW. ASSEMBLY OPEN CLOCKWISE.

REV:07.07 BUTTERFLY VALVE FM-13



REV:04.07 TORQUE OVERLOAD PROTECTOR FM-14

NOTES:

- WATER MAIN CONTROL VALVE-48 INCH BUTTERFLY VALVE SHALL BE AN ADVANCE PROCUREMENT FOR CONTRACT 62A74. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.



DI62A75-SHT-WM-DET-05.dgn
 USER NAME = djshavez
 PLOT SCALE = 48,0000' / 1" / 1"
 PLOT DATE = 3/20/2017

DESIGNED - RBB
 DRAWN - AFC
 CHECKED - MJE
 DATE - 03/21/2017

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS
 48 INCH BUTTERFLY VALVE ADVANCE PROCUREMENT

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-021-1	COOK	153	63
			CONTRACT NO. 62A75	



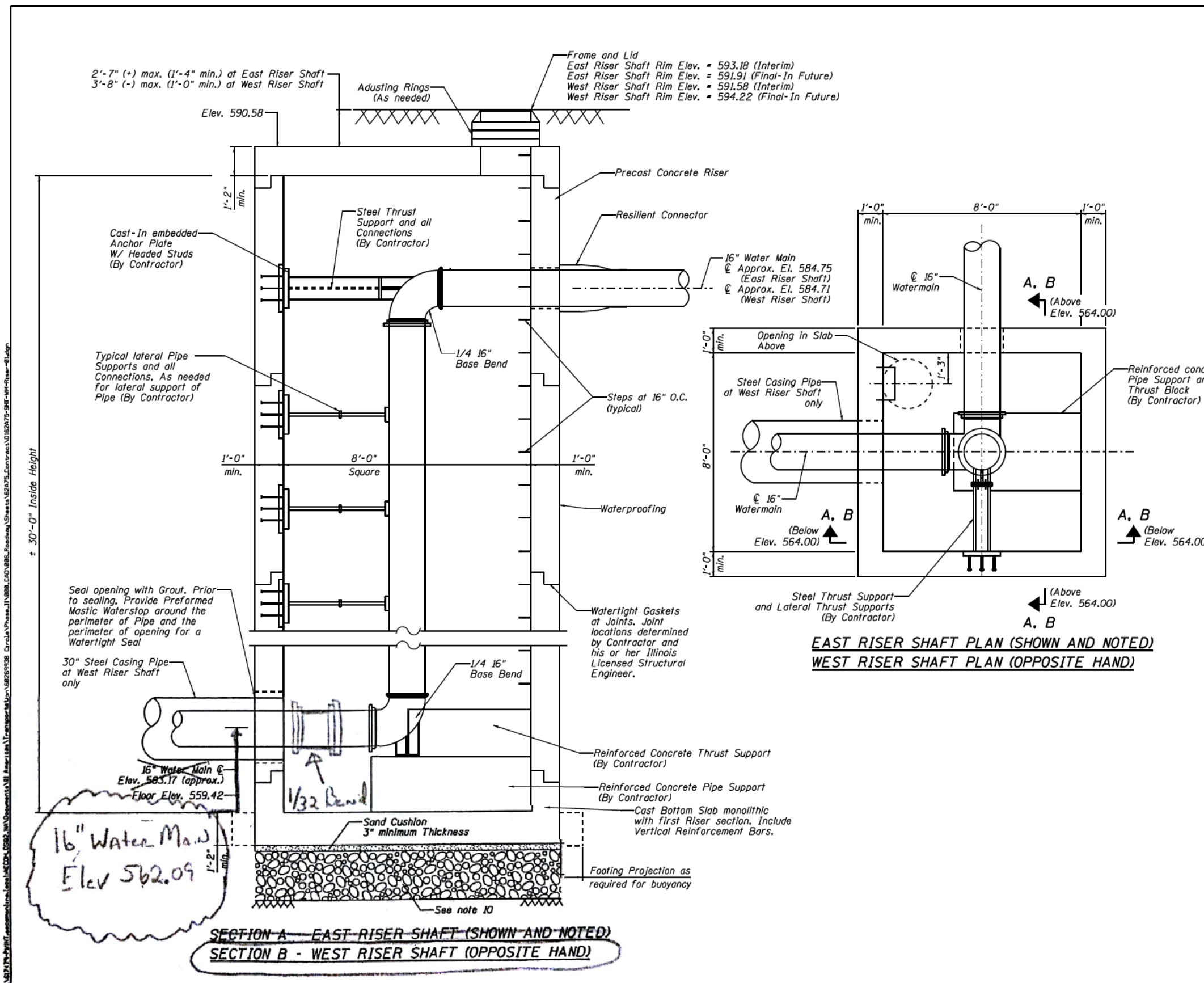
DI62J31-SHT-WATERMAIN-11.dgn
 USER NAME = mrc155
 PLOT SCALE = 100,0000' / 1" / 1"
 PLOT DATE = 8/13/2019

DESIGNED -
 DRAWN - NLD
 CHECKED - JMG
 DATE - 8/16/2019

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS
 JACKSON BOULEVARD

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	142
			CONTRACT NO. 62J31	



- NOTES:**
- For water main general notes, construction sequencing notes, location plans and profile and water main and structure details, see sheet Nos. 54 through 67.
 - Riser shaft for the relocated water main shall be designed and constructed of precast reinforced concrete to the minimum requirements shown on the drawings, special provision for Precast Concrete Riser, required references and as shown at contractor's option, riser shaft may be constructed of cast-in-place concrete.
 - Riser shaft, pipe supports and thrust restraints for the relocated water main, including embedments into riser structure and all connections shall be designed by an Illinois Licensed Structural Engineer employed by the Contractor. Contractor shall submit design calculations, drawings and details sealed and signed by the Contractor's Illinois Licensed Structural Engineer.
 - Test pressure for water mains = 100 psi. Thrust restraints and riser shall be designed for 1.5 times the maximum test pressure.
 - All reinforcing bars shall be epoxy coated.
 - Concrete strength shall meet or exceed 5000 psi at 28 days.
 - Exterior surfaces of riser shaft shall be waterproofed for watertight structure.
 - Concrete cover:
 - Concrete placed against earth - 3"
 - Concrete in contact with earth or water - 2"
 - Soft clays occur in the soil profile for the borings in this area. Contractor shall review geotechnical report and boring logs in his selection of methods to support the excavation and for the design of the riser shaft and thrust restraints. Surface and subsurface water shall not be permitted to enter the excavation. The contractor shall comply with the requirements of the Illinois Department of Transportation (IDOT) and the various infrastructure departments of the City of Chicago, including, but not limited to, the Chicago Department of Transportation (CDOT), the Office of Underground Coordination (OUC) and the Department of Water Management (DWM).
 - During construction, soft clay is expected at the base of the excavation and a working platform will be required. To establish a working platform at the base of the precast riser shafts, the soil should first be evaluated during construction by the Engineer. The working platform shall consist of a minimum of 2 feet of compacted CA-1 gradation aggregate, capped with 6 inches of CA-6 gradation aggregate. The working platform at the base of the concrete riser shall be considered included within the cost of the Steel Casing Pipe Augered and Jacked 30".
 - Exact locations of existing water mains and existing below grade structures and utilities shall be determined in the field prior to excavation for water mains. Any conflicts with existing structures and utilities due to field conditions encountered that will impact construction shall be brought to the attention of the Engineer, so as not to delay construction, along with detailed locations of conflicting structures and utilities and suggested solutions to resolve the conflict for Engineer review and approval. Any changes required as a result of field conditions encountered shall be considered included within the cost of the respective pay item.
 - Contractor shall protect existing buried and above ground structures and utilities that are to remain during construction of the water main and riser shaft. The cost of such protection shall be included within the cost of the respective pay item.
 - All work to conform to IDOT Standard Specifications for Road and Bridge Construction, latest edition, unless otherwise specified. Use more stringent requirement where requirements conflict.
 - Assumed allowable net design soil bearing pressure = 1500 psf. Verify in field by Contractor's Independent Geotechnical Engineer.
 - Coat all steel pipe supports and thrust supports with a polyamide epoxy paint system. Prepare surface and prime in accordance with coating manufacturer's recommendations.
 - The water main in the riser shall be paid for as "Ductile Iron Water Main, Mechanical Joint 16"" at each location.

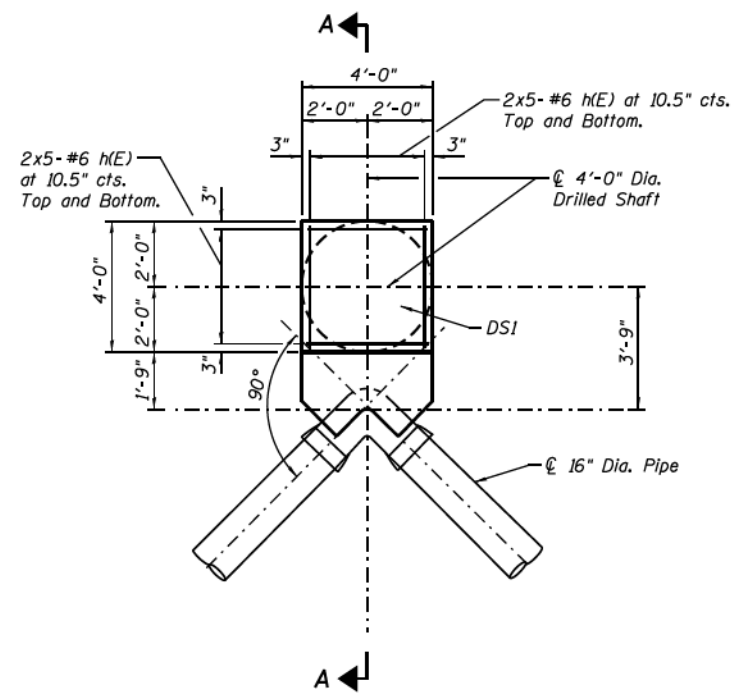
**EAST RISER SHAFT PLAN (SHOWN AND NOTED)
WEST RISER SHAFT PLAN (OPPOSITE HAND)**

**SECTION A - EAST RISER SHAFT (SHOWN AND NOTED)
SECTION B - WEST RISER SHAFT (OPPOSITE HAND)**

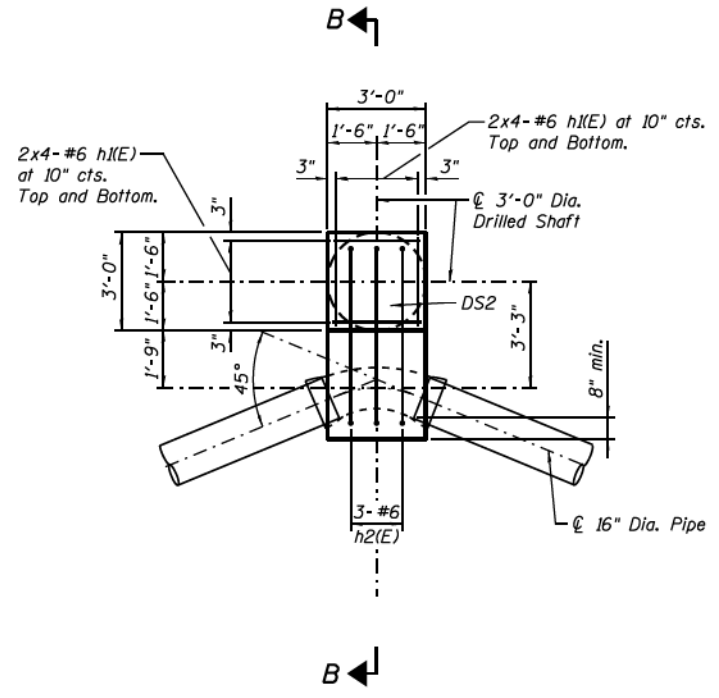
AECOM 300 East Wacker Drive, Suite 1400 Chicago, IL 60601-4000 Phone: (312) 271-7000 Fax: (312) 271-4000	DESIGNED - AAG DRAWN - HMC CHECKED - RBB DATE - 4/21/2017	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WATER MAIN RISER PLAN AND SECTIONS		F.A.I. RTE. 90/94/290	SECTION 2015-021-I	COUNTY COOK	TOTAL SHEETS 153	SHEET NO. 64
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TranSystems	D162J31-SHT-WATERMAIN-12.dgn USER NAME = mrc155 PLOT SCALE = 100.0000' / 1"	DESIGNED - DRAWN - NLD CHECKED - JMG DATE - 8/13/2019	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING WATER MAIN PLANS JACKSON BOULEVARD		F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 143
	DATE - 8/13/2019	SCALE: NONE SHEET 12 OF 17 SHEETS STA. TO STA.	CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT					

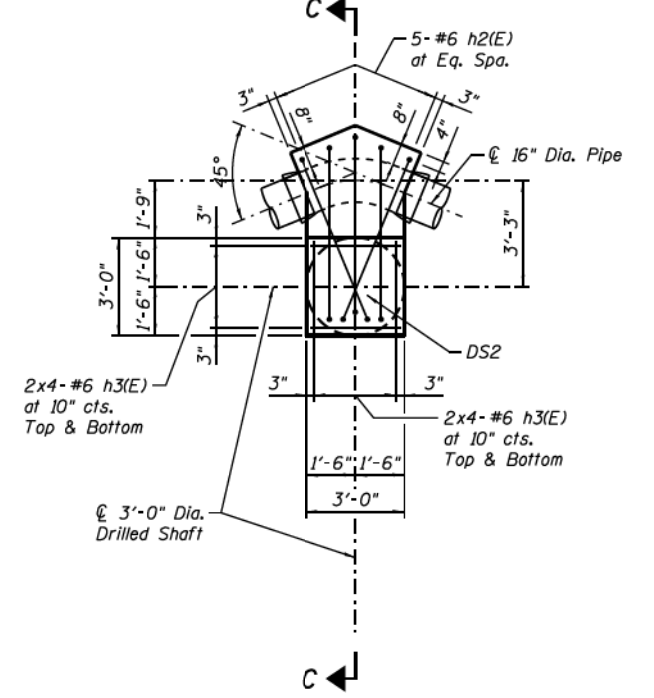
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 SHEET = 12 OF 17
 DATE = 8/13/2019



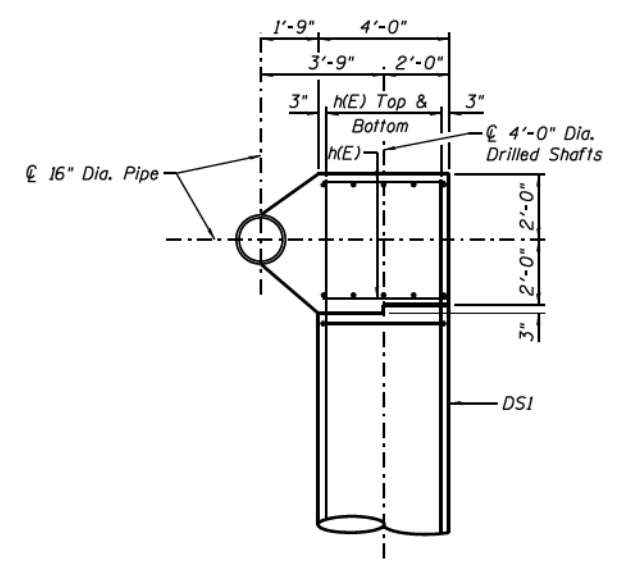
PLAN DETAIL
THRUST RESTRAINT - TYPE 1 (1 THUS)



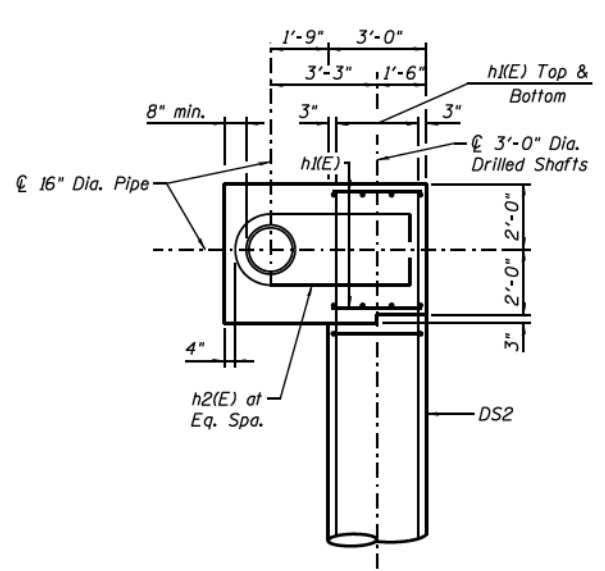
PLAN DETAIL
THRUST RESTRAINT - TYPE 2 (2 THUS)



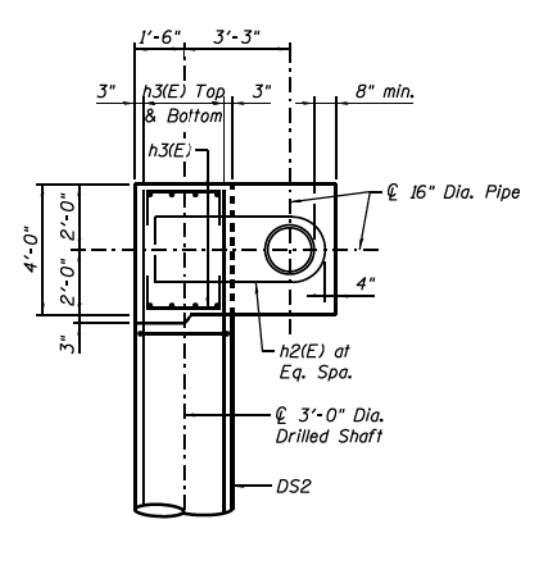
PLAN DETAIL
THRUST RESTRAINT - TYPE 3 (1 THUS)



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:
1. Work this sheet with Sheet No. 66.

	D162A75-SHT-WM-Thrust-Detail-01.dgn	DESIGNED - AAG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WATER MAIN THRUST RESTRAINT DETAILS AND SECTIONS		F.A.I. RTE. 90/94/290	SECTION 2015-021-I	COUNTY COOK	TOTAL SHEETS 153	SHEET NO. 65
	USER NAME = f1j08sg PLOT SCALE = 200 1" = 1'-0" PLOT DATE = 3/17/2017	DRAWN - GF CHECKED - KWH/AAG DATE - 03/21/2017	REVISED - REVISED - REVISED - REVISED -		SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT					

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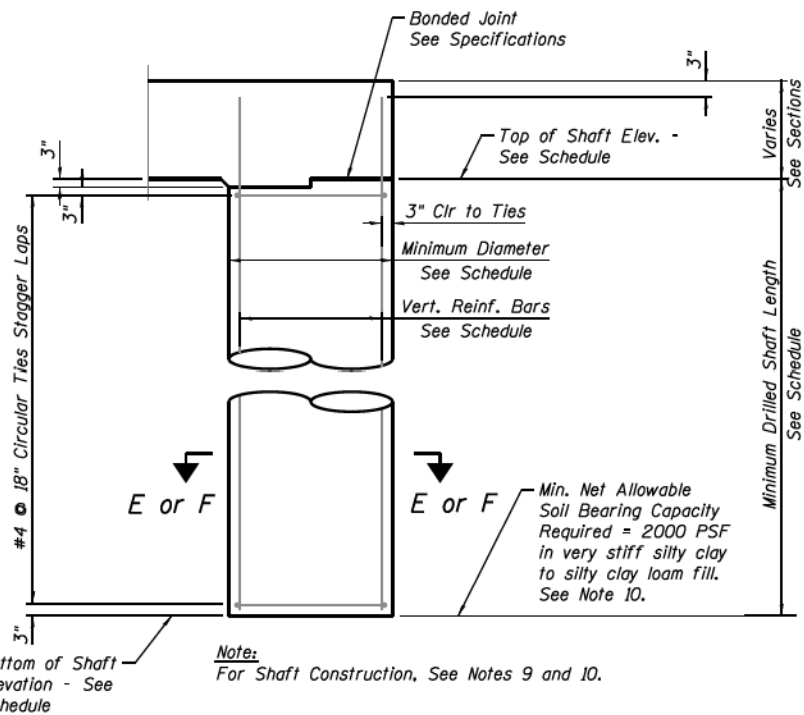
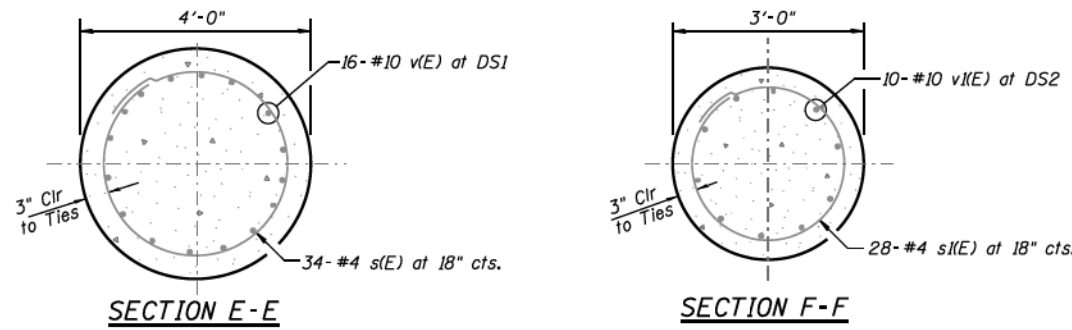


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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

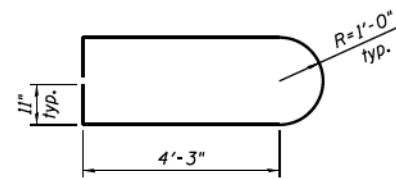
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS JACKSON BOULEVARD	
SCALE: NONE	SHEET 13 OF 17 SHEETS STA. TO STA.

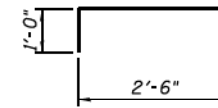
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ILLINOIS FED. AID PROJECT				



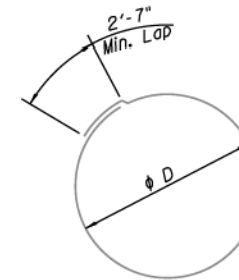
TYPICAL DRILLED SHAFT DETAIL
No Scale



BAR h2(E)



BAR h3(E)



BAR	phi D
s(E)	3'-6"
s(K)	2'-6"

TIES

**THRUST RESTRAINTS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	20	#6	3'-6"	—
h(K)	32	#6	2'-6"	—
h2(E)	11	#6	13'-6"	D
h3(E)	16	#6	4'-6"	—
v(E)	16	#10	53'-6"	—
v(K)	30	#10	44'-6"	—
s(E)	34	#4	13'-8"	○
s(K)	84	#4	10'-6"	○
Item		Unit	Quantity	
Concrete Structures		Cu. Yd.	12	
Reinforcement Bars, Epoxy Coated		Pound	10,890	
Drilled Shaft In Soil		Cu. Yd.	56	

NOTES:

- For water main general notes, location plans, profiles, details and thrust restraint locations and types see Sheet Nos. 54 through 62. For existing water main reference drawings, see Sheet Nos. 55, 68 and 69.
- Exact locations of existing water mains, existing concrete thrust blocks and existing below grade structures and utilities shall be determined in the field prior to excavation for water mains and drilling shafts for new reinforced concrete thrust restraints and pipe supports. Any conflicts with existing structures and utilities due to field conditions encountered that will impact construction shall be brought to the attention of the Engineer, so as not to delay construction, along with detailed locations of conflicting structures and utilities and suggested solutions to resolve the conflict for Engineer review and approval.
- Contractor shall protect existing buried and above ground structures and utilities that are to remain during construction of the water main and thrust restraints. The cost of such protection shall be considered included within the cost of the respective pay item.
- New permanent concrete thrust restraints shall have been in place for a minimum of 28 days and shall have achieved a minimum 28 day compressive strength of 4000 psi prior to pressure testing pipe with water.
- Maximum test pressure for water mains = 100 psi.
- Fitting bends shall not be encased in concrete unless otherwise noted on the drawings. Minor adjustments to concrete dimensions and reinforcing bars shown may be required in the field and shall be considered included within the cost of the respective pay item.
- Trench excavation and backfill for thrust restraint shall be considered included within the cost of the Ductile Iron Water Main, Mechanical Joint, 16" pay item.
- Mechanical reinforcing bar splices, where shown or required, shall be considered included within the cost of Reinforcement Bars, Epoxy Coated.
- Contractor shall review Geotechnical Report and boring logs in his selection of methods to support the excavation in the various stages of shaft drilling, cleaning and concrete placement dependent on the boring logs and site conditions encountered. Surface water shall not be permitted to enter the hole. The Contractor shall comply with the requirements of the Illinois Department of Transportation (IDOT) and the various infrastructure departments of the City of Chicago, including, but not limited to, the Chicago Department of Transportation (CDOT), the Office of Underground Coordination (OUC) and the Department of Water Management (DWM).
- Shafts must be drilled into very stiff silty clay to silty clay loam with a minimum net allowable soil bearing capacity of 2000 PSF, however, the drilled shaft shall not be less than 50 feet in length for DS1 & 41 feet in length for DS2
- Concrete Cover:
 - Concrete placed against earth - 3"
 - Concrete in contact with earth - 2"
- All work to conform to IDOT Standard Specifications for Road and Bridge Construction, latest edition.
- Work this sheet with Sheet No. 65.

LEGEND

DS - Drilled Shaft

SCHEDULE FOR DRILLED SHAFTS IN SOIL

MARK	TOTAL QUANTITY	ELEV. @ WATERMAIN (FEET)	ELEV. TOP OF DRILLED SHAFT (FEET)	ELEV. BOTTOM OF DRILLED SHAFT (FEET)	MINIMUM DRILLED SHAFT LENGTH (FEET)	MINIMUM DRILLED SHAFT DIAMETER (FEET)	VERTICAL REINFORCEMENT BARS AT EACH SHAFT	CIRCULAR TIES AT EACH SHAFT	SECTION	THRUST RESTRAINT TYPE
DS1	1	587.37	585.37	535.37	50'	4'-0"	16- #10 v(E)	34- #4 s(E) at 18"	E	1
DS2	3	587.47	585.47	544.47	41'	3'-0"	10- #10 v(E)	28- #4 s(K) at 18"	F	2, 3



D162A75-SHT-WM-Thrust-Detail-02.dgn
USER NAME: dshavez
PLOT SCALE: 20' = 1"
PLOT DATE: 3/28/2017

DESIGNED - AAG
DRAWN - GF
CHECKED - KWH/AAG
DATE - 03/21/2017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN THRUST RESTRAINT DETAILS AND SECTIONS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-021-1	COOK	153	66
			CONTRACT NO. 62A75	



D162J31-SHT-WATERMAIN-14.dgn
USER NAME: mrc155
PLOT SCALE: 100.0000' = 1"
PLOT DATE: 8/13/2019

DESIGNED -
DRAWN - NLD
CHECKED - JMG
DATE - 8/16/2019

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS
JACKSON BOULEVARD

SCALE: NONE SHEET 14 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	145
			CONTRACT NO. 62J31	

ILLINOIS FED. AID PROJECT

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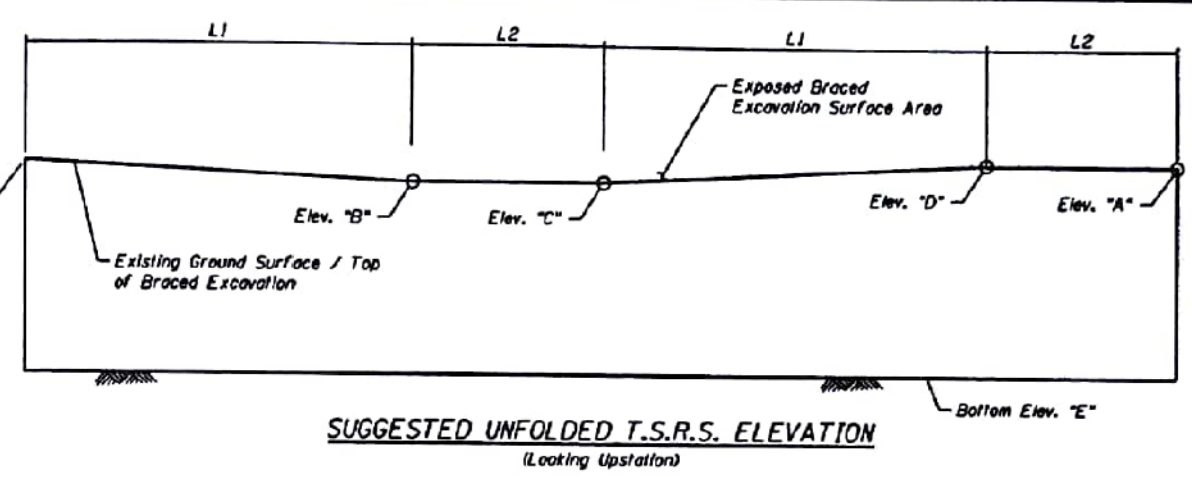
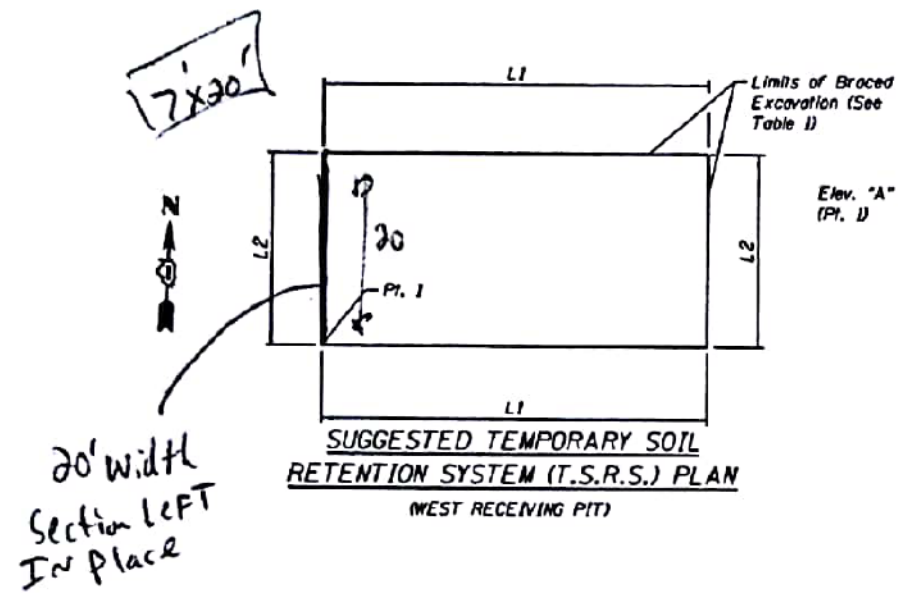


TABLE 1

Pt.	Sta.	Offset.	L1 (ft)	L2 (ft)	Elevation				
					A	B	C	D	E
1	8211+68.25	84.27' RT	24	20	+592.83	+587.62	+587.62	+592.83	+555.50

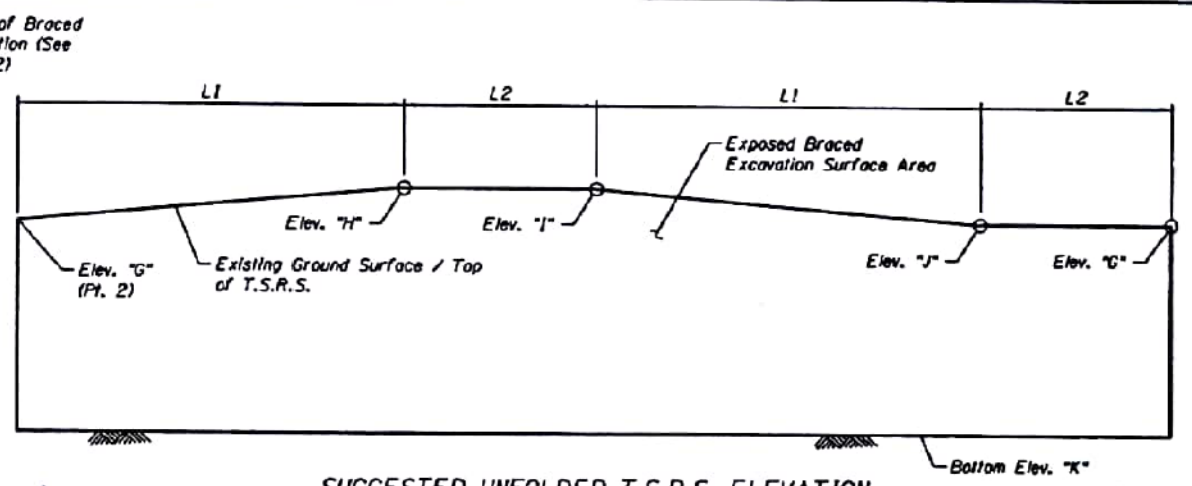
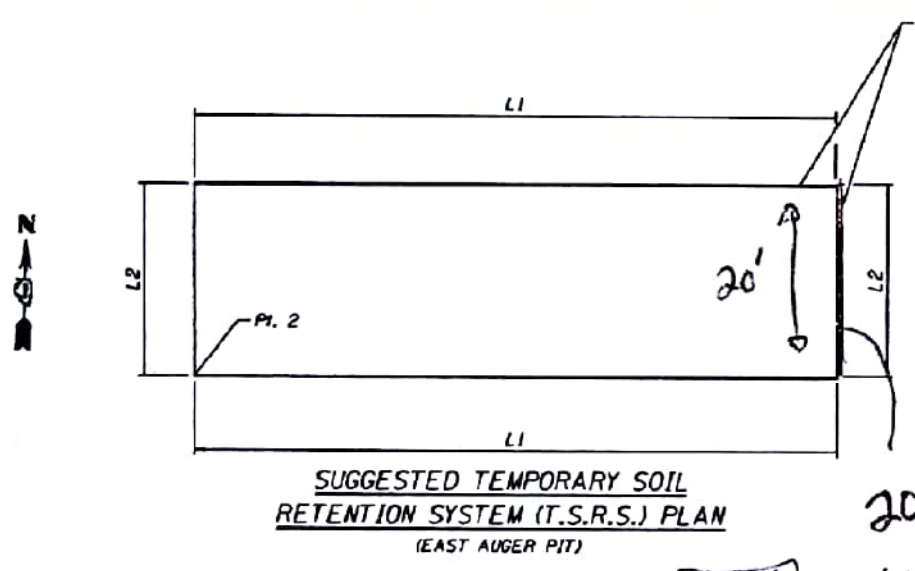
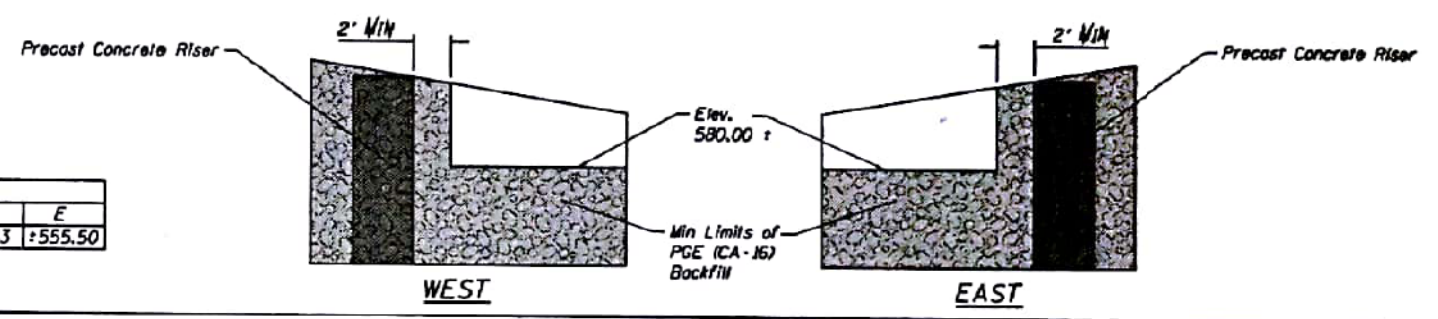


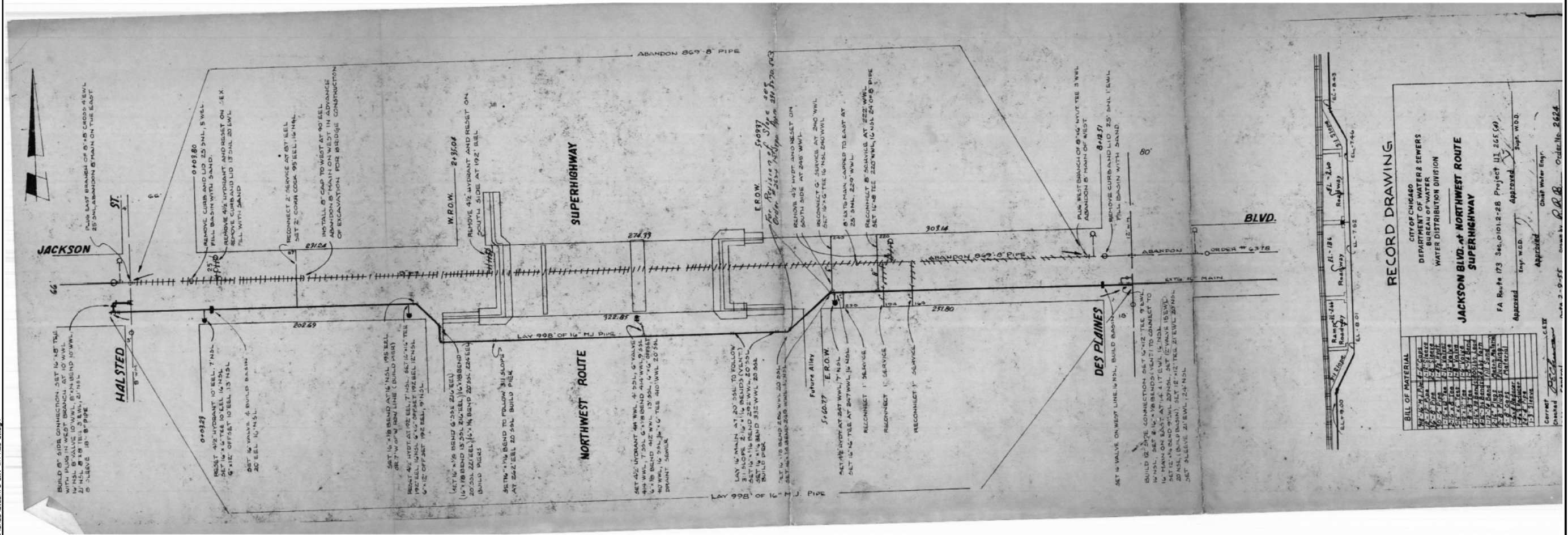
TABLE 2

Pt.	Sta.	Offset.	L1 (ft)	L2 (ft)	Elevation				
					G	H	I	J	K
2	8214+66.93	83.36' RT	40	20	+585.58	+593.23	+593.23	+585.58	+555.50

- NOTES**
1. Temporary Soil Retention System layout and elevations provided are for contractor bidding purposes only. Exact layout and elevations of Temporary Soil Retention System (T.S.R.S.) shall be determined by contractor in the field.
 2. Excavation, backfilling (including PGE backfill), and bracing system and/or T.S.R.S. is included in the pay item "Steel Casing Pipe Augered and Jacked 30".
 3. The bracing system for the T.S.R.S shall be installed without the use of Impact-type pile drivers. The proposed equipment and procedures used for the installation of bracing system shall be submitted to the Engineer for approval prior to their use. If vibratory equipment utilized, the Contractor shall also submit documentation regarding the operating noise levels and operating vibration characteristics of the equipment proposed. The approval of the equipment and procedure by the Engineer does not guarantee the performance in the field of the equipment will be acceptable. If in the judgment of the Engineer, the noise and/or vibration effects exceed those required by the local residents, then the Contractor must halt production and find a remedy suitable to the Engineer. Threshold values for vibration monitoring are included in the special provision "CONSTRUCTION VIBRATION MONITORING". The costs incurred finding suitable equipment and procedures shall be included in the cost of "Steel Casing Pipe Augered and Jacked 30". No additional costs shall be paid for this effort.

AECOM	USER NAME = dshvaz	DESIGNED - CRH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUGGESTED TEMPORARY SOIL RETENTION SYSTEM DETAIL JACKING & RECEIVING PITS	F.A.I. RTE. = 90/94/290	SECTION = 2015-021-1	COUNTY = COOK	TOTAL SHEETS = 153	SHEET NO. = 87
	PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED			CONTRACT NO. = 62A75				
	PLOT DATE = 4/21/2017	CHECKED - ATB	REVISED			SHEET NO. 5-1 OF 5-1 SHEETS				

FOR INFORMATION ONLY



RECORD DRAWING

CITY OF CHICAGO
DEPARTMENT OF WATER SEWERS
BUREAU OF WATER
WATER DISTRIBUTION DIVISION

JACKSON BLVD. at NORTHWEST ROUTE SUPERHIGHWAY

FA Route 73 Sec. 0101.2-28 Project UI 265 (A)

Approved: [Signature] Sup. W.D.
Approved: [Signature] Chief Water Eng.
Checked: [Signature] C.E.T.

Scale: 1" = 40'

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DESIGNED -	REVISD -
DRAWN -	REVISD -
CHECKED -	REVISD -
DATE - 03/21/2017	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN RECORD INFORMATION	
F.A.I. RTE. 90/94/290	SECTION 2015-021-1
COUNTY COOK	TOTAL SHEETS 153
SHEET NO. 68	
CONTRACT NO. 62A75	

ILLINOIS	FED. AID PROJECT
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DESIGNED -	REVISD -
DRAWN - NLD	REVISD -
CHECKED - JMG	REVISD -
DATE - 8/16/2019	REVISD -

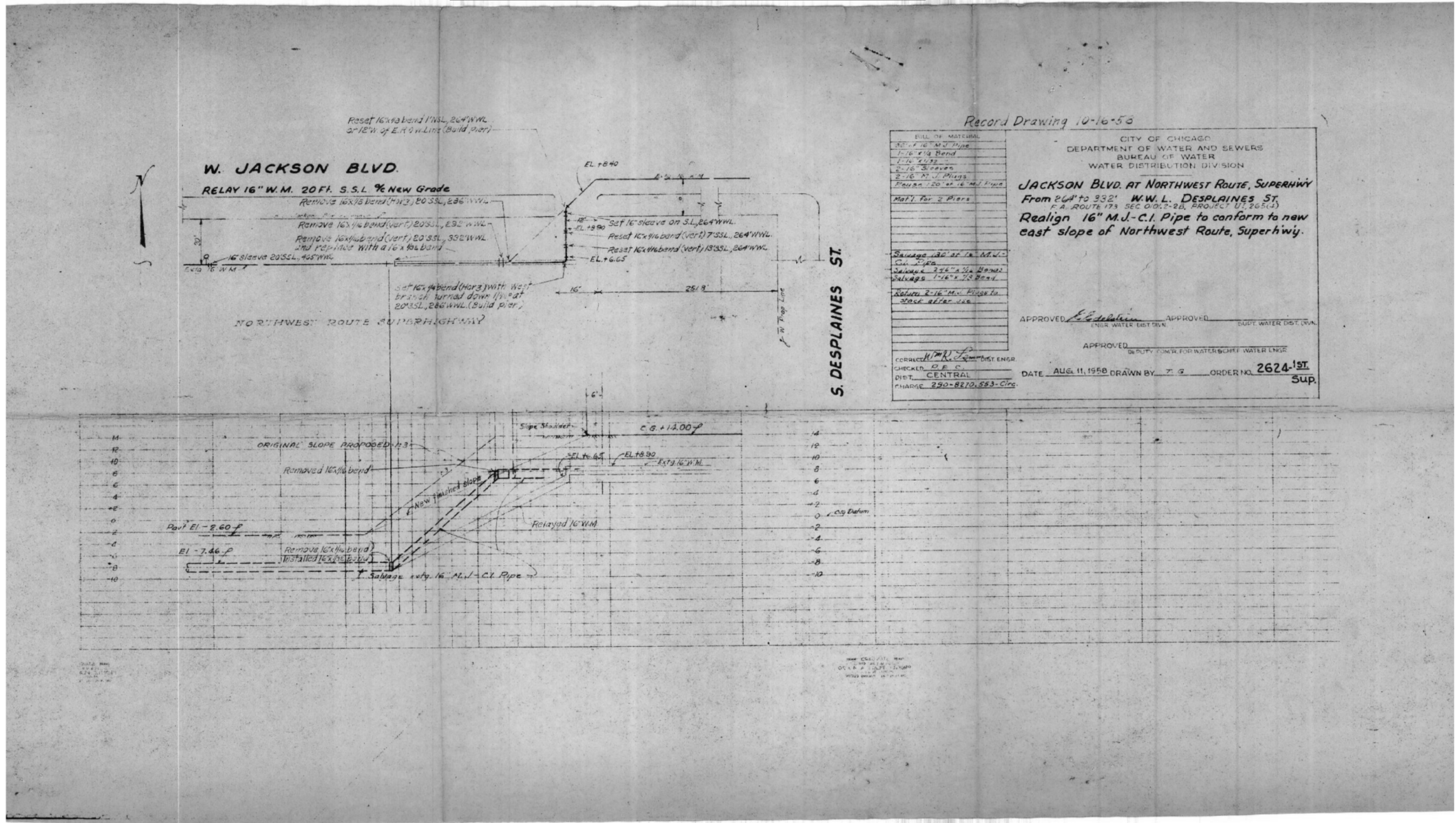
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WATER MAIN PLANS	
JACKSON BOULEVARD	
SCALE: NONE	SHEET 16 OF 17 SHEETS
STA.	TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-1
COUNTY COOK	TOTAL SHEETS 400
SHEET NO. 147	
CONTRACT NO. 62J31	
ILLINOIS FED. AID PROJECT	

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FOR INFORMATION ONLY



Record Drawing 10-16-56

BILL OF MATERIAL	
20' x 16" M.J. Pipe	
1-16" x 16" Bend	
1-16" x 16" Tee	
2-16" Sleeves	
2-16" M.J. Plugs	
1-20' x 16" M.J. Pipe	
Mat'l. for 2 Piers	
Salvage 120' of 16" M.J.-C.I. Pipe	
Salvage 2-16" x 1/2" Band	
Salvage 1-16" x 1/2" Band	
Return 2-16" M.J. Plugs to stock after use	

CITY OF CHICAGO
DEPARTMENT OF WATER AND SEWERS
BUREAU OF WATER
WATER DISTRIBUTION DIVISION

JACKSON BLVD. AT NORTHWEST ROUTE, SUPERHWY
From 264' to 332' W.W.L. DESPLAINES ST.
F.A. ROUTE 173 SEC 01/2-20, PROJECT 01, 265(1)
Realign 16" M.J.-C.I. Pipe to conform to new east slope of Northwest Route, Superhighwy.

APPROVED: *[Signature]* ENGR. WATER DIST. DIV. APPROVED: *[Signature]* CHIEF, WATER DIST. DIV.

APPROVED: *[Signature]* DEPUTY COMR. FOR WATERWORKS WATER LINE

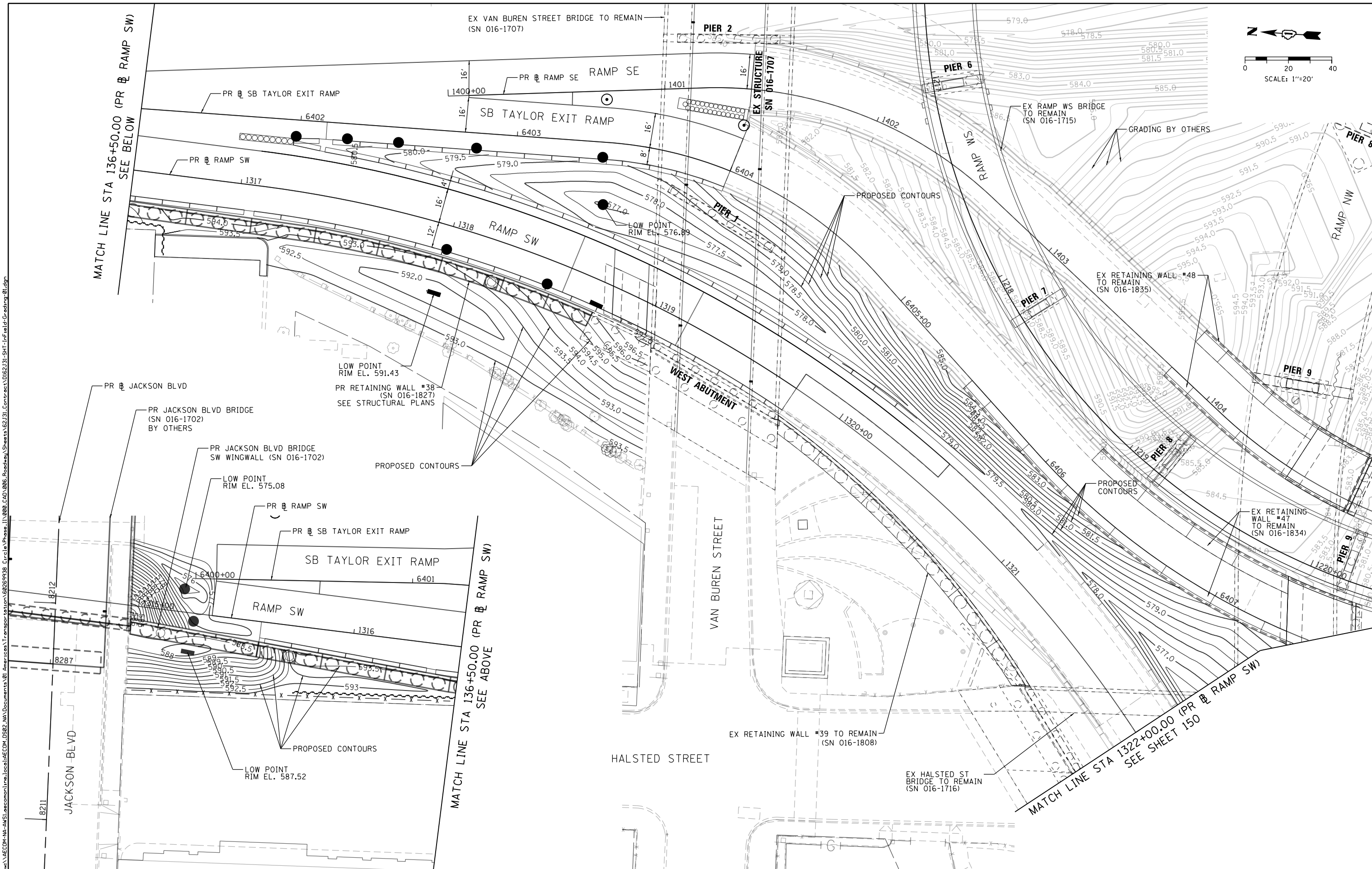
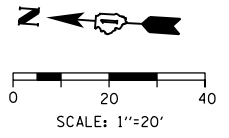
CORRECTED: *[Signature]* DIST. ENGR.
CHECKER: D.E.C.
DIST. CENTRAL
CHARGE: 290-8270.553-Circ.

DATE: AUG 11, 1958 DRAWN BY: Z.G. ORDER NO. 2624-1ST Sup.

AECOM 303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-2076 PHONE: (312) 373-7700 FAX: (312) 373-6800	D16275-SHT-WM-REC-02.dgn	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WATER MAIN RECORD INFORMATION		F.A.I. RTE. 90/94/290	SECTION 2015-021-1	COUNTY COOK	TOTAL SHEETS 153	SHEET NO. 69
	USER NAME = dlshevez	DRAWN -	REVISED -		SCALE: 48,0000' / 1" =	SHEET 2 OF 2	SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT			
	PLOT SCALE = 48,0000' / 1" =	CHECKED -	REVISED -								
	PLOT DATE = 3/20/2017	DATE -	03/21/2017	REVISED -							

TranSystems	D162J31-SHT-WATERMAIN-17.dgn	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING WATER MAIN PLANS JACKSON BOULEVARD		F.A.I. RTE. 90/94/290	SECTION 2019-054-1	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 148
	USER NAME = mrc155	DRAWN -	NLD		REVISED -	SCALE: NONE	SHEET 17 OF 17	SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT		
	PLOT SCALE = 100,0000' / 1" =	CHECKED -	JMG	REVISED -							
	PLOT DATE = 8/13/2019	DATE -	8/16/2019	REVISED -							

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FILE PATH = p:\VACOM\NA-AVSI\ecom\line\local\AECOM_DS02_NA.Documents\01_Americas\Transportation\60269938_Circle\Phase1\1000_CAD\006_Roadway_Sheets\62J31_Contract\162J31-SHT-1-Field-Grading_01.dgn



D162J31-SHT-1-Field-Grading-01.dgn	DESIGNED - ATB	REVISED -
USER NAME = andy.becker	DRAWN - ATB	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - MJE	REVISED -
PLOT DATE = 8/14/2019	DATE - 8/16/2019	REVISED -

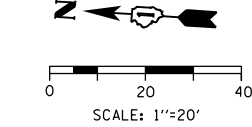
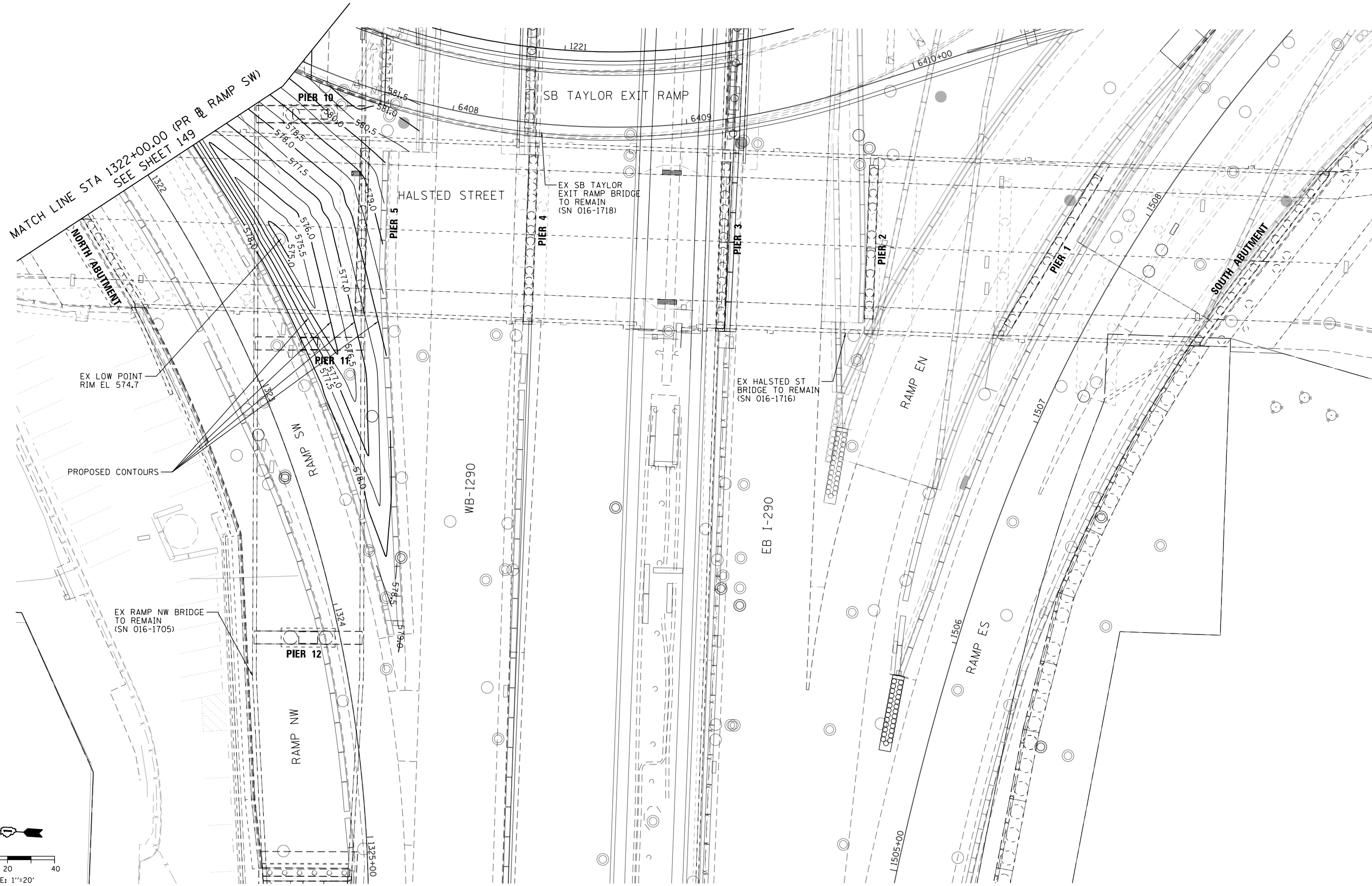
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INFIELD GRADING

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. 1315+00.47 TO STA. 1322+00.00

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 149
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT

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D162J31-SHT-1-Field-Grading-02.dgn
 USER NAME = ChiuA
 PLOT SCALE = 40.0000' / in.
 PLOT DATE = 8/15/2019

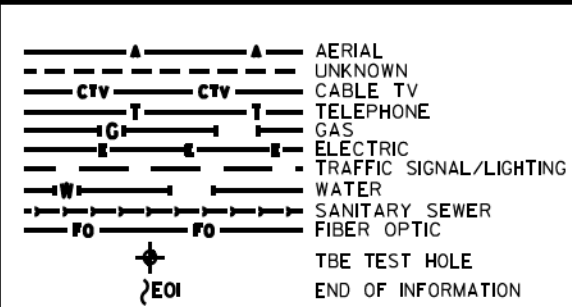
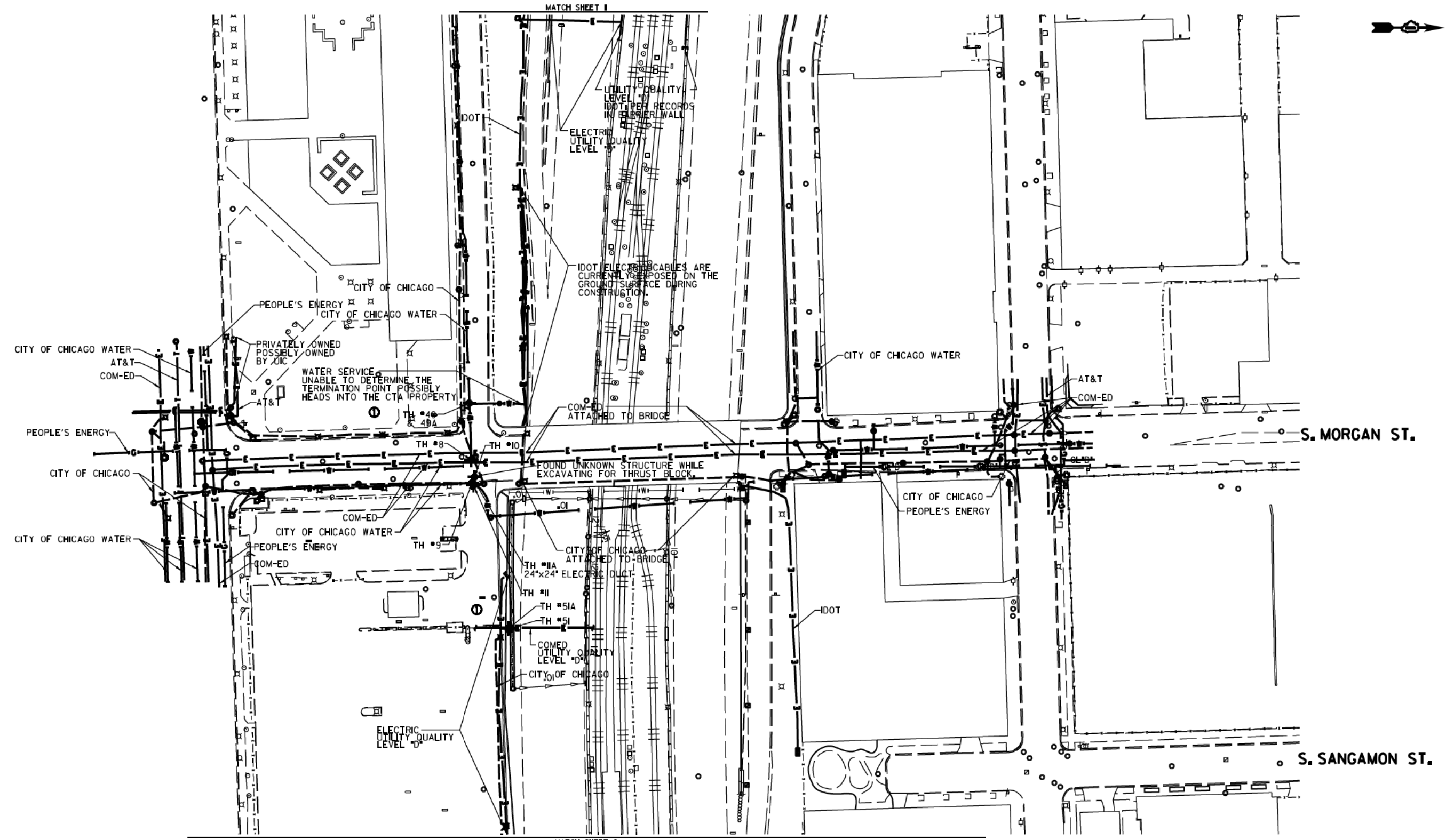
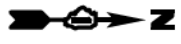
DESIGNED -	ATB	REVISED -	
DRAWN -	ATB	REVISED -	
CHECKED -	MJE	REVISED -	
DATE -	8/16/2019	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

INFIELD GRADING

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 1322+00.00 TO STA. 1325+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	150
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

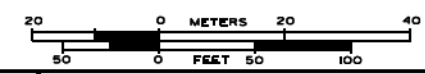


UTILITY OWNERS	
AT&T	= TELEPHONE
COM-ED	= ELECTRIC
CITY OF CHICAGO	= ELECTRIC
CITY OF CHICAGO	= WATER
IDOT	= ELECTRIC
PEOPLE'S ENERGY	= GAS

UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/14/13 THROUGH 7/25/14. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 11/17/16 THROUGH 12/09/16 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 4300 W. 111th St., Suite 100, Alsip, IL 60413
 (708) 744-3720 clausenwhite.com



TBE Job No. L0990531 563, 647, 737
 SUE Plan Page 1 of 12

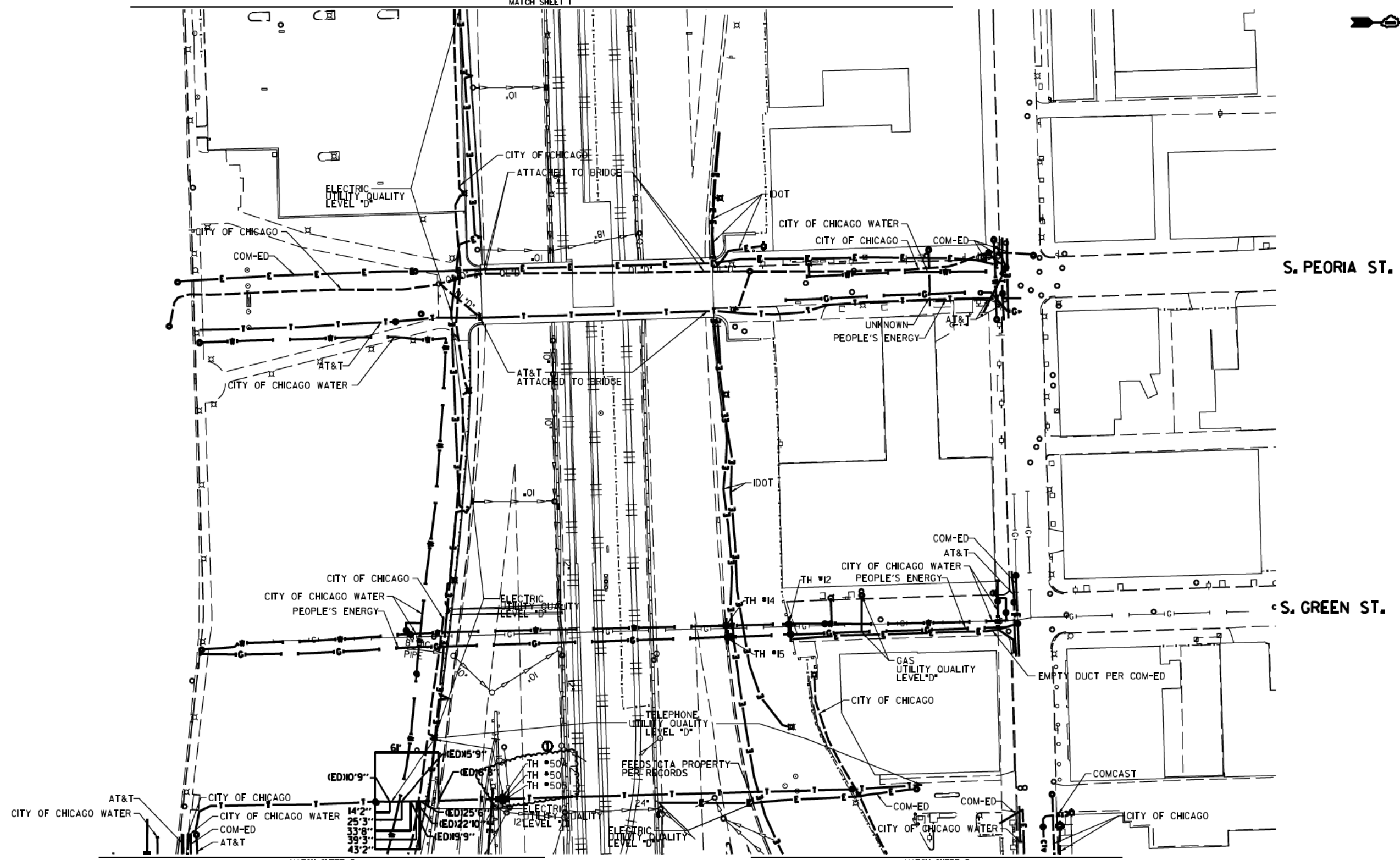
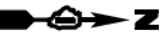
Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

DESIGNED	JP	REVISED	12/20/16
DRAWN	SRK	REVISED	
CHECKED	MGR	REVISED	
DATE	12/18/15	REVISED	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

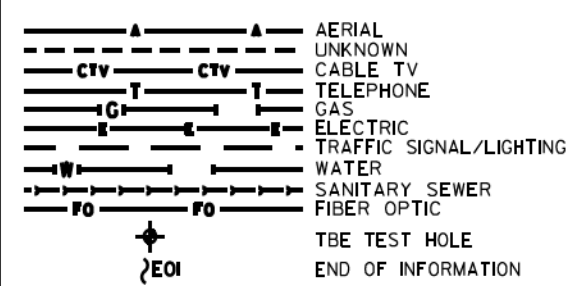
I-94-901-290 (Circle Interchange)
 Chicago, Illinois
 SHEET 1 OF 27 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	151
Contract No. N/A				
FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-9-259-12				



MATCH SHEET 3

MATCH SHEET 3



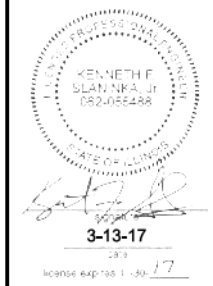
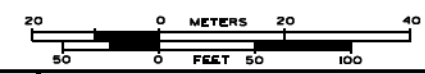
UTILITY OWNERS
 AT&T = TELEPHONE
 COMCAST = CABLE TV
 COM-ED = ELECTRIC
 CITY OF CHICAGO = ELECTRIC
 CITY OF CHICAGO WATER = WATER
 IDOT = ELECTRIC
 PEOPLE'S ENERGY = GAS

NOTE: ALL ELECTRONIC DEPTHS MARKED AS (ED) WERE OBTAINED UTILIZING A SONDE DEVICE. DEPTHS ON THE AT&T DUCT WERE RECORDED FROM AN AT&T CONTRACTOR, DEPTHS ON THE COMED DUCT WERE RECORDED BY A CARDNO CREW. CARDNO CAN NOT VERIFY THE ACCURACY OF THESE DEPTHS AND SHOULD BE USED AS APPROXIMATE AND AS INFORMATION ONLY.

UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/14/13 THROUGH 7/25/14. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 11/7/16 THROUGH 12/09/16 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 63 AIRPORT DRIVE, SUITE 1, JOLIET, ILLINOIS 60433
 (815) 744-3720 clausse@cwawhite.com



TBE Job No. L0990531 563, 647, 737
 SUE Plan Pages 2 of 12

Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

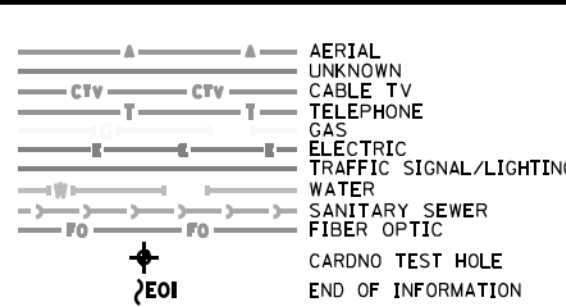
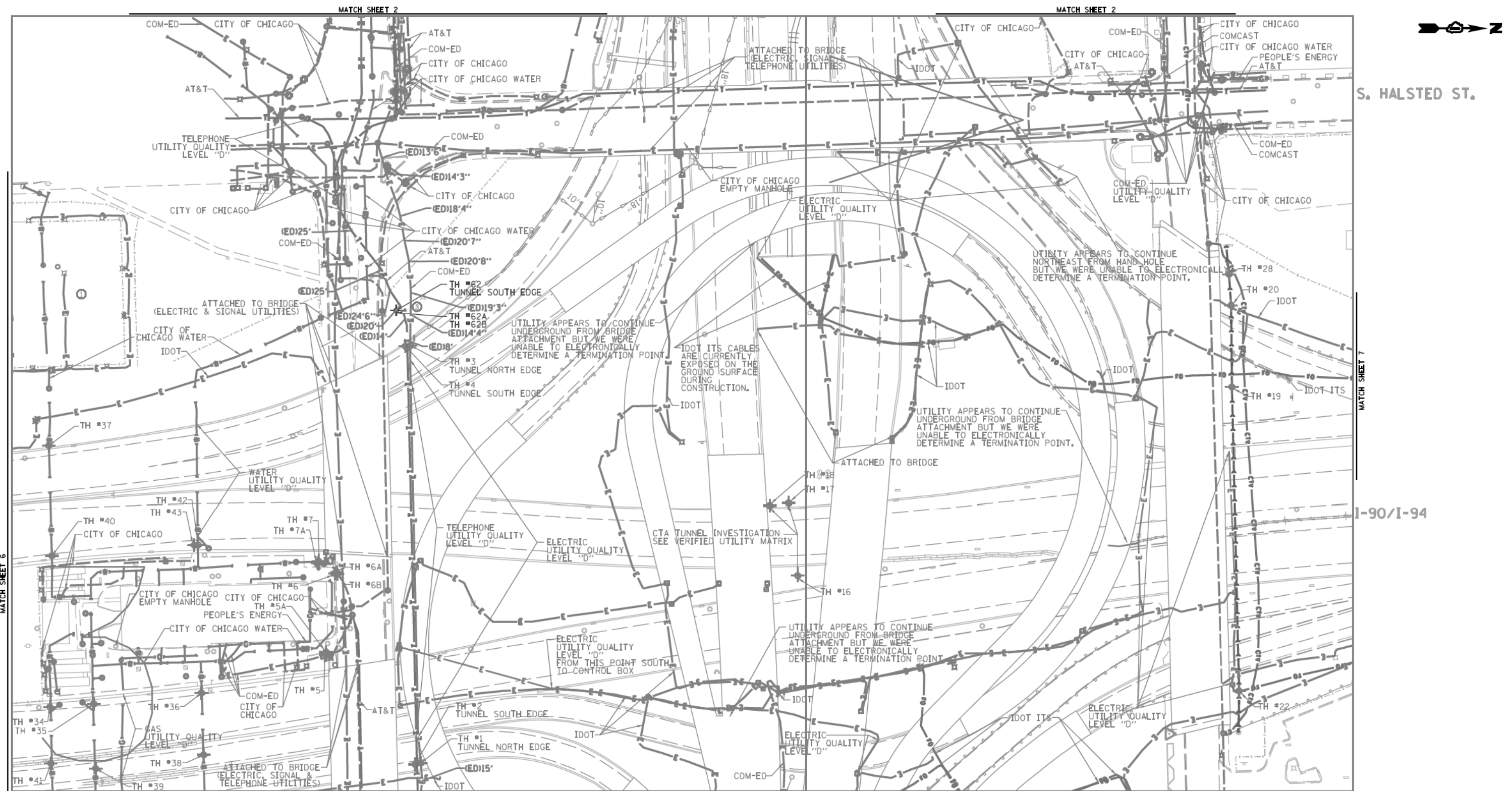
DESIGNED JP	REVISED 12/20/16
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
 Chicago, Illinois

SHEET 2 OF 27 SHEETS

F.A. R.T.C.	SECTION N/A	COUNTY Cook	TOTAL SHEETS 400	SHEET NO. 152
FED. ROAD DIST. NO.		ILLINOIS	DOT Project No. P-9-259-12	



UTILITY OWNERS	
AT&T	= TELEPHONE
COM-ED	= ELECTRIC
CITY OF CHICAGO	= ELECTRIC
CITY OF CHICAGO WATER	= WATER
IDOT	= ELECTRIC
IDOT ITS	= FIBER OPTIC
PEOPLE'S ENERGY	= GAS

NOTE: ALL ELECTRONIC DEPTHS MARKED AS (ED) WERE OBTAINED UTILIZING A SONDE DEVICE. DEPTHS ON THE AT&T DUCT WERE RECORDED FROM AN AT&T CONTRACTOR. DEPTHS ON THE COMED DUCT WERE RECORDED BY A CARDNO CREW. CARDNO CAN NOT VERIFY THE ACCURACY OF THESE DEPTHS AND SHOULD BE USED AS APPROXIMATE AND AS INFORMATION ONLY.

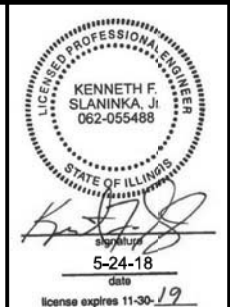
UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/14/13 THROUGH 10/21/15. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 1/24/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 5/11/18 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

CHANGES TO UTILITIES OUTSIDE THE LIMITS OF THIS INVESTIGATION AREA MAY HAVE BEEN MADE AFTER OUR PREVIOUS INVESTIGATION AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



CLAASSEN, WHITE & ASSOCIATES, P.C.
LAND SURVEYORS
121 AIRPORT DR. UNIT 1, COLETT, ILLINOIS 60431
(815) 744-3720 clausse@cwacsurvey.com

Dynasty Group
Engineers & Surveyors
CARDNO Job No. 109510531, 563, 647, 737, 758, 761, 764
SUE Plan Pages: 3 of 12

Utility Quality Level "A": Visually Verified Test Hole
Utility Quality Level "B": Designating/non Visually Verified Test Hole
Utility Quality Level "C": Research with Survey
Utility Quality Level "D": Records Research

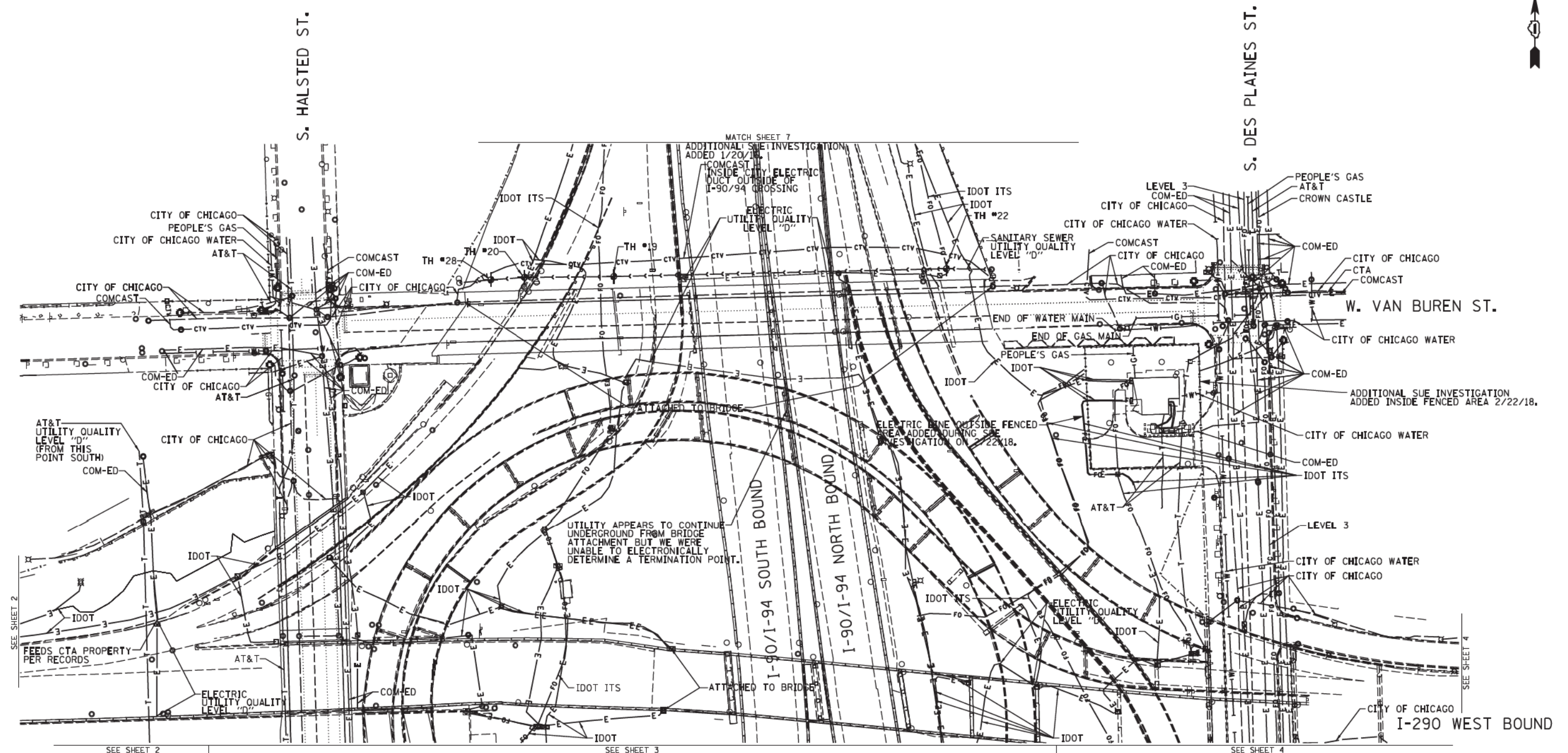
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DRAWN	SRK	REVISED	5/24/14 ADDED TH #2, 62A
CHECKED	MGR	REVISED	
DATE	12/18/15	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
Chicago, Illinois
SHEET 3 OF 27 SHEETS

F.A. R.T.C.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	153

Contract No. N/A
FED. ROAD DIST. NO. ILLINOIS IDOT Project No. P-91-259-12



NOTE:
 THE CITY OF CHICAGO LINES (OTHER THAN THE WATER LINES), ARE MULTI-DUCT SYSTEMS, AND MAY CONTAIN ELECTRIC, TRAFFIC SIGNAL, CPS FIBER OPTICS, OEMC FIBER OPTICS, OTHER CITY COMMUNICATION LINES, AND OCCASIONALLY 3RD PARTY LINES. CARDNO HAS NOT ATTEMPTED TO DETERMINE THE NUMBER, SIZE, CONFIGURATION, OR OWNERSHIP OF THESE DUCT SYSTEMS. SUCH DETERMINATION SHOULD BE MADE BY OTHERS DURING THE UTILITY COORDINATION PROCESS.

CHANGES TO UTILITIES OUTSIDE THE LIMITS OF THIS INVESTIGATION AREA MAY HAVE BEEN MADE AFTER OUR PREVIOUS INVESTIGATION AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPGRADING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

	A	AERIAL
	—	UNKNOWN
	CTV	CABLE TV
	T	TELEPHONE
	G	GAS
	E	ELECTRIC
	TL	TRAFFIC SIGNAL/LIGHTING
	W	WATER
	SS	SANITARY SEWER
	FO	FIBER OPTIC
	+	TBE TEST HOLE
	EOI	END OF INFORMATION

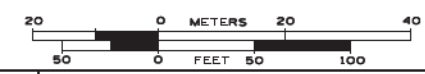
UTILITY OWNERS	
AT&T	= TELEPHONE
CITY OF CHICAGO	= ELECTRIC
CITY OF CHICAGO	= FIBER OPTIC
CITY OF CHICAGO WATER	= WATER
COMCAST	= CABLE TV
COM-ED	= ELECTRIC
CROWN CASTLE	= FIBER OPTIC
CTA	= ELECTRIC
IDOT	= ELECTRIC
IDOT ITS	= FIBER OPTIC
LEVEL 3	= FIBER OPTIC
PEOPLE'S GAS	= GAS

UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 6/30/14 THROUGH 8/07/14. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 11/17/16 THROUGH 12/09/16 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 2/22/18 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 121 AIRPORT DRIVE, SUITE 1, BLOOMINGTON, ILLINOIS 60010
 (815) 744-3720 clausse@cwaweb.com



CARDNO Job No. IL09510531, 563, 647, 737, 758
 SUE Plan Page: 3A of 12

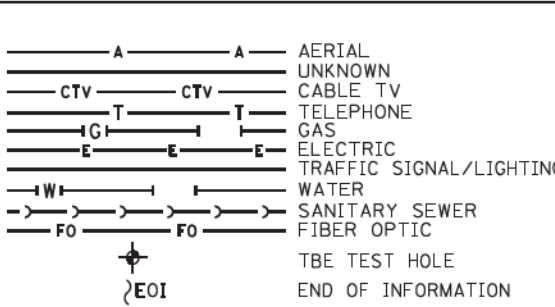
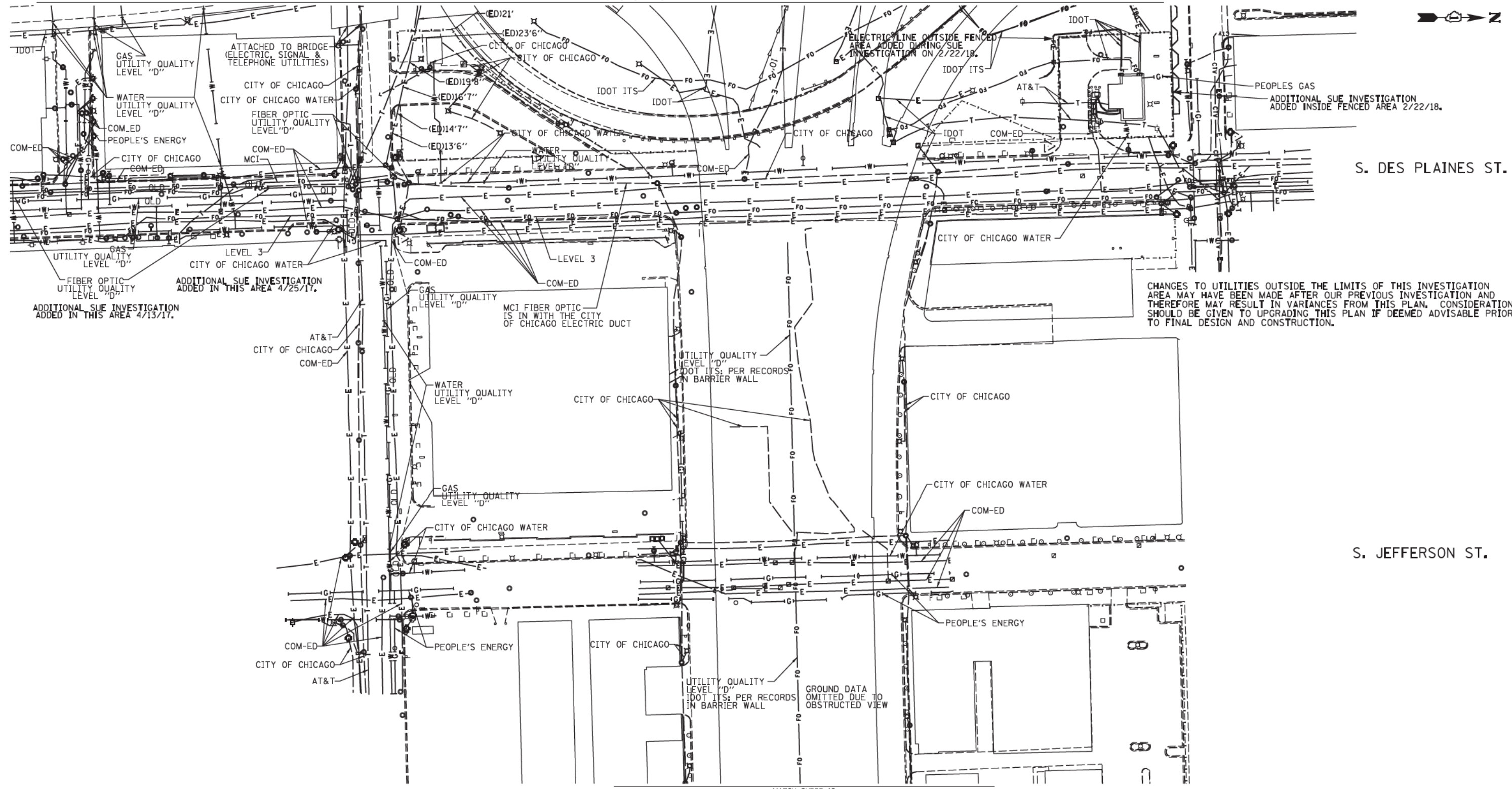
Utility Quality Level "A": Visually Verified Test Hole
Utility Quality Level "B": Designating/non Visually Verified Test Hole
Utility Quality Level "C": Research with Survey
Utility Quality Level "D": Records Research

DESIGNED	IP/ER/LP	REVISED	12/20/16
DRAWN	SRK/KLC	REVISED	2/23/18
CHECKED	MGR/KFS	REVISED	
DATE	12/18/15	REVISED	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94/I-90-290 (Circle Interchange)
 Chicago, Illinois
 SHEET 4 OF 27 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	154
FED. ROAD DIST. NO.		ILLINOIS	IDOT Project No. P-91-259-12	Contract No. N/A



UTILITY OWNERS

AT&T = TELEPHONE
 COM-ED = ELECTRIC
 CITY OF CHICAGO = ELECTRIC
 CITY OF CHICAGO = SANITARY SEWER
 CITY OF CHICAGO WATER = WATER
 IDOT = ELECTRIC
 IDOT SURVEILLANCE = FIBER OPTIC
 LEVEL 3 = FIBER OPTIC
 MCI = FIBER OPTIC
 PEOPLE'S ENERGY = GAS

NOTE: ALL ELECTRONIC DEPTHS MARKED AS (ED) WERE OBTAINED UTILIZING A SONDE DEVICE. DEPTHS ON THE AT&T DUCT WERE RECORDED FROM AN AT&T CONTRACTOR. DEPTHS ON THE COMED DUCT WERE RECORDED BY A CARDNO CREW. CARDNO CAN NOT VERIFY THE ACCURACY OF THESE DEPTHS AND SHOULD BE USED AS APPROXIMATE AND AS INFORMATION ONLY.

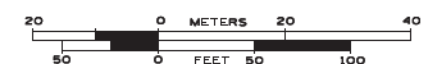
UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/14/13 THROUGH 8/07/14. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/27/17 THROUGH 4/07/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 4/25/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 2/22/18 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 121 AIRPORT DRIVE, SUITE 1, BLOOMINGTON, ILLINOIS 60010
 (815) 744-3720 clausse@cwawhite.com

Dynasty Group
 Engineers & Surveyors
 CARDNO Job No. IL09510531, 563, 647, 737, 758
 SUE Plan Page: 4 of 12

Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

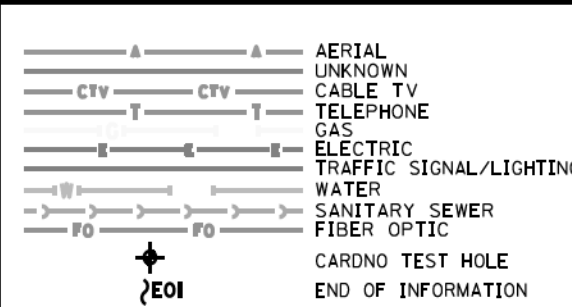
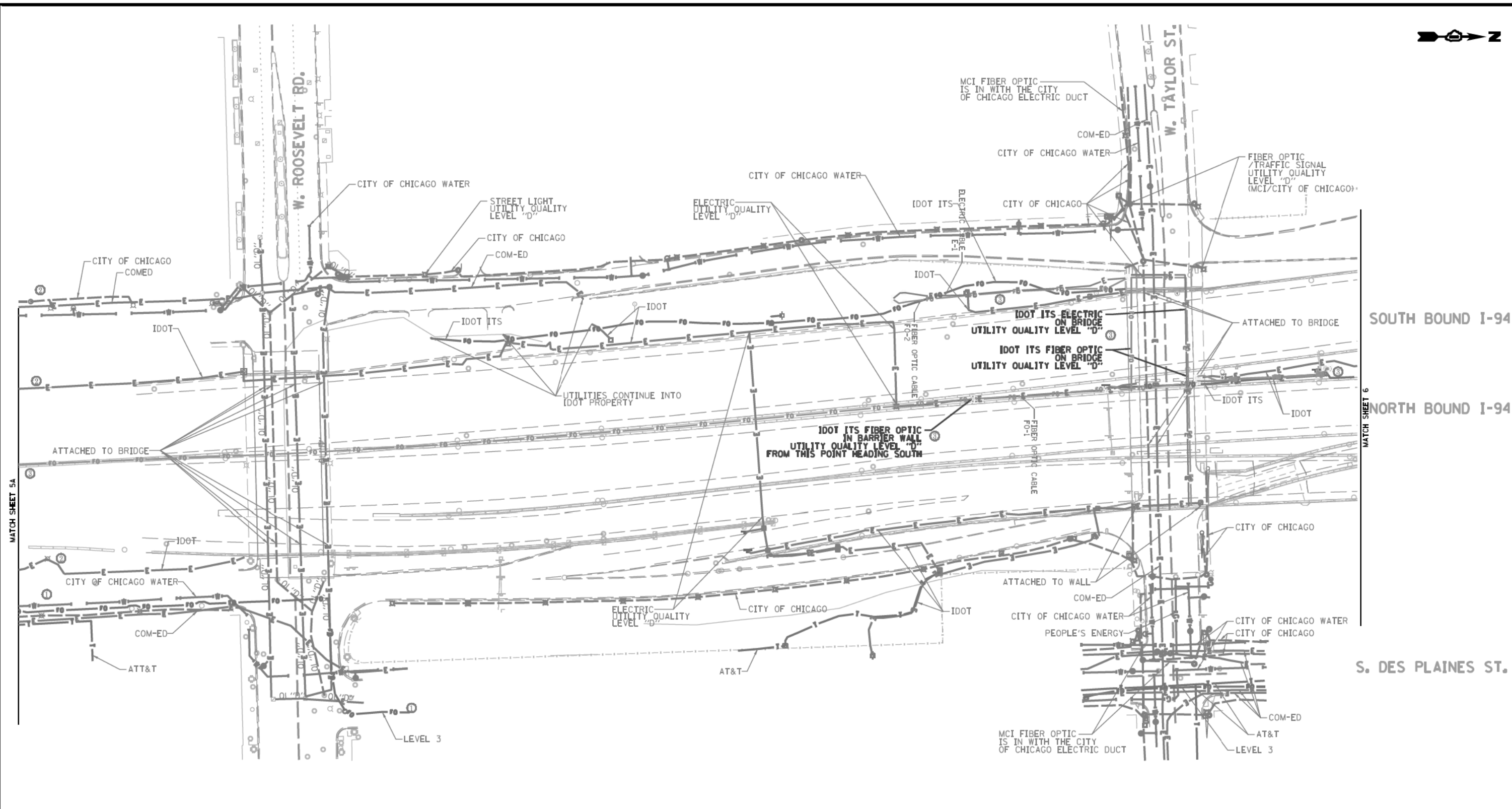
DESIGNED	IP/ER/LP	REVISED	4/13/17
DRAWN	SRK/KLC	REVISED	5/1/17
CHECKED	MGR/KFS	REVISED	2/23/18
DATE	12/18/15	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
Chicago, Illinois

SHEET 5 OF 27 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	155
Contract No. N/A				
FED. ROAD DIST. NO. ILLINOIS IDOT Project No. P-91-259-12				



UTILITY OWNERS	
AT&T	= TELEPHONE
COM-ED	= ELECTRIC
CITY OF CHICAGO	= ELECTRIC
CITY OF CHICAGO	= WATER
IDOT	= ELECTRIC
IDOT ITS	= FIBER OPTIC
LEVEL 3	= FIBER OPTIC
MCI	= FIBER OPTIC
PEOPLE'S ENERGY	= GAS

NOTE: ALL ELECTRONIC DEPTHS MARKED AS (ED) WERE OBTAINED UTILIZING A SONDE DEVICE. DEPTHS ON THE AT&T DUCT WERE RECORDED FROM AN AT&T CONTRACTOR. DEPTHS ON THE COMED DUCT WERE RECORDED BY A CARDNO CREW. CARDNO CAN NOT VERIFY THE ACCURACY OF THESE DEPTHS AND SHOULD BE USED AS APPROXIMATE AND AS INFORMATION ONLY.

UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/14/13 THROUGH 8/07/14. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

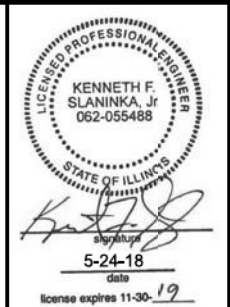
ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 11/17/16 THROUGH 12/09/16 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/06/17 THROUGH 3/08/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 5/11/18 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

CHANGES TO UTILITIES OUTSIDE THE LIMITS OF THIS INVESTIGATION AREA MAY HAVE BEEN MADE AFTER OUR PREVIOUS INVESTIGATION AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



Cardno
Engineers & Surveyors

Dynasty Group
Engineers & Surveyors

CLAASSEN, WHITE & ASSOCIATES, P.C.
LAND SURVEYORS
121 AIRPORT DRIVE, SUITE 1, GLETT, ILLINOIS 60431
(815) 744-3720 clausse@cwacsurvey.com

CARDNO Job No. 109510531, 563, 647, 737, 758, 761, 764
SUE Plan Pages 5 of 12

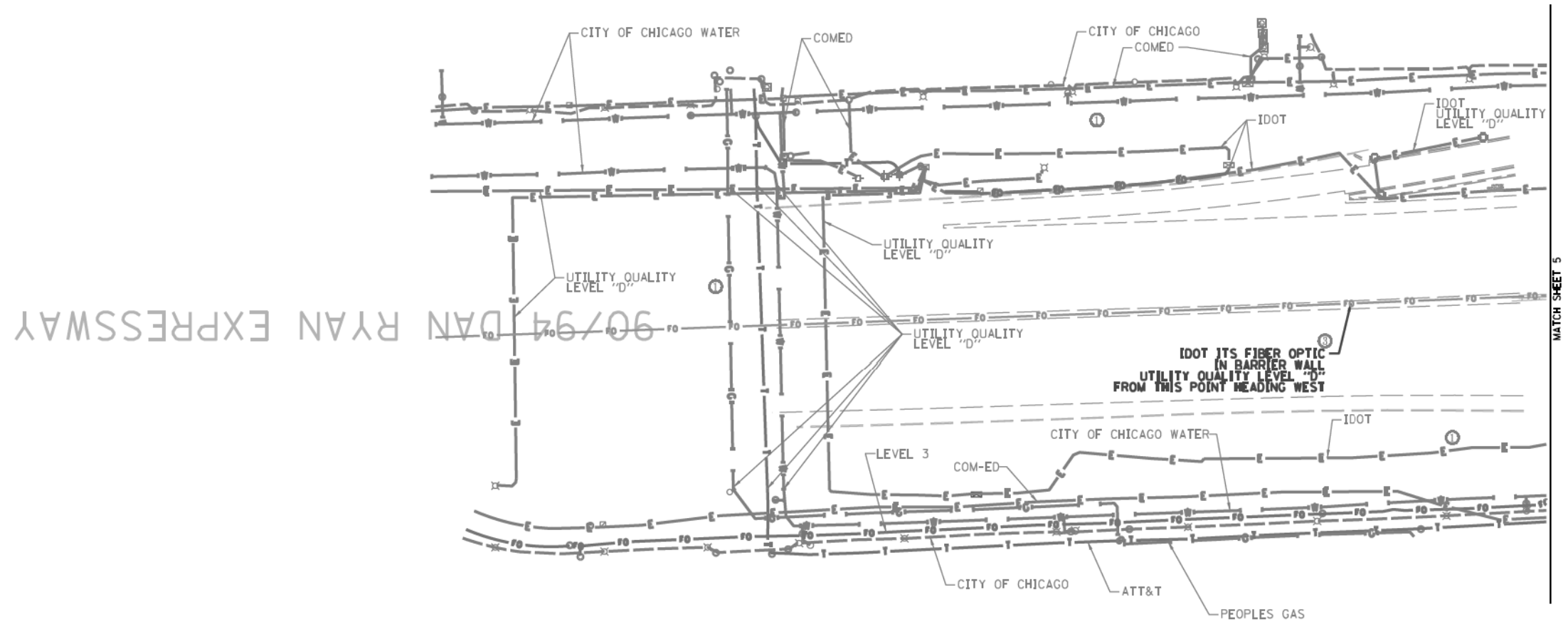
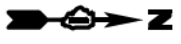
Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

DESIGNED	JP	REVISED	12/20/16
DRAWN	SRK	REVISED	3/13/17
CHECKED	MGR	REVISED	5/24/14 UPDATED UTILITIES
DATE	12/18/15	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
Chicago, Illinois

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	156
FED. ROAD DIST. NO. ILLINOIS			IDOT Project No. P-91-259-12	



MATCH SHEET 5

	AERIAL UNKNOWN
	CABLE TV
	TELEPHONE
	GAS
	ELECTRIC
	TRAFFIC SIGNAL/LIGHTING
	WATER
	SANITARY SEWER
	FIBER OPTIC
	CARDNO TEST HOLE
	END OF INFORMATION

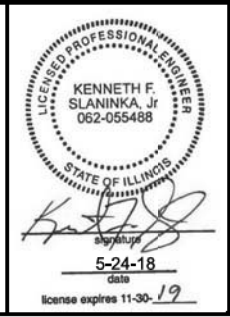
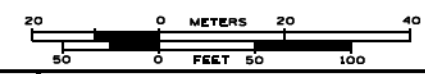
UTILITY OWNERS	
AT&T = TELEPHONE	
COM-ED = ELECTRIC	
CITY OF CHICAGO = ELECTRIC	
CITY OF CHICAGO WATER = WATER	
IDOT = ELECTRIC	
IDOT ITS = FIBER OPTIC	
LEVEL 3 = FIBER OPTIC	
PEOPLE'S ENERGY = GAS	

UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 11/17/16 THROUGH 12/09/16. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/06/17 THROUGH 3/08/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES. ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 5/11/18 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

CHANGES TO UTILITIES OUTSIDE THE LIMITS OF THIS INVESTIGATION AREA MAY HAVE BEEN MADE AFTER OUR PREVIOUS INVESTIGATION AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

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121 AIRPORT DRIVE, SUITE 1, GLEET, ILLINOIS 60431
(815) 744-3720 clausse@cwacsurvey.com

CARDNO Job No. IL09510531, 563, 647, 737, 758, 761, 764
SUE Plan Pages 5A of 12

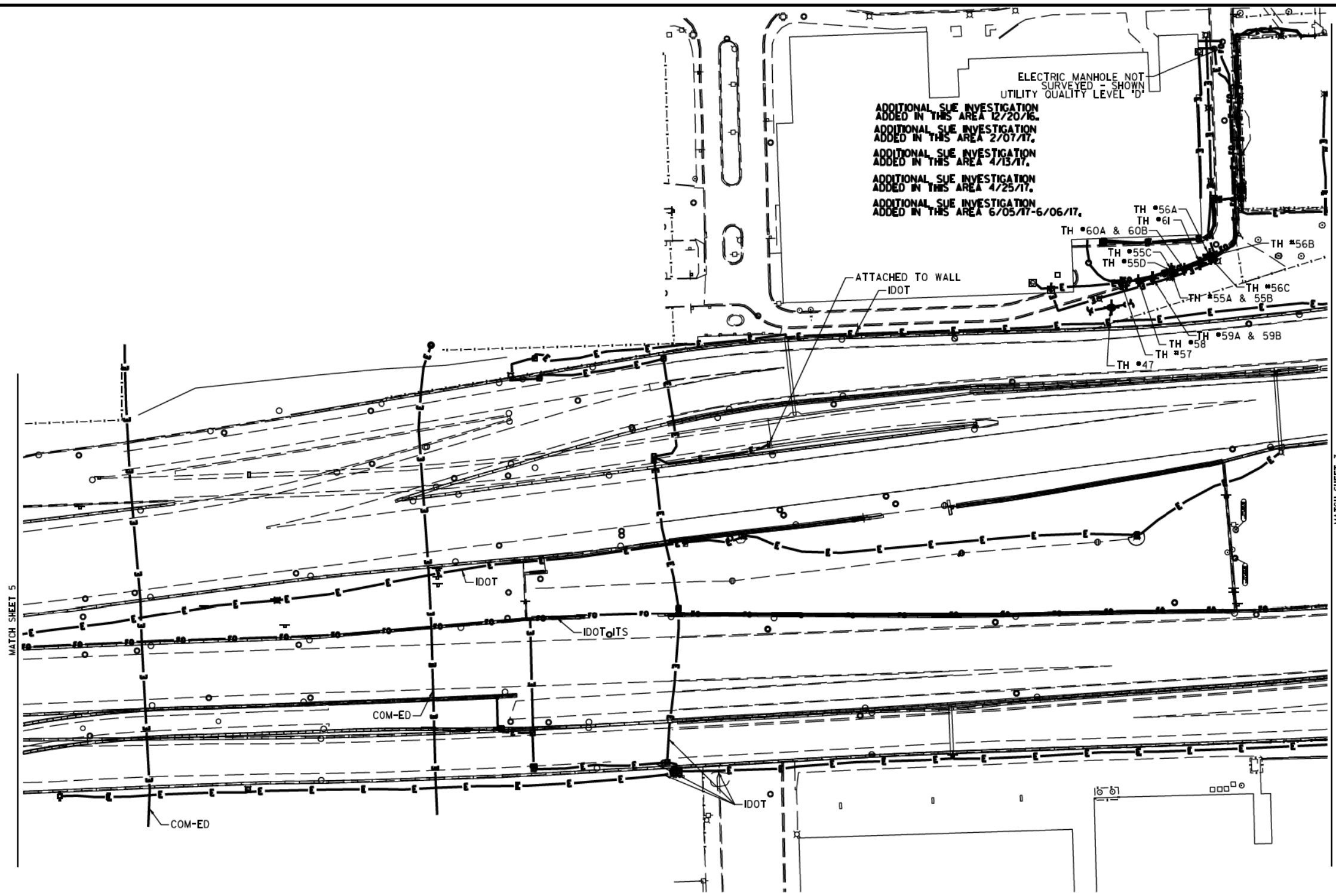
Utility Quality Level "A" : Visually Verified Test Hole
Utility Quality Level "B" : Designating/non Visually Verified Test Hole
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

DESIGNED JP	REVISED 3/13/17
DRAWN SRK	REVISED 5/24/14 UPDATED UTILITIES
CHECKED MGR	REVISED
DATE 12/20/16	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
Chicago, Illinois
SHEET 7 OF 27 SHEETS

F.A. RTG	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	157
FED. ROAD DIST. NO. ILLINOIS			IDOT Project No. P-91-259-12	



ELECTRIC MANHOLE NOT SURVEYED - SHOWN UTILITY QUALITY LEVEL 'D'

ADDITIONAL SUE INVESTIGATION ADDED IN THIS AREA 12/20/16.

ADDITIONAL SUE INVESTIGATION ADDED IN THIS AREA 2/07/17.

ADDITIONAL SUE INVESTIGATION ADDED IN THIS AREA 4/13/17.

ADDITIONAL SUE INVESTIGATION ADDED IN THIS AREA 4/25/17.

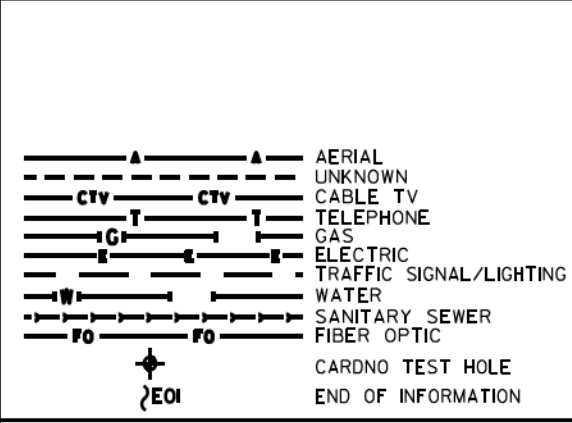
ADDITIONAL SUE INVESTIGATION ADDED IN THIS AREA 6/05/17-6/06/17.

SOUTH BOUND I-94

NORTH BOUND I-94

MATCH SHEET 5

MATCH SHEET 3



UTILITY OWNERS

COM-ED = ELECTRIC
 IDOT = ELECTRIC
 IDOT ITS = FIBER OPTIC

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ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 1/24/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 3/27/17 THROUGH 4/07/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 4/25/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 6/5/17-6/6/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.

6-08-17

license exp 12-30-17

CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
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 (815) 744-3720 claussewh@cwawhite.com

Dynasty Group
 Engineers & Surveyors

CARDNO Job No. IL0950531 563, 647, 737, 748
 SUE Plan Page 6 of 12

Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

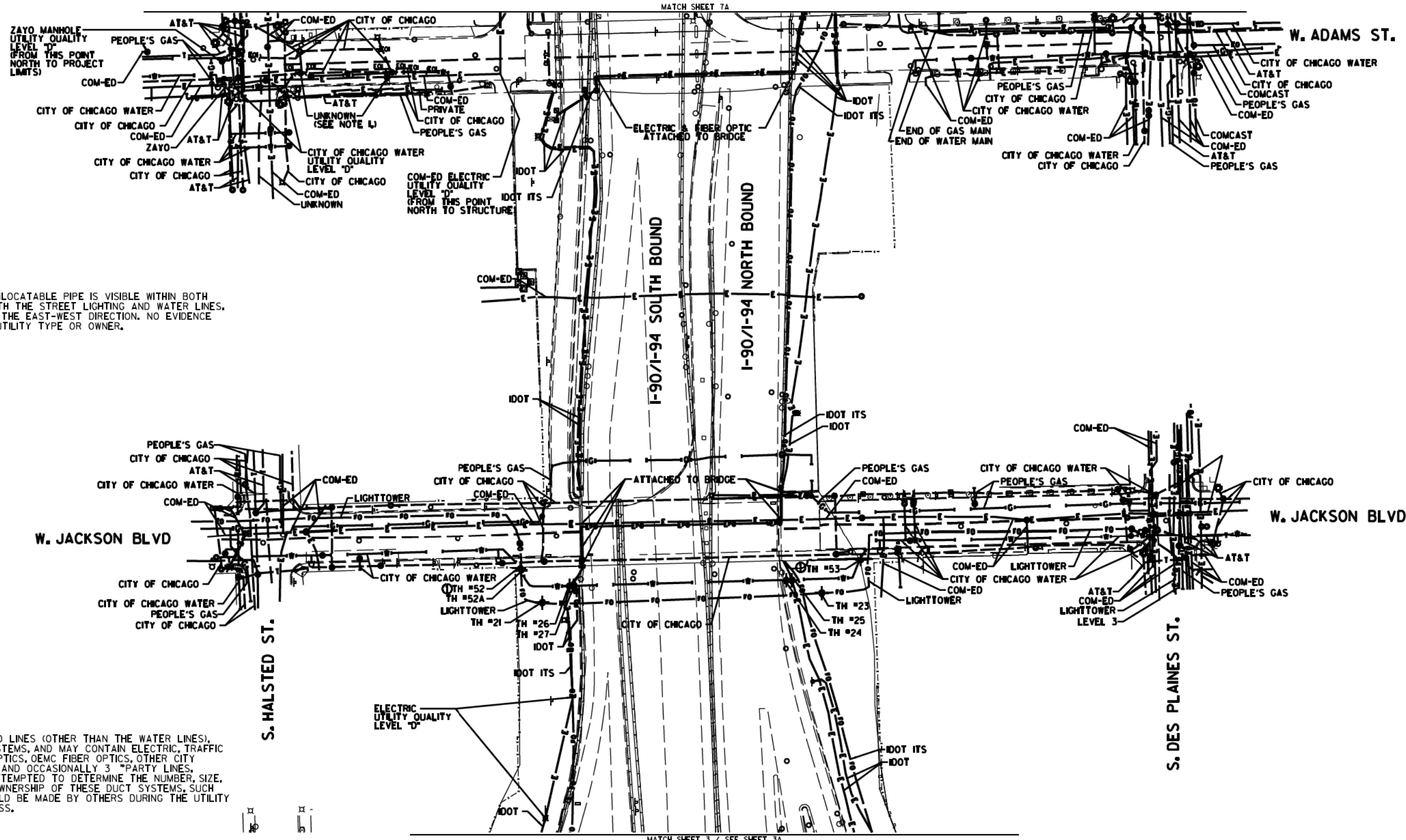
DESIGNED JP	REVISED 12/20/16 ADDED UTILITIES	REVISED 6/08/17 ADDED TH#57-61
DRAWN SRK	REVISED 2/01/17 ADDED UTILITIES	
CHECKED	REVISED 4/13/17 ADJUSTED UTILITIES	
DATE	REVISED 5/1/17 ADDED TH#55A-56C	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
 Chicago, Illinois

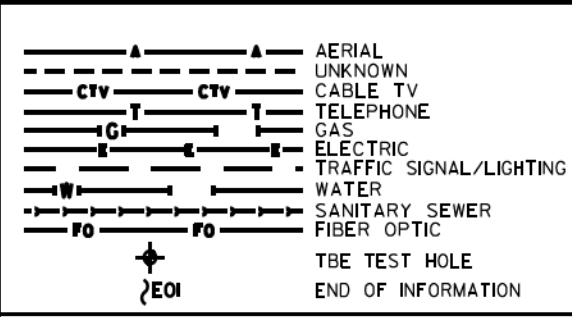
SHEET 8 OF 27 SHEETS

F.A. R.T.C.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	158
Contract No. N/A				
FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-9-259-12				



NOTE 1:
 AN UNKNOWN AND UNLOCATABLE PIPE IS VISIBLE WITHIN BOTH MANHOLES ALONG WITH THE STREET LIGHTING AND WATER LINES. PIPE IS ORIENTED IN THE EAST-WEST DIRECTION. NO EVIDENCE WAS AVAILABLE OF UTILITY TYPE OR OWNER.

NOTE:
 THE CITY OF CHICAGO LINES (OTHER THAN THE WATER LINES), ARE MULTI-DUCT SYSTEMS, AND MAY CONTAIN ELECTRIC, TRAFFIC SIGNAL, CPS FIBER OPTICS, OEMC FIBER OPTICS, OTHER CITY COMMUNICATION LINES, AND OCCASIONALLY 3 PARTY LINES. CARDNO HAS NOT ATTEMPTED TO DETERMINE THE NUMBER, SIZE, CONFIGURATION, OR OWNERSHIP OF THESE DUCT SYSTEMS. SUCH DETERMINATION SHOULD BE MADE BY OTHERS DURING THE UTILITY COORDINATION PROCESS.

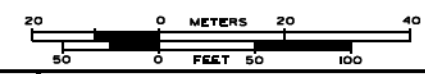


UTILITY OWNERS	
AT&T	= TELEPHONE
CITY OF CHICAGO	= ELECTRIC
CITY OF CHICAGO	= FIBER OPTIC
CITY OF CHICAGO WATER	= WATER
COM-ED	= ELECTRIC
IDOT	= ELECTRIC
IDOT ITS	= FIBER OPTIC
LEVEL 3	= FIBER OPTIC
LIGHTTOWER	= FIBER OPTIC
PEOPLE'S GAS	= GAS
ZAYO	= FIBER OPTIC

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ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 12/10/16 THROUGH 3/03/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES. TEST HOLES #52-53 ADDED.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



CLAASSEN, WHITE & ASSOCIATES, P.C.
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 8300 SOUTH STATE ST., SUITE 100, CHICAGO, IL 60619
 (312) 744-3720 clausenwhite@cwasurevey.com



Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

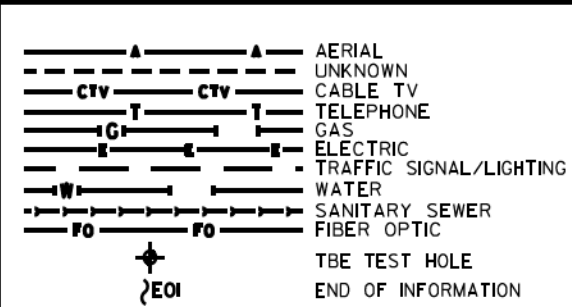
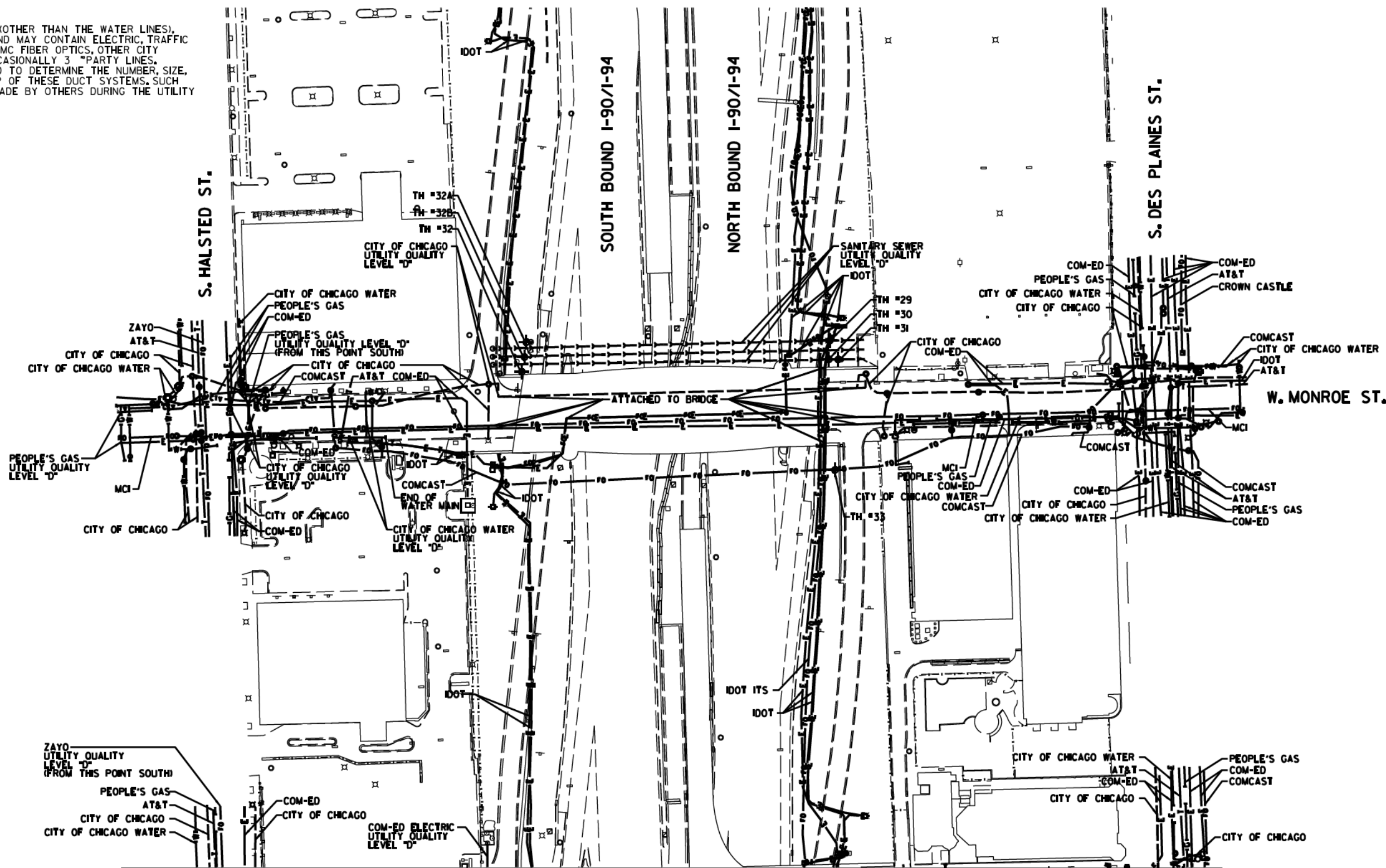
DESIGNED JP	REVISED 3/07/17
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
 Chicago, Illinois
 SHEET 9 OF 27 SHEETS

F.A. R.T.C.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	159
Contract No. N/A				
FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-9-259-2				

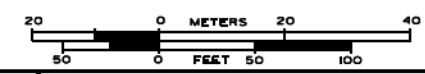
NOTE:
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UTILITY OWNERS
 AT&T = TELEPHONE
 CITY OF CHICAGO = ELECTRIC
 CITY OF CHICAGO WATER = WATER
 COMCAST = CABLE TV
 COMCAST = FIBER OPTIC
 COM-ED = ELECTRIC
 CROWN CASTLE = FIBER OPTIC
 IDOT = ELECTRIC
 IDOT ITS = FIBER OPTIC
 IDOT = TELEPHONE
 MCI = FIBER OPTIC
 PEOPLE'S GAS = GAS
 ZAYO = FIBER OPTIC

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CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 83 AIRPORT DRIVE, SUITE 1, JOLIET, ILLINOIS 60433
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TBE Job No. L0990531 563, 647, 737
 SUE Plan Page 7A of 12

Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

DESIGNED JP	REVISED
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

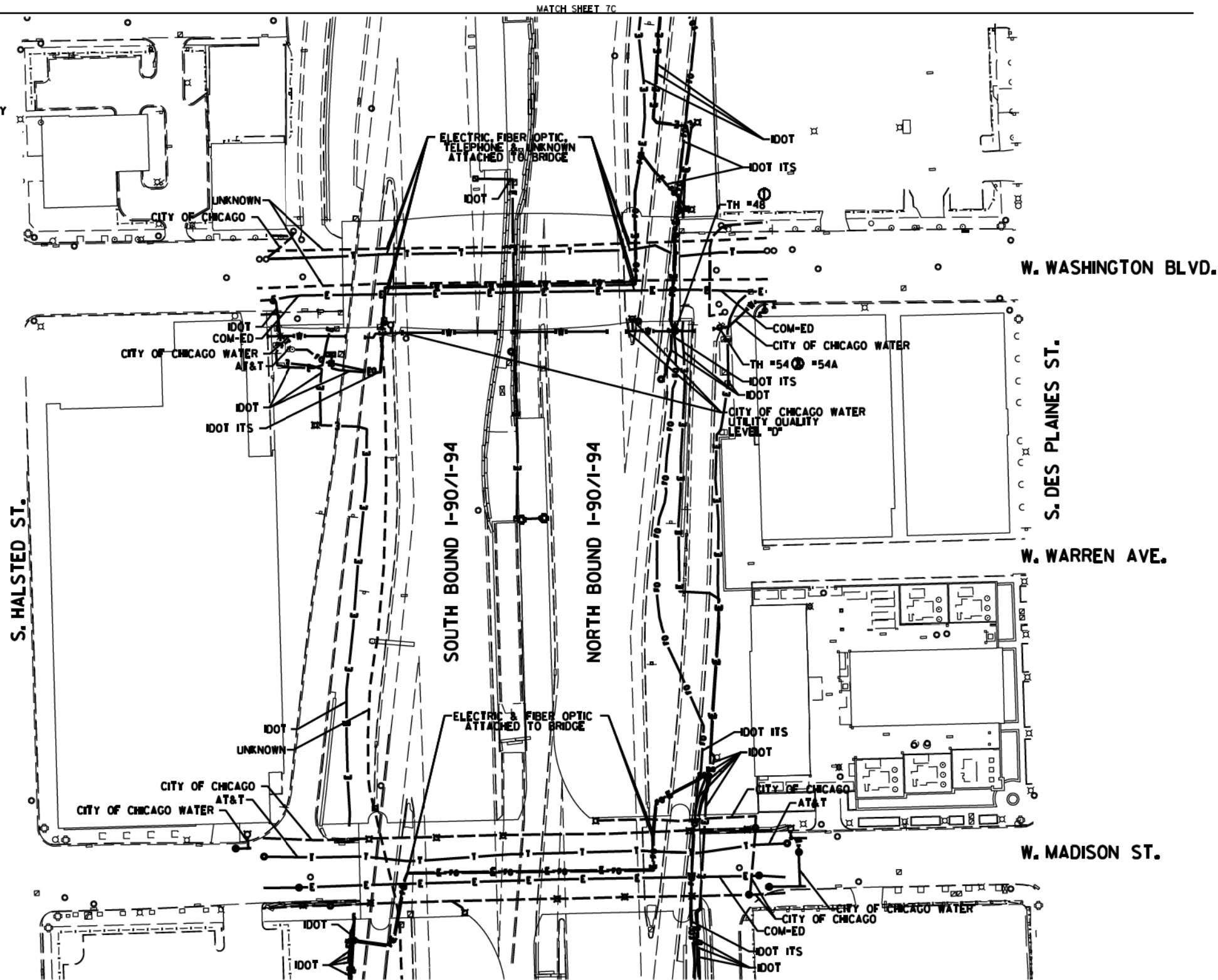
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
 Chicago, Illinois

SHEET 10 OF 27 SHEETS

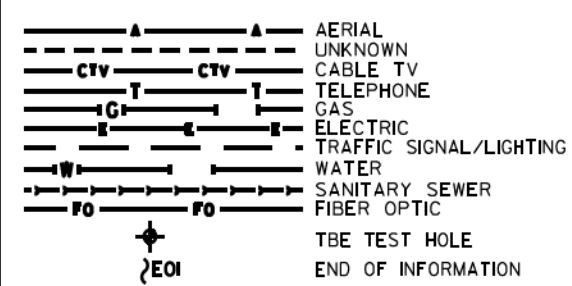
F.A. RTIC	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	160
Contract No. N/A				
FED. ROAD DIST. NO., ILLINOIS IDOT Project No. P-9-259-R				

NOTE:
 THE CITY OF CHICAGO LINES (OTHER THAN THE WATER LINES), ARE MULTI-DUCT SYSTEMS, AND MAY CONTAIN ELECTRIC, TRAFFIC SIGNAL, CPS FIBER OPTICS, OEMC FIBER OPTICS, OTHER CITY COMMUNICATION LINES, AND OCCASIONALLY 3RD PARTY LINES. CARDNO HAS NOT ATTEMPTED TO DETERMINE THE NUMBER, SIZE, CONFIGURATION, OR OWNERSHIP OF THESE DUCT SYSTEMS, SUCH DETERMINATION SHOULD BE MADE BY OTHERS DURING THE UTILITY COORDINATION PROCESS.



MATCH SHEET 7C

MATCH SHEET 7A

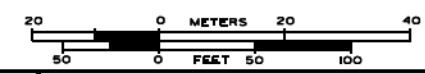


UTILITY OWNERS
 AT&T = TELEPHONE
 CITY OF CHICAGO = ELECTRIC
 CITY OF CHICAGO WATER = WATER
 COMCAST = FIBER OPTIC
 COM-ED = ELECTRIC
 IDOT = ELECTRIC
 IDOT ITS = FIBER OPTIC

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 ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 12/10/16 THROUGH 3/03/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES. TEST HOLE #54 ADDED.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 13100 S. JOLIET BLVD., SUITE 6013
 JOLIET, IL 61781-3720 claussewhite.com



TBE Job No. L0990531 563, 647, 737
 SUE Plan Pages 78 of 12

Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

DESIGNED JP	REVISED 1 12/20/16
DRAWN SRK	REVISED 2 3/07/17
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

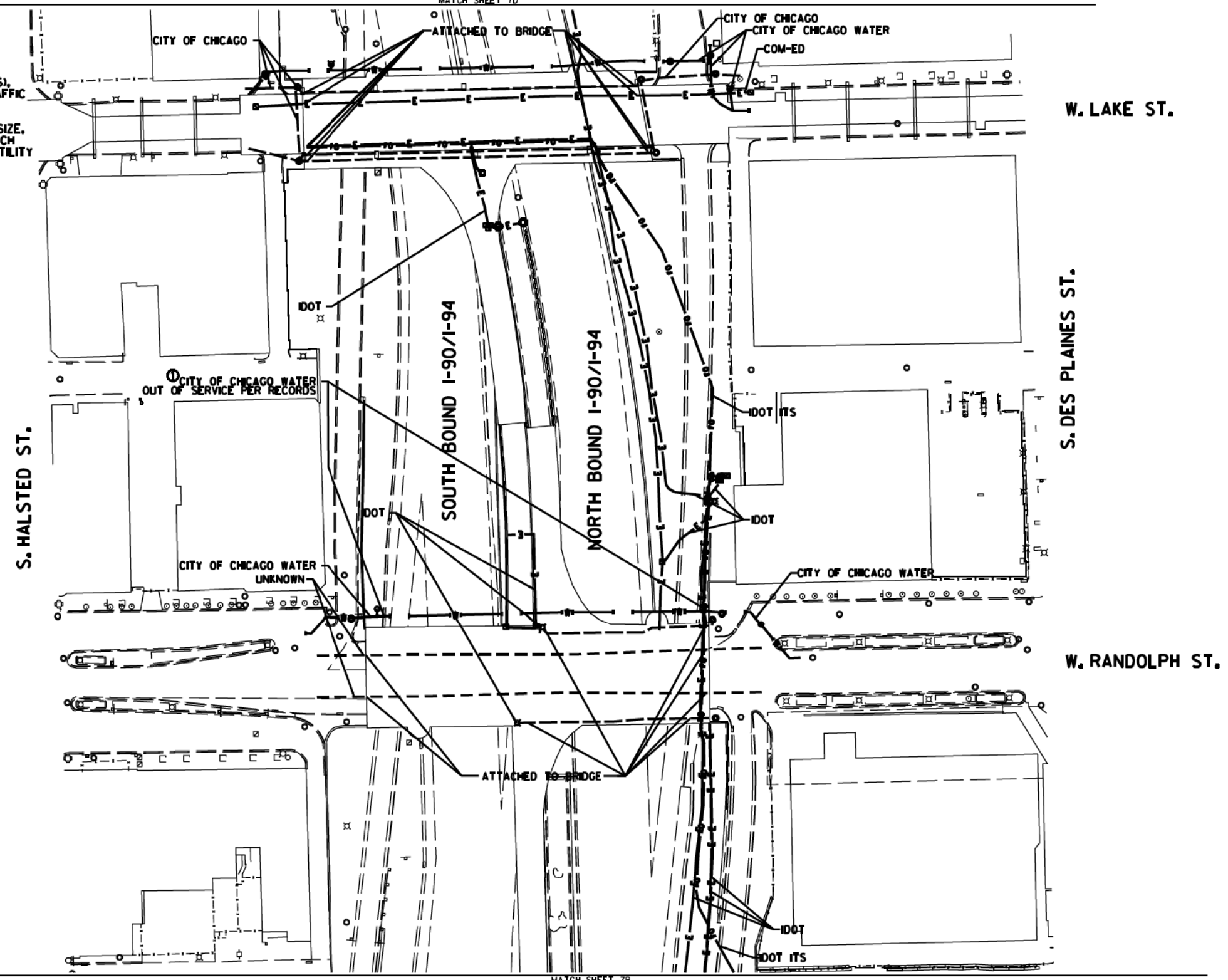
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
 Chicago, Illinois
 SHEET 11 OF 27 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	161
Contract No. N/A				
FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-9-259-12				



NOTE:
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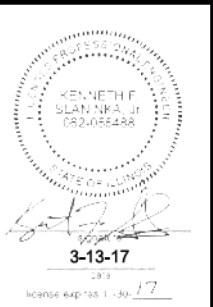
	AERIAL
	UNKNOWN
	CABLE TV
	TELEPHONE
	GAS
	ELECTRIC
	TRAFFIC SIGNAL/LIGHTING
	WATER
	SANITARY SEWER
	FIBER OPTIC
	TBE TEST HOLE
	END OF INFORMATION

UTILITY OWNERS	
CITY OF CHICAGO	= ELECTRIC
CITY OF CHICAGO WATER	= WATER
COM-ED	= ELECTRIC
IDOT	= ELECTRIC
IDOT ITS	= FIBER OPTIC
UNKNOWN	= UNKNOWN

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CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 13100 W. 141ST. STREET, SUITE 200
 BLUE MOUNTAIN, ILLINOIS 60013
 (815) 744-3720 clausse@cwawhite.com



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Utility Quality Level "B": Designating/non Visually Verified Test Hole
Utility Quality Level "C": Research with Survey
Utility Quality Level "D": Records Research

DESIGNED JP	REVISED 12/20/16
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

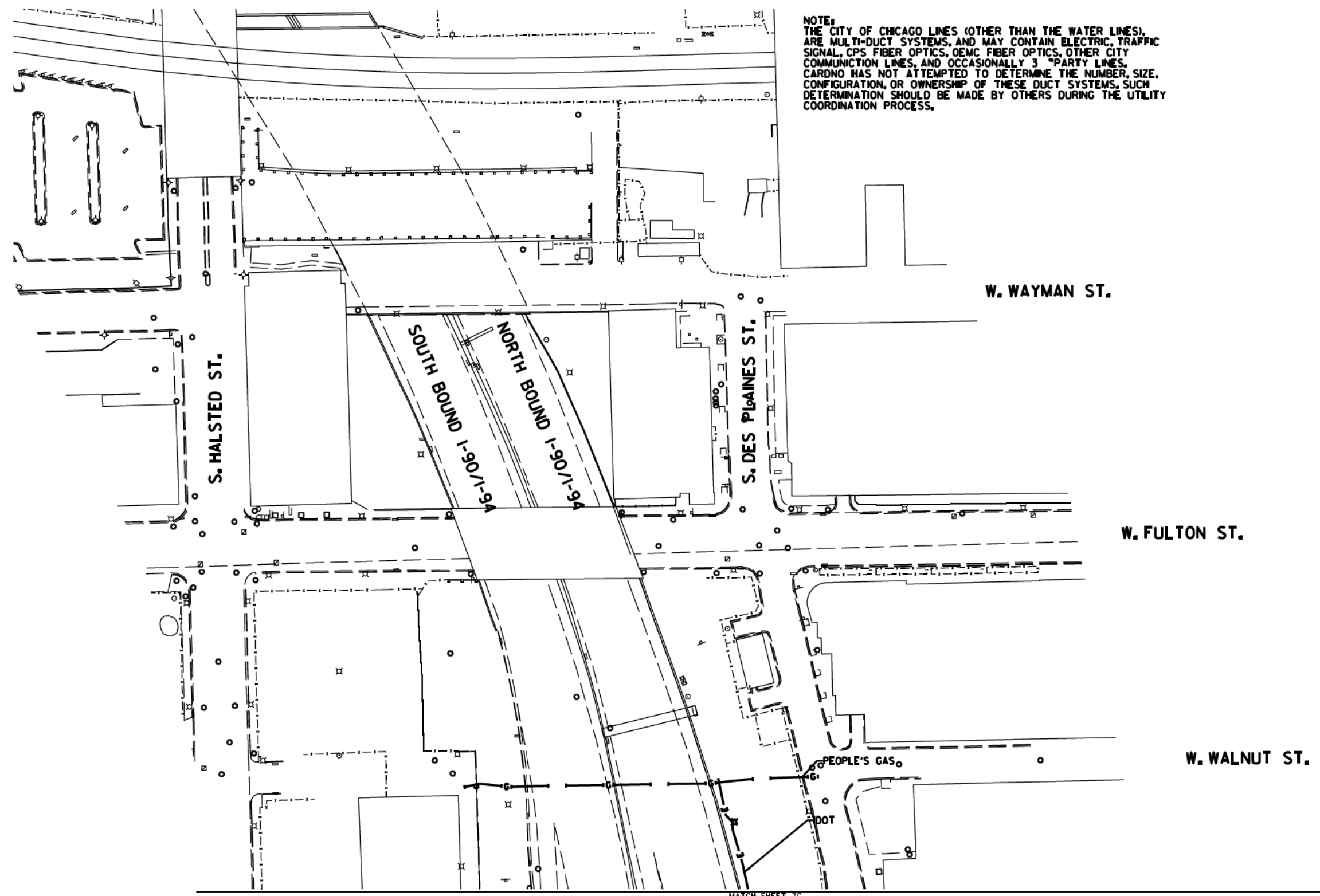
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
 Chicago, Illinois

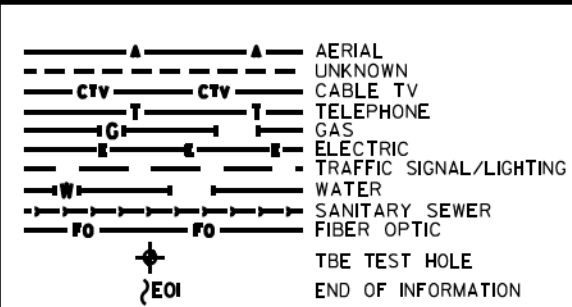
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	162
Contract No. N/A			FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-94-259-R	



NOTE:
 THE CITY OF CHICAGO LINES (OTHER THAN THE WATER LINES),
 ARE MULTI-DUCT SYSTEMS, AND MAY CONTAIN ELECTRIC, TRAFFIC
 SIGNAL, CPS FIBER OPTICS, OEMC FIBER OPTICS, OTHER CITY
 COMMUNICATION LINES, AND OCCASIONALLY 3RD PARTY LINES.
 CARDNO HAS NOT ATTEMPTED TO DETERMINE THE NUMBER, SIZE,
 CONFIGURATION, OR OWNERSHIP OF THESE DUCT SYSTEMS. SUCH
 DETERMINATION SHOULD BE MADE BY OTHERS DURING THE UTILITY
 COORDINATION PROCESS.



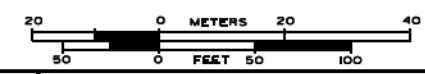
MATCH SHEET 7C



UTILITY OWNERS
 IDOT = ELECTRIC
 PEOPLE'S GAS = GAS

UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 2/09/15 THROUGH 3/18/15. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



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 LAND SURVEYORS
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TBE Job No. L09910531 563, 647, 737
 SUE Plan Pages 70 of 12

Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

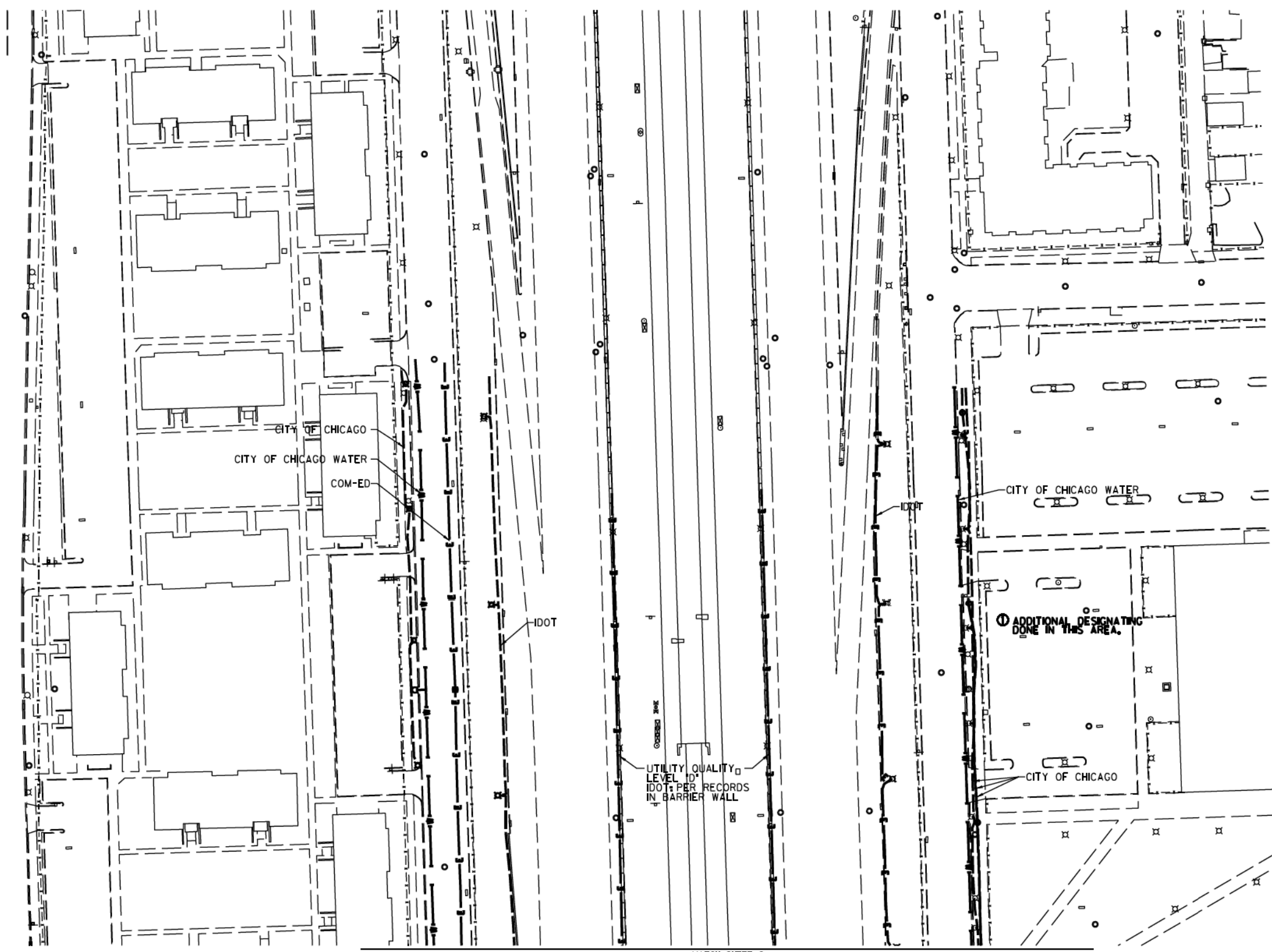
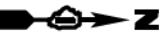
DESIGNED JP	REVISED
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
 Chicago, Illinois

SHEET 13 OF 27 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	163
FED. ROAD DIST. NO., ILLINOIS			DOT Project No. P-9-259-12	



S. LAFLIN ST.

MATCH SHEET 9

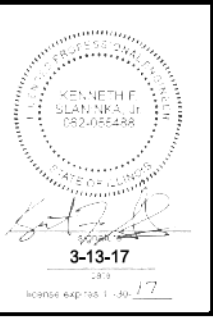
	AERIAL
	UNKNOWN
	CABLE TV
	TELEPHONE
	GAS
	ELECTRIC
	TRAFFIC SIGNAL/LIGHTING
	WATER
	SANITARY SEWER
	FIBER OPTIC
	TBE TEST HOLE
	END OF INFORMATION

UTILITY OWNERS	
COM-ED	= ELECTRIC
CITY OF CHICAGO	= ELECTRIC
CITY OF CHICAGO WATER	= WATER
IDOT	= ELECTRIC

UTILITIES SHOWN ON THESE PLANS AS DEPICTED IN THE LEGEND HAVE BEEN INVESTIGATED BY CARDNO IN ACCORDANCE WITH SUE INDUSTRY STANDARDS. ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED TO CARDNO BY OTHERS. CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 6/30/14 THROUGH 7/25/14. CHANGES TO UTILITIES MAY HAVE BEEN MADE AND THEREFORE MAY RESULT IN VARIANCES FROM THIS PLAN. CONSIDERATION SHOULD BE GIVEN TO UPDATING THIS PLAN IF DEEMED ADVISABLE PRIOR TO FINAL DESIGN AND CONSTRUCTION.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 12/10/16 THROUGH 3/03/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



CLAASSEN, WHITE & ASSOCIATES, P.C.
LAND SURVEYORS
1300 W. 111TH STREET, SUITE 100
CHICAGO, ILLINOIS 60643
(773) 744-3720 clausenwhite.com



Utility Quality Level "A": Visually Verified Test Hole
Utility Quality Level "B": Designating/non Visually Verified Test Hole
Utility Quality Level "C": Research with Survey
Utility Quality Level "D": Records Research

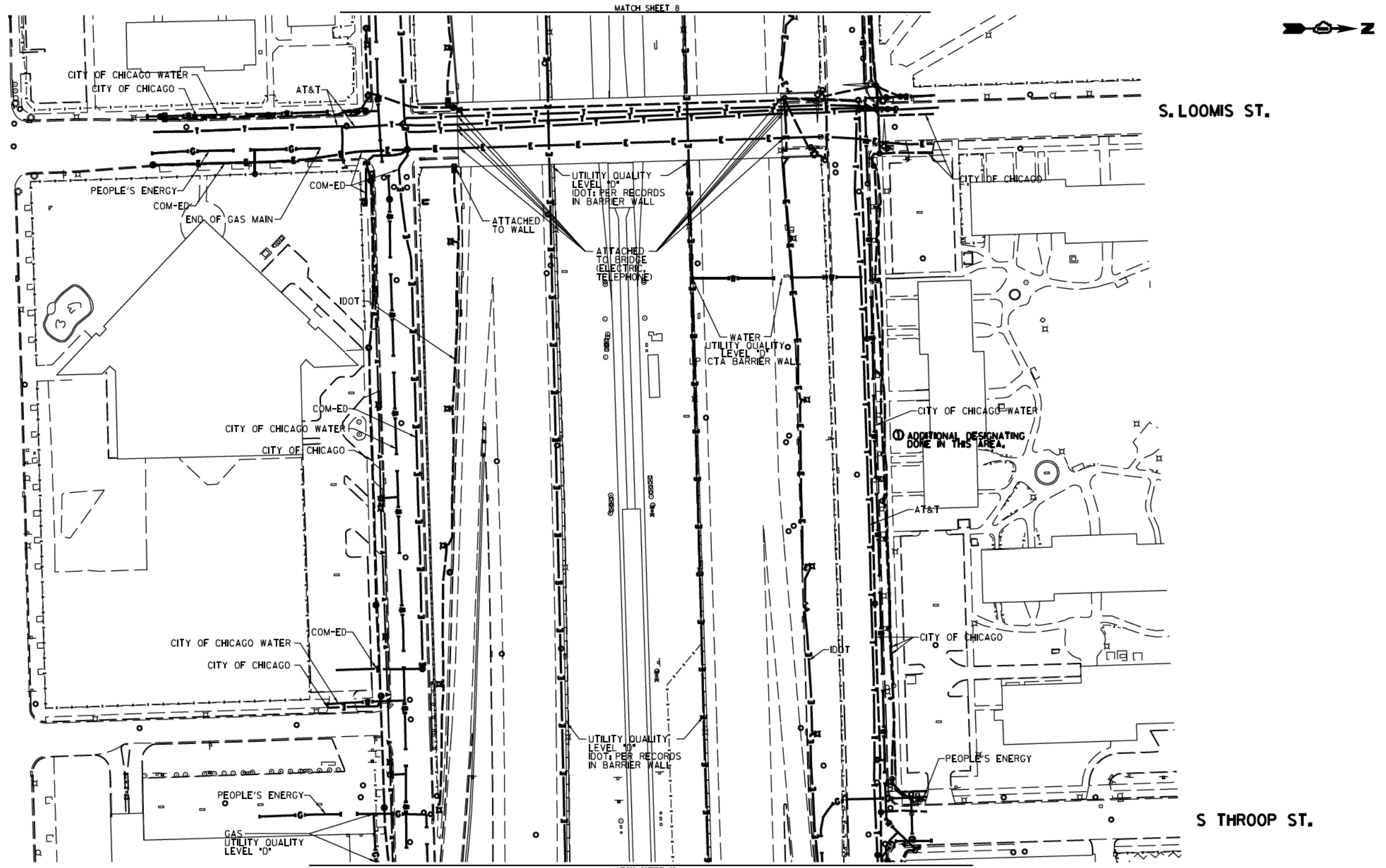
DESIGNED JP	REVISED 3/07/17
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
Chicago, Illinois
SHEET 14 OF 27 SHEETS

F.A. RTIC	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	164

TBE Job No. L0990531 563, 647, 737
SUE Plan Page 8 of 12
Contract No. N/A
FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-9-259-12

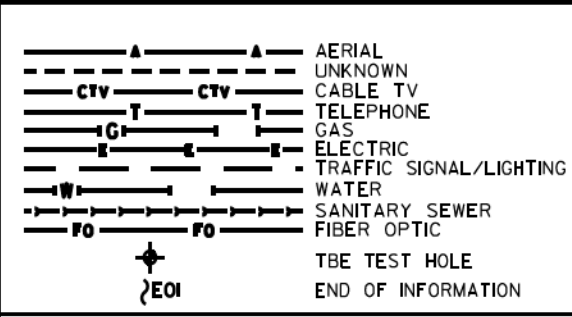


MATCH SHEET 8

MATCH SHEET 10

S. LOOMIS ST.

S THROOP ST.

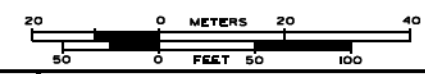


UTILITY OWNERS
 AT&T = TELEPHONE
 COM-ED = ELECTRIC
 CITY OF CHICAGO = ELECTRIC
 CITY OF CHICAGO WATER = WATER
 IDOT = ELECTRIC
 PEOPLE'S ENERGY = GAS

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CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 8300 SOUTH DRUMMETT AVE., SUITE 100, CHICAGO, IL 60649
 (773) 744-3720 clausenwhiteassociates.com



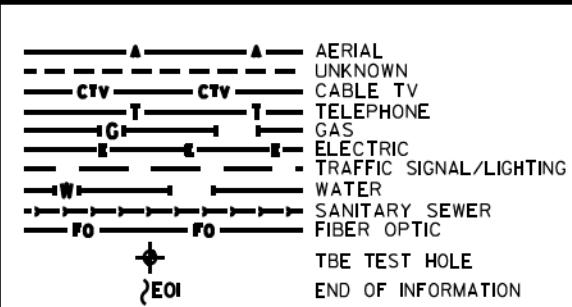
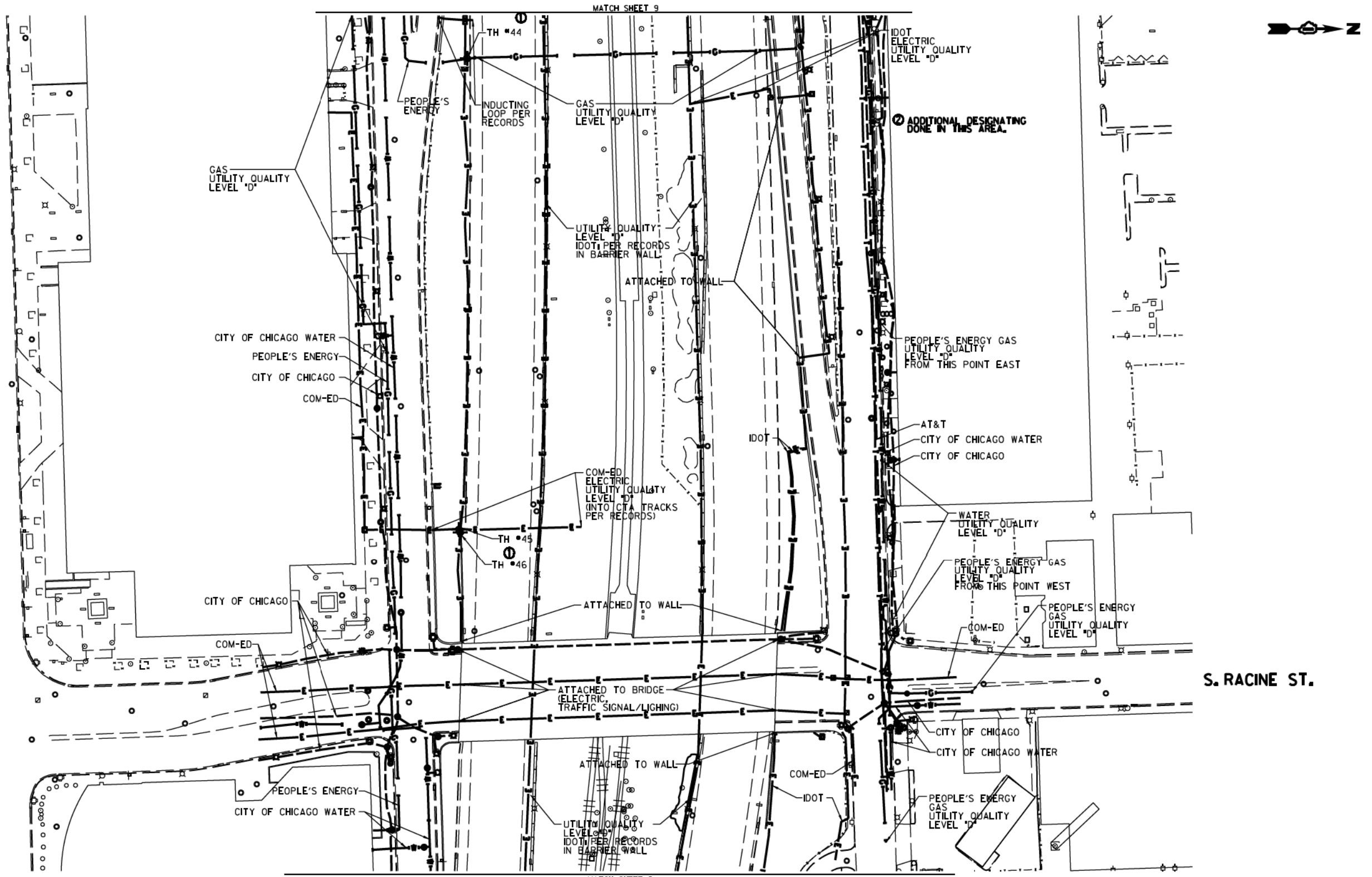
Utility Quality Level "A": Visually Verified Test Hole
 Utility Quality Level "B": Designating/non Visually Verified Test Hole
 Utility Quality Level "C": Research with Survey
 Utility Quality Level "D": Records Research

DESIGNED JP	REVISED ① 3/07/17
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I-94/904-290 (Circle Interchange)
 Chicago, Illinois
 SHEET 15 OF 27 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	165
Contract No. N/A				
FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-9-259-12				



UTILITY OWNERS

AT&T = TELEPHONE
 COM-ED = ELECTRIC
 CITY OF CHICAGO = ELECTRIC
 CITY OF CHICAGO WATER = WATER
 IDOT = ELECTRIC
 PEOPLE'S ENERGY = GAS

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ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 11/17/16 THROUGH 12/09/16 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ADDITIONAL CARDNO SUE FIELD INVESTIGATION WAS PERFORMED 12/10/16 THROUGH 3/03/17 AND SURVEYED BY CLAASSEN, WHITE & ASSOCIATES.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.

Professional Engineer Seal for Kenneth F. Slaninka, Jr., State of Illinois, License No. 082-000488.

3-13-17

Cardno TBE

CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 83 AIRPORT DRIVE, SUITE 1, JOLIET, ILLINOIS 60433
 (815) 744-3720 claussewhite@cwacsv.com

Dynasty Group
 Engineers & Surveyors

TBE Job No. IL0950531 563, 647, 737
 SUE Plan Page 10 of 12

Utility Quality Level "A": Visually Verified Test Hole	DESIGNED JP	REVISED 1 12/20/16
Utility Quality Level "B": Designating/non Visually Verified Test Hole	DRAWN SRK	REVISED 2 3/07/17
Utility Quality Level "C": Research with Survey	CHECKED MGR	REVISED
Utility Quality Level "D": Records Research	DATE 12/18/15	REVISED

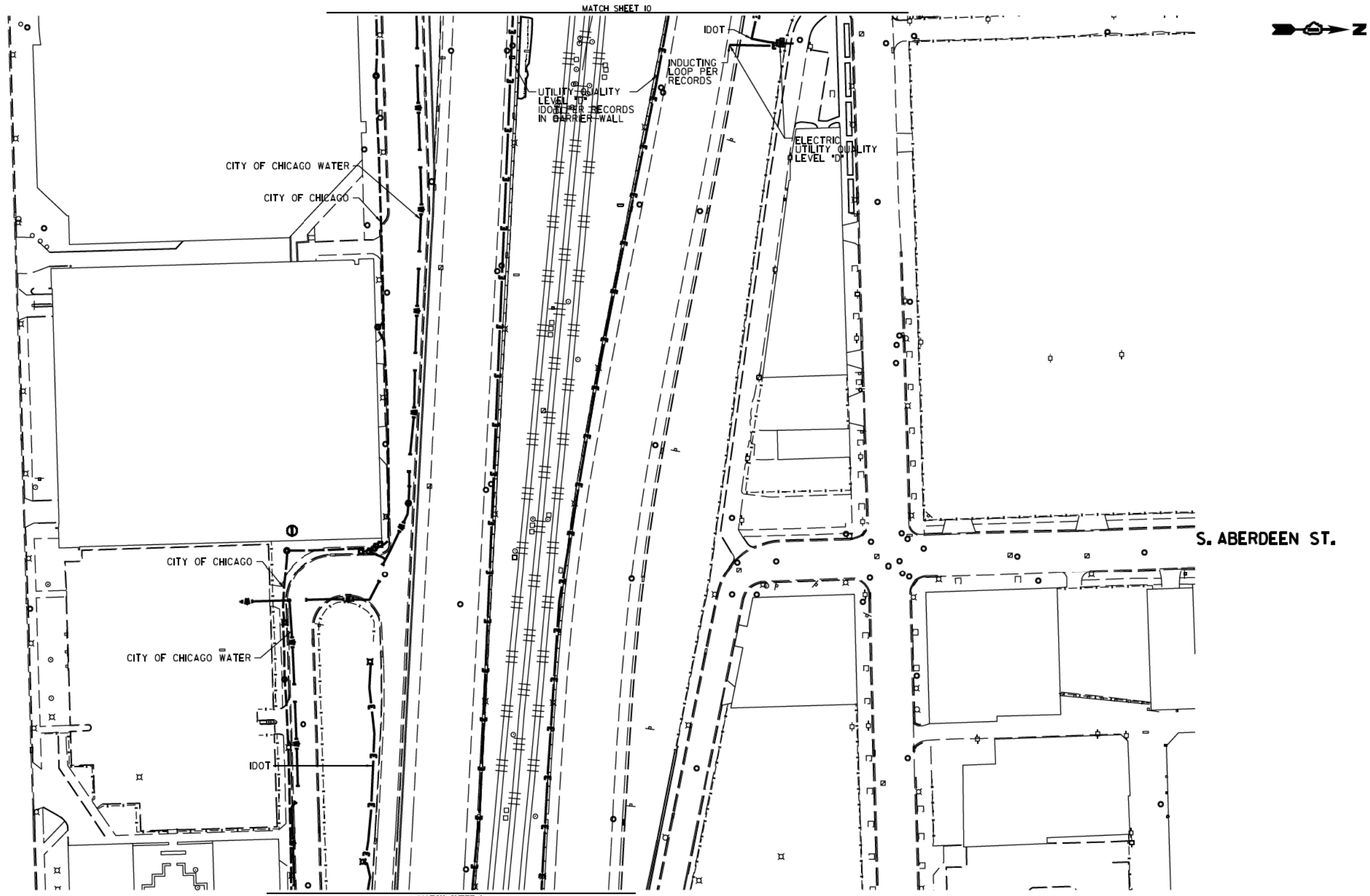
DESIGNED JP	REVISED 1 12/20/16
DRAWN SRK	REVISED 2 3/07/17
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94/90-290 (Circle Interchange)
Chicago, Illinois

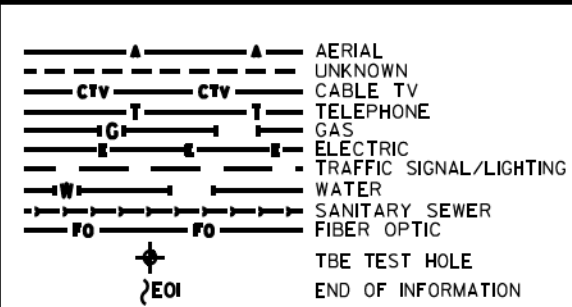
SHEET 16 OF 27 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	166
Contract No. N/A				
FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-9-259-2				



MATCH SHEET 10

MATCH SHEET 1

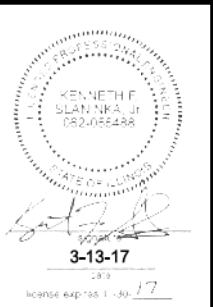


UTILITY OWNERS
 CITY OF CHICAGO = ELECTRIC
 CITY OF CHICAGO WATER = WATER
 IDOT = ELECTRIC

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 LAND SURVEYORS
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 (815) 744-3720 clausse@cwawhite.com



TBE Job No. L09910531 563, 647, 737
 SUE Plan Page 1 of 12

Utility Quality Level "A": Visually Verified Test Hole
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 Utility Quality Level "D": Records Research

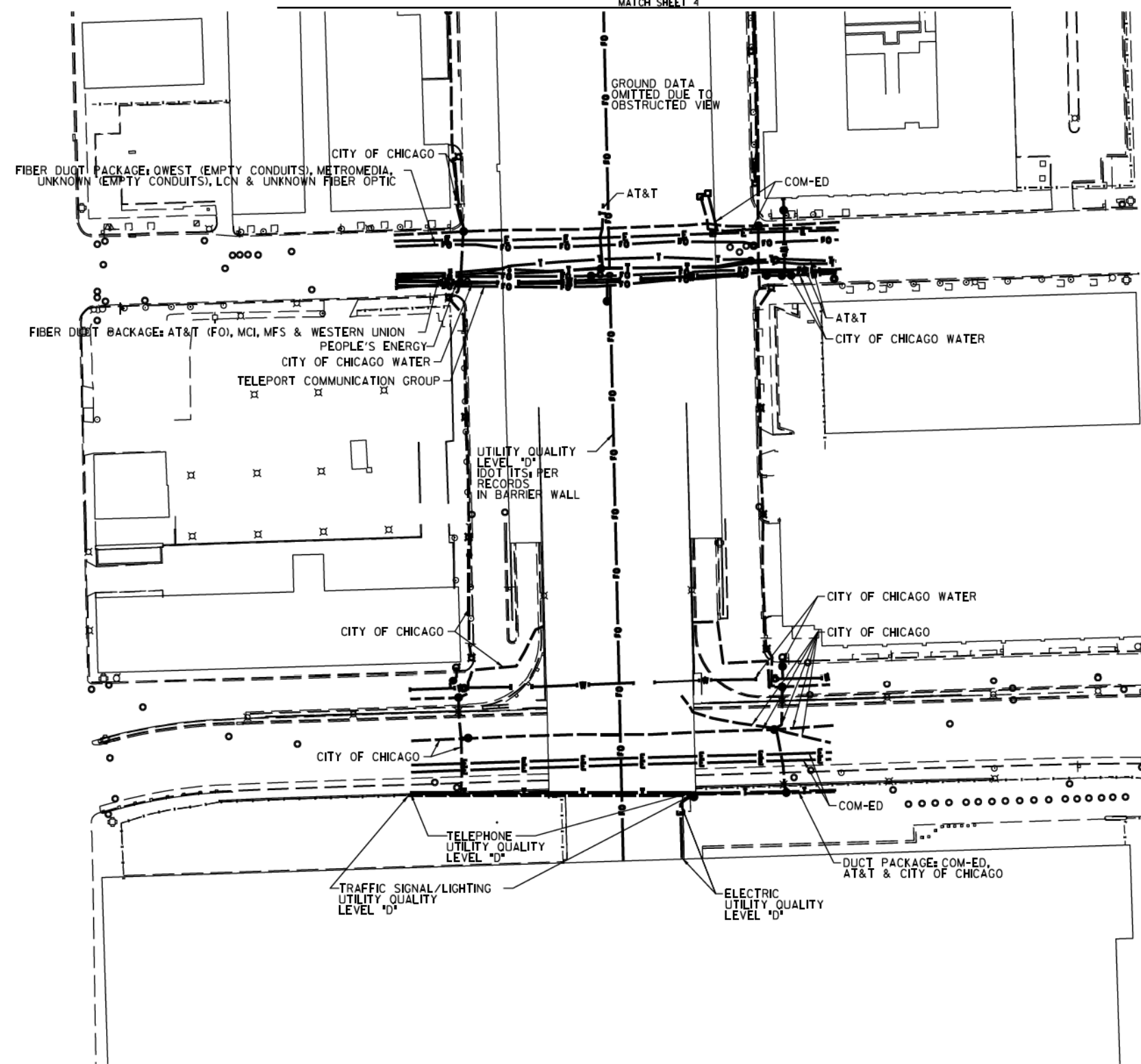
DESIGNED JP	REVISED ① 12/20/16
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
Chicago, Illinois

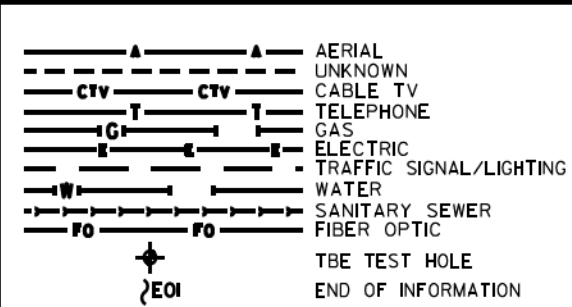
SHEET 17 OF 27 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	167
Contract No. N/A			FED. ROAD DIST. NO., ILLINOIS DOT Project No. P-9-259-12	



S. CLINTON ST.

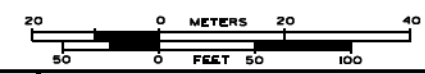
S. CANAL ST.



UTILITY OWNERS	
AT&T = FIBER OPTIC	
AT&T = TELEPHONE	
COM-ED = ELECTRIC	
CITY OF CHICAGO = ELECTRIC	
CITY OF CHICAGO WATER = WATER	
IDOT = ELECTRIC	
LCN = FIBER OPTIC	
MCI = FIBER OPTIC	
METROMEDIA = FIBER OPTIC	
MFS = FIBER OPTIC	
PEOPLE'S ENERGY = GAS	
TELEPORT COMM. GROUP = FIBER OPTIC	
QWEST = FIBER OPTIC	
WESTERN UNION = FIBER OPTIC	

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LAND SURVEYORS
3300 W. 111th St., Suite 100, Mokena, IL 60450
(815) 744-3720 claussewh@cwawhite.com



TBE Job No. L0990531 563, 647, 737
SUE Plan Pages 12 of 12

Utility Quality Level "A": Visually Verified Test Hole	DESIGNED JP	REVISED
Utility Quality Level "B": Designating/non Visually Verified Test Hole	DRAWN SRK	REVISED
Utility Quality Level "C": Research with Survey	CHECKED MGR	REVISED
Utility Quality Level "D": Records Research	DATE 12/18/15	REVISED

DESIGNED JP	REVISED
DRAWN SRK	REVISED
CHECKED MGR	REVISED
DATE 12/18/15	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-94-901-290 (Circle Interchange)
Chicago, Illinois

SHEET 18 OF 27 SHEETS

F.A. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	168
Contract No. N/A				
FED. ROAD DIST. NO. ILLINOIS DOT Project No. P-9-259-12				

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	EXISTING TOP ELEVATION	EXISTING CUT	REFERENCE ELEVATION	SUE QUALITY LEVEL	COMMENTS
1	N/A TUNNEL	1897611.31	1171790.60	573.30'	7.17'	580.47'	A	NORTH EDGE
2	N/A TUNNEL	1897605.50	1171792.00	573.36'	6.92'	580.28'	A	SOUTH EDGE
3	N/A TUNNEL	1897600.91	1171359.65	573.15'	3.86'	577.01'	A	NORTH EDGE
4	N/A TUNNEL	1897595.46	1171360.49	573.09'	3.90'	576.99'	A	SOUTH EDGE
5	N/A THRUST BLOCK	1897513.66	1171678.90	589.72'	6.56'	596.28'	A	
5A	N/A THRUST BLOCK	1897513.63	1171676.05	589.64'	7.20'	596.84'	A	
6	N/A THRUST BLOCK	1897522.75	1171594.74	589.37'	6.68'	596.05'	A	
6A	N/A THRUST BLOCK	1897524.90	1171593.77	589.37'	6.76'	596.13'	A	
6B	N/A THRUST BLOCK	1897525.17	1171595.71	589.38'	6.73'	596.11'	A	
7	N/A THRUST BLOCK	1897506.19	1171582.40	589.21'	6.36'	595.57'	A	
7A	N/A THRUST BLOCK	1897505.10	1171584.54	589.20'	6.42'	595.62'	A	
8	8" WATER	1897811.64	1169853.98	586.86'	7.31'	594.17'	A	
9	N/A THRUST BLOCK	1897812.80	1169876.49	588.42'	4.88'	593.30'	A	
10	N/A THRUST BLOCK	1897815.06	1169870.75	588.64'	5.09'	593.73'	A	
11	SEE NOTE WATER	1897813.75	1169879.18	588.06'	5.49'	593.55'	A	
11A	24"x24" ELECTRIC	1897814.13	1169877.49	591.41'	2.03'	593.44'	A	
12	16" WATER	1898158.45	1170801.96	586.95'	6.60'	593.55'	A	
13	24" GAS	1898159.98	1170811.42	590.55'	3.22'	593.77'	A	
14	16" WATER	1898098.96	1170803.32	570.59'	5.30'	575.89'	A	
15	20" GAS	1898100.29	1170814.06	569.38'	6.45'	575.83'	A	
16	N/A TUNNEL	1898000.74	1171597.17	569.79'	8.10'	577.89'	A	
17	N/A TUNNEL	1897991.35	1171521.95	572.07'	4.11'	576.18'	A	
18	N/A TUNNEL	1897921.01	1171524.66	572.02'	3.99'	576.01'	A	
19	60" SIPHON	1898449.22	1171402.46	572.68'	7.88'	580.56'	A	
20	60" SIPHON	1898448.41	1171318.35	572.62'	6.12'	578.74'	B	
21	2-(4") FIBER OPTIC	1898798.52	1171364.87	581.80'	6.04'	587.84'	A	
22	60" SIPHON	1898456.60	1171716.09	571.31'	11.07'	582.38'	A	
23	2-(4") FIBER OPTIC	1898807.90	1171637.47	574.87'	9.02'	583.89'	A	
24	SEE NOTE WATER	1898820.21	1171602.72	571.87'	4.71'	576.58'	A	
25	SEE NOTE WATER	1898820.37	1171608.33	571.65'	5.80'	577.45'	B	

NOTES

TH #1 - Found North edge of what appears to be a 6' wide wooden frame around utility tunnel. Frame has appearance of wooden railroad ties.
 TH #2 - Found South edge of what appears to be a 6' wide wooden frame around utility tunnel. Frame has appearance of wooden railroad ties.
 TH #3 - Found North edge of what appears to be a 6' wide wooden frame around utility tunnel. Frame has appearance of wooden railroad ties. Wooden frame is 5" thick.
 TH #4 - Found South edge of what appears to be a 6' wide wooden frame around utility tunnel. Frame has appearance of wooden railroad ties.
 TH #5 - Found North edge of Thrust Block.
 TH #5A - Found North edge of Thrust Block. Reference point placed on east curb of driveway.
 TH #6 - Found West edge of Thrust Block.
 TH #6A - Found a 90 degree bend on Thrust Block. Reference point placed in line with bend.
 TH #6B - Found North edge of Thrust Block.
 TH #7 - Found North edge of Thrust Block.
 TH #7A - Found North edge of Thrust Block.
 TH #9 - Found what is believed to be the southern edge of thrust block.
 TH #10 - Found what is believed to be the southern edge of thrust block. Also found a vertical concrete structure that the thrust block seemed to go around. Reference point was placed where edge of thrust block met this structure.
 TH #11 - Found the east edge of water main at the bend. Water main was directly under City of Chicago electric duct and could not verify a size. Records show that this main is a 30". Reference point was placed directly in line with the eastern edge of pipe at the center of bend.
 TH #11A - Found a 24x24 concrete electric duct while excavating for water main.
 TH #13 - Exposed fitting connecting steel gas main to cast iron gas main. (Per Joe People's Energy Inspector)
 TH #14 - Did not find bend. Water main was still on slight downward slope.
 TH #15 - Gas main was still on slight downward slope. Exposed pipe at a weld but could not determine if this was part of the bend.
 TH #16 - Exposed Northern edge of CTA Tunnel.
 TH #17 - Top of CTA Tunnel.
 TH #18 - Top of CTA Tunnel.
 TH #19 - Exposed what we believe to be the crown of the concrete pipe. Records indicate the utility size to be 60".
 TH #20 - Unable to visually verify utility due to back fill infiltrating the test hole. However, by utilizing the air lance we were able to feel what is believed to be the edges and top of the pipe. Records indicate utility to be a 60" pipe.
 TH #22 - Exposed what we believe to be the crown of the concrete pipe. Records indicate the utility to be a 60" pipe.
 TH #24 - Briefly had a visual of the utility until sand and ground water infiltrated the test hole. By utilizing the air lance we were able to feel what is believed to be the edges and top of pipe. Records indicate the utility to be a 16" pipe.
 TH #25 - Unable to visually verify utility due to back fill infiltrating the test hole. However, by utilizing the air lance we were able to feel what is believed to be the edges and top of the pipe. Records indicate utility to be a 16" pipe.

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.



Checked By: *[Signature]*
 Date: 3/13/17
 TBE Job No. R-0990531-563, 647, 737
 SHEET 109 OF 169

DESIGNED EG	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-941-901-290 (Circle Interchange) Chicago, Illinois		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN SRK	REVISED					N/A	Cook	400	169
CHECKED MCR	REVISED								
DATE 12/18/15	REVISED								
			SHEET NO. 19 OF 27 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS		Contract No. N/A Job No. P-91-259-12		

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE &	TYPE	NORTHING	EASTING	EXISTING TOP ELEVATION	EXISTING CUT	REFERENCE ELEVATION	SUE QUALITY LEVEL	COMMENTS
26	N/A	WATER	1898814.654	1171391.251	572.75'	7.50'	580.25'	B	
27	N/A	WATER	1898814.915	1171395.719	571.67'	7.16'	578.83'	B	
28	N/A	SIPHON	1898446.146	1171286.067	572.68'	13.38'	586.06'	B	
29	N/A	SIPHON	1899863.107	1171643.779	572.74'	7.90'	580.64'	B	
30	N/A	SIPHON	1899845.426	1171642.747	572.90'	7.06'	579.96'	A	
31	N/A	SIPHON	1899845.311	1171651.515	575.42'	6.42'	581.84'	A	
32	N/A	SIPHON	1899833.821	1171355.929	576.15'	3.62'	579.77'	A	
32A	N/A	SIPHON	1899861.396	1171360.162	574.89'	4.07'	579.07'	A	
32B	N/A	SIPHON	1899847.605	1171358.462	575.20'	4.18'	579.38'	A	
33	N/A	FIBER OPTIC	1899742.060	1171648.471	N/A	SEE NOTE	585.56'	C	
34	48"	WATER	1897228.575	1171732.883	576.44'	5.14'	581.58'	A	
35	48"	WATER	1897273.960	1171729.504	576.92'	4.46'	581.38'	A	
36	N/A	WATER	1897385.054	1171718.156	578.38'	2.22'	580.60'	A	
37	54"	WATER	1897227.364	1171462.933	576.33'	6.03'	582.36'	A	
38	N/A	WATER	1897387.290	1171782.047	576.60'	5.46'	582.06'	A	
39	N/A	WATER	1897275.870	1171796.286	577.47'	5.97'	583.44'	A	
40	54"	WATER	1897230.523	1171576.645	578.58'	2.80'	581.38'	A	
41	N/A	WATER	1897229.624	1171790.841	577.55'	6.17'	583.72'	A	
42	48"	WATER	1897381.570	1171565.533	575.29'	4.43'	579.72'	A	
43	14"x14"	UNKNOWN	1897377.583	1171565.776	577.49'	2.14'	579.63'	A	

NOTES

TH #26 - Unable to visually verify utility due to back fill infiltrating the test hole. However, by utilizing the air lance we were able to feel what is believed to be the edges and top of the pipe. Records indicate utility to be a 16" pipe.

TH #27 - Unable to visually verify utility due to back fill infiltrating the test hole. However, by utilizing the air lance we were able to feel what is believed to be the edges and top of the pipe. Records indicate utility to be a 16" pipe.

TH #28 - Unable to visually verify utility due to back fill and ground water infiltrating the test hole. However, by utilizing the air lance we were able to feel what is believed to be the crown of pipe. Records indicate utility to be a 60" pipe.

TH #29 - Unable to visually verify utility due to sand and ground water infiltrating the test hole. However, by utilizing the air lance we were able to feel what is believed to be the crown of pipe. Records indicate utility to be a 60" pipe.

TH #30 - Exposed what we believe to be the crown of the concrete pipe. Records indicate the utility to be a 108" pipe.

TH #31 - Exposed what we believe to be the crown of the concrete pipe. Records indicate the utility to be a 108" pipe. Found what we believe to be the Siphon Outlet Chamber.

TH #32 - Found a flat formed concrete structure. Reference point placed in line with southern edge of concrete structure.

TH #32A - Found a flat formed concrete structure. Reference point placed in line with Northern edge of concrete structure.

TH #32B - Found a flat formed concrete structure. Reference point placed in line with center of concrete structure.

TH #33 - Were only able to excavated to a depth of 10' and did not find utility. Electronic depths indicate utility to 27' +/- deep.

TH #35 - Depth taken from top of pipe joint.

TH #38 - Were only able to see the top crown of pipe. Records indicate pipe size to be 36".

TH #39 - Were only able to see the top crown of pipe. Records indicate pipe size to be 48".

TH #40 - Pipe appears to be on a slight upward angle towards the retaining wall.

TH #41 - Were only able to see the top crown of pipe. Records indicate pipe size to be 48".

TH #42 - Depth taken from top of pipe joint.

TH #43 - Found unknown concrete 14"x14" structure that appears to be a duct.

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.



CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
PLANNING * UTILITY ENGINEERING/LOCATING

Checked By: *[Signature]* TBE Job No. IL0990531.563.647.737
Date: 3/8/17 SHEET 2 OF 3

DESIGNED	EG	REVISED	
DRAWN	SRK	REVISED	
CHECKED	MGR	REVISED	
DATE	12/18/15	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-941-901-290 (Circle Interchange)
Chicago, Illinois

SHEET NO. 20 OF 27 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	N/A	Cook	400	170
FED. ROAD DIST. NO.		ILLINOIS	Contract No. N/A	
			Job No. P-9-259-12	

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	EXISTING TOP ELEVATION	EXISTING CUT	REFERENCE ELEVATION	SUE QUALITY LEVEL	COMMENTS
44	SEE NOTE GAS	1897941.863	1167859.669	572.26'	8.14'	580.40'	B	
45	18"x4" ELECTRIC	1897934.185	1168300.312	574.30'	5.26'	579.56'	A	
46	6" UNKOWN	1897935.218	1168302.972	577.15'	2.31'	579.46'	A	
47	60" SANITARY	1897000.917	1171469.596	582.85'	9.84'	592.69'	A	
48	SEE NOTE WATER	1900713.310	1171605.295	571.30'	8.18'	579.48'	B	
49	2" WATER	1897809.914	1169798.544	588.83'	4.92'	593.75'	A	
49A	8" WATER	1897809.914	1169798.544	587.83'	5.92'	593.75'	A	
50	42" TELEPHONE	1897887.300	1170967.618	568.18'	7.04'	575.22'	A	
50A	2" TELEPHONE	1897887.267	1170965.824	570.40'	4.81'	575.21'	A	
50B	42" TELEPHONE	1897887.404	1170969.381	568.18'	7.04'	575.22'	A	
51	(2) 4" ELECTRIC	1897848.317	1170019.373	573.62'	3.71'	577.33'	A	
51A	(2) 4" ELECTRIC	1897848.348	1170018.630	573.73'	3.63'	577.36'	A	
52	16" WATER	1898832.110	1171343.510	587.38'	5.02'	592.40'	A	
52A	(2) 4" FIBER OPTIC	1898829.974	1171344.221	589.65'	2.92'	592.57'	A	
53	16" WATER	1898840.107	1171675.502	587.67'	5.08'	592.75'	A	
54	12" WATER	1900715.908	1171642.460	586.55'	7.00'	593.55'	A	
54A	12" WATER	1900715.908	1900715.908	570.95'	22.60'	593.55'	A	
55A	40"x18" ELEC/FIBER OPTIC	1897053.710	1171439.938	590.22'	2.69'	592.91'	A	
55B	40"x18" ELEC/FIBER OPTIC	1897053.710	1171439.938	588.72'	4.19'	592.91'	A	
55C	40"x18" ELEC/FIBER OPTIC	1897053.661	1171436.669	590.23'	2.38'	592.61'	A	
55D	(2) 1.5" UNKNOWN	1897054.054	1171438.116	590.37'	2.12'	592.49'	A	
56A	40" ELEC/FIBER OPTIC	1897086.682	1171423.877	588.81'	3.92'	592.73'	A	
56B	(2) 1.5" UNKNOWN	1897087.277	1171425.482	589.26'	3.45'	592.71'	A	
56C	40" ELEC/FIBER OPTIC	1897087.963	1171426.847	588.63'	4.03'	592.66'	A	

NOTES

TH #44 - Unable to visually verify utility due to back fill infiltrating the test hole. However, by utilizing the air lance we were able to feel what is believed to be the edges and top of the pipe. Records indicate utility to be a 18" pipe.

TH #48 - Unable to visually verify utility due to back fill infiltrating the test hole. However, by utilizing the air lance we were able to feel what is believed to be the edges and top of the pipe. Records indicate utility to be a 12" pipe.

TH #51 - Found (2) 4" conduits side by side. Reference placed in the center of Eastern pipe.

TH #51A - Found (2) 4" conduits side by side. Reference placed in the center of Western pipe.

TH #52A - Found (2) 4" conduits side by side. Reference placed in the center of the two pipes.

TH #54 - Claassen, White & Associates obtained an elevation of 586.55 on the 90 degree bend on the water main inside the manhole. The approximate manual depth of 7' was also obtained by Claassen, White & Associates.

TH #54A - Claassen, White & Associates obtained an elevation of 570.95 on the water main near the bottom of the manhole as it heads West. The approximate manual depth of 22.6' was also obtained by Claassen, White & Associates.

TH #55A - Exposed the top Eastern edge of the concrete duct.

TH #55B - Exposed the bottom Eastern edge of the concrete duct.

TH #55C - Exposed the top Western edge of the concrete duct.

TH #55D - Exposed (2) 1.5" unknown direct buried cables laying on top of the concrete duct in approximately the center of the duct.

TH #56A - Exposed the top Western edge of the concrete duct.

TH #56B - Exposed (2) 1.5" unknown direct buried cables laying on top of the concrete duct in approximately the center of the duct.

TH #56C - Exposed the bottom eastern edge of the concrete duct. Also attempted to expose the bottom eastern edge of the duct but we were unable, due to the gravel fill infiltrating the test hole.

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.



Checked By: _____ Date: _____ TBE Job No. 1095053L 563, 647, 737 SHEET 3 OF 3

DESIGNED EJ	REVISED 3/07/17 ADDED TH#52-54	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-94I-90I-290 (Circle Interchange) Chicago, Illinois	F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN KLC	REVISED 3/13/17 ADDED TH#54A			N/A		Cook	400	171
CHECKED KS	REVISED 5/01/17 ADDED TH#55A - 56C			Contract No. N/A				
DATE 12/20/16	REVISED			SHEET NO. 21 OF 27 SHEETS STA. TO STA.				
				FED. ROAD DIST. NO. ILLINOIS Job No. P-91-259-42				



VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	EXISTING TOP ELEVATION	EXISTING CUT	REFERENCE ELEVATION	SUE QUALITY LEVEL	COMMENTS
57	SEE NOTE ELEC/FIBER OPTIC	1897009.098	1171448.371	588.19'	4.12'	592.31'	A	
58	SEE NOTE ELEC/FIBER OPTIC	1897024.271	1171446.227	588.36'	3.96'	592.32'	A	
59A	SEE NOTE ELEC/FIBER OPTIC	1897036.487	1171443.974	587.23'	5.08'	592.31'	A	
59B	SEE NOTE ELEC/FIBER OPTIC	1897036.487	1171443.974	589.00'	3.31'	592.31'	A	
60A	SEE NOTE ELEC/FIBER OPTIC	1897064.630	1171436.240	590.08'	2.99'	593.07'	A	
60B	SEE NOTE ELEC/FIBER OPTIC	1897064.630	1171436.240	588.58'	4.49'	593.07'	A	
61	SEE NOTE ELEC/FIBER OPTIC	1897078.362	1171430.925	589.45'	3.29'	592.74'	A	
62	SEE NOTE TELEPHONE	1897586.227	1171323.180	573.12'	7.75'	580.87'	A	
62A	SEE NOTE SEE NOTE	1897585.995	1171323.301	571.77'	9.07'	580.84'	A	
62B	SEE NOTE SEE NOTE	1897585.995	1171323.301	566.27'	14.57'	580.84'	A	


NOTES

- TH #57 - Only exposed the top of the eastern edge of the concrete duct. Measured the thickness of the duct to be approximately 14".
- TH #58 - Only exposed the top of the eastern edge of the concrete duct. Unable to determine the thickness of the duct due to bricks and big rocks inside the hole.
- TH #59A - Manual depth obtained from the bottom of the eastern edge of the concrete duct. Same reference point used in the field for the top and bottom measurements.
- TH #59B - Manual depth obtained from the top of the eastern edge of the concrete duct. Same reference point used in the field for the top and bottom measurements.
- TH #60A - Manual depth obtained from the top of the eastern edge of the concrete duct. Same reference point used in the field for the top and bottom measurements.
- TH #60B - Manual depth obtained from the bottom of the eastern edge of the concrete duct. Same reference point used in the field for the top and bottom measurements.
- TH #61 - Only exposed the the top of the eastern edge of the duct. Attempted to expose the bottom of the eastern edge of the duct but was unable to accurately do so due to the curb and gutter.
- TH #62 - Only exposed the the top of the eastern edge of the duct. Attempted to expose the bottom of the eastern edge of the duct but was unable to accurately do so due to the curb and gutter.
- TH #62A - Depth was recorded from from we believe to be a some type of wooden support for the AT&T tunnel.
- TH #62B - Depth was recorded from what we believe to be a some type of wooden support for the AT&T tunnel. Unable to determine if this support was located at the bottom of the AT&T tunnel due to water was infiltrating the hole. Used the same reference point from test hole 62A.

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.

CLAASSEN, WHITE & ASSOCIATES, P.C.
 LAND SURVEYORS
 121 AIRPORT DRIVE, UNIT L, JOLIET, ILLINOIS 60431
 (815) 744-3720 clausenwhitecwasurvey.com



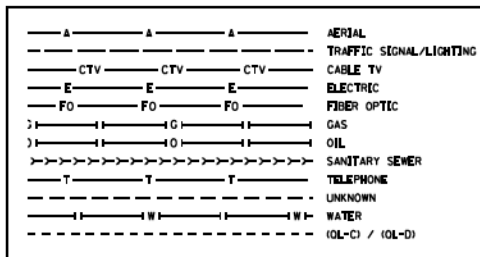
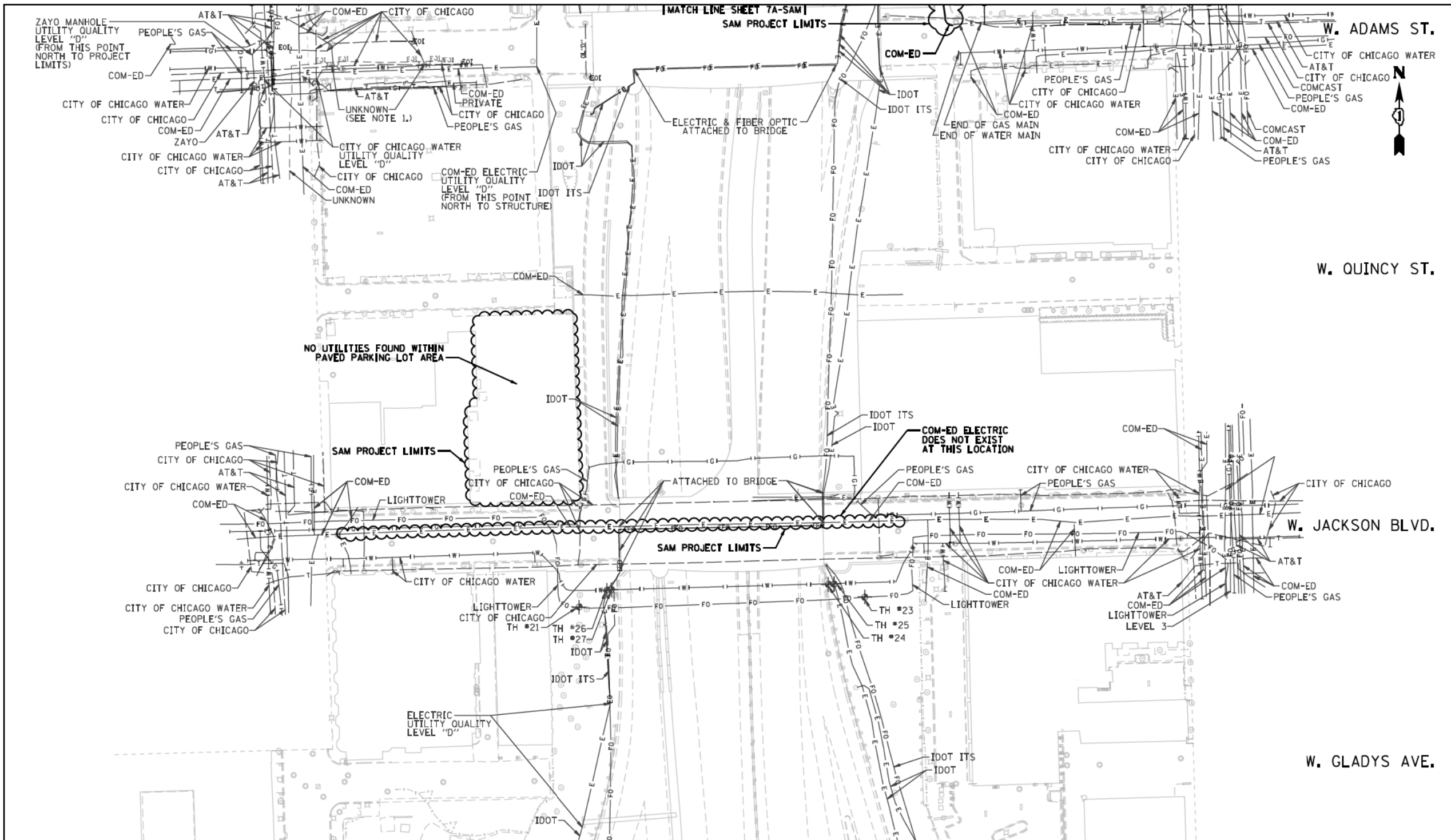
CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
 * PLANNING * UTILITY ENGINEERING/LOCATING

CARDNO Job No. IL09510531, 563, 647, 737, 748, 761
 SHEET 4 OF 4

DESIGNED EJ	REVISED 5/24/18 ADDED TH #62 - 62B		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-941-901-290 (Circle Interchange) Chicago, Illinois	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
DRAWN KLC	REVISED				N/A	Cook	400	172		
CHECKED KFS	REVISED				Contract No. N/A					
DATE 6/08/17	REVISED				Job No. P-91-259-12					

SHEET NO. 22 OF 27 SHEETS STA. TO STA.

FED. ROAD DIST. NO. ILLINOIS



ILLINOIS
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

I, SCOTT A. WECHTER, CERTIFY TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE UTILITY INFORMATION DEPICTED BY SAM, LLC, ON THIS PLAN SHEET WAS OBTAINED AND COMPILED UNDER MY DIRECT SUPERVISION USING ACCEPTED PRACTICES AND PROCEDURES.

DATE: 04-29-2019
 SCOTT A. WECHTER
 PROJECT MANAGER SAM, LLC

SAM
 SURVEILLANCE AND MONITORING
 ILLINOIS

1087 East 8th Avenue, Monroeville, VA 20111
 OR 703.911.0006 Fax 703.911.7867
 info@samllc.com www.samllc.com

D162A77_SUE.DGN Designated By: B.J. E.F. L.P.
 Scale: 1"=50' Drafted By: P.B.
 Sheet: 7-SAM Checked By: S.W.
 Date: 04-29-2019 1018047098 IDOT-1 W.O. 120

0 50 100 150
 SCALE IN FEET

7-SAM

- NOTES:
- UTILITIES DESIGNATED BY SAM, LLC. ARE SHOWN AS THICK LINES. UTILITIES DESIGNATED BY CARDNO ARE SHOWN AS THIN LINES.

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PLOT DATE = 8/13/2019	DATE = 8/16/2019	REVISED -

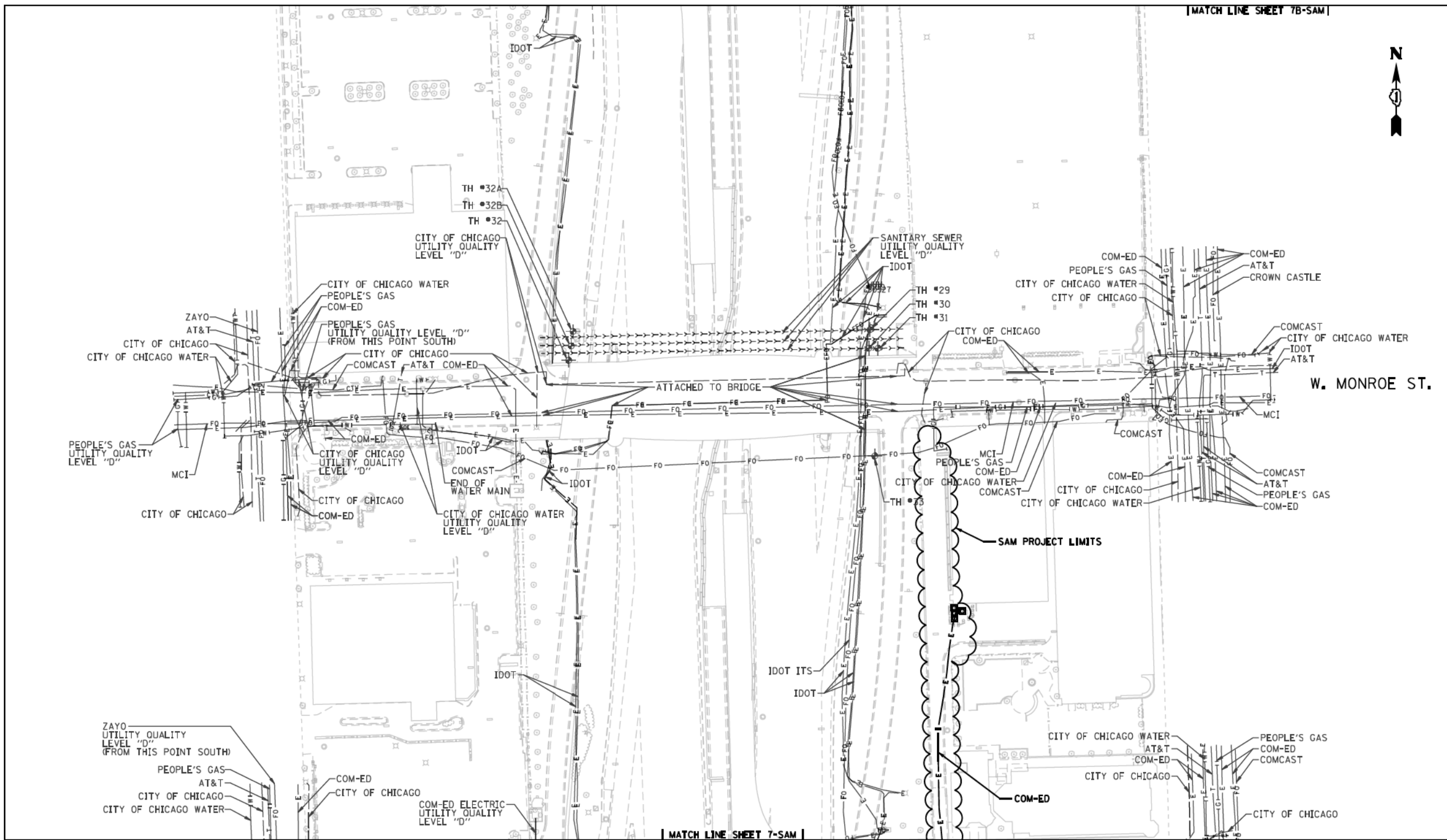
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DATE = 8/16/2019	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION


SCALE:	SHEET 23 OF 27 SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	173
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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— A — A — A — A —	AERIAL
— T — T — T — T —	TRAFFIC SIGNAL/LIGHTING
— CTV — CTV — CTV —	CABLE TV
— E — E — E —	ELECTRIC
— FO — FO — FO —	FIBER OPTIC
— G — G — G —	GAS
— O — O — O —	OIL
— S — S — S — S — S — S — S — S —	SANITARY SEWER
— T — T — T —	TELEPHONE
— U — U — U —	UNKNOWN
— W — W — W —	WATER
— (OL-C) / (OL-D) —	


 I, SCOTT A. WECHTER, CERTIFY TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE UTILITY INFORMATION DEPICTED BY SAM, LLC, ON THIS PLAN SHEET WAS OBTAINED AND COMPILED UNDER MY DIRECT SUPERVISION USING ACCEPTED PRACTICES AND PROCEDURES.
 DATE: 04-29-2019
 SCOTT A. WECHTER
 PROJECT MANAGER SAM, LLC


 1027 East Avenue, Manassas, VA 20108
 Or 7534 W 100th, Fort Worth, TX 76116
 Tel: 703.281.1887
 M@samllc.com www.samllc.com

D162A77_SUE.DGN	Designated By: B.J. E.F. L.P.
Scale: 1"=50'	Drafted By: P.B.
Sheet: 7A-SAM	Checked By: S.W.
Date: 04-29-2019	1018047098 IDOT-1 W.O. 120

0 50 100 150
 SCALE IN FEET

7A-SAM

- NOTES:
- UTILITIES DESIGNATED BY SAM, LLC. ARE SHOWN AS THICK LINES. UTILITIES DESIGNATED BY CARDNO ARE SHOWN AS THIN LINES.

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PLOT DATE = 8/13/2019

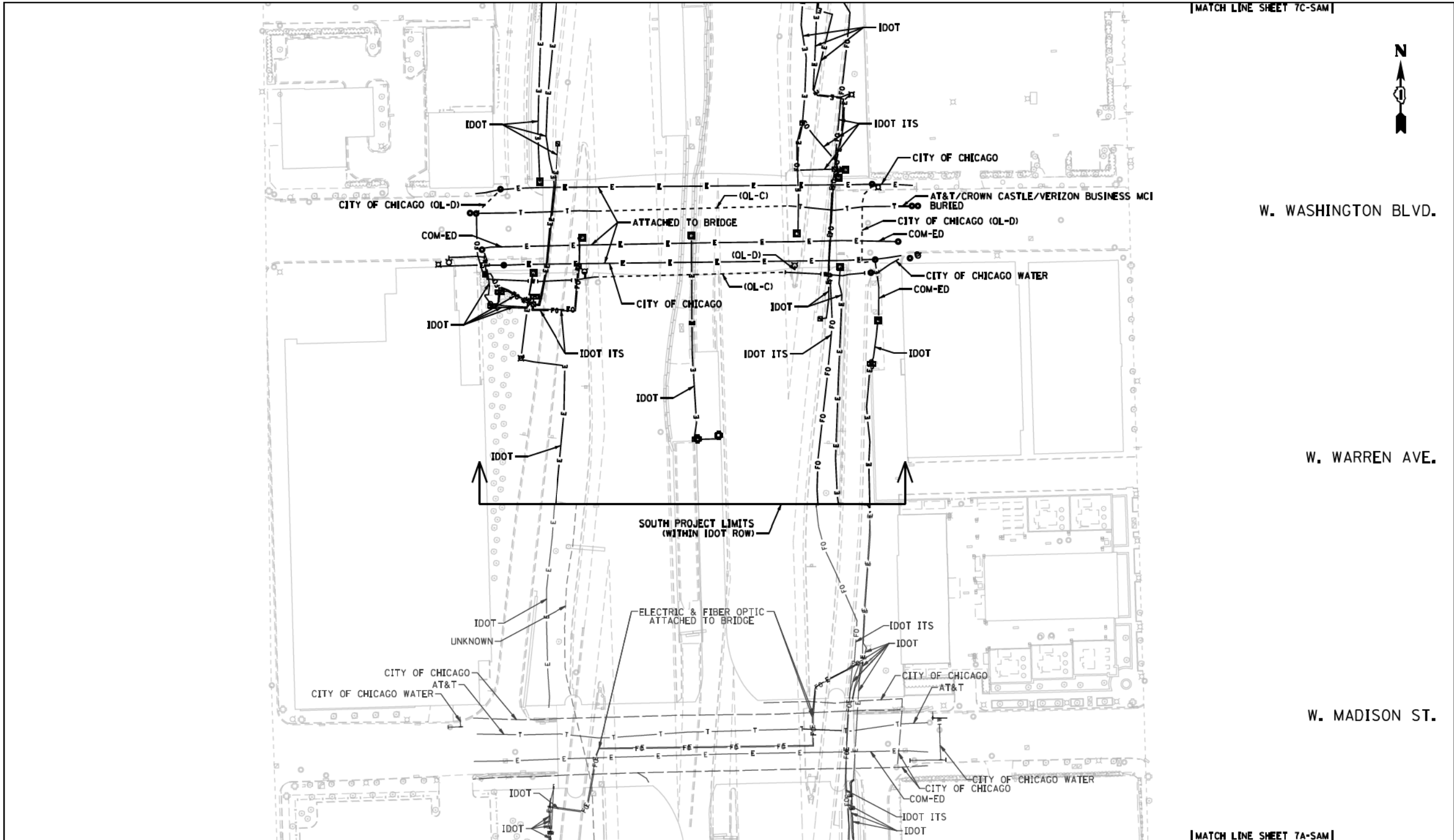
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DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:	SHEET 24 OF 27 SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	174
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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— E — E — E —	ELECTRIC
— FO — FO — FO —	FIBER OPTIC
— G — G — G —	GAS
— OIL — OIL — OIL —	OIL
— SANITARY SEWER — SANITARY SEWER —	SANITARY SEWER
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— W — W — W —	WATER
— (OL-C) / (OL-D) — (OL-C) / (OL-D) —	(OL-C) / (OL-D)

SCOTT A. WECHTER
PROJECT MANAGER SAM, LLC

DATE: 04-29-2019

D162A77 SUE.DGN Designated By: B.J. E.F. L.P.
Scale: 1"=50' Drafted By: P.B.
Sheet: 7B-SAM Checked By: S.W.
Date: 04-29-2019 1018047098 IDOT-1 W.O. 120

0 50 100 150
SCALE IN FEET

7B-SAM

- NOTES:**
- UTILITIES DESIGNATED BY SAM, LLC. ARE SHOWN AS THICK LINES.
UTILITIES DESIGNATED BY CARDNO ARE SHOWN AS THIN LINES.

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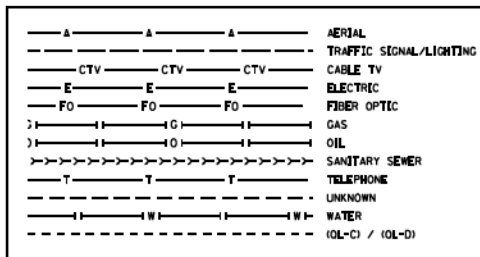
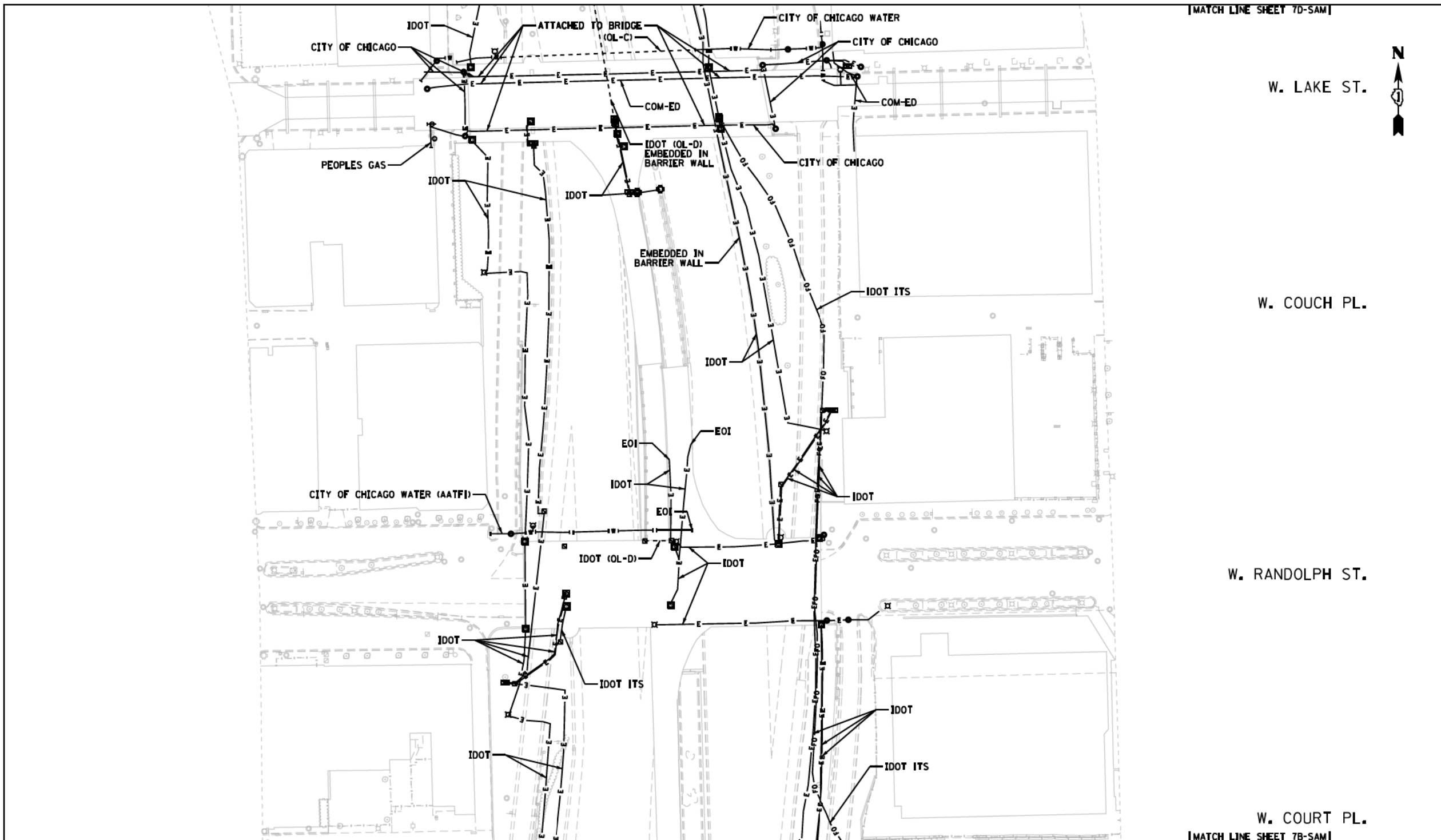
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CHECKED -	REVISED -
DATE - 8/16/2019	REVISED -


**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**


SCALE:	SHEET 25 OF 27 SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	175
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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I, SCOTT A. WECHTER, CERTIFY TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE UTILITY INFORMATION DEPICTED BY SAM, LLC, ON THIS PLAN SHEET WAS OBTAINED AND COMPILED UNDER MY DIRECT SUPERVISION USING ACCEPTED PRACTICES AND PROCEDURES.
 DATE: 04-29-2019
 SCOTT A. WECHTER
 PROJECT MANAGER SAM, LLC


 1087 East Avenue, Monroeville, VA 20111
 OR 703.911.0006 Fax 703.911.7867
 info@samllc.com www.samllc.com

D162A77_SUE.DGN	Designated By: B.J. E.F. L.P.
Scale: 1"=50'	Drafted By: P.B.
Sheet: 7C-SAM	Checked By: S.W.
Date: 04-29-2019	1018047098 IDOT-1 W.O. 120

0 50 100 150
SCALE IN FEET

7C-SAM

- NOTES:
- UTILITIES DESIGNATED BY SAM, LLC. ARE SHOWN AS THICK LINES.
 - UTILITIES DESIGNATED BY CARDNO ARE SHOWN AS THIN LINES.
- RECORDS FROM CDOT INDICATE FREIGHT TUNNELS UNDER FULTON STREET, LYDIA STREET, AND LAKE STREET.

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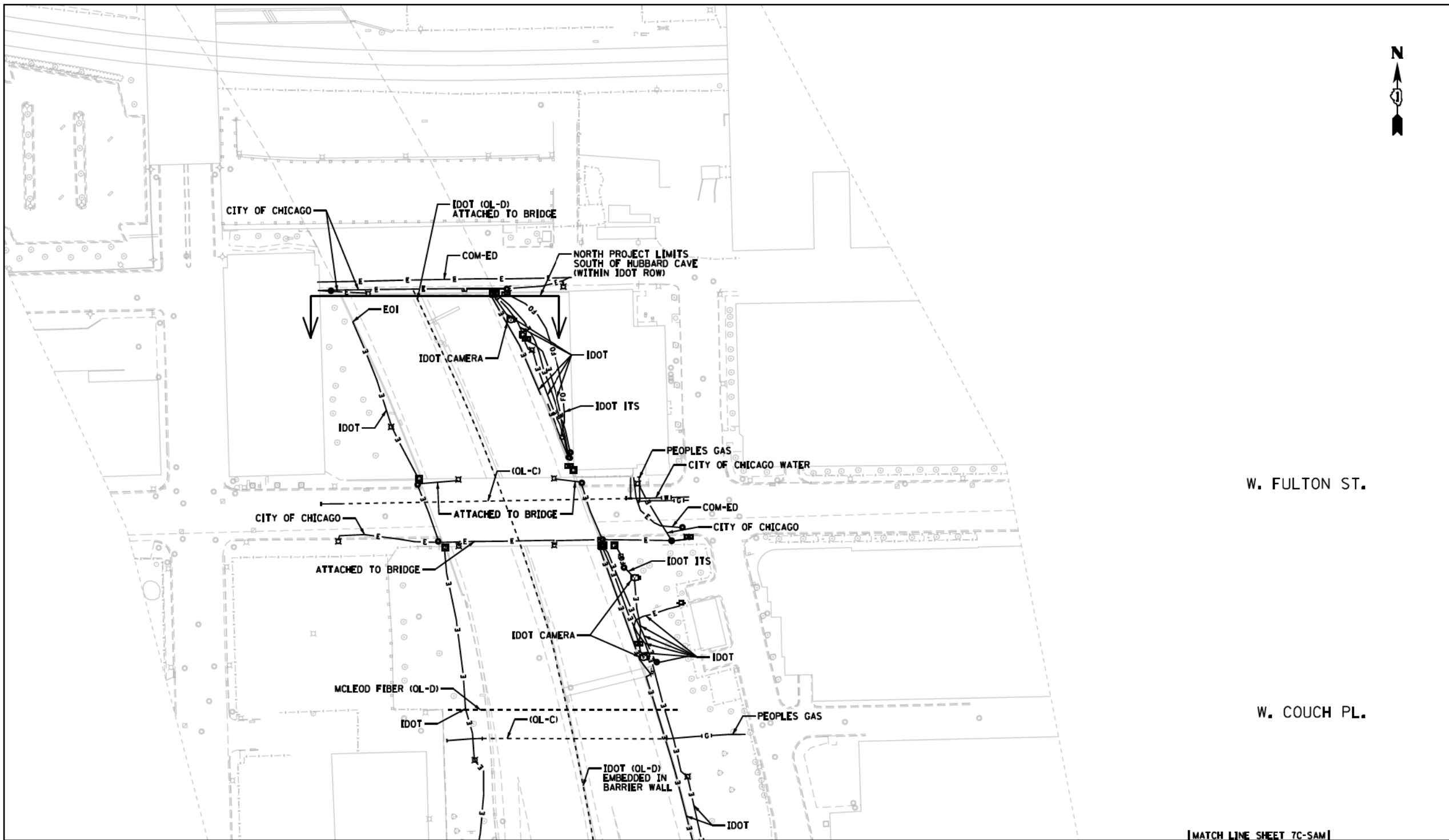
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: SHEET 26 OF 27 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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—▲—▲—▲—▲—	AERIAL TRAFFIC SIGNAL/LIGHTING
—CTV—CTV—CTV—	CABLE TV
—E—E—E—E—	ELECTRIC
—FO—FO—FO—FO—	FIBER OPTIC
—G—G—G—G—	GAS
—O—O—O—O—	OIL
—S—S—S—S—	SANITARY SEWER
—T—T—T—T—	TELEPHONE
—U—U—U—U—	UNKNOWN
—W—W—W—W—	WATER
—(OL-C) / (OL-D)—	

I, SCOTT A. WECHTER, CERTIFY TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE UTILITY INFORMATION DEPICTED BY SAM, LLC, ON THIS PLAN SHEET WAS OBTAINED AND COMPILED UNDER MY DIRECT SUPERVISION USING ACCEPTED PRACTICES AND PROCEDURES.

DATE: 04-29-2019
 SCOTT A. WECHTER
 PROJECT MANAGER SAM, LLC

D162A77_SUE.DGN	Designated By: B.J. E.F. L.P.
Scale: 1"=50'	Drafted By: P.B.
Sheet: 7D-SAM	Checked By: S.W.
Date: 04-29-2019	1018047098 IDOT-1 W.O. 120

0 50 100 150
 SCALE IN FEET

7D - SAM

- NOTES:
- UTILITIES DESIGNATED BY SAM, LLC. ARE SHOWN AS THICK LINES. UTILITIES DESIGNATED BY CARDNO ARE SHOWN AS THIN LINES.
 - RECORDS FROM CDOT INDICATE FREIGHT TUNNELS UNDER FULTON STREET, LYDIA STREET, AND LAKE STREET.

D162J31-Sht-SUE-23-27.dgn	DESIGNED -	REVISED -
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PLOT SCALE = 2.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/13/2019	DATE = 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:	SHEET 27 OF 27 SHEETS	STA.	TO STA.
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F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 177
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

SECTION 1.0 SCOPE OF WORK

A PORTION OF THE W. JACKSON BLVD. TUNNEL SHALL BE FILLED WITH A FLOWABLE FILL MATERIAL IN ACCORDANCE WITH THESE DRAWINGS. THE PORTION TO BE FILLED IS LOCATED WITHIN THE W. JACKSON BLVD. CHICAGO FREIGHT TUNNEL BETWEEN HALSTED ST. AND DES PLAINES ST.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE DRAWINGS.

SECTION 2.0 GENERAL SPECIFICATIONS AND INSTRUCTIONS

- 2.01 THE CONTRACTOR SHALL PROVIDE SUCH PLANS, SPECIFICATIONS, DRAWINGS, COMPLETED APPLICATION FORMS AND INFORMATION NECESSARY TO SECURE ALL PERMITS AS REQUIRED BY THE CHICAGO DEPARTMENT OF TRANSPORTATION (CDOT) FOR REGULATED WORK WITHIN THE FREIGHT TUNNEL SYSTEM. A CHICAGO FREIGHT TUNNEL TEMPORARY ACCESS AGREEMENT AND A CHICAGO FREIGHT TUNNEL INTERIOR CONSTRUCTION AND MAINTENANCE AGREEMENT SHALL BE EXECUTED ON BEHALF OF THE CONTRACTOR. A PERMIT FOR PENETRATION AND INTERIOR CONSTRUCTION IN THE CHICAGO FREIGHT TUNNEL SYSTEMS MUST BE ISSUED BY THE BUREAU OF BRIDGES AND TRANSIT, CDOT. WORK SHALL NOT BE STARTED PRIOR TO ACQUISITION OF ALL REQUIRED PERMITS.
- 2.02 COPIES OF THE PLANS, INSTRUCTIONS AND SPECIFICATIONS SHALL BE FORWARDED TO THE CHICAGO DEPARTMENT OF TRANSPORTATION, 30 NORTH LASALLE STREET, SUITE 1100, CHICAGO, ILLINOIS 60602 FOR EVALUATION AND COMMENTS. ALTERATIONS AND SUGGESTED CHANGES SHALL BE RESOLVED PRIOR TO THE START OF ANY WORK UNDER THIS PROJECT.
- 2.03 USE OF PUBLIC WAY AND/OR TEMPORARY PUBLIC WAY CLOSURE AND STREET OPENING PERMITS SHALL BE OBTAINED FROM THE CONSTRUCTION COMPLIANCE DIVISION, BUREAU OF INSPECTIONS, DEPARTMENT OF TRANSPORTATION, PRIOR TO ANY WORK REQUIRING SUCH ACTION.

COSNTRUCTION ALONG ROADWAYS UNDER CDOT JURISDICTION SHALL BE COORDINATED WITH THE CHICAGO DEPARTMENT OF TRANSPORTATION TO INSURE THAT THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND OF RESIDENTS ALONG THE ROADWAY ARE PROVIDED FOR IN AN ADEQUATE AND SATISFACTORY MANNER. AT NO TIME SHALL THE EXISTING ROADWAYS BE CLOSED TO TRAFFIC, UNLESS APPROVED BY THE ENGINEER AND THE CHICAGO DEPARTMENT OF TRANSPORTATION. DURING CONSTRUCTION OPERATIONS, ACCESS SHALL BE PROVIDED TO PRIVATE PROPERTY ALONG THE EXISTING ROADWAYS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, BARRICADES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC.
- 2.04 PROJECT DATUM: ELEVATIONS SHOWN ON THESE DRAWINGS ARE REFERENCED TO CHICAGO CITY DATUM 0.00 = 579.19 MEAN SEA LEVEL, 1929.
- 2.05 ALL DIMENSIONS SHOWN ON THESE DRAWINGS ARE IN FEET AND INCHES.

SECTION 3.0 TUNNEL LOCATIONS

THE HORIZONTAL AND VERTICAL DIMNSIONS OF THE TUNNEL ARE AS ESTABLISHED IN THE CHICAGO FREIGHT TUNNEL ATLAS. DIMENSIONS ARE NOT TO BE ASSUMED OR SCALED FROM THE PLANS AND ACTUAL DIMENSIONS SHALL BE DETERMINED BY FIELD MEASUREMENTS TO BE PERFORMED BY THE CONTRACTOR.

SECTION 4.0 WORK

- 4.01 THE CONTRACTOR SHALL INVESTIGATE THE PROJECT, PLANS, SPECIFICATIONS, INSTRUCTIONS, SITE, UTILITIES, TRAFFIC CONDITIONS, MATERIAL, LABOR, EXCAVATION, RESTORATION AND REQUIRED SAFETY PRECAUTIONS INVOLVED WITH THIS PROJECT. ANY QUESTIONS OR CONCERNS THE CONTRACTOR MAY HAVE ARE TO BE DISCUSSED WITH THE ENGINEER AND CDOT PRIOR TO CONSTRUCTION.
- 4.02 THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, EQUIPMENT, LABOR, INSTALLATION AND JOB SITE DELIVERY COSTS TO COMPLETE THE DESCRIBED AND ILLUSTRATED WORK SHOWN ON THESE PLANS.
- 4.03 ANY CHANGE-ORDER REQUEST MUST BE PRESENTED IN WRITING TO THE ENGINEER AND CDOT AND APPROVED PRIOR TO PROCEEDING WITH THE REQUESTED CHANGE. DOCUMENTATION CONCERNING ANY AND ALL CHANGE ORDERS SHALL BE REDUCED TO FORMAL RECORD, BE FILED WITH CDOT AND BE MADE AVAILABLE FOR FUTURE REFERENCE.
- 4.04 ACCUMULATION OF DEBRIS MATERIAL SHALL NOT BE ALLOWED WITHIN THE TUNNEL SITE. THIS DEBRIS MATERIAL SHALL BE REMOVED FROM THE WORK SITE AT LEAST ONCE PER WEEK. THIS PROVISION SHALL BE CONTINGENT UPON THE ORIGINAL INSPECTION OF THE WORK.
- 4.05 THE CONTRACTOR SHALL ARRANGE TO FILL ENCOUNTERED HOLES WITH SELECT BACKFILL MATERIAL, AS DIRECTED BY THE AGREEMENT FOR WORK IN THE TUNNEL. THE CONTRACTOR MAY BE REQUIRED TO REMOVE EXISTING ACCESS MATERIAL OR DEBRIS AS DIRECTED BY THE CHICAGO DEPARTMENT OF TRANSPORTATION. PAYMENT FOR THIS WORK SHALL BE ACCORDING TO ARTICLE 109.4 OF THE STANDARD SPECIFICATIONS.

- 4.06 SAFE WORKING PRACTICES SHALL BE CONTINUOUSLY DEMONSTRATED BY THE CONTRACTOR. THE TUNNEL ENVIRONMENT IS TO BE CONSIDERED HOSTILE AND DUE CAUTION SHALL BE EXERCISED IN ALL MANNERS OF WORK PERFORMANCE AND INSPECTION. AS A MINIMUM, THE CONTRACTOR SHALL CONFORM TO THE SAFETY PROCEDURES AS STATED IN THE CHICAGO FREIGHT TUNNEL TEMPORARY ACCESS AGREEMENT.

THE SITE AND THE IMMEDIATELY ADJACENT AREA SHALL BE MADE SAFE FOR WORKMEN, PEDESTRIANS, INSPECTORS, CDOT REPRESENTATIVES, AND THOSE PERSONS GRANTED ACCESS AND MAINTENANCE RIGHTS IN THE TUNNEL.
- 4.07 THE ENGINEER SHALL NOT BE RESPONSIBLE NOR ASSUME LIABILITY FOR NEGLIGENT ACTS, ERRORS, OR OMISSIONS OF CONTRACTOR, ANY SUBCONTRACTOR, OR ANY OF THE CONTRACTOR'S OR SUBCONTRACTOR'S AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS AT THE PROJECT SITE, OR OTHERWISE PERFORMING ANY OF THE WORK ON THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING AND MAINTAINING A COMPREHENSIVE SAFETY PROGRAM AT THE PROJECT SITE.
- 4.08 NEITHER THE PROFESSIONAL ACTIVITIES OF THE ENGINEER, NOR THE PRESENCE OF THE ENGINEER OR ITS EMPLOYEES OF SUBCONSULTANTS AT THE CONSTRUCTION SITE, SHALL RELIEVE ANY CONTRACTOR OF ITS OBLIGATIONS, DUTIES, OR RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ALL HEALTH OR SAFETY PRECAUTIONS REQUIRED BY THE CONTRACT, APPLICABLE LAW OR ANY REGULATORY AGENCY HAVING JURISDICTION OVER THE CONSTRUCTION, OR BE DEEMED TO CONFER ANY SUCH OBLIGATIONS, DUTIES OR RESPONSIBILITIES UPON THE ENGINEER. THE ENGINEER AND ITS PERSONNEL OR SUBCONTRACTORS HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH ANY HEALTH OR SAFETY PRECAUTIONS.
- 4.09 THE CONTRACTOR SHALL RESTORE ALL DAMAGED STRUCTURES AND UTILITIES TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE.
- 4.10 THE CONTRACTOR SHALL PROVIDE A MINIMUM 24 HOURS ADVANCED NOTICE PRIOR TO COMMENCEMENT OF ANY WORK WITHIN THE TUNNELS AND A MINIMUM 48 HOURS NOTICE PRIOR TO ANY PENETRATION OF THE EXISTING TUNNEL LINING. NOTICE SHALL BE GIVEN TO MR. JAMES J. MADIA, CDOT, AT (312) 744-3920.
- 4.11 ARRANGEMENTS OF PERIODIC INSPECTIONS DURING CONSTRUCTION SHALL BE MADE WITH CDOT, WHO SHALL DETERMINE THE FREQUENCY WITH WHICH WUCH CONSTRUCTION INSPECTIONS ARE TO BE AMDE. THE CONTRACTOR SHALL ARRANGE FOR CDOT TO ACCOMPANY THE OWNER ON A FINAL INSPECTION IN COMPLIANCE WITH SECTION 9, PARAGRAPH D, OF THE TUNNEL AGREEMENT.
- 4.12 RESTORATION SHALL BE IN ACCORDANCE WITH THE RECOMMENDED PRACTICES AND REQUIREMENTS OF THE CHICAGO DEPARTMENT OF TRANSPORTATION AND THE PERMITS ISSUED.

SECTION 5.0 GENERAL NOTES FOR CONCRETE

- 5.01 FORMWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE METHODOLOGY OF THE CURRENT ACI 347 "GUIDE TO FORMWORK FOR CONCRETE" FOR ANTICIPATED LOADS, LATERAL PRESSURES AND STRESSES INCLUDING THE PRESSURES RESULTING FROM PLACEMENT AND VIBRATION OF CONCRETE.
- 5.02 FORMS FOR EXPOSED SURFACES SHALL BE LINED WITH OR CONSTRUCTED OF PLYWOOD SHEATHING, TEMPERED COCNRETE FROM HARDBOARD, OTHER APPROVED CONCRETE FORM MATERIAL, OR STEEL, EXCEPT THAT STEEL LINING ON WOOD SHEATHING SHALL NOT BE USED.
- 5.03 FORMWORK FOR PARTS NOT SUPPORTING THE WEIGHT OF CONCRETE MAY BE REMOVED WHEN THE CONCRETE HAS ATTAINED SUFFICIENT STRENGTH TO RESIST DAMAGE FROM THE REMOVAL OPERATION BUT NOT BEFORE AT LEAST 24 HOURS HAS ELAPSED SINCE CONCRETE PACEMENT. SUPPORTING FORMS OR SHORES SHALL NOT BE REMOVED BEFORE THE CONCRETE STRENGTH HAS REACHED 70 PERCENT OF DESIGN STRENGTH, AS DETERMINED BY FIELD CURED CYLINDERS OR OTHER APPROVED METHODS.
- 5.04 ALL REINFORCEMENT FABRICATION, PLACEMENT AND DETAILING INCLUDING DEVELOPMENT LENGTHS, SPLICING AND CONCRETE COVER SHALL BE IN ACCORDANCE WITH THE CURRENT ACI 315 AND THE CURRENT ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY" UNLESS OTHERWISE NOTED.
- 5.05 CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WHICH INCLUDE REINFORCMENT STEEL PLACEMENT DRAWINGS AND SCHEDULES TO THE ENGINEER FOR APPROVAL.
- 5.06 REINFORCEMENT BARS SHALL BE EPOXY COATED DEFORMED BILLET STEEL BARS CONFORMING TO ASTM A 615 AND ASTM A 775 OR ASTM A 934, GRADE 60 WITH Fy=60,000 PSI. ALL REINFORCEMENT ACCESSORIES SHALL BE EPOXY COATED.
- 5.07 HOOPS AND BENDS SHALL CONFORM TO ACI 315.
- 5.08 AT THE TIME OF CONCRETE PLACEMENT, ALL STEEL SHALL BE FREE FROM LOOSE, FLAKY RUST, SCALE (EXCEPT TIGHT MILL SCALE), MUD, OIL, GREAS OR ANY OTHER COATING THAT MIGHT REDUCE THE BOND WITH CONCRETE.
- 5.09 ALL STEEL SHALL BE RIGIDLY SECURED IN PLACE SO THAT IT WILL NOT OR BULGE FROM ITS PROPER LOCATION DURING FORMING, CONCRETE PLACEMENT AND CONSOLIDATION.

- 5.10 REINFORCEMENT LAPS SHALL BE STAGGERED.
- 5.11 STEEL BARS SHALL NOT BE WELDED.
- 5.12 REBAR COUPLERS MAY BE SUBSTITUTED FOR LAP SPLICES AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 5.13 ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND THE CURRENT ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE." COLD WEATHER CONCRETEING SHALL BE PERFORMED IN ACCORDANCE WITH ACI 306.
- 5.14 CONTRACTOR QUALITY CONTROL PERSONNEL ASSIGNED TO CONCRETE CONSTRUCTION SHALL BE AMERICAN CONCRETE INSTITUTE (ACI) CERTIFIED WORKMEN IN ONE OF THE FOLLOWING GRADES OR SHALL HAVE WRITTEN EVIDENCE OF HAVING COMPLETED SIMILAR QUALIFICATION PROGRAMS: CONCRETE FIELD TESTING TECHNICIAN GRADE I; CONCRETE LABORATORY TESTING TECHNICIAN GRADE I OR II; CONCRETE CONSTRUCTION INSPECTOR LEVEL II; CONCRETE TRANSPORTATION CONSTRUCTION INSPECTOR; OR REINFORCED CONCRETE SPECIAL INSPECTOR JOINTLY CERTIFIED BY ACI, BUILDING OFFICIAL AND CODE ADMINISTRATORS INTERNATIONAL (BOCA), INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO), AND SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL (SBCCI).
- 5.15 STRUCTURAL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH f'c OF 4000 PSI AT 28 DAYS WITH A MINIMUM SLUMP OF 1 INCH AND A MAXIMUM SLUMP OF 3 INCHES, UNLESS OTHERWISE NOTED ON DRAWINGS.
- 5.16 COMPRESSIVE STRENGTH SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C 39.
- 5.17 SLUMP OF THE CONCRETE SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C 143.
- 5.18 THE MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO (w/cm) BY WEIGHT FOR CONCRETE SHALL BE 0.45.
- 5.19 ALL CONCRETE SHALL BE AIR ENTRAINED TO CONTAIN BETWEEN 4 AND 7 PERCENT TOTAL AIR. AIR CONTENT SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C 231.
- 5.20 WHEN A PLASTICIZING ADMIXTURE OR WHEN A TYPE F OR G HIGH RANGE WATER REDUCING ADMIXTURE CONFORMING TO ASTM C 494 IS USED TO INCREASE THE SLUMP OF CONCRETE, THE CONCRETE SHALL HAVE A SLUMP OF 2 TO 4 INCHES BEFORE THE ADMIXTURE IS ADDED AND A MAXIMUM SLUMP OF 8 INCHES AT THE POINT OF DELIVERY AFTER THE ADMIXTURE IS ADDED.
- 5.21 TOLERANCES SHALL BE AS DEFINED IN ACI 117/117R "STANDARD TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS."
- 5.22 CONCRETE SHALL BE COMPOSED OF PORTLAND CEMENT, POZZOLANIC MATERIAL, AGGREGATES, WATER AND ADMIXTURES AS SPECIFIED. CONCRETE MIXTURES SHALL BE PROPORTIONED IN ACCORDANCE WITH SECTION 4 OF THE CURRENT ACI 301. POZZOLAN SHALL BE USED IN ALL CONCRETE AT NO LESS THAN 15 PERCENT, BY WEIGHT, OF THE TOTAL CEMENTITIOUS MATERIAL.
- 5.23 ADMIXTURES WHICH HAVE BEEN IN STORAGE FOR LONGER THAN 6 MONTHS OR WHICH HAVE BEEN SUBJECTED TO FREEZING SHALL NOT BE USED UNLESS RETESTED AND PROVEN TO MEET THE SPECIFIED REQUIREMENTS.
- 5.24 CEMENT SHALL CONFORM TO ASTM C 150, TYPE II UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 5.25 POZZOLAN SHALL CONFORM TO ASTM C 618 TYPES F OR N EXCEPT THAT CARBON CONTENT SHALL NOT BE MORE THAN 3 PERCENT BY WEIGHT AND LOSS ON IGNITION SHALL NOT BE MORE THAN 6 PERCENT BY WEIGHT.
- 5.26 SILICA FUME SHALL CONFORM TO ASTM C 1240.
- 5.27 FINE AND COARSE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS ASTM C 33.
- 5.28 THE AIR-ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C 260 AND SHALL CONSISTENTLY CAUSE THE CONCRETE TO HAVE AN AIR CONTENT IN THE SPECIFIED RANGES UNDER FIELD CONDITIONS.
- 5.29 WATER REDUCING AND RETARDING ADMIXTURES SHALL CONFORM TO ASTM C 494, TYPE A OR D. THESE ADMIXTURES SHALL BE USED AT THE MID-RANGE OF THE MANUFACTURER'S RECOMMENDED DOSAGE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 5.30 HIGH-RANGE WATER REDUCING ADMIXTURE SHALL CONFORM TO ASTM C 494, TYPE F OR G AND MAY ONLY BE USED WHEN APPROVED IN WRITING BY THE ENGINEER, SUCH APPROVAL BEING CONTINGENT UPON PERTICULAR MIXTURE CONTROL OR UPON PERFORMANCE OF SEPARATE MIXTURE DESIGN STUDIES.
- 5.31 WATER FOR MIXING AND CURING SHALL BE FRESH, CLEAN, POTABLE AND FREE OF INJURIOUS AMOUNTS OF OIL, ACID, SALT, OR ALKALI, EXCEPT THAT NONPOTABLE WATER MAY BE USED IF IT MEETS THE REQUIREMENTS OF COE CRD-C 400.

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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FREIGHT TUNNEL BULKHEADING GENERAL NOTES AND CONSTRUCTION PROCEDURES	
SCALE:	SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	178
				CONTRACT NO. 62J31
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

SECTION 5.0 GENERAL NOTES FOR CONCRETE (CONTINUED)

- 5.32 EPOXY RESIN FOR USE IN REPAIRS SHALL CONFORM TO ASTM C 881, TYPE V, GRADE 2. CLASS AS APPROPRIATE TO THE EXISTING AMBIENT AND SURFACE TEMPERATURES.
- 5.33 SURFACES UPON WHICH CONCRETE IS TO BE PLACED SHALL BE CLEAN AND FREE FROM DEBRIS, FROST, ICE, AND STANDING OR RUNNING WATER.
- 5.34 ALL EMBEDDED STEEL, ANCHORS, DRAIN OUTLETS, EMBEDDED RUNGS, EMBEDDED METAL, ETC. SHALL BE FIRMLY AND SECURELY IN PLACE, CLEAN AND FREE OF OIL AND OTHER FOREIGN MATTER SUCH AS LOOSE COATINGS OR RUST, PAINT, AND SCALE BEFORE CONCRETE IS PLACED, EXCEPT AS NOTED.
- 5.35 CONCRETE SHALL BE FURNISHED FROM A READY-MIXED CONCRETE PLANT. READY-MIXED CONCRETE SHALL BE BATCHED, MIXED, AND TRANSPORTED IN ACCORDANCE WITH ASTM C 94, EXCEPT AS OTHERWISE SPECIFIED TRUCK MIXERS SHALL COMPLY WITH NRMCA TMMB 100. READY-MIX PLANT EQUIPMENT AND FACILITIES SHALL BE CERTIFIED IN ACCORDANCE WITH NRMCA QC 3. APPROVED BATCH TICKETS SHALL BE FURNISHED FOR EACH LOAD OF READY-MIXED CONCRETE. WATER SHALL NOT BE ADDED AT THE PLACING SITE UNLESS SPECIFICALLY APPROVED AND IN NO CASE SHALL IT EXCEED THE SPECIFIED W/CM.
- 5.36 MIXED CONCRETE SHALL BE DISCHARGED WITHIN 1-1/2 HOURS OR BEFORE THE MIXER DRUM HAS REVOLVED 300 REVOLUTIONS, WHICHEVER COMES FIRST AFTER THE INTRODUCTION OF THE MIXING WATER TO THE CEMENT AND AGGREGATES.
- 5.37 CONCRETE SHALL BE DEPOSITED AS CLOSE AS POSSIBLE TO ITS FINAL POSITION IN THE FORMS, AND THERE SHALL BE NO VERTICAL DROP GREATER THAN 5 FEET EXCEPT WHERE SUITABLE EQUIPMENT IS PROVIDED TO PREVENT SEGREGATION AND WHERE SPECIFICALLY AUTHORIZED
- 5.38 DEPOSITING OF CONCRETE SHALL BE SO REGULATED THAT IT WILL BE EFFECTIVELY CONSOLIDATED IN HORIZONTAL LAYERS NOT MORE THAN 18 INCHES THICK, EXCEPT THAT SLABS SHALL BE PLACED IN A SINGLE LAYER.
- 5.39 CONCRETE SHALL BE DEPOSITED CONTINUOUSLY IN ONE LAYER OR IN LAYERS SO THAT FRESH CONCRETE IS DEPOSITED ON IN-PLACE CONCRETE THAT IS STILL PLASTIC.
- 5.40 SPECIAL CARE SHALL BE USED TO ENSURE COMPLETE FILLING OF THE FORMS, ELIMINATION OF ALL VOIDS, AND COMPLETE CONSOLIDATION OF THE CONCRETE WHEN PLACING CONCRETE IN AREAS CONGESTED WITH REINFORCING BARS, EMBEDDED ITEMS, WATERSTOPS AND OTHER TIGHT SPACING.
- 5.41 IMMEDIATELY AFTER PLACING, EACH LAYER OF CONCRETE SHALL BE CONSOLIDATED BY INTERNAL VIBRATORS. THE VIBRATOR SHALL PENETRATE RAPIDLY TO THE BOTTOM OF THE LAYER AND AT LEAST 6 INCHES INTO THE PRECEDING LAYER IF THERE IS SUCH. VIBRATOR SHALL BE HELD STATIONARY UNTIL THE CONCRETE IS CONSOLIDATED AND THEN VERTICALLY WITHDRAWN SLOWLY WHILE OPERATING.
- 5.42 SPECIAL PROTECTION MEASURES SHALL BE USED IF FREEZING TEMPERATURES ARE ANTICIPATED DURING PLACING OR BEFORE THE EXPIRATION OF THE SPECIFIED CURING PERIOD. THE AMBIENT TEMPERATURE OF THE AIR WHERE CONCRETE IS TO BE PLACED AND THE TEMPERATURE OF SURFACE TO RECEIVE CONCRETE SHALL NOT BE LESS THAN 40 DEGREES F. THE TEMPERATURE OF THE CONCRETE WHEN PLACED SHALL NOT BE LESS THAN 50 DEGREES F NOR MORE THAN 75 DEGREES F. HEATING OF MIXING WATER OR AGGREGATE WILL BE REQUIRED TO REGULATE THE CONCRETE PLACING TEMPERATURE. MATERIALS ENTERING THE MIXER SHALL BE FREE FROM ICE, SNOW, OR FROZEN LUMPS. SALT, CHEMICALS OR OTHER MATERIALS SHALL NOT BE INCORPORATED IN THE CONCRETE TO PREVENT FREEZING.
- 5.43 ALL CONSTRUCTION JOINTS SHALL BE AS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER. KEYS SHALL BE PROVIDED AT ALL CONSTRUCTION JOINTS WHERE NOTED. KEY DETAILS WILL BE AS SHOWN IN THE STANDARD DETAILS. FRESH CONCRETE SHALL NOT BE PLACED AGAINST ADJACENT HARDENED CONCRETE UNTIL IT IS AT LEAST 24 HOURS OLD.
- 5.44 CONCRETE SURFACES TO WHICH ADDITIONAL CONCRETE IS TO BE BONDED SHALL BE PREPARED FOR RECEIVING THE NEXT LIFT OR ADJACENT CONCRETE BY CLEANING WITH EITHER SANDBLASTING, HIGH-PRESSURE WATER JET, OR OTHER APPROVED METHOD. REGARDLESS OF THE METHOD USED, THE RESULTING SURFACES SHALL BE FREE FROM ALL LAITANCE AND INFERIOR CONCRETE SO THAT CLEAN, WELL BONDED COARSE AGGREGATE IS EXPOSED UNIFORMLY THROUGHOUT THE LIFT SURFACE, AND MAKES UP AT LEAST 10 PERCENT OF THE SURFACE AREA. THE EDGES OF THE COARS AGGREGATE SHALL NOT BE UNDERCUT. THE SURFACE OF HORIZONTAL CONSTRUCTION JOINTS SHALL BE KEPT CONTINUOUSLY WET FOR THE FIRST 12 HOURS DURING THE 24-HOUR PERIOD PRIOR TO PLACING FRESH CONCRETE. THE SURFACE SHALL BE WASHED CLEAN AGAIN AS THE LAST OPERATION PRIOR TO PLACING THE NEXT LIFT. THERE SHALL BE NO STANDING WATER ON THE SURFACE UPON WHICH CONCRETE IS PLACED.
- 5.45 ALL EXPOSED EDGES SHALL BE PROVIDED WITH A 3/4 INCH CHAMFER, EXCEPT AS NOTED.
- 5.46 FORMED SURFACES SHALL BE LEFT WITH THE TEXTURE IMPARTED BY THE FORMS EXCEPT THAT DEFECTIVE SURFACES SHALL BE REPAIRED WITHIN 24 HOURS AFTER FORMS ARE REMOVED. REPAIRS SHALL BE DEMONSTRATED TO BE ACCEPTABLE AND FREE FROM CRACKS OR LOOSE OR DRUMMY AREAS AT THE COMPLETION OF THE CONTRACT. REPAIRS NOT MEETING THESE REQUIREMENTS WILL BE REJECTED AND SHALL BE REPLACED.

- 5.47 FORM TIE HOLES SHALL BE REAMED AND OTHER SIMILAR DEFECTS SHALL BE CUT OUT TO SOUND CONCRETE. THE VOID SHALL THEN BE THOROUGHLY CLEANED, THOROUGHLY WETTED, BRUSH-COATED WITH A THIN COAT OF NEAT CEMENT GROUT AND FILLED WITH MORTAR. ALL HOLES SHALL BE PACKED FULL AND SHALL BE MOIST CURED FOR AT LEAST 48 HOURS.
- 5.48 CONCRETE WITH EXCESSIVE HONEYCOMB, OR OTHER DEFECTS WHICH AFFECT THE STRENGTH OF THE MEMBER, WILL BE REJECTED.
- 5.49 ALL CONCRETE SHALL BE CURED BY AN APPROVED METHOD FOR AT LEAST 7 DAYS.
- 5.50 WHEN THE DAILY AMBIENT LOW TEMPERATURE IS LESS THAN 32 DEGREES F THE TEMPERATURE OF THE CONCRETE SHALL BE MAINTAINED ABOVE 40 DEGREES F FOR THE FIRST SEVEN DAYS AFTER PLACING. DURING THE PERIOD OF PROTECTION REMOVAL, THE AIR TEMPERATURE ADJACENT TO THE CONCRETE SURFACES SHALL BE CONTROLLED SO THAT CONCRETE NEAR THE SURFACE WILL NOT BE SUBJECTED TO A TEMPERATURE DIFFERENTIAL OF MORE THAN 25 DEGREES F AS DETERMINED BY SUITABLE TEMPERATURE MEASURING DEVICES FURNISHED BY THE CONTRACTOR, AS REQUIRED, AND INSTALLED ADJACENT TO THE CONCRETE SURFACE AND 2 INCHES INSIDE THE SURFACE OF THE CONCRETE. THE INSTALLATION OF THE THERMOMETERS SHALL BE MADE BY THE CONTRACTOR AS DIRECTED.

SECTION 6.0 GENERAL DESIGN NOTES

- 6.01 DESIGN SPECIFICATIONS
 - ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE 318-19 AND COMMENTARY 318R-19
 - CHICAGO BUILDING CODE
 - AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES SEVENTEENTH EDITION
 - ANSI/AF & PA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS-2018)
- 6.02 DESIGN STRESSES
 - EXISTING FREIGHT TUNNEL CONCRETE: f'c=2,000psi (ASSUMED)
 - CONCRETE: f'c=4000psi
 - FLOWABLE FILL: SEE SPECIAL PROVISIONS
- 6.03 THE TIMBER BULKHEAD SHOWN IN SECTION C-C ON SHEET NO. 181 HAS BEEN DESIGNED FOR A STATIC FLUID PRESSURE RESULTING FROM A WATER COLUMN HEIGHT OF 5 FEET ABOVE THE TUNNEL CROWN. THE CONTRACTOR SHALL SUBMIT WRITTEN VERIFICATION TO THE ENGINEER FOR APPROVAL THAT THE FLOWABLE FILL DENSITY AND PLACEMENT PROCEDURES WILL NOT RESULT IN HIGHER PRESSURES AGAINST THE BULKHEAD.

CONSTRUCTION PROCEDURE – FREIGHT TUNNEL LOCATE AND FILLING

1. CONTRACTOR TO LOCATE THE FREIGHT TUNNEL PER THE LOCATE TUNNEL, CHICAGO SPECIAL PROVISION.
2. A PILOT HOLE WILL BE DRILLED FOR EACH BORE HOLE THAT WILL PENETRATE THE FREIGHT TUNNEL. THIS PILOT HOLE SHALL NOT BE LESS THAN ONE AND ONE HALF INCHES (1 1/2”), NOR EXCEED THREE AND ONE HALF INCHES (3 1/2”), IN OUTSIDE DIAMETER. THE PILOT HOLE SHALL BE DRILLED WITH A ROTATING TRI-CONE BIT AND DRILL ROD EXTENSIONS OF IDENTICAL SIZE AND OUTSIDE DIAMETER. THE PILOT DRILL BIT AND ROD EXTENSIONS MAY BE LUBRICATED DURING DRILLING OPERATIONS. THE DRILL HEAD AND RODS SHALL NOT BE WITHDRAWN MORE THAN ONE BIT DIAMETER LENGTH AFTER BEING AUGERED INTO PLACE WITHOUT THE USE OF BENTONITE SLURRY, AS HEREAFTER DESCRIBED.
3. THE PILOT HOLE SHALL BE DRILLED TO WITHIN A CAUTION-DISTANCE OF APPROXIMATELY FIFTEEN INCHES (15”) OF THE TUNNEL CROWN. DRILLING OPERATIONS SHALL STOP AT THE CALCULATED CAUTION DISTANCE TO PREPARE FOR SOUND LEVEL MONITORING FROM WITHIN THE TUNNEL. DRILLING SHALL NOT RESUME UNTIL THE APPROXIMATE DRILL BIT LOCATION HAS BEEN ESTIMATED FROM SOUND MONITORING RESULTS, AND APPROVED BY THE ENGINEER. ANY MISALIGNED, FAILED AND ABANDONED PILOT HOLES WILL BE COMPLETELY FILLED WITH NON-SHRINK CEMENT MORTAR.
4. AFTER THE ALIGNMENT OF THE PILOT HOLE HAS BEEN CONFIRMED AND APPROVED BY THE ENGINEER, THE PILOT HOLE DRILL BIT AND EXTENSION RODS SHALL BE WITHDRAWN. BORING OPERATIONS FOR THE CASING PIPE MAY THEN PROCEED. THE CASING INSTALLATION SHALL BE ACCOMPLISHED BY DRILLING AND SEATING A STEEL FLUSH JOINT CASING PIPE INTO THE FREIGHT TUNNEL LINING. CASING INSTALLATION AND BORING SHALL BE MONITORED FOR TRANSMITTED SOUND LEVEL WITHIN THE FREIGHT TUNNEL. THE CASING PIPE SHALL ADVANCE TO PARTIALLY PENETRATE AND KEY THE CASING PIPE INTO THE FREIGHT TUNNEL LINING BY NO MORE THAN THREE INCHES (3”).
5. THE CASING SHALL THEN BE CLEANED OUT AND THE BOTTOM OF THE CASING FILLED WITH 1-FOOT OF CEMENT-BENTONITE GROUT AT THE TUNNEL CROWN.
6. UPON SET-UP OF THE BENTONITE-CEMENT GROUT, A TUNNEL LINING PENETRATION SHALL BE MADE BY BORING THROUGH THE CASING INTO THE FREIGHT TUNNEL CROWN. ALL DEBRIS ENTERING THE FREIGHT TUNNEL AS A RESULT OF THE GROUT/VENT HOLE DRILLING AND TUNNEL PENETRATION SHALL BE THOROUGHLY CLEANED IMMEDIATELY AFTER THE PENETRATION IS COMPLETE.
7. REMOVE EXISTING BULKHEAD (COST TO BE INCLUDED IN CONCRETE REMOVAL (SPECIAL)).
8. REMOVE EXISTING FILLED TUNNEL MATERIAL TO STATION 8214+45. THE EXISTING TUNNEL SHALL BE CLEANED TO BE FREE OF DEBRIS TO PROVIDE A CLEAN CONTACT ZONE BETWEEN THE EXISTING TUNNEL LINER AND THE FILL MATERIAL. ALL EXISTING PIPES, DEBRIS AND OTHER MATERIALS SHALL BE CLEARED FROM THE CONCRETE LEDGES ON BOTH SIDES OF THE TUNNEL FLOOR TO PROVIDE A CLEAR CONTACT AREA OF THE BASE. REMOVE ANY EXISTING RAILS WITHIN THIS AREA CLEARED OF THE EXISTING TUNNEL PREVIOUSLY FILLED AND 10’ EAST OF THE LOCATION OF THE PROPOSED CONCRETE BULKHEAD.
9. CONSTRUCT TEMPORARY BULKHEAD AS DETAILED ON SHEET 182.
10. LUMBER FOR THE TEMPORARY BULKHEAD SHALL BE STRUCTURAL GRADE SOUTHERN PINE, NO. 1, OR EQUAL. UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY ALTER THE ORIENTATION OF THE BULKHEAD FRAMEWORK.
11. VENT PIPES SUITABLE FOR VENTING THE PORTION OF THE TUNNEL TO BE FILLED WITH FLOWABLE FILL SHALL BE PROVIDED AS SHOWN OR AS REQUIRED BASED ON THE ACTUAL TUNNEL PROFILE AND THE FILLING METHOD/DELIVERY SYSTEM TO BE PROVIDED BY THE CONTRACTOR, AND SUBJECT TO THE APPROVAL OF THE ENGINEER AND CDOT. THE VENT PIPES SHALL BE CAPPED ONCE FLOWABLE FILL IS DISCHARGED THROUGH THE PIPES.
12. ONCE THE TEMPORARY BULKHEAD IS PLACED, FILL THE TUNNEL WITH FLOWABLE FILL IN 3 EQUAL LIFTS OF 2.5 FEET. CONTRACTOR MUST WAIT A MINIMUM OF 48 HOURS BETWEEN PLACEMENTS OF FILL LIFTS.
13. AFTER 48 HOURS OF THE LAST FILL LIFT, THE OPERATION TO CONSTRUCT THE CONCRETE BULKHEAD MAY BEGIN.
14. CONSTRUCT CONCRETE BULKHEAD AS DETAILED ON SHEET 181.

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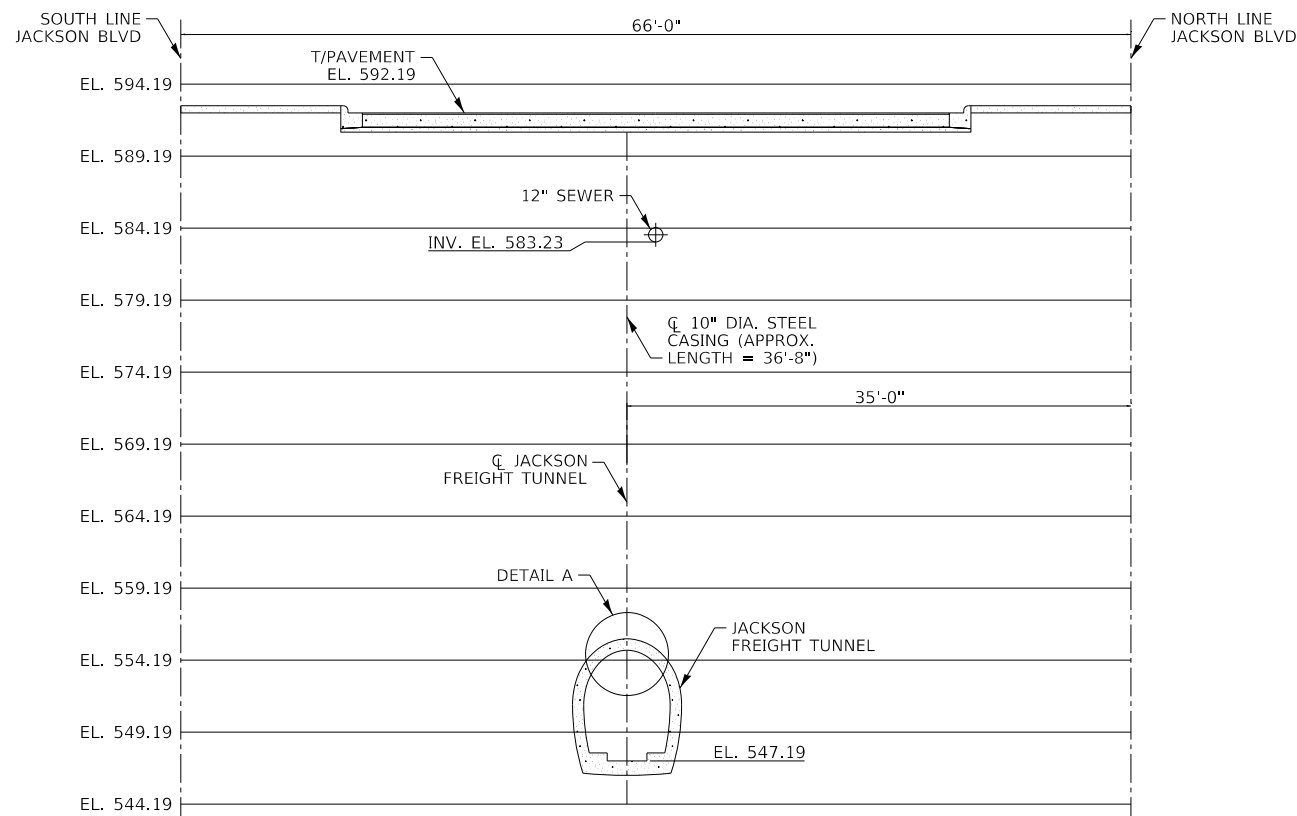
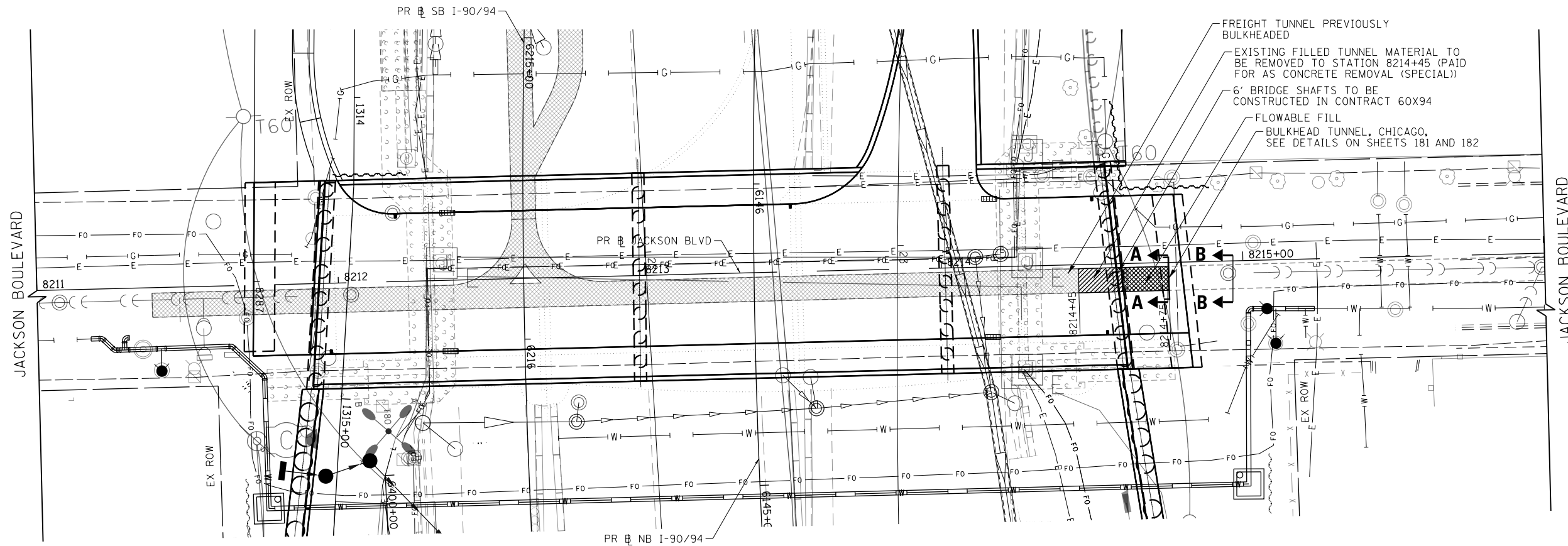
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PLOT DATE = 8/14/2019	DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FREIGHT TUNNEL BULKHEADING GENERAL NOTES AND CONSTRUCTION PROCEDURES			
SCALE:	SHEET 2 OF 2 SHEETS	STA. TO STA.	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	179
			CONTRACT NO.	62J31
ILLINOIS FED. AID PROJECT				

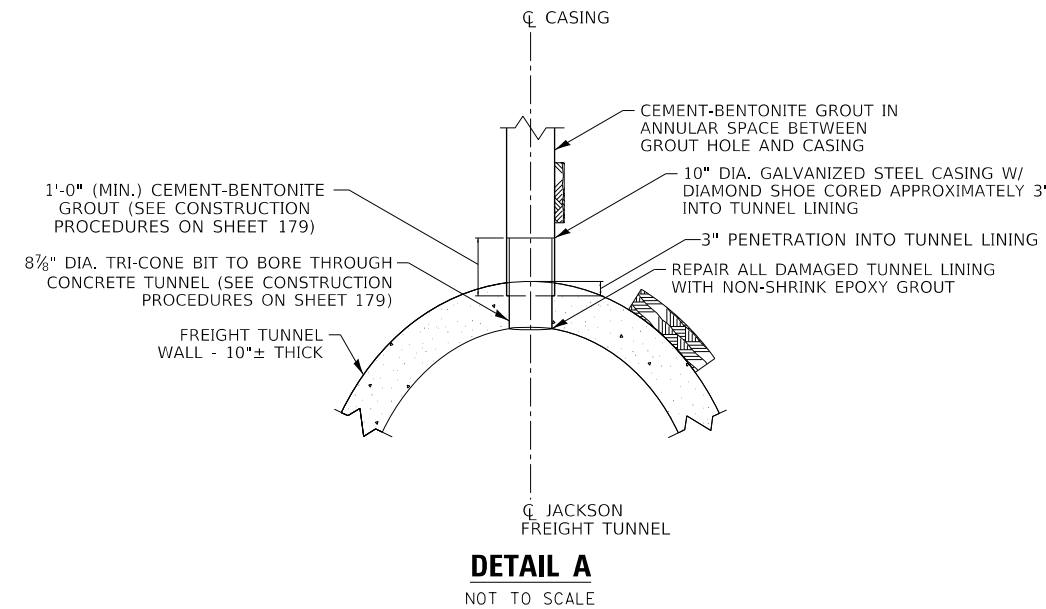
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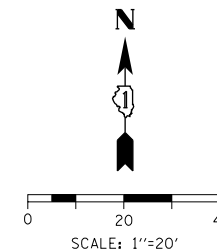
A - A
(LOOKING WEST ON JACKSON)
NOT TO SCALE

NOTE: ALL ACCESS TO TUNNEL SHALL BE FROM CITY OF CHICAGO CITY HALL ACCESS POINT OR RIVER CITY ACCESS MANHOLE.

PAY ITEM	QUANTITY
LOCATE TUNNEL, CHICAGO	1 EACH
BULKHEAD TUNNEL, CHICAGO	1 EACH
FLOWABLE FILL	52 CU YD
CONCRETE REMOVAL (SPECIAL)	17 CU YD



DETAIL A
NOT TO SCALE



D162J31-SHT-TUNNEL-01.dgn
USER NAME = mrc155
PLOT SCALE = 40.0000' / in.
PLOT DATE = 8/14/2019

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DRAWN - AMK
CHECKED - JMG
DATE - 8/16/2019

REVISED -
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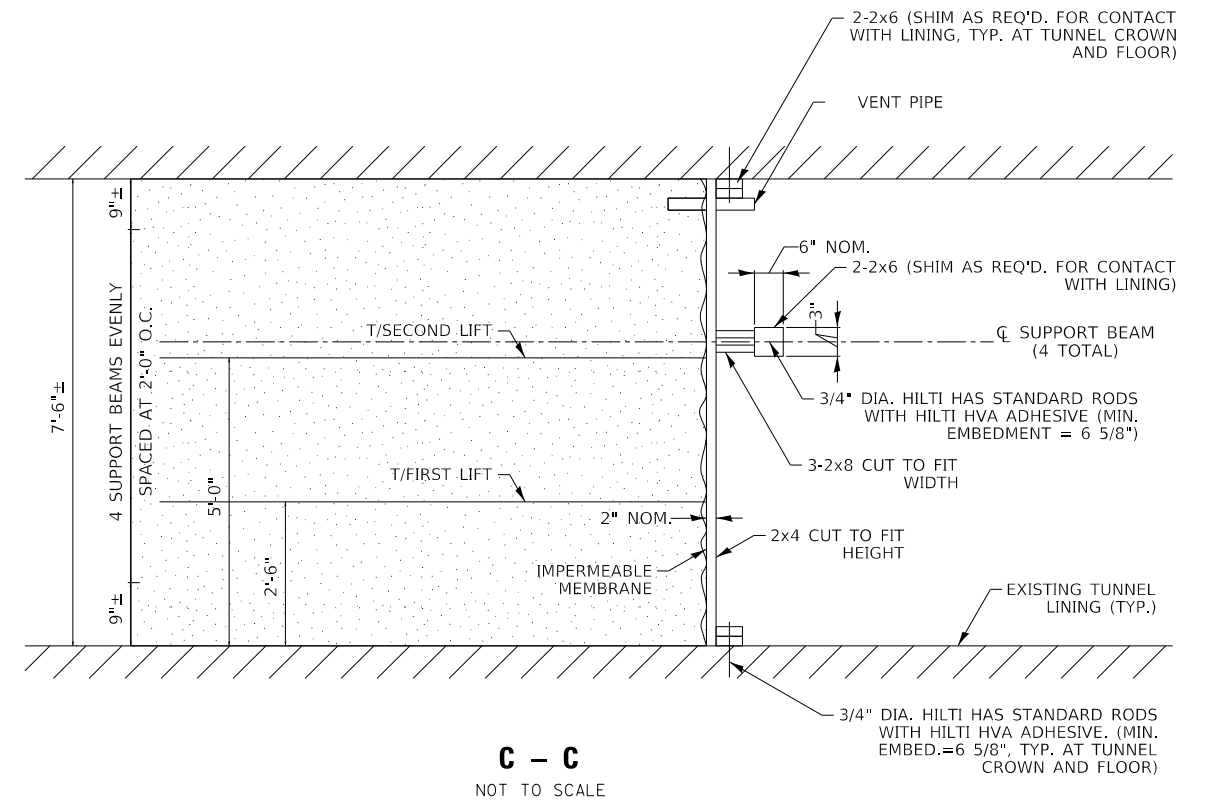
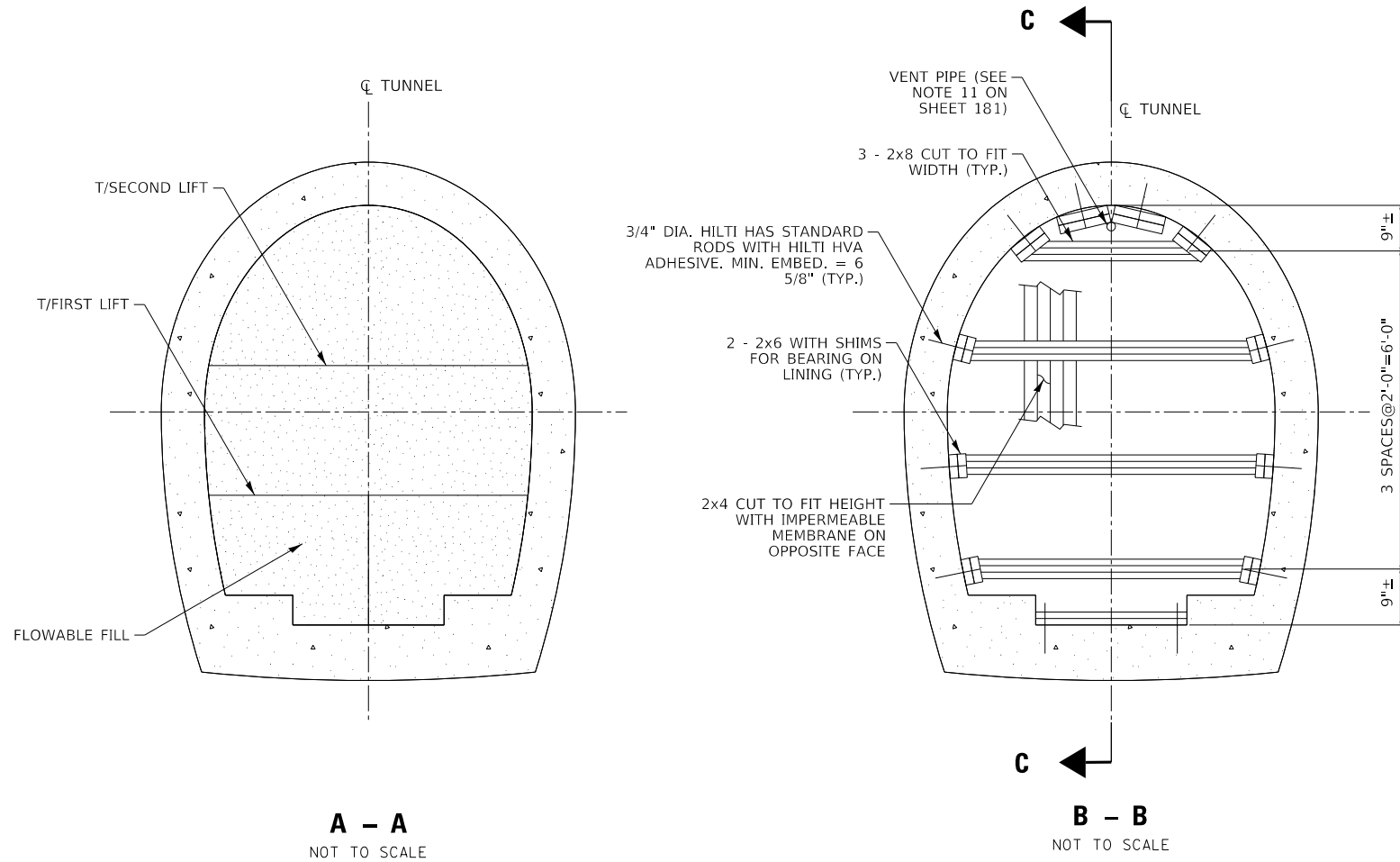
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FREIGHT TUNNEL BULKHEADING PLAN

SCALE: 1" = 20' SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	180
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

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TEMPORARY BULKHEAD DETAILS

- NOTES:**
- SEE CONSTRUCTION PROCEDURES ON SHEET NO. 179



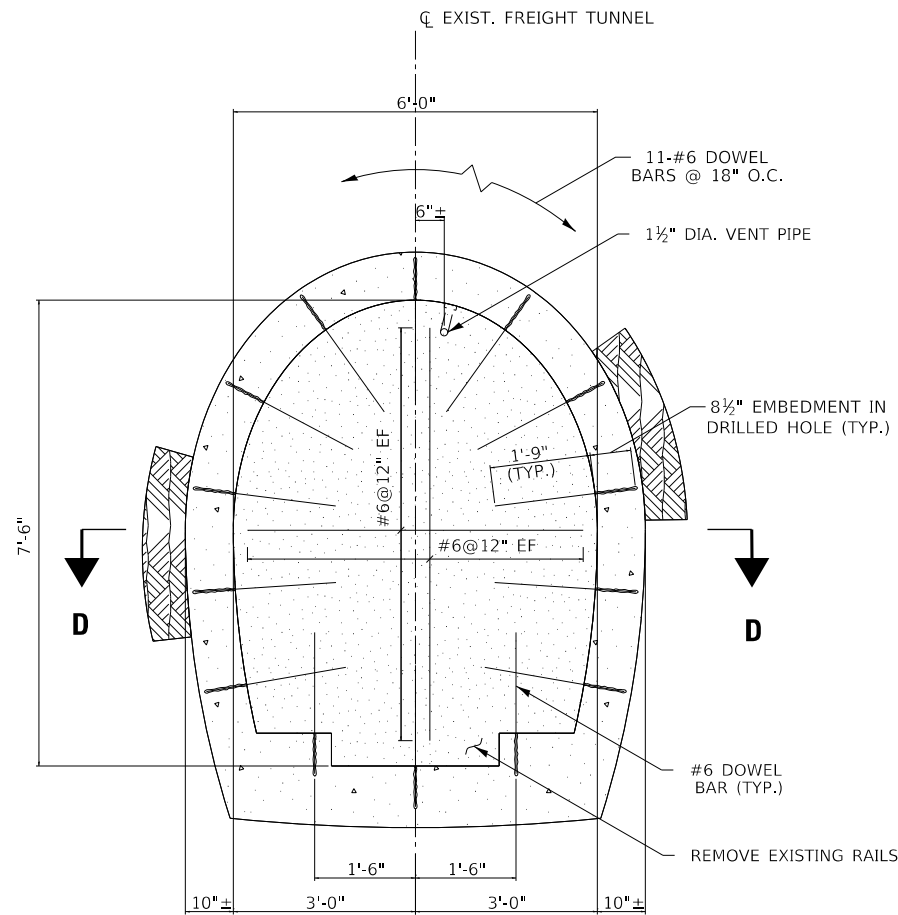
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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

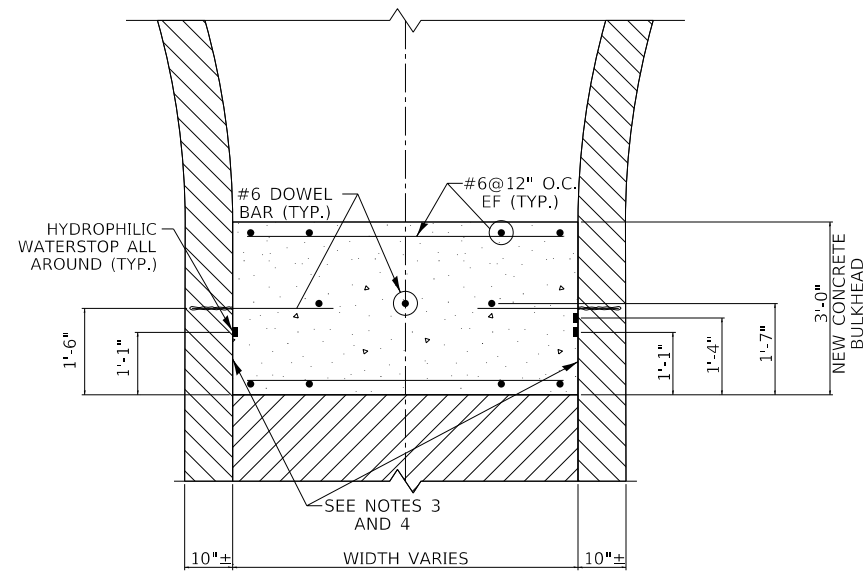
FREIGHT TUNNEL BULKHEADING PLAN TEMPORARY BULKHEAD DETAILS		
SCALE: NONE	SHEET 2 OF 3 SHEETS	STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 181
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT

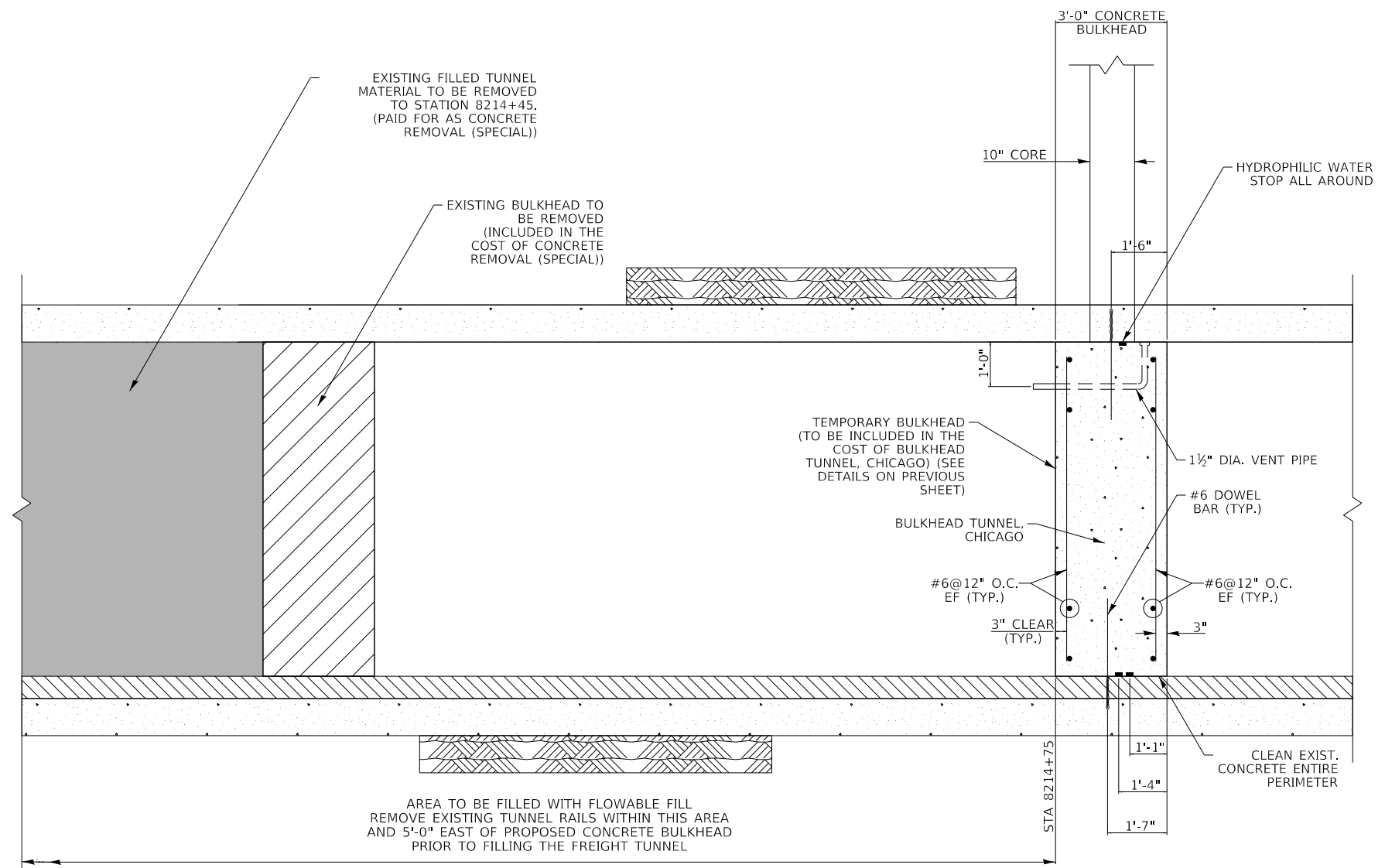
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CONCRETE BULKHEAD DETAIL
(TYPICAL BULKHEAD SECTION)
NOT TO SCALE



D - D
NOT TO SCALE



LONGITUDINAL SECTION
LOOKING NORTH
NOT TO SCALE

NOTES:

1. GROUT FOR DOWEL BARS SHALL BE HILTI HY150 EPOXY GROUT.
2. PROVISIONS SHALL BE MADE TO ACCOMMODATE LEAKING WATER AT THE PERIMETER OF THE EXISTING BULKHEAD DURING CONSTRUCTION.
3. ALL SURFACES AGAINST WHICH NEW CONCRETE SHALL BE PLACED AND ALL CONSTRUCTION JOINTS SHALL BE TREATED WITH HIGH PRESSURE WATER JET BLASTING UNTIL ALL LOOSE OR DEFECTIVE CONCRETE AND ALL LAITANCE, COATINGS, STAINS, DEBRIS, AND OTHER FOREIGN MATERIALS ARE REMOVED.
4. AFTER CLEANING OF THE SURFACES HAS BEEN COMPLETED AND BEFORE NEW CONCRETE IS PLACED, A BONDING AGENT SUCH AS SIKA ARMATEC 110 EPOCEM SHALL BE APPLIED TO THE EXISTING SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED.
5. HYDROPHILIC WATERSTOP SHALL BE A SWELLABLE STRIP TYPE COMPOUND OF POLYMER MODIFIED CHLOROPRENE RUBBER THAT SWELLS UPON CONTACT WITH WATER SUCH AS SIKASWELL PROFILE AS MANUFACTURED BY SIKA CORPORATION. ENDS TO BE JOINED SHALL BE MITER CUT WITH A SHARP KNIFE OR SHEARS. THE ENDS SHALL BE ADHERED WITH CYANACRYLATE (SUPER GLUE) ADHESIVE. WATERSTOPS SHALL BE BONDED TO EXISTING CONCRETE WITH AN ADHESIVE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. DOWEL BARS SHALL BE ANCHORED TO THE EXISTING CONCRETE TUNNEL WALLS WITH A TWO COMPONENT RESIN SYSTEM SUCH AS HILTI HIT HY 150. DOWEL BARS SHALL BE INSTALLED IN ACCORDANCE WITH THE ADHESIVE MANUFACTURER'S INSTRUCTIONS. THE MINIMUM EMBEDMENT INTO EXISTING CONCRETE SHALL BE 8 1/2 INCHES.
7. 1 1/2" DIA. GROUT/VENT PIPES MAY BE RELOCATED IN THE FIELD WITH THE APPROVAL OF THE ENGINEER.



DI62J31-SHT-TUNNEL-03.dgn
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PLOT DATE = 8/14/2019

DESIGNED - HMA
DRAWN - AMK
CHECKED - JMG
DATE - 8/16/2019

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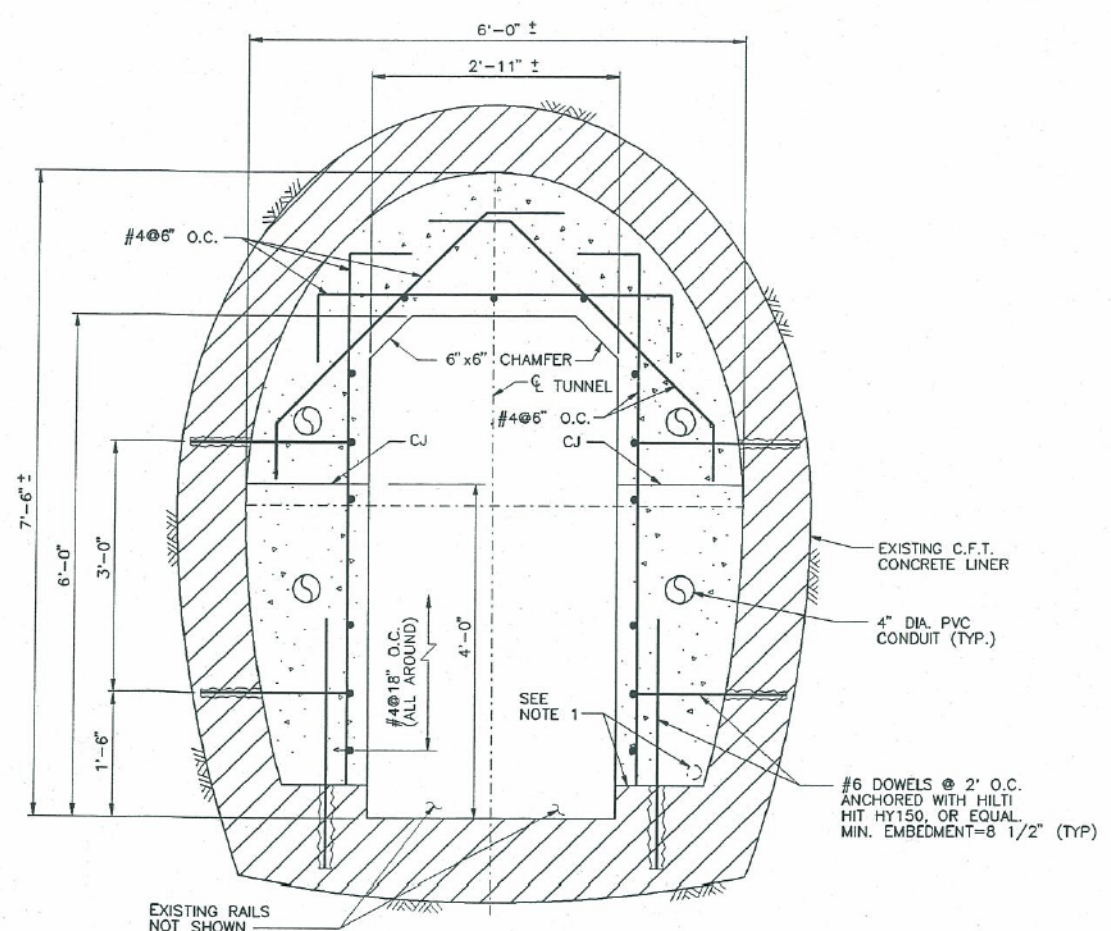
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FREIGHT TUNNEL BULKHEADING PLAN
CONCRETE BULKHEAD DETAILS**

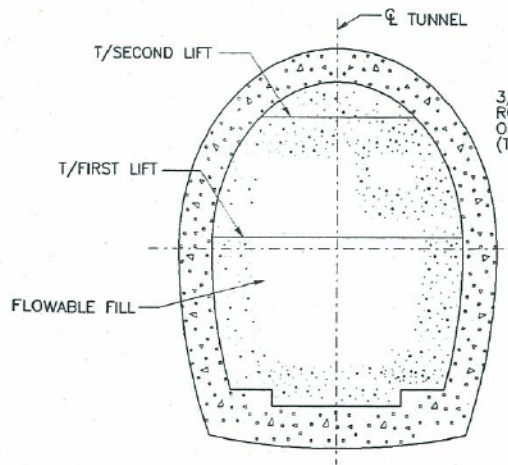
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	182
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

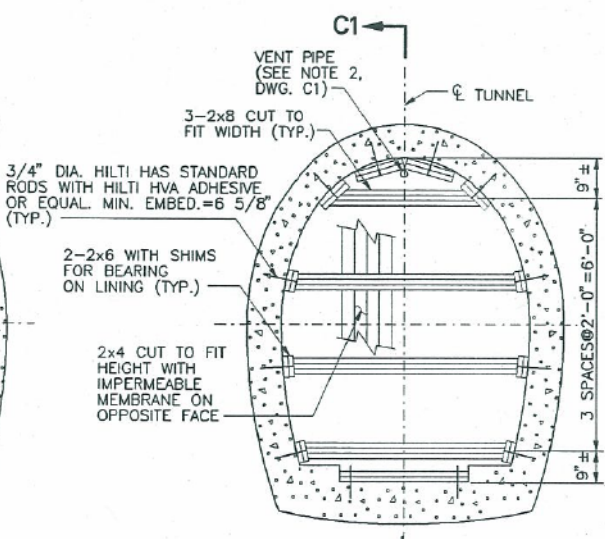
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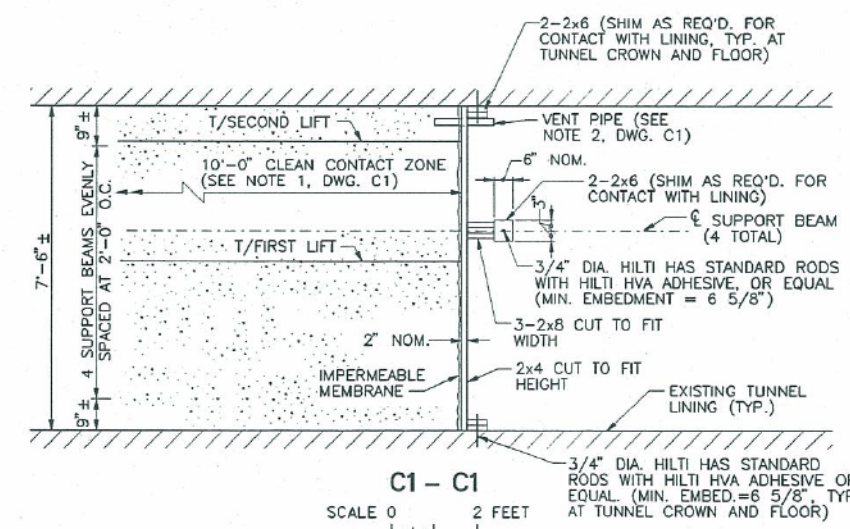
A - A
(C1)
SCALE 0 1 FOOT



B - B
(C1)
SCALE 0 2 FEET



C - C
(C1)
SCALE 0 2 FEET



C1 - C1
SCALE 0 2 FEET
OUC NO. 27008

REFERENCE DRAWINGS:
WORK THIS DRAWING WITH: 1001605B-C1

- NOTES:
1. PRIOR TO CONSTRUCTION OF THE NEW CONCRETE LINER, ALL EXISTING PIPES, DEBRIS AND OTHER MATERIALS SHALL BE CLEARED FROM THE CONCRETE LEDGES ON BOTH SIDES OF THE TUNNEL FLOOR TO PROVIDE A CLEAR CONTACT AREA AT THE BASE.
 2. LUMBER FOR THE NEW BULKHEAD SHOWN IN SECTION C-C SHALL BE STRUCTURAL GRADE SOUTHERN PINE NO. 1, OR EQUAL. MISCELLANEOUS FASTENERS SHALL BE USED AS REQUIRED. UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY ALTER THE ORIENTATION OF THE BULKHEAD FORMWORK.
 3. PROVIDING TEMPORARY SHORING OF THE FREIGHT TUNNEL SHALL BE AT THE SOLE DISCRETION OF THE CONTRACTOR.

DESIGN	CHKD.	REV.	DATE
JMC	PRB		
JMC	WCC		
JMC	MJC		
HB	HEB		

PROJECT MANAGER: HERBERT BERG
FILE: cid1605bd1605b-c3.dgn

REV. NO.	DWG. TRANSMITTAL LETTER NO.	DATE	NATURE OF REVISION	BY	CHKD.	APPD.
2		9-12-03	RECORD DRAWING	DAM	JRK	PRB
1		5-12-03	REPLACED STEEL SETS WITH CONCRETE LINER ON QUINCY & FLOWABLE FILL ON RANDOLPH	MJC	PRB	ZRW
		4-16-03	ISSUED FOR CONSTRUCTION			

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
CHICAGO, ILLINOIS

CHICAGO FREIGHT AND TROLLEY TUNNEL SYSTEMS
W. JACKSON BLVD., W. QUINCY ST., & W. RANDOLPH ST. FREIGHT TUNNEL REMEDIATION

SECTIONS AND DETAILS

PREPARED BY:
MWH

CHICAGO, ILLINOIS DATE APR. 2003 DWG. NO. 1001605B-C2



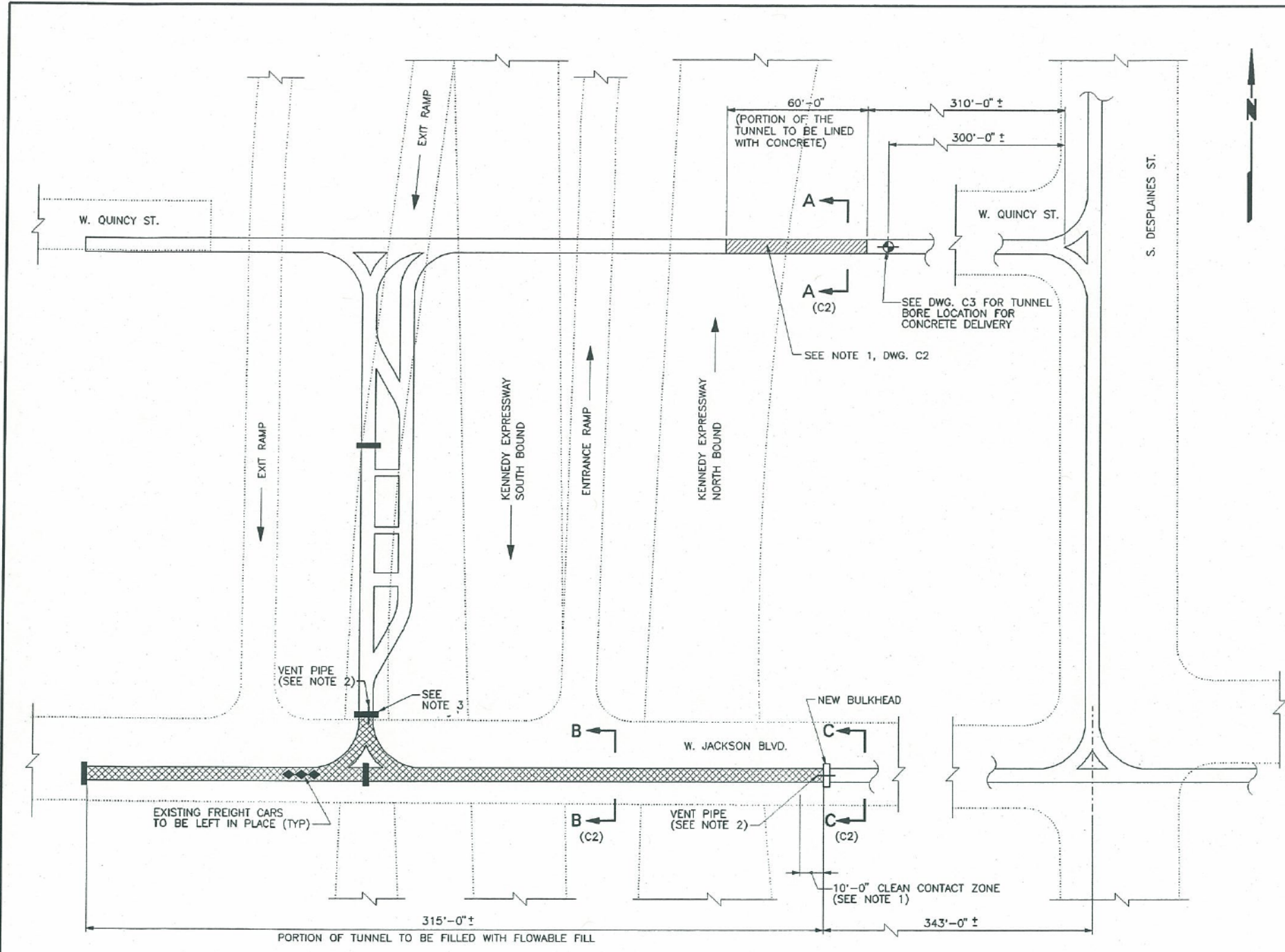
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PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

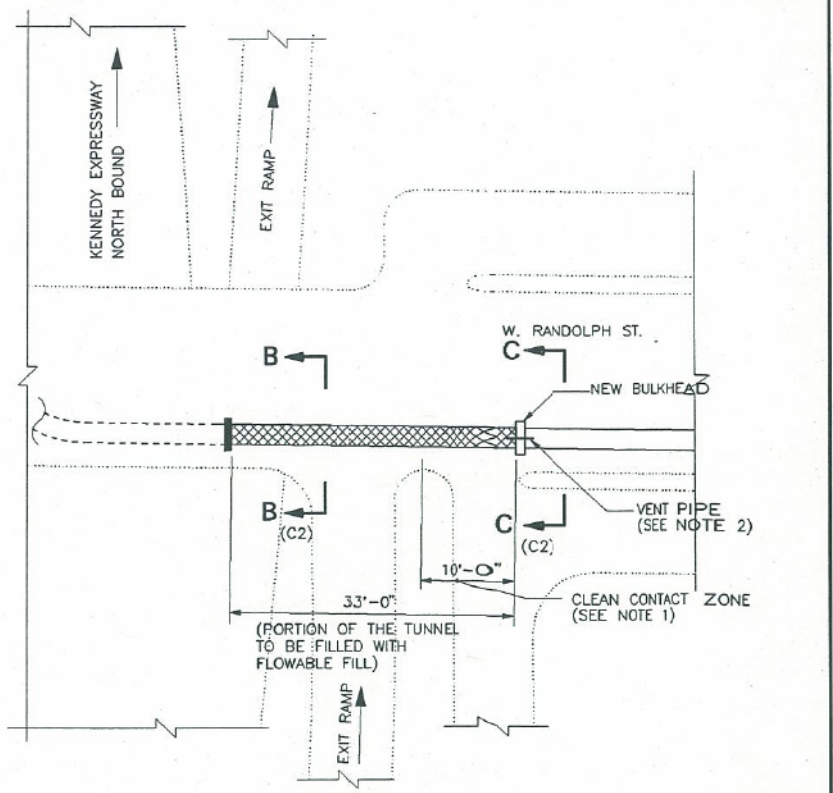
EXISTING FREIGHT TUNNEL PLANS
SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 184
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62J31	

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PLAN
W. JACKSON BLVD. & W. QUINCY ST.



PLAN
W. RANDOLPH ST.

REFERENCE DRAWINGS:
WORK THIS DRAWING WITH 1001605B-C2, C3 AND C4
GENERAL NOTES 1001605B-G1

- NOTES:
- A MINIMUM 10' LENGTH OF THE TUNNEL IMMEDIATELY WEST OF THE NEW BULKHEAD IS TO BE FREE OF DEBRIS TO PROVIDE A CLEAN CONTACT ZONE BETWEEN THE EXISTING TUNNEL LINER AND THE FILL MATERIAL.
 - VENT PIPES SUITABLE FOR VENTING THE PORTION OF TUNNEL TO BE FILLED WITH FLOWABLE FILL SHALL BE PROVIDED AS SHOWN OR AS REQUIRED BASED ON THE ACTUAL TUNNEL PROFILE AND THE FILLING METHOD/ DELIVERY SYSTEM TO BE PROVIDED BY THE CONTRACTOR, SUBJECT TO THE APPROVAL OF THE ENGINEER. THE VENT PIPES SHALL BE CAPPED ONCE FLOWABLE FILL IS DISCHARGED THROUGH THE PIPES.
 - THE EXISTING BULKHEAD AT THE SOUTH END OF THE TUNNEL UNDER THE SOUTHBOUND EXIT RAMP SHALL BE INVESTIGATED BY THE CONTRACTOR TO DETERMINE ITS DIMENSIONS, MATERIAL, AND OVERALL INTEGRITY. ADDITIONAL SUPPORT CONSISTING OF BEAMS SIMILAR TO THOSE PROVIDED FOR THE NEW BULKHEAD TO BE CONSTRUCTED SHALL BE PROVIDED IF THE BULKHEAD IS FOUND TO BE INADEQUATE TO RESIST THE LOADING FROM THE FLOWABLE FILL, SUBJECT TO THE APPROVAL OF THE ENGINEER.

SCALE 0 25 50 FEET

OUC NO. 27008

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
CHICAGO, ILLINOIS

CHICAGO FREIGHT AND TROLLEY TUNNEL SYSTEMS
W. JACKSON BLVD., W. QUINCY ST., & W. RANDOLPH ST. FREIGHT TUNNEL REMEDIATION

PLANS

PREPARED BY:
MWH

CHICAGO, ILLINOIS DATE APR. 2003 DWG. NO. 1001605B-C1

DESIGN	MJC	REVIEWED
CHKD.	PRB	CIVIL
DRAWN	MCC	ZRM
CHKD.	MJC	MECH.
SHEW.	HB	ELECT.
PROJECT MANAGER HERBERT BERG		

2		9-12-03	RECORD DRAWING	DAM	JRK	PRB
1		5-12-03	REPLACED STEEL SETS WITH CONCRETE LINER ON QUINCY & FLOWABLE FILL ON RANDOLPH	MJC	PRB	ZRM
		4-16-03	ISSUED FOR CONSTRUCTION			
REV. NO.	DWG. TRANSMITTAL LETTER NO.	DATE	NATURE OF REVISION	BY	CHKD.	APPD.

FILE: c:\1605bd\1605b-c1.dgn



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PLOT DATE = 8/13/2019

DESIGNED - JLV
DRAWN - MKW
CHECKED - JMG
DATE - 8/16/2019

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FREIGHT TUNNEL PLANS
SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.

F.A.I. R.T.E. 90/94/290
SECTION 2019-054-I
COUNTY COOK
TOTAL SHEETS 400
SHEET NO. 185
CONTRACT NO. 62J31
ILLINOIS FED. AID PROJECT

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SECTION 5.0 GENERAL NOTES FOR CONCRETE

- 5.22 WHEN THE AMBIENT TEMPERATURE DURING PLACING IS 40 DEGREES F OR LESS, OR IS EXPECTED TO BE AT ANY TIME WITHIN 6 HOURS AFTER PLACING, THE TEMPERATURE OF THE CONCRETE AS DELIVERED SHALL BE BETWEEN 50 AND 75 DEGREES F.
- 5.23 CONCRETE SHALL BE COMPOSED OF PORTLAND CEMENT, POZZOLANIC MATERIAL, AGGREGATES, WATER AND ADMIXTURES AS SPECIFIED. CONCRETE MIXTURES SHALL BE PROPORTIONED IN ACCORDANCE WITH SECTION 4 OF ACI 301. POZZOLAN SHALL BE USED IN ALL CONCRETE AT NO LESS THAN 15 PERCENT, BY WEIGHT, OF THE TOTAL CEMENTITIOUS MATERIAL.
- 5.24 ADMIXTURES WHICH HAVE BEEN IN STORAGE FOR LONGER THAN 6 MONTHS OR WHICH HAVE BEEN SUBJECTED TO FREEZING SHALL NOT BE USED UNLESS RETESTED AND PROVEN TO MEET THE SPECIFIED REQUIREMENTS.
- 5.25 CEMENT SHALL CONFORM TO ASTM C 150, TYPE II UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 5.26 POZZOLAN SHALL CONFORM TO ASTM C 618 TYPES F OR N EXCEPT THAT CARBON CONTENT SHALL NOT BE MORE THAN 3% BY WEIGHT AND LOSS ON IGNITION SHALL NOT BE MORE THAN 6% BY WEIGHT.
- 5.27 SILICA FUME SHALL CONFORM TO ASTM C 1240.
- 5.28 FINE AND COARSE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C33.
- 5.29 THE AIR-ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C 260 AND SHALL CONSISTENTLY CAUSE THE CONCRETE TO HAVE AN AIR CONTENT IN THE SPECIFIED RANGES UNDER FIELD CONDITIONS.
- 5.30 WATER REDUCER AND RETARDING ADMIXTURES SHALL CONFORM TO ASTM C 494, TYPE A OR D. THESE ADMIXTURES SHALL BE USED AT THE MID-RANGE OF THE MANUFACTURER'S RECOMMENDED DOSAGE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 5.31 HIGH-RANGE WATER REDUCING ADMIXTURE SHALL CONFORM TO ASTM C 494, TYPE F OR G AND MAY ONLY BE USED WHEN APPROVED IN WRITING BY THE ENGINEER, SUCH APPROVAL BEING CONTINGENT UPON PARTICULAR MIXTURE CONTROL OR UPON PERFORMANCE OF SEPARATE MIXTURE DESIGN STUDIES.
- 5.32 WATER FOR MIXING AND CURING SHALL BE FRESH, CLEAN, POTABLE AND FREE OF INJURIOUS AMOUNTS OF OIL, ACID, SALT, OR ALKALI, EXCEPT THAT NONPOTABLE WATER MAY BE USED IF IT MEETS THE REQUIREMENTS OF COE CRD-C 400.
- 5.33 EPOXY RESIN FOR USE IN REPAIRS SHALL CONFORM TO ASTM C 881, TYPE V, GRADE 2, CLASS AS APPROPRIATE TO THE EXISTING AMBIENT AND SURFACE TEMPERATURES.
- 5.34 SURFACES UPON WHICH CONCRETE IS TO BE PLACED SHALL BE CLEAN AND FREE FROM DEBRIS, FROST, ICE, AND STANDING OR RUNNING WATER.
- 5.35 ALL EMBEDDED STEEL, ANCHORS, DRAIN OUTLETS, EMBEDDED RUNGS, EMBEDDED METAL, ETC. SHALL BE FIRMLY AND SECURELY IN PLACE, CLEAN AND FREE OF OIL AND OTHER FOREIGN MATTER SUCH AS LOOSE COATINGS OR RUST, PAINT, AND SCALE BEFORE CONCRETE IS PLACED, EXCEPT AS NOTED.
- 5.36 CONCRETE SHALL BE FURNISHED FROM A READY-MIXED CONCRETE PLANT. READY-MIXED CONCRETE SHALL BE BATCHED, MIXED, AND TRANSPORTED IN ACCORDANCE WITH ASTM C 94, EXCEPT AS OTHERWISE SPECIFIED. TRUCK MIXERS SHALL COMPLY WITH NRMCA TMMB 100. READY-MIX PLANT EQUIPMENT AND FACILITIES SHALL BE CERTIFIED IN ACCORDANCE WITH NRMCA QC 3. APPROVED BATCH TICKETS SHALL BE FURNISHED FOR EACH LOAD OF READY-MIXED CONCRETE. WATER SHALL NOT BE ADDED AT THE PLACING SITE UNLESS SPECIFICALLY APPROVED; AND IN NO CASE SHALL IT EXCEED THE SPECIFIED W/CM.
- 5.37 MIXED CONCRETE SHALL BE DISCHARGED WITHIN 1-1/2 HOURS OR BEFORE THE MIXER DRUM HAS REVOLVED 300 REVOLUTIONS, WHICHEVER COMES FIRST AFTER THE INTRODUCTION OF THE MIXING WATER TO THE CEMENT AND AGGREGATES.
- 5.38 CONCRETE SHALL BE DEPOSITED AS CLOSE AS POSSIBLE TO ITS FINAL POSITION IN THE FORMS, AND THERE SHALL BE NO VERTICAL DROP GREATER THAN 5 FEET EXCEPT WHERE SUITABLE EQUIPMENT IS PROVIDED TO PREVENT SEGREGATION AND WHERE SPECIFICALLY AUTHORIZED.
- 5.39 DEPOSITING OF CONCRETE SHALL BE SO REGULATED THAT IT WILL BE EFFECTIVELY CONSOLIDATED IN HORIZONTAL LAYERS NOT MORE THAN 18 INCHES THICK, EXCEPT THAT SLABS SHALL BE PLACED IN A SINGLE LAYER.
- 5.40 CONCRETE SHALL BE DEPOSITED CONTINUOUSLY IN ONE LAYER OR IN LAYERS SO THAT FRESH CONCRETE IS DEPOSITED ON IN-PLACE CONCRETE THAT IS STILL PLASTIC.
- 5.41 SPECIAL CARE SHALL BE USED TO ENSURE COMPLETE FILLING OF THE FORMS, ELIMINATION OF ALL VOIDS, AND COMPLETE CONSOLIDATION OF THE CONCRETE WHEN PLACING CONCRETE IN AREAS CONGESTED WITH REINFORCING BARS, EMBEDDED ITEMS, WATERSTOPS AND OTHER TIGHT SPACING.
- 5.42 IMMEDIATELY AFTER PLACING, EACH LAYER OF CONCRETE SHALL BE CONSOLIDATED BY INTERNAL VIBRATORS. THE VIBRATOR SHALL PENETRATE RAPIDLY TO THE BOTTOM OF THE LAYER AND AT LEAST 6 INCHES INTO THE PRECEDING LAYER IF THERE IS SUCH. VIBRATOR SHALL BE HELD STATIONARY UNTIL THE CONCRETE IS CONSOLIDATED AND THEN VERTICALLY WITHDRAWN SLOWLY WHILE OPERATING.
- 5.43 SPECIAL PROTECTION MEASURES SHALL BE USED IF FREEZING TEMPERATURES ARE ANTICIPATED BEFORE THE EXPIRATION OF THE SPECIFIED CURING PERIOD. THE AMBIENT TEMPERATURE OF THE AIR WHERE CONCRETE IS TO BE PLACED AND THE TEMPERATURE OF SURFACES TO RECEIVE CONCRETE SHALL NOT BE LESS THAN 40 DEGREES F. THE TEMPERATURE OF THE CONCRETE WHEN PLACED SHALL NOT BE LESS THAN 50 DEGREES F NOR MORE THAN 75 DEGREES F. HEATING OF MIXING WATER OR AGGREGATE WILL BE REQUIRED TO REGULATE THE CONCRETE PLACING TEMPERATURE. MATERIALS ENTERING THE MIXER SHALL BE FREE FROM ICE, SNOW, OR FROZEN LUMPS. SALT, CHEMICALS OR OTHER MATERIALS SHALL NOT BE INCORPORATED IN THE CONCRETE TO PREVENT FREEZING.

- 5.44 ALL CONSTRUCTION JOINTS SHALL BE AS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER. KEYS SHALL BE PROVIDED AT ALL CONSTRUCTION JOINTS WHERE NOTED. KEY DETAILS WILL BE AS SHOWN IN THE STANDARD DETAILS. FRESH CONCRETE SHALL NOT BE PLACED AGAINST ADJACENT HARDENED CONCRETE UNTIL IT IS AT LEAST 24 HOURS OLD.
- 5.45 CONCRETE SURFACES TO WHICH ADDITIONAL CONCRETE IS TO BE BONDED SHALL BE PREPARED FOR RECEIVING THE NEXT LIFT OR ADJACENT CONCRETE BY CLEANING WITH EITHER SANDBLASTING, HIGH-PRESSURE WATER JET, OR OTHER APPROVED METHOD. REGARDLESS OF THE METHOD USED, THE RESULTING SURFACES SHALL BE FREE FROM ALL LAITANCE AND INFERIOR CONCRETE SO THAT CLEAN, WELL BONDED COARSE AGGREGATE IS EXPOSED UNIFORMLY THROUGHOUT THE LIFT SURFACE, AND MAKES UP AT LEAST 10 PERCENT OF THE SURFACE AREA. THE EDGES OF THE COARSE AGGREGATE SHALL NOT BE UNDERCUT. THE SURFACE OF HORIZONTAL CONSTRUCTION JOINTS SHALL BE KEPT CONTINUOUSLY WET FOR THE FIRST 12 HOURS DURING THE 24-HOUR PERIOD PRIOR TO PLACING FRESH CONCRETE. THE SURFACE SHALL BE WASHED CLEAN AGAIN AS THE LAST OPERATION PRIOR TO PLACING THE NEXT LIFT. THERE SHALL BE NO STANDING WATER ON THE SURFACE UPON WHICH CONCRETE IS PLACED.
- 5.46 ALL EXPOSED EDGES SHALL BE PROVIDED WITH A 3/4 INCH CHAMFER, EXCEPT AS NOTED.
- 5.47 FORMED SURFACES SHALL BE LEFT WITH THE TEXTURE IMPARTED BY THE FORMS EXCEPT THAT DEFECTIVE SURFACES SHALL BE REPAIRED WITHIN 24 HOURS AFTER FORMS ARE REMOVED. REPAIRS SHALL BE DEMONSTRATED TO BE ACCEPTABLE AND FREE FROM CRACKS OR LOOSE OR DRUMMY AREAS AT THE COMPLETION OF THE CONTRACT. REPAIRS NOT MEETING THESE REQUIREMENTS WILL BE REJECTED AND SHALL BE REPLACED.
- 5.48 FORM TIE HOLES SHALL BE REAMED AND OTHER SIMILAR DEFECTS SHALL BE CUT OUT TO SOUND CONCRETE. THE VOID SHALL THEN BE THOROUGHLY CLEANED, THOROUGHLY WETTED, BRUSH-COATED WITH A THIN COAT OF NEAT CEMENT GROUT AND FILLED WITH MORTAR. ALL HOLES SHALL BE PACKED FULL AND SHALL BE MOIST CURED FOR AT LEAST 48 HOURS.
- 5.49 CONCRETE WITH EXCESSIVE HONEYCOMB, OR OTHER DEFECTS WHICH AFFECT THE STRENGTH OF THE MEMBER, WILL BE REJECTED.
- 5.50 ALL CONCRETE SHALL BE CURED BY AN APPROVED METHOD FOR AT LEAST 7 DAYS.
- 5.51 WHEN THE DAILY AMBIENT LOW TEMPERATURE IS LESS THAN 32 DEGREES F THE TEMPERATURE OF THE CONCRETE SHALL BE MAINTAINED ABOVE 40 DEGREES F FOR THE FIRST SEVEN DAYS AFTER PLACING. DURING THE PERIOD OF PROTECTION REMOVAL, THE AIR TEMPERATURE ADJACENT TO THE CONCRETE SURFACES SHALL BE CONTROLLED SO THAT CONCRETE NEAR THE SURFACE WILL NOT BE SUBJECTED TO A TEMPERATURE DIFFERENTIAL OF MORE THAN 25 DEGREES F AS DETERMINED BY SUITABLE TEMPERATURE MEASURING DEVICES FURNISHED BY THE CONTRACTOR, AS REQUIRED, AND INSTALLED ADJACENT TO THE CONCRETE SURFACE AND 2 INCHES INSIDE THE SURFACE OF THE CONCRETE. THE INSTALLATION OF THE THERMOMETERS SHALL BE MADE BY THE CONTRACTOR AS DIRECTED.

SECTION 6.0 GENERAL DESIGN NOTES

- 6.01 DESIGN SPECIFICATIONS
 - ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (318-02) AND COMMENTARY (318R-02)
 - CHICAGO BUILDING CODE
 - AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES-SIXTEENTH EDITION
 - ANSI/AF & PA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS-1997)
- 6.02 DESIGN STRESSES
 - EXISTING FREIGHT TUNNEL CONCRETE: f'c=2,000psi (ASSUMED)
 - CONCRETE: f'c=4000psi
 - FLOWABLE FILL: f'c=50psi (MIN.)
- 6.03 THE TIMBER BULKHEAD SHOWN IN SECTION C-C ON DWG. C2 HAS BEEN DESIGNED FOR A STATIC FLUID PRESSURE RESULTING FROM A WATER COLUMN HEIGHT OF 5 FEET ABOVE THE TUNNEL CROWN. THE CONTRACTOR SHALL SUBMIT WRITTEN VERIFICATION TO THE ENGINEER FOR APPROVAL THAT THE FLOWABLE FILL DENSITY AND PLACEMENT PROCEDURES WILL NOT RESULT IN HIGHER PRESSURES AGAINST THE BULKHEAD.

SECTION 7.0 ABBREVIATIONS & SYMBOLS

ABT.	ABOUT	EXP.	EXPANSION	PROJ.	PROJECTION
ADD'L.	ADDITIONAL	EXP. JT.	EXPANSION JOINT	PT	POINT OF TANGENCY
AL.	ALUMINUM	EXT.	EXTERIOR	R	RADIUS OR RISER
ALT.	ALTERNATE	FDN.	FOUNDATION	R.C.	REINFORCED CONCRETE
APPROX.	APPROXIMATE	FIN.	FINISH	R.C.P.	REINFORCED CONCRETE PIPE
B/	BOTTOM OF	FL.	FLOOR	R.D.	ROOF DRAIN
BOT	BOTTOM	GA.	GAGE	REINF.	REINFORCEMENT
CC	CENTER TO CENTER	GALV.	GALVANIZED	REQ'D	REQUIRED
C.I.	CAST IRON	H.P.	HIGH POINT	R.O.W.	RIGHT OF WAY
C.I.P.	CAST-IN-PLACE	ID	INSIDE DIAMETER	V.C.P.	VITRIFIED CLAY PIPE
CJ	CONSTRUCTION JOINT	INV.	INVERT	Ø	DIAMETER
CL	CENTER LINE	JT.	JOINT	SCH.	SCHEDULE
CL	CLEAR	L	LENGTH ALONG CURVE	SECT.	SECTION
C.M.P.	CORRUGATED METAL PIPE	L.P.	LOW POINT	SH.	SHEET
COE	CORPS OF ENGINEERS	MAX.	MAXIMUM	S.S.	STAINLESS STEEL
COL.	COLUMNS	MFR	MANUFACTURER	STA.	STATION
CONC.	CONCRETE	MH	MANHOLE	STD.	STANDARD
CONT.	CONTINUOUS	MI	MALLEABLE IRON	SYM.	SYMMETRICAL
C.S.K.	COUNTERSUNK	MIN.	MINIMUM	+	CONCRETE WALL THICKNESS
CRV	CURVE	MW	MONITORING WELL	T	TANGENT LENGTH
DA	DOVETAIL ANCHORS	M.L.	MATCH LINE	T/	TOP OF
DAS	DOVETAIL ANCHOR SLOTS	NAT.	NATURAL	TI	TUNNEL INTERSECTION
DET.	DETAIL	NOM.	NOMINAL	T.B.M.	TUNNEL BORING MACHINE
DN	DOWN	N.T.S.	NOT TO SCALE	(TYP.)	TYPICAL
D.I.	DUCTILE IRON	NO.	NUMBER	T.O.R.	TOP OF ROCK
DIA.	DIAMETER	O.C.	ON CENTERS	TRC	TOP OF ROUGH CONCRETE
DEFL.	DEFLECTION	OD	OUTSIDE DIAMETER	U.N.O.	UNLESS NOTED OTHERWISE
DWG.	DRAWING	OPNG	OPENING	VER.	VERTICAL
DWLS	DOWELS	OPP	OPPOSITE	VG	V-GROOVE
EA	EXPANSION ANCHORS	PL	PLATE	WL	WORKING LINE
E/B	EASTBOUND	PC	POINT OF CURVATURE	WP	WORKING POINT
EL.	ELEVATION	PI	POINT OF INTERSECTION	WS	WATERSTOP
EMB.	EMBEDMENT	P.O.A.	POINT ON ALIGNMENT		
EOB	END OF BORING	POT	POINT ON TANGENT		
		PRC	POINT OF REVERSE CURVE		

DSGIL	MAC	REVIEWED	
CHKD.	PRG	CIVL	ZRM
DWNL	WCC	MECH	
CHKD.	MAC	ELECT.	
SUBM.	HB		
PROJECT MANAGER	HERBERT BERG		

2		9-12-03	RECORD DRAWING	DAM	JRK	PRB
1		5-12-03	REPLACED STEEL SETS WITH CONCRETE LINER ON QUINCY & FLOWABLE FILL ON RANDOLPH	MJC	PRB	ZRM
		4-16-03	ISSUED FOR CONSTRUCTION			
REV. NO.	DWG. TRANSMITTAL LETTER NO.	DATE	NATURE OF REVISION	BY	CHKD.	APPD.

OUC NO. 27008

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
CHICAGO, ILLINOIS

CHICAGO FREIGHT AND TROLLEY TUNNEL SYSTEMS
W. JACKSON BLVD., W. QUINCY ST., & W. RANDOLPH ST. FREIGHT TUNNEL REMEDIATION

GENERAL NOTES
SHEET 2 OF 2

PREPARED BY:
MWH

CHICAGO, ILLINOIS DATE APR. 2003 DWG. NO. 1001605B-G3

RECORD DRAWING



D162J31-SHT-EX-TUNNEL-04.dgn	DESIGNED - JLV	REVISED -
USER NAME = mrc155	DRAWN - MKW	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED - JMG	REVISED -
PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

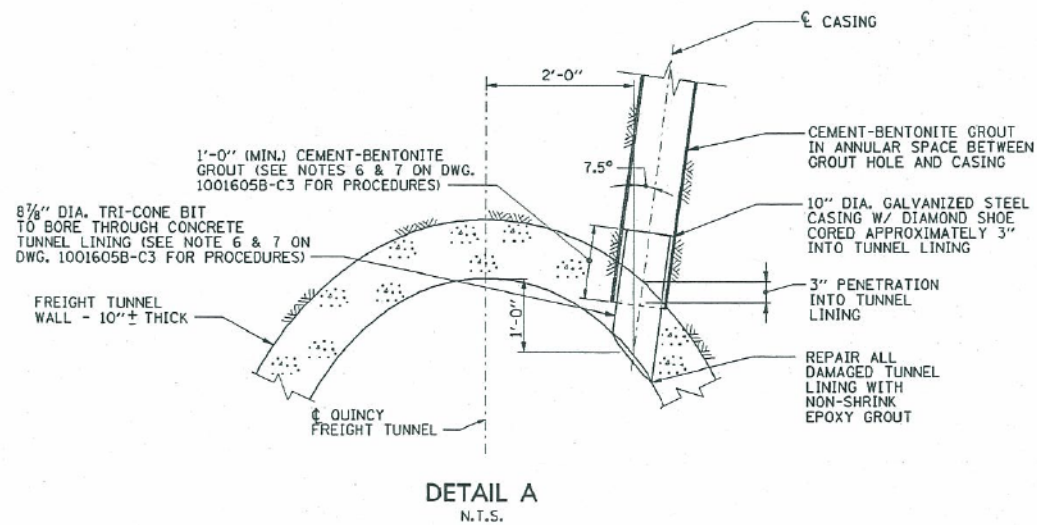
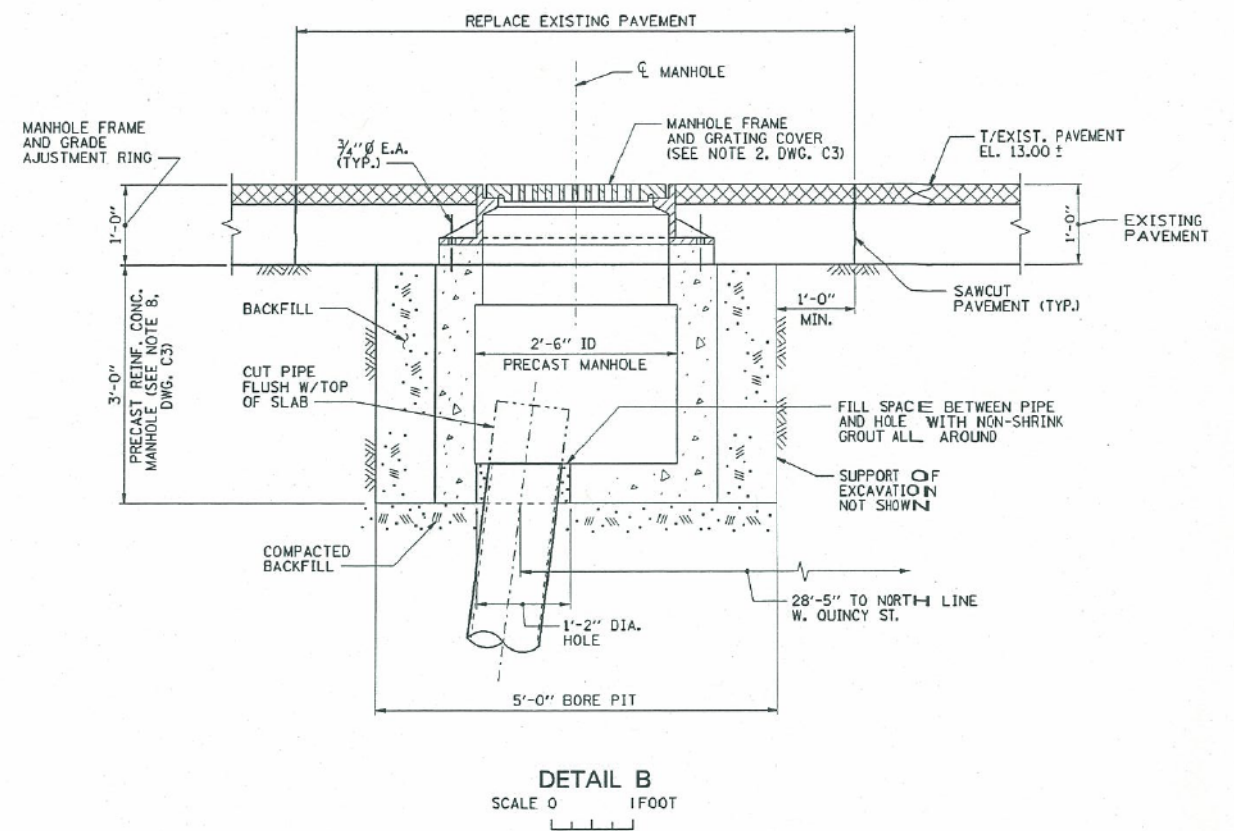
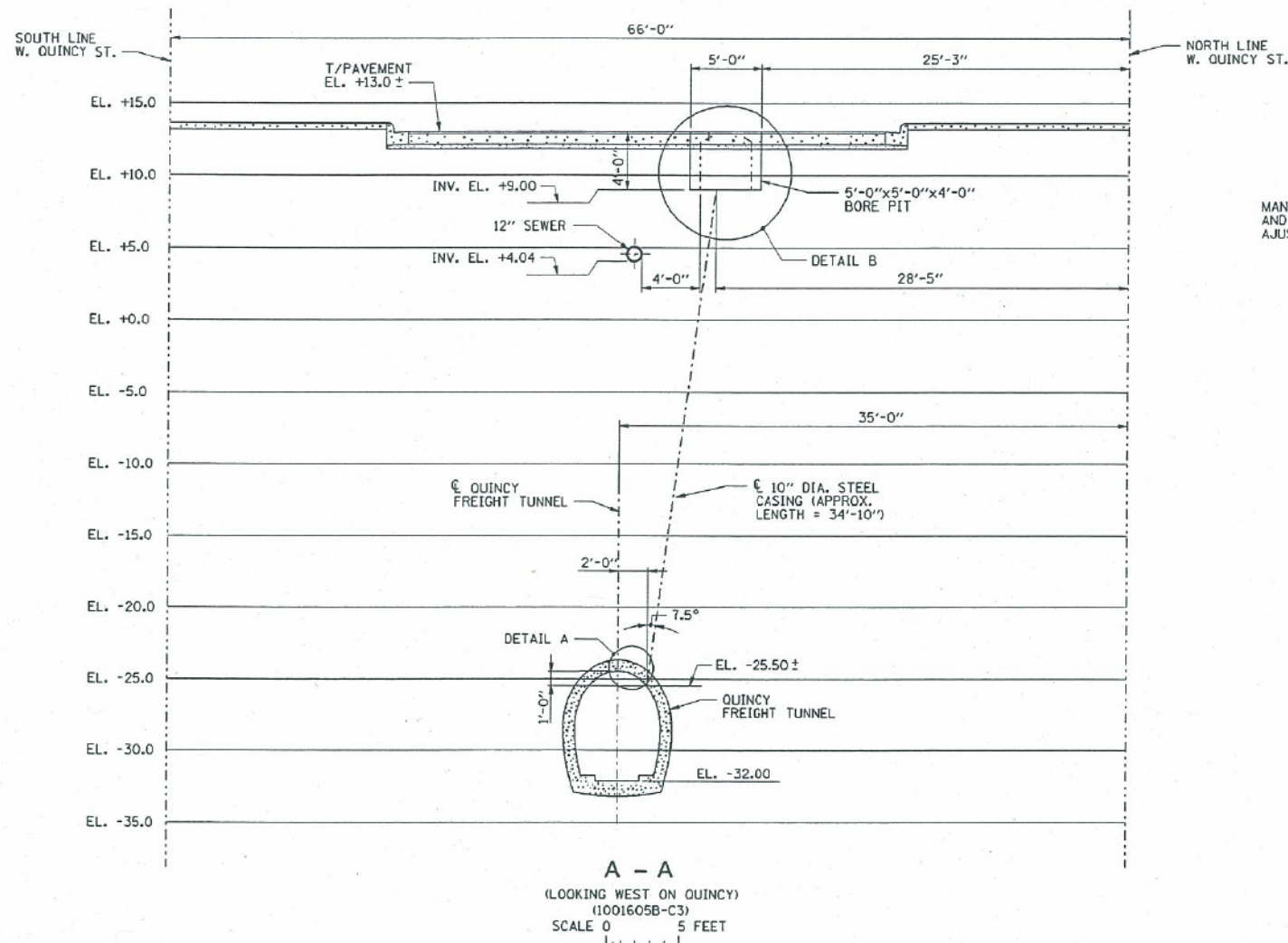
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FREIGHT TUNNEL PLANS

SCALE: NONE SHEET 4 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	186
				CONTRACT NO. 62J31
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\V\ECOM\NA-NV\Seecom\line\local\ECOM_DS02_NA\Documents\01_Americas\Transportation\60269938_Circle Phase_1\1000_CAD\006_Roadway_Sheets\62J31_Contract\1001605B-EX-TUNNEL-05.dgn



REFERENCE DRAWINGS:
WORK THIS DRAWING WITH 1001605B-C3

ouc no. 27008

DESIGNED	DAM	REVIEWED
CHKD. MKW		CIVIL CK
CHKD. DAM		MECH.
SLSH. HE		ELECT.

PROJECT MANAGER HERBERT BERG
FILE: R:\1001605\1001605C\1001605b-c4.dgn

REV. NO.	DWG. TRANSMITTAL LETTER NO.	DATE	NATURE OF REVISION	BY	CHKD.	APPD.
1		9-12-03	RECORD DRAWING	DAM	JRK	PFB
2		5-12-03	ISSUED FOR CONSTRUCTION			

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
CHICAGO, ILLINOIS

CHICAGO FREIGHT AND TROLLEY TUNNEL SYSTEMS
W. JACKSON BLVD., W. QUINCY ST., & W. RANDOLPH ST. FREIGHT TUNNEL REMEDIATION

FREIGHT TUNNEL LINING PENETRATION PROFILE AND DETAILS

PREPARED BY:
MWH

CHICAGO, ILLINOIS DATE MAY 2003 DWG. NO. 1001605B-C4



D162J31-SHT-EX-TUNNEL-05.dgn	DESIGNED - JLV	REVISED -
USER NAME = mrc155	DRAWN - MKW	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED - JMG	REVISED -
PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FREIGHT TUNNEL PLANS

SCALE: NONE SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	187
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

OWNER: CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND TRANSIT
30 N. LASALLE STREET, SUITE 500
CHICAGO, ILLINOIS 60602
1-312-744-3920

ENGINEER: MWH AMERICAS, INC.
175 WEST JACKSON BLVD., SUITE 1900
CHICAGO, ILLINOIS 60604
1-312-831-3000

SECTION 1.0 SCOPE OF WORK

A NEW CONCRETE LINER SHALL BE CONSTRUCTED WITHIN THE W. QUINCY ST. CHICAGO FREIGHT TUNNEL IN ACCORDANCE WITH THESE DRAWINGS. AS A MEANS OF DELIVERING THE CONCRETE, A STEEL CASING AND MANHOLE WILL BE INSTALLED ON QUINCY STREET TO THE FREIGHT TUNNEL. A PORTION OF THE W. JACKSON BLVD. AND W. RANDOLPH ST. CHICAGO FREIGHT TUNNELS SHALL BE FILLED WITH A FLOWABLE FILL MATERIAL IN ACCORDANCE WITH THESE DRAWINGS. THE PROJECT SITE IS LOCATED WITHIN THE W. JACKSON BLVD., W. QUINCY ST., AND W. RANDOLPH ST. CHICAGO FREIGHT TUNNELS, BETWEEN HALSTED ST. AND DESPLAINES ST.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE DRAWINGS.

SECTION 2.0 GENERAL SPECIFICATIONS AND INSTRUCTIONS

- 2.01 THE CONTRACTOR SHALL PROVIDE SUCH PLANS, SPECIFICATIONS, DRAWINGS, COMPLETED APPLICATION FORMS AND INFORMATION NECESSARY TO SECURE ALL PERMITS AS REQUIRED BY THE CHICAGO DEPARTMENT OF TRANSPORTATION (CDOT) FOR REGULATED WORK WITHIN THE FREIGHT TUNNEL SYSTEM. A CHICAGO FREIGHT TUNNEL TEMPORARY ACCESS AGREEMENT AND A CHICAGO FREIGHT TUNNEL INTERIOR CONSTRUCTION AND MAINTENANCE AGREEMENT SHALL BE EXECUTED ON BEHALF OF THE CONTRACTOR. A PERMIT FOR PENETRATION AND INTERIOR CONSTRUCTION IN THE CHICAGO FREIGHT TUNNEL SYSTEMS MUST BE ISSUED BY THE BUREAU OF BRIDGES AND TRANSIT, CDOT. WORK SHALL NOT BE STARTED PRIOR TO ACQUISITION OF ALL REQUIRED PERMITS.
- 2.02 COPIES OF THE PLANS, INSTRUCTIONS AND SPECIFICATIONS SHALL BE FORWARDED TO THE CHICAGO DEPARTMENT OF TRANSPORTATION, 30 NORTH LASALLE STREET, SUITE 500, CHICAGO, ILLINOIS 60602-2570 FOR EVALUATION AND COMMENTS. ALTERATIONS AND SUGGESTED CHANGES SHALL BE RESOLVED PRIOR TO THE START OF ANY WORK UNDER THIS PROJECT.
- 2.03 USE OF PUBLIC WAY AND/OR TEMPORARY PUBLIC WAY CLOSURE AND STREET OPENING PERMITS SHALL BE OBTAINED FROM THE CONSTRUCTION COMPLIANCE DIVISION, BUREAU OF INSPECTIONS, DEPARTMENT OF TRANSPORTATION, PRIOR TO ANY WORK REQUIRING SUCH ACTION.
- CONSTRUCTION ALONG EXISTING ROADWAYS SHALL BE COORDINATED WITH THE CHICAGO DEPARTMENT OF TRANSPORTATION AND THE OWNER TO INSURE THAT THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND OF RESIDENTS ALONG THE ROADWAY PROVIDED FOR IN AN ADEQUATE AND SATISFACTORY MANNER. AT NO TIME SHALL THE EXISTING ROADWAYS BE CLOSED TO TRAFFIC, UNLESS APPROVED BY THE OWNER, THE ENGINEER, AND THE CHICAGO DEPARTMENT OF TRANSPORTATION. DURING CONSTRUCTION OPERATIONS, ACCESS SHALL BE PROVIDED TO PRIVATE PROPERTY ALONG THE EXISTING ROADWAYS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, BARRICADES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC. THE COST OF FURNISHING AND MAINTAINING SIGNS, BARRICADES, AND WARNING DEVICES SHALL BE INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 2.04 PROJECT DATUM: ELEVATIONS SHOWN ON THESE DRAWINGS ARE REFERENCED TO CHICAGO CITY DATUM 0.00 = 579.48' MEAN SEA LEVEL, 1929.
- 2.05 ALL DIMENSIONS SHOWN ON THESE DRAWINGS ARE IN FEET AND INCHES.

SECTION 3.0 TUNNEL LOCATIONS

THE HORIZONTAL AND VERTICAL DIMENSIONS OF THE TUNNEL ARE AS ESTABLISHED IN THE CHICAGO FREIGHT TUNNEL ATLAS. DIMENSIONS ARE NOT TO BE ASSUMED OR SCALED FROM THE PLANS AND ACTUAL DIMENSIONS SHALL BE DETERMINED BY FIELD MEASUREMENTS TO BE PERFORMED BY THE CONTRACTOR.

DSGN.	MJC	REVIEWED
CHLD.	FRB	CIVIL ZJM
DNAL	WCC	MECH.
CHLD.	MJC	ELECT.
SUBM.	HB	
PROJECT MANAGER HERBERT BERG		

SECTION 4.0 WORK

- 4.01 THE CONTRACTOR SHALL INVESTIGATE THE PROJECT, PLANS, SPECIFICATIONS, INSTRUCTIONS, SITE, UTILITIES, TRAFFIC CONDITIONS, MATERIAL, LABOR, EXCAVATION, RESTORATION AND REQUIRED SAFETY PRECAUTIONS INVOLVED WITH THIS PROJECT. ANY QUESTIONS OR CONCERNS THE CONTRACTOR MAY HAVE ARE TO BE DISCUSSED WITH THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
- 4.02 THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, EQUIPMENT, LABOR, INSTALLATION, RESTORATION, UTILITY RELOCATION CHARGES, AND JOB SITE DELIVERY COSTS TO COMPLETE THE DESCRIBED AND ILLUSTRATED WORK UNDER THIS CONTRACT.
- 4.03 ANY CHANGE-ORDER REQUEST MUST BE PRESENTED IN WRITING TO THE OWNER AND APPROVED PRIOR TO PROCEEDING WITH THE REQUESTED CHANGE. DOCUMENTATION CONCERNING ANY AND ALL CHANGE ORDERS SHALL BE REDUCED TO FORMAL RECORD, BE FILED WITH THE OWNER AND BE MADE AVAILABLE FOR FUTURE REFERENCE.
- 4.04 ACCUMULATION OF DEBRIS MATERIAL SHALL NOT BE ALLOWED WITHIN THE TUNNEL SITE. THIS DEBRIS MATERIAL SHALL BE REMOVED FROM THE WORK SITE AT LEAST ONCE PER WEEK. THIS PROVISION SHALL BE CONTINGENT UPON THE ORIGINAL INSPECTION OF THE WORK.
- 4.05 THE CONTRACTOR SHALL ARRANGE TO FILL ENCOUNTERED HOLES WITH SELECT BACKFILL MATERIAL, AS DIRECTED BY THE AGREEMENT FOR WORK IN THE TUNNEL. THE CONTRACTOR MAY BE REQUIRED TO REMOVE EXISTING ACCESS MATERIAL OR DEBRIS AS DIRECTED BY THE CHICAGO DEPARTMENT OF TRANSPORTATION. PAYMENT FOR THIS WORK SHALL BE A NEGOTIATED FEE PAYABLE BY THE OWNER.
- 4.06 SAFE WORKING PRACTICES SHALL BE CONTINUOUSLY DEMONSTRATED BY THE CONTRACTOR. THE TUNNEL ENVIRONMENT IS TO BE CONSIDERED HOSTILE AND DUE CAUTION SHALL BE EXERCISED IN ALL MANNERS OF WORK PERFORMANCE AND INSPECTION. AS A MINIMUM, THE CONTRACTOR SHALL CONFORM TO THE SAFETY PROCEDURES AS STATED IN THE CHICAGO FREIGHT TUNNEL TEMPORARY ACCESS AGREEMENT.
- THE SITE AND THE IMMEDIATELY ADJACENT AREA SHALL BE MADE SAFE FOR WORKMEN, PEDESTRIANS, INSPECTORS, OWNER REPRESENTATIVES, AND THOSE PERSONS GRANTED ACCESS AND MAINTENANCE RIGHTS IN THE TUNNEL.
- 4.07 THE ENGINEER SHALL NOT BE RESPONSIBLE NOR ASSUME LIABILITY FOR NEGLIGENT ACTS, ERRORS, OR OMISSIONS OF CONTRACTOR, ANY SUBCONTRACTOR, OR ANY OF THE CONTRACTOR'S OR SUBCONTRACTOR'S AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS AT THE PROJECT SITE, OR OTHERWISE PERFORMING ANY OF THE WORK ON THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING AND MAINTAINING A COMPREHENSIVE SAFETY PROGRAM AT THE PROJECT SITE.
- 4.08 NEITHER THE PROFESSIONAL ACTIVITIES OF THE ENGINEER, NOR THE PRESENCE OF THE ENGINEER OR ITS EMPLOYEES OR SUBCONSULTANTS AT THE CONSTRUCTION SITE, SHALL RELIEVE ANY CONTRACTOR OF ITS OBLIGATIONS, DUTIES OR RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ALL HEALTH OR SAFETY PRECAUTIONS REQUIRED BY THE CONTRACT, APPLICABLE LAW OR ANY REGULATORY AGENCY HAVING JURISDICTION OVER THE CONSTRUCTION, OR BE DEEMED TO CONFER ANY SUCH OBLIGATIONS, DUTIES OR RESPONSIBILITIES UPON THE ENGINEER. THE ENGINEER AND ITS PERSONNEL OR SUBCONTRACTORS HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH ANY HEALTH OR SAFETY PRECAUTIONS.
- 4.09 THE CONTRACTOR SHALL RESTORE ALL DAMAGED STRUCTURES AND UTILITIES TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE.
- 4.10 THE CONTRACTOR SHALL PROVIDE A MINIMUM 24 HOURS ADVANCED NOTICE PRIOR TO COMMENCEMENT OF ANY WORK WITHIN THE TUNNELS AND A MINIMUM 48 HOURS NOTICE PRIOR TO ANY PENETRATION OF THE EXISTING TUNNEL LINING. NOTICE SHALL BE GIVEN TO MR. JAMES J. MADIA, CDOT, AT (312) 744-3920.
- 4.11 ARRANGEMENTS OF PERIODIC INSPECTIONS DURING CONSTRUCTION SHALL BE MADE WITH CDOT, WHO SHALL DETERMINE THE FREQUENCY WITH WHICH SUCH CONSTRUCTION INSPECTIONS ARE TO BE MADE. THE CONTRACTOR SHALL ARRANGE FOR CDOT TO ACCOMPANY THE OWNER ON A FINAL INSPECTION IN COMPLIANCE WITH SECTION 9, PARAGRAPH D, OF THE TUNNEL AGREEMENT.
- 4.12 RESTORATION SHALL BE IN ACCORDANCE WITH THE RECOMMENDED PRACTICES AND REQUIREMENTS OF THE CHICAGO DEPARTMENT OF TRANSPORTATION AND THE PERMITS ISSUED.

SECTION 5.0 GENERAL NOTES FOR CONCRETE

- 5.01 FORMWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE METHODOLOGY OF ACI 347 "GUIDE TO FORMWORK FOR CONCRETE" FOR ANTICIPATED LOADS, LATERAL PRESSURES, AND STRESSES INCLUDING THE PRESSURES RESULTING FROM PLACEMENT AND VIBRATION OF CONCRETE.
- 5.02 FORMS FOR EXPOSED SURFACES SHALL BE LINED WITH OR CONSTRUCTED OF PLYWOOD SHEATHING, TEMPERED CONCRETE FORM HARDBOARD, OTHER APPROVED CONCRETE FORM MATERIAL, OR STEEL, EXCEPT THAT STEEL LINING ON WOOD SHEATHING SHALL NOT BE USED.
- 5.03 FORMWORK FOR PARTS NOT SUPPORTING THE WEIGHT OF CONCRETE MAY BE REMOVED WHEN THE CONCRETE HAS ATTAINED SUFFICIENT STRENGTH TO RESIST DAMAGE FROM THE REMOVAL OPERATION BUT NOT BEFORE AT LEAST 24 HOURS HAS ELAPSED SINCE CONCRETE PLACEMENT. SUPPORTING FORMS OR SHORES SHALL NOT BE REMOVED BEFORE THE CONCRETE STRENGTH HAS REACHED 70 PERCENT OF DESIGN STRENGTH, AS DETERMINED BY FIELD CURED CYLINDERS OR OTHER APPROVED METHODS.
- 5.04 ALL REINFORCEMENT FABRICATION, PLACEMENT AND DETAILING INCLUDING DEVELOPMENT LENGTHS, SPLICING AND CONCRETE COVER SHALL BE IN ACCORDANCE WITH ACI 315 "ACI DETAILING MANUAL: SECTION DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY" UNLESS OTHERWISE NOTED.
- 5.05 CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WHICH INCLUDE REINFORCEMENT STEEL PLACEMENT DRAWINGS AND SCHEDULES TO THE ENGINEER FOR APPROVAL.
- 5.06 REINFORCEMENT BARS SHALL BE EPOXY COATED DEFORMED BILLET STEEL BARS CONFORMING TO ASTM A 615 AND ASTM A 775 OR ASTM A 934, GRADE 60 WITH Fy=60,000 PSI. ALL REINFORCEMENT ACCESSORIES SHALL BE EPOXY COATED.
- 5.07 HOOPS AND BENDS SHALL CONFORM TO ACI 315.
- 5.08 AT THE TIME OF CONCRETE PLACEMENT, ALL STEEL SHALL BE FREE FROM LOOSE, FLAKY RUST, SCALE (EXCEPT TIGHT MILL SCALE), MUD, OIL, GREASE OR ANY OTHER COATING THAT MIGHT REDUCE THE BOND WITH CONCRETE.
- 5.09 ALL STEEL SHALL BE RIGIDLY SECURED IN PLACE SO THAT IT WILL NOT MOVE OR BULGE FROM ITS PROPER LOCATION DURING FORMING, CONCRETE PLACEMENT AND CONSOLIDATION.
- 5.10 REINFORCEMENT LAPS SHALL BE STAGGERED.
- 5.11 STEEL BARS SHALL NOT BE WELDED.
- 5.12 REBAR COUPLERS MAY BE SUBSTITUTED FOR LAP SPLICES AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 5.13 ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ACI 301 "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE" AND THE CURRENT ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE." COLD WEATHER CONCRETING SHALL BE PERFORMED IN ACCORDANCE WITH ACI 306.
- 5.14 CONTRACTOR QUALITY CONTROL PERSONNEL ASSIGNED TO CONCRETE CONSTRUCTION SHALL BE AMERICAN CONCRETE INSTITUTE (ACI) CERTIFIED WORKMEN IN ONE OF THE FOLLOWING GRADES OR SHALL HAVE WRITTEN EVIDENCE OF HAVING COMPLETED SIMILAR QUALIFICATION PROGRAMS: CONCRETE FIELD TESTING TECHNICIAN GRADE I; CONCRETE LABORATORY TESTING TECHNICIAN GRADE I OR II; CONCRETE CONSTRUCTION INSPECTOR LEVEL II; CONCRETE TRANSPORTATION CONSTRUCTION INSPECTOR; OR REINFORCED CONCRETE SPECIAL INSPECTOR JOINTLY CERTIFIED BY AMERICAN CONCRETE INSTITUTE (ACI), BUILDING OFFICIAL AND CODE ADMINISTRATORS INTERNATIONAL (BOCA), INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO), AND SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL (SBCCI).
- 5.15 STRUCTURAL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH f'_c OF 4000 PSI AT 28 DAYS WITH A MINIMUM SLUMP OF 1 INCH AND A MAXIMUM SLUMP OF 3 INCHES, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 5.16 COMPRESSIVE STRENGTH SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C 39.
- 5.17 SLUMP OF THE CONCRETE SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C 143.
- 5.18 THE MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO (w/c) BY WEIGHT FOR CONCRETE SHALL BE 0.45.
- 5.19 ALL CONCRETE SHALL BE AIR ENTRAINED TO CONTAIN BETWEEN 4 AND 7 PERCENT TOTAL AIR. AIR CONTENT SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C 231.
- 5.20 WHEN A PLASTICIZING ADMIXTURE OR WHEN A TYPE F OR G HIGH RANGE WATER REDUCING ADMIXTURE CONFORMING TO ASTM C 494 IS USED TO INCREASE THE SLUMP OF CONCRETE, THE CONCRETE SHALL HAVE A SLUMP OF 2 TO 4 INCHES BEFORE THE ADMIXTURE IS ADDED AND A MAXIMUM SLUMP OF 8 INCHES AT THE POINT OF DELIVERY AFTER THE ADMIXTURE IS ADDED.
- 5.21 TOLERANCES SHALL BE AS DEFINED IN ACI 117/117R "STANDARD TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS."

OUCC NO. 27008

REV. NO.	DATE	NATURE OF REVISION	BY	CHKD.	APPD.
2	9-12-03	RECORD DRAWING	DAM	JRK	FRB
1	5-12-03	REPLACED STEEL SETS WITH CONCRETE LINER ON QUINCY & FLOWABLE FILL ON RANDOLPH	MJC	FRB	ZJM
	4-16-03	ISSUED FOR CONSTRUCTION			

CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION CHICAGO, ILLINOIS		
CHICAGO FREIGHT AND TROLLEY TUNNEL SYSTEMS W. JACKSON BLVD., W. QUINCY ST., & W. RANDOLPH ST. FREIGHT TUNNEL REMEDIATION		
GENERAL NOTES SHEET 1 OF 2		
PREPARED BY:  MWH		DATE APR. 2003
CHICAGO, ILLINOIS		DWG. NO. 1001605B-G2

RECORD DRAWING



D162J31-SHT-EX-TUNNEL-06.dgn
USER NAME = mrc155
PLOT SCALE = 100.0000' / 1"
PLOT DATE = 8/13/2019

DESIGNED - JLV
DRAWN - MKW
CHECKED - JMG
DATE - 8/16/2019

REVISED -
REVISED -
REVISED -
REVISED -

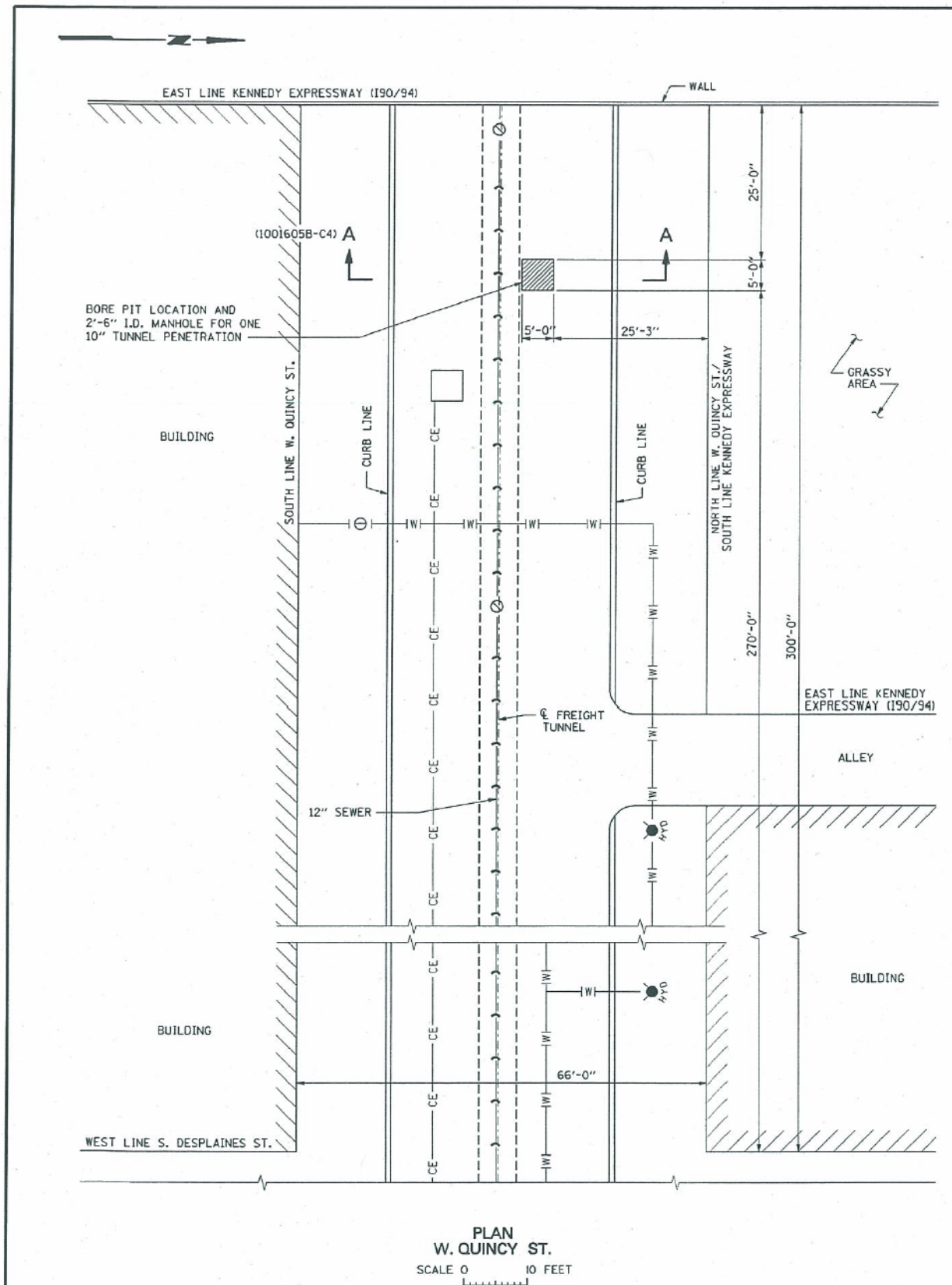
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FREIGHT TUNNEL PLANS

SCALE: NONE SHEET 6 OF 7 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 188
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT

FILE PATH = p:\V\ECOM-NR-ANSI\ecomm\line\local\h\ECOM_DS02_MA\Documents\01_Americas\Transportation\62629938_Circle Phase_1\1000_CAD\006_Roadway_Sheets\62J31_Contract\1001605B-C3-EX-TUNNEL-07.dgn



DSQL	DAM	REVIEWED
CHKD.	MJC	CIVIL
CHKD.	MEK	MECH.
CHKD.	DAM	ELECT.
SUBJ.	HS	

PROJECT MANAGER: HERBERT BERG

FILES R:\1001605\1001605C\1001605B-c3a.dgn

REFERENCE DRAWINGS:

WORK THIS DRAWING WITH 1001605B-C1 THROUGH C3, C1, C2 AND C4

NOTES:

- "DIGGER" IS TO BE NOTIFIED 48 HOURS PRIOR TO THE START OF ANY WORK ON THIS PROJECT (1-312-744-7000). THE CONTRACTOR IS CAUTIONED TO EXPECT TO ENCOUNTER UNRECORDED UTILITIES DURING EXCAVATION. DUE CAUTION AND HAND-DIGGING SHALL BE EXERCISED IN CLOSE PROXIMITY TO INDICATED UNDERGROUND UTILITIES.
- MANHOLE FRAME AND COVER SHALL BE NEENAH FRAME R-1710 AND OPEN GRATE R-2090 TYPE A WITH LOCKING DEVICE J. THE VENT OPENINGS AT THE LOCKING DEVICE SHALL BE FILLED WITH STEEL TO PREVENT TAMPERING WITH THE LOCKING DEVICE AND UNAUTHORIZED ENTRY. THE LID SHALL BE FLUSH WITH THE SURROUNDING PAVEMENT.
- A PILOT HOLE WILL BE DRILLED FOR EACH BORE HOLE THAT WILL PENETRATE THE FREIGHT TUNNEL. THIS PILOT HOLE SHALL BE BORED TO PROVIDE PROPER BIT ALIGNMENT. THE PILOT HOLE SHALL NOT BE LESS THAN ONE AND ONE HALF INCHES (1 1/2"), NOR EXCEED THREE AND ONE HALF INCHES (3 1/2"), IN OUTSIDE DIAMETER. THE PILOT HOLE SHALL BE DRILLED WITH A ROTATING TRI-CONE BIT AND DRILL ROD EXTENSIONS OF IDENTICAL SIZE AND OUTSIDE DIAMETER. THE PILOT DRILL BIT AND ROD EXTENSIONS MAY BE LUBRICATED DURING DRILLING OPERATIONS. THE DRILL HEAD AND RODS SHALL NOT BE WITHDRAWN MORE THAN ONE BIT DIAMETER LENGTH AFTER BEING AUGERED INTO PLACE WITHOUT THE USE OF BENTONITE SLURRY, AS HEREAFTER DESCRIBED.
- THE PILOT HOLE SHALL BE DRILLED TO WITHIN A CAUTION-DISTANCE OF APPROXIMATELY FIFTEEN INCHES (15") OF THE TUNNEL CROWN. DRILLING OPERATIONS SHALL STOP AT THE CALCULATED CAUTION DISTANCE TO PREPARE FOR SOUND LEVEL MONITORING FROM WITHIN THE TUNNEL. DRILLING SHALL NOT RESUME UNTIL THE APPROXIMATE DRILL BIT LOCATION HAS BEEN ESTIMATED FROM SOUND MONITORING RESULTS, AND APPROVED BY THE ENGINEER. ANY MISALIGNED, FAILED AND ABANDONED PILOT HOLES WILL BE COMPLETELY FILLED WITH NON-SHRINK CEMENT MORTAR.
- AFTER THE ALIGNMENT OF THE PILOT HOLE HAS BEEN CONFIRMED AND APPROVED BY THE ENGINEER, THE PILOT HOLE DRILL BIT AND EXTENSION RODS SHALL BE WITHDRAWN. BORING OPERATIONS FOR THE CASING PIPE MAY THEN PROCEED. THE CASING INSTALLATION SHALL BE ACCOMPLISHED BY DRILLING AND SEATING A STEEL FLUSH JOINT CASING PIPE INTO THE FREIGHT TUNNEL LINING. CASING INSTALLATION AND BORING SHALL BE MONITORED FOR TRANSMITTED SOUND LEVEL WITHIN THE FREIGHT TUNNEL. THE CASING PIPE SHALL ADVANCE TO PARTIALLY PENETRATE AND KEY THE CASING PIPE INTO THE FREIGHT TUNNEL LINING BY NO MORE THAN THREE INCHES (3").
- THE CASING SHALL THEN BE CLEANED OUT AND THE BOTTOM OF THE CASING FILLED WITH 1-FOOT OF CEMENT-BENTONITE GROUT AT THE TUNNEL CROWN.
- UPON SET-UP OF THE BENTONITE-CEMENT GROUT, A TUNNEL LINING PENETRATION SHALL BE MADE BY BORING THROUGH THE CASING INTO THE FREIGHT TUNNEL CROWN. ALL DEBRIS ENTERING THE FREIGHT TUNNEL AS A RESULT OF THE GROUT/VENT HOLE DRILLING AND TUNNEL PENETRATION SHALL BE THOROUGHLY CLEANED IMMEDIATELY AFTER THE PENETRATION IS COMPLETE.
- PRECAST REINFORCED CONCRETE MANHOLE SECTION SHALL CONFORM TO ASTM C478.
- BACKFILL UNDER THE MANHOLE SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DENSITY DETERMINED IN ACCORDANCE WITH THE STANDARD PROCTOR TEST.
- EXISTING PAVEMENT AND ASPHALT SURFACES SHALL BE REPLACED OR REPAIRED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION STANDARDS.
- CONTRACTOR SHALL PROTECT SEWER LINES AND MANHOLES, CATCH BASINS, LATERALS AND INLETS.
- CITY OF CHICAGO - DEPARTMENT OF WATER MANAGEMENT - SEWERS SHALL BE NOTIFIED PRIOR TO THE START OF CONSTRUCTION AT (312) 747-7047.
- CONTRACTOR SHALL PROVIDE BARRICADING TO INSURE CORRECT TRAFFIC CONTROL PER THE CHICAGO DEPARTMENT OF TRANSPORTATION REGULATIONS FOR OPENINGS, CONSTRUCTION AND REPAIR IN THE PUBLIC WAY.
- CONTRACTOR SHALL MAINTAIN VEHICULAR TRAFFIC AT ALL TIMES.
- RESTORATION OF THE ROADWAY SHALL BE IN COMPLIANCE WITH CHICAGO DEPARTMENT OF TRANSPORTATION STANDARDS.
- THE UNDERGROUND UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE. EXACT UTILITY LOCATIONS SHALL BE IDENTIFIED IN THE FIELD DURING A MEETING OF THE CDOT OFFICE OF UNDERGROUND COORDINATION MEMBERS WHICH SHALL BE ARRANGED BY CDOT. CONSTRUCTION SHALL NOT START UNTIL AFTER THIS MEETING HAS BEEN HELD.

OUC NO. 27008

REV. NO.	DWG. TRANSMITTAL LETTER NO.	DATE	NATURE OF REVISION	BY	CHKD.	APPD.
1		9-12-03	RECORD DRAWING	DAM	JRK	FRB
2		5-12-03	ISSUED FOR CONSTRUCTION			

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
CHICAGO, ILLINOIS

CHICAGO FREIGHT AND TROLLEY TUNNEL SYSTEMS
W. JACKSON BLVD., W. QUINCY ST., & W. RANDOLPH ST. FREIGHT TUNNEL REMEDIATION

**FREIGHT TUNNEL LINING PENETRATION
PLAN AND NOTES**

PREPARED BY:
MWH

CHICAGO, ILLINOIS DATE: MAY 2003 DWG. NO.: 1001605B-C3

RECORD DRAWING



D162J31-SHT-EX-TUNNEL-07.dgn
USER NAME = mrc155
PLOT SCALE = 100.0000' / 1"
PLOT DATE = 8/13/2019

DESIGNED - JLV
DRAWN - MKW
CHECKED - JMG
DATE - 8/16/2019

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

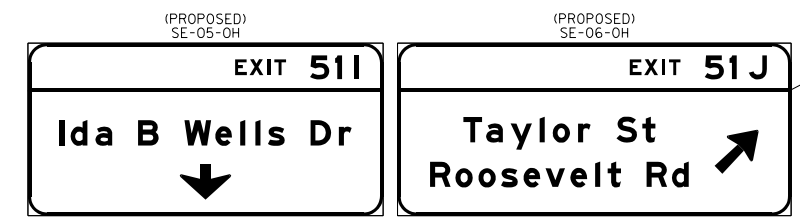
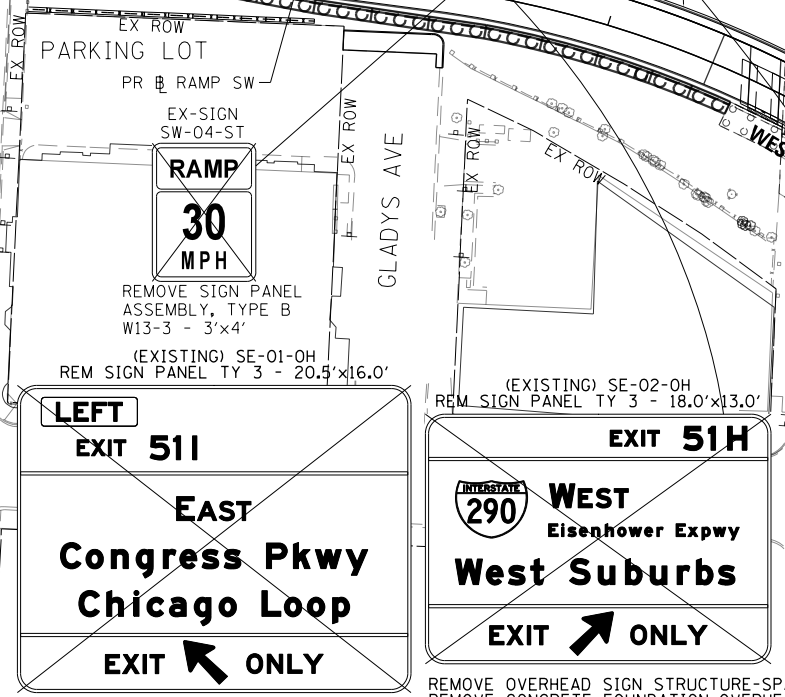
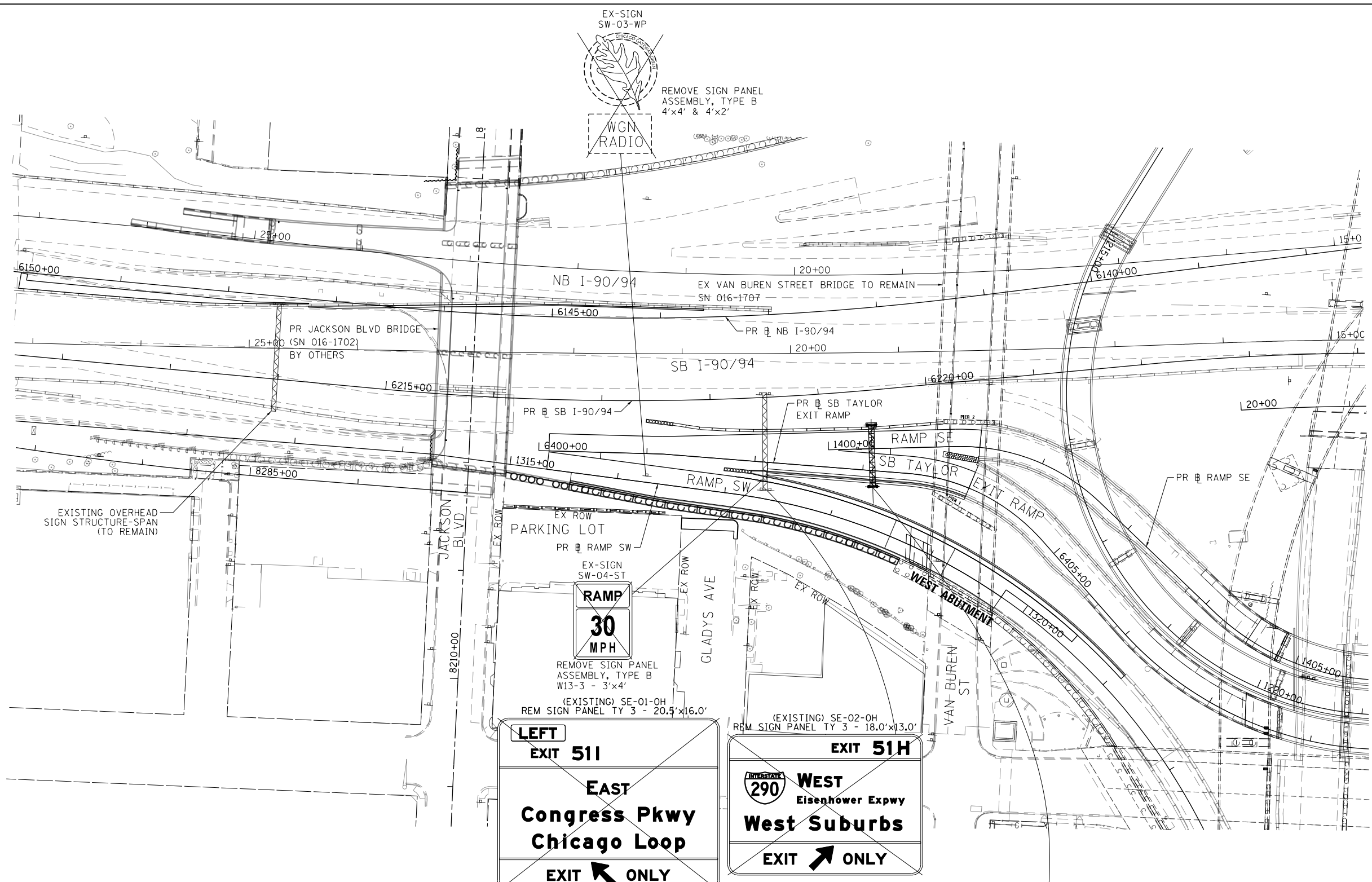
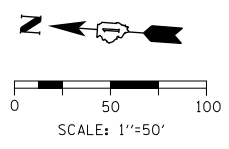
EXISTING FREIGHT TUNNEL PLANS

SCALE: NONE SHEET 7 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-1	COOK	400	189
CONTRACT NO. 62J31				

ILLINOIS FED. AID PROJECT

1/18/03 08:24:50 AM P:\V\ECOM-NR-ANSI\ecomm\line\local\h\ECOM_DS02_MA\Documents\01_Americas\Transportation\62629938_Circle Phase_1\1000_CAD\006_Roadway_Sheets\62J31_Contract\1001605B-C3-EX-TUNNEL-07.dgn



SIGN NUMBERING CODE - EXAMPLE

DIRECTION OF TRAFFIC	WN-03-LP	MOUNTING TYPE
SB - SOUTHBOUND I-90/94		LP - LIGHT POLE BANDING
EB - EASTBOUND I-290		ST - STEEL POST
MER - MADISON EXIT RAMP		SA - SIGNAL POLE MAST ARM
MON - MONROE EXIT RAMP		FM - FENCE MOUNTED
AER - ADAMS EXIT RAMP		GM - GROUND MOUNTED
JER - JACKSON EXIT RAMP		BM - BRIDGE MOUNTED
BS - RAMP SE		TM - TRUSS SUPPORT MOUNTED
WS - RAMP SW		SP - SIGNAL POLE BANDING
		WP - WOOD POST
		OH - OVERHEAD

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D162J31-SHT-Sign-PLAN-01.dgn	DESIGNED - HJF	REVISED -
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PLOT SCALE = 100.0000' / 1"	CHECKED - MJL	REVISED -
PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

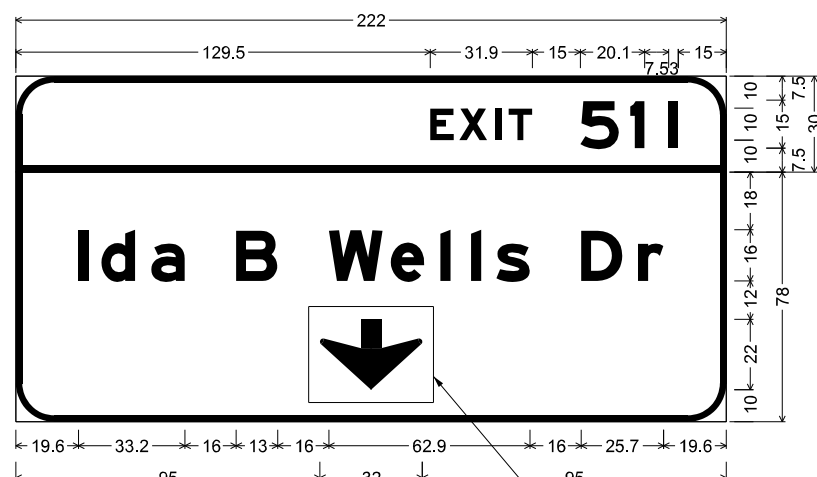
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
RAMP SW, RAMP SE AND SB TAYLOR EXIT RAMP**

SCALE: 1"=50' SHEET 1 OF 4 SHEETS STA. 1315+00.47 TO STA. 1319+75.65

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 190
CONTRACT NO. 62J31				ILLINOIS FED. AID PROJECT

SIGN DETAIL
1:50



12.0" Radius, 2.0" Border, White on Green;
 [EXIT] E Mod 2K specified length; [51 I] E Mod 2K;
 12.0" Radius, 2.0" Border, White on Green;
 [Ida B Wells Dr] E Mod 2K; Down Arrow 22.0" 270°;

Table of letter and object lefts.

E	X	I	T	S	I	I				
129.5	138.6	149.8	154.0	176.4	192.0	204.0				
I	d	a	B	W	e	I	I	s	D	r
19.6	26.8	42.3	68.8	97.8	117.2	132.7	142.3	150.1	176.7	194.4
↓										
95.0										

Letter locations are panel edge to lower left corner

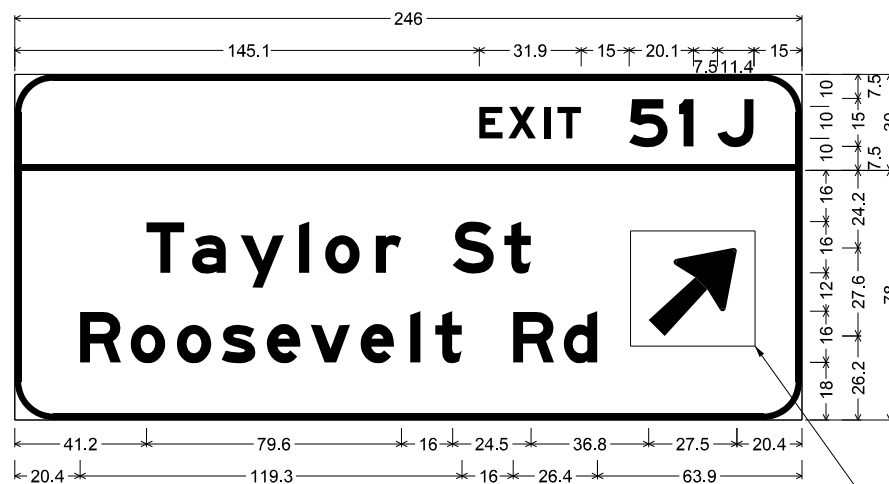
SIGN NUMBER	SE-05-0H
WIDTH x HEIGHT	18'-6" x 9'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective - ZZ
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective - ZZ
	COLOR: White

SYMBOL	ROT	X	Y	WID	HT
AR_Down	0	-	-	32	22

NOTE:
 ALL ARROWS (DOWN OR 45°) USED
 ON OVERHEAD SIGNS SHALL BE
 DEMOUNTABLE AND INCLUDED IN
 THE COST OF THE SIGN PANEL.

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SIGN DETAIL
1:50



Letter locations are panel edge to lower left corner

SEE NOTE

12.0" Radius, 2.0" Border, White on Green;
 [EXIT] E Mod 2K specified length; [51 J] E Mod 2K;
 12.0" Radius, 2.0" Border, White on Green;
 [Taylor St] E Mod 2K; [Roosevelt Rd] E Mod 2K; Arrow 160 - 35.0" 45°;
 Table of letter and object lefts.

E	X	I	T	S	I	J				
145.1	154.2	165.4	169.6	192.0	207.6	219.6				
T	a	y	I	o	r	S	t	↗		
41.2	55.4	70.6	88.8	97.0	112.8	136.8	153.0	198.1		
R	o	o	s	e	v	e	I	t	R	d
20.4	36.2	50.6	64.7	78.8	92.5	108.0	123.6	131.4	155.7	171.6

SIGN NUMBER	SE-06-OH
WIDTH x HEIGHT	20'-6" x 9'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective - ZZ
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective - ZZ
	COLOR: White

SYMBOL	ROT	X	Y	WID	HT
AR_Type A	315	-	-	22.3	35.6

NOTE:
 ALL ARROWS (DOWN OR 45°) USED
 ON OVERHEAD SIGNS SHALL BE
 DEMOUNTABLE AND INCLUDED IN
 THE COST OF THE SIGN PANEL.

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DI62J31-SHT-Sign-Panel-Detail-21.dgn	DESIGNED - HJF	REVISED -
USER NAME = mrc1ss	DRAWN - HJF	REVISED -
PLOT SCALE = 10.0000 / in.	CHECKED - MJL	REVISED -
PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

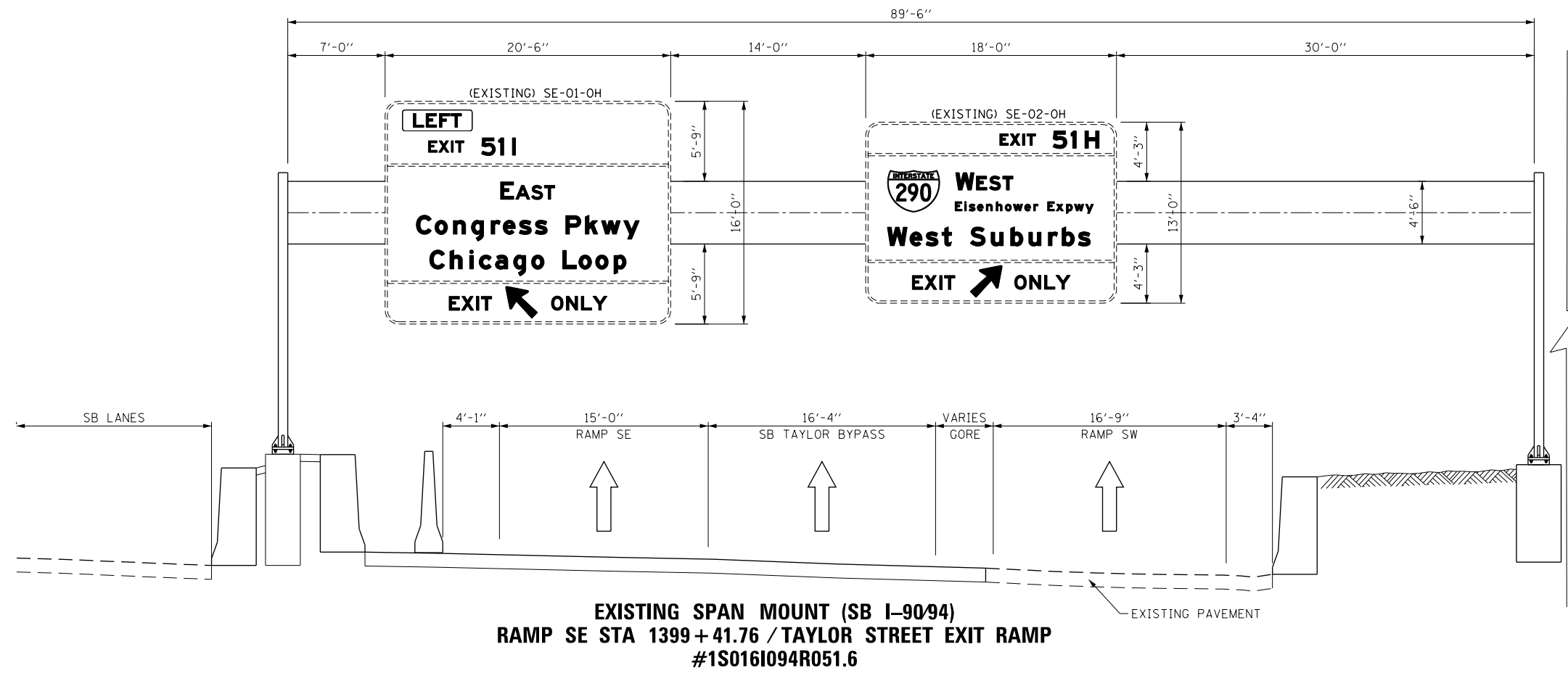
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
 SIGN PANEL DETAIL

SCALE: 1" = 2.5' SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	192
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	

FILE PATH = p:\NREC\COM-NR-NV5\Leecomon\IneLocal\I-90-DS02-NA-Documents\01_Americas\Transportation\60269938_Circle\Phase_1\000_CAD\006_Roadway\Sheets\62J31_Contract\DI62J31-SHT-Sign-OSS-13.dgn



EXISTING SPAN MOUNT (SB I-90/94)
RAMP SE STA 1399 + 41.76 / TAYLOR STREET EXIT RAMP
#1S016I094R051.6

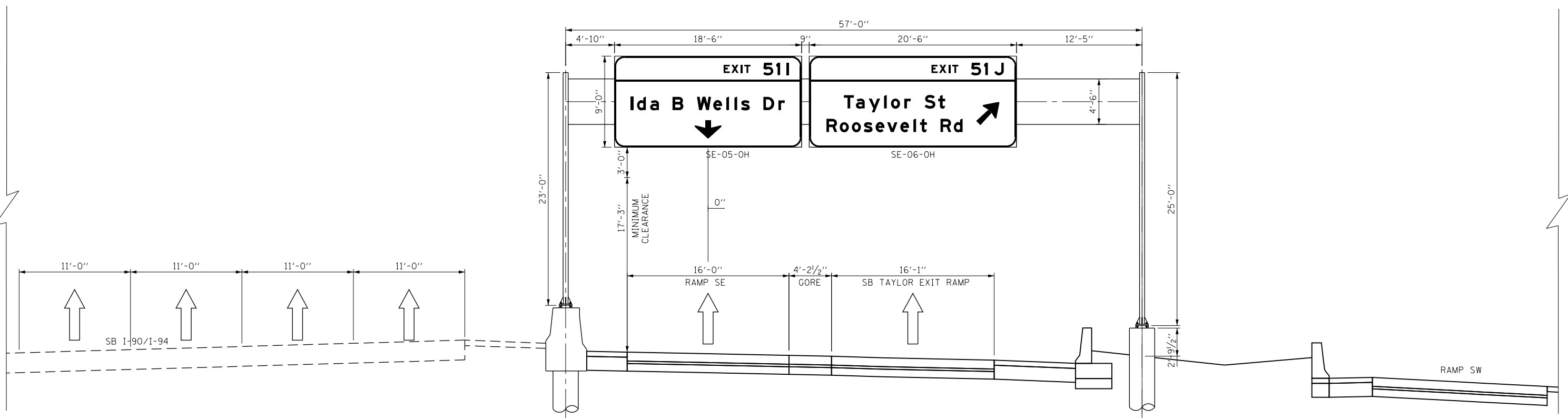
NOTES:

- ALL DIMENSIONS SHOWN FOR THE EXISTING BRACKETS ON THE BRIDGE MOUNT ARE APPROXIMATED. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ORDERING SIGNS.
- DOWN/LANE ARROWS SHALL BE PLACED APPROXIMATELY OVER THE CENTER OF ASSOCIATED TRAVEL LANE.

SIGN NUMBERING CODE EXAMPLE

DIRECTION OF TRAFFIC	NB-01-OH	MOUNTING TYPE
EB - EASTBOUND IDA B WELLS DR		ST - STEEL POST
WB - WESTBOUND IDA B WELLS DR		TS - TELESCOPING STEEL
NB - NORTHBOUND I-90/94		LP - LIGHT POLE BANDING
SB - SOUTHBOUND I-90/94		SP - SIGNAL POLE BANDING
TAY - TAYLOR ST ENTRANCE RAMP		SA - SIGNAL POLE MAST ARM
EN - EAST NORTH RAMP		BM - BRIDGE MOUNTED
NE - NORTH EAST RAMP		BS - BREAKAWAY STEEL
		WP - WOOD POST
		OH - OVERHEAD
		TM - TRUSS SUPPORT MOUNTED
		FM - FENCE MOUNTED
		MP - METAL POST
		BW - BARRIER WALL MOUNTED

SIGN PANEL NUMBER



PROPOSED SPAN MOUNT (SB I-90/94)
RAMP SE STA 1400 + 40.09
#1S016I094R051.6



DI62J31-SHT-Sign-OSS-13.dgn	DESIGNED - HJF	REVISED -
USER NAME = mrc155	DRAWN - MSW	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 8/13/2019	DATE - 8/16/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

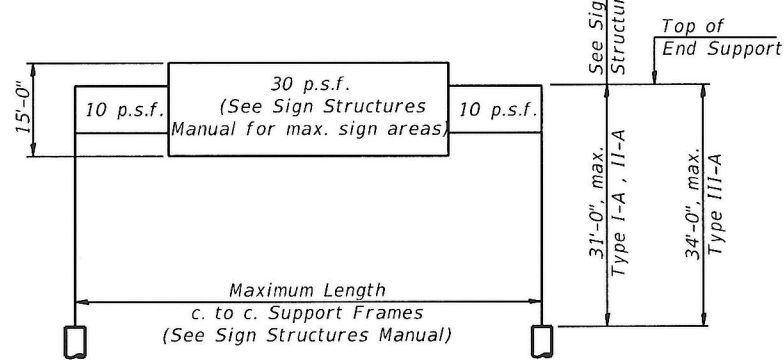
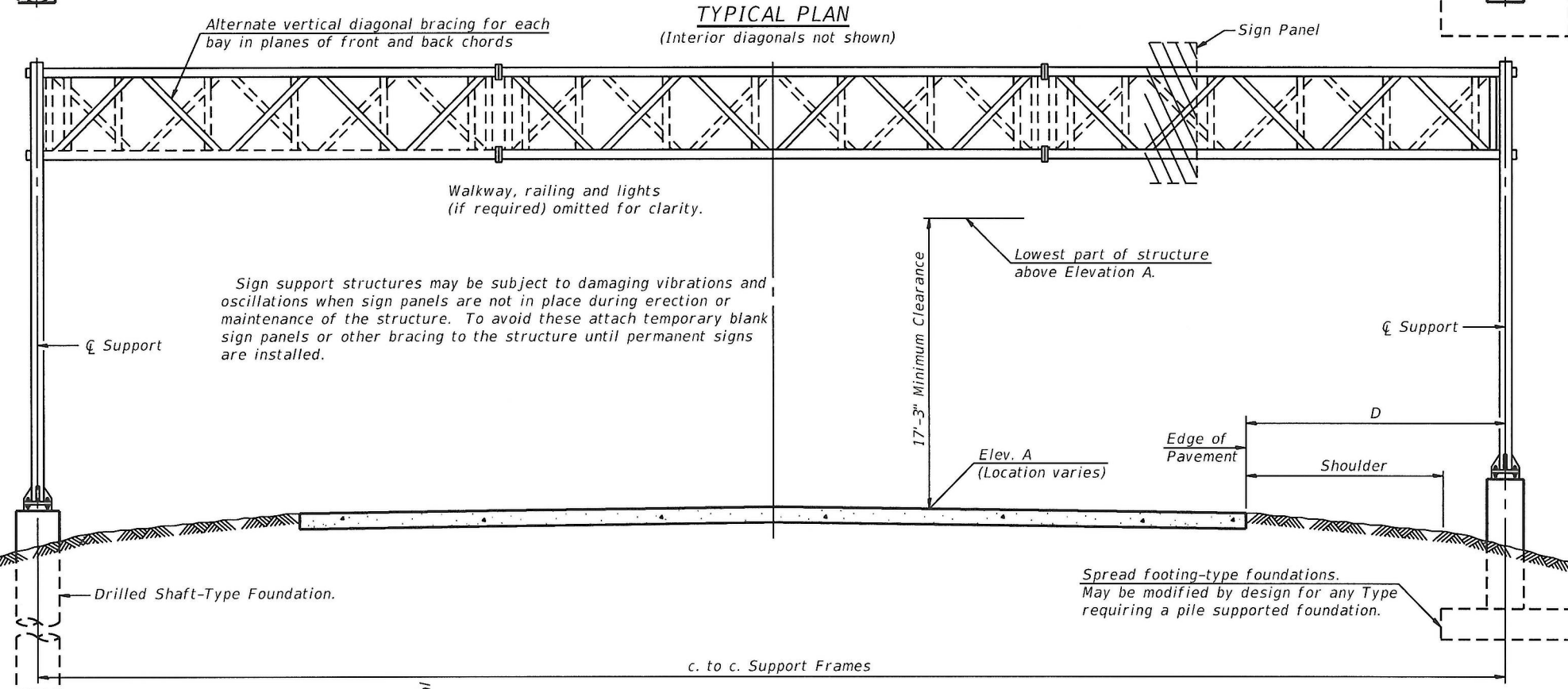
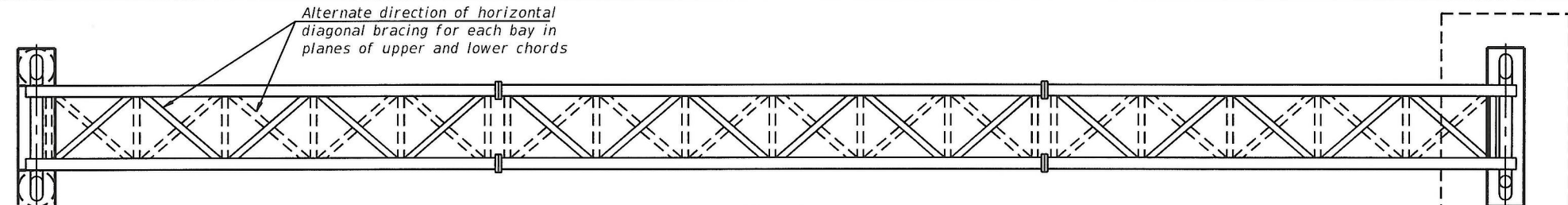
OVERHEAD SIGN STRUCTURES
SIGN PANEL PLACEMENT

SCALE: 1" = 5' SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	193
				CONTRACT NO. 62J31
ILLINOIS FED. AID PROJECT				

SB-13

FILE NAME: p:\v\AECOM-NA-AWS1\acconline\local\AECOM_DS02_NADocuments\01_Americas\Transportation\60269938_Circle\Phase_1\1000_CAD\008_Structural\Sign_Structures\62A77_Sign_Structure\62131-Span-SS143-SignStruct.dgn



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

TYPICAL ELEVATION
(Looking at Face of Signs**)

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
ISQ161094R050.1	1400+40.09	I-A	57'-0"	579.16	14'-9"	9'-0"	351

**Looking upstation for structures with signs both sides.
* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

SIGNED: *Moussa A. Issa*
DR. MOUSSA A. ISSA, S.E. IL. LIC. NO. 081-005738
EXPIRES 11-30-2020
DATE: 8/16/2019 FOR SHEETS SS-01 THRU SS-10 (TOTAL OF 10 SHEETS)

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	57
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	17.4

OS-A-1

2-17-2017



USER NAME = marlan.agamy	DESIGNED - JJS, AMS	REVISED -
CHECKED - MI, MAI	REVISED -	
PLOT SCALE = N.T.S.	DRAWN - AMS	REVISED -
PLOT DATE = 8/16/2019	CHECKED - MI, MAI	REVISED -

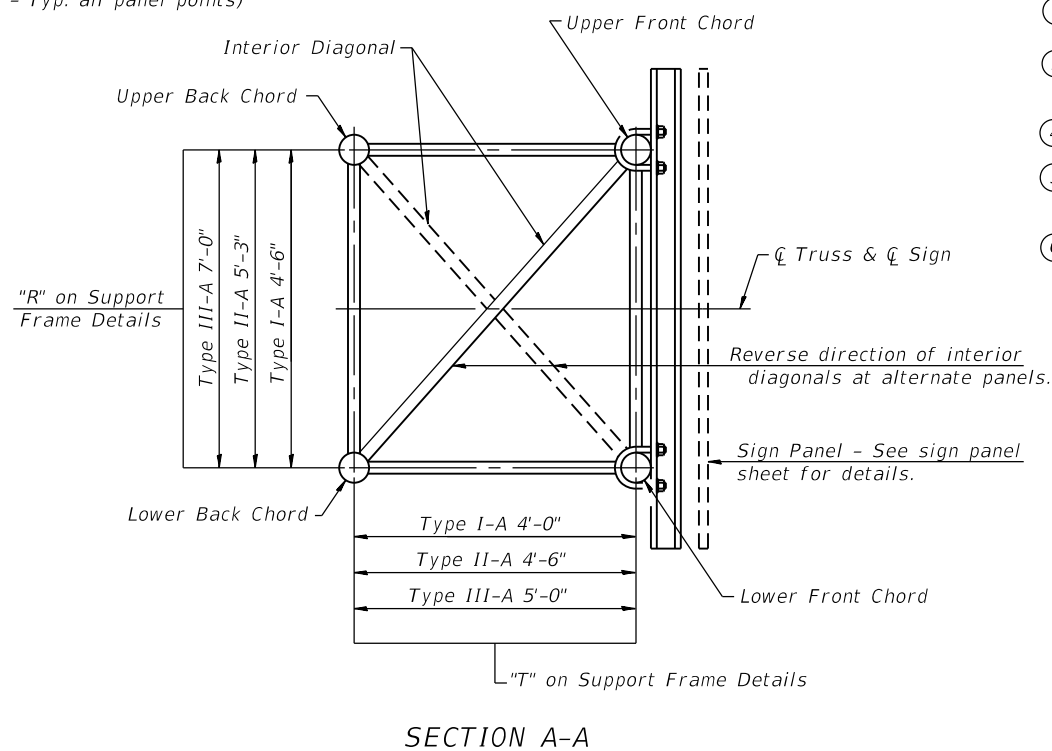
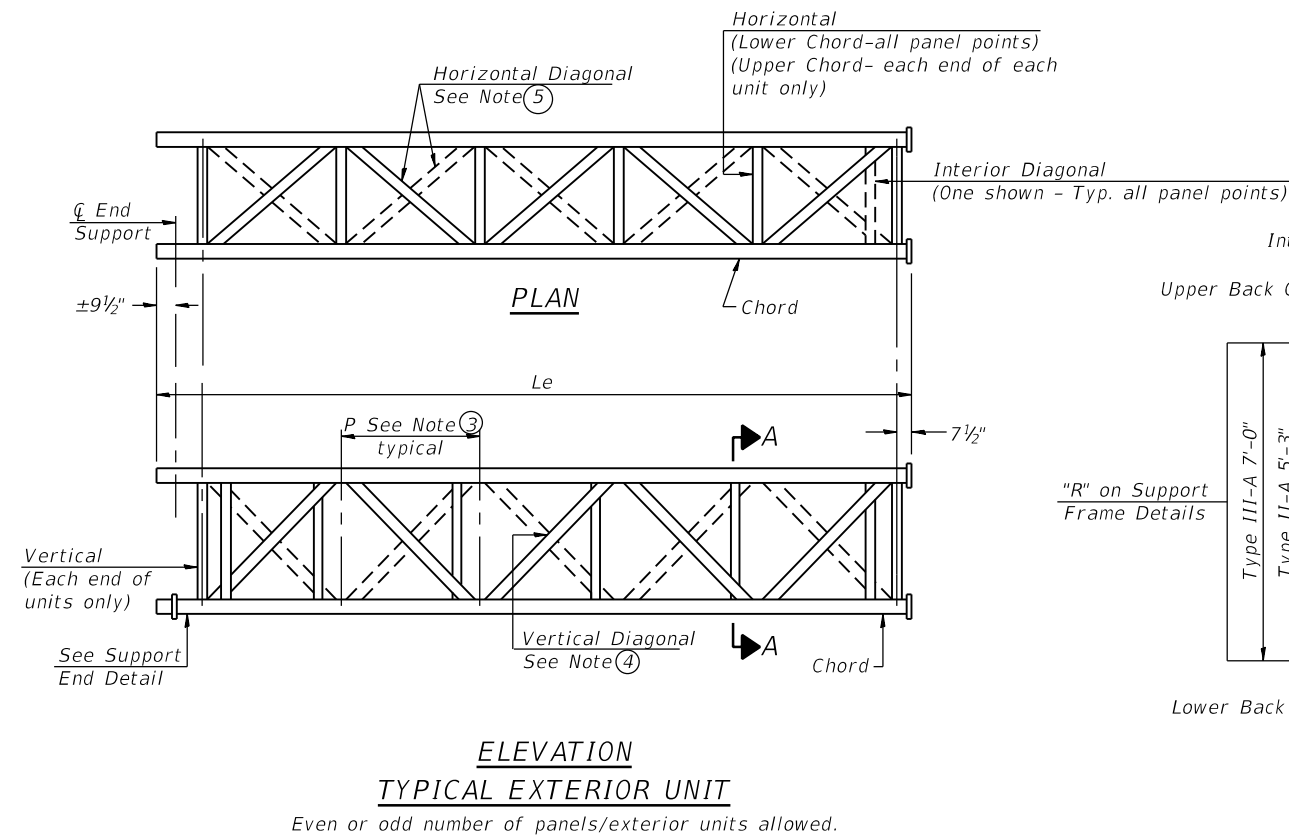
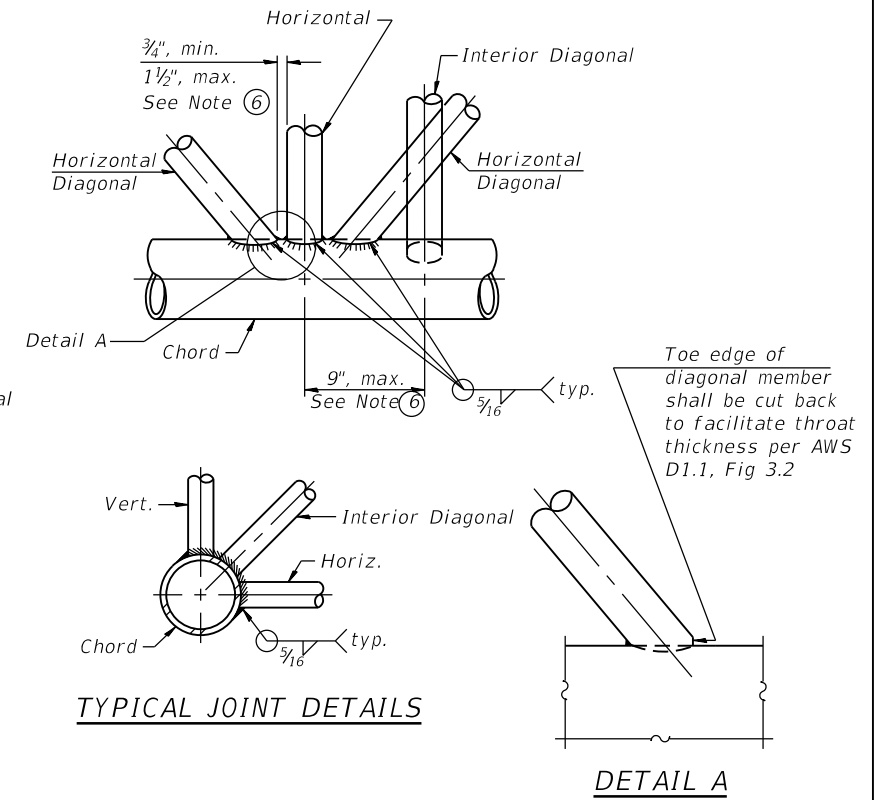
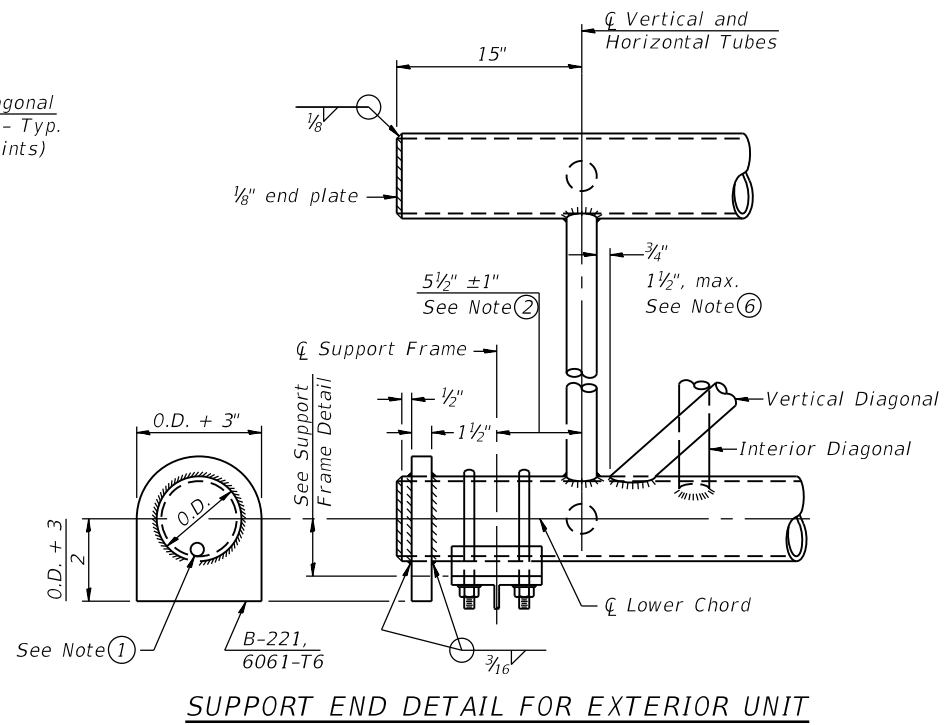
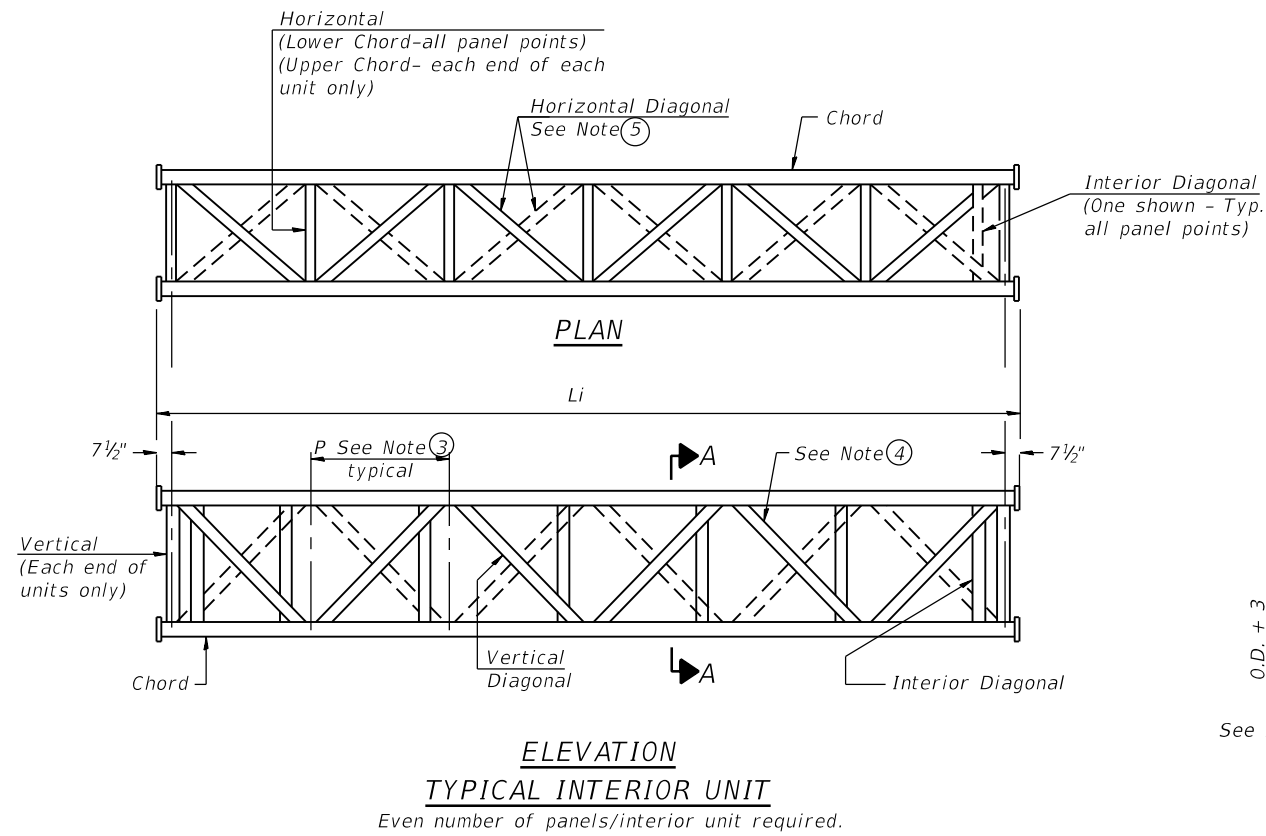
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - GENERAL PLAN & ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	194
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	

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- ① Contractor may alternatively use standard aluminum drive-fit cap to close end. 1/2" Ø drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
- ② 5 1/2" end dimension may vary by ±1" to provide uniform panel spacing (P).
- ③ Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
- ④ Vertical Diagonals in front and back face shall alternate.
- ⑤ Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
- ⑥ All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 3/4" minimum to 1 1/2" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

05-A-2

2-17-2017

HBM
ENGINEERING GROUP, LLC

USER NAME = marian.agamy	DESIGNED - JJS, AMS	REVISED -
PLOT SCALE = N.T.S	CHECKED - MI, MAI	REVISED -
PLOT DATE = 8/16/2019	DRAWN - AMS	REVISED -
	CHECKED - MI, MAI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

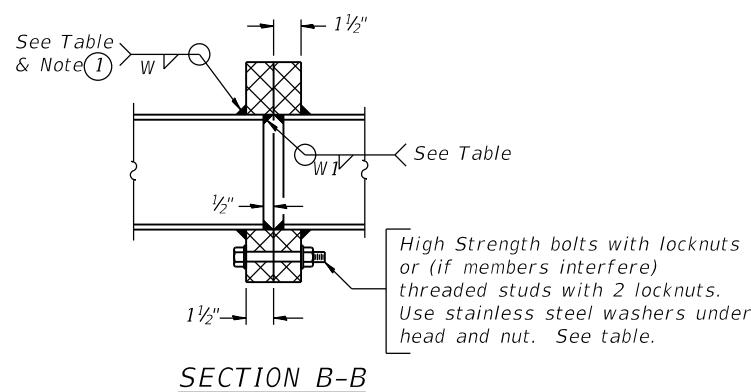
**OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	195
CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

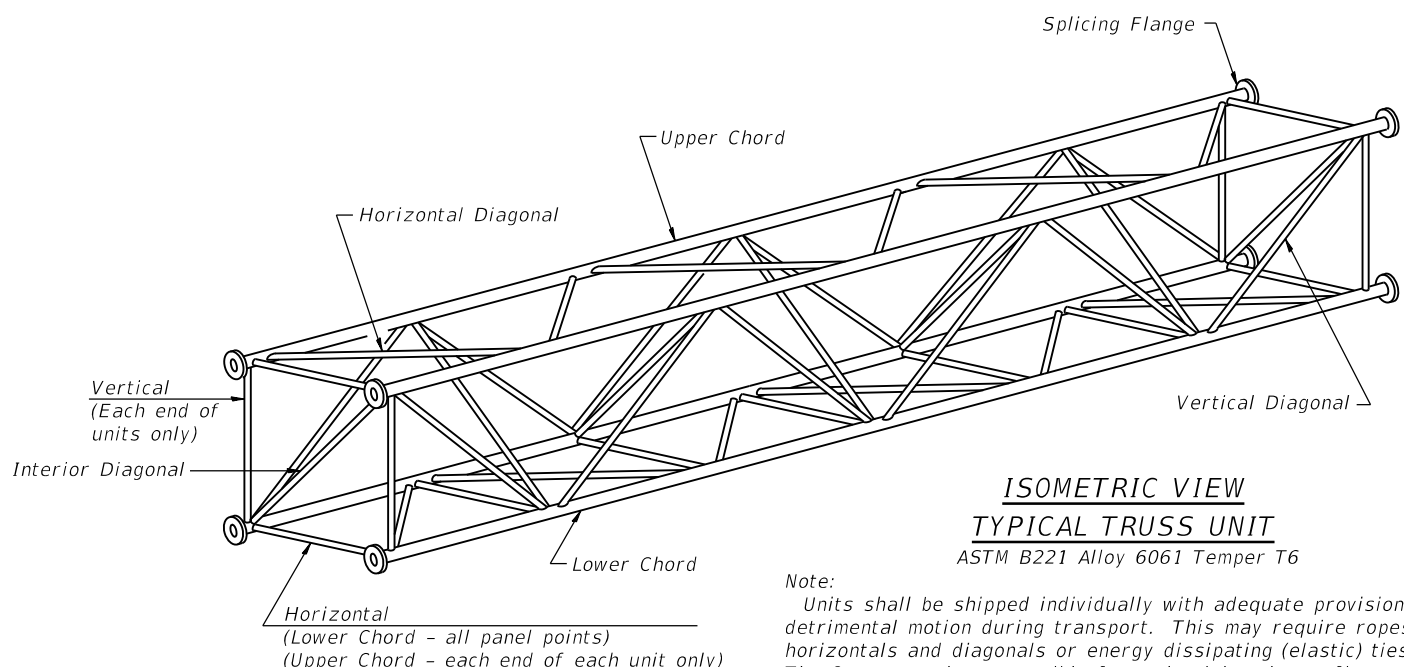
SHEET SS-02 OF SS-10 SHEETS

TRUSS UNIT TABLE

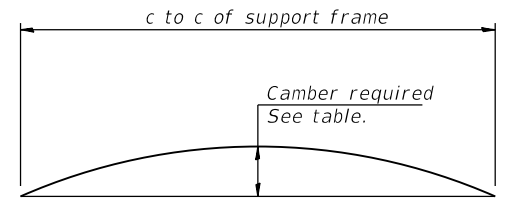
Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontal; and Interior Diagonals		Camber at Midspan	Splicing Flange							
			No. Panels per Unit	Unit Lgth.(Le)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(Li)	Panel Lgth.(P)	0.D.	Wall	0.D.	Wall		Bolts		Weld Sizes		A	B		
															No./Splice	Dia.	W	WI				
ISO161094R050.1	1400+40.09	I-A	6	29'-4 1/2"	4'-7"	0	-	-	-	5"	1/4"	2 1/2"	1/4"	3/4"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"		



① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to ensure proper field assembly.

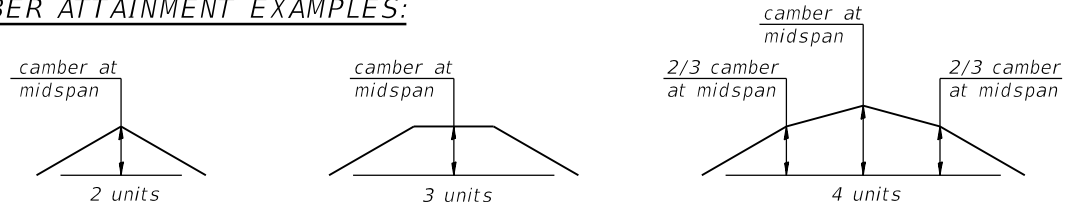


Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.

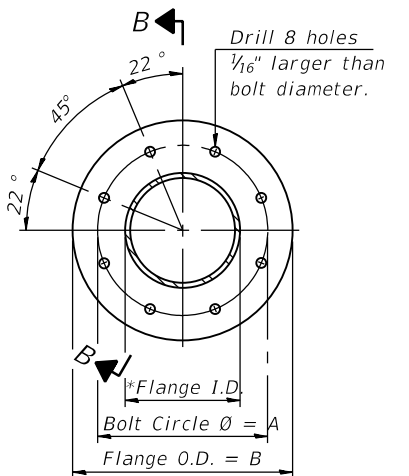
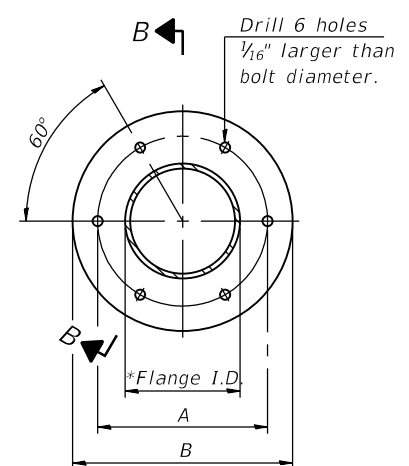


Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



SPLICING FLANGES
ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

054-A-2

2-17-2017



USER NAME = marian.agamy	DESIGNED - JJS, AMS	REVISED -
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PLOT DATE = 8/16/2019	CHECKED - MI, MAI	REVISED -

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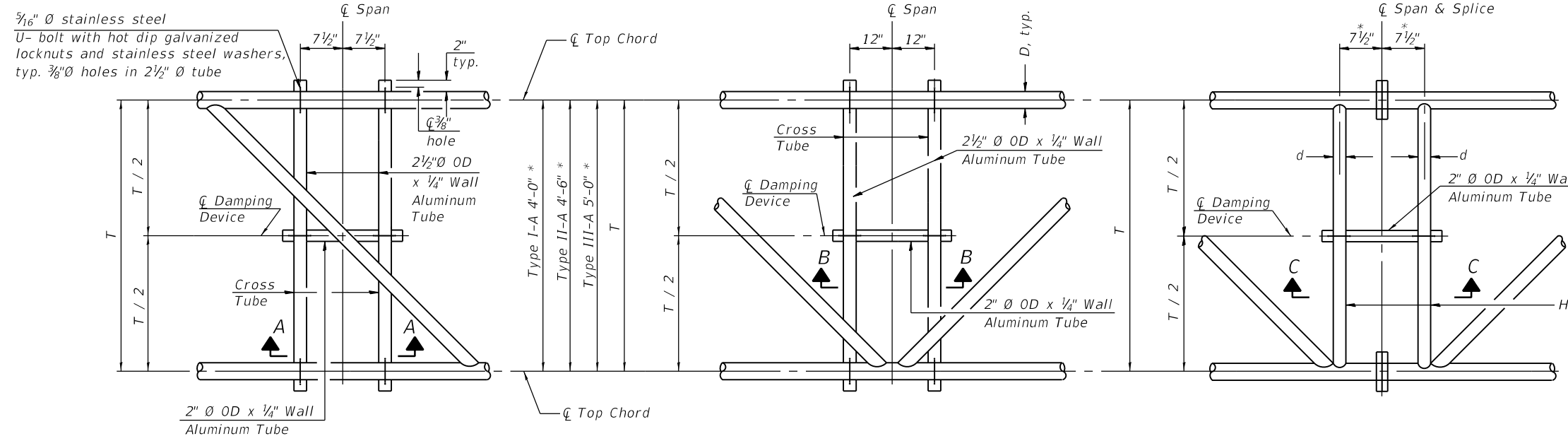
**OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS
FOR TRUSS TYPES I-A, II-A AND III-A**

SHEET SS-03 OF SS-10 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 196
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	

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* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

PLAN DETAIL "A"
 \varnothing Span between Panel Points

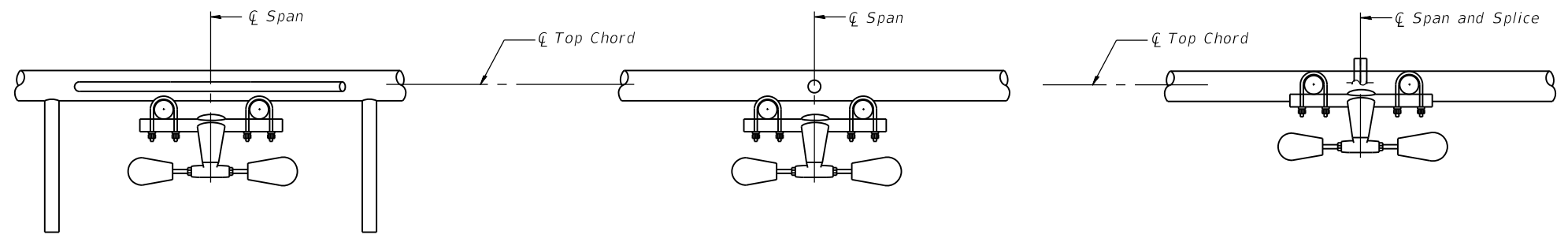
PLAN DETAIL "B"
 \varnothing Span at Panel Point

PLAN DETAIL "C"
 \varnothing Span at \varnothing Chord Splice

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...

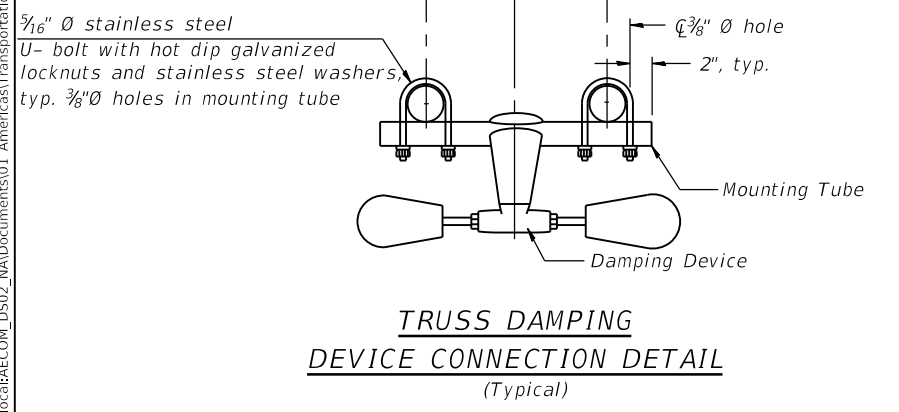
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



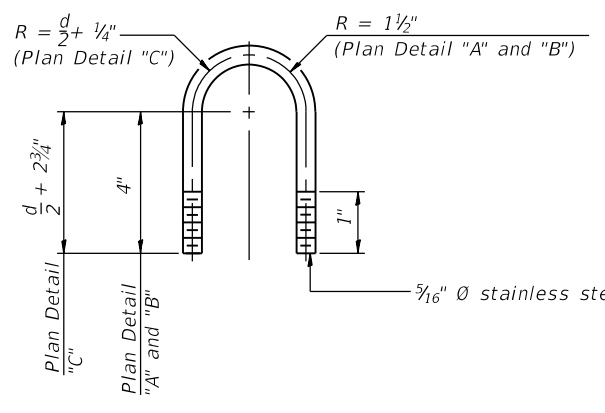
SECTION A-A

SECTION B-B

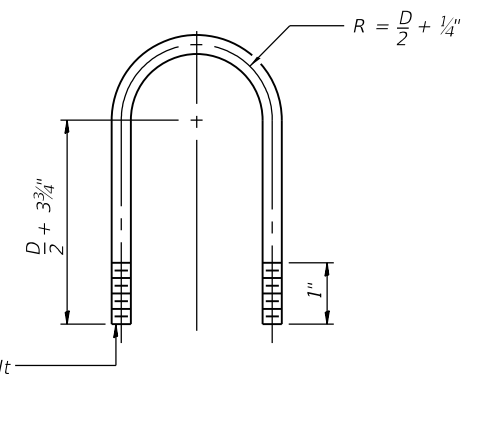
SECTION C-C



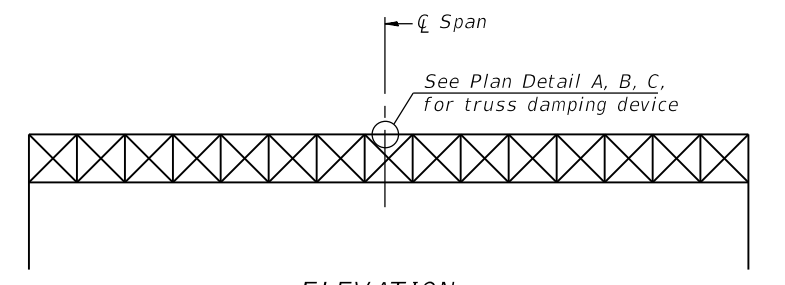
TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail "A" and "B")



ELEVATION
Aluminum Overhead Sign Truss

05-A-D

2-17-2017



USER NAME = marian.agamy	DESIGNED - JJS, AMS	REVISED -
PLOT SCALE = N.T.S	CHECKED - MI, MAI	REVISED -
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	CHECKED - MI, MAI	REVISED -

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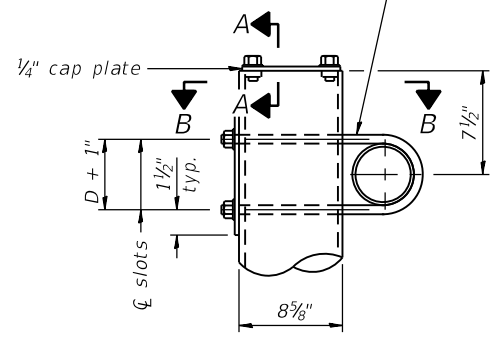
OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

SHEET SS-04 OF SS-10 SHEETS

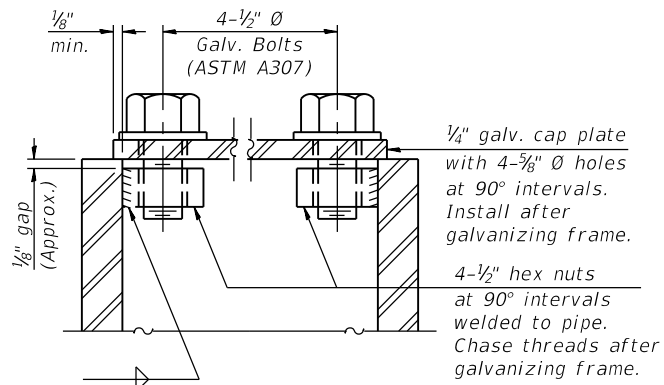
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CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	

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3/4" Ø stainless steel U-bolt.
Provide two washers and two hexagon locknuts. (4)
1 3/16" x 2" slots on 8" Ø pipe.
(4 slots required per pipe)

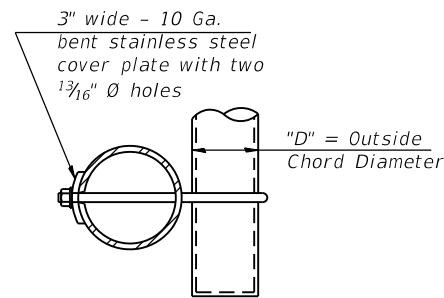


DETAIL A

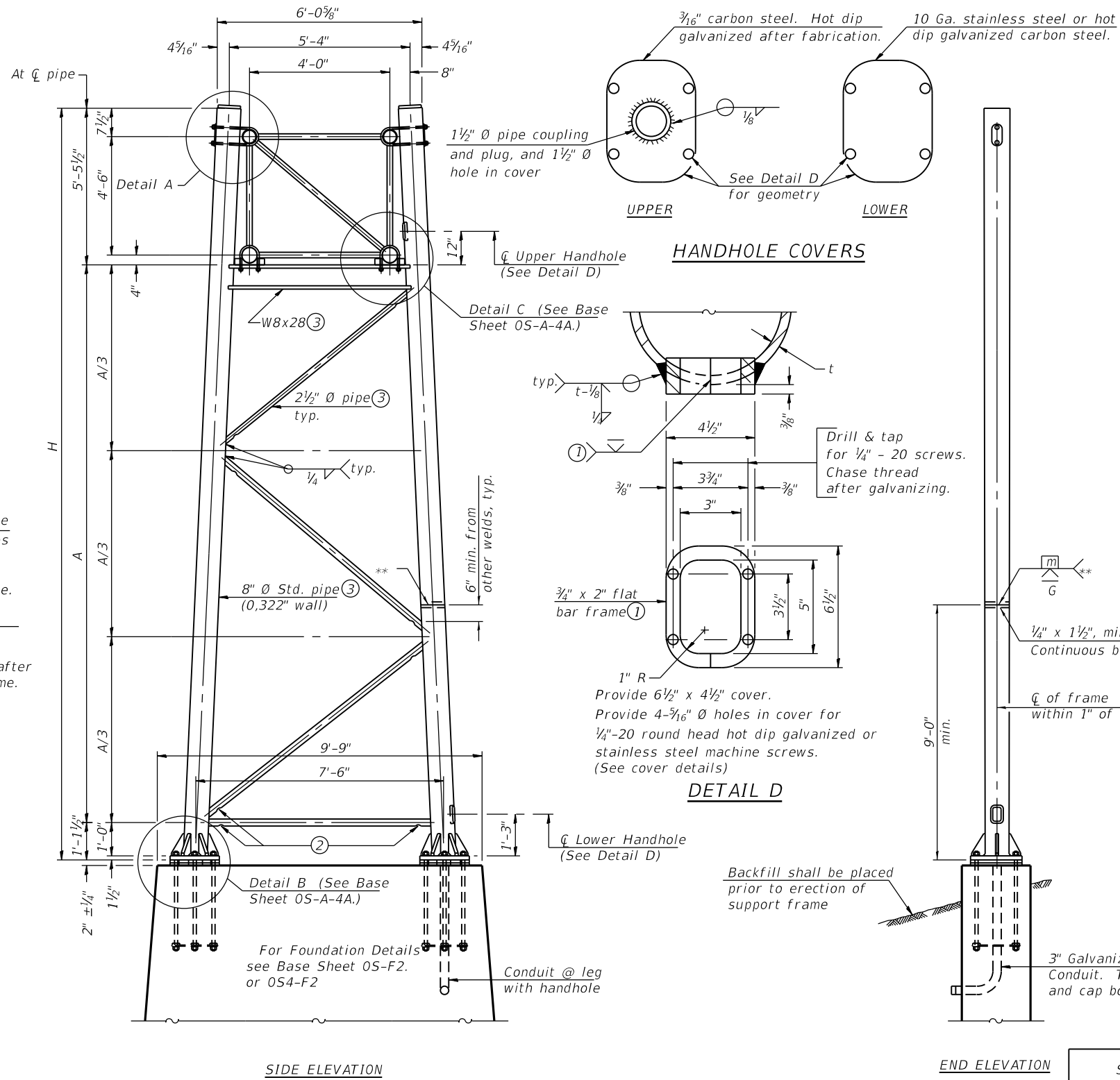


SECTION A-A

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.

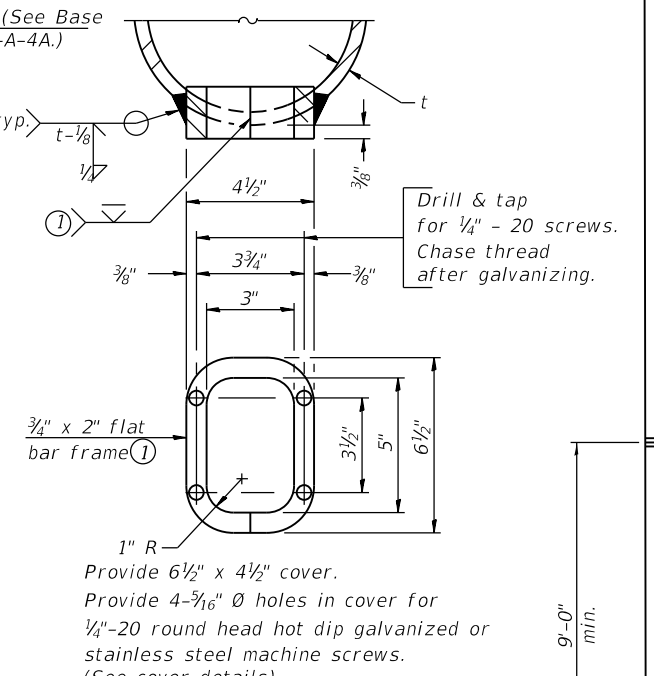


SECTION B-B



SIDE ELEVATION

HANDHOLE COVERS



DETAIL D

END ELEVATION

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.
Load combinations checked include dead load plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

- ① In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500µ in or less.
- ② Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
- ③ Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.
- ④ See General Notes for fasteners.
- ⑤ Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
- ⑥ "H" based on 15'-0" or actual sign height, whichever is greater.

8" Ø PIPE TRUSS SUPPORT FRAME

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	Support		H ⑥	A
		Left	Right		
ISO161094R050.1	1400+40.09	XX	-	24'-5"	17'-10"
		-	XX	26'-5"	19'-10"

OS-A-4

2-17-2017



USER NAME = marian.agamy	DESIGNED - JJS, AMS	REVISED -
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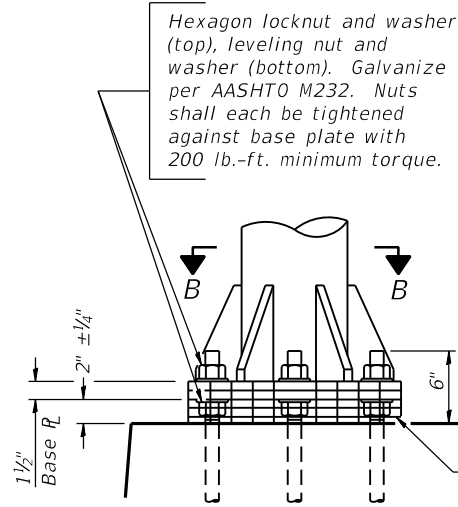
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR TYPE I-A ALUMINUM TRUSS

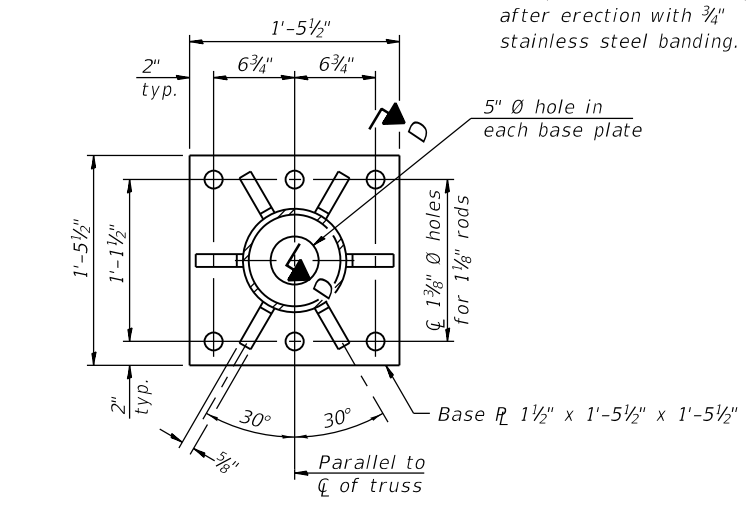
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CONTRACT NO. 62J31				
ILLINOIS FED. AID PROJECT				

SHEET SS-05 OF SS-10 SHEETS

FILE NAME: D:\V\AECOM-NA-AWS1\arecomonline-local\AECOM_ID502_NAD\Documents\01_Americas\Transportation\60269938_Circle\Phase_I\0000_CAD\008_Structural\Sign_Structures\62131-Span-SS148-SignStruct.dgn

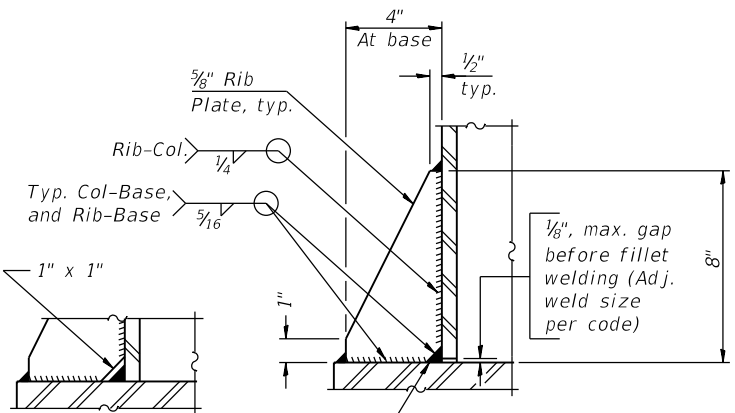


DETAIL B
Ribs shall be cut to fit slope of pipe.



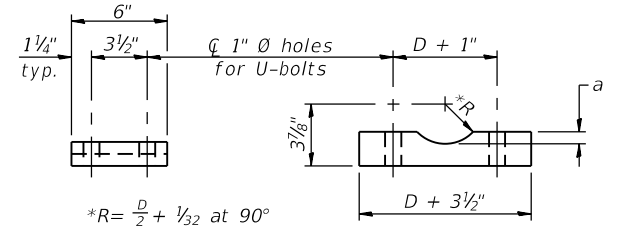
SECTION B-B

Stainless Steel Standard Grade Wire Cloth, 3" wide, 1/4" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with 3/4" stainless steel banding.



** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.

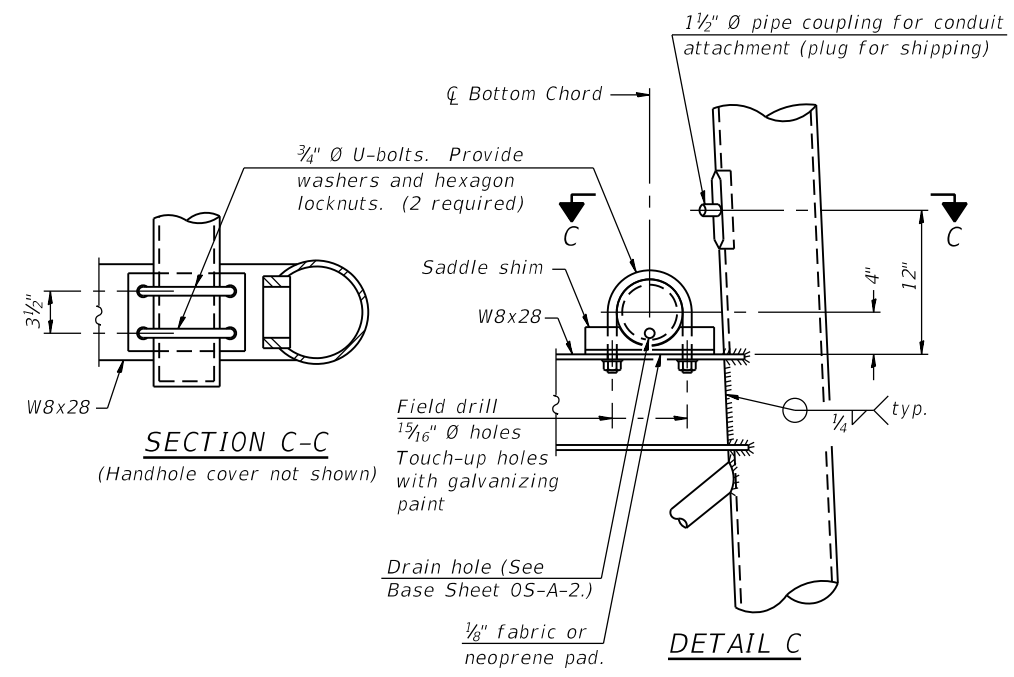
SECTION D-D



SADDLE SHIM DETAIL
ASTM B26 Alloy 356-F

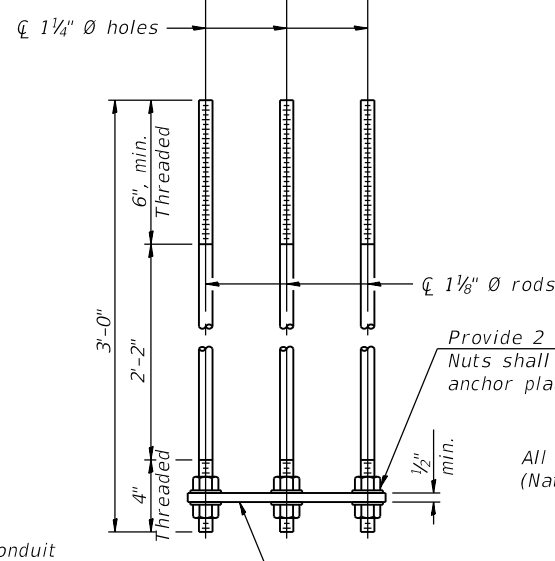
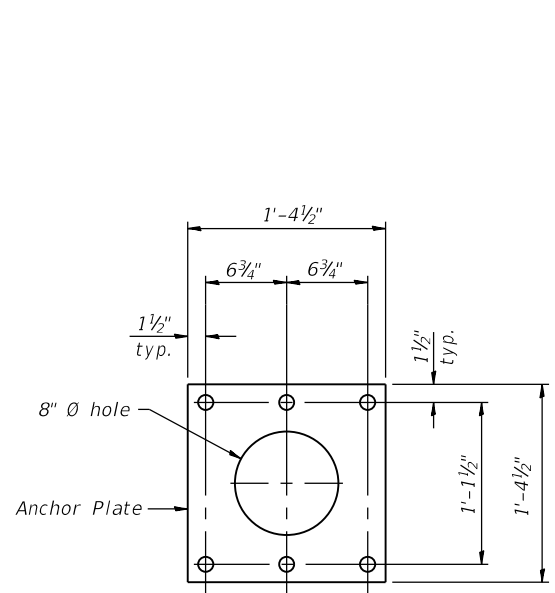
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)

Truss Chord Nominal Dia.	a
5"	3/4"
5 1/2"	1 3/16"
6"	7/8"
6 1/2"	1 5/16"

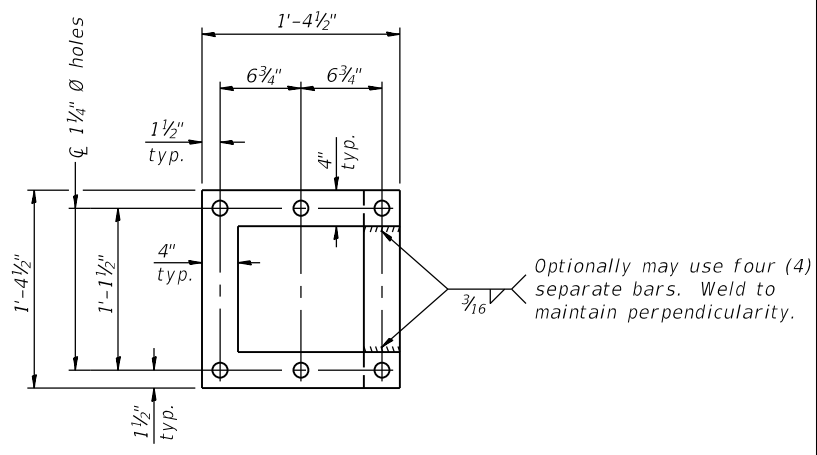


SECTION C-C
(Handhole cover not shown)

DETAIL C

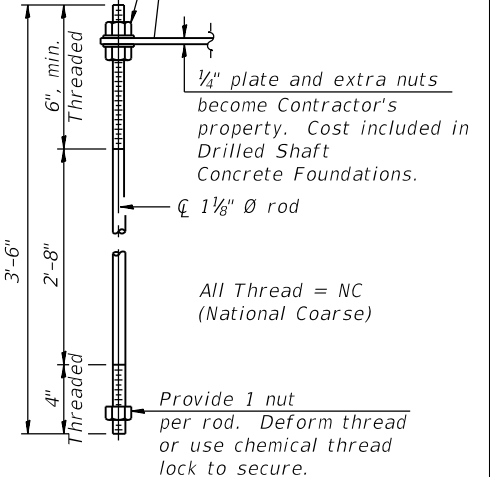


ANCHOR ROD DETAIL
Spread Footing Foundation



POSITIONING PLATE(S)

At each location, provide 1/4" thick positioning plate(s) and six (6) additional nuts to be used with leveling nuts to maintain anchor bolts position during concrete placement.



ANCHOR ROD DETAIL
Drilled Shaft Foundation

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

TYPE I-A TRUSS
8" Ø PIPE SUPPORT FRAME DETAILS

05-A-4A

2-17-2017



USER NAME	DESIGNED	REVISION
marian.agamy	JJS, AMS	-
	MI, MAI	-
	AMS	-
	MI, MAI	-

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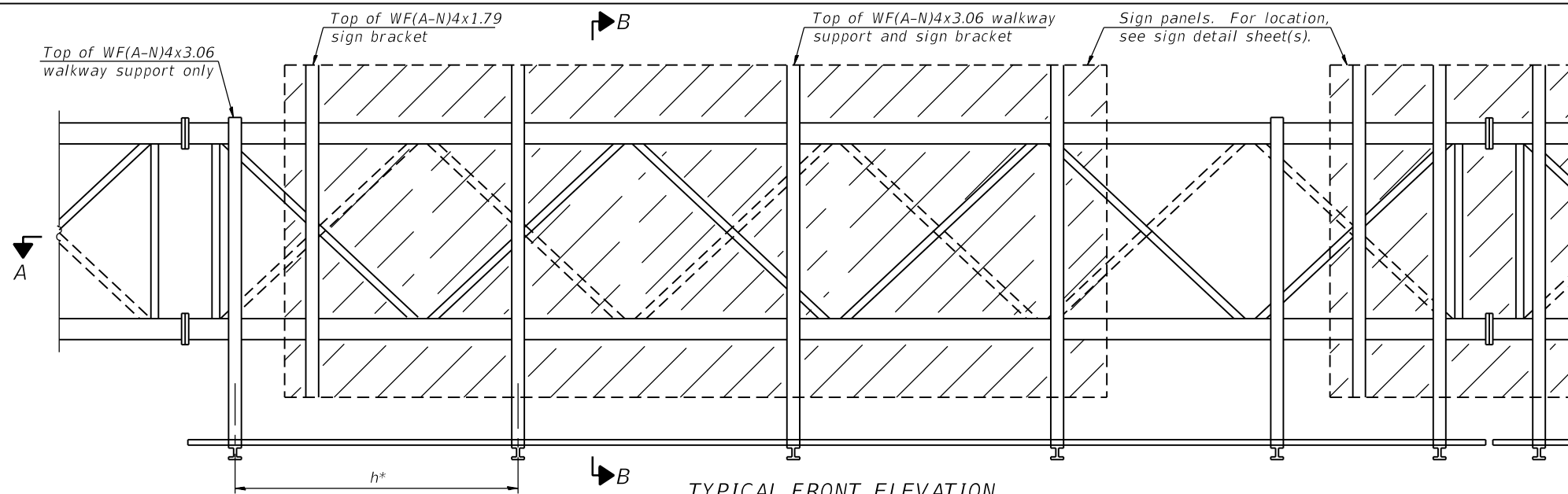
OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS - ALUMINUM TRUSS

SHEET SS-06 OF SS-10 SHEETS

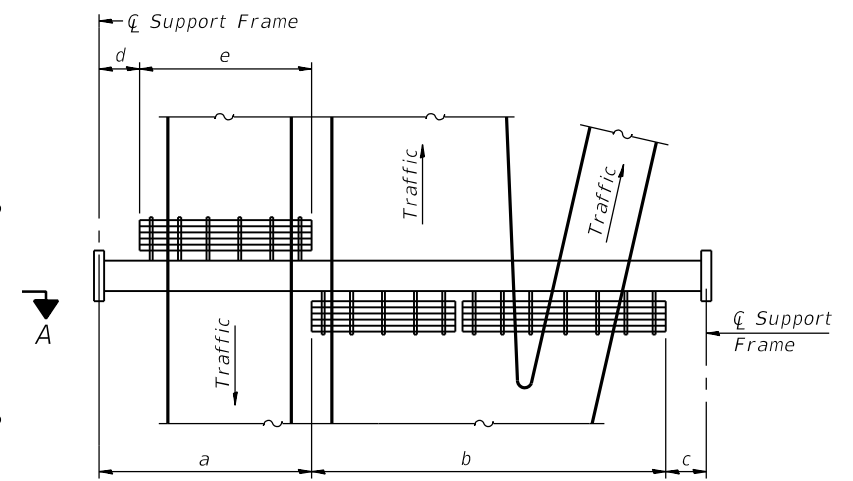
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2019-054-I	COOK	400	199
CONTRACT NO. 62J31				

ILLINOIS FED. AID PROJECT

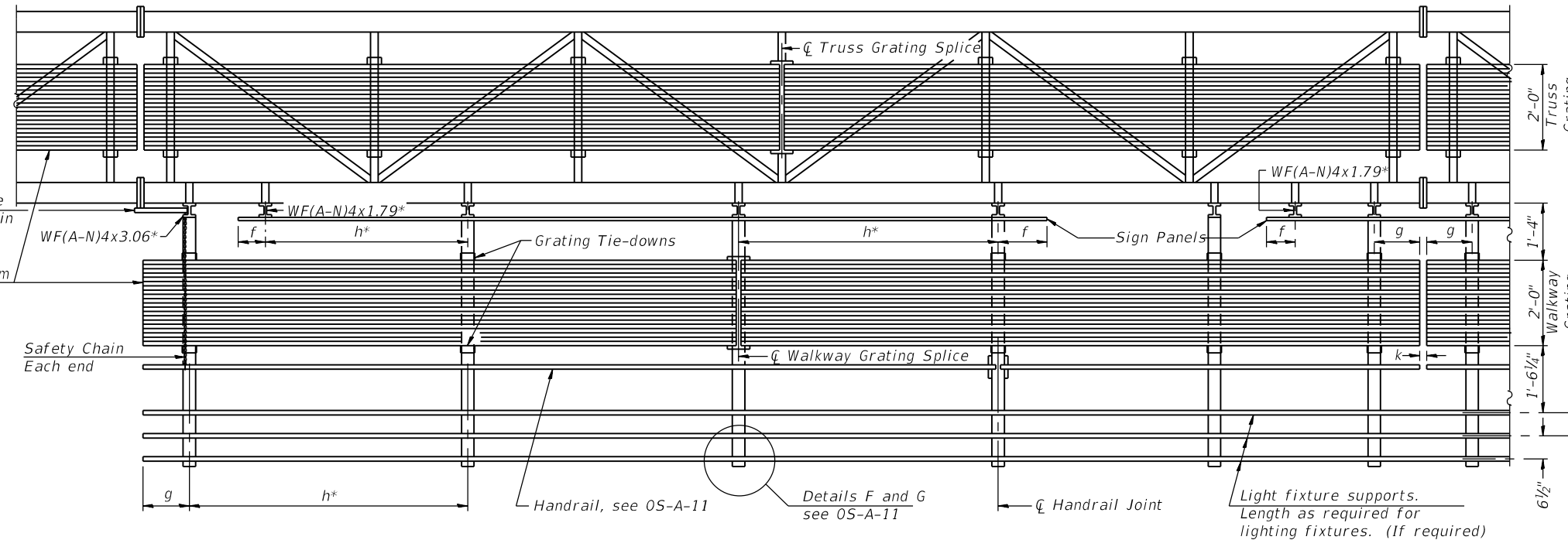
FILE NAME: P:\V\AECOM-NA-AWS1\...; USER: marian.agamy; DATE: 8/16/2019



TYPICAL FRONT ELEVATION
 With lights and handrail omitted for clarity.
 For Section B-B, see Base Sheet 05-A-10.



PLAN
WALKWAY AND HANDRAIL SKETCH
 (Road plan beneath truss varies)



SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
 Place all sign and walkway brackets as close to panel points as practical.
 Handrail joints, grating, and light support splices placed as needed.

BRACKET TABLE

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:
 * Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:
 f = 12" maximum, 4" minimum (End of sign to ϕ of nearest bracket)
 g = 12" maximum, 4" minimum (End of walkway grating to ϕ of nearest support bracket)
 h = 6'-0" maximum (ϕ to ϕ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)
 k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet 05-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet 05-A-10.

For Handrail Details see Base Sheet 05-A-11.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
ISO161094R050.1	1400+40.09	-	-	-	-	-	-

Truss grating to facilitate inspection shall run full length (center to center of support frames) $\pm 12"$ on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary $\pm 1/2"$ based on available standard widths.

05-A-9

2-17-2017



USER NAME = marian.agamy	DESIGNED - JJS, AMS	REVISED -
PLOT SCALE = N.T.S	CHECKED - MI, MAI	REVISED -
PLOT DATE = 8/16/2019	DRAWN - AMS	REVISED -
	CHECKED - MI, MAI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

SHEET SS-07 OF SS-10 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2019-054-I	COUNTY COOK	TOTAL SHEETS 400	SHEET NO. 200
CONTRACT NO. 62J31			ILLINOIS FED. AID PROJECT	