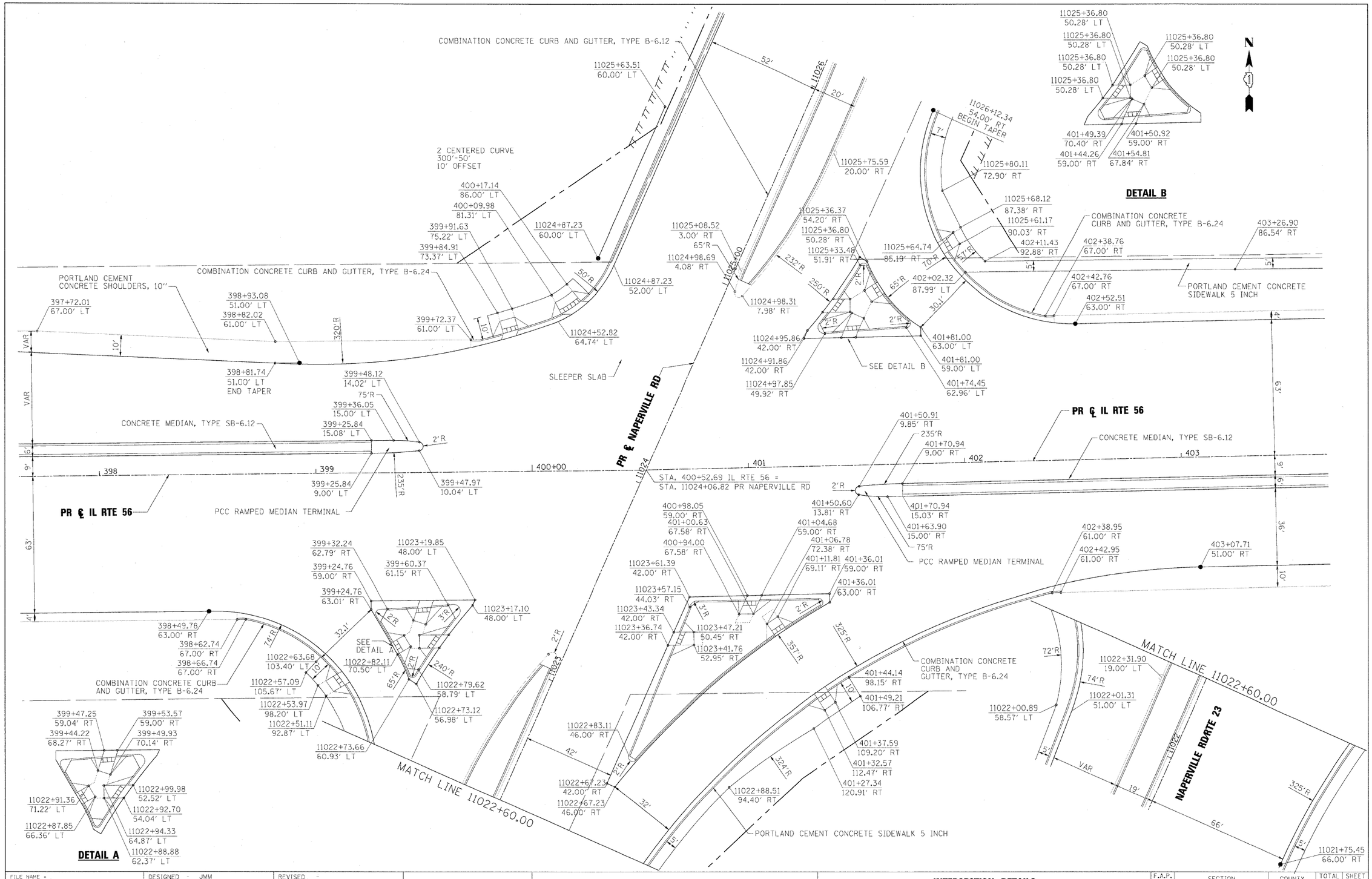


FILE NAME =	DESIGNED - JMM	REVISED -
...\d162419-sht-intersec_NAP_geom.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

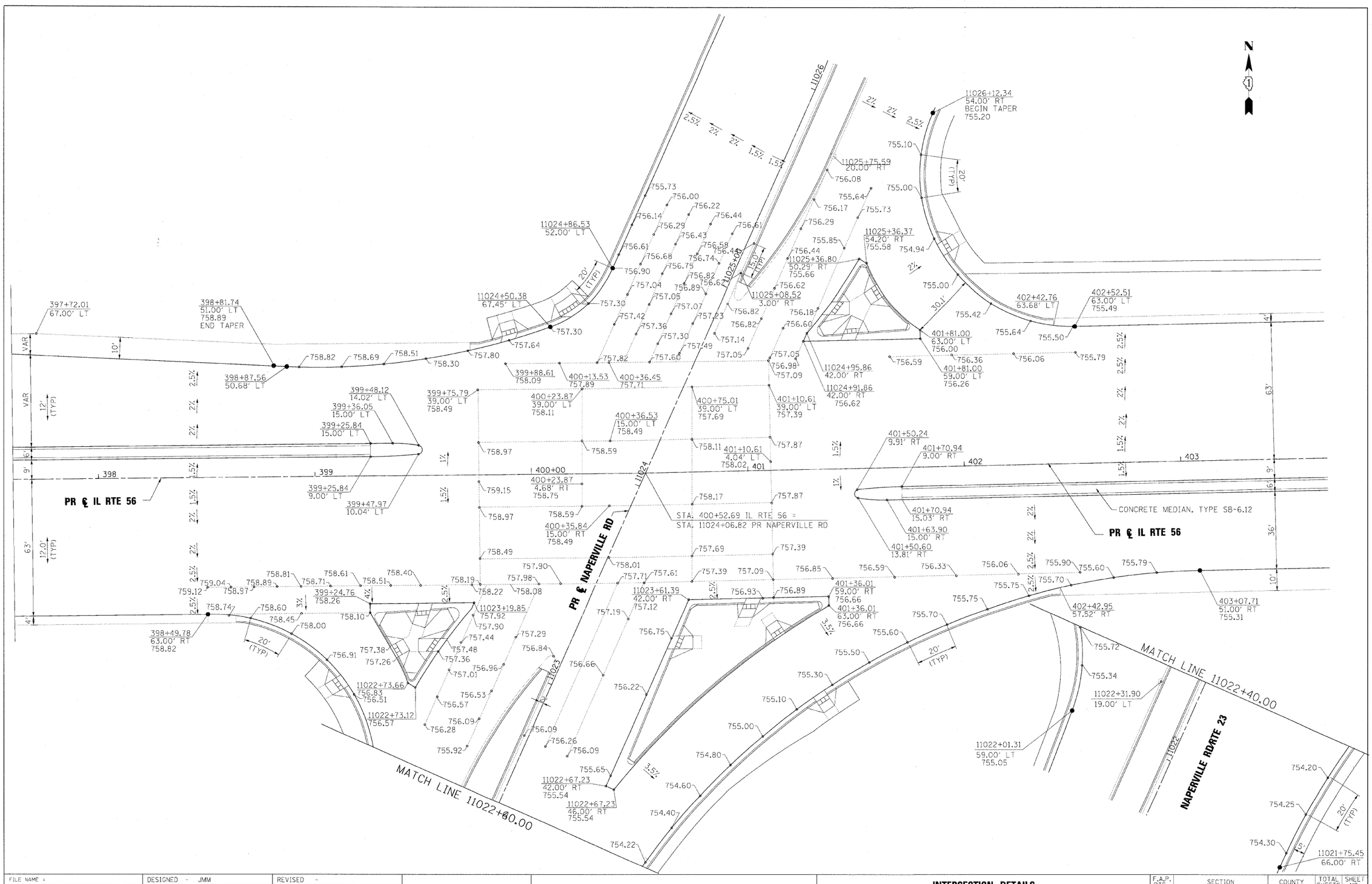
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERSECTION DETAILS
NAPERVILLE RD

SCALE: 1"=20' | SHEET NO. 6 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	301
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



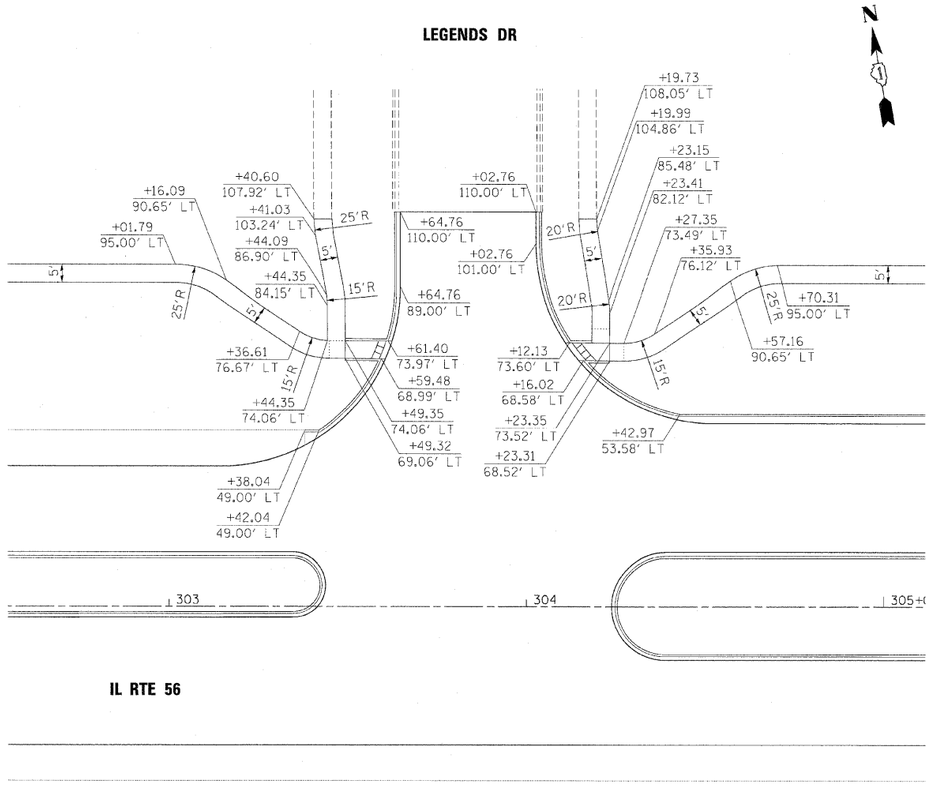
FILE NAME = ...\c162419-sht-intersec_NAP_elev.dgn	DESIGNED - JMM	REVISED -	benesch
USER NAME = tblank	DRAWN - TMB	REVISED -	
PLOT DATE = 12/7/2210	CHECKED - RMT	REVISED -	
	DATE - 12/6/10	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

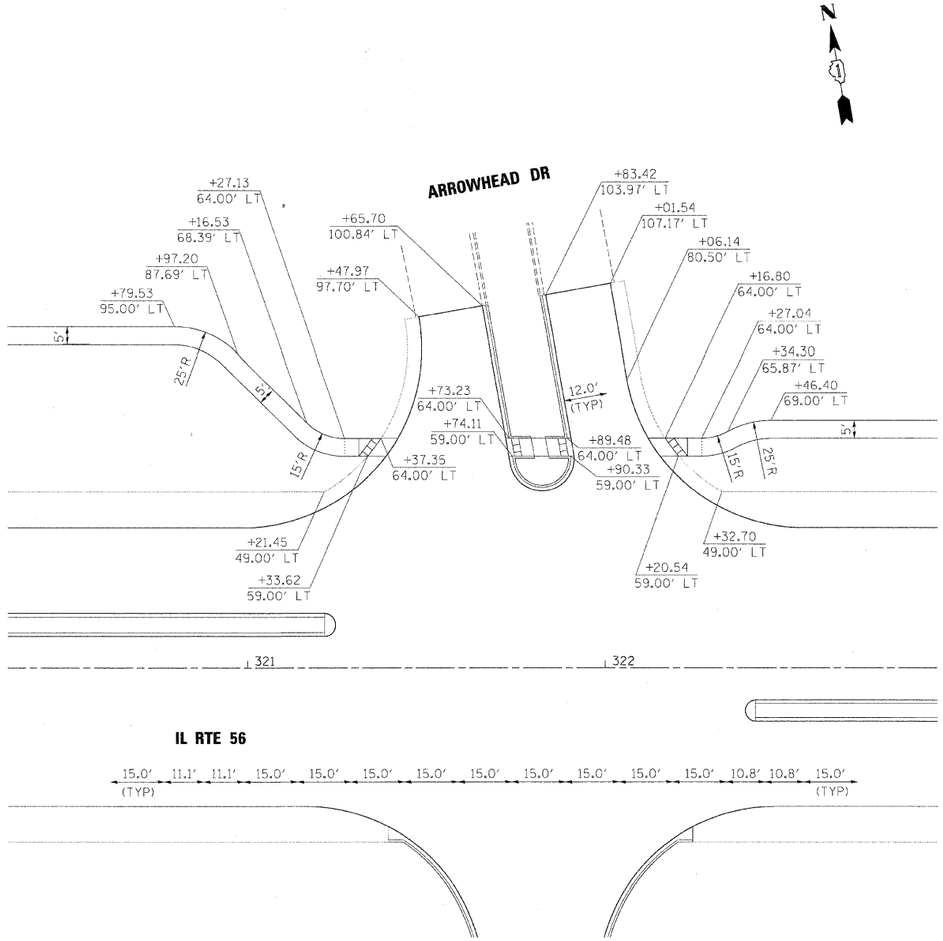
INTERSECTION DETAILS
NAPERVILLE RD

SCALE: 1"=20' | SHEET NO. 7 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	302
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



DETAIL A



DETAIL B

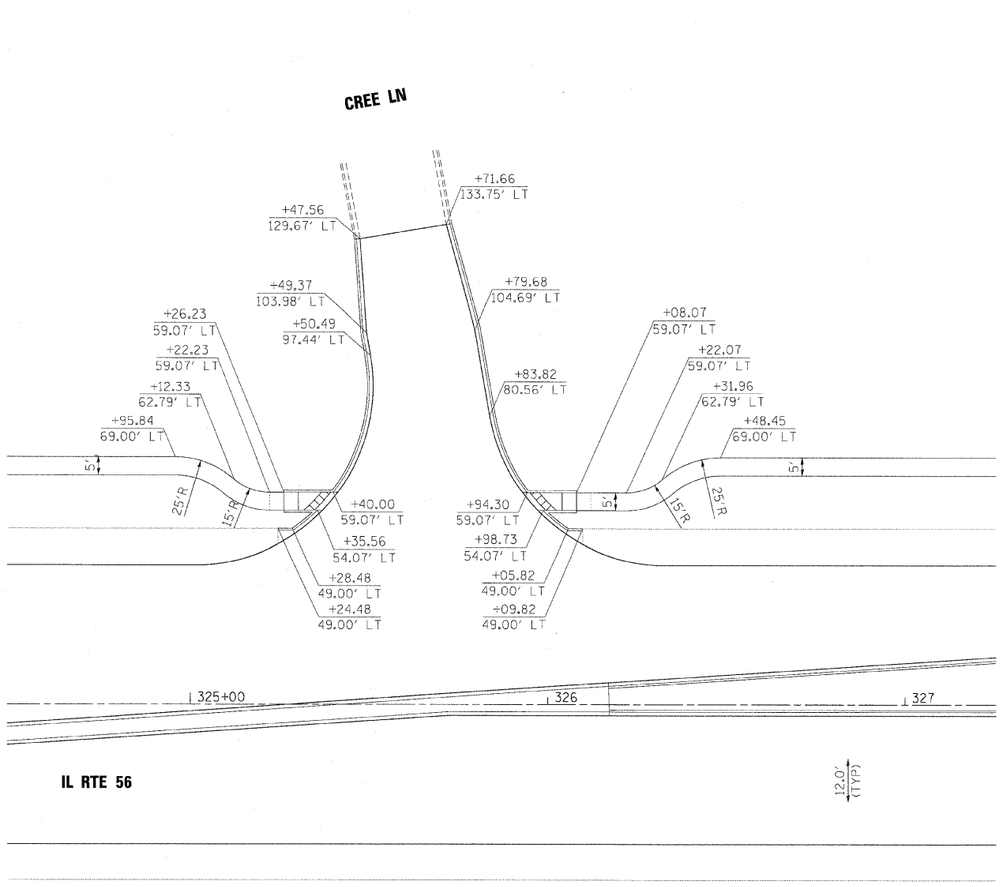
FILE NAME =	DESIGNED - JMM	REVISED -	benesch
...\D162419-sht-intersec_Det_01.dgn	DRAWN - TMB	REVISED -	
USER NAME = tblenk	CHECKED - RMT	REVISED -	
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

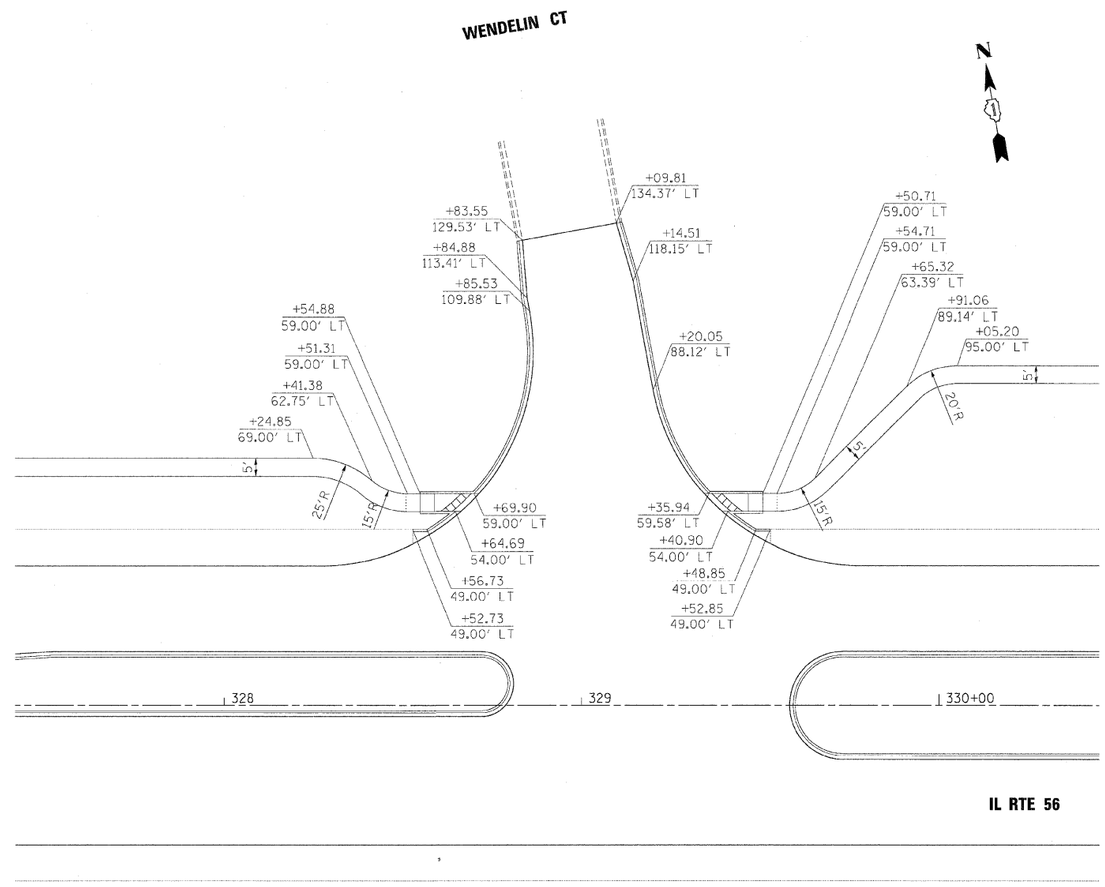
INTERSECTION DETAILS
IL RTE 56

SCALE: 1"=20' | SHEET NO. 8 OF 19 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	303
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



DETAIL C



DETAIL D

FILE NAME = ...\0162419-sht-intersec_Det_02.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = sblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

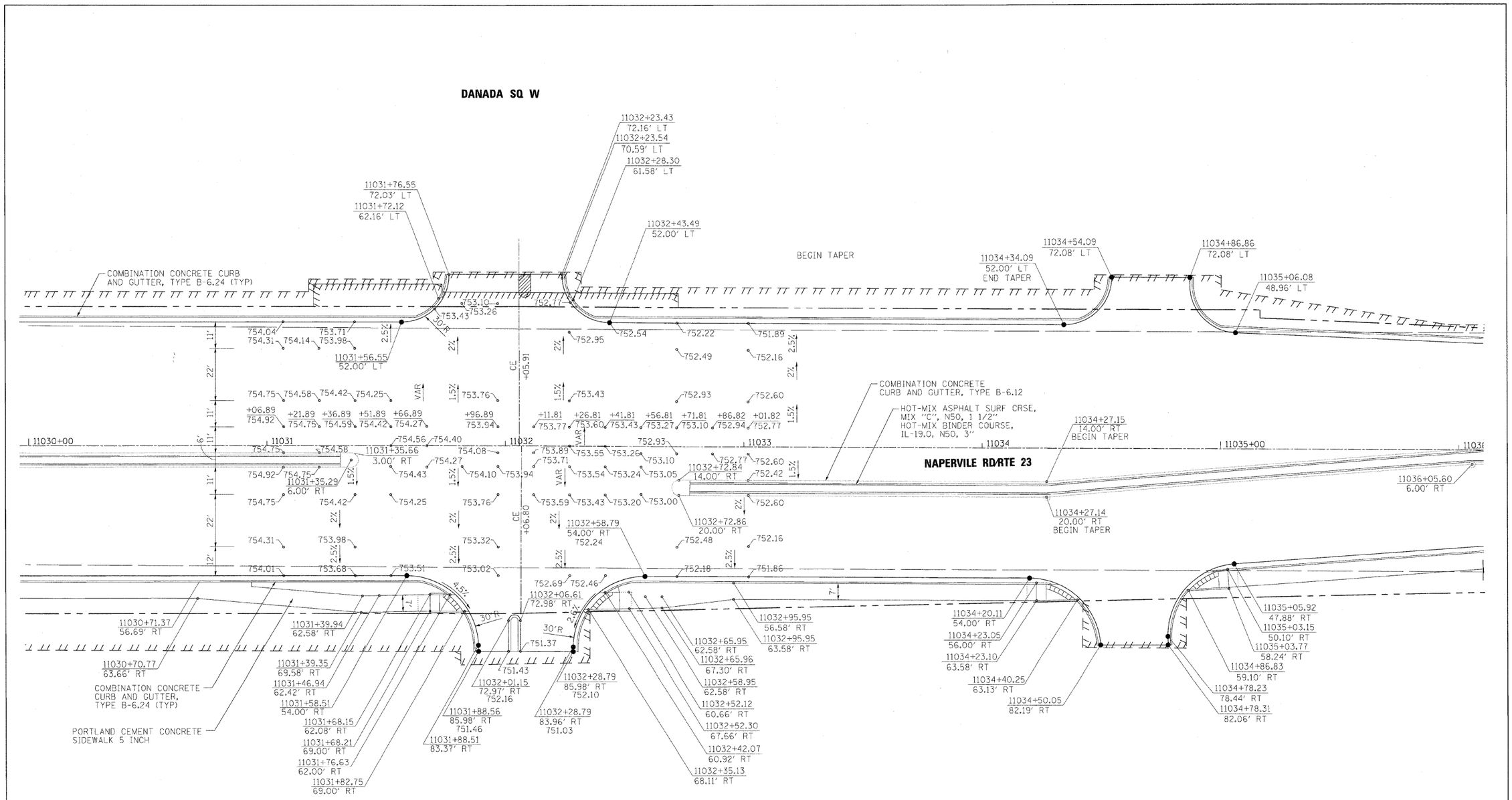
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERSECTION DETAILS
IL RTE 56

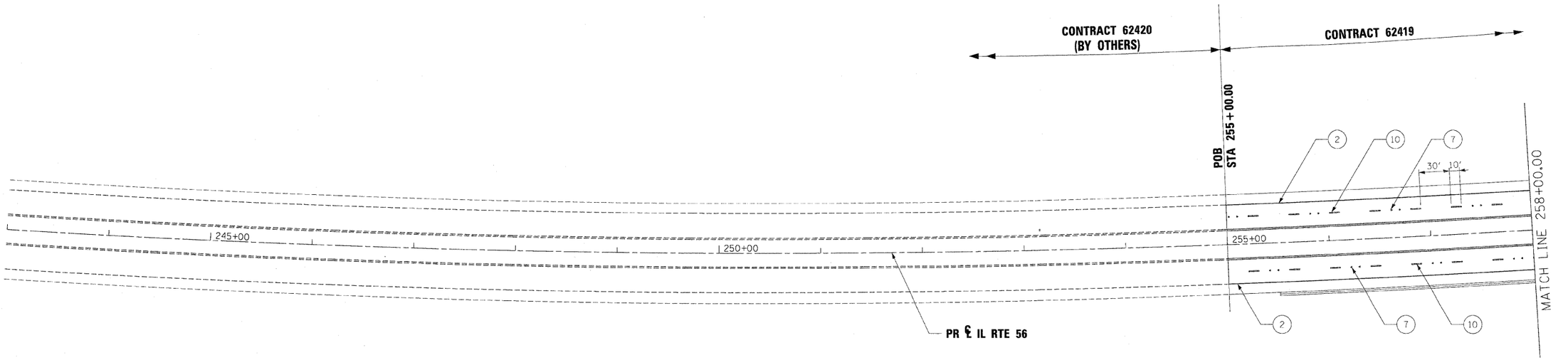
SCALE: 1"=20' | SHEET NO. 9 OF 19 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	304
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



FILE NAME =	DESIGNED - JMM	REVISED -	benesch	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERSECTION DETAILS NAPERVILLE RD /DANADA SQ
...\d162419-sht-intersec DAN.dgn	DRAWN - TMB	REVISED -			SCALE: 1"=20' | SHEET NO. 10 OF 10 SHEETS | STA. | TO STA.
USER NAME = tblank	CHECKED - RMT	REVISED -			
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	305
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME =	DESIGNED - JMM	REVISED -
...\D162419-sht-pmsign01.dgn	DRAWN - TMB	REVISED -
USER NAME = tblenk	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

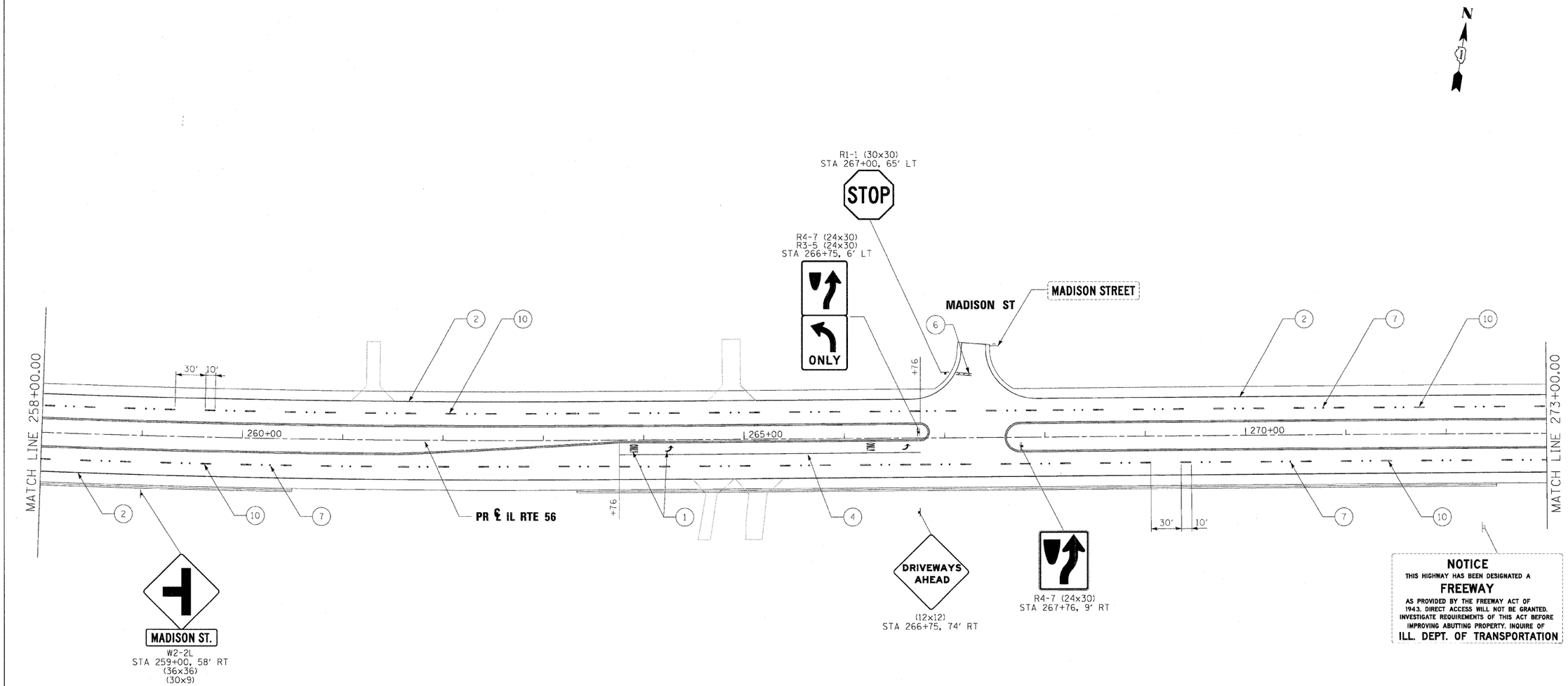
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 1 OF 19 SHEETS | STA. POB | TO STA. 258+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	306
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME =	DESIGNED - JMM	REVISED -
...\D162419-sht-pmsign002.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

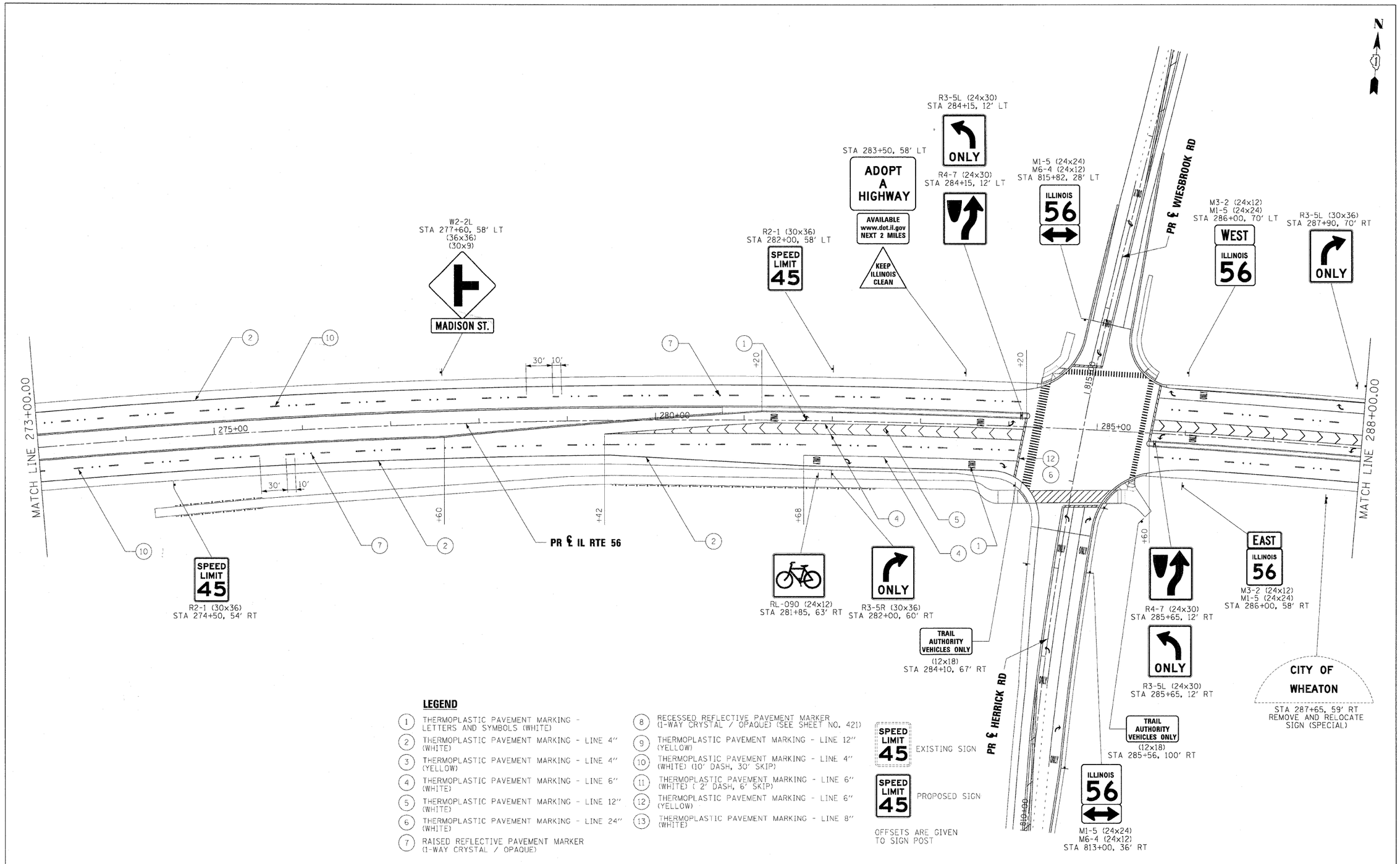
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 2 OF 19 SHEETS | STA. 258+00 TO STA. 273+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	157 & 58)WRS-2	DUPAGE	681	307
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 EXISTING SIGN

SPEED LIMIT 45 PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME =	DESIGNED - JMM	REVISED -
...\D162419-sht-pmsign003.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2012	DATE - 12/6/10	REVISED -

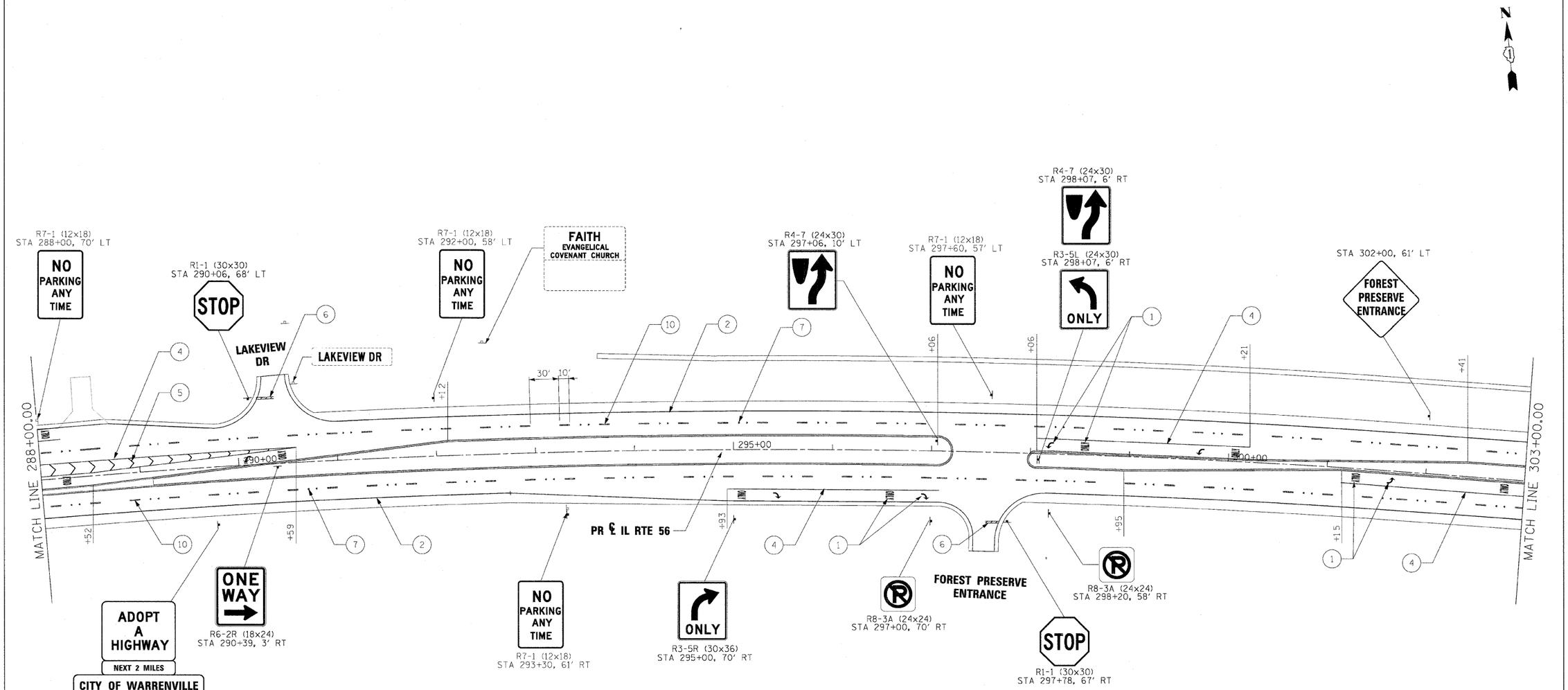
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 3 OF 19 SHEETS | STA. 273+00 TO STA. 288+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	308
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\62419-sht-pmsign04.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblenk	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

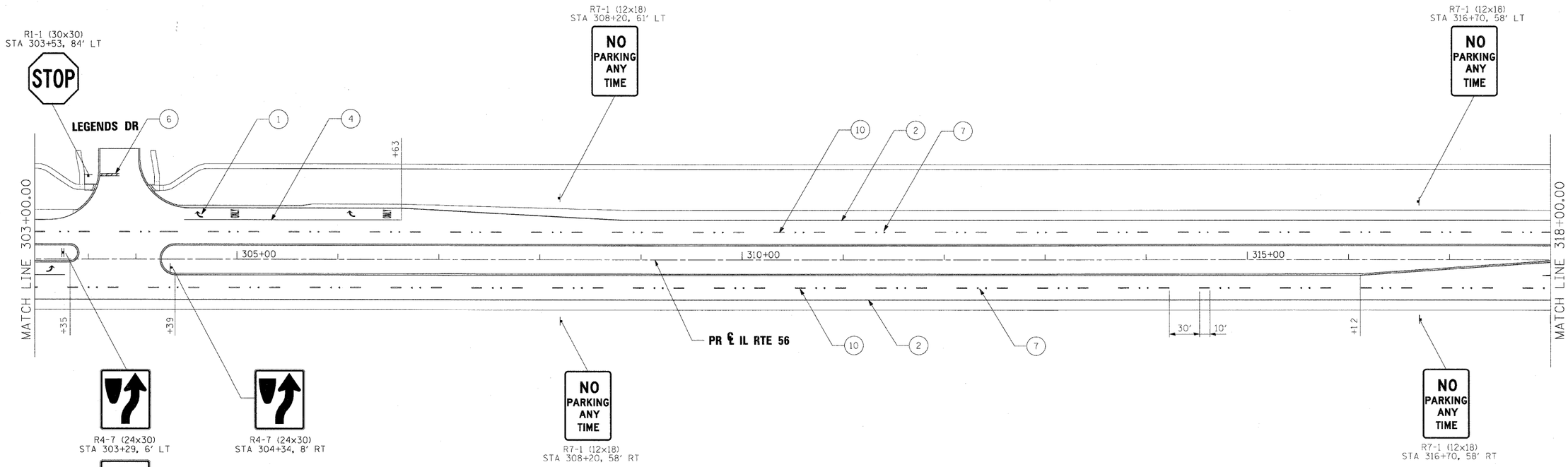
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 4 OF 19 SHEETS | STA. 288+00 TO STA. 303+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	309
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\D162419-sht-pmsign02S.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tolenk	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

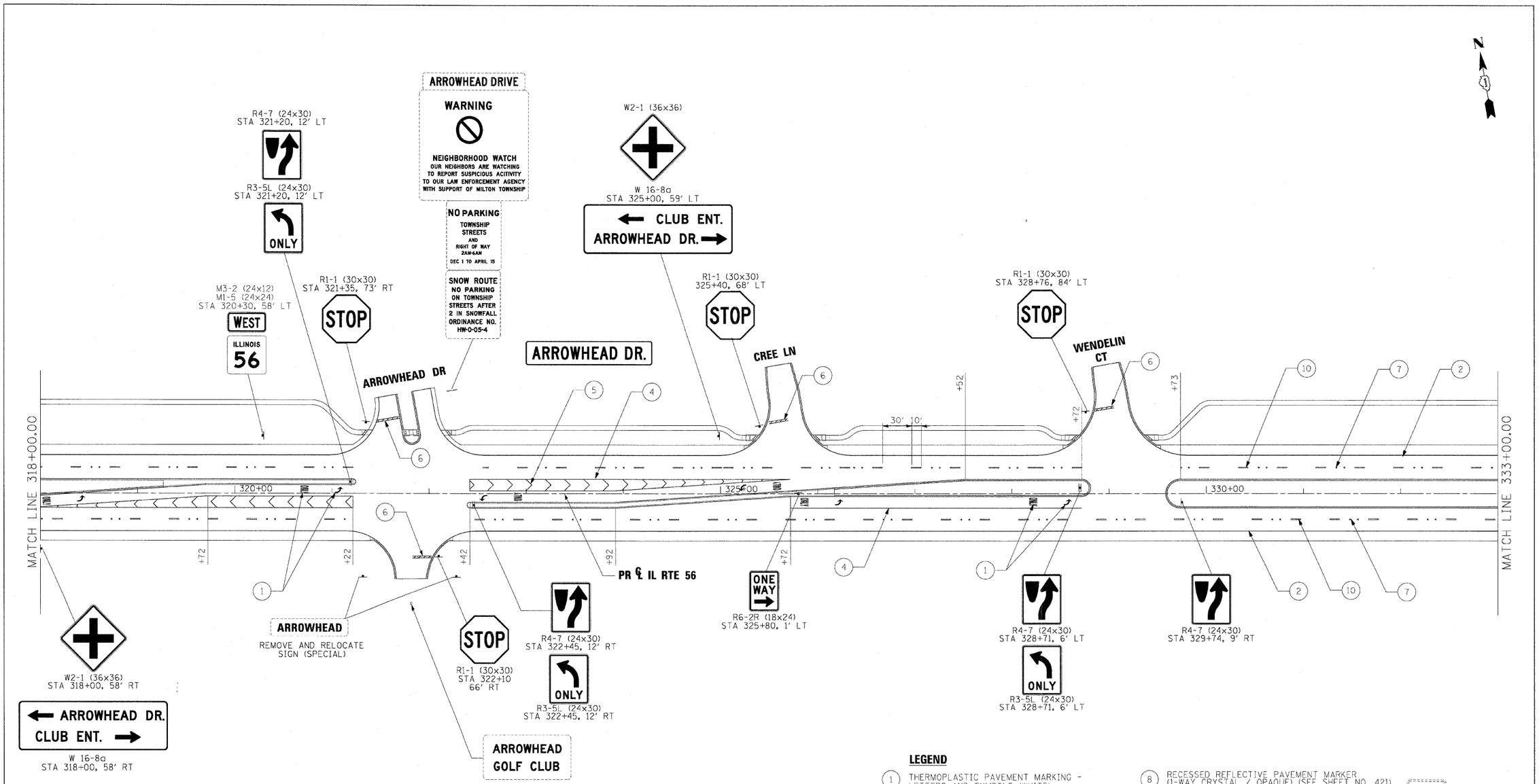
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 5 OF 19 SHEETS | STA. 303+00 TO STA. 318+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	310
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\D162419-sht-pmsign026.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = sblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 6 OF 19 SHEETS | STA. 318+00 TO STA. 333+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	311
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

PR ℄ ORCHARD RD

R2-1 (30x36)
STA 338+75, 58' LT

R3-5L (30x36)
STA 340+31, 1' LT

(30x24)
STA 341+75, 58' LT
(30x9)

R4-7 (24X30)
STA 343+60, 12' LT

R3-5L (24x30)
STA 343+60, 12' LT

R3-5R (30x36)
STA 345+00, 76' LT

R3-5R (30x36)
STA 347+10, 70' LT

MATCH LINE 333+00.00

335+00

340+00

345+00

MATCH LINE 348+00.00

+13

+61

+08

+53

+33

+93

+70

30'

10'

PR ℄ IL RTE 56

R2-1 (30x36)
STA 338+75, 58' RT

R7-1 (12x18)
STA 346+10,
58' RT

R4-7 (24x30)
STA 345+25, 1' RT

R3-5L (24x30)
STA 345+25, 1' RT

LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 EXISTING SIGN

SPEED LIMIT 45 PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\D162419-sht-pmsign207.dgn	DESIGNED - JMM	REVISED -
USER NAME = tblank	DRAWN - TMB	REVISED -
PLOT DATE = 12/7/2010	CHECKED - RMT	REVISED -
	DATE - 12/6/10	REVISED -

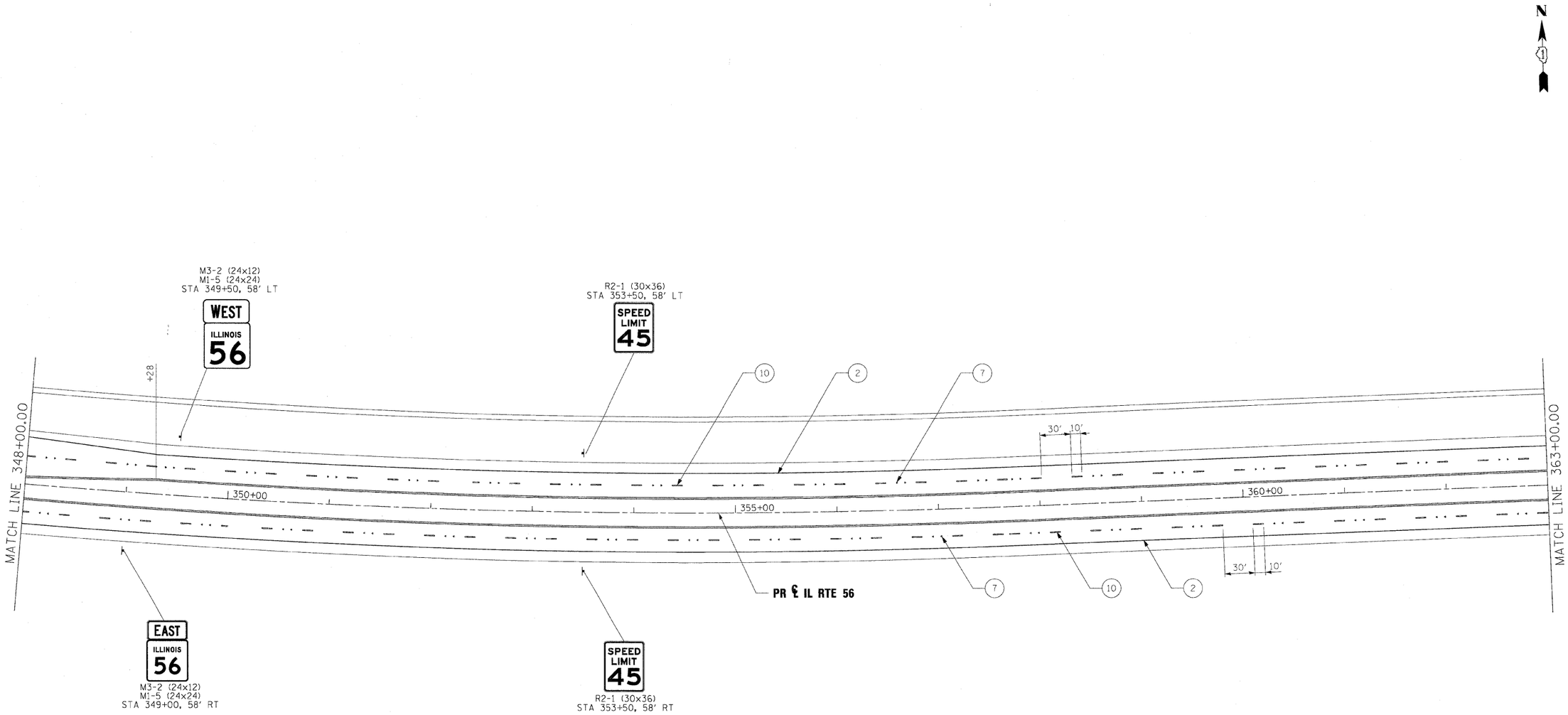
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 7 OF 19 SHEETS | STA. 333+00 TO STA. 348+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	312
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\0162419-sht-pmsign008.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

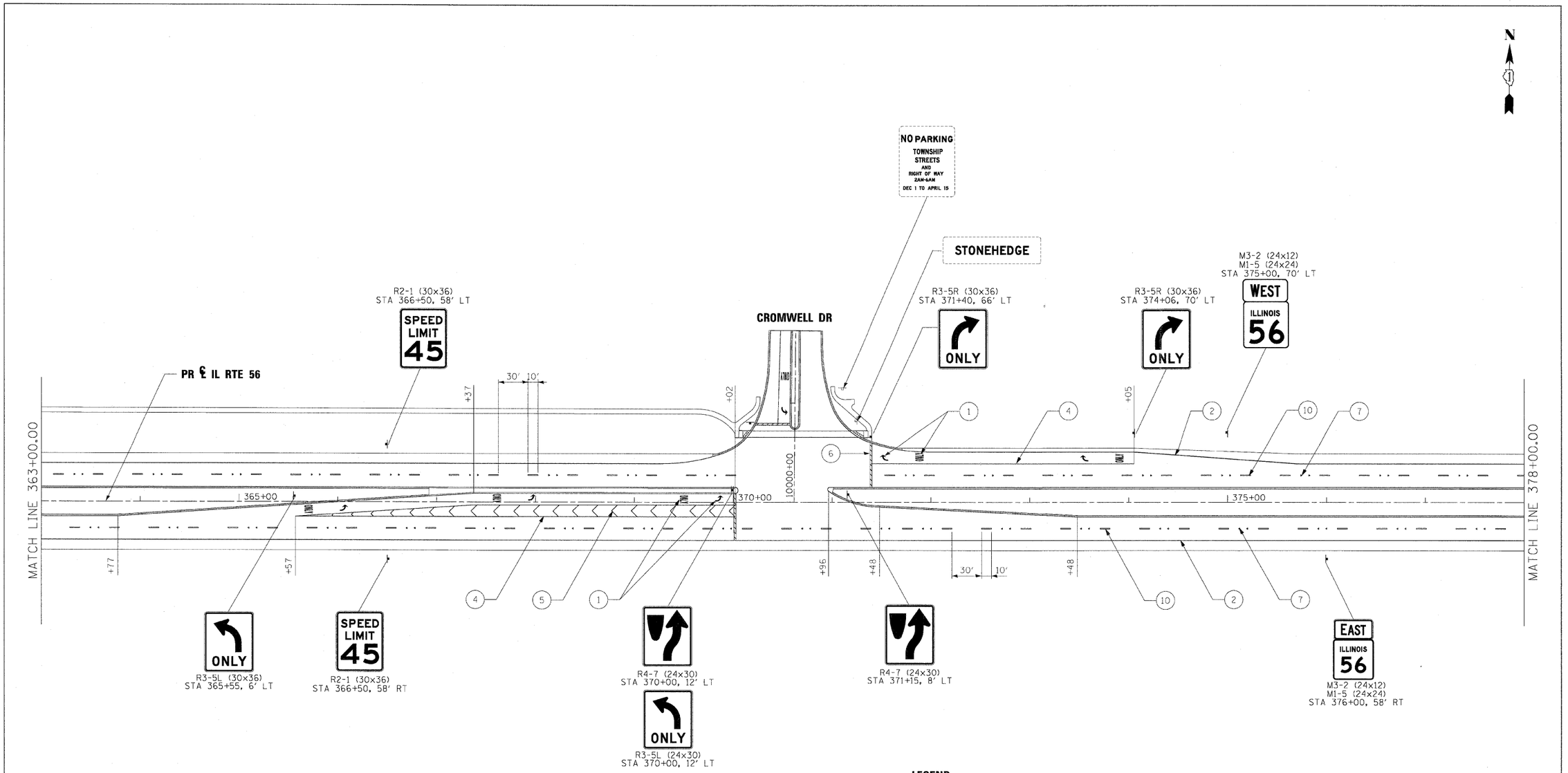
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 8 OF 19 SHEETS | STA. 348+00 TO STA. 363+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	313
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 EXISTING SIGN

SPEED LIMIT 45 PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\3162419-sht-pmsign09.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tolank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

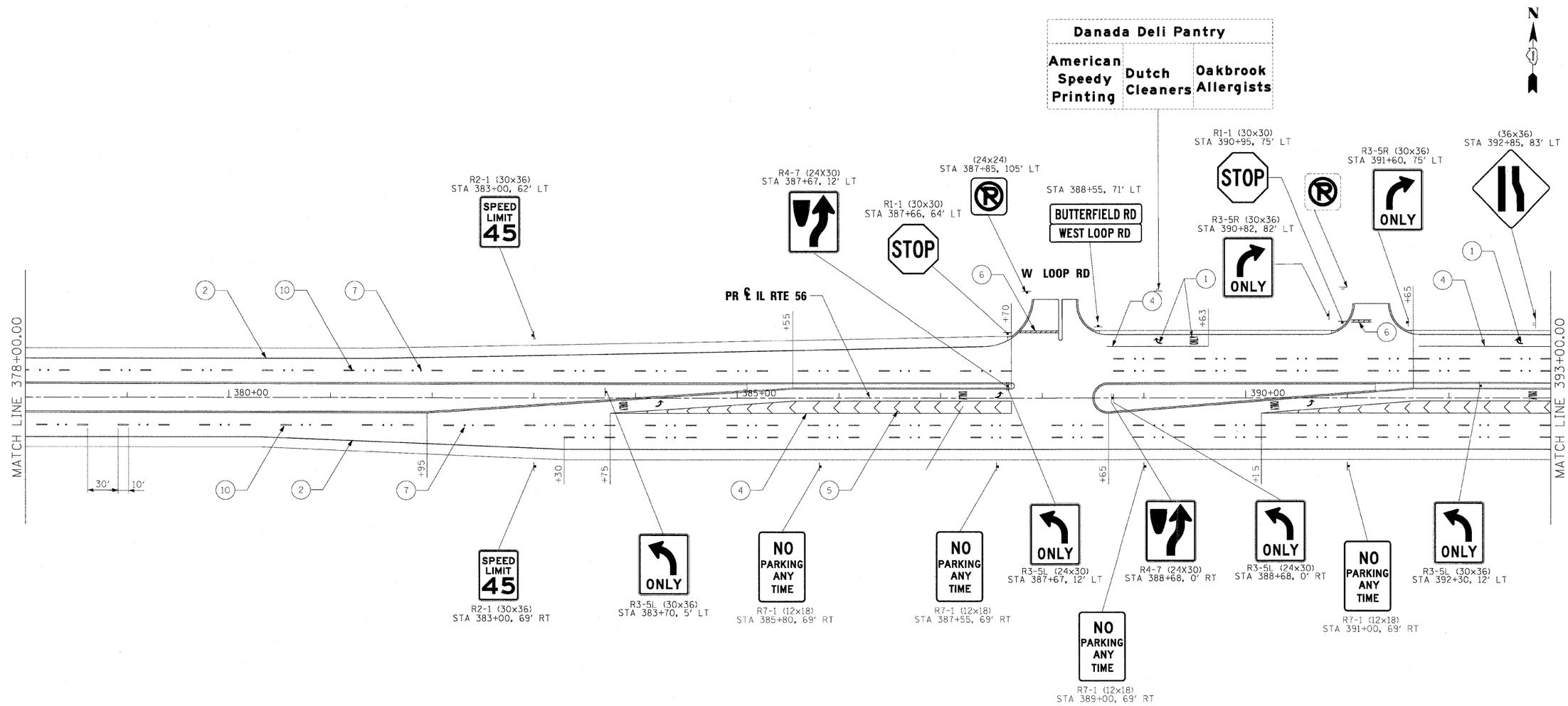
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 9 OF 19 SHEETS | STA. 363+00 TO STA. 378+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	314
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME =	DESIGNED - JMM	REVISED -
...\0162419-sht-psnsign01@.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

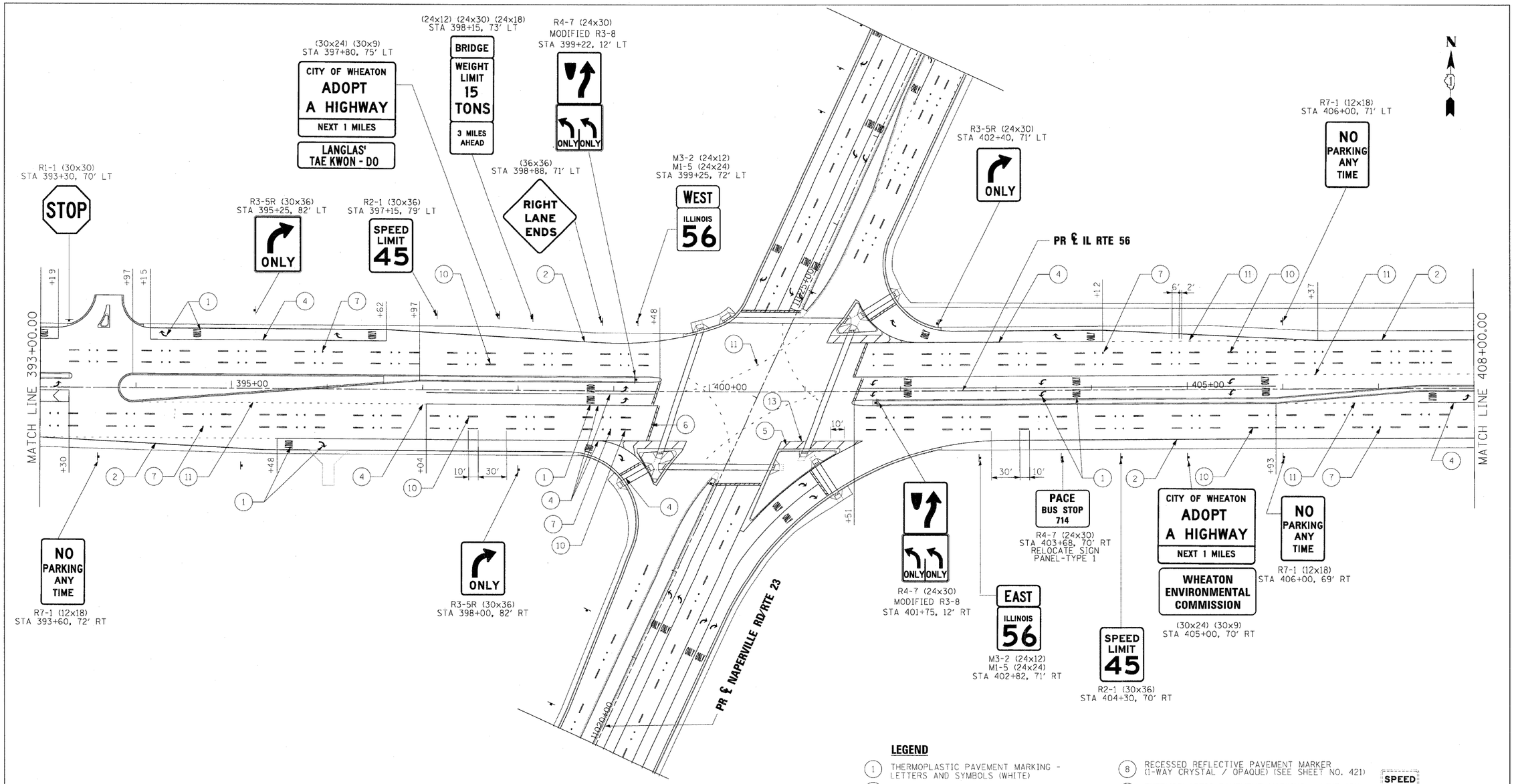
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO.10 OF 19 SHEETS | STA. 378+00 TO STA. 393+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	315
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\0162419-sht-pmsign11.dgn	DESIGNED - JMM	REVISED -
USER NAME = tblank	DRAWN - TMB	REVISED -
PLOT DATE = 12/7/2010	CHECKED - RMT	REVISED -
	DATE - 12/6/10	REVISED -

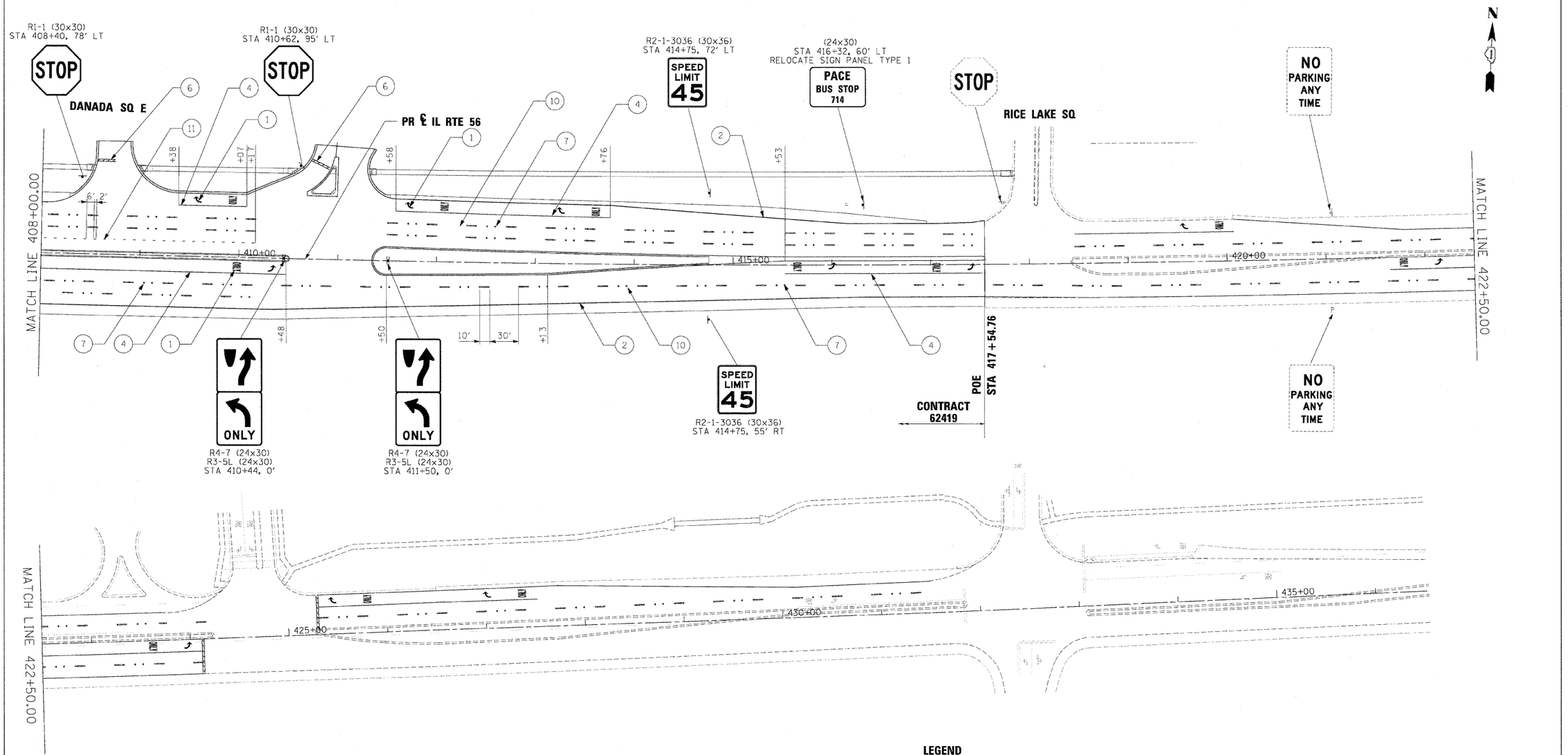
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO. 11 OF 19 SHEETS | STA. 393+00 TO STA. 408+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	316
		CONTRACT NO. 62419		
	ILLINOIS	FED. AID PROJECT		



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 EXISTING SIGN

SPEED LIMIT 45 PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME =	DESIGNED - JMM	REVISED -
...\D162419-sht-pmsign012.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

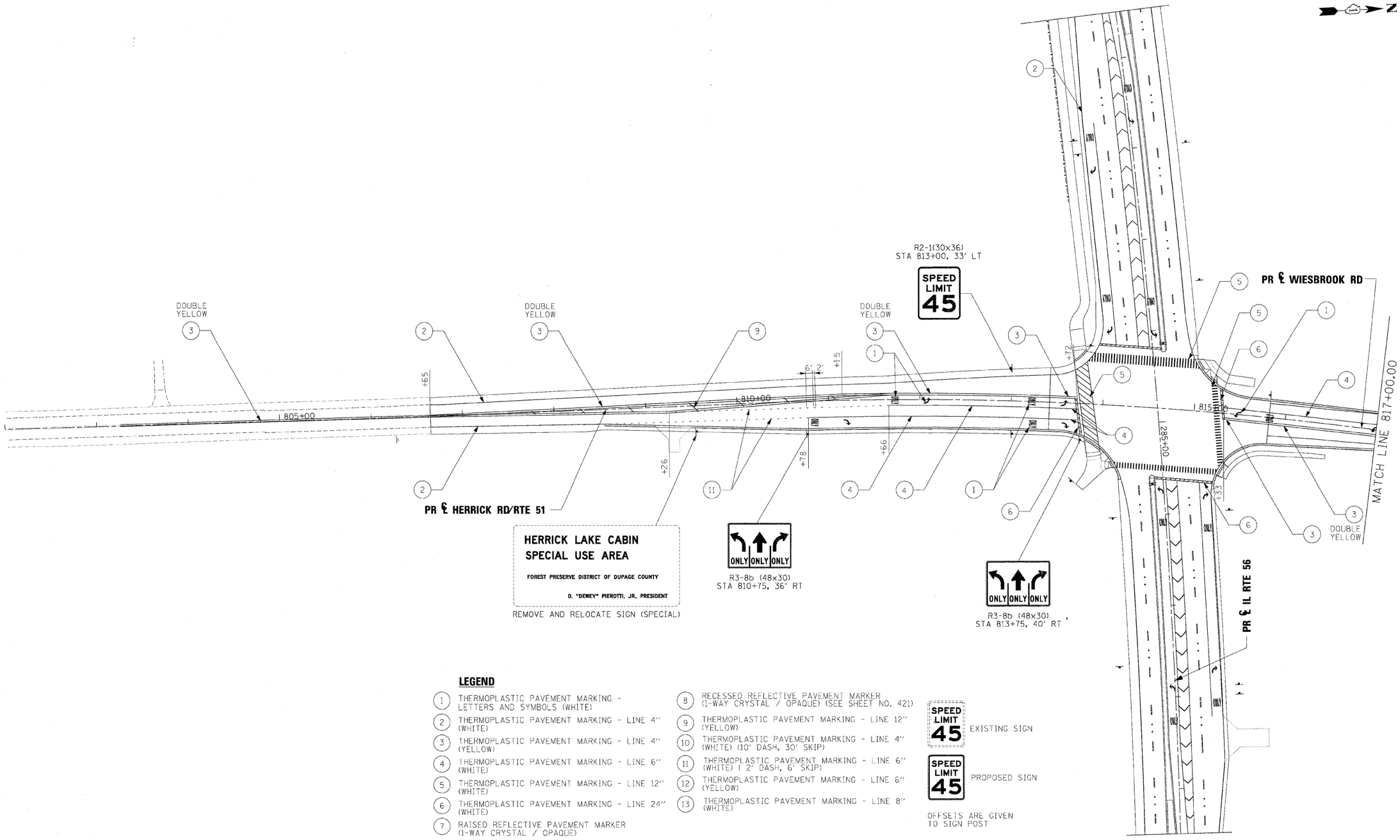
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL RTE 56

SCALE: 1"=50' | SHEET NO.12 OF 19 SHEETS | STA. 408+00 TO STA. POE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	317
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\D162419-sht-pmsign013.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tolenk	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

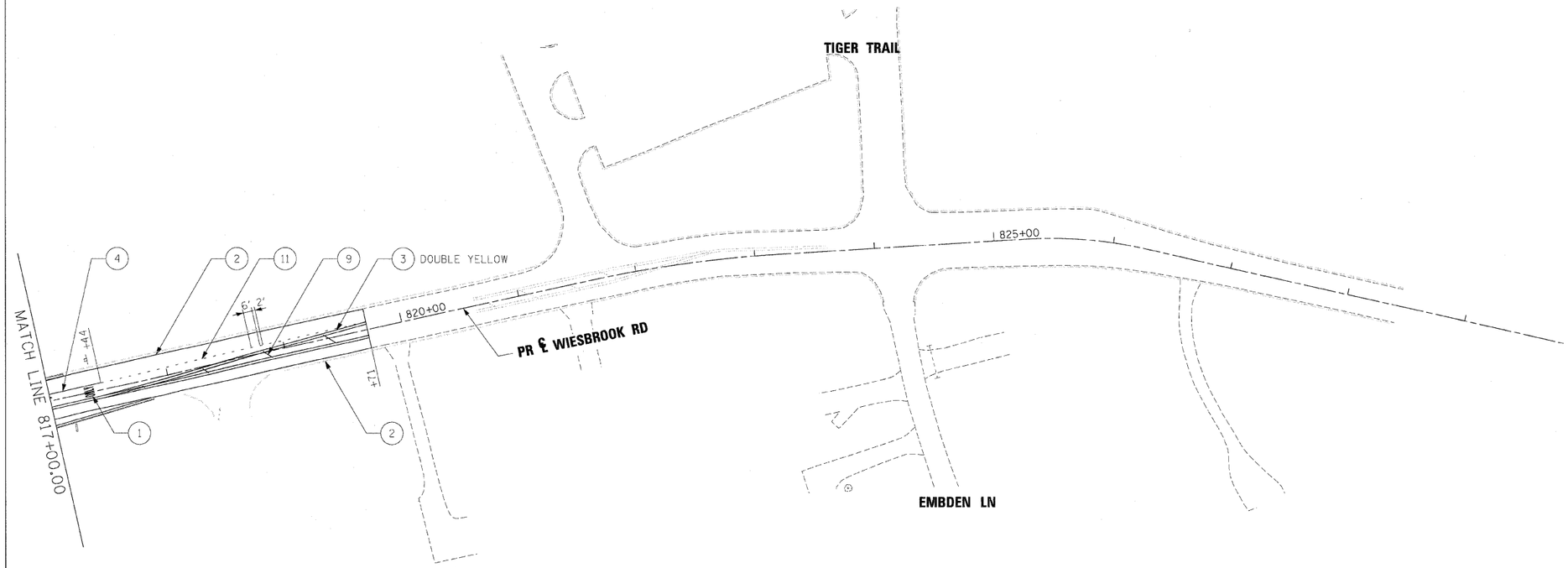
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
HERRICK RD /WIESBROOK RD

SCALE: 1"=50' | SHEET NO. 13 OF 19 SHEETS | STA. POB TO STA. 817+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	318
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\D162419-sht-pmsign014.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

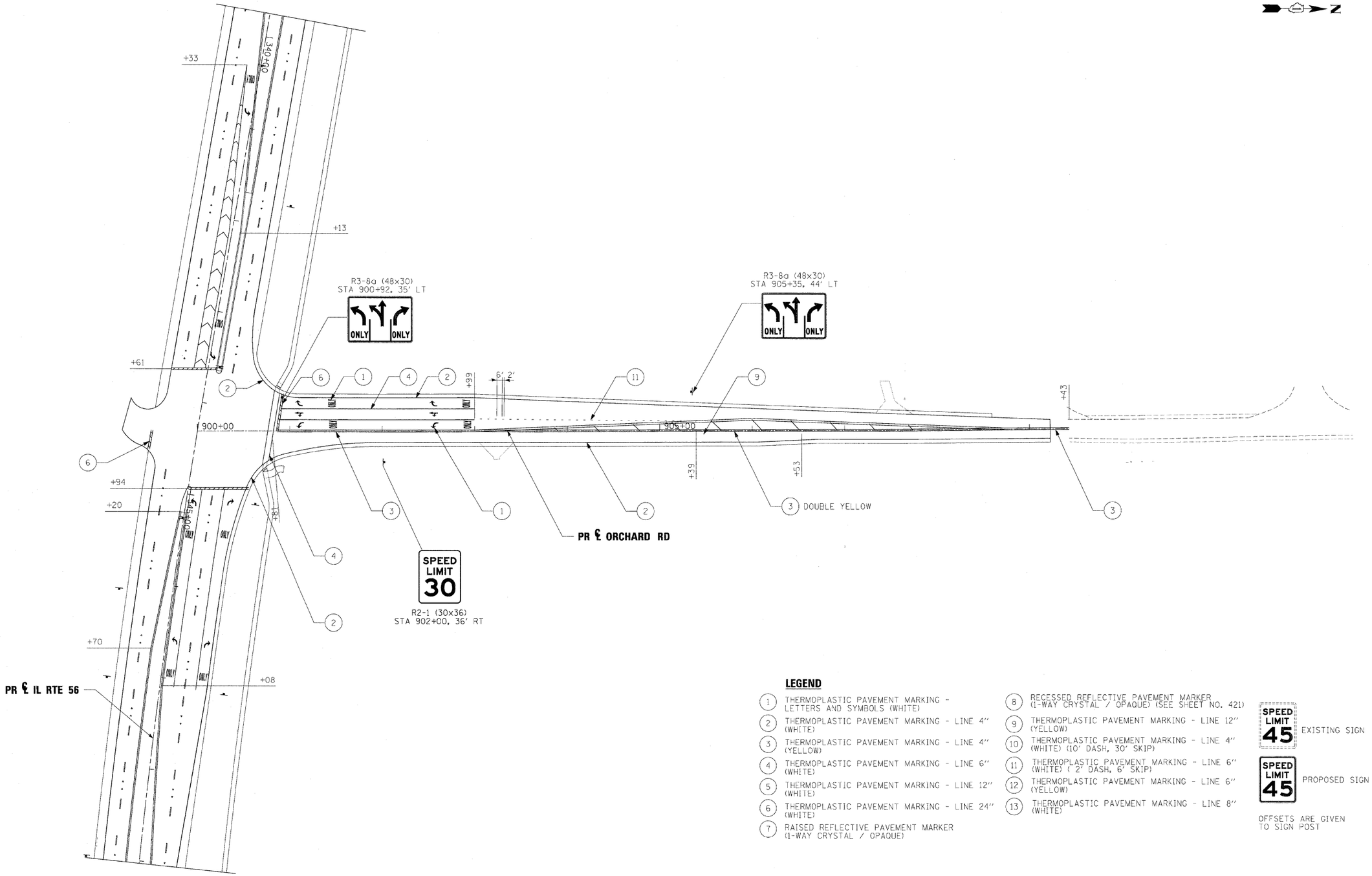
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
WIESBROOK RD

SCALE: 1"=50' | SHEET NO.14 OF 19 SHEETS | STA. 817+00 TO STA. POE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	319
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 EXISTING SIGN

SPEED LIMIT 45 PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\0162419-sht-pmsign15.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tb'ank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

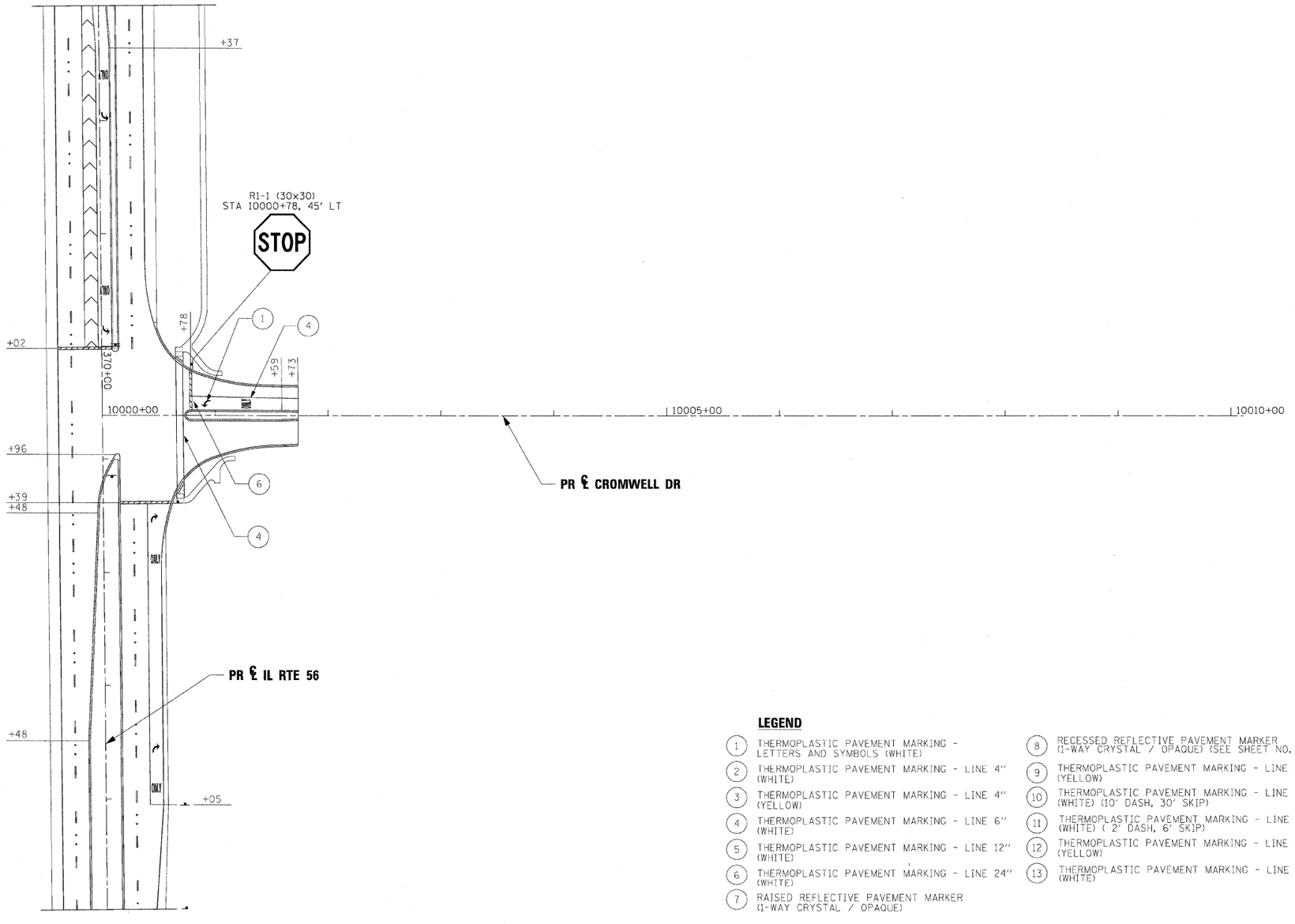
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
ORCHARD RD

SCALE: 1"=50' | SHEET NO.15 OF 19 SHEETS | STA. 900+00 TO STA. POE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	320
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME =	DESIGNED - JMM	REVISED -
...\C162419-sht-pmsign216.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2210	DATE - 12/6/10	REVISED -

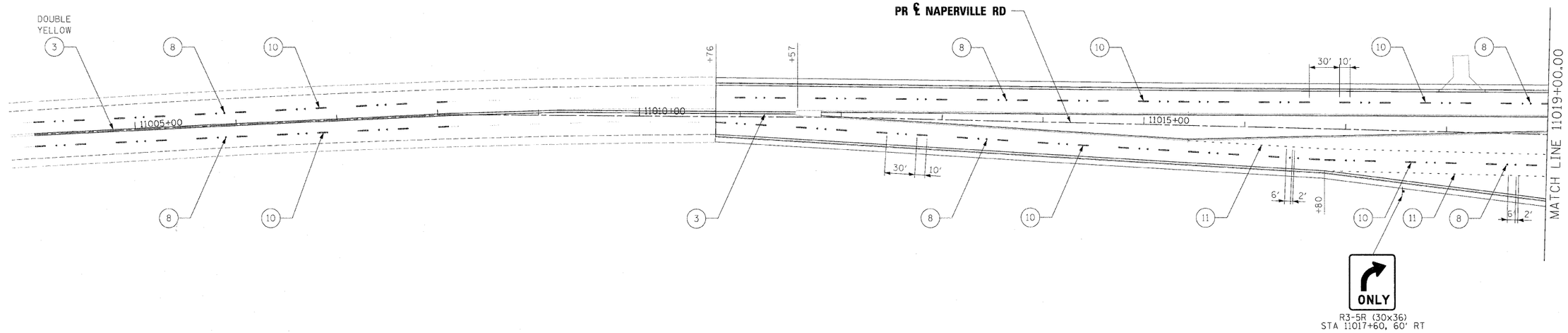
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
CROMWELL DR

SCALE: 1"=50' | SHEET NO.16 OF 19 SHEETS | STA. 0000+00 TO STA. POE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	321
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME =	DESIGNED - JMM	REVISED -
...\D162419-sht-pmsign17.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

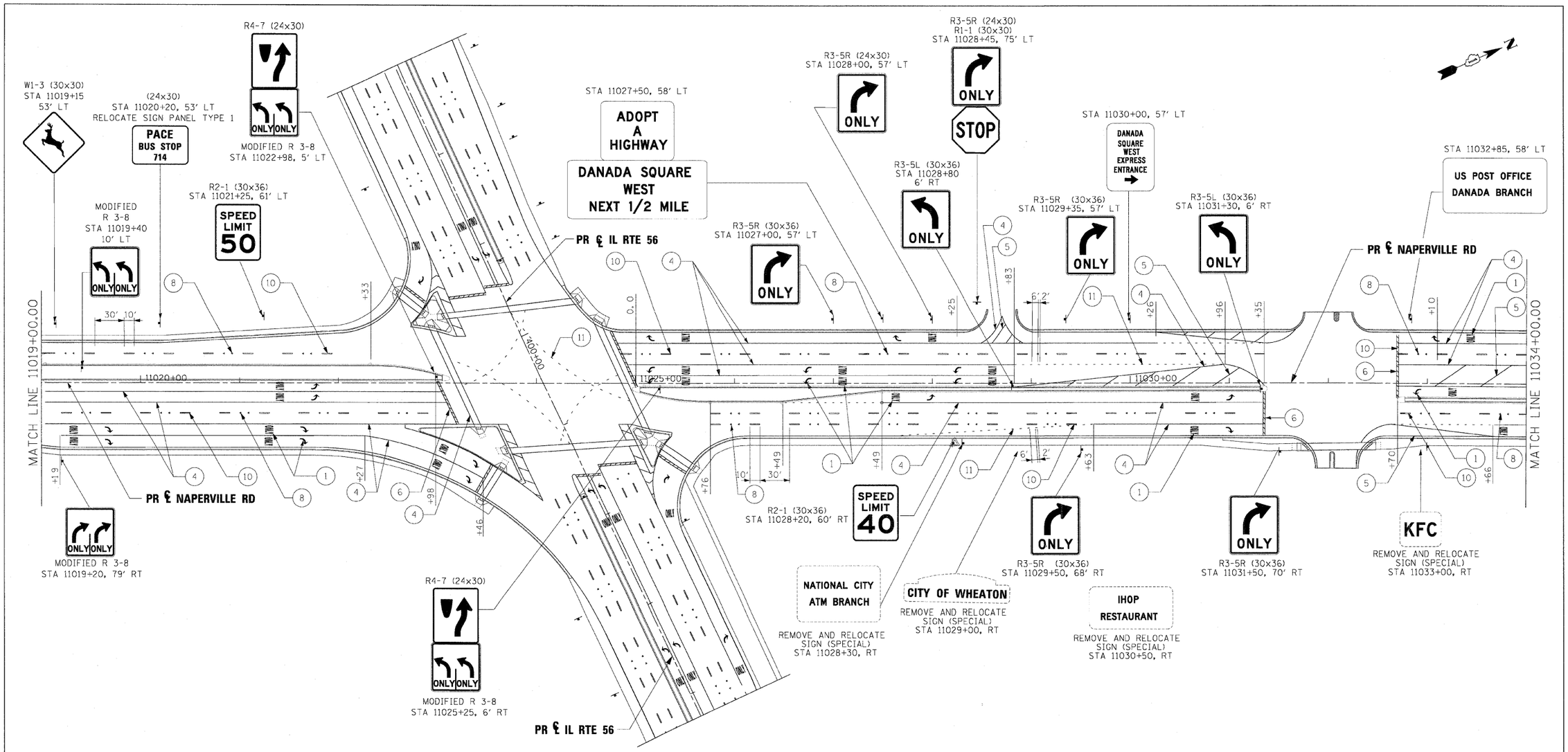
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
NAPERVILLE RD

SCALE: 1"=50' | SHEET NO.17 OF 19 SHEETS | STA. POB TO STA. 1019+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	322
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\C162419-sht-rpmsign2.8.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

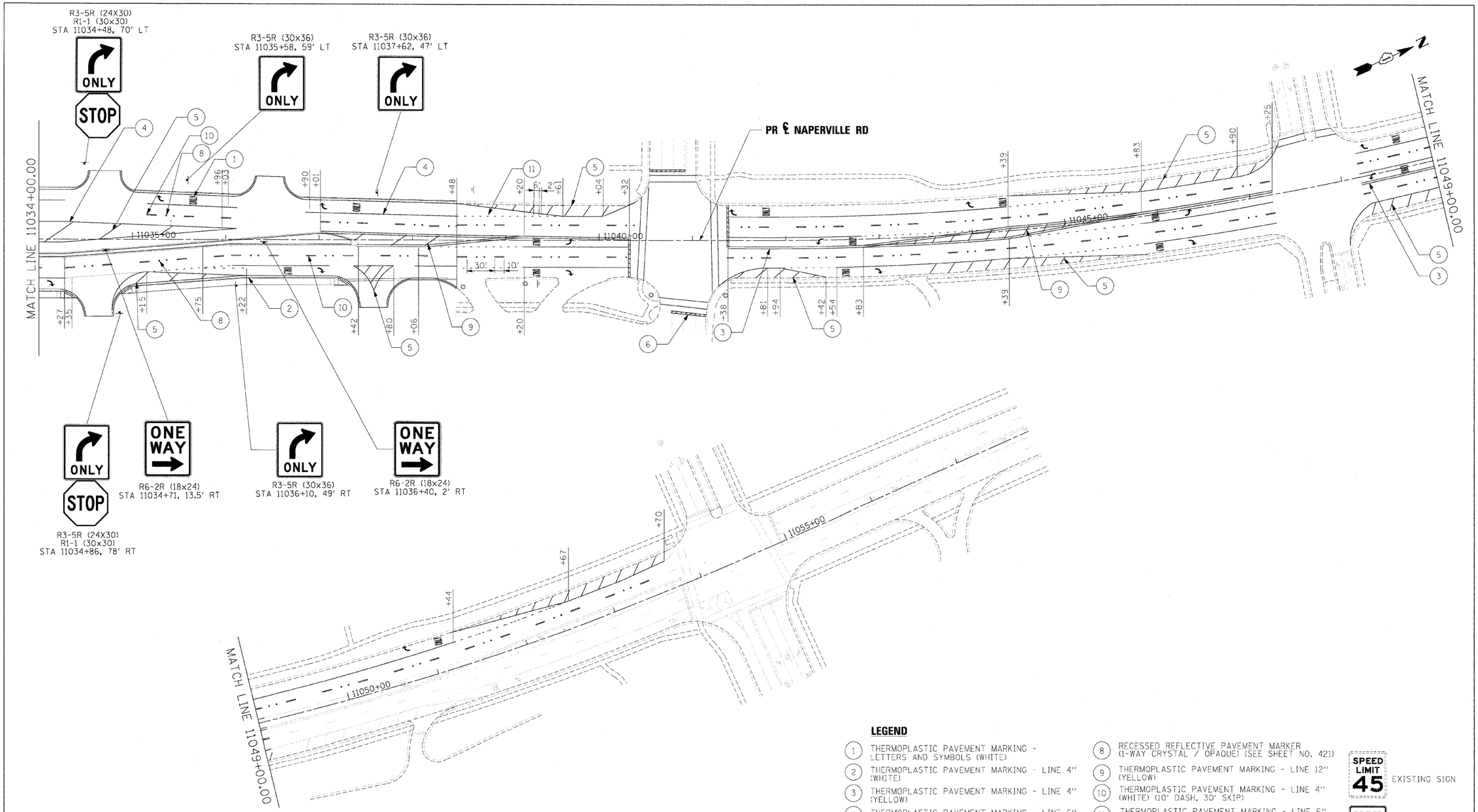
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
NAPERVILLE RD

SCALE: 1"=50' | SHEET NO. 18 OF 19 SHEETS | STA. 1019+00 TO STA. 1034+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	323
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



LEGEND

1. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
2. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)
3. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
4. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
5. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
6. THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
7. RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE)
8. RECESSED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL / OPAQUE) (SEE SHEET NO. 421)
9. THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW)
10. THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH, 30' SKIP)
11. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH, 6' SKIP)
12. THERMOPLASTIC PAVEMENT MARKING - LINE 6" (YELLOW)
13. THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE)

SPEED LIMIT 45 — EXISTING SIGN

SPEED LIMIT 45 — PROPOSED SIGN

OFFSETS ARE GIVEN TO SIGN POST

FILE NAME = ...\D162419-sht-pmsign219.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

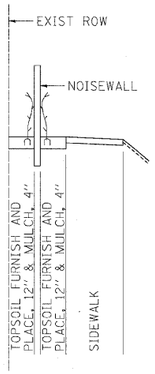
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
NAPERVILLE RD

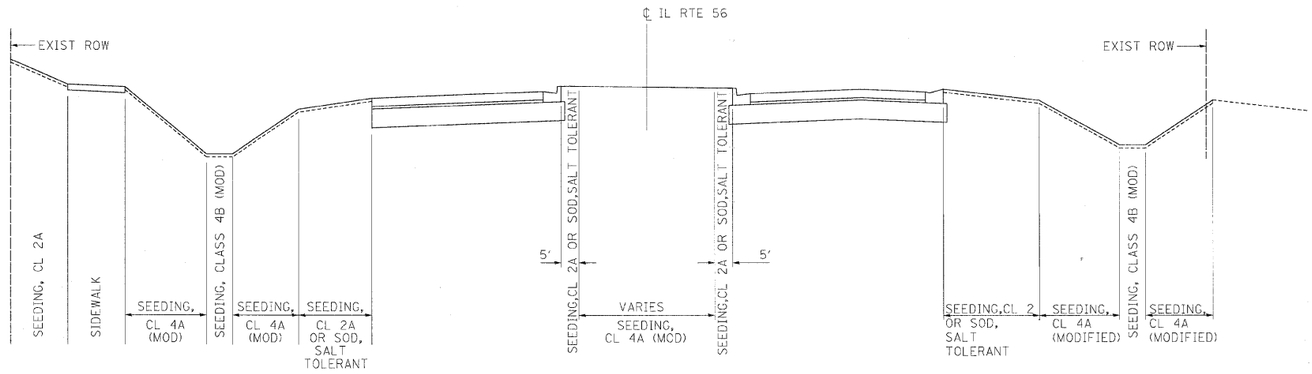
SCALE: 1"=50' | SHEET NO. 19 OF 19 SHEETS | STA. 1034+00 TO STA. POE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	324
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



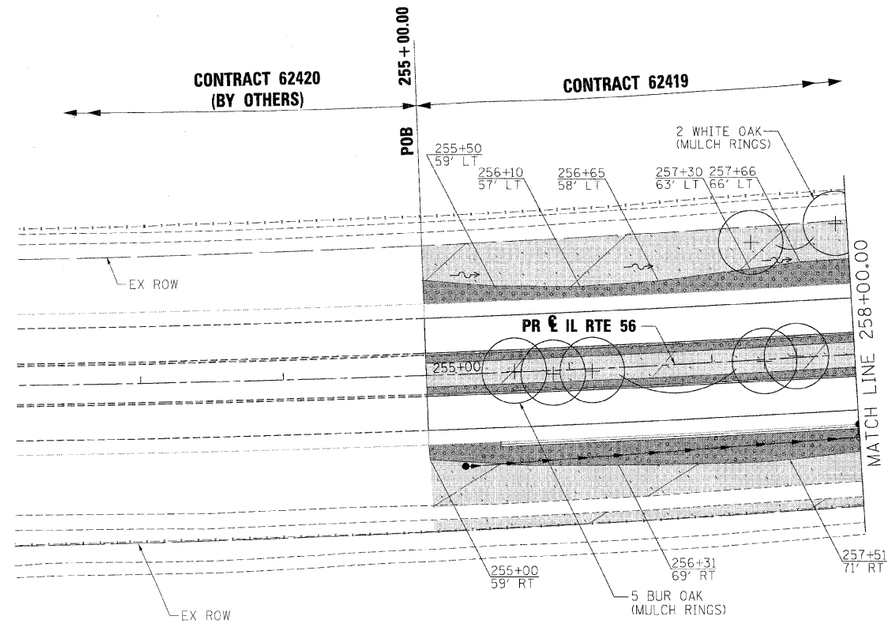
TYPICAL DETAIL
IN AREAS WITH A NOISEWALL

NOTE: THE COST OF FURNISHING AND PLACING THE MULCH ALONG THE NOISEWALL IS INCIDENTAL TO THE PLANTINGS FOR THE NOISEWALL LANDSCAPING.



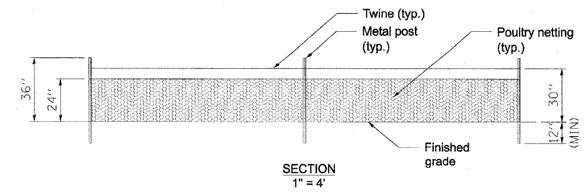
NOTE: USE TOPSOIL FURNISH & PLACE, 6" FOR FILL AREAS AND TOPSOIL FURNISH & PLACE, 8" FOR CUT AREAS

TYPICAL CROSS SECTION
IN AREAS WITHOUT A NOISEWALL

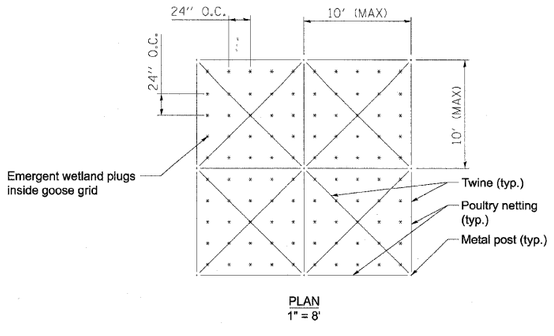


NOTE: THE CROSS SECTIONS WILL INDICATE THE TOPSOIL FURNISH & PLACE, 24".

THE MINIMUM DEPTH OF SWALE IS 6"

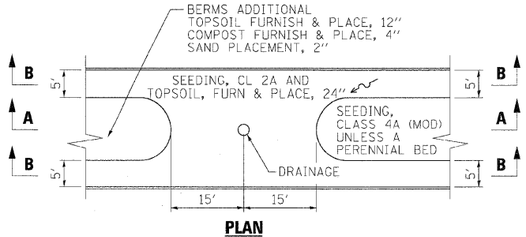


SECTION
1" = 4'

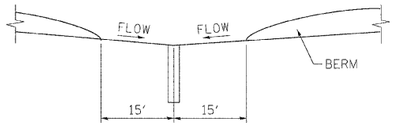


PLAN
1" = 8'

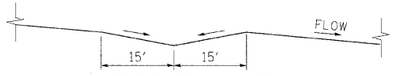
Goose Grid with Wetland & Sedge Meadow Plug
Scale: 1" = 4'



PLAN



SECTION A–A



IN AREAS OTHER THAN SAGS THIS DETAIL SHALL APPLY

SECTION B–B

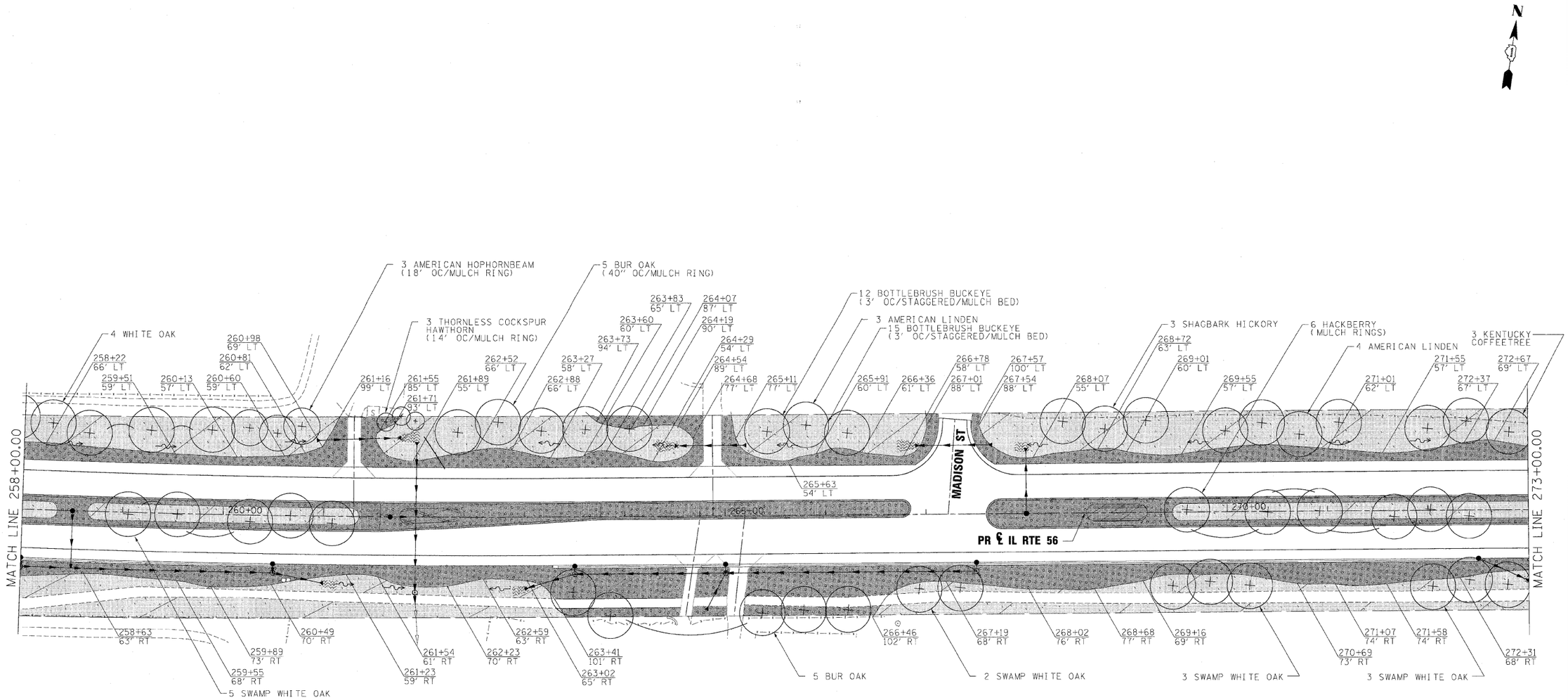
NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419-sht-LAND_01.dgn	DESIGNED - JMM	REVISED -	benesch	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME = tblank	DRAWN - TMB	REVISED -				365	(57 & 58)WRS-2	DUPAGE	681	325
PLOT DATE = 12/7/2210	CHECKED - RMT	REVISED -						CONTRACT NO. 62419		
	DATE - 12/6/10	REVISED -			SCALE: 1"=50' SHEET NO. 1 OF 20 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4996, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419-sht-LAND_02.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = \$blank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

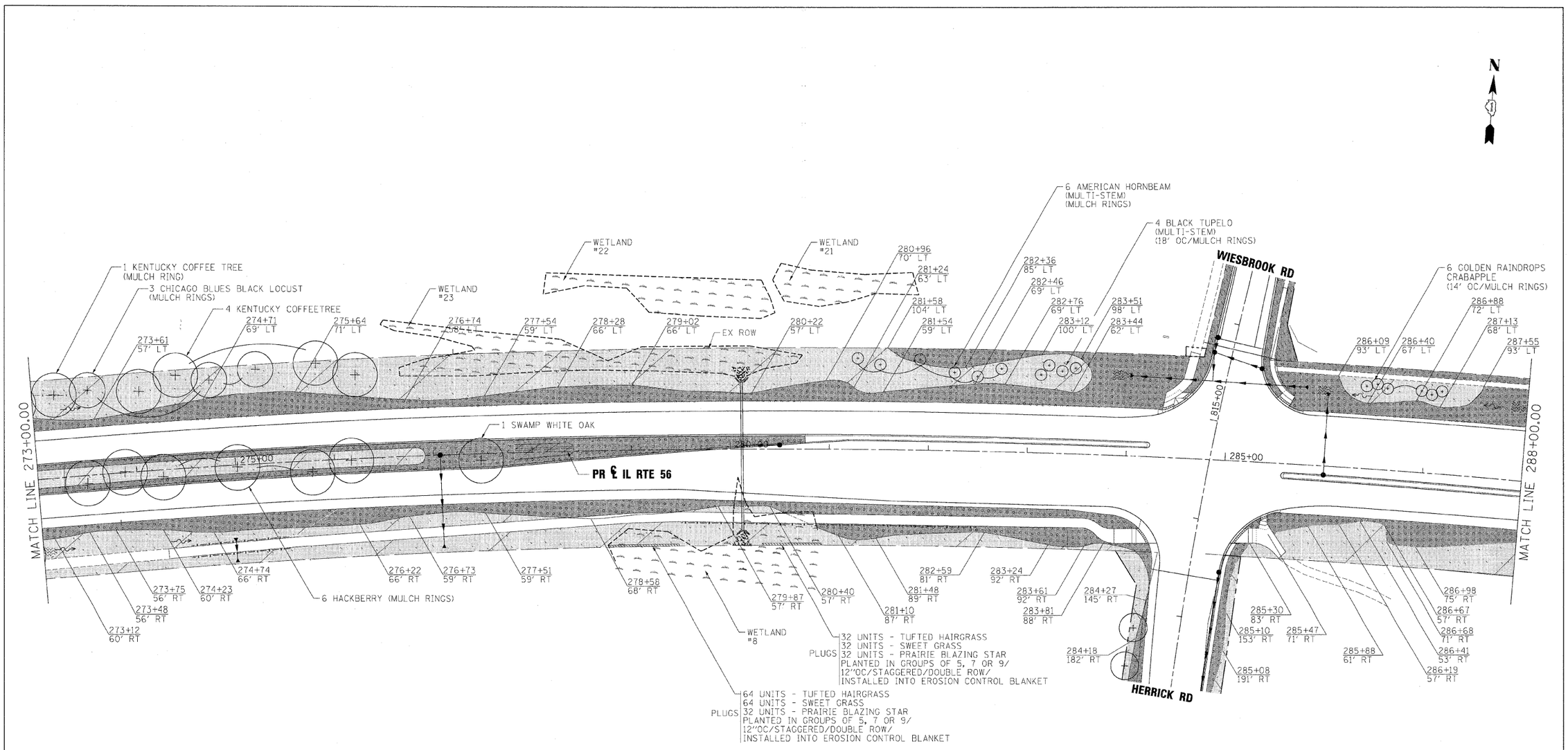
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 2 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	326
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419-sht-LAND_83.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

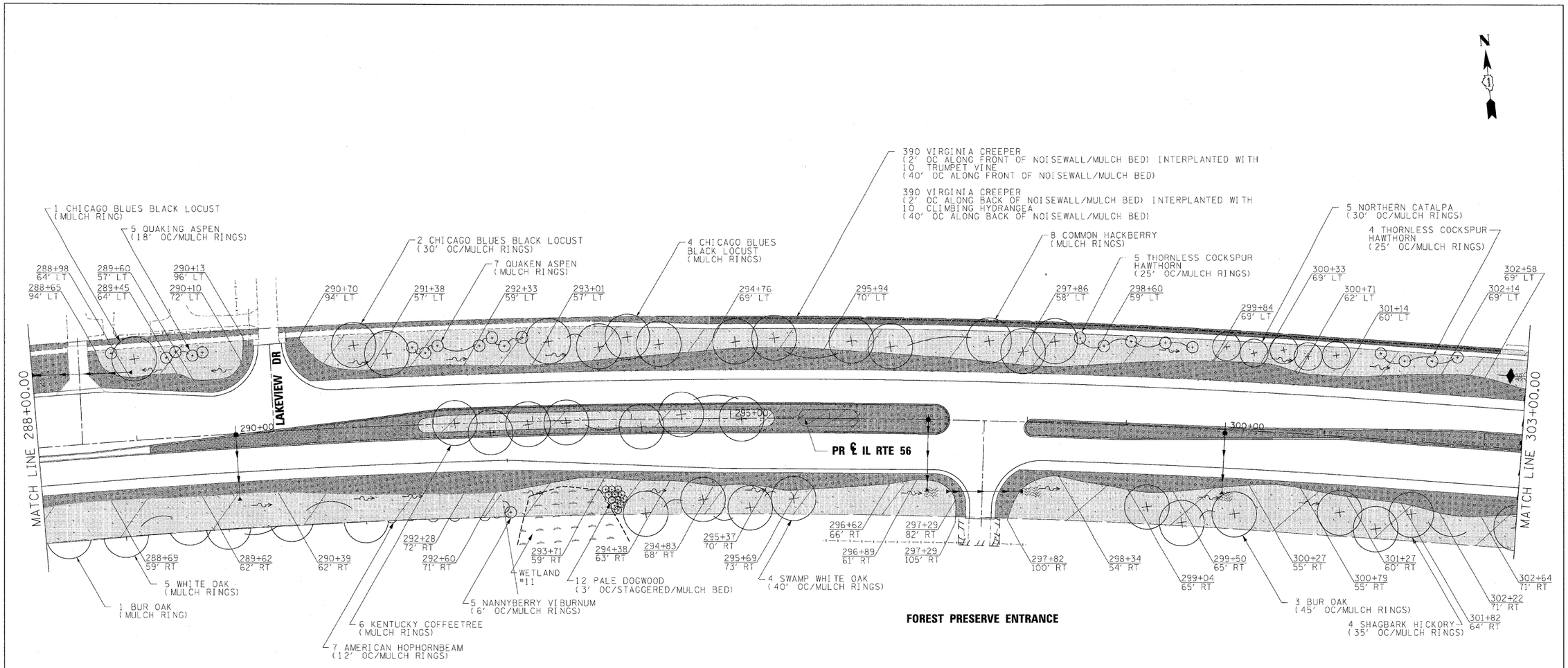
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 3 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	327
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\0152419-sht-LAND_04.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

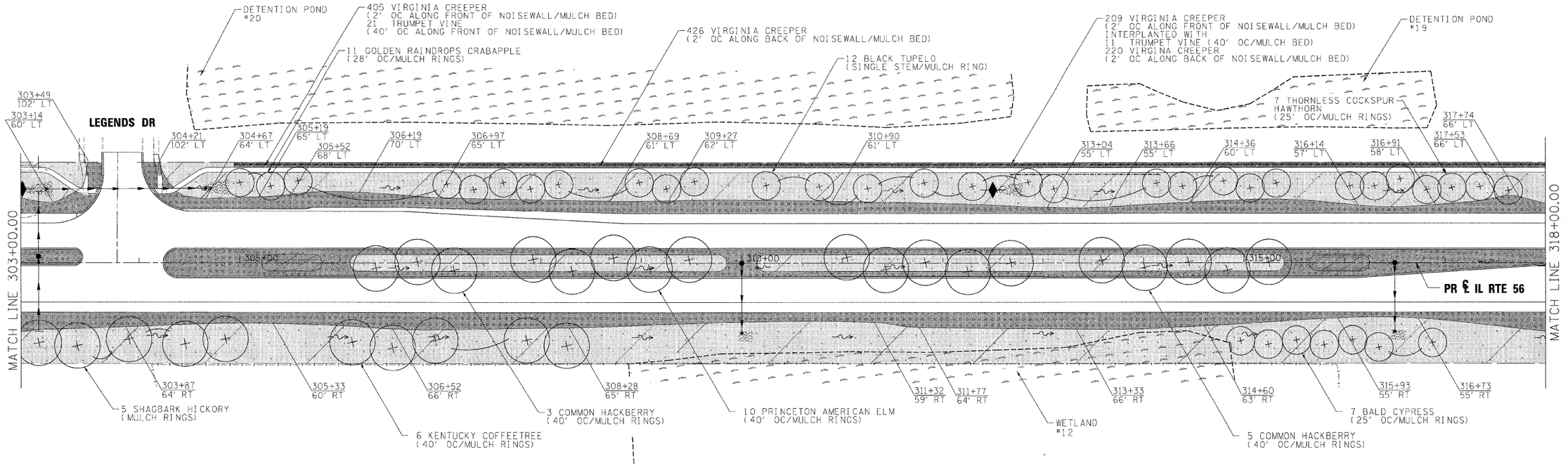
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 4 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	328
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\C162419-sht-LAND_05.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

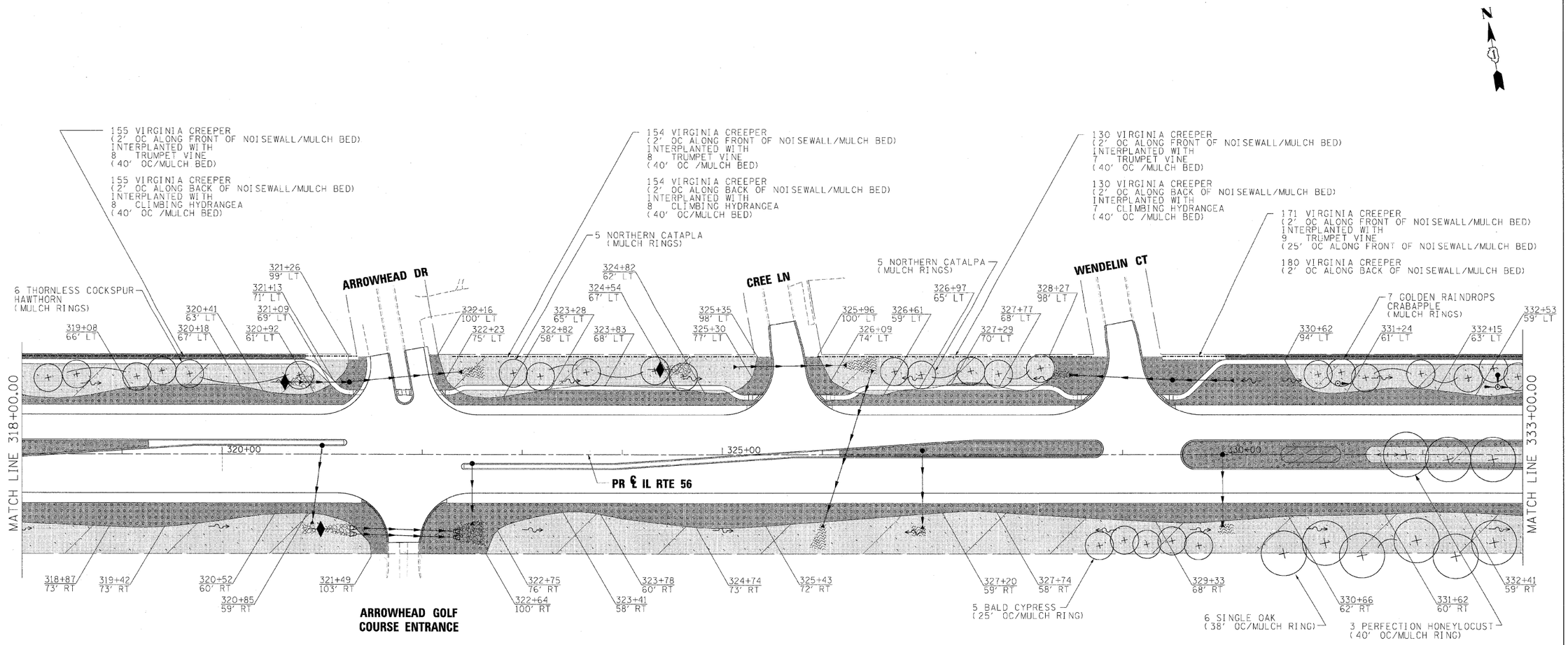
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 5 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	329
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION, SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419-sht-LAND_06.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tolank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

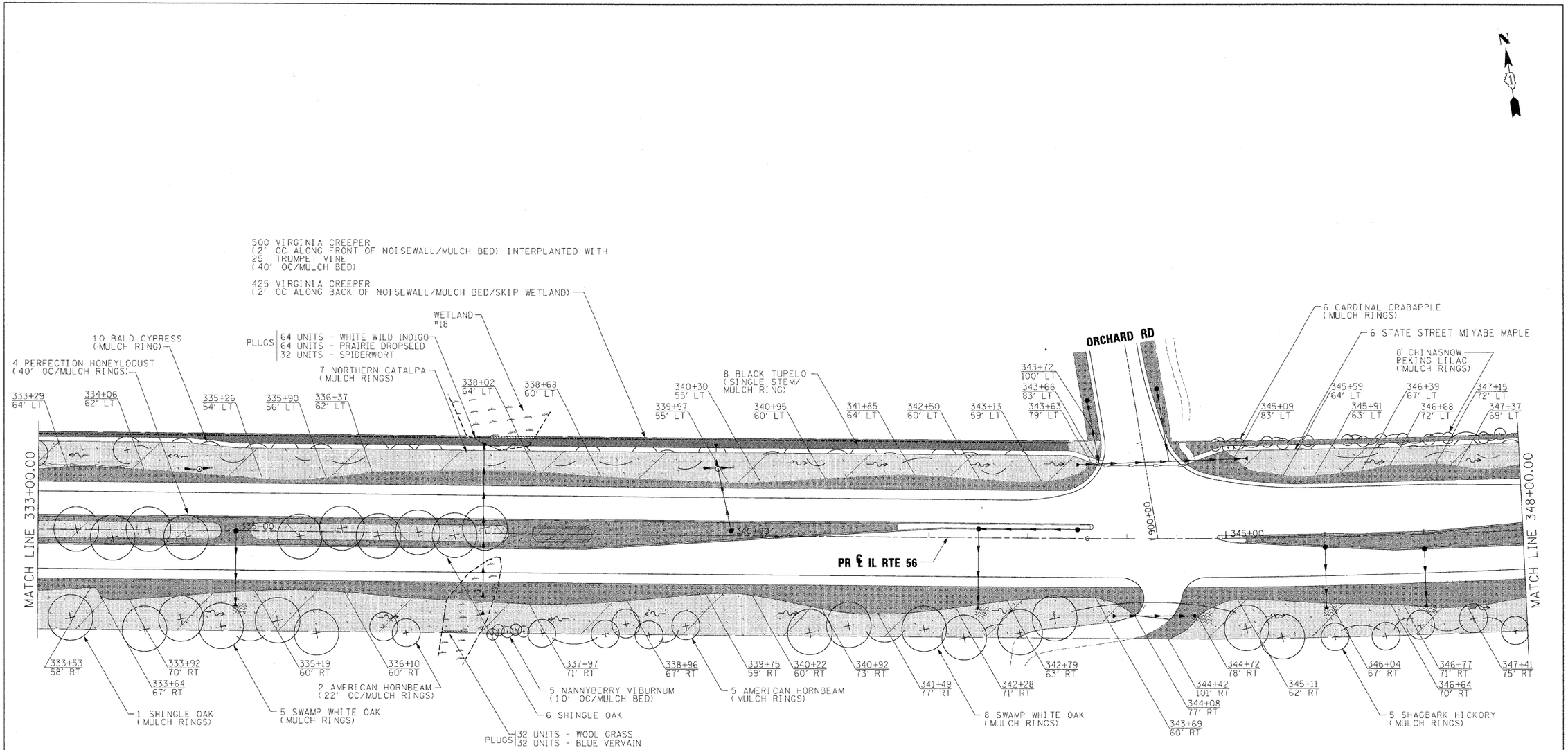
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 6 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	330
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\0162419-sht-LAND_07.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

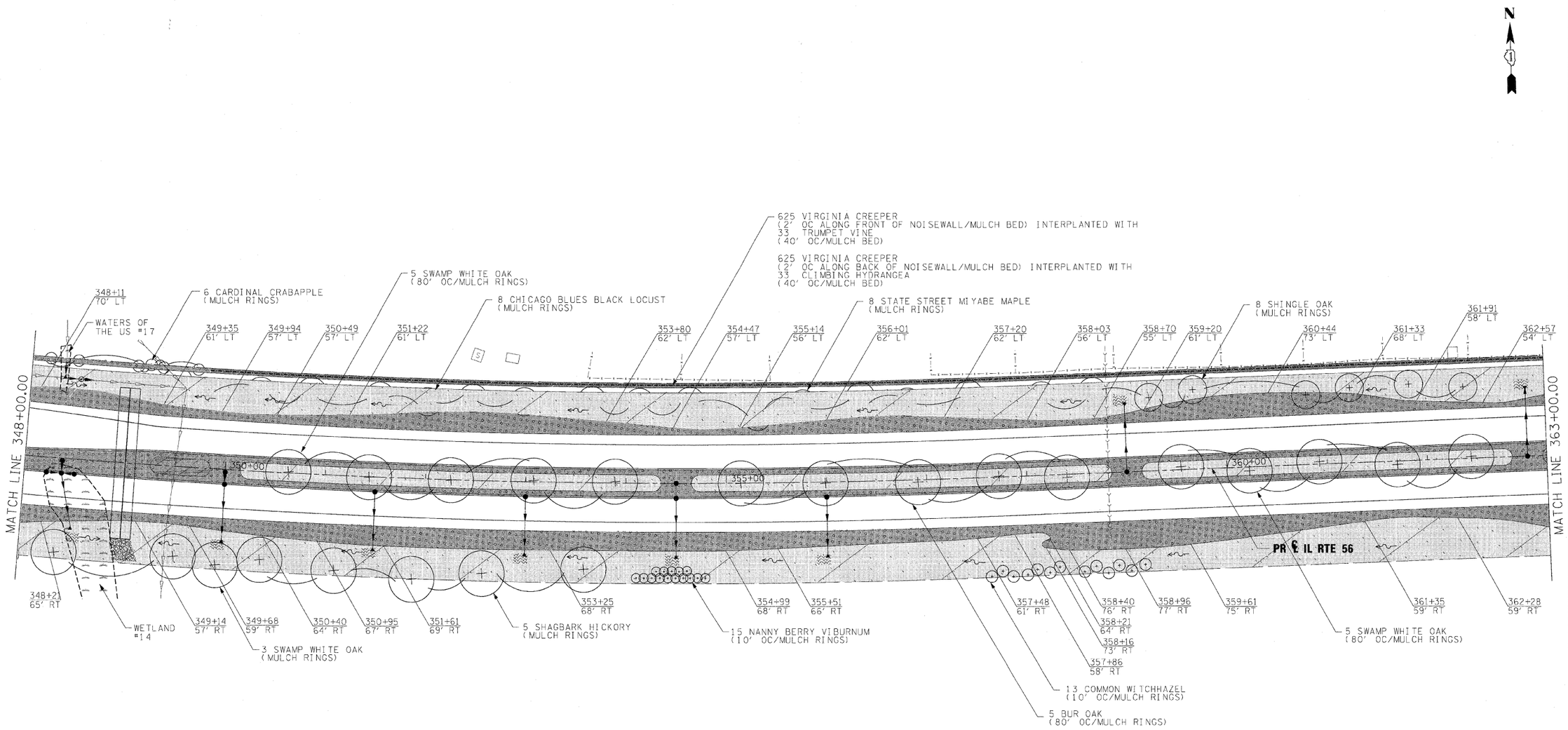
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 7 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	331
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME =	DESIGNED - JMM	REVISED -
...\D162419-sht-LAND_08.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

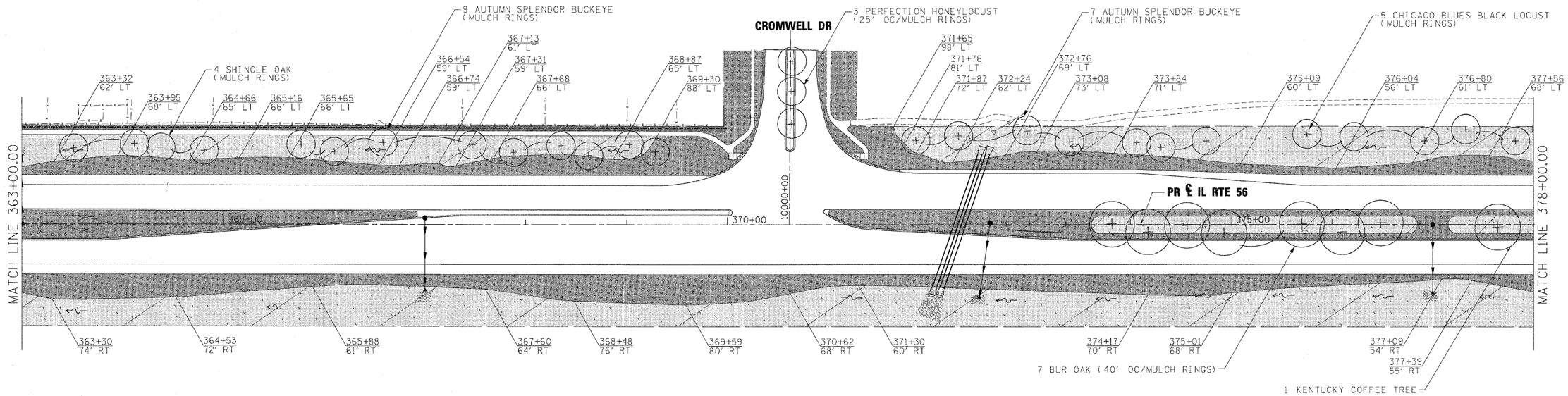
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 8 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	332
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\C162419-sht-LAND_09.dgn	DESIGNED - JMM	REVISED -
USER NAME = ublank	DRAWN - TMB	REVISED -
PLOT DATE = 12/7/2010	CHECKED - RMT	REVISED -
	DATE - 12/6/10	REVISED -

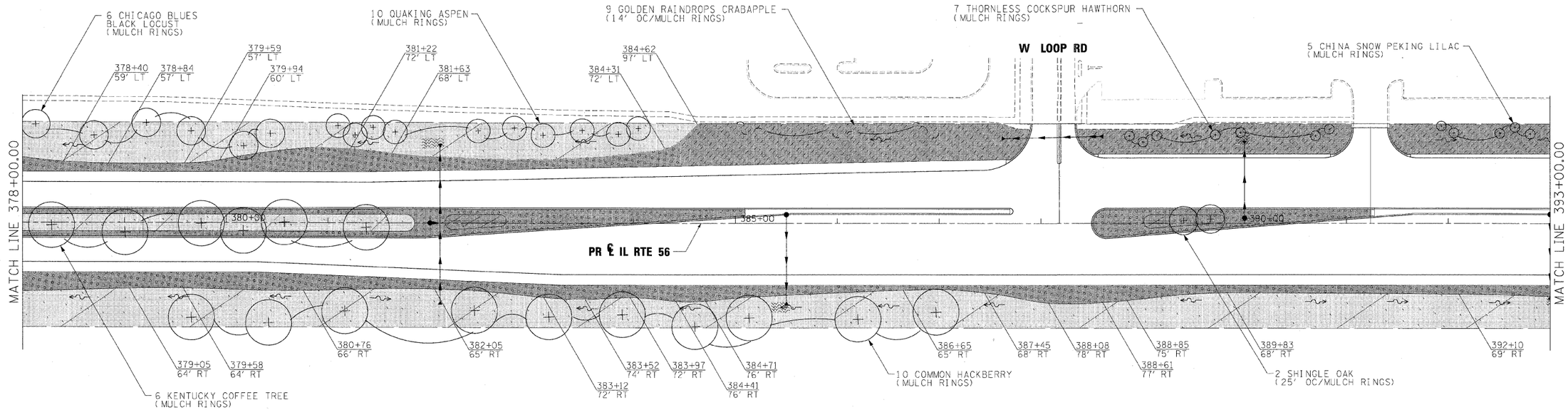
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 9 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	333
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419-sht-LAND_2.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tolank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

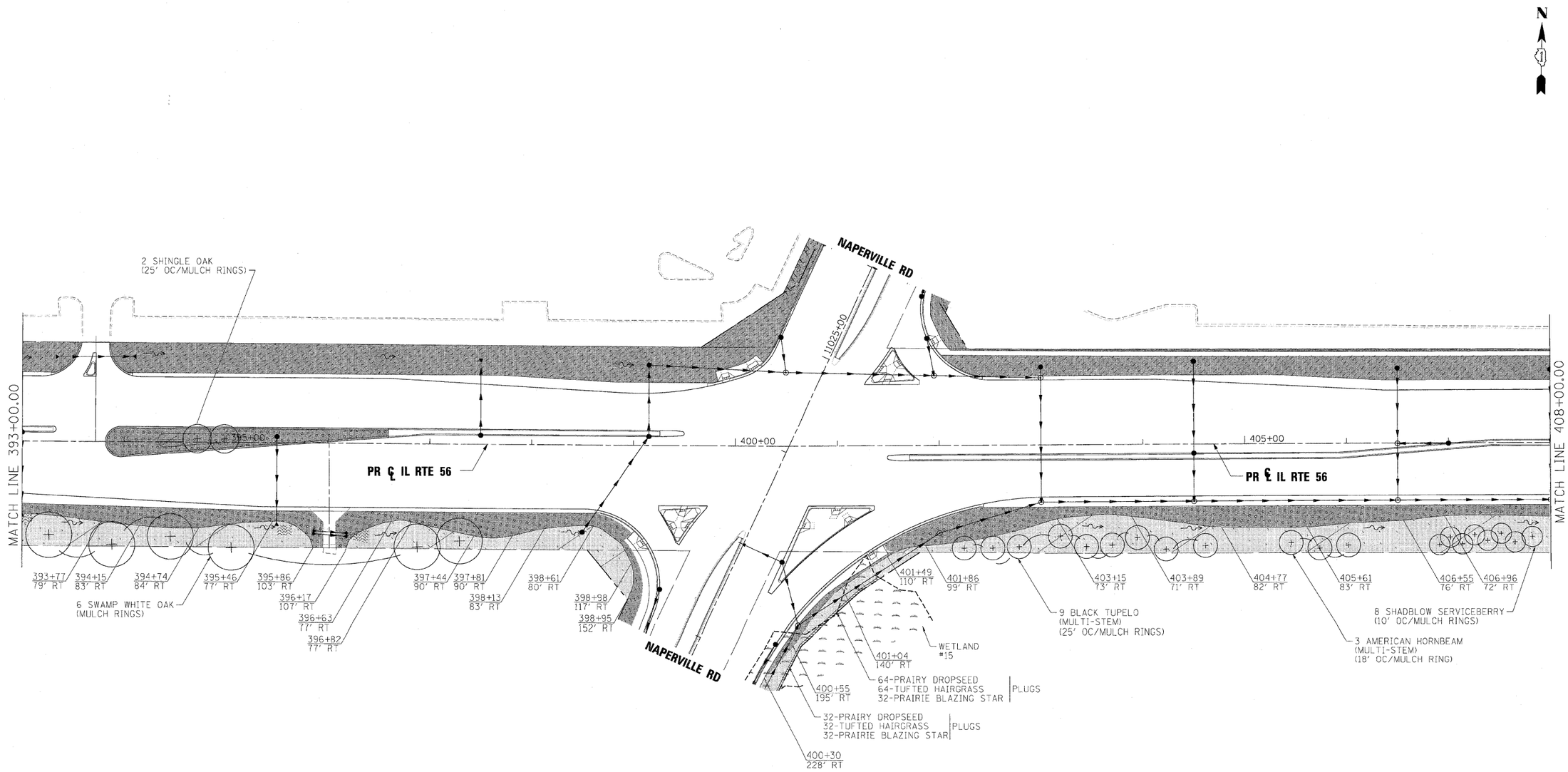
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 10 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	334
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419 sht LAND_11.dgn	DESIGNED - JMM	REVISED -
USER NAME = tblank	DRAWN - TMB	REVISED -
PLOT DATE = 12/7/2010	CHECKED - RMT	REVISED -
	DATE - 12/6/10	REVISED -

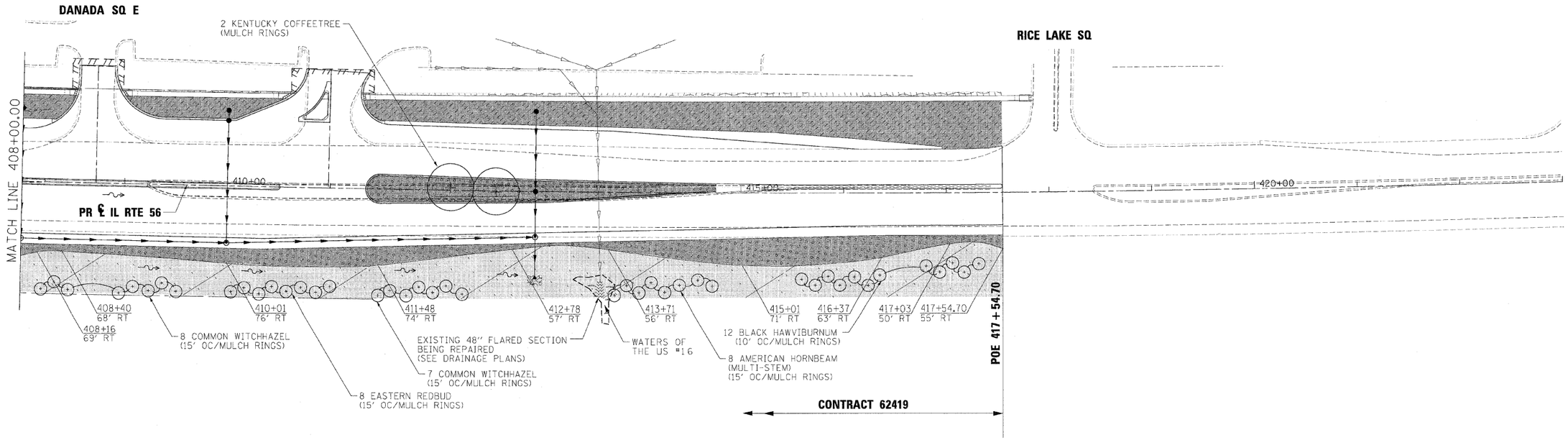
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 11 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	335
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME =	DESIGNED - JMM	REVISED -
...\D162419-sht-LAND_12.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2210	DATE - 12/6/10	REVISED -

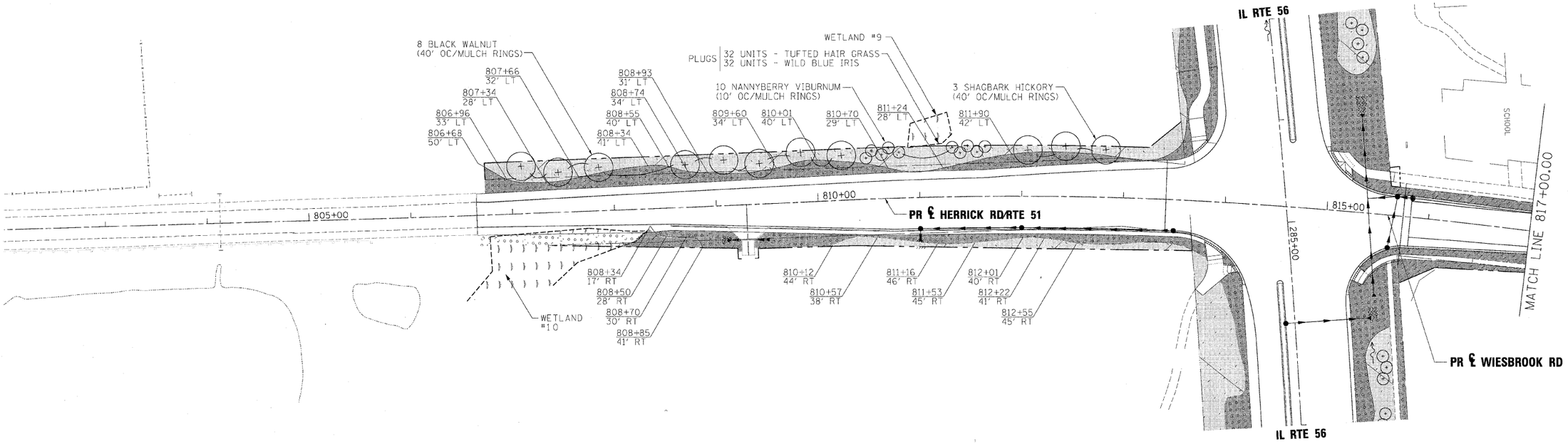
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 12 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	336
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\0162419-sht-LAND_13.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2012	DATE - 12/6/10	REVISED -

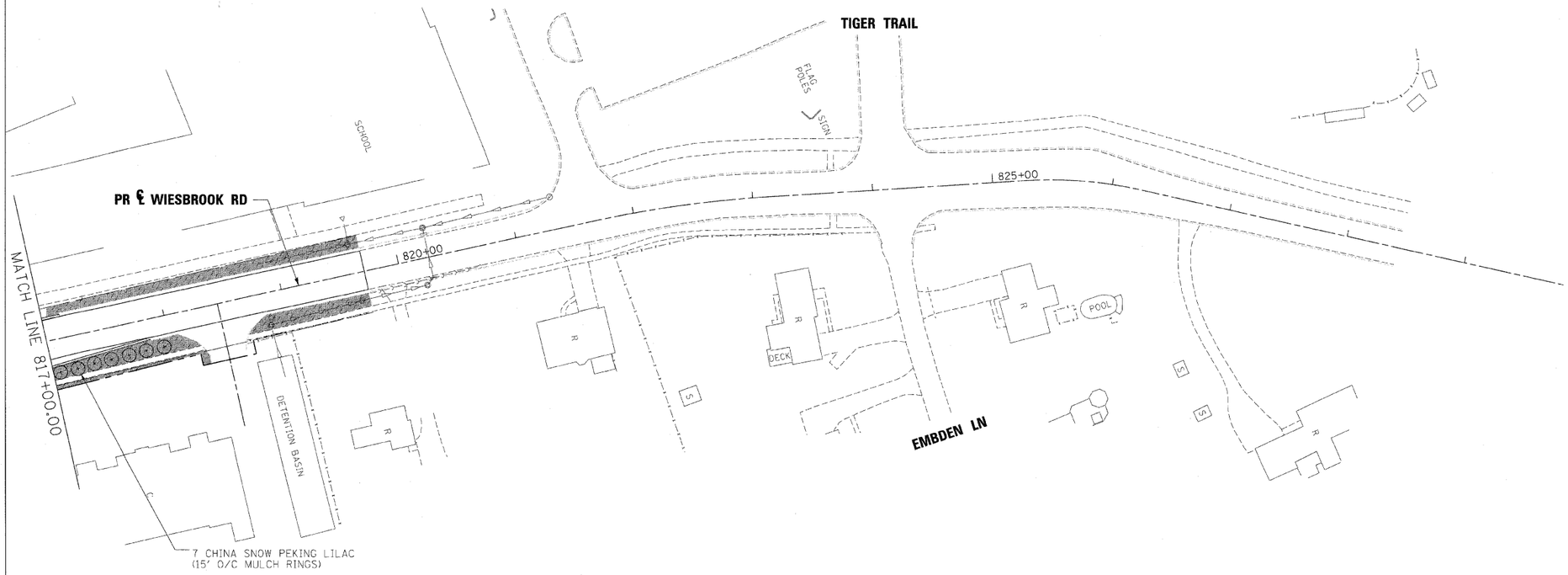
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 13 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	337
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419-sht-LAND_14.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tplenk	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

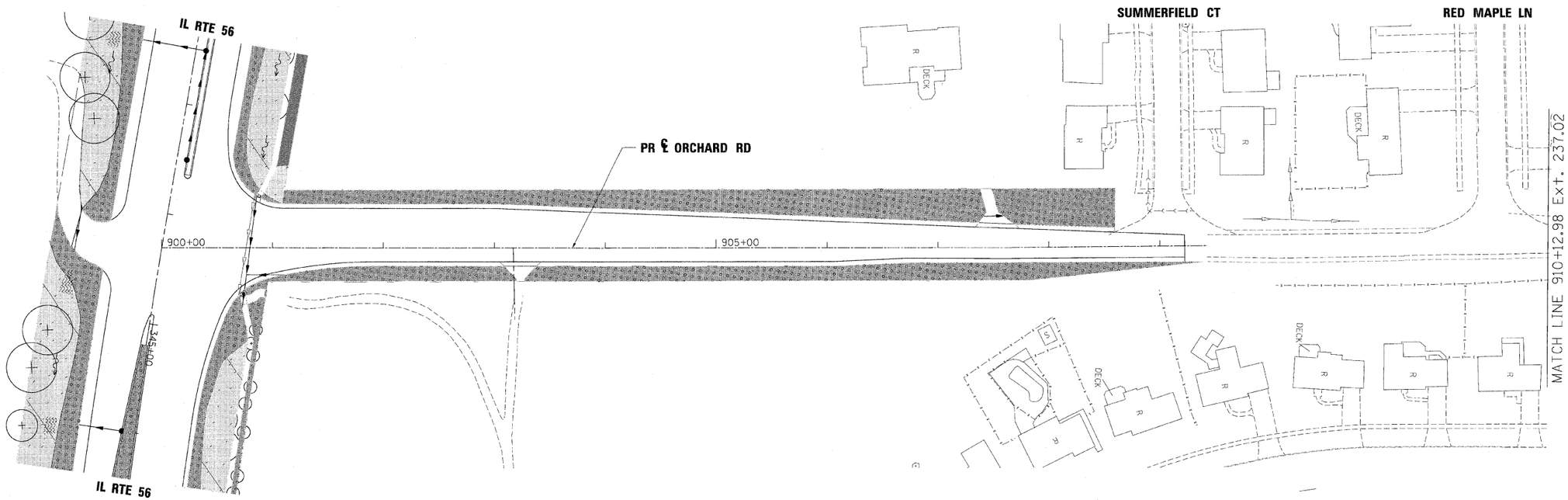
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 14 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	338
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419-sht-LAND_15.dgn	DESIGNED - JMM	REVISED -
	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2210	DATE - 12/6/10	REVISED -

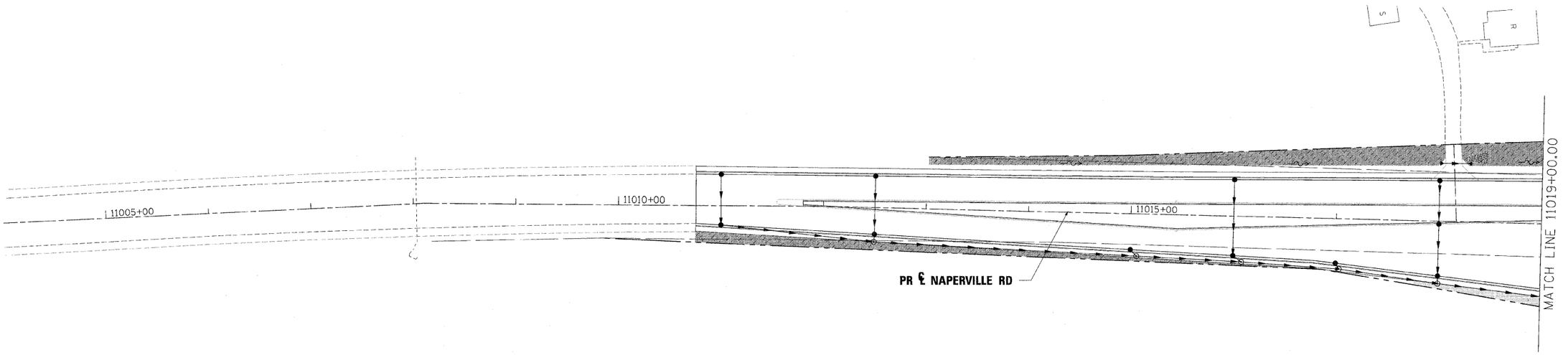
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 15 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	339
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME =	DESIGNED - JMM	REVISED -
...\D162419-sht-LAND_17.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

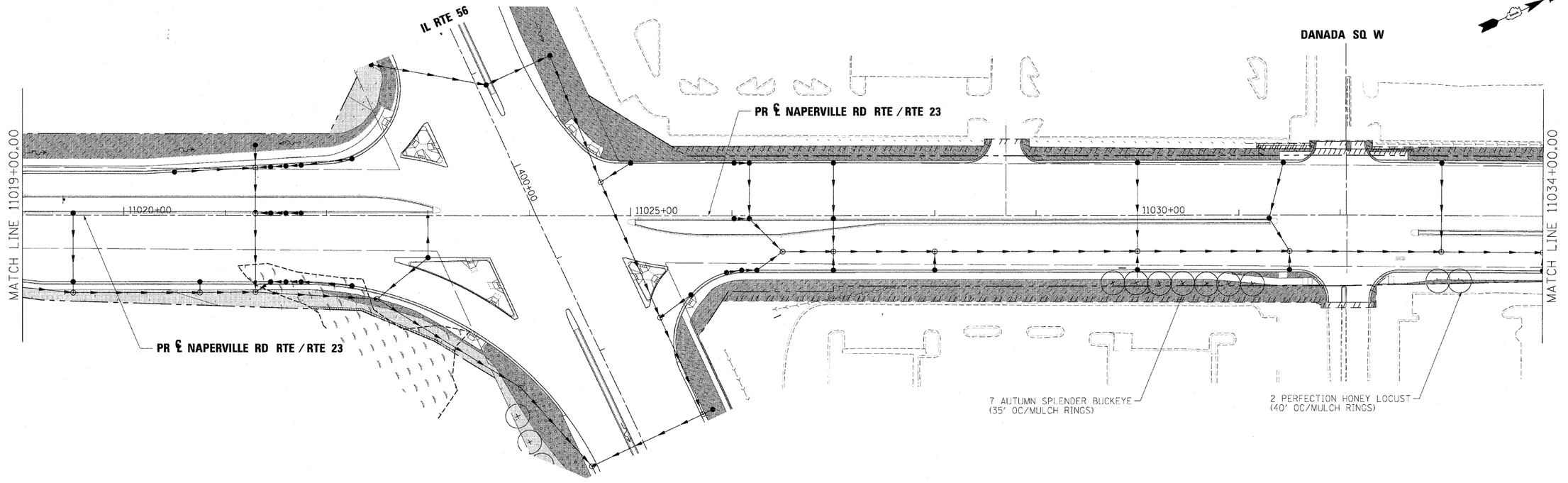
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 17 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	340
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME = ...\D162419-sht-LAND_18.dgn	DESIGNED - JMM	REVISED -
USER NAME = tolenk	DRAWN - TMB	REVISED -
PLOT DATE = 12/7/2010	CHECKED - RMT	REVISED -
	DATE - 12/6/10	REVISED -

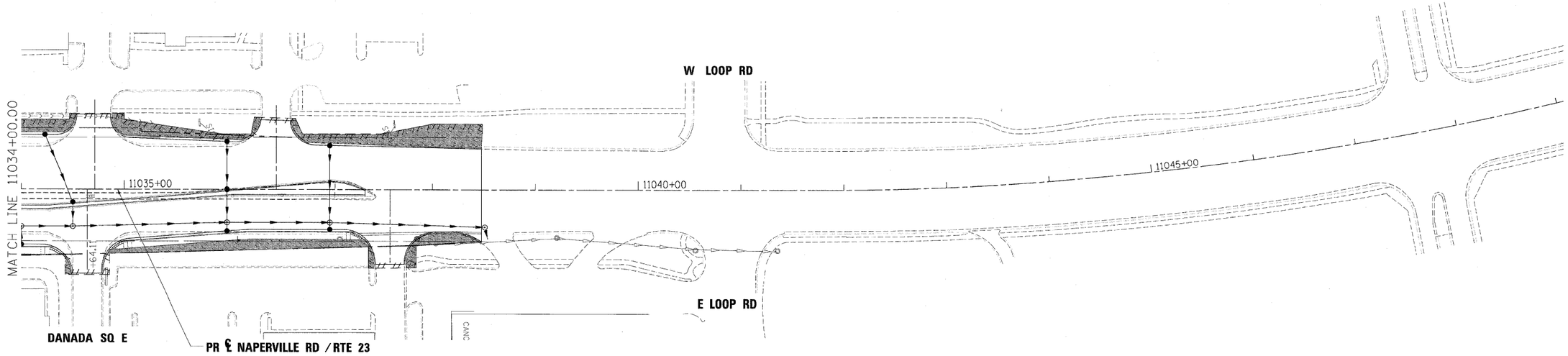
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 18 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	341
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. FOR PERMANENT RIP RAP QUANTITIES AND DIMENSIONS AT OUTLETS, SEE RIP RAP OUTLET DETAIL.
2. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 4A, 4B, AND WETLAND MIX SHALL BE FROM NOVEMBER 15 TO MARCH 15. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT HIS/HER EXPENSE.
4. THE ENGINEER WILL CONTACT FABIOLA QUIROZ OF THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4596, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT OF THE SEEDING, TREES, SHRUBS, VINES, PERENNIALS AND PLUGS.

LEGEND:

- DITCH FLOW ARROW
- PERMANENT DITCH CHECK FOR DETENTION. SEE DRAINAGE PLANS FOR DETAILS
- PERMANENT RIP RAP
- SEEDING CLASS 2A AND EROSION CONTROL BLANKET
- SODDING, SALT TOLERANT
- SEEDING CLASS 4A (MODIFIED) AND EROSION CONTROL BLANKET
- PERENNIAL BED
- MULCH
- TURF REINFORCEMENT MAT

FILE NAME =	DESIGNED - JMM	REVISED -
...\0162419-sht-LAND_19.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - RMT	REVISED -
PLOT DATE = 12/7/2012	DATE - 12/6/10	REVISED -

benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

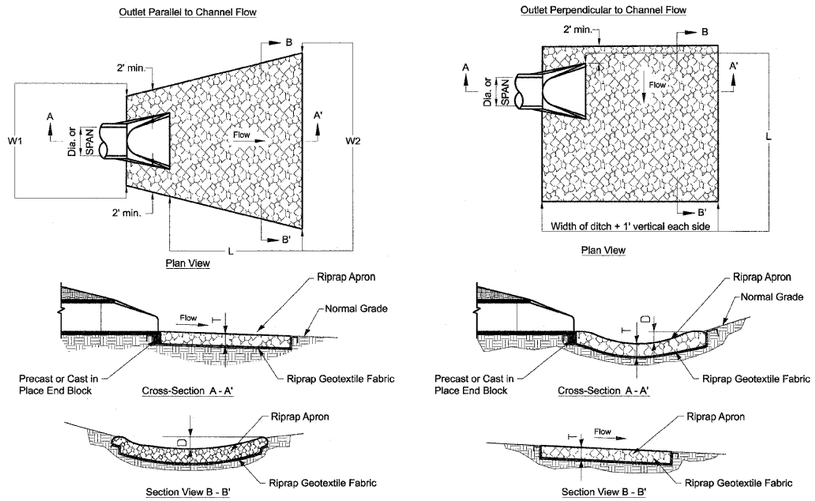
EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN

SCALE: 1"=50' | SHEET NO. 19 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	342
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

STUCTURE ID	PIPE DIAMETER	IDOT GRADATION	OUTLET DIR.	BED THICKNESS - T	APRON LENGTH - L	APRON WIDTH -W1	APRON WIDTH - W2	AREA	28100105 STONE RIPRAP, CLASS A3	28100107 STONE RIPRAP, CLASS A4	25100900 TURF REINFORCEMENT MAT	28200200 FILTER FABRIC
	[IN]			[IN]	[FT]	[FT]	[FT]	[SQ-YD]	[SQ-YD]	[SQ-YD]		[SQ-YD]
264	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
284	18	RR-3	PARALLEL	15	25	5.5	13.5	26.39			26.39	26.39
304	21	RR-4	PARALLEL	15	18	6	16	22.00			22.00	22.00
328	15	RR-3	PARALLEL	15	14	5	12	13.22			13.22	13.22
344	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
345	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
387	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
393	18	RR-3	PERPENDICULAR	15	16	10		8.89			8.89	8.89
26100	12	RR-3	PARALLEL	15	12	5	11	10.67			10.67	10.67
26300	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
27300	12	RR-3	PARALLEL	15	12	5	11	10.67			10.67	10.67
32237	27 X 2	RR-4	PARALLEL	20	24	10	21	41.33		41.33		41.33
32600	24	RR-4	PARALLEL	15	20	6	16	24.44			24.44	24.44
32624	24	RR-4	PARALLEL	15	28	6	16	34.22			34.22	34.22
34834	-	RR-4	PERPENDICULAR	20	94	13		67.89		67.89		67.89
80910	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
180B	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
26193A	24	RR-4	PARALLEL	15	20	6	16	24.44			24.44	24.44
266A	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
26800A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
27496C	15	RR-3	PARALLEL	15	14	5	12	13.22			13.22	13.22
28600A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
288B	15	RR-3	PARALLEL	15	14	5	12	13.22			13.22	13.22
29000A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
29700A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
297B	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
30000A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
30300B	24	RR-4	PERPENDICULAR	15	20	10		11.11			11.11	11.11
31000A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
31650A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
32100A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
322A	4x2	RR-4	PARALLEL	20	24	8	19	36.00			36.00	36.00
32700A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
33000A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
33500A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
33750B	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
34250A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
34600A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
34700A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
34850A	36	RR-4	PERPENDICULAR	20	24	10		13.33			13.33	13.33
35000B	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
35150A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
35300A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
35450B	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
35600A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
35900A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
36300A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
36700A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
37203/37211	36 x 2	RR-4	PARALLEL	20	24	12	24	48.00		48.00		48.00
37700A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
37250	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
38210B	24	RR-4	PERPENDICULAR	15	20	10		11.11			11.11	11.11
38550A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
39000A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
39300A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
39550A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
396A	10	RR-3	PARALLEL	15	10	5	11	8.89			8.89	8.89
39750A	12	RR-3	PERPENDICULAR	15	12	10		6.67			6.67	6.67
41300C	36	RR-4	PERPENDICULAR	20	24	10		13.33		13.33		13.33
41350EXIST	48	RR-4	PARALLEL	20	30	8	24	53.33			53.33	53.33
80910	18	RR-3	PARALLEL	15	16	5.5	13.5	16.89			16.89	16.89
81100A	12	RR-3	PARALLEL	15	12	5	11	10.67			10.67	10.67
DC30284	12	RR-3	PARALLEL	15	12	5	11	10.67	10.67			10.67
DC31250	12	RR-3	PARALLEL	15	12	5	11	10.67	10.67			10.67
DC32053	12	RR-3	PARALLEL	15	12	5	11	10.67	10.67			10.67
DC32100	12	RR-3	PARALLEL	15	12	5	11	10.67	10.67			10.67
DC32484	12	RR-3	PARALLEL	15	12	5	11	10.67	10.67			10.67
						TOTALS		895	53	171	725	949

SEE DRAINAGE PLAN AND PROFILE SHEETS
FOR LOCATIONS BY STRUCTURE ID GIVEN ABOVE



ROCK OUTLET PROTECTION DETAIL

N.T.S.

DIA. OF ROUND INLET PIPE (in)	IDOT RIPRAP GRADATION (RR)	RIPRAP BED THICKNESS (in)	APRON LEGNTH (ft)	APRON WIDTH UPSTREAM (ft)	APRON WIDTH DOWNSTREAM (ft)	DEPTH BELOW NORMAL GRADE
		T	L	W1	W2	D
12	RR-3	15.0	12.0	5.0	11.0	6.0
15	RR-3	15.0	14.0	5.0	12.0	6.0
18	RR-3	15.0	16.0	5.5	13.5	7.0
24	RR-4	15.0	20.0	6.0	16.0	10.0
30	RR-4	20.0	22.0	6.0	17.0	11.0
36	RR-4	20.0	24.0	7.0	19.0	11.0

FILE NAME = ...\D162419-sht-LAND-DET_01.dgn	DESIGNED - MJM	REVISED -	benesch
USER NAME = tblank	DRAWN - MJM	REVISED -	
PLOT DATE = 12/7/2010	CHECKED - TJR	REVISED -	
	DATE - 12/6/10	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL DETAILS

SCALE: N.T.S. | SHEET NO. 20 OF 20 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	343
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE	DESCRIPTION	UNIT	TOTAL QUANTITY
42400800	DETECTABLE WARNINGS	SQ FT	479
72000100	SIGN PANEL - TYPE 1	SQ FT	151
72000200	SIGN PANEL - TYPE 2	SQ FT	90
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	14,833
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	313
81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	321
81000900	CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	FOOT	27
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	237
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	2,590
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	2,805
81400100	HANDHOLE	EACH	24
81400200	HEAVY DUTY HANDHOLE	EACH	53
81400300	DOUBLE HANDHOLE	EACH	9
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	15,723
82102310	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	2
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	5
86000105	MASTER CONTROLLER (SPECIAL)	EACH	1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	5
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	6,738
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	8,002
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	10,256
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	10,318
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	20,681
87301615	ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 16, 6 PAIR	FOOT	843
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C	FOOT	504
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT	EACH	4
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT.	EACH	1
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 15 FT.	EACH	1
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	5
87601100	PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE I	EACH	1
87700120	STEEL MAST ARM ASSEMBLY AND POLE, 16 FT.	EACH	1
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	2
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	3
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
87700400	STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.	EACH	1
87700414	STEEL MAST ARM ASSEMBLY AND POLE, 66 FT.	EACH	1
87702245	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 20 FT. AND 55 FT.	EACH	1
87702518	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 34 FT. AND 16 FT.	EACH	1
87702574	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 36 FT. AND 54 FT.	EACH	1

CODE	DESCRIPTION	UNIT	TOTAL QUANTITY
87702600	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 38 FT. AND 44 FT.	EACH	1
87702662	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 42 FT. AND 60 FT.	EACH	1
87702990	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
87703050	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 64 FT.	EACH	1
87703224	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 48 FT. AND 24 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	44
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	20
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	40
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	211
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	88
87900200	DRILL EXISTING HANDHOLE	EACH	2
88030020	SIGNAL HEAD LED 1-FACE 3-SECTION MAST ARM MOUNTED	EACH	33
88030050	SIGNAL HEAD LED 1-FACE 3-SECTION BRACKET MOUNTED	EACH	2
88030070	SIGNAL HEAD LED 1-FACE 4-SECTION, BRACKET MOUNTED	EACH	2
88030080	SIGNAL HEAD LED 1-FACE 4-SECTION, MAST ARM MOUNTED	EACH	4
88030100	SIGNAL HEAD LED 1-FACE 5-SECTION BRACKET MOUNTED	EACH	6
88030110	SIGNAL HEAD LED 1-FACE 5-SECTION MAST ARM MOUNTED	EACH	31
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
88030230	SIGNAL HEAD LED 2-FACE 1-3-SECTION, 1-4 SECTION BRACKET MOUNTED	EACH	1
88030240	SIGNAL HEAD LED 2-FACE 1-3-SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
88030250	SIGNAL HEAD LED 2-FACE 1-4-SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	13
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	7
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	64
88500100	INDUCTIVE LOOP DETECTOR	EACH	61
88600100	DETECTOR LOOP, TYPE I	FOOT	4,323
88700200	LIGHT DETECTOR	EACH	11
88700300	LIGHT DETECTOR AMPLIFIER	EACH	5
88800100	PEDESTRIAN PUSH-BUTTON	EACH	33
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	6
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5
89502380	REMOVE EXISTING HANDHOLE	EACH	15
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	45
X0320872	VIDEO VEHICLE DETECTION SYSTEM	EACH	1
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO.14 1C	FOOT	15,672
X0325096	OPTIMIZE TRAFFIC SIGNAL SYSTEM	LSUM	1
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	6
X0325938	TEMPORARY WIRELESS INTERCONNECT, COMPLETE	L SUM	1
X0326269	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	5
X8620020	UNITERRUPTIBLE POWER SUPPLY	EACH	5
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO.62.5/125, MM12F SM12F	FOOT	15,672
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C	FOOT	3,763
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED SHIELDED	FOOT	3,044
XX003661	ELECTRICAL CABLE IN CONDUIT, COAXIAL	FOOT	843
X0323371	VIDEO VEHICLE DETECTION, 1 CAMERA	EACH	4

FILE NAME = ...\Traffic\di62419-sht-ts-soq.dgn	DESIGNED - GHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2012	DATE - 12/6/10	REVISED -

benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 1 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	344
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R		
RAILROAD CONTROL CABINET		R	R
COMMUNICATIONS CABINET	R CC	CC	CC
MASTER CONTROLLER		EMC	MC
MASTER MASTER CONTROLLER		EMMC	MMC
UNINTERRUPTIBLE POWER SUPPLY	R UPS	EUPS	UPS
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	R	P	P
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P T	P T
STEEL MAST ARM ASSEMBLY AND POLE	R		
ALUMINUM MAST ARM ASSEMBLY AND POLE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R PTZ	PTZ	PTZ
SIGNAL POST	R		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R		
GUY WIRE	R		
SIGNAL HEAD	R		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			2
SIGNAL HEAD WITH BACKPLATE	R 3		
SIGNAL HEAD OPTICALLY PROGRAMMED	R "P"	"P"	"P"
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R "F"	"F"	"F"
PEDESTRIAN SIGNAL HEAD	R		
PEDESTRIAN PUSHBUTTON DETECTOR	R		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	APS	APS
ILLUMINATED SIGN "NO LEFT TURN"	R		
ILLUMINATED SIGN "NO RIGHT TURN"	R		
DETECTOR LOOP, TYPE I			
PREFORMED DETECTOR LOOP		P	P
MICROWAVE VEHICLE SENSOR	R M	M	M
VIDEO DETECTION CAMERA	R V	V	V
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA	R PTZ	PTZ	PTZ
WIRELESS DETECTOR SENSOR	R W	W	W
WIRELESS ACCESS POINT	R		

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR	R		
CONFIRMATION BEACON	R		
HANDHOLE	R		
HEAVY DUTY HANDHOLE	R H	H	H
DOUBLE HANDHOLE	R		
JUNCTION BOX	R		
GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION		R	R
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y G	
SIGNAL FACE		R Y G Y G	R Y G Y G
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		R Y G Y G "P"	R Y G Y G "P"
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED		PW A	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		C D	C D
RADIO INTERCONNECT	R		
RADIO REPEATER	R ERR	ERR	RR
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		6	5
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	1

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		1	1
COAXIAL CABLE		5	C
VENDOR CABLE FOR CAMERA		V	V
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
FIBER OPTIC CABLE NO. 62.5/125, MM12F		12F	
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		24F	24F
FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		C	C
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR		IS	IS
SAMPLING (SYSTEM) DETECTOR		S	S
EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		P	
EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PP	
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
PREFORMED SAMPLING (SYSTEM) DETECTOR		PS	PS

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET	R	R
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

FILE NAME = c:\dw_work\PWIDOT\BAUEROL\d0108315\ts05.dgn	USER NAME = bauerdl	DESIGNED - DAG/BCK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - BCK	REVISED -	
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - DAD	REVISED -	
	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -	

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

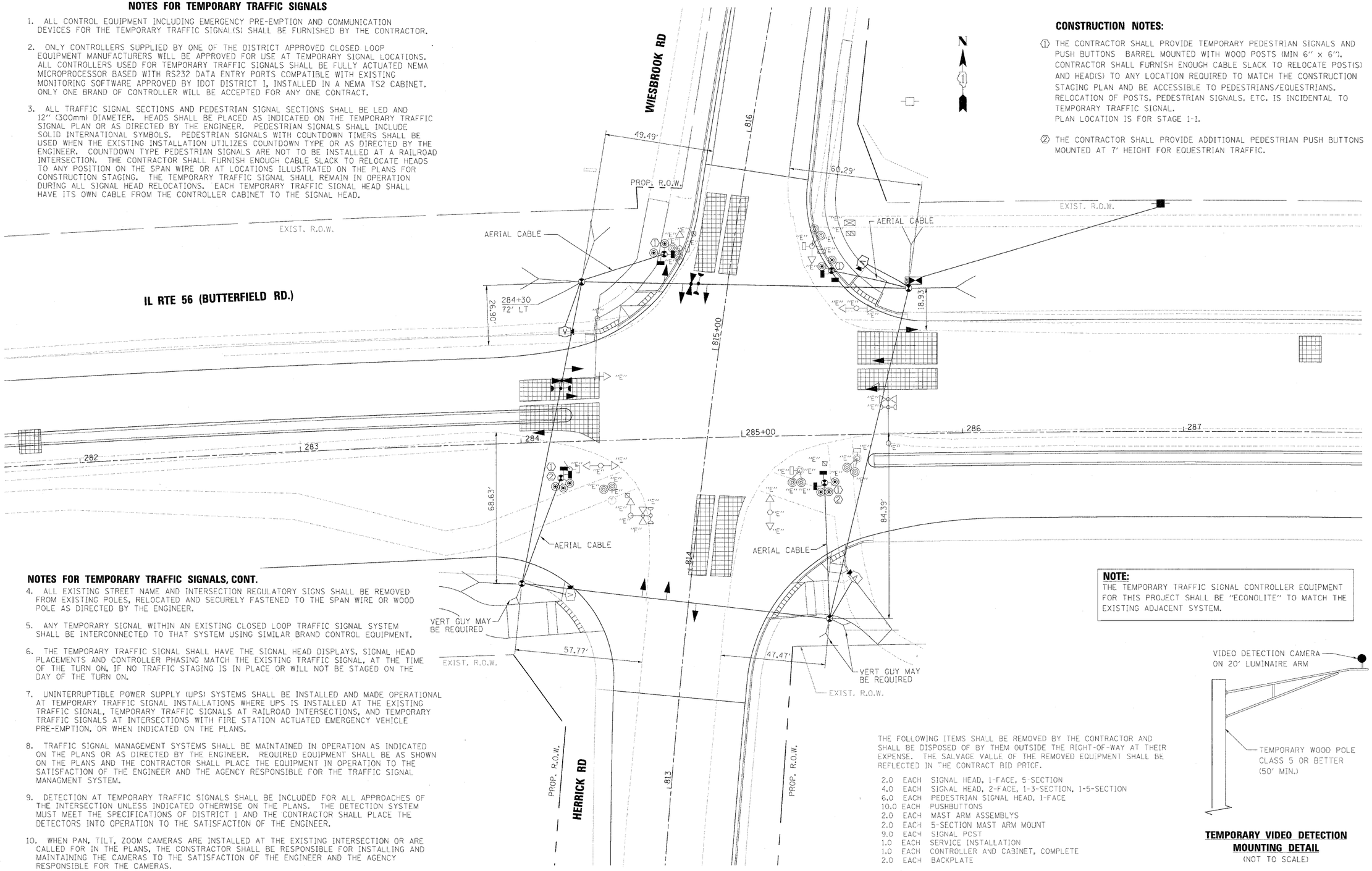
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			681	345
	TS-05	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES FOR TEMPORARY TRAFFIC SIGNALS

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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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.



CONSTRUCTION NOTES:

① THE CONTRACTOR SHALL PROVIDE TEMPORARY PEDESTRIAN SIGNALS AND PUSH BUTTONS BARREL MOUNTED WITH WOOD POSTS (MIN 6" x 6"). CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE POST(S) AND HEAD(S) TO ANY LOCATION REQUIRED TO MATCH THE CONSTRUCTION STAGING PLAN AND BE ACCESSIBLE TO PEDESTRIANS/EQUESTRIANS. RELOCATION OF POSTS, PEDESTRIAN SIGNALS, ETC. IS INCIDENTAL TO TEMPORARY TRAFFIC SIGNAL.
PLAN LOCATION IS FOR STAGE 1-1.

② THE CONTRACTOR SHALL PROVIDE ADDITIONAL PEDESTRIAN PUSH BUTTONS MOUNTED AT 7' HEIGHT FOR EQUESTRIAN TRAFFIC.

NOTES FOR TEMPORARY TRAFFIC SIGNALS, CONT.

4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE 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.

7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGMENT SYSTEM.

9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONSTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

2.0	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4.0	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
6.0	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
10.0	EACH	PUSHBUTTONS
2.0	EACH	MAST ARM ASSEMBLYS
2.0	EACH	5-SECTION MAST ARM MOUNT
9.0	EACH	SIGNAL POST
1.0	EACH	SERVICE INSTALLATION
1.0	EACH	CONTROLLER AND CABINET, COMPLETE
2.0	EACH	BACKPLATE

TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

FILE NAME = ...\d162419-sht-ts-templ.dgn	DESIGNED - GHT	REVISED -
USER NAME = tblank	DRAWN - BDW	REVISED -
PLOT DATE = 12/7/2010	CHECKED - MPM	REVISED -
	DATE - 12/6/10	REVISED -

benesch

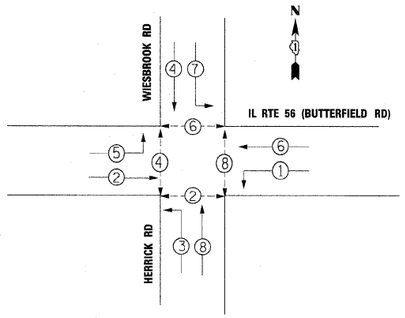
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL AND REMOVAL PLAN
IL RTE 56 AND HERRICK RD /WIESBROOK RD

SCALE: | SHEET NO. 3 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	346
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

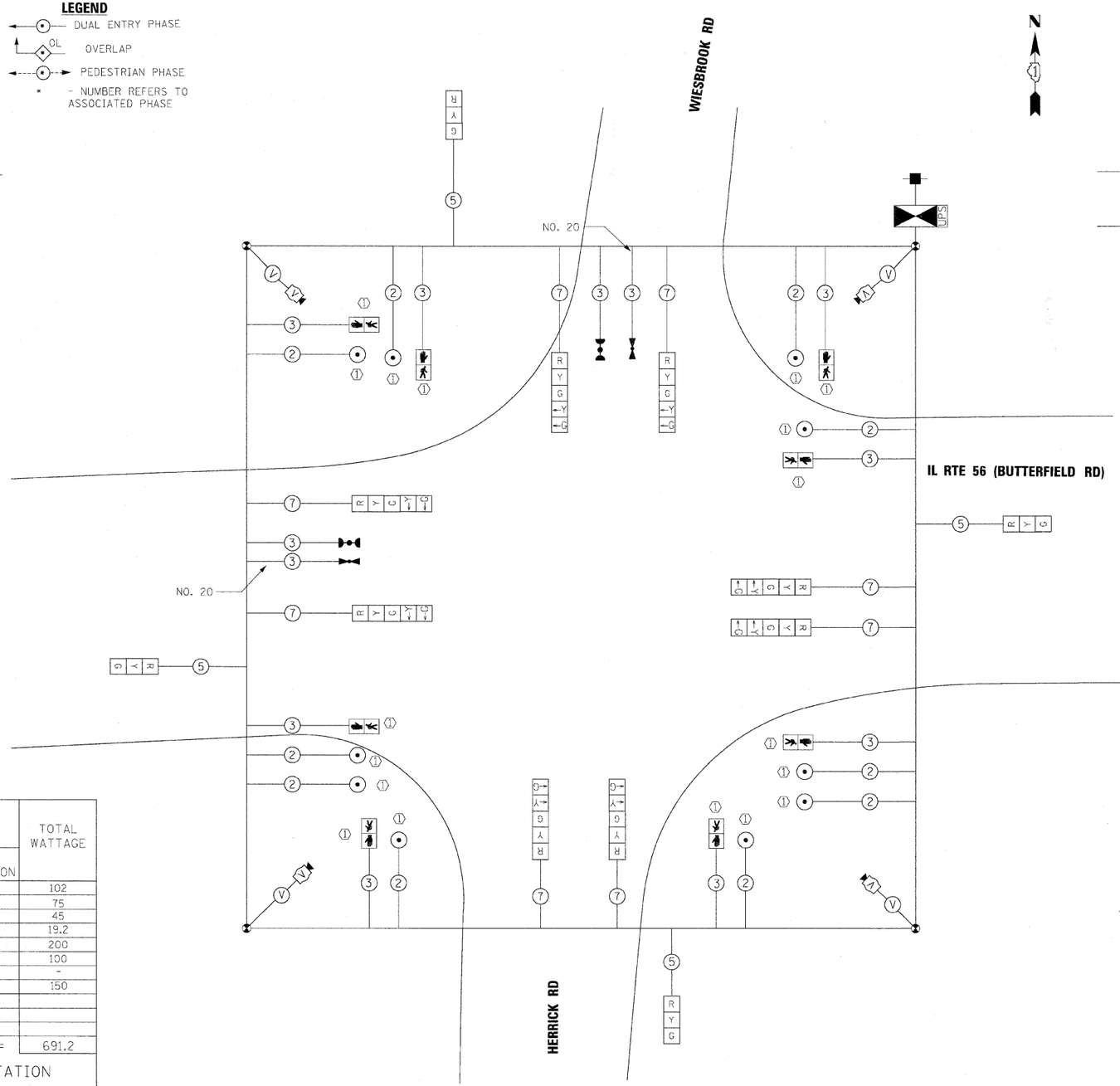
TEMPORARY CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM STAGE 1-1, 1-2, 1-3, & 2

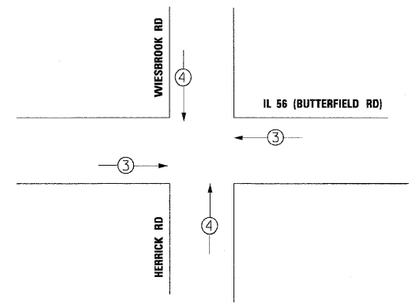
LEGEND

- DUAL ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE



TEMPORARY CABLE PLAN

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	-	17	0.50	102
(YELLOW)	12	-	25	0.25	75
(GREEN)	12	-	15	0.25	45
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	8	-	25	1.00	200
CONTROLLER	1	-	100	1.00	100
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	691.2

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

CONSTRUCTION NOTES:

(1) PEDESTRIAN SIGNALS AND PUSH BUTTONS SHALL REMAIN IN OPERATION AT ALL TIMES WHILE THE TEMPORARY TRAFFIC SIGNALS ARE IN USE. ANY REQUIRED ADJUSTMENT, RELOCATION OR TEMPORARY CABLING REQUIRED TO MAINTAIN PEDESTRIAN SIGNAL OPERATIONS DURING CONSTRUCTION IS INCIDENTAL TO "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = ...\d162419-sht-ts-tempcable1.dgn	DESIGNED - GHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2012	DATE - 12/6/10	REVISED -

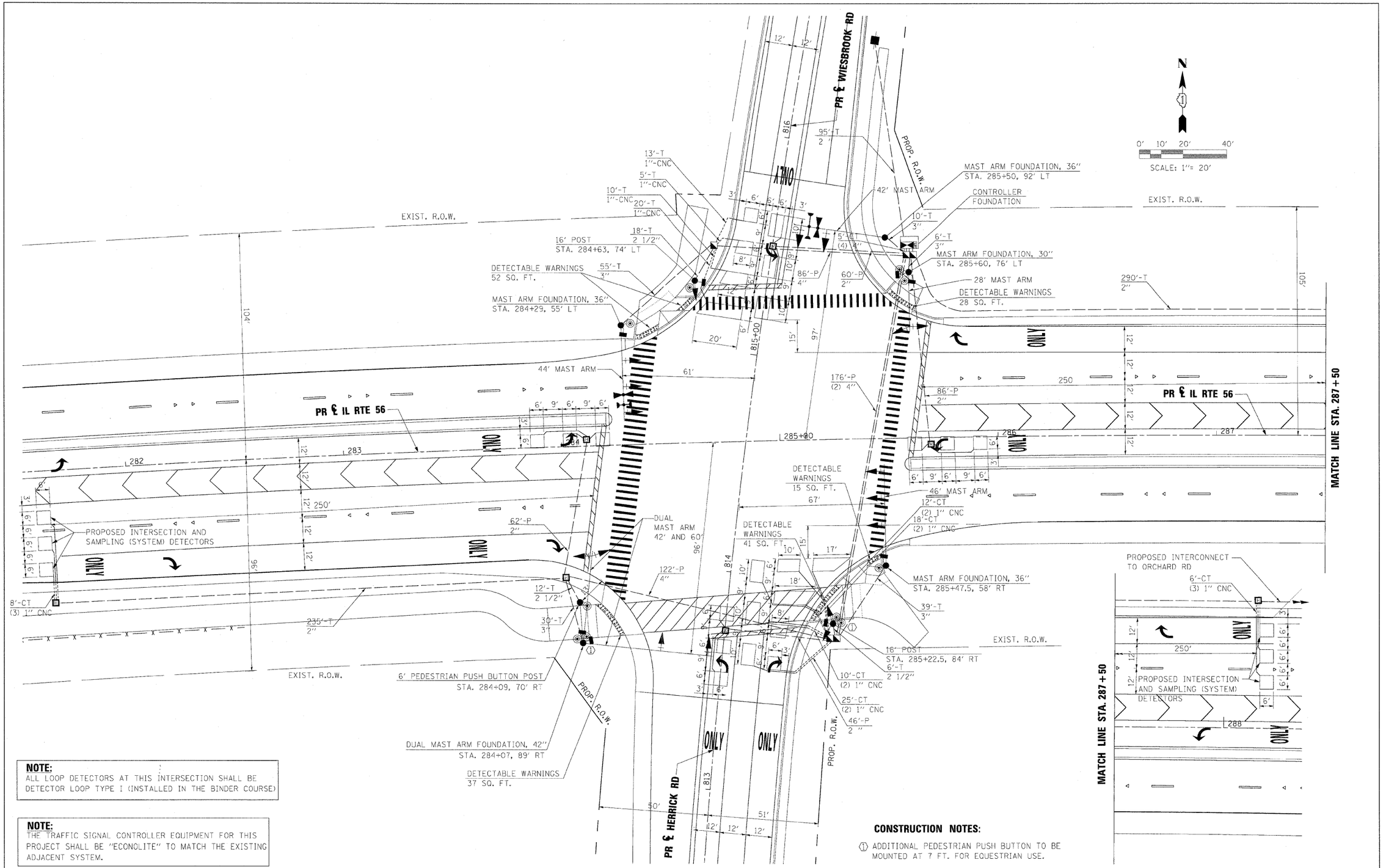
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL
PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE
IL RTE 56 AND HERRICK RD /WIESBROOK RD

SCALE: | SHEET NO. 4 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	347
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTE:
ALL LOOP DETECTORS AT THIS INTERSECTION SHALL BE DETECTOR LOOP TYPE I (INSTALLED IN THE BINDER COURSE)

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

CONSTRUCTION NOTES:

① ADDITIONAL PEDESTRIAN PUSH BUTTON TO BE MOUNTED AT 7 FT. FOR EQUESTRIAN USE.

FILE NAME = ...\d162419-sht-ts-modplan1.dgn	DESIGNED - GHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

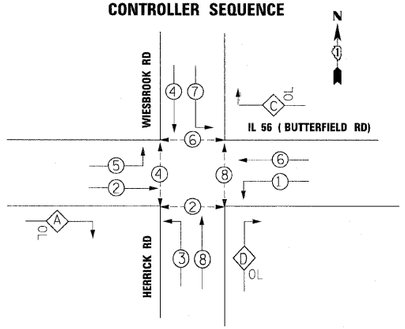
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
IL RTE 56 AND HERRICK RD /WIESBROOK RD

SCALE: | SHEET NO. 5 OF 27 SHEETS | STA. | TO STA.

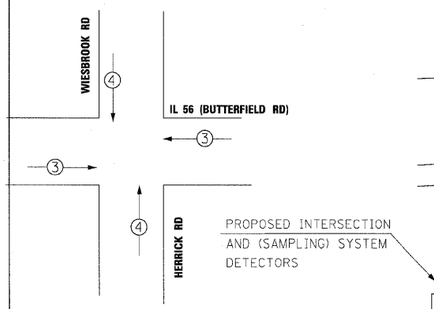
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	348
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



OVERLAP LETTER	PERMISSIVE PHASE		PROTECTED PHASE
A	2	+	3
C	6	+	7
D	8	+	1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	17	-	17	0.50	144.5
(YELLOW)	17	-	25	0.25	106.25
(GREEN)	17	-	15	0.25	63.75
ARROW	28	-	12	0.10	33.6
PED. SIGNAL	8	-	25	1.00	200
CONTROLLER	1		100	1.00	100
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	648.1

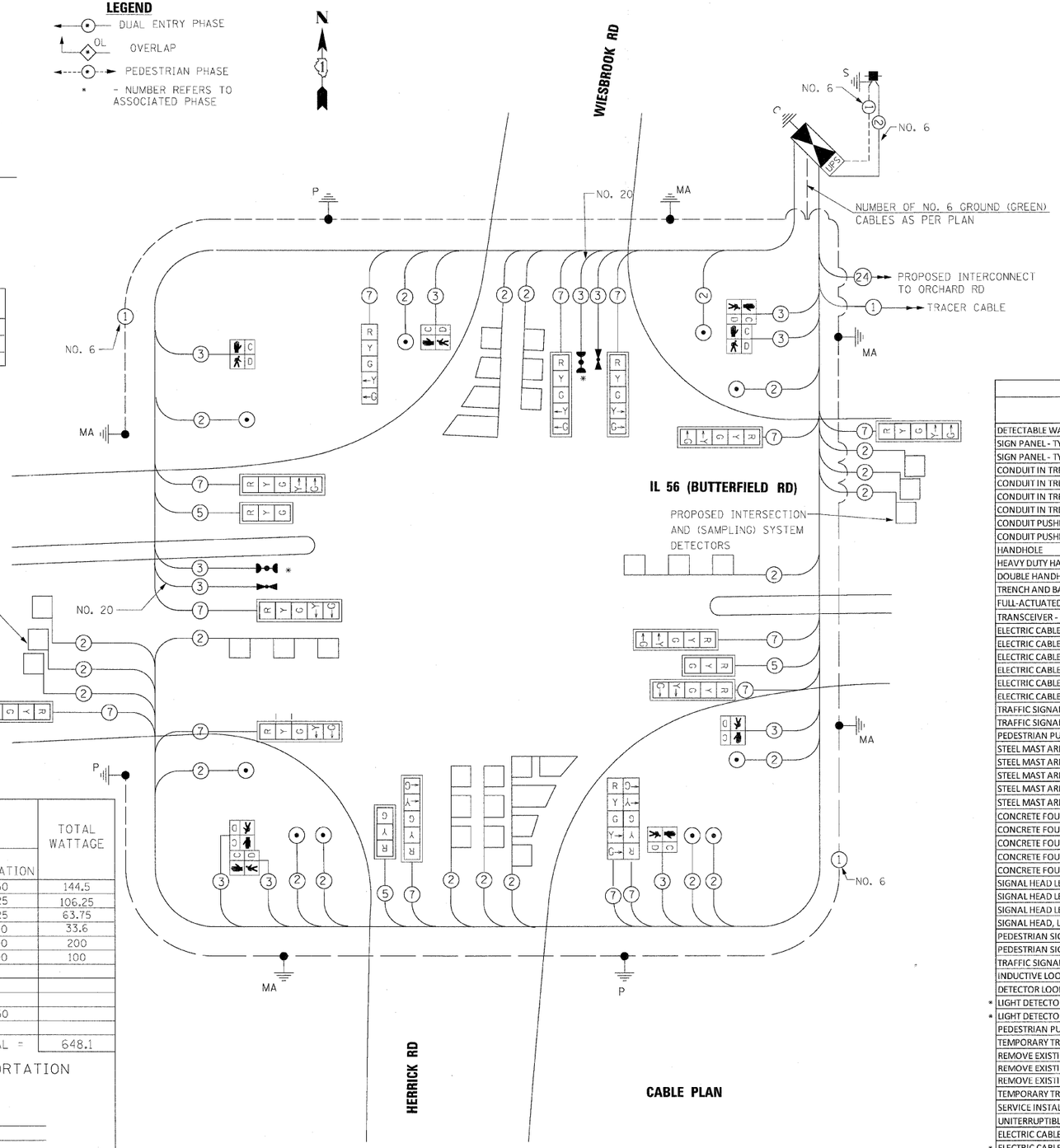
ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196

ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

LEGEND

- DUAL ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE



NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

- 50% EVP COST TO WHEATON FIRE DEPARTMENT
- 50% EVP COST TO WARRENVILLE FIRE DISTRICT

NOTE:
ALL DETECTOR LOOPS AT THIS INTERSECTION ARE PREFORMED (EMBEDDED IN PCC PAVEMENT)

SUMMARY OF QUANTITIES

	DESCRIPTION	UNIT	TOTAL QUANTITY
	DETECTABLE WARNINGS	SQ FT	173
	SIGN PANEL - TYPE 1	SQ FT	30
	SIGN PANEL - TYPE 2	SQ FT	30
	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	620
	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	36
	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	140
	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	254
	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	560
	HANDHOLE	EACH	1
	HEAVY DUTY HANDHOLE	EACH	7
	DOUBLE HANDHOLE	EACH	2
	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	638
	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
	TRANSCEIVER - FIBER OPTIC	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2,285
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2,023
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	997
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3,636
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	4,069
	ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C	FOOT	130
	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT	EACH	1
	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	2
	PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE I	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 42 FT. AND 60 FT.	EACH	1
	CONCRETE FOUNDATION, TYPE A	FOOT	12
	CONCRETE FOUNDATION, TYPE C	FOOT	4
	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	39
	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
	SIGNAL HEAD LED 1-FACE 3-SECTION MAST ARM MOUNTED	EACH	3
	SIGNAL HEAD LED 1-FACE 5-SECTION BRACKET MOUNTED	EACH	1
	SIGNAL HEAD LED 1-FACE 5-SECTION MAST ARM MOUNTED	EACH	11
	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	14
	INDUCTIVE LOOP DETECTOR	EACH	13
	DETECTOR LOOP, TYPE I	FOOT	1,234
*	LIGHT DETECTOR	EACH	2
*	LIGHT DETECTOR AMPLIFIER	EACH	1
	PEDESTRIAN PUSH-BUTTON	EACH	10
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	REMOVE EXISTING HANDHOLE	EACH	5
	REMOVE EXISTING CONCRETE FOUNDATION	EACH	12
	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
	SERVICE INSTALLATION - POLE MOUNTED	EACH	1
	UNITERRUPTIBLE POWER SUPPLY	EACH	1
	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C	FOOT	660
*	ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED SHIELDED	FOOT	329

FILE NAME = ...\d162419-sht-ta-cable&phl.dgn	DESIGNED GHT	REVISED -
USER NAME = tblank	DRAWN BDW	REVISED -
PLOT DATE = 12/7/2010	CHECKED MPM	REVISED -
	DATE 12/6/10	REVISED -

benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE
IL RTE 56 AND HERRICK RD /WIESBROOK RD

SCALE: | SHEET NO. 6 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	349
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

NOTES FOR TEMPORARY TRAFFIC SIGNALS

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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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.

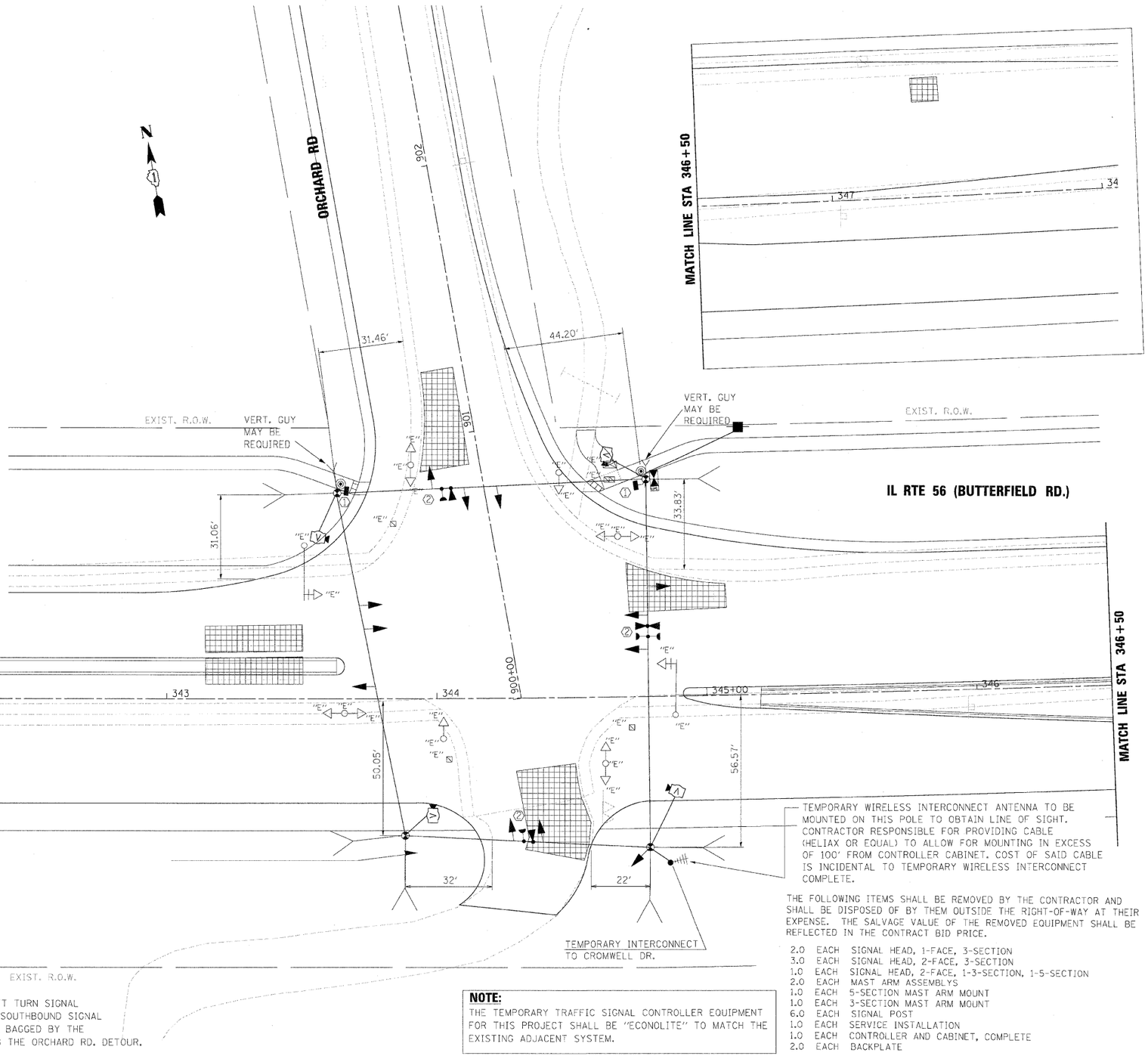
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.

9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.



VIDEO DETECTION CAMERA ON 20' LUMINAIRE ARM

TEMPORARY WOOD POLE CLASS 5 OR BETTER (50' MIN.)

TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

CONSTRUCTION NOTES:

① TEMPORARY PEDESTRIAN SIGNALS SHALL BE BAGGED UNTIL THE PROPOSED SIDEWALK IS INSTALLED.

② THE EASTBOUND LEFT TURN SIGNAL SECTIONS AND THE SOUTHBOUND SIGNAL SECTIONS SHALL BE BAGGED BY THE CONTRACTOR DURING THE ORCHARD RD. DETOUR.

TEMPORARY WIRELESS INTERCONNECT ANTENNA TO BE MOUNTED ON THIS POLE TO OBTAIN LINE OF SIGHT. CONTRACTOR RESPONSIBLE FOR PROVIDING CABLE (HELIAX OR EQUAL) TO ALLOW FOR MOUNTING IN EXCESS OF 100' FROM CONTROLLER CABINET. COST OF SAID CABLE IS INCIDENTAL TO TEMPORARY WIRELESS INTERCONNECT COMPLETE.

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

2.0	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
3.0	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
1.0	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
2.0	EACH	MAST ARM ASSEMBLYS
1.0	EACH	5-SECTION MAST ARM MOUNT
1.0	EACH	3-SECTION MAST ARM MOUNT
6.0	EACH	SIGNAL POST
1.0	EACH	SERVICE INSTALLATION
1.0	EACH	CONTROLLER AND CABINET, COMPLETE
2.0	EACH	BACKPLATE

FILE NAME = ...\c162419-sht-ts-temp2.dgn	DESIGNED - CHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPW	REVISED -
PLOT DATE = 12/7/2210	DATE - 12/6/10	REVISED -

benesch

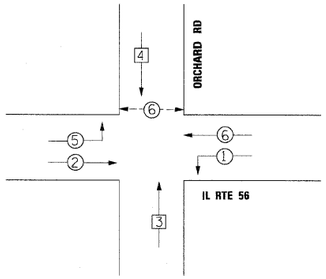
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL AND REMOVAL PLAN
IL RTE 56 AND ORCHARD RD

SCALE: | SHEET NO. 7 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	350
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

TEMPORARY CONTROLLER SEQUENCE

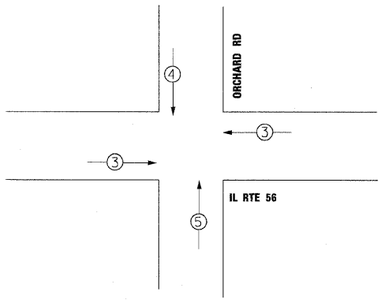


LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM STAGES 1 & 2 (NON–DETOUR)

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE STAGES 1 & 2 (NON–DETOUR)

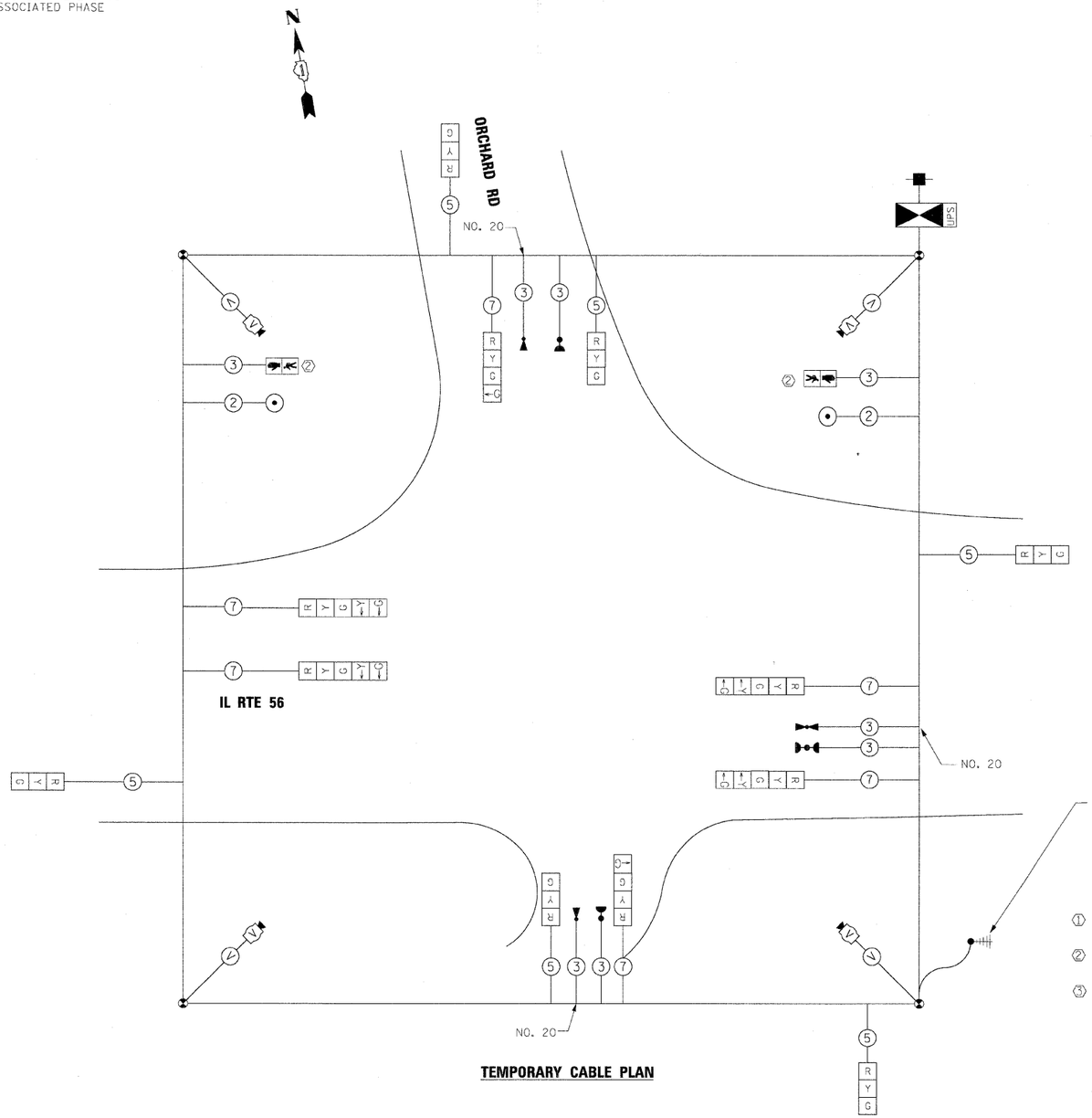


TEMPORARY EMERGENCY VEHICLE PREEMPTORS STAGES 1 AND 2 (NON-DETOUR)			
EMERGENCY VEHICLE PREEMPTORS	3	4	5
MOVEMENT	← →	↓	↑

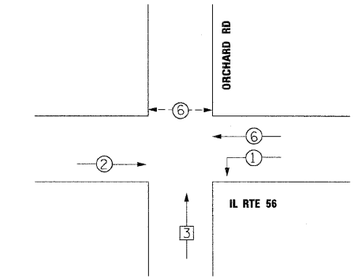
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	-	17	0.50	102
(YELLOW)	12	-	25	0.25	75
(GREEN)	14	-	15	0.25	52.5
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	2	-	25	1.00	50
CONTROLLER	1	-	100	1.00	100
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	539.1

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED



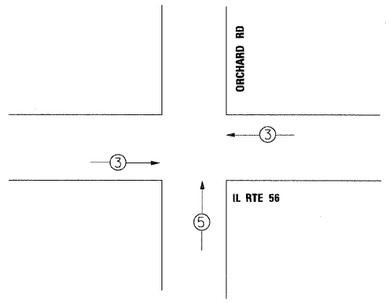
TEMPORARY CABLE PLAN



TEMPORARY PHASE DESIGNATION DIAGRAM STAGE 2 (ONLY DURING ORCHARD RD. DETOUR)

THE EASTBOUND LEFT TURN SIGNAL SECTIONS AND THE SOUTHBOUND SIGNAL SECTIONS SHALL BE BAGGED BY THE CONTRACTOR DURING THE ORCHARD RD. DETOUR

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE STAGE 2 (ONLY DURING ORCHARD RD DETOUR)



TEMPORARY EMERGENCY VEHICLE PREEMPTORS STAGE 2 (ONLY DURING ORCHARD RD. DETOUR)		
EMERGENCY VEHICLE PREEMPTORS	3	5
MOVEMENT	← →	↑

TEMPORARY WIRELESS INTERCONNECT TO CROMWELL DR. (HELIAX CABLE OR EQUIVALENT) TO ALLOW FOR ANTENNA MOUNTING IN EXCESS OF 100 FEET FROM CONTROLLER. SAID CABLE IS INCIDENTAL TO TEMPORARY TRAFFIC SIGNAL.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION.
2. TEMPORARY PEDESTRIAN SIGNALS SHALL BE BAGGED UNTIL THE PROPOSED SIDEWALK IS INSTALLED.
3. THE EASTBOUND LEFT-TURN SIGNAL SECTIONS AND SOUTHBOUND SIGNAL SECTIONS SHALL BE BAGGED BY THE CONTRACTOR DURING THE ORCHARD RD. DETOUR

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	DESIGNED - GHT	REVISED -
...\d162419-sht-ts-tempcable2.dgn	DRAWN - BDW	REVISED -
USER NAME - tblanx	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

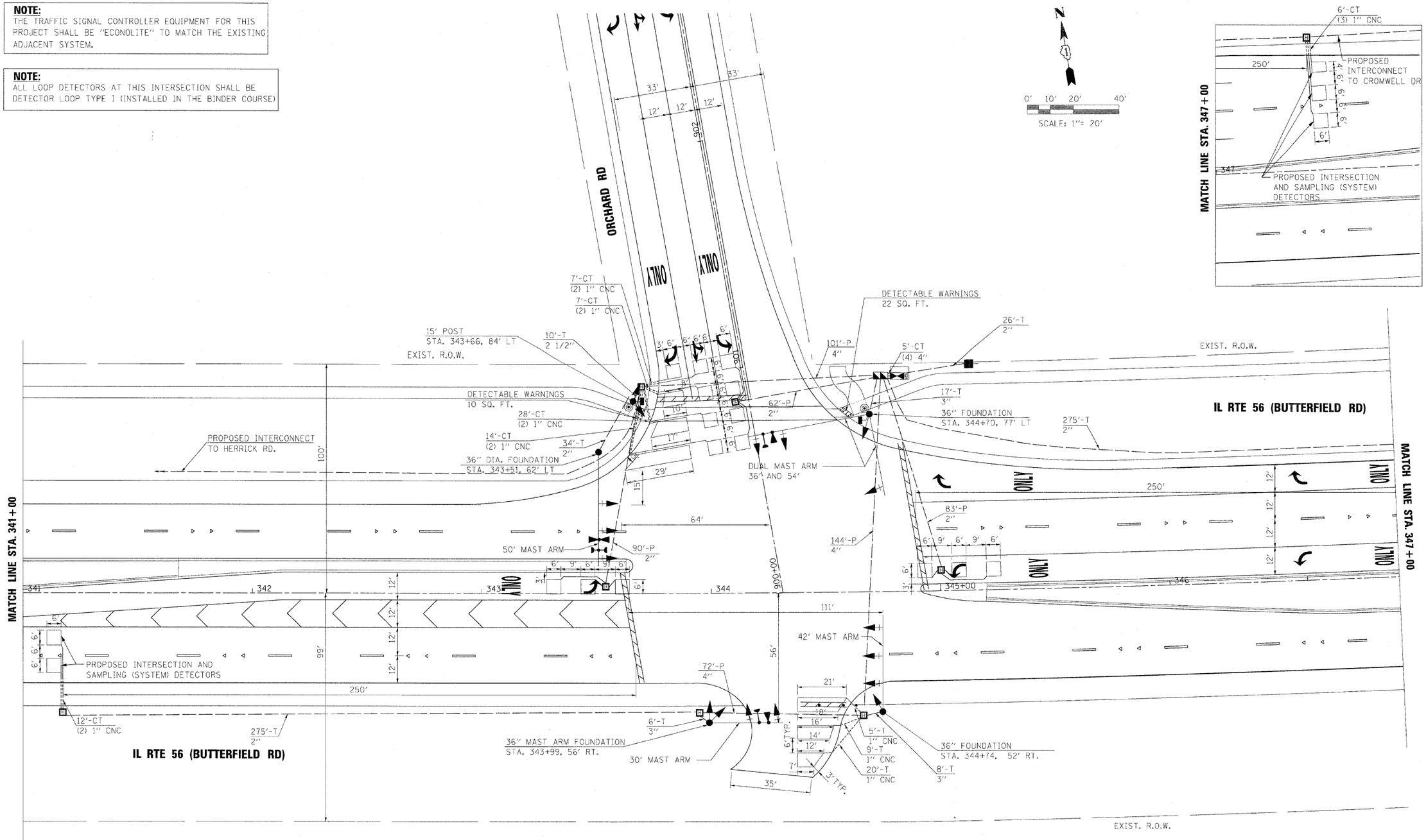
TEMPORARY TRAFFIC SIGNAL CABLE PLAN
PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE
IL RTE 56 AND ORCHARD RD

SCALE: | SHEET NO. 8 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	351
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE:
ALL LOOP DETECTORS AT THIS INTERSECTION SHALL BE DETECTOR LOOP TYPE I (INSTALLED IN THE BINDER COURSE)



FILE NAME = ...\d162419-sht-ts-modplan2.dgn	DESIGNED - GHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED

benesch

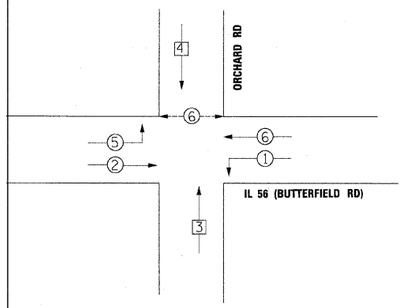
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
IL RTE 56 AND ORCHARD RD

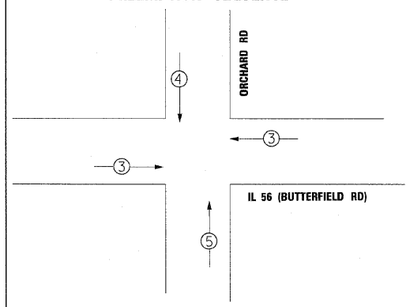
SCALE: 1"=20' | SHEET NO. 9 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	352
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

CONTROLLER SEQUENCE



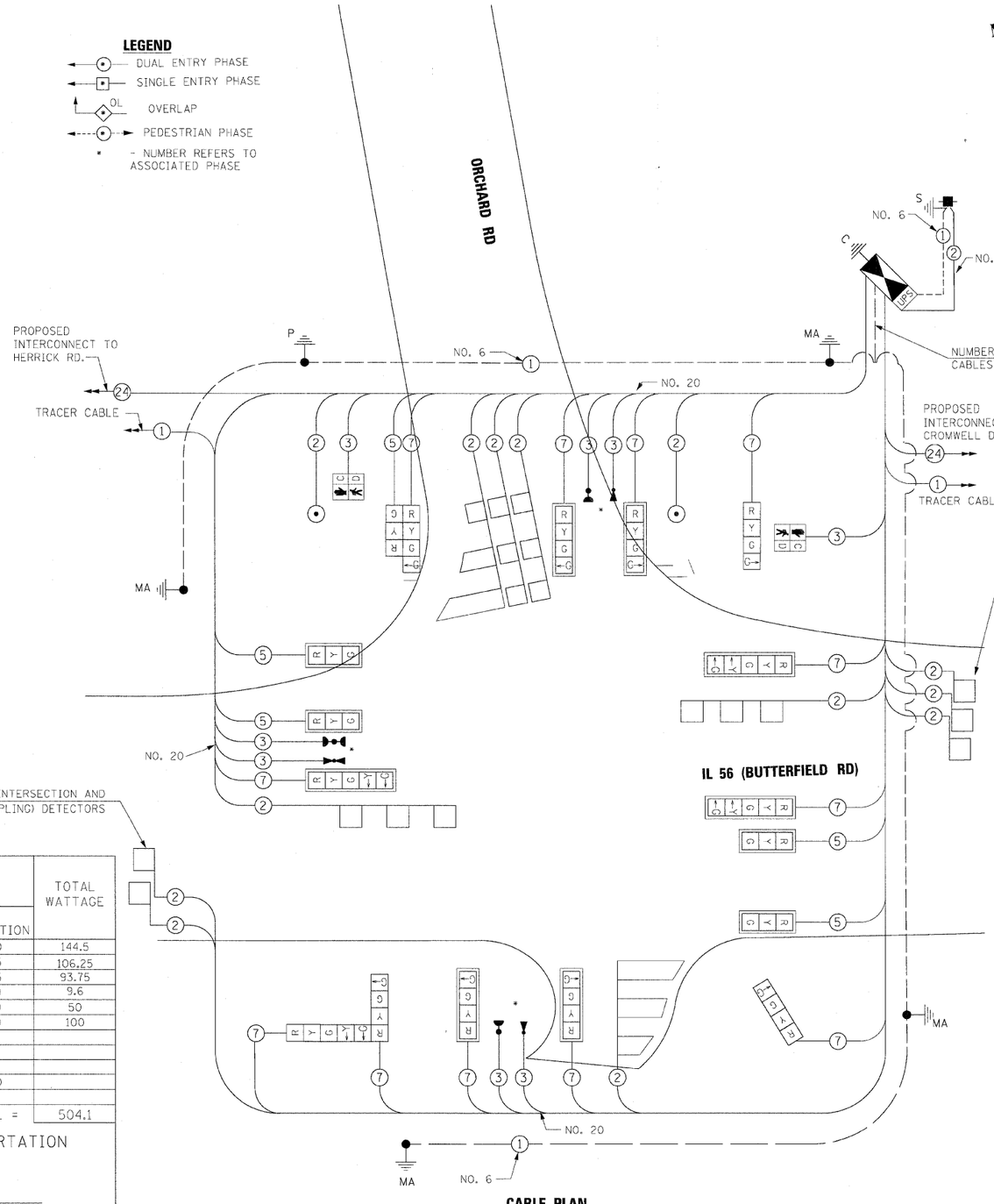
EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTORS	3	4	5
MOVEMENT	← →	↓	↑

LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE



CABLE PLAN

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	17	-	17	0.50	144.5
(YELLOW)	17	-	25	0.25	106.25
(GREEN)	25	-	15	0.25	93.75
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	2	-	25	1.00	50
CONTROLLER	1		100	1.00	100
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	504.1

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

* 100% OF EVP COSTS WHEATON FIRE DEPARTMENT

NOTE:
ALL DETECTOR LOOPS AT THIS INTERSECTION ARE PREFORMED (EMBEDDED IN PCC PAVEMENT)

SUMMARY OF QUANTITIES

	DESCRIPTION	UNIT	TOTAL QUANTITY
	DETECTABLE WARNINGS	SQ FT	22
	SIGN PANEL - TYPE 1	SQ FT	16.5
	SIGN PANEL - TYPE 2	SQ FT	15.0
	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	610
	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	10
	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	14
	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	235
	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	438
	HEAVY DUTY HANDHOLE	EACH	8
	DOUBLE HANDHOLE	EACH	1
	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	741
	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
	TRANSCEIVER - FIBER OPTIC	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	187
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	200
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,067
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,385
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	2,740
	ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C	FOOT	80
	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 15 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 36 FT. AND 54 FT.	EACH	1
	CONCRETE FOUNDATION, TYPE A	FOOT	4
	CONCRETE FOUNDATION, TYPE C	FOOT	4
	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	55
	SIGNAL HEAD LED 1-FACE 3-SECTION MAST ARM MOUNTED	EACH	4
	SIGNAL HEAD LED 1-FACE 4-SECTION, BRACKET MOUNTED	EACH	2
	SIGNAL HEAD LED 1-FACE 4-SECTION, MAST ARM MOUNTED	EACH	4
	SIGNAL HEAD LED 1-FACE 5-SECTION MAST ARM MOUNTED	EACH	3
	SIGNAL HEAD LED 2-FACE 1-3-SECTION, 1-4 SECTION BRACKET MOUNTED	EACH	1
	SIGNAL HEAD LED 2-FACE 1-4-SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1
	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	7
	INDUCTIVE LOOP DETECTOR	EACH	11
	DETECTOR LOOP, TYPE I	FOOT	1,026
*	LIGHT DETECTOR	EACH	3
*	LIGHT DETECTOR AMPLIFIER	EACH	1
	PEDESTRIAN PUSH-BUTTON	EACH	2
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	REMOVE EXISTING HANDHOLE	EACH	4
	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
	SERVICE INSTALLATION - POLE MOUNTED	EACH	1
	UNITERRUPTIBLE POWER SUPPLY	EACH	1
	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C	FOOT	519
*	ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED SHIELDED	FOOT	1,268

FILE NAME = ...\c162419-sht-ts-cable&ph2.dgn	DESIGNED - GHT	REVISED -
USER NAME = tblank	DRAWN - BDW	REVISED -
PLOT DATE = 12/7/2010	CHECKED - MPM	REVISED -
	DATE - 12/6/10	REVISED -

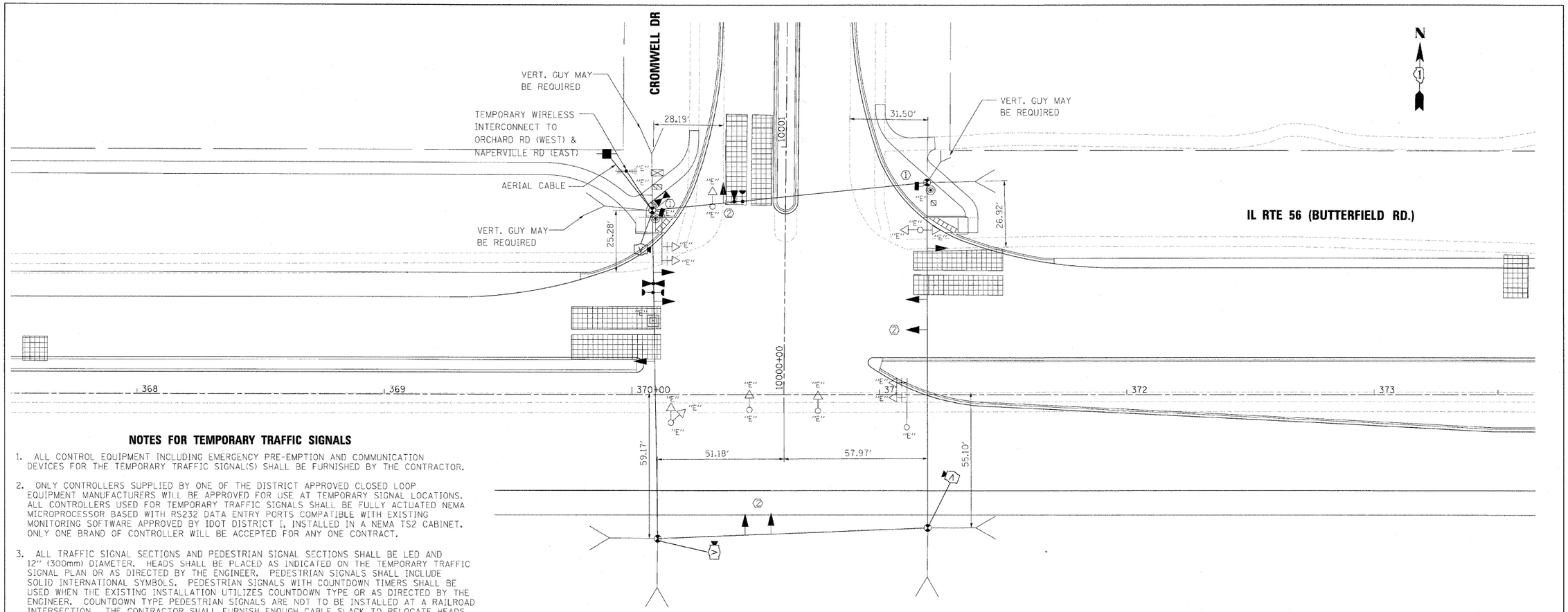
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE
IL RTE 56 AND ORCHARD RD

SCALE: 1"=20' | SHEET NO.10 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	353
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



NOTES FOR TEMPORARY TRAFFIC SIGNALS

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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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.

7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.

9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

CONSTRUCTION NOTES:

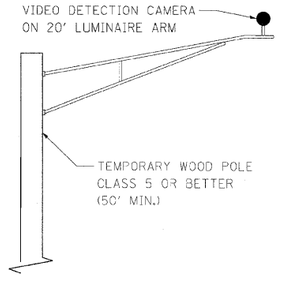
(1) TEMPORARY PEDESTRIAN SIGNALS SHALL BE BAGGED UNTIL THE PROPOSED SIDEWALK IS INSTALLED.

(2) THE EASTBOUND LEFT-TURN SIGNAL SECTIONS AND THE SOUTHBOUND SIGNAL SECTIONS SHALL BE BAGGED BY THE CONTRACTOR DURING THE CROMWELL DR. DETOUR

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

3.0	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
1.0	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION
1.0	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
2.0	EACH	MAST ARM ASSEMBLYS
1.0	EACH	5-SECTION MAST ARM MOUNT
3.0	EACH	3-SECTION MAST ARM MOUNT
5.0	EACH	SIGNAL POST
1.0	EACH	SERVICE INSTALLATION
1.0	EACH	CONTROLLER AND CABINET, COMPLETE
4.0	EACH	BACKPLATE



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

FILE NAME =	DESIGNED - GHT	REVISED -
...\d\62419-sht-ta-temp3.dgn	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

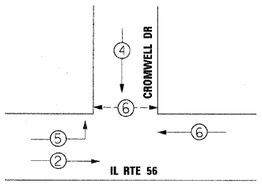
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL AND REMOVAL PLAN
IL RTE 56 AND CROMWELL DR

SCALE: | SHEET NO. 11 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	354
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

TEMPORARY CONTROLLER SEQUENCE

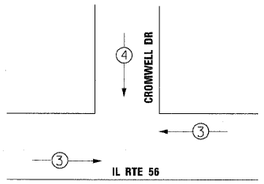


LEGEND

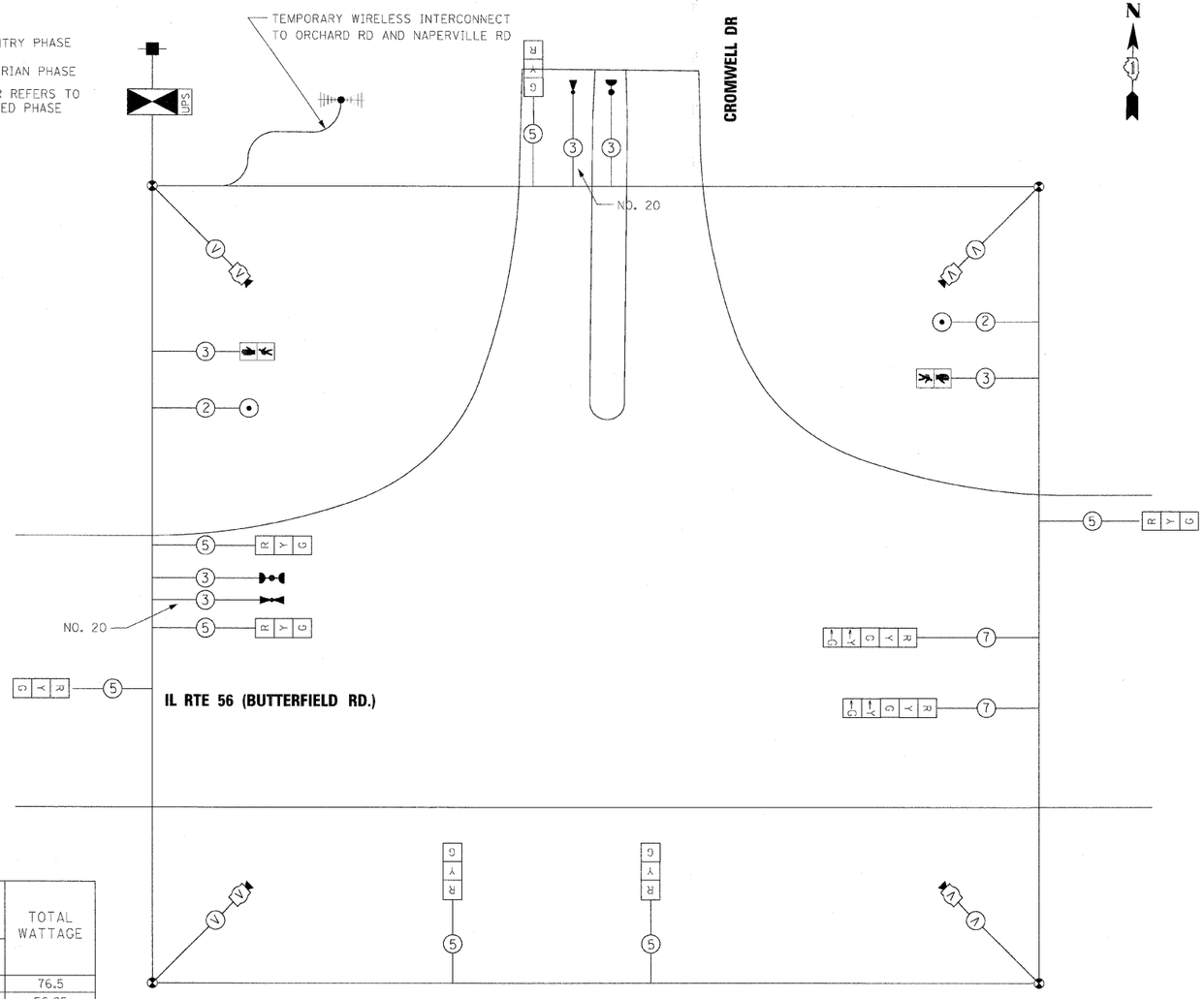
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY
PHASE DESIGNATION DIAGRAM
STAGES 1 & 2 (NON–DETOUR)

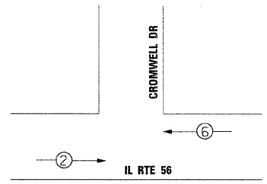
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE STAGES 1 & 2 (NON–DETOUR)



TEMPORARY EMERGENCY VEHICLE PREEMPTORS STAGES 1 & 2 (NON-DETOUR)		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓



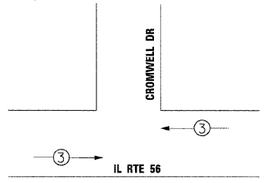
TEMPORARY CABLE PLAN



TEMPORARY
PHASE DESIGNATION DIAGRAM
STAGE 2 (ONLY DURING CROMWELL DETOUR)

THE EASTBOUND LEFT TURN SIGNAL HEADS AND THE SOUTHBOUND SIGNAL HEADS SHALL BE BAGGED BY THE CONTRACTOR

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE STAGE 2 (ONLY DURING CROMWELL DETOUR)



TEMPORARY EMERGENCY VEHICLE PREEMPTORS STAGE 2 (ONLY DURING CROMWELL DETOUR)	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	← →

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	9	-	17	0.50	76.5
(YELLOW)	9	-	25	0.25	56.25
(GREEN)	9	-	15	0.25	33.75
ARROW	4	-	12	0.10	4.8
PED. SIGNAL	2	-	25	1.00	50
CONTROLLER	1	-	100	1.00	100
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	471.3

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION.
2. PEDESTRIAN SIGNALS SHALL REMAIN IN OPERATION AT ALL TIMES WHILE THE TEMPORARY TRAFFIC SIGNALS ARE IN USE. ANY REQUIRED ADJUSTMENT, RELOCATION OR TEMPORARY CABLING REQUIRED TO MAINTAIN PEDESTRIAN SIGNAL OPERATIONS DURING CONSTRUCTION IS INCIDENTAL TO "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	DESIGNED - GHT	REVISED -
...\d162419-sht-ts-tempcable3.dgn	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

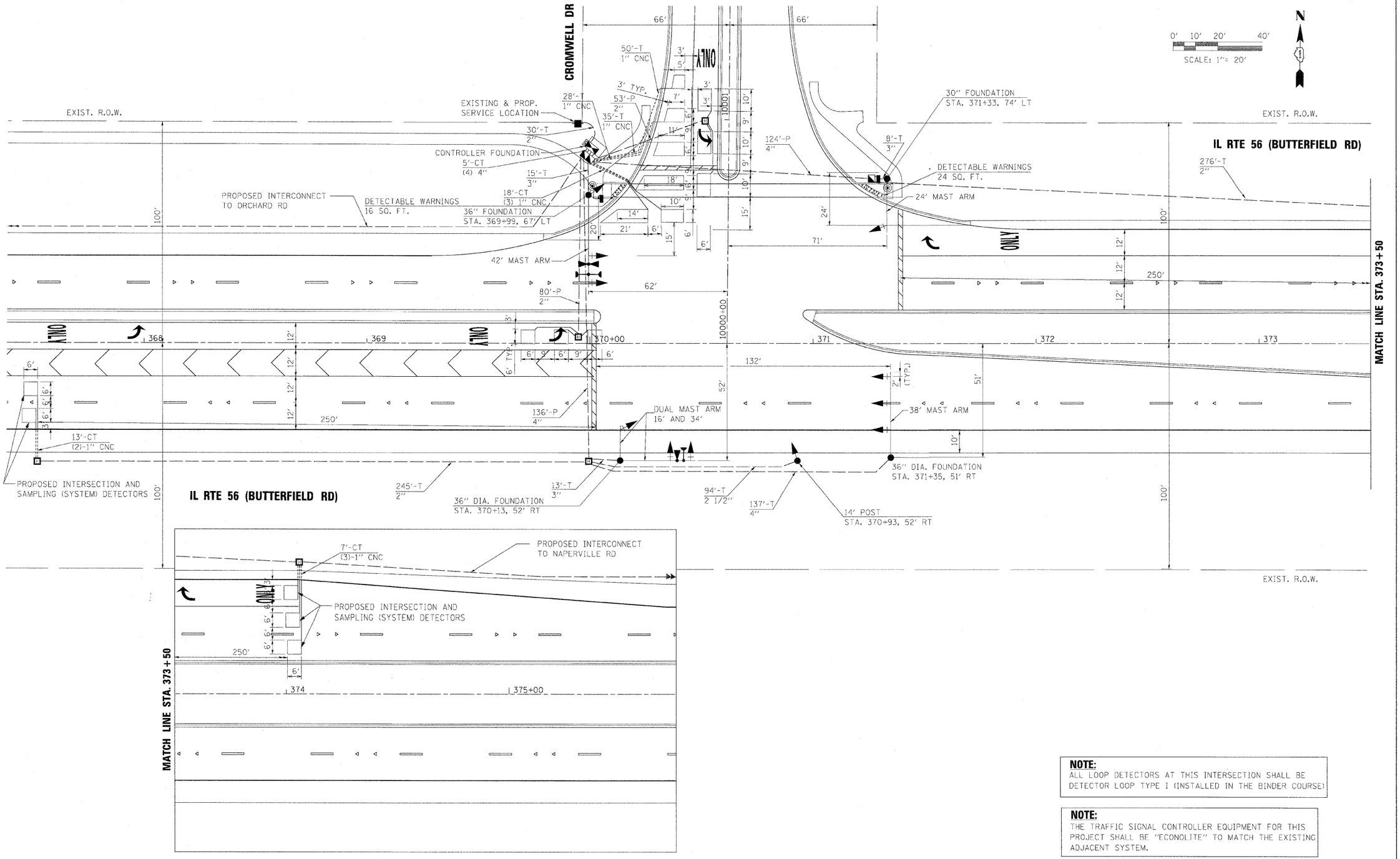
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE
IL RTE 56 AND CROMWELL DR

SCALE: | SHEET NO.12 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	355
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



NOTE:
ALL LOOP DETECTORS AT THIS INTERSECTION SHALL BE DETECTOR LOOP TYPE I (INSTALLED IN THE BINDER COURSE)

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = ...\d162419-sht-ts-modplan3.dgn	DESIGNED - GHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

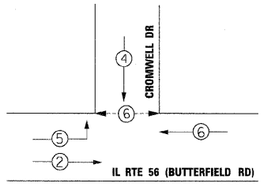
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
IL RTE 56 AND CROMWELL DR

SCALE: 1"=20' | SHEET NO. 13 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	356
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



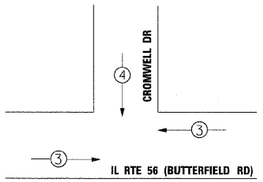
PHASE DESIGNATION DIAGRAM

LEGEND

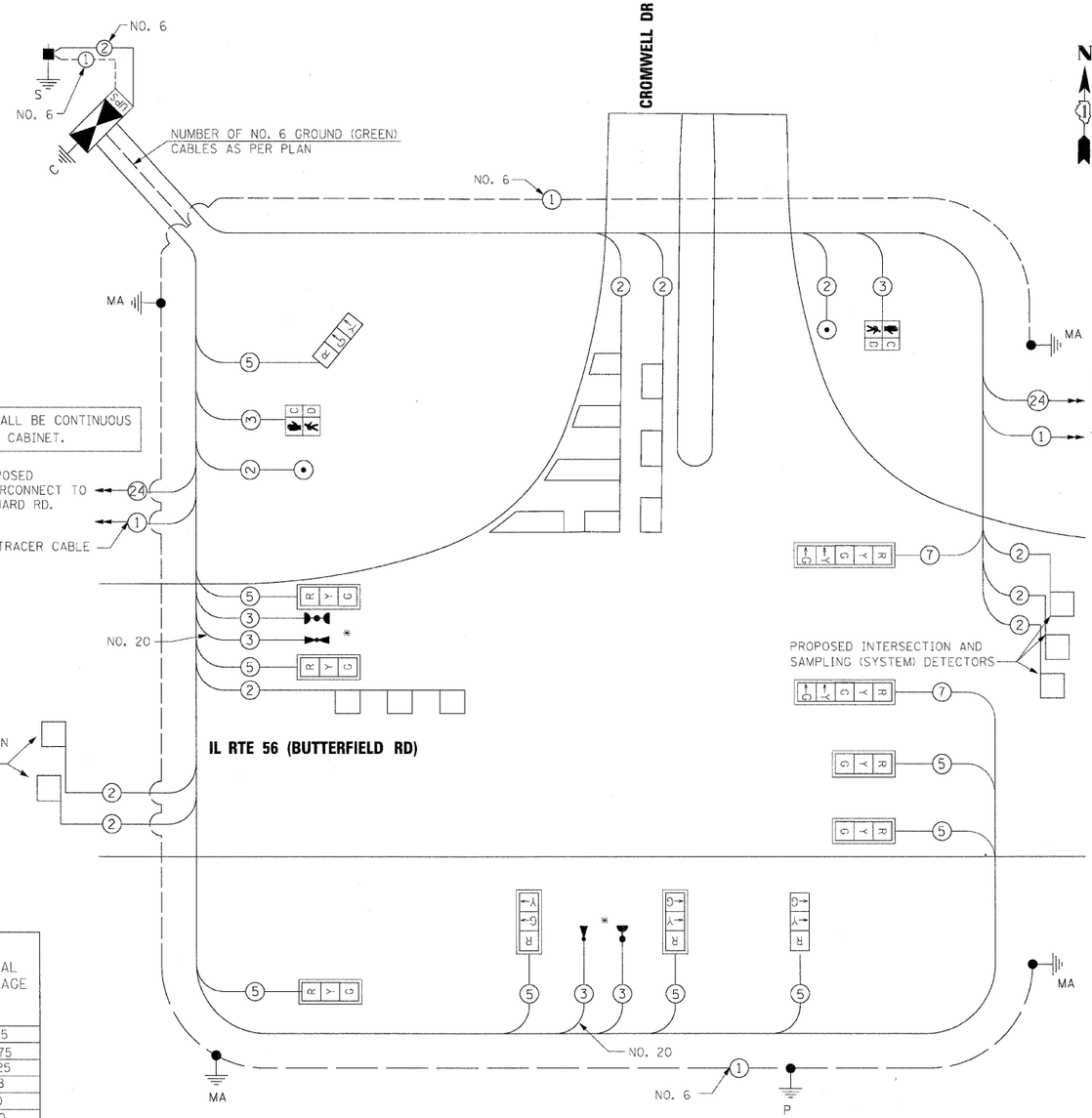
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	11	-	17	0.50	93.5
(YELLOW)	11	-	25	0.25	68.75
(GREEN)	11	-	15	0.25	41.25
ARROW	4	-	12	0.10	4.8
PED. SIGNAL	2	-	25	1.00	50
CONTROLLER	1		100	1.00	100
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	358.3

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

NOTE:
ALL DETECTOR LOOPS AT THIS INTERSECTION ARE PREFORMED (EMBEDDED IN PCC PAVEMENT)

* 100% OF EVP COSTS TO WHEATON FIRE DEPARTMENT

SUMMARY OF QUANTITIES

	DESCRIPTION	UNIT	TOTAL QUANTITY
	DETECTABLE WARNINGS	SQ FT	40
	SIGN PANEL - TYPE 1	SQ FT	16.5
	SIGN PANEL - TYPE 2	SQ FT	15.0
	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	551
	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	94
	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	36
	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	157
	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	123
	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	260
	HANDHOLE	EACH	1
	HEAVY DUTY HANDHOLE	EACH	4
	DOUBLE HANDHOLE	EACH	1
	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	911
	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
	TRANSCEIVER - FIBER OPTIC	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	229
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	565
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,958
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	571
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	2,485
	ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C	FOOT	65
	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 34 FT. AND 16 FT.	EACH	1
	CONCRETE FOUNDATION, TYPE A	FOOT	4
	CONCRETE FOUNDATION, TYPE C	FOOT	4
	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	36
	SIGNAL HEAD LED 1-FACE 3-SECTION MAST ARM MOUNTED	EACH	7
	SIGNAL HEAD LED 1-FACE 3-SECTION BRACKET MOUNTED	EACH	2
	SIGNAL HEAD LED 1-FACE 5-SECTION MAST ARM MOUNTED	EACH	2
	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
	INDUCTIVE LOOP DETECTOR	EACH	8
	DETECTOR LOOP, TYPE I	FOOT	699
*	LIGHT DETECTOR	EACH	2
*	LIGHT DETECTOR AMPLIFIER	EACH	1
	PEDESTRIAN PUSH-BUTTON	EACH	2
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	REMOVE EXISTING HANDHOLE	EACH	3
	REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
	SERVICE INSTALLATION - POLE MOUNTED	EACH	1
	UNINTERRUPTIBLE POWER SUPPLY	EACH	1
	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C	FOOT	796
*	ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED SHIELDED	FOOT	336

FILE NAME = ...\d162419-sht-ts-cable&ph3.dgn	DESIGNED - CHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

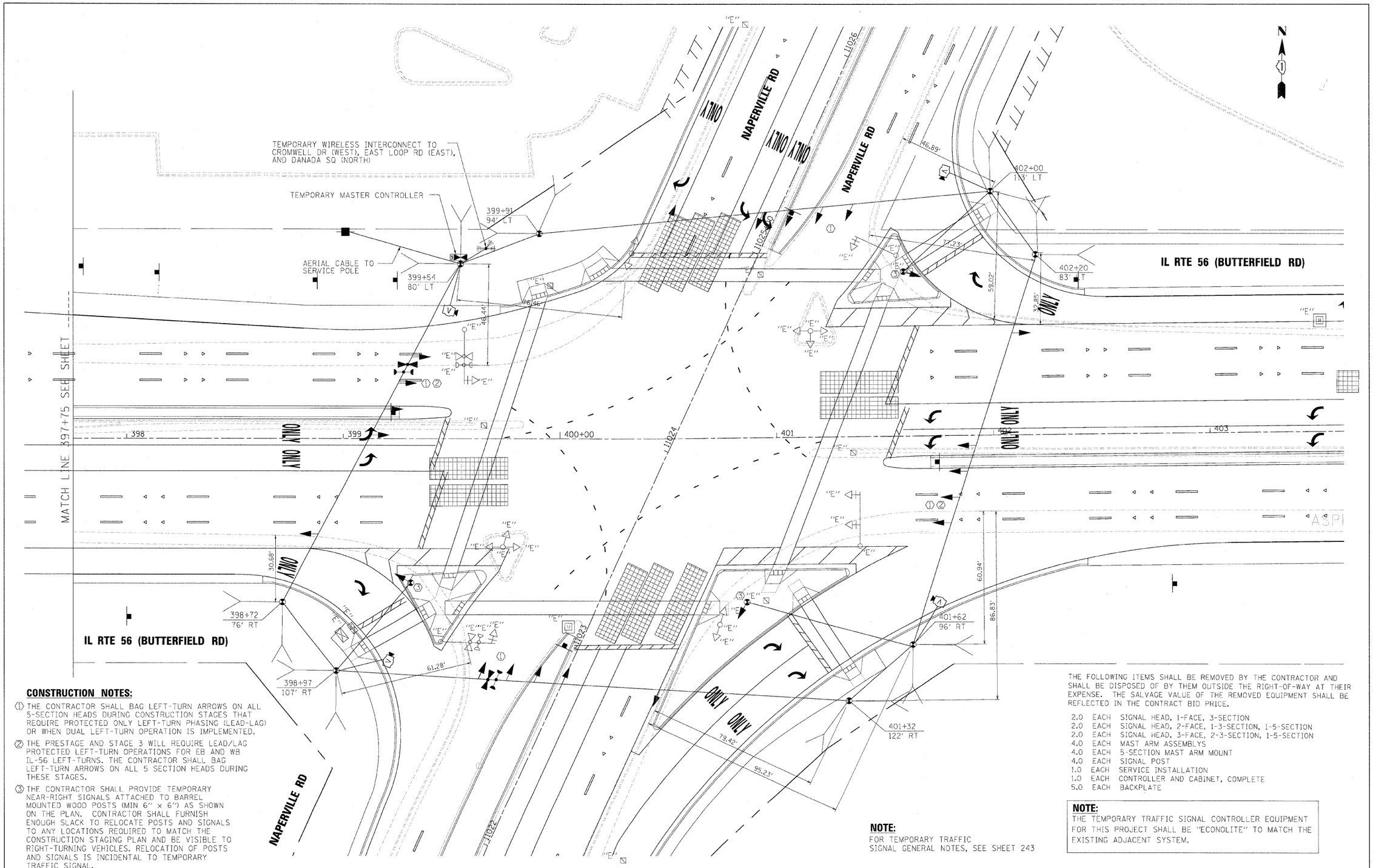
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION AND EVP SEQUENCE
IL RTE 56 AND CROMWELL DR

SCALE: NTS | SHEET NO.14 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	357
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



CONSTRUCTION NOTES:

① THE CONTRACTOR SHALL BAG LEFT-TURN ARROWS ON ALL 5-SECTION HEADS DURING CONSTRUCTION STAGES THAT REQUIRE PROTECTED ONLY LEFT-TURN PHASING (LEAD-LAG) OR WHEN DUAL LEFT-TURN OPERATION IS IMPLEMENTED.

② THE PRESTAGE AND STAGE 3 WILL REQUIRE LEAD/LAG PROTECTED LEFT-TURN OPERATIONS FOR EB AND WB IL-56 LEFT-TURNS. THE CONTRACTOR SHALL BAG LEFT-TURN ARROWS ON ALL 5 SECTION HEADS DURING THESE STAGES.

③ THE CONTRACTOR SHALL PROVIDE TEMPORARY NEAR-RIGHT SIGNALS ATTACHED TO BARREL MOUNTED WOOD POSTS (MIN 6" × 6") AS SHOWN ON THE PLAN. CONTRACTOR SHALL FURNISH ENOUGH SLACK TO RELOCATE POSTS AND SIGNALS TO ANY LOCATIONS REQUIRED TO MATCH THE CONSTRUCTION STAGING PLAN AND BE VISIBLE TO RIGHT-TURNING VEHICLES. RELOCATION OF POSTS AND SIGNALS IS INCIDENTAL TO TEMPORARY TRAFFIC SIGNAL.

NOTE:
FOR TEMPORARY TRAFFIC SIGNAL GENERAL NOTES, SEE SHEET 243

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

2.0	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2.0	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
2.0	EACH	SIGNAL HEAD, 3-FACE, 2-3-SECTION, 1-5-SECTION
4.0	EACH	MAST ARM ASSEMBLYS
4.0	EACH	5-SECTION MAST ARM MOUNT
4.0	EACH	SIGNAL POST
1.0	EACH	SERVICE INSTALLATION
1.0	EACH	CONTROLLER AND CABINET, COMPLETE
5.0	EACH	BACKPLATE

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = ...\d162419-sht-ta-temp4.dgn	DESIGNED - GHT	REVISED -
USER NAME = tblank	DRAWN - BDW	REVISED -
PLOT DATE = 12/7/2010	CHECKED - MPM	REVISED -
	DATE - 12/6/10	REVISED -

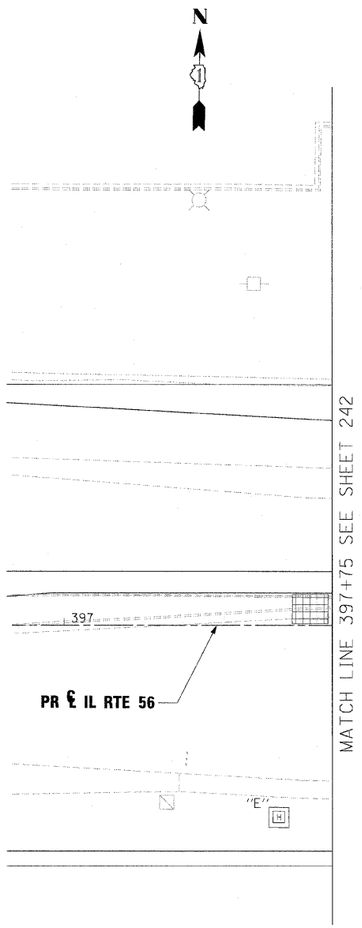
benesch

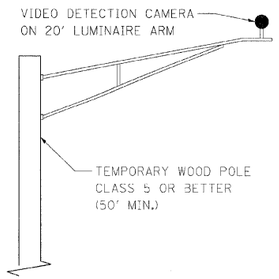
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL AND REMOVAL PLAN
IL RTE 56 AND NAPERVILLE RD

SCALE: 1"=20' | SHEET NO. 15 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	358
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			





TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

NOTES FOR TEMPORARY TRAFFIC SIGNALS

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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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.

7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.

9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

FILE NAME = ...\d162419-sht-ts-temp48.dgn	DESIGNED - GHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tolenk	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

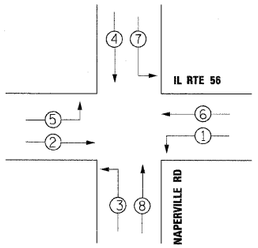
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL AND REMOVAL PLAN
IL RTE 56 AND NAPERVILLE RD

SCALE: 1"=20' | SHEET NO.16 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	157 & 58WRS-2	DUPAGE	681	359
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

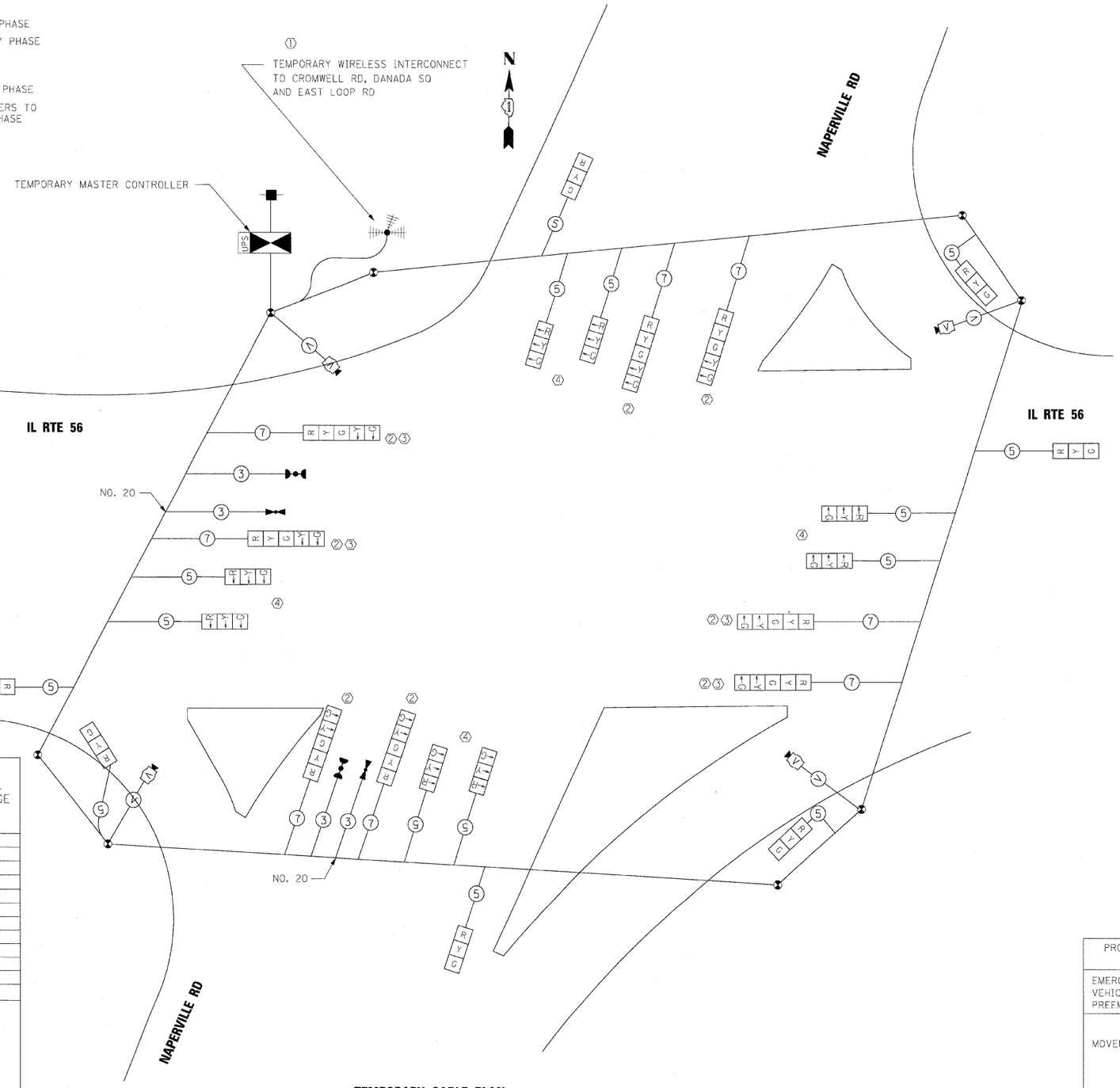
CONTROLLER SEQUENCE



TEMPORARY
PHASE DESIGNATION DIAGRAM
STAGES 1, 2-1,2-2, 2-3, & 2-4

LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL OVERLAP
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE



CONSTRUCTION NOTES:

① THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION.

② THE CONTRACTOR SHALL BAG LEFT TURN ARROWS ON ALL 5-SECTION HEADS DURING CONSTRUCTION STAGES THAT REQUIRE PROTECTED ONLY LEFT-TURN PHASING (LEAD-LAG) OR WHEN DUAL LEFT TURN OPERATION IS IMPLEMENTED.

③ THE PRE-STAGE AND STAGE 3 WILL REQUIRE LEAD/LAG PROTECTED LEFT-TURN OPERATIONS FOR EB AND WB IL-56 LEFT TURNS. THE CONTRACTOR SHALL BAG LEFT TURN ARROWS ON ALL 5-SECTION HEADS DURING THESE STAGES.

④ ALL 3-SECTION PROTECT LEFT-TURN SIGNAL HEADS SHALL BE BAGGED DURING PROTECTED/PERMISSIVE OPERATIONS.

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

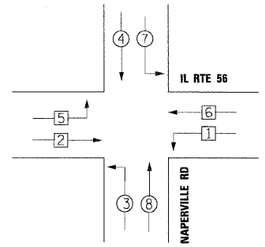
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	20	-	17	0.50	212.5
(YELLOW)	12	-	25	0.25	106.25
(GREEN)	12	-	15	0.25	63.75
ARROW	32	-	12	0.10	38.4
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	-	100	1.00	100
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	670.9

ILLINOIS DEPARTMENT OF TRANSPORTATION

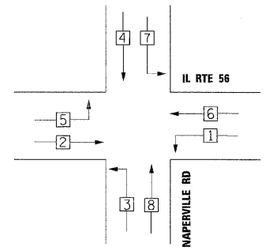
201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

TEMPORARY CABLE PLAN

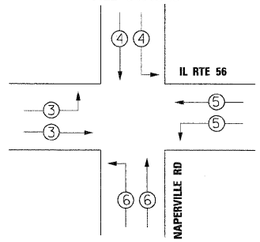
TEMPORARY PHASE DESIGNATION DIAGRAM PRE-STAGE & STAGE 3 EB, WB PROTECTED LT LEAD/LAG OPERATION



TEMPORARY PHASE DESIGNATION DIAGRAM DUAL LEFT-TURN OPERATION



EMERGENCY VEHICLE PREEMPTION SEQUENCE ALL STAGES



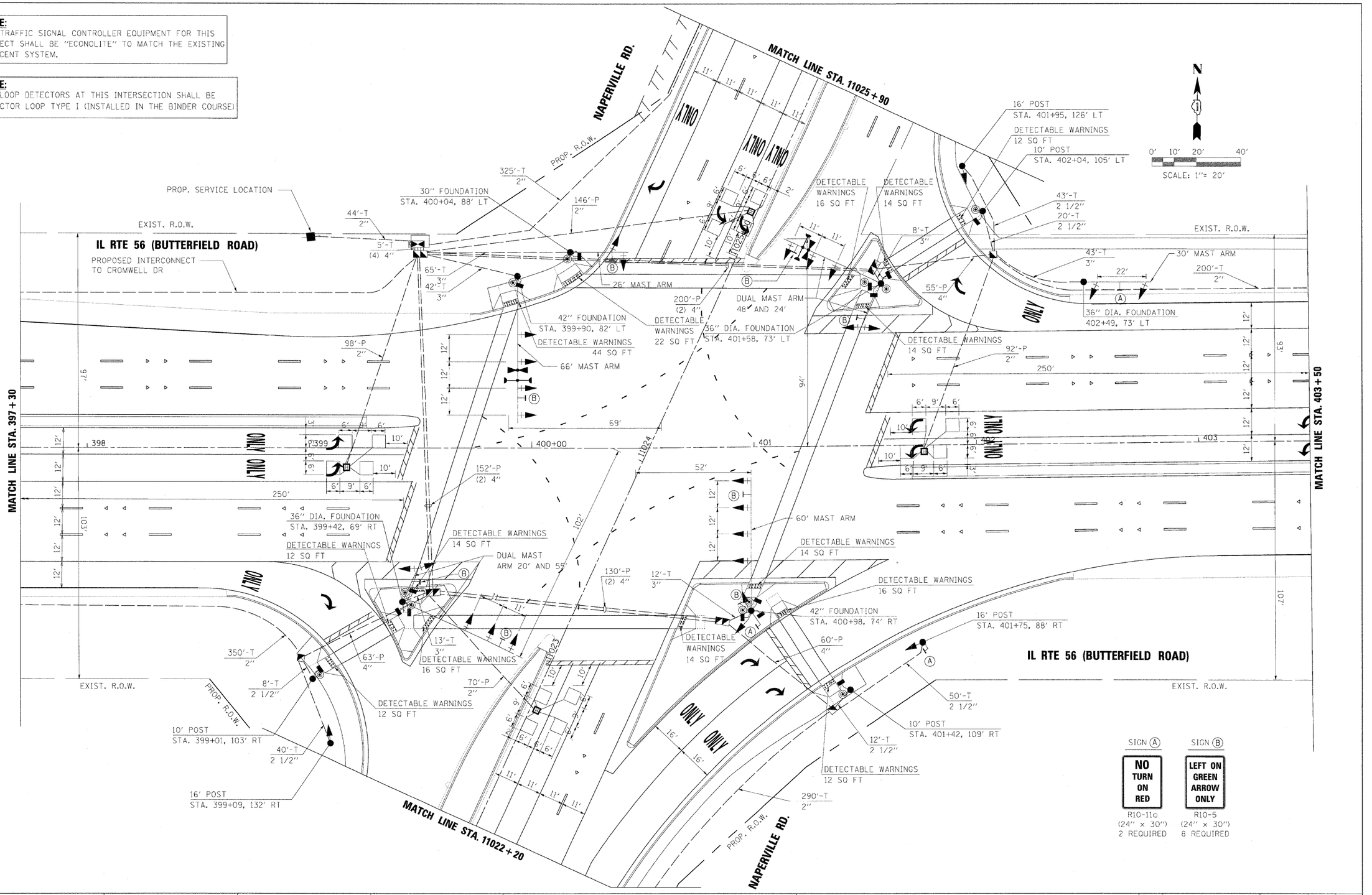
PROPOSED EMERGENCY VEHICLE PREEMPTORS ALL STAGES				
EMERGENCY VEHICLE PREEMPTORS	3	4	5	6
MOVEMENT				

FILE NAME = ...\d162419-sht-ts-tempoable4.dgn	DESIGNED - GHT	REVISED -	benesch
USER NAME = tblank	DRAWN - BDW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
PLOT DATE = 12///2010	CHECKED - MPM	REVISED -	TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE IL RTE 56 AND NAPERVILLE RD
	DATE - 12/6/10	REVISED -	SCALE: NTS SHEET NO.17 OF 27 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	360
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE:
ALL LOOP DETECTORS AT THIS INTERSECTION SHALL BE DETECTOR LOOP TYPE I (INSTALLED IN THE BINDER COURSE)



FILE NAME = ...\dl62419-sht-ts-modalon4.dgn	DESIGNED - GHT	REVISED -	benesch	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL INSTALLATION PLAN IL RTE 56 AND NAPERVILLE RD
USER NAME = tblank	DRAWN - BDW	REVISED -			SCALE: 1"=20' SHEET NO.18 OF 27 SHEETS STA. TO STA.
PLOT DATE = 12/7/2010	CHECKED - MPM	REVISED -			
	DATE - 12/6/10	REVISED -			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	361
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

FILE NAME = ...\d162419-sht-ts-modplan4b.dgn	DESIGNED - GHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

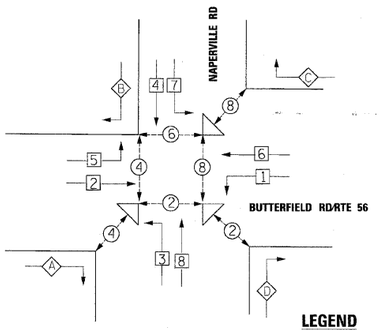
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
IL RTE 56 AND NAPERVILLE RD

SCALE: 1"=20' | SHEET NO. 19 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	362
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

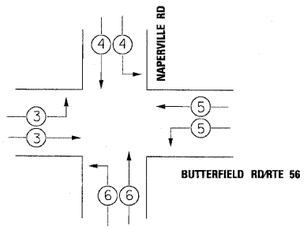
CONTROLLER SEQUENCE



LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE

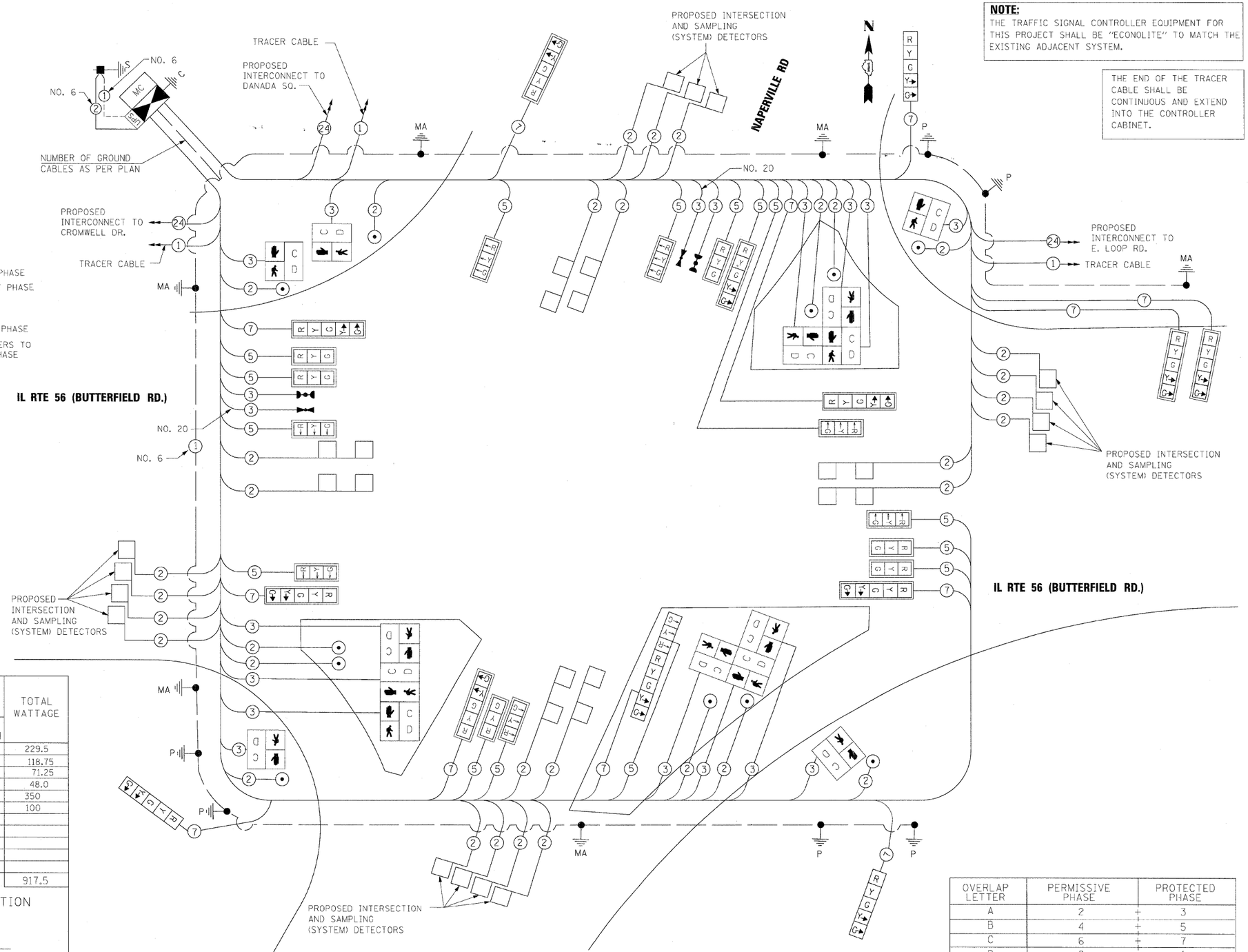


PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTORS	3	4	5	6
MOVEMENT				

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	27	-	17	0.50	229.5
(YELLOW)	19	-	25	0.25	118.75
(GREEN)	19	-	15	0.25	71.25
ARROW	40	-	12	0.10	48.0
PED. SIGNAL	14	-	25	1.00	350
CONTROLLER	1		100	1.00	100
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	917.5

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED



NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

OVERLAP LETTER	PERMISSIVE PHASE		PROTECTED PHASE
A	2	+	3
B	4	+	5
C	6	+	7
D	8	+	1

FILE NAME =	DESIGNED - GHT	REVISED -
...\d162419-sht-ta-cable&ph4.dgn	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE
IL RTE 56 AND NAPERVILLE RD

SCALE: NTS | SHEET NO.20 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	363
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

IL–56 AND NAPERVILLE RD
SCHEDULE OF QUANTITIES

SUMMARY OF QUANTITIES		
DESCRIPTION	UNIT	TOTAL QUANTITY
DETECTABLE WARNINGS	SQ FT	203
SIGN PANEL - TYPE 1	SQ FT	56.5
SIGN PANEL - TYPE 2	SQ FT	30.0
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	1,209
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	173
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	76
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	406
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	1,142
HANDHOLE	EACH	5
HEAVY DUTY HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	4
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1,489
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2,467
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3,099
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5,021
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,286
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	10,583
ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C	FOOT	79
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 66 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 20 FT. AND 55 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 48 FT. AND 24 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	24
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	41
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	46
SIGNAL HEAD LED 1-FACE 3-SECTION MAST ARM MOUNTED	EACH	13
SIGNAL HEAD LED 1-FACE 5-SECTION BRACKET MOUNTED	EACH	3
SIGNAL HEAD LED 1-FACE 5-SECTION MAST ARM MOUNTED	EACH	9
SIGNAL HEAD LED 2-FACE 1-3-SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	22
INDUCTIVE LOOP DETECTOR	EACH	23
DETECTOR LOOP, TYPE I	FOOT	1,143
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	11
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNITERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C	FOOT	1,070
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED SHIELDED	FOOT	896

FILE NAME =	DESIGNED - GHT	REVISED -
...\d162419-sht-ts-cable&ph1e.dgn	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

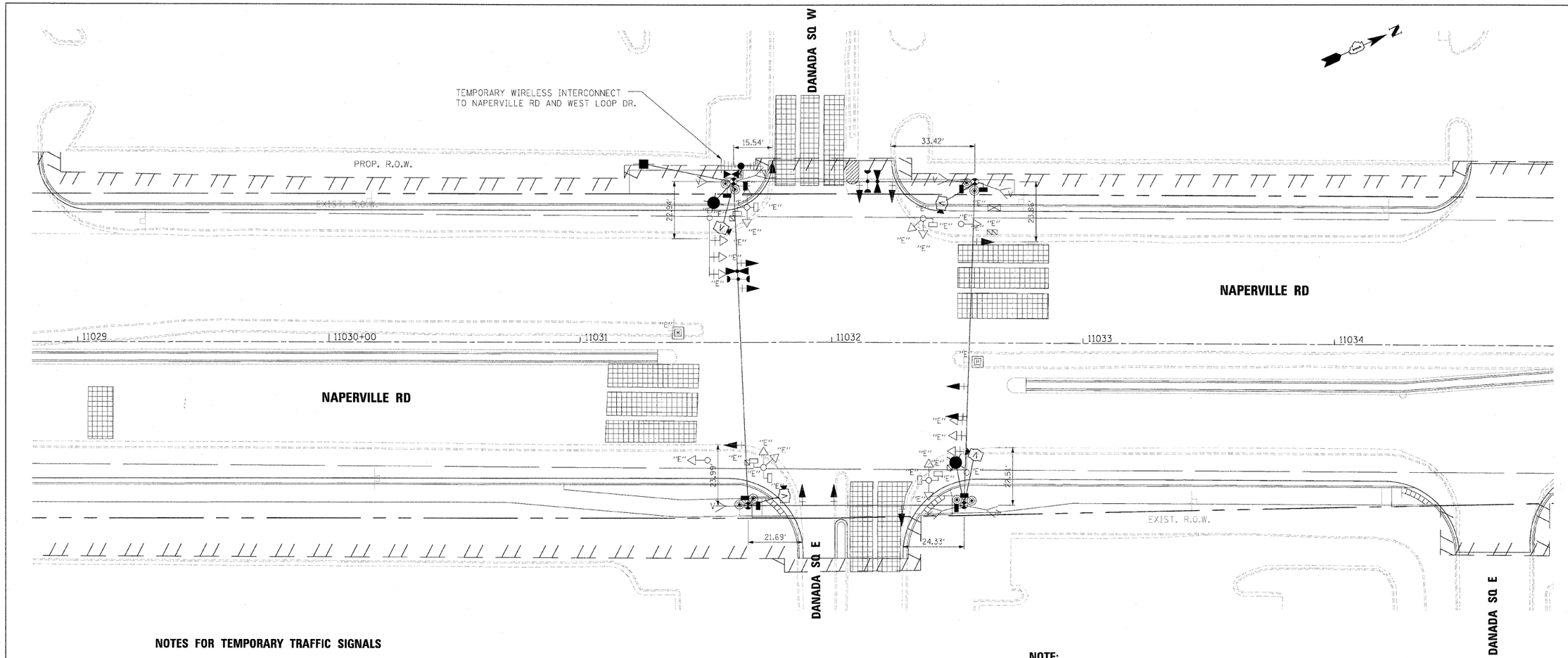
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL RTE 56 AND NAPERVILLE RD

SCALE: NTS | SHEET NO. 21 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	364
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



NOTES FOR TEMPORARY TRAFFIC SIGNALS

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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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.

7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL. TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.

9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

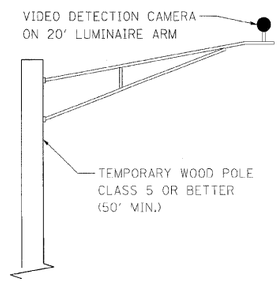
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE:
SIDEWALK IS TO BE GAPPED FOR TEMPORARY SIGNAL POST PLACEMENT UNTIL THE PROPOSED SIGNALS ARE ACTIVE AND THE TEMPORARY SIGNAL POSTS CAN BE REMOVED.

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

2.0	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2.0	EACH	SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
2.0	EACH	SIGNAL HEAD, 2-FACE, 5-SECTION
8.0	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
4.0	EACH	PUSHBUTTONS
2.0	EACH	MAST ARM ASSEMBLYS
4.0	EACH	5-SECTION MAST ARM MOUNT
2.0	EACH	3-SECTION MAST ARM MOUNT
4.0	EACH	SIGNAL POST
1.0	EACH	SERVICE INSTALLATION
1.0	EACH	CONTROLLER AND CABINET, COMPLETE
6.0	EACH	BACKPLATE



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

FILE NAME =	DESIGNED - GHT	REVISED -
...\d162419-aht-ta-temp5.dgn	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

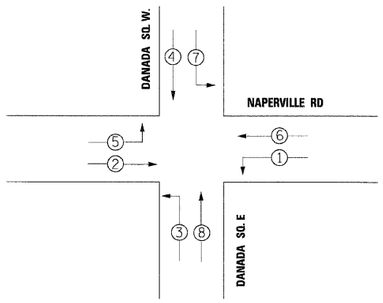
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL AND REMOVAL PLAN
NAPERVILLE RD AND DANADA SQ

SCALE: 1"=20' | SHEET NO. 22 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	365
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

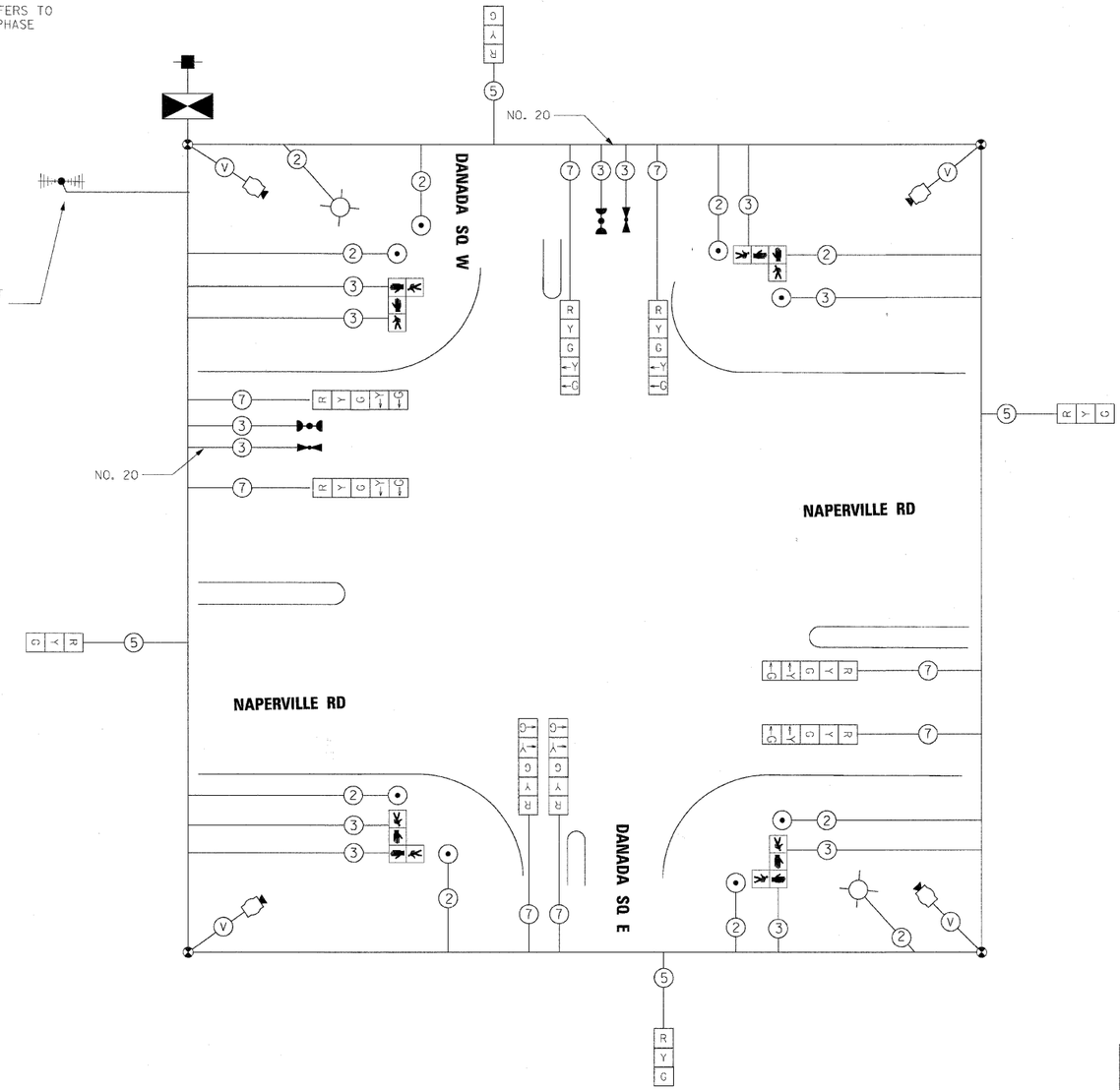
TEMPORARY CONTROLLER SEQUENCE



TEMPORARY
PHASE DESIGNATION DIAGRAM

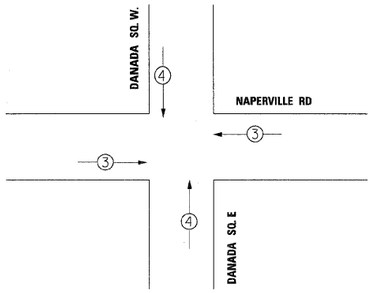
LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE



TEMPORARY CABLE PLAN

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	← →	↑

CONSTRUCTION NOTES:

1. TEMPORARY RADIO INTERCONNECT SHALL NOT BE REMOVED UNTIL FIBER INTERCONNECT TO BUTTERFIELD RD. AND LOOP RD. IS INSTALLED AND OPERATIONAL.
2. THE EXISTING TRAFFIC SIGNAL CLOSED LOOP SYSTEM OPERATION SHALL BE MAINTAINED DURING CONSTRUCTION
3. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION.
4. PEDESTRIAN SIGNALS SHALL REMAIN IN OPERATION AT ALL TIMES WHILE THE TEMPORARY TRAFFIC SIGNALS ARE IN USE. ANY REQUIRED ADJUSTMENT, RELOCATIONOR TEMPORARY CABLING REQUIRED TO MAINTAIN PEDESTRIAN SIGNAL OPERATIONS DURING CONSTRUCTION IS INCIDENTAL TO "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	-	17	0.50	102
(YELLOW)	12	-	25	0.25	75
(GREEN)	12	-	15	0.25	45
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	4	-	25	1.00	100
CONTROLLER	1	-	100	1.00	100
ILLUM. SIGN	-	-	25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	591.2

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOVED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME =	DESIGNED - GHT	REVISED -
...\d162419-sht-ts-tempcable5.dgn	DRAWN - BDW	REVISED -
USER NAME = blank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

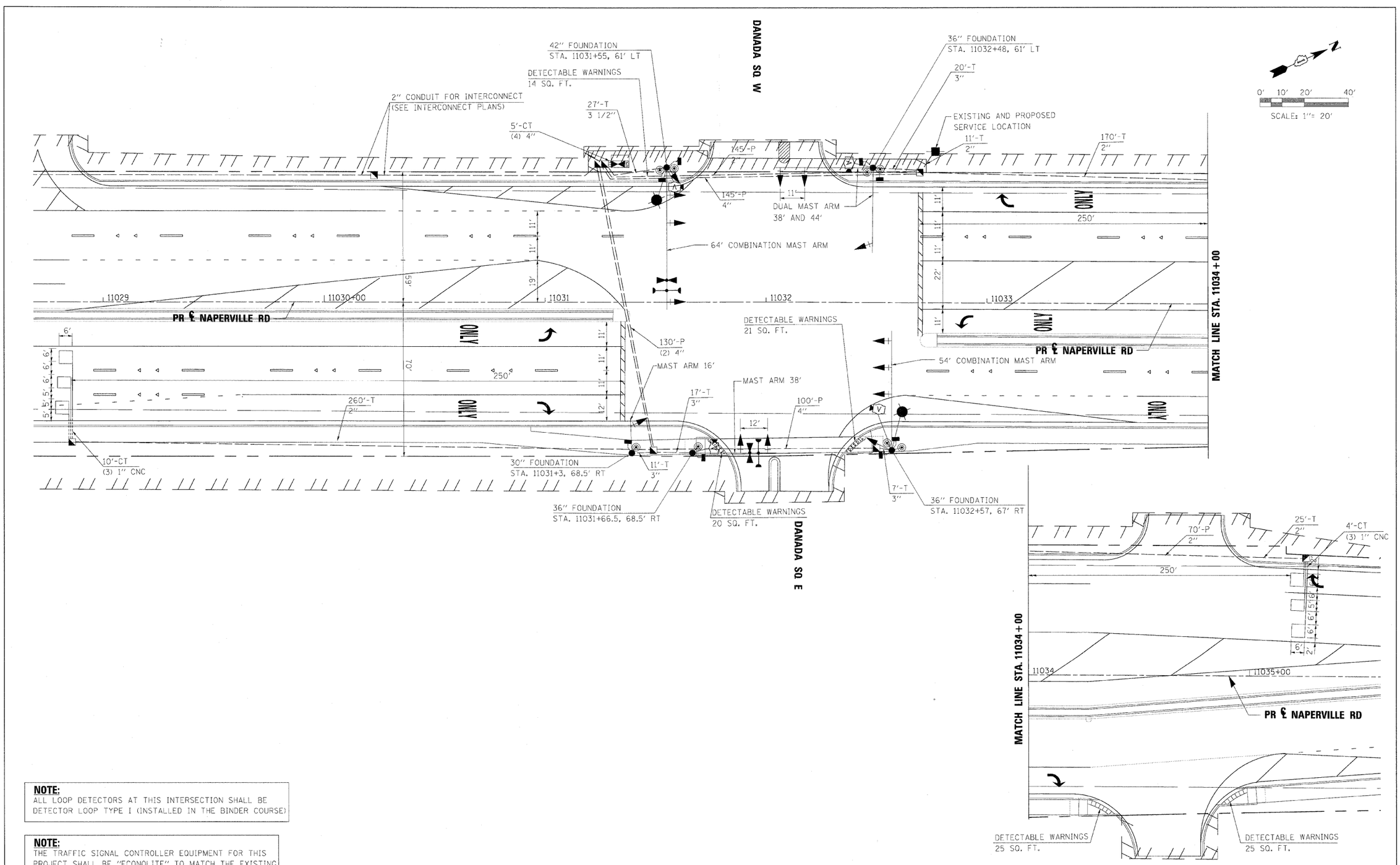
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DESIGNATION AND EVP SEQUENCE NAPERVILLE RD AND DANADA SQ

SCALE: NTS | SHEET NO. 23 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	366
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



NOTE:
ALL LOOP DETECTORS AT THIS INTERSECTION SHALL BE DETECTOR LOOP TYPE I (INSTALLED IN THE BINDER COURSE)

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = ...\c162419-sht-ts-modplan5.dgn	DESIGNED - GHT	REVISED -
USER NAME = tblank	DRAWN - BDW	REVISED -
PLOT DATE = 12/7/2210	CHECKED - MPM	REVISED -
	DATE - 12/6/10	REVISED -

benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
NAPERVILLE RD AND DANADA SQ

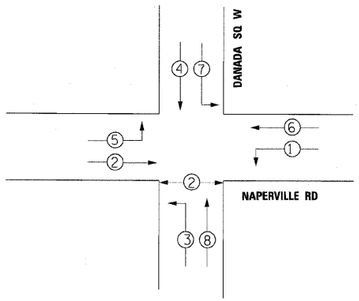
SCALE: 1"=20' | SHEET NO. 24 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	367
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

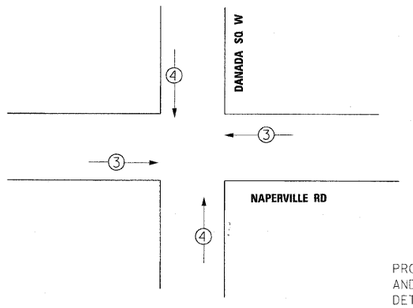
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

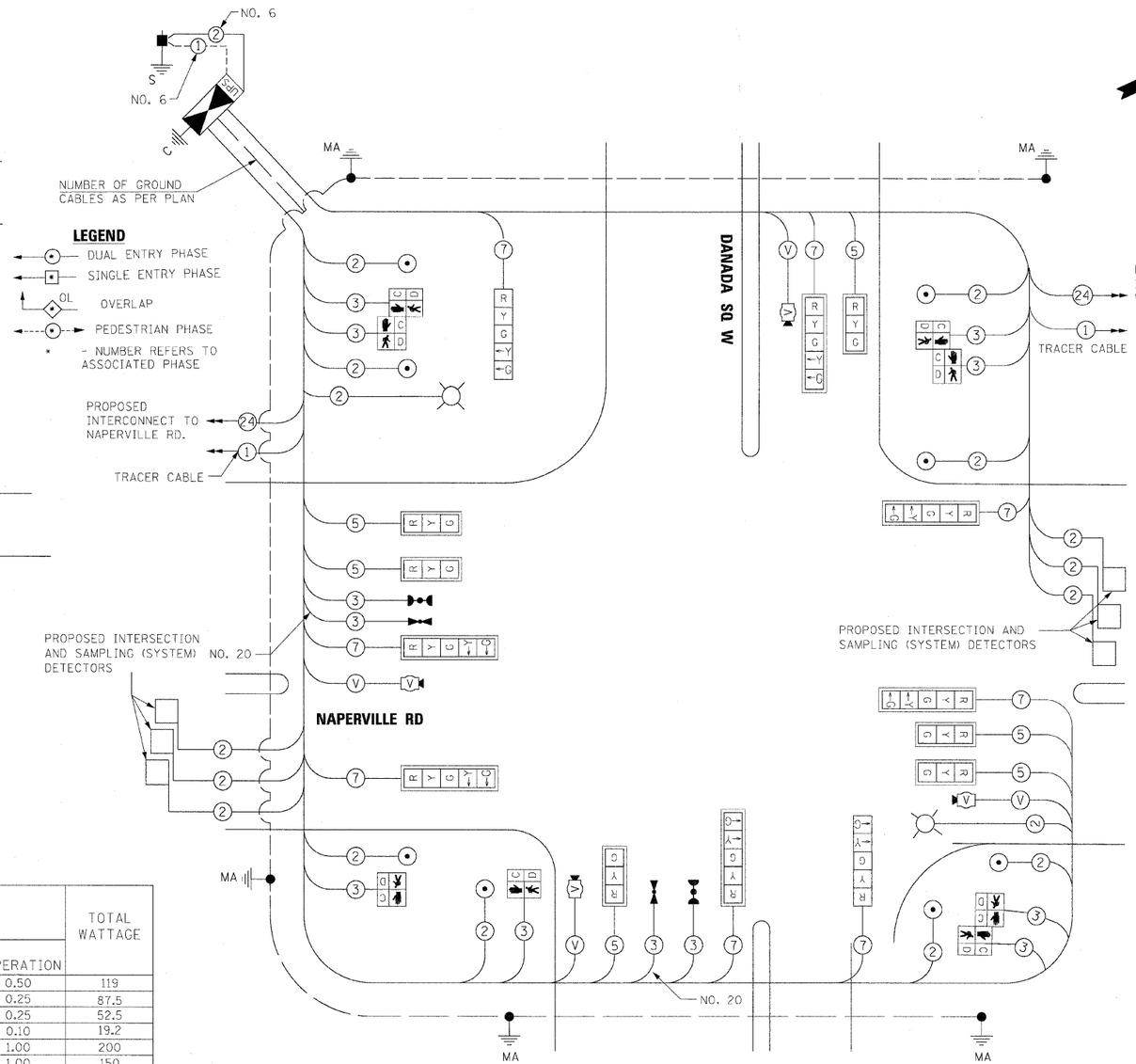
CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↕



CABLE PLAN

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	14	-	17	0.50	119
(YELLOW)	14	-	25	0.25	87.5
(GREEN)	14	-	15	0.25	52.5
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	8	-	25	1.00	200
VIDEO SYSTEM	1		150	1.00	150
CONTROLLER	1		100	1.00	100
STREET LIGHTS	2	310		0.50	310
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	1038.2

DUPAGE COUNTY DIVISION OF TRANSPORTATION

421 W. COUNTY FARM RD
WHEATON, ILLINOIS 60187
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

SUMMARY OF QUANTITIES

DESCRIPTION	UNIT	TOTAL QUANTITY
DETECTABLE WARNINGS	SQ FT	41
SIGN PANEL - TYPE 1	SQ FT	32
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	466
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	55
CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	FOOT	27
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	215
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	405
HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	567
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	2
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,570
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2,115
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,213
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,440
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	804
ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 16, 6 PAIR	FOOT	843
ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C	FOOT	150
STEEL MAST ARM ASSEMBLY AND POLE, 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 38 FT. AND 44 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 64 FT.	EACH	1
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	40
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
SIGNAL HEAD LED 1-FACE 3-SECTION MAST ARM MOUNTED	EACH	6
SIGNAL HEAD LED 1-FACE 5-SECTION BRACKET MOUNTED	EACH	2
SIGNAL HEAD LED 1-FACE 5-SECTION MAST ARM MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	221
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
VIDEO VEHICLE DETECTION SYSTEM	EACH	1
VIDEO VEHICLE DETECTION, 1 CAMERA	EACH	4
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNITERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C	FOOT	718
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED SHIELDED	FOOT	215
ELECTRICAL CABLE IN CONDUIT, COAXIAL	FOOT	843

FILE NAME = ...\c162419-sht-ts-cable&ph3.dgn	DESIGNED - GHT	REVISED -
USER NAME = tblank	DRAWN - BDW	REVISED -
PLOT DATE = 12/7/2210	CHECKED - MPM	REVISED -
	DATE - 12/6/10	REVISED -

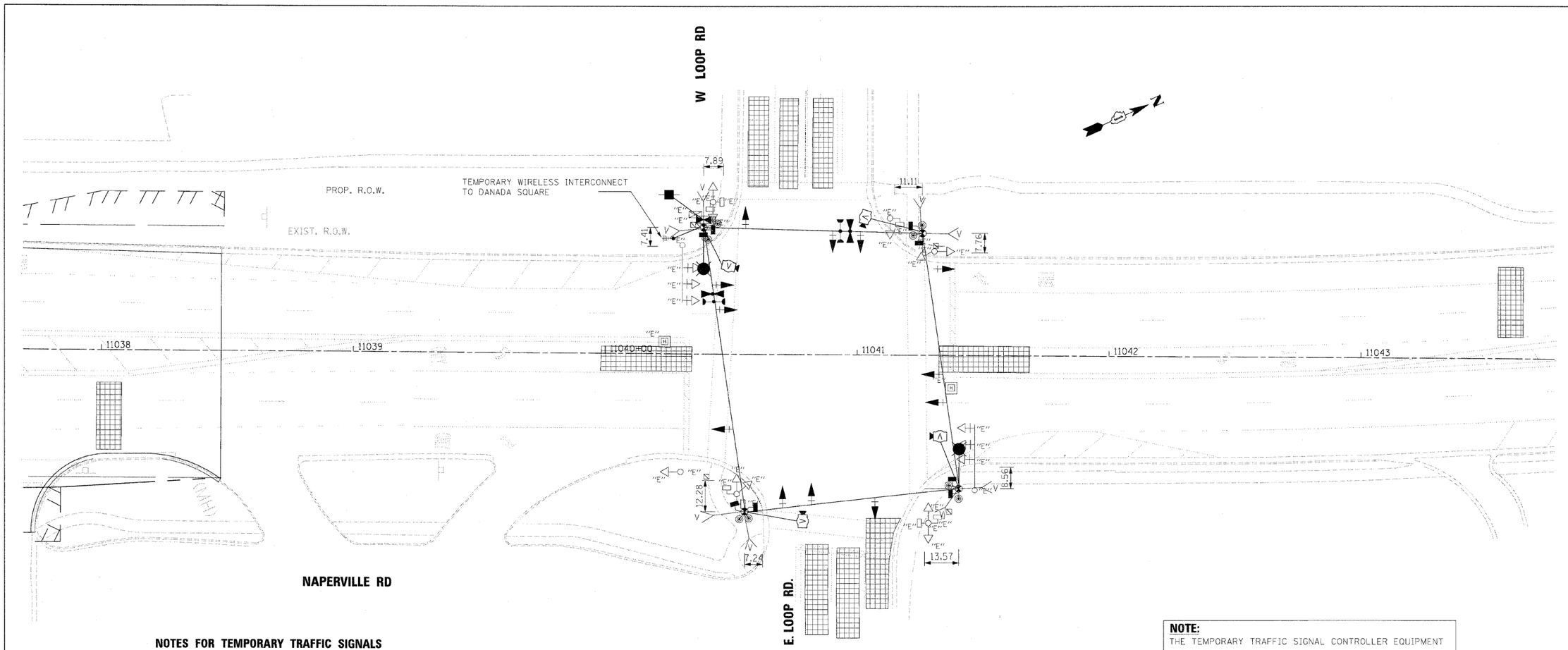
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN
PHASE DESIGNATION AND EVP SEQUENCE
NAPERVILLE RD AND DANADA SQ

SCALE: NTS | SHEET NO.25 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	368
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



NOTES FOR TEMPORARY TRAFFIC SIGNALS

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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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.

7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.

8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.

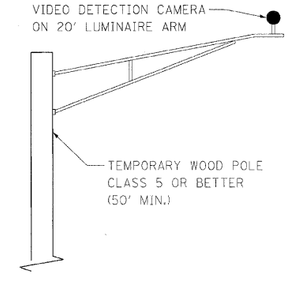
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

11. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE UNDERGROUND TRAFFIC SIGNAL CONDUITS AND CABLES PRIOR TO PLACING THE TEMPORARY TRAFFIC SIGNAL WOOD POLES.

12. THE CONTRACTOR SHALL BAG THE EXISTING TRAFFIC SIGNALS AND LEAVE ALL EQUIPMENT IN PLACE DURING THE NAPERVILLE ROAD RECONSTRUCTION. AN AERIAL CABLE SHALL RUN TO EACH POST TO RUN AND OPERATE THE PEDESTRIAN SIGNAL HEADS AND PUSH BUTTONS.

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

FILE NAME = ...\c162419-sht-ts-temp6.dgn	DESIGNED - CHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPW	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

benesch

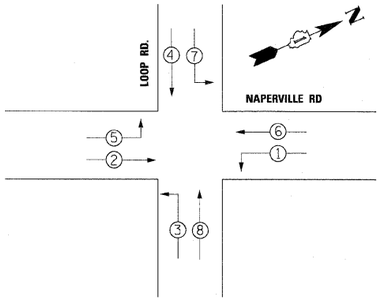
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL AND REMOVAL PLAN AND REMOVAL PLAN

SCALE: 1"=20' | SHEET NO. 26 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	369
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			

TEMPORARY CONTROLLER SEQUENCE

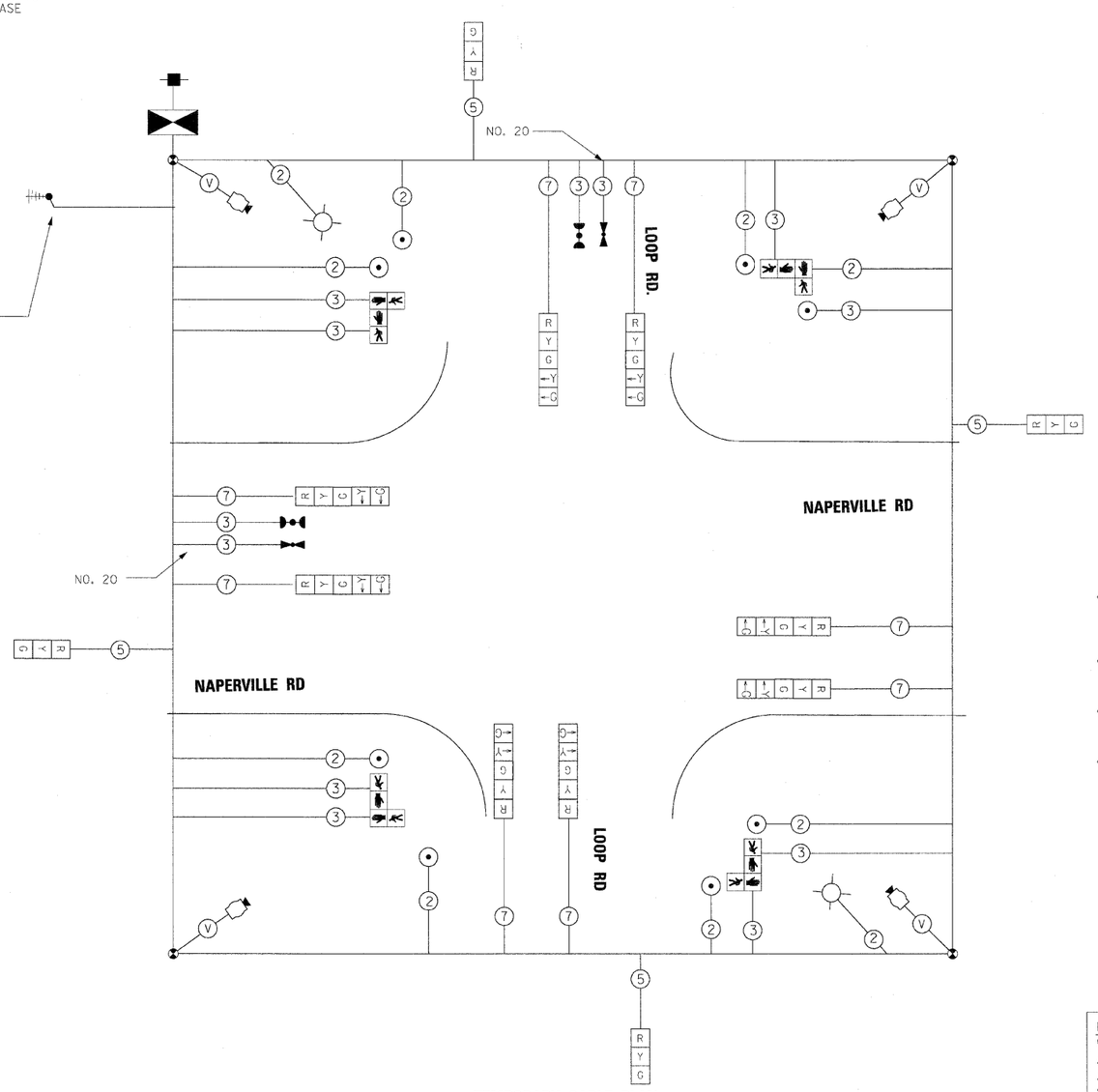


TEMPORARY
PHASE DESIGNATION DIAGRAM

LEGEND

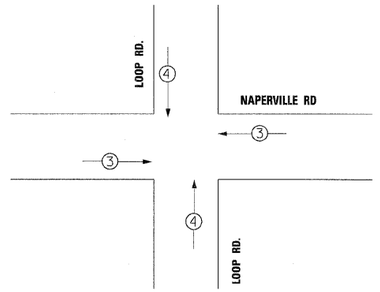
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE

SUMMARY OF QUANTITIES		
DESCRIPTION	UNIT	TOTAL QUANTITY
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1



TEMPORARY CABLE PLAN

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	-	17	0.50	102
(YELLOW)	12	-	25	0.25	75
(GREEN)	12	-	15	0.25	45
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	4	-	25	1.00	100
CONTROLLER	1	-	100	1.00	100
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	591.2

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196
ENERGY SUPPLY CONTACT: JOSEPH STACHO
PHONE: 630-424-5704
COMPANY: COMED

CONSTRUCTION NOTES:

1. TEMPORARY RADIO INTERCONNECT SHALL NOT BE REMOVED UNTIL FIBER INTERCONNECT TO BUTTERFIELD RD. AND LOOP RD. IS INSTALLED AND OPERATIONAL.
2. THE EXISTING TRAFFIC SIGNAL CLOSED LOOP SYSTEM OPERATION SHALL BE MAINTAINED DURING CONSTRUCTION
3. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION.
4. PEDESTRIAN SIGNALS SHALL REMAIN IN OPERATION AT ALL TIMES WHILE THE TEMPORARY TRAFFIC SIGNALS ARE IN USE. ANY REQUIRED ADJUSTMENT, RELOCATIONOR TEMPORARY CABLING REQUIRED TO MAINTAIN PEDESTRIAN SIGNAL OPERATIONS DURING CONSTRUCTION IS INCIDENTAL TO "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOVED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME = ...\d162419-sht-ts-tempcable6.dgn	DESIGNED - GHT	REVISED -
USER NAME = tblank	DRAWN - BDW	REVISED -
PLOT DATE = 12/7/2010	CHECKED - MPM	REVISED -
	DATE - 12/6/10	REVISED -

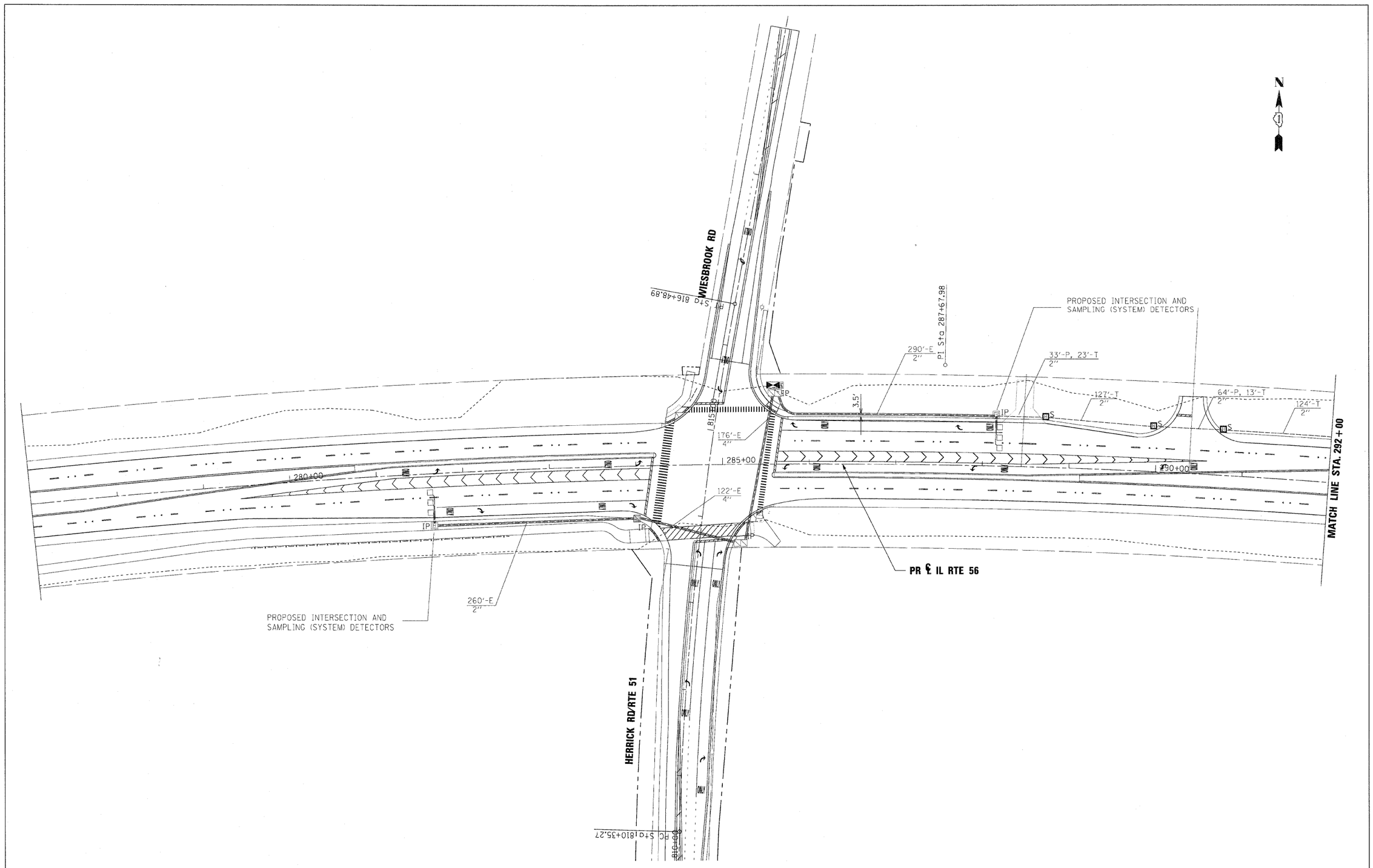
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUESNCE

SCALE: NTS | SHEET NO. 27 OF 27 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	370
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



FILE NAME = ...\d162419-sht-interconnect-il56-01.dgn	DESIGNED - GHT	REVISED -
	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

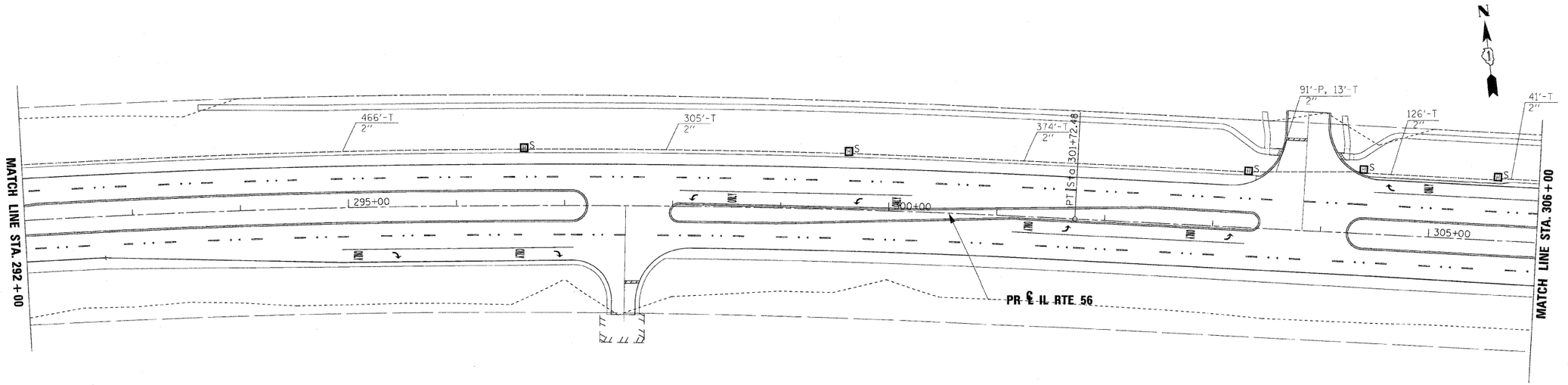
benesch

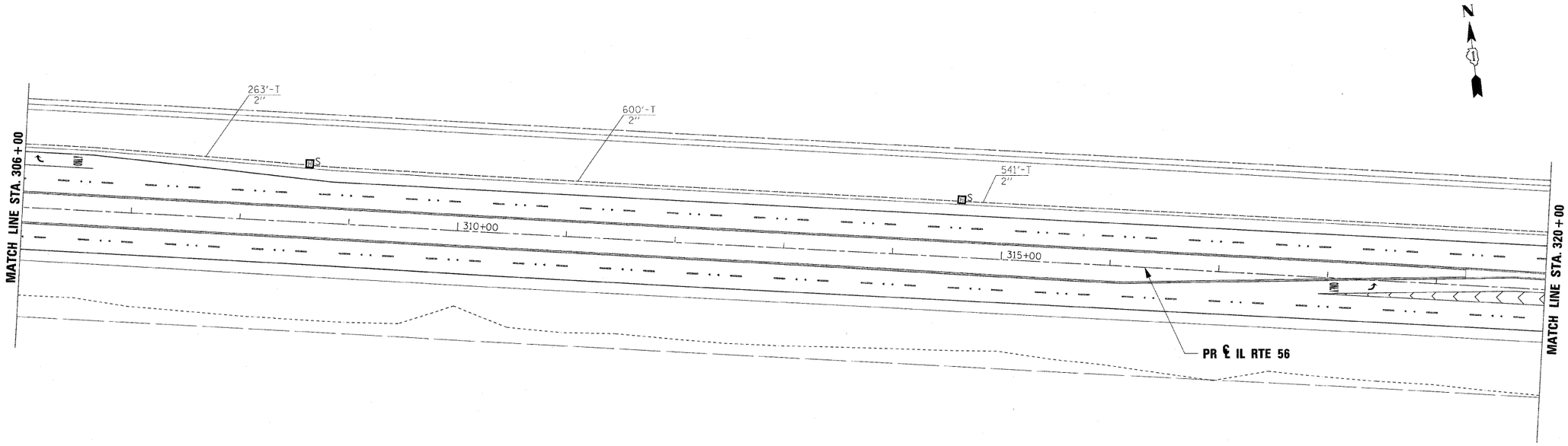
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 56 /HERRICK RD /WIESBROOK RD TO NAPERVILLE RD

SCALE: | SHEET NO. 1 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	371
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		





FILE NAME =	DESIGNED - GHT	REVISED -
...\a162419-sht-interconnect-il56-02.dgn	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

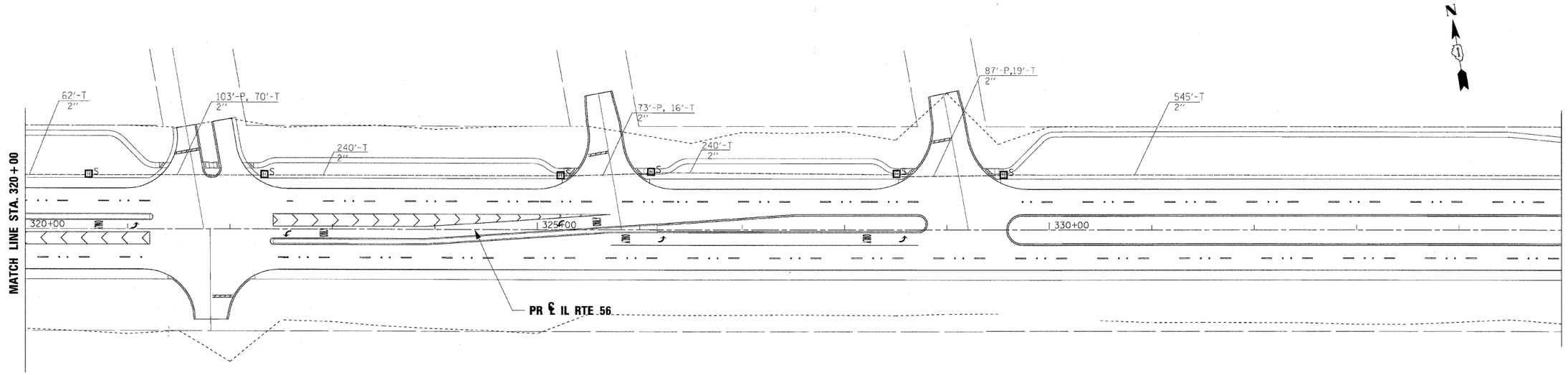
benesch

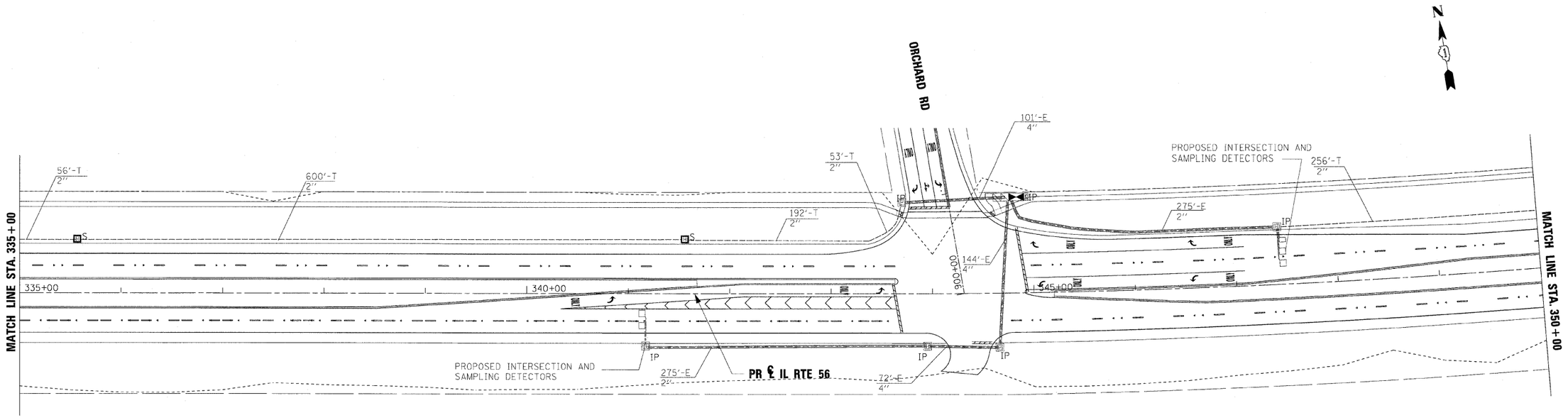
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 56 /HERRICK RD /WIESBROOK RD TO NAPERVILLE RD

SCALE: | SHEET NO. 2 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	372
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			





FILE NAME =	DESIGNED - GHT	REVISED -
...\di62419-aht-interconnect-rt56-23.dgn	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

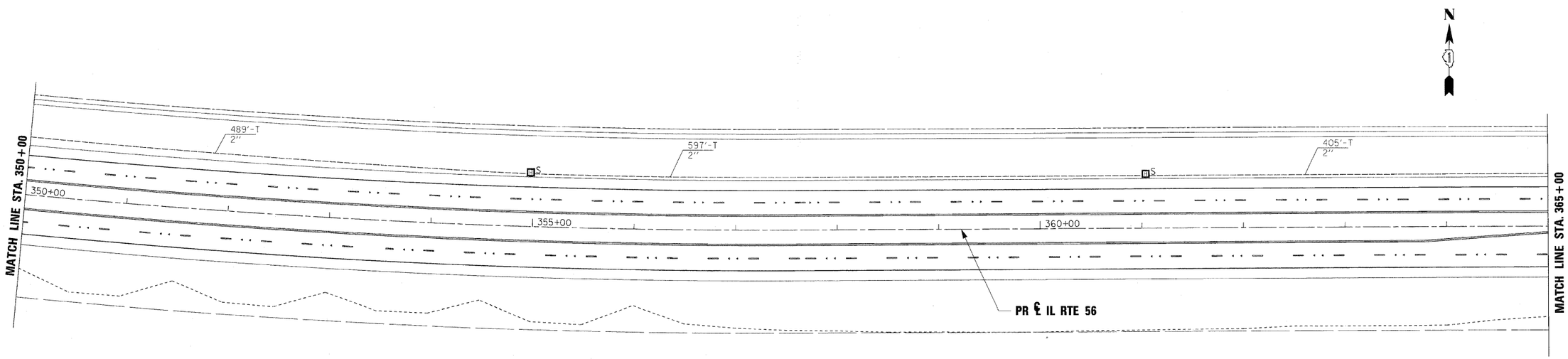
benesch

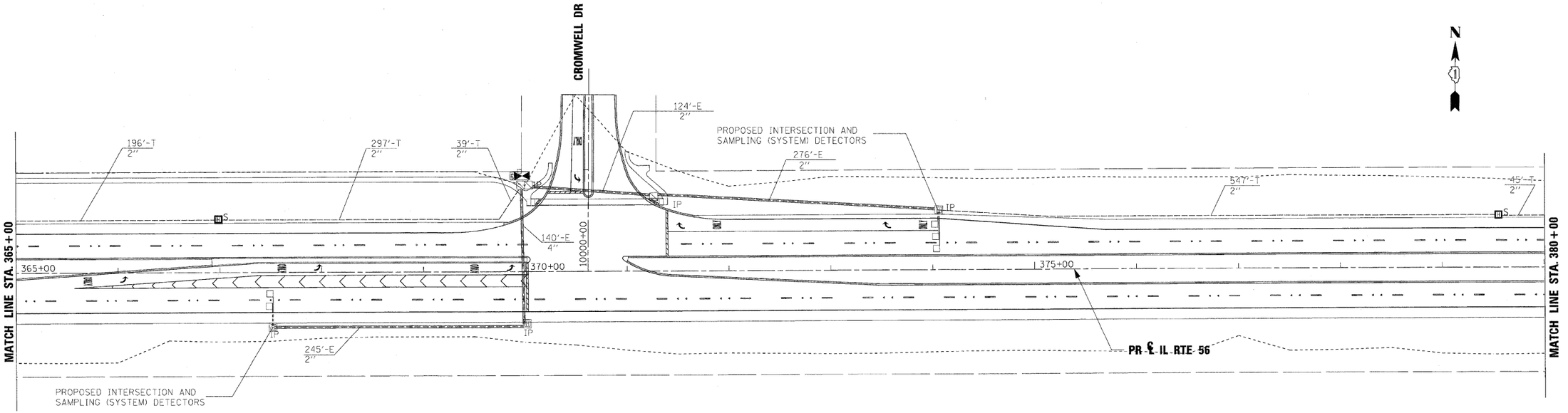
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 56 /HERRICK RD /WIESBROOK RD TO NAPERVILLE RD

SCALE: | SHEET NO. 3 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	373
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			





FILE NAME =	DESIGNED - GHT	REVISED -
...\d162419 sht interconnect il56 04.dgn	DRAWN BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

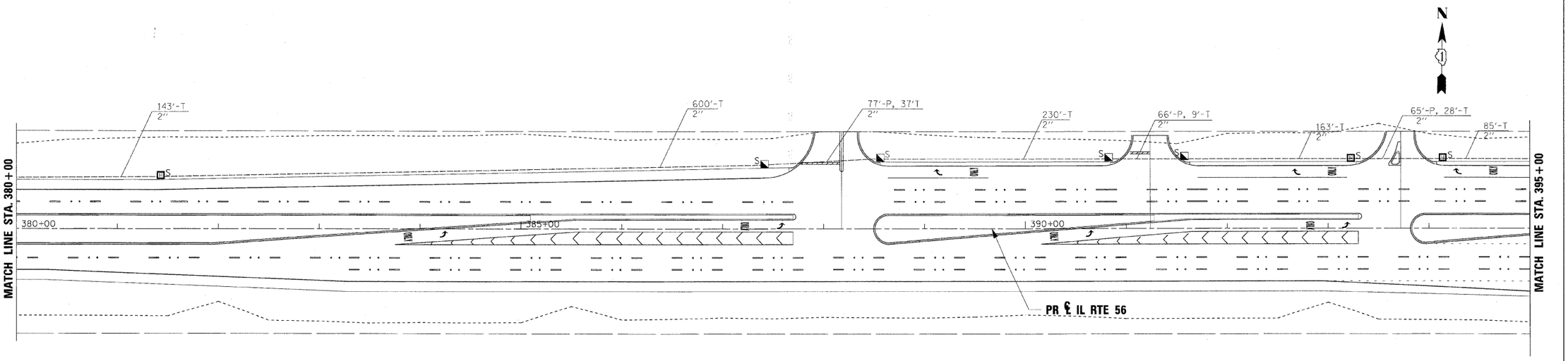
benesch

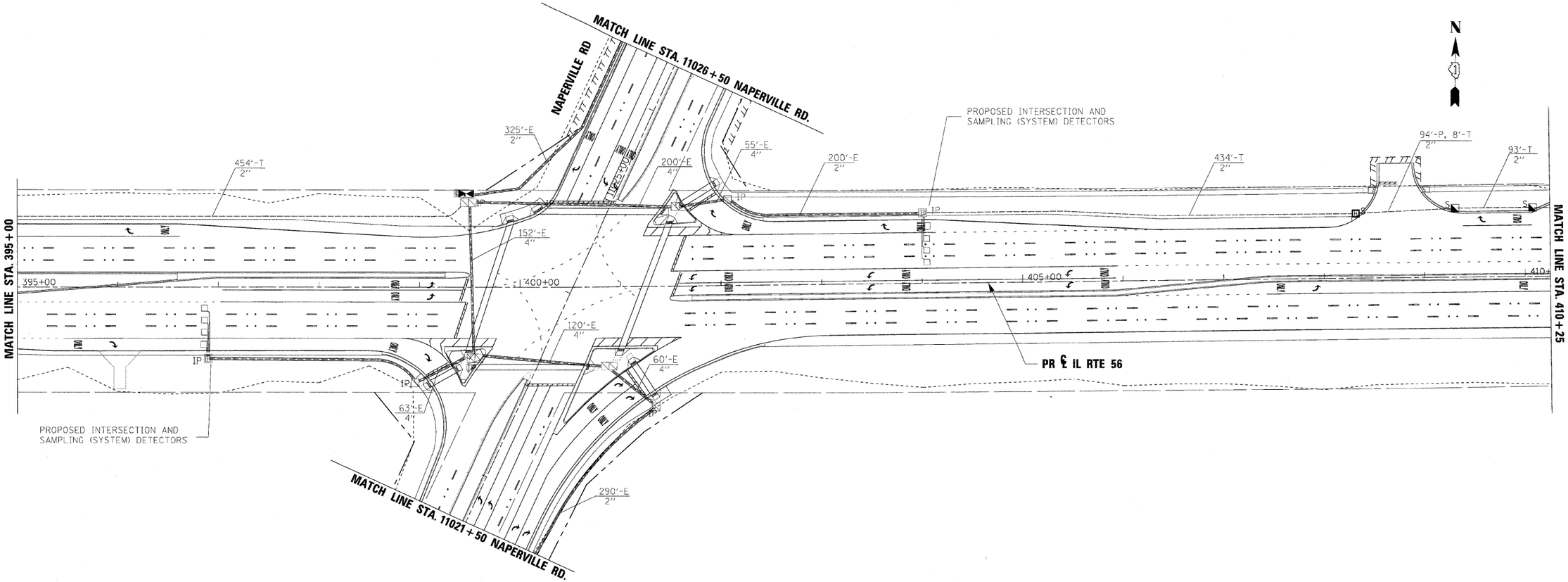
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 56 /HERRICK RD /WIESBROOK RD TO NAPERVILLE RD

SCALE: | SHEET NO. 4 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	374
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		





FILE NAME =	DESIGNED - GHT	REVISED -
...\d162419-sht-interconnect-il56-05.dgn	DRAWN - BDW	REVISED -
USER NAME = tblank	CHECKED - MPM	REVISED -
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -

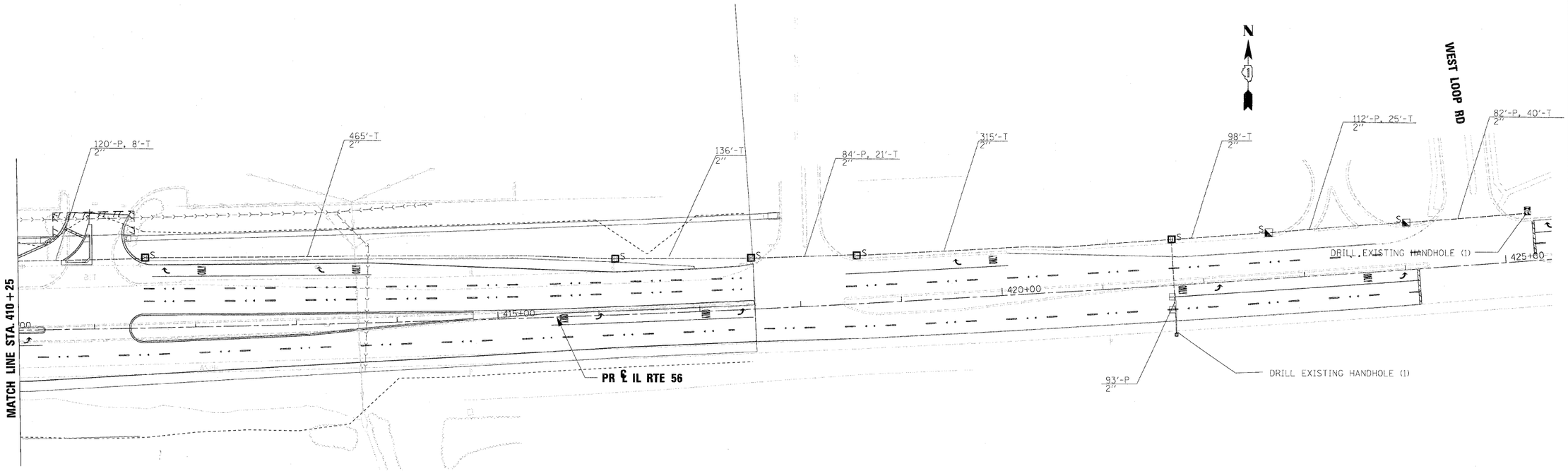
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 56 /HERRICK RD /WIESBROOK RD TO NAPERVILLE RD

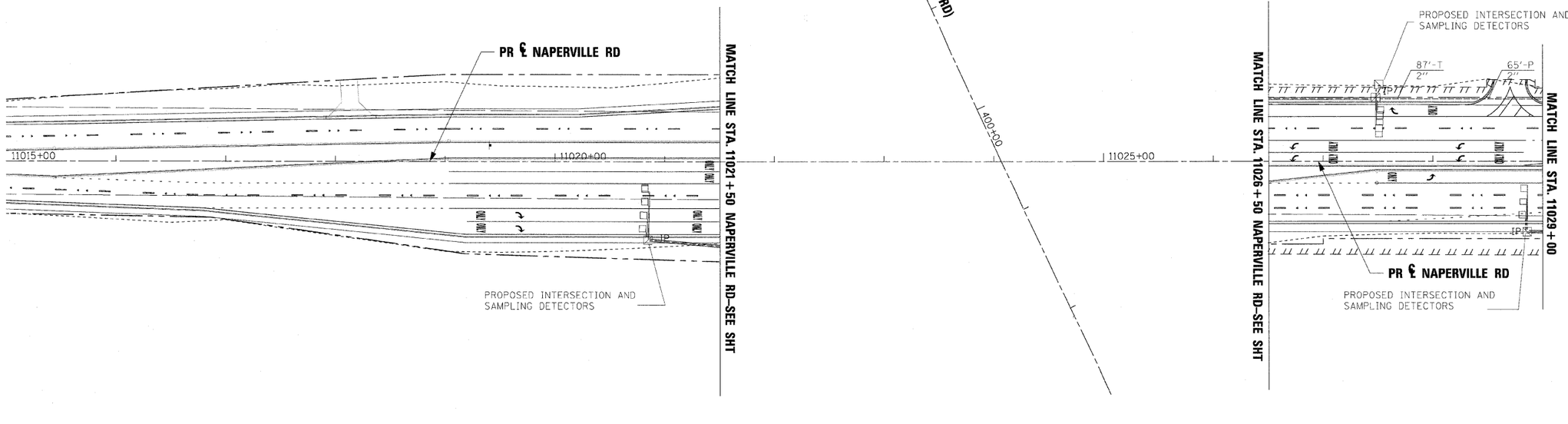
SCALE: | SHEET NO. 5 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	375
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		



FILE NAME = ...\d162419-sht-interconnect-il56-06.dgn	DESIGNED - GHT	REVISED -	benesch	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN IL RTE 56 /HERRICK RD /WIESBROOK RD TO NAPERVILLE RD
USER NAME = tblank	DRAWN - BDW	REVISED -			SCALE: SHEET NO. 6 OF 8 SHEETS STA. TO STA.
PLOT DATE = 12/7/2010	CHECKED - MPW	REVISED -			
	DATE - 12/6/10	REVISED -			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	376
		CONTRACT NO. 62419		
	ILLINOIS FED. AID PROJECT			



FILE NAME =	DESIGNED - GHT	REVISED -	benesch
...\d162419-sht-interconnect-map-07.dgn	DRAWN - BDW	REVISED -	
USER NAME = tblank	CHECKED - MPM	REVISED -	
PLOT DATE = 12/7/2010	DATE - 12/6/10	REVISED -	

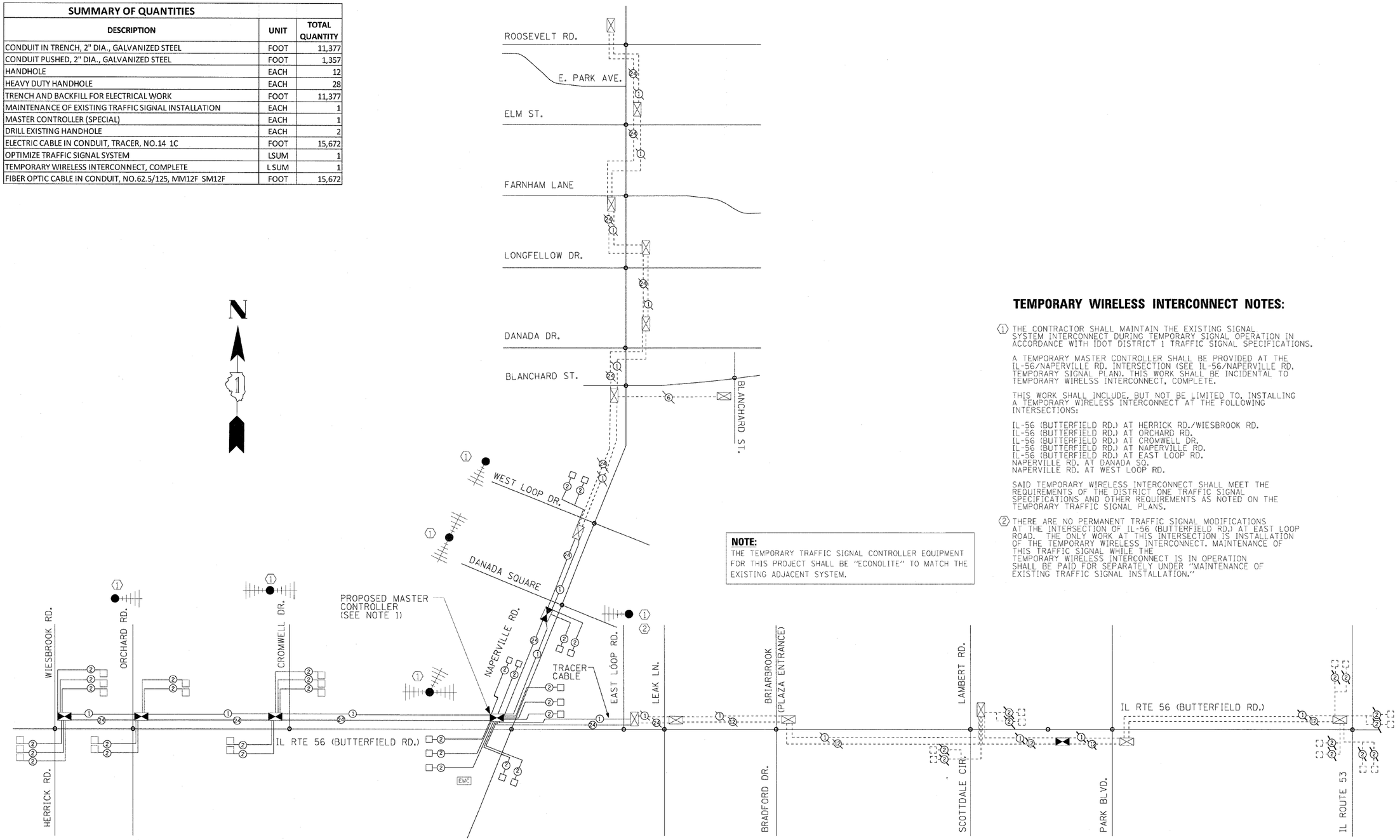
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 56 /HERRICK RD /WIESBROOK RD TO NAPERVILLE RD

SCALE: | SHEET NO. 7 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	377
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES		
DESCRIPTION	UNIT	TOTAL QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	11,377
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1,357
HANDHOLE	EACH	12
HEAVY DUTY HANDHOLE	EACH	28
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	11,377
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MASTER CONTROLLER (SPECIAL)	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER, NO.14 1C	FOOT	15,672
OPTIMIZE TRAFFIC SIGNAL SYSTEM	LSUM	1
TEMPORARY WIRELESS INTERCONNECT, COMPLETE	LSUM	1
FIBER OPTIC CABLE IN CONDUIT, NO.62.5/125, MM12F SM12F	FOOT	15,672



NOTE:
THE TEMPORARY TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

TEMPORARY WIRELESS INTERCONNECT NOTES:

(1) THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAL SYSTEM INTERCONNECT DURING TEMPORARY SIGNAL OPERATION IN ACCORDANCE WITH IDOT DISTRICT 1 TRAFFIC SIGNAL SPECIFICATIONS.

A TEMPORARY MASTER CONTROLLER SHALL BE PROVIDED AT THE IL-56/NAPERVILLE RD. INTERSECTION (SEE IL-56/NAPERVILLE RD. TEMPORARY SIGNAL PLAN). THIS WORK SHALL BE INCIDENTAL TO TEMPORARY WIRELSS INTERCONNECT, COMPLETE.

THIS WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, INSTALLING A TEMPORARY WIRELESS INTERCONNECT AT THE FOLLOWING INTERSECTIONS:

IL-56 (BUTTERFIELD RD.) AT HERRICK RD./WIESBROOK RD.
IL-56 (BUTTERFIELD RD.) AT ORCHARD RD.
IL-56 (BUTTERFIELD RD.) AT CROMWELL DR.
IL-56 (BUTTERFIELD RD.) AT NAPERVILLE RD.
IL-56 (BUTTERFIELD RD.) AT EAST LOOP RD.
NAPERVILLE RD. AT DANADA SQ.
NAPERVILLE RD. AT WEST LOOP RD.

SAID TEMPORARY WIRELESS INTERCONNECT SHALL MEET THE REQUIREMENTS OF THE DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS AND OTHER REQUIREMENTS AS NOTED ON THE TEMPORARY TRAFFIC SIGNAL PLANS.

(2) THERE ARE NO PERMANENT TRAFFIC SIGNAL MODIFICATIONS AT THE INTERSECTION OF IL-56 (BUTTERFIELD RD.) AT EAST LOOP ROAD. THE ONLY WORK AT THIS INTERSECTION IS INSTALLATION OF THE TEMPORARY WIRELESS INTERCONNECT. MAINTENANCE OF THIS TRAFFIC SIGNAL WHILE THE TEMPORARY WIRELESS INTERCONNECT IS IN OPERATION SHALL BE PAID FOR SEPARATELY UNDER "MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION."

FILE NAME = ...\d162419-sht-interconnect-sch-01.dgn	DESIGNED - GHT	REVISED
USER NAME = tblank	DRAWN - BDW	REVISED -
PLOT DATE = 12/7/2010	CHECKED - MPM	REVISED -
	DATE - 12/6/10	REVISED -

benesch

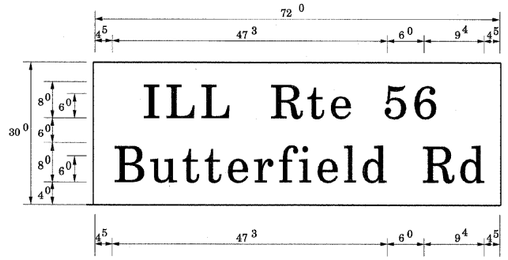
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL RTE 56 /HERRICK RD /WIESBROOK RD TO NAPERVILLE RD

SCALE: | SHEET NO. 8 OF 8 SHEETS | STA. | TO STA.

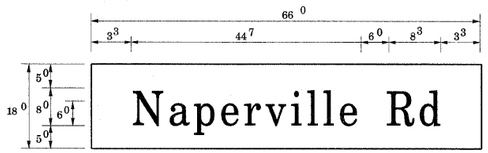
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(57 & 58)WRS-2	DUPAGE	681	378
		CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT		

PANEL SIGN DESIGN TYPE II



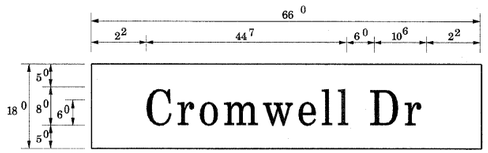
15.0 Sq. Ft. each
6 Required
Design Series C

PANEL SIGN DESIGN TYPE 1



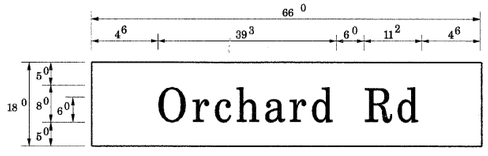
8.25 Sq. Ft. each
4 Required
Design Series C

PANEL SIGN DESIGN TYPE 1



8.25 Sq. Ft. each
2 Required
Design Series D

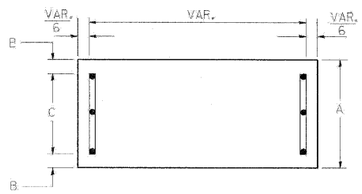
PANEL SIGN DESIGN TYPE 1



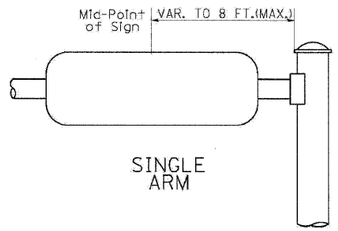
8.25 Sq. Ft. each
2 Required
Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

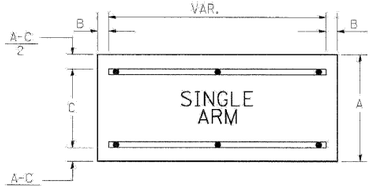
SUPPORTING CHANNELS



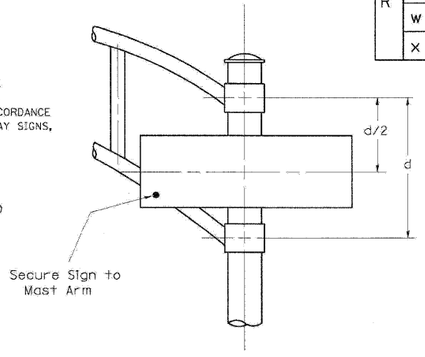
A	B	C
18″	2″	14″



SUPPORTING CHANNELS



A	B	C
18″	2″	12″
30″	2″	22″



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

GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-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.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
4. ALL BORDERS SHALL BE ¾" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
5. 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:

* J.O. HERBERT CO.
MIDLOTHIAN, VA.

* WESTERN REMAC INC.
WOODRIDGE, IL.

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

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

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{2}	1^{4}
B	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{6}	1^{7}
C E G	1^{4}	1^{5}	2^{0}	2^{1}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
D O Q R	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
F	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}
H I M N	2^{0}	2^{1}	2^{2}	2^{4}	2^{0}	2^{1}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}	2^{0}	2^{1}
J U	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}
K L	1^{1}	1^{2}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
P	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
S	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
T	1^{1}	1^{2}	1^{6}	1^{7}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
V	0^{6}	1^{0}	1^{4}	1^{5}	1^{1}	1^{2}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
Y	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{5}	0^{7}	0^{5}	0^{6}	0^{6}	1^{0}	1^{1}	1^{2}
Z	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}

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

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}
b f k o p s	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
c e	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
r	0^{6}	1^{0}	1^{2}	1^{4}	0^{6}	1^{0}	0^{3}	0^{3}	0^{5}	0^{6}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}
t z	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
v y	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}
w	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
x	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}

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

FIRST NUMBER	SECOND NUMBER: 0		1		2		3		4		5		6		7		8		9	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}
1	2^{0}	2^{1}	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}
2 3 4	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{6}	1^{7}	1^{4}	1^{5}
5	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
6	1^{6}	1^{7}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
7	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{5}	0^{5}	0^{6}	1^{2}	1^{4}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}
8	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{4}	1^{5}

EXAMPLE, 2 (3) DENOTES $\frac{3}{8}$″

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	D	8 INCH UPPER CASE LETTERS SERIES C	D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	D
A	3^{6}	5^{0}	5^{0}	6^{5}	a	3^{5}	4^{2}
B	3^{2}	4^{0}	4^{3}	5^{3}	b	3^{5}	4^{2}
C	3^{2}	4^{0}	4^{3}	5^{3}	c	3^{5}	4^{1}
D	3^{2}	4^{0}	4^{3}	5^{3}	d	3^{5}	4^{2}
E	3^{0}	3^{5}	4^{0}	4^{7}	e	3^{5}	4^{2}
F	3^{0}	3^{5}	4^{0}	4^{7}	f	2^{3}	2^{6}
G	3^{2}	4^{0}	4^{3}	5^{3}	g	3^{5}	4^{2}
H	3^{2}	4^{0}	4^{3}	5^{3}	h	3^{5}	4^{2}
I	0^{7}	0^{7}	1^{1}	1^{2}	i	1^{1}	1^{1}
J	3^{0}	3^{6}	4^{0}	5^{0}	j	2^{0}	2^{2}
K	3^{2}	4^{1}	4^{3}	5^{4}	k	3^{5}	4^{2}
L	3^{0}	3^{5}	4^{0}	4^{7}	l	1^{1}	1^{1}
M	3^{7}	4^{5}	5^{1}	6^{1}	m	6^{0}	7^{0}
N	3^{2}	4^{0}	4^{3}	5^{3}	n	3^{5}	4^{2}
O	3^{4}	4^{2}	4^{5}	5^{5}	o	3^{6}	4^{3}
P	3^{2}	4^{0}	4^{3}	5^{3}	p	3^{5}	4^{2}
Q	3^{4}	4^{2}	4^{5}	5^{5}	q	3^{5}	4^{2}
R	3^{2}	4^{0}	4^{3}	5^{3}	r	2^{6}	3^{2}
S	3^{2}	4^{0}	4^{3}	5^{3}	s	3^{6}	4^{2}
T	3^{0}	3^{5}	4^{0}	4^{7}	t	2^{7}	3^{2}
U	3^{2}	4^{0}	4^{3}	5^{3}	u	3^{5}	4^{2}
V	3^{5}	4^{4}	4^{7}	6^{0}	v	4^{2}	4^{7}
W	4^{4}	5^{2}	6^{0}	7^{0}	w	5^{5}	6^{4}
X	3^{4}	4^{0}	4^{5}	5^{3}	x	4^{4}	5^{1}
Y	3^{6}	5^{0}	5^{0}	6^{6}	y	4^{6}	5^{3}
Z	3^{2}	4^{0}	4^{3}	5^{3}	z	3^{6}	4^{3}

NUMBER	6 INCH SERIES C	D	8 INCH SERIES C	D
1	1^{2}	1^{4}	1^{5}	2^{0}
2	3^{2}	4^{0}	4^{3}	5^{3}
3	3^{2}	4^{0}	4^{3}	5^{3}
4	3^{5}	4^{3}	4^{7}	5^{7}
5	3^{2}	4^{0}	4^{3}	5^{3}
6	3^{2}	4^{0}	4^{3}	5^{3}
7	3^{2}	4^{0}	4^{3}	5^{3}
8	3^{2}	4^{0}	4^{3}	5^{3}
9	3^{2}	4^{0}	4^{3}	5^{3}
0	3^{4}	4^{2}	4^{5}	5^{5}

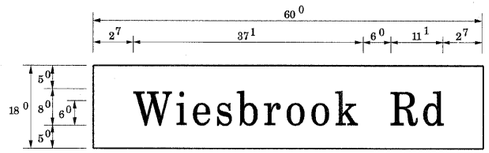
FILE NAME = c:\pw_work\PWIDOT\BAUEROL\d0108315\ts02.dgn	USER NAME = bauerdl	DESIGNED - DAG/BCK	REVISED - DAG 10/28/09
		DRAWN - BCK	REVISED -
	PLOT SCALE = 49.9999 ' / IN.	CHECKED - DAG/DAD	REVISED -
	PLOT DATE = 11/4/2009	DATE - 03-15-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

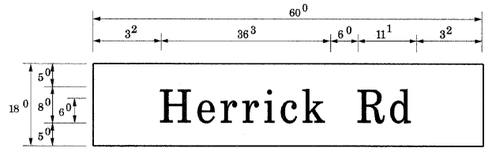
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			681	379
	TS-02		CONTRACT NO.	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PANEL SIGN DESIGN TYPE 1



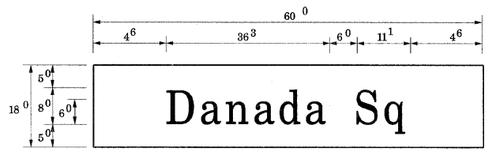
7.5 Sq. Ft. each
2 Required
Design Series D

PANEL SIGN DESIGN TYPE 1



7.5 Sq. Ft. each
2 Required
Design Series D

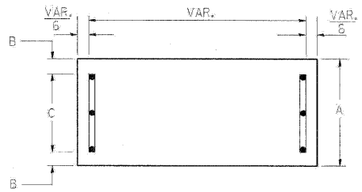
PANEL SIGN DESIGN TYPE 1



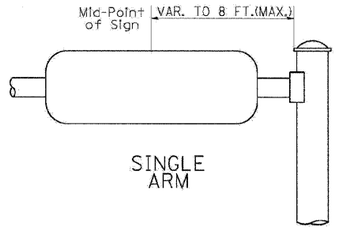
7.5 Sq. Ft. each
2 Required
Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

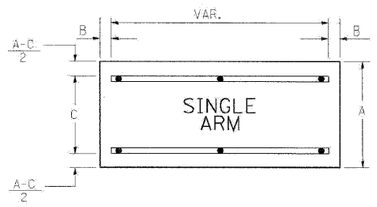
SUPPORTING CHANNELS



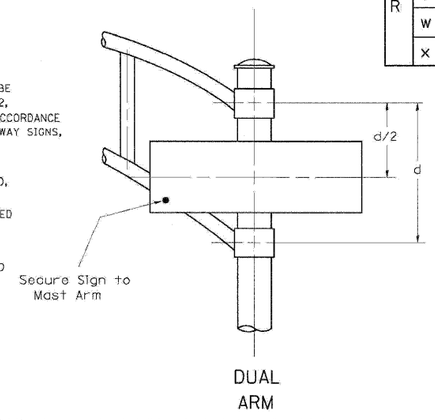
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-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.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
4. ALL BORDERS SHALL BE ¾" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
5. 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:

* J.O. HERBERT CO.
MIDLOTHIAN, VA.

* WESTERN REMAC INC.
WOODRIDGE, IL.

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

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

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

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{2}	1^{4}
B	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{6}	1^{7}
C E G	1^{4}	1^{5}	2^{0}	2^{1}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
D O Q R	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
F	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}
H I M N	2^{0}	2^{1}	2^{2}	2^{4}	2^{0}	2^{1}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}	2^{0}	2^{1}
J U	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}
K L	1^{1}	1^{2}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
P	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
S	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
T	1^{1}	1^{2}	1^{6}	1^{7}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
V	0^{6}	1^{0}	1^{4}	1^{5}	1^{1}	1^{2}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
Y	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{5}	0^{7}	0^{5}	0^{6}	0^{6}	1^{0}	1^{1}	1^{2}
Z	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}

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

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}
b f k o p s	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
c e	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
r	0^{6}	1^{0}	1^{2}	1^{4}	0^{6}	1^{0}	0^{3}	0^{3}	0^{5}	0^{6}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}
t z	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
v y	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}
w	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
x	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}

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

FIRST NUMBER	SECOND NUMBER: 0		1		2		3		4		5		6		7		8		9	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}
1	2^{0}	2^{1}	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}
2 3 4	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{6}	1^{7}	1^{4}	1^{5}
5	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
6	1^{6}	1^{7}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
7	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{5}	0^{5}	0^{6}	1^{2}	1^{4}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}
8	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{4}	1^{5}

EXAMPLE, $2\frac{3}{8}$ DENOTES $\frac{3''}{8}$

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	D	8 INCH UPPER CASE LETTERS SERIES C	D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	D
A	3^{6}	5^{0}	5^{0}	6^{5}	a	3^{5}	4^{2}
B	3^{2}	4^{0}	4^{3}	5^{3}	b	3^{5}	4^{2}
C	3^{2}	4^{0}	4^{3}	5^{3}	c	3^{5}	4^{1}
D	3^{2}	4^{0}	4^{3}	5^{3}	d	3^{5}	4^{2}
E	3^{0}	3^{5}	4^{0}	4^{7}	e	3^{5}	4^{2}
F	3^{0}	3^{5}	4^{0}	4^{7}	f	2^{3}	2^{6}
G	3^{2}	4^{0}	4^{3}	5^{3}	g	3^{5}	4^{2}
H	3^{2}	4^{0}	4^{3}	5^{3}	h	3^{5}	4^{2}
I	0^{7}	0^{7}	1^{1}	1^{2}	i	1^{1}	1^{1}
J	3^{0}	3^{6}	4^{0}	5^{0}	j	2^{0}	2^{2}
K	3^{2}	4^{1}	4^{3}	5^{4}	k	3^{5}	4^{2}
L	3^{0}	3^{5}	4^{0}	4^{7}	l	1^{1}	1^{1}
M	3^{7}	4^{5}	5^{1}	6^{1}	m	6^{0}	7^{0}
N	3^{2}	4^{0}	4^{3}	5^{3}	n	3^{5}	4^{2}
O	3^{4}	4^{2}	4^{5}	5^{5}	o	3^{6}	4^{3}
P	3^{2}	4^{0}	4^{3}	5^{3}	p	3^{5}	4^{2}
Q	3^{4}	4^{2}	4^{5}	5^{5}	q	3^{5}	4^{2}
R	3^{2}	4^{0}	4^{3}	5^{3}	r	2^{6}	3^{2}
S	3^{2}	4^{0}	4^{3}	5^{3}	s	3^{6}	4^{2}
T	3^{0}	3^{5}	4^{0}	4^{7}	t	2^{7}	3^{2}
U	3^{2}	4^{0}	4^{3}	5^{3}	u	3^{5}	4^{2}
V	3^{5}	4^{4}	4^{7}	6^{0}	v	4^{2}	4^{7}
W	4^{4}	5^{2}	6^{0}	7^{0}	w	5^{5}	6^{4}
X	3^{4}	4^{0}	4^{5}	5^{3}	x	4^{4}	5^{1}
Y	3^{6}	5^{0}	5^{0}	6^{6}	y	4^{6}	5^{3}
Z	3^{2}	4^{0}	4^{3}	5^{3}	z	3^{6}	4^{3}

NUMBER	6 INCH SERIES C	D	8 INCH SERIES C	D
1	1^{2}	1^{4}	1^{5}	2^{0}
2	3^{2}	4^{0}	4^{3}	5^{3}
3	3^{2}	4^{0}	4^{3}	5^{3}
4	3^{5}	4^{3}	4^{7}	5^{7}
5	3^{2}	4^{0}	4^{3}	5^{3}
6	3^{2}	4^{0}	4^{3}	5^{3}
7	3^{2}	4^{0}	4^{3}	5^{3}
8	3^{2}	4^{0}	4^{3}	5^{3}
9	3^{2}	4^{0}	4^{3}	5^{3}
0	3^{4}	4^{2}	4^{5}	5^{5}

FILE NAME = c:\ow..work\PWIDOT\BAUERDL\d0108315\ts02.dgn	USER NAME = bauerdl	DESIGNED - DAG/BCK	REVISED - DAG 10/28/09	
		DRAWN - BCK	REVISED -	
	PLOT SCALE = 49.9999 '/ IN.	CHECKED - DAG/DAD	REVISED -	
	PLOT DATE = 11/4/2009	DATE - 03-15-09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			681	380
	TS-02	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT 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.

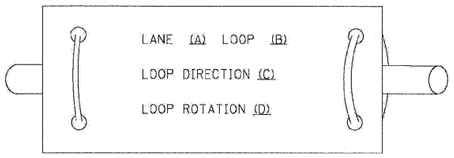
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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.

LOOP LEAD-IN CABLE TAG

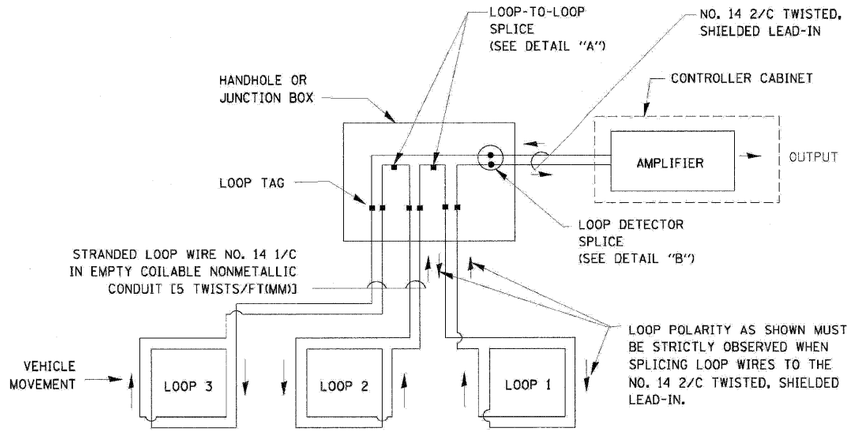


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

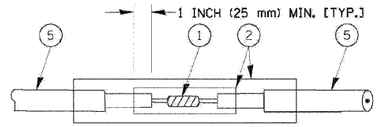
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

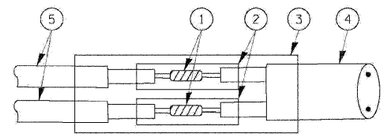


DETECTOR LOOP WIRING SCHEMATIC

- 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.

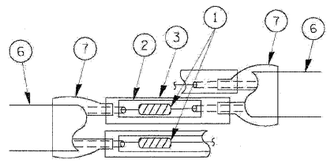


DETAIL "A"
LOOP-TO-LOOP SPLICE



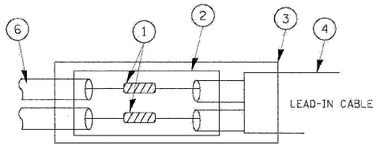
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



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 LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME = c:\pw_work\PWIDOT\BAUEROL\d0108315\ts05.dgn	USER NAME = bauerdl	DESIGNED - DAD	REVISED -
		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0300 ' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 11/9/2009	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

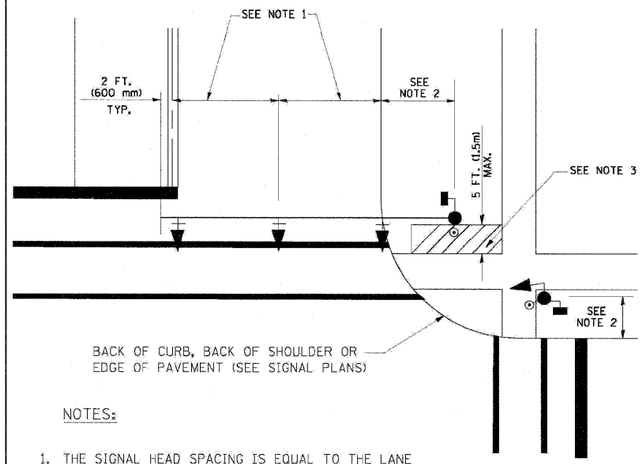
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			681	381
	TS-05	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

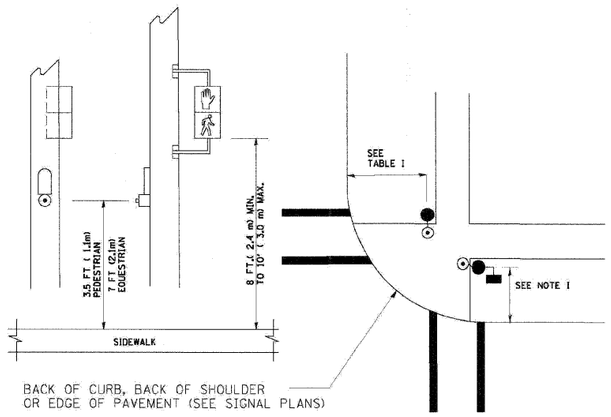
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

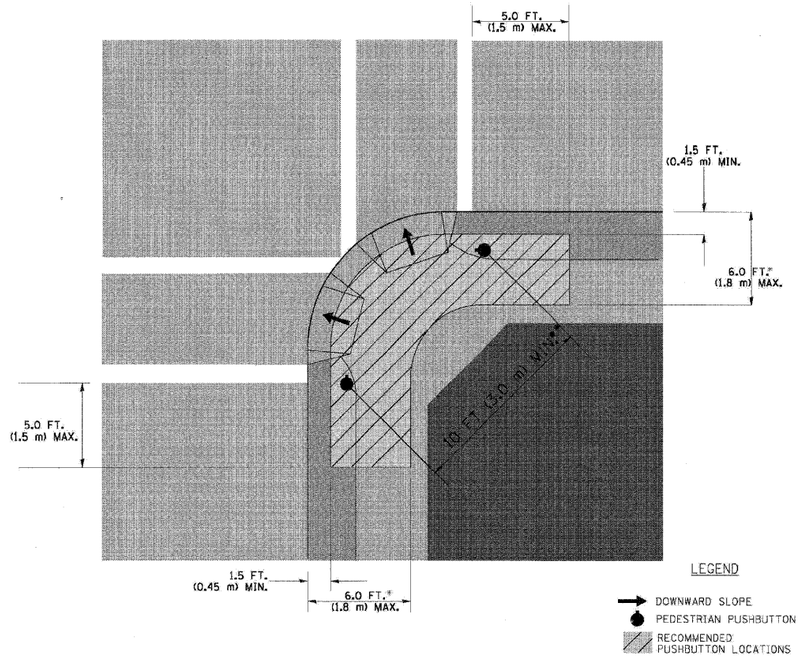
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

FILE NAME = e:\pw_work\PWIDOT\BAUEROL\d0108315\ta05.dgn	USER NAME = baueroll	DESIGNED - DAD	REVISED -
		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -

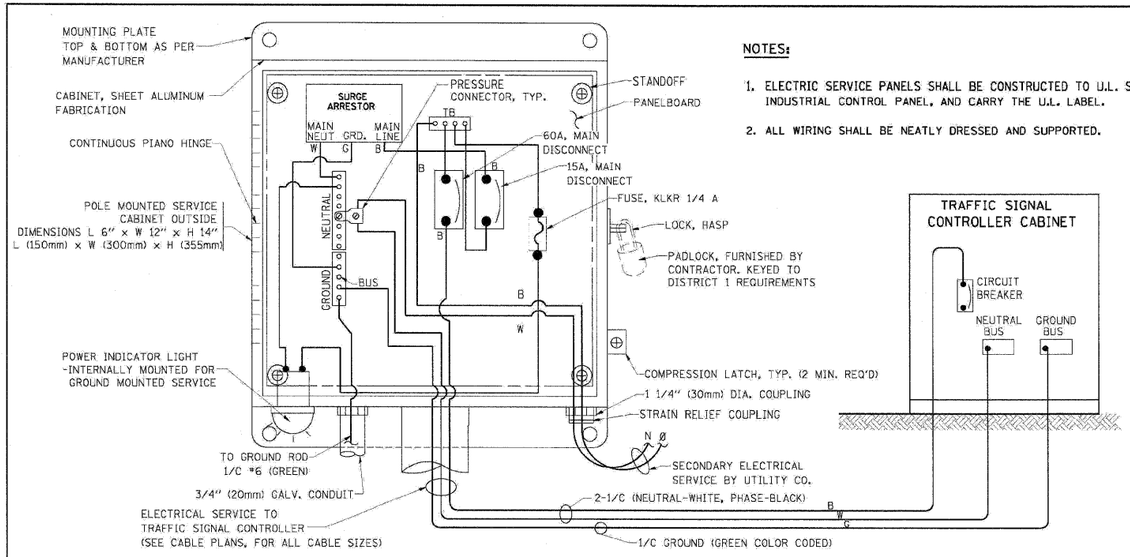
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 2 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			681	382
	TS-05	CONTRACT NO.		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



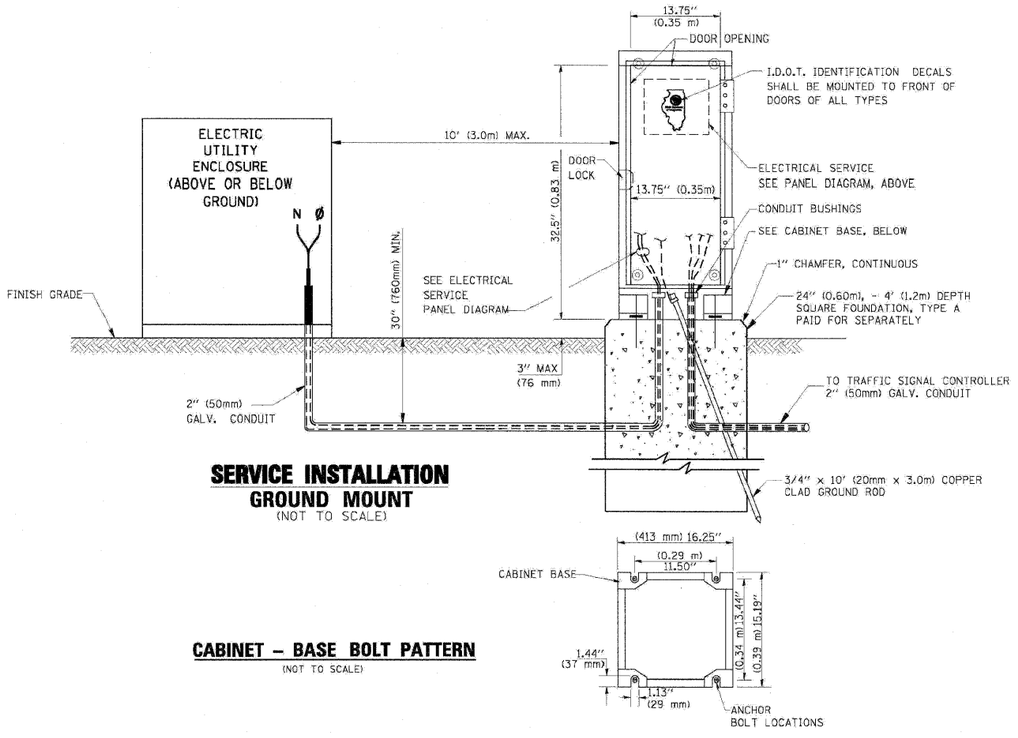
NOTES:

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.

ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

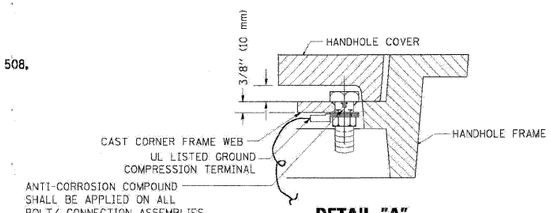


SERVICE INSTALLATION GROUND MOUNT

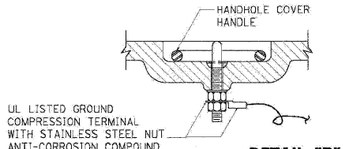
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



DETAIL "A"

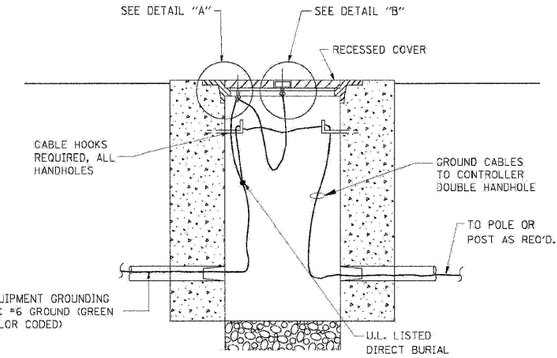


DETAIL "B"

NOTES:

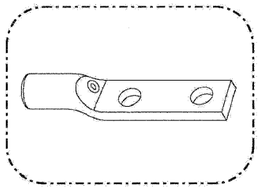
GROUNDING SYSTEM

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.



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

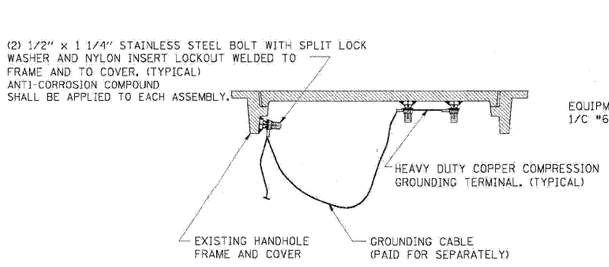


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

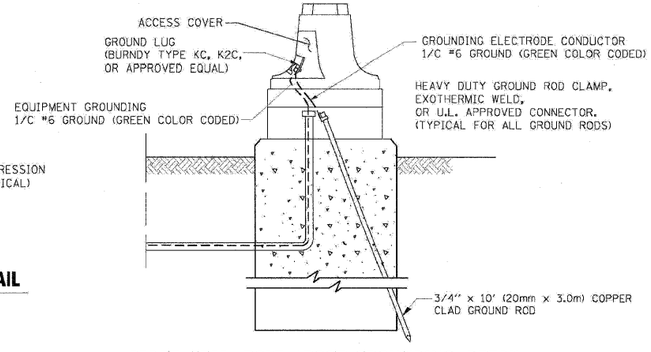
NOTES:

- 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.



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

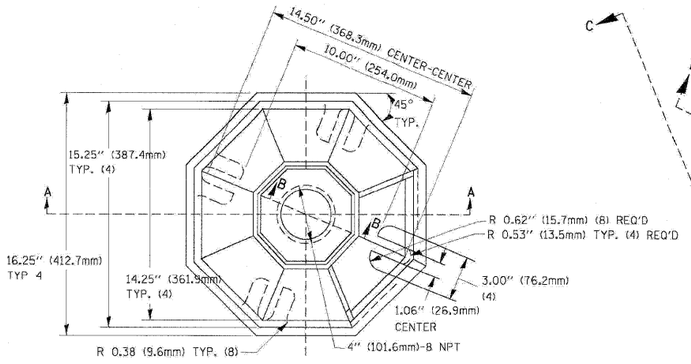
(NOT TO SCALE)



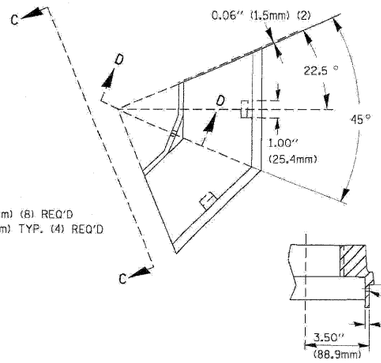
MAST ARM POLE / POST–GROUNDING DETAIL

(NOT TO SCALE)

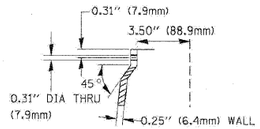
FILE NAME = c:\pw_work\PWIDOT\BAUERDL\d0108319\ts05.dgn	USER NAME = bauerdl	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
	PLOT SCALE = 50.0000 ' / IN.	DRAWN - BCK	REVISED -								681 / 383
	PLOT DATE = 11/4/2009	CHECKED - DAD	REVISED -						TS-05		CONTRACT NO.
		DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 3 OF 6 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	



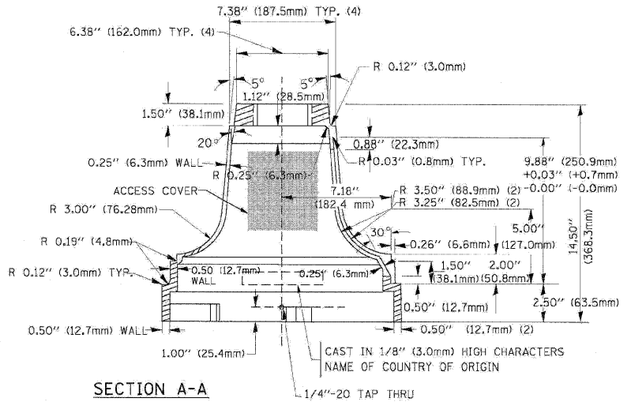
TOP VIEW



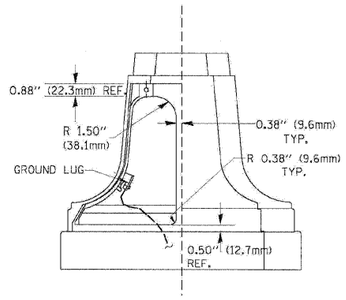
SECTION B-B



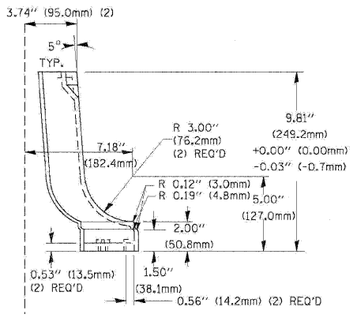
SECTION D-D



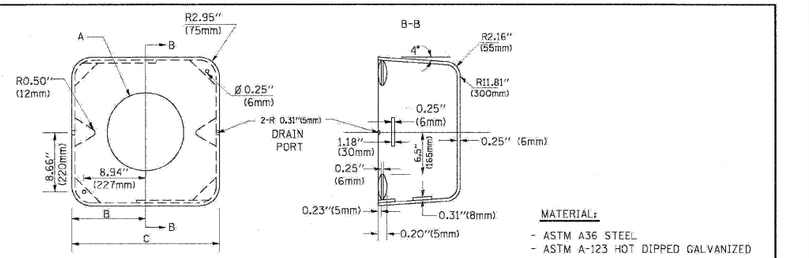
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

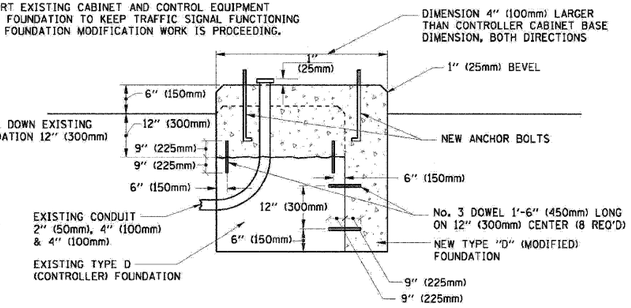
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24Kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 Kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 Kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 Kg)

SHROUD

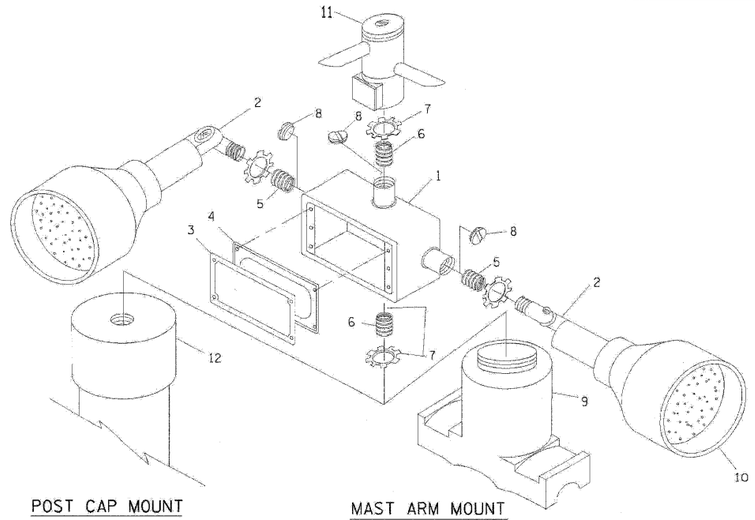
NOTES:

1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT

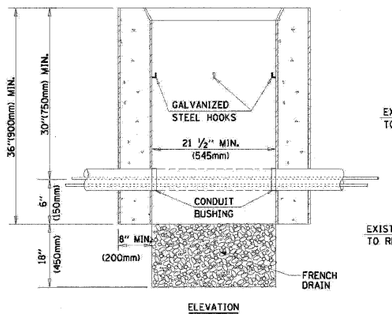
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

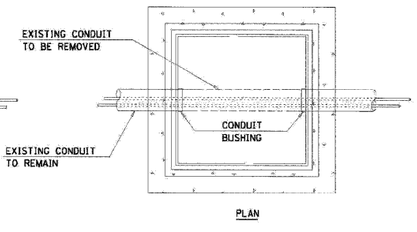
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ¾"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



ELEVATION



PLAN

NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

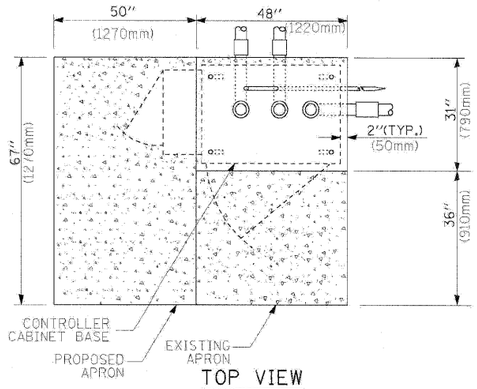
FILE NAME = c:\ow.work\PWIDOT\BAUEROL\d0108315\ts05.dgn	USER NAME = bauerdl	DESIGNED - DAD	REVISED -
		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

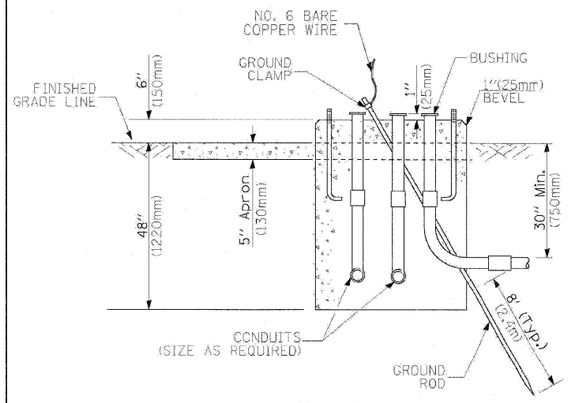
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

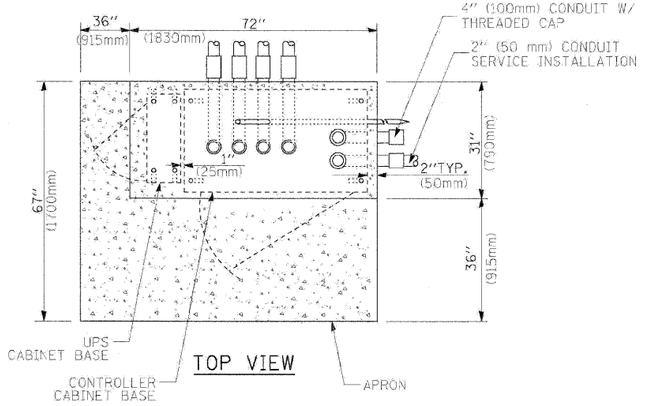
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			681	384
	TS-05	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



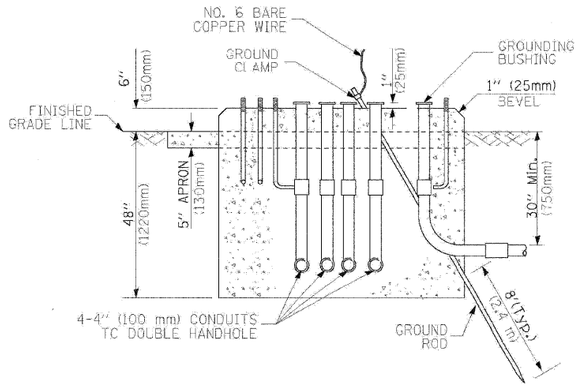
TOP VIEW



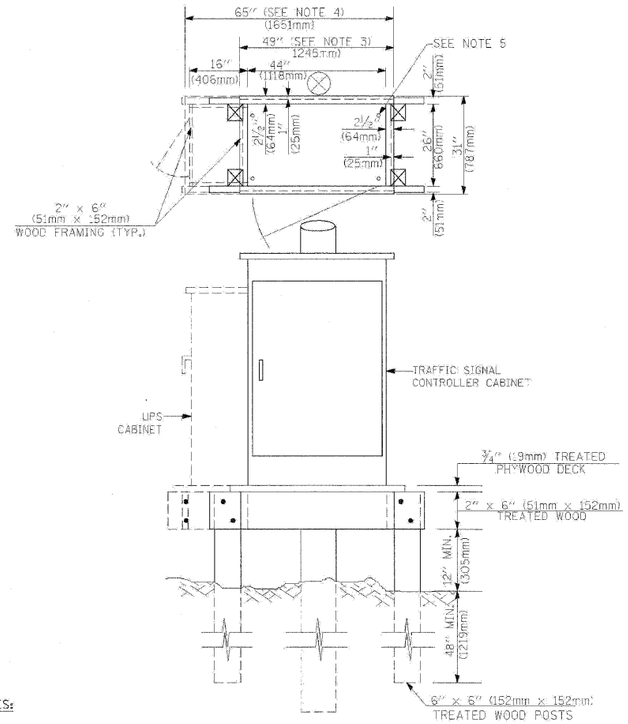
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



TOP VIEW



TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME = e:\cw_work\PWIDOT\BAUEROL\d0108315\ts05.dgn	USER NAME = bauerdl	DESIGNED - DAG	REVISED -
		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			681	385
	TS-05	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

Bench Mark: "□" On end of Mast Arm.
SE Quadrant of IL RTE 56
and Wiesbrook Rd
Elev. 771.63

Existing Structure: Single cell 4'x4' concrete box culvert.

Traffic to be maintained using Stage Construction

No salvage.

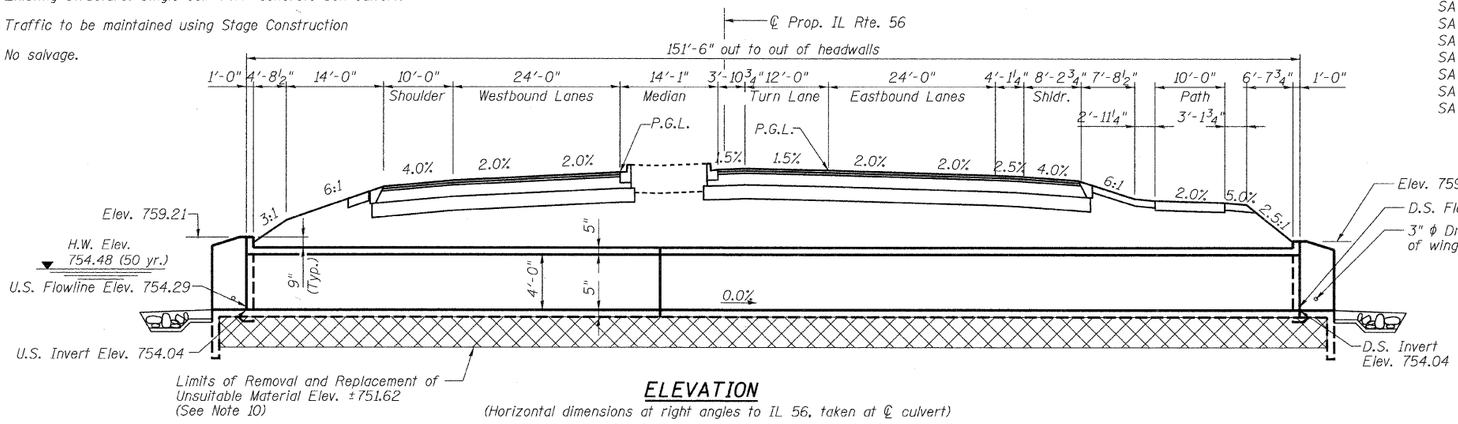
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

SA-1 General Plan and Elevation
SA-2 Stage Construction
SA-3 Temporary Concrete Barrier
SA-4 Precast Box Section
SA-5 Cast-in-Place Apron Details
SA-6 Section Through Box Culvert
SA-7 Soil Boring Logs

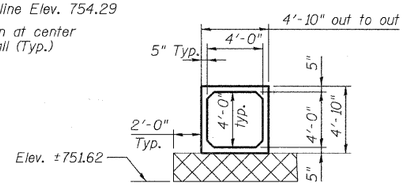
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu Yd	874
Porous Granular Embankment, Subgrade	Cu Yd	100
Stone Riprap, Class A4	Sq Yd	29
Filter Fabric	Sq Yd	29
Structure Excavation	Cu Yd	411
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 1	Each	2
Precast Concrete Box Culvert 4' X 4'	Foot	151.5
Temporary Soil Retention System	Sq Ft	392



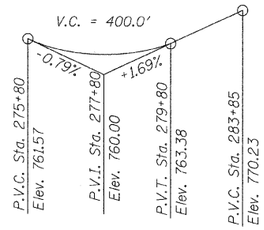
ELEVATION

(Horizontal dimensions at right angles to IL 56, taken at ℄ culvert)



SECTION THRU BARREL

The limits and quantities of removal and replacement are based on the Structure Geotechnical Report and may be modified by the District Geotechnical Engineer and Field Engineers for variable subsurface encountered in the field.



PROFILE GRADE

LOADING HS20-44

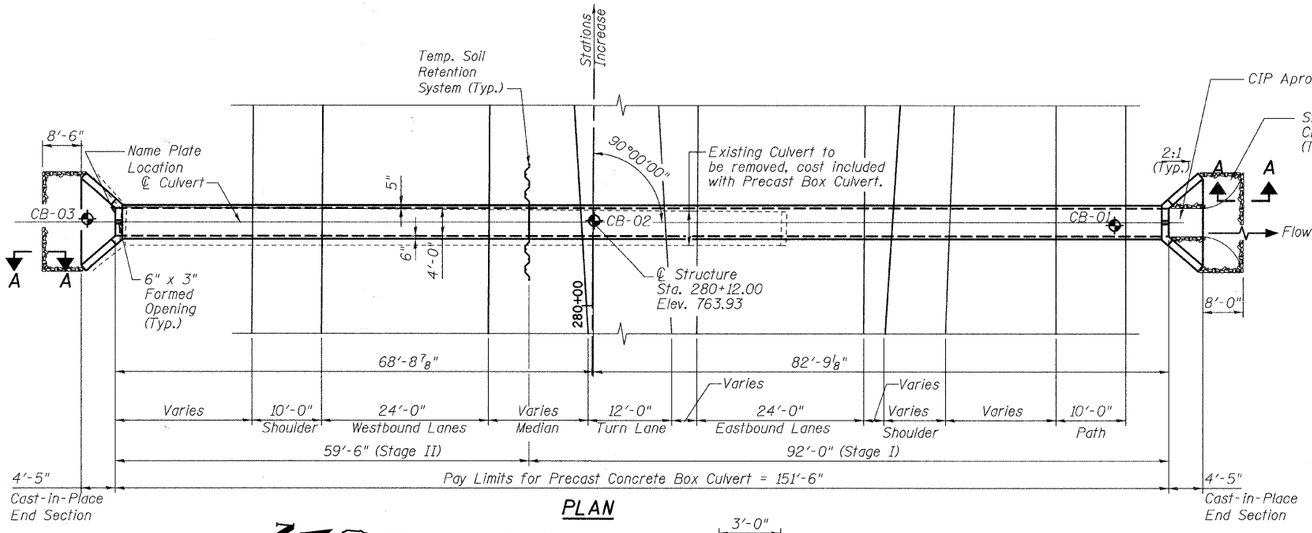
Allow 50#/sq. ft. for future wearing surface.
Design fill height > 2 ft.

DESIGN SPECIFICATIONS

2002 AASHTO 17th Edition

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0



PLAN

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See special provision.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
4. Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M 259.
5. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
6. Class SI Concrete shall be used for cast-in-place concrete.
7. Exposed edges shall be beveled ¾".
8. For backfilling and embankment see standard specifications.
9. Precast End Sections are not allowed.
10. The material used to replace the unsuitable material removed below the bottom of the proposed precast concrete box culvert and cast-in-place concrete aprons shall conform to the requirements of "Porous Granular Embankment, Subgrade".
11. The required soil strength beneath the box culverts is 2500 psf and shall be verified at the time of construction.

DESIGN STRESSES

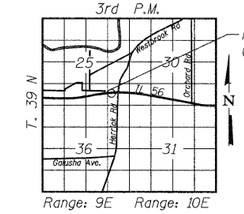
FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

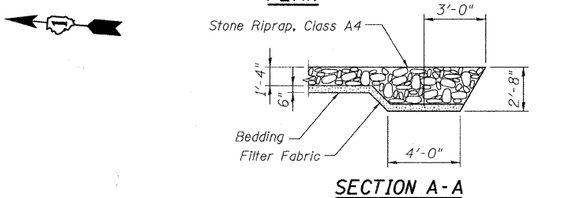
PRECAST UNITS

f'c = 5,000 psi
fy = 65,000 psi (welded wire fabric)

⊕ Indicates Soil Boring



LOCATION SKETCH

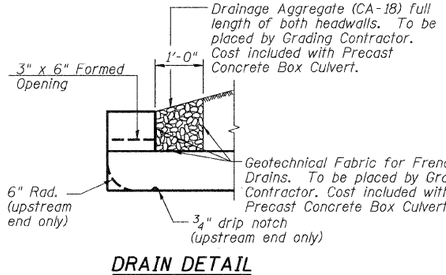


SECTION A-A

STATION 280+12
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RTE. 365
SEC (57 & 58) WRS-2
LOADING HS20

NAME PLATE

See Std. 515001



DRAIN DETAIL

WATERWAY INFORMATION

Drainage Area = 27.9 Acres Low Grade Elev. 761.08 @ Sta. 277+07

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	8.29	1.36	1.36	754.38	0.54	0.57	754.92	754.95
Design	50	13.22	1.76	1.76	754.48	0.80	0.83	755.28	755.31
Base	100	16.38	1.88	1.88	754.51	0.95	0.97	755.46	755.48
Overtopping									
Max. Calc.									

DESIGNED -	EFS
CHECKED -	RJT
DRAWN -	EFS
CHECKED -	RJT

STATE OF ILLINOIS
MARK R. BENDOK
081-006616
LICENSED STRUCTURAL ENGINEER
CHICAGO, ILL.
Expiration Date 11-30-2012
DATE: 12/3/2010

benesch

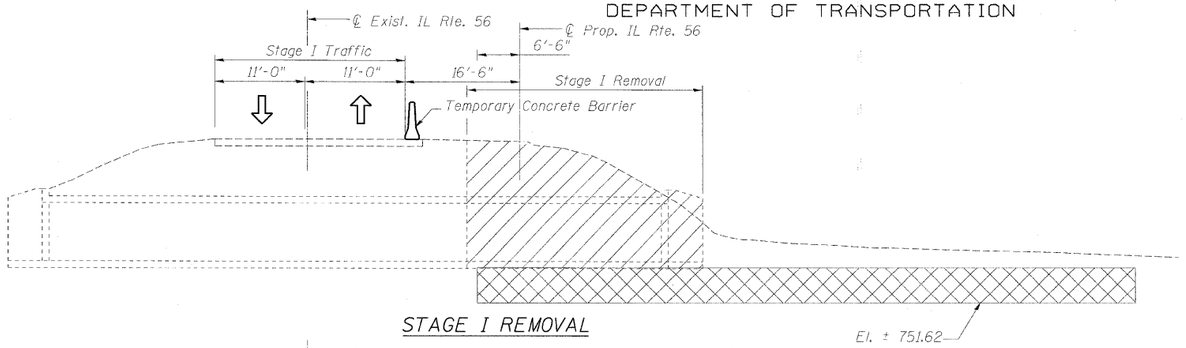
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

GENERAL PLAN AND ELEVATION
ILLINOIS RTE. 56 OVER DRAINAGE DITCH
F.A.P. ROUTE 365 SEC (57 & 58) WRS-2
DUPAGE COUNTY
STATION 280+12.00
CULVERT #1

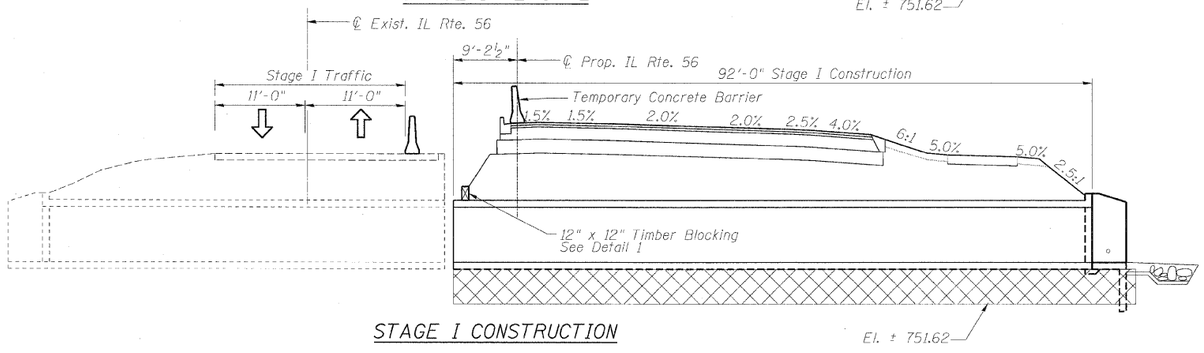
SHEET NO. SA-1 / SA-7 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	365	(57 & 58)WRS-2	DUPAGE	681	386
			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

x:\3700s\3733\Engineering_Documents_Phase_II\Culvert#1_Single_4'x4'\Final\Culvert_1_62419-001-GPE.dgn
12/3/2010 11:21:10 AM

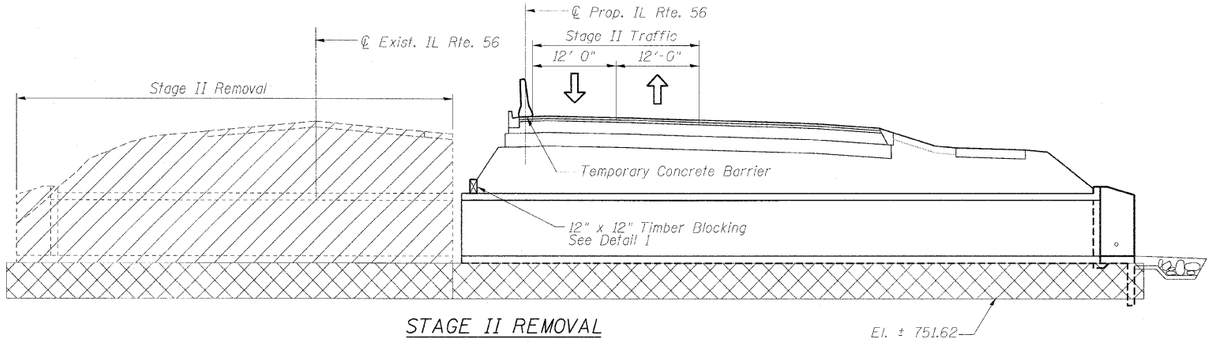
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



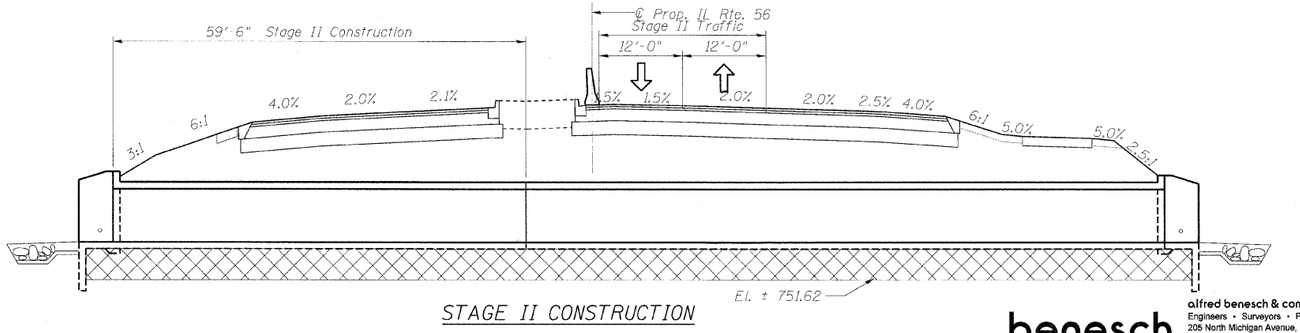
STAGE I REMOVAL



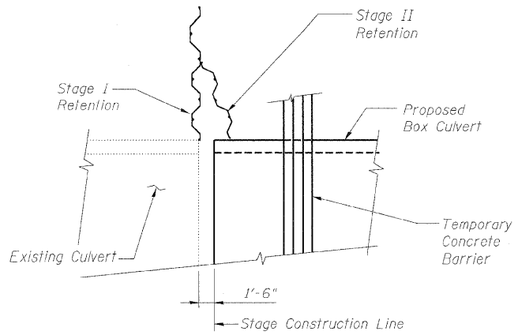
STAGE I CONSTRUCTION



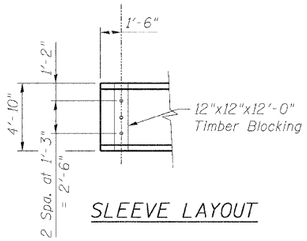
STAGE II REMOVAL



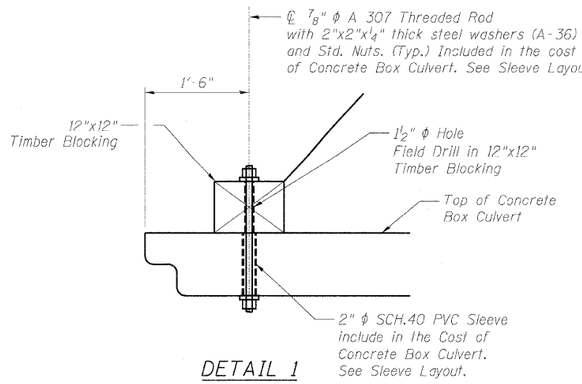
STAGE II CONSTRUCTION



PART PLAN



SLEEVE LAYOUT



DETAIL 1

LEGEND

Indicates Removal of Existing Structure.

Indicates Removal and Replacement of Unsuitable Material.

NOTE:
For details of Temporary Concrete Barrier, see Sheet SA-3.

STAGE CONSTRUCTION
CULVERT #1

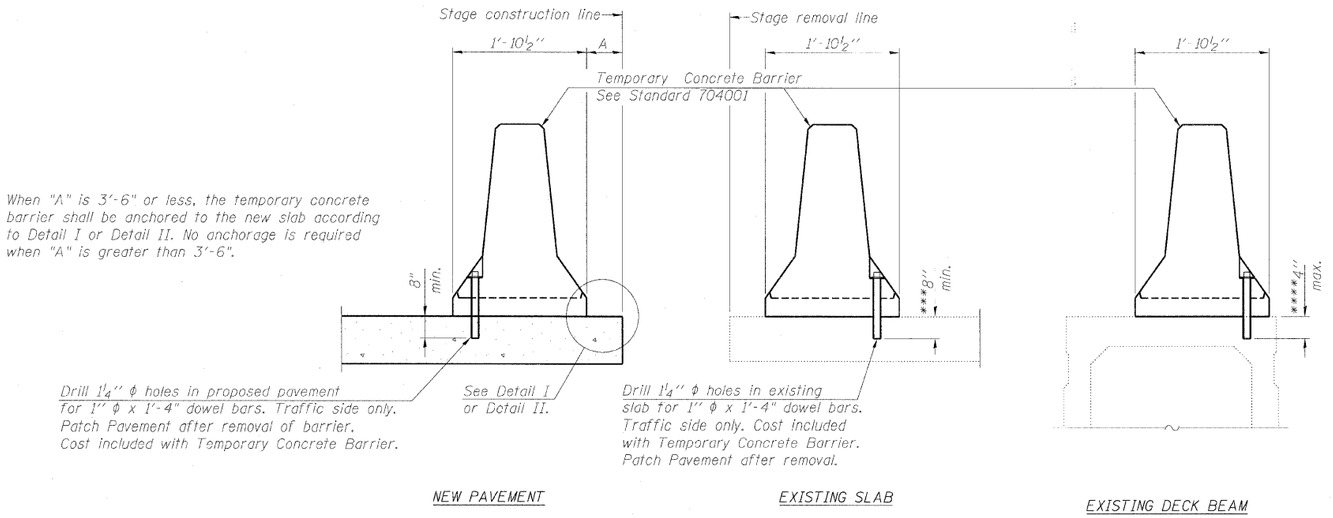
DESIGNED -	EFS
CHECKED -	RJT
DRAWN -	EFS
CHECKED -	RJT

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SHEET NO. SA-2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SA-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	387
			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

X:\3700s\3733\Engineering_Documents_Phase_II\Culvert_#1_Single_4'x4'\Final\Culvert_1_62419-001-STAGE.dgn
1:43:30 PM
12/3/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THRU SLAB OR PAVEMENT

NOTES:

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

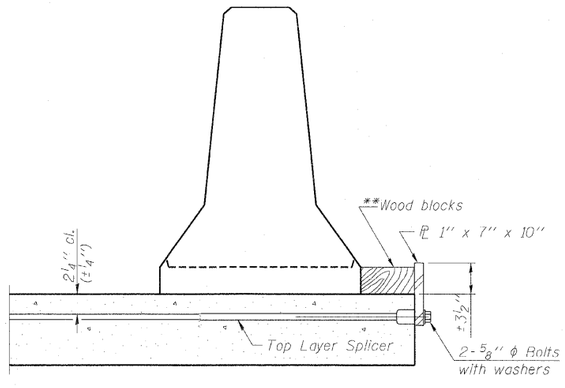
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝"ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

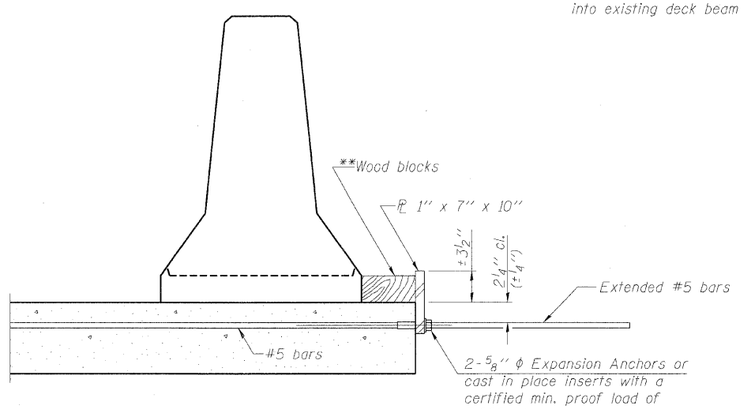
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

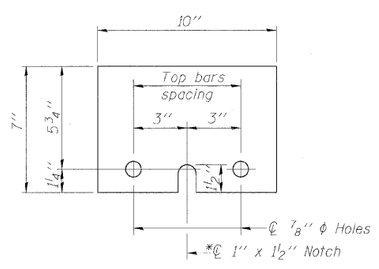
****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1" x 7" x 10"

* Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

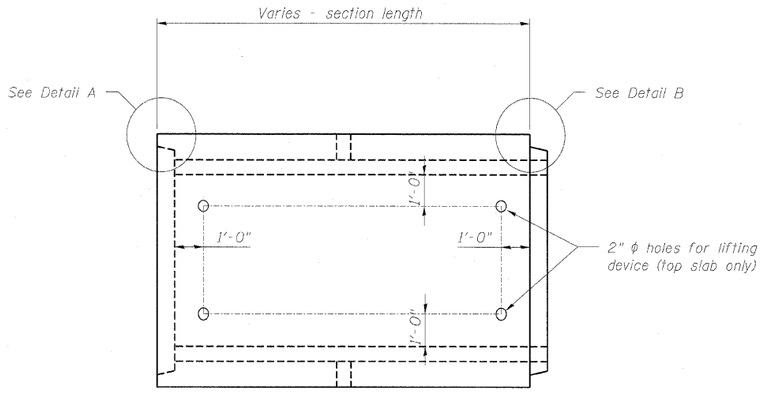
DESIGNED	EFS
CHECKED	RJT
DRAWN	EFS
CHECKED	RJT

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

TEMPORARY CONCRETE BARRIER
CULVERT #1

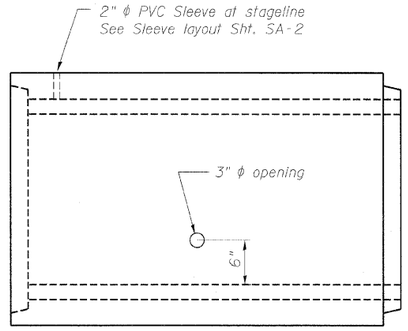
SHEET NO. SA-3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SA-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	388
			CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

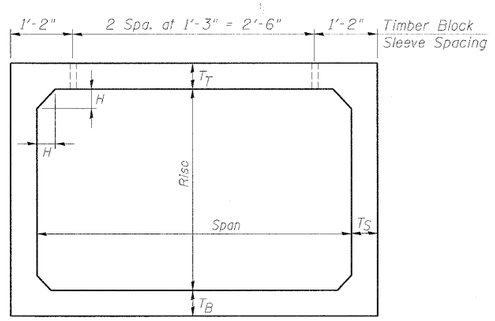


Note: Location of lifting holes may be varied as needed to clear reinforcement.

PLAN

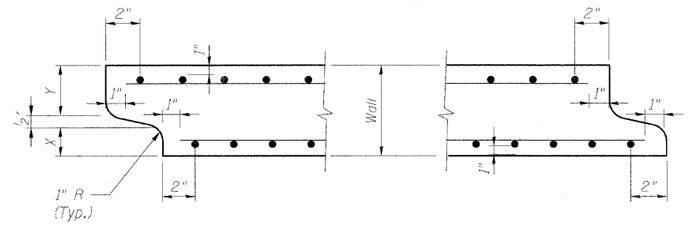


ELEVATION



Note: The haunch dimension h, is equal to the wall thickness t_s.

TYPICAL BOX SECTION



End detail is subject to variation by fabricator.

DETAIL A
(typ. inlet end)

DETAIL B
(typ. outlet end)

Note: Inlet and Outlet ends shall be compatible.

Span, Feet	T_T, inches		T_B, inches		T_S, inches	
	M 259	M 273	M 259	M 273	M 259	M 273
3	4	7	4	6	4	4
4	5	7½	5	6	5	5
5	6	8	6	7	6	6
6	7	8	7	7	7	7
7	8	8	8	8	8	8
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12

TYPICAL THICKNESSES

GENERAL NOTES:

Minimum cover for box culverts shall be 6".

PRECAST BOX SECTION
CULVERT #1

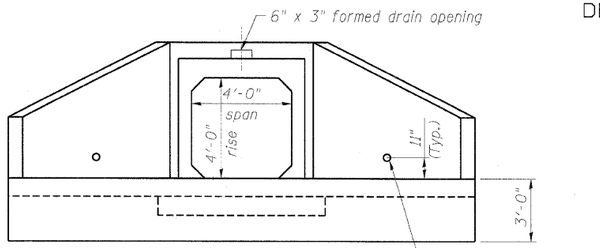
DESIGNED -	EFS
CHECKED -	RJT
DRAWN -	EFS
CHECKED -	RJT

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

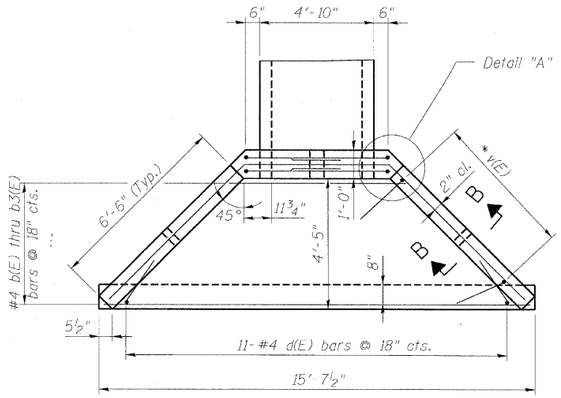
SHEET NO. SA-4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SA-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	389
			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

X:\3700s\3733\Engineering_Documents_Phase_II\Culvert\1_Single_4'x4'\Final\Culvert_1_62419_201-PRECAST_BOX.dgn
12/3/2010 1:44:30 PM

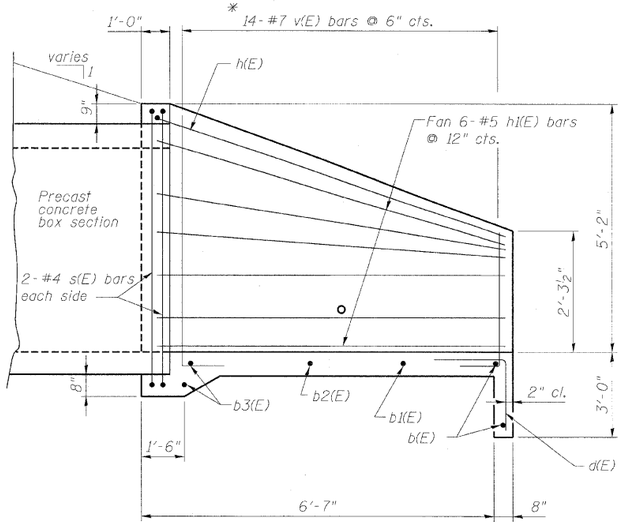
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



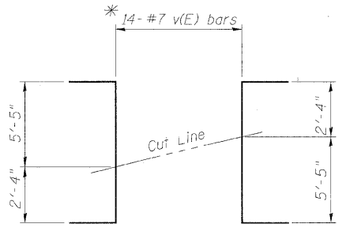
END ELEVATION



PLAN

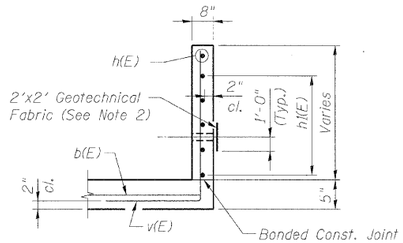


HALF SIDE ELEVATION

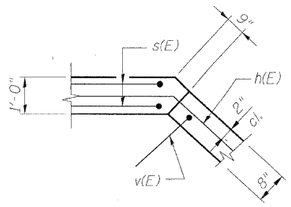


FIELD CUTTING DIAGRAM

* Order v(E) bars full length. Cut to fit as shown and use remainder of bars in other side of apron.



SECTION B-B



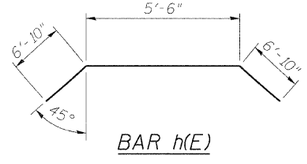
DETAIL "A"

MIN. BAR LAP
#4 - 1'-8"
#5 - 2'-2"

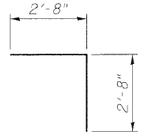
BILL OF MATERIAL **

Bar	Size	No.	Length	Shape
b(E)	#5	4	14'-11"	
b1(E)	#4	2	12'-8"	
b2(E)	#4	2	9'-10"	
b3(E)	#4	4	7'-0"	
d(E)	#4	22	5'-4"	
h(E)	#5	2	19'-2"	
h1(E)	#5	24	7'-3"	
s(E)	#4	8	14'-5"	
v(E)	#7	28	11'-9"	
Item			Unit	Total
Class SI Concrete			C.Y.	6.8
Reinforcement Bars, Epoxy Coated			Lbs.	1,170

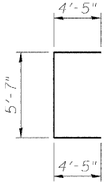
** For two aprons. The quantities shown are for information only.



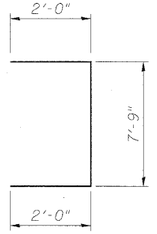
BAR h(E)



BAR d(E)



BAR s(E)



BAR v(E)

NOTES:
1. All construction joints shall be bonded.
2. Cover 3" ϕ weep holes with geotechnical fabric for box culvert end section and precast box culvert.

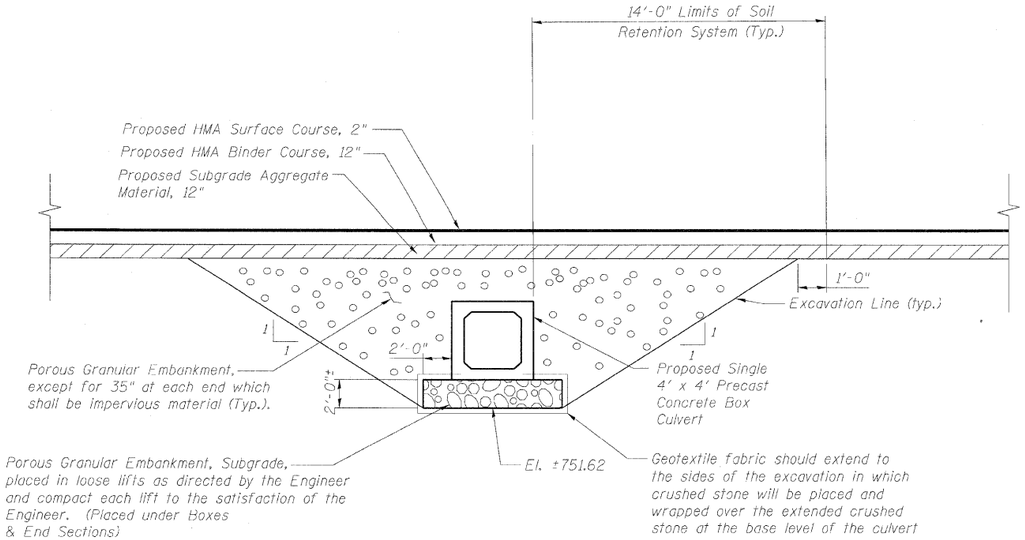
CAST IN PLACE APRON DETAILS
CULVERT #1

DESIGNED -	EFS
CHECKED -	RJT
DRAWN -	EFS
CHECKED -	RJT

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SHEET NO. SA-5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SA-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	390
			CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THROUGH PRECAST BOX CULVERT

DESIGNED -	EFS
CHECKED -	RJT
DRAWN -	EFS
CHECKED -	RJT

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SECTION THROUGH BOX CULVERT
CULVERT #1

SHEET NO. SA-6	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	365	(57 & 58)WRS-2	DUPAGE	681	391
SA-7 SHEETS			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
Applied GeoScience, Inc.

SOIL BORING LOG

Page 1 of 1

Date 6/12/09

ROUTE FAP 365, (IL56) DESCRIPTION Butterfield Road (Winfield Road to Naperville Road) LOGGED BY MG

SECTION (57 & 58) WRS- 2 LOCATION , SEC. , TWP. , RNG.

COUNTY DuPage County DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station _____

BORING NO. CB- 01
Station 280+12
Offset 75.00ft RT
Ground Surface Elev. 754.00 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Topsoil & silty clay, dark gray, very stiff			
	6		
752.00	5	3.0	25.8
Silty clay, brown & gray, stiff	5		
	4		
	4	0.8	27.8
-5	4		
748.00			
Silty clay, trace sand, brown, very stiff	3		
	4	2.7	18.4
	6		
745.00	3		
Clay, some silt, trace sand, brown, very stiff	4	2.0	16.6
-10	6		
	4		
	4	1.3	17.1
	4		
	2		
	3	0.3	17.5
-15	4		
	4		
737.00	4	1.3	17.7
Clay with brown sand layer & gravel, gray 736.50	5		
Silty clay, some stone, gray, hard			
	5		
	4	4.0	14.1
734.00 -20	34		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Large stone & gravel, brown, dry, very dense			
	50		
731.00			
Fine to medium stone & sand, brown, moist very dense			
	50		
-25			6.1
	36		
	24		7.1
728.00	17		
Sandy clay & large stone, gray, medium dense	8		
	9	0.6	26.2
724.00 -30	10		
End of Boring			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Applied GeoScience, Inc.

SOIL BORING LOG

Page 1 of 1

Date 7/29/09

ROUTE FAP 365, (IL56) DESCRIPTION Butterfield Road (Winfield Road to Naperville Road) LOGGED BY MG

SECTION (57 & 58) WRS- 2 LOCATION , SEC. , TWP. , RNG.

COUNTY DuPage County DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station _____

BORING NO. CB-02
Station 280+12
Offset 0.00ft CL
Ground Surface Elev. 761.70 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 753.2 ft ▼
Upon Completion 736.7 ft ▽
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10" Sand & gravel over fabric & clay 760.87			
Clay, some silt & stone, dark gray, moist, loose	3		
	4		16.7
	5		
758.70			
Silt, some clay, sand & grand, dark gray, dry loose to medium dense	2		
	3		17.8
-5	2		
	7		
	4		14.6
	3		
753.70			
Clay, some silt & stone, gray, very stiff ▼	1		
	4	2.0	29.2
-10	3		
	2		
	1	2.5	13.1
	4		
748.70			
Sandy silt, trace clay, moist to wet, brown, medium dense	2		
	4		19.1
746.70 -15	6		
Clay, some silt, gray, very stiff to stiff			
	3		
	3	1.5	14.5
	3		
	3		
-20	3	1.5	13.8
	4		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Clay, some silt, gray, very stiff to stiff *(continued)*			
	1		
	3	2.1	15.2
	4		
	2		
-25	2	2.1	17.0
	4		
	15		
734.70	17		13.4
Sandy silt, brown, moist to dry, dense	19		
	14		
731.70 -30	16		12.0
End of Boring	19		
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Applied GeoScience

SOIL BORING LOG

Page 1 of 1

Date 8/12/09

ROUTE FAP 365 - IL56 DESCRIPTION Butterfield Rd (Winfield Rd to Naperville Rd) LOGGED BY MG

SECTION (57 & 58) WRS- 2 LOCATION Butterfield Road, SEC. 25, TWP. 39N, RNG. 9E

COUNTY DuPage County DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO. _____
Station _____

BORING NO. CB-03
Station 280+12
Offset 75.00ft LT
Ground Surface Elev. 754.14 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 746.1 ft ▼
Upon Completion 743.1 ft ▽
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Topsoil & silty clay, some stone, trace roots, brown to black, stiff			
	3		
	2		24.6
751.14	3		
Clay, some silt & topsoil, trace gravel, dark gray, stiff	2		
	3	2.4	29.5
-5	5		
	1		
	2		26.6
746.64	3		
Clayey silt, brown, some gray, moist, soft, 746.14 ▼	1		
Clay, some silt, sand & gravel, brown & gray, medium stiff	2	0.6	26.4
744.14 -10	4		
Clay, some silt, gray, hard ▽	2		
	4	5.3	13.8
	6		
741.14			
Clay, some silt, trace stone, gray, stiff	2		
Stone obstruction at 21.5' & 24.5', wet	4	1.8	18.2
-15	4		
	2		
	3	1.6	17.0
	5		
	2		
	3	1.1	17.5
-20	5		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Clay, some silt, trace stone, gray, stiff			
	4		
Stone obstruction at 21.5' & 24.5', wet *(continued)*			
	50	0.8	18.5
	15		
	25		16.8
-25	27		
728.14			
Sandy silt & weathered limestone, some coarse sand & gravel, moist	6		
	10		13.4
to wet, gray, medium dense 726.64	19		
Silty clay with coarse sand & & limestone pieces, dark gray, wet, medium dense	9		
725.14			
Layers of limestone pieces with sand & clay, dark gray, moist, dense	29		7.8
724.14 -30	23		
End of Boring			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

DESIGNED -	EFS
CHECKED -	RJT
DRAWN -	EFS
CHECKED -	RJT

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SOIL BORING LOGS
CULVERT #1

SHEET NO. SA-7	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SA-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	392
			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

12/3/2010 1:46:17 PM X:\3700s\3733\Engineering_Documents_Phase_II\Culvert#1_Single_4'x4'\Final\Culvert#1_62419_001_LOGS.dgn

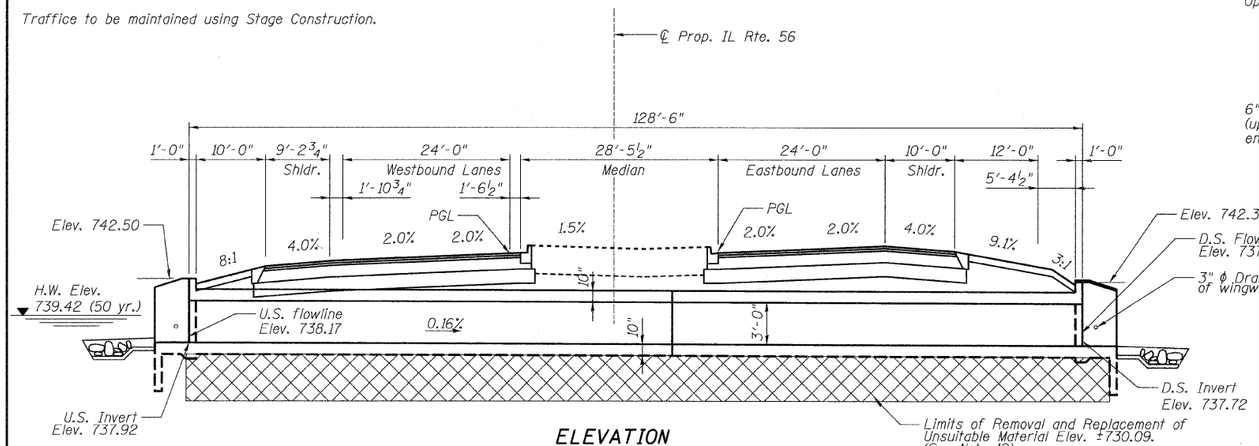
Bench Mark: "□" In foundation of Mast Arm. SE Quadrant of IL RTE 56 and Orchard Rd Elev. 744.94

Existing Structure: None.

No salvage.

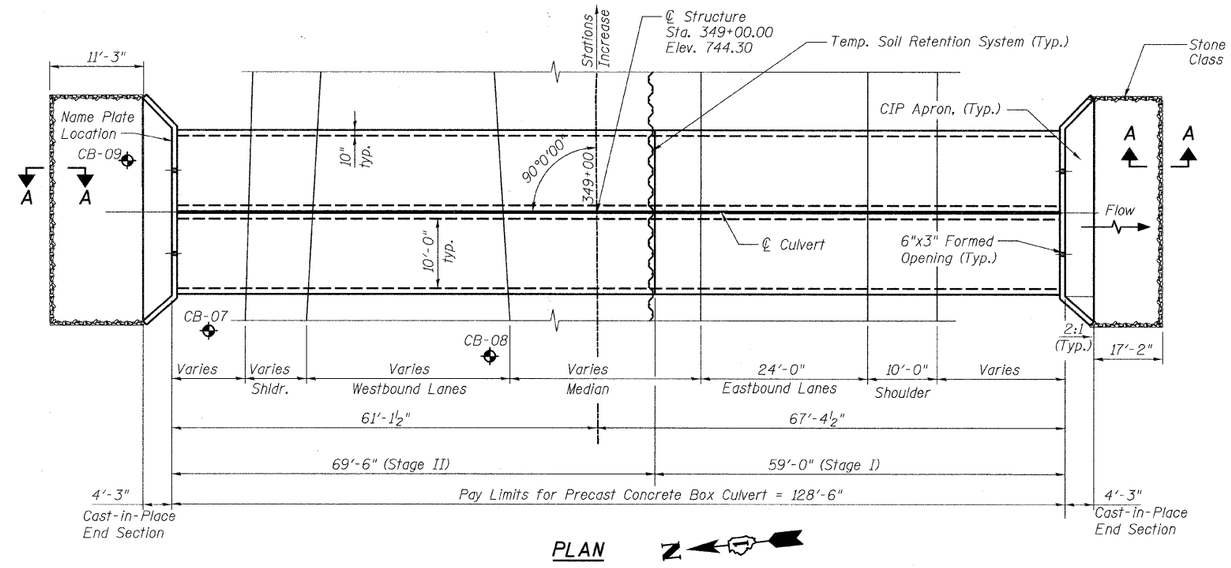
Traffice to be maintained using Stage Construction.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

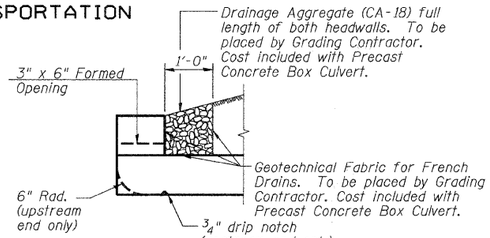


ELEVATION

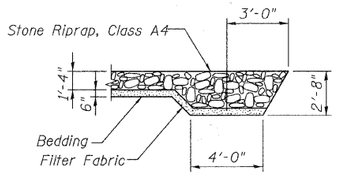
(Horizontal dimensions at right angels to IL 56, taken at ℄ culvert)



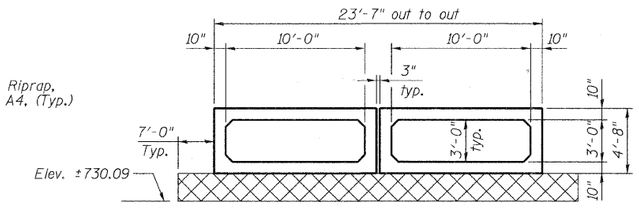
PLAN



DRAIN DETAIL



SECTION A-A



SECTION THRU BARREL

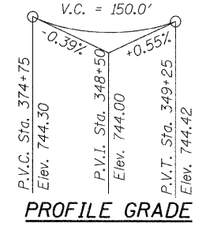
The limits and quantities of removal and replacement are based on the Structure Geotechnical Report and may be modified by the District Geotechnical Engineer and Field Engineers for variable subsurface encountered in the field.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu Yd	1125
Porous Granular Embankment, Subgrade	Cu Yd	1253
Stone Riprap, Class A4	Sq Yd	110
Filter Fabric	Sq Yd	110
Structure Excavation	Cu Yd	687
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 2	Each	2
Precast Concrete Box Culvert 10' X 3'	Foot	257
Temporary Soil Retention System	Sq Ft	889

INDEX OF SHEETS

SB-1 General Plan and Elevation
SB-2 Stage Construction
SB-3 Temporary Concrete Barrier
SB-4 Precast Box Section
SB-5 Cast-in-Place Apron Details
SB-6 Section Through Box Culvert
SB-7 Soil Boring Logs



PROFILE GRADE

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.
Design fill height < 2 ft.

DESIGN SPECIFICATIONS

2002 AASHTO 17th Edition

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST UNITS

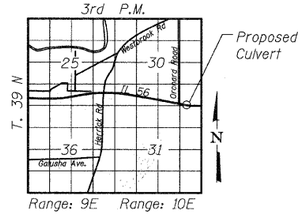
f'c = 5,000 psi
fy = 65,000 psi (welded wire fabric)

◈ *Indicates Soil Boring*

GENERAL NOTES

1. *Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See special provision.*
2. *Reinforcement bars designated (E) shall be epoxy coated.*
3. *Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.*
4. *Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M 273.*
5. *Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.*
6. *Class SI Concrete shall be used for cast-in-place concrete.*
7. *Exposed edges shall be beveled ¾".*
8. *For backfilling and embankment see standard specifications.*
9. *Precast End Sections are not allowed.*
10. *The material used to replace the unsuitable material removed below the bottom of the proposed precast concrete box culvert and cast-in-place concrete aprons shall conform to the requirements of "Porous Granular Embankment, Subgrade."*
11. *The required soil strength beneath the box culverts is 2500 psf and shall be verified at the time of construction.*

STATE OF ILLINOIS
MARK R. BENSOK
062-060506
CHICAGO, ILL.
STRUCTURAL ENGINEER
Expiration Date 11-30-2012
DATE: 12/3/2010



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
ILLINOIS RTE. 56 OVER DRAINAGE DITCH
F.A.P. ROUTE 365 SEC (57 & 58) WRS-2
DUPAGE COUNTY
STATION 349+00.00
STRUCTURE NO. 022-2028

WATERWAY INFORMATION

Drainage Area = 207.2 Acres Low Grade Elev. 744.29 @ Sta. 349+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	196.44	0.92	29.80	739.42	2.67	1.00	742.09	740.42
Design	50	196.44	0.92	29.80	739.42	2.67	1.00	742.09	740.42
Base	100	295.68	1.41	33.00	739.57	2.66	1.61	742.09	741.18
Overtopping									
Max. Calc.									

DESIGNED -	RJT
CHECKED -	EFS
DRAWN -	MB
CHECKED -	EFS

STATION 349+00
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RTE. 365
SEC (57 & 58) WRS-2
LOADING HS20
STRUCTURE NO. 022-2028

NAME PLATE

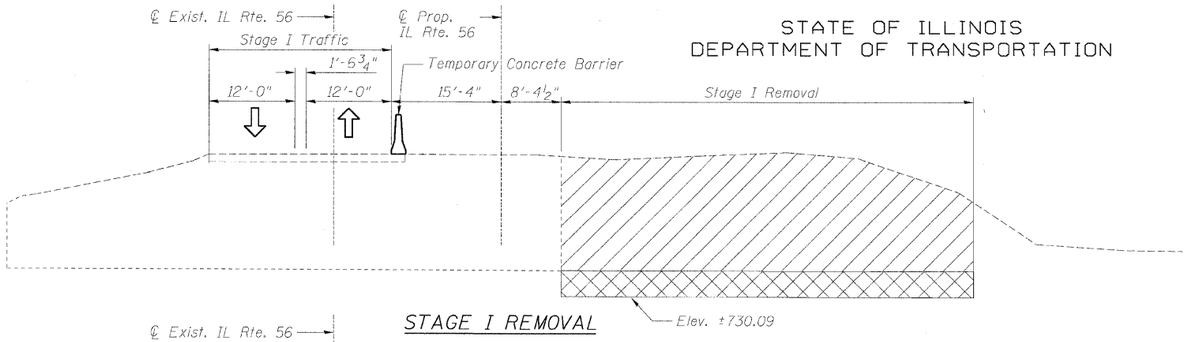
See Std. 515001

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

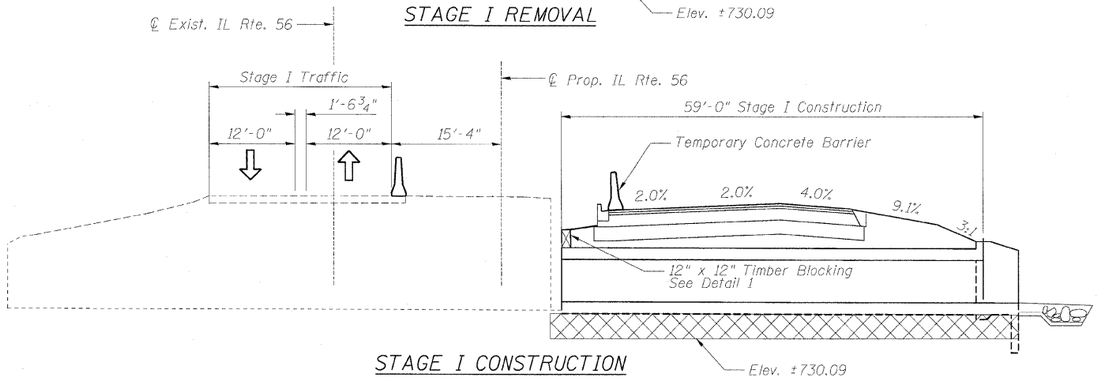
SHEET NO. SB-1 SB-7 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	365	(57 & 58)WRS-2	DUPAGE	681	393
			CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT			

x:\3700s\3733\Engineering_Documents_Phase_II\Culvert#2_Double_10'x3'\Final\022-2028-62419-001-GPE.dgn
12/3/2010 11:22:36 AM

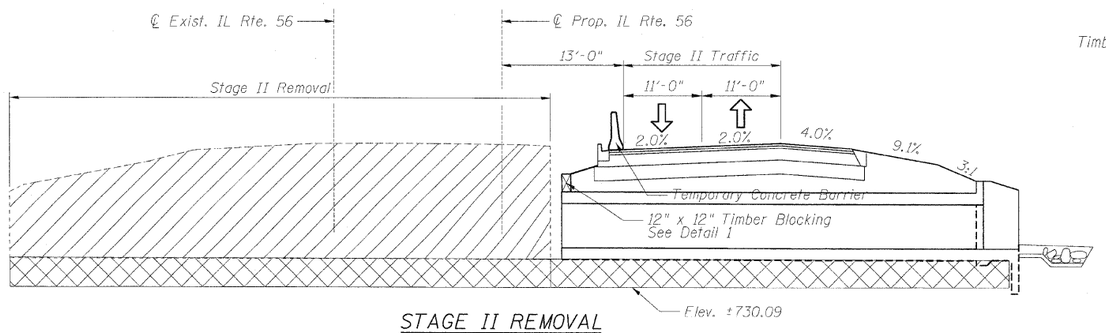
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



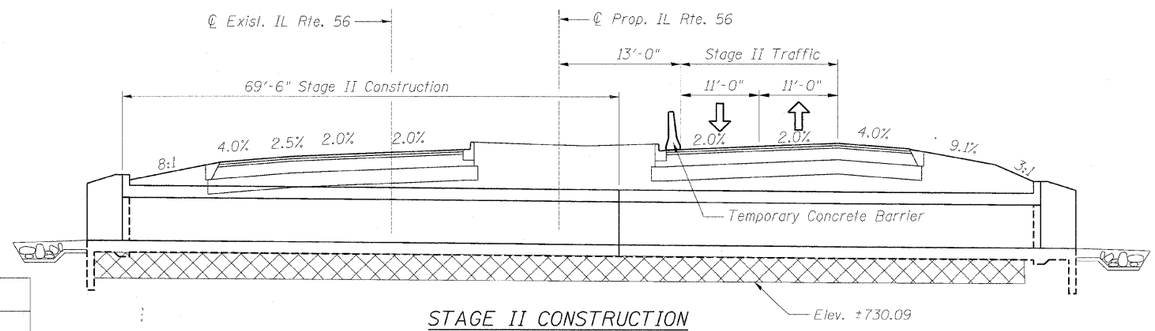
STAGE I REMOVAL



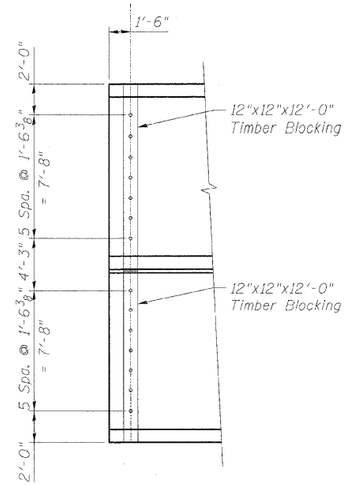
STAGE I CONSTRUCTION



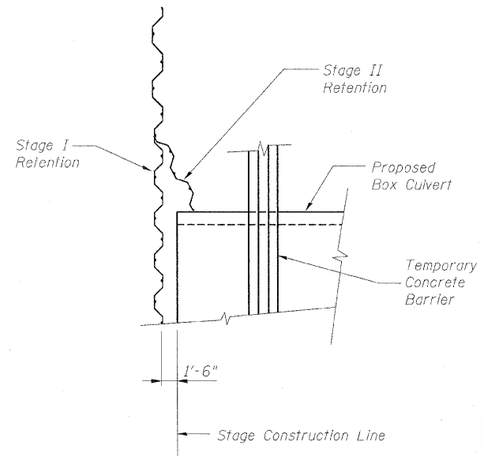
STAGE II REMOVAL



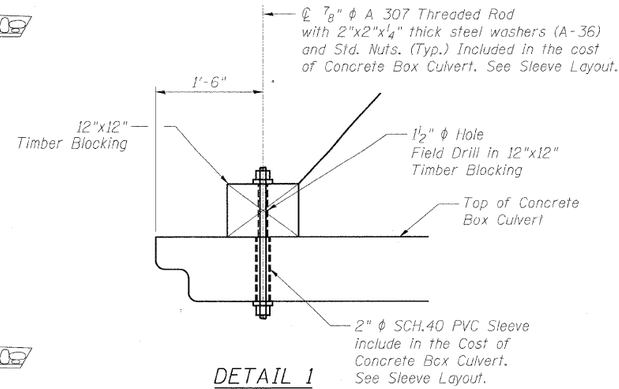
STAGE II CONSTRUCTION



SLEEVE LAYOUT



PART PLAN



DETAIL 1

LEGEND

Indicates Removal of Existing Embankment.

Indicates Removal and Replacement of Unsuitable Material.

NOTE:
For details of Temporary Concrete Barrier, see Sheet SB-3.

STAGE CONSTRUCTION
STRUCTURE NO. 022-2028

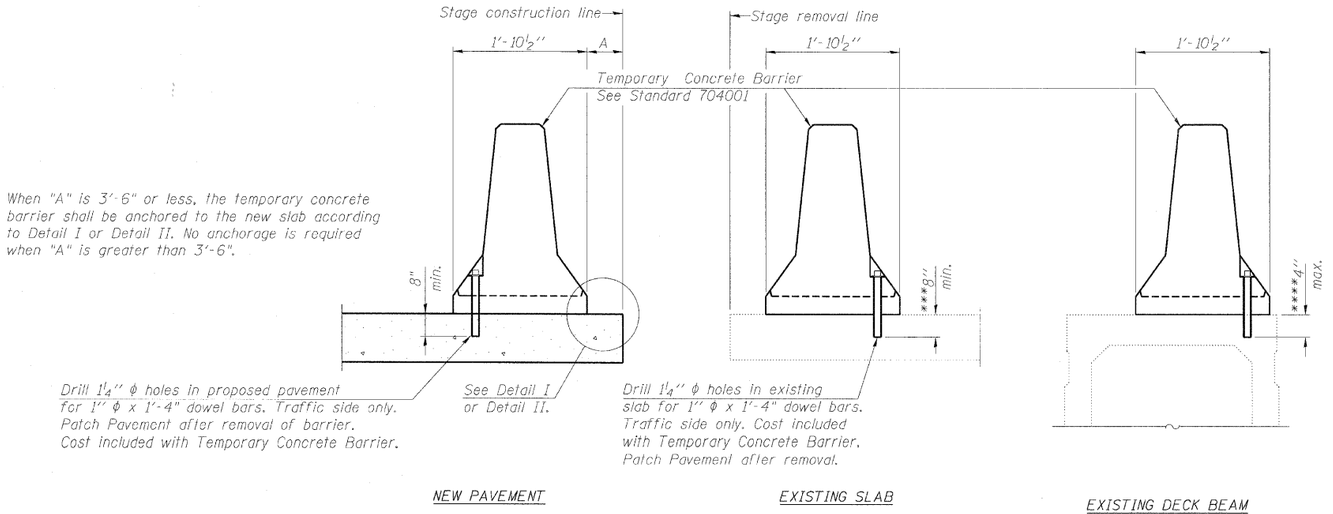
DESIGNED	RJT
CHECKED	EFS
DRAWN	MB
CHECKED	EFS

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SHEET NO. SB-2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SB-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	394
			CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT			

$FILE$
$TIME$
12/3/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

NEW PAVEMENT | EXISTING SLAB | EXISTING DECK BEAM

SECTION THRU SLAB OR PAVEMENT

***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

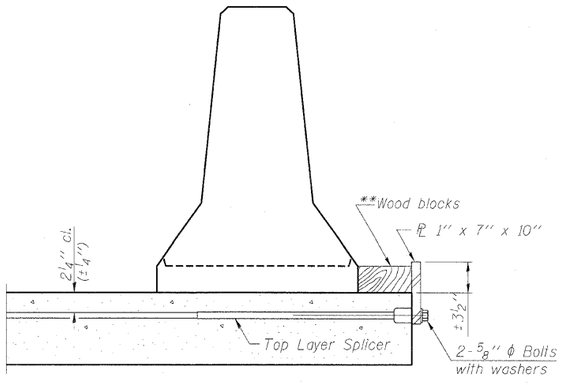
NOTES:

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

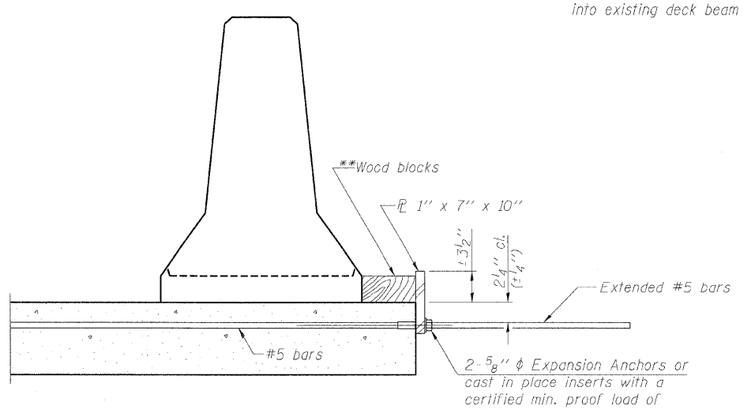
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel PL to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

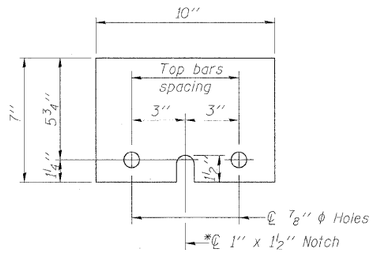
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



DETAIL I



DETAIL II



STEEL RETAINER PL 1" x 7" x 10"

* Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

DESIGNED	RJT
CHECKED	EFS
DRAWN	MB
CHECKED	EFS

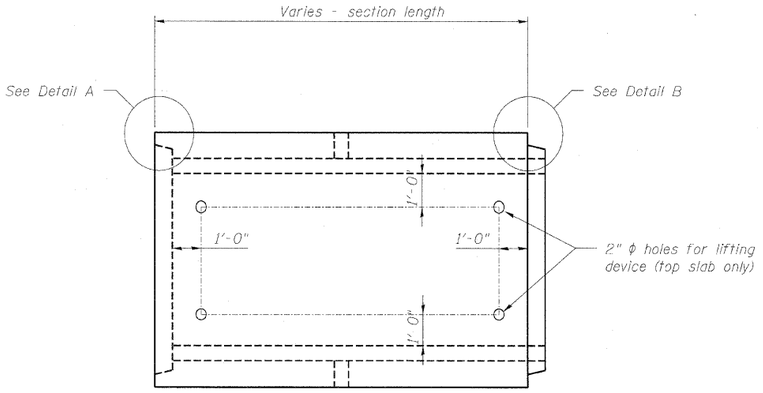
benesch
alfred benesch & company
Engineers · Surveyors · Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 022-2028

SHEET NO. SB-3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SB-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	395
			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

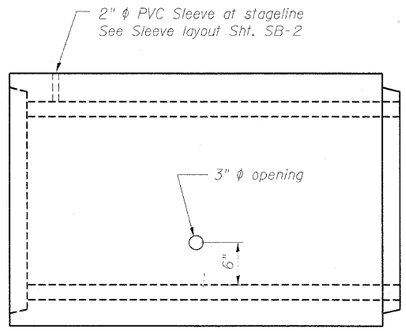
$FILE$
$TIME$
12/3/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

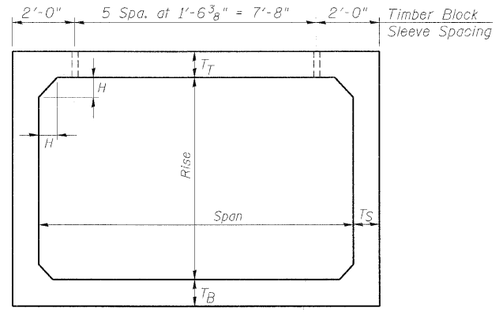


Note: Location of lifting holes may be varied as needed to clear reinforcement.

PLAN



ELEVATION

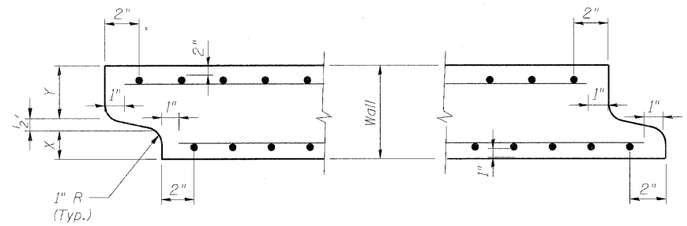


Note: The haunch dimension h, is equal to the wall thickness t_S.

TYPICAL BOX SECTION

Span, Feet	T_T, inches		T_B, inches		T_S, inches	
	M 259	M 273	M 259	M 273	M 259	M 273
3	4	7	4	6	4	4
4	5	7½	5	6	5	5
5	6	8	6	7	6	6
6	7	8	7	7	7	7
7	8	8	8	8	8	8
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12

TYPICAL THICKNESSES



End detail is subject to variation by fabricator.

DETAIL A
(typ. inlet end)

DETAIL B
(typ. outlet end)

Note: Inlet and Outlet ends shall be compatible.

GENERAL NOTES:

Minimum cover for box culverts shall be 6".

DESIGNED -	RJT
CHECKED -	EFS
DRAWN -	MB
CHECKED -	EFS

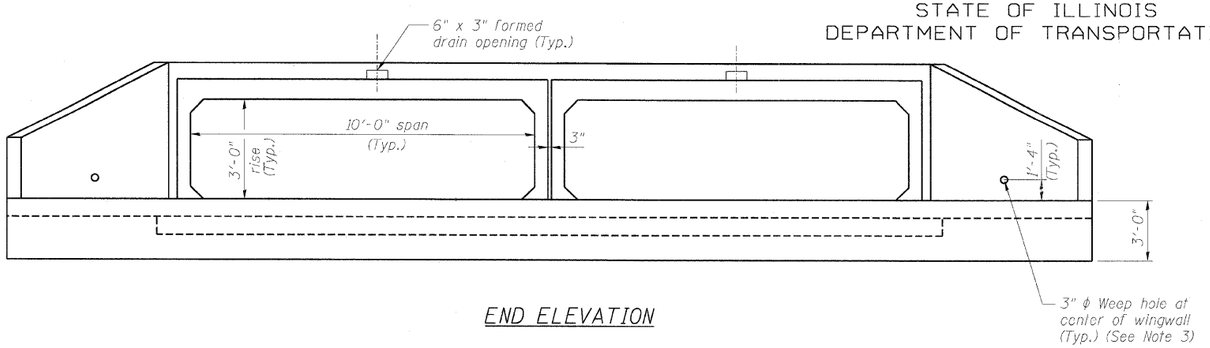
benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

PRECAST BOX SECTION
STRUCTURE NO. 022-2028

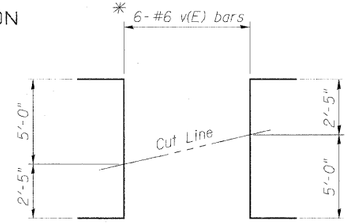
SHEET NO. SB-4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SB-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	396
			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

$TIME$ $FILE$ 12/3/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



END ELEVATION



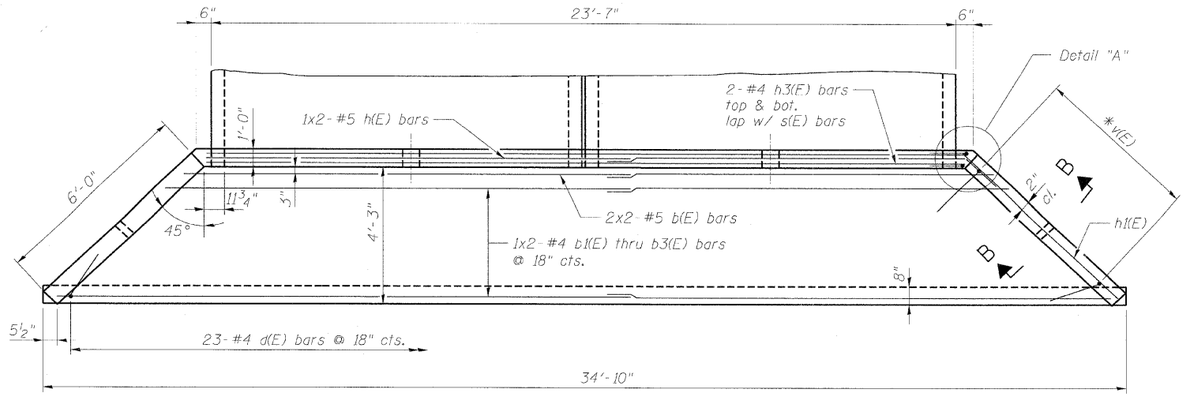
FIELD CUTTING DIAGRAM

* Order v(E) bars full length. Cut to fit as shown and use remaider of bars in other side of apron.

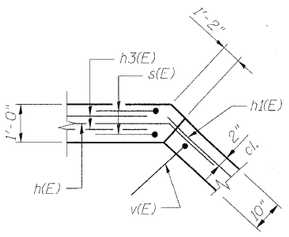
BILL OF MATERIAL **

Bar	Size	No.	Length	Shape
b(E)	#4	8	13'-3"	
b1(E)	#4	4	14'-8"	
b2(E)	#4	4	16'-4"	
b3(E)	#4	4	18'-0"	
d(E)	#4	46	5'-4"	
h(E)	#5	4	16'-3"	
h1(E)	#5	4	7'-3"	
h2(E)	#4	20	6'-10"	
h3(E)	#4	8	24'-3"	
s(E)	#4	8	11'-9"	
v(E)	#6	12	11'-5"	
Item			Unit	Total
Class SI Concrete			C.Y.	19.2
Reinforcement Bars, Epoxy Coated			Lbs.	960

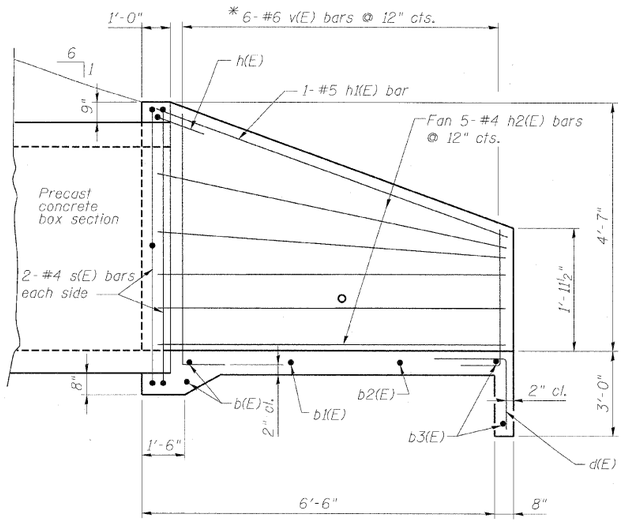
** For two aprons. The quantities shown are for information only.



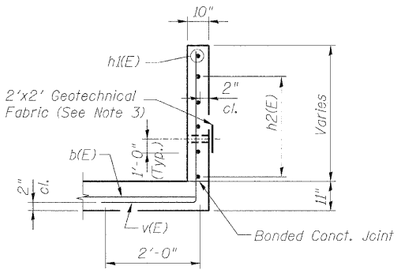
PLAN



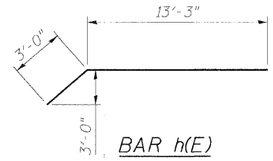
DETAIL "A"



HALF SIDE ELEVATION

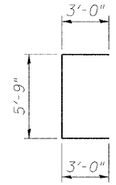


SECTION B-B

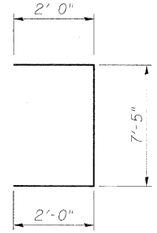


BAR h(E)

BAR d(E)



BAR s(E)



BAR v(E)

NOTES:
1. Bars indicated thus 1x2-#4 etc. indicates 1 line of bars with 2 lengths per line.
2. All construction joints shall be bonded.
3. Cover 3" ϕ weep holes with geotechnical fabric for box culvert end section and precast box culvert.

MIN. BAR LAP
#4 - 1'-8"
#5 - 2'-2"

DESIGNED -	RJT
CHECKED -	EFS
DRAWN -	MB
CHECKED -	EFS

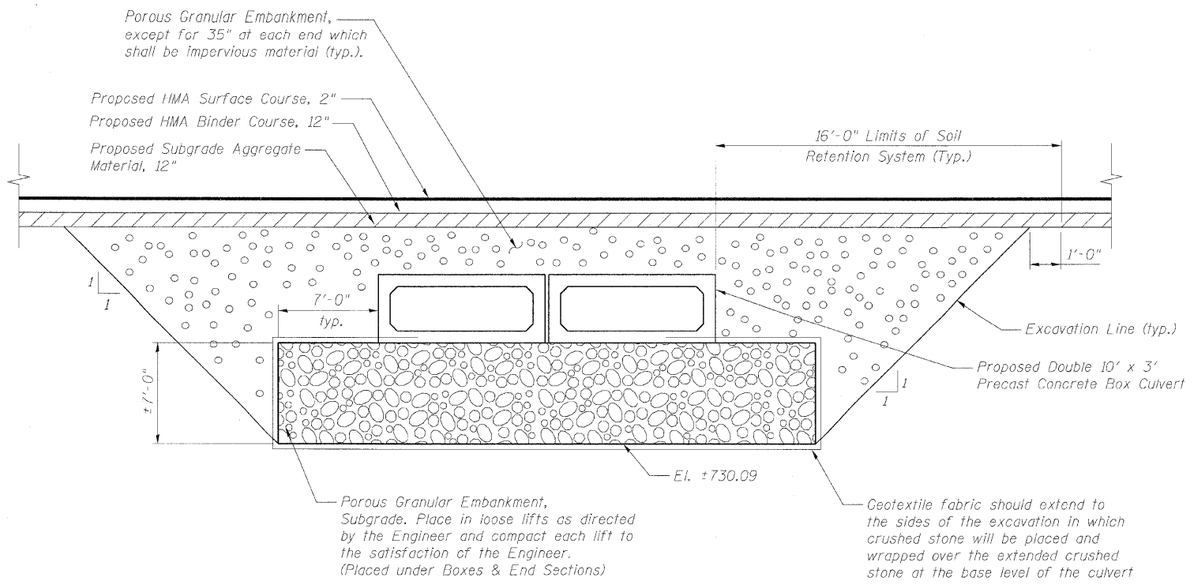
CAST IN PLACE APRON DETAILS
STRUCTURE NO. 022-2028

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SHEET NO. SB-5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SB-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	397
			CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT			

$TIME$ $FILE$ 12/3/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THROUGH PRECAST BOX CULVERT

DESIGNED -	RJT
CHECKED -	EFS
DRAWN -	MB
CHECKED -	EFS

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SECTION THROUGH BOX CULVERT
STRUCTURE NO. 022-2028

SHEET NO. SB-6	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SB-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	398
			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

$TIME$ $FILE$ 12/3/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
Applied GeoScience, Inc.

SOIL BORING LOG

Page 1 of 1

Date 4/21/10

ROUTE IL Route 56 DESCRIPTION Butterfield Rd (Winfield Rd to Naperville Rd) LOGGED BY MG

SECTION (57+58) WRS-2 LOCATION Butterfield Road, SEC. 32, TWP. 39N, RNG. 10E

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO.
Station

BORING NO. CB-7
Station 348+82.98
Offset 55.92ft LT
Ground Surface Elev. 738.12 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 727.1 ft ▼
Upon Completion 711.6 ft ▽
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Topsoil & silty clay, trace roots, dark gray 737.12			24.1
Topsoil, sandy loam, black, soft	2		
	2	0.5	38.6
	3		
735.12			
Silty loam, trace organic, sand & gravel, brown-gray, soft	2		
	1	0.3	40.0
-5	2		
732.12			
Silty loam, some organic, trace gravel, dark gray, stiff	1		
	1	1.1	50.9
	1		
730.12			
Silty loam, with sand seams, trace gravel, dark gray, stiff to soft	2		
	1	1.1	27.3
-10	1		
▼			
	1		
	1	1.0	21.3
	2		
	2		
	2	0.3	21.1
-15	4		
722.12			
Fine to coarse sand, some silt & clay, gray, wet, medium dense	2		
	3		18.9
	4		
	2		
	3		16.0
-20	4		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Fine to coarse sand, some silt & clay, gray, wet, medium dense *(continued)* 716.62			
	3		
Silty clay, trace gravel, gray, very stiff	6	2.4	19.0
	7		
-25	7	3.0	21.8
	10		
▽			
708.12 -30	7		
End of Boring			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

SOIL BORING LOG

Page 1 of 1

Date 4/21/10

ROUTE IL Route 56 DESCRIPTION Butterfield Rd (Winfield Rd to Naperville Rd) LOGGED BY MG

SECTION (57+58) WRS-2 LOCATION Butterfield Road, SEC. 32, TWP. 39N, RNG. 10E

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO.
Station

BORING NO. CB-8
Station 348+79.36
Offset 15.54ft LT
Ground Surface Elev. 738.64 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 720.1 ft ▼
Upon Completion 715.6 ft ▽
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Topsoil, sandy loam, black 737.64			
Silty clay & topsoil, dark gray, very stiff (FILL)	4		
	4	2.3	31.8
735.64			
Silty loam, light brown & gray, soft (FILL)	2		
	2	0.3	32.5
733.64 -5	2		
Silty clay, trace sand & gravel, gray, stiff	1		
	2	1.0	24.1
	2		
	4		
	2	1.1	22.1
-10	3		
	2		
	4	1.7	22.5
	7		
725.64			
Silty clay, trace gravel, gray, very stiff	3		
	4	2.2	21.5
-15	6		
722.64			
Sandy clay, trace gravel, gray, medium stiff	2		
	3	0.8	10.8
	4		
720.64			
Silty clay, trace gravel, gray, stiff to very stiff	2		
▼			
	5	1.2	17.4
-20	6		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Silty clay, trace gravel, gray, stiff to very stiff *(continued)*	3		
	4	2.3	16.1
	6		
715.64 ▽			
Silty clay, trace gravel, gray, stiff	3		
-25	4	1.0	17.7
	6		
	4		
	6	1.0	18.1
708.64 -30	7		
End of Boring			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

SOIL BORING LOG

Page 1 of 1

Date 4/19/10

ROUTE IL Route 56 DESCRIPTION Butterfield Rd (Winfield Rd to Naperville Rd) LOGGED BY MG

SECTION (57+58) WRS-2 LOCATION Butterfield Road, SEC. 32, TWP. 39N, RNG. 10E

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO.
Station

BORING NO. CB-9
Station 349+07.41
Offset 67.60ft LT
Ground Surface Elev. 742.25 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 731.3 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Silty clay & topsoil, dark gray 741.25			20.6
Topsoil, sandy loam & silty clay, dark gray, stiff	2		
	3	1.9	28.9
	4		
	2		
	2	1.3	25.9
-5	3		
736.25			
Sandy loam, trace gravel, dark brown, stiff to very stiff	1		
	1	1.8	30.5
	2	3.1	
734.25			
Silty loam, trace gravel, dark gray, wet, medium stiff	2		
	1	0.6	20.1
-10	3		
▼			
730.75	3		
Silty clay, trace gravel, gray, soft	3	0.5	26.9
	4		
729.25			
Silty clay, with sand seam, trace gravel, gray, very stiff	3		
	5	3.4	21.7
727.25 -15	7		
Sandy clay, trace gravel, gray, very stiff	3		
	4	2.9	21.9
	7		
724.25			
Silty loam, trace gravel, gray, wet, stiff	3		
	4	1.6	22.8
-20	4		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Silty loam, trace gravel, gray, wet, stiff *(continued)* 721.25			
	2		
Silty clay, some stone, gray, very stiff to stiff	3	2.4	14.5
	5		
	3		
-25	4	1.1	17.3
	5		
	3		
	4	1.1	18.0
712.25 -30	5		
End of Boring			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

DESIGNED	RJT
CHECKED	EFS
DRAWN	MB
CHECKED	EFS

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SOIL BORING LOGS
STRUCTURE NO. 022-2028

SHEET NO. SB-7	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SB-7 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	399
			CONTRACT NO. 62419		
		ILLINOIS FED. AID PROJECT			

$FILE$
$TIME$
12/3/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHMARKS:

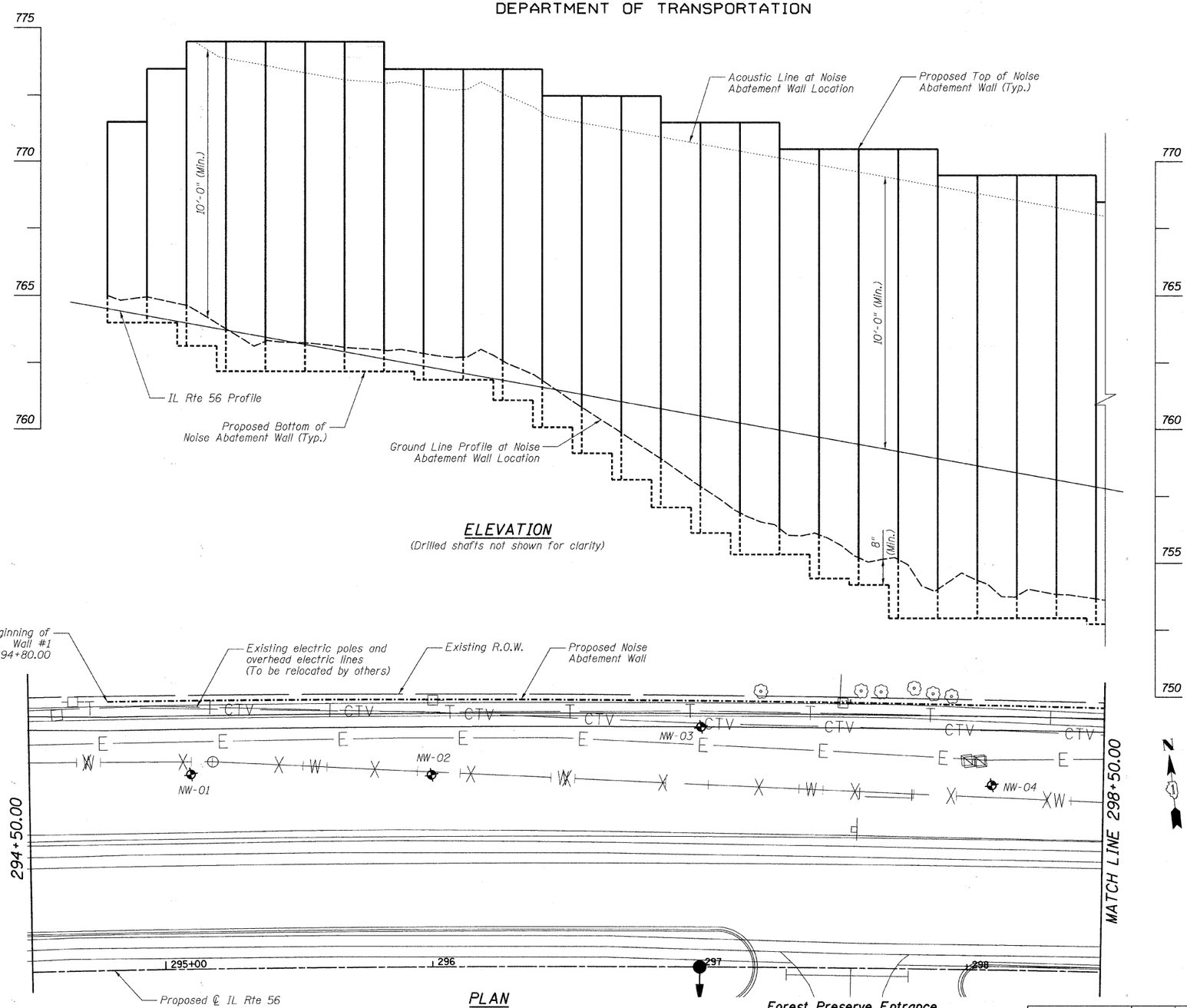
1. "□" on end of Mast Arm, SE quadrant of IL Rte 56 and Wiesbrook Rd Elev. 771.63

2. "□" in foundation of Mast Arm, SE quadrant of IL Rte 56 and Orchard Rd Elev. 744.94

Existing Strucure: None

Staging: See Roadway MOT Plans

Salvage: None



ELEVATION
(Drilled shafts not shown for clarity)

PLAN

4 2 0 4
SCALE : 1" = 2'-0"
VERTICAL SCALE

40 20 0 40
SCALE : 1" = 20'-0"
HORIZONTAL SCALE

INDEX OF SHEETS

1-17	Geneal Plan and Elevation
18	General Data
19	Alignment Plan
20	Noise Abatement Wall Details
21-30	Soil Boring Logs

LEGEND

- Existing Individual Tree
- Boring Location
- Existing Electric Pole
- Existing Fence
- Existing Right Of Way
- CTV — Existing Underground TV Cable
- E — Existing Underground Electric Cable
- G — Existing Underground Gas Pipe Line
- W — Existing Underground Watermain
- T — Existing Underground Telephone Line
- FO — Existing Underground Fiber Optic Cable
- Existing Underground Drainage Utility
- Proposed Underground Drainage Utility

N

STATE OF ILLINOIS
MARK R. BENDOK
081-006646
Lombard, IL
STRUCTURAL ENGINEER

Expiration Date 11-30-2012
DATE: 12/3/2010

DESIGNED -	RJT
CHECKED -	MRB
DRAWN -	MB
CHECKED -	MRB

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 3733

SHEET NO. N1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N30 SHEETS	365	(57 & 58)WRS-2	DUPAGE	681	400
			CONTRACT NO. 62419		
		ILLINOIS	FED. AID PROJECT		

GENERAL PLAN AND ELEVATION 1 OF 17
NOISE ABATEMENT WALL

x:\3700s\3733\Engineering_Documents_Phase_II\Noise_Abatement_Wall\Final\D62419-naw-gpe01.dgn
12/3/2010 11:56:29 AM