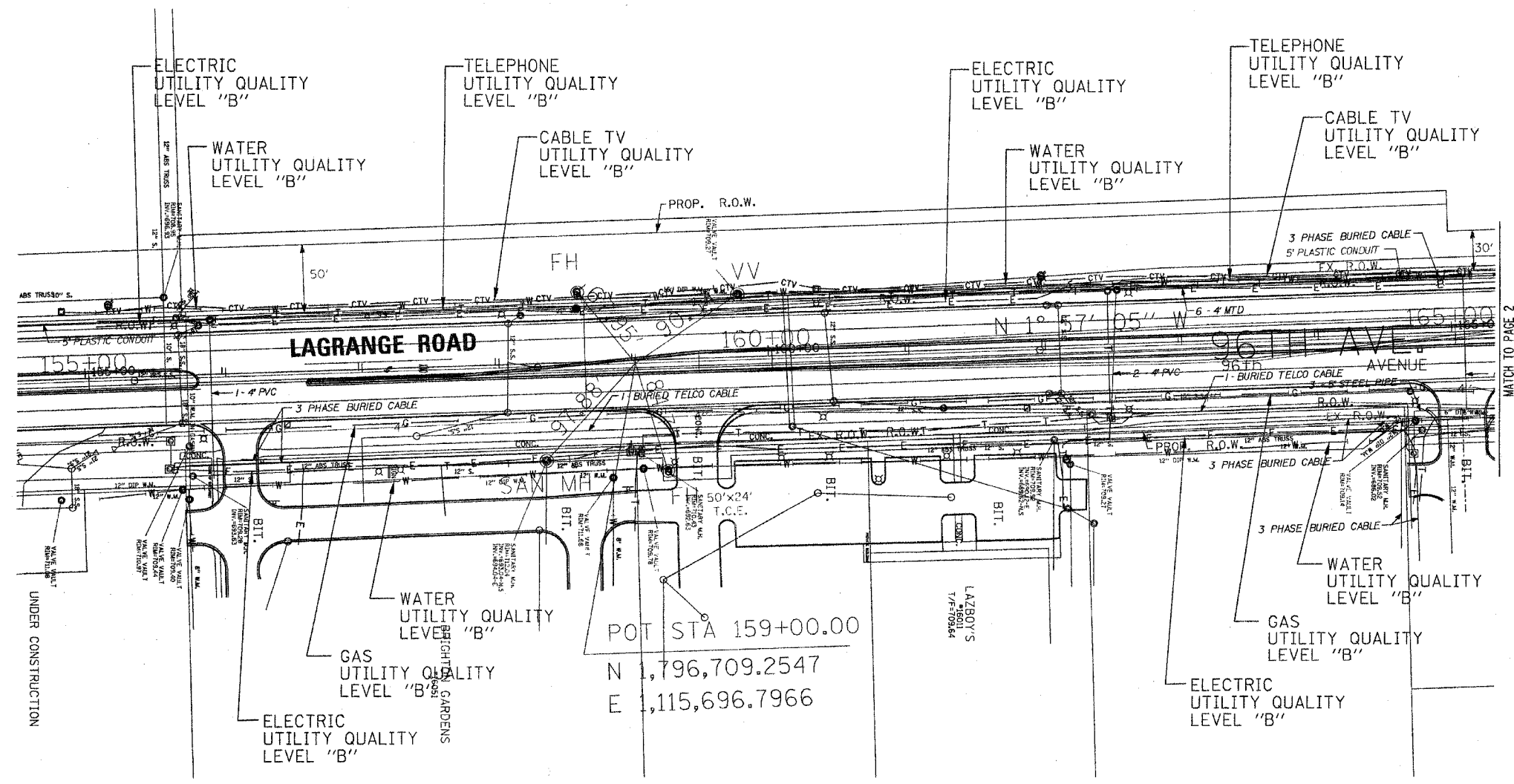


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537R-1	Cook	245	101
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



The SBC locations depicted have been obtained through the application of geophysical methods to determine the existence and approximate horizontal position of these facilities. However, SBC will not provide TBE Group, Inc. with utility records to help verify the locations of their existing underground facilities. Therefore, TBE is unable to verify the completeness of the SBC locations depicted in accordance with the CI/ASCE Standard 38-02.

The Village of Orland Park Water locations depicted have been obtained through the application of geophysical methods to determine the existence and approximate horizontal position of these facilities. However, the Village of Orland Park Water Department will not provide TBE Group, Inc. with utility records to help verify the locations of their existing underground facilities. Therefore, TBE is unable to verify the completeness of Orland Park Water locations depicted in accordance with the CI/ASCE Standard 38-02.

**TBE GROUP, INC.**  
 CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL  
 • PLANNING • UTILITY ENGINEERING/LOCATING

**TBE GROUP**  
 IL09500247  
 TBE SUE PAGE NO: 1 of 6  
 Checked by: *Sue Seaton*  
 SUE Quality Level "B" : Designating

— CTV —	— CTV —	CABLE TV
— T —	— T —	TELEPHONE
— W —	— W —	WATER
— E —	— E —	GAS
— E —	— E —	ELECTRIC

Utilities shown in color on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others. TBE's SUE field investigation was performed during the period 1-18-06 through 3-02-06. Changes to utilities after these dates 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.

205 W. WACKER DRIVE  
 SUITE 1020  
 CHICAGO, IL 60606  
 (312) 704-1970

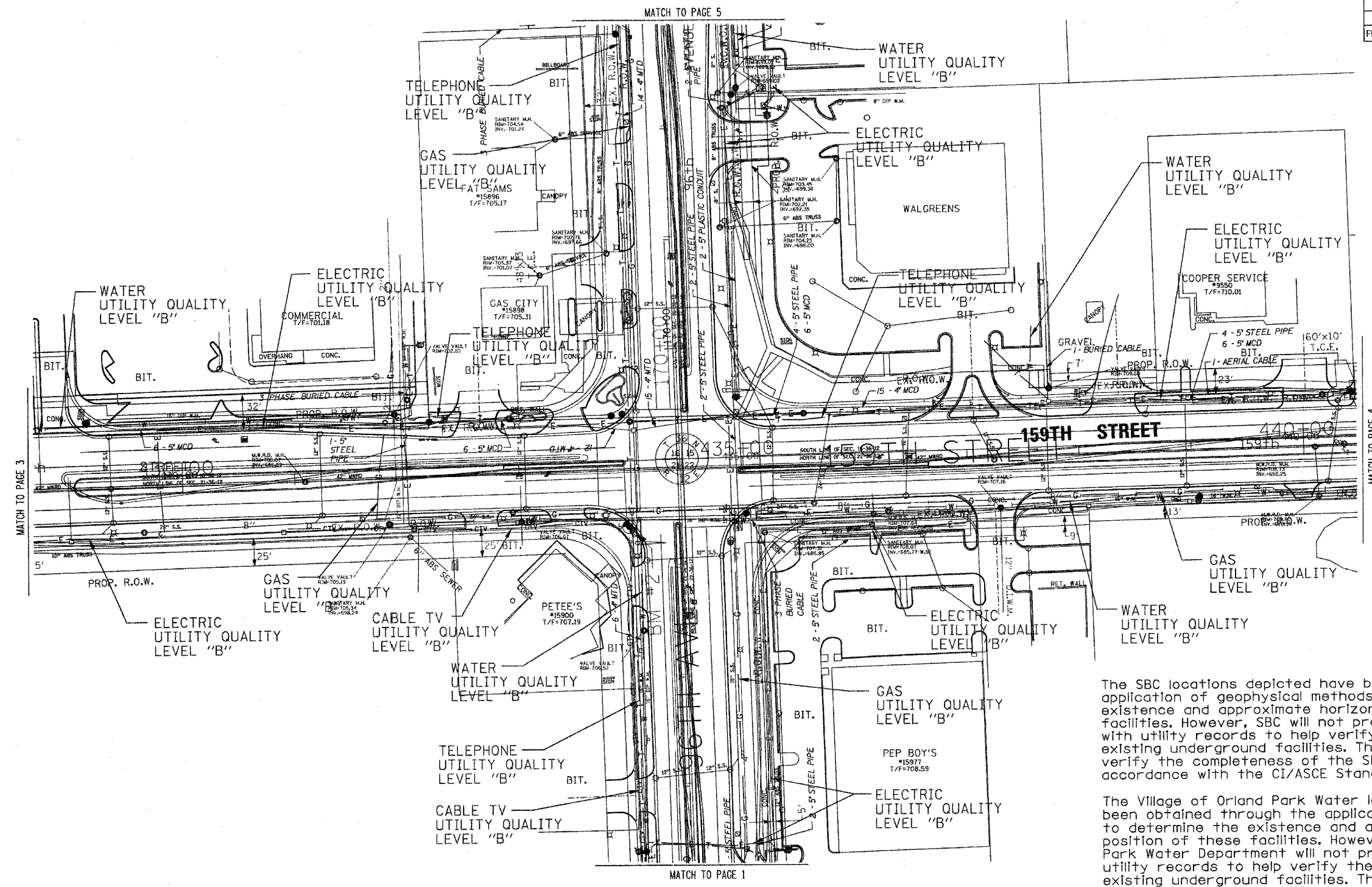
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUE Investigation of Underground Utilities  
 RT. 6 (159th Street) and US Rt. 45 (96th Avenue)  
 Orland Park, Cook County  
 Section No. 537R-1  
 Contract No. 62880

DRAWN BY : KLC  
 SCALE : 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537R-1	Cook	245	102
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



MATCH TO PAGE 3

MATCH TO PAGE 4

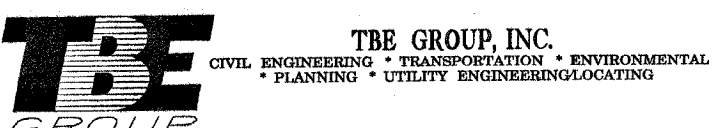
MATCH TO PAGE 5

MATCH TO PAGE 1

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IL09500247  
 TBE SUE PAGE NO: 2 of 6  
 Checked by: *[Signature]*  
 SUE Quality Level "B" : Designating

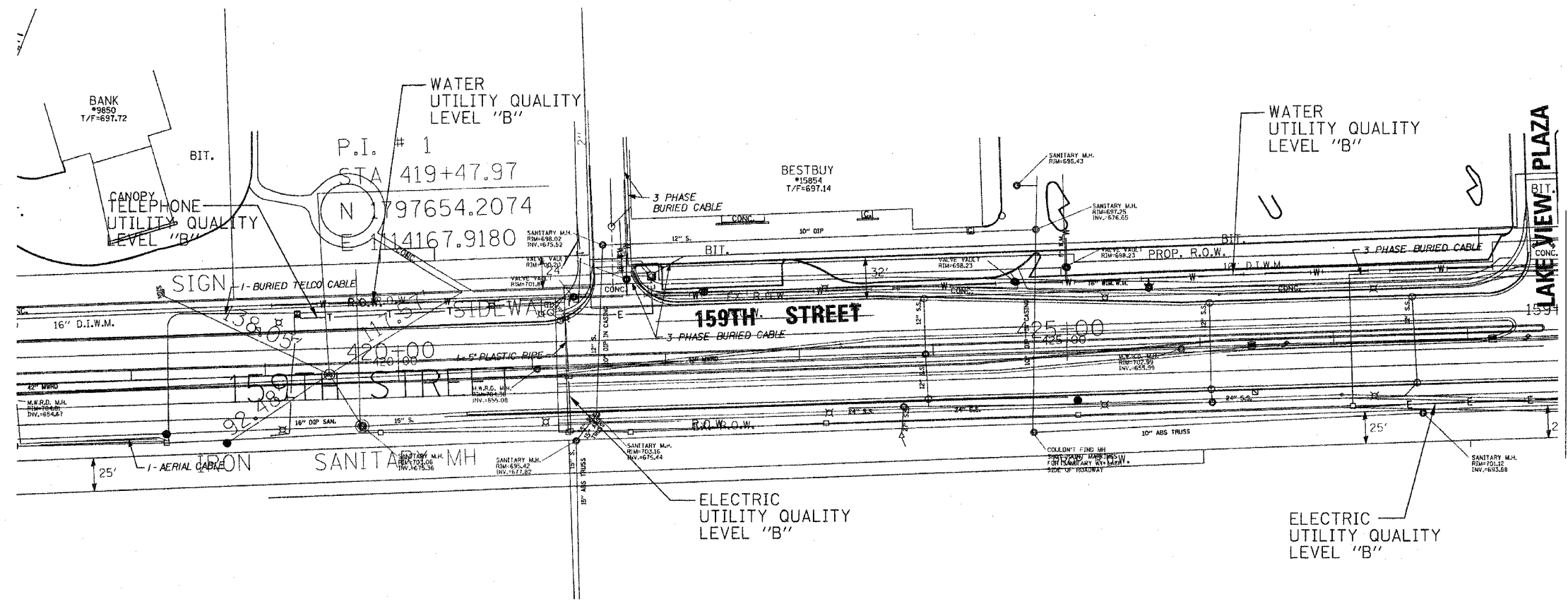
— CTV —	— CTV —	CABLE TV
— T —	— T —	TELEPHONE
— W —	— W —	WATER
— G —	— G —	GAS
— E —	— E —	ELECTRIC

205 W. WACKER DRIVE  
 SUITE 1020  
 CHICAGO, IL 60606  
 (312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SUE Investigation of Underground Utilities  
 RT. 6 (159th Street) and US Rt. 45 (96th Avenue)  
 Orland Park, Cook County  
 Section No. 537R-1  
 Contract No. 62880  
 DRAWN BY : KLC  
 SCALE : 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537R-1	Cook	245	103
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



MATCH TO PAGE 2

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**TBE GROUP, INC.**  
 CIVIL ENGINEERING \* TRANSPORTATION \* ENVIRONMENTAL  
 \* PLANNING \* UTILITY ENGINEERING \* LOCATING

**TBE GROUP**  
 IL09500247  
 TBE SUE PAGE NO: 3 of 6  
 Checked by: *[Signature]*  
 SUE Quality Level "B" : Designating

— CTV —	— CTV —	— CABLE TV —
— T —	— T —	— TELEPHONE —
— W —	— W —	— WATER —
— G —	— G —	— GAS —
— E —	— E —	— ELECTRIC —

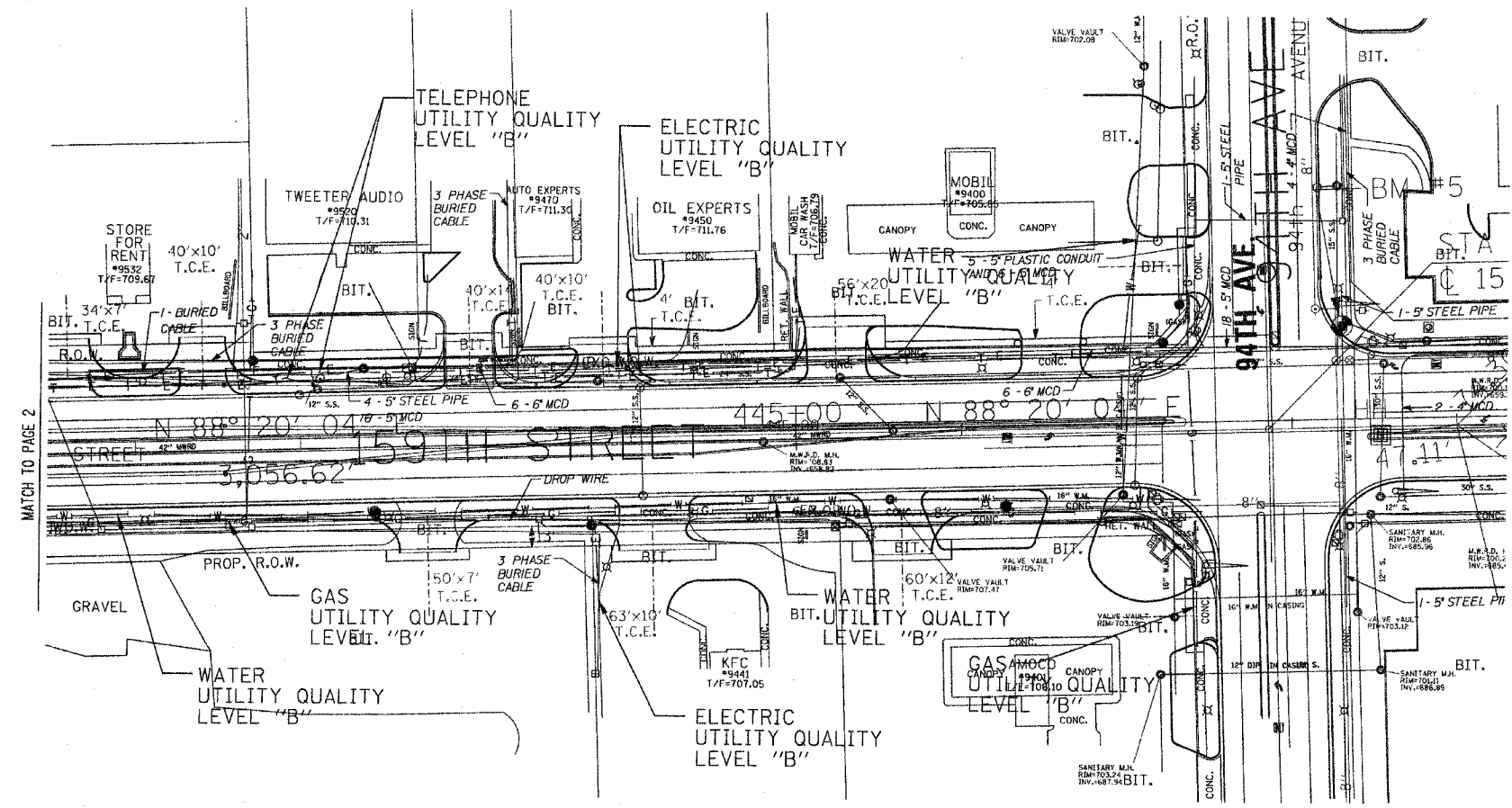
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 205 W. WACKER DRIVE  
 SUITE 1020  
 CHICAGO, IL 60606  
 (312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SUE Investigation of Underground Utilities  
 RT. 6 (159th Street) and US Rt. 45 (96th Avenue)  
 Orland Park, Cook County  
 Section No. 537R-1  
 Contract No. 62880  
 DRAWN BY : KLC  
 SCALE : 1" = 50'

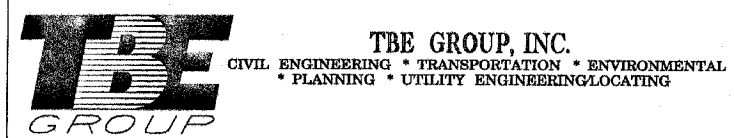
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537R-1	Cook	245	104
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



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IL09500247  
TBE SUE PAGE NO: 4 of 6  
Checked by: *Sue Lopez*  
SUE Quality Level "B" : Designating

— CTV —	— CTV —	CABLE TV
— T —	— T —	TELEPHONE
— W —	— W —	WATER
— G —	— G —	GAS
— E —	— E —	ELECTRIC

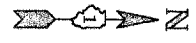
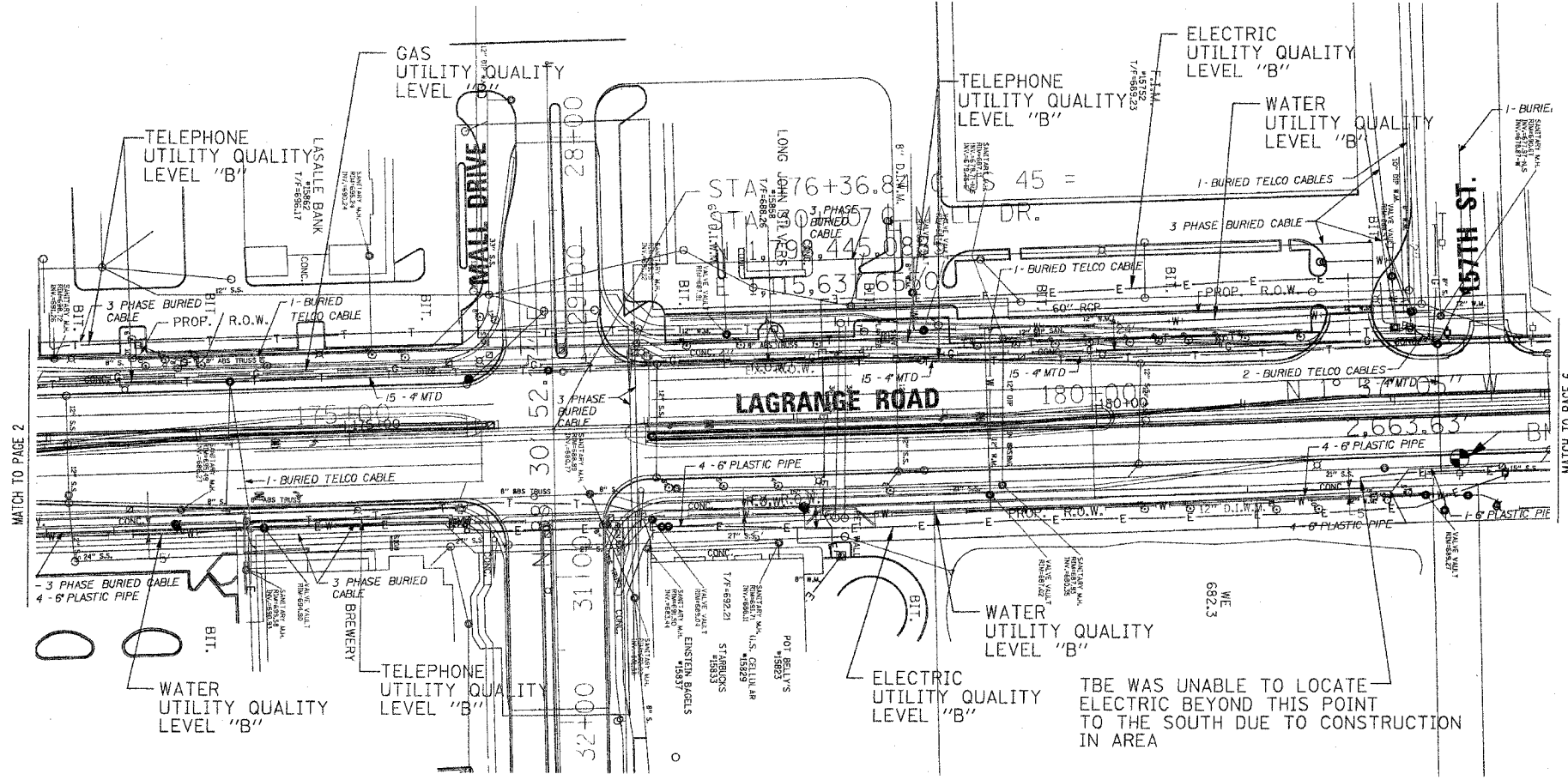
  
205 W. WACKER DRIVE  
SUITE 1020  
CHICAGO, IL 60606  
(312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUE Investigation of Underground Utilities  
RT. 6 (159th Street) and US Rt. 45 (96th Avenue)  
Orland Park, Cook County  
Section No. 537R-1  
Contract No. 62880  
DRAWN BY : KLC  
SCALE : 1" = 50'



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537R-1	Cook	245	105
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



TBE WAS UNABLE TO LOCATE ELECTRIC BEYOND THIS POINT TO THE SOUTH DUE TO CONSTRUCTION IN AREA

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**TBE GROUP, INC.**  
 CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL  
 • PLANNING • UTILITY ENGINEERING/LOCATING

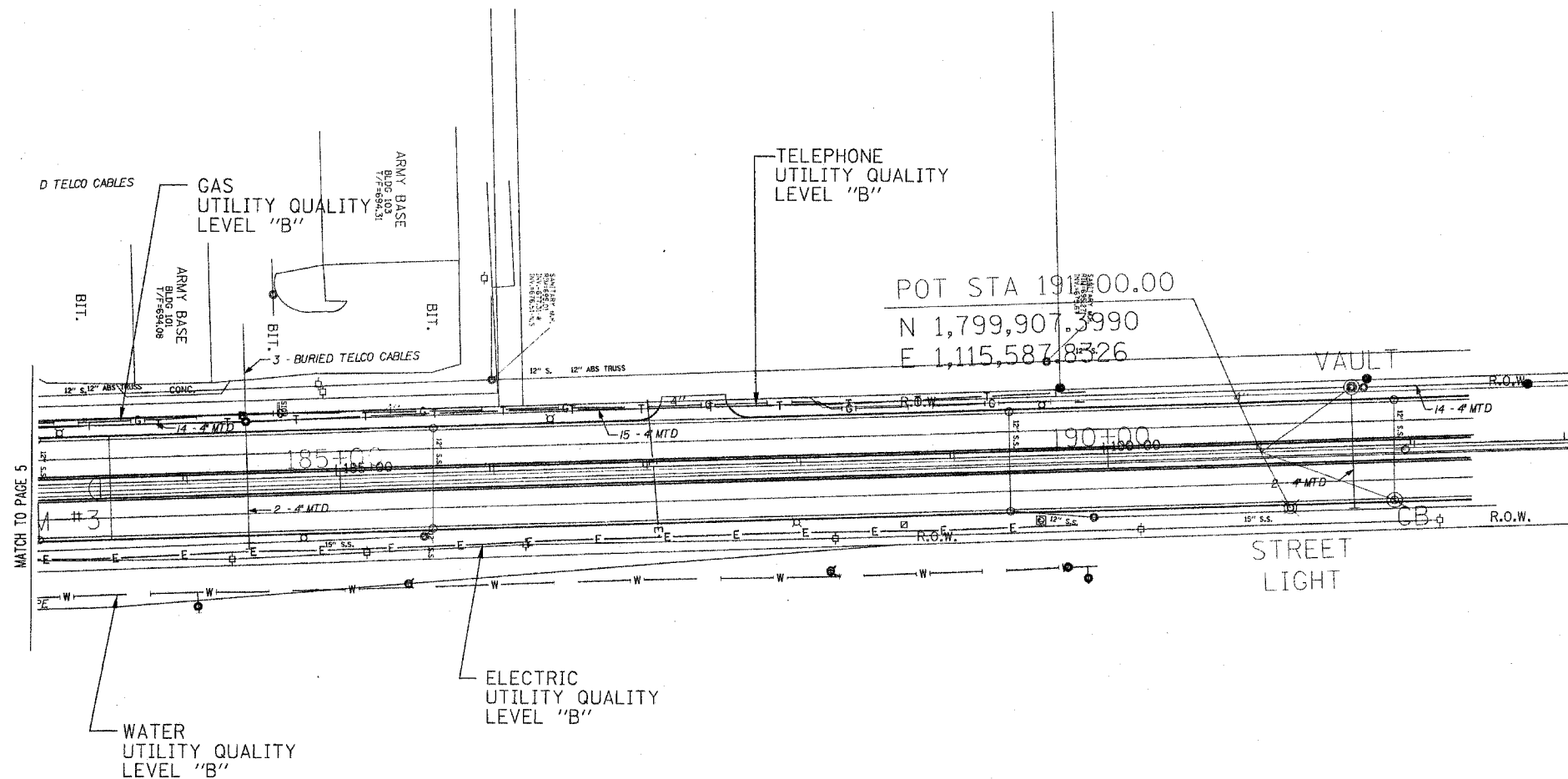
IL09500247  
 TBE SUE PAGE NO: 5 of 6  
 Checked by: *[Signature]*  
 SUE Quality Level "B" : Designating

— CTV —	— CTV —	CABLE TV
— T —	— T —	TELEPHONE
— W —	— W —	WATER
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<p>205 W. WACKER DRIVE          SUITE 1020          CHICAGO, IL 60606          (312) 704-1970</p>	REVISIONS NAME      DATE		ILLINOIS DEPARTMENT OF TRANSPORTATION  SUE Investigation of Underground Utilities RT. 6 (159th Street) and US Rt. 45 (96th Avenue) Orland Park, Cook County Section No. 537R-1 Contract No. 62880  DRAWN BY : KLC SCALE : 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537R-1	Cook	245	106
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



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**TBE GROUP, INC.**  
 CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL  
 • PLANNING • UTILITY ENGINEERING/LOCATING

IL09500247  
 TBE SUE PAGE NO: 6 of 6  
 Checked by: *[Signature]*  
 SUE Quality Level "B" : Designating

— CTV —	— CTV —	— CABLE TV —
— T —	— T —	— TELEPHONE —
— W —	— W —	— WATER —
— E —	— E —	— GAS —
— E —	— E —	— ELECTRIC —

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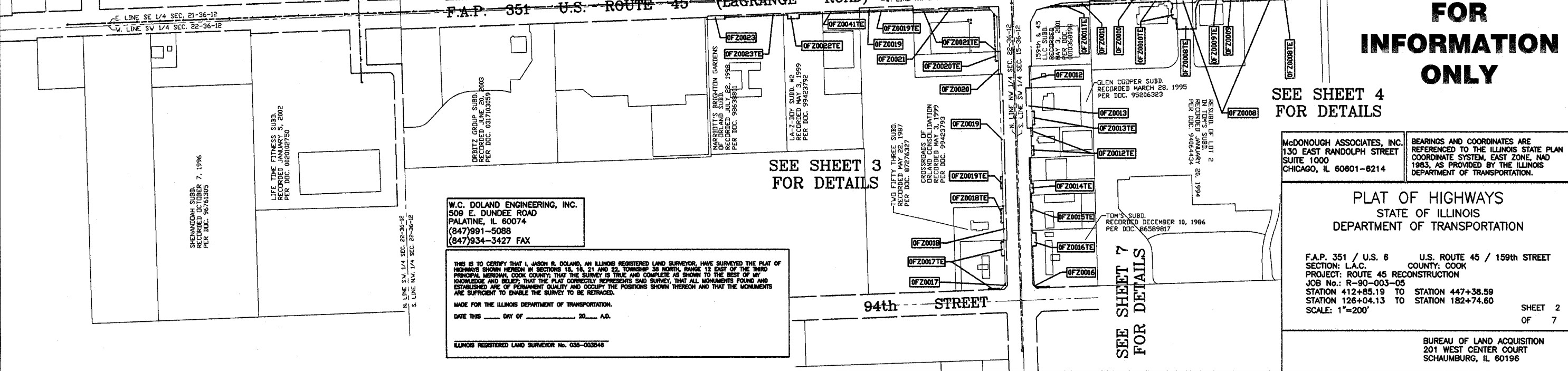
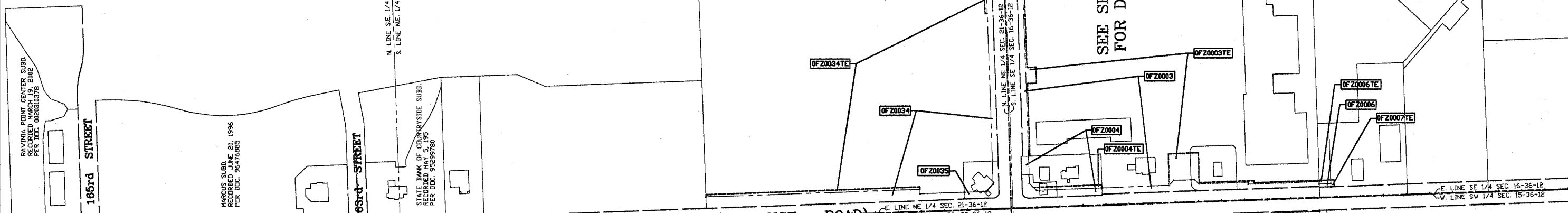
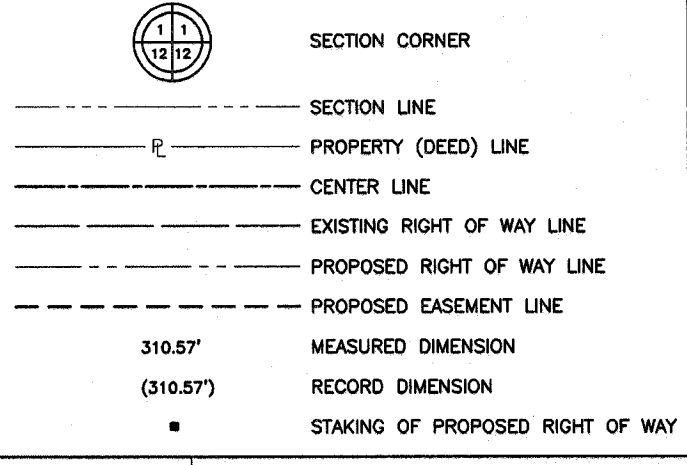
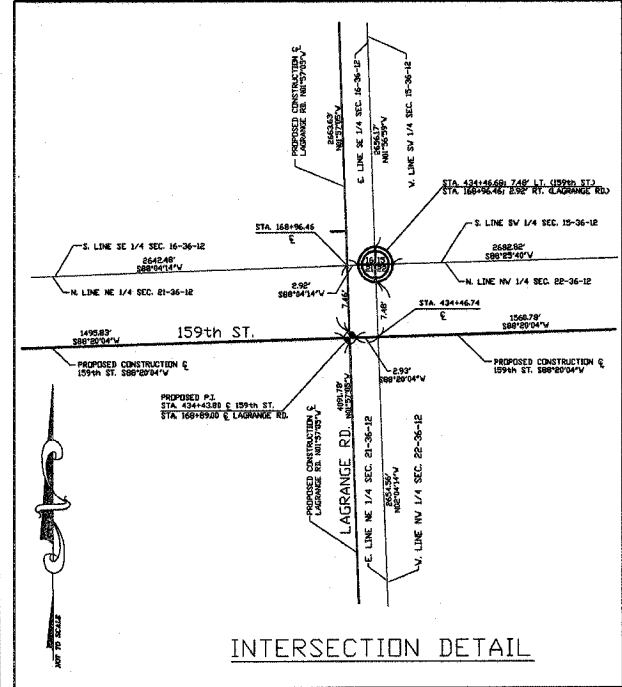
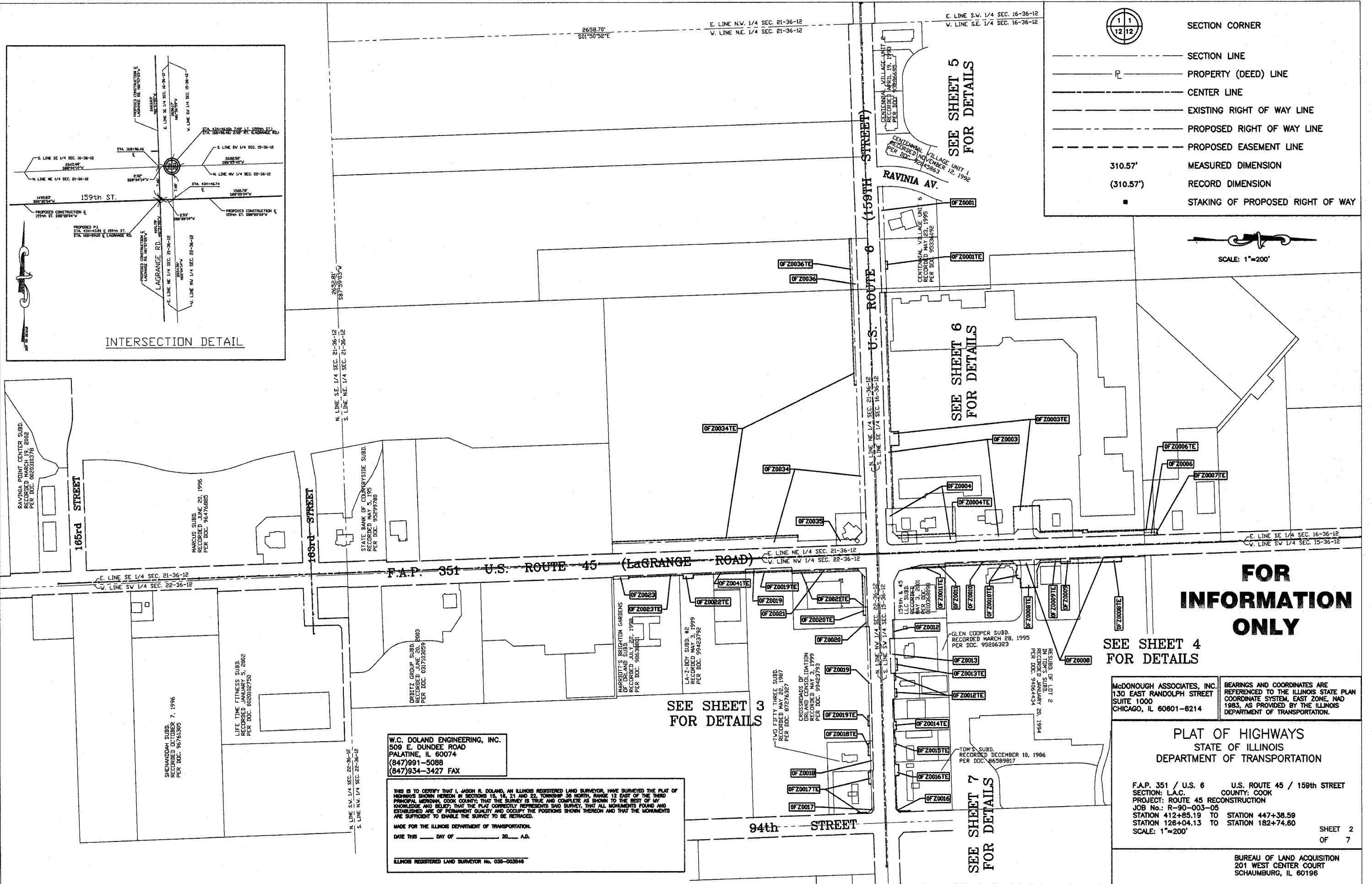
205 W. WACKER DRIVE  
 SUITE 1020  
 CHICAGO, IL 60606  
 (312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUE Investigation of Underground Utilities  
 RT. 6 (159th Street) and US Rt. 45 (96th Avenue)  
 Orland Park, Cook County  
 Section No. 537R-1  
 Contract No. 62880

DRAWN BY : KLC  
 SCALE : 1" = 50'



**FOR INFORMATION ONLY**

SEE SHEET 4 FOR DETAILS

SEE SHEET 3 FOR DETAILS

SEE SHEET 7 FOR DETAILS

W.C. DOLAND ENGINEERING, INC.  
509 E. DUNDEE ROAD  
PALATINE, IL 60074  
(847)991-5088  
(847)934-3427 FAX

THIS IS TO CERTIFY THAT I, JASON B. DOLAND, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREIN IN SECTIONS 15, 16, 21 AND 22, TOWNSHIP 36 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 THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

MADE FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION.  
DATE THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_ A.D.

ILLINOIS REGISTERED LAND SURVEYOR No. 035-003548

McDONOUGH ASSOCIATES, INC.  
130 EAST RANDOLPH STREET  
SUITE 1000  
CHICAGO, IL 60601-6214

BEARINGS AND COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLAN COORDINATE SYSTEM, EAST ZONE, NAD 1983, AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

PLAT OF HIGHWAYS  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. 351 / U.S. 6 U.S. ROUTE 45 / 159th STREET  
SECTION: L.A.C. COUNTY: COOK  
PROJECT: ROUTE 45 RECONSTRUCTION  
JOB No.: R-90-003-05  
STATION 412+85.19 TO STATION 447+38.59  
STATION 128+04.13 TO STATION 182+74.60  
SCALE: 1"=200'

SHEET 2 OF 7

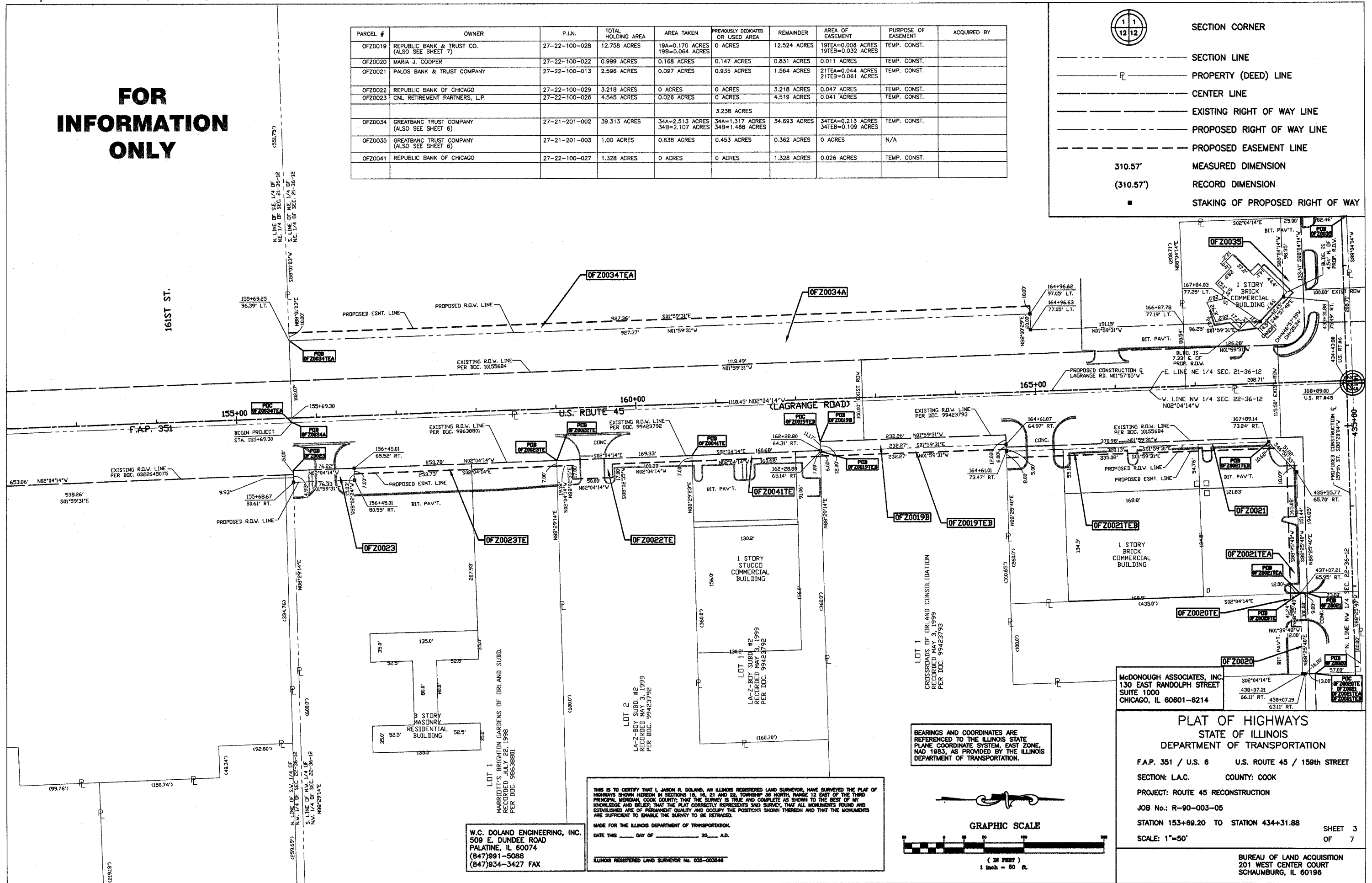
BUREAU OF LAND ACQUISITION  
201 WEST CENTER COURT  
SCHAUMBURG, IL 60196

**FOR INFORMATION ONLY**

PARCEL #	OWNER	P.I.N.	TOTAL HOLDING AREA	AREA TAKEN	PREVIOUSLY DEDICATED OR USED AREA	REMAINDER	AREA OF EASEMENT	PURPOSE OF EASEMENT	ACQUIRED BY
OFZ0019	REPUBLIC BANK & TRUST CO. (ALSO SEE SHEET 7)	27-22-100-028	12.758 ACRES	18A=0.170 ACRES 19B=0.064 ACRES	0 ACRES	12.524 ACRES	19TE=0.008 ACRES 19TEB=0.032 ACRES	TEMP. CONST.	
OFZ0020	MARIA J. COOPER	27-22-100-022	0.999 ACRES	0.168 ACRES	0.147 ACRES	0.831 ACRES	0.011 ACRES	TEMP. CONST.	
OFZ0021	PALOS BANK & TRUST COMPANY	27-22-100-013	2.596 ACRES	0.097 ACRES	0.935 ACRES	1.564 ACRES	21TEA=0.044 ACRES 21TEB=0.061 ACRES	TEMP. CONST.	
OFZ0022	REPUBLIC BANK OF CHICAGO	27-22-100-029	3.218 ACRES	0 ACRES	0 ACRES	3.218 ACRES	0.047 ACRES	TEMP. CONST.	
OFZ0023	CNL RETIREMENT PARTNERS, L.P.	27-22-100-026	4.545 ACRES	0.026 ACRES	0 ACRES	4.519 ACRES	0.041 ACRES	TEMP. CONST.	
					3.238 ACRES				
OFZ0034	GREATBANC TRUST COMPANY (ALSO SEE SHEET 6)	27-21-201-002	39.313 ACRES	34A=2.513 ACRES 34B=2.107 ACRES	34A=1.317 ACRES 34B=1.468 ACRES	34.693 ACRES	34TEA=0.213 ACRES 34TEB=0.109 ACRES	TEMP. CONST.	
OFZ0035	GREATBANC TRUST COMPANY (ALSO SEE SHEET 6)	27-21-201-003	1.00 ACRES	0.638 ACRES	0.453 ACRES	0.362 ACRES	0 ACRES	N/A	
OFZ0041	REPUBLIC BANK OF CHICAGO	27-22-100-027	1.328 ACRES	0 ACRES	0 ACRES	1.328 ACRES	0.026 ACRES	TEMP. CONST.	



- SECTION CORNER**
- SECTION LINE
  - PROPERTY (DEED) LINE
  - CENTER LINE
  - EXISTING RIGHT OF WAY LINE
  - PROPOSED RIGHT OF WAY LINE
  - PROPOSED EASEMENT LINE
  - 310.57' MEASURED DIMENSION
  - (310.57') RECORD DIMENSION
  - STAKING OF PROPOSED RIGHT OF WAY



F.A.P. 351

161ST ST.

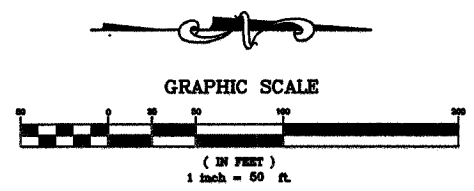
W.C. DOLAN ENGINEERING, INC.  
509 E. DUNDEE ROAD  
PALATINE, IL 60074  
(847)991-5088  
(847)934-3427 FAX

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MADE FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION.  
DATE THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_ A.D.

ILLINOIS REGISTERED LAND SURVEYOR No. 035-003648

BEARINGS AND COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 1983, AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.



**PLAT OF HIGHWAYS**  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

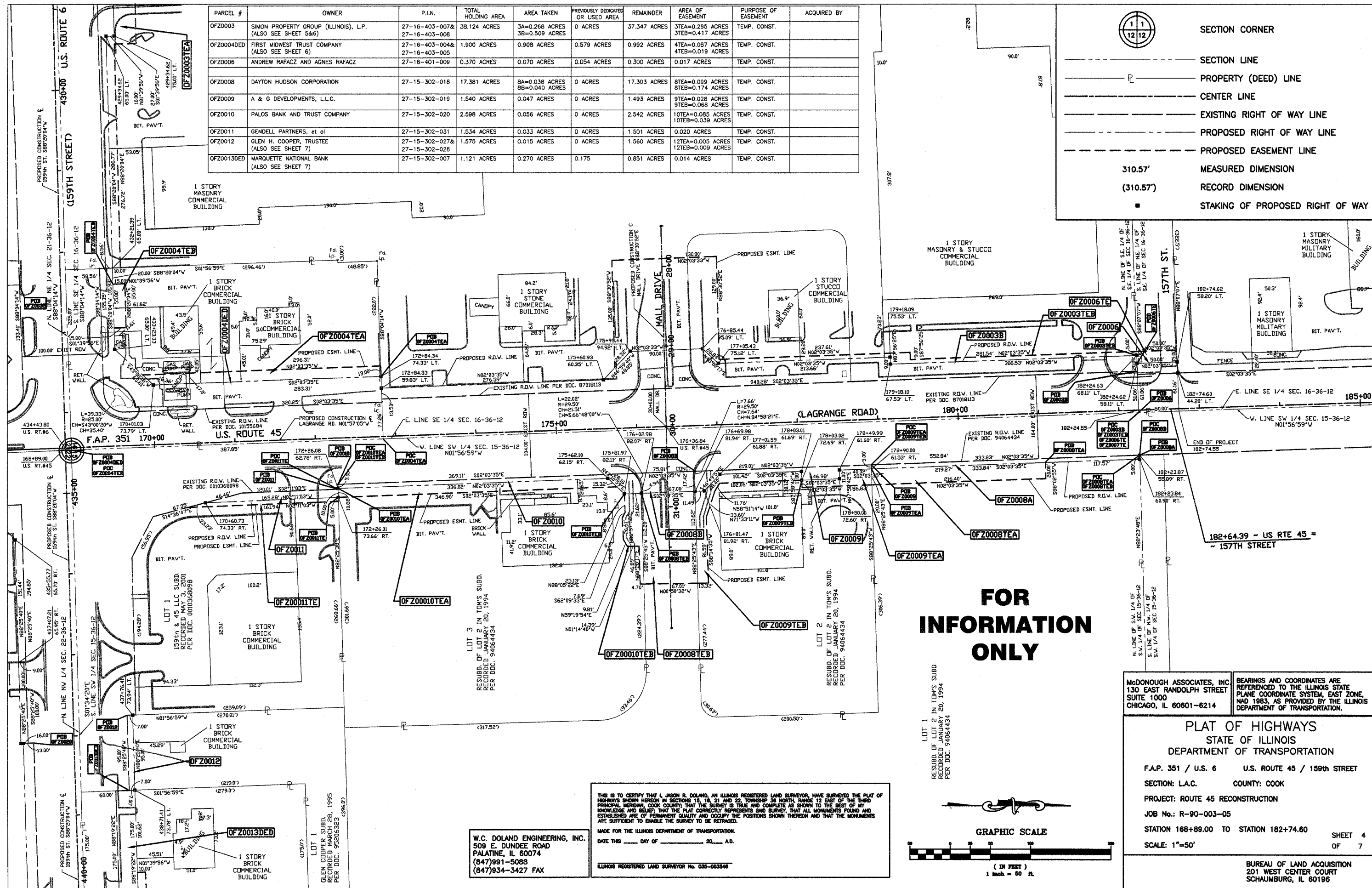
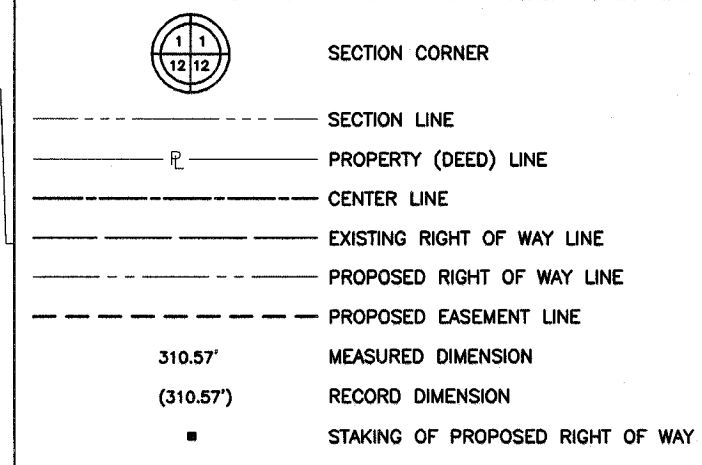
F.A.P. 351 / U.S. 6 U.S. ROUTE 45 / 159th STREET  
SECTION: L.A.C. COUNTY: COOK  
PROJECT: ROUTE 45 RECONSTRUCTION  
JOB No.: R-90-003-05  
STATION 153+89.20 TO STATION 434+31.88  
SCALE: 1"=50'

McDONOUGH ASSOCIATES, INC.  
130 EAST RANDOLPH STREET  
SUITE 1000  
CHICAGO, IL 60601-6214

BUREAU OF LAND ACQUISITION  
201 WEST COURT  
SCHAUMBURG, IL 60196

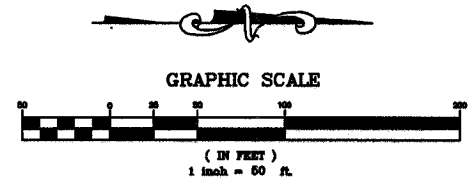
SEE SHEET 4

PARCEL #	OWNER	P.I.N.	TOTAL HOLDING AREA	AREA TAKEN	PREVIOUSLY DEDICATED OR USED AREA	REMAINDER	AREA OF EASEMENT	PURPOSE OF EASEMENT	ACQUIRED BY
OFZ0003	SIMON PROPERTY GROUP (ILLINOIS), L.P. (ALSO SEE SHEET 5&6)	27-16-403-007& 27-16-403-008	38.124 ACRES	3A=0.268 ACRES 3B=0.509 ACRES	0 ACRES	37.347 ACRES	3TEA=0.295 ACRES 3TEB=0.417 ACRES	TEMP. CONST.	
OFZ0004DED	FIRST MIDWEST TRUST COMPANY (ALSO SEE SHEET 6)	27-16-403-004& 27-16-403-005	1.900 ACRES	0.908 ACRES	0.579 ACRES	0.992 ACRES	4TEA=0.087 ACRES 4TEB=0.019 ACRES	TEMP. CONST.	
OFZ0006	ANDREW RAFACZ AND AGNES RAFACZ	27-16-401-009	0.370 ACRES	0.070 ACRES	0.054 ACRES	0.300 ACRES	0.017 ACRES	TEMP. CONST.	
OFZ0008	DAYTON HUDSON CORPORATION	27-15-302-018	17.381 ACRES	8A=0.038 ACRES 8B=0.040 ACRES	0 ACRES	17.303 ACRES	8TEA=0.099 ACRES 8TEB=0.174 ACRES	TEMP. CONST.	
OFZ0009	A & G DEVELOPMENTS, L.L.C.	27-15-302-019	1.540 ACRES	0.047 ACRES	0 ACRES	1.493 ACRES	9TEA=0.028 ACRES 9TEB=0.068 ACRES	TEMP. CONST.	
OFZ0010	PALOS BANK AND TRUST COMPANY	27-15-302-020	2.598 ACRES	0.056 ACRES	0 ACRES	2.542 ACRES	10TEA=0.085 ACRES 10TEB=0.039 ACRES	TEMP. CONST.	
OFZ0011	GENDELL PARTNERS, et al	27-15-302-031	1.534 ACRES	0.033 ACRES	0 ACRES	1.501 ACRES	0.020 ACRES	TEMP. CONST.	
OFZ0012	GLEN H. COOPER, TRUSTEE (ALSO SEE SHEET 7)	27-15-302-027& 27-15-302-028	1.575 ACRES	0.015 ACRES	0 ACRES	1.560 ACRES	12TEA=0.005 ACRES 12TEB=0.009 ACRES	TEMP. CONST.	
OFZ0013DED	MARQUETTE NATIONAL BANK (ALSO SEE SHEET 7)	27-15-302-007	1.121 ACRES	0.270 ACRES	0.175	0.851 ACRES	0.014 ACRES	TEMP. CONST.	



**FOR INFORMATION ONLY**

LOT 1  
RESUBD. OF LOT 2 IN TOM'S SUBD.  
RECORDED JANUARY 20, 1994  
PER DOC. 94064434



W.C. DOLAND ENGINEERING, INC.  
509 E. DUNDEE ROAD  
PALATINE, IL 60074  
(847)991-5088  
(847)934-3427 FAX

THIS IS TO CERTIFY THAT J. LASON R. DOLAND, AN ILLINOIS REGISTERED LAND SURVEYOR, HAS SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 15, 16, 21 AND 22, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, ILLINOIS, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

MADE FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION.  
DATE THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_ A.D.  
ILLINOIS REGISTERED LAND SURVEYOR No. 035-003546

McDONOUGH ASSOCIATES, INC.  
130 EAST RANDOLPH STREET  
SUITE 1000  
CHICAGO, IL 60601-6214

BEARINGS AND COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 1983, AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

**PLAT OF HIGHWAYS**  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. 351 / U.S. 6      U.S. ROUTE 45 / 159th STREET  
SECTION: L.A.C.      COUNTY: COOK  
PROJECT: ROUTE 45 RECONSTRUCTION  
JOB No.: R-90-003-05  
STATION 168+89.00 TO STATION 182+74.60  
SCALE: 1"=50'

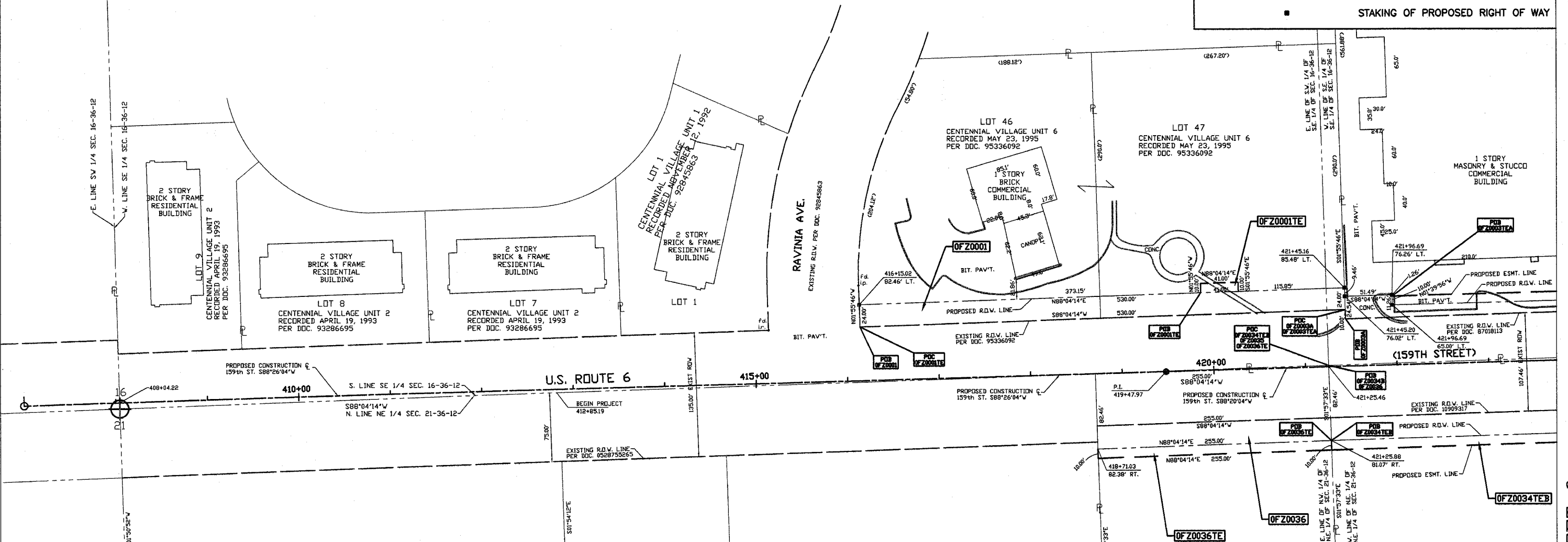
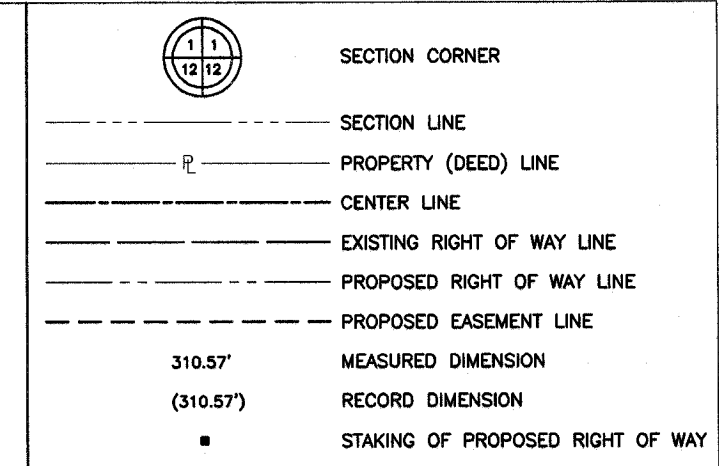
SHEET 4  
OF 7

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

SEE SHEET 3



PARCEL #	OWNER	P.I.N.	TOTAL HOLDING AREA	AREA TAKEN	PREVIOUSLY DEDICATED OR USED AREA	REMAINDER	AREA OF EASEMENT	PURPOSE OF EASEMENT	ACQUIRED BY
OFZ0001	CENTRAL CREDIT UNION OF ILLINOIS	27-16-408-001&27-16-408-002	3.383 ACRES	0.292 ACRES	0 ACRES	3.091 ACRES	0.009 ACRES	TEMP. CONST.	
OFZ0003	SIMON PROPERTY GROUP (ILLINOIS), L.P. (ALSO SEE SHEET 4&6)	27-16-403-007&27-16-403-008	38.124 ACRES	3A=0.268 ACRES 3B=0.509 ACRES	0 ACRES	37.347 ACRES	3TEA=0.295 ACRES 3TEB=0.417 ACRES	TEMP. CONST.	
OFZ0036	JOHN CHERMAK AND MARJORIE CHERMAK	27-21-200-006	9.659 ACRES	0.483 ACRES	0.336 ACRES	9.177 ACRES	0.059 ACRES	TEMP. CONST.	

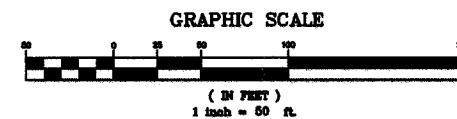


**FOR INFORMATION ONLY**

W.C. DOLAND ENGINEERING, INC.  
509 E. DUNDEE ROAD  
PALATINE, IL 60074  
(847)991-5088  
(847)934-3427 FAX

THIS IS TO CERTIFY THAT I, JASON R. DOLAND, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 16, 18, 21 AND 22, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, ILLINOIS; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

MADE FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION.  
DATE THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_ A.D.  
ILLINOIS REGISTERED LAND SURVEYOR No. 036-003644



McDONOUGH ASSOCIATES, INC.  
130 EAST RANDOLPH STREET  
SUITE 1000  
CHICAGO, IL 60601-8214

BEARINGS AND COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 1983, AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

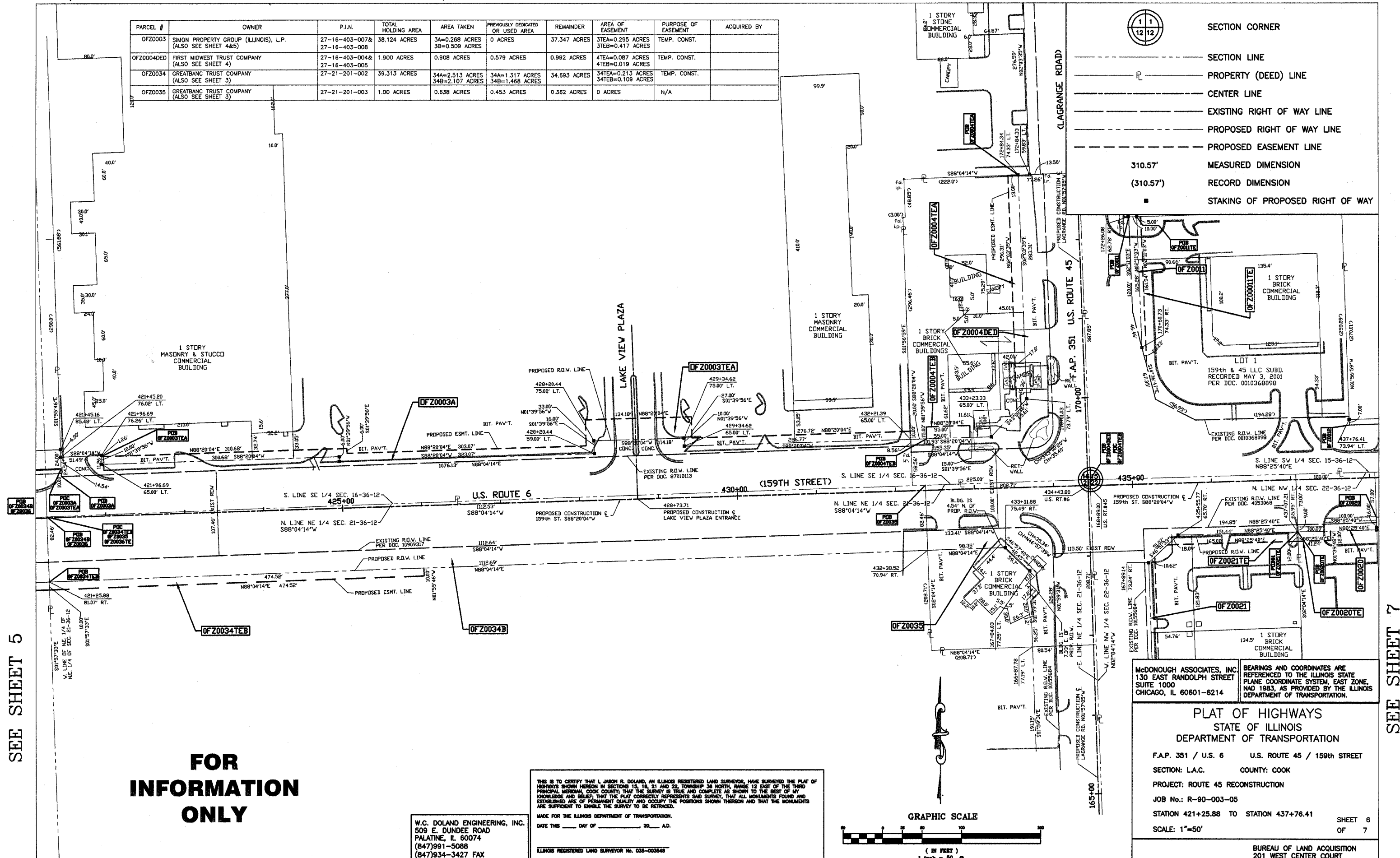
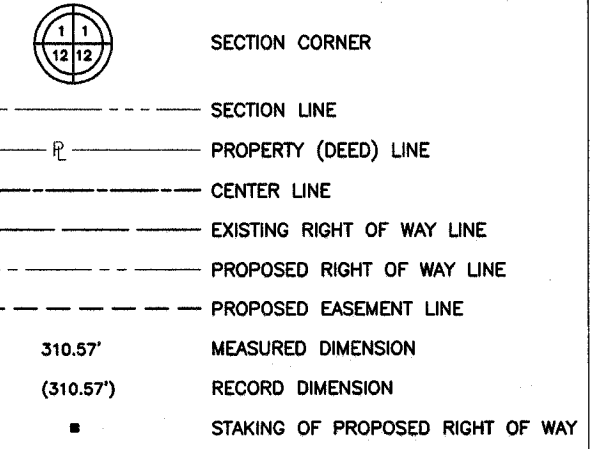
**PLAT OF HIGHWAYS**  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. 351 / U.S. 6 U.S. ROUTE 45 / 159th STREET  
SECTION: L.A.C. COUNTY: COOK  
PROJECT: ROUTE 45 RECONSTRUCTION  
JOB No.: R-90-003-05  
STATION 412+85.19 TO STATION 421+45.20 SHEET 5 OF 7  
SCALE: 1"=50'

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

SEE SHEET 6

PARCEL #	OWNER	P.I.N.	TOTAL HOLDING AREA	AREA TAKEN	PREVIOUSLY DEDICATED OR USED AREA	REMAINDER	AREA OF EASEMENT	PURPOSE OF EASEMENT	ACQUIRED BY
OFZ0003	SIMON PROPERTY GROUP (ILLINOIS), L.P. (ALSO SEE SHEET 4&5)	27-16-403-007& 27-16-403-008	38.124 ACRES	3A=0.268 ACRES 3B=0.509 ACRES	0 ACRES	37.347 ACRES	3TEA=0.295 ACRES 3TEB=0.417 ACRES	TEMP. CONST.	
OFZ0004DE	FIRST MIDWEST TRUST COMPANY (ALSO SEE SHEET 4)	27-16-403-004& 27-16-403-005	1.900 ACRES	0.908 ACRES	0.579 ACRES	0.992 ACRES	4TEA=0.087 ACRES 4TEB=0.019 ACRES	TEMP. CONST.	
OFZ0034	GREATBANC TRUST COMPANY (ALSO SEE SHEET 3)	27-21-201-002	39.313 ACRES	34A=2.513 ACRES 34B=2.107 ACRES	34A=1.317 ACRES 34B=1.468 ACRES	34.693 ACRES	34TEA=0.213 ACRES 34TEB=0.109 ACRES	TEMP. CONST.	
OFZ0035	GREATBANC TRUST COMPANY (ALSO SEE SHEET 3)	27-21-201-003	1.00 ACRES	0.638 ACRES	0.453 ACRES	0.362 ACRES	0 ACRES	N/A	



SEE SHEET 5

SEE SHEET 7

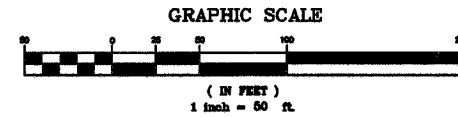
**FOR INFORMATION ONLY**

W.C. DOLAND ENGINEERING, INC.  
509 E. DUNDEE ROAD  
PALATINE, IL 60074  
(847)991-5088  
(847)934-3427 FAX

THIS IS TO CERTIFY THAT I, JASON R. DOLAND, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 15, 16, 21 AND 22, TOWNSHIP 36 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 THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RE-TRACED.

MADE FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION.  
DATE THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_ A.D.

ILLINOIS REGISTERED LAND SURVEYOR No. 036-003848



McDONOUGH ASSOCIATES, INC.  
130 EAST RANDOLPH STREET  
SUITE 1000  
CHICAGO, IL 60601-6214

BEARINGS AND COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 1983, AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

**PLAT OF HIGHWAYS**  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. 351 / U.S. 6      U.S. ROUTE 45 / 159th STREET  
SECTION: L.A.C.      COUNTY: COOK

PROJECT: ROUTE 45 RECONSTRUCTION  
JOB No.: R-90-003-05  
STATION 421+25.88 TO STATION 437+76.41  
SCALE: 1"=50'

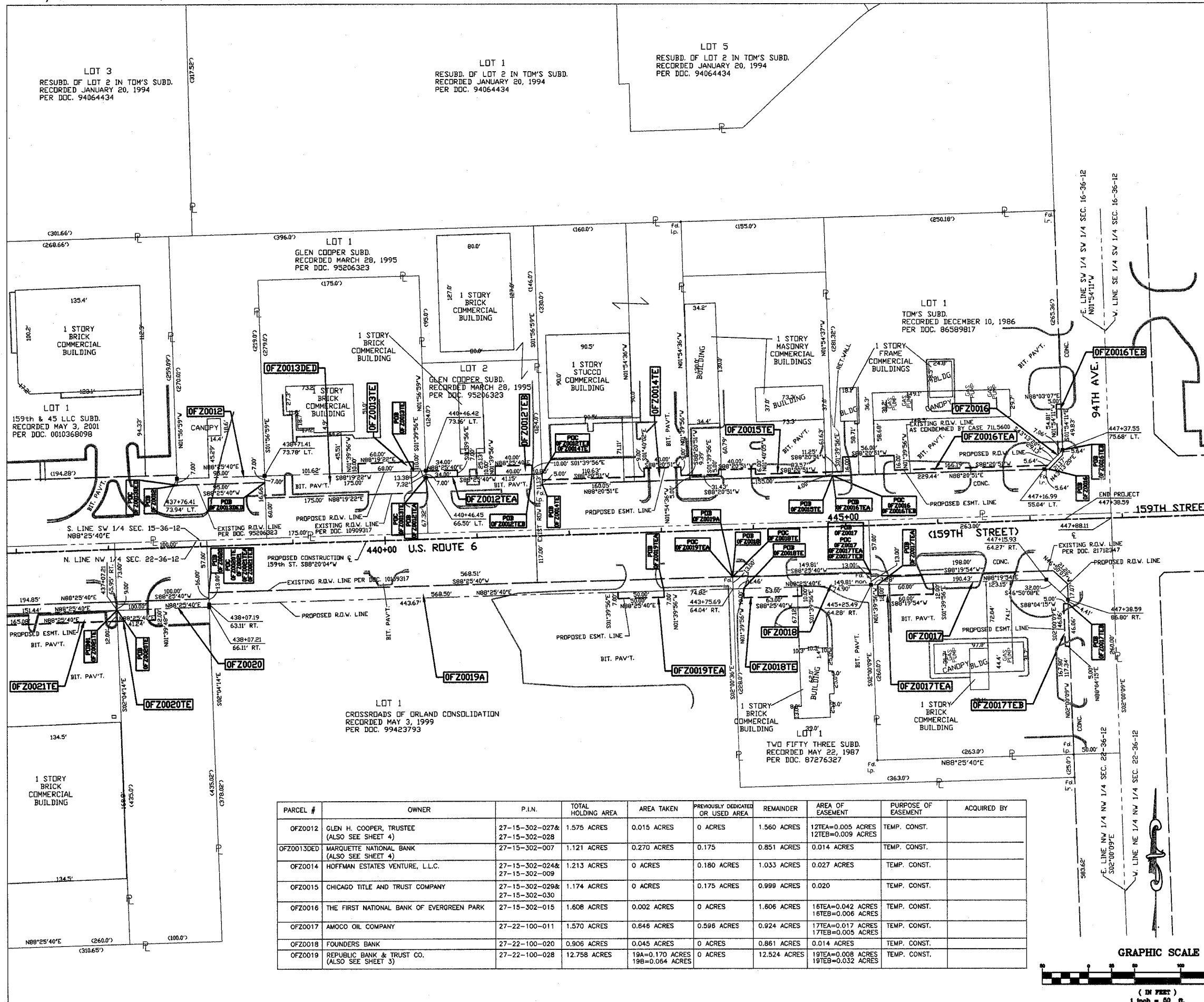
SHEET 6 OF 7

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



- SECTION CORNER
- SECTION LINE
- PROPERTY (DEED) LINE
- CENTER LINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT LINE
- 310.57' MEASURED DIMENSION
- (310.57') RECORD DIMENSION
- STAKING OF PROPOSED RIGHT OF WAY

**FOR INFORMATION ONLY**



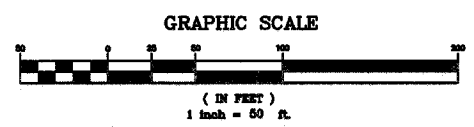
W.C. DOLAND ENGINEERING, INC.  
509 E. DUNDEE ROAD  
PALATINE, IL 60074  
(847)991-5088  
(847)934-3427 FAX

THIS IS TO CERTIFY THAT I, JASON R. DOLAND, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 15, 16, 21 AND 22, TOWNSHIP 36 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 THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.  
MADE FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION.  
DATE THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_ A.D.  
ILLINOIS REGISTERED LAND SURVEYOR No. 035-003548

McDONOUGH ASSOCIATES, INC.  
130 EAST RANDOLPH STREET  
SUITE 1000  
CHICAGO, IL 60601-6214  
BEARINGS AND COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 1983, AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

**PLAT OF HIGHWAYS**  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
F.A.P. 351 / U.S. 6 U.S. ROUTE 45 / 159th STREET  
SECTION: L.A.C. COUNTY: COOK  
PROJECT: ROUTE 45 RECONSTRUCTION  
JOB No.: R-90-003-05  
STATION 437+07.21 TO STATION 437+38.59  
SCALE: 1"=50'

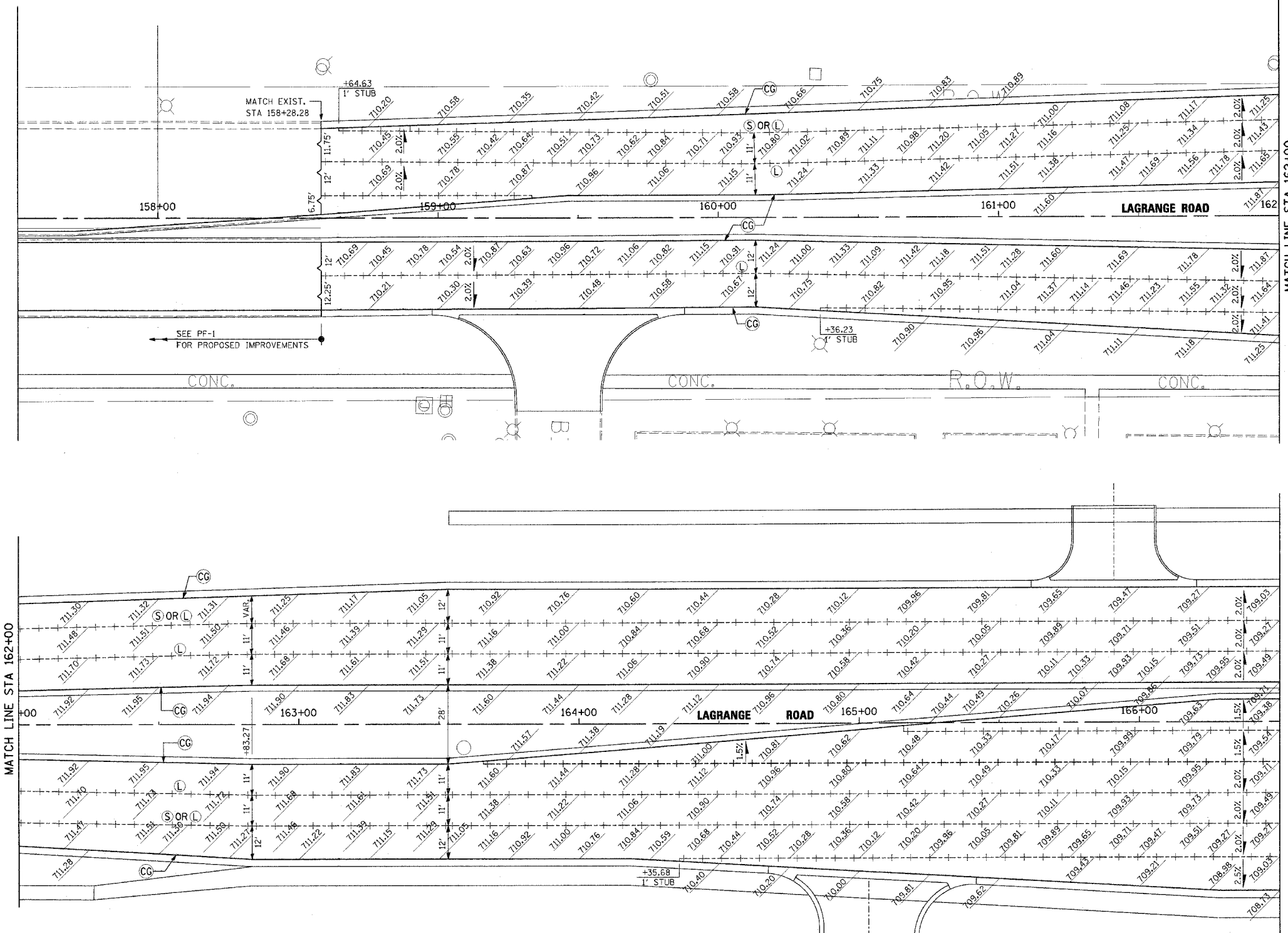
PARCEL #	OWNER	P.I.N.	TOTAL HOLDING AREA	AREA TAKEN	PREVIOUSLY DEDICATED OR USED AREA	REMAINDER	AREA OF EASEMENT	PURPOSE OF EASEMENT	ACQUIRED BY
OFZ0012	GLEN H. COOPER, TRUSTEE (ALSO SEE SHEET 4)	27-15-302-027& 27-15-302-028	1.575 ACRES	0.015 ACRES	0 ACRES	1.560 ACRES	12TEA=0.005 ACRES 12TEB=0.009 ACRES	TEMP. CONST.	
OFZ0013DED	MARQUETTE NATIONAL BANK (ALSO SEE SHEET 4)	27-15-302-007	1.121 ACRES	0.270 ACRES	0.175	0.851 ACRES	0.014 ACRES	TEMP. CONST.	
OFZ0014	HOFFMAN ESTATES VENTURE, L.L.C.	27-15-302-024& 27-15-302-009	1.213 ACRES	0 ACRES	0.180 ACRES	1.033 ACRES	0.027 ACRES	TEMP. CONST.	
OFZ0015	CHICAGO TITLE AND TRUST COMPANY	27-15-302-029& 27-15-302-030	1.174 ACRES	0 ACRES	0.175 ACRES	0.999 ACRES	0.020	TEMP. CONST.	
OFZ0016	THE FIRST NATIONAL BANK OF EVERGREEN PARK	27-15-302-015	1.608 ACRES	0.002 ACRES	0 ACRES	1.606 ACRES	16TEA=0.042 ACRES 16TEB=0.006 ACRES	TEMP. CONST.	
OFZ0017	AMOCO OIL COMPANY	27-22-100-011	1.570 ACRES	0.646 ACRES	0.596 ACRES	0.924 ACRES	17TEA=0.017 ACRES 17TEB=0.005 ACRES	TEMP. CONST.	
OFZ0018	FOUNDERS BANK	27-22-100-020	0.906 ACRES	0.045 ACRES	0 ACRES	0.861 ACRES	0.014 ACRES	TEMP. CONST.	
OFZ0019	REPUBLIC BANK & TRUST CO. (ALSO SEE SHEET 3)	27-22-100-028	12.758 ACRES	19A=0.170 ACRES 19B=0.064 ACRES	0 ACRES	12.524 ACRES	19TEA=0.008 ACRES 19TEB=0.032 ACRES	TEMP. CONST.	



SEE SHEET 6

\* Plan Sheets 113-114 Not Used \*

STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	115
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



**LEGEND**

----- LONGITUDINAL CONSTRUCTION JOINT GROUTED IN PLACE, NO. 6 TIE BAR AT 24" LONG, DEFORMED (EPOXY COATED) AT 24" CENTERS

**NOTE:** TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED ACCORDING TO STANDARDS 420101 AND 420106.

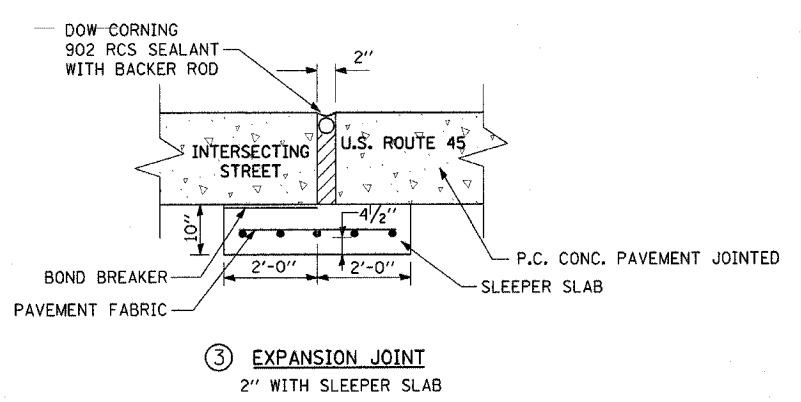
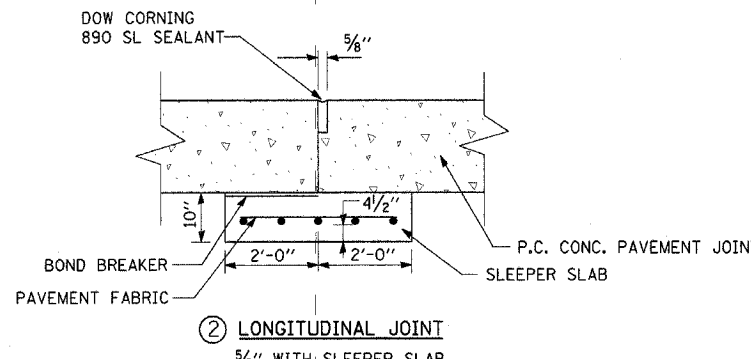
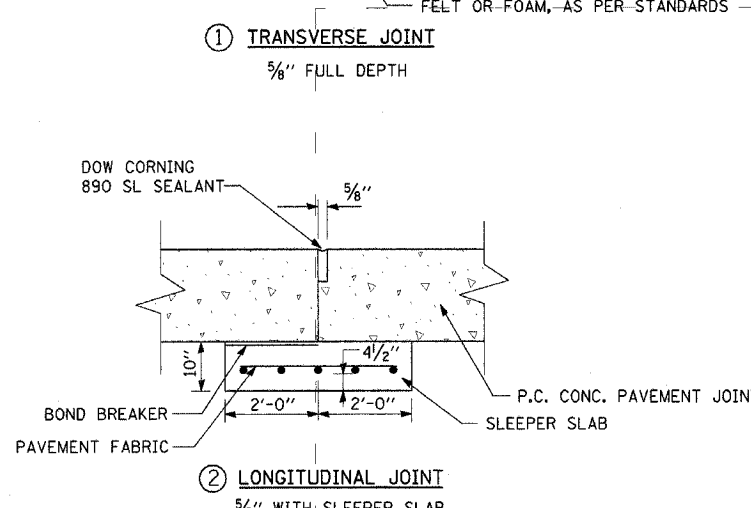
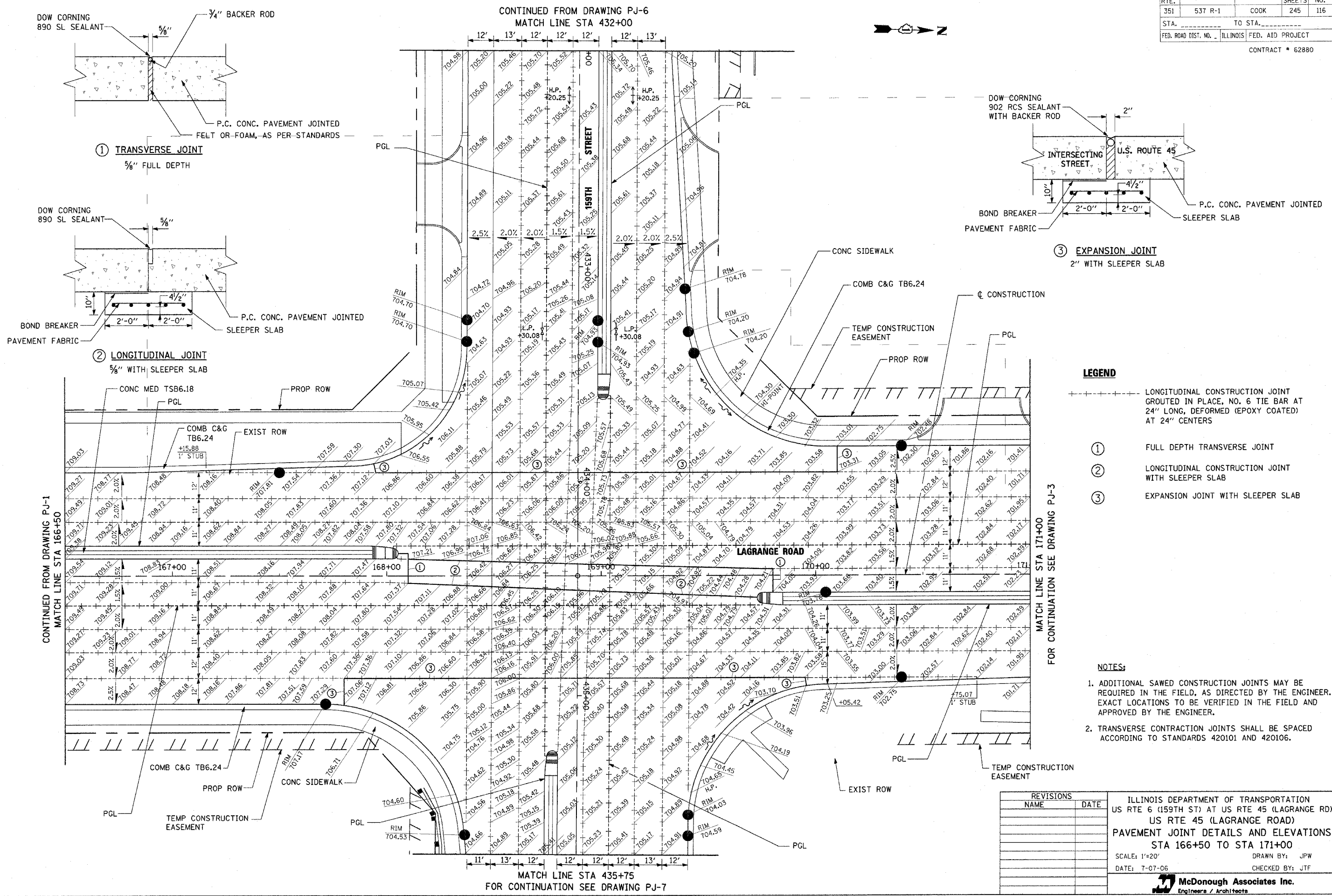
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US RTE 45 (LAGRANGE ROAD)  
 PAVEMENT JOINT DETAILS AND ELEVATIONS  
 STA 157+50 TO STA 166+50  
 SCALE: 1"=20'  
 DATE: 7-07-06  
 DRAWN BY: BA  
 CHECKED BY: RCH

**McDonough Associates Inc.**  
 Engineers/Architects

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	116
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT * 62880				



- LEGEND**
- LONGITUDINAL CONSTRUCTION JOINT GROUTED IN PLACE, NO. 6 TIE BAR AT 24" LONG, DEFORMED (EPOXY COATED) AT 24" CENTERS
  - ① FULL DEPTH TRANSVERSE JOINT
  - ② LONGITUDINAL CONSTRUCTION JOINT WITH SLEEPER SLAB
  - ③ EXPANSION JOINT WITH SLEEPER SLAB

- NOTES:**
1. ADDITIONAL SAWED CONSTRUCTION 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. TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED ACCORDING TO STANDARDS 420101 AND 420106.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US RTE 45 (LAGRANGE ROAD)  
 PAVEMENT JOINT DETAILS AND ELEVATIONS  
 STA 166+50 TO STA 171+00  
 SCALE: 1"=20' DRAWN BY: JPW  
 DATE: 7-07-06 CHECKED BY: JTF

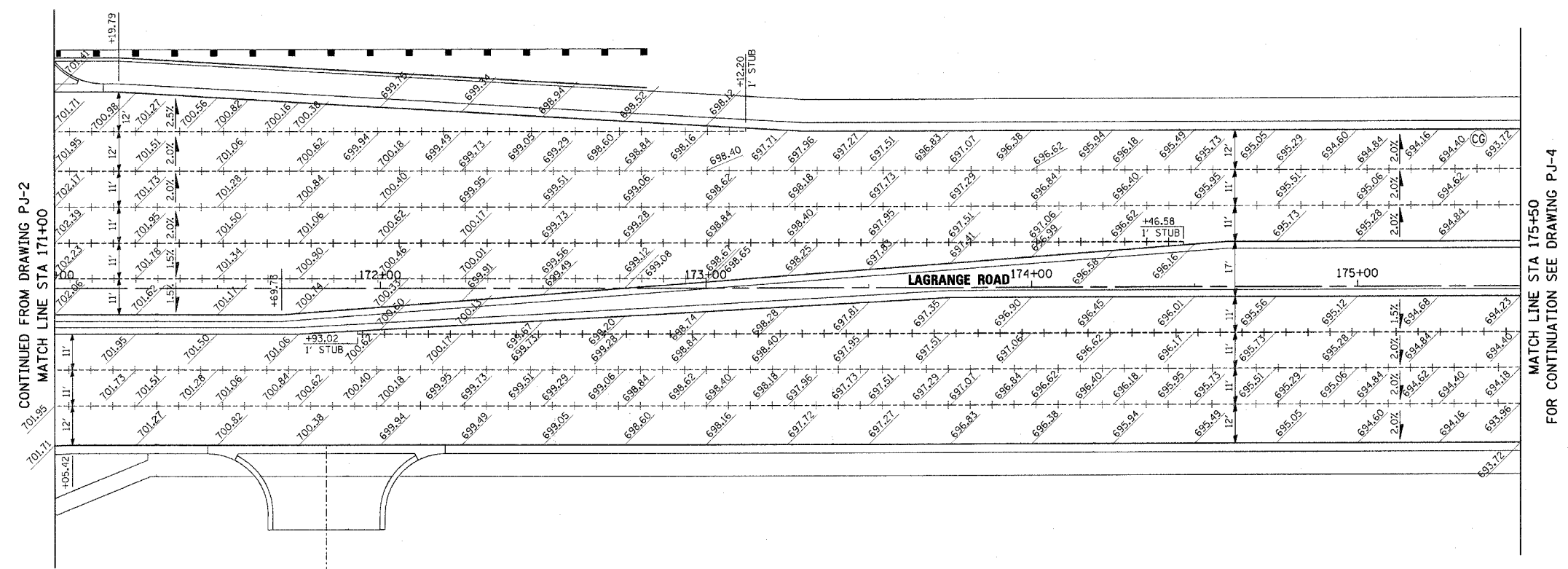


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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	117
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT • 62880



**LEGEND**

----- LONGITUDINAL CONSTRUCTION JOINT GROUTED IN PLACE, NO. 6 TIE BAR AT 24" LONG, DEFORMED (EPOXY COATED) AT 24" CENTERS

**NOTE:**  
TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED ACCORDING TO STANDARDS 420101 AND 420106.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
US RTE 45 (LAGRANGE ROAD)  
PAVEMENT JOINT DETAILS AND ELEVATIONS  
STA 171+00 TO STA 175+50  
SCALE: 1"=20'  
DATE: 7-07-06

McDonough Associates Inc.  
Engineers/Architects

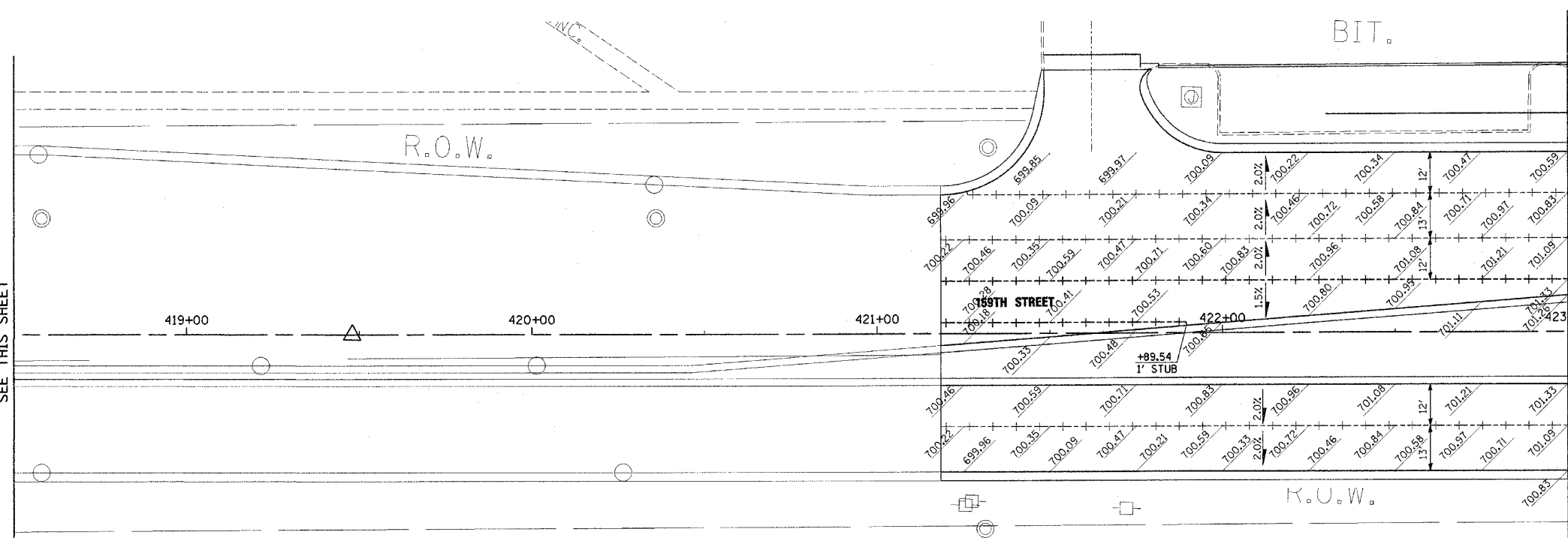
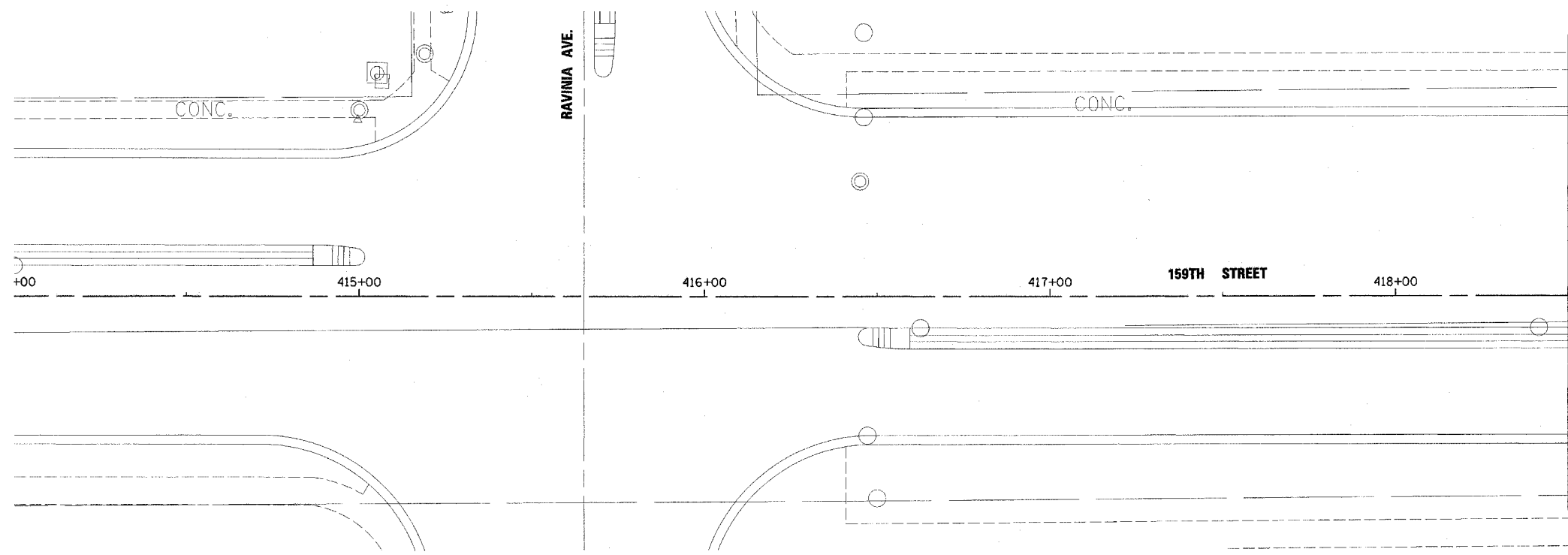
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8-8-06

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F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	119
STA. _____ TO STA. _____		FED. AID PROJECT		
FED. ROAD DIST. NO. _____ ILLINOIS		CONTRACT # 62880		



**LEGEND**

----- LONGITUDINAL CONSTRUCTION JOINT GROUDED IN PLACE, NO. 6 TIE BAR AT 24" LONG, DEFORMED (EPOXY COATED) AT 24" CENTERS

**NOTE:** TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED ACCORDING TO STANDARDS 420101 AND 420106.

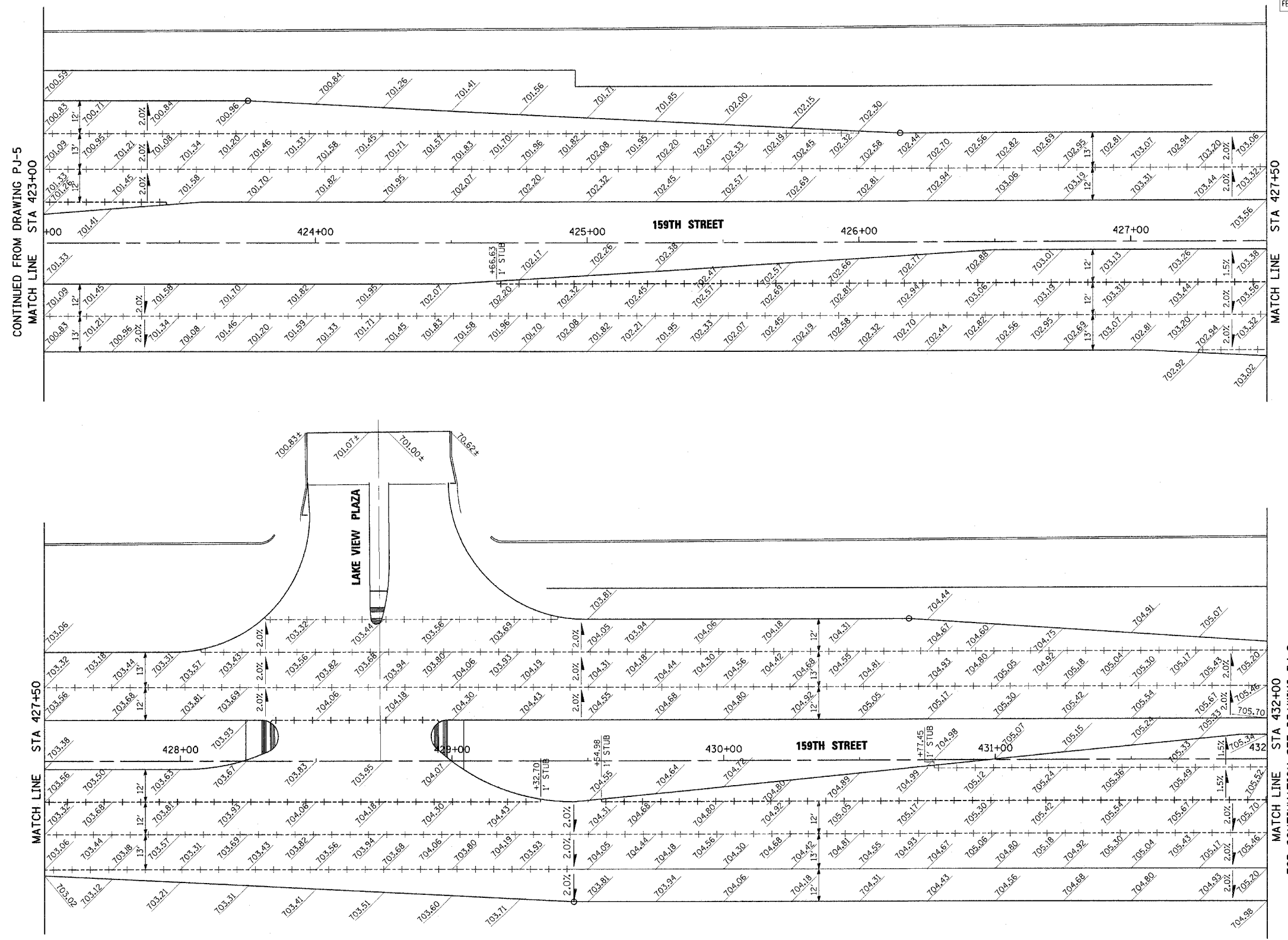
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US RTE 6 (159TH STREET)  
 PAVEMENT JOINT DETAILS AND ELEVATIONS  
 STA. 414+00 TO STA 423+00  
 SCALE: 1"=20' DRAWN BY: BA  
 DATE: 7-07-06 CHECKED BY: RCH

**McDonough Associates Inc.**  
 Engineers / Architects

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E.A.C. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	120
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT # 62880				



**LEGEND**

-----  
 LONGITUDINAL CONSTRUCTION JOINT GROUDED  
 IN PLACE, NO. 6 TIE BAR AT 24" LONG, DEFORMED  
 (EPOXY COATED) AT 24" CENTERS

**NOTE:**  
 TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED  
 ACCORDING TO STANDARDS 420101 AND 420106.

REVISIONS	
NAME	DATE

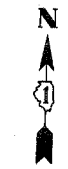
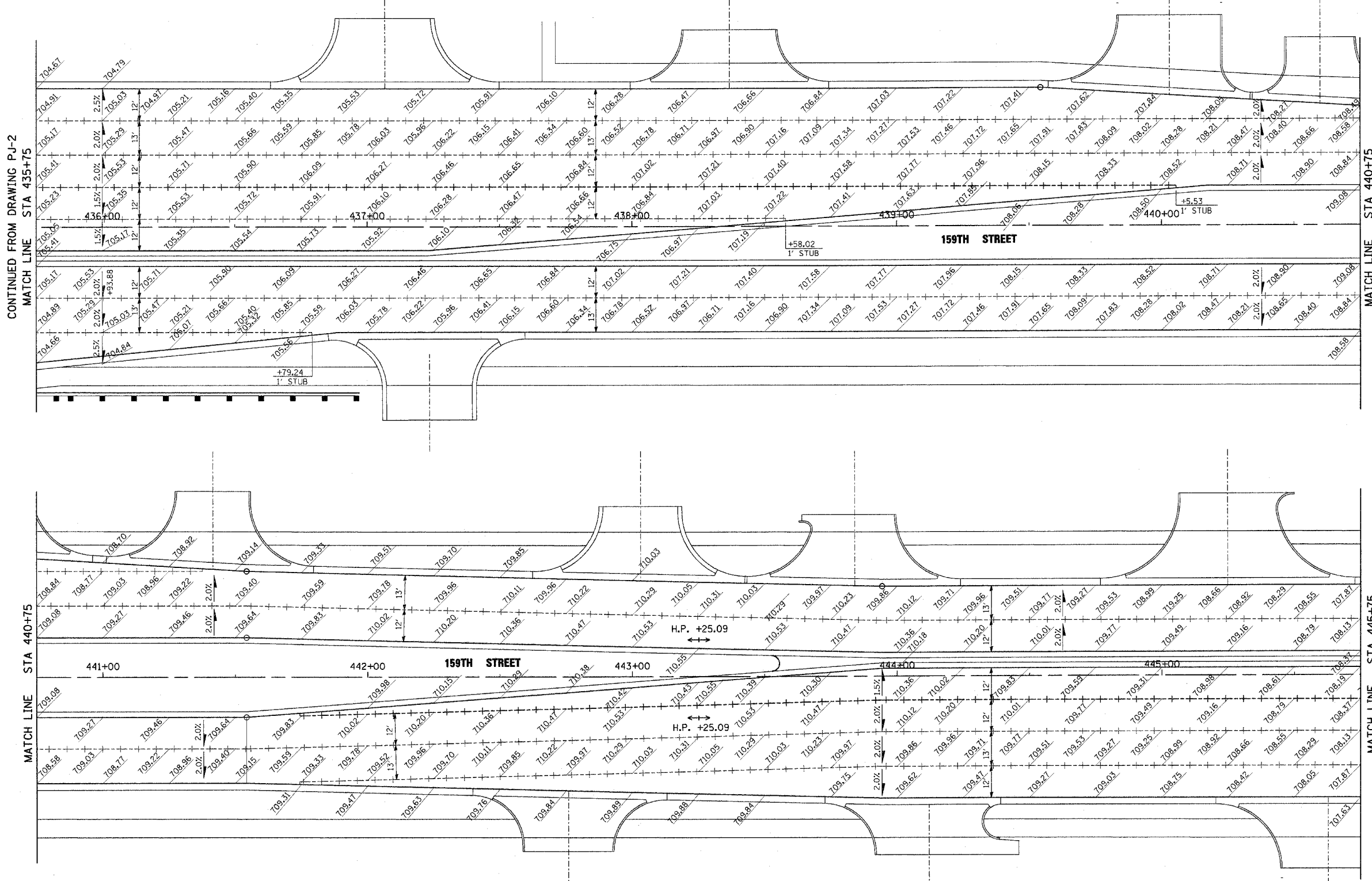
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US RTE 6 (159TH STREET)  
 PAVEMENT JOINT DETAILS AND ELEVATIONS  
 STA 423+00 TO STA 432+00  
 SCALE: 1"=20'  
 DATE: 7-07-06  
 DRAWN BY: BA  
 CHECKED BY: RCH

**McDonough Associates Inc.**  
 Engineers / Architects

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STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	121
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		

CONTRACT # 62880



CONTINUED FROM DRAWING PJ-2  
MATCH LINE STA 435+75

MATCH LINE STA 440+75

MATCH LINE STA 440+75

MATCH LINE STA 445+75  
FOR CONTINUATION SEE DRAWING PJ-8

**LEGEND**

----- LONGITUDINAL CONSTRUCTION JOINT GROUTED  
IN PLACE, NO. 6 TIE BAR AT 24" LONG, DEFORMED  
(EPOXY COATED) AT 24" CENTERS

**NOTE:**  
TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED  
ACCORDING TO STANDARDS 420101 AND 420106.

REVISIONS	
NAME	DATE

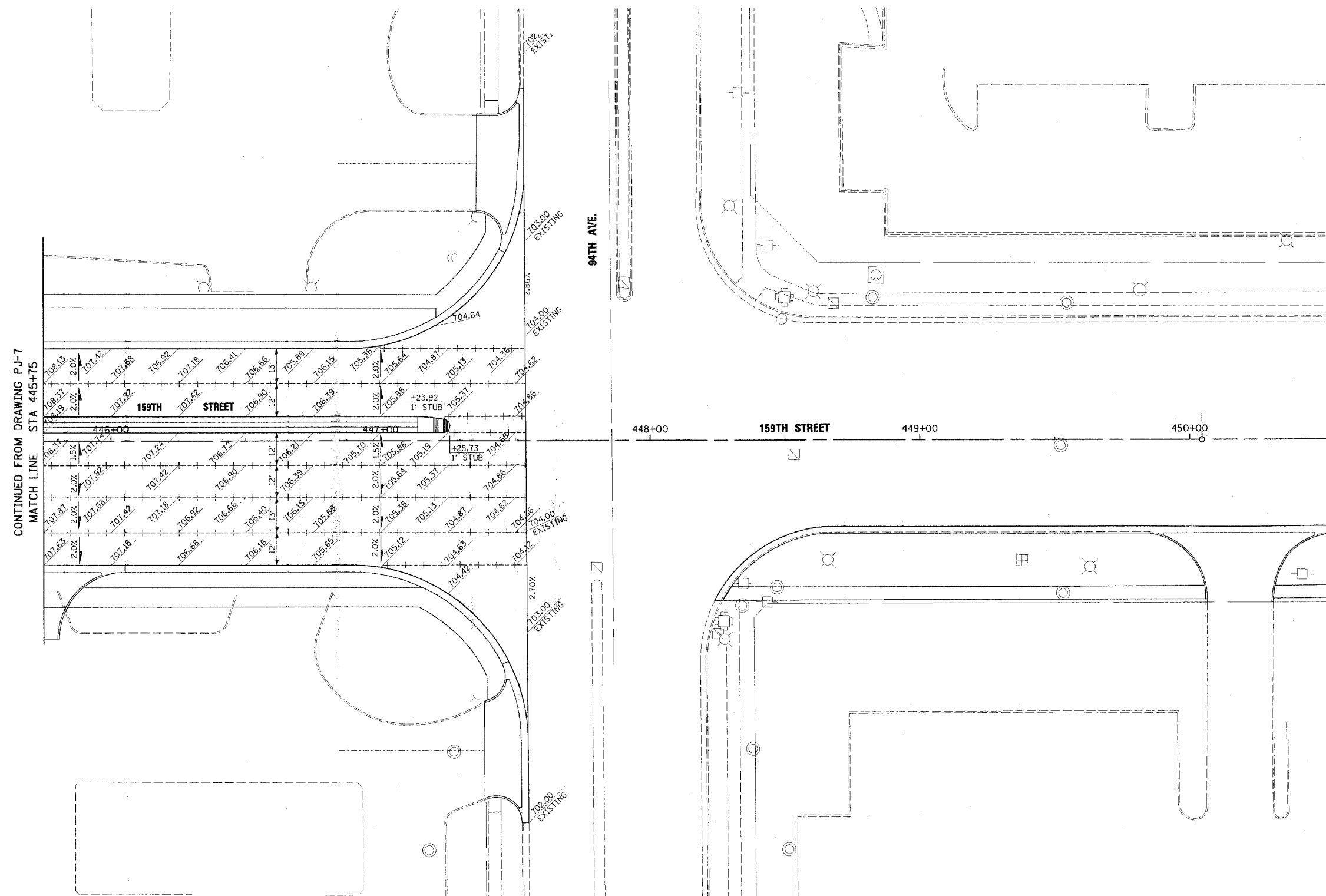
ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
US RTE 6 (159TH STREET)  
PAVEMENT JOINT DETAILS AND ELEVATIONS  
STA 435+75 TO STA 445+75  
SCALE: 1"=20' DRAWN BY: BA  
DATE: 7-07-06 CHECKED BY: RCH

**McDonough Associates Inc.**  
Engineers / Architects

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8/7/2006  
3:37:35 PM



F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	122
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



**LEGEND**

+++++ LONGITUDINAL CONSTRUCTION JOINT GROUTED IN PLACE, NO. 6 TIE BAR AT 24" LONG, DEFORMED (EPOXY COATED) AT 24" CENTERS

**NOTE:** TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED ACCORDING TO STANDARDS 420101 AND 420106.

REVISIONS	
NAME	DATE

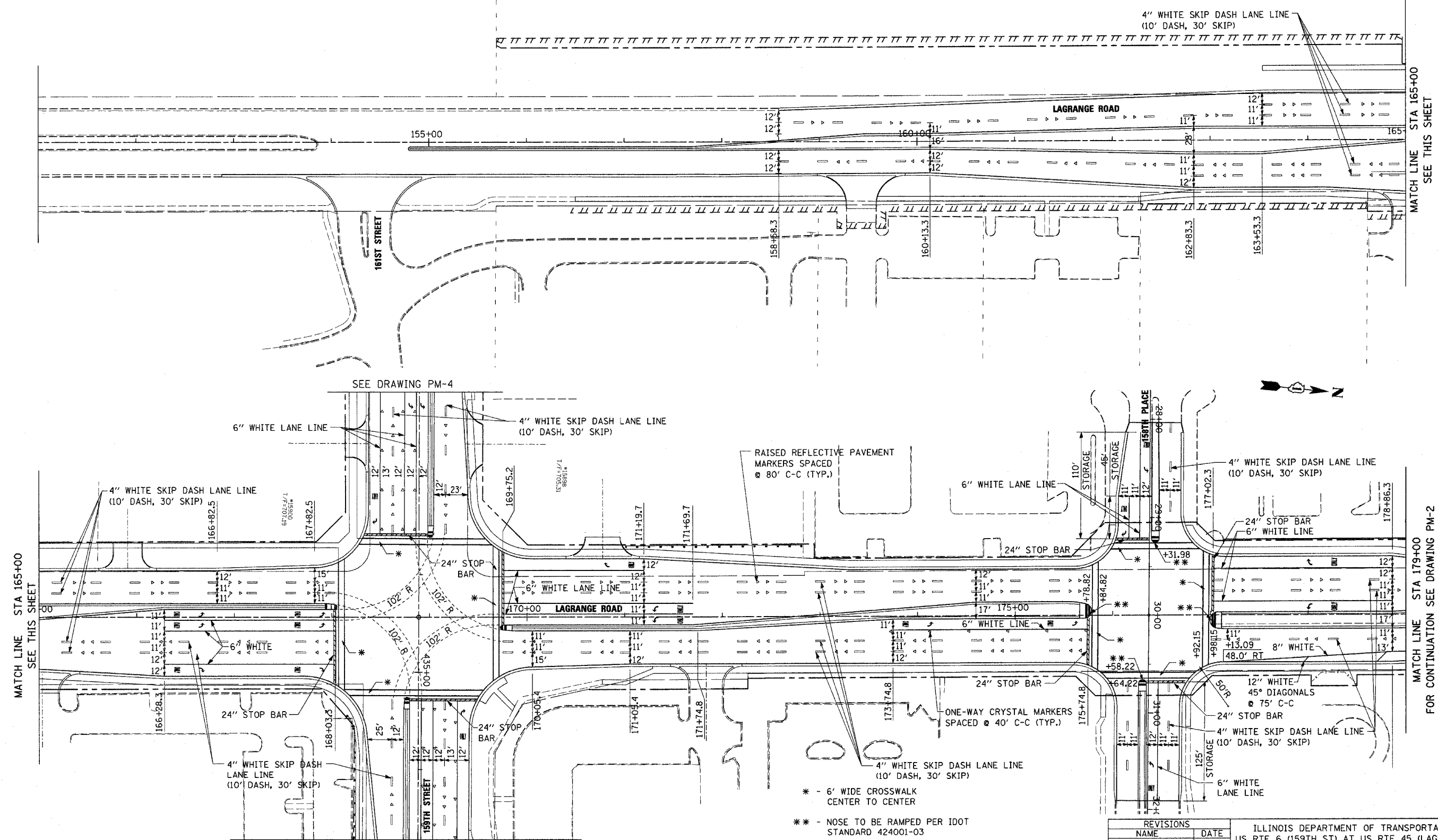
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US RTE 6 (159TH STREET)  
 PAVEMENT JOINT DETAILS AND ELEVATIONS  
 STA 445+75 TO 94TH AVENUE  
 SCALE: 1"=20'  
 DATE: 7-07-06  
 DRAWN BY: JTF  
 CHECKED BY: RCH

**McDonough Associates Inc.**  
 Engineers / Architects

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F.A.D. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	123
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		

CONTRACT # 62880



MATCH LINE STA 165+00  
SEE THIS SHEET

MATCH LINE STA 165+00  
SEE THIS SHEET

MATCH LINE STA 179+00  
FOR CONTINUATION SEE DRAWING PM-2

- \* - 6' WIDE CROSSWALK CENTER TO CENTER
- \*\* - NOSE TO BE RAMPED PER IDOT STANDARD 424001-03

NOTES:  
 1. TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS CONTACT MS. PATRICE HARRIS, AREA TRAFFIC TECHNICIAN AT (708) 597-9800.  
 2. THE CONTRACTOR SHALL USE POLYUREA PAVEMENT MARKING LINES ON PCC PAVEMENT OF THE SIZE AND COLOR SPECIFIED.

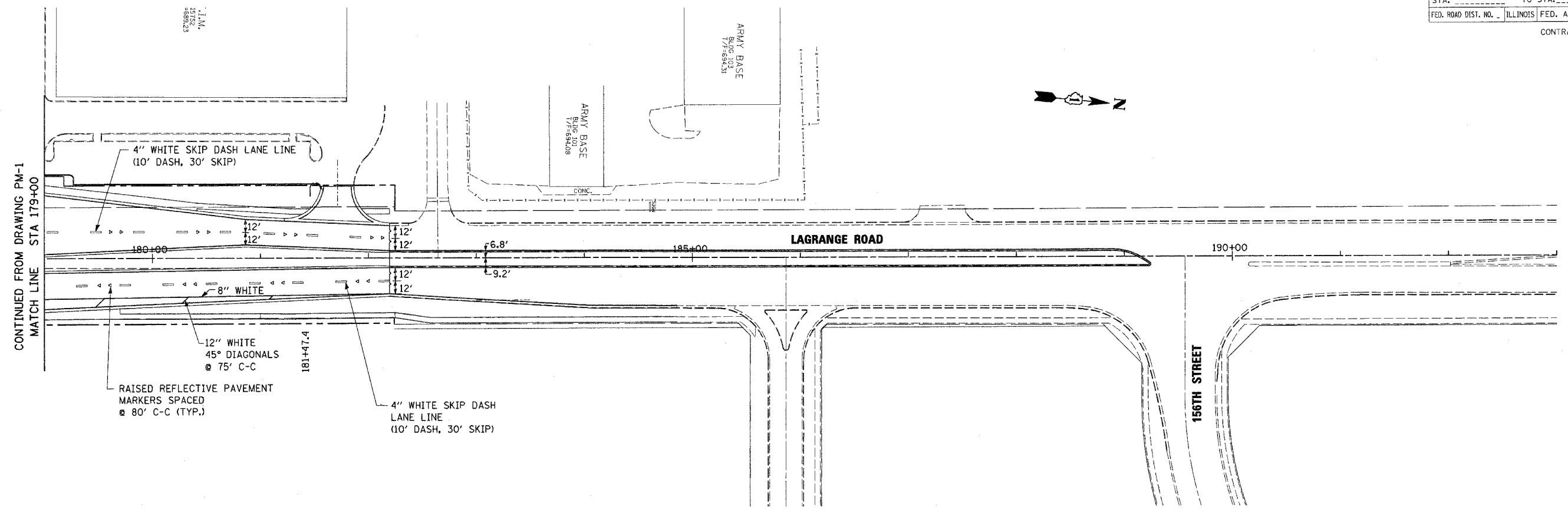
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US RTE 45 (LAGRANGE ROAD)  
 SIGNING AND PAVEMENT MARKING PLAN  
 STA 151+00 TO STA 179+00  
 SCALE: 1"=50'  
 DATE: 7-07-06  
 DRAWN BY: JTF  
 CHECKED BY: RCH

**McDonough Associates Inc.**  
 Engineers / Architects

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STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	124
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT				
CONTRACT # 62880				



CONTINUED FROM DRAWING PM-1  
MATCH LINE STA 179+00

- 4" WHITE SKIP DASH LANE LINE  
(10' DASH, 30' SKIP)
- 12' 12'
- 12' 12'
- 8" WHITE
- 12" WHITE  
45° DIAGONALS  
@ 75' C-C
- RAISED REFLECTIVE PAVEMENT  
MARKERS SPACED  
@ 80' C-C (TYP.)
- 181+47.4
- 4" WHITE SKIP DASH  
LANE LINE  
(10' DASH, 30' SKIP)

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7/31/2006  
1:01:51 PM

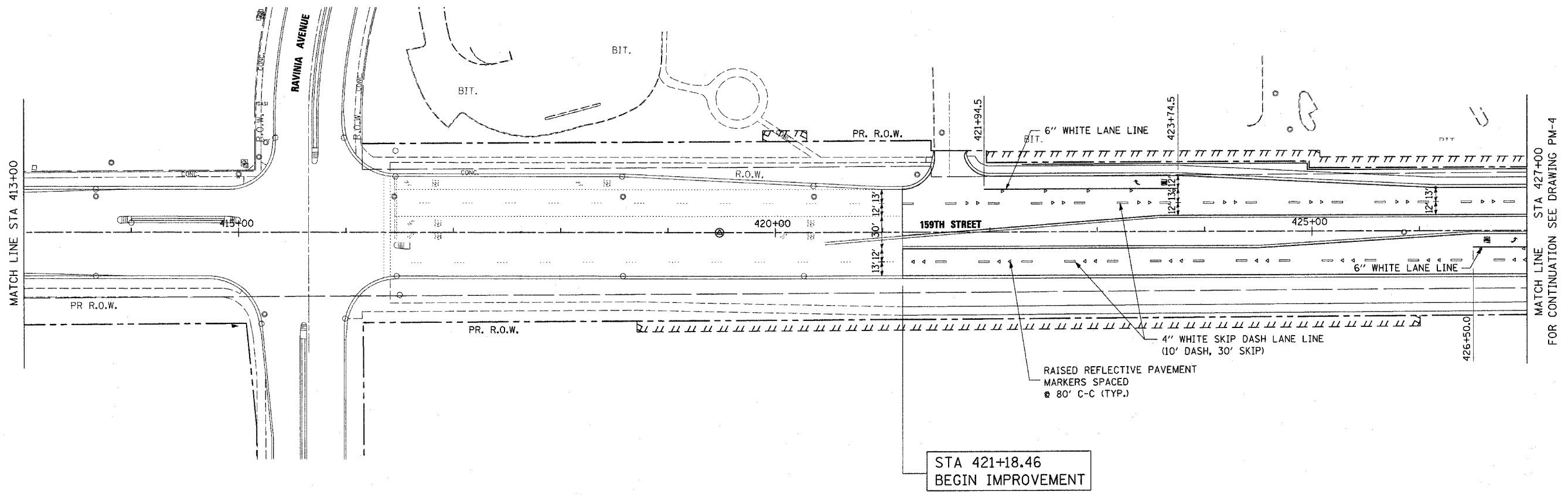
REVISIONS		NAME	DATE
NO.	DESCRIPTION		

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
US RTE 45 (LAGRANGE ROAD)  
SIGNING AND PAVEMENT MARKING PLAN  
STA 179+00 TO STA 183+50

SCALE: 1"=50'      DRAWN BY: JTF  
DATE: 7-07-06      CHECKED BY: RCH

**McDonough Associates Inc.**  
Engineers / Architects

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	125
STA. _____ TO STA. _____		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



STA 421+18.46  
BEGIN IMPROVEMENT

REVISIONS	
NAME	DATE

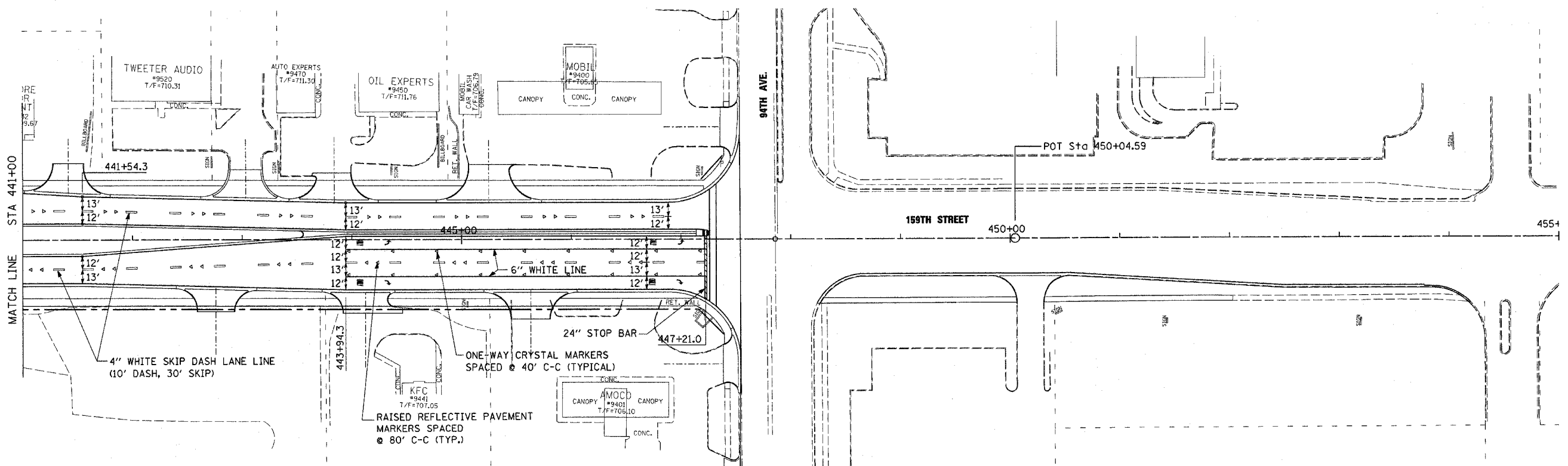
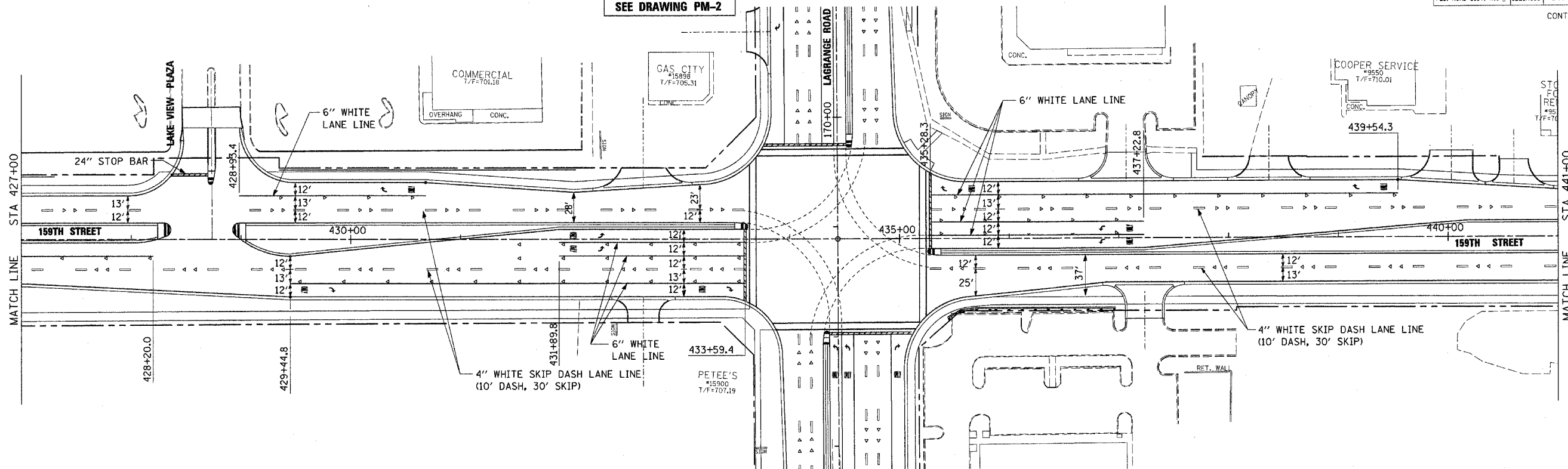
ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
US RTE 6 (159TH STREET)  
SIGNING AND PAVEMENT MARKING PLAN  
STA 408+00 TO STA 427+00  
SCALE: 1"=50'  
DATE: 7-07-06  
DRAWN BY: JTF  
CHECKED BY: RCH

**McDonough Associates Inc.**  
Engineers / Architects

FILES  
DATES  
TIMES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	126
STA. _____ TO STA. _____		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO. _____		CONTRACT # 62880		

FOR STRIPING CALLOUTS  
LAGRANGE ROAD  
SEE DRAWING PM-2



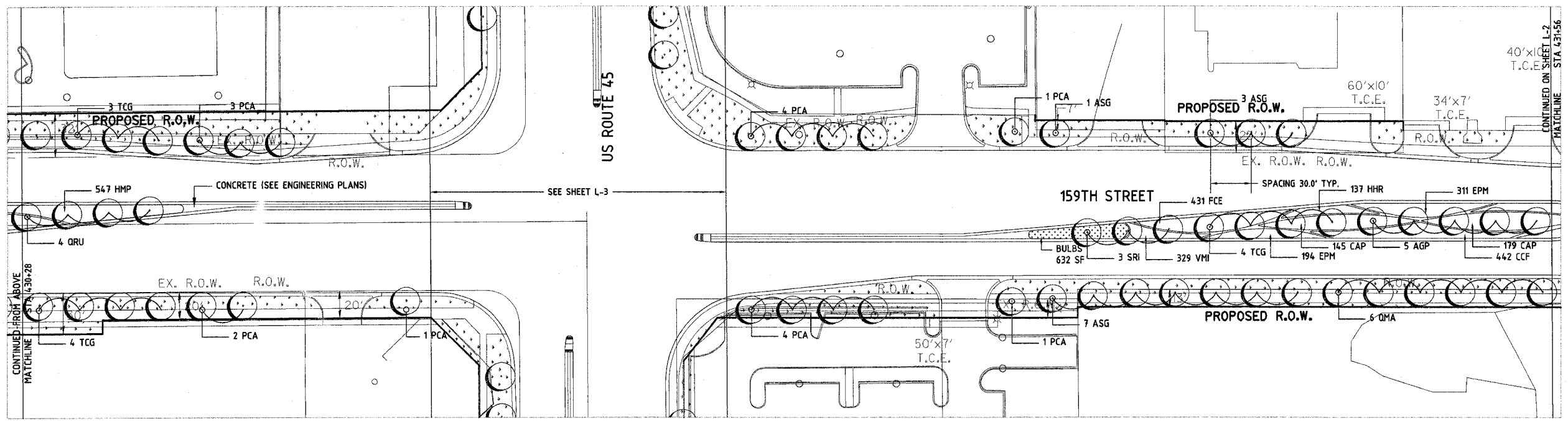
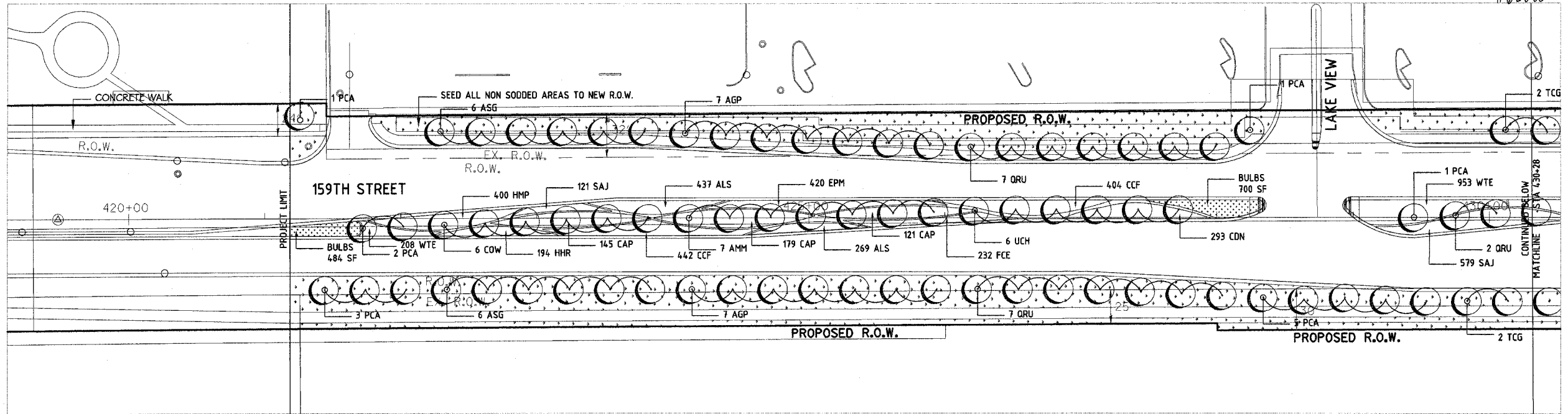
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
US RTE 6 (159TH STREET)  
SIGNING AND PAVEMENT MARKING PLAN  
STA 427+00 TO 94TH AVENUE  
SCALE: 1"=50'  
DATE: 7-07-06  
DRAWN BY: JTF  
CHECKED BY: RCH

**McDonough Associates Inc.**  
Engineers / Architects

STYLES  
DATES  
STRIPES

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
531 R-1	COOK	245	127
STA. 420+00	TO STA. 420+00		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT # 02880			



REVISIONS	
NAME	DATE
Pre-Final Submission	12-23-05
Pre-Final Submission	07-17-06

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US ROUTE 6 (159TH STREET)  
 AT US ROUTE 45 (LAGRANGE ROAD)

LANDSCAPING PLAN

SCALE: 1" = 40'

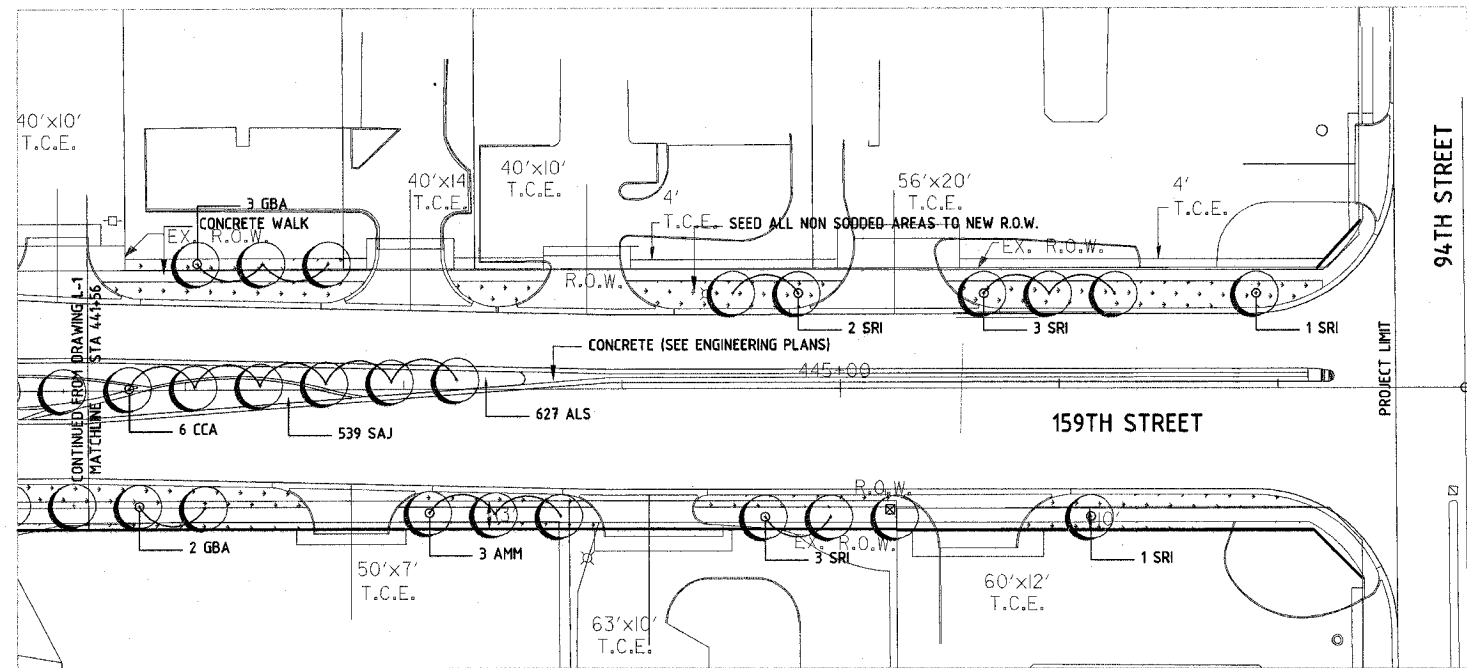
DATE: 07-17-06

DRAWN BY: MEG  
 CHECKED BY: JMS/JCG

**MCDONOUGH ASSOCIATES INC.**  
 Engineers / Architects

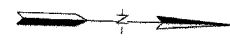


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
361	537 P-1	COOK	245	128
STA. _____		TO STA. _____		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
# 02880				

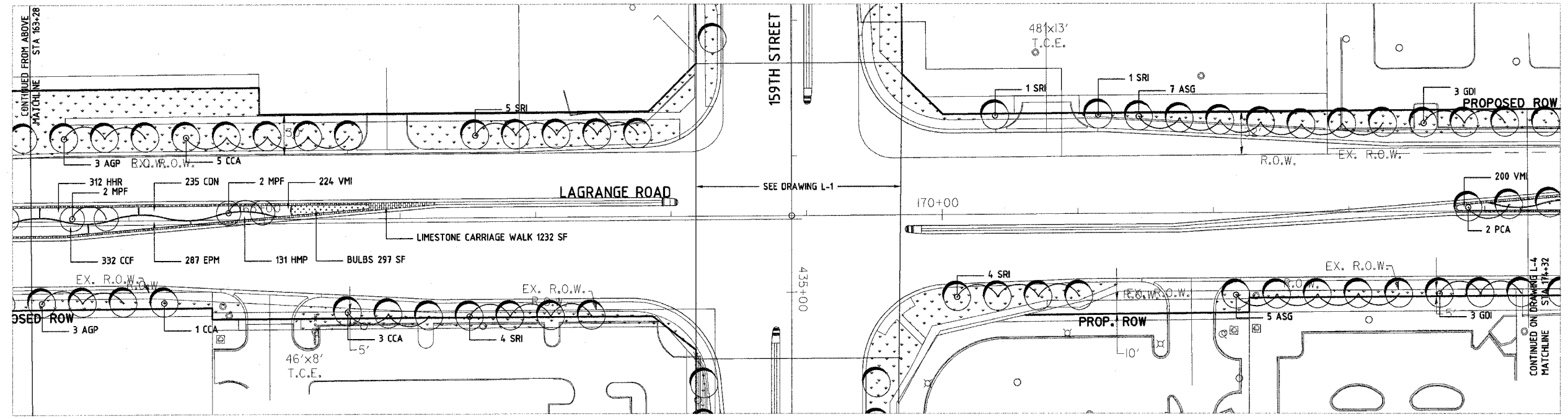
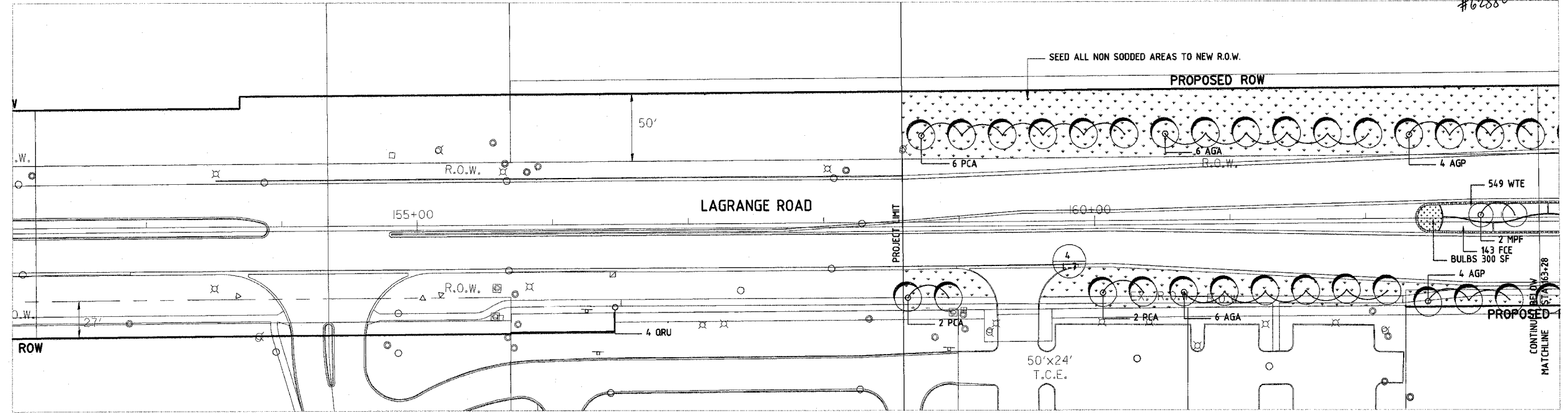


REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION US ROUTE 6 (159TH STREET) AT US ROUTE 45 (LAGRANGE ROAD)
NAME	DATE	
Pre-Final Submission	12-23-05	LANDSCAPING PLAN SCALE: 1" = 40' DATE: 07-17-06
Pre-Final Submission	07-17-06	
		DRAWN BY: MEG CHECKED BY: JMB/JCC
		MCDONOUGH ASSOCIATES INC. Engineers / Architects

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	637 P1	COOK	245	129
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



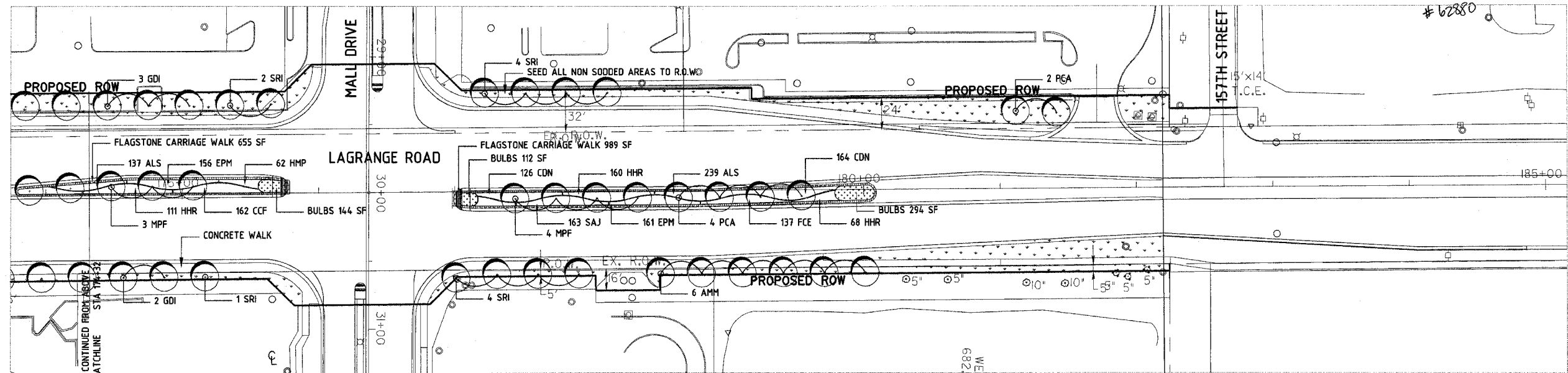
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REVISIONS	
NAME	DATE
Pre-Find Submission	12-23-05
Pre-Find Submission	07-17-06

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US ROUTE 6 (159TH STREET)  
 AT US ROUTE 45 (LAGRANGE ROAD)  
**LANDSCAPING PLAN**  
 SCALE: 1" = 40'  
 DATE: 07-17-06  
 DRAWN BY: MEG  
 CHECKED BY: JMB/JCC  
**MCDONOUGH ASSOCIATES INC.**  
 Engineers / Architects

F.A. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351 537 R1	COOK	245	130
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



**LANDSCAPING GENERAL NOTES**

Landscaping Work shall conform to the applicable portions of Sections 211, 250, 252, 253, 254 and 1081 of the Standard Specifications, except as noted below

**Materials**

- In addition to Article 1081.05 of the Standard Specifications where a specific type of compost is called for (including but not limited to composted leaf mold, composted hardwood, composted manure and spent mushroom compost), the Contractor shall provide documentation to the Engineer that the compost meets that description prior to placement.
- Mulch to be used in planted areas shall be shredded hardwood bark per Article 1081.06.
- All sod shall be Salt Tolerant Sod in compliance with article 1081.03 (b).
- Peat or Peat Moss shall not be used. Wherever "peat" or "peat moss" is called for mushroom compost shall be substituted in accordance with 1081.05.

**Installation**

- All areas to be planted with shrubs, perennials and ornamental grasses shall be backfilled with Soil Planting Mix of Imported Topsoil, Compost and Sand in the ratio of 1:1:1 to achieve an 18" depth below finished grades. Compost used shall be mushroom compost in compliance with article 1081.05. Planted areas shall otherwise be prepared in compliance with articles 211.04 and 211.05. This item shall be measured per square yard and paid for at the contract unit price for SOIL PLANTING MIX FURNISH AND PLACE 18". Constituents of the soil planting mix shall be considered integral to the mix and shall not be measured for payment.
- Lawn areas shall receive 6" depth of topsoil imported from outside the right-of-way in accordance with Article 211. This item shall be measured per square yard and paid for at the contract unit price for TOPSOIL FURNISH AND PLACE 6".
- Subgrade or fill under all planted or lawn areas shall be as described in the engineering drawings.
- Lawn seed mix shall be IDOT Mix 1A Salt Tolerant Lawn Mixture installed in accordance with Article 250.
- The unit prices for Shrubs as identified in the item list shall not include mulch.
- Perennial plants shall be measured per each plant and paid for at the contract unit price for PERENNIAL PLANTS. The Unit Price for perennial plants shall not include mulch.
- All shrub and perennial areas shall be mulched to the extent of the bed with shredded hardwood mulch in accordance with article 1081.06(b) to a depth of 3". This item shall be measured per cubic yard and paid for on the basis of MULCH.
- For Flagstone Sidewalk see the Special Provisions.

IDOT ITEM #	PLAN SYMBOL	DESC.	UNIT	QTY
XX005840		FLAGSTONE SIDEWALK (SPECIAL)	SF	2876
K1003679		MULCH	CY	89.3
25000110		SEEDING, CLASS 1A	AC	3.3
X2510630		HEAVY DUTY EROSION CONTROL BLANKET	SY	15971
25000750		MOWING	AC	3.3
25200200		SUPPLEMENTAL WATERING	UNIT (1000 Gal)	180
21104625		TOPSOIL-FURNISH AND PLACE 6"	SY	15971
		SOIL PLANTING, FURNISH AND PLACE MIX 18"	SY	1072
25000400		NITROGEN FERTILIZER NUTRIENT	POUND	335
25000500		PHOSPHOROUS FERTILIZER NUTRIENT	POUND	335
25000600		POTASSIUM FERTILIZER NUTRIENT	POUND	335
X0322859		WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	24
K0026850		PERENNIAL PLANT CARE	SY	15971
A2000320	AMM	TREE, ACER MIYABEI MORTON (STATE STREET MIYABE MAPLE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	18
A2000120	AFR	TREE, ACER X FREEMANII AUTUMN BLAZE (AUTUMN BLAZE FREEMAN MAPLE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	1
A2001018	ASG	TREE, ACER SACCHARUM GREEN MOUNTAIN (GREEN MOUNTAIN SUGAR MAPLE), 2-1/4" CALIPER, BALLED AND BURLAPPED	EACH	34
A2002020	AGA	TREE, AESCULUS GLABRA (OHIO BUCKEY), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	12
A2002238	AGP	TREE, ALNUS GLUTINOSA (BLACK ALDER), 2" CALIPER, BALLED AND BURLAPPED	EACH	32
A2002520	CCA	TREE, CARPINUS CAROLINIANA (AMERICAN HORNBEAM), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	15
A2003120	COW	TREE, CELTIS OCCIDENTALIS WINDY CITY (WINDY CITY HACKBERRY), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	6
ITEM # NEEDED	GBA	TREE, GINKGO BILOBA AUTUMN GOLD (AUTUMN GOLD GINKGO), 2-1/2", BALLED AND BURLAPPED	EACH	5
A2005020	GDI	TREE, GYMNOCADUS DIOICUS (KENTUCKY COFFEETREE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	11
B2004120	MPF	TREE, MALUS PRAIRIFIRE (PRAIRIFIRE CRABAPPLE), 2-1/2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	13
B2005520	PCA	TREE, PYRUS CALLERYANA ARISTOCRAT (ARISTOCRAT CALLERY PEAR), 2-1/2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	48
A2006720	QMA	TREE, QUERCUS MACROCARPA (BUR OAK), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	6
A2007120	ORU	TREE, QUERCUS RUBRA (RED OAK), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	20
B2006320	SRI	TREE, SYRINGA RETICULATA IVORY SILK (IVORY SILK JAPANESE TREE LILAC), 2-1/2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	37
A2008120	TCG	TREE, TILIA CORDATA GREENSPIRE (GREENSPIRE LITTLE LEAF LINDEN), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	14
A2008820	UCH	TREE, ULMUS CARPINIFOLIA HOMESTEAD (HOMESTEAD ELM), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	6
C2C02115	CAP	SHRUB, COTONEASTER APICULATUS (CRANBERRY COTONEASTER), 15" WIDTH, CONTAINER	EACH	769
25301700		SHRUBS	EACH	818
25400105		PERENNIAL PLANTS	EACH	1950
XX004122		PERENNIAL PLANTS BULB, SPECIAL	UNIT (100)	33

PLAN SYMBOL	PLANT NAME	SIZE	SPACING (in)	QTY
<b>GROUND COVER/SHRUBS</b>				
CDN	COTONEASTER DAMMERI NORDIC CARPET	1 Gal	20	818
CAP	COTONEASTER APICULATUS	15" W.	30	769
<b>GROUND COVER/PERENNIALS</b>				
ALS	ARTEMESIA LUDOVICIANA "SILVER KING"	01	15	1709
CCF	CALAMAGROSTIS "CARL FOERSTER"	01	18	1782
EPM	ECHINACEA "PURPLE MAGNUS"	01	18	1529
FCE	FESTUCA CINERIA "ELIJAH BLUE"	01	18	943
HHR	HEMEROCALLIS "HAPPY RETURNS"	01	18	982
HMP	HEUCHERA MICRANTHA "PALACE PURPLE"	01	18	1140
SAJ	SEDUM "AUTUMN JOY"	01	18	1402
VMI	VINCA MINOR	01	12	753
WTE	WALDSTEINIA TERNATA	01	15	1710



REVISIONS	
NAME	DATE
Pre-Final Submission	12-23-05
Pre-Final Submission	07-17-06

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US ROUTE 6 (159TH STREET)  
 AT US ROUTE 45 (LAGRANGE ROAD)

**LANDSCAPING PLAN**

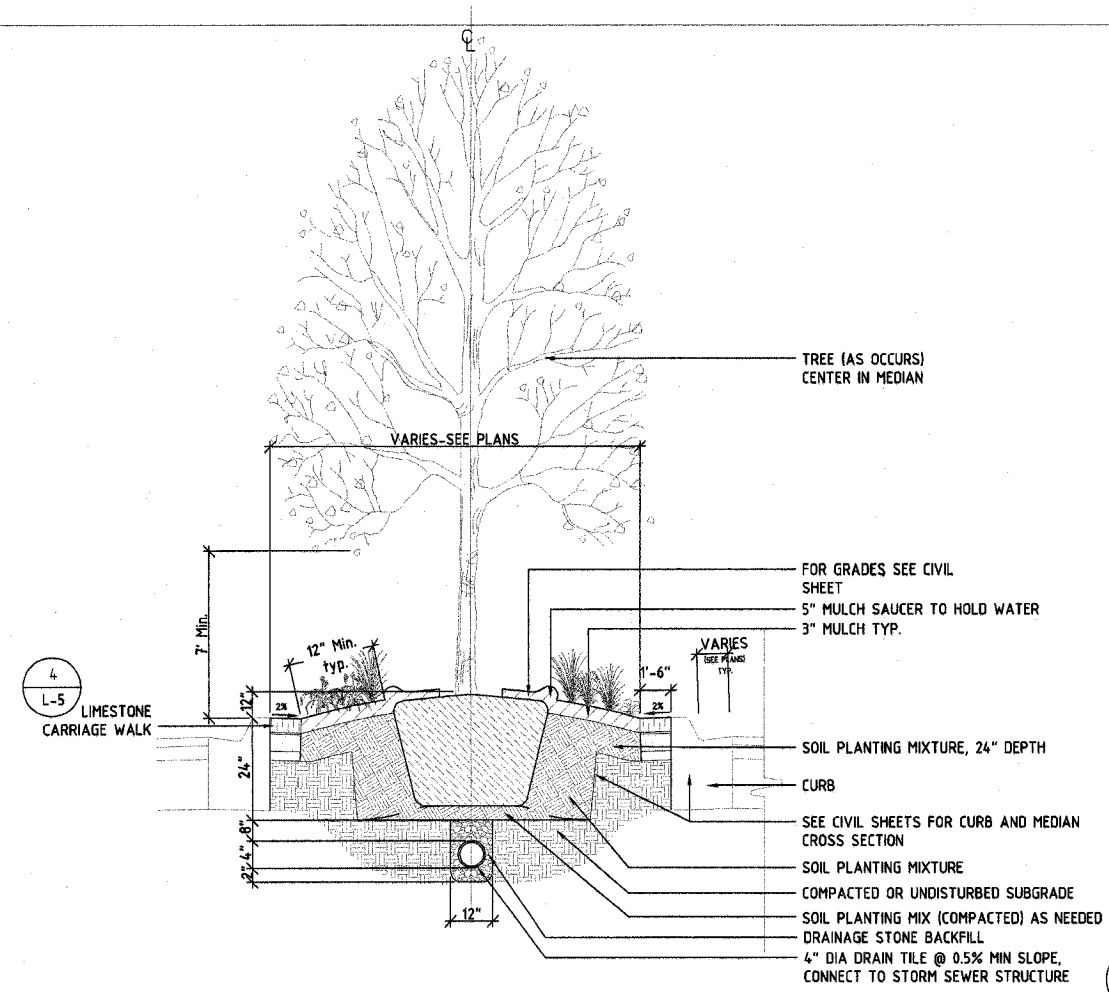
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 DATE: 07-17-06

DRAWN BY: MEG  
 CHECKED BY: JMB/JCC

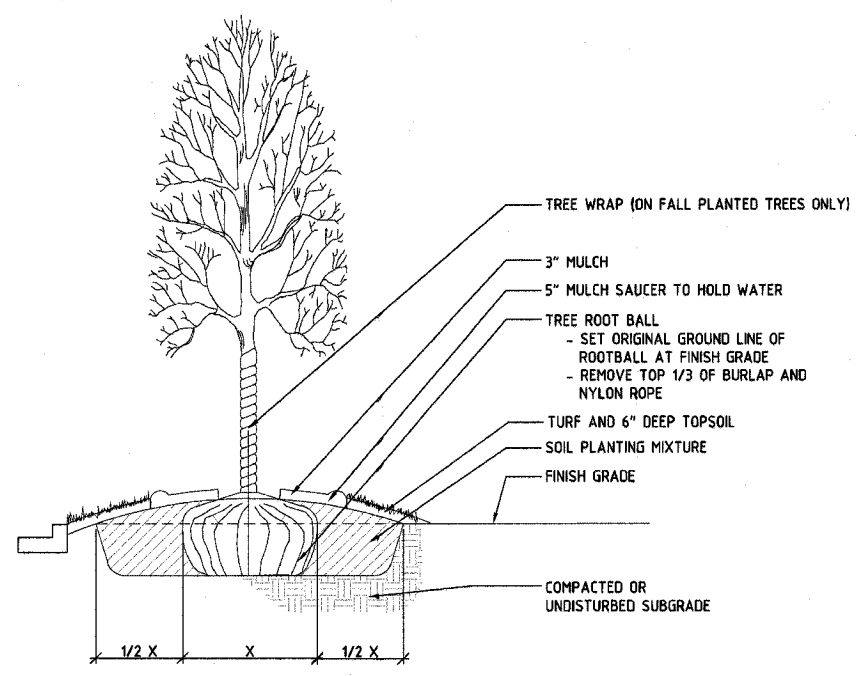
**MCDONOUGH ASSOCIATES INC.**  
 Engineers / Architects

F.A. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	531 B-1	COOK	245	131
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		

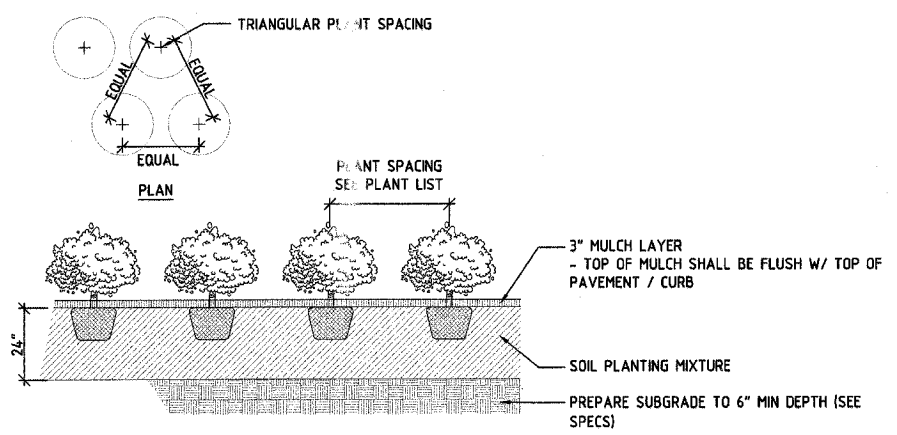
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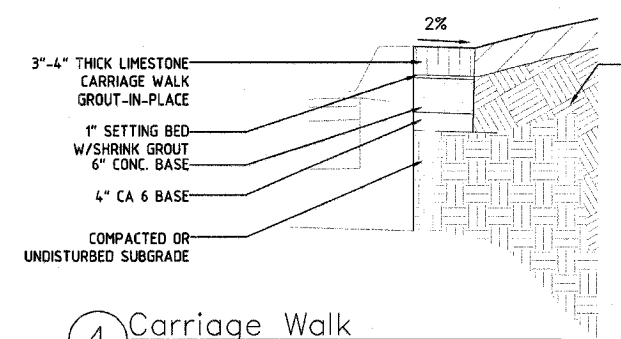
1 Median Planting Detail  
Scale: N.T.S.



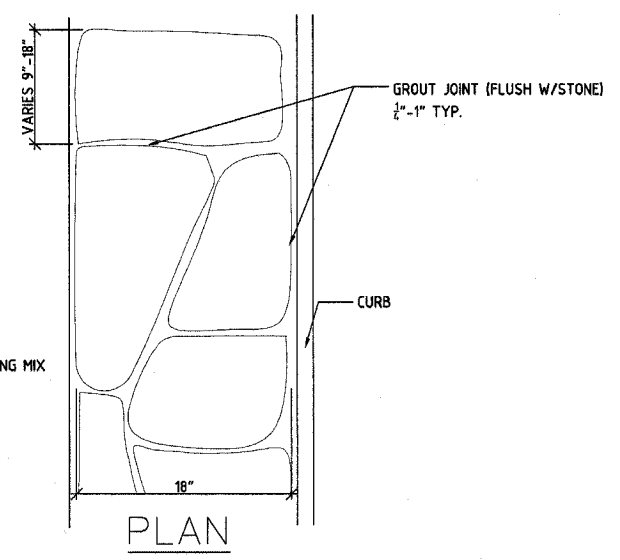
2 Parkway Tree Planting Detail  
Scale: 1/4" = 1'-0"



3 Shrub Groundcover / Perennial Planting Detail  
Scale: N.T.S.



4 Carriage Walk  
Scale: N.T.S.



REVISIONS	
NAME	DATE
Pre-Final Submission	12-23-05
Pre-Final Submission	07-17-06

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US ROUTE 6 (159TH STREET)  
AT US ROUTE 45 (LAGRANGE ROAD)

LANDSCAPING DETAILS

SCALE: P = 40'  
DATE: 07-17-06

DRAWN BY: MEG  
CHECKED BY: JMB/JCG

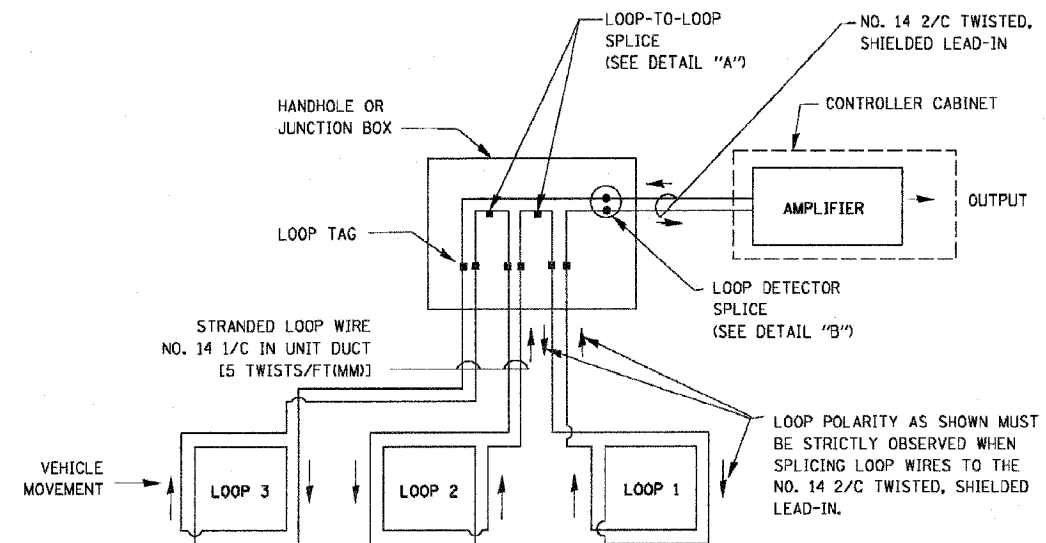
**MCDONOUGH ASSOCIATES INC.**  
Engineers / Architects

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	132
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

62880

**LOOP DETECTOR NOTES**

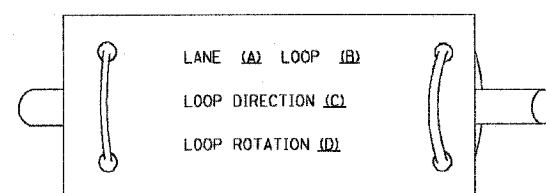
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



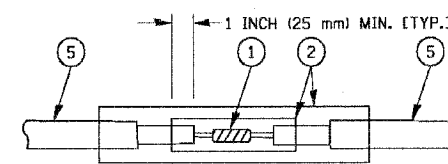
**DETECTOR LOOP WIRING SCHEMATIC**

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

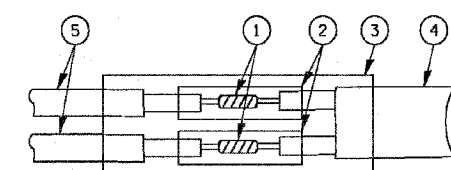
**LOOP LEAD-IN CABLE TAG**



- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



**DETAIL "A"  
LOOP-TO-LOOP SPLICE**



**DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE**

**LOOP DETECTOR SPLICE**

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS**

SCALE: VERT. NONE  
HORIZ. NONE  
DATE 10/18/2002

DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 1 OF 4

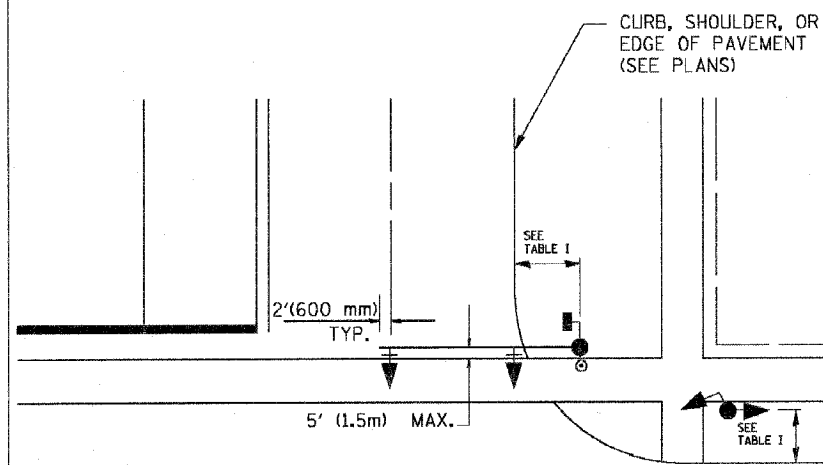
**TD-1**

REVISION DATE: 01/01/02

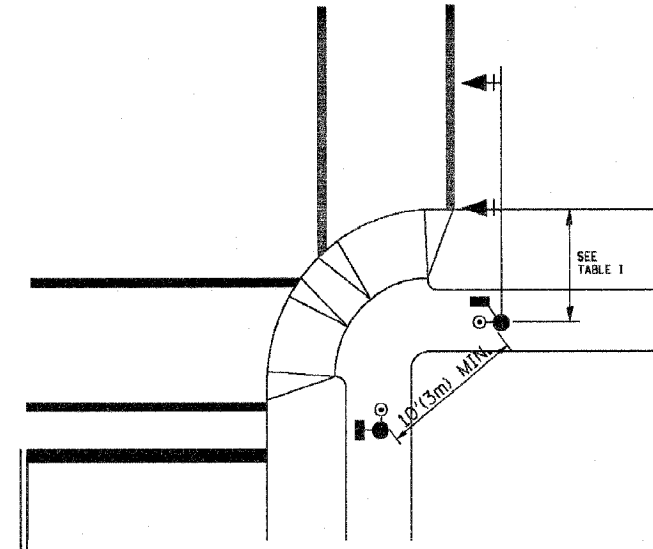
62880

**TRAFFIC SIGNAL MAST ARM AND POST**

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



**PEDESTRIAN SIGNAL PUSHBUTTON**



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

**NOTES:**

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.  
  
AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.  
  
PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:  
  - A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
  - B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
  - C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
  - D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
  - E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

**PEDESTRIAN SIGNAL POST**

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

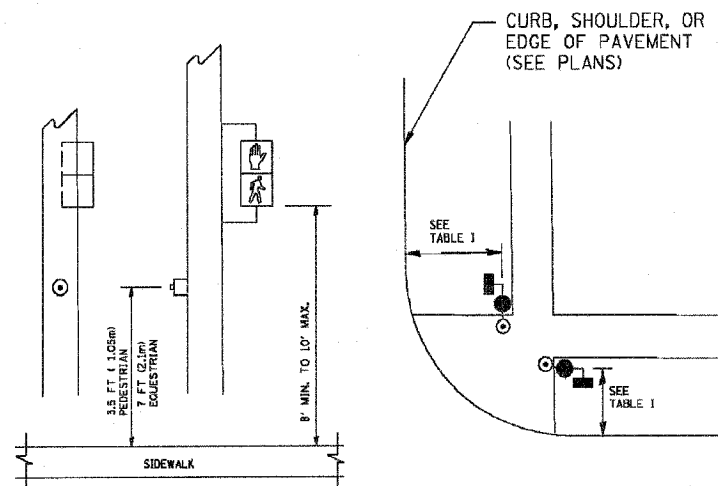


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT 1**  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

SCALE: VERT. NONE  
HORIZ. NONE  
DATE 10/18/2002

DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 2 OF 4



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	134
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

62880

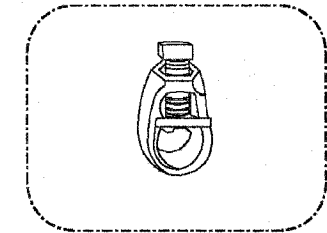
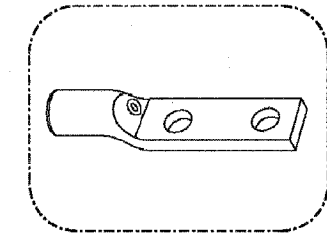
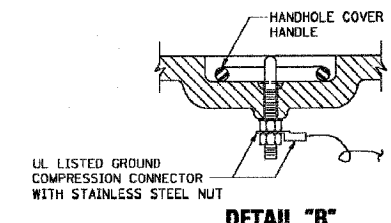
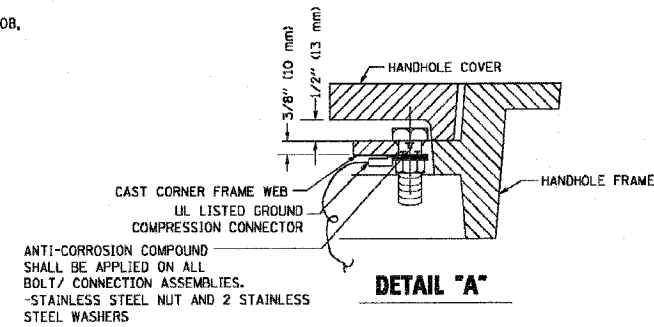
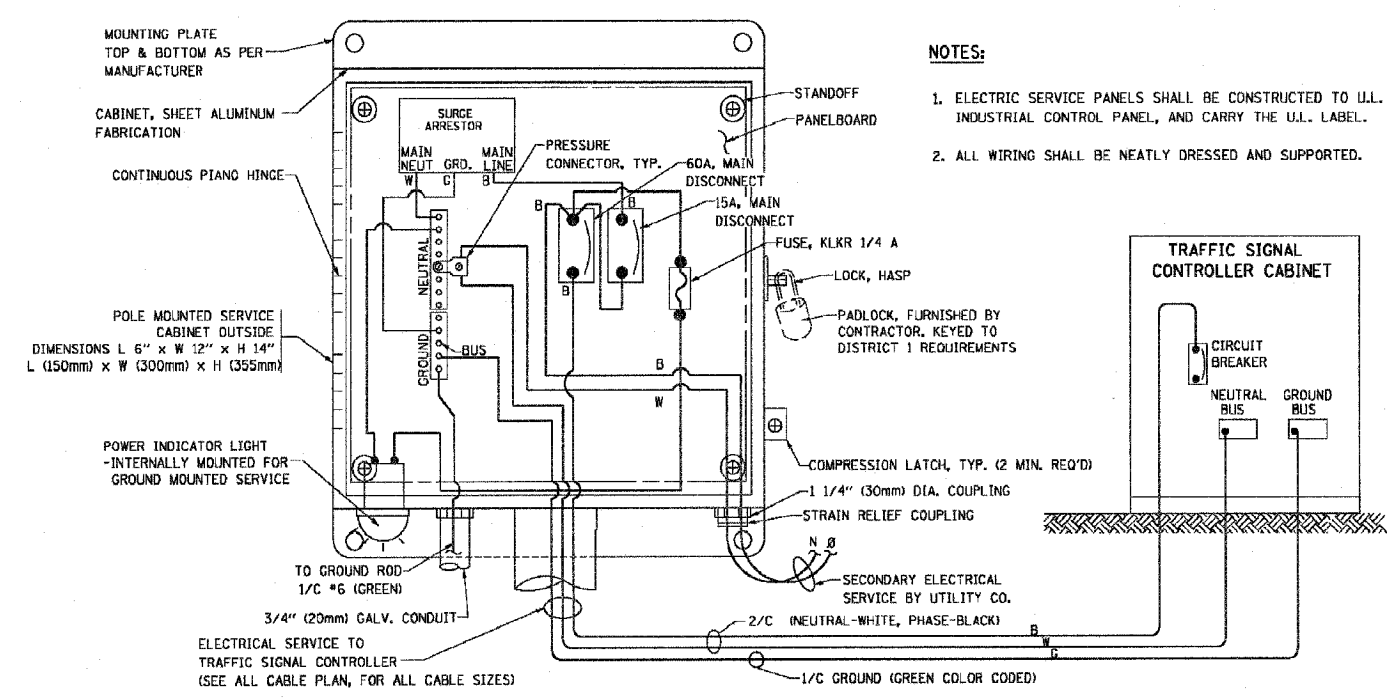
**NOTES:**

**GROUNDING SYSTEM**

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

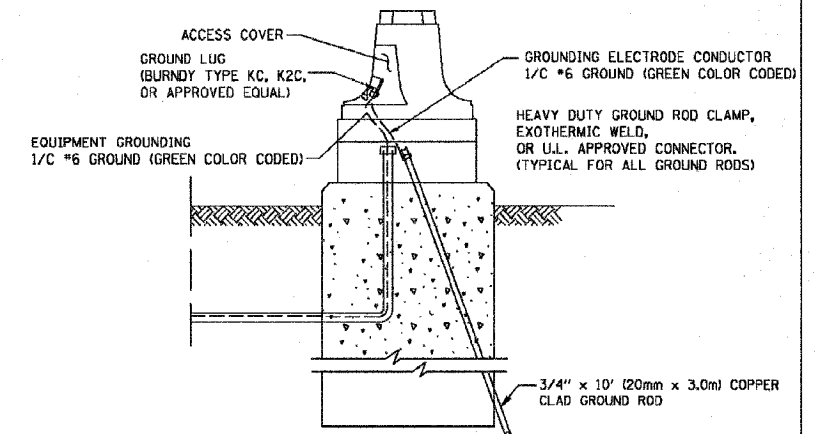
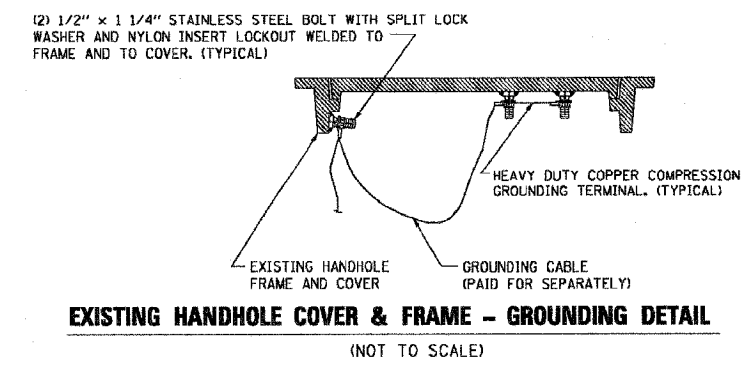
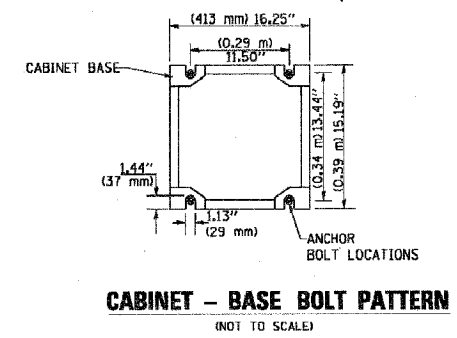
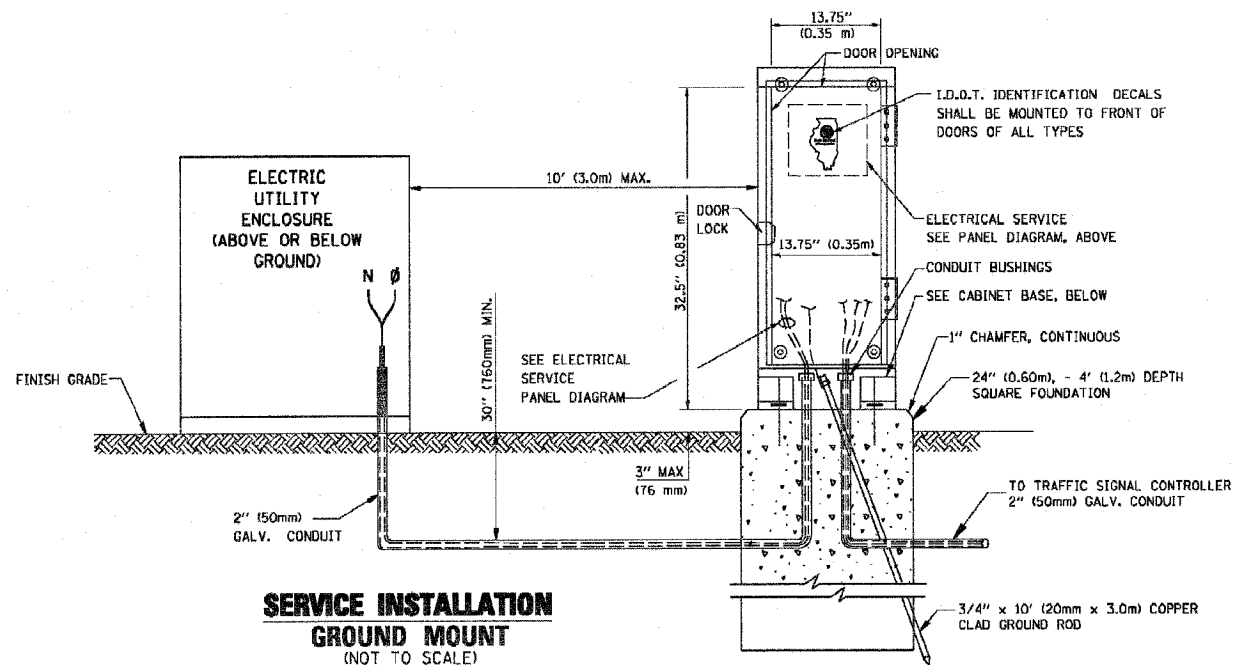
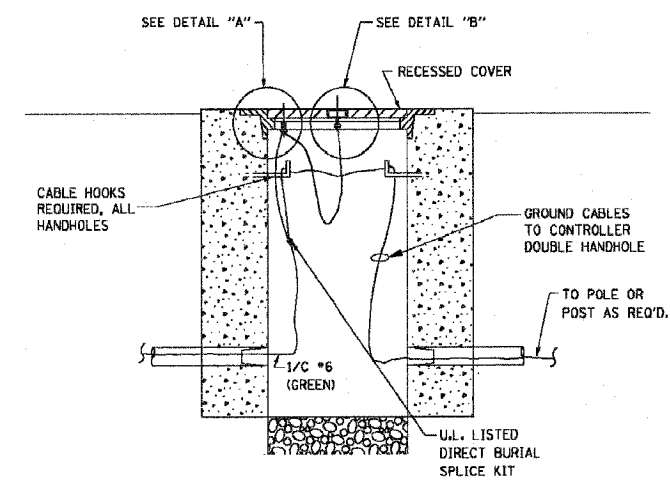
**NOTES:**

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



**NOTES:**

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



REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

SCALE: VERT. NONE  
HORIZ. NONE  
DATE 10/18/2002

DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 3 OF 4

TD-3

TS05

REVISION DATE: 01/01/02



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATION.

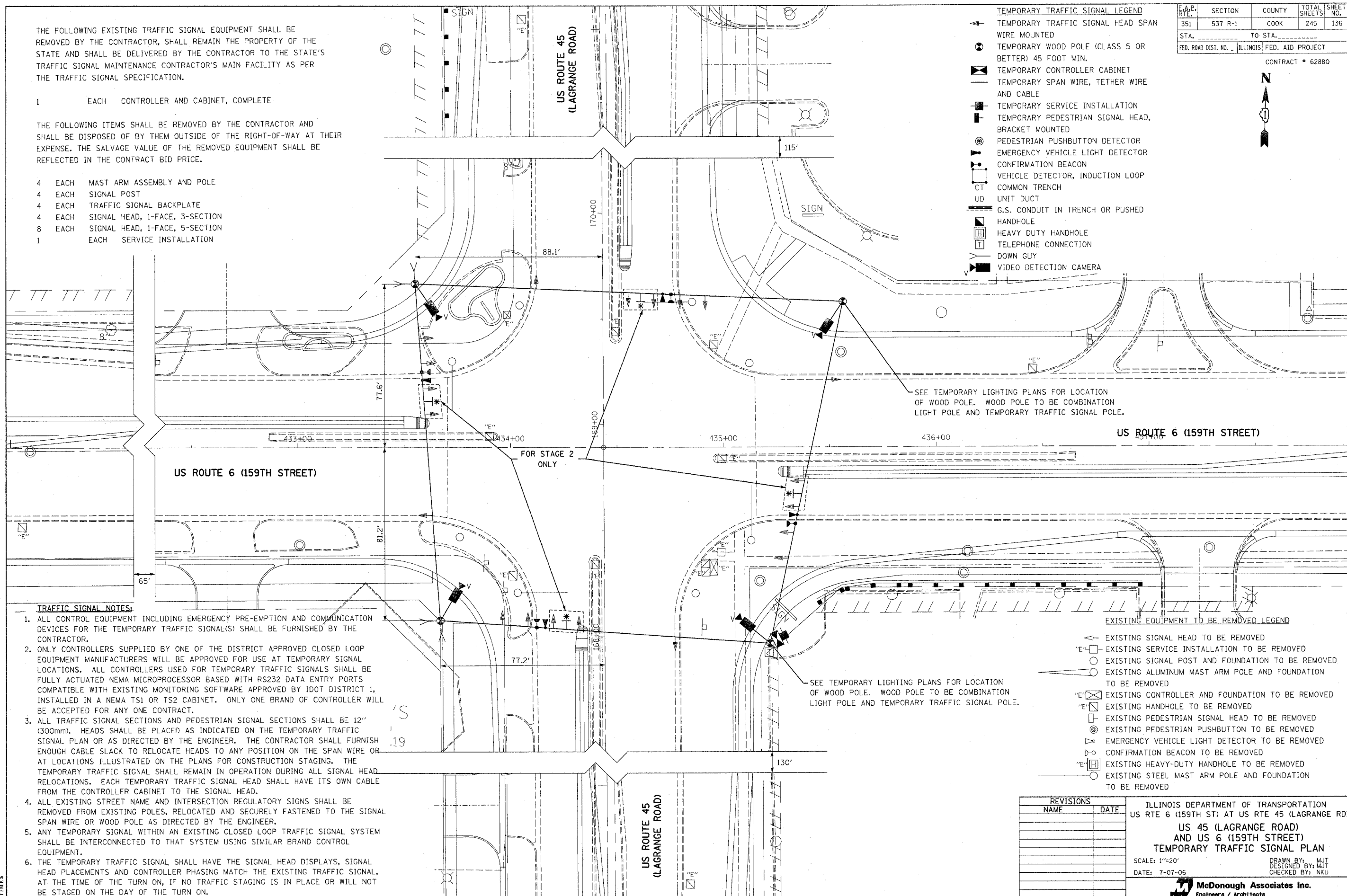
1 EACH CONTROLLER AND CABINET, COMPLETE

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

4 EACH MAST ARM ASSEMBLY AND POLE  
 4 EACH SIGNAL POST  
 4 EACH TRAFFIC SIGNAL BACKPLATE  
 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION  
 8 EACH SIGNAL HEAD, 1-FACE, 5-SECTION  
 1 EACH SERVICE INSTALLATION

- TEMPORARY TRAFFIC SIGNAL LEGEND**
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED
  - ⊙ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MIN.
  - ▭ TEMPORARY CONTROLLER CABINET
  - TEMPORARY SPAN WIRE, TETHER WIRE AND CABLE
  - ⊞ TEMPORARY SERVICE INSTALLATION
  - ⊞ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
  - ⊞ PEDESTRIAN PUSHBUTTON DETECTOR
  - ⊞ EMERGENCY VEHICLE LIGHT DETECTOR
  - ⊞ CONFIRMATION BEACON
  - ⊞ VEHICLE DETECTOR, INDUCTION LOOP
  - ⊞ COMMON TRENCH
  - UD UNIT DUCT
  - G.S. CONDUIT IN TRENCH OR PUSHED
  - ⊞ HANDHOLE
  - ⊞ HEAVY DUTY HANDHOLE
  - ⊞ TELEPHONE CONNECTION
  - ⊞ DOWN GUY
  - ⊞ VIDEO DETECTION CAMERA

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	136
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS		FED. AID PROJECT
CONTRACT # 62880				



SEE TEMPORARY LIGHTING PLANS FOR LOCATION OF WOOD POLE. WOOD POLE TO BE COMBINATION LIGHT POLE AND TEMPORARY TRAFFIC SIGNAL POLE.

SEE TEMPORARY LIGHTING PLANS FOR LOCATION OF WOOD POLE. WOOD POLE TO BE COMBINATION LIGHT POLE AND TEMPORARY TRAFFIC SIGNAL POLE.

**TRAFFIC SIGNAL NOTES:**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- ⊞ EXISTING SIGNAL HEAD TO BE REMOVED
- ⊞ EXISTING SERVICE INSTALLATION TO BE REMOVED
- ⊞ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ⊞ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊞ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- ⊞ EXISTING HANDHOLE TO BE REMOVED
- ⊞ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊞ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- ⊞ EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- ⊞ CONFIRMATION BEACON TO BE REMOVED
- ⊞ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- ⊞ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

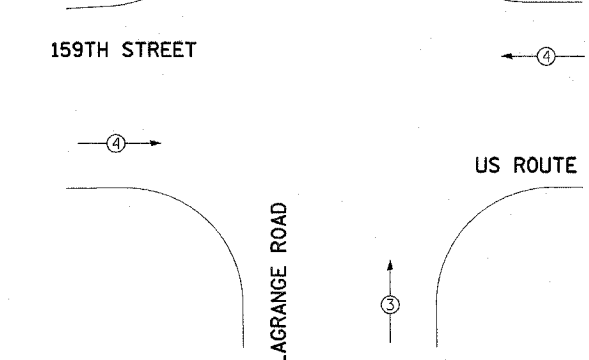
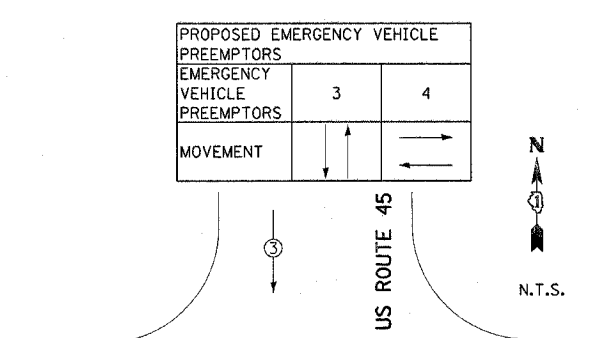
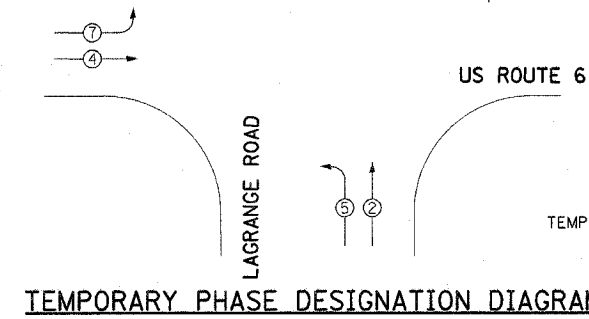
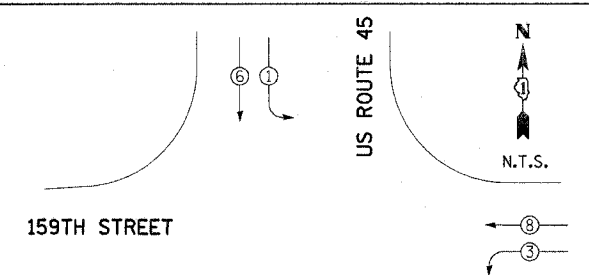
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 45 (LAGRANGE ROAD)  
 AND US 6 (159TH STREET)  
 TEMPORARY TRAFFIC SIGNAL PLAN  
 SCALE: 1"=20'  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects

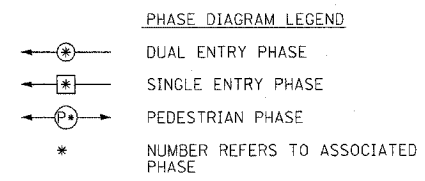
FILES  
 DATES  
 TIMES

STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	137
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



TEMPORARY EMERGENCY VEHICLE PREEMPTION DIAGRAM

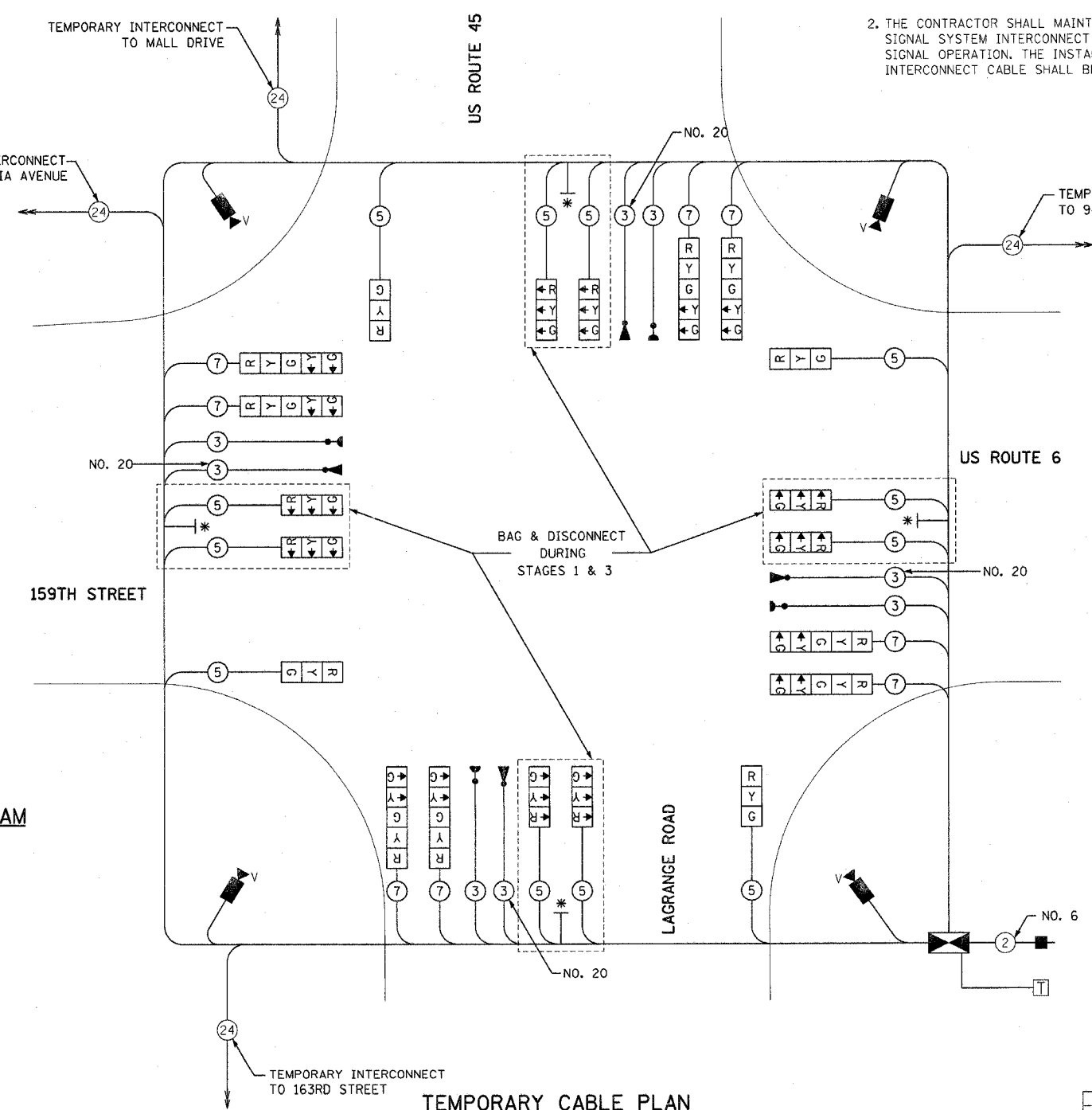
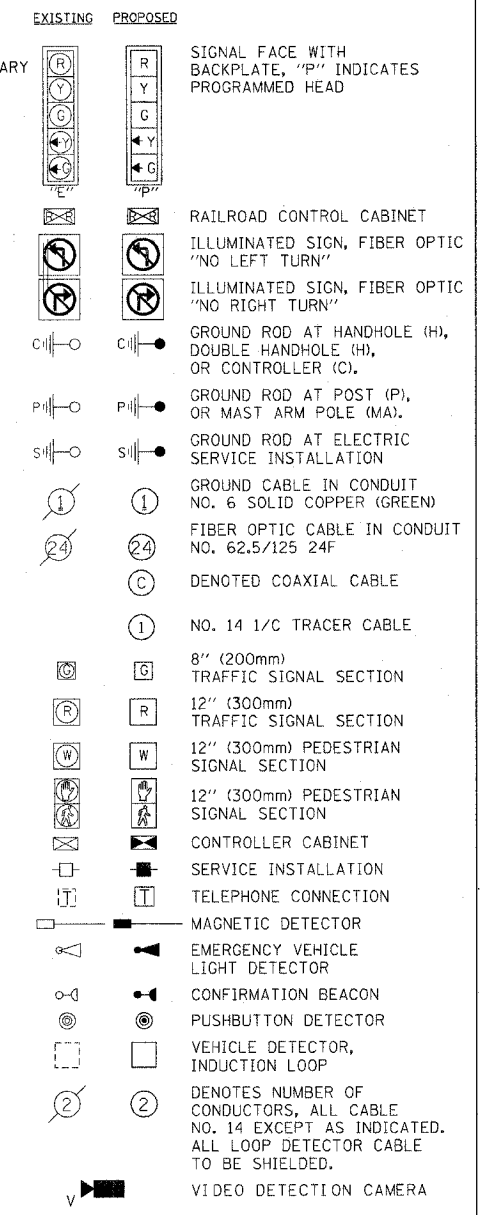
PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	↑ ↓ ← →



CONSTRUCTION NOTES

1. THE EXISTING TRAFFIC RESPONSIVE CLOSED LOOP SYSTEM OPERATION SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE COUNTY SIGNAL SYSTEM ENGINEER AT LEAST 72 HOURS PRIOR TO THE START OF WORK TO REQUEST MODIFICATION OF THE EXISTING TRAFFIC RESPONSIVE PROGRAM. UPON COMPLETION AND ACCEPTANCE OF THE TRAFFIC SIGNAL MODIFICATIONS, THE CONTRACTOR SHALL CONTACT THE SIGNAL SYSTEM ENGINEER TO REQUEST RESTORATION OF THE ORIGINAL TRAFFIC RESPONSIVE PROGRAM.
2. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION. THE INSTALLATION OF THE TEMPORARY INTERCONNECT CABLE SHALL BE NON-DESTRUCTIVE.

CABLE PLAN LEGEND



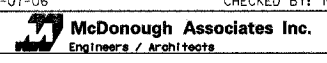
TEMPORARY CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	20	135	17	0.50	1350.0
(YELLOW)	20	135	25	0.25	675.0
(GREEN)	20	135	15	0.25	675.0
ARROW	0	135	12	0.10	0.0
PED. SIGNAL	0	90	25	1.00	0.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. STGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	2800.0

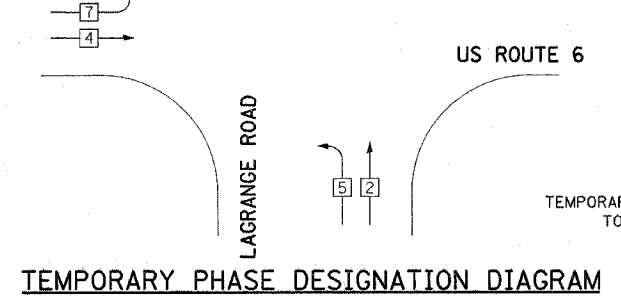
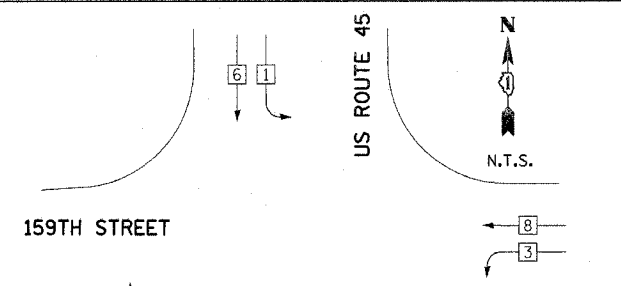
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON

REVISIONS	
NAME	DATE

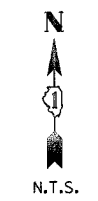
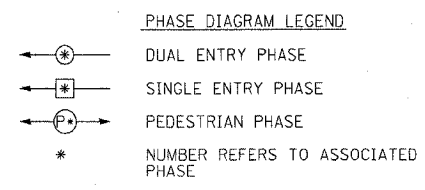
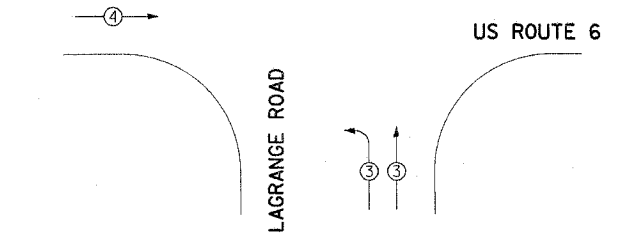
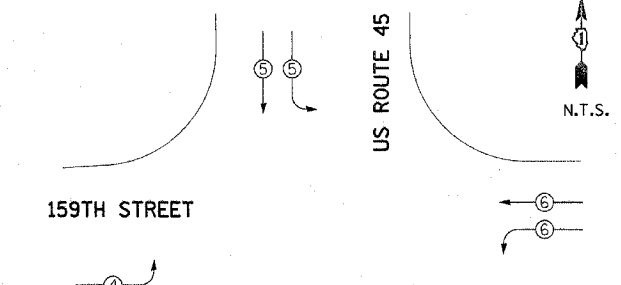
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 45 (LAGRANGE ROAD)  
 AND US 6 (159TH STREET)  
 TEMPORARY CABLE PLAN - STAGES 1 & 3  
 SCALE: N.T.S.  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	138
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 62880				

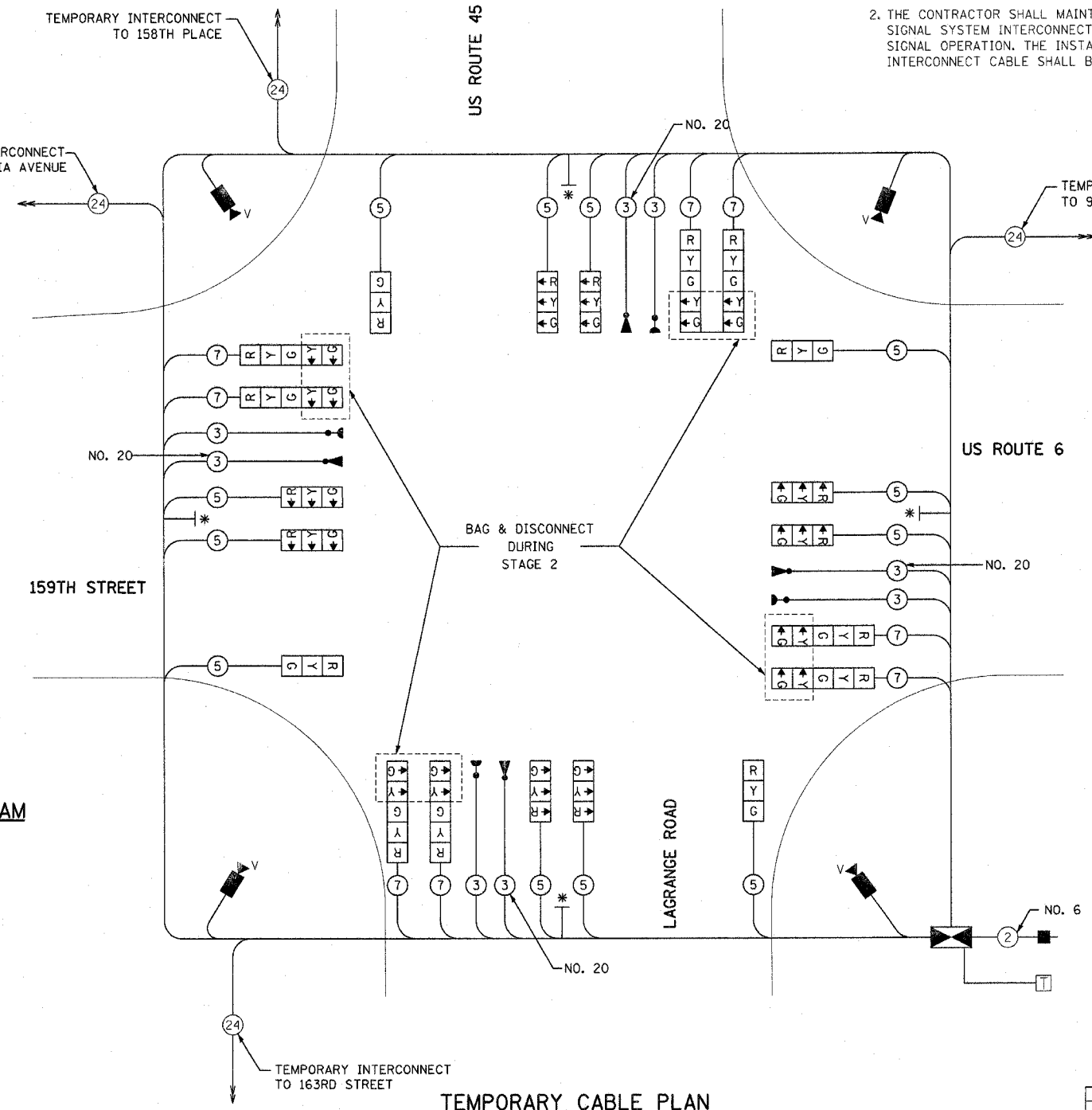
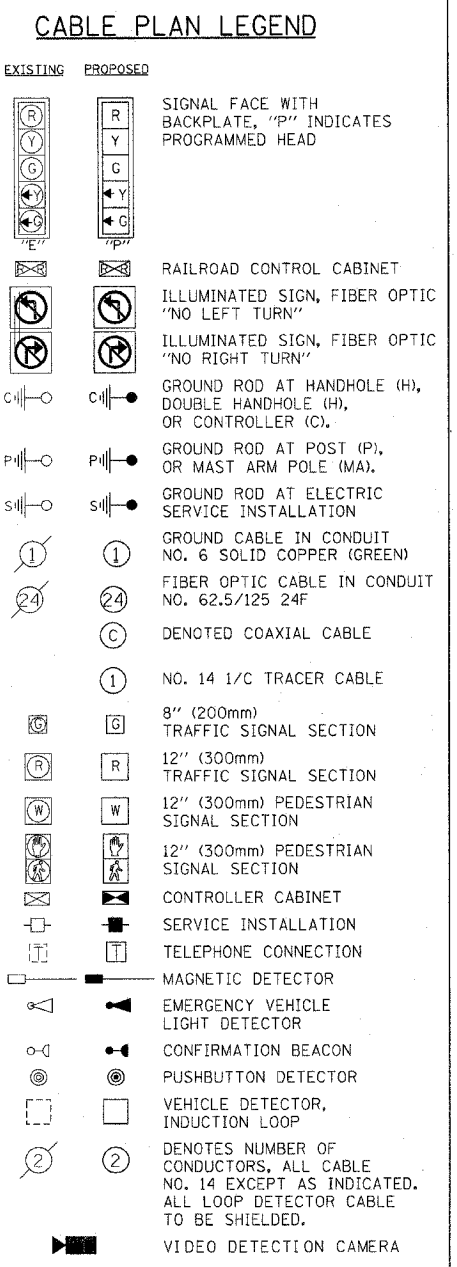


PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTORS	3	4	5	6
MOVEMENT				



**CONSTRUCTION NOTES**

- THE EXISTING TRAFFIC RESPONSIVE CLOSED LOOP SYSTEM OPERATION SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE COUNTY SIGNAL SYSTEM ENGINEER AT LEAST 72 HOURS PRIOR TO THE START OF WORK TO REQUEST MODIFICATION OF THE EXISTING TRAFFIC RESPONSIVE PROGRAM. UPON COMPLETION AND ACCEPTANCE OF THE TRAFFIC SIGNAL MODIFICATIONS, THE CONTRACTOR SHALL CONTACT THE SIGNAL SYSTEM ENGINEER TO REQUEST RESTORATION OF THE ORIGINAL TRAFFIC RESPONSIVE PROGRAM.
- THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION. THE INSTALLATION OF THE TEMPORARY INTERCONNECT CABLE SHALL BE NON-DESTRUCTIVE.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE	
TYPE	NO. OF LAMPS	WATTAGE	INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	135	17		0.50	810.0
(YELLOW)	12	135	25		0.25	405.0
(GREEN)	12	135	15		0.25	405.0
ARROW	16	135	12		0.10	216.0
PED. SIGNAL	0	90	25		1.00	0.0
CONTROLLER	1	100	100		1.00	100.0
ILLUM. SIGN	0	84	35		0.05	0.0
FLASHER	0		25		0.50	0.0
ENERGY COST TO:					TOTAL =	1936.0

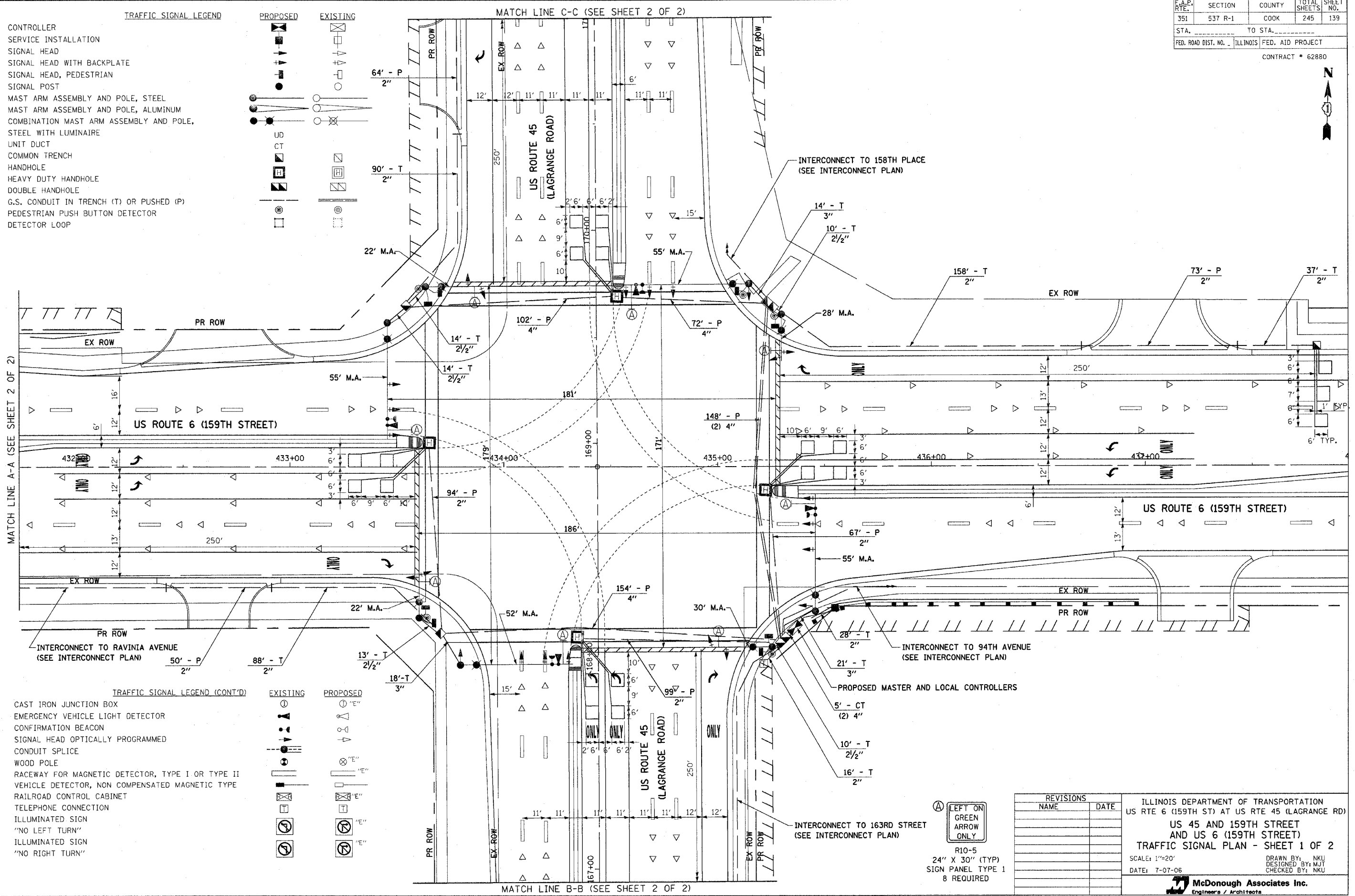
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 45 (LAGRANGE ROAD)  
 AND US 6 (159TH STREET)  
 TEMPORARY CABLE PLAN - STAGE 2  
 SCALE: N.T.S.  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	139
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



- TRAFFIC SIGNAL LEGEND**
- PROPOSED**
- CONTROLLER
  - SERVICE INSTALLATION
  - SIGNAL HEAD
  - SIGNAL HEAD WITH BACKPLATE
  - SIGNAL HEAD, PEDESTRIAN
  - SIGNAL POST
  - MAST ARM ASSEMBLY AND POLE, STEEL
  - MAST ARM ASSEMBLY AND POLE, ALUMINUM
  - COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
  - UNIT DUCT
  - COMMON TRENCH
  - HANDHOLE
  - HEAVY DUTY HANDHOLE
  - DOUBLE HANDHOLE
  - G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
  - PEDESTRIAN PUSH BUTTON DETECTOR
  - DETECTOR LOOP

- EXISTING**
- UB
  - CT
  - Handhole symbols
  - Conduit symbols
  - Detector loop symbols

MATCH LINE A-A (SEE SHEET 2 OF 2)

MATCH LINE B-B (SEE SHEET 2 OF 2)

- TRAFFIC SIGNAL LEGEND (CONT'D)**
- EXISTING**
- CAST IRON JUNCTION BOX
  - EMERGENCY VEHICLE LIGHT DETECTOR
  - CONFIRMATION BEACON
  - SIGNAL HEAD OPTICALLY PROGRAMMED
  - CONDUIT SPLICE
  - WOOD POLE
  - RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
  - VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
  - RAILROAD CONTROL CABINET
  - TELEPHONE CONNECTION
  - ILLUMINATED SIGN "NO LEFT TURN"
  - ILLUMINATED SIGN "NO RIGHT TURN"
- PROPOSED**
- Signal head symbols
  - Conduit symbols
  - Detector symbols
  - Sign symbols

**LEFT ON GREEN ARROW ONLY**

R10-5  
24" X 30" (TYP)  
SIGN PANEL TYPE 1  
8 REQUIRED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**US 45 AND 159TH STREET AND US 6 (159TH STREET)**  
TRAFFIC SIGNAL PLAN - SHEET 1 OF 2

SCALE: 1"=20'  
DATE: 7-07-06

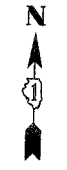
DRAWN BY: NKU  
DESIGNED BY: MJT  
CHECKED BY: NKU

**McDonough Associates Inc.**  
Engineers / Architects



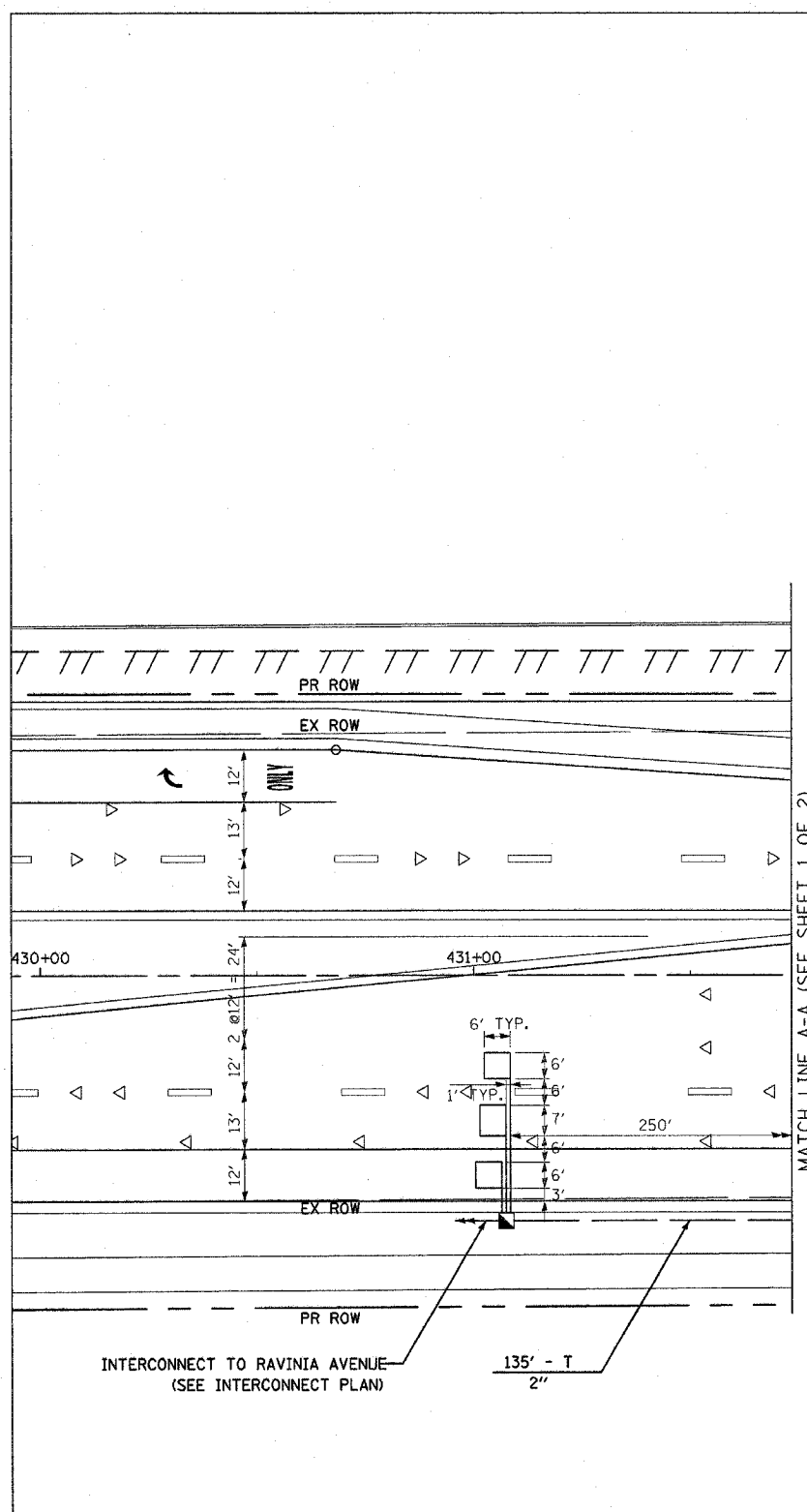
STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	140
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		

CONTRACT # 62880

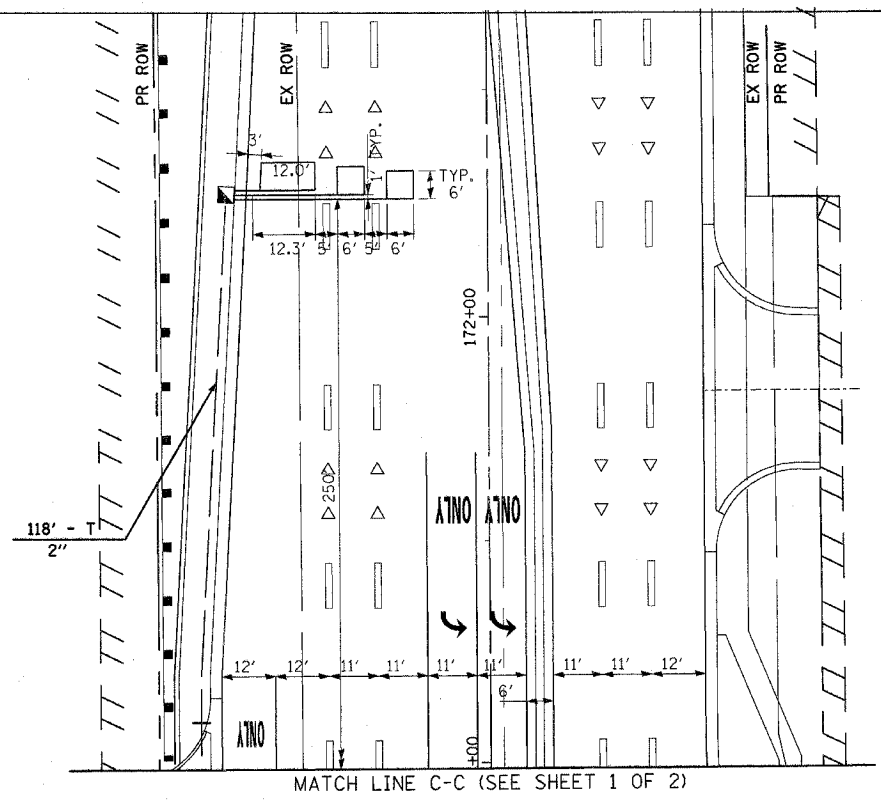


TRAFFIC SIGNAL LEGEND

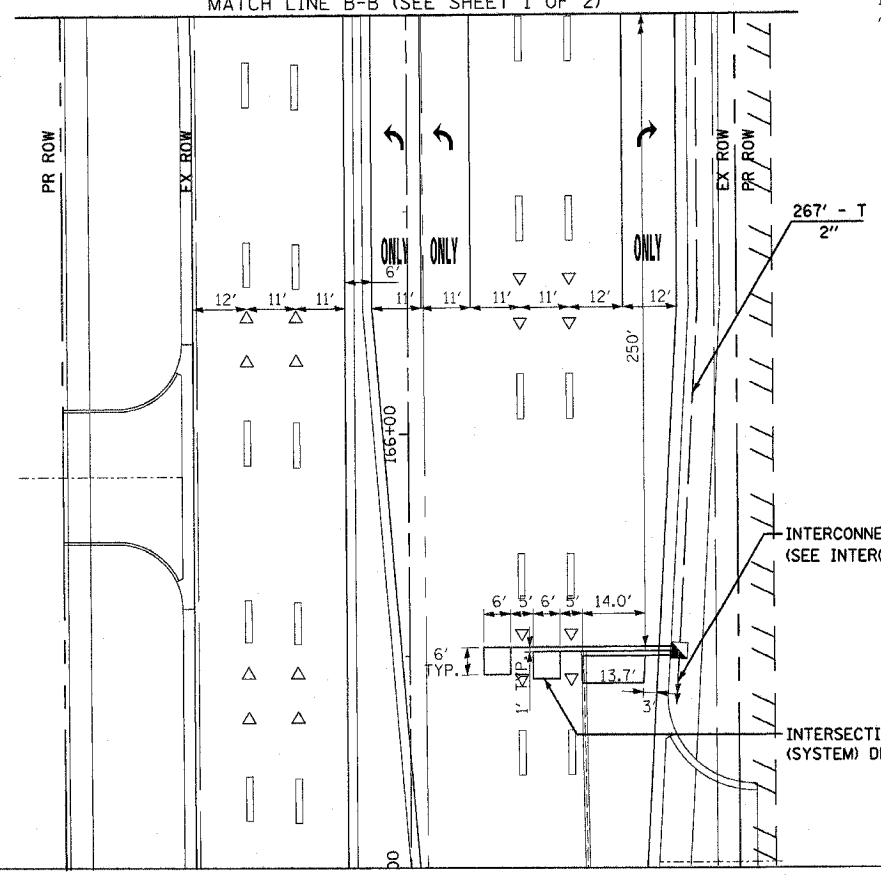
- |                                                              |          |          |
|--------------------------------------------------------------|----------|----------|
| CONTROLLER                                                   | PROPOSED | EXISTING |
| SERVICE INSTALLATION                                         |          |          |
| SIGNAL HEAD                                                  |          |          |
| SIGNAL HEAD WITH BACKPLATE                                   |          |          |
| SIGNAL HEAD, PEDESTRIAN                                      |          |          |
| SIGNAL POST                                                  |          |          |
| MAST ARM ASSEMBLY AND POLE, STEEL                            |          |          |
| MAST ARM ASSEMBLY AND POLE, ALUMINUM                         |          |          |
| COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE |          |          |
| UNIT DUCT                                                    |          |          |
| COMMON TRENCH                                                |          |          |
| HANDHOLE                                                     |          |          |
| HEAVY DUTY HANDHOLE                                          |          |          |
| DOUBLE HANDHOLE                                              |          |          |
| G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)                     |          |          |
| PEDESTRIAN PUSH BUTTON DETECTOR                              |          |          |
| DETECTOR LOOP                                                |          |          |
| CAST IRON JUNCTION BOX                                       |          |          |
| EMERGENCY VEHICLE LIGHT DETECTOR                             |          |          |
| CONFIRMATION BEACON                                          |          |          |
| SIGNAL HEAD OPTICALLY PROGRAMMED                             |          |          |
| CONDUIT SPLICE                                               |          |          |
| WOOD POLE                                                    |          |          |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II             |          |          |
| VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE              |          |          |
| RAILROAD CONTROL CABINET                                     |          |          |
| TELEPHONE CONNECTION                                         |          |          |
| ILLUMINATED SIGN                                             |          |          |
| "NO LEFT TURN"                                               |          |          |
| ILLUMINATED SIGN                                             |          |          |
| "NO RIGHT TURN"                                              |          |          |



MATCH LINE A-A (SEE SHEET 1 OF 2)



MATCH LINE B-B (SEE SHEET 1 OF 2)

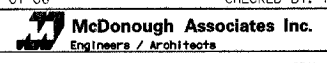


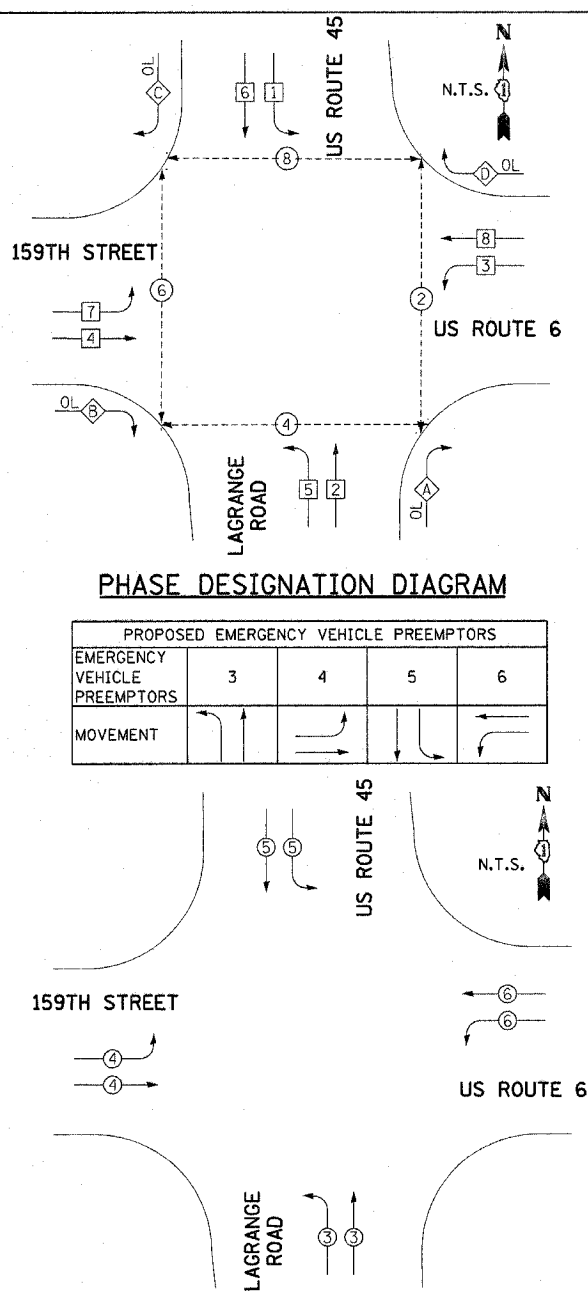
TRAFFIC SIGNAL NOTES:

1. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES, CALL J.U.L.I.E. AT 1-800-892-0123.
3. ALL SIGNAL POSTS AND MAST ARM POLES SHALL BE LOCATED A MINIMUM OF FOUR (4) AND SIX (6) FEET, RESPECTIVELY, FROM THE BACK OF CURB UNLESS OTHERWISE NOTED OR DIMENSIONED IN THE PLANS.
4. ALL DETECTOR LOOPS SHALL BE PREFORMED UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 45 AND 159TH STREET  
 AND US 6 (159TH STREET)  
 TRAFFIC SIGNAL PLAN - SHEET 2 OF 2  
 SCALE: 1"=20'  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU





**PHASE DESIGNATION DIAGRAM**

PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTORS	3	4	5	6
MOVEMENT	→	→	→	→

**EMERGENCY VEHICLE PREEMPTION DIAGRAM**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	23	135	17	0.50	195.5
(YELLOW)	23	135	25	0.25	143.75
(GREEN)	23	135	15	0.25	86.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	744.7

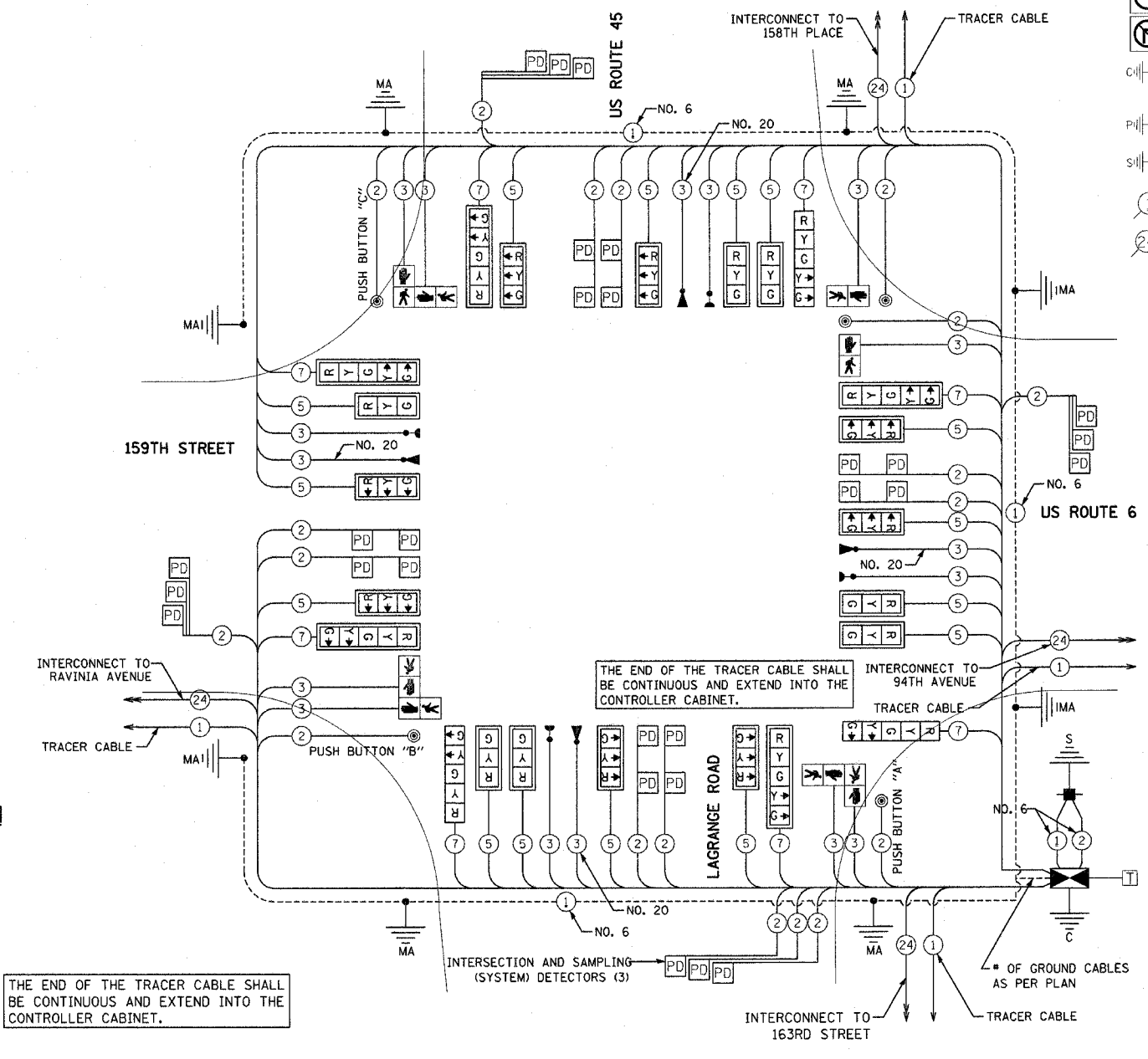
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON

FOUNDATION (DEPTH)	FT (m)	CABLE SLACK	FT (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
TYPE D-CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L= (6m+L)=
30", TYPE E	15 (4.6)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
36", TYPE E	15 (4.6)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
		FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

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

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

**CABLE PLAN**



**CABLE PLAN LEGEND**

- |  |                                                                     |  |                                                    |
|--|---------------------------------------------------------------------|--|----------------------------------------------------|
|  | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD           |  | RAILROAD CONTROL CABINET                           |
|  | ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"                        |  | ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"      |
|  | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C). |  | GROUND ROD AT POST (P), OR MAST ARM POLE (MA).     |
|  | GROUND ROD AT ELECTRIC SERVICE INSTALLATION                         |  | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
|  | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F             |  | NO. 14 1/C TRACER CABLE                            |

**SCHEDULE OF QUANTITIES**

SIGN PANEL - TYPE 1	50 FT	40
SIGN PANEL - TYPE 2	50 FT	120
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	937
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	61
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	53
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	447
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	624
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1056
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1080
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2920
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3850
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2389
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3994
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	46
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	3
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	71
TRAFFIC SIGNAL BACKPLATE	EACH	20
INDUCTIVE LOOP DETECTOR	EACH	14
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	12
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	748
PERFORMED DETECTOR LOOP	FOOT	1244
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	1188
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	15
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	2

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8

REVISIONS	NAME	DATE

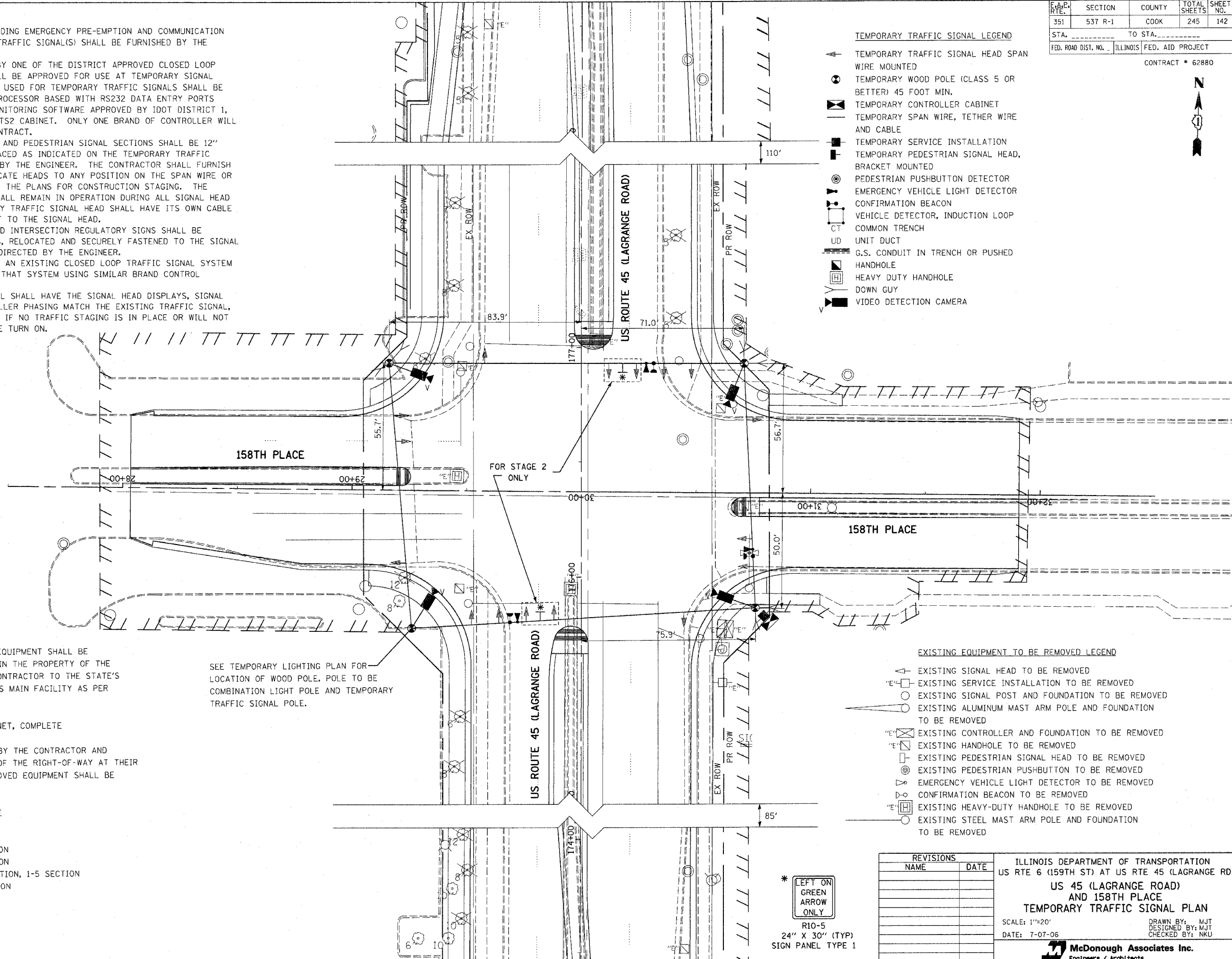
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 45 (LAGRANGE ROAD)  
 AND US 6 (159TH STREET)  
 CABLE PLAN  
 SCALE: N.T.S.  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU  
**McDonough Associates Inc.**  
 Engineers / Architects

E.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	142
STA. _____ TO STA. _____		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO. _____		CONTRACT # 62880		

**TRAFFIC SIGNAL NOTES:**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TSI OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

- TEMPORARY TRAFFIC SIGNAL LEGEND**
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED
  - ⊙ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MIN.
  - ▣ TEMPORARY CONTROLLER CABINET
  - TEMPORARY SPAN WIRE, TETHER WIRE AND CABLE
  - TEMPORARY SERVICE INSTALLATION
  - ⊠ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
  - ⊙ TEMPORARY PUSHBUTTON DETECTOR
  - ⊙ TEMPORARY EMERGENCY VEHICLE LIGHT DETECTOR
  - ⊙ TEMPORARY CONFIRMATION BEACON
  - ⊙ TEMPORARY VEHICLE DETECTOR, INDUCTION LOOP
  - TEMPORARY COMMON TRENCH
  - UD UNIT DUCT
  - G.S. CONDUIT IN TRENCH OR PUSHED
  - HANDHOLE
  - HEAVY DUTY HANDHOLE
  - DOWN GUY
  - ⊙ VIDEO DETECTION CAMERA



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATION.

- 1 EACH CONTROLLER AND CABINET, COMPLETE

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

- 4 EACH MAST ARM ASSEMBLY AND POLE
- 3 EACH SIGNAL POST
- 8 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 6 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 5 SECTION
- 1 EACH SERVICE INSTALLATION

SEE TEMPORARY LIGHTING PLAN FOR LOCATION OF WOOD POLE. POLE TO BE COMBINATION LIGHT POLE AND TEMPORARY TRAFFIC SIGNAL POLE.

**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- ▲ EXISTING SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING SERVICE INSTALLATION TO BE REMOVED
- ⊙ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ⊙ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊙ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- ⊙ EXISTING HANDHOLE TO BE REMOVED
- ⊙ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- ⊙ EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- ⊙ EXISTING CONFIRMATION BEACON TO BE REMOVED
- ⊙ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- ⊙ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

\* LEFT ON GREEN ARROW ONLY  
R10-5  
24" X 30" (TYP)  
SIGN PANEL TYPE 1

REVISIONS	
NAME	DATE

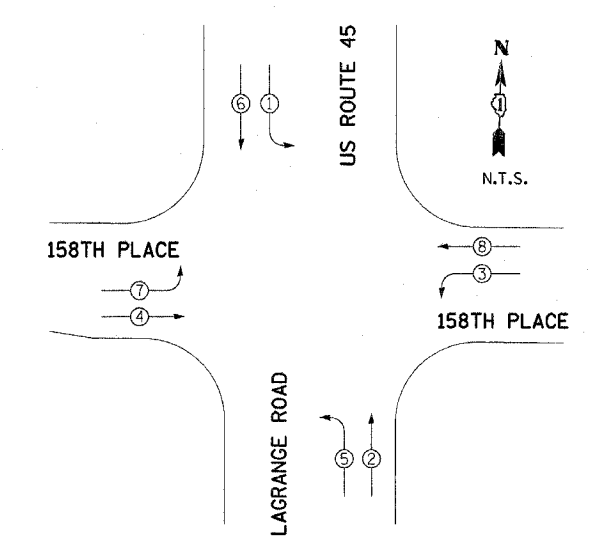
ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
US 45 (LAGRANGE ROAD)  
AND 158TH PLACE  
TEMPORARY TRAFFIC SIGNAL PLAN  
SCALE: 1"=20'  
DATE: 7-07-06  
DRAWN BY: MJT  
DESIGNED BY: MJT  
CHECKED BY: NKU

**McDonough Associates Inc.**  
Engineers / Architects

F.A.R. RYE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	143

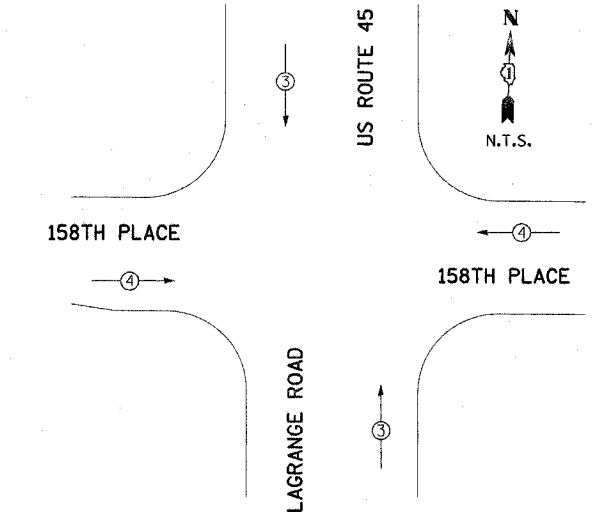
STA. \_\_\_\_\_ TO STA. \_\_\_\_\_  
 FED. ROAD DIST. NO. \_\_\_\_\_ ILLINOIS FED. AID PROJECT

CONTRACT # 62880

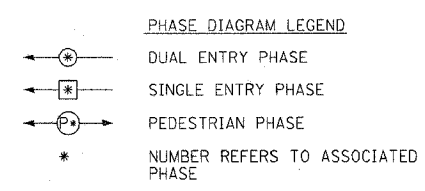


TEMPORARY PHASE DESIGNATION DIAGRAM

PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	↑	→

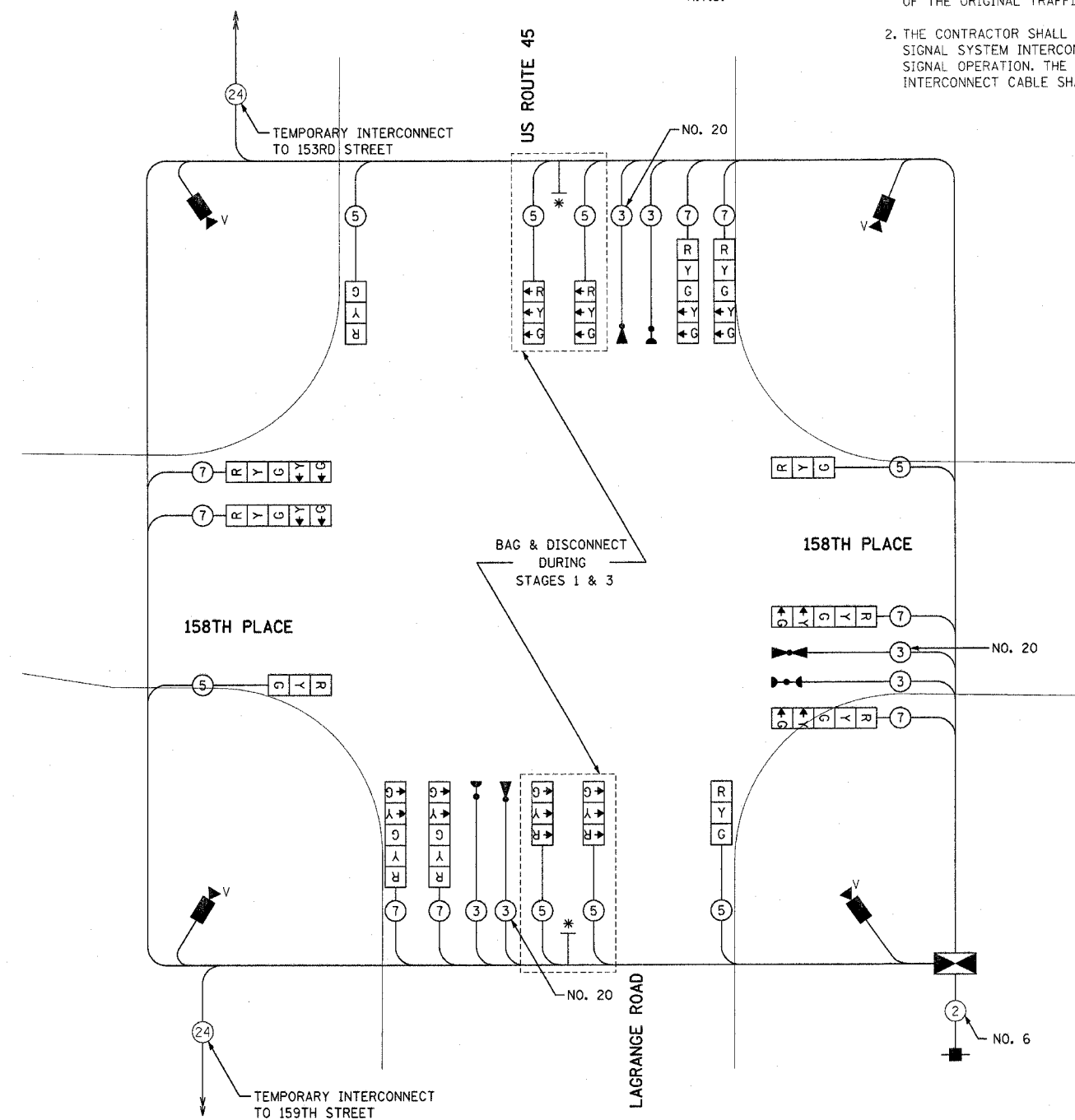
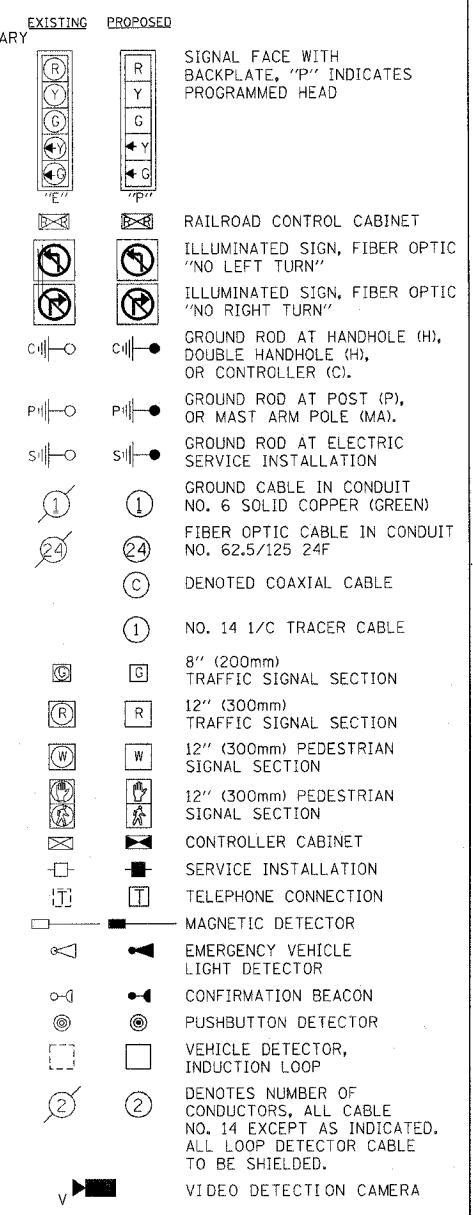


TEMPORARY EMERGENCY VEHICLE PREEMPTION DIAGRAM



- CONSTRUCTION NOTES
- THE EXISTING TRAFFIC RESPONSIVE CLOSED LOOP SYSTEM OPERATION SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE COUNTY SIGNAL SYSTEM ENGINEER AT LEAST 72 HOURS PRIOR TO THE START OF WORK TO REQUEST MODIFICATION OF THE EXISTING TRAFFIC RESPONSIVE PROGRAM. UPON COMPLETION AND ACCEPTANCE OF THE TRAFFIC SIGNAL MODIFICATIONS, THE CONTRACTOR SHALL CONTACT THE SIGNAL SYSTEM ENGINEER TO REQUEST RESTORATION OF THE ORIGINAL TRAFFIC RESPONSIVE PROGRAM.
  - THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION. THE INSTALLATION OF THE TEMPORARY INTERCONNECT CABLE SHALL BE NON-Destructive.

CABLE PLAN LEGEND



TEMPORARY CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCANDESCENT	LED	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	810.0
(YELLOW)	12	135	25	0.25	405.0
(GREEN)	12	135	15	0.25	405.0
ARROW	16	135	12	0.10	216.0
PED. SIGNAL	0	90	25	1.00	0.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	1936.0

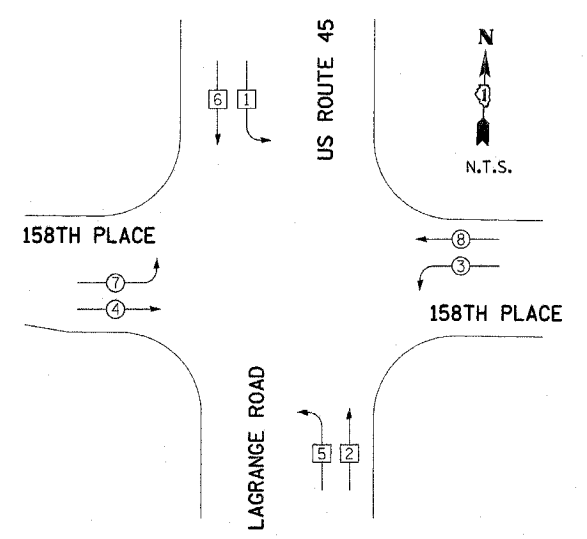
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON

\* LEFT ON GREEN ARROW ONLY  
 R10-5  
 24" X 30" (TYP)  
 SIGN PANEL TYPE 1

REVISIONS	
NAME	DATE

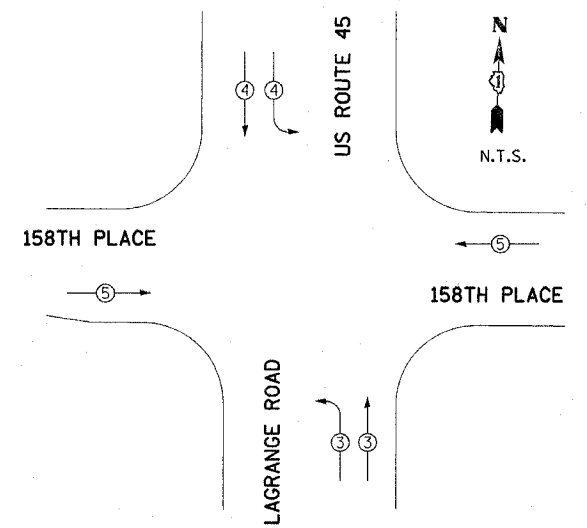
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 AND 158TH PLACE  
 TEMPORARY CABLE PLAN - STAGES 1 & 3  
 SCALE: N.T.S. DRAWN BY: MJT  
 DATE: 7-07-06 DESIGNED BY: MJT  
 CHECKED BY: NKU  
**McDonough Associates Inc.**  
 Engineers / Architects

E.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	144
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



**TEMPORARY PHASE DESIGNATION DIAGRAM**

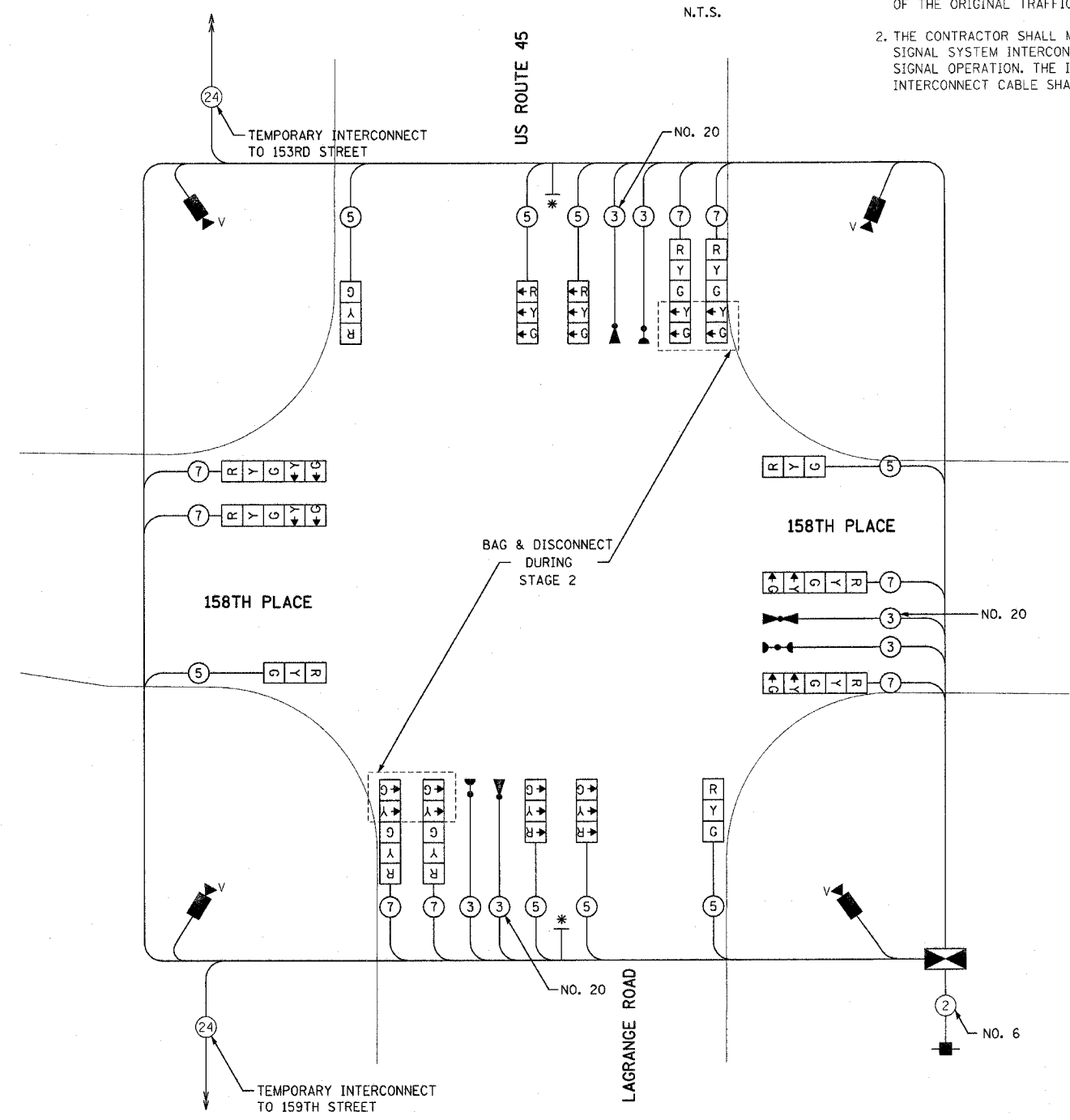
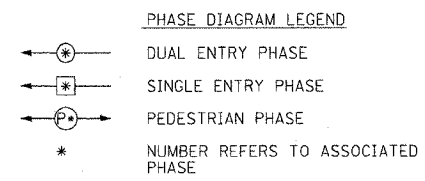
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT		



**TEMPORARY EMERGENCY VEHICLE PREEMPTION DIAGRAM**

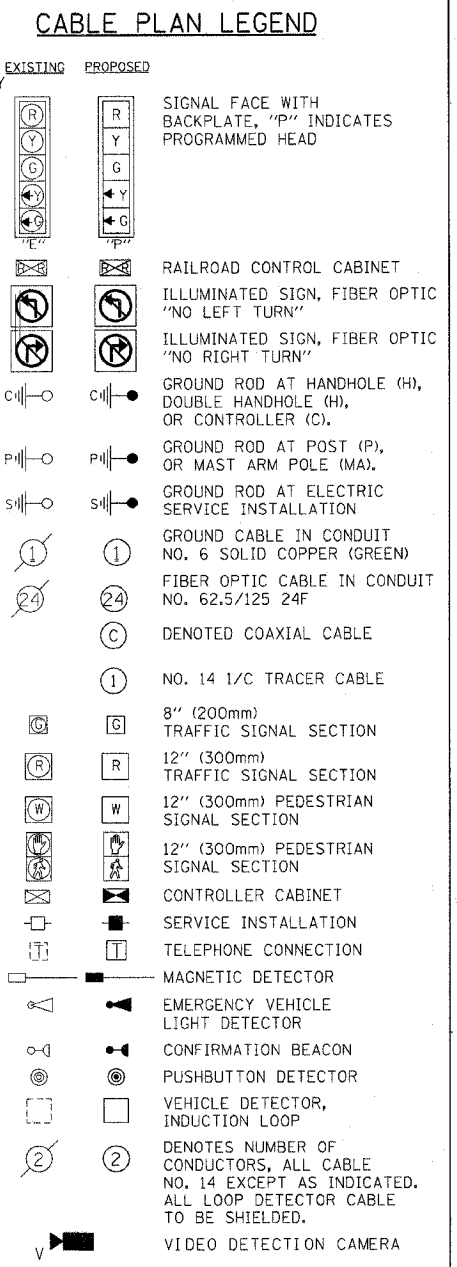
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE	
TYPE	NO. OF LAMPS	WATTAGE	INCAND.	LED	% OPERATION	
SIGNAL (RED)	16	135	17		0.50	1080.0
(YELLOW)	16	135	25		0.25	540.0
(GREEN)	16	135	15		0.25	540.0
ARROW	8	135	12		0.10	108.0
PED. SIGNAL	0	90	25		1.00	0.0
CONTROLLER	1	100	100		1.00	100.0
ILLUM. SIGN	0	84	35		0.05	0.0
FLASHER	0		25		0.50	0.0
ENERGY COST TO:					TOTAL =	2368.0

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON



**TEMPORARY CABLE PLAN**

- CONSTRUCTION NOTES**
1. THE EXISTING TRAFFIC RESPONSIVE CLOSED LOOP SYSTEM OPERATION SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE COUNTY SIGNAL SYSTEM ENGINEER AT LEAST 72 HOURS PRIOR TO THE START OF WORK TO REQUEST MODIFICATION OF THE EXISTING TRAFFIC RESPONSIVE PROGRAM. UPON COMPLETION AND ACCEPTANCE OF THE TRAFFIC SIGNAL MODIFICATIONS, THE CONTRACTOR SHALL CONTACT THE SIGNAL SYSTEM ENGINEER TO REQUEST RESTORATION OF THE ORIGINAL TRAFFIC RESPONSIVE PROGRAM.
  2. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION. THE INSTALLATION OF THE TEMPORARY INTERCONNECT CABLE SHALL BE NON-DESTRUCTIVE.

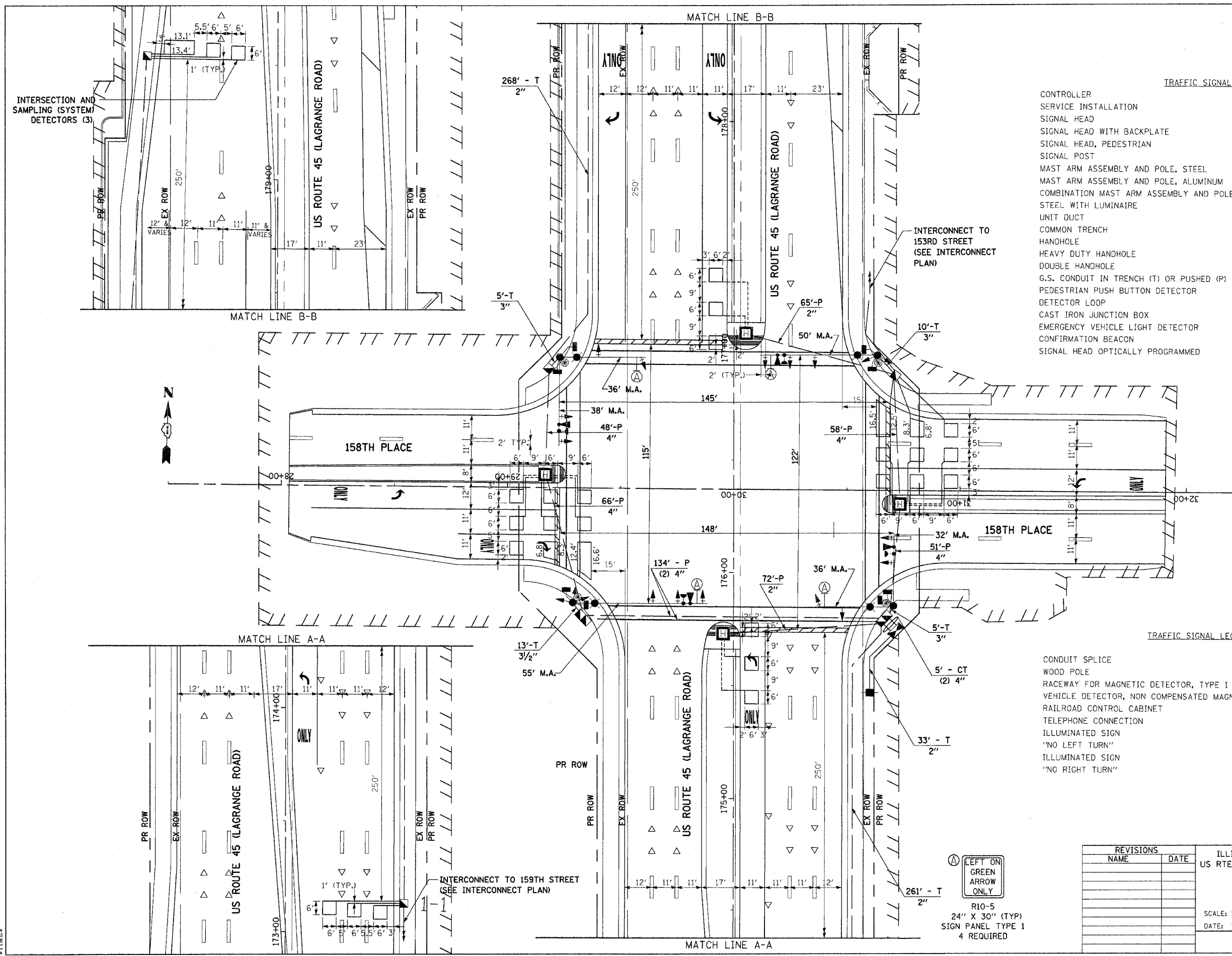


\* LEFT ON GREEN ARROW ONLY  
 R10-5  
 24" X 30" (TYP)  
 SIGN PANEL TYPE 1

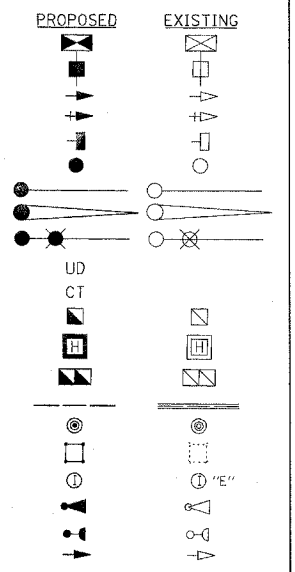
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 45 (LAGRANGE ROAD)  
 AND 158TH PLACE  
 TEMPORARY CABLE PLAN - STAGE 2  
 SCALE: N.T.S.  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 CHECKED BY: NKU  
**McDonough Associates Inc.**  
 Engineers / Architects

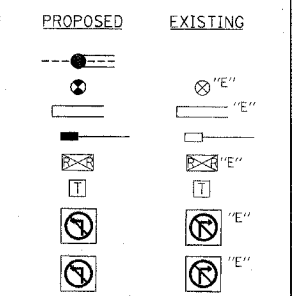
STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	145
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



- TRAFFIC SIGNAL LEGEND**
- CONTROLLER
  - SERVICE INSTALLATION
  - SIGNAL HEAD
  - SIGNAL HEAD WITH BACKPLATE
  - SIGNAL HEAD, PEDESTRIAN
  - SIGNAL POST
  - MAST ARM ASSEMBLY AND POLE, STEEL
  - MAST ARM ASSEMBLY AND POLE, ALUMINUM
  - COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
  - UNIT DUCT
  - COMMON TRENCH
  - HANDHOLE
  - HEAVY DUTY HANDHOLE
  - DOUBLE HANDHOLE
  - G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
  - PEDESTRIAN PUSH BUTTON DETECTOR
  - DETECTOR LOOP
  - CAST IRON JUNCTION BOX
  - EMERGENCY VEHICLE LIGHT DETECTOR
  - CONFIRMATION BEACON
  - SIGNAL HEAD OPTICALLY PROGRAMMED



- TRAFFIC SIGNAL LEGEND (CONT'D)**
- CONDUIT SPLICE
  - WOOD POLE
  - RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
  - VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
  - RAILROAD CONTROL CABINET
  - TELEPHONE CONNECTION
  - ILLUMINATED SIGN
  - "NO LEFT TURN"
  - ILLUMINATED SIGN
  - "NO RIGHT TURN"



**LEFT ON GREEN ARROW ONLY**

R10-5  
24" X 30" (TYP)  
SIGN PANEL TYPE 1  
4 REQUIRED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
US 45 (LAGRANGE ROAD)  
AND 158TH PLACE  
TRAFFIC SIGNAL PLAN

SCALE: 1"=20'  
DATE: 7-07-06

DRAWN BY: NKJ  
DESIGNED BY: MJT  
CHECKED BY: NKJ

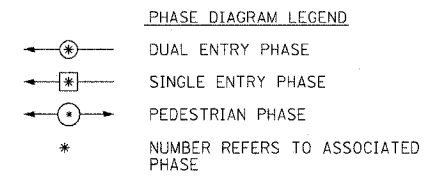
**McDonough Associates Inc.**  
Engineers / Architects

FILES  
DATES  
STINES

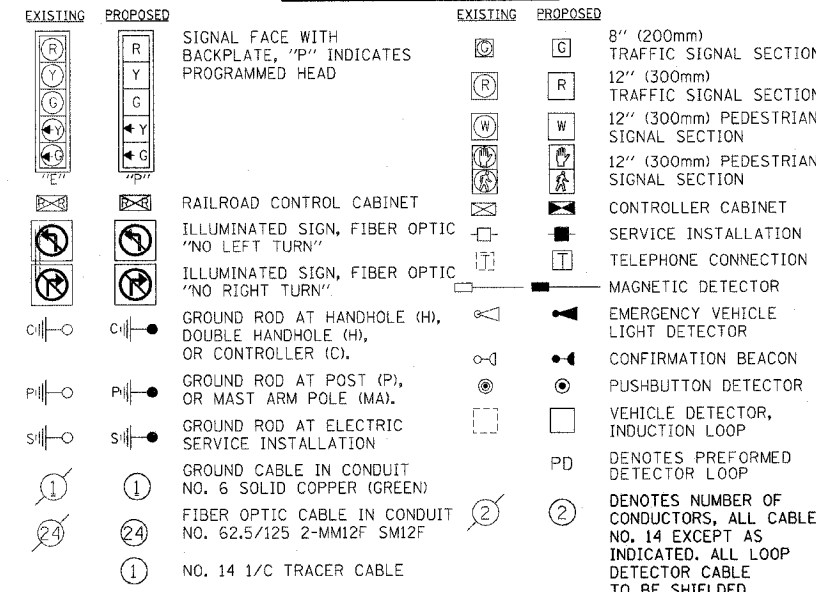


F.A.P. RITE-1	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	146
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ (ILLINOIS) FED. AID PROJECT		

CONTRACT # 62880

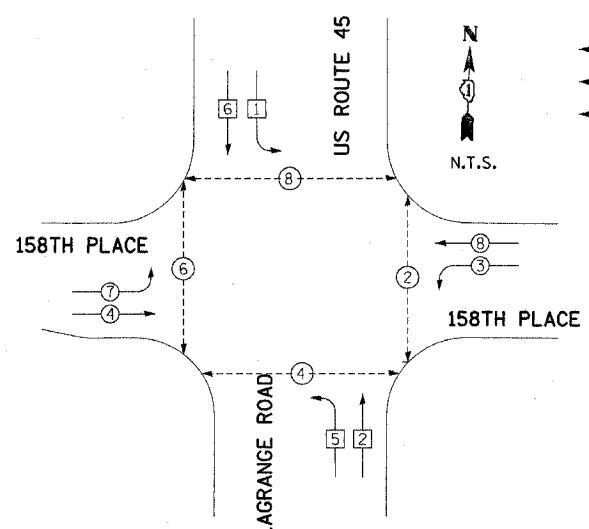


**CABLE PLAN LEGEND**



**SCHEDULE OF QUANTITIES**

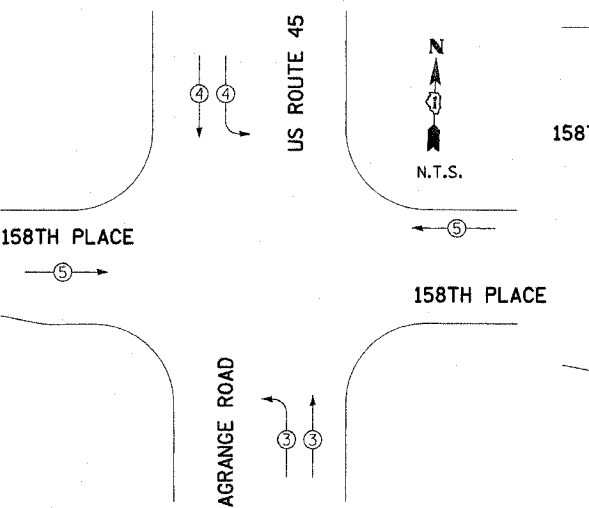
SIGN PANEL - TYPE 1	50 FT	38
SIGN PANEL - TYPE 2	50 FT	0
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	562
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	FOOT	13
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	137
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	491
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	587
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	704
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2415
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2822
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1382
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4702
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	51
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	1
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52
TRAFFIC SIGNAL BACKPLATE	EACH	14
INDUCTIVE LOOP DETECTOR	EACH	12
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	10
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	515
PREFORMED DETECTOR LOOP	FOOT	1450
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	948
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	11
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD ,LED, 2-FACE, 1-3 SECTION, 1-5, SECTION BRACKET MOUNTED	EACH	1
SIGNAL HEAD ,LED, 3-FACE, 1-3 SECTION, 1-5, SECTION BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 32 FT. AND 36 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 36 FT. AND 38 FT	EACH	1



**PHASE DESIGNATION DIAGRAM**

**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

EMERGENCY VEHICLE PREEMPTORS	3	4	5
MOVEMENT			

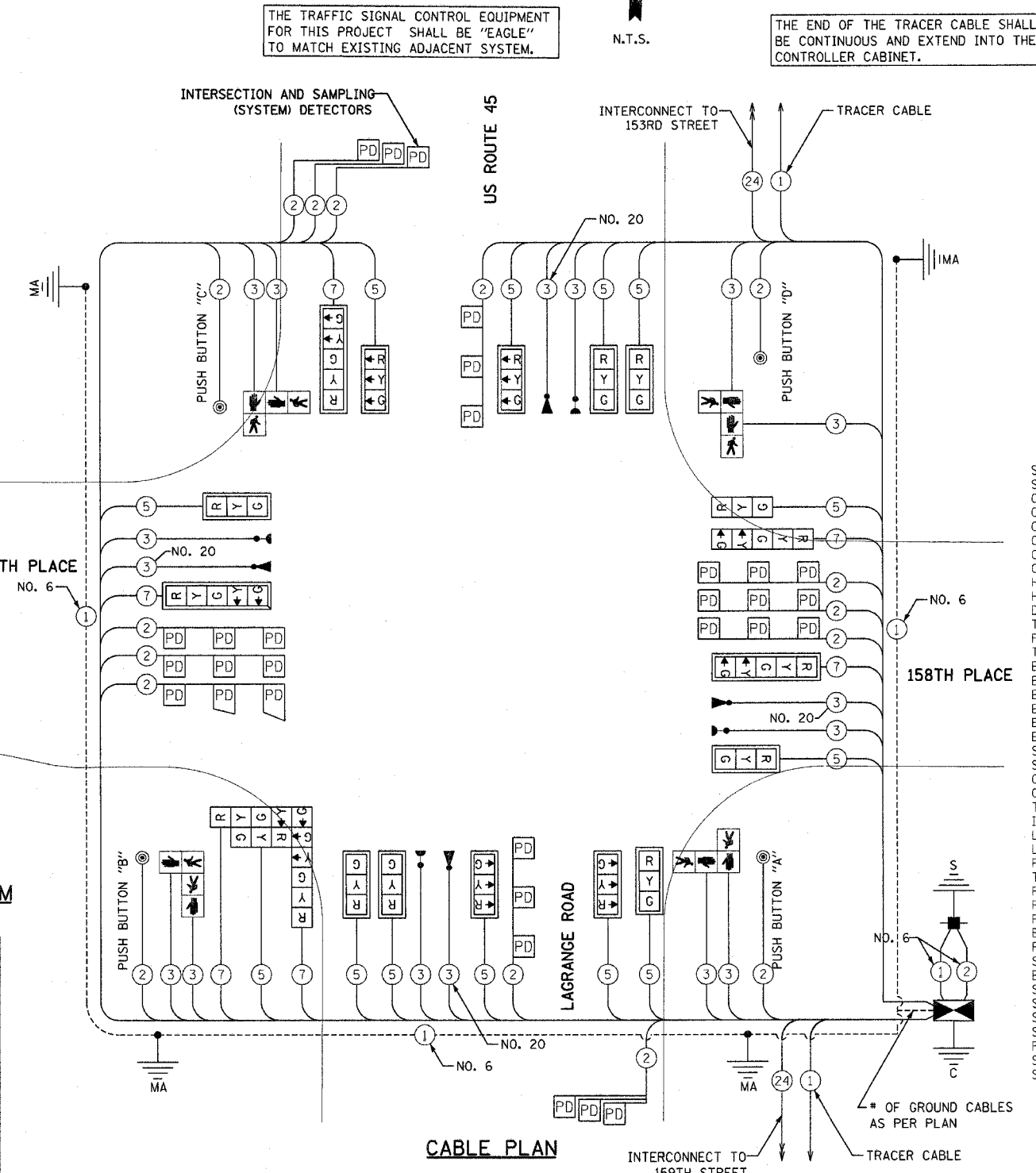


**EMERGENCY VEHICLE PREEMPTION DIAGRAM**

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

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	19	135	0.50	161.5
(YELLOW)	19	135	0.25	118.75
(GREEN)	19	135	0.25	118.75
ARROW	12	135	0.10	14.4
PED. SIGNAL	8	90	1.00	200.0
CONTROLLER	1	100	1.00	100.0
ILLUM. SIGN	0	84	0.05	0.0
FLASHER	0	25	0.50	0.0
ENERGY COST TO:			TOTAL =	665.9

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON



**CABLE PLAN**

FOUNDATION (DEPTH)	FT (m)	CABLE SLACK	FT (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
TYPE D-CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+H = (6m+L) =
30", TYPE E	15 (4.6)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
36", TYPE E	15 (4.6)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
		FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2

**REVISIONS**

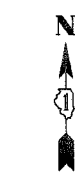
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 45 (LAGRANGE ROAD)  
 AND 158TH PLACE  
 CABLE PLAN  
 SCALE: N.T.S.  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU  
**McDonough Associates Inc.**  
 Engineers / Architects

STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	147
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT _____		
CONTRACT # 62880				

**TRAFFIC SIGNAL NOTES:**

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

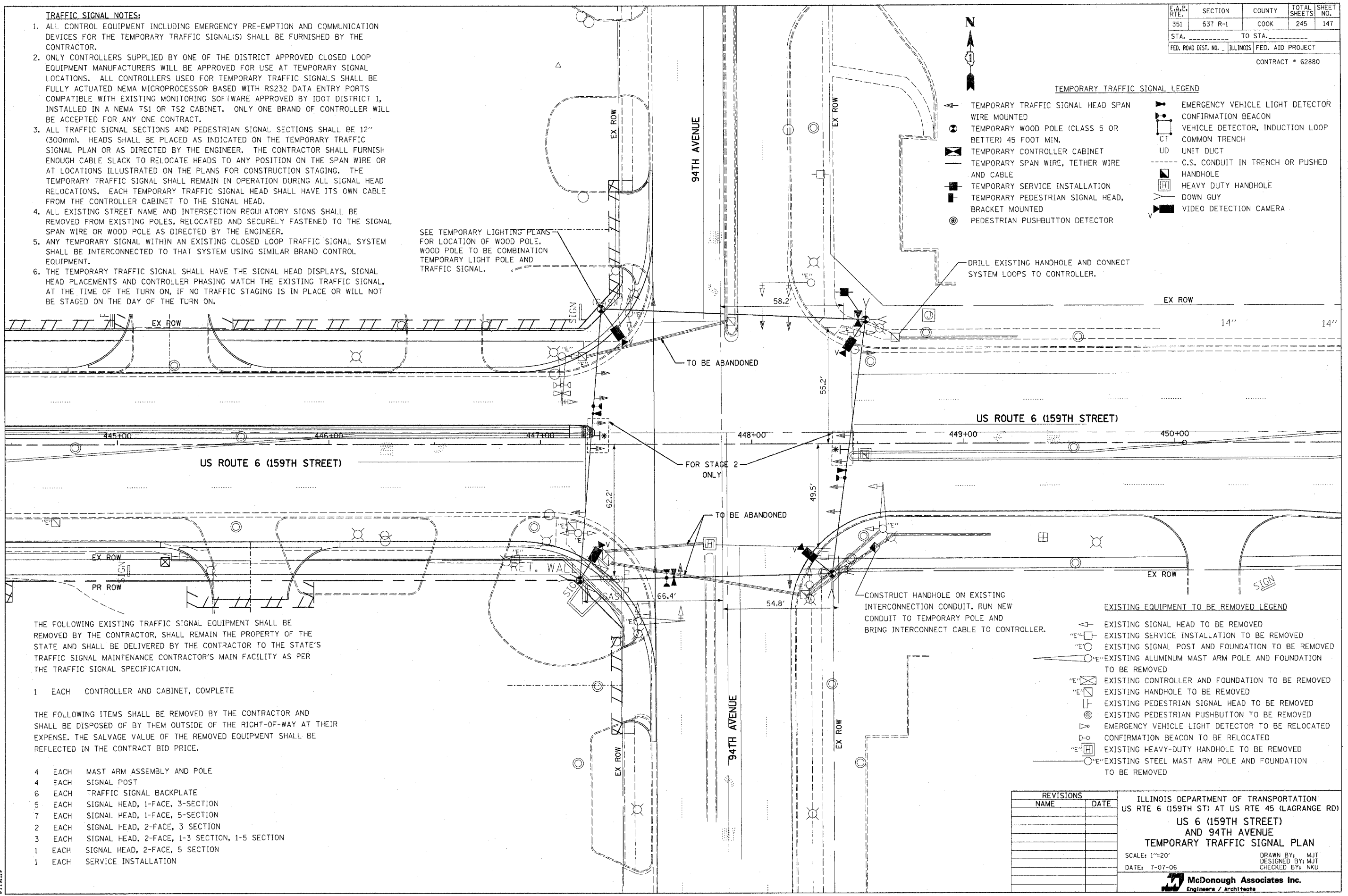


**TEMPORARY TRAFFIC SIGNAL LEGEND**

- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED
- ⊙ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MIN.
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ▲ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊙ CONFIRMATION BEACON
- ⊠ VEHICLE DETECTOR, INDUCTION LOOP COMMON TRENCH
- UD UNIT DUCT
- G.S. CONDUIT IN TRENCH OR PUSHED
- HANDHOLE
- HEAVY DUTY HANDHOLE
- ▽ DOWN GUY
- VIDEO DETECTION CAMERA

SEE TEMPORARY LIGHTING PLANS FOR LOCATION OF WOOD POLE. WOOD POLE TO BE COMBINATION TEMPORARY LIGHT POLE AND TRAFFIC SIGNAL.

DRILL EXISTING HANDHOLE AND CONNECT SYSTEM LOOPS TO CONTROLLER.



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATION.

- 1 EACH CONTROLLER AND CABINET, COMPLETE

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

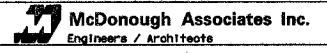
- 4 EACH MAST ARM ASSEMBLY AND POLE
- 4 EACH SIGNAL POST
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 5 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 7 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3 SECTION
- 3 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 5 SECTION
- 1 EACH SERVICE INSTALLATION

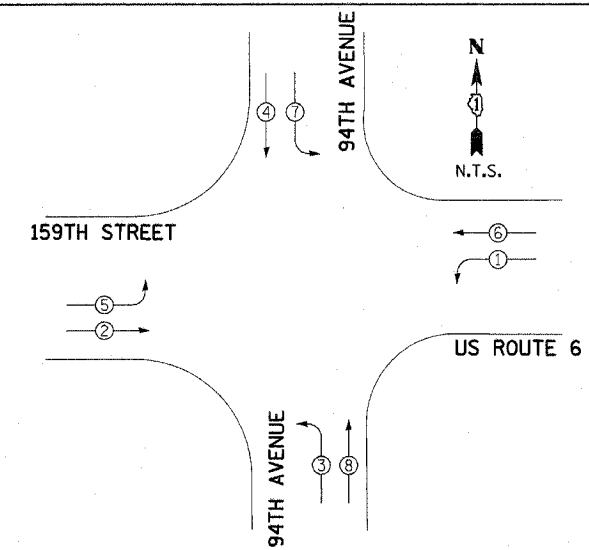
**EXISTING EQUIPMENT TO BE REMOVED LEGEND**

- ▲ EXISTING SIGNAL HEAD TO BE REMOVED
- ⊠ EXISTING SERVICE INSTALLATION TO BE REMOVED
- ⊙ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ⊠ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊠ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- ⊠ EXISTING HANDHOLE TO BE REMOVED
- ⊠ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- ▲ EMERGENCY VEHICLE LIGHT DETECTOR TO BE RELOCATED
- ⊙ CONFIRMATION BEACON TO BE RELOCATED
- ⊠ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- ⊙ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

REVISIONS	
NAME	DATE

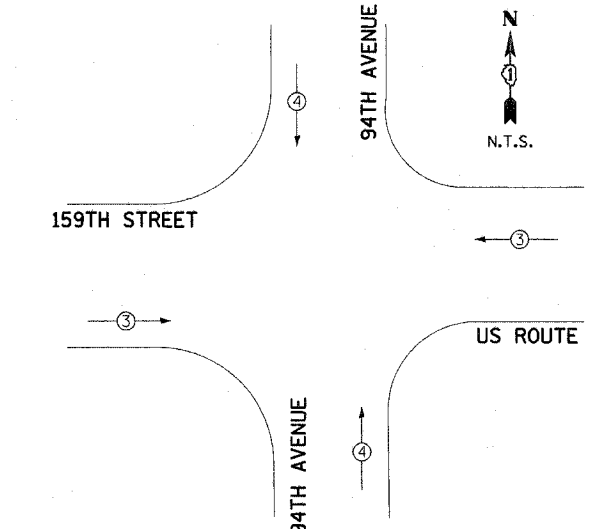
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**US 6 (159TH STREET)  
 AND 94TH AVENUE**  
**TEMPORARY TRAFFIC SIGNAL PLAN**  
 SCALE: 1"=20'  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU



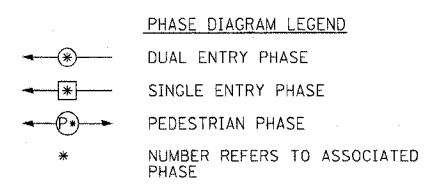


**TEMPORARY PHASE DESIGNATION DIAGRAM**

PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← → ↑ ↓

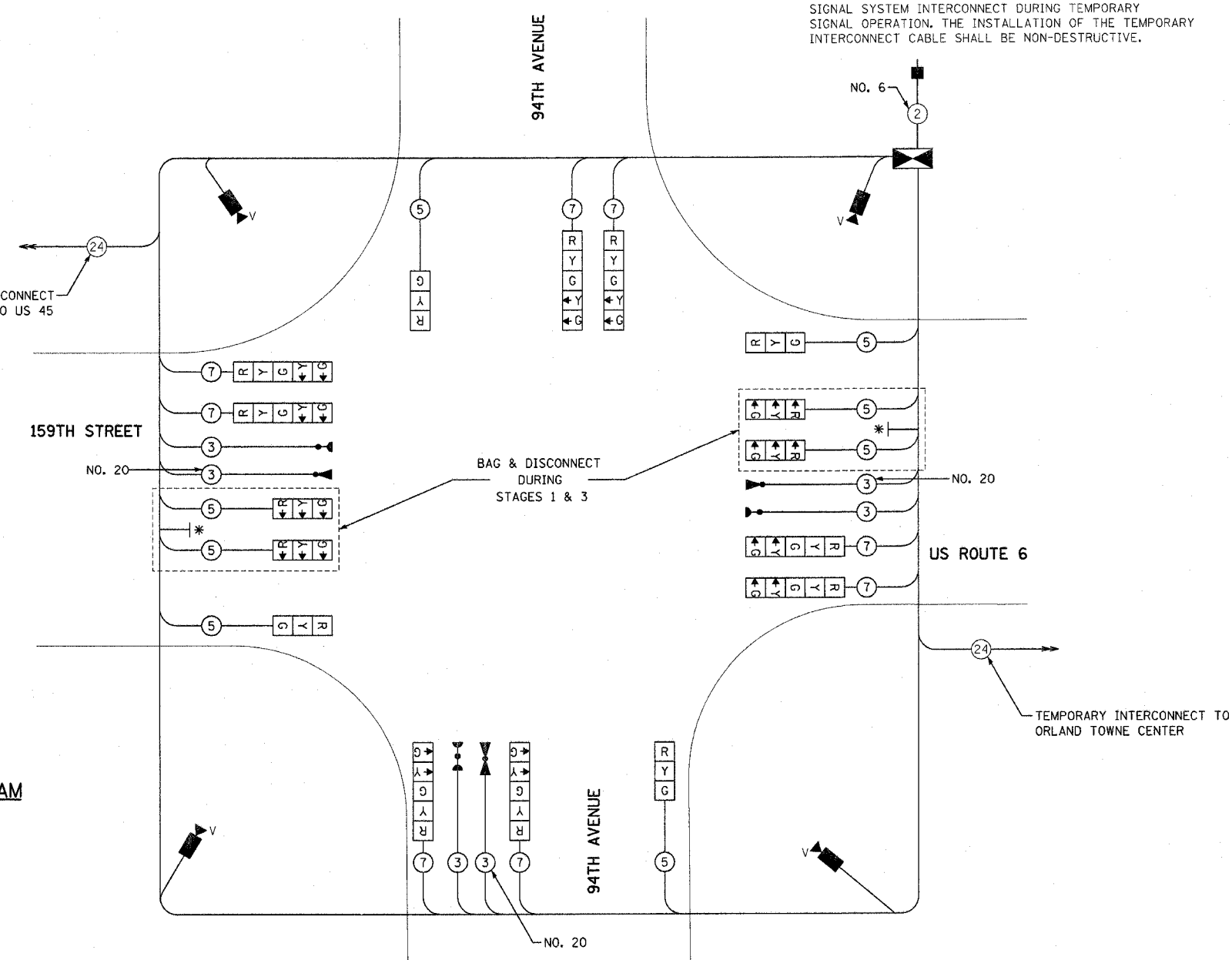
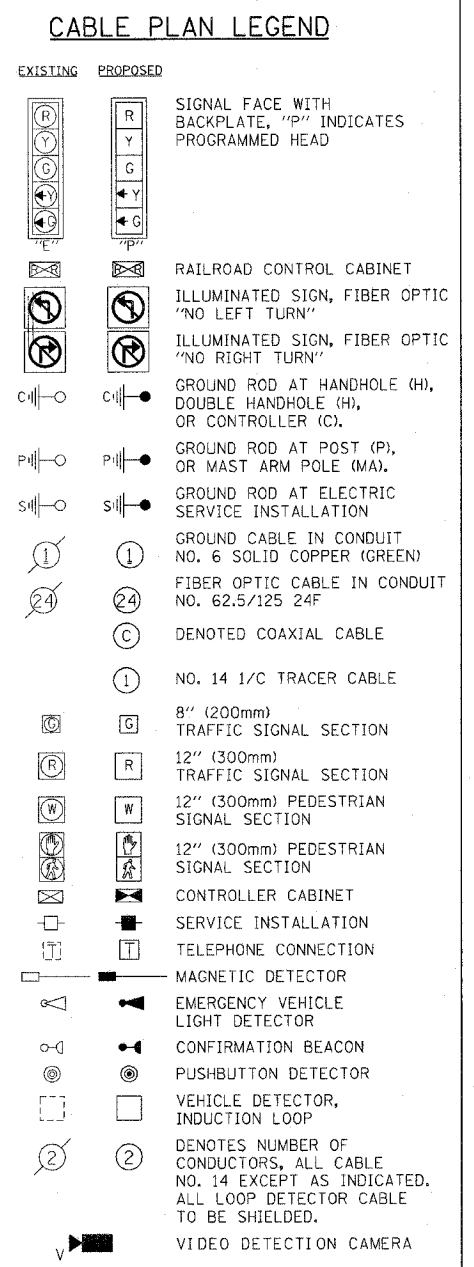


**TEMPORARY EMERGENCY VEHICLE PREEMPTION DIAGRAM**



**CONSTRUCTION NOTES**

- THE EXISTING TRAFFIC RESPONSIVE CLOSED LOOP SYSTEM OPERATION SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE COUNTY SIGNAL SYSTEM ENGINEER AT LEAST 72 HOURS PRIOR TO THE START OF WORK TO REQUEST MODIFICATION OF THE EXISTING TRAFFIC RESPONSIVE PROGRAM. UPON COMPLETION AND ACCEPTANCE OF THE TRAFFIC SIGNAL MODIFICATIONS, THE CONTRACTOR SHALL CONTACT THE SIGNAL SYSTEM ENGINEER TO REQUEST RESTORATION OF THE ORIGINAL TRAFFIC RESPONSIVE PROGRAM.
- THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION. THE INSTALLATION OF THE TEMPORARY INTERCONNECT CABLE SHALL BE NON-DESTRUCTIVE.



**TEMPORARY CABLE PLAN**

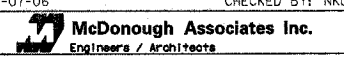
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE IN CAN.	LED	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	810.0
(YELLOW)	12	135	25	0.25	405.0
(GREEN)	12	135	15	0.25	405.0
ARROW	16	135	12	0.10	216.0
PED. SIGNAL	0	90	25	1.00	0.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	1936.0

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON

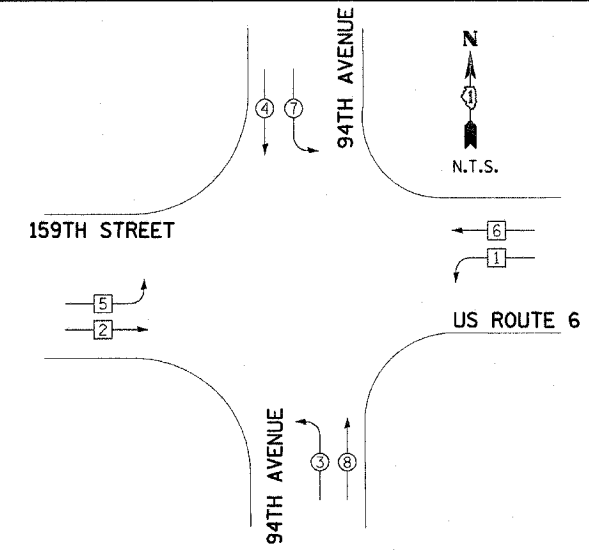
\* LEFT ON GREEN ARROW ONLY  
 R10-5  
 24" X 30" (TYP)  
 SIGN PANEL TYPE 1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 6 (159TH STREET) AND 94TH AVENUE  
 TEMPORARY CABLE PLAN - STAGES 1 & 3  
 SCALE: N.T.S.  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU

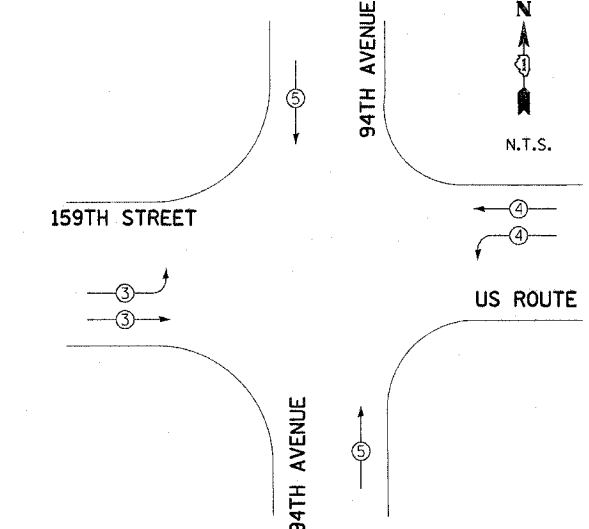


F.A.D. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	149
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



**TEMPORARY PHASE DESIGNATION DIAGRAM**

PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTORS	3	4	5
MOVEMENT			



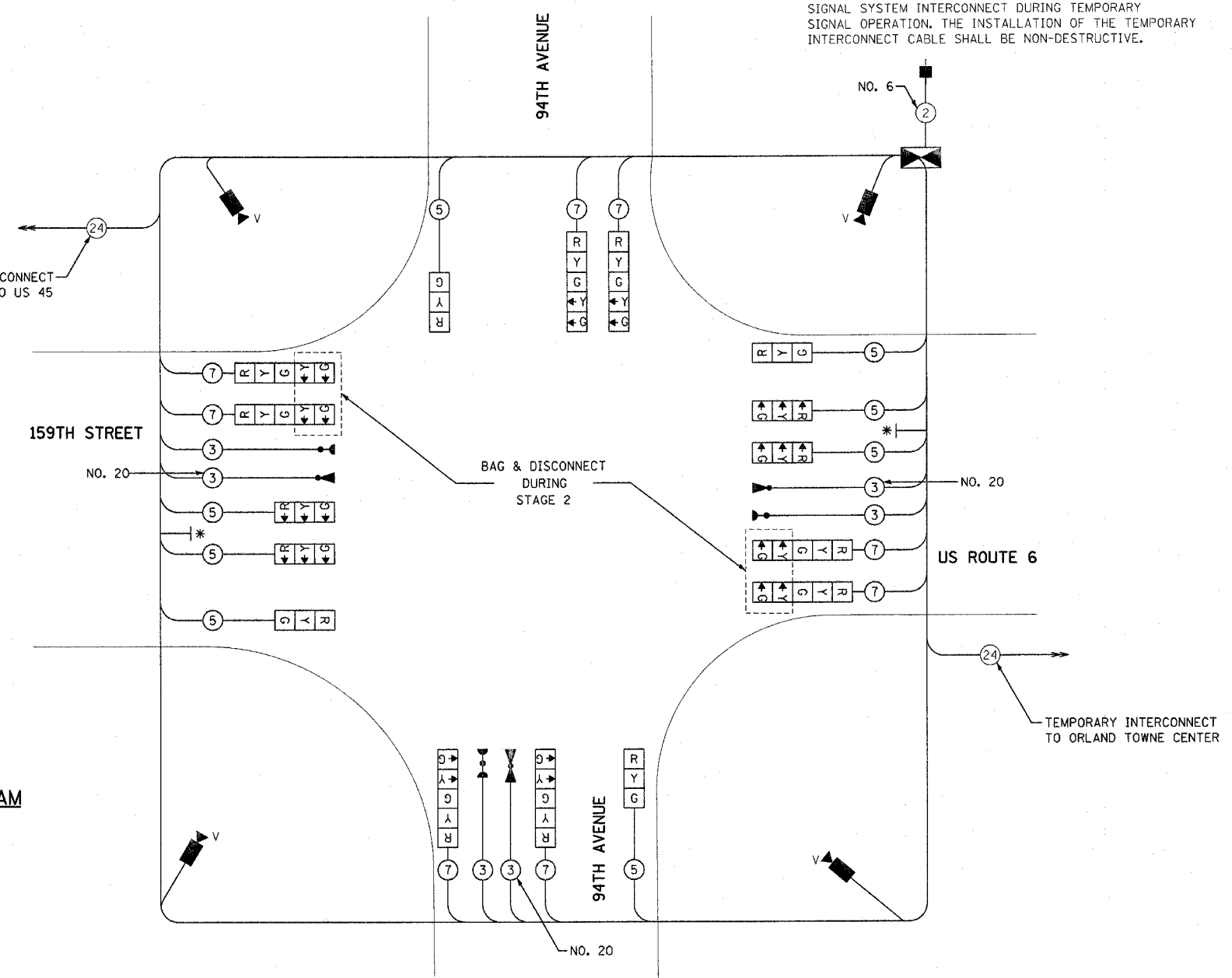
**TEMPORARY EMERGENCY VEHICLE PREEMPTION DIAGRAM**

- PHASE DIAGRAM LEGEND**
- DUAL ENTRY PHASE
  - SINGLE ENTRY PHASE
  - PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

- CONSTRUCTION NOTES**
- THE EXISTING TRAFFIC RESPONSIVE CLOSED LOOP SYSTEM OPERATION SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE COUNTY SIGNAL SYSTEM ENGINEER AT LEAST 72 HOURS PRIOR TO THE START OF WORK TO REQUEST MODIFICATION OF THE EXISTING TRAFFIC RESPONSIVE PROGRAM. UPON COMPLETION AND ACCEPTANCE OF THE TRAFFIC SIGNAL MODIFICATIONS, THE CONTRACTOR SHALL CONTACT THE SIGNAL SYSTEM ENGINEER TO REQUEST RESTORATION OF THE ORIGINAL TRAFFIC RESPONSIVE PROGRAM.
  - THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION. THE INSTALLATION OF THE TEMPORARY INTERCONNECT CABLE SHALL BE NON-Destructive.

**CABLE PLAN LEGEND**

- |  |  |                                                                                                             |
|--|--|-------------------------------------------------------------------------------------------------------------|
|  |  | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD                                                   |
|  |  | RAILROAD CONTROL CABINET                                                                                    |
|  |  | ILLUMINATED SIGN, FIBER OPTIC 'NO LEFT TURN'                                                                |
|  |  | ILLUMINATED SIGN, FIBER OPTIC 'NO RIGHT TURN'                                                               |
|  |  | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).                                         |
|  |  | GROUND ROD AT POST (P), OR MAST ARM POLE (MA).                                                              |
|  |  | GROUND ROD AT ELECTRIC SERVICE INSTALLATION                                                                 |
|  |  | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)                                                          |
|  |  | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 24F                                                               |
|  |  | DENOTED COAXIAL CABLE                                                                                       |
|  |  | NO. 14 1/2 TRACER CABLE                                                                                     |
|  |  | 8" (200mm) TRAFFIC SIGNAL SECTION                                                                           |
|  |  | 12" (300mm) TRAFFIC SIGNAL SECTION                                                                          |
|  |  | 12" (300mm) PEDESTRIAN SIGNAL SECTION                                                                       |
|  |  | 12" (300mm) PEDESTRIAN SIGNAL SECTION                                                                       |
|  |  | CONTROLLER CABINET                                                                                          |
|  |  | SERVICE INSTALLATION                                                                                        |
|  |  | TELEPHONE CONNECTION                                                                                        |
|  |  | MAGNETIC DETECTOR                                                                                           |
|  |  | EMERGENCY VEHICLE LIGHT DETECTOR                                                                            |
|  |  | CONFIRMATION BEACON                                                                                         |
|  |  | PUSHBUTTON DETECTOR                                                                                         |
|  |  | VEHICLE DETECTOR, INDUCTION LOOP                                                                            |
|  |  | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
|  |  | VIDEO DETECTION CAMERA                                                                                      |



**TEMPORARY CABLE PLAN**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCANDESCENT	LED	% OPERATION	
SIGNAL (RED)	16	135	17	0.50	1080.0
(YELLOW)	16	135	25	0.25	540.0
(GREEN)	16	135	15	0.25	540.0
ARROW	8	135	12	0.10	108.0
PED. SIGNAL	0	90	25	1.00	0.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	2368.0

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON

\* LEFT ON GREEN ARROW ONLY  
 R10-5  
 24" X 30" (TYP)  
 SIGN PANEL TYPE 1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 US 6 (159TH STREET) AND 94TH AVENUE  
 TEMPORARY CABLE PLAN - STAGE 2  
 SCALE: N.T.S. DRAWN BY: MJT  
 DATE: 7-07-06 DESIGNED BY: MJT  
 CHECKED BY: NKU  
 McDonough Associates Inc.  
 Engineers / Architects

F.A.E. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	150
STA. _____ TO STA. _____		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO. _____		CONTRACT # 62880		

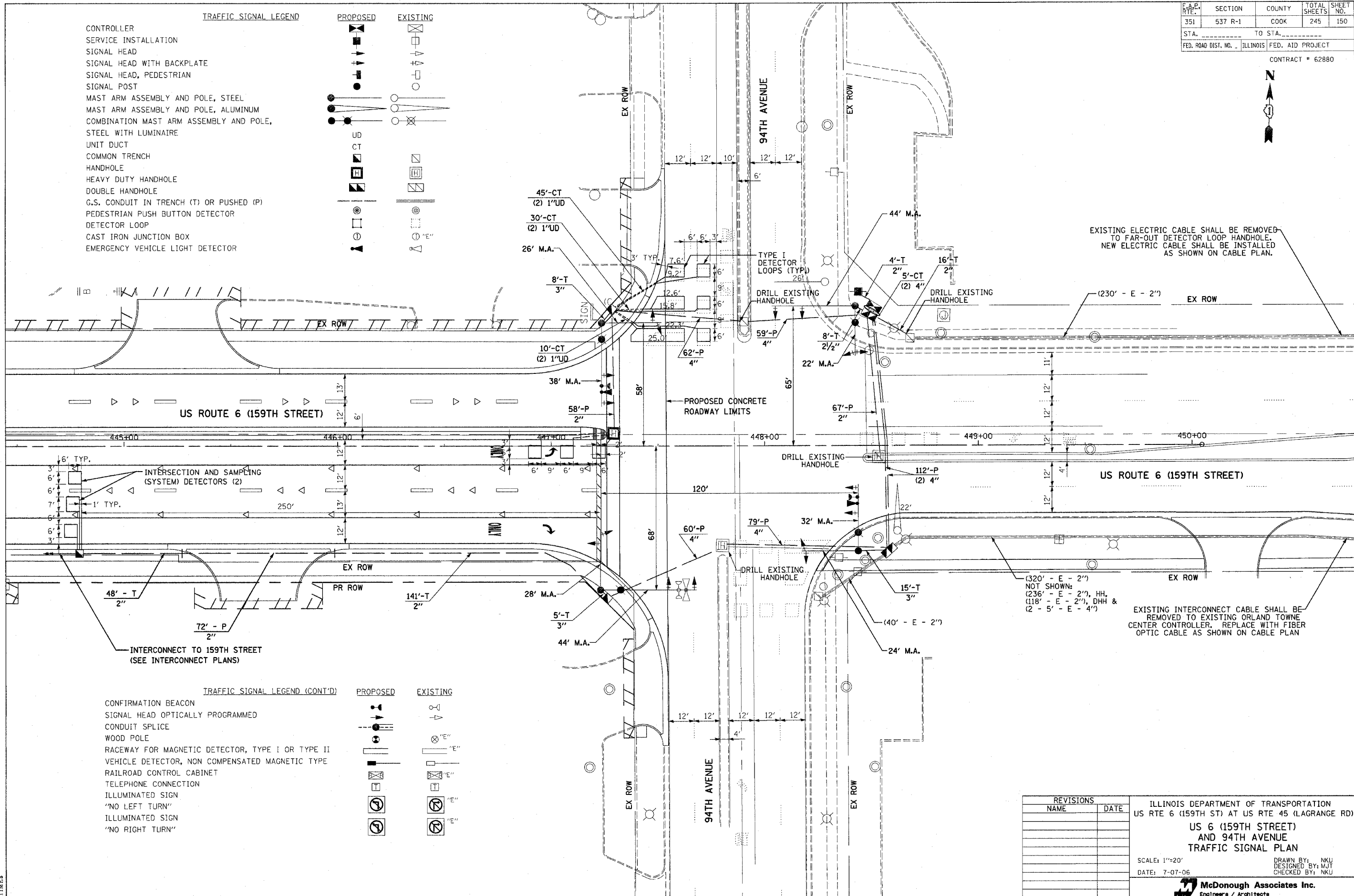


**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT		
COMMON TRENCH		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSH BUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		
EMERGENCY VEHICLE LIGHT DETECTOR		

**TRAFFIC SIGNAL LEGEND (CONT'D)**

	PROPOSED	EXISTING
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED		
CONDUIT SPLICE		
WOOD POLE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		
TELEPHONE CONNECTION		
ILLUMINATED SIGN		
"NO LEFT TURN" ILLUMINATED SIGN		
"NO RIGHT TURN" ILLUMINATED SIGN		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**US 6 (159TH STREET)  
 AND 94TH AVENUE  
 TRAFFIC SIGNAL PLAN**

SCALE: 1"=20'  
 DATE: 7-07-06

DRAWN BY: NKU  
 DESIGNED BY: MJT  
 CHECKED BY: NKU

**McDonough Associates Inc.**  
 Engineers / Architects

FILES  
 DATES  
 TIMES

STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	151
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT _____		

CONTRACT # 62880

**CABLE PLAN LEGEND**

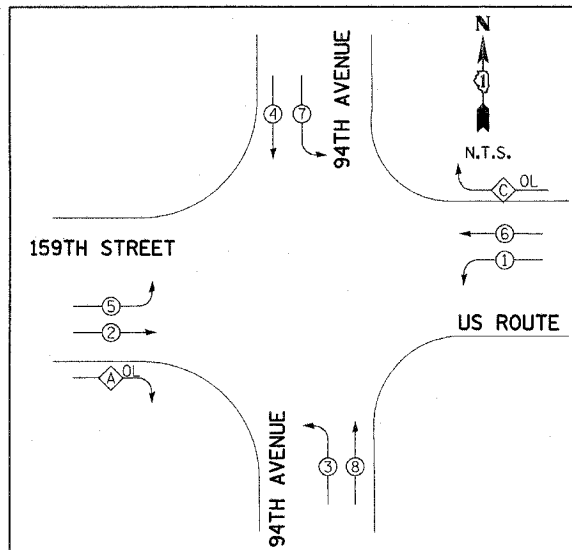
EXISTING	PROPOSED	EXISTING	PROPOSED	DESCRIPTION
(R)	(R)	(C)	(C)	8" (200mm) TRAFFIC SIGNAL SECTION
(Y)	(Y)	(R)	(R)	12" (300mm) TRAFFIC SIGNAL SECTION
(G)	(G)	(W)	(W)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(P)	(P)	(H)	(H)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(S)	(S)	(T)	(T)	CONTROLLER CABINET
(MA)	(MA)	(SI)	(SI)	SERVICE INSTALLATION
(NLT)	(NLT)	(TE)	(TE)	TELEPHONE CONNECTION
(NRT)	(NRT)	(MD)	(MD)	MAGNETIC DETECTOR
(H)	(H)	(EVL)	(EVL)	EMERGENCY VEHICLE LIGHT DETECTOR
(P)	(P)	(CB)	(CB)	CONFIRMATION BEACON
(S)	(S)	(P)	(P)	PUSHBUTTON DETECTOR
(SI)	(SI)	(V)	(V)	VEHICLE DETECTOR, INDUCTION LOOP
(C)	(C)	(PD)	(PD)	PD DENOTES PERFORMED DETECTOR LOOP
(1)	(1)	(2)	(2)	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(24)	(24)			
(1)	(1)			
(V)	(V)			

**SCHEDULE OF QUANTITIES**

SIGN PANEL - TYPE 1	15
SIGN PANEL - TYPE 2	0
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	209
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	8
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	28
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	197
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	484
HANDHOLE	3
HEAVY-DUTY HANDHOLE	1
DOUBLE HANDHOLE	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	250
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	1
TRANSCEIVER - FIBER OPTIC	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	816
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	894
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	2646
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	3885
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	22
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 24 FT. AND 32 FT.	1
CONCRETE FOUNDATION, TYPE D	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	48
DRILL EXISTING HANDHOLE	7
TRAFFIC SIGNAL BACKPLATE	16
INDUCTIVE LOOP DETECTOR	14
DETECTOR LOOP, TYPE I	470
LIGHT DETECTOR	2
TEMPORARY TRAFFIC SIGNAL INSTALLATION	1
REMOVE ELECTRIC CABLE FROM CONDUIT	2977
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	1
REMOVE EXISTING HANDHOLE	4
REMOVE EXISTING CONCRETE FOUNDATION	9
ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	494
PERFORMED DETECTOR LOOP	243
SERVICE INSTALLATION - POLE MOUNTED	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	816
SIGNAL HEAD LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	4
SIGNAL HEAD LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	12
RELOCATE LIGHT DETECTOR	1
RELOCATE LIGHT DETECTOR AMPLIFIER	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 26 FT. AND 38 FT.	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 44 FT AND 22 FT.	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 44 FT AND 28 FT.	1

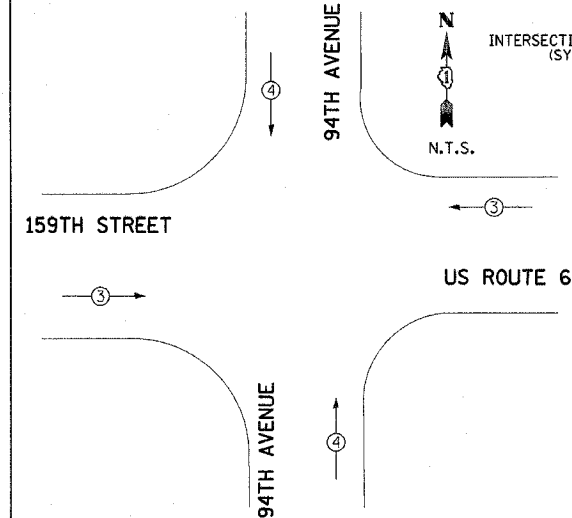
**PHASE DIAGRAM LEGEND**

(*)	DUAL ENTRY PHASE
(*)	SINGLE ENTRY PHASE
(P)	PEDESTRIAN PHASE
*	NUMBER REFERS TO ASSOCIATED PHASE
(A) OL	RIGHT TURN OVERLAP, WHERE:
(A) OL	OVERLAP LETTER
A	PERMISSIVE PHASE
C	PROTECTED PHASE
A C	= 2 + 3
	= 6 + 7



**PHASE DESIGNATION DIAGRAM**

PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	← → ↑ ↓



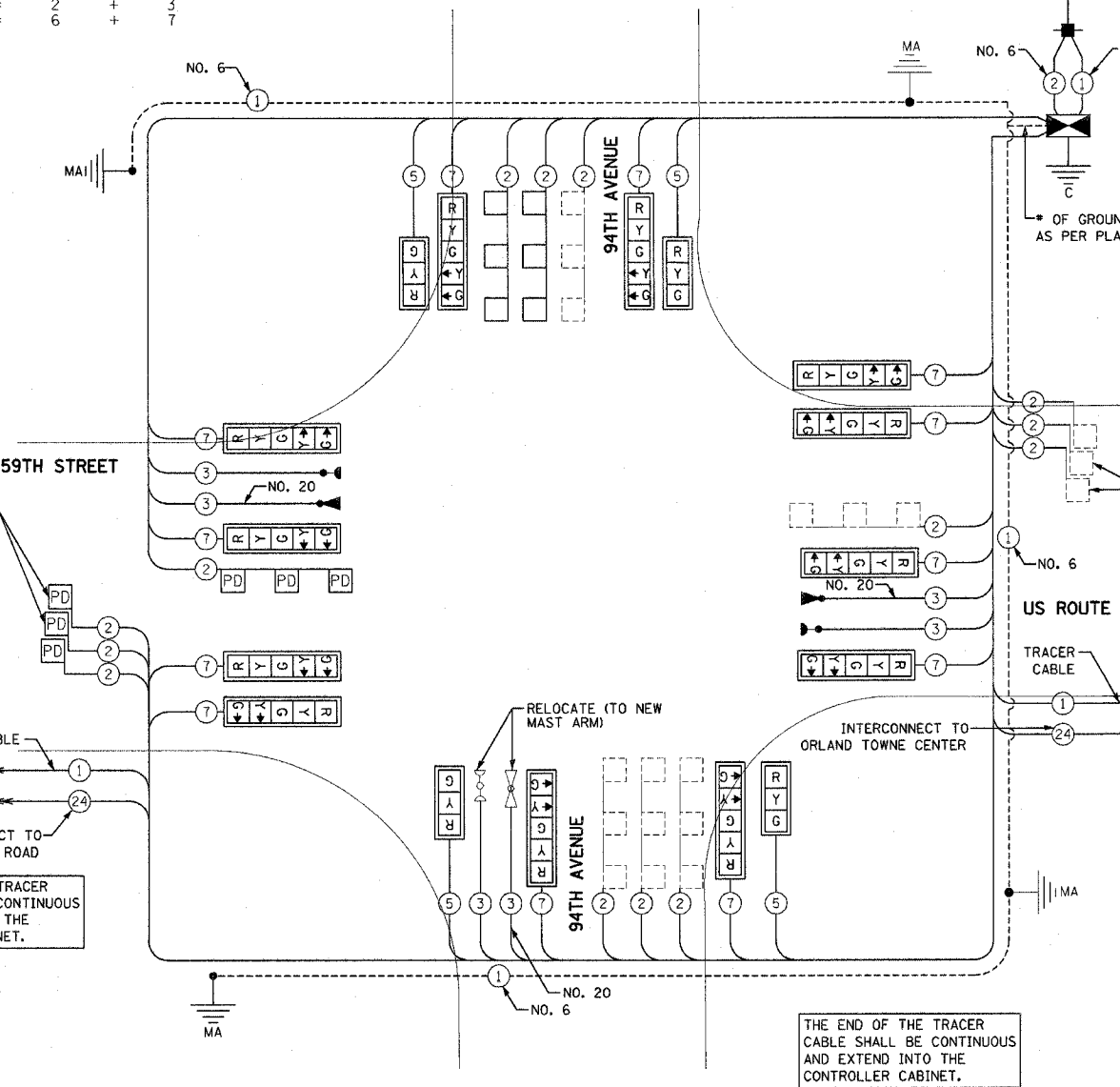
**EMERGENCY VEHICLE PREEMPTION DIAGRAM**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.0
(YELLOW)	16	135	25	0.25	100.0
(GREEN)	16	135	15	0.25	60.0
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	0	90	25	1.00	0.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	424.8

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: NILES K. AKBAR  
 PHONE: (708) 235-2338  
 COMPANY: COMMONWEALTH EDISON

FOUNDATION (DEPTH)	FT (m)	CABLE SLACK	FT (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
TYPE D-CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L= (6m+L)=
30", TYPE E	15 (4.6)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
36", TYPE E	15 (4.6)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
		FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

**CABLE PLAN**



NOTE:  
 ALL EXISTING CABLE TO BE REMOVED FROM CONDUIT AND REPLACED WITH NEW CABLE

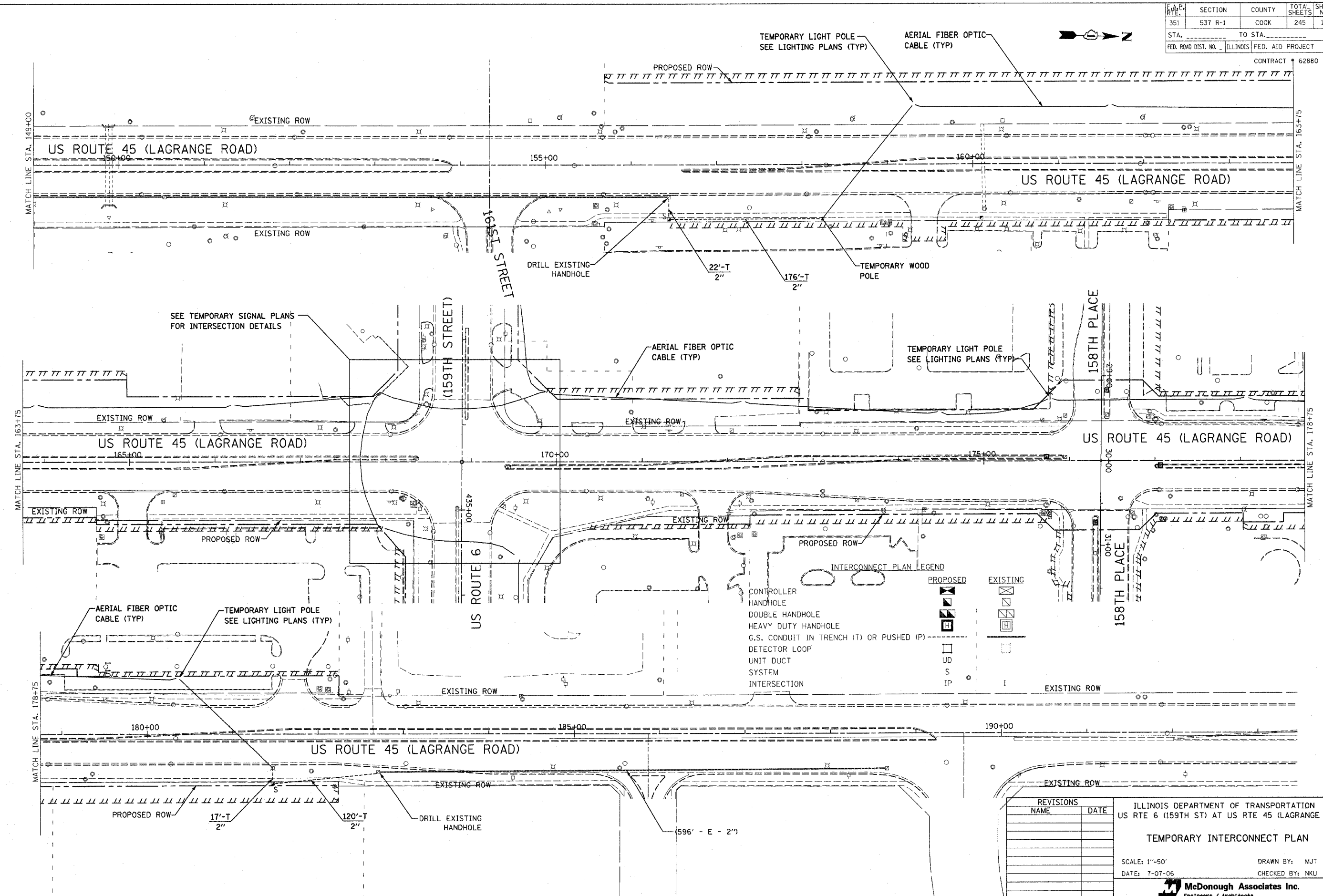
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**US 6 (159TH STREET) AND 94TH AVENUE CABLE PLAN**  
 SCALE: N.T.S.  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 DESIGNED BY: MJT  
 CHECKED BY: NKU  
**McDonough Associates Inc.**  
 Engineers / Architects



F.A.P. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	152
STA. _____ TO STA. _____		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

CONTRACT 62880

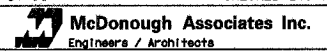


INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]
SYSTEM	[Symbol]	[Symbol]
INTERSECTION	[Symbol]	[Symbol]

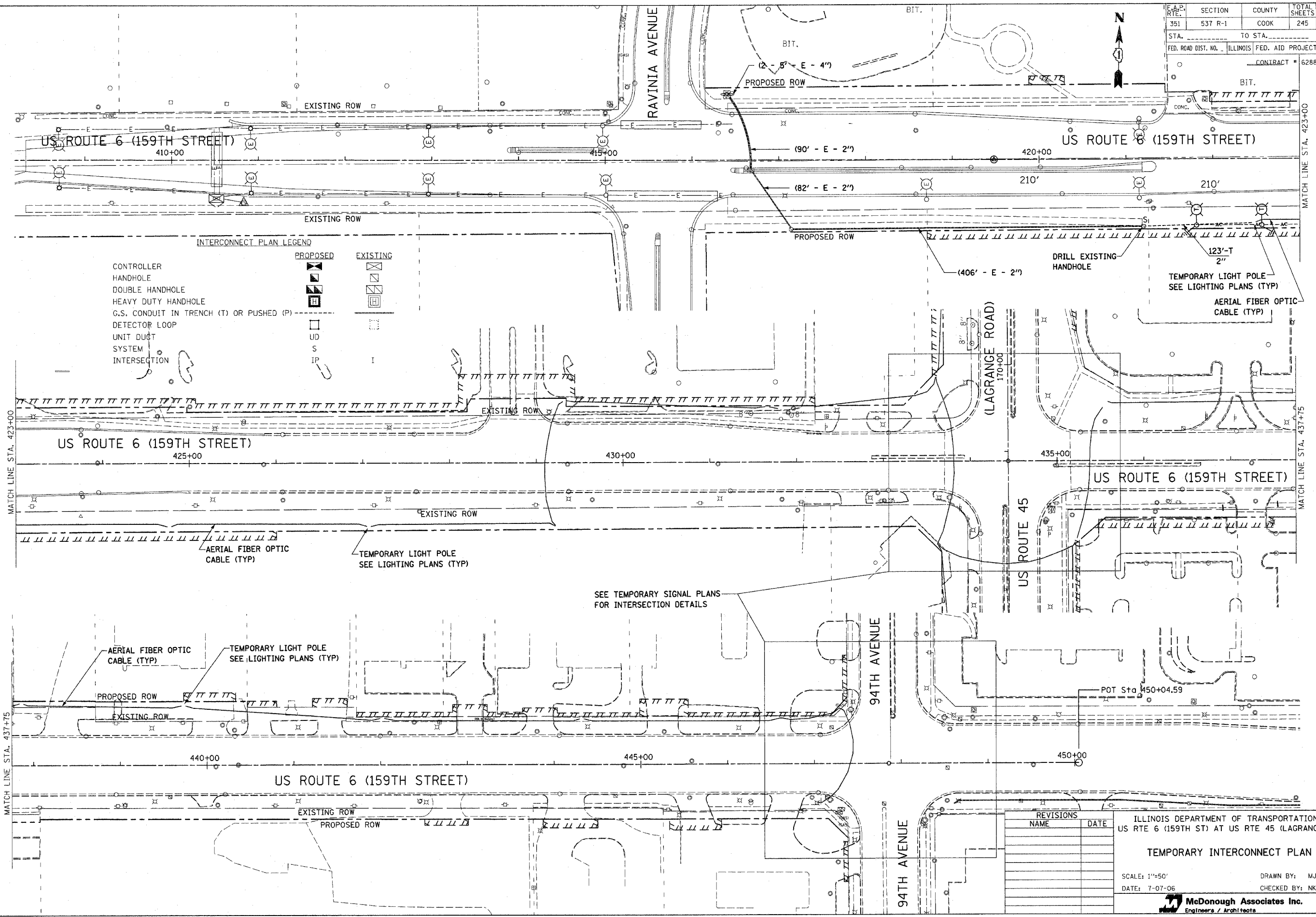
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**TEMPORARY INTERCONNECT PLAN**  
 SCALE: 1"=50'  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 CHECKED BY: NKU



FILES  
DATES  
TIMES

E.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	153
STA.	TO STA.		FED. ROAD DIST. NO. ILLINOIS	
			FED. AID PROJECT	
			CONTRACT # 62880	



INTERCONNECT PLAN LEGEND

CONTROLLER	PROPOSED	EXISTING
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
UNIT DUCT SYSTEM		
INTERSECTION		

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)

**TEMPORARY INTERCONNECT PLAN**

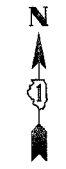
SCALE: 1"=50'  
 DATE: 7-07-06

DRAWN BY: MJT  
 CHECKED BY: NKU

McDonough Associates Inc.  
 Engineers / Architects

FILES  
 DATES  
 TIMES

E.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	154
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
CONTRACT # 62880				



- INTERCONNECT SCHEMATIC LEGEND**
- EXISTING INTERSECTION CONTROLLER
  - PROPOSED INTERSECTION CONTROLLER
  - EXISTING MASTER CONTROLLER
  - PROPOSED MASTER CONTROLLER
  - MASTER MASTER CONTROLLER
  - EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS
  - PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS
  - EXISTING INTERSECTION LOOP DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.
  - EXISTING SAMPLING (SYSTEM) DETECTORS
  - PROPOSED SAMPLING (SYSTEM) DETECTORS
  - EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.
  - EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.
  - EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS
  - PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS
  - EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS
  - PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS
  - EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
  - PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
  - EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE
  - PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE
  - EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED
  - PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED
  - EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
  - PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
  - EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)
  - PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)
  - EXISTING TELEPHONE CONNECTION
  - PROPOSED TELEPHONE CONNECTION

REVISIONS	
NAME	DATE

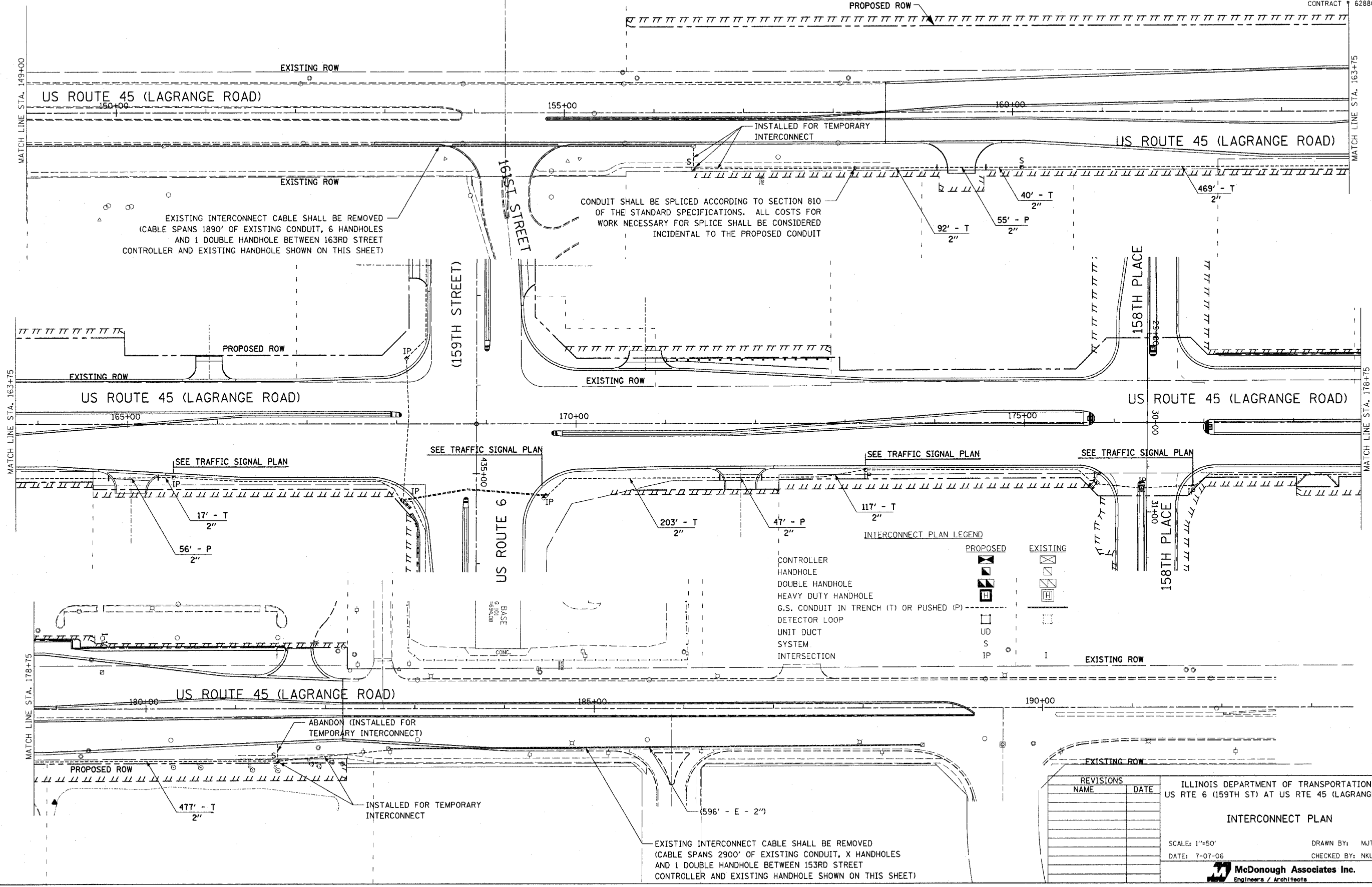
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**TEMPORARY INTERCONNECT SCHEMATIC**  
 SCALE: N.T.S. DRAWN BY: NKU  
 DATE: 7-07-06 CHECKED BY: NKU



SFILES SDATES SFILES



CONTRACT 62880



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)

**INTERCONNECT PLAN**

SCALE: 1"=50'

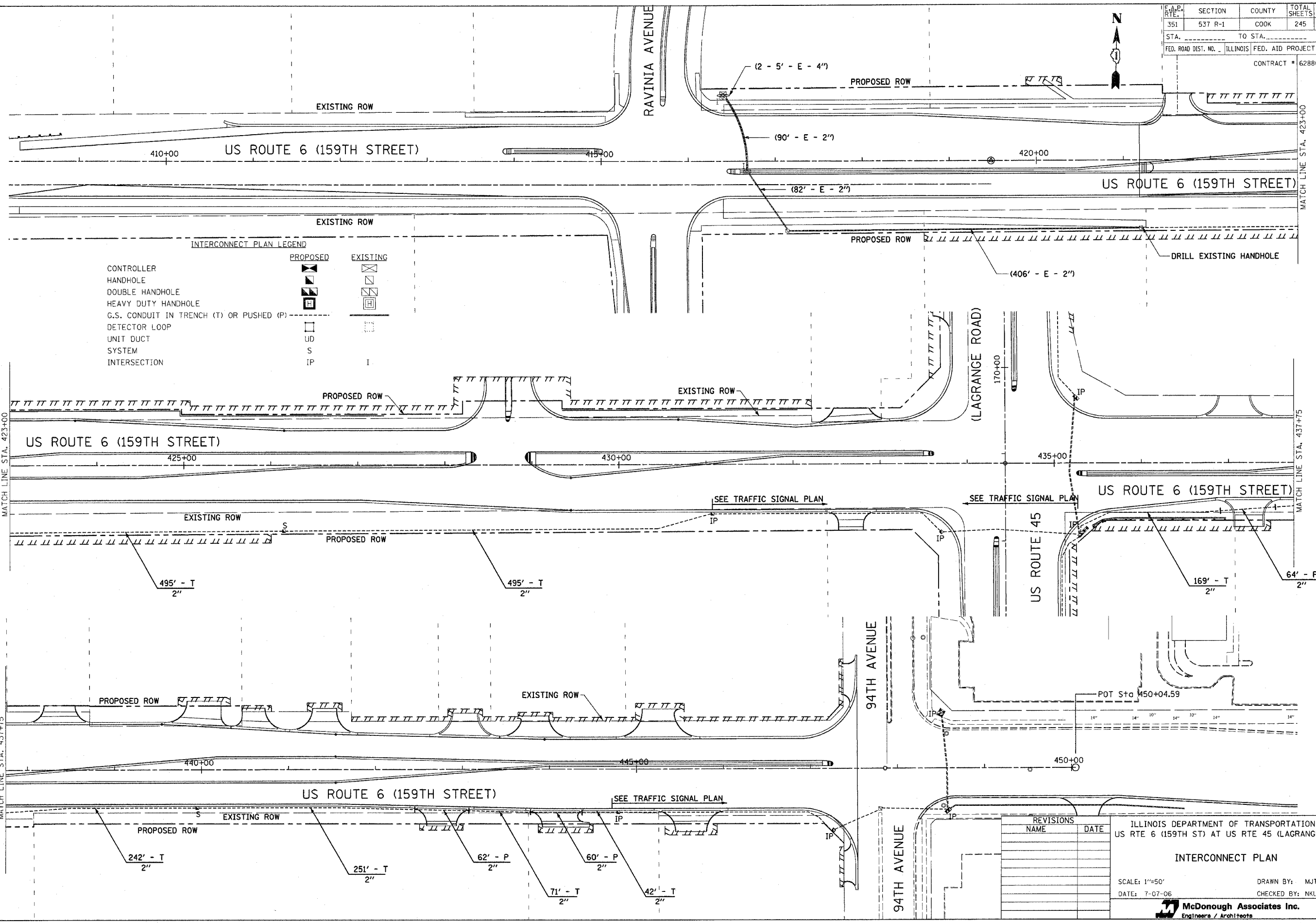
DATE: 7-07-06

DRAWN BY: MJT  
CHECKED BY: NKU

**McDonough Associates Inc.**  
Engineers / Architects

FILES  
DATES  
STAGES

S.A.E. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	156
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 62880				



INTERCONNECT PLAN LEGEND

CONTROLLER	PROPOSED	EXISTING
HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**INTERCONNECT PLAN**  
 SCALE: 1"=50'  
 DATE: 7-07-06  
 DRAWN BY: MJT  
 CHECKED BY: NKU  
**McDonough Associates Inc.**  
 Engineers / Architects

FILES  
 SDATES  
 STIMES



**GENERAL NOTES**

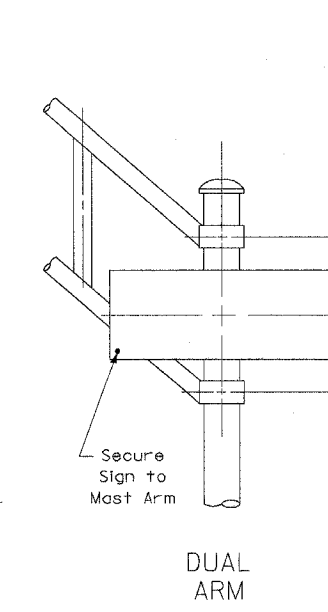
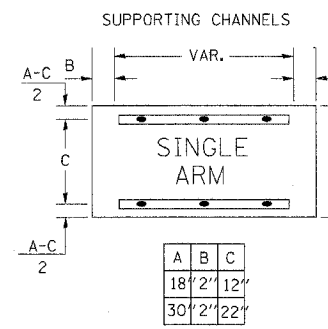
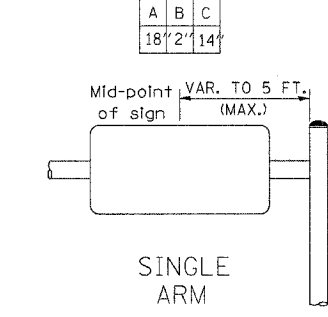
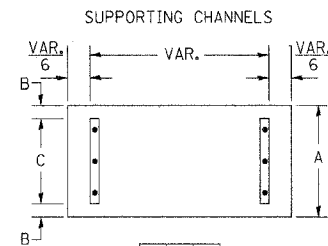
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED. THE ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS B34001, B34006 AND B34011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" X 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND. TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

- A.K.T. CORPORATION
- SCHAUMBURG, IL
- TUCKER COMPANY, INC.
- WAUWATOSA, WI
- AMERICAN FABRICATION CO.
- CHICAGO HEIGHTS, IL
- WESTERN TRAFFIC CONTROL INC.
- CICERO, IL

**PARTS LISTING:**

- SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
- SIGN SCREWS 1/4" X 14 X 1" H.W.H. #3
- BRACKETS SELF TAPPING WITH NEOPRENE WASHER
- CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE PRODUCT.



Upper Case To Lower Case Spacing Chart 8-6 Inch Series "C & D"

SERIES	SECOND LETTER																																	
	c		d		e		b		h		i		k		l		f		w		j		s		t		v		y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D		
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14	12	14	12	14	12	14	12	14	12	14	12	14	12	14	12	14		
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	12	14	16	17																
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15																		
DOQR	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15																		
H	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12																		
I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21																		
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21																		
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	11	12	12	14																
P	12	14	14	15	12	14	05	06	11	12	11	12	11	12	14	12	14																	
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14																		
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	11	12	12	14																
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14																		
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12																		
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21																		

Lower Case To Lower Case Spacing Chart 6 Inch Series "C & D"

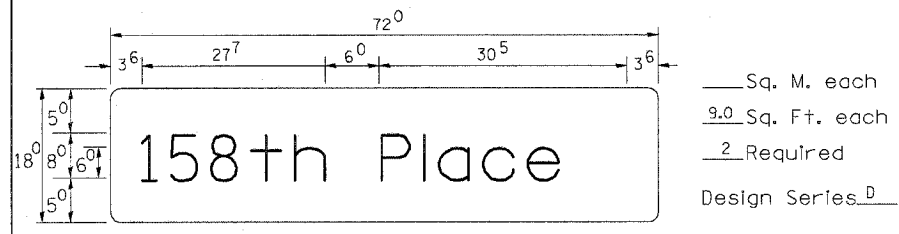
SERIES	SECOND LETTER																																	
	c		d		e		b		h		i		k		l		f		w		j		s		t		v		y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D		
adghjlmnqu	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17																		
bfkops	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14																		
ce	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14																		
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10																		
t z	12	14	16	17	12	14	06	10	11	12	11	12	11	12	12	14																		
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12																		
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	11	12	12	14																
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	11	12	12	14																

Number To Number Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15
6	16	17	14	15	14	15	12	15	12	14	14	15	14	15	11	12	14	15	14	15
7	12	14	12	14	14	15	12	15	15	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15

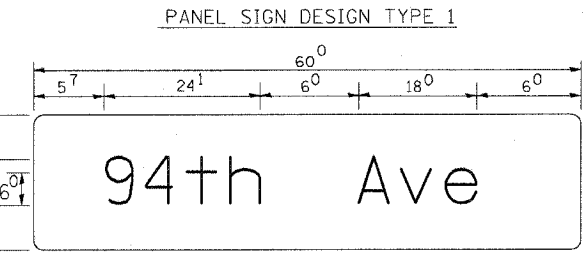
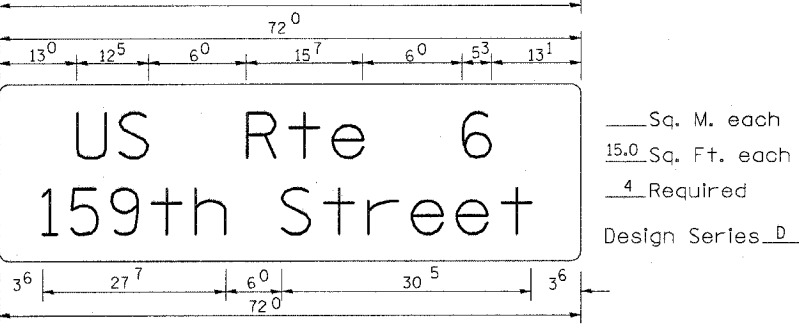
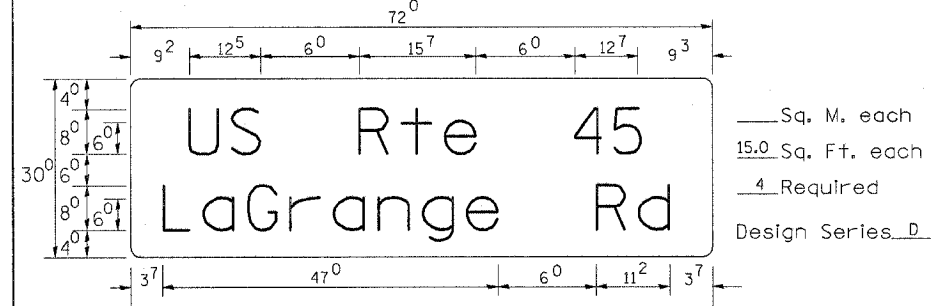
LETTERS	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	12	14	15	20
2	32	40	43	53
3	32	40	43	53
4	35	43	47	57
5	32	40	43	53
6	32	40	43	53
7	32	40	43	53
8	32	40	43	53
9	32	40	43	53
0	34	42	45	55

PANEL SIGN DESIGN TYPE 1



NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS.

PANEL SIGN DESIGN TYPE 2



SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5

REVISIONS		DATE
NAME		

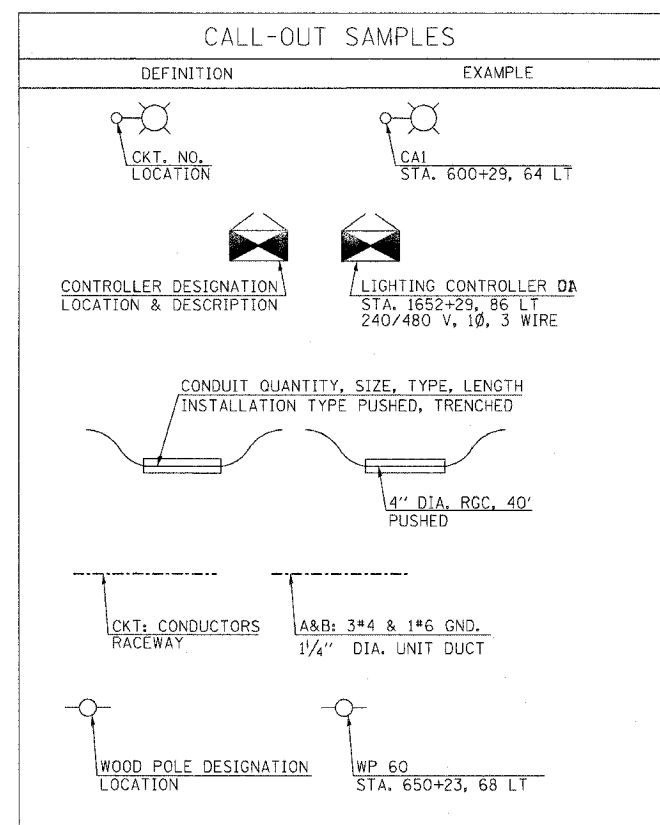
ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
DISTRICT 1  
MAST ARM MOUNTED  
STREET NAME SIGNS

SCALE: N.T.S. DRAWN BY: BA  
DATE: 7-07-06 BA  
CHECKED BY: NKU

**McDonough Associates Inc.**  
Engineers / Architects



ROADWAY ELECTRICAL SYMBOL	
SYMBOL	DESCRIPTION
	PROPOSED LIGHTING UNIT: 47'-6" M.H., 15' MAST ARM WITH 400W HPS LUMINAIRE M-C-III
	EXISTING RELOCATED AND MODIFIED LIGHTING UNIT WITH NEW 15'-0" MAST ARM AND 20A, 120V, GFI DUPLEX RECEPTACLE WITH WP COVER
	EXISTING LIGHTING UNIT TO REMAIN
	EXISTING COMBINATION LIGHTING TRAFFIC POLE
	EXISTING LIGHTING UNIT TO BE REMOVED AND SALVAGED
	EXISTING LIGHTING UNIT TO BE REMOVED AND REINSTALLED AT A NEW LOCATION
	EXISTING RELOCATED LIGHTING UNIT
	TEMPORARY LIGHTING UNIT: 60 FT., CLASS 4 WOOD POLE, 20 FT. MAST ARM AND 400W SODIUM VAPOR, CUTOFF ARCHITECTURAL LUMINAIRE WITH IES TYPE IV DISTRIBUTION UNLESS NOTED OTHERWISE
	EXPOSED CONDUIT
	RACEWAY OR DIRECT BURIAL CABLE UNDERGROUND WITHOUT ENCASUREMENT
	EXISTING UNDERGROUND WIRING TO REMAIN
	EXISTING UNIT DUCT TO BE ABANDONED
	AERIAL ELECTRIC CABLE
	EXISTING AERIAL ELECTRIC CABLE
	RIGID GALVANIZED STEEL CONDUIT SLEEVE, TRENCHED OR PUSHED
	EXISTING LIGHTING CONTROLLER, DUPLEX
	EXISTING UTILITY SERVICE CONNECTION, POLE MOUNTED
	EXISTING UTILITY SERVICE CONNECTION, PAD MOUNTED
	PROPOSED LIGHTING CONTROLLER, DUPLEX
	PROPOSED UTILITY SERVICE CONNECTION, POLE MOUNTED
	PROPOSED UTILITY SERVICE CONNECTION, PAD MOUNTED
	PAD MOUNTED VILLAGE OF ORLAND PARK TRANSFORMER
	TEMPORARY WOOD POLE
	ELECTRIC UTILITY POLE
	ELECTRIC GROUND ROD
	20A, 120V, WP RECEPTACLE WITH GFCI DEVICE



ABBREVIATIONS	
SYMBOL	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
AFG	ABOVE FINISHED GRADE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CP	CONTROL PANEL
DIA	DIAMETER
E	EXISTING UNIT TO REMAIN
FT	FEET OR FOOT
FU	FUSE
GND	GROUND
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
MA	MAST ARM
MH	MOUNTING HEIGHT
NO. *	NUMBER
P	PROPOSED
PNL	PANEL
R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)
RECP	RECEPTACLE
RGC	RIGID GALVANIZED CONDUIT
SEL SW	SELECTOR SWITCH
SPARE	SPARE
SPACE	SPACE
STA	STATION
T	TEMPORARY LIGHTING UNIT
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
WP	WOOD POLE
XFMR	TRANSFORMER

GENERAL ELECTRICAL NOTES:

- ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST CODES, STANDARDS, NEC, IES, THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2002, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, AND THE VILLAGE OF ORLAND PARK ORDINANCES, UNLESS SPECIFICALLY NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.
- CONSULT AND COORDINATE WITH ALL TRADES AND AUTHORITIES INVOLVED TO AVOID INTERFERENCE WITH EXISTING AND NEW UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL EXERCISE UTMOST CARE IN EXCAVATING AND BACKFILLING THE TRENCHES TO AVOID CUTTING OR DAMAGING EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE DRAWINGS.
- ALL CONDUIT, EQUIPMENT AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.
- WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTIONS IN WRITING PRIOR TO FURTHER EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES TO THE SATISFACTION OF THE ENGINEER. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THIS CONTRACT.
- ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER. THE LUMINAIRES MAY REQUIRE NIGHT-TIME OPTICAL ADJUSTMENT UPON INSPECTION BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE APPROPRIATE LUMINAIRE PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT.
- CONDUIT AND UNIT DUCT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30 INCHES BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCTS AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO THE VILLAGE. COORDINATE RACEWAY DEPTHS WITH THE DETAILS AND THE ENGINEER.
- THE CONTRACTOR SHALL PREPARE A PRELIMINARY SCHEDULE WHEN THE CONTRACT COMMENCES WHICH ESTABLISHES THE DATE WHEN THE ELECTRICAL SERVICES WILL BE REQUIRED. THIS SCHEDULE SHALL BE FORWARDED IN WRITING TO C.E.CO. SUBSEQUENT UPDATING OF THE SERVICE REQUIREMENTS, FIVE (5) DAYS BEFORE THE ELECTRICAL SERVICES ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY C.E.CO. BY PHONE AND CONFIRM THE REQUEST IN WRITING. ALL C.E.CO. ELECTRIC SERVICE CONTRACTS AND AGREEMENTS SHALL BE FORWARDED TO THE VILLAGE OF ORLAND PARK FOR REVIEW AND SIGNATURE.
- ALL PITS USED FOR INSTALLING PUSHED (JACKED) STEEL CONDUITS UNDER EXISTING ROADWAYS SHALL BE LOCATED 5'-0" (MINIMUM) CLEAR FROM THE EDGE OF SHOULDER. LOCATIONS OF THE CONDUIT CROSSINGS SHOWN ARE APPROXIMATE AND MAY BE SHIFTED AS NECESSARY TO AVOID THE MOTORISTS. THE CONTRACTOR SHALL SUBMIT PLANS FOR THE LOCATION AND SIZE OF EACH PIT AND MAINTENANCE AND PROTECTION OF TRAFFIC AT THE SITE OF EACH PIT FOR THE APPROVAL OF THE ENGINEER BEFORE THE EXCAVATION OF ANY PIT MAY BEGIN.
- ALL EXISTING AREAS THAT ARE DAMAGED AS PART OF THIS WORK, INCLUDING BUT NOT LIMITED TO FENCING, CURB AND CUTTER, SIDEWALKS, AND WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS, SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THIS CONTRACT. NO SEPARATE PAYMENT WILL BE MADE.
- ALL CONDUCTORS SHALL RUN CONTINUOUS WITHOUT ANY UNDERGROUND SPLICES. SPLICING OF CONDUCTORS WILL BE PERMITTED ONLY IN THE BASE OF THE LIGHTING UNITS UNLESS NOTED OTHERWISE.
- GROUNDING CONNECTIONS AT ALL EQUIPMENT FOUNDATIONS SHALL BE EXOTHERMICALLY WELDED, UNLESS NOTED OTHERWISE AND SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
- THE QUANTITIES OF CONDUITS WHERE INDICATED ON THESE PLAN DRAWINGS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLIANCE WITH THE SPECIFIED REQUIREMENTS. CONDUITS SHALL EXTEND 5'-0" BEYOND BACK OF CURB.
- ALL EXISTING LIGHTING UNITS SHALL REMAIN OPERATIONAL FOR NORMAL NIGHT TIME HOURS UNTIL THE NEW SYSTEM HAS BEEN INSTALLED, TESTED AND ENERGIZED FROM THE NEW LIGHTING CONTROLLER.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL WORK WITH THE CONSTRUCTION STAGING PLANS.
- TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE LIGHT POLES, THEY SHALL NOT BE ERECTED AND/OR LEFT TO STAND WITHOUT LUMINAIRES. THE CONTRACTOR WILL NOT BE PAID FOR POLES UNTIL LUMINAIRES ARE INSTALLED, ENERGIZED, TESTED AND ACCEPTED BY THE ENGINEER.
- ALL PERMANENT LIGHTING UNITS WHETHER THEY ARE NEW OR EXISTING UNITS INSTALLED ON NEW FOUNDATIONS, SHALL BE PROVIDED WITH ALUMINUM BREAKAWAY TRANSFORMER BASE WITH BOLTED METAL COVER PLATE IN ACCORDANCE WITH SPECIAL PROVISIONS.
- WHERE MULTIPLE CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL WILL NOT BE PAID FOR EACH CONDUIT, BUT WILL BE PAID FOR THE LENGTH OF THE COMMON TRENCH ONLY.
- EXISTING LIGHTING UNITS ALONG 159TH STREET WITHIN THE LIMITS OF THIS CONSTRUCTION ARE 47.5 FOOT MOUNTING HEIGHT WITH 12-FOOT MAST ARM AND 400W HPS LUMINAIRE. THESE POLES SHALL BE REMOVED AND MODIFIED AS SPECIFIED IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND SHALL BE REINSTALLED ON NEW FOUNDATIONS AS INDICATED ON THE DRAWINGS.
- EXISTING LIGHTING UNITS ALONG LAGRANGE ROAD WITHIN THE LIMITS OF THIS CONSTRUCTION ARE 40 FOOT MOUNTING HEIGHT WITH 12-FOOT MAST ARM. THESE LIGHTING UNITS SHALL BE REMOVED AND SHALL BE TURNED OVER TO THE VILLAGE OF ORLAND PARK PUBLIC WORKS IN ACCORDANCE WITH SPECIAL PROVISIONS.
- REPLACE LIGHT POLE/UNIT IDENTIFICATION ON ALL EXISTING, MODIFIED AND REINSTALLED LIGHT POLES, AS INDICATED ON THE PLANS, TO CORRESPOND TO ACTUAL CIRCUITING. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "MODIFY EXISTING LIGHT POLE, ALUMINUM 47.5 FT, M.H., WITH NEW 15 FT MAST ARM AND 20A, 120V, GFI RECEPTACLE" PAY ITEM.
- REMOVAL OF TEMPORARY LIGHTING CONTROLLER AND ASSOCIATED WOOD POLE, AERIAL CABLES AND APPURTENANCES SHALL BE INCLUDED IN THE COST OF "REMOVAL OF TEMPORARY LIGHTING UNITS" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.

GE-1

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD) <b>ELECTRICAL SYMBOL LIST, ABBREVIATIONS AND GENERAL NOTES</b>
NAME	DATE	

SCALE: NONE      DRAWN BY: MB  
DATE: 7-07-06      CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	160
STA. 151+00		TO STA. 165+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT # 62880



**LIGHTING PHASING NOTES:**

**PRE-STAGE 1 (PRIOR TO THE START OF STAGE 1 CONSTRUCTION)**

- A. FURNISH AND INSTALL TEMPORARY LIGHTING CONTROLLER "CT".
- B. FURNISH, INSTALL AND ENERGIZE ALL TEMPORARY LIGHTING UNITS.
- C. EXISTING LIGHTING UNITS C2-C4, C2-D4, C5-R1, C5-S1, AND C5-R2 SHALL BE REMOVED AND SALVAGED.
- D. REMOVE ALL EXISTING LIGHTING UNITS LOCATED ON THE SOUTH SIDE OF 159TH ST. AND THE WEST SIDE OF LAGRANGE RD. AS INDICATED ON DRAWINGS RL-1 THRU RL-5. ALL 47.5 FT MOUNTING HEIGHT LIGHTING UNITS SHALL BE MODIFIED AND SHALL BE REUSED FOR THE PERMANENT LIGHTING. ALL 40 FT. POLES SHALL BE SALVAGED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
- E. REMOVE EXISTING LIGHTING CONTROLLER "C6" AND THE ASSOCIATED SERVICE. COORDINATE THE WORK WITH COMED.

**STAGE 1**

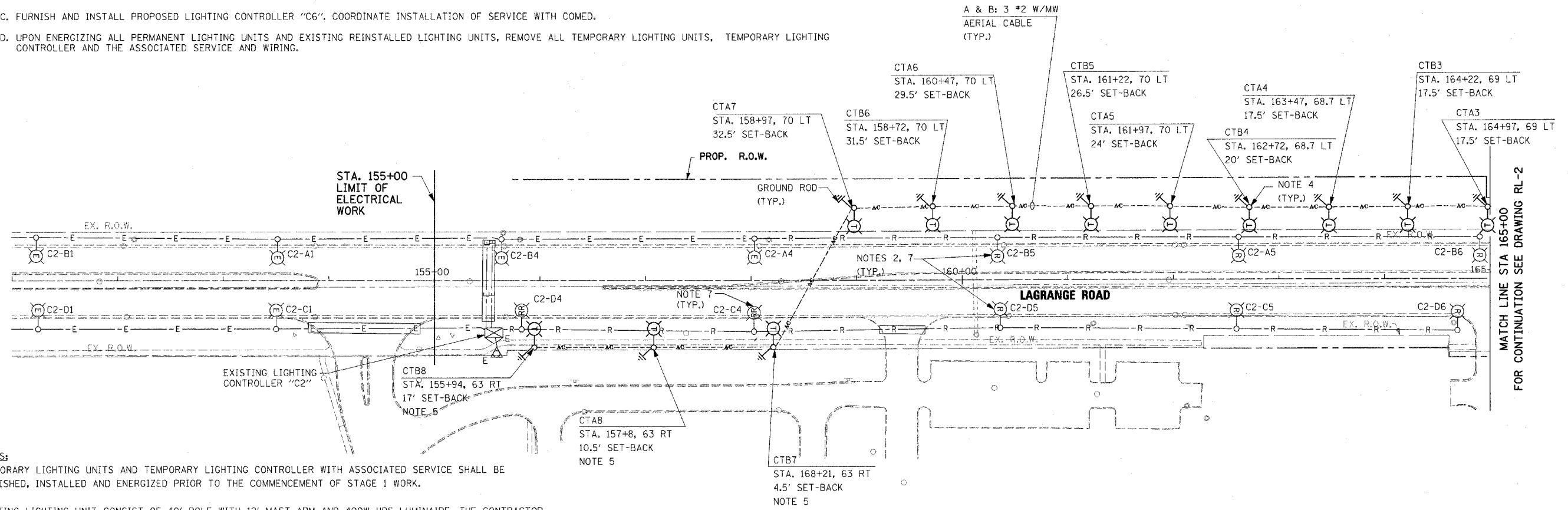
- A. REMOVE ALL EXISTING LIGHTING UNITS LOCATED ON THE NORTH SIDE OF 159TH ST. AND ON THE EAST SIDE OF LAGRANGE RD. ALL 47.5 FT. MOUNTING HEIGHT LIGHTING UNITS SHALL BE MODIFIED AND SHALL BE REUSED FOR THE PERMANENT LIGHTING. ALL 40 FT. POLES SHALL BE SALVAGED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
- B. FURNISH AND INSTALL PROPOSED LIGHTING UNITS ON NORTH SIDE OF 159TH ST. AND ON WEST SIDE OF LAGRANGE RD..

**STAGE 2**

- A. NO NEW ELECTRICAL/LIGHTING WORK NEEDS TO BE DONE.

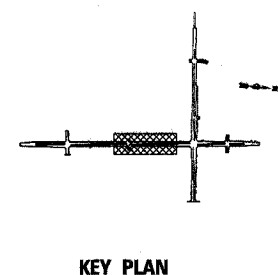
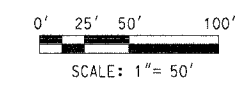
**STAGE 3**

- A. FURNISH AND INSTALL ALL PROPOSED LIGHTING UNITS ON THE SOUTH SIDE OF 159TH ST. AND ON THE EAST SIDE OF LAGRANGE RD. AS INDICATED ON DRAWINGS RL-6 THRU RL-10.
- B. RE-INSTALL EXISTING LIGHTING UNITS C2-C4, C2-D4, C5-R1, C5-S1, AND C5-R2 REMOVED IN PRE-STAGE 1.
- C. FURNISH AND INSTALL PROPOSED LIGHTING CONTROLLER "C6". COORDINATE INSTALLATION OF SERVICE WITH COMED.
- D. UPON ENERGIZING ALL PERMANENT LIGHTING UNITS AND EXISTING REINSTALLED LIGHTING UNITS, REMOVE ALL TEMPORARY LIGHTING UNITS, TEMPORARY LIGHTING CONTROLLER AND THE ASSOCIATED SERVICE AND WIRING.



**NOTES:**

- 1. TEMPORARY LIGHTING UNITS AND TEMPORARY LIGHTING CONTROLLER WITH ASSOCIATED SERVICE SHALL BE FURNISHED, INSTALLED AND ENERGIZED PRIOR TO THE COMMENCEMENT OF STAGE 1 WORK.
- 2. EXISTING LIGHTING UNIT CONSIST OF 40' POLE WITH 12' MAST ARM AND 400W HPS LUMINAIRE. THE CONTRACTOR SHALL REMOVE EXISTING LIGHTING UPON ENERGIZING TEMPORARY LIGHTING UNITS. EXISTING LUMINAIRE SHALL BE REUSED FOR PERMANENT LIGHTING. EXISTING LIGHT POLE AND MAST ARM SHALL BE SALVAGED AND SHALL BE DELIVERED TO THE ORLAND PARK PUBLIC WORKS DEPARTMENT IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
- 3. TEMPORARY LIGHTING WILL REMAIN IN SERVICE UNTIL PROPOSED (PERMANENT) LIGHTING IS INSTALLED, ENERGIZED, TESTED AND APPROVED BY THE ENGINEER.
- 4. FOR TEMPORARY LIGHTING DETAILS, SEE DRAWING ED-7.
- 5. TEMPORARY LIGHTING LUMINAIRE, 400W SODIUM VAPOR, CUTOFF ARCHITECTURAL WITH IES TYPE III DISTRIBUTION.
- 6. THE SET-BACK DISTANCE FOR TEMPORARY LIGHT POLES LOCATED WEST OF LAGRANGE RD. IS FROM THE BACK OF THE CURB INSTALLED IN STAGE 1 OF CONSTRUCTION. THE SET-BACK DISTANCE FOR TEMPORARY LIGHT POLES LOCATED EAST OF LAGRANGE RD. IS FROM THE EDGE OF TEMPORARY PAVEMENT INSTALLED IN PRE-STAGE 1 OF CONSTRUCTION.
- 7. EXISTING LIGHT POLE FOUNDATION SHALL BE REMOVED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**LAGRANGE ROAD (US45)**  
**TEMPORARY LIGHTING AND REMOVAL PLAN**  
 STA 158+63.28 TO STA 165+00  
 SCALE: 1" = 50' DRAWN BY: MB  
 DATE: 7-07-06 CHECKED BY: KMY

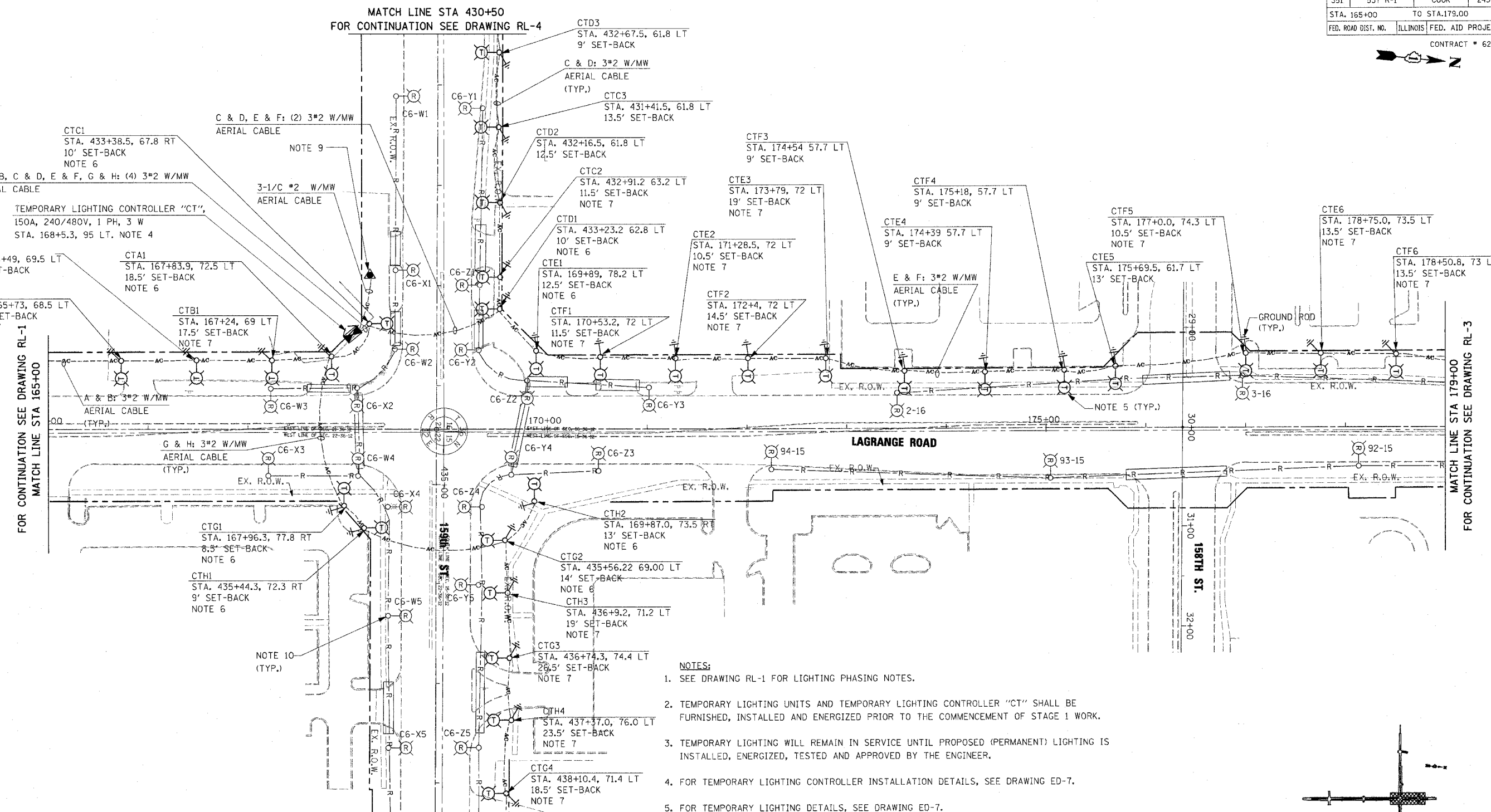
**McDonough Associates Inc.**  
 Engineers / Architects

**RL-1**

FILES  
 DATES  
 TIMES

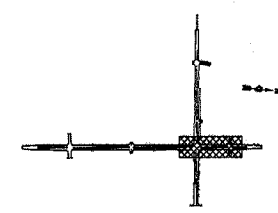
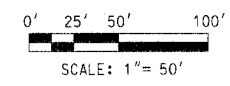
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	161
STA. 165+00		TO STA. 179+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT # 62880



- NOTES:**
- SEE DRAWING RL-1 FOR LIGHTING PHASING NOTES.
  - TEMPORARY LIGHTING UNITS AND TEMPORARY LIGHTING CONTROLLER "CT" SHALL BE FURNISHED, INSTALLED AND ENERGIZED PRIOR TO THE COMMENCEMENT OF STAGE 1 WORK.
  - TEMPORARY LIGHTING WILL REMAIN IN SERVICE UNTIL PROPOSED (PERMANENT) LIGHTING IS INSTALLED, ENERGIZED, TESTED AND APPROVED BY THE ENGINEER.
  - FOR TEMPORARY LIGHTING CONTROLLER INSTALLATION DETAILS, SEE DRAWING ED-7.
  - FOR TEMPORARY LIGHTING DETAILS, SEE DRAWING ED-7.
  - TEMPORARY LIGHTING LUMINAIRE, 400W SODIUM VAPOR, CUTOFF ARCHITECTURAL, WITH IES TYPE III DISTRIBUTION.
  - LUMINAIRE SHALL BE TILTED 5° FROM THE HORIZONTAL PLANE.
  - THE SET-BACK DISTANCE FOR THE TEMPORARY LIGHT POLES LOCATED WEST OF LAGRANGE RD. AND THE TEMPORARY LIGHT POLES LOCATED NORTH OF 159TH ST. IS FROM THE BACK OF THE CURB INSTALLED IN STAGE 1 OF CONSTRUCTION. THE SET-BACK DISTANCE FOR THE TEMPORARY LIGHT POLES LOCATED EAST OF LAGRANGE RD. AND THE TEMPORARY LIGHT POLES LOCATED SOUTH OF 159TH ST. IS FROM THE EDGE OF TEMPORARY PAVEMENT INSTALLED IN PRE-STAGE 1 OF CONSTRUCTION.
  - ELECTRIC UTILITY SERVICE DROP, 240/480V, 1-PHASE, 3-WIRE SERVICE. EXACT LOCATION OF SERVICE POLE AND THE UTILITY SERVICE DROP TO BE DETERMINED IN THE FIELD.

10. EXISTING LIGHT POLE FOUNDATIONS SHALL BE REMOVED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.



KEY PLAN

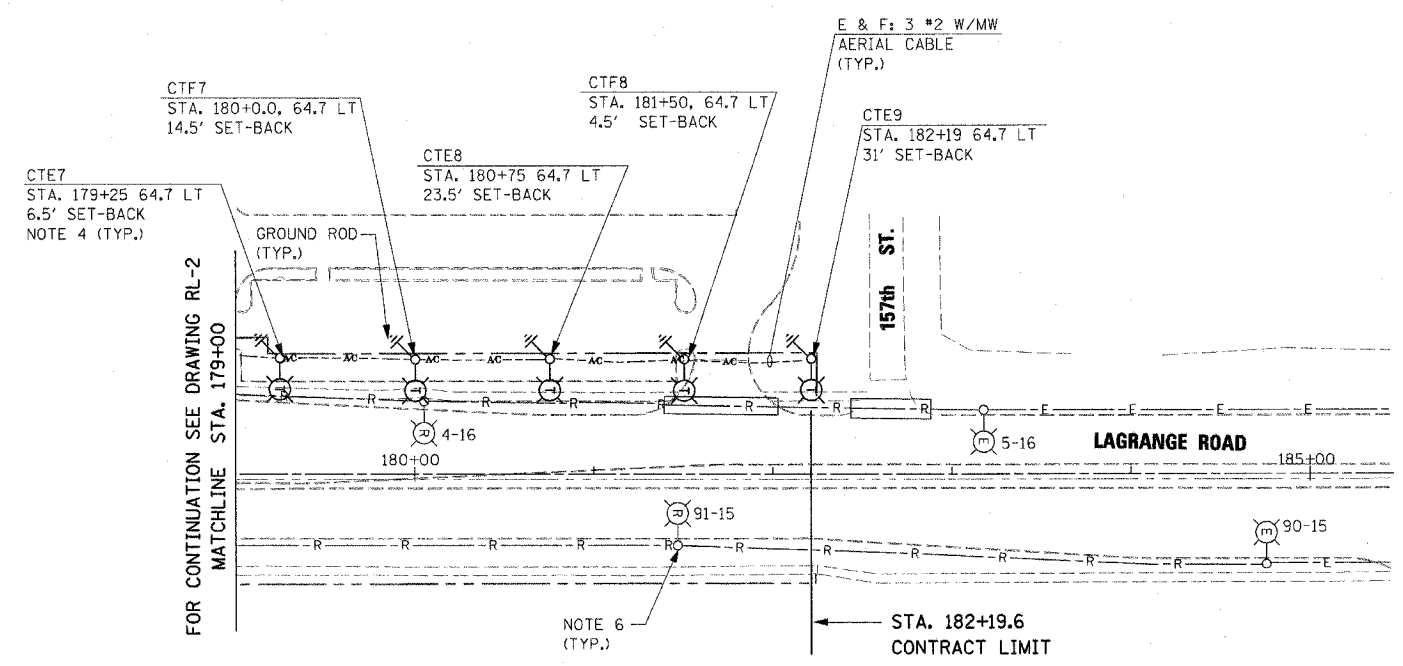
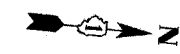
RL-2

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD) LAGRANGE ROAD (US45) TEMPORARY LIGHTING AND REMOVAL PLAN STA 165+00 TO STA 179+00 SCALE: 1" = 50' DATE: 7-07-06	DRAWN BY: MB CHECKED BY: KMY
NAME	DATE		
		<p>McDonough Associates Inc. Engineers / Architects</p>	

FILES  
DATES  
TIMES

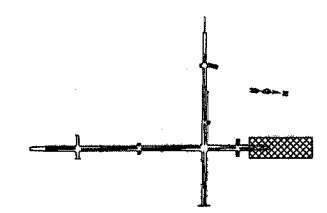
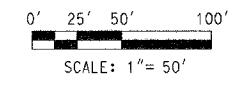
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	162
STA. 179+00		TO STA. 183+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 62880



**NOTES:**

1. SEE DRAWING RL-1 FOR LIGHTING PHASING NOTES.
2. TEMPORARY LIGHTING UNITS SHALL BE FURNISHED, INSTALLED AND ENERGIZED PRIOR TO THE COMMENCEMENT OF STAGE 1 WORK.
3. TEMPORARY LIGHTING WILL REMAIN IN SERVICE UNTIL PROPOSED (PERMANENT) LIGHTING IS INSTALLED, ENERGIZED, TESTED AND APPROVED BY THE ENGINEER.
4. FOR TEMPORARY LIGHTING DETAILS, SEE DRAWING ED-7.
5. INDICATED SET-BACK DISTANCE FOR TEMPORARY LIGHT POLES IS FROM THE BACK OF THE CURB INSTALLED IN STAGE 1 OF CONSTRUCTION.
6. EXISTING LIGHT POLE FOUNDATION SHALL BE REMOVED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.



**KEY PLAN**

**RL-3**

REVISIONS		DATE
NAME		

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
LAGRANGE ROAD (US45)  
TEMPORARY LIGHTING AND REMOVAL PLAN  
STA 179+00 TO STA 182+19.6

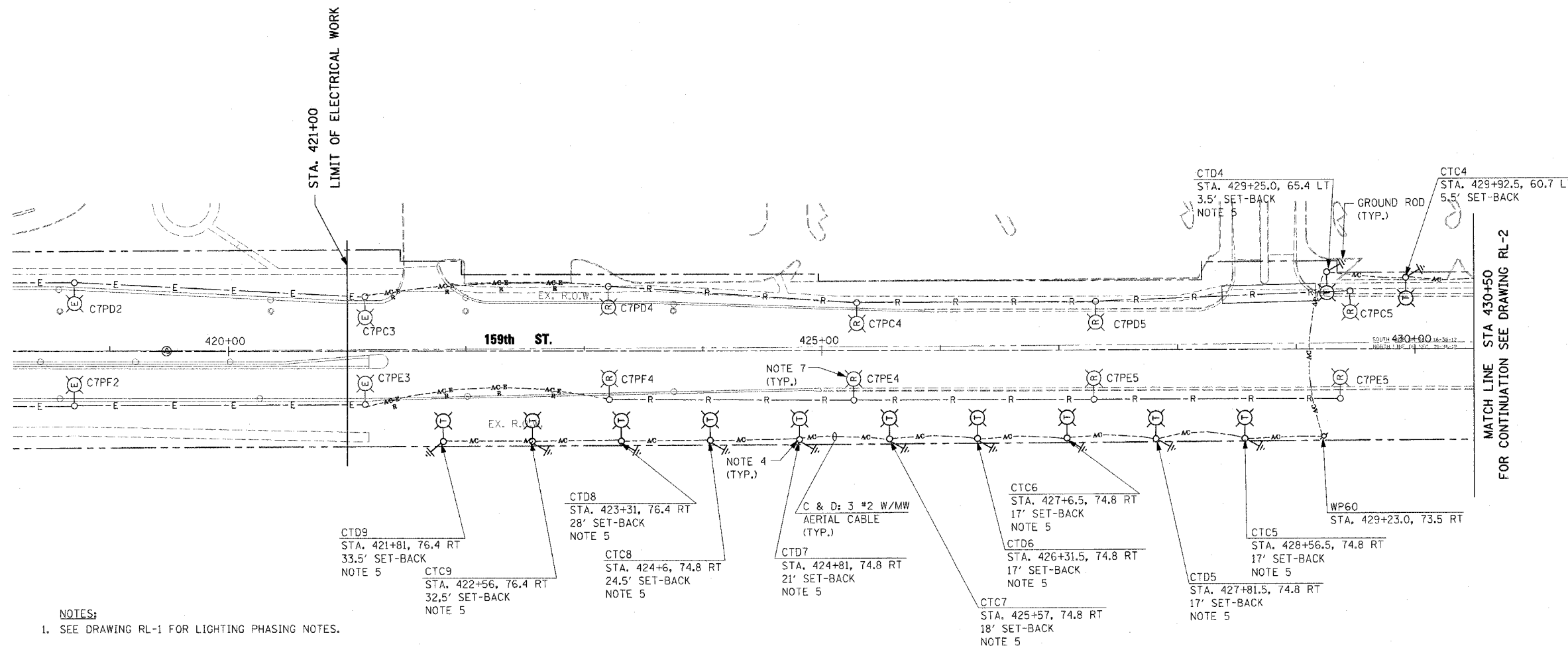
SCALE: 1" = 50'      DRAWN BY: MB  
DATE: 7-07-06      CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

FILES  
DATES  
TIMES

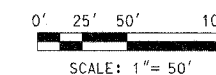
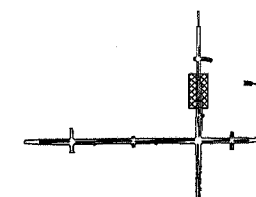
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	163
STA. 413+00		TO STA. 427+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 62880



**NOTES:**

- SEE DRAWING RL-1 FOR LIGHTING PHASING NOTES.
- TEMPORARY LIGHTING UNITS SHALL BE FURNISHED, INSTALLED AND ENERGIZED PRIOR TO THE COMMENCEMENT OF STAGE 1 WORK.
- TEMPORARY LIGHTING WILL REMAIN IN SERVICE UNTIL PROPOSED (PERMANENT) LIGHTING IS INSTALLED, ENERGIZED, TESTED AND APPROVED BY THE ENGINEER.
- FOR TEMPORARY LIGHTING DETAILS, SEE DRAWING ED-7.
- TEMPORARY LIGHTING FIXTURES SHALL BE TILTED 5° FROM THE HORIZONTAL PLANE.
- INDICATED SET-BACK DISTANCE FOR TEMPORARY LIGHT POLES LOCATED NORTH OF 159TH ST. IS FROM THE BACK OF THE CURB INSTALLED IN STAGE 1 OF CONSTRUCTION, INDICATED SET-BACK DISTANCE FOR TEMPORARY LIGHT POLES LOCATED SOUTH OF 159TH ST. IS FROM THE EDGE OF TEMPORARY PAVEMENT INSTALLED IN PRE-STAGE 1 OF CONSTRUCTION.
- EXISTING LIGHTING POLE FOUNDATION SHALL BE REMOVED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.



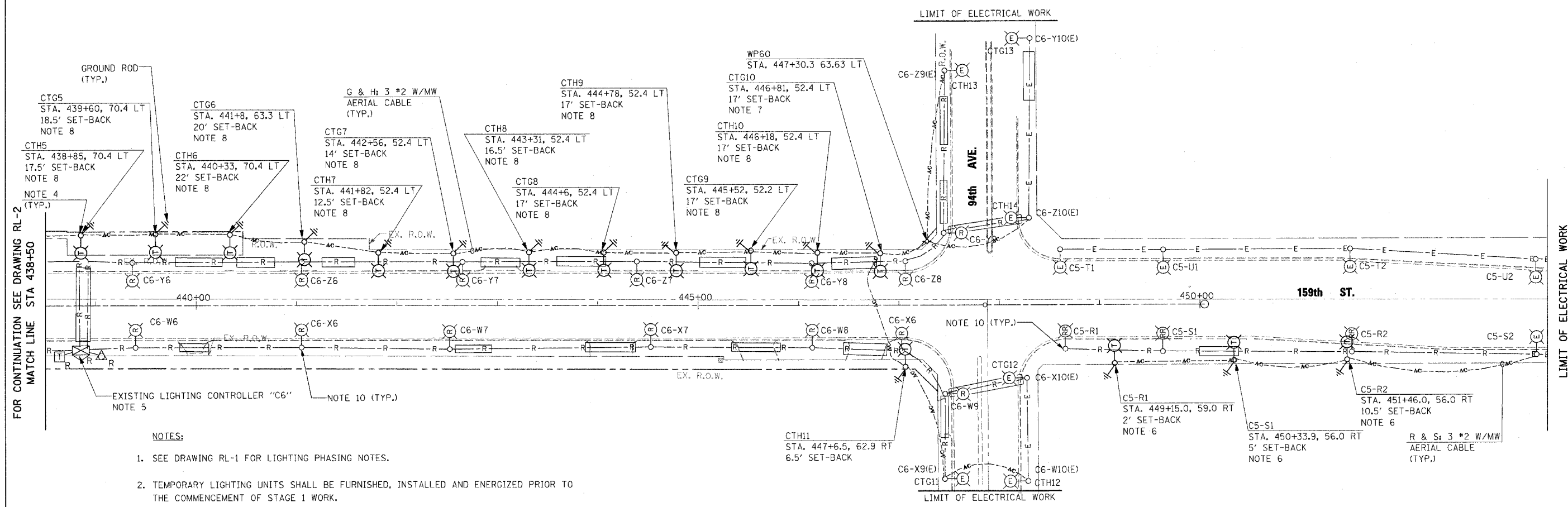
**RL-4**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
 159TH STREET (US RTE 6)  
 TEMPORARY LIGHTING AND REMOVAL PLAN  
 STA 421+18.76 TO STA 430+50  
 SCALE: 1" = 50' DRAWN BY: MB  
 DATE: 7-07-06 CHECKED BY: KMY

**McDonough Associates Inc.**  
 Engineers / Architects

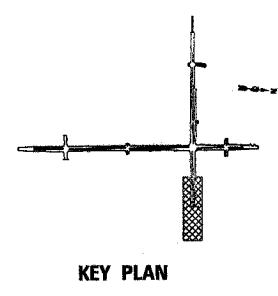
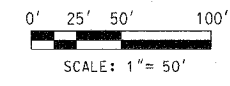
FILES  
 DATES  
 TIMES



FOR CONTINUATION SEE DRAWING RL-2  
MATCH LINE STA 438+50

LIMIT OF ELECTRICAL WORK

- NOTES:**
- SEE DRAWING RL-1 FOR LIGHTING PHASING NOTES.
  - TEMPORARY LIGHTING UNITS SHALL BE FURNISHED, INSTALLED AND ENERGIZED PRIOR TO THE COMMENCEMENT OF STAGE 1 WORK.
  - TEMPORARY LIGHTING WILL REMAIN IN SERVICE UNTIL PROPOSED (PERMANENT) LIGHTING IS INSTALLED, ENERGIZED, TESTED AND APPROVED BY THE ENGINEER.
  - FOR TEMPORARY LIGHTING DETAILS, SEE DRAWING ED-7.
  - EXISTING LIGHTING CONTROLLER "C6" AND THE 30KVA BUCK-BOOST TRANSFORMER SHALL BE DISCONNECTED, REMOVED AND SALVAGED IN ACCORDANCE WITH THE SPECIAL PROVISIONS. ALL REMOVAL WORK MUST BE COORDINATED WITH COMED AND THE VILLAGE OF ORLAND PARK PUBLIC WORKS DEPARTMENT. THE COST OF THIS WORK SHALL BE INCLUDED IN "REMOVAL OF LIGHTING CONTROLLER SALVAGE" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
  - TEMPORARY LIGHTING SHALL BE INSTALLED WITHIN THE R.O.W. LINE AND SHALL BE PROTECTED BY PROTECTION BARRELS AS SHOWN ON THE MAINTENANCE OF TRAFFIC DRAWINGS. THE COST OF THIS WORK SHALL BE INCLUDED IN "TRAFFIC CONTROL AND PROTECTION (SPECIAL)" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
  - TEMPORARY LIGHTING LUMINAIRE, 400W SODIUM VAPOR, CUTOFF ARCHITECTURAL WITH IES TYPE III DISTRIBUTION.
  - TEMPORARY LIGHTING FIXTURES SHALL BE TILTED 5° FROM THE HORIZONTAL PLANE.
  - INDICATED SET-BACK DISTANCE FOR TEMPORARY LIGHT POLES LOCATED NORTH OF 159TH ST. IS FROM THE BACK OF THE CURB INSTALLED IN STAGE 1 OF CONSTRUCTION. INDICATED SET-BACK DISTANCE FOR TEMPORARY LIGHT POLES LOCATED SOUTH OF 159TH ST. IS FROM THE EDGE OF TEMPORARY PAVEMENT INSTALLED IN PRE-STAGE 1 OF CONSTRUCTION.
  - EXISTING LIGHT POLE FOUNDATION SHALL BE REMOVED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**159TH STREET (US RTE 6)  
TEMPORARY LIGHTING AND REMOVAL PLAN  
STA 438+50 TO 94TH AVE.**

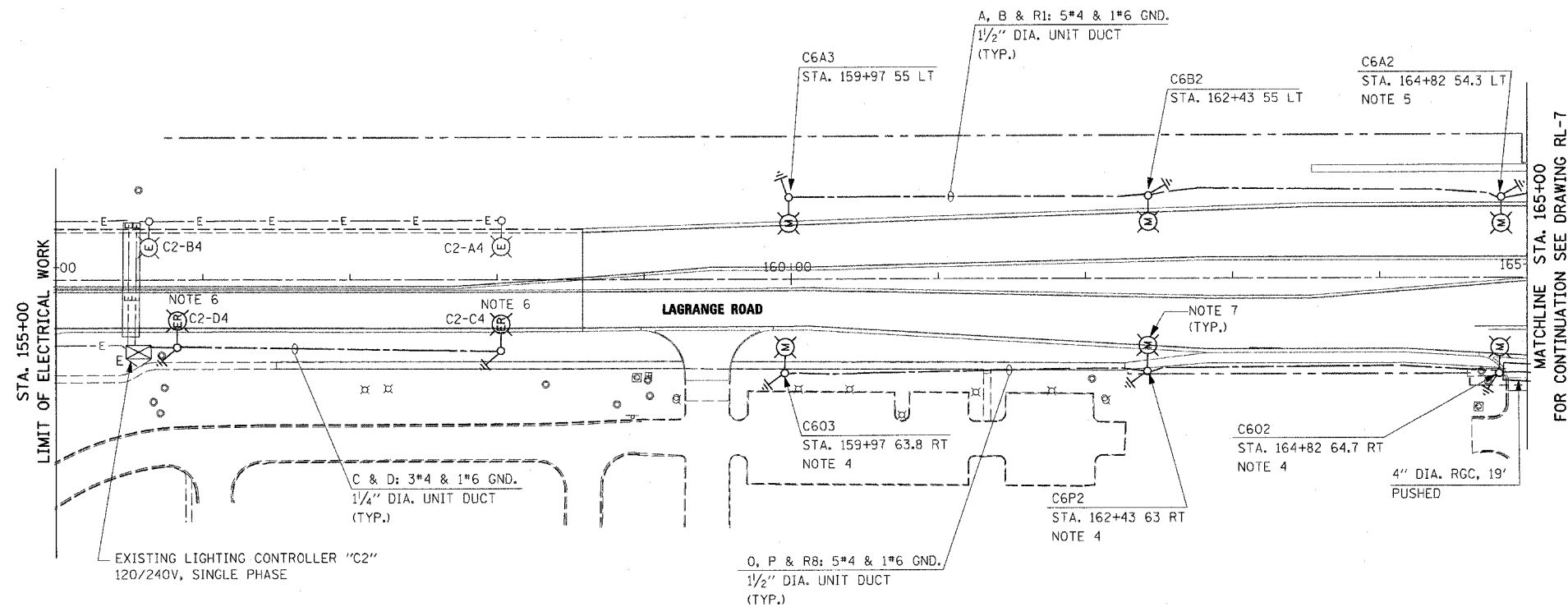
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DATE: 7-07-06 CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

**RL-5**

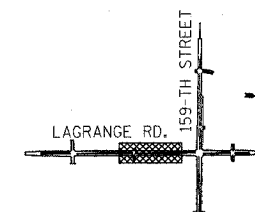
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	165
STA. 151+00		TO STA. 165+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 62880

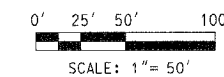


**NOTES:**

- SEE DRAWING RL-1 FOR APPLICABLE LIGHTING PHASING NOTES.
- FOR EXISTING LIGHTING UNIT MODIFICATION DETAIL, SEE DWG ED-1.
- FOR LIGHT POLE FOUNDATION DETAILS, SEE DWG. ED-4.
- INSTALL LIGHT POLE FOUNDATION ON THE BACKSIDE OF SIDEWALK.
- THE ROADSIDE FACE OF THE LIGHT POLE FOUNDATION SHALL BE SET 2'-0" FROM THE BACK OF CURB.
- REINSTALL EXISTING LIGHTING UNIT ON A NEW FOUNDATION AFTER TEMPORARY PAVEMENT HAS BEEN REMOVED.
- INSTALL PREVIOUSLY REMOVED EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE CONTRACTOR SHALL REPLACE EXISTING 12'-0" MAST ARM WITH 15'-0" MAST ARM PRIOR TO THE INSTALLATION OF EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "MODIFY EXISTING LIGHT POLE, ALUMINUM 47.5 FT M.H., WITH NEW 15 FT MAST ARM AND 20A, 120V, GFI RECEPTACLE" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.



**KEY PLAN**



**RL-6**

REVISIONS	
NAME	DATE

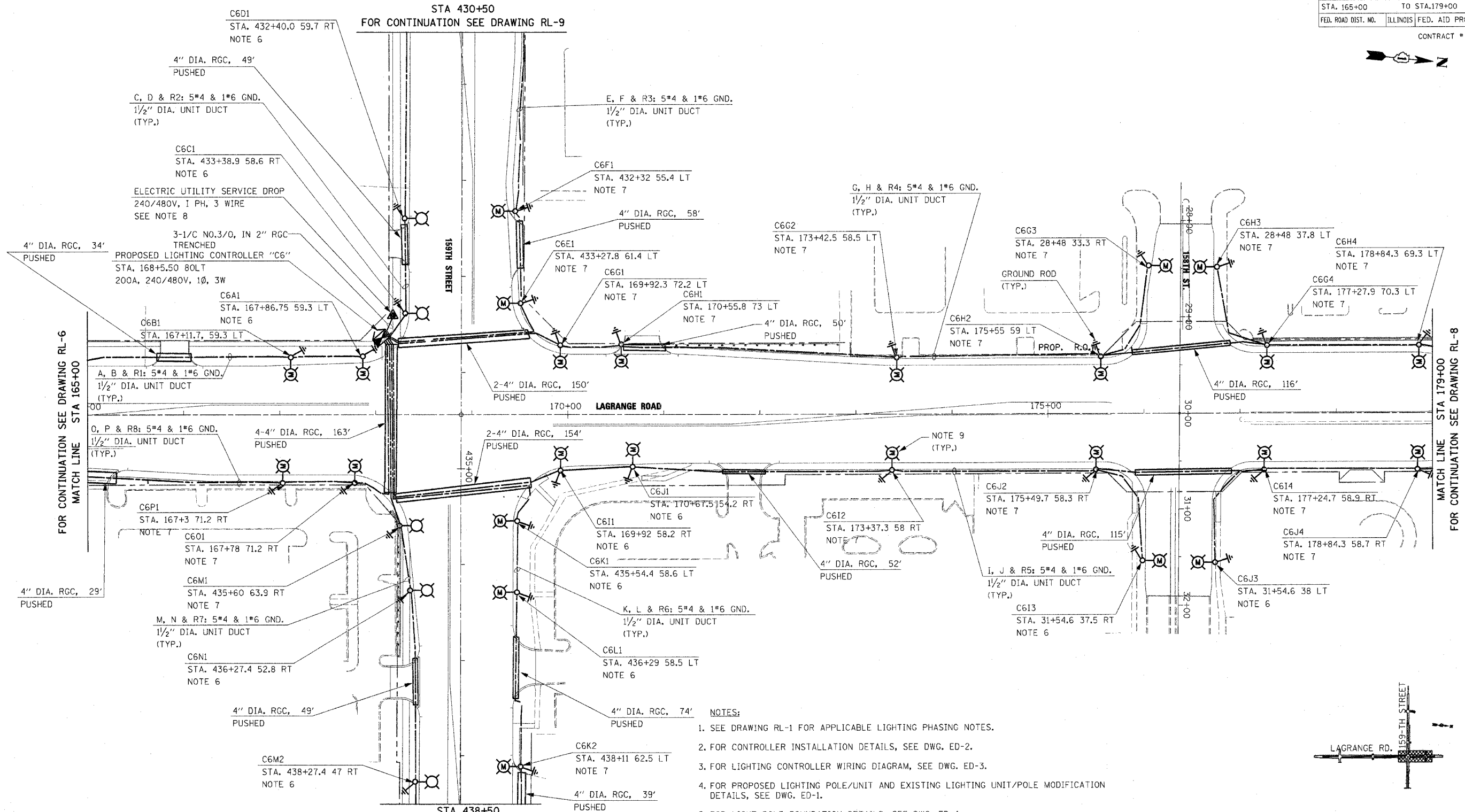
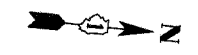
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**LAGRANGE ROAD (US45)  
 PROPOSED LIGHTING PLAN  
 STA 158+63.28 TO STA 165+00**  
 SCALE: 1" = 50' DRAWN BY: MB  
 DATE: 7-07-06 CHECKED BY: KMY

**McDonough Associates Inc.**  
 Engineers / Architects

SPILES  
 SDATES  
 STIMES



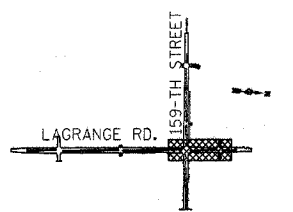
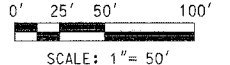
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	166
STA. 165+00		TO STA. 179+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 62880				



FOR CONTINUATION SEE DRAWING RL-6  
MATCH LINE STA 165+00

FOR CONTINUATION SEE DRAWING RL-8  
MATCH LINE STA 179+00

- NOTES:**
- SEE DRAWING RL-1 FOR APPLICABLE LIGHTING PHASING NOTES.
  - FOR CONTROLLER INSTALLATION DETAILS, SEE DWG. ED-2.
  - FOR LIGHTING CONTROLLER WIRING DIAGRAM, SEE DWG. ED-3.
  - FOR PROPOSED LIGHTING POLE/UNIT AND EXISTING LIGHTING UNIT/POLE MODIFICATION DETAILS, SEE DWG. ED-1.
  - FOR LIGHT POLE FOUNDATION DETAILS, SEE DWG. ED-4.
  - THE ROADSIDE FACE OF THE LIGHT POLE FOUNDATION SHALL BE SET 2'-0" FROM THE BACK OF CURB.
  - INSTALL LIGHT POLE FOUNDATION ON THE BACK SIDE OF SIDEWALK.
  - FOR ELECTRIC SERVICE INSTALLATION DETAIL, SEE DWG. ED-5. THE EXACT LOCATION OF SERVICE POLE AND THE UTILITY SERVICE DROP TO BE DETERMINED IN THE FIELD.
  - INSTALL PREVIOUSLY REMOVED EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE CONTRACTOR SHALL REPLACE EXISTING 12'-0" MAST ARM WITH 15'-0" MAST ARM PRIOR TO THE INSTALLATION OF EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "MODIFY EXISTING LIGHT POLE, ALUMINUM 47.5 FT M.H., WITH NEW 15 FT MAST ARM AND 20A, 120V, GFI RECEPTACLE" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.



**KEY PLAN**

**RL-7**

FILES  
DATES  
TIMES

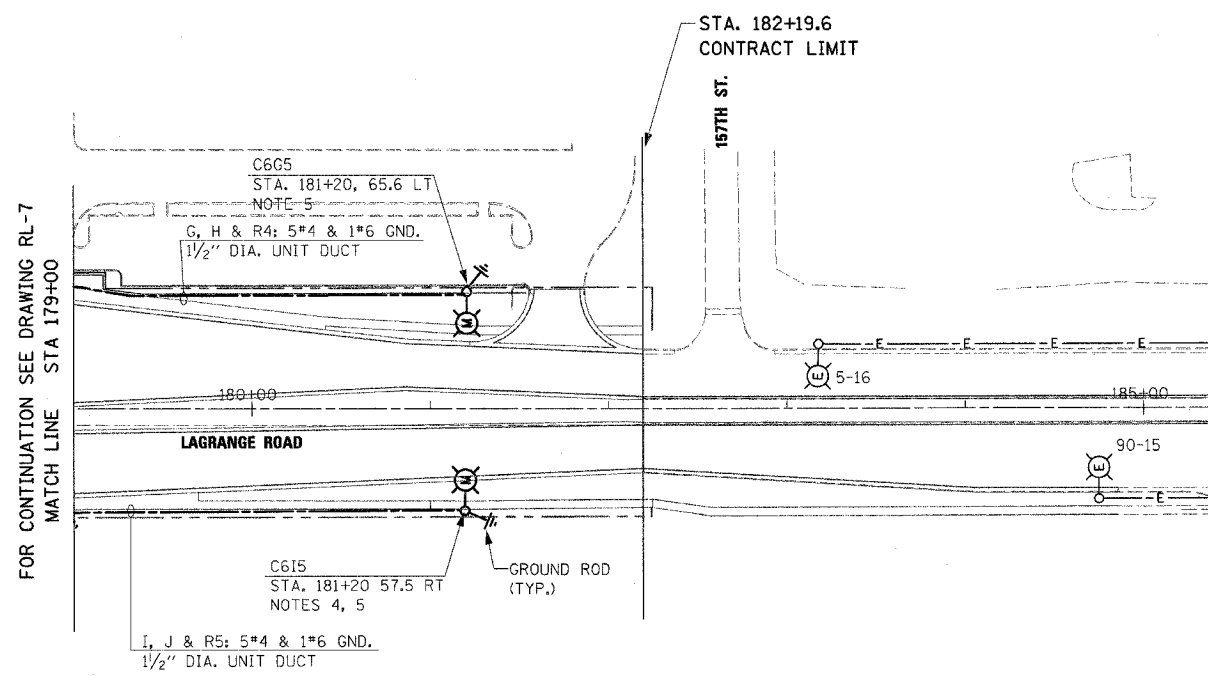
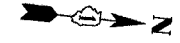
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**LAGRANGE ROAD (US45)  
PROPOSED LIGHTING PLAN  
STA 165+00 TO STA 179+00**

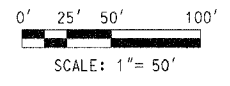
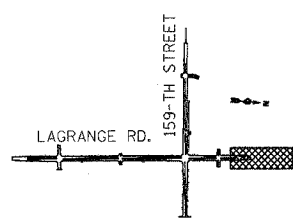
SCALE: 1" = 50'      DRAWN BY: MB  
DATE: 7-07-06      CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	167
STA. 179+00		TO STA. 183+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 62880				



- NOTES:**
1. SEE DRAWING RL-1 FOR APPLICABLE LIGHTING PHASING NOTES.
  2. FOR EXISTING LIGHTING UNIT/POLE MODIFICATION DETAIL, SEE DWG. ED-1.
  3. FOR LIGHT POLE FOUNDATION DETAILS, SEE DWG. ED-4.
  4. INSTALL LIGHT POLE FOUNDATION ON THE BACK SIDE OF SIDEWALK.
  5. INSTALL PREVIOUSLY REMOVED EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE CONTRACTOR SHALL REPLACE EXISTING 12'-0" MAST ARM WITH 15'-0" MAST ARM PRIOR TO THE INSTALLATION OF EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "MODIFY EXISTING LIGHT POLE, ALUMINUM 47.5 FT M.H., WITH NEW 15 FT MAST ARM AND 20A, 120V, GFI RECEPTACLE" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.



REVISIONS	
NAME	DATE

**RL-8**

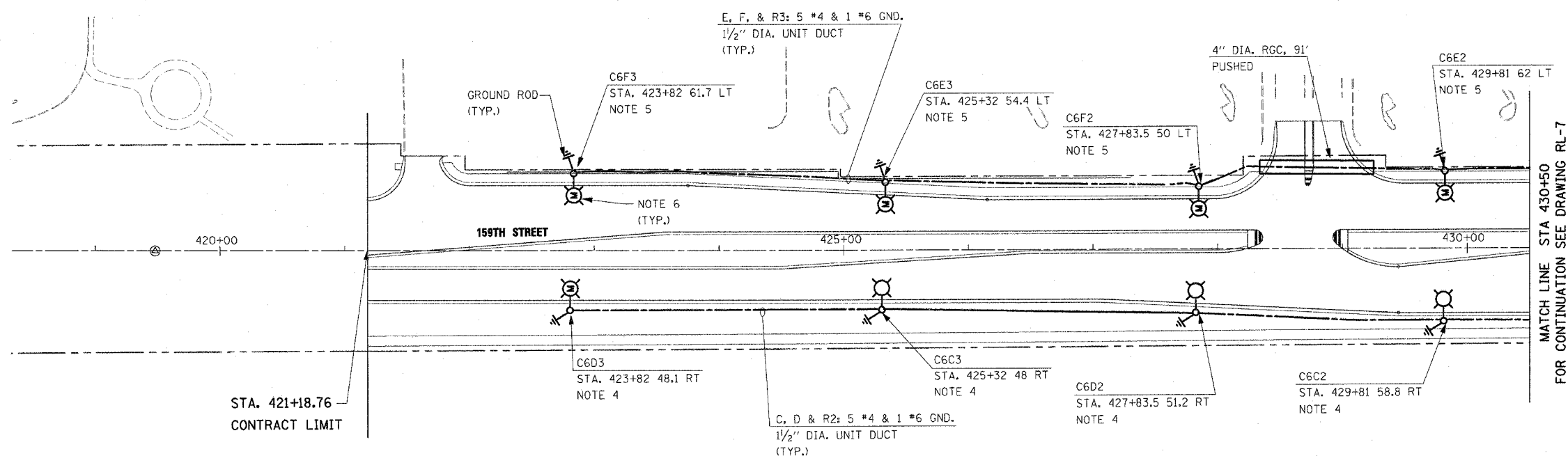
ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**LAGRANGE ROAD (US45)  
PROPOSED LIGHTING PLAN  
STA 179+00 TO STA 182+19.6**

SCALE: 1" = 50'      DRAWN BY: MB  
DATE: 7-07-06      CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

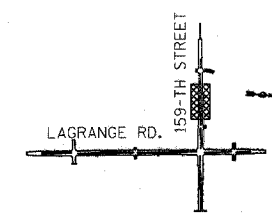
5/11/06  
 5/11/06  
 5/11/06

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	168
STA. 421+18.76		TO STA. 427+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 62880				

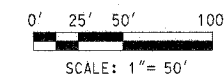


**NOTES:**

- SEE DRAWING RL-1 FOR APPLICABLE LIGHTING PHASING NOTES.
- FOR PROPOSED LIGHTING POLE/UNIT AND EXISTING LIGHTING UNIT/POLE MODIFICATION DETAILS, SEE DWG. ED-1.
- FOR LIGHT POLE FOUNDATION DETAILS, SEE DWG. ED-4.
- THE ROADSIDE FACE OF THE LIGHT POLE FOUNDATION SHALL BE SET 2'-0" FROM THE BACK OF CURB.
- INSTALL LIGHT POLE FOUNDATION ON THE BACK SIDE OF SIDEWALK.
- INSTALL PREVIOUSLY REMOVED EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE CONTRACTOR SHALL REPLACE EXISTING 12'-0" MAST ARM WITH 15'-0" MAST ARM PRIOR TO THE INSTALLATION OF EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "MODIFY EXISTING LIGHT POLE, ALUMINUM 47.5 FT M.H., WITH NEW 15 FT MAST ARM AND 20A, 120V, GFI RECEPTACLE" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.



**KEY PLAN**



**RL-9**

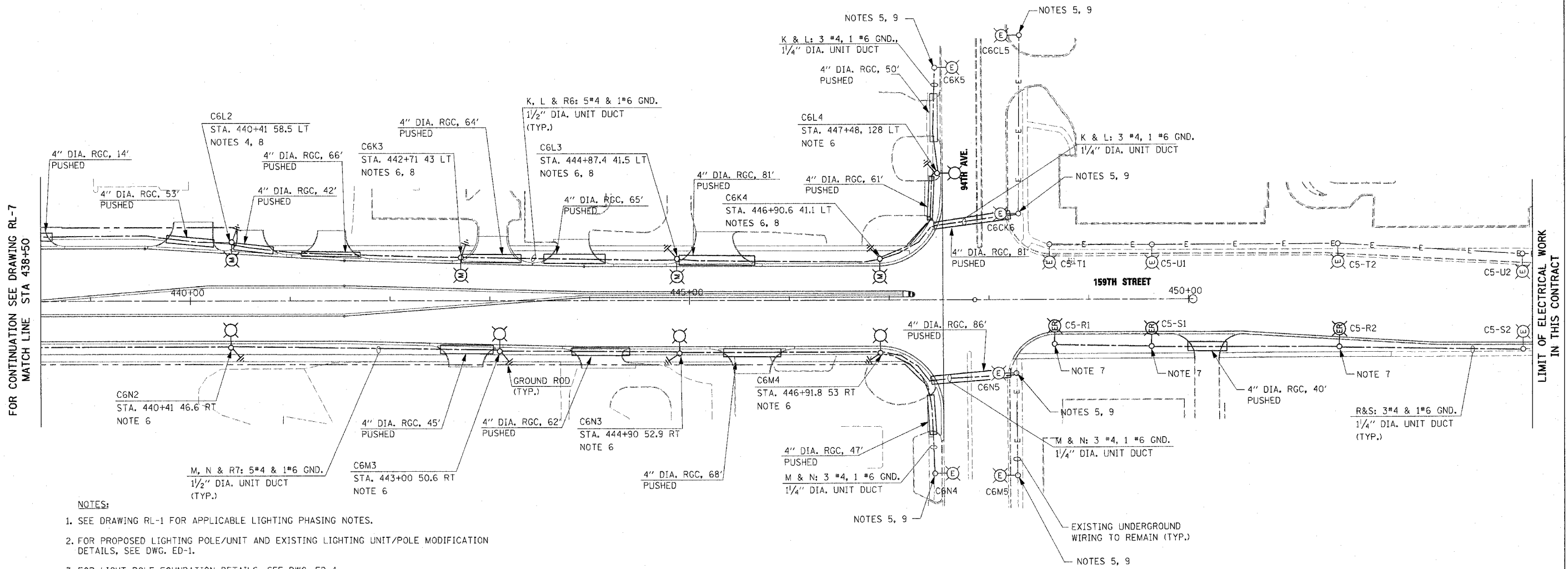
REVISIONS		DATE
NAME		

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**159TH STREET (US RTE 6)  
PROPOSED LIGHTING PLAN  
STA 421+18.76 TO STA 430+50**  
SCALE: 1" = 50' DRAWN BY: MB  
DATE: 7-07-06 CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

FILES  
DATES  
TIMES

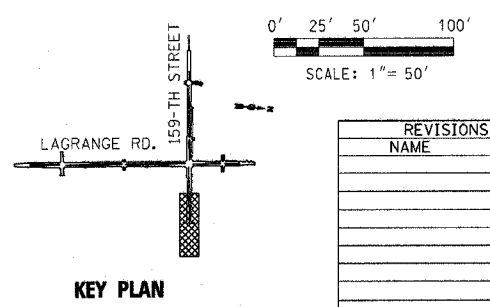
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	169
STA. 441+00		TO STA. 457+53.5		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 62880				



FOR CONTINUATION SEE DRAWING RL-7  
MATCH LINE STA 438+50

LIMIT OF ELECTRICAL WORK  
IN THIS CONTRACT

- NOTES:**
- SEE DRAWING RL-1 FOR APPLICABLE LIGHTING PHASING NOTES.
  - FOR PROPOSED LIGHTING POLE/UNIT AND EXISTING LIGHTING UNIT/POLE MODIFICATION DETAILS, SEE DWG. ED-1.
  - FOR LIGHT POLE FOUNDATION DETAILS, SEE DWG. ED-4.
  - INSTALL LIGHT POLE FOUNDATION ON THE BACK SIDE OF SIDEWALK.
  - REVISE LIGHT POLE/UNIT IDENTIFICATION AS SHOWN ON THIS PLAN. THE COST OF THIS WORK SHALL BE INCLUDED IN THE "UNIT DUCT" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
  - THE ROADSIDE FACE OF THE LIGHT POLE FOUNDATION SHALL BE SET 2'-0" FROM THE BACK OF CURB.
  - REINSTALL EXISTING LIGHTING UNIT ON A NEW FOUNDATION AFTER TEMPORARY PAVEMENT HAS BEEN REMOVED.
  - INSTALL PREVIOUSLY REMOVED EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE CONTRACTOR SHALL REPLACE EXISTING 12'-0" MAST ARM WITH 15'-0" MAST ARM PRIOR TO THE INSTALLATION OF EXISTING LIGHTING UNIT ON A NEW FOUNDATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "MODIFY EXISTING LIGHT POLE, ALUMINUM 47.5 FT M.H., WITH NEW 15 FT MAST ARM AND 20A, 120V, GF1 RECEPTACLE" PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.
  - REWORK EXISTING UNDERGROUND WIRING AS REQUIRED TO CONNECT THE EXISTING LIGHTING UNIT TO PROPOSED LIGHTING CONTROLLER "C6". THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF APPLICABLE UNIT DUCT PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.



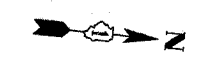
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**159TH STREET (US RTE 6)  
PROPOSED LIGHTING PLAN  
STA 438+50 TO 94TH AVE.**  
SCALE: 1" = 50'  
DATE: 7-07-06  
DRAWN BY: MB  
CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

FILES  
DATES  
TIMES

**RL-10**



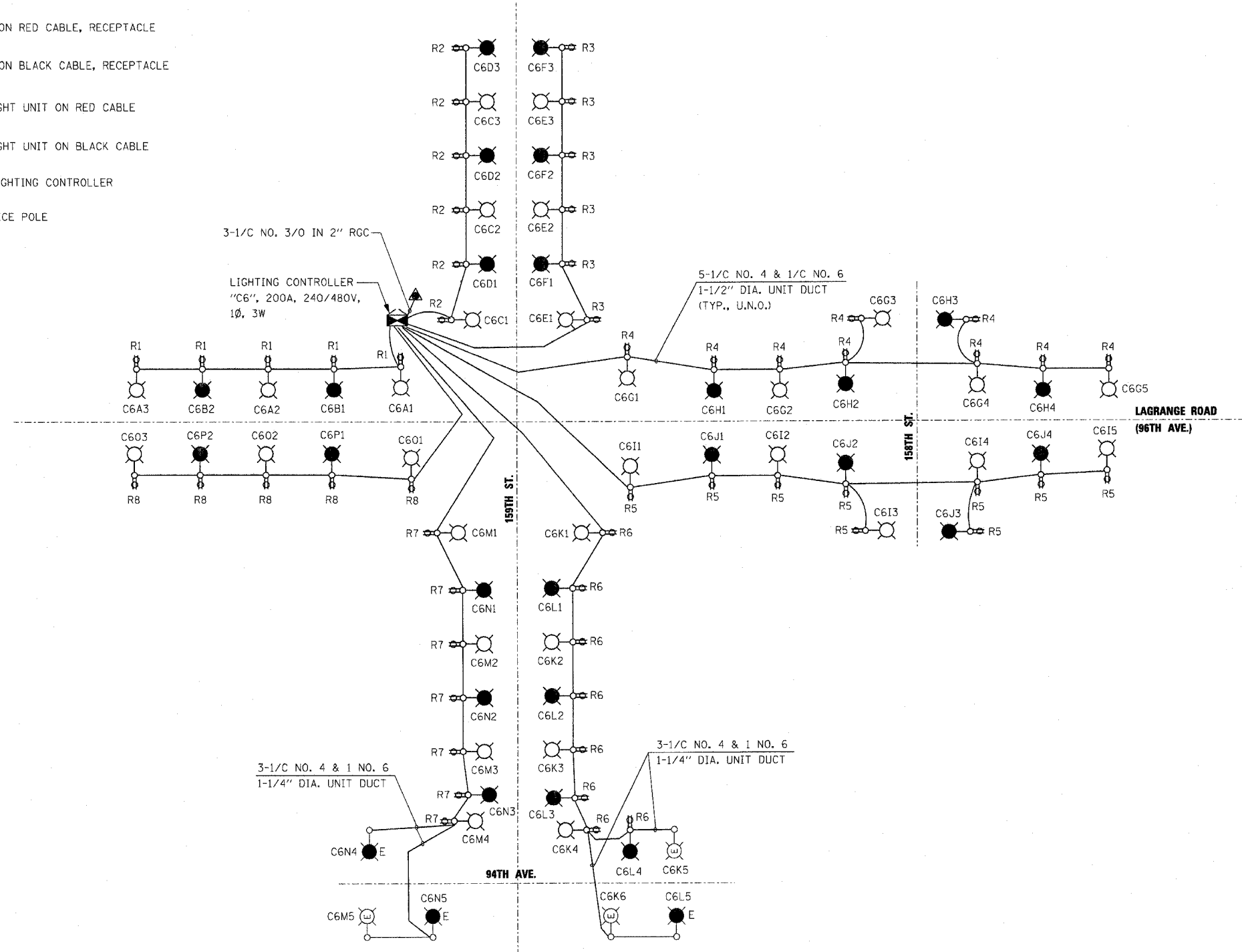
CIRCUIT	AMPS	VA
A	6	1440
B	4	960
C	6	1440
D	6	1440
E	6	1440
F	6	1440
G	10	2400
H	8	1920
I	10	2400
J	8	1920
K	12	2880
L	10	2400
M	10	2400
N	12.25	2940
O	8.25	1980
P	5.5	1320
S	20.6	4950
T	20.6	4950
TOTAL	204.5	49080

NOTE:  
LOAD INFORMATION IS BASED ON THE FOLLOWING DATA:  
400W HPS LUMINAIRE: 2AMP @ 240V

CIRCUIT	AMPS	VA
R1	7.5	900
R2	9	1080
R3	9	1080
R4	13.5	1620
R5	13.5	1620
R6	12	1440
R7	10.5	1260
R8	7.5	900
TOTAL	82.5	9900

NOTE:  
LOAD INFORMATION IS BASED ON THE FOLLOWING DATA:  
180VA RECEPTACLE LOAD: 1.5AMP @ 120V

- LEGEND**
- LIGHT UNIT ON RED CABLE
  - LIGHT UNIT ON BLACK CABLE
  - LIGHT UNIT ON RED CABLE, RECEPTACLE
  - LIGHT UNIT ON BLACK CABLE, RECEPTACLE
  - EXISTING LIGHT UNIT ON RED CABLE
  - EXISTING LIGHT UNIT ON BLACK CABLE
  - PROPOSED LIGHTING CONTROLLER
  - COMED SERVICE POLE



FILES  
DATES  
STINES

WE-1

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

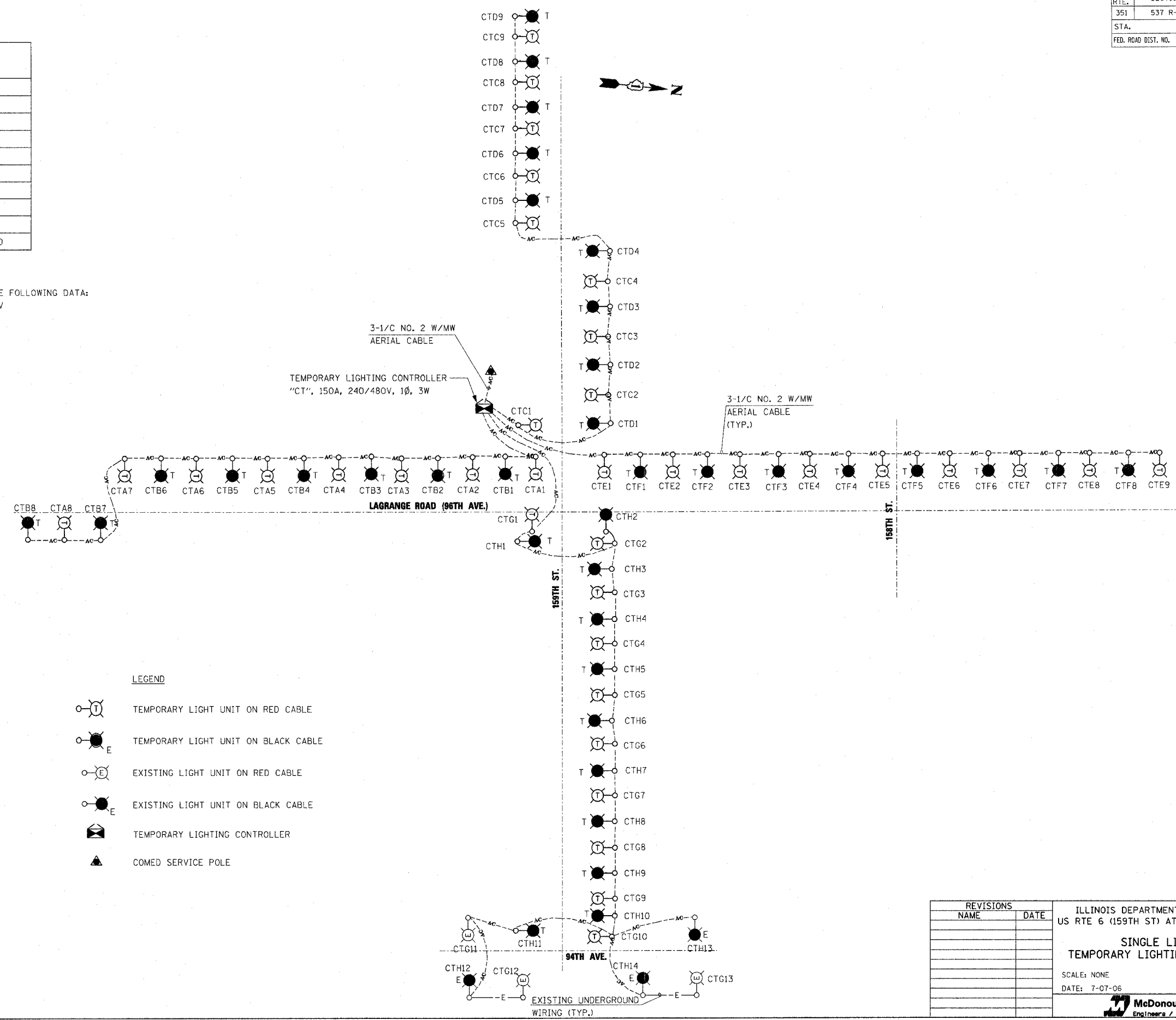
ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**PROPOSED SINGLE LINE DIAGRAM  
LIGHTING CONTROLLER "C6" AND  
RECEPTACLE CONTROLLER "RP"**  
SCALE: NONE  
DATE: 7-07-06  
DRAWN BY: MB  
CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	171
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 62880				

CIRCUIT	AMPS	VA
A	16	3840
B	16	3840
C	18	4320
D	18	4320
E	18	4320
F	16	3840
G	26	6240
H	28	6720
TOTAL	156	37440

NOTE:  
LOAD INFORMATION IS BASED ON THE FOLLOWING DATA:  
400W HPS LUMINAIRE: 2AMP @ 240V



- LEGEND**
- TEMPORARY LIGHT UNIT ON RED CABLE
  - TEMPORARY LIGHT UNIT ON BLACK CABLE
  - EXISTING LIGHT UNIT ON RED CABLE
  - EXISTING LIGHT UNIT ON BLACK CABLE
  - TEMPORARY LIGHTING CONTROLLER
  - COMED SERVICE POLE

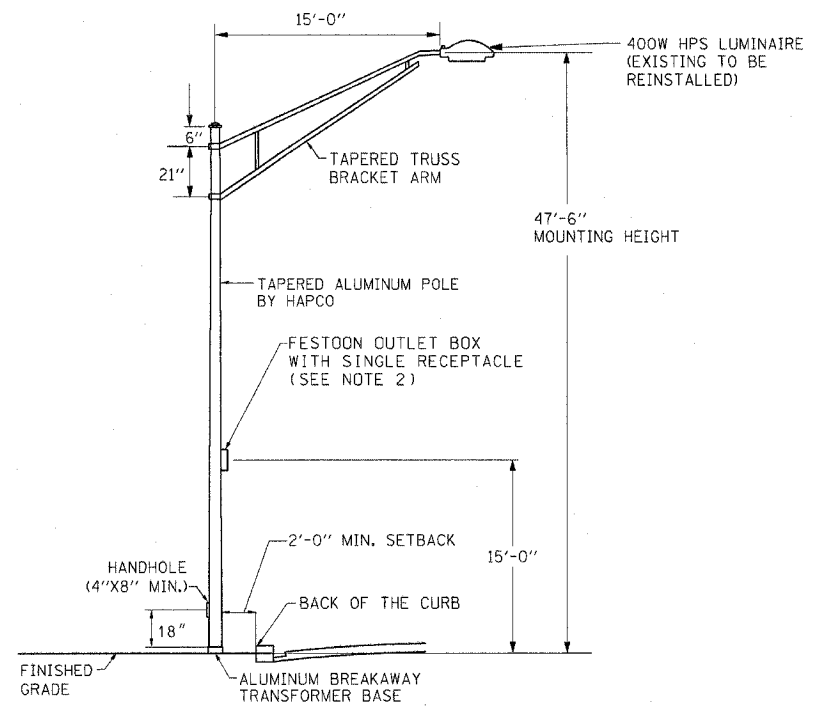
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**SINGLE LINE DIAGRAM  
TEMPORARY LIGHTING CONTROLLER "CT"**  
SCALE: NONE  
DATE: 7-07-06  
DRAWN BY: MB  
CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

WE-2

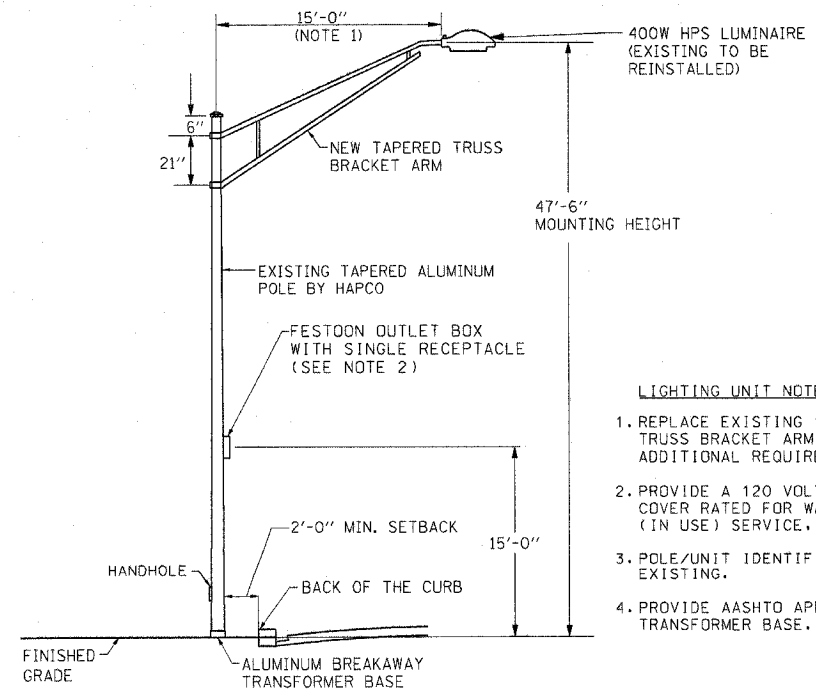
FILES  
DATES  
STINES



**PROPOSED LIGHTING POLE/UNIT DETAIL**  
N.T.S.

**LIGHTING UNIT NOTES:**

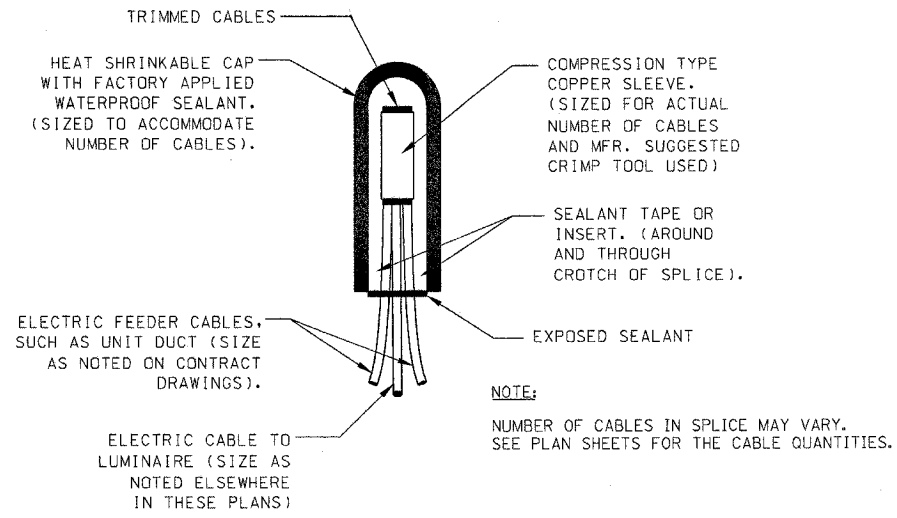
1. POLE DESIGN SHALL CONFORM WITH A.A.S.H.T.O. 1985 "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" FOR 80 M.P.H. WIND SPEED AND THE VILLAGE OF ORLAND PARK SECTION 6-407 REQUIREMENTS.
2. PROVIDE A 120 VOLT, 20 AMP RECEPTACLE ICE AND SNAP COVER RATED FOR WATER TIGHT AND WEATHER PROOF (IN USE) SERVICE, IN ACCORDANCE WITH NEC 406.8 (B) (2) (a).
3. POLE/UNIT IDENTIFICATION MOUNTING HEIGHT SHALL MATCH EXISTING.
4. PROVIDE AASHTO APPROVED ALUMINUM BREAKAWAY TRANSFORMER BASE.
5. THE COMPLETE LIGHT STANDARD SHALL BE IDENTICAL TO THE TYPE MANUFACTURED BY THE HAPCO COMPANY TO MATCH THE EXISTING LIGHTING UNITS.



**EXISTING LIGHTING POLE/UNIT MODIFICATION DETAIL**  
N.T.S.

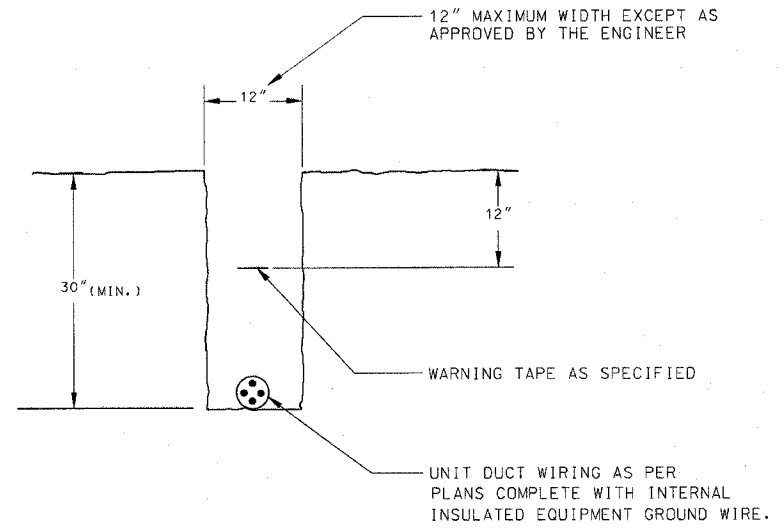
**LIGHTING UNIT NOTES:**

1. REPLACE EXISTING 12 FT. MAST ARM WITH TAPERED TRUSS BRACKET ARM. SEE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE A 120 VOLT, 20 AMP RECEPTACLE ICE AND SNAP COVER RATED FOR WATER TIGHT AND WEATHER PROOF (IN USE) SERVICE, IN ACCORDANCE WITH NEC 406.8 (B) (2) (a).
3. POLE/UNIT IDENTIFICATION MOUNTING HEIGHT SHALL MATCH EXISTING.
4. PROVIDE AASHTO APPROVED ALUMINUM BREAKAWAY TRANSFORMER BASE.

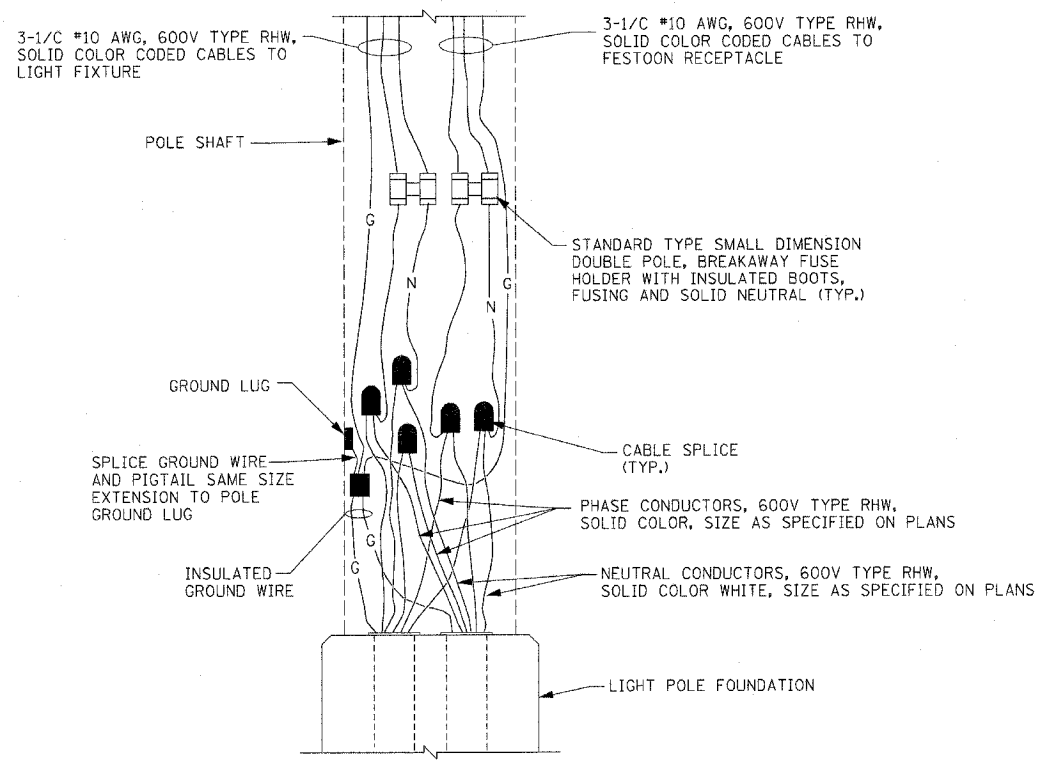


**TYPICAL SPLICE DETAIL**

**NOTE:**  
NUMBER OF CABLES IN SPLICE MAY VARY. SEE PLAN SHEETS FOR THE CABLE QUANTITIES.



**TYPICAL WIRING IN TRENCH - DETAIL**  
N.T.S.



**POLE BASE WIRING DIAGRAM**  
N.T.S.

**NOTES:**

1. FUSES SHALL BE OF THE TIME DELAY TYPE (SEE SPECS.).
2. FOR AN END POLE, CAP AND SEAL THE UNUSED ELBOW.
3. CABLE/WIRE COLOR CODING:  
BLACK - PHASE CONDUCTOR  
RED - PHASE CONDUCTOR  
WHITE - NEUTRAL CONDUCTOR  
GREEN - GROUND CONDUCTOR

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)

**POLE AND WIRING DETAILS**

SCALE: NONE  
DATE: 7-07-06

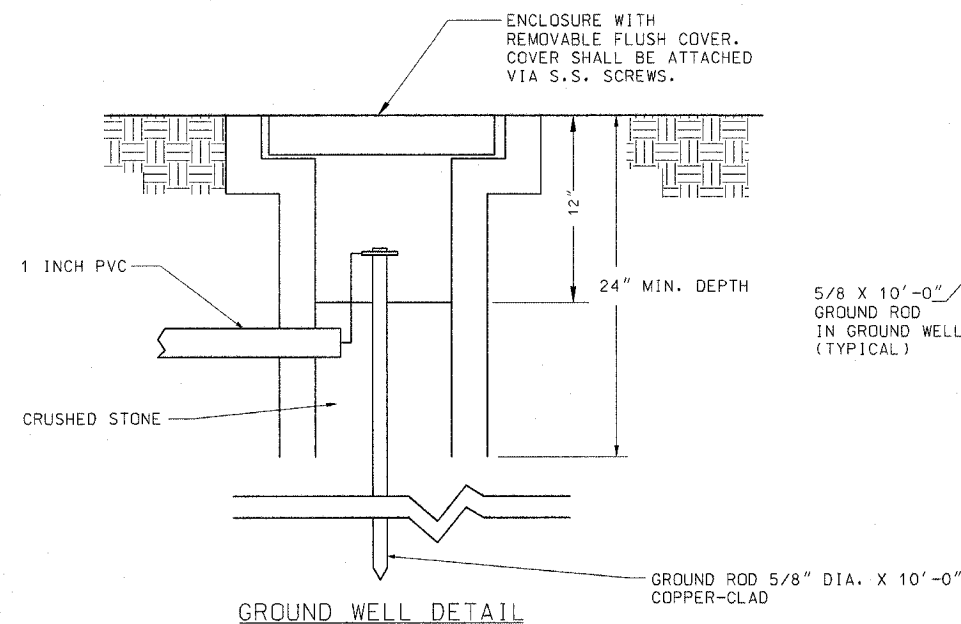
DRAWN BY: MB  
CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

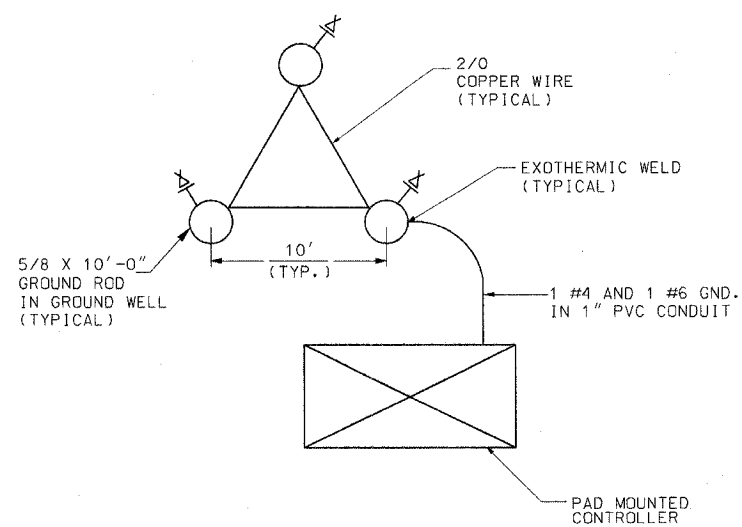


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	173
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 62880



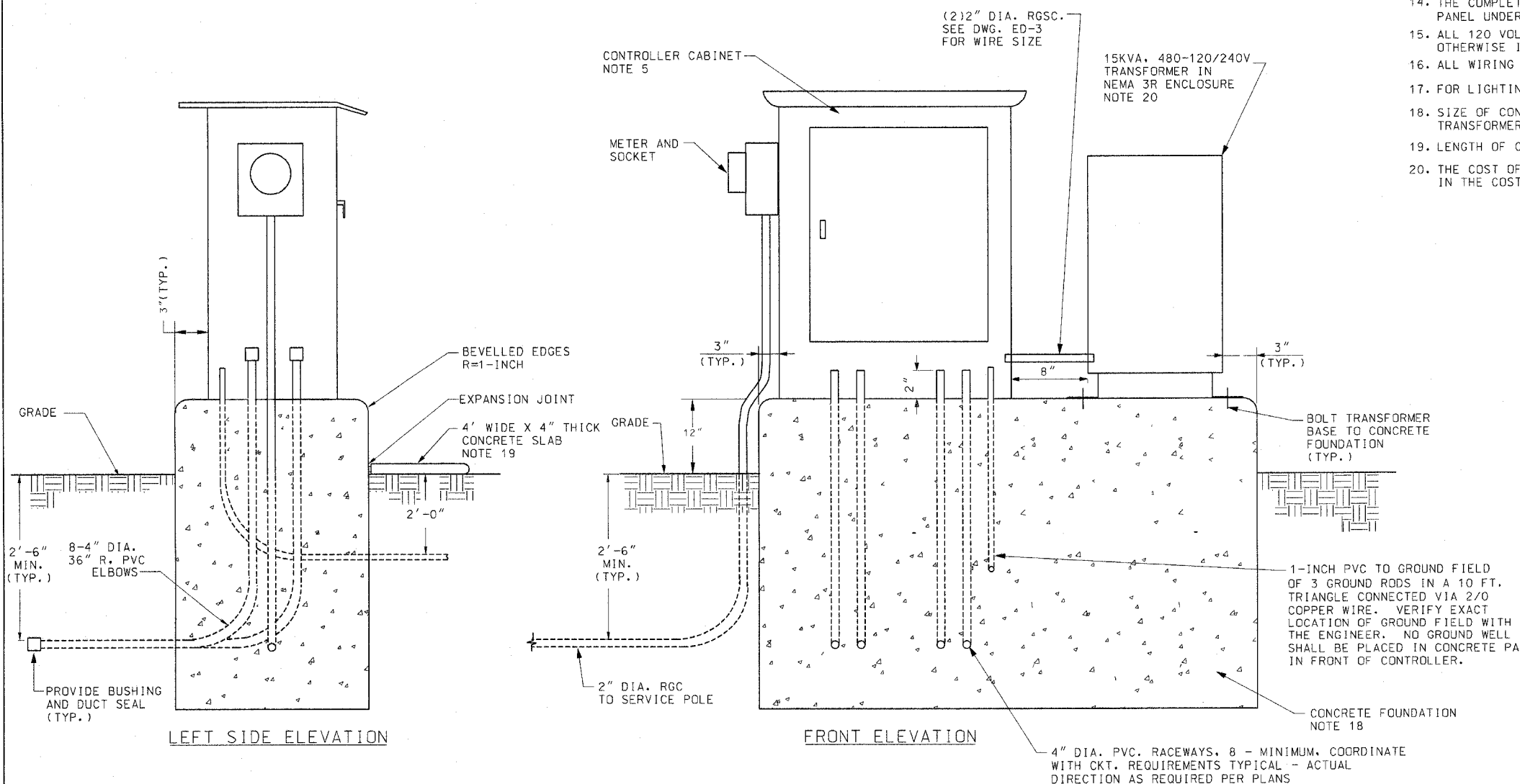
GROUND WELL DETAIL



GROUND FIELD DETAIL

GENERAL NOTES:

- COORDINATE PLACEMENT OF RACEWAYS WITH CONTROLLER MANUFACTURER TO ASSURE DOOR LATCH DOES NOT INTERFERE WITH CABLES OR OTHER DEVICES.
- NOT USED.
- THE CONTRACTOR SHALL PROVIDE A GROUND FIELD AT EACH CABINET LOCATION. THE GROUND RODS, ANCHOR BOLTS AND REINFORCEMENT STEEL SHALL ALL BE INTERCONNECTED.
- THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF GROUND FIELD WITH THE ENGINEER.
- SEE DRAWING ED-6 FOR CONTROL CABINET DETAILS.
- ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL.
- NAME PLATE SHALL HAVE ENGRAVED 0.75 INCH HIGH LETTERS FILLED IN BLACK: "ROADWAY LIGHTING CONTROLLER, VILLAGE OF ORLAND PARK".
- ONE INCH THICK POLYISOCYANURATE INSULATION SHALL BE INSTALLED AND PERMANENTLY CEMENTED ON ALL SIDES OF THE CABINET AND DOORS.
- ALL DEVICES SHALL BE FRONT REMOVABLE.
- ALL LUGS SHALL BE OF COPPER SCREWS AND CONNECTORS, SPRING HELD.
- ALL CONTROL WIRING SHALL BE 600V MACHINE TOOL WIRE TYPE MTW.
- ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
- CIRCUIT BREAKERS, CONTACTORS AND OTHER COMPONENTS SHALL BE PANEL MOUNTED ON 0.125 INCH THICK GLASTIC INSULATION BACK PANEL.
- THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508.
- ALL 120 VOLT SYSTEM AND ALL CONTROL WIRING SHALL BE #12AWG STRANDED UNLESS OTHERWISE INDICATED.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- FOR LIGHTING CONTROLLER WIRING DIAGRAM, SEE DRAWING ED-3.
- SIZE OF CONCRETE FOUNDATION AS REQUIRED TO SUPPORT CONTROL CABINET AND TRANSFORMER.
- LENGTH OF CONCRETE SLAB SHOULD MATCH LENGTH OF CONCRETE FOUNDATION.
- THE COST OF THE TRANSFORMER AND THE RELATED WORK SHALL BE INCLUDED IN THE COST OF "LIGHTING CONTROLLER, SPECIAL, 200A, 240/480V" PAY ITEM.



LEFT SIDE ELEVATION

FRONT ELEVATION

ED-2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**GROUNDING AND LIGHTING CONTROLLER  
INSTALLATION DETAILS**  
SCALE: NONE  
DATE: 7-07-06  
DRAWN BY: MB  
CHECKED BY: KMY

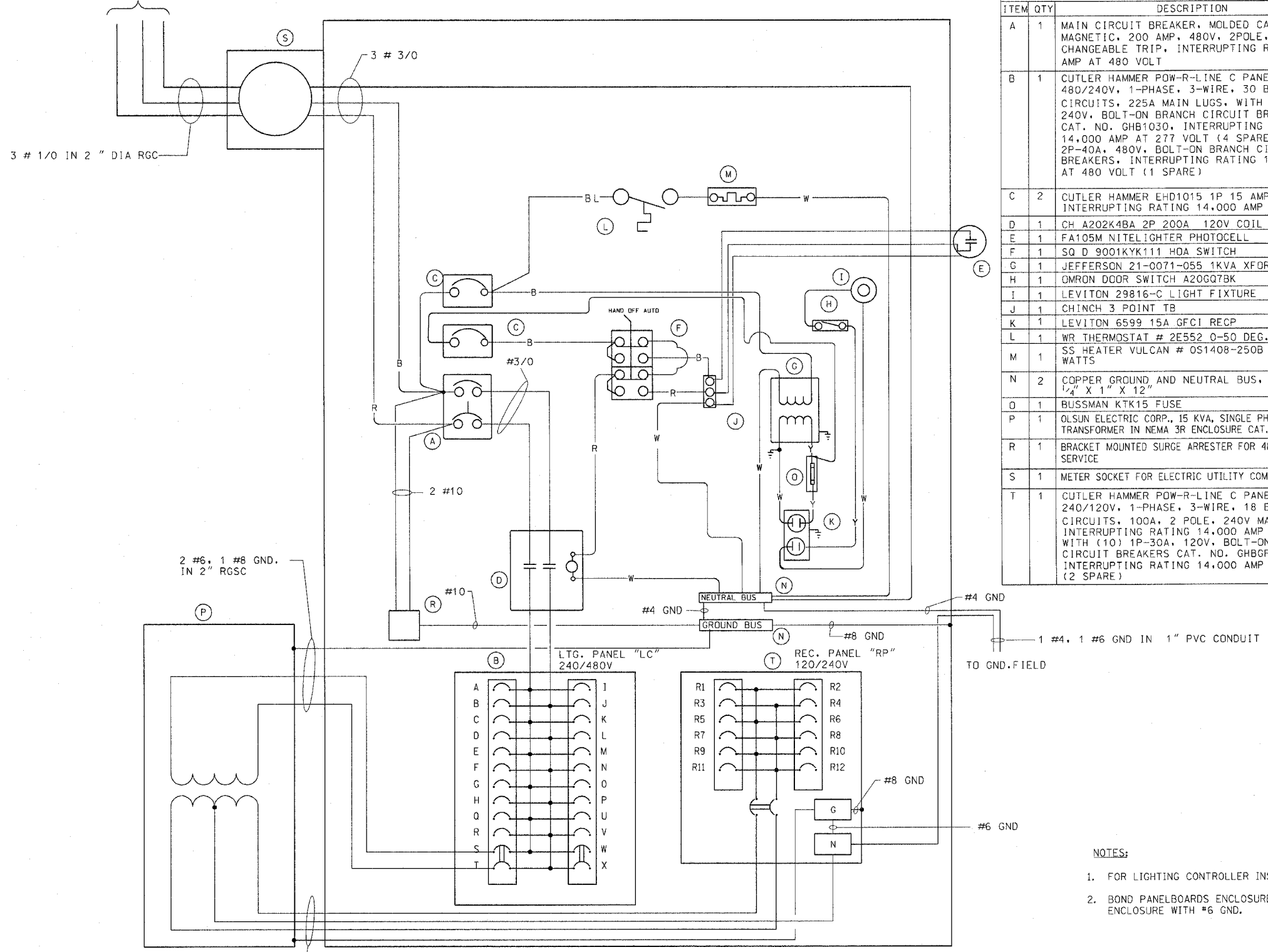
**McDonough Associates Inc.**  
Engineers / Architects

SPRUE  
SDATES  
STIMES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	174
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 62880

ELECTRICAL SERVICE FROM COMED  
150A, 240/480V, 1 PH, 3W



BILL OF MATERIALS		
ITEM	QTY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 200 AMP, 480V, 2POLE, NON-INTERCHANGEABLE TRIP, INTERRUPTING RATING 25,000 AMP AT 480 VOLT
B	1	CUTLER HAMMER POW-R-LINE C PANELBOARD PRL2A, 480/240V, 1-PHASE, 3-WIRE, 30 BRANCH CIRCUITS, 225A MAIN LUGS, WITH (20) 1P-30A 240V, BOLT-ON BRANCH CIRCUIT BREAKERS, CAT. NO. GHB1030, INTERRUPTING RATING 14,000 AMP AT 277 VOLT (4 SPARE) AND (2) 2P-40A, 480V, BOLT-ON BRANCH CIRCUIT BREAKERS, INTERRUPTING RATING 14,000 AMP AT 480 VOLT (1 SPARE)
C	2	CUTLER HAMMER EHD1015 1P 15 AMP, 240V, INTERRUPTING RATING 14,000 AMP AT 277 VOLT
D	1	CH A202K4BA 2P 200A 120V COIL
E	1	FA105M NITELIGHTER PHOTOCELL
F	1	SQ D 9001KYK111 HOA SWITCH
G	1	JEFFERSON 21-0071-055 1KVA XFORMER
H	1	OMRON DOOR SWITCH A20GQ7BK
I	1	LEVITON 29816-C LIGHT FIXTURE
J	1	CHINCH 3 POINT TB
K	1	LEVITON 6599 15A GFCI RECP
L	1	WR THERMOSTAT # 2E552 0-50 DEG.
M	1	SS HEATER VULCAN # OS1408-250B 250 WATTS
N	2	COPPER GROUND AND NEUTRAL BUS, MIN. 1/4" X 1" X 12"
O	1	BUSSMAN KTK15 FUSE
P	1	OLSUN ELECTRIC CORP., 15 KVA, SINGLE PHASE, 480-120/240V TRANSFORMER IN NEMA 3R ENCLOSURE CAT. # GS15LE-6
R	1	BRACKET MOUNTED SURGE ARRESTER FOR 480/240V, 3W SERVICE
S	1	METER SOCKET FOR ELECTRIC UTILITY COMPANY METER
T	1	CUTLER HAMMER POW-R-LINE C PANELBOARD PRL1A, 240/120V, 1-PHASE, 3-WIRE, 18 BRANCH CIRCUITS, 100A, 2 POLE, 240V MAIN BREAKER, INTERRUPTING RATING 14,000 AMP AT 277V, WITH (10) 1P-30A, 120V, BOLT-ON GFCI BRANCH CIRCUIT BREAKERS CAT. NO. GHBGFE1030, INTERRUPTING RATING 14,000 AMP AT 120 VOLT (2 SPARE)

POWER WIRING RHH/RHW  
CONTROL WIRING #12 MTW  
NEUTRAL BUS COLOR CODED WHITE  
GROUND BUS COLOR CODED GREEN  
UL LISTED

BL = BLUE  
W = WHITE  
B = BLACK  
R = RED  
Y = YELLOW

CONTROLLER WIRING BY EXCEL LTD. INC.  
GRAYSLAKE, IL PHONE: 847-543-9138

NOTES:

- FOR LIGHTING CONTROLLER INSTALLATION DETAILS, SEE DRAWING ED-2.
- BOND PANELBOARDS ENCLOSURES "LC" AND "RP" TO THE CONTROLLER ENCLOSURE WITH #6 GND.

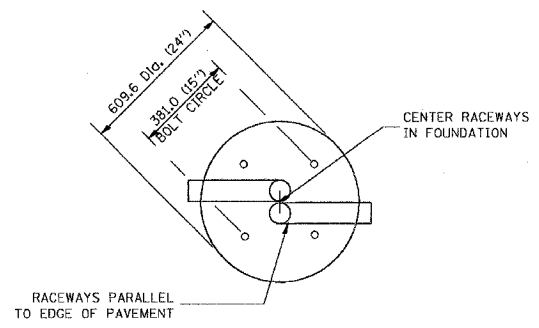
ED-3

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)
NAME	DATE	
		LIGHTING CONTROLLER "C6" WIRING DIAGRAM
		SCALE: NONE DRAWN BY: MB
		DATE: 7-07-06 CHECKED BY: KMY
		McDonough Associates Inc. Engineers / Architects

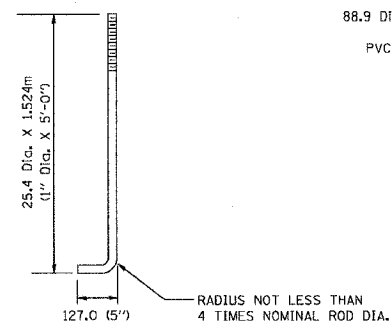
FILES  
DATES  
TIMES

LIGHT POLE FOUNDATION DEPTH TABLE  
12.192M (40 FT.) TO 14.478M (47.5 FT.) MOUNTING HEIGHT

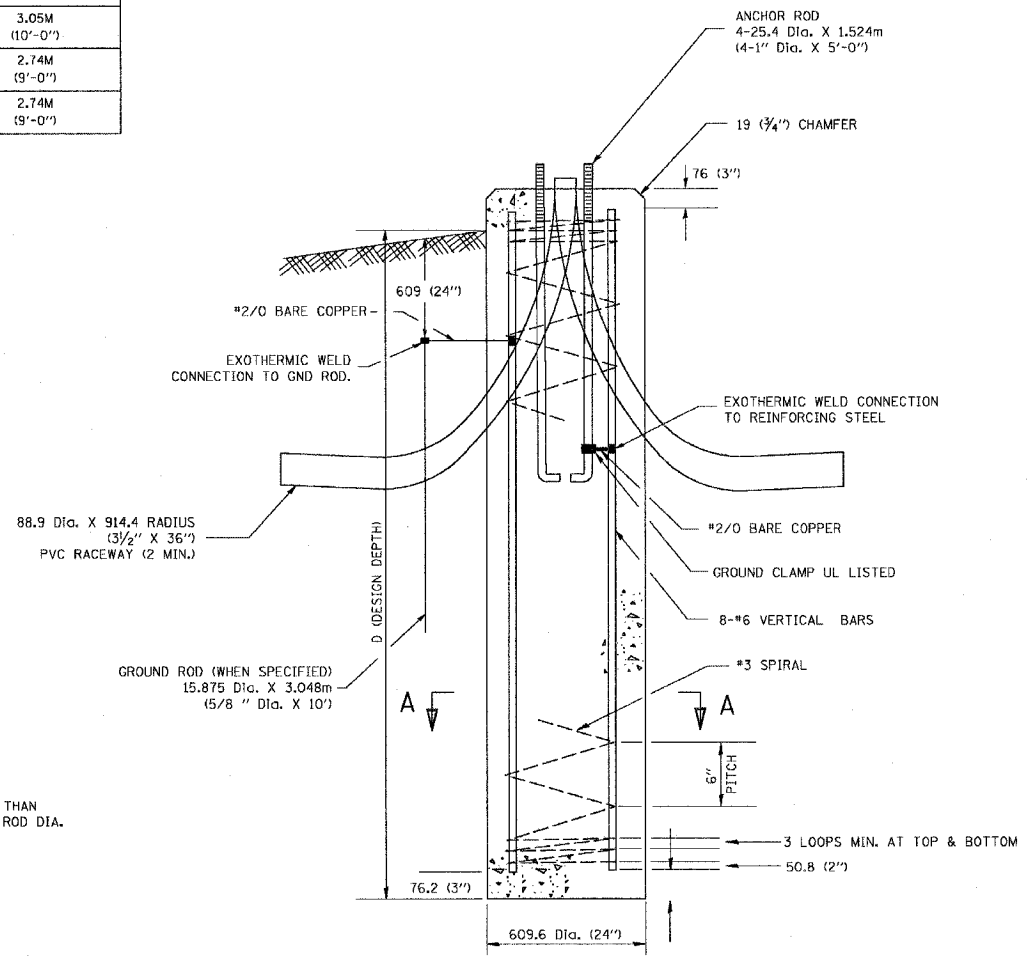
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	3.96M (13'-0")	4.57M (15'-0")
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	2.09M (9'-6")	3.23M (10'-9")
STIFF CLAY Qu = 1.50 TON/SQ. FT.	2.13M (7'-0")	2.44M (8'-0")
LOOSE SAND φ = 34°	2.74M (9'-0")	3.05M (10'-0")
MEDIUM SAND φ = 37.5°	2.52M (8'-3")	2.74M (9'-0")
DENSE SAND φ = 40°	2.36M (7'-9")	2.74M (9'-0")



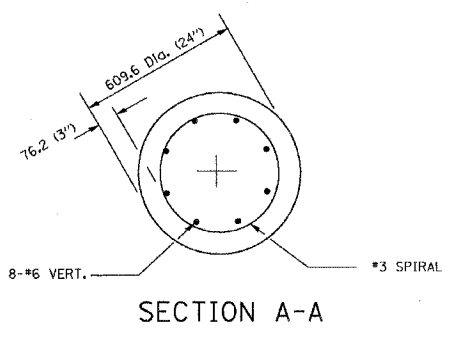
TOP VIEW



ANCHOR ROD DETAIL



FOUNDATION DETAIL



SECTION A-A

NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 1.5M (60 IN.) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 20MM (3/4-IN.).
- THE CONCRETE SHALL BE CLASS SL. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG (MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 150 MM (6 INCHES) WITH A MINIMUM OF 75 MM (3 INCHES) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 69.9MM (2 3/4") ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 152.4MM (6") PITCH OR MAY SUBSTITUTE #3 TIES AT 304.8MM (12") O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 25.4MM (1") ABOVE THE TOP OF THE FOUNDATION.

FILES  
DATES  
TIMES

ED-4

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)

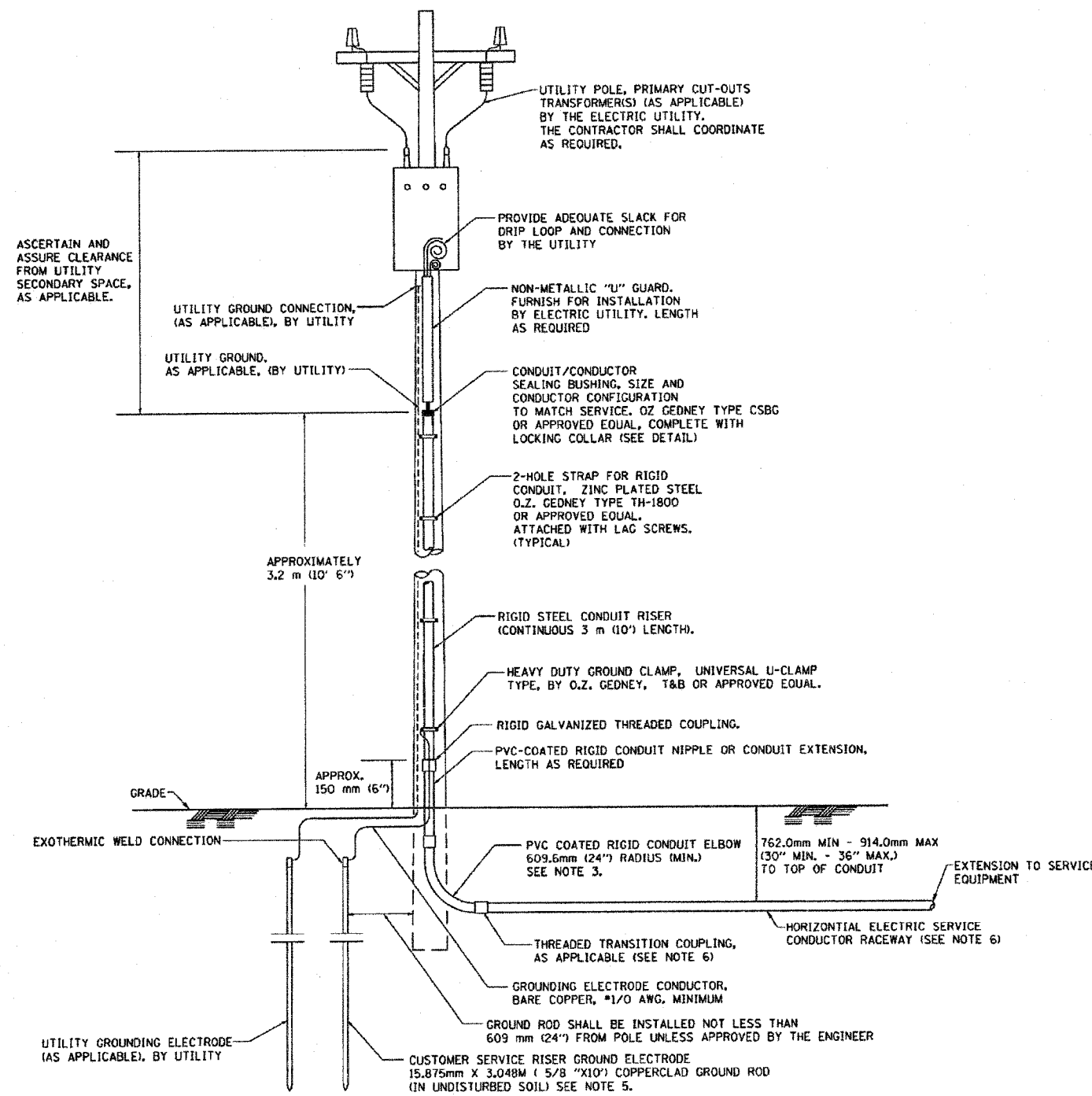
LIGHT POLE FOUNDATION  
DETAILS

SCALE: NONE  
DATE: 7-07-06

DRAWN BY: MB  
CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	176
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 62880				

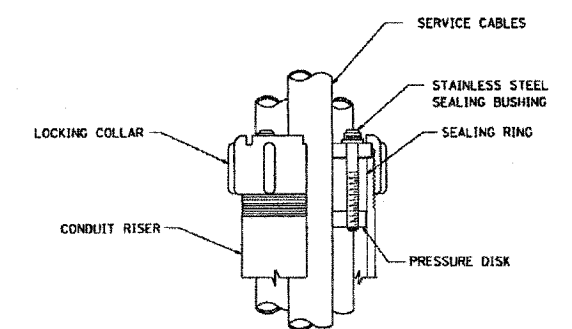


**APPLICATION**

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPARATLY-MOUNTED SERVICE EQUIPMENT.

**NOTES**

- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALLIC TO NON METALLIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED.



SEALING BUSHING DETAIL

ED-5

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)
NAME	DATE	
		ELECTRIC SERVICE INSTALLATION DETAIL
SCALE: NONE		DRAWN BY: MB
DATE: 7-07-06		CHECKED BY: KMY
 McDonough Associates Inc. Engineers / Architects		

SFILES  
 5DATES  
 5TIMES

F.A.P. RTE.	SECTION	COUNTY	TOTL SHEETS	SHEET NO.
351	537 R-1	COOK	245	177
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 62880

SPECIFICATIONS

PERFORMANCE - THE ENCLOSURE WILL MEET OR EXCEED THE REQUIREMENTS OF A NEMA 3R RATING AND SHALL BE U.L. LISTED.

MATERIAL - SHEET ALUMINUM 1/8" THICKNESS, ALLOY 5052 H32. SURFACE SHALL HAVE A SMOOTH, NATURAL ALUMINUM MILL FINISH. ALL WELDS TO BE HELIARC AND SHALL BE NEATLY FORMED AND FREE OF CRACKS, BLOW HOLES, AND OTHER DEFECTS. ALL EDGES TO BE FREE OF BURRS.

CABINET FEATURES - CABINET TOP SLOPED 1/2" TO THE REAR, WITH 1/8" X 1" VENT SLOTS UNDER FRONT OVERHAND.

DOORS AND LOCKS - THE MAIN DOOR IS OF NEMA TYPE 3R CONSTRUCTION WITH CELLULAR NEOPRENE GASKET, WHICH IS RAIN TIGHT. HINGE IS 2" OPEN AND IS CONTINUOUS 14 GAUGE STAINLESS STEEL WITH A 1/4" DIA. PIN AND IS CAPPED AT THE TOP TO RENDER IT TAMPER PROOF. THE HINGE IS SECURED WITH 1/4-20 STAINLESS STEEL CARRIAGE BOLTS AND ESNA LOCK NUTS. STANDARD EQUIPMENT INCLUDES A THREE POINT LOCKING SYSTEM, WHICH SECURES THE DOOR AT THE TOP, BOTTOM, AND CENTER. A CORBIN LOCK WITH TWO KEYS IS ALSO FURNISHED. THE MAIN DOOR IS ALSO EQUIPPED WITH A THREE POSITION DOOR STOP, ONE AT 90°, ONE AT 120°, AND ONE AT 180°. DOOR LOCKING RODS ARE 1/4" X 3/4" ALUMINUM TURNED EDGEWAYS WITH 1" NYLON ROLLERS. MAIN DOOR HANDLE IS 3/4" DIAMETER STAINLESS STEEL. THE CABINET DOOR SHALL BE HINGED ON THE RIGHT SIDE WHEN FACING THE FRONT OF THE CABINET.

EQUIPMENT MOUNTING - THE CABINET SHALL BE EQUIPPED WITH TWO ADJUSTABLE "L" MOUNTING CHANNELS WELDED TO EACH SIDE WALL AND THE BACK WALL ALLOWING FULL ADJUSTMENT OF SHELVES OR PANELS.

VENTILATION - VENT SLOTS (1/8" X 1") ARE PROVIDED ON THE UNDERSIDE OF THE COVER OVERHANG AND LOUVER SLOTS ARE FORMED IN THE LOWER PORTION OF THE MAIN DOOR. THIS CREATES A NATURAL MOVEMENT OF AIR AND HAS A COOLING EFFECT ON THE ELECTRICAL EQUIPMENT.

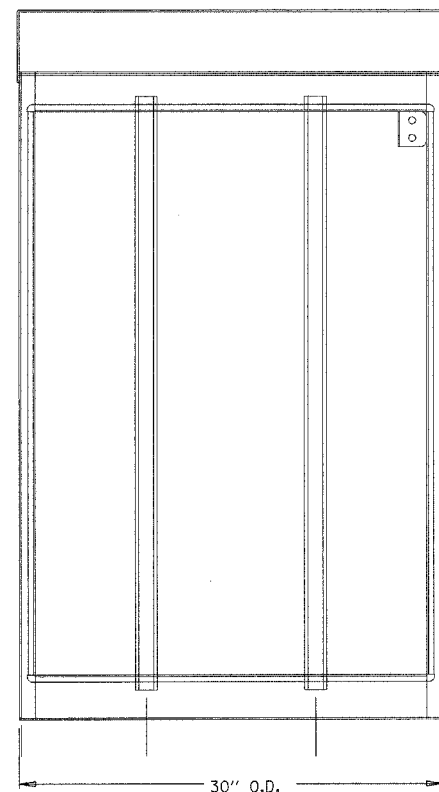
CABINET TYPE FOR PERMANENT CONTROLLER "LC" IS BASE MOUNTED AND EQUIPPED WITH INSIDE FLANGES AT THE FRONT, BACK, AND SIDES FOR ANCHORING TO A BASE (SEE INSTALLATION DETAILS ON DRAWING ED-2).

CABINET TYPE FOR TEMPORARY CONTROLLER "CT" IS POLE MOUNTED (SEE INSTALLATION DETAILS ON DRAWING ED-7).

THIS SPECIFICATION IS PER IDOT STANDARD SPECIFICATIONS.

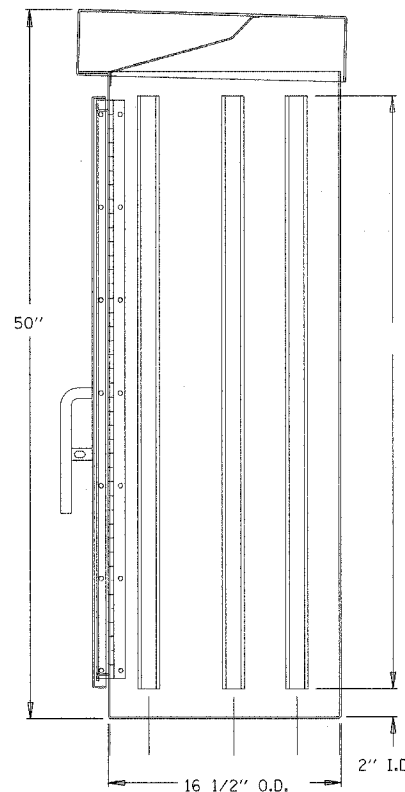
INDICATED DIMENSIONS REPRESENT THE MINIMUM REQUIREMENTS. DIMENSIONS SHALL BE INCREASED AS REQUIRED TO COMPLY WITH THE CODE AND TO ADEQUATELY HOUSE ALL REQUIRED COMPONENTS WITH AMPLE ROOM FOR ARRANGEMENT AND TERMINATION OF WIRING.

THE SERVICE EQUIPMENT SHALL BE MARKED TO IDENTIFY AS BEING SUITABLE AS SERVICE EQUIPMENT IN ACCORDANCE WITH NEC ARTICLE 230.66.

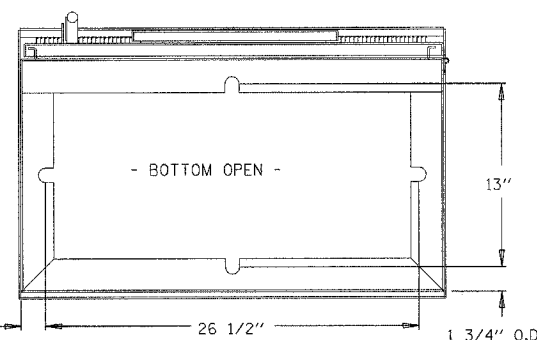


DOOR OPENING IS 39 7/8" HIGH X 27 3/4" WIDE

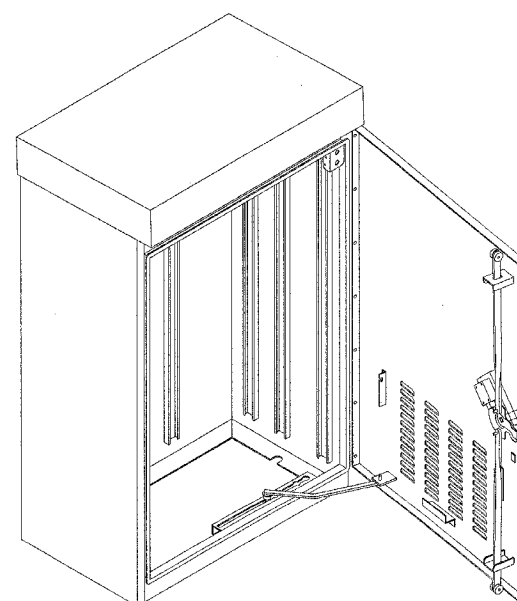
FRONT VIEW  
DOOR REMOVED



RIGHT SIDE  
VIEW



BOTTOM VIEW  
MOUNTING PATTERN



**SOUTHERN** MFG. CO.  
501 HERNDON AVE.  
ORLANDO, FLORIDA 32803  
SINCE 1939 (407) 894-8851

SOUTHERN MFG. CO.  
ALUMINUM TYPE IV CONTROL CABINET 3R  
50" X 30" X 16 1/2"  
SCALE: NOT TO SCALE

REVISIONS	
NAME	DATE

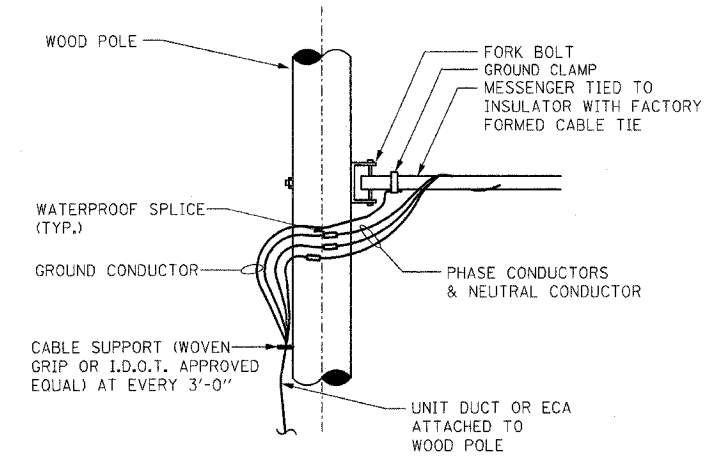
ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)  
**LIGHTING CONTROLLER  
CABINET**

SCALE: NONE  
DATE: 7-07-06  
DRAWN BY: MB  
CHECKED BY: KMY

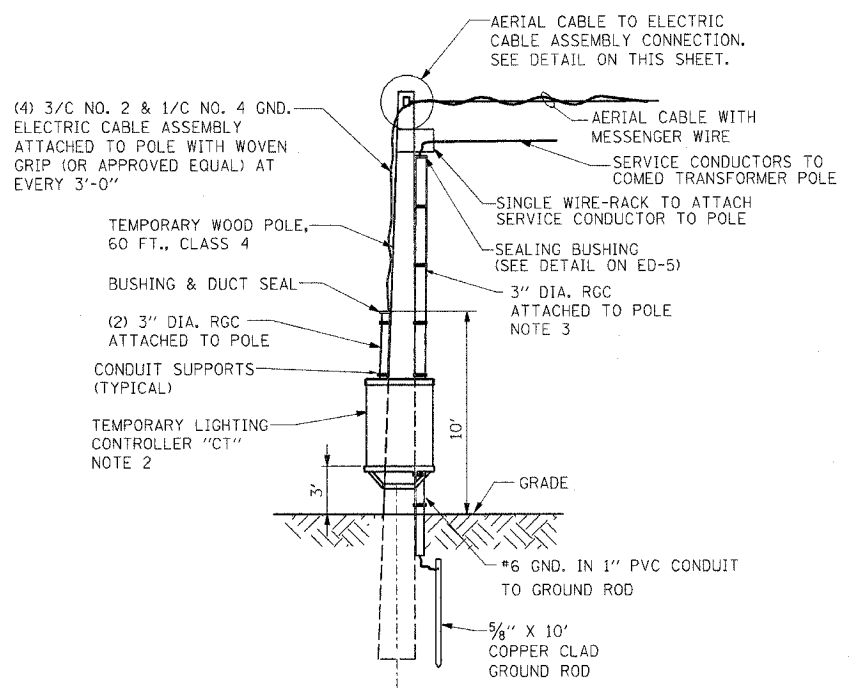
**McDonough Associates Inc.**  
Engineers / Architects

ED-6

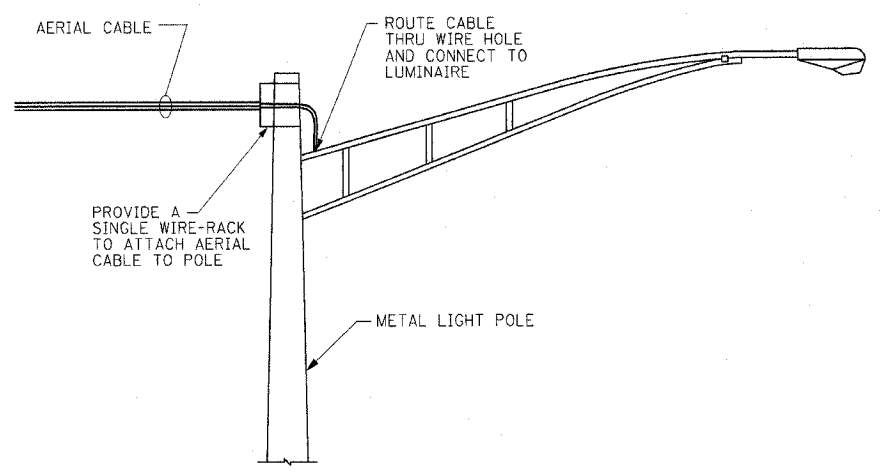
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DATES  
TTMES



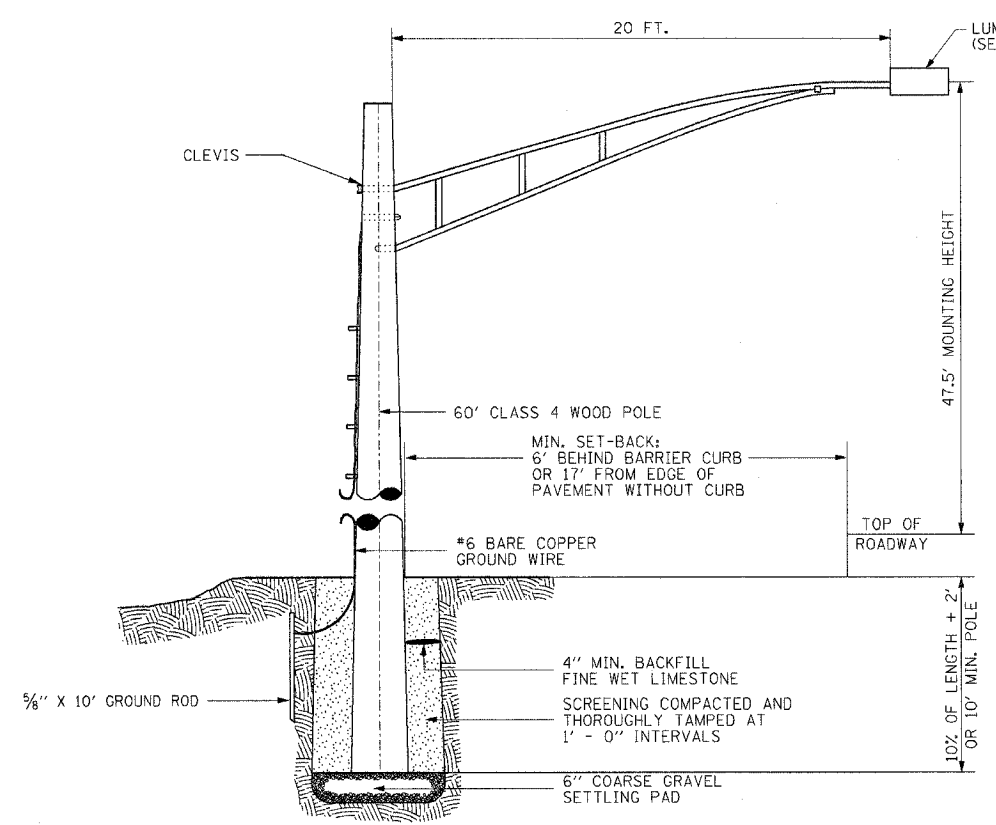
**AERIAL CABLE TO ELECTRIC CABLE ASSEMBLY CONNECTION DETAIL**  
N.T.S.



**TEMPORARY LIGHTING CONTROLLER "CT" WIRING AND SERVICE INSTALLATION DETAIL**  
N.T.S.

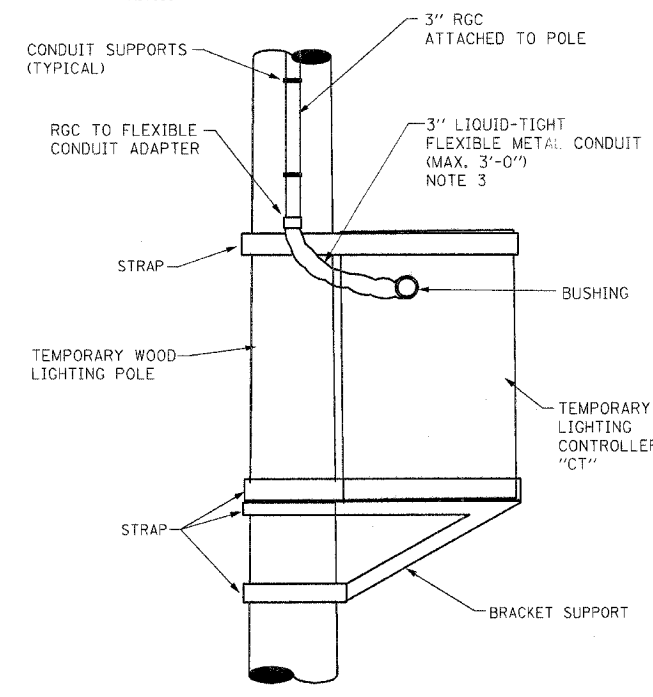


**TEMPORARY POWER FEED TO EXISTING POLE DETAIL**  
N.T.S.



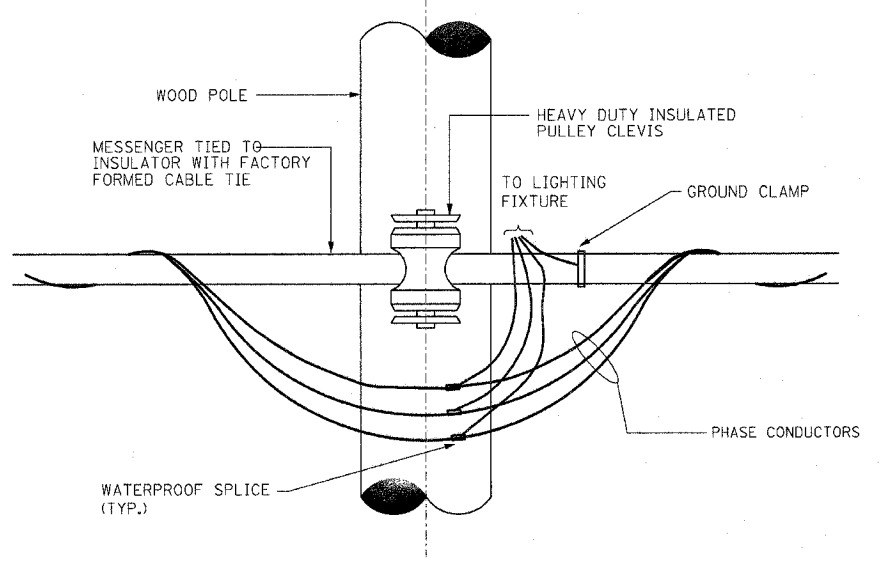
**TEMPORARY LIGHT POLE INSTALLATION DETAIL**  
N.T.S.

**NOTE:**  
TEMPORARY LUMINAIRE SHALL BE HORIZONTAL MOUNTED 400W HPS, CUTOFF ARCHITECTURAL WITH EITHER TYPE III OR TYPE IV DISTRIBUTION AS SPECIFIED ON THE PLANS. FIXTURE SHALL BE PROVIDED WITH MAST ARM ADAPTER.



**TEMPORARY LIGHTING CONTROLLER "CT" INSTALLATION DETAIL**  
N.T.S.

- NOTES:**
- TEMPORARY WOOD POLE AND CONTROLLER MOUNTING HARDWARE AND RELATED APPURTENANCES SHALL BE INCLUDED IN TEMPORARY LIGHTING CONTROLLER PAY ITEM.
  - SEE DRAWING ED-6 FOR DETAILS AND ED-8 FOR CONTROLLER WIRING DIAGRAM.
  - THE COST OF ALL CONDUITS ATTACHED TO WOOD POLE AND 3/C NO.2 & 1/C NO.4 GND ELECTRIC CABLE ASSEMBLY TO THE POLE TOP SHALL BE INCLUDED IN THE COST OF TEMPORARY ELECTRIC SERVICE INSTALLATION PAY ITEM. NO SEPARATE PAYMENT WILL BE MADE.



**TEMPORARY LIGHT POLE CABLE ATTACHMENT DETAIL**  
N.T.S.

FILES  
DATES  
TIMES

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)

**TEMPORARY LIGHTING DETAILS**

SCALE: NONE  
DATE: 7-07-06

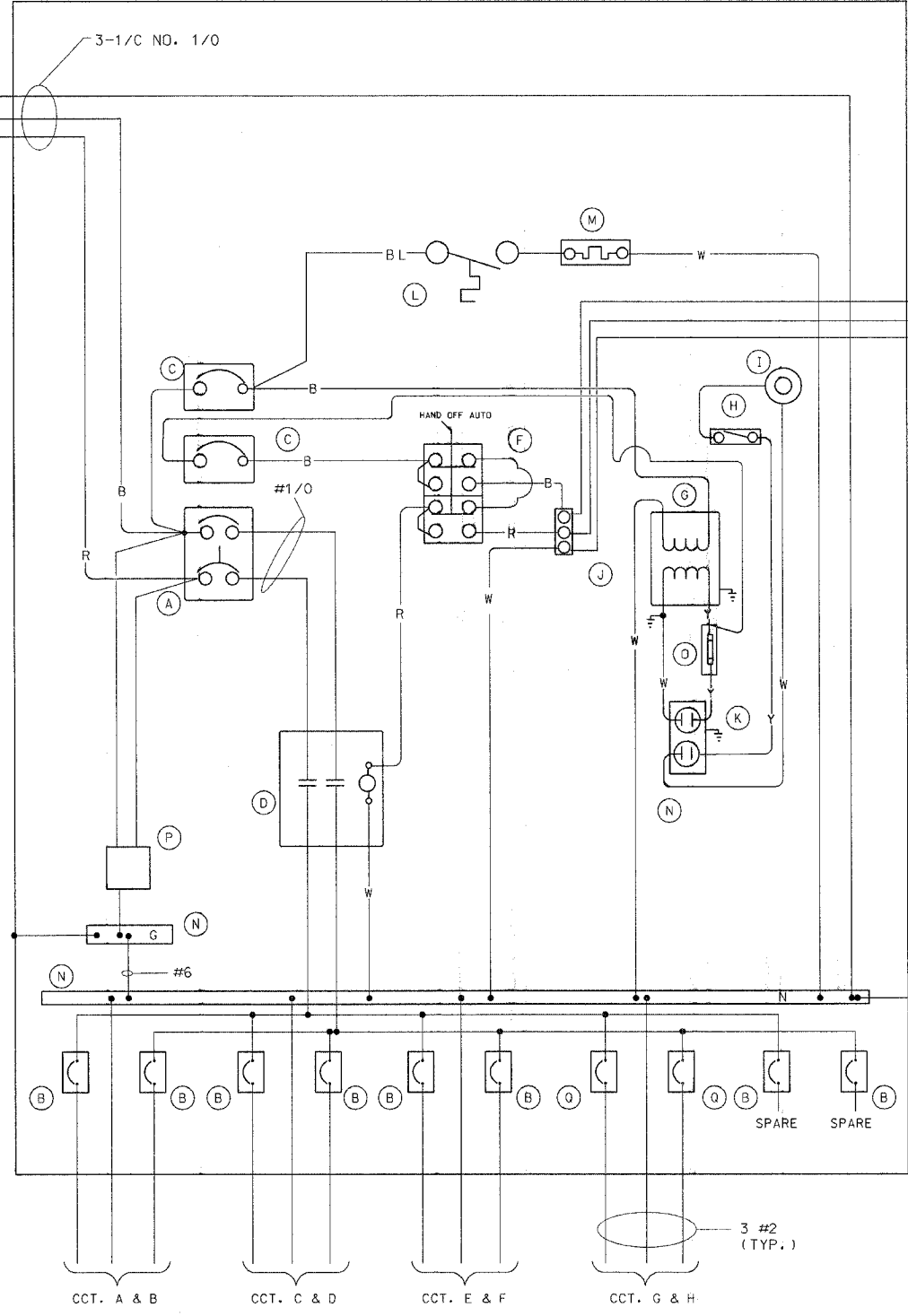
DRAWN BY: MB  
CHECKED BY: KMY

**McDonough Associates Inc.**  
Engineers / Architects



ELECTRICAL SERVICE FROM COMED  
100A, 240/480V, 1 PH, 3W

3-1/C NO. 2 W/MW  
AERIAL CABLE



BILL OF MATERIALS CONTROLLER "CT"		
ITEM	QTY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 150 AMP, 2POLE, 480V, NON-INTERCHANGEABLE TRIP, INTERRUPTING RATING 25,000 AMP AT 480 VOLT
B	8	1P-30A, 240V, BOLT-ON BRANCH CIRCUIT BREAKERS, CAT. NO. GHB1030, INTERRUPTING RATING 14,000 AMP AT 277 VOLT (2 SPARE)
C	2	CUTLER HAMMER EHD1015 1P 15 AMP, 240V, INTERRUPTING RATING 14,000 AMP AT 277 VOLT
D	1	CH A202K4BA 2P 200A, 600V, 120V COIL
E	1	FA105M NITELIGHTER PHOTOCELL
F	1	SQ D 9001KYK111 HOA SWITCH
G	1	JEFFERSON 21-0071-055 1KVA XFORMER
H	1	OMRON DOOR SWITCH A20G07BK
I	1	LEVITON 29816-C LIGHT FIXTURE
J	1	CHINCH 3 POINT TB
K	1	LEVITON 6599 15A GFCI RECP
L	1	WR THERMOSTAT # 2E552 0-50 DEG.
M	1	SS HEATER VULCAN # 051408-250B 250 WATTS
N	2	COPPER GROUND AND NEUTRAL BUS, MIN. 1/4" X 1" X 12"
D	1	BUSSMAN KTK15 FUSE
P	1	BRACKET MOUNTED SURGE ARRESTER FOR 480/240V, 3W SERVICE
Q	2	1P-40A, 240V, BOLT-ON BRANCH CIRCUIT BREAKERS, CAT. NO. GHB1040, INTERRUPTING RATING 14,000 AMP AT 277 VOLT

POWER WIRING RHH/RHW  
CONTROL WIRING #12 MTW  
NEUTRAL BUS COLOR CODED WHITE  
GROUND BUS COLOR CODED GREEN  
UL LISTED

BL = BLUE  
W = WHITE  
B = BLACK  
R = RED  
Y = YELLOW

#6 GND IN 1/2" PVC CONDUIT  
TO 5/8" X 10" GROUND ROD

NOTES:

- FOR TEMPORARY LIGHTING CONTROLLER INSTALLATION DETAILS, SEE DRAWING ED-7.
- PROVIDE #4 EQUIPMENT GROUND WIRE WITH EACH PAIR OF CIRCUIT CONDUCTORS.

CCT. A & B      CCT. C & D      CCT. E & F      CCT. G & H

3 #2 (TYP.)

ED-8

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

ILLINOIS DEPARTMENT OF TRANSPORTATION  
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)

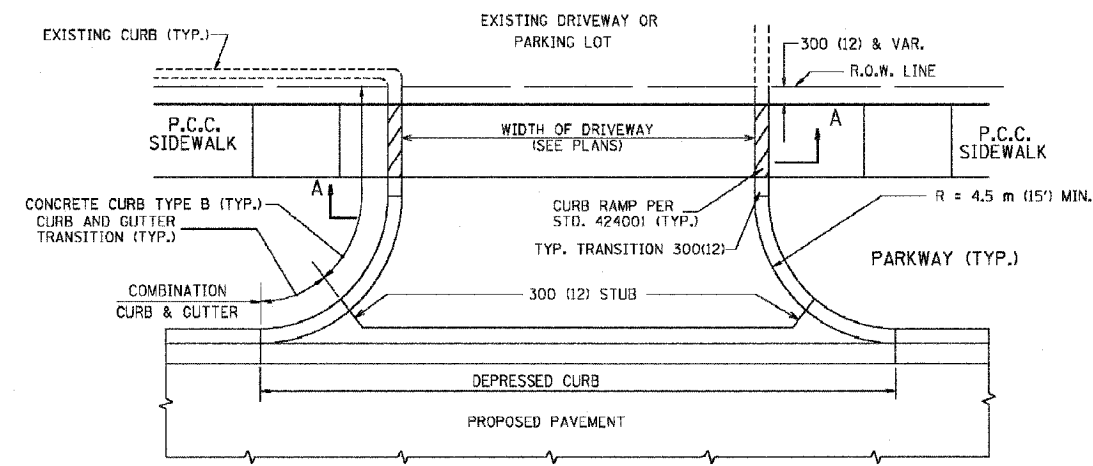
TEMPORARY  
LIGHTING CONTROLLER  
WIRING DIAGRAM

SCALE: NONE      DRAWN BY: MB  
DATE: 7-07-06      CHECKED BY: KMY

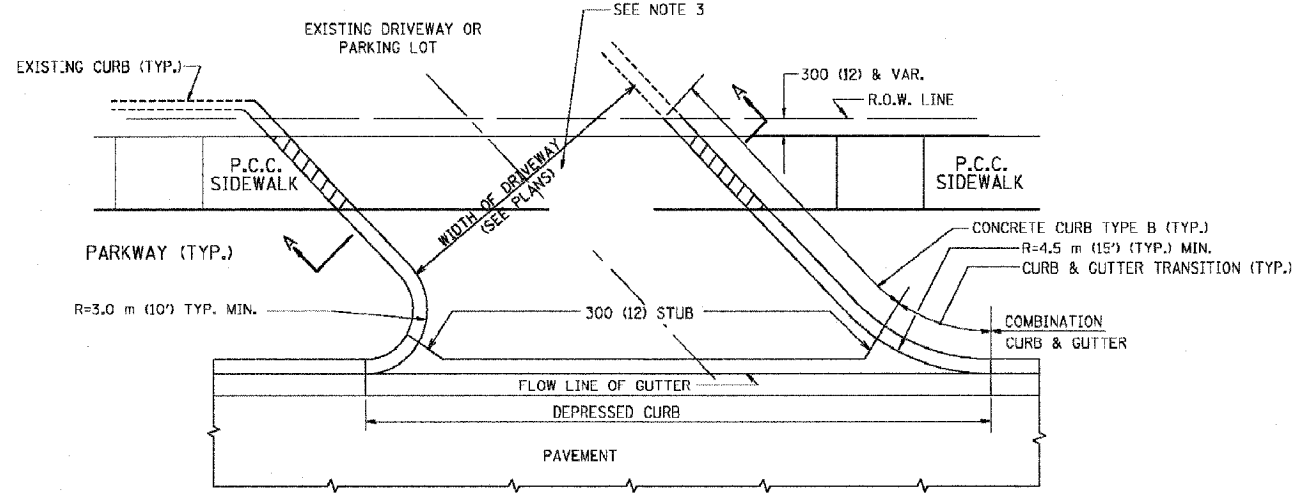
**McDonough Associates Inc.**  
Engineers / Architects

FILES  
DATES  
TIMES

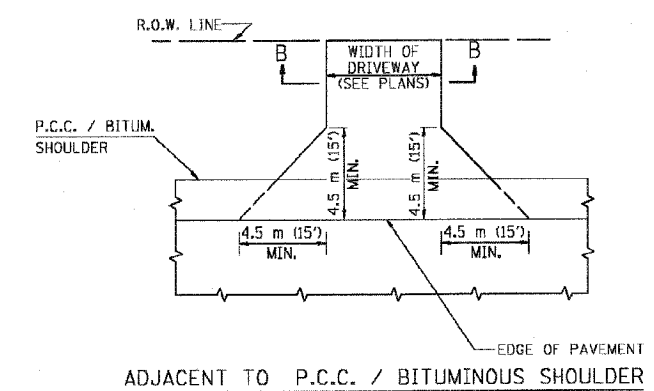
F.L. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	180
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



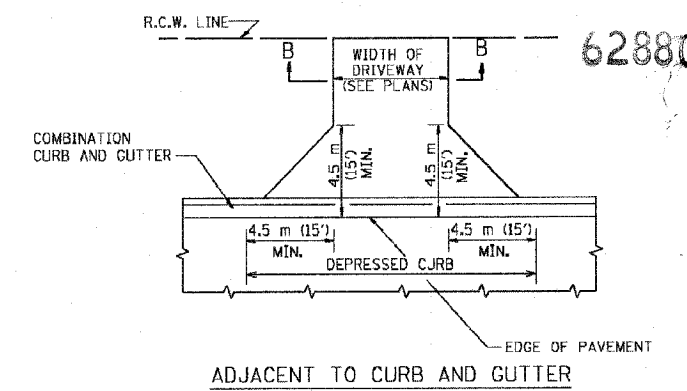
WITH CONCRETE CURB, TYPE B



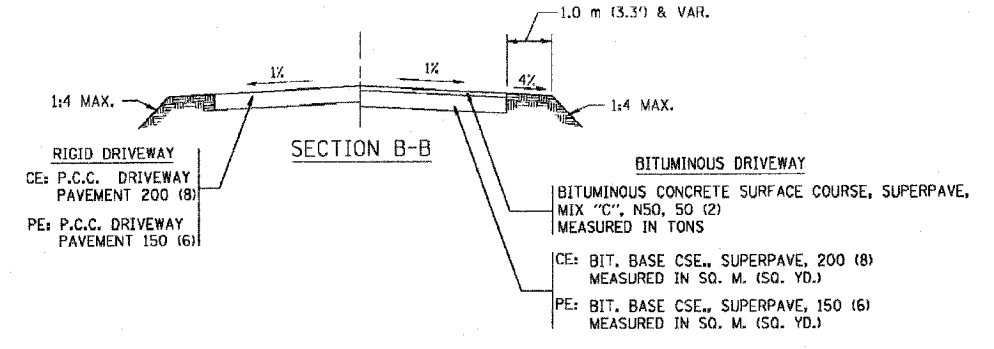
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / BITUMINOUS SHOULDER



ADJACENT TO CURB AND GUTTER



**RIGID DRIVEWAY**  
 CE: P.C.C. DRIVEWAY PAVEMENT 200 (8)  
 PE: P.C.C. DRIVEWAY PAVEMENT 150 (6)

**BITUMINOUS DRIVEWAY**  
 BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50, 50 (2) MEASURED IN TONS  
 CE: BIT. BASE CSE., SUPERPAVE, 200 (8) MEASURED IN SQ. M. (SQ. YD.)  
 PE: BIT. BASE CSE., SUPERPAVE, 150 (6) MEASURED IN SQ. M. (SQ. YD.)

**RURAL FIELD ENTRANCE (IFE)**  
 BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C", N50, 50 (2) MEASURED IN TONS  
 AGGREGATE BASE CSE., TYPE A 200 (8) MEASURED IN SQ. M. (SQ. YD.)

**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.

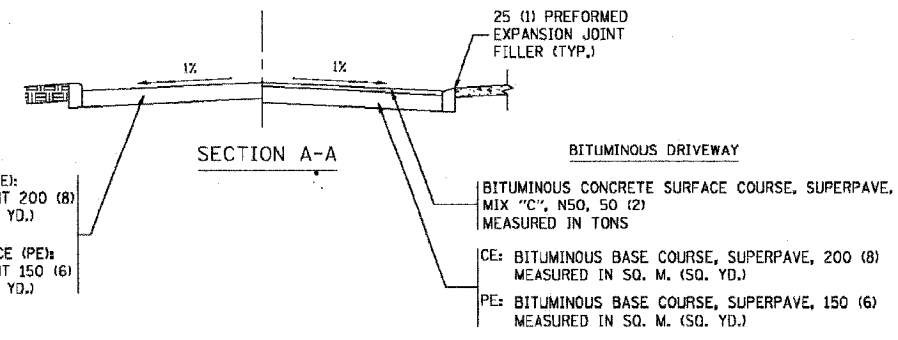
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 1.2 METERS (4 FEET) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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.

25 (1) 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.



**RIGID DRIVEWAY**  
 COMMERCIAL ENTRANCE (CE): P.C.C. DRIVEWAY PAVEMENT 200 (8) MEASURED IN SQ. M. (SQ. YD.)  
 NON-COMMERCIAL ENTRANCE (PE): P.C.C. DRIVEWAY PAVEMENT 150 (6) MEASURED IN SQ. M. (SQ. YD.)

**BITUMINOUS DRIVEWAY**  
 BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50, 50 (2) MEASURED IN TONS  
 CE: BITUMINOUS BASE COURSE, SUPERPAVE, 200 (8) MEASURED IN SQ. M. (SQ. YD.)  
 PE: BITUMINOUS BASE COURSE, SUPERPAVE, 150 (6) MEASURED IN SQ. M. (SQ. YD.)

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

ILLINOIS DEPARTMENT OF TRANSPORTATION

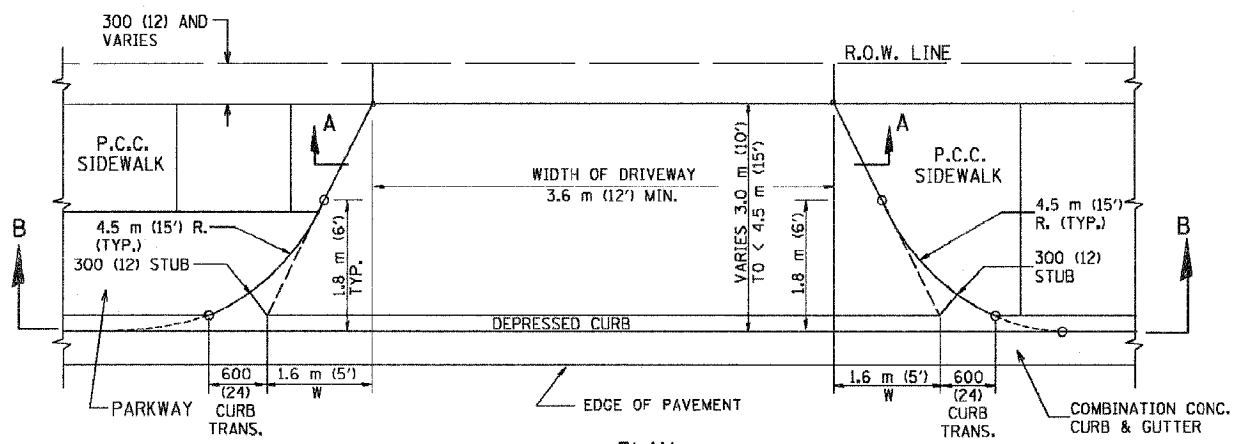
DRIVEWAY DETAILS  
 DISTANCE BETWEEN R.O.W. AND FACE OF CURB / EDGE OF SHOULDER >= 4.5 m (15')

REVISIONS	
NAME	DATE
P. LofLEUR	04-15-03
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01

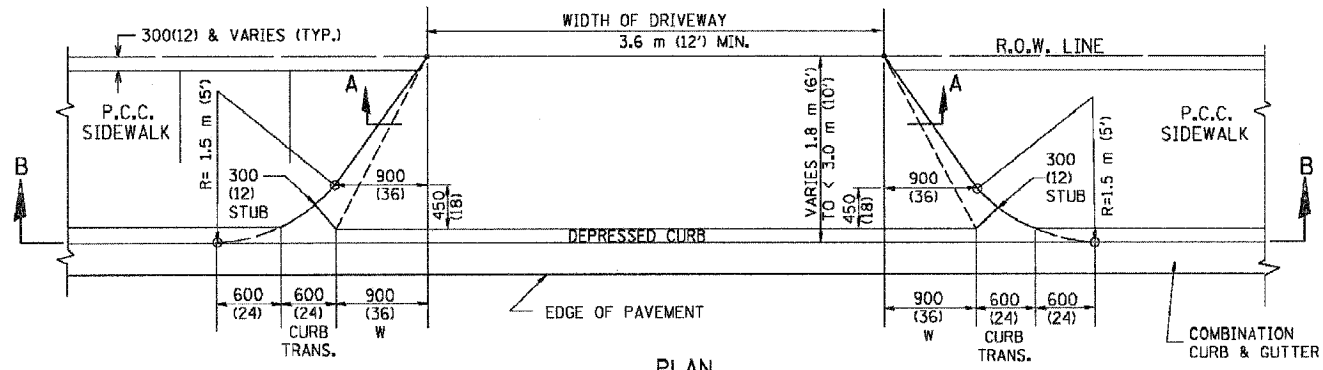
SCALE: NONE  
 DATE PLOTTED: 04/17/2003  
 DRAWN BY: SG  
 CHECKED BY: JFP

P. & R.TE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	181
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

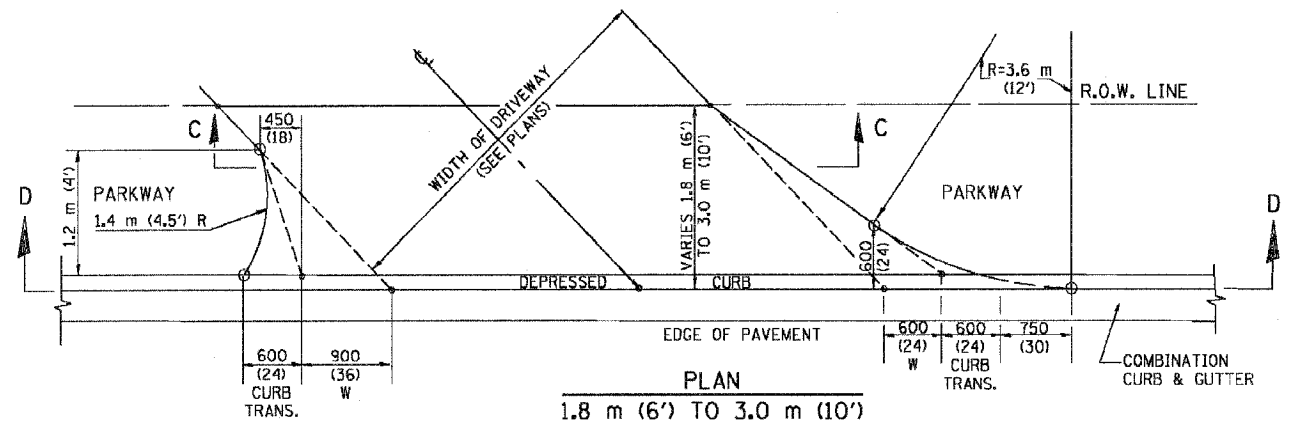
62880



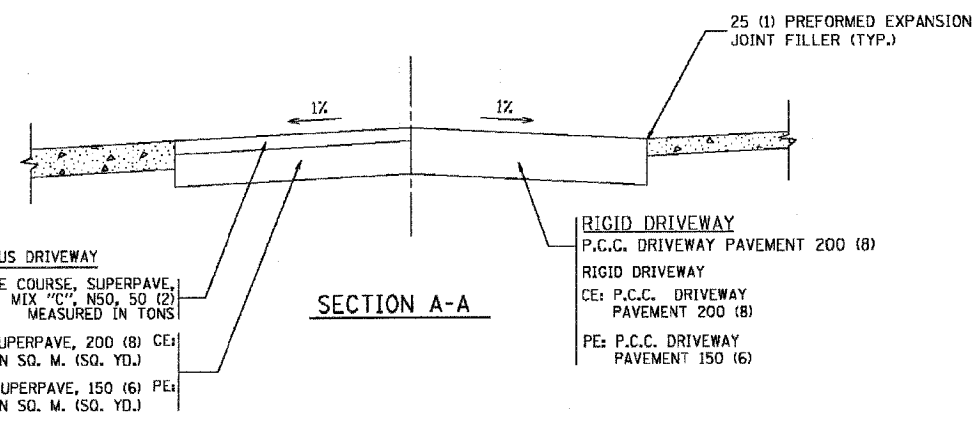
PLAN  
3.0 m (10') TO < 4.5 m (15')



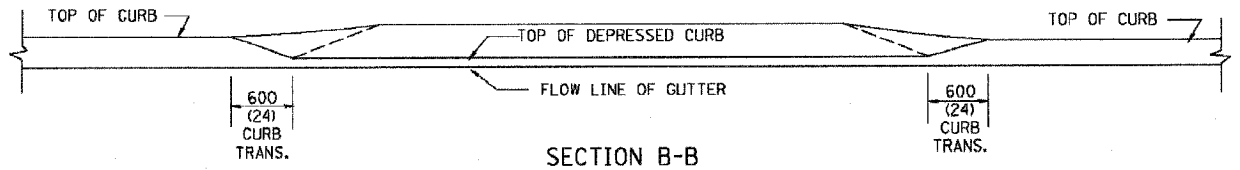
PLAN  
1.8 m (6') < 3.0 m (10')



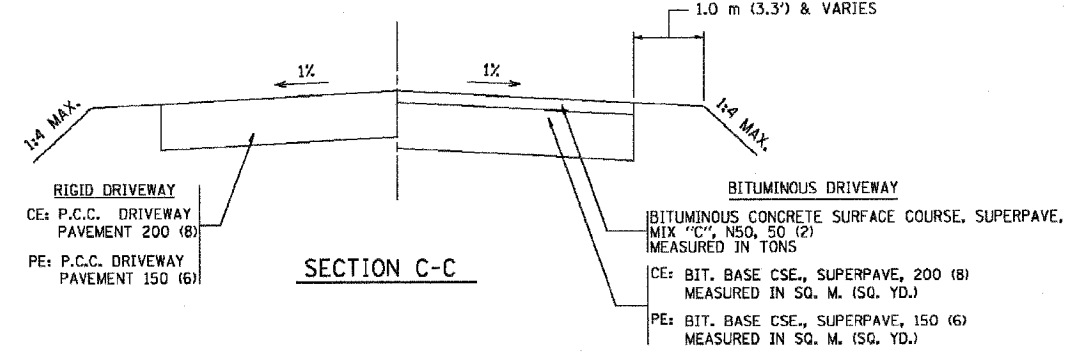
PLAN  
1.8 m (6') TO 3.0 m (10')



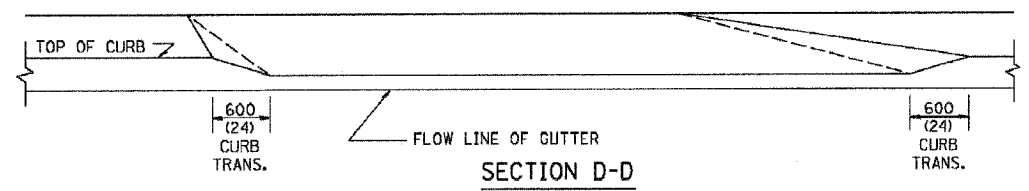
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

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 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 2.4 M (8'), 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.

25 (1) 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 900 (36) TO 1.5 m (5 FT.) PROPORTIONAL TO THE LENGTH (L), FROM 1.8 m (6 FT.) TO 3 m (10 FT.).

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS

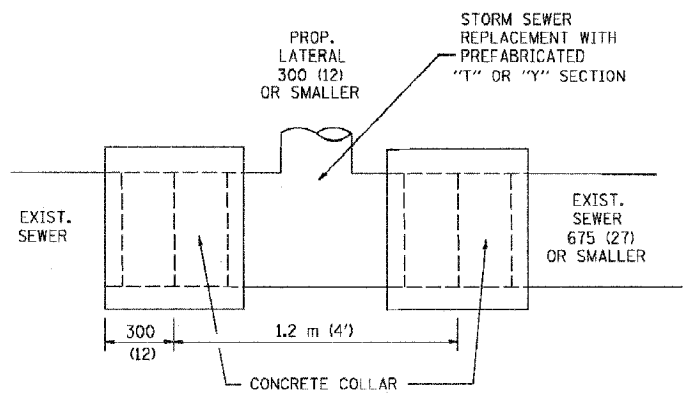
DISTANCE BETWEEN ROW AND FACE OF CURB < 4.5 m (15')

SCALE: NONE  
DATE PLOTTED: 04/17/2003  
DRAWN BY: SG  
CHECKED BY: JFP  
BD400-02 (BD-02)

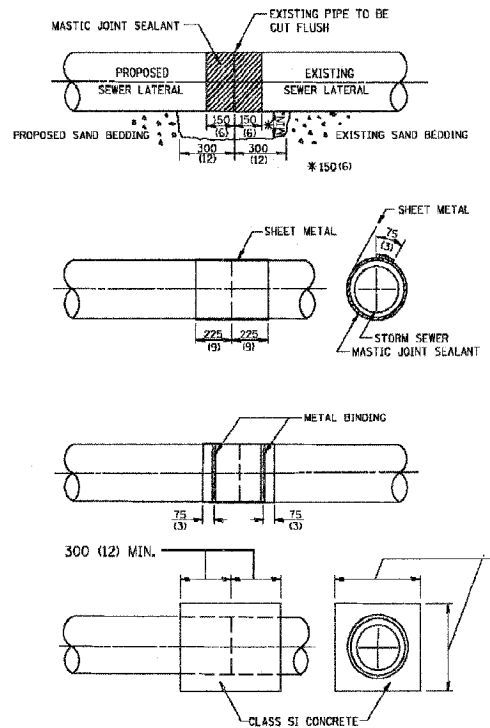
REVISIONS	
NAME	DATE
P. LOFLEUR	04/15/03
M. GOMEZ	04/05/01
R. SHAH	11/06/95
J. POLLASTRINI	08/12/96
J. POLLASTRINI	12/14/96
A. ABBAS	03/21/97
T. HOLTZ	04/08/97

DS-2

REVISION DATE: 04/15/03



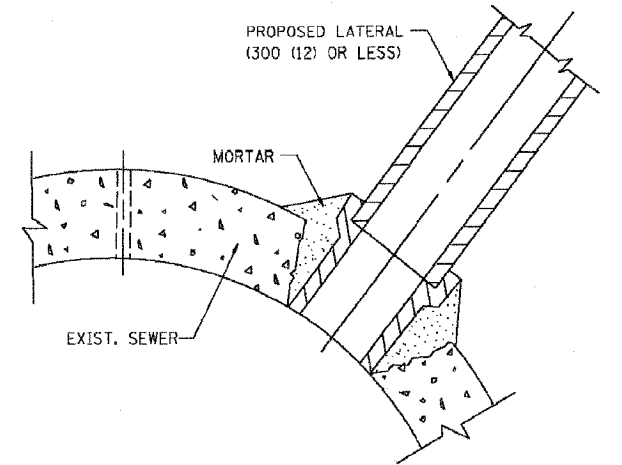
DETAIL "A"  
LATERAL CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER



DETAIL "B"  
CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- APPLY THE MASTIC JOINT SEALANT TO THE FIRST 150 (6) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 300 x 150 (12 x 6) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 450 (18) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 75 (3) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 225 (9) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 75 (3) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OZZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"  
PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER SEE DETAIL "A" AND "B".
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

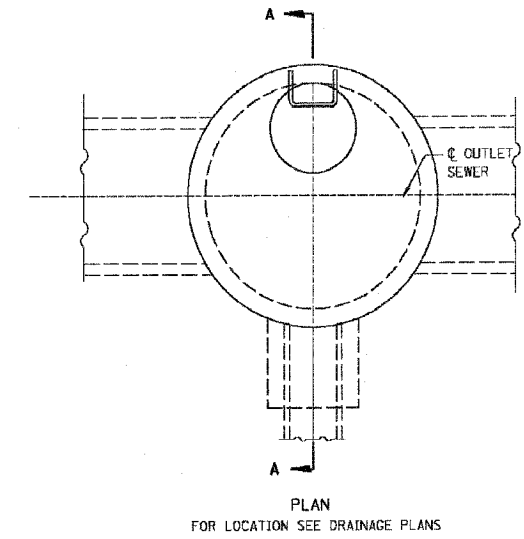
ILLINOIS DEPARTMENT OF TRANSPORTATION  
DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

REVISIONS	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

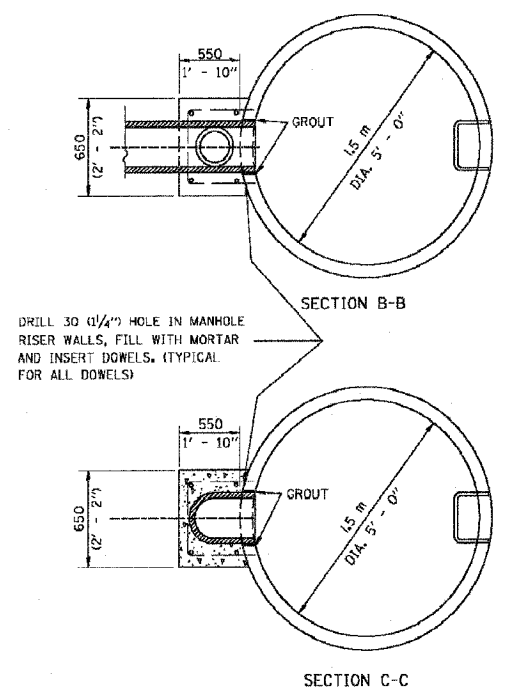
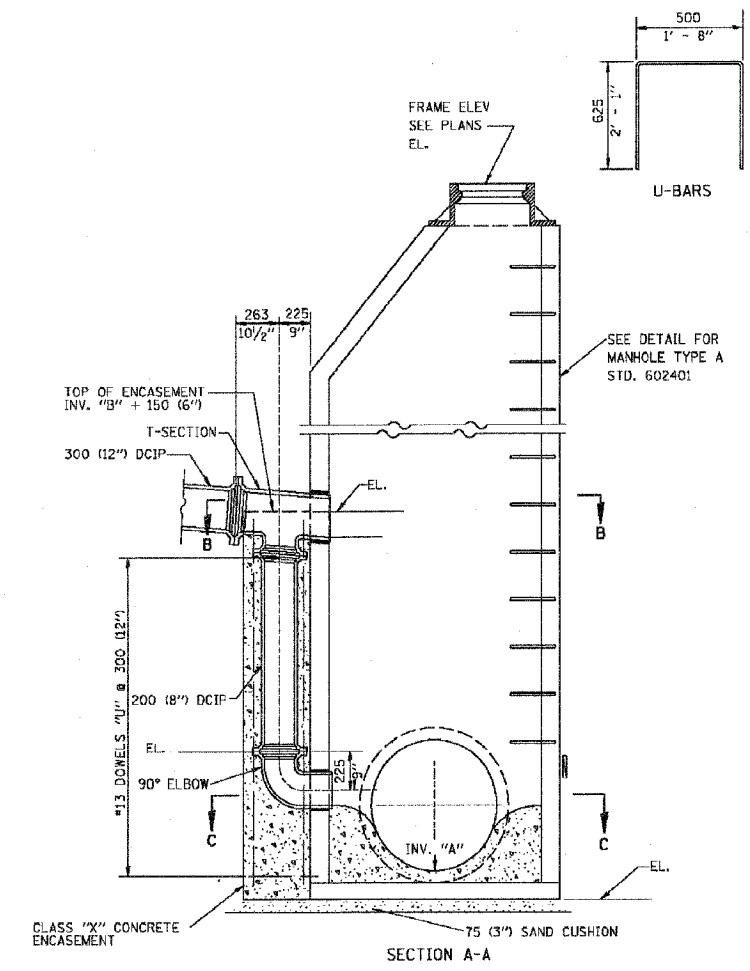
SCALE: NONE  
DATE: \*\*DATE\*\*  
DRAWN BY: CADD  
CHECKED BY:

F. A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	183
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

62880



ENCASEMENT DETAILS			
DROP M.H. LOCATION STA. OFFSET			
INV. "A"			
INLET PIPE			
INV. "B"			
INV. "C"			
A			
B			
"V" BAR LENGTH			
NO. OF "U" BARS			
REINF. BARS			
CLASS "SI" CONC. CUBIC METER (CU. YD.)			



- TYPE A1-1 MANHOLE WITH 1 DROP AND DEPTH UP TO 3 m (10')
- TYPE A1-2 " " " " " FROM 3 m TO 1.5 m (10' TO 15')
- TYPE A1-3 " " " " " FROM 1.5 m TO 6 m (15' TO 20')
- TYPE A1-4 " " " " " OVER 6 m (20')
  
- TYPE A2-1 MANHOLE WITH 2 DROPS AND DEPTH UP TO 3 m (10')
- TYPE A2-2 " " " " " FROM 3 m TO 1.5 m (10' TO 15')
- TYPE A2-3 " " " " " FROM 1.5 m TO 6 m (15' TO 20')
- TYPE A2-4 " " " " " OVER 6 m (20')

REVISIONS	
NAME	DATE

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DROP MANHOLE DETAILS**

SCALE: NONE

DATE 10/18/2002

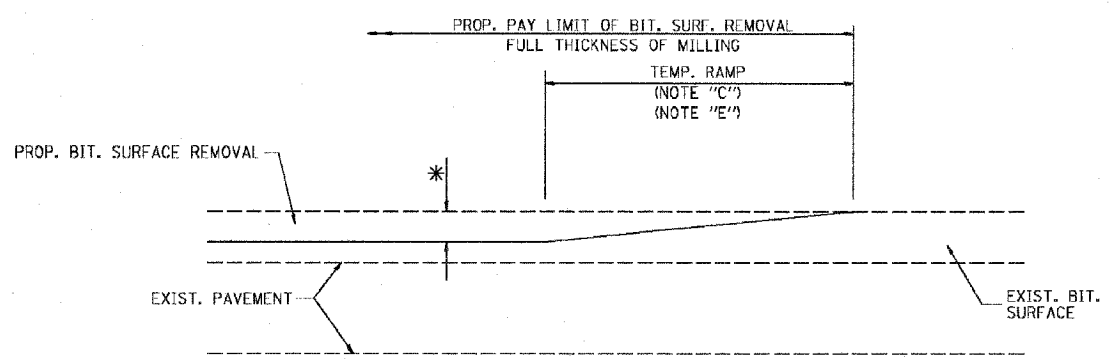
DRAWN BY jls

CHECKED BY

BD600-05 (BD-16)

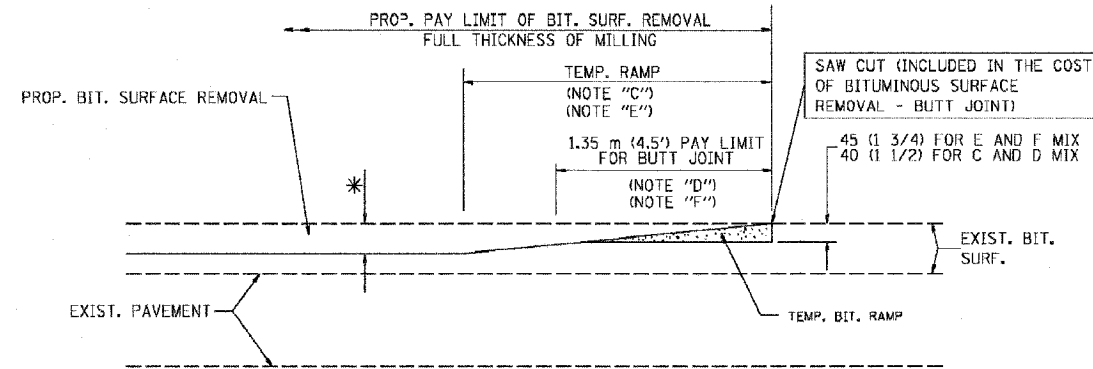
REVISION DATE:

62880



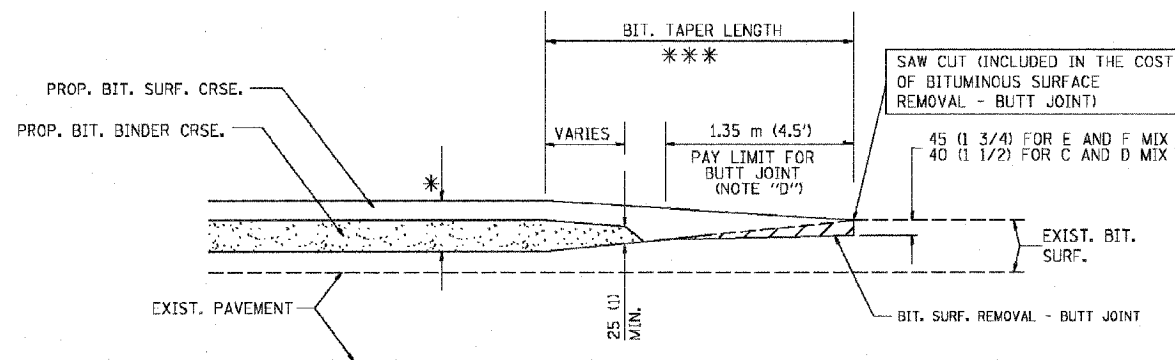
MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

OPTION 1



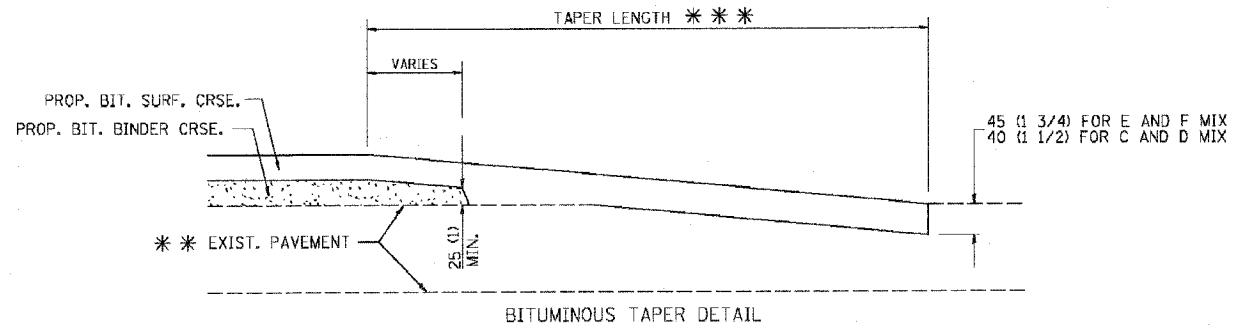
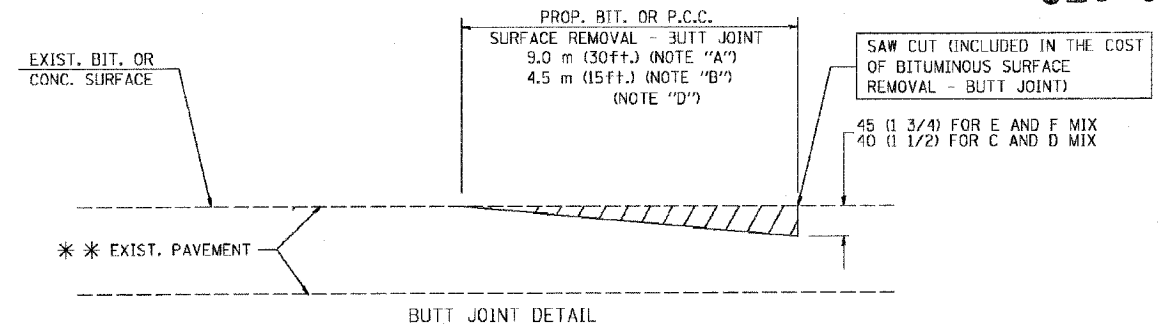
BITUMINOUS CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

OPTION 2  
TYPICAL TEMPORARY RAMP



BUTT JOINT AND BITUMINOUS TAPER

TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING



TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY

\*\*\* PC CONCRETE, BITUMINOUS OR BITUMINOUS RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING BITUMINOUS SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".
  - G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

\*\*\* 6.1 m (20') PER 25 (1) RESURFACING (NOTE "A")  
3.0 m (10') PER 25 (1) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

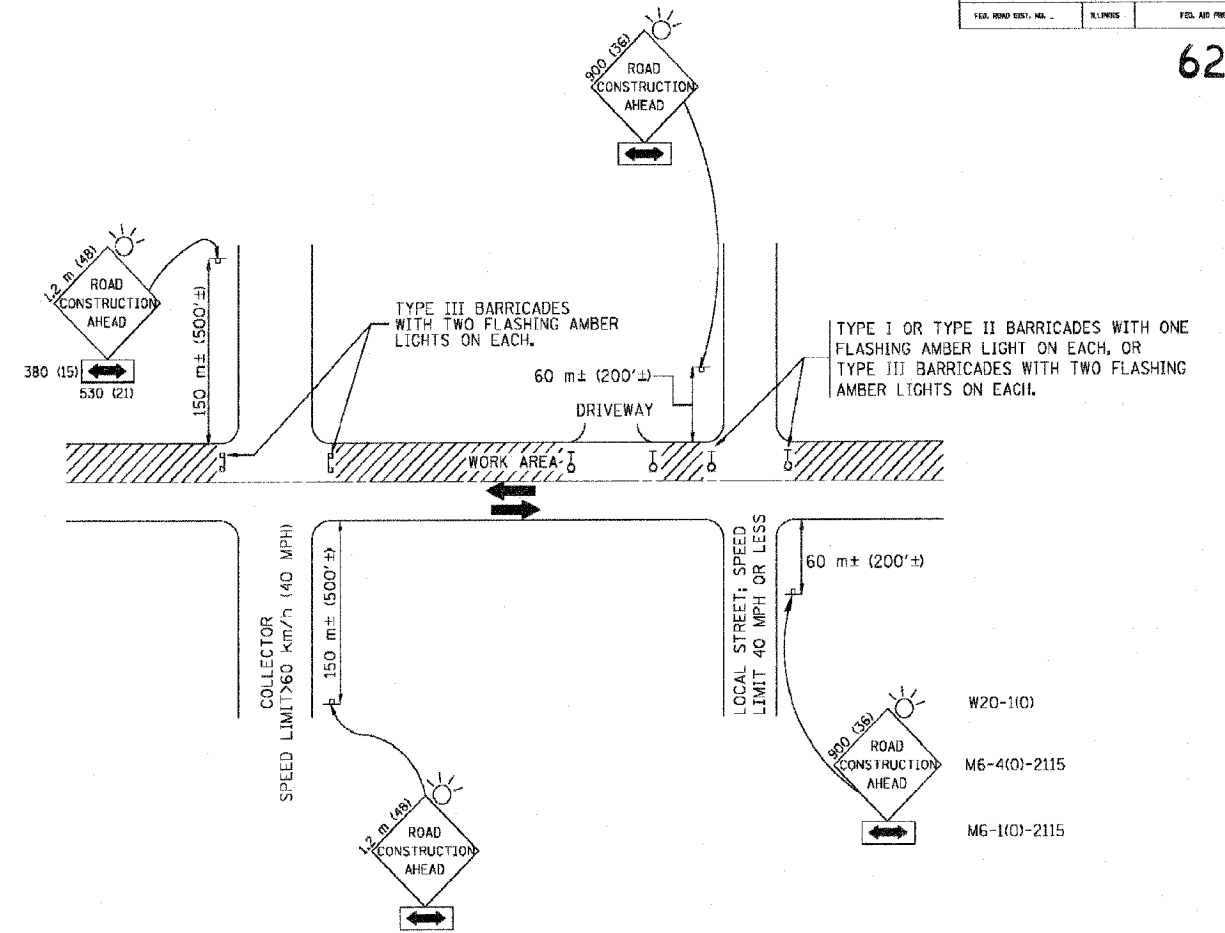
BUTT JOINT AND BITUMINOUS TAPER DETAILS

SCALE: NONE  
DATE PLOTTED: \*\*DATE\*\*  
DRAWN BY  
CHECKED BY

DS-5

F.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	185
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62880



- W20-1(0)
- M6-4(0)-2115
- M6-1(0)-2115

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
  2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
  3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.**
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.**

All dimensions are in millimeters (inches) unless otherwise shown.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

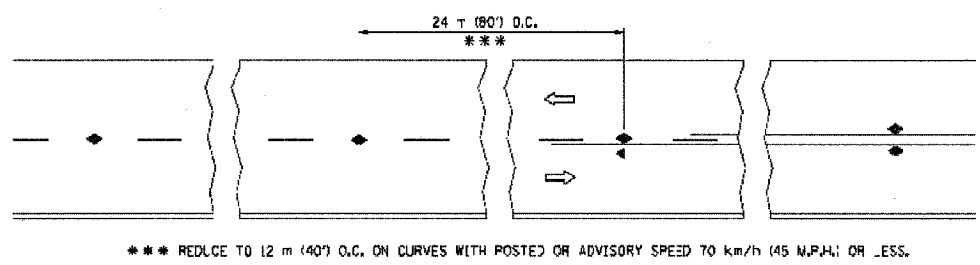
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TRAFFIC CONTROL AND PROTECTION FOR  
 SIDE ROADS, INTERSECTIONS, AND  
 DRIVEWAYS

SCALE: NONE DRAWN BY  
 DATE: \*\*DATE\*\* CHECKED BY

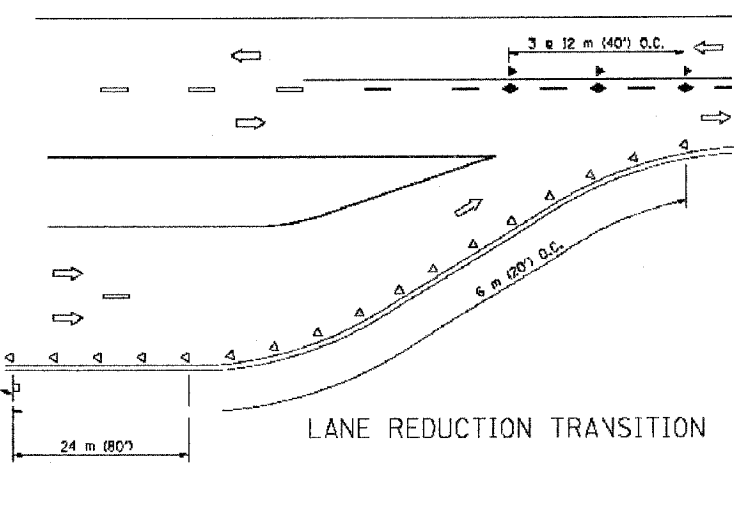
DS-6

TC-10

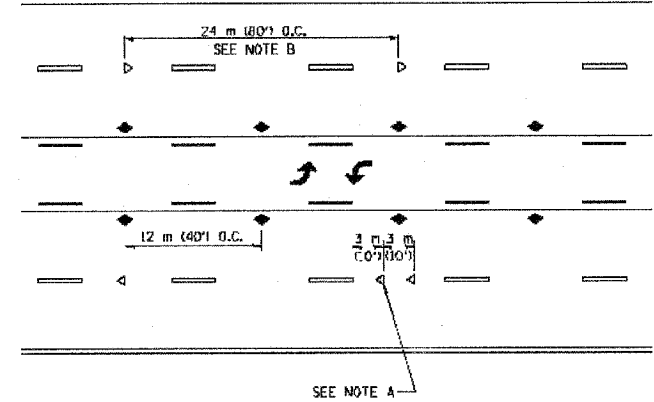




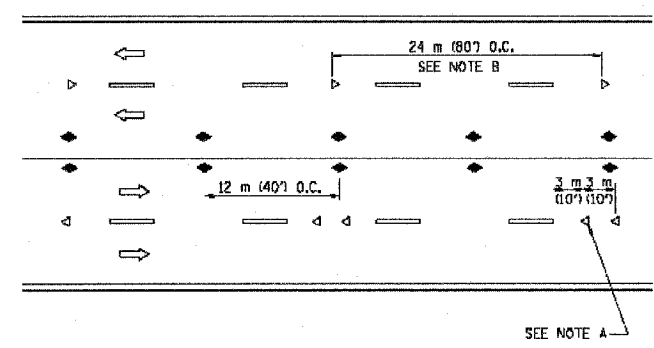
TWO-LANE/TWO-WAY



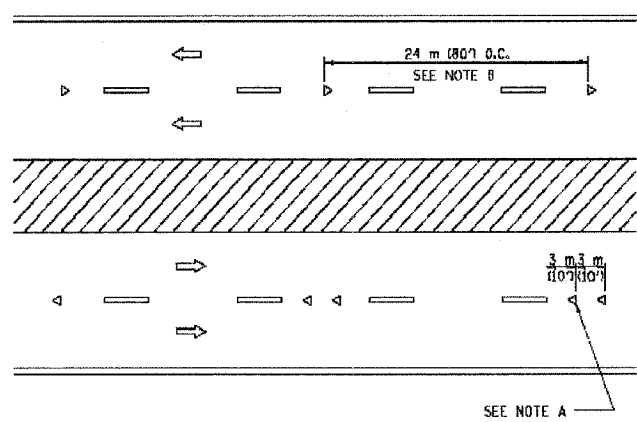
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 50 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

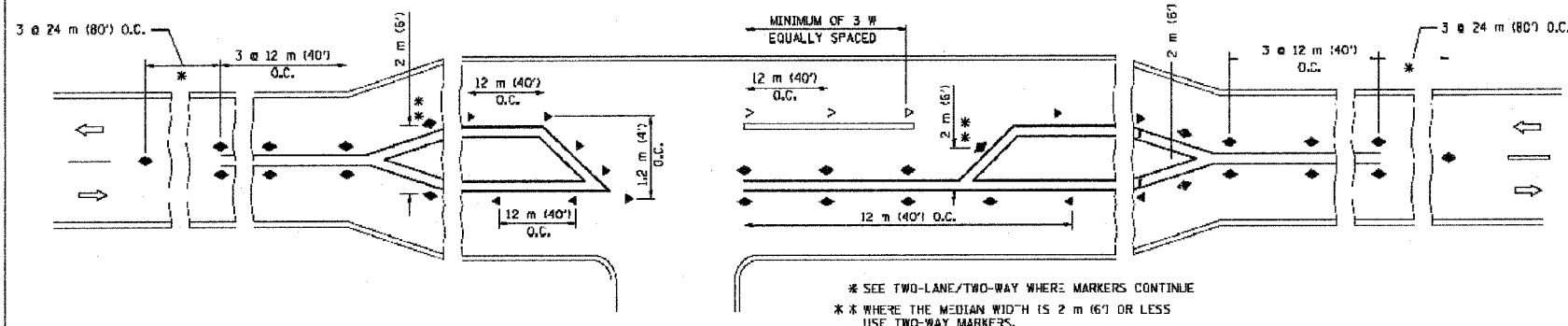
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 12 m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 20 km/h (10 M.P.H.) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 2 m (6') OR LESS USE TWO-WAY MARKERS.

All dimensions are in millimeters (Inches) unless otherwise shown.

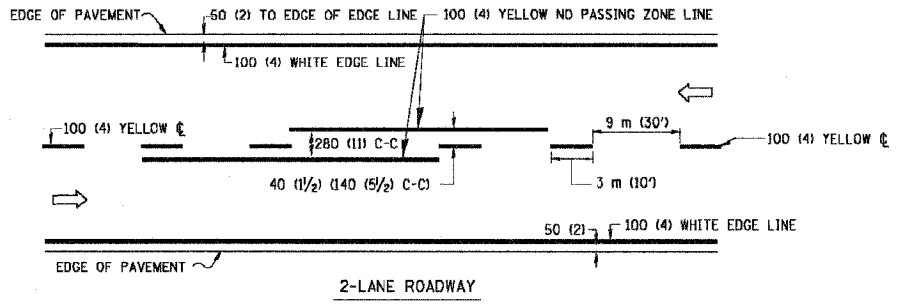
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT MARKERS  
 (SNOW-PLOW RESISTANT)

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

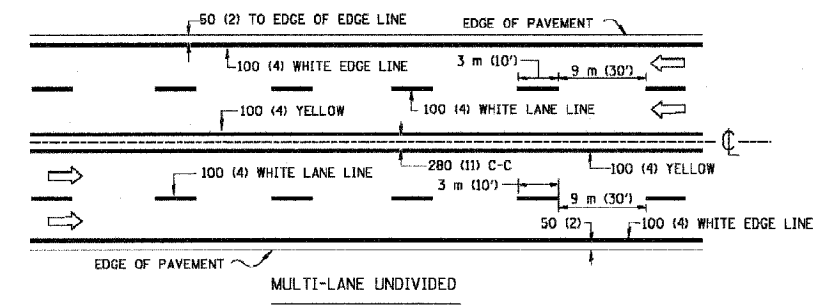
SCALE: NONE  
 DATE: 02/01/2002  
 DRAWN BY: CADD  
 CHECKED BY:

1. A. SEC.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	187
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

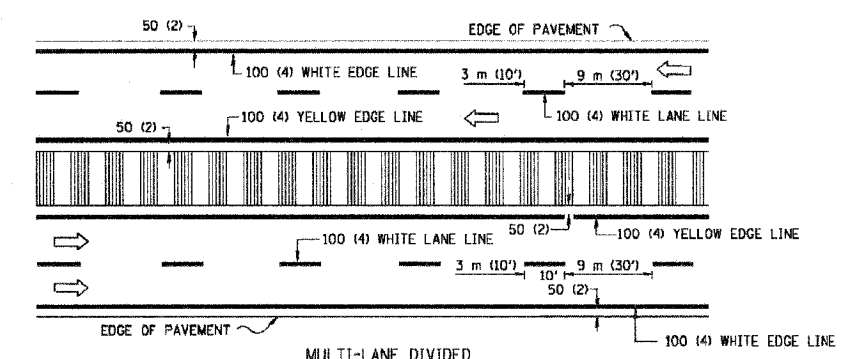
62880



2-LANE ROADWAY



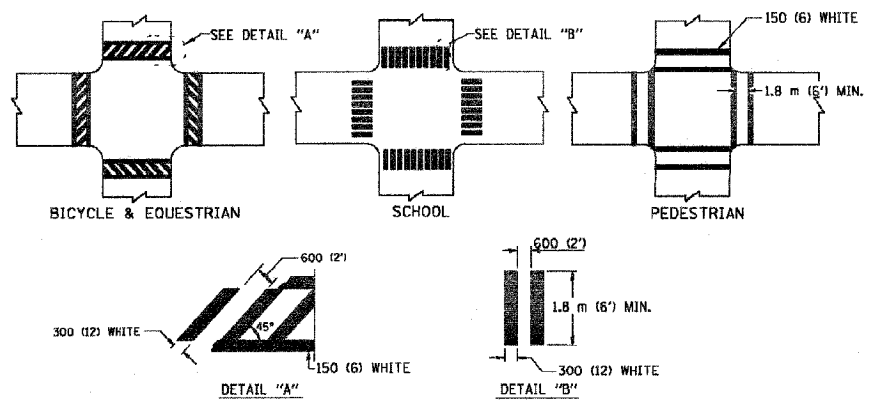
MULTI-LANE UNDIVIDED



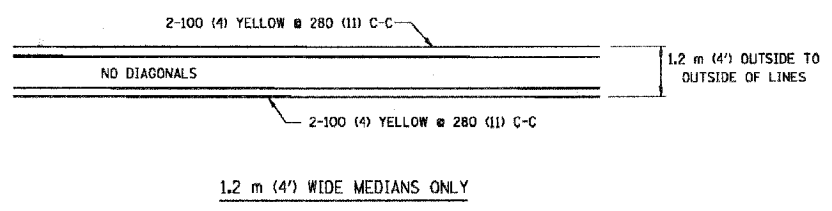
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

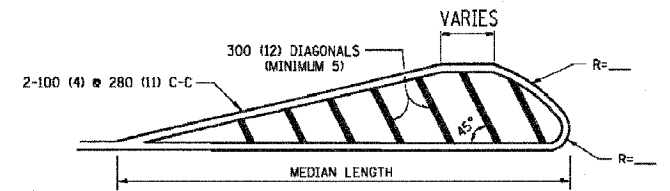
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

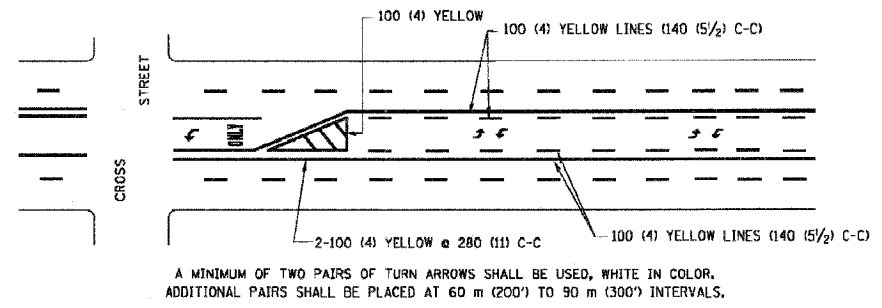


1.2 m (4') WIDE MEDIANS ONLY

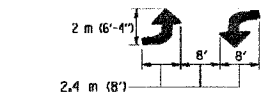


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
 DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))  
 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))  
 45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

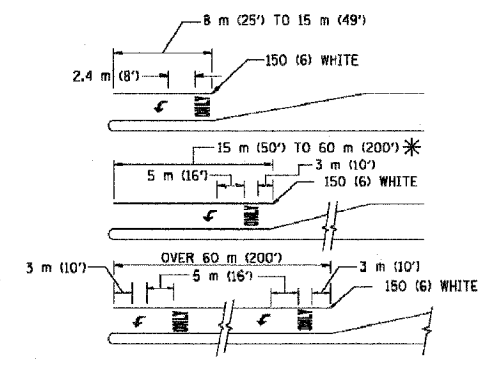


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

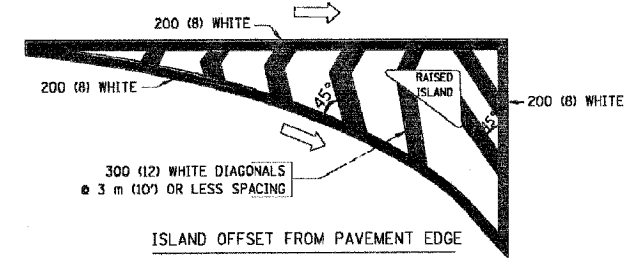
TYPICAL PAINTED MEDIAN MARKING



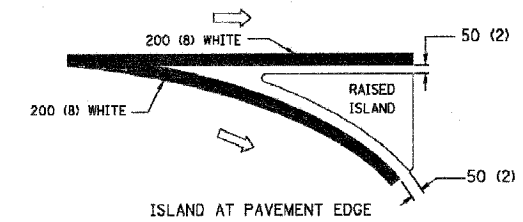
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.  
 AREA = 1.5 m<sup>2</sup> (15.6 SQ. FT.) ONLY AREA = 1.9 m<sup>2</sup> (20.8 SQ. FT.)  
 \* TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW, EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" 15 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR"=0.33m <sup>2</sup> (3.6 SQ. FT.) EACH "X"=5.0 m <sup>2</sup> (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in millimeters (inches) unless otherwise shown.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS

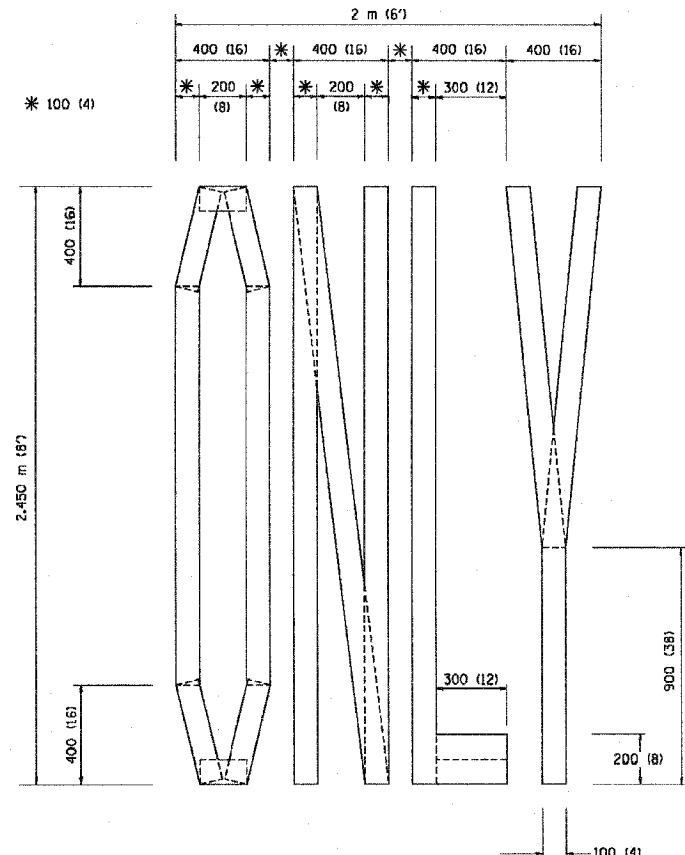
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

SCALE: NONE  
 DATE ##DATE##  
 DRAWN BY CADD  
 CHECKED BY

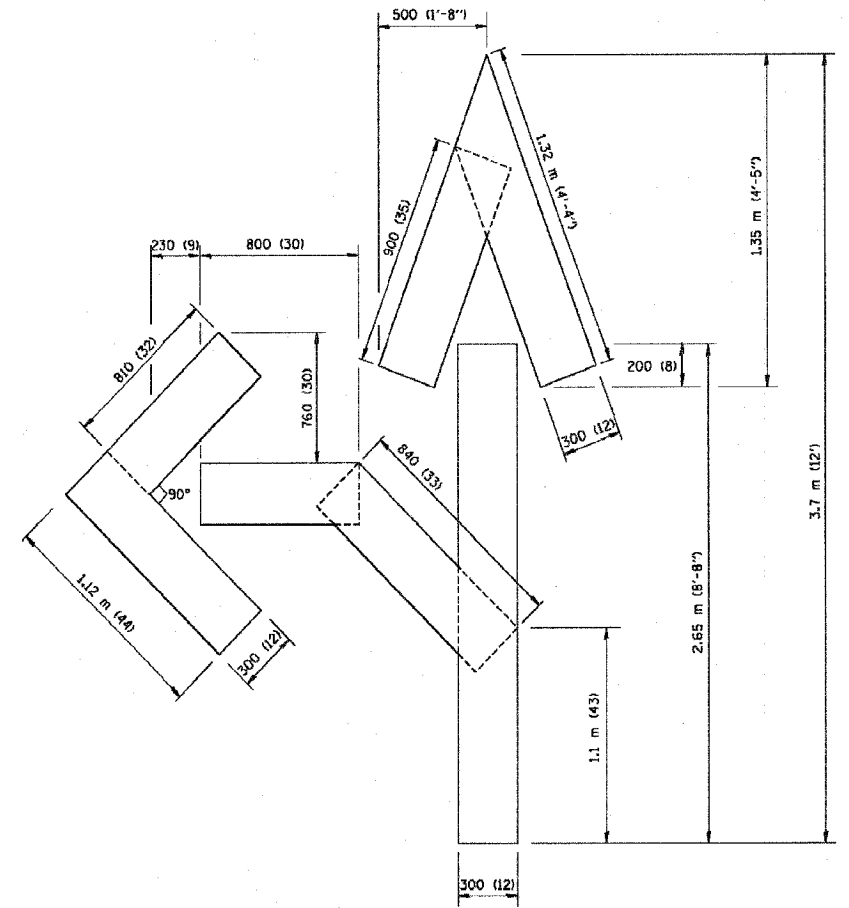
DS-8

TC-13

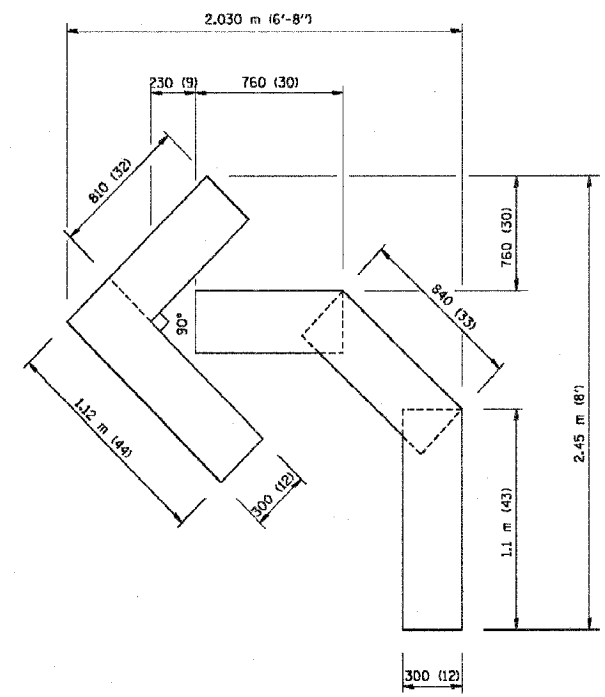
62880



QUANTITY  
 100 (4) LINE = 19.7 m (64.1 ft.)  
 1.97 sq. m (21.1 sq. ft.)



QUANTITY  
 100 (4) LINE = 25.3 m (82.5 ft.)  
 2.53 sq. m (27.5 sq. ft.)



QUANTITY  
 100 (4) LINE = 13.9 m (45.5 ft.)  
 1.39 sq. m (15.2 sq. ft.)

All dimensions are in millimeters (Inches) unless otherwise shown.

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING  
 LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

SCALE: NONE  
 DATE \*\*DATE\*\*

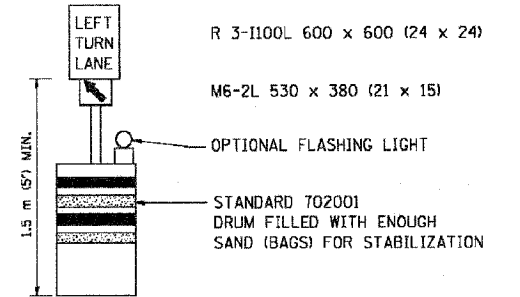
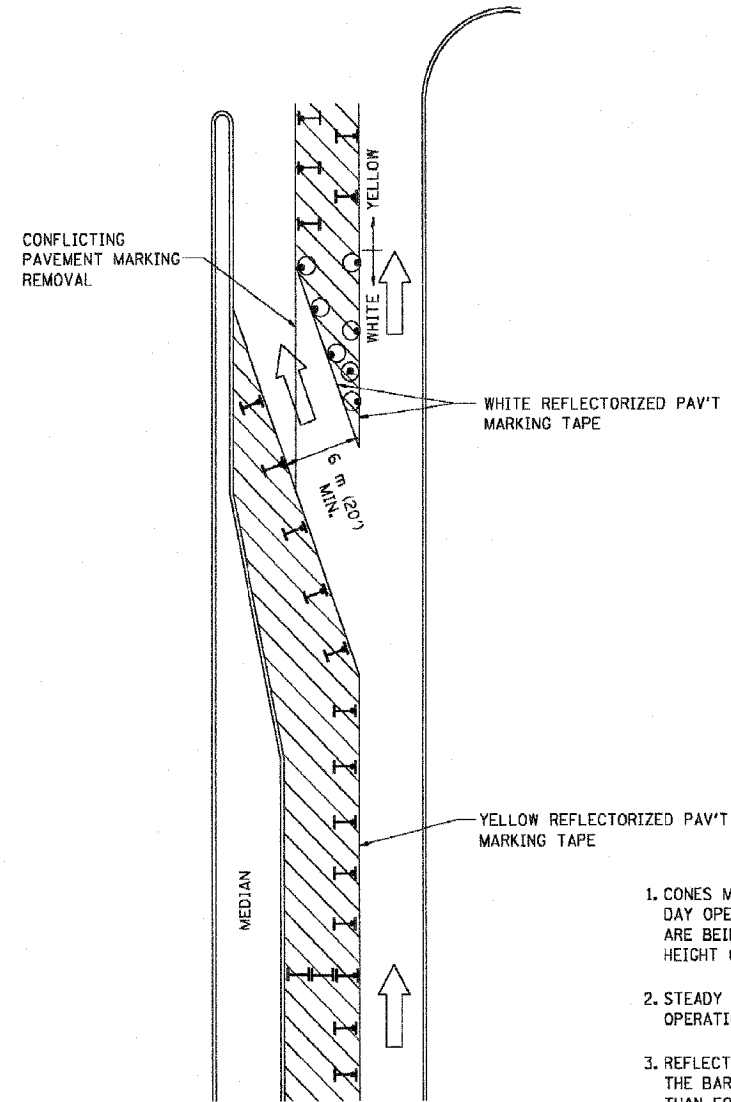
DRAWN BY CADD  
 CHECKED BY

DS-10

TC-16

F. A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	189
STA.		TO STA.		
FED. ROAD DIST. NO.	ALIGNED	FED. AID PROJECT		

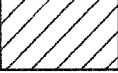





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GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 1.5 m (5').
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 600 x 600 (24 x 24) AND M6-2R 530 x 380 (21 x 15) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

All dimensions are in millimeters (inches) unless otherwise shown.

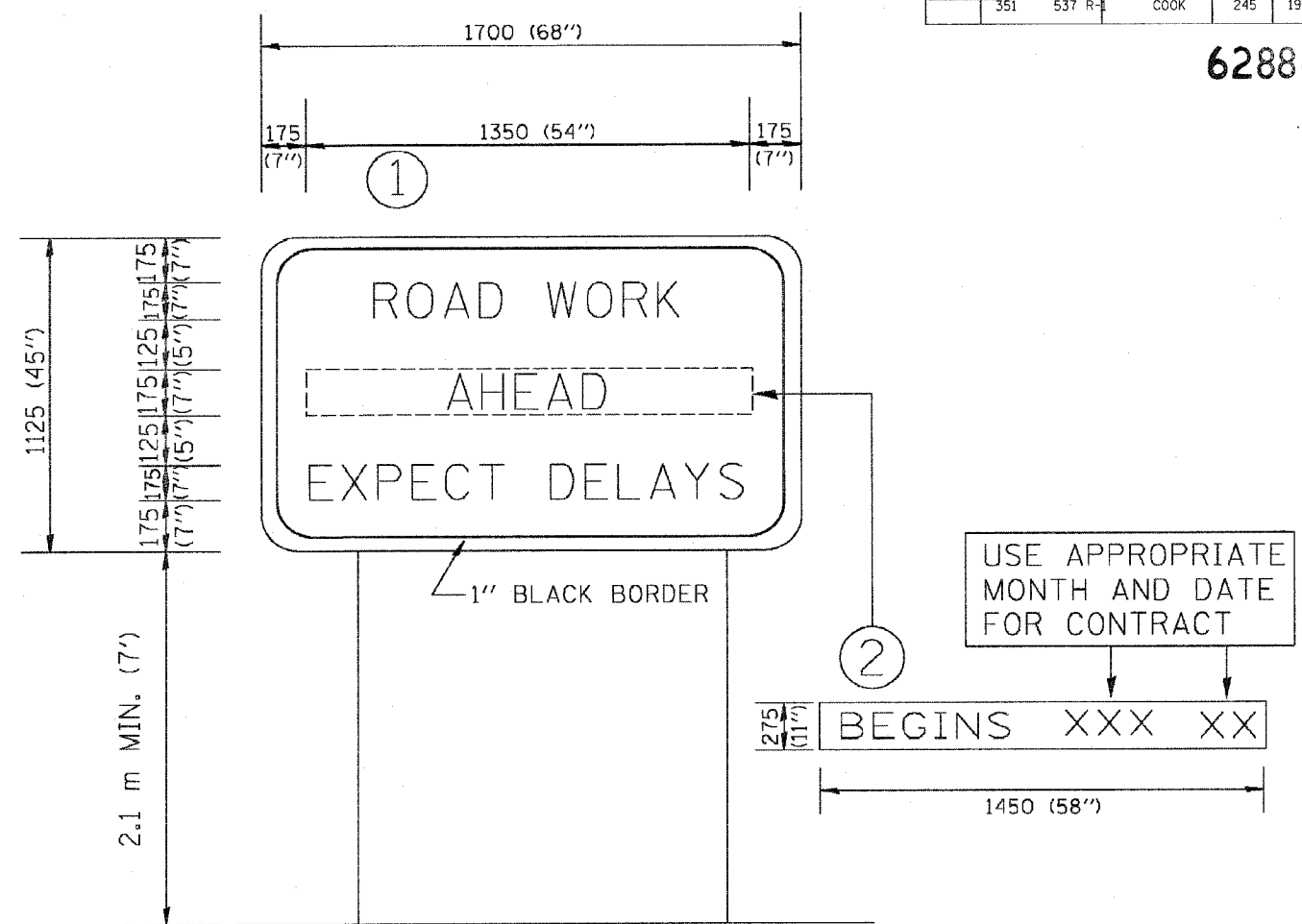
ILLINOIS DEPARTMENT OF TRANSPORTATION  
TRAFFIC CONTROL AND PROTECTION  
AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)

REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

SCALE: NONE  
DATE: \*\*DATE\*\*  
DRAWN BY  
CHECKED BY LHA

DS-9

TC-14



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 2.3 SQ. M. (25.70 SQ. FT.)

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

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TEMPORARY INFORMATION SIGNING  
 DRAWN BY: BUR. OF DESIGN  
 CHECKED BY:  
 \*\*DATE\*\*

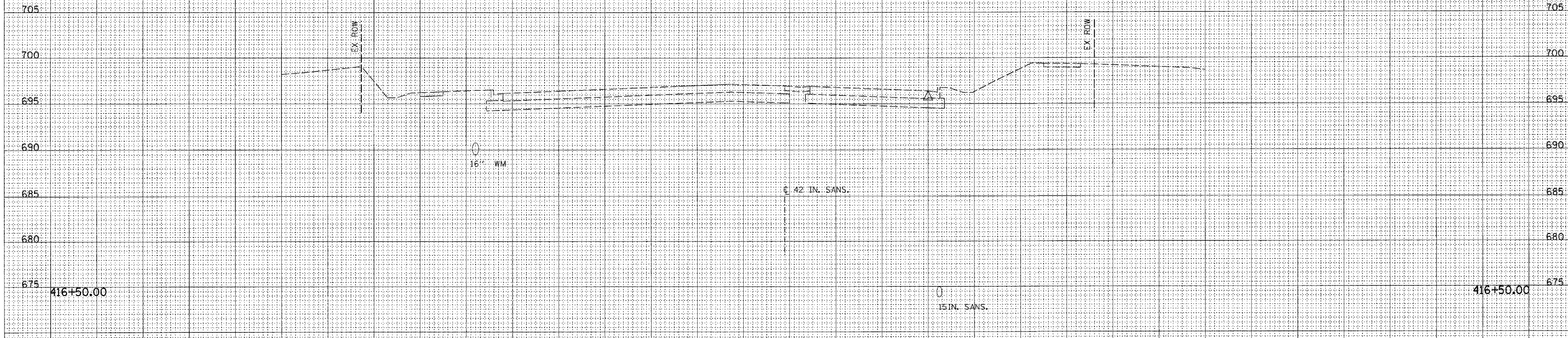
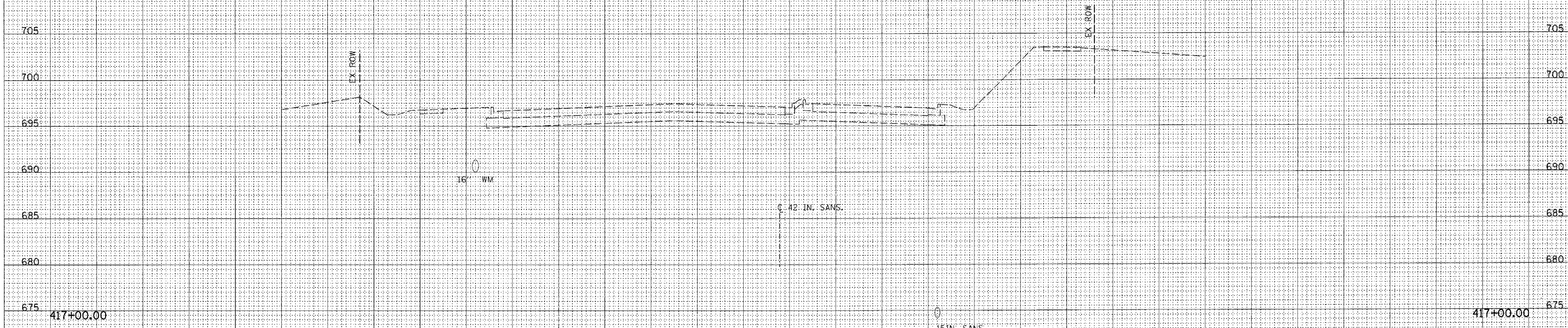
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			245	191
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62880

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

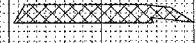


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			245	192
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

62880

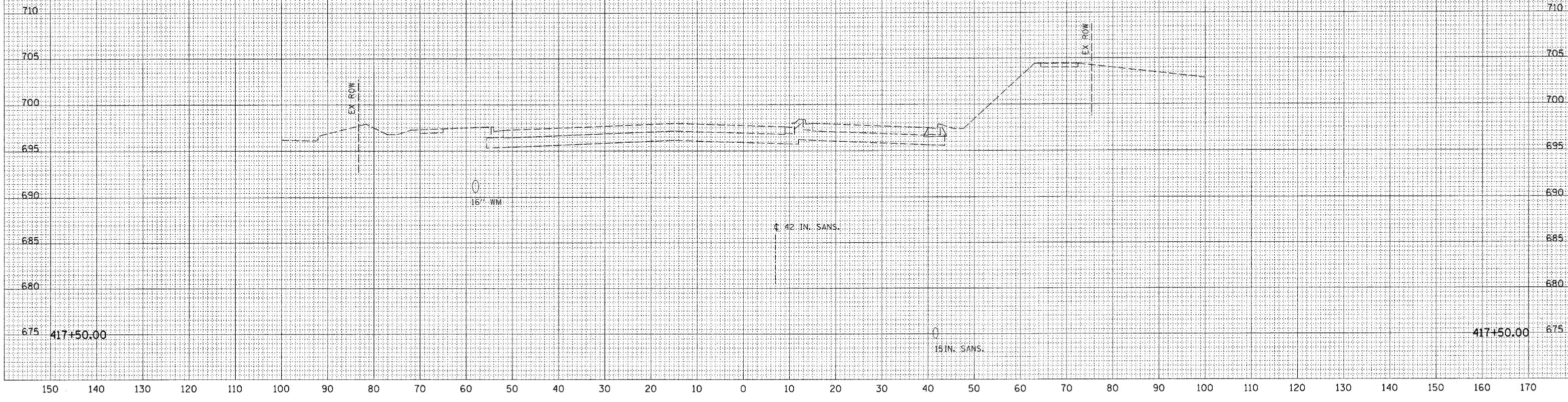
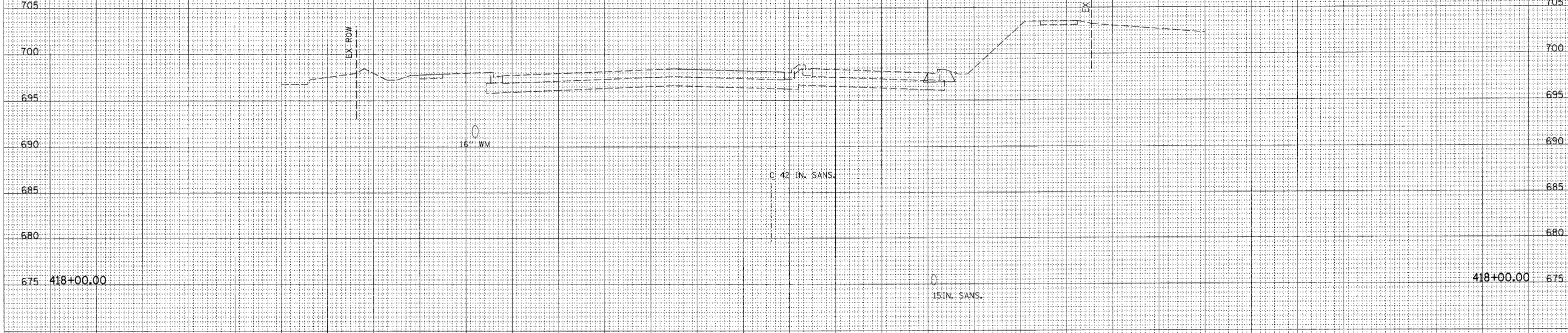
LEGEND

TEMPORARY PAVEMENT  
SHOWING SLOPE TO  
EXISTING GRADE



DATE	BY
NO.	
AREAS CHECKED	
TEMP. PLATE	
NOTE BOOK	
SURVEYED	
FINAL SURVEY	

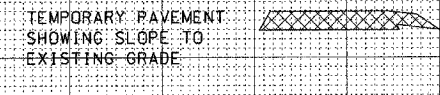
DATE	BY
NO.	
AREAS CHECKED	
TEMP. PLATE	
NOTE BOOK	
SURVEYED	
ORIGINAL SURVEY	





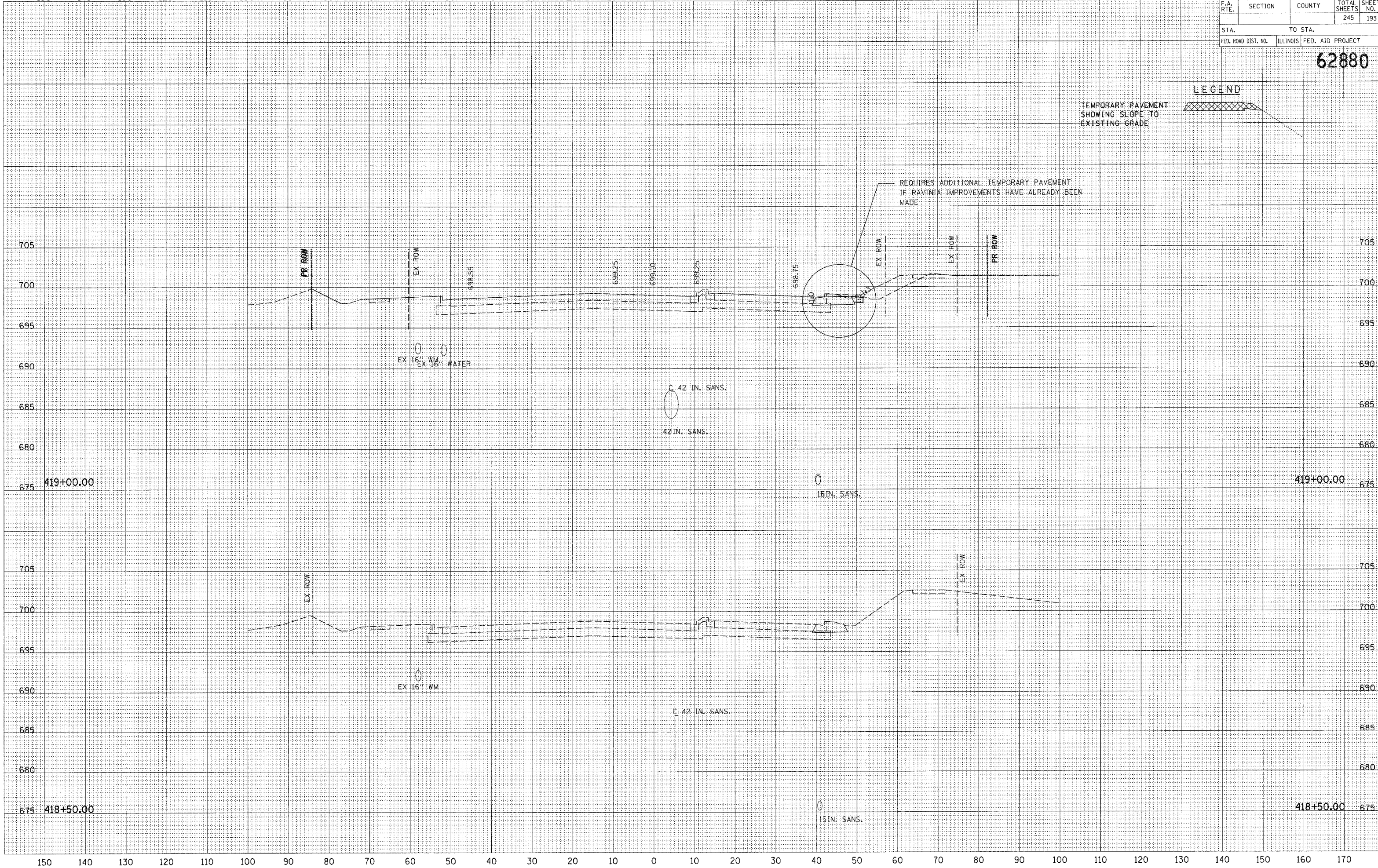
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			245	193
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
<b>62880</b>				

LEGEND



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

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



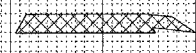


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			245	194
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

62880

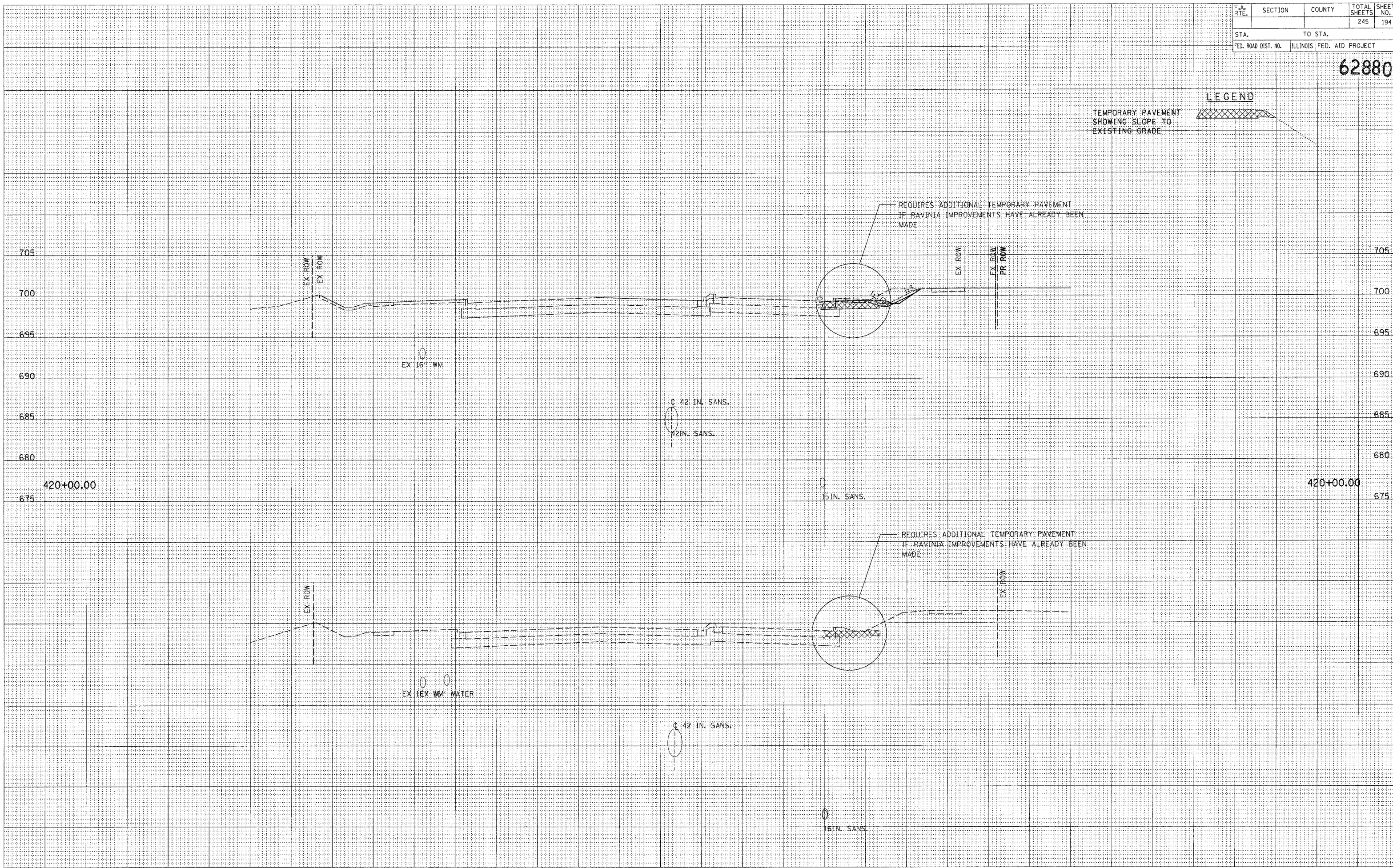
LEGEND

TEMPORARY PAVEMENT  
SHOWING SLOPE TO  
EXISTING GRADE



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

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





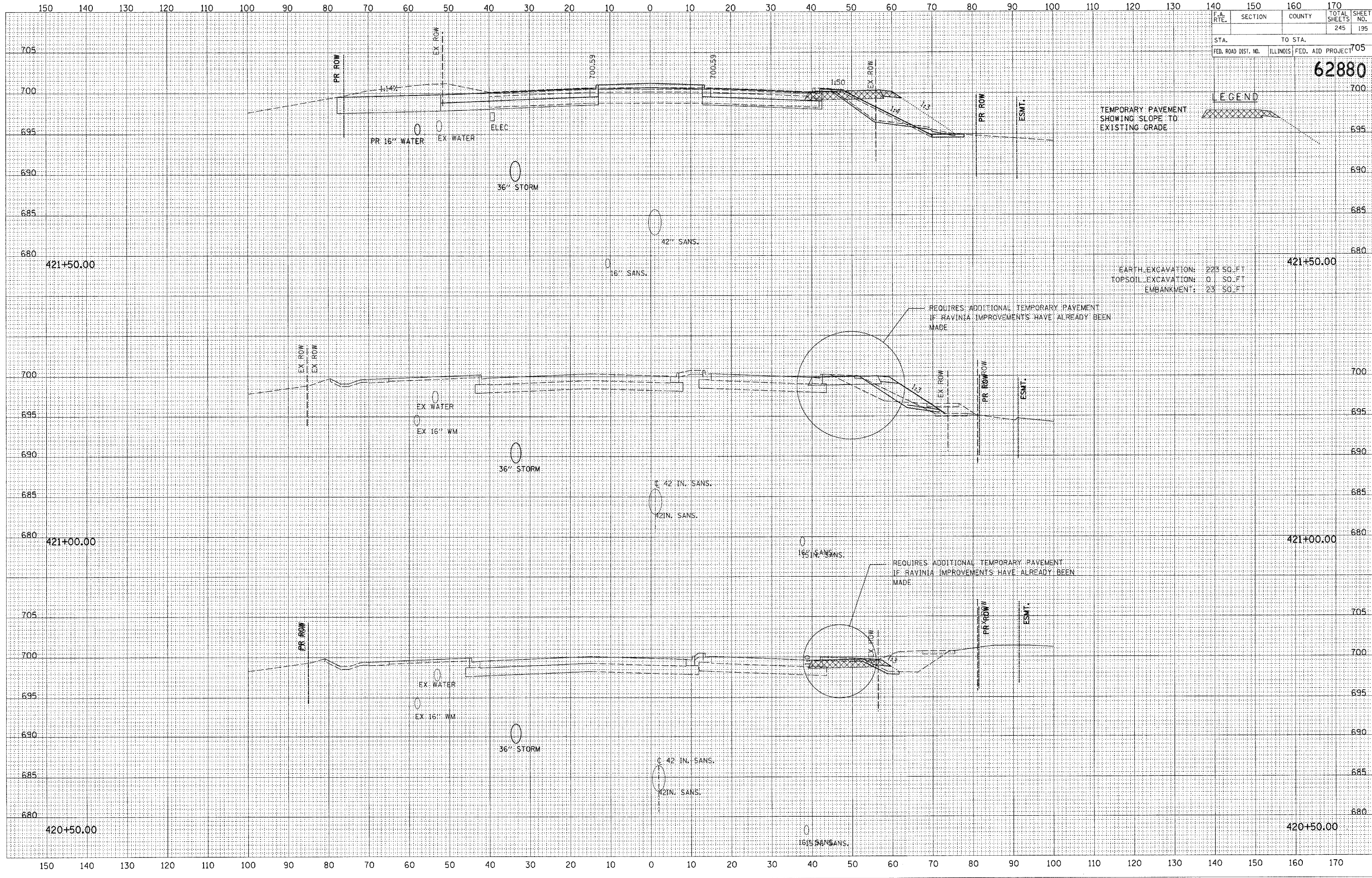
STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILLINOIS			245	195
STA. 140		TO STA. 170		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		705
				<b>62880</b>

LEGEND



TEMPORARY PAVEMENT  
SHOWING SLOPE TO  
EXISTING GRADE

EARTH EXCAVATION: 223 SQ. FT.  
TOPSOIL EXCAVATION: 0 SQ. FT.  
EMBANKMENT: 23 SQ. FT.



REQUIRES ADDITIONAL TEMPORARY PAVEMENT  
IF RAVINE IMPROVEMENTS HAVE ALREADY BEEN  
MADE

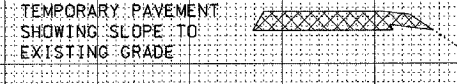
REQUIRES ADDITIONAL TEMPORARY PAVEMENT  
IF RAVINE IMPROVEMENTS HAVE ALREADY BEEN  
MADE

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

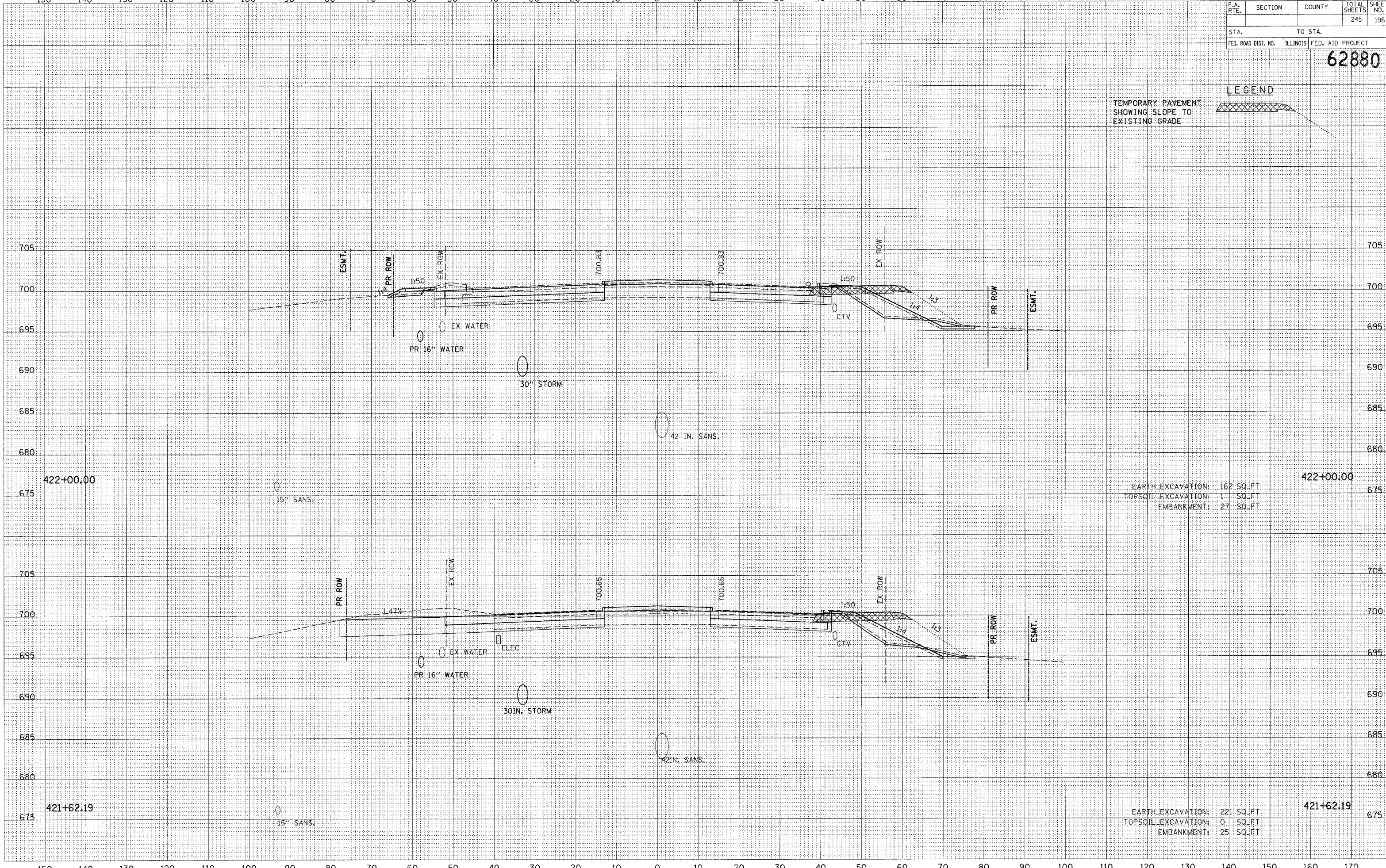


**LEGEND**



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

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



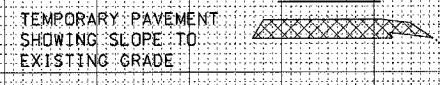
EARTH EXCAVATION: 162 SQ. FT  
 TOPSOIL EXCAVATION: 1 SQ. FT  
 EMBANKMENT: 27 SQ. FT

EARTH EXCAVATION: 221 SQ. FT  
 TOPSOIL EXCAVATION: 0 SQ. FT  
 EMBANKMENT: 25 SQ. FT



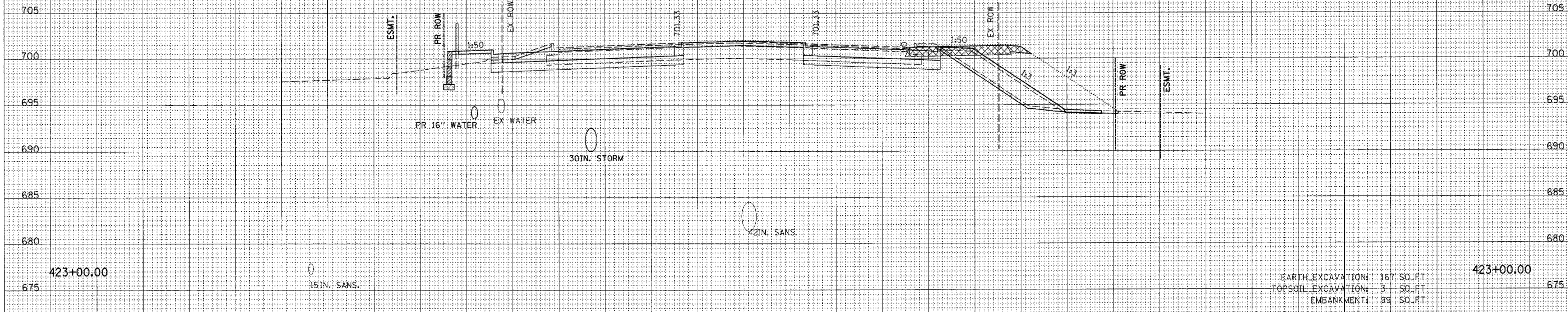
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			245	197
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
<b>62880</b>				

**LEGEND**

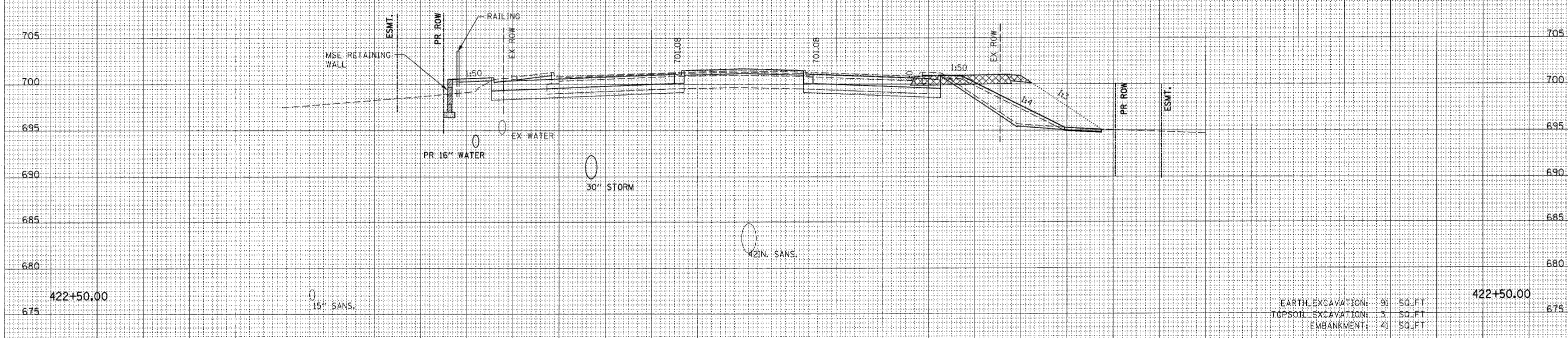


DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	REPLATE
NO.	AREAS CHECKED

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	REPLATE
NO.	AREAS CHECKED



EARTH EXCAVATION: 167 SQ. FT.  
 TOPSOIL EXCAVATION: 3 SQ. FT.  
 EMBANKMENT: 39 SQ. FT.



EARTH EXCAVATION: 91 SQ. FT.  
 TOPSOIL EXCAVATION: 3 SQ. FT.  
 EMBANKMENT: 41 SQ. FT.



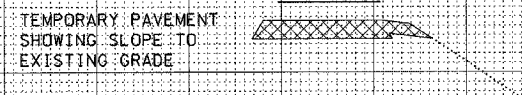
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			245	198

STA. TO STA.  
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

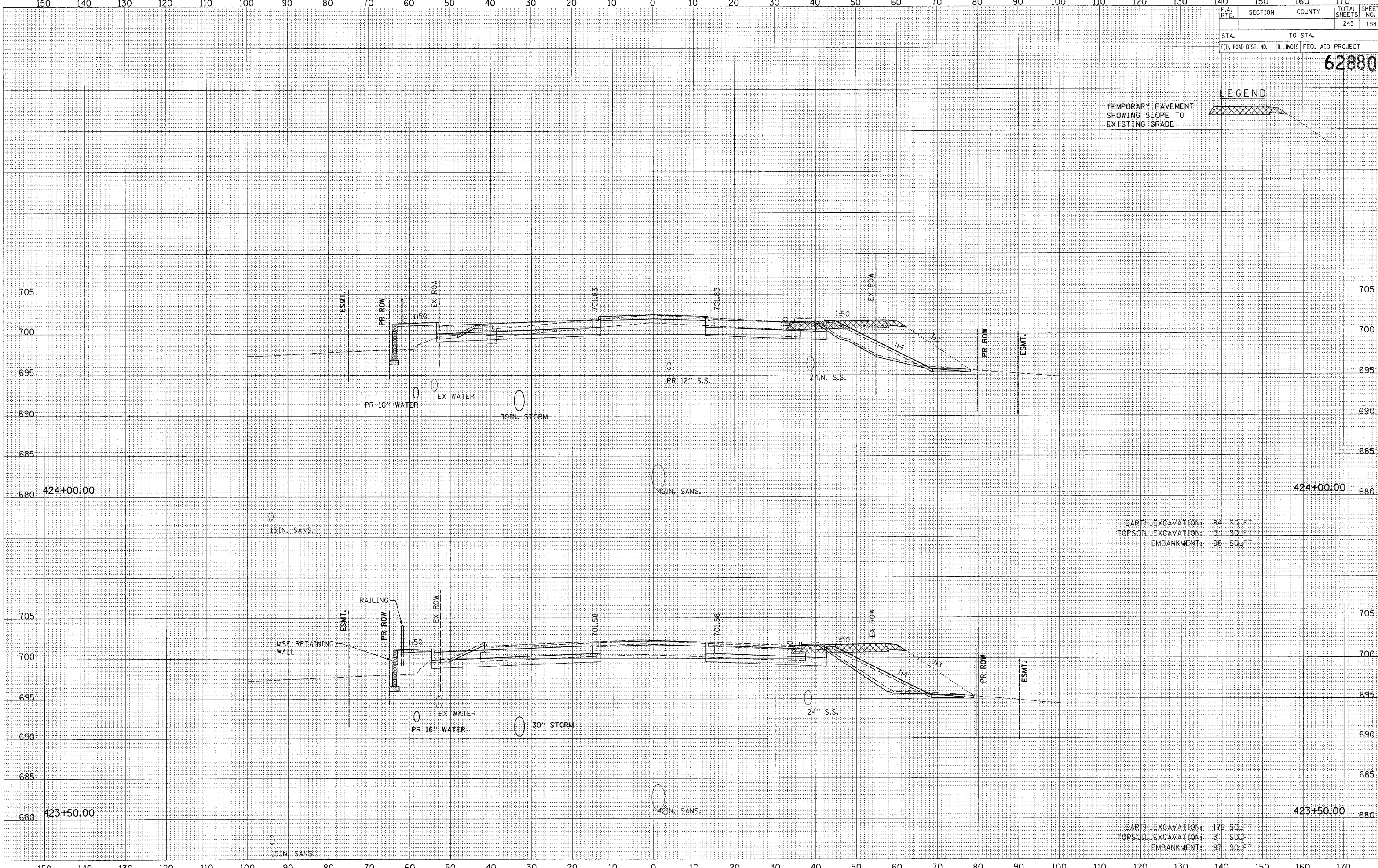
**62880**

**LEGEND**



DATE	
BY	
FINI SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	



EARTH EXCAVATION: 84 SQ. FT.  
TOPSOIL EXCAVATION: 3 SQ. FT.  
EMBANKMENT: 98 SQ. FT.

EARTH EXCAVATION: 172 SQ. FT.  
TOPSOIL EXCAVATION: 3 SQ. FT.  
EMBANKMENT: 97 SQ. FT.

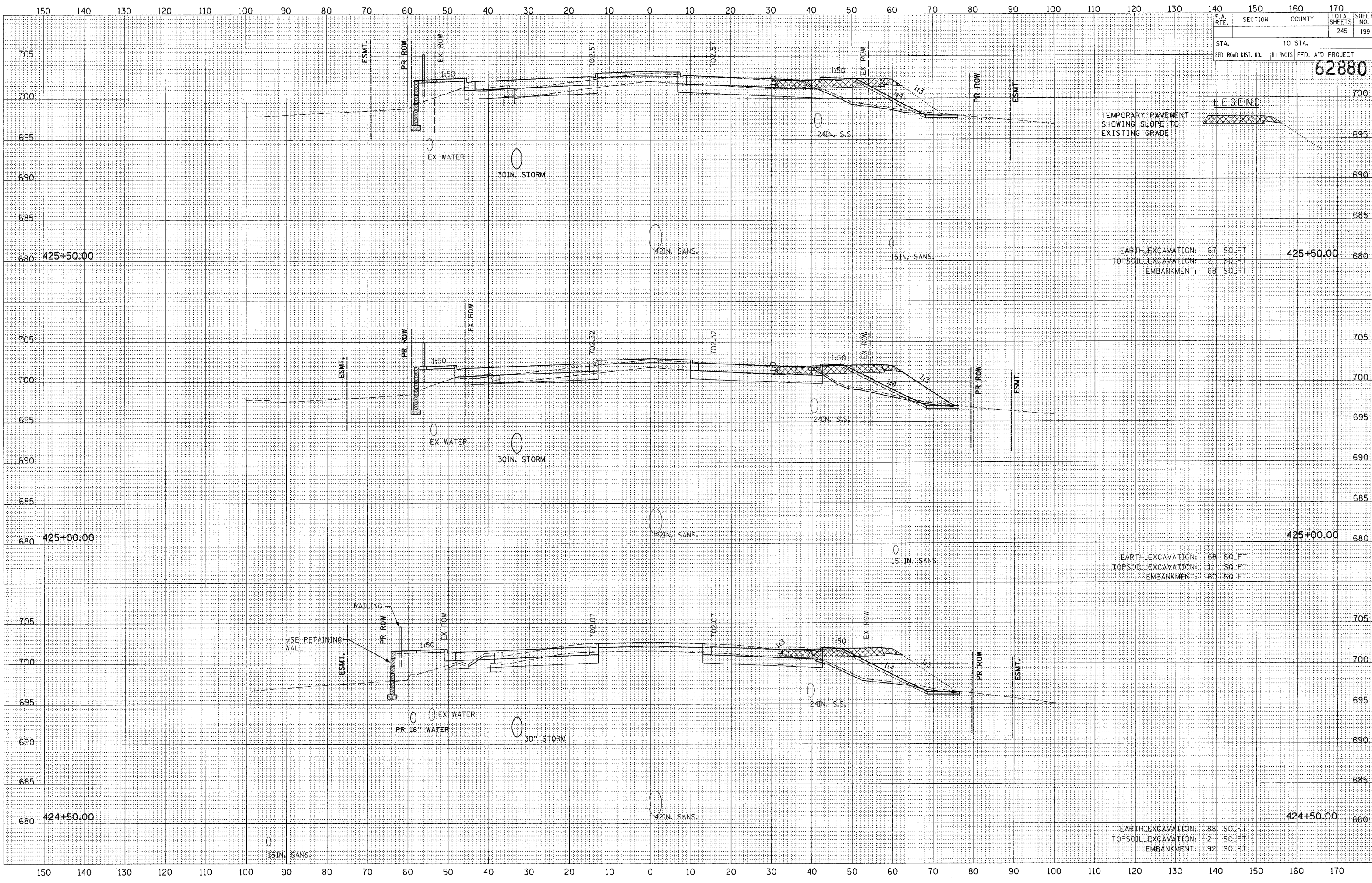
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DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 ORIGINAL SURVEY \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 ORIGINAL SURVEY \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			245	199
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		<b>62880</b>		



TEMPORARY PAVEMENT  
 SHOWING SLOPE TO  
 EXISTING GRADE

LEGEND

EARTH EXCAVATION: 67 SQ. FT.  
 TOPSOIL EXCAVATION: 2 SQ. FT.  
 EMBANKMENT: 68 SQ. FT.

EARTH EXCAVATION: 68 SQ. FT.  
 TOPSOIL EXCAVATION: 1 SQ. FT.  
 EMBANKMENT: 80 SQ. FT.

EARTH EXCAVATION: 88 SQ. FT.  
 TOPSOIL EXCAVATION: 2 SQ. FT.  
 EMBANKMENT: 92 SQ. FT.

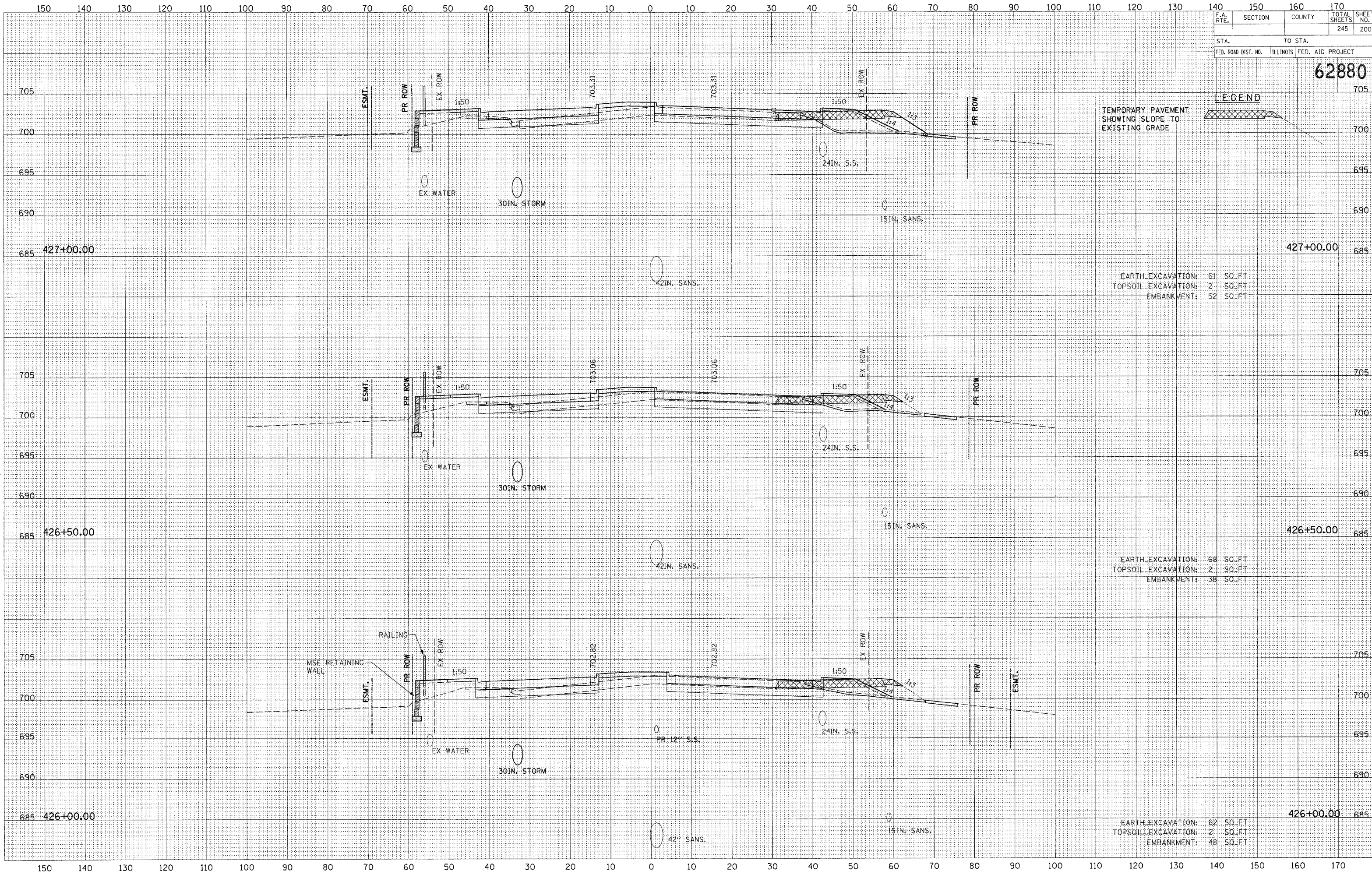


DATE	
BY	
FINAL SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
NO.	
AREAS CHECKED	

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			245	200
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62880



LEGEND

TEMPORARY PAVEMENT  
SHOWING SLOPE TO  
EXISTING GRADE

EARTH EXCAVATION: 61 SQ. FT.  
TOPSOIL EXCAVATION: 2 SQ. FT.  
EMBANKMENT: 52 SQ. FT.

EARTH EXCAVATION: 68 SQ. FT.  
TOPSOIL EXCAVATION: 2 SQ. FT.  
EMBANKMENT: 38 SQ. FT.

EARTH EXCAVATION: 62 SQ. FT.  
TOPSOIL EXCAVATION: 2 SQ. FT.  
EMBANKMENT: 48 SQ. FT.