

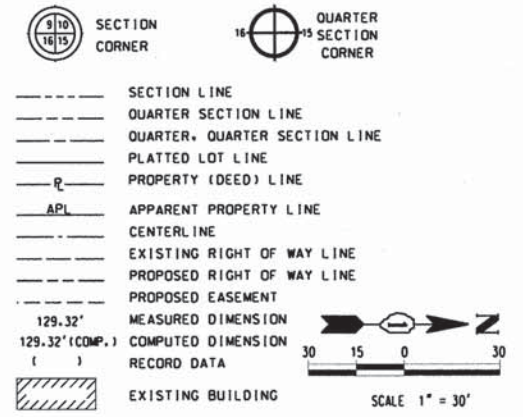
Part of NW 1/4 Section 10, Township 39 North, Range 12 East of the Third Principal Meridian, Cook Co.

- NAD 83(2011) ILLINOIS EAST STATE PLANE ZONE -

COORDINATES SHOWN HEREON ARE BASED ON STATE PLANE COORDINATES. COMBINED SCALE FACTOR IS 0.99996489
 -- PROPOSED R.O.W. AND CENTERLINE CONTROL POINTS --
 STATE PLANE COORDINATES

| POINT | NORTH | EAST | STATION | OFFSET |
|--------------------|---------------|---------------|-----------|----------|
| AJ2805 NAD83(2011) | 1,909,480.922 | 1,118,826.732 | | |
| AJ2809 NAD83(2011) | 1,909,574.314 | 1,116,660.165 | | |
| 250 | 1,902,597.89 | 1,112,110.85 | 104+50.42 | 32.60'R |
| 251 | 1,902,601.88 | 1,112,234.78 | 104+50.16 | 156.60'R |
| 252 | 1,902,551.91 | 1,112,236.45 | 104+00.16 | 156.56'R |
| 253 | 1,902,547.92 | 1,112,112.52 | 104+00.42 | 32.56'R |
| 255 | 1,902,402.00 | 1,112,241.47 | 102+50.16 | 156.43'R |
| 256 | 1,902,663.85 | 1,112,108.64 | 105+16.42 | 32.66'R |
| 257 | 1,902,667.85 | 1,112,232.58 | 105+16.16 | 156.66'R |
| 258 | 1,902,713.83 | 1,112,106.97 | 105+66.42 | 32.17'R |
| 259 | 1,902,717.82 | 1,112,230.92 | 105+66.16 | 156.72'R |
| 260 | 1,902,753.80 | 1,112,105.63 | 106+06.42 | 32.74'R |
| 261 | 1,902,757.80 | 1,112,229.57 | 106+06.16 | 156.74'R |
| 262 | 1,902,928.71 | 1,112,099.78 | 107+81.42 | 32.90'R |
| 263 | 1,902,932.70 | 1,112,223.72 | 107+81.16 | 156.90'R |
| 271 | 1,902,548.11 | 1,112,118.52 | 104+00.41 | 38.56'R |
| 272 | 1,902,456.62 | 1,112,121.58 | 103+08.87 | 38.48'R |
| 273 | 1,902,456.50 | 1,112,117.90 | 103+08.87 | 34.80'R |
| 274 | 1,902,414.45 | 1,112,119.30 | 102+66.80 | 34.76'R |
| 275 | 1,902,548.27 | 1,112,123.51 | 104+00.40 | 43.56'R |
| 276 | 1,902,456.79 | 1,112,126.57 | 103+08.87 | 43.48'R |
| 277 | 1,902,456.60 | 1,112,120.80 | 103+08.87 | 37.70'R |
| 278 | 1,902,414.54 | 1,112,122.21 | 102+66.79 | 37.67'R |
| 280 | 1,902,750.28 | 1,112,113.76 | 106+02.63 | 40.74'R |
| 281 | 1,902,714.25 | 1,112,120.20 | 105+66.39 | 45.94'R |
| 284 | 1,902,749.76 | 1,112,108.77 | 106+02.27 | 35.74'R |
| 285 | 1,902,714.09 | 1,112,115.15 | 105+66.40 | 40.89'R |
| 313 | 1,902,753.90 | 1,112,108.63 | 106+06.42 | 35.74'R |
| 314 | 1,902,754.06 | 1,112,113.63 | 106+06.41 | 40.74'R |
| 340 | 1,902,414.37 | 1,112,116.99 | 102+66.80 | 32.44'R |
| 390 | 1,902,714.25 | 1,112,119.96 | 105+66.39 | 45.71'R |
| 391 | 1,902,677.27 | 1,112,121.20 | 105+29.39 | 45.68'R |
| 392 | 1,902,667.60 | 1,112,131.53 | 105+19.37 | 55.67'R |
| 393 | 1,902,669.59 | 1,112,193.50 | 105+19.24 | 117.67'R |
| 394 | 1,902,666.59 | 1,112,193.60 | 105+16.24 | 117.66'R |
| 395 | 1,902,714.55 | 1,112,128.96 | 105+66.39 | 54.71'R |
| 396 | 1,902,668.56 | 1,112,130.50 | 105+20.38 | 54.67'R |

LEGEND



BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.

- IRON PIPE OR ROD FOUND
- ⊕ 'MAG' NAIL SET
- + CUT CROSS FOUND OR SET
- 5/8" REBAR SET
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY, SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS, BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STD 2135 (TO BE SET BY OTHERS).
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS)
) 155
 COUNTY OF COOK)

THIS IS TO CERTIFY THAT I, BEN B. POCHYLKA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTIONS 3, 4, TOWNSHIP 39 NORTH, RANGE 12 EAST, AND SECTIONS 9, 10, TOWNSHIP 39 NORTH, RANGE 12 EAST, OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN HEREON AND THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO, ILLINOIS THIS 10th DAY OF March, 2013 A.D.

STATE OF ILLINOIS
 BEN B. POCHYLKA
 3139
 PROFESSIONAL LAND SURVEYOR

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3139
 LICENSE EXPIRATION DATE: 11/30/2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

GLOBETROTTERS
 300 S. WACKER DR., CHICAGO, IL 60606
 (312) 922-6400 (312) 922-6558 FAX

CONTRACT 63887
 TOTAL SHEETS 240 SHEET NO. 101

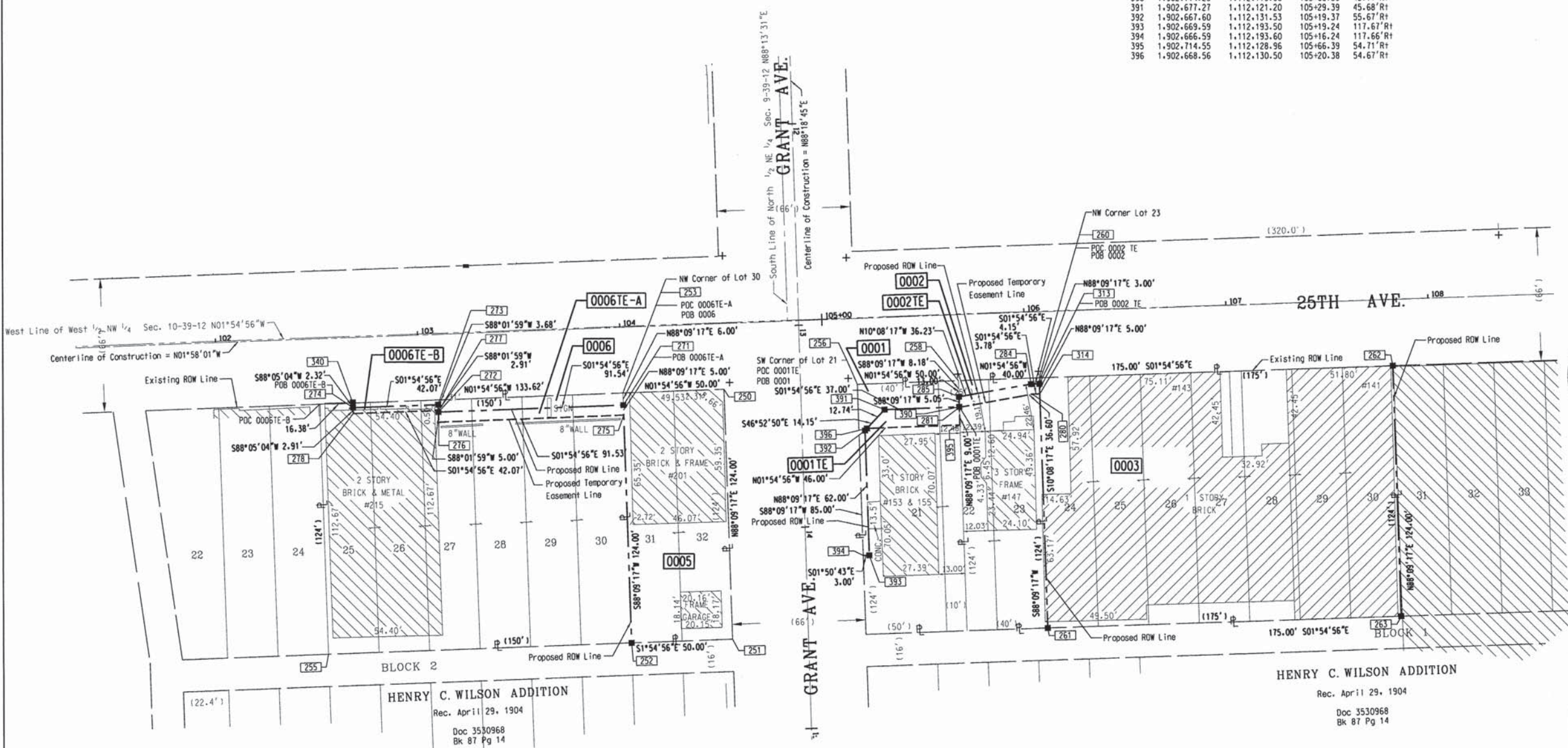
PLAT OF HIGHWAYS
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 25th AVENUE

LIMITS: IL64 TO US20 COUNTY: COOK
 SECTION: 99-00094-00-GS JOB NO.: R-90-028-13
 STATION 102+67 TO STATION 106+16
 SCALE: 1" = 30' SHEET 3 OF 7

BUREAU OF LAND ACQUISITION
 201 WEST CENTER COURT
 SCHAMBURG, ILLINOIS 60196

OWNERSHIP TABLE

| PARCEL NUMBER | TOTAL HOLDINGS ACRES | PART TAKEN ACRES | SQUARE FEET | AREA IN EXISTING R.O.W. ACRES | REMAINDER AREA ACRES | EASEMENT ACRES | AREA SQUARE FEET | EASEMENT PURPOSE | PARCEL INDEX NUMBER |
|----------------------------|----------------------|------------------|-------------|-------------------------------|----------------------|----------------|------------------|------------------|--|
| 0001 0001E | 0.142 | 0.021 | | | 0.121 | 0.009 | 374 | CONSTRUCTION | 15-10-112-026 15-10-112-034 |
| 0002 0002E | 0.114 | 0.005 | 213 | | 0.109 | 0.005 | 202 | CONSTRUCTION | 15-10-112-033 |
| 0003 | 0.498 | 0.498 | | | 0.000 | | | | 15-10-112-010 15-10-112-011 15-10-112-012 15-10-112-013 15-10-112-014 15-10-112-015 |
| 0005 | 0.142 | 0.142 | | | 0.000 | | | | 15-10-113-001 15-10-113-002 |
| 0006 0006E-A 0006E-B | 0.427 | 0.015 | | | 0.412 | 0.011 0.003 | 122 | CONSTRUCTION | 15-10-113-003 15-10-113-004 15-10-113-005 15-10-113-006 |



P:\projects\12024\000\CADD_Drawings\12024-LandAcq_P3.dgn 7/29/2014

OWNERSHIP TABLE

| PARCEL NUMBER | TOTAL HOLDINGS ACRES | PART TAKEN ACRES | SQUARE FEET | AREA IN EXISTING R.O.W. ACRES | REMAINDER AREA ACRES | EASEMENT ACRES | AREA SQUARE FEET | EASEMENT PURPOSE | PARCEL INDEX NUMBER |
|---|----------------------|------------------|-------------|-------------------------------|----------------------|------------------------------|------------------|------------------|---|
| 00014 0014PE 0014TE-A 0014TE-B | 11.798 | 0.112 | | | 11.686 | 0.638 | | CONSTRUCTION | 15-09-201-003 15-09-201-005 15-09-201-019 |
| | | | | | | TE-A = 0.042 TE-B = 0.047 | | | |

LEGEND

SECTION CORNER
QUARTER SECTION CORNER

SECTION LINE
QUARTER SECTION LINE
QUARTER, QUARTER SECTION LINE
PLATTED LOT LINE
PROPERTY (DEED) LINE
APL APPARENT PROPERTY LINE
CENTERLINE
EXISTING RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPOSED EASEMENT
MEASURED DIMENSION
COMPUTED DIMENSION
RECORD DATA
EXISTING BUILDING

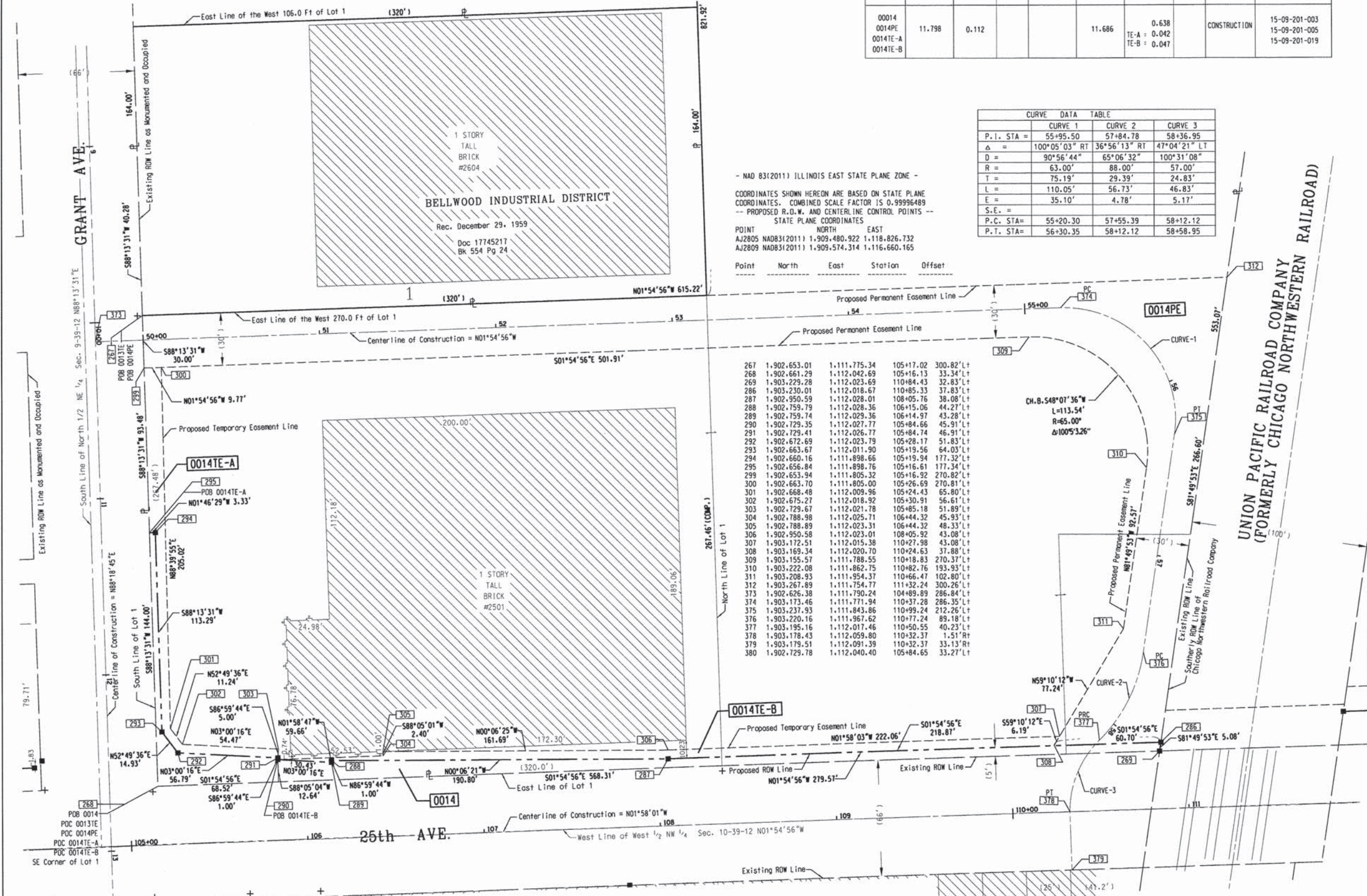
SCALE 1" = 30'

CURVE DATA TABLE

| P.I. STA | CURVE 1 | CURVE 2 | CURVE 3 |
|---------------------|--------------|--------------|----------|
| 55+95.50 | 57+84.78 | 57+84.78 | 58+36.95 |
| Δ = 100°05'03" RT | 36°56'13" RT | 47°04'21" LT | |
| D = 90°56'44" | 65°06'32" | 100°31'08" | |
| R = 63.00' | 88.00' | 57.00' | |
| T = 75.19' | 29.39' | 24.83' | |
| L = 110.05' | 56.73' | 46.83' | |
| E = 35.10' | 4.78' | 5.17' | |
| S.E. = | | | |
| P.C. STA = 55+20.30 | 57+55.39 | 58+12.12 | |
| P.T. STA = 56+30.35 | 58+12.12 | 58+58.95 | |

- NAD 83(2011) ILLINOIS EAST STATE PLANE ZONE -
COORDINATES SHOWN HEREON ARE BASED ON STATE PLANE COORDINATES. COMBINED SCALE FACTOR IS 0.99996489
-- PROPOSED R.O.W. AND CENTERLINE CONTROL POINTS --
STATE PLANE COORDINATES

| Point | North | East | Station | Offset |
|--------------------|---------------|---------------|---------|--------|
| AJ2805 NAD83(2011) | 1.909,480.922 | 1,118,826.732 | | |
| AJ2809 NAD83(2011) | 1.909,574.314 | 1,116,660.165 | | |



BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.

○ IRON PIPE OR ROD FOUND ⊕ "MAG" NAIL SET
+ CUT CROSS FOUND OR SET ● 5/8" REBAR SET

● T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO THE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
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STATE OF ILLINOIS)
COUNTY OF COOK)

THIS IS TO CERTIFY THAT I, BEN B. POCHYLA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTIONS 3, 4, TOWNSHIP 39 NORTH, RANGE 12 EAST, AND SECTIONS 9, 10 TOWNSHIP 39 NORTH, RANGE 12 EAST, OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN HEREON AND THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO ILLINOIS THIS 10th DAY OF March 2013 A.D.

STATE OF ILLINOIS
BEN B. POCHYLA
3139
PROFESSIONAL LAND SURVEYOR

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3139
LICENSE EXPIRATION DATE: 11/30/2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

GLOBETROTTERS
300 S. WACKER DR., CHICAGO, IL 60606
(312) 922-6400 (312) 922-6558 FAX

CONTRACT 63887
TOTAL SHEETS 240 SHEET NO. 102

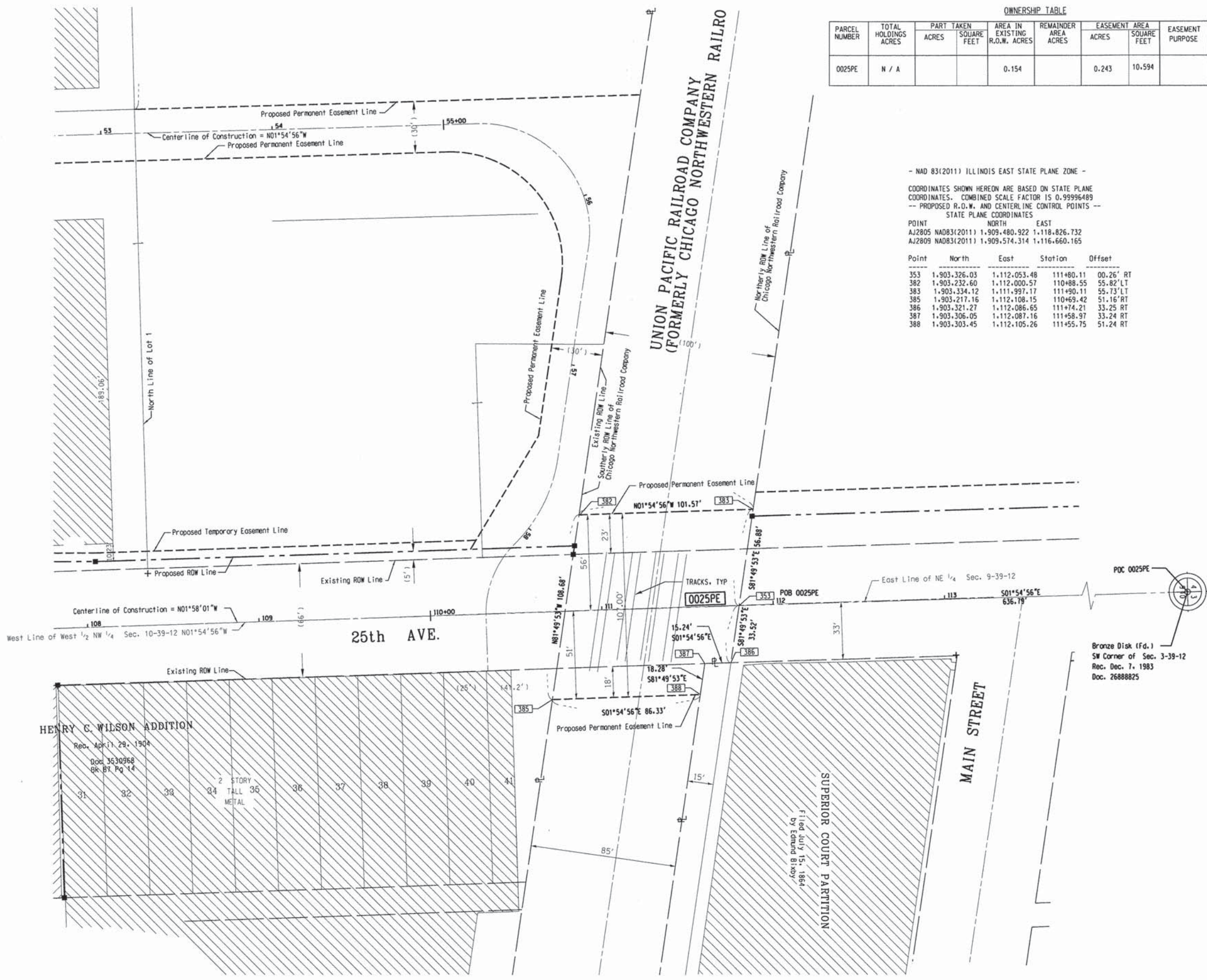
PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
25th AVENUE

LIMITS: IL64 TO US20 COUNTY: COOK
SECTION: 99-00094-00-GS JOB NO.: R-90-028-13
STATION 105+27 TO STATION 111+32
SCALE: 1" = 30' SHEET 4 OF 7

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

HENRY C. WILSON ADDITION
Rec. April 29, 1904
Doc 3530968
Bk 87 Pg 14

P:\projects\12024\000\CADD\Drawings\12024-LandAcq P4.dgn 7/29/2014



OWNERSHIP TABLE

| PARCEL NUMBER | TOTAL HOLDINGS ACRES | PART TAKEN | | AREA IN EXISTING R.O.W. ACRES | REMAINDER AREA ACRES | EASEMENT AREA | | EASEMENT PURPOSE | PARCEL INDEX NUMBER |
|---------------|----------------------|------------|-------------|-------------------------------|----------------------|---------------|-------------|------------------|--------------------------------|
| | | ACRES | SQUARE FEET | | | ACRES | SQUARE FEET | | |
| 0025PE | N / A | | | 0.154 | | 0.243 | 10.594 | | 15-09-500-001 15-10-500-008 |

LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORD DATA
- EXISTING BUILDING

SCALE 1" = 30'

- NAD 83(2011) ILLINOIS EAST STATE PLANE ZONE -

COORDINATES SHOWN HEREON ARE BASED ON STATE PLANE COORDINATES. COMBINED SCALE FACTOR IS 0.99996489

-- PROPOSED R.O.W. AND CENTERLINE CONTROL POINTS --

STATE PLANE COORDINATES

| POINT | NORTH | EAST | STATION | OFFSET |
|--------------------|---------------|---------------|---------|--------|
| AJ2805 NAD83(2011) | 1,909,480.922 | 1,118,826.732 | | |
| AJ2809 NAD83(2011) | 1,909,574.314 | 1,116,660.165 | | |

| Point | North | East | Station | Offset |
|-------|--------------|--------------|-----------|-----------|
| 353 | 1,903,326.03 | 1,112,053.48 | 111+80.11 | 00.26' RT |
| 382 | 1,903,232.60 | 1,112,000.57 | 110+88.55 | 55.82' LT |
| 383 | 1,903,334.12 | 1,111,997.17 | 111+90.11 | 55.73' LT |
| 385 | 1,903,217.16 | 1,112,108.15 | 110+69.42 | 51.16' RT |
| 386 | 1,903,321.27 | 1,112,086.65 | 111+74.21 | 33.25 RT |
| 387 | 1,903,306.05 | 1,112,087.16 | 111+58.97 | 33.24 RT |
| 388 | 1,903,303.45 | 1,112,105.26 | 111+55.75 | 51.24 RT |

- BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.
- IRON PIPE OR ROD FOUND ⊕ "MAG" NAIL SET
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STATE OF ILLINOIS)
)SS
COUNTY OF COOK)

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DATED AT CHICAGO ILLINOIS THIS 10th DAY OF March 2013 A.D.

STATE OF ILLINOIS
BEN B. POCHYLA
3139
PROFESSIONAL LAND SURVEYOR

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3139
LICENSE EXPIRATION DATE: 11/30/2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

GLOBETROTTERS
300 S. WACKER DR., CHICAGO, IL 60606
(312) 922-6400 (312) 922-6558 FAX

CONTRACT 63887

TOTAL SHEETS 240 SHEET NO. 103

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
25th AVENUE

LIMITS: IL64 TO US20 COUNTY: COOK
SECTION: 99-00094-00-GS JOB NO.: R-90-028-13
STATION 110+84 TO STATION 111+75
SCALE: 1" = 30' SHEET 5 OF 7

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

Part of NE 1/4 Section 9, Township 39 North, Range 12 East of the Third Principal Meridian, Cook Co.
Part of NW 1/4 Section 10, Township 39 North, Range 12 East of the Third Principal Meridian, Cook Co.

P:\projects\12824\000\CADD_Drawings\12824-LandAcq_PS.dgn
3/21/2014

Part of SW 1/4 Section 3, Township 39 North, Range 12 East of the Third Principal Meridian, Cook Co.
 Part of SE 1/4 Section 4, Township 39 North, Range 12 East of the Third Principal Meridian, Cook Co.
 Part of NE 1/4 Section 9, Township 39 North, Range 12 East of the Third Principal Meridian, Cook Co.
 Part of NW 1/4 Section 10, Township 39 North, Range 12 East of the Third Principal Meridian, Cook Co.

OWNERSHIP TABLE

| PARCEL NUMBER | TOTAL HOLDINGS ACRES | PART TAKEN | | AREA IN EXISTING R.O.W. ACRES | REMAINDER AREA ACRES | EASEMENT ACRES | AREA SQUARE FEET | EASEMENT PURPOSE | PARCEL INDEX NUMBER |
|----------------|----------------------|------------|-------------|-------------------------------|----------------------|----------------|------------------|------------------|---|
| | | ACRES | SQUARE FEET | | | | | | |
| 0016 0016PE | 20.881 | 0.832 | | 0.538 | 20.049 | 0.226 | | | 15-04-412-008 15-09-201-001 |
| 0020 | 1.107 | 1.107 | | | 0.000 | | | | 15-10-100-022 15-10-100-023 15-10-100-024 15-10-100-025 15-10-100-026 15-10-100-027 15-10-100-028 15-10-100-029 15-10-100-030 15-10-100-031 15-10-100-032 |
| 0021 | 0.175 | 0.175 | | | 0.000 | | | | 15-10-100-075 |
| 0022 | 0.610 | 0.610 | | | 0.000 | | | | 15-10-100-014 15-10-100-015 15-10-100-016 15-10-100-017 15-10-100-018 15-10-100-019 |

LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORD DATA
- EXISTING BUILDING

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.

STATE OF ILLINOIS)
 COUNTY OF COOK)

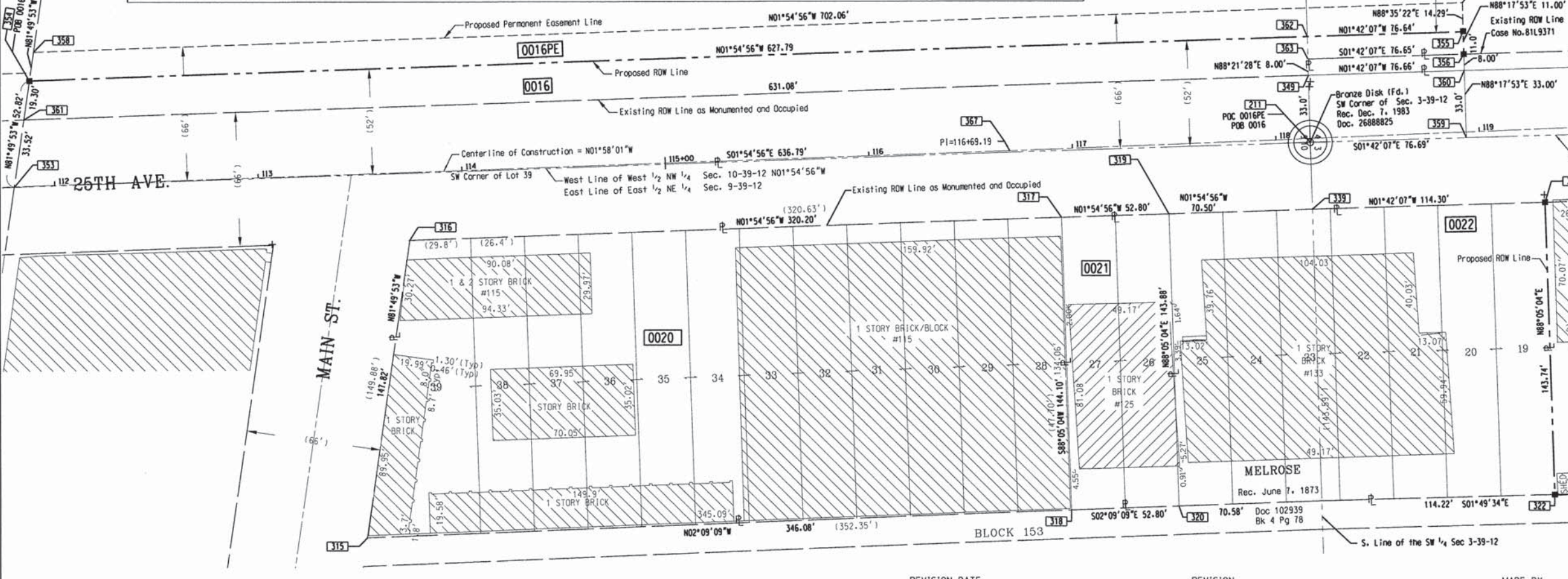
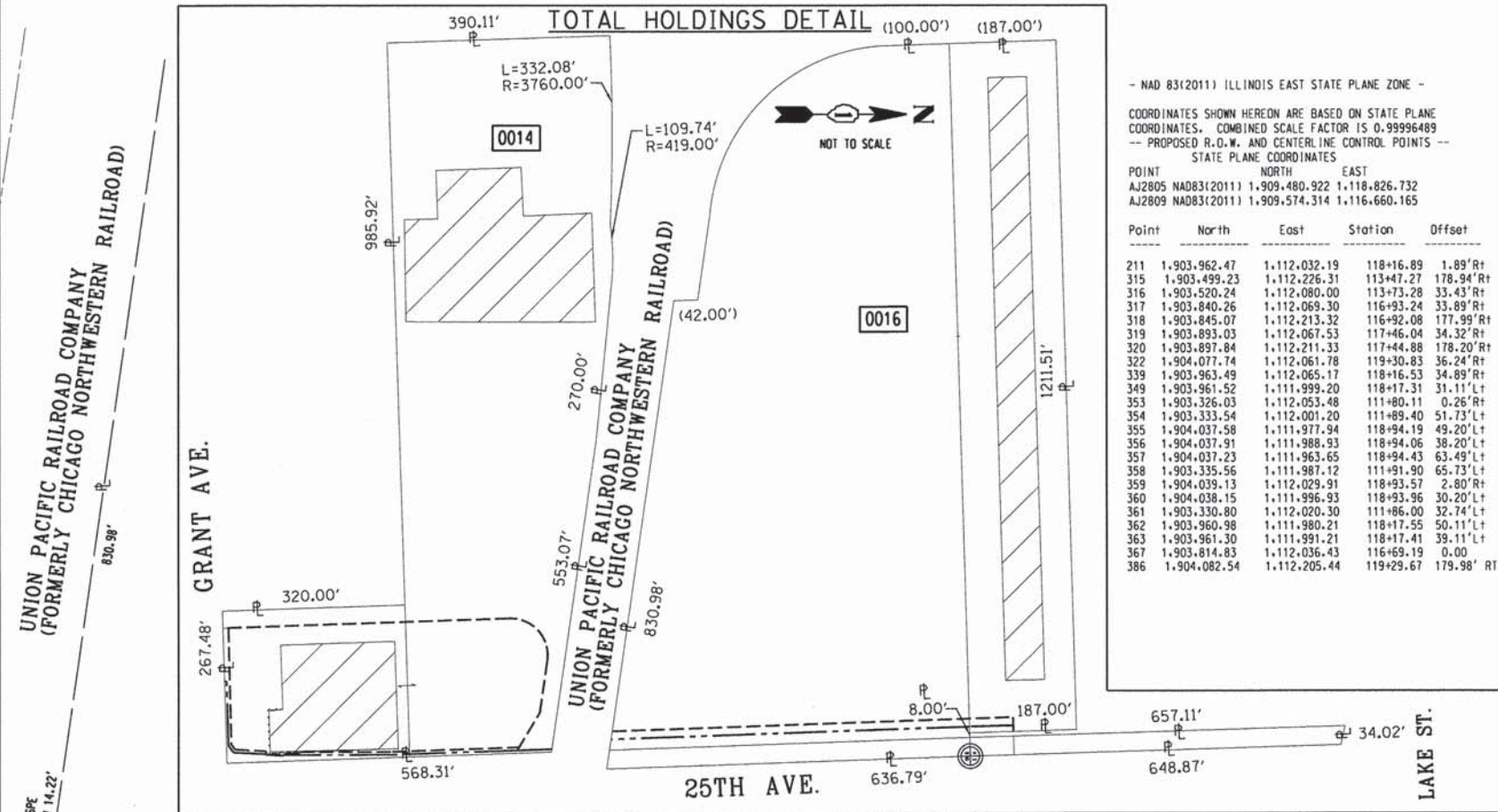
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DATED AT CHICAGO ILLINOIS THIS 10th DAY of March 2013 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3139
 LICENSE EXPIRATION DATE: 11/30/2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

GLOBETROTTERS
 300 S. WACKER DR., CHICAGO, IL 60606
 (312) 922-6400 (312) 922-6558 FAX



CONTRACT 63887

TOTAL SHEETS 240 SHEET NO. 104

PLAT OF HIGHWAYS
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 25th AVENUE

LIMITS: IL64 TO US20 COUNTY: COOK
 SECTION: 99-00094-00-GS JOB NO.: R-90-028-13
 STATION 111+80 TO STATION 119+31
 SCALE: 1" = 30' SHEET 6 OF 7

BUREAU OF LAND ACQUISITION
 201 WEST CENTER COURT
 SCHAUMBURG, ILLINOIS 60196

- NAD 83(2011) ILLINOIS EAST STATE PLANE ZONE -

COORDINATES SHOWN HEREON ARE BASED ON STATE PLANE COORDINATES. COMBINED SCALE FACTOR IS 0.99996489 -- PROPOSED R.O.W. AND CENTERLINE CONTROL POINTS -- STATE PLANE COORDINATES

| Point | NORTH | EAST | Station | Offset |
|-------|--------------|--------------|-----------|-----------|
| 323 | 1,904,183.29 | 1,112,058.64 | 120+36.42 | 37.48' Rt |
| 325 | 1,904,278.53 | 1,112,055.81 | 121+32.20 | 37.50' Rt |
| 333 | 1,904,108.65 | 1,112,065.86 | 119+61.54 | 41.60' Rt |
| 334 | 1,904,183.46 | 1,112,063.64 | 120+36.38 | 42.48' Rt |
| 335 | 1,904,278.68 | 1,112,060.81 | 121+32.21 | 42.50' Rt |
| 364 | 1,904,108.50 | 1,112,060.87 | 119+61.60 | 36.60' Rt |
| 368 | 1,904,194.53 | 1,112,020.66 | 120+49.23 | 0.00 |
| 369 | 1,904,545.19 | 1,112,010.80 | 124+00.02 | 0.00 |

LEGEND

SECTION CORNER
QUARTER SECTION CORNER

SECTION LINE
QUARTER SECTION LINE
QUARTER, QUARTER SECTION LINE
PLATTED LOT LINE
PROPERTY (DEED) LINE
APL APPARENT PROPERTY LINE
CENTERLINE
EXISTING RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPOSED EASEMENT
MEASURED DIMENSION
COMPUTED DIMENSION
RECORD DATA
EXISTING BUILDING

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011) ADJUSTMENT, EAST ZONE.

IRON PIPE OR ROD FOUND
CUT CROSS FOUND OR SET
MAG NAIL SET
5/8" REBAR SET

T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
M STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
PERMANENT SURVEY MARKER. I.D.O.T. STD 2135 (TO BE SET BY OTHERS).
RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS)
COUNTY OF COOK)

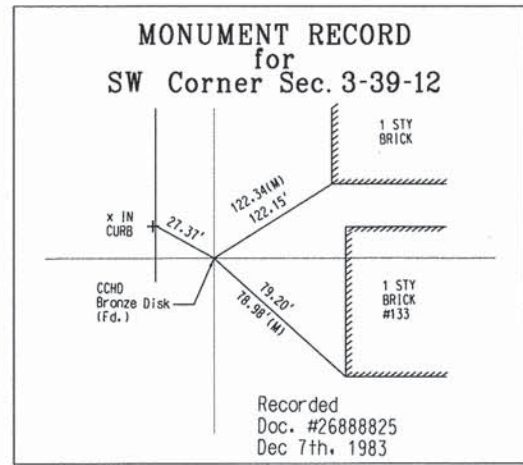
THIS IS TO CERTIFY THAT I, BEN B. POCHYLA, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTIONS 3, 4, TOWNSHIP 39 NORTH, RANGE 12 EAST, AND SECTIONS 9, 10, TOWNSHIP 39 NORTH, RANGE 12 EAST, OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN HEREON AND THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT CHICAGO ILLINOIS THIS 10th DAY OF March 2013 A.D.

STATE OF ILLINOIS
BEN B. POCHYLA
3139
PROFESSIONAL LAND SURVEYOR

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3139
LICENSE EXPIRATION DATE: 11/30/2014
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.
GLOBETROTTERS
300 S. WACKER DR., CHICAGO, IL 60606
(312) 922-6400 (312) 922-6558 FAX

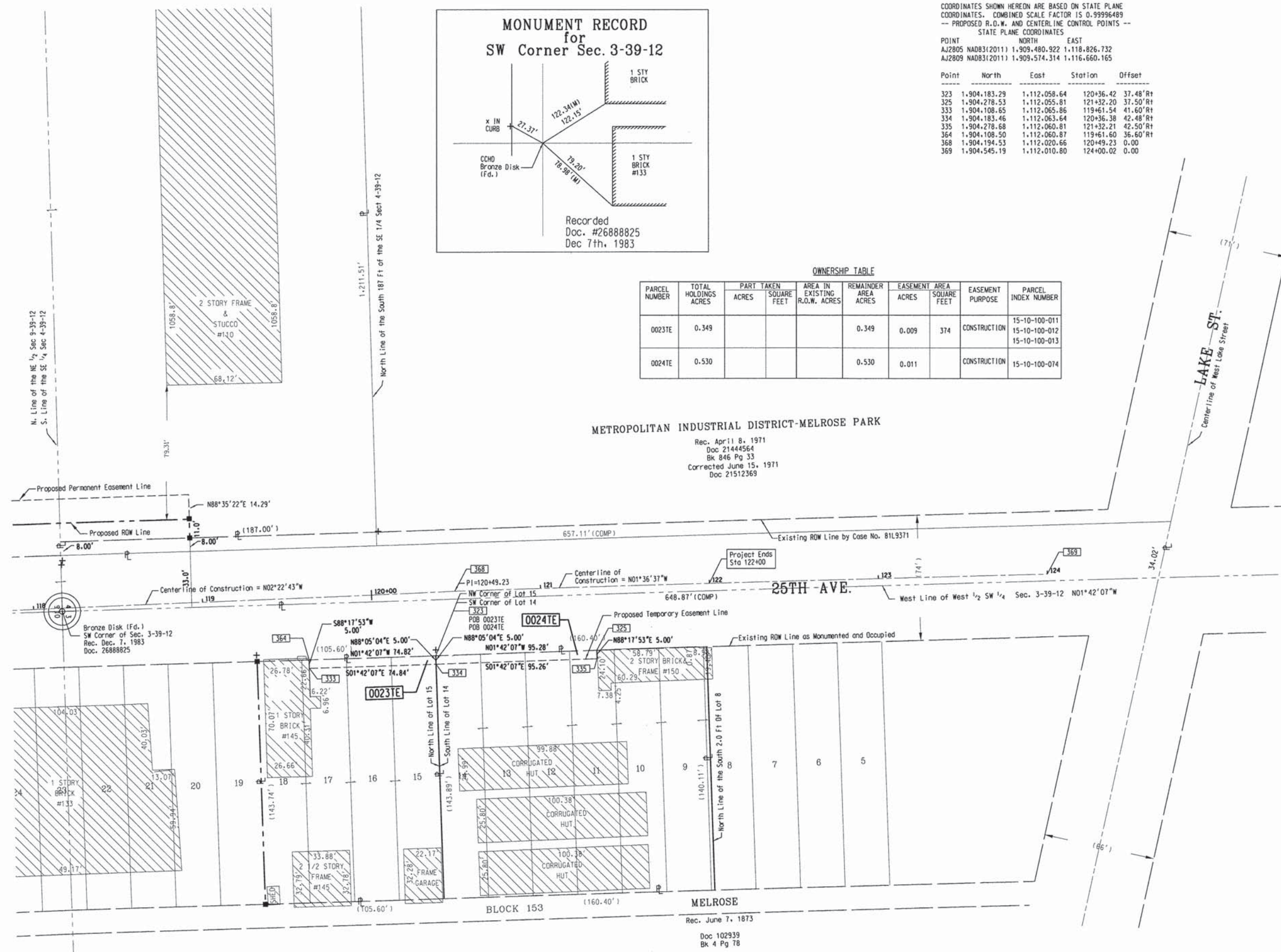
SCALE 1" = 30'



OWNERSHIP TABLE

| PARCEL NUMBER | TOTAL HOLDINGS ACRES | PART TAKEN ACRES | AREA IN EXISTING R.O.W. ACRES | REMAINDER AREA ACRES | EASEMENT ACRES | AREA SQUARE FEET | EASEMENT PURPOSE | PARCEL INDEX NUMBER |
|---------------|----------------------|------------------|-------------------------------|----------------------|----------------|------------------|------------------|---|
| 0023TE | 0.349 | | | 0.349 | 0.009 | 374 | CONSTRUCTION | 15-10-100-011 15-10-100-012 15-10-100-013 |
| 0024TE | 0.530 | | | 0.530 | 0.011 | | CONSTRUCTION | 15-10-100-074 |

METROPOLITAN INDUSTRIAL DISTRICT-MELROSE PARK
Rec. April 8, 1971
Doc. 21444564
Bk. 846 Pg. 33
Corrected June 15, 1971
Doc. 21512369



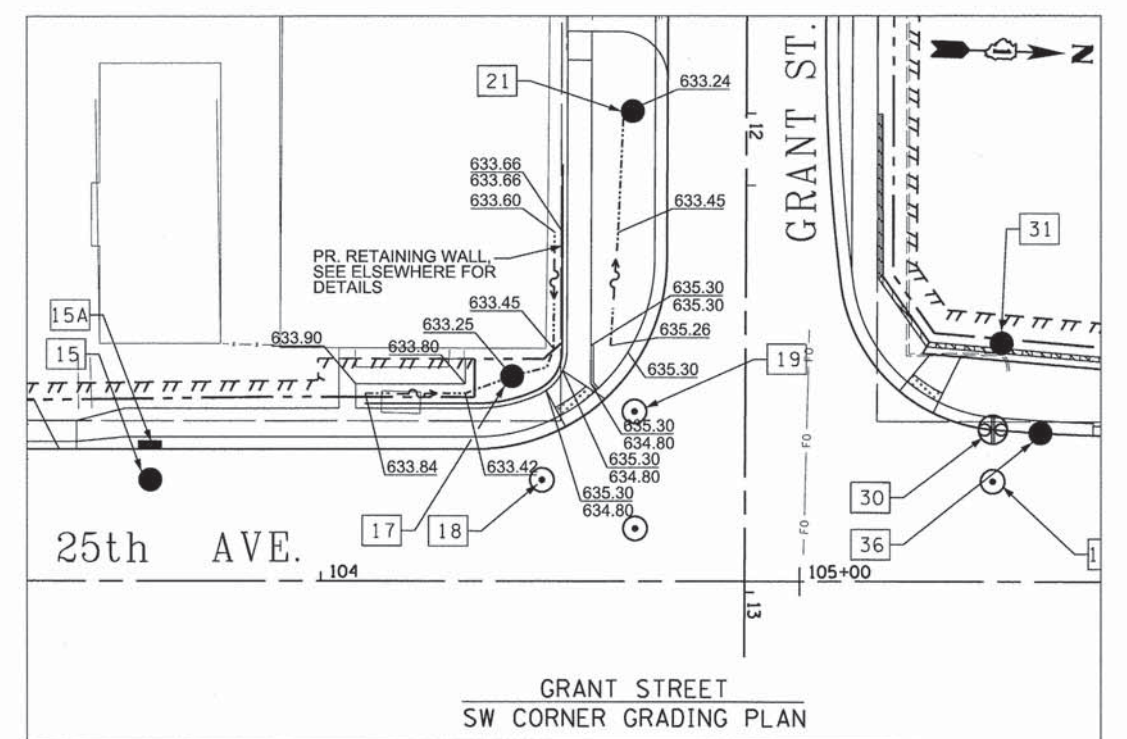
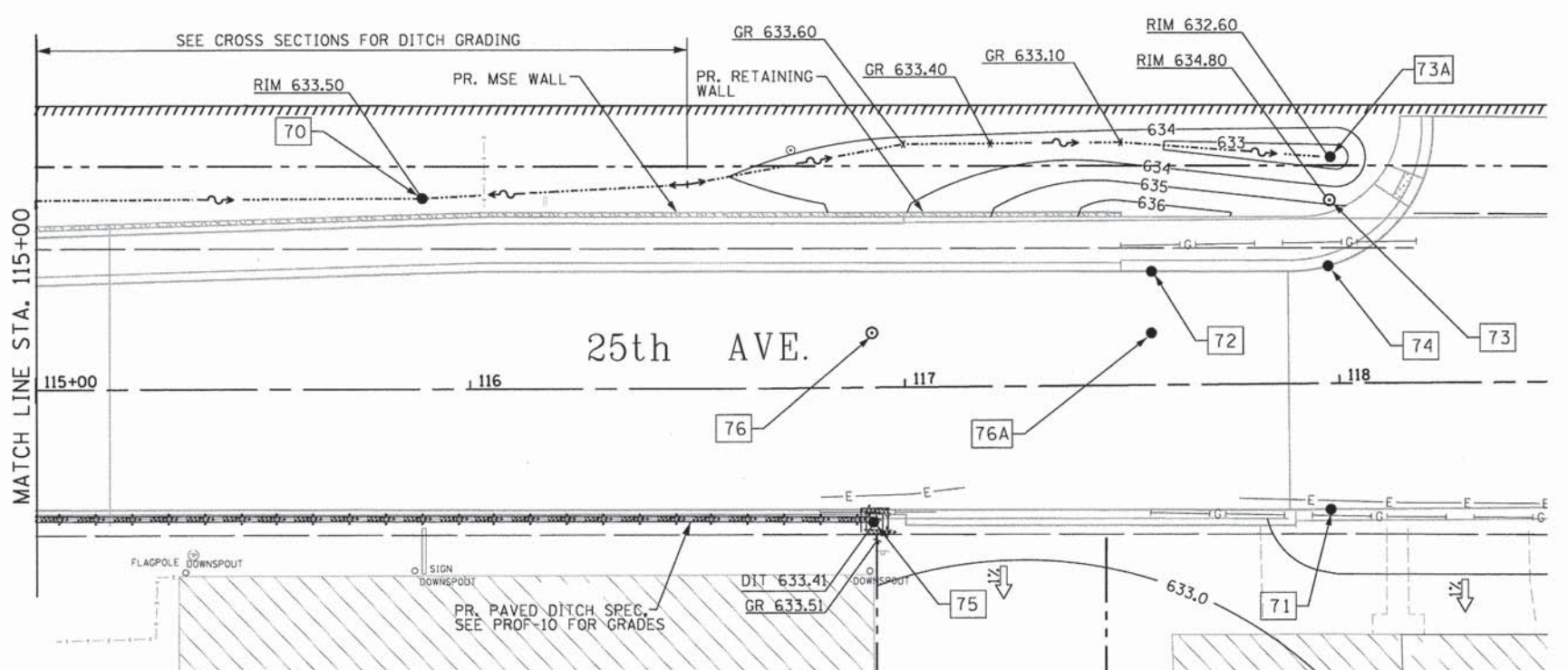
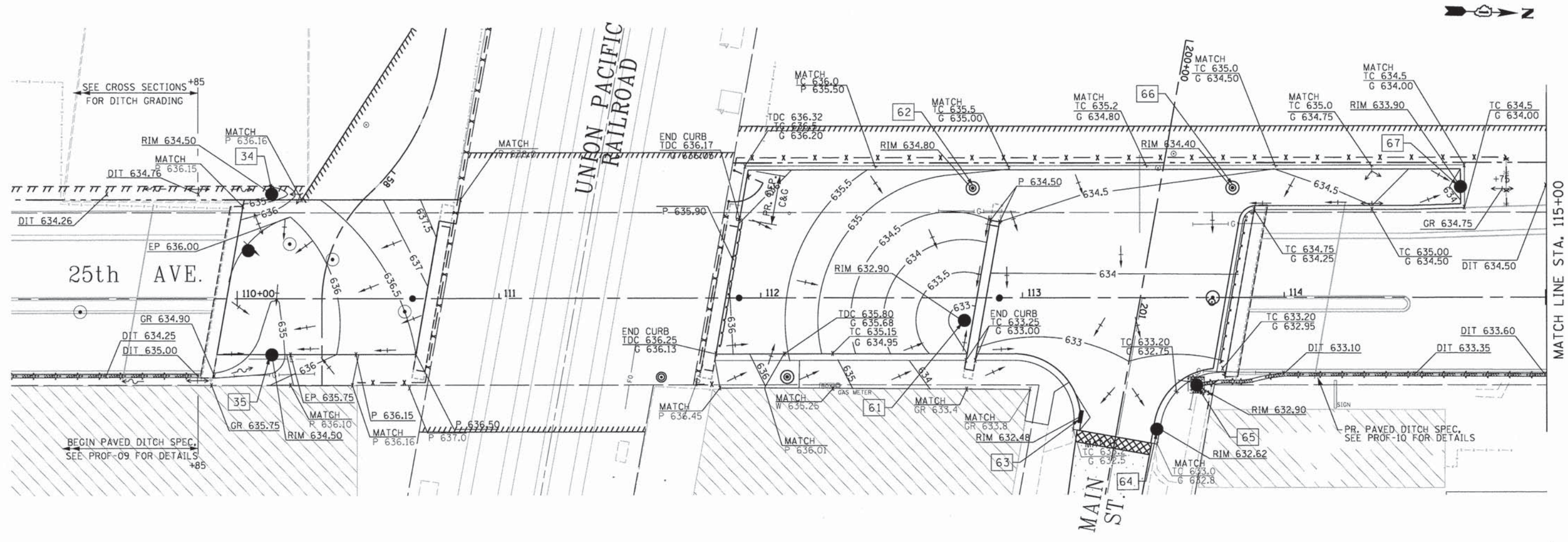
CONTRACT 63887
TOTAL SHEETS 240 SHEET NO. 105

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
25th AVENUE

LIMITS: IL64 TO US20 COUNTY: COOK
SECTION: 99-00094-00-GS JOB NO.: R-90-028-13
STATION 119+31 TO STATION 122+00
SCALE: 1" = 30' SHEET 7 OF 7

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

P:\projects\12824\800\CADD-Drawings\12824-LandAcq P7.dgn
3/21/2014



| | | |
|----------------------------|------------------|-----------|
| USER NAME = mohammed.ali | DESIGNED - MA | REVISED - |
| PLOT SCALE = 28.0000' / 1" | DRAWN - MA | REVISED - |
| PLOT DATE = 7/30/2014 | CHECKED - MA | REVISED - |
| | DATE - 3-24-2014 | REVISED - |

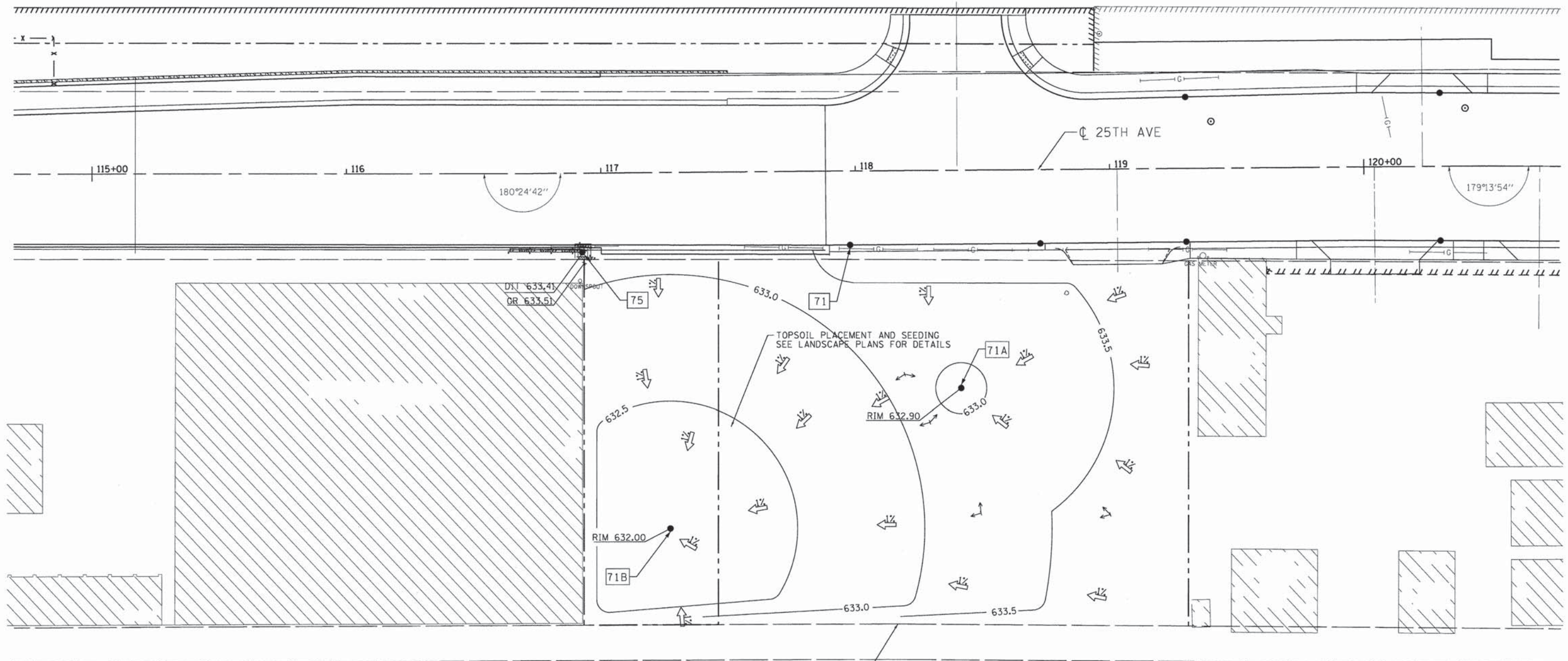
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GRADING PLAN
25TH AVENUE GRADE SEPARATION**

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 109+30.00 TO STA. 118+50.00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|--------------------|
| 2714 | 99-00094-00-GS | COOK | 240 | 106 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |

GRD-1



MATCH EXISTING
AT ROW LINE



| | | |
|------------------------------|------------------|-----------|
| USER NAME = mohammed.ali | DESIGNED - MA | REVISED - |
| PLOT SCALE = 20.0000' / 1" = | DRAWN - MA | REVISED - |
| PLOT DATE = 7/30/2014 | CHECKED - MA | REVISED - |
| | DATE - 3-24-2014 | REVISED - |

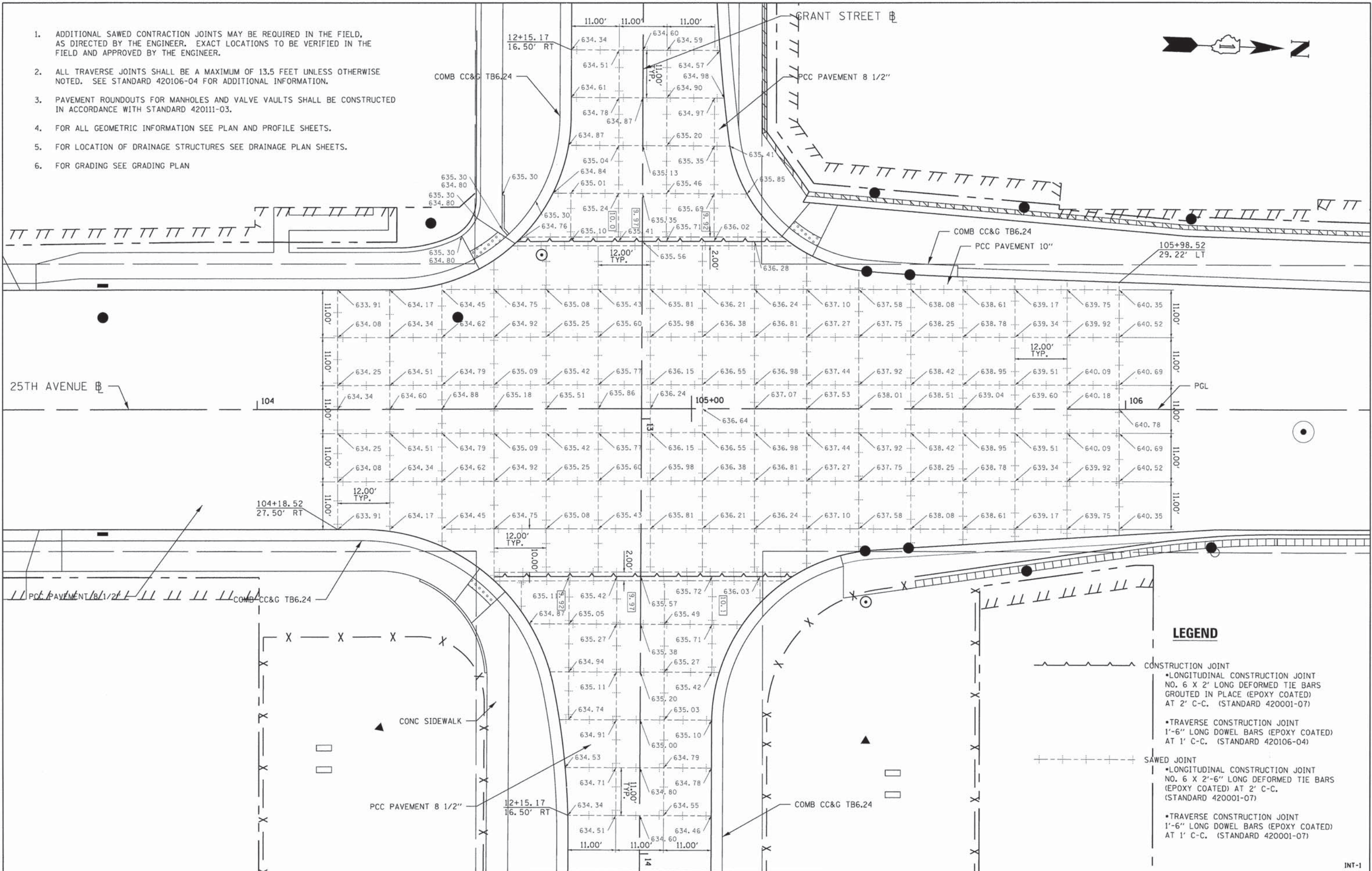
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | |
|-------------------------------------|--|
| GRADING PLAN | |
| 25TH AVENUE GRADE SEPARATION | |
| SCALE: 1"=20' | SHEET 2 OF 2 SHEETS STA. 115+00.00 TO STA. 120+50.00 |

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 107 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

GRD-2

1. ADDITIONAL SAWED CONTRACTION JOINTS MAY BE REQUIRED IN THE FIELD, AS DIRECTED BY THE ENGINEER. EXACT LOCATIONS TO BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
2. ALL TRAVERSE JOINTS SHALL BE A MAXIMUM OF 13.5 FEET UNLESS OTHERWISE NOTED. SEE STANDARD 420106-04 FOR ADDITIONAL INFORMATION.
3. PAVEMENT ROUNDOUTS FOR MANHOLES AND VALVE VAULTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD 420111-03.
4. FOR ALL GEOMETRIC INFORMATION SEE PLAN AND PROFILE SHEETS.
5. FOR LOCATION OF DRAINAGE STRUCTURES SEE DRAINAGE PLAN SHEETS.
6. FOR GRADING SEE GRADING PLAN



LEGEND

- CONSTRUCTION JOINT**
- LONGITUDINAL CONSTRUCTION JOINT NO. 6 X 2' LONG DEFORMED TIE BARS GROUTED IN PLACE (EPOXY COATED) AT 2' C-C. (STANDARD 420001-07)
 - TRAVERSE CONSTRUCTION JOINT 1'-6" LONG DOWEL BARS (EPOXY COATED) AT 1' C-C. (STANDARD 420106-04)
- SAWED JOINT**
- LONGITUDINAL CONSTRUCTION JOINT NO. 6 X 2'-6" LONG DEFORMED TIE BARS (EPOXY COATED) AT 2' C-C. (STANDARD 420001-07)
 - TRAVERSE CONSTRUCTION JOINT 1'-6" LONG DOWEL BARS (EPOXY COATED) AT 1' C-C. (STANDARD 420001-07)



USER NAME = stephenschuh
 PLOT SCALE = 10.0000' / 1" = 100
 PLOT DATE = 3/21/2014

DESIGNED - MT
 DRAWN - MT
 CHECKED - RH
 DATE - 3-24-2014

REVISED -
 REVISED -
 REVISED -
 REVISED -

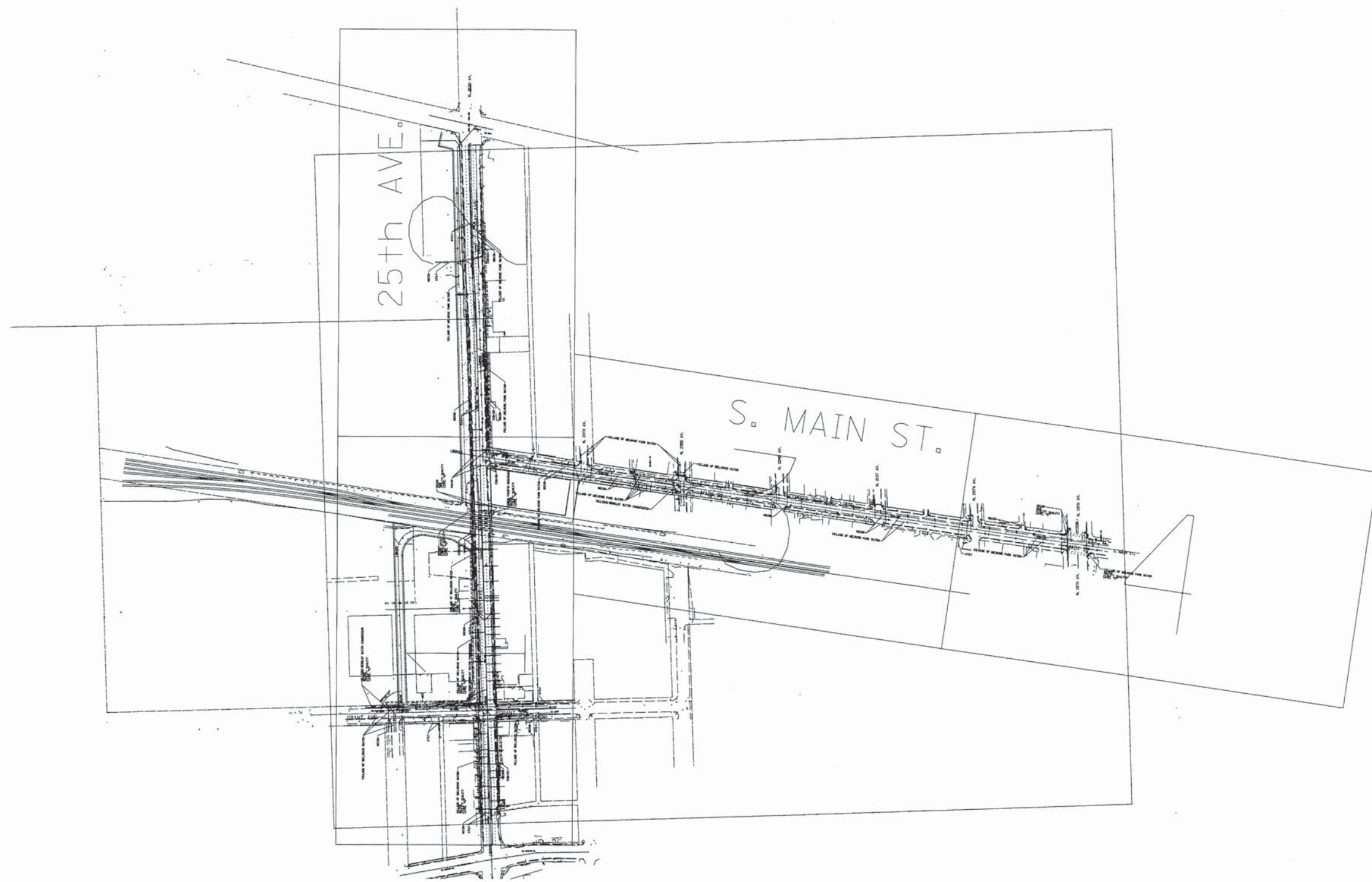
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

INTERSECTION DETAIL / JOINTING PLAN
25TH AVENUE GRADE SEPARATION
 SCALE: 1"=10'
 SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------------|--------|--------------|-----------|
| 2714 | 99-0094-00-G5 | COOK | 240 | 108 |
| CONTRACT NO. 63887 | | | | |

ILLINOIS FED. AID PROJECT

P:\projects\12024\000\CA00_Sheets\0116899-sh1-intersection-detail.dgn



| | |
|-------------------|-------------------------|
| — A — A — | AERIAL |
| — — — — | UNKNOWN |
| — CTV — CTV — CTV | CABLE TV |
| — T — T — | TELEPHONE |
| — G — — — | GAS |
| — E — — — | ELECTRIC |
| — W — — — W — | TRAFFIC SIGNAL/LIGHTING |
| — W — — — W — | WATER |
| — FO — — — FO — | FIBER OPTIC |
| ⊕ | TBE TEST HOLE |

| UTILITY OWNERS | |
|---|--|
| AT&T = FIBER OPTIC | |
| AT&T = TELEPHONE | |
| COMCAST = CATV | |
| COMED = ELECTRIC | |
| MCI = FIBER OPTIC | |
| NICOR = GAS | |
| SPRINT = FIBER OPTIC | |
| VILLAGE OF BELLWOOD WATER = WATER | |
| VILLAGE OF MELROSE PARK WATER = WATER | |
| UNION PACIFIC RR = WATER | |
| HILLSIDE-BERKLEY WATER COMMISSION = WATER | |

Underground utilities shown on these plans as depicted in the legend have been investigated by Cardno TBE in accordance with SUE Industry Standards. All other information shown has been provided to Cardno TBE by others. Cardno TBE's SUE field investigation was performed 7/25/13 through 8/14/13. Changes to utilities after 8/14/13 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.



**Cardno
TBE**

Dynasty Group
Engineers & Surveyors

TBE Job No. IL09510546
SUE Plan Page: Cover

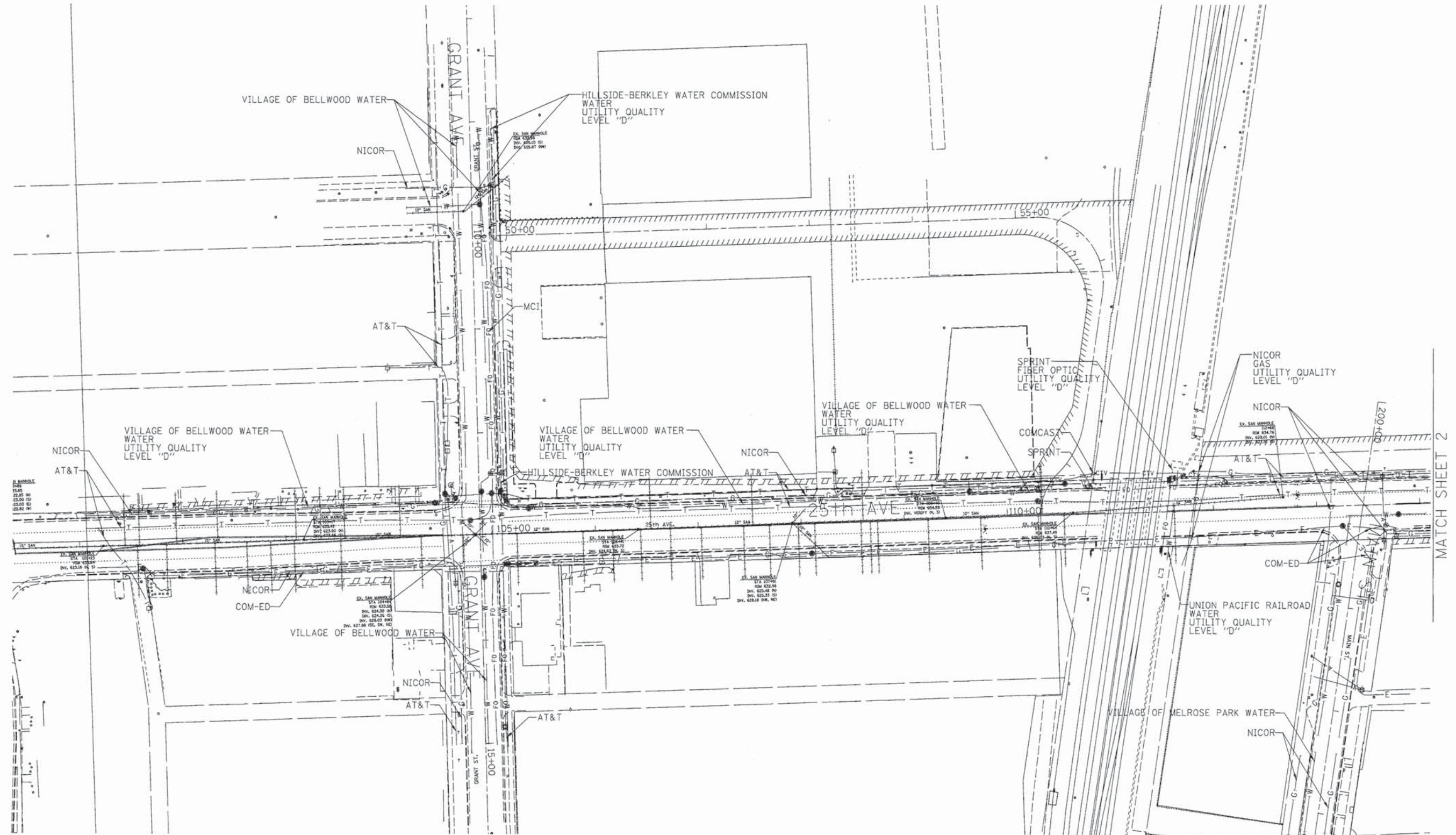
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|---|
| Utility Quality Level "A" : Visually Verified Test Hole |
| Utility Quality Level "B" : Designating/non Visually Verified Test Hole |
| Utility Quality Level "C" : Research with Survey |
| Utility Quality Level "D" : Records Research |

| | | | |
|----------|---------|-------------------|-----------------|
| DESIGNED | ER | REVISED: 11/13/13 | ADDED ALIGNMENT |
| DRAWN | SRK | REVISED | |
| CHECKED | KFS | REVISED | |
| DATE | 8/15/13 | REVISED | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

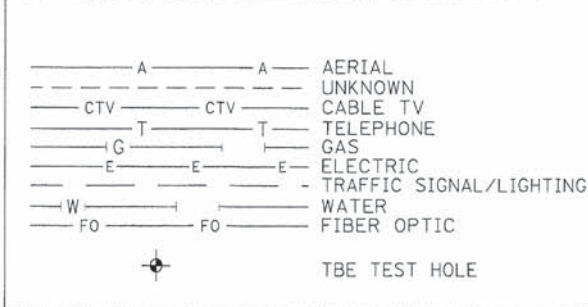
**25th Avenue at UPRR Grade Separation
Melrose Park, IL**

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------------|-----------|
| 2714 | 99-00094-00-GS | Cook | 240 | 109 |
| FED. ROAD DIST. NO. ILLINOIS IDOT Project No. | | | Contract No. 63887 | |



MATCH SHEET 2

MATCH SHEET 3

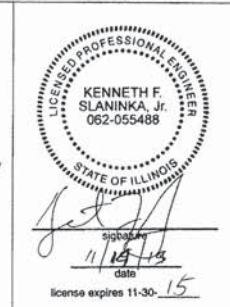
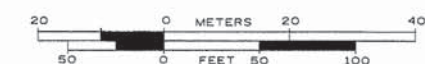


UTILITY OWNERS

AT&T = FIBER OPTIC
 AT&T = TELEPHONE
 COMCAST = CATV
 COMED = ELECTRIC
 MCI = FIBER OPTIC
 NICOR = GAS
 SPRINT = FIBER OPTIC
 VILLAGE OF BELLWOOD WATER = WATER
 VILLAGE OF MELROSE PARK WATER = WATER
 UNION PACIFIC RR = WATER
 HILLSIDE-BERKLEY WATER COMMISSION = WATER

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



TBE Job No. IL09510546
 SUE Plan Page: 1 of 4

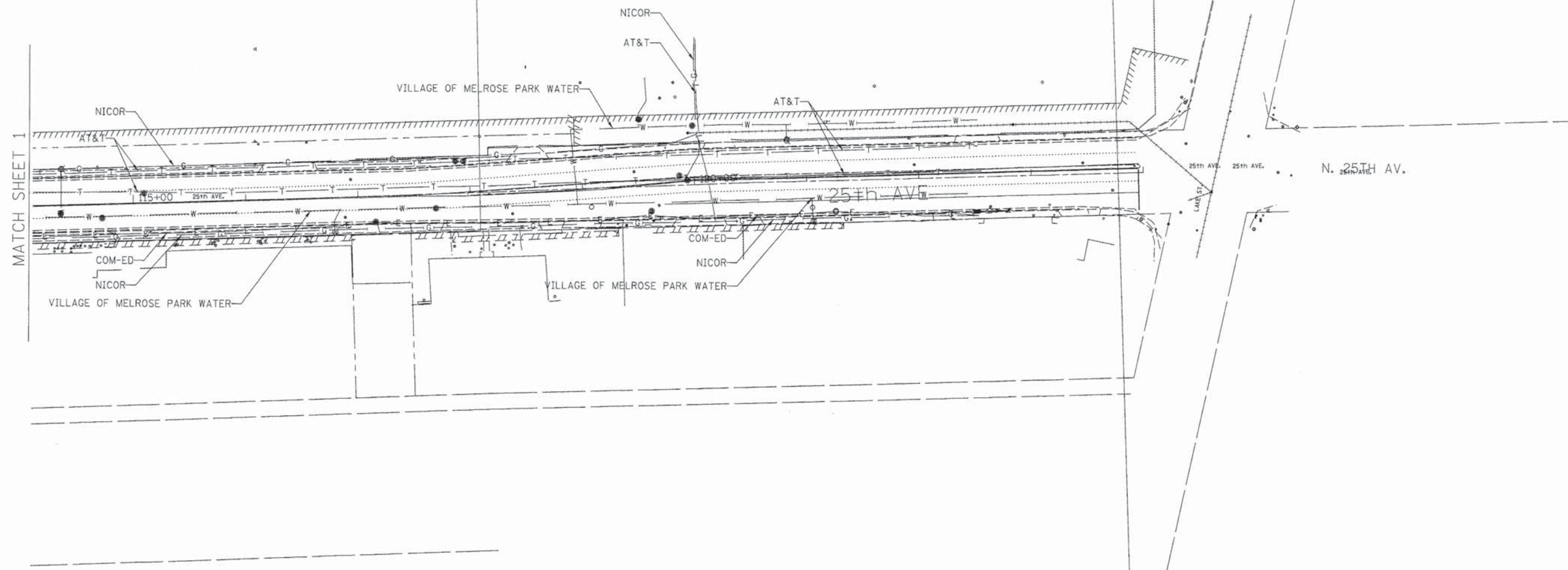
| |
|---|
| Utility Quality Level "A" : Visually Verified Test Hole |
| Utility Quality Level "B" : Designating/non Visually Verified Test Hole |
| Utility Quality Level "C" : Research with Survey |
| Utility Quality Level "D" : Records Research |

| | |
|--------------|-----------------------------------|
| DESIGNED ER | REVISED: 11/13/13 ADDED ALIGNMENT |
| DRAWN SRK | REVISED |
| CHECKED KFS | REVISED |
| DATE 8/14/13 | REVISED |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**25th Avenue at UPRR Grade Separation
 Melrose Park, IL**

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | Cook | 240 | 110 |
| Contract No. 63887 | | | | |
| FED. ROAD DIST. NO. - [ILLINOIS] IDOT Project No. | | | | |

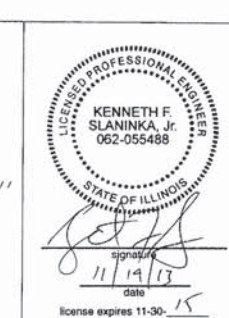
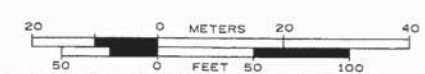


| | |
|---------------|-------------------------|
| — A — A — | AERIAL |
| - - - - - | UNKNOWN |
| - CTV - CTV - | CABLE TV |
| - T - T - | TELEPHONE |
| - G - G - | GAS |
| - E - E - | ELECTRIC |
| - - - - - | TRAFFIC SIGNAL/LIGHTING |
| - W - W - | WATER |
| - FO - FO - | FIBER OPTIC |
| ⊙ | TBE TEST HOLE |

| UTILITY OWNERS | |
|---|--|
| AT&T = FIBER OPTIC | |
| AT&T = TELEPHONE | |
| COMCAST = CATV | |
| COMED = ELECTRIC | |
| MCI = FIBER OPTIC | |
| NICOR = GAS | |
| SPRINT = FIBER OPTIC | |
| VILLAGE OF BELLWOOD WATER = WATER | |
| VILLAGE OF MELROSE PARK WATER = WATER | |
| UNION PACIFIC RR = WATER | |
| HILLSIDE-BERKLEY WATER COMMISSION = WATER | |

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



Cardno TBE

Dynasty Group
Engineers & Surveyors

TBE Job No. IL09510546
SUE Plan Page: 2 of 4

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

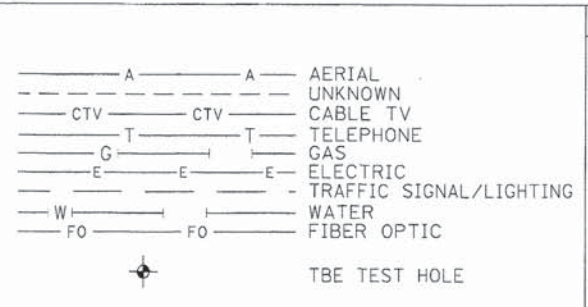
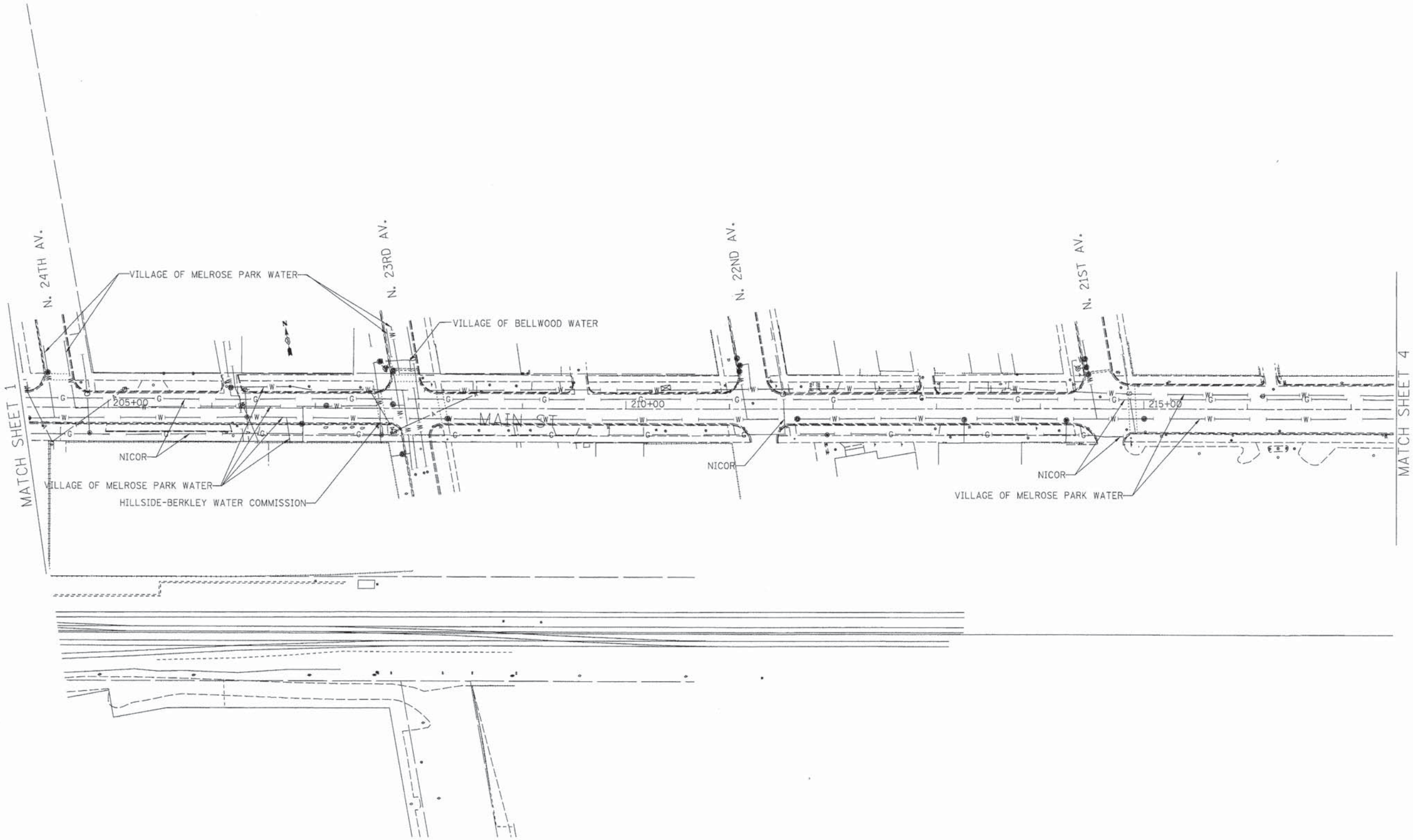
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|--------------|-----------------------------------|
| DESIGNED ER | REVISED: 11/13/13 ADDED ALIGNMENT |
| DRAWN SRK | REVISED |
| CHECKED KFS | REVISED |
| DATE 8/14/13 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

25th Avenue at UPRR Grade Separation
Melrose Park, IL

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | Cook | 240 | 111 |

Contract No. 63887
FED. ROAD DIST. NO. - ILLINOIS IDOT Project No.



| UTILITY OWNERS | |
|---|--|
| AT&T = FIBER OPTIC | |
| AT&T = TELEPHONE | |
| COMCAST = CATV | |
| COMED = ELECTRIC | |
| MCI = FIBER OPTIC | |
| NICOR = GAS | |
| SPRINT = FIBER OPTIC | |
| VILLAGE OF BELLWOOD WATER = WATER | |
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| HILLSIDE-BERKLEY WATER COMMISSION = WATER | |

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



TBE Job No. IL09510546
SUE Plan Page: 3 of 4

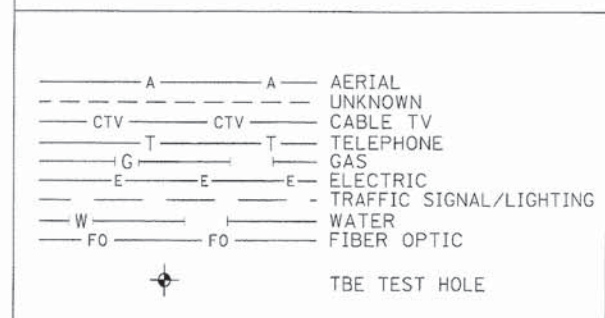
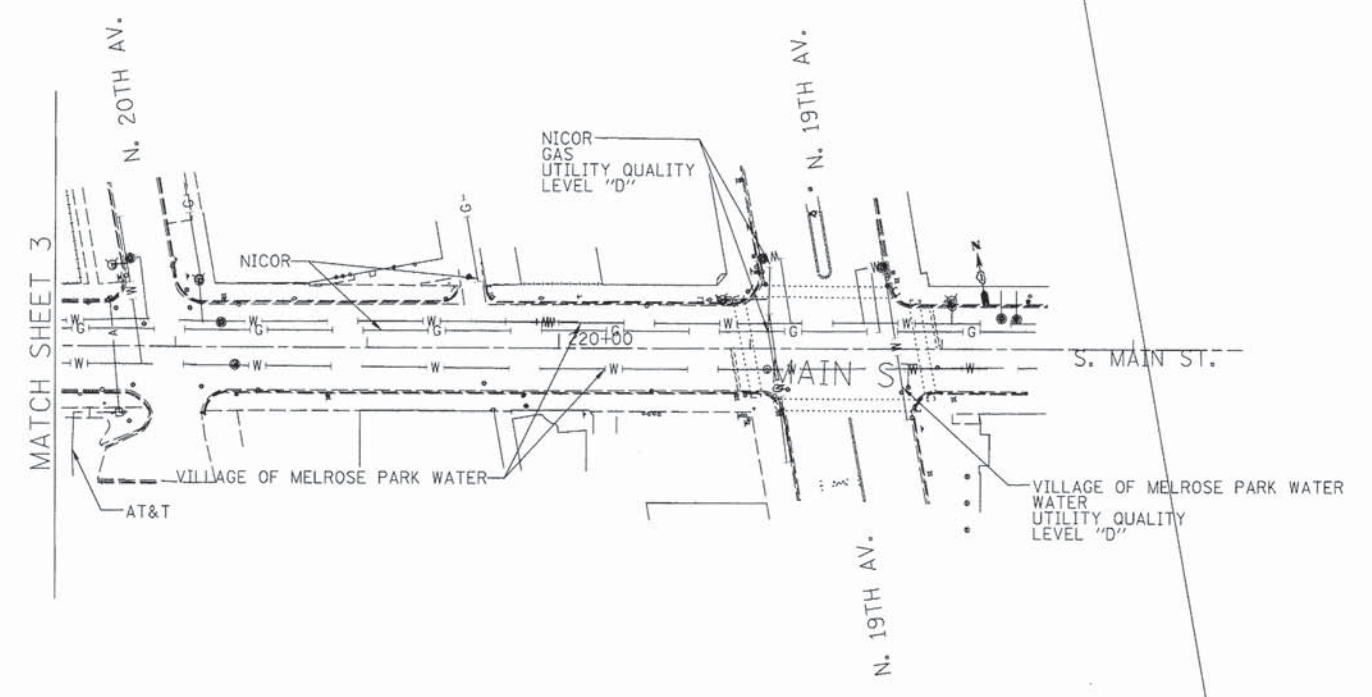
Utility Quality Level "A" : Visually Verified Test Hole
Utility Quality Level "B" : Designating/non Visually Verified Test Hole
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

| DESIGNED | ER | REVISED | 11/13/13 ADDED ALIGNMENT |
|----------|---------|---------|--------------------------|
| DRAWN | SRK | REVISED | |
| CHECKED | KFS | REVISED | |
| DATE | 8/14/13 | REVISED | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

25th Avenue at UPRR Grade Separation
Melrose Park, IL

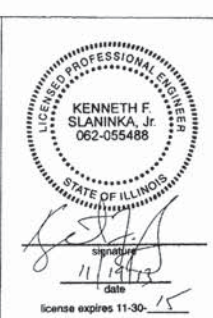
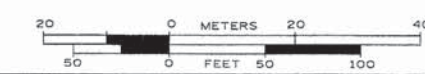
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------------|-----------|
| 2714 | 99-00094-00-GS | Cook | 240 | 112 |
| FED. ROAD DIST. NO. - [ILLINOIS] IDOT Project No. | | | Contract No. 63887 | |



| UTILITY OWNERS | |
|---|--|
| AT&T = FIBER OPTIC | |
| AT&T = TELEPHONE | |
| COMCAST = CATV | |
| COMED = ELECTRIC | |
| MCI = FIBER OPTIC | |
| NICOR = GAS | |
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ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



TBE Job No. IL09510546
SUE Plan Page: 4 of 4

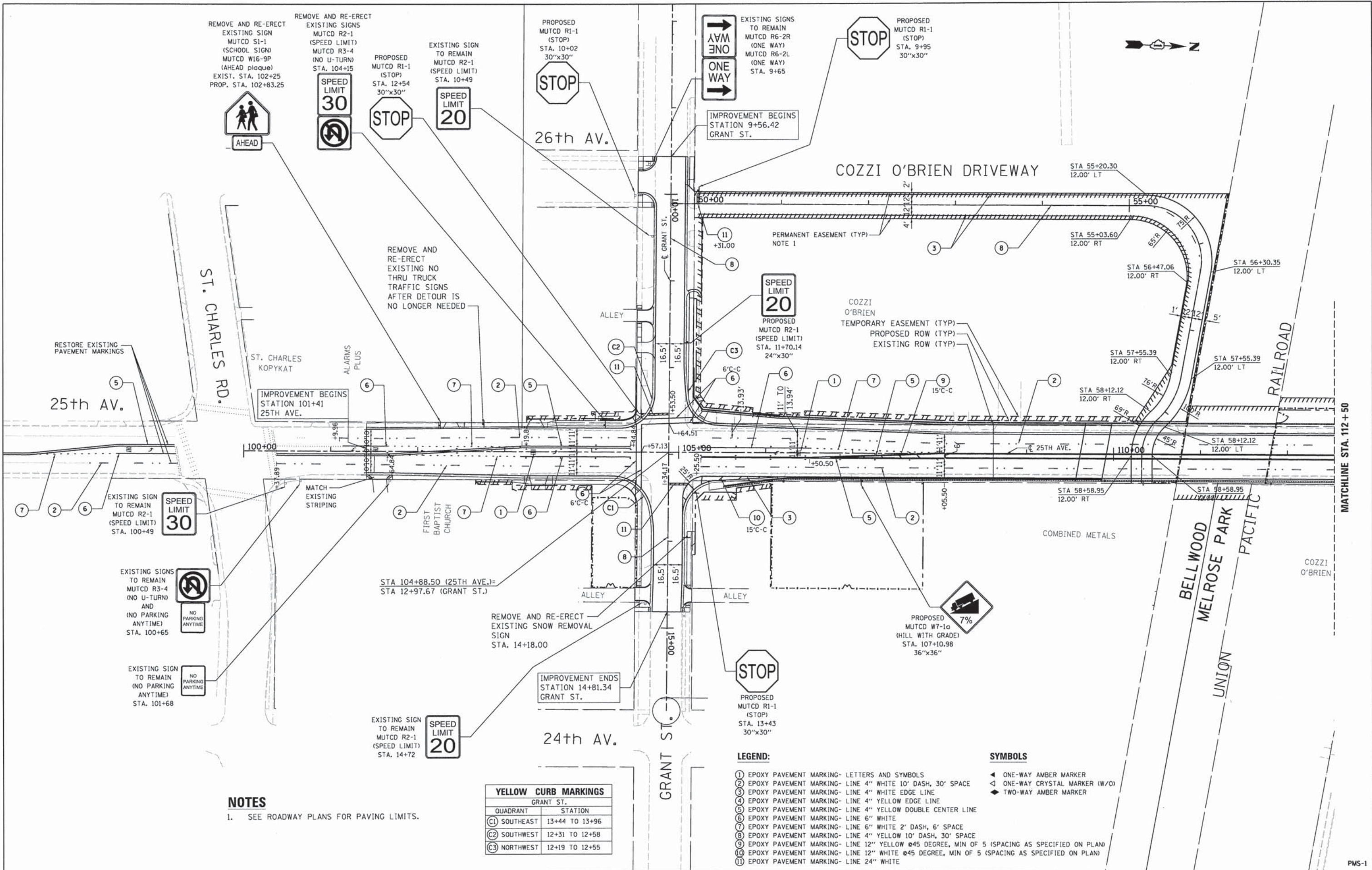
Utility Quality Level "A" : Visually Verified Test Hole
 Utility Quality Level "B" : Designating/non Visually Verified Test Hole
 Utility Quality Level "C" : Research with Survey
 Utility Quality Level "D" : Records Research

| DESIGNED | ER | REVISED: 11/13/13 ADDED ALIGNMENT |
|----------|---------|-----------------------------------|
| DRAWN | SRK | REVISED |
| CHECKED | KFS | REVISED |
| DATE | 8/14/13 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

25th Avenue at UPRR Grade Separation
Melrose Park, IL

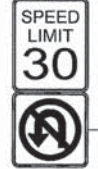
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | Cook | 240 | 113 |
| Contract No. 63887 | | | | |
| FED. ROAD DIST. NO. _ [ILLINOIS] IDOT Project No. | | | | |



REMOVE AND RE-ERECT EXISTING SIGN MUTCD S1-1 (SCHOOL SIGN) MUTCD W16-9P (AHEAD plaque) EXIST. STA. 102+25 PROP. STA. 102+83.25



REMOVE AND RE-ERECT EXISTING SIGNS MUTCD R2-1 (SPEED LIMIT) MUTCD R3-4 (NO U-TURN) STA. 104+15



PROPOSED MUTCD R1-1 (STOP) STA. 12+54 30"x30"



EXISTING SIGN TO REMAIN MUTCD R2-1 (SPEED LIMIT) STA. 10+49



PROPOSED MUTCD R1-1 (STOP) STA. 10+02 30"x30"



EXISTING SIGNS TO REMAIN MUTCD R6-2R (ONE WAY) MUTCD R6-2L (ONE WAY) STA. 9+65



PROPOSED MUTCD R1-1 (STOP) STA. 9+95 30"x30"

IMPROVEMENT BEGINS STATION 9+56.42 GRANT ST.

COZZI O'BRIEN DRIVEWAY

STA 55+20.30 12.00' LT

STA 55+03.60 12.00' RT

STA 56+47.06 12.00' RT

STA 56+30.35 12.00' LT

STA 57+55.39 12.00' RT

STA 57+55.39 12.00' LT

STA 58+12.12 12.00' RT

STA 58+12.12 12.00' LT

STA 58+58.95 12.00' RT

STA 58+58.95 12.00' LT

RESTORE EXISTING PAVEMENT MARKINGS

25th AV.

ST. CHARLES RD.

ST. CHARLES KOPYKAT

IMPROVEMENT BEGINS STATION 101+41 25TH AVE.

EXISTING SIGN TO REMAIN MUTCD R2-1 (SPEED LIMIT) STA. 100+49



EXISTING SIGNS TO REMAIN MUTCD R3-4 (NO U-TURN) AND (NO PARKING ANYTIME) STA. 100+65



EXISTING SIGN TO REMAIN (NO PARKING ANYTIME) STA. 101+68



NOTES

1. SEE ROADWAY PLANS FOR PAVING LIMITS.

YELLOW CURB MARKINGS

| GRANT ST. | |
|----------------|----------------|
| QUADRANT | STATION |
| (C1) SOUTHEAST | 13+44 TO 13+96 |
| (C2) SOUTHWEST | 12+31 TO 12+58 |
| (C3) NORTHWEST | 12+19 TO 12+55 |

LEGEND:

- 1 EPOXY PAVEMENT MARKING- LETTERS AND SYMBOLS
- 2 EPOXY PAVEMENT MARKING- LINE 4" WHITE 10' DASH, 30' SPACE
- 3 EPOXY PAVEMENT MARKING- LINE 4" WHITE EDGE LINE
- 4 EPOXY PAVEMENT MARKING- LINE 4" YELLOW EDGE LINE
- 5 EPOXY PAVEMENT MARKING- LINE 4" YELLOW DOUBLE CENTER LINE
- 6 EPOXY PAVEMENT MARKING- LINE 6" WHITE
- 7 EPOXY PAVEMENT MARKING- LINE 6" WHITE 2' DASH, 6' SPACE
- 8 EPOXY PAVEMENT MARKING- LINE 4" YELLOW 10' DASH, 30' SPACE
- 9 EPOXY PAVEMENT MARKING- LINE 12" YELLOW @45 DEGREE, MIN OF 5 (SPACING AS SPECIFIED ON PLAN)
- 10 EPOXY PAVEMENT MARKING- LINE 12" WHITE @45 DEGREE, MIN OF 5 (SPACING AS SPECIFIED ON PLAN)
- 11 EPOXY PAVEMENT MARKING- LINE 24" WHITE

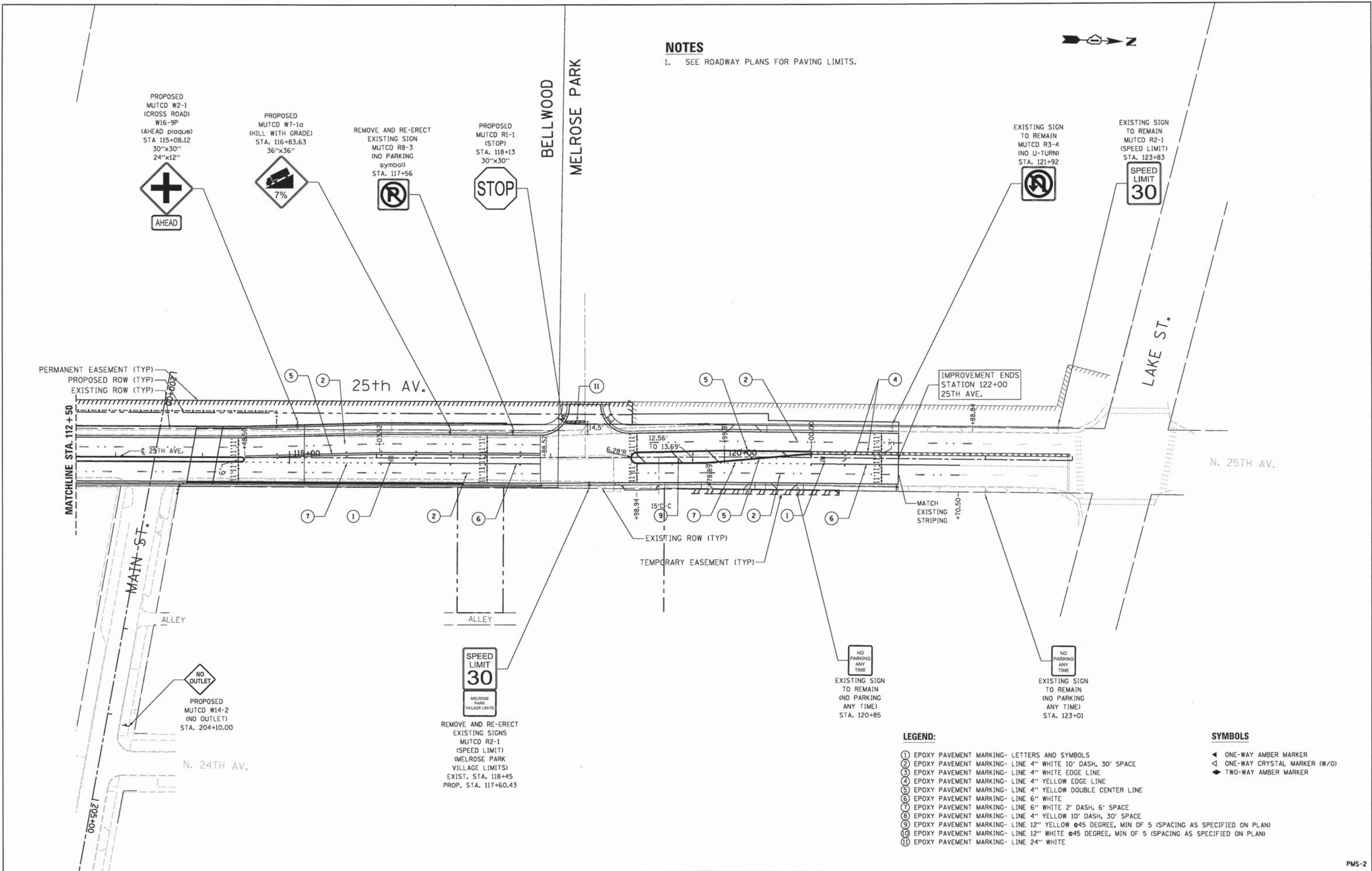
SYMBOLS

- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

FILE NAME = P:\projects\12024\000\CA00.Sheets\0116899-sh-pmk1.dgn

NOTES

1. SEE ROADWAY PLANS FOR PAVING LIMITS.



LEGEND:

- ① EPOXY PAVEMENT MARKING- LETTERS AND SYMBOLS
- ② EPOXY PAVEMENT MARKING- LINE 4" WHITE 10' DASH, 30' SPACE
- ③ EPOXY PAVEMENT MARKING- LINE 4" WHITE EDGE LINE
- ④ EPOXY PAVEMENT MARKING- LINE 4" YELLOW EDGE LINE
- ⑤ EPOXY PAVEMENT MARKING- LINE 4" YELLOW DOUBLE CENTER LINE
- ⑥ EPOXY PAVEMENT MARKING- LINE 6" WHITE
- ⑦ EPOXY PAVEMENT MARKING- LINE 6" WHITE 2' DASH, 6' SPACE
- ⑧ EPOXY PAVEMENT MARKING- LINE 4" YELLOW 10' DASH, 30' SPACE
- ⑨ EPOXY PAVEMENT MARKING- LINE 12" YELLOW @45 DEGREE, MIN OF 5 (SPACING AS SPECIFIED ON PLAN)
- ⑩ EPOXY PAVEMENT MARKING- LINE 12" WHITE @45 DEGREE, MIN OF 5 (SPACING AS SPECIFIED ON PLAN)
- ⑪ EPOXY PAVEMENT MARKING- LINE 24" WHITE

SYMBOLS

- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◀ TWO-WAY AMBER MARKER



USER NAME = mohammed.ali
 PLOT SCALE = 50.0000' / in.
 PLOT DATE = 7/30/2014

DESIGNED - MA
 DRAWN - MA
 CHECKED - RH
 DATE - 3-24-2014

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

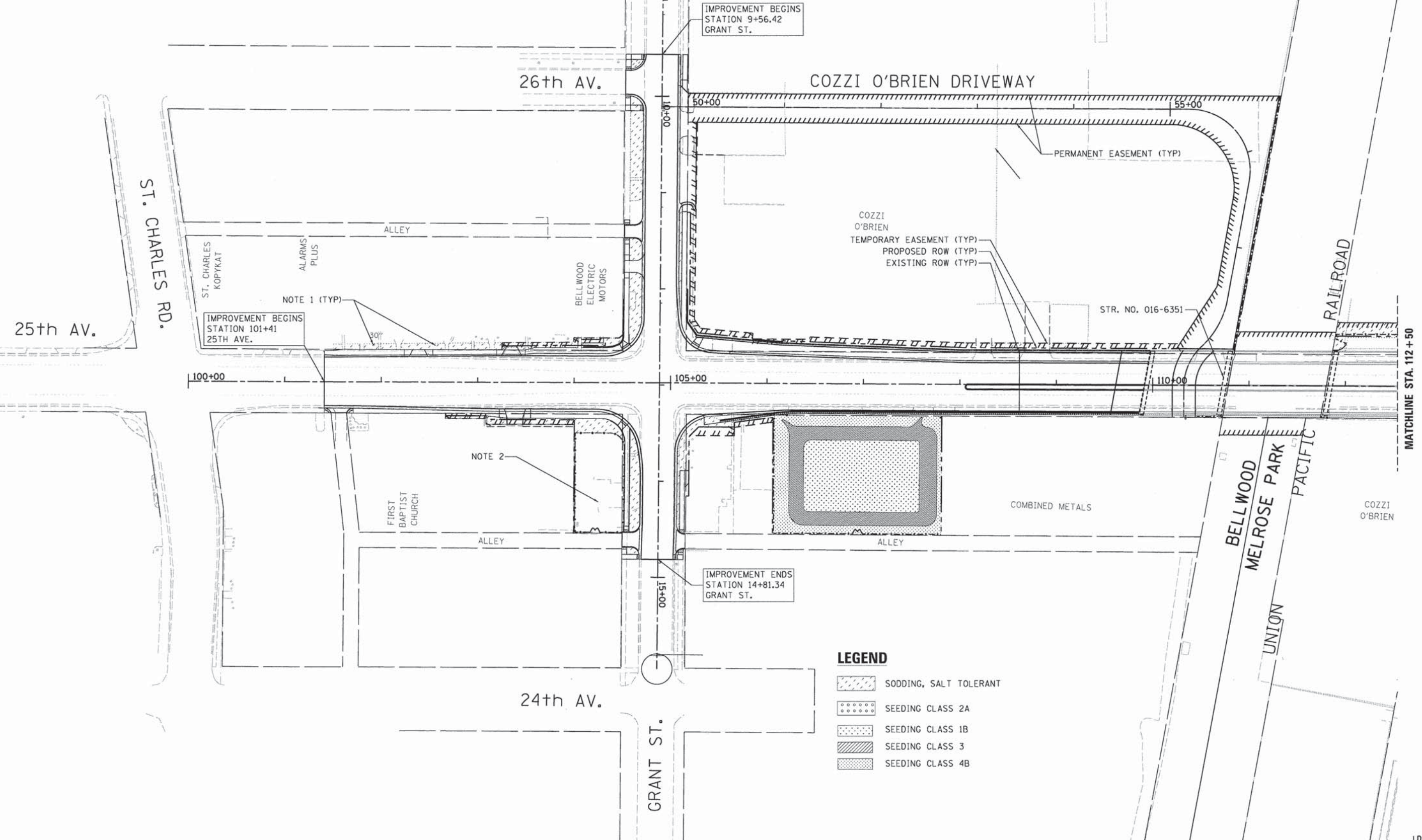
**PAVEMENT MARKING AND SIGNING PLAN
 25TH AVENUE GRADE SEPARATION**

SCALE: 1" = 50' SHEET 2 OF 2 SHEETS STA. 112+50.00 TO STA. 122+00.00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|--------------------|
| 2714 | 99-00094-00-GS | COOK | 240 | 115 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |

NOTES

- SODDING SHALL BE USED FOR LONG TERM STABILIZATION. PRIOR TO PLACING SODDING, REMOVE ANY TEMPORARY EROSION CONTROL MEASURES IN PLACE. SEE EROSION AND SEDIMENT CONTROL PLANS FOR TREE PROTECTION, SHORT TERM STABILIZATION AND ADDITIONAL REQUIREMENTS. SEE REMOVAL PLANS FOR TREES AND OTHER LANDSCAPE ITEMS TO BE REMOVED.
- SEE LANDSCAPE PLAN SHEET LDS-3 FOR TREES, SEEDING LOCATIONS AND SEEDING TYPE WITHIN PROPOSED DETENTION POND.



LEGEND

| | |
|--|------------------------|
| | SODDING, SALT TOLERANT |
| | SEEDING CLASS 2A |
| | SEEDING CLASS 1B |
| | SEEDING CLASS 3 |
| | SEEDING CLASS 4B |



USER NAME = mohammed.ali
 PLOT SCALE = 50.0000' / 1" =
 PLOT DATE = 7/31/2014

| | |
|------------------|-----------|
| DESIGNED - MA | REVISED - |
| DRAWN - MA | REVISED - |
| CHECKED - RH | REVISED - |
| DATE - 3-24-2014 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
 25TH AVENUE GRADE SEPARATION**

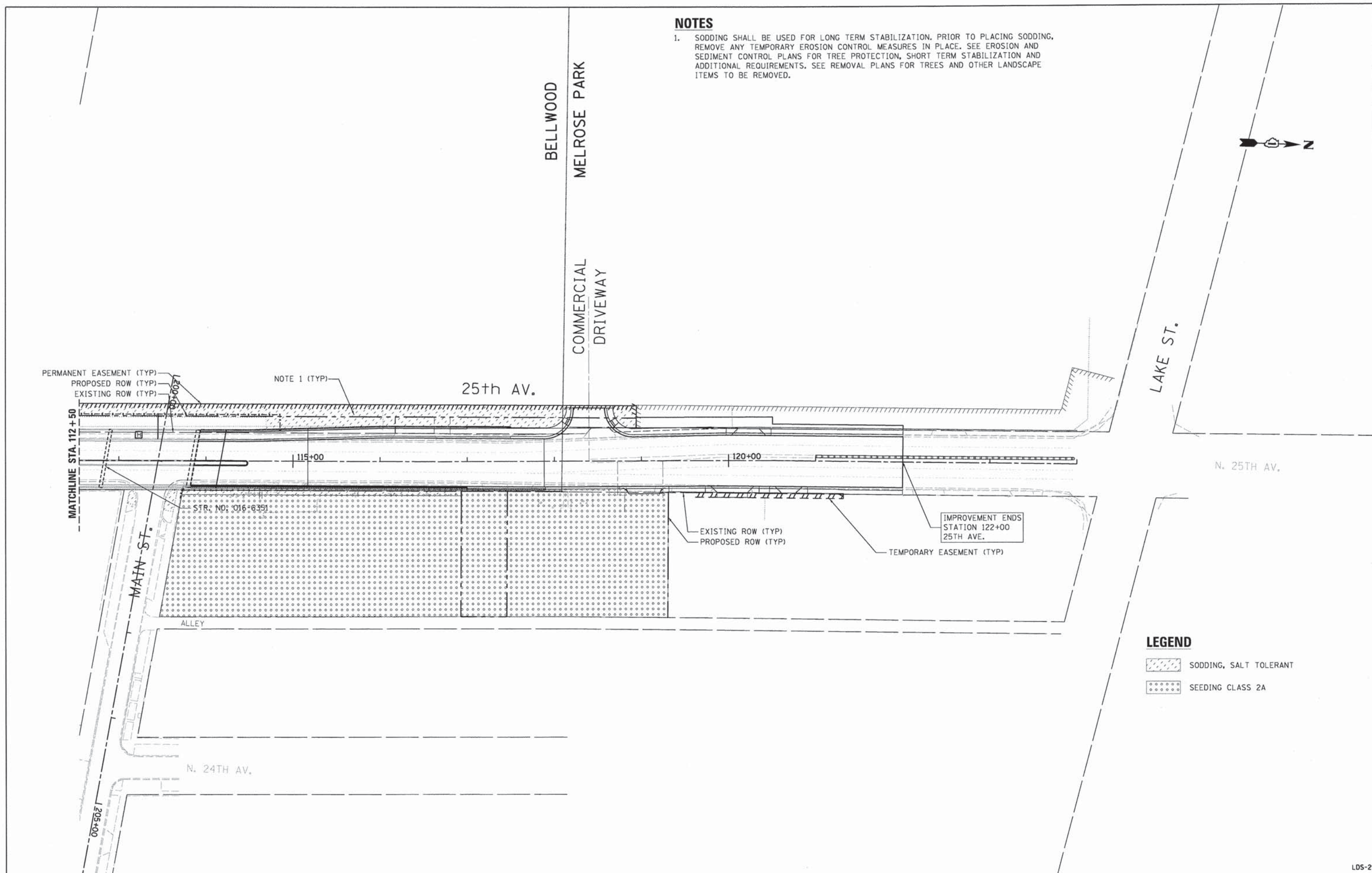
SCALE: 1" = 50' SHEET 1 OF 4 SHEETS STA. 101+41.00 TO STA. 112+50.00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|---------------------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 116 |
| CONTRACT NO. 63887 | | | ILLINOIS FED. AID PROJECT | |

FILE NAME = P:\projects\12024\000\CA00_Sheets\01168999-sht-landscpl.dgn

NOTES

- SODDING SHALL BE USED FOR LONG TERM STABILIZATION. PRIOR TO PLACING SODDING, REMOVE ANY TEMPORARY EROSION CONTROL MEASURES IN PLACE. SEE EROSION AND SEDIMENT CONTROL PLANS FOR TREE PROTECTION, SHORT TERM STABILIZATION AND ADDITIONAL REQUIREMENTS. SEE REMOVAL PLANS FOR TREES AND OTHER LANDSCAPE ITEMS TO BE REMOVED.



| | | | |
|--|-----------------------------|------------------|-----------|
| | USER NAME = mohammed.ali | DESIGNED - MA | REVISED - |
| | PLOT SCALE = 50.0000' / in. | DRAWN - MA | REVISED - |
| | PLOT DATE = 7/31/2014 | CHECKED - RH | REVISED - |
| | | DATE - 3-24-2014 | REVISED - |

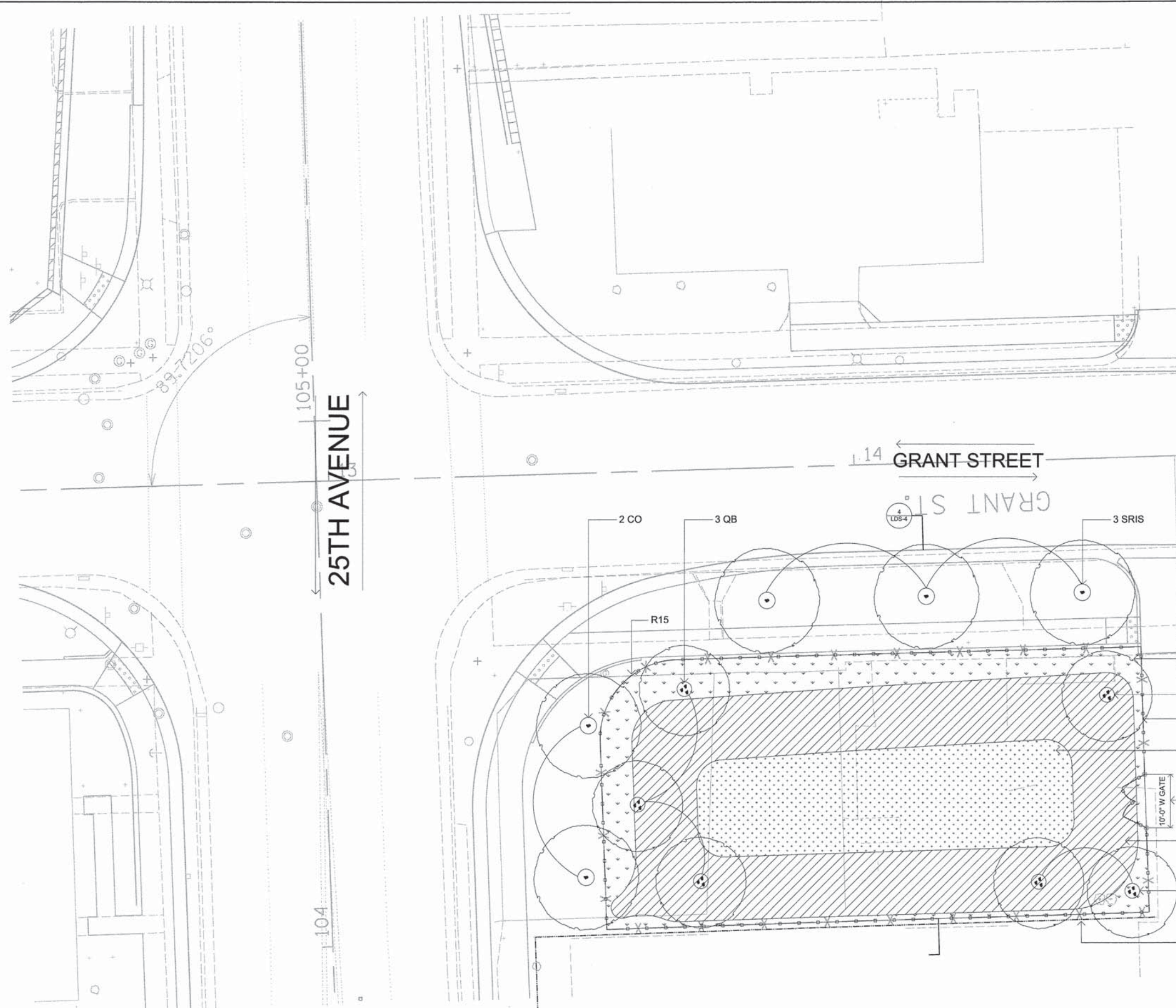
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
25TH AVENUE GRADE SEPARATION**




SCALE: 1" = 50' SHEET 2 OF 4 SHEETS STA. 112+50.00 TO STA. 122+00.00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 117 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

FILE NAME = P:\projects\12024\000\CADD_Sheets\0116899-shr-landscp2.dgn
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KEY:

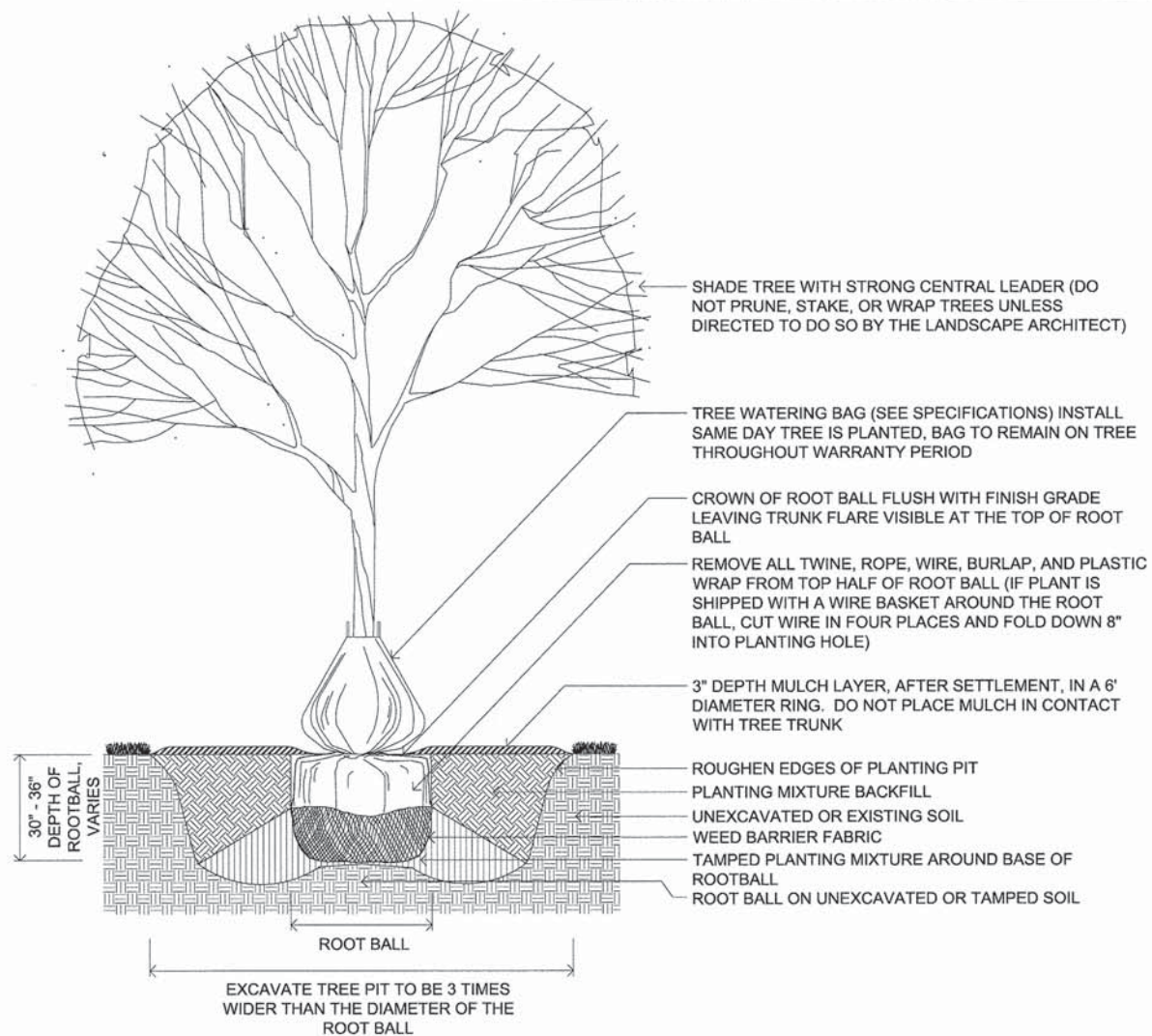
-  1B LOW MAINTENANCE LAWN MIXTURE
-  3 NORTHERN ILLINOIS SLOPE MIXTURE
-  4B WETLAND GRASS AND SEDGE MIXTURE

NOTE #1:
SEEDING MIXTURES RELATE TO ART. 250.07 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, PUBLISHED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION

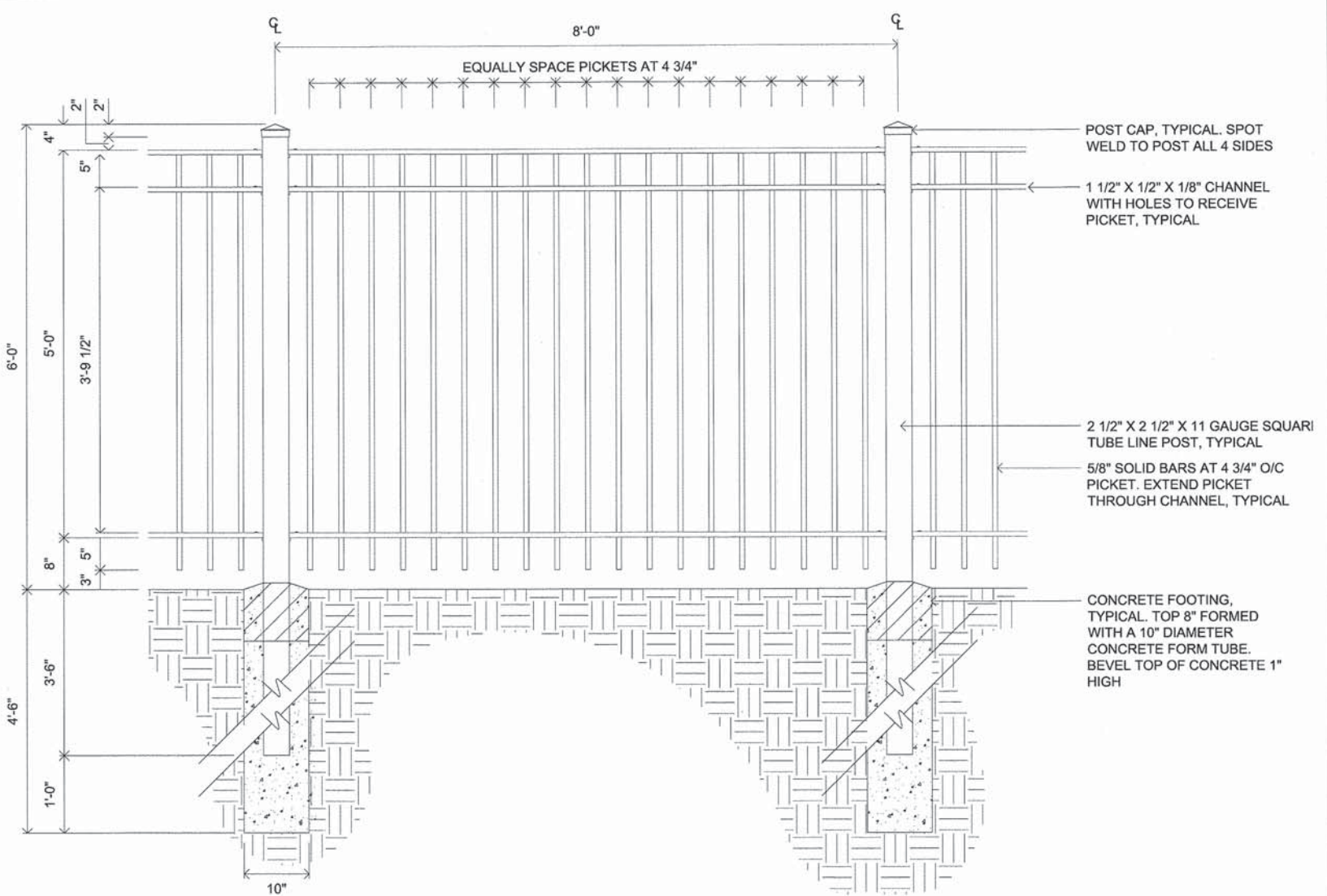
LOW MAINTENANCE LAWN MIXTURE
 1 QB
 ORNAMENTAL METAL FENCE, 6'-0" HT, TYP.
 WETLAND GRASS AND SEDGE MIXTURE
 ORNAMENTAL METAL FENCE GATE, DOUBLE LEAF WITH LATCH
 10'-0" W GATE
 NORTHERN ILLINOIS SLOPE MIXTURE
 2 QB
 PROPERTY LINE

LDS-3

| | | | | | | | | | | | |
|---|-----------------------------|---------------|-----------------|---|--|----------------|-------------|---------------------------|--------|--------------|-----------|
| WOLFF LANDSCAPE ARCHITECTURE 100 N. WASHINGTON ST. CHICAGO, IL 60602 TEL: 312.467.1000 WWW.WOLFFLANDSCAPE.COM | USER NAME = mhammed.ali | DESIGNED - MA | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | LANDSCAPING PLAN 25TH AVENUE GRADE SEPARATION | | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLT SCALE = 10.0000' / 1" = | DRAWN - MA | REVISED - | | 2714 | 99-00094-00-GS | COOK | 240 | 118 | | |
| | PLT DATE = 7/31/2014 | CHECKED - RH | REVISED - | | CONTRACT NO. 63887 | | | ILLINOIS FED. AID PROJECT | | | |
| FILE NAME = P:\projects\12024\000\CA00.Sheets\0116899-sh1-Indsop3.dgn | DATE - 3-24-2014 | REVISED - | SCALE: 1" = 20' | SHEET 3 OF 4 SHEETS STA. TO STA. | | | | | | | |



1 DECIDUOUS TREE INSTALLATION DETAIL
SCALE: 1/2" = 1'-0"

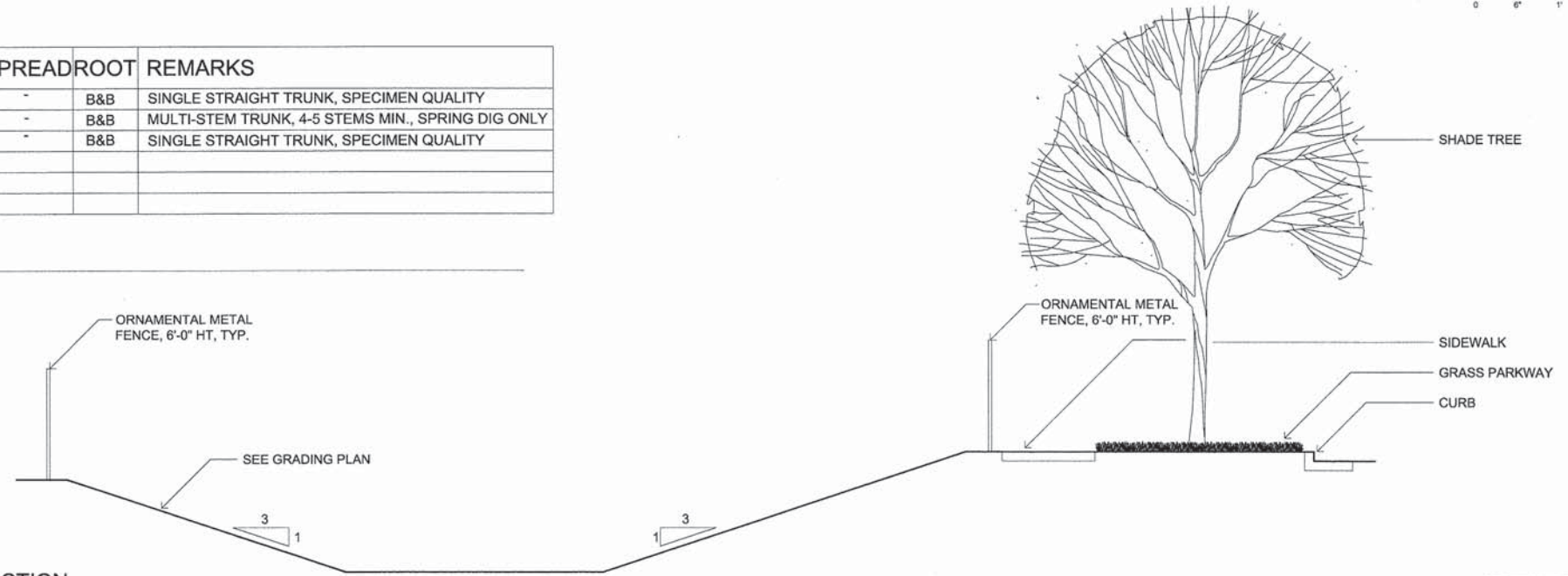


3 ORNAMENTAL METAL FENCE DETAIL
SCALE: 1" = 1'-0"



| | CODE | BOTANICAL NAME | COMMON NAME | QTY. | CAL. | HT. | SPREAD | ROOT | REMARKS |
|-------------|------|---------------------------------|--------------------------------|------|------|-----|--------|------|---|
| SHADE TREES | CO | CELTIS OCCIDENTALIS CHICAGOLAND | CHICAGOLAND HACKBERRY | 2 | 4" | - | - | B&B | SINGLE STRAIGHT TRUNK, SPECIMEN QUALITY |
| | QB | QUERCUS BICOLOR | SWAMP WHITE OAK | 6 | - | 10' | - | B&B | MULTI-STEM TRUNK, 4-5 STEMS MIN., SPRING DIG ONLY |
| | SRIS | SYRINGA RETICULATA IVORY SILK | IVORY SILK JAPANESE TREE LILAC | 3 | 4" | - | - | B&B | SINGLE STRAIGHT TRUNK, SPECIMEN QUALITY |
| | | | | | | | | | |
| | | | | | | | | | |

2 PLANT LIST



4 SECTION
SCALE: 1/4" = 1'-0"



INDEX OF SHEETS

- E-01 ELECTRICAL SHEET INDEX, GENERAL NOTES AND ABBREVIATIONS
- E-02 ELECTRICAL LEGENDS
- E-03 LIGHTING REMOVAL PLAN
- E-04 LIGHTING REMOVAL PLAN
- E-05 PROPOSED LIGHTING PLAN
- E-06 PROPOSED LIGHTING PLAN
- E-07 PROPOSED UNDERPASS LIGHTING PLAN
- E-08 SINGLE LINE DIAGRAM - CONTROLLER A
- E-09 ELECTRICAL DETAILS
- E-10 ELECTRICAL DETAILS

ABBREVIATIONS

- AMP AMPERE
- AWG AMERICAN WIRE GAUGE
- BC BOLT CIRCLE
- C CONDUIT
- CDA CHICAGO DEPARTMENT OF AVIATION
- DIA DIAMETER
- GRD GROUND
- GS GALVANIZED STEEL
- HDP HIGH DENSITY POLYETHYLENE
- HPS HIGH PRESSURE SODIUM
- J JUNCTION BOX
- MA MAST ARM
- MH MOUNTING HEIGHT
- MOT MAINTENANCE OF TRAFFIC
- N NEUTRAL
- NIC NOT IN CONTRACT
- PH PHASE
- PVC POLYVINYL CHLORIDE
- RGS RIGID GALVANIZED STEEL
- USE UNDERGROUND SERVICE ENTRANCE
- W WATTS
- XLP CROSS-LINKED POLYETHYLENE

LIGHTING GENERAL NOTES

1. PRIOR TO INSTALLATION OF THE NEW UNIT DUCT, CONDUITS, JUNCTION BOXES, LIGHT STANDARD FOUNDATION AND APPURTENANCES, THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION OF EXISTING CONDUITS, CABLE AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123 OR 811) TO AID IN THIS TASK.
2. THE CONTRACTOR MUST VERIFY ALL OF THE INFORMATION SHOWN ON THE CONTRACT PLANS WHICH WOULD EFFECT HIS WORK UNDER THIS CONTRACT FOR THE OPERATION OF THE EXISTING ROADWAY LIGHTING SYSTEM.
3. NO MATERIAL OR EQUIPMENT SHALL BE DELIVERED TO THE JOB SITE WITHOUT PRIOR INSPECTION AND APPROVAL BY THE ENGINEER. ANY MATERIAL AND EQUIPMENT NOT APPROVED BY THE ENGINEER MUST BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
4. ALL NEW UNIT DUCT, CONDUIT, JUNCTION BOXES AND APPURTENANCES ARE SHOWN DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD MUST MEET THE APPROVAL OF THE ENGINEER.
5. CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH UNDER DRAINS.
6. ALL ELECTRICAL SYSTEMS, EQUIPMENT AND APPURTENANCES SHALL BE PROPERLY GROUNDED IN STRICT CONFORMANCE WITH NATIONAL ELECTRICAL CODE.
7. GROUNDING OF POLE AND CONTROLLER INCLUDING GROUND ROD, CONDUCTOR AND LUGS INCLUDING EXOTHERMIC WELD TO GROUND ROD SHALL BE INCLUDED IN THE COST OF THE PAY ITEM FOR WHICH IT IS INSTALLED.
8. ALL UNDERGROUND WIRING SHALL BE 30 INCHES MINIMUM BELOW GRADE PER IDOT STANDARD SPECIFICATION SECTION 810.
9. THE NEW ELECTRICAL INSTALLATION AND MATERIALS MUST MEET REQUIREMENTS OF STANDARDS BY THE FOLLOWING ORGANIZATIONS:
 - ILLINOIS DEPARTMENT OF TRANSPORTATION. (IDOT)
 - NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION. (NEMA)
 - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS. (IEEE)
 - ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA. (IES)
 - AMERICAN ASSOCIATION OF TRANSPORTATION OFFICIALS. (AATO)
 - U.S. DEPARTMENT OF TRANSPORTATION. (U.S.D.O.T)
 - UNDERWRITERS LABORATORIES. (UL)
 - AMERICAN STANDARD INSTITUTE. (ASI)
 - INSULATED POWER AND CABLE ENGINEERS ASSOCIATION. (IPCEA)
 - NATIONAL ELECTRICAL SAFETY CODE (NESC)
 - NATIONAL ELECTRICAL CODE 2011
 - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
 - AMERICAN NATIONAL STANDARD PRACTICE FOR ROADWAY LIGHTING (ANSI/IESNA RP-8)
10. ALL SPLICING MUST BE IN POLE BASES OR JUNCTION BOXES ABOVE GRADE WITH WATERPROOF SEALANT AND HEAT SHRINKABLE PLASTIC CAPS.
11. UNLESS NOTED OTHERWISE, ALL SHOULDER MOUNTED POLES SHALL HAVE MINIMUM SETBACK REQUIREMENT AS FOLLOWS:
 - 1- FACE OF THE CURB TO CENTERLINE OF THE POLE AS 3 FT.
12. ERECT POLES AFTER RESPECTIVE FOUNDATION HAS CURED.
13. TO MAINTAIN STRUCTURAL INTEGRITY, POLES WITH MAST ARMS SHALL NOT BE ERECTED WITHOUT LUMINAIRES.
14. PROVIDE RACKING AND TRAINING OF ALL CABLES IN MANHOLES AND HANDHOLES WITH APPROVED TYPE FASTENERS.
15. PLACE COUPLING ON THE ENDS OF CONDUIT TERMINATIONS AND PLUG WITH REMOVABLE PLUG.
16. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED TO EACH JUNCTION BOX THEY PASS THROUGH AS WELL AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT. BOXES SHALL BE EQUIPPED FOR THE GROUNDING WIRE TERMINATIONS WITHOUT DEGRADATION OF BOX RATING.
17. VERIFY BRANCH CIRCUITRY BEFORE PERFORMING ELECTRICAL WORK.
18. NOTIFY THE PROPER UTILITY COMPANIES 48 HOURS PRIOR TO WORKING ON THE ROADWAY LIGHTING.
19. ELECTRICAL SERVICE SHALL BE 120/240 VOLT, UNLESS NOTED OTHERWISE.
20. INSTALL CABLE IN CONTINUOUS UNCUT LENGTHS BETWEEN HANDHOLES AND LIGHT POLES.
21. ALL IRON AND STEEL PRODUCTS WHICH ARE TO BE INCORPORATED INTO THE WORK SHALL BE DOMESTICALLY MANUFACTURED OR PRODUCED AND FABRICATED.

LIGHTING REMOVAL GENERAL NOTES

1. PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL REVIEW THE CONTRACT DRAWINGS AND ASCERTAIN EXISTING SITE CONDITIONS TO VERIFY THE EXTENT OF DEMOLITION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING ALL RELOCATIONS AND REMOVALS REQUIRED IN THIS CONTRACT. CONTRACTOR SHALL VERIFY IN THE FIELD THE EXISTING CONDITIONS AND COORDINATE AS REQUIRED.
2. BRANCH CIRCUIT WIRING FOR EXISTING EQUIPMENT TO BE REMOVED SHALL BE DISCONNECTED TO NEAREST LIGHTING EQUIPMENT TO REMAIN. REMOVE EXISTING WIRING.
3. THE CONTRACTOR SHALL PROVIDE ALL CONDUITS AND WIRES OF THE SAME TYPE AND SIZE REQUIRED TO MAINTAIN THE CONTINUITY OF THE CIRCUIT TO EXISTING LIGHT POLES TO REMAIN WHICH MAY BE AFFECTED BY THIS DEMOLITION. SHUTDOWN OF EXISTING SERVICES SHALL ONLY BE PERMITTED UPON WRITTEN APPROVAL FROM BELLWOOD/MELROSE PARK, AND THEN ONLY FOR THE DATE AND DURATION AGREED UPON. NEVER DURING NIGHT TIME.
4. COMMENCEMENT OF WORK SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING ROADWAY FOR THIS WORK, AND ACCESS TO WORK SPACES, HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. LATER CLAIMS SHALL NOT BE MADE FOR ADDITIONAL LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AN EXAMINATION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, REINSTALLING, REPAIRING, OR REPLACING EQUIPMENT.
5. ALL EXISTING EQUIPMENT THAT ARE TO BE REMOVED AND SALVAGED SHALL BE RETURNED TO BELLWOOD/MELROSE PARK AS DIRECTED BY THE ENGINEER.
6. LOCATIONS SELECTED FOR COLLECTION OF DEBRIS AND/OR STORAGE OF EQUIPMENT SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.
7. WHERE THE CONTINUITY OF CIRCUITS OR CONDUITS SERVING ANY EXISTING LIGHTING/EQUIPMENT TO REMAIN IN OPERATION IS INTERFERED WITH, RE-ROUTE AND RECONNECT SUCH CIRCUITS OR CONDUITS. THE CONTINUITY OF THE CIRCUIT OR CONDUITS WILL BE INCIDENTAL TO THE PAY ITEM, "MAINTENANCE OF LIGHTING SYSTEM."
8. IN AREAS WHERE LIGHT POLES ON SIDEWALKS ARE TO BE REMOVED, THE REMOVAL OF CABLE DUCT AND ELECTRICAL STREET LIGHTING HAND HOLES SHALL BE INCLUDED IN THE COST OF SIDEWALK REMOVAL PAY ITEM. IN AREAS WHERE LIGHT POLES ARE TO BE REMOVED ARE NOT AFFECTED BY SIDEWALK REMOVAL THE CABLE DUCT SHALL BE ABANDON IN PLACE.

| | | | | | | | | | | |
|---|------------------------------|------------------|-----------|---|--|---------------------------|--------------------------|----------------|---------------------|------------------|
|  | USER NAME = stephen.schuh | DESIGNED - CD | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | ELECTRICAL SHEET INDEX, GENERAL NOTES, AND ABBREVIATIONS 25TH AVENUE GRADE SEPARATION | F.A.U. RTE. 2714 | SECTION 99-0094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 120 |
| | PLOT SCALE = 50.0003' / 1" = | CHECKED - IB | REVISED - | | | SCALE: NONE | SHEET 1 OF 10 SHEETS | STA. TO STA. | CONTRACT NO. 63887 | |
| | PLOT DATE = 3/21/2014 | DATE - 1-06-2014 | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | |

FILE NAME = P:\projects\12024\000\Sheet\0116899-sht-E1tg-E-01.dgn
Default

BILL OF MATERIALS

| ALIGNMENT | DRAWING | STATION | STATION | EACH | LSUM | FOOT | FOOT | FOOT | FOOT | EACH | EACH | EACH | EACH | FOOT | FOOT | EACH | FEET | EACH | EACH | EACH | EACH | EACH | EACH | | |
|--------------|---------|-----------|-----------|----------|----------|------------|------------|------------|-------------|----------|-----------|----------|----------|------------|-------------|------------|----------|------------|-----------|-----------|-----------|----------|-----------|----------|-----------|
| 25TH AVE. | E-03 | BOP | 112+50.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 0 | 0 | 0 | | |
| 25TH AVE. | E-04 | 112+50.00 | EOP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 0 | 0 | | |
| 25TH AVE. | E-05 | BOP | 112+50.00 | 0 | 0 | 84 | 500 | 0 | 2180 | 5 | 2 | 2580 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 14 | 2 | 12 | | |
| 25TH AVE. | E-06 | 112+50.00 | EOP | 0 | 0 | 60 | 310 | 110 | 1740 | 5 | 3 | 1 | 0 | 270 | 1 | 40 | 0 | 0 | 0 | 3 | 10 | 0 | 7 | | |
| 25TH AVE. | E-07 | 110+10.00 | 114+00.00 | 1 | 1 | 0 | 130 | 1 | 0 | 0 | 0 | 810 | 1670 | 290 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | | |
| TOTAL | | | | 1 | 1 | 144 | 810 | 240 | 3920 | 1 | 10 | 5 | 1 | 810 | 4250 | 560 | 1 | 120 | 18 | 18 | 18 | 7 | 24 | 2 | 19 |

LIGHTING FIXTURE SCHEDULE

| TAG | LIGHT FIXTURE DESCRIPTION | MANUFACTURER AND CATALOG NUMBER | LAMPS | | | MOUNTING | REMARKS |
|-----|---|---|-------|------|------|----------------------------------|---|
| | | | TYPE | VOLT | WATT | | |
| A | OUTDOOR TYPE LED LUMINAIRE ON 18'-0" ALUMINUM POLE WITH 8' EXTENDED REACH BRACKET | PHILIPS RVS-55W32LED4K-R-LE3 GE ERS 13BXDX5401GRAYF AEL 20BLEDE70 | LED | 240 | 56 | POLE | EQUIPPED WITH -40" BALLAST AND FUSES. |
| B | OUTDOOR TYPE LED LUMINAIRE ON 14'-0" ALUMINUM POLE WITH 8' EXTENDED REACH BRACKET | PHILIPS RVS-55W32LED4K-R-LE3 GE 454893 AEL 20BLEDE70 | LED | 240 | 56 | POLE | EQUIPPED WITH -40" BALLAST AND FUSES. POLE MOUNTED TO PARAPET WALL. |
| C | OUTDOOR TYPE LED LUMINAIRE ON 18'-0" ALUMINUM POLE WITH 8' EXTENDED REACH BRACKET | PHILIPS RVS-80W48LED4K-R-LE3 GE ERS 23EXDX5401GRAYF AEL 30BLEDE10 | LED | 240 | 81 | POLE | EQUIPPED WITH -40" BALLAST AND FUSES. |
| D | OUTDOOR TYPE UNDERPASS LED LUMINAIRE | PHILIPS 1614-220LA-9670-NW-240-BRP-DL | LED | 240 | 220 | WALL | EQUIPPED WITH -40" BALLAST AND FUSES. |
| E | (2) OUTDOOR TYPE LED 4' LUMINAIRE WITH 4000 K, 30"x 60" BEAM ANGLE | PHILIPS eW Graze QLX Powercore 523-000081-25 | LED | 240 | 40 | WITHIN BOTTOM OF PYLON EXTENSION | EQUIPPED WITH -40" BALLAST AND FUSES. |

CABLE AND CONDUIT SCHEDULE

| TAG | DESCRIPTION |
|-----|--|
| 1 | UNIT DUCT, 5-1/C, NO.8, 1/C NO. 8 GRD., 1/4" DIA., DIRECT BURIED. |
| 2 | UNIT DUCT, 5-1/C, NO.8, 1/C NO.8 GRD., 1 1/4" DIA., IN 3" PUSH THROUGH UNDERGROUND CONDUIT GALVANIZED STEEL CONDUIT. |
| 3 | UNIT DUCT, 5-1/C, NO.8, 1/C NO.8 GRD., 1 1/4" DIA., IN 2" PVC COATED GALVANIZED STEEL CONDUIT, ATTACHED TO STRUCTURE. |
| 4 | UNIT DUCT, 5-1/C, NO.8, 1/C NO.8 GRD., 1 1/4" DIA., IN 2" PVC CONDUIT, IN SIDEWALK OR IN SLAB. |
| 5 | UNIT DUCT, 5-1/C, NO.8, 1/C NO.8 GRD., 1 1/4" DIA., IN 2" PVC CONDUIT, EMBEDDED IN STRUCTURE. |
| 6 | UNIT DUCT, 4-1/C, NO.6, 1/C NO. 6 GRD., 1 1/4" DIA., IN 2" PVC COATED RGS CONDUIT, ATTACHED TO STRUCTURE. |
| 7 | 3-1/C NO.2 IN UNDERGROUND 3" GALVANIZED STEEL CONDUIT. |
| 8 | 3-1/C NO.2 3" PVC COATED GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE. |
| 9 | 2" PVC COATED GALVANIZED STEEL CONDUIT, ATTACHED TO STRUCTURE FOR TRAFFIC CONTROLS. TRAFFIC CABLES PROVIDED BY OTHERS. PROVIDE PULL STRING IN EMPTY CONDUIT. |
| 10 | 2" PVC CONDUIT, EMBEDDED IN STRUCTURE FOR TRAFFIC CONTROLS. TRAFFIC CABLES PROVIDED BY OTHERS. PROVIDE PULL STRING IN EMPTY CONDUIT. |

LEGENDS

LEGENDS

PROPOSED LIGHTING UNIT 18 FOOT ALUMINUM POLE, 8 FOOT DAVIT ARM, WITH 56 WATT LED LUMINAIRE (SEE LIGHT POLE DETAILS SHT. E-09)

PROPOSED LIGHTING UNIT 14 FOOT ALUMINUM POLE, 8 FOOT DAVIT ARM, WITH 56 WATT LED LUMINAIRE MOUNTED ON PARAPET WALL. (SEE LIGHT POLE DETAILS SHT. E-09)

PROPOSED LIGHTING UNIT 18 FOOT ALUMINUM POLE, 8 FOOT DAVIT ARM, WITH 81 WATT LED LUMINAIRE (SEE LIGHT POLE DETAILS SHT. E-09)

PROPOSED UNDERPASS LIGHTING UNIT AT 15' ABOVE GRADE.

EXISTING LIGHTING TO REMAIN

EXISTING LIGHTING UNIT TO BE REMOVED

GROUND FIELD FOR CONTROLLERS
GROUND RODS 5/8" x 10'-0"
2/0 AWG BARE COPPER WIRE

ELECTRICAL JUNCTION BOX

ELECTRICAL HANDHOLE

GROUND ROD 5/8" DIA. X 10'

2" RIGID GALVANIZED STEEL CONDUIT SLEEVE BELOW PAVEMENT
L-LENGTH
U-UNDERGROUND
R-RIGID
S-STEEL
C-CONDUIT

UNIT DUCT, 1 1/4" DIA POLYETHYLENE, SCH-40 600V, 5-1/C #8 & 1/C #8 GROUND (XLP-TYPE USE), (UNLESS NOTED OTHERWISE)

2" DIA. RIGID GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE, INCLUDING UNIT DUCT (SEE PLANS FOR UNIT DUCT TYPE)

2" DIA PVC CONDUIT EMBEDDED IN BARRIER WALL. INCLUDING UNIT DUCT. (SEE PLANS FOR UNIT DUCT TYPE)

PROPOSED LIGHTING CONTROLLER 120/240V, 1PH, 3 WIRE

EXISTING LIGHTING CONTROLLER 120/240V, 1PH, 3 WIRE

POLE /UNIT IDENTIFICATION
A - DENOTES CONTROLLER
α - DENOTES CIRCUIT NUMBER
X - DENOTES POLE NUMBER ON THE CIRCUIT

E-02



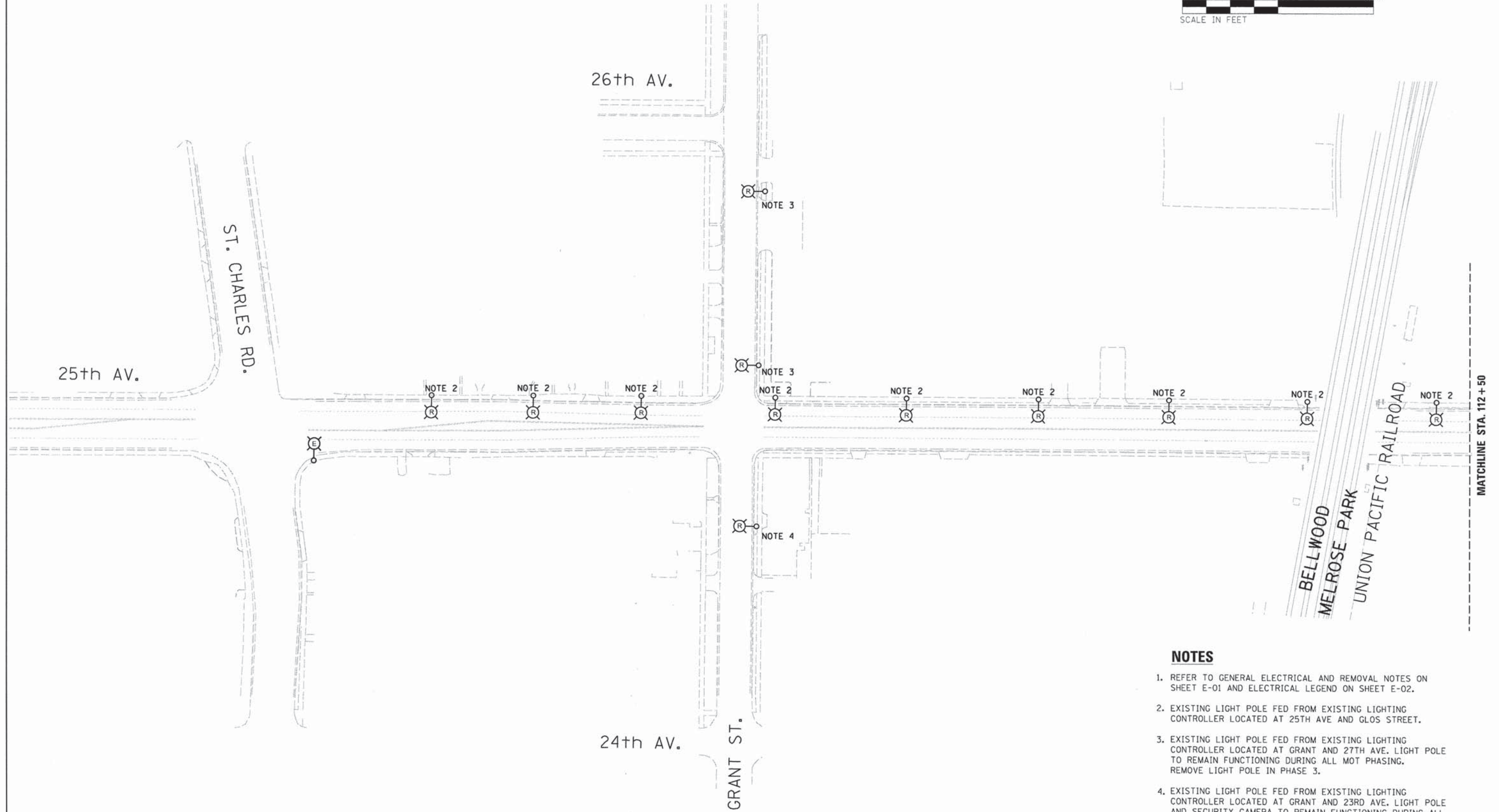
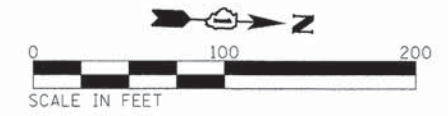
| | | |
|------------------------------|------------------|-----------|
| USER NAME = stephen.schuh | DESIGNED - CD | REVISED - |
| PLDT SCALE = 50.0000' / 1" = | DRAWN - CD | REVISED - |
| PLDT DATE = 3/21/2014 | CHECKED - IB | REVISED - |
| | DATE - 1-06-2014 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ELECTRICAL LEGENDS
25TH AVENUE GRADE SEPARATION**

SCALE: NONE SHEET 2 OF 10 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------|--------|--------------|-----------|
| 2714 | 99-0094-00-GS | COOK | 240 | 121 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



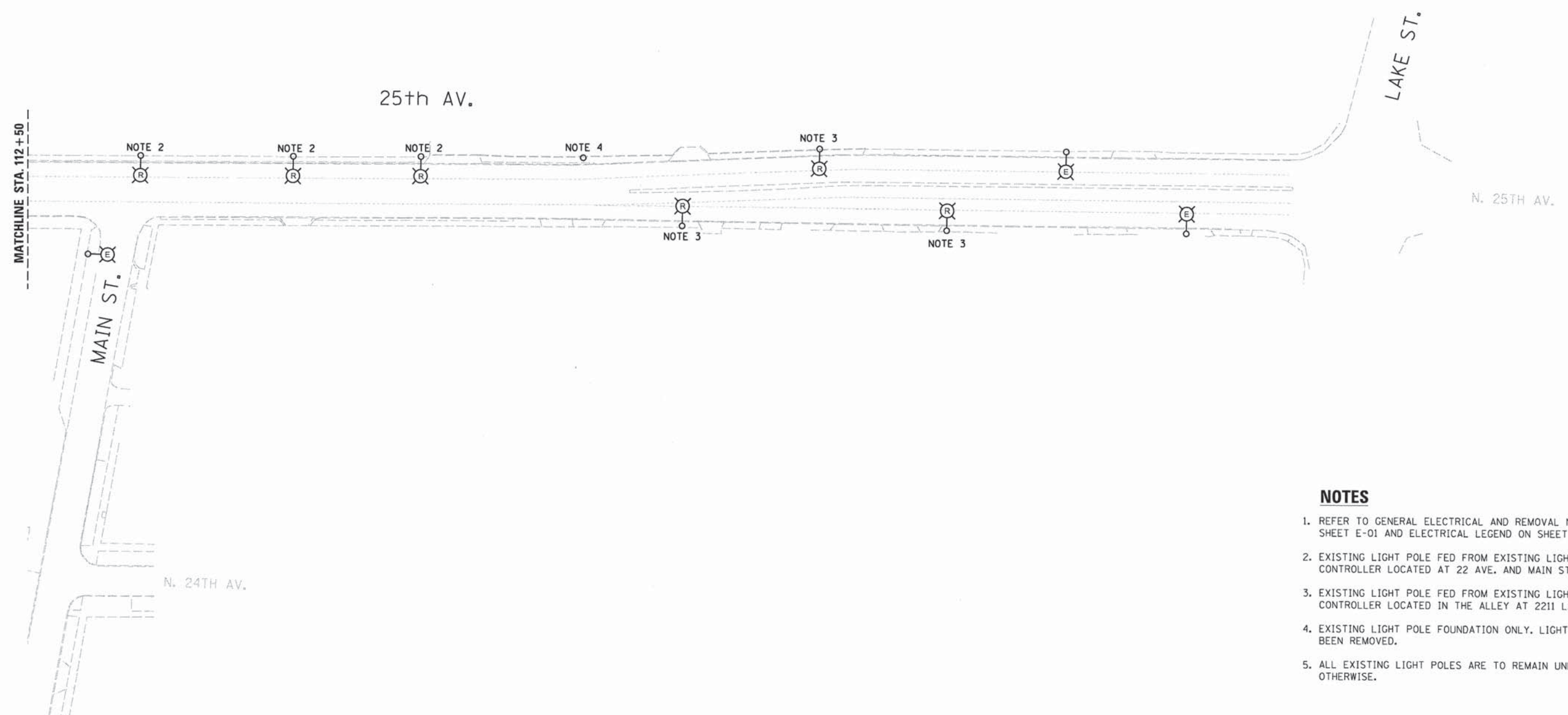
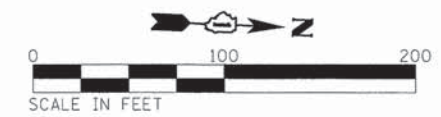
NOTES

1. REFER TO GENERAL ELECTRICAL AND REMOVAL NOTES ON SHEET E-01 AND ELECTRICAL LEGEND ON SHEET E-02.
2. EXISTING LIGHT POLE FED FROM EXISTING LIGHTING CONTROLLER LOCATED AT 25TH AVE AND GLOS STREET.
3. EXISTING LIGHT POLE FED FROM EXISTING LIGHTING CONTROLLER LOCATED AT GRANT AND 27TH AVE. LIGHT POLE TO REMAIN FUNCTIONING DURING ALL MOT PHASING. REMOVE LIGHT POLE IN PHASE 3.
4. EXISTING LIGHT POLE FED FROM EXISTING LIGHTING CONTROLLER LOCATED AT GRANT AND 23RD AVE. LIGHT POLE AND SECURITY CAMERA TO REMAIN FUNCTIONING DURING ALL MOT PHASING. CCTV CAMERA TO BE REMOVED BY THE VILLAGE OF BELLWOOD. REMOVE LIGHT POLE IN PHASE 3.

E-03

| | | | | | | | | | | | | |
|--|-----------------------------------|---------------|-----------|---|---|----------------|------|--------------------|---------|--------|--------------|-----------|
| | USER NAME = stephen.schuh | DESIGNED - CD | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | LIGHTING REMOVAL PLAN 25TH AVENUE GRADE SEPARATION | | | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLOT SCALE = 50,0000' / 1" = 1/4" | DRAWN - CD | REVISED - | | 2714 | 99-00094-00-GS | COOK | 240 | 122 | | | |
| | PLOT DATE = 3/21/2014 | CHECKED - IB | REVISED - | | SCALE: 1" = 50' SHEET 3 OF 10 SHEETS STA. 101+41 TO STA. 112+50 | | | CONTRACT NO. 63887 | | | | |
| | DATE - 1-06-2014 | REVISED - | | ILLINOIS FED. AID PROJECT | | | | | | | | |

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Default



NOTES

1. REFER TO GENERAL ELECTRICAL AND REMOVAL NOTES ON SHEET E-01 AND ELECTRICAL LEGEND ON SHEET E-02.
2. EXISTING LIGHT POLE FED FROM EXISTING LIGHTING CONTROLLER LOCATED AT 22 AVE. AND MAIN STREET.
3. EXISTING LIGHT POLE FED FROM EXISTING LIGHTING CONTROLLER LOCATED IN THE ALLEY AT 2211 LAKE STREET.
4. EXISTING LIGHT POLE FOUNDATION ONLY. LIGHT POLE HAS BEEN REMOVED.
5. ALL EXISTING LIGHT POLES ARE TO REMAIN UNLESS NOTED OTHERWISE.

E-04



| | | |
|---------------------------------|------------------|-----------|
| USER NAME = stephen.schuh | DESIGNED - CD | REVISED - |
| PLOT SCALE = 50.0000' / 1" = 1' | DRAWN - CD | REVISED - |
| PLOT DATE = 3/21/2014 | CHECKED - IB | REVISED - |
| | DATE - 1-06-2014 | REVISED - |

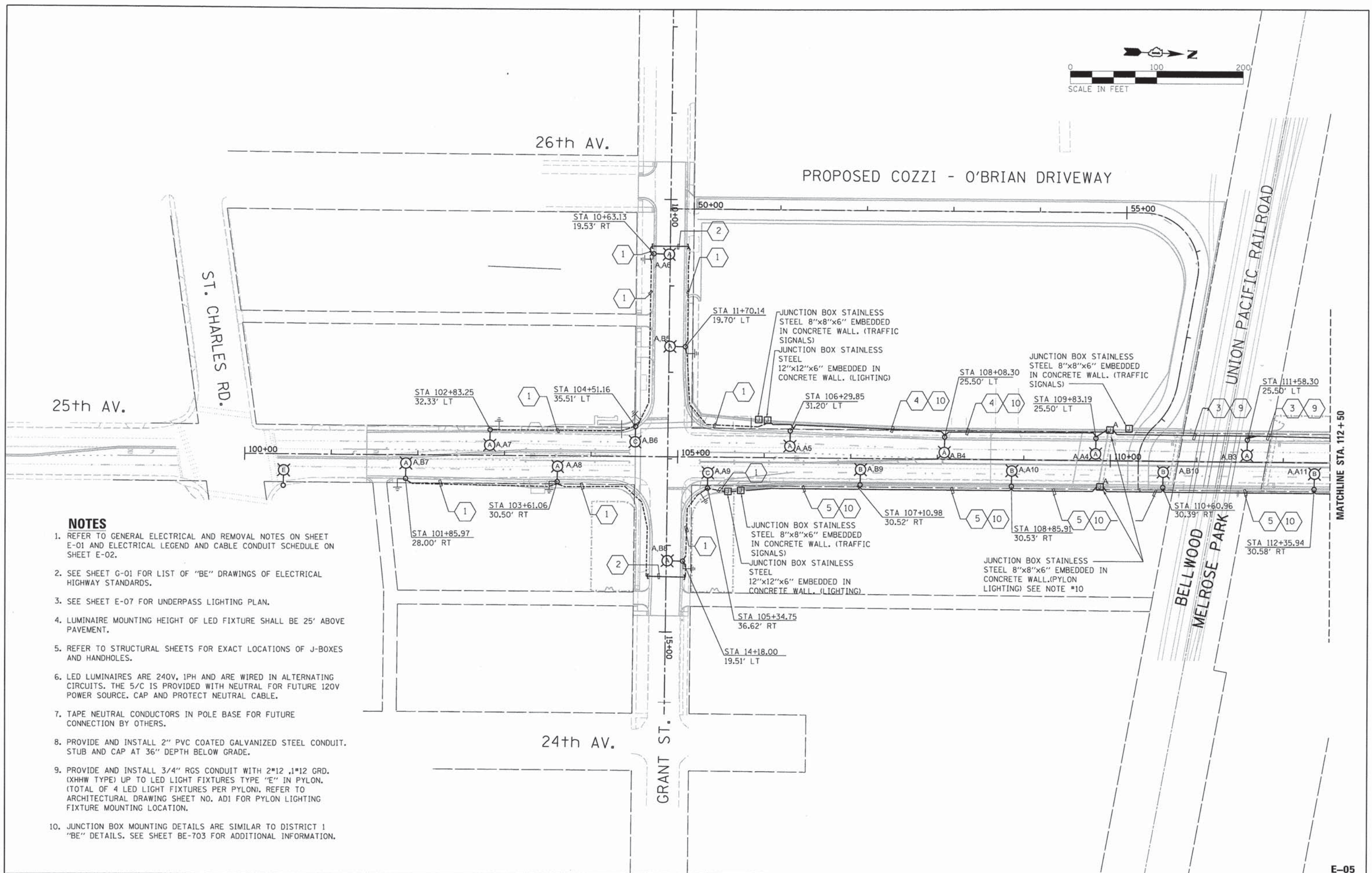
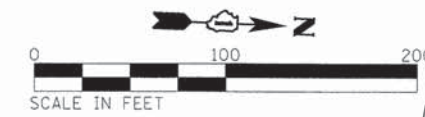
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHTING REMOVAL PLAN
25TH AVENUE GRADE SEPARATION**

SCALE: 1"=50' SHEET 4 OF 10 SHEETS STA. 112+50 TO STA. 122+00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|--------------------|
| 2714 | 99-00094-00-GS | COOK | 240 | 123 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |

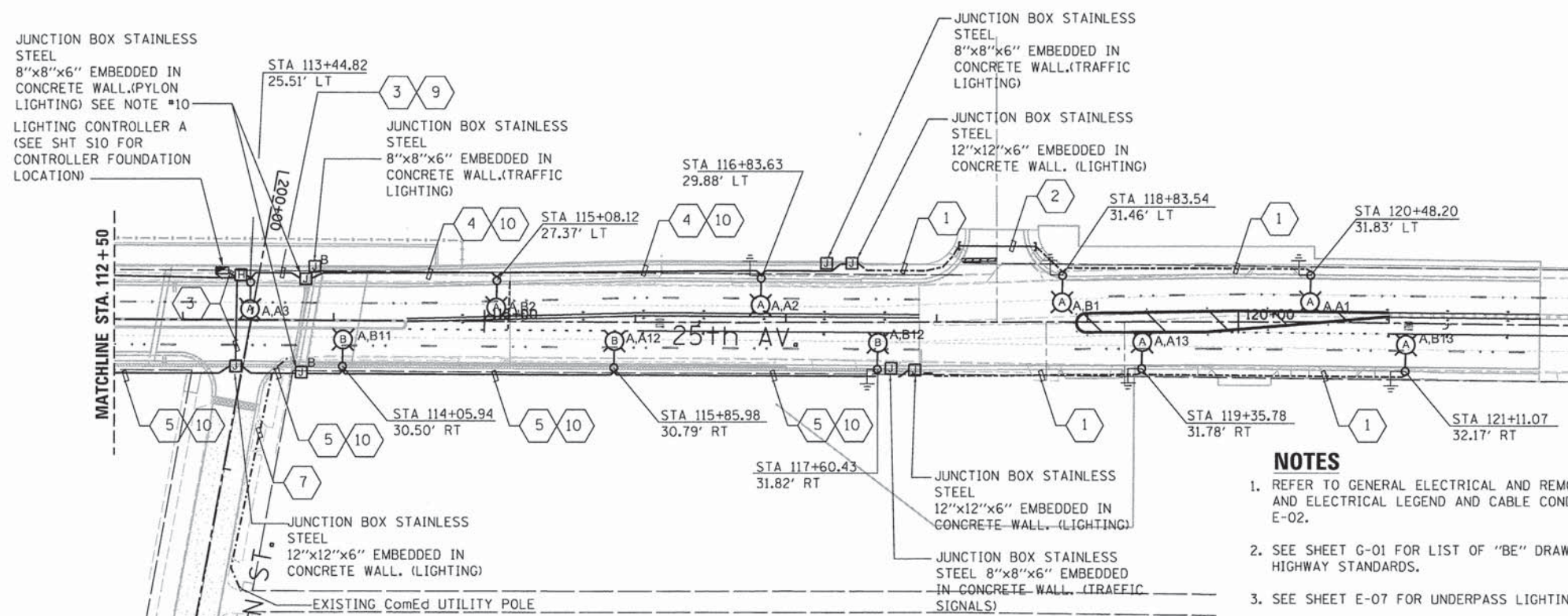
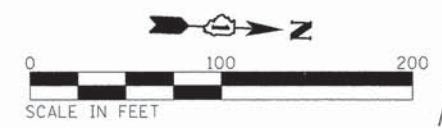
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NOTES

1. REFER TO GENERAL ELECTRICAL AND REMOVAL NOTES ON SHEET E-01 AND ELECTRICAL LEGEND AND CABLE CONDUIT SCHEDULE ON SHEET E-02.
2. SEE SHEET G-01 FOR LIST OF "BE" DRAWINGS OF ELECTRICAL HIGHWAY STANDARDS.
3. SEE SHEET E-07 FOR UNDERPASS LIGHTING PLAN.
4. LUMINAIRE MOUNTING HEIGHT OF LED FIXTURE SHALL BE 25' ABOVE PAVEMENT.
5. REFER TO STRUCTURAL SHEETS FOR EXACT LOCATIONS OF J-BOXES AND HANDHOLES.
6. LED LUMINAIRES ARE 240V, 1PH AND ARE WIRED IN ALTERNATING CIRCUITS. THE 5/C IS PROVIDED WITH NEUTRAL FOR FUTURE 120V POWER SOURCE. CAP AND PROTECT NEUTRAL CABLE.
7. TAPE NEUTRAL CONDUCTORS IN POLE BASE FOR FUTURE CONNECTION BY OTHERS.
8. PROVIDE AND INSTALL 2" PVC COATED GALVANIZED STEEL CONDUIT. STUB AND CAP AT 36" DEPTH BELOW GRADE.
9. PROVIDE AND INSTALL 3/4" RGS CONDUIT WITH 2#12 ,1#12 GRD. (XHHW TYPE) UP TO LED LIGHT FIXTURES TYPE "E" IN PYLON. (TOTAL OF 4 LED LIGHT FIXTURES PER PYLON). REFER TO ARCHITECTURAL DRAWING SHEET NO. AD1 FOR PYLON LIGHTING FIXTURE MOUNTING LOCATION.
10. JUNCTION BOX MOUNTING DETAILS ARE SIMILAR TO DISTRICT 1 "BE" DETAILS. SEE SHEET BE-703 FOR ADDITIONAL INFORMATION.

| | | | | | | | | | | |
|---|---------------------------|---------------|-----------|---|--|---|------------------------|-------------|------------------|---------------|
| | USER NAME = stephen.schuh | DESIGNED - CD | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PROPOSED LIGHTING PLAN 25TH AVENUE GRADE SEPARATION | F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 124 |
| | PLOT SCALE = 50,0000 "/> | | | | | | | | | |
| FILE NAME = P:\projects\12024\000\VE\Sheets\DI16899-shs-E1tg_E-05.dgn | | | | SCALE: 1"=50' SHEET 5 OF 10 SHEETS STA. 101+41 TO STA. 112+50 | | CONTRACT NO. 63887 ILLINOIS FED. AID PROJECT | | | | |



- NOTES**
1. REFER TO GENERAL ELECTRICAL AND REMOVAL NOTES ON SHEET E-01 AND ELECTRICAL LEGEND AND CABLE CONDUIT SCHEDULE ON SHEET E-02.
 2. SEE SHEET G-01 FOR LIST OF "BE" DRAWINGS OF ELECTRICAL HIGHWAY STANDARDS.
 3. SEE SHEET E-07 FOR UNDERPASS LIGHTING PLAN.
 4. LUMINAIRE MOUNTING HEIGHT OF LED FIXTURE SHALL BE 25' ABOVE PAVEMENT.
 5. REFER TO STRUCTURAL SHEETS FOR EXACT LOCATIONS OF J-BOXES AND HANDHOLES.
 6. LED LUMINAIRES ARE 240V, 1PH AND ARE WIRED IN ALTERNATING CIRCUITS. THE 5/C IS PROVIDED WITH NEUTRAL FOR FUTURE 120V POWER SOURCE. CAP AND PROTECT NEUTRAL CABLE.
 7. TAPE NEUTRAL CONDUCTORS IN POLE BASE FOR FUTURE CONNECTION BY OTHERS.
 8. PROVIDE AND INSTALL 2" PVC COATED GALVANIZED STEEL CONDUIT, STUB AND CAP AT 36" DEPTH BELOW GRADE.
 9. PROVIDE AND INSTALL 3/4" RGS CONDUIT WITH 2#12 ,1#12 GRD. (XHHW TYPE) UP TO LED LIGHT FIXTURES TYPE "E" IN PYLON. REFER TO ARCHITECTURAL DRAWINGS FOR PYLON LIGHTING FIXTURE MOUNTING LOCATION.
 10. JUNCTION BOX MOUNTING DETAILS ARE SIMILAR TO DISTRICT 1 "BE" DETAILS. SEE SHEET BE-703 FOR ADDITIONAL INFORMATION.

E-06



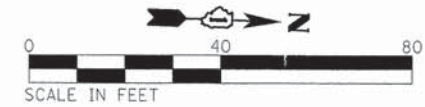
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|------------------------------|------------------|-----------|
| USER NAME = stephen.schuh | DESIGNED - CD | REVISED - |
| PLOT SCALE = 50.0000' / 1" = | DRAWN - CD | REVISED - |
| PLOT DATE = 3/21/2014 | CHECKED - IB | REVISED - |
| | DATE - 1-06-2014 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | |
|-------------------------------------|---|
| PROPOSED LIGHTING PLAN | |
| 25TH AVENUE GRADE SEPARATION | |
| SCALE: 1"=50' | SHEET 6 OF 10 SHEETS STA. 112+50 TO STA. 122+00 |

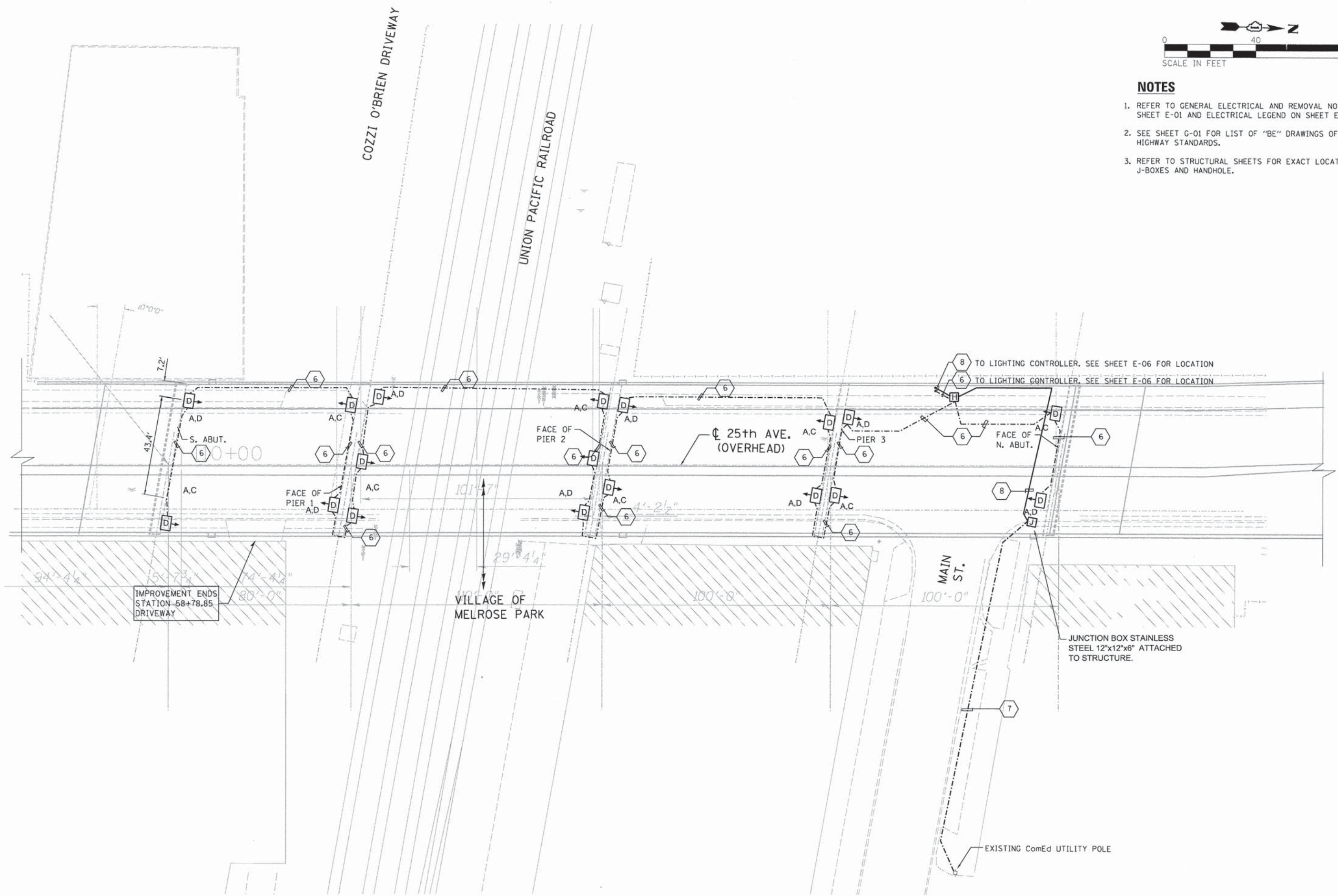
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 125 |
| CONTRACT NO. 63887 | | | | |

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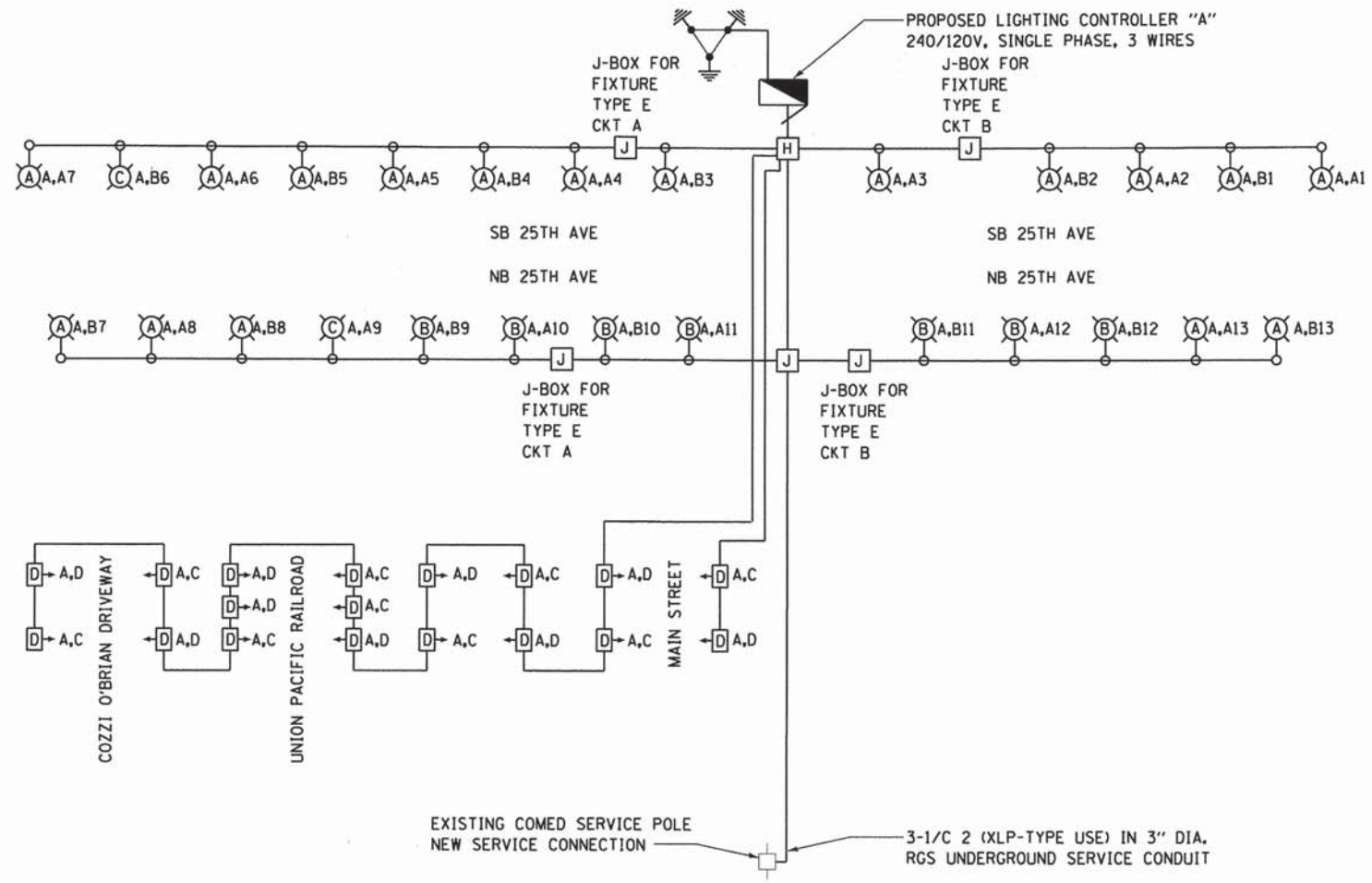
NOTES

1. REFER TO GENERAL ELECTRICAL AND REMOVAL NOTES ON SHEET E-01 AND ELECTRICAL LEGEND ON SHEET E-02.
2. SEE SHEET G-01 FOR LIST OF "BE" DRAWINGS OF ELECTRICAL HIGHWAY STANDARDS.
3. REFER TO STRUCTURAL SHEETS FOR EXACT LOCATIONS OF J-BOXES AND HANDHOLE.



E-07

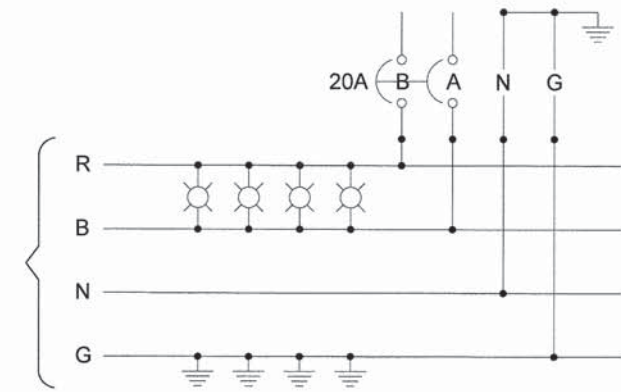
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|---|------------------------------|---------------|---------------|---|--|---------------------------|--------------------|----------------|--------|--------------|-----------|
| | USER NAME = stephen.schuh | DESIGNED - CD | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PROPOSED UNDERPASS LIGHTING PLAN 25TH AVENUE GRADE SEPARATION | | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLLOT SCALE = 20.0000' / in. | DRAWN - CD | REVISED - | | | | 2714 | 99-00094-00-GS | COOK | 240 | 126 |
| | PLLOT DATE = 3/21/2014 | CHECKED - IB | REVISED - | | | | CONTRACT NO. 63887 | | | | |
| FILE NAME = P:\projects\12024\000\Sheet\0116899-sht-E1tg_E-07.dgn | DATE - 1-06-2014 | REVISED - | SCALE: 1"=20' | SHEET 7 OF 10 SHEETS STA. TO STA. | | ILLINOIS FED. AID PROJECT | | | | | |



**LOAD TABLE (AMPS)
CONTROLLER
240/120V, 1PH, 3W**

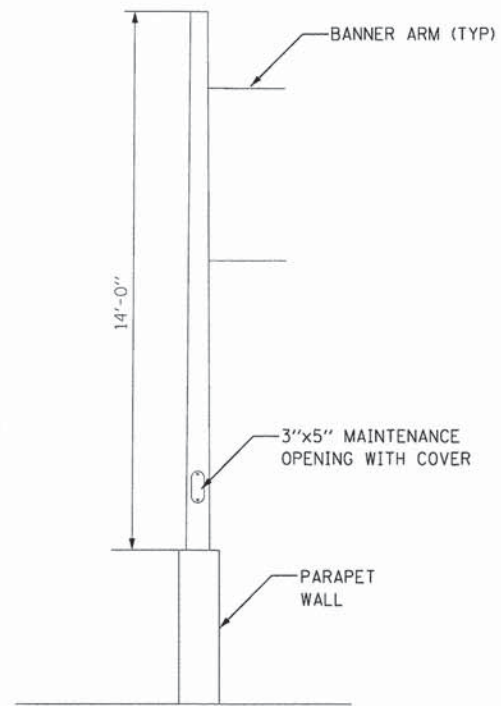
| CKT. TAG | PHASE A WATTS | PHASE B WATTS | LUMINAIRES |
|--------------------|---------------|---------------|----------------|
| A | 377 | ---- | A,B,C,E |
| | ---- | 377 | A,B,C,E |
| B | 377 | ---- | A,B,C,E |
| | ---- | 377 | A,B,C,E |
| C | 880 | ---- | D |
| | ---- | 880 | D |
| D | 880 | ---- | D |
| | ---- | 880 | D |
| TOTAL WATTS | 2514 | 2514 | A,B,C,D |

| | |
|-------------------------|-------------------|
| TOTAL CONN. LOAD | 5028 WATTS |
| TOTAL CONN. LOAD | 21 AMPS |

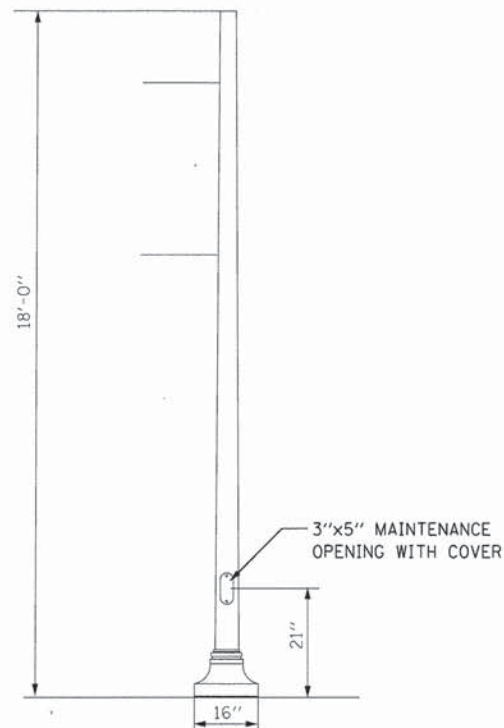


LUMINAIRE WIRING DETAIL (TYPICAL)

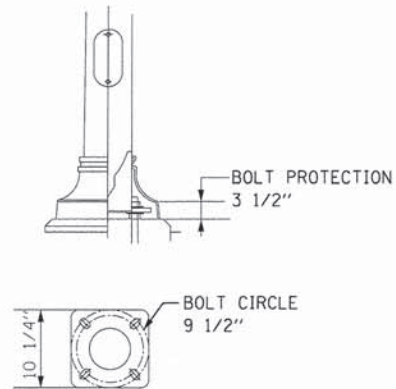
NOTE:
1. LOADING ASSUMES 22% BALLAST FACTOR ON ALL LUMINAIRES.



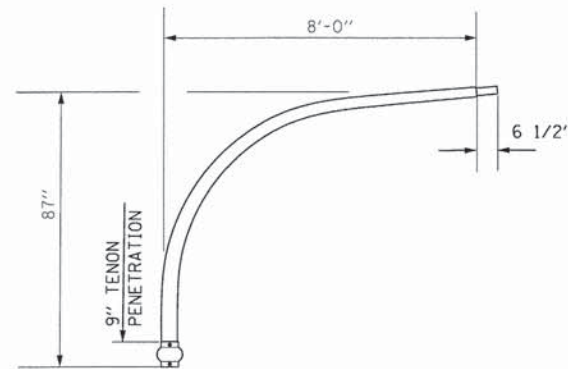
ALUMINUM TAPERED POLE (14' HIGH)
N.T.S.



ALUMINUM TAPERED POLE (18' HIGH)
N.T.S.



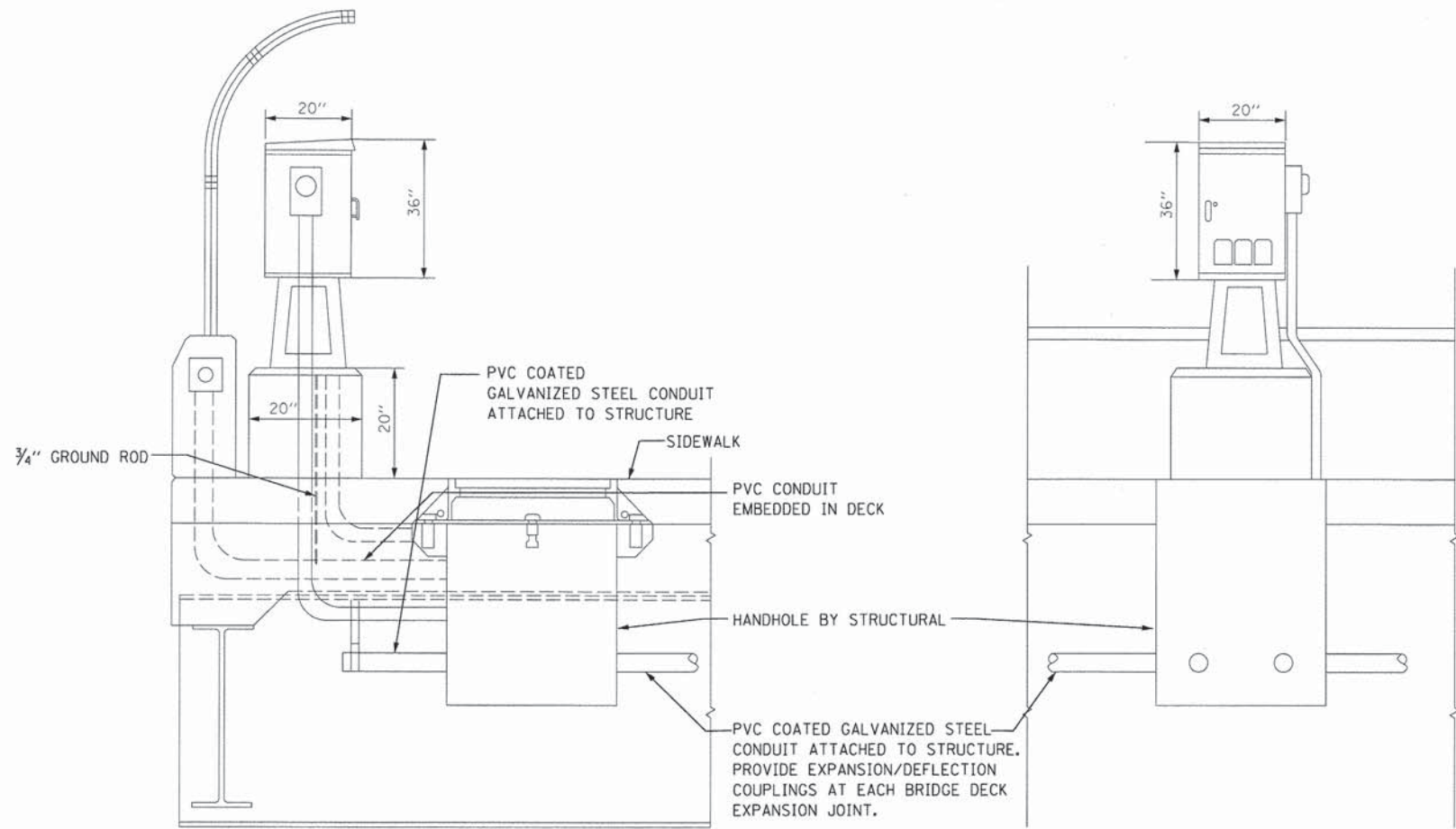
BASE DETAIL
N.T.S.



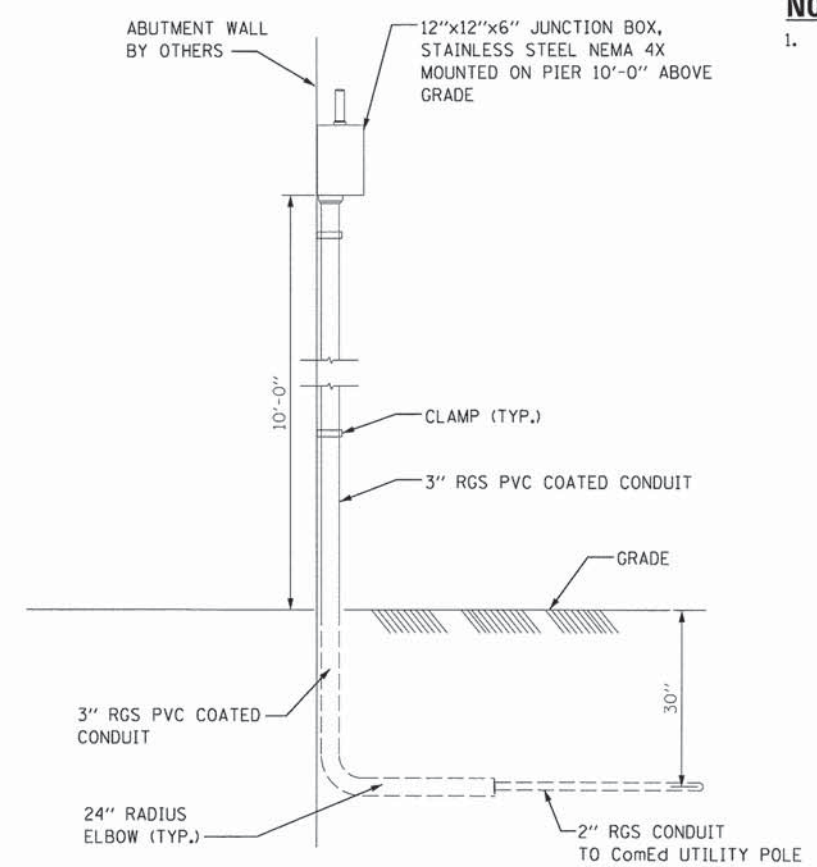
EXTENDED REACH BRACKET DETAIL
N.T.S.

NOTES:

1. 18', 14' POLES AND DAVIT ARM DETAILS ON THIS SHEET ARE SIMILAR TO DISTRICT 1 "BE" DAVIT LIGHT POLE DETAIL. SEE SHEET BE-412 FOR ADDITIONAL INFORMATION.
2. BASE DETAIL, BOLT CIRCLE ON THIS SHEET IS SIMILAR TO DISTRICT 1 "BE" LIGHT POLE MOUNTED TO PARAPET WALL. SEE SHEET BE-330 FOR ADDITIONAL INFORMATION.



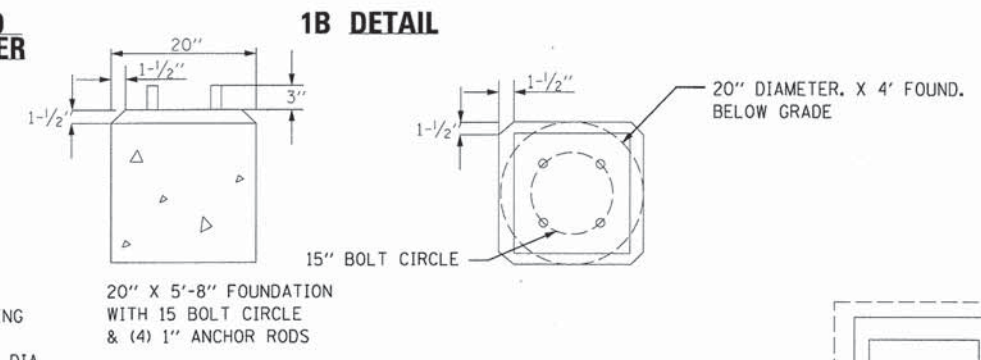
INSTALLATION DETAIL FOR PAD MOUNTED LIGHTING CONTROLLER



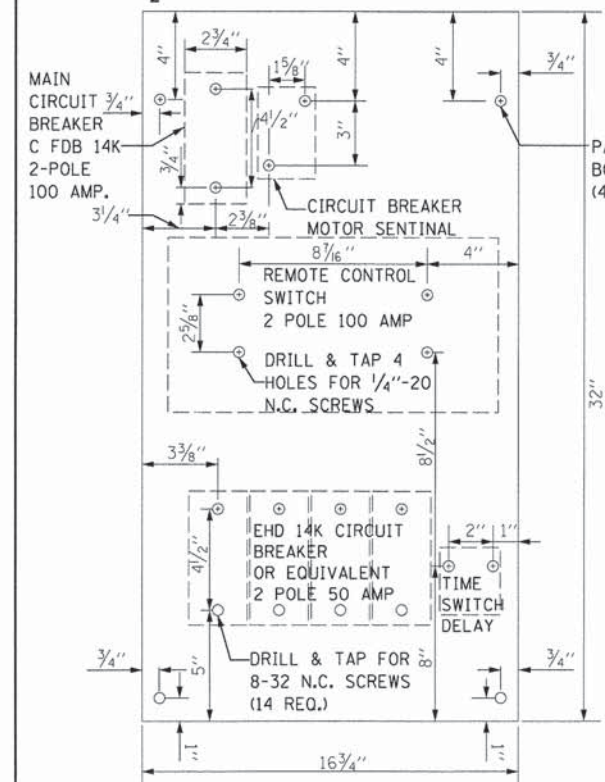
ELECTRIC CONNECTION TO LIGHTING CONTROLLER

NOTES:
 1. 100A, 240/120V, 3PH, 3W LIGHTING CONTROLLER DETAIL ON THIS SHEET IS SIMILAR TO DISTRICT 1 "BE" LIGHTING CONTROLLER SINGLE DOOR. SEE SHEET BE-215 FOR ADDITIONAL INFORMATION.

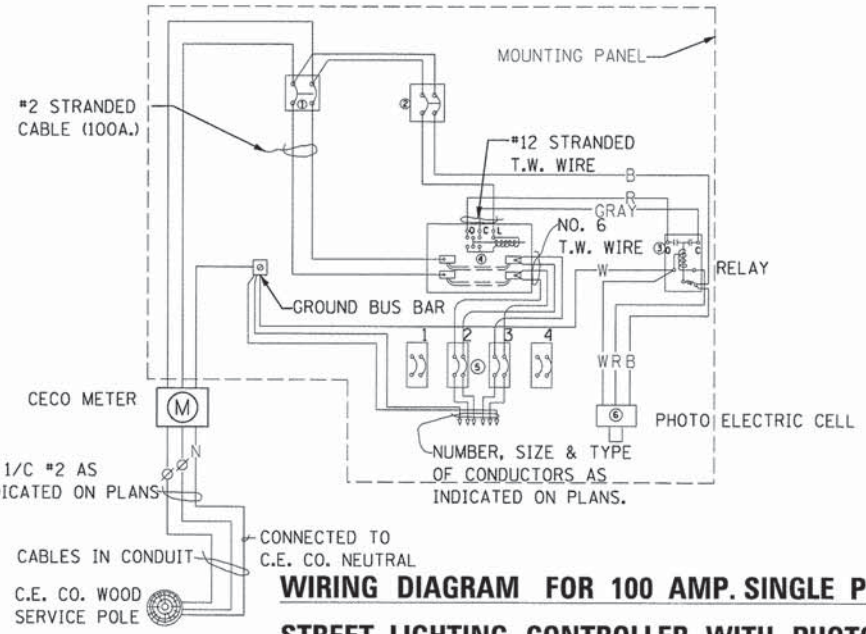
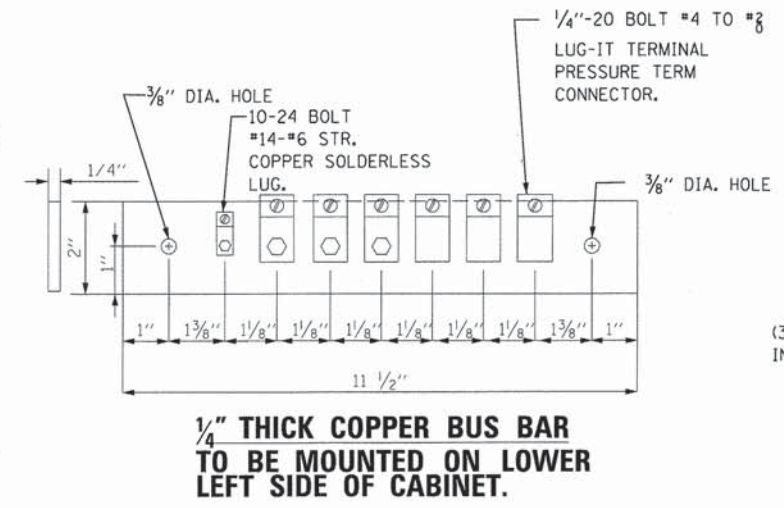
NOTES:
 N.T.S.
 1. COORDINATE WITH BRIDGE STRUCTURAL WORK.
 2. JUNCTION BOX ATTACHED TO PIER/ ABUTMENT WALL MUST BE ATTACHED WITH EXPANSION ANCHORS AS RECOMMENDED BY MANUFACTURER. EXPANSION ANCHORS POWDER ACTUATED FASTENERS WILL NOT BE ALLOWED.



BACK PANEL 1/2" THICK PHENOLIC LINEN BASE

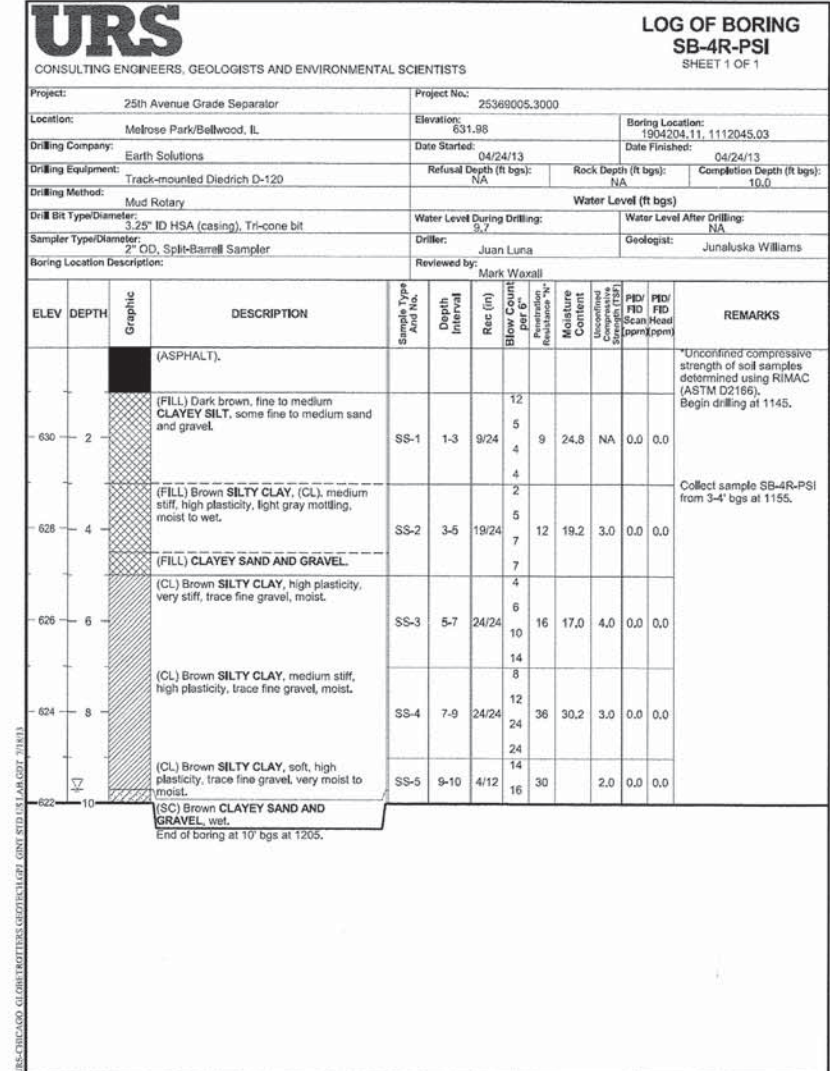
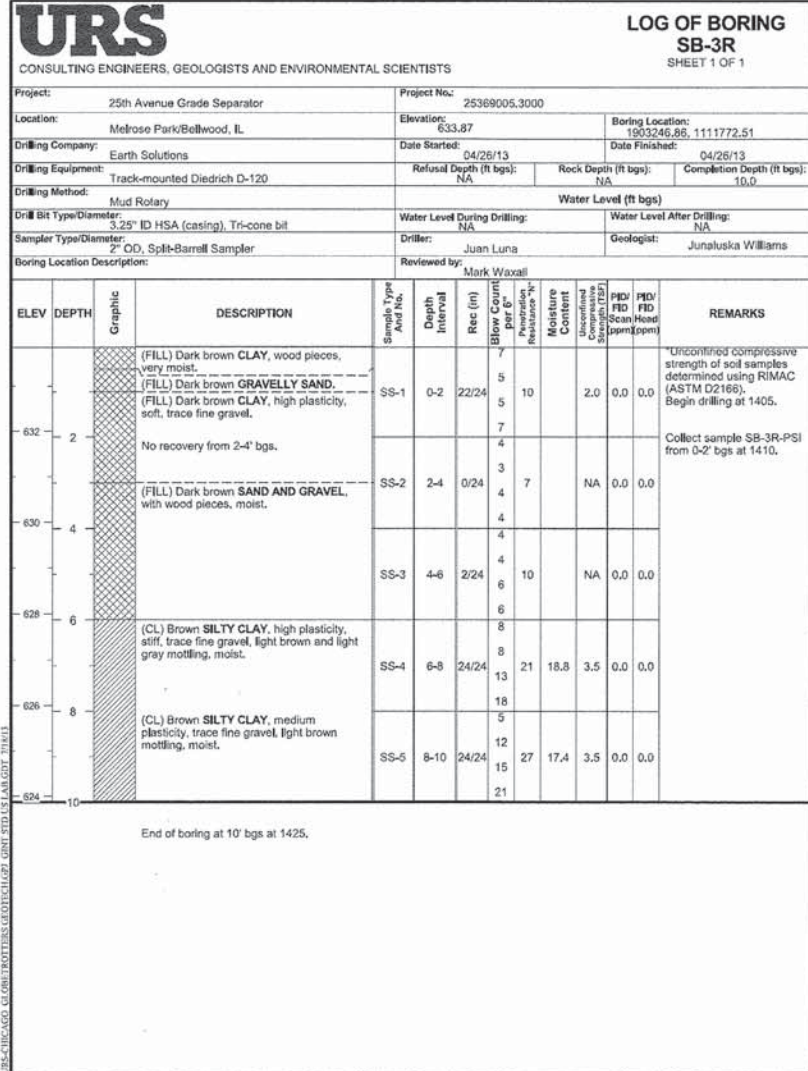
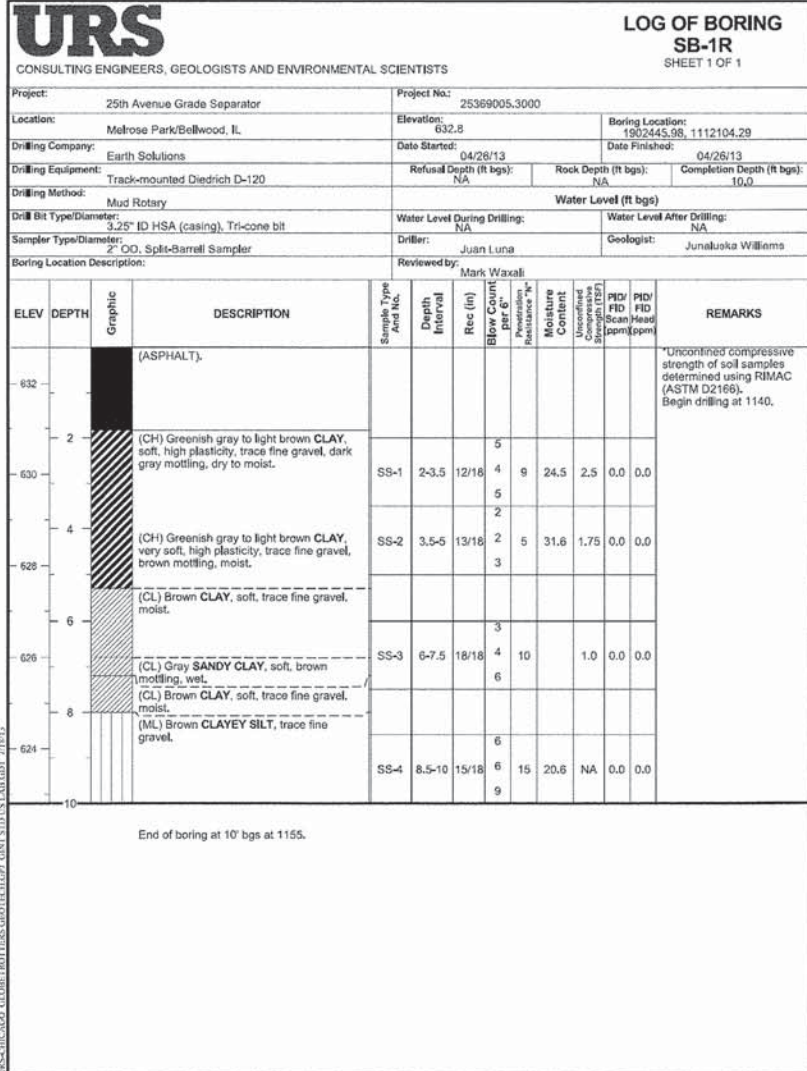


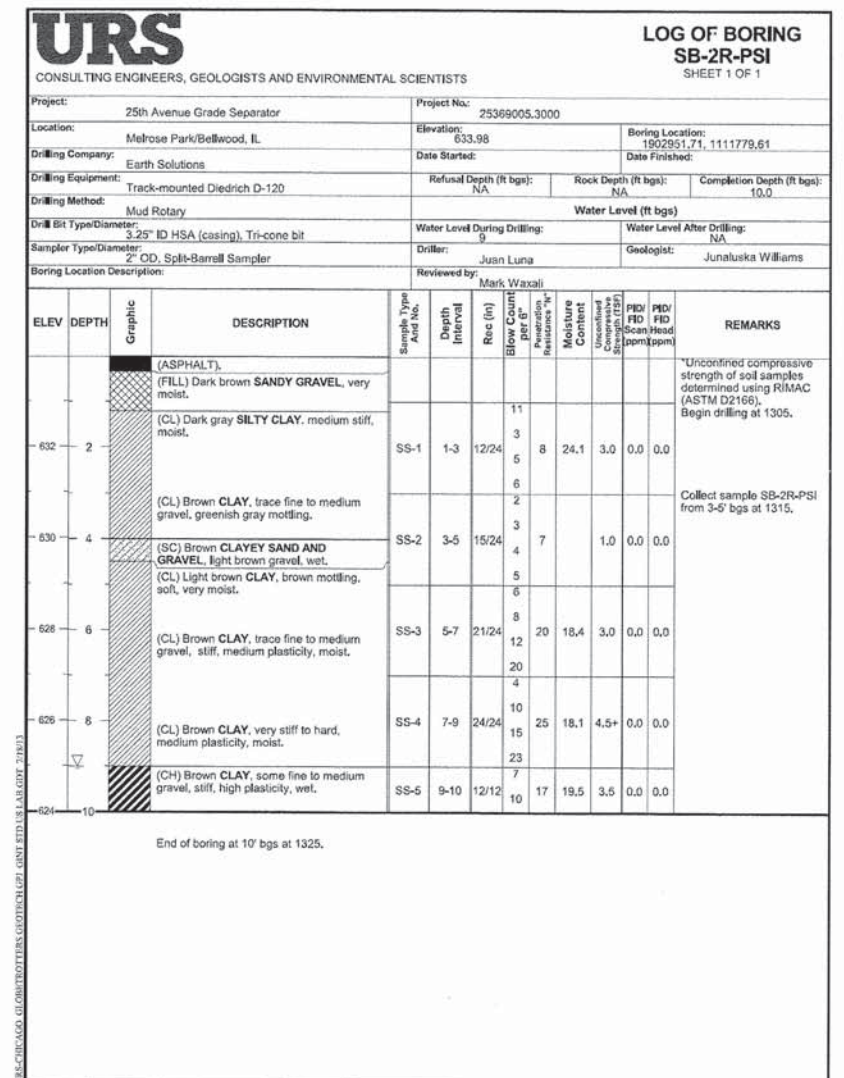
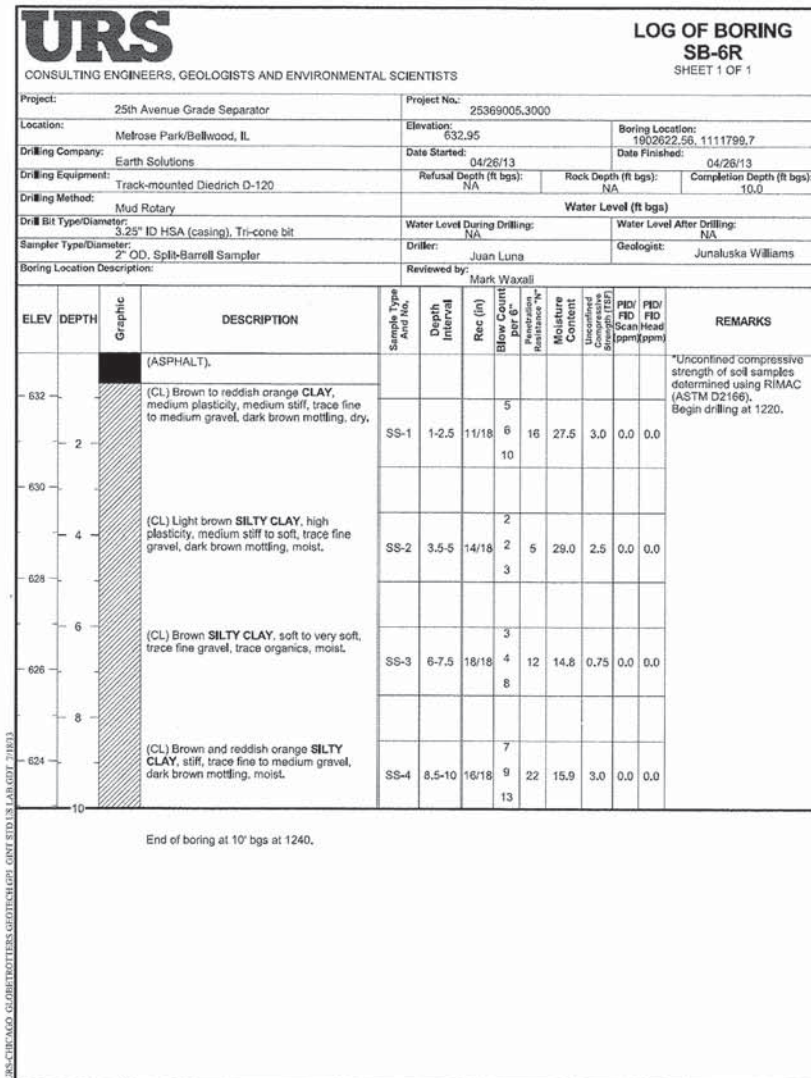
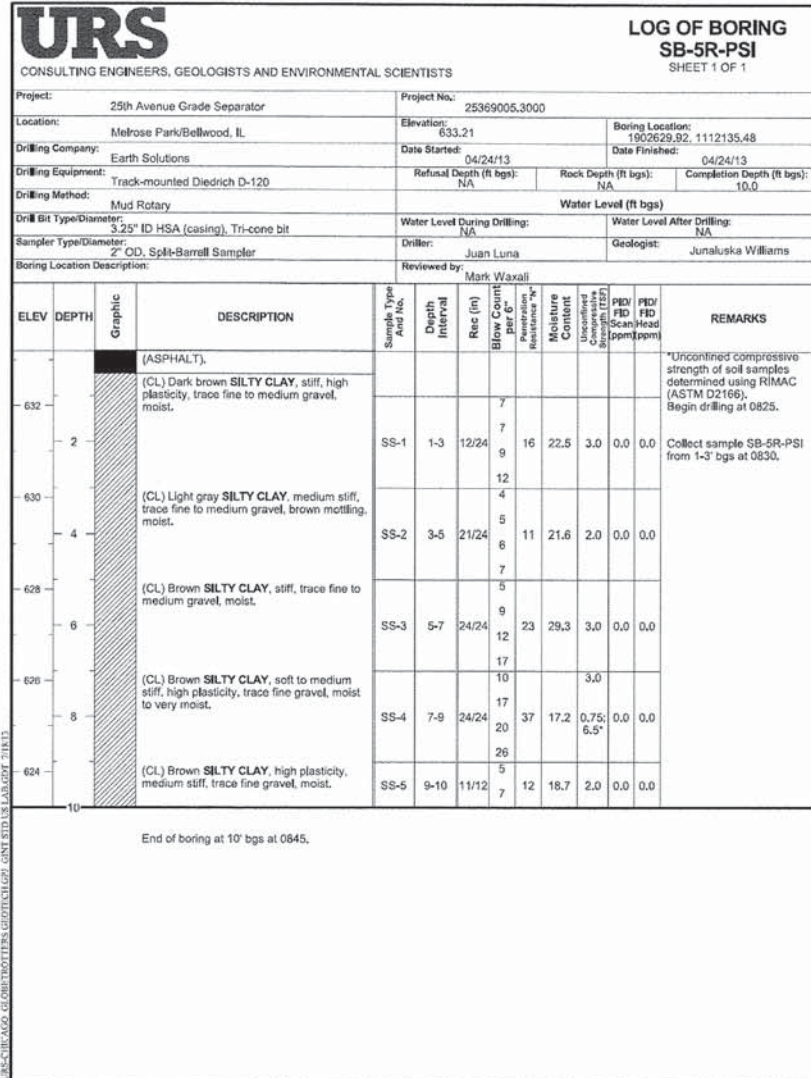
PANEL MOUNTING BOLT HOLES, (4) HOLES 1/2" DIA.



WIRING DIAGRAM FOR 100 AMP. SINGLE PHASE 240V. STREET LIGHTING CONTROLLER WITH PHOTO CELL (120V.)

1. CIRCUIT BREAKER-2 POLE, 100A
 2. MANUAL STARTER-2 POLE, 5.3A, THERMAL OVERLOAD
 3. RELAY
 4. REMOTE CONTROL SWITCH-2 POLE, 100A, 240 V. A.C. COIL
 5. BRANCH CIRCUIT BREAKER-2 POLE, 20A.
 6. PHOTO ELECTRIC CELL
- NOTES**
 1. MOUNT PHOTOCELL IN BOTTOM OF CABINET AT RIGHT SIDE. BOTTOM OF PHOTOCELL TO BE FLUSH OR SLIGHTLY ABOVE OUTSIDE EDGE OF CABINET.
 2. GROUND BUS TO BE MOUNTED ON LEFT SIDE WALL OF CABINET



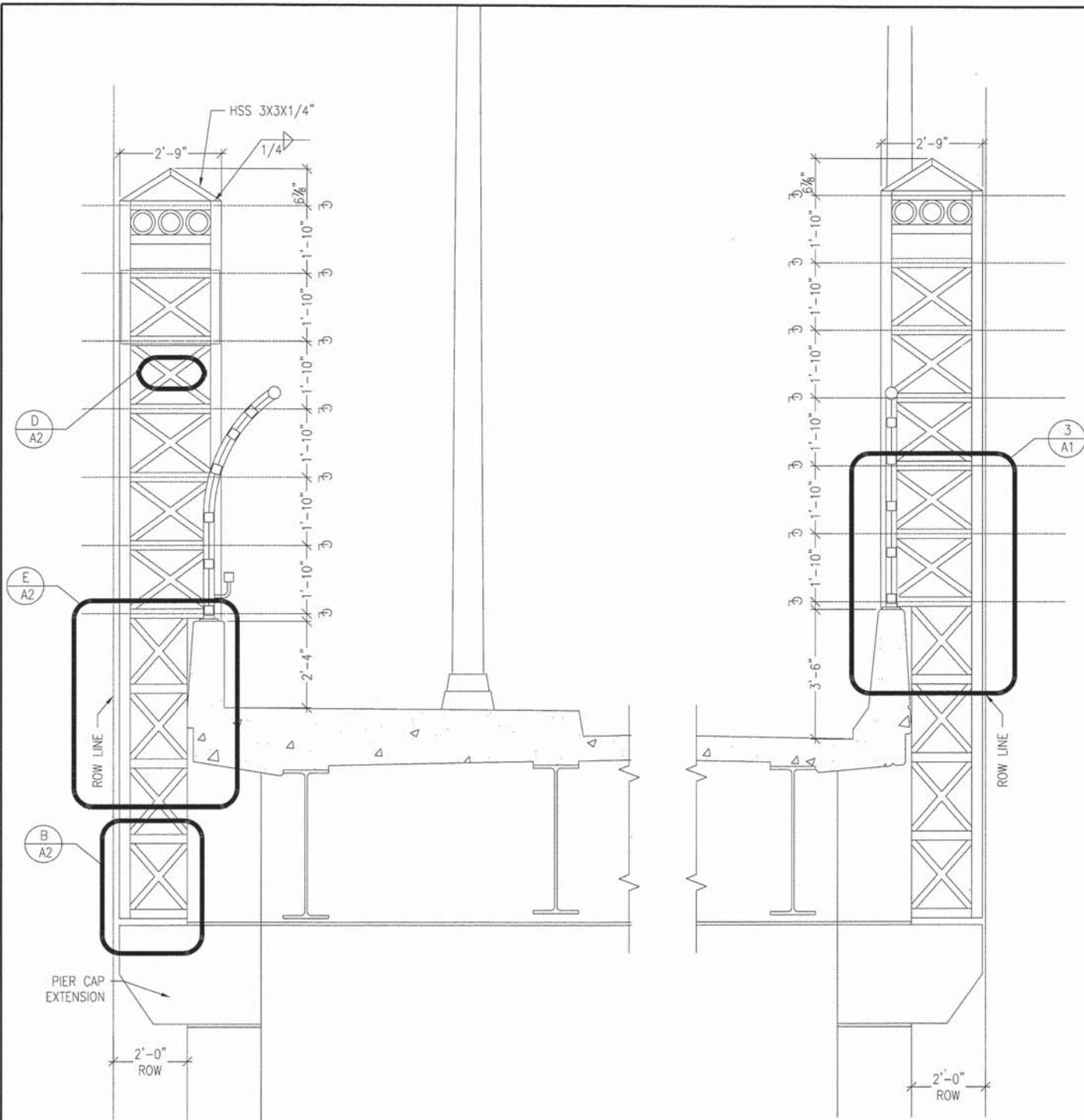


| | | |
|-----------------------------|----------------|-----------|
| USER NAME = stephen.schuh | DESIGNED MA | REVISED - |
| PLOT SCALE = 10.0000' / in. | DRAWN MA | REVISED - |
| PLOT DATE = 3/21/2014 | CHECKED RH | REVISED - |
| | DATE 3-24-2014 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | |
|-------------------------------------|----------------------------------|
| SOIL BORING LOGS | |
| 25TH AVENUE GRADE SEPARATION | |
| SCALE: N.T.S. | SHEET 2 OF 2 SHEETS STA. TO STA. |

| | | | | |
|---------------------------|---------------|--------|--------------|-----------|
| F.A.U R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-0094-00-GS | COOK | 240 | 131 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

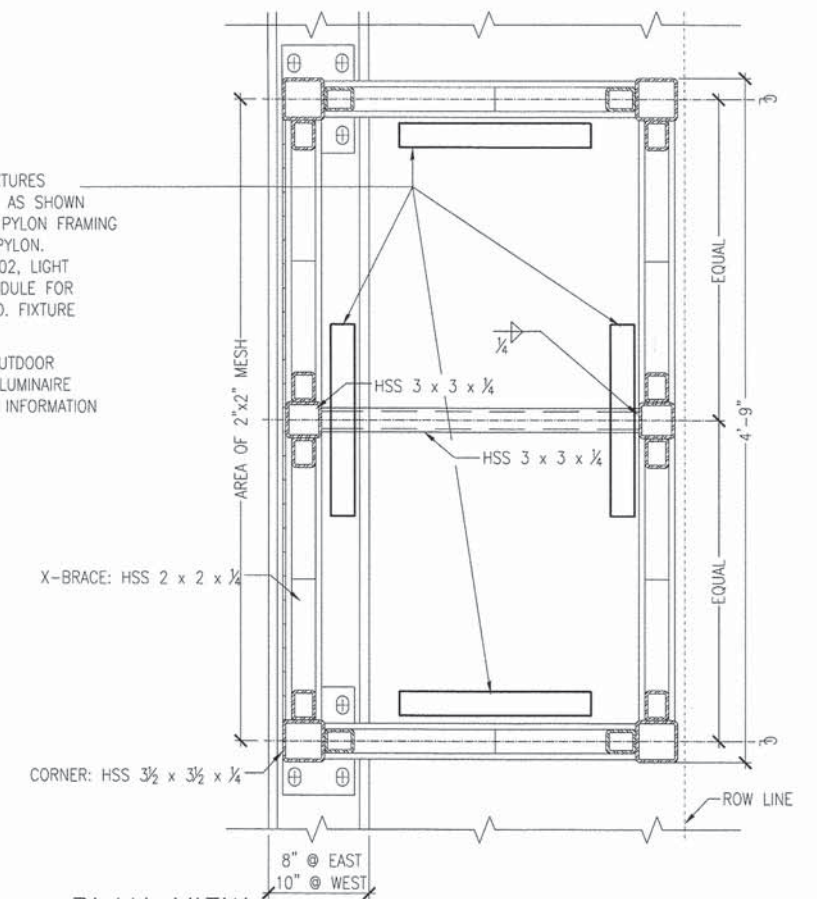


1 SECTION AT PYLON/VIEW NORTH (TYPICAL OF 4)
SCALE: 1/2"=1'-0"

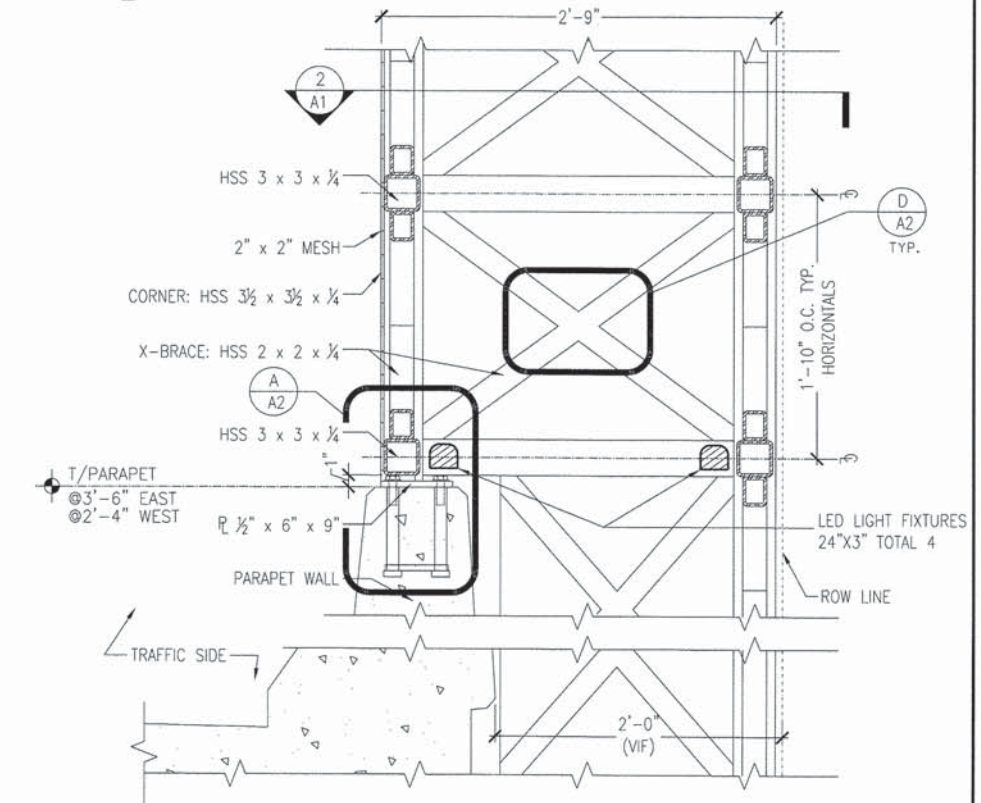
GENERAL NOTES

1. ALL TUBE SECTIONS ARE GALVANIZED ACCORDING TO ARTICLE 509.05 OF THE STANDARD SPECIFICATIONS.
2. ALL WELDED CONSTRUCTION, TYPICAL.
3. 2"x2" GALVANIZED MESH TO EXTEND ACROSS ROADWAY SIDE OF EACH PYLON, TO HEIGHT OF ADJACENT FENCE.

LED LIGHT FIXTURES
4 PER PYLON AS SHOWN
ATTACHED TO PYLON FRAMING
AT BASE OF PYLON.
REF. SHT. E-02, LIGHT
FIXTURE SCHEDULE FOR
TYPE-'E' L.E.D. FIXTURE
TYPICAL
REFERENCE OUTDOOR
TYPE LED 2' LUMINAIRE
FOR ADDITION INFORMATION



2 PLAN VIEW
PYLON DETAIL AT EAST PARAPET
SCALE: 1 1/2"=1'-0"



3 PYLON DETAIL AT EAST PARAPET
SCALE: 1 1/2"=1'-0"



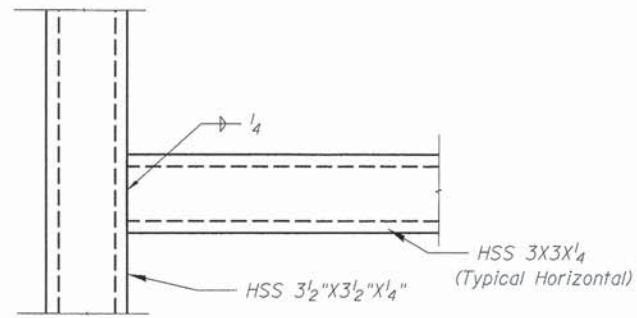
| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - JG | REVISED |
| PLOT SCALE = None | CHECKED - RD | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - MH | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 132 OF 240 SHEETS

| | | | | |
|---------------------------|---------------------------|----------------|------------------------|---------------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 132 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

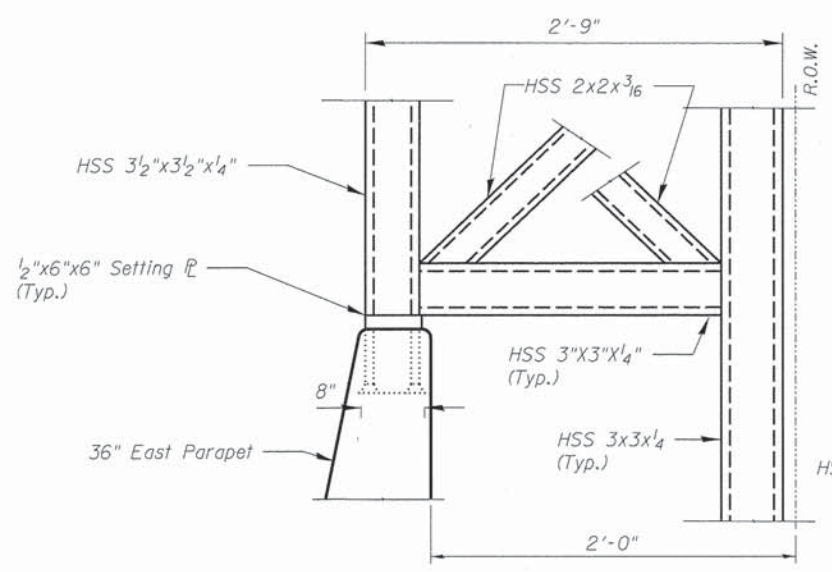
P:\projects\12224\020\5\CA00 Sheets\0166351-25th-A01-Pylon.dgn
4/14/14 PM



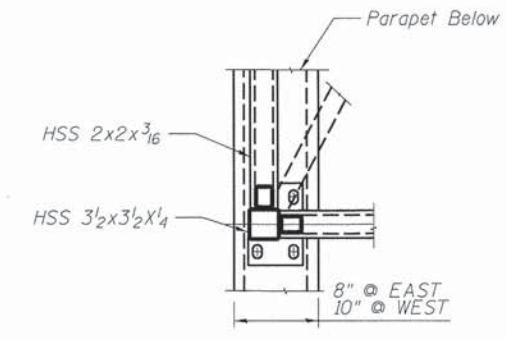
Per AISC J4:
 For Shear yielding, $R_n = F_y A_g$
 Design Strength = $\phi F_y A_g = \phi F_y (A_e / 0.85)$, where
 $A_e = 5/8 R$ (AISC Table J2)
 Therefore, $\phi F_y A_g = 0.80 (LRFD) (42 \text{ ksi}) (5/8 R)$
 $R = 1.11"$ for HSS 3X3X1/4
 Design Strength of HSS 3x3x1/4 = 23.3 k/in
 Total Shear @ Base = 1.32 << 23.3 k/in
 Total Mmax @ Base = 161 k-in, meaning weld req'd.
 is minimal.

*Per Table J2.5
 **=0.6(70 ksi), per Table J2.5

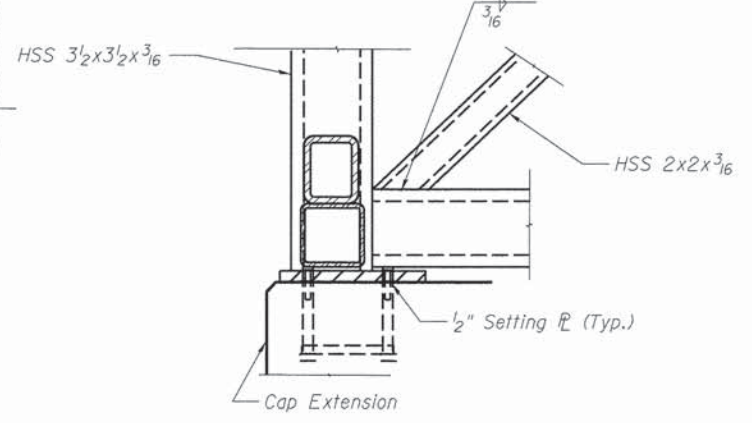
WELD DETAIL - TYP



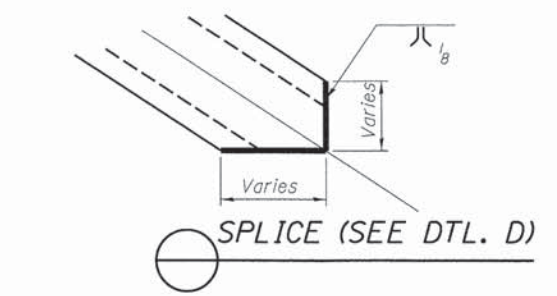
DETAIL A



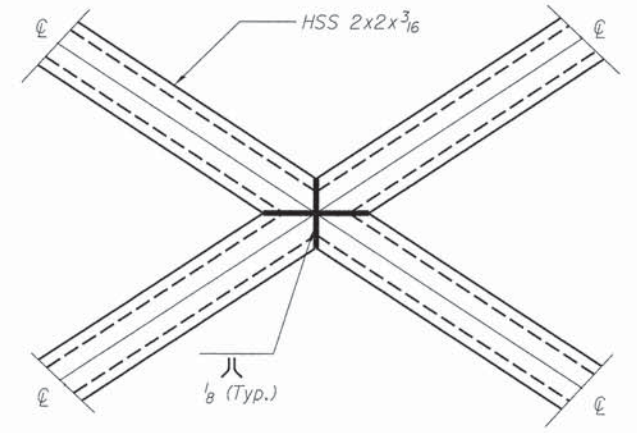
DETAIL B - PLAN VIEW AT WEST PARAPET



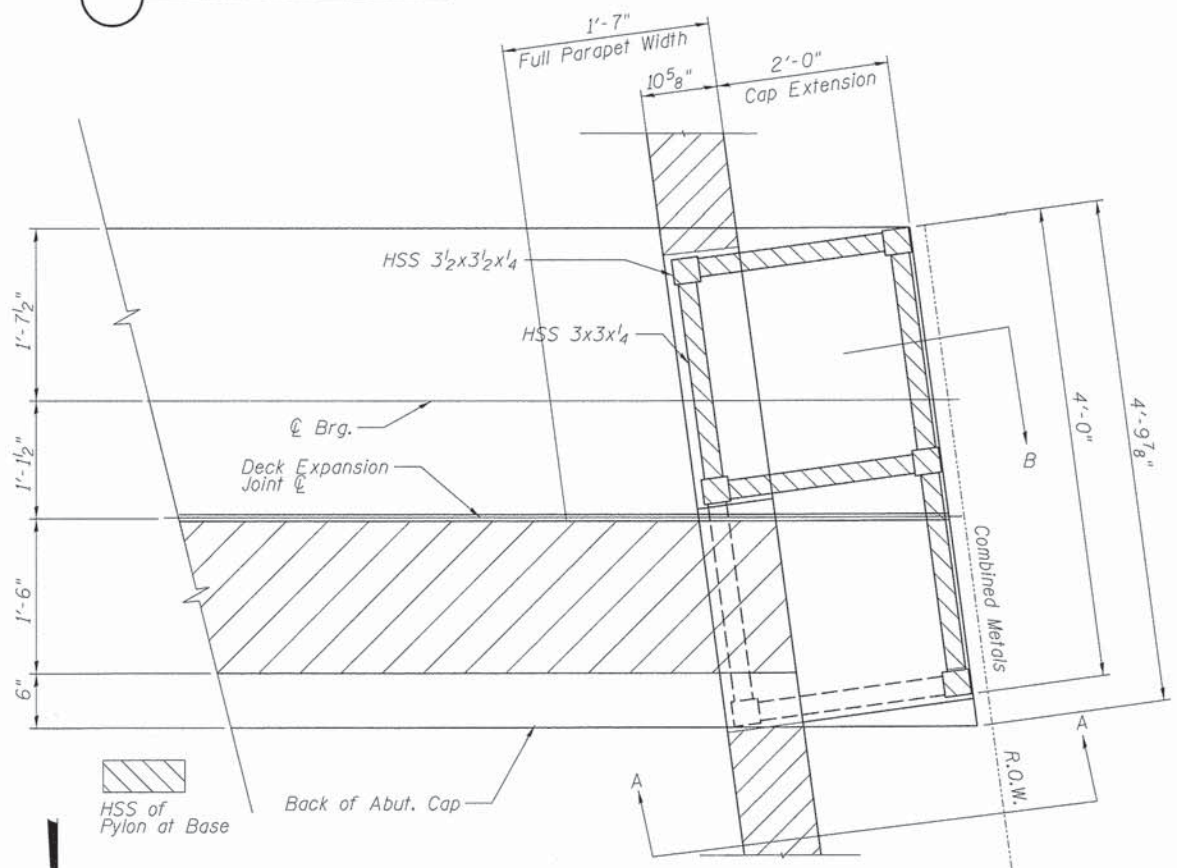
DETAIL B-ELEVATION DETAIL AT WEST PARAPET



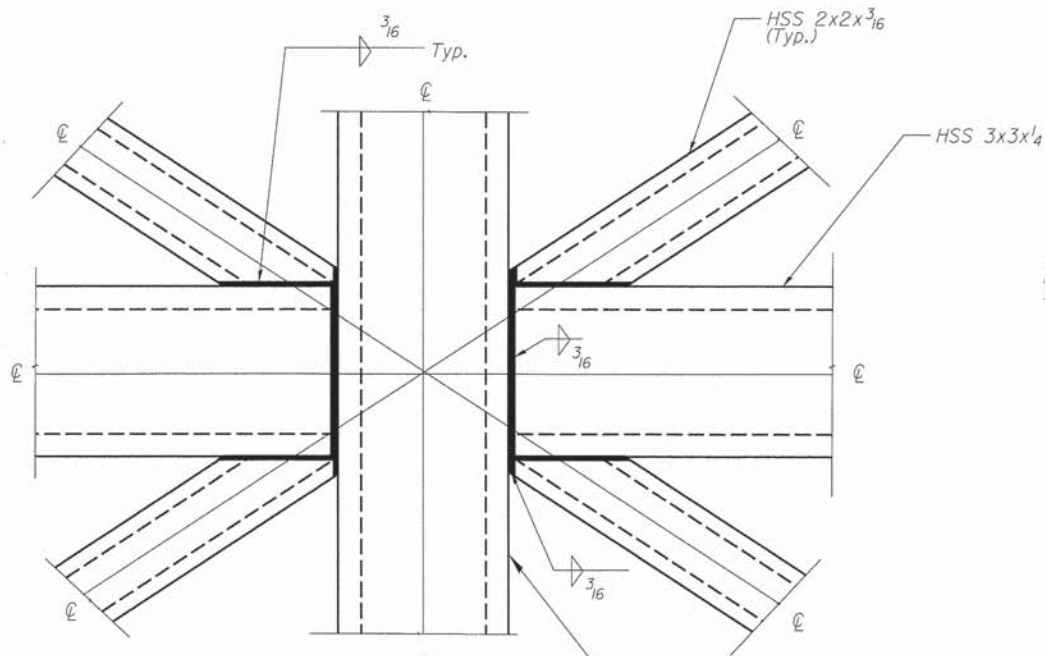
SPLICE (SEE DTL. D)



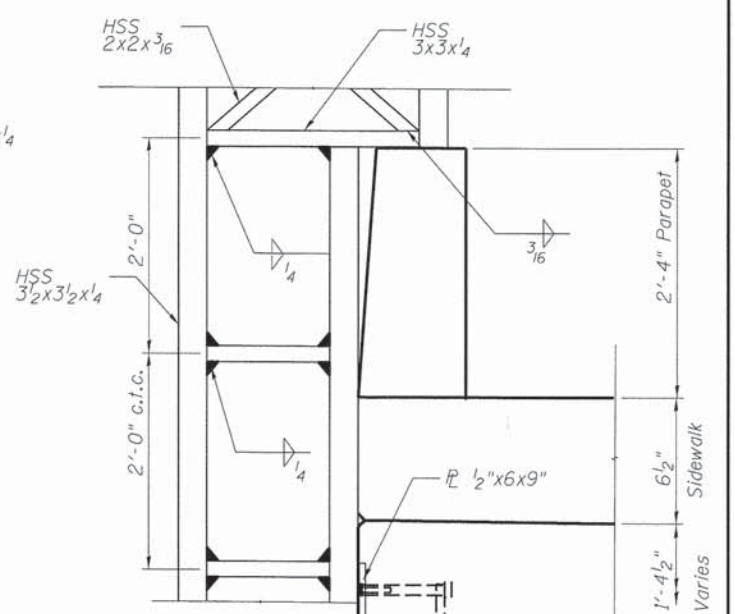
DETAIL D - TYPICAL



SECTION A-A
 (Planview Set at S-E Pylon)



DETAIL C



DETAIL E (TYPICAL)

Bench Mark: West Bonnet Bolt on fire hydrant at northeast corner,
25th Ave. & Lake St. Elev. 634.60.

Existing Structure: N/A
No. Stage Construction
No Salvage

Grant Ave.
Sta. 104+84.79

Indicated Proposed Bridge Boring Points from URS Geotechnical Report
2B (Soil Boring Data)

No free fall deck drains are permitted in the span
over the tracks or the proposed tracks or within
10 ft of the cross arms of a railroad post line

Pier 1 requires design for a 600k impact load
per LRFD Standards.

Grant Ave.

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge
Design Specifications, 6th Edition

DESIGN STRESSES

FIELD UNITS

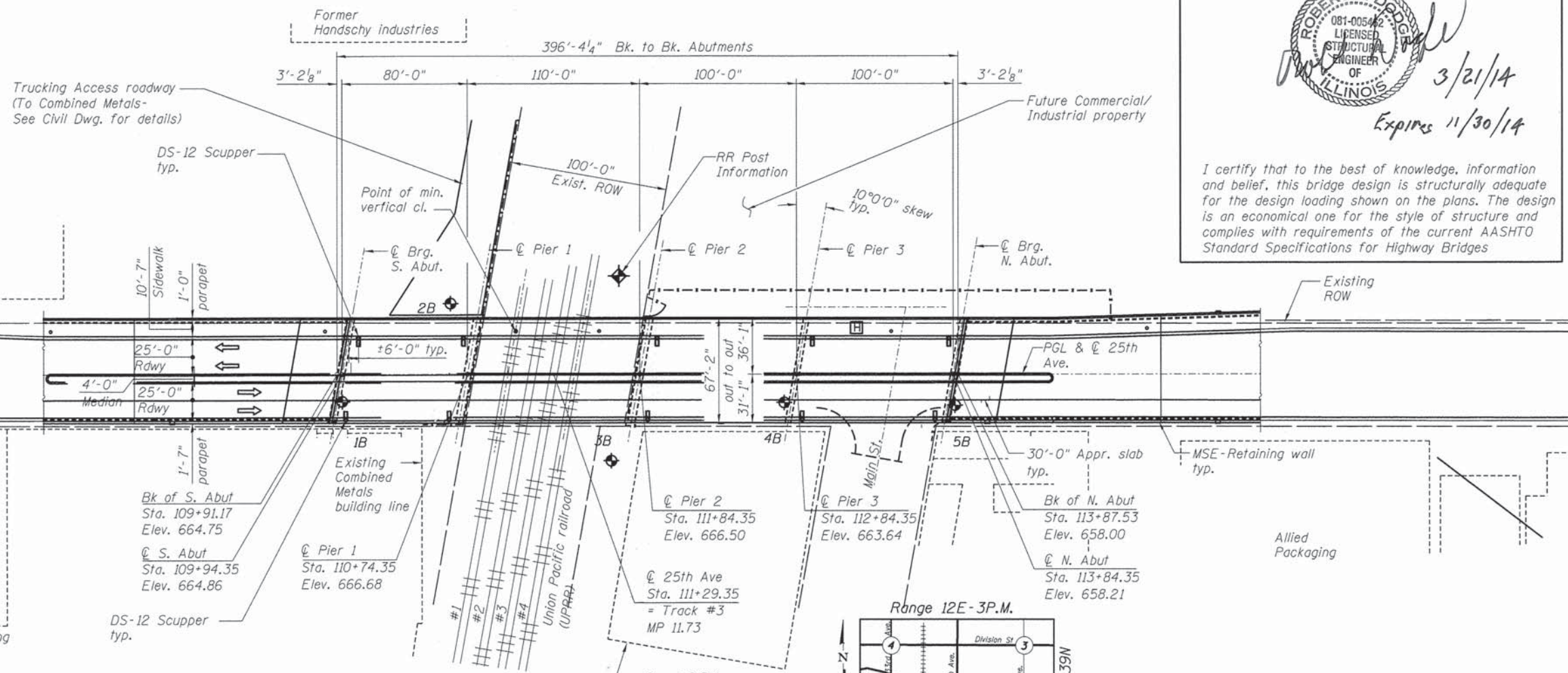
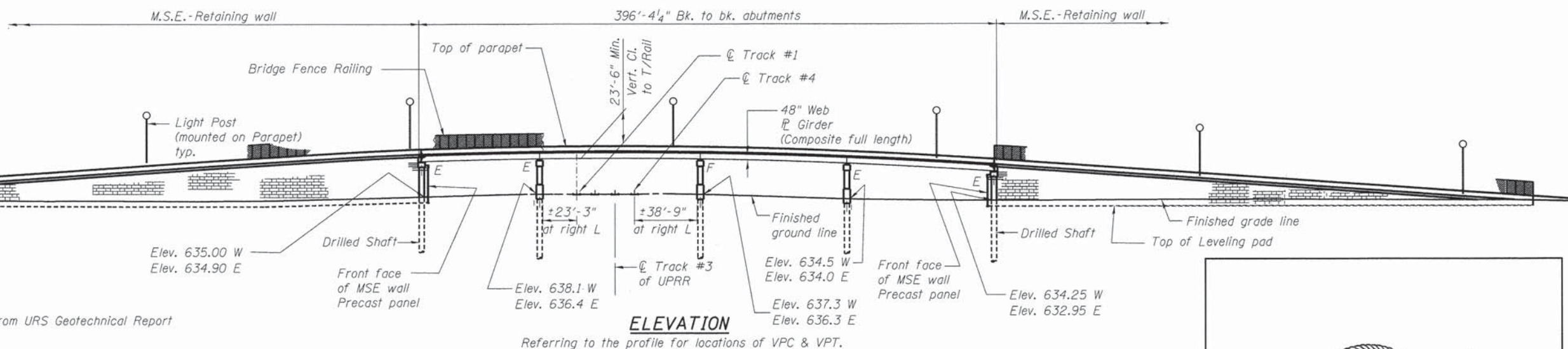
$f'_c = 4,000$ psi
 $f'_c = 4,500$ psi (Precast panels)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50W)

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 Second (SD1) = 0.04
Design Spectral Acceleration at 0.2 Second (SDS) = 0.09
Soil Site Class = C

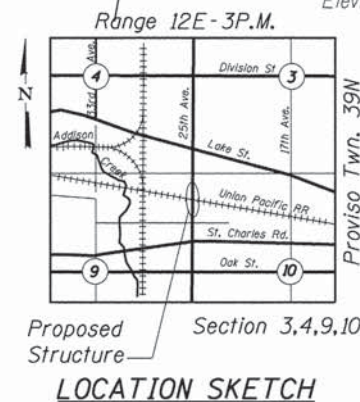


ROBERT A. DEB...

081-00542
LICENSED
STRUCTURAL
ENGINEER
OF
ILLINOIS

3/21/14
Expires 11/30/14

I certify that to the best of knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges



GENERAL PLAN AND ELEVATION
25th AVE. OVER U.P.R.R. TRACKS
MELROSE PARK/BELLWOOD, IL
F.A.U. RTE. 2714
PROVISO TOWNSHIP SECTION 3, 4, 9 & 10
COOK COUNTY STATION 111+28.59
STRUCTURE NO. 016-6351



| | | |
|--------------------------|------------------|---------|
| USER NAME = mohammed.als | DESIGNED - RD | REVISED |
| PLLOT SCALE = None | CHECKED - JG | REVISED |
| PLLOT DATE = 3/20/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-6351
SHEET NO. 134 OF 240 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-G5 | COOK | 240 | 134 |
| CONTRACT NO. 63887 | | | | |

GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts (in painted areas and ASTM A325 Type 3 in unpainted areas). Bolts 7/8-in. ϕ , holes 15/16-in. ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 764,452 lbs. (M270 Grade 50W)
- All structural steel shall be AASHTO M 270 Grade -50W (except expansion joints which shall be AASHTO M 270 Grade 36).
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to the designated areas of the abutments.
- All structural steel and exposed surfaces of bearings within a distance of 10 ft. each way from the deck joints shall be painted as specified in Section 506 of the Standard Specifications.
- Concrete for the Drilled Shafts shall be placed in accordance with Articles 516.03 and 516.12 of the Standard Specifications. Cost included in Drilled Shaft in Soil and/or Drilled Shaft in Rock. When drilling shafts, the locations will be specified. Place note with shaft data on appropriate substructure sheet.
- All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other places or shims and placed as shown on bearing details.
- Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
- The Contractor must submit a proposed method of erosion and sediment control and have the method approved by the Railroad.
- Slipforming of the parapets is not allowed.
- All demolition within the Railroad's Right-of-Way Shall and/or demolition that may impact the Railroad's tracks or operations shall be in compliance with the Railroad's Demolition Guidelines.

- Erection over the Railroad's Right-of-Way Shall be done to cause no interruption to the Railroad's traffic, enabling the track(s) to remain open per the Railroad's requirements.
- Railroad requirements do not allow work within 50 feet of the track centerline when a train passes the work site, and all personnel must clear the area within 25 feet of the track centerline and secure all equipment.
- All permanent clearances shall be verified before the project's closing.
- When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
 - At least 72 hours shall have elapsed from the end of the previous pour.
 - The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

INDEX OF DRAWING

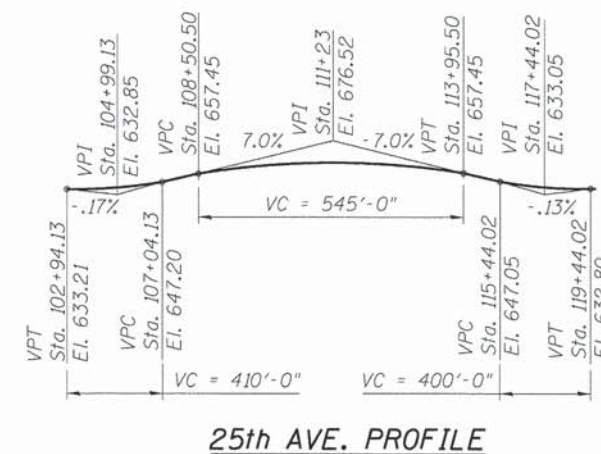
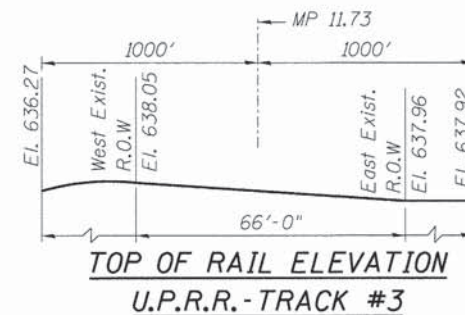
- S1 General Plan
- S2 General Data
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- S4 Top of Slab Elevations - 1
- S5 Top of Slab Elevations - 2
- S6 Top of Slab Elevations - 3
- S7 Top of Slab Elevations - 4
- S8 Top of S. Approach Slab Elevations
- S9 Top of N. Approach Slab Elevations
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- S17 Bridge Fence Railing (Sidewalk)
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- S19 Drainage Scuppers DS-12
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- S40 Soil Boring Logs
- S41 Soil Boring Logs
- S42 Soil Boring Logs
- S43 Soil Boring Logs

TOTAL BILL OF MATERIAL

| Item | Unit | Super | Sub | Total |
|--|---------|--------|--------|--------|
| Drainage System | L. Sum | 1 | | 1 |
| Drainage Scupper, DS-12 | Each | 10 | | 10 |
| MSE Wall (Abutment) | Sq. Ft. | | 3362 | 3362 |
| Remove & Dispose Unsuitable Mat'l. | Cu. Yd. | | 150 | 150 |
| Protective Shield | Sq. Yd. | 2722 | | 2722 |
| Structure Excavation | Cu. Yd. | | 369 | 369 |
| Concrete Structure | Cu. Yd. | | 667 | 667 |
| Concrete Superstructure | Cu. Yd. | 1166 | | 1166 |
| Bridge Deck Grooving | Sq. Yd. | 1993 | | 1993 |
| Protective Coat | Sq. Yd. | 3227 | | 3227 |
| Furnishing and Erecting Struct. Steel | L. Sum | 1 | | 1 |
| Stud Shear Connectors | Each | 9450 | | 9450 |
| Reinf. Bars, Epoxy-Coated (Superstruct.) | Pound | 248100 | | 248100 |
| Reinf. Bars, Epoxy-Coated (Substruct.) | Pound | | 105070 | 105070 |
| Reinforcement Bars | Pound | | 89310 | 89310 |
| Bar Splicers | Each | | 134 | 134 |
| Bridge Fence Railing (Sidewalk) | Foot | 450 | | 450 |
| Bridge Fence Railing | Foot | 450 | | 450 |
| Name Plates | Each | | 2 | 2 |
| Drilled Shaft in Soil (Abutments) | Cu. Yd. | | 149 | 149 |
| Drilled Shaft in Soil (Piers) | Cu. Yd. | | 314 | 314 |
| Preformed Joint Strip Seal | Foot | 142 | | 142 |
| Elast. Brg. Assembly, Type I, 15"x 24" | Each | | 20 | 20 |
| Elast. Brg. Assembly, Type II, 10"x14" | Each | | 20 | 20 |
| Anchor Bolts, 1" | Each | | 80 | 80 |
| Concrete Sealer | Sq. Ft. | | 1366 | 1366 |

STATION
BUILT BY
STATE OF ILLINOIS
CREATE GS6, SECTION 3.4.9.10
LOADING HL-93
STRUCTURE NO. 016-6351

NAME PLATE
See Std. 515001



| | | |
|-------------------------|------------------|---------|
| USER NAME = mohammed.oi | DESIGNED - RD | REVISED |
| PLLOT SCALE = None | CHECKED - JG | REVISED |
| PLLOT DATE = 7/31/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

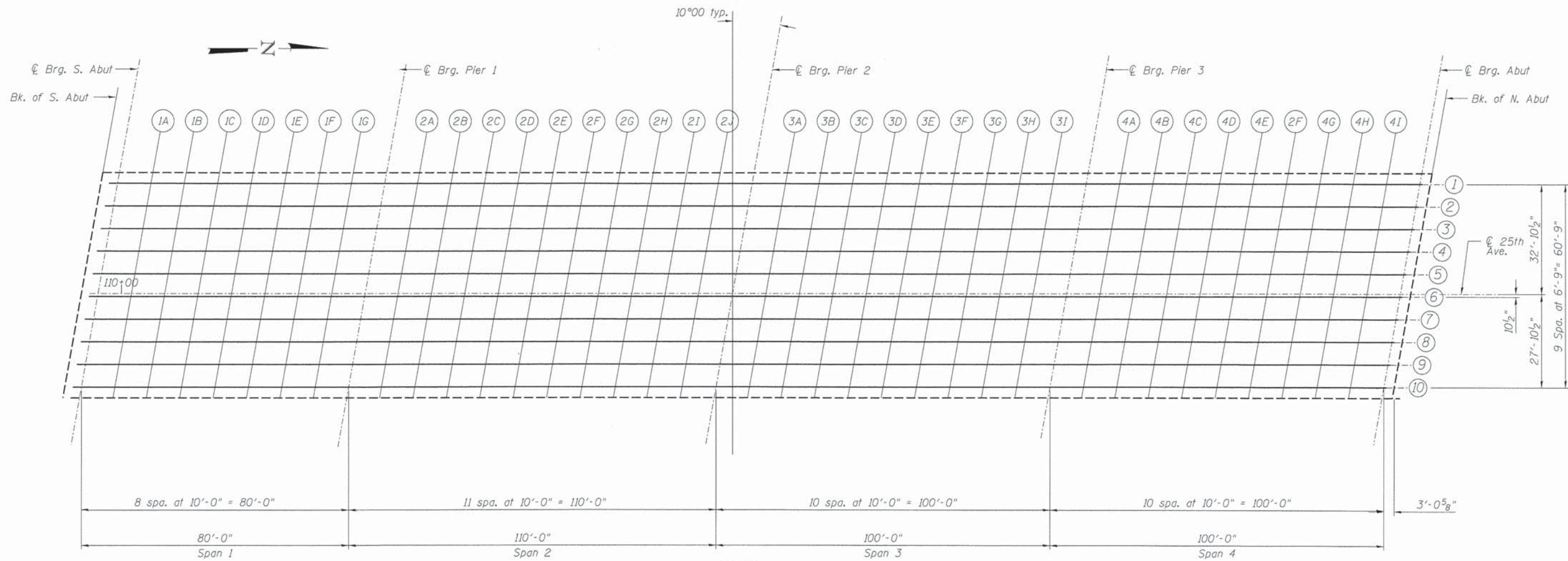
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA
STRUCTURE NO. 016-6351**

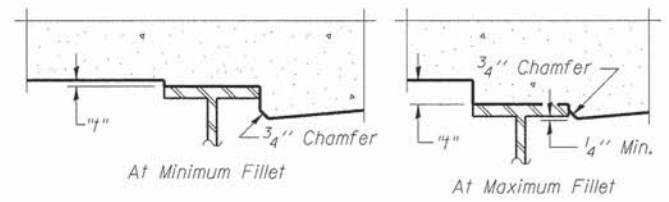
SHEET NO. 135 OF 240 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 135 |

CONTRACT NO. 63887

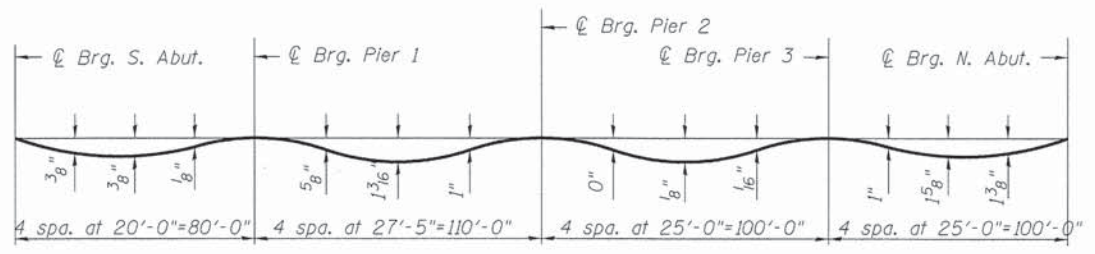


PLAN



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

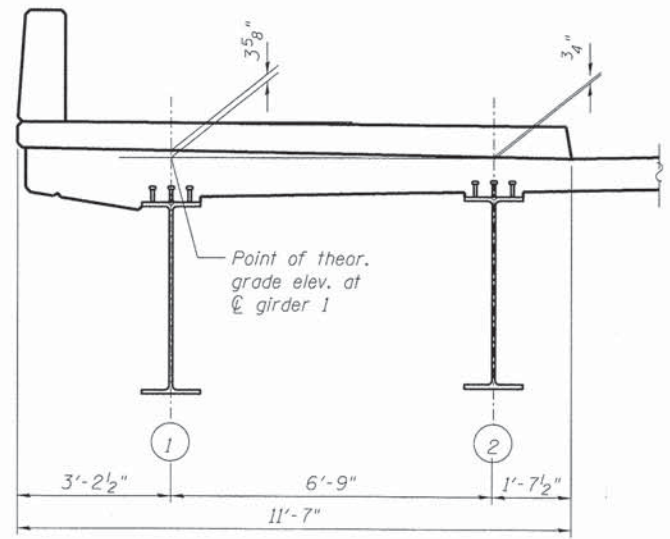
FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



SECTION THRU SIDEWALK
(Looking North)



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLLOT SCALE = None | CHECKED - JG | REVISED |
| PLLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - PLAN
STRUCTURE NO. 016-6351

SHEET NO. 136 OF 240 SHEETS

| | | | | |
|------------------|------------------------|-------------|------------------|--------------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 136 |
| | | | | CONTRACT NO. 63887 |

ILLINOIS FED. AID PROJECT

GIRDER 1

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|---------|------------------------------|--|
| Bk. of S. Abut. | 109+96.966 | -32.875 | 664.430 | 664.430 |
| @ S. Abut | 110+00.146 | -32.875 | 664.532 | 664.532 |
| 1A | 110+10.146 | -32.875 | 664.835 | 664.850 |
| 1B | 110+20.146 | -32.875 | 665.112 | 665.138 |
| 1C | 110+30.146 | -32.875 | 665.363 | 665.396 |
| 1D | 110+40.146 | -32.875 | 665.589 | 665.615 |
| 1E | 110+50.146 | -32.875 | 665.789 | 665.806 |
| 1F | 110+60.146 | -32.875 | 665.963 | 665.966 |
| 1G | 110+70.146 | -32.875 | 666.112 | 666.110 |
| @ Brg. Pier 1 | 110+80.146 | -32.875 | 666.235 | 666.235 |
| 2A | 110+90.146 | -32.875 | 666.332 | 666.348 |
| 2B | 111+00.146 | -32.875 | 666.403 | 666.446 |
| 2C | 111+10.146 | -32.875 | 666.449 | 666.519 |
| 2D | 111+20.146 | -32.875 | 666.469 | 666.560 |
| 2E | 111+30.146 | -32.875 | 666.464 | 666.562 |
| 2F | 111+40.146 | -32.875 | 666.433 | 666.529 |
| 2G | 111+50.146 | -32.875 | 666.376 | 666.468 |
| 2H | 111+60.146 | -32.875 | 666.293 | 666.365 |
| 2I | 111+70.146 | -32.875 | 666.185 | 666.232 |
| 2J | 111+80.146 | -32.875 | 666.051 | 666.070 |
| @ Brg. Pier 2 | 111+90.146 | -32.875 | 665.891 | 665.891 |
| 3A | 112+00.146 | -32.875 | 665.706 | 665.701 |
| 3B | 112+10.146 | -32.875 | 665.495 | 665.495 |
| 3C | 112+20.146 | -32.875 | 665.258 | 665.264 |
| 3D | 112+30.146 | -32.875 | 664.996 | 665.006 |
| 3E | 112+40.146 | -32.875 | 664.708 | 664.719 |
| 3F | 112+50.146 | -32.875 | 664.394 | 664.402 |
| 3G | 112+60.146 | -32.875 | 664.055 | 664.055 |
| 3H | 112+70.146 | -32.875 | 663.689 | 663.683 |
| 3I | 112+80.146 | -32.875 | 663.299 | 663.290 |
| @ Brg. Pier 3 | 112+90.146 | -32.875 | 662.882 | 662.882 |
| 4A | 113+00.146 | -32.875 | 662.440 | 662.451 |
| 4B | 113+10.146 | -32.875 | 661.972 | 662.029 |
| 4C | 113+20.146 | -32.875 | 661.478 | 661.570 |
| 4D | 113+30.146 | -32.875 | 660.959 | 661.069 |
| 4E | 113+40.146 | -32.875 | 660.414 | 660.553 |
| 4F | 113+50.146 | -32.875 | 659.844 | 659.983 |
| 4G | 113+60.146 | -32.875 | 659.247 | 659.373 |
| 4H | 113+70.146 | -32.875 | 658.625 | 658.720 |
| 4I | 113+80.146 | -32.875 | 657.977 | 658.029 |
| @ Brg. N. Abut | 113+90.146 | -32.875 | 657.304 | 657.304 |
| Bk. of N. Abut. | 113+93.326 | -32.875 | 657.085 | 657.085 |

GIRDER 2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|---------|------------------------------|--|
| Bk. of S. Abut. | 109+95.776 | -26.125 | 664.497 | 664.497 |
| @ S. Abut | 109+98.956 | -26.125 | 664.600 | 664.600 |
| 1A | 110+08.956 | -26.125 | 664.905 | 664.920 |
| 1B | 110+18.956 | -26.125 | 665.186 | 665.212 |
| 1C | 110+28.956 | -26.125 | 665.440 | 665.473 |
| 1D | 110+38.956 | -26.125 | 665.669 | 665.695 |
| 1E | 110+48.956 | -26.125 | 665.872 | 665.889 |
| 1F | 110+58.956 | -26.125 | 666.049 | 666.052 |
| 1G | 110+68.956 | -26.125 | 666.201 | 666.200 |
| @ Brg. Pier 1 | 110+78.956 | -26.125 | 666.327 | 666.327 |
| 2A | 110+88.956 | -26.125 | 666.427 | 666.444 |
| 2B | 110+98.956 | -26.125 | 666.502 | 666.545 |
| 2C | 111+08.956 | -26.125 | 666.551 | 666.621 |
| 2D | 111+18.956 | -26.125 | 666.574 | 666.664 |
| 2E | 111+28.956 | -26.125 | 666.571 | 666.669 |
| 2F | 111+38.956 | -26.125 | 666.543 | 666.640 |
| 2G | 111+48.956 | -26.125 | 666.489 | 666.581 |
| 2H | 111+58.956 | -26.125 | 666.410 | 666.482 |
| 2I | 111+68.956 | -26.125 | 666.305 | 666.352 |
| 2J | 111+78.956 | -26.125 | 666.174 | 666.193 |
| @ Brg. Pier 2 | 111+88.956 | -26.125 | 666.017 | 666.017 |
| 3A | 111+98.956 | -26.125 | 665.835 | 665.830 |
| 3B | 112+08.956 | -26.125 | 665.627 | 665.627 |
| 3C | 112+18.956 | -26.125 | 665.393 | 665.399 |
| 3D | 112+28.956 | -26.125 | 665.134 | 665.144 |
| 3E | 112+38.956 | -26.125 | 664.849 | 664.860 |
| 3F | 112+48.956 | -26.125 | 664.538 | 664.546 |
| 3G | 112+58.956 | -26.125 | 664.202 | 664.202 |
| 3H | 112+68.956 | -26.125 | 663.840 | 663.833 |
| 3I | 112+78.956 | -26.125 | 663.452 | 663.443 |
| @ Brg. Pier 3 | 112+88.956 | -26.125 | 663.038 | 663.038 |
| 4A | 112+98.956 | -26.125 | 662.599 | 662.611 |
| 4B | 113+08.956 | -26.125 | 662.134 | 662.191 |
| 4C | 113+18.956 | -26.125 | 661.644 | 661.735 |
| 4D | 113+28.956 | -26.125 | 661.128 | 661.238 |
| 4E | 113+38.956 | -26.125 | 660.586 | 660.724 |
| 4F | 113+48.956 | -26.125 | 660.018 | 660.157 |
| 4G | 113+58.956 | -26.125 | 659.425 | 659.551 |
| 4H | 113+68.956 | -26.125 | 658.806 | 658.901 |
| 4I | 113+78.956 | -26.125 | 658.161 | 658.213 |
| @ Brg. N. Abut | 113+88.956 | -26.125 | 657.491 | 657.491 |
| Bk. of N. Abut. | 113+92.136 | -26.125 | 657.272 | 657.272 |

GIRDER 3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|---------|------------------------------|--|
| Bk. of S. Abut. | 109+94.586 | -19.375 | 664.563 | 664.563 |
| @ S. Abut | 109+97.766 | -19.375 | 664.667 | 664.667 |
| 1A | 110+07.766 | -19.375 | 664.976 | 664.991 |
| 1B | 110+17.766 | -19.375 | 665.259 | 665.286 |
| 1C | 110+27.766 | -19.375 | 665.516 | 665.549 |
| 1D | 110+37.766 | -19.375 | 665.748 | 665.775 |
| 1E | 110+47.766 | -19.375 | 665.954 | 665.971 |
| 1F | 110+57.766 | -19.375 | 666.135 | 666.137 |
| 1G | 110+67.766 | -19.375 | 666.290 | 666.288 |
| @ Brg. Pier 1 | 110+77.766 | -19.375 | 666.419 | 666.419 |
| 2A | 110+87.766 | -19.375 | 666.522 | 666.538 |
| 2B | 110+97.766 | -19.375 | 666.600 | 666.642 |
| 2C | 111+07.766 | -19.375 | 666.652 | 666.722 |
| 2D | 111+17.766 | -19.375 | 666.678 | 666.769 |
| 2E | 111+27.766 | -19.375 | 666.678 | 666.776 |
| 2F | 111+37.766 | -19.375 | 666.653 | 666.750 |
| 2G | 111+47.766 | -19.375 | 666.603 | 666.695 |
| 2H | 111+57.766 | -19.375 | 666.526 | 666.598 |
| 2I | 111+67.766 | -19.375 | 666.424 | 666.471 |
| 2J | 111+77.766 | -19.375 | 666.296 | 666.316 |
| @ Brg. Pier 2 | 111+87.766 | -19.375 | 666.143 | 666.143 |
| 3A | 111+97.766 | -19.375 | 665.963 | 665.959 |
| 3B | 112+07.766 | -19.375 | 665.758 | 665.759 |
| 3C | 112+17.766 | -19.375 | 665.528 | 665.533 |
| 3D | 112+27.766 | -19.375 | 665.272 | 665.282 |
| 3E | 112+37.766 | -19.375 | 664.990 | 665.001 |
| 3F | 112+47.766 | -19.375 | 664.682 | 664.689 |
| 3G | 112+57.766 | -19.375 | 664.349 | 664.349 |
| 3H | 112+67.766 | -19.375 | 663.990 | 663.983 |
| 3I | 112+77.766 | -19.375 | 663.605 | 663.596 |
| @ Brg. Pier 3 | 112+87.766 | -19.375 | 663.194 | 663.194 |
| 4A | 112+97.766 | -19.375 | 662.758 | 662.770 |
| 4B | 113+07.766 | -19.375 | 662.297 | 662.353 |
| 4C | 113+17.766 | -19.375 | 661.809 | 661.901 |
| 4D | 113+27.766 | -19.375 | 661.296 | 661.406 |
| 4E | 113+37.766 | -19.375 | 660.757 | 660.896 |
| 4F | 113+47.766 | -19.375 | 660.193 | 660.332 |
| 4G | 113+57.766 | -19.375 | 659.602 | 659.728 |
| 4H | 113+67.766 | -19.375 | 658.986 | 659.082 |
| 4I | 113+77.766 | -19.375 | 658.345 | 658.396 |
| @ Brg. N. Abut | 113+87.766 | -19.375 | 657.678 | 657.678 |
| Bk. of N. Abut. | 113+90.946 | -19.375 | 657.460 | 657.460 |

GIRDER 4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|---------|------------------------------|--|
| Bk. of S. Abut. | 109+93.396 | -12.625 | 664.629 | 664.629 |
| @ S. Abut | 109+96.576 | -12.625 | 664.734 | 664.734 |
| 1A | 110+06.576 | -12.625 | 665.046 | 665.061 |
| 1B | 110+16.576 | -12.625 | 665.332 | 665.359 |
| 1C | 110+26.576 | -12.625 | 665.593 | 665.625 |
| 1D | 110+36.576 | -12.625 | 665.827 | 665.854 |
| 1E | 110+46.576 | -12.625 | 666.037 | 666.054 |
| 1F | 110+56.576 | -12.625 | 666.220 | 666.223 |
| 1G | 110+66.576 | -12.625 | 666.378 | 666.377 |
| @ Brg. Pier 1 | 110+76.576 | -12.625 | 666.510 | 666.510 |
| 2A | 110+86.576 | -12.625 | 666.616 | 666.633 |
| 2B | 110+96.576 | -12.625 | 666.697 | 666.740 |
| 2C | 111+06.576 | -12.625 | 666.752 | 666.822 |
| 2D | 111+16.576 | -12.625 | 666.782 | 666.872 |
| 2E | 111+26.576 | -12.625 | 666.785 | 666.883 |
| 2F | 111+36.576 | -12.625 | 666.763 | 666.860 |
| 2G | 111+46.576 | -12.625 | 666.715 | 666.807 |
| 2H | 111+56.576 | -12.625 | 666.642 | 666.714 |
| 2I | 111+66.576 | -12.625 | 666.543 | 666.590 |
| 2J | 111+76.576 | -12.625 | 666.418 | 666.438 |
| @ Brg. Pier 2 | 111+86.576 | -12.625 | 666.268 | 666.268 |
| 3A | 111+96.576 | -12.625 | 666.092 | 666.087 |
| 3B | 112+06.576 | -12.625 | 665.890 | 665.890 |
| 3C | 112+16.576 | -12.625 | 665.662 | 665.667 |
| 3D | 112+26.576 | -12.625 | 665.409 | 665.419 |
| 3E | 112+36.576 | -12.625 | 665.130 | 665.141 |
| 3F | 112+46.576 | -12.625 | 664.825 | 664.833 |
| 3G | 112+56.576 | -12.625 | 664.495 | 664.496 |
| 3H | 112+66.576 | -12.625 | 664.139 | 664.133 |
| 3I | 112+76.576 | -12.625 | 663.758 | 663.749 |
| @ Brg. Pier 3 | 11286.576 | -12.625 | 663.350 | 663.350 |
| 4A | 11296.576 | -12.625 | 662.917 | 662.929 |
| 4B | 11306.576 | -12.625 | 662.458 | 662.515 |
| 4C | 11316.576 | -12.625 | 661.974 | 662.065 |
| 4D | 11326.576 | -12.625 | 661.464 | 661.574 |
| 4E | 11336.576 | -12.625 | 660.928 | 661.066 |
| 4F | 11346.576 | -12.625 | 660.367 | 660.506 |
| 4G | 11356.576 | -12.625 | 659.779 | 659.905 |
| 4H | 11366.576 | -12.625 | 659.167 | 659.262 |
| 4I | 11376.576 | -12.625 | 658.528 | 658.579 |
| @ Brg. N. Abut | 11386.576 | -12.625 | 657.864 | 657.864 |
| Bk. of N. Abut. | 11389.756 | -12.625 | 657.647 | 657.647 |

GIRDER 5

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. of S. Abut. | 109+92.206 | -5.875 | 664.695 | 664.695 |
| @ S. Abut | 109+95.386 | -5.875 | 664.801 | 664.801 |
| 1A | 110+05.386 | -5.875 | 665.116 | 665.131 |
| 1B | 110+15.386 | -5.875 | 665.405 | 665.432 |
| 1C | 110+25.386 | -5.875 | 665.668 | 665.701 |
| 1D | 110+35.386 | -5.875 | 665.906 | 665.933 |
| 1E | 110+45.386 | -5.875 | 666.119 | 666.135 |
| 1F | 110+55.386 | -5.875 | 666.305 | 666.308 |
| 1G | 110+65.386 | -5.875 | 666.466 | 666.465 |
| @ Brg. Pier 1 | 110+75.386 | -5.875 | 666.601 | 666.601 |
| 2A | 110+85.386 | -5.875 | 666.711 | 666.727 |
| 2B | 110+95.386 | -5.875 | 666.794 | 666.837 |
| 2C | 111+05.386 | -5.875 | 666.852 | 666.923 |
| 2D | 111+15.386 | -5.875 | 666.885 | 666.976 |
| 2E | 111+25.386 | -5.875 | 666.892 | 666.989 |
| 2F | 111+35.386 | -5.875 | 666.873 | 666.969 |
| 2G | 111+45.386 | -5.875 | 666.828 | 666.920 |
| 2H | 111+55.386 | -5.875 | 666.758 | 666.830 |
| 2I | 111+65.386 | -5.875 | 666.662 | 666.709 |
| 2J | 111+75.386 | -5.875 | 666.540 | 666.559 |
| @ Brg. Pier 2 | 111+85.386 | -5.875 | 666.392 | 666.392 |
| 3A | 111+95.386 | -5.875 | 666.219 | 666.215 |
| 3B | 112+05.386 | -5.875 | 666.021 | 666.021 |
| 3C | 112+15.386 | -5.875 | 665.796 | 665.801 |
| 3D | 112+25.386 | -5.875 | 665.546 | 665.556 |
| 3E | 112+35.386 | -5.875 | 665.270 | 665.281 |
| 3F | 112+45.386 | -5.875 | 664.968 | 664.976 |
| 3G | 112+55.386 | -5.875 | 664.641 | 664.642 |
| 3H | 112+65.386 | -5.875 | 664.288 | 664.282 |
| 3I | 112+75.386 | -5.875 | 663.910 | 663.901 |
| @ Brg. Pier 3 | 112+85.386 | -5.875 | 663.505 | 663.505 |
| 4A | 112+95.386 | -5.875 | 663.075 | 663.087 |
| 4B | 113+05.386 | -5.875 | 662.620 | 662.676 |
| 4C | 113+15.386 | -5.875 | 662.138 | 662.230 |
| 4D | 113+25.386 | -5.875 | 661.631 | 661.741 |
| 4E | 113+35.386 | -5.875 | 661.099 | 661.237 |
| 4F | 113+45.386 | -5.875 | 660.540 | 660.679 |
| 4G | 113+55.386 | -5.875 | 659.956 | 660.082 |
| 4H | 113+65.386 | -5.875 | 659.346 | 659.441 |
| 4I | 113+75.386 | -5.875 | 658.711 | 658.762 |
| @ Brg. N. Abut | 113+85.386 | -5.875 | 658.050 | 658.050 |
| Bk. of N. Abut. | 113+88.566 | -5.875 | 657.834 | 657.834 |

PGL & @ 25th Ave.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. of S. Abut. | 109+91.170 | 0.000 | 664.752 | 664.752 |
| @ S. Abut | 109+94.350 | 0.000 | 664.858 | 664.858 |
| 1A | 110+04.350 | 0.000 | 665.176 | 665.191 |
| 1B | 110+14.350 | 0.000 | 665.468 | 665.495 |
| 1C | 110+24.350 | 0.000 | 665.734 | 665.767 |
| 1D | 110+34.350 | 0.000 | 665.975 | 666.001 |
| 1E | 110+44.350 | 0.000 | 666.190 | 666.207 |
| 1F | 110+54.350 | 0.000 | 666.379 | 666.381 |
| 1G | 110+64.350 | 0.000 | 666.542 | 666.541 |
| @ Brg. Pier 1 | 110+74.350 | 0.000 | 666.680 | 666.680 |
| 2A | 110+84.350 | 0.000 | 666.792 | 666.809 |
| 2B | 110+94.350 | 0.000 | 666.879 | 666.922 |
| 2C | 111+04.350 | 0.000 | 666.939 | 667.010 |
| 2D | 111+14.350 | 0.000 | 666.974 | 667.065 |
| 2E | 111+24.350 | 0.000 | 666.984 | 667.082 |
| 2F | 111+34.350 | 0.000 | 666.968 | 667.064 |
| 2G | 111+44.350 | 0.000 | 666.926 | 667.017 |
| 2H | 111+54.350 | 0.000 | 666.858 | 666.930 |
| 2I | 111+64.350 | 0.000 | 666.764 | 666.812 |
| 2J | 111+74.350 | 0.000 | 666.645 | 666.665 |
| @ Brg. Pier 2 | 111+84.350 | 0.000 | 666.501 | 666.501 |
| 3A | 111+94.350 | 0.000 | 666.330 | 666.326 |
| 3B | 112+04.350 | 0.000 | 666.134 | 666.134 |
| 3C | 112+14.350 | 0.000 | 665.912 | 665.918 |
| 3D | 112+24.350 | 0.000 | 665.665 | 665.675 |
| 3E | 112+34.350 | 0.000 | 665.392 | 665.403 |
| 3F | 112+44.350 | 0.000 | 665.093 | 665.100 |
| 3G | 112+54.350 | 0.000 | 664.768 | 664.769 |
| 3H | 112+64.350 | 0.000 | 664.418 | 664.411 |
| 3I | 112+74.350 | 0.000 | 664.042 | 664.033 |
| @ Brg. Pier 3 | 112+84.350 | 0.000 | 663.640 | 663.640 |
| 4A | 112+94.350 | 0.000 | 663.213 | 663.224 |
| 4B | 113+04.350 | 0.000 | 662.760 | 662.817 |
| 4C | 113+14.350 | 0.000 | 662.281 | 662.373 |
| 4D | 113+24.350 | 0.000 | 661.777 | 661.887 |
| 4E | 113+34.350 | 0.000 | 661.247 | 661.385 |
| 4F | 113+44.350 | 0.000 | 660.691 | 660.830 |
| 4G | 113+54.350 | 0.000 | 660.110 | 660.236 |
| 4H | 113+64.350 | 0.000 | 659.502 | 659.598 |
| 4I | 113+74.350 | 0.000 | 658.870 | 658.921 |
| @ Brg. N. Abut | 113+84.350 | 0.000 | 658.211 | 658.211 |
| Bk. of N. Abut. | 113+87.530 | 0.000 | 657.996 | 657.996 |



| | | |
|--------------------------|------------------|---------|
| USER NAME = stephenschuh | DESIGNED - RD | REVISED |
| PLLOT SCALE = None | CHECKED - JG | REVISED |
| PLLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - 2
STRUCTURE NO. 016-6351

SHEET NO. 138 OF 240 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.J. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 138 |
| CONTRACT NO. 63887 | | | | S5 |
| ILLINOIS FED. AID PROJECT | | | | |

GIRDER 6

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. of S. Abut. | 109+91.016 | 0.875 | 664.733 | 664.733 |
| @ S. Abut | 109+94.196 | 0.875 | 664.840 | 664.840 |
| 1A | 110+04.196 | 0.875 | 665.158 | 665.173 |
| 1B | 110+14.196 | 0.875 | 665.450 | 665.477 |
| 1C | 110+24.196 | 0.875 | 665.717 | 665.749 |
| 1D | 110+34.196 | 0.875 | 665.958 | 665.984 |
| 1E | 110+44.196 | 0.875 | 666.173 | 666.190 |
| 1F | 110+54.196 | 0.875 | 666.362 | 666.365 |
| 1G | 110+64.196 | 0.875 | 666.526 | 666.525 |
| @ Brg. Pier 1 | 110+74.196 | 0.875 | 666.665 | 666.665 |
| 2A | 110+84.196 | 0.875 | 666.777 | 666.794 |
| 2B | 110+94.196 | 0.875 | 666.864 | 666.907 |
| 2C | 111+04.196 | 0.875 | 666.925 | 666.995 |
| 2D | 111+14.196 | 0.875 | 666.960 | 667.051 |
| 2E | 111+24.196 | 0.875 | 666.970 | 667.068 |
| 2F | 111+34.196 | 0.875 | 666.954 | 667.051 |
| 2G | 111+44.196 | 0.875 | 666.913 | 667.005 |
| 2H | 111+54.196 | 0.875 | 666.845 | 666.917 |
| 2I | 111+64.196 | 0.875 | 666.752 | 666.800 |
| 2J | 111+74.196 | 0.875 | 666.634 | 666.653 |
| @ Brg. Pier 2 | 111+84.196 | 0.875 | 666.489 | 666.489 |
| 3A | 111+94.196 | 0.875 | 666.319 | 666.315 |
| 3B | 112+04.196 | 0.875 | 666.124 | 666.124 |
| 3C | 112+14.196 | 0.875 | 665.902 | 665.907 |
| 3D | 112+24.196 | 0.875 | 665.655 | 665.666 |
| 3E | 112+34.196 | 0.875 | 665.382 | 665.394 |
| 3F | 112+44.196 | 0.875 | 665.084 | 665.091 |
| 3G | 112+54.196 | 0.875 | 664.760 | 664.760 |
| 3H | 112+64.196 | 0.875 | 664.410 | 664.403 |
| 3I | 112+74.196 | 0.875 | 664.034 | 664.026 |
| @ Brg. Pier 3 | 112+84.196 | 0.875 | 663.633 | 663.633 |
| 4A | 112+94.196 | 0.875 | 663.206 | 663.218 |
| 4B | 113+04.196 | 0.875 | 662.753 | 662.810 |
| 4C | 113+14.196 | 0.875 | 662.275 | 662.367 |
| 4D | 113+24.196 | 0.875 | 661.771 | 661.881 |
| 4E | 113+34.196 | 0.875 | 661.242 | 661.380 |
| 4F | 113+44.196 | 0.875 | 660.686 | 660.825 |
| 4G | 113+54.196 | 0.875 | 660.105 | 660.231 |
| 4H | 113+64.196 | 0.875 | 659.498 | 659.594 |
| 4I | 113+74.196 | 0.875 | 658.866 | 658.917 |
| @ Brg. N. Abut | 113+84.196 | 0.875 | 658.208 | 658.208 |
| Bk. of N. Abut. | 113+87.376 | 0.875 | 657.993 | 657.993 |

GIRDER 7

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. of S. Abut. | 109+89.826 | 7.625 | 664.587 | 664.587 |
| @ S. Abut | 109+93.006 | 7.625 | 664.695 | 664.695 |
| 1A | 110+03.006 | 7.625 | 665.016 | 665.031 |
| 1B | 110+13.006 | 7.625 | 665.311 | 665.338 |
| 1C | 110+23.006 | 7.625 | 665.581 | 665.613 |
| 1D | 110+33.006 | 7.625 | 665.825 | 665.851 |
| 1E | 110+43.006 | 7.625 | 666.043 | 666.060 |
| 1F | 110+53.006 | 7.625 | 666.236 | 666.238 |
| 1G | 110+63.006 | 7.625 | 666.403 | 666.401 |
| @ Brg. Pier 1 | 110+73.006 | 7.625 | 666.544 | 666.544 |
| 2A | 110+83.006 | 7.625 | 666.660 | 666.676 |
| 2B | 110+93.006 | 7.625 | 666.749 | 666.792 |
| 2C | 111+03.006 | 7.625 | 666.814 | 666.884 |
| 2D | 111+13.006 | 7.625 | 666.852 | 666.943 |
| 2E | 111+23.006 | 7.625 | 666.865 | 666.963 |
| 2F | 111+33.006 | 7.625 | 666.852 | 666.949 |
| 2G | 111+43.006 | 7.625 | 666.814 | 666.905 |
| 2H | 111+53.006 | 7.625 | 666.749 | 666.821 |
| 2I | 111+63.006 | 7.625 | 666.659 | 666.707 |
| 2J | 111+73.006 | 7.625 | 666.544 | 666.563 |
| @ Brg. Pier 2 | 111+83.006 | 7.625 | 666.402 | 666.402 |
| 3A | 111+93.006 | 7.625 | 666.235 | 666.231 |
| 3B | 112+03.006 | 7.625 | 666.043 | 666.043 |
| 3C | 112+13.006 | 7.625 | 665.824 | 665.830 |
| 3D | 112+23.006 | 7.625 | 665.580 | 665.591 |
| 3E | 112+33.006 | 7.625 | 665.311 | 665.322 |
| 3F | 112+43.006 | 7.625 | 665.015 | 665.023 |
| 3G | 112+53.006 | 7.625 | 664.694 | 664.695 |
| 3H | 112+63.006 | 7.625 | 664.347 | 664.341 |
| 3I | 112+73.006 | 7.625 | 663.975 | 663.966 |
| @ Brg. Pier 3 | 112+83.006 | 7.625 | 663.577 | 663.577 |
| 4A | 112+93.006 | 7.625 | 663.153 | 663.164 |
| 4B | 113+03.006 | 7.625 | 662.703 | 662.760 |
| 4C | 113+13.006 | 7.625 | 662.228 | 662.319 |
| 4D | 113+23.006 | 7.625 | 661.727 | 661.837 |
| 4E | 113+33.006 | 7.625 | 661.200 | 661.339 |
| 4F | 113+43.006 | 7.625 | 660.648 | 660.787 |
| 4G | 113+53.006 | 7.625 | 660.070 | 660.196 |
| 4H | 113+63.006 | 7.625 | 659.466 | 659.562 |
| 4I | 113+73.006 | 7.625 | 658.837 | 658.888 |
| @ Brg. N. Abut | 113+83.006 | 7.625 | 658.182 | 658.182 |
| Bk. of N. Abut. | 113+86.186 | 7.625 | 657.968 | 657.968 |

GIRDER 8

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. of S. Abut. | 109+88.636 | 14.375 | 664.441 | 664.441 |
| @ S. Abut | 109+91.816 | 14.375 | 664.549 | 664.549 |
| 1A | 110+01.816 | 14.375 | 664.873 | 664.888 |
| 1B | 110+11.816 | 14.375 | 665.172 | 665.198 |
| 1C | 110+21.816 | 14.375 | 665.444 | 665.477 |
| 1D | 110+31.816 | 14.375 | 665.692 | 665.718 |
| 1E | 110+41.816 | 14.375 | 665.913 | 665.930 |
| 1F | 110+51.816 | 14.375 | 666.109 | 666.111 |
| 1G | 110+61.816 | 14.375 | 666.279 | 666.278 |
| @ Brg. Pier 1 | 110+71.816 | 14.375 | 666.423 | 666.423 |
| 2A | 110+81.816 | 14.375 | 666.542 | 666.558 |
| 2B | 110+91.816 | 14.375 | 666.635 | 666.678 |
| 2C | 111+01.816 | 14.375 | 666.702 | 666.772 |
| 2D | 111+11.816 | 14.375 | 666.743 | 666.834 |
| 2E | 111+21.816 | 14.375 | 666.759 | 666.857 |
| 2F | 111+31.816 | 14.375 | 666.750 | 666.846 |
| 2G | 111+41.816 | 14.375 | 666.714 | 666.806 |
| 2H | 111+51.816 | 14.375 | 666.653 | 666.725 |
| 2I | 111+61.816 | 14.375 | 666.566 | 666.613 |
| 2J | 111+71.816 | 14.375 | 666.453 | 666.473 |
| @ Brg. Pier 2 | 11181.816 | 14.375 | 666.315 | 666.315 |
| 3A | 11191.816 | 14.375 | 666.151 | 666.147 |
| 3B | 11201.816 | 14.375 | 665.962 | 665.962 |
| 3C | 11211.816 | 14.375 | 665.746 | 665.752 |
| 3D | 11221.816 | 14.375 | 665.505 | 665.516 |
| 3E | 11231.816 | 14.375 | 665.239 | 665.250 |
| 3F | 11241.816 | 14.375 | 664.946 | 664.954 |
| 3G | 11251.816 | 14.375 | 664.628 | 664.629 |
| 3H | 11261.816 | 14.375 | 664.284 | 664.278 |
| 3I | 11271.816 | 14.375 | 663.915 | 663.906 |
| @ Brg. Pier 3 | 11281.816 | 14.375 | 663.520 | 663.520 |
| 4A | 11291.816 | 14.375 | 663.099 | 663.111 |
| 4B | 11301.816 | 14.375 | 662.653 | 662.709 |
| 4C | 11311.816 | 14.375 | 662.180 | 662.272 |
| 4D | 11321.816 | 14.375 | 661.683 | 661.792 |
| 4E | 11331.816 | 14.375 | 661.159 | 661.297 |
| 4F | 11341.816 | 14.375 | 660.610 | 660.749 |
| 4G | 11351.816 | 14.375 | 660.035 | 660.161 |
| 4H | 11361.816 | 14.375 | 659.434 | 659.529 |
| 4I | 11371.816 | 14.375 | 658.808 | 658.859 |
| @ Brg. N. Abut | 11381.816 | 14.375 | 658.156 | 658.156 |
| Bk. of N. Abut. | 11384.996 | 14.375 | 657.943 | 657.943 |



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS - 3
STRUCTURE NO. 016-6351**

SHEET NO. 139 OF 240 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 139 |
| CONTRACT NO. 63887 | | | | S6 |
| ILLINOIS FED. AID PROJECT | | | | |

GIRDER 9

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. of S. Abut. | 109+87.446 | 21.125 | 664.294 | 664.294 |
| ⊕ S. Abut | 109+90.626 | 21.125 | 664.403 | 664.403 |
| 1A | 110+00.626 | 21.125 | 664.731 | 664.746 |
| 1B | 110+10.626 | 21.125 | 665.032 | 665.059 |
| 1C | 110+20.626 | 21.125 | 665.308 | 665.341 |
| 1D | 110+30.626 | 21.125 | 665.558 | 665.585 |
| 1E | 110+40.626 | 21.125 | 665.782 | 665.799 |
| 1F | 110+50.626 | 21.125 | 665.981 | 665.984 |
| 1G | 110+60.626 | 21.125 | 666.154 | 666.153 |
| ⊕ Brg. Pier 1 | 110+70.626 | 21.125 | 666.302 | 666.302 |
| 2A | 110+80.626 | 21.125 | 666.423 | 666.440 |
| 2B | 110+90.626 | 21.125 | 666.519 | 666.562 |
| 2C | 111+00.626 | 21.125 | 666.590 | 666.660 |
| 2D | 111+10.626 | 21.125 | 666.634 | 666.725 |
| 2E | 111+20.626 | 21.125 | 666.653 | 666.751 |
| 2F | 111+30.626 | 21.125 | 666.647 | 666.743 |
| 2G | 111+40.626 | 21.125 | 666.614 | 666.706 |
| 2H | 111+50.626 | 21.125 | 666.556 | 666.628 |
| 2I | 111+60.626 | 21.125 | 666.472 | 666.519 |
| 2J | 111+70.626 | 21.125 | 666.363 | 666.382 |
| ⊕ Brg. Pier 2 | 111+80.626 | 21.125 | 666.228 | 666.228 |
| 3A | 111+90.626 | 21.125 | 666.067 | 666.011 |
| 3B | 112+00.626 | 21.125 | 665.880 | 665.883 |
| 3C | 112+10.626 | 21.125 | 665.668 | 665.731 |
| 3D | 112+20.626 | 21.125 | 665.430 | 665.555 |
| 3E | 112+30.626 | 21.125 | 665.166 | 665.303 |
| 3F | 112+40.626 | 21.125 | 664.877 | 664.967 |
| 3G | 112+50.626 | 21.125 | 664.562 | 664.567 |
| 3H | 112+60.626 | 21.125 | 664.221 | 664.144 |
| 3I | 112+70.626 | 21.125 | 663.855 | 663.752 |
| ⊕ Brg. Pier 3 | 112+80.626 | 21.125 | 663.463 | 663.463 |
| 4A | 112+90.626 | 21.125 | 663.045 | 663.183 |
| 4B | 113+00.626 | 21.125 | 662.602 | 663.281 |
| 4C | 113+10.626 | 21.125 | 662.132 | 663.229 |
| 4D | 113+20.626 | 21.125 | 661.638 | 662.956 |
| 4E | 113+30.626 | 21.125 | 661.117 | 662.778 |
| 4F | 113+40.626 | 21.125 | 660.571 | 662.239 |
| 4G | 113+50.626 | 21.125 | 659.999 | 661.510 |
| 4H | 113+60.626 | 21.125 | 659.402 | 660.544 |
| 4I | 113+70.626 | 21.125 | 658.778 | 659.395 |
| ⊕ Brg. N. Abut | 113+80.626 | 21.125 | 658.129 | 658.129 |
| Bk. of N. Abut. | 113+83.806 | 21.125 | 657.918 | 657.918 |

GIRDER 10

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|------------|--------|------------------------------|--|
| Bk. of S. Abut. | 109+86.256 | 27.875 | 664.147 | 664.147 |
| ⊕ S. Abut | 109+89.436 | 27.875 | 664.257 | 664.257 |
| 1A | 109+99.436 | 27.875 | 664.588 | 664.603 |
| 1B | 110+09.436 | 27.875 | 664.892 | 664.919 |
| 1C | 110+19.436 | 27.875 | 665.171 | 665.204 |
| 1D | 110+29.436 | 27.875 | 665.424 | 665.451 |
| 1E | 110+39.436 | 27.875 | 665.652 | 665.669 |
| 1F | 110+49.436 | 27.875 | 665.853 | 665.856 |
| 1G | 110+59.436 | 27.875 | 666.030 | 666.028 |
| ⊕ Brg. Pier 1 | 110+69.436 | 27.875 | 666.180 | 666.180 |
| 2A | 110+79.436 | 27.875 | 666.305 | 666.321 |
| 2B | 110+89.436 | 27.875 | 666.404 | 666.447 |
| 2C | 110+99.436 | 27.875 | 666.477 | 666.547 |
| 2D | 111+09.436 | 27.875 | 666.525 | 666.616 |
| 2E | 111+19.436 | 27.875 | 666.547 | 666.645 |
| 2F | 111+29.436 | 27.875 | 666.543 | 666.640 |
| 2G | 111+39.436 | 27.875 | 666.514 | 666.606 |
| 2H | 111+49.436 | 27.875 | 666.459 | 666.531 |
| 2I | 111+59.436 | 27.875 | 666.378 | 666.425 |
| 2J | 111+69.436 | 27.875 | 666.272 | 666.291 |
| ⊕ Brg. Pier 2 | 111+79.436 | 27.875 | 666.139 | 666.139 |
| 3A | 111+89.436 | 27.875 | 665.982 | 665.977 |
| 3B | 111+99.436 | 27.875 | 665.798 | 665.798 |
| 3C | 112+09.436 | 27.875 | 665.589 | 665.594 |
| 3D | 112+19.436 | 27.875 | 665.354 | 665.364 |
| 3E | 112+29.436 | 27.875 | 665.094 | 665.105 |
| 3F | 112+39.436 | 27.875 | 664.807 | 664.815 |
| 3G | 112+49.436 | 27.875 | 664.495 | 664.496 |
| 3H | 112+59.436 | 27.875 | 664.158 | 664.151 |
| 3I | 112+69.436 | 27.875 | 663.794 | 663.786 |
| ⊕ Brg. Pier 3 | 112+79.436 | 27.875 | 663.405 | 663.405 |
| 4A | 112+89.436 | 27.875 | 662.991 | 663.002 |
| 4B | 112+99.436 | 27.875 | 662.550 | 662.607 |
| 4C | 113+09.436 | 27.875 | 662.084 | 662.176 |
| 4D | 113+19.436 | 27.875 | 661.592 | 661.702 |
| 4E | 113+29.436 | 27.875 | 661.075 | 661.213 |
| 4F | 113+39.436 | 27.875 | 660.532 | 660.671 |
| 4G | 113+49.436 | 27.875 | 659.963 | 660.089 |
| 4H | 113+59.436 | 27.875 | 659.369 | 659.464 |
| 4I | 113+69.436 | 27.875 | 658.748 | 658.800 |
| ⊕ Brg. N. Abut | 113+79.436 | 27.875 | 658.102 | 658.102 |
| Bk. of N. Abut. | 113+82.616 | 27.875 | 657.892 | 657.892 |



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| | CHECKED - JG | REVISED |
| PLOT SCALE = None | DRAWN - RJ | REVISED |
| PLOT DATE = 3/21/2014 | DATE - 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS - 4
STRUCTURE NO. 016-6351**

SHEET NO. 140 OF 240 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|--------------------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 140 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |

S7

WEST CURB LINE

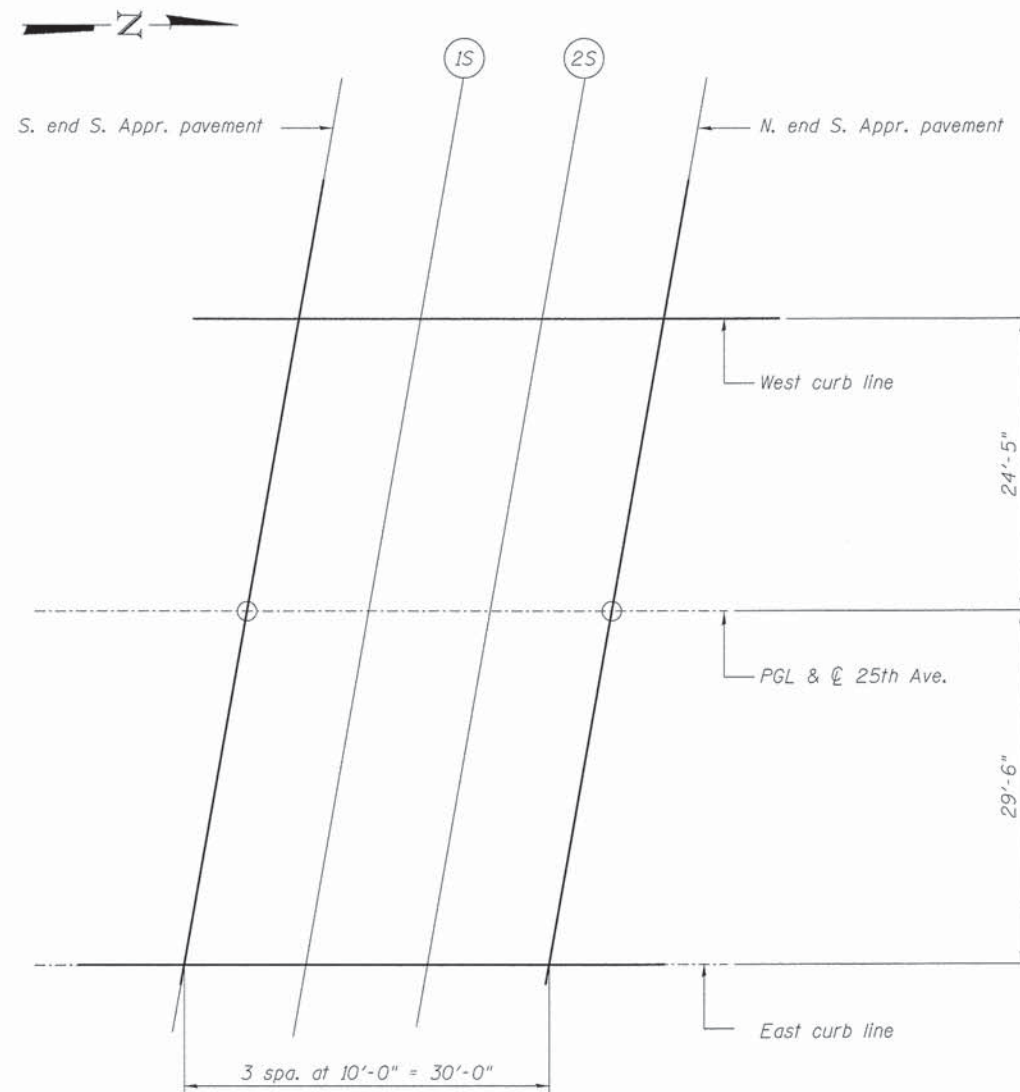
| Location | Station | Offset | Theoretical Grade Elevations |
|--------------------------|-----------|--------|------------------------------|
| S. end S. Appr. pavement | 109+56.81 | -24.5 | 663.06 |
| 1S | 109+66.81 | -24.5 | 666.47 |
| 2S | 109+76.81 | -24.5 | 663.86 |
| N. end S. Appr. pavement | 109+86.81 | -24.5 | 664.22 |

PGL & C 25th AVE.

| Location | Station | Offset | Theoretical Grade Elevations |
|--------------------------|-----------|--------|------------------------------|
| S. end S. Appr. pavement | 109+61.17 | 0.0 | 663.62 |
| 1S | 109+71.17 | 0.0 | 664.02 |
| 2S | 109+81.17 | 0.0 | 664.40 |
| N. end S. Appr. pavement | 109+91.17 | 0.0 | 664.75 |

EAST CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|--------------------------|-----------|--------|------------------------------|
| S. end S. Appr. pavement | 109+66.43 | 29.5 | 664.30 |
| 1S | 109+76.43 | 29.5 | 664.69 |
| 2S | 109+86.43 | 29.5 | 665.05 |
| N. end S. Appr. pavement | 109+96.43 | 29.5 | 665.39 |



SOUTH APPROACH



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLDT SCALE = None | CHECKED - JG | REVISED |
| PLDT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS - SOUTH APPROACH
STRUCTURE NO. 016-6351**

SHEET NO. 141 OF 240 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|--------------------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 141 |
| ILLINOIS FED. AID PROJECT | | | | CONTRACT NO. 63887 |

WEST CURB LINE

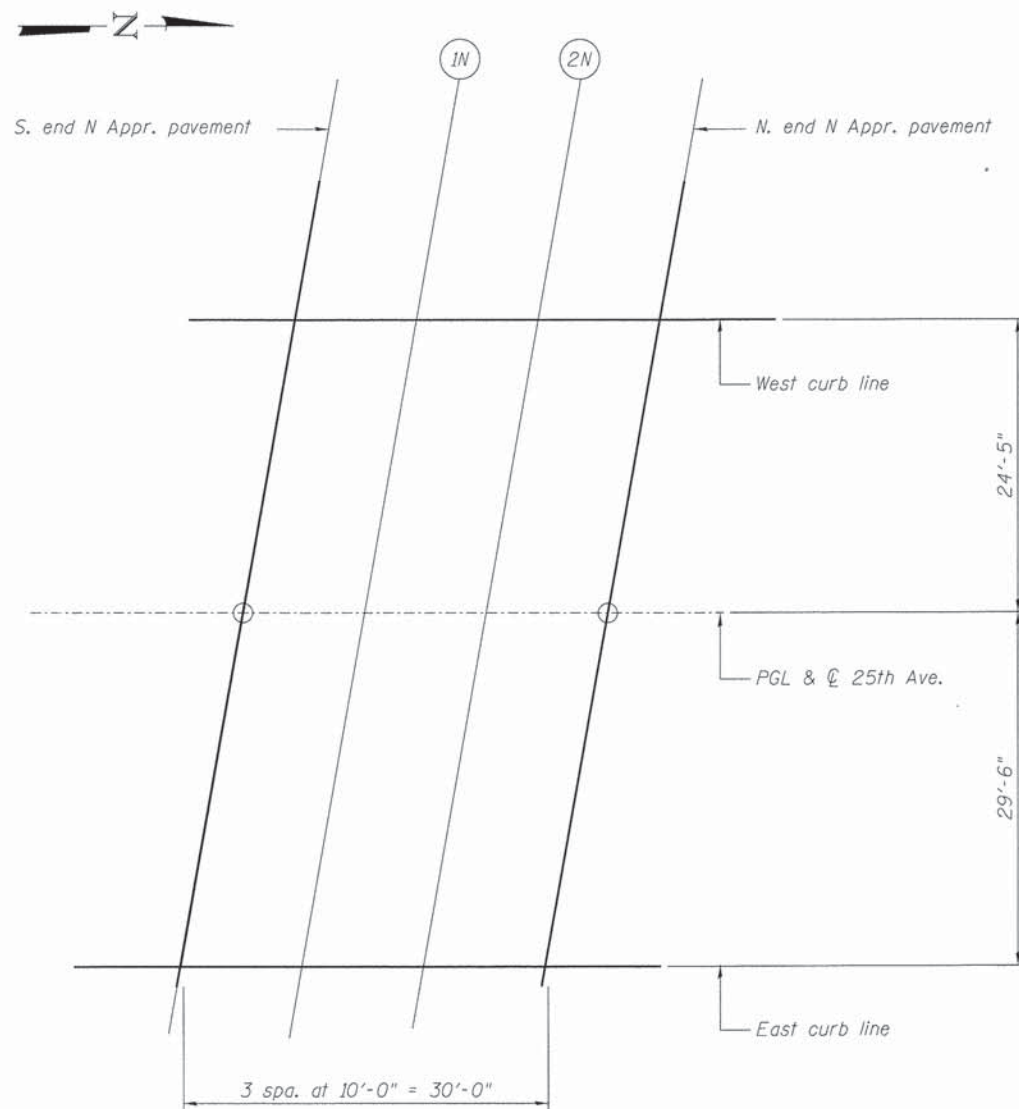
| Location | Station | Offset | Theoretical Grade Elevations |
|--------------------------|-----------|--------|------------------------------|
| S. end N. Appr. pavement | 113+83.17 | -24.5 | 657.91 |
| 1N | 113+93.17 | -24.5 | 657.23 |
| 2N | 114+03.17 | -24.5 | 656.53 |
| N. end N. Appr. pavement | 114+13.17 | -24.5 | 655.83 |

PGL & C 25th AVE.

| Location | Station | Offset | Theoretical Grade Elevations |
|--------------------------|-----------|--------|------------------------------|
| S. end N. Appr. pavement | 113+87.53 | 0.0 | 658.00 |
| 1N | 113+97.53 | 0.0 | 657.30 |
| 2N | 114+07.53 | 0.0 | 656.60 |
| N. end N. Appr. pavement | 114+17.53 | 0.0 | 655.90 |

EAST CURB LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|--------------------------|-----------|--------|------------------------------|
| S. end N. Appr. pavement | 113+92.79 | 29.5 | 658.10 |
| 1N | 114+02.79 | 29.5 | 657.40 |
| 2N | 114+12.79 | 29.5 | 656.70 |
| N. end N. Appr. pavement | 114+22.79 | 29.5 | 656.00 |



NORTH APPROACH



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| | CHECKED - JG | REVISED |
| PLOT SCALE = None | DRAWN - RJ | REVISED |
| PLOT DATE = 3/21/2014 | DATE - 3-24-2014 | REVISED |

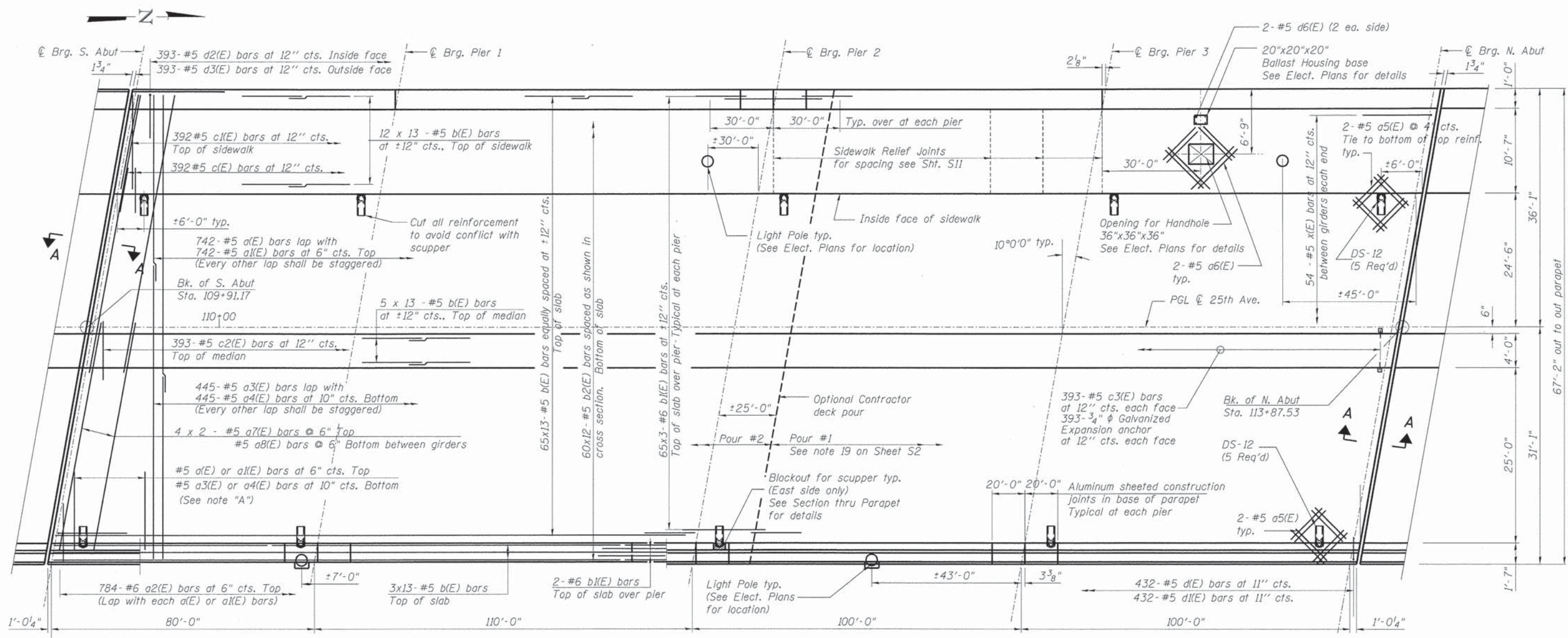
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - NORTH APPROACH
STRUCTURE NO. 016-6351

SHEET NO. 142 OF 240 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 142 |
| CONTRACT NO. 63887 | | | | S9 |

ILLINOIS FED. AID PROJECT



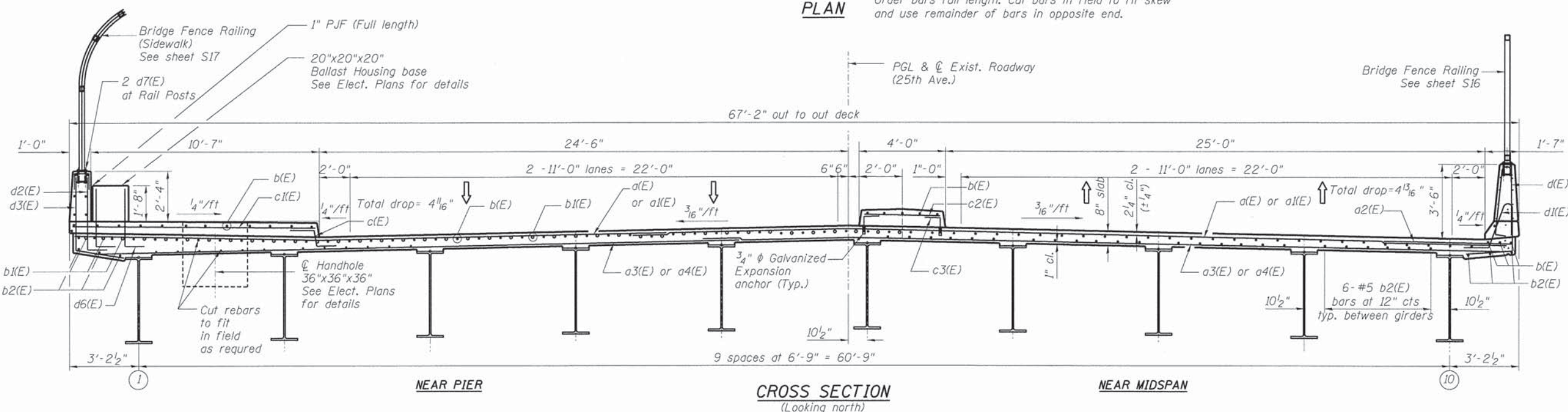
PLAN

Note "A"
Order bars full length. Cut bars in field to fit skew and use remainder of bars in opposite end.

MINIMUM BAR LAPS

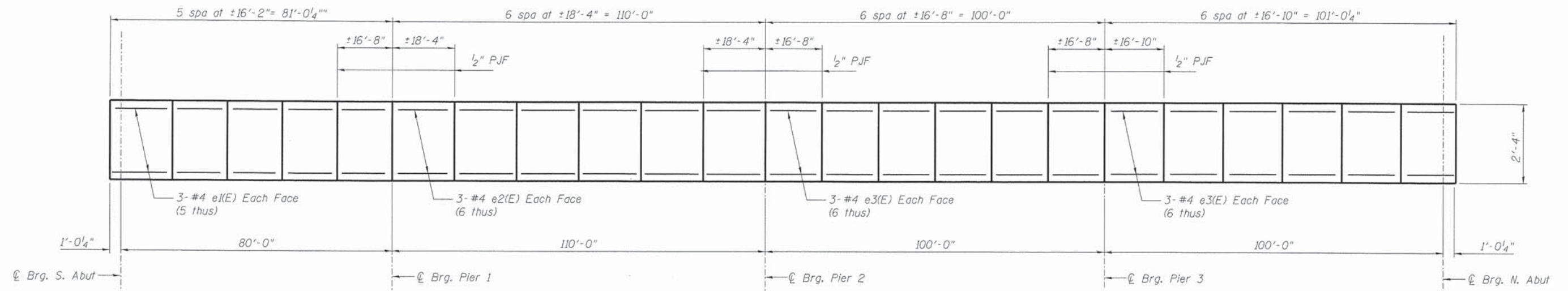
- #4 bar=2'-10"
- #5 bar=3'-5"
- #6 bar=4'-0"

- Notes:
1. See Sheet S2 for superstructure details and Bill of Material.
 2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 3. See Sheet S11 for parapet reinforcement.
 4. For Light pole anchor details See Sheet S12.
 5. For Section A-A see Sheet S13.
 6. 3/4" φ Galvanized Expansion anchor is included in the cost of reinf. bars, Epoxy Coated.

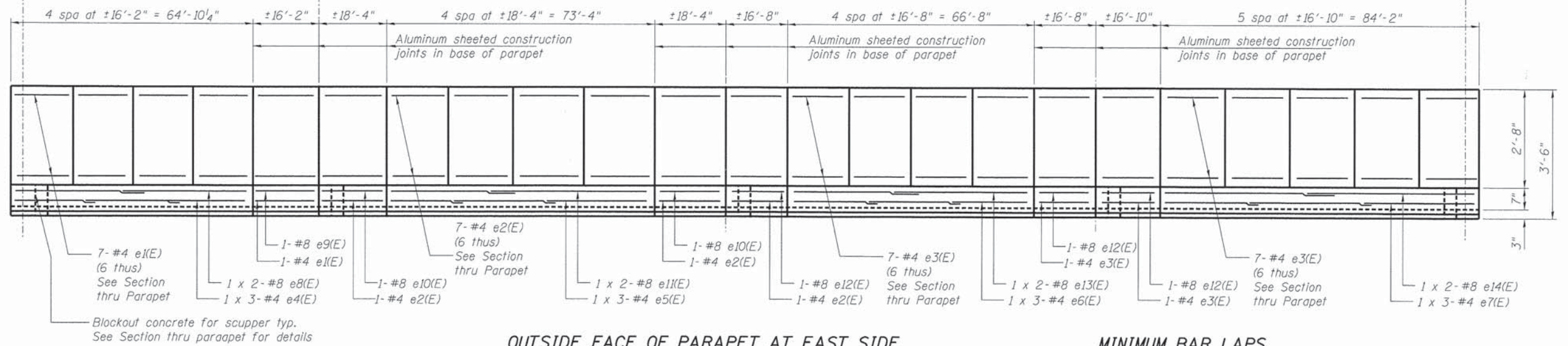


CROSS SECTION
(Looking north)

| | | | | | | | | | | | |
|--|--------------------------|---------------|---------------------------|---|--|--------------------|----------------|--------|--------------|-----------|--|
| | USER NAME = mohammed.ali | DESIGNED - RD | REVISED | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SUPERSTRUCTURE - DECK PLAN STRUCTURE NO. 016-6351 | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| | PLOT SCALE = None | CHECKED - JG | REVISED | | | 2714 | 99-00094-00-GS | COOK | 240 | 143 | |
| | PLOT DATE = 7/31/2014 | DRAWN - RJ | REVISED | | | CONTRACT NO. 63887 | | | | | |
| | DATE = 3-24-2014 | REVISED | ILLINOIS FED. AID PROJECT | | | | | | | | |



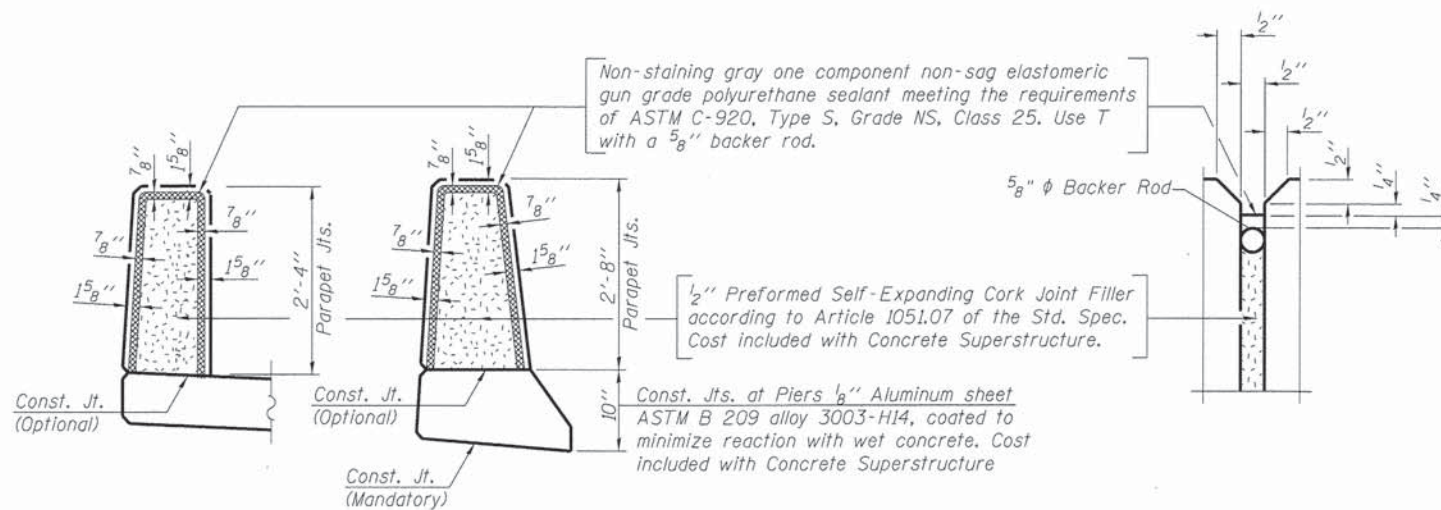
INSIDE FACE OF PARAPET AT WEST SIDE



OUTSIDE FACE OF PARAPET AT EAST SIDE

MINIMUM BAR LAPS

For parapet
 #4 = 2'-10"
 #8 = 5'-2"



PARAPET JOINT DETAILS



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

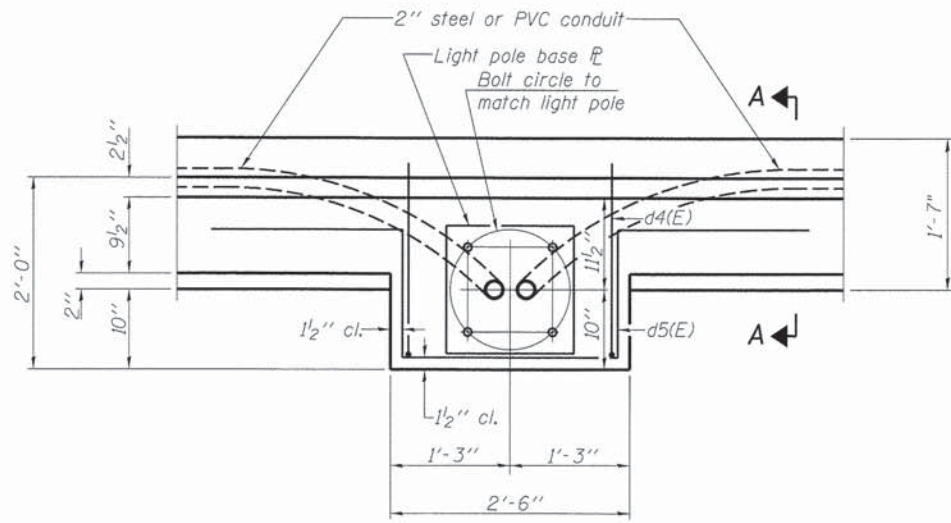
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS - 1
 STRUCTURE NO. 016-6351**

SHEET NO. 144 OF 240 SHEETS

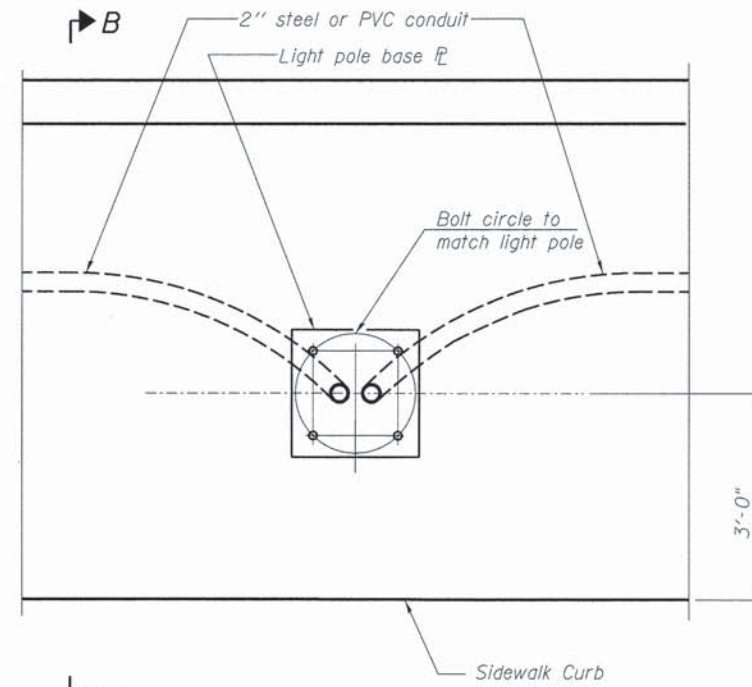
| | | | | |
|-------------|----------------|--------|--------------|--------------------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 144 |
| | | | | CONTRACT NO. 63887 |

ILLINOIS FED. AID PROJECT

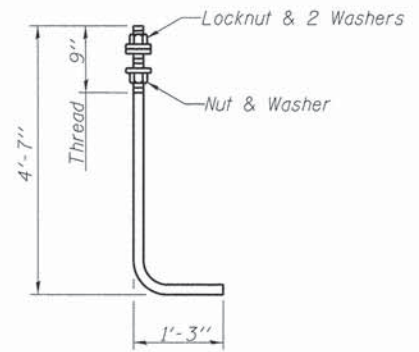


PLAN
LIGHT POLE AT PARAPET

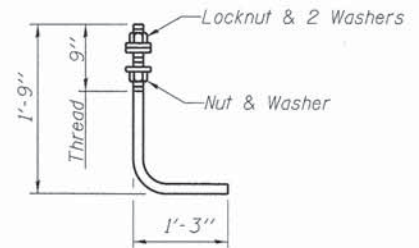
Note:
Cost of anchor rods and conduit is included with Concrete Superstructure.



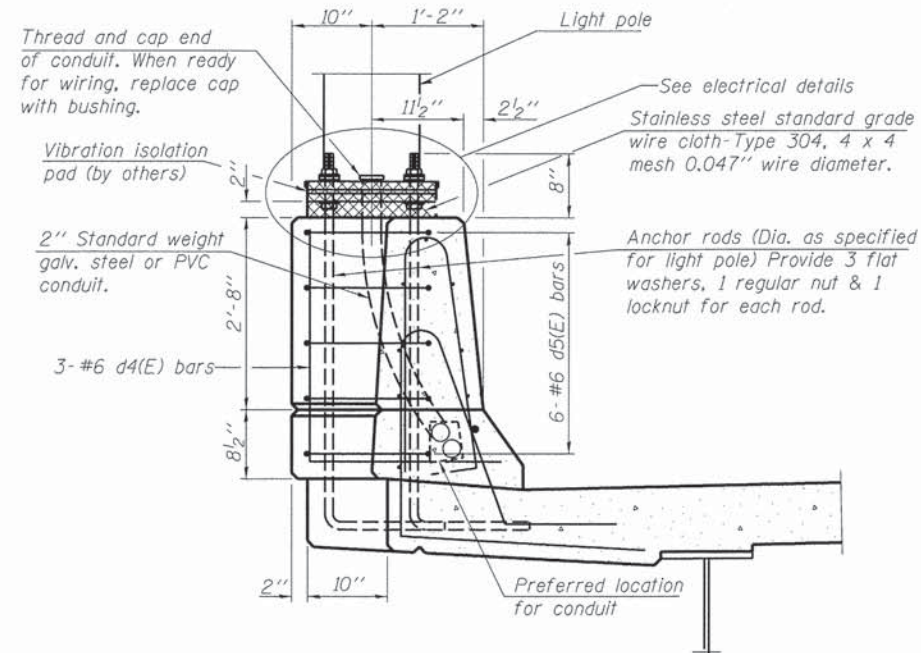
PLAN
LIGHT POLE AT SIDEWALK



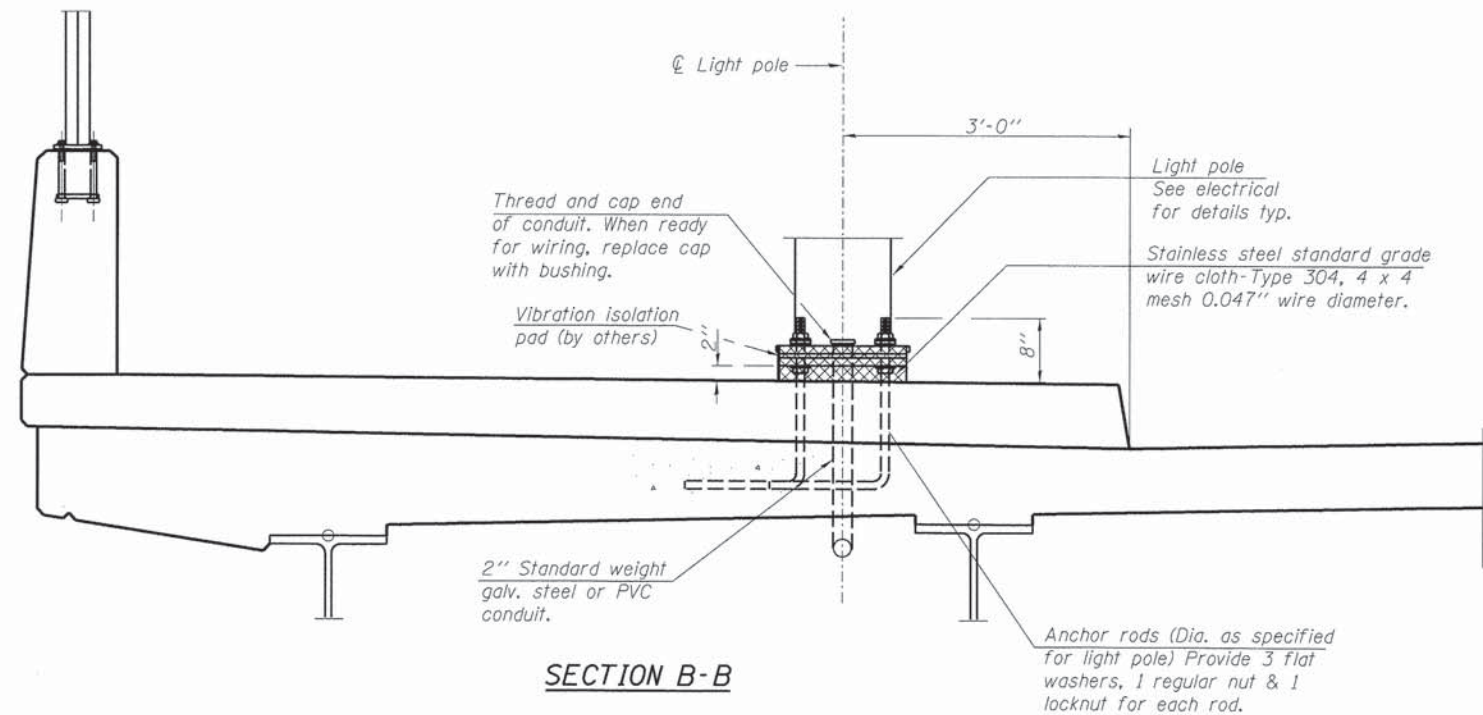
ANCHOR ROD - PARAPET
Diameter as specified for light poles.
(ASTM F 1554 Grade 105)



ANCHOR ROD - SIDEWALK
Diameter as specified for light poles.
(ASTM F 1554 Grade 105)



SECTION A-A

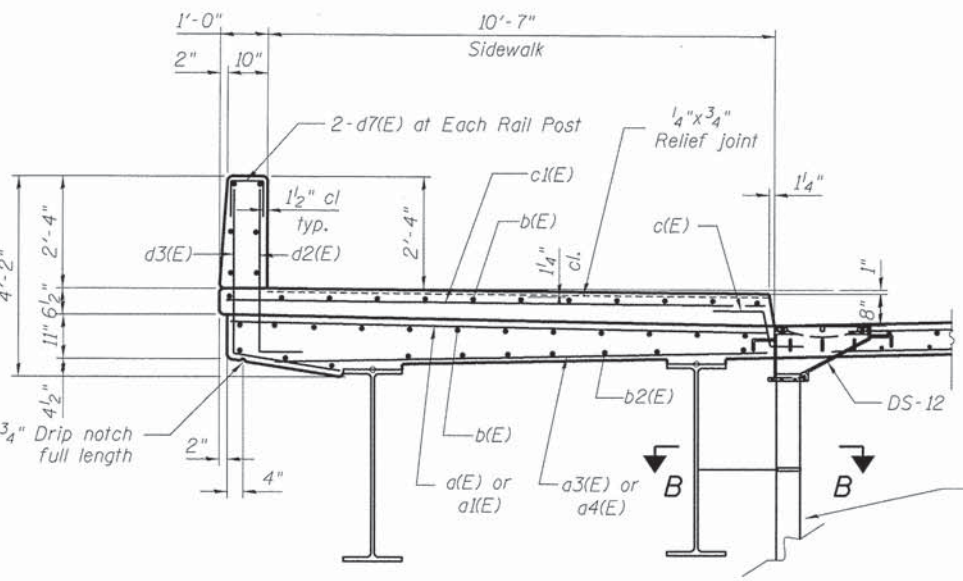


SECTION B-B

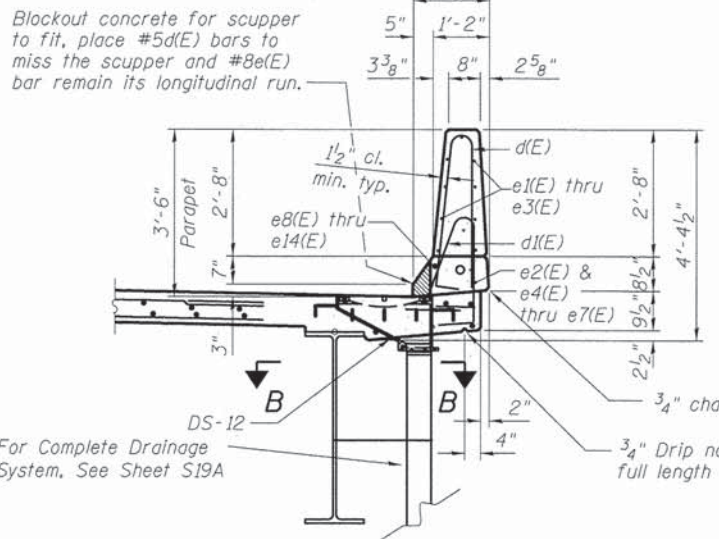
**SUPERSTRUCTURE
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|------|----------|---------|-------|
| a(E) | 760 | #5 | 28'-9" | |
| a1(E) | 760 | #5 | 41'-3" | |
| a2(E) | 784 | #5 | 6'-6" | |
| a3(E) | 445 | #5 | 31'-2" | |
| a4(E) | 445 | #5 | 37'-9" | |
| a5(E) | 80 | #5 | 2'-0" | |
| a6(E) | 8 | #5 | 5'-0" | |
| a7(E) | 16 | #5 | 31'-2" | |
| a8(E) | 54 | #5 | 5'-4" | |
| b(E) | 1105 | #5 | 32'-2" | |
| b1(E) | 591 | #6 | 31'-1" | |
| b2(E) | 720 | #5 | 32'-2" | |
| c(E) | 393 | #5 | 2'-4" | |
| c1(E) | 393 | #5 | 11'-3" | |
| c2(E) | 393 | #5 | 3'-8" | |
| c3(E) | 786 | #5 | 1'-3" | |
| d(E) | 432 | #5 | 6'-10" | |
| d1(E) | 432 | #5 | 7'-9" | |
| d2(E) | 393 | #5 | 4'-5" | |
| d3(E) | 393 | #5 | 5'-7" | |
| d4(E) | 6 | #6 | 5'-1" | |
| d5(E) | 10 | #6 | 8'-11" | |
| d6(E) | 4 | #5 | 3'-9" | |
| d7(E) | 150 | #4 | 2'-0" | |
| e1(E) | 66 | #4 | 15'-10" | |
| e2(E) | 79 | #4 | 18'-0" | |
| e3(E) | 159 | #4 | 16'-4" | |
| e4(E) | 3 | #4 | 28'-3" | |
| e5(E) | 3 | #4 | 25'-9" | |
| e6(E) | 3 | #4 | 23'-6" | |
| e7(E) | 3 | #4 | 29'-4" | |
| e8(E) | 2 | #8 | 40'-3" | |
| e9(E) | 1 | #8 | 15'-10" | |
| e10(E) | 2 | #8 | 18'-0" | |
| e11(E) | 2 | #8 | 41'-11" | |
| e12(E) | 3 | #8 | 16'-4" | |
| e13(E) | 2 | #8 | 35'-8" | |
| e14(E) | 2 | #8 | 44'-1" | |
| x(E) | 393 | #5 | 5'-7" | |
| Reinforcement Bars, Epoxy Coated | | Pound | 191,600 | |
| Concrete Superstructure | | Cu. Yds. | 920 | |
| Bridge Deck Grooving | | Sq. Yd. | 1993 | |
| Protective Coat | | Sq. Yd. | 3227 | |

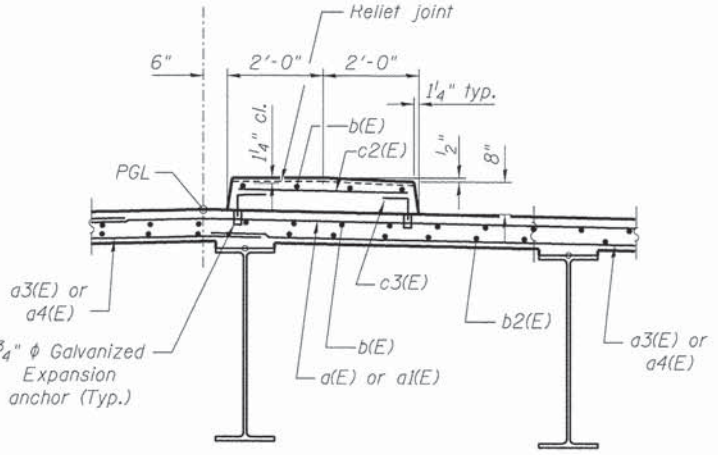
Bars indicated thus 2 x 3 - #5 etc. indicates 2 line of bars with 3 lengths per line.
For Section A-A see Sheet S10.



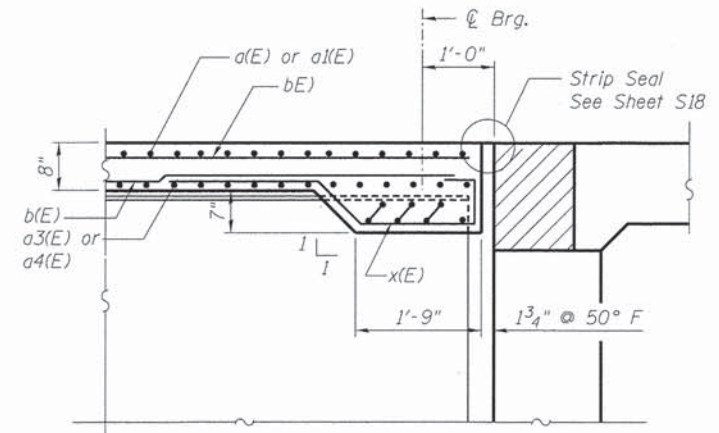
**SECTION THRU SIDEWALK
(WEST SIDE)**



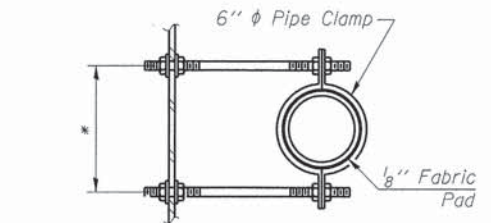
**SECTION THRU PARAPET
(EAST SIDE)**



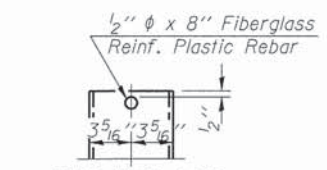
SECTION THRU MEDIAN



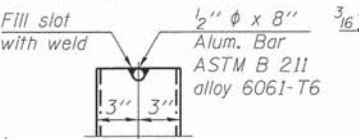
SECTION A-A



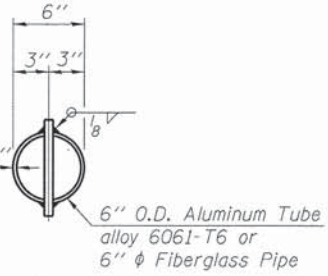
SECTION B-B
*Dimension as required by Pipe Clamp



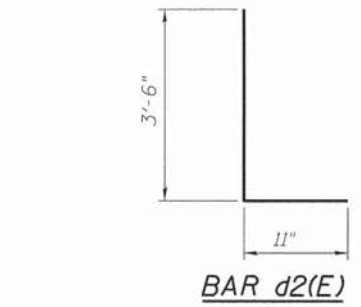
FIBERGLASS PIPE



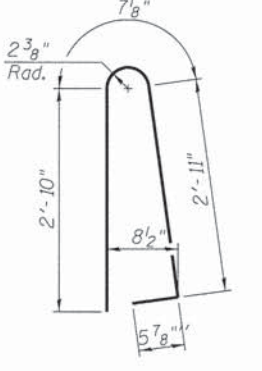
ALUMINUM TUBE



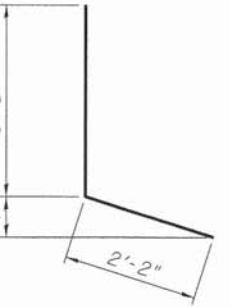
TOP PLAN
(Showing Aluminum Tube)



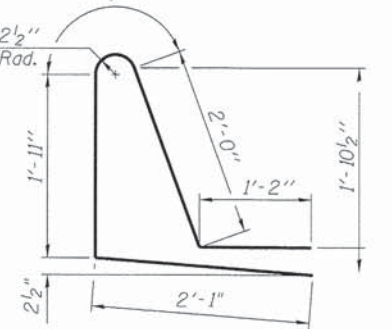
BAR d2(E)



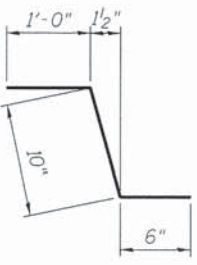
BAR d(E)



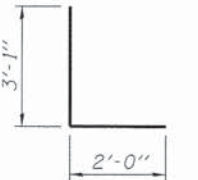
BAR d3(E)



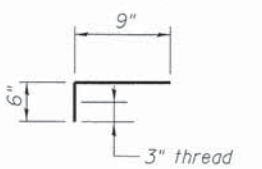
BAR d1(E)



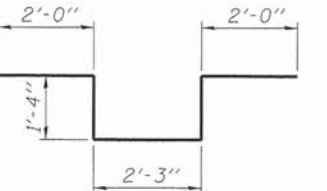
BAR c(E)



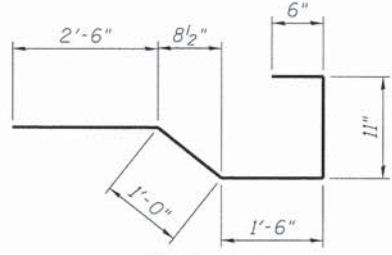
BAR d4(E)



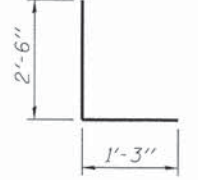
BAR c3(E)



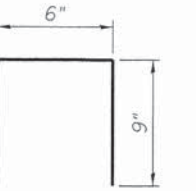
BAR d5(E)



BAR X (E)

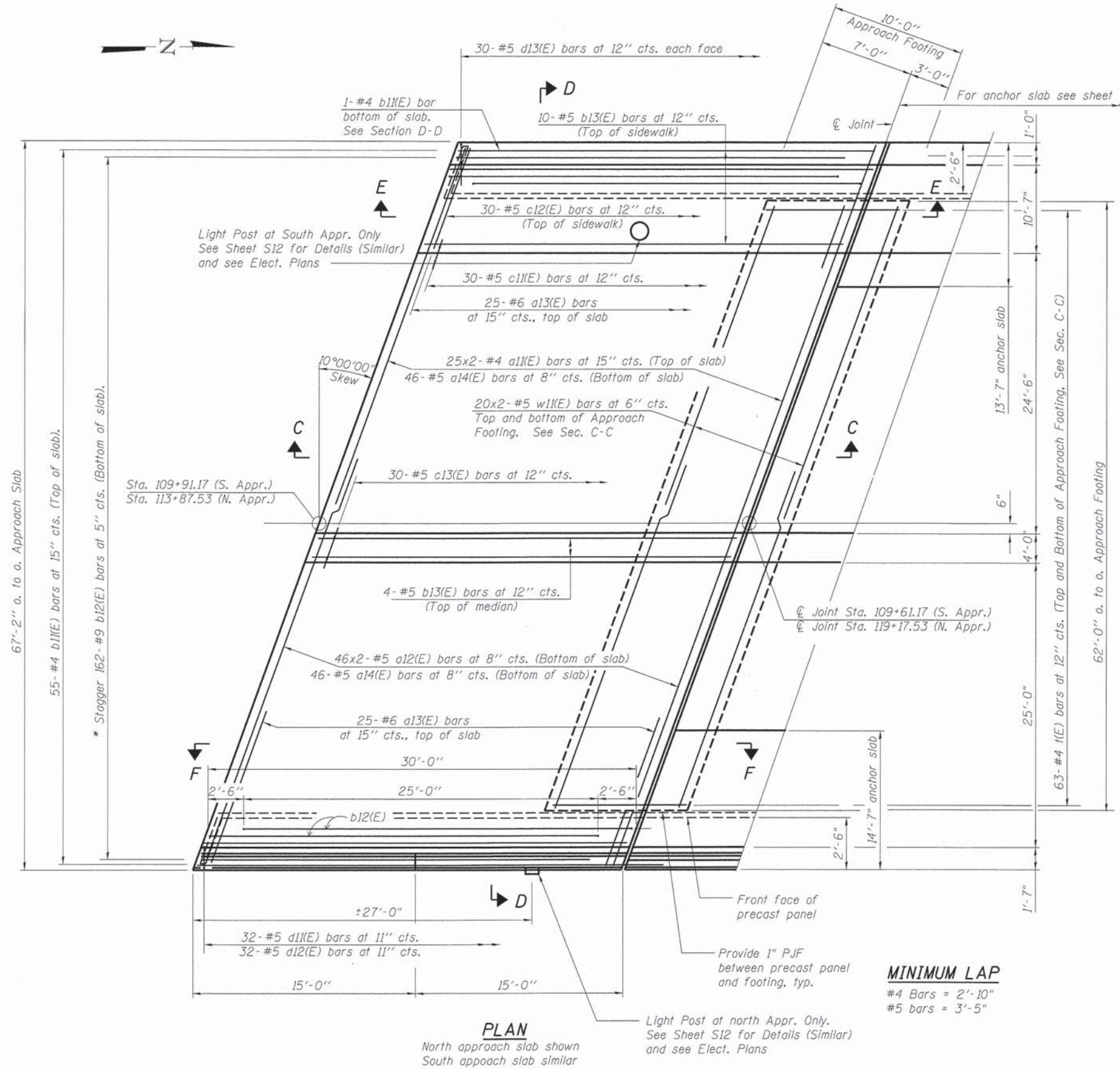
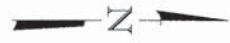


BAR d6(E)

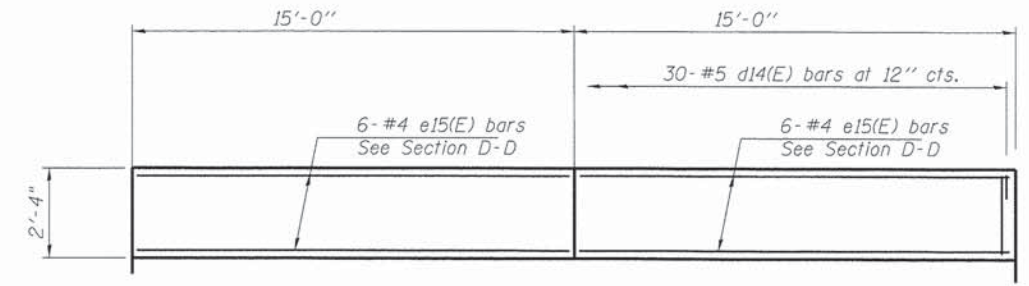


BAR d7(E)

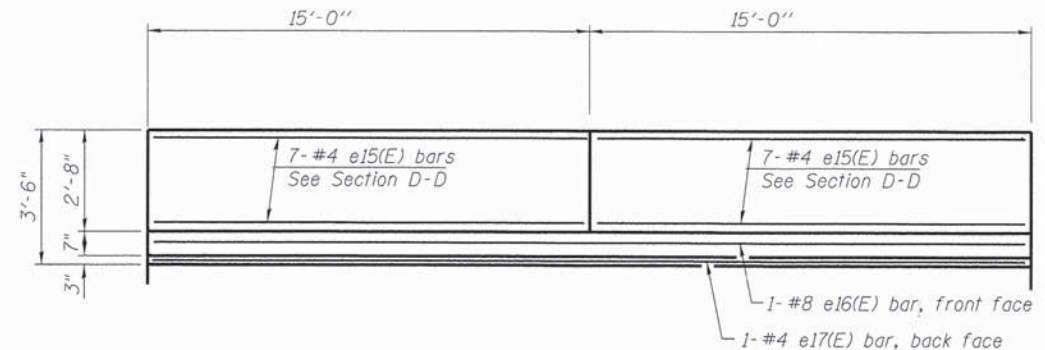
Notes:
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Society of Protective Coatings Spec. SSPC-SP1 prior to painting.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.



PLAN
North approach slab shown
South approach slab similar



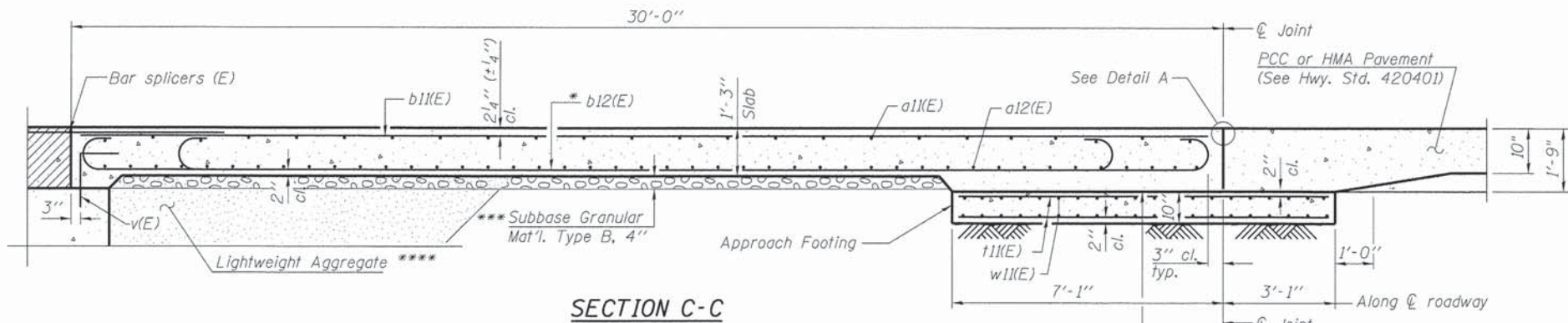
VIEW E-E
INSIDE FACE OF PARAPET AT WEST SIDE



VIEW F-F
INSIDE FACE OF PARAPET AT EAST SIDE

Notes:
See sheet S15 for Sections C-C & D-D.
Bars indicated thus 46 x 2-#5 etc. indicates 46 lines of bars with 2 lengths per line.
See Sheet S15 for Bill of Material.

MINIMUM LAP
#4 Bars = 2'-10"
#5 bars = 3'-5"

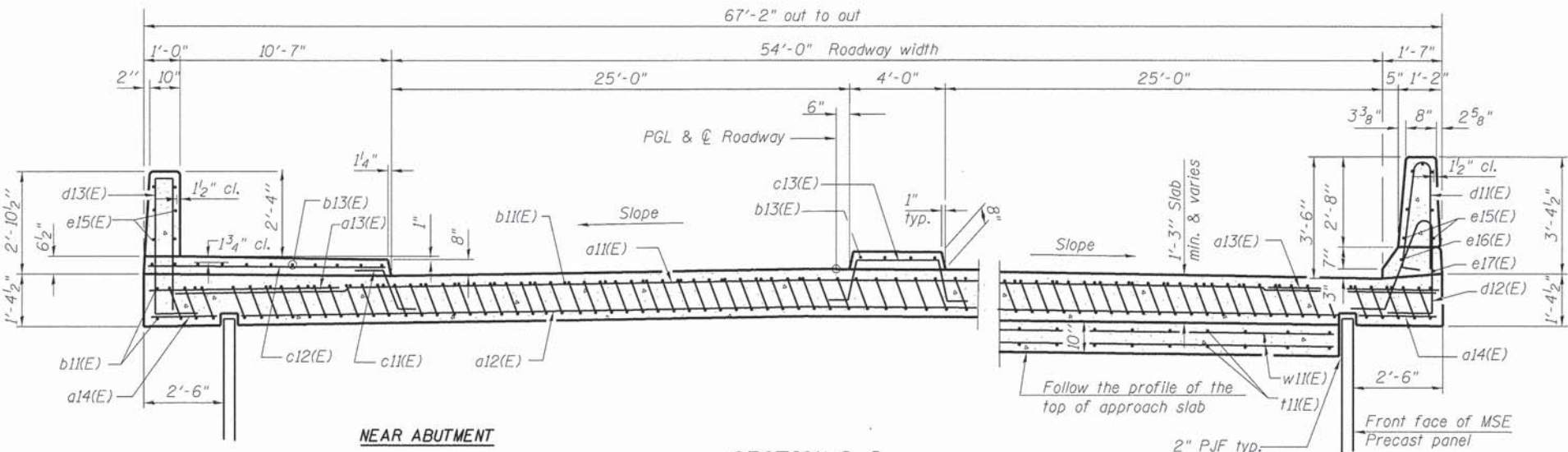
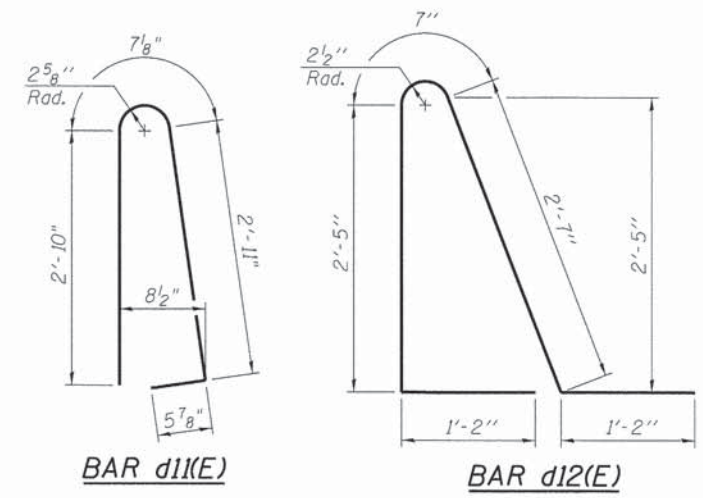


Notes:
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For additional parapet details, see sheet S18.

For location of Section C-C and D-D see Sheet S14.

Preformed Joint Steel of Detail A is incidental with concrete superstructure.

* Tilt #9 b12(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.
 **** Cost included with MSE Walls.

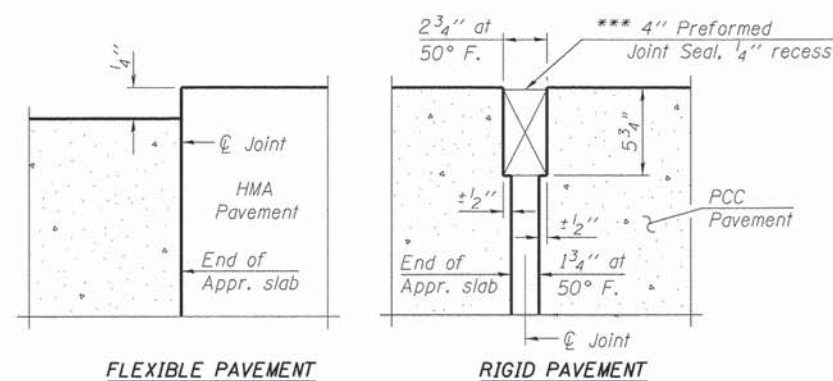


**TWO APPROACHES
 BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|---------------------|-----|---------|---------|-------|
| a1(E) | 100 | #4 | 34'-11" | — |
| a2(E) | 184 | #5 | 35'-0" | — |
| a3(E) | 100 | #6 | 6'-6" | — |
| a4(E) | 184 | #5 | 2'-2" | — |
| b1(E) | 112 | #4 | 29'-8" | — |
| b2(E) | 324 | #9 | 29'-9" | — |
| b3(E) | 28 | #5 | 29'-8" | — |
| c1(E) | 60 | #5 | 3'-2" | — |
| c2(E) | 60 | #5 | 11'-3" | — |
| c3(E) | 60 | #5 | 7'-11" | — |
| d4(E) | 3 | #6 | 5'-1" | — |
| d5(E) | 5 | #6 | 8'-11" | — |
| d1(E) | 68 | #5 | 6'-10" | — |
| d2(E) | 68 | #5 | 7'-11" | — |
| d3(E) | 60 | #5 | 9'-3" | — |
| e15(E) | 52 | #4 | 14'-8" | — |
| e16(E) | 2 | #8 | 29'-8" | — |
| e17(E) | 2 | #4 | 29'-8" | — |
| w1(E) | 272 | #4 | 9'-10" | — |
| w1(E) | 160 | #5 | 32'-4" | — |
| Rebar, Epoxy-Coated | | Poured | 57200 | |
| Conc. Superstruct. | | Cu. Yd. | 246 | |

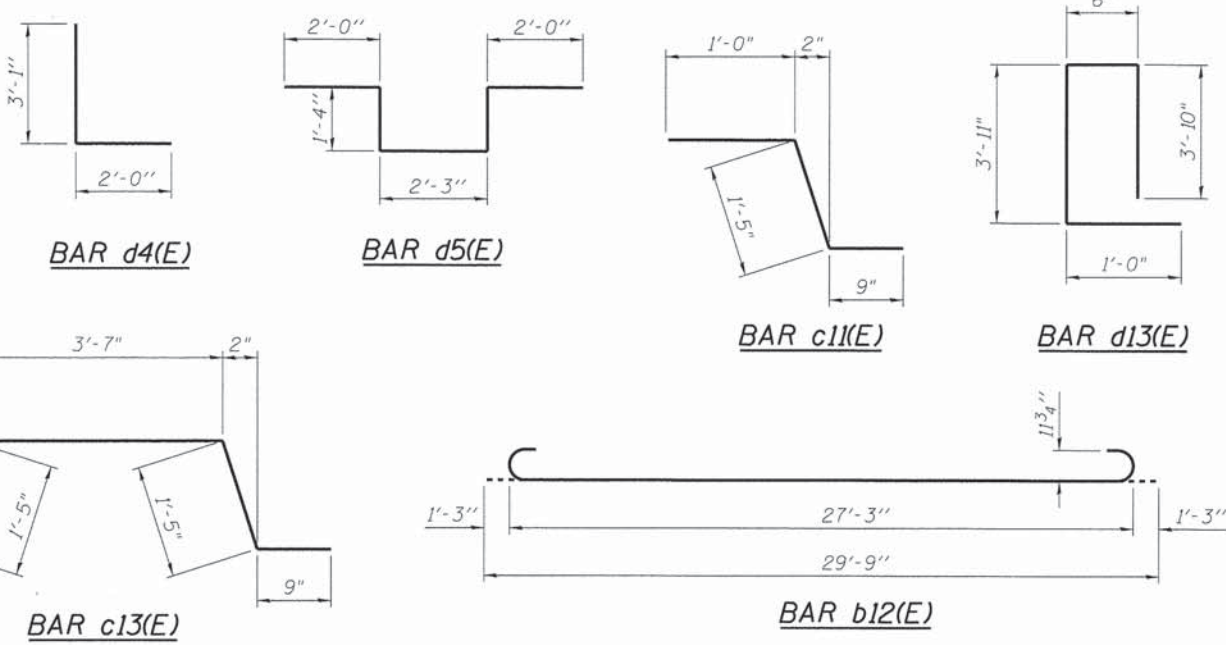
SECTION D-D
 (See Plan for dimensions not shown)

AT APPROACH FOOTING

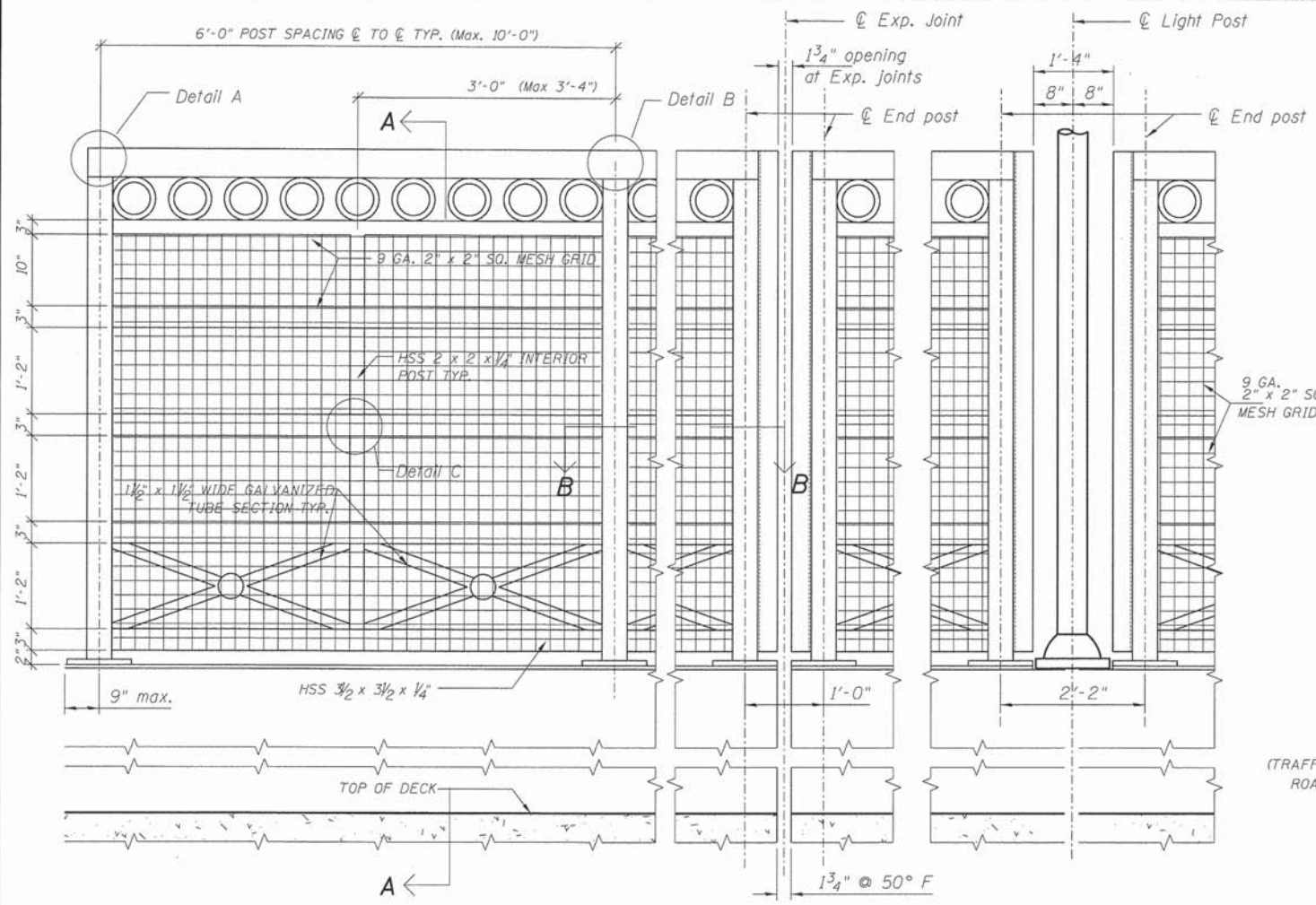


FLEXIBLE PAVEMENT **RIGID PAVEMENT**

DETAIL A



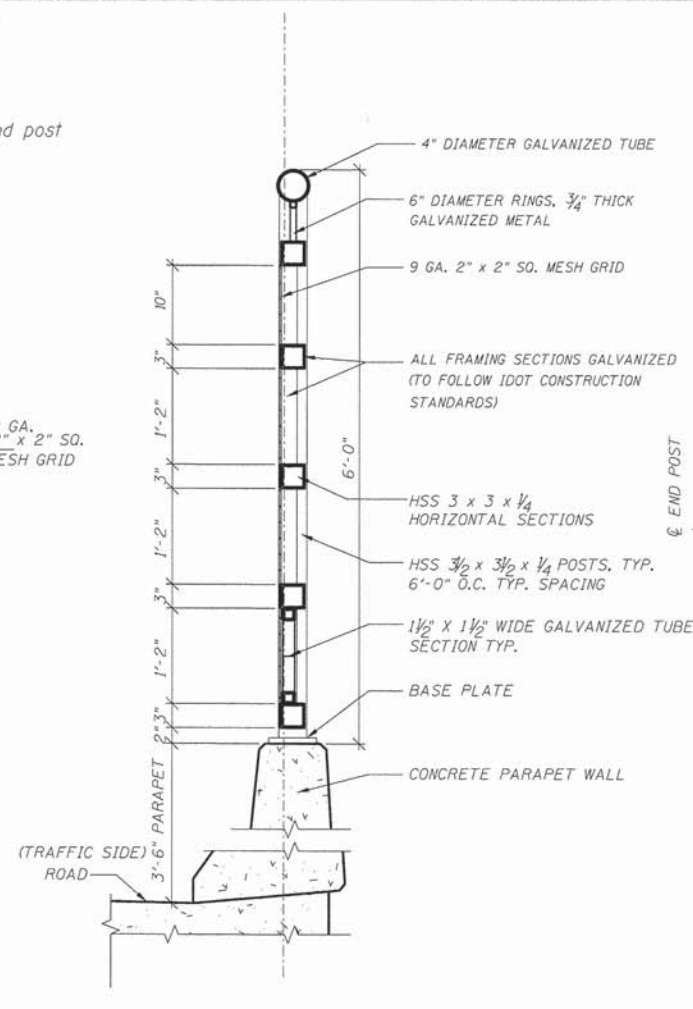
**PREFORMED
 JOINT SEAL**



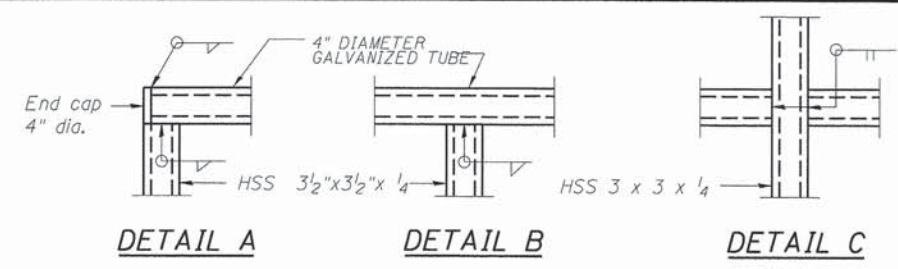
ELEVATION

ELEVATION
At Exp. Joints

ELEVATION
At Light Post



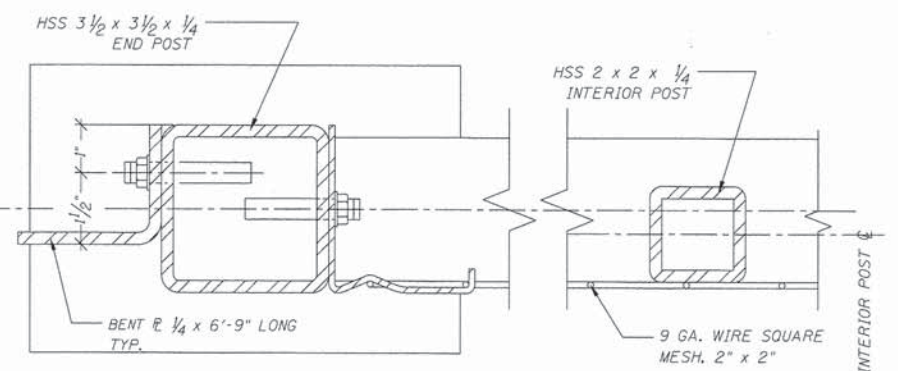
SECTION A-A



DETAIL A

DETAIL B

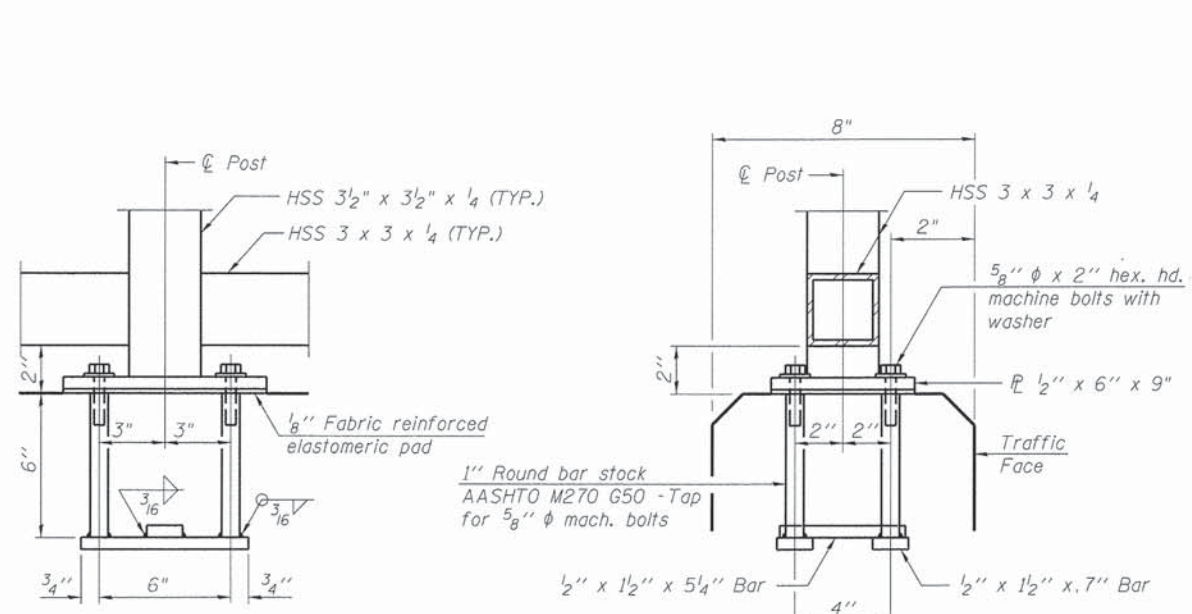
DETAIL C



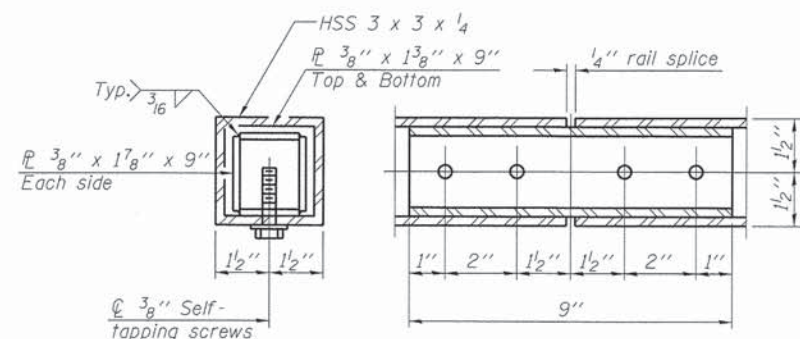
TYPICAL AT END POST

TYPICAL AT INTERIOR

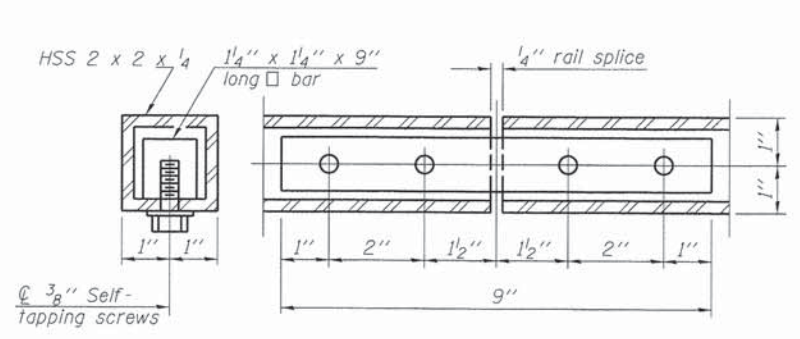
SECTION B-B



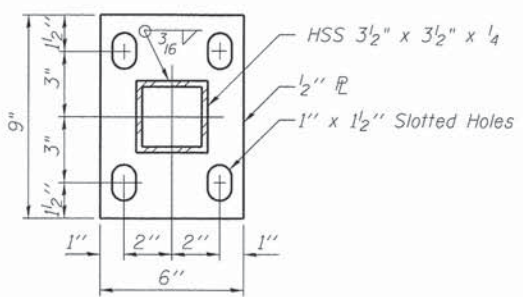
ANCHOR BOLT DETAILS



RAIL SPLICE



HANDRAIL SPLICE



BASE P

Note:
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

BILL OF MATERIAL

| Item | Unit | Quantity |
|----------------------|------|----------|
| Bridge Fence Railing | Foot | 1203 |

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



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ/MH | REVISED |
| | DATE - 3-24-2014 | REVISED |

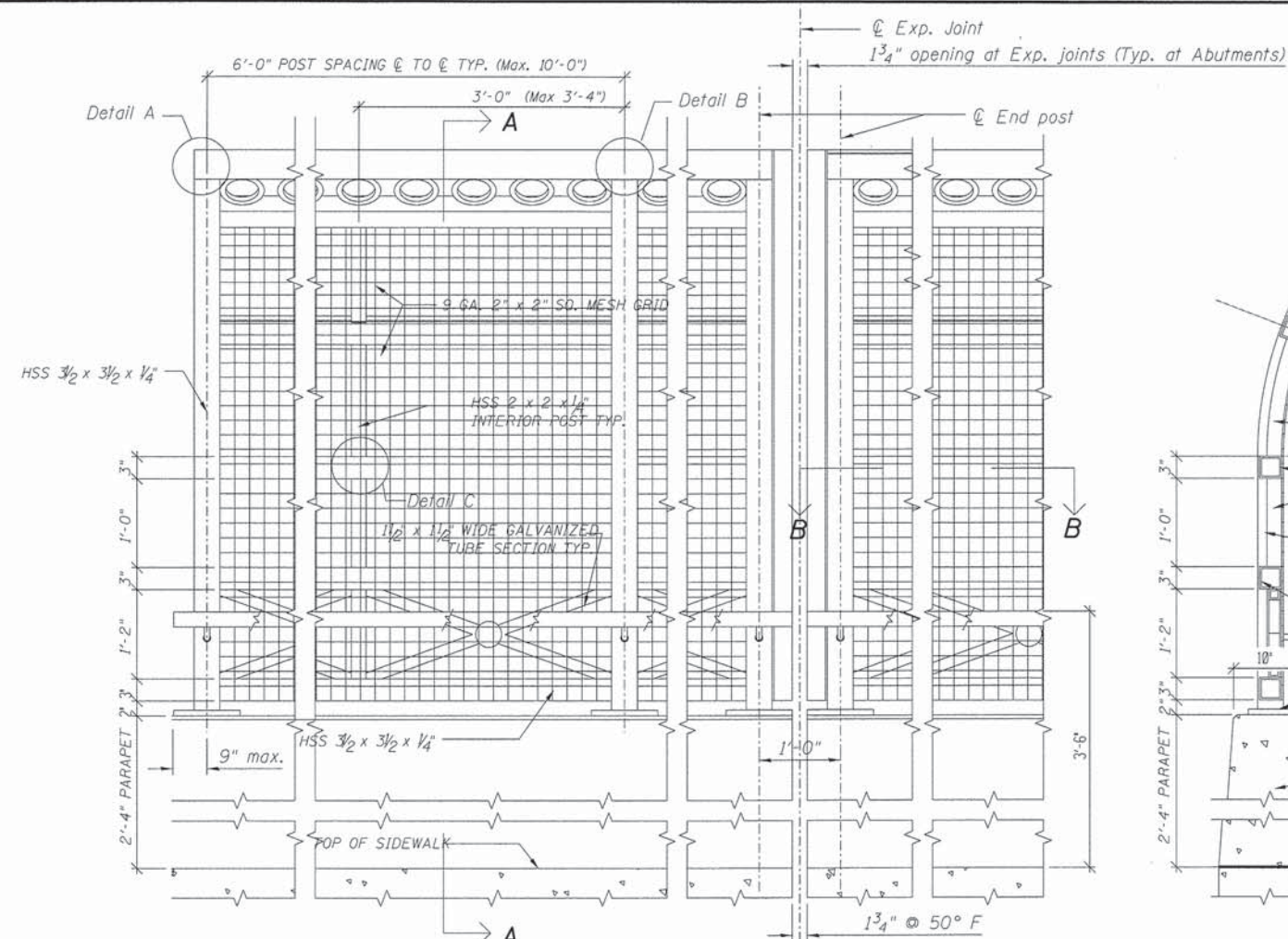
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE FENCE RAILING
STRUCTURE NO. 016-6351

SHEET NO. 149 OF 240 SHEETS

| | | | | |
|---------------------------|------------------------|-------------|------------------|---------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 149 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

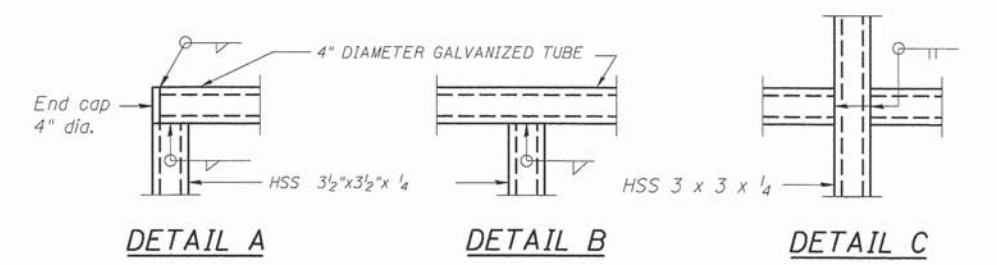
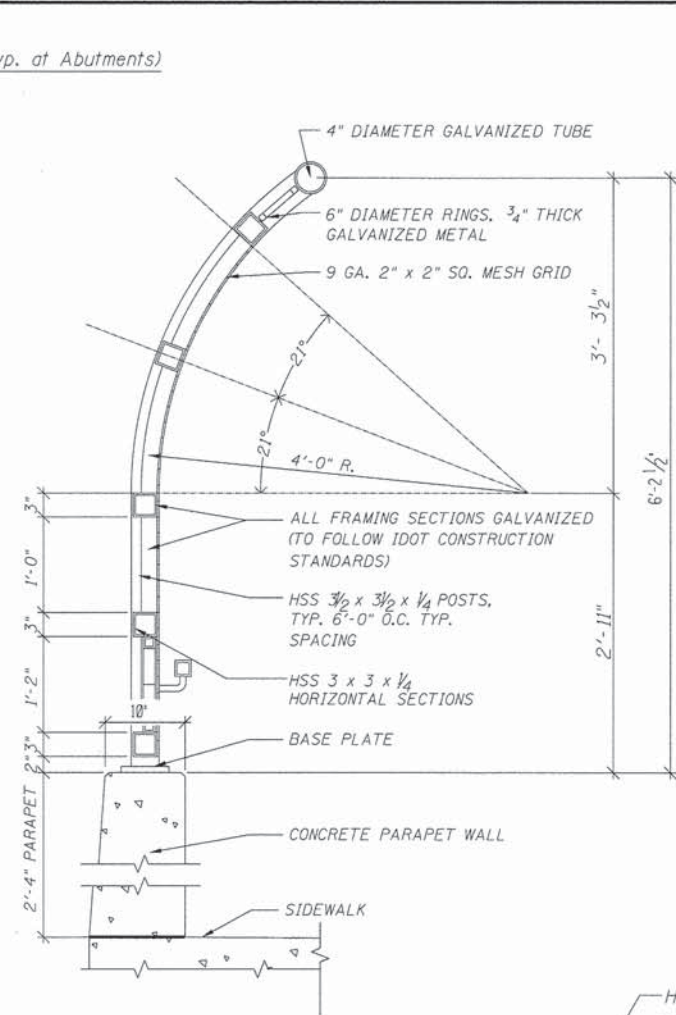
S16



ELEVATION

ELEVATION
At Exp. Joints

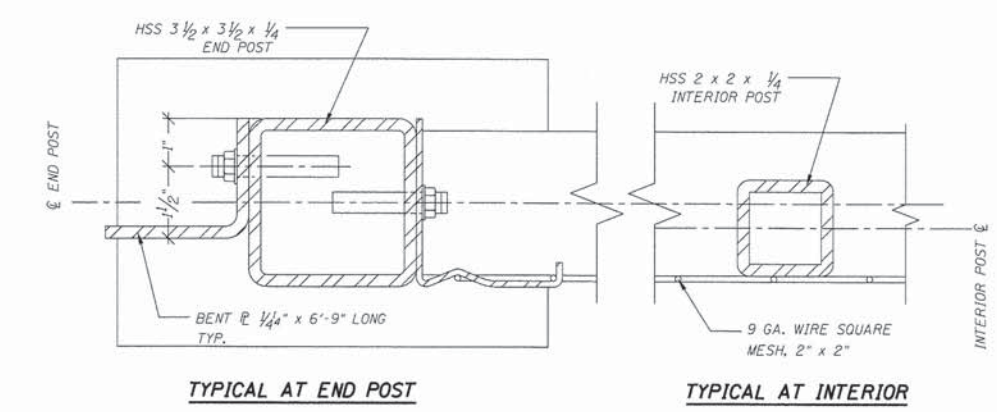
SECTION A-A



DETAIL A

DETAIL B

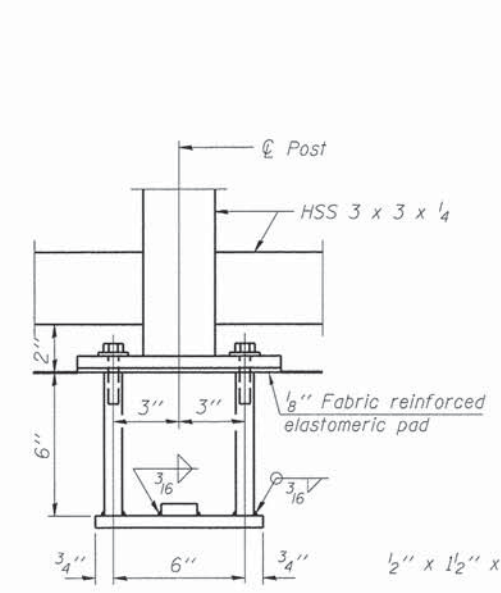
DETAIL C



TYPICAL AT END POST

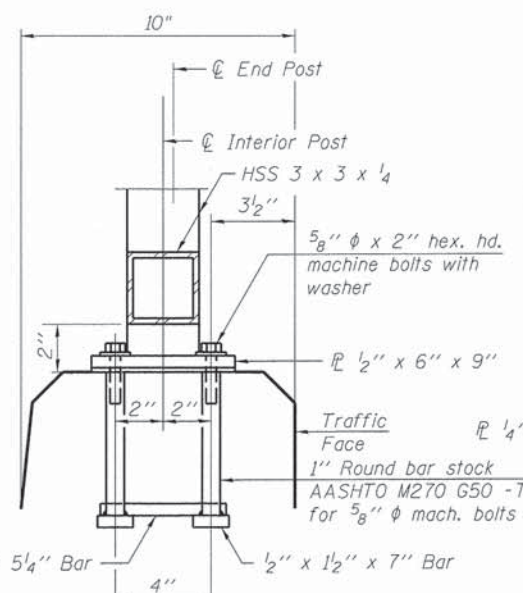
TYPICAL AT INTERIOR

SECTION B-B

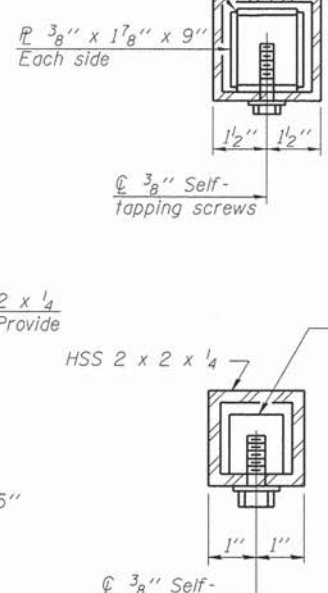
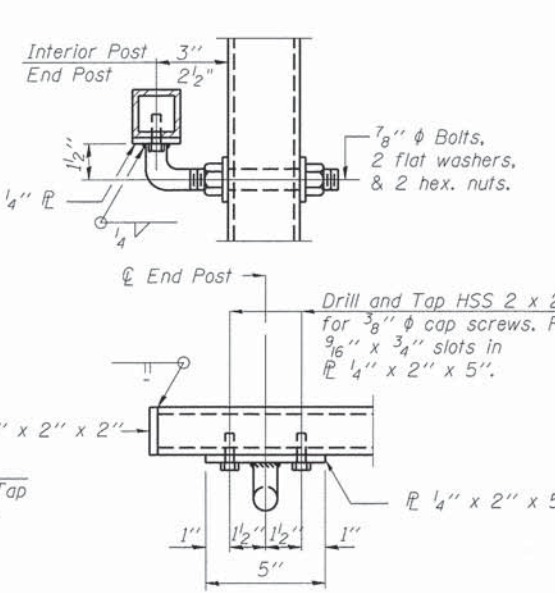


ANCHOR BOLT DETAILS

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

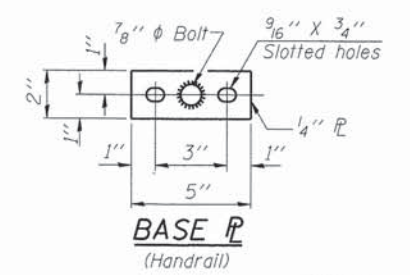


HANDRAIL DETAIL

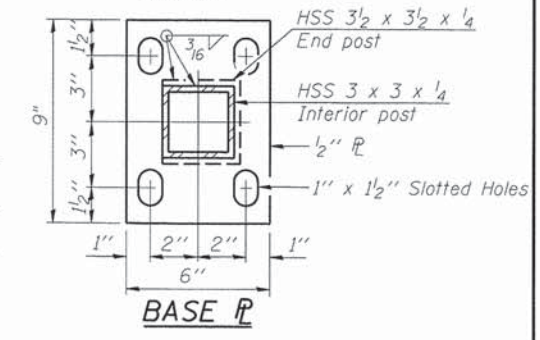


RAIL SPLICE

HANDRAIL SPLICE



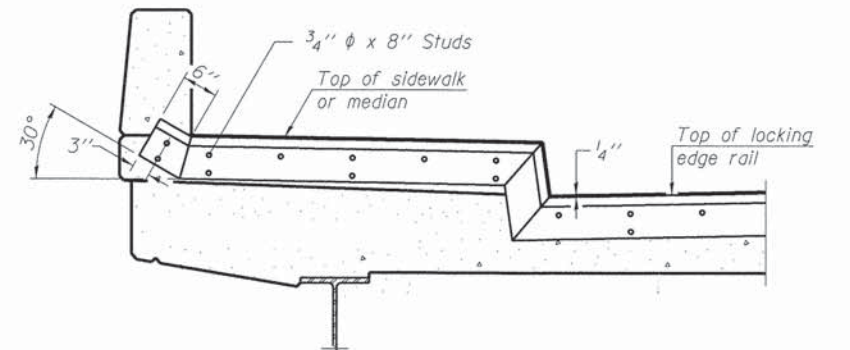
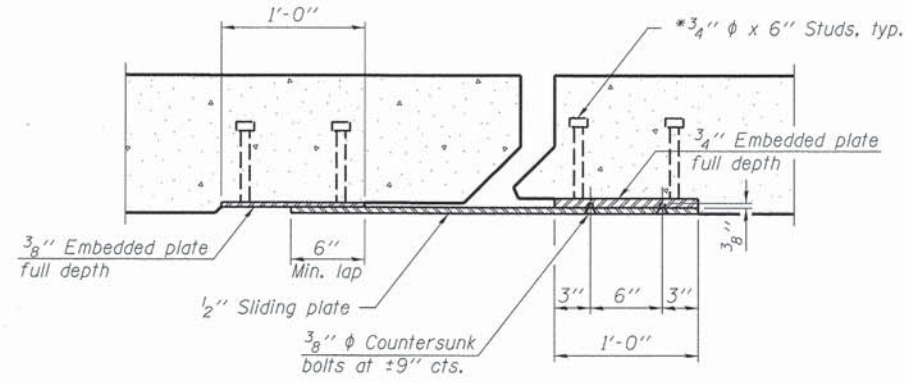
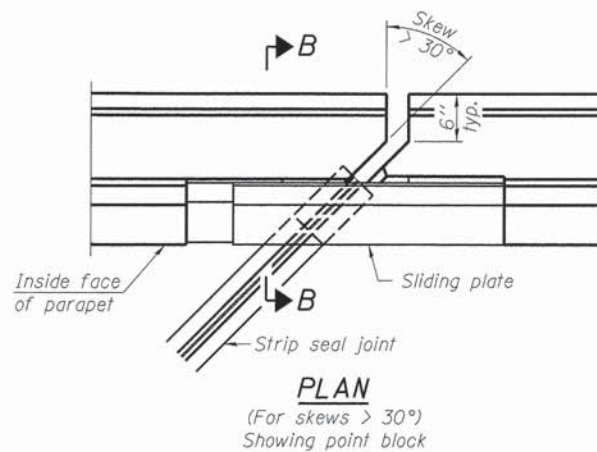
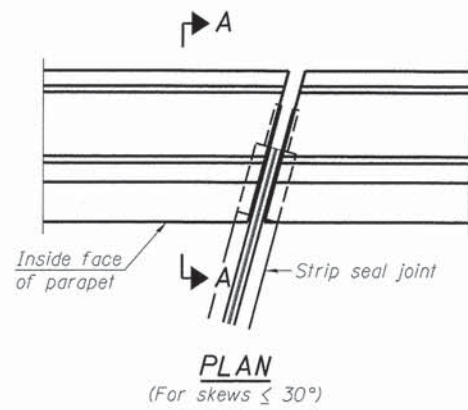
BASE PL
(Handrail)



BASE PL

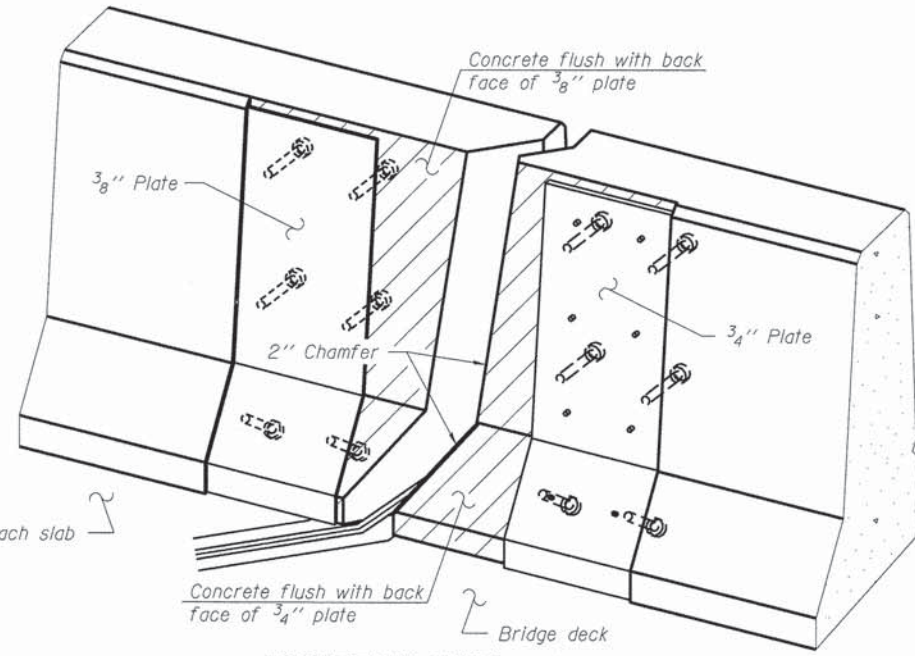
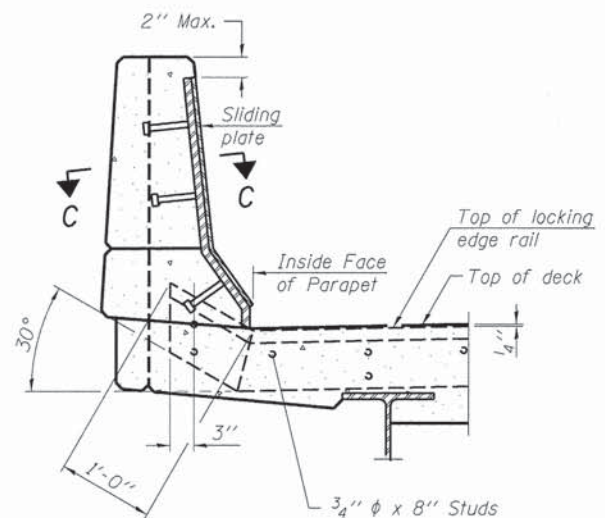
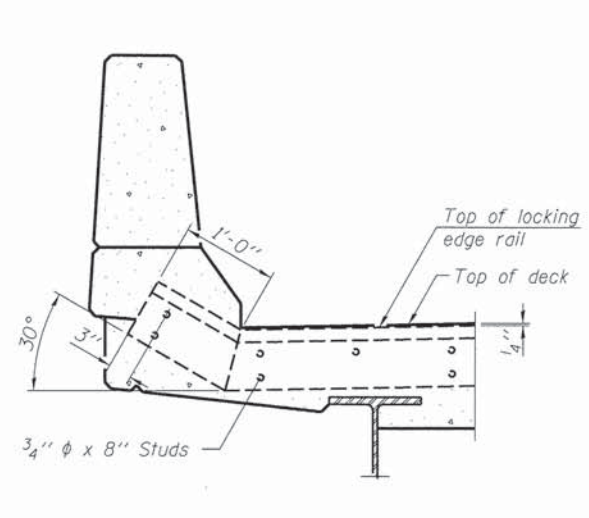
BILL OF MATERIAL

| Item | Unit | Quantity |
|---------------------------------|------|----------|
| Bridge Fence Railing (Sidewalk) | Foot | 1228 |



TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

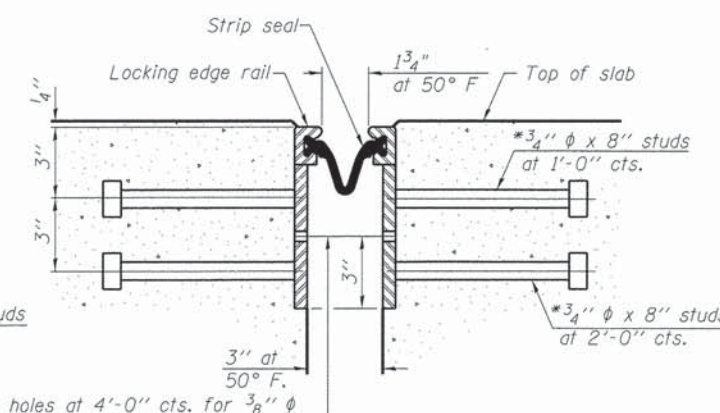
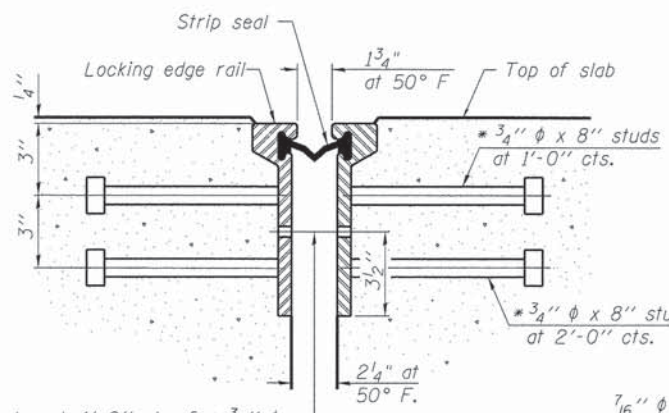
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

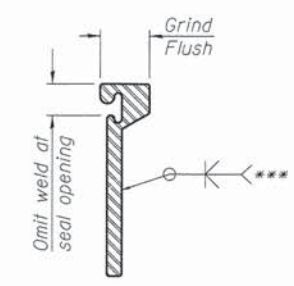
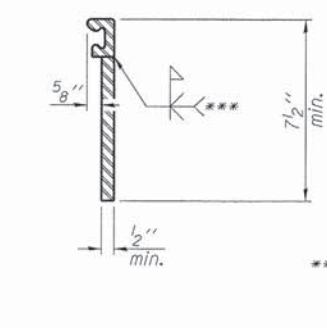
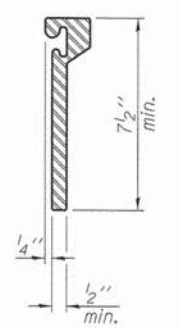
Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews $> 30^\circ$ included in the cost of Preformed Joint Strip Seal.



7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



*** Back gouge not required if complete joint penetration is verified by mock-up.

ROLLED EXTRUDED RAIL

WELDED RAIL

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

BILL OF MATERIAL

| Item | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 142 |

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

EJ-SSJ

1-27-12



| | | |
|---------------------------|------------------|-----------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISIONS |
| PLOT SCALE = None | CHECKED - JG | REVISIONS |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISIONS |
| | DATE - 3-24-2014 | REVISIONS |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

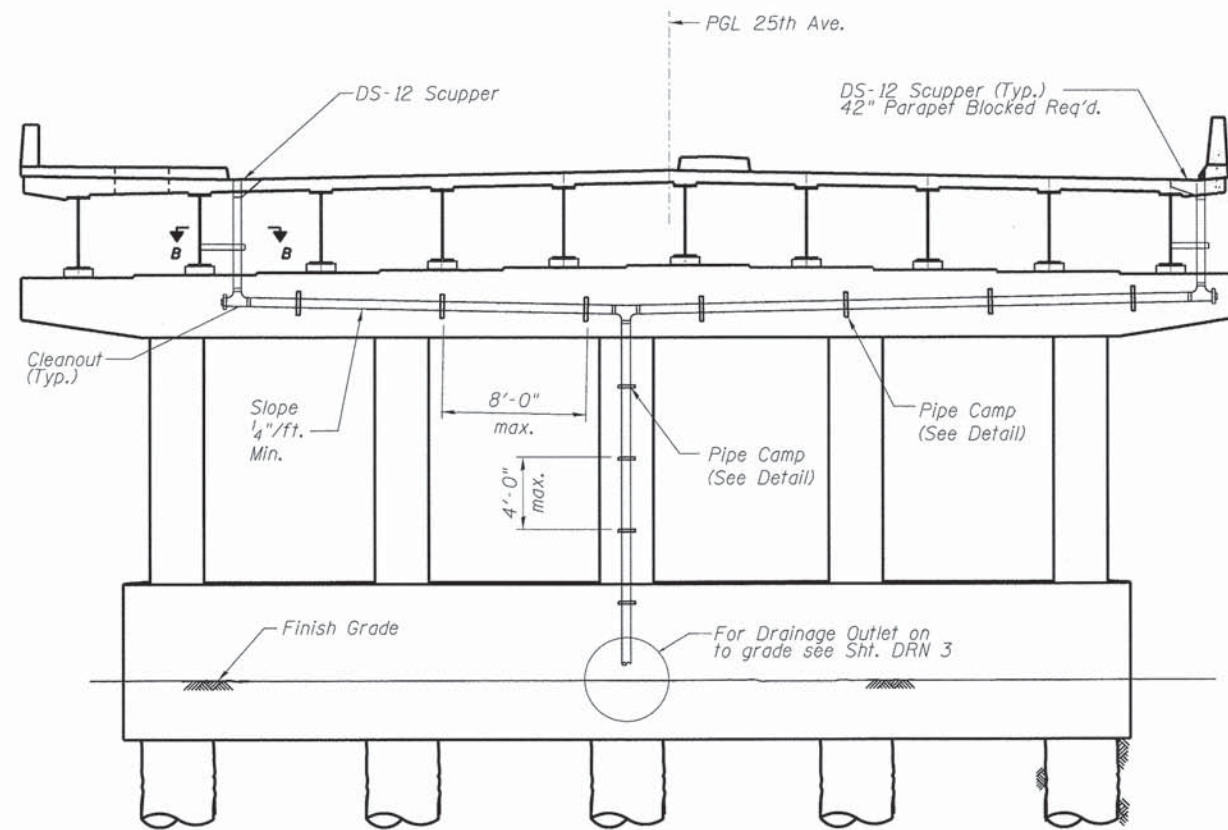
PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-6351

SHEET NO. 151 OF 240 SHEETS

| | | | | |
|-------------|----------------|--------|--------------|--------------------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 151 |
| | | | | CONTRACT NO. 63887 |

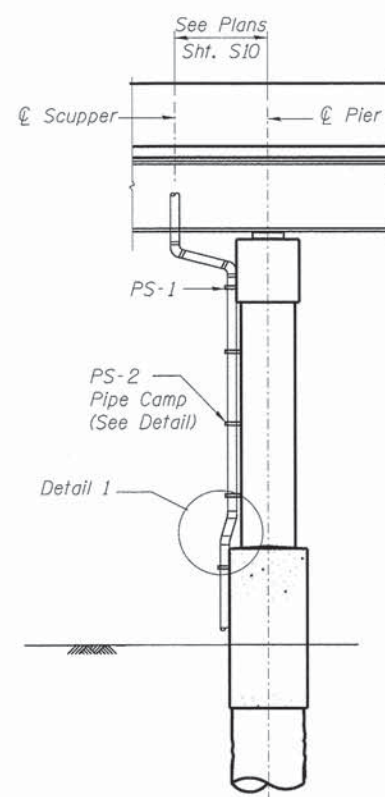
S18

ILLINOIS FED. AID PROJECT

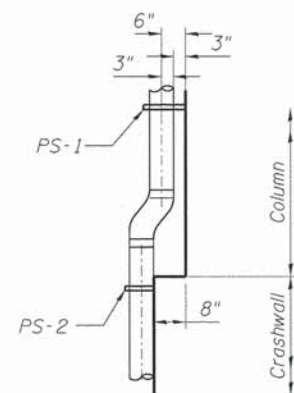


ELEVATION

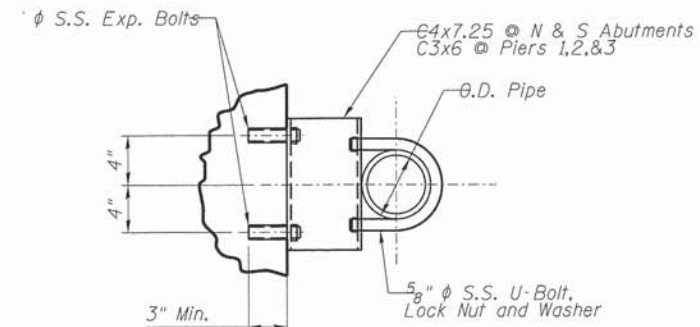
(Looking North - Pier 1 Shown)
Piers 2 & 3 Similar
but drawn on South Side



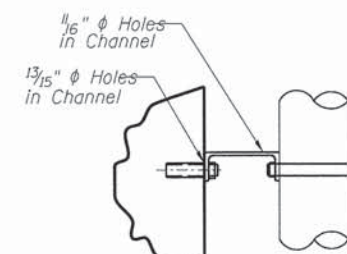
END VIEW



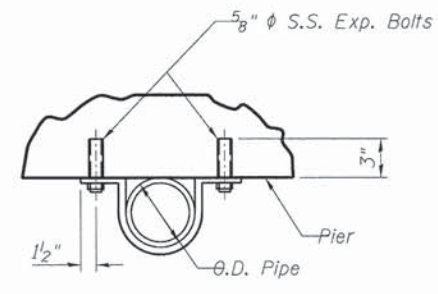
DETAIL 1



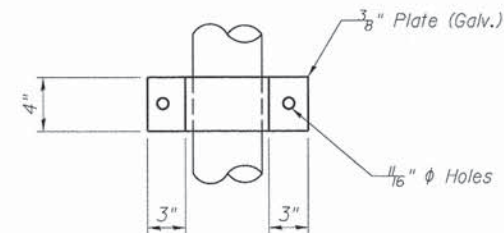
PLAN



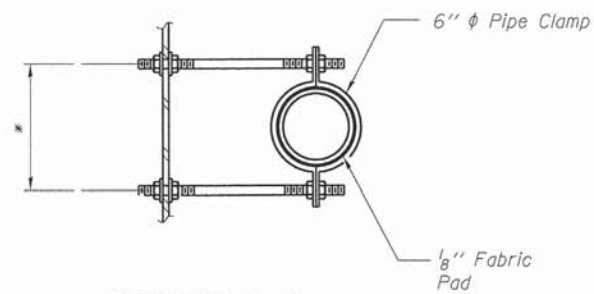
PIPE SUPPORT DETAIL PS-2



PLAN



PIPE SUPPORT DETAIL PS-1



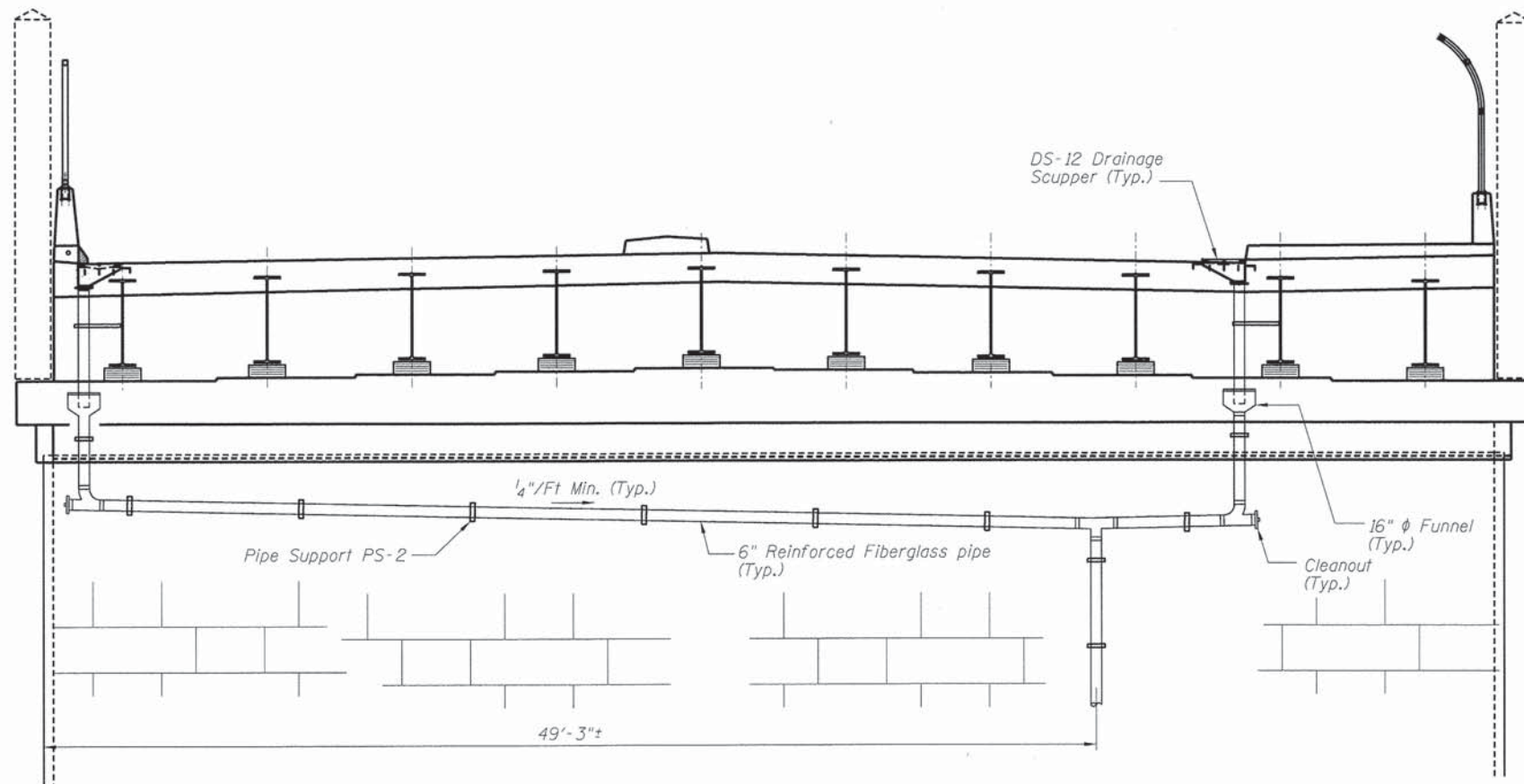
SECTION B-B

*Dimension as required
by Pipe Clamp

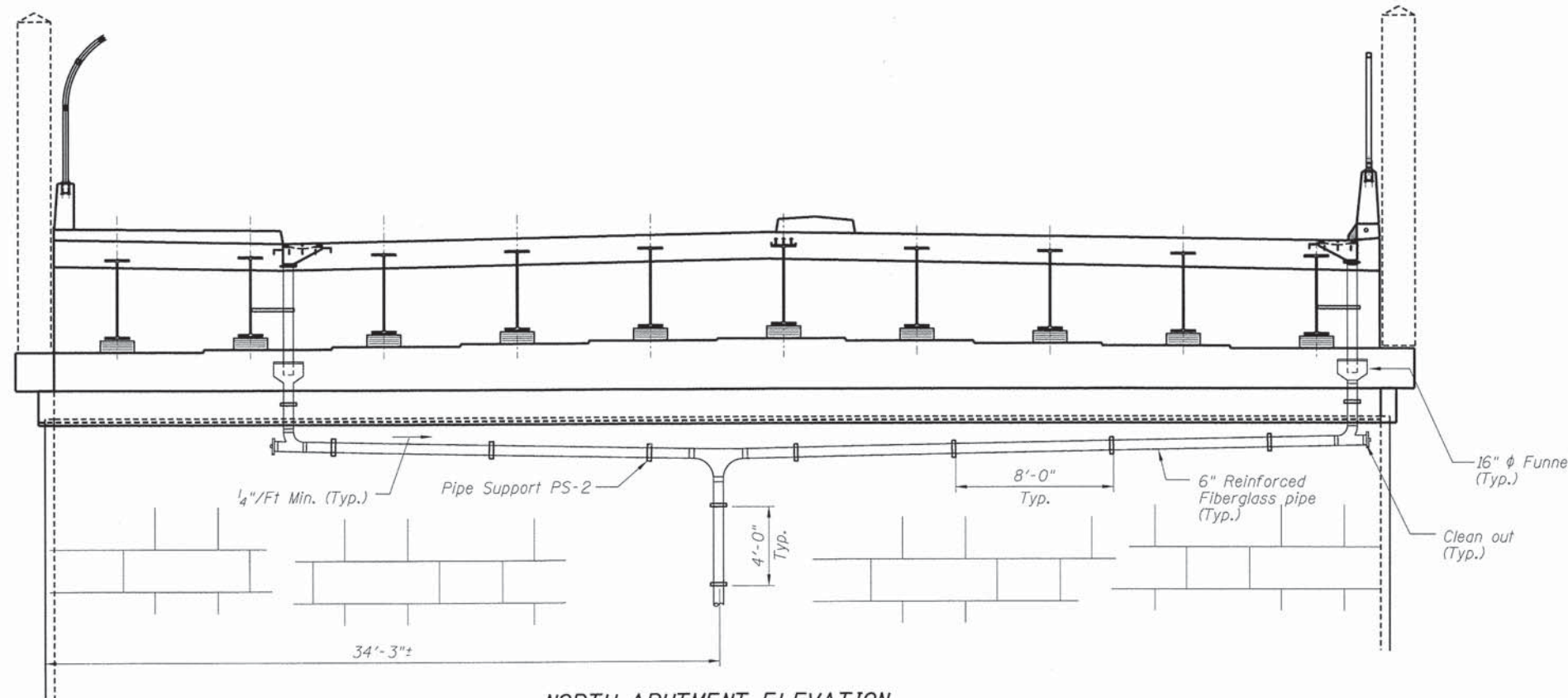
Notes:
This Elevation View is looking North, (with sidewalk on the West Side). This is applicable only to Pier One, which has piping on the South Side, Piers Two and Three having piping on their North Sides. Note as such.

| | | |
|--------------------------|------------------|---------|
| USER NAME = mohammed.ali | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 7/31/2014 | DRAWN - DH/RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

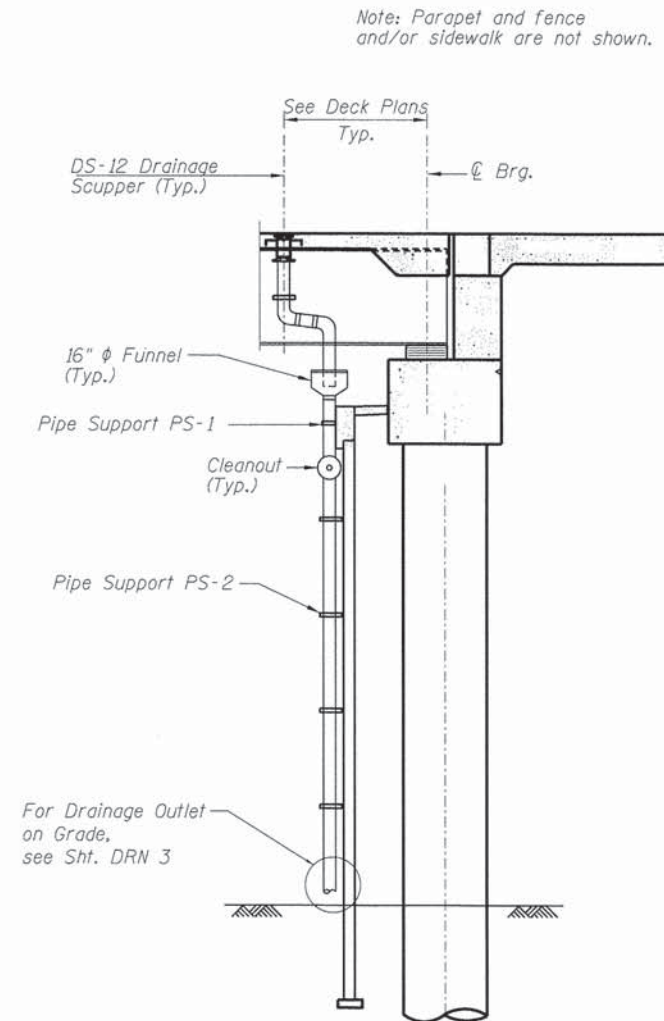
| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 152 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



SOUTH ABUTMENT ELEVATION
Looking South



NORTH ABUTMENT ELEVATION
Looking North



END VIEW SECTION THRU ABUTMENT

For Drainage Outlet on Grade, see Sht. DRN 3



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephan.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - DH/RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

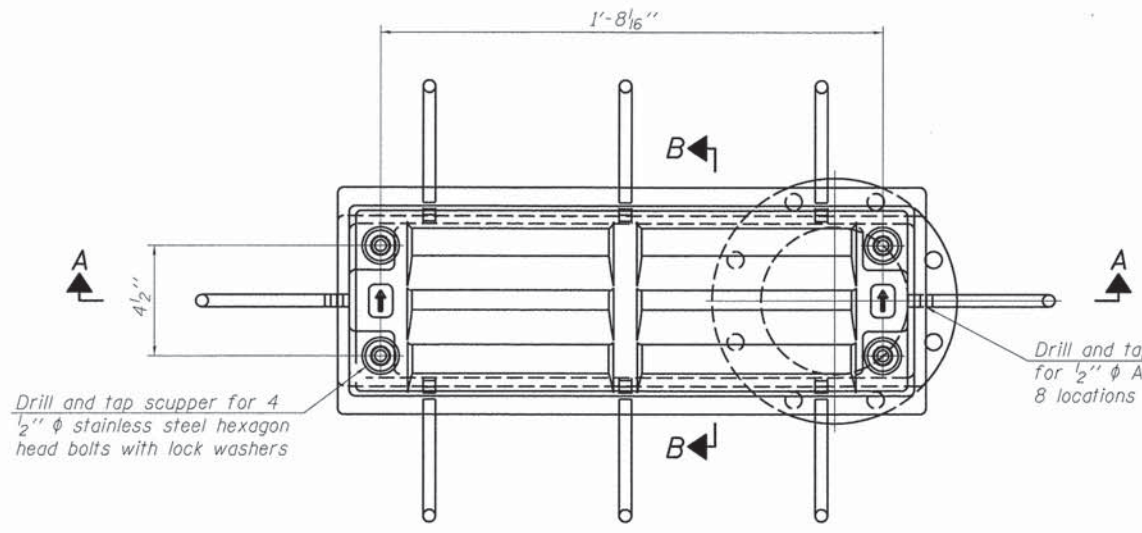
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE ELEVATION AT ABUTMENTS
STRUCTURE NO. 016-6351

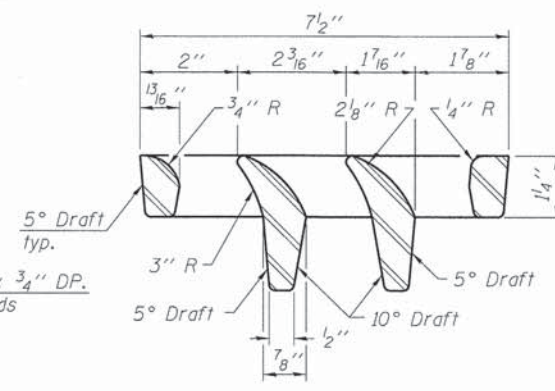
SHEET NO. 153 OF 240 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|--------------------|
| 2714 | 99-00094-00-GS | COOK | 240 | 153 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |

S19B



PLAN

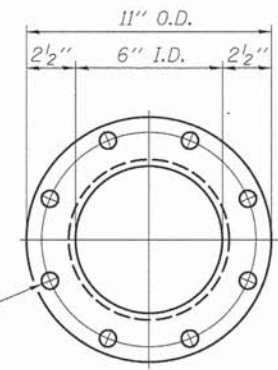


VANE GRATE DETAIL

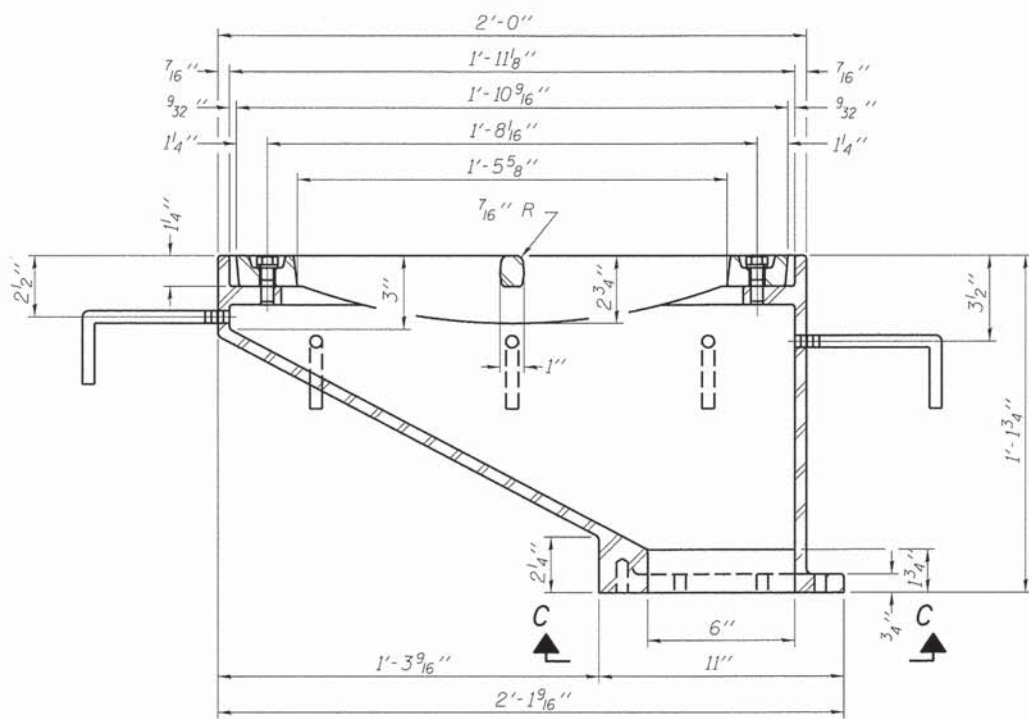
Drill and tap scupper for 4 1/2" φ stainless steel hexagon head bolts with lock washers

Drill and tap 1/2"-13 x 3/4" DP. for 1/2" φ Anchor Studs 8 locations

8-9/16" φ holes on an 9 1/2" φ bolt circle

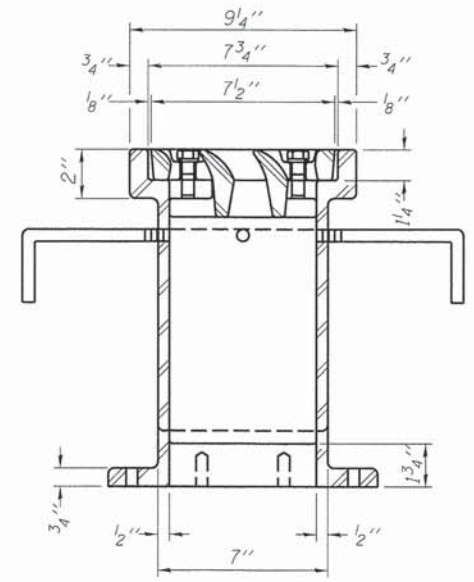


VIEW C-C

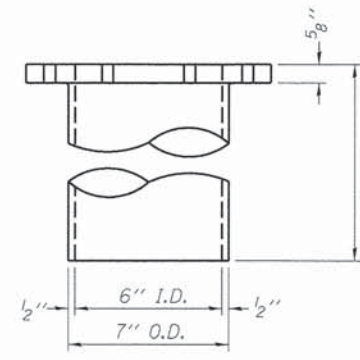


SECTION A-A

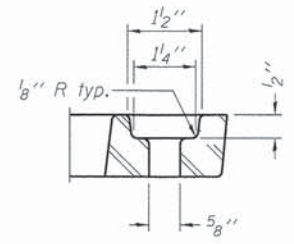
See sheet S10 of S13 for scupper location relative to parapet.



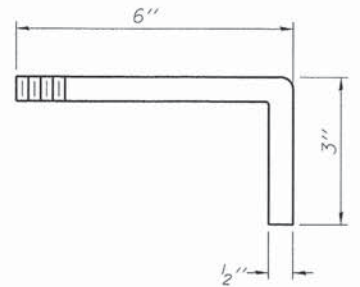
SECTION B-B



DOWNSPOUT



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

Notes:
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

Drill and tap 8 holes for 1/2"-13 bolts on a 9 1/2" φ bolt circle. (2 blind holes are 1/4" deep, 6 thru holes)

BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|-------------------------|------|----------|
| Drainage Scupper, DS-12 | Each | 10 |

DS-12

7-1-10



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLLOT SCALE = None | CHECKED - JG | REVISED |
| PLLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

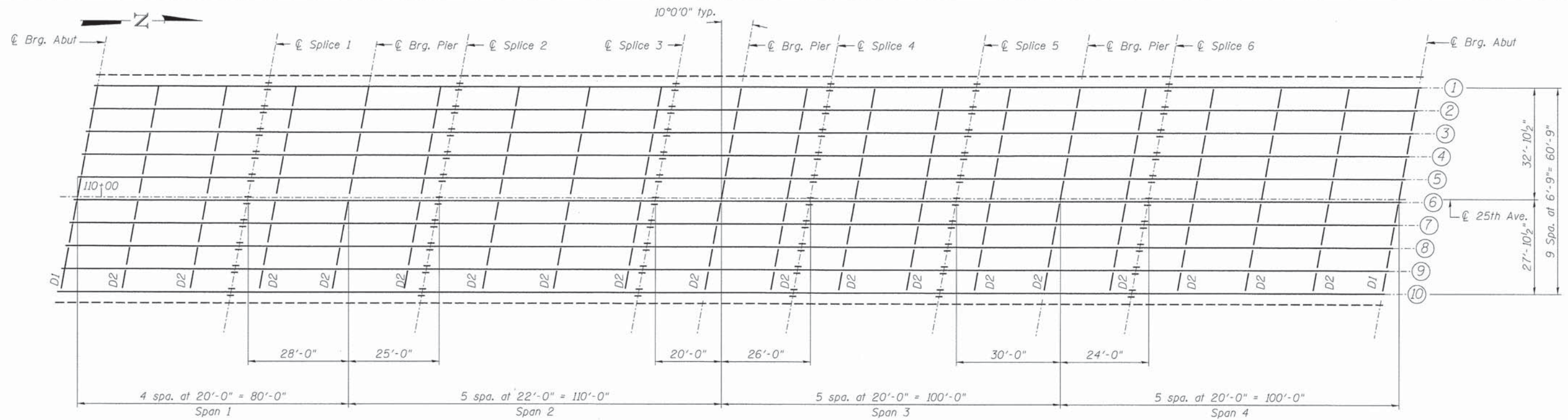
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER, DS-12
STRUCTURE NO. 016-6351**

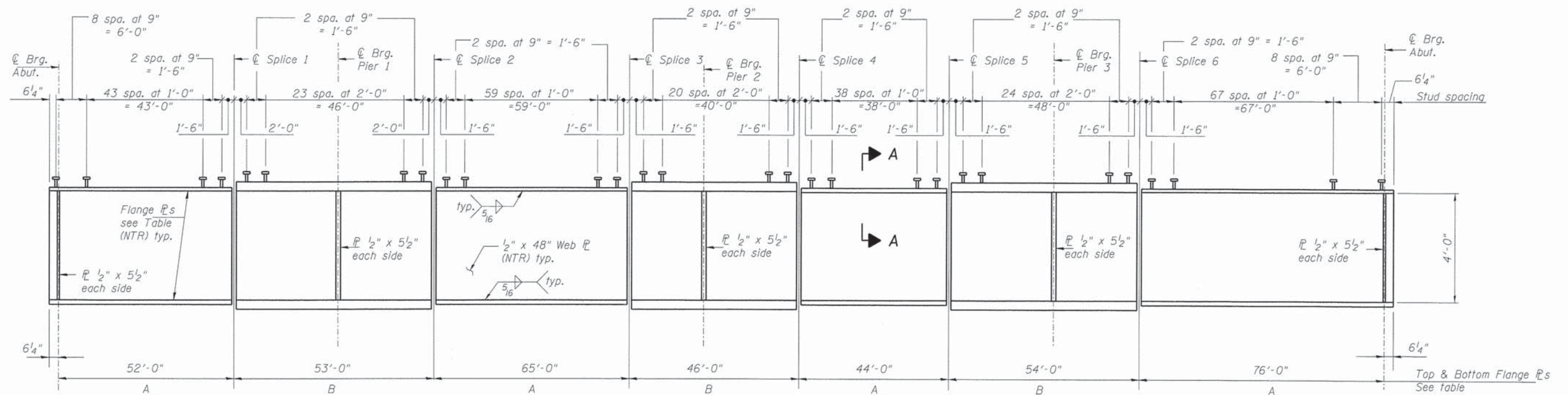
SHEET NO. 154 OF 240 SHEETS

| | | | | |
|---------------------------|------------------------|-------------|------------------|--------------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 154 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |

S19



FRAMING PLAN



GIRDER ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

| FLANGE PLATE THICKNESS FOR GIRDER 1 THRU 10 | | |
|---|--------------|----------------|
| Location | A | B |
| Top | 3/4" x 1'-2" | 1/4" x 1'-2" |
| Bottom | 7/8" x 1'-2" | 1 3/8" x 1'-2" |

Notes:

- All Structural Steel on this sheet shall be AASHTO M270 Grade 50W Steel.
- All splice plates shall comply with NTR.
- Longitudinal dimensions for Girders are shown horizontal, exclusive of rise.
- 5/16" φ holes typ. for all T₈ φ bolts unless noted otherwise.
- Two hardened washers shall be required over all holes for diaphragm connections.
- For Section A-A see sheet S21.
- For Splice details see sheet S21.
- All cross frames or diaphragms between beams or girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.



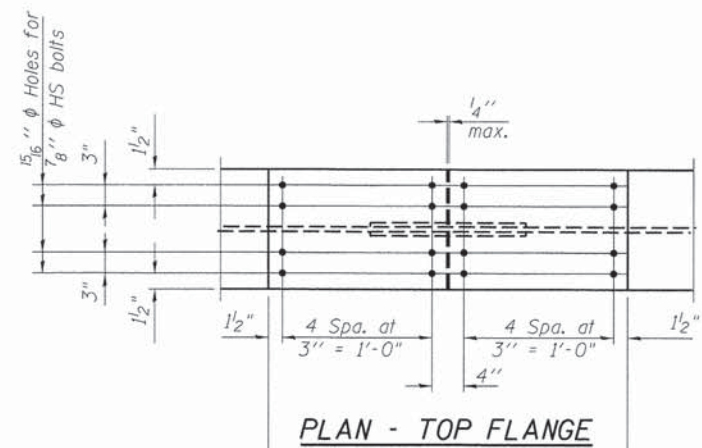
| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

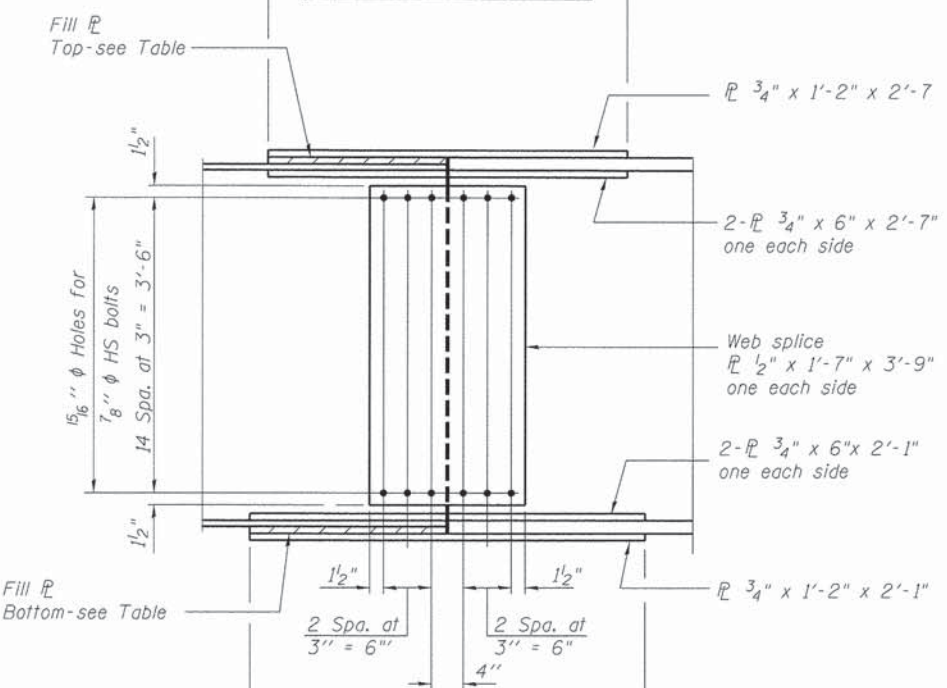
**STRUCTURAL STEEL - FRAMING PLAN
STRUCTURE NO.**

SHEET NO. 155 OF 240 SHEETS

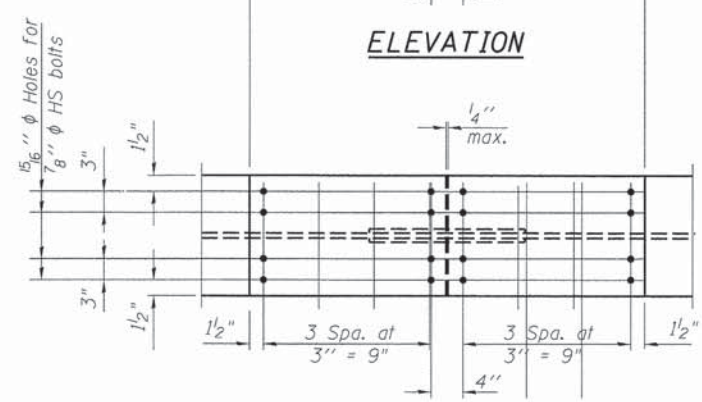
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 155 |
| CONTRACT NO. 63887 | | | | S20 |



PLAN - TOP FLANGE



ELEVATION

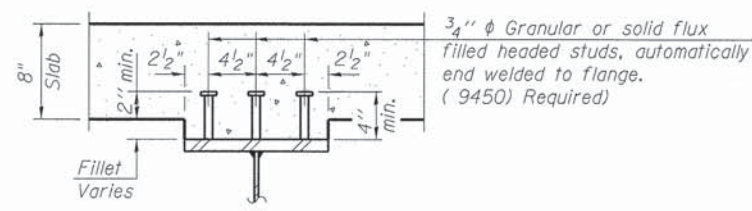


PLAN - BOTTOM FLANGE

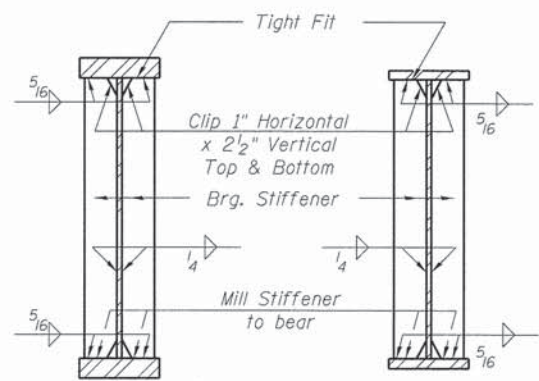
SPLICE DETAIL
(60 Required)

FILL PLATES THICKNESS AT SPLICE

| Location | SP 1 | SP 2 | SP 3 | SP 4 | SP 5 | SP 6 |
|----------|------|------|------|------|------|------|
| Top | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| Bottom | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |



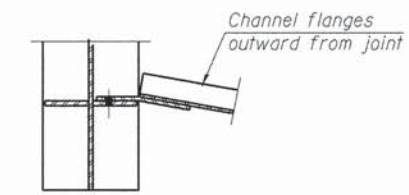
SECTION A-A



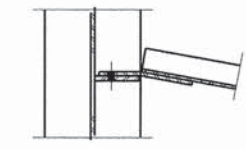
SECTION AT PIER

SECTION AT ABUTMENT

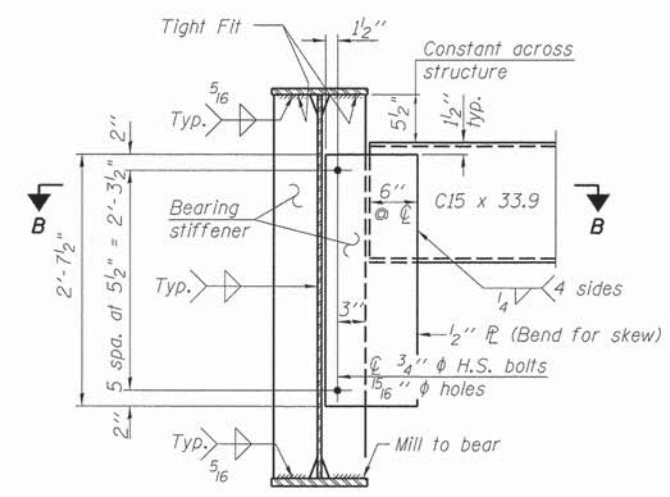
BEARING STIFFENER



SECTION B-B



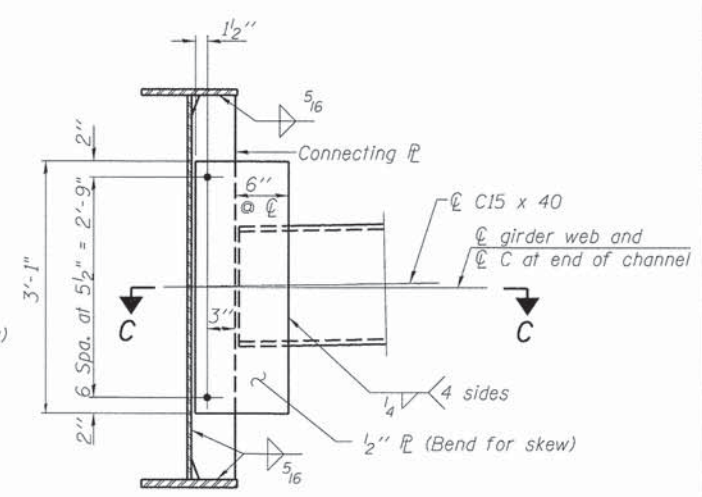
SECTION C-C



END DIAPHRAGM-D1

Note: Two hardened washers required for each set of oversized holes.

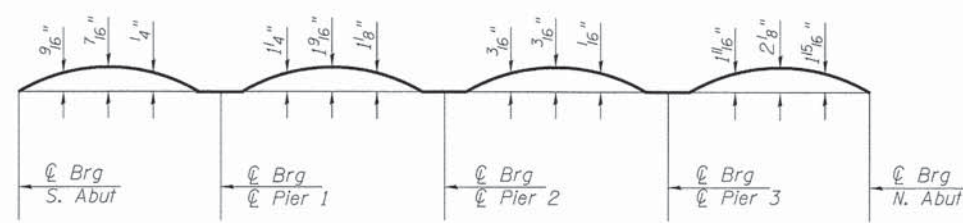
18 REQUIRED



INTERIOR DIAPHRAGM-D2

Note: Two hardened washers required for each set of oversized holes.
*3/4" HS bolts, 15/16" holes

162 REQUIRED



CAMBER DIAGRAM

TOP OF WEB ELEVATIONS

Note: Top of web elevations for fabrication only

| Girder | ℄ Brg S. Abut | Splice 1 | ℄ Brg ℄ Pier 1 | Splice 2 | Splice 3 | ℄ Brg ℄ Pier 2 | Splice 4 | Splice 5 | ℄ Brg ℄ Pier 3 | Splice 6 | ℄ Brg N. Abut |
|--------|---------------|----------|----------------|----------|----------|----------------|----------|----------|----------------|----------|---------------|
| 1 | 663.64 | 664.67 | 665.35 | 665.36 | 665.20 | 665.08 | 664.45 | 663.21 | 662.13 | 660.99 | 657.46 |
| 2 | 663.75 | 664.78 | 665.46 | 665.46 | 665.30 | 665.18 | 664.55 | 663.32 | 662.23 | 661.09 | 656.76 |
| 3 | 663.86 | 664.89 | 665.57 | 665.57 | 665.41 | 665.29 | 664.66 | 663.42 | 662.34 | 661.20 | 657.87 |
| 4 | 663.85 | 665.01 | 665.66 | 665.70 | 665.58 | 665.42 | 664.75 | 663.53 | 662.50 | 661.34 | 657.05 |
| 5 | 663.99 | 665.10 | 665.75 | 665.78 | 665.63 | 665.54 | 664.87 | 663.64 | 662.66 | 661.24 | 657.24 |
| 6 | 664.03 | 665.17 | 665.81 | 665.88 | 665.77 | 665.63 | 664.96 | 663.72 | 662.77 | 663.86 | 657.40 |
| 7 | 663.89 | 665.07 | 665.69 | 665.83 | 665.65 | 665.55 | 664.83 | 663.61 | 662.73 | 661.33 | 657.37 |
| 8 | 663.74 | 664.92 | 665.57 | 665.69 | 665.48 | 665.47 | 664.67 | 663.47 | 662.66 | 663.28 | 657.35 |
| 9 | 663.59 | 664.86 | 665.45 | 665.57 | 665.43 | 665.38 | 664.17 | 663.47 | 662.61 | 663.68 | 657.32 |
| 10 | 663.45 | 664.73 | 665.33 | 665.47 | 665.29 | 665.29 | 664.53 | 663.26 | 662.56 | 663.13 | 657.29 |

BILL OF MATERIAL

| Item | Unit | Total |
|-----------------------------|---------|-------|
| Stud Shear Connect. | Each | 9450 |
| Furn. and Erect Struc. Stl. | L. Sum. | 1 |

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).

$I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_L + 1M$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).

$$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + 1M$$

$\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

$$M_{DC1} / S_{nc}$$

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

$$M_{DC2} / S_c(3n) \text{ or } M_{DC2} / S_c(cr) \text{ as applicable.}$$

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

$$M_{DW} / S_c(3n) \text{ or } M_{DW} / S_c(cr) \text{ as applicable.}$$

f_s (L+1M): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).

$$M_L + 1M / S_c(n) \text{ or } M_{DW} / S_c(cr) \text{ as applicable.}$$

f_s (Service II): Sum of stresses as computed below (ksi).

$$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s (L + 1M)$$

0.95R_nF_yf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).

$$1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s (L + 1M)$$

$\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_r: Maximum factored shear range in span computed according to Article 6.10.10.

Note:

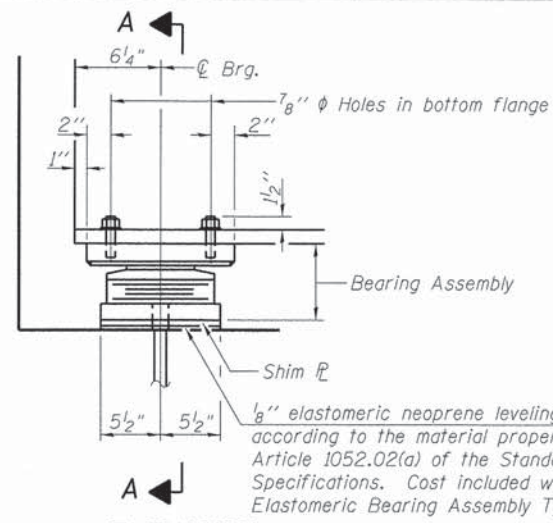
M_L and R_L include the effects of centrifugal force and superelevation.

INTERIOR GIRDER MOMENT TABLE

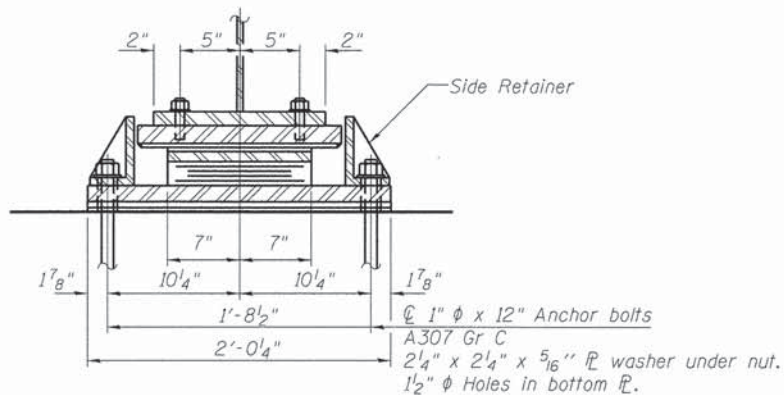
| | 0.4 Sp. 1 | Pier 1 | 0.5 Sp. 2 | Pier 2 | 0.5 Sp. 3 | Pier 3 | 0.6 Sp. 4 |
|-------------------------------------|--------------------------|--------|-----------|--------|-----------|--------|-----------|
| I_s | (in ⁴) 18123 | 26295 | 18123 | 26295 | 18123 | 26295 | 18123 |
| $I_c(n)$ | (in ⁴) 50926 | 30992 | 50926 | 30992 | 50926 | 30992 | 50926 |
| $I_c(3n)$ | (in ⁴) 37256 | 30992 | 37256 | 30992 | 37256 | 30992 | 37256 |
| S_s | (in ³) 757 | 1093 | 757 | 1093 | 757 | 1093 | 757 |
| $S_c(n)$ | (in ³) 1129 | 1406 | 1129 | 1406 | 1129 | 1406 | 1129 |
| $S_c(3n)$ | (in ³) 1024 | 1160 | 1024 | 1160 | 1024 | 1160 | 1024 |
| DC1 | (k/ft) 0.851 | 0.853 | 0.854 | 0.858 | 0.861 | 0.854 | 0.846 |
| M _{DC1} | (k) 308 | 941 | 459 | 844 | 195 | 1019 | 655 |
| DC2 | (k/ft) 0.131 | 0.131 | 0.131 | 0.131 | 0.131 | 0.131 | 0.131 |
| M _{DC2} | (k) 47 | 133 | 71 | 121 | 32 | 144 | 100 |
| DW | (k/ft) 0.240 | 0.240 | 0.240 | 0.240 | 0.240 | 0.240 | 0.240 |
| M _{DW} | (k) 87 | 244 | 130 | 221 | 58 | 263 | 183 |
| $M_L + 1M$ | (k) 974 | 206 | 1012 | 225 | 968 | 204 | 1200 |
| M_u (Strength I) | (k) 2279 | 2069 | 2629 | 1932 | 2065 | 2205 | 3318 |
| $\phi_r M_n$ | (k) 5845 | x | 5711 | x | 5944 | x | 5540 |
| f_s DC1 | (ksi) 4.88 | 10.34 | 7.28 | 9.27 | 3.09 | 11.19 | 10.39 |
| f_s DC2 | (ksi) 0.55 | 1.38 | 0.83 | 1.25 | 0.38 | 1.49 | 1.17 |
| f_s DW | (ksi) 1.02 | 2.52 | 1.52 | 2.29 | 0.68 | 2.72 | 2.14 |
| f_s (L+1M) | (ksi) 10.58 | 13.21 | 11.03 | 14.33 | 10.53 | 15.54 | 13.06 |
| f_s (Service II) | (ksi) 20.21 | 31.41 | 23.97 | 31.44 | 17.83 | 35.60 | 30.68 |
| 0.95R _n F _y f | (ksi) 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 |
| f_s (Total)(Strength I) | (ksi) 26.84 | 41.55 | 31.72 | 41.66 | 23.78 | 47.12 | 40.52 |
| $\phi_r F_n$ | (ksi) 39.60 | 50.00 | 38.00 | 50.00 | 47.00 | 50.00 | 35.60 |
| V _r | (k) 17.2 | 26.8 | 20.4 | 29.8 | 19.7 | 28.6 | 19.5 |

INTERIOR GIRDER REACTION TABLE

| | S. Abut. | Pier 1 | Pier 2 | Pier 3 | N. Abut. |
|--------------------|-----------|--------|--------|--------|----------|
| R _{DC1} | (k) 23.9 | 97.4 | 91.6 | 101.3 | 34.1 |
| R _{DC2} | (k) 3.6 | 14.2 | 13.4 | 14.8 | 5.1 |
| R _{DW} | (k) 6.6 | 26.0 | 24.6 | 27.0 | 9.4 |
| $R_L + 1M$ | (k) 78.2 | 149.4 | 146.8 | 154.7 | 83.5 |
| R _{Total} | (k) 112.3 | 287.0 | 276.4 | 297.8 | 132.1 |

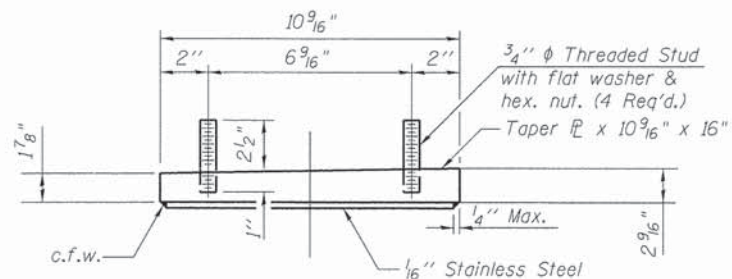


ELEVATION

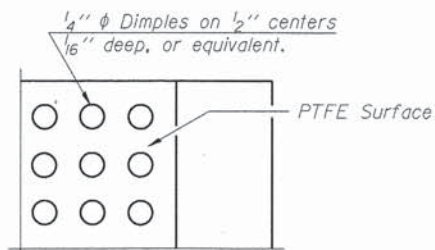


SECTION A-A

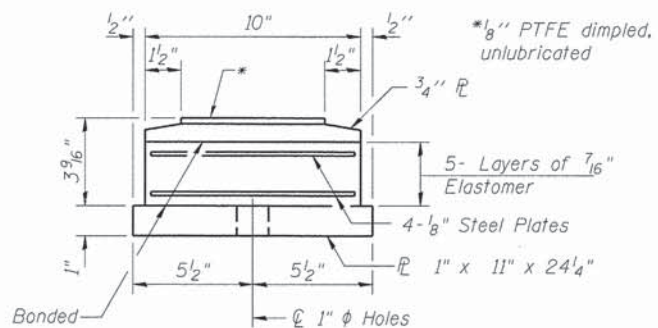
TYPE II ELASTOMERIC EXP. BRG. AT ABUTMENTS



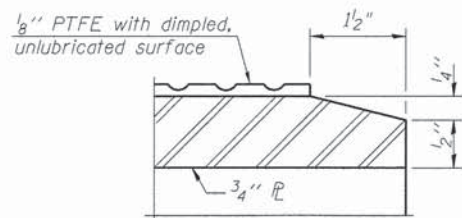
TOP BEARING ASSEMBLY



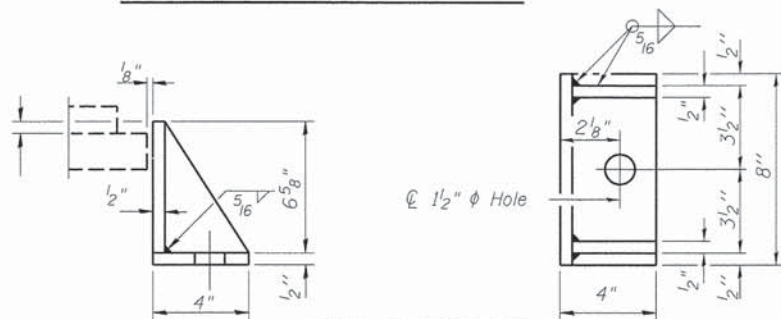
PLAN-PTFE SURFACE



BOTTOM BEARING ASSEMBLY

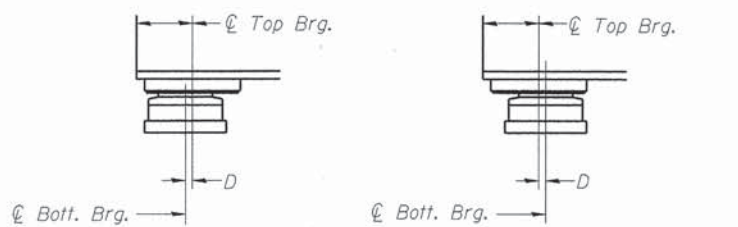


SECTION THRU PTFE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50°F.

ABOVE 50°F.

(Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 grade 50W.

Two 1/8" adjusting shims shall be provided for each bearing in addition to the other plates or shims and placed as shown on the bearing plans.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade -50 (AASHTO M 270 Grade -50W.)

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. For Type I elastomeric bearings, shims should be detailed between the bearing and the flange, and not extend beyond their mutual contact area.

BILL OF MATERIAL

| Item | Unit | Total |
|--|------|-------|
| Elastomeric Bearing Assembly Type II - 10" x 14" | Each | 20 |
| Anchor Bolts | Each | 40 |

I-2E-2

1-27-12



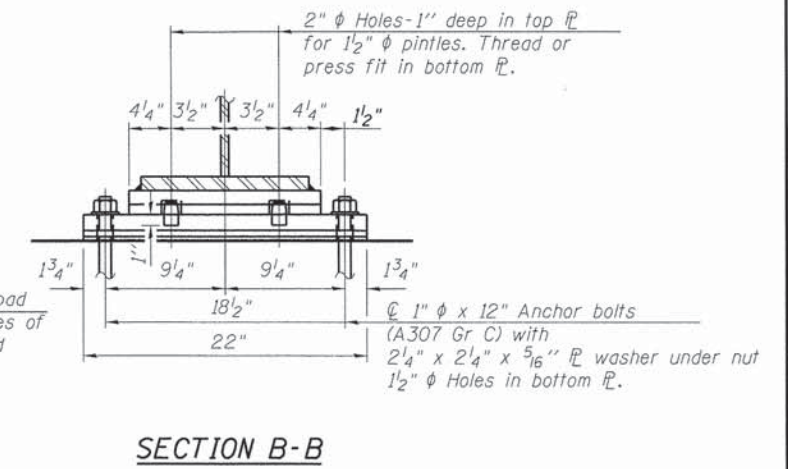
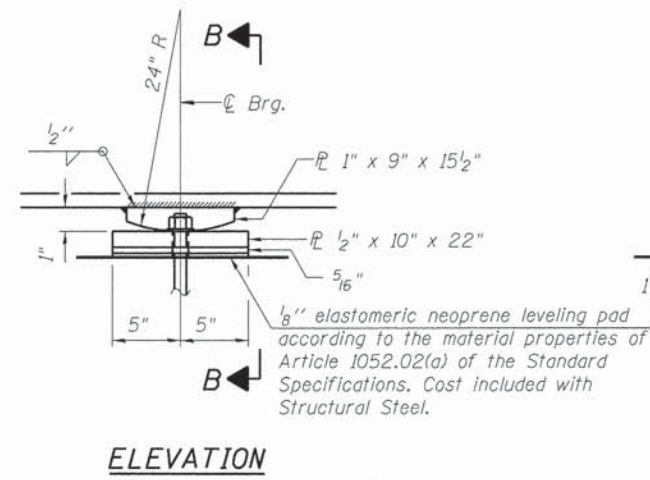
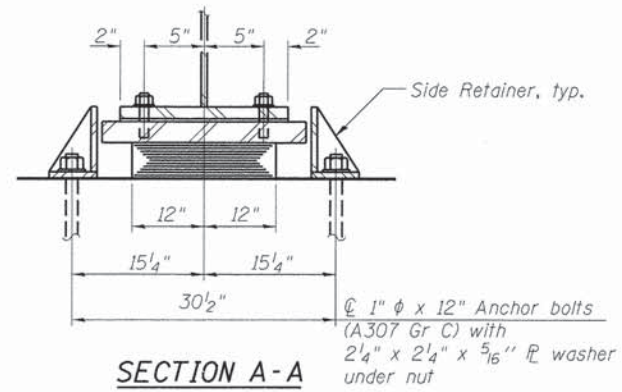
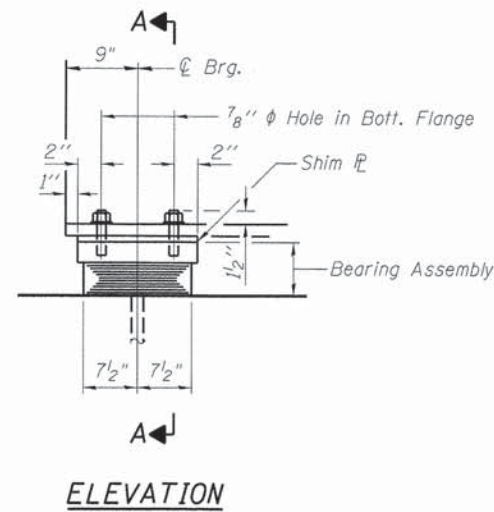
| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLDT SCALE = None | CHECKED - JG | REVISED |
| PLDT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

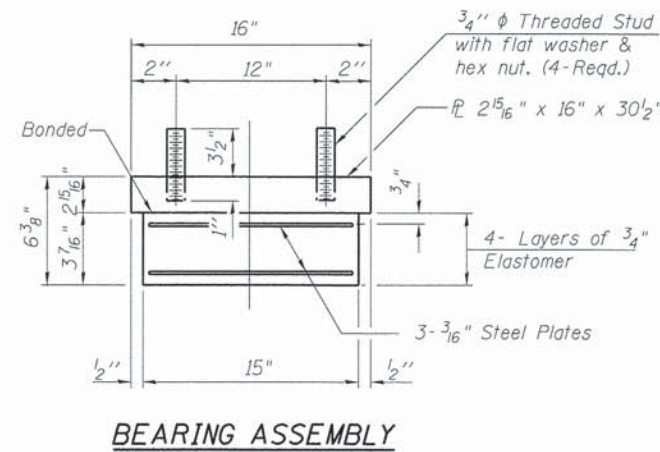
**BEARING DETAILS
STRUCTURE NO. 016-6351**

SHEET NO. 158 OF 240 SHEETS

| F.A.U RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|------------|
| 2714 | 99-00094-00-GS | COOK | 240 | 158 |
| CONTRACT NO. 63887 | | | | S23 |



TYPE I ELASTOMERIC EXP. BRG. - PIER 1



Note:
Shim plates shall not be placed under Bearing Assembly.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

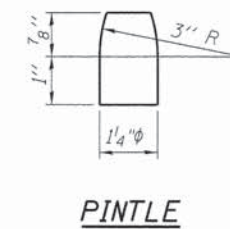
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50 (AASHTO M270 Grade 50W).

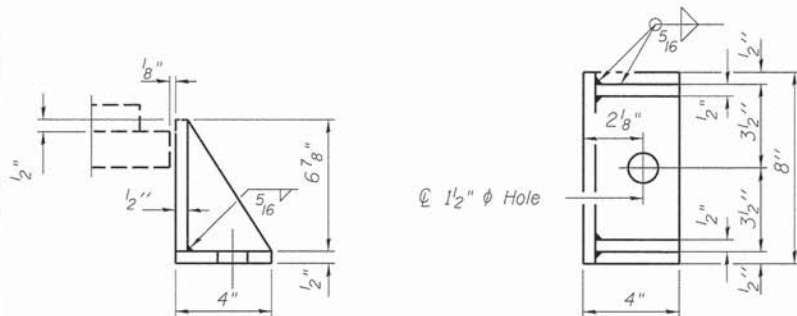
Two 1/8" adjusting shims shall be provided for each bearing in addition to other plates or shims and placed as shown on the bearing plans.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade - 50 (AASHTO M 270 Grade - 50W.)

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. For Type I elastomeric bearings, shims should be detailed between the bearing and the flange, and not extend beyond their mutual contact area.



FIXED BEARING - PIER 2



Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

| Item | Unit | Total |
|---|------|-------|
| Elastomeric Bearing Assembly Type I 15"X24" | Each | 10 |
| Anchor Bolts | Each | 20 |

I-2E-1

I-27-12



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

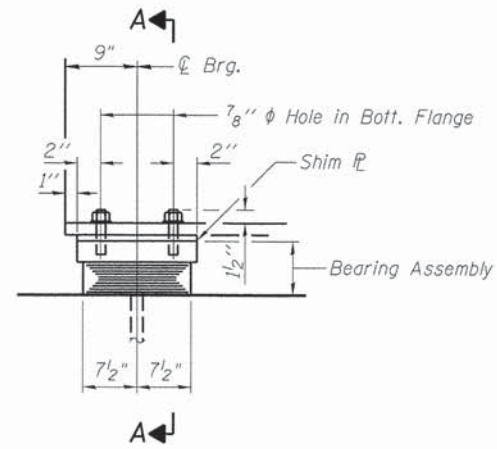
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 016-6351

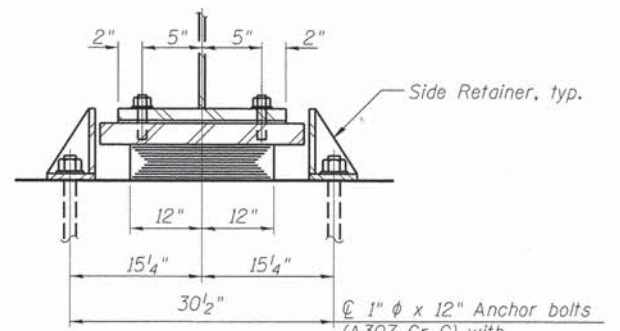
SHEET NO. 159 OF 240 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|--------------------|
| 2714 | 99-00094-00-GS | COOK | 240 | 159 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |

S24



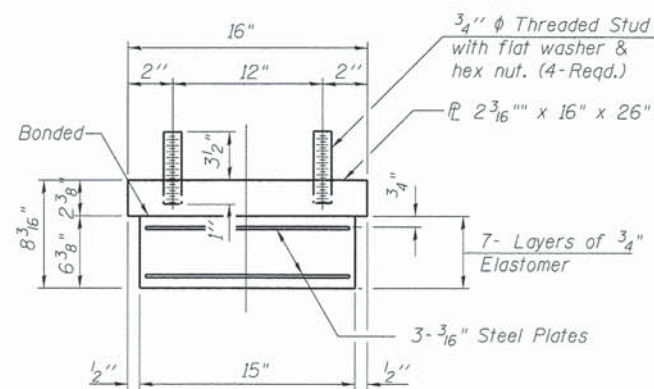
ELEVATION



SECTION A-A

1" ϕ x 12" Anchor bolts (A307 Gr C) with 2 1/4" x 2 1/4" x 5/16" \mathbb{R} washer under nut

TYPE I ELASTOMERIC EXP. BRG. - PIER 3



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

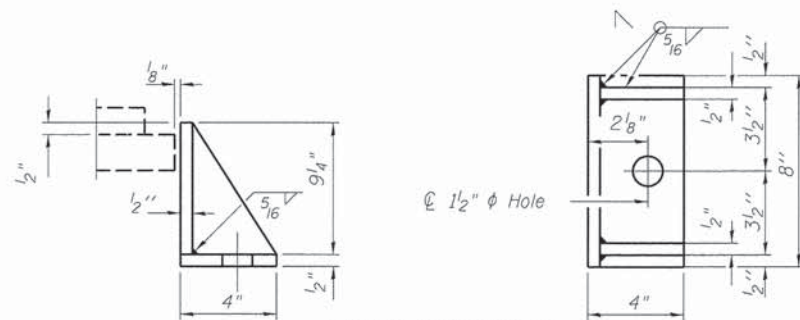
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50 (AASHTO M270 Grade 50W).

Two 1/8" adjusting shims shall be provided for each bearing in addition to other plates or shims and placed as shown on the bearing plans.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade - 50W (AASHTO M 270 Grade - 50W.)

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. For Type I elastomeric bearings, shims should be detailed between the bearing and the flange, and not extend beyond their mutual contact area.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

| Item | Unit | Total |
|---|------|-------|
| Elastomeric Bearing Assembly Type I 15"X24" | Each | 10 |
| Anchor Bolts | Each | 20 |

I-2E-2

1-27-12



USER NAME = stephen.vschuh
 CHECKED - JG
 DRAWN - RJ
 DATE - 3-24-2014

DESIGNED - RD
 CHECKED - JG
 DRAWN - RJ
 DATE - 3-24-2014

REVISED
 REVISED
 REVISED
 REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BEARING DETAILS
 STRUCTURE NO. 016-6351**

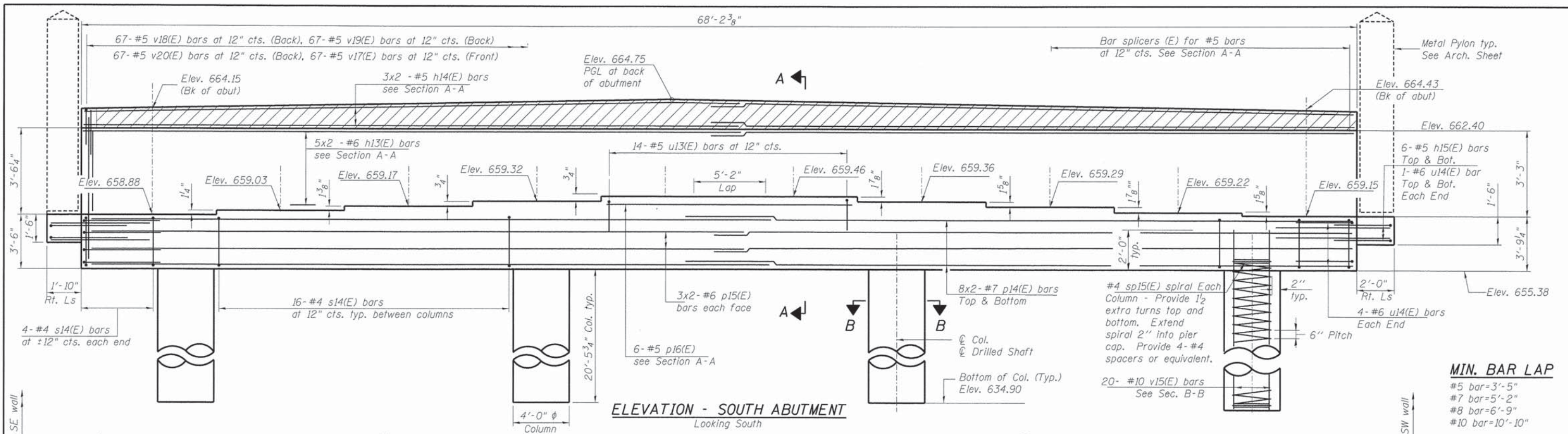
SHEET NO. 160 OF 240 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 160 |

CONTRACT NO. 63887

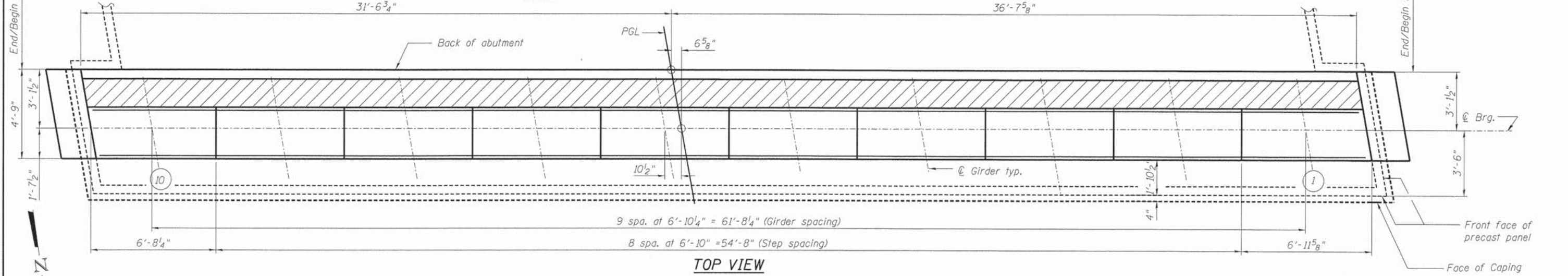
ILLINOIS FED. AID PROJECT

S25

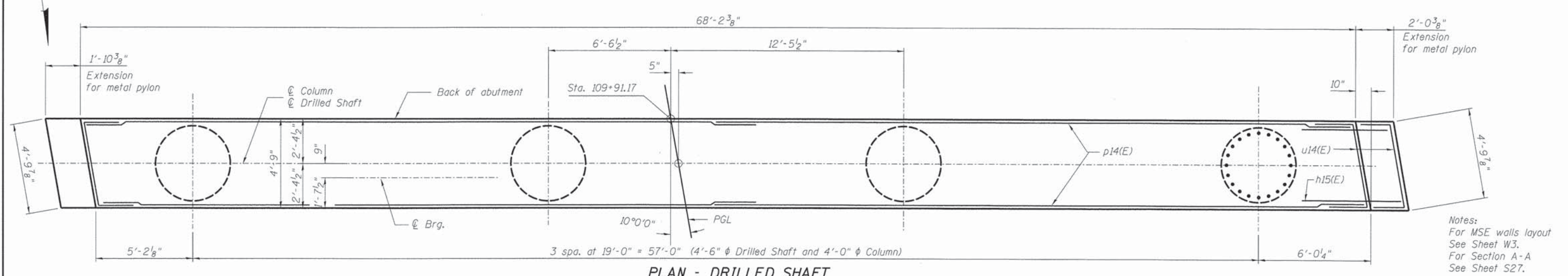


ELEVATION - SOUTH ABUTMENT
Looking South

MIN. BAR LAP
 #5 bar=3'-5"
 #7 bar=5'-2"
 #8 bar=6'-9"
 #10 bar=10'-10"



TOP VIEW



PLAN - DRILLED SHAFT

Notes:
 For MSE walls layout
 See Sheet W3.
 For Section A-A
 See Sheet S27.



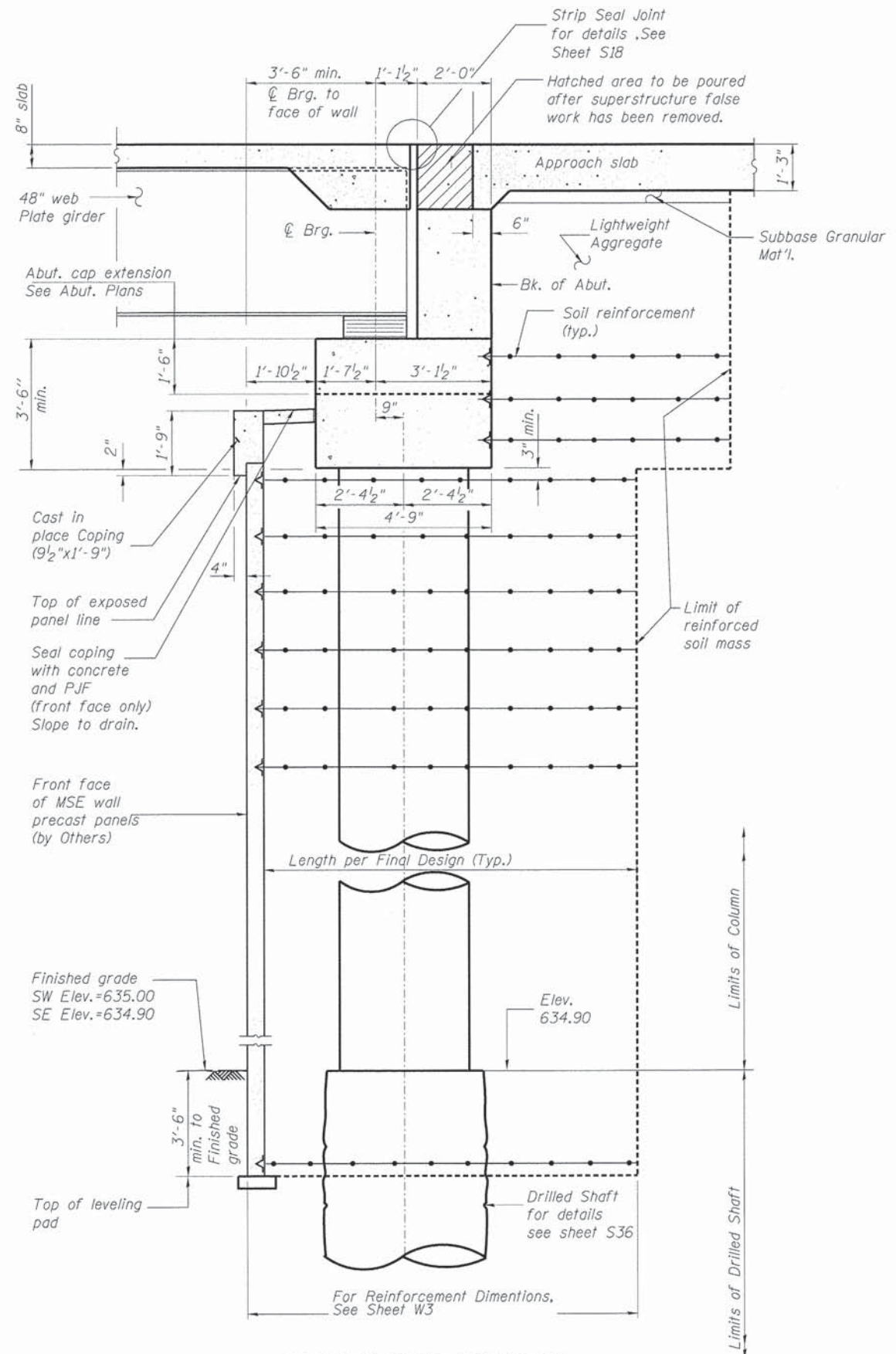
| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLLOT SCALE = None | CHECKED - JG | REVISED |
| PLLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

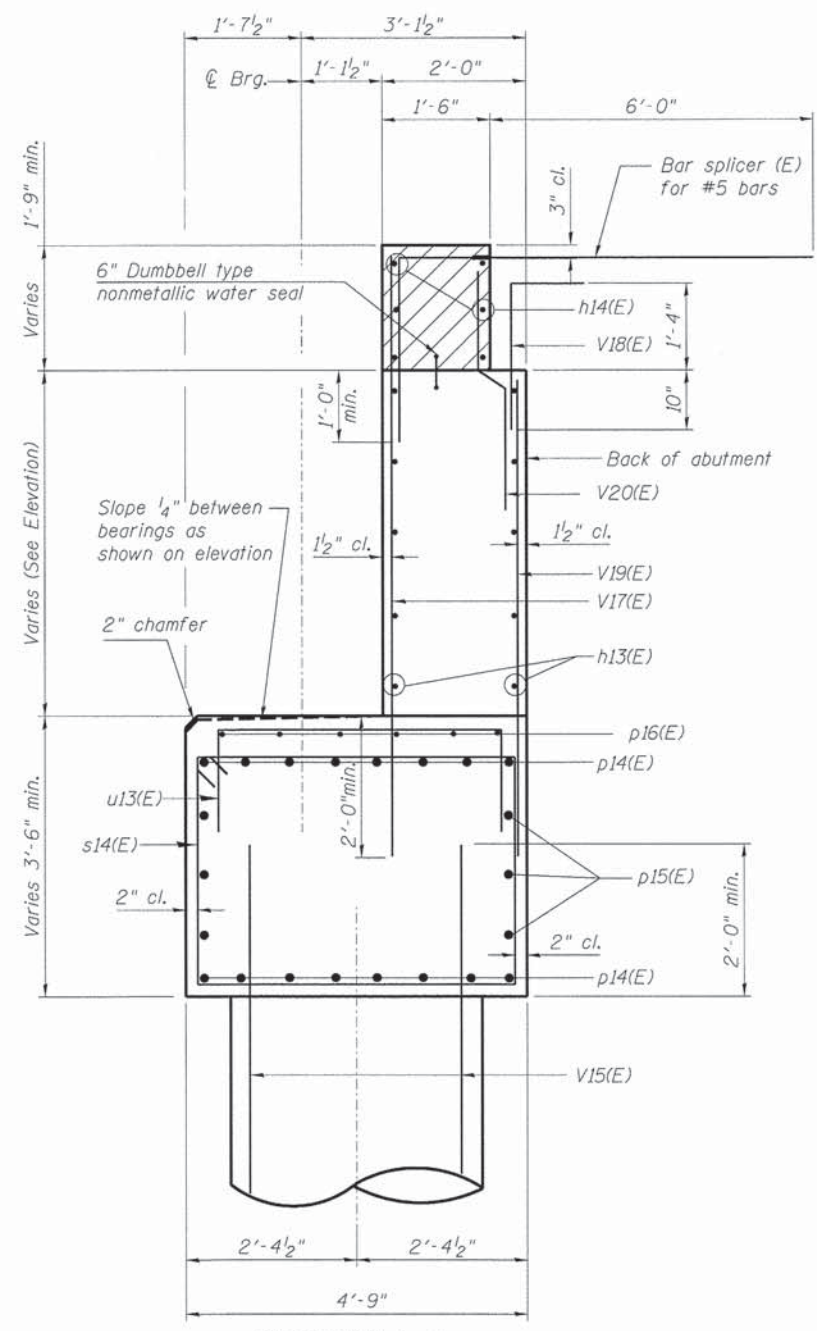
SOUTH ABUTMENT
STRUCTURE NO. 016-6351

SHEET NO. 161 OF 240 SHEETS

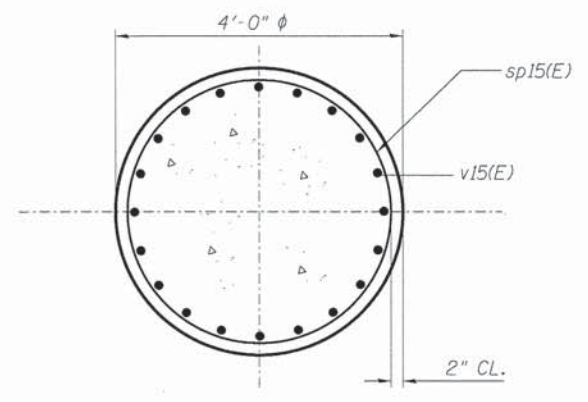
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| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 161 |
| CONTRACT NO. 63887 | | | | S26 |



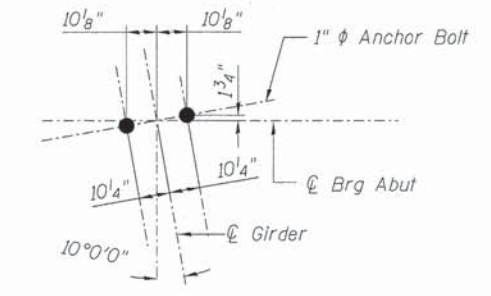
SECTION THRU ABUTMENT
(Horiz. dim. @ Rt. L's)



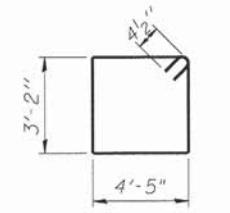
SECTION A-A
Shown Reinforcement



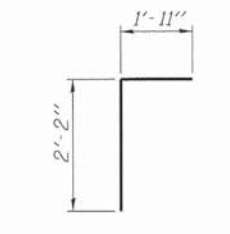
SECTION B-B



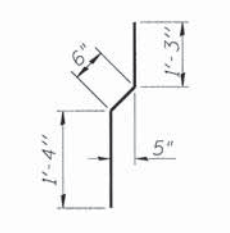
ANCHOR BOLTS LAYOUT



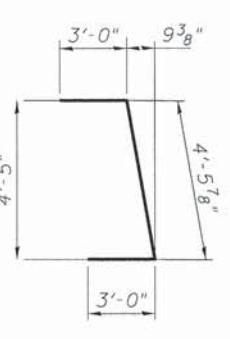
BARS s14(E)



BAR v18(E)



BAR v20(E)



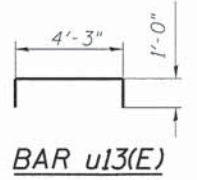
BAR u14(E)

**SOUTH ABUTMENT
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|---------|------|---------|-------|
| h13(E) | 20 | #6 | 36'-0" | — |
| h14(E) | 6 | #5 | 35'-10" | — |
| h15(E) | 24 | #6 | 4'-6" | — |
| p14(E) | 32 | #7 | 36'-6" | — |
| p15(E) | 12 | #6 | 35'-10" | — |
| p16(E) | 6 | #5 | 13'-2" | — |
| s14(E) | 56 | #4 | 15'-11" | □ |
| sp15(E) | 4 | #4 | 22'-5" | WM |
| u13(E) | 14 | #5 | 6'-3" | ┌ |
| u14(E) | 12 | #6 | 10'-6" | ┌ |
| v15(E) | 80 | #10 | 22'-5" | — |
| v17(E) | 67 | #6 | 7'-4" | — |
| v18(E) | 67 | #5 | 4'-1" | — |
| v19(E) | 67 | #6 | 5'-7" | — |
| v20(E) | 67 | #5 | 3'-1" | — |
| Concrete Structures | Cu. Yd. | | 104 | |
| Reinforcement Bars, Epoxy Coated | Pound | | 16,000 | |
| Bar Splicers | Each | | 67 | |
| Temporary Casting | Foot | | 180 | |
| Concrete Sealer | Sq. Ft. | | 683 | |
| MSE Wall (Abut) | Sq. Ft. | | 1810 | |
| Structure Excavation | Cu. Yd. | | 75 | |

For details of piles and Concrete Encasement, see sheet S36.

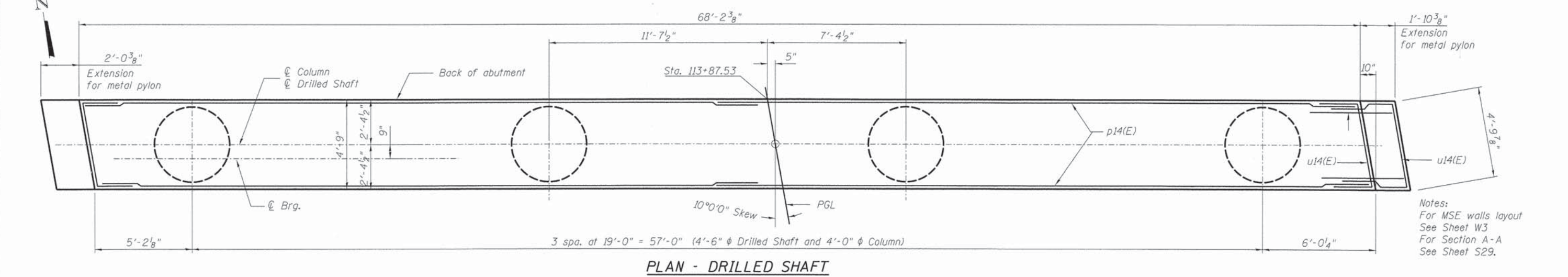
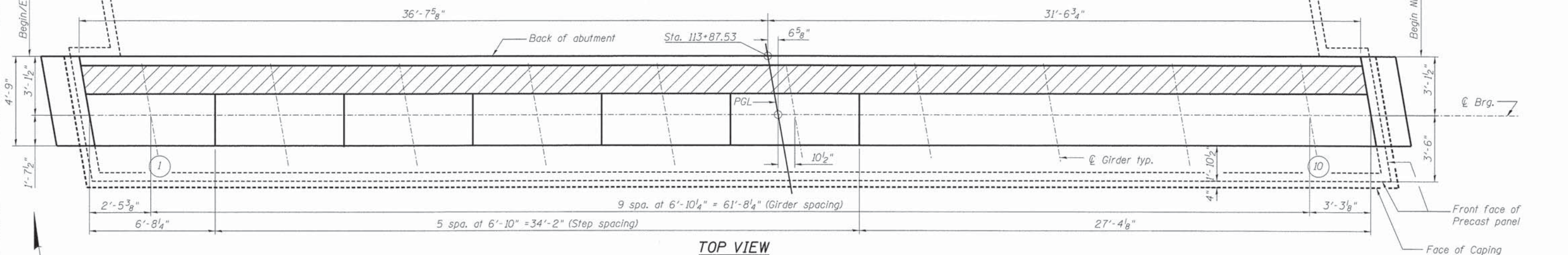
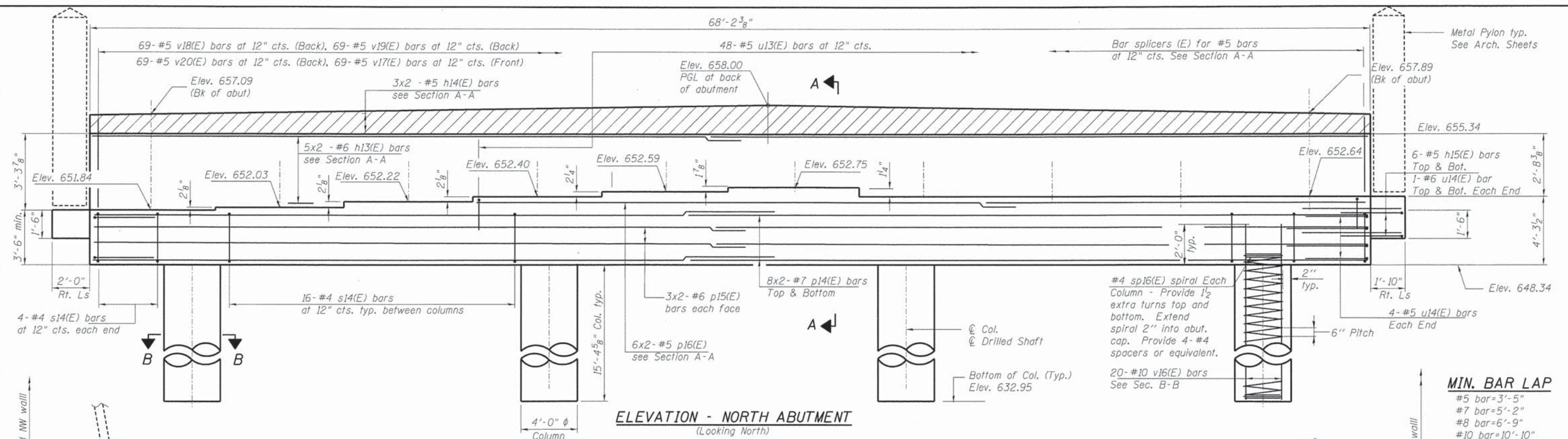
** Minimum lap for spirals = 1'-8" Length is height of spiral.

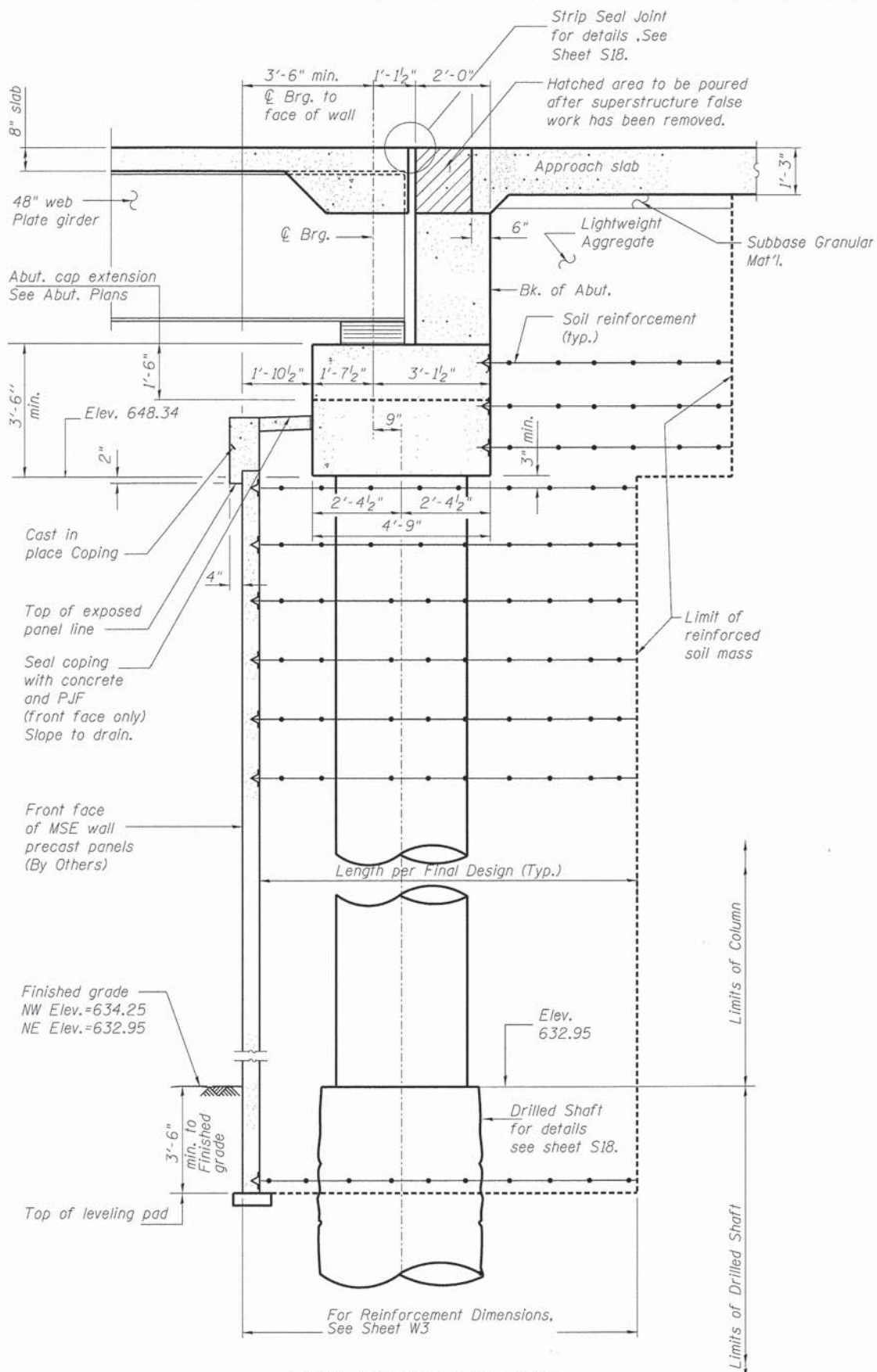


BAR u13(E)

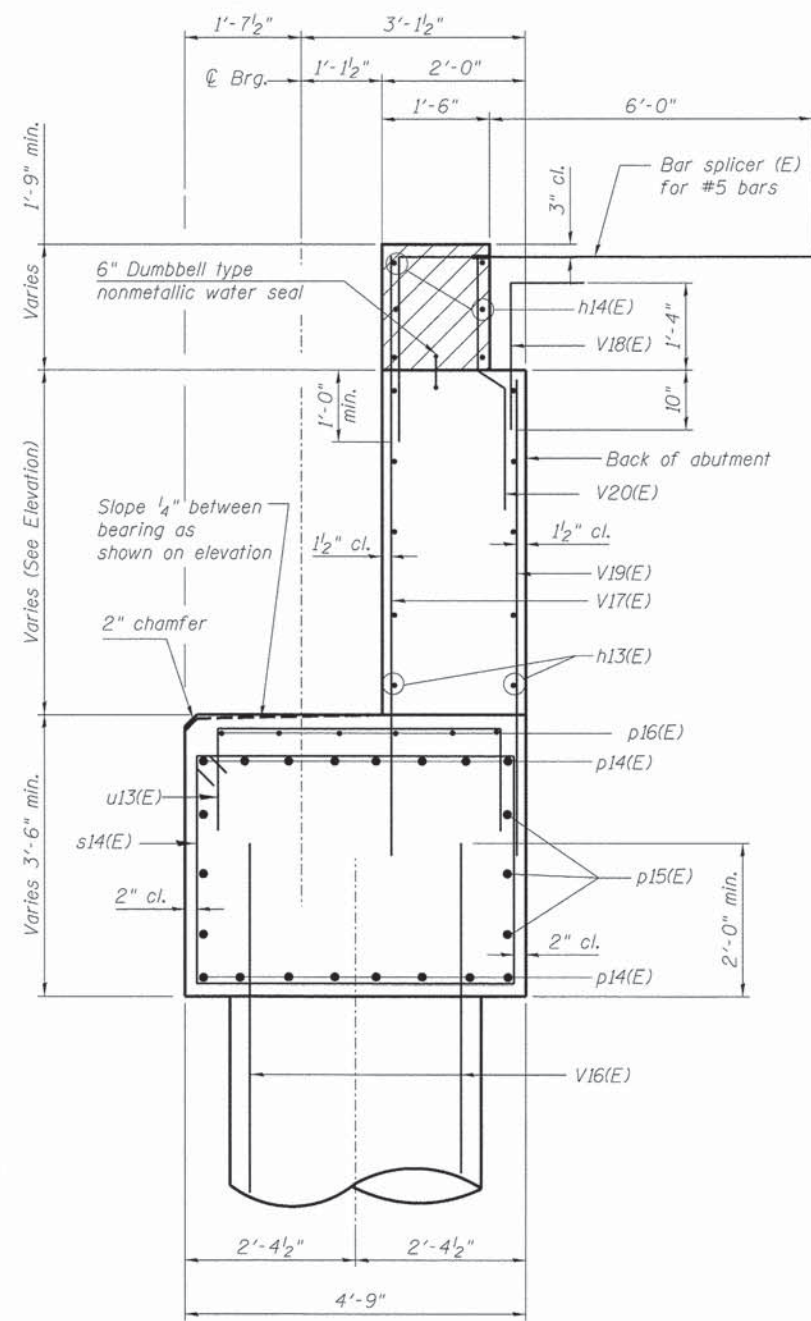
Notes:
Pour steps Monolithically with Cap.
Concrete Sealer shall be applied to exposed surfaces of Backwall, Cap Seat, and Front of Cap Seat.

Note:
Reinforced MSE fill shall be placed behind the MSE Abutment after the superstructure has been poured and falsework removed.

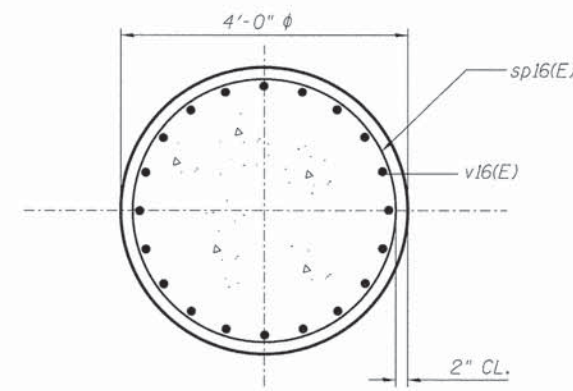




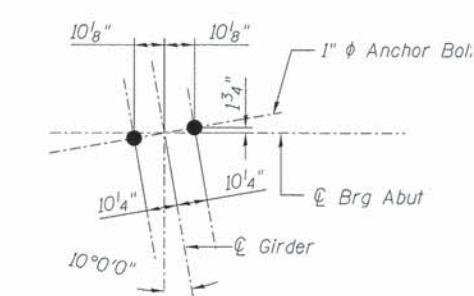
SECTION THRU ABUTMENT
(Horiz. dim. @ Rt. L's)



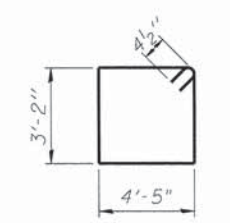
SECTION A-A
Shown Reinforcement



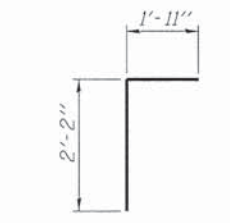
SECTION B-B



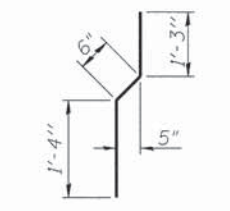
ANCHOR BOLTS LAYOUT



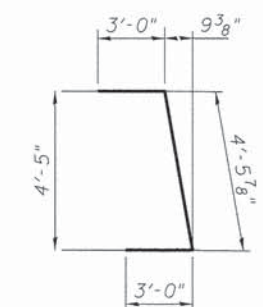
BARS s14(E)



BAR v18(E)



BAR v20(E)



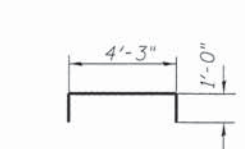
BAR u14(E)

**NORTH ABUTMENT
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|---------|------|---------|-------|
| h13(E) | 20 | #6 | 36'-0" | — |
| h14(E) | 6 | #5 | 35'-10" | — |
| h15(E) | 24 | #6 | 4'-6" | — |
| p14(E) | 32 | #7 | 36'-6" | — |
| p15(E) | 12 | #6 | 35'-10" | — |
| p16(E) | 12 | #5 | 25'-7" | — |
| s14(E) | 56 | #4 | 15'-11" | □ |
| sp16(E) | 4 | #4 | 17'-7" | ⊞ |
| u13(E) | 48 | #5 | 6'-3" | ⊞ |
| u14(E) | 12 | #6 | 10'-10" | ⊞ |
| v16(E) | 80 | #10 | 17'-6" | — |
| v17(E) | 67 | #6 | 7'-4" | — |
| v18(E) | 67 | #5 | 4'-1" | — |
| v19(E) | 67 | #6 | 5'-7" | — |
| v20(E) | 67 | #5 | 3'-1" | — |
| Concrete Structures | Cu. Yd. | | 105 | |
| Reinforcement Bars, Epoxy Coated | Pound | | 15,700 | |
| Drilled Shaft | Cu. Yd. | | 65 | |
| Bar Splices | Each | | 67 | |
| Temporary Casing | Foot | | 140 | |
| Concrete Sealer | Sq. Ft. | | 683 | |
| MSE Wall Abut | Sq. Ft. | | 1551 | |
| Structure Excavation | Cu. Yd. | | 75 | |

For details of piles and Concrete Encasement, see sheet S36.

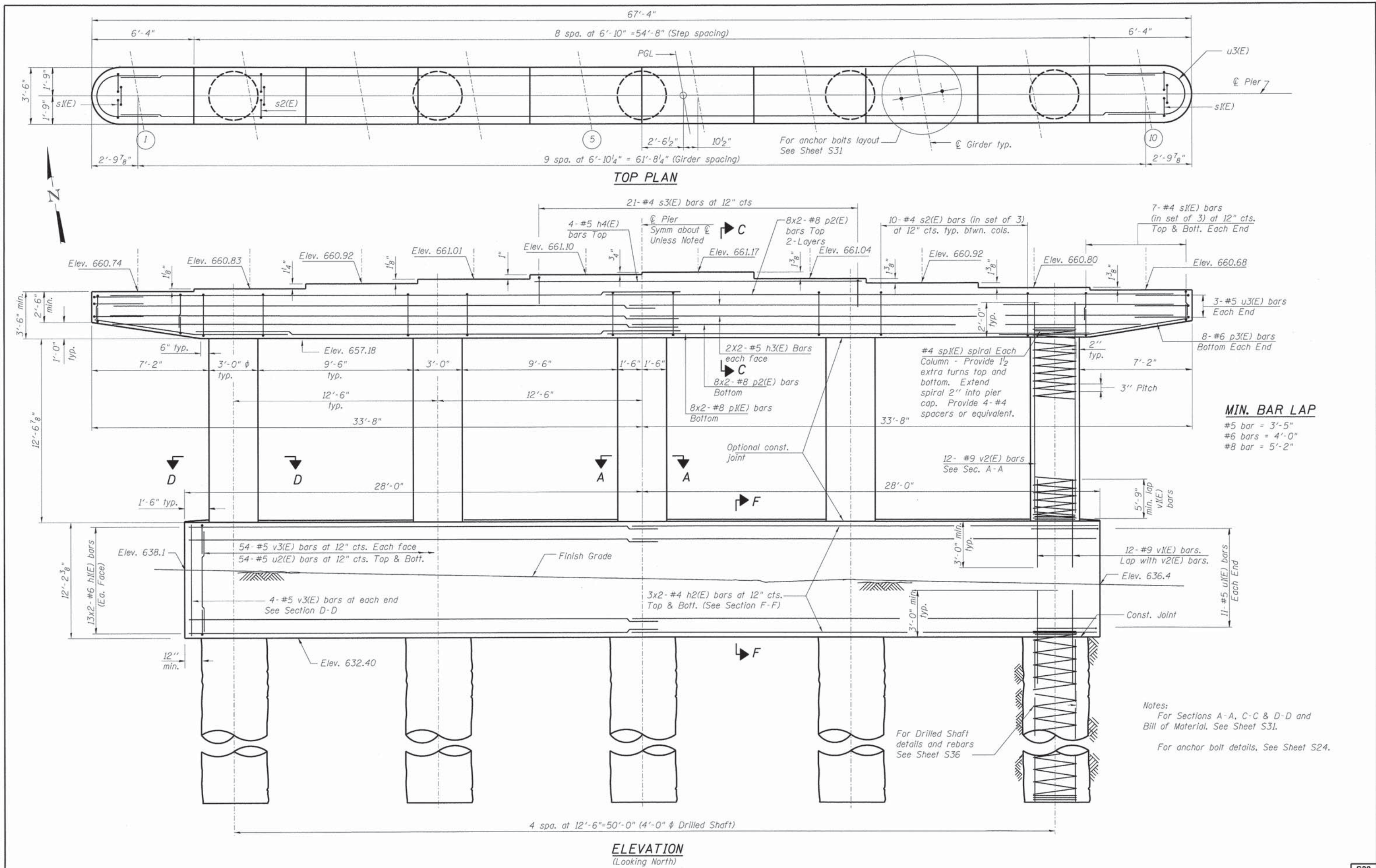
** Minimum lap for spirals = 1'-8" Length is height of spiral.



BAR u13(E)

Notes:
Pour steps Monolithically with Cap. Concrete Sealer shall be applied to exposed surfaces of Backwall, Cap Seat, and Front of Cap Seat.

Note:
Reinforced MSE fill shall be placed behind the MSE Abutment after the superstructure has been poured and falsework removed.



MIN. BAR LAP
 #5 bar = 3'-5"
 #6 bars = 4'-0"
 #8 bar = 5'-2"

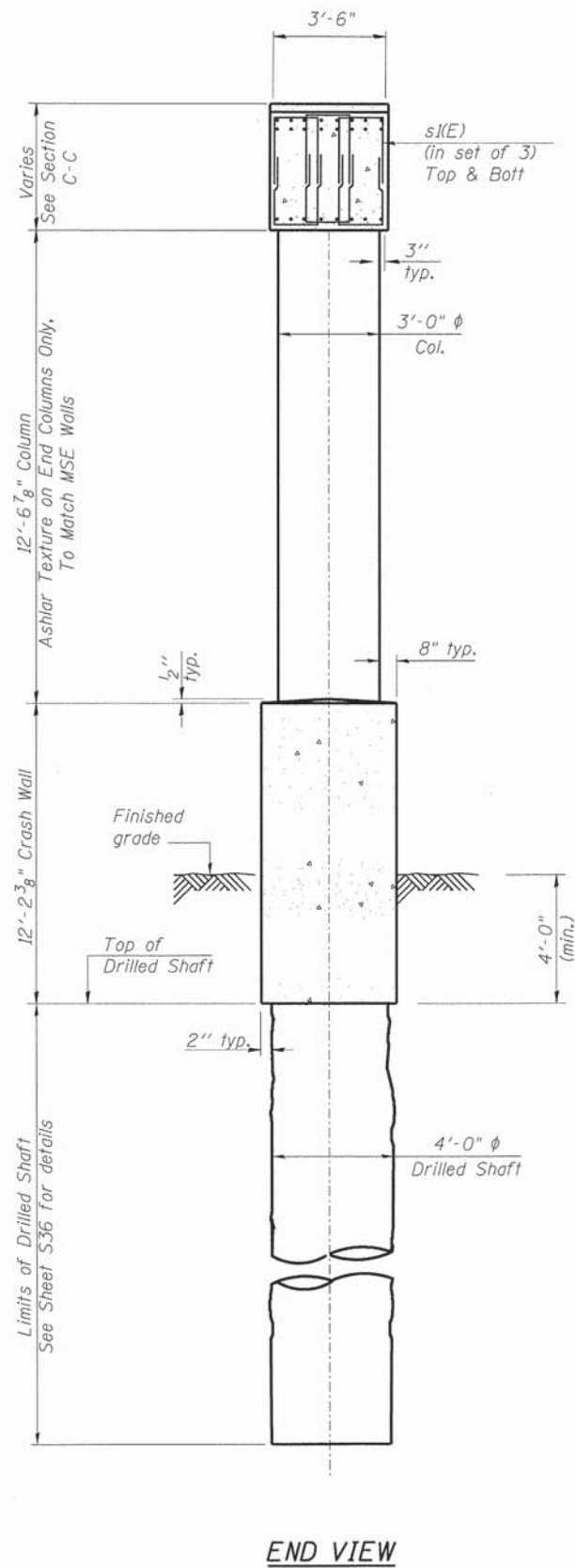
Notes:
 For Sections A-A, C-C & D-D and Bill of Material. See Sheet S31.
 For anchor bolt details. See Sheet S24.

| | | | |
|--|--------------------------|------------------|---------|
| | USER NAME : mohammed.ali | DESIGNED - RD | REVISED |
| | PLOT SCALE : None | CHECKED - JG | REVISED |
| | PLOT DATE : 7/31/2014 | DRAWN - RJ | REVISED |
| | | DATE - 3-24-2014 | REVISED |

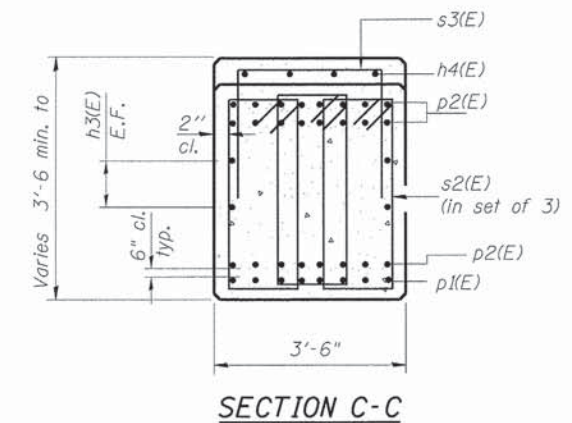
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1
STRUCTURE NO. 016-6351
 SHEET NO. 165 OF 240 SHEETS

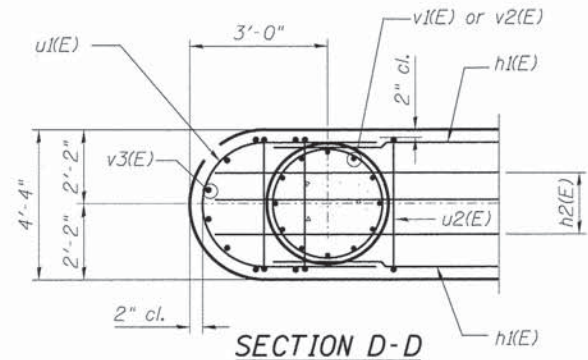
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|---------------------------|----------------|--------|--------------|--------------------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 165 |
| ILLINOIS FED. AID PROJECT | | | | CONTRACT NO. 63887 |



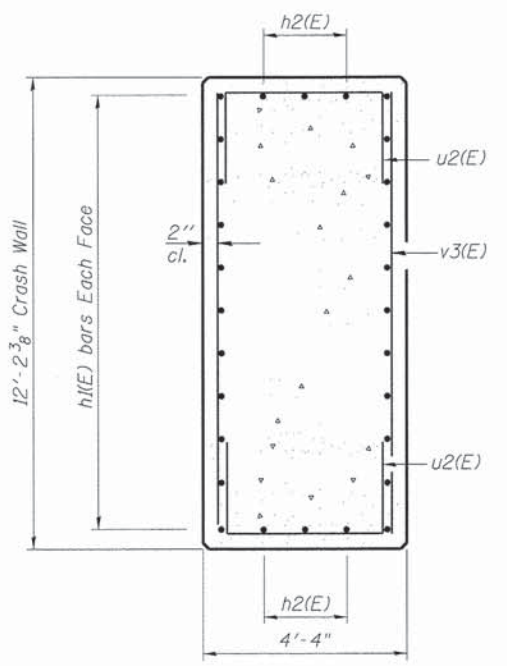
END VIEW



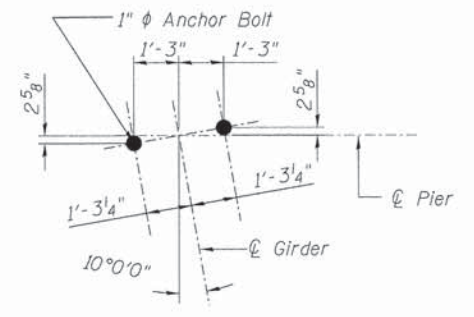
SECTION C-C



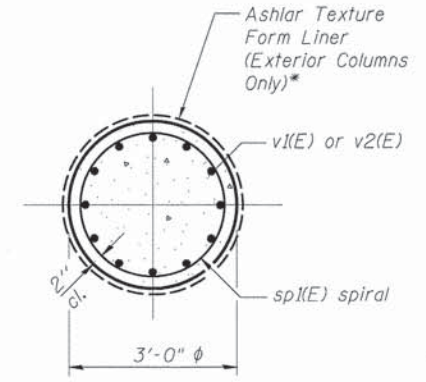
SECTION D-D



SECTION F-F

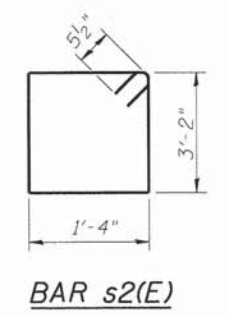


ANCHOR BOLTS LAYOUT

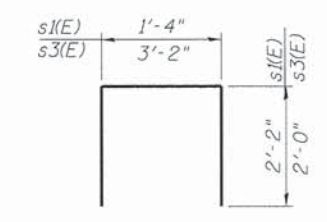


SECTION A-A

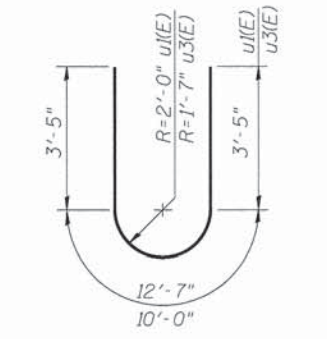
*NOTE:
Ashlar Texture Form Liner Shall Be Included In Payment With Concrete Structures



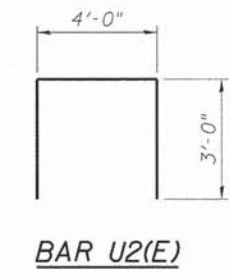
BAR s2(E)



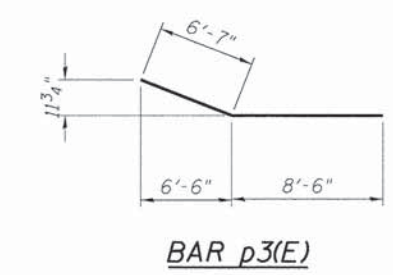
BARS s1(E) & s3(E)



BARS u1(E) and u3(E)



BAR u2(E)



BAR p3(E)

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|---------|-------|
| h1(E) | 52 | #6 | 29'-10" | — |
| h2(E) | 12 | #4 | 29'-3" | — |
| h3(E) | 8 | #5 | 33'-3" | — |
| h4(E) | 4 | #5 | 20'-3" | — |
| p1(E) | 16 | #8 | 29'-1" | — |
| p2(E) | 48 | #8 | 34'-3" | — |
| p3(E) | 16 | #6 | 15'-1" | — |
| s1(E) | 84 | #4 | 5'-8" | U |
| s2(E) | 120 | #4 | 9'-11" | □ |
| s3(E) | 21 | #5 | 7'-2" | U |
| sp1(E) | 5 | #4 | 14'-0" | ⊘ |
| u1(E) | 22 | #5 | 19'-5" | U |
| u2(E) | 108 | #5 | 10'-0" | U |
| u3(E) | 6 | #5 | 16'-10" | U |
| v1(E) | 60 | #9 | 8'-9" | — |
| v2(E) | 60 | #9 | 14'-5" | — |
| v3(E) | 116 | #5 | 11'-10" | — |
| Concrete Structures | | Cu. Yd. | 159 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 19,700 | |
| Drilled Shaft in Soil | | Cu. Yd. | 105 | |
| Struct. Excavation | | Cu. Yd. | 77 | |

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
**Length is height of spiral.

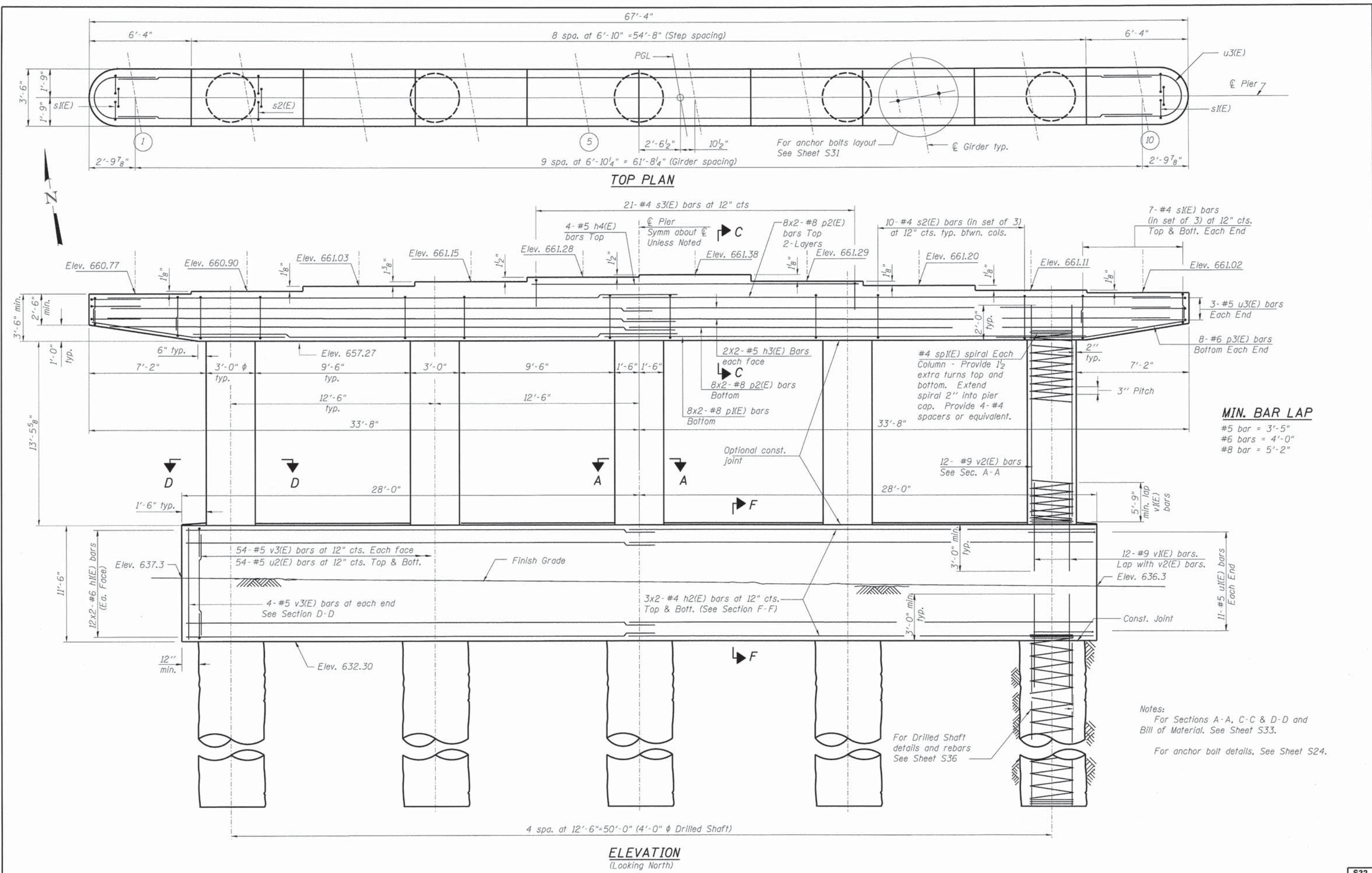


| | | |
|--------------------------|------------------|---------|
| USER NAME = mohammed.a.i | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 7/31/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

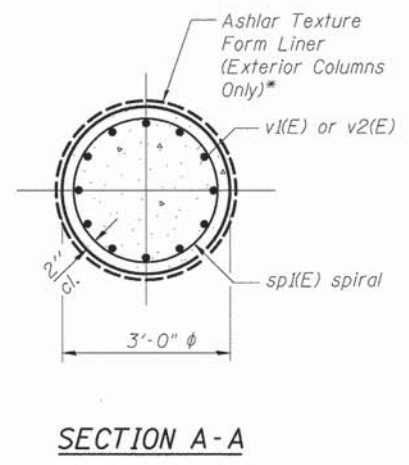
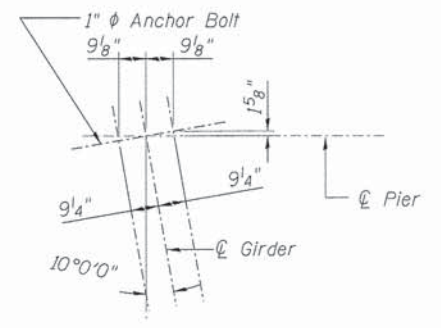
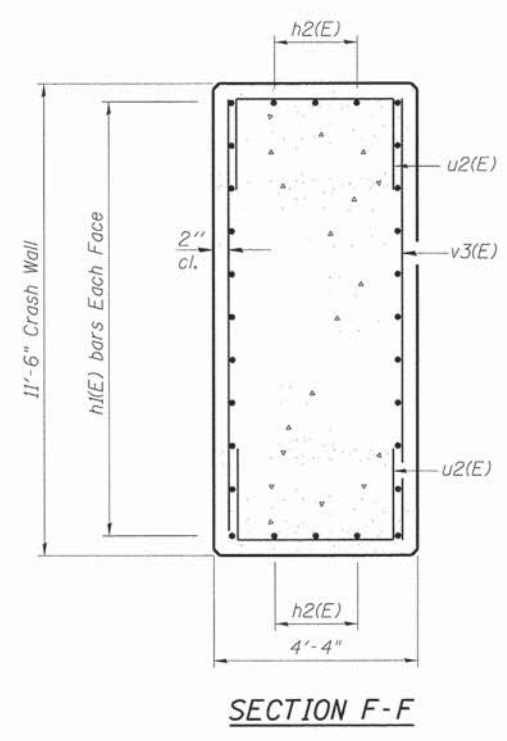
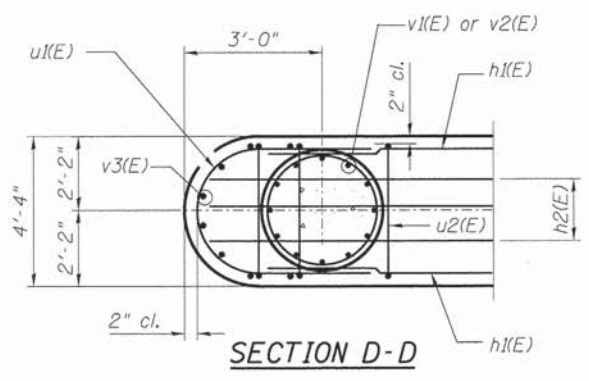
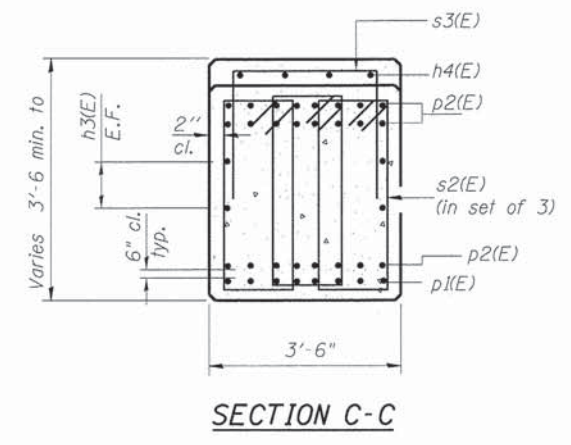
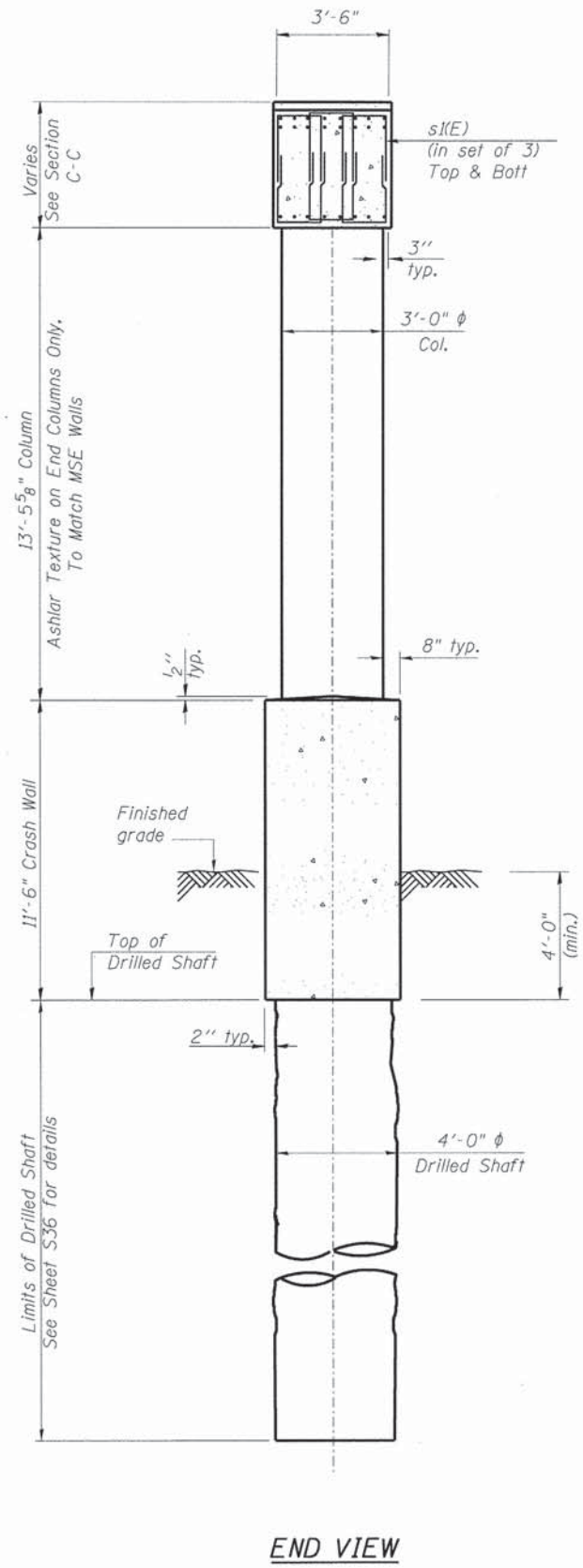
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS
STRUCTURE NO. 016-6351
SHEET NO. 166 OF 240 SHEETS

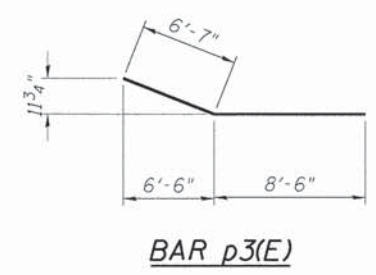
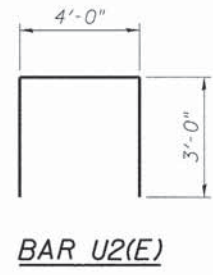
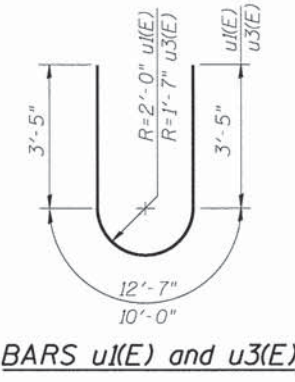
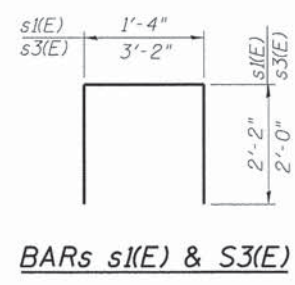
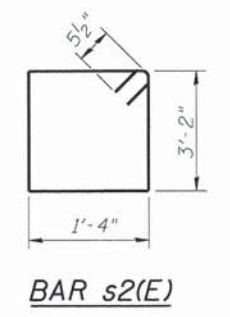
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|--------------------|
| 2714 | 99-00094-00-GS | COOK | 240 | 166 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |



| | | | | | | | | | | |
|---|--------------------------|------------------|---------|---|--|--------------------|----------------|---------------------------|--------------|-----------|
| | USER NAME = mohammed.ali | DESIGNED - RD | REVISED | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PIER 2 STRUCTURE NO. 016-6351 | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLOT SCALE = None | CHECKED - JG | REVISED | | | 2714 | 99-00094-00-GS | COOK | 240 | 167 |
| | PLOT DATE = 7/31/2014 | DRAWN - RJ | REVISED | SHEET NO. 167 OF 240 SHEETS | | CONTRACT NO. 63887 | | ILLINOIS FED. AID PROJECT | | |
| P:\projects\12024\200\5\CADD Sheets\0166351-25th-S32-Pier 2.dgn 2:54:37 PM | | DATE - 3-24-2014 | REVISED | | | | | | | |



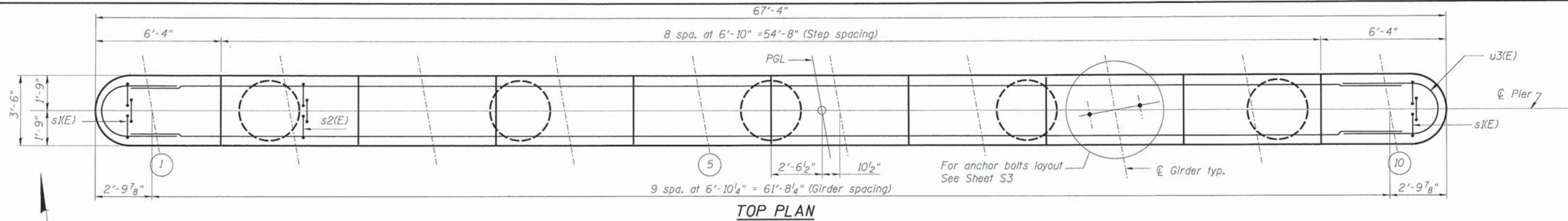
*NOTE:
Ashlar Texture Form Liner Shall Be Included In Payment With Concrete Structures



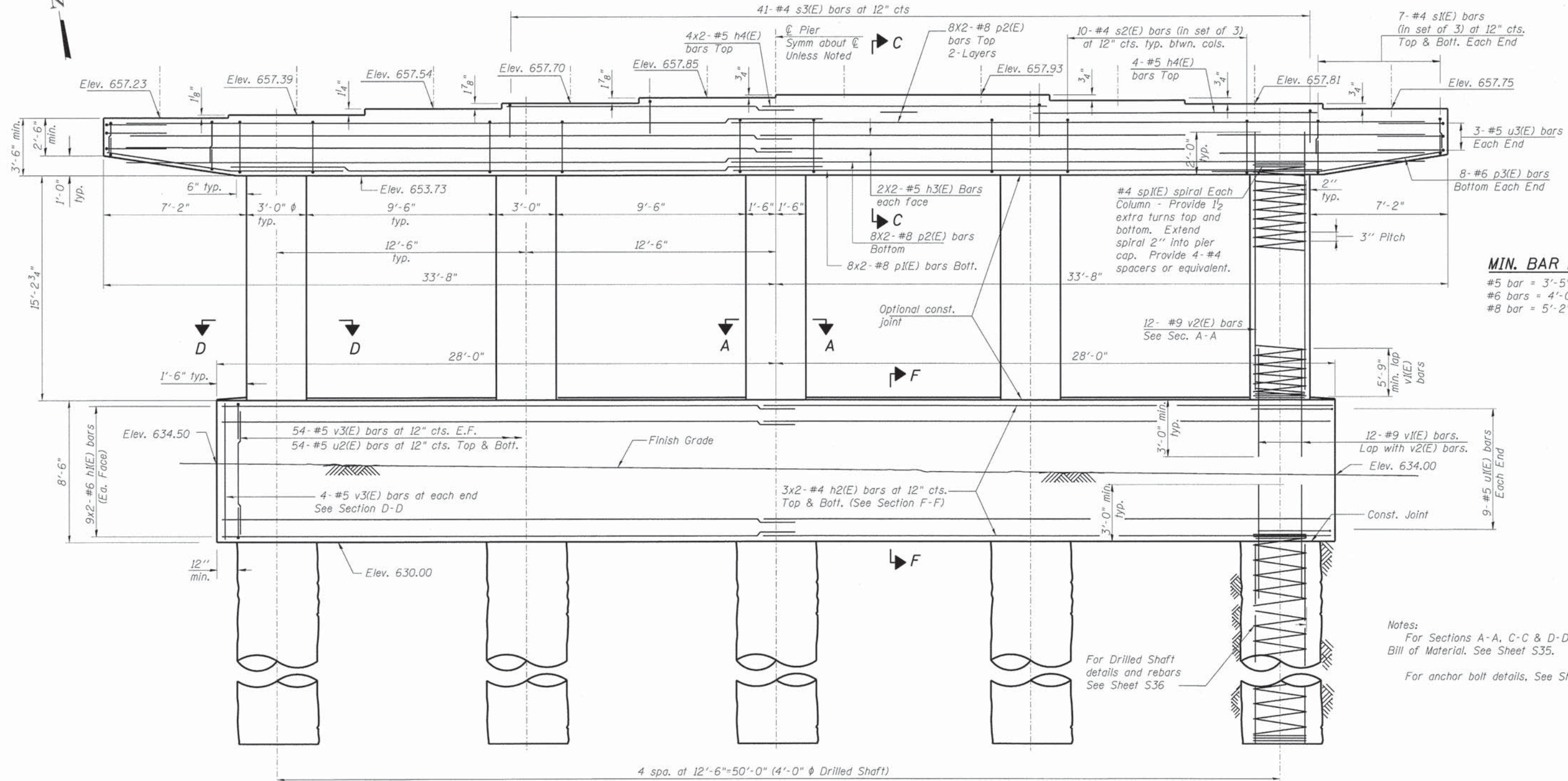
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|---------|------|---------|-------|
| h1(E) | 48 | #6 | 29'-10" | — |
| h2(E) | 12 | #4 | 29'-3" | — |
| h3(E) | 8 | #5 | 35'-4" | — |
| h4(E) | 4 | #5 | 20'-3" | — |
| p1(E) | 16 | #8 | 36'-3" | — |
| p2(E) | 48 | #8 | 31'-9" | — |
| p3(E) | 16 | #6 | 15'-1" | — |
| s1(E) | 84 | #4 | 5'-8" | U |
| s2(E) | 120 | #4 | 9'-11" | □ |
| s3(E) | 21 | #5 | 7'-2" | U |
| sp1(E) | 5 | #4 | 10'-5" | ⋈ |
| u1(E) | 22 | #5 | 19'-5" | U |
| u2(E) | 108 | #5 | 10'-0" | U |
| u3(E) | 6 | #5 | 16'-0" | U |
| v1(E) | 60 | #9 | 8'-9" | — |
| v2(E) | 60 | #9 | 15'-4" | — |
| v3(E) | 116 | #5 | 11'-2" | — |
| Concrete Structures | Cu. Yd. | | 154 | |
| Reinforcement Bars, Epoxy Coated | Pound | | 19,200 | |
| Drilled Shaft in Soil | Cu. Yd. | | 128 | |
| Struct. Excavation | Cu. Yd. | | 73 | |

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
**Length is height of spiral.



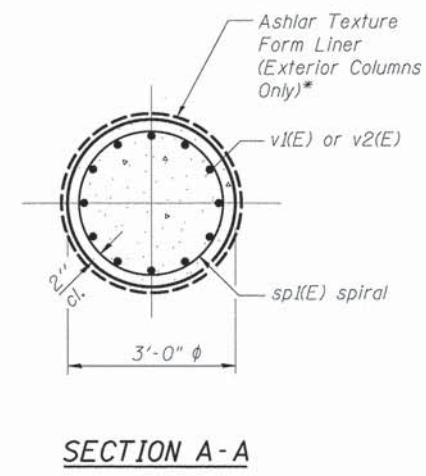
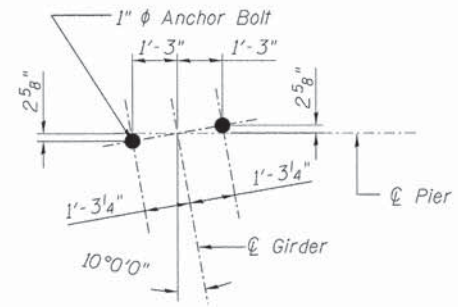
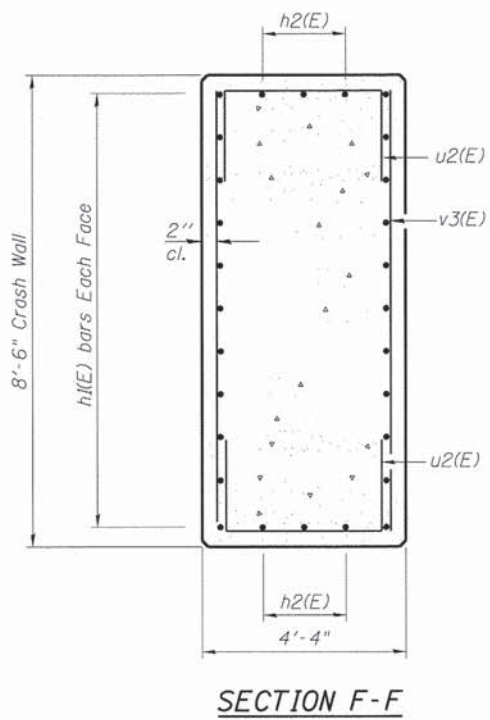
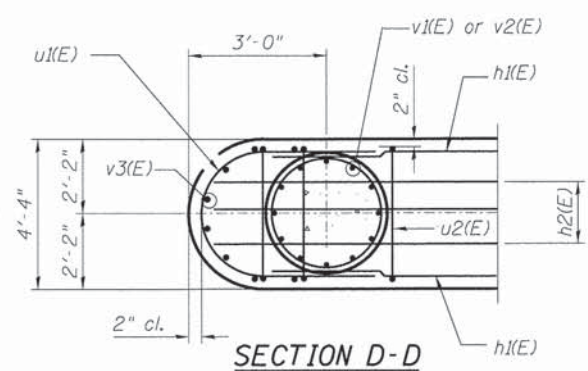
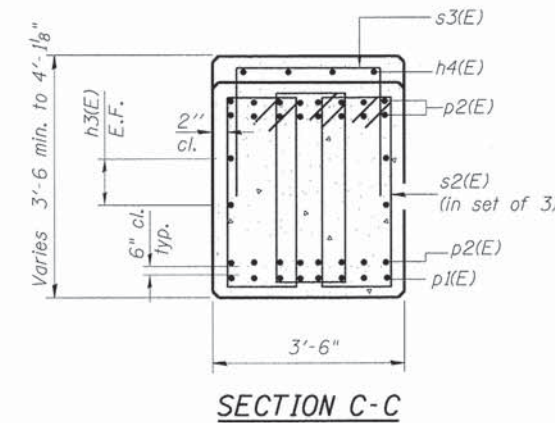
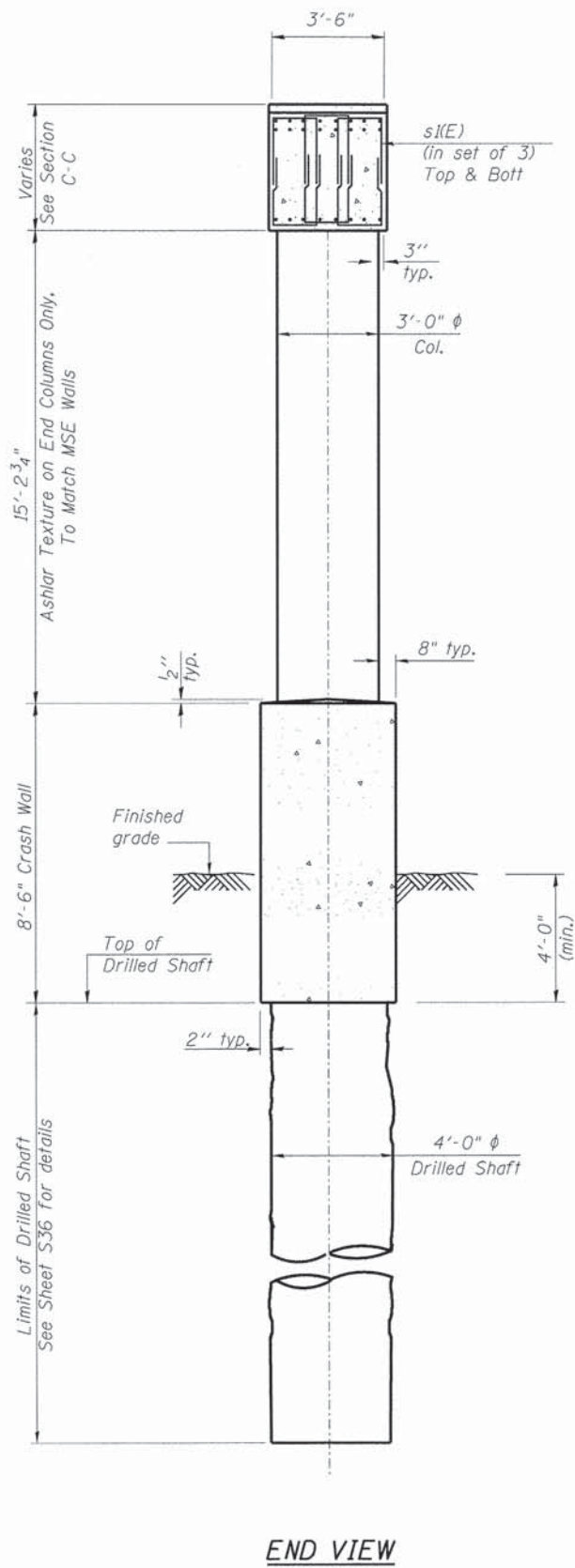
TOP PLAN



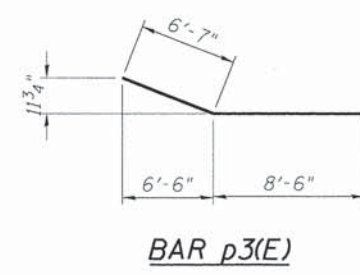
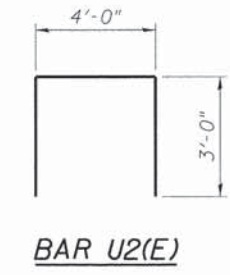
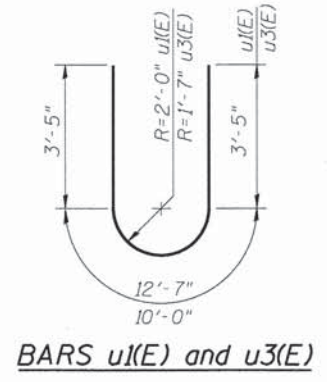
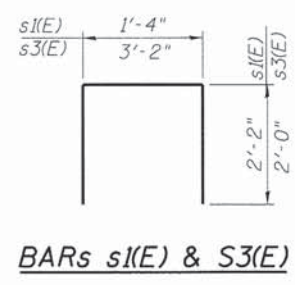
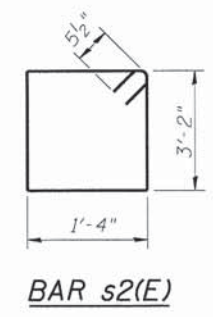
ELEVATION
(Looking North)

MIN. BAR LAP
 #5 bar = 3'-5"
 #6 bars = 4'-0"
 #8 bar = 5'-2"

Notes:
 For Sections A-A, C-C & D-D and Bill of Material. See Sheet S35.
 For anchor bolt details, See Sheet S25.



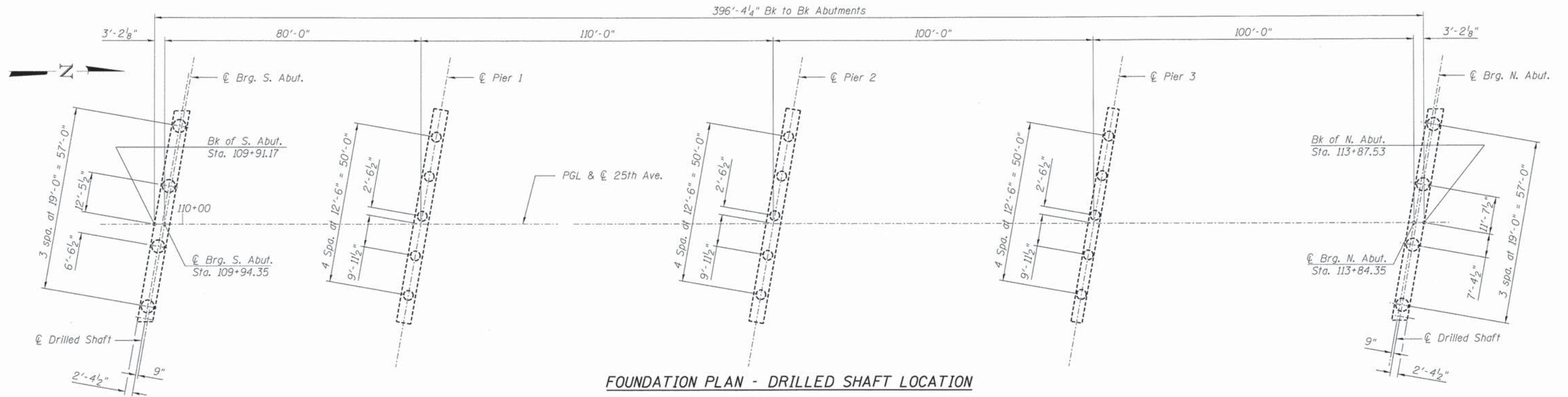
*NOTE:
Ashlar Texture Form Liner
Shall Be Included In Payment
With Concrete Structures



BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|-------------------------------------|---------|------|---------|-------|
| h1(E) | 36 | #6 | 29'-10" | — |
| h2(E) | 12 | #4 | 29'-3" | — |
| h3(E) | 8 | #5 | 33'-4" | — |
| h4(E) | 12 | #5 | 15'-3" | — |
| p1(E) | 16 | #8 | 29'-1" | — |
| p2(E) | 48 | #8 | 34'-3" | — |
| p3(E) | 16 | #6 | 15'-1" | — |
| s1(E) | 84 | #4 | 5'-8" | U |
| s2(E) | 120 | #4 | 9'-11" | U |
| s3(E) | 41 | #5 | 7'-2" | U |
| sp1(E) | 5 | #4 | 15'-9" | W |
| u1(E) | 22 | #5 | 19'-5" | U |
| u2(E) | 108 | #5 | 10'-0" | U |
| u3(E) | 6 | #5 | 16'-10" | U |
| v1(E) | 60 | #9 | 8'-9" | — |
| v2(E) | 60 | #9 | 17'-1" | — |
| v3(E) | 116 | #5 | 8'-2" | — |
| Concrete Structures | Cu. Yd. | | 130 | |
| Reinforcement Bars, Epoxy Coated | Pound | | 19,200 | |
| Drilled Shaft in Soil | Cu. Yd. | | 81 | |
| Struct. Excavation | Cu. Yd. | | 68 | |

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
**Length is height of spiral.



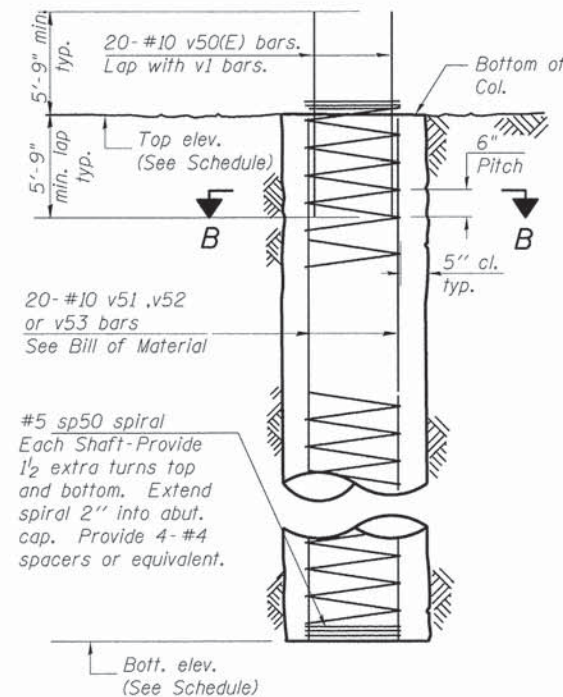
FOUNDATION PLAN - DRILLED SHAFT LOCATION

DRILLED SHAFT-SCHEDULE

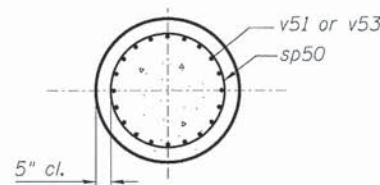
| Location | No. Required | Diameter (Inch) | Top Elevation | Bottom Elevation | Length (Ft) | Vertical Bar Size | Bar No. Required |
|-------------|--------------|-----------------|---------------|------------------|-------------|-------------------|------------------|
| S. Abutment | 4 | 54 | 634.90 | 589.90 | 45 | #10 | 20 |
| Pier 1 | 5 | 48 | 632.40 | 587.40 | 45 | #10 | 16 |
| Pier 2 | 5 | 48 | 632.30 | 577.30 | 55 | #10 | 16 |
| Pier 3 | 5 | 48 | 630.00 | 595.00 | 35 | #10 | 16 |
| N. Abutment | 4 | 54 | 632.95 | 597.95 | 35 | #10 | 20 |

| Location | Axial Capacity (Kip) | Moment Capacity ("/Kip) |
|----------|----------------------|-------------------------|
| Abutment | 7590 | 27900 |
| Pier | 7303 | 27600 |

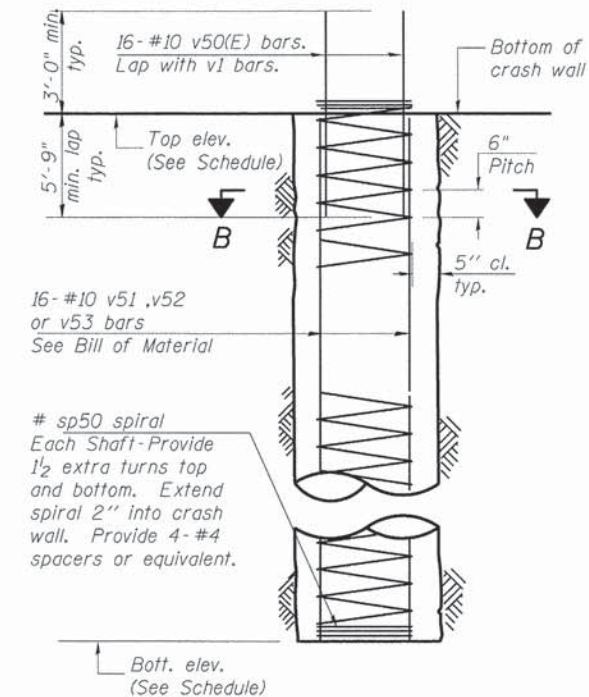
If a portion of drilled shaft concrete encasement is under water, reinforcement may be placed under water into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



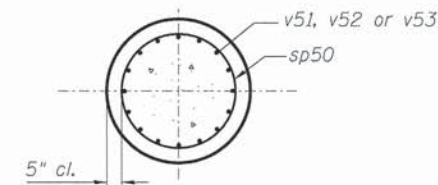
ELEVATION - ABUTMENTS



SECTION B-B



ELEVATION - PIERS



SECTION B-B

BILL OF MATERIAL

| LOCATION | Bar No. | Size | Length | Shape |
|----------------------------------|-----------|------|--------|-------|
| South Abutment | v50(E) 80 | #10 | 11'-6" | — |
| | v51 160 | #10 | 25'-9" | — |
| ** | sp50 4 | #5 | 45'-0" | ⌘ |
| | v50(E) 80 | #10 | 8'-9" | — |
| Pier 1 | v51 160 | #10 | 25'-9" | — |
| | ** sp50 5 | #5 | 45'-0" | ⌘ |
| Pier 2 | v50(E) 80 | #10 | 8'-9" | — |
| | v52 160 | #10 | 30'-9" | — |
| ** | sp50 5 | #5 | 55'-0" | ⌘ |
| | v50(E) 80 | #10 | 8'-9" | — |
| Pier 3 | v53 80 | #10 | 34'-8" | — |
| | ** sp50 5 | #5 | 35'-0" | ⌘ |
| North Abutment | v50(E) 80 | #10 | 11'-6" | — |
| | v53 80 | #10 | 34'-8" | — |
| ** | sp50 4 | #5 | 35'-0" | ⌘ |
| Reinforcement Bars, Epoxy Coated | | | Pound | 17000 |
| Reinforcement Bars | | | Pound | 81000 |

** Minimum lap for spirals = 1'-10" Length is height of spiral.



**LOG OF BORING
SB-1B
SHEET 1 OF 4**

| | |
|--|---------------------------------|
| Project: 25th Avenue Grade Separator | Project No.: 2336005.3000 |
| Location: Melrose Park/Bellwood, IL | Elevation: 635.38 |
| Drilling Company: Earth Solutions | Date Started: 04/17/13 |
| Drilling Equipment: Track-mounted Dierckh D-120 | Date Finished: 04/22/13 |
| Drilling Method: Mud Rotary | Refusal Depth (ft bgs): NA |
| Drill Bit Type/Diameter: 3.25" ID HSA (casing), Tri-cone bit | Rock Depth (ft bgs): NA |
| Sampler Type/Diameter: 2" OD Split-Barrel Sampler | Completion Depth (ft bgs): 75.0 |
| Boring Location Description: | Water Level (ft bgs): |
| Mark Wuxiali | Water Level During Drilling: NA |
| Driller: Juan Luna | Water Level After Drilling: NA |
| Geologist: Junaluska Williams | |

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Moisture Content (%) | Liquid Limit (%) | Plasticity Index (PI) | PI/60 | PI/75 | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------|----------------------|------------------|-----------------------|-------|-------|--|
| 634 | 2 | | (ASPHALT) | | | | | | | | | | Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2166). Begin drilling at 0820. |
| 632 | 2-4 | | (FILL) Dark brown to black CLAYEY SAND, little fine to coarse gravel, dry to moist. | SS-1 | 2-4 | 17/24 | 18 | NA | 0.0 | 0.0 | | 0.0 | Collect sample SS-1B from 2-4' bgs at 0830. |
| 630 | 4-6 | | (CL) Light brown and gray SILTY CLAY, soft, high plasticity, trace fine gravel, brown mottling, moist. | SS-2 | 4-6 | 12/24 | 9 | 26.2 | 1.0 | 0.0 | 0.0 | 0.0 | |
| 628 | 6-8 | | (CL) Light brown SILTY CLAY, some fine to coarse sand, little fine to coarse gravel, low plasticity, medium stiff, moist. | SS-3 | 6-8 | 15/24 | 5 | 20.9 | 0.75 | 0.0 | 0.0 | 0.0 | |
| 626 | 8-10 | | (CL) Brown SANDY CLAY, soft, high plasticity, trace fine gravel, moist. | 3T | 8-10 | 50/24 | 2 | | | | | | 3T: LL: 23; PL: 15; PI: 8. |
| 624 | 11-13 | | (CL) Light brown to gray SILTY CLAY, medium to high plasticity, medium stiff, trace fine gravel, moist. | SS-4 | 11-13 | 24/24 | 30 | 17.2 | 3.0; 4.9 | 0.0 | 0.0 | 0.0 | |
| 622 | 13-15 | | (CL) Same as above, gray. | SS-5 | 13-15 | 24/24 | 23 | 16.8 | 3.5 | 0.0 | 0.0 | 0.0 | |



**LOG OF BORING
SB-1B
SHEET 2 OF 4**

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Moisture Content (%) | Liquid Limit (%) | Plasticity Index (PI) | PI/60 | PI/75 | REMARKS |
|------|---------|---------|--|---------------------|----------------|----------|-------------------|----------------------|------------------|-----------------------|-------|-------|---------------------------------------|
| 618 | 15-17 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, very stiff, low plasticity, moist. | SS-6 | 15-17 | 24/24 | 13 | 17 | 16.3 | 3.75 | 0.0 | 0.0 | |
| 616 | 17-19 | | | SS-7 | 17-19 | 24/24 | 8 | 20 | 18.1 | 3.75 | 0.0 | 0.0 | |
| 614 | 23.5-25 | | (CL) Gray SILTY CLAY, stiff, very hard, low plasticity, trace fine gravel, moist. | SS-8 | 23.5-25 | 13/18 | 44 | 10.4 | 4.5+ | 0.0 | 0.0 | 0.0 | Resume drilling at 23.5' bgs at 1055. |
| 612 | 25-27 | | | | | | 50 for 4' | | | | | | Pressure testing from 35-47' bgs. |
| 610 | 28.5-30 | | (SP) Gray, fine to medium SAND, poorly graded, very dense, dry. | SS-9 | 28.5-30 | 14/18 | 28 | 88 | 3.0 | NA | 0.0 | 0.0 | |
| 608 | 32-34 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, hard, low plasticity, moist. | SS-10 | 32-34 | 14/18 | 17 | 44 | 16.4 | 4.0 | 0.0 | 0.0 | |
| 606 | | | (CL) Gray SILTY CLAY, very stiff, trace fine gravel, high plasticity. | | | | 27 | | | | | | |



**LOG OF BORING
SB-1B
SHEET 3 OF 4**

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Moisture Content (%) | Liquid Limit (%) | Plasticity Index (PI) | PI/60 | PI/75 | REMARKS |
|------|---------|---------|--|---------------------|----------------|----------|-------------------|----------------------|------------------|-----------------------|-------|-------|---------|
| 604 | 38.5-40 | | (ML) Gray CLAYEY SILT, little fine to coarse sand, trace fine to coarse gravel, very dense, low plasticity, moist. | SS-11 | 38.5-40 | 14/18 | 30 | 100 | 13.5 | NA | 0.0 | 0.0 | |
| 602 | 43.5-45 | | (ML) Same as above, dry. | SS-12 | 43.5-45 | 14/18 | 50 for 5' | >100 | NA | 0.0 | 0.0 | 0.0 | |
| 600 | 48.5-50 | | (ML) Same as above. | SS-13 | 48.5-50 | 12/18 | 23 | 88 | NA | 0.0 | 0.0 | 0.0 | |
| 598 | 53.5-55 | | (ML) Gray CLAYEY SILT, trace fine gravel, dry. | SS-14 | 53.5-55 | 9/18 | 50 for 4' | >100 | NA | 0.0 | 0.0 | 0.0 | |



| | | |
|--------------------------|------------------|---------|
| USER NAME = stephenschuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JC | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE = 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS
STRUCTURE NO. 016-6351**

SHEET NO. 171 OF 240 SHEETS

| | | | | |
|--------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-G5 | COOK | 240 | 171 |
| CONTRACT NO. 63887 | | | | |

S37

ILLINOIS FED. AID PROJECT



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-1B SHEET 4 OF 4

| ELEV DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Ree (in) | Blow Count per 5' | Penetration Resistance "N" | Mol. Content | Unconfined Strength (psi) | PIV/ FID Scan/Head | PIV/ FID Scan/Head | REMARKS |
|------------|---------|--|---------------------|----------------|----------|-------------------|----------------------------|--------------|---------------------------|--------------------|--------------------|-----------------------------------|
| 570 | | | | | | | | | | | | |
| 578 | | | SS-15 | 58.5-60 | 11/18 | 23 | >100 | NA | 0.0 | 0.0 | | |
| 574 | | | | | | | | | | | | |
| 572 | | (ML) Gray CLAYEY SILT, trace fine gravel, wet. | | | | | | | | | | |
| 564 | | | SS-16 | 63.5-65 | 10/18 | 50 for 5' | >100 | NA | 0.0 | 0.0 | | |
| 570 | | | | | | | | | | | | |
| 566 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, moist. | | | | | | | | | | |
| 564 | | | SS-17 | 65.5-70 | 21/18 | 12 | 35 | NA | 0.0 | 0.0 | | |
| 570 | | | | | | | | | | | | |
| 562 | | | SS-18 | 73.5-75 | 13/18 | 50 for 5' | >100 | NA | 0.0 | 0.0 | | |
| 570 | | | | | | | | | | | | |
| 562 | | | | | | | | | | | | |
| 562 | | | | | | | | | | | | End of boring at 75' bgs at 0655. |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-2B-PSI SHEET 1 OF 4

| ELEV DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Ree (in) | Blow Count per 5' | Penetration Resistance "N" | Mol. Content | Unconfined Strength (psi) | PIV/ FID Scan/Head | PIV/ FID Scan/Head | REMARKS |
|------------|---------|---|---------------------|----------------|----------|-------------------|----------------------------|--------------|---------------------------|--------------------|--------------------|---|
| 630 | | (ASPHALT) ASPHALT GRAVEL | | | | | | | | | | |
| 625 | | (FILL) Dark brown to black CLAYEY SAND, little fine to coarse gravel, dry to moist. | SS-1 | 0.5-2 | 17/18 | 23 | 43 | NA | 0 | 0 | | *Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2186). Begin drilling at 0820. |
| 624 | | (FILL) Dark brown CLAYEY SAND, some fine to coarse gravel, moist. | SS-2 | 2-4 | 16/24 | 7 | 20 | NA | 0 | 0 | | Collect sample SB-2B-PSI from 2-4' bgs at 0830. |
| 624 | | (FILL) Dark brown CLAYEY SAND, some fine to coarse gravel, trace wood pieces, moist to wet. | SS-3 | 4-6 | 9/18 | 50 for 2' | >100 | NA | 0 | 0 | | |
| 620 | | (CL) Light brown to light gray CLAY, trace fine to medium gravel, trace fine to coarse sand, brown mottling, medium stiff, low plasticity, moist. | SS-4 | 6-8 | 16/24 | 4 | 9 | 24.0 | 0.75 | 0 | 0 | |
| 618 | | (CL) Light brown SILTY CLAY, little fine to coarse sand, little fine to coarse gravel, medium stiff, low plasticity, moist. | SS-5 | 8-10 | 22/20 | 6 | 12 | 14.0 | 1 | 0 | 0 | |
| 618 | | (CL) Brown SILTY CLAY, high plasticity, stiff, trace fine gravel, moist. | 3T | 10-12.5 | 20/30 | | | | | | | SI; LI: 34; PL: 20; PI: 14. |
| 614 | | | | | | | | | | | | |
| 612 | | | | | | | | | | | | |
| 610 | | | | | | | | | | | | |
| 608 | | | | | | | | | | | | |
| 608 | | (CL) Gray SILTY CLAY, little fine to coarse sand, little fine to coarse gravel, hard, low plasticity, moist. | SS-6 | 13.5-15 | 18/18 | 6 | 7 | 13.9 | 4 | 0 | 0 | |
| 604 | | | | | | | | | | | | |
| 602 | | | | | | | | | | | | |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-2B-PSI SHEET 2 OF 4

| ELEV DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Ree (in) | Blow Count per 5' | Penetration Resistance "N" | Mol. Content | Unconfined Strength (psi) | PIV/ FID Scan/Head | PIV/ FID Scan/Head | REMARKS |
|------------|---------|--|---------------------|----------------|----------|-------------------|----------------------------|--------------|---------------------------|--------------------|--------------------|---------|
| 620 | | (CL) Gray SILTY CLAY, little fine to coarse sand, little fine to coarse gravel, hard, low plasticity, moist. | SS-7 | 16-17.5 | 20/18 | 8 | 22 | 14.5 | 4 | 0 | 0 | |
| 618 | | | | | | | | | | | | |
| 616 | | | SS-8 | 18.5-20 | 10/18 | 8 | 19 | 10.2 | 4; 5.7 | 0 | 0 | |
| 616 | | | | | | | | | | | | |
| 614 | | (ML) Gray CLAYEY SILT, little fine to coarse sand, trace fine to coarse gravel, dense, low plasticity, moist to dry. | | | | | | | | | | |
| 614 | | | | | | | | | | | | |
| 612 | | | SS-9 | 23.5-25 | 18/18 | 15 | 35 | 11.1 | NA | 0 | 0 | |
| 612 | | | | | | | | | | | | |
| 610 | | | | | | | | | | | | |
| 608 | | (ML) Gray CLAYEY SILT, moist. | | | | | | | | | | |
| 608 | | (SC) Gray, fine POORLY GRADED CLAYEY SAND, wet. | SS-10 | 28.5-30 | 17/18 | 37 | >100 | 13.6 | NA | 0 | 0 | |
| 608 | | (ML) Gray CLAYEY SILT. | | | | | | | | | | |
| 604 | | | | | | | | | | | | |
| 602 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine gravel, very stiff, low plasticity, moist. | | | | | | | | | | |
| 604 | | | | | | | | | | | | |
| 602 | | (CL) Gray SILTY CLAY, hard, high plasticity, trace fine gravel. | SS-11 | 33.5-35 | 18/18 | 6 | 15 | 18.0 | 4.5+ | 0 | 0 | |
| 602 | | | | | | | | | | | | |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-2B-PSI SHEET 3 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count per 5' | Penetration Resistance (psf) | Moisture Content (%) | Unconfined Compressive Strength (TSF) | PI (ppm) | FI (ppm) | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------|------------------------------|----------------------|---------------------------------------|----------|----------|---------|
| 600 | | | (ML) Gray CLAYEY SILT, trace fine to coarse sand, trace medium gravel, medium dense, low plasticity, moist. | | | | | | | | | | |
| 598 | 38 | | | SS-12 | 38.5-40 | 18/18 | 14 | 38 | 12.8 | NA | 0 | 0 | |
| 594 | 42 | | | | | | | | | | | | |
| 590 | 46 | | | | | | | | | | | | |
| 586 | 50 | | Sample dry at 48.5' bgs. | SS-13 | 43.5-48 | 7/18 | 50 for 5' | >100 | 16.9 | NA | 0 | 0 | |
| 582 | 54 | | | | | | | | | | | | |
| 578 | 58 | | | | | | | | | | | | |
| 574 | 62 | | | | | | | | | | | | |
| 570 | 66 | | | | | | | | | | | | |
| 566 | 70 | | | SS-14 | 48.5-50 | 15/18 | 50 for 5' | >100 | 9.0 | NA | 0 | 0 | |
| 562 | 74 | | (ML) Gray CLAYEY SILT, dry to moist. | | | | | | | | | | |
| 558 | 78 | | | SS-15 | 53.5-55 | 7/18 | 50 for 5' | >100 | 15.9 | NA | 0 | 0 | |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-2B-PSI SHEET 4 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count per 5' | Penetration Resistance (psf) | Moisture Content (%) | Unconfined Compressive Strength (TSF) | PI (ppm) | FI (ppm) | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------|------------------------------|----------------------|---------------------------------------|----------|----------|---------|
| 580 | | | (ML) Gray CLAYEY SILT, trace fine gravel, dry. | SS-16 | 58.5-50 | 6/18 | 50 for 5' | >100 | 14.2 | NA | 0 | 0 | |
| 576 | 54 | | | | | | | | | | | | |
| 572 | 58 | | (ML) Same as above, moist. | SS-17 | 63.5-65 | 6/18 | 50 for 4' | >100 | 18.5 | NA | 0 | 0 | |
| 568 | 62 | | | | | | | | | | | | |
| 564 | 66 | | (ML) SILT, trace fine sand, very dense, wet. | | | | | | | | | | |
| 560 | 70 | | | SS-18 | 68.5-70 | 8/18 | 50 for 4' | >100 | 20.1 | NA | 0 | 0 | |
| 556 | 74 | | (ML) CLAYEY SILT, trace fine gravel, wet. | | | | | | | | | | |
| 552 | 78 | | Higher sand content, little fine to coarse sand at 73.5' bgs. | SS-19 | 73.5-42 | 16/18 | 37 for 5' | >100 | 9.1 | NA | 0 | 0 | |

End of boring at 79' bgs at 1110.



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-3B SHEET 1 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count per 5' | Penetration Resistance (psf) | Moisture Content (%) | Unconfined Compressive Strength (TSF) | PI (ppm) | FI (ppm) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------|------------------------------|----------------------|---------------------------------------|----------|----------|--|
| 600 | | | (ASPHALT) | | | | | | | | | | |
| 598 | 2 | | (FILL) Brown to dark brown, fine to coarse CLAYEY GRAVEL AND SAND, dry. | | | | | | | | | | Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2166). Begin drilling at 0815. |
| 594 | 6 | | (FILL) Dark brown CLAYEY SAND AND GRAVEL, moist to wet. | SS-1 | 2-4 | 10/24 | 6 | 10 | NA | 0.0 | 0.0 | | |
| 590 | 10 | | (ML) Dark brown CLAYEY SILT, moist. | | | | | | | | | | |
| 586 | 14 | | (CL) Olive gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, soft, low plasticity, moist. | SS-2 | 4-6 | 13/24 | 2 | 4 | 36.8 | NA | 0.0 | 0.0 | |
| 582 | 18 | | (CL) Olive green SILTY CLAY, medium stiff, high plasticity, trace fine gravel, light brown mottling, moist. | SS-3 | 6-8 | 14/24 | 1 | 2 | 34.0 | 0.5 | 0.0 | 0.0 | SS-3: LL: 99; PI: 16; P: 23. |
| 578 | 22 | | (CL) Gray SILTY CLAY, hard, high plasticity, trace fine gravel, brown mottling, moist. | SS-4 | 8-10 | 18/24 | 2 | 4 | 16.7 | 1.0 | 0.0 | 0.0 | Shelby tube collected from 10-12.5' bgs. |
| 574 | 26 | | (CL) Light brown SILTY CLAY, soft to very stiff, high plasticity, trace fine to medium gravel, moist. | SS-5 | 11-12.5 | 16/18 | 10 | 24 | 15.0 | 3.75 | 0.0 | 0.0 | SI: LL: 99; PI: 16; P: 19. |
| 570 | 30 | | (CL) Gray SILTY CLAY, stiff, high plasticity, trace fine gravel, moist. | SS-1 | 13.5-15 | 18/18 | 7 | 15 | 16.1 | 4.0 | 0.0 | 0.0 | |



USER NAME = stephen.schuh
 PLOT SCALE = None
 PLOT DATE = 3/21/2014

DESIGNED - RD
 CHECKED - JG
 DRAWN - RJ
 DATE - 3-24-2014

REVISED
 REVISED
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
 STRUCTURE NO. 016-6351

SHEET NO. 173 OF 240 SHEETS

| | | | | |
|--------------------|----------------|--------|--------------|-----------|
| F.A.J. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 173 |
| CONTRACT NO. 63887 | | | S39 | |

ILLINOIS FED. AID PROJECT



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-3B SHEET 2 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Ret (ft) | Blow Count per 6" | Penetration (psi) | Moisture Content (%) | Unclassified Sand (PTSD) | PIV/Scan Head (ppm) | PIV/Scan Head (ppm) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------|-------------------|----------------------|--------------------------|---------------------|---------------------|---------|
| -620 | 16 | | (CL) Gray SILTY CLAY, hard, high plasticity, trace fine gravel, brown mottling, moist. | SS-2 | 16-17.5 | 18/18 | 6 | 17 | 18.8 | 1.0 | 0.0 | 0.0 | |
| -618 | 18 | | (CL) Gray SILTY CLAY, stiff, high plasticity, trace fine gravel, moist. | SS-3 | 18.5-20 | 18/18 | 5 | 8 | 20 | 17.5 | 3.0 | 0.0 | 0.0 |
| -616 | 20 | | | | | | 12 | | | | | | |
| -614 | 22 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, moist. | | | | 13 | | | | | | |
| -612 | 24 | | | SS-4 | 23.5-25 | 17/18 | 25 | 55 | 11.7 | NA | 0.0 | 0.0 | |
| -610 | 26 | | | | | | 30 | | | | | | |
| -608 | 28 | | | | | | 17 | | | | | | |
| -606 | 30 | | (SP) Gray, fine to medium POORLY GRADED SAND, dry. (ML) Gray CLAYEY SILT, dry. | SS-8 | 28.5-30 | 18/18 | 38 | 88 | 7.0 | NA | 0.0 | 0.0 | |
| -604 | 32 | | (CL) Gray SILTY CLAY, medium plasticity, hard, trace fine to medium gravel, dry. | | | | 8 | | | | | | |
| -602 | 34 | | | SS-7 | 33.5-35 | 18/18 | 5 | 25 | 13.5 | 4.5+ | 0.0 | 0.0 | |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-3B SHEET 3 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Ret (ft) | Blow Count per 6" | Penetration (psi) | Moisture Content (%) | Unclassified Sand (PTSD) | PIV/Scan Head (ppm) | PIV/Scan Head (ppm) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------|-------------------|----------------------|--------------------------|---------------------|---------------------|---------|
| -600 | 36 | | (CL) Gray SILTY CLAY, medium stiff, high plasticity, trace fine to medium gravel, moist. | SS-8 | 38.5-40 | 18/18 | 15 | 25 | 55 | 16.3 | 3.5 | 0.0 | 0.0 |
| -598 | 38 | | | | | | 30 | | | | | | |
| -596 | 40 | | | | | | 37 | | | | | | |
| -594 | 42 | | (ML) Gray CLAYEY SILT, trace fine gravel, moist to very moist. | | | | 30 | | | | | | |
| -592 | 44 | | | SS-9 | 43.5-45 | 14/18 | 30 | >100 | 18.6 | NA | 0.0 | 0.0 | |
| -590 | 46 | | | | | | 24 | | | | | | |
| -588 | 48 | | (ML) Gray CLAYEY SILT, trace fine gravel, dry. | SS-10 | 48.5-50 | 18/18 | 27 | 57 | 10.2 | NA | 0.0 | 0.0 | |
| -586 | 50 | | | | | | 30 | | | | | | |
| -584 | 52 | | | | | | 12 | | | | | | |
| -582 | 54 | | (ML) Gray CLAYEY SILT, trace fine gravel, dry. | SS-11 | 53.5-55 | 16/18 | 12 | 46 | 11.5 | NA | 0.0 | 0.0 | |
| -580 | 56 | | | | | | 34 | | | | | | |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-3B SHEET 4 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Ret (ft) | Blow Count per 6" | Penetration (psi) | Moisture Content (%) | Unclassified Sand (PTSD) | PIV/Scan Head (ppm) | PIV/Scan Head (ppm) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------|-------------------|----------------------|--------------------------|---------------------|---------------------|---------|
| -580 | 58 | | | | | | 48 | | | | | | |
| -578 | 60 | | (ML) Gray CLAYEY SILT, trace fine gravel, dry. | SS-12 | 58.5-60 | 12/18 | 50 | >100 | 15.9 | NA | 0.0 | 0.0 | |
| -576 | 62 | | | | | | 45 | | | | | | |
| -574 | 64 | | (ML) Same as above, wet. | SS-13 | 63.5-65 | 10/18 | 60 | >100 | 18.5 | NA | 0.0 | 0.0 | |
| -572 | 66 | | | | | | 38 | | | | | | |
| -570 | 68 | | (SP) Fine to medium POORLY GRADED SAND. | | | | 39 | | | | | | |
| -568 | 70 | | (ML) Gray CLAYEY SILT, dry. | SS-14 | 68.5-70 | 18/18 | 45 | 84 | NA | 0.0 | 0.0 | 0.0 | |
| -566 | 72 | | | | | | 50 | | | | | | |
| -564 | 74 | | (ML) Gray CLAYEY SILT, trace fine gravel, dry. | SS-15 | 73.5-75 | 8/18 | 3 | >100 | 10.9 | NA | 0.0 | 0.0 | |
| -562 | 76 | | | | | | | | | | | | |

End of boring at 75' bgs at 1110.



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 016-6351 SHEET NO. 174 OF 240 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 174 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

S40



**LOG OF BORING
SB-4B-PSI
SHEET 1 OF 4**

| | | | |
|------------------------------|-------------------------------------|-----------------------------|--------------------|
| Project: | 25th Avenue Grade Separator | Project No.: | 25389005.3000 |
| Location: | Maitrose Park/Bellwood, IL | Elevation: | 634.36 |
| Drilling Company: | Earth Solutions | Date Started: | 04/29/13 |
| Drilling Equipment: | Track-mounted Dietrich D-120 | Date Finished: | 04/29/13 |
| Drilling Method: | Mud Rotary | Refusal Depth (ft bgs): | 7 |
| Drill Bit Type/Size: | 3.25" ID HSA (casing), Tri-cone bit | Rock Depth (ft bgs): | NA |
| Sample Type/Quantity: | 2" OD, Split-Barrel Sampler | Completion Depth (ft bgs): | 76.0 |
| Boring Location Description: | | Water Level (ft bgs): | |
| Driller: | Juan Luna | Water Level After Drilling: | NA |
| Geologist: | Junataska Williams | Geologist: | Junataska Williams |

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Blow Count (per 10') | Penetration Resistance (psi) | Moisture Content (%) | Unconfined Compressive Strength (psi) | PIV (psi) | PIV (psi) | REMARKS |
|------|-------|---|-------------|---------------------|----------------|----------------------|------------------------------|----------------------|---------------------------------------|-----------|-----------|--|
| 634 | 2 | (ASPHALT) | | | | | | | | | | Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2166). Begin drilling at 0845. |
| 632 | 2 | (FILL) Dark gray CLAY, stiff, medium plasticity, some fine to coarse gravel, dry to moist. | SS-1 | 2-4 | 15/24 | 6 | 12 | 6.3 | 3.0 | 0.0 | 0.0 | Collect sample SB-4B-PS1 from 2-4' bgs at 0855. |
| 630 | 4 | Gray concrete pieces at 4' bgs. | SS-2 | 4-6 | 14/24 | 5 | 10 | 18.2 | 1.75 | 0.0 | 0.0 | |
| 628 | 6 | (FILL) Brown and gray SILTY CLAY, little fine to medium gravel, little fine to coarse sand, low plasticity, stiff, moist. | SS-3 | 6-8 | 17/24 | 2 | 3 | NA | 0.0 | 0.0 | 0.0 | |
| 626 | 8 | (FILL) Brown, fine to medium CLAYEY SAND, poorly graded, loose, wet. | SS-4 | 8-10 | 17/24 | 6 | 14 | 20.1 | 3.5 | 3.5 | 0.0 | 0.0 |
| 624 | 10 | (CL) Brown CLAY, high plasticity, medium stiff, trace fine to medium gravel, moist. | SS-5 | 10-12 | 21/24 | 4 | 24 | 17.9 | 4.0 | 0.0 | 0.0 | |
| 622 | 12 | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, hard, low plasticity, wet. | SS-8 | 12-14 | 22/24 | 10 | 25 | 15.0 | 4.5 | 0.0 | 0.0 | |
| 620 | 14 | | 3T | 14-16.5 | 20/30 | | | 3.5 | 0.0 | 0.0 | 0.0 | 3T; LL: 31; PL: 16; PI: 15. |



**LOG OF BORING
SB-4B-PSI
SHEET 2 OF 4**

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Blow Count (per 10') | Penetration Resistance (psi) | Moisture Content (%) | Unconfined Compressive Strength (psi) | PIV (psi) | PIV (psi) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------------------|------------------------------|----------------------|---------------------------------------|-----------|-----------|--|
| 618 | 18 | | (ML) Gray CLAYEY SILT, some fine to coarse sand, little fine to coarse gravel, medium dense, low plasticity, moist. | SS-7 | 17-19 | 22/24 | 8 | 13 | 10.3 | 3.0 | 0.0 | 0.0 |
| 616 | 20 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, dry. | SS-8 | 19-21 | 17/24 | 14 | 19 | 12.7 | NA | 0.0 | 0.0 |
| 614 | 20 | | (SC) Gray, fine CLAYEY SAND, very moist. | | | | | | | | | |
| 612 | 22 | | (ML) Gray CLAYEY SILT, little fine to coarse sand, little fine to coarse gravel, dense to very dense, low plasticity, dry. | | | | | | | | | |
| 610 | 24 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, moist. | SS-9 | 23.5-25 | 15/18 | 50 | 77 | NA | 0.0 | 0.0 | Pressure testing from 19-23' bgs from 0955 to 1040. Resume drilling at 1055. |
| 608 | 26 | | | | | | | | | | | |
| 606 | 28 | | No recovery from 28.5-30' bgs. | SS-10 | 28.5-30 | 0/18 | 20 | 41 | NA | 0.0 | 0.0 | |
| 604 | 30 | | | | | | | | | | | |
| 602 | 32 | | | | | | | | | | | |
| 600 | 34 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, dry. | SS-11 | 33.5-35 | 14/18 | 40 | 80 | 11.4 | NA | 0.0 | 0.0 |



**LOG OF BORING
SB-4B-PSI
SHEET 3 OF 4**

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Blow Count (per 10') | Penetration Resistance (psi) | Moisture Content (%) | Unconfined Compressive Strength (psi) | PIV (psi) | PIV (psi) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------------------|------------------------------|----------------------|---------------------------------------|-----------|-----------|---------|
| 598 | 38 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, dry. | SS-12 | 38.5-40 | 14/18 | 40 | 50 | >100 | 13.4 | NA | 0.0 |
| 596 | 40 | | | | | | | | | | | |
| 594 | 42 | | | | | | | | | | | |
| 592 | 44 | | (ML) Gray CLAYEY SILT, wet. | SS-13 | 43.5-45 | 6/18 | 31 | 50 | >100 | 13.9 | NA | 0.0 |
| 590 | 44 | | Seam of gray fine to coarse gravel from 44.7-45' bgs. | | | | | | | | | |
| 588 | 46 | | | | | | | | | | | |
| 586 | 48 | | | | | | | | | | | |
| 584 | 50 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel. | SS-14 | 48.5-50 | 17/18 | 13 | 27 | 57 | 17.5 | NA | 0.0 |
| 582 | 52 | | | | | | | | | | | |
| 580 | 54 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel. | SS-15 | 53.5-55 | 4/18 | 50 | 50 | >100 | 15.3 | NA | 0.0 |



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS
STRUCTURE NO. 016-6351**

SHEET NO. 175 OF 240 SHEETS

| | | | | |
|--------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 175 |
| CONTRACT NO. 63887 | | | | S41 |



**LOG OF BORING
SB-4B-PSI**
SHEET 4 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (ft) | Blow Count (ASTM D1586) | Moisture Content (%) | Liquid Limit (%) | Plasticity Index (%) | PI/ FID (%) | PI/ FID (%) | REMARKS |
|-----------------------------------|-------|---------|--|---------------------|----------------|----------|-------------------------|----------------------|------------------|----------------------|-------------|-------------|---------|
| | | | | | | | | | | | | | |
| 678 | | | | | | | | | | | | | |
| 670 | 58 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, moist. | SS-16 | 58.5-60 | 11/10 | 49 | >100 | NA | 0.0 | 0.0 | | |
| 674 | 60 | | | | | | | | | | | | |
| 678 | 64 | | (ML) Gray CLAYEY SILT, trace fine gravel, very moist. | SS-17 | 63.5-65 | 15/18 | 41 | >100 | NA | 0.0 | 0.0 | | |
| 682 | 66 | | | | | | | | | | | | |
| 686 | 68 | | (ML) CLAYEY SILT, trace fine to medium gravel, dry. | SS-18 | 69.5-70 | 14/10 | 31 | >100 | NA | 0.0 | 0.0 | | |
| 690 | 70 | | | | | | | | | | | | |
| 694 | 72 | | (SM) Gray, fine to coarse SILTY SAND, trace fine to coarse gravel, well graded, very dense, wet. | SS-19 | 73.5-75 | 10/18 | 48 | >100 | NA | 0.0 | 0.0 | | |
| 698 | 74 | | | | | | | | | | | | |
| End of boring at 75' bgs at 1345. | | | | | | | | | | | | | |



**LOG OF BORING
SB-5B**
SHEET 1 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (ft) | Blow Count (ASTM D1586) | Moisture Content (%) | Liquid Limit (%) | Plasticity Index (%) | PI/ FID (%) | PI/ FID (%) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------------|----------------------|------------------|----------------------|-------------|-------------|---|
| | | | | | | | | | | | | | |
| 622 | | | (ASPHALT). | | | | | | | | | | *Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2166). |
| 630 | 2 | | (CL) Brown SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, stiff, low plasticity, moist. | SS-1 | 2-3.5 | 9/18 | 5 | 12 | 34.7 | NA | 0.0 | 0.0 | |
| 634 | 4 | | | SS-2 | 3.5-5 | 12/18 | 3 | 8 | 18.9 | NA | 0.0 | 0.0 | |
| 638 | 6 | | (ML) Brown CLAYEY SILT, trace fine sand, medium dense, low plasticity, wet. | | | | | | | | | | |
| 642 | 8 | | | SS-3 | 6-7.5 | 15/18 | 5 | 10 | 17.7 | NA | 0.0 | 0.0 | |
| 646 | 10 | | | SS-4 | 8.5-10 | 15/18 | 5 | 17 | 12.2 | NA | 0.0 | 0.0 | |
| 650 | 12 | | No recovery from 11-12.0' bgs. | SS-5 | 11-12.5 | 0/18 | 8 | 12 | 30 | NA | 0.0 | 0.0 | |
| 654 | 14 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, very stiff, low plasticity, moist. | SS-6 | 13.5-15 | 18/18 | 11 | 24 | 17.1 | 3.75 | 0.0 | 0.0 | |
| 658 | | | | | | | | | | | | | |



**LOG OF BORING
SB-5B**
SHEET 2 OF 4

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (ft) | Blow Count (ASTM D1586) | Moisture Content (%) | Liquid Limit (%) | Plasticity Index (%) | PI/ FID (%) | PI/ FID (%) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------------|----------------------|------------------|----------------------|-------------|-------------|---|
| | | | | | | | | | | | | | |
| 618 | 15 | | (CL) Gray SILTY CLAY, medium stiff, high plasticity, trace fine gravel, moist. | SS-7 | 16-17.5 | 4.8/18 | 6 | 21 | 15.0 | 3.5 | 4.9 | 0.0 | 0.0 |
| 622 | 18 | | (ML) Gray CLAYEY SILT, some fine to medium gravel, dry. | SS-8 | 18.5-20 | 18/18 | 31 | 67 | 9.5 | NA | 0.0 | 0.0 | |
| 626 | 20 | | | | | | | | | | | | Setup for pressure testing at 0900. |
| 630 | 22 | | | | | | | | | | | | |
| 634 | 24 | | | | | | | | | | | | Noticed water coming up through auger when drilling down 23-25' bgs. Hit obstruction at 23.5' bgs. Had to pound through to 25' bgs at 1058. |
| 638 | 26 | | | | | | | | | | | | Pressure testing from 25-29' bgs at 1120. Resume drilling at 1100 on 4/22/2013. |
| 642 | 28 | | | | | | | | | | | | |
| 646 | 30 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, wet. | SS-9 | 28.5-30 | 12/18 | 16 | >100 | 14.4 | NA | 0.0 | 0.0 | |
| 650 | 32 | | | | | | | | | | | | |
| 654 | 34 | | (ML) Gray CLAYEY SILT, trace fine gravel, moist. | SS-10 | 33.5-35 | 9/18 | 39 | >100 | NA | 0.0 | 0.0 | 0.0 | |



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS
STRUCTURE NO. 016-6351**

SHEET NO. 176 OF 240 SHEETS

| | | | | |
|---------------------------|------------------------|-------------|------------------|---------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 176 |
| CONTRACT NO. 63887 | | | | S42 |
| ILLINOIS FED. AID PROJECT | | | | |

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**LOG OF BORING
SB-5B**
SHEET 3 OF 4

CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Res (in) | Blow Count per Ft | Penetration Resistance "p" | Moisture Content | Organic Content (%) | PIV (psi) | FI (psi) | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------|----------------------------|------------------|---------------------|-----------|----------|---------|
| 506 | | | | | | | | | | | | | |
| 504 | | | (ML) Gray CLAYEY SILT, trace fine gravel, dry. | SS-11 | 38.5-40 | 18/18 | 27 | 28 | 52 | NA | 0.0 | 0.0 | |
| 502 | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | |
| 504 | | | (ML) Same as above. | SS-12 | 43.5-45 | 18/18 | 17 | 12 | 42 | NA | 0.0 | 0.0 | |
| 502 | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | |
| 504 | | | (ML) Gray CLAYEY SILT, trace fine gravel, moist. | SS-13 | 48.5-50 | 12/18 | 40 | 50 for 3" | >100 | NA | 0.0 | 0.0 | |
| 502 | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | |
| 504 | | | (ML) Gray CLAYEY SILT, trace fine gravel, moist to wet. | SS-14 | 53.5-55 | 18/18 | 35 | 50 for 4" | >100 | NA | 0.0 | 0.0 | |
| 502 | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | |



**LOG OF BORING
SB-5B**
SHEET 4 OF 4

CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Res (in) | Blow Count per Ft | Penetration Resistance "p" | Moisture Content | Organic Content (%) | PIV (psi) | FI (psi) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------|----------------------------|------------------|---------------------|-----------|----------|---------|
| 576 | | | | | | | | | | | | | |
| 574 | | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, dry. | SS-15 | 58.5-60 | 16/18 | 21 | 21 | 46 | NA | 0.0 | 0.0 | |
| 572 | | | | | | | | | | | | | |
| 570 | | | | | | | | | | | | | |
| 574 | | | (ML) Gray CLAYEY SILT, trace fine gravel, moist to wet. | SS-16 | 63.5-65 | 18/18 | 27 | 43 | >100 | NA | 0.0 | 0.0 | |
| 572 | | | | | | | | | | | | | |
| 570 | | | | | | | | | | | | | |
| 574 | | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, dry. | SS-17 | 68.5-70 | 18/18 | 15 | 20 | 56 | NA | 0.0 | 0.0 | |
| 572 | | | | | | | | | | | | | |
| 570 | | | | | | | | | | | | | |
| 574 | | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, dry. | SS-18 | 73.5-75 | 18/18 | 15 | 20 | 56 | NA | 0.0 | 0.0 | |
| 572 | | | | | | | | | | | | | |
| 570 | | | | | | | | | | | | | |
| 574 | | | (ML) Same as above. | | | | | | | | | | |
| 572 | | | | | | | | | | | | | |
| 570 | | | | | | | | | | | | | |

End of boring at 75' bgs at 1335.



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephan.schuh | DESIGNED - RD | REVISED |
| | CHECKED - JG | REVISED |
| PLOT SCALE = None | DRAWN - RJ | REVISED |
| PLOT DATE = 3/21/2014 | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 016-6351

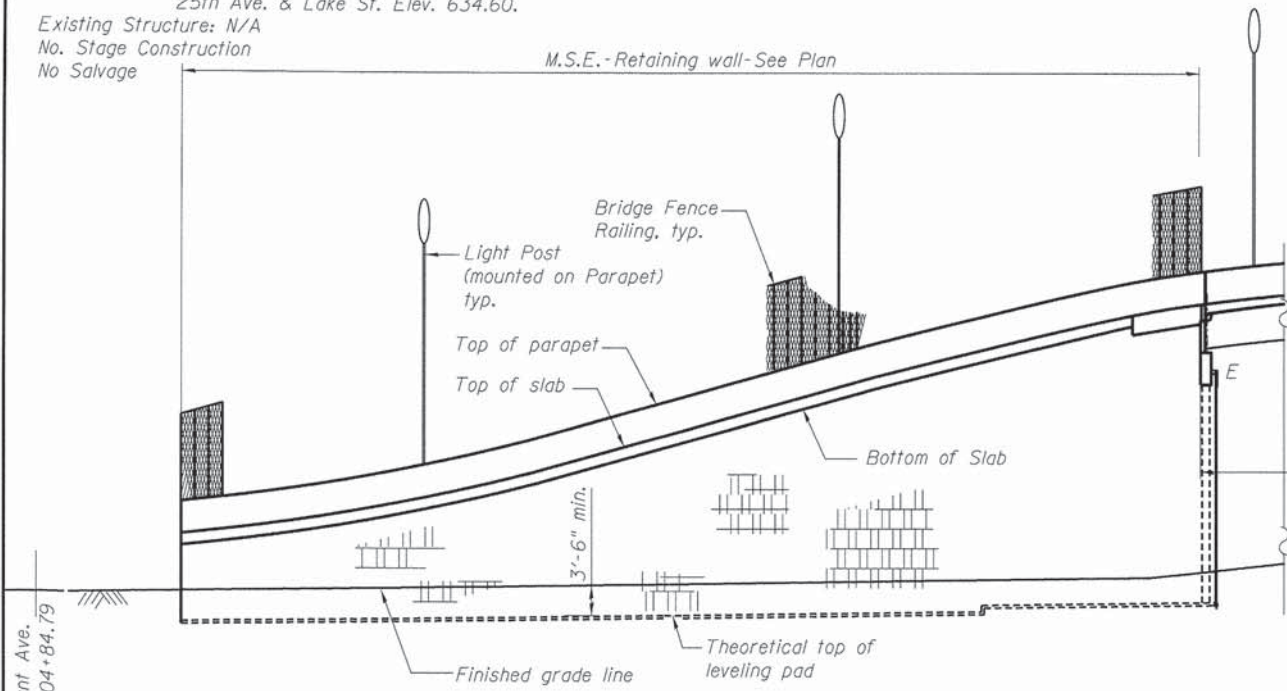
SHEET NO. 177 OF 240 SHEETS

| | | | | |
|--------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 177 |
| CONTRACT NO. 63887 | | | | S43 |

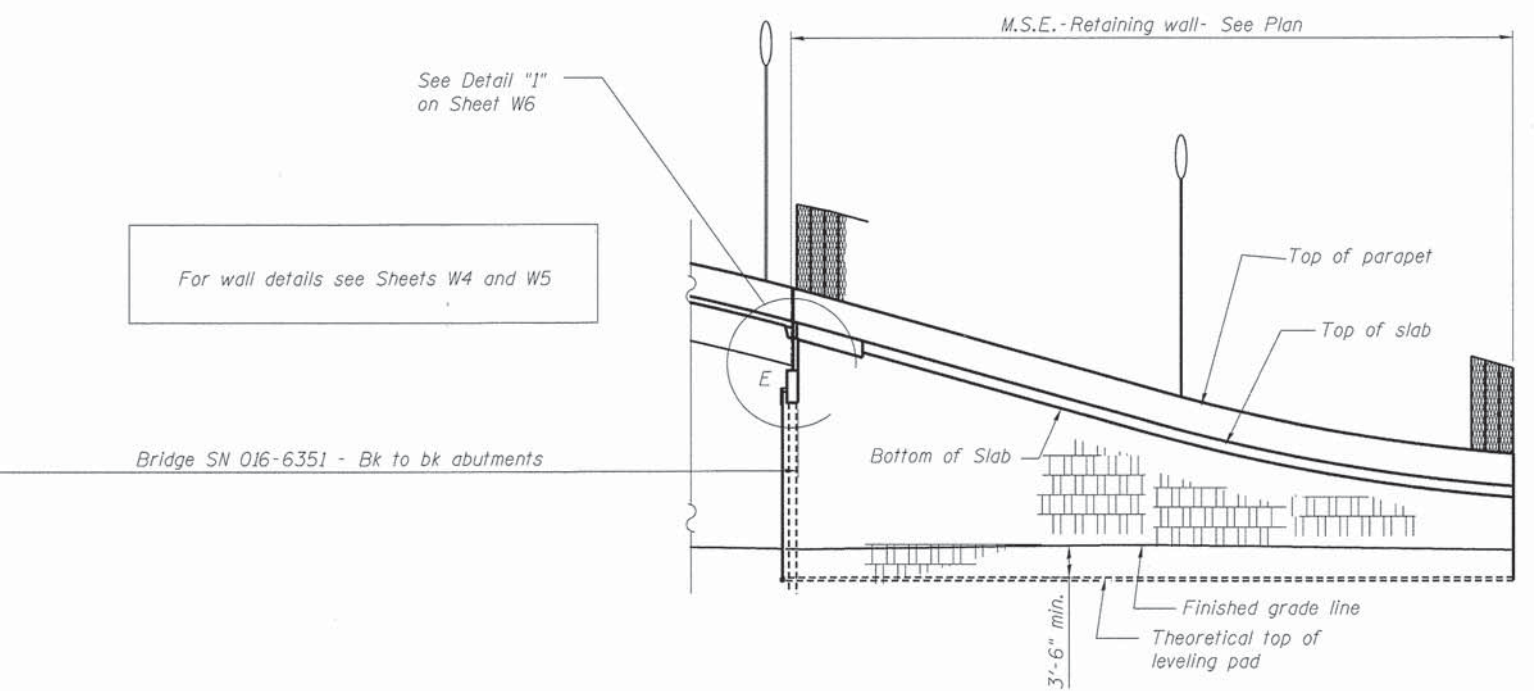
ILLINOIS FED. AID PROJECT

Bench Mark: West Bonnet Bolt on fire hydrant at northeast corner,
25th Ave. & Lake St. Elev. 634.60.

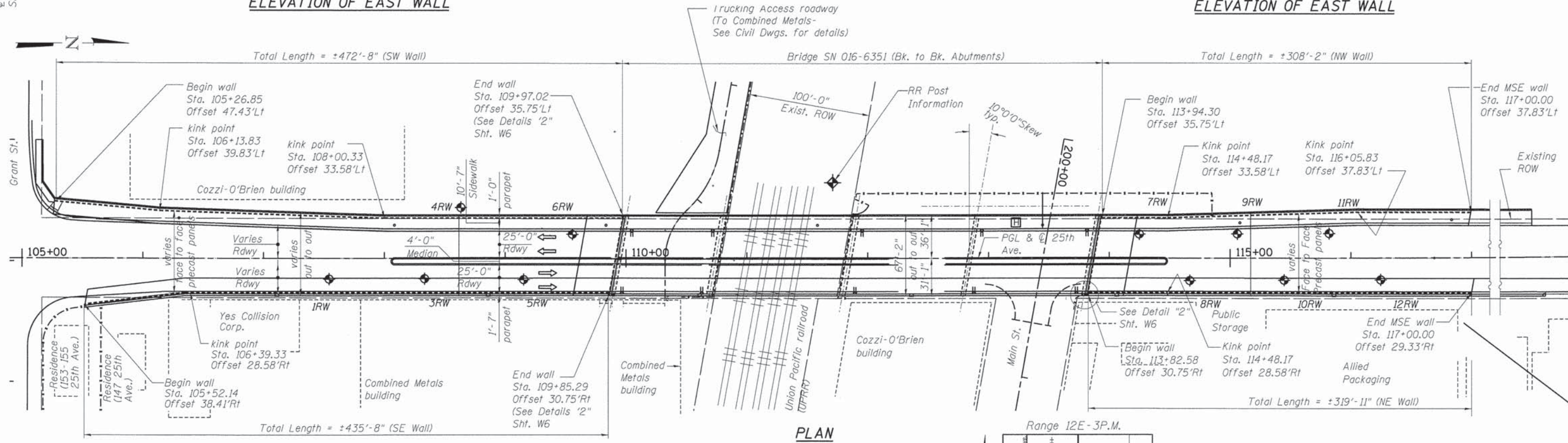
Existing Structure: N/A
No. Stage Construction
No Salvage



ELEVATION OF EAST WALL



ELEVATION OF EAST WALL



PLAN

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

DESIGN STRESSES

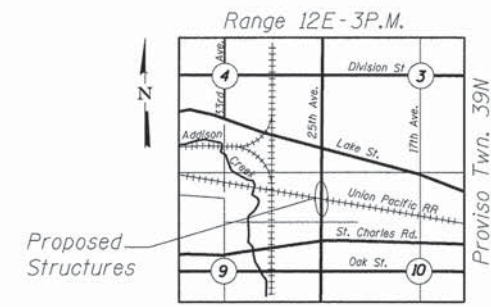
FIELD UNITS
f'c = 4,000 psi
f'c = 4,500 psi (Precast panel)
fy = 60,000 psi (Reinforcement)

HIGHWAY CLASSIFICATION

Funding Rte.: F.A.U. Rte. 2714
Functional Class: Minor Arterial Urban Street
ADT: 19,000 (2012); 20000 (2040)
ADTT: 950 (5%) (2012); 1000 (2040)
DHW: 1,729
Design Speed: 35 m.p.h.
Posted Speed: 30 m.p.h.
2-Way Traffic
Directional Distribution: 50:50

Notes:
Horizontal dimensions, Stations and offsets are measured at the front face of precast panels.

◆ - Indicated Proposed MSE wall boring points from URS Geotechnical Report
5RW (Soil Boring Data)



LOCATION SKETCH

| | | | |
|--|-----------------------------|------------------|---------|
| | USER NAME = robert.esquivel | DESIGNED - RD | REVISED |
| | PLOT SCALE = None | CHECKED - JG | REVISED |
| | PLOT DATE = 4/8/2014 | DRAWN - RJ | REVISED |
| | | DATE - 3-24-2014 | REVISED |

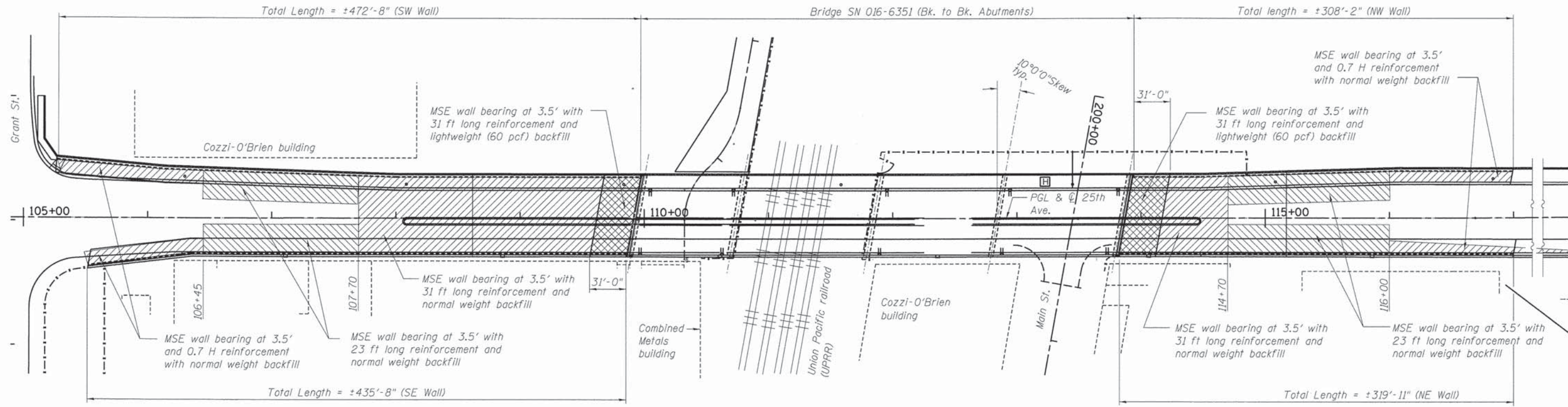
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION
MSE RETAINING WALLS**

SHEET NO. 178 OF 240 SHEETS

| | | | | |
|---------------------------|------------------------|-------------|------------------|---------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 178 |
| CONTRACT NO. 63887 | | | | W1 |
| ILLINOIS FED. AID PROJECT | | | | |

P:\projects\12024\000\SCADD Sheets\MSE Wall-W01-General Plan.dgn 3/5/2014 PM



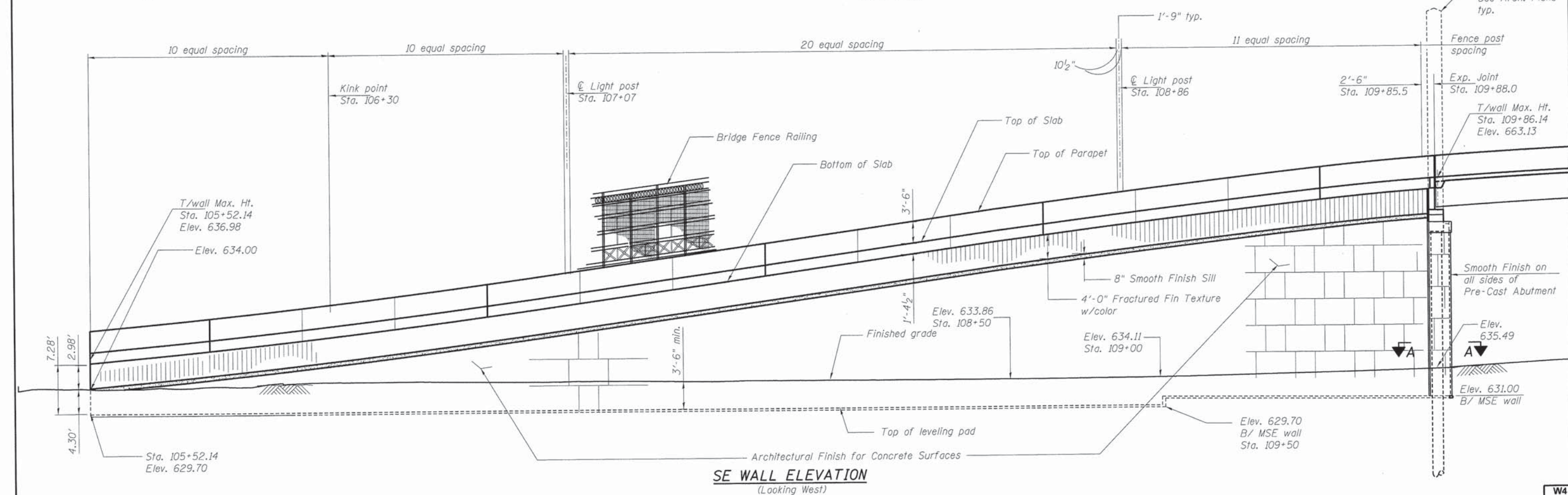
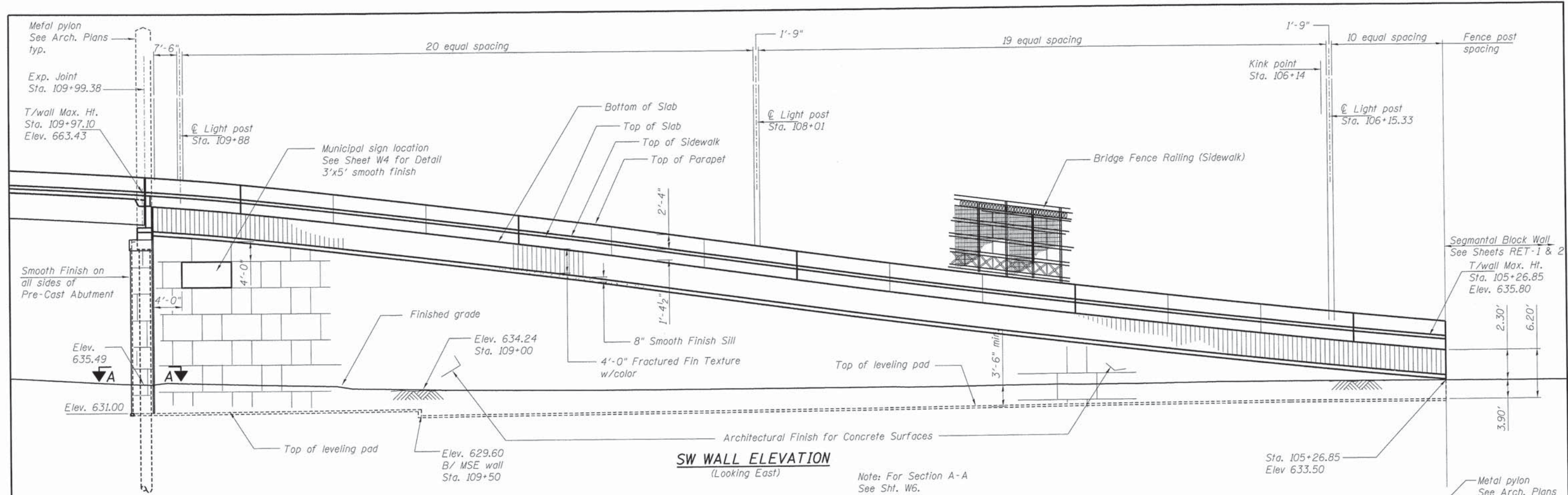
REINFORCED SOIL MASS PLAN

Note:
The above is merely a recommendation, not a design directive, relative to the MSE wall design. The final design is the responsibility of the Contractor, taking into account all conditions as presented in the projects Geotechnical Report, per URS.

The cost of back fill and rebar are included in the per Sq. Ft. cost of the wall.

| | | | | | | | | | | |
|-----------------------------|-----------------------------|---------------|---------------------------|---|--|--------------------|----------------|--------|--------------|-----------|
| | USER NAME = robert.esquivel | DESIGNED - RD | REVISED | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | REINFORCED SOIL MASS PLAN MSE RETAINING WALLS | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLOT SCALE = None | CHECKED - JG | REVISED | | | 2714 | 99-00094-00-GS | COOK | 240 | 180 |
| | PLOT DATE = 4/8/2014 | DRAWN - RJ | REVISED | | | CONTRACT NO. 63887 | | | | |
| | DATE - 3-24-2014 | REVISED | ILLINOIS FED. AID PROJECT | | | | | | | |
| SHEET NO. 180 OF 240 SHEETS | | | | | | W3 | | | | |

P:\projects\12024\000\SS\CADD Sheets\MSE Wall-W03-MSE Fill Plan.dgn 3:55:53 PM



| | | |
|-----------------------------|------------------|---------|
| USER NAME = rober.Lesquivel | DESIGNED - RD | REVISED |
| PLLOT SCALE = None | CHECKED - JG | REVISED |
| PLLOT DATE = 4/8/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

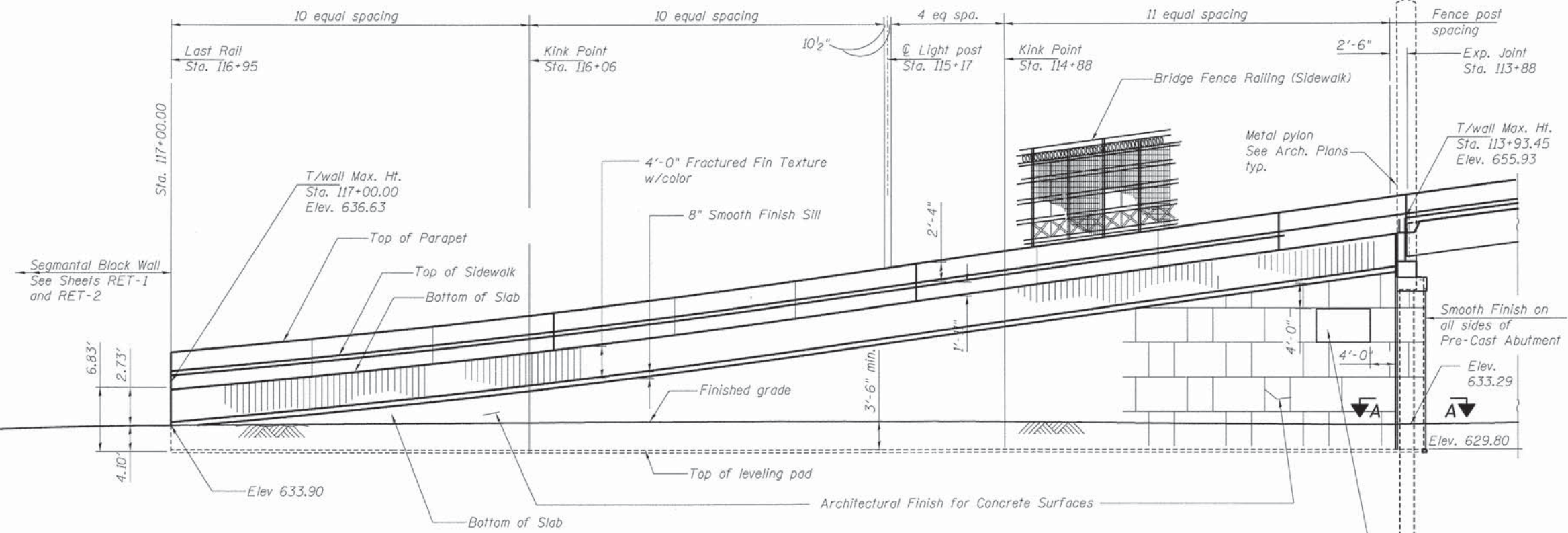
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH WALL ELVATIONS
MSE RETAINING WALLS
SHEET NO. 181 OF 240 SHEETS

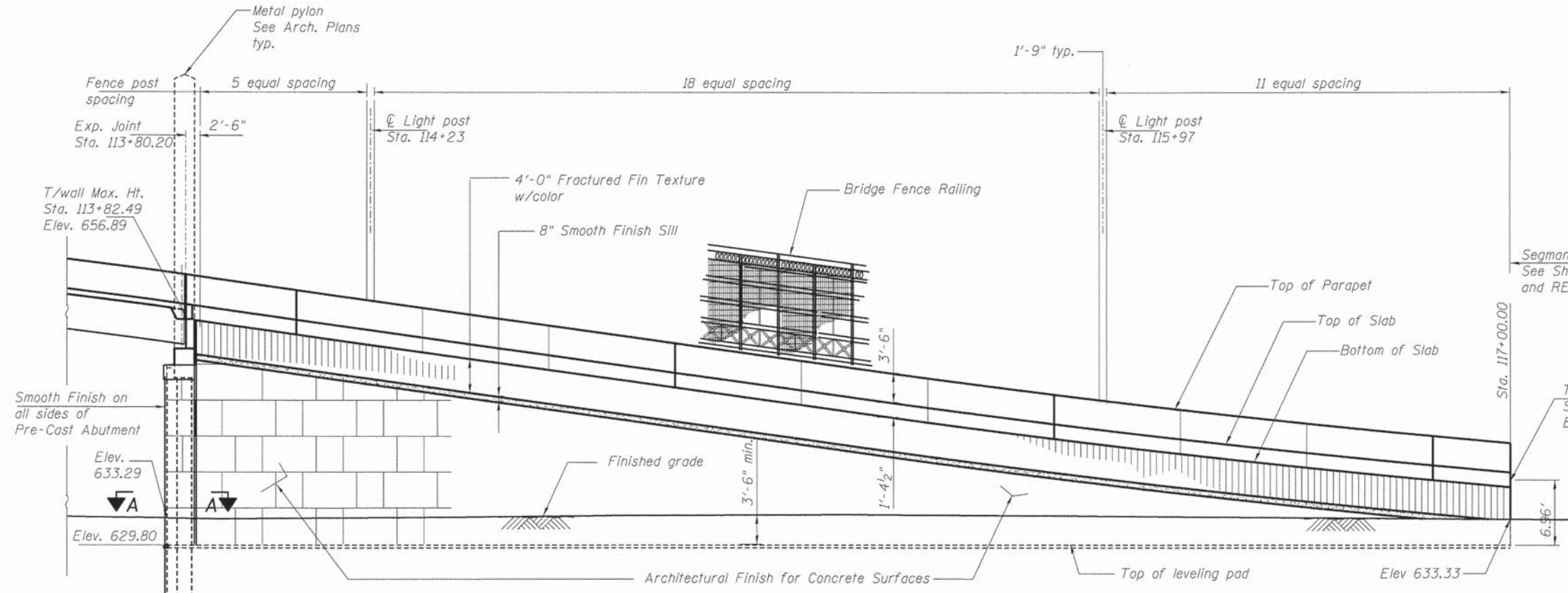
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|---------------------------|------------------------|-------------|------------------|---------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 181 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

P:\projects\12824\200\SCADD Sheets\MSE Wall-W6-South Elev.dgn 3/5/14 PM

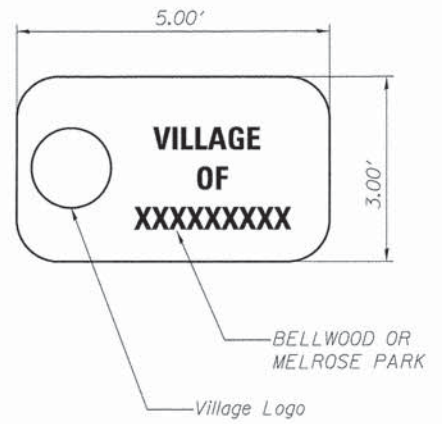
Note: For Section A-A
See Sht. W6.



NW WALL ELEVATION
(Looking East)



NE WALL ELEVATION
(Looking West)



- NOTES:**
1. The Contractor Shall Submit Municipal Sign Shop Drawings for Review. Municipal Sign Shall be Measured and Paid for Per EACH.
 2. Exterior Sign of Cast Aluminum, 3' x 5', at Locations Indicated Anchored to The West Face of The MSE Wall Surface, Total of 2 Municipal Signs.
 3. 1 Sign to Read; Village of Bellwood and Will Include The Village Logo, 1 Sign to Read; Village of Melrose Park and Will Include Village Logo

MUNICIPAL SIGN DETAIL



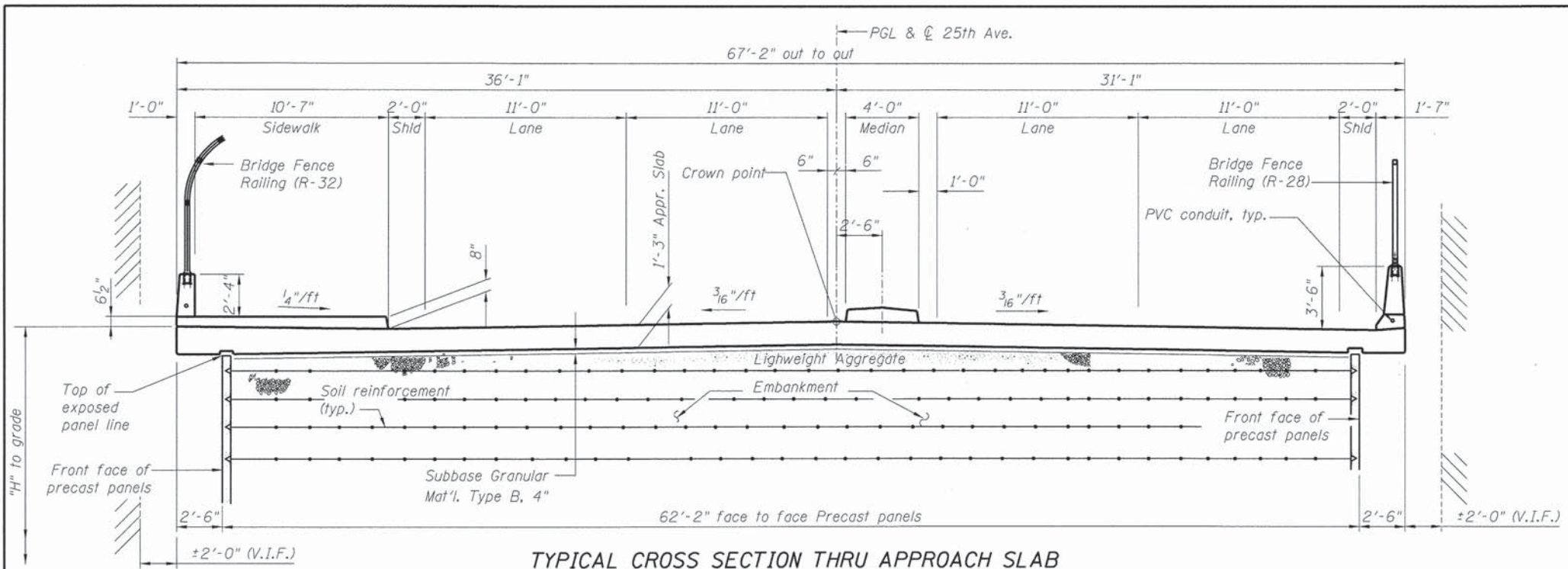
| | | |
|----------------------------|------------------|---------|
| USER NAME = robertesquivel | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 4/8/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

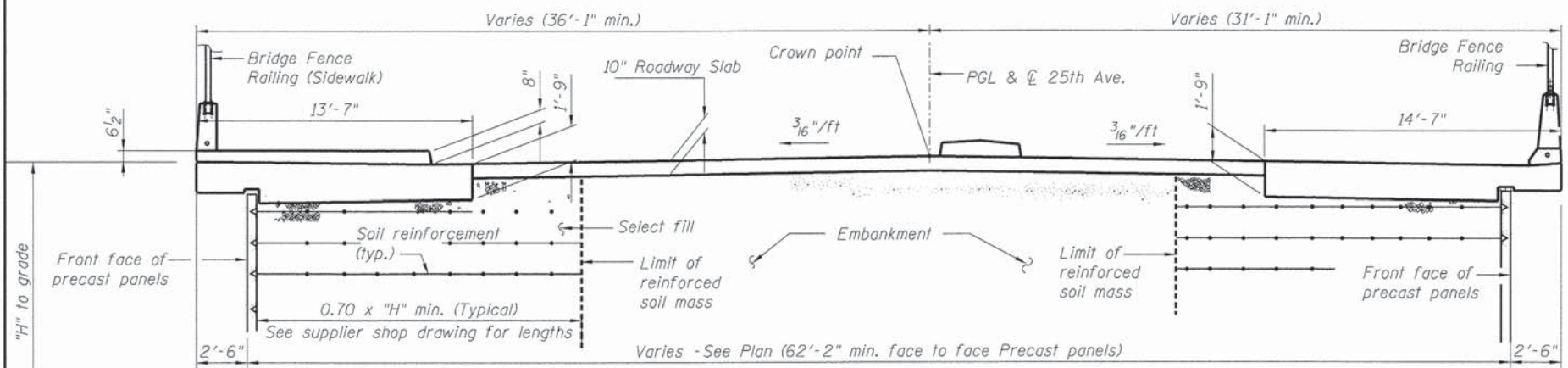
NORTH WALL ELEVATIONS
MSE RETAINING WALLS

SHEET NO. 182 OF 240 SHEETS

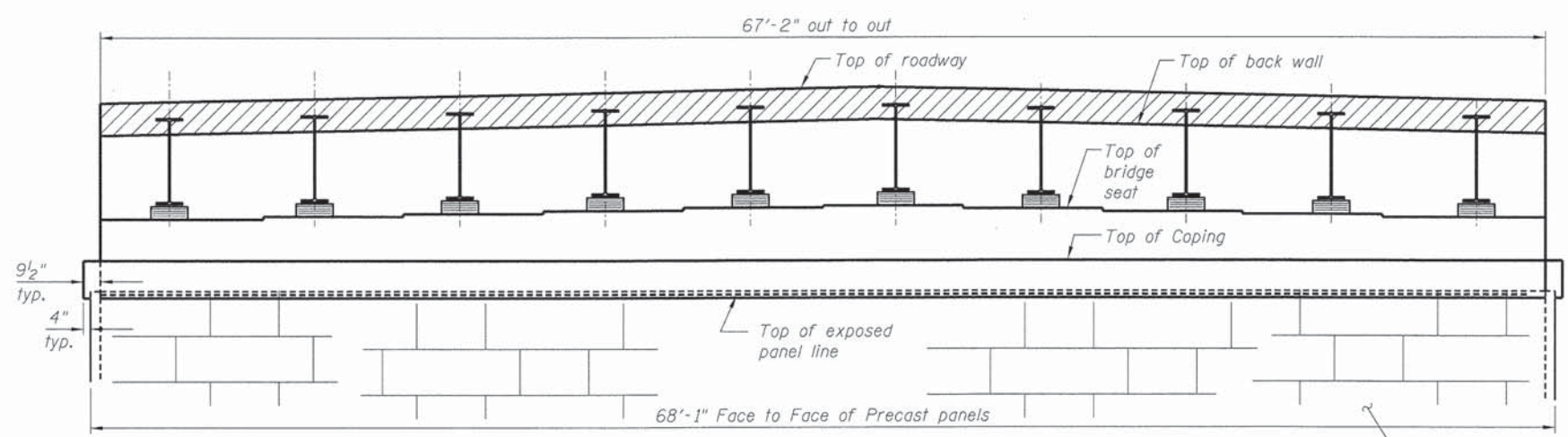
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|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 182 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



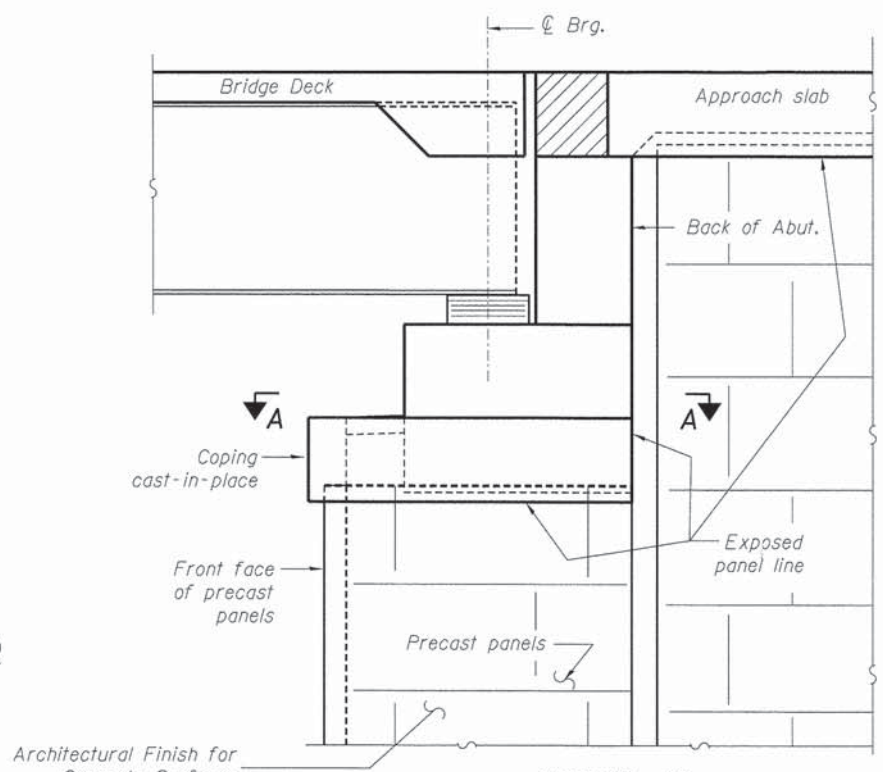
TYPICAL CROSS SECTION THRU APPROACH SLAB
Looking North



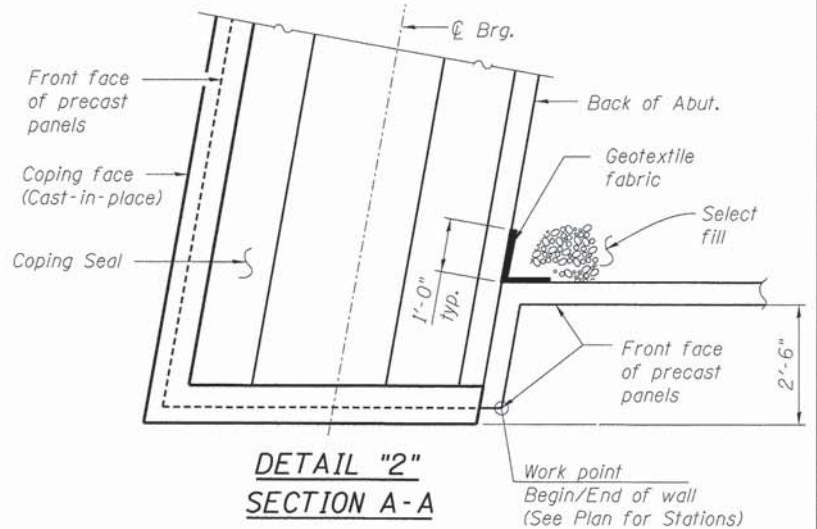
TYPICAL CROSS SECTION THRU ROADWAY
Looking North



ELEVATION AT ABUTMENT - M.S.E. RETAINING WALLS
Looking North - North abutment shown, south abutment similar



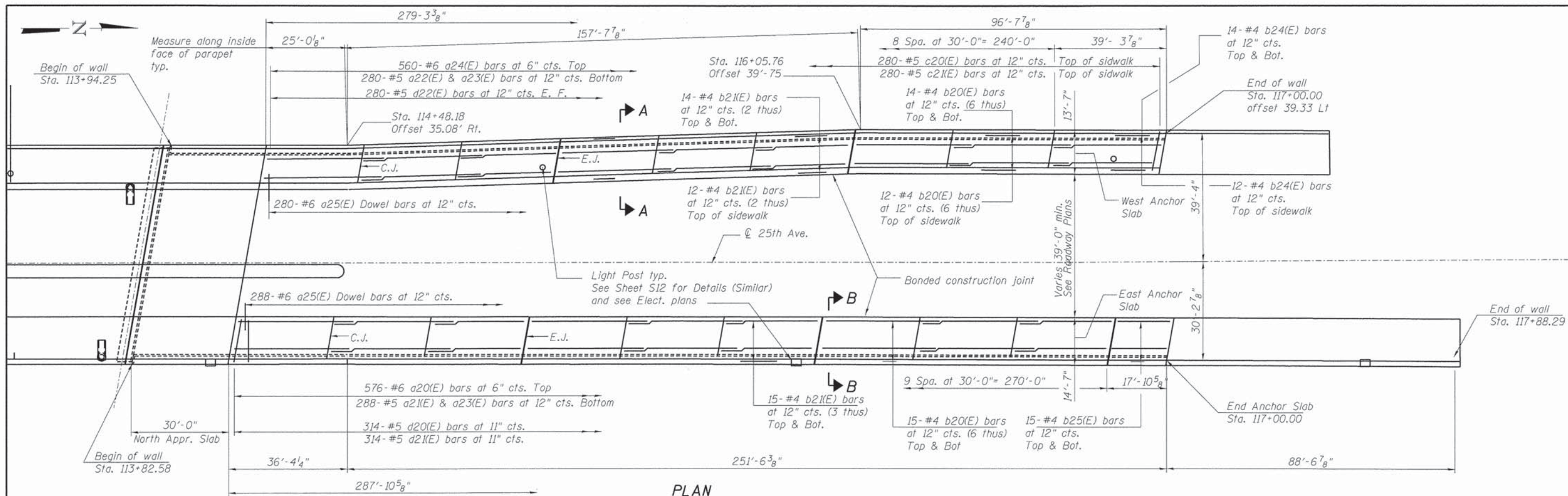
DETAIL "1"
END VIEW AT ABUTMENT



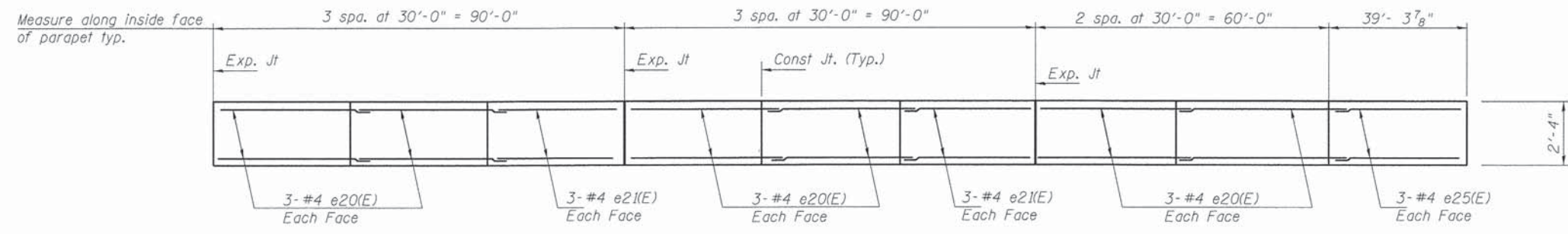
DETAIL "2"
SECTION A-A

Note: Hatched area to be poured after superstructure false work has been removed.

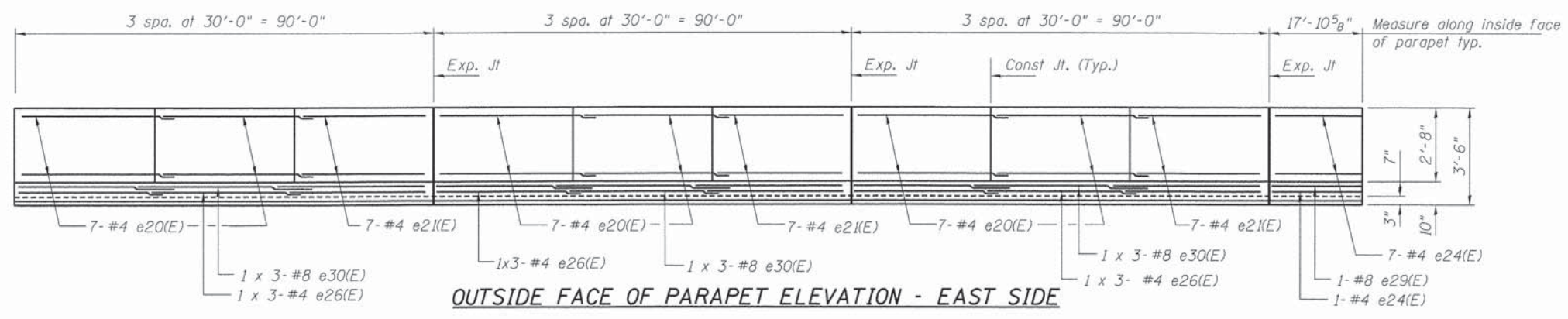
| Item | Unit | Quantity |
|---------------------------------|------|----------|
| Bridge Fence Railing (Sidewalk) | Foot | 778 |
| Bridge Fence Railing | Foot | 753 |



PLAN

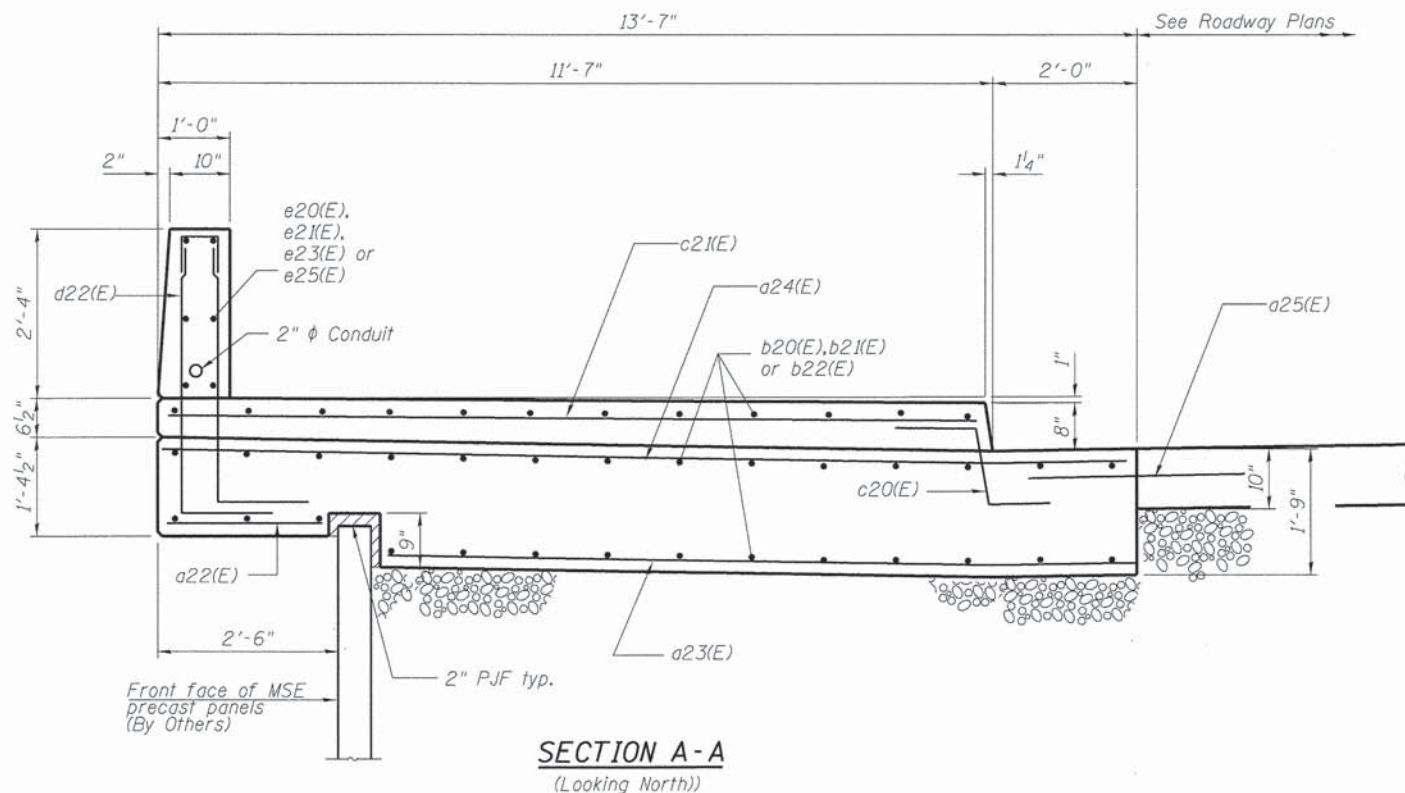


INSIDE FACE OF PARAPET ELEVATION - WEST SIDE

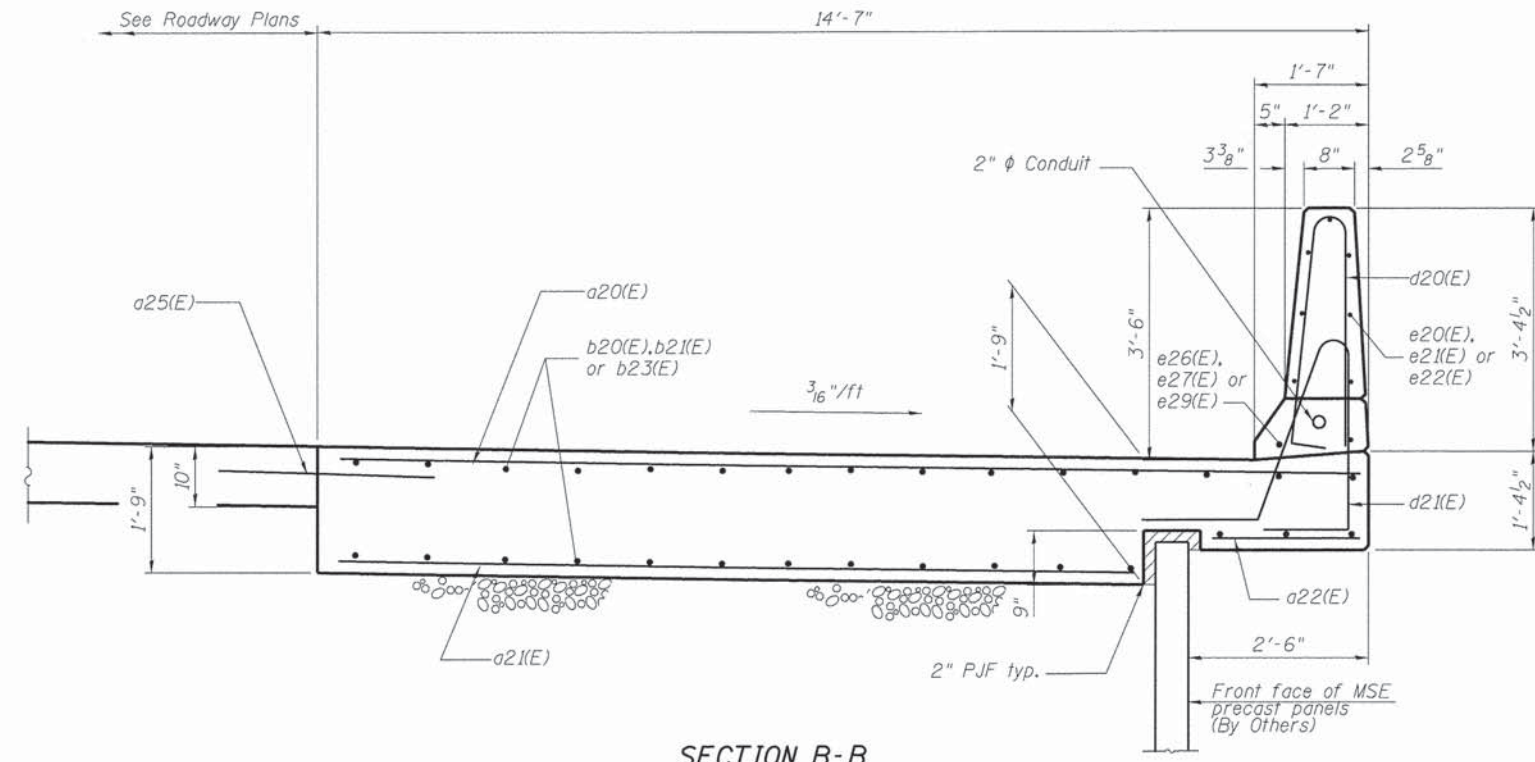


OUTSIDE FACE OF PARAPET ELEVATION - EAST SIDE

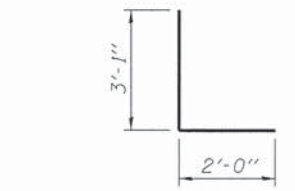
| | | | | | | | | | | | |
|--|--------------------------|---------------|---------------------------|---|---|--------------------|----------------|--------|--------------|-----------|--|
| | USER NAME = stephenschuh | DESIGNED - RD | REVISED | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | NORTH ANCHOR SLAB PLAN AND DETAILS MSE RETAINING WALLS | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| | PLLOT SCALE = None | CHECKED - JG | REVISED | | | 2714 | 99-00094-00-GS | COOK | 240 | 185 | |
| | PLLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED | | | CONTRACT NO. 63887 | | | | | |
| | DATE = 3-24-2014 | REVISED | ILLINOIS FED. AID PROJECT | | | | | | | | |



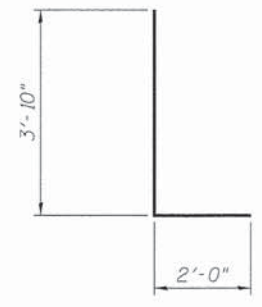
SECTION A-A
(Looking North)



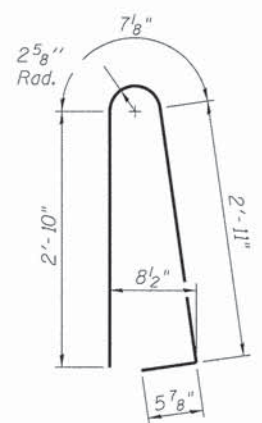
SECTION B-B
(Looking North)



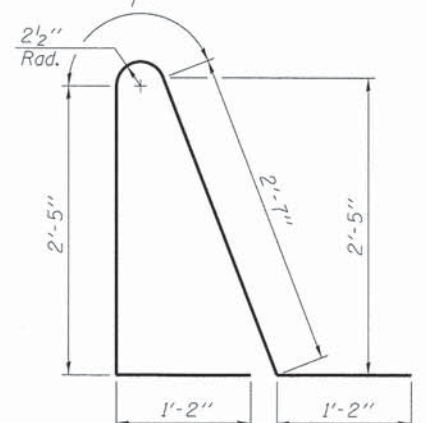
BAR d4(E)



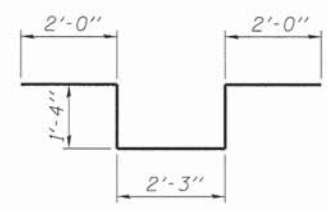
BAR d22(E)



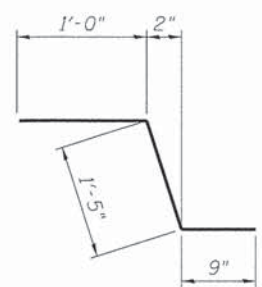
BAR d20(E)



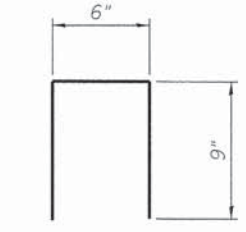
BAR d21(E)



BAR d5(E)



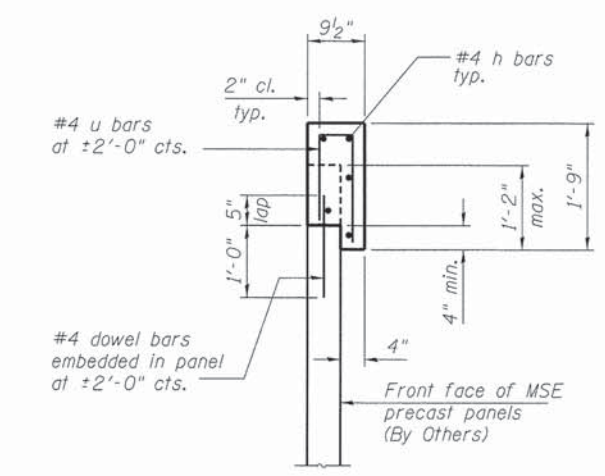
BAR c20(E)



BAR u20(E)

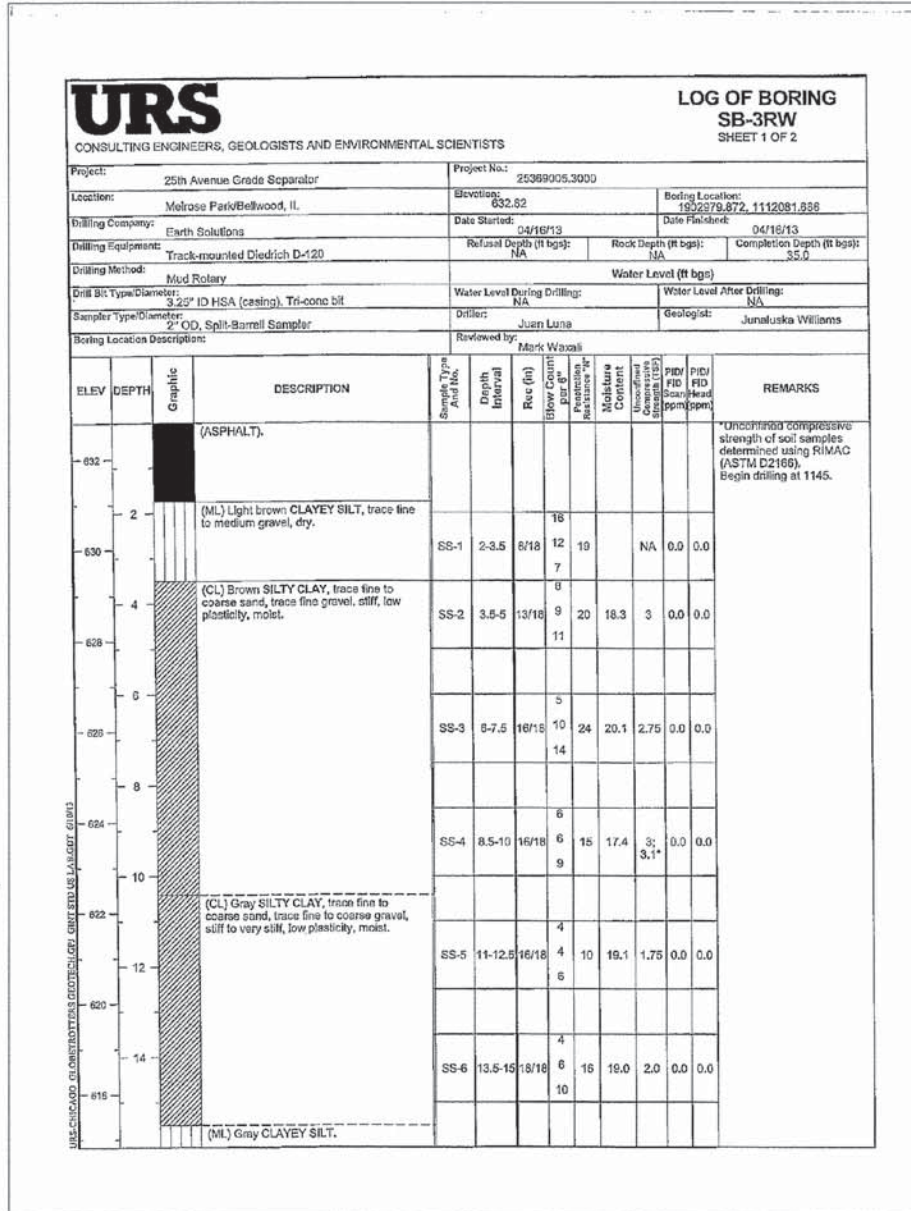
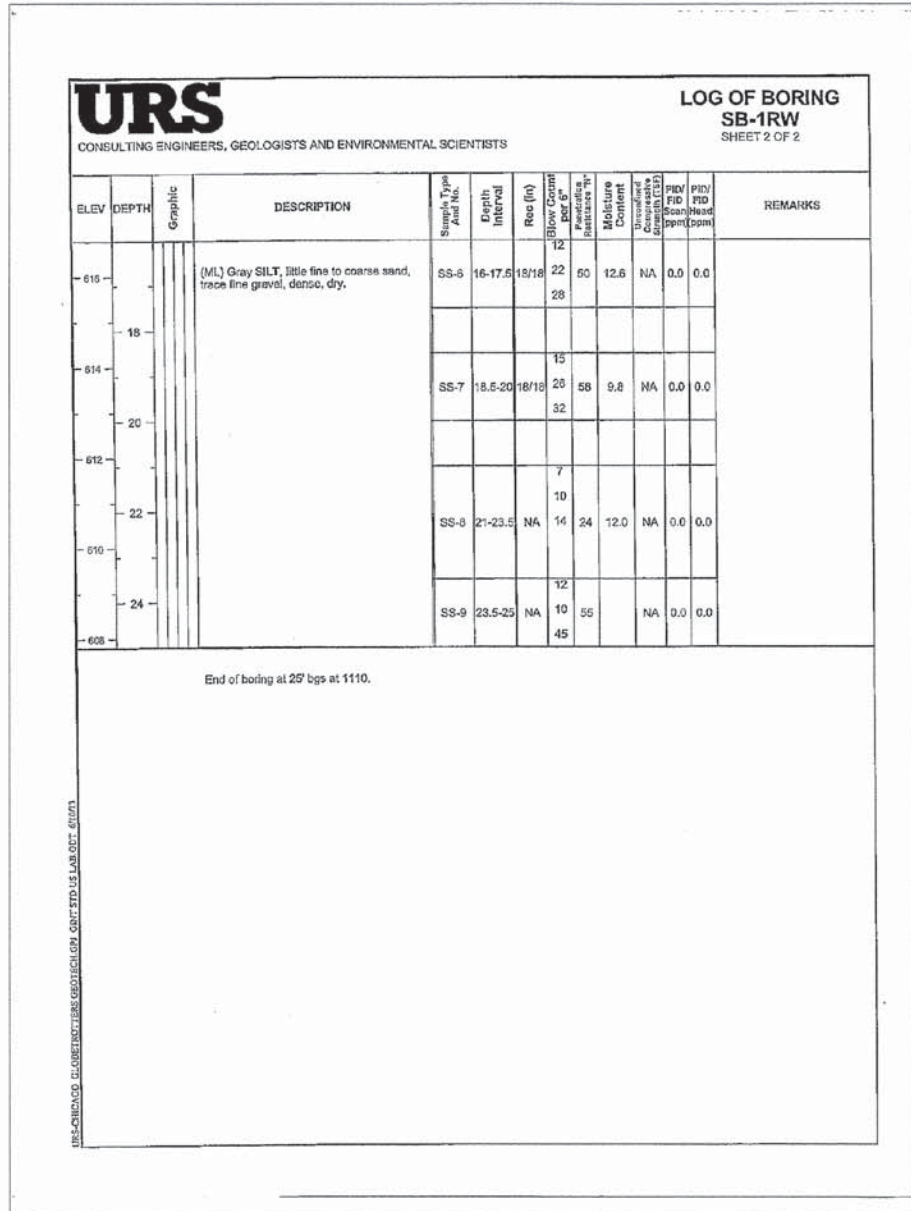
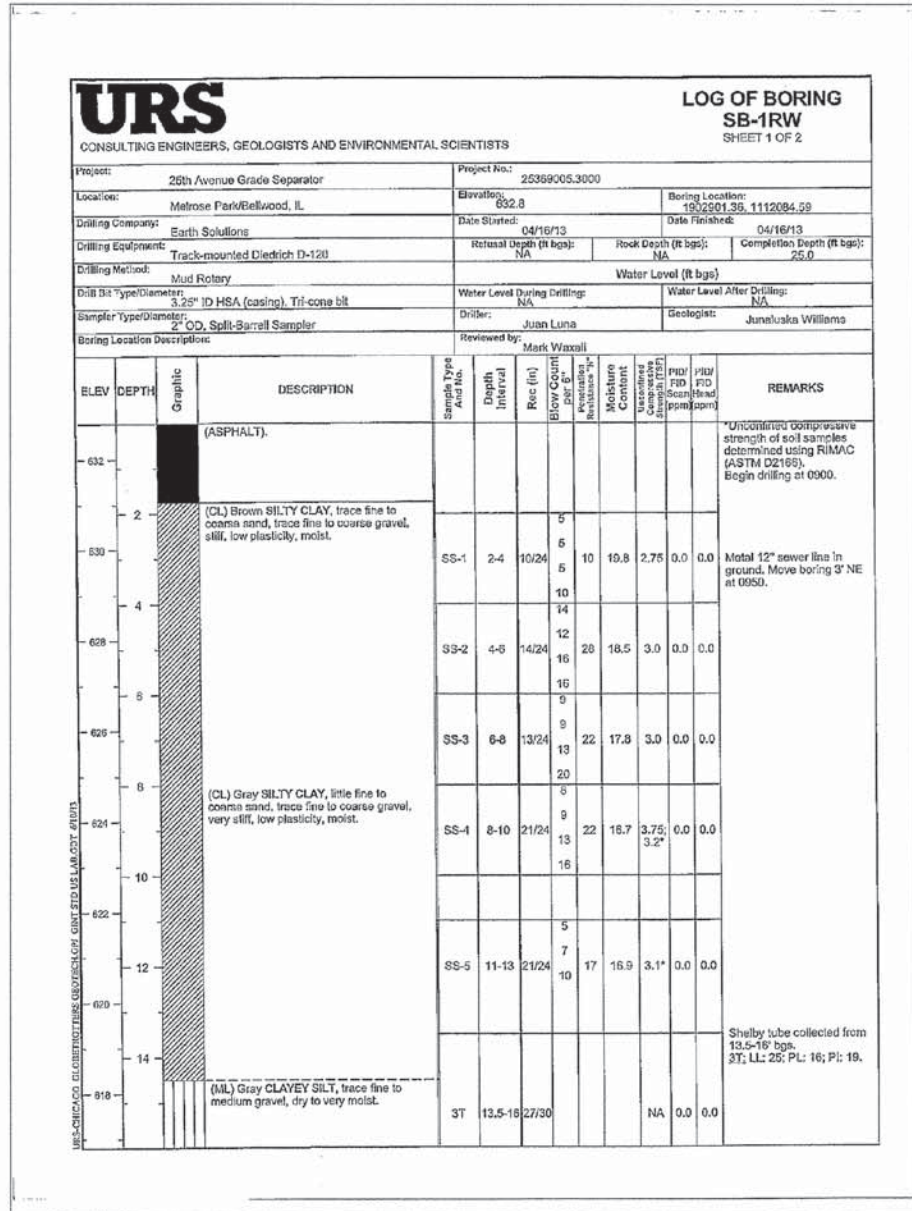
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|--------------------|------|---------|---------|-------|
| a20(E) | 1386 | #6 | 14'-3" | — |
| a21(E) | 694 | #5 | 11'-1" | — |
| a22(E) | 1412 | #5 | 2'-0" | — |
| a23(E) | 718 | #5 | 10'-1" | — |
| a24(E) | 1435 | #6 | 13'-3" | — |
| a25(E) | 1412 | #6 | 3'-0" | — |
| b20(E) | 1090 | #4 | 33'-3" | — |
| b21(E) | 450 | #4 | 29'-8" | — |
| b22(E) | 40 | #4 | 21'-0" | — |
| b23(E) | 30 | #4 | 14'-10" | — |
| b24(E) | 40 | #4 | 36'-3" | — |
| b25(E) | 30 | #4 | 17'-7" | — |
| c20(E) | 718 | #5 | 3'-2" | — |
| c21(E) | 718 | #5 | 11'-2" | — |
| d4(E) | 6 | #6 | 5'-1" | L |
| d5(E) | 10 | #6 | 8'-11" | U |
| d20(E) | 755 | #4 | 6'-10" | U |
| d21(E) | 755 | #4 | 7'-11" | U |
| d22(E) | 1436 | #4 | 5'-10" | U |
| e20(E) | 201 | #4 | 32'-8" | — |
| e21(E) | 85 | #4 | 29'-8" | — |
| e22(E) | 7 | #4 | 14'-10" | — |
| e23(E) | 6 | #4 | 20'-11" | — |
| e24(E) | 8 | #4 | 17'-7" | — |
| e25(E) | 6 | #4 | 39'-0" | — |
| e26(E) | 21 | #4 | 31'-9" | — |
| e27(E) | 2 | #8 | 25'-0" | — |
| e28(E) | 2 | #4 | 23'-10" | — |
| e29(E) | 1 | #8 | 17'-6" | — |
| e30(E) | 14 | #8 | 35'-1" | — |
| Rebar, Epoxy-Coded | | lbs | 151,130 | |
| Conc. Superstruct. | | Cu. Yd. | 1430 | |
| Protection Coat | | Sq. Yd. | 2810 | |



CAST IN PLACE COPING DETAILS

- Notes:
- When transverse joints are required in anchorage slabs, they shall be aligned with joints in parapets and, if possible, adjacent pavement joints.
 - Anchorage slabs shall be cast-in-place for the inset of the 2" P.J.F. and the coping of the MSE Wall.



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS
STRUCTURE NO. 016-6351**

| F.A.U RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 187 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING
SB-3RW
SHEET 2 OF 2

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count (ASTM D1586) | Penetration (ASTM D4849) | Moisture Content (%) | Unconsolidated Compressive Strength (psi) | PI/D (Scan) | PI/D (Head) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------------|--------------------------|----------------------|---|-------------|-------------|---|
| 616 | 18 | | (ML) Gray CLAYEY SILT, trace fine to coarse sand, trace fine gravel, medium dense, low plasticity, moist to dry. | SS-7 | 16-17.5 | 18/18 | 9 15 | 24 | 12.3 | NA | 0.0 | 0.0 | |
| 614 | 20 | | | SS-8 | 18.5-20 | 18/18 | 7 22 | 42 | NA | 0.0 | 0.0 | 0.0 | Stop drilling for lunch at 1255. Resume drilling at 1317. |
| 610 | 24 | | | SS-9 | 23.5-25 | 18/18 | 10 21 | 30 | 10.8 | NA | 0.0 | 0.0 | Blind drilled from 25-28.5' bgs. |
| 606 | 30 | | | SS-10 | 28.5-30 | 18/18 | 14 20 | 37 | 14.8 | NA | 0.0 | 0.0 | Blind drilled from 30-33.5' bgs. |
| 602 | 34 | | | SS-11 | 33.5-35 | NA | 13 30 | 25 | 66 | NA | 0.0 | 0.0 | End of boring at 35' bgs at 1250. |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING
SB-4RW-PSI
SHEET 1 OF 3

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count (ASTM D1586) | Penetration (ASTM D4849) | Moisture Content (%) | Unconsolidated Compressive Strength (psi) | PI/D (Scan) | PI/D (Head) | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------------|--------------------------|----------------------|---|-------------|-------------|--|
| 616 | 2 | | (TOPSOIL) (FILL) Dark brown CLAY AND GRAVEL | SS-1 | 0-2 | 24/24 | 5 7 | 11 | 3.75 | 0.0 | 0.0 | 0.0 | Unconsolidated compressive strength of soil samples determined using RIMAC (ASTM D2165). Begin drilling at 1250. |
| 612 | 4 | | (CL) Brown CLAY, stiff, trace organics, trace fine to medium gravel, light gray mottling, moist. | SS-2 | 2-4 | 12/24 | 6 9 | 15 | 18.8 | 3.75 | 0.0 | 0.0 | Collect sample SB-4RW-PSI from 2-4' bgs at 1300. |
| 608 | 6 | | (CL) Brown SILTY CLAY, medium plasticity, stiff to medium stiff, light brown mottling, moist. | SS-3 | 4-6 | 18/24 | 7 11 | 15 | 18.4 | 3.5 | 0.0 | 0.0 | |
| 604 | 8 | | (CL) Brown to gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, very stiff, low plasticity, moist. | SS-4 | 6-8 | 22/24 | 4 7 | 17 | 20.2 | 3.75 | 0.0 | 0.0 | |
| 600 | 10 | | (CL) Brown SILTY CLAY, trace fine to coarse sand, very stiff, low plasticity, moist. | SS-5 | 8-10 | 18/24 | 7 9 | 16 | 17.7 | 3.75 | 0.0 | 0.0 | SS-5; LL: 37; PL: 16; PI: 21. |
| 596 | 12 | | | 3T | 10-12.5 | 20/30 | 3 8 | | 3.5 | 0.0 | 0.0 | 0.0 | |
| 592 | 14 | | | SS-6 | 13.5-15 | 14/18 | 5 8 | 19 | 18.7 | 3.0 | 0.0 | 0.0 | |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING
SB-4RW-PSI
SHEET 2 OF 3

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count (ASTM D1586) | Penetration (ASTM D4849) | Moisture Content (%) | Unconsolidated Compressive Strength (psi) | PI/D (Scan) | PI/D (Head) | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------------|--------------------------|----------------------|---|-------------|-------------|---------------------|
| 616 | 18 | | (CL) Gray SILTY CLAY, high plasticity, medium stiff, trace fine gravel, moist. | SS-7 | 16-17.5 | 12/18 | 7 7 | 14 | 20.6 | 2.6 | 0.0 | 0.0 | |
| 614 | 20 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, dry. | SS-8 | 18.5-20 | 18/18 | 9 18 | 24 | 11.9 | NA | 0.0 | 0.0 | |
| 610 | 22 | | (CL) Gray SILTY CLAY, little fine to coarse sand, trace fine to coarse gravel, very stiff, low plasticity, moist. | SS-9 | 23.5-25 | 18/18 | 6 10 | 18 | 12.7 | NA | 0.0 | 0.0 | |
| 606 | 24 | | | SS-10 | 28.5-30 | 14/18 | 12 13 | 33 | NA | 0.0 | 0.0 | 0.0 | (CL) Same as above. |
| 602 | 32 | | (CL) Gray SILTY CLAY, low plasticity, very stiff, moist. | SS-11 | 33.5-35 | NA | 8 13 | 32 | 18.0 | 4.5 | 0.0 | 0.0 | |
| 598 | 34 | | (CL) Gray SILTY CLAY, low plasticity, very stiff, moist. | | | | 19 | | | | | | |



| | | |
|--------------------------|------------------|---------|
| USER NAME = stephenschuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 016-6351

SHEET NO. 188 OF 240 SHEETS

| F.A.U RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
| 2714 | 99-00094-00-GS | COOK | 240 | 188 |
| CONTRACT NO. 63887 | | | | W11 |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-4RW-PSI SHEET 3 OF 3

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Penetration Resistance (lb/in ²) | Moisture Content (%) | Compressive Strength (lb/in ²) | PI/100 | FI/100 | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------|--|----------------------|--|--------|--------|--|
| 39.0 | 39.0 | | (ML) Gray CLAYEY SILT, trace fine gravel, some fine to coarse sand, low plasticity, dry. | | | | | | | | | | |
| 39.0 | 40.0 | | | SS-12 | 36.5-40.0 | 6/18 | 50 for 4" | >100 | 10.0 | NA | 0.0 | 0.0 | |
| 44.0 | 44.0 | | 0.2' gray rock, dry at 43.0' bgs. (ML) Gray CLAYEY SILT, dry. | SS-13 | 43.5-45.0 | 13/18 | 50 for 4" | >100 | 10.5 | NA | 0.0 | 0.0 | SS-13: Drilled on a piece of coarse gravel at 44' bgs. |
| 58.0 | 58.0 | | (ML) Same as above. | SS-14 | 48.5-50.0 | 8/18 | 50 for 5" | >100 | NA | 0.0 | 0.0 | | |

End of boring at 50' bgs at 1446.



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-5RW SHEET 1 OF 3

| | | | |
|------------------------------|-------------------------------------|------------------------------|--------------------|
| Project: | 25th Avenue Grade Separator | Project No.: | 25389005.3000 |
| Location: | Meirrose Park/Bellwood, IL | Elevation: | 833.38 |
| Drilling Company: | Earth Solutions | Date Started: | 04/16/13 |
| Drilling Equipment: | Track-mounted Dierich D-120 | Date Finished: | 04/16/13 |
| Drilling Method: | Mud Rotary | Retard Depth (ft bgs): | NA |
| Drill Bit Type/Diameter: | 3.25" ID HSA (casing), Tri-cone bit | Rock Depth (ft bgs): | NA |
| Sampler Type/Diameter: | 2" OD, Split-Barrel Sampler | Completion Depth (ft bgs): | 50.0 |
| Boring Location Description: | | Water Level During Drilling: | NA |
| | | Water Level After Drilling: | NA |
| | | Driller: | Juan Luna |
| | | Geologist: | JanaLaska Williams |
| | | Reviewed by: | Mark Wozniak |

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Penetration Resistance (lb/in ²) | Moisture Content (%) | Compressive Strength (lb/in ²) | PI/100 | FI/100 | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------|--|----------------------|--|--------|--------|--|
| 1410 | 1410 | | (ASPHALT). | | | | | | | | | | Unclassified compressive strength of soil samples determined using RIMAC (ASTM D2150). Begin drilling at 1410. |
| 1410 | 1410 | | (CL) Greenish gray to light brown mottled SILTY CLAY, trace fine gravel, trace fine to coarse sand, very stiff, medium plasticity, moist. | SS-1 | 2-3.5 | 8/18 | 7 | 14 | 22.0 | 2.0 | 0.0 | 0.0 | |
| 1410 | 1410 | | | SS-2 | 3.5-5 | 8/18 | 7 | 13 | 20.9 | 2.5; 2.8 | 0.0 | 0.0 | |
| 1410 | 1410 | | (CL) Brown SILTY CLAY, trace fine gravel, little fine to coarse sand, very stiff, low plasticity, moist. | SS-3 | 6-7.5 | 18/18 | 12 | 34 | 17.3 | 3.0 | 0.0 | 0.0 | |
| 1410 | 1410 | | (CL) Brown SILTY CLAY, stiff, low plasticity, trace fine gravel, moist. | SS-4 | 8.5-10 | 18/18 | 10 | 21 | 17.0 | 3.5; 4.0 | 0.0 | 0.0 | |
| 1410 | 1410 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine gravel, very stiff, low plasticity, moist. | SS-5 | 11-12.5 | 15/18 | 5 | 11 | 19.7 | 2.0 | 0.0 | 0.0 | SS-5: LL: 35; PL: 18; PI: 19. |
| 1410 | 1410 | | Stiff at 13.5' bgs. | SS-6 | 13.5-15 | 17/18 | 3 | 8 | 19.5 | 1.5 | 0.0 | 0.0 | |
| 1410 | 1410 | | (CH) Brown to olive gray CLAY. | | | | | | | | | | |



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-5RW SHEET 2 OF 3

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Penetration Resistance (lb/in ²) | Moisture Content (%) | Compressive Strength (lb/in ²) | PI/100 | FI/100 | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------|--|----------------------|--|--------|--------|---------|
| 1410 | 1410 | | (CH) Brown to olive gray CLAY, soft, high plasticity, trace fine gravel, 2" seam of fine sand at 18.5-18.7' bgs. | SS-7 | 15-17.5 | 18/18 | 7 | 21 | 13.8 | 2.0; 2.7 | 0.0 | 0.0 | |
| 1410 | 1410 | | (ML) Gray CLAYEY SILT, trace fine to coarse sand, trace fine to medium gravel, dense, low plasticity, moist to dry. | SS-8 | 18.5-20 | 16/18 | 13 | 31 | 10.0 | NA | 0.0 | 0.0 | |
| 1410 | 1410 | | (ML) Same as above, trace fine to coarse gravel. | SS-9 | 23.5-25 | 19/18 | 28 | 48 | NA | 0.0 | 0.0 | 0.0 | |
| 1410 | 1410 | | (ML) Higher clay content at 28.5' bgs. | SS-10 | 28.5-30 | 19/18 | 17 | 39 | 11.6 | NA | 0.0 | 0.0 | |
| 1410 | 1410 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, hard, low plasticity, moist. | SS-11 | 33.5-35 | 16/18 | 14 | 35 | 4.0 | 0.0 | 0.0 | 0.0 | |



USER NAME = stephen.schuh
DESIGNED - RD
CHECKED - JG
DRAWN - RJ
DATE - 3-24-2014

REVISIONS
REVISED
REVISED
REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 016-6351

SHEET NO. 189 OF 240 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 189 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

W12



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-5RW SHEET 3 OF 3

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count per 5' | Penetration Resistance % | Moisture Content % | Liquid Limit % | Plasticity Index % | PID/ FID Scan/Head (ppm) | PID/ FID Scan/Head (ppm) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------|--------------------------|--------------------|----------------|--------------------|--------------------------|--------------------------|---------|
| 595 | 38 | | (ML) Gray CLAYEY SILT, trace fine to coarse sand, trace fine to coarse gravel, very dense, low plasticity, moist to dry. | | | | | | | | | | | |
| 594 | 40 | | | SS-12 | 38.5-40 | 0'18" | 80 for 5' | >100 | 14.4 | NA | 0.0 | 0.0 | | |
| 592 | 42 | | | | | | | | | | | | | |
| 590 | 44 | | (ML) Gray CLAYEY SILT, piece of rock in spoon. | SS-13 | 43.5-45 | 2'18" | 35 | | 78 | NA | 0.0 | 0.0 | | |
| 588 | 46 | | | | | | | | | | | | | |
| 586 | 48 | | (ML) Gray CLAYEY SILT, trace fine to coarse gravel, dry. | SS-14 | 48.5-50 | 1'11" | 50 for 9' | >100 | 14.1 | NA | 0.0 | 0.0 | | |

End of boring at 50' bgs at 1625.

USE CHICAGO CLIMATE/TEMPERATURE CORRECTION CHART FOR SOIL TEMPERATURE CORRECTION



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-6RW SHEET 1 OF 2

| | | | |
|------------------------------|-------------------------------------|------------------------------|--------------------|
| Project: | 25th Avenue Grade Separator | Project No.: | 25369005.000 |
| Location: | Melrose Park/Bellwood, IL | Elevation: | 634.52 |
| Drilling Company: | Earth Solutions | Date Started: | 05/08/13 |
| Drilling Equipment: | Track-mounted Dladrich D-120 | Date Finished: | 05/08/13 |
| Drilling Method: | Mud Rotary | Refusal Depth (ft bgs): | NA |
| Drill Bit Type/Diameter: | 3.25" ID HSA (casing), Tri-cone bit | Rock Depth (ft bgs): | NA |
| Sampler Type/Diameter: | 2" ID, Split-Barrel Sampler | Completion Depth (ft bgs): | 28.0 |
| Boring Location Description: | | Water Level During Drilling: | 17 |
| | | Water Level After Drilling: | NA |
| | | Driller: | Juan Luna |
| | | Geologist: | Jana'uska Williams |
| | | Reviewed by: | Mark Waxall |

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count per 5' | Penetration Resistance % | Moisture Content % | Liquid Limit % | Plasticity Index % | PID/ FID Scan/Head (ppm) | PID/ FID Scan/Head (ppm) | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------|--------------------------|--------------------|----------------|--------------------|--------------------------|--------------------------|---|
| 634 | 2 | | (ASPHALT). | | | | | | | | | | | *Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2166). Begin drilling at 0825. |
| 632 | 2 | | (FL) Dark brown SAND, some fine to coarse gravel, dry. | | | | | | | | | | | |
| 630 | 3 | | (CL) Light brown to greenish gray CLAY, soft, low plasticity, dark brown mottling, dry to moist. | SS-1 | 2-3.5 | 4'18" | 3 | | 6 | 3.0 | 0.0 | 0.0 | | |
| 628 | 4 | | (CL) Light brown to light gray SILTY CLAY, trace fine to coarse gravel, brown mottling, medium stiff, high plasticity, moist. | SS-2 | 3.5-5 | 1'11" | 3 | | 5 | 20.1 | 3.0 | 0.0 | 0.0 | |
| 626 | 6 | | (CL) Light brown CLAY, stiff, medium plasticity, trace fine to medium gravel, brown mottling, moist. | SS-3 | 6-7.5 | 12'18" | 7 | | 18 | 17.8 | 4.0 | 0.0 | 0.0 | |
| 624 | 8 | | (CL) Olive gray CLAY, hard, high plasticity, trace fine to medium gravel, brown mottling, moist. | SS-4 | 8.5-10 | 16'18" | 9 | | 20 | 17.0 | 4.5+ | 0.0 | 0.0 | |
| 622 | 11 | | (CL) Olive gray SILTY CLAY, medium stiff, high plasticity, trace fine to medium gravel, moist. | SS-5 | 11-12.5 | 16'18" | 4 | | 11 | 19.2 | 2.5 | 0.0 | 0.0 | |
| 620 | 14 | | (CL) Same as above. | | | | | | | | | | | |
| 618 | 14 | | (ML) Gray CLAYEY SILT, very moist. | SS-6 | 13.5-15 | 18'18" | 4 | | 10 | 18.0 | 2.5 | 0.0 | 0.0 | |
| 616 | 16 | | (CL) Gray SILTY CLAY. | | | | | | | | | | | |

USE CHICAGO CLIMATE/TEMPERATURE CORRECTION CHART FOR SOIL TEMPERATURE CORRECTION



CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

LOG OF BORING SB-6RW SHEET 2 OF 2

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count per 5' | Penetration Resistance % | Moisture Content % | Liquid Limit % | Plasticity Index % | PID/ FID Scan/Head (ppm) | PID/ FID Scan/Head (ppm) | REMARKS |
|------|-------|---------|--|---------------------|----------------|----------|-------------------|--------------------------|--------------------|----------------|--------------------|--------------------------|--------------------------|---------|
| 615 | 17 | | (CL) Gray SILTY CLAY, soft, high plasticity, trace fine to medium gravel, moist. | SS-7 | 16-17.5 | 18'18" | 3 | | 13 | 14.4 | 2.5 | 0.0 | 0.0 | |
| 613 | 18 | | (ML) Gray SANDY, CLAYEY SILT, wet. (ML) Gray CLAYEY SILT, very moist. | | | | | | | | | | | |
| 611 | 19 | | (ML) Gray CLAYEY SILT, trace fine to coarse gravel, dry to moist. | SS-8 | 18.5-20 | 15'18" | 15 | | 31 | 11.2 | NA | 0.0 | 0.0 | |
| 609 | 24 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, moist. | SS-9 | 23.5-25 | 18'18" | 18 | | 26 | 11.5 | NA | 0.0 | 0.0 | |

End of boring at 25' bgs at 1005.

USE CHICAGO CLIMATE/TEMPERATURE CORRECTION CHART FOR SOIL TEMPERATURE CORRECTION



| | | |
|---------------------------|------------------|---------|
| USER NAME = stephen.schuh | DESIGNED - RD | REVISED |
| PLDT SCALE = None | CHECKED - JG | REVISED |
| PLDT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE = 3-24-2014 | REVISED |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 016-6351

SHEET NO. 190 OF 240 SHEETS

| | | | | |
|------------------|------------------------|-------------|------------------|--------------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 190 |
| | | | | CONTRACT NO. 63887 |

ILLINOIS FED. AID PROJECT



LOG OF BORING
SB-7RW-PSI
SHEET 1 OF 3

| | | | |
|------------------------------|-------------------------------------|------------------------------|--------------|
| Project: | 26th Avenue Grade Separator | Project No.: | 2538005.2000 |
| Location: | Melrose Park/Railwood, IL | Borehole: | 032.87 |
| Drilling Company: | Earth Solutions | Date Started: | 04/26/13 |
| Drilling Method: | Track-mounted Dierich D-120 | Date Finished: | 04/26/13 |
| Drill Bit Type/Diameter: | 3.25" ID HSA (casing), Tri-cone bit | Refusal Depth (ft bgs): | NA |
| Sampler Type/Diameter: | 2" OD, Split-Barrel Sampler | Rock Depth (ft bgs): | NA |
| Boring Location Description: | | Completion Depth (ft bgs): | 50.0 |
| Driller: | Juan Luna | Water Level During Drilling: | NA |
| Geologist: | Jana/aska Williams | Water Level After Drilling: | NA |
| Reviewed by: | Mark Waxall | | |

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count Per 6" | Penetration Resistance "N" | Moisture Content (%) | Unconfined Compressive Strength (psi) | PI/ FID (%) | PI/ FID Head (psf) | REMARKS |
|------|---------|---------|---|---------------------|----------------|----------|-------------------|----------------------------|----------------------|---------------------------------------|-------------|--------------------|--|
| 632 | 2 | | (ASPHALT) | | | | | | | | | | Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2156). Begin drilling at 0810. |
| 630 | 2-4 | | (CL) Dark brown SILTY CLAY, high plasticity, medium stiff, trace fine to medium gravel, light brown to light gray mottling. | SS-1 | 2-4 | 11/24 | 6 | 14 | 18.9 | 3.0 | 0.0 | 0.0 | |
| 628 | 4 | | (CL) Brown SILTY CLAY, little fine to coarse sand, trace fine to coarse gravel, very stiff, low plasticity, moist. | SS-2 | 4-6 | 20/24 | 4 | 10 | 20.5 | 2.0 | 0.0 | 0.0 | Collect sample SB-7RW-PSI from 4-6' bgs at 0845. |
| 626 | 6 | | (CL) Brown SILTY CLAY, trace fine to coarse sand, trace fine to medium gravel, hard, low plasticity, moist. | SS-3 | 6-8 | 24/24 | 13 | 17 | 17.6 | 4.0 | 0.0 | 0.0 | |
| 624 | 8-10 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, stiff, low plasticity, moist. | SS-4 | 8-10 | 24/24 | 21 | 35 | 18.4 | 4.0 | 0.0 | 0.0 | |
| 622 | 11-12.5 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, stiff, low plasticity, moist. | SS-5 | 11-12.5 | 15/18 | 8 | 21 | 10.3 | 4.0 | 0.0 | 0.0 | Shelby tube collected from 12.5-16' bgs. ST: LL: S1; PL: 15; PI: 18. |
| 616 | 12.5-15 | | (CL) Gray SILTY CLAY, trace fine to medium gravel, stiff, medium plasticity, moist. | 3T | 12.5-15 | 30/30 | | | 4.0 | 0.0 | 0.0 | 0.0 | |



LOG OF BORING
SB-7RW-PSI
SHEET 2 OF 3

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count Per 6" | Penetration Resistance "N" | Moisture Content (%) | Unconfined Compressive Strength (psi) | PI/ FID (%) | PI/ FID Head (psf) | REMARKS |
|------|---------|---------|---|---------------------|----------------|----------|-------------------|----------------------------|----------------------|---------------------------------------|-------------|--------------------|---------|
| 618 | 16-17.5 | | (CL) Gray SILTY CLAY, high plasticity, medium stiff, trace fine gravel, moist. | SS-6 | 16-17.5 | 17/18 | 7 | 17 | 17.6 | 3.0 | 0.0 | 0.0 | |
| 614 | 18.5-20 | | (SC) Gray, fine POORLY GRADED CLAYEY SAND, dry to moist. | SS-7 | 18.5-20 | 13/16 | 8 | 26 | 10.2 | NA | 0.0 | 0.0 | |
| 612 | 20 | | (ML) Gray CLAYEY SILT. | | | | | | | | | | |
| 610 | 23.5-25 | | (ML) Gray CLAYEY SILT, little fine to coarse sand, trace fine to coarse gravel, very dense, low plasticity, moist to dry. | SS-8 | 23.5-25 | 15/16 | 25 | 60 | 11.4 | NA | 0.0 | 0.0 | |
| 608 | 28.5-30 | | (ML) Gray CLAYEY SILT, little fine to coarse sand, trace fine to coarse gravel, very dense, low plasticity, moist to dry. | SS-9 | 28.5-30 | 18/18 | 30 | 65 | 11.5 | NA | 0.0 | 0.0 | |
| 606 | 33.5-35 | | (ML) Gray CLAYEY SILT, little fine to coarse sand, trace fine to coarse gravel, very dense, low plasticity, moist to dry. | SS-10 | 33.5-35 | 18/16 | 50 for 5' | >100 | 13.7 | NA | 0.0 | 0.0 | |



LOG OF BORING
SB-7RW-PSI
SHEET 3 OF 3

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count Per 6" | Penetration Resistance "N" | Moisture Content (%) | Unconfined Compressive Strength (psi) | PI/ FID (%) | PI/ FID Head (psf) | REMARKS |
|------|-----------------------------------|---------|--|---------------------|----------------|----------|-------------------|----------------------------|----------------------|---------------------------------------|-------------|--------------------|---------|
| 598 | 38.5-40 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, moist. | SS-11 | 38.5-40 | 12/18 | 30 | 50 for 4' | >100 | 8.3 | NA | 0.0 | 0.0 |
| 596 | 43.5-45 | | (ML) Same as above, dry. | SS-12 | 43.5-45 | 14/18 | 33 | 50 for 4' | >100 | 12.1 | NA | 0.0 | 0.0 |
| 594 | 48.5-50 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, dry. | SS-13 | 48.5-50 | NA | 23 | 50 for 6' | >100 | 12.2 | NA | 0.0 | 0.0 |
| 592 | End of boring at 50' bgs at 1035. | | | | | | | | | | | | |



| | | |
|--------------------------|------------------|---------|
| USER NAME = stephenschuh | DESIGNED - RD | REVISED |
| PLOT SCALE = None | CHECKED - JG | REVISED |
| PLOT DATE = 3/21/2014 | DRAWN - RJ | REVISED |
| | DATE - 3-24-2014 | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 016-6351

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 191 |
| CONTRACT NO. 63887 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



LOG OF BORING SB-8RW SHEET 1 OF 3

Project: 25th Avenue Grade Separator Project No.: 25395005.3000
Location: Melrose Park/Bellwood, IL Elevation: 632.06 Boring Location: 1203612-62, 1112061.3
Date Started: 04/19/13 Date Finished: 04/19/13
Drilling Equipment: Earth Solutions Refusal Depth (ft bgs): NA Rock Depth (ft bgs): NA Completion Depth (ft bgs): 50.0
Drilling Method: Track-mounted Dierich D-120 Water Level (ft bgs): NA
Soil Bit Type/Diameter: 3.25" ID HSA (casing), Tri-cone bit Water Level During Drilling: NA Water Level After Drilling: NA
Sampler Type/Diameter: 2" OD Split-Barrel Sampler Driller: Juan Luna Geologist: Juna'ska Williams

Table with columns: ELEV, DEPTH, Graphic, DESCRIPTION, Sample Type And No., Depth Interval, Rec (ft), Blow Count (ASTM D1586), Moisture Content, Unconfined Compressive Strength (psi), P100/FID Scan Head (ppm), P200/FID Scan Head (ppm), REMARKS. Includes soil descriptions like (CL) Greenish gray to light brown SILTY CLAY and (ML) Light brown CLAYEY SILT.



LOG OF BORING SB-8RW SHEET 2 OF 3

Table with columns: ELEV, DEPTH, Graphic, DESCRIPTION, Sample Type And No., Depth Interval, Rec (ft), Blow Count (ASTM D1586), Moisture Content, Unconfined Compressive Strength (psi), P100/FID Scan Head (ppm), P200/FID Scan Head (ppm), REMARKS. Includes soil descriptions like (CL) Gray SILTY CLAY and (ML) Gray CLAYEY SILT.



LOG OF BORING SB-8RW SHEET 3 OF 3

Table with columns: ELEV, DEPTH, Graphic, DESCRIPTION, Sample Type And No., Depth Interval, Rec (ft), Blow Count (ASTM D1586), Moisture Content, Unconfined Compressive Strength (psi), P100/FID Scan Head (ppm), P200/FID Scan Head (ppm), REMARKS. Includes soil descriptions like (ML) Gray SILT and (ML) Same as above.



USER NAME = stephan.schuh DESIGNED - RD REVISIONS: CHECKED - JG, DRAWN - RJ, DATE - 3-24-2014

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 016-6351

SHEET NO. 192 OF 240 SHEETS

Table with columns: F.A.U. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO. Includes values: 2714, 99-00094-00-GS, COOK, 240, 192, 63887

W15

ILLINOIS FED. AID PROJECT



LOG OF BORING SB-9RW SHEET 1 OF 2

Project: 25th Avenue Grade Separator, Project No.: 25369005.3000, Location: Melrose Park/Bellwood, IL, Elevation: 633.25, Boring Location: 1903650.62, 1112022.25, Date Started: 04/24/13, Date Finished: 04/24/13, Refusal Depth (ft bgs): NA, Rock Depth (ft bgs): NA, Completion Depth (ft bgs): 30.0, Drilling Method: Mud Rotary, Water Level (ft bgs): NA, Drilling Equipment: Track-mounted Dietrich D-120, Drill Bit Type/Diameter: 3.25" ID HSA (casing), Tri-cone bit, Sampler Type/Diameter: 2" OD, Split-Barrel Sampler, Driller: Juan Luna, Geologist: Junoluska Williams

Table with columns: ELEV, DEPTH, Graphic, DESCRIPTION, Sample Type And No., Depth Interval, Rec (in), Blow Count (pcf), Penetration Resistance (psi), Moisture Content (%), Liquid Limit (LL), Plasticity Index (PI), FID (lbm/ft³), FID (lbm/ft³), REMARKS. Includes soil descriptions like (ASPHALT), (CL) Brown, fine to coarse WELL GRADED SAND AND GRAVEL, (CL) Dark brown SILTY CLAY, (CL) Dark brown CLAY, (CL) Brown CLAY, (CL) Gray SILTY CLAY, (CL) Gray SILTY CLAY, (CL) Gray SILTY CLAY, (CL) Gray SILTY CLAY.



LOG OF BORING SB-9RW SHEET 2 OF 2

Table with columns: ELEV, DEPTH, Graphic, DESCRIPTION, Sample Type And No., Depth Interval, Rec (in), Blow Count (pcf), Penetration Resistance (psi), Moisture Content (%), Liquid Limit (LL), Plasticity Index (PI), FID (lbm/ft³), FID (lbm/ft³), REMARKS. Includes soil descriptions like (CL) Gray SILTY CLAY, (ML) Gray CLAYEY SILT, (SM) Gray, fine SILTY SAND.

Table with columns: ELEV, DEPTH, Graphic, DESCRIPTION, Sample Type And No., Depth Interval, Rec (in), Blow Count (pcf), Penetration Resistance (psi), Moisture Content (%), Liquid Limit (LL), Plasticity Index (PI), FID (lbm/ft³), FID (lbm/ft³), REMARKS. Includes soil descriptions like (CL) Gray SILTY CLAY, (ML) Gray CLAYEY SILT, (SM) Gray, fine SILTY SAND, (CL) Brown SILTY CLAY, (ML) Light brown CLAYEY SILT, (ML) CLAYEY SILT, (CL) Gray SILTY CLAY, (CL) Gray SILTY CLAY.



LOG OF BORING SB-10RW SHEET 1 OF 2

Project: 25th Avenue Grade Separator, Project No.: 25369005.3000, Location: Melrose Park/Bellwood, IL, Elevation: 633.22, Boring Location: 1903650.99, 1112058.85, Date Started: 04/22/13, Date Finished: 04/22/13, Refusal Depth (ft bgs): NA, Rock Depth (ft bgs): NA, Completion Depth (ft bgs): 30.0, Drilling Method: Mud Rotary, Water Level (ft bgs): NA, Drilling Equipment: Track-mounted Dietrich D-120, Drill Bit Type/Diameter: 3.25" ID HSA (casing), Tri-cone bit, Sampler Type/Diameter: 2" OD, Split-Barrel Sampler, Driller: Juan Luna, Geologist: Junoluska Williams

Table with columns: ELEV, DEPTH, Graphic, DESCRIPTION, Sample Type And No., Depth Interval, Rec (in), Blow Count (pcf), Penetration Resistance (psi), Moisture Content (%), Liquid Limit (LL), Plasticity Index (PI), FID (lbm/ft³), FID (lbm/ft³), REMARKS. Includes soil descriptions like (ASPHALT), (SC) Dark brown CLAYEY SAND, (CL) Dark brown CLAY, (CL) Gray SILTY CLAY, (CL) Brown CLAY, (CL) Gray SILTY CLAY, (ML) Light brown CLAYEY SILT, (ML) CLAYEY SILT, (CL) Gray SILTY CLAY, (CL) Gray SILTY CLAY, (CL) Gray SILTY CLAY.



Table with columns: USER NAME, DESIGNED, CHECKED, DRAWN, DATE, REVISED. Values: USER NAME = stephen.schuh, DESIGNED = RD, CHECKED = JG, DRAWN = RJ, DATE = 3-24-2014, REVISED = REVISED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 016-6351 SHEET NO. 193 OF 240 SHEETS

Table with columns: F.A.U RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO. Values: F.A.U RTE. = 2714, SECTION = 99-00094-00-GS, COUNTY = COOK, TOTAL SHEETS = 240, SHEET NO. = 193, CONTRACT NO. = 63887



LOG OF BORING SB-10RW SHEET 2 OF 2

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Penetration Resistance (psi) | Moisture Content (%) | Compressive Strength (psi) | PIV (psi) | FIID (psi) | REMARKS |
|-----------------------------------|-------|---------|--|---------------------|----------------|----------|-------------------|------------------------------|----------------------|----------------------------|-----------|------------|---------|
| 616 | 16 | | (CL) Gray SILTY CLAY. | | | | 4 | | | | | | |
| 614 | 18 | | (ML) Gray CLAYEY SILT, trace fine to medium gravel, moist. | SS-6 | 18.5-20 | 18/18 | 9 | 24 | 14.8 | NA | 0.0 | 0.0 | |
| 612 | 20 | | | | | | 15 | | | | | | |
| 610 | 22 | | | | | | 12 | | | | | | |
| 608 | 24 | | (ML) Gray CLAYEY SILT, trace fine gravel, moist. | SS-7 | 23.5-25 | 18/18 | 14 | 31 | 13.2 | NA | 0.0 | 0.0 | |
| 606 | 26 | | | | | | 17 | | | | | | |
| 604 | 28 | | (ML) Gray CLAYEY SILT, moist. | | | | 14 | | | | | | |
| 602 | 30 | | (SP) Gray, fine to medium POORLY GRADED SAND, dry. | SS-8 | 28.5-30 | 18/18 | 22 | 52 | NA | 0.0 | 0.0 | 0.0 | |
| 600 | 32 | | | | | | 30 | | | | | | |
| End of boring at 30' bgs at 1640. | | | | | | | | | | | | | |



LOG OF BORING SB-11RW-PSI SHEET 1 OF 2

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Penetration Resistance (psi) | Moisture Content (%) | Compressive Strength (psi) | PIV (psi) | FIID (psi) | REMARKS |
|------|-------|---------|---|---------------------|----------------|----------|-------------------|------------------------------|----------------------|----------------------------|-----------|------------|--|
| 632 | 2 | | (ASPHALT). | | | | 8 | | | | | | Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2166). Begin drilling at 1300. |
| 630 | 2 | | (CL) Greenish gray to light brown SILTY CLAY, medium stiff, high plasticity, some fine to medium gravel, brown mottling. | SS-1 | 2-4 | 14/24 | 10 | 22 | 19.8 | 3.0 | 0.0 | 0.0 | Collected sample SB-11RW-PSI from 2-4' bgs at 1305. |
| 628 | 4 | | (CL) Brown and gray mottled SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, stiff, low plasticity, moist. | SS-2 | 4-6 | 17/24 | 3 | 7 | 22.4 | 1.0 | 0.0 | 0.0 | |
| 626 | 6 | | (CL) Same as above, moist. | | | | 3 | | | | | | |
| 624 | 6 | | | | | | 3 | | | | | | |
| 622 | 8 | | (CL) Brown SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, stiff, low plasticity, moist. | SS-3 | 6-8 | 24/24 | 4 | 7 | 18.9 | 0.75 | 0.0 | 0.0 | |
| 620 | 8 | | | | | | 5 | | | | | | |
| 618 | 8 | | | | | | 4 | | | | | | |
| 616 | 10 | | (CL) Brown SILTY CLAY, soft, trace fine gravel, moist. | SS-4 | 8-10 | 24/24 | 4 | 10 | 19.6 | 1.0 | 0.0 | 0.0 | |
| 614 | 10 | | | | | | 6 | | | | | | |
| 612 | 10 | | | | | | 4 | | | | | | |
| 610 | 10-12 | | (CL) Brown SILTY CLAY, soft, trace fine gravel, moist. | SS-5 | 10-12 | 24/24 | 10 | 18 | 13.0 | 1.75 | 0.0 | 0.0 | |
| 608 | 12 | | | | | | 10 | | | | | | |
| 606 | 12 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, trace fine to coarse gravel, very stiff, low plasticity, moist. | SS-6 | 12-14 | 21/24 | 4 | 12 | 17.9 | 2.75 | 0.0 | 0.0 | |
| 604 | 14 | | | | | | 8 | | | | | | |
| 602 | 14 | | | | | | 10 | | | | | | |



LOG OF BORING SB-11RW-PSI SHEET 2 OF 2

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type and No. | Depth Interval | Rec (in) | Blow Count per 6" | Penetration Resistance (psi) | Moisture Content (%) | Compressive Strength (psi) | PIV (psi) | FIID (psi) | REMARKS |
|-----------------------------------|-------|---------|--|---------------------|----------------|----------|-------------------|------------------------------|----------------------|----------------------------|-----------|------------|---------|
| 616 | 18 | | (CL) Gray SILTY CLAY, soft, high plasticity, trace fine gravel, moist. | SS-7 | 16-17.5 | 18/18 | 8 | 14 | 17.8 | 1.75 | 0.0 | 0.0 | |
| 614 | 18 | | | | | | 3 | | | | | | |
| 612 | 18 | | (ML) Gray CLAYEY SILT, trace fine sand, medium dense, moist. | | | | 3 | | | | | | |
| 610 | 18-20 | | | SS-9 | 18.5-20 | 18/18 | 4 | 10 | 19.8 | NA | 0.0 | 0.0 | |
| 608 | 20 | | | | | | 6 | | | | | | |
| 606 | 22 | | (ML) Gray CLAYEY SILT, trace fine to coarse sand, dense, dry. | | | | 17 | | | | | | |
| 604 | 24 | | | SS-9 | 23.5-25 | 18/18 | 14 | 41 | 14.2 | NA | 0.0 | 0.0 | |
| 602 | 24 | | | | | | 27 | | | | | | |
| End of boring at 28' bgs at 1350. | | | | | | | | | | | | | |



**LOG OF BORING
SB-12RW
SHEET 1 OF 2**

CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

| | |
|--|---|
| Project: 25th Avenue Grade Separator | Project No.: 25389005.3000 |
| Location: Melrose Park/Bellwood, IL | Elevation: 632.72 |
| Drilling Company: Earth Solutions | Boring Location: 1505771.23, 1112055.22 |
| Drilling Equipment: Track-mounted Dietrich D-129 | Date Started: 04/24/13 |
| Drilling Method: Mud Rotary | Date Finished: 04/24/13 |
| Drill Bit Type/Diameter: 3.25" ID HSA (casing), Tri-cone bit | Refusal Depth (ft bgs): NA |
| Sampler Type/Diameter: 2" OD, Split-Barrel Sampler | Rock Depth (ft bgs): NA |
| Boring Location Description: | Completion Depth (ft bgs): 25.0 |
| | Water Level During Drilling: NA |
| | Water Level After Drilling: NA |
| | Driller: Juan Luna |
| | Geologist: Junaluska Williams |
| | Reviewed by: Mark Waxall |

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count per 6" | Penetration Resistance "N" | Moisture Content | Compressive Strength (psi) | PIV | FI | FI | FI | FI | REMARKS |
|------|---------|---------|--|---------------------|----------------|----------|-------------------|----------------------------|------------------|----------------------------|-----|-----|----|----|----|--|
| 632 | 0 | | (ASPHALT) | | | | | | | | | | | | | |
| 630 | 2 | | (FILL) RED BRICK, dry. | | | | | | | | | | | | | Unconfined compressive strength of soil samples determined using RIMAC (ASTM D2166). Begin drilling at 0925. |
| 630 | 2-3.5 | | (FILL) Dark brown CLAY, low plasticity, stiff, some fine to medium gravel, dry. | SS-1 | 2-3.5 | 12/18 | 8 | 18 | 21.1 | 3.0 | 0.0 | 0.0 | | | | Collect sample SB-12RW from 3-4' bgs at 0935. |
| 628 | 4 | | (FILL) Dark gray, fine CLAYEY SAND, (SC), medium dense, wet. | SS-2 | 3.5-5 | 11/18 | 5 | 10 | NA | 0.0 | 0.0 | | | | | Encountered dark gray, oily soil, odor. |
| 628 | 5 | | (FILL) Brown, fine POORLY GRADED SAND, (SP). | | | | | | | | | | | | | |
| 626 | 6-7.5 | | (FILL) RED BRICK, (FILL) Brown CLAYEY SAND AND GRAVEL, (FILL) Dark gray, fine CLAYEY SAND, (SC). | SS-3 | 6-7.5 | 11/18 | 9 | 18 | NA | 0.0 | 0.0 | | | | | Odor. |
| 624 | 8-5-10 | | (ML) Brown CLAYEY SILT, trace fine to coarse sand, medium dense, low plasticity, moist to wet. | SS-4 | 8.5-10 | 17/18 | 9 | 14 | 24.1 | 3.0 | 0.0 | 0.0 | | | | |
| 622 | 11-12.5 | | (CL) Gray SILTY CLAY, trace fine to coarse sand, stiff, low plasticity, moist. | SS-5 | 11-12.5 | 18/18 | 6 | 16 | 16.9 | 2.0, 2.5 | 0.0 | 0.0 | | | | |
| 620 | 13.5-15 | | (ML) Gray CLAYEY SILT. | SS-6 | 13.5-15 | 16/18 | 10 | 25 | 16.8 | 3.0 | 0.0 | 0.0 | | | | |



**LOG OF BORING
SB-12RW
SHEET 2 OF 2**

CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS

| ELEV | DEPTH | Graphic | DESCRIPTION | Sample Type And No. | Depth Interval | Rec (in) | Blow Count per 6" | Penetration Resistance "N" | Moisture Content | Compressive Strength (psi) | PIV | FI | FI | FI | FI | REMARKS |
|------|---------|---------|---|---------------------|----------------|----------|-------------------|----------------------------|------------------|----------------------------|-----|-----|-----|----|----|---------|
| 616 | 16-17.5 | | (ML) Gray CLAYEY SILT, trace fine to coarse sand, medium dense, low plasticity, moist. | SS-7 | 16-17.5 | 16/18 | 6 | 16 | 14.9 | NA | 0.0 | 0.0 | | | | |
| 614 | 18-20 | | (CL) Gray SILTY CLAY, little fine to coarse sand, trace fine gravel, very stiff, low plasticity, moist. | SS-8 | 18-20 | 14/18 | 5 | 7 | 18 | 13.3 | 3.0 | 0.0 | 0.0 | | | |
| 612 | 20-24 | | (CL) Same as above. | | | | | | | | | | | | | |
| 608 | 23.5-25 | | | SS-9 | 23.5-25 | 17/18 | 18 | 38 | 14.0 | 3.0, 2.9 | 0.0 | 0.0 | | | | |

End of boring at 25' bgs at 1030.



USER NAME = stephen.schuh
 PLOT SCALE = None
 PLOT DATE = 3/21/2014

DESIGNED - RD
 CHECKED - JG
 DRAWN - RJ
 DATE - 3-24-2014

REVISED
 REVISED
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

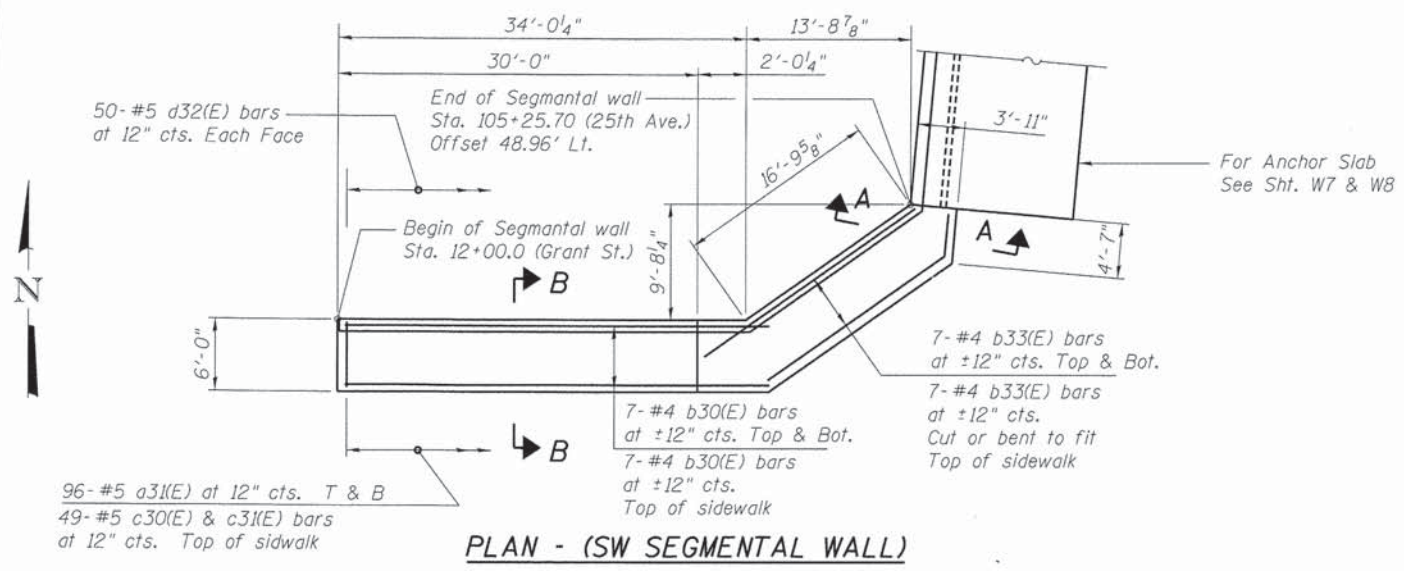
SOIL BORING LOGS
 STRUCTURE NO. 016-6351

SHEET NO. 195 OF 240 SHEETS

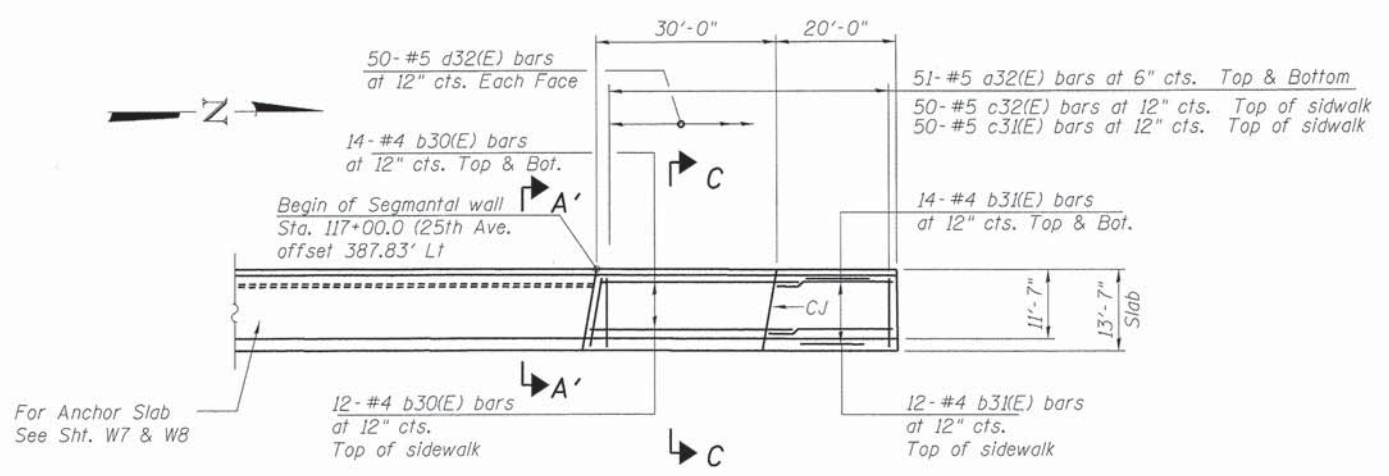
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|--------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 195 |
| CONTRACT NO. 63887 | | | | |

ILLINOIS FED. AID PROJECT

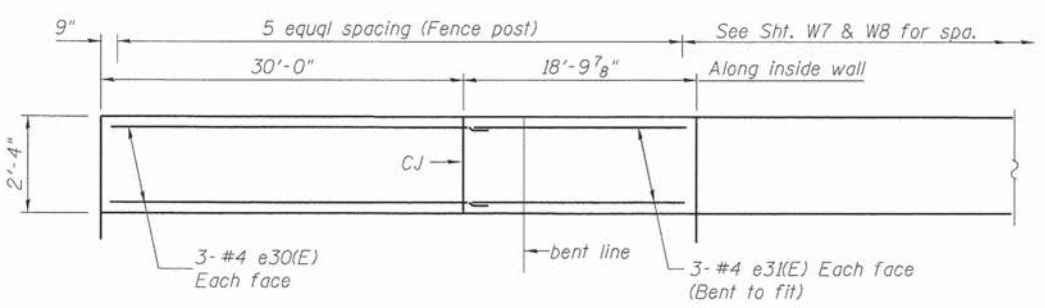
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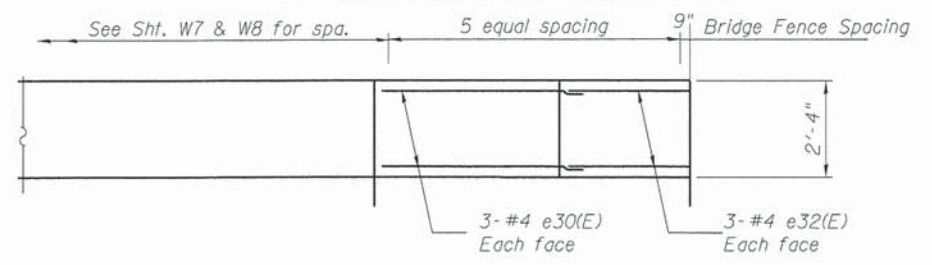
PLAN - (SW SEGMENTAL WALL)



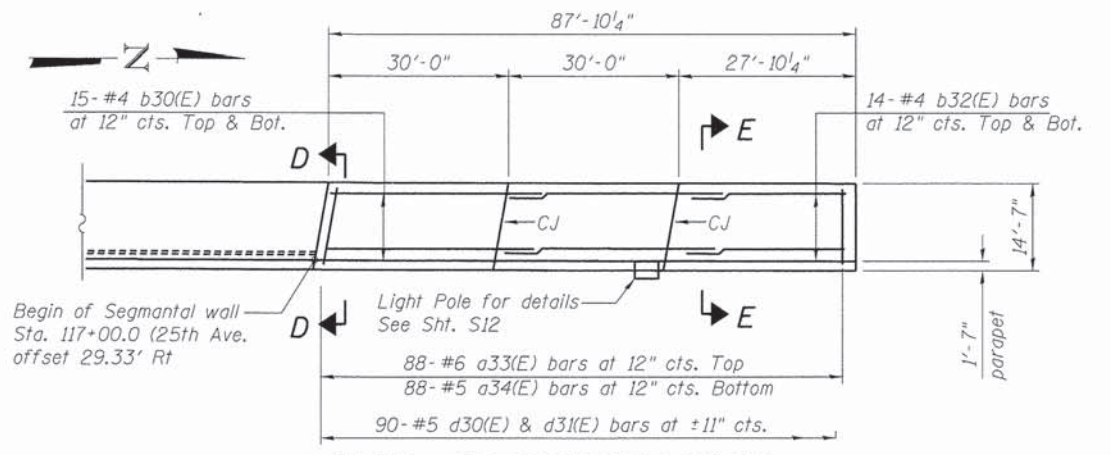
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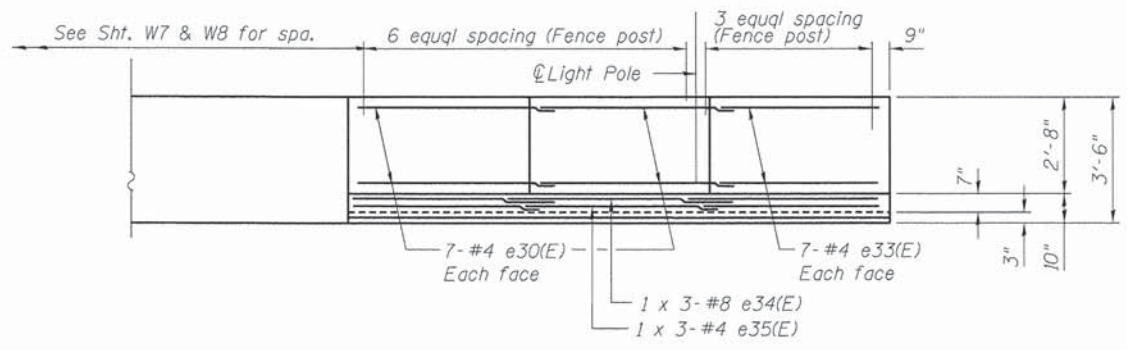
ELEVATION - (SW SEGMENTAL WALL)



ELEVATION - (NW SEGMENTAL WALL)



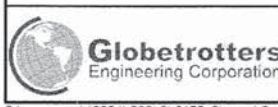
PLAN - (NE SEGMENTAL WALL)



ELEVATION - (NE SEGMENTAL WALL)

TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|--|---------|-------|
| Segmental Wall | Sq. Ft. | 358 |
| Conc. Super Struct. (Appr. Overhang) | Cu. Yd. | 111 |
| Protective Coat | Sq. Yd. | 592 |
| Reinf. Bar, Epoxy-Ctd (Appr. Overhang) | Pound | 15204 |
| Bridge Fence Railing (Sidewalk) | Foot | 101 |
| Bridge Fence Railing | Foot | 88 |



| | | |
|-----------------------------|---------------|---------|
| USER NAME = robert.esquivel | DESIGNED - RD | REVISED |
| PLOT SCALE = NONE | CHECKED - DP | REVISED |
| PLOT DATE = 3-24-2014 | DRAWN - RJ | REVISED |
| | CHECKED - RD | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEGMENTAL CONCRETE BLOCK WALLS
25TH AVENUE GRADE SEPARATION

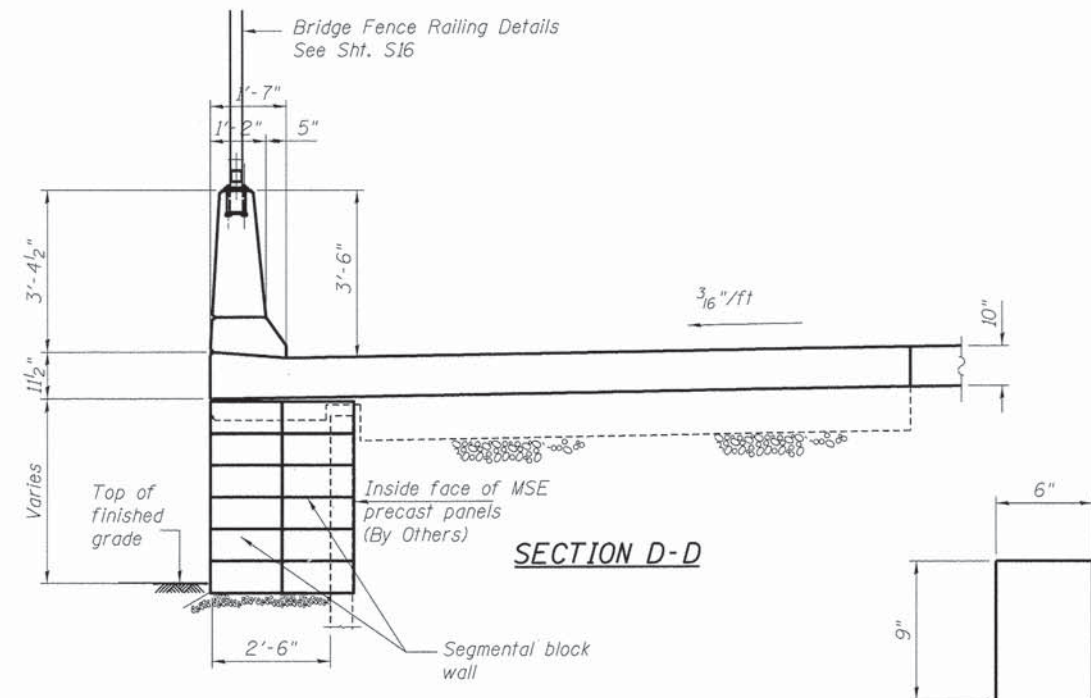
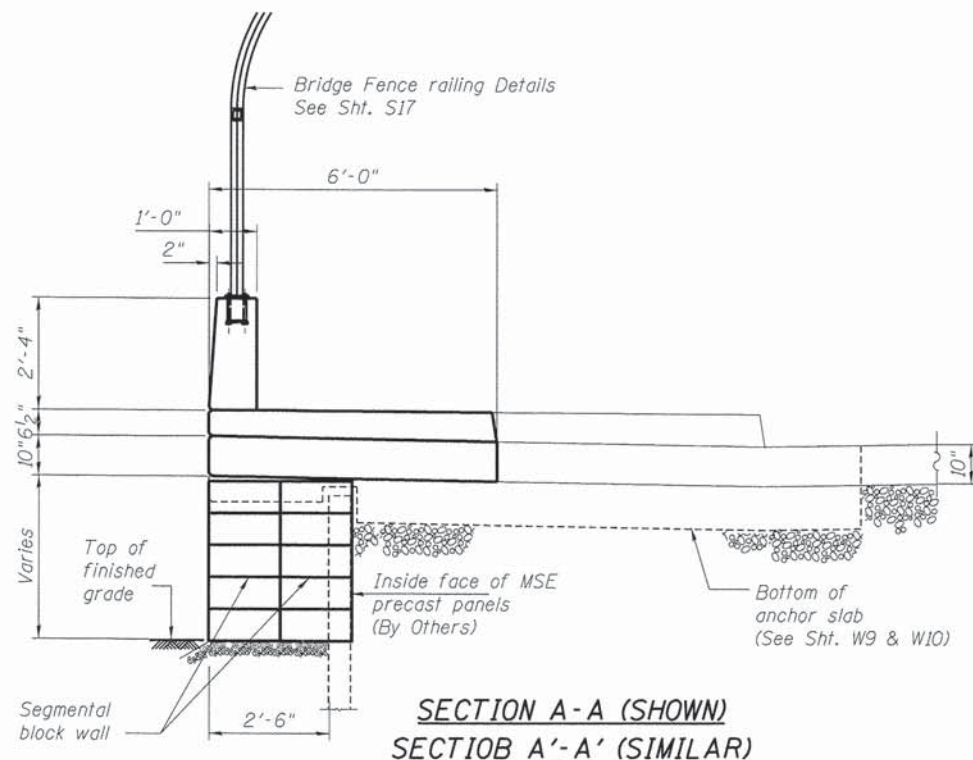
SHEET NO. 1 OF 2 SHEETS

| | | | | |
|---------------------------|------------------------|-------------|------------------|--------------------|
| F.A.U. RTE. 2714 | SECTION 99-00094-00-GS | COUNTY COOK | TOTAL SHEETS 240 | SHEET NO. 196 |
| | | | | CONTRACT NO. 63887 |
| ILLINOIS FED. AID PROJECT | | | | |

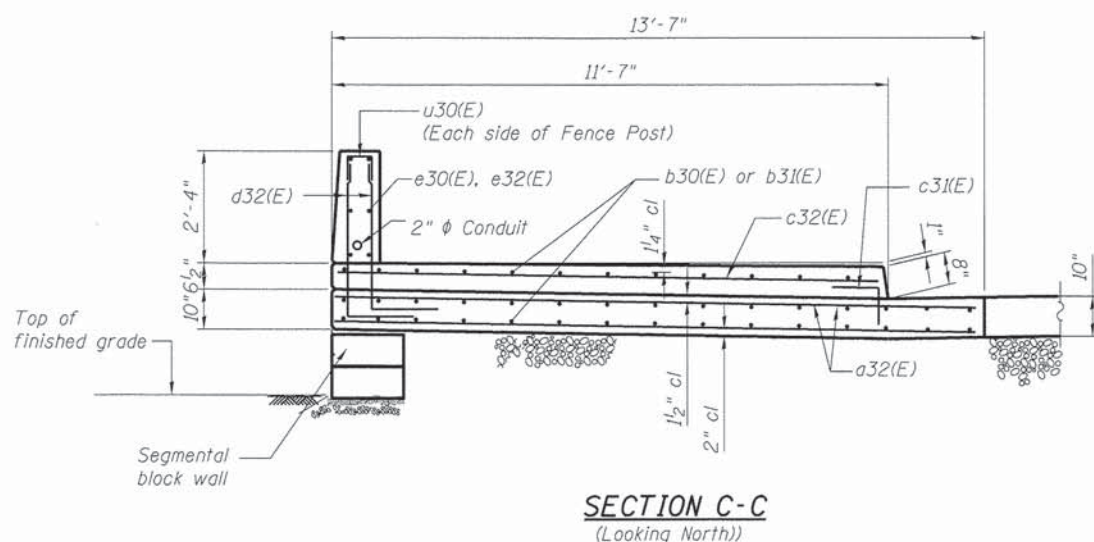
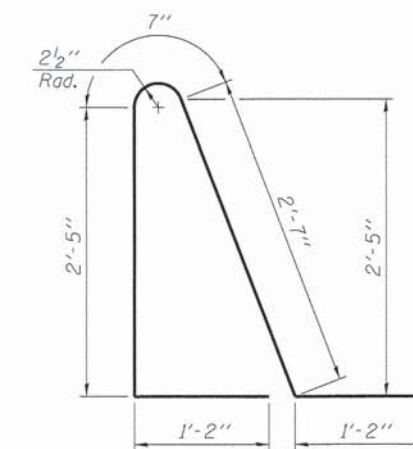
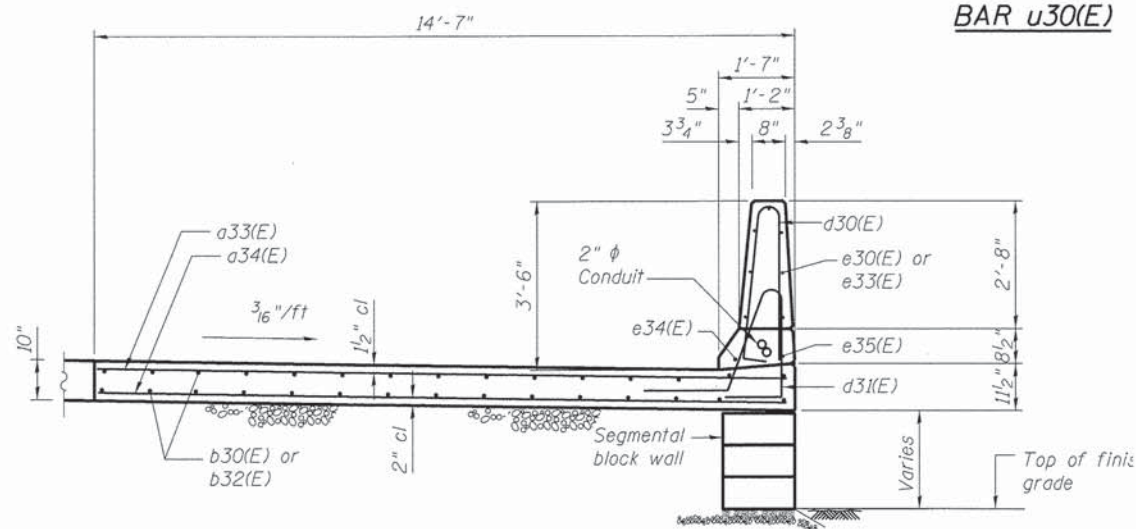
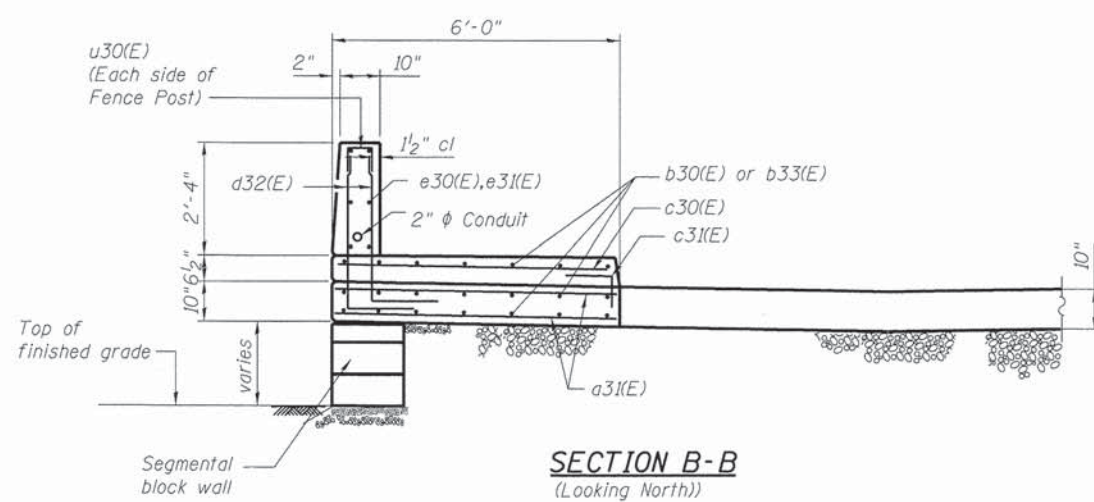
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BILL OF MATERIAL

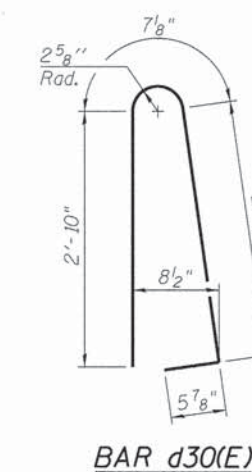
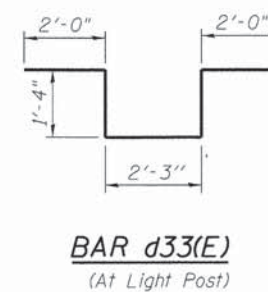
| Bar | No. | Size | Length | Shape |
|---------------------|-----|------|---------|-------|
| a31(E) | 96 | #5 | 5'-8" | — |
| a32(E) | 102 | #5 | 13'-3" | — |
| a33(E) | 88 | #6 | 14'-3" | — |
| a34(E) | 88 | #5 | 14'-3" | — |
| b30(E) | 91 | #4 | 32'-6" | — |
| b31(E) | 40 | #4 | 19'-8" | — |
| b32(E) | 28 | #4 | 27'-6" | — |
| b33(E) | 21 | #4 | 18'-6" | — |
| c30(E) | 49 | #5 | 5'-8" | — |
| c31(E) | 99 | #5 | 1'-9" | — |
| c32(E) | 50 | #5 | 13'-3" | — |
| d30(E) | 90 | #5 | 6'-10" | ⌒ |
| d31(E) | 90 | #5 | 7'-11" | ⌒ |
| d32(E) | 203 | #5 | 5'-1" | ⌒ |
| d33(E) | 6 | #5 | 8'-11" | ⌒ |
| e30(E) | 40 | #4 | 32'-6" | — |
| e31(E) | 6 | #4 | 18'-6" | — |
| e32(E) | 6 | #4 | 19'-8" | — |
| e33(E) | 6 | #4 | 27'-6" | — |
| e34(E) | 3 | #8 | 31'-10" | — |
| e35(E) | 3 | #4 | 30'-8" | — |
| u30(E) | 46 | #4 | 2'-0" | ⌒ |
| Conc. Superstruct. | | | Cu. Yd. | |
| Rebar, Epoxy-Coated | | | Lbs | |
| Protection Coat | | | Sq. Yd. | |



BAR u30(E)



SECTION E-E



| | | |
|----------------------------|---------------|---------|
| USER NAME = robertesqueval | DESIGNED - RD | REVISED |
| PLOT SCALE = NONE | CHECKED - DP | REVISED |
| PLOT DATE = 3-24-2014 | DRAWN - RJ | REVISED |
| | CHECKED - RD | REVISED |

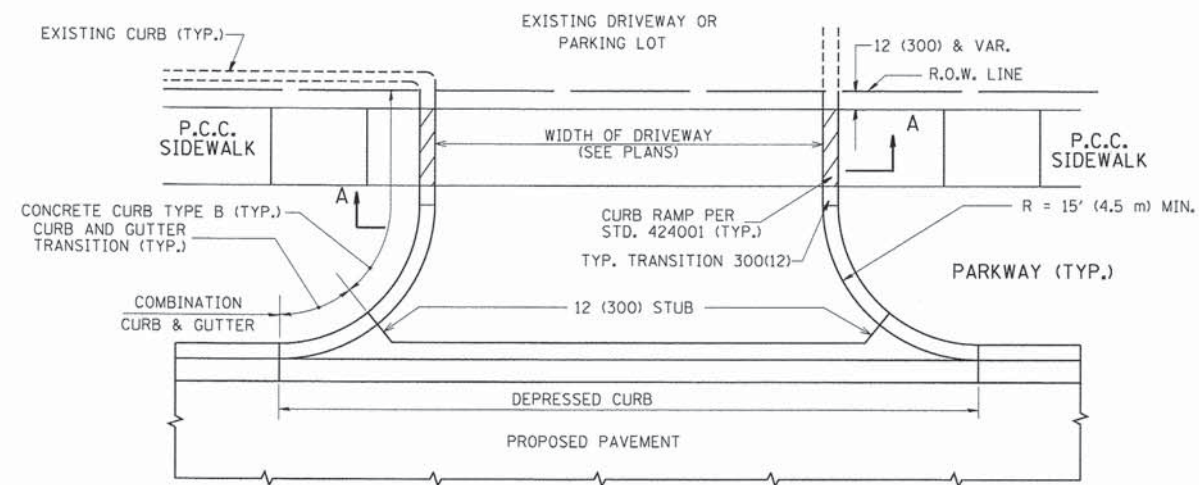
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEGMENTAL CONCRETE BLOCK WALLS
25TH AVENUE GRADE SEPARATION

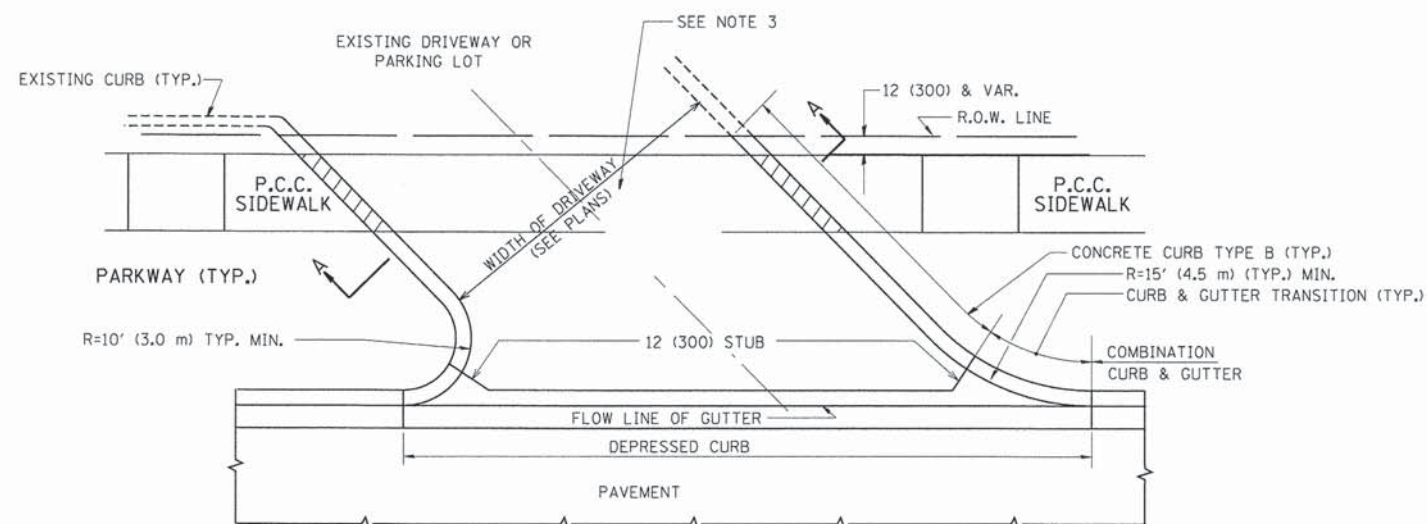
SHEET NO. 2 OF 2 SHEETS

| | | | | |
|--------------------|----------------|--------|---------------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2714 | 99-00094-00-GS | COOK | 240 | 197 |
| CONTRACT NO. 63887 | | | ILLINOIS FED. AID PROJECT | |

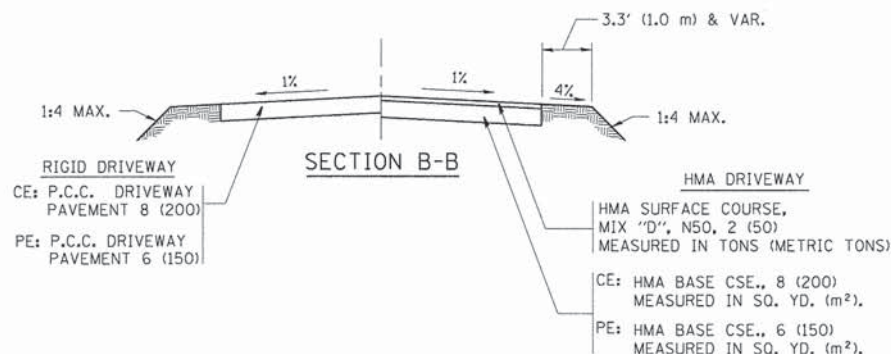
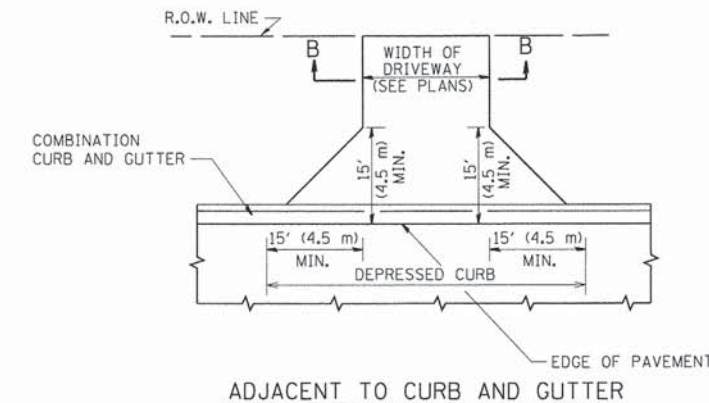
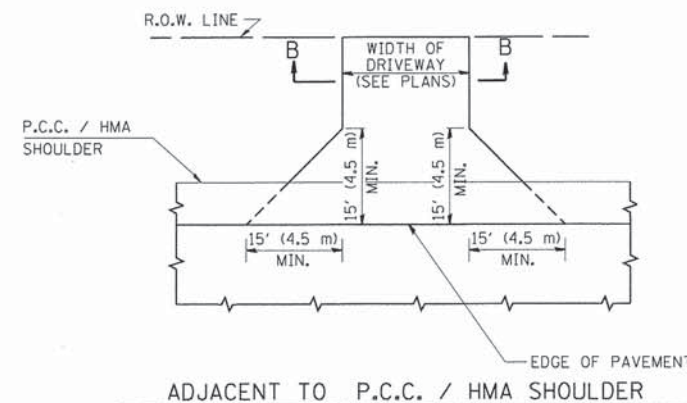
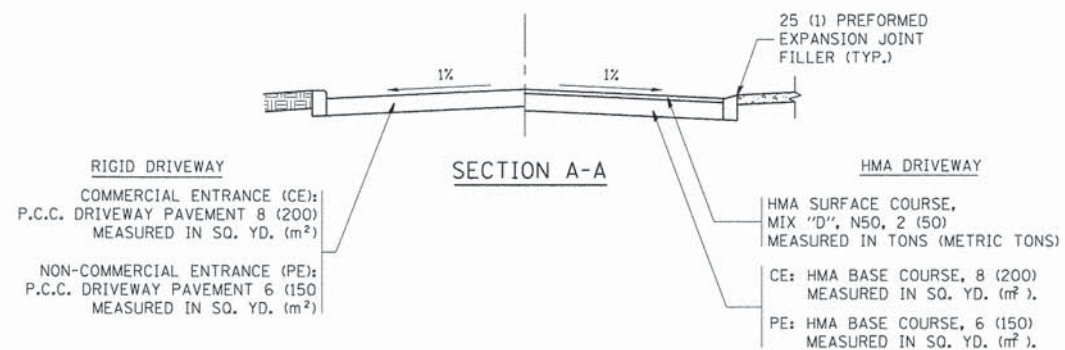
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WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)
HMA SURFACE COURSE,
MIX "D", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)
AGGREGATE BASE CSE., TYPE B, 8 (200)
MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

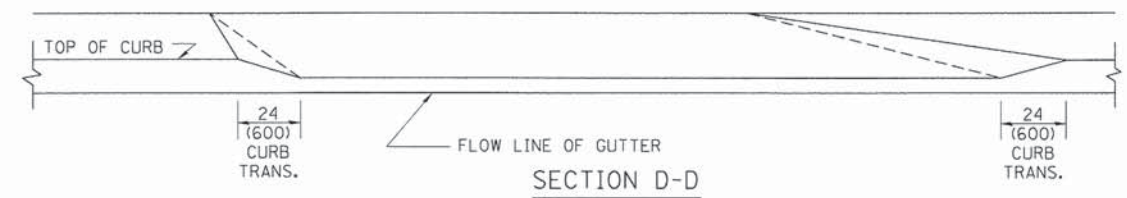
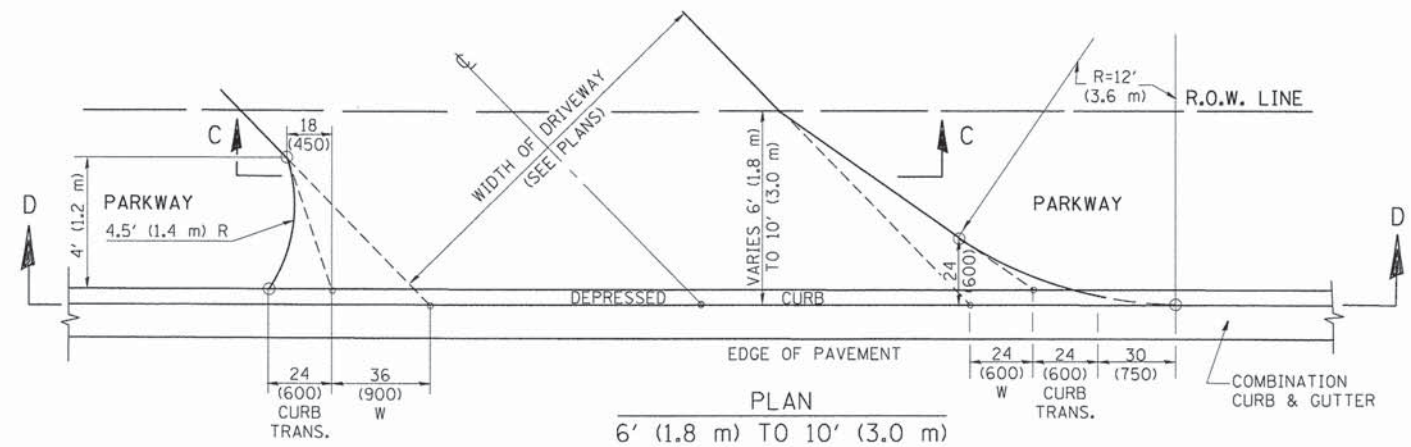
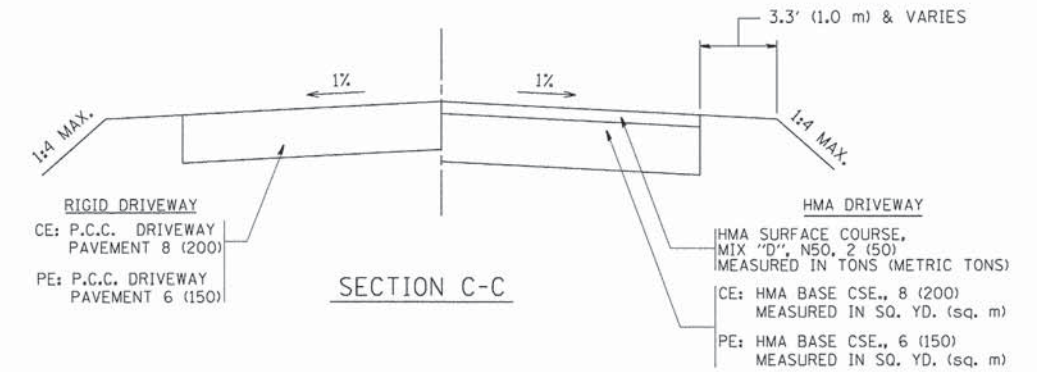
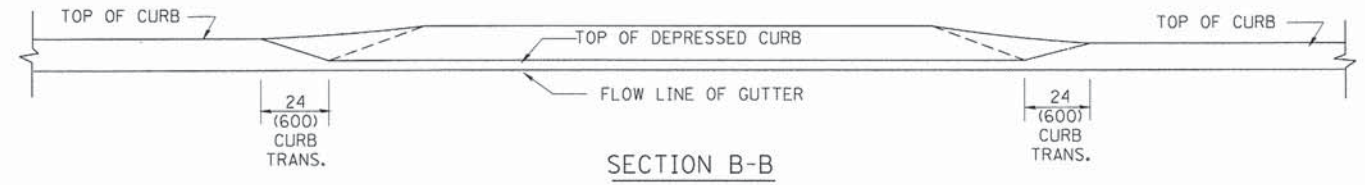
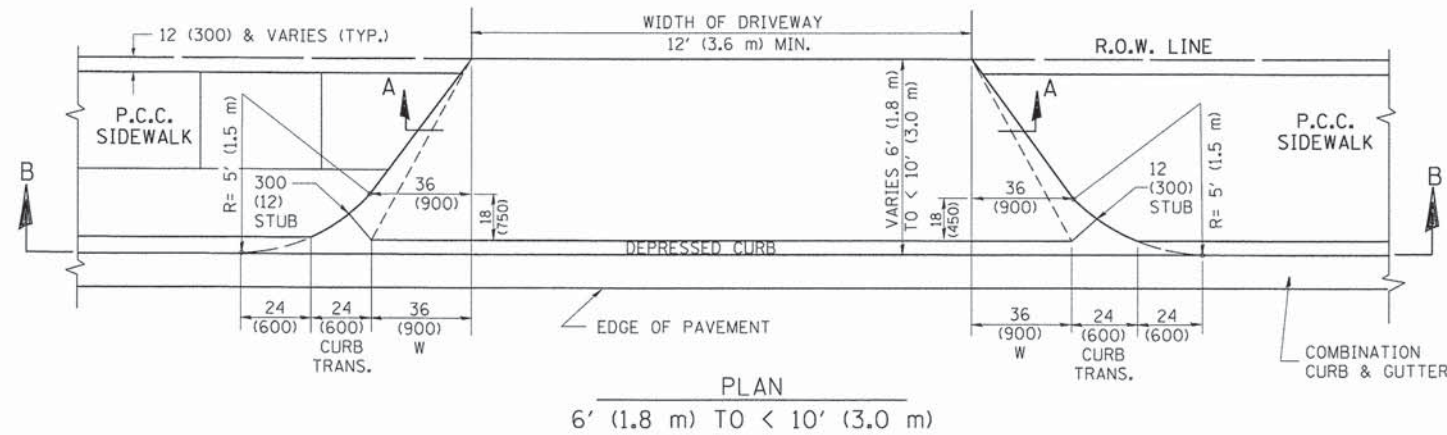
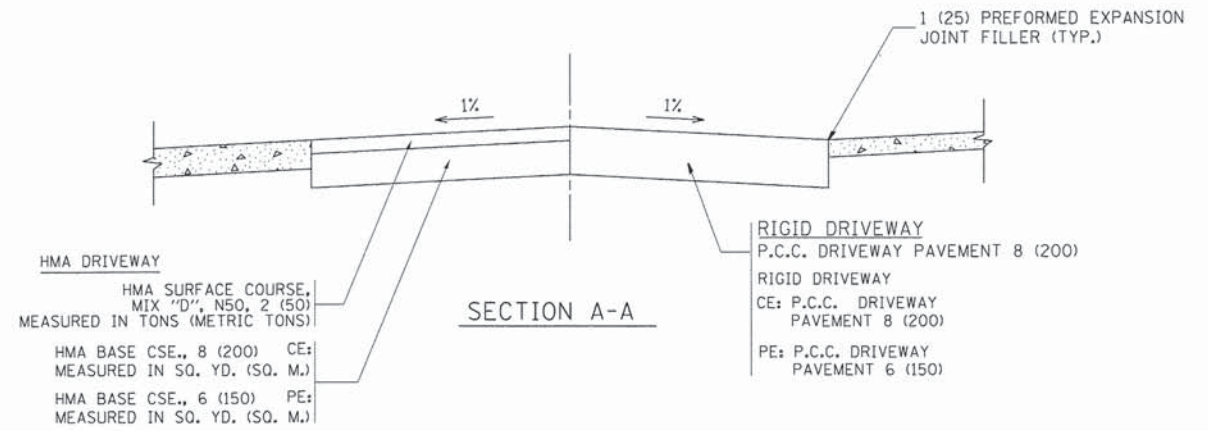
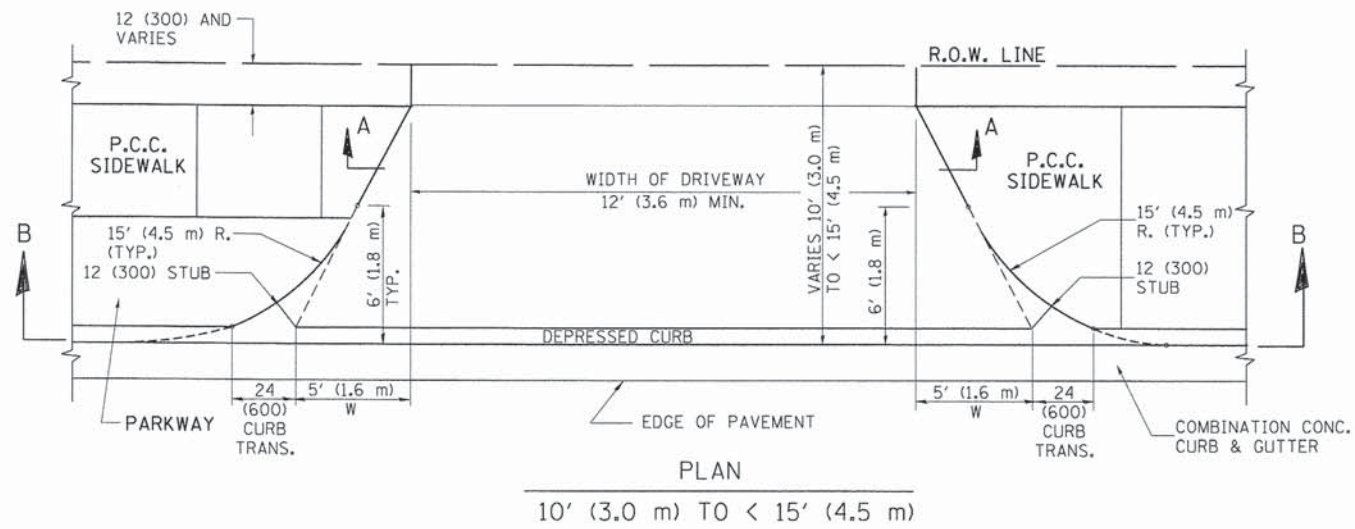
THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

| | | | | | | | | | | |
|---|-------------------|----------------------------|-------------------------------|---|---|---|----------------|--------|------------------|---------------|
| FILE NAME = c:\pw_work\pawdot\layse\0100315\bd01.dgn | USER NAME = layse | DESIGNED - R. SHAH | REVISED - P. LoFLUER 04-15-03 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m) | F.A. RTE. 2714 | SECTION | COUNTY | TOTAL SHEETS 240 | SHEET NO. 198 |
| PLOT SCALE = 50,0000' / in. | CHECKED - | REVISED - R. BORO 01-01-07 | REVISED - R. BORO 06-11-08 | | | BD0156-07 (BD-01) | CONTRACT 63887 | | | |
| PLOT DATE = 9/6/2011 | DATE - 11-04-95 | REVISED - R. BORO 09-06-11 | SCALE: NONE | | | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | | | |
| | | | | | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS", FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

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

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

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

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

| | | | |
|--|------------------------------|--------------------|-------------------------------|
| FILE NAME = | USER NAME = jeyse | DESIGNED - R. SHAH | REVISED - M. GOMEZ 04-06-01 |
| cd\pw\work\p\wdot\jeyse\0108315\bd02.dwg | | DRAWN - | REVISED - P. LoFLEUR 04-15-03 |
| | PLOT SCALE = 50.0000' / 1" = | CHECKED - | REVISED - R. BORO 01-01-07 |
| | PLOT DATE = 10/28/2011 | DATE - 11-06-95 | REVISED - R. BORO 09-06-11 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

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

| | | | | |
|---|---------|--------|------------------|---------------|
| F.A. RTE. 2714 | SECTION | COUNTY | TOTAL SHEETS 240 | SHEET NO. 199 |
| BD400-02 (BD-02) | | | CONTRACT 63887 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

