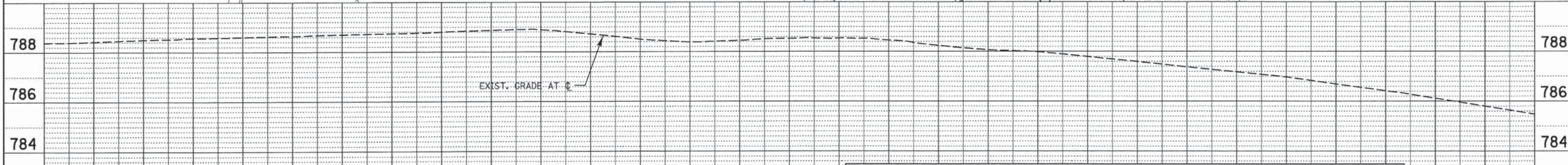
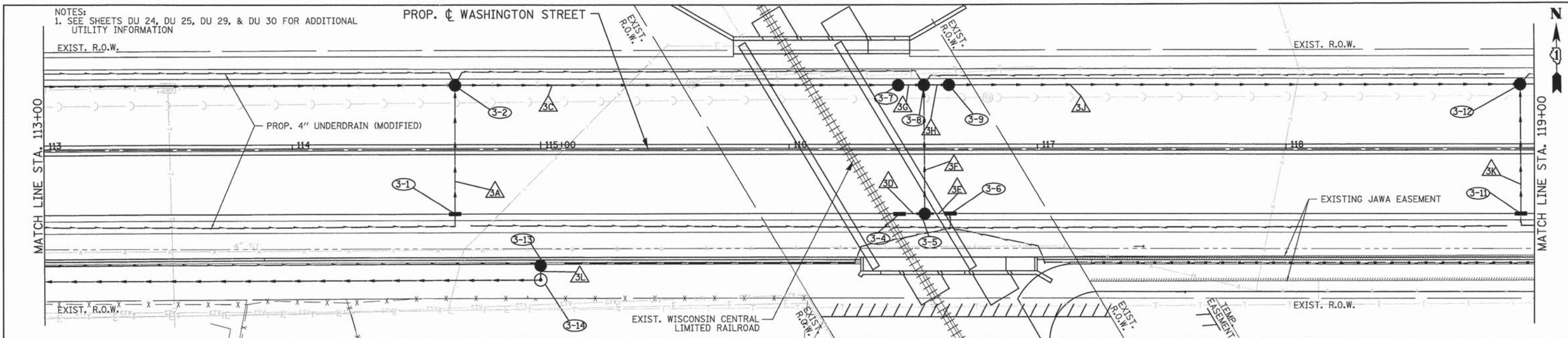


PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	NOTE BOOK	
	NO.	
	NO. OF WAY CHECKED	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	NOTE BOOK	
	NO.	
	NO. OF WAY CHECKED	
	STRUCTURE NOTATION'S CIV/D	



STORM SEWER SCHEDULE						
PIPE NO.	FROM	TO	LENGTH (FT)	DIA. (IN)	TYPE	TRENCH BACKFILL (CU YD)
3A	3-1	3-2	49	12	STORM SEW CL A 2 12	9.5
3C	3-2	3-7	175	24	STORM SEW CL A 2 24	173.0
3D	3-4	3-5	7	12	STORM SEW CL A 2 12	1.4
3E	3-6	3-5	7	12	STORM SEW CL A 2 12	1.4
3F	3-5	3-8	49	15	STORM SEW CL A 1 15	10.4
3G	3-7	3-8	7	30	STORM SEW CL A 2 30	4.2
3H	3-8	3-9	7	30	STORM SEW CL A 2 30	0.14
3J	3-9	3-12	226	30	STORM SEW CL A 2 30	292.0
3K	3-11	3-12	49	12	STORM SEW CL A 2 12	9.5
3L	3-13	3-14	2	12	STORM SEW CL A 2 12	0.5

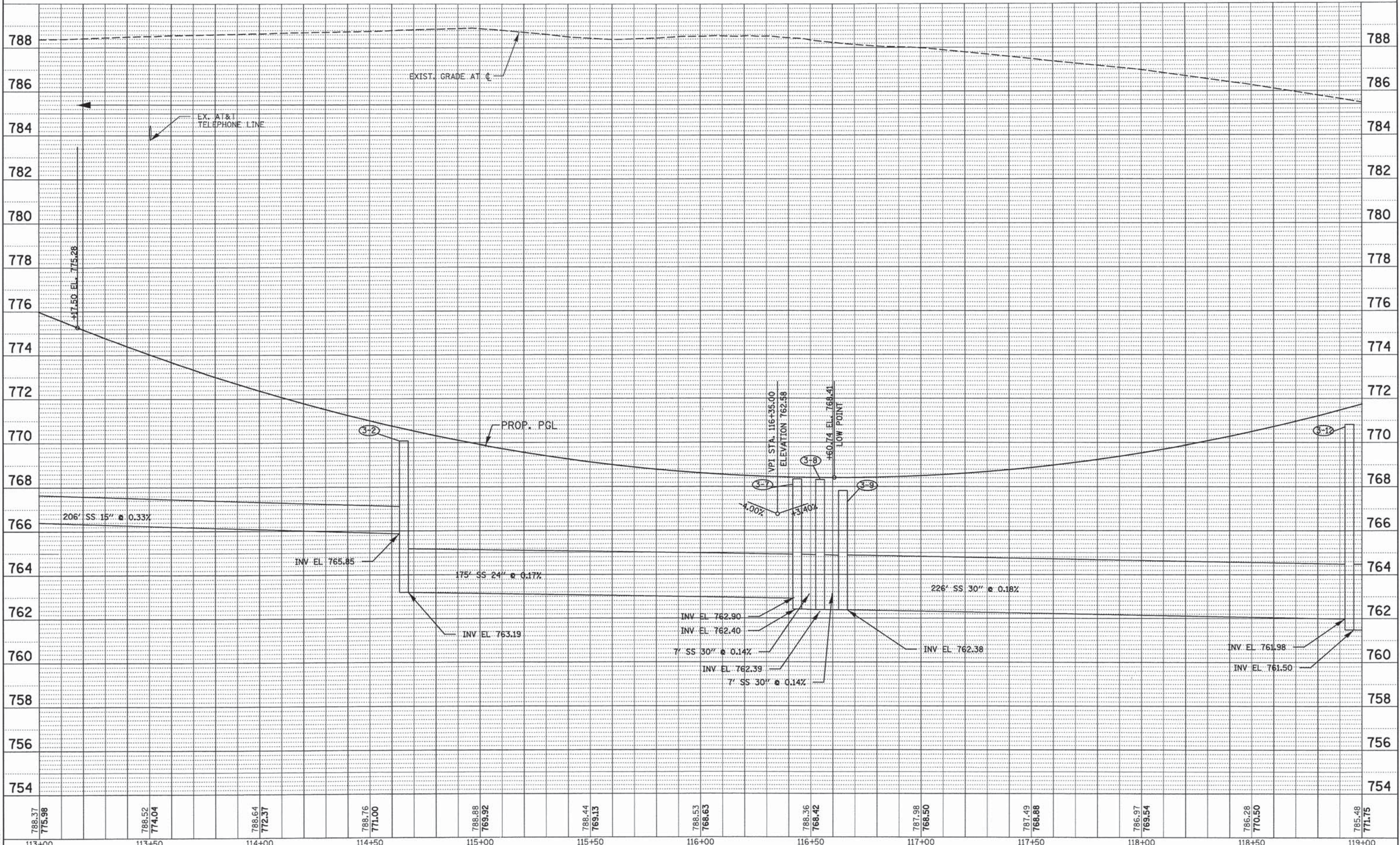
DRAINAGE STRUCTURE SCHEDULE								
STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	RIM ELEV.	INVERT (N)	INVERT (S)	INVERT (W)	INVERT (E)
3-1	INLETS TA T24F&G	114+65.56	26.00 RT	770.28	766.12			
3-2	CB TA 5 DIA T24F&G	114+65.52	26.00 LT	770.28		765.90	765.85	763.19
3-4	INLETS TA T24F&G	116+44.43	26.10 RT	768.48			764.16	764.16
3-5	CB TA 4 DIA T24F&G	116+54.80	26.08 RT	768.60	764.16		764.31	764.16
3-6	INLETS TA T24F&G	116+64.95	25.94 RT	768.48			762.90	762.40
3-7	CB TA 5 DIA T24F&G	116+43.93	25.94 LT	768.48		764.00	762.39	762.39
3-8	CB TA 5 DIA T24F&G	116+54.30	25.97 LT	768.60			762.38	762.38
3-9	CB TA 5 DIA T24F&G	116+64.66	25.95 LT	768.48				
3-11	INLETS TA T24F&G	118+94.60	26.00 RT	771.14	766.97		766.75	761.50
3-12	CB TA 5 DIA T24F&G	118+94.36	26.01 LT	771.14		780.84	780.83	
3-13	CB TA 4 DIA T10F&G	115+00.00	46.75 RT	785.13				
3-14	MAN TA 4 DIA T11 CL	115+00.00	52.68 RT	785.46				

SEE DU 4 FOR DRAINAGE PROFILE

NOTES:
1. SEE SHEET DU 24, DU 25, DU 29, & DU 30 FOR ADDITIONAL UTILITY INFORMATION

DATE	BY
PLAN	REVISIONS
	PLOTTED
	ALIGNMENT CHECKED
	NOTE BOOK NO.
	STUDY FILE NAME

DATE	BY
PROFILE	GRADES
	CHECKED
	BLM. NOTED
	STRUCTURE NOTATIONS OK'D
	NO.



PENTABLE = #PENTBLA#

PATRICK ENGINEERING INC.
4970 VARSITY DRIVE
LISLE, IL 60532
patrickengineering.com

USER NAME = eocinVB(Rdy_Lista)
PLOT CONFIG = PDF(Grey_Large.plt)
PLOT SCALE = 1:20
PLOT DATE = 7/16/2014 5:36:16 PM

DESIGNED - JWM
DRAWN - JWM
CHECKED - EYC
DATE - 6/30/2014

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
DRAINAGE PROFILE**

SCALE: 1"=20' SHEET NO. DU 4 OF 37 STA. 113+00 TO STA. 119+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	102
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			61A63	

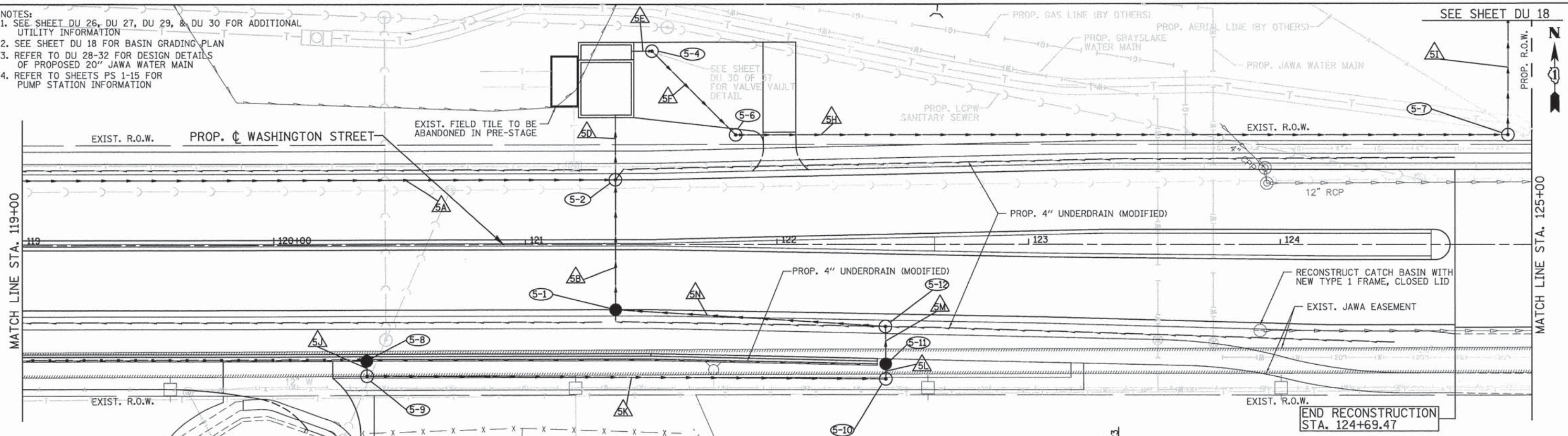
G:\LCOOT\21158_884\Drawings\shots\Draw\5-D-rpp_84_28scale.dgn

- NOTES:
- SEE SHEET DU 26, DU 27, DU 29, & DU 30 FOR ADDITIONAL UTILITY INFORMATION
 - SEE SHEET DU 18 FOR BASIN GRADING PLAN
 - REFER TO DU 28-32 FOR DESIGN DETAILS OF PROPOSED 20" JAWA WATER MAIN
 - REFER TO SHEETS PS 1-15 FOR PUMP STATION INFORMATION

SEE SHEET DU 18

DATE	BY
DATE	BY
DATE	BY

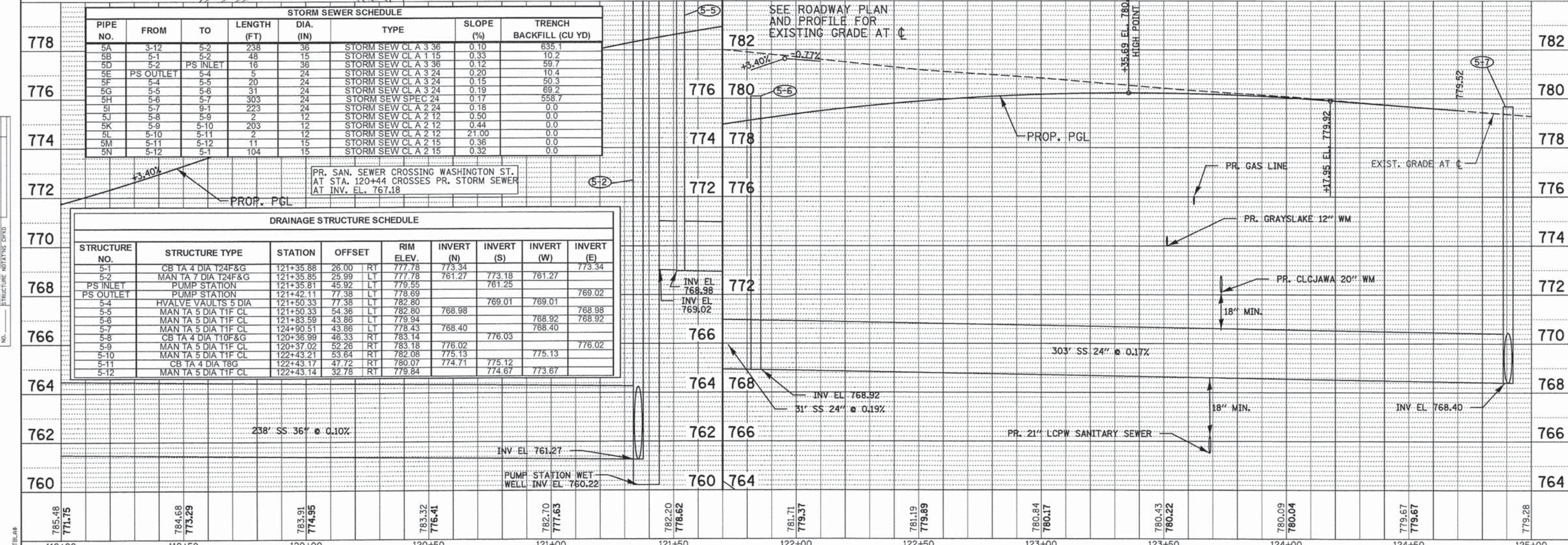
DATE	BY
DATE	BY
DATE	BY



PIPE NO.	FROM	TO	LENGTH (FT)	DIA. (IN)	TYPE	SLOPE (%)	TRENCH BACKFILL (CU YD)
5A	3-12	5-2	238	36	STORM SEW CL A 3 36	0.10	635.1
5B	5-1	5-2	48	15	STORM SEW CL A 1 15	0.33	10.2
5D	5-2	PS INLET	16	36	STORM SEW CL A 3 36	0.12	59.7
5E	PS OUTLET	5-4	5	24	STORM SEW CL A 3 24	0.20	10.4
5F	5-4	5-5	20	24	STORM SEW CL A 3 24	0.15	50.3
5G	5-5	5-6	31	24	STORM SEW CL A 3 24	0.19	69.2
5H	5-6	5-7	303	24	STORM SEW SPEC 24	0.17	558.7
5I	5-7	9-1	223	24	STORM SEW CL A 2 24	0.18	0.0
5J	5-8	5-9	2	12	STORM SEW CL A 2 12	0.50	0.0
5K	5-9	5-10	203	12	STORM SEW CL A 2 12	0.44	0.0
5L	5-10	5-11	2	12	STORM SEW CL A 2 12	21.00	0.0
5M	5-11	5-12	11	15	STORM SEW CL A 2 15	0.36	0.0
5N	5-12	5-1	104	15	STORM SEW CL A 2 15	0.32	0.0

STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	RIM ELEV.	INVERT (N)	INVERT (S)	INVERT (W)	INVERT (E)
5-1	CB TA 4 DIA T24F&G	121+35.88	26.00 RT	777.78	773.34	773.18	761.27	773.34
5-2	MAN TA 7 DIA T24F&G	121+35.85	25.99 LT	777.78	761.27	761.25	761.25	761.25
PS INLET	PUMP STATION	121+35.81	45.92 LT	779.55	769.01	769.01	769.01	769.01
PS OUTLET	PUMP STATION	121+42.11	77.38 LT	778.69	769.01	769.01	769.01	769.01
5-4	HVALVE VAULTS 5 DIA	121+50.33	77.38 LT	782.80	768.98	768.92	768.92	768.92
5-5	MAN TA 5 DIA T1F CL	121+50.33	54.36 LT	782.80	768.40	768.40	768.40	768.40
5-6	MAN TA 5 DIA T1F CL	121+83.59	43.86 LT	779.94	776.03	776.03	776.03	776.03
5-7	MAN TA 5 DIA T1F CL	124+90.51	43.86 LT	778.43	774.67	774.67	774.67	774.67
5-8	CB TA 4 DIA T10F&G	120+36.99	46.33 RT	783.14	776.02	776.02	776.02	776.02
5-9	MAN TA 5 DIA T1F CL	120+37.02	52.26 RT	783.18	775.13	775.13	775.13	775.13
5-10	MAN TA 5 DIA T1F CL	122+43.21	53.64 RT	782.08	774.67	774.67	774.67	774.67
5-11	CB TA 4 DIA T8G	122+43.17	47.72 RT	780.07	774.67	774.67	774.67	774.67
5-12	MAN TA 5 DIA T1F CL	122+43.14	32.78 RT	779.84	774.67	774.67	774.67	774.67

PR. SAN. SEWER CROSSING WASHINGTON ST. AT STA. 120+44 CROSSES PR. STORM SEWER AT INV. EL. 767.18



785.48	771.75	784.68	773.29	783.91	774.95	783.32	776.41	782.70	777.63	782.20	778.62	781.71	779.37	781.19	779.89	780.84	780.17	780.43	780.22	780.09	780.04	779.67	779.67	779.28
119+00	119+50	120+00	120+50	121+00	121+50	122+00	122+50	123+00	123+50	124+00	124+50	125+00												

PATRICK ENGINEERING INC.
4970 VARSITY DRIVE
LISLE, IL 60532
patrickengineering.com

USER NAME = ecolnV8(Rdy.Lisle)
DESIGNED - JWM
DRAWN - JWM
CHECKED - EYC
DATE - 6/30/2014

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
DRAINAGE PLAN AND PROFILE

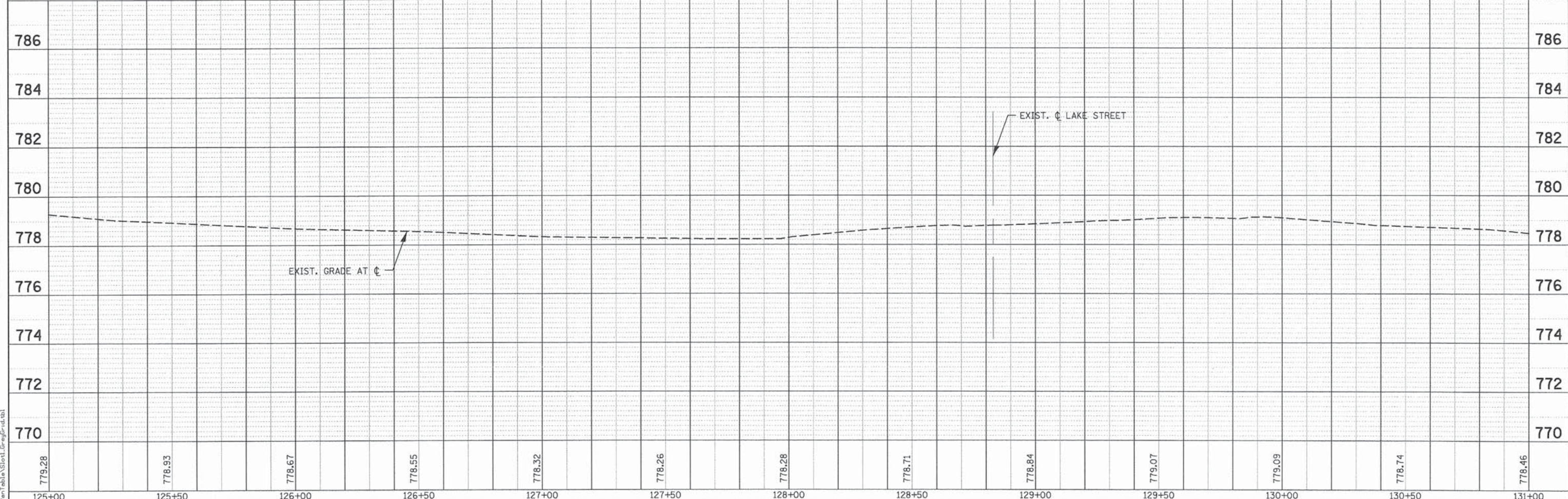
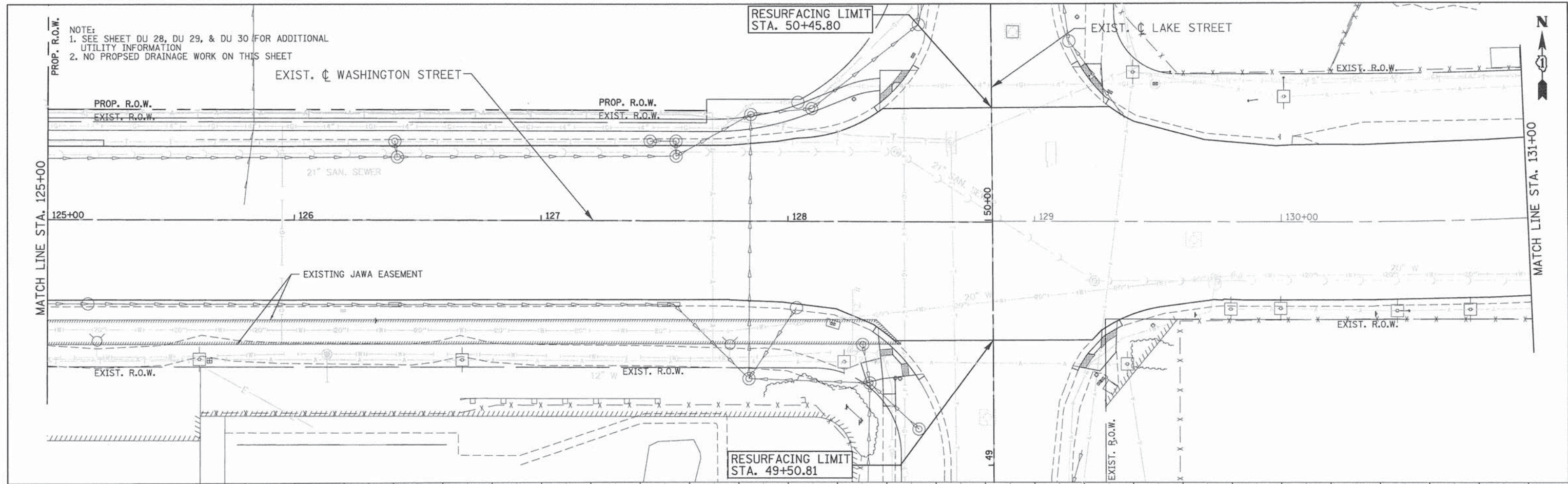
SCALE: 1"=20' SHEET NO. DU 5 OF 37 STA. 119+00 TO STA. 125+00

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 103
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

6:\L\CDOT\21158_084\Drawings\shhs\0-a\5-D-r-pp_05_28scale.dgn

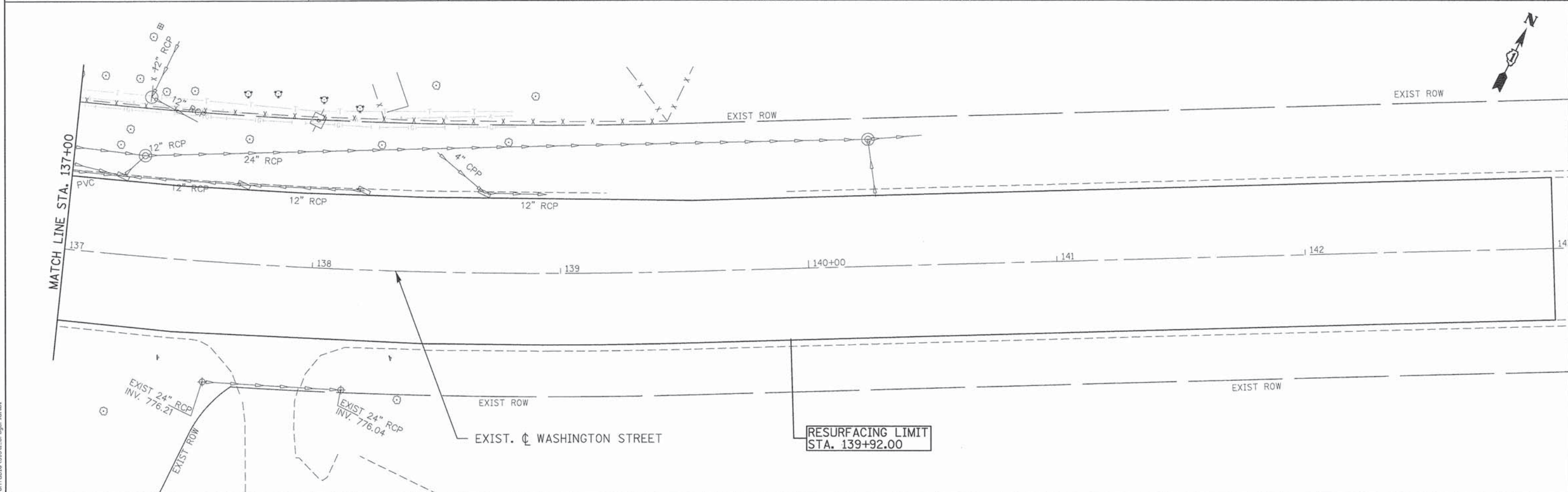
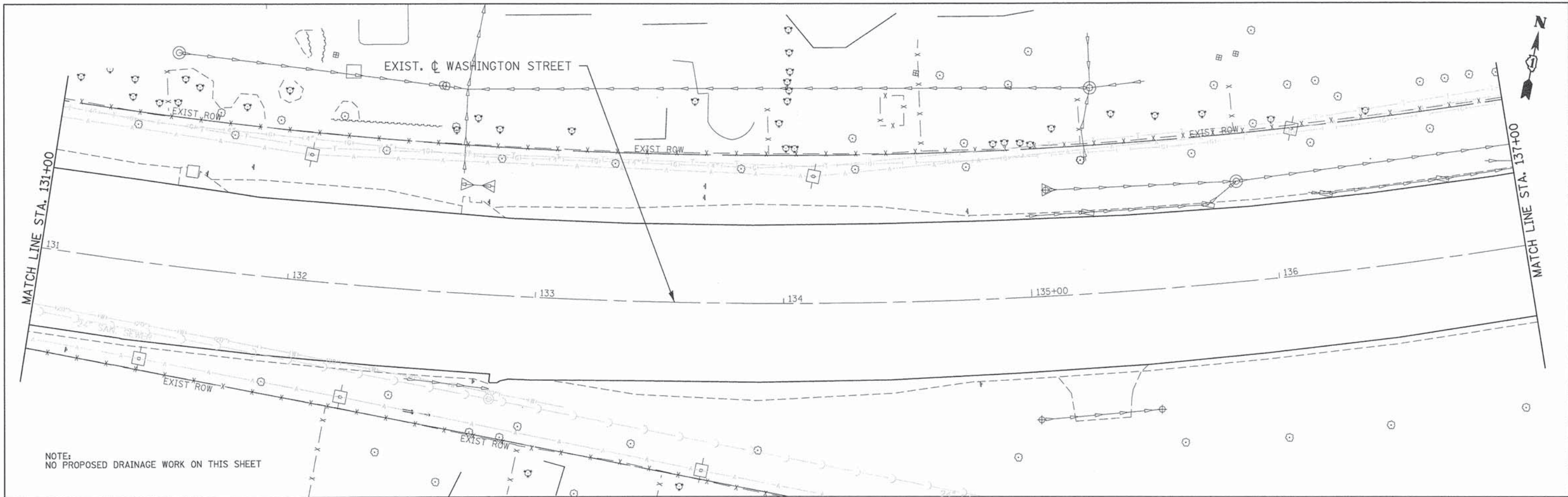
DATE	
BY	
REVISIONS	
1. PLOTTED	
2. CHECKED	
3. FILED	
4. NAME	
5. NO.	
PLAN	
NOTE BOOK	
NO.	

DATE	
BY	
REVISIONS	
1. CHECKED	
2. GRADES	
3. NOTED	
4. STRUCTURE	
5. NOTATIONS	
6. OTHER	
PROFILE	
NOTE BOOK	
NO.	



PENTABLE = ...\\net\table\stortl_0r\ngfr\nt.tbl

779.28	778.93	778.67	778.55	778.32	778.26	778.28	778.71	778.84	779.07	779.09	778.74	778.46									
125+00	125+50	126+00	126+50	127+00	127+50	128+00	128+50	129+00	129+50	130+00	130+50	131+00									
PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com				USER NAME = tkoeppen(Rdwy.Lisle) PLOT CONFIG = PDF(Grey.Small).plt PLOT SCALE = 1:40 PLOT DATE = 7/3/2014 12:21:28 AM				DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014				REVISED - REVISED - REVISED - REVISED -									
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION												F.A.U. RTE. 187		SECTION 11-00121-11-BR		COUNTY LAKE		TOTAL SHEETS 496		SHEET NO. 104	
WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET DRAINAGE PLAN AND PROFILE												SCALE: 1"=20'		SHEET NO. DU 6 OF 37		STA. 125+00 TO STA. 131+00		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		61A63	

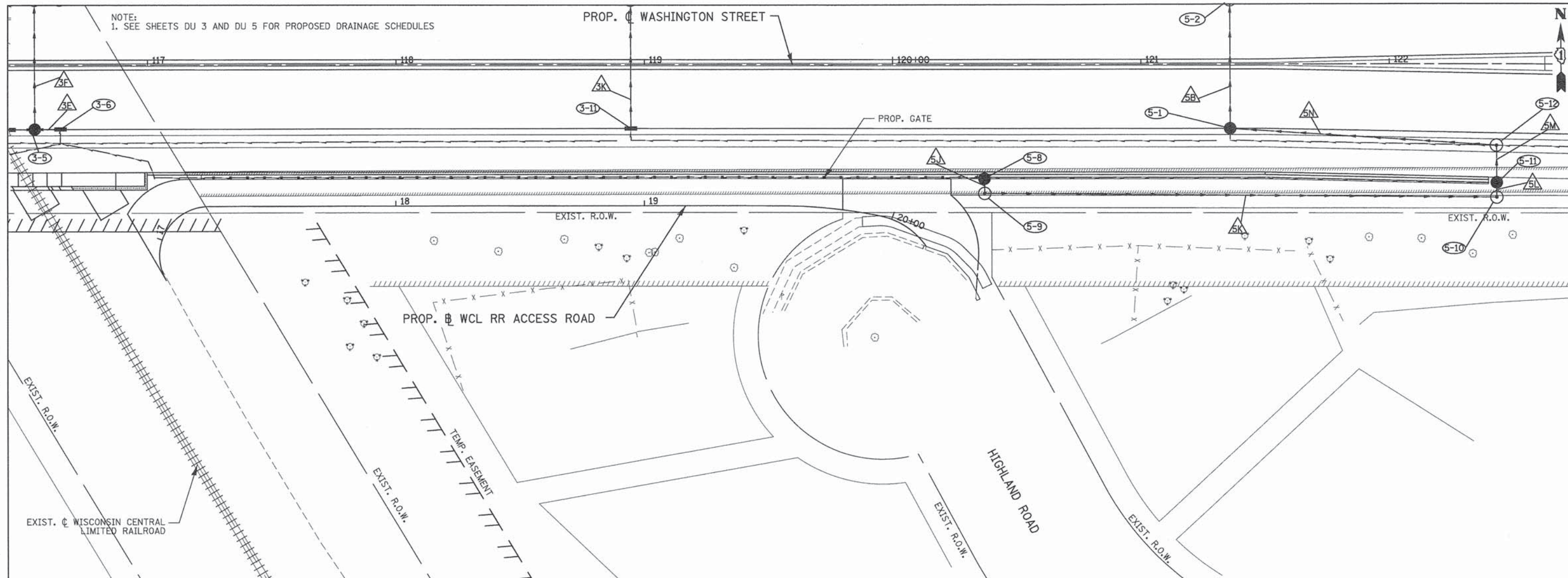


PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen@rdwy.lisle.il.gov PLOT CONFIG = PDF(Grey_Small).plt PLOT SCALE = 1:40 PLOT DATE = 7/3/2014 12:21:45 AM	DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET DRAINAGE PLAN		F.A.U. RTE. 187 SECTION 11-00121-11-BR COUNTY LAKE TOTAL SHEETS 496 SHEET NO. 105 61A63
	SCALE: 1"=20' SHEET NO. DU 7 OF 37 STA. 131+00 TO STA. EOP				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

G:\C001\21150_804\Drawings\shes\Draw\DrainPP_07_20scale.dgn

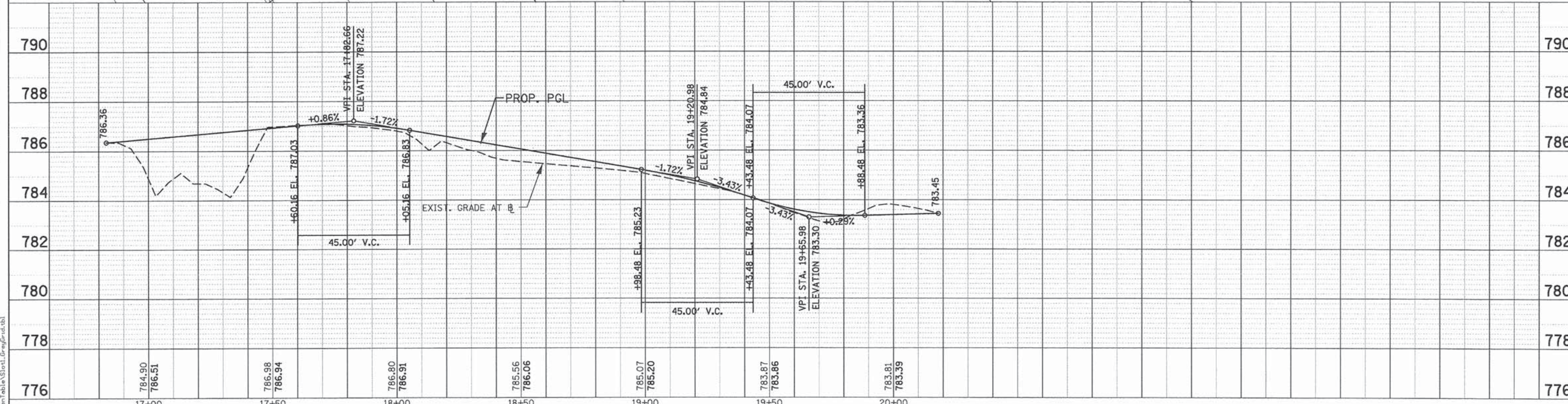
NOTE:
1. SEE SHEETS DU 3 AND DU 5 FOR PROPOSED DRAINAGE SCHEDULES

PROP. WASHINGTON STREET



PLAN	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NO. _____	
	DATE _____	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NO. _____	
	DATE _____	



PENTABLE = ...Pentable\Stort_Gray\Grd4.tbl

PATRICK ENGINEERING
PATRICK ENGINEERING INC.
4970 VARSITY DRIVE
LISLE, IL 60532
patrickengineering.com

USER NAME = tkoeppner\dwy.Lisla	DESIGNED - JWM	REVISED - 3/17/14 MJV
PLOT CONFIG= POF(Grey_Small).plt	DRAWN - JWM	REVISED -
PLOT SCALE = 1:40	CHECKED - EYC	REVISED -
PLOT DATE = 7/3/2014 12:22:02 AM	DATE - 6/30/2014	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

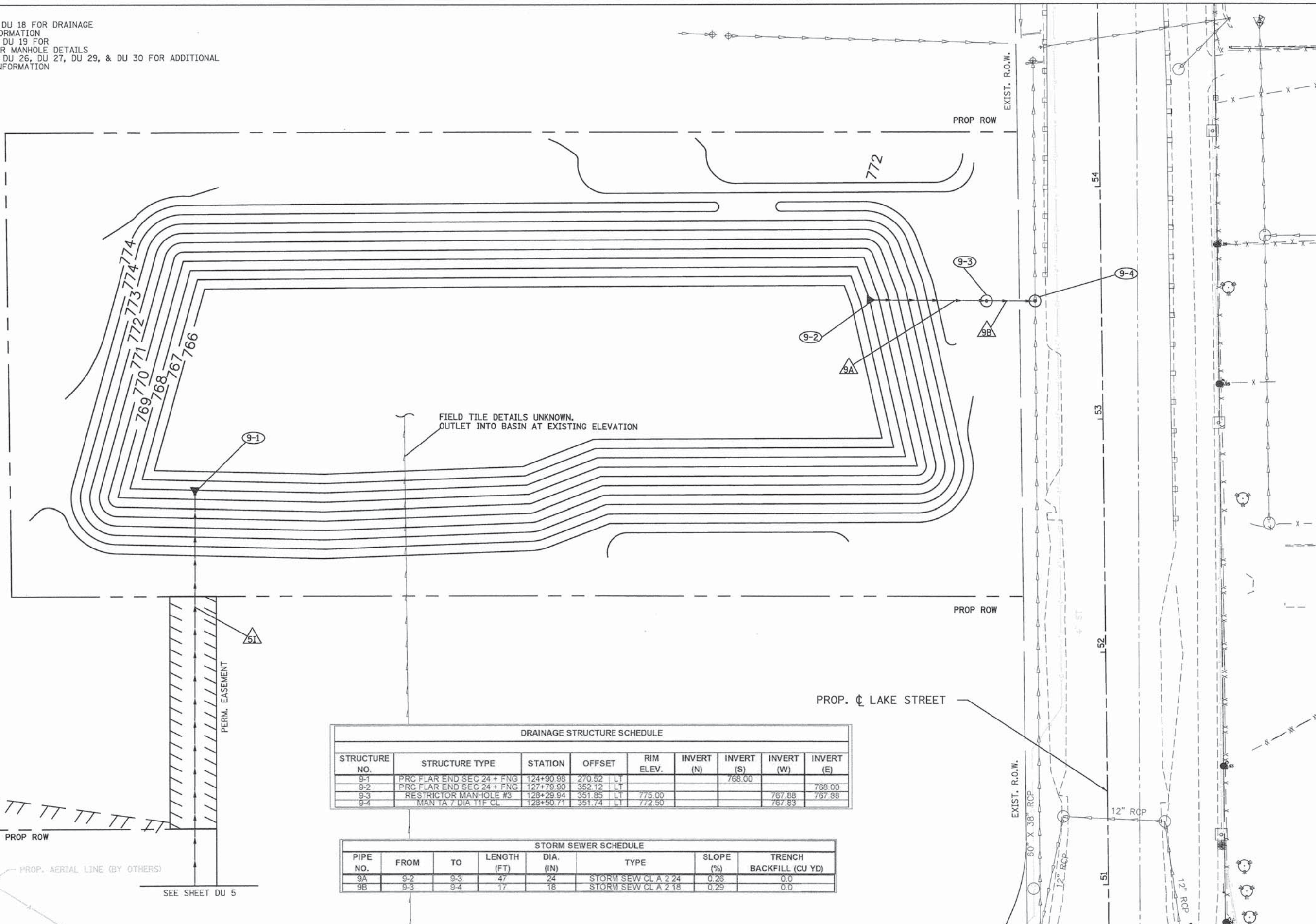
**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
DRAINAGE PLAN AND PROFILE**

SCALE: 1"=20' SHEET NO. DU 8 OF 37 STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	106
61A63				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



- NOTES:
 1. SEE SHEET DU 18 FOR DRAINAGE BASIN INFORMATION
 2. SEE SHEET DU 19 FOR RESTRICTOR MANHOLE DETAILS
 3. SEE SHEET DU 26, DU 27, DU 29, & DU 30 FOR ADDITIONAL UTILITY INFORMATION



DRAINAGE STRUCTURE SCHEDULE									
STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	RIM ELEV.	INVERT (N)	INVERT (S)	INVERT (W)	INVERT (E)	
9-1	PRC FLAR END SEC 24 + FNG	124+90.98	270.52 LT					768.00	
9-2	PRC FLAR END SEC 24 + FNG	127+79.90	352.12 LT						768.00
9-3	RESTRICTOR MANHOLE #3	128+29.94	351.85 LT	775.00				767.88	767.88
9-4	MAN TA 7 DIA 11F CL	128+50.71	351.74 LT	772.50				767.83	

STORM SEWER SCHEDULE							
PIPE NO.	FROM	TO	LENGTH (FT)	DIA. (IN)	TYPE	SLOPE (%)	TRENCH BACKFILL (CU YD)
9A	9-2	9-3	47	24	STORM SEW CL A 2' 24"	0.26	0.0
9B	9-3	9-4	17	18	STORM SEW CL A 2' 18"	0.29	0.0



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 DRAINAGE PLAN

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen@dwg.Lislae	DESIGNED - JWM	REVISED -
	PLOT CONFIG = PDF(Dwg_Small).plt	DRAWN - JWM	REVISED -
	PLOT SCALE = 1:40	CHECKED - EYC	REVISED -
	PLOT DATE = 7/3/2014 12:22:18 AM	DATE - 6/30/2014	REVISED -

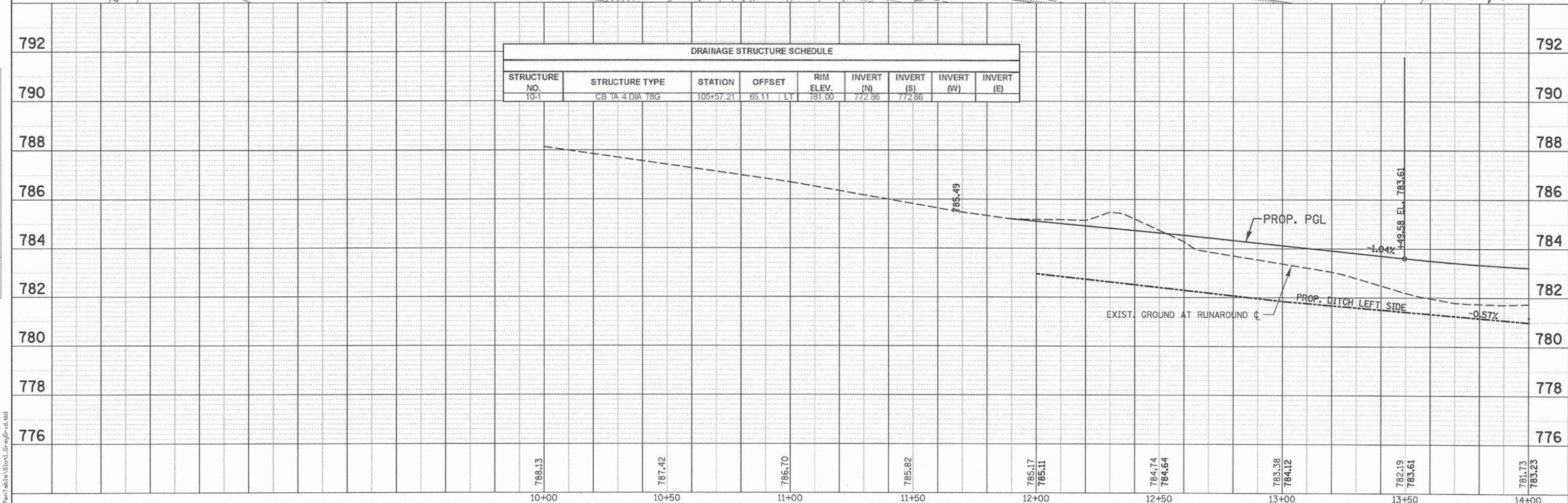
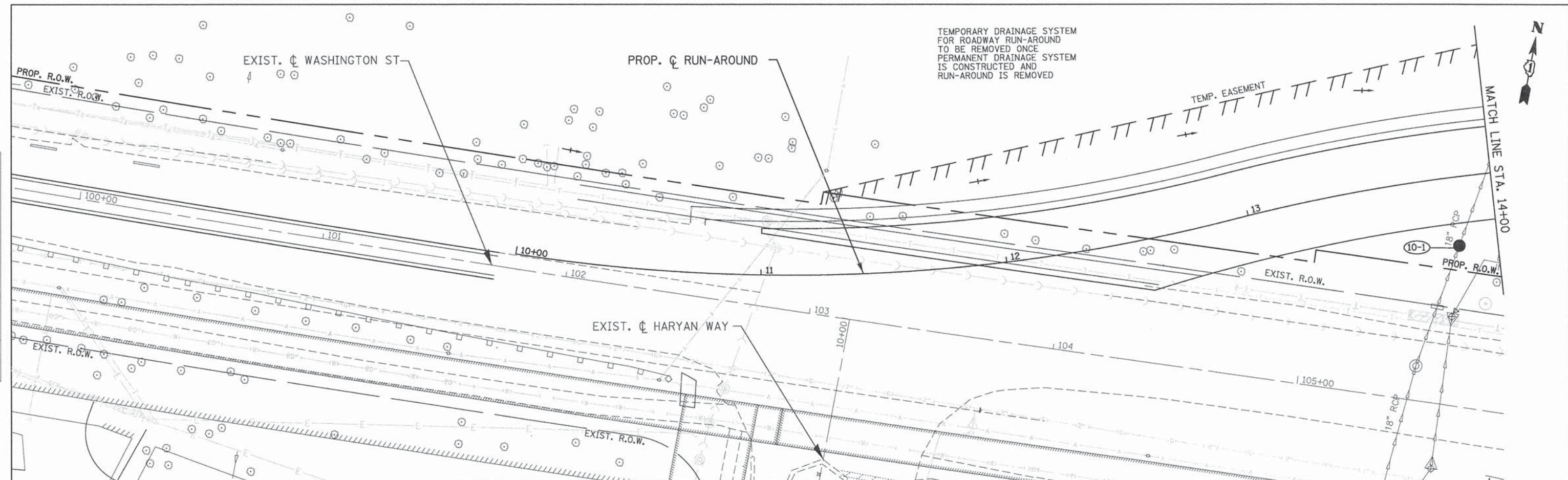
SCALE: 1"=20' SHEET NO. DU 9 OF 37 STA. TO STA.

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 107
61A63				

G:\L\CD01\21158.004\Drawings\shhs\Draw\PP_09_20scale.dgn

REVISIONS	DATE
PLANNED	
ALIGNED	
CHECKED	
NO. OF CHECKS	
DATE	
BY	
PLAN	
NOTE BOOK	
NO.	

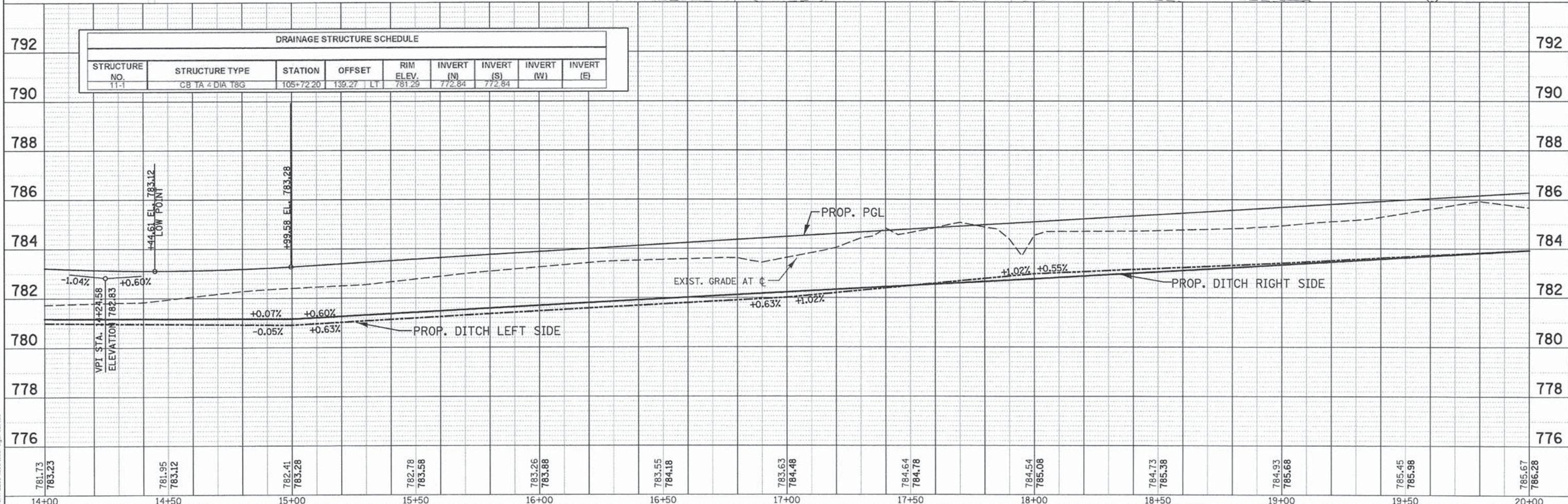
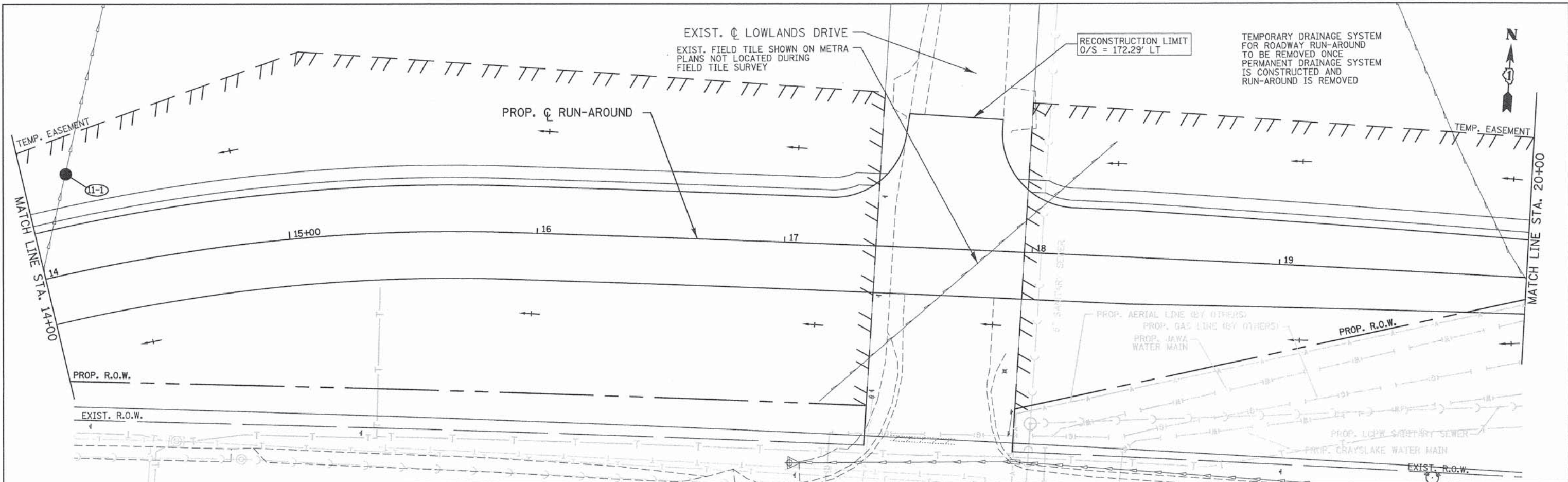
REVISIONS	DATE
PLANNED	
GRADES CHECKED	
B.M. NOTED	
STRUCTURE ADJUSTMENTS	
NO.	
PROFILE	
NOTE BOOK	
NO.	



PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoepfen@adv.Lisle PLOT CONFIG = PDF(Grey_Small).plt PLOT SCALE = 1:40 PLOT DATE = 7/3/2014 12:22:40 AM	DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET DRAINAGE PLAN AND PROFILE RUN-AROUND	F.A.U. RTE. 187 SECTION 11-00121-11-BR COUNTY LAKE TOTAL SHEETS 496 SHEET NO. 108 61A63	SCALE: 1"=20' SHEET NO. DU 10 OF 37 STA. BOP TO STA. 14+00	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT
	G:\L\001\21158_884\Drawings\sheet\Drawings\18_RA_22scale.dgn							

DATE	
BY	
REVISIONS	
NO.	
PLAN	
NO.	
NO.	
NO.	
NO.	
NO.	

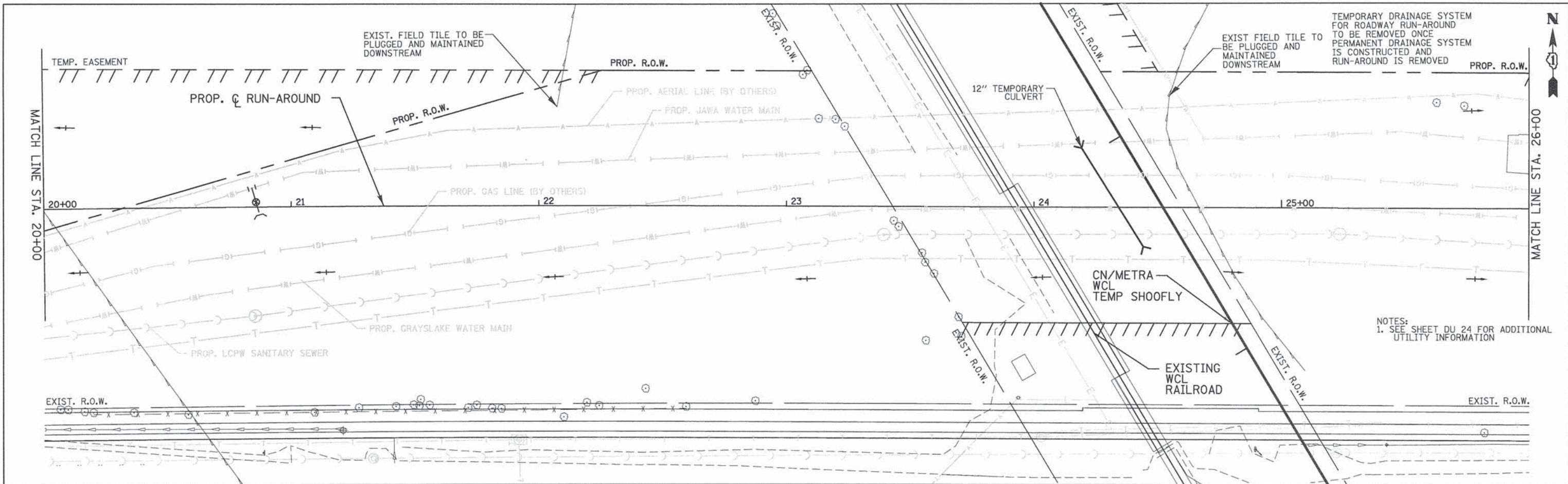
DATE	
BY	
REVISIONS	
NO.	
PROFILE	
NO.	
NO.	
NO.	
NO.	
NO.	



PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen@rdwy.lisle PLOT CONFIG = PDFGrey_Small.plt PLOT SCALE = 1:40 PLOT DATE = 7/3/2014 12:23:06 AM	DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET DRAINAGE PLAN AND PROFILE RUN-AROUND		F.A.U. RTE. 187 SECTION 11-00121-11-BR COUNTY LAKE ILLINOIS FED. AID PROJECT	TOTAL SHEETS 496 SHEET NO. 109 61A63
	SCALE: 1"=20' STA. 14+00 TO STA. 20+00		SHEET NO. DU 11 OF 37	FED. ROAD DIST. NO.					

PENTABLE = ...\\pentable\lort\l...
G:\C001\21158_884\Drawings\shs\Draws\DrPP_11_RA_28scale.dgn

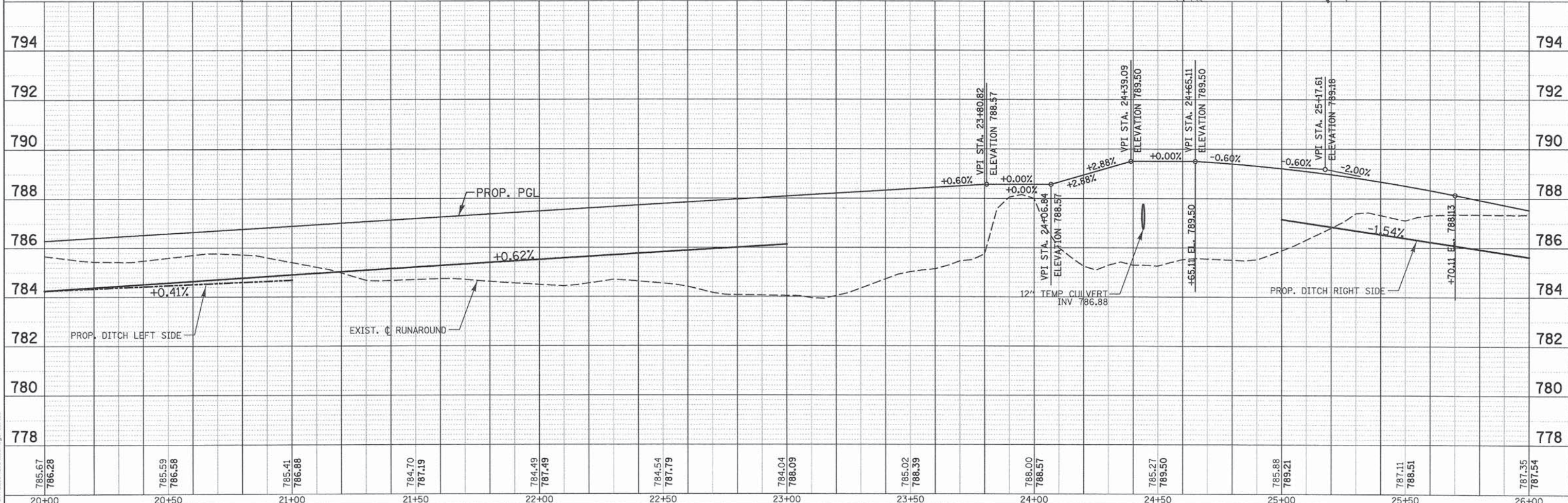
DATE	
BY	
REVIEWED	
ALIGNED	
CHECKED	
NO. OF W.A. CHECKED	
NO. OF S.D. CHECKED	
NO. OF FILE NAME	
PLAN	
NOTE BOOK	
NO.	



TEMPORARY DRAINAGE SYSTEM FOR ROADWAY RUN-AROUND TO BE REMOVED ONCE PERMANENT DRAINAGE SYSTEM IS CONSTRUCTED AND RUN-AROUND IS REMOVED

NOTES:
1. SEE SHEET DU 24 FOR ADDITIONAL UTILITY INFORMATION

DATE	
BY	
REVIEWED	
ALIGNED	
CHECKED	
NO. OF W.A. CHECKED	
NO. OF S.D. CHECKED	
NO. OF FILE NAME	
PROFILE	
NOTE BOOK	
NO.	



PENTABLE = ...\\PentTable\StnL_Dreg\m-dtbl

785.67 786.28	785.59 786.58	785.41 786.98	784.70 787.19	784.49 787.49	784.54 787.79	784.04 788.09	785.02 788.39	788.00 788.57	785.27 789.50	785.88 789.21	787.11 788.51	787.35 787.54
20+00	20+50	21+00	21+50	22+00	22+50	23+00	23+50	24+00	24+50	25+00	25+50	26+00

PATRICK ENGINEERING INC.
4970 VARSITY DRIVE
LUSLE, IL 60532
patrickengineering.com

USER NAME = tkoepfen@rdwy.lisle
PLOT CONFIG = PDF(Dreg_Small.plt)
PLOT SCALE = 1:48
PLOT DATE = 7/3/2014 12:23:26 AM

DESIGNED - JWM
DRAWN - JWM
CHECKED - EYC
DATE - 6/30/2014

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
DRAINAGE PLAN AND PROFILE RUN-AROUND
SCALE: 1"=20' SHEET NO. DU 12 OF 37 STA. 20+00 TO STA. 26+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	110
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			61A63	

DRAINAGE STRUCTURE SCHEDULE								
STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	RIM ELEV.	INVERT (N)	INVERT (S)	INVERT (W)	INVERT (E)
1-1	RESTRICTOR MANHOLE #1	105+25.41	29.39 RT	785.17			778.70	778.70
1-2	WQ STRUCTURE #1	105+32.29	34.68 RT	785.48			778.69	778.69
1-3	MAN TA 7 DIA T1F CL	105+40.01	40.61 RT	785.35	773.00		778.68	773.27
1-4	WQ STRUCTURE #2	105+47.31	34.69 RT	785.54			773.29	773.29
1-5	RESTRICTOR MANHOLE #2	105+53.64	29.56 RT	785.29			773.30	773.30
1-6	PRC FLAR END SEC 24 + FNG	105+58.88	54.56 RT		781.29			
1-7	PRC FLAR END SEC 24 + FNG	105+58.30	47.46 LT			780.52		
1-8	CB TA 4 DIA T8G	105+54.15	50.53 LT	782.10	772.87	772.87		
1-9	INLETS TA T24F&G	106+46.59	29.50 LT	785.66		779.81		
1-10	CB TA 4 DIA T24F&G	106+47.73	29.50 RT	785.66	779.56		773.46	773.46
1-P	PLUG	104+61.83	33.57 RT					778.76
2-1	MAN TA 6 DIA T1F CL	110+45.11	34.54 RT	784.23	778.73		778.73	
2-2	CB TA 4 DIA T8G	110+25.25	48.77 RT	785.08	778.75	778.75		
2-3	CB TA 4 DIA T24F&G	110+45.14	28.50 RT	783.98	778.74	778.74		
2-4	CB TA 4 DIA T24F&G	110+46.16	28.47 LT	783.98		779.27	778.88	
2-5	INLETS TA T24F&G	112+55.33	25.94 RT	777.26	773.00			
2-6	CB TA 4 DIA T24F&G	112+55.75	25.99 LT	777.25		772.78		766.54
2-8	CB TA 4 DIA T24F&G	109+74.63	29.50 LT	785.30			781.16	780.53
2-9	CB TA 4 DIA T24F&G	109+45.60	57.95 LT	785.26			781.33	781.33
2-10	INLETS TA T24F&G	109+09.63	57.96 LT	785.26				781.47
2-11	MAN TA 5 DIA T1F CL	110+25.53	34.45 RT	784.38		778.71	774.10	778.70
2-12	MAN TA 4 DIA T1F CL	110+25.13	54.80 RT	787.02	778.77			778.77
2-13	MAN TA 4 DIA T1F CL	112+58.28	52.32 RT	787.30	779.78		779.78	779.78
2-14	CB TA 4 DIA T10F&G	112+58.29	46.39 RT	787.10		779.79		
3-1	INLETS TA T24F&G	114+65.56	26.00 RT	770.28	766.12			
3-2	CB TA 5 DIA T24F&G	114+65.52	26.00 LT	770.28		765.90	765.85	763.19
3-4	INLETS TA T24F&G	116+44.43	26.10 RT	768.48				764.31
3-5	CB TA 4 DIA T24F&G	116+54.80	26.08 RT	768.60	764.16		764.16	764.16
3-6	INLETS TA T24F&G	116+64.95	25.94 RT	768.48			764.31	
3-7	CB TA 5 DIA T24F&G	116+43.93	25.94 LT	768.48			762.90	762.40
3-8	CB TA 5 DIA T24F&G	116+54.30	25.97 LT	768.60		764.00	762.39	762.39
3-9	CB TA 5 DIA T24F&G	116+64.66	25.95 LT	768.48			762.38	762.38
3-11	INLETS TA T24F&G	118+94.60	26.00 RT	771.14	766.97			
3-12	CB TA 5 DIA T24F&G	118+94.36	26.01 LT	771.14		766.75	761.98	761.50
3-13	CB TA 4 DIA T10F&G	115+00.00	46.75 RT	785.13		780.84		
3-14	MAN TA 4 DIA T1F CL	115+00.00	52.68 RT	785.46	780.83		780.83	
5-1	CB TA 4 DIA T24F&G	121+35.88	26.00 RT	777.78	773.34			773.34
5-2	MAN TA 7 DIA T24F&G	121+35.85	25.99 LT	777.78	761.27	773.18	761.27	
PS INLET	PUMP STATION	121+35.81	45.92 LT	779.55		761.25		
PS OUTLET	PUMP STATION	121+42.11	77.38 LT	778.69				769.02
5-4	HVALVE VAULTS 5 DIA	121+50.33	77.38 LT	782.80		769.01	769.01	
5-5	MAN TA 5 DIA T1F CL	121+50.33	54.36 LT	782.80	768.98			768.98
5-6	MAN TA 5 DIA T1F CL	121+83.59	43.86 LT	779.94			768.92	768.92
5-7	MAN TA 5 DIA T1F CL	124+90.51	43.86 LT	778.43	768.40		768.40	
5-8	CB TA 4 DIA T10F&G	120+36.99	46.33 RT	783.14		776.03		
5-9	MAN TA 5 DIA T1F CL	120+37.02	52.26 RT	783.18	776.02			776.02
5-10	MAN TA 5 DIA T1F CL	122+43.21	53.64 RT	782.08	775.13		775.13	
5-11	CB TA 4 DIA T8G	122+43.17	47.72 RT	780.07	774.71	775.12		
5-12	MAN TA 5 DIA T1F CL	122+43.14	32.78 RT	779.84		774.67	773.67	
9-1	PRC FLAR END SEC 24 + FNG	124+90.98	270.52 LT			768.00		
9-2	PRC FLAR END SEC 24 + FNG	127+79.90	352.12 LT					768.00
9-3	RESTRICTOR MANHOLE #3	128+29.94	351.85 LT	775.00			767.88	767.88
9-4	MAN TA 7 DIA T1F CL	128+50.71	351.74 LT	772.50			767.83	
10-1	CB TA 4 DIA T8G	105+57.21	65.11 LT	781.00	772.86	772.86		
11-1	CB TA 4 DIA T8G	105+72.20	139.27 LT	781.29	772.84	772.84		
13-1	PRC FLAR END SEC 18	120+91.99	146.93 LT			777.00		
13-2	PRC FLAR END SEC 18	120+79.58	80.50 LT		779.75			

- NOTES:
- PIPE UNDERDRAIN (SUB-SURFACE DRAIN) OPENINGS SHALL BE PRECAST INTO PROPOSED STRUCTURES.
 - COMPREHENSIVE DRAINAGE STRUCTURE INCLUDES ALL SCHEDULES SHOWN ON PLAN & PROFILE SHEETS
 - SEE DETAIL SHEETS FOR ADDITIONAL SIZING AND DIMENSIONS OF RESTRICTOR MANHOLES AND WATER QUALITY STRUCTURES

EXISTING DRAINAGE STRUCTURE ADJUSTMENT SCHEDULE					
	STRUCTURE TYPE	STATION	OFFSET	ADJUSTED RIM ELEV.	NO.
WASH. ST.	CATCH BASIN	123+91.98	34.3 RT	779.90	1
WASH. ST.	CATCH BASIN	123+94.61	24.6 LT	779.63	1
WASH. ST.	MANHOLE	127+84.81	43.5 LT	777.67	1
WASH. ST.	MANHOLE	128+09.47	46.0 LT	777.62	1

EXISTING DRAINAGE STRUCTURE REMOVAL SCHEDULE				
	STRUCTURE TYPE	STATION	OFFSET	NO.
WASH. ST.	INLET	105+40.24	40.6 RT	1
WASH. ST.	MANHOLE	105+46.77	14.0 LT	1
WASH. ST.	INLET	105+52.03	39.1 LT	1
WASH. ST.	FLARED END SECTION	108+66.69	30.5 LT	1
WASH. ST.	FLARED END SECTION	108+69.50	33.8 RT	1
WASH. ST.	FLARED END SECTION	108+90.87	34.3 RT	1
WASH. ST.	INLET	109+57.19	35.1 LT	1
WASH. ST.	FLARED END SECTION	112+80.63	29.7 LT	1
WASH. ST.	FLARED END SECTION	117+00.14	24.2 LT	1
WASH. ST.	CATCH BASIN	121+50.02	42.5 RT	1

TEMPORARY DRAINAGE STRUCTURE REMOVAL SCHEDULE				
	STRUCTURE TYPE	STATION	OFFSET	NO.
WASH. ST.	CATCH BASIN	105+57.21	65.1 LT	1
WASH. ST.	CATCH BASIN	105+72.79	139.3 LT	1
WASH. ST.	FLARED END SECTION	120+82.32	94.6 LT	1
WASH. ST.	FLARED END SECTION	120+91.99	146.9 LT	1

EXISTING DRAINAGE STRUCTURE TO BE CLEANED SCHEDULE					
	STRUCTURE TYPE	STATION	OFFSET		NO.
WASH. ST.	CATCH BASIN	123+91.98	34.30 RT		1
WASH. ST.	CATCH BASIN	123+94.61	24.60 LT		1
WASH. ST.	MANHOLE	127+84.81	43.50 LT		1
WASH. ST.	MANHOLE	128+09.47	46.00 LT		1
WASH. ST.	CATCH BASIN	123+91.98	34.32 RT		1
WASH. ST.	MANHOLE	123+93.93	30.67 LT		1
WASH. ST.	MANHOLE	123+94.61	24.56 LT		1
WASH. ST.	MANHOLE	126+40.6	32.17 LT		1
WASH. ST.	MANHOLE	126+41.66	25.78 LT		1
WASH. ST.	MANHOLE	127+43.53	32.51 LT		1
WASH. ST.	MANHOLE	127+54.58	26.38 LT		1
WASH. ST.	MANHOLE	127+84.81	43.49 LT		1
WASH. ST.	MANHOLE	128+09.47	45.98 LT		1
WASH. ST.	MANHOLE	128+30.45	50.31 RT		1
WASH. ST.	MANHOLE	128+33.43	66.00 RT		1
WASH. ST.	MANHOLE	128+53.39	84.66 RT		1

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com

	PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = eoolnV8t(Rdwg_Lisle) PLOT CONFIG = PDF(Greg_Large).plt PLOT SCALE = 1:50 PLOT DATE = 7/16/2014 5:23:59 PM	DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET DRAINAGE STRUCTURE SCHEDULE	F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 113
	SCALE:	SHEET NO. DU 15 OF 37	STA. TO STA.	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			61A63				


STORM SEWER SCHEDULE							
PIPE NO.	FROM	TO	LENGTH (FT)	DIA. (IN)	TYPE	SLOPE (%)	TRENCH BACKFILL (CU YD)
1A	1-1	1-2	5	21	STORM SEW CL A 2 21	0.21	5.2
1B	1-2	1-3	6	21	STORM SEW CL A 1 21	0.21	6.3
1C	1-4	1-3	6	15	STORM SEW CL A 3 15	0.33	11.7
1D	1-5	1-4	5	15	STORM SEW CL A 3 15	0.20	9.6
1E	1-6	1-7	99	24	STORM SEW SPEC 24	0.78	15.9
1F	1-10	1-5	91	24	STORM SEW CL A 2 24	0.18	197.5
1G	1-9	1-10	56	18	STORM SEW CL A 2 18	0.45	22.1
1I	2-11	1-10	374	24	STORM SEW SPEC 24	0.17	743.1
1J	1-P	1-1	62	36	STORM SEW CL A 1 36	0.10	0.0
1K	1-3	1-8	89	18	STORM SEW CL A 3 18	0.15	158.1
2A	2-2	2-11	11	15	STORM SEW CL A 2 15	0.36	11.0
2B	2-3	2-1	3	18	STORM SEW CL A 2 18	0.33	2.4
2C	2-4	2-3	53	18	STORM SEW CL A 2 18	1.00	14.2
2D	2-5	2-6	48	12	STORM SEW CL A 2 12	0.46	9.8
2F	2-6	3-2	206	15	STORM SEW CL A 2 15	0.33	238.1
2G	2-8	2-4	68	15	STORM SEW SPEC 15	2.43	47.2
2H	2-9	2-8	37	12	STORM SEW SPEC 12	0.46	12.6
2I	2-10	2-9	32	12	STORM SEW CL A 1 12	0.44	10.6
2J	2-1	2-11	16	24	STORM SEW CL A 2 24	0.19	13.5
2K	2-12	2-2	3	12	STORM SEW CL A 2 12	0.67	3.5
2L	2-13	2-12	230	12	STORM SEW CL A 2 12	0.44	0.0
2M	2-14	2-13	2	12	STORM SEW CL A 2 12	0.50	0.0
2N	3-14	2-13	238	12	STORM SEW CL A 2 12	0.44	0.0
3A	3-1	3-2	49	12	STORM SEW CL A 2 12	0.45	9.5
3C	3-2	3-7	175	24	STORM SEW CL A 2 24	0.17	173.0
3D	3-4	3-5	7	12	STORM SEW CL A 2 12	2.14	1.4
3E	3-6	3-5	7	12	STORM SEW CL A 2 12	2.14	1.4
3F	3-5	3-8	49	15	STORM SEW CL A 1 15	0.33	10.4
3G	3-7	3-8	7	30	STORM SEW CL A 2 30	0.14	4.2
3H	3-8	3-9	7	30	STORM SEW CL A 2 30	0.14	4.2
3J	3-9	3-12	226	30	STORM SEW CL A 2 30	0.18	292.0
3K	3-11	3-12	49	12	STORM SEW CL A 2 12	0.45	9.5
3L	3-13	3-14	2	12	STORM SEW CL A 2 12	0.50	0.5
5A	3-12	5-2	238	36	STORM SEW CL A 3 36	0.10	635.1
5B	5-1	5-2	48	15	STORM SEW CL A 1 15	0.33	10.2
5D	5-2	PS INLET	16	36	STORM SEW CL A 3 36	0.12	59.7
5E	PS OUTLET	5-4	5	24	STORM SEW CL A 3 24	0.20	10.4
5F	5-4	5-5	20	24	STORM SEW CL A 3 24	0.15	50.3
5G	5-5	5-6	31	24	STORM SEW CL A 3 24	0.19	69.2
5H	5-6	5-7	303	24	STORM SEW SPEC 24	0.17	558.7
5I	5-7	9-1	223	24	STORM SEW CL A 2 24	0.18	0.0
5J	5-8	5-9	2	12	STORM SEW CL A 2 12	0.50	0.0
5K	5-9	5-10	203	12	STORM SEW CL A 2 12	0.44	0.0
5L	5-10	5-11	2	12	STORM SEW CL A 2 12	0.50	0.0
5M	5-11	5-12	11	15	STORM SEW CL A 2 15	0.36	0.0
5N	5-12	5-1	104	15	STORM SEW CL A 2 15	0.32	0.0
9A	9-2	9-3	47	24	STORM SEW CL A 2 24	0.26	0.0
9B	9-3	9-4	17	18	STORM SEW CL A 2 18	0.29	0.0
13A	13-2	13-1	64	18	STORM SEW SPEC 18	4.30	0.0

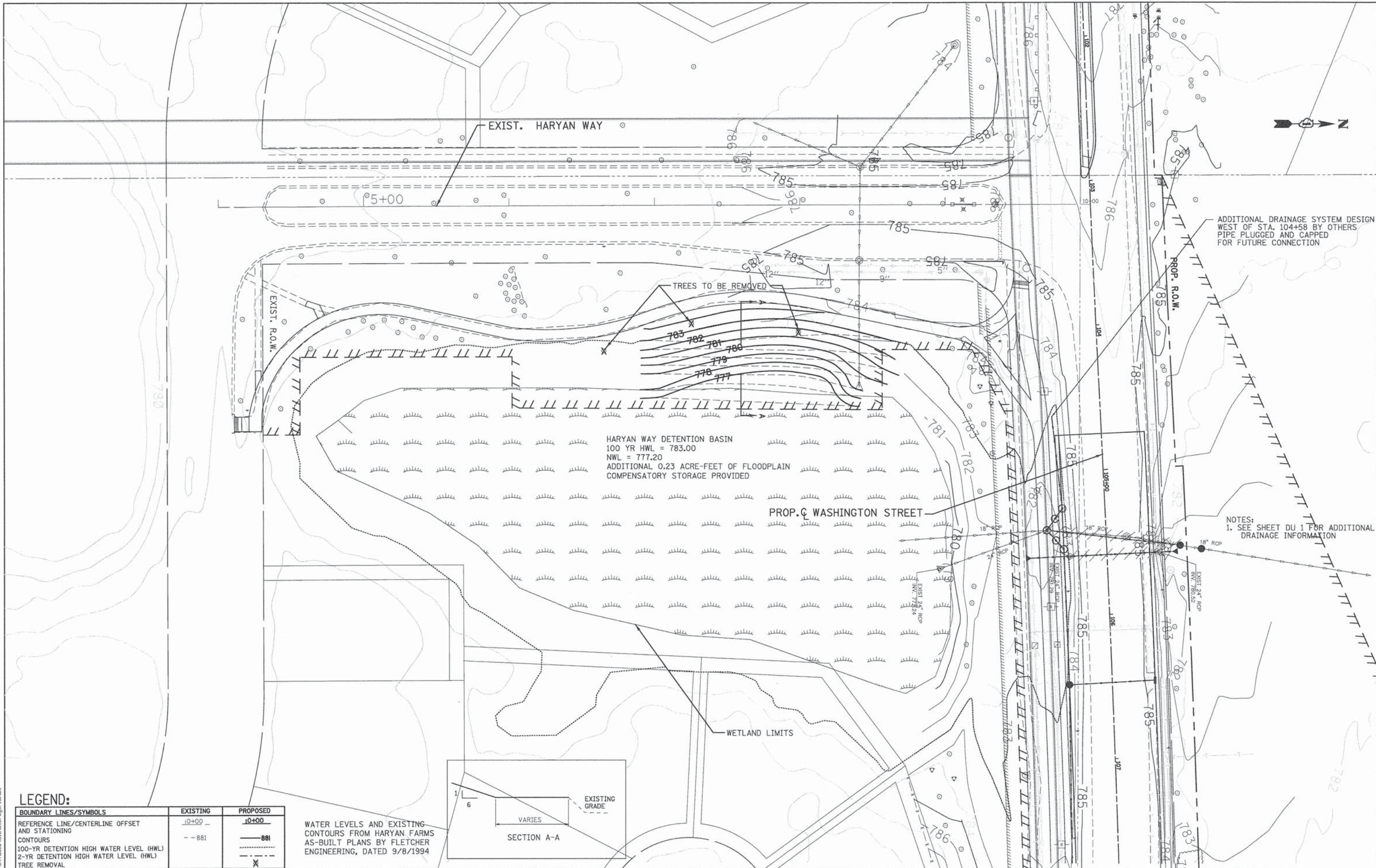
EXISTING STORM SEWER REMOVAL SCHEDULE						
	FROM	TO	LENGTH (FT)	DIA. (IN)	MATERIAL	
WASH. ST.	105+40.01 RT	105+36.73 LT	55	18	RCP	
WASH. ST.	105+46.73 LT	105+51.91 LT	26	18	RCP	
WASH. ST.	105+51.91 LT	105+54.13 LT	12	18	RCP	
WASH. ST.	105+58.75 RT	105+58.49 LT	63	24	RCP	
WASH. ST.	108+69.50 RT	108+90.87 RT	21	12	PVC	
WASH. ST.	108+66.77 LT	109+57.05 LT	91	12	RCP	
WASH. ST.	109+57.05 LT	111+18.05 LT	162	12	RCP	
WASH. ST.	111+18.05 LT	112+79.04 LT	162	12	RCP	
WASH. ST.	116+67.38 LT	117+00.23 LT	33	15	CMP	
WASH. ST.	118+25.87 LT	118+57.33 LT	32	24	RCP	
WASH. ST.	121+50.02 RT	123+91.98 RT	242	12	RCP	

TEMPORARY STORM SEWER REMOVAL SCHEDULE					
	FROM	TO	LENGTH (FT)	DIA. (IN)	MATERIAL
WASH. ST.	120+82.32 LT	120+91.99 LT	53	18	RCP

- NOTES: 1. CLASS A PIPE CULVERTS AND CLASS A STORM SEWERS SHALL CONSIST OF THE FOLLOWING MATERIALS:
 REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE
 2. PIPES DESIGNATED "STORM SEW SPEC" SHALL SATISFY WATER MAIN REQUIREMENTS (SEE SPECIAL PROVISIONS).
 3. COMPREHENSIVE STORM SEWER SCHEDULE INCLUDES ALL SCHEDULES SHOWN ON PLAN & PROFILE SHEETS

F:\TABLE - ... \PentTable\31041_0-egforid.tbl

 PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen(Rdwy_Lis1e) PLOT CONFIG = PDFIGrey_Small1.plt PLOT SCALE = 1:1000 PLOT DATE = 7/3/2014 12:25:15 AM	DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET DRAINAGE STRUCTURE SCHEDULE	F.A.U. RTE. 187 SECTION 11-00121-11-BR COUNTY LAKE TOTAL SHEETS 496 SHEET NO. 114 61A63
	SCALE: SHEET NO. DU 16 OF 37 STA. TO STA.					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



LEGEND:

BOUNDARY LINES/SYMBOLS	EXISTING	PROPOSED
REFERENCE LINE/CENTERLINE OFFSET AND STATIONING	10+00	10+00
CONTOURS	-- 881	--- 881
100-YR DETENTION HIGH WATER LEVEL (HWL)		---
2-YR DETENTION HIGH WATER LEVEL (HWL)		---
TREE REMOVAL		X

WATER LEVELS AND EXISTING CONTOURS FROM HARYAN FARMS AS-BUILT PLANS BY FLETCHER ENGINEERING, DATED 9/8/1994

PATRICK ENGINEERING INC.
 4970 VARSITY DRIVE
 LISLE, IL 60532
 patrickengineering.com

USER NAME = tkoeppen@dwj.lisle
 PLOT CONFIG = PDF(Grey_Small).plt
 PLOT SCALE = 1:600
 PLOT DATE = 7/3/2014 12:26:33 AM

DESIGNED - JWM
 DRAWN - JWM
 CHECKED - EYC
 DATE - 6/30/2014

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 BASIN 1 GRADING PLAN**

SCALE: 1"=30' SHEET NO. DU 17 OF 37 STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	115

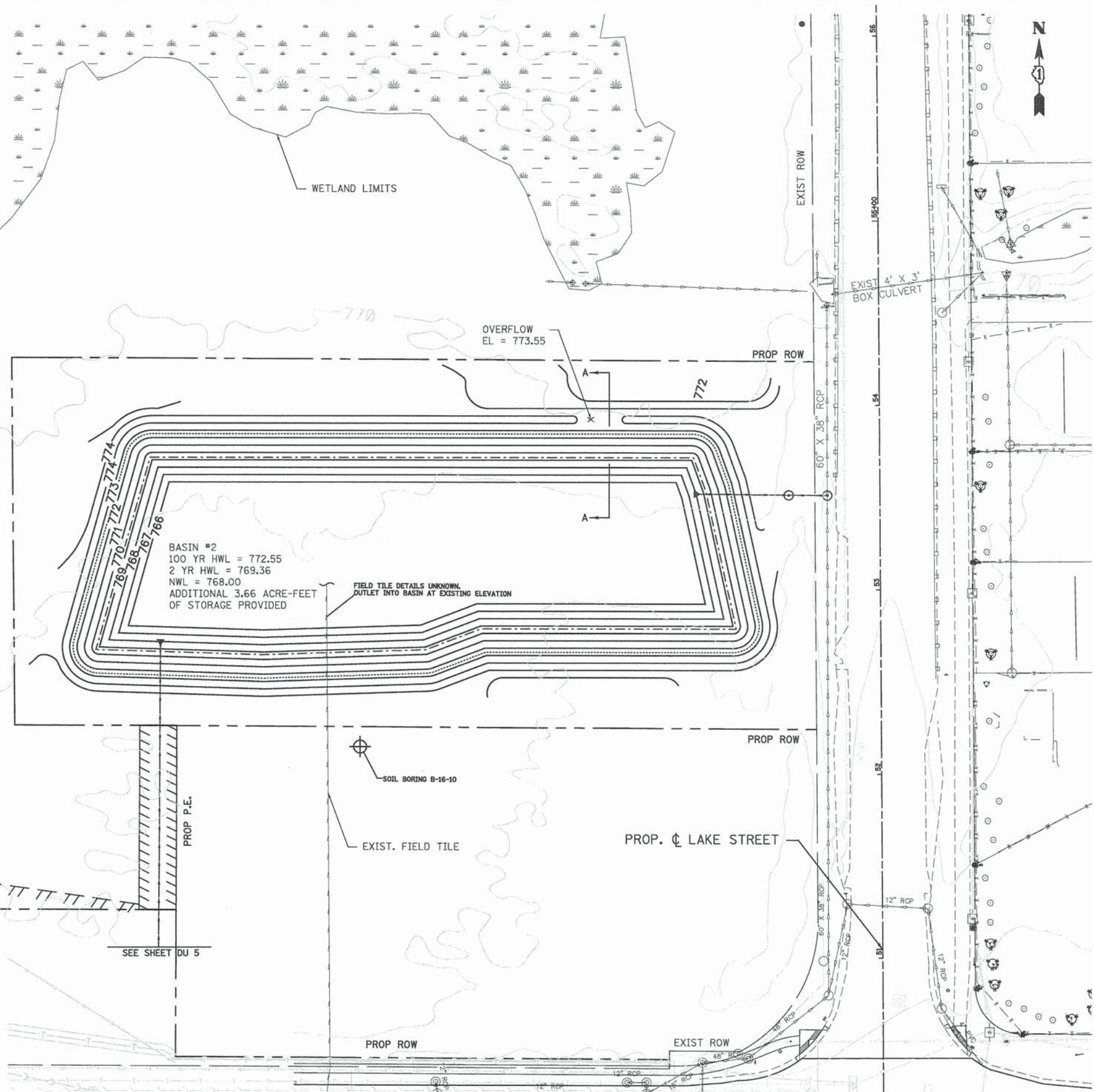
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

G:\N\C001\21158_884\Drawings\hts\Draw\S_Grading_81.dgn

PATRICK ENGINEERING INC.		BORING NUMBER	B-16-10	SHEET	1 OF 1
LOGGED BY		JLJ	CLIENT	Lake County Department of Transportation	
GROUND ELEVATION		779.0	PROJECT & NO.	20808.039	
			LOCATION	Grayslake, IL Washington Street	

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO.	DEPTH (FT)	RECOVERY(%)	PL	Water Content	LL	NOTES & TEST RESULTS
779.0	0.0	14" black topsoil								
777.6	1.2		Brown and gray silty clay, trace organics, trace medium sand, stiff, moist	SS-1	1.0-2.5	12R				
778.0	3.0		Gray fine to medium sand, with silt, loose, wet	SS-2	3.5-5.0	16R				
771.0	8.0		Brown silty clay, with medium sand, trace fine gravel, stiff, moist	SS-3	6.0-7.5	12R				% Sand=75.4 % Gravel=4.7 % Silt=15.4 % Clay=4.5
768.0	11.0		Gray silty clay, with medium sand, trace fine gravel, stiff, moist	SS-4	8.5-10.0	16R				
766.0	13.0		Gray fine to medium sand, medium dense, moist	SS-5	11.0-12.5	14R				
763.0	16.0		Gray silty clay, with medium sand, stiff, moist	SS-6	13.5-15.0	16R				
759.0	20.0		Gray silty clay, with medium sand, stiff, moist	SS-7	18.5-20.0	16R				
End of Boring at 20.0'										

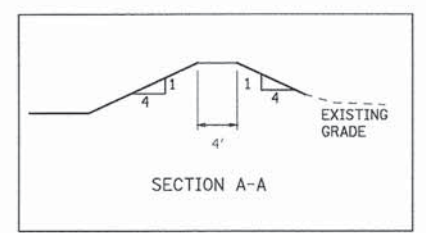
DRILLING CONTRACTOR	Groff Testing Corp.	REMARKS	Borehole backfilled with soil cuttings.	WATER LEVEL (ft.)	11.0'
DRILLING METHOD	2.25" I.D. HSA				
DRILLING EQUIPMENT	LC-60				
DRILLING STARTED	12/15/10	ENDED	12/15/10		



- NOTES:
- SEE SHEET DU-8 FOR DRAINAGE STRUCTURE SCHEDULE
 - SEE SPECIAL PROVISIONS FOR INFORMATION ON CLAY LINING FOR DETENTION BASIN CONSTRUCTION.

LEGEND:

BOUNDARY LINES/SYMBOLS	EXISTING	PROPOSED
REFERENCE LINE/CENTERLINE OFFSET AND STATIONING	10+00	10+00
CONTOURS	881	881
100-YR DETENTION HIGH WATER LEVEL (HWL)	---	---
2-YR DETENTION HIGH WATER LEVEL (HWL)	---	---



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
BASIN 2 GRADING PLAN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	116
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SCALE: 1"=30' SHEET NO. DU 18 OF 37 STA. TO STA.

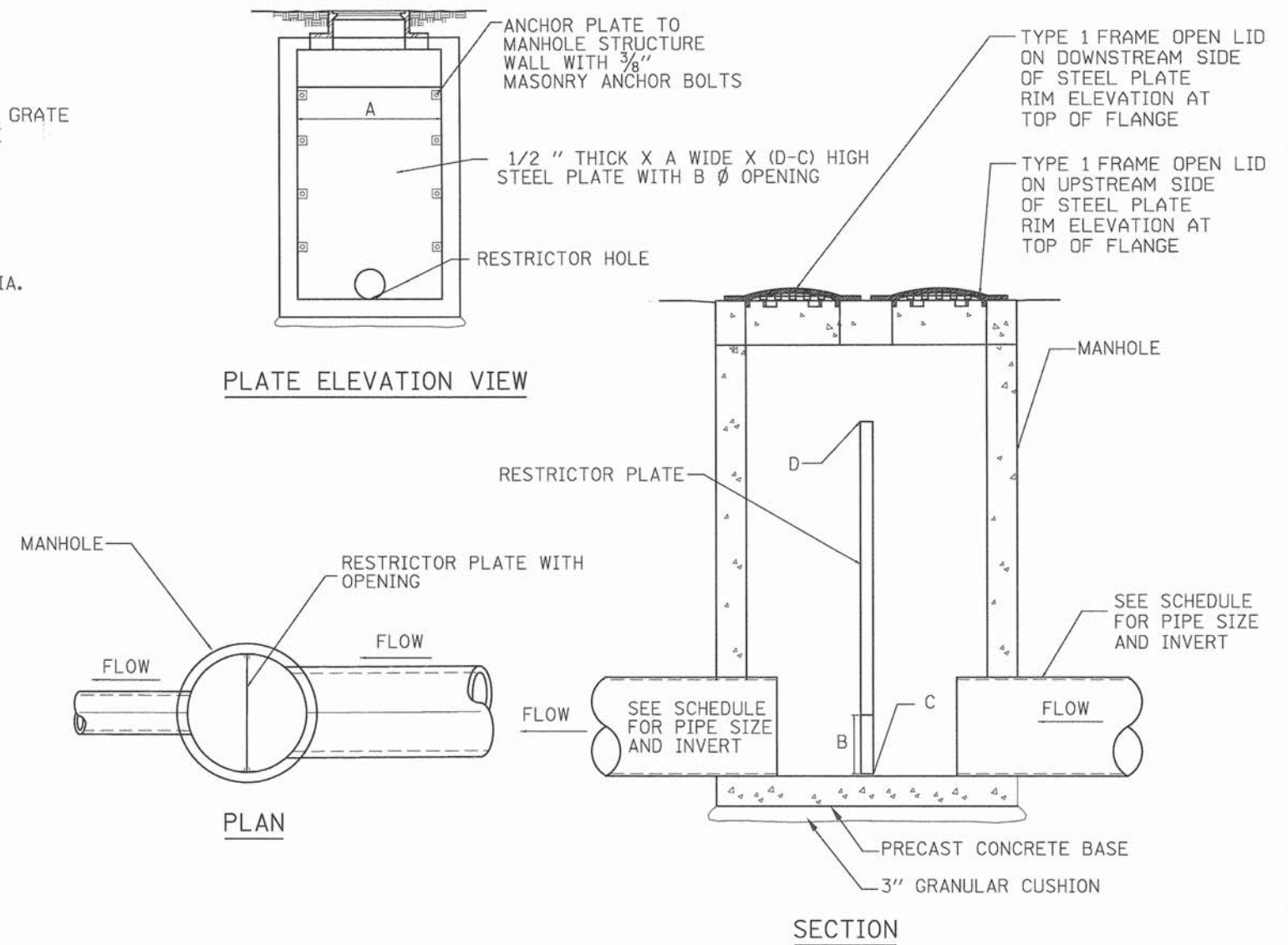
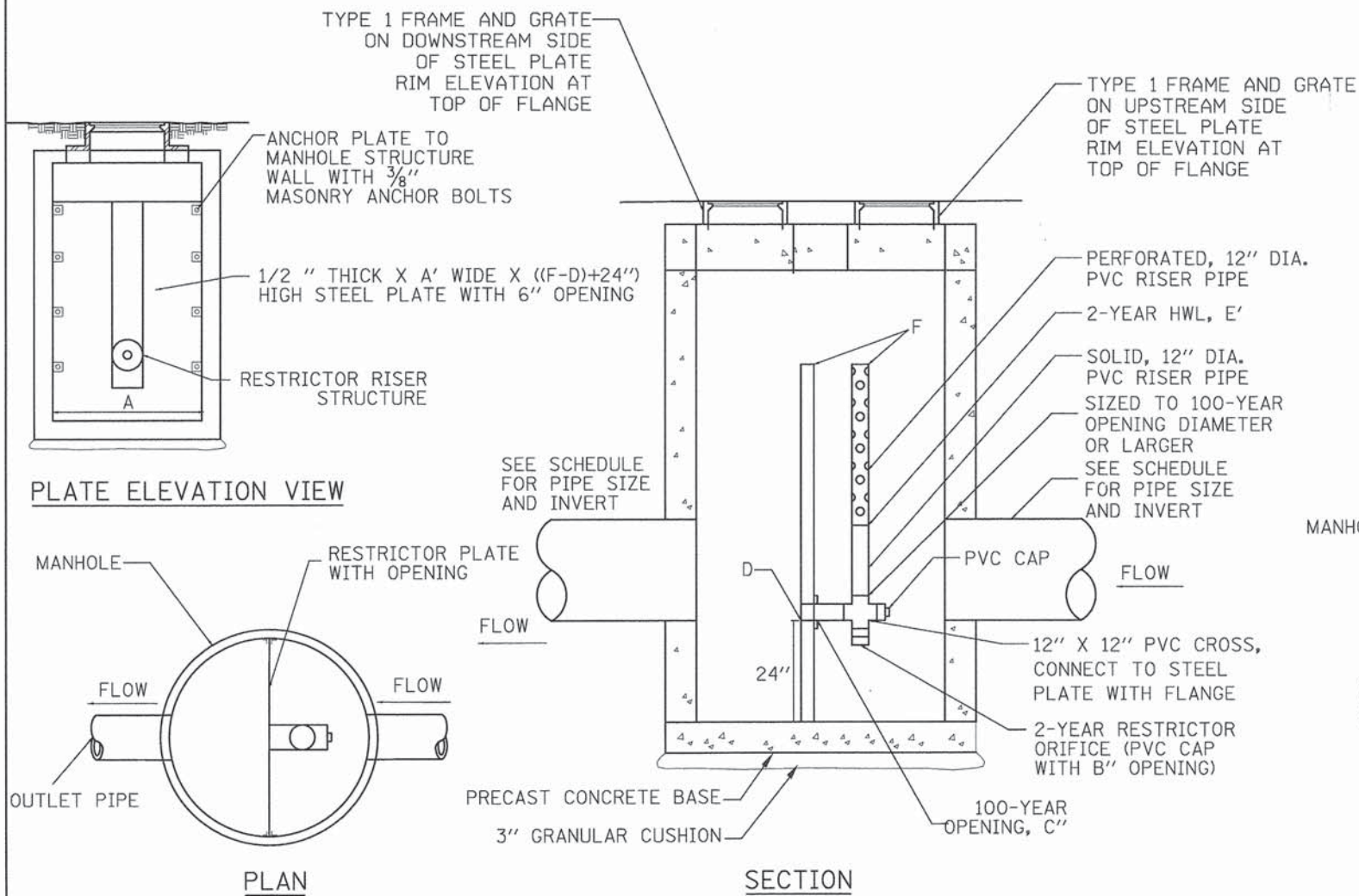
PATRICK ENGINEERING

PATRICK ENGINEERING INC.
4970 VARSITY DRIVE
LISLE, IL 60532
patrickengineering.com

USER NAME = skoepen(Rdwy_L1s)e
PLOT CONFIG = PDF(Greg_Small).plt
PLOT SCALE = 1:60
PLOT DATE = 7/3/2014 12:26:58 AM

DESIGNED - JWM
DRAWN - JWM
CHECKED - EYC
DATE - 6/30/2014

REVISED -
REVISED -
REVISED -
REVISED -



RESTRICTOR MANHOLE STYLE A

RESTRICTOR MANHOLE STYLE B

STRUCTURE No.	RESTRICTOR No.	MANHOLES, SPECIAL, TYPE No.	STATION	OFFSET	MANHOLE WIDTH AT PLATE (FT.) A	2-YR RESTRICTOR DIAMETER (IN.) B	100-YR OPENING DIAMETER (IN.) C	INVERT OF 2-YR OPENING D	INVERT OF 100-YR OPENING D	2-YEAR HWL ELEVATION E	ELEVATION OF TOP OF PLATE / RISER OVERFLOW F
1-1	1	2	105+25.41	29.39 RT	7	4.00	10.50	778.70	778.70	780.81	782.83
1-5	2	2	105+53.64	29.56 RT	7	4.00	6.30	777.90	777.90	778.82	782.57

STRUCTURE No.	RESTRICTOR No.	MANHOLES, SPECIAL, TYPE No.	STATION	OFFSET	MANHOLE WIDTH AT PLATE (FT.) A	RESTRICTOR DIAMETER (IN.) B	INVERT OF RESTRICTOR C	ELEVATION OF TOP OF PLATE / RISER OVERFLOW D
9-3	3	2	128+29.94	351.85 LT	5	4.00	767.88	772.55

NOTE: PVC PIPE SHALL BE SDR 35, ASTM D-3034

G:\L\CDOT\21158.884\Drawings\shhs\Draw\S.Dra.Details_01.dgn

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkooppen@dwj.lisale PLOT CONFIG = PDF(Greg_Small).plt PLOT SCALE = 1:1000 PLOT DATE = 7/3/2014 12:27:31 AM	DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET DRAINAGE DETAILS	F.A.U. RTE. 187 SECTION 11-00121-11-BR COUNTY LAKE TOTAL SHEETS 496 SHEET NO. 117	61A63
	SCALE: SHEET NO. DU 19 OF 37 STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SCHEMATIC ONLY - NOT FOR CONSTRUCTION

DESIGN NOTES:

- 1) THE OUTLET PIPE INVERT SHOULD BE AT THE SAME ELEVATION OR LOWER THAN INVERTS INTO THE UPSTREAM CHAMBER.
- 2) THE DOWNSTREAM DEFENDER HAS A SUBMERGED INLET PIPE. THE INLET PIPE INVERT IS ONE INLET PIPE DIAMETER BELOW THE OUTLET PIPE INVERT. THE INLET PIPE ENTERS THE UNIT TANGENTIALLY. THE INLET PIPE SLOPE SHOULD NOT EXCEED 15%. HEADLOSS AT PEAK TREATMENT FLOW USES THE MAXIMUM PIPE DIAMETER FOR THAT UNIT. HEADLOSS WILL INCREASE WITH SMALLER INLET PIPES.
- 3) " DISTANCES ARE APPROXIMATE AND DEPEND ON TOP SLAB THICKNESS. ASSUMES A 4" FRAME AND COVER. CONFIRM WITH A HYDRO REPRESENTATIVE.
- 4) " MAY NOT BE AVAILABLE IN ALL AREAS. CONFIRM WITH A HYDRO REPRESENTATIVE.

MODEL NUMBER & DIAMETER (FT)	PEAK TREATMENT FLOW (CFS)	MAXIMUM PIPE DIAMETER (IN)	HEADLOSS AT PEAK TREATMENT FLOW (IN)	OIL STORAGE CAPACITY (GALLONS)	SEDIMENT STORAGE CAPACITY (CUBIC YARDS)	MIN. DIST. FROM OUTLET INVERT TO TOP OF RIM (FT)	STANDARD DIST. FROM SUMP FLOOR TO OUTLET INVERT (FT)
4	3.0	12	8	70	0.73	2.8	4.08
6	8.0	18	12	216	2.13	3.24	5.68
8	15.0	24	13	540	4.65	4.2	7.67
10 **	25.0	30	15	1,050	8.73	5.0	9.44
12 **	38.0	36	16	1,770	14.70	5.6	11.18

Hydro International
Stormwater Solutions
94 Hutchins Drive,
Portland, Maine 04102
Tel: (207) 756-6200
Fax: (207) 756-6212
stormwaterinquiry@hydro-int.com

This CADD file is for the purpose of specifying stormwater treatment equipment to be furnished by CONTECH Stormwater Solutions and may only be transferred to other documents exactly as provided by CONTECH Stormwater Solutions. Title block information, excluding the CONTECH Stormwater Solutions logo and the VortSentry HS Stormwater Treatment System designation and patent number, may be deleted if necessary. Revisions to any part of this CADD file without prior coordination with CONTECH Stormwater Solutions shall be considered unauthorized use of proprietary information.

THE VORTSENTRY HS CONTROL SECTION SHALL BE STENCILED WITH THE CONTECH STORMWATER SOLUTIONS NAME AND LOGO. PIPE OPENINGS SHALL BE STENCILED "INLET" OR "OUTLET" AS APPROPRIATE.

NOTES:

1. STORMWATER TREATMENT SYSTEM (SWTS) SHALL REMOVE 80% OF A SEDIMENT GRADATION WITH AN AVERAGE PARTICLE SIZE OF 240 MICRONS AT THE DESIGNATED TREATMENT FLOW RATE LISTED IN THE TABLE FOR EACH CORRESPONDING MODEL.
2. SWTS REMOVAL EFFICIENCY CLAIM SHALL BE CORROBORATED BY FULL SCALE LABORATORY TEST PERFORMANCE DATA.
3. SWTS MAINTENANCE RECOMMENDATION SHALL BE SUPPORTED BY FULL SCALE WASH-OUT TESTING.
4. SWTS SHALL PROVIDE INTERNAL BYPASS OF FLOWS THAT EXCEED THE TREATMENT FLOW RATE.
5. SWTS MAXIMUM HYDRAULIC CAPACITY MAY VARY DEPENDING UPON THE INLET PIPE DIAMETER, MATERIAL AND SLOPE.
6. SWTS INVERTS IN AND OUT SHALL BE AT THE SAME ELEVATION. INLET AND OUTLET PIPES MUST BE 180" FROM EACH OTHER.
7. MINIMUM RIM TO INVERT DISTANCE MAY BE REDUCED DEPENDING UPON ACTUAL PIPE DIAMETER. CONTACT CONTECH STORMWATER SOLUTIONS FOR SITE SPECIFIC INFORMATION.
8. PIPE SIZE MAY BE SMALLER THAN THE MAXIMUM PIPE SHOWN ON THE TABLE; SEE SITE PLAN FOR PIPE SIZE.
9. PURCHASER SHALL NOT BE RESPONSIBLE FOR ASSEMBLY OF INTERNAL COMPONENTS.
10. ACCESS FRAME AND COVER SUPPLIED WITH SYSTEM, NOT INSTALLED. SWTS MAY ALSO HAVE A GRATED INLET COVER (NOT SHOWN).
11. PURCHASER TO PREPARE EXCAVATION AND PROVIDE LIFTING EQUIPMENT.
12. VORTSENTRY HS BY CONTECH STORMWATER SOLUTIONS; PORTLAND, OR (800) 548-4667; SCARBOROUGH, ME (877) 907-8676; LINTHICUM, MD (866) 740-3318.

VortSentry Model	Manhole Diameter (ID)	Total Treatment Flow Rate	Typical Total Distance Rim to Outside Bottom	Typical Distance Rim to Invert	Typical Depth Below Invert (Inside)	Approximate Minimum Distance Rim to Invert (See Note 7)	Maximum Pipe Diameter (ID)							
			A	B	C									
HS36	3	900	10.16	3.10	4.08	1.24	5.5833	1702	3.00	0.91	18	450		
HS48	4	1200	1.20	34.0	13.25	4.04	6.00	1.83	6.75	2057	4.00	1.22	24	600
HS60	5	1500	2.20	62.3	16.38	4.99	6.50	1.98	9.21	2807	4.82	1.47	30	750
HS72	6	1800	3.70	104.8	16.56	5.05	6.75	2.06	9.15	2788	5.59	1.70	36	900
HS84	7	2100	5.60	158.6	18.85	5.75	7.75	2.36	10.35	3156	4.77	1.45	42	1050
HS96	8	2400	8.10	229.4	20.87	6.36	8.50	2.59	11.54	3518	6.91	2.11	48	1200

FOR INFORMATIONAL PURPOSES ONLY - NOT INTENDED FOR CONSTRUCTION

RIPRAP NOTES:

1. Use for aprons serving culverts with slopes of less than 10%.
2. Furnish Filter Fabric per section 282 of the standard specifications. 2' Turn downs not shown.
3. Provide bedding stone (not shown) per section 281 of the standard specifications.
4. Excavation for placement of riprap will not be measured for payment.

ARTICULATED BLOCK LAYOUT

CULVERT WITH STANDARD END SECTION AND RIPRAP

CULVERT WITH STANDARD END SECTION AND ARTICULATED BLOCK REVETMENT MAT

SECTION A-A

SECTION B-B

PROTECTIVE APRON AT CULVERT OUTLET WITHOUT DITCH

TYPICAL DETAIL WITH SIZING TABLE
VORTSENTRY[®] HS US PATENT PENDING

SCALE: NONE
DRAWN: NDG
CHECKED: GWB
FILE NAME: VSHS TYPTBL
DATE: 8/17/07

WATER QUALITY STRUCTURE NUMBER	STRUCTURE NAME	VORT SENTRY MODEL
1	1-2	HS96
2	1-4	HS72

OUTLET WITHOUT DITCH
PROTECTIVE APRON DIMENSIONS AND ESTIMATED QUANTITIES

	CULVERT SIZE D (inches)	RIPRAP CLASS	LENGTH OF APRON L (feet)	DEPTH OF RIPRAP APRON H (feet)	ESTIMATED RIPRAP QUANTITY (SY)	ESTIMATED GEOTEXTILE QUANTITY (SY)
WITH END SECTION	18	RR4	7	1.33	6	6
	24	RR4	9	1.33	9	9
	30	RR5	13.5	1.83	18	18
	36	RR5	16	1.83	26	26
	42	RR6	22	2.17	44	44
	48	RR6	25	2.17	57	57

PATRICK ENGINEERING PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = skooppen@rdwy.lisla PLOT CONFIG = PDF(Grey.Small).plt PLOT SCALE = 1:1200 PLOT DATE = 7/3/2014 12:27:45 AM	DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET DRAINAGE DETAILS	SCALE: TO STA.	SHEET NO. DU 20 OF 37	STA. TO STA.	F.A.U. RTE. 187 SECTION 11-00121-11-BR COUNTY LAKE TOTAL SHEETS 496 SHEET NO. 118 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT 61A63
---	---	--	--	---	--	----------------	-----------------------	--------------	--

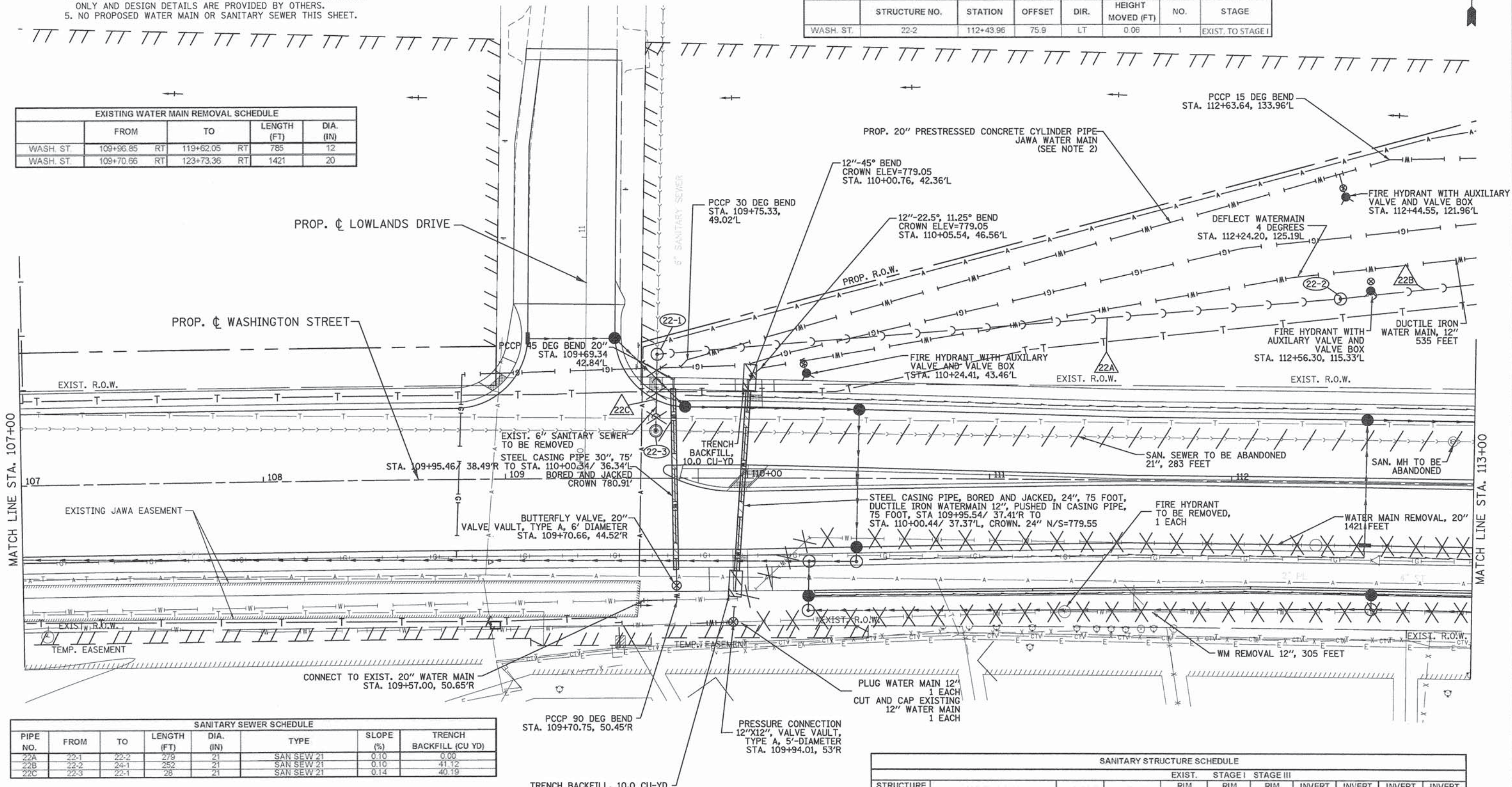
NOTES:

- UTILITY SHEETS SHOW DESIGN FOR GRAYSLAKE SANITARY SEWER (8"), LAKE COUNTY PUBLIC WORKS SANITARY SEWER (21"), GRAYSLAKE WATER MAIN, AND JAWA WATER MAIN.
- REFER TO SHEETS DU 31 TO DU 35 FOR JAWA WATER MAIN PROFILE AND DETAILS.
- SANITARY SEWERS AND WATER MAIN TO BE ABANDONED SHALL BE FILLED WITH FLOWABLE FILL.
- OTHER EXISTING AND PROPOSED UTILITIES ARE FOR REFERENCE ONLY AND DESIGN DETAILS ARE PROVIDED BY OTHERS.
- NO PROPOSED WATER MAIN OR SANITARY SEWER THIS SHEET.

EXISTING SANITARY SEWER ABANDONMENT SCHEDULE					
	FROM	TO	LENGTH (FT)	DIA. (IN)	
WASH. ST.	110+08.62 LT	112+91.21 LT	283	21	
WASH. ST.	112+91.21 LT	116+79.98 LT	389	21	

SAN STRUCTURE ADJUSTMENT SCHEDULE							
	STRUCTURE NO.	STATION	OFFSET	DIR.	HEIGHT MOVED (FT)	NO.	STAGE
WASH. ST.	22-2	112+43.96	75.9	LT	0.05	1	EXIST. TO STAGE I

EXISTING WATER MAIN REMOVAL SCHEDULE					
	FROM	TO	LENGTH (FT)	DIA. (IN)	
WASH. ST.	109+96.85 RT	119+62.05 RT	785	12	
WASH. ST.	109+70.66 RT	123+73.36 RT	1421	20	



SANITARY SEWER SCHEDULE							
PIPE NO.	FROM	TO	LENGTH (FT)	DIA. (IN)	TYPE	SLOPE (%)	TRENCH BACKFILL (CU YD)
22A	22-1	22-2	279	21	SAN SEW 21	0.10	0.00
22B	22-2	24-1	252	21	SAN SEW 21	0.10	41.12
22C	22-3	22-1	28	21	SAN SEW 21	0.14	40.19

SANITARY STRUCTURE SCHEDULE										
STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	EXIST. STAGE I STAGE III						
				RIM ELEV.	RIM ELEV.	RIM ELEV.	INVERT (N)	INVERT (S)	INVERT (W)	INVERT (E)
22-1	SAN MH 5 DIA	110+09.14	55.06 LT	785.37	785.37	785.37	785.37	765.52	766.29	766.52
22-2	SAN MH 5 DIA	112+43.96	75.87 LT	785.62	785.56	785.62	785.62	766.29	766.29	766.29
22-3	SAN MH 5 DIA	110+08.62	18.89 LT	784.85	784.85	784.85	766.56			

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com

PATRICK ENGINEERING
 4970 VARSITY DRIVE
 LISLE, IL 60532
 patrickengineering.com

USER NAME = tkoepen@dwg.Lislo
 PLOT CONFIG = POF(Reg_Small).plt
 PLOT SCALE = 1:40
 PLOT DATE = 7/3/2014 12:29:08 AM

DESIGNED - JWM
 DRAWN - JWM
 CHECKED - EYC
 DATE - 6/30/2014

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 UTILITY PLAN AND PROFILE**

SCALE: 1"=20' SHEET NO. DU 22 OF 37 STA. 107+00 TO STA. 113+00

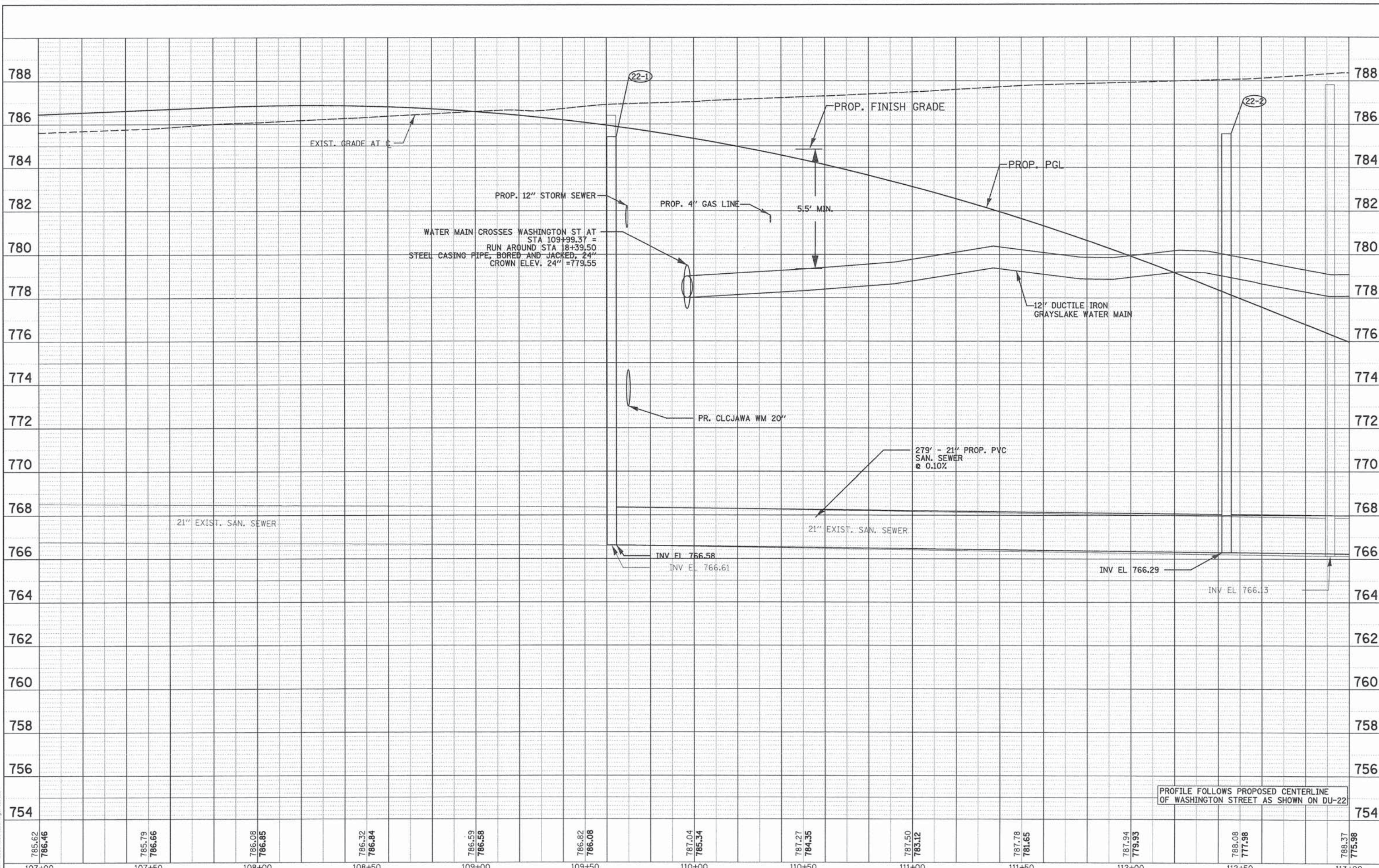
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	120

61A63

Q:\L2007\21158_024\Drawings\AutoCAD\Drawings\21158_02_PP_22scale.dgn

DATE	
BY	
REVIEWED	
PLANNED	
ALIGNMENT	
CHECKED	
OF	
PLAN	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
GRADES	
CHECKED	
STRUCTURE	
NOTATIONS	
CHKD	
PROFILE	
NOTE BOOK	
NO.	



PROFILE FOLLOWS PROPOSED CENTERLINE OF WASHINGTON STREET AS SHOWN ON DU-22

785.62	786.46	785.79	786.66	786.08	786.85	786.32	786.84	786.59	786.58	786.82	786.08	787.04	785.34	787.27	784.35	787.50	783.12	787.78	781.65	787.94	779.93	788.08	777.98	788.37	775.98
107+00	107+50	108+00	108+50	109+00	109+50	110+00	110+50	111+00	111+50	112+00	112+50	113+00													

PATRICK ENGINEERING PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoepper(Rdy_Lisle)	DESIGNED - JWM	REVISED -
	PLOT CONFIG = PDF(Grey_Small).plt	DRAWN - JWM	REVISED -
	PLOT SCALE = 1:40	CHECKED - EYC	REVISED -
	PLOT DATE = 7/3/2014 12:29:37 AM	DATE - 6/30/2014	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
UTILITY PLAN AND PROFILE**

SCALE: 1"=20' SHEET NO. DU 23 OF 37 STA. 107+00 TO STA. 113+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	121
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			61A63	

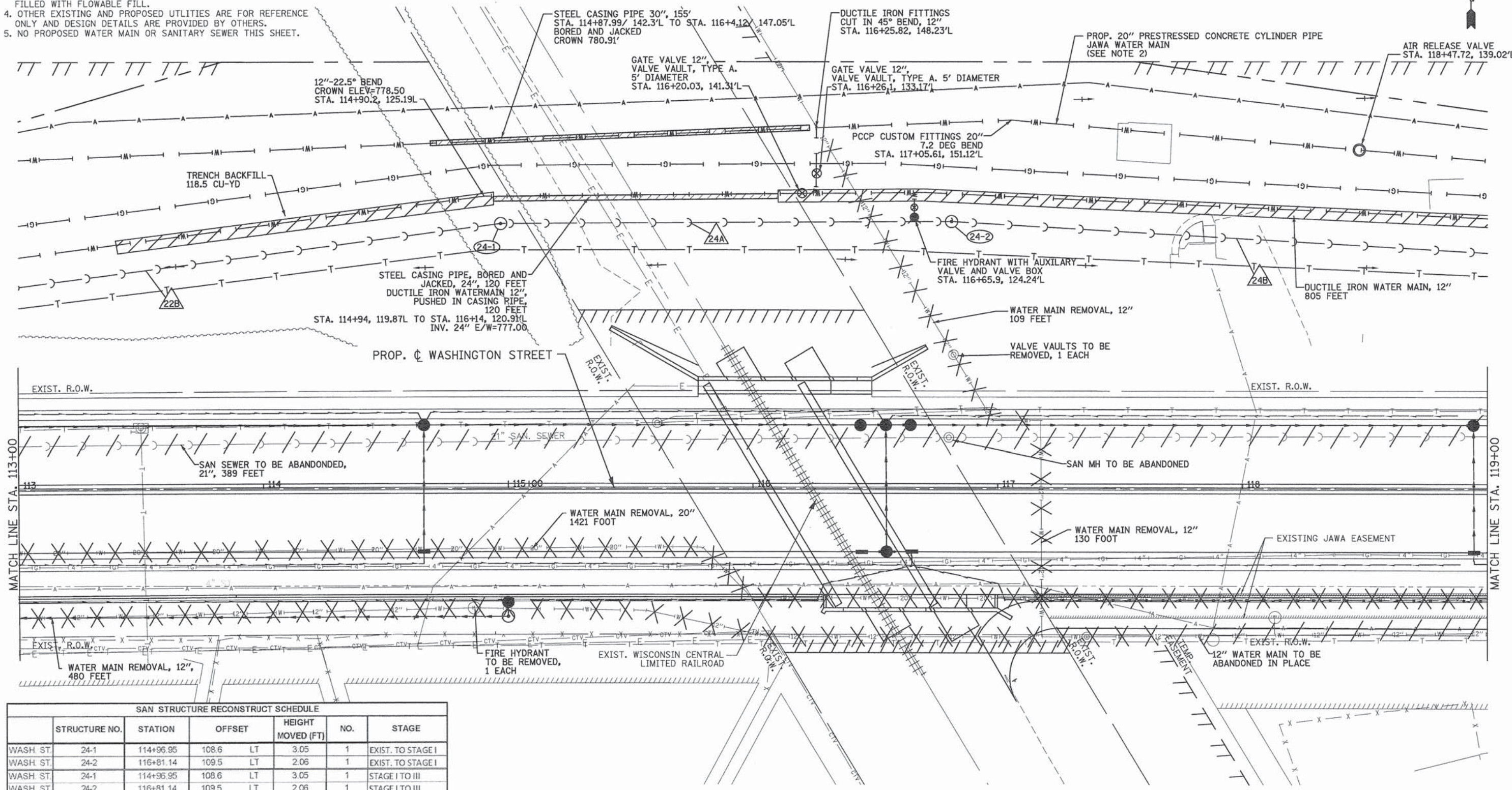
G:\L\CDOT\21158_024\Drawings\Sheet\Draw\S_Utl1_03_PP_20sc01a.dgn

NOTES:

- UTILITY SHEETS SHOW DESIGN FOR GRAYSLAKE SANITARY SEWER (8"), LAKE COUNTY PUBLIC WORKS SANITARY SEWER (21"), GRAYSLAKE WATER MAIN, AND JAWA WATER MAIN.
- REFER TO SHEETS DU 31 TO DU 35 FOR JAWA WATER MAIN PROFILE AND DETAILS.
- SANITARY SEWERS AND WATER MAIN TO BE ABANDONED SHALL BE FILLED WITH FLOWABLE FILL.
- OTHER EXISTING AND PROPOSED UTILITIES ARE FOR REFERENCE ONLY AND DESIGN DETAILS ARE PROVIDED BY OTHERS.
- NO PROPOSED WATER MAIN OR SANITARY SEWER THIS SHEET.

EXISTING WATER MAIN ABANDONMENT SCHEDULE					
	FROM	TO	LENGTH (FT)	DIA. (IN)	
WASH ST.	117+71.23 RT	119+65.93 RT	195	12	

EXISTING WATER MAIN REMOVAL SCHEDULE					
	FROM	TO	LENGTH (FT)	DIA. (IN)	
WASH ST.	116+31.70 LT	117+17.98 RT	130	12	



SAN STRUCTURE RECONSTRUCT SCHEDULE						
	STRUCTURE NO.	STATION	OFFSET	HEIGHT MOVED (FT)	NO.	STAGE
WASH ST.	24-1	114+95.95	108.6 LT	3.05	1	EXIST. TO STAGE I
WASH ST.	24-2	116+81.14	109.5 LT	2.06	1	EXIST. TO STAGE I
WASH ST.	24-1	114+95.95	108.6 LT	3.05	1	STAGE I TO III
WASH ST.	24-2	116+81.14	109.5 LT	2.06	1	STAGE I TO III

SANITARY SEWER SCHEDULE							
PIPE NO.	FROM	TO	LENGTH (FT)	DIA. (IN)	TYPE	SLOPE (%)	TRENCH BACKFILL (CU YD)
24A	24-1	24-2	181	21	SAN SEW 21	0.10	588.77
24B	24-2	26-1	360	21	SAN SEW 21	0.10	130.14

SANITARY STRUCTURE SCHEDULE										
STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	EXIST.			STAGE I		STAGE III	
				RIM ELEV.	INVERT (N)	INVERT (S)	RIM ELEV.	RIM ELEV.	INVERT (W)	INVERT (E)
24-1	SAN MH 5 DIA	114+96.95	108.59 LT	784.94	787.99	787.99			785.04	785.04
24-2	SAN MH 5 DIA	116+81.14	109.50 LT	786.64	788.70	788.70			785.85	785.85

EXISTING SANITARY SEWER ABANDONMENT SCHEDULE				
	FROM	TO	LENGTH (FT)	DIA. (IN)
WASH ST.	116+79.98 LT	120+70.16 LT	390	21

PENTABLE = ...PenTable\Std\Grng\Std.tbl

<p>PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com</p>	USER NAME = thoeppen\rdy.Lis1e	DESIGNED -	REVISED -
	PLOT CONFIG = PDF\Grng.Small.plt	DRAWN - JWM	REVISED -
	PLOT SCALE = 1:48	CHECKED - EYC	REVISED -
	PLOT DATE = 7/3/2014 12:29:53 AM	DATE - 6/30/2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
UTILITY PLAN AND PROFILE

SCALE: 1"=20' SHEET NO. DU 24 OF 37 STA. 113+00 TO STA. 119+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	122

61A63



NOTES:

- UTILITY SHEETS SHOW DESIGN FOR GRAYSLAKE SANITARY SEWER (8"), LAKE COUNTY PUBLIC WORKS SANITARY SEWER (21"), GRAYSLAKE WATER MAIN, AND JAWA WATER MAIN.
- REFER TO SHEETS DU 31 TO DU 35 FOR JAWA WATER MAIN PROFILE AND DETAILS.
- SANITARY SEWERS AND WATER MAIN TO BE ABANDONED SHALL BE FILLED WITH FLOWABLE FILL.
- OTHER EXISTING AND PROPOSED UTILITIES ARE FOR REFERENCE ONLY AND DESIGN DETAILS ARE PROVIDED BY OTHERS.
- NO PROPOSED WATER MAIN OR SANITARY SEWER THIS SHEET.

FROM	TO	LENGTH (FT)	DIA. (IN)
WASH. ST. 120+70.16 LT	124+55.49 LT	385	21

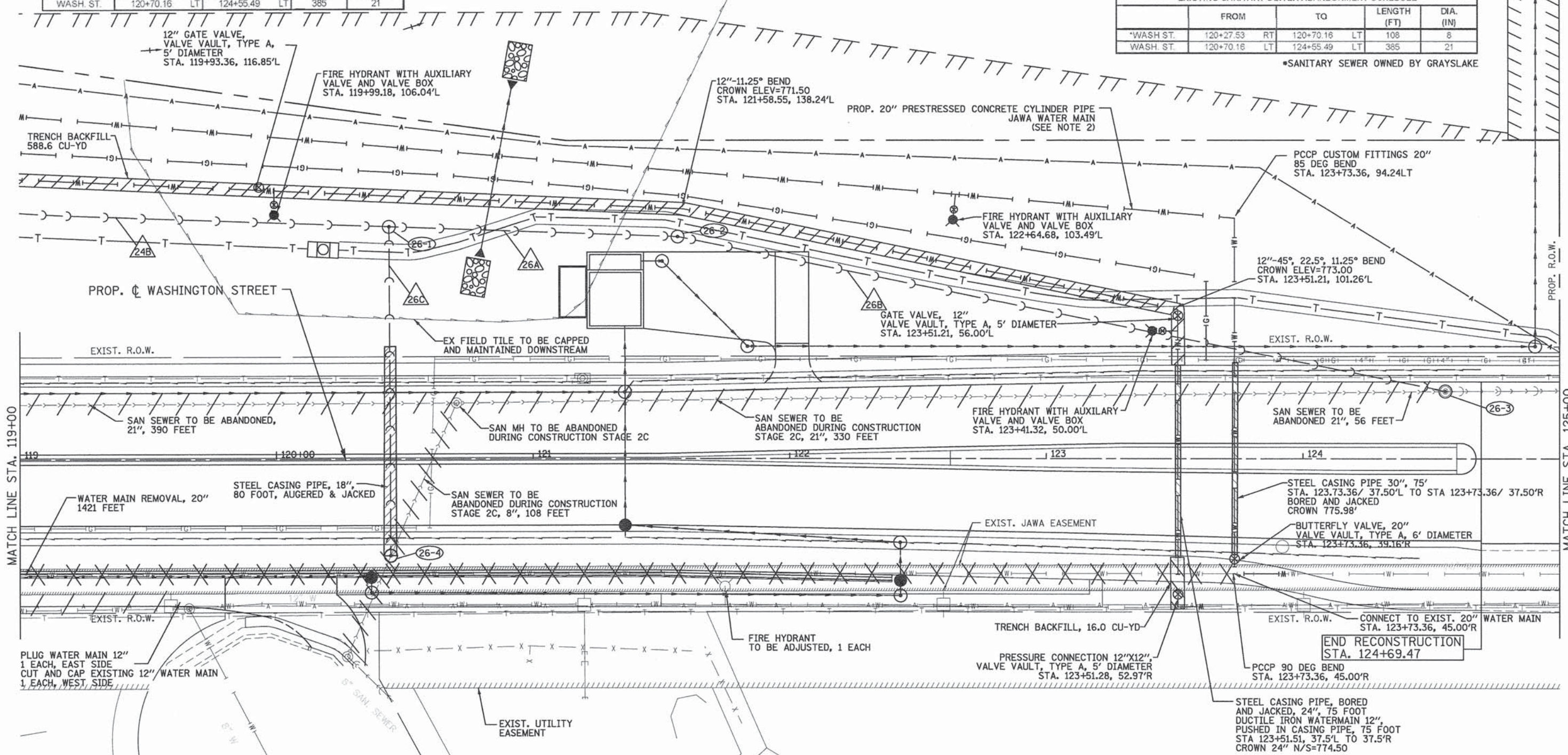
STRUCTURE NO.	STATION	OFFSET	DIR.	HEIGHT MOVED (FT)	NO.	STAGE
WASH. ST. 26-1	120+43.94	91.1	LT	1.81	1	EXIST. TO STAGE I
WASH. ST. 26-3	124+55.49	26.3	LT	0.28	1	STAGE I TO III

STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	EXIST.				STAGE I				STAGE III								
				RIM ELEV.	RIM ELEV.	RIM ELEV.	INVERT (N)	INVERT (S)	INVERT (W)	INVERT (E)	RIM ELEV.	RIM ELEV.	RIM ELEV.	INVERT (N)	INVERT (S)	INVERT (W)	INVERT (E)			
26-1	SAN MH 5 DIA	120+43.94	91.07	LT	779.25	781.08	779.25													
26-2	SAN MH 5 DIA	121+56.43	88.95	LT	777.62	780.11	782.31													
26-3	SAN MH 5 DIA	124+55.49	26.27	LT	778.92	779.20														
26-4	SAN MH 4 DIA	120+44.52	37.85	RT	782.97	782.97	775.76	768.09	768.09	768.09										

*SANITARY SEWER OWNED BY GRAYSLAKE

FROM	TO	LENGTH (FT)	DIA. (IN)
WASH. ST. 120+27.53 RT	120+70.16 LT	108	8
WASH. ST. 120+70.16 LT	124+55.49 LT	385	21

*SANITARY SEWER OWNED BY GRAYSLAKE



PIPE NO.	FROM	TO	LENGTH (FT)	DIA. (IN)	TYPE	SLOPE (%)	TRENCH BACKFILL (CU YD)
26A	26-1	26-2	109	21	SAN SEW 21	0.10	0.00
26B	26-2	26-3	302	21	SAN SEW 21	0.12	340.90
26C	26-4	26-1	125	8	SAN SEW 8	1.47	161.43

*SANITARY SEWER OWNED BY GRAYSLAKE

STRUCTURE NO.	STATION	OFFSET	HEIGHT MOVED (FT)	NO.	STAGE	
WASH. ST. 26-2	121+56.43	87.0	LT	2.49	1	EXIST. TO STAGE I
WASH. ST. 26-2	121+56.43	87.0	LT	2.2	1	STAGE I TO III

<p>PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com</p>	USER NAME = skoeppen(Rdwj.Lisle)	DESIGNED - JWM	REVISED -
	PLOT CONFIG = PDF(Grey_Small.plt)	DRAWN - JWM	REVISED -
	PLOT SCALE = 1:48	CHECKED - EYC	REVISED -
	PLOT DATE = 7/3/2014 12:38:49 AM	DATE - 6/30/2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
UTILITY PLAN AND PROFILE

SCALE: 1"=20' SHEET NO. DU 26 OF 37 STA. 119+00 TO STA. 125+00

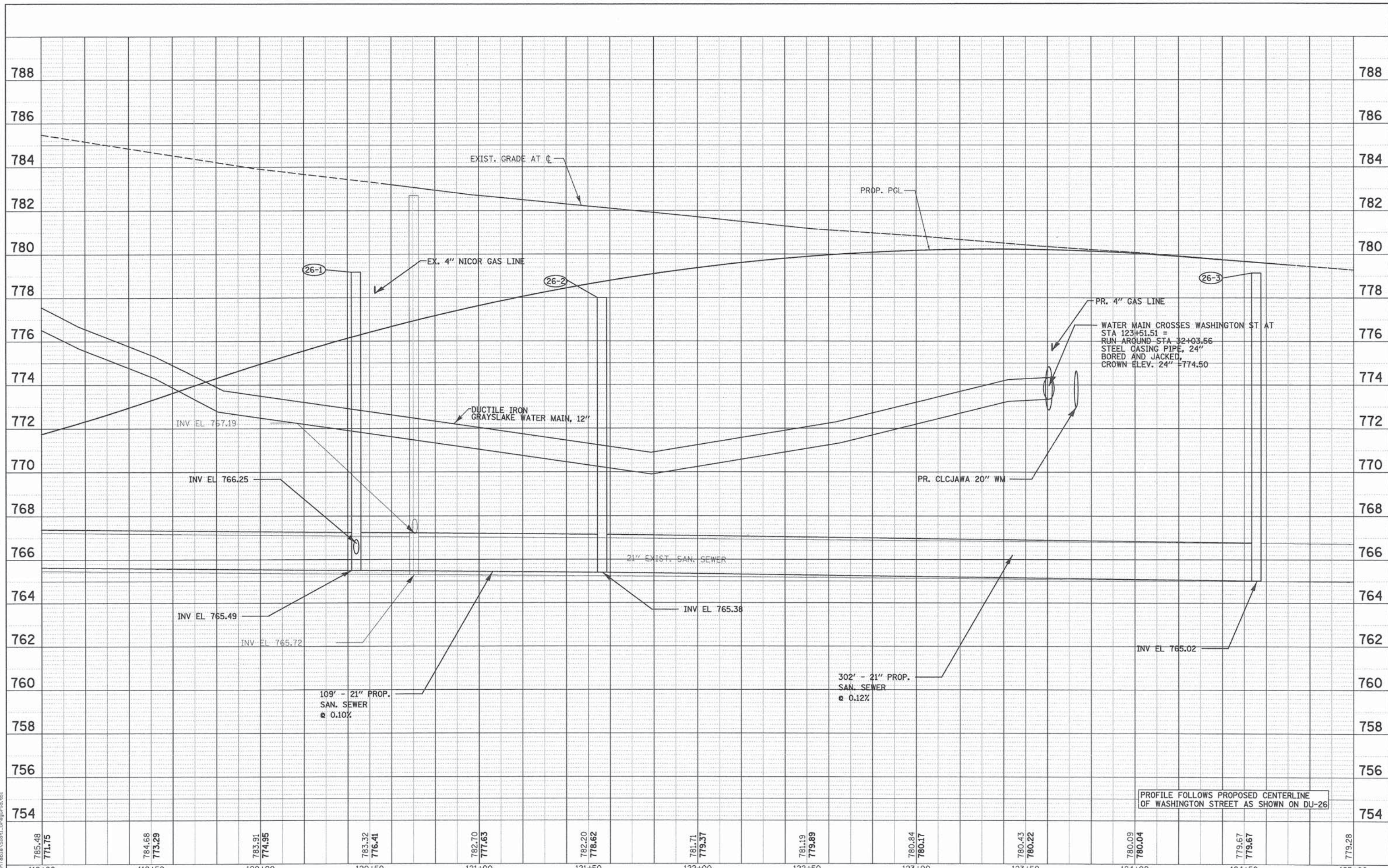
F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 124
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

61A63

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532

DATE	
BY	
REVIEWED	
PLANNED	
ALIGNED	
CHECKED	
NO. OF WAY	
PLAN	
NO.	

DATE	
BY	
REVIEWED	
PLANNED	
ALIGNED	
CHECKED	
NO. OF WAY	
PROFILE	
NO.	

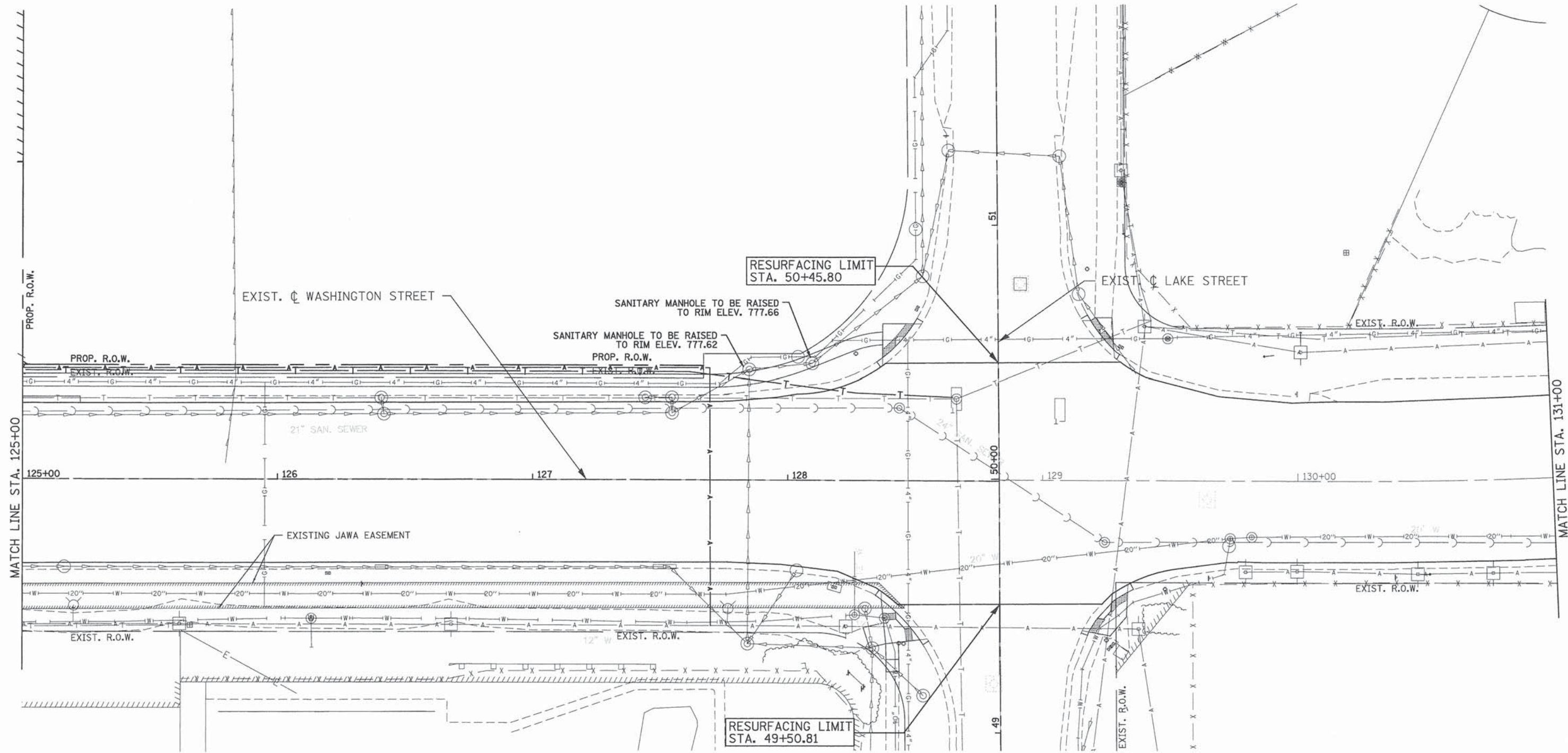


PROFILE FOLLOWS PROPOSED CENTERLINE OF WASHINGTON STREET AS SHOWN ON DU-26

PENTABLE = ...\\net\tools\stol\... (vertical text)

785.48 771.75	784.68 773.29	783.91 774.95	783.32 776.41	782.70 777.63	782.20 778.62	781.71 779.37	781.19 779.89	780.84 780.17	780.43 780.22	780.09 780.04	779.67 779.67	779.28											
119+00	119+50	120+00	120+50	121+00	121+50	122+00	122+50	123+00	123+50	124+00	124+50	125+00											
PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com				USER NAME = tkoeppen(Rdwy.Lisle) PLOT CONFIG = PDF(Grey_Small).plt PLOT SCALE = 1:48 PLOT DATE = 7/3/2014 12:31:26 AM				DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE - 6/30/2014				REVISED - REVISED - REVISED - REVISED -											
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION												WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET UTILITY PLAN AND PROFILE		F.A.U. RTE. 187		SECTION 11-00121-11-BR		COUNTY LAKE		TOTAL SHEETS 496		SHEET NO. 125	
SCALE: 1"=20'												SHEET NO. DU 27 OF 37		STA. 119+00 TO STA. 125+00		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT					

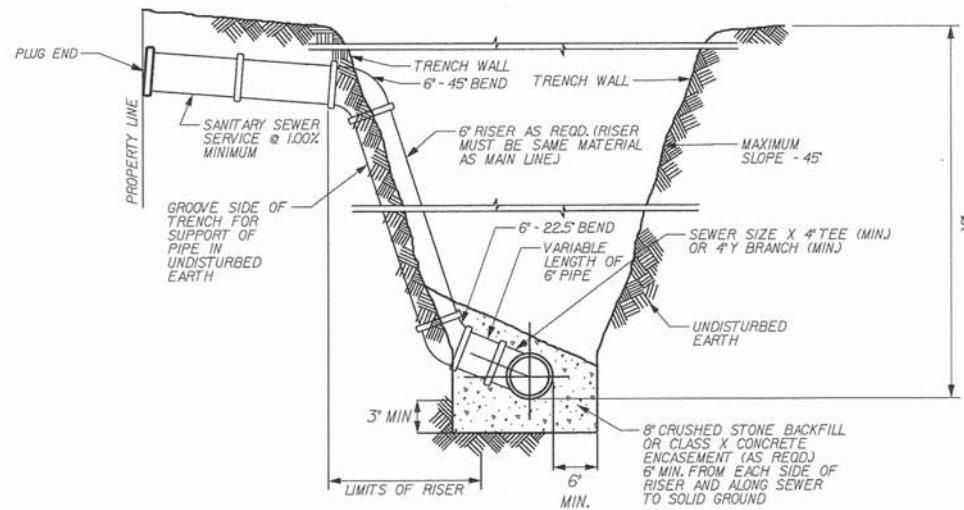
SAN STRUCTURE ADJUSTMENT SCHEDULE							
	STRUCTURE NO.	STATION	OFFSET	DIR.	HEIGHT MOVED (FT)	NO.	STAGE
WASH. ST.	EXIST	127+84.81	43.5	LT	0.45	1	STAGE IIA TO III
WASH. ST.	EXIST	128+09.47	46.0	LT	0.42	1	STAGE IIA TO III



PENTABLE * ...\\PentTable\Stor1.dwg for rdt.tbl

PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen(Rdwy_Lis)le PLOT CONFIG = PDF(Gray_Small).plt PLOT SCALE = 1:40 PLOT DATE = 7/3/2014 12:31:58 AM	DESIGNED - JWM DRAWN - JWM CHECKED - EYC DATE = 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET UTILITY PLAN AND PROFILE	F.A.U. RTE. 187 SECTION 11-00121-11-BR COUNTY LAKE TOTAL SHEETS 496 SHEET NO. 126 61A63
	SCALE: 1"=20' SHEET NO. DU 28 OF 37 STA. 125+00 TO STA. 131+00					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

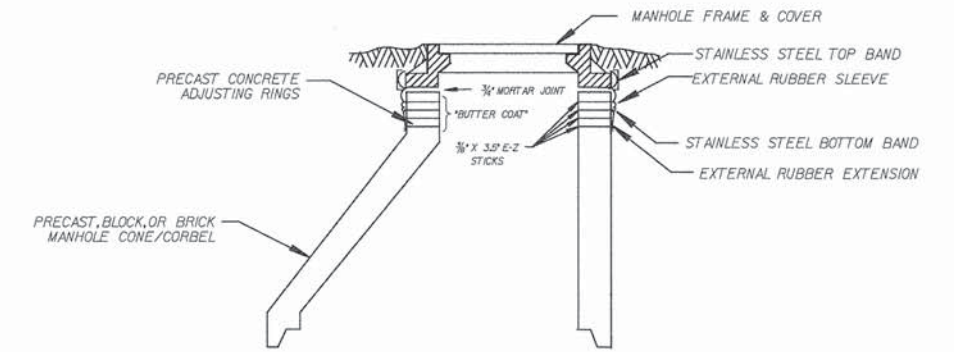
G:\C007\21150_004\Drawings\shh\Draw\S_Utl1_08_PP_28eole.dgn



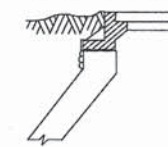
NOTE:

- SANITARY SEWER RISERS TO BE CONSTRUCTED IN LIEU OF WYES WHERE SEWER DEPTH EXCEEDS 8'-0".
- USE MISSION COUPLINGS TO CONNECT DISSIMILAR MATERIALS

SANITARY SEWER SERVICE RISER



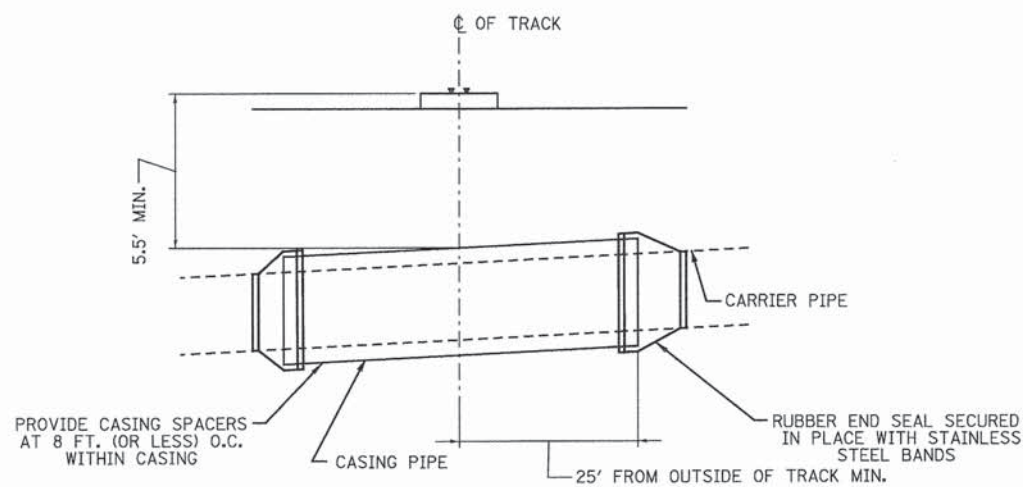
NARROW EXTERNAL RUBBER SEAL



NOTE:

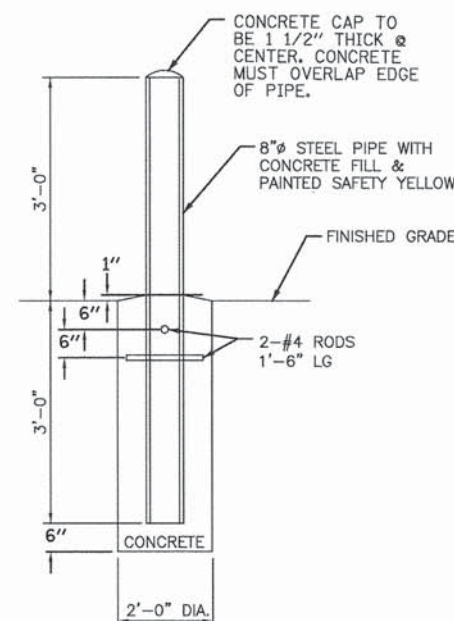
- TO SPAN CHIMNEY HEIGHTS OF:
- 0 - 3' - NARROW (6") SEAL ONLY
 - OVER 3' - 6 1/2' - STANDARD (9") SEAL ONLY
 - OVER 6 1/2' - 12' - STD. SEAL & EXTENSION
 - OVER 12' - SEAL & MULT. EXTENSIONS

EXTERNAL MANHOLE CHIMNEY SEAL DETAILS

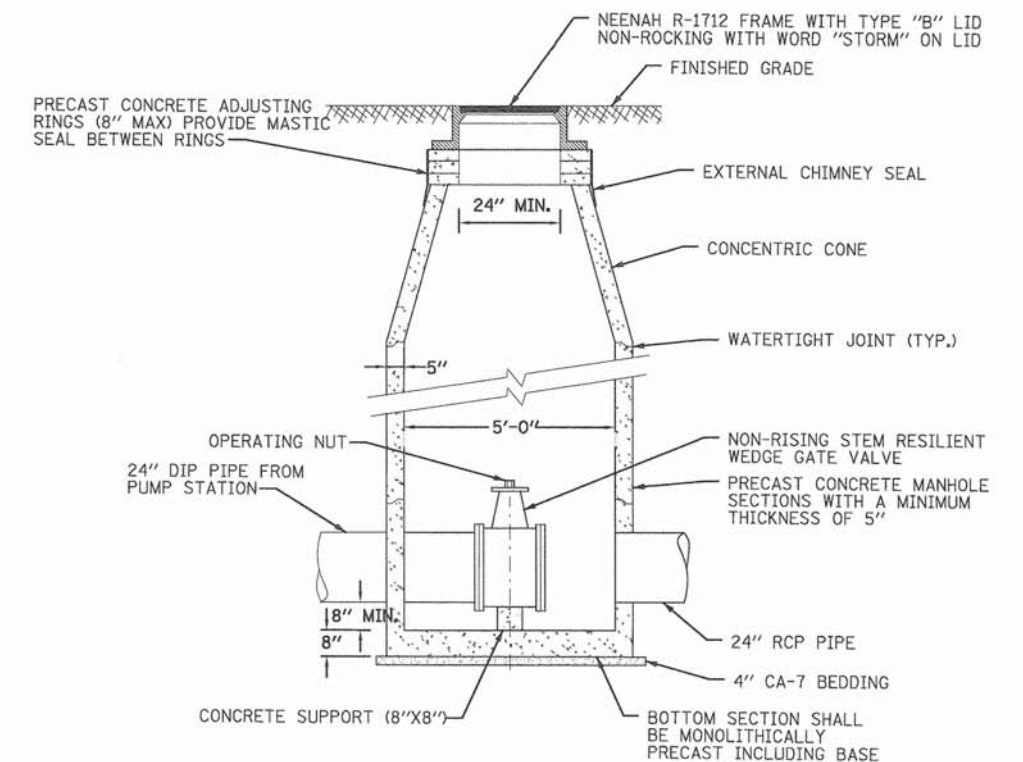


SANITARY SEWER PIPE SIZE	CASING PIPE SIZE	LENGTH OF CASING PIPE	MIN. WALL THICKNESS
21"	30"	120'	0.375"

RAILROAD SANITARY SEWER CROSSING CASING PIPE DETAIL
N.T.S.



TYPICAL GUARD POST DETAIL
N.T.S.



VALVE VAULT DETAIL
N.T.S.

PATRICK ENGINEERING

PATRICK ENGINEERING
4970 VARSITY DRIVE
LISLE, IL 60532
patrickengineering.com

USER NAME = tkoeppen@dwg.lisla	DESIGNED - JWM	REVISED -
PLOT CONFIG = PDF(Greg.Small).plt	DRAWN - JWM	REVISED -
PLOT SCALE = 1:100	CHECKED - EYC	REVISED -
PLOT DATE = 7/3/2014 12:32:46 AM	DATE - 6/30/2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

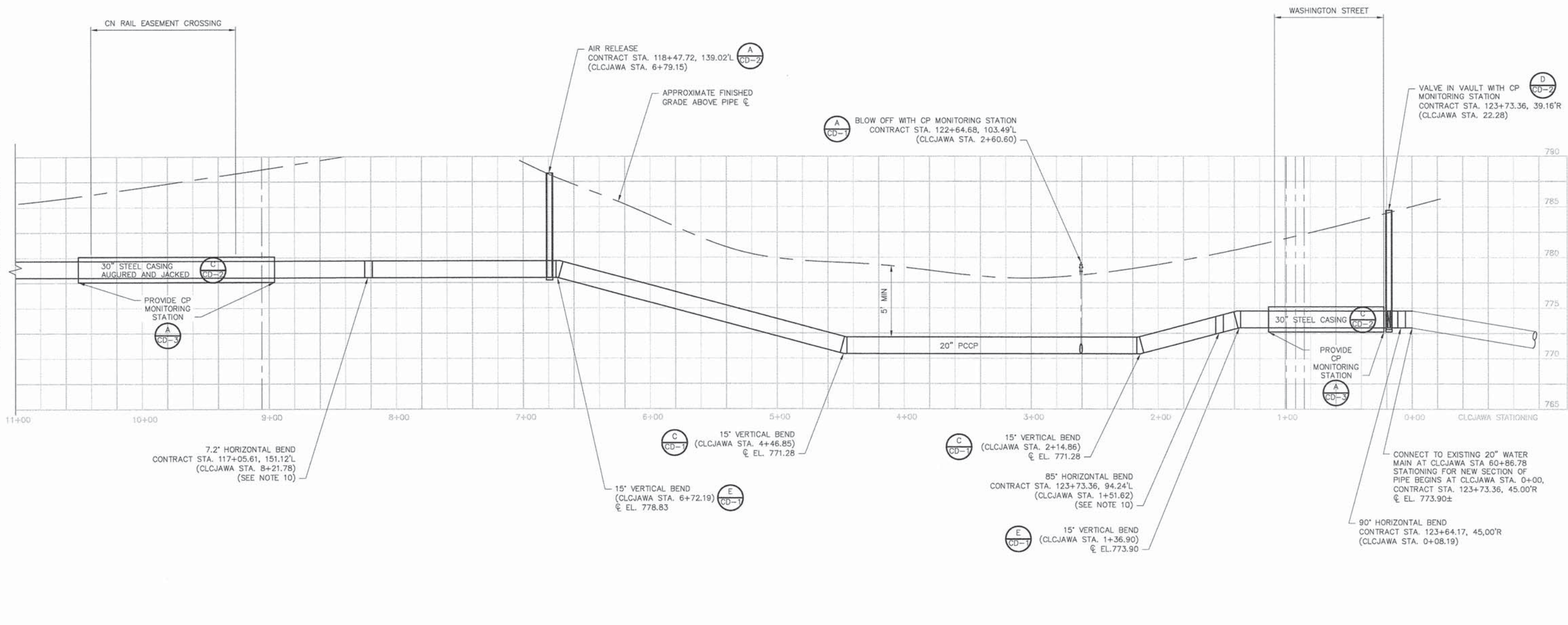
WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
UTILITY DETAILS

SCALE: SHEET NO. DU 30 OF 37 STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	128
61A63				

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

SEE SHEET NO. DU 32 OF 37 STA. 11+00



STATIONING KEY:

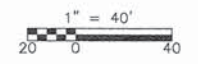
CONTRACT STATIONING PROVIDED IS BASED ON THE WASHINGTON STREET AND IS FOR CONSTRUCTION PURPOSES. THE CLCJAWA STATIONING PROVIDED IS FOR AS-BUILT PURPOSE ONLY AND ARE NOT FOR CONSTRUCTION.

DETAIL REFERENCE KEY:

- CD-1 = SHEET NO. DU 33
- CD-2 = SHEET NO. DU 34
- CD-3 = SHEET NO. DU 35

SCALE:

HORIZONTAL AND VERTICAL 1" = 40'



GENERAL NOTES:

1. REFER TO UTILITY PLAN AND PROFILE SHEET NO. DU 22, 24, AND 26 FOR HORIZONTAL ALIGNMENT OF THE TRANSMISSION MAIN.
2. THE CLCJAWA DOES NOT GUARANTEE THE COMPLETENESS OR ACCURACY OF EXISTING UTILITIES AND STRUCTURES SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND SITE CONDITIONS IN FIELD, INCLUDING HORIZONTAL AND VERTICAL LOCATION OF THE TRANSMISSION MAIN, AND SUBMIT A LAYING SCHEDULE FOR APPROVAL TO THE ENGINEER PRIOR TO COMMENCING WORK.
4. CLCJAWA REQUIRES A MINIMUM 2 WEEK NOTICE PRIOR TO COMMENCING ANY WORK RELATED TO THE TRANSMISSION MAIN. ONLY CLCJAWA STAFF ARE PERMITTED TO OPERATE VALVES AND OTHER APPURTENANCES ASSOCIATED WITH THE TRANSMISSION MAIN.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT ABUTTING PROPERTY, UTILITIES, PEDESTRIANS AND VEHICULAR TRAFFIC.
6. WHERE A SANITARY OR STORM SEWER MAIN, LATERAL OR BUILDING SERVICE SEWER CROSSES A WATER MAIN, MINIMUM SEPARATION MUST BE MAINTAINED PER ILLINOIS ADMINISTRATIVE CODE TITLE 35, SUBTITLE F, CHAPTER 2, SECTION 653.119 PROTECTION OF WATER MAIN AND SERVICE LINES.
7. CP = CATHODIC PROTECTION. SEE SHEET NO. DU 35 FOR CP MONITORING STATION DETAILS.
8. A MINIMUM OF 5' OF COVER FROM THE TOP OF PIPE SHALL BE MAINTAINED AT ALL TIMES.
9. PIPE MAY BE DEFLECTED WITHIN ACCEPTABLE ANGLE DEFINED BY THE MANUFACTURER.
10. PROVIDE SPARE CUSTOM FITTINGS AS SPECIFIED, COORDINATE WITH CLCJAWA DELIVERY TIME AND LOCATION AT THE TIME OF SHOW DRAWING REVIEWS.

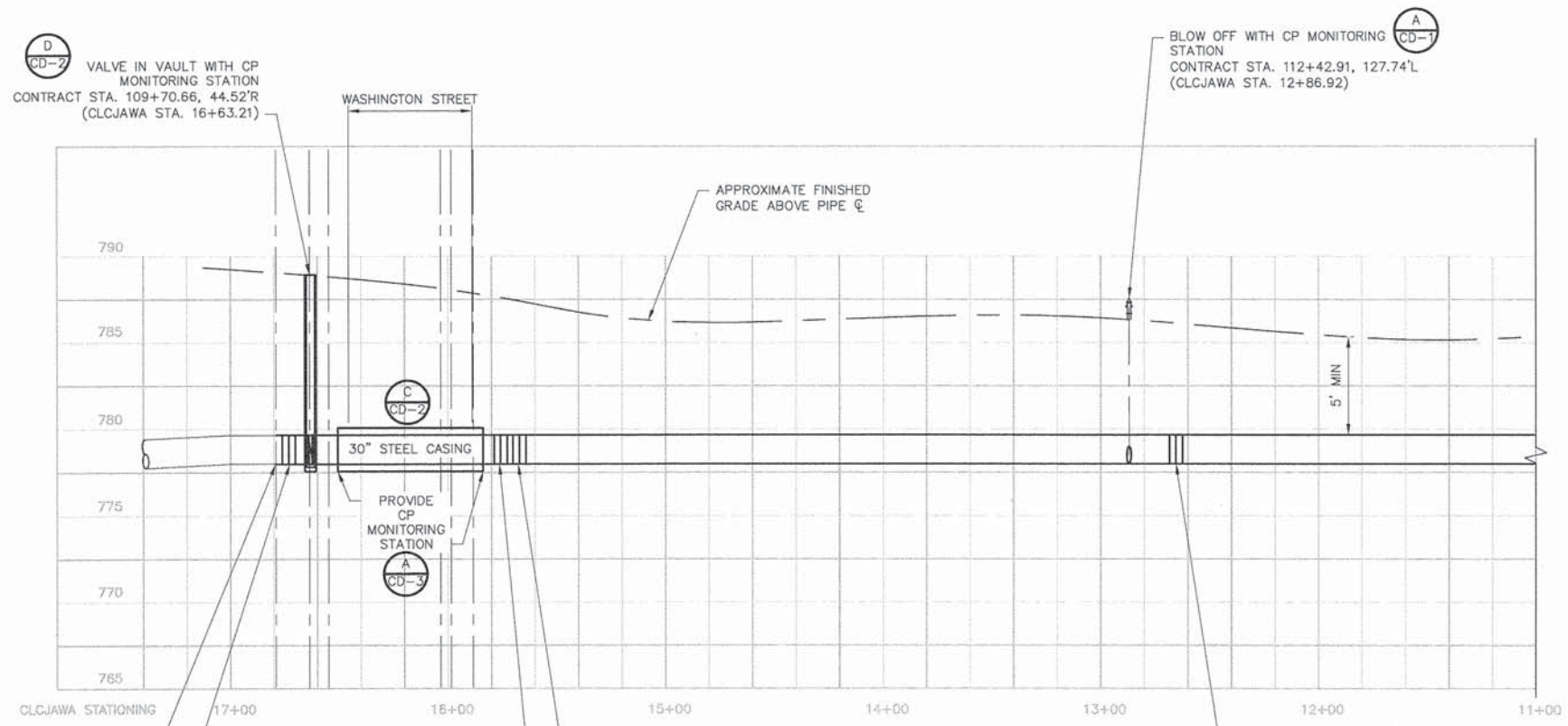


USER NAME = CELAYABJ	DESIGNED -- BJC	REVISED --
PLOT CONFIG = CDMS.plt	DRAWN -- JWW	REVISED --
PLOT SCALE = N/A	CHECKED -- AA	REVISED --
PLOT DATE = 6-29-2014	DATE -- 6-30-2014	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
CLCJAWA 20" TRANSMISSION MAIN REALIGNMENT - PROFILE I

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 129
SCALE: 1"=40'		SHEET NO. DU 31 OF 37		STA. 109+50 TO STA. 124+50
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



CONNECT TO EXISTING 20" WATER MAIN AT CLCJAWA EXISTING STA. 76+31.35. STATIONING FOR NEW SECTION OF PIPE ENDS AT CLCJAWA STA. 16+79.15, CONTRACT STA. 109+57.00, 50.65'R @ EL. 778.83±

90° HORIZONTAL BEND CONTRACT STA. 109+70.75, 50.45'R (CLCJAWA STA. 16+73.21)

30° HORIZONTAL BEND CONTRACT STA. 109+75.33, 49.02'L (CLCJAWA STA. 15+67.23)

45° HORIZONTAL BEND CONTRACT STA. 109+69.34, 42.84'L (CLCJAWA STA. 15+75.85)

15° HORIZONTAL BEND CONTRACT STA. 112+63.64, 133.96'L (CLCJAWA STA. 12+65.52)

STATIONING KEY:

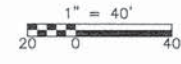
CONTRACT STATIONING PROVIDED IS BASED ON THE WASHINGTON STREET AND IS FOR CONSTRUCTION PURPOSES. THE CLCJAWA STATIONING PROVIDED IS FOR AS-BUILT PURPOSE ONLY AND ARE NOT FOR CONSTRUCTION.

DETAIL REFERENCE KEY:

- CD-1 = SHEET NO. DU 33
- CD-2 = SHEET NO. DU 34
- CD-3 = SHEET NO. DU 35

SCALE:

HORIZONTAL AND VERTICAL 1" = 40'



GENERAL NOTES:

1. REFER TO UTILITY PLAN AND PROFILE SHEET NO. DU 22, 24, AND 26 FOR HORIZONTAL ALIGNMENT OF THE TRANSMISSION MAIN.
2. THE CLCJAWA DOES NOT GUARANTEE THE COMPLETENESS OR ACCURACY OF EXISTING UTILITIES AND STRUCTURES SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND SITE CONDITIONS IN FIELD, INCLUDING HORIZONTAL AND VERTICAL LOCATION OF THE TRANSMISSION MAIN, AND SUBMIT A LAYING SCHEDULE FOR APPROVAL TO THE ENGINEER PRIOR TO COMMENCING WORK.
4. CLCJAWA REQUIRES A MINIMUM 2 WEEK NOTICE PRIOR TO COMMENCING ANY WORK RELATED TO THE TRANSMISSION MAIN. ONLY CLCJAWA STAFF ARE PERMITTED TO OPERATE VALVES AND OTHER APPURTENANCES ASSOCIATED WITH THE TRANSMISSION MAIN.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT ABUTTING PROPERTY, UTILITIES, PEDESTRIANS AND VEHICULAR TRAFFIC.
6. WHERE A SANITARY OR STORM SEWER MAIN, LATERAL OR BUILDING SERVICE SEWER CROSSES A WATER MAIN, MINIMUM SEPARATION MUST BE MAINTAINED PER ILLINOIS ADMINISTRATIVE CODE TITLE 35, SUBTITLE F, CHAPTER 2, SECTION 653.119 PROTECTION OF WATER MAIN AND SERVICE LINES.
7. CP = CATHODIC PROTECTION. SEE SHEET NO. DU 35 FOR CP MONITORING STATION DETAILS.
8. A MINIMUM OF 5' OF COVER FROM THE TOP OF PIPE SHALL BE MAINTAINED AT ALL TIMES.
9. PIPE MAY BE DEFLECTED WITHIN ACCEPTABLE ANGLE DEFINED BY THE MANUFACTURER.
10. PROVIDE SPARE CUSTOM FITTINGS AS SPECIFIED, COORDINATE WITH CLCJAWA DELIVERY TIME AND LOCATION AT THE TIME OF SHOW DRAWING REVIEWS.

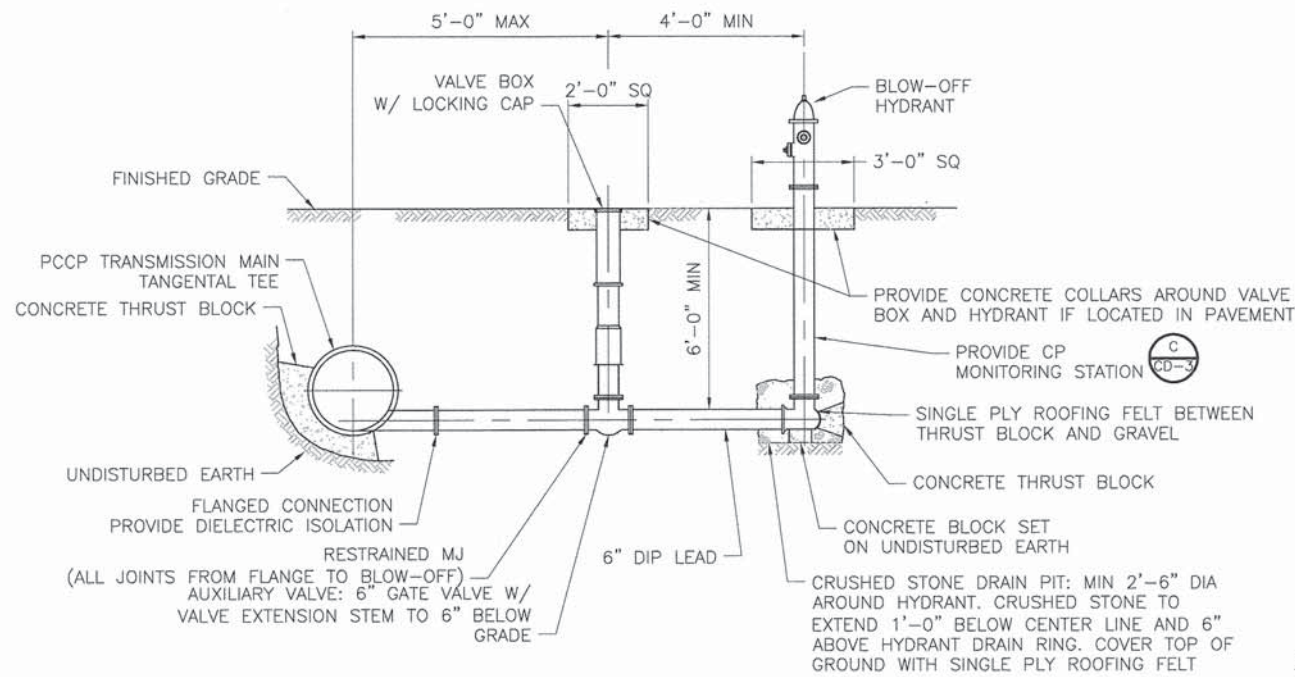
SEE SHEET NO. 31 OF 37 STA. 11+00



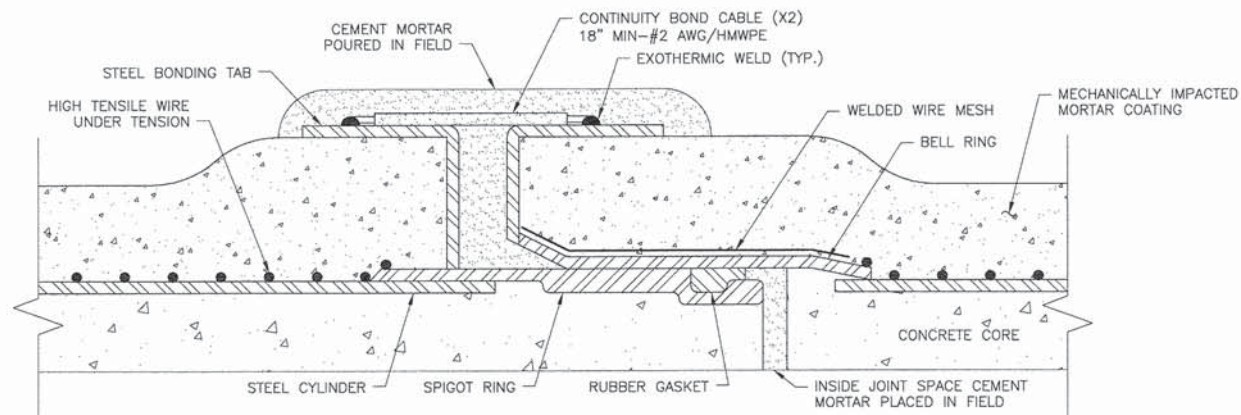
USER NAME = CELAYABJ	DESIGNED -- BJC	REVISED --
PLOT CONFIG = CDMS.plt	DRAWN -- JWW	REVISED --
PLOT SCALE = N/A	CHECKED -- AA	REVISED --
PLOT DATE = 6-29-2014	DATE -- 6-30-2014	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET CLCJAWA 20" TRANSMISSION MAIN REALIGNMENT - PROFILE II		F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 130
SCALE: 1"=40'	SHEET NO. DU 32 OF 37	STA. 109+50	TO STA. 124+50	CONTRACT NO. 61A63		
				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

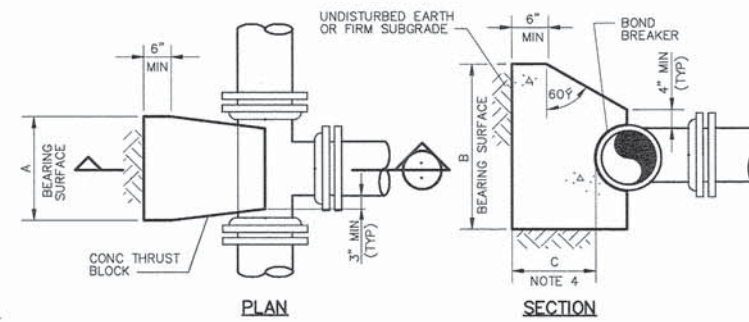


BLOW-OFF: PCCP TRANSMISSION MAIN
DETAIL A
 N.T.S.



NOTE: COAT EXOTHERMIC WELDS AND EXPOSED AREAS OF STEEL BONDING TABS WITH COAL TAR COMPOUND.

CONTINUITY BOND FOR PCCP JOINTS
DETAIL D
 N.T.S.



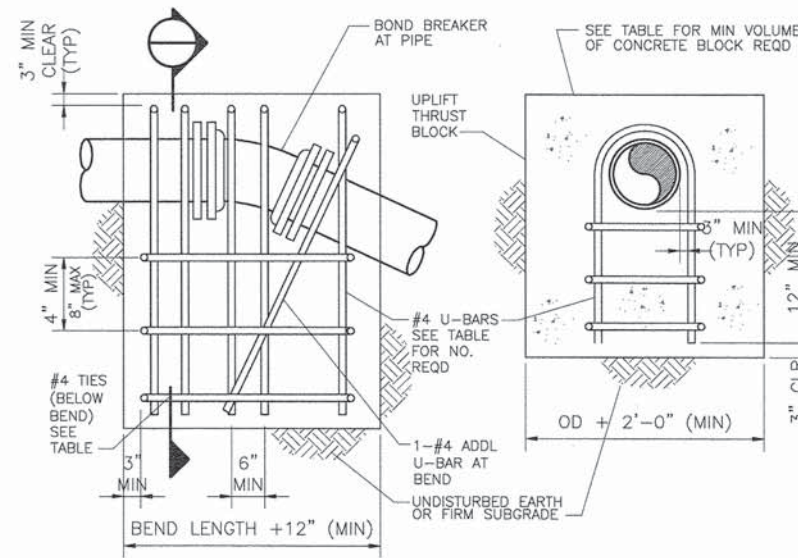
NOMINAL PIPE SIZE (IN)	MAXIMUM PIPE OD (IN)	REQUIRED BEARING AREA (SQ FT)
6	21.60	41
20	6.90	4

- NOTES:
 1. MAXIMUM TEST PRESSURE = 1.50x150 PSI
 2. MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
 3. BEARING AREA = A x B
 4. C SHALL BE GREATER THAN A/2 AND B/2.

THRUST BLOCKS FOR TEES
DETAIL B
 N.T.S.

GENERAL THRUST BLOCKS NOTES:

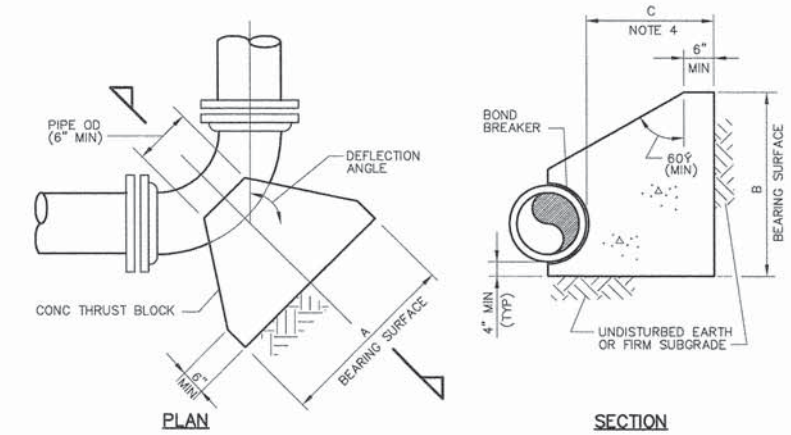
- USE THRUST BLOCKS AS CALLED OUT IN THE DRAWINGS OR AS DIRECTED BY THE ENGINEER.
- THRUST BLOCKS DO NOT REPLACE THE USE OF RESTRAINED JOINT PIPE.



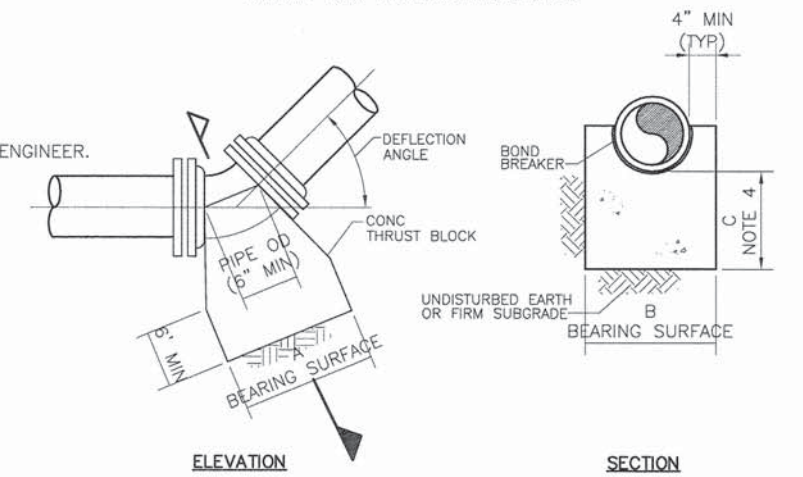
THRUST BLOCK FOR UPPER VERTICAL BENDS WITH REINFORCING BARS
DETAIL E
 N.T.S.

PIPE SIZE (IN.)	PIPE O.D. (IN.)	REQUIRED BEARING AREA (SQ FT)								#4 TIES REQD
		60 DEG		45 DEG		30 DEG		22.5 DEG		
		REINF	CONC	REINF	CONC	REINF	CONC	REINF	CONC	
6	6.90	2	2	2	1.5	2	1.0	2	1.0	2
18	19.50	7	15	6	12	4	9	3	7	4

- NOTES:
 1. "REINF" = NO. OF #4-U-BARS REQUIRED.
 2. "CONCRETE" = VOLUME OF CONCRETE BLOCK REQUIRED, CU YD.
 3. MAXIMUM TEST PRESSURE = 1.50x150 PSI.
 4. MINIMUM GRADE 40 REBAR.



DETAIL FOR HORIZONTAL BENDS



DETAIL FOR LOWER VERTICAL BENDS

NOMINAL PIPE SIZE (INCHES)	MAXIMUM PIPE OD (INCHES)	REQUIRED BEARING AREA (SQ FT)					
		90 DEG	60 DEG	45 DEG	30 DEG	22.50 DEG	11.25 DEG
6	21.60	58	41	32	21	16	8
20	6.90	6	4	3	2.2	1.6	0.8

THRUST BLOCKS FOR HORIZONTAL BENDS AND LOWER VERTICAL BENDS

- NOTES:
 1. MAXIMUM TEST PRESSURE = 1.5 x 150 PSI
 2. MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
 3. BEARING AREA = A x B
 4. C SHALL BE GREATER THAN A/2 AND B/2.

THRUST BLOCKS FOR HORIZONTAL BENDS AND LOWER VERTICAL BENDS

DETAIL C
 N.T.S.



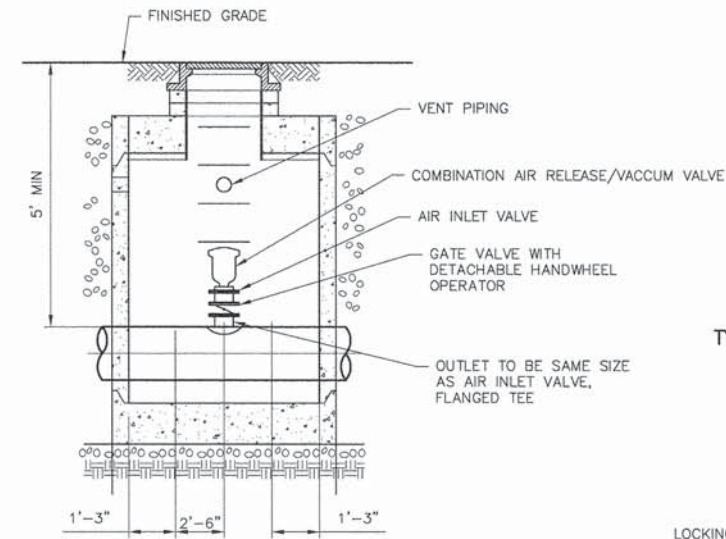
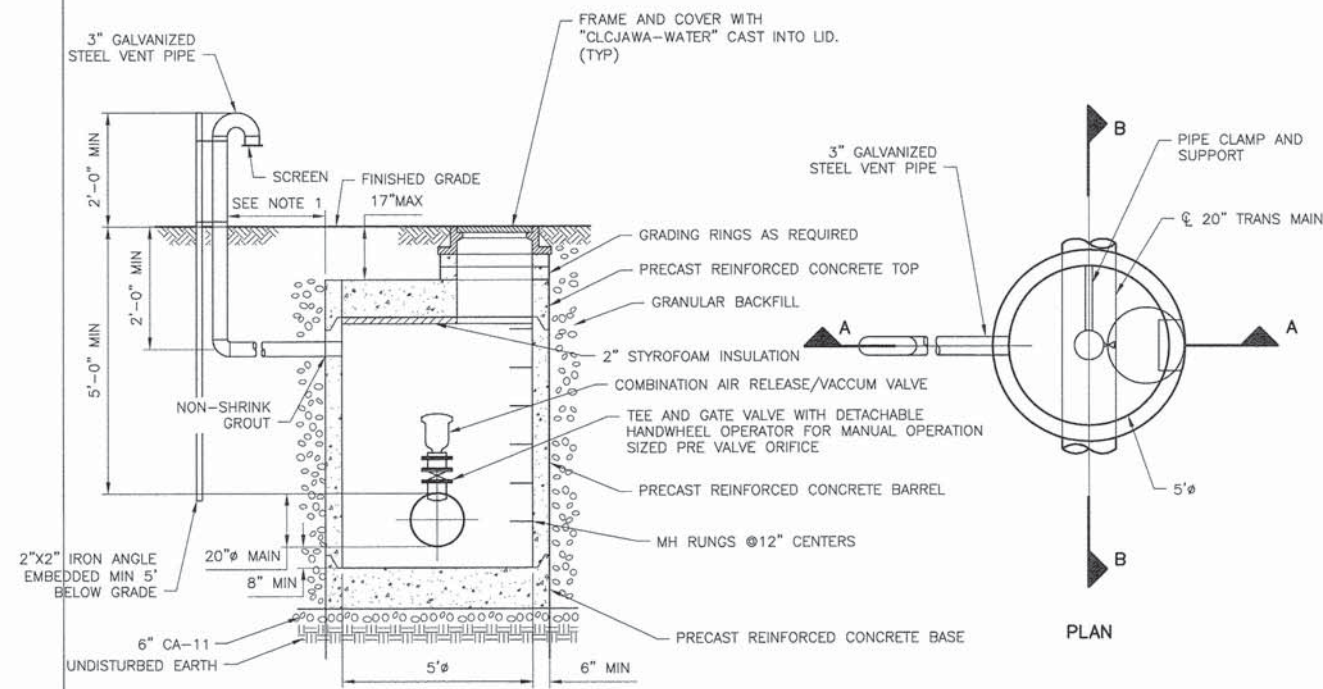
USER NAME = CELAYABJ	DESIGNED -- BJC	REVISED --
PLOT CONFIG = CDMS.plt	DRAWN -- JWW	REVISED --
PLOT SCALE = N/A	CHECKED -- AA	REVISED --
PLOT DATE = 6-29-2014	DATE -- 6-30-2014	REVISED --

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 CLCJAWA 20" TRANSMISSION MAIN REALIGNMENT - DETAILS I

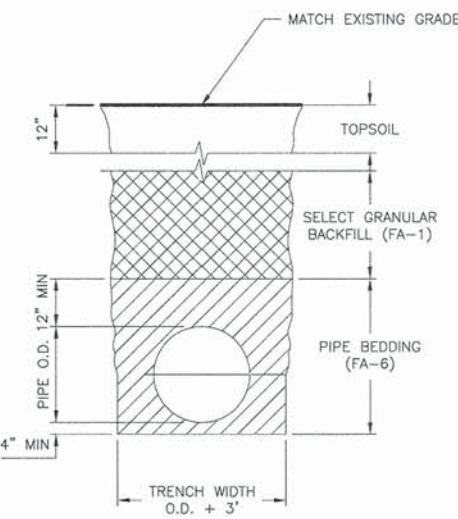
SCALE: NTS SHEET NO. DU 33 OF 37 STA. 109+50 TO STA. 124+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	131
CONTRACT NO. 61A63			ILLINOIS FED. AID PROJECT	



TYPICAL BEDDING - CLCJAWA WATER MAIN ONLY

DETAIL B
N.T.S.



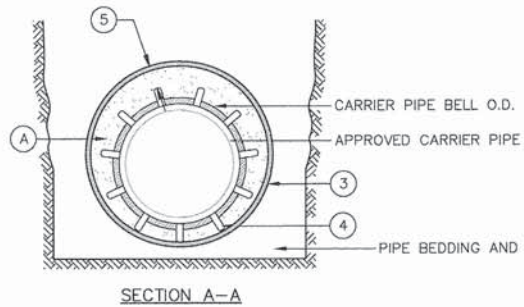
NOTES:
1. THE CONTRACTOR SHALL SCRAP TOP 18" OF SOIL AND STOCKPILE FOR USE DURING BACKFILL OPERATIONS AS TOPSOIL.

AIR RELEASE NOTES:

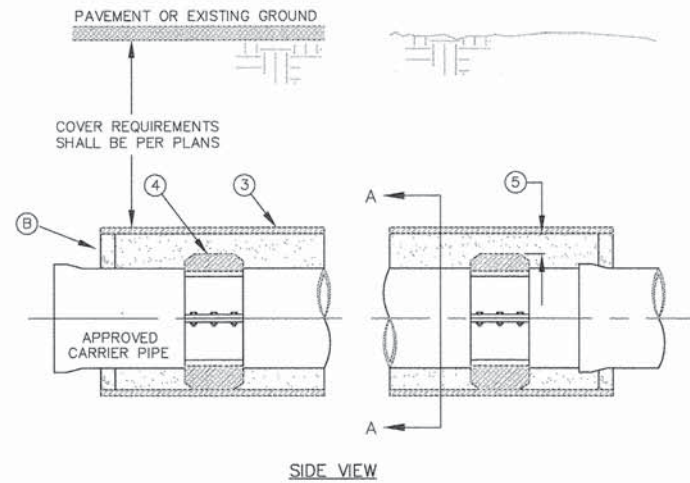
- DISTANCE AS SPECIFIED BY ENGINEER.
- SLOPE VENT BACK TO THE AIR RELEASE VALVE VAULT WITH A MINIMUM SLOPE OF 1/8" PER FOOT.

AIR RELEASE/AIR INLET VALVE VAULT FOR 20" PIPE

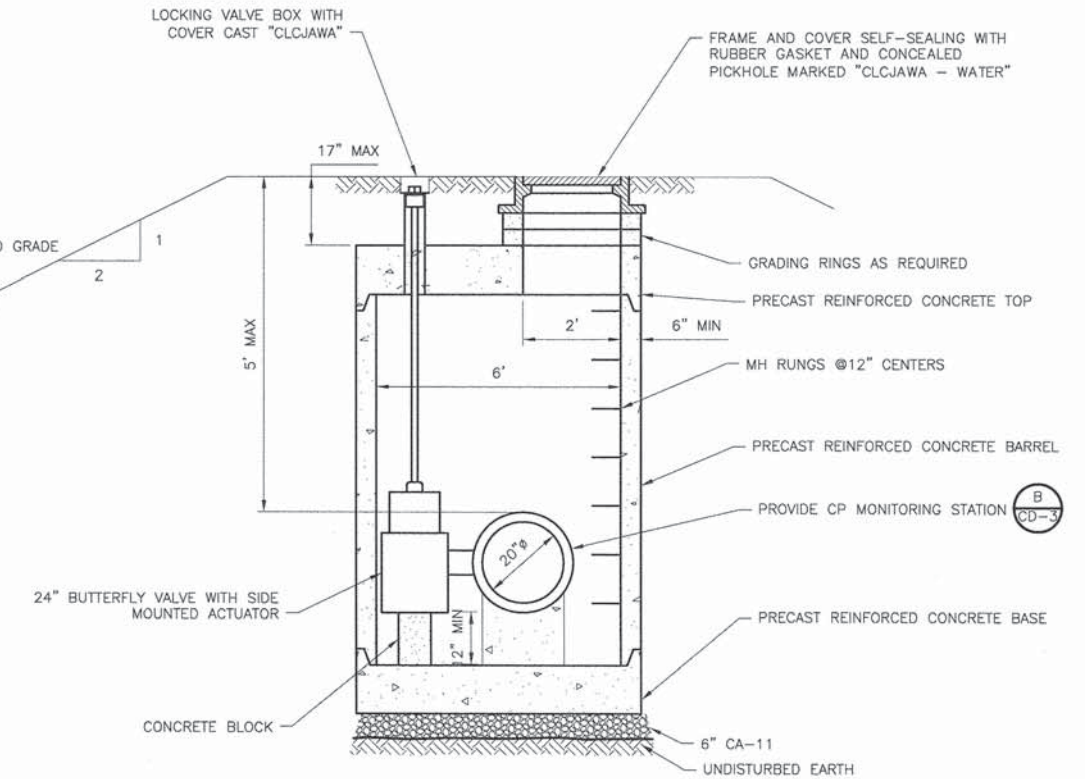
DETAIL A
N.T.S.



SECTION A-A



SIDE VIEW



VALVE IN VAULT
DETAIL D
N.T.S.

CARRIER PIPE INSTALLATION WITH CASING INSULATORS

DETAIL C
N.T.S.

GENERAL NOTES:

- INSULATED SPACERS SHALL BE USED TO PROVIDE CORROSION PROTECTION FOR DUCTILE IRON PIPE.
- TUNNEL SKIDS SHALL BE USED FOR PCCP TO MATCH EXISTING PIPE.
- STEEL CASING MINIMUM YIELD 36,000 PSI, SIZE AND LENGTH AS SHOWN IN PLAN AND SPECIFIED.
- CASING INSULATORS. SPACING AND LOCATION PER MANUFACTURER'S RECOMMENDATIONS. INSULATORS SHALL FIT SNUG OVER THE CARRIER PIPE.
- POSITION CARRIER PIPE APPROXIMATELY IN CENTER OF CASING. MINIMUM SPACING BETWEEN INSULATOR AND CASING PIPE SHALL BE 1", MAXIMUM SPACING SHALL BE 2".

CONSTRUCTION NOTES:

- ANNULAR SPACE SHALL BE FILLED WITH SAND AS SPECIFIED.
- ENDS SHALL BE SEALED WITH GROUT.



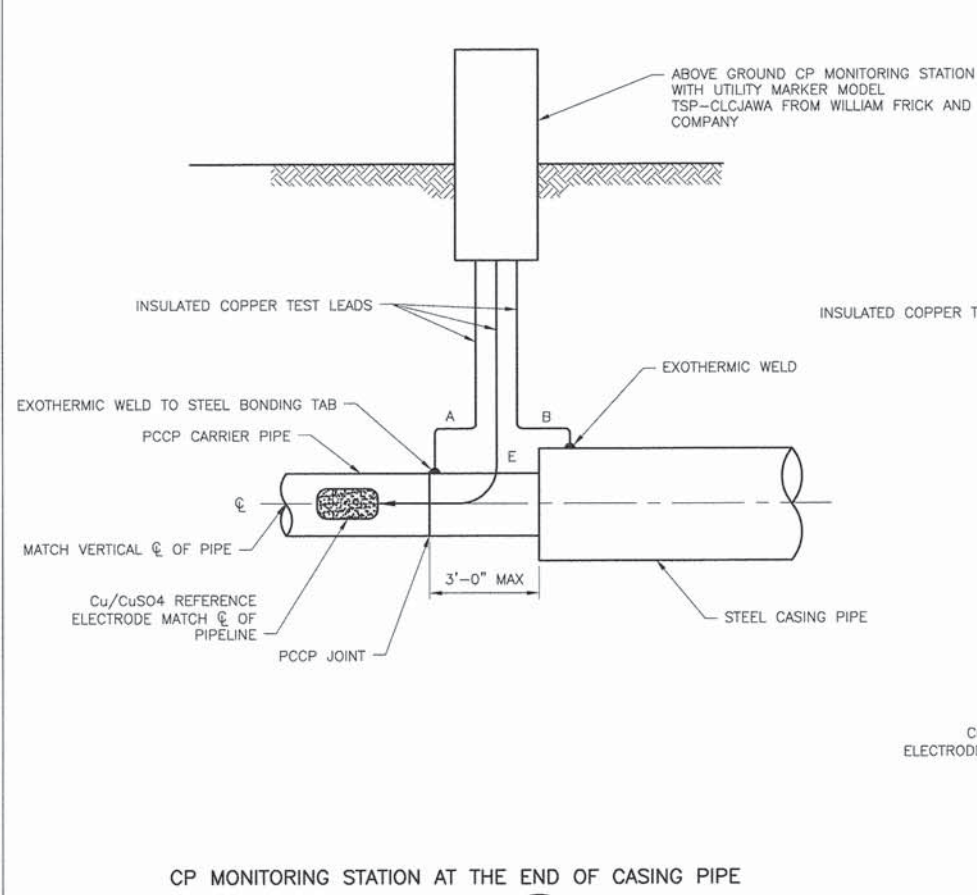
USER NAME = CELAYABJ	DESIGNED -- BJC	REVISED --
PLOT CONFIG = CDMS.plt	DRAWN -- JWW	REVISED --
PLOT SCALE = N/A	CHECKED -- AA	REVISED --
PLOT DATE = 6-29-2014	DATE -- 6-30-2014	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
CLCJAWA 20" TRANSMISSION MAIN REALIGNMENT - DETAILS II

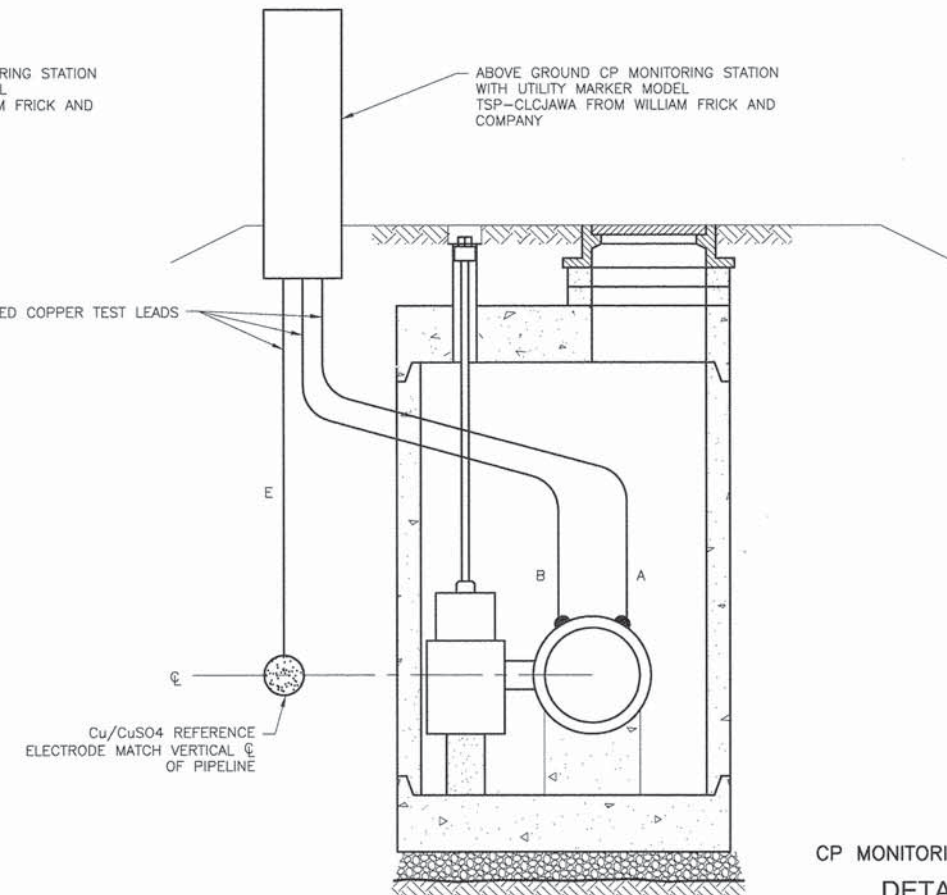
SCALE: NTS SHEET NO. DU 34 OF 37 STA. 109+50 TO STA. 124+50

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 132
CONTRACT NO. 61A63				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



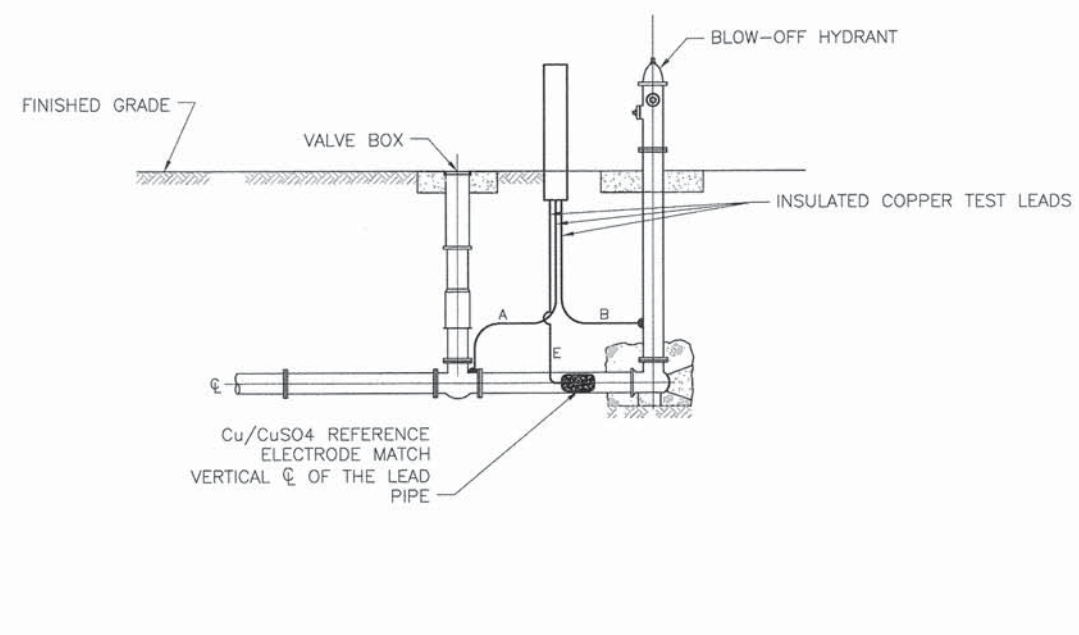
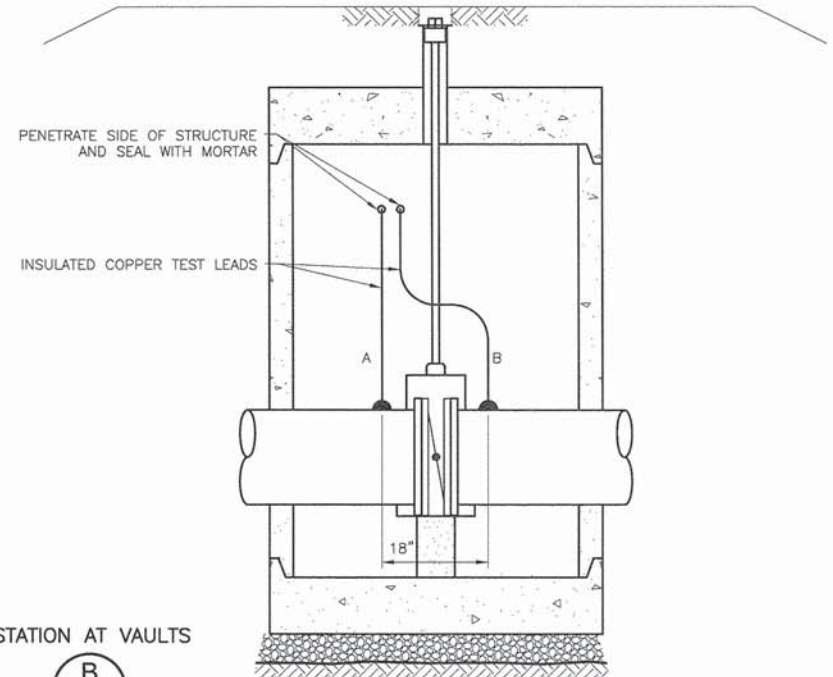
CP MONITORING STATION AT THE END OF CASING PIPE

DETAIL A
N.T.S.



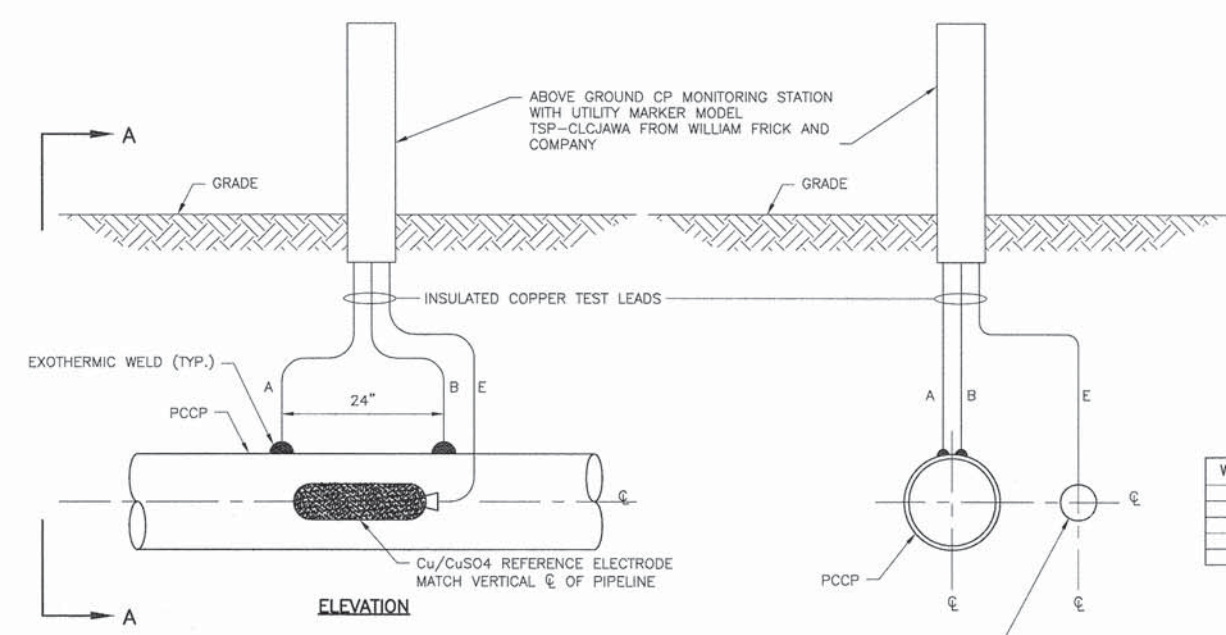
CP MONITORING STATION AT VAULTS

DETAIL B
N.T.S.



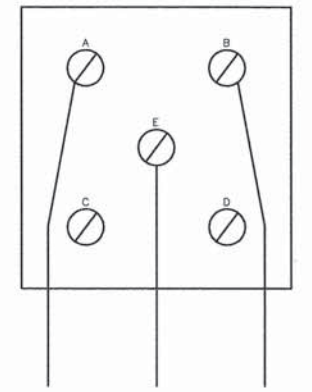
CP MONITORING STATION AT BLOW-OFF HYDRANT

DETAIL D
N.T.S.



FOR BURIED PIPE

DETAIL D
N.T.S.



TWO WIRE TEST STATION

WIRE TAG	GAUGE (AWG)	INSULATION	COLOR	CONNECTION
A	NO.12	THWN	BLUE	PIPE
B	NO. 12	THWN	BLUE	PIPE
C	NOT USED	--	--	--
D	NOT USED	--	--	--
E	NO. 14	BLACK	BLACK	REF. ELECTRODE

FOR ALL TEST STATIONS

DETAIL E
N.T.S.

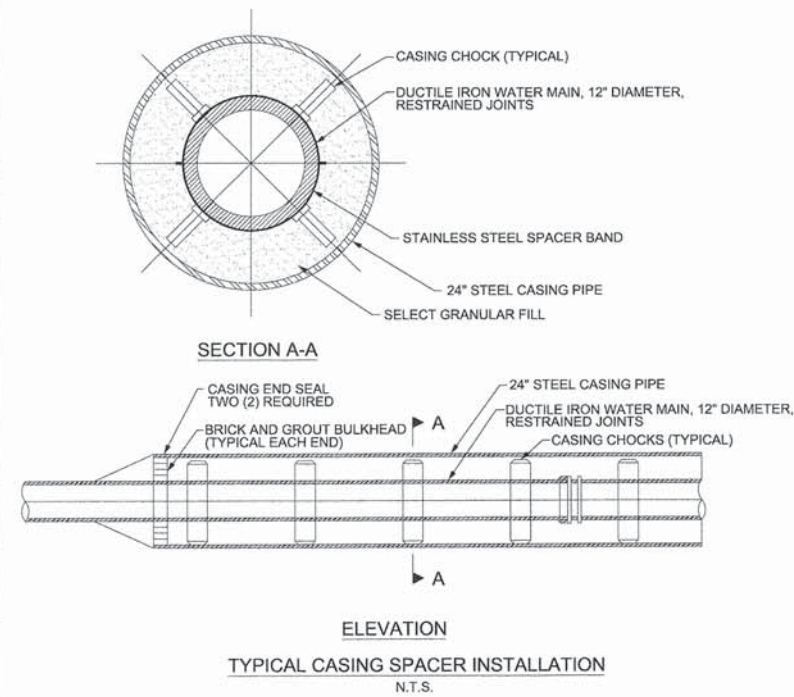


USER NAME = CELAYABJ	DESIGNED -- BJC	REVISED --
PLOT CONFIG = CDMS.plt	DRAWN -- JWW	REVISED --
PLOT SCALE = N/A	CHECKED -- AA	REVISED --
PLOT DATE = 6-29-2014	DATE -- 6-30-2014	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
CLCJAWA 20" TRANSMISSION MAIN REALIGNMENT - DETAILS III
SCALE: NTS SHEET NO. DU 35 OF 37 STA. 109+50 TO STA. 124+50

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 133
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



TYPICAL CASING SPACER INSTALLATION
N.T.S.

STEEL CASING PIPE SHALL MEET THE REQUIREMENTS OF ASTM A139 (ANSI B36.10); MINIMUM YIELD STRENGTH OF 35,000 P.S.I.; 0.375\"/>

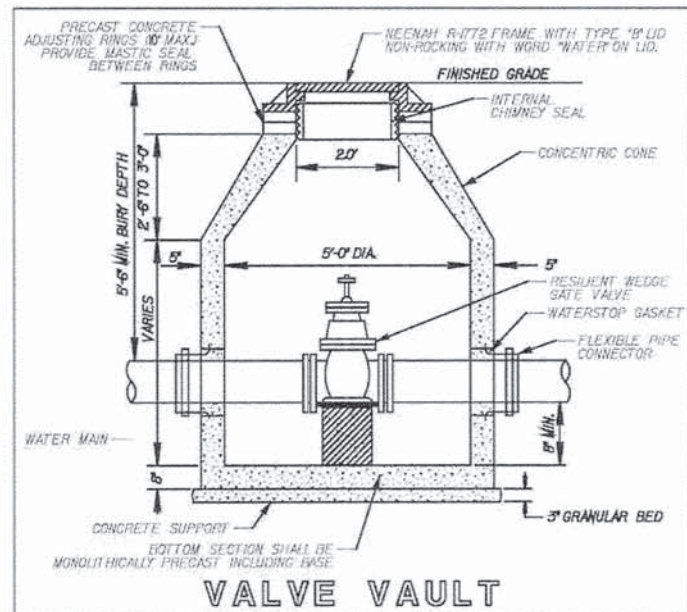
CASING PIPE SHALL BE WELDED IN ACCORDANCE WITH THE REQUIREMENTS OF AMERICAN WELDING SOCIETY (AWS) STANDARD D1.1.

CASING PIPE SHALL BE BITUMINOUS COATED INSIDE AND OUTSIDE IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO M190.

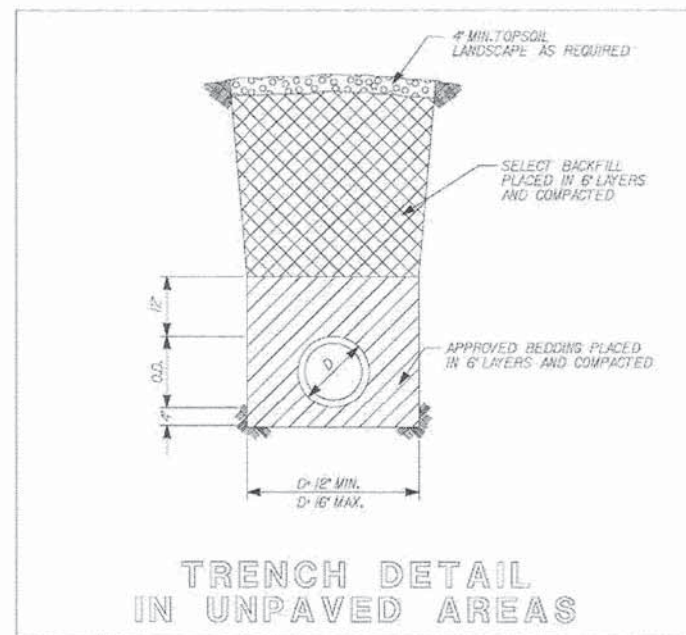
CASING CHOCKS SHALL BE STAINLESS STEEL, RESTRAINED CHOCKS AS MANUFACTURED BY CASCADE WATERWORKS MANUFACTURING CO., OR POWER SEAL PIPELINE PRODUCTS CORP.

CASING END SEALS SHALL BE SYNTHETIC RUBBER WITH TWO (2) STAINLESS STEEL BANDS AS MANUFACTURED BY CASCADE WATERWORKS MANUFACTURING CO., OR PIPELINE SEAL AND INSULATOR INC. END SEALS SHALL BE BONDED TO CASING PIPE AND DUCTILE IRON PIPE WATER MAIN WITH A BONDING CEMENT SUPPLIED BY THE END SEAL MANUFACTURER.

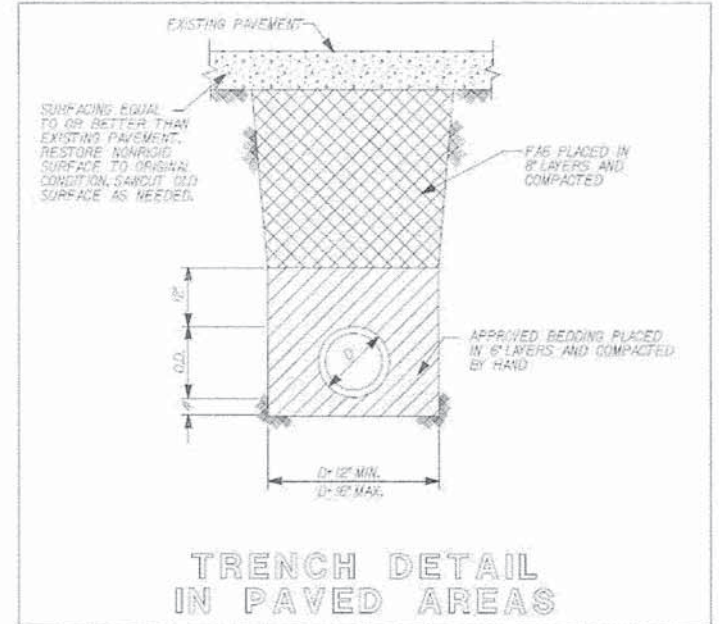
CARRIER PIPE SHALL BE RESTRAINED W/MEGA LUG RETAINERS.



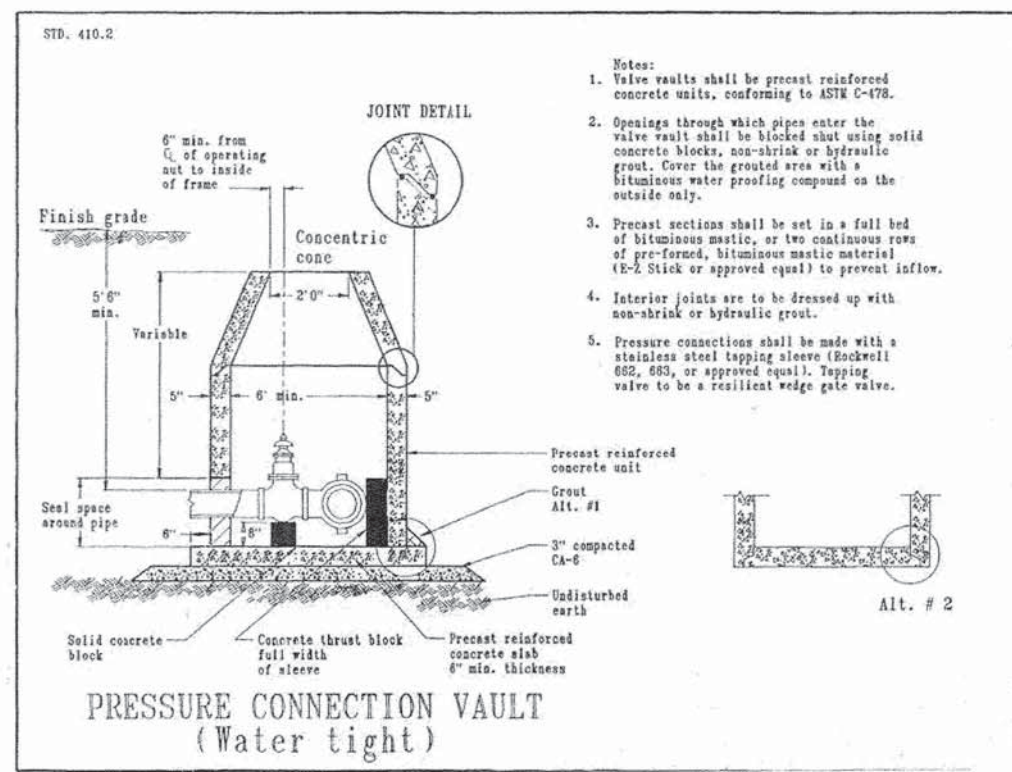
VALVE VAULT



TRENCH DETAIL IN UNPAVED AREAS

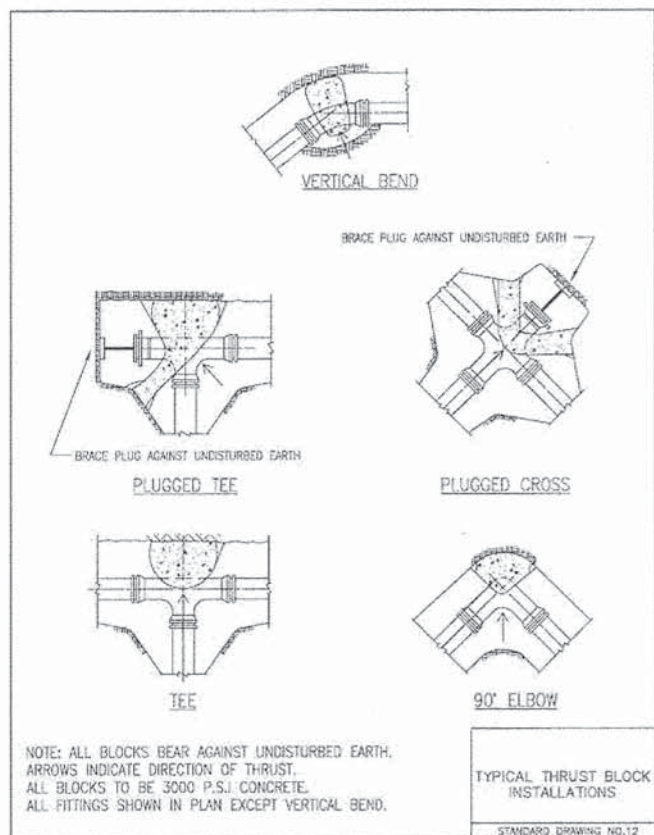


TRENCH DETAIL IN PAVED AREAS



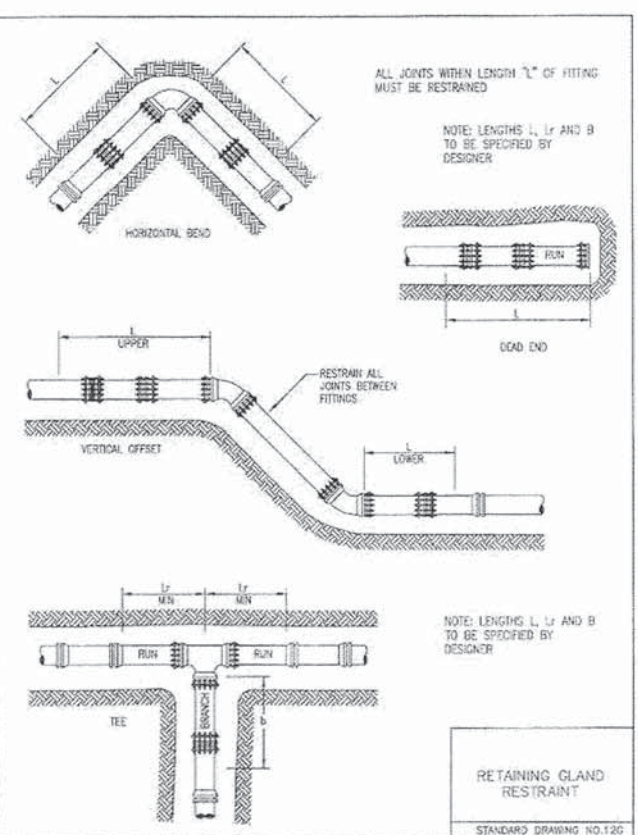
PRESSURE CONNECTION VAULT (Water tight)

- Notes:
1. Valve vaults shall be precast reinforced concrete units, conforming to ASTM C-478.
 2. Openings through which pipes enter the valve vault shall be blocked shut using solid concrete blocks, non-shrink or hydraulic grout. Cover the grouted area with a bituminous water proofing compound on the outside only.
 3. Precast sections shall be set in a full bed of bituminous mastic, or two continuous rows of pre-formed, bituminous mastic material (E-Z Stick or approved equal) to prevent inflow.
 4. Interior joints are to be dressed up with non-shrink or hydraulic grout.
 5. Pressure connections shall be made with a stainless steel tapping sleeve (Rockwell 662, 663, or approved equal). Tapping valve to be a resilient wedge gate valve.

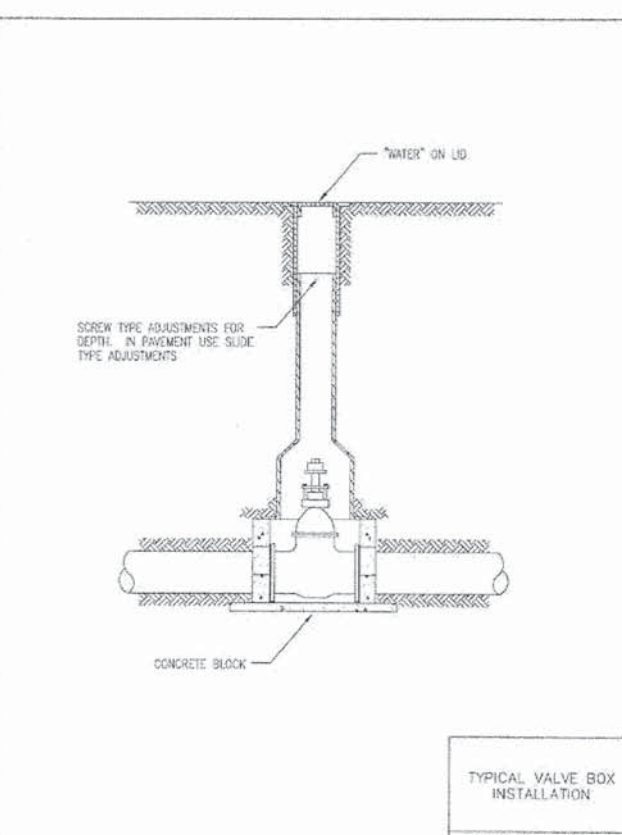


NOTE: ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH. ARROWS INDICATE DIRECTION OF THRUST. ALL BLOCKS TO BE 3000 P.S.I. CONCRETE. ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.

TYPICAL THRUST BLOCK INSTALLATIONS
STANDARD DRAWING NO.12



RETAINING GLAND RESTRAINT
STANDARD DRAWING NO.12G



TYPICAL VALVE BOX INSTALLATION
STANDARD DRAWING NO.14

B Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME = erik
PLOT CONFIG = #PLTDV5#
PLOT SCALE = #SCALESORT#
PLOT DATE = 6/28/2014 2:34:37 PM

DESIGNED - AL
DRAWN - AL
CHECKED - EO
DATE - 06-30-2014

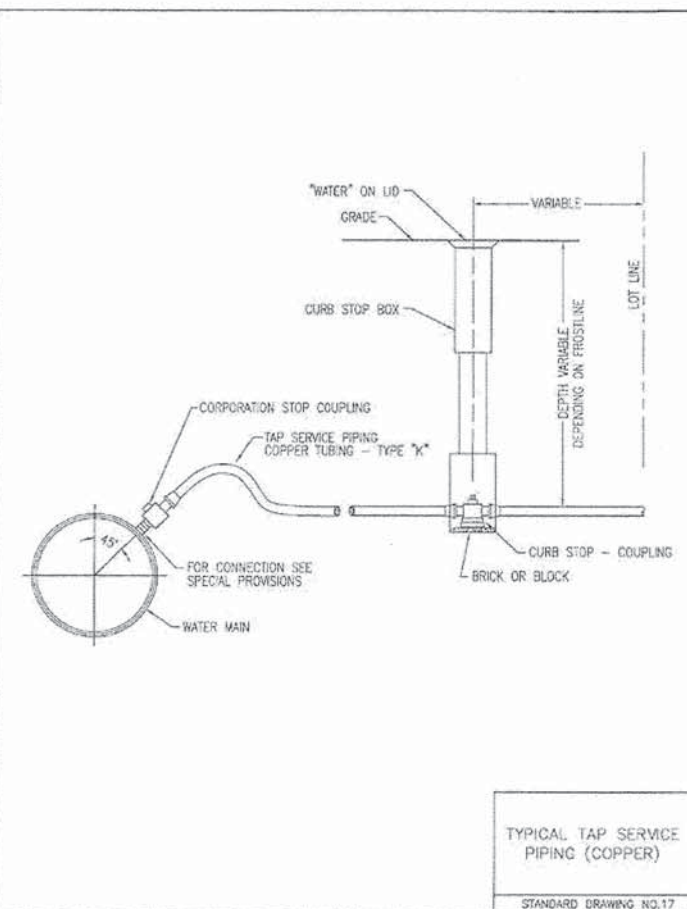
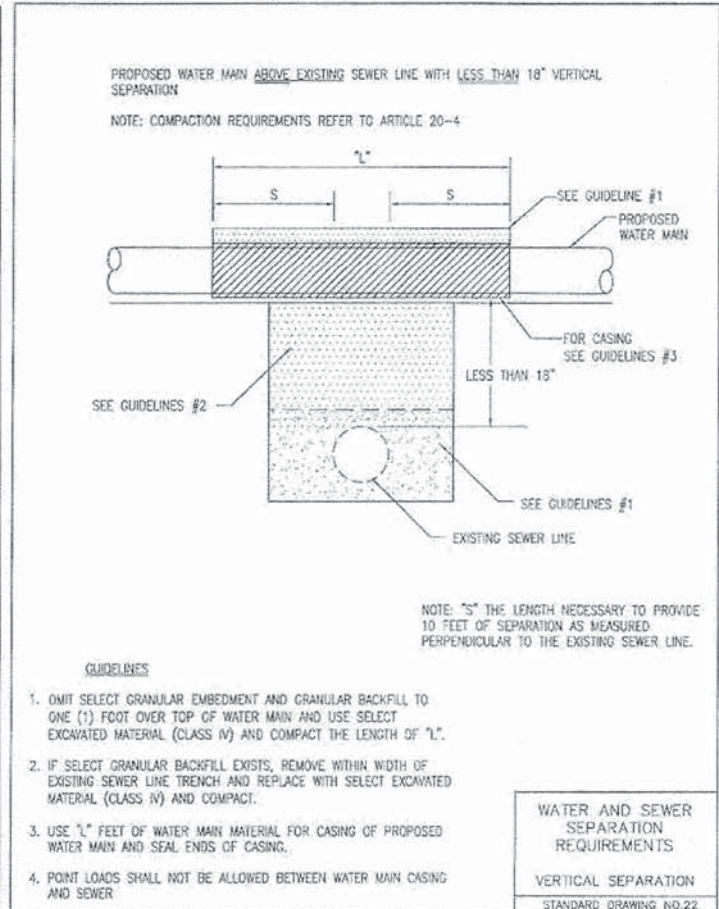
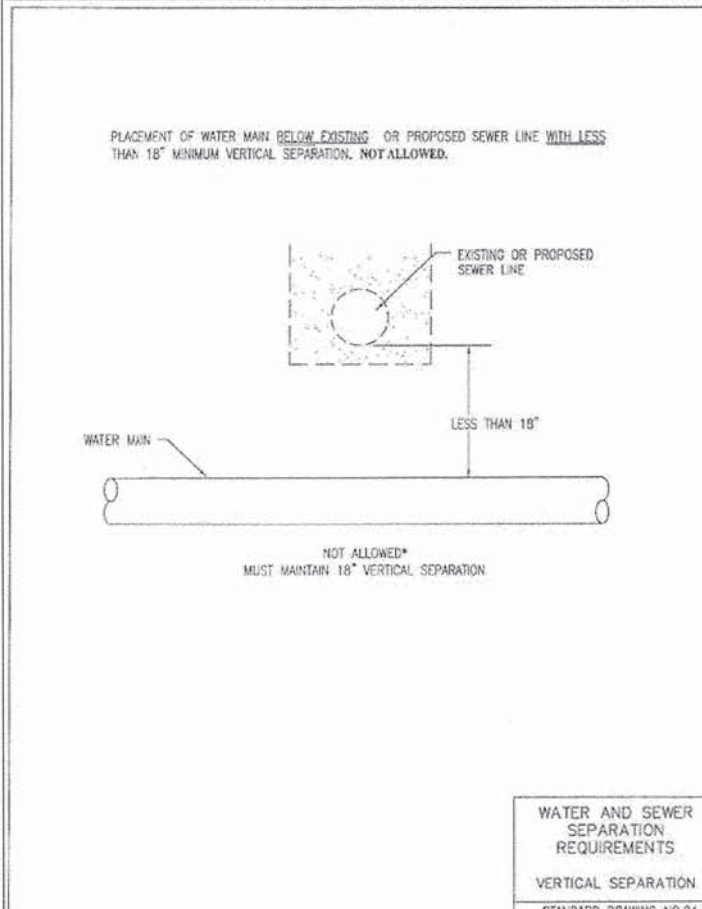
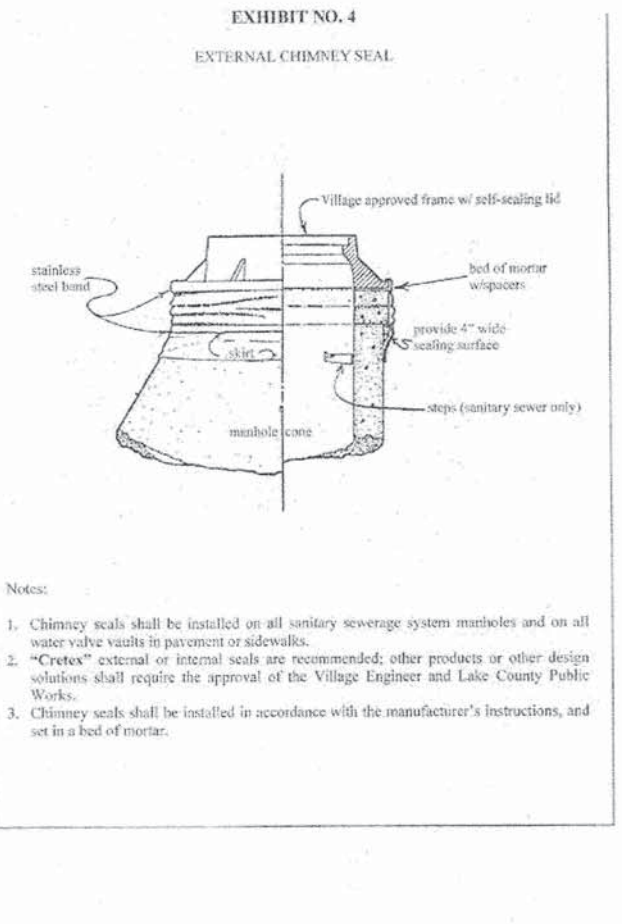
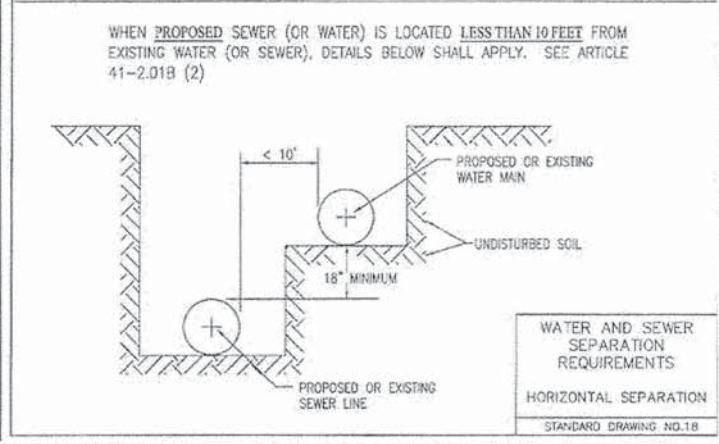
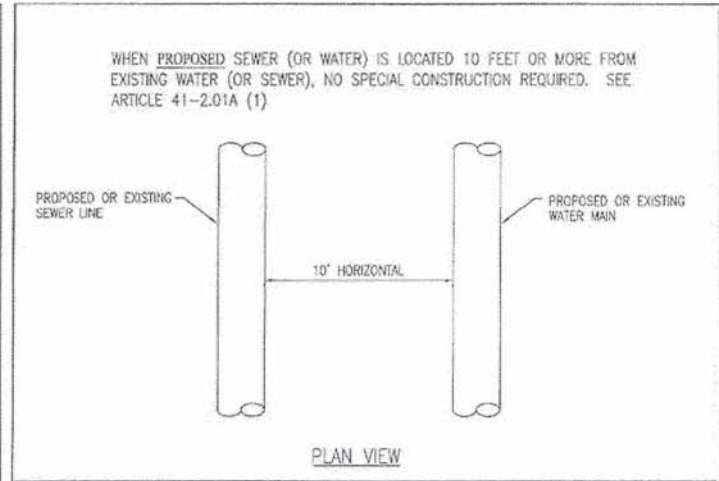
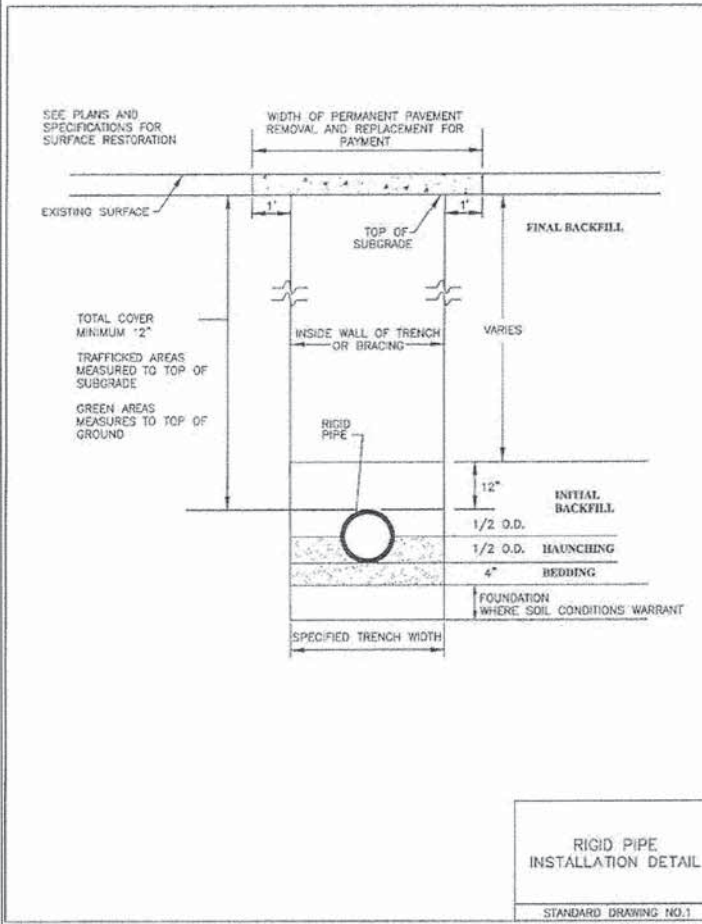
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
WATER MAIN DETAILS

SCALE: N.T.S. SHEET NO. DU 33 OF 34

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	134
CONTRACT NO.				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

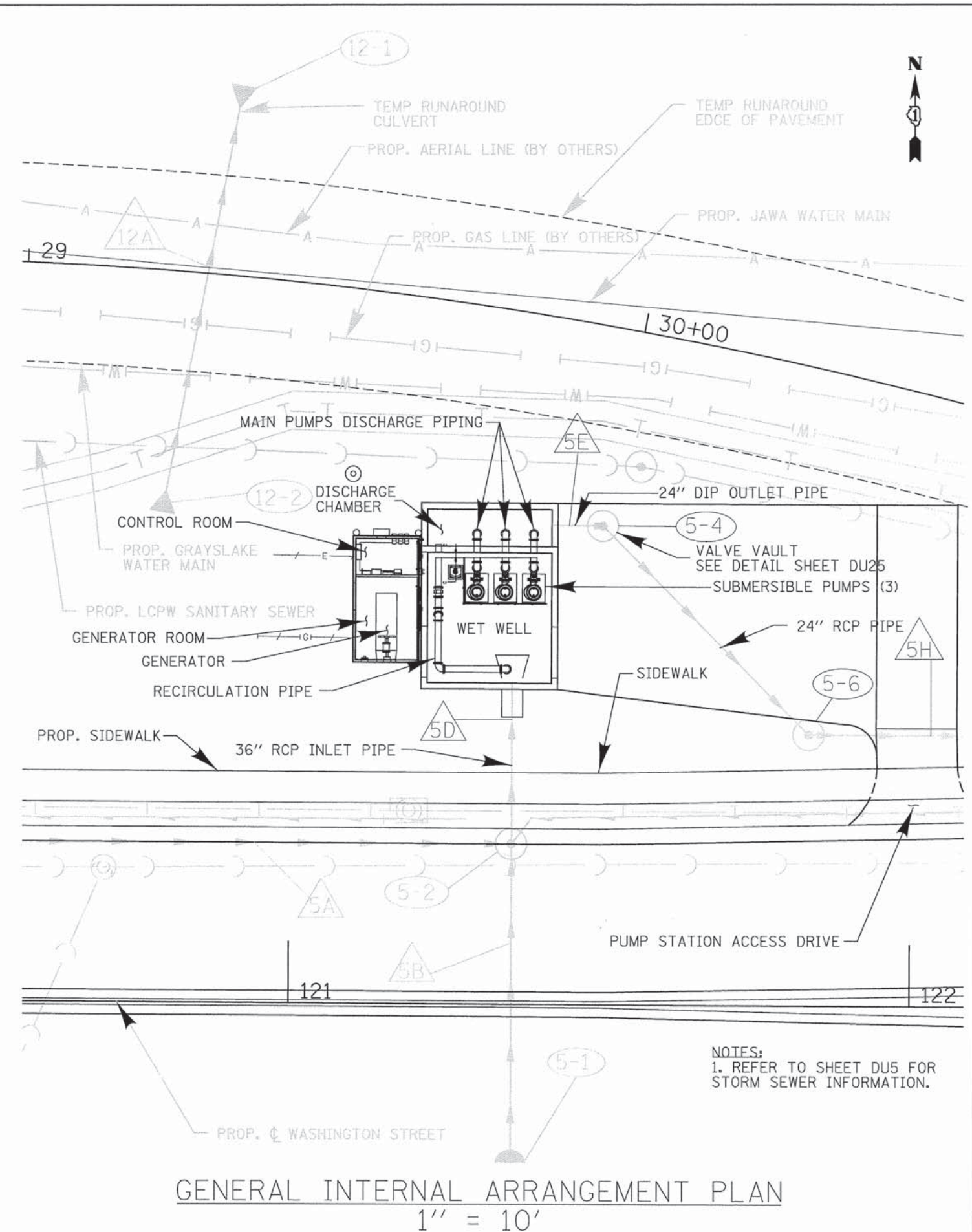
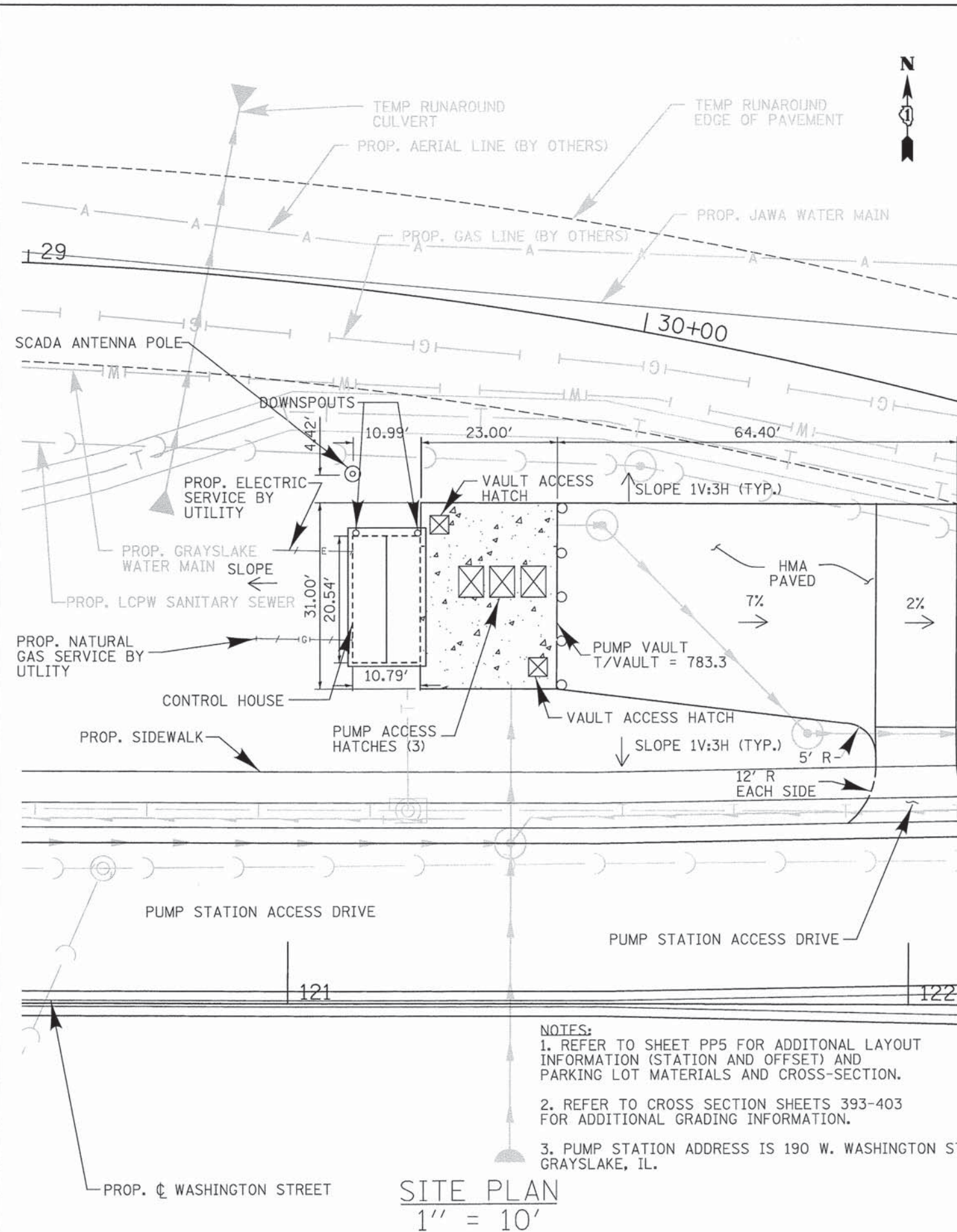
USER NAME = erik	DESIGNED - AL	REVISED -
PLOT CONFIG = #PLTDV5#	DRAWN - AL	REVISED -
PLOT SCALE = #SCALESHORT#	CHECKED - EO	REVISED -
PLOT DATE = 6/28/2014 2:35:46 PM	DATE - 06-30-2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
WATER MAIN DETAILS

SCALE: N.T.S. SHEET NO. DU 34 OF 34

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 135
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



RENTABLE - ...LISLE\PE\TABLE\TRANSPEN\FBL

<p>PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com</p>	USER NAME = tkoepen(Rdwy.Lisle)	DESIGNED - JWM	REVISED -
	PLOT CONFIG = PDF(Grey_Large.plt)	DRAWN - JWM	REVISED -
	PLOT SCALE = 1:10	CHECKED - EYC	REVISED -
	PLOT DATE = 7/17/2014 4:42:18 PM	DATE - 6/30/2014	REVISED -

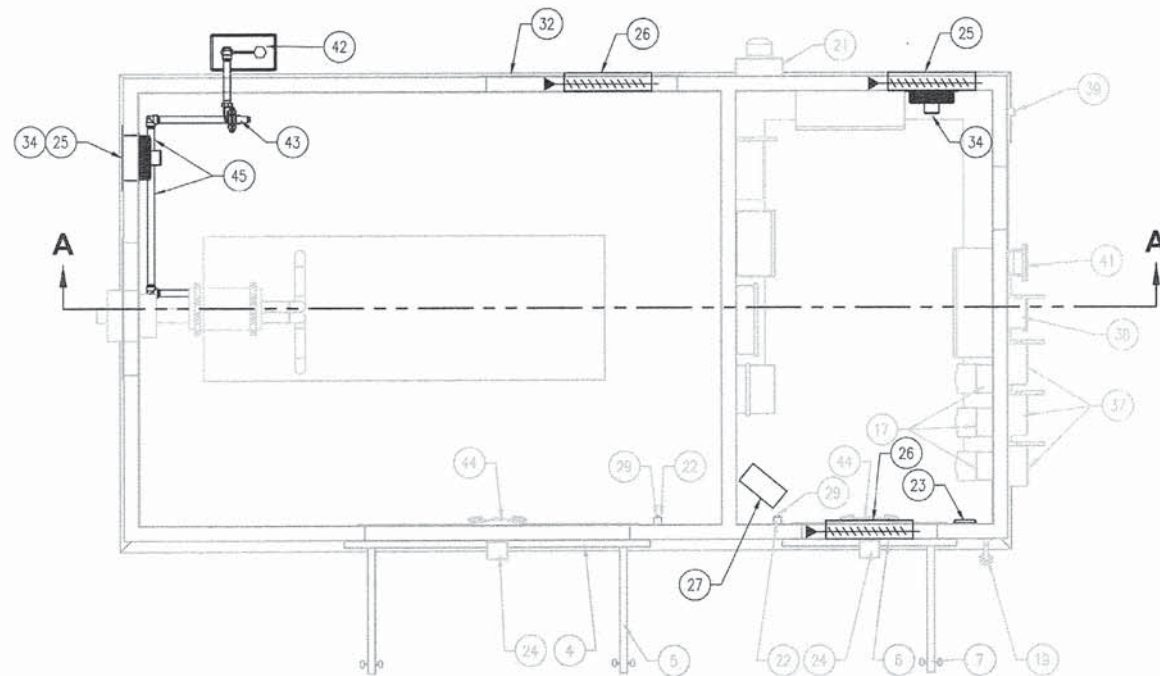
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
PUMP STATION SITE PLAN**

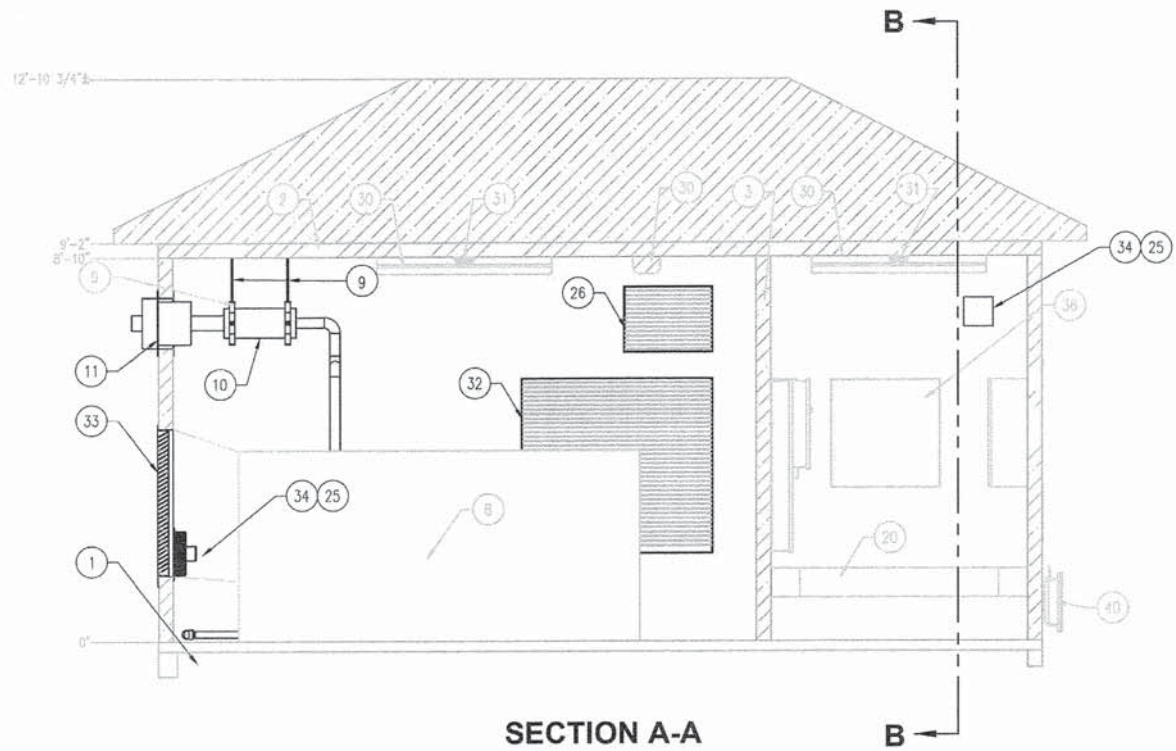
SCALE: 1"=10' SHEET NO. PS 1 OF 15 STA. TO STA.

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 136
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

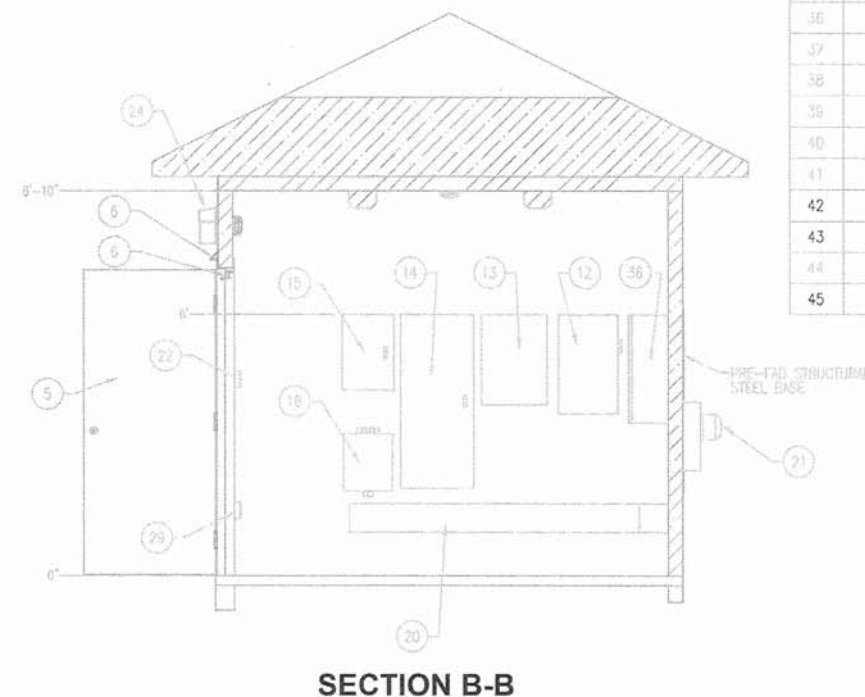
G:\L\CDOT\21158.004\Drawings\shs\0ra\S.P\Station Site_01.dgn



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	STRUCTURAL STEEL BASE		1
2	BUILDING ROOF	INSULATED, R25	1
3	BUILDING WALLS	INSULATED, R20	1
4	DRIP LEDGE, 72" DOUBLE DOOR		1
5	72" x 84" DOUBLE DOOR		1
6	DRIP LEDGE, 36" DOOR		1
7	DOOR	36" WIDE x 84" TALL	1
8	130 KW STANDBY GENERATOR	NATURAL GAS FUELED	1
9	SILENCER SUPPORT BRACKET		3
10	SILENCER		1
11	4" O.D. EXHAUST THIMBLE		1
12	MAIN DISCONNECT	100 AMP SERVICE ENTRANCE DISCONNECT	1
13	TRANSFER SWITCH	200 AMP AUTOMATIC TRANSFER SWITCH	1
14	PANEL BOARD	480 VAC, 3 PHASE, 200 AMP	1
15	LOADING PANEL	SINGLE PHASE, 24 SPACES	1
16	10 KW TRANSFORMER		1
17	WIND	25 THRU 40 HP (200/230 V); 30 THRU 75 HP (480V)	3
18	C-10303010	CONTROL PANEL	1
19	ALARM LIGHT		1
20	WINDING TROUGH		1
21	METER - BY OTHERS		1
22	LIGHT SWITCH	115 VAC	2
23	THERMISTOR		1
24	WALL LIGHT	OUTDOOR - 58W	2
25	LOUVER WITH GRAVITY DAMPER	24X24	
26	LOUVER WITH DAMPER	24X18	1
27	UNIT HEATER	3.75KW, 208V 3Ø	1
28	LIGHT SWITCH		2
29	OUTLET	115 VAC	2
30	48" EXHAUST FAN	115 VAC - SUITABLE FOR DAMP LOCATIONS	5
31	COMBINATION "SMOKE/CO" DETECTOR		2
32	48"x52" LOUVER	INTAKE	1
33	36"x40" LOUVER	EXHAUST	1
34	12" EXHAUST FAN	120V, 1Ø, 1/12 HP, CORROSION RESISTANT	2
35	HIP ROOF	FIELD ERECTED	1
36	SCADA PANEL	BY OTHERS	1
37	MAIN DISCONNECT	FUSIBLE	3
38	50 AMP LOCAL DISCONNECT	NON FUSIBLE DISCONNECT	1
39	EXTERIOR OUTLET	115 VAC	1
40	JUNCTION BOX: PUMP GALLES	ALUMINUM EXPLOSION PROOF JUNCTION BOX	4
41	JUNCTION BOX: LEVEL CORRECTED	ALUMINUM EXPLOSION PROOF JUNCTION BOX	1
42	GAS METER & PRIMARY REGULATOR	BY OTHERS	1
43	NATURAL GAS REGULATOR	14" WC	1
44	EMERGENCY LIGHTS		2
45	2" NATURAL GAS PIPING	SCH 40 BLACK STL WELDED OR SCREWED	2



SECTION A-A



SECTION B-B

NOTE:
1. BUILDING SHOWN FOR MECHANICAL LAYOUT REFERENCE ONLY

PENTABLE = ...\\Lisla\PenTable\TransPen.tbl

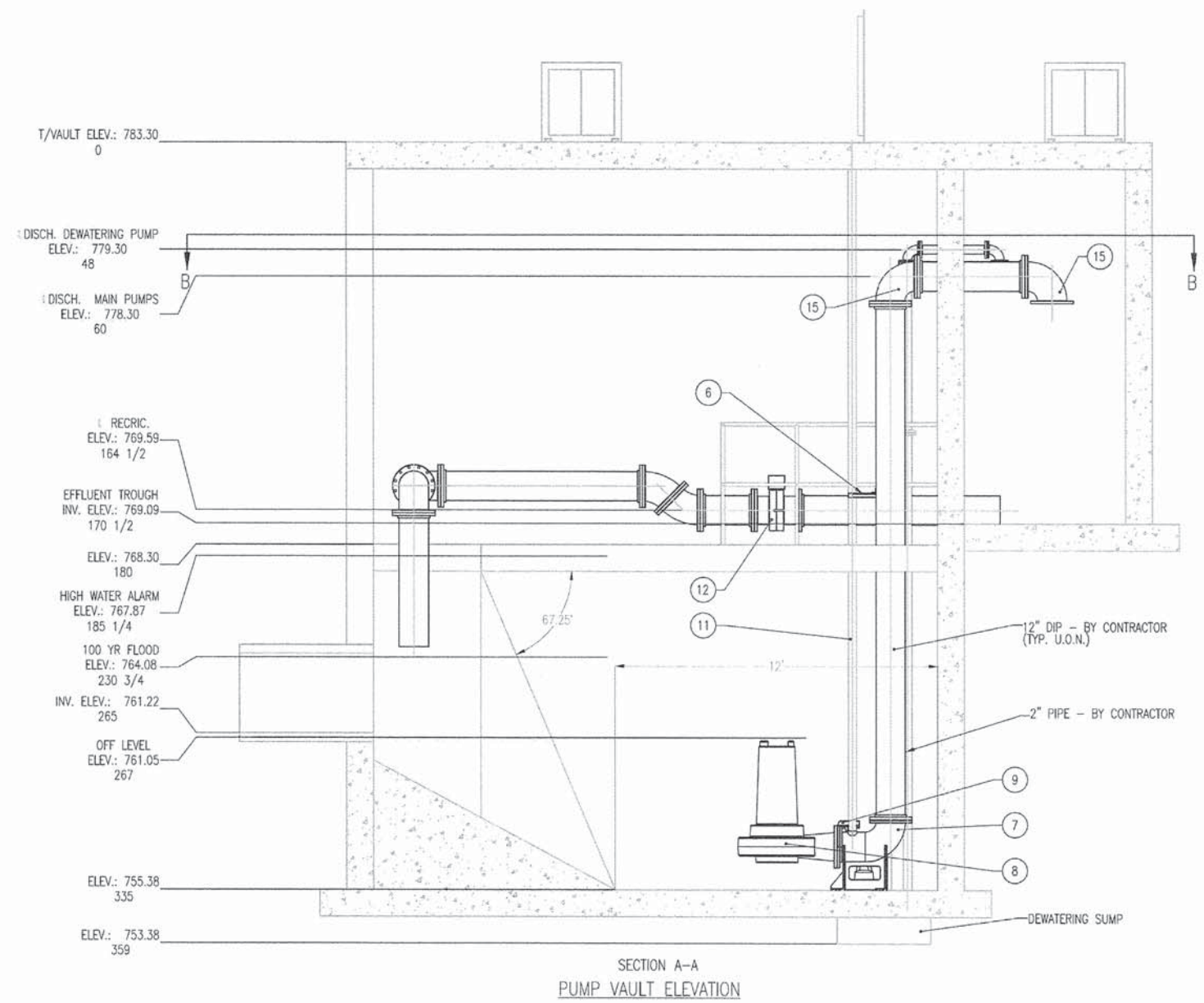
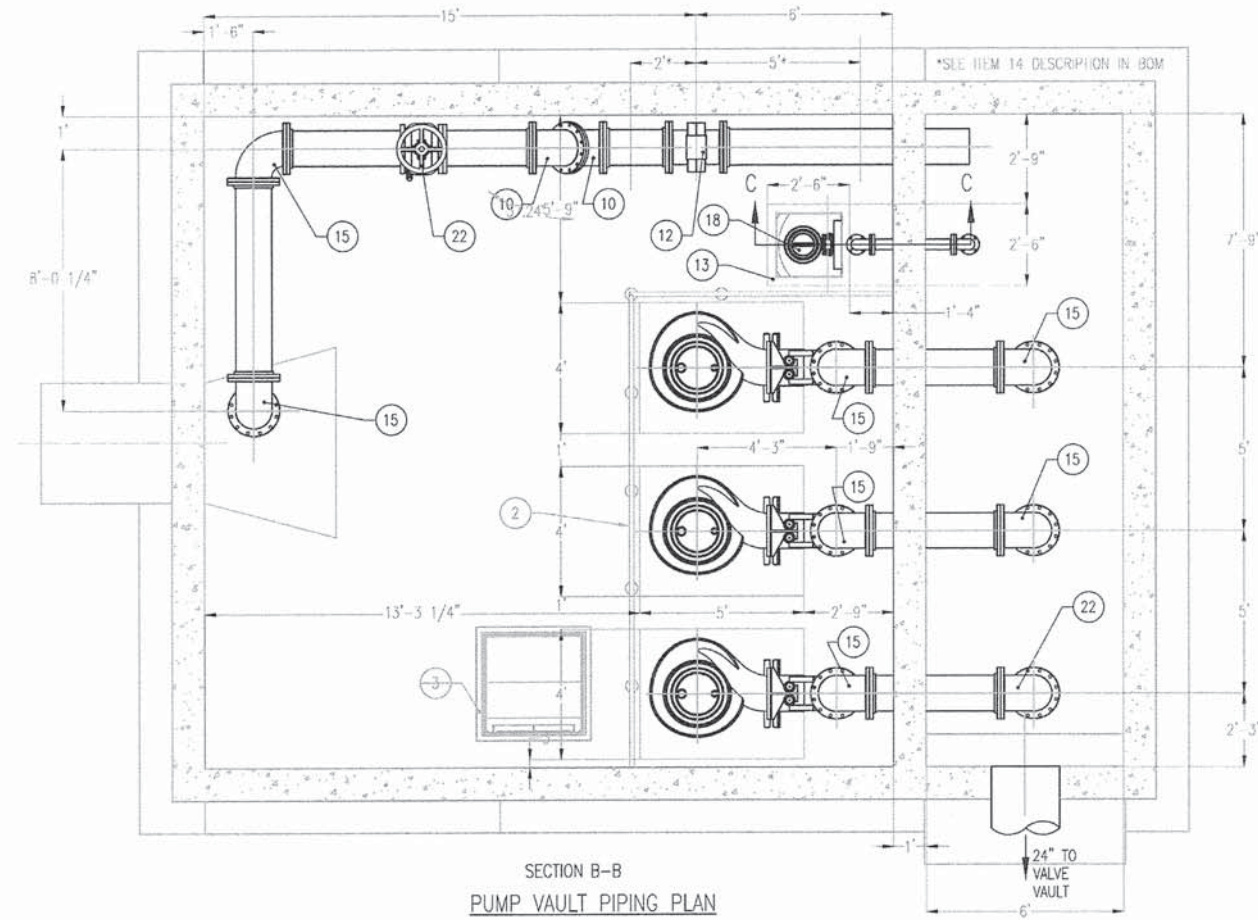
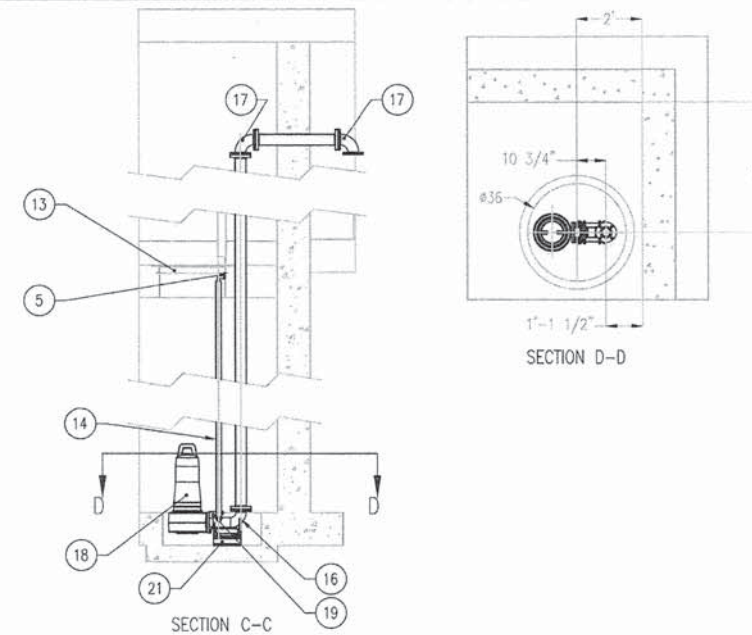
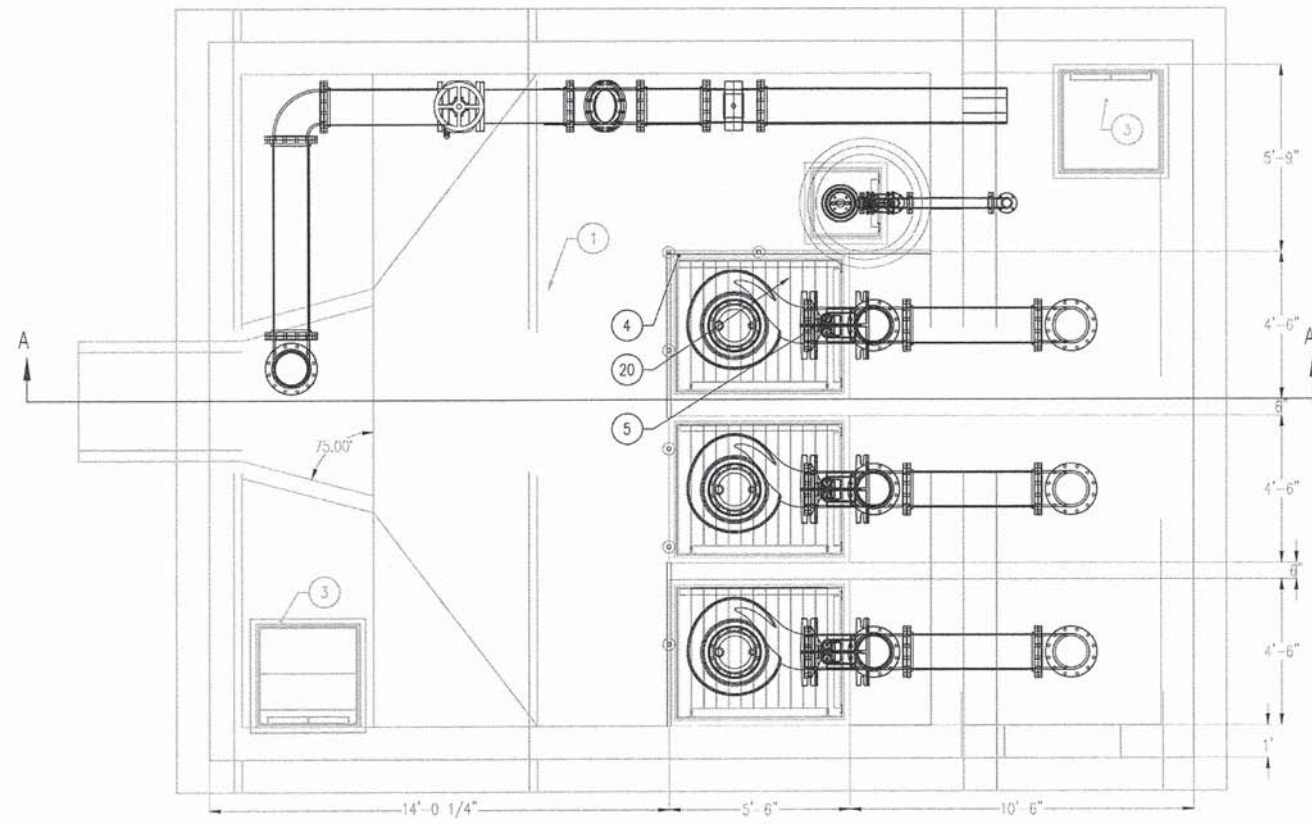
PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen@dwg.Lisla PLOT CONFIG = PDF(Grey_Small).plt PLOT SCALE = 1:100 PLOT DATE = 7/2/2014 10:08:35 PM	DESIGNED - ACH DRAWN - ACH CHECKED - AMH DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -
---	---	--	--

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
PUMP STATION GENERATOR/CONTROL HOUSE MECHANICAL PLAN
SCALE: SHEET NO. PS 2 OF 15 STA. TO STA.

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 137
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	WET WELL	REFER TO STRUCTURAL DRAWINGS	1
2	RAILING	REFER TO STRUCTURAL DRAWINGS	1
3	APS300-36x36	36"x36" OPENING	2
4	APS300-80x48		3
5	UPPER GUIDE RAIL SUPPORT	FOR 3" GUIDE RAILS (3" MTM SYSTEM)	4
6	INTERMEDIATE GUIDE RAIL SUPPORT 3IN RAILS	3" GUIDE RAILS	3
7	12" MTM ELBOW		3
8	SUBMERSIBLE SEWAGE PUMP	12" DISCHARGE	3
9	12" MTM SEALING FLANGE		3
10	12" - 45 DEG ELBOW	FLANGED FITTING	2
11	3" GUIDE RAIL	SCHED. 40 STAINLESS STEEL PIPE	12
12	12" FLOW METER	MAG METER - 5" PIPE DIA. REQ. UP STREAM & 2" PIPE DIA. REQ. DOWN STREAM	1
13	APS300-24x24	ALUMINUM ACCESS HATCH - TO BE SHIPPED LOOSE - CONTRACTOR TO INSTALL IN FIELD	1
14	3" GUIDE RAIL	SCHED. 40 STAINLESS STEEL PIPE	2
15	12" S.R. ELBOW	D.I. FITTING	8
16	3" MTM ELBOW	BASE ELBOW 3" MTM	1
17	3" S.R. ELBOW	D.I. FITTING	2
18	FA 08.52W	SUBMERSIBLE SEWAGE PUMP	1
19	3" MTM SEALING FLANGE		1
20	SAFETY CRATE		3
21	DEWATERING PUMP BASE ELBOW SPACER		1
22	12" GATE VALVE		1



PENITABLE = ...\\lusia\pant\table\TransPen.tbl

PATRICK ENGINEERING
 4970 VARSITY DRIVE
 LISLE, IL 60532
 patrickengineering.com

USER NAME = skoepfer@dwg.lisle
 PLOT CONFIG = PDF(Dwg_Small).plt
 PLOT SCALE = 1:100
 PLOT DATE = 7/2/2014 10:10:03 PM

DESIGNED - ACH
 DRAWN - ACH
 CHECKED - AMH
 DATE - 6/30/2014

REVISED -
 REVISED -
 REVISED -
 REVISED -

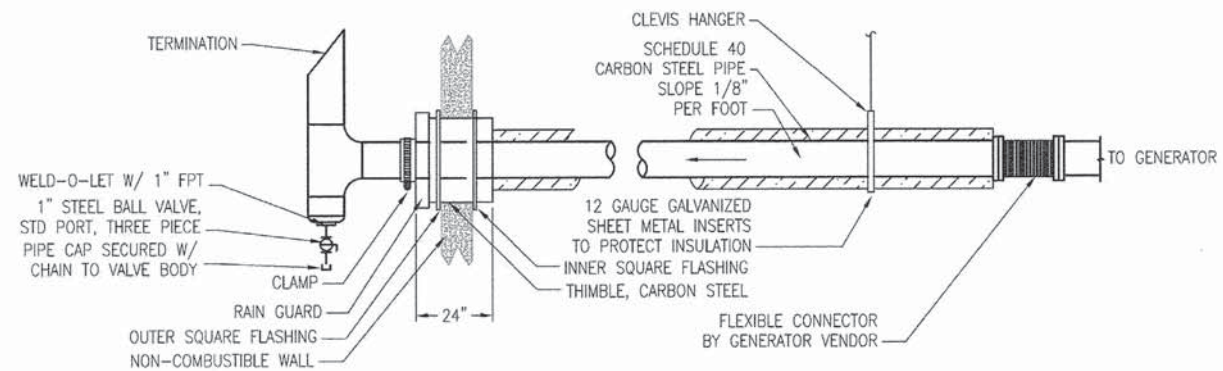
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 PUMP STATION WET WELL MECHANICAL PLAN**

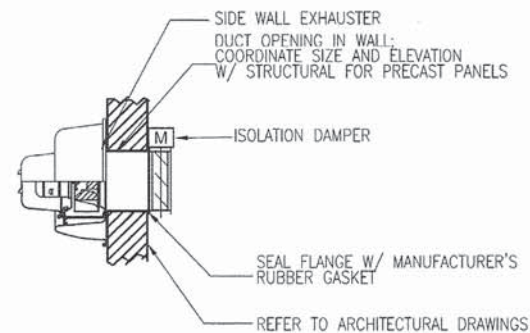
SCALE: SHEET NO. PS 3 OF 15 STA. TO STA.

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 138
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

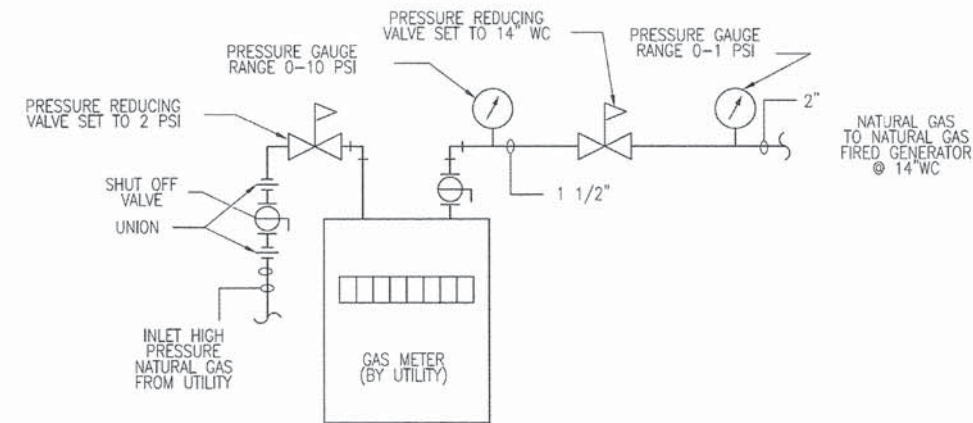
61A63



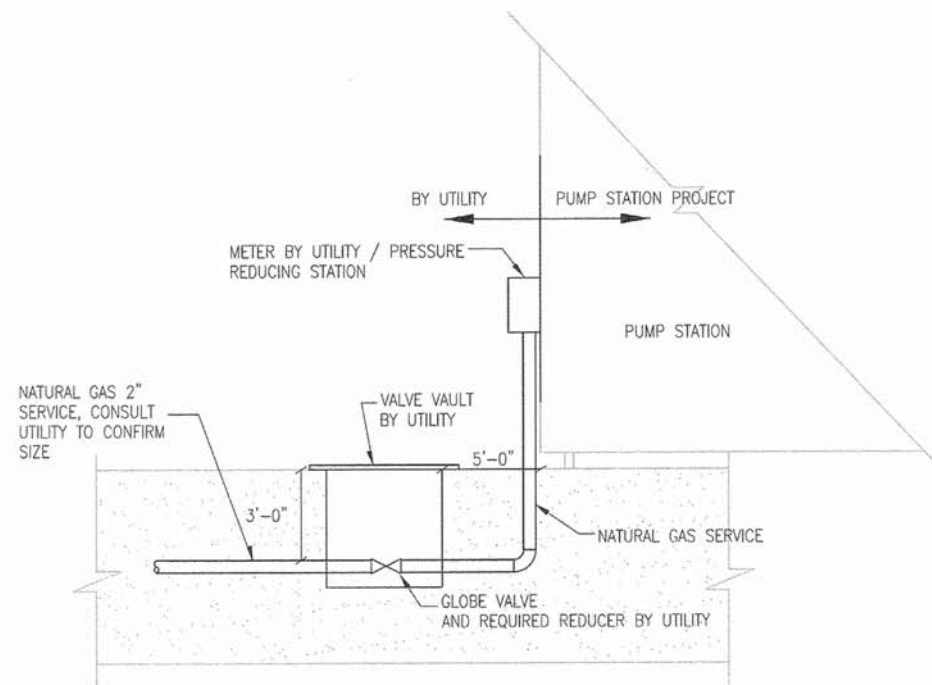
1 GENERATOR EXHAUST PIPING DETAIL
PS4 N.T.S.



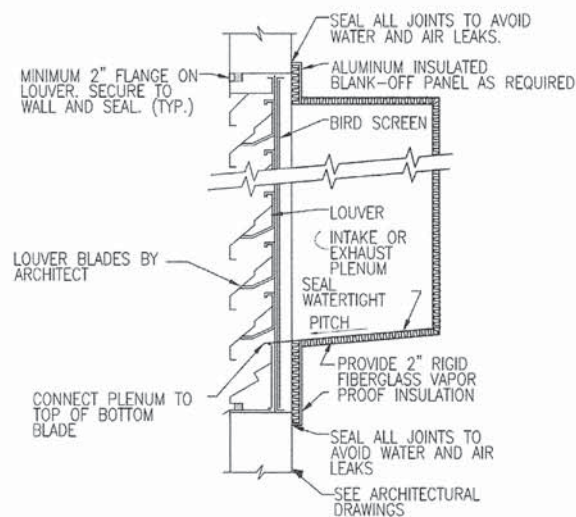
2 SIDE WALL EXHAUSTER
PS4 N.T.S.



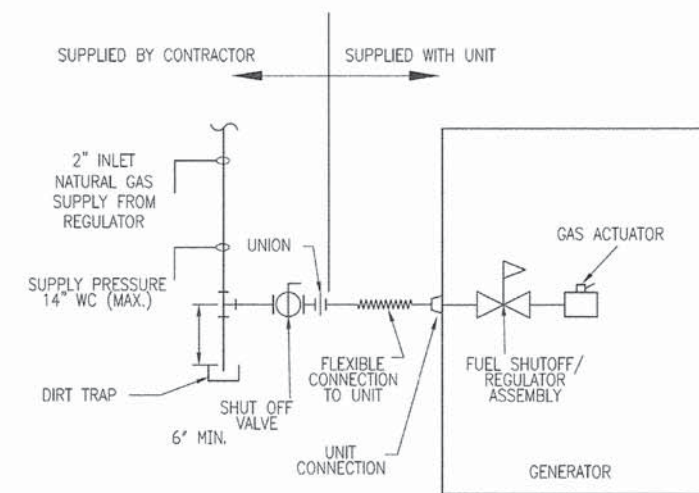
3 GAS METER PIPING DETAIL
PS4 N.T.S.



4 OUTSIDE GAS CONNECTION DETAIL
PS4 N.T.S.



5 LOUVER DETAIL
PS4 N.T.S.



6 GENERATOR GAS PIPING DETAIL
PS4 N.T.S.

P:\L\DOT\21150_004\Drawings\Auto\Drawings\MechDetails_03.dgn

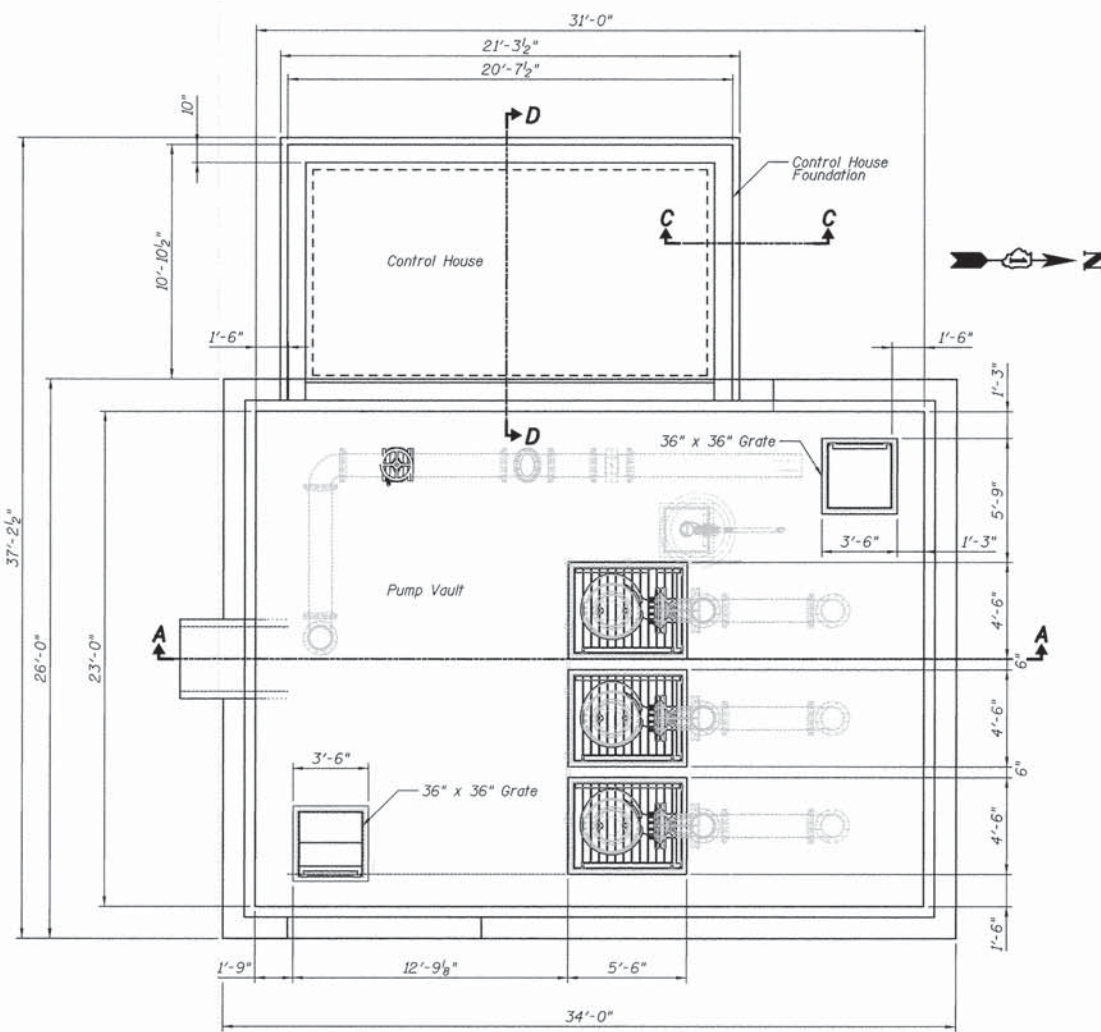
PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen@dwg.lisle	DESIGNED - DF	REVISED -
	PLOT CONFIG = PDF(Grey.Small).plt	DRAWN - DF	REVISED -
	PLOT SCALE = 1:100	CHECKED - HF	REVISED -
	PLOT DATE = 7/2/2014 10:11:33 PM	DATE - 6/30/2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

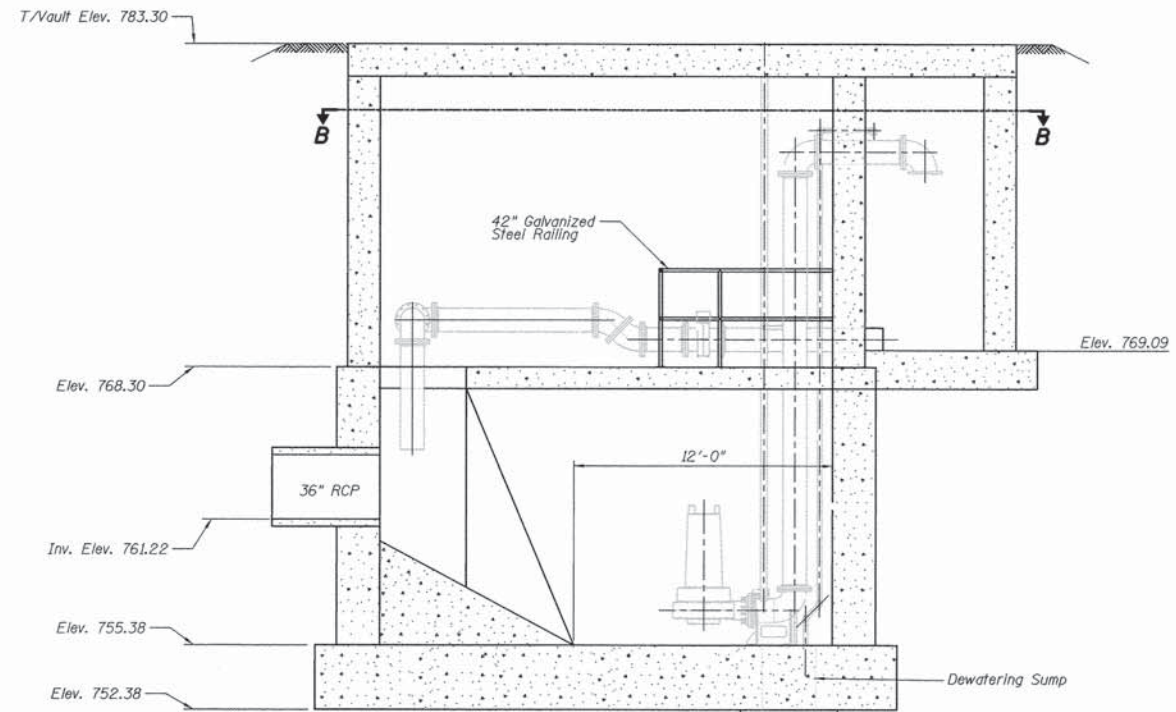
WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
PUMP STATION MECHANICAL DETAILS

SCALE: 1"=50' SHEET NO. PS 4 OF 15 STA. TO STA.

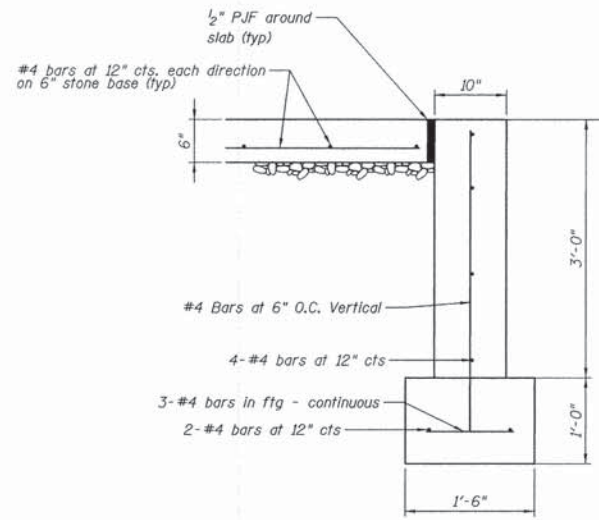
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	139
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
				61A63



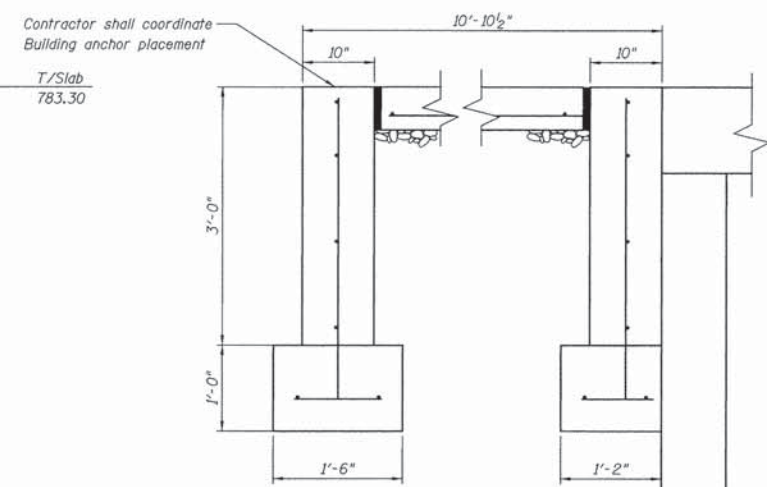
LAYOUT PLAN- TOP OF VAULT



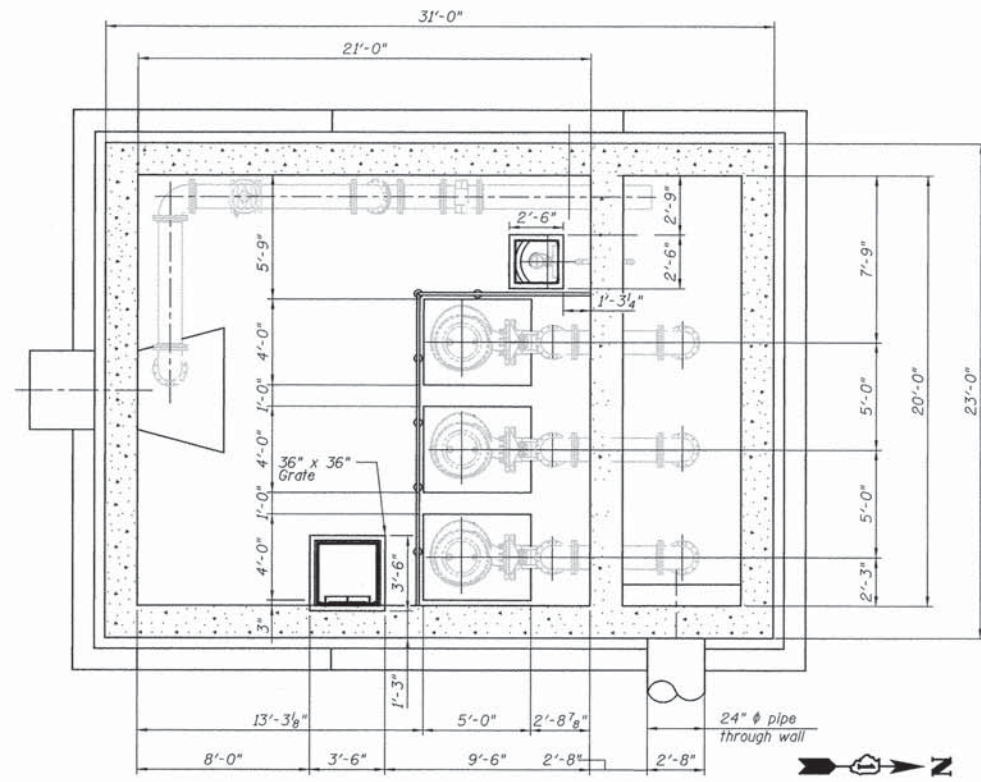
SECTION A-A



SECTION C-C



SECTION D-D



SECTION B-B

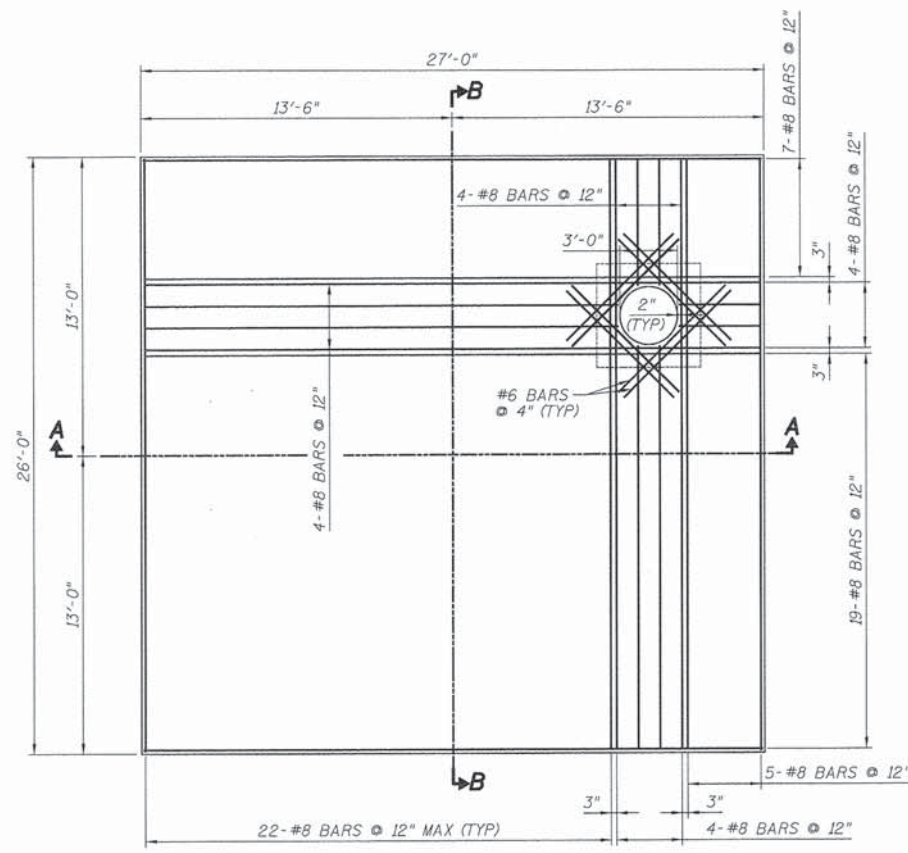


Sarah L. Czapliski
 SARAH L. CZAPLICKI, S.E. 7/2/2014
 NO. 081-006191
 EXP. DATE: 11/30/14

Notes:
 Contractor shall coordinate and verify all wall penetrations size and locations with electrical mechanical components prior to placing concrete.

PENTABLE = ...\\state\pentable\trans\pentab1

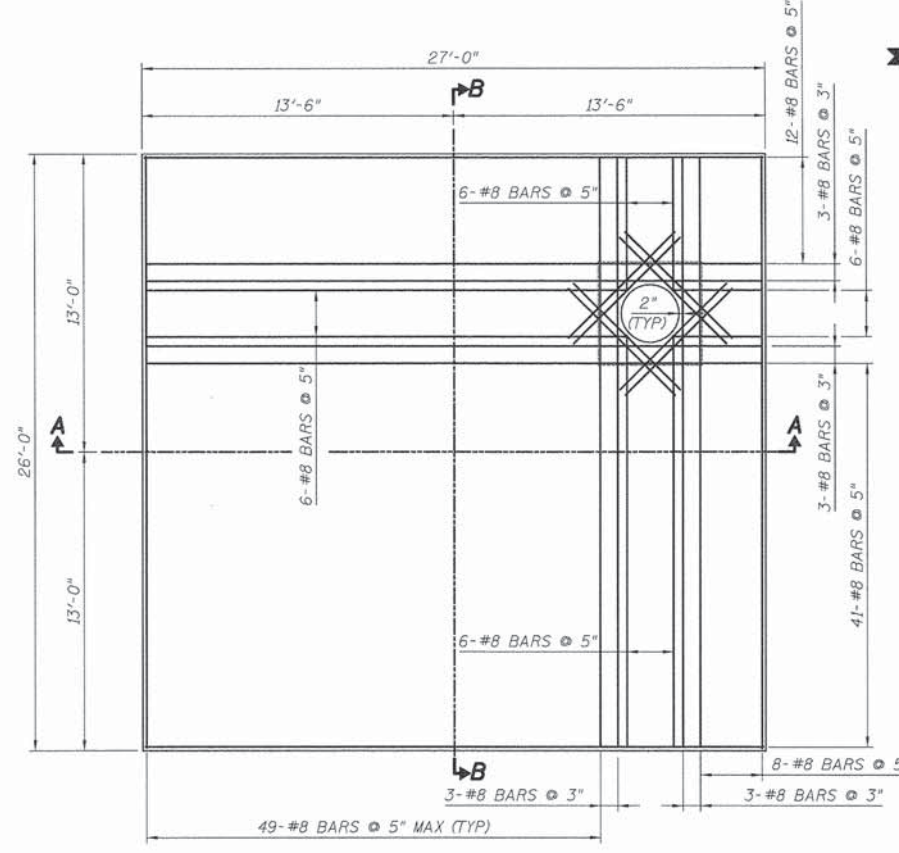
PATRICK ENGINEERING PATRICK ENGINEERING INC. 4670 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = kkoepen(Rdwy_Lisle) PLOT CONFIG = PDF(Grey_Large).plt PLOT SCALE = 1:50 PLOT DATE = 7/2/2014 6:28:24 PM	DESIGNED - CH/AY DRAWN - DM CHECKED - AY DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PUMP STATION VAULT - STRUCTURAL GENERAL PLAN AND ELEVATION	F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 140
	SCALE: 1"=50' SHEET NO. PS 5 OF 15 STA. TO STA.					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 61A63				



BOTTOM SLAB REINFORCEMENT PLAN

(BOTTOM LAYER)

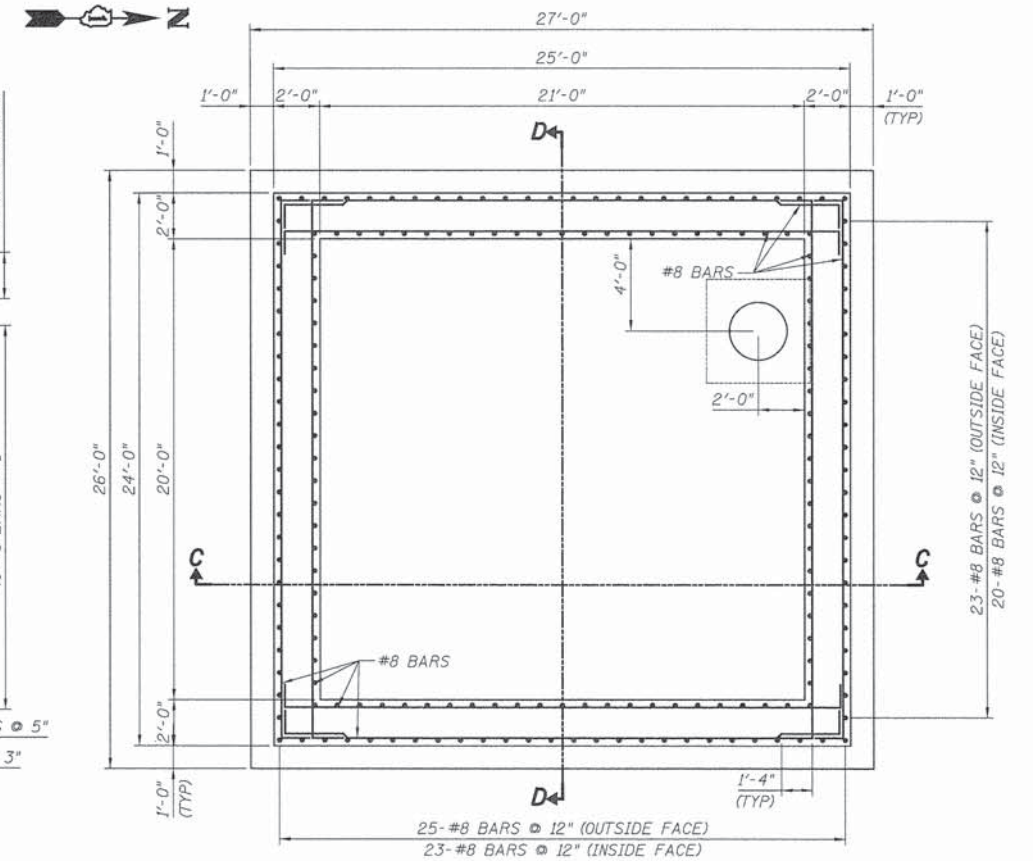
SCALE: 1/4" = 1'-0"



BOTTOM SLAB REINFORCEMENT PLAN

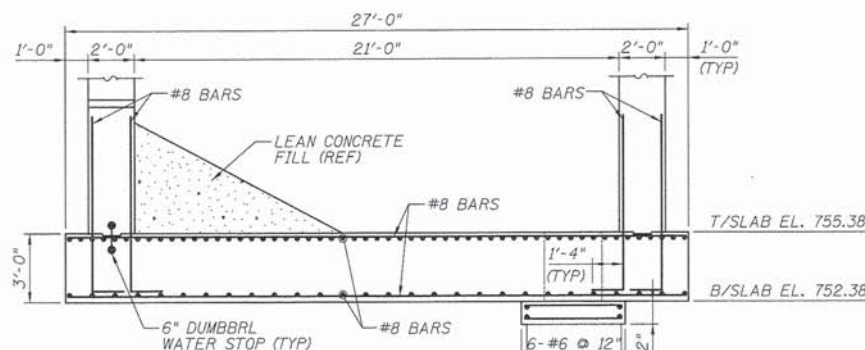
(TOP LAYER)

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



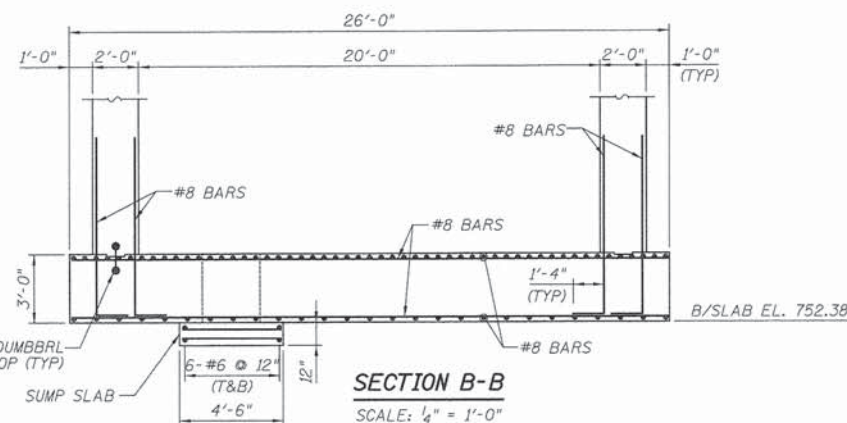
PUMP STATION LOWER CHAMBER WALL REINFORCEMENT PLAN

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



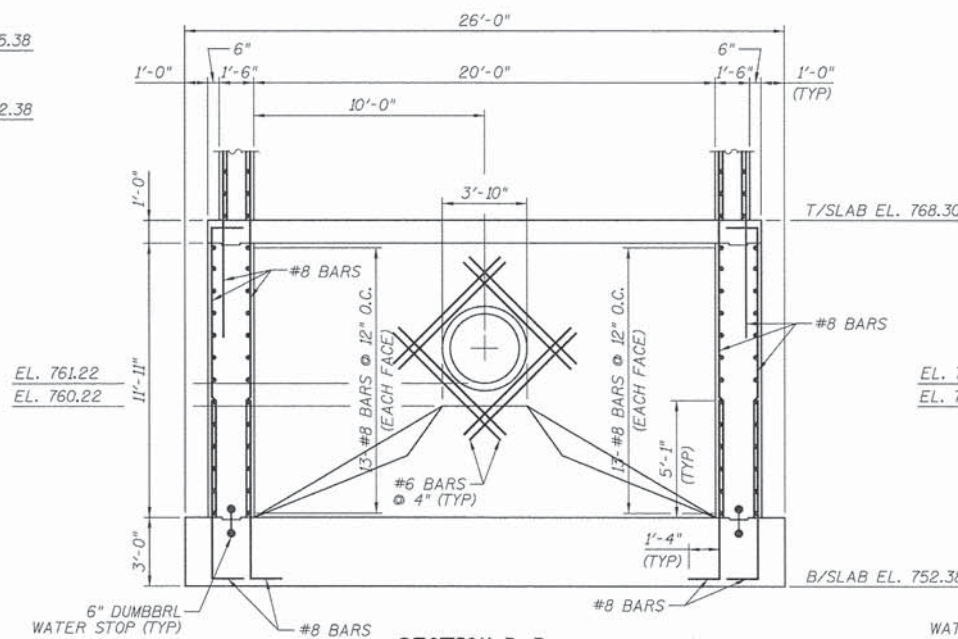
SECTION A-A

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



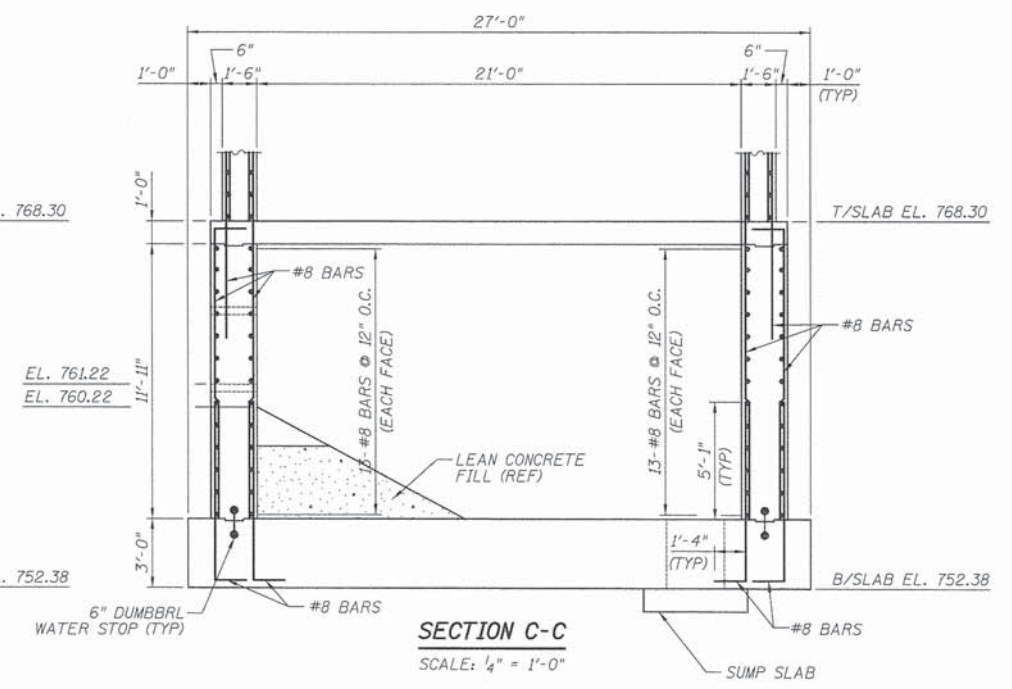
SECTION B-B

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



SECTION D-D

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



SECTION C-C

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

P:\TABLE - ...L1a1a\PenTable\Y-ransPen.tbl

PATRICK ENGINEERING
 PATRICK ENGINEERING INC.
 4970 VARSITY DRIVE
 LISLE, IL 60532
 patrickengineering.com

USER NAME = tkoeppen(Rdwj_L1a1e)
 PLOT CONFIG = PDF(Grey_Small).plt
 PLOT SCALE = 1:100
 PLOT DATE = 7/2/2014 10:13:11 PM

DESIGNED - PS
 DRAWN - PS
 CHECKED - AY
 DATE - 6/30/2014

REVISED -
 REVISED -
 REVISED -
 REVISED -

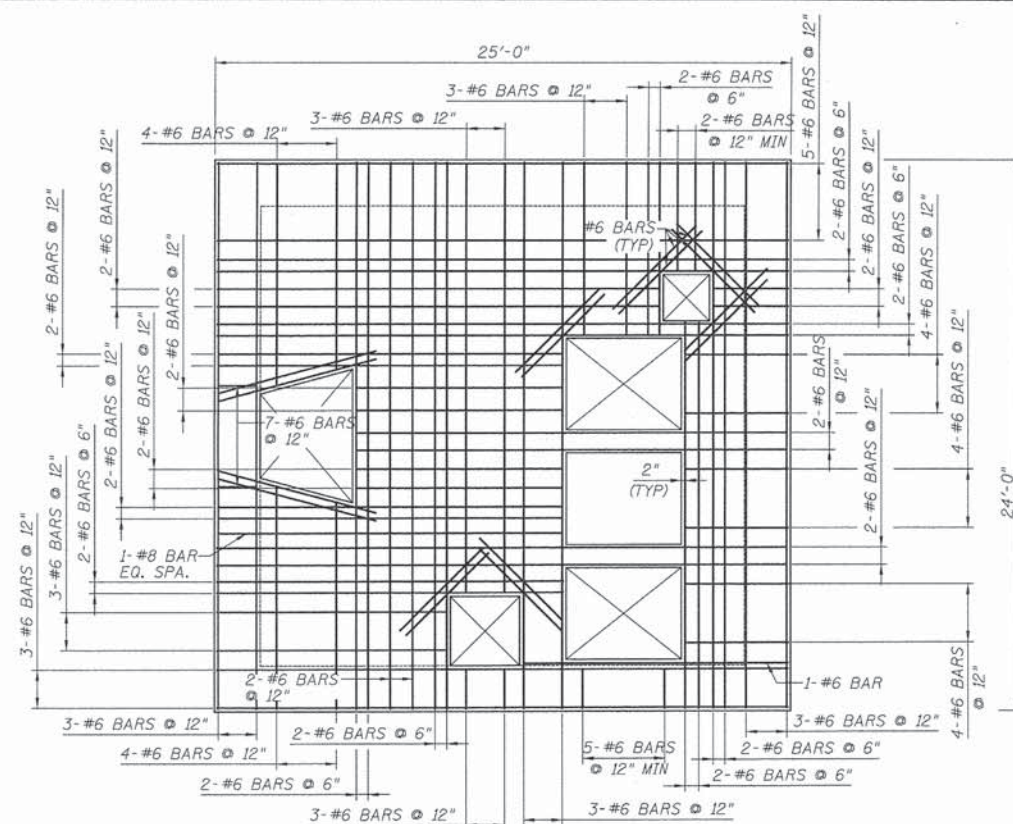
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 PUMP STATION STRUCTURAL - BOTTOM SLAB & LOWER WALL**

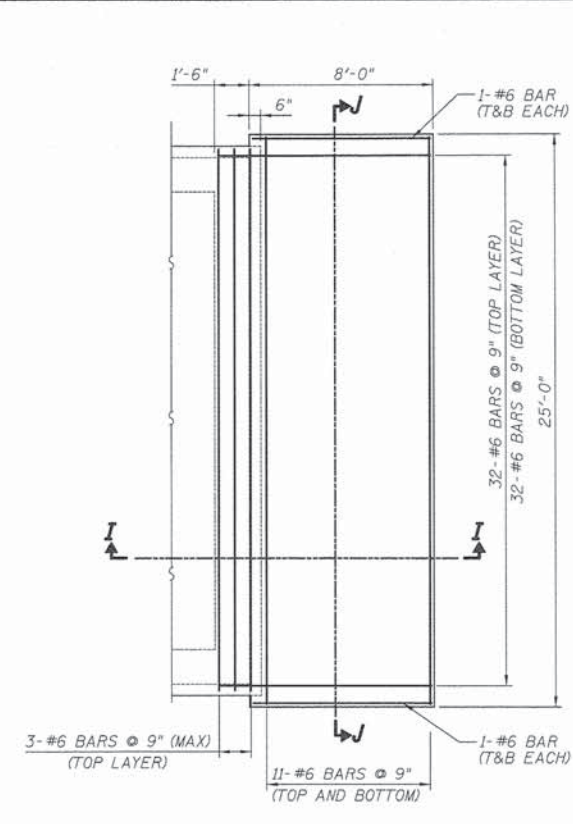
SCALE: NTS SHEET NO. PS 6 OF 15 STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	141
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT
CONTRACT NO. 61A63				

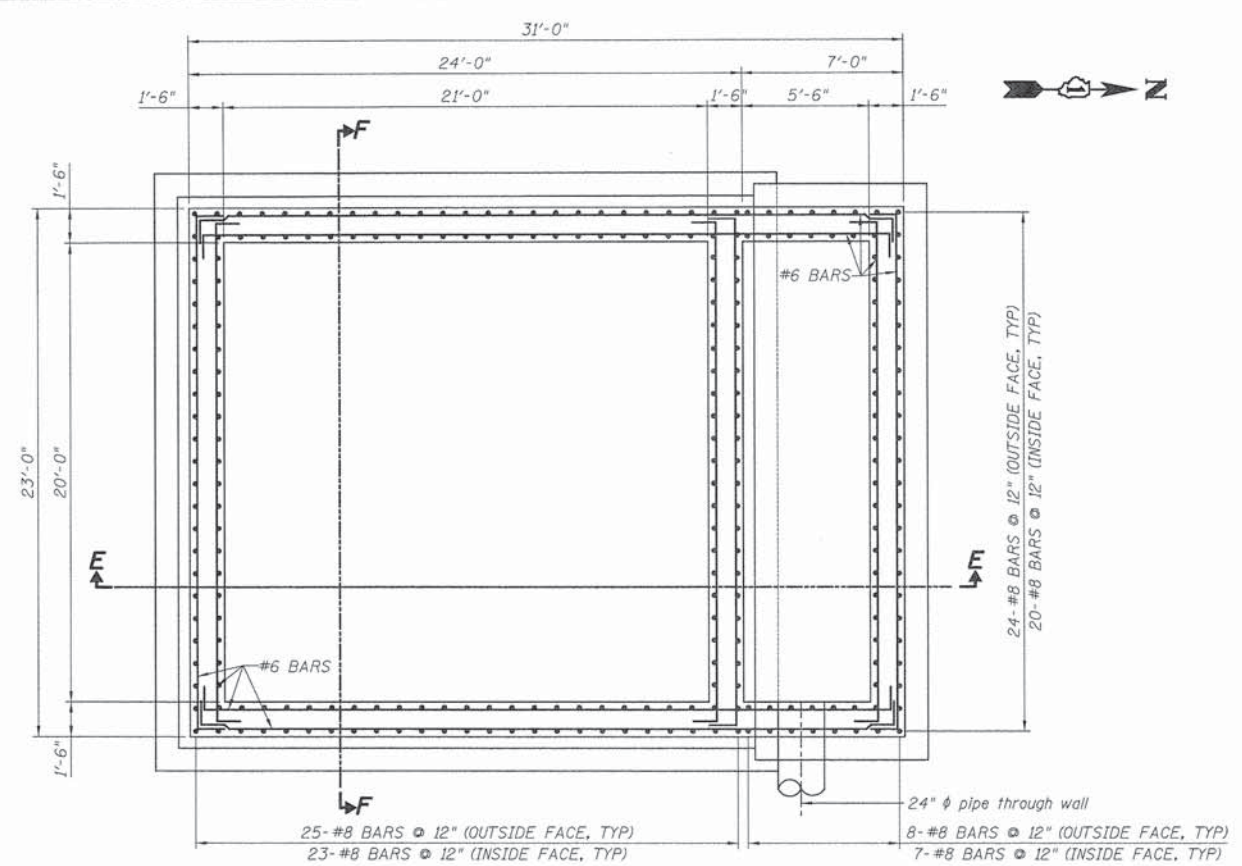
G:\C00T\21150_004\Drawings\STRUCT\PumpStation\Bottom slab and lower wall.dgn



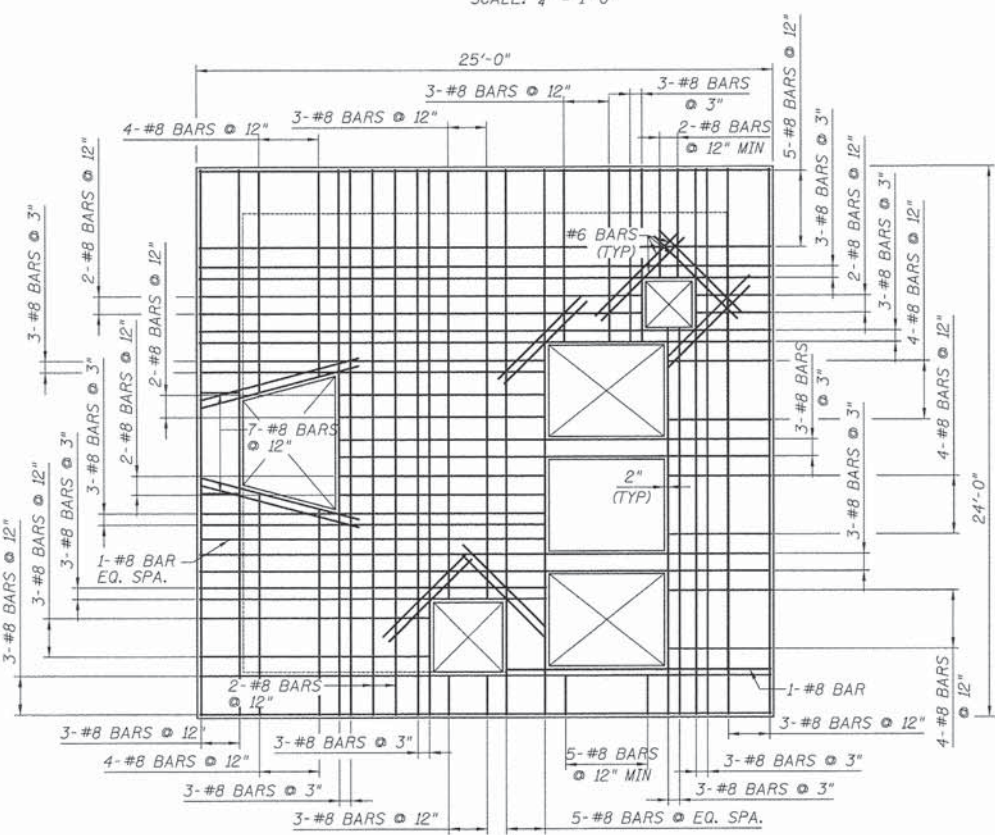
INTERMEDIATE SLAB REINFORCEMENT PLAN
(TOP LAYER)
SCALE: 1/4" = 1'-0"



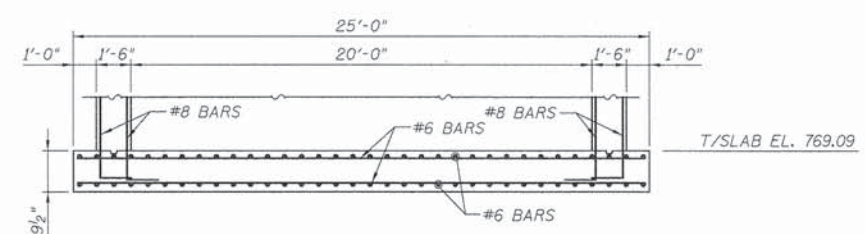
DISCHARGE CHAMBER FLOOR SLAB
REINFORCEMENT PLAN
SCALE: 1/4" = 1'-0"



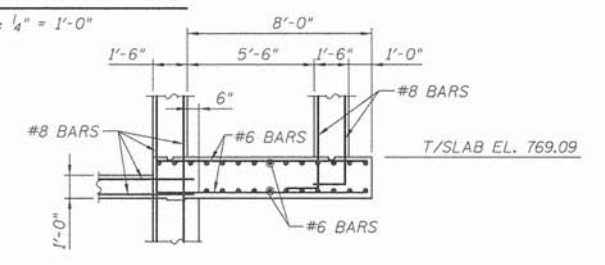
PUMP STATION UPPER CHAMBER
WALL REINFORCEMENT PLAN
SCALE: 1/4" = 1'-0"



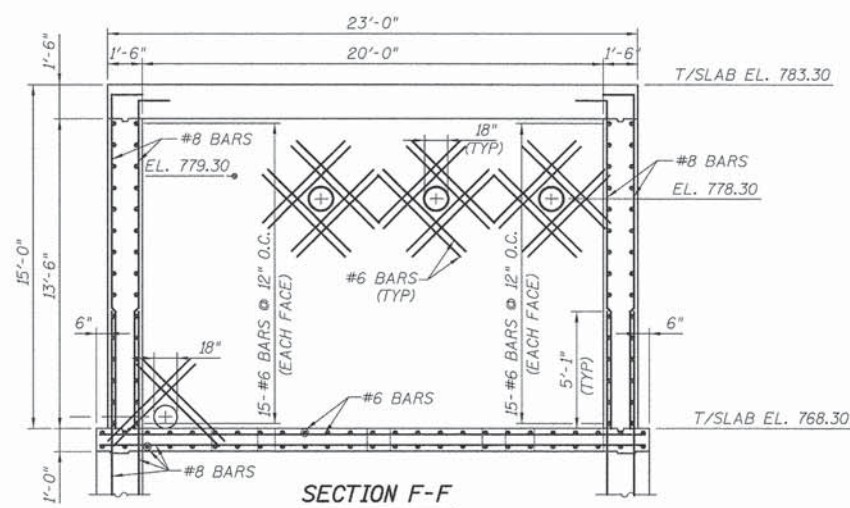
INTERMEDIATE SLAB REINFORCEMENT PLAN
(BOTTOM LAYER)
SCALE: 1/4" = 1'-0"



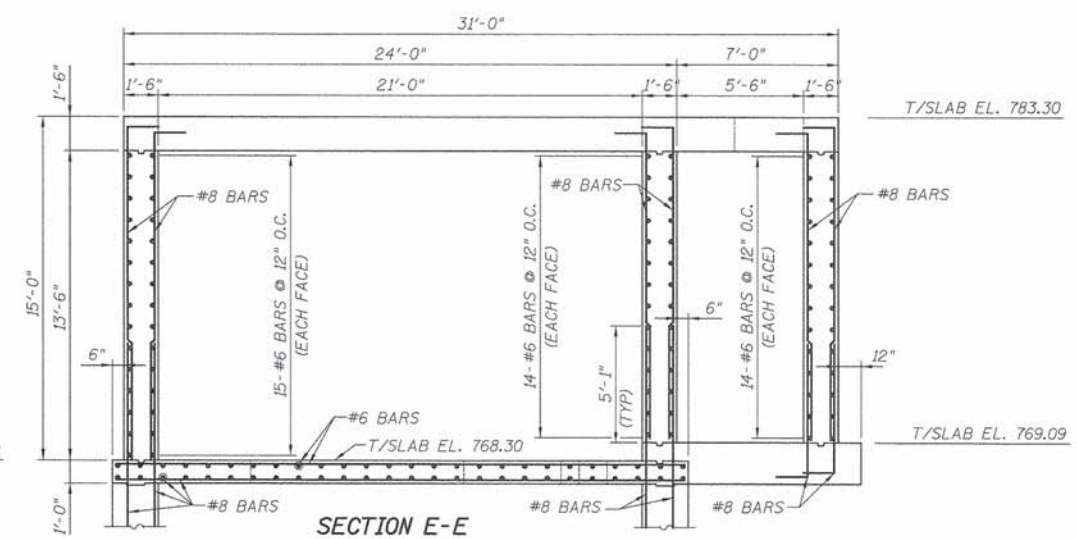
SECTION J-J
SCALE: 1/4" = 1'-0"



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



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



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

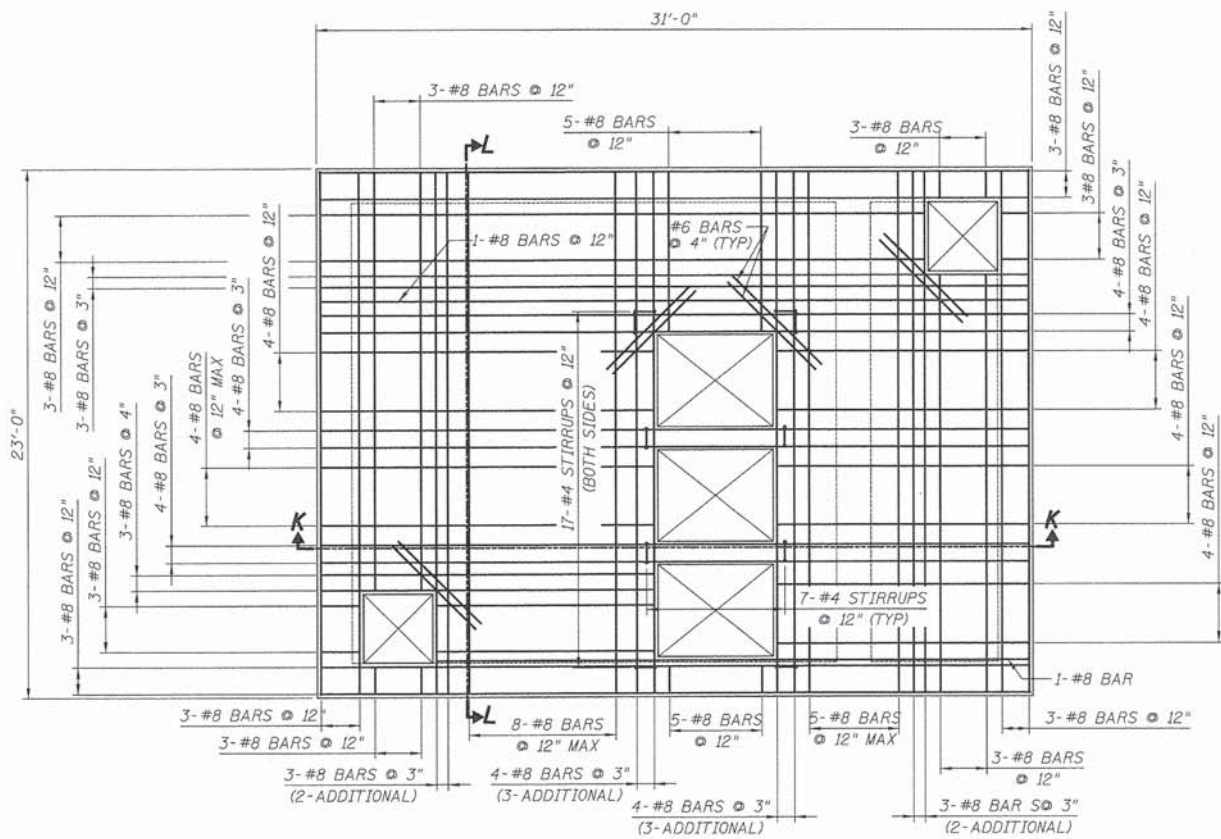
PENITABLE = ...\\lucia\pantabla\Tran\pen.tbl

	PATRICK ENGINEERING INC 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeperlrdy.Lisla PLOT CONFIG = PDF(Dreg.Small).plt PLOT SCALE = 1:1000 PLOT DATE = 7/2/2014 10:13:20 PM	DESIGNED - PS DRAWN - PS CHECKED - AY DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -
--	--	---	---	--

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

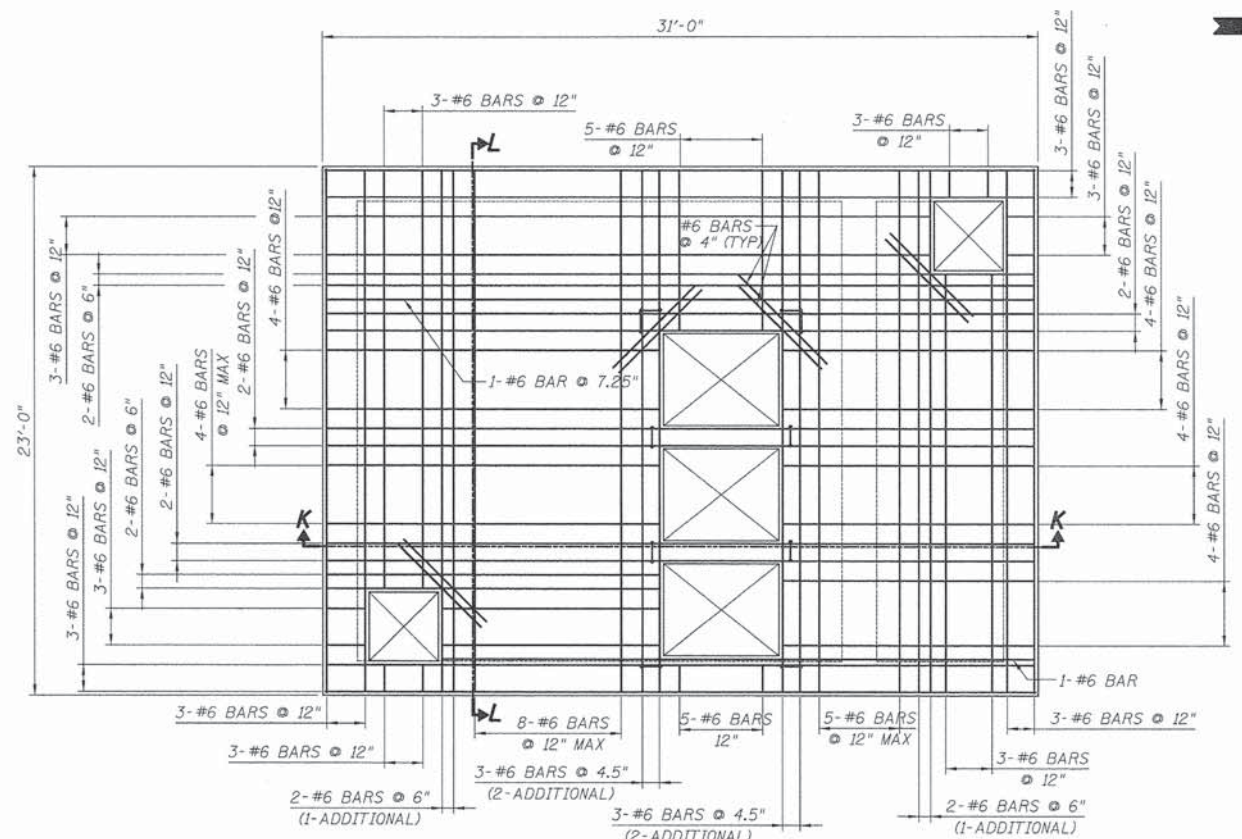
WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
PUMP STATION STRUCTURAL - INTERMEDIATE SLAB & UPPER WALL
SCALE: NTS SHEET NO. PS 7 OF 15 STA. TO STA.

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 142
CONTRACT NO. 61A63				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



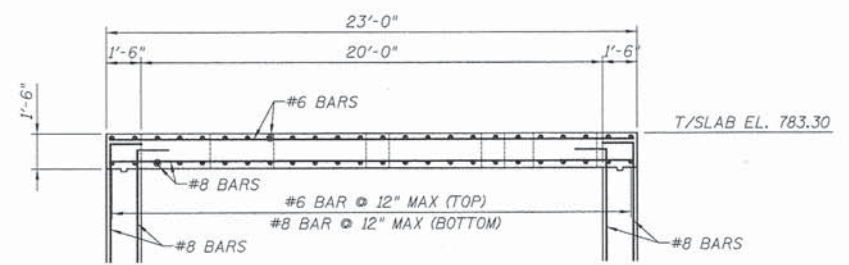
**PUMP STATION TOP SLAB
REINFORCEMENT PLAN (BOTTOM LAYER)**

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

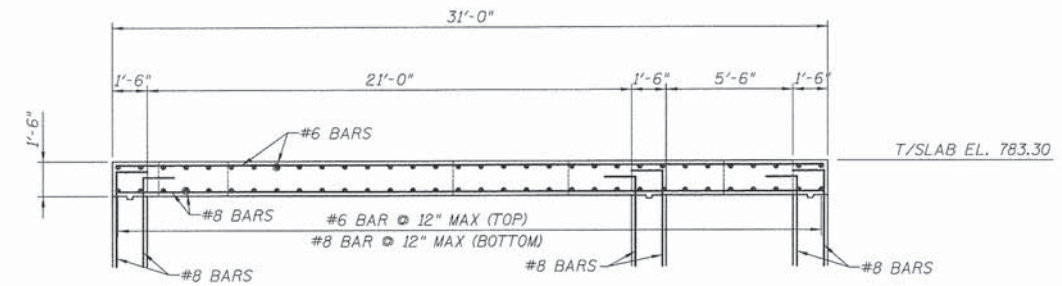


**PUMP STATION TOP SLAB
REINFORCEMENT PLAN (TOP LAYER)**

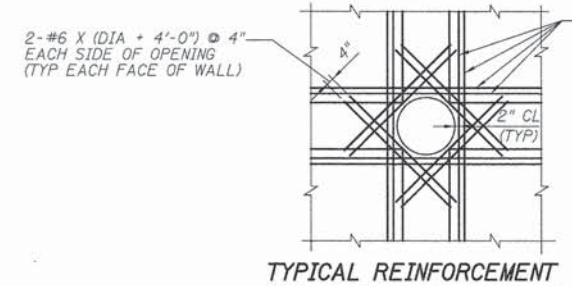
SCALE: 1/4" = 1'-0"



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

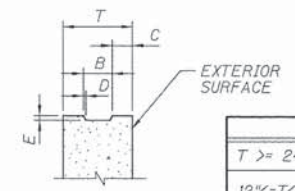


SECTION K-K
SCALE: 1/4" = 1'-0"



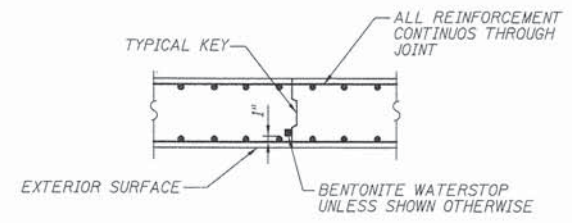
**TYPICAL REINFORCEMENT
AT OPENINGS**
SCALE: NTS

PROVIDE ADDITIONAL BARS EQUAL TO ONE-HALF OF BARS OF OPENING AT 3 BAR DIAMETER OR 3" (MINIMUM) OC, WHICHEVER IS GREATER. ADDITIONAL BARS MUST BE SAME SIZE AS ORIGINAL BARS (TYP)



**TYPICAL KEY DETAIL
AT CONSTRUCTION JOINT**
SCALE: NTS

	B	C	D	E
T >= 24"	T/3+2	T/3-1	1"	3"
12" < T < 24"	3 1/2"	(T-3 1/2) / 2	1/2"	1 1/2"



PENITABLE = ...\\lisa\p\ent\table\trerep\ent.tbl



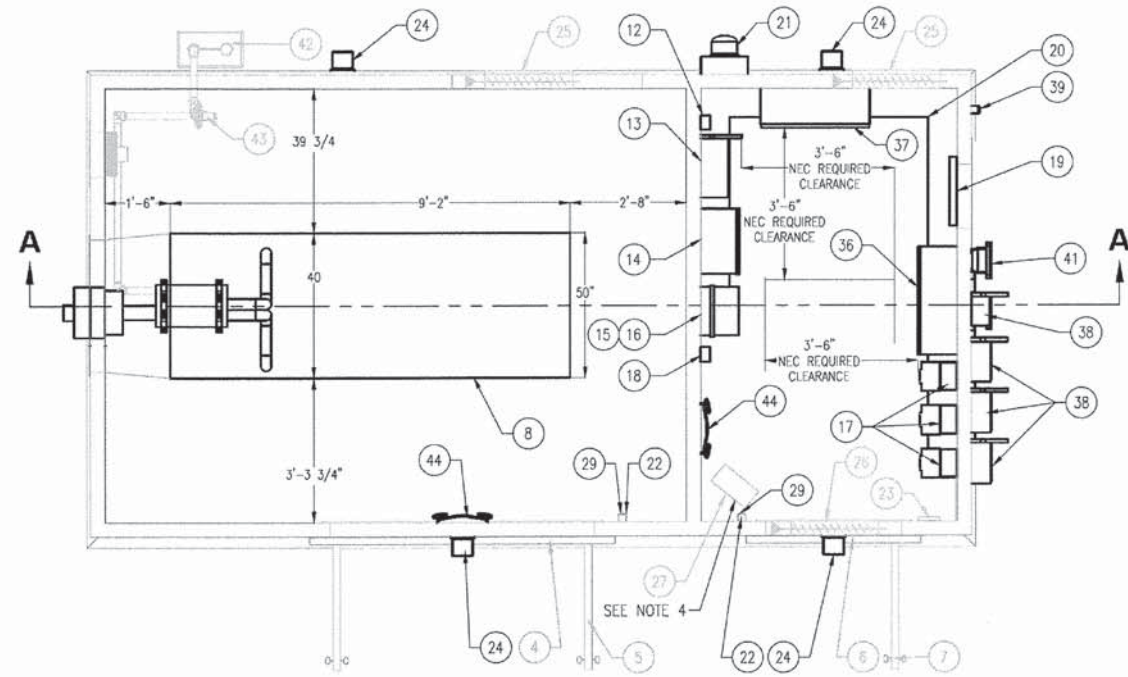
USER NAME = koeppen@dwg.lisala	DESIGNED - PS	REVISED -
PLOT CONFIG = PDF(Dwg_Small).plt	DRAWN - PS	REVISED -
PLOT SCALE = 1:1000	CHECKED - AY	REVISED -
PLOT DATE = 7/2/2014 10:13:30 PM	DATE - 6/30/2014	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
PUMP STATION STRUCTURAL - TOP SLAB**

SCALE: NTS SHEET NO. PS 8 OF 15 STA. TO STA.

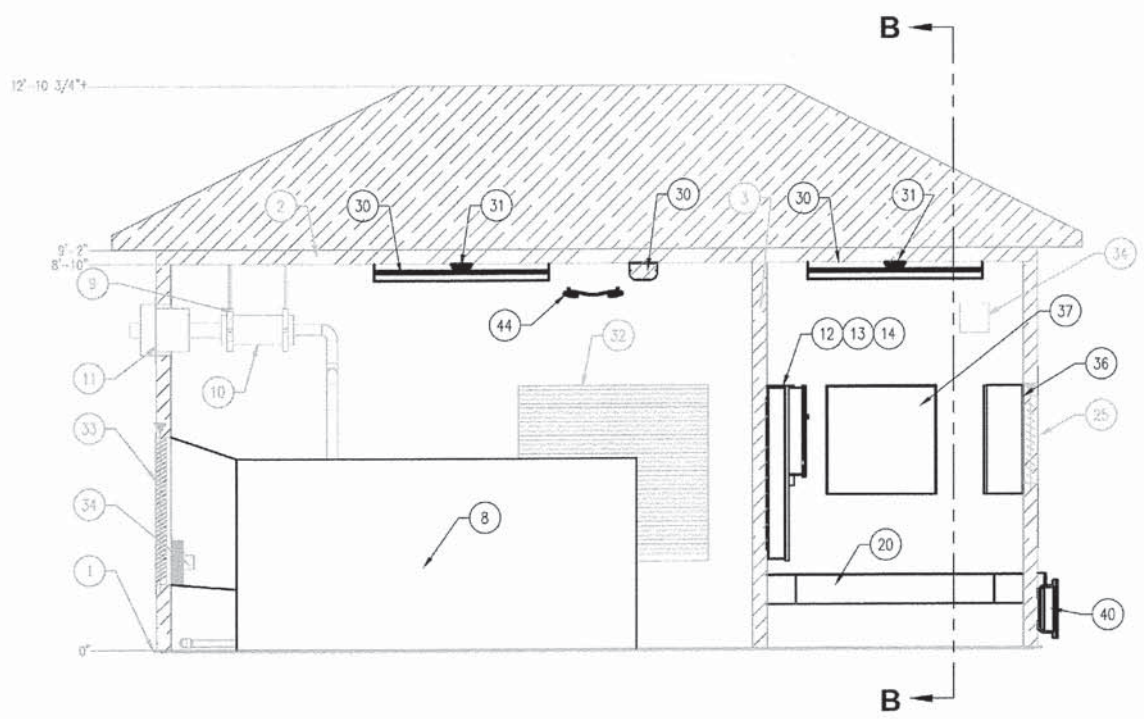
F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 143
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 61A63				



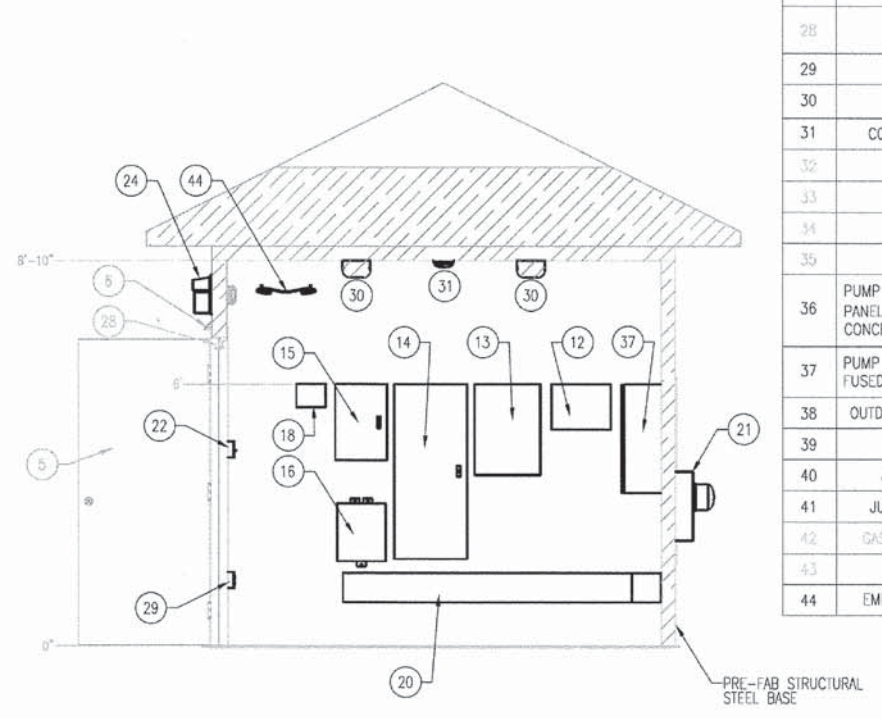
PUMPING STATION CONTROL HOUSE ELECTRICAL ENLARGED PLAN

- GENERAL NOTES:
- BUILDING SHOWN FOR ELECTRICAL LAYOUT REFERENCE ONLY.
 - REFER TO ELECTRICAL SPECIFICATIONS FOR LAKE COUNTY PUBLIC WORKS (LCPW) STANDARD PUMP STATION TECHNOLOGY CONTROL PANEL AND ELECTRICAL EQUIPMENT PART LISTS.
 - ALL EQUIPMENT AND TERMINATIONS IN THE PUMPING STATION VAULT SHALL BE CLASSIFIED AS CLASS 1, DIVISION 2 PER THE NATIONAL ELECTRICAL CODE ARTICLE 500. SEE PUMP STATION ELECTRICAL VAULT PLAN FOR MORE INFORMATION.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH FOR UNIT HEATER AS MANUFACTURED BY SQUARE D 3110HU361, 30A NON-FUSED, 600V, NEMA 1.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE MANUAL STARTER FOR EXHAUST FAN (AND ALL OTHER FRACTIONAL HORSEPOWER MOTORS) AS MANUFACTURED BY SQUARE D 2510FG1P WITH RED (RUN) PILOT LIGHT AND THERMAL OVERLOADS.

GENERAL ELECTRICAL/TECHNOLOGY EQUIPMENT SCHEDULE			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	STRUCTURAL STEEL BASE		1
2	BUILDING ROOF	INSULATED, R28	1
3	BUILDING WALLS	INSULATED, R28	1
4	DRIP LEDGE, 72" DOUBLE DOOR		1
5	72" x 84" DOUBLE DOOR		1
6	DRIP LEDGE, 36" DOOR		1
7	DOOR	36" WID x 84" H	1
8	STANDBY BACK-UP GENERATOR (GEN-NG) & ASSOCIATED GENERATOR CONTROL PANEL (GCP), GENERATOR BATTERY CHARGER (GBC), GENERATOR BLOCK HEATER (GBH).	SEE RISER DIAGRAM AND SPECIFICATIONS	1
9	CYLINDER SUPPORT BRACKET		3
10	SILENCER		1
11	4" O.D. EXHAUST THIMBLE		1
12	SURGE PROTECTIVE DEVICE	SEE RISER DIAGRAM AND SPECIFICATIONS	1
13	AUTOMATIC TRANSFER SWITCH	SEE RISER DIAGRAM AND SPECIFICATIONS	1
14	EQUIPMENT PANELBOARD	SEE RISER DIAGRAM	1
15	LIGHTING PANELBOARD	SEE RISER DIAGRAM	1
16	LOW VOLTAGE TRANSFORMER	SEE RISER DIAGRAM	1
17	VARIABLE FREQUENCY DRIVE	SEE RISER DIAGRAM AND SPECIFICATIONS	3
18	GENERATOR ANNUNCIATOR PANEL	SEE RISER DIAGRAM AND SPECIFICATIONS	1
19	TELEPHONE TERMINATION CABINET (TTC), AUTOMATIC TELEPHONE DIALER (SENSA-PHONE 400) & FIBER TERMINATION CABINET	SEE ELECTRICAL SYMBOL LIST AND SPECIFICATIONS	1
20	WIRING TROUGH	SEE RISER DIAGRAM	1
21	ELECTRICAL METER - BY COMED	SEE RISER DIAGRAM	1
22	OCCUPANCY SENSOR/LIGHT SWITCH	SEE ELECTRICAL SYMBOL LIST AND SPECIFICATIONS	2
23	THERMOSTAT		1
24	WALL LIGHT	OUTDOOR - LITHONIA WSTM LED 1A 30K 120 PE	2
25	LOUVER WITH GRAVITY DAMPER	24X24	2
26	LOUVER WITH MOTORIZED DAMPER	24X18	2
27	UNIT HEADFER	5KW, 480V 3Ø	1
28	LIMIT SWITCH	SEE LCPW STANDARD CONTROLLER PARTS LIST	2
29	DUPLEX GFCI OUTLET	SEE ELECTRICAL SYMBOLS LIST	2
30	48" FLUORESCENT LIGHT	SEE DRAWINGS AND SPECIFICATIONS	5
31	COMBINATION SMOKE/CO ALARM	SEE DRAWINGS AND SPECIFICATIONS	2
32	48"x62" LOUVER	STACK	1
33	36"x48" LOUVER	EXHAUST	1
34	12" EXHAUST FAN	120V, 1Ø, 1/12 HP, CORROSION RESISTANT	2
35	HIP ROOF	FIELD ERECTED	1
36	PUMP STATION TECHNOLOGY CONTROL PANEL MOUNTED ON A 3 1/2" HIGH CONCRETE PAD	SEE DRAWINGS AND SPECIFICATIONS	1
37	PUMP STATION SERVICE ENTRANCE MAIN FUSED DISCONNECT SWITCH	SEE DRAWINGS AND SPECIFICATIONS	1
38	OUTDOOR EQUIPMENT DISCONNECT SWITCH	SEE DRAWINGS AND SPECIFICATIONS	4
39	EXTERIOR GFCI/WP OUTLET	SEE DRAWINGS AND SPECIFICATIONS	1
40	JUNCTION BOX: PUMP CABLES	ALUMINUM EXPLOSION PROOF JUNCTION BOX	4
41	JUNCTION BOX: LEVEL CONTROLS	ALUMINUM EXPLOSION PROOF JUNCTION BOX	1
42	GAS METER & PRIMARY REGULATOR	BY OTHERS	1
43	NATURAL GAS REGULATOR	1/4" WC	1
44	EMERGENCY LIGHTING (UNIT BATTERIES)	SEE DRAWINGS AND SPECIFICATIONS	2



PUMPING STATION CONTROL HOUSE ELECTRICAL ENLARGED PLAN SECTION A-A



PUMPING STATION CONTROL HOUSE ELECTRICAL ENLARGED PLAN SECTION B-B

PLOT SCALE = 1:50

	PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoepfen@dwg.lisle	DESIGNED - AG	REVISED -
		PLOT CONFIG = PDFGreg.Largelpt	DRAWN - AG	REVISED -
		PLOT SCALE = 1:50	CHECKED - DF	REVISED -
		PLOT DATE = 7/17/2014 4:07:49 PM	DATE - 6/30/2014	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PUMP STATION GENERATOR/CONTROL HOUSE ELECTRICAL PLAN		F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 144
		SCALE: NTS	SHEET NO. PS 9 OF 15	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

ELECTRICAL ABBREVIATIONS	
ABBREV	DESCRIPTION
A	AMP
AF	FUSED AMPS
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFI	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GROUND
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERES INTERRUPTING CAPACITY
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AS	SWITCH AMPS
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS
AT	AMPS TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BPS	BOLTED PRESSURE SWITCH BREAKER
BRKR	BREAKER
C	CONDUIT
CA	CONSTRUCTION ADMINISTRATOR
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION CAMERA
CLG	CEILING
CO	CARBON MONOXIDE DETECTOR
COAX	COAXIAL
COMED	COMMONWEALTH EDISON COMPANY CONTROL PANEL
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CU	COPPER
DO	DRAWOUT
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DS	DISCONNECT SWITCH
DT	DUST TIGHT
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EM	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
EPO	EMERGENCY POWER OFF DEVICE
EWC	ELECTRIC WATER COOLER
EWI	ELECTRIC WATER HEATER
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FDS	FUSED DISCONNECT SWITCH
FJA	FULL LOAD AMPS
FU	FUSE
FWNR	FULL VOLTAGE, NON REVERSING (MAGNETIC STARTER)
GC	GENERAL CONTRACTOR
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTION
G, GND	GROUND
GRS	GALVANIZED RIGID STEEL CONDUIT
H	HEIGHT - MOUNTED ABOVE COUNTER (+6" TO CENTERLINE ABOVE COUNTER OR BACK-SPLASH)
HOA	HAND-OFF-AUTO
HP	HORSE POWER
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
IBC	INTERNATIONAL BUILDING CODE
IECC	INTERNATIONAL ENERGY CONSERVATION CODE
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IES	ILLUMINATING ENGINEERING SOCIETY
IFC	INTERNATIONAL FIRE CODE
IG	ISOLATED GROUND
IMC	INTERMEDIATE STEEL CONDUIT
IN	INCH(ES)
INC	INCANDESCENT
JB	JUNCTION BOX
JPC	JOCKEY PUMP CONTROLLER
KCM	THOUSAND CIRCULAR MILS WIRE CROSS SECTION AREA
KVA	KILOVOLT-AMPERE
KW	KILOWATT
KWH	KILOWATT-HOUR
LCP	LIGHTING CONTROL PANEL
LSIG	INDICATES FEATURES PROVIDED WITH ADJUSTABLE TRIP BREAKER (LONG TIME (W/DELAY), SHORT TIME (W/DELAY), INSTANTANEOUS, GROUND FAULT)
LV	LOW VOLTAGE
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MAXIMUM CIRCUIT PROTECTION
MDF	MAIN DISTRIBUTION FRAME
MFR	MANUFACTURER
MH	MAN-OLE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCIP	MAXIMUM OVERCURRENT PROTECTION
MSB	MAIN SWITCHBOARD
MTD	MOUNTED
N	NEUTRAL
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NF	NON-FUSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NG	NATURAL GAS
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OL	OVERLOAD
P	POLE
PEI	PATRICK ENGINEERING INCORPORATED
PB	PULL BOX
PC	PHOTOCELL
PNL	PANEL
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
RECP	RECEPTACLE
RIGD	RIGID GALVANIZED STEEL CONDUIT
RCS	SHORT CIRCUIT CURRENT RATING
SCCR	SWITCH EMERGENCY
SE	SECONDARY
SPD	SURGE PROTECTIVE DEVICE
SPDT	SINGLE POLE DOUBLE THROW
SPST	SINGLE POLE SINGLE THROW
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TECHNOLOGY CONTRACTOR
TR	TRANSFORMER
TTC	TELEPHONE TERMINAL CABINET
TYP	TYPICAL
UC	UNDER COUNTER
UGE	UNDERGROUND ELECTRICAL
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SOURCE
V	VOLT
VA	VOLT-AMPERE
VFD	VARIABLE FREQUENCY DRIVE
VFI	VACUUM FAULT INTERRUPTER
W	WATT
WP	WEATHERPROOF
WT	WATER TIGHT
#	PHASE

ELECTRICAL IDENTIFICATIONS	
SYMBOL	DESCRIPTION
E	ADJACENT TO DEVICE OR EQUIPMENT, DENOTES EXISTING TO REMAIN.
	CONCEALED CONDUIT AND WIRE. RUN DASH WIRE DENOTES GROUND CONDUCTOR
	EXPOSED CONDUIT RUN.
	CONDUIT RUN (UNDER FLOOR OR UNDERGROUND)
	FLEXIBLE CONDUIT CONNECTION
	CONDUIT ROUTED UP
	CONDUIT ROUTED DOWN

ELECTRICAL LINETYPES	
SYMBOL	DESCRIPTION
	NEW WORK
	NEW WORK UNDERGROUND
	EXISTING TO REMAIN OR NEW WORK BY OTHERS
	EXISTING TO BE REMOVED

SITE PLAN FEEDER DESIGNATION	
SYMBOL	DESCRIPTION
UGE	ELECTRICAL UNDERGROUND FEEDER ROUTING DESIGNATION
OHE	ELECTRICAL OVERHEAD FEEDER ROUTING DESIGNATION
UGT	TECHNOLOGY UNDERGROUND CABLE ROUTING DESIGNATION
OHT	TECHNOLOGY OVERHEAD CABLE ROUTING DESIGNATION

CODE REFERENCES	
CODE	REFERENCE
CONTRACTOR SHALL COMPLY WITH APPLICABLE CODES AND LOCAL AMENDMENTS	
BUILDING CODE:	IBC 2009 EDITION
ELECTRICAL CODE:	NEC 2011 EDITION
ENERGY CODE:	IECC 2012 EDITION
LIFE SAFETY CODE:	NFPA 101 2009 EDITION
FUEL GAS CODE:	IFGC 2009 EDITION

LIGHTING SCHEDULE		
SYMBOL	DESCRIPTION	APPROVED MANUFACTURERS:
	CLASS 1, DIVISION 2 INTERIOR VAULT LIGHTING FIXTURE	SPECIFICATIONS AS INDICATED ON THE DESIGN DRAWINGS.
	INTERIOR LIGHTING FIXTURE	COOPER LIGHTING (SEE ELECTRICAL SPECIFICATIONS)
	EXTERIOR LIGHTING FIXTURE	SPECIFICATIONS AS INDICATED ON THE DESIGN DRAWINGS.
	BATTERY EMERGENCY LIGHTING UNIT, TWO-WAY THROW, UL APPROVED. WALL MOUNTED MAX OF 8'-0" AFF.	SPECIFICATIONS AS INDICATED ON THE DESIGN DRAWINGS.
	WALL MOUNTED OCCUPANCY SENSOR/SWITCH WITH INTEGRAL 120/277V, 20A POWER PACK. DUAL TECHNOLOGY (INFRARED/ULTRASONIC OR MICROPHONICS), MANUAL 'ON' OPERATION.	HUBBELL.
	PROVIDE PANEL/CIRCUIT NUMBER IDENTIFICATION LABEL ON COVERPLATE.	
	CLASS 1, DIV 2, SINGLE POLE SWITCH, SINGLE THROW, 120/277, 20A, TOGGLE HANDLE, MAINTAINED CONTACT, SIDE AND BACK WIRED TO BE LOCATED IN VAULT.	HUBBELL.
	PROVIDE PANEL/CIRCUIT NUMBER IDENTIFICATION LABEL ON COVERPLATE.	
	PHOTOCELL (PC), 120/277V, 1800VA RATED, SINGLE POLE, SINGLE THROW CONTACT IN A HEAVY DUTY, CORROSION PROOF, GASKETED ENCLOSURE. MOUNT ON ROOF FACING NORTH.	SIEMENS LEN SERIES TORX PARAGON

TECHNOLOGY SCHEDULE		
SYMBOL	DESCRIPTION	APPROVED MANUFACTURERS:
	120 VAC SMOKE/CARBON MONOXIDE ALARM WITH BATTERY BACK-UP, LOW BATTERY SIGNAL. PROVIDE 9V BATTERY, MOUNTING HARDWARE AND BACKBOX.	FIRST ALERT SAS20CN3ST KIDDE
	TELEPHONE TERMINAL CABINET, 2'H X 4'L X 3/4"D A-C GRADE FIRE-RATED PLYWOOD. EXPOSED SIDE SHALL BE SMOOTH. MOUNT VERTICALLY WITH TOP OF PLYWOOD AT 6'-0" AFF	SOUTH COAST LUMBER CO. HOUSING INDUSTRY CO. GEORGIA PACIFIC
HH-11	PRECAST HANDHOLE, 24"L X 24"H X 18"D. PROVIDE WITH STAINLESS STEEL ACCESSORIES. OPEN BOTTOM BODY WITH MOUSEHOLES. BOLTED NON-SKID COVER RATED FOR 8,000 LBS. DESIGN LOAD NON-DELIBERATE VEHICULAR TRAFFIC. UNIT IN LANDSCAPED AREAS SHALL BE GREEN IN COLOR. PROVIDE LABEL "TECHNOLOGY"	HUBBELL QUAZITE SERIES ARMORCAST CARSON INDUSTRIES

OUTLET BOXES	
SYMBOL	DESCRIPTION
	OUTLET BOXES SHALL BE GALVANIZED PRESSED STEEL, KNOCKOUT TYPE, WITH SUITABLE PLASTER RINGS AND COVERS OR PLATES USED IN CONCEALED INTERIOR LOCATIONS, EXPOSED INTERIOR UTILITY ROOMS, IN DIRECT CONTACT WITH CONCRETE EXCEPT SLAB ON GRADE.
	OUTLET BOXES SHALL BE CAST, KNOCKOUT TYPE, WITH SUITABLE PLASTER RINGS AND COVERS OR PLATES USED IN EXTERIOR LOCATIONS, HAZARDOUS LOCATIONS, IN DIRECT CONTACT WITH EARTH, IN DIRECT CONTACT WITH SLAB ON GRADE, AND IN WET LOCATIONS.

POWER SYMBOLS		
SYMBOL	DESCRIPTION	APPROVED MANUFACTURERS:
	RECEPTACLE, GROUND FAULT DUPLEX, 125V, 20A, SPECIFICATION GRADE, 3-WIRE GROUNDING TYPE, IMPACT RESISTANT THERMOPLASTIC FACE, STEEL BACK STRAP, STRAIGHT BLADE, NEMA 5-20R, TEST AND RESET BUTTONS, BACK AND SIDE WIRED. LETTER "G" NEXT TO SYMBOL INDICATES GROUND FAULT INTERRUPTER (GFI)	LEVITON (SEE ELECTRICAL SPECIFICATIONS)
	PROVIDE PANEL/CIRCUIT NUMBER IDENTIFICATION LABEL ON COVERPLATE.	
	RECEPTACLE, GROUND FAULT DUPLEX, NEMA 3R RATED WHILE-IN-USE, CAST ALUMINUM, NON-LOCKING, WEATHERPROOF COVERPLATE, 125V, 20A, SPECIFICATION GRADE, 3-WIRE GROUNDING TYPE, IMPACT RESISTANT THERMOPLASTIC FACE, STEEL BACK STRAP, STRAIGHT BLADE, NEMA 5-20R, TEST AND RESET BUTTONS, BACK AND SIDE WIRED. LETTER "G" NEXT TO SYMBOL INDICATES GROUND FAULT INTERRUPTER (GFI)	LEVITON (SEE ELECTRICAL SPECIFICATIONS)
	PROVIDE PANEL/CIRCUIT NUMBER IDENTIFICATION LABEL ON COVERPLATE.	
	VARIABLE FREQUENCY DRIVE (MATCH MOTOR HORSE POWER RATING AS INDICATED ON THE DESIGN DRAWINGS)	CUTLER-HAMMER (SEE ELECTRICAL SPECIFICATIONS)
	NON-FUSED DISCONNECT SWITCH, CONFIGURATION AS INDICATED ON THE DESIGN DRAWINGS.	SQUARE D (SEE ELECTRICAL SPECIFICATIONS)
	FUSED DISCONNECT SWITCH, CONFIGURATION AS INDICATED ON THE DESIGN DRAWINGS.	SQUARE D (SEE ELECTRICAL SPECIFICATIONS)
	AUTOMATIC TRANSFER SWITCH, CONFIGURATION AS INDICATED ON THE DESIGN DRAWINGS.	ZENITH (SEE ELECTRICAL SPECIFICATIONS)
	PANELBOARD, SURFACE MOUNT, CONFIGURATION AS INDICATED ON THE DESIGN DRAWINGS. PROVIDE 42" FRONT CLEARANCE ON 480Y/277V PANELBOARDS.	SQUARE D NF SIEMENS EATON
	PANELBOARD, SURFACE MOUNT, CONFIGURATION AS INDICATED ON THE DESIGN DRAWINGS. PROVIDE 36" FRONT CLEARANCE ON 208Y/120V PANELBOARDS.	SQUARE D NQ SIEMENS EATON
	TRANSFORMER, CONFIGURATION AS INDICATED ON THE DESIGN DRAWINGS.	SQUARE D (SEE ELECTRICAL SPECIFICATIONS)
	PUMP STATION TECHNOLOGY CONTROL PANEL MOUNTED ON A 3 1/2" HIGH CONCRETE PAD	ALLEN BRADLEY (SEE ELECTRICAL SPECIFICATIONS)
	SURGE PROTECTION DEVICE, EXTERNAL MOUNTED CABINET AND NON MODULAR CONSTRUCTION, NEMA 12 ENCLOSURE. CONFIGURATION AS INDICATED ON THE DESIGN DRAWINGS.	SQUARE D (SEE ELECTRICAL SPECIFICATIONS) SIEMENS EATON
	PROVIDE ELECTRICAL PANEL/CIRCUIT NUMBER IDENTIFICATION LABEL ON COVERPLATE.	
	EMERGENCY POWER OFF (EPO), RED MUSHROOM TYPE WITH CLEAR PLASTIC COVER, N.C. CONTACT, PUSH TO RELEASE.	SQUARE D XAL K174 COVER: STI INC. SIEMENS EATON
	PROVIDE ENGRAVED NAMEPLATE "GENERATOR POWER OFF" ON COVERPLATE.	
	ENGINE GENERATOR, NATURAL GAS-POWERED, OPEN UNIT, STAND-BY RATED 125KW, 156.25KVA, UNIT MOUNTED RADIATOR, SILENCER, BATTERY CHARGER AND BLOCK HEATER. PROVIDE 5-YR WARRANTY FROM THE DATE OF EQUIPMENT START-UP.	KOHLER (SEE ELECTRICAL SPECIFICATIONS) MTU ON SITE CATERPILLAR GENERAC
	ENGINE GENERATOR CONTROL PANEL, UNIT MOUNTED.	PROVIDED AS PART OF THE GENERATOR PACKAGE.
	ENGINE GENERATOR BATTERY CHARGER. PROVIDED AS PART OF THE GENERATOR PACKAGE.	PROVIDED AS PART OF THE GENERATOR PACKAGE.
	PROVIDE ELECTRICAL PANEL/CIRCUIT NUMBER IDENTIFICATION LABEL ON COVERPLATE.	
	ENGINE GENERATOR BLOCK HEATER. PROVIDED AS PART OF THE GENERATOR PACKAGE.	PROVIDED AS PART OF THE GENERATOR PACKAGE.
	PROVIDE ELECTRICAL PANEL/CIRCUIT NUMBER IDENTIFICATION LABEL ON COVERPLATE.	
	ENGINE GENERATOR ANNUNCIATOR PANEL, PROVIDED AS PART OF THE GENERATOR PACKAGE TO MEET NFPA 110 REQUIRED ALARMS AND PRE-ALARMS. PROVIDE ALL MANUFACTURER REQUIRED SIGNAL WIRING FROM THE GENERATOR, TRANSFER SWITCHES, EMERGENCY POWER OFF, AND GENERATOR CONTROL PANEL.	PROVIDED AS PART OF THE GENERATOR PACKAGE.

RENTABLE = ...LISLE/VENTABLE/TRANSPEN.TBL

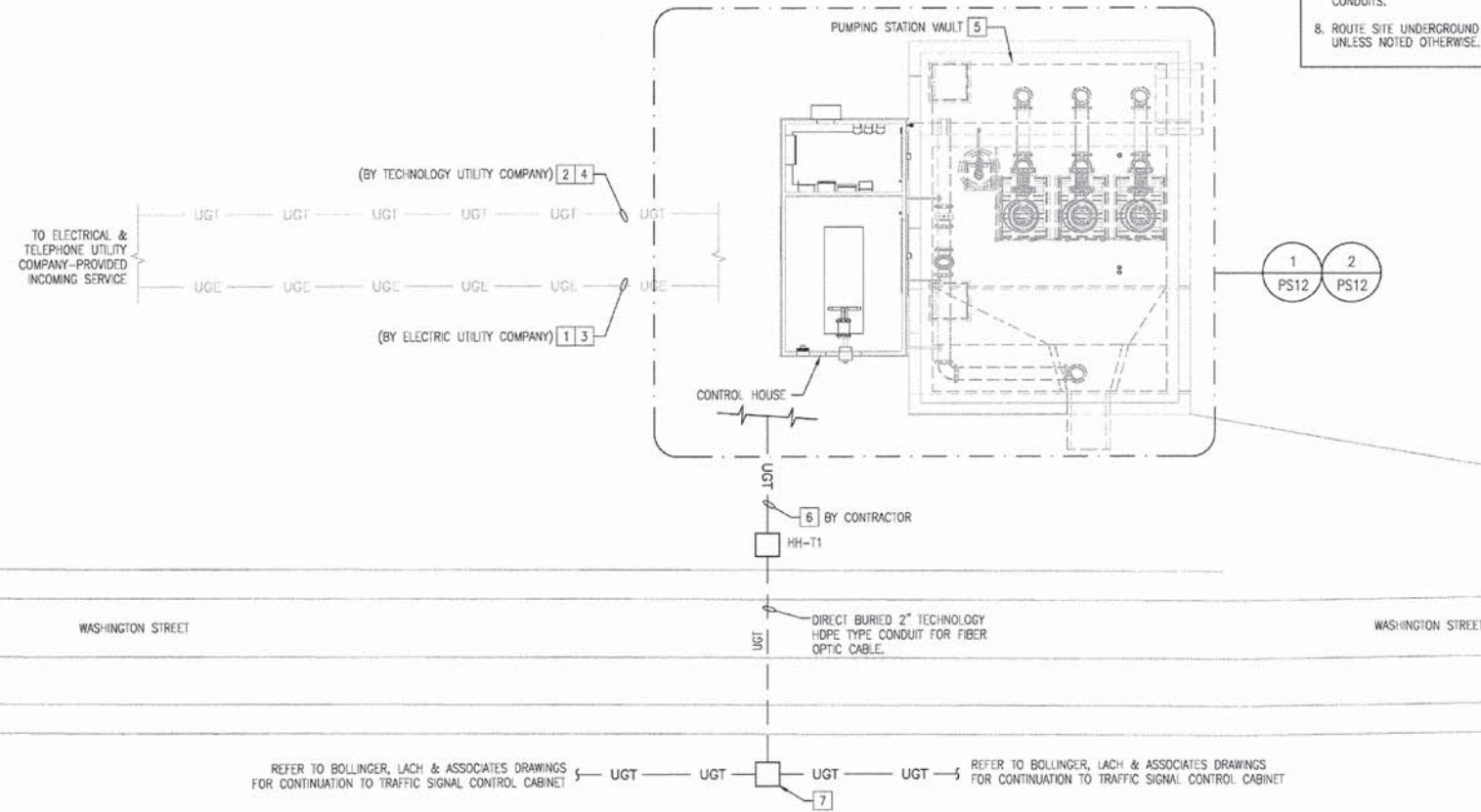
PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = kkoepfer(Rdy.Lisle)	DESIGNED - AG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PUMP STATION ELECTRIC SYMBOLS	F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 145
	PLOT CONFIG = Pdf(Greg.Largo).plt PLOT SCALE = 1:50 PLOT DATE = 7/17/2014 4:09:38 PM	DRAWN - AG CHECKED - DF DATE - 6/30/2014	REVISED - REVISED - REVISED -			SCALE: NTS SHEET NO. PS 10 OF 15 STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT 61A63			

GENERAL NOTES

1. SEE GENERATOR/CONTROL HOUSE ELECTRICAL PLAN, SHEET PS9.
2. SEE ELECTRICAL SYMBOL LIST, SHEET PS10.
3. SEE ELECTRICAL RISER DIAGRAM, SHEET PS13.
4. WHERE REGULATIONS OF ELECTRIC AND/OR TELEPHONE UTILITY COMPANIES APPLY, CONFORMANCE WITH THEIR REGULATIONS IS MANDATORY AND ANY COSTS INVOLVED SHALL BE INCLUDED IN THE CONTRACT. WHEN EXCAVATIONS ARE MADE ADJACENT TO OR BELOW OTHER UTILITIES, THESE UTILITIES SHALL BE PROPERLY SUPPORTED SO AS NOT TO DISTURB THE OPERATION, ALIGNMENT OR INTEGRITY OF OTHER UTILITIES.
5. CONTRACTOR SHALL DO ALL EXCAVATING, FILLING, BACKFILLING, COMPACTING, AND RESTORATION IN CONNECTION WITH HIS WORK.
6. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES WITH THE REGIONAL UTILITY LOCATOR, PROVIDE NOTICE TO THE LOCATOR BEFORE EXCAVATIONS.
7. SITE UNDERGROUND CONDUIT SHALL HAVE STEEL ELBOWS AND PULLSTRINGS. INSTALL WARNING TAPE WITH METALLIC TRACER, 8" BELOW GRADE ON TOP OF CONDUITS.
8. ROUTE SITE UNDERGROUND CONDUIT AT A MINIMUM OF 24" BELOW GRADE UNLESS NOTED OTHERWISE.

TAG NOTES

- | | |
|---|--|
| 1 | ELECTRIC UTILITY COMPANY PROVIDED INCOMING SERVICE. COORDINATE ELECTRICAL INCOMING SERVICE INTO CONTROL HOUSE SERVICE ENTRANCE MAIN DISCONNECT SWITCH IN ACCORDANCE WITH THE ELECTRIC UTILITY COMPANY SERVICE PROVIDER. |
| 2 | TELEPHONE UTILITY COMPANY PROVIDED INCOMING SERVICE. COORDINATE INCOMING TELEPHONE SERVICE INTO CONTROL HOUSE TELEPHONE TERMINAL CABINET (TTC) IN ACCORDANCE WITH THE TELEPHONE UTILITY COMPANY SERVICE PROVIDER. |
| 3 | SEE DRAWING PS12 FOR CONTINUATION TO ELECTRICAL UTILITY COMPANY TRANSFORMER. |
| 4 | SEE DRAWING PS12 FOR CONTINUATION TO TELEPHONE TERMINAL CABINET (TTC). |
| 5 | PUMPING STATION VAULT IS CLASSIFIED AS CLASS 1, DIV. 2, GROUP D, HAZARDOUS LOCATION. ALL VAULT ELECTRICAL EQUIPMENT, AND TERMINATIONS SHALL CONFORM TO NEC REQUIREMENTS ASSOCIATED FOR CLASS 1, DIV. 2, GROUP D, HAZARDOUS LOCATION. |
| 6 | SINGLE-MODE 24 STRAND OUTDOOR RATED FIBER OPTIC CABLE ROUTING FROM CONTROL ROOM TO HANDHOLE (HH-T1) FOR WASHINGTON STREET/LAKE STREET TRAFFIC SIGNAL CONTROL CABINET. |
| 7 | HANDHOLE LOCATION IS SHOWN GRAPHICALLY FOR COORDINATION PURPOSES ONLY AND IT IS PROVIDED BY BOLLINGER, LACH & ASSOCIATES INC. DESIGN DOCUMENTS. REFER TO THEIR DRAWINGS FOR CONTINUATION TO WASHINGTON AND LAKE STREET TRAFFIC SIGNAL CONTROL CABINET. |

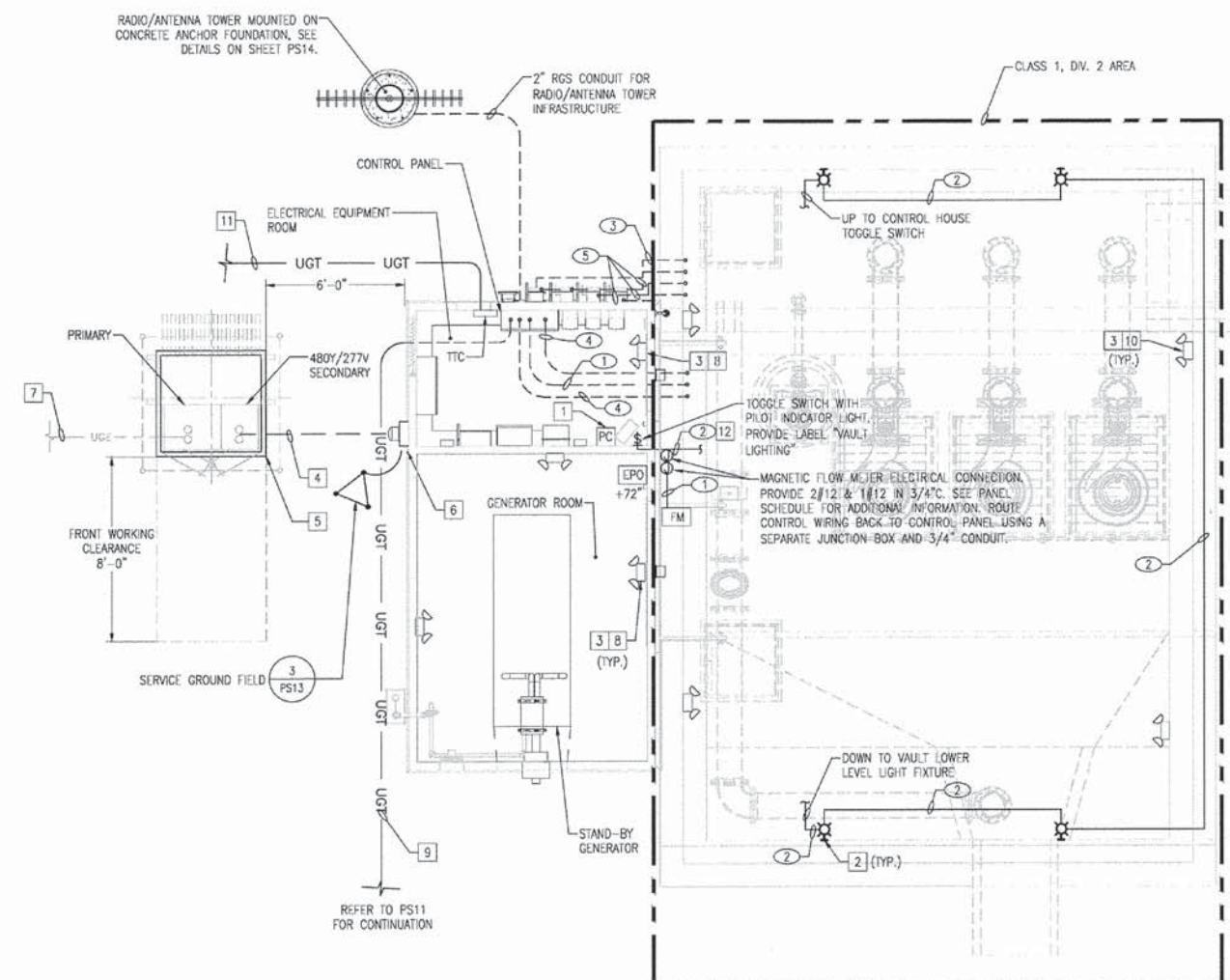


1 PUMP STATION PARTIAL ELECTRICAL SITE PLAN
PS11 SCALE: 1/8" = 1'-0"

PENTABLE = ...LISLE\PEMPABLE\TRANSPEN\TBL

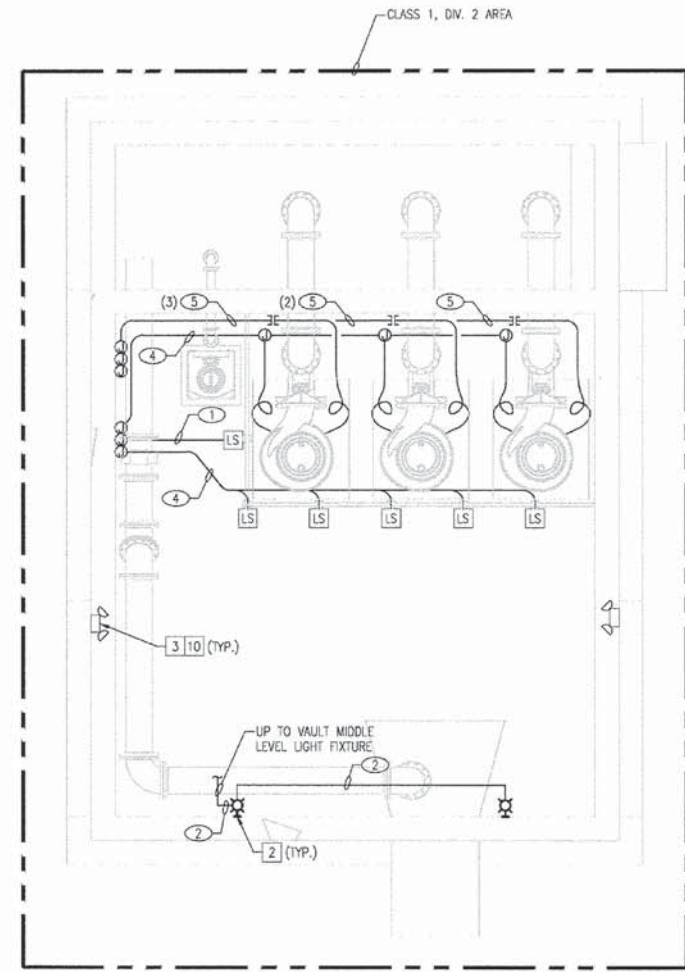
PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = koeppen(Rdw,Lisle) PLOT CONFIG = PDF(Grey, Large).plt PLOT SCALE = 1:50 PLOT DATE = 7/17/2014 4:09:26 PM	DESIGNED - AG DRAWN - AG CHECKED - DF DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PUMP STATION ELECTRIC PARTIAL SITE		F.A.U. RTE. = 187 SECTION = 11-00121-11-BR COUNTY = LAKE TOTAL SHEETS = 496 SHEET NO. = 146 61A63
					SCALE: 1" = 20' SHEET NO. PS 11 OF 15 STA. TO STA.	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT	

Q:\LCDOT\21150_004\Drawings\Auto\Draw\Elec For Conversion\PSstation_ElecPartialSite_03.dgn



1 CONTROL HOUSE ELECTRICAL PLAN
PS12 SCALE: 1/4" = 1'-0"

2 PUMP STATION VAULT MIDDLE LEVEL ELECTRICAL PLAN
PS12 SCALE: 1/4" = 1'-0"



3 PUMP STATION VAULT LOWER LEVEL ELECTRICAL PLAN
PS12 SCALE: 1/4" = 1'-0"

REFER TO PUMPING STATION CONTROL HOUSE ELECTRICAL ENLARGED PLANS ON PS9 FOR EQUIPMENT LAYOUT.

GENERAL NOTES

- SEE DRAWING PS10 FOR SYMBOL LIST.
- SEE DRAWING PS13 FOR ELECTRICAL RISER DIAGRAM AND FEEDER SCHEDULE.
- WHERE REGULATIONS OF ELECTRIC AND/OR TELEPHONE UTILITY COMPANIES APPLY, CONFORMANCE WITH THEIR REGULATIONS IS MANDATORY AND ANY COSTS INVOLVED SHALL BE INCLUDED IN THE CONTRACT.
- CONTRACTOR SHALL DO ALL EXCAVATING, FILLING, BACKFILLING, COMPACTING, AND RESTORATION IN CONNECTION WITH HIS WORK. WHEN EXCAVATIONS ARE MADE ADJACENT TO OR BELOW OTHER UTILITIES, THESE UTILITIES SHALL BE PROPERLY SUPPORTED SO AS NOT TO DISTURB THE OPERATION, ALIGNMENT OR INTEGRITY OF OTHER UTILITIES.
- CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES WITH THE REGIONAL UTILITY LOCATOR. PROVIDE NOTICE TO THE LOCATOR BEFORE EXCAVATIONS.
- SITE UNDERGROUND CONDUIT SHALL HAVE STEEL ELBOWS AND PULLSTRINGS. INSTALL WARNING TAPE WITH METALLIC TRACER, 8" BELOW GRADE ON TOP OF CONDUITS.
- ROUTE SITE UNDERGROUND CONDUIT AT A MINIMUM OF 24" BELOW GRADE UNLESS NOTED OTHERWISE.

TAG NOTES

- | | |
|----|---|
| 1 | PROVIDE PHOTOCELL ON ROOF FACING NORTH, INCLUDING ALL MOUNTING SUPPORTS. |
| 2 | PROVIDE WALL MOUNTED, CAST ALUMINUM HOUSING, CLASS 1, DIV. 2 LIGHT FIXTURE AS MANUFACTURED BY LITHONIA # EJA ZX CF070S WM OR APPROVED EQUAL. MOUNT FIXTURE AT 48" AFF. PROVIDE TWO (2) SPARE LIGHT FIXTURES TO BE UTILIZED AS DEEMED BY THE OWNER. |
| 3 | EMERGENCY UNIT BATTERY SHALL BE WIRED AHEAD OF LOCAL LIGHTING SWITCH CIRCUIT USING 2#12 AND 1#12 GND IN 3/4" TC. |
| 4 | PROVIDE ONE (1) 4" RGS CONDUIT. SECONDARY WIRING AND TERMINATIONS INSTALLED IN ACCORDANCE WITH THE ELECTRIC UTILITY COMPANY REQUIREMENTS. COORDINATE WITH ELECTRIC UTILITY COMPANY. |
| 5 | HOUSEKEEPING CONCRETE PAD INSTALLED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH THE ELECTRIC UTILITY COMPANY REQUIREMENTS. COORDINATE WITH ELECTRIC UTILITY COMPANY. |
| 6 | PROVIDE A NEMA 3R METERING CABINET, ELECTRICAL REVENUE METER PROVIDED BY THE ELECTRIC UTILITY COMPANY REQUIREMENTS. COORDINATE WITH ELECTRIC UTILITY COMPANY. |
| 7 | TO ELECTRIC UTILITY COMPANY PRIMARY SERVICE. PROVIDE ONE (1) 4" WIDE SWEEP RIGID GALVANIZED STEEL CONDUIT ELBOW WITH STEEL ELBOWS AND PULLSTRINGS, IN ACCORDANCE WITH THE ELECTRIC UTILITY COMPANY. FOR THE ELECTRICAL UTILITY COMPANY PRIMARY SERVICE CABLE INSTALLATION/TERMINATIONS. VERIFY WITH ELECTRIC UTILITY COMPANY. |
| 8 | PROVIDE EMERGENCY BATTERY (90 MINS), TWO ADJUSTABLE 12W HALOGEN, 6 VOLT HEADS, STEEL HOUSING WITH SELF TEST AND DIAGNOSTIC OF INVERTER AND LAMPS AS MANUFACTURED BY SURELITES XR SERIES OR APPROVED EQUAL. |
| 9 | TO TECHNOLOGY HANDHOLE. PROVIDE ONE (1) 2" RGS CONDUIT FROM CONTROL PANEL TO TECHNOLOGY HANDHOLE FOR FIBER OPTIC CABLE INSTALLATION TO TRAFFIC CONTROL. REFER TO ELECTRICAL SITE PLAN PS11 FOR CONTINUATION. |
| 10 | PROVIDE WALL MOUNTED, STRUCTURAL FOAM, GLASS REINFORCED HOUSING, CLASS 1, DIV. 2 BATTERY UNIT WITH SELF TEST AND DIAGNOSTIC OF INVERTER AND LAMPS AS MANUFACTURED BY EMERGI-LITE #6H2M-2 VP-WB-2-42-F-MI OR APPROVED EQUAL. PROVIDE TWO (2) SPARE UNIT BATTERIES TO BE UTILIZED AS DEEMED BY THE OWNER. |
| 11 | TO TELEPHONE UTILITY COMPANY INCOMING SERVICE. PROVIDE TEN (10) FEET OF 2 1/2" RGS CONDUIT WITH STEEL ELBOWS AND PULLSTRINGS, IN ACCORDANCE WITH THE TELEPHONE UTILITY COMPANY, FOR THE TELEPHONE COMPANY INCOMING CABLE INSTALLATION/TERMINATIONS. VERIFY WITH TELEPHONE UTILITY COMPANY. |
| 12 | CONNECT VAULT MIDDLE AND LOWER LEVEL LIGHT FIXTURES TO PANEL P208, CIRCUIT #5, VIA TOGGLE SWITCH LOCATED IN CONTROL HOUSE ELECTRICAL ROOM. |

PENTABLE = ...\\LISLE\VENTABLE\TRANSPARENT.TBL

	PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen@dwg.lisle PLOT CONFIG = PDF(Grey, Large).plt PLOT SCALE = 1:500 PLOT DATE = 7/17/2014 4:18:08 PM	DESIGNED - AG DRAWN - AG CHECKED - DF DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -
--	---	--	---	--

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PUMP STATION AND CONTROL HOUSE PLANS		F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 147
SCALE: 1/4" = 1'-0" SHEET NO. PS 12 OF 15		STA.	TO STA.	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT		

PANELBOARD

PANEL: P480 TYPE: NF BUS: 225A VOLTAGE: 277/480 3 PHASE 4 WIRE

LOCATION: CONTROL BLDG MOUNTING: FLUSH SURFACE MAN: 225A MAIN BREAKER NEUTRAL: 100% 200% OPTIONS: BOLT-ON CIRCUIT BREAKERS FEED THRU LUGS

ENCLOSURE: NEMA 1 FEEDER: TOP BOTTOM GROUND: EQUIPMENT ISOLATED DOOR TO DOOR CONSTRUCTION SHUNT TRIP

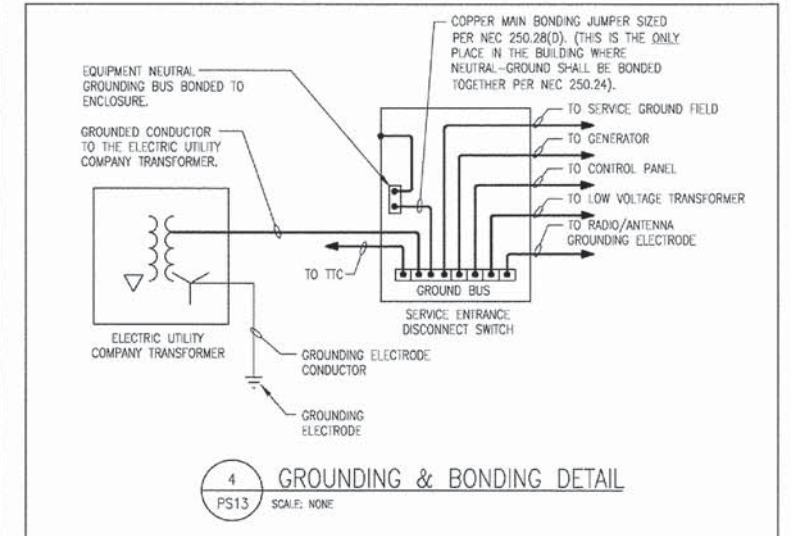
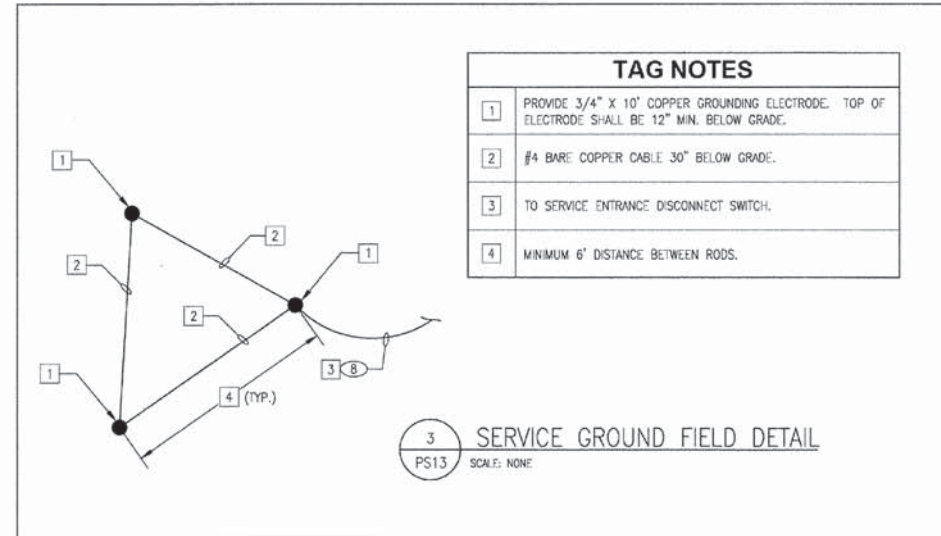
BUS TYPE: COPPER SHORT CIRCUIT RATING: 22,000 AIC

ITEM	TYPE	AMP RATING	POLE	CIR NO	LEFT PHASE LOAD			RIGHT PHASE LOAD			CIR NO	AMP RATING	POLE	TYPE	ITEM		
					A	B	C	A	B	C							
30 HP PUMP (P-1)	M	80	3	1	10835			10835			2	80	3	M	30 HP PUMP (P-2)		
	M			3				10835			4			M			
	M			5	10835	10835		10835	10835		6			M	3HP SEWAGE EJECTOR (SE-1)		
30 HP PUMP (P-3)	M	80	3	1	10835			1270			8	20	3	M			
	M			3				10835			10			M			
	M			5	10835	10835		1270			12			M			
PANEL P208 VA 10KVA XFMR	E	20	2	1	5750			500			14	20	1	L	*LIGHTING UNIT BATTERIES		
	E			3				500			16	20	1	L	*LIGHTING UNIT BATTERIES		
SPARE	S	20	1	5	500			500			18	20	1	S	TIMECLOCK		
SPARE	S	20	3	19	0			1866			20	20	3	L	UNIT HEATER		
	S			21	0			1866			22			L			
	S			23				0			24			E			
SPARE	S	20	1	25	500			500			26	20	1	S	SPARE		
SPARE	S	20	1	27	500			500			28	20	1	S	SPARE		
SPARE	S	20	1	29	500			500			30	20	1	S	SPARE		
SPARE	S	20	1	31	500			500			32	20	1	S	SPARE		
SPARE	S	20	1	33	500			500			34	20	1	S	SPARE		
SPARE	S	20	1	35	500			500			36	20	1	S	SPARE		
SPARE	S	80	3	37	1500			1500			38	20	3	S	SPARE		
SPARE	S			39	1500			1500			40			S	SPARE		
SPARE	S			41	1500			1500			42			S	SPARE		
CONNECTED LOAD (VA)					29520	28450	23270	16571	16571	16571	132953 VA						
CONNECTED LOAD PER PHASE (VA)					48091	46021	40841						121703 VA				

DEMAND					
TYPE	FACTOR	LOAD	TYPE	FACTOR	LOAD
L	1.25	1875	E	1.00	18428
R	0.70	0	S	0.25	3875
M	1.00	99525	X	0.00	0

TOTAL CONNECTED LOAD: 132953 VA
TOTAL DEMAND LOAD: 121703 VA
TOTAL ESTIMATED DEMAND: 146 AMPS

PROVIDE BREAKER LOCK OFF



PANELBOARD

PANEL: P208 TYPE: N2 BUS: 100A VOLTAGE: 120/208 1 PHASE 3 WIRE

LOCATION: CONTROL BLDG MOUNTING: FLUSH SURFACE MAN: 60A MAIN BREAKER NEUTRAL: 100% 200% OPTIONS: BOLT-ON CIRCUIT BREAKERS FEED THRU LUGS

ENCLOSURE: NEMA 1 FEEDER: TOP BOTTOM GROUND: EQUIPMENT ISOLATED DOOR TO DOOR CONSTRUCTION SHUNT TRIP

BUS TYPE: COPPER SHORT CIRCUIT RATING: 10,000 AIC

ITEM	TYPE	AMP RATING	POLE	CIR NO	SINGLE PHASE LOAD			CIR NO	AMP RATING	POLE	TYPE	ITEM				
					A	B	C									
*GEN-NG BATTERY CHARGER	E	25	2	1	250			2	20	1	E	*GEN-NG BATTERY CHARGER				
	E			3	500			4	20	1	E	*GEN-NG ACCESSORIES				
PIT LIGHTING UNIT BATTERIES	L	20	1	5	500			8	20	1	R	RECEPTACLES				
*CARTRIDGE DEVICES	E	20	1	7	500			8	20	1	R	RECEPTACLES				
CONTROL PANEL	E	20	1	9	500			10	20	1	E	DAMPER OPERATOR				
TIC	R	20	1	11	180			12	20	1	E	EXHAUST FAN				
MAGNETIC FLOW METER	E	20	1	13	500			14	20	1	E	EXHAUST FAN				
SPARE	S	20	1	15	500			16	20	1	S	SPARE				
SPARE	S	20	1	17	500			18	20	1	S	SPARE				
SPARE	S	20	1	19	500			20	20	1	S	SPARE				
SPARE	S	20	1	21	500			22	20	1	S	SPARE				
SPARE	S	20	1	23	500			24	20	1	S	SPARE				
CONNECTED LOAD (VA)					2750	2980	3000	3000	11430 VA							
CONNECTED LOAD PER PHASE (VA)					5750	5980						7650 VA				

DEMAND					
TYPE	FACTOR	LOAD	TYPE	FACTOR	LOAD
L	1.25	625	E	1.00	4750
R	0.70	625	S	0.25	1250
M	0.00	0	X	0.00	0

TOTAL CONNECTED LOAD: 11430 VA
TOTAL DEMAND LOAD: 7650 VA
TOTAL ESTIMATED DEMAND: 38 AMPS

PROVIDE BREAKER LOCK OFF

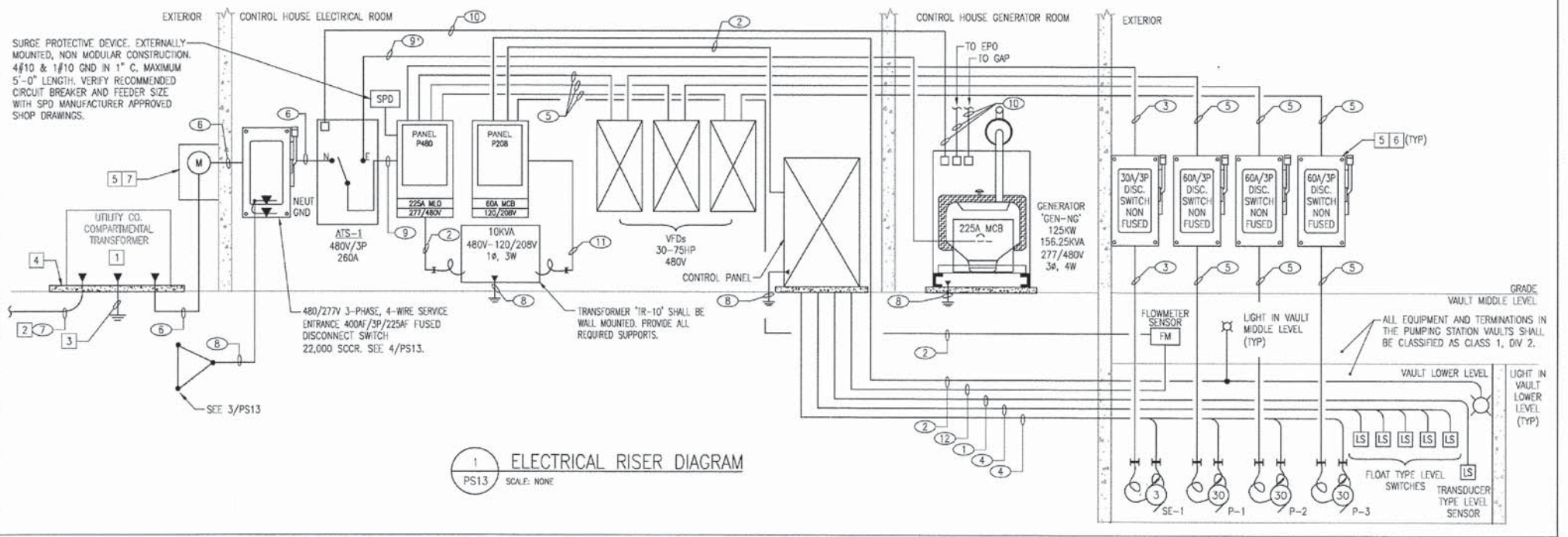
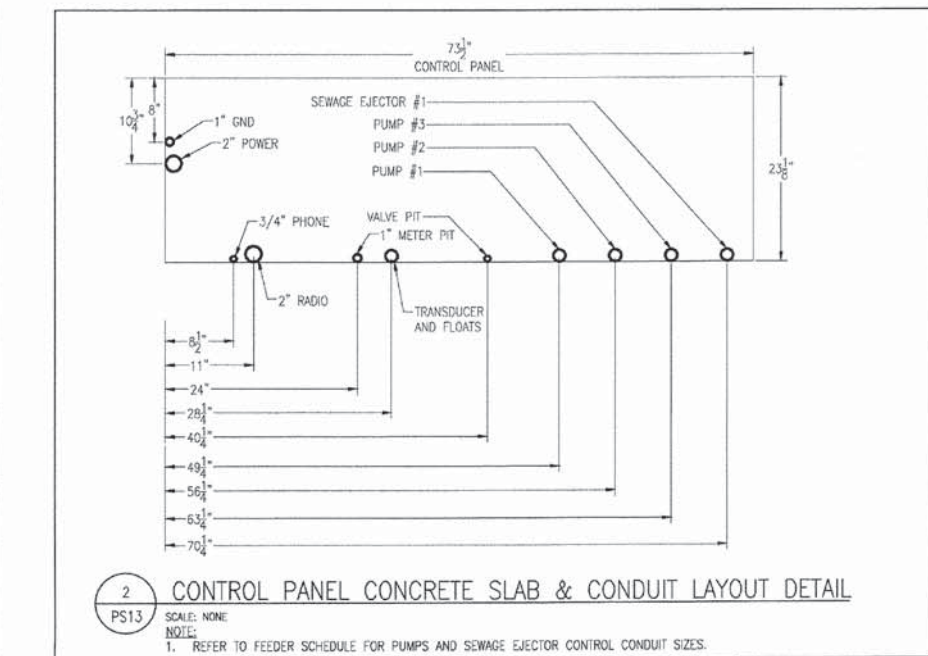
TAG NOTES

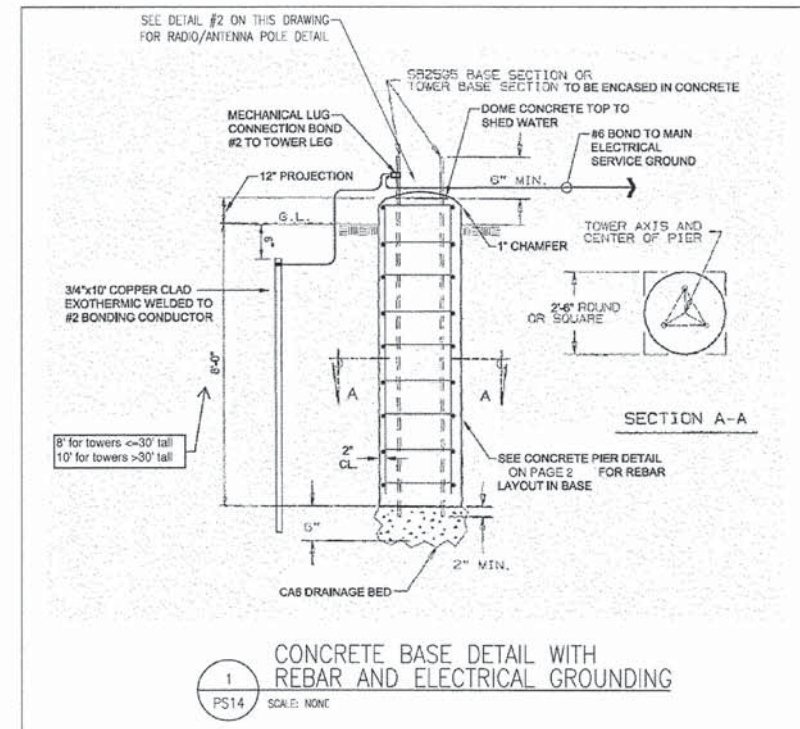
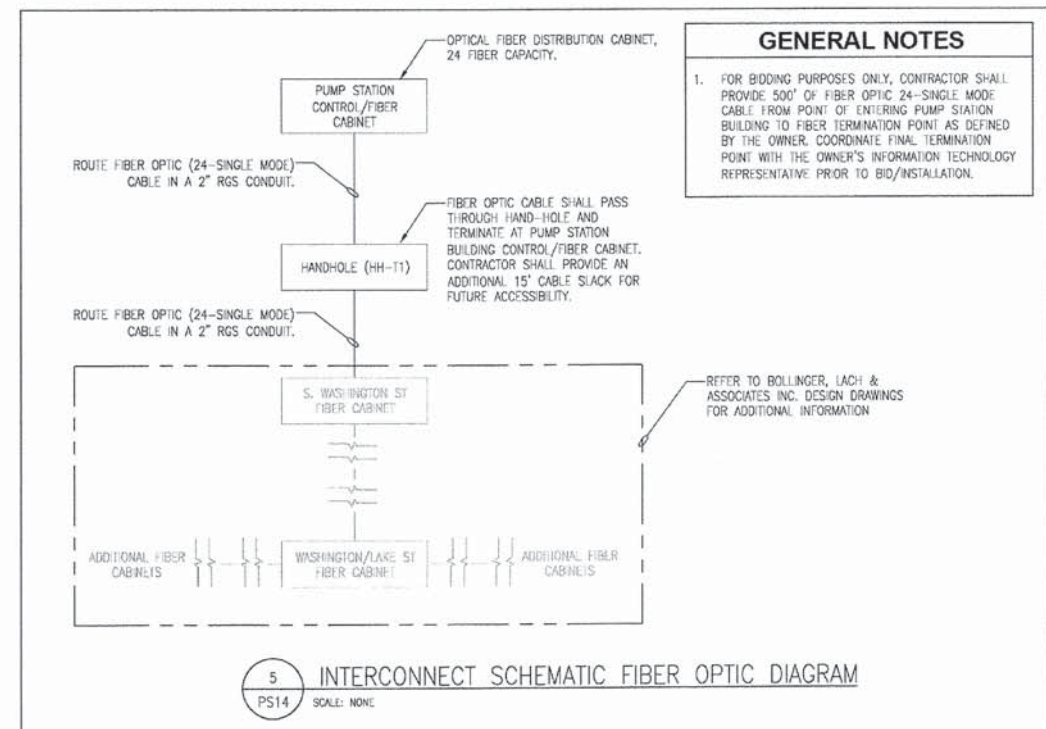
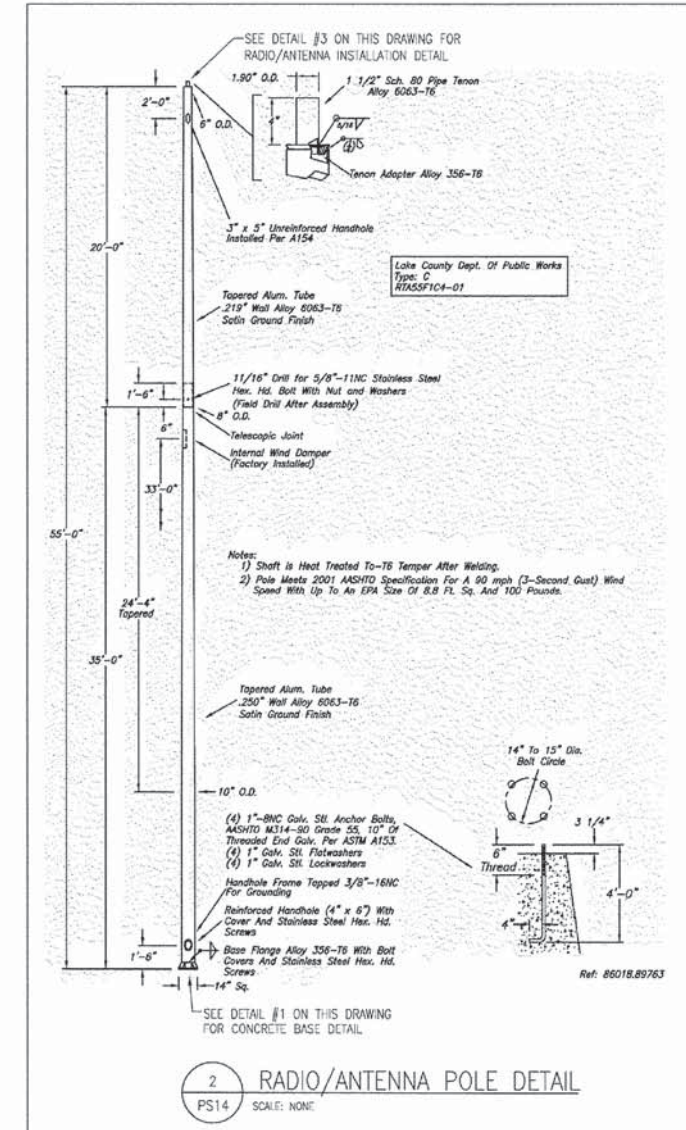
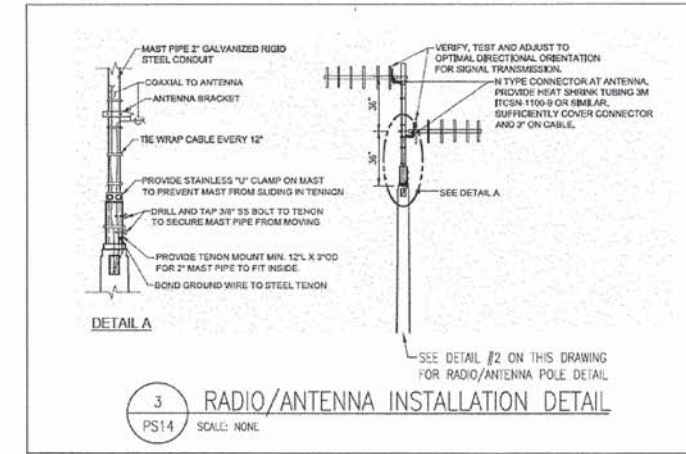
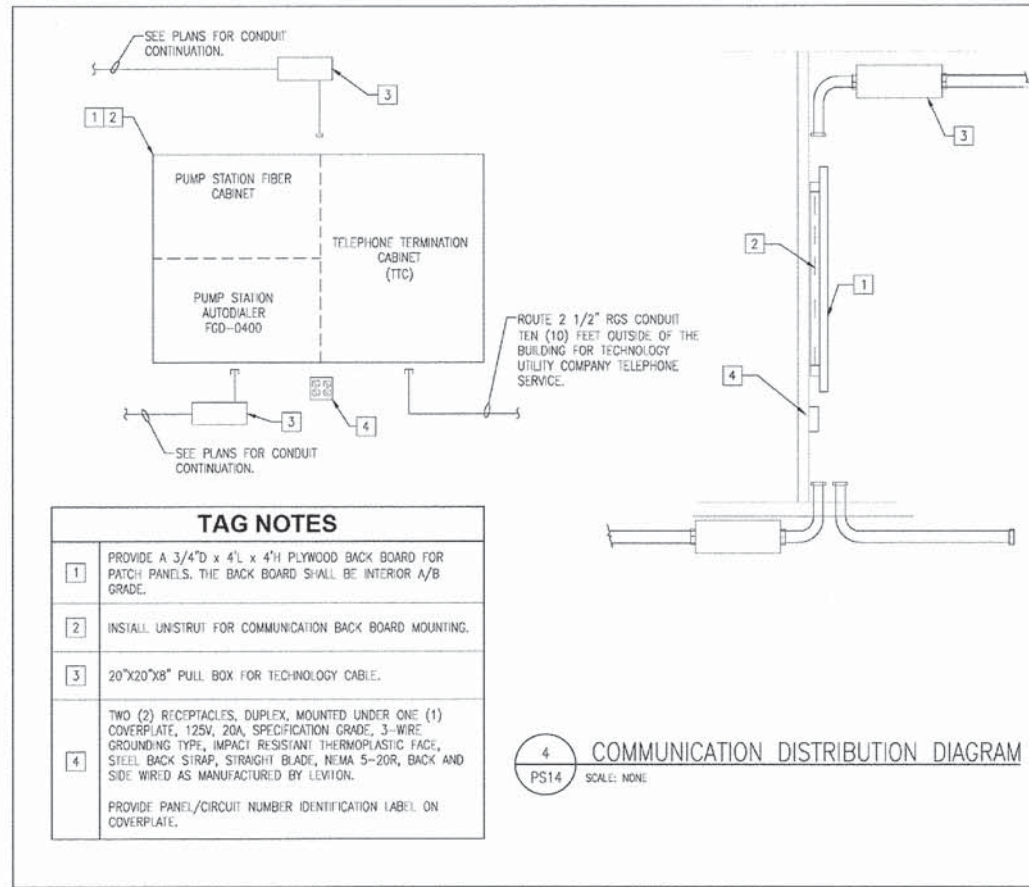
- UTILITY COMPANY COMPARTMENTAL TRANSFORMER FURNISHED AND INSTALLED BY THE ELECTRIC UTILITY COMPANY.
- PROVIDE 1-4" WIDE SWEEP RIGID ELBOWS FOR THE ELECTRIC UTILITY FOR THE UTILITY COMPANY SERVICE CABINETS.
- PROVIDE EMPTY CONDUIT PER THE ELECTRIC UTILITY COMPANY REQUIREMENTS FOR COMPARTMENTAL TRANSFORMER GROUND CONDUCTOR.
- PROVIDE A CONCRETE PAD COMPLETE WITH RE-BAR AND FROST FOOTING PER THE ELECTRIC UTILITY COMPANY REQUIREMENTS.
- ALL ELECTRICAL EQUIPMENT LOCATED ON THE EXTERIOR SHALL BE NEMA 4, STAINLESS STEEL WITH DRIP SHIELD.
- PROVIDE ALL INTERLOCKING REQUIRED BETWEEN THE VARIABLE FREQUENCY DRIVE AND DISCONNECT SWITCHES.
- PROVIDE CURRENT TRANSFORMER AND METERING COMPARTMENT. ALL METERING EQUIPMENT SHALL MEET THE UTILITY COMPANY REQUIREMENTS.

FEEDER SCHEDULE

FEEDER TAGS	LOAD AMPS	OC DEVICE AMPS	PHASE CONDUCTORS	GROUND	CONDUIT SIZE
1			R3-R20 COAX		1"
2	20	20	2#12	1#12	1"
3	20	20	3#12	1#12	1"
4			5 SETS 3#18		1.14"
5		80	3#6	1#10	1.12"
6	225	225	4#4/0		3"
7					4"
8				1#4	1"
9	225	225	4#4/0	1#4	3"
10			4#18	1#18	1.12"
11	60	60	3#6	1#10	1.14"
12			3#18		1"

NOTES:
1 ALL SIZES ABOVE ARE BASED ON COPPER WITH A 75°C TEMPERATURE RATING
2 VERIFY CONTROL WIRING WITH EQUIPMENT MANUFACTURER APPROVED SHOP DRAWINGS.





RENTABLE = ...LISLE\VENTABLE\TRANSPEN\FBL

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoepfer(Rdwy.Lisle) PLOT CONFIG = PDF(Greg.Largel.plt) PLOT SCALE = 1:50 PLOT DATE = 7/17/2014 4:11:39 PM	DESIGNED - AG DRAWN - AG CHECKED - DF DATE - 6/30/2014	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PUMP STATION ELECTRICAL SCADA DETAILS	F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 495	SHEET NO. 149
	SCALE: NTS SHEET NO. PS 14 OF 15 STA. TO STA.					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	61A63			

G:\C007\21158_884\Drawings\shs\Draw\Elec For Conversion\PSStation_ElecDetails_06.dgn

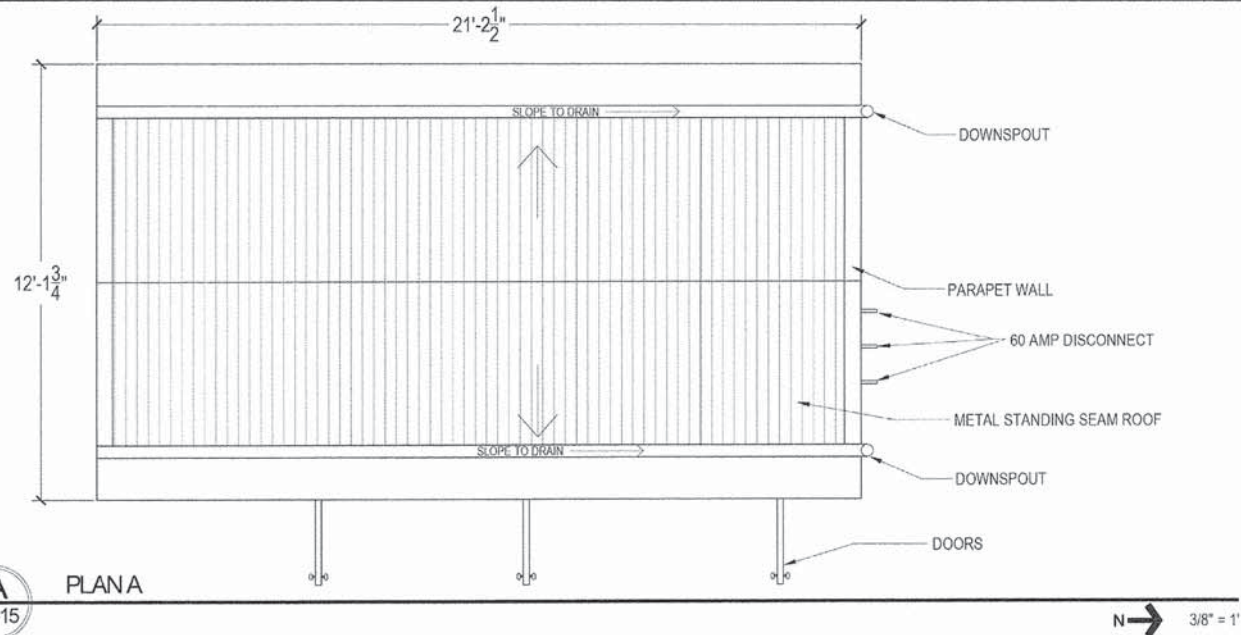
GENERAL NOTES:

EXTERIOR TREATMENTS SHOWN SHALL BE CAST IN PRECAST CONCRETE PANELS.

REFER TO ENGINEERING DOCUMENTS FOR CIVIL, HVAC, ELECTRICAL AND STRUCTURAL INFORMATION.

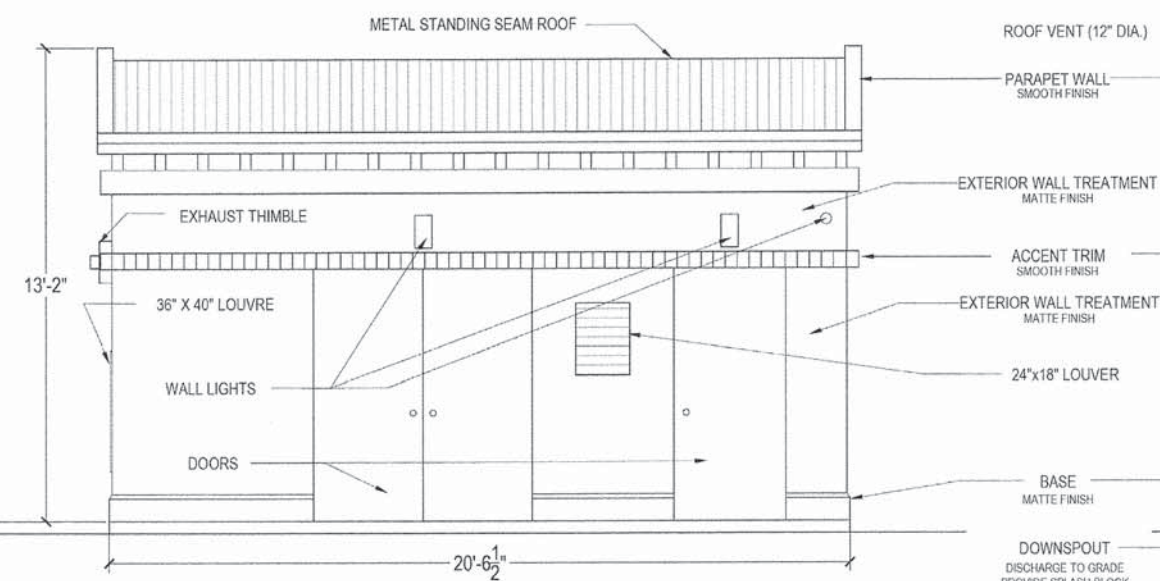
BUILDING ANCHORS TO COORDINATE WITH FOUNDATION PLACEMENT.

CONTRACTOR SHALL COORDINATE ALL WALL PENETRATIONS AND ATTACHMENTS REQUIRED BY ELECTRICAL AND MECHANICAL ELEMENTS.



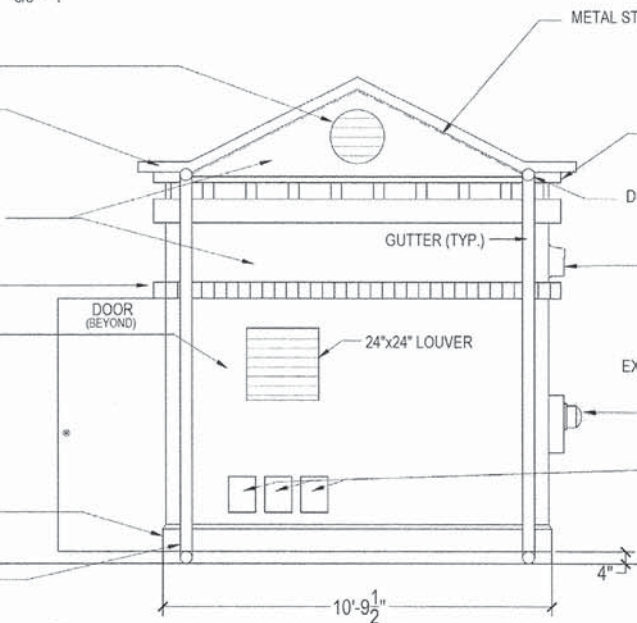
A PLAN A
PS-15

N → 3/8" = 1'



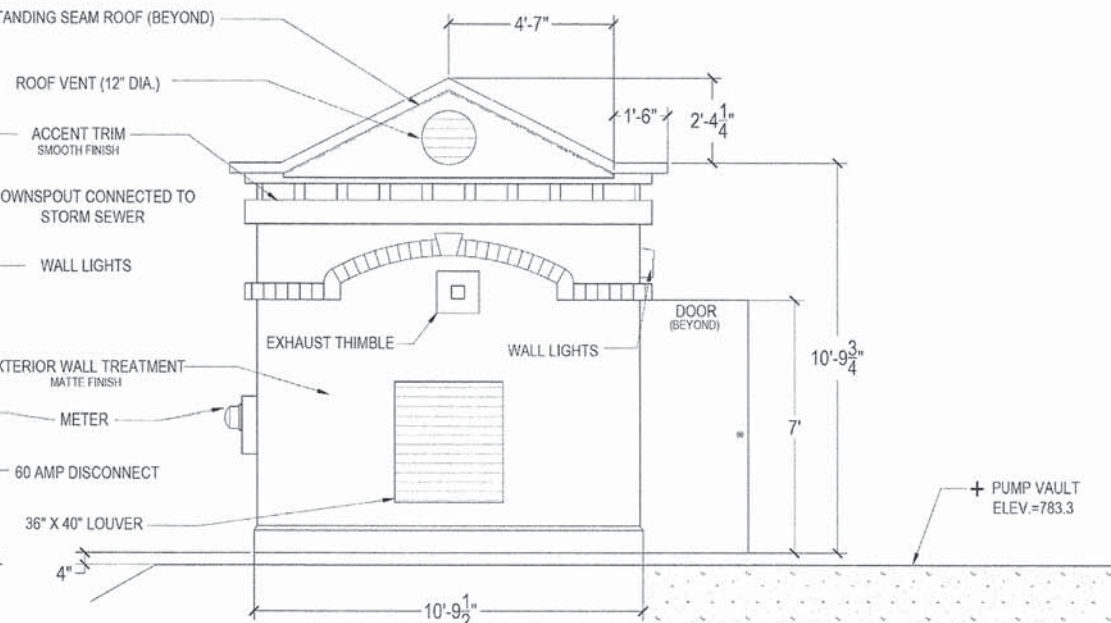
B EAST ELEVATION B
PS-15
LOOKING WEST

3/8" = 1'



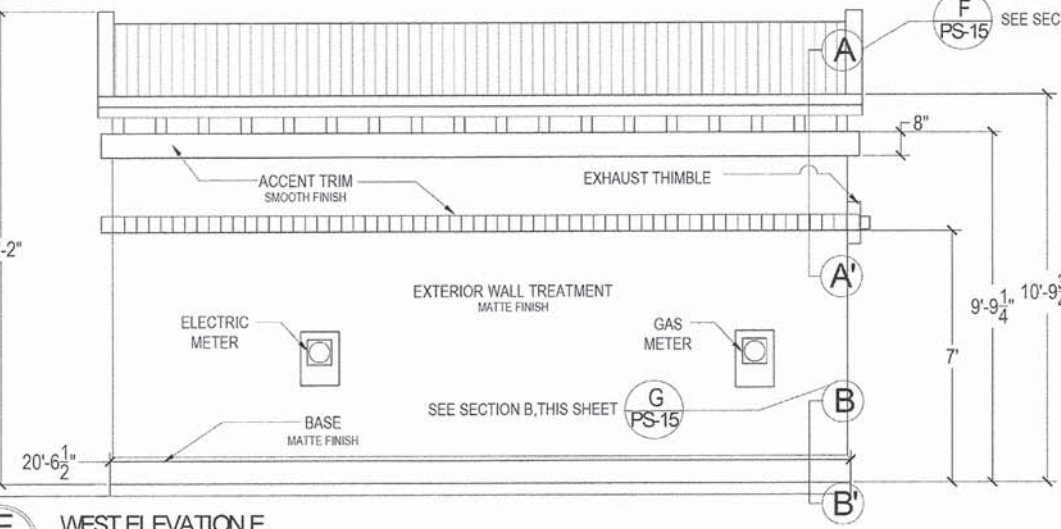
C NORTH ELEVATION C
PS-15
LOOKING SOUTH

3/8" = 1'



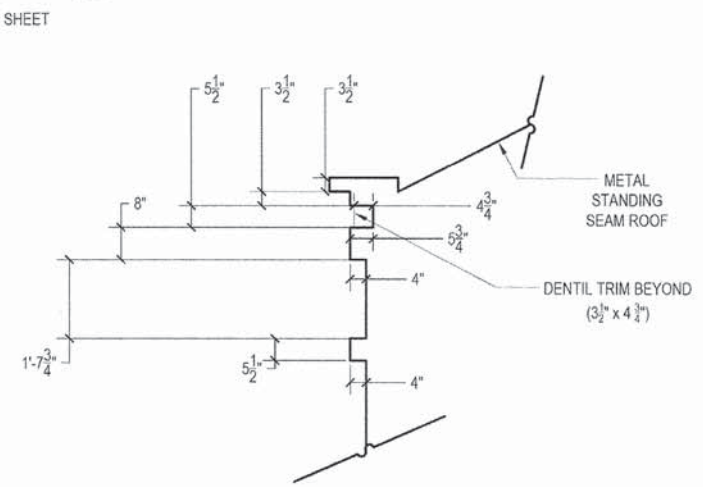
D SOUTH ELEVATION D
PS-15
LOOKING NORTH

3/8" = 1'



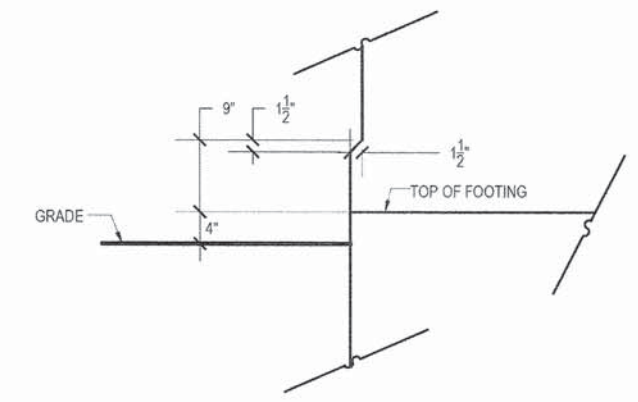
E WEST ELEVATION E
PS-15
LOOKING EAST

3/8" = 1'



F TYPICAL SECTION AT CORNICE - SECTION A
PS-15

1/2" = 1'



G TYPICAL SECTION AT BASE - SECTION B
PS-15

1" = 1'



USER NAME = tkoeppen@dwg.Ltsle	DESIGNED - JM	REVISED -
PLOT CONFIG = PDF(Grey_Small).plt	DRAWN - HF	REVISED -
PLOT SCALE = 1:100	CHECKED - JM	REVISED -
PLOT DATE = 7/2/2014 10:21:21 PM	DATE - 6/30/2014	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
PUMP STATION ARCHITECTURAL PLAN AND ELEVATION**

SCALE: 3/8" = 1'-0" SHEET NO. PS 15 OF 15

STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	150
			61A63	
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

G:\L\CDOT\21158_884\Drawings\shs\Teska\5_Plan_PumpSta_Teska.dgn

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	08-00121-08-BR	PLAT	43	1
		ILLINOIS	CONTRACT NO. 61A63	

INDEX OF SHEETS

- SHEET 1 - COVER SHEET
- SHEET 2 - PLAT OF HIGHWAYS - Washington Street
- SHEET 3 - PLAT OF HIGHWAYS - Washington street
- SHEET 4 - PLAT OF HIGHWAYS - Washington Street
- SHEET 5 - PLAT OF HIGHWAYS - Washington Street

- SHEET 6 - PLAT OF HIGHWAYS - Washington Street
- SHEET 7 - PLAT OF HIGHWAYS - Washington Street
- SHEET 8 - PLAT OF HIGHWAYS - Washington Street
- SHEET 9 - PLAT OF HIGHWAYS - Washington Street
- SHEET 10 - PLAT OF HIGHWAYS - Washington Street

- SHEET 11 - PLAT OF HIGHWAYS - Washington Street
- SHEET 12 - PLAT OF HIGHWAYS - Washington Street
- SHEET 13 - PLAT OF HIGHWAYS - Washington Street
- SHEET 14 - PLAT OF HIGHWAYS - Washington Street
- SHEET 15 - PLAT OF HIGHWAYS - Washington Street
- SHEET 16 - PLAT OF HIGHWAYS - Washington Street
- SHEET 17 - PLAT OF HIGHWAYS - Washington Street
- SHEET 18 - PLAT OF HIGHWAYS - Washington Street
- SHEET 19 - PLAT OF HIGHWAYS - Washington Street
- SHEET 20 - PLAT OF HIGHWAYS - Washington Street

- SHEET 21 - PLAT OF HIGHWAYS - Washington Street
- SHEET 22 - PLAT OF HIGHWAYS - Washington Street
- SHEET 23 - PLAT OF HIGHWAYS - Hainesville Road
- SHEET 24 - PLAT OF HIGHWAYS - Hainesville Road
- SHEET 25 - PLAT OF HIGHWAYS - Hainesville Road
- SHEET 26 - PLAT OF HIGHWAYS - Hainesville Road
- SHEET 27 - PLAT OF HIGHWAYS - Lake Street
- SHEET 28 - PLAT OF HIGHWAYS - Lake Street
- SHEET 29 - PLAT OF HIGHWAYS - Lake Street
- SHEET 30 - PLAT OF HIGHWAYS - Lake Street

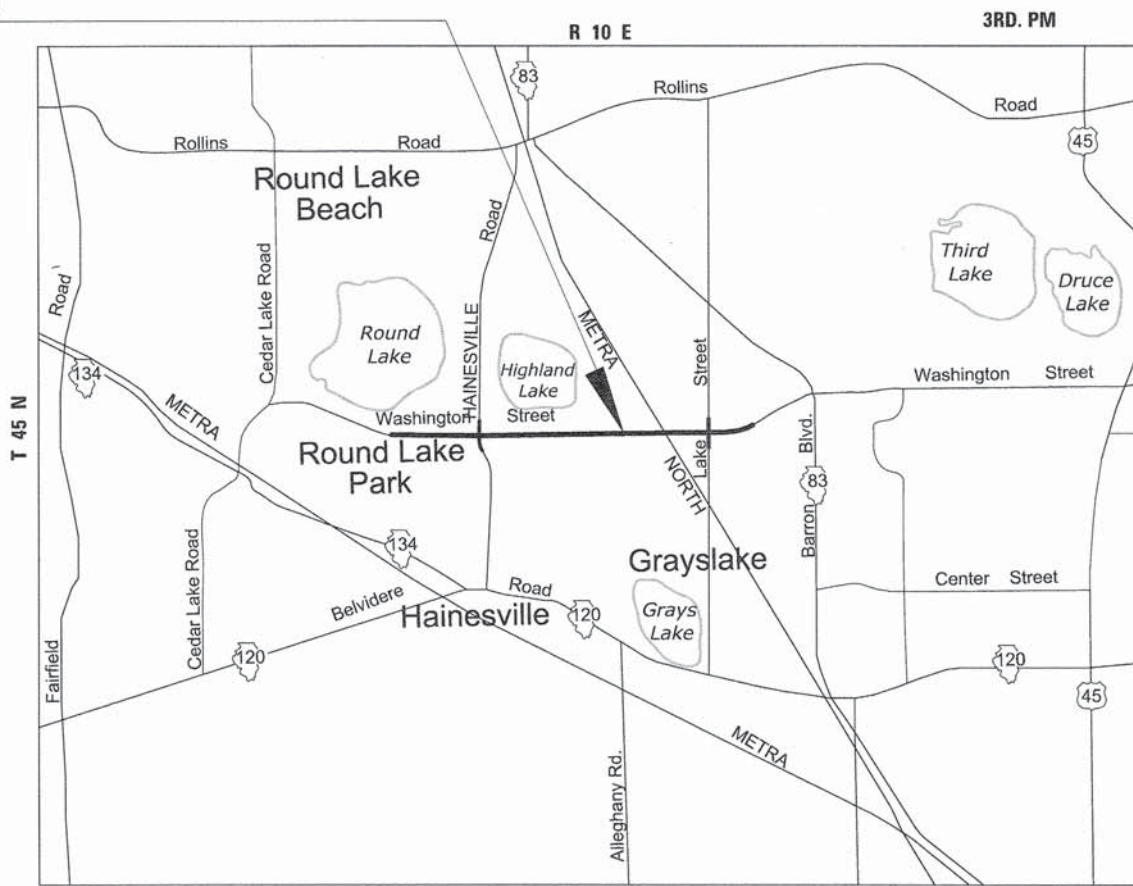
- SHEET 31 - PLAT OF HIGHWAYS - Lake Street
- SHEET 32 - PLAT OF HIGHWAYS - Grayslake Park Dist.
- SHEET 33 - PLAT OF HIGHWAYS - Metra North
- SHEET 34 - PLAT OF HIGHWAYS - Metra North
- SHEET 35 - PLAT OF HIGHWAYS - Metra North
- SHEET 36 - PLAT OF HIGHWAYS - Metra North
- SHEET 37 - ALIGNMENT, TIES, AND BENCHMARKS
- SHEET 38 - ALIGNMENT, TIES, AND BENCHMARKS
- SHEET 39 - ALIGNMENT, TIES, AND BENCHMARKS
- SHEET 40 - ALIGNMENT, TIES, AND BENCHMARKS
- SHEET 41 - TOTAL HOLDINGS - PARCELS 0001 & 0001TE
- SHEET 42 - TOTAL HOLDINGS - PARCEL 0061 TE
- SHEET 43 - TOTAL HOLDINGS - PARCELS 0060, 0060TE, 0063, 0063TE, 0064-A, 0064-B, 0064-PE, 0064-TE1 & 0064-TE2

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

RIGHT-OF-WAY PLATS FOR PROPOSED FEDERAL AID HIGHWAY

**F.A.U. ROUTE 187 (WASHINGTON STREET)
F.A.U. ROUTE 193 (HAINESVILLE ROAD)
F.A.U. ROUTE 195 (LAKE STREET)
SECTION 08-00121-08-BR
SECTION 01-00121-10-WR
PROJECT CMM-9003(923)
JOB C-91-181-12
LAKE COUNTY**

**PROJECT LOCATION
WASHINGTON STREET
BEGIN IMPROVEMENT
AT STA. 42+51.70
END IMPROVEMENT
AT STA. 143+59.92**



REVISION	
DATE	DESCRIPTION
6-29-11	C'NTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
6-5-12	TOTAL HOLD. 0060
12-13-12	LEGAL + TABLE 0060
12-18-12	38TE REM, 38+39 REV.
9-9-13	CN.JAWA,0001,0010
9-23-13	0010 REMOVED
11-26-13	65TE REM,SIG. BLOCK
2-27-14	66(CLIP),66TE REV
4-8-14	SE-X LAKE EX. EASE
5-6-14	0066 CHG. TO 0066PE

**PROJECT LOCATED IN
THE VILLAGES OF GRAYSLAKE,
HAINESVILLE, ROUND LAKE PARK,
AND AVON TOWNSHIP**

**J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION
FOR EXCAVATION
1-800-892-0123 OR 811**

CONTRACT NO. 61A63

MAP SCALE: NTS
LOCATION MAP
WASHINGTON STREET GROSS AND NET LENGTH = 10108 FT. = 1.91 MILE

PART OF SECTION 21, 22, 23, 26, 27 & 28, T45 N, R 10 E, OF THE 3RD P.M.- LAKE COUNTY, ILLINOIS

Bollinger, Lach & Associates, Inc.
333 PIERCE ROAD SUITE 200 ITASCA, IL 60143
P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED _____ 20 _____
COUNTY OF LAKE, COUNTY ENGINEER

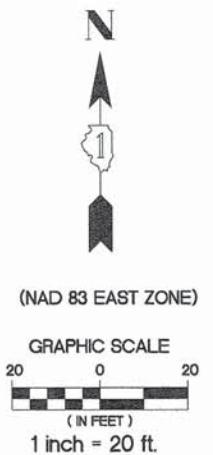
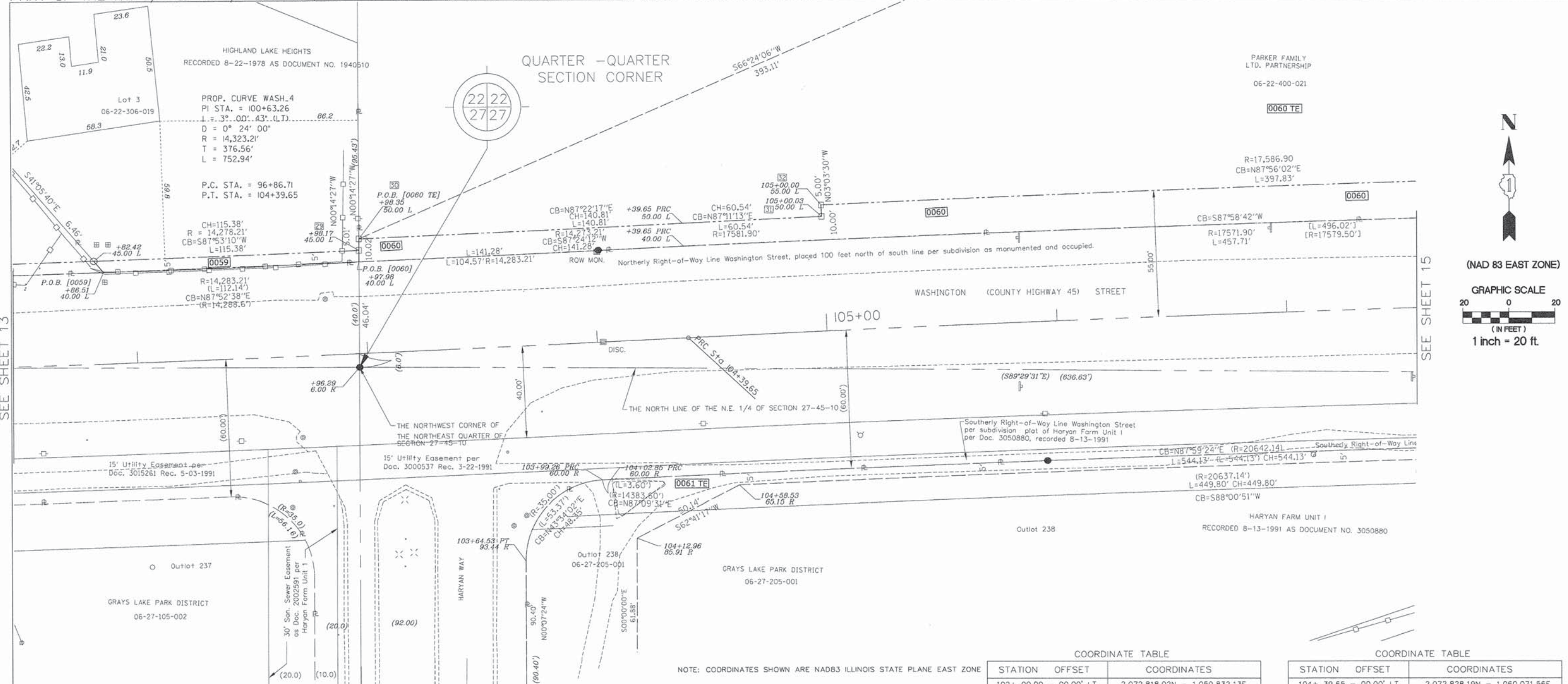
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PASSED _____ 20 _____
DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW _____ 20 _____
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



SEE SHEET 13

SEE SHEET 15

SEE SHEET 32

LEGEND

- PROPOSED RIGHT OF WAY LINE
- - - PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO THE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

SCHEDULE OF TIES

POINT NUMBER	TIE POINT	TIE DISTANCE
29	T1	12
	T2	13
30	T1	12
	T2	13
31	T1	12
	T2	13
32	T1	12
	T2	13

COORDINATE TABLE

STATION	OFFSET	COORDINATES
102+ 00.00	- 00.00' LT.	2,072,818.02N - 1,059,832.13E
102+ 96.29	- 6.00' RT.	2,072,815.61N - 1,059,928.59E
102+ 97.98	- 40.00' LT.	2,072,861.65N - 1,059,928.39E
102+ 98.17	- 45.00' LT.	2,072,866.65N - 1,059,928.37E
102+ 98.35	- 50.00' LT.	2,072,871.66N - 1,059,928.35E
103+ 64.53	- 93.44' RT.	2,072,731.22N - 1,060,000.77E
103+ 99.26	- 60.00' RT.	2,072,766.25N - 1,060,034.09E
104+ 02.85	- 60.00' RT.	2,072,766.42N - 1,060,037.68E
104+ 12.96	- 85.91' RT.	2,072,741.05N - 1,060,049.09E

COORDINATE TABLE

STATION	OFFSET	COORDINATES
104+ 39.65	- 00.00' LT.	2,072,828.19N - 1,060,071.56E
104+ 39.65	- 40.00' LT.	2,072,868.13N - 1,060,069.52E
104+ 39.65	- 50.00' LT.	2,072,878.12N - 1,060,069.02E
104+ 58.53	- 65.15' RT.	2,072,764.05N - 1,060,093.64E
105+ 00.00	- 55.00' LT.	2,072,886.08N - 1,060,129.22E
105+ 00.03	- 50.00' LT.	2,072,881.09N - 1,060,129.48E
105+ 00.00	- 55.00' LT.	2,072,886.08N - 1,060,129.22E
106+ 65.57	- 191.00' LT.	2,073,029.02N - 1,060,288.58E
107+ 00.00	- 00.00' LT.	2,072,839.49N - 1,060,331.66E

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0059	Hal M. Shepherd, a single man	0.569	0.013	0.556	Ease.	06-22-306-019	
0060	The Parker Family Ltd. Partnership [14 & 15]	37.314	0.189	37.125	R.O.W.	06-22-300-028 06-22-400-021	
0060 TE			1.290		Temp. Ease.	06-22-300-028 06-22-400-021	
0061 TE	Grayslake Community Park District	3.431	1.015	3.431	Temp. Ease.	06-27-205-001	

STATE OF ILLINOIS)
 COUNTY OF LAKE) SS
 I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.
 DATED THIS _____ DAY OF _____, A.D., 20____.

STATE OF ILLINOIS)
 COUNTY OF DUPAGE) SS
 THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.
 DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____.A.D.
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

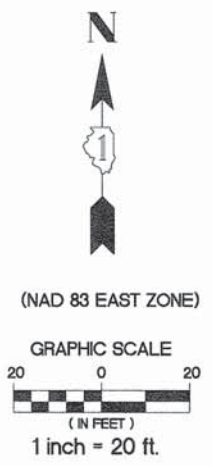
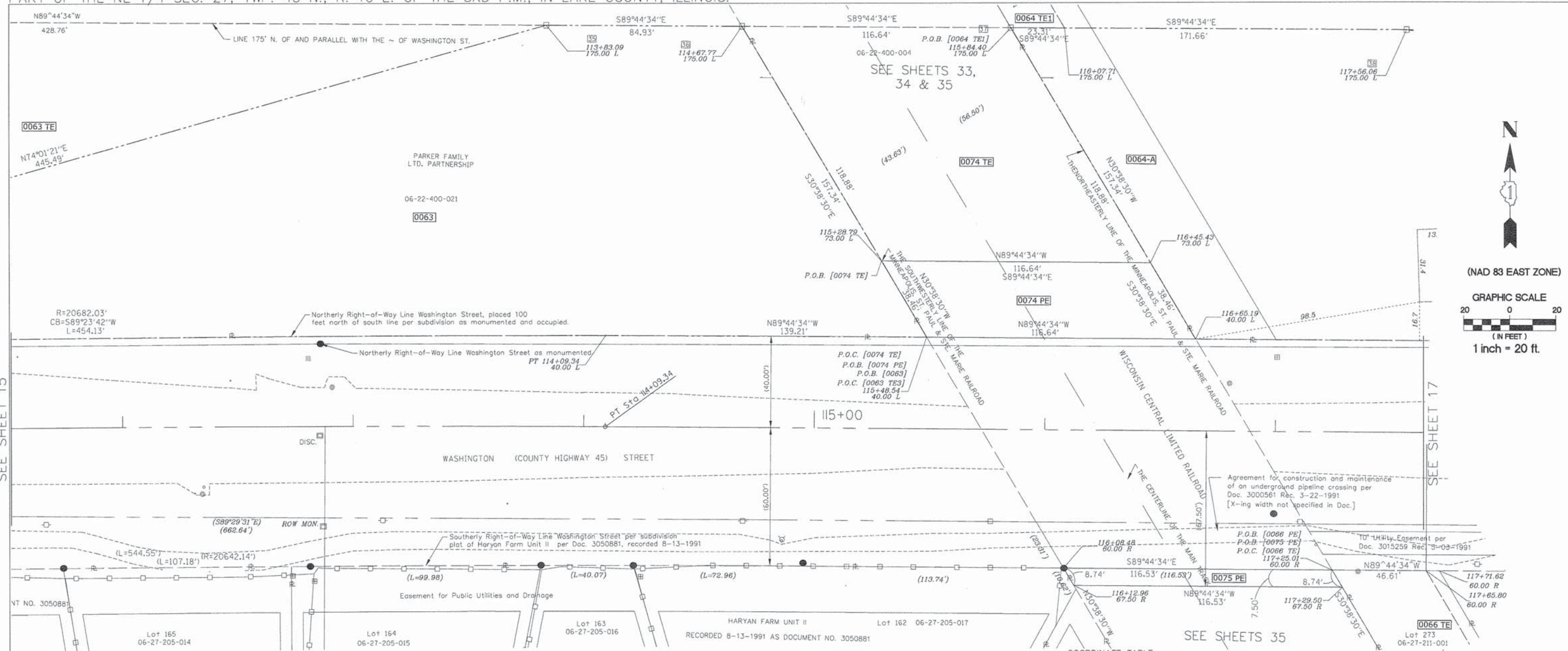
Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • BIRMINGHAM

REVISION

DATE	DESCRIPTION
6-29-11	C'NTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
6-05-12	TOT.HOLDINGS 0060
12-13-12	LGL.+TABLE 0060
9-9-13	JAWA EASE.
11-26-13	SIG. BLOCK

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 101+50 TO STA. 107+50
 DRAWN: TMS CHECKED: JDB
 PLAT 14 OF 43

PART OF THE SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



SEE SHEET 15

SEE SHEET 17

LEGEND

- PROPOSED RIGHT OF WAY LINE
- - - PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPL APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO THE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

SCHEDULE OF TIES

POINT NUMBER	TIE POINT	TIE DISTANCE
35	T1	
	T2	
	T3	
36	T1	
	T2	
	T3	
37	T1	
	T2	
	T3	
38	T1	
	T2	
	T3	

COORDINATE TABLE

STATION	OFFSET	COORDINATES
112+ 00.00	- 00.00' LT.	2,072,850.34N - 1,060,831.53E
112+ 00.00	- 60.85' RT.	2,072,789.48N - 1,060,831.96E
112+ 00.00	- 63.85' RT.	2,072,786.48N - 1,060,831.99E
112+ 73.06	- 60.66' RT.	2,072,790.06N - 1,060,904.78E
112+ 73.06	- 63.66' RT.	2,072,787.06N - 1,060,904.79E
113+ 83.09	- 175.00' LT.	2,073,025.75N - 1,061,015.14E
114+ 09.34	- 00.00' LT.	2,072,850.65N - 1,061,040.86E
114+ 09.34	- 40.00' LT.	2,072,890.45N - 1,061,041.03E
114+ 67.77	- 175.00' LT.	2,073,025.37N - 1,061,100.04E
115+ 28.79	- 73.00' LT.	2,072,923.10N - 1,061,160.64E
115+ 48.54	- 40.00' LT.	2,072,890.00N - 1,061,180.22E
115+ 84.40	- 170.00' LT.	2,073,024.85N - 1,061,216.69E
116+ 07.71	- 170.00' LT.	2,073,024.74N - 1,061,239.99E
116+ 08.48	- 60.00' RT.	2,072,789.74N - 1,061,239.73E
116+ 12.96	- 67.50' RT.	2,072,782.22N - 1,061,244.18E

COORDINATE TABLE

STATION	OFFSET	COORDINATES
116+ 45.43	- 73.00' LT.	2,072,922.58N - 1,061,277.28E
116+ 65.19	- 40.00' LT.	2,072,889.48N - 1,061,296.88E
117+ 00.00	- 00.00' LT.	2,072,849.34N - 1,061,331.52E
117+ 25.01	- 60.00' RT.	2,072,789.22N - 1,061,356.26E
117+ 25.50	- 67.50' RT.	2,072,781.70N - 1,061,360.71E
117+ 56.06	- 170.00' LT.	2,073,024.08N - 1,061,388.31E
117+ 65.80	- 60.00' RT.	2,072,784.80N - 1,061,399.55E
117+ 71.62	- 60.00' RT.	2,072,789.01N - 1,061,402.87E

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0063	SEE SHEET 15						
0063 TE	SEE SHEET 15						
0064-A	The Parker Family Ltd. Partnership	66.779	2.090	Sheet 18 see re-cap	R.O.W. Temp. Ease.	06-22-400-021	
0064 TE1			0.456				
0066 TE	Haryan Farm Neighborhood Association	2.103	0.453	2.103	Temp. Ease.	06-27-211-001	
0074 PE	Wisconsin Central Ltd.		0.087		Perm. Ease.	06-22-400-004	
0074 TE	Wisconsin Central Ltd.		0.273		Temp. Ease.	06-22-400-004	
0075 PE	Wisconsin Central Ltd.		0.020		Perm. Ease.	06-27-200-018	

STATE OF ILLINOIS)
) SS
 COUNTY OF LAKE)

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D., 20____

STATE OF ILLINOIS)
) SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20 ____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

REVISION

DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
9-9-13	CN, JAWA EASE.
5-6-14	0066 CHG. TO 0066PE
11-26-13	65TE REM, SIG. BLOCK
2-27-14	66(C)IP, 66TE REV

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS

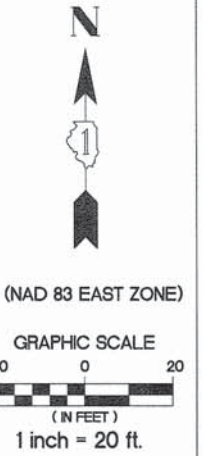
F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 111+50 TO STA. 117+50
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 16 OF 43

PART OF THE SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.

[SEE NEXT SHEET FOR ADDITIONAL DATA THIS AREA]
 NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

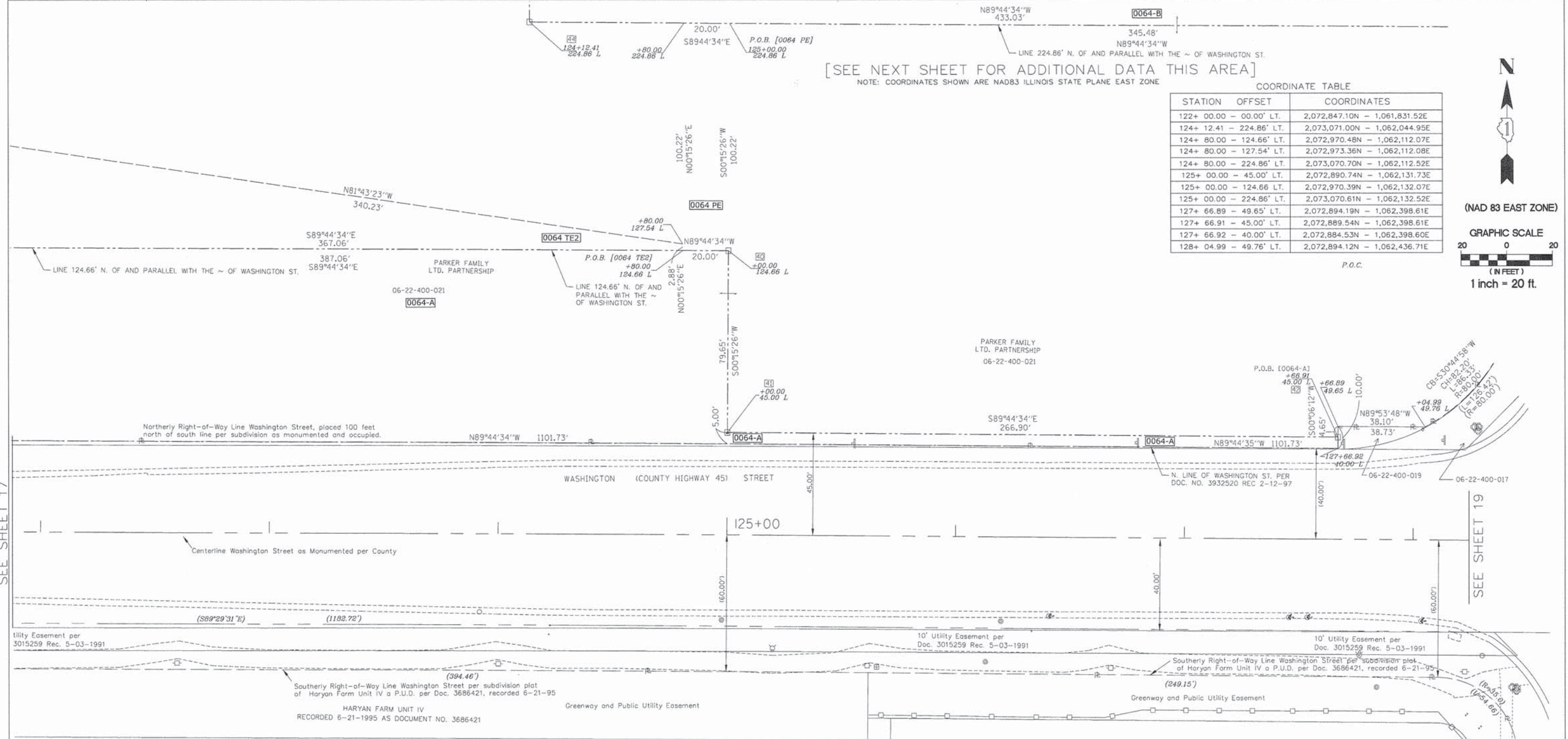
COORDINATE TABLE

STATION	OFFSET	COORDINATES
122+	00.00 - 00.00' LT.	2,072,847.10N - 1,061,831.52E
124+	12.41 - 224.86' LT.	2,073,071.00N - 1,062,044.95E
124+	80.00 - 124.66' LT.	2,072,970.48N - 1,062,112.07E
124+	80.00 - 127.54' LT.	2,072,973.36N - 1,062,112.08E
124+	80.00 - 224.86' LT.	2,073,070.70N - 1,062,112.52E
125+	00.00 - 45.00' LT.	2,072,890.74N - 1,062,131.73E
125+	00.00 - 124.66' LT.	2,072,970.39N - 1,062,132.07E
125+	00.00 - 224.86' LT.	2,073,070.61N - 1,062,132.52E
127+	66.89 - 49.65' LT.	2,072,894.19N - 1,062,398.61E
127+	66.91 - 45.00' LT.	2,072,889.54N - 1,062,398.61E
127+	66.92 - 40.00' LT.	2,072,884.53N - 1,062,398.60E
128+	04.99 - 49.76' LT.	2,072,894.12N - 1,062,436.71E



SEE SHEET 17

SEE SHEET 19



- LEGEND**
- PROPOSED RIGHT OF WAY LINE
 - - - PROPOSED EASEMENT
 - EXISTING RIGHT OF WAY LINE
 - CENTERLINE
 - PLATTED LOT LINES
 - PROPERTY (DEED) LINE
 - APPARENT PROPERTY LINE
 - SECTION LINE
 - 129.324 MEASURED DIMENSION
 - 129.324 (COMP) COMPUTED DIMENSION
 - (129.324) RECORDED DIMENSION
 - + CUT CROSS FOUND OR SET
 - IRON PIPE OR IRON ROD
 - RESET PIPE OR ROD TO ORIGINAL POSITION.

- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

SCHEDULE OF TIES

POINT NUMBER	TIE POINT	TIE DISTANCE
40	T1	
	T2	
	T3	
41	T1	
	T2	
	T3	
42	T1	
	T2	
	T3	
44	T1	
	T2	
	T3	

STATE OF ILLINOIS)
 COUNTY OF DUPAGE) SS

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

Lot 275
 06-27-212-012

REVISION

DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
9-9-13	JAWA EASE.
11-26-13	SIG. BLOCK

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

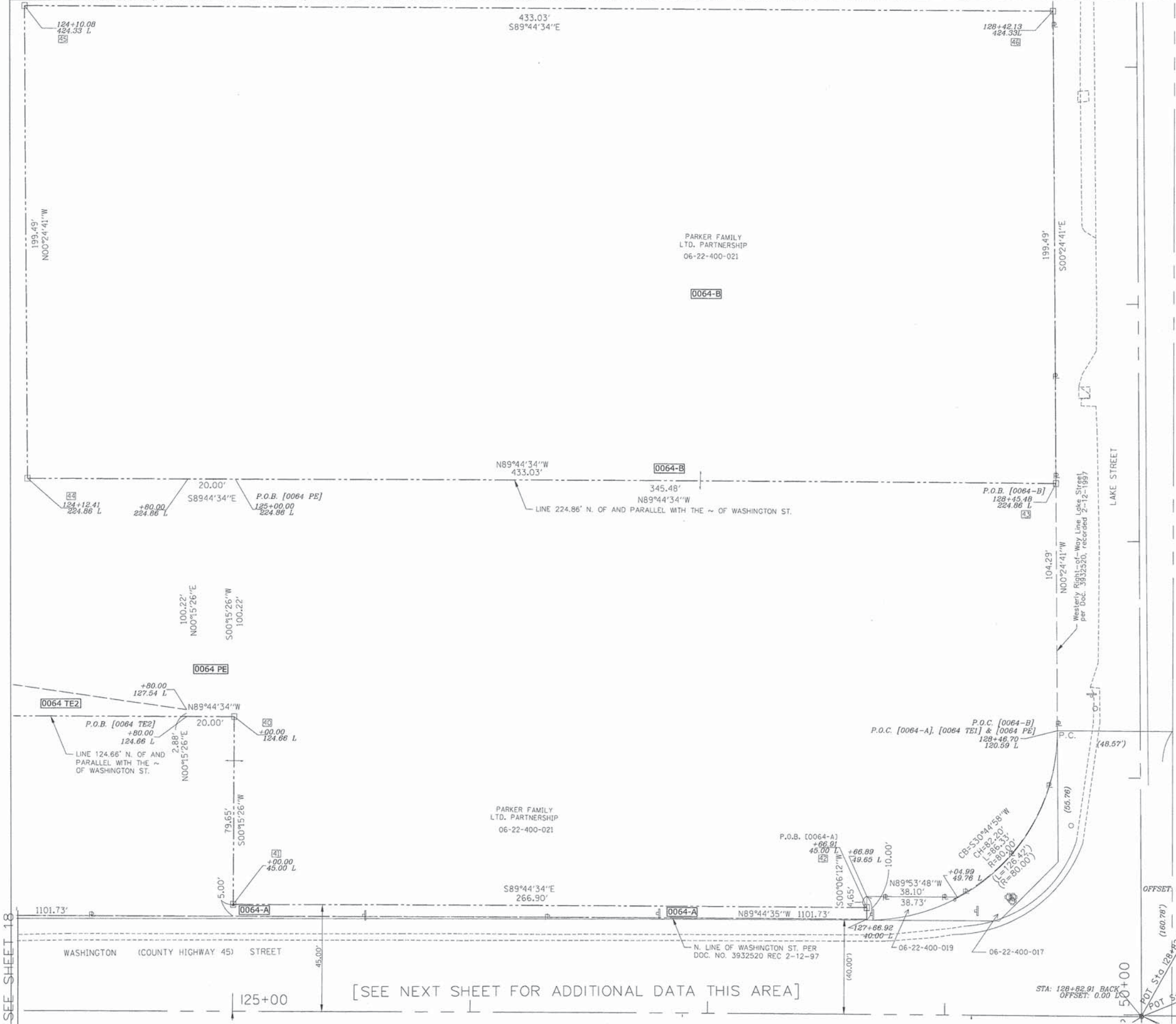
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 121+75 TO STA. 128+25
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' [PLAT] 18 OF 43

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0064-A 0064-B	The Parker Family Ltd. Partnership SEE SHEET 17, 18 AND 19	66.779	2.090 1.983	62.706	R.O.W. R.O.W.	06-02-400-021	
0064 PE	The Parker Family Ltd. Partnership SEE SHEET 17, 18 AND 19	66.779	0.046	62.706	Perm. Ease.	06-02-400-021	
0064 TE2	The Parker Family Ltd. Partnership SEE SHEET 14 & 17	66.779	0.447	62.706	Temp. Ease.	06-02-400-021	

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

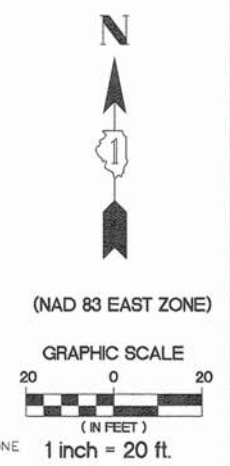
DATED THIS _____ DAY OF _____, A.D. 20____

PART OF THE SE 1/4 SEC. 22 & SW 1/4 SEC. 23, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NE 1/4 SEC. 27 & NW 1/4 SEC. 26, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



COORDINATE TABLE

STATION	OFFSET	COORDINATES
124+ 10.08	- 424.33' LT.	2,073,270.48N - 1,062,043.51E
124+ 12.41	- 224.86' LT.	2,073,071.00N - 1,062,044.95E
124+ 80.00	- 124.66' LT.	2,072,970.48N - 1,062,112.07E
124+ 80.00	- 127.54' LT.	2,072,973.36N - 1,062,112.08E
124+ 80.00	- 224.86' LT.	2,073,070.70N - 1,062,112.52E
125+ 00.00	- 45.00' LT.	2,072,890.74N - 1,062,131.73E
125+ 00.00	- 124.66' LT.	2,072,970.39N - 1,062,132.07E
125+ 00.00	- 224.86' LT.	2,073,070.61N - 1,062,132.52E
127+ 66.89	- 49.65' LT.	2,072,894.19N - 1,062,398.61E
127+ 66.91	- 45.00' LT.	2,072,889.54N - 1,062,398.61E
127+ 66.92	- 40.00' LT.	2,072,884.53N - 1,062,398.60E
128+ 04.99	- 49.76' LT.	2,072,894.12N - 1,062,436.71E
128+ 42.13	- 424.33' LT.	2,073,268.54N - 1,062,476.55E
128+ 45.48	- 224.86' LT.	2,073,069.05N - 1,062,477.99E
128+ 46.70	- 120.59' LT.	2,072,964.77N - 1,062,478.74E
128+ 82.91	- 00.00' LT.	2,072,844.44N - 1,062,514.42E



NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

LEGEND

---	PROPOSED RIGHT OF WAY LINE	○	RESET PIPE OR ROD TO ORIGINAL POSITION.
---	PROPOSED EASEMENT	○ T1(B1)	THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
---	EXISTING RIGHT OF WAY LINE	○ T2(B2)	SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY
---	CENTERLINE	○ T3(B3)	COLORLED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
---	PLATTED LOT LINES	○ T1	DENOTES TIE POINT NO. 1, SET IRON ROD FLUSH WITH GROUND SURFACE.
---	PROPERTY (DEED) LINE	○ (B1)	DENOTES TIE POINT NO. 1, SET IRON ROD 20" BELOW GROUND SURFACE.
---	APPARENT PROPERTY LINE	□	DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
---	SECTION LINE	+	STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
129.324	MEASURED DIMENSION	●	PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
129.324 (COMP)	COMPUTED DIMENSION		
(129.324)	RECORDED DIMENSION		
+	CUT CROSS FOUND OR SET		
●	IRON PIPE OR IRON ROD		

STATE OF ILLINOIS)
 COUNTY OF DUPAGE) SS

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ATASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

STATE OF ILLINOIS)
 COUNTY OF LAKE) SS

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D. 20____

SCHEDULE OF TIES		
POINT NUMBER	TIE POINT	TIE DISTANCE
40	T1 T2 T3	
41	T1 T2 T3	
42	T1 T2 T3	
43	T1 T2 T3	
44	T1 T2 T3	
45	T1 T2 T3	
46	T1 T2 T3	

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ATASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
11-26-13	SIG. BLOCK

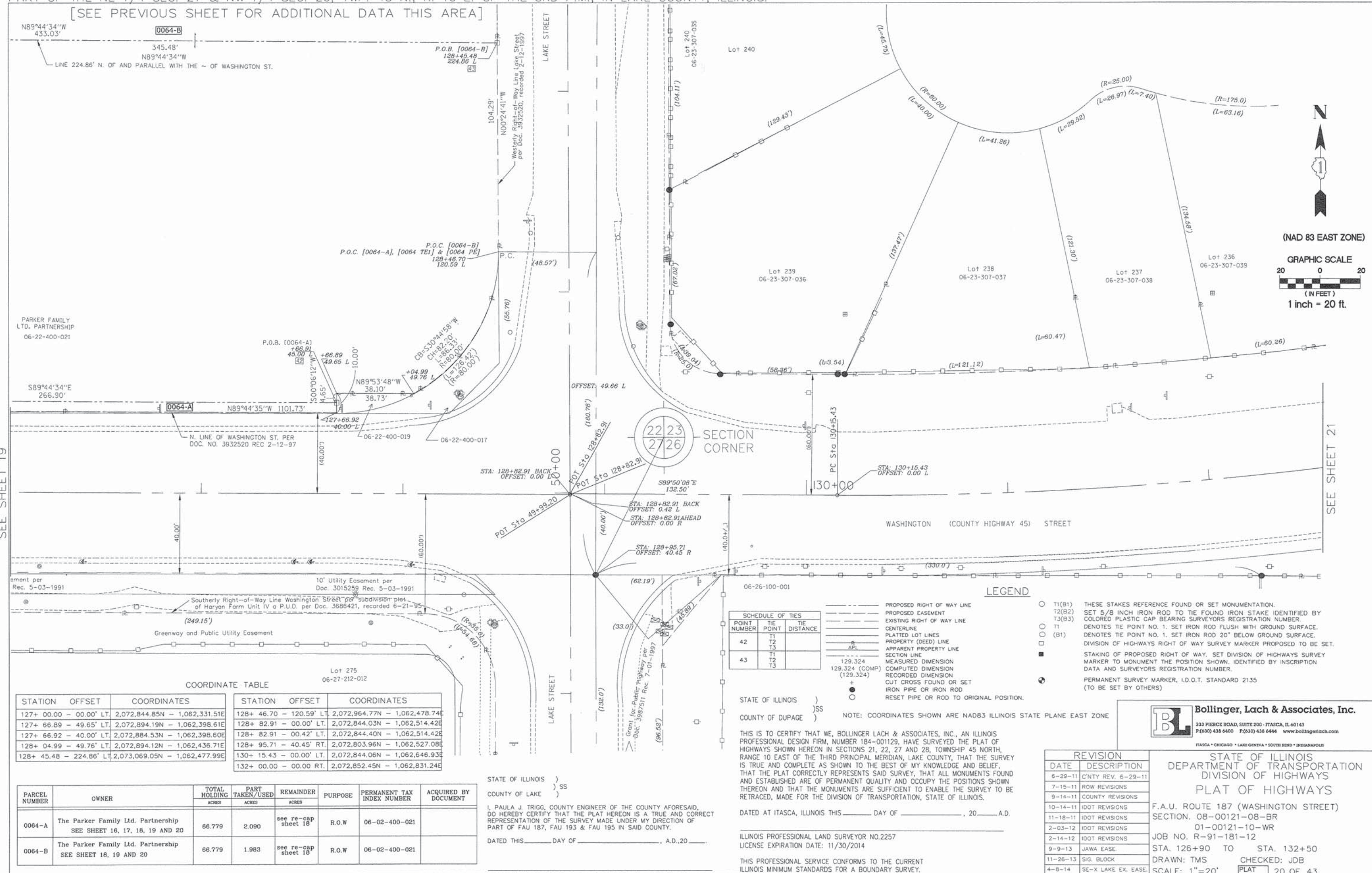
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION: 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 124+25 TO STA. 129+25
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 19 OF 43

SEE SHEET 18

[SEE NEXT SHEET FOR ADDITIONAL DATA THIS AREA]

PART OF THE SE 1/4 SEC. 22 & SW 1/4 SEC. 23, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NE 1/4 SEC. 27 & NW 1/4 SEC. 26, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.

[SEE PREVIOUS SHEET FOR ADDITIONAL DATA THIS AREA]



SEE SHEET 19

SEE SHEET 21

COORDINATE TABLE

STATION	OFFSET	COORDINATES	STATION	OFFSET	COORDINATES
127+ 00.00	- 00.00' LT.	2,072,844.85N - 1,062,331.51E	128+ 46.70	- 120.59' LT.	2,072,964.77N - 1,062,478.74E
127+ 66.89	- 49.65' LT.	2,072,894.19N - 1,062,398.61E	128+ 82.91	- 00.00' LT.	2,072,844.03N - 1,062,514.42E
127+ 66.92	- 40.00' LT.	2,072,884.53N - 1,062,398.60E	128+ 82.91	- 00.42' LT.	2,072,844.40N - 1,062,514.42E
128+ 04.99	- 49.76' LT.	2,072,894.12N - 1,062,436.71E	128+ 95.71	- 40.45' RT.	2,072,803.96N - 1,062,527.08E
128+ 45.48	- 224.86' LT.	2,073,069.05N - 1,062,477.99E	130+ 15.43	- 00.00' LT.	2,072,844.06N - 1,062,646.93E
			132+ 00.00	- 00.00' RT.	2,072,852.45N - 1,062,831.24E

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0064-A	The Parker Family Ltd. Partnership SEE SHEET 16, 17, 18, 19 AND 20	66.779	2.090	see re-cap sheet 18	R.O.W	06-02-400-021	
0064-B	The Parker Family Ltd. Partnership SEE SHEET 18, 19 AND 20	66.779	1.983	see re-cap sheet 18	R.O.W	06-02-400-021	

SCHEDULE OF TIES

POINT NUMBER	TIE POINT	TIE DISTANCE
42	T1 T2 T3	
43	T1 T2 T3	

- LEGEND
- PROPOSED RIGHT OF WAY LINE
 - - - PROPOSED EASEMENT
 - EXISTING RIGHT OF WAY LINE
 - CENTERLINE
 - PLATTED LOT LINES
 - PROPERTY (DEED) LINE
 - APPARENT PROPERTY LINE
 - SECTION LINE
 - MEASURED DIMENSION
 - COMPUTED DIMENSION
 - RECORDED DIMENSION
 - CUT CROSS FOUND OR SET
 - IRON PIPE OR IRON ROD
 - RESET PIPE OR ROD TO ORIGINAL POSITION.

- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3) DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- (B1) DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY, SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

STATE OF ILLINOIS)
 COUNTY OF DUPAGE) SS

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

STATE OF ILLINOIS)
 COUNTY OF LAKE) SS

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D. 20____

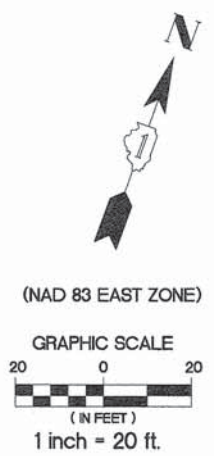
Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P.(630) 438 6400 F.(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
9-9-13	JAWA EASE
11-26-13	SIG. BLOCK
4-8-14	SE-X LAKE EX. EASE.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS

F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 126+90 TO STA. 132+50
 DRAWN: TMS CHECKED: JOB
 SCALE: 1"=20' PLAT 20 OF 43

PART OF THE SW 1/4 SEC. 23, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 SEC. 26, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



LEGEND

- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ⊕ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

COORDINATE TABLE

STATION	OFFSET	COORDINATES
132+ 00.00	- 00.00' LT.	2,072,852.45N - 1,062,831.24E
134+ 84.22	- 59.01' RT.	2,072,842.68N - 1,063,125.37E
137+ 00.00	- 00.00' LT.	2,072,963.51N - 1,063,317.29E

STATE OF ILLINOIS)
)SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

STATE OF ILLINOIS)
)SS
 COUNTY OF LAKE)

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D., 20____.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

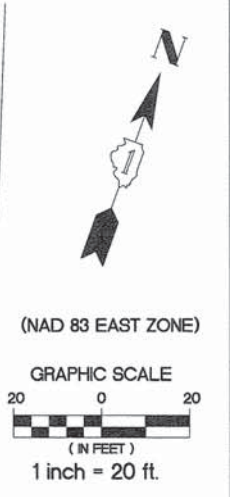
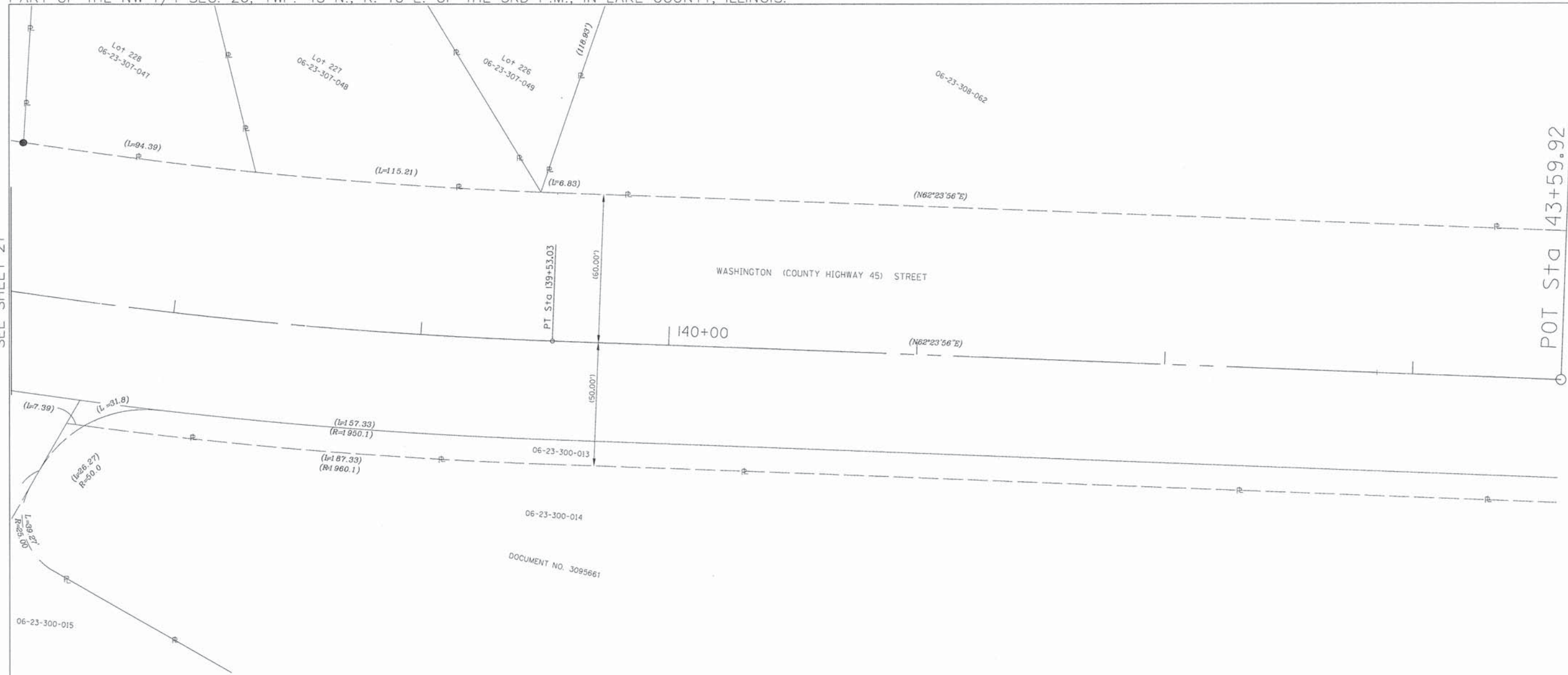
REVISION	DATE	DESCRIPTION
6-29-11	C'NTY REV.	6-29-11
7-15-11	ROW REVISIONS	
9-14-11	COUNTY REVISIONS	
10-14-11	IDOT REVISIONS	
11-18-11	IDOT REVISIONS	
2-03-12	IDOT REVISIONS	
2-14-12	IDOT REVISIONS	
11-26-13	SIG. BLOCK	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS

F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 131+90 TO STA. 138+00
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 21 OF 43

PART OF THE SW 1/4 SEC. 23, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 SEC. 26, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.

SEE SHEET 21



- LEGEND**
- PROPOSED RIGHT OF WAY LINE
 - - - PROPOSED EASEMENT
 - EXISTING RIGHT OF WAY LINE
 - CENTERLINE
 - PLATTED LOT LINES
 - PROPERTY (DEED) LINE
 - APL APPARENT PROPERTY LINE
 - SECTION LINE
 - 129.324 MEASURED DIMENSION
 - 129.324 (COMP) COMPUTED DIMENSION
 - (129.324) RECORDED DIMENSION
 - + CUT CROSS FOUND OR SET
 - IRON PIPE OR IRON ROD
 - RESET PIPE OR ROD TO ORIGINAL POSITION.
 - T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
 - T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
 - T3(B3)
 - T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
 - (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
 - DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
 - STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
 - PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

COORDINATE TABLE

STATION	OFFSET	COORDINATES
137+ 00.00 - 00.00' LT.		2,072,963.51N - 1,063,317.29E
139+ 53.03 - 00.00' LT.		2,073,067.03N - 1,063,547.98E
143+ 59.92 - 00.00' LT.		2,073,257.80N - 1,063,907.35E

STATE OF ILLINOIS)
) SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

STATE OF ILLINOIS)
) SS
 COUNTY OF LAKE)

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D. 20____

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

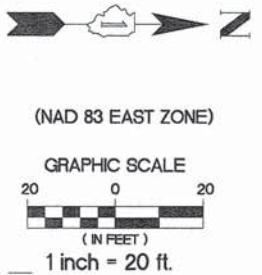
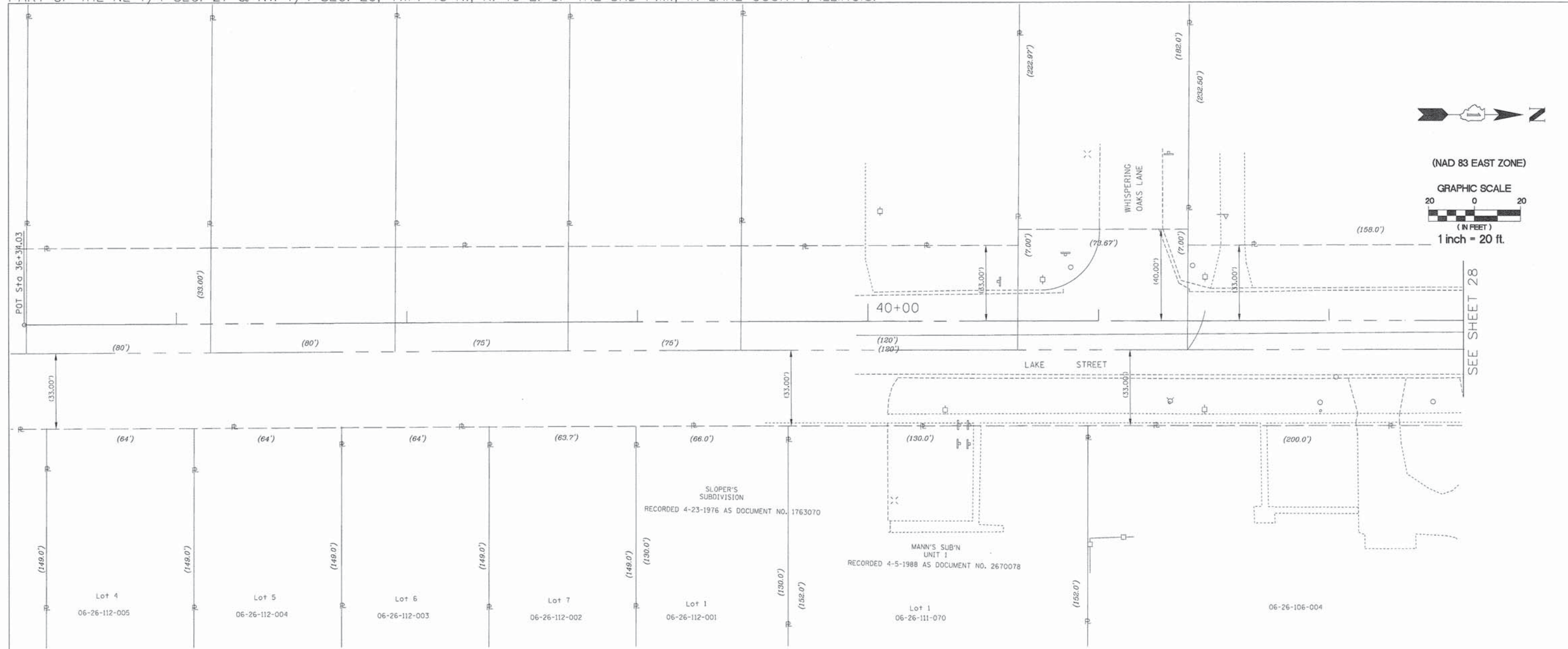
Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

DATE	REVISION DESCRIPTION
6-29-11	C'NTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
11-26-13	SIG. BLOCK

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS

F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 137+50 TO STA. 143+59.92
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 22 OF 43

PART OF THE SE 1/4 SEC. 22 & SW 1/4 SEC. 23, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NE 1/4 SEC. 27 & NW 1/4 SEC. 26, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



LEGEND

- PROPOSED RIGHT OF WAY LINE
- - - PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

COORDINATE TABLE		
STATION	OFFSET	COORDINATES
36 + 34.03	- 00.00' LT.	2,071,478.88N - 1,062,520.61E

STATE OF ILLINOIS)
) SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

STATE OF ILLINOIS)
) SS
 COUNTY OF LAKE)

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D., 20____.

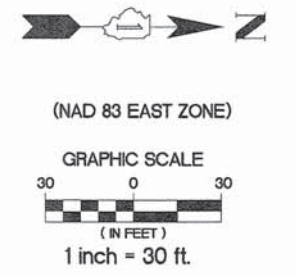
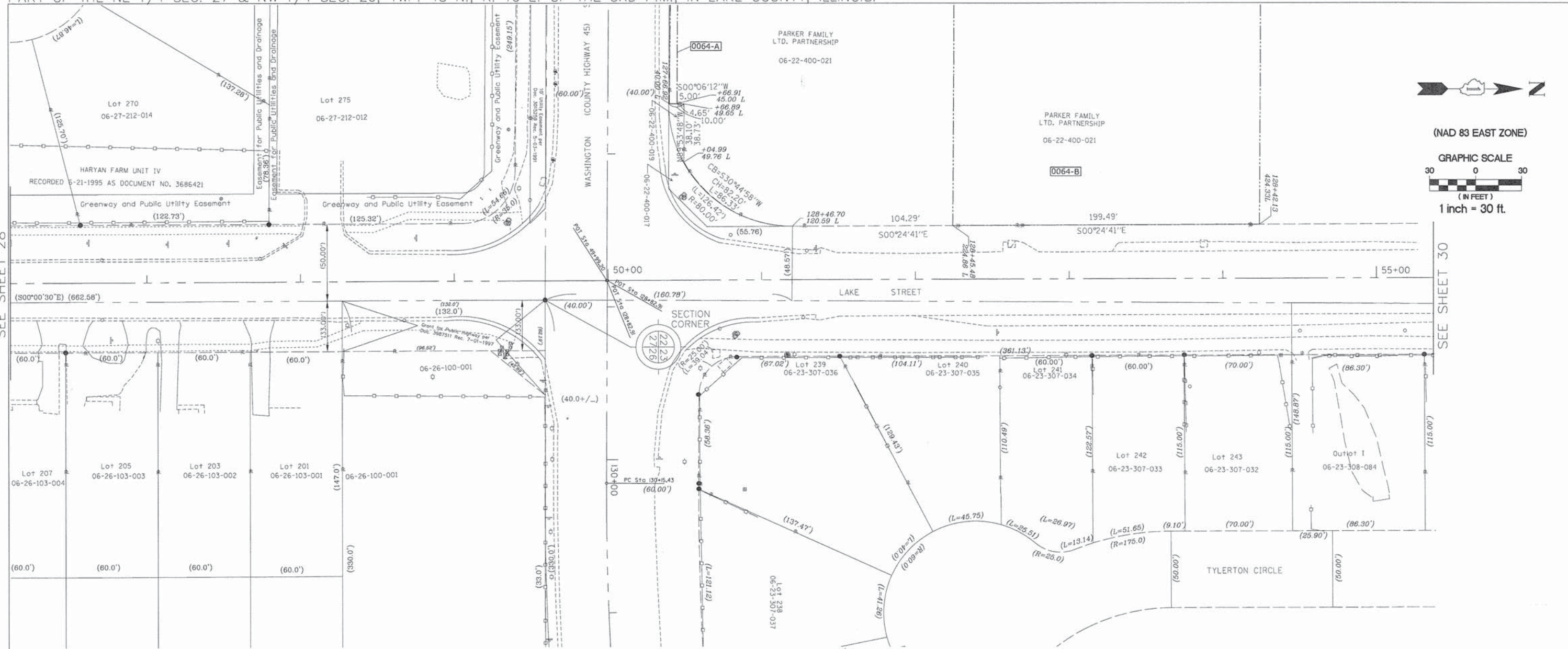
Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

REVISION	DATE	DESCRIPTION
6-29-11	C'NTY REV. 6-29-11	
7-15-11	ROW REVISIONS	
9-14-11	COUNTY REVISIONS	
10-14-11	IDOT REVISIONS	
11-18-11	IDOT REVISIONS	
2-03-12	IDOT REVISIONS	
2-14-12	IDOT REVISIONS	
11-26-13	SIG. BLOCK	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS

F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 36+34.03 TO STA. 42+50
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 27 OF 43

PART OF THE SE 1/4 SEC. 22 & SW 1/4 SEC. 23, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NE 1/4 SEC. 27 & NW 1/4 SEC. 26, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



SEE SHEET 28

SEE SHEET 30

LEGEND

- PROPOSED RIGHT OF WAY LINE
- - - PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY
- T3(B3) COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

COORDINATE TABLE		COORDINATES
STATION	OFFSET	COORDINATES
49 + 99.20	- 00.00'	2,072,844.03N - 1,062,514.42E
128 + 82.91	- 00.00' WEST	
44 + 93.84	- 00.00 LT.	2,072,338.68N - 1,062,516.72E

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0064-A	SEE SHEET 16, 17, 18, 19 & 20						
0064-B	SEE SHEET 18, 19 & 20						

STATE OF ILLINOIS)
) SS
 COUNTY OF LAKE)
)
 I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.
 DATED THIS _____ DAY OF _____, A.D., 20____

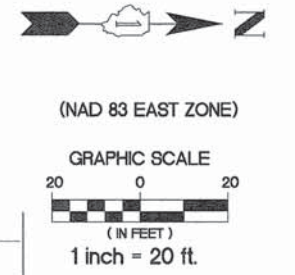
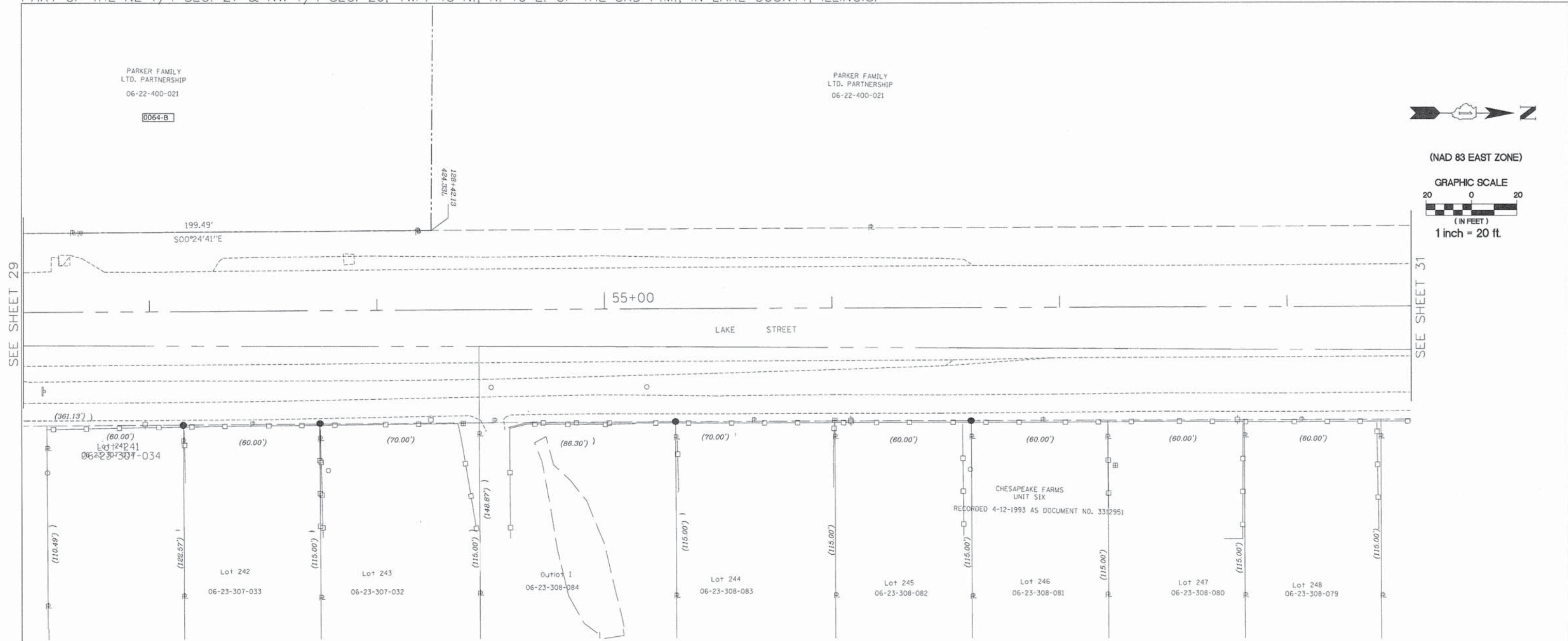
STATE OF ILLINOIS)
) SS
 COUNTY OF DUPAGE)
)
 THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.
 DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2257
 LICENSE EXPIRATION DATE: 11/30/2014
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

REVISION	DATE	DESCRIPTION
6-29-11	C'NTY REV. 6-29-11	
7-15-11	ROW REVISIONS	
9-14-11	COUNTY REVISIONS	
10-14-11	IDOT REVISIONS	
11-18-11	IDOT REVISIONS	
2-03-12	IDOT REVISIONS	
2-14-12	IDOT REVISIONS	
9-9-13	JAWA EASE	
11-26-13	SIG. BLOCK	
4-8-14	SE-X LAKE EX. EASE	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 46+50 TO STA. 55+50
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=30' PLAT 29 OF 43

PART OF THE SE 1/4 SEC. 22 & SW 1/4 SEC. 23, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NE 1/4 SEC. 27 & NW 1/4 SEC. 26, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



SEE SHEET 29

SEE SHEET 31

LEGEND

- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPL APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY
- T3(B3) COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

STATE OF ILLINOIS)
) SS
 COUNTY OF LAKE)
 I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID,
 DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT
 REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF
 PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.
 DATED THIS _____ DAY OF _____, A.D., 20____.

STATE OF ILLINOIS)
) SS
 COUNTY OF DUPAGE)
 THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS
 PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF
 HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH,
 RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY
 IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT
 THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND
 ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON
 AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED,
 MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.
 DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT
 ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEEVA • SOUTH BEND • INDIANAPOLIS

REVISION		
DATE	DESCRIPTION	
6-29-11	C'NTY REV. 6-29-11	
7-15-11	ROW REVISIONS	
9-14-11	COUNTY REVISIONS	
10-14-11	IDOT REVISIONS	
11-18-11	IDOT REVISIONS	
2-03-12	IDOT REVISIONS	
2-14-12	IDOT REVISIONS	
11-26-13	SIG. BLOCK	

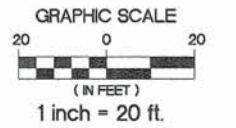
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 52+50 TO STA. 58+50
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 30 OF 43

PART OF THE SE 1/4 SEC. 22 & SW 1/4 SEC. 23, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NE 1/4 SEC. 27 & NW 1/4 SEC. 26, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.

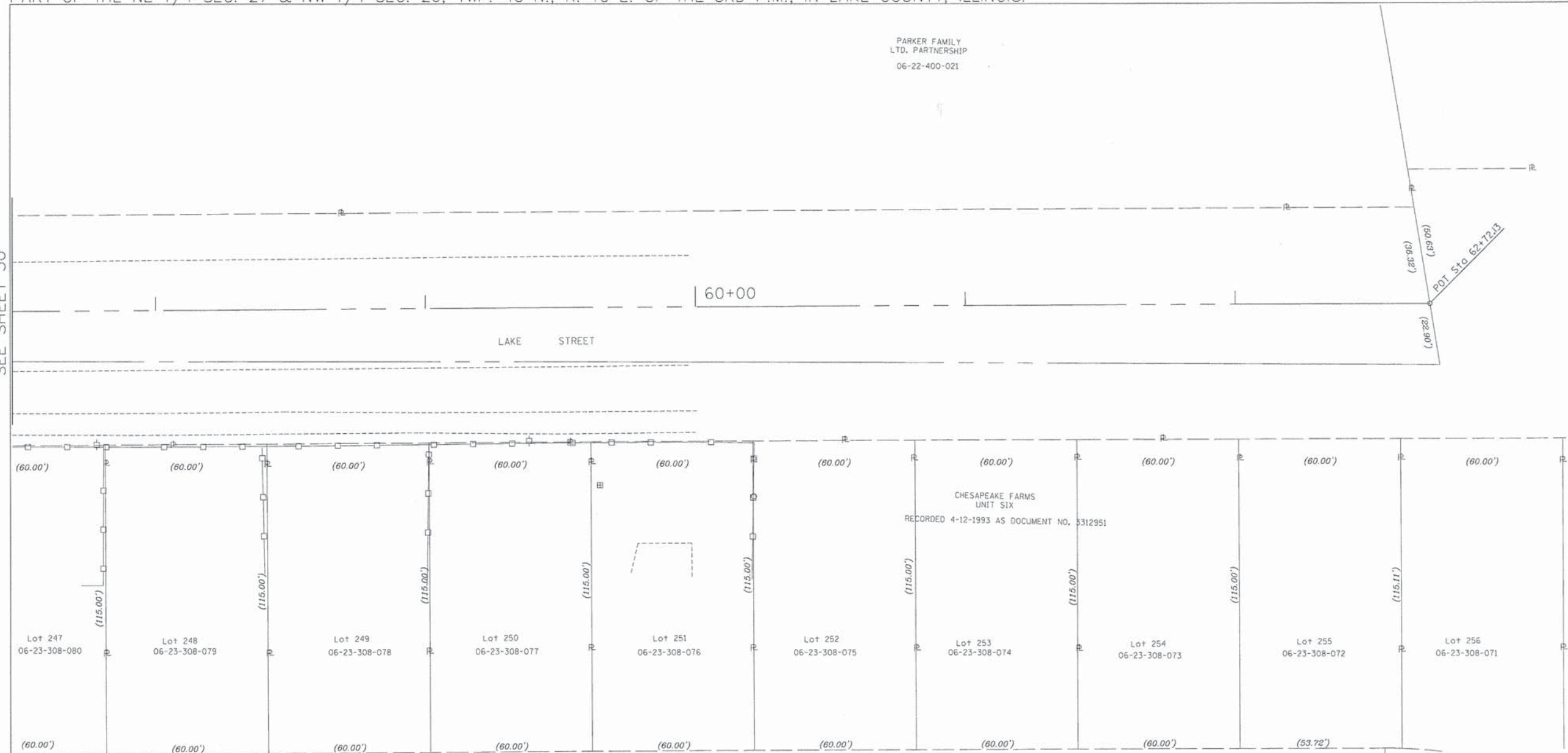
PARKER FAMILY LTD. PARTNERSHIP
 06-22-400-021



(NAD 83 EAST ZONE)



SEE SHEET 30



LEGEND

- PROPOSED RIGHT OF WAY LINE
- - - PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.

- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T2(B2)
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ⊕ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

COORDINATE TABLE

STATION	OFFSET	COORDINATES
62 + 72.13 - 00.00' LT.		2,074,116.94N - 1,062,506.33E

STATE OF ILLINOIS)
) SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

STATE OF ILLINOIS)
) SS
 COUNTY OF LAKE)

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D., 20____

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

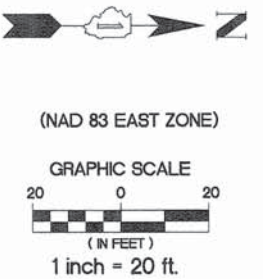
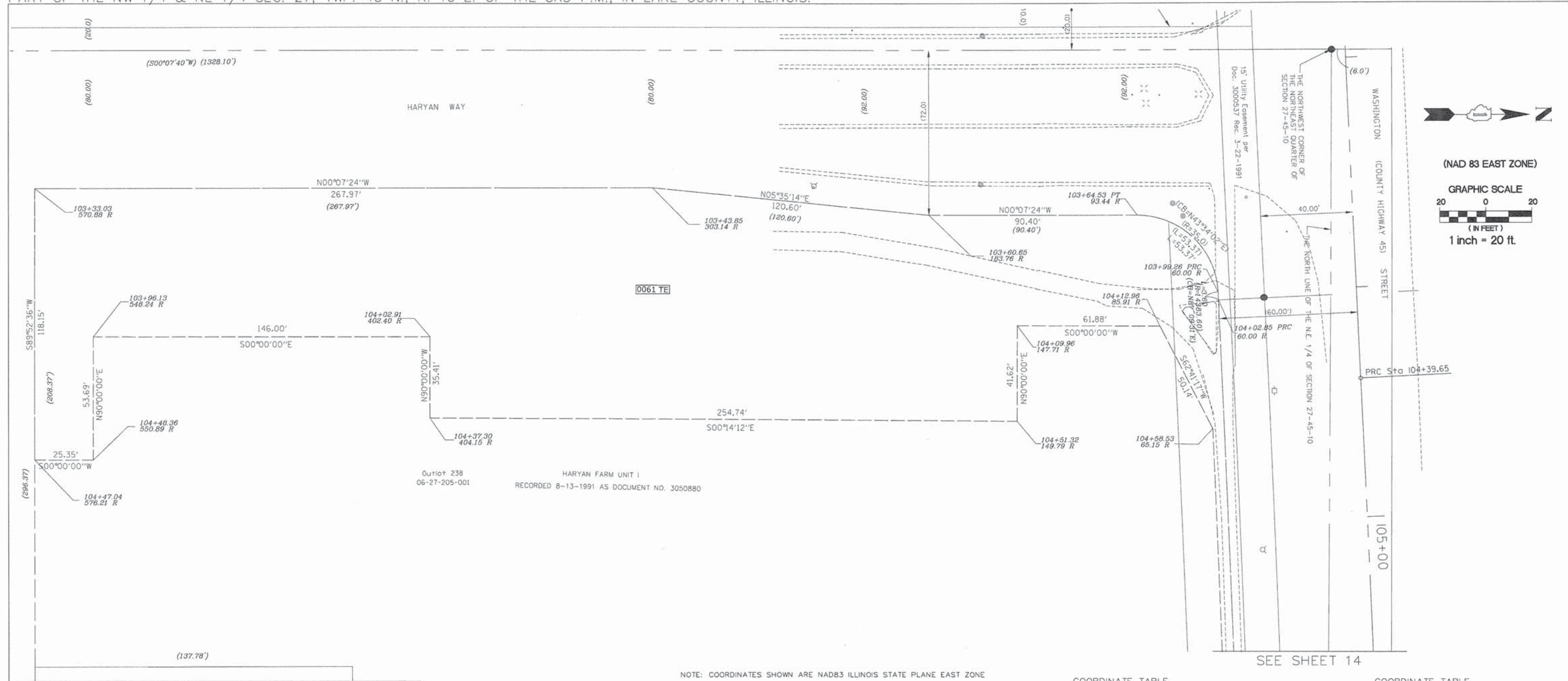
DATE	REVISION DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
11-26-13	SIG. BLOCK

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 58+50 TO STA. 62+72.13
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 31 OF 43

RECORDED ON:

AS DOCUMENT NO.:

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

COORDINATE TABLE

STATION	OFFSET	COORDINATES
103+ 33.03	- 570.88' RT.	2,072,252.82N - 1,059,989.80E
103+ 43.85	- 303.14' RT.	2,072,520.79N - 1,059,989.22E
103+ 60.65	- 183.76' RT.	2,072,640.82N - 1,060,000.96E
103+ 64.53	- 93.44' RT.	2,072,731.22N - 1,060,000.77E
104+ 09.96	- 147.71' RT.	2,072,679.17N - 1,060,049.09E
104+ 12.96	- 85.91' RT.	2,072,741.05N - 1,060,049.09E

COORDINATE TABLE

STATION	OFFSET	COORDINATES
103+ 96.13	- 548.24' RT.	2,072,278.43N - 1,060,054.26E
104+ 02.91	- 402.40' RT.	2,072,424.43N - 1,060,054.26E
104+ 37.30	- 404.15' RT.	2,072,424.43N - 1,060,089.66E
104+ 51.32	- 149.79' RT.	2,072,679.17N - 1,060,090.71E
104+ 47.04	- 576.21' RT.	2,072,253.08N - 1,060,107.95E
104+ 48.36	- 550.89' RT.	2,072,278.43N - 1,060,107.95E

LEGEND

- PROPOSED RIGHT OF WAY LINE
- - - PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD FOUND
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0061 TE	SEE SHEETS 14 & 15						

STATE OF ILLINOIS)
) SS
 COUNTY OF LAKE)

I, PAULA J. TRIGO, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D., 20____.

STATE OF ILLINOIS)
) SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

REVISION	DATE	DESCRIPTION
	6-29-11	CNTY REV. 6-29-11
	7-15-11	ROW REVISIONS
	9-14-11	COUNTY REVISIONS
	10-14-11	IDOT REVISIONS
	11-18-11	IDOT REVISIONS
	2-03-12	IDOT REVISIONS
	2-14-12	IDOT REVISIONS
	9-9-13	JAWA EASE
	11-26-13	SIG. BLOCK

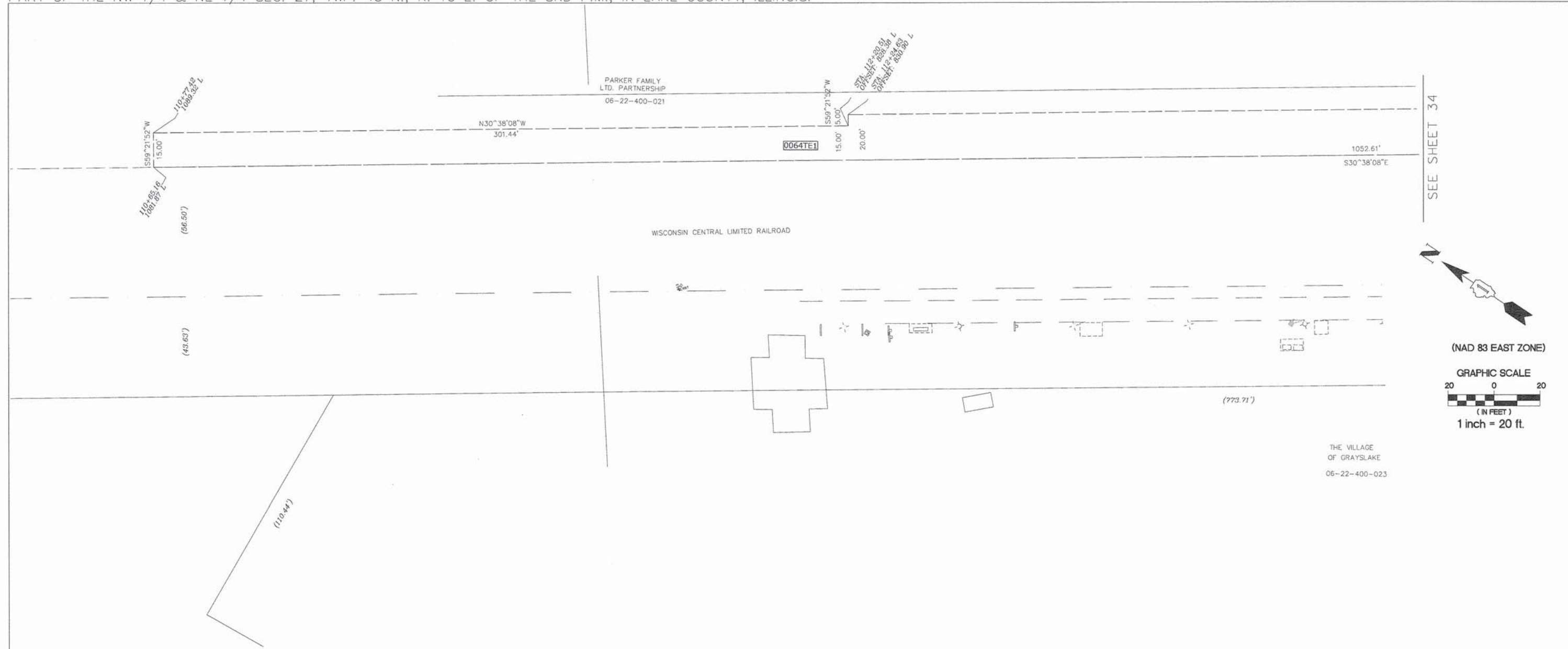
Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS

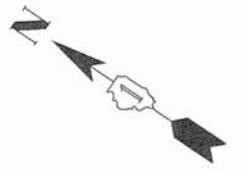
F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 103+33.03 TO STA. 104+58.33
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 32 OF 43

RECORDED ON: _____ AS DOCUMENT NO.: _____

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



SEE SHEET 34



(NAD 83 EAST ZONE)
 GRAPHIC SCALE
 20 0 20
 (IN FEET)
 1 inch = 20 ft.

LEGEND

- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO THE FOUND IRON STAKE IDENTIFIED BY
- T3(B3) COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ⊕ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

STATION	OFFSET	COORDINATES
110+	65.16 - 1081.87' LT.	2,073,930.55N - 1,060,680.31E
110+	77.42 - 1089.32' LT.	2,073,938.19N - 1,060,693.22E
112+	00.00 - 00.00' LT.	2,072,850.34N - 1,060,831.53E
112+	20.51 - 828.38' LT.	2,073,678.83N - 1,060,846.83E
112+	24.63 - 830.90' LT.	2,073,681.37N - 1,060,851.12E
117+	00.00 - 00.00' LT.	2,072,849.34N - 1,061,331.52E

STATION	OFFSET	COORDINATES
117+	25.01 - 60.00' RT.	2,072,789.21N - 1,061,356.25E
120+	20.03 - 553.09' RT.	2,072,294.80N - 1,061,649.06E
120+	49.89 - 534.83' RT.	2,072,312.93N - 1,061,679.00E

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0064 TEI	SEE SHEETS 16, 17, 18 AND 34						

STATE OF ILLINOIS)
 COUNTY OF LAKE) SS

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D., 20____.

STATE OF ILLINOIS)
 COUNTY OF DUPAGE) SS

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

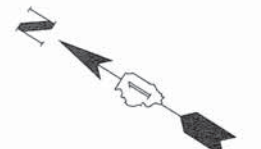
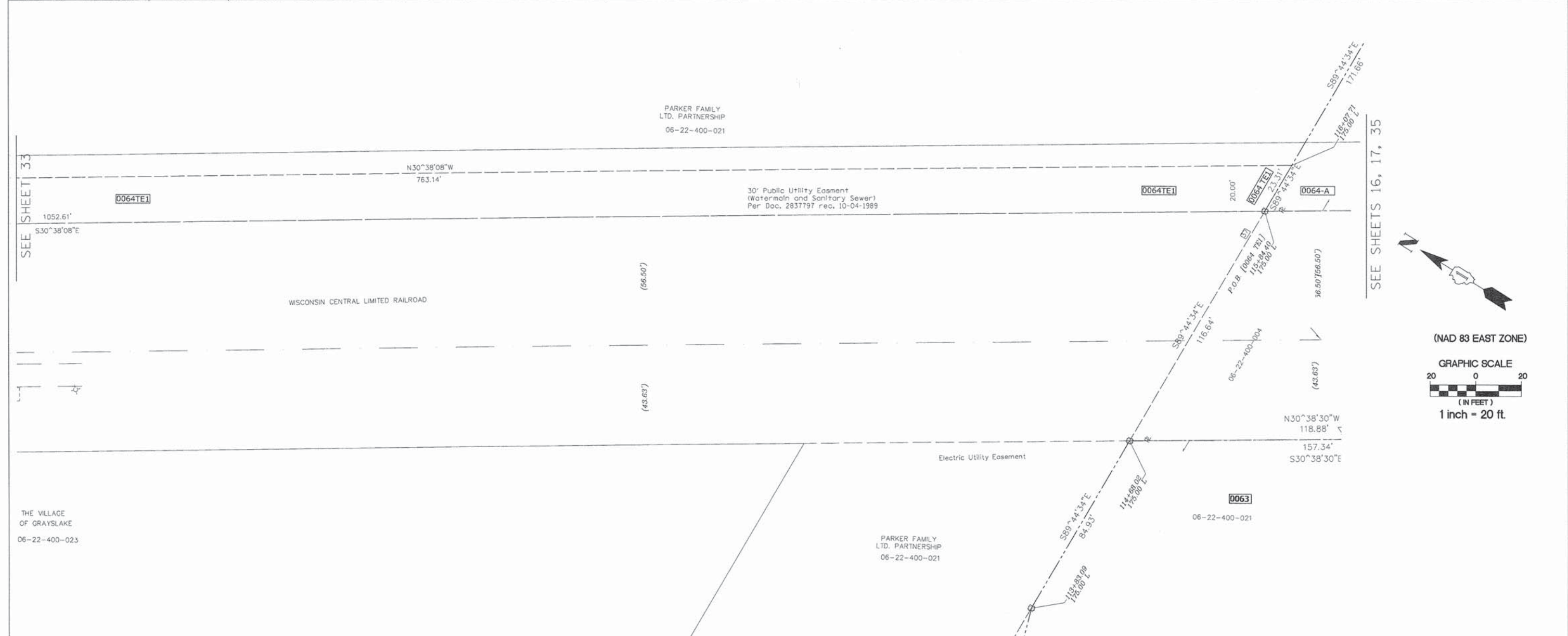
DATE	REVISION DESCRIPTION
6-29-11	C'NTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
11-26-13	SIG. BLOCK

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 110+65.16 TO STA. 113+00
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 33 OF 43

RECORDED ON:

AS DOCUMENT NO.:

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



(NAD 83 EAST ZONE)
 GRAPHIC SCALE
 20 0 20
 (IN FEET)
 1 inch = 20 ft.

LEGEND

- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO THE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES THE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES THE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ⊕ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

COORDINATE TABLE

STATION	OFFSET	COORDINATES

COORDINATE TABLE

STATION	OFFSET	COORDINATES

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0063	SEE SHEETS 15 & 16						
0063 TE	SEE SHEETS 15 & 16						
0064-A	SEE SHEETS 16, 17, 18, 19 & 20						
0064 TE1	SEE SHEETS 16, 17 & 33						

STATE OF ILLINOIS)
) SS
 COUNTY OF LAKE)
 I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.
 DATED THIS _____ DAY OF _____, A.D., 20____.

STATE OF ILLINOIS)
) SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2257
 LICENSE EXPIRATION DATE: 11/30/2014

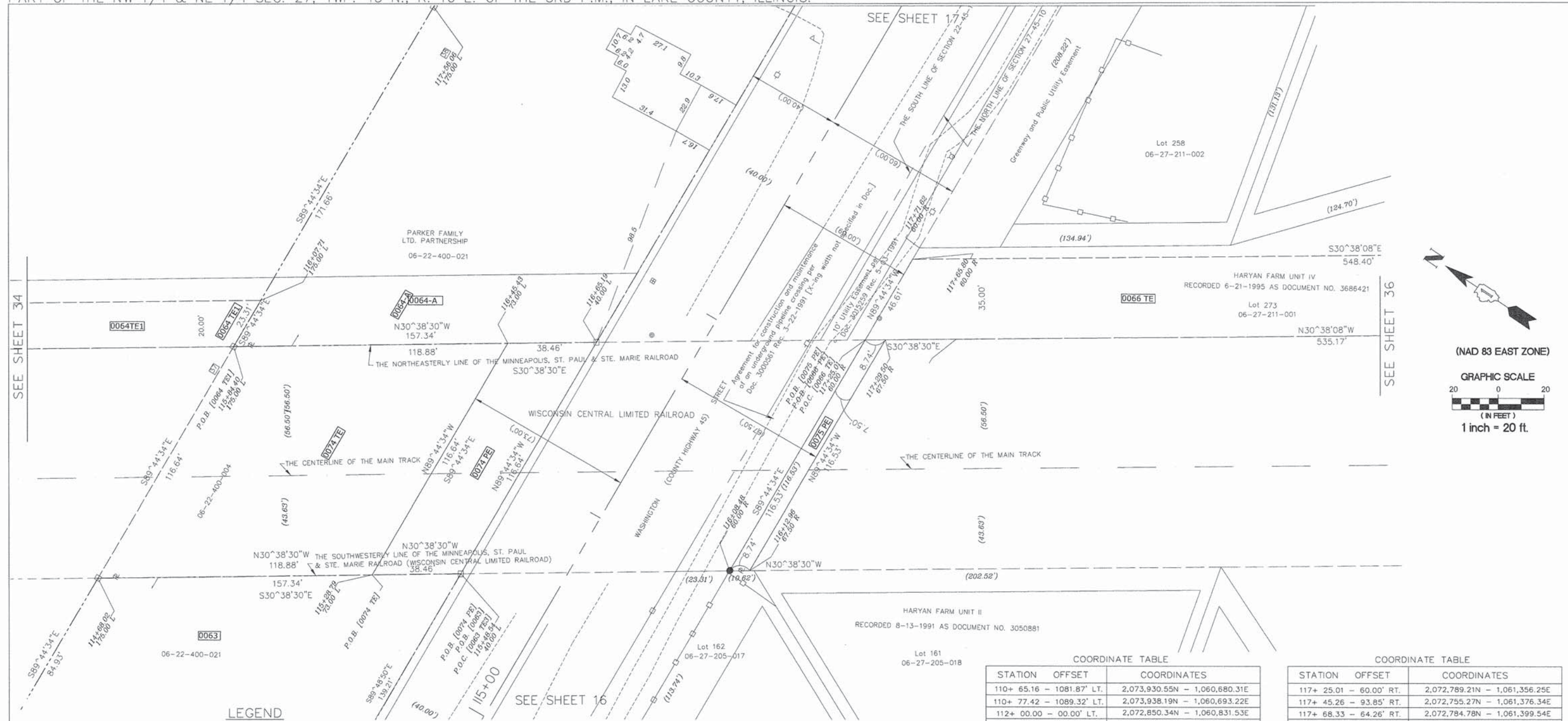
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

REVISION	DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11	
7-15-11	ROW REVISIONS	
9-14-11	COUNTY REVISIONS	
10-14-11	IDOT REVISIONS	
11-18-11	IDOT REVISIONS	
2-03-12	IDOT REVISIONS	
2-14-12	IDOT REVISIONS	
11-26-13	SIG. BLOCK	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 113+00 TO STA. 115+00
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 34 OF 43

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



LEGEND

- PROPOSED RIGHT OF WAY LINE
- - - PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.

- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO THE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN/USED ACRES	REMAINDER ACRES	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
0063	SEE SHEETS 15 & 16						
0063 TE	SEE SHEETS 15 & 16						
0064-A	SEE SHEETS 16, 17, 18, 19 & 20						
0063	SEE SHEETS 16, 17, 18, 19 & 20						
0066 TE	SEE SHEETS 16, 17 & 36						

STATE OF ILLINOIS)
 COUNTY OF LAKE) SS
 I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.
 DATED THIS _____ DAY OF _____, A.D., 20____.

STATE OF ILLINOIS)
 COUNTY OF DUPAGE) SS

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.
 DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

COORDINATE TABLE

STATION	OFFSET	COORDINATES
110+	65.16 - 1081.87' LT.	2,073,930.55N - 1,060,680.31E
110+	77.42 - 1089.32' LT.	2,073,938.19N - 1,060,693.22E
112+	00.00 - 00.00' LT.	2,072,850.34N - 1,060,831.53E
112+	20.51 - 828.38' LT.	2,073,678.83N - 1,060,846.83E
112+	24.63 - 830.90 LT.	2,073,681.37N - 1,060,851.12E
115+	90.37 - 165.00' LT.	2,073,014.83N - 1,061,222.62E
117+	00.00 - 00.00' LT.	2,072,849.34N - 1,061,331.52E

COORDINATE TABLE

STATION	OFFSET	COORDINATES
117+	25.01 - 60.00' RT.	2,072,789.21N - 1,061,356.25E
117+	45.26 - 93.85' RT.	2,072,755.27N - 1,061,376.34E
117+	68.33 - 64.26' RT.	2,072,784.78N - 1,061,399.54E
117+	71.62 - 60.00' RT.	2,072,788.99N - 1,061,402.86E
120+	20.03 - 553.09' RT.	2,072,294.80N - 1,061,649.06E
120+	49.89 - 534.83' RT.	2,072,312.93N - 1,061,679.00E

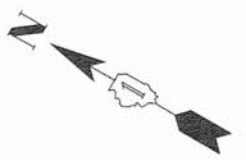
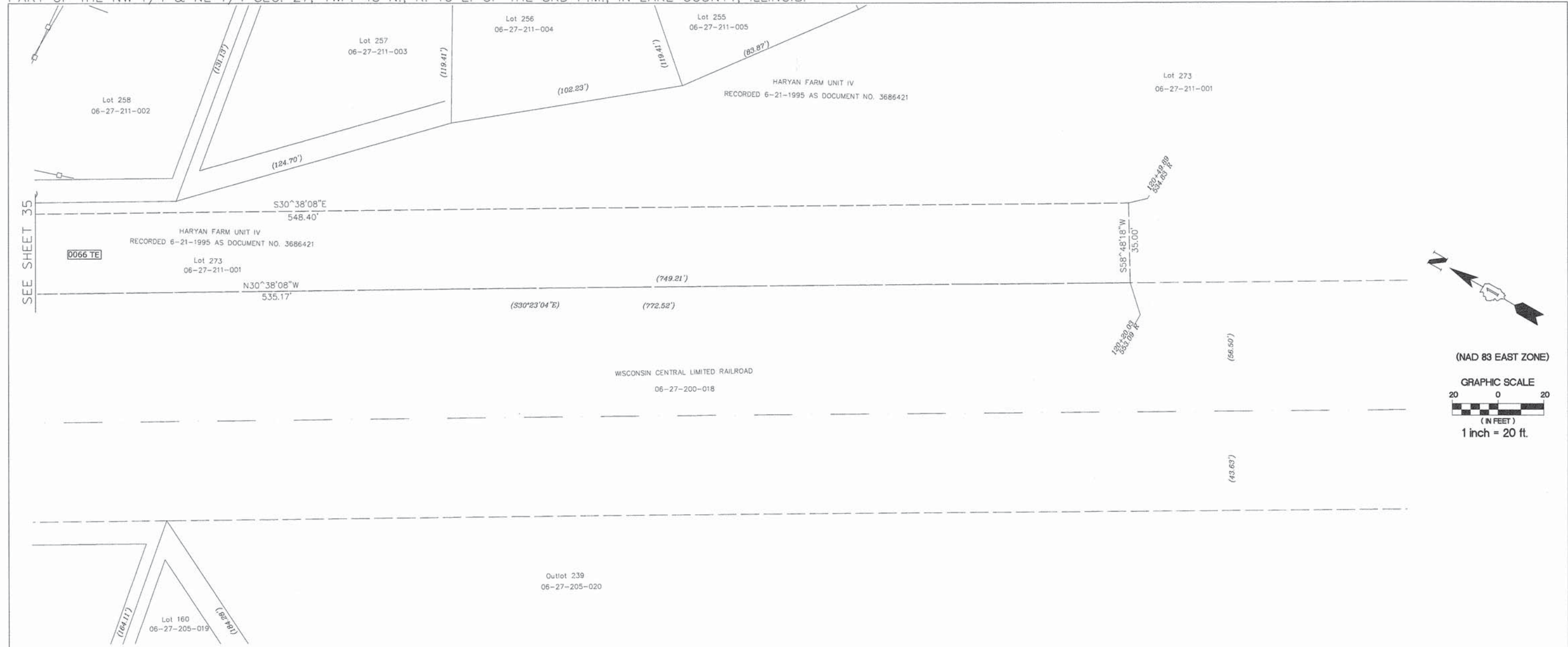
REVISION

DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
9-9-13	CN, JAWA EASE.
5-6-14	0066 CHG. TO 0066PE
11-26-13	SIG. BLOCK
2-27-14	66(CLP), 66TE REV

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 115+00 TO STA. 118+00
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 35 OF 43

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



(NAD 83 EAST ZONE)
 GRAPHIC SCALE
 20 0 20
 (IN FEET)
 1 inch = 20 ft.

LEGEND

- PROPOSED RIGHT OF WAY LINE
- - - PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- A.P.L. APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.

- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
- T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.Q.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

COORDINATE TABLE		
STATION	OFFSET	COORDINATES

COORDINATE TABLE		
STATION	OFFSET	COORDINATES

STATE OF ILLINOIS)
)SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

PARCEL NUMBER	OWNER	TOTAL HOLDING	PART TAKEN/USED	REMAINDER	PURPOSE	PERMANENT TAX INDEX NUMBER	ACQUIRED BY DOCUMENT
		ACRES	ACRES	ACRES			
0066 TE	SEE SHEETS 16, 17, & 35						

STATE OF ILLINOIS)
)SS
 COUNTY OF LAKE)

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D. 20____

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

REVISION	
DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-19-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	EASEMENT REVISIONS
11-26-13	SIG. BLOCK
2-27-14	66(CLIP),66TE REV

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLAT OF HIGHWAYS

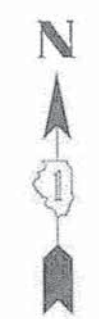
F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION. 08-00121-08-BR
 01-00121-10-WR
 JOB NO. R-91-181-12
 STA. 118+00 TO STA. 121+00
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=20' PLAT 36 OF 43

PART OF THE SW 1/4 & SE 1/4 SECS. 21 & 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SECS. 27 & 28, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.

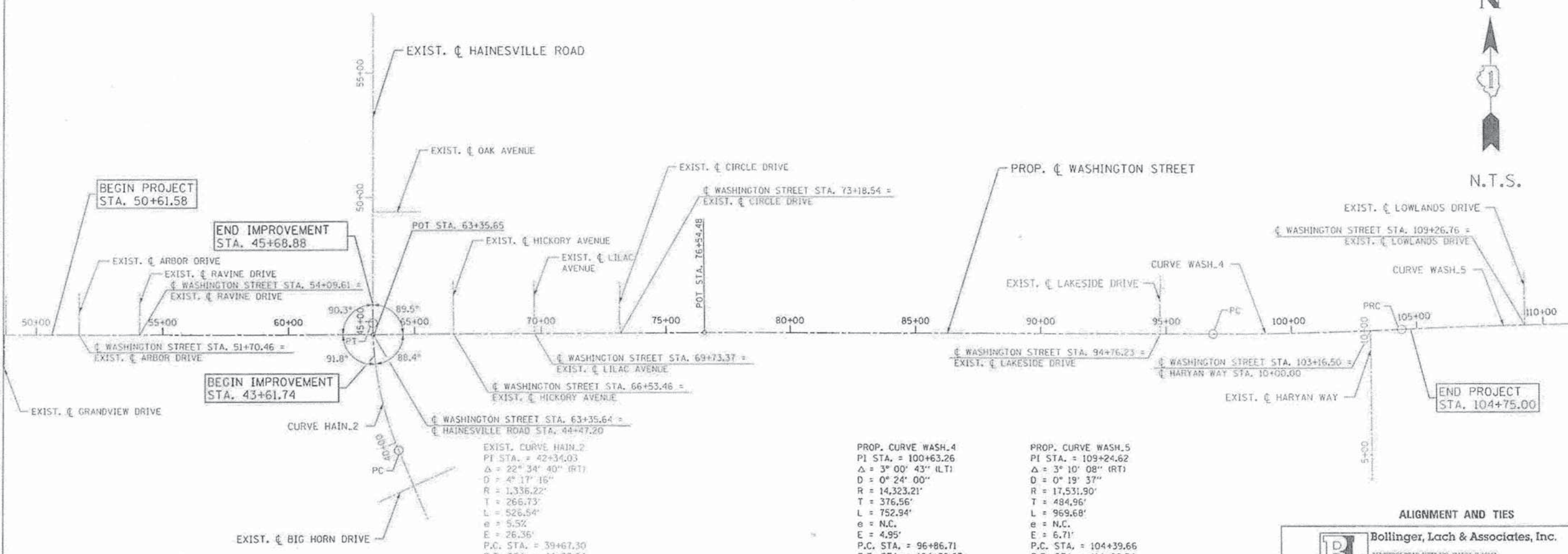
INTERSECTION COORDINATE TABLE		
STATION EQUATION	N	E
☐ WASHINGTON STREET STA. 63+35.64 = ☐ HAINESVILLE ROAD STA. 44+47.20	2072806.316	1055967.886
☐ WASHINGTON STREET STA. 103+16.50 = ☐ HARYAN WAY STA. 10+00.00	2072822.465	1059948.543

HAINESVILLE ROAD COORDINATE TABLE				
	DESCRIPTION	ALIGNMENT POINT	N	E
HAINESVILLE ROAD	CURVE HAIN.2	PC 39+67.30	2072339.615	1056058.016
		PI 42+34.03	2072586.224	1055966.382
		PT 44+93.84	2072652.955	1055967.219
	BEGIN IMPROVEMENT	43+61.74	2072721.051	1055973.329
	END IMPROVEMENT	45+68.88	2072927.991	1055967.454

WASHINGTON STREET COORDINATE TABLE					
	DESCRIPTION	ALIGNMENT POINT	N	E	
WASHINGTON STREET	BEGIN PROJECT	50+61.58	2072804.687	1054693.824	
		POT 63+35.65	2072806.316	1055967.894	
		POT 76+54.48	2072813.295	1057286.701	
	CURVE WASH.4		PC 96+86.71	2072809.727	1059318.929
			PI 100+63.26	2072809.066	1059695.485
			PRC 104+39.65	2072828.191	1060071.555
	CURVE WASH.5		PRC 104+39.65	2072828.191	1060071.555
			PI 109+24.62	2072852.826	1060555.902
			PT 114+09.34	2072850.648	1061040.860
		END PROJECT	104+75.00	2072829.834	1060106.870



N.T.S.



EXIST. CURVE HAIN.2
 PI STA. = 42+34.03
 $\Delta = 22^\circ 34' 40''$ (RT)
 $D = 4^\circ 17' 16''$
 $R = 1,336.22'$
 $T = 266.73'$
 $L = 526.54'$
 $e = 5.52'$
 $E = 26.36'$
 P.C. STA. = 39+67.30
 P.T. STA. = 44+93.84

PROP. CURVE WASH.4
 PI STA. = 100+63.26
 $\Delta = 3^\circ 00' 43''$ (LT)
 $D = 0^\circ 24' 00''$
 $R = 14,323.21'$
 $T = 376.56'$
 $L = 752.94'$
 $e = N.C.$
 $E = 4.95'$
 P.C. STA. = 96+86.71
 P.T. STA. = 104+39.65

PROP. CURVE WASH.5
 PI STA. = 109+24.62
 $\Delta = 3^\circ 10' 08''$ (RT)
 $D = 0^\circ 19' 37''$
 $R = 17,531.90'$
 $T = 484.96'$
 $L = 969.68'$
 $e = N.C.$
 $E = 6.71'$
 P.C. STA. = 104+39.66
 P.T. STA. = 114+09.34

ALIGNMENT AND TIES

BL Bollinger, Lach & Associates, Inc.
 833 PIERCE ROAD, SUITE 100 - STASIA, ILLINOIS 60143
 P(630) 431-6400 F(630) 432-6444 www.bollingerlach.com

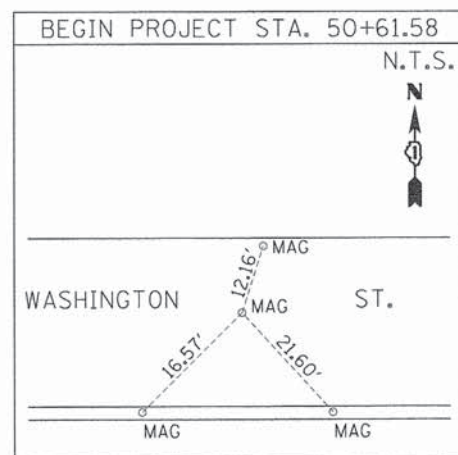
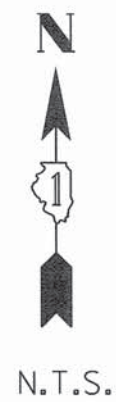
REVISION	
DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS

LAKE COUNTY DIVISION
 OF TRANSPORTATION
 PLAT OF HIGHWAYS

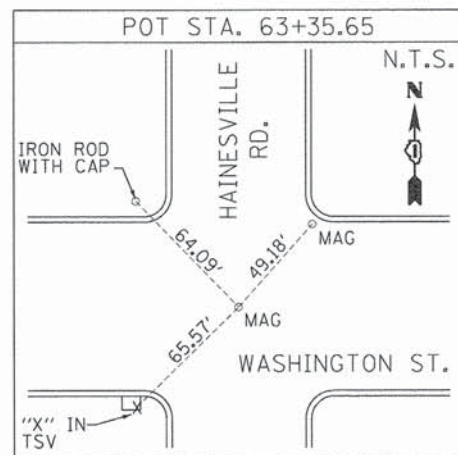
F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION
 JOB NO. R-91-007-12
 STA. 50+61.58 TO STA. 110+00.00
 DRAWN: TMS CHECKED: JDB
 SCALE: N.T.S. PLAT 37 OF 43

RECORDED ON:

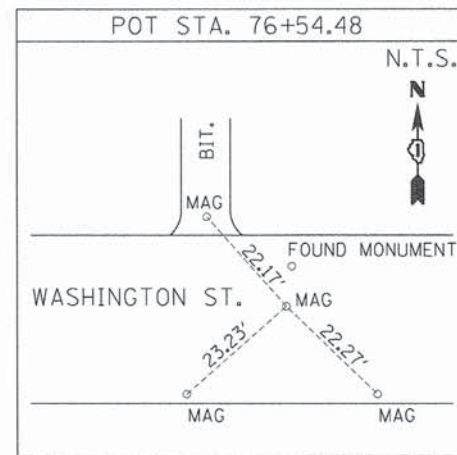
AS DOCUMENT NO.:



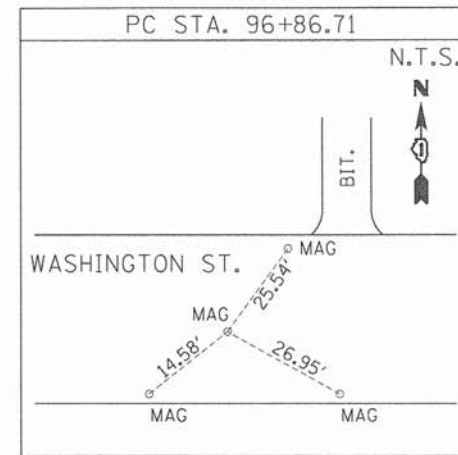
STA. 50+61.58
 N. 2072804.69
 E. 1054693.82



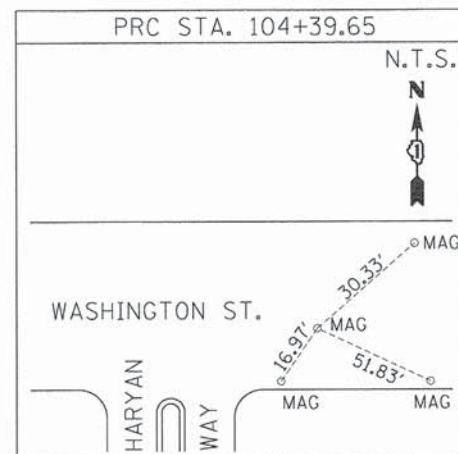
STA. 63+35.65
 N. 2072806.32
 E. 1055967.89



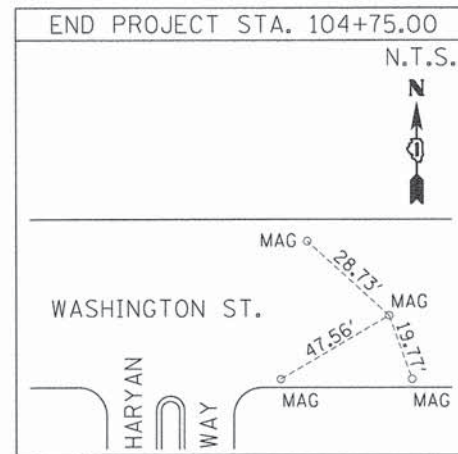
STA. 76+54.48
 N. 2072813.30
 E. 1057286.70



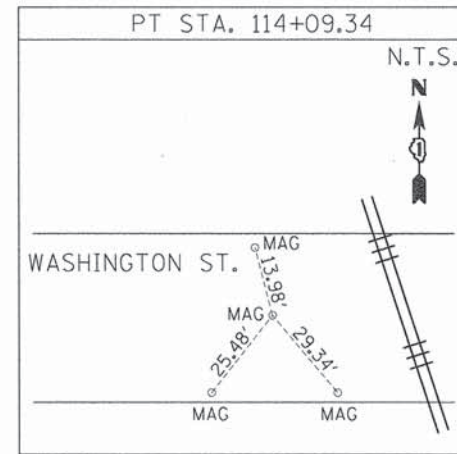
STA. 96+86.71
 N. 2072809.72
 E. 105318.93



STA. 104+39.65
 N. 2072828.20
 E. 1060071.56



STA. 104+75.00
 N. 2072829.93
 E. 1060106.87



STA. 114+09.34
 N. 2072850.65
 E. 1061040.86

ALIGNMENT AND TIES

BL Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P.(630) 438 6400 F.(630) 438 6444 www.bollingerlach.com
ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

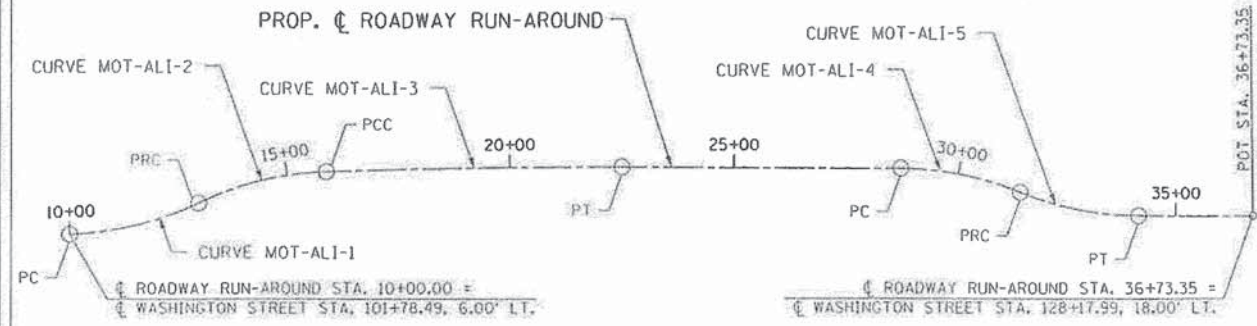
REVISION	
DATE	DESCRIPTION
6-29-11	C'NTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS

LAKE COUNTY DIVISION
 OF TRANSPORTATION
 PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION
 JOB NO. R-91-007-12
 STA. 50+61.58 TO STA. 114+09.34
 DRAWN: TMS CHECKED: JDB
 SCALE: N.T.S. PLAT 38 OF 43

RECORDED ON:

AS DOCUMENT NO.:

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.

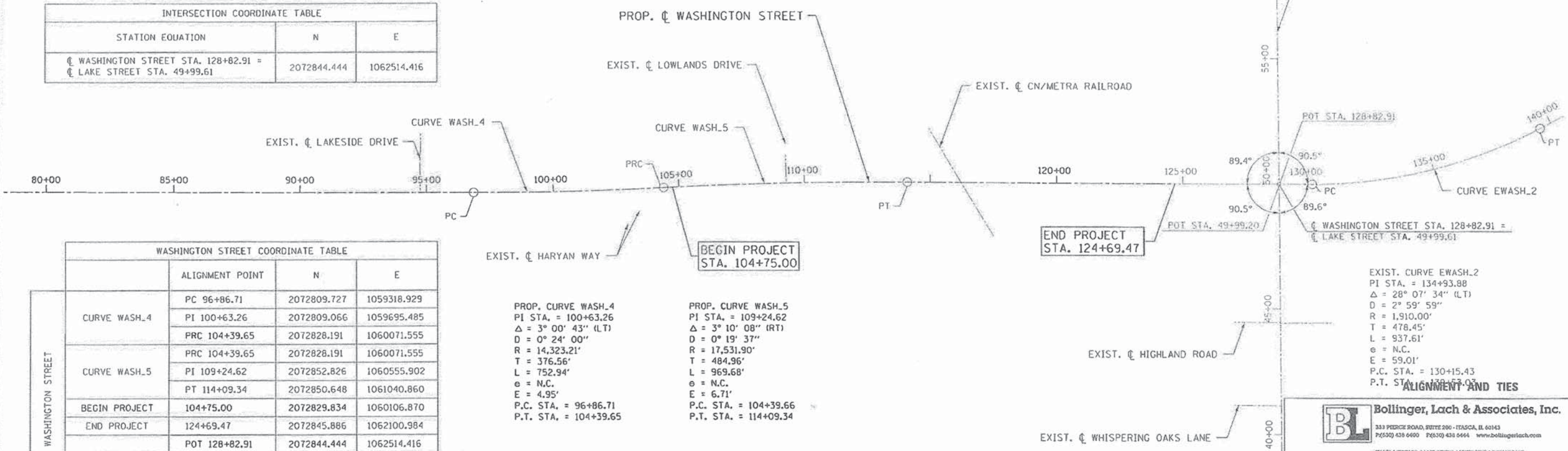


PROP. CURVE MOT-ALI-1	PROP. CURVE MOT-ALI-2	PROP. CURVE MOT-ALI-3	PROP. CURVE MOT-ALI-4	PROP. CURVE MOT-ALI-5
PI STA. = 11+49.17	PI STA. = 14+43.10	PI STA. = 19+19.83	PI STA. = 30+09.63	PI STA. = 32+81.31
$\Delta = 23^\circ 34' 09''$ (LT)	$\Delta = 23^\circ 32' 19''$ (RT)	$\Delta = 2^\circ 09' 17''$ (RT)	$\Delta = 21^\circ 46' 17''$ (RT)	$\Delta = 21^\circ 46' 17''$ (LT)
D = 8° 00' 48"	D = 8° 00' 48"	D = 0° 19' 29"	D = 8° 00' 48"	D = 8° 00' 48"
R = 715.00'	R = 715.00'	R = 17,651.90'	R = 715.00'	R = 715.00'
T = 149.17'	T = 148.97'	T = 331.96'	T = 137.50'	T = 137.50'
L = 294.12'	L = 293.74'	L = 663.85'	L = 271.69'	L = 271.69'
E = 15.40'	E = 15.35'	E = 3.12'	E = 13.10'	E = 13.10'
e = N.C.	e = N.C.	e = N.C.	e = N.C.	e = N.C.
P.C. STA. = 10+00.00	P.C. STA. = 12+94.12	P.C. STA. = 15+87.86	P.C. STA. = 28+72.12	P.C. STA. = 31+43.81
P.T. STA. = 12+94.12	P.T. STA. = 15+87.86	P.T. STA. = 22+51.71	P.T. STA. = 31+43.81	P.T. STA. = 34+15.50

DESCRIPTION	ALIGNMENT POINT	N	E
CURVE MOT-ALI-1	PC 10+00.00	2072823.302	1059810.433
	PI 11+49.17	2072828.161	1059959.526
	PRC 12+94.12	2072892.231	1060094.237
CURVE MOT-ALI-2	PI 14+43.10	2072956.214	1060228.768
	PCC 15+87.86	2072961.146	1060377.658
	PCC 15+87.86	2072961.146	1060377.658
CURVE MOT-ALI-3	PI 19+19.83	2072972.138	1060709.439
	PT 22+51.71	2072970.647	1061041.399
	PC 28+72.12	2072967.860	1061661.805
CURVE MOT-ALI-4	PI 30+09.63	2072967.242	1061799.305
	PRC 31+43.81	2072915.669	1061926.770
	PRC 31+43.81	2072915.669	1061926.770
CURVE MOT-ALI-5	PI 32+81.31	2072864.096	1062054.234
	PT 34+15.50	2072863.479	1062191.734
	POT 36+73.35	2072862.320	1062449.585

ALIGNMENT POINT	N	E
POT 36+34.03	2071478.880	1062520.613
POT 49+99.20	2072844.039	1062514.431
POT 62+72.13	2074116.944	1062506.331

STATION EQUATION	N	E
☐ WASHINGTON STREET STA. 128+82.91 = ☐ LAKE STREET STA. 49+99.61	2072844.444	1062514.416



	ALIGNMENT POINT	N	E
CURVE WASH_4	PC 96+86.71	2072809.727	1059318.929
	PI 100+63.26	2072809.066	1059695.485
	PRC 104+39.65	2072828.191	1060071.555
CURVE WASH_5	PRC 104+39.65	2072828.191	1060071.555
	PI 109+24.62	2072852.826	1060555.902
	PT 114+09.34	2072850.648	1061040.860
BEGIN PROJECT	104+75.00	2072829.834	1060106.870
END PROJECT	124+69.47	2072845.886	1062100.984
CURVE EWASH_2	POT 128+82.91	2072844.444	1062514.416
	PC 130+15.43	2072844.064	1062646.931
	PI 134+93.88	2072842.690	1063125.379
	PT 139+53.03	2073067.027	1063547.976

PROP. CURVE WASH_4	PROP. CURVE WASH_5
PI STA. = 100+63.26	PI STA. = 109+24.62
$\Delta = 3^\circ 00' 43''$ (LT)	$\Delta = 3^\circ 10' 08''$ (RT)
D = 0° 24' 00"	D = 0° 19' 37"
R = 14,323.21'	R = 17,531.90'
T = 376.56'	T = 484.96'
L = 752.94'	L = 969.68'
e = N.C.	e = N.C.
E = 4.95'	E = 6.71'
P.C. STA. = 96+86.71	P.C. STA. = 104+39.66
P.T. STA. = 104+39.65	P.T. STA. = 114+09.34

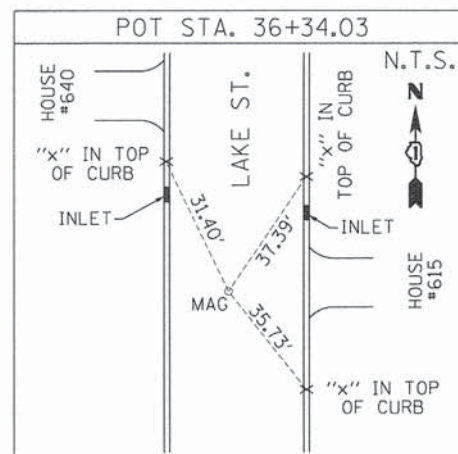
EXIST. CURVE EWASH_2
PI STA. = 134+93.88
$\Delta = 28^\circ 07' 34''$ (LT)
D = 2° 59' 59"
R = 1,910.00'
T = 478.45'
L = 937.61'
e = N.C.
E = 59.01'
P.C. STA. = 130+15.43
P.T. STA. = 139+53.03

B **LL** **A** **I** **C** **S** **I** **A** **S** **I** **N** **C** **O** **R** **P** **O** **R** **T** **I** **O** **N**
 333 PIEDICE ROAD, SUITE 200 - ITASCA, IL 60143
 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com

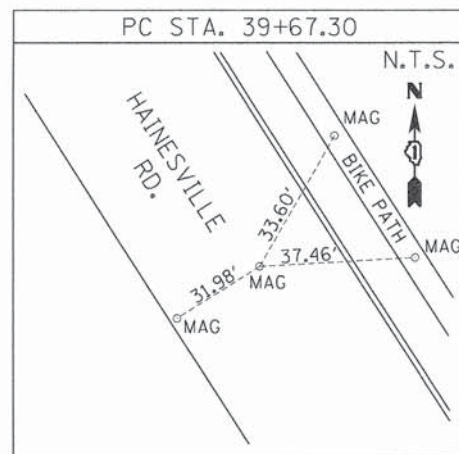
DATE	DESCRIPTION
6-29-11	C'NTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS

LAKE COUNTY DIVISION
 OF TRANSPORTATION
 PLAT OF HIGHWAYS

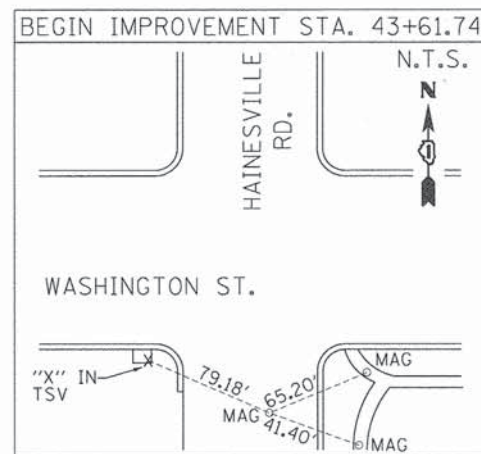
F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION
 JOB NO. R-91-007-12
 STA. 80+00.00 TO STA. 124+69.47
 DRAWN: TMS CHECKED: JDB
 SCALE: N.T.S. PLAT 39 OF 43



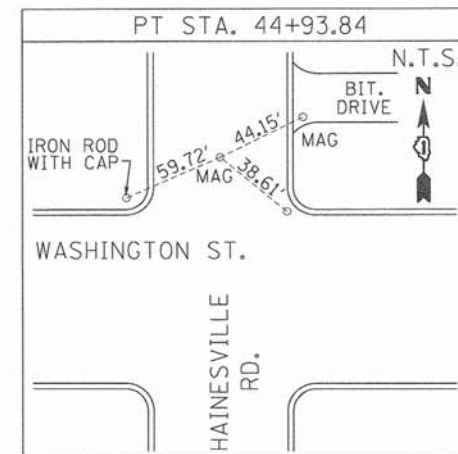
STA. 36+34.03
 N. 2071478.88
 E. 1062520.61



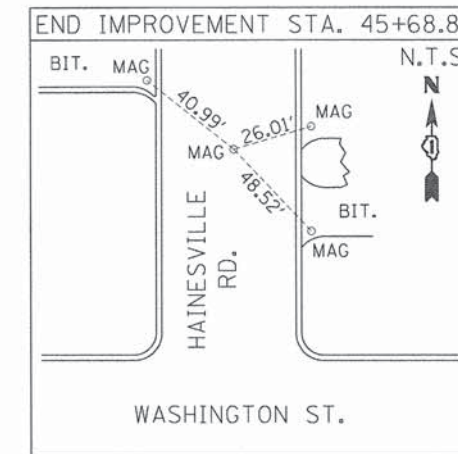
STA. 39+67.30
 N. 2072339.62
 E. 1056068.02



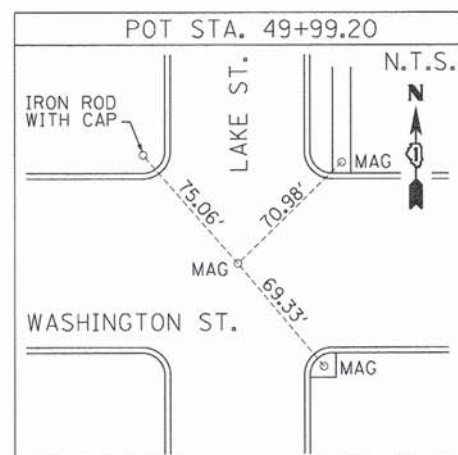
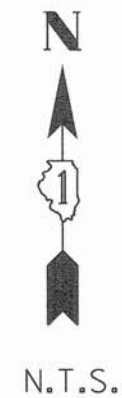
STA. 43+61.74
 N. 2072721.05
 E. 1055973.33



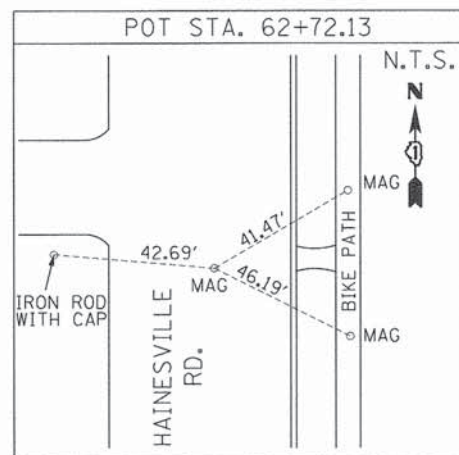
STA. 44+93.84
 N. 2072852.96
 E. 1055967.22



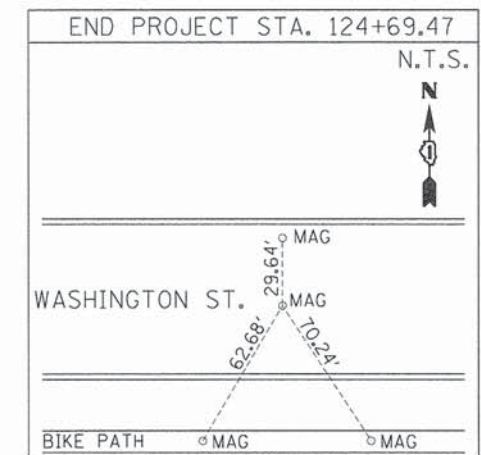
STA. 45+68.88
 N. 2072927.99
 E. 1055967.45



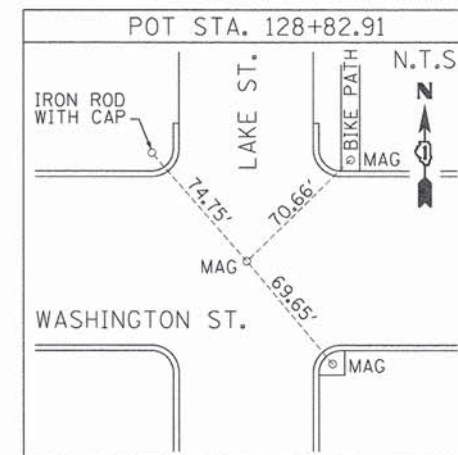
STA. 49+99.20
 N. 2072844.04
 E. 1062514.43



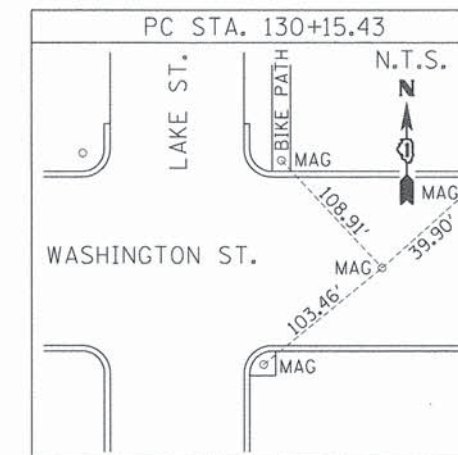
STA. 62+72.13
 N. 2074116.94
 E. 1062506.33



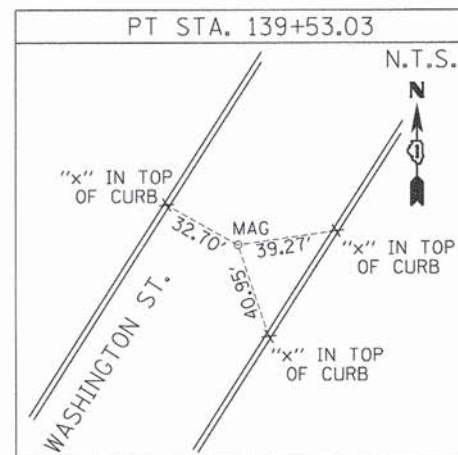
STA. 124+69.47
 N. 2072850.65
 E. 1061040.86



STA. 128+82.91
 N. 2072844.44
 E. 1062514.42



STA. 130+15.43
 N. 2072844.06
 E. 1062646.93



STA. 139+53.03
 N. 2073067.03
 E. 1063547.98

ALIGNMENT AND TIES

B Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

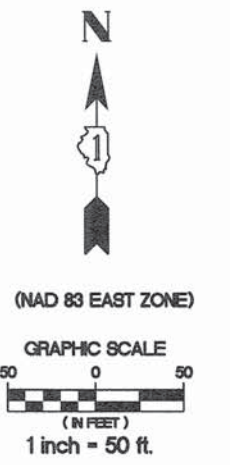
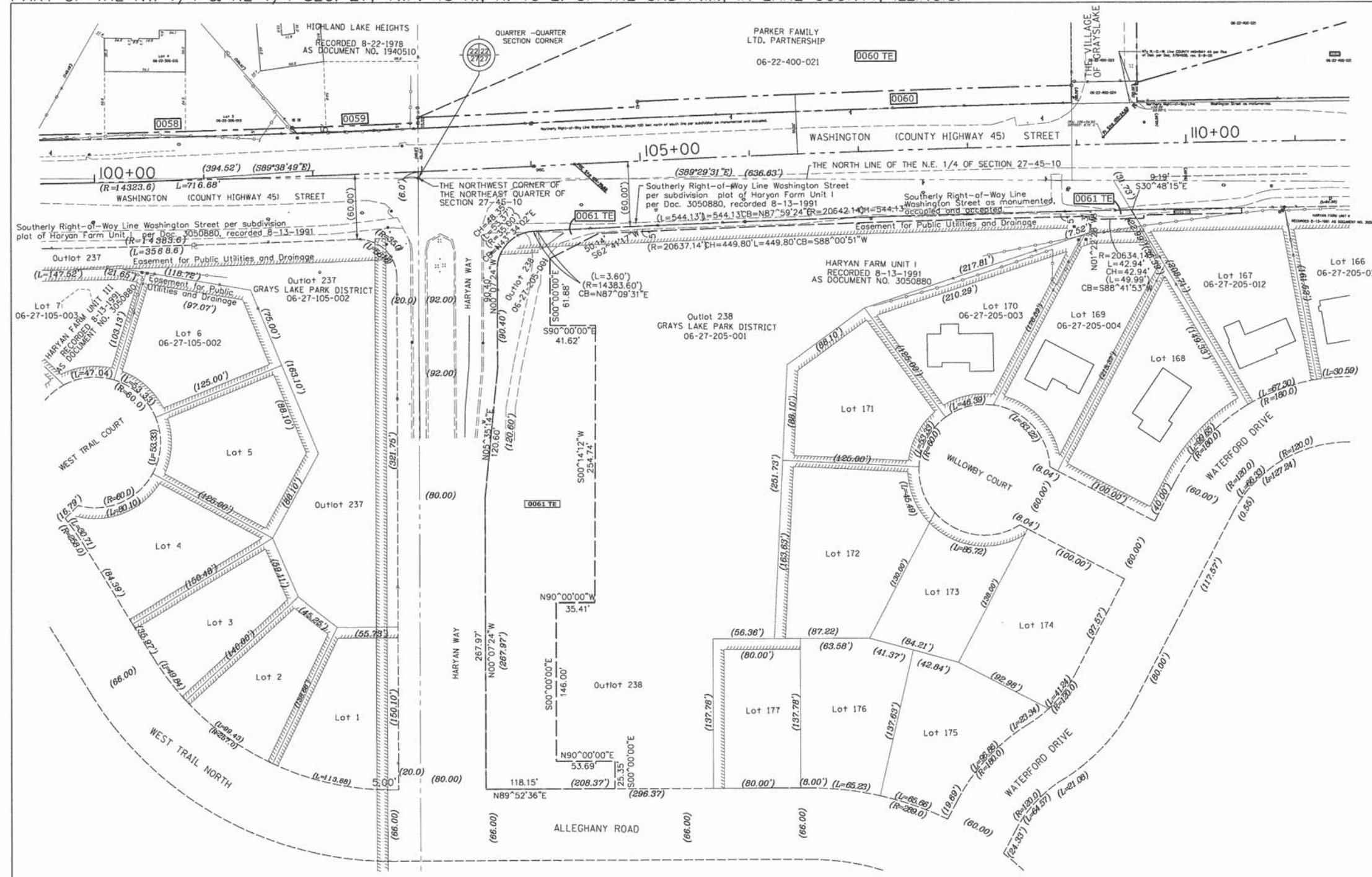
REVISION	
DATE	DESCRIPTION
6-29-11	C'NTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS

LAKE COUNTY DIVISION
 OF TRANSPORTATION
 PLAT OF HIGHWAYS
 F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION
 JOB NO. R-91-007-12
 STA. 36+34.03 TO STA. 139+53.03
 DRAWN: TMS CHECKED: JDB
 SCALE: N.T.S. PLAT 40 OF 43

RECORDED ON:

AS DOCUMENT NO.:

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



- LEGEND**
- PROPOSED RIGHT OF WAY LINE
 - - - PROPOSED EASEMENT
 - EXISTING RIGHT OF WAY LINE
 - CENTERLINE
 - PLATTED LOT LINES
 - PROPERTY (DEED) LINE
 - APPARENT PROPERTY LINE
 - SECTION LINE
 - 129.324 MEASURED DIMENSION
 - 129.324 (COMP) COMPUTED DIMENSION
 - (129.324) RECORDED DIMENSION
 - + CUT CROSS FOUND OR SET
 - IRON PIPE OR IRON ROD
 - RESET PIPE OR ROD TO ORIGINAL POSITION.
 - T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
 - T2(B2) SET 5/8 INCH IRON ROD TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
 - T3(B3)
 - T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
 - (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
 - DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
 - STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
 - ⊕ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

STATE OF ILLINOIS)
)SS
 COUNTY OF DUPAGE)

TOTAL HOLDINGS PARCELS 0061 TE

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com

STATE OF ILLINOIS)
)SS
 COUNTY OF LAKE)

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID,
 DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT
 REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF
 PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.
 DATED THIS _____ DAY OF _____, A.D., 20____.

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

REVISION	
DATE	DESCRIPTION
6-29-11	C'NTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
9-9-13	JAWA EASE.
11-26-13	SIG. BLOCK

LAKE COUNTY DIVISION
 OF TRANSPORTATION
 PLAT OF HIGHWAYS

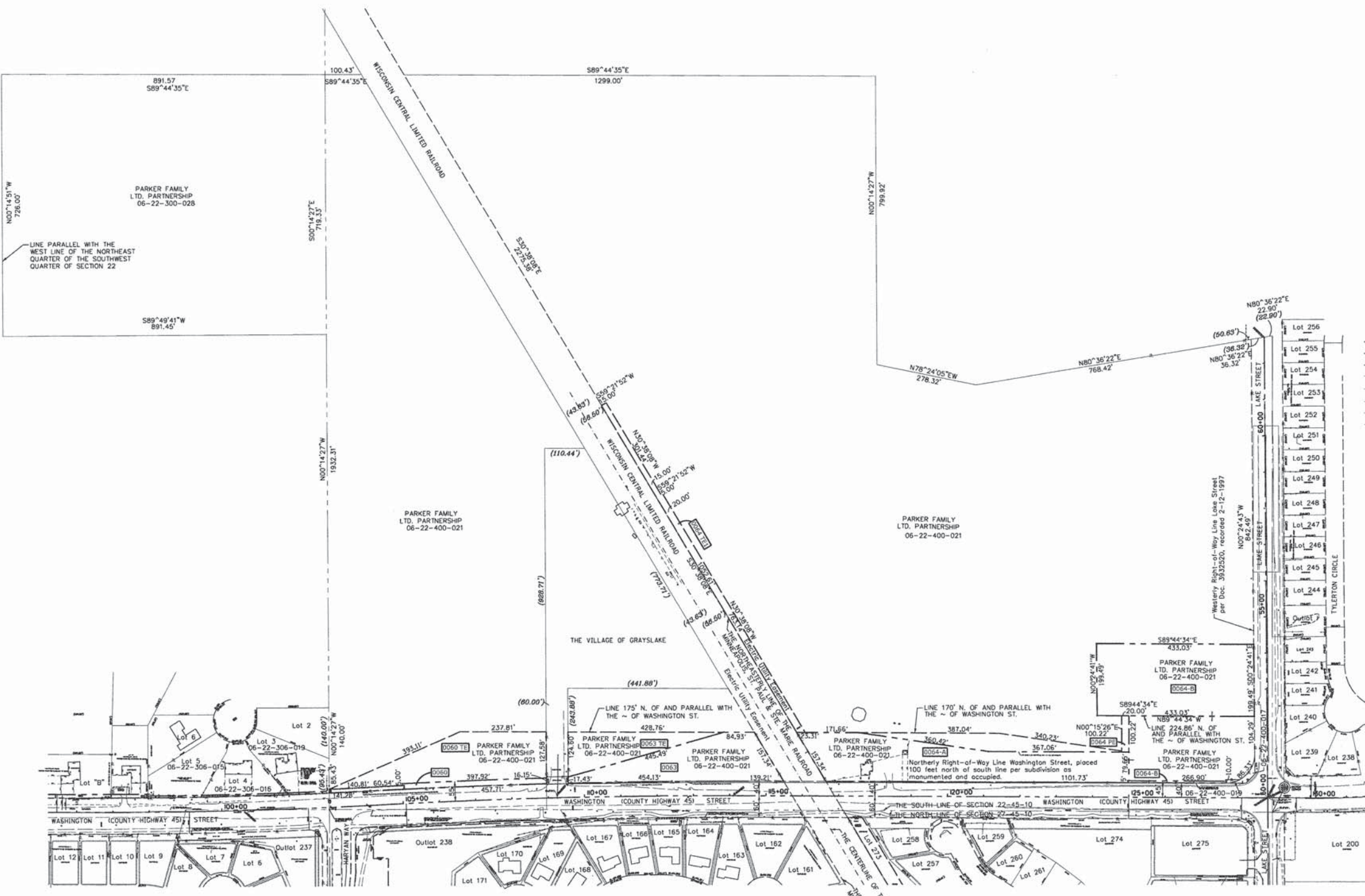
F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION
 JOB NO. R-91-007-12
 STA. 99+50 TO STA. 111+50
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=50' PLAT 42 OF 43

RECORDED ON: AS DOCUMENT NO.:

PART OF THE SW 1/4 & SE 1/4 SEC. 22, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.
 PART OF THE NW 1/4 & NE 1/4 SEC. 27, TWP. 45 N., R. 10 E. OF THE 3RD P.M., IN LAKE COUNTY, ILLINOIS.



(NAD 83 EAST ZONE)
GRAPHIC SCALE
 150 0 150
 (IN FEET)
 1 inch = 150 ft



LEGEND

- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY LINE
- CENTERLINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- SECTION LINE
- 129.324 MEASURED DIMENSION
- 129.324 (COMP) COMPUTED DIMENSION
- (129.324) RECORDED DIMENSION
- + CUT CROSS FOUND OR SET
- IRON PIPE OR IRON ROD
- RESET PIPE OR ROD TO ORIGINAL POSITION.
- T1(B1) THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.
 SET 5/8 INCH IRON ROD TO THE FOUND IRON STAKE IDENTIFIED BY
 COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T2(B2)
- T3(B3)
- T1 DENOTES TIE POINT NO. 1. SET IRON ROD FLUSH WITH GROUND SURFACE.
- (B1) DENOTES TIE POINT NO. 1. SET IRON ROD 20" BELOW GROUND SURFACE.
- DIVISION OF HIGHWAYS RIGHT OF WAY SURVEY MARKER PROPOSED TO BE SET.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY
 MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION
 DATA AND SURVEYORS REGISTRATION NUMBER.
- ⊕ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135
 (TO BE SET BY OTHERS)

NOTE: COORDINATES SHOWN ARE NAD83 ILLINOIS STATE PLANE EAST ZONE

TOTAL HOLDINGS PARCELS: 0060
 0060 TE
 0063
 0063 TE
 0064-A
 0064-B
 0064-PE
 0064-TE 1
 0064-TE 2

STATE OF ILLINOIS)
)SS
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT WE, BOLLINGER LACH & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001129, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 21, 22, 27 AND 28, TOWNSHIP 45 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DIVISION OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT ITASCA, ILLINOIS THIS _____ DAY OF _____, 20____ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO.2257
 LICENSE EXPIRATION DATE: 11/30/2014

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

STATE OF ILLINOIS)
)SS
 COUNTY OF LAKE)

I, PAULA J. TRIGG, COUNTY ENGINEER OF THE COUNTY AFORESAID, DO HEREBY CERTIFY THAT THE PLAT HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY MADE UNDER MY DIRECTION OF PART OF FAU 187, FAU 193 & FAU 195 IN SAID COUNTY.

DATED THIS _____ DAY OF _____, A.D., 20____

Bollinger, Lach & Associates, Inc.
 333 PIERCE ROAD, SUITE 200 - ITASCA, IL 60143
 P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com

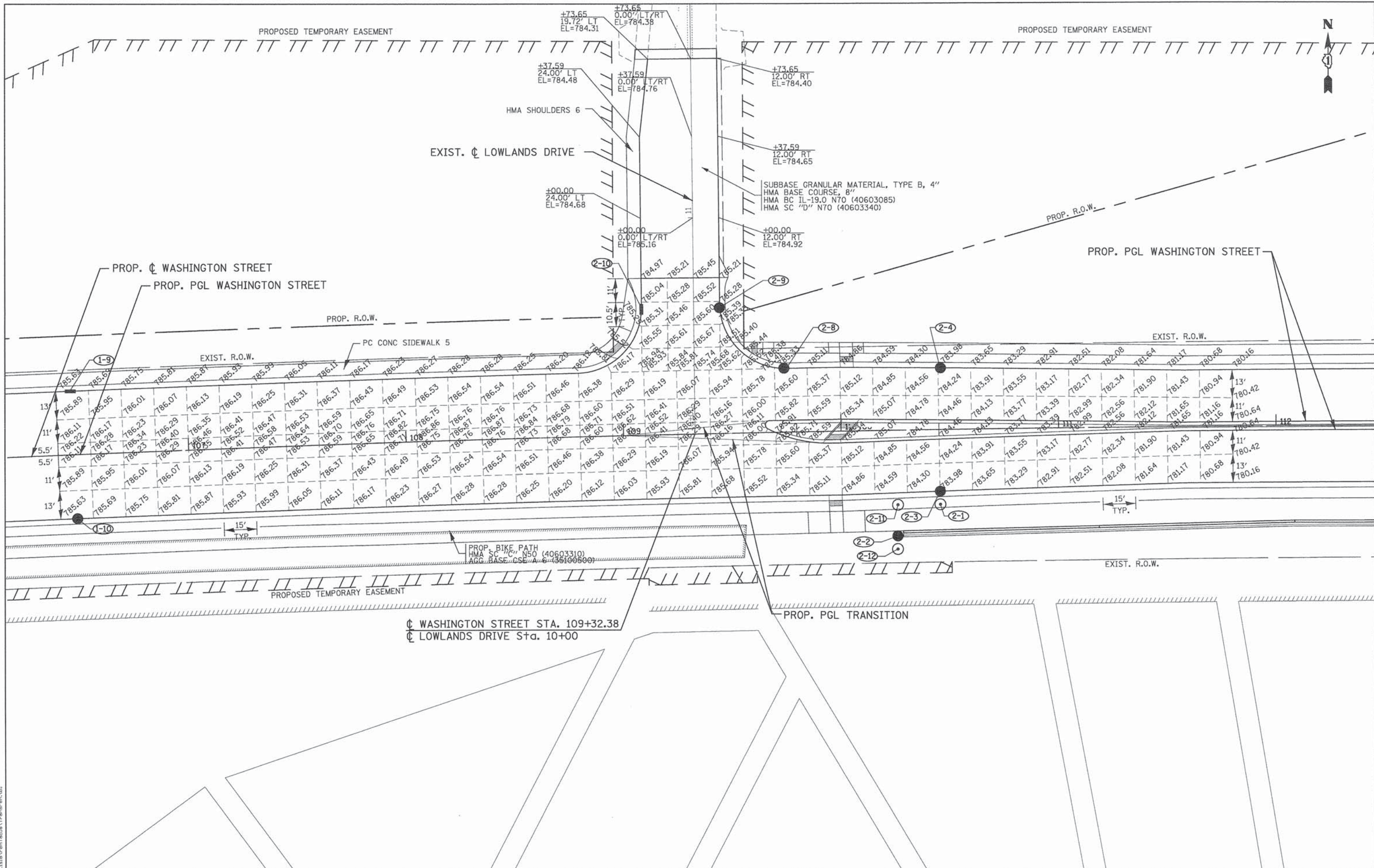
REVISION	
DATE	DESCRIPTION
6-29-11	CNTY REV. 6-29-11
7-15-11	ROW REVISIONS
9-14-11	COUNTY REVISIONS
10-14-11	IDOT REVISIONS
11-18-11	IDOT REVISIONS
2-03-12	IDOT REVISIONS
2-14-12	IDOT REVISIONS
6-05-12	TOT. HOLDINGS 0060
11-26-13	SIG. BLOCK

LAKE COUNTY DIVISION
 OF TRANSPORTATION
 PLAT OF HIGHWAYS

F.A.U. ROUTE 187 (WASHINGTON STREET)
 SECTION
 JOB NO. R-91-007-12
 STA. 95+20 TO STA. 131+50
 DRAWN: TMS CHECKED: JDB
 SCALE: 1"=150' PLAT 43 OF 43

RECORDED ON:

AS DOCUMENT NO.:



PATRICK ENGINEERING
 4970 VARSITY DRIVE
 LISLE, IL 60532
 patrickengineering.com

USER NAME = tkoeppen@dwg.Lisle	DESIGNED - MJV	REVISED -
PLOT CONFIG = PDF(Grey_Small).plt	DRAWN - MJV	REVISED -
PLOT SCALE = 1:40	CHECKED - MJP	REVISED -
PLOT DATE = 7/3/2014 5:43:41 AM	DATE - 6/30/2014	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 PAVEMENT JOINT AND ELEVATION PLAN - LOWLANDS DRIVE**

SCALE: 1"=20' SHEET NO. JT 1 OF 2 STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	177
61A63				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

Q:\L\DOT\21150.004\Drawings\shhs\Jnt\15_Jnt.01.dgn

119+00

120+00

PROP. CL WASHINGTON STREET



PROP. BIKE PATH
HMA SC "C" N50 (40603310)
AGG BASE CSE B 6 (35101800)

PROP. RETAINING WALL

14.9'

14.3'

14.3'

TYPE B GUTTER

SPBGR TY B 6FT POSTS

HMA SHOULDERS 6

783.22

783.15

783.08

783.01

5-8

5-9

19+00

EXIST. R.O.W.

AGGREGATE SURFACE COURSE
TYPE A 12"

PROP. WCL RR ACCESS ROAD

PCC DRIVEWAY PAVT 6

783.37

783.35

783.30

783.38

783.24

783.46

783.17

783.50

11'

PC CONC SIDEWALK 5

EXIST. R.O.W.

PC CONC SIDEWALK 5

HIGHLAND ROAD

PCC DRIVEWAY PAVT 6

783.42

783.47

783.53

783.57

783.44

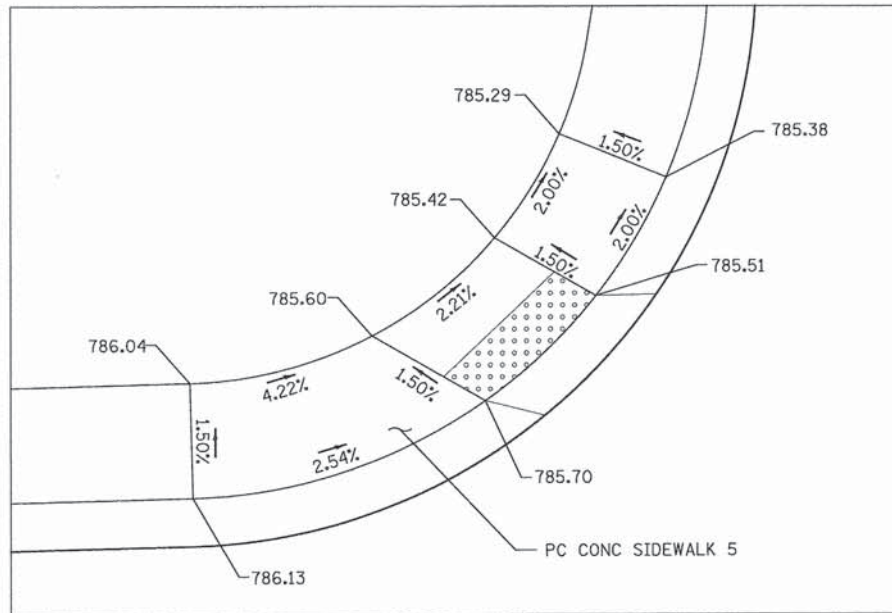
783.42

783.17

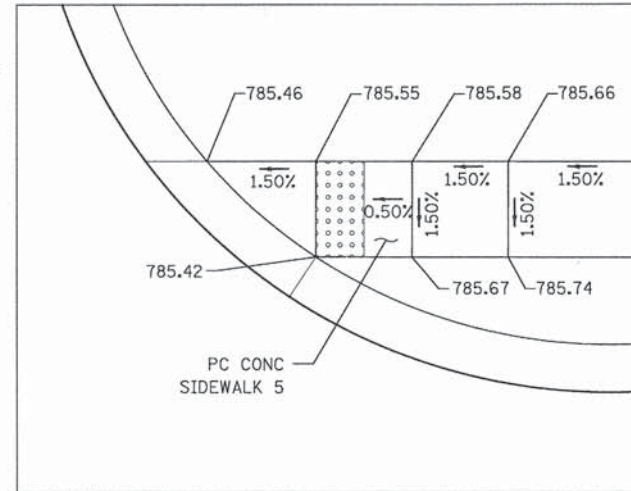
EXIST. R.O.W.

PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = skoeppen(Rdy.Lisle)	DESIGNED - MJV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PAVEMENT JOINT AND ELEVATION PLAN - WCL RR ACCESS ROAD		F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 178
	PLOT CONFIG = PDF(Grey.Small.plt)	DRAWN - MJV	REVISED -		SCALE: 1"=5'	SHEET NO. JT 2 OF 2	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	61A63	
	PLOT SCALE = 1:10	CHECKED - MJP	REVISED -								
	PLOT DATE = 7/3/2014 5:43:51 AM	DATE - 6/30/2014	REVISED -								

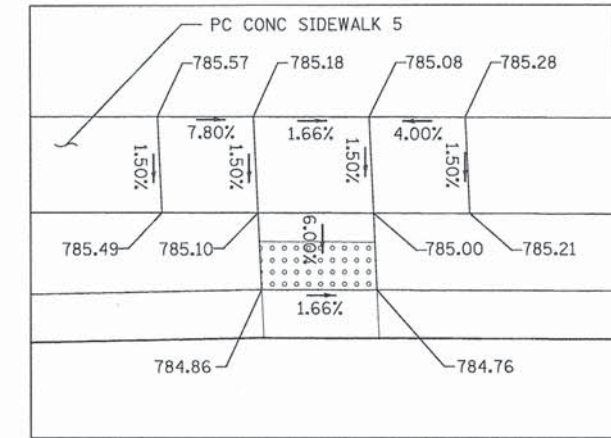
Q:\L\CDOT\21150.004\Drawings\sheet\Int\S_Int.02.dgn



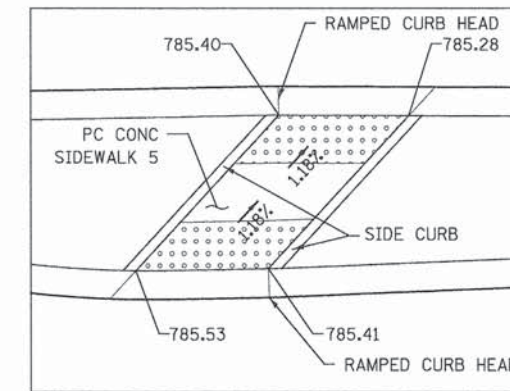
NW CORNER OF WASHINGTON @ HARYAN



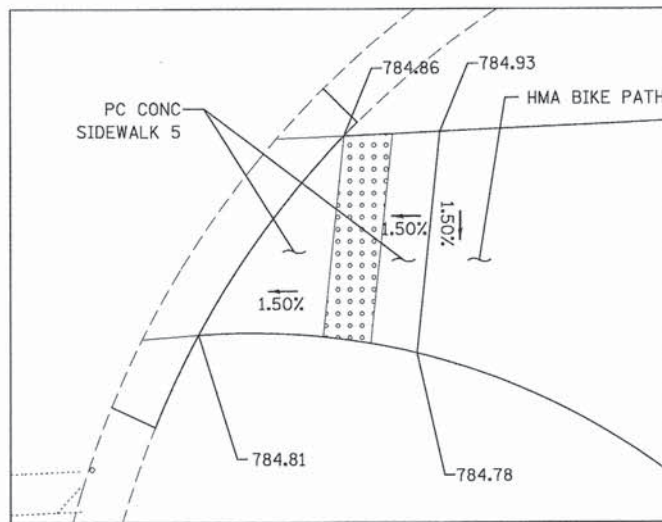
NE CORNER WASHINGTON @ HARYAN



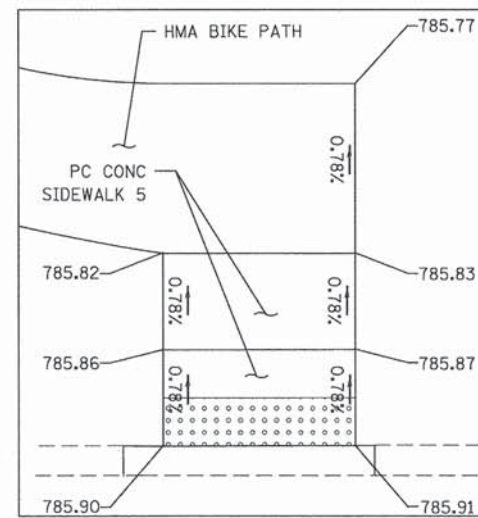
MID-BLOCK CROSSING
WASHINGTON WEST OF LOWLANDS (NORTH SIDE)



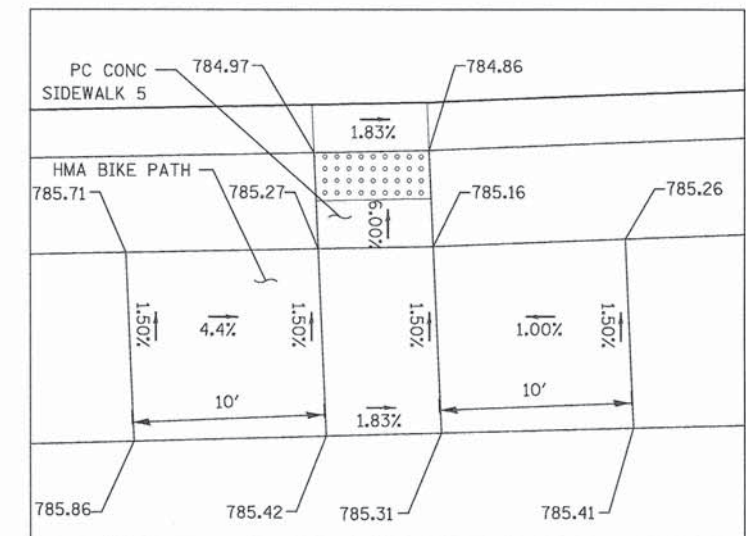
MID-BLOCK CROSSING
WASHINGTON WEST OF LOWLANDS (MEDIAN)



SE CORNER OF WASHINGTON @ HARYAN



ALLEGHANY RD EAST OF HARYAN



MID-BLOCK CROSSING
WASHINGTON EAST OF LOWLANDS (SOUTH SIDE)

PENITABLE = ...LISLE\PROJECTABLE\TRANSPARENT.TBL

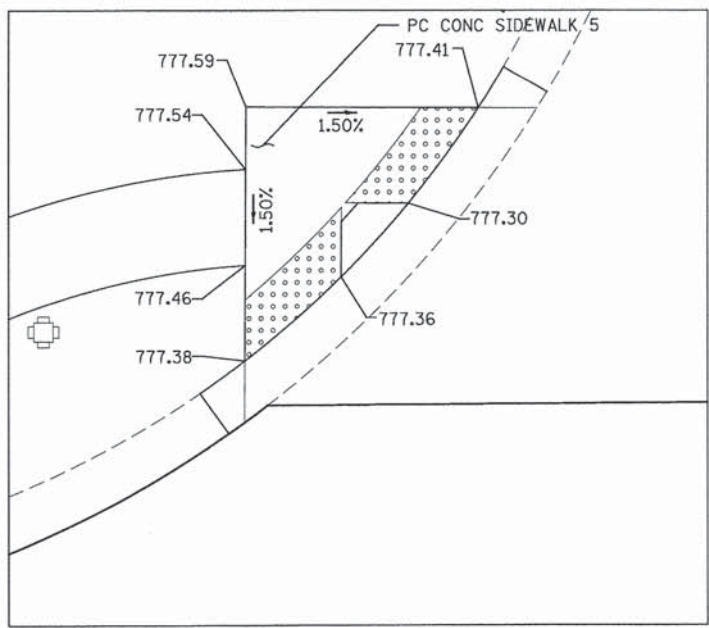
PATRICK ENGINEERING 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen@dwg.Lisle	DESIGNED - ZMZ	REVISED -
	PLOT CONFIG = PDF(Grey_Small).plt	DRAWN - ZMZ	REVISED -
	PLOT SCALE = 1:10	CHECKED - MJP	REVISED -
	PLOT DATE = 7/3/2014 5:44:56 AM	DATE - 6/30/2014	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

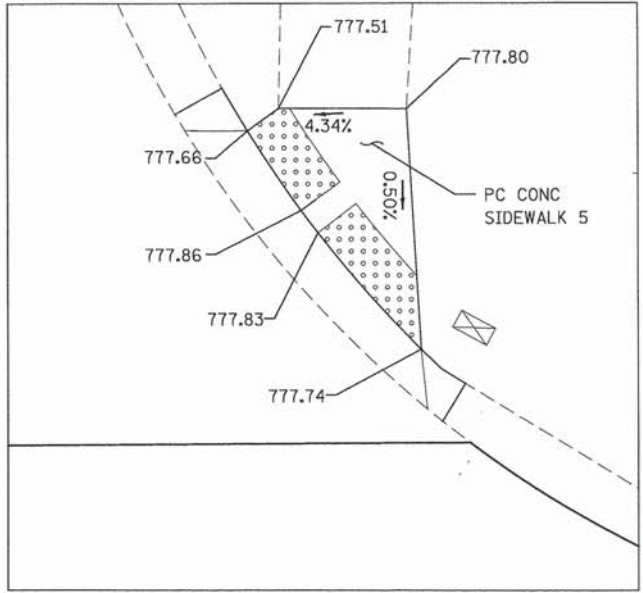
**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
SIDEWALK CURB RAMP DETAILS**

SCALE: 1"=5' SHEET NO. SW 1 OF 2 STA. TO STA.

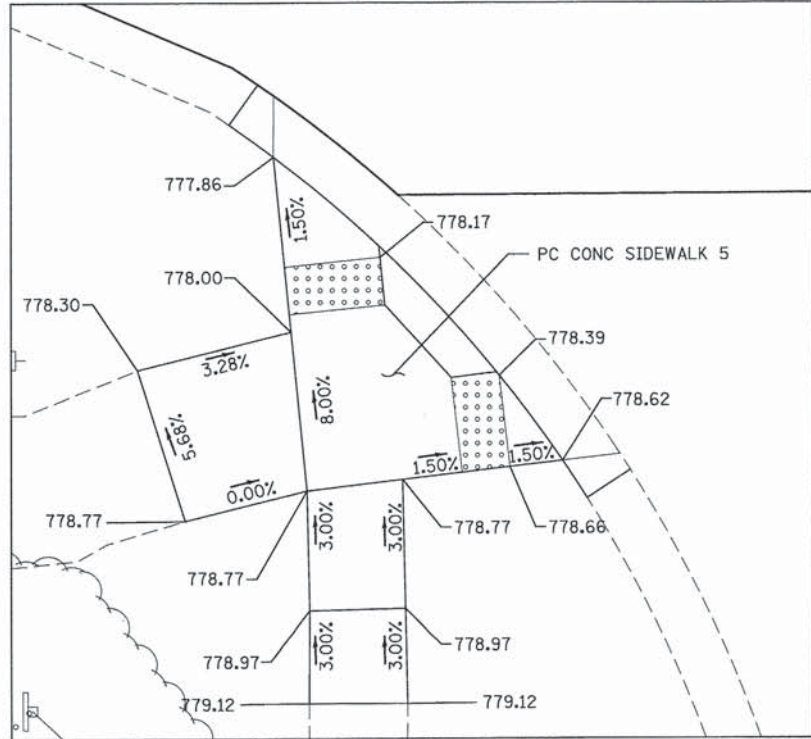
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	179
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			61A63	



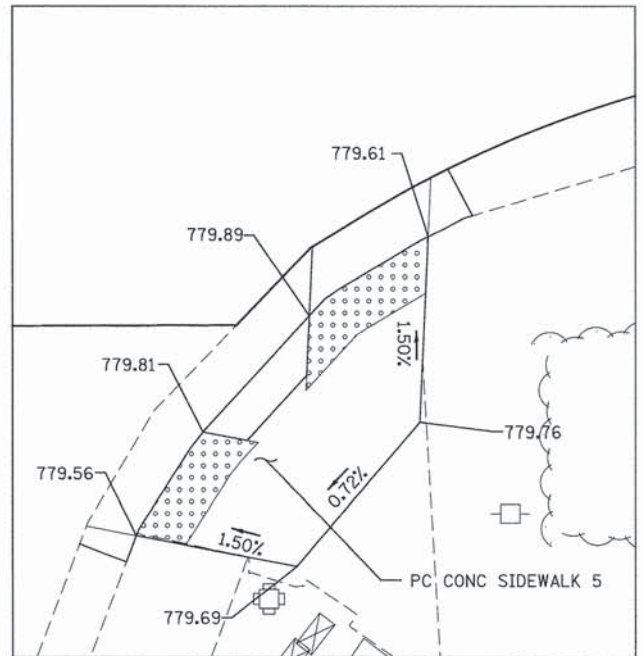
NW CORNER WASHINGTON @ LAKE



NE CORNER WASHINGTON @ LAKE



SW CORNER WASHINGTON @ LAKE



SE CORNER WASHINGTON @ LAKE

REVTABLE = ...LISLE\REVTABLE\TRANSPEN.TBL

PATRICK ENGINEERING
 PATRICK ENGINEERING INC.
 4970 VARSITY DRIVE
 LISLE, IL 60532
 patrickengineering.com

USER NAME = mpineV8i(Rdwy.Lisla)
 PLOT CONFIG = PDF(Grey, Large).plt
 PLOT SCALE = 1/5
 PLOT DATE = 7/17/2014 9:00:52 AM

DESIGNED - ZMZ
 DRAWN - ZMZ
 CHECKED - MJP
 DATE - 6/30/2014

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 SIDEWALK CURB RAMP DETAILS**

SCALE: 1"=5' SHEET NO. SW 2 OF 2 STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	180
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			61A63	

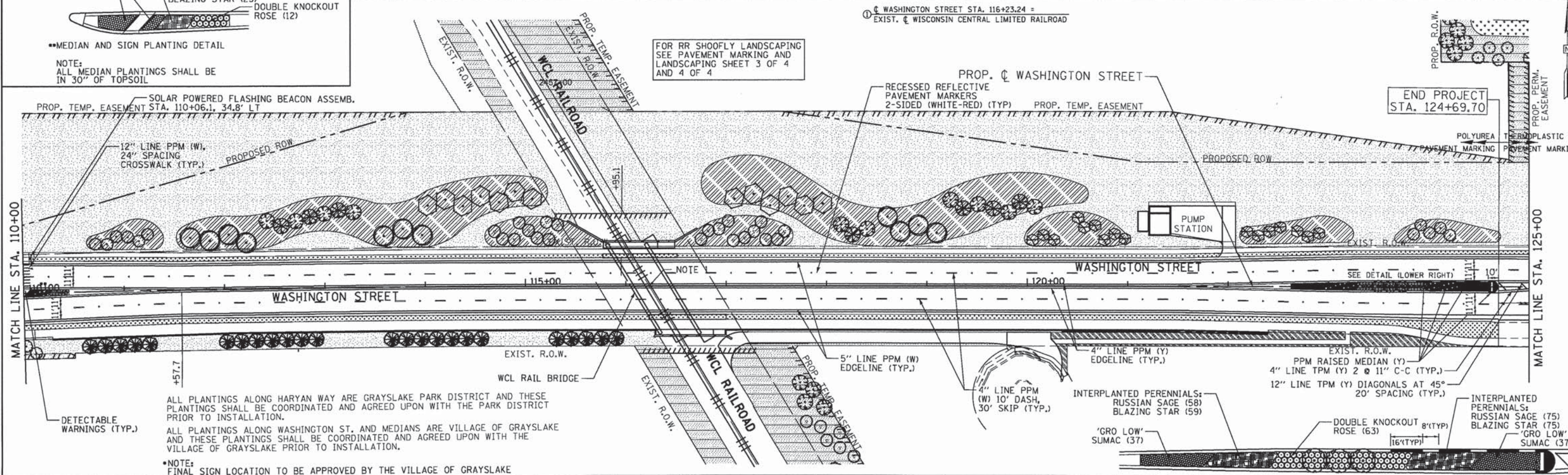
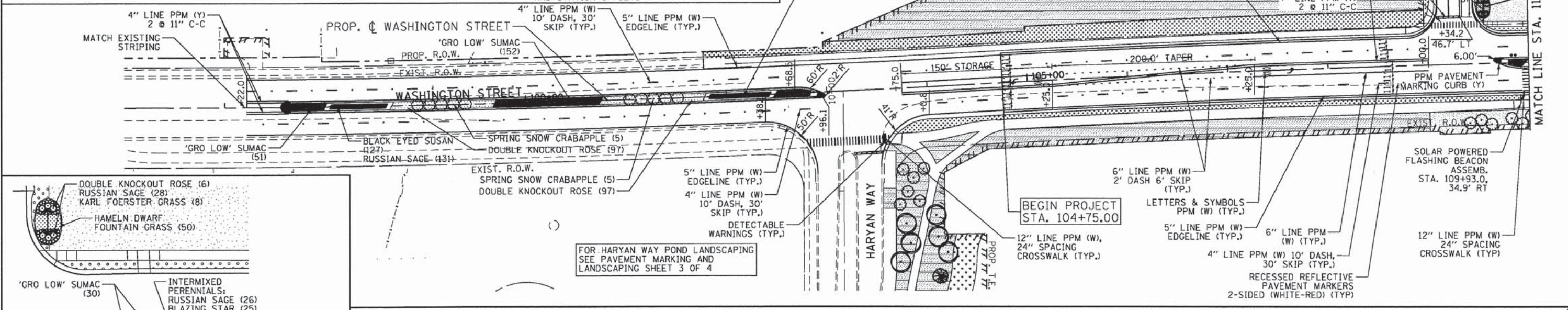
LEGEND

PPM = POLYUREA PAVEMENT MARKING
 TPM = THERMOPLASTIC PAVEMENT MARKING

- [Pattern] = SEEDING, CLASS 4A (MODIFIED) LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
- [Pattern] = SEEDING, CLASS 4B WETLAND GRASS AND SEDGE MIXTURE TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
- [Pattern] = SEEDING, CL 1B LOW MAINTENANCE LAWN MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
- [Pattern] = SEEDING, CLASS 2A ROADSIDE MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
- [Pattern] = SEEDING, CLASS 4A LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET

- [Symbol] = SEEDING, CLASS 4A (MODIFIED) LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
- [Symbol] = SEEDING, CLASS 4B WETLAND GRASS AND SEDGE MIXTURE TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
- [Symbol] = SEEDING, CL 1B LOW MAINTENANCE LAWN MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
- [Symbol] = SEEDING, CLASS 2A ROADSIDE MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
- [Symbol] = SEEDING, CLASS 4A LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET

- [Symbol] = PROPOSED SNOWDRIFT CRABAPPLE TREE, 7 FT. (20' MIN. SPACING)
- [Symbol] = PROPOSED SPRING SNOW CRABAPPLE TREE, 2" MIN. (15' MIN. SPACING)
- [Symbol] = PROPOSED NORWAY SPRUCE TREE, 8 FT. (15' MIN. SPACING)
- [Symbol] = PROPOSED WHITE PINE TREE, 8 FT. (20' MIN. SPACING)
- [Symbol] = PROPOSED WHITE PINE TREE, 10 FT. (20' MIN. SPACING)
- [Symbol] = PROPOSED FRONTIER ELM, 3" (15' MIN. SPACING)
- [Symbol] = PROPOSED SHRUB
- [Symbol] = PROPOSED BUR OAK TREE, 2.5" MIN. (20' MIN. SPACING)
- [Symbol] = PROPOSED RED OAK TREE, 2.5" MIN. (20' MIN. SPACING)
- [Symbol] = PROPOSED WINTER KING GREEN HAWTHORN TREE, 2.5" MIN. (15' MIN. SPACING)



Bollinger, Lach & Associates, Inc.
 ITCASCA, ILLINOIS

USER NAME = #USER#	DESIGNED - AL	REVISED -
PLOT CONFID = #PLTDRVS#	DRAWN - AL	REVISED -
PLOT SCALE = #SCALESHT#	CHECKED - EO	REVISED -
PLOT DATE = 7/16/2014 12:33:36 PM	DATE - 06-30-2014	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

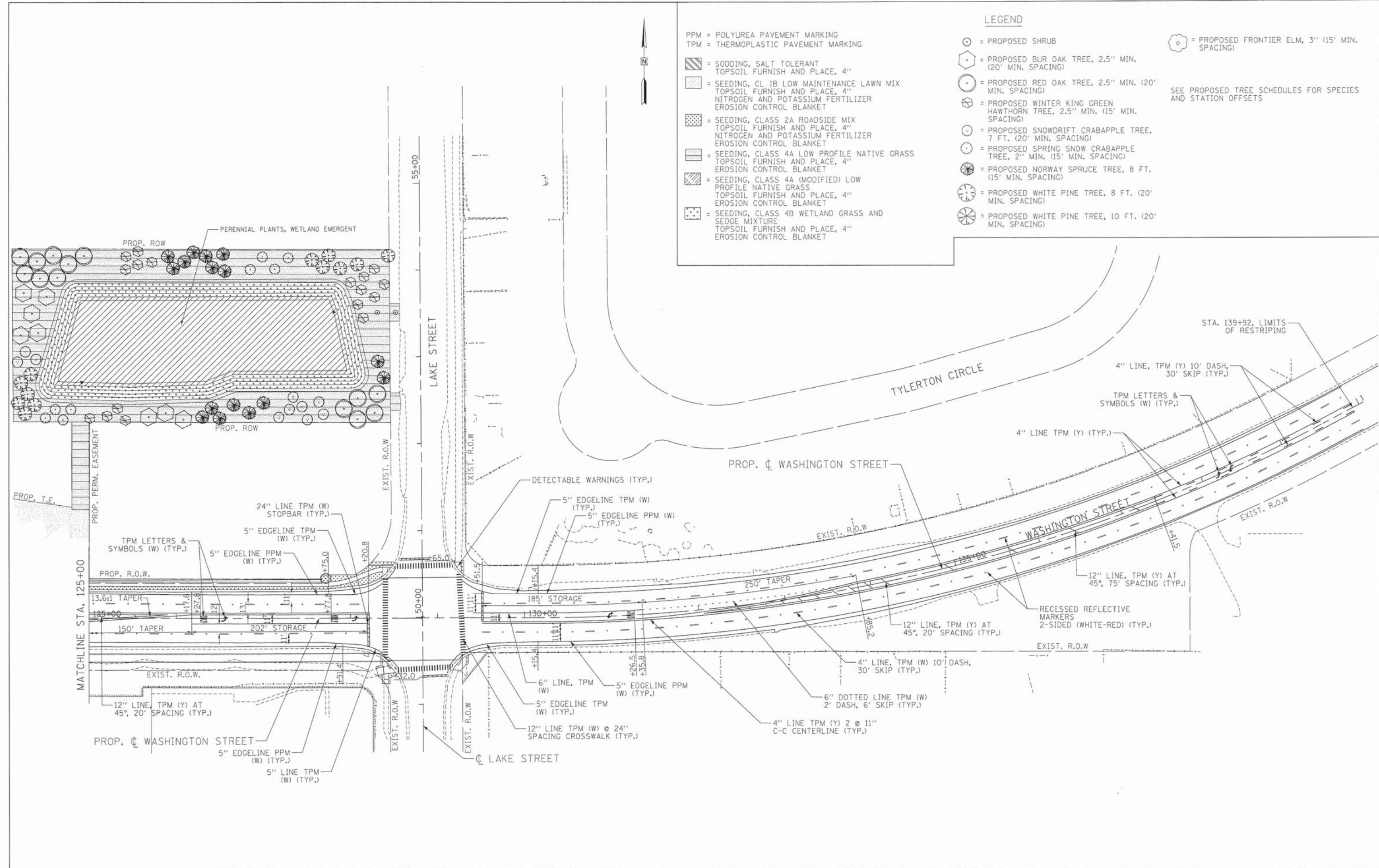
WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PAVEMENT MARKING AND LANDSCAPE PLAN

SCALE: 1"=50' SHEET NO. PMK 1 OF 4 STA. 98+55 TO STA. 125+00

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 181
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

- PPM = POLYUREA PAVEMENT MARKING
 TPM = THERMOPLASTIC PAVEMENT MARKING
- [Hatched Box] = SODDING, SALT TOLERANT TOPSOIL FURNISH AND PLACE, 4"
 - [Dotted Box] = SEEDING, CL 1B LOW MAINTENANCE LAWN MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
 - [Cross-hatched Box] = SEEDING, CLASS 2A ROADSIDE MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
 - [Horizontal Line Box] = SEEDING, CLASS 4A LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
 - [Vertical Line Box] = SEEDING, CLASS 4A (MODIFIED) LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
 - [Stippled Box] = SEEDING, CLASS 4B WETLAND GRASS AND SEDGE MIXTURE TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET

- LEGEND**
- [Circle with dot] = PROPOSED SHRUB
 - [Hexagon] = PROPOSED BUR OAK TREE, 2.5" MIN. (20' MIN. SPACING)
 - [Circle with cross] = PROPOSED RED OAK TREE, 2.5" MIN. (20' MIN. SPACING)
 - [Circle with triangle] = PROPOSED WINTER KING GREEN HAWTHORN TREE, 2.5" MIN. (15' MIN. SPACING)
 - [Circle with square] = PROPOSED SNOWDRIFT CRABAPPLE TREE, 7 FT. (20' MIN. SPACING)
 - [Circle with diamond] = PROPOSED SPRING SNOW CRABAPPLE TREE, 2" MIN. (15' MIN. SPACING)
 - [Circle with star] = PROPOSED NORWAY SPRUCE TREE, 8 FT. (15' MIN. SPACING)
 - [Circle with circle] = PROPOSED WHITE PINE TREE, 8 FT. (20' MIN. SPACING)
 - [Circle with cross-hatch] = PROPOSED WHITE PINE TREE, 10 FT. (20' MIN. SPACING)
- SEE PROPOSED TREE SCHEDULES FOR SPECIES AND STATION OFFSETS



Bollinger, Lach & Associates, Inc.
 ILLINOIS

USER NAME = epk	DESIGNED - AL	REVISED -
PLOT CONFIG = #PLTDV5#	DRAWN - AL	REVISED -
PLOT SCALE = #SCALE#HRT#	CHECKED - EO	REVISED -
PLOT DATE = 7/16/2014 12:33:44 PM	DATE - 06-30-2014	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**












**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 PAVEMENT MARKING AND LANDSCAPE PLAN**

SCALE: 1"=50' SHEET NO. PMK 2 OF 4 STA. 125+00 TO STA. 140+00

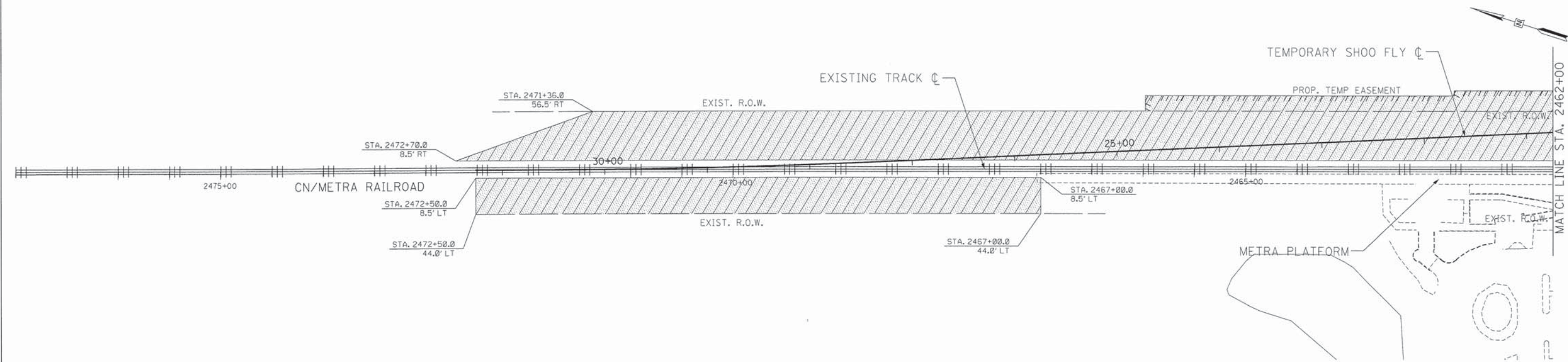
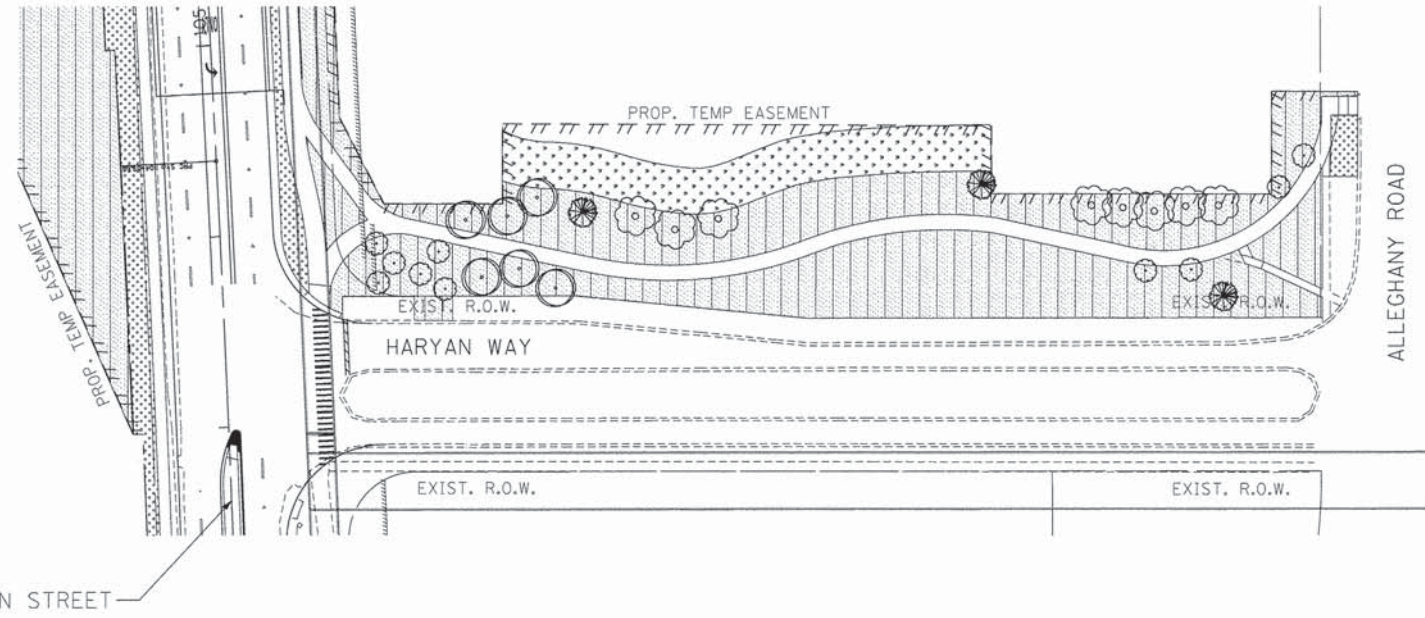
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	182
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				


LEGEND

PPM = POLYUREA PAVEMENT MARKING
 TPM = THERMOPLASTIC PAVEMENT MARKING







-  = SODDING, SALT TOLERANT TOPSOIL FURNISH AND PLACE, 4"
-  = SEEDING, CLASS 2A ROADSIDE MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
-  = SEEDING, CLASS 4A (MODIFIED) LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
-  = SEEDING, CLASS 4B WETLAND GRASS AND SEDGE MIXTURE TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
-  = PROPOSED BUR OAK TREE, 2.5" MIN. (20' MIN. SPACING)
-  = PROPOSED RED OAK TREE, 2.5" MIN. (20' MIN. SPACING)
-  = PROPOSED WINTER KING GREEN HAWTHORN TREE, 2.5" MIN. (15' MIN. SPACING)
-  = PROPOSED SNOWDRIFT CRABAPPLE TREE, 7 FT. (20' MIN. SPACING)
-  = PROPOSED SPRING SNOW CRABAPPLE TREE, 2" MIN. (15' MIN. SPACING)
-  = PROPOSED NORWAY SPRUCE TREE, 8 FT. (15' MIN. SPACING)
-  = PROPOSED WHITE PINE TREE, 8 FT. (20' MIN. SPACING)
-  = PROPOSED WHITE PINE TREE, 10 FT. (20' MIN. SPACING)
-  = PROPOSED FRONTIER ELM, 3" (15' MIN. SPACING)

SEE PROPOSED TREE SCHEDULES FOR SPECIES AND STATION OFFSETS












	USER NAME = erik	DESIGNED - AL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET PAVEMENT MARKING AND LANDSCAPE PLAN	F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 183
	PLOT CONFIG = #PLTDRVS#	DRAWN - AL	REVISED -			SCALE: 1"=50'	SHEET NO. PMK 3 OF 4	STA. 2473+00 TO STA. 2462+00	CONTRACT NO.	
	PLOT SCALE = #SCALESHORT#	CHECKED - EO	REVISED -							
	PLOT DATE = 7/16/2014 12:33:46 PM	DATE - 06-30-2014	REVISED -							

PPM = POLYUREA PAVEMENT MARKING
 TPM = THERMOPLASTIC PAVEMENT MARKING

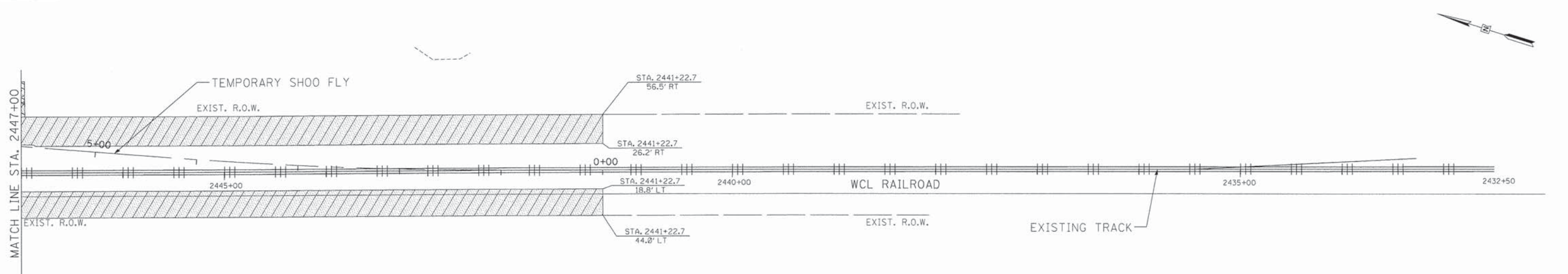
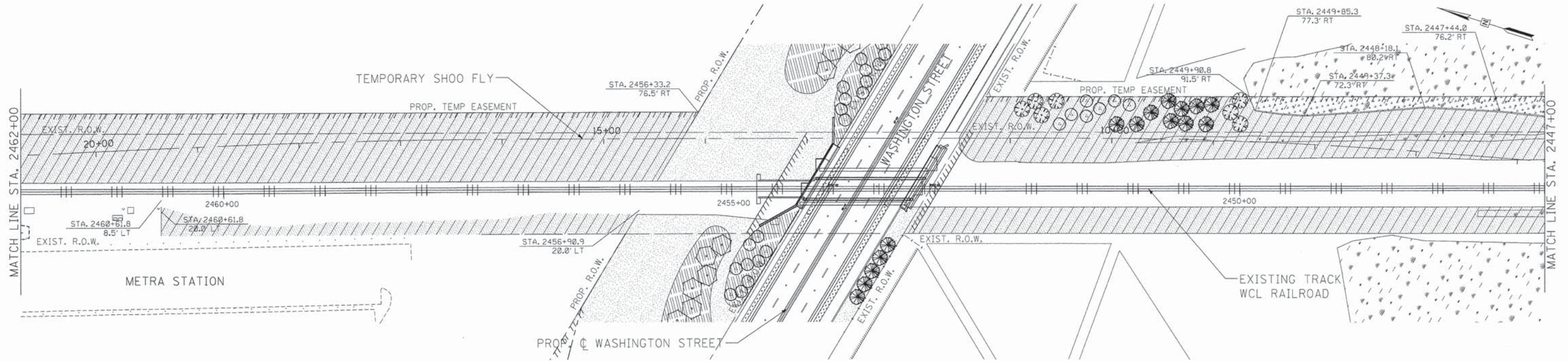
-  = SODDING, SALT TOLERANT TOPSOIL FURNISH AND PLACE, 4"
-  = SEEDING, CL 1B LOW MAINTENANCE LAWN MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
-  = SEEDING, CLASS 2A ROADSIDE MIX TOPSOIL FURNISH AND PLACE, 4" NITROGEN AND POTASSIUM FERTILIZER EROSION CONTROL BLANKET
-  = SEEDING, CLASS 4A LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
-  = SEEDING, CLASS 4A (MODIFIED) LOW PROFILE NATIVE GRASS TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET
-  = SEEDING, CLASS 4B WETLAND GRASS AND SEDGE MIXTURE TOPSOIL FURNISH AND PLACE, 4" EROSION CONTROL BLANKET

LEGEND

-  = PROPOSED SHRUB
-  = PROPOSED BUR OAK TREE, 2.5" MIN. (20' MIN. SPACING)
-  = PROPOSED RED OAK TREE, 2.5" MIN. (20' MIN. SPACING)
-  = PROPOSED WINTER KING GREEN HAWTHORN TREE, 2.5" MIN. (15' MIN. SPACING)
-  = PROPOSED SNOWDRIFT CRABAPPLE TREE, 7 FT. (20' MIN. SPACING)
-  = PROPOSED SPRING SNOW CRABAPPLE TREE, 2" MIN. (15' MIN. SPACING)
-  = PROPOSED NORWAY SPRUCE TREE, 8 FT. (15' MIN. SPACING)
-  = PROPOSED WHITE PINE TREE, 8 FT. (20' MIN. SPACING)
-  = PROPOSED WHITE PINE TREE, 10 FT. (20' MIN. SPACING)

 = PROPOSED FRONTIER ELM, 3" (15' MIN. SPACING)

SEE PROPOSED TREE SCHEDULES FOR SPECIES AND STATION OFFSETS



Bollinger, Lach & Associates, Inc.
 ILLINOIS

USER NAME = erik	DESIGNED - AL	REVISED -
PLOT CONFIG = #PLTDIVS#	DRAWN - AL	REVISED -
PLOT SCALE = #SCALESHORT#	CHECKED - EO	REVISED -
PLOT DATE = 7/16/2014 12:33:52 PM	DATE - 06-30-2014	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
 PAVEMENT MARKING AND LANDSCAPE PLAN**

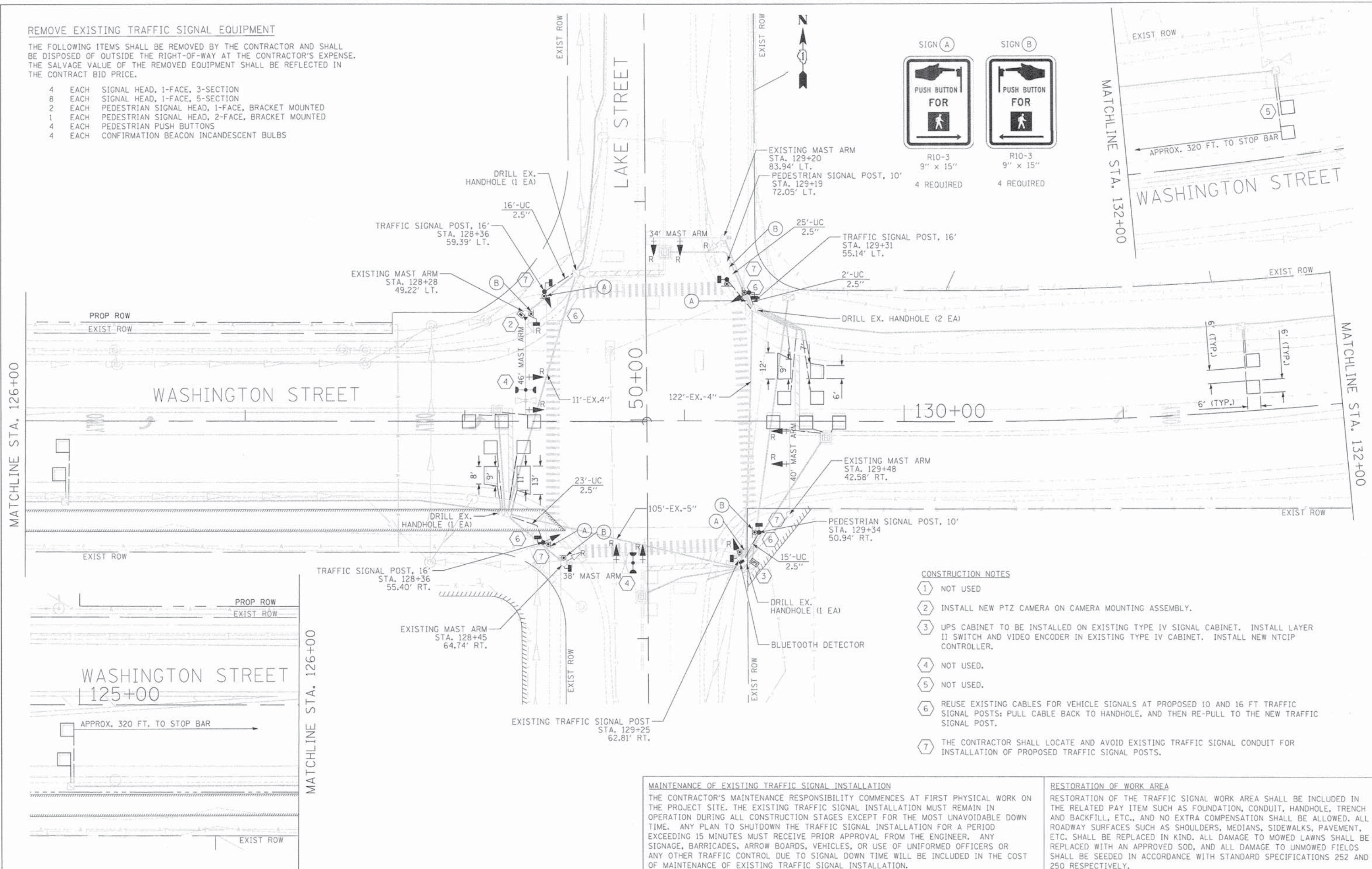
SCALE: 1"=50' SHEET NO. PMK 4 OF 4 STA. 2462+00 TO STA. 2432+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	184
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 8 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED
- 4 EACH PEDESTRIAN PUSH BUTTONS
- 4 EACH CONFIRMATION BEACON INCANDESCENT BULBS



CONSTRUCTION NOTES

- ① NOT USED
- ② INSTALL NEW PTZ CAMERA ON CAMERA MOUNTING ASSEMBLY.
- ③ UPS CABINET TO BE INSTALLED ON EXISTING TYPE IV SIGNAL CABINET. INSTALL LAYER II SWITCH AND VIDEO ENCODER IN EXISTING TYPE IV CABINET. INSTALL NEW NTCIP CONTROLLER.
- ④ NOT USED.
- ⑤ NOT USED.
- ⑥ REUSE EXISTING CABLES FOR VEHICLE SIGNALS AT PROPOSED 10 AND 16 FT TRAFFIC SIGNAL POSTS; PULL CABLE BACK TO HANDHOLE, AND THEN RE-PULL TO THE NEW TRAFFIC SIGNAL POST.
- ⑦ THE CONTRACTOR SHALL LOCATE AND AVOID EXISTING TRAFFIC SIGNAL CONDUIT FOR INSTALLATION OF PROPOSED TRAFFIC SIGNAL POSTS.

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

THE CONTRACTOR'S MAINTENANCE RESPONSIBILITY COMMENCES AT FIRST PHYSICAL WORK ON THE PROJECT SITE. THE EXISTING TRAFFIC SIGNAL INSTALLATION MUST REMAIN IN OPERATION DURING ALL CONSTRUCTION STAGES EXCEPT FOR THE MOST UNAVOIDABLE DOWN TIME. ANY PLAN TO SHUTDOWN THE TRAFFIC SIGNAL INSTALLATION FOR A PERIOD EXCEEDING 15 MINUTES MUST RECEIVE PRIOR APPROVAL FROM THE ENGINEER. ANY SIGNAGE, BARRICADES, ARROW BOARDS, VEHICLES, OR USE OF UNIFORMED OFFICERS OR ANY OTHER TRAFFIC CONTROL DUE TO SIGNAL DOWN TIME WILL BE INCLUDED IN THE COST OF MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN 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 UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

<p>Bollinger, Lach & Associates, Inc. ITASCA, ILLINOIS</p>	USER NAME = #USER#	DESIGNED - AL	REVISED -
	PLOT CONFIG = #PLTDRVS#	DRAWN - AL	REVISED -
	PLOT SCALE = #SCALESHORT#	CHECKED - EO	REVISED -
	PLOT DATE = #DATE#	DATE - 06-30-2014	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
PROPOSED TRAFFIC SIGNAL PLAN**

SCALE: 1"=20' SHEET NO. SGL 1 OF 15 WASHINGTON ST AT LAKE ST

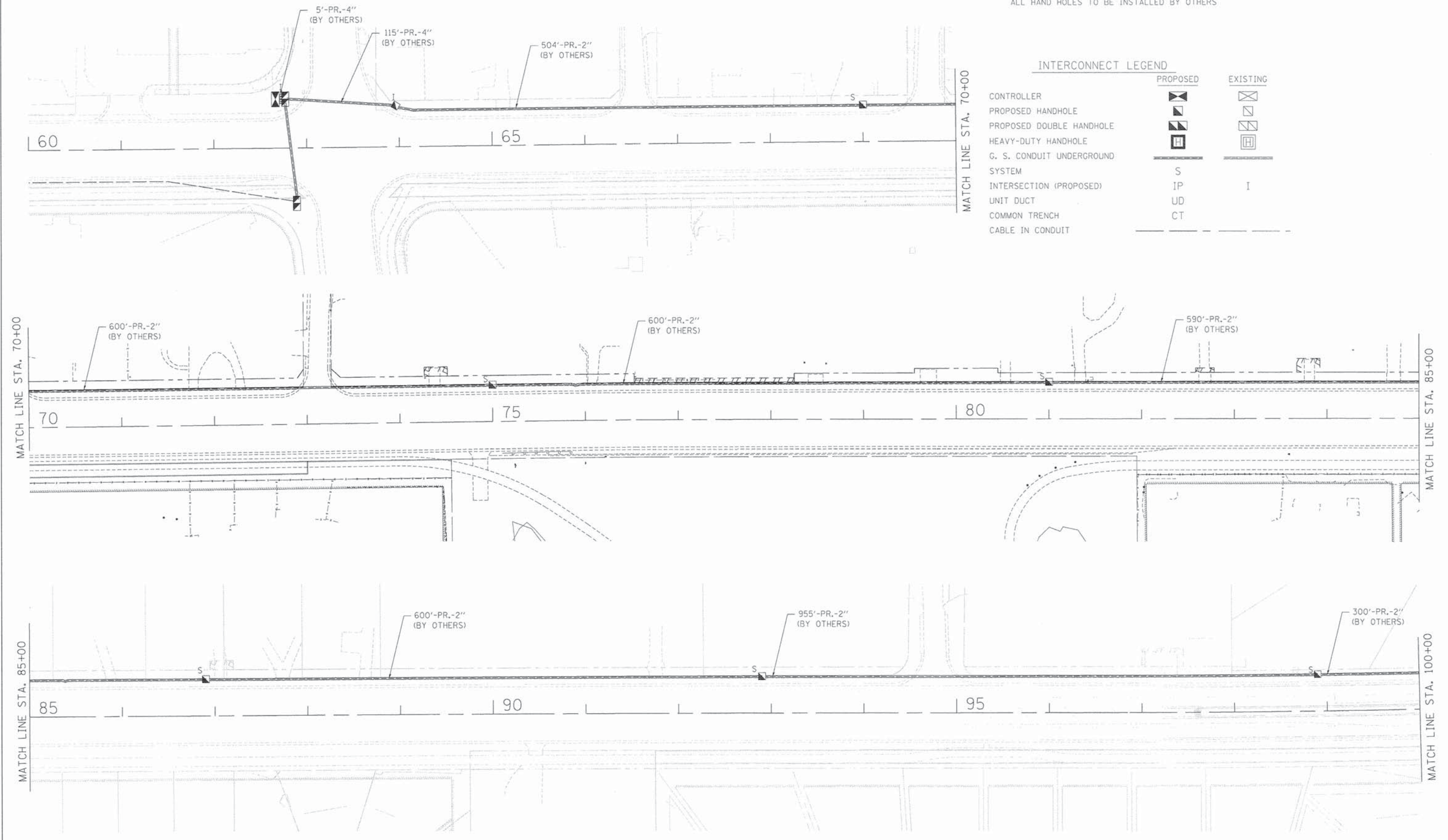
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	11-00121-11-BR	LAKE	496	185
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO.				

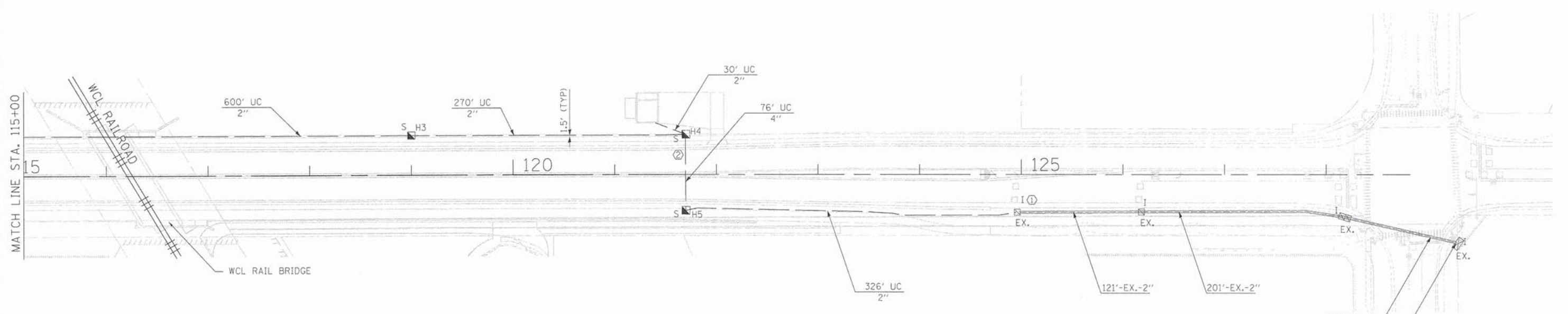
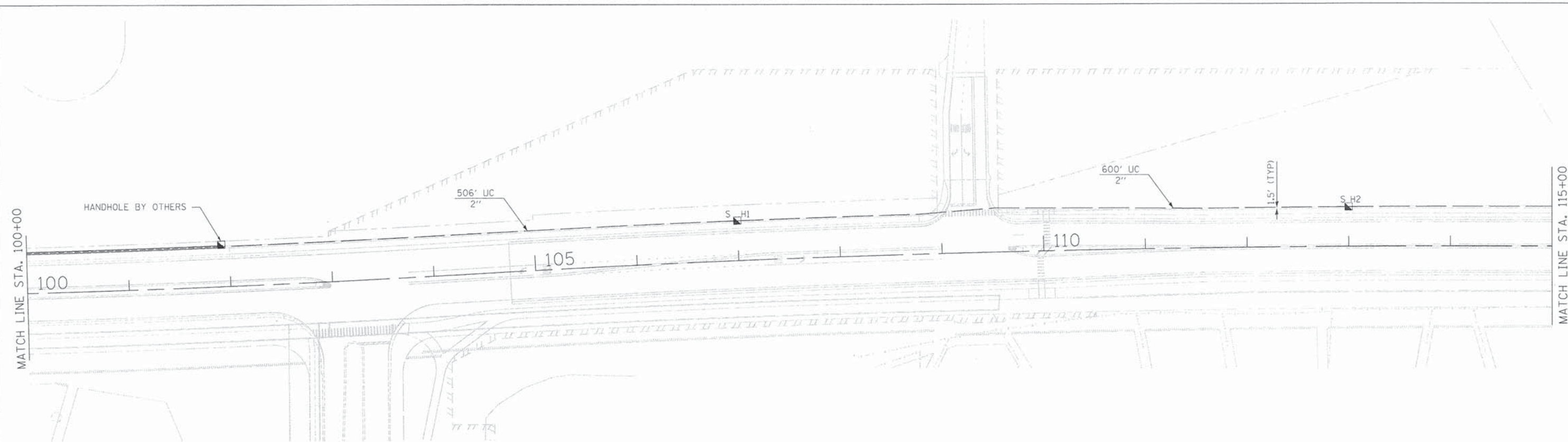
NOTES

PULL CABLE THROUGH CONDUIT INSTALLED BY OTHERS
 ALL HAND HOLES TO BE INSTALLED BY OTHERS

INTERCONNECT LEGEND

	PROPOSED	EXISTING
CONTROLLER		
PROPOSED HANDHOLE		
PROPOSED DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G. S. CONDUIT UNDERGROUND SYSTEM	S	I
INTERSECTION (PROPOSED)	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	
CABLE IN CONDUIT	---	





INTERCONNECT LEGEND

	PROPOSED	EXISTING
CONTROLLER		
PROPOSED HANDHOLE		
PROPOSED DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE		
G. S. CONDUIT UNDERGROUND SYSTEM	S	I
INTERSECTION (PROPOSED)	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	
CABLE IN CONDUIT	---	

NOTES

- ① DRILL EXISTING HANDHOLE (1 EA)
- ② INSTALL CONDUIT UNDER PIPE DRAINS

ITEM	STATIONING	OFFSET
H1	107+00	39' LT.
H2	113+00	39' LT.
H3	119+00	39' LT.
H4	121+70	39' LT.
H5	121+70	36' RT.

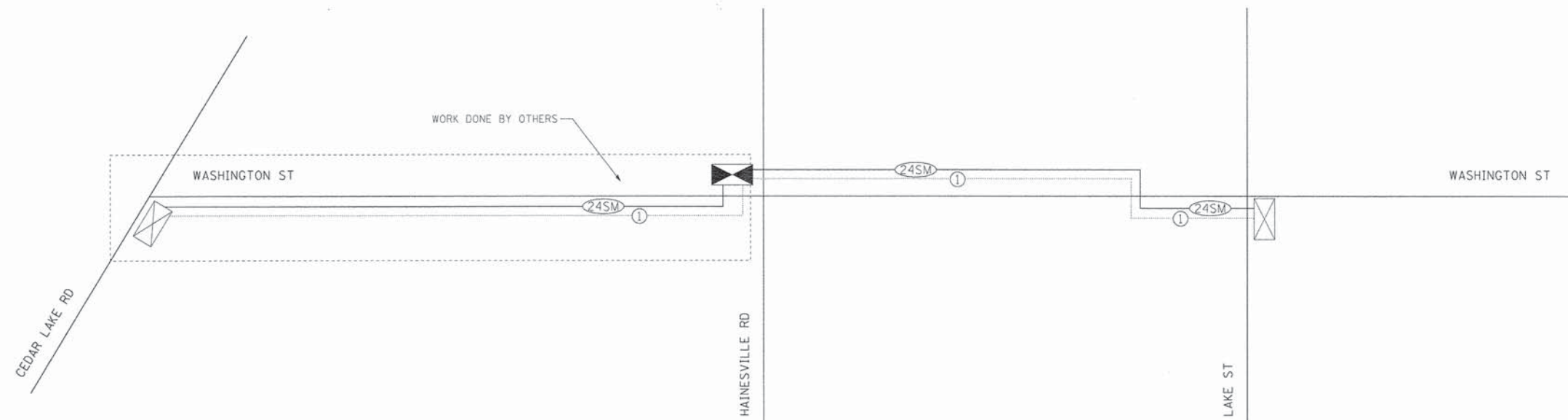
	USER NAME = #USER#	DESIGNED - AL	REVISED -
	PLOT CONFIG = #PLTDV#	DRAWN - AL	REVISED -
	PLOT SCALE = #SCALESHORT#	CHECKED - EO	REVISED -
	PLOT DATE = #DATE#	DATE - 06-30-2014	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



















**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
INTERCONNECT PLAN**

SCALE: 1"=50' SHEET NO. SGL. 4 OF 15 STA. 104+00 TO STA. 130+00

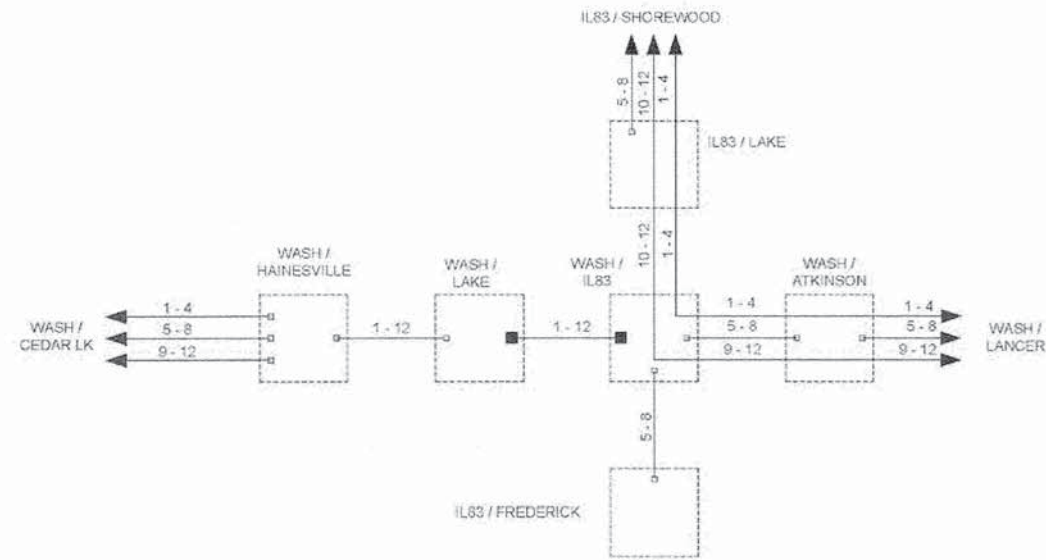
F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 188
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



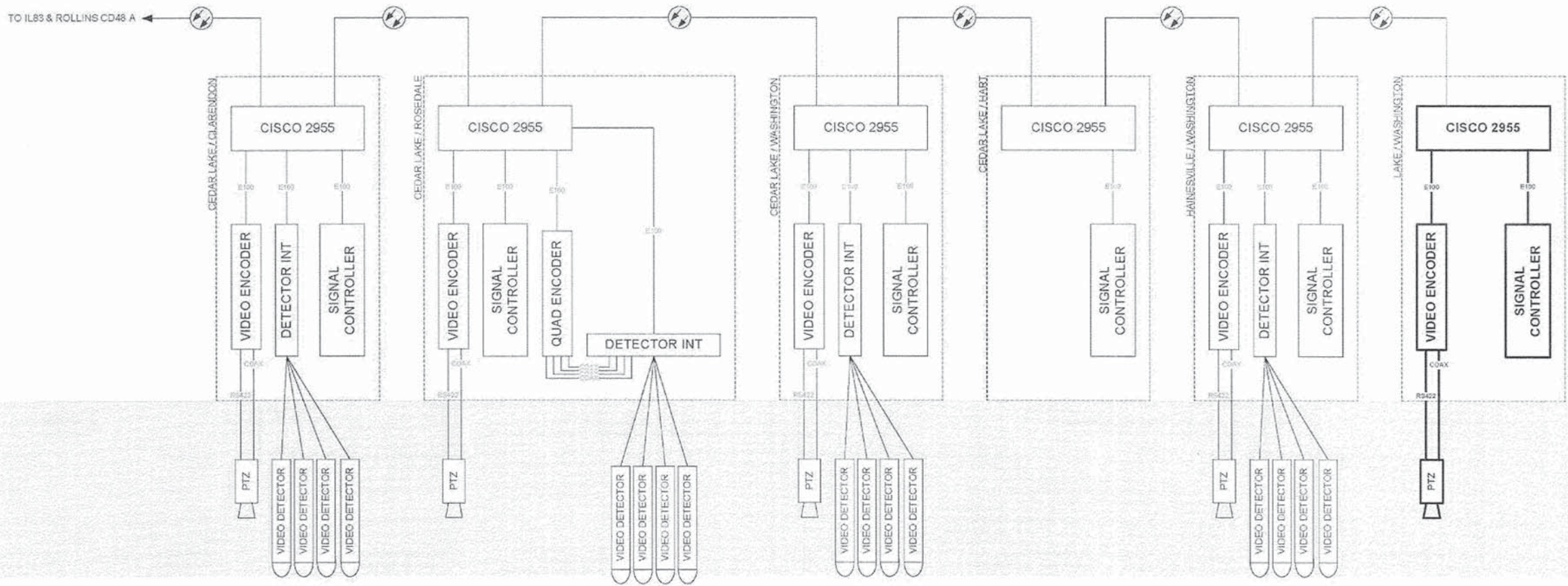
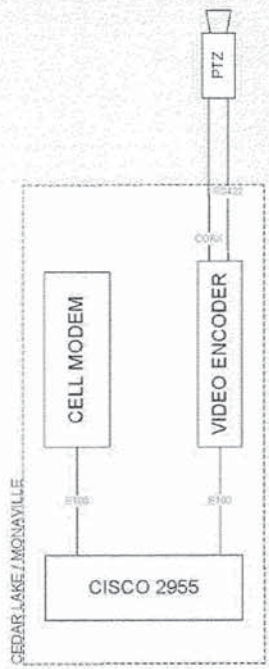
INTERCONNECT SCHEMATIC LEGEND

-  INTERSECTION CONTROLLER
-  VIDEO COMMUNICATIONS CABINET
-  EXISTING INTERSECTION CONTROLLER
-  MASTER CONTROLLER
-  EXISTING MASTER CONTROLLER
-  PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTOR
-  SAMPLING (SYSTEM) DETECTOR
-  PROPOSED INTERCONNECT CABLE NO. 62.5/125 24F MULTIMODE AND 12F SINGLE MODE
-  PROPOSED INTERCONNECT CABLE NO. 62.5/125 12F MULTIMODE AND 12F SINGLE MODE
-  EXISTING INTERCONNECT CABLE NO. 62.5/125 12C FIBER OPTIC CABLE
-  PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
-  EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
-  PROPOSED TRACER CABLE NO. 14 1/C
-  EXISTING TRACER CABLE NO. 14 1/C
-  EXISTING TELEPHONE CONNECTION
-  PROPOSED TELEPHONE CONNECTION
-  PROPOSED ISDN CONNECTION
-  PROPOSED FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2,332
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	76
HANDHOLE	EACH	5
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	8,564
DRILL EXISTING HANDHOLE	EACH	1
FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	8,564



	DESIGNED - DG	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	FIBER SPLICING DIAGRAM WASHINGTON - HARYAN to IL83		ROUTE	SECTION	ROUTE	SECTION	SHEET	SHEETS
	DRAWN - YM	REVISED -		SCALE: N/A							
	CHECKED - DG	REVISED -									
	DATE 04/18/2014	REVISED -									



DESIGNED - DG	REvised -	LAKE COUNTY DIVISION OF TRANSPORTATION	CABINET DETAIL WASHINGTON - HARYAN to IL83		ROUTE	SECTION	ROUTE	SECTION	SHEET	SHEETS
DRAWN - YM	REvised -		SCALE: N/A							
CHECKED - DG	REvised -									
DATE 04/16/2014	REvised -									

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
GUY WIRE				ABANDON ITEM				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				QUEUE DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				PREFORMED QUEUE DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE							
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT							
DETECTOR LOOP, TYPE I				RADIO REPEATER							
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED							
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

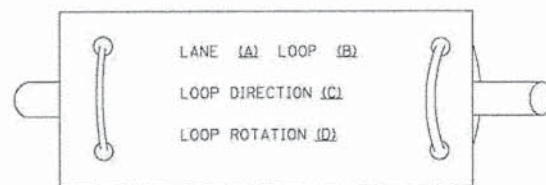
RAILROAD SYMBOLS

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

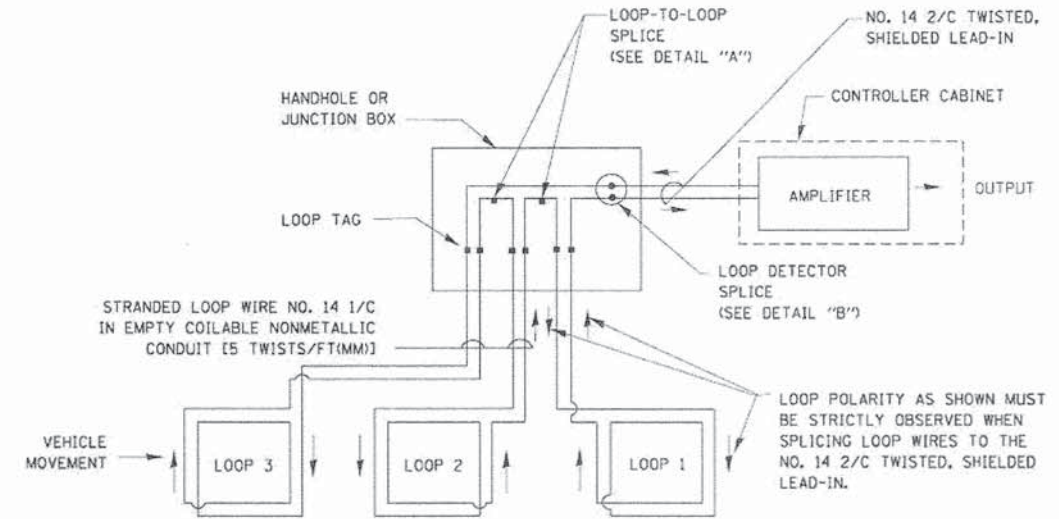
LOOP DETECTOR NOTES

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 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.
- 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.
- PERFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PERFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

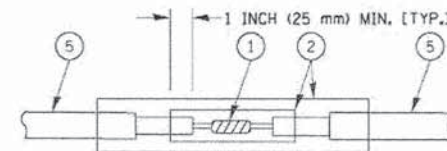


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

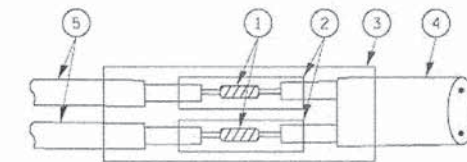


DETECTOR LOOP WIRING SCHEMATIC

- 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.

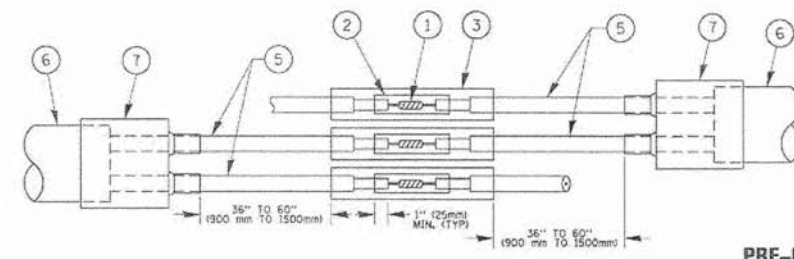


DETAIL "A"
LOOP-TO-LOOP SPLICE

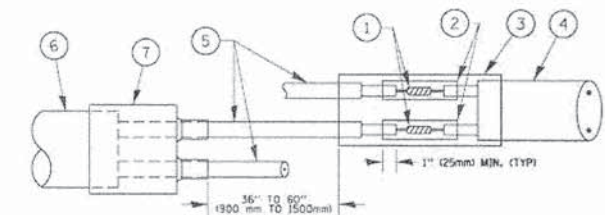


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



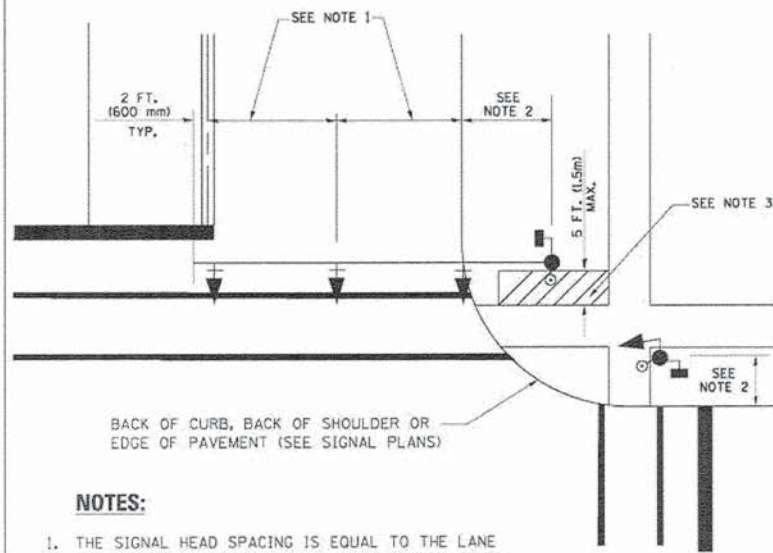
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PRE-FORMED LOOP

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

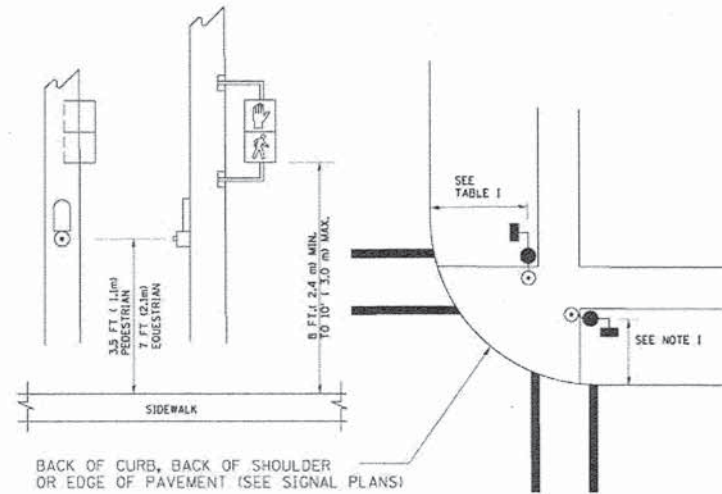
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



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."

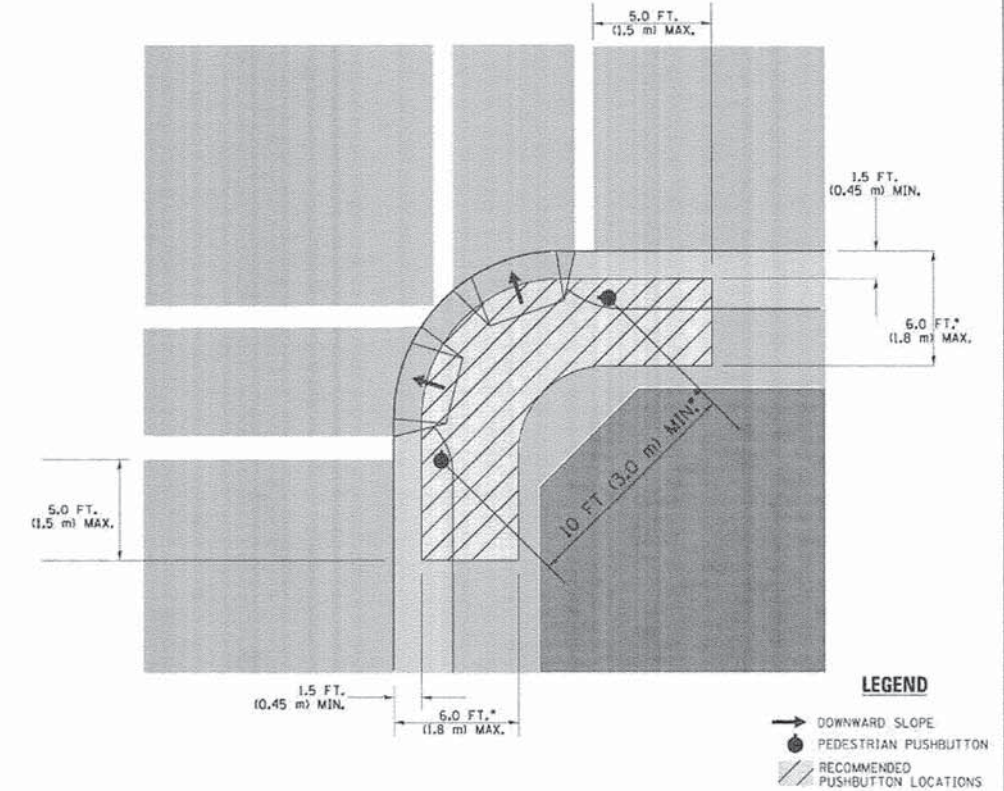
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



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:

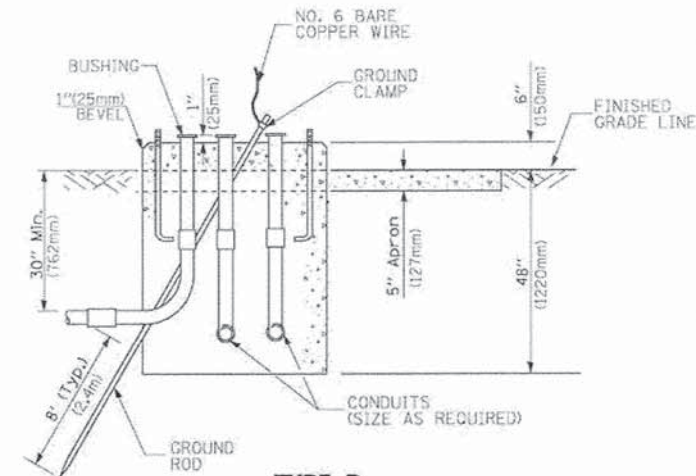
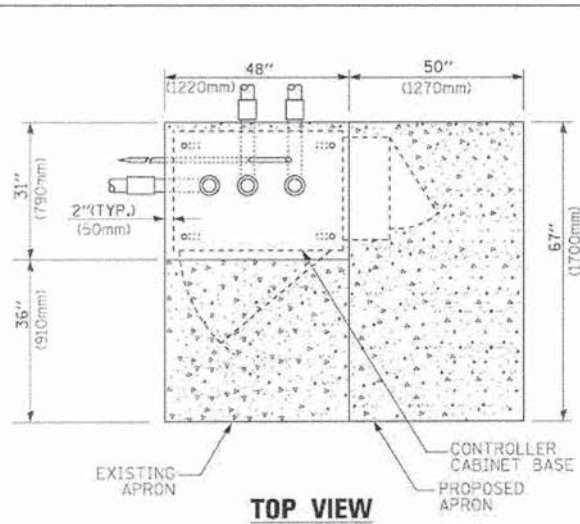
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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.



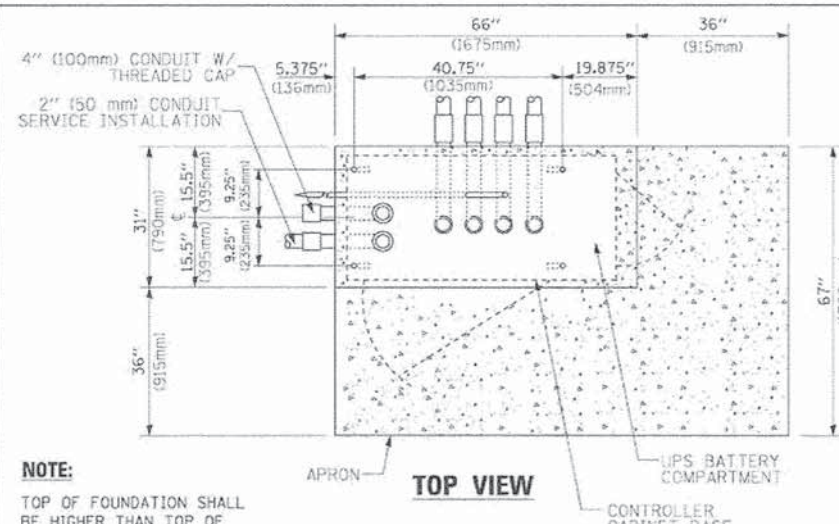
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

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

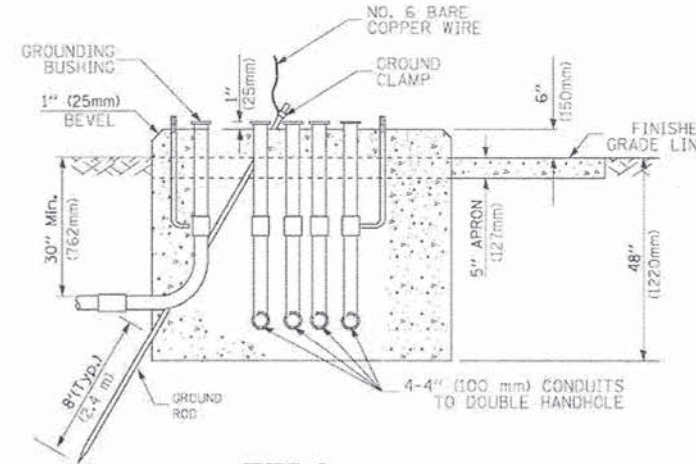
CABLE SLACK

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



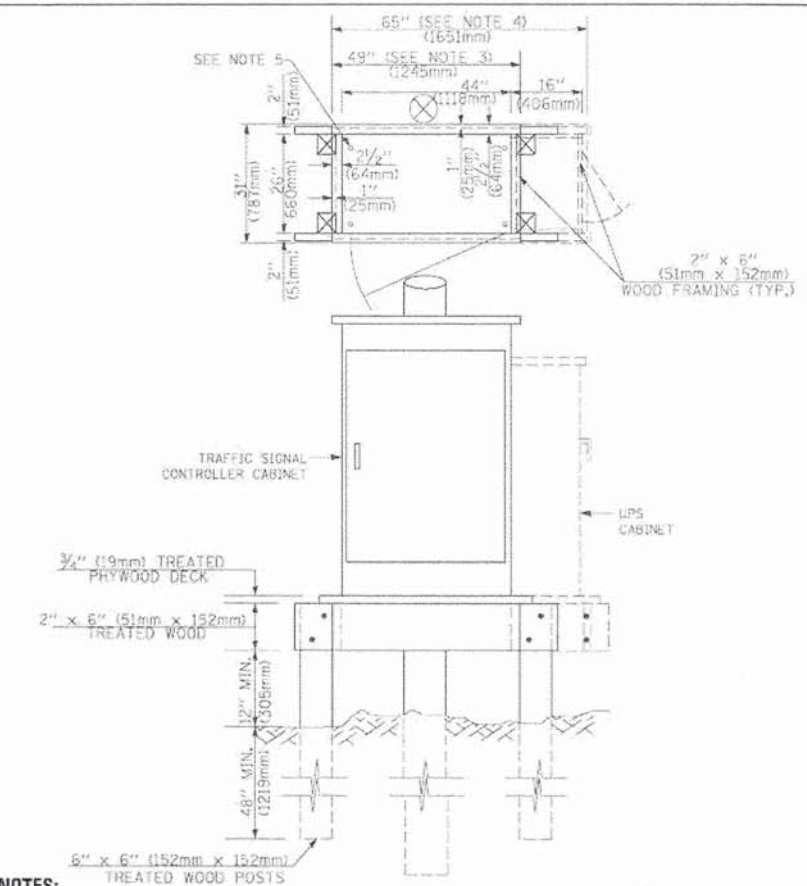
NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**

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



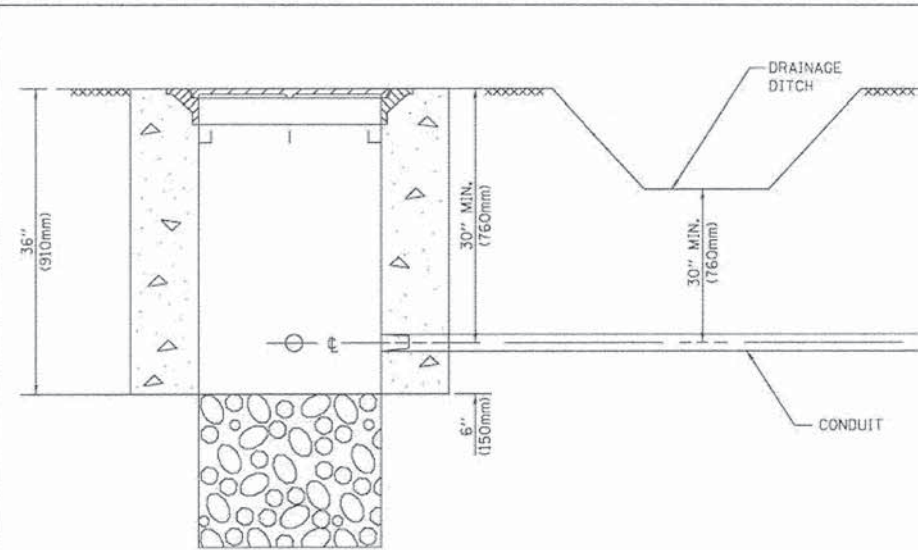
- NOTES:**
- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 - BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
 - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
 - 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.
 - FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

- NOTES:**
- 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 (UCS) > 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.
 - Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
 - Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
 - For mast arm assemblies with dual arms refer to state standard 878001.

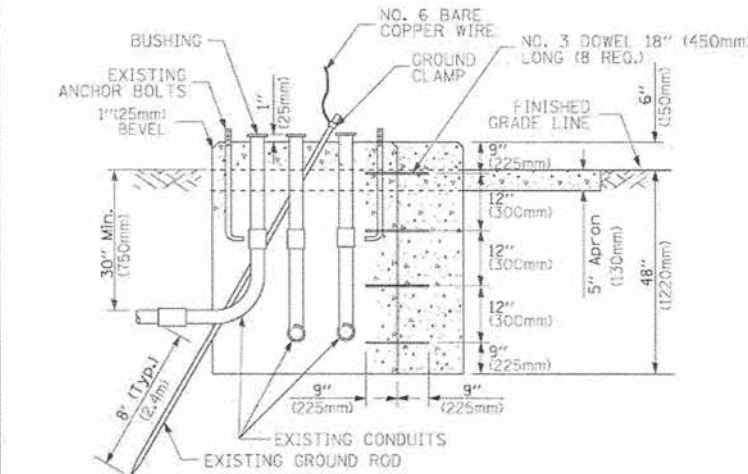
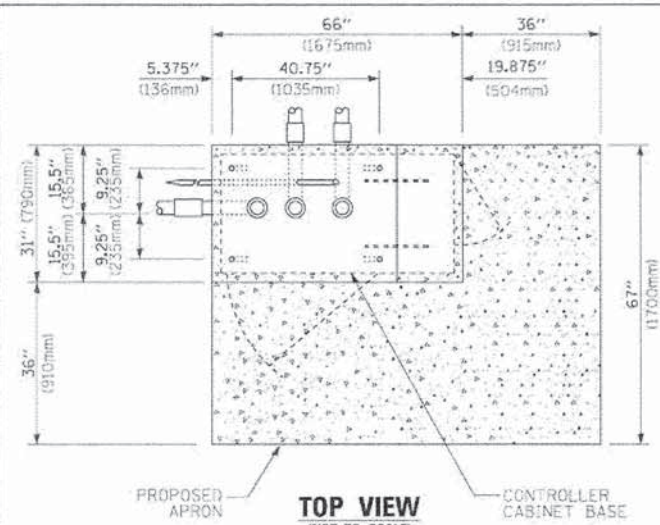
DEPTH OF MAST ARM FOUNDATIONS, TYPE E



NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)

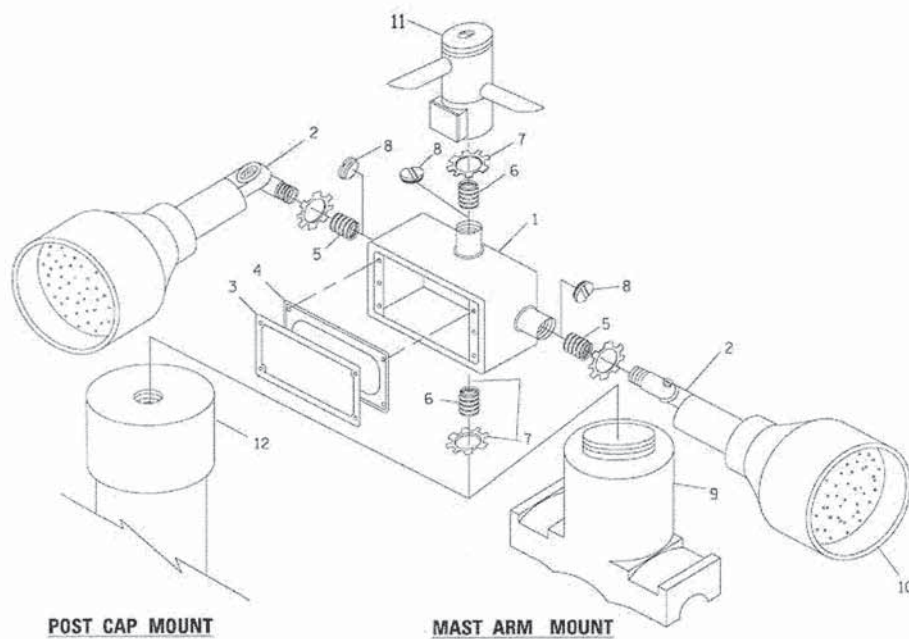


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

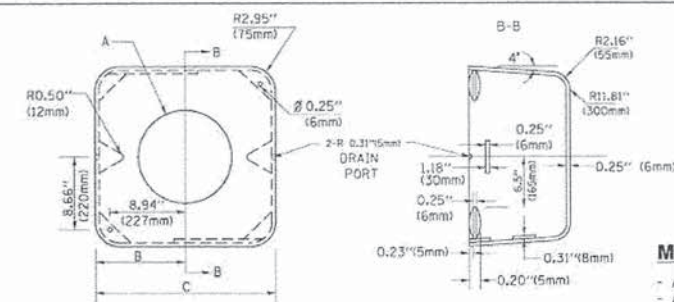
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. 10.000344 CU-IN
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
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-D-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 3/4" (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.



POST CAP MOUNT **MAST ARM MOUNT**
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



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

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

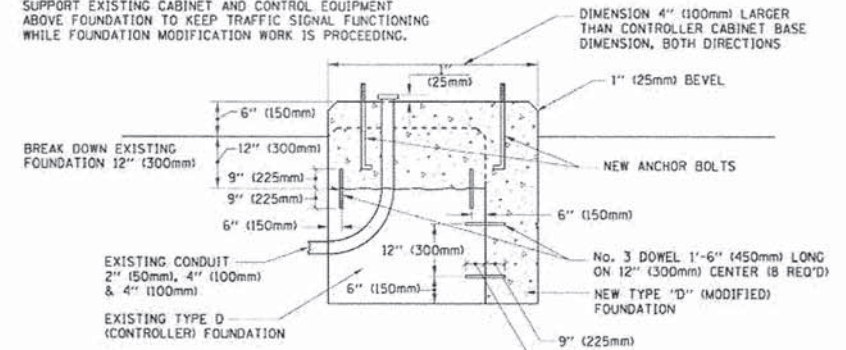
SHROUD

NOTES:

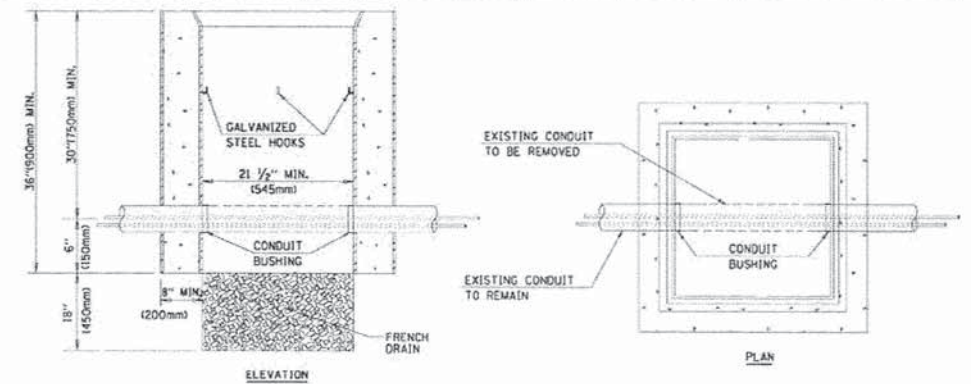
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

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



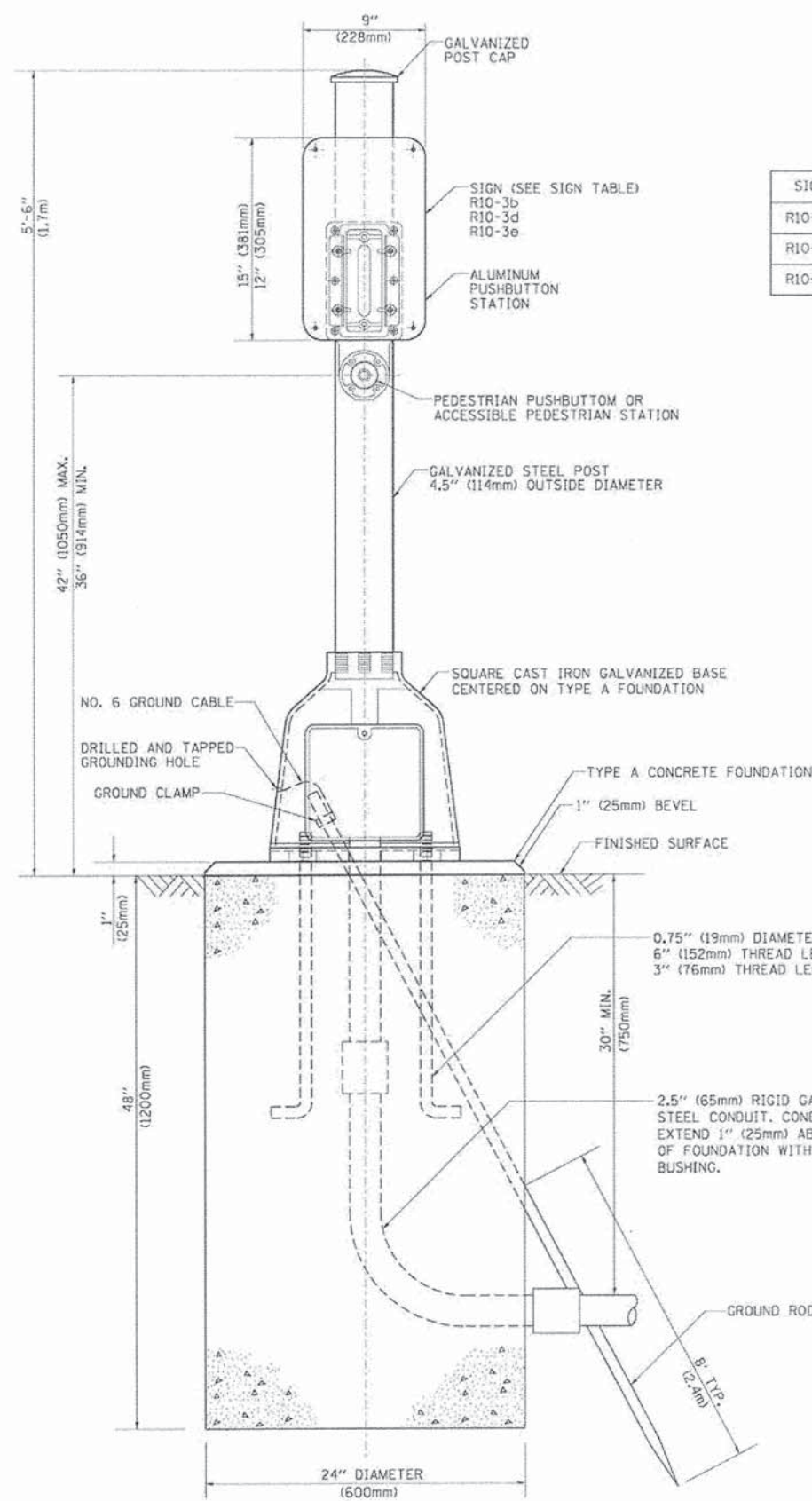
MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

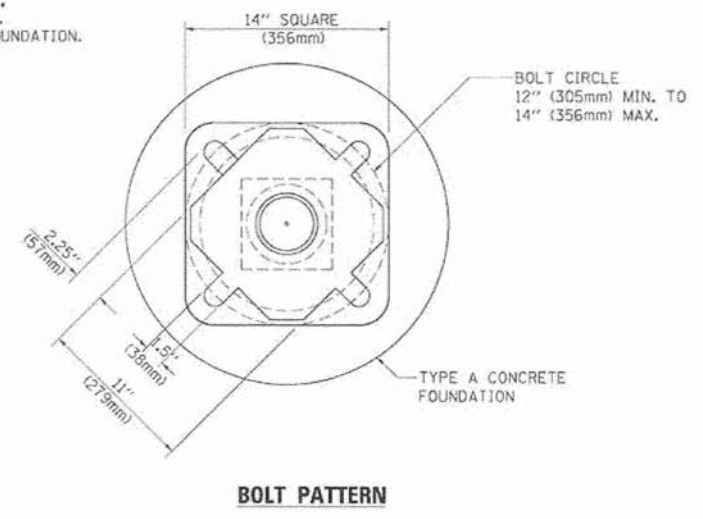
1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT



SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



PEDESTRIAN PUSH BUTTON POST, TYPE A

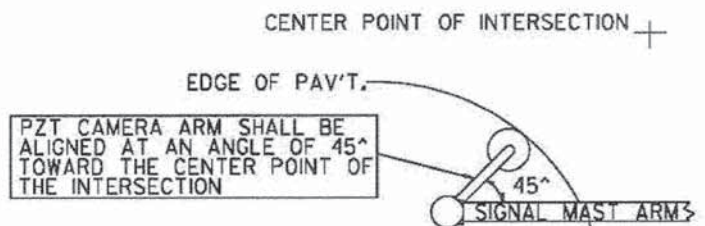
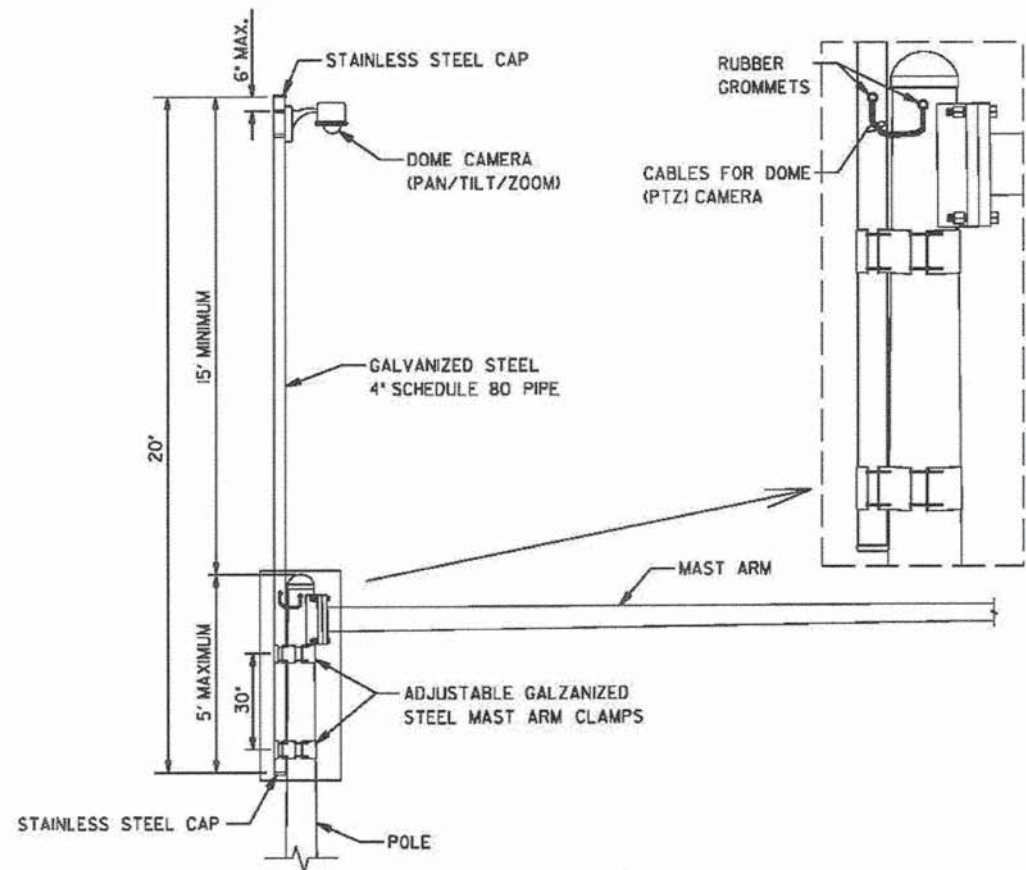


IMAGE SENSOR MOUNTING DETAILS

(NO SCALE)



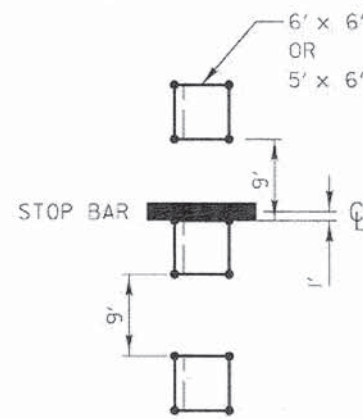
CAMERA MOUNTING ASSEMBLY DETAIL

(NOT TO SCALE)

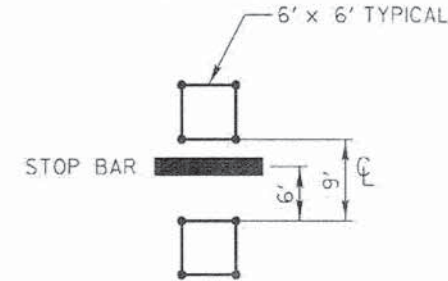
REVISIONS	DATE	APPROVED BY: A. KHAWAJA	LC8900
Mounting Details Revised	05/01/08	DATE: APRIL 1, 2007	
2nd Camera Locat. added	01/14/09		

VIDEO DETECTION DETAILS

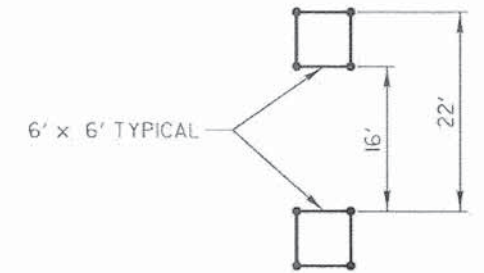
LEFT TURN LANE



THRU LANE

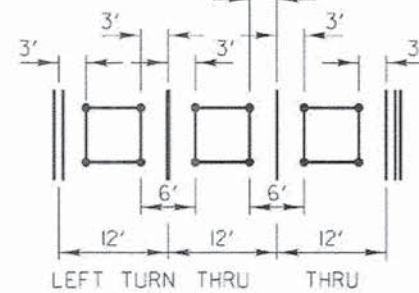


SPEED DETECTION



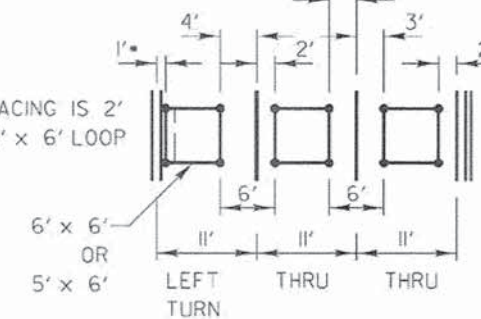
TYPICAL SPACING FOR DETECTOR LOOPS

12' LANES

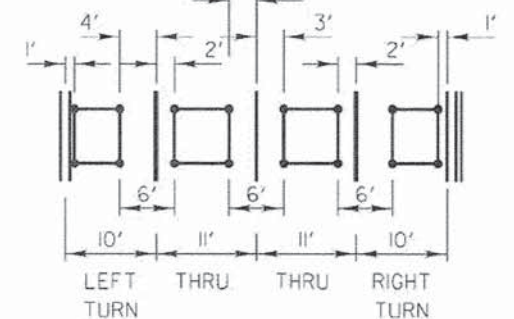


11' LANES

• SPACING IS 2' ON 5' x 6' LOOP



11' THRU LANES, 10' TURN LANE(S)



TYPICAL LATERAL PLACEMENT FOR DETECTOR LOOPS

REVISIONS	DATE	LakeCounty Division of Transportation	APPROVED BY: A. KHAWAJA DATE: APRIL 1, 2007	LC8600
TYPICAL DETECTOR LOOP LAYOUTS				

	USER NAME = orik	DESIGNED - AL	REVISED -
	PLOT CONFIG = #PLTDV5#	DRAWN - AL	REVISED -
	PLOT SCALE = #SCALESHORT#	CHECKED - ED	REVISED -
	PLOT DATE = 6/28/2014 2:49:41 PM	DATE - 06-30-2014	REVISED -

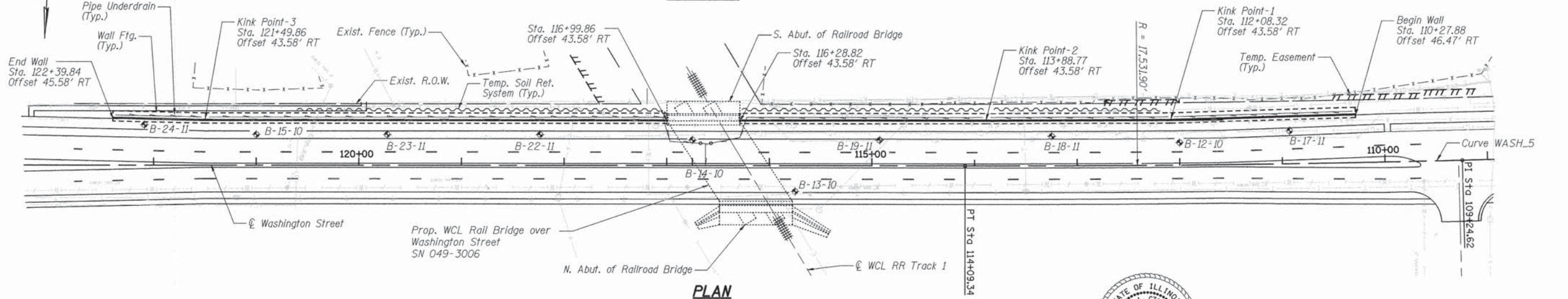
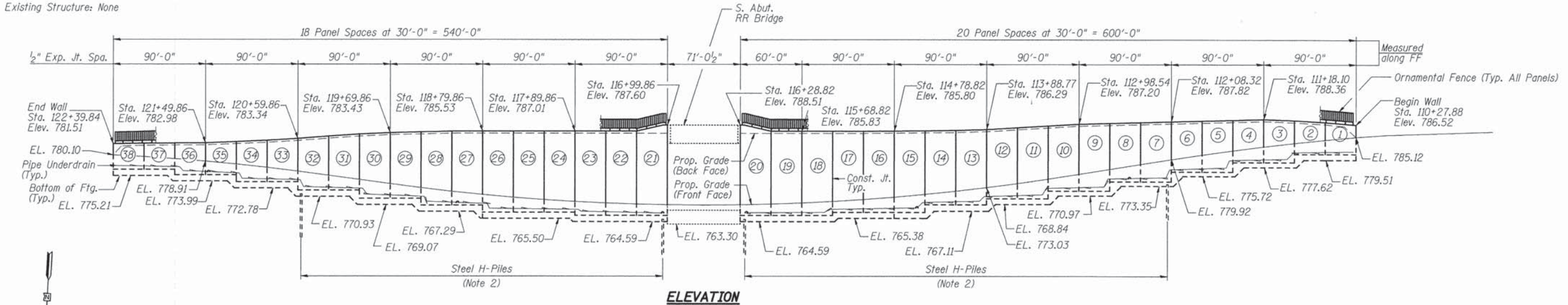
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET
TRAFFIC SIGNAL DETAILS**

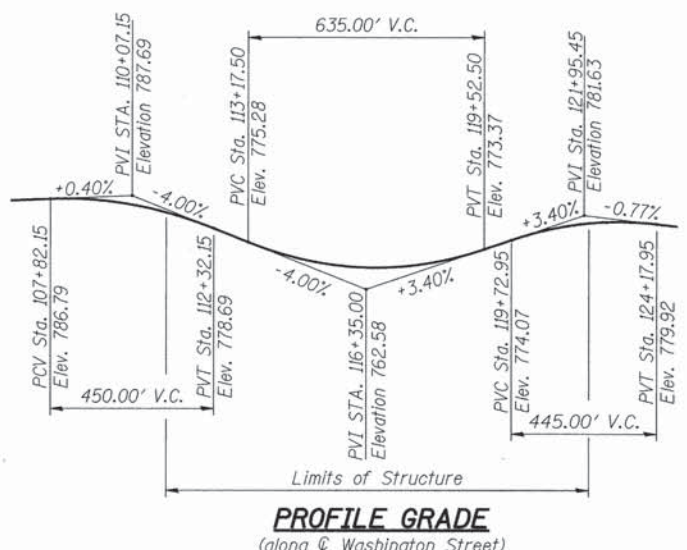
SCALE: N.T.S. SHEET NO. SGL 15 OF 15

F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 199
CONTRACT NO.				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

Benchmark: A 3' rebar with a yellow topper, located 19.2' south of the south edge of pavement and 44.5' east of the easterly rail. Elev. 786.62
 Existing Structure: None



PROP. CURVE WASH_5
 PI STA. = 109+24.62
 $\Delta = 3^\circ 10' 08''$ (RT)
 $D = 0^\circ 19' 37''$
 $R = 17,531.90'$
 $T = 484.96'$
 $L = 969.68'$
 $E = 6.71'$
 $e = \text{Normal Crown}$
 P.C. STA. = 104+39.65
 P.T. STA. = 114+09.34



GENERAL NOTES:

- All offsets are measured to the front face of the wall.
- For pile location, see Plan & Elevation sheets. For pile data, see Sheet STR 10 of 29.
- Due to the close proximity of houses to construction activities, vibrations shall be monitored during construction. The contractor shall take all necessary precautions to prevent vibrations. See Construction Vibration Monitoring Special Provision for additional information. Vibration monitoring limits extend from Station 111+00 to 121+50 along south edge of proposed improvement.
- The Contractor shall submit a soil retention system design sealed by an Illinois Licensed Structural Engineer including plan details and calculations for review and acceptance by the Engineer and the Railroad. Excavation support within the influence of railroad live load shall be designed per AREMA requirements and WCL standards for E-90 loading. Outlines and dimensions shown are schematic and are to establish the general configuration of the system required.
- Reinforcement bars designated (E) shall be epoxy coated.



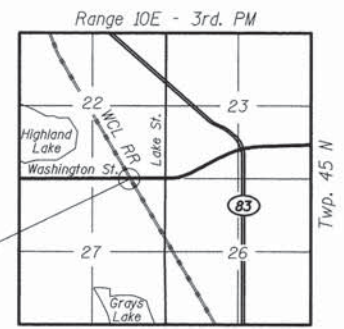
Sarah L. Czapliski
 SARAH L. CZAPLICKI, S.E. 7/2/2014
 NO. 081-006191
 EXP. DATE: 11/30/14

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications, 5th Ed. with 2010 Interims
 E-90 Railroad Live Load Surcharge

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural Steel)



LEGEND:

- Soil Boring
- Pipe Underdrain
- Railroad Track
- Exist. Fence
- FF Front Face of Wall
- BF Back Face of Wall

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME = tkoeppen@rdwy.lisle	DESIGNED - JM	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET RETAINING WALL GENERAL PLAN AND ELEVATION	F.A.U. RTE. 187	SECTION 11-00121-11-BR	COUNTY LAKE	TOTAL SHEETS 496	SHEET NO. 200
	PLOT CONFIG = PDF(Gr-eg-Large).plt	CHECKED - SLC	REVISED			CONTRACT NO. 61A63				
	PLOT SCALE = 1:49,9999	DRAWN - HH	REVISED			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 7/3/2014	CHECKED - SLC	REVISED			SHEET NO. STR 1 OF 29				