

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8367	05-0005- 00-1Y	EFFINGHAM	18	2
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	


CONTRACT #95507

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	MILANO & GRUNLOH ENGINEERS, LLC	INDEX OF SHEETS AND STANDARDS BANKER STREET CITY OF EFFINGHAM, ILLINOIS
	84 WEST WASHINGTON P.O. BOX 997 EFFINGHAM, ILLINOIS 62401 PHONE: (217) 547-7262 (800) 677-2714 FAX #: (217) 342-3433	
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8367	05-0005- 00-PV	EFFINGHAM	18	3
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT #95507

1. The contractor shall be responsible for protecting the utility property from construction operations as outlined in Article 107.31 of the Standard Specifications. The J.U.L.I.E. number is 800-892-0123. A minimum of 48 hours advance notice is required. The utility members of J.U.L.I.E. known to be within the limits of the improvements:

<u>ELECTRIC</u> AmerenCIPS 1800 Ford Avenue Effingham, Illinois 62401 217-342-2540 888-789-2477	<u>TELEPHONE</u> Illinois Consolidated Telephone Company 121 S. 17th Street Mattoon, Illinois 61938 217-234-9971
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<u>GAS</u> AmerenCIPS 1800 Ford Avenue Effingham, Illinois 62401 217-342-2540 888-789-2477	<u>WATER, SEWER</u> City of Effingham 201 E. Jefferson Avenue Effingham, Illinois 62401 217-342-2366
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CABLE TV
MediaCom
710 W. Jefferson Avenue
Effingham, Illinois 62401
217-342-6656

2. The following rates of application have been assumed in calculating plan quantities:

Crushed Stone	2.05 Tons/CY
Bituminous Concrete	115 lbs/Inch/SY
Bituminous Materials (Prime Coat) on Aggregate Bases	0.50 Gal/SY
Nitrogen Fertilizer Nutrient	90 lbs/Acre
Phosphorus Fertilizer Nutrient	90 lbs/Acre
Potassium Fertilizer Nutrient	90 lbs/Acre
Agricultural Ground Limestone	2 Tons/Acre
Mulch, Method 2	2 Tons/Acre
Temporary Erosion Control Seeding	100 lbs/Acre

3. Before ordering storm sewers, pipe culverts or pipe drains, the Contractor shall consult the Engineer for exact lengths.

4. CURB AND GUTTER, WALKS, SLABS AND RETAINING WALLS

A. Concrete curb and gutter shall be in accordance with IDOT Std. Spec. Locate contraction joints at 20 ft on center, unless otherwise shown. Locate expansion joints at minimum 100 ft. on center, unless otherwise shown.

B. Concrete walks, islands, and other slabs shall be in accordance with IDOT Std. Spec. Unless otherwise shown, locate sidewalk contraction joints at 5 ft on center and expansions joints at 50 ft on center, unless otherwise shown, locate contraction joints in larger slabs at 15 ft intervals in each direction, reinforced with lubricated smooth dowel bars (3/4 in. diameter, 18 in. length, at 12 in. centers).

5. HANDHOLES, CONDUCTORS, ELECTRIC CABLES, AND TRAFFIC SIGNAL COMPONENTS

A. The size of the cable supplied shall be equal to or greater than the size of the cable required to carry the load between the controller and the service installation.

B. A 2 foot minimum, 6 foot desirable, horizontal clearance shall be maintained from the back of the curb to the edge of signal post foundations. A 5 foot minimum horizontal clearance shall be maintained from the back of the curb to all mast arm foundations.

C. All hardware shall be tightened and well secured. Cables shall be neatly wound in handholes. Cables shall be neatly trained in the controller cabinet.


D. All threads of bolts used in assembly of traffic signal components shall be coated with a non-lead based anti-seize compound, similar to lead plate, prior to assembly.

E. No Additional compensation will be allowed for placing conduit at greater than 2 foot minimum depth to avoid obstacles such as underground utilities.

F. The contractor is responsible for uncovering or hand digging around utilities as necessary. The cost of this work is to be included with the trench and backfill for electrical work pay item.

G. The number of conductors for electric cables as shown on the plans shall be the minimum number of conductors furnished for each location. The contractor may substitute an electric cable with more conductors than specified but no additional compensation will be made for the extra conductors.

H. All new traffic and pedestrian signal wiring shall extend from controller to signal. Splices in handholes will not be allowed.

	MILANO & GRUNLOH ENGINEERS, LLC
	14 WEST WASHINGTON P.O. BOX 897 EFFINGHAM, ILLINOIS 62401 PHONE: (217) 347-7282 (800) 677-2714 FAX #: (217) 342-3433

GENERAL NOTES
BANKER STREET
CITY OF EFFINGHAM, ILLINOIS

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Plot date: 05/22/07 at 07:40

CONTRACT #95507

ITEM #	ITEM	UNIT	QUANTITY	PARTICIPATING	NON-PARTICIPATING
XX003461	Earth Excavation, Special	L SUM	1	1	
20700220	Porous Granular Embankment	CU YD	5	5	
20800150	Trench Backfill	CU YD	25	25	
25000900	Seeding, Class 1 (Special)	ACRE	0.2	0.2	
28000510	Inlet Filters	EACH	2	2	
35100100	Aggregate Base Course, Type A	TON	62	62	
42001000	High-Early-Strength Portland Cement Concrete Pavement 9"	SQ YD	219	219	
42001200	Pavement Fabric	SQ YD	219	219	
42001300	Protective Coat	SQ YD	375	375	
42400100	Portland Cement Concrete Sidewalk 4 Inch	SQ FT	825	825	
42400800	Detectable Warnings	SQ FT	36	36	
44000200	Driveway Pavement Removal	SQ YD	90	90	
44000500	Combination Curb and Gutter Removal	FOOT	185	185	
44000600	Sidewalk Removal	SQ FT	370	370	
44002020	Concrete Median Surface Removal	SQ FT	193	193	
44002212	Hot-Mix Surface Removal Over Patches, 3"	SQ YD	112	112	
50300225	Concrete Structures	CU YD	20	20	
50300254	Rubbed Finish	SQ FT	42	42	
50800105	Reinforcement Bars	POUND	2377	2377	
55100500	Storm Sewer Removal 12"	FOOT	41	41	
60235700	Inlets, Type A, Type 3 Frame and Grate	EACH	1	1	
60255500	Manholes to be Adjusted	EACH	4	4	
60260300	Inlets to be Adjusted with New Type 1 Frame, Open Lid	EACH	1	1	
60260500	Inlets to be Adjusted with New Type 3 Frame and Grate	EACH	1	1	
60266600	Valve Boxes to be Adjusted	EACH	2	2	
60605000	Combination Concrete Curb and Gutter, Type B-6.24	FOOT	120	120	
60618300	Concrete Median Surface, 4 Inch	SQ FT	193	193	
67100100	Mobilization	L SUM	1	1	
70102620	Traffic Control and Protection, Standard 701501	L SUM	1	1	
70102625	Traffic Control and Protection, Standard 701606	L SUM	1	1	
70102635	Traffic Control and Protection, Standard 701701	L SUM	1	1	
70102640	Traffic Control and Protection, Standard 701801	L SUM	1	1	
70103700	Traffic Control Complete	L SUM	1	1	
* 78005100	Epoxy Pavement Marking - Letters and Symbols	SQ FT	32	32	
* 78005130	Epoxy Pavement Marking - Line 6"	FOOT	252	252	
* 78005180	Epoxy Pavement Marking - Line 24"	FOOT	10	10	
* 78300105	Pavement Marking Removal	FOOT	171	171	
* 81012600	Conduit in Trench, 2" Dia., PVC	FOOT	171	171	
* 81013000	Conduit in Trench, 4" Dia., PVC	FOOT	29	29	
* 81021330	Conduit Pushed, 2" Dia., PVC	FOOT	10	10	
* 81021370	Conduit Pushed, 4" Dia., PVC	FOOT	100	100	

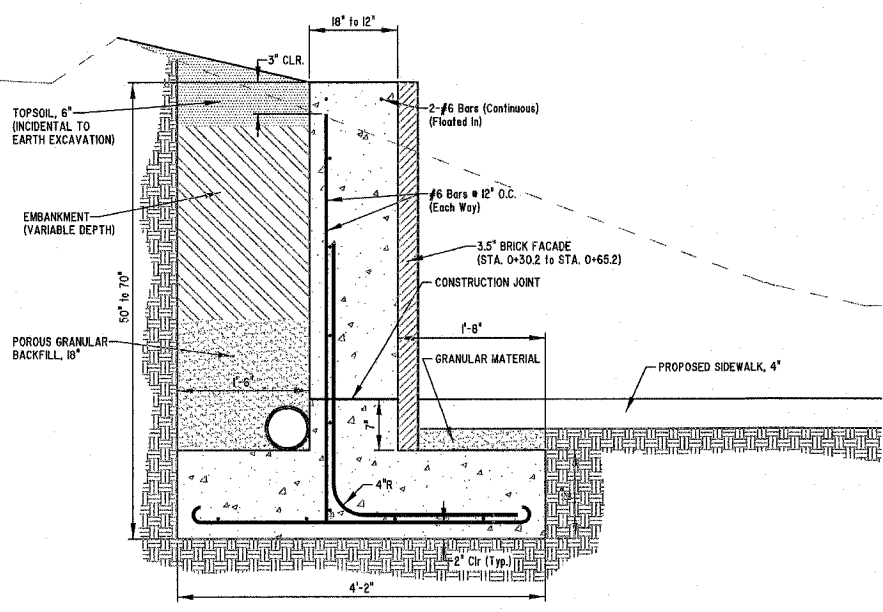
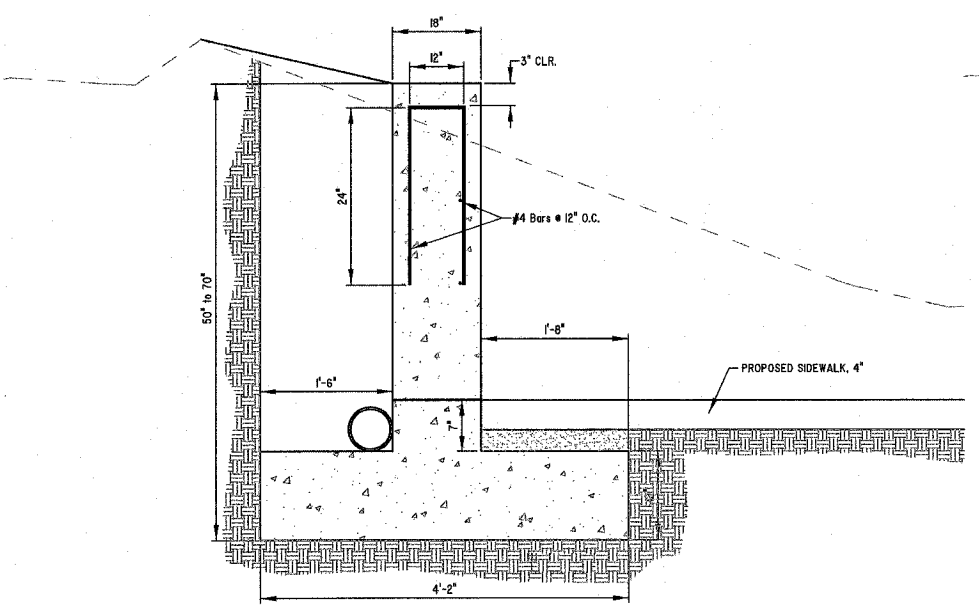
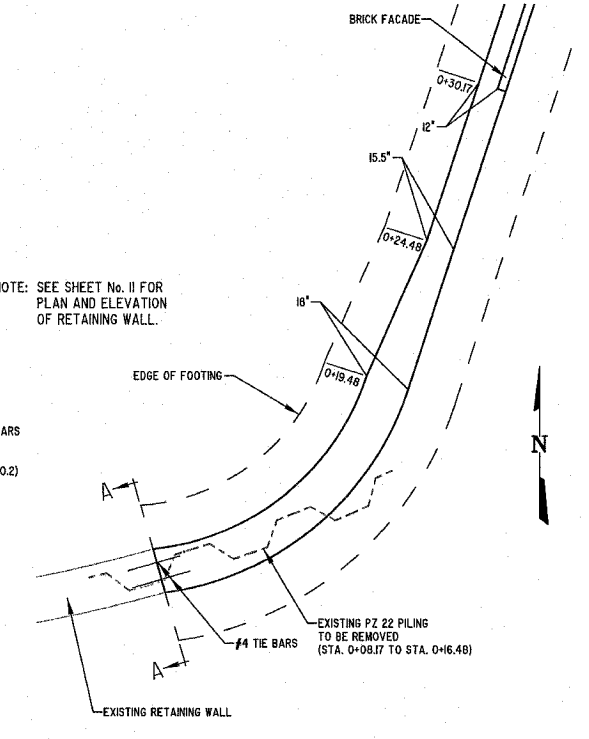
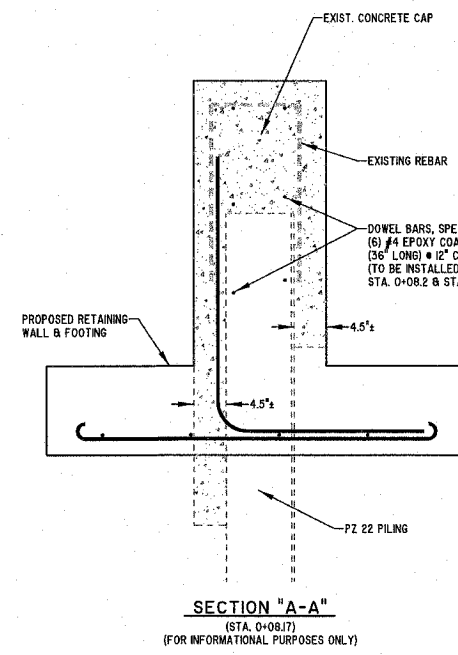
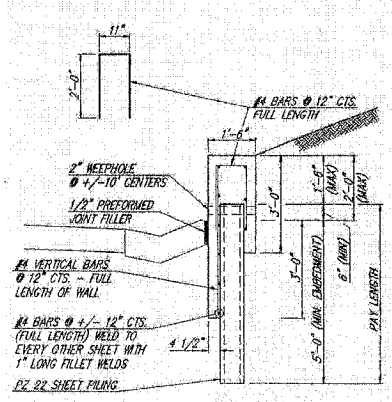
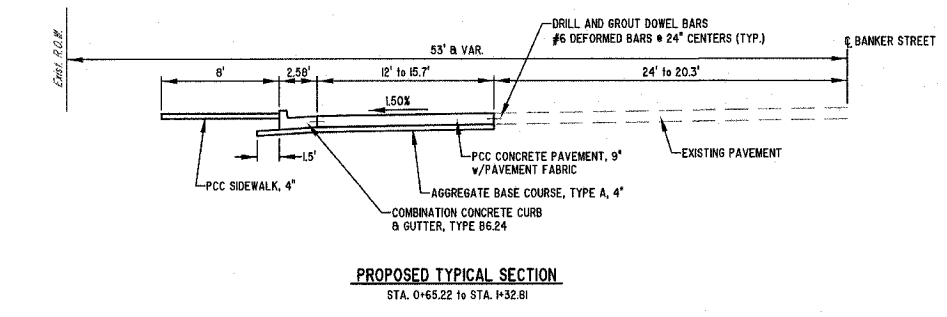
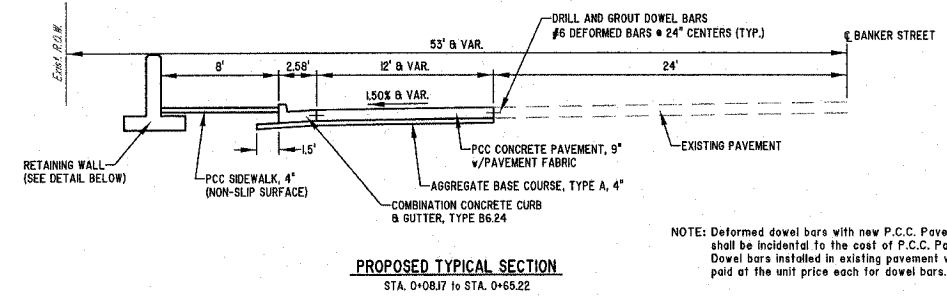
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ITEM #	ITEM	UNIT	QUANTITY	PARTICIPATING	NON-PARTICIPATING
* 81400100	Handhole	EACH	3	3	
* 81400730	Handhole, Composite Concrete	EACH	1	1	
* 81603045	Unit Duct, 600V, 3-1C No. 6 1/C No. 6 Ground, (XLP-Type Use), 1" Dia. Polyethylene	FOOT	205	205	
* 81900200	Trench and Backfill for Electrical Work	FOOT	200	200	
* 87301245	Electric Cable in Conduit, Signal No. 14 5C	FOOT	90	90	
* 87301255	Electric Cable in Conduit, Signal No. 14 7C	FOOT	310	310	
* 87301305	Electric Cable in Conduit Lead-in, No. 14 1 Pair	FOOT	240	240	
* 87502700	Traffic Signal Post, Aluminum 16 FT.	EACH	2	2	
* 87600100	Pedestrian Push-Button Post, Type 1	EACH	1	1	
* 87800100	Concrete Foundation, Type A	FOOT	3	3	
* 87900100	Drill Existing Foundation	EACH	1	1	
* 87900200	Drill Existing Handhole	EACH	1	1	
* 88040150	Signal Head, Polycarbonate, LED, 1-Face, 5-Section, Bracket Mounted	EACH	2	2	
* 88200410	Traffic Signal Backplate, Louvered, Formed Plastic	EACH	2	2	
* 88500100	Inductive Loop Detector	EACH	1	1	
* 88600100	Detector Loop, Type 1	FOOT	204	204	
* 89500100	Relocate Existing Signal Head	EACH	2	2	
* 89500200	Relocate Existing Pedestrian Signal Head	EACH	2	2	
* 89500400	Relocate Existing Pedestrian Push-Button	EACH	2	2	
* 89502100	Rebuild Existing Signal Head	EACH	2	2	
* 89502110	Rebuild Existing Pedestrian Signal Head, LED	EACH	2	2	
* 89502200	Modify Existing Controller	EACH	1	1	
* 89502210	Modify Existing Controller Cabinet	EACH	1	1	
* 89502375	Remove Existing Traffic Signal Equipment	EACH	1	1	
* 89502380	Remove Existing Handhole	EACH	1	1	
550A0050	Storm Sewers, Class A, Type 1, 12"	FOOT	40	40	
X0323426	Sediment Control, Drainage Structure Inlet Filter Cleaning	EACH	2	2	
* XX003163	Emergency Vehicle Priority System	EACH	1		1
XX006067	Pipe Underdrains, Perforated PVC, 6 Inch	FOOT	60	60	
XZ188000	Retaining Wall Removal	L SUM	1	1	
Z0017100	Dowel Bars	EACH	125	125	
XX006990	Remove and Replace Existing Gutter, Gutter Outlet & Inlet (Special) with Type 1 Frame, Open Lid	L SUM	1	1	
XX006991	Brick Facade	SQ FT	200	200	
XX006992	Dowel Bars, Special	EACH	12	12	

* SPECIALTY ITEMS

	MILANO & GRUNLOH ENGINEERS, LLC	SUMMARY OF QUANTITIES BANKER STREET CITY OF EFFINGHAM
	14 WEST WASHINGTON P.O. BOX 897 EFFINGHAM, ILLINOIS 62401	
	PHONE: (217) 547-7282 (800) 677-2714 FAX #: (217) 542-3433	
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CONTRACT #95507



BAR SCHEDULE					
Location	Size	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Total Length in Foot
Wall Horizontal	#6	0+08.2 to 0+30.2		0+30.2 to 0+65.2	322
			8 @ 21'-6"	8 @ 34'-6"	
Footing Horizontal *	#6	0+08.2 to 0+31.87		0+30.2 to 0+65.2	346
			4 @ 23'-0"	4 @ 34'-6"	
Vertical Hooked (Footing)	#6	24 @ varies	0	36 @ Varies	278
Bent	#6	3'-9" to 4'-6"		3'-9" to 5'-6"	300
			24 @ 5'-0"	36 @ 5'-0"	
#6 Bars Total Length					1556 FT
Weight: 1556' x 1.502 #/ft					2337 LBS
Concrete Structures					20 CY
Rubbed Finish					42 SF
Brick Façade					200 SF
Porous Granular Embankment					5 CY

* SEE SHEET No. 11

BAR SCHEDULE IN FACE OF WALL STA. 0+08.2 TO STA. 0+16.5			
Location	Size	Sta. to Sta.	Total Length in Foot
Horizontal	#4	1'-Centers	15
U Shape Bars	#4	9 @ 5'-0"	45
Total Length			60 FT
Weight: 60' x 0.668 #/ft.			40 LBS

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 Fax #: (217) 342-3433
 Web Address: www.mgeengineers.com
 Single Firm #: 194-003100
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TYPICAL SECTIONS
 BANKER STREET
 CITY OF EFFINGHAM
 EFFINGHAM COUNTY, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8367	05-0005-00-PV	EFFINGHAM	18	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT #95507

STORM SEWER REMOVAL		12" VCP FOOT
LOCATION		
Rt. Sta. 0+21.7 to Lt. Sta. 0+60.2		41

MANHOLES TO BE ADJUSTED		EACH
LOCATION		
Rt. Sta. 1+13.2		1
Lt. Sta. 1+13.3		1
Rt. Sta. 1+22.1		1
Rt. Sta. 1+24.2		1
TOTAL		4

INLETS TO BE ADJUSTED WITH NEW TYPE 3 FRAME AND GRATE		EACH
LOCATION		
Rt. Sta. 1+02.5		1

INLETS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID		EACH
LOCATION		
Rt. Sta. 0+21.7		1

INLET, TYPE A, TYPE 3 FRAME AND GRATE		EACH
LOCATION		
8.88 Rt. STA. 0+34.84		1

STORM SEWER			
LOCATION	12" DUCTILE IRON, CL 50 FOOT	6" PIPE UNDERDRAIN FOOT	TRENCH BACKFILL CU YD
Rt. Sta. 0+21.7 to 0+34.8	12		5
Rt. Sta. 0+34.8 to Lt. Sta. 0+60.2	28		20
Lt. Sta. 0+07.1 to 0+85.2		60	
TOTAL	40	60	25

EROSION CONTROL		
LOCATION	INLET FILTERS EACH	SEDIMENT CONTROL EACH
Rt. STA. 0+34.8	1	1
Lt. Sta. 0+60.2	1	1
TOTAL	2	2

VALVE BOXES TO BE ADJUSTED		EACH
LOCATION		
Rt. Sta. 0+52.0		1
Lt. Sta. 0+80.0		1
TOTAL		2

ELECTRICAL (STREET LIGHTING)			
ITEM	UNIT	QUANTITY	LOCATION
Conduit in Trench 2" diameter PVC	FT	110	9.5' LT STA. 0+26.6 to 11.5' RT STA 1+29.77
Conduit Pushed 2" Diameter PVC	FT	10	9' LT STA 0+07.4 TP 9.5' LT STA 0+26.6
Handhole	EACH	1	9' LT STA 0+07.4
Trench and Backfill for Electrical Work	FT	110	9.5' LT STA 0+26.6 TO 11.5' RT STA 1+29.77
Unit Duct, 600V, 3-1C No. 6, 1/C No. 6 Ground, (XLP-Type Use), 1" Polyethylene	FT	205	9' LT STA 0+0.074 TO EXISTING HANDHOLE 17' RT STA 201+00

DEMOLITION			
ITEM	UNIT	QUANTITY	LOCATION
Driveway Pavement Removal	SQ YD	90	RT STA. 0+52 TO RT STA. 1+02
Combination Curb and Gutter Removal	FT	185	RT STA. 0+08.2 TO RT STA 0+52 AND RT STA 0+08.2 TO RT STA 0+62 AND RT STA 1+09 TO 1+34
Hot Mix Surface Removal Over Patches, 3"	SQ YD	112	RT STA 1+01 TO 1+27
Sidewalk Removal	SQ FT	370	RT STA 0+08.2 TO RT STA 0+62
Retaining Wall Removal	LS	1	RT STA 0+08.2 TO RT STA 0+19.5
Remove and Replace Existing Gutter, Gutter Outlet and Inlet (Special) with Type 1 Frame, Open Lid	LS	1	LT STA 0+43 TO ST STA 0+62
Concrete Median Surface Removal	SQ FT	193	LT STA 111+88.4 TO LT STA 112+11.9

PAVING			
ITEM	UNIT	QUANTITY	LOCATION
Combination Concrete Curb and Gutter, Type B-6.24	FT	120	RT STA 0+8.2 TO LT STA 1+16
High Early Strength Portland Cement Concrete Pavement 9"	SQ YD	219	RT STA 0+16 TO RT STA 1+32.81
Pavement Fabric	SQ YD	219	SEE PCC PAVEMENT 9"
Protective Coat	SQ YD	375	ALL PAVED SURFACES
Portland Cement Concrete Sidewalk 4"	SQ FT	825	RT STA 0+08.2 TO STA 1+11
Detectable Warnings	SQ FT	36	RT STA 0+15 AND RT STA 1+10
Concrete Median Surface, 4 Inch	SQ FT	193	LT STA 111+88.4 TO LT STA 112+11.9
Dowel Bars	EACH	125	LT STA 112+91 TO LT STA 114+22

AGGREGATE BASE COURSE, TYPE A			
UNIT	QUANTITY	LOCATION	
TON	50	Under PCC Pavement 9"	
TON	12	Under CCC&G B-6.24	
TOTAL	62		

PAVEMENT MARKING			
ITEM	UNIT	QUANTITY	LOCATION
Symbol (Right Turn Arrow)	SQ FT	15.6	LT STA. 113+35
Symbol (Right Turn Arrow)	SQ FT	15.6	LT STA. 113+79
TOTAL		31.2	
Line, 6" (White) (Crosswalks)	FOOT	182	LT STA 112+45 TO LT STA 113+09
Line, 6" (White) (Lane Line)	FOOT	70	LT STA 113+21 TO LT STA 113+91
TOTAL		252	
Line, 24" (White) (Stop Bar)	FOOT	10	LT STA 113+20

PAVEMENT MARKING REMOVAL			
ITEM	UNIT	QUANTITY	LOCATION
Line, 6" (White) (Crosswalks)	FOOT	171	LT STA. 112+28 TO LT STA 113+00

TRAFFIC SIGNAL BILL OF MATERIALS			
ITEM #	ITEM	QUANTITY	UNIT
1	CONDUIT IN TRENCH, 2" DIAMETER, PVC	61	FOOT
2	CONDUIT IN TRENCH, 4" DIAMETER, PVC	29	FOOT
3	CONDUIT PUSHED 4" DIAMETER, PVC	100	FOOT
4	HANDHOLE	2	EACH
5	HANDHOLE COMPOSITE CONCRETE	1	EACH
6	TRENCH AND BACKFILL FOR ELECTRICAL WORK	90	FOOT
7	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	90	FOOT
8	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	310	FOOT
9	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR	240	FOOT
10	TRAFFIC SIGNAL POST, ALUMINUM 16'	2	EACH
11	PEDESTRIAN PUSH BUTTON POST, TYPE 1	1	EACH
12	CONCRETE FOUNDATION TYPE A	3	FOOT
13	DRILL EXISTING FOUNDATION	1	EACH
14	DRILL EXISTING HANDHOLE	1	EACH
15	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE 5 SECTION, BRACKET MOUNTED	2	EACH
16	TRAFFIC SIGNAL BACKPLATE, LOUVERED FORMED PLASTIC	2	EACH
17	INDUCTIVE LOOP DETECTOR	1	EACH
18	DETECTOR LOOP, TYPE 1	204	FOOT
19	RELOCATE EXISTING SIGNAL HEAD	2	EACH
20	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	2	EACH
21	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	2	EACH
22	REBUILD EXISTING SIGNAL HEAD	2	EACH
23	REBUILD EXISTING PEDESTRIAN SIGNAL HEAD, LED	2	EACH
24	MODIFY EXISTING CONTROLLER	1	EACH
25	MODIFY EXISTING CONTROLLER CABINET	1	EACH
27	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	1	EACH
28	REMOVE EXISTING HANDHOLE	1	EACH

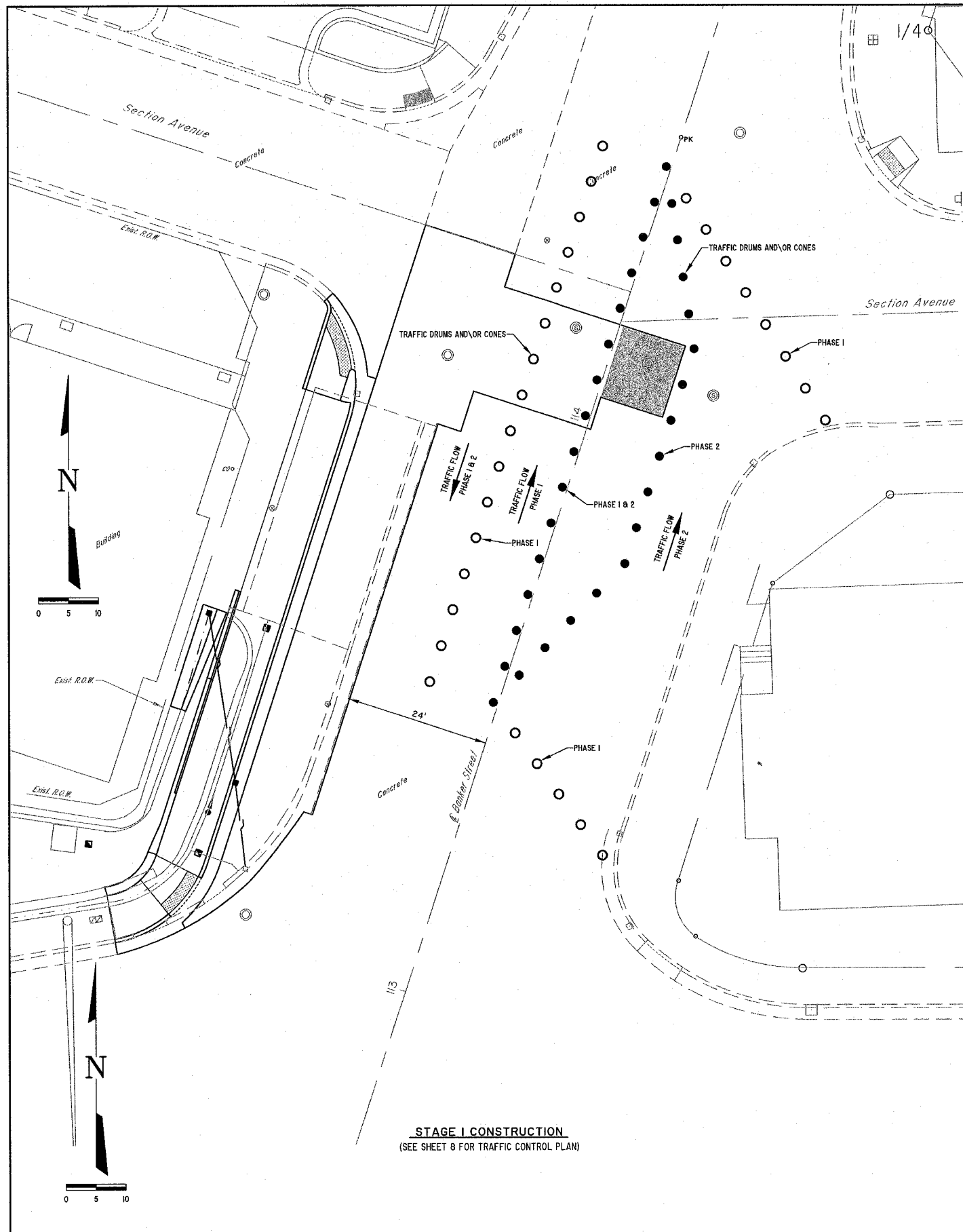
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SCHEDULE OF QUANTITIES
 BANKER STREET
 CITY OF EFFINGHAM

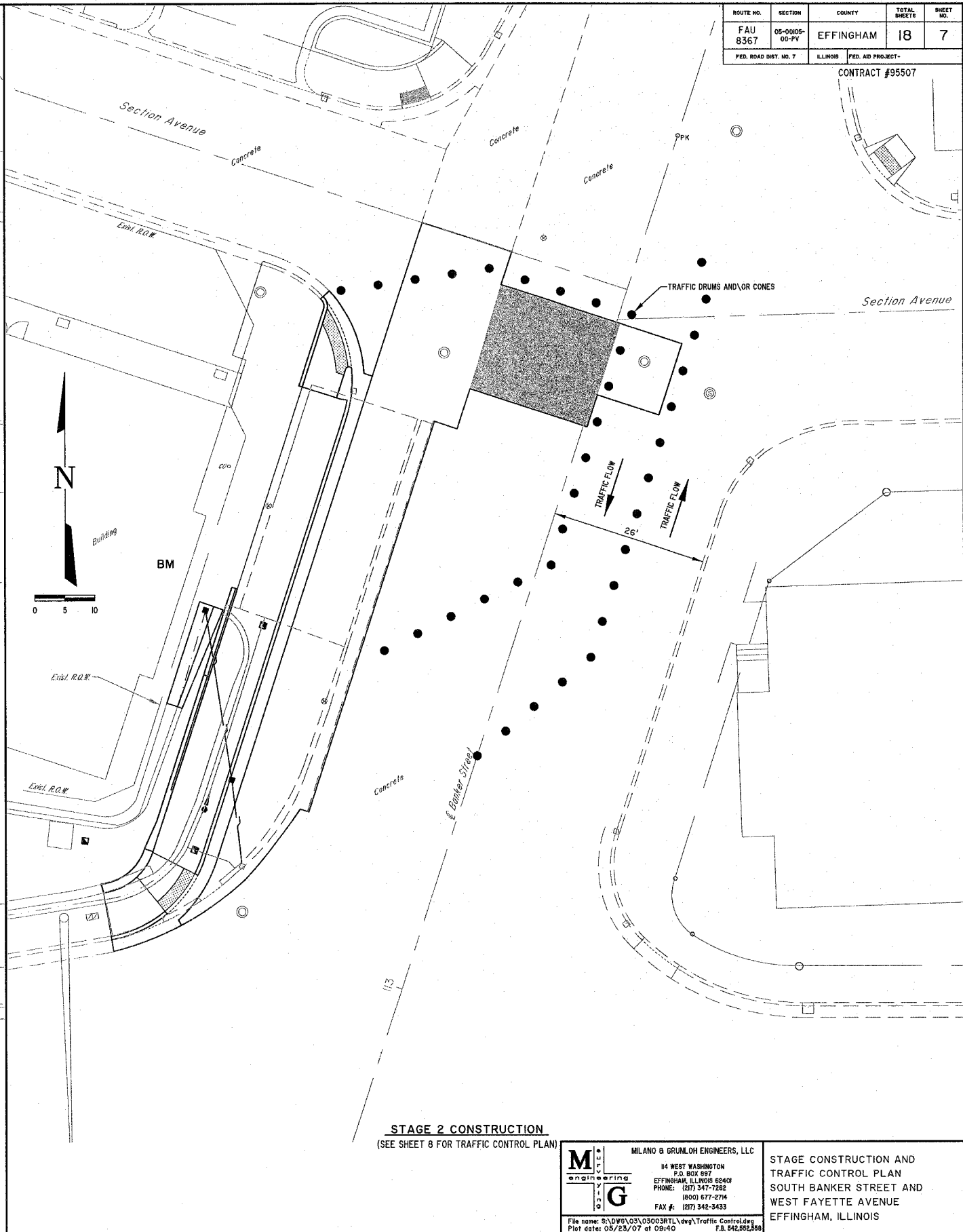
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FAU 8367	05-0005-00-PV	EFFINGHAM	18	7
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT #95507



STAGE 1 CONSTRUCTION
(SEE SHEET 8 FOR TRAFFIC CONTROL PLAN)



STAGE 2 CONSTRUCTION
(SEE SHEET 8 FOR TRAFFIC CONTROL PLAN)

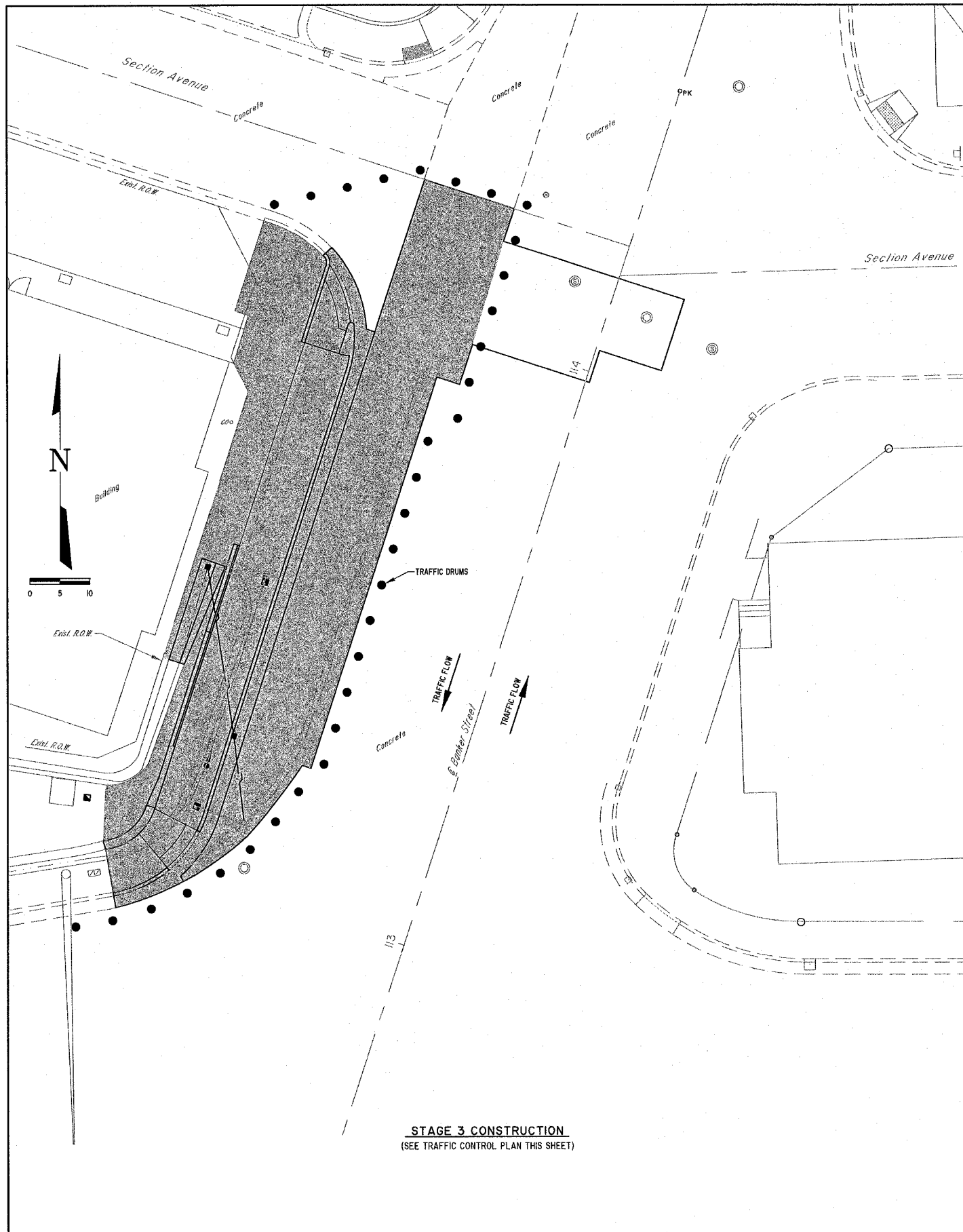
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STAGE CONSTRUCTION AND TRAFFIC CONTROL PLAN
 SOUTH BANKER STREET AND WEST FAYETTE AVENUE
 EFFINGHAM, ILLINOIS

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 Plot date: 05/23/07 of 09:40
 F.B. 542,592,588

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8367	06-0005-00-PV	EFFINGHAM	18	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT #95507



STAGE 3 CONSTRUCTION
(SEE TRAFFIC CONTROL PLAN THIS SHEET)

TRAFFIC CONTROL PLAN

The work along Banker Street will be divided into three stages as follows:

Stage 1 - All work located 47 feet to 58 feet right of Station 1+13 to Station 1+22 shall be constructed as Stage 1. Stage 1 is divided into two phases. Phase 1 shall be the time construction takes place. This phase shall require the presence of two flaggers and shall conform to Standard 701606. Phase 2 would be the curing period after completion of construction and would conform to Standard 701501.

Stage 2 - All work located 27 feet to 47 feet right between Station 1+07 and Station 1+25 shall be constructed as part of Stage 2. Stage 2 shall be constructed in two phases. Phase 1 shall be the time of construction and shall require the presence of two flaggers and conform to Standard 701606. Phase 2 will be the curing time and will conform to Standard 701501.

Stage 3 - The balance of required construction on Banker Street shall be in Stage 3 and shall conform to Standard 701501. Work along Fayette Avenue including all traffic signal work shall utilize Standard 701701 and Standard 701501. Standards 701701 and 701501 shall also be used along Maple Street, Banker Street, Third Street and Fourth Street during installation of traffic signal pre-emption equipment.

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engineering

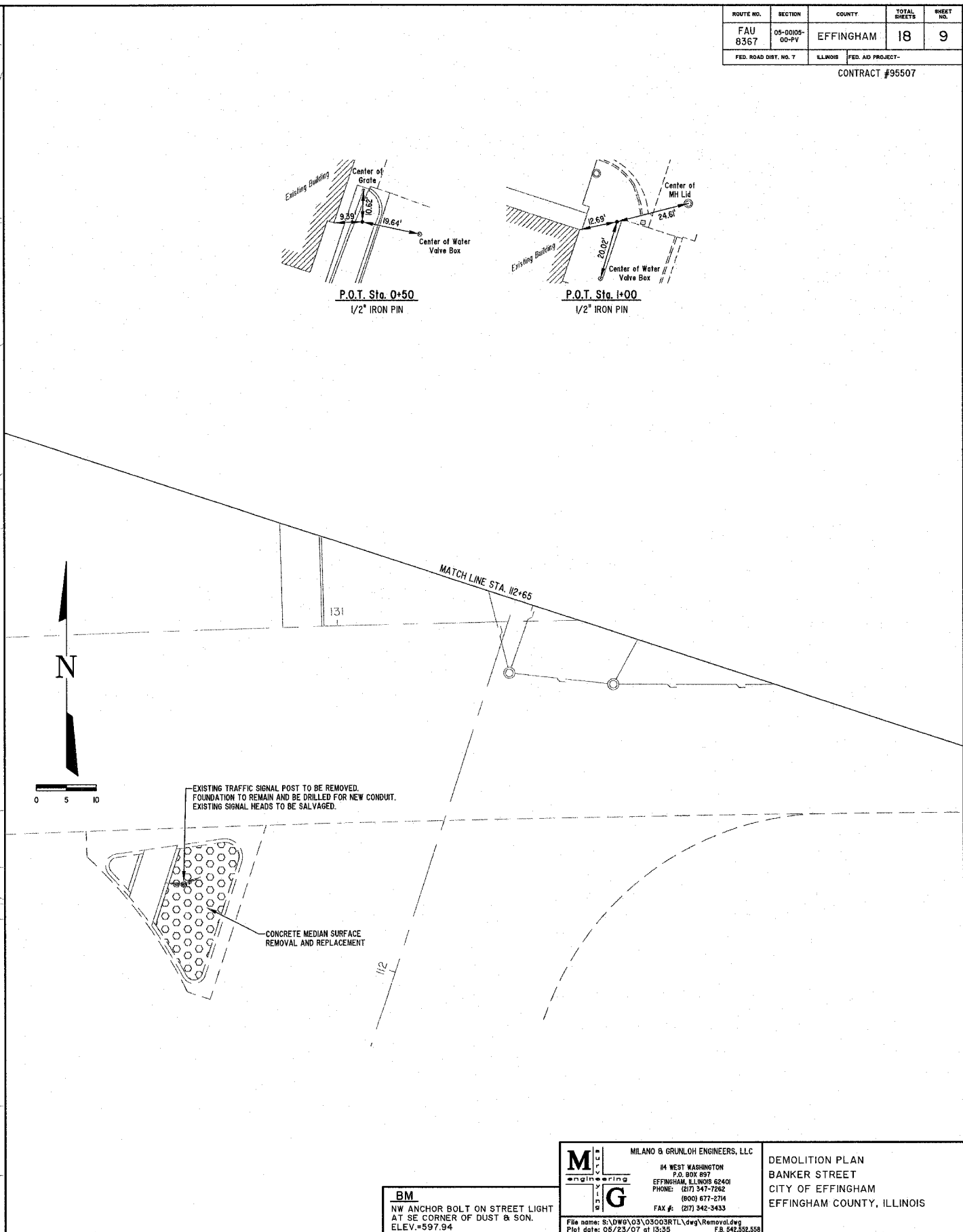
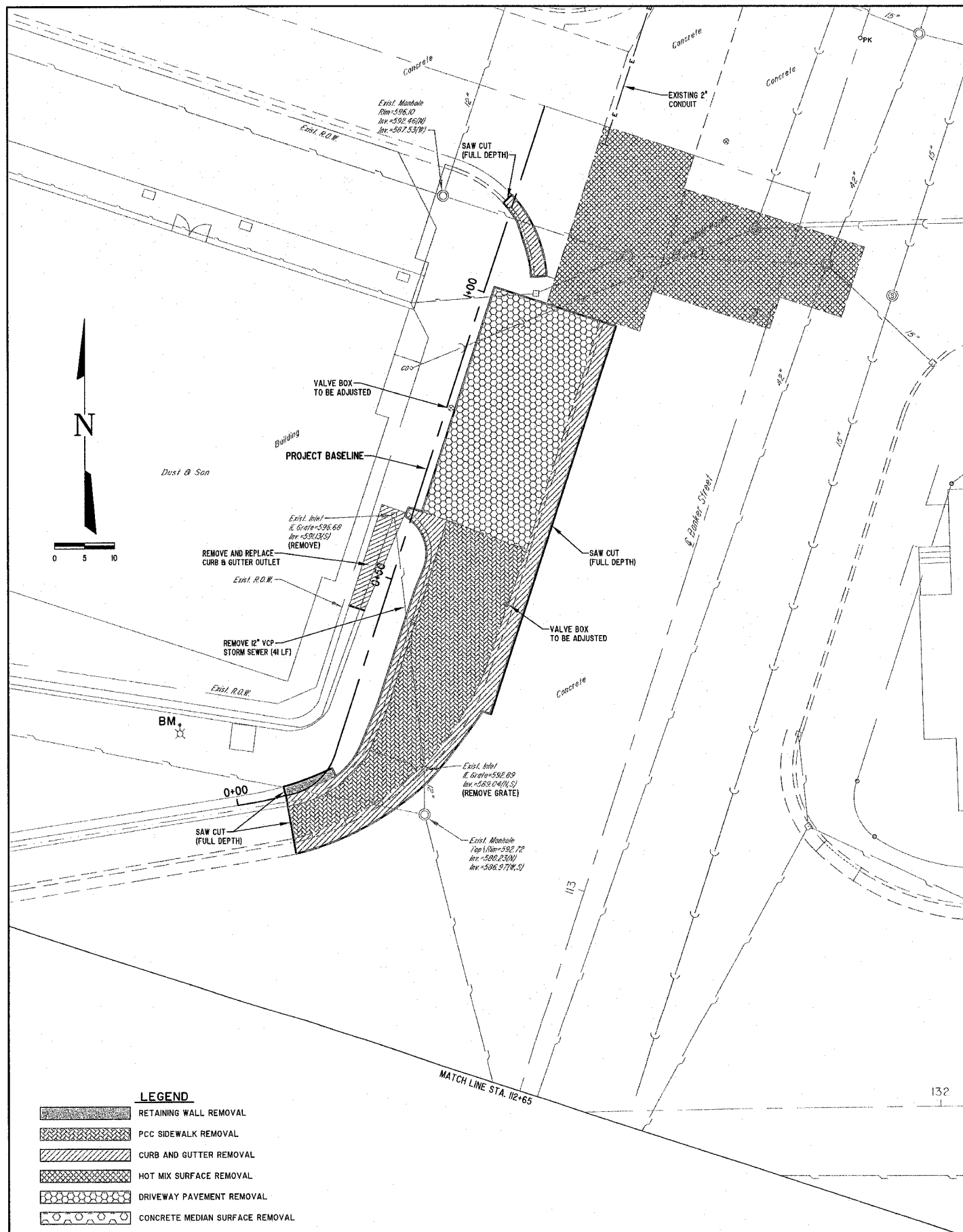
MLANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7282
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DW\03\03003RTR\deg\Traffic Control.dwg
Plot date: 05/24/07 of 06:45

STAGE CONSTRUCTION AND
TRAFFIC CONTROL PLAN
SOUTH BANKER STREET AND
WEST FAYETTE AVENUE
EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8367	05-0005-00-PV	EFFINGHAM	18	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT #95507



LEGEND

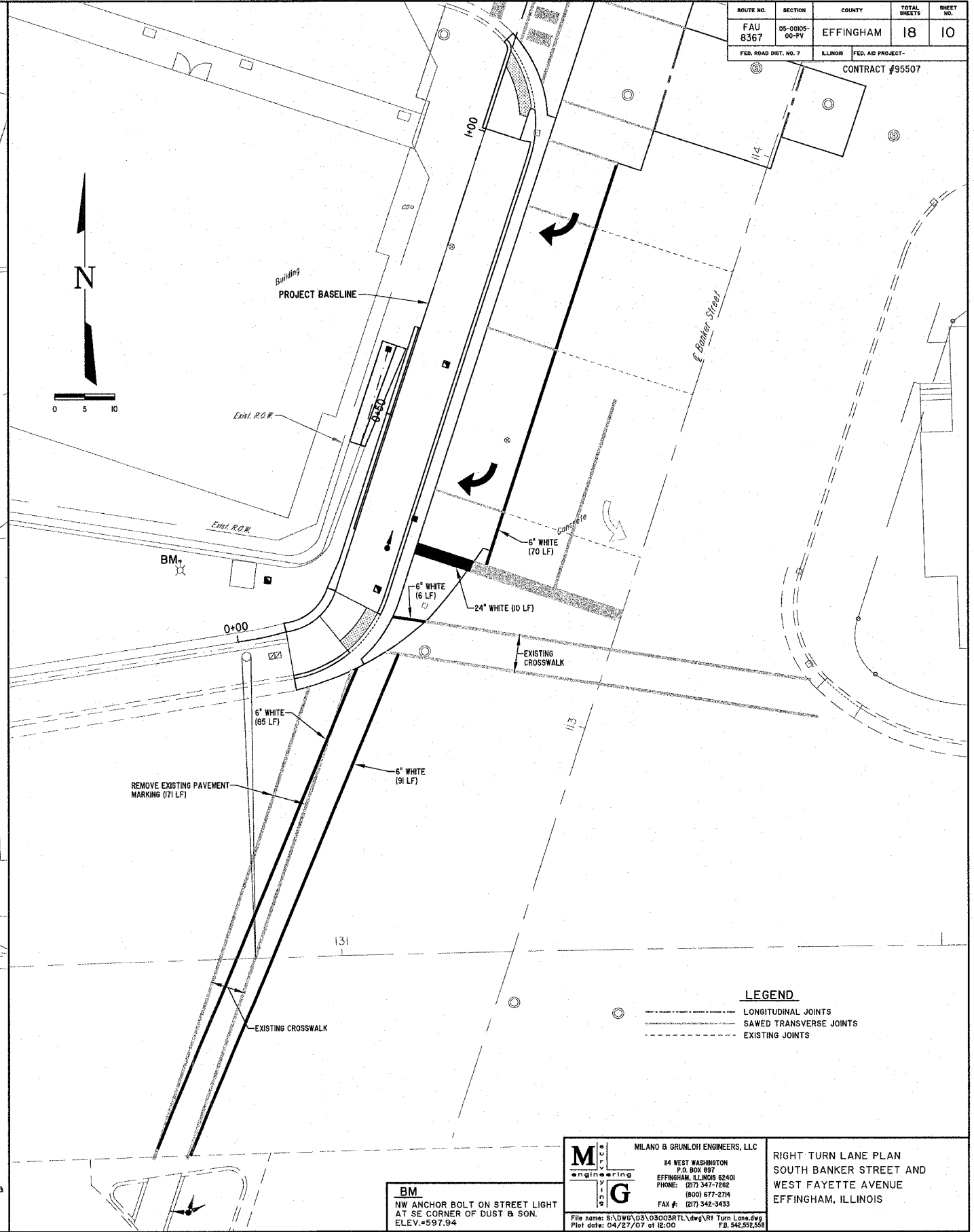
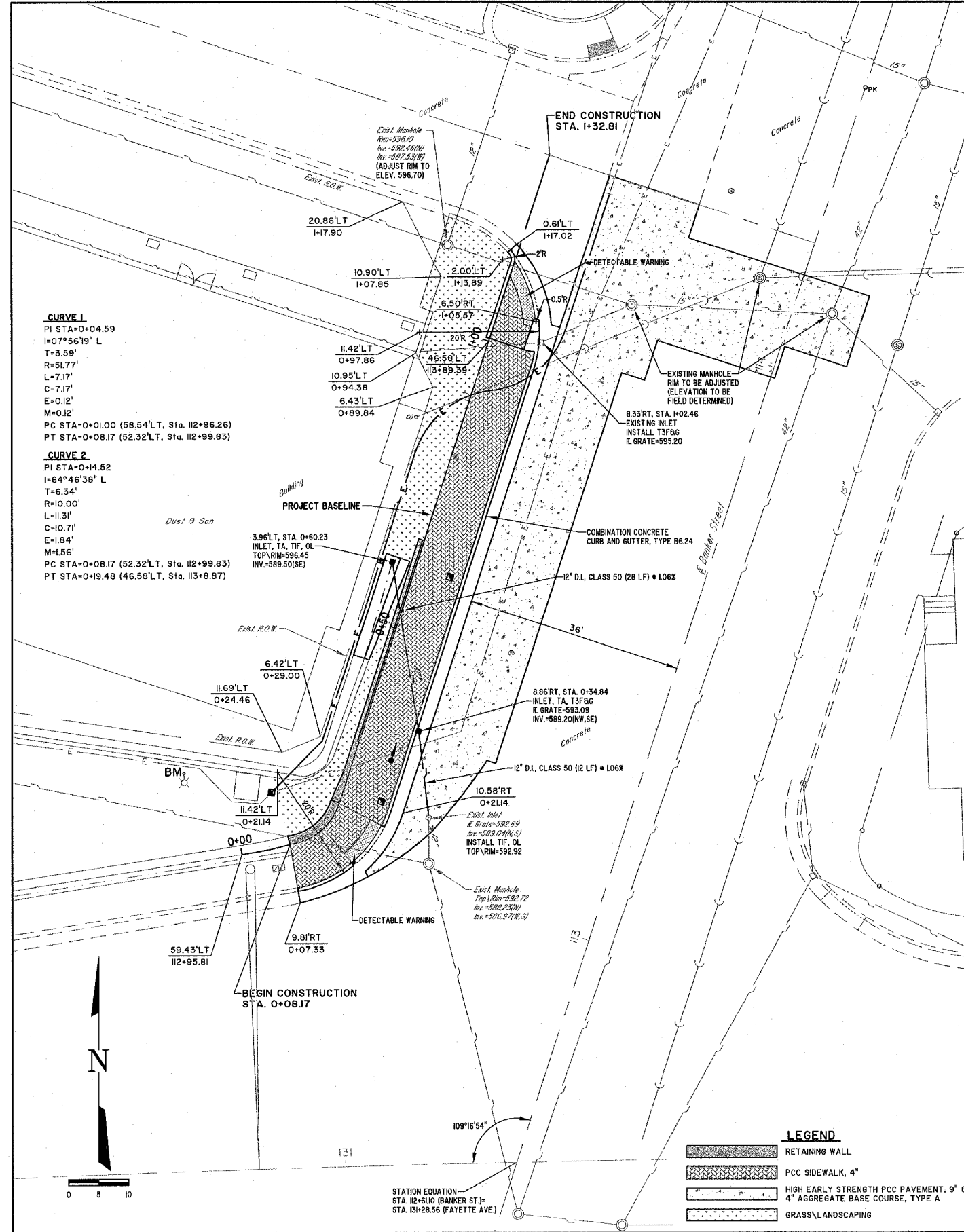
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	PCC SIDEWALK REMOVAL
	CURB AND GUTTER REMOVAL
	HOT MIX SURFACE REMOVAL
	DRIVEWAY PAVEMENT REMOVAL
	CONCRETE MEDIAN SURFACE REMOVAL

BM
NW ANCHOR BOLT ON STREET LIGHT
AT SE CORNER OF DUST & SON.
ELEV.=597.94

MILANO & GRUNLOH ENGINEERS, LLC
14 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7252
(800) 677-2714
FAX #: (217) 342-3433
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Plot date: 06/23/07 at 15:35

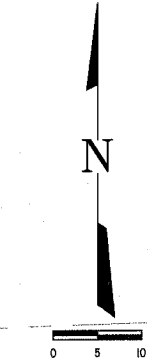
DEMOLITION PLAN
BANKER STREET
CITY OF EFFINGHAM
EFFINGHAM COUNTY, ILLINOIS

ROUTE NO. FAU 8367	SECTION 05-0005- 00-PV	COUNTY EFFINGHAM	TOTAL SHEETS 18	SHEET NO. 10
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	
CONTRACT #95507				



CURVE 1
 PI STA=0+04.59
 I=07°56'19" L
 T=3.59'
 R=51.77'
 L=7.17'
 C=7.17'
 E=0.12'
 M=0.12'
 PC STA=0+01.00 (58.54' LT, Sta. 112+96.26)
 PT STA=0+08.17 (52.32' LT, Sta. 112+99.83)

CURVE 2
 PI STA=0+14.52
 I=64°46'38" L
 T=6.34'
 R=10.00'
 L=11.31'
 C=10.71'
 E=1.84'
 M=1.56'
 PC STA=0+08.17 (52.32' LT, Sta. 112+99.83)
 PT STA=0+19.48 (46.58' LT, Sta. 113+8.87)



LEGEND

	RETAINING WALL
	PCC SIDEWALK, 4"
	HIGH EARLY STRENGTH PCC PAVEMENT, 9" & 4" AGGREGATE BASE COURSE, TYPE A
	GRASS LANDSCAPING

LEGEND

	LONGITUDINAL JOINTS
	SAWED TRANSVERSE JOINTS
	EXISTING JOINTS

STATION EQUATION
 STA. 112+61.0 (BANKER ST.)
 STA. 113+28.56 (FAYETTE AVE.)

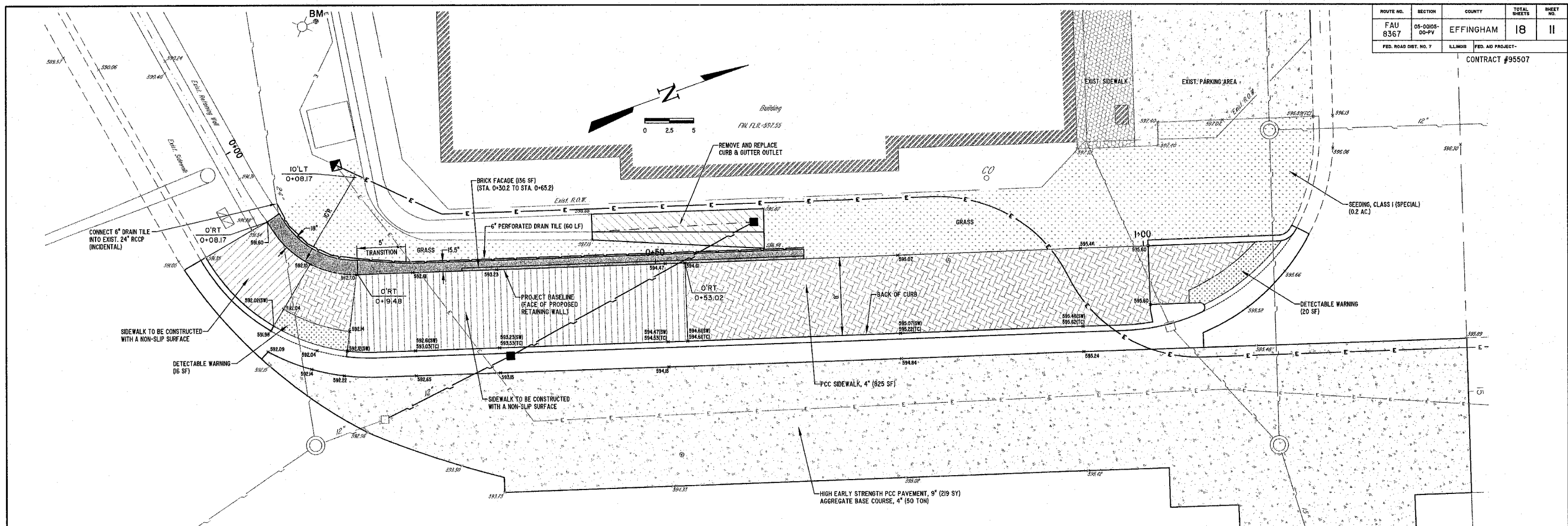
BM
 NW ANCHOR BOLT ON STREET LIGHT
 AT SE CORNER OF DUST & SON.
 ELEV.=597.94

MILANO & GRUNLOH ENGINEERS, LLC
 84 WEST WASHINGTON
 P.O. BOX 897
 EFFINGHAM, ILLINOIS 62401
 PHONE: (217) 347-7252
 (800) 677-5774
 FAX #: (217) 342-3435

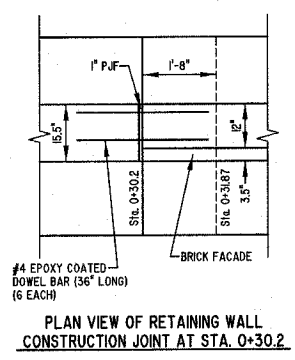
RIGHT TURN LANE PLAN
 SOUTH BANKER STREET AND
 WEST FAYETTE AVENUE
 EFFINGHAM, ILLINOIS

File name: S:\DWG\03\030038TL\dwg\RT Turn Lane.dwg
 Plot date: 04/27/07 at 12:00 PM
 FB: 542,552,558

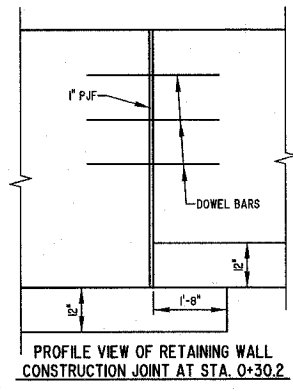
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FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- CONTRACT #95507	



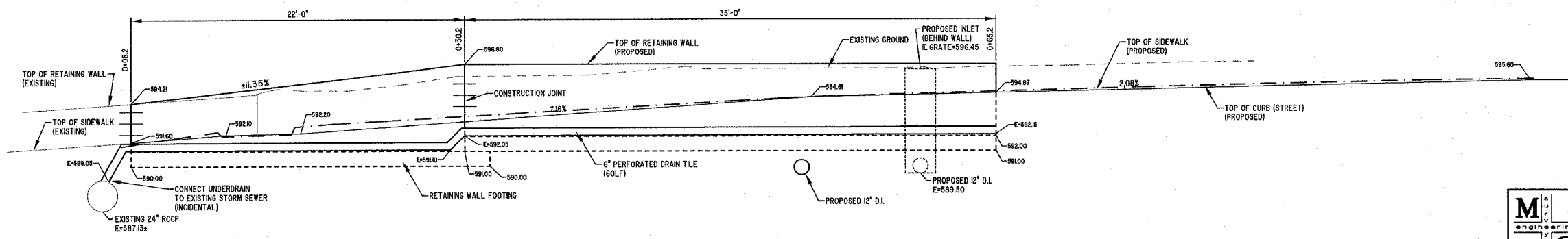
RETAINING WALL PLAN



**PLAN VIEW OF RETAINING WALL
CONSTRUCTION JOINT AT STA. 0+30.2**



**PROFILE VIEW OF RETAINING WALL
CONSTRUCTION JOINT AT STA. 0+30.2**



RETAINING WALL PROFILE
(ALONG FACE OF RETAINING WALL)
SCALE: 1"=4'

BM
NW ANCHOR BOLT ON STREET LIGHT
AT SE CORNER OF DUST & SON.
ELEV.=597.94

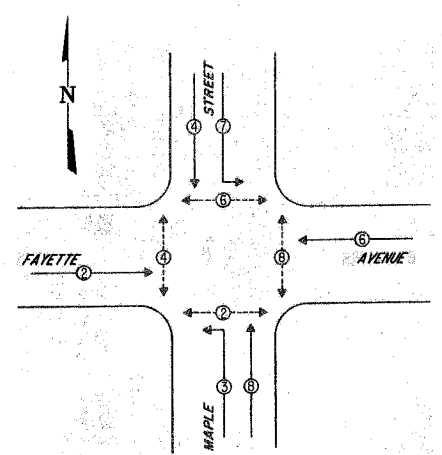
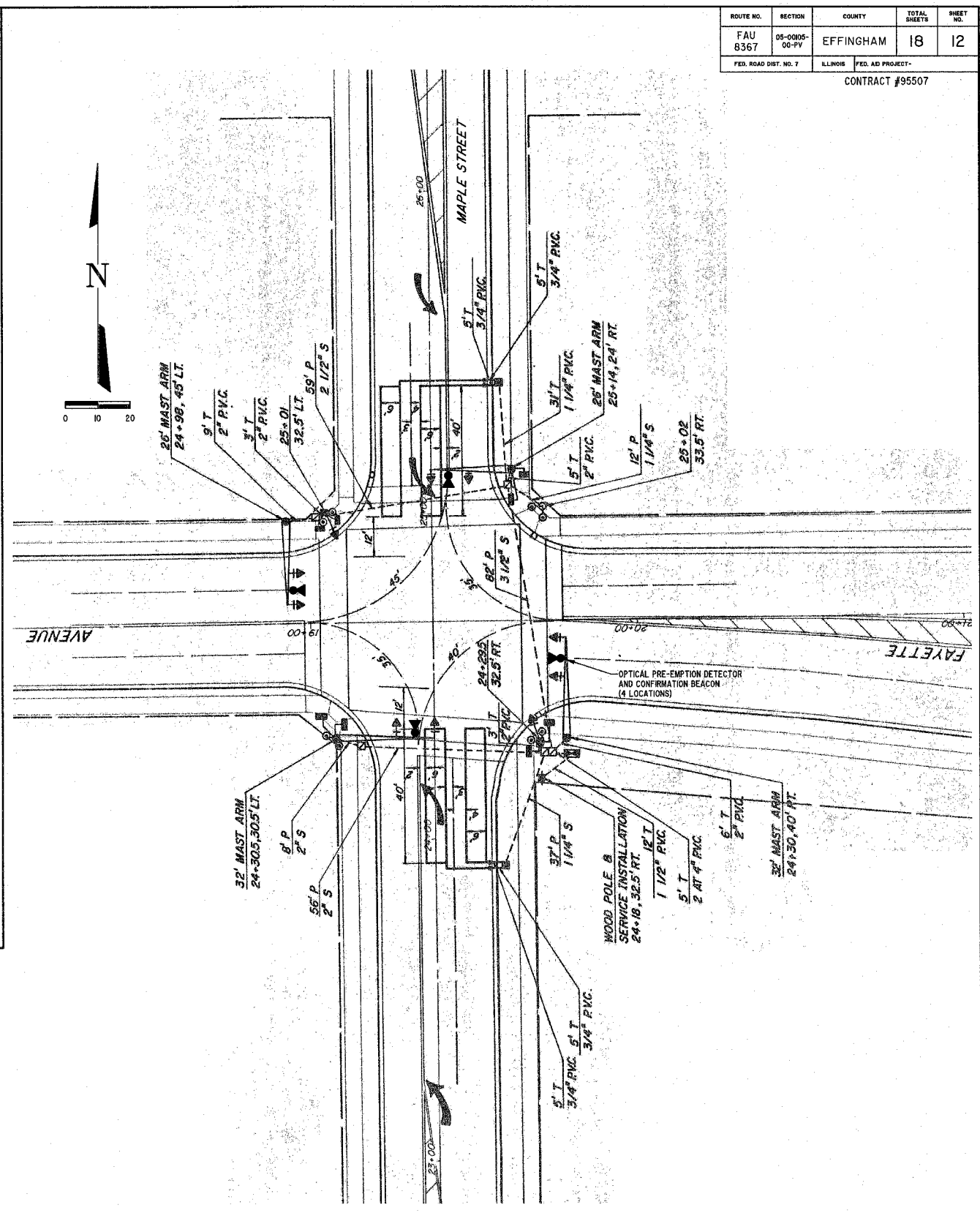
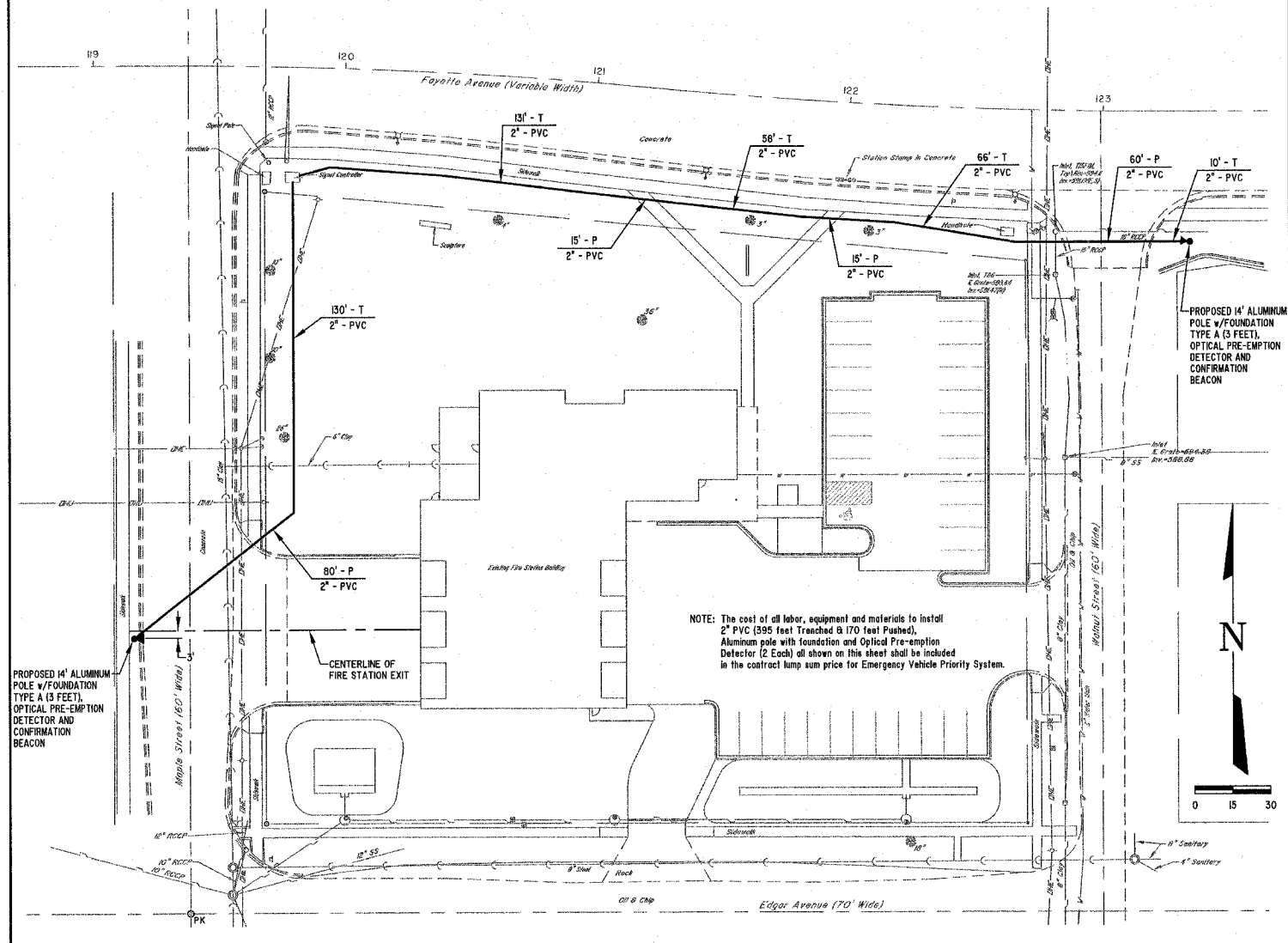
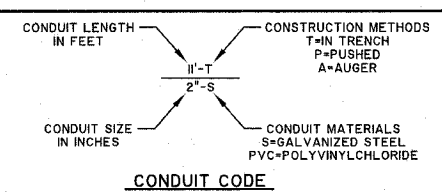
MILANO & GRUNLOH ENGINEERS, LLC
14 WEST WASHINGTON
P.O. BOX 697
EFFINGHAM, ILLINOIS 62404
PHONE: (217) 347-7252
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05003R11\cwg\Retaining Wall.dwg
Plot date: 04/27/07 at 12:00
FB: 542,546,552,554,558

RETAINING WALL DETAILS
BANKER STREET
CITY OF EFFINGHAM
EFFINGHAM COUNTY, ILLINOIS

ROUTE NO. 8367	SECTION 05-0005-00-PV	COUNTY EFFINGHAM	TOTAL SHEETS 18	SHEET NO. 12
FED. ROAD DIST. NO. 7		ILLINOIS FED. AD PROJECT-		

CONTRACT #95507



CONTROLLER SEQUENCE

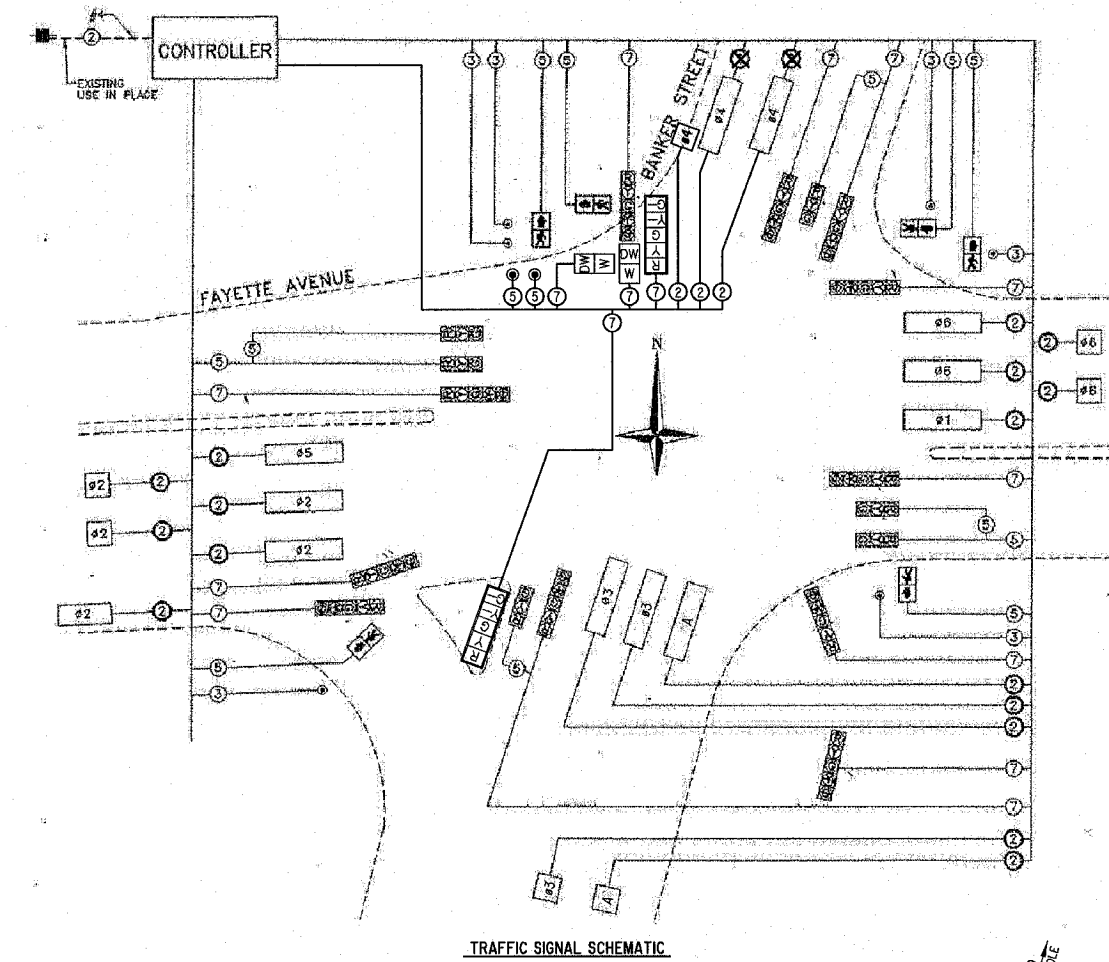
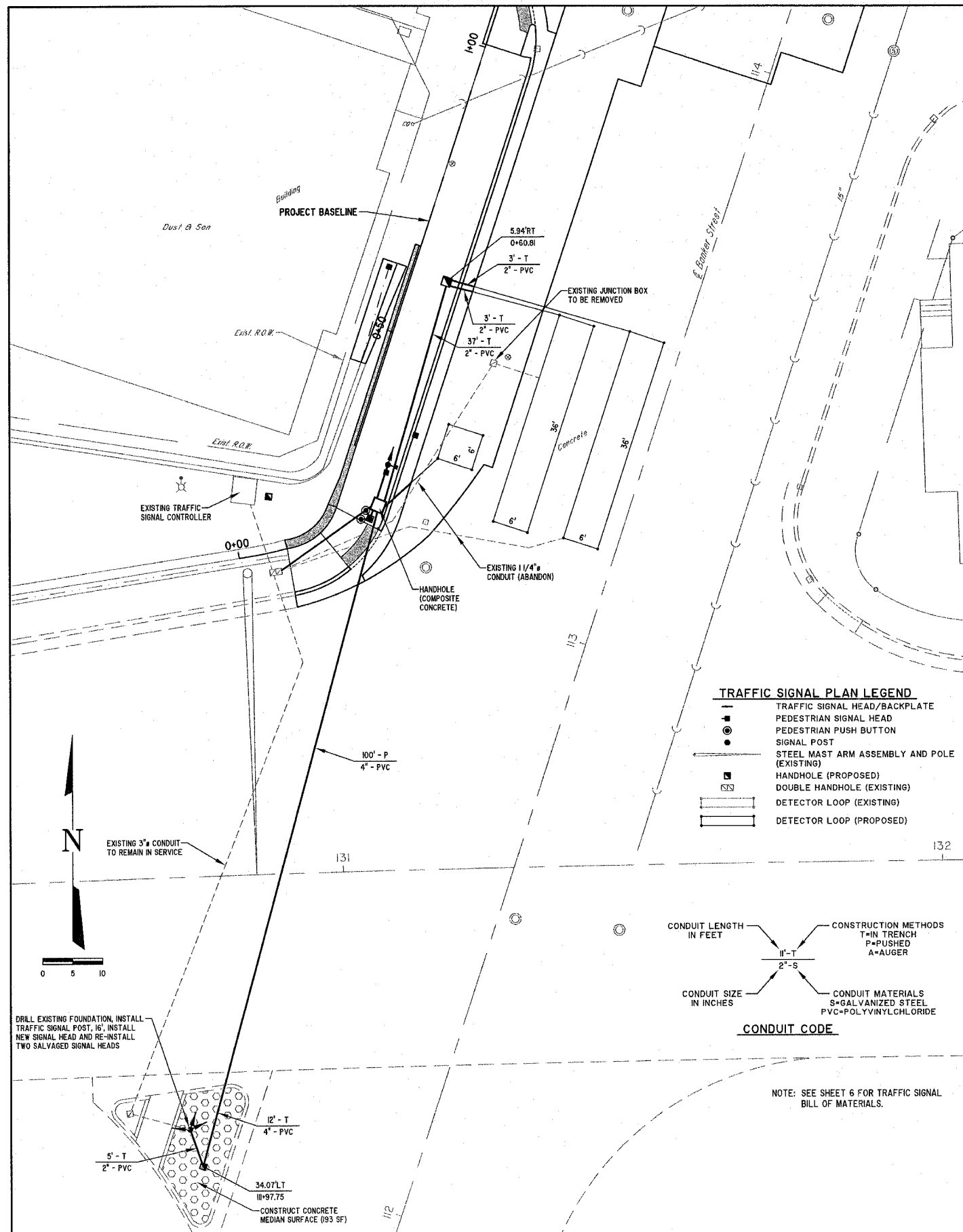
FIRE STATION #1 FIRE PRE-EMPTION	FIRE STATION #3 FIRE PRE-EMPTION
3	6
8	6

**FOR INFORMATIONAL PURPOSES ONLY
(EMERGENCY VEHICLE PRIORITY SYSTEM)**

MILANO & GRUNLOH ENGINEERS, LLC
 14 WEST WASHINGTON
 P.O. BOX 897
 EFFINGHAM, ILLINOIS 62401
 PHONE: (217) 547-7262
 (800) 877-2714
 FAX #: (217) 542-3433

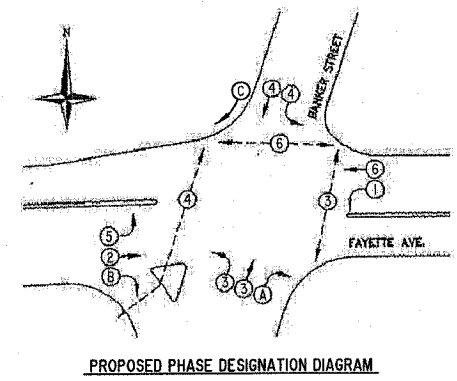
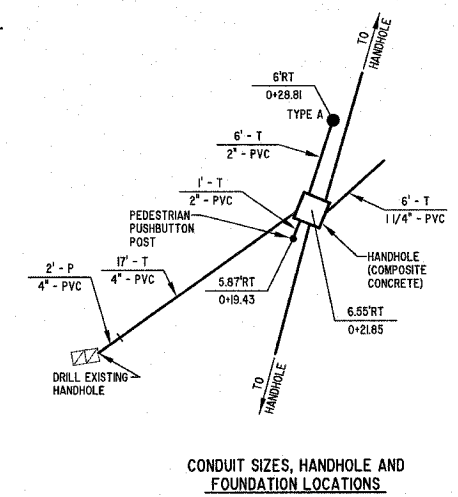
TRAFFIC SIGNAL
 PRE-EMPTION PLAN
 SOUTH MAPLE STREET AND
 WEST FAYETTE AVENUE
 EFFINGHAM, ILLINOIS

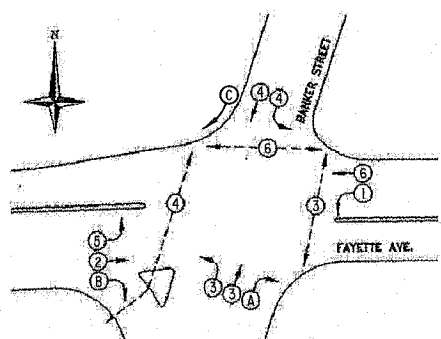
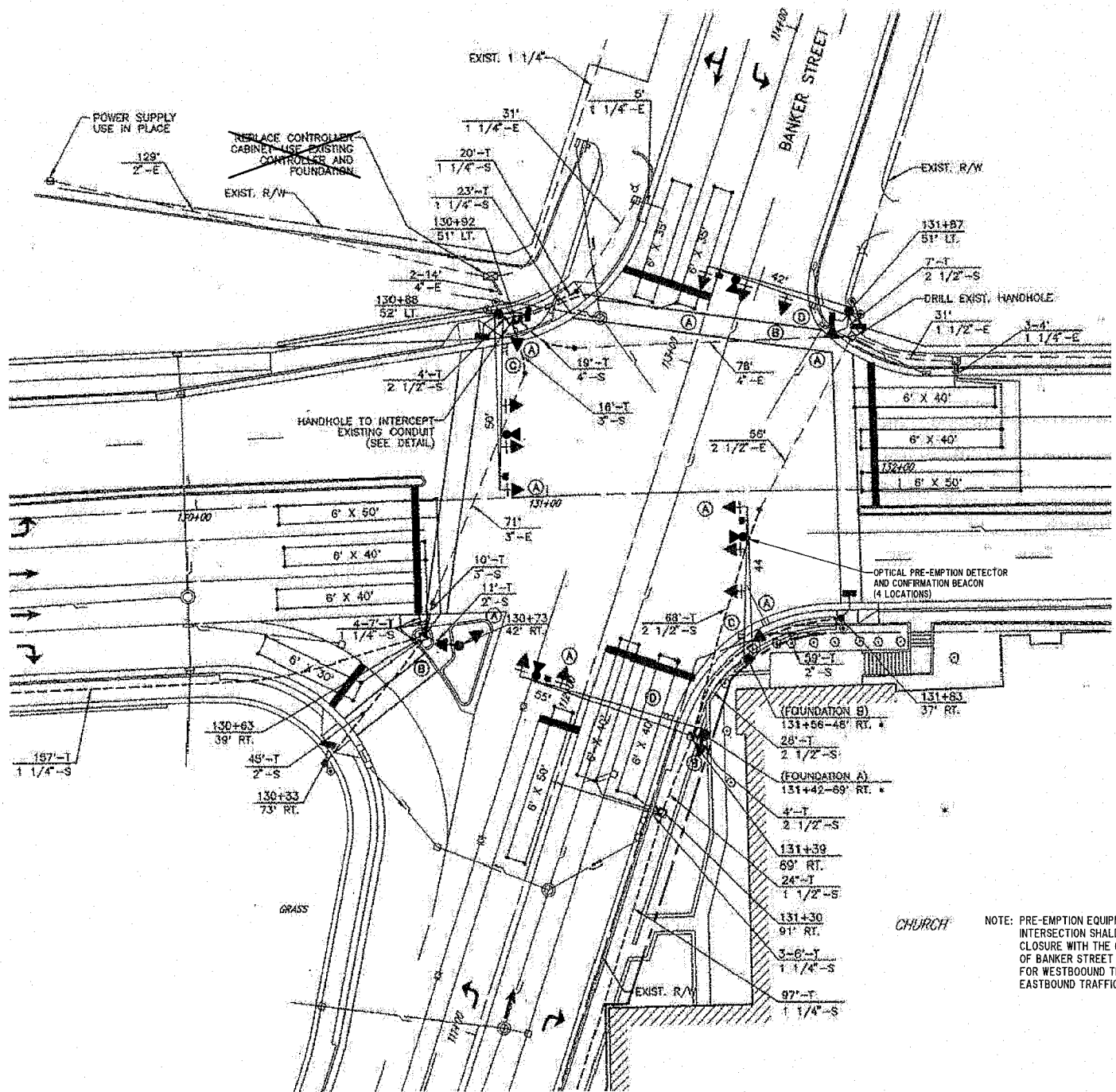
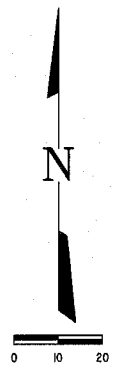
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 Plot date: 04/27/07 at 12:00



CONTROLLER SEQUENCE

PHASE #	PROPOSED OPERATION								FIRE STATION #1 FIRE PRE-EMPTION	FIRE STATION #3 FIRE PRE-EMPTION
	1	2	3	4	5	6	7	8		
MOVEMENT	←	→	↑	↓	←	→	↑	↓	5	3
CONCURRENT MOVEMENT PERMITTED	5 or 6	5 or 6			1 or 2	1 or 2				
OVERLAP MOVEMENT ACTIVE	A	B	A B B	C	C					





PROPOSED PHASE DESIGNATION DIAGRAM

CONTROLLER SEQUENCE

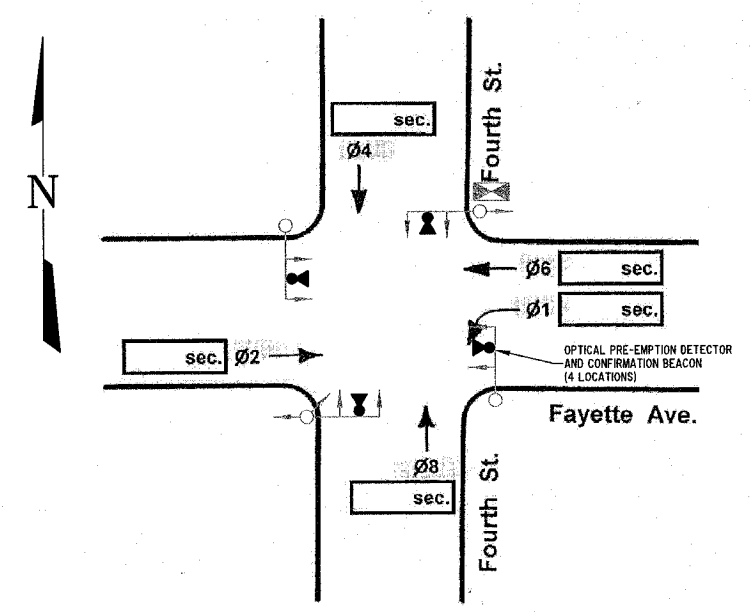
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	1	2	3	4	5	6	7	8		
MOVEMENT	←	→	↑	↓	←	→	↑	↓	←	→
CONCURRENT MOVEMENT PERMITTED	5 or 6	5 or 6	7 or 8	7 or 8	1 or 2	1 or 2				
OVERLAP MOVEMENT ACTIVE	A		B		C					

NOTE: PRE-EMPTION EQUIPMENT TO BE INSTALLED IN THIS INTERSECTION SHALL PROVIDE FOR RADIO CONTACT CLOSURE WITH THE CONTROLLERS AT THE INTERSECTIONS OF BANKER STREET WITH MAPLE STREET AND FOURTH STREET FOR WESTBOUND TRAFFIC AT MAPLE STREET AND EASTBOUND TRAFFIC AT MAPLE STREET.

FOR INFORMATIONAL PURPOSES ONLY
(EMERGENCY VEHICLE PRIORITY SYSTEM)

MILANO & GRUNLOH ENGINEERS, LLC
 14 WEST WASHINGTON
 P.O. BOX 997
 EFFINGHAM, ILLINOIS 62401
 PHONE: (217) 547-7262
 (800) 477-2314
 FAX #: (217) 342-3433
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 Plot date: 04/27/07 at 12:00
 F.B. 542,592,858

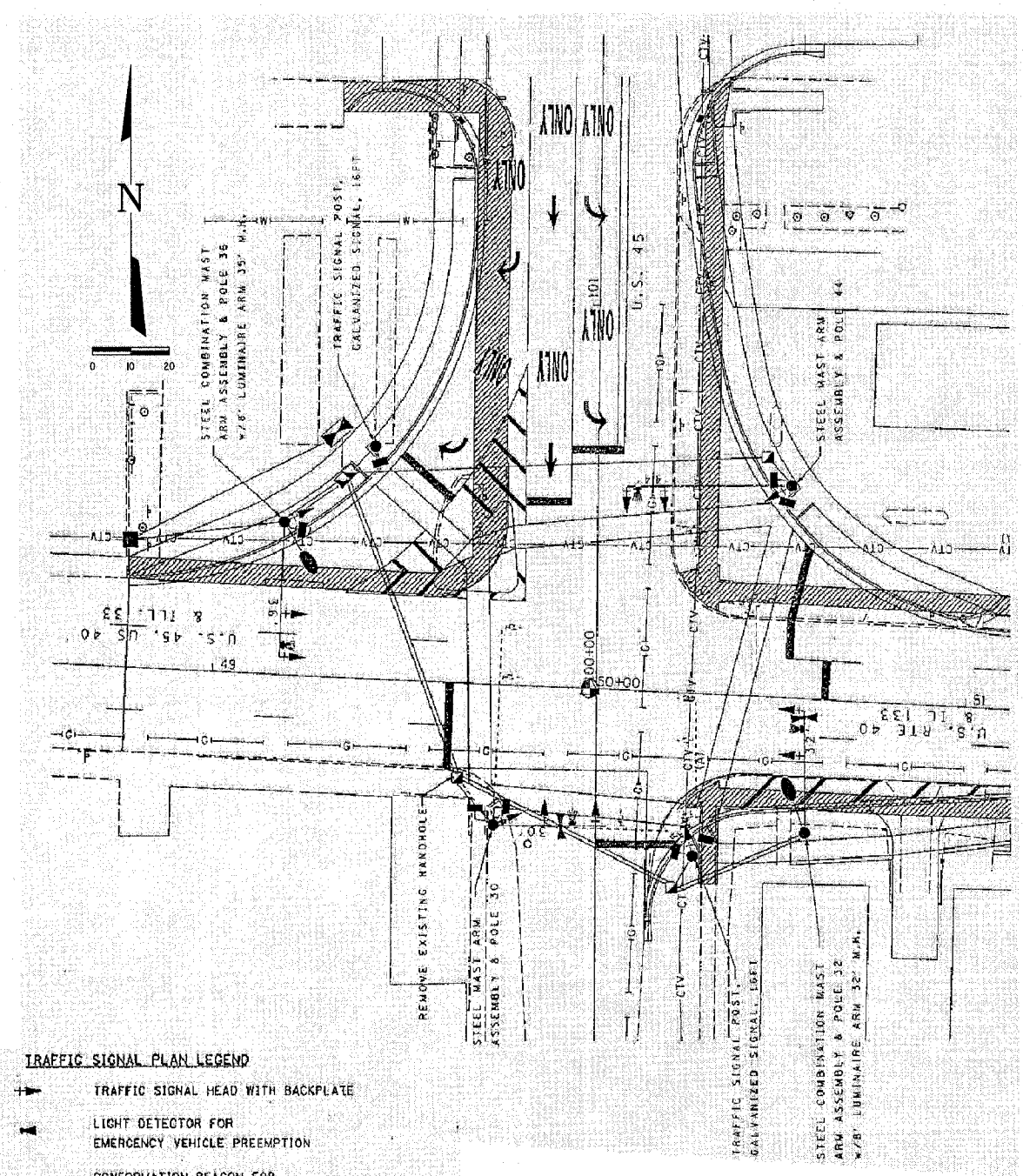
TRAFFIC SIGNAL
 PRE-EMPTION PLAN
 SOUTH BANKER STREET AND
 WEST FAYETTE AVENUE
 EFFINGHAM, ILLINOIS



CONTROLLER SEQUENCE

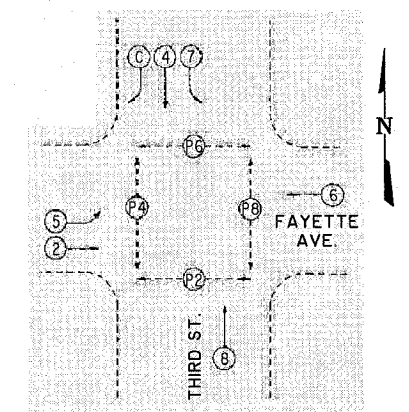
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	1	2	3	4	5	6	7	8		
MOVEMENT	←	→	↓	↑	←	→	↓	↑	←	→
CONCURRENT MOVEMENT PERMITTED	←	←	↑			1 or 2	↓			
OVERLAP MOVEMENT ACTIVE										

Traffic Signal Programming Note: Monday thru Saturday from Midnight to 6:00 am
Dial 1 - Split 1



TRAFFIC SIGNAL PLAN LEGEND

- TRAFFIC SIGNAL HEAD WITH BACKPLATE
- ▲ LIGHT DETECTOR FOR EMERGENCY VEHICLE PREEMPTION
- ▲ CONFORMATION BEACON FOR EMERGENCY VEHICLE PREEMPTION
- PEDESTRIAN SIGNAL HEAD
- ◻ EXISTING PEDESTRIAN SIGNAL HEAD
- SIGNAL POST
- STEEL MAST ARM ASSEMBLY AND POLE
- EXISTING STEEL MAST ARM ASSEMBLY AND POLE
- ☐ HANDHOLE
- ☐ EXISTING HANDHOLE
- ☒ CONTROLLER
- SERVICE INSTALLATION ON 25', CLASS 5, WOOD POLE
- PROPOSED CONDUIT SPLICE
- EXISTING SIGNAL EQUIPMENT (TO BE REMOVED)



PHASE DESIGNATION DIAGRAM

CONTROLLER SEQUENCE

PHASE #	PROPOSED OPERATION								FIRE STATION #1 FIRE PRE-EMPTION	FIRE STATION #3 FIRE PRE-EMPTION		
	1	2	3	4	5	6	7	8				
MOVEMENT		→		↓	↑	←	→	↓	↑	←	→	
CONCURRENT MOVEMENT PERMITTED			5 or 6	7 or 8	2	2	4	4	5	2	5	2
OVERLAP MOVEMENT ACTIVE				C	C		C					

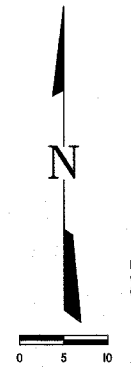
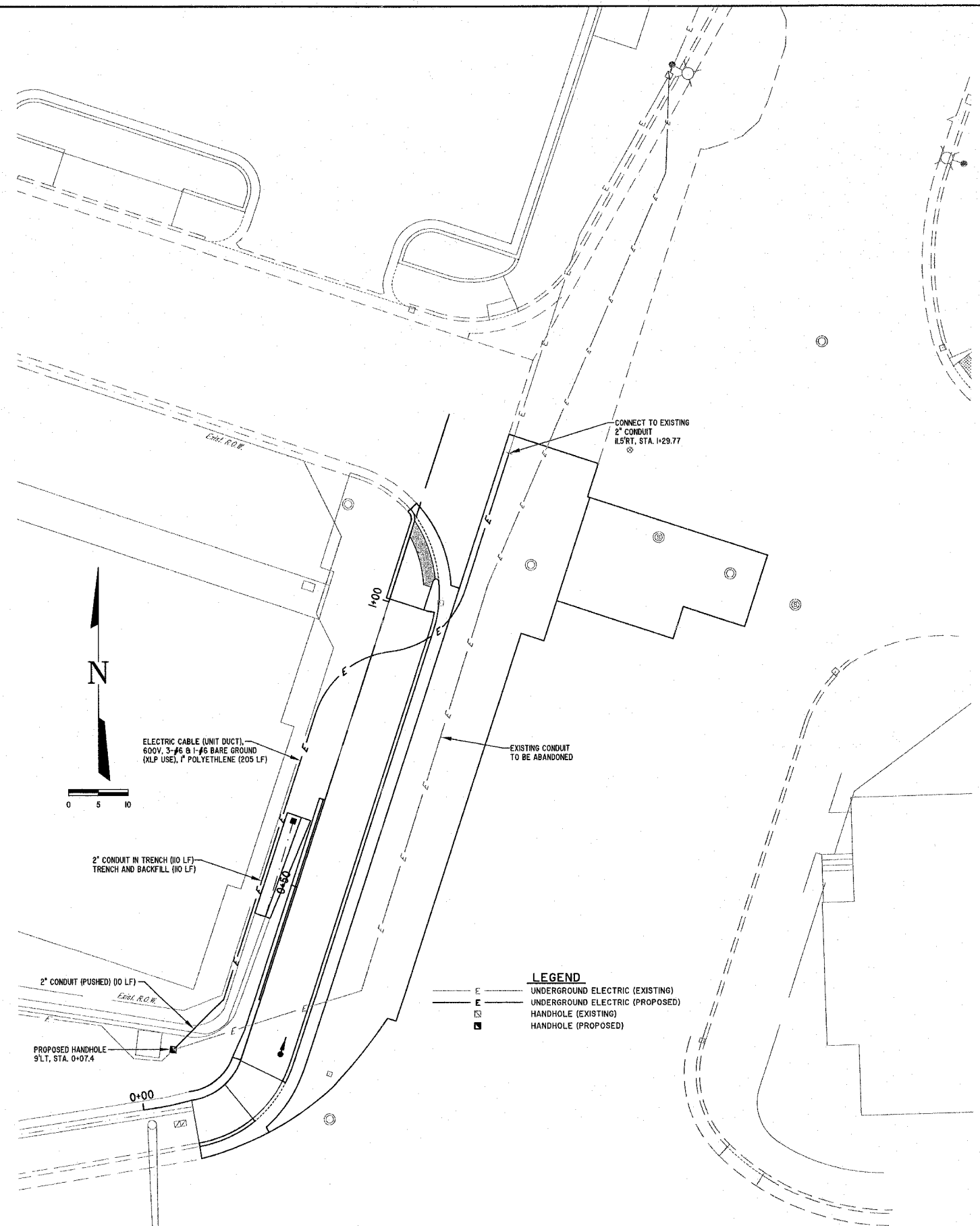
Traffic Signal Programming Note: Monday thru Saturday from Midnight to 6:00 am
Dial 1 - Split 1

**FOR INFORMATIONAL PURPOSES ONLY
(EMERGENCY VEHICLE PRIORITY SYSTEM)**

	MILANO & BRUNLOH ENGINEERS, LLC 84 WEST WASHINGTON P.O. BOX 897 EFFINGHAM, ILLINOIS 62401 PHONE: (217) 347-7282 (800) 677-2714 FAX #: (217) 342-3455	TRAFFIC SIGNAL PRE-EMPTION PLAN THIRD STREET AND FAYETTE AVENUE & FOURTH STREET AND FAYETTE AVENUE EFFINGHAM, ILLINOIS
	<small>File name: S:\DW\03\03003RTL\04\PreEmption.dwg Plot date: 04/27/07 at 12:00</small>	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8367	05-0005-00-77	EFFINGHAM	18	16
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

CONTRACT #95507



ELECTRIC CABLE (UNIT DUCT)
600V, 3-#6 B-1-#6 BARE GROUND
(XLP USE), 1" POLYETHYLENE (205 LF)

2" CONDUIT IN TRENCH (10 LF)
TRENCH AND BACKFILL (10 LF)

2" CONDUIT (PUSHED) (0 LF)

PROPOSED HANDHOLE
S.T. STA. 0+07.4

CONNECT TO EXISTING
2" CONDUIT
I.S.R.T. STA. 1+29.77

EXISTING CONDUIT
TO BE ABANDONED

LEGEND

- E — UNDERGROUND ELECTRIC (EXISTING)
- - - E - - - UNDERGROUND ELECTRIC (PROPOSED)
- ⊠ EXISTING HANDHOLE (EXISTING)
- PROPOSED HANDHOLE (PROPOSED)

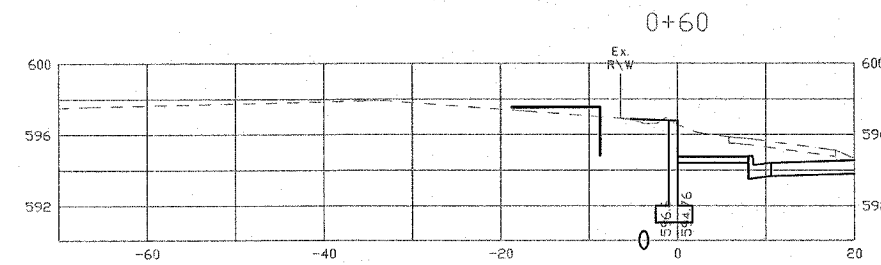
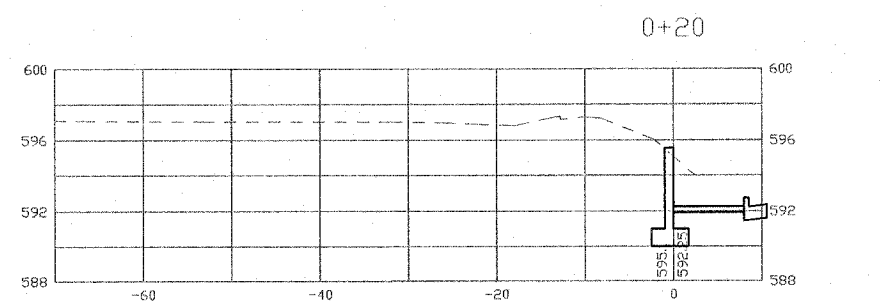
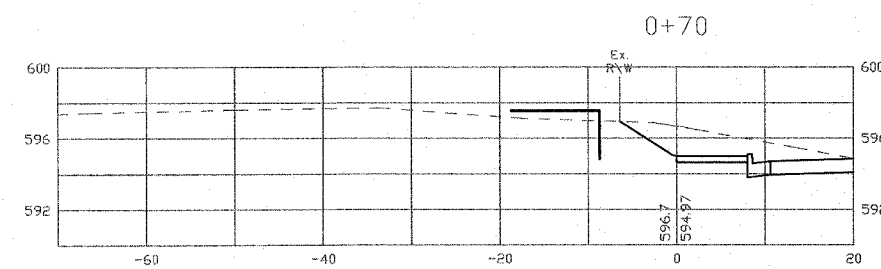
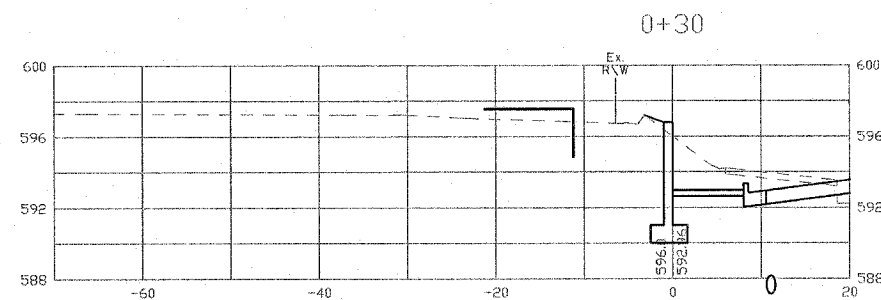
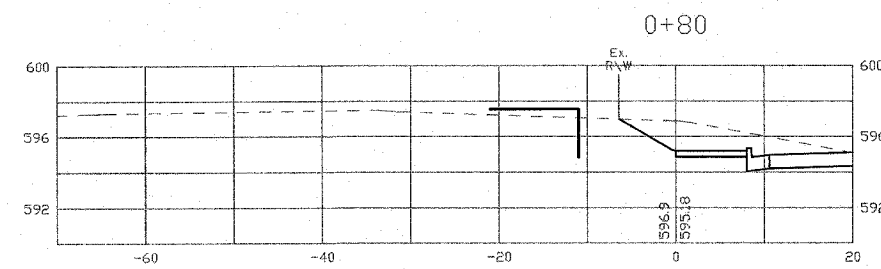
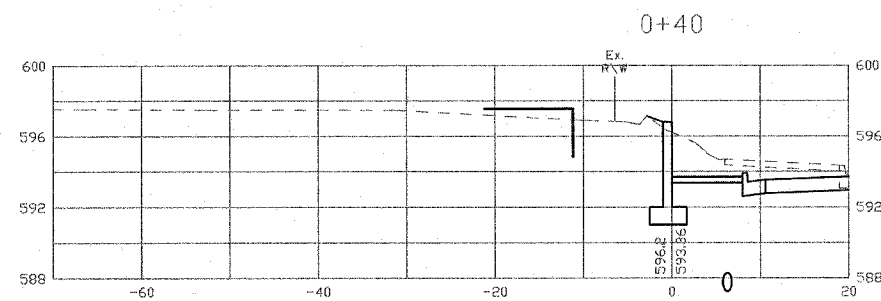
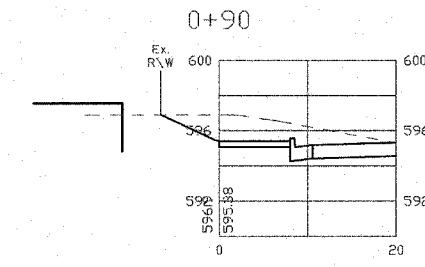
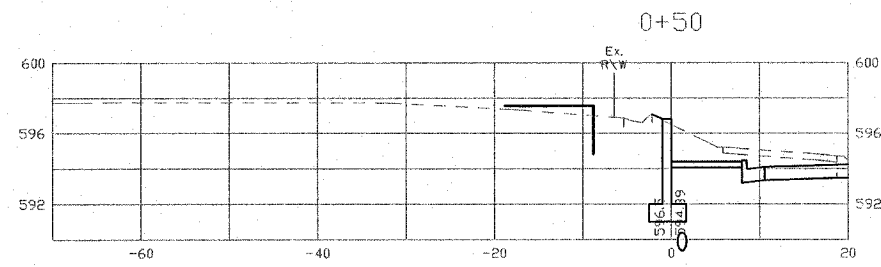
MILANO & GRUNLOH ENGINEERS, LLC
 14 WEST WASHINGTON
 P.O. BOX 837
 EFFINGHAM, ILLINOIS 62401
 PHONE: (217) 347-7282
 (800) 677-2774
 FAX #: (217) 348-3433

STREET LIGHTING ELECTRICAL PLAN
 BANKER STREET
 CITY OF EFFINGHAM
 EFFINGHAM COUNTY, ILLINOIS

File name: S:\DWG\03\0303RTR\dwg\01rml Lights.dwg
 Plot date: 04/27/07 at 12:00 P.M.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6367	06-0005-00-PV	EFFINGHAM	18	17
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT #95507



MILANO & GRUNLOH ENGINEERS, LLC
 14 WEST WASHINGTON
 P.O. BOX 897
 EFFINGHAM, ILLINOIS 62401
 PHONE: (217) 347-7252
 (800) 677-2714
 FAX #: (217) 342-3433

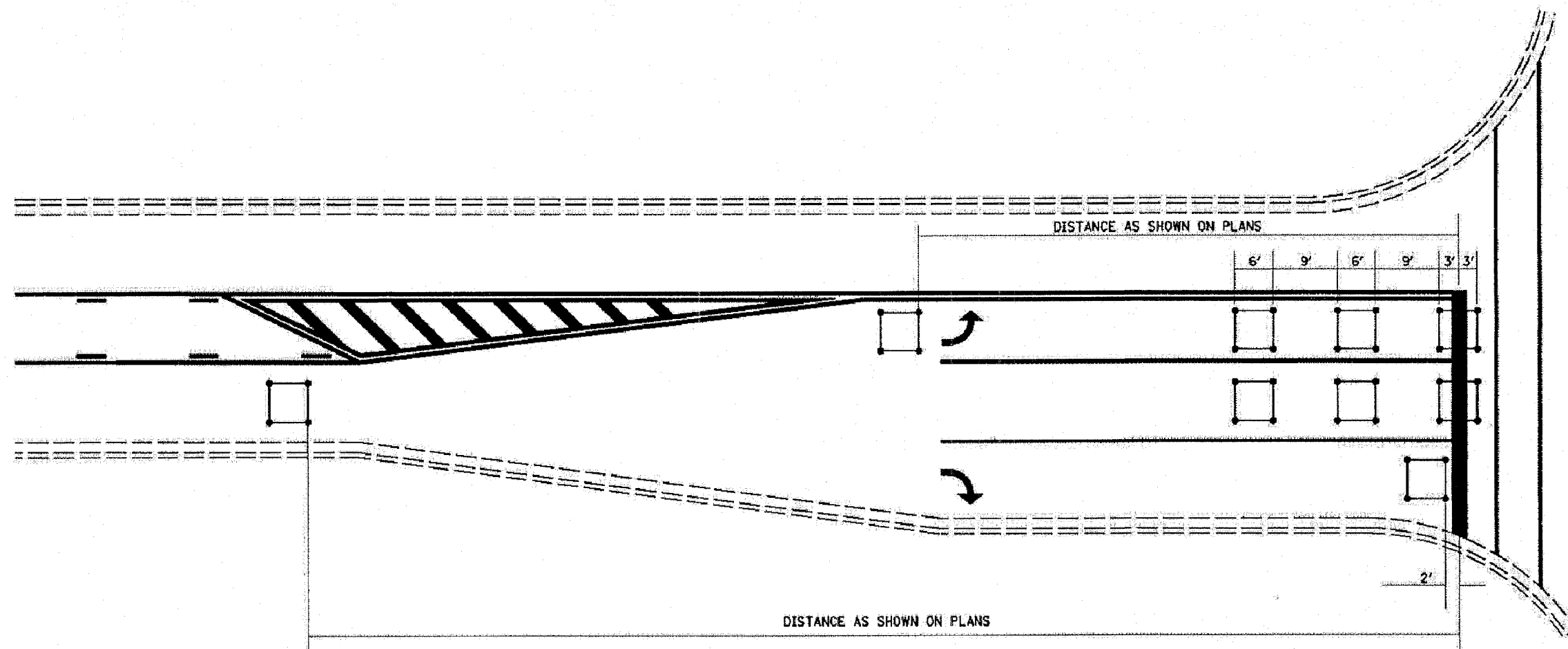
CROSS SECTIONS
 BANKER STREET
 CITY OF EFFINGHAM
 EFFINGHAM COUNTY, ILLINOIS

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 Plot date: 04/27/07 at 12:00

ROUTE NO. FAU 8367	SECTION 06-0005- 00-PV	COUNTY EFFINGHAM	TOTAL SHEETS 18	SHEET NO. 18
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		

CONTRACT #95507

TYPICAL APPLICATION OF DETECTOR LOOPS



NOTES:

1. EACH LOOP SHALL HAVE ITS OWN HOMERUN TO THE GULFBOX/HANDHOLE.
2. LOOPS SHOULD BE CENTERED IN EACH LANE.
3. USE 6' BY 6' LOOPS FOR LANE WIDTHS OF 11' OR GREATER.
4. USE 5' BY 5' LOOPS IF LANE WIDTH IS LESS THAN 11'.

M
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Engineering
G

MLANO & GRUNLOH ENGINEERS, LLC
14 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DW\05\03003RTL\dwg\Traffic Signals.dwg
Plot date: 04/27/07 at 12:00

TYPICAL APPLICATION OF
DETECTOR LOOPS
SOUTH BANKER STREET AND
WEST FAYETTE AVENUE
EFFINGHAM, ILLINOIS