

SUMMARY OF QUANTITIES						
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QTY.	RDWY 0004	TRAFFIC SIGNALS 0021	WAUBONSEE COMMUNITY COLLEGE 0021
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	78	78		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	17	17		
20101700	SUPPLEMENTAL WATERING	UNIT	31	31		
20200100	EARTH EXCAVATION	CU YD	2,075	2,075		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	680	680		
20800150	TRENCH BACKFILL	CU YD	742	742		
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	10,286	10,286		
* 25000210	SEEDING, CLASS 2A	ACRE	1.8	1.8		
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	192	192		
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	192	192		
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	192	192		
* 25100630	EROSION CONTROL BLANKET	SQ YD	9,770	9,770		
* 25200110	SODDING, SALT TOLERANT	SQ YD	2,057	2,057		
* 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	4,038	4,038		
* 28000305	TEMPORARY DITCH CHECKS	FOOT	240	240		
* 28000400	PERIMETER EROSION BARRIER	FOOT	4,004	4,004		
28000500	INLET AND PIPE PROTECTION	EACH	2	2		
28000510	INLET FILTERS	EACH	18	18		
28100107	STONE RIPRAP, CLASS A4	SQ YD	32	32		
28200200	FILTER FABRIC	SQ YD	32	32		
† 30300108	AGGREGATE SUBGRADE IMPROVEMENT 8"	SQ YD	1,660	1,660		
† 30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	4,606	4,606		
35501303	HOT-MIX ASPHALT BASE COURSE, 4 3/4"	SQ YD	1,549	1,549		
35501318	HOT-MIX ASPHALT BASE COURSE, 8 1/2"	SQ YD	2,647	2,647		
35600665	HOT-MIX ASPHALT BASE COURSE WIDENING, 4 3/4"	SQ YD	410	410		
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,599	1,599		
40600300	AGGREGATE (PRIME COAT)	TON	32	32		
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	9	9		
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	423	423		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	84	84		
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	20	20		
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	784	784		
42001300	PROTECTIVE COAT	SQ YD	314	314		
44000100	PAVEMENT REMOVAL	SQ YD	1,184	1,184		
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	3,491	3,491		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	198	198		
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	86	86		
44003100	MEDIAN REMOVAL	SQ FT	386	386		
44004250	PAVED SHOULDER REMOVAL	SQ YD	1,910	1,910		
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	12	12		
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	74	74		
48101500	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	529	529		
48203007	HOT-MIX ASPHALT SHOULDERS, 2 1/2"	SQ YD	186	186		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	1,347	1,347		
54213453	END SECTIONS 18"	EACH	2	2		
54213465	END SECTIONS 30"	EACH	1	1		
† 54260311	TRAVERSABLE PIPE GRATE	FOOT	26	26		
550A0050	STORM SEWERS, CLASS A, TYPE 1 1/2"	FOOT	162	162		

* DENOTES SPECIALTY ITEM
† DENOTES SPECIAL PROVISION

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

USER NAME = #USER#	DESIGNED - MJP	REVISED - 4/16/2013
PLOT CONFIG = #PLTDRVS#	DRAWN - MJP	REVISED - 5/7/2013
PLOT SCALE = #SCALESHORT#	CHECKED - JAH	REVISED - 5/29/2013
PLOT DATE = #DATE#	DATE - 3/25/2013	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ILLINOIS ROUTE 47 AT WAUBONSEE DRIVE
 SUMMARY OF QUANTITIES**

SCALE: N/A SHEET 001 OF 3 STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	11-00001-00-CH	KANE	55	4
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 63829				

SUMMARY OF QUANTITIES

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QTY.	RDWY 0004	TRAFFIC SIGNALS 0021	WAUBONSEE COMMUNITY COLLEGE 0021	TRAINEES 0042
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	130	130			
550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	144	144			
550A0140	STORM SEWERS, CLASS A, TYPE 1 30"	FOOT	57	57			
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	499	499			
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	174	174			
550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	156	156			
55100500	STORM SEWER REMOVAL 12"	FOOT	70	70			
55100900	STORM SEWER REMOVAL 18"	FOOT	58	58			
55101400	STORM SEWER REMOVAL 30"	FOOT	154	154			
60200805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	5	5			
60201110	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11V FRAME AND GRATE	EACH	4	4			
60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	5	5			
60204505	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 8 GRATE	EACH	1	1			
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2			
60224005	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 8 GRATE	EACH	1	1			
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1			
60500040	REMOVING MANHOLES	EACH	1	1			
60500050	REMOVING CATCH BASINS	EACH	1	1			
60500060	REMOVING INLETS	EACH	1	1			
*† 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	2,050	2,050			
*† 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1			
*† 66900530	SOIL DISPOSAL ANALYSIS	EACH	4	4			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6			
67100100	MOBILIZATION	L SUM	1	1			
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1			
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1	1			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1			
* 72000100	SIGN PANEL - TYPE 1	SQ FT	99	99			
* 72000200	SIGN PANEL - TYPE 2	SQ FT	45		45		
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	9	9			
72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	6.25	6.25			
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	164	164			
* 73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	11	11			
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	344	344			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	5,345	5,345			
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	579	579			
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1,245	1,245			
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	927	927			
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	238	238			
* 80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1		1		
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	825		825		
* 81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	35		35		
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	90		90		
* 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	395		395		
* 81400100	HANDHOLE	EACH	3		3		
* 81400200	HEAVY-DUTY HANDHOLE	EACH	4		4		
* 81400300	DOUBLE HANDHOLE	EACH	2		2		
* 85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1		1		

WAUBONSEE COMMUNITY COLLEGE 0021

* DENOTES SPECIALTY ITEM
† DENOTES SPECIAL PROVISION

SUMMARY OF QUANTITIES						
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QTY.	RDWY 0004	TRAFFIC SIGNALS 0021	WAUBONSEE COMMUNITY COLLEGE 0021
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,833		1,833	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	934		934	
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,100		2,100	
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,488		2,488	
* 87301295	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3C	FOOT	934		934	
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	68		68	
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	654		654	
* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3		3	
* 87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1		1	
* 87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	2		2	
* 87700310	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1		1	
* 87700418	STEEL MAST ARM ASSEMBLY AND POLE, 68 FT.	EACH	1		1	
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12		12	
* 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4	
†* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52		52	
†* 87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	25		25	
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7		7	
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	7		7	
* 88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3		3	
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	14		14	
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	8		8	
* 88600100	DETECTOR LOOP, TYPE I	FOOT	1,320		1,320	
* 88700200	LIGHT DETECTOR	EACH	4		4	
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		1	
* A2002520	TREE, CARPINUS CAROLINIANA (AMERICAN HORNBEAM), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	2	2		
* A2002924	TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 3" CALIPER, BALLED AND BURLAPPED	EACH	3	3		
* A2006518	TREE, ULMUS PARVIFOLIA (LACEBARK ELM), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2		
* A2007120	TREE, QUERCUS RUBRA (RED OAK), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	3	3		
† X0322936	REMOVE EXISTING FLARED END SECTION	EACH	3	3		
† X4023000	TEMPORARY ACCESS (ROAD)	EACH	2	2		
† X6060502	CONCRETE MEDIAN, TYPE SM-6.24 (SPECIAL)	SQ FT	2,818	2,818		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
† Z0019600	DUST CONTROL WATERING	UNIT	50	50		
† Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4		
† Z0076600	TRAINEES	HOUR	500			500
† Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500			500

WAUBONSEE COMMUNITY COLLEGE 0021

934

* DENOTES SPECIALTY ITEM
† DENOTES SPECIAL PROVISION

SIGNING SCHEDULE

SIGN INFORMATION						NEW SIGN PANELS	NEW SIGN PANELS	METAL POST	CAST IRON BASE	
STATION	LOCATION	OFFSET		SIGN NUMBER	WIDTH (FT)	HEIGHT (FT)	(72000100)	(72000200)	(72800100)	(73100100)
		LT	RT				SIGN PANEL TYPE 1 (SQ. FT.)	SIGN PANEL TYPE 2 (SQ. FT.)	TELESCOPING STEEL SIGN SUPPORT (L.F.)	BASE FOR TELESCOPING SIGN SUPPORT (EACH)
103+00.00	IL ROUTE 47		RT	8	7.00	2.50		17.50	29.0	2
105+79.92	IL ROUTE 47		RT	4	3.00	3.00	9.00		16.0	1
105+79.92	IL ROUTE 47		RT	9	2.00	1.00	2.00			
107+32.93	IL ROUTE 47		LT	3	2.50	3.00			15.0	1
109+54.06	IL ROUTE 47		LT	1	2.00	2.50			14.5	1
109+54.06	IL ROUTE 47		LT	3	2.00	2.50				
110+84.21	IL ROUTE 47		RT	1	2.00	2.50			14.5	1
110+84.21	IL ROUTE 47		RT	3	2.00	2.50				
113+08.45	IL ROUTE 47		RT	3	2.50	3.00			15.0	1
114+58.00	IL ROUTE 47		LT	4	3.00	3.00			16.0	1
114+58.00	IL ROUTE 47		LT	9	2.00	1.00	2.00			
118+02.06	IL ROUTE 47		LT	7	7.00	2.50		17.50	29.0	2
13+72.00	OLD OAKS RD		RT	5	2.50	2.50	6.25		14.5	1
17+72.99	WAUBONSEE DR		RT	2	2.50	3.00	7.50			
18+59.95	WAUBONSEE DR		LT	6	2.50	2.50	6.25			
	MAST ARM MOUNTED						6.75			
	MAST ARM MOUNTED						6.75			
	MAST ARM MOUNTED						8.25			
	MAST ARM MOUNTED									
								9.75		
									164	11
							99	45		

20100110 TREE REMOVAL (6 TO 15 UNITS DIAMETER)				
TREE #	STATION	OFFSET		UNIT
1882	13+49.64	35.60	RT	6
1783	13+73.89	40.56	RT	9
1784	13+95.85	43.28	RT	9
1788	14+06.93	35.19	RT	7
1789	14+32.52	46.53	RT	8
1790	14+34.24	36.30	RT	11
1790A	14+34.24	36.30	RT	8
1890	14+03.30	13.34	RT	10
10	18+14.41	-22.01	LT	10
TOTAL				78

20100210 TREE REMOVAL (OVER 15 UNITS DIAMETER)				
TREE #	STATION	OFFSET		UNIT
1888	14+06.93	35.19	RT	17
TOTAL				17

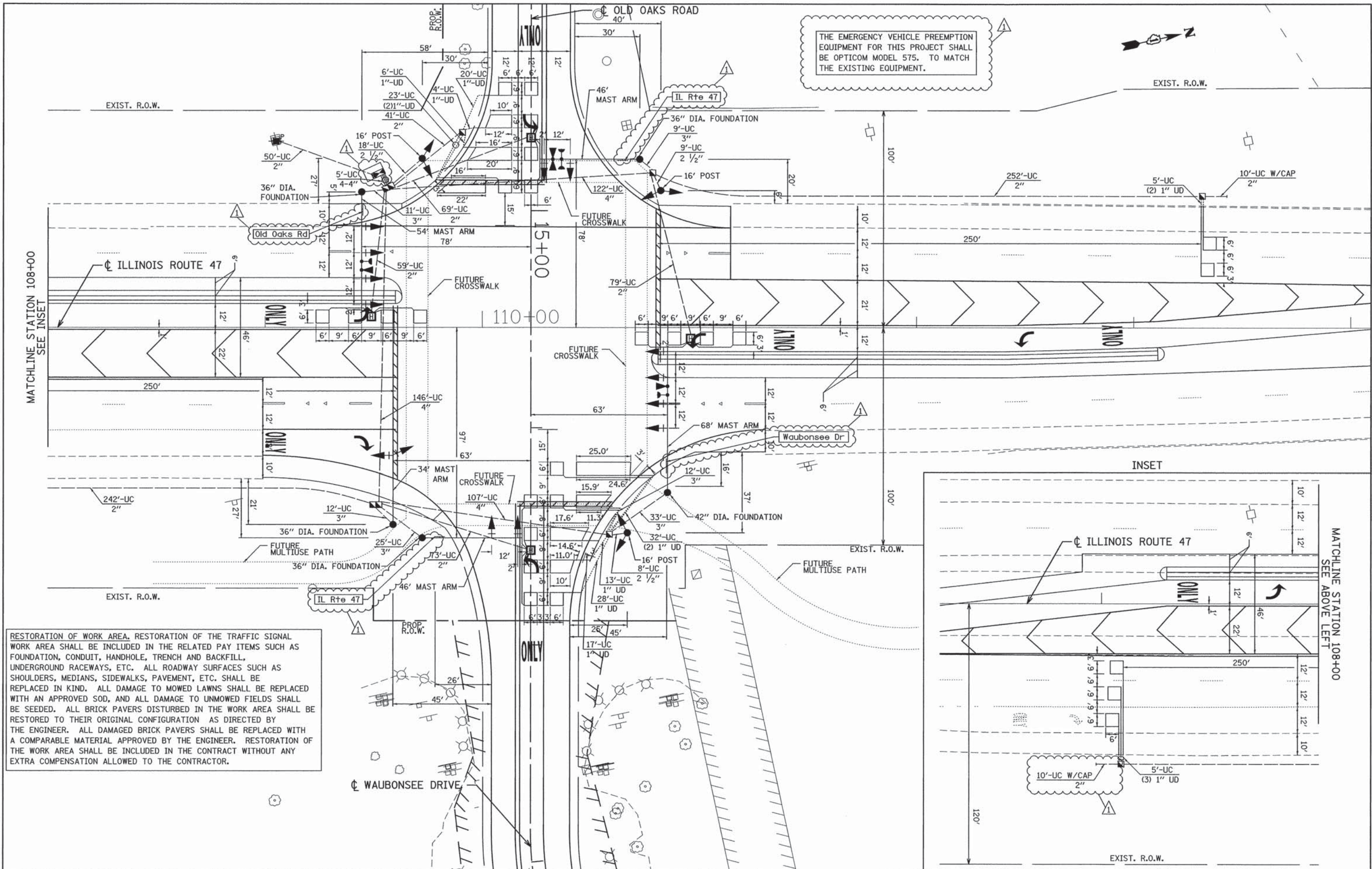
IL ROUTE 47 EARTHWORK			REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	SUITABLE EARTH EXCAVATION (CUT)	SUITABLE EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT (FILL)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
STATION	TO	STATION	PRE-STAGE	PRE-STAGE	PRE-STAGE	PRE-STAGE	PRE-STAGE
			CU YD	CU YD	CU YD	CU YD	CU YD
104+30.00	TO	105+00.00	4	16	12	5	7
105+00.00	TO	106+00.00	11	48	36	28	8
106+00.00	TO	107+00.00	17	61	46	26	19
107+00.00	TO	108+00.00	21	80	60	9	51
108+00.00	TO	109+00.00	36	102	76	20	57
109+00.00	TO	109+09.00	5	10	8	3	5
109+09.00	TO	109+50.00	49	53	39	195	-155
109+50.00	TO	109+85.00	41	45	34	166	-132
INTERSECTION							
110+55.00	TO	111+00.00	47	55	41	32	9
111+00.00	TO	112+00.00	64	111	84	36	48
112+00.00	TO	113+00.00	23	100	75	0	75
113+00.00	TO	114+00.00	20	95	72	0	72
114+00.00	TO	115+00.00	18	103	78	0	78
115+00.00	TO	116+00.00	16	110	83	0	83
116+00.00	TO	116+70.00	5	37	28	0	28
TOTALS =			377	1,027	770	520	250

OLD OAKS ROAD EARTHWORK			REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	SUITABLE EARTH EXCAVATION (CUT)	SUITABLE EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT (FILL)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
STATION	TO	STATION	PRE-STAGE	PRE-STAGE	PRE-STAGE	PRE-STAGE	PRE-STAGE
			CU YD	CU YD	CU YD	CU YD	CU YD
11+17.65	TO	11+25.00	2	7	5	0	5
11+25.00	TO	11+50.00	7	21	16	0	16
11+50.00	TO	11+75.00	6	19	14	0	14
11+75.00	TO	12+00.00	6	19	14	0	14
12+00.00	TO	12+25.00	7	22	16	0	16
12+25.00	TO	12+50.00	8	26	20	0	20
12+50.00	TO	12+75.00	9	37	28	0	28
12+75.00	TO	13+00.00	10	53	39	0	39
13+00.00	TO	13+25.00	10	65	49	0	49
13+25.00	TO	13+50.00	10	70	53	0	53
13+50.00	TO	13+75.00	10	72	54	0	54
13+75.00	TO	14+00.00	11	70	53	2	51
14+00.00	TO	14+25.00	14	62	47	5	42
14+25.00	TO	14+50.00	13	54	41	7	34
14+50.00	TO	15+07.84	26	117	88	19	69
TOTALS =			151	715	536	33	504

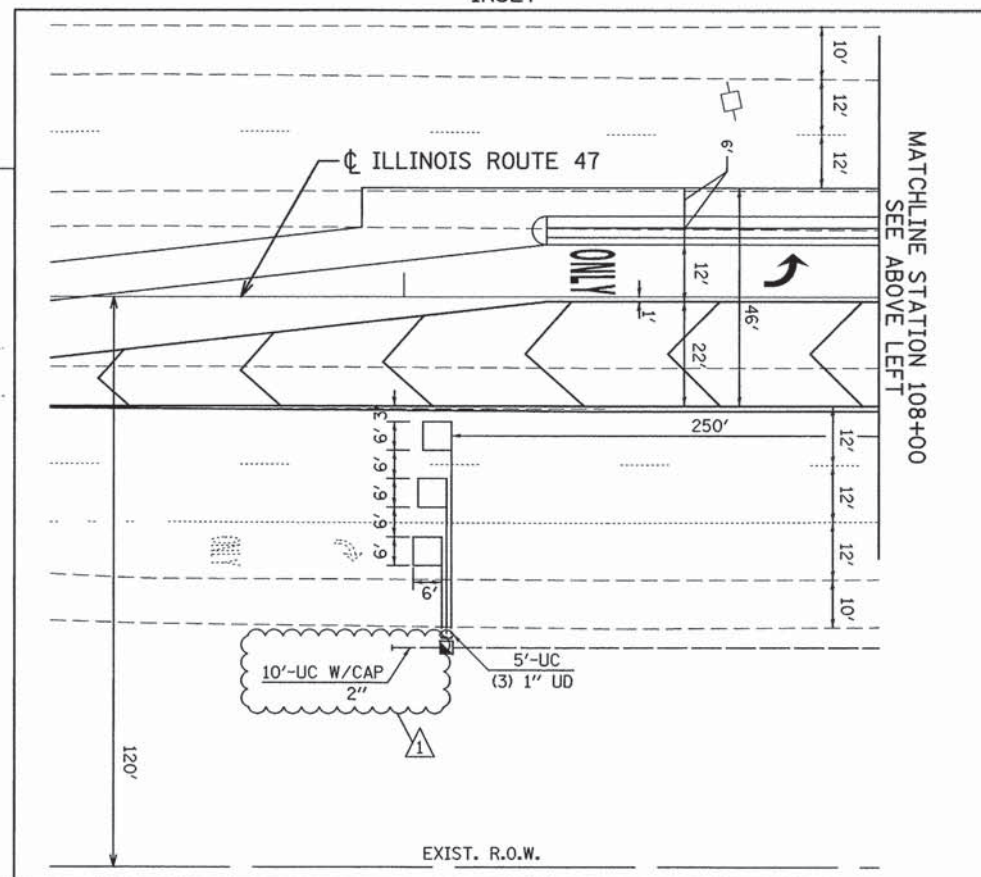
WAUBONSEE DRIVE EARTHWORK			REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	SUITABLE EARTH EXCAVATION (CUT)	SUITABLE EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT (FILL)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
STATION	TO	STATION	PRE-STAGE	PRE-STAGE	PRE-STAGE	PRE-STAGE	PRE-STAGE
			CU YD	CU YD	CU YD	CU YD	CU YD
16+46.03	TO	16+75.00	10	18	14	2	11
16+75.00	TO	17+00.00	8	13	10	2	8
17+00.00	TO	17+25.00	8	14	10	2	8
17+25.00	TO	17+50.00	7	11	8	2	7
17+50.00	TO	17+75.00	8	14	10	1	10
17+75.00	TO	18+00.00	10	17	13	0	13
18+00.00	TO	18+25.00	10	18	14	0	14
18+25.00	TO	18+50.00	12	22	17	0	17
18+50.00	TO	18+75.00	11	25	19	0	19
18+75.00	TO	19+00.00	12	34	25	0	25
19+00.00	TO	19+25.00	14	47	36	0	35
19+25.00	TO	19+50.00	13	46	34	1	33
19+50.00	TO	19+75.00	11	29	21	3	19
19+75.00	TO	20+00.00	9	15	11	2	9
20+00.00	TO	20+16.27	5	7	5	0	5
TOTALS =			150	330	248	16	232

EARTHWORK SUMMARY TABLE		
ITEM	UNIT	TOTAL
IL ROUTE 47 WIDENING		
EARTH EXCAVATION (20200100)	CU YD	1,027
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)	CU YD	377
FURNISHED EXCAVATION (20400800)	CU YD	0
OLD OAKS ROAD RECONSTRUCTION		
EARTH EXCAVATION (20200100)	CU YD	715
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)	CU YD	151
FURNISHED EXCAVATION (20400800)	CU YD	0
WAUBONSEE DRIVE WIDENING AND RESURFACING		
EARTH EXCAVATION (20200100)	CU YD	330
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)	CU YD	150
FURNISHED EXCAVATION (20400800)	CU YD	0
GRAND TOTALS		
EARTH EXCAVATION (20200100)	CU YD	2,075
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)	CU YD	680
FURNISHED EXCAVATION (20400800)	CU YD	0

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM MODEL 575. TO MATCH THE EXISTING EQUIPMENT.

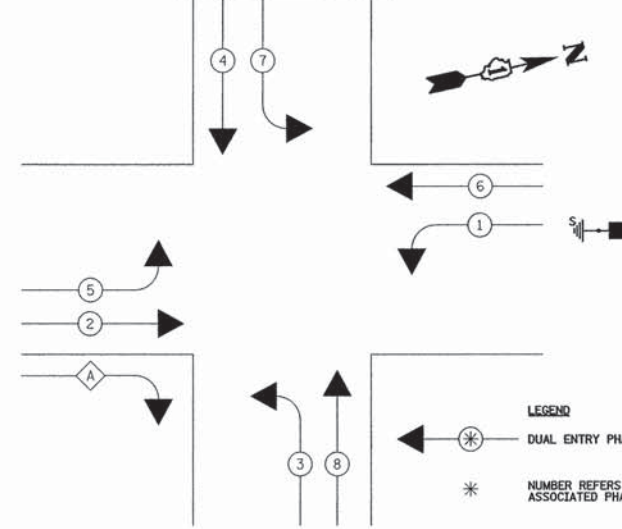


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, UNDERGROUND RACEWAYS, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED. ALL BRICK PAVERS DISTURBED IN THE WORK AREA SHALL BE RESTORED TO THEIR ORIGINAL CONFIGURATION AS DIRECTED BY THE ENGINEER. ALL DAMAGED BRICK PAVERS SHALL BE REPLACED WITH A COMPARABLE MATERIAL APPROVED BY THE ENGINEER. RESTORATION OF THE WORK AREA SHALL BE INCLUDED IN THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.



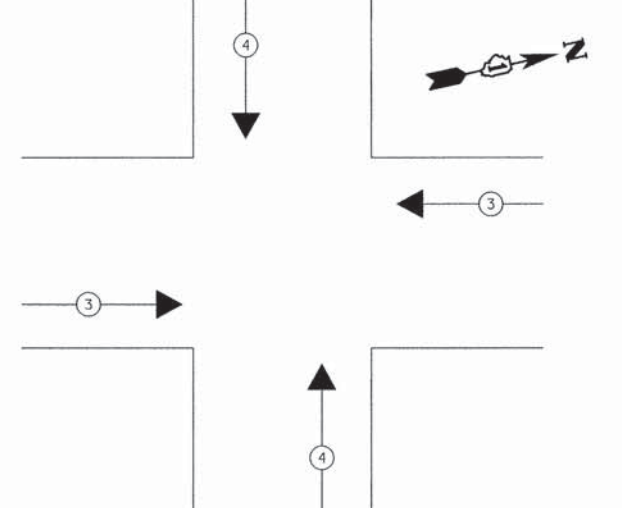
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	#FILE#	*TIME#	DATE			REVISED	TO STA.	

CONTROLLER SEQUENCE AND PHASE DESIGNATION DIAGRAM



LEGEND
 * DUAL ENTRY PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE

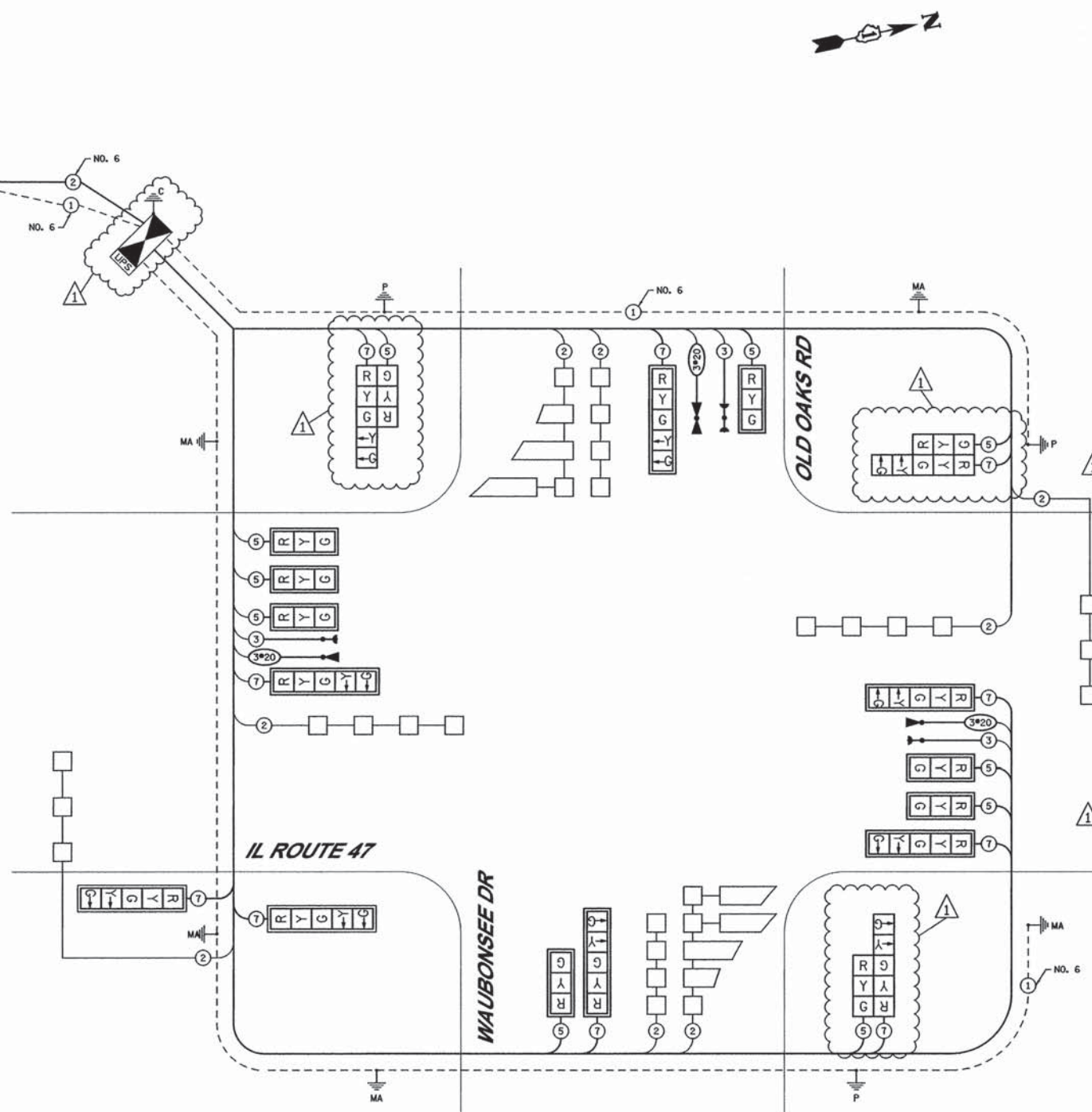


PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	↑	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	20		17	0.50	170.00
(YELLOW)	20		25	0.25	125.00
(GREEN)	20		15	0.25	75.00
ARROW	20		12	0.10	24.00
CONTROLLER			100	1.00	100.00

ENERGY COSTS TO: TOTAL = 494.00
 WAUBONSEE COMMUNITY COLLEGE
 ILLINOIS ROUTE 47 @ WAUBONSEE DRIVE
 SUGAR GROVE, ILLINOIS 60554
 ENERGY SUPPLY: CONTACT: TOM PERKINS
 PHONE: (630) 723 - 2127
 COMPANY: COMED

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM MODEL 575. TO MATCH THE EXISTING EQUIPMENT.



SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
72000100	SIGN PANEL - TYPE 1	SQ FT 99
72000200	SIGN PANEL - TYPE 2	SQ FT 45
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH 1
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT 825
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT 35
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT 90
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT 395
81400100	HANDHOLE	EACH 3
81400200	HEAVY-DUTY HANDHOLE	EACH 4
81400300	DOUBLE HANDHOLE	EACH 2
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH 1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT 1,833
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT 934
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT 2,100
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT 2,488
87301295	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3C	FOOT 934
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT 68
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT 654
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH 3
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH 1
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH 2
87700310	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH 1
87700418	STEEL MAST ARM ASSEMBLY AND POLE, 68 FT.	EACH 1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT 12
87800150	CONCRETE FOUNDATION, TYPE C	FOOT 4
87800415	CONCRETE FOUNDATION, TYPE E 96-INCH DIAMETER	FOOT 52
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT 25
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH 7
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH 7
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH 3
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH 14
88500100	INDUCTIVE LOOP DETECTOR	EACH 8
88600100	DETECTOR LOOP, TYPE I	FOOT 1,320
88700200	LIGHT DETECTOR	EACH 4
88700300	LIGHT DETECTOR AMPLIFIER	EACH 1

*100% OF COST TO THE WAUBONSEE COMMUNITY COLLEGE

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, UNDERGROUND RACEWAYS, ETC. 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. ALL BRICK PAVERS DISTURBED IN THE WORK AREA SHALL BE RESTORED TO THEIR ORIGINAL CONFIGURATION AS DIRECTED BY THE ENGINEER. ALL DAMAGED BRICK PAVERS SHALL BE REPLACED WITH A COMPARABLE MATERIAL APPROVED BY THE ENGINEER. RESTORATION OF THE WORK AREA SHALL BE INCLUDED IN THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

CABLE PLAN

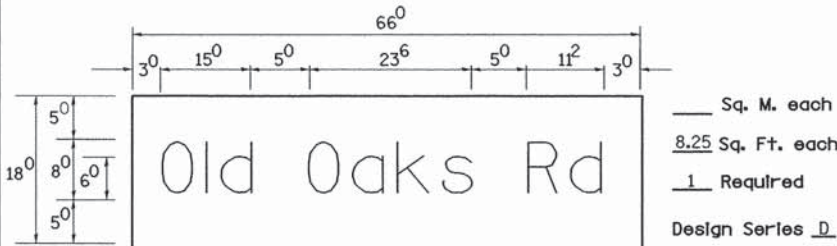
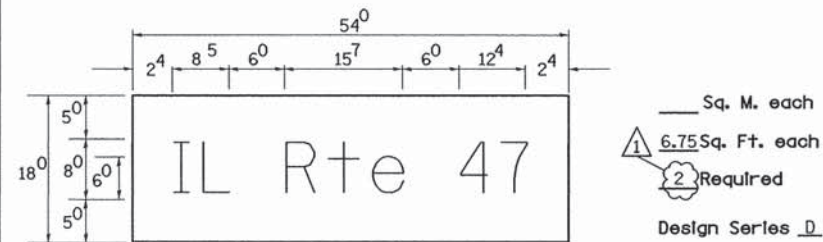
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 47 AT WAUBONSEE DRIVE
 CABLE PLAN AND SEQUENCE OF OPERATION
 SCALE: N/A SHEET SGL 8 OF 9 STA. TO STA.

F.A.P. RTE. 326	SECTION 11-00001-00-CH	COUNTY KANE	TOTAL SHEETS 55	SHEET NO. 34
CONTRACT NO. 63829				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

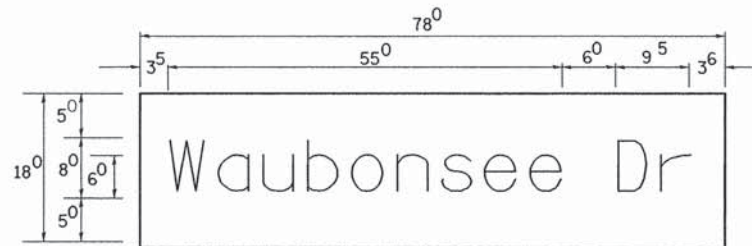
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	PLOT SCALE = #SCALESHORT#	CHECKED - JAH	REVISED - 5/29/2013
	PLOT DATE = #DATE#	DATE - 3/25/2013	REVISED -

PANEL SIGN DESIGN TYPE 1



NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

PANEL SIGN DESIGN TYPE 2



GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
- ALL BORDERS SHALL BE 1/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

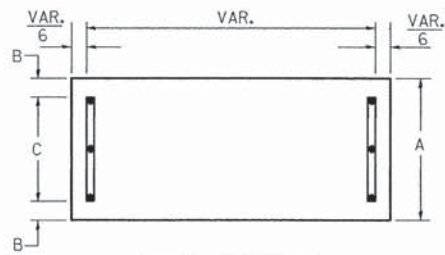
* J.O. HERBERT CO. MIDLOTHIAN, VA. * WESTERN REMAC INC. WOODRIDGE, IL.

PARTS LISTING:

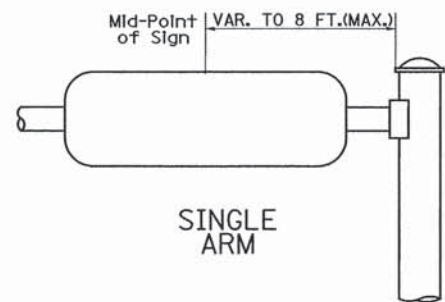
SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
BRACKETS PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

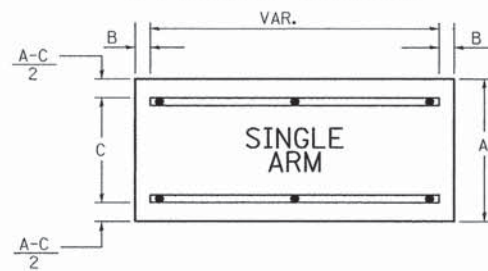
SUPPORTING CHANNELS



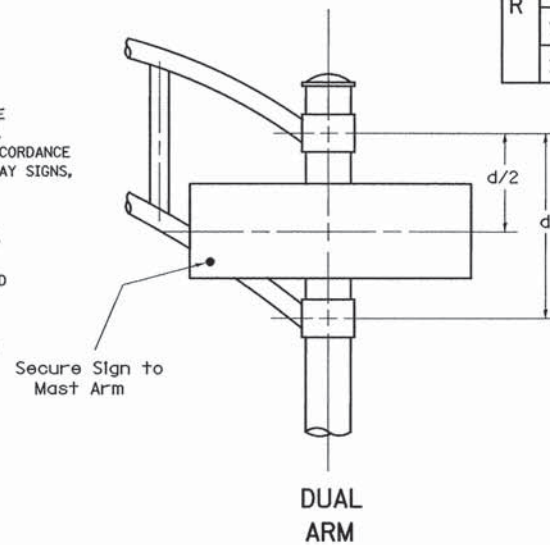
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



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



DUAL ARM

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

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

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		J		s t		v y		x		z	
	g o q	m n p r u														
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D O Q R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

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

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		J		s t		v y		x		z	
	g o q	m n p r u														
ad h g l j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
l m n q u																
b f k o p s	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

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

SERIES	SECOND NUMBER																				
	0		1		2		3		4		5		6		7		8		9		
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17	
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21	
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15	
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15	
6	16	17	14	15	14	15	12	14	14	15	14	15	11	12	14	15	14	15	14	15	
7	12	14	12	14	14	15	12	14	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	14	14	15	16	17	12	14	16	17	14	15			

EXAMPLE, 2 3/8 DENOTES 3 3/8

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES		SERIES		SERIES			SERIES	
	C	D	C	D	C	D	C	D		C	D
A	36	50	50	65	a	35	42				
B	32	40	43	53	b	35	42				
C	32	40	43	53	c	35	41				
D	32	40	43	53	d	35	42				
E	30	35	40	47	e	35	42				
F	30	35	40	47	f	23	26				
G	32	40	43	53	g	35	42				
H	32	40	43	53	h	35	42				
I	07	07	11	12	i	11	11				
J	30	36	40	50	j	20	22				
K	32	41	43	54	k	35	42				
L	30	35	40	47	l	11	11				
M	37	45	51	61	m	60	70				
N	32	40	43	53	n	35	42				
O	34	42	45	55	o	36	43				
P	32	40	43	53	p	35	42				
Q	34	42	45	55	q	35	42				
R	32	40	43	53	r	26	32				
S	32	40	43	53	s	36	42				
T	30	35	40	47	t	27	32				
U	32	40	43	53	u	35	42				
V	35	44	47	60	v	42	47				
W	44	52	60	70	w	55	64				
X	34	40	45	53	x	44	51				
Y	36	50	50	66	y	46	53				
Z	32	40	43	53	z	36	43				

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