INDEX OF SHEETS

DESCRIPTION	SHEET NO
TITLE SHEET	1
GENERAL NOTES & IDOT STANDARDS	2
SUMMARY OF QUANTITIES	3
TYPICAL SECTIONS	4
ALIGNMENT, TIES AND BENCHMARKS	5
EARTHWORK SCHEDULE	6
EXISTING CONDITIONS AND REMOVAL PLAN	7–10
SIDEWALK PLAN AND PROFILE	11–17
TRAFFIC SIGNAL MODIFICATION PLAN AT GRAND AVE AND INDUSTRIAL/ENTRY DRIVE	18
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRA AND EMERGENCY VEHICLE PREEMPTION SEQUENCE AT GRAND AVE INDUSTRIALENTRY DRIVE	
DISTRICT ONE STANDARD TAFFIC SIGNAL DESIGN DETAILS	20-25
CONSTRUCTION DETAILS	26
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	27
DISTRICT ONE TYPICAL PAVEMENT MARKINGS	28
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTION AND DRIVEWAYS	IS, 29
CROSS SECTIONS	30–41

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

CMAQ SIDEWALK PROJECT
GRAND AVENUE (CHURCH ROAD TO YORK ROAD) (FAU 1376)
SECTION No. 08-00086-00-SW
PROJECT NO.: CMM-9003(053)
VILLAGE OF BENSENVILLE
DUPAGE COUNTY
JOB NO.: C-91-492-08

PROJECT BEGINS

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

LOCATION MAP

N.T.S.

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

ADT (YEAR) = 27,800 (2009)

STATION 10+00

TRAFFIC DATA

TRAF

GROSS LENGTH OF PROJECT = 3335 FEET (0.63 MI)

NET LENGTH OF PROJECT = 3335 FEET (0.63 MI)

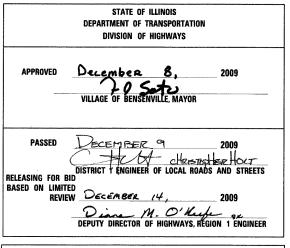
100' 200' 300' — 1" = 100' 0 10' 20' 30' — 1" = 10' 0 50' 100' — 1" = 50' 0 50' 100' — 1" = 40' 0 50' — 1" = 30' — 1" = 30'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 63187









CHRISTOPHER B. BURKE ENGINEERING, LTD.

9575 W. Higgins Road, Suite 600 Rosemont, Illinois 60018 (847) 823-0500 PROFESSIONAL DESIGN FIRM NO. 184-001175

EXPIRATION DATE: 04/30/2011

 \circ

GENERAL NOTES

UTILITIES

THE CONTRACTOR SHALL COOPERATE WITH THE VILLAGE IN ANY UNDERGROUND UTILITY CONSTRUCTION WHICH THE VILLAGE MAY WANT TO PLACE DURING THE CONTRACTOR'S OPERATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND THE VILLAGE DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS OWN EVENDRINGE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE VILLAGE. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

COORDINATION OF ALL UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT THE PRECONSTRUCTION CONFERENCE.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 8-1-1 0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED.)

STAKING

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE VILLAGE, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED, AND SHALL BE AS INDICATED ON THE PLANS, ELEVATIONS SHOWN AT POINT OF CURVE, ETC. IS EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

WATER, STORM SEWER AND SANITARY SEWER

WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

ANY EXISTING OR PROPOSED STORM SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AND INCLUDED IN THE COST OF THE CONTRACT.

THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS WITHOUT PRIOR AUTHORIZATION FROM THE VILLAGE WATER DEPARTMENT. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.

MISCELLANEOU

ACCESS: THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT, EXCEPT FOR PERIODS OF SHORT DURATION. THE COST TO PROVIDE ACCESS SHALL BE PAID FOR AND INCLUDED IN THE ITEM AGGREGATE FOR TEMPORARY ACCESS.

DIMENSIONS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

ALL SAWCUTTING SHALL BE INCLUDED TO REMOVAL ITEMS AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

ANY EXISTING PAVEMENT DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION SHALL BE REPLACEDREPAIRED BY THE CONTRACTOR AT HISHER OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER WITH NO ADDITIONAL COMPENSATION TO THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STREETS, ROADWAYS, DRIVEWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO CORRECT DAMAGE AT HIS OWN EXPENSE.

DETECTABLE WARNINGS FOR THE HANDICAPPED SHALL BE INSTALLED AT ALL INTERSECTING STREETS, DRIVEWAYS, AND ALLEYS AS DIRECTED BY THE ENGINEER (SEE IDOT STD. 424001-05).

PAVEMENT GRADES: THE ELEVATIONS INDICATED ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

RELOCATING EXISTING SIGNS: EXISTING SIGNS WHICH ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF CONFLICTING IMPROVEMENTS IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". STOP SIGNS, SPEED LIMIT SIGNS, AND STREET NAME SIGNS SHALL BE UP AND VISIBLE AT ALL TIMES. THIS WORK SHALL BE INCLUDED TO THE PAY ITEM PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, SPECIAL.

PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

PROPOSED CONCRETE CURB AND GUTTER SHALL BE TRANSITIONED TO EXISTING CURB AND GUTTER OVER A LENGTH OF 5 FEET. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT.

ALL UNDERGROUND, DRIVEWAY, CONCRETE, AND LANDSCAPE WORK IS TO BE COMPLETED BEFORE THE SURFACE COURSE CAN BE INSTALLED.

TREE ROOT PRUNNING AND TREE TRUNK PROTECTION SHALL BE LOCATED AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE PRESERVATION OF EXISTING TREES IS OF UTMOST IMPORTANCE TO THE VILLAGE OF BENSENVILLE. ALL TREE PROTECTION, TREE REMOVAL, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.

TREE ROOT PRUNING IS TO BE USED ON EXISTING TREES TO PREVENT THE RIPPING UP OF ROOTS WHEN TRENCHING OR EXCAVATION IS WITHIN THE ROOT ZONE OF ADJACENT TREES TO REMAIN. SUPPLEMENTAL WATERING OF TREES SHOULD BEGIN IMMEDIATELY AFTER ROOT PRUNING OF THE TREES HAS OCCURRED.

FIRE HYDRANTS

ALL HYDRANTS ARE TO BE MUELLER SUPER CENTURIAN # A-423 OR APPROVED EQUAL ALL HYDRANTS ARE TO HAVE AN AUXILIARY VALVE ATTACHED VIA A FLAT FLANGE TYPE CONNECTION. ALL BELOW GRADE NUTS AND BOLTS SHALL BE STAINLESS STEEL HYDRANTS SHALL BE INSTALLED WITH A BURY MARK AT GRADE LEVEL AND NO LOWER THAN 18" FROM THE CENTER OF STEAMER PORT TO FINAL GRADE. HYDRANTS SHALL BE INSTALLED PLUMB AND LEVEL. WHEN EXTENDING A HYDRANT THE "BREAK FLANGE" SHALL BE RELOCATED TO GRADE LEVEL AUXILIARY VALVES SHALL BE KEYABLE AND TO GRADE. AND SHALL INCLUDE VALVE BOXES RETURN OLD HYDRANTS TO THE VILLAGE.

UTILITY COORDINATION

CONSTRUCTION CONTACT PERSON PHONE DUPAGE WATER COMMISSIO VICOR GAS CONSTANCE LAN MARTHA GIERAS 630-983-8676 EXT. 2362 630-810-6274 630-600-6532 630-437-2236 630-600-6390 630-437-2177 630-983-4028 1000 COMMERCE DR., FLOOR 4513 WESTERN AVENUE LISLE, IL 60532 ADDRESS 2 LINCOLN CENTER 810 JORIE BLVD., SUITE 110 600 EAST BUTTERFIELD ROAD INVESTIGATIONS DEPT. 42864- 810 JORIE BLVD. OAK BROOK, IL 60523 UNDERGROUND FACILITIES NAPERVILLE, IL 60563-9600 UNDERGROUND FACILITIES ELMHURST, IL 60126 2400 N. GLENVILLE RICHARDSON, TX 75082 ELMHURST, IL 60126 FACILITIES IN / NEAR PROJECT UNDERGROUND FACILITIES REVIEW RECEIVED 03/12/09.
NO CONFLICTS ANTICIPATED. SUBMITTED 02/11/09 REVIEW RECEIVED 03/02/09. REVIEW RECEIVED 5/5/09. NO NO CONFLICTS ANTICIPATED. CONFLICTS ANTICIPATED. STATUS ON DATE OF PLAN PRINTING SUBMITTED 02/11/09 SUBMITTED 02/11/09 SUBMITTED 02/11/09

SCALE: 1'

Dupage county division of transportation right-of-way

1. DAILY LANE CLOSURES WITHIN COUNTY RIGHTS-OF-WAY ARE PERMITTED BETWEEN 9:00 A.M.
AND 4:00 P.M. ONLY. TRAFFIC CONTROL SHALL CONFORM TO IDOT*S HIGHWAY STANDARDS AND
THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES AT ALL TIMES DURING CONSTRUCTION.
TRAFFIC CONTROL SHALL INCLUDE ADVANCE WARNING LANE CLOSURE SIGNAGE, AN ARROW BOARD
AND TYPE I BARRICADES WITH STEADY BURN LIGHTS AND SANDBAGS, AS IS APPLICABLE.

2. LANE CLOSURES ARE NOT PERMITTED ON COUNTY ROADWAYS DURING SNOWFALL OR WITHIN 2 HOURS
PRIOR TO PREDICTED SNOWFALL OR PRECIPITATION CONDITIONS BETWEEN NOVEMBER 15 AND APRIL
15 FOR MAINTENANCE OF THE ROADWAY PAVEMENT BY COUNTY HIGHWAY MAINTENANCE DEPARTMENT
STAFF AND EQUIPMENT.

3. EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN THE COUNTY'S HIGHWAY RIGHT-OF-WAY AT ANY TIME WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE COUNTY ENGINEER, OR HIS DULY A

4. DISTURBED AREAS OF THE COUNTY'S RIGHT OF WAY SHALL BE DRESSED WITH A MINIMUM OF 6*
TOPSOIL AND CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) SEED (WITH EROSION CONTROL
BLANKET OR HYDRO SEEDING) OR SOD (SALT TOLERANT AND STAKED IN PLACE).

5. CONTACT THE DIVISION OF TRANSPORTATION (630407-6900) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION WITHIN THE COUNTY'S RIGHT-OF-WAY TO COORDINATE INSPECTIONS WITH THE PERMITTING STAFF.

6. EROSION CONTROL MEASURES SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF THE DUPAGE COUNTY STORMWATER AND FLOODPLAIN ORDINANCE (LATEST EDITION/REVISION) SPECIFICATIONS AT ALL TIMES.

7. PAVEMENT, CURBGUTTER AND STORM STRUCTURES WITHIN THE COUNTY'S RIGHT OF WAY SHALL BE MAINTAINED FREE OF MUDDEBRIS AT ALL TIMES AND SHALL BE CLEANED AS IS REQUIRED ANDOR AS DIRECTED BY DUPAGE COUNTY.

8. THE DUPAGE COUNTY DIVISION OF TRANSPORTATION MAINTAINS TRAFFIC SIGNAL AND RELATED EQUIPMENT WITHIN THE VICINITY OF THE PROJECT. CONTACT THE DEPARTMENT (630407-6900) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION WITHIN THE COUNTY'S RIGHT-OF-WAY AND WITHIN 300° OF ANY COUNTY MAINTAINED SIGNAL THE COUNTY'S TRAFFIC SIGNALS AND RELATED EQUIPMENT ARE NOT ON THE JULLIE SYSTEM.

HIGHWAY STANDARDS

000001-05 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS 280001-05 TEMPORARY EROSION CONTROL SYSTEMS 424001-05 CURB RAMPS FOR SIDEWALKS CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER URBAN LANE CLOSURE, 2L, 2W UNDIVIDED 701501-05 701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK 701801-04 OR SIDEWALK CLOSURE 701901-01 TRAFFIC CONTROL DEVICES 780001-02 TYPICAL PAVEMENT MARKINGS TRAFFIC CONTROL DEVICES B.L.R. 17-4 DAY LABOR CONSTRUCTION DAY LABOR MAINTENANCE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

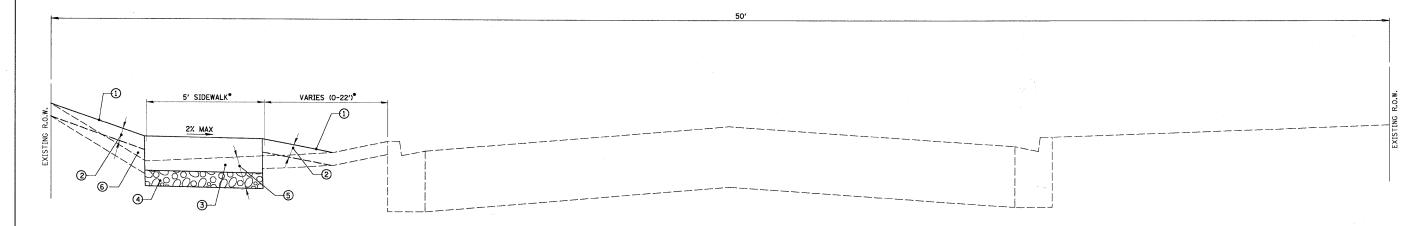
| F.A.U | SECTION | COUNTY | TOTAL SHEETS | NO. | 1376 | O8-00086-00-SW | DUPAGE | 41 | 2 | CONTRACT NO. | 63187 | SHEET NO. | OF SHEETS | STA. TO STA. | ILLINOIS | FED. AID PROJECT CMM-9003 (0635)

SUMMARY OF QUANTITIES

ITEM NO.	ITEMS	UNIT	SFTY-1B QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	82
20101000	TEMPORARY FENCE	FOOT	15
*20101200	TREE ROOT PRUNING	EACH	3
20200100	EARTH EXCAVATION	CU YD	830
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	35
20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CUYD	35
20800250	TRENCH BACKFILL, SPECIAL	CU YD	14
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	477
*25200110	SODDING, SALT TOLERANT	SQ YD	2500
25200200	SUPPLEMENTAL WATERING	UNIT	20
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	20
42400430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	14120
42400800	DETECTABLE WARNINGS	SQ FT	264
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	220
56103000	DUCTILE IRON WATER MAIN, 6"	FOOT	10
56400500	FIRE HYDRANTS TO BE REMOVED	EACH	1
56400820	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L.SUM	1
70102635	TRAFFIC CONTROL AND PROTETION, STANDARD 701701	L.SUM	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L.SUM	1
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1000
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	32
⁶ 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	32
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	219
*87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	237
*87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
*87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8
*87900200	DRILL EXISTING HANDHOLE	EACH	2
*88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
*88800100	PEDESTRIAN PUSH-BOTTON	EACH	2
89502200	MODIFY EXISTING CONTROLLER	EACH	1
B2006116	TREE, SYRINGA PEKINENSIS MORTON (CHINA SNOW PEKING LILAC), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	6
Z0013798	CONSTRUCTION LAYOUT	L.SUM	1
XX002258	STRUCTURES TO BE ADJUSTED	EACH	5
XX011700	WATER MAIN FITTINGS	POUND	550

*INDICATES SPECIALTY ITEM

DESIGNED -FILE NAME = USER NAME = MAGOLDEN REVISED SECTION SUMMARY OF QUANTITIES STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION l:\BENSENVILLE\080659\C1v1\659_soql.p DRAWN REVISED 08-00086-00-SW CHECKED REVISED LOT DATE = 12/14/2009 DATE TO STA. REVISED SCALE: 1' SHEET NO. OF SHEETS STA.



*NOTE: SIDEWALK IS 6' WIDE FROM STA 30+18 TO 30+32 AND STA 43+36 TO STA 45+07 PROPOSED TYPICAL SECTION

NOT TO SCALE

STA 10+00 TO STA 43+35

1 PROPOSED SODDING, SALT TOLERANT

② PROPOSED TOPSOIL FURNISH AND PLACE, 4"

3 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH

PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B - 2"
(INCLUDED IN THE COST OF PORTLAND CEMENT CONCRETE SIDEWALK, 5", SPECIAL)

5 EARTH EXCAVATION

6 PROPOSED EMBANKMENT (INCLUDED IN COST OF EARTH EXCAVATION)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

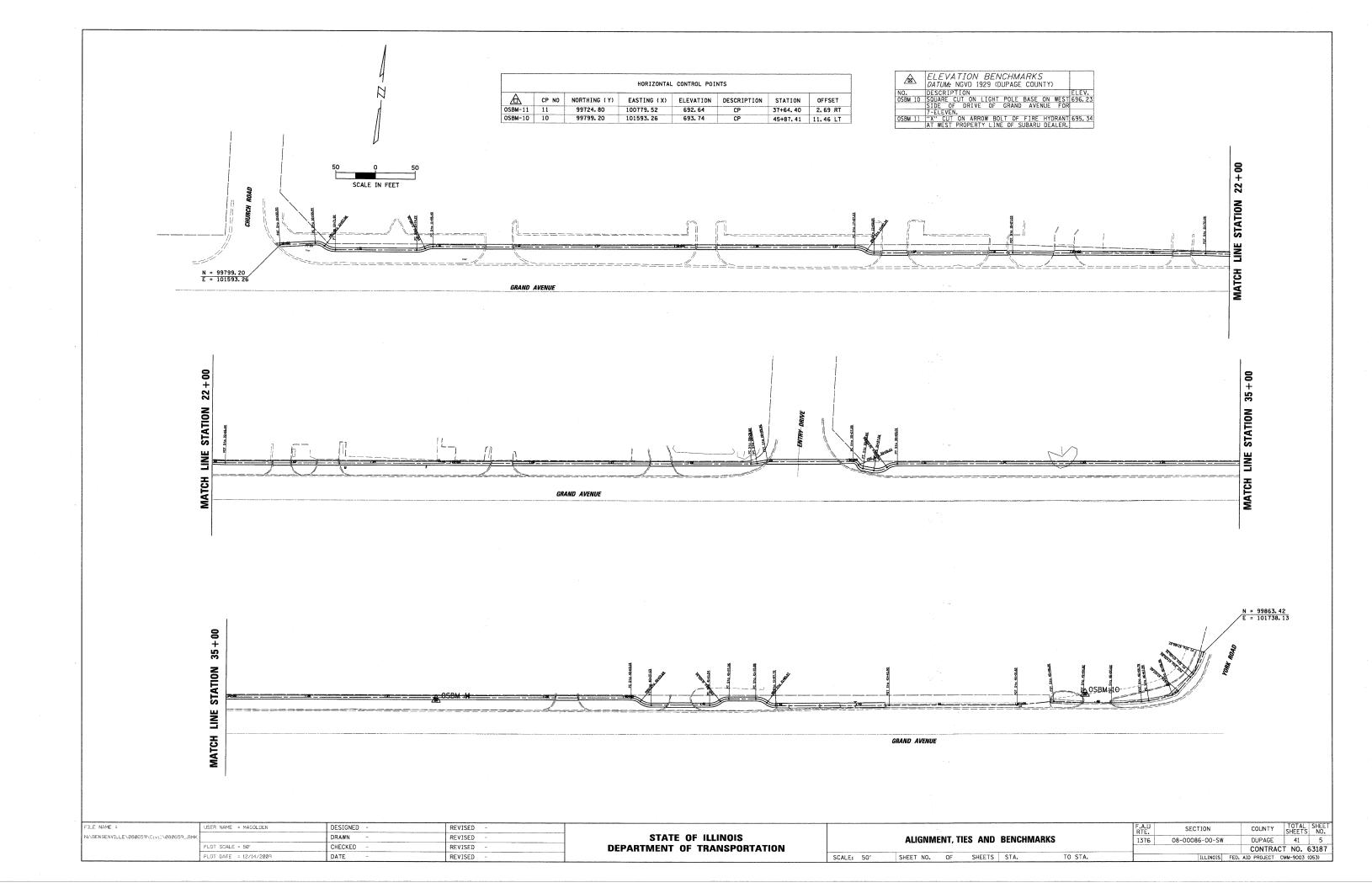
MIXTURE TYPE	AIR VOIDS & Ndes
HOT-MIX ASPHALT SURFACE	4%@50 GYR.
COURSE, MIX "C", N50, 3" (IL 9.5mm)	

NOTES:

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT QUANTITIES IS 112 LBS/SY/IN.

2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

ţ	FILE NAME =	USER NAME = MACOLDEN	DESIGNED -	REVISED -				TVDI	CAL SE	CTIONS			F.A.U	SECTION	COUN	Y TOT.	L SHEET
	Nt\BENSENVILLE\Ø8Ø659\C1v1\659_detl.pln		DRAWN -	REVISED -	STATE OF ILLINOIS			1111	ICAL SE	CHONS	l		1376	08-00086-00-SW	DUPAG	E 41	4
		PLOT SCALE = 20'	CHECKED -	REVISED	DEPARTMENT OF TRANSPORTATION											RACT NO	63187
L		PLBT DATE = 12/14/2009	DATE -	REVISED -		SCALE: N'29'	SHEET NO.	OF	SHEET	TS STA	•	TO STA.		ILLINOIS	FED. AID PROJE	CT CMM-900	3 (053)



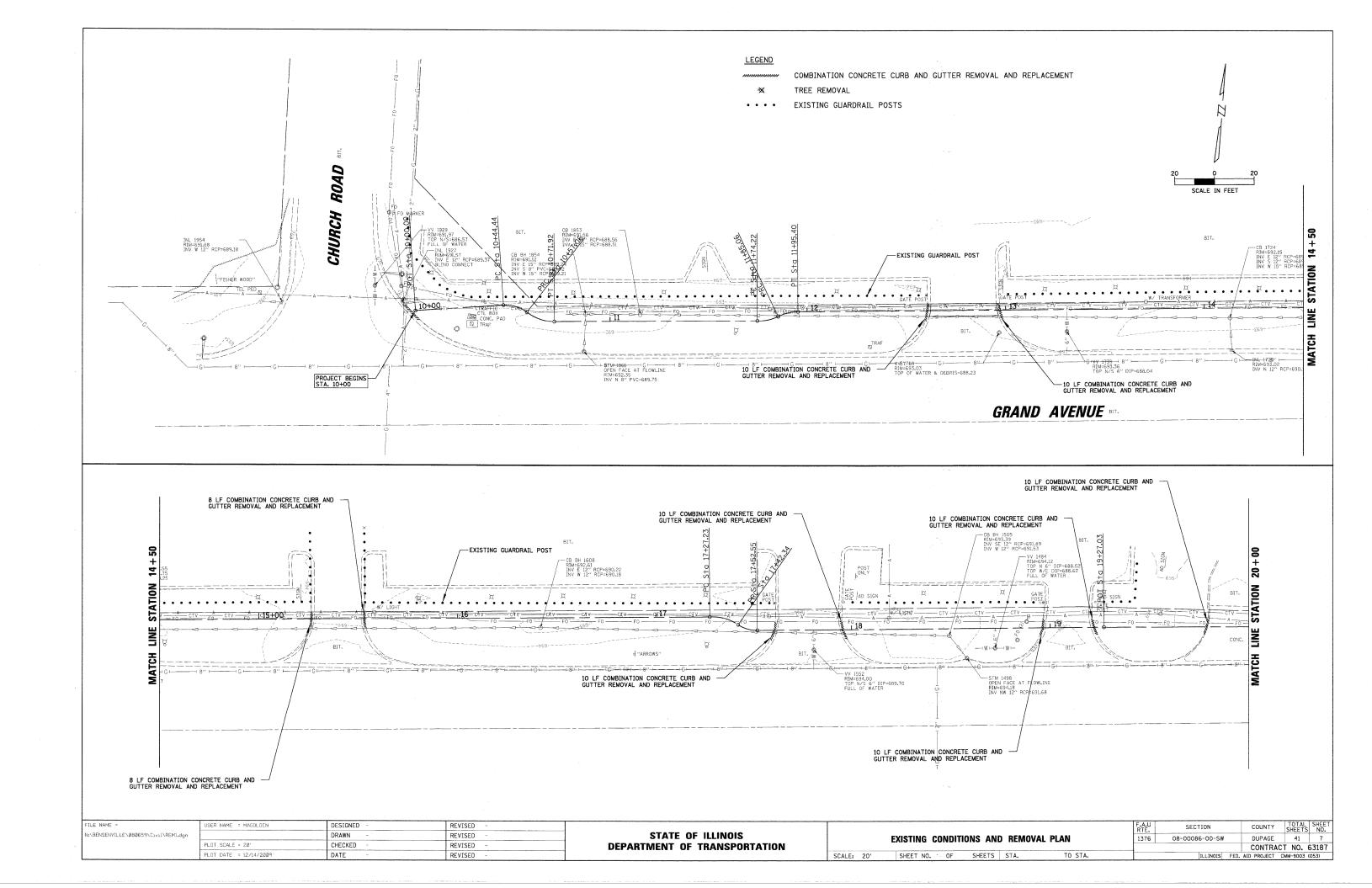
	Cut	Volume	CUT (ft3)	Fill	Volume	EARTH BALANCE	TOPSOIL EXCAVATION	Volume	TOPSOIL PLACEMENT	Volume	REMOVE UNSUITABLE
Station	End Area ft ²	ft ³	ADJUSTED FOR SHRINKAGE	End Area ft2	ft³	ft³	End Area ft2	ft ³	End Area ft2	ft³	ft ³
10+00.00	1.3	110.00	93.50	0	15.00	78.50	1.7	140.00	0	57.50	161.00
10+50.00	3.1	84.58	71.89	0.6	43.23	28.66	3.9	140.96	2.3	48.87	120.76
10+87.59	1.4	22.96	19.51	1.7	21.10	-1.58	3.6	45.30	0.3	4.34	39.37
11+00.00	2.3	28.10	23.89	1.7	25.82	-1.94	3.7	54.68	0.4	3.80	48.95
11+15.19	1.4	45.25	38.47	1.7	60.92	-22.45	3.5	121.84	0.1	3.48	95.90
11+50.00	1.2	72.50	61.63	1.8	47.50	14.13	3.5	137.50	0.1	7.50	144.13
12+00.00	1,7	50.00	42.50	0.1	5.00	37.50	2	107.50	0.2	20.00	125.00
12+50.00	0.3	4.27	3.63	0.1	17.07	-13.44	2.3	81.08	0.6	8.54	59.10
12+78.45	0	17.24	14.65	1.1	11.85	2.80	3.4	59.26	0	19.40	42.67
13+00.00	1.6	70.00	59.50	0	7.50	52.00	2.1	115.00	1.8	47.50	119.50
13+50.00	1.2	42.50	36.13	0.3	27.50	8.63	2.5	115.00	0.1	17.50	106.13
14+00,00	0.5	35 00	29.75	0.8	27.50	2.25	2.1	105.00	0.6	20.00	87.25
14+50.00	0.9	37.50	31.88	0.3	15.00	16.88	2.1	102.50	0.2	10.00	109.38
15+00.00	0.6	47.08	40.01	0.3	21.58	18.44	2	86.31	0.2	3.92	100.82
15+39.23	1.8	100.27	85.23	0.8	27.35	57.88	2.4	136.73	o	6.08	
16+00.00	1.5	50.00	42.50	0.1	17.50	25.00	2.1	162.50	0.2	15.00	188.54 172.50
16+50.00	0.5	32.50	27.63	0.6	22.50	5.13	4.4		0.4		
17+00.00	0.8	57.50	48.88	0.3			4.5	222.50	0.1	12.50	215.13
17+50.00	1.5	26.69	22.69	2.6	72.50	-23.63	4.8	232.50	0.1	5.00	203.88
17+78.10	0.4			0.8	47.77	-25.08	6.8	162.98	0	1.41	136.50
18+00.00	2.2	28.47	24.20	2.5	36.14	-11.94	4.1	119.36	0.4	4.38	103.04
18+50.00	0	55.00	46.75	2.9	135.00	-88.25	2.9	175.00	2.2	65.00	21.75
19+00.00	0.8	20.00	17.00	1.5	110.00	-93.00	2.8	142.50	0	55.00	-5.50
19+09.00	1.4	9.90	8.42	0.8	10.35	-1.94	2	21.60	0	0.00	19.67
19+50.00	0.2	32.80	27.88	1.7	51.25	-23.37	3.4	110.70	5.1	104.55	-17.22
19+92.51	2.9	65.89	56.01	0	36.13	19.87	1.8	110.53	0	108.40	22.00
20+00.00	2.9	21.72	18.46	0	0.00	18.46	2.2	14.98	0	0.00	33.44
20+50.00	2.1	125.00	106.25	0	0.00	106.25	2.2	110.00	2.4	60.00	156.25
20+85.71	1	55.35	47.05	1.1	19.64	27.41	2.1	76.78	0.1	44.64	59.55
21+00.00	1.1	15.00	12.75	1	15.00	-2.25	2.1	30.01	0.1	1.43	26.33
21+41.07	o	22.59	19.20	1	41.07	-21.87	2.3	90.35	0	2.05	66.43
21+50.00	0	0.00	0.00	1.5	11.16	-11.16	2	19.20	0	0.00	8.04
22+00.00	1	25.00	21.25	0.2	42.50	-21.25	2.2	105.00	0.1	2.50	81.25
22+50.00	0.9	47.50	40.38	0.4	15.00	25.38	2.3	112.50	1.5	40.00	97.88
22+87.46	0.3	22.48	19.10	0.8	22.48	-3.37	1.8	76.79	0	28.10	45,33
23+00.00	1.9	13.79	11.72	0.1	5.64	6.08	1.7	21.94	0	0.00	28.03
23+46.58	0.1	46.58	39.59	0.8	20.96	18.63	2.1	88.50	0	0.00	107.13
23+50.00	0.2	0.51	0.44	0.8	2.74	-2.30	2.2	7.35	0	0.00	5.05
24+00.00	1.3	37.50	31.88	0.2	25.00	6.88	2.2	110.00	0.3	7.50	109.38
24+50.00	1.3	65.00	55.25	0.2	10.00	45.25	2.1	107.50	0.4	17.50	135.25
25+00.00	0.5	45.00	38.25	0.2	10.00	28.25	2.1	105.00	0.3	17.50	115.75
25+64.45	1	48.34	41.09	0.5	22.56	18.53	2	132.12	0.0	9.67	140.98
26+00.00	0.9	33.77	28.71	0.1	10.67	18,04	2.1	72:88	0.4	7.11	83.81
26+50.00	1.3	55.00	46.75	0.1	5.00	41.75	2	102.50	0.6	25.00	119.25
27+06.00	0.9	55.00	46.75	0	2.50	44.25	2.1	102.50	0.4	25.00	121.75
27+64.78	0.5	29.15	24.78	0.9	29.15	-4.37	2.2	139.28	0.4	12.96	121.95
28+00.00	0.9	15.85	13.47	0.4	22.89	-9,42	2.1	75.72		3.52	62.78
20.00.00	0.9	42.50	36.13	0.4	20.00	16.13	2.1	102.50	0.2	12.50	106.13

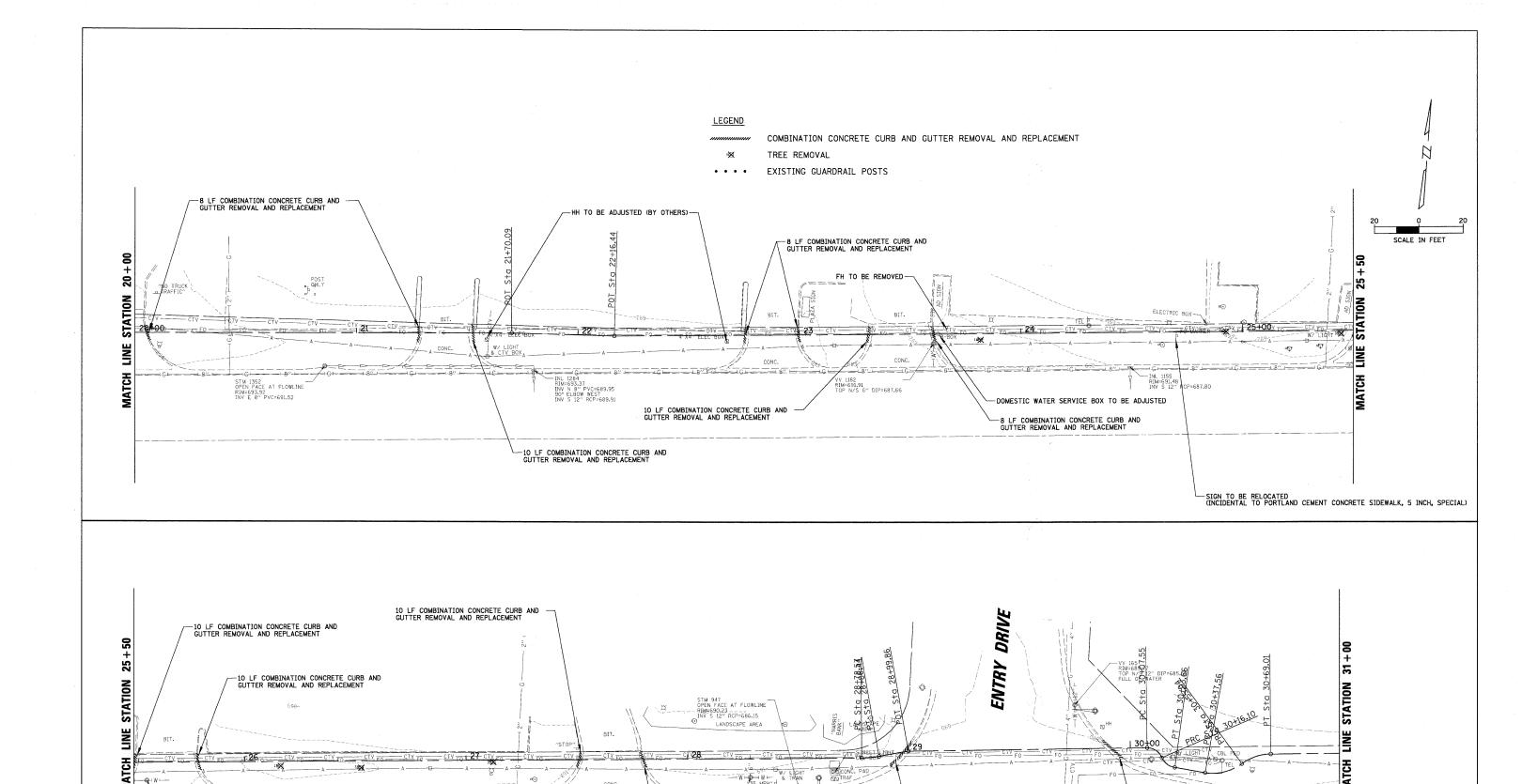
	Cut	Volume	CUT (ff3)	FIII	Volume	EARTH BALANCE	TOPSOIL EXCAVATION	Volume	TOPSOIL PLACEMENT	Volume	REMOVE UNSUITABL
Station	End Area ft ²	ft ³	ADJUSTED FOR SHRINKAGE	End Area ft2	ft ³	ft ³	End Area ft2	ft³	End Area ft2	ft ³	ft ³
28+50.00	0.8			0.4			2		0.3		
30+00.00	1.3	157.50	133.88	0	30.00	103.88	2	300.00	0.1	30.00	373.88
30700.00	1.3	62.50	53.13	V	0.00	53.13		102.50	U, I	2.50	153.13
30+50.00	1.2			0			2.1		0		
		70.00	59.50		7.50	52.00		102.50	***************************************	2.50	152.00
31+00.00	1.6	70.00	59.50	0.3	12.50	47.00	2	100.00	0.1	12.50	134.50
31+50.00	1.2	10.00	00.00	0.2	12.00	41.00	2	150.00	0.4	12.00	104,00
		62.50	53.13		10.00	43.13		102.50		17.50	128.13
32+00.00	1.3	16.29	13.85	0.2		10.71	2.1	25 69	0.3	0.40	
32+12.53	1.3	10.29	13.85	0.3	3.13	10.71	2	25.09	0.2	3.13	33.27
327 12.33	1.3	43.09	36.63	0.3	11.24	25.39		74.94	0.2	7.49	92.83
32+50.00	1			0.3			2		0.2		
		55.00	46.75		7.50	39.25		100.00		12.50	126.75
33+00.00	1.2	65.00	55.25	0	7.50	47.75	2	170.00	0.3	10.00	207.75
33+50.00	1.4	05.00	35.25	0.3	7.30	47.73	4.8	170.00	0.1	10.00	207.75
		52.50	44.63		10.00	34.63		170.00		10.00	194.63
34+00.00	0.7			0.1			2		0.3		
		50.00	42.50		10.00	32.50		95.00		10,00	117.50
34+50.00	1,3	75.00	63.75	0.3	12.50	51.25	1.8	87.50	0.1	10.00	128.75
35+00.00	1.7	10.00	55775	0.2	12.00	01.20	1.7	51150	0.3	10.00	120.75
		97.50	82.88		5.00	77.88		102.50		17.50	162.88
35+50.00	2.2			0			2.4		0.4		
36+00.00	1.4	90.00	76.50	0.3	7.50	69.00	2.8	130.00	0	10.00	189.00
36+00.00	1.4	60.00	51.00	0.3	7.50	43.50	2.8	120.00		10.00	153.50
36+50.00	1			0			2	*	0.4		100.00
		5.58	4.74		0.29	4.45		11.45		2.05	13.84
36+55,87	0.9	48.54	41.26	0.1	8.83	32.44	1.9	81.64	0.3	6.62	107.46
37+00.00	1.3	40.04	41.20	0.3	0.03	32.44	1.8	01.04	0	0.02	107.46
		62.50	53.13	<u> </u>	15.00	38.13		92.50		2.50	128.13
37+50.00	1.2			0.3			1.9		0.1		
		62.50	53,13		15.00	38.13		90.00		5.00	123.13
38+00.00	1.3	70.00	59.50	0.3	15.00	44.50	1.7	87.50	0.1	5.00	127.00
38+50.00	1,5			0.3			1.8		0.1		121.00
		8.31	7.06	***************************************	1.66	5.40		10.25		0.55	15.10
38+55.54	1.5			0.3			1.9		0.1		
39+00.00	1.4	64.47	54.80	0.3	13.34	41.46	3.1	111.15	0	2.22	150.39
39+00.00	1.4	21.92	18.63	0.3	20.46	-1.83	3,1	95.00	Ů.	0.00	93.17
39+29.23	0.1			1.1			3.4		0		
		12.46	10.59	***************************************	17.65	-7.06		68.54		32,19	29.29
39+50.00	1.1	55.00	46.75	0.6	22.50	24.25	3.2	100.00	3.1	77,50	40.75
40+00.00	1.1	55.00	40.75	0.3	22.50	24.23	0.8	100.00	0	11,30	46.75
40.00.00		52.50	44.63	0.0	7.50	37.13		20.00		2.50	54.63
40+50.00	1			0			0		0.1		
		19.29	16.39		7.23	9.16	***************************************	30.14		1.21	38.09
40+74,11	0.6	23.30	19.81	0.6	7.77	12.04	2.5	77.67	0	1.29	88.41
41+00.00	1.2	20.00	10.01	0			3.5		0.1		00.41
		60.00	51.00		15.00	36.00		255.00		5.00	286.00
41+50.00	1.2	00.50	50.10	0.6	15.00	00.40	6.7	075.00	0.1	00.00	
42+00.00	1.3	62.50	53.13	0	15.00	38.13	4.3	275.00	1.1	30.00	283.13
4 <u>2</u> +00,00	1.3	77.50	65.88	U	0.00	65.88	4.3	292.50	1. 1	30.00	328.38
42+50.00	1.8			0			7.4		0.1		
		82.50	70.13		0.00	70.13	-	320.00		7.50	382.63
43+00.00	1.5			0	150: ::	100	5.4	2015 55	0.2	4045 ::	00000
otal (CU FT)		3784.39	3216.73		1591.12	1625.61		8613.69		1343.40	8895.91
otal (CU YD)	=	140.16	119.14		58.93	60.21		319.03		49.76	329.48

FILE NAME =	USER NAME = MAGOLDEN	DESIGNED ~	REVISED -
N:\BENSENVILLE\Ø8Ø659\C1v1:\659_soq2.pln		DRAWN -	REVISED -
	PLOT SCALE = 1'	CHECKED -	REVISED -
	PLOT DATE = 12/14/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

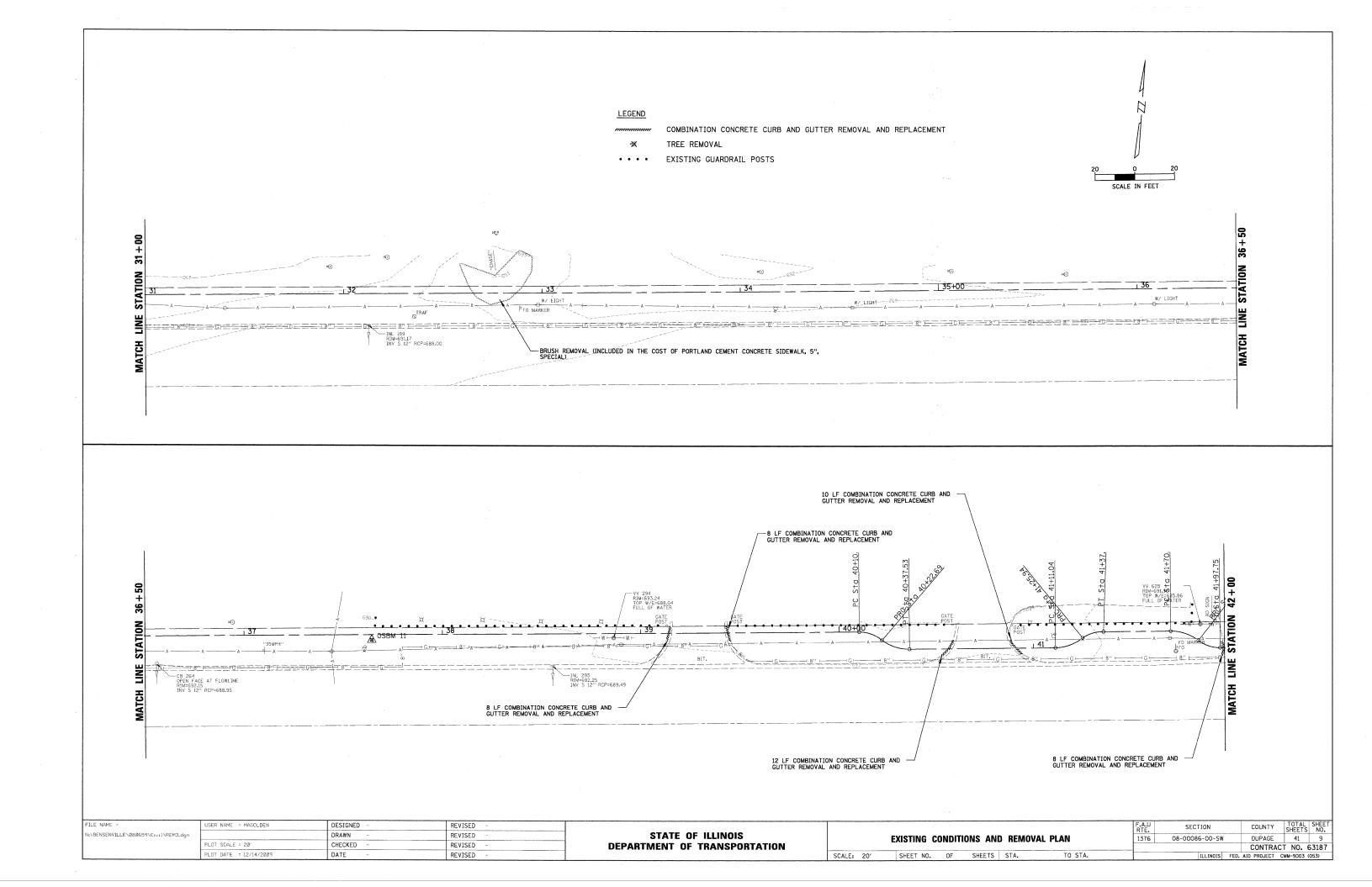
			VODIC OO	IFNIII F		F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEE NO.
		AKIHV	VORK SCI	HEDULE		1376	08-00086-00-SW	DUPAGE	41	6
								CONTRAC	T NO.	63187
SCALE: 1'	SHEET NO.	OF.	SHEETS	STA.	TO STA.		ILLINOIS FE	D. AID PROJECT (MM-9003	(053)





					15 LF COMBINATION CONC	ON CONCRETE CURB AND . AND REPLACEMENT				
FILE NAME =	USER NAME = MAGOLDEN	DESIGNED -	REVISED -		T	F-A.U SECTION COUNTY TOTAL SHEET				
N:\BENSENVILLE\Ø8Ø659\Cıvı1\REM2.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS	EXISTING CONDITIONS AND REMOVAL PLAN	1376 08-00086-00-SW DUPAGE 41 8				
-	PLOT SCALE = 20'	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	EXISTING COMPLITIONS AND HEMICARE FERM	CONTRACT NO. 6318				
	PLOT DATE = 12/14/2009	DATE -	REVISED -	,	SCALE: 20' SHEET NO. OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT CMM-9003 (053)				

-10 LF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT -15 LF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT



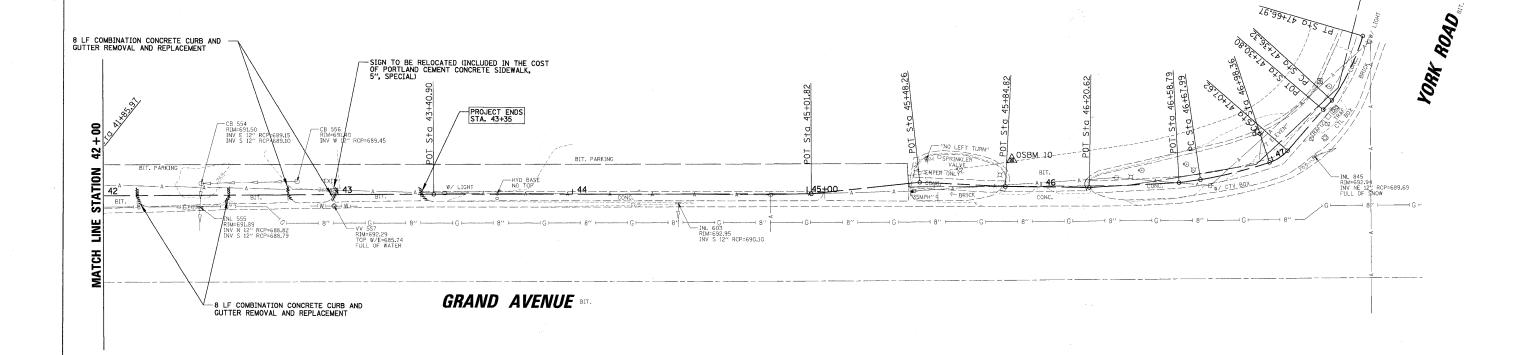
20 0 20
SCALE IN FEET

LEGEND

COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT

TREE REMOVAL

• • • • EXISTING GUARDRAIL POSTS

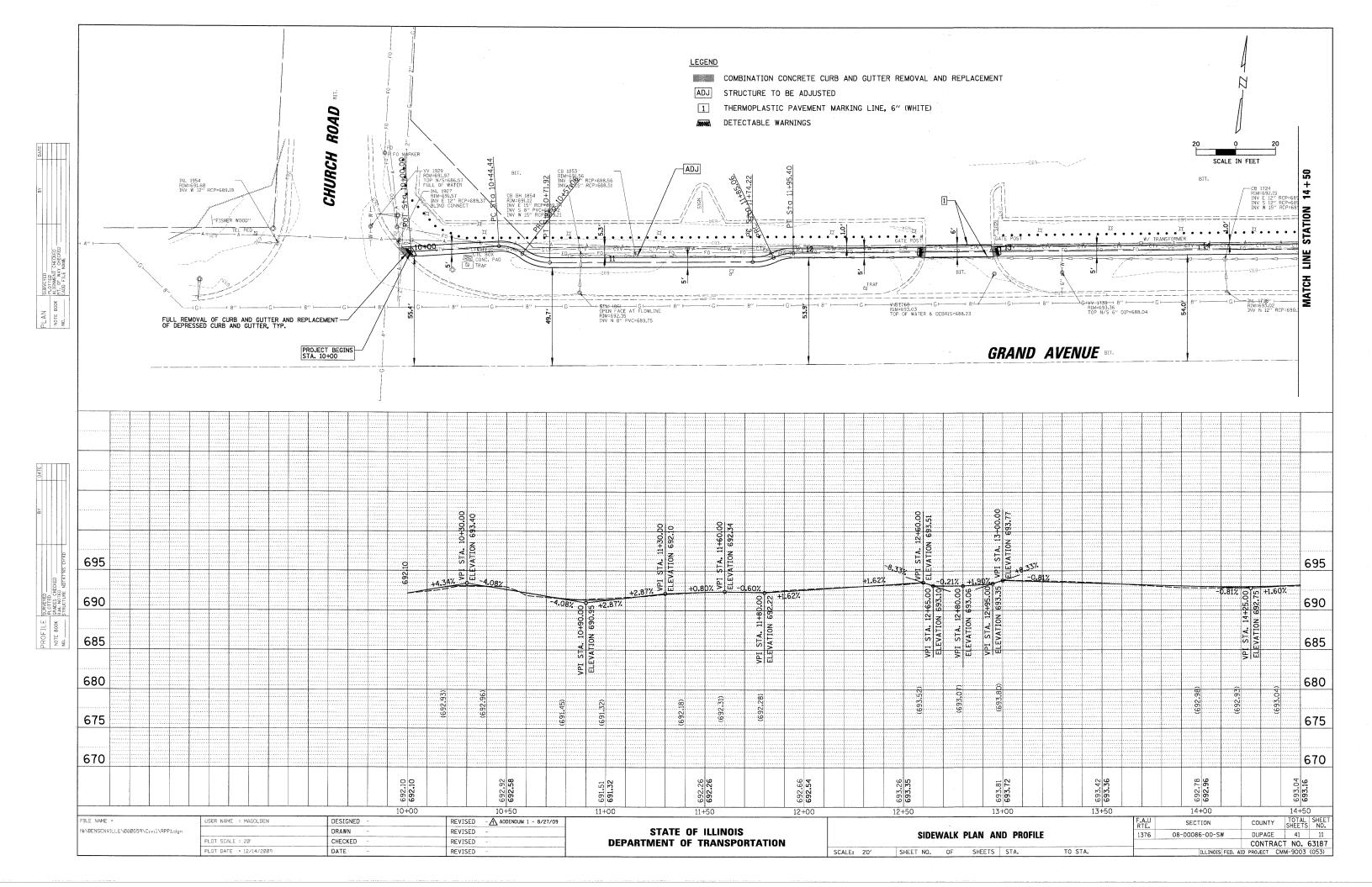


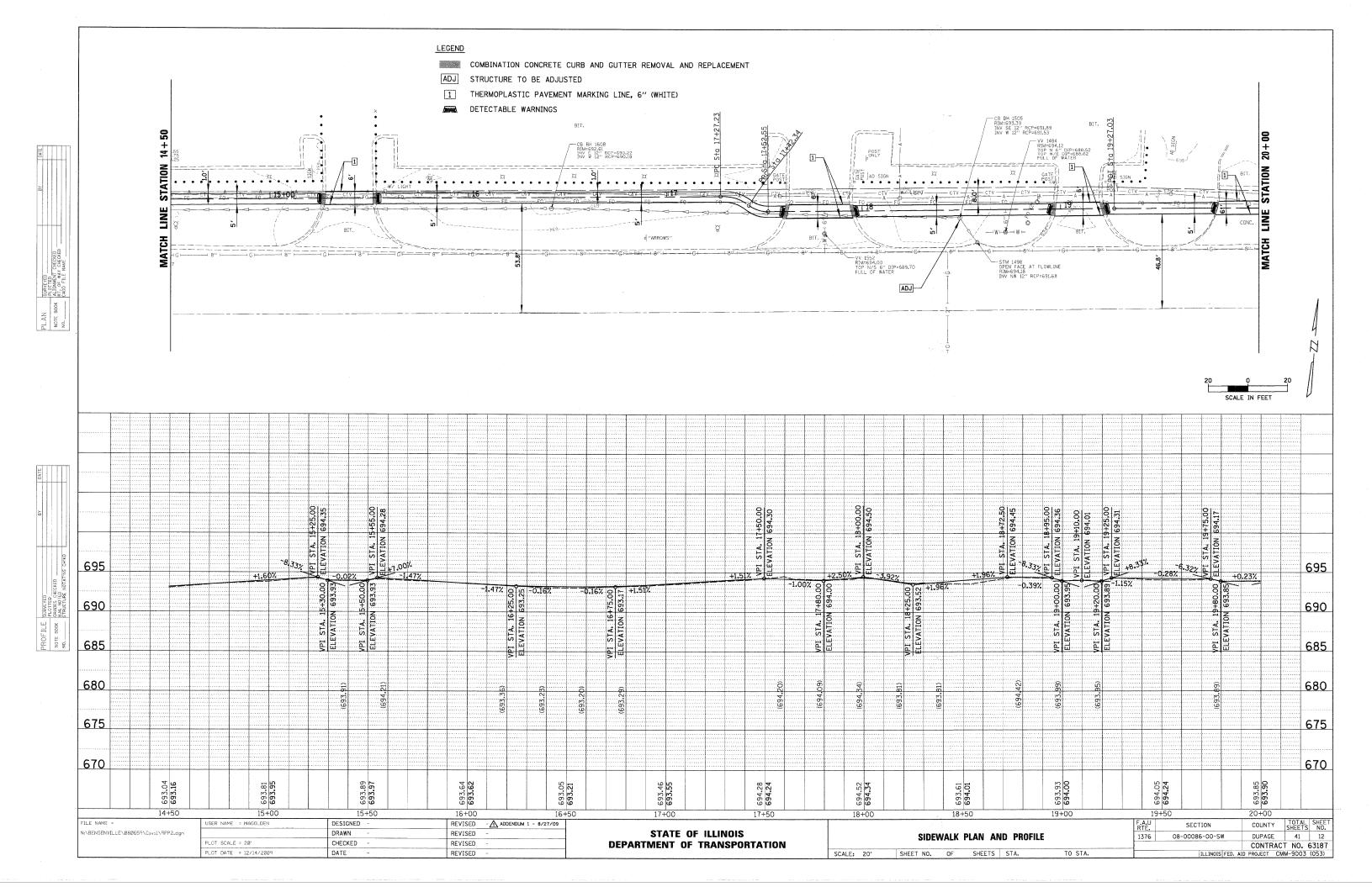
FILE NAME =	USER NAME = MAGOLDEN	DESIGNED -	REVISED -	Γ
N:\BENSENVILLE\080659\Civil\REM4.dgn		DRAWN ~	REVISED -	
	PLOT SCALE = 20'	CHECKED -	REVISED -	
	PLOT DATE = 12/14/2009	DATE -	REVISED -	

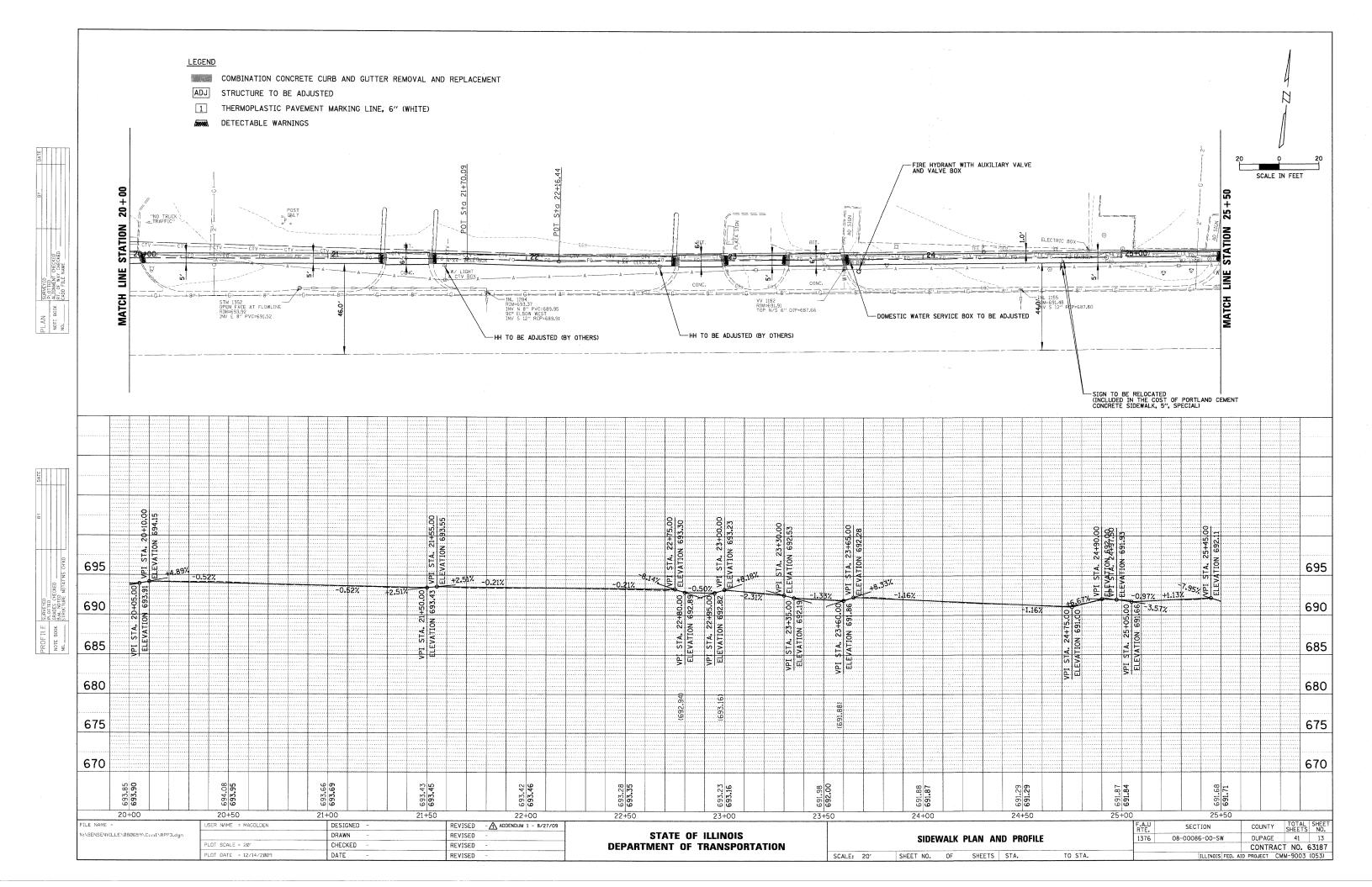
	STATI	E OF	ILLINOIS
DEPART	MENT	0F	TRANSPORTATION

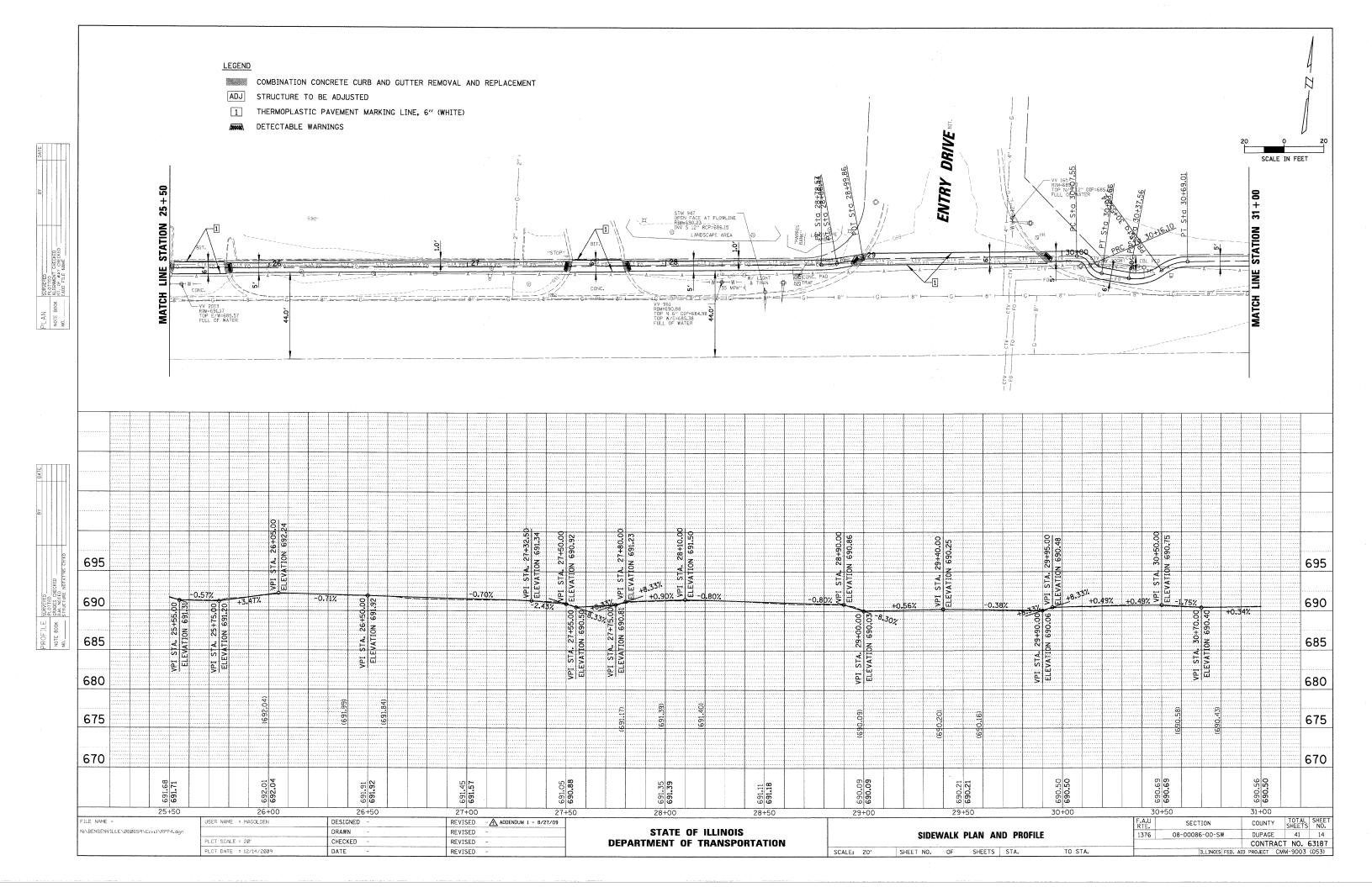
SCALE: 20'

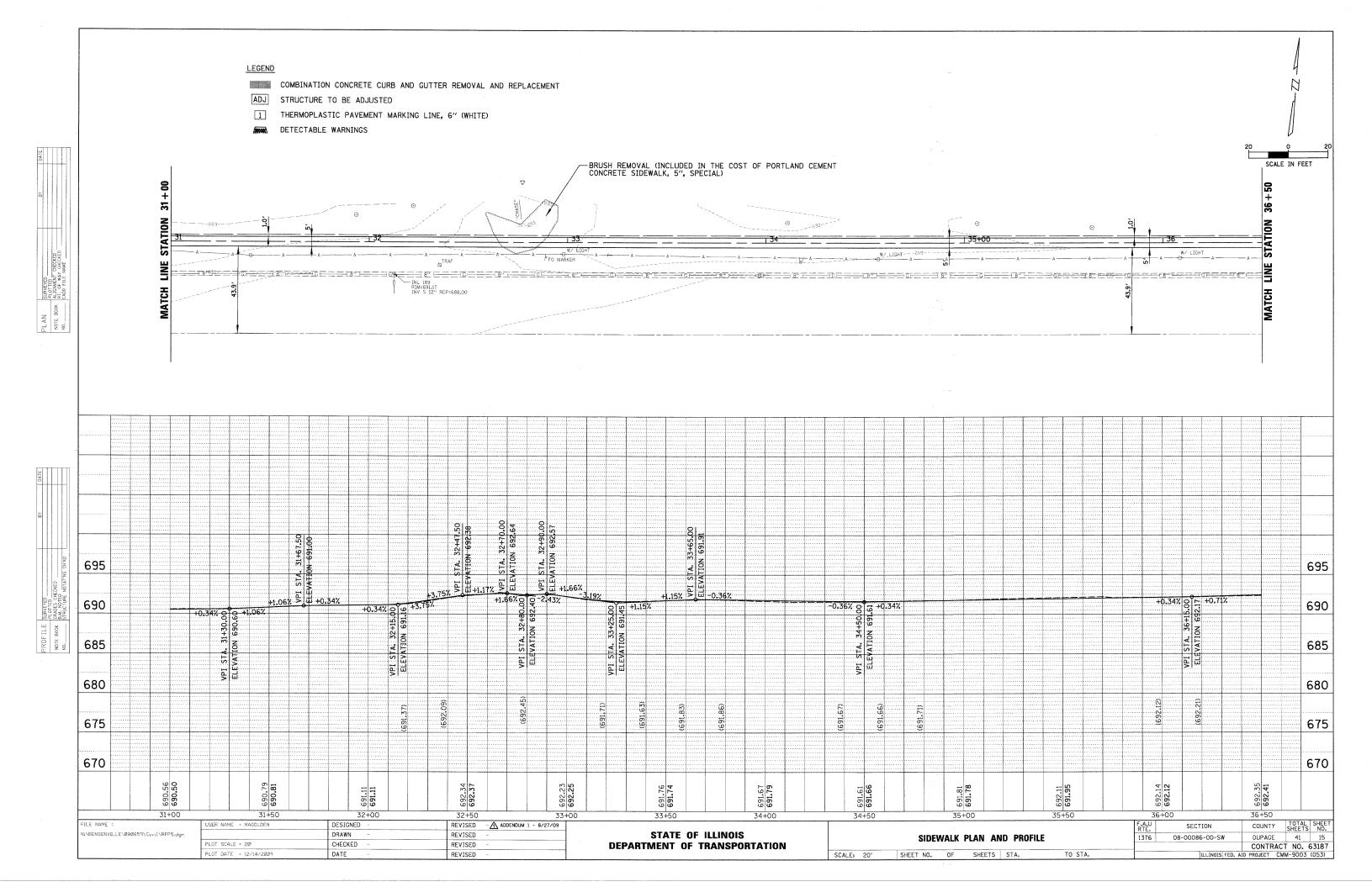
	F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
EXISTING CONDITIONS AND REMOVAL	. PLAN	1376	08-00086-00-SW	DUPAGE	41	10
			CONTRAC	T NO.	63187	
SHEET NO. OF SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT C	MM-9003	(053)

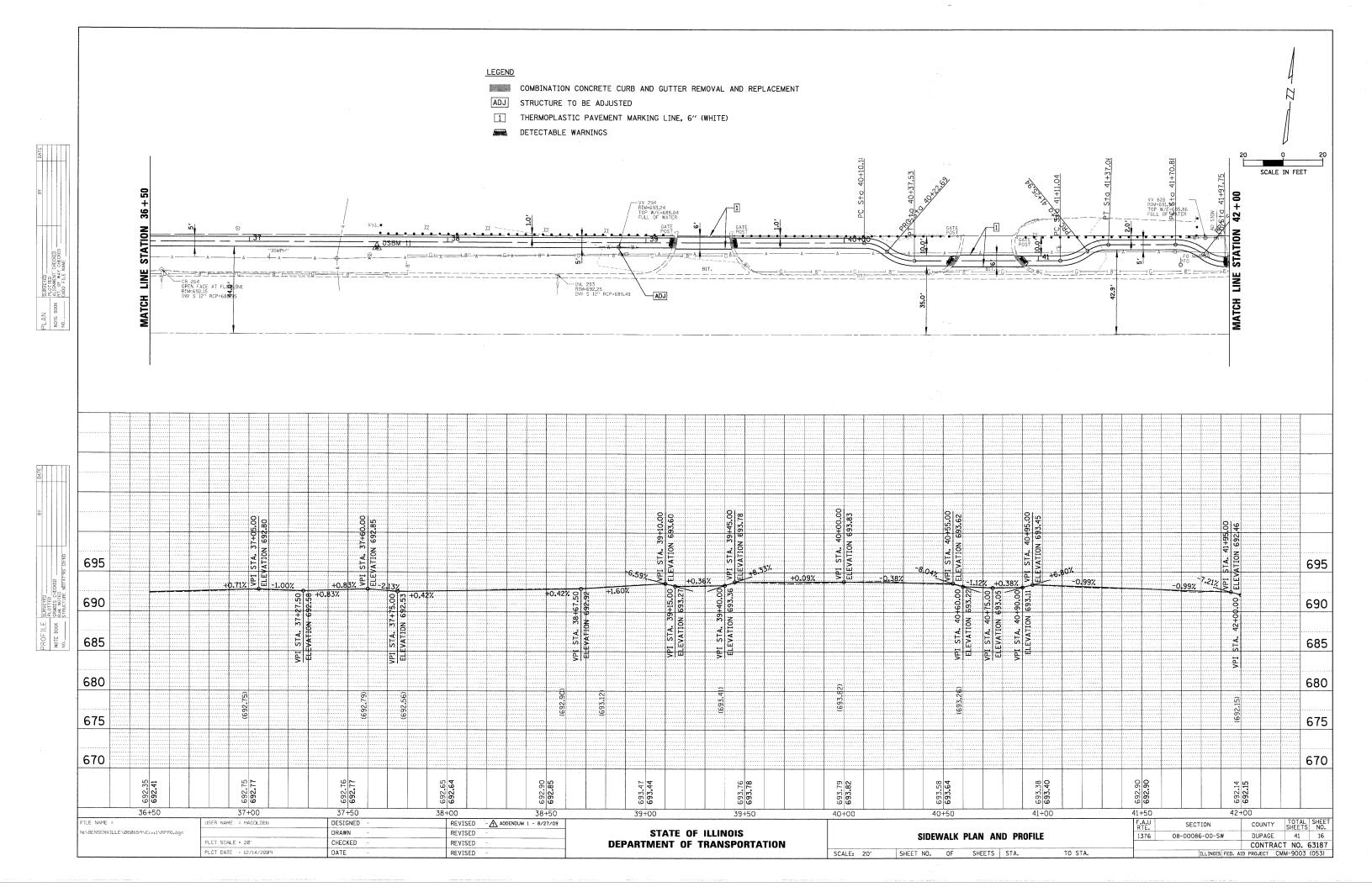


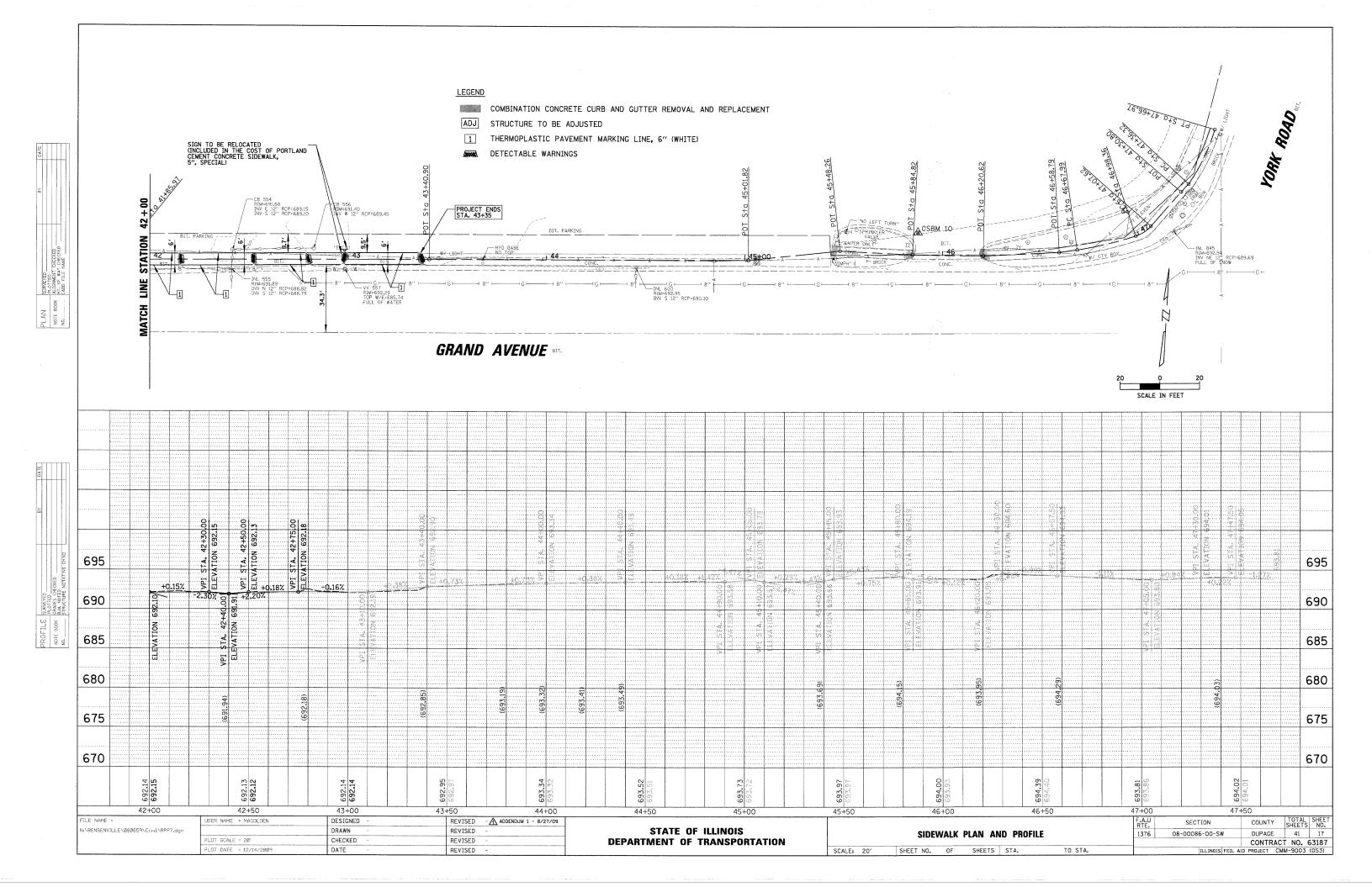


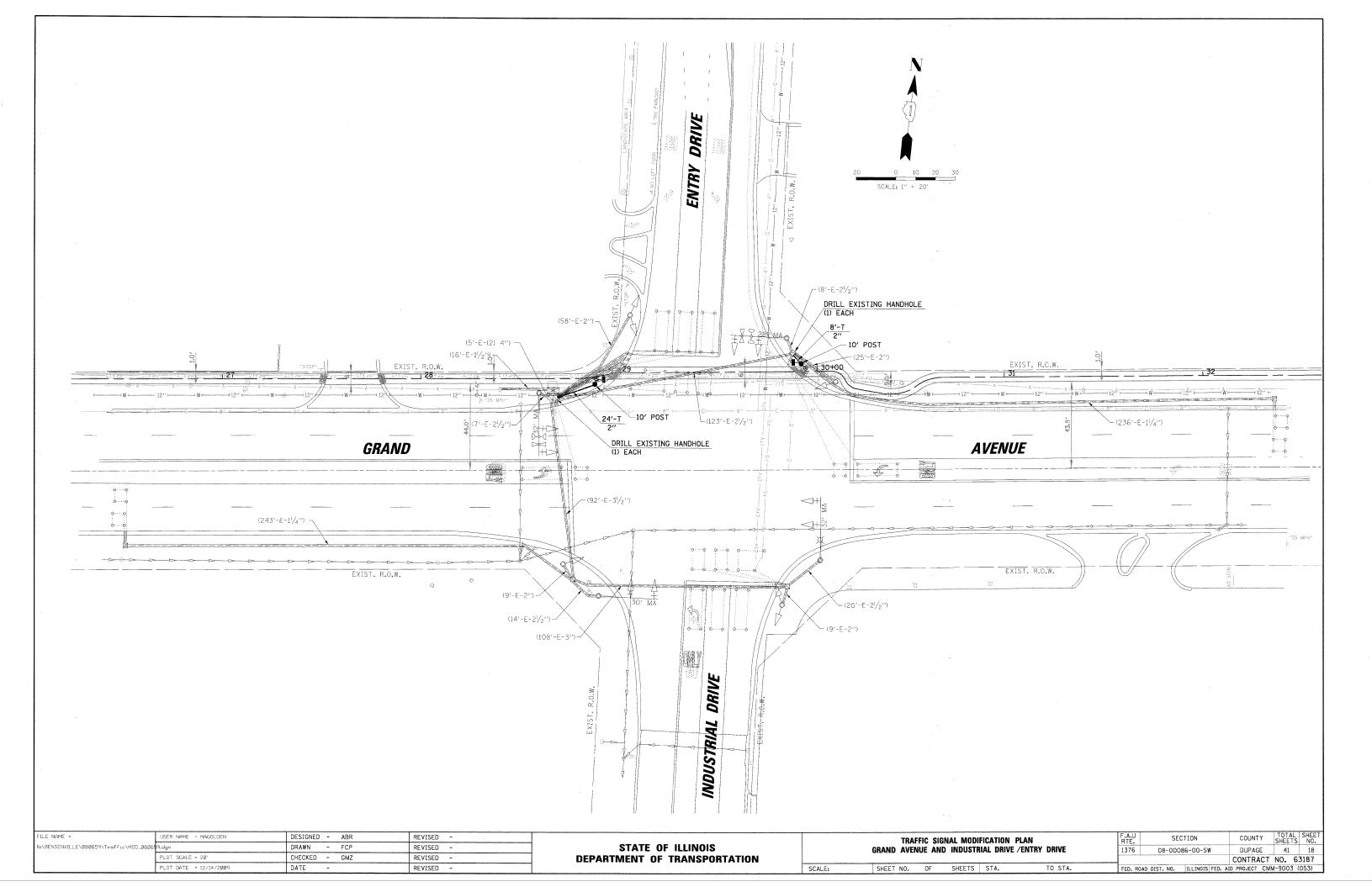


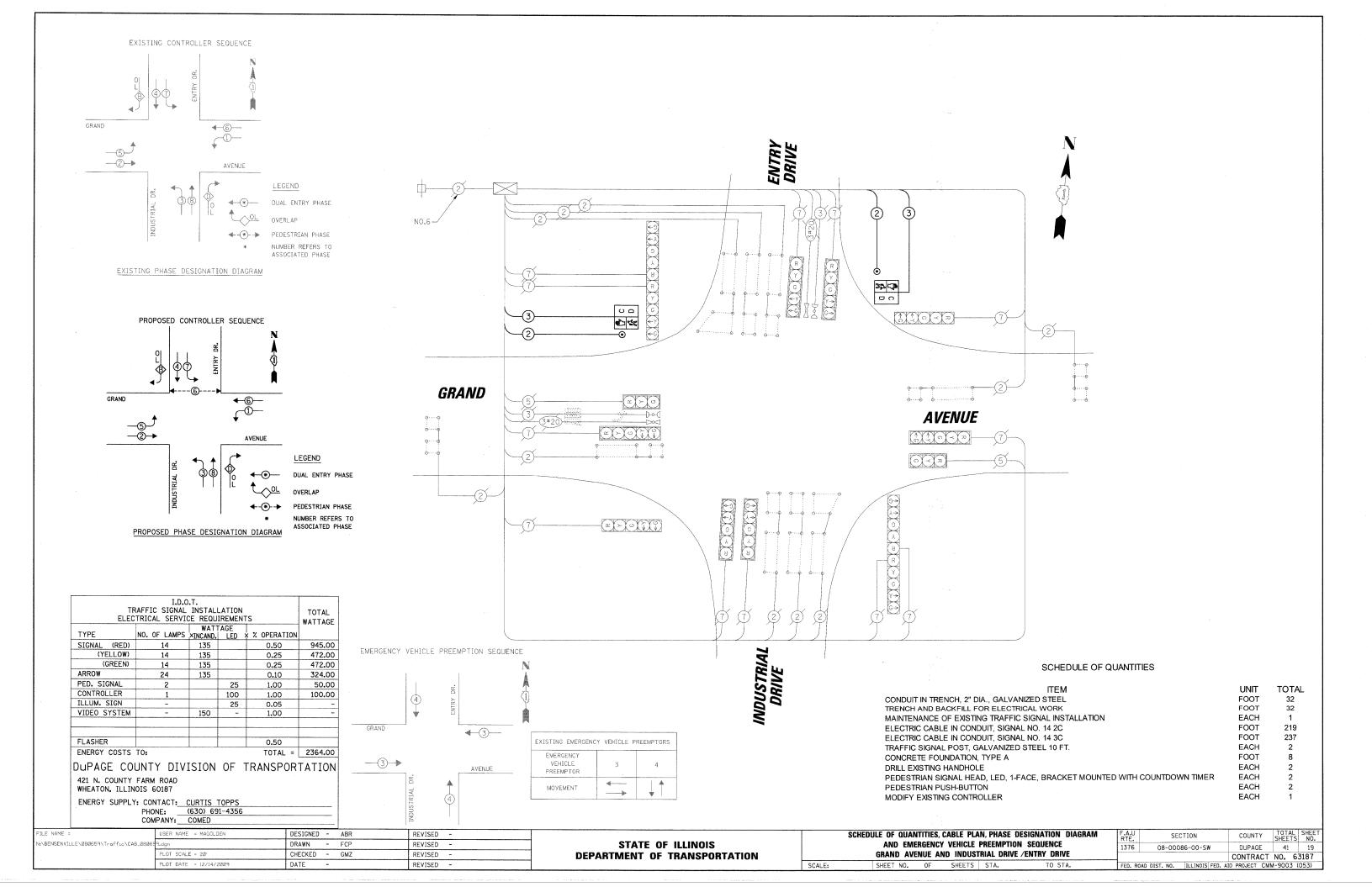








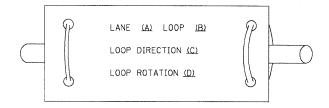




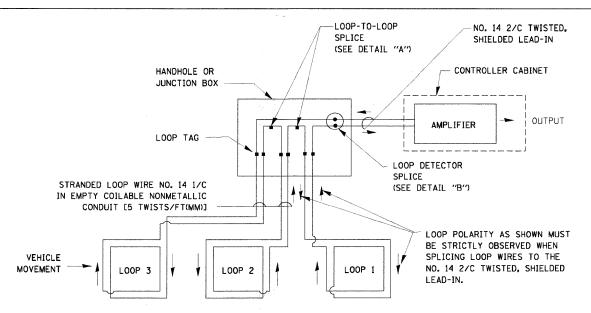
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

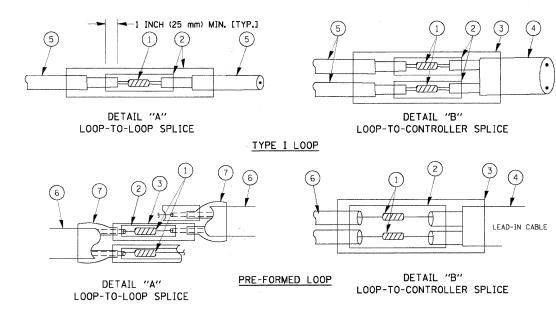


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

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



LOOP DETECTOR SPLICE

- $\ensuremath{\text{\textcircled{1}}}$ western union splice soldered with rosin core flux. All exposed surfaces of the solder shall be smooth.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

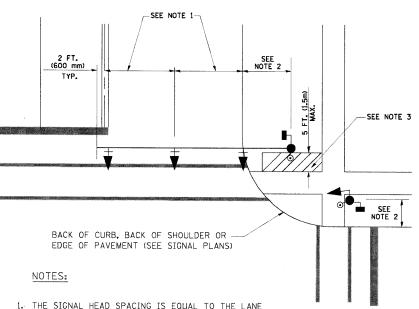
FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED	-	DAD	REVISED	Mr.
o:\pw_work\PWIDOT\KANTHAPHIXAY8C\d01126	4\traffic_legend_v7.dgn	DRAWN	-	BCK	REVISED	-
	PLOT SCALE = 20.0000 ′/ IN.	CHECKED	-	DAD	REVISED	
	PLOT DATE : 10/6/2009	DATE	-	10/28/09	REVISED	-

STATE	0F	ILLINOIS
DEPARTMENT	OF 1	TRANSPORTATION

	DISTRICT	ONE		F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
CTANDAD			IGN DETAILS	1376	08-00086-00-SW	DuPAGE	41	20
STANDARD TRAFFIC SIGNAL DESIGN DETAILS				CONTRACT	NO. 6	3187		
SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO. ILLINOIS FED. A	ID PROJECT CM	M-9003	(053)

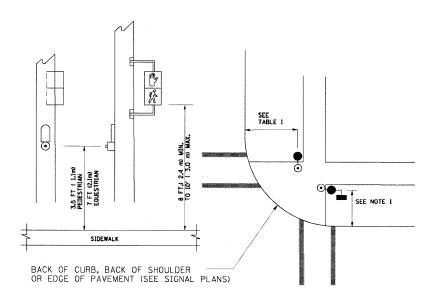
TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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



- 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.
- 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 5.0 FT. (1.5 m) MAX. 1.5 FT. (0.45 m) MIN. 1.5 FT. (0.45 m) MAX. LEGEND DOWNWARD SLOPE PEDISTRIAN PUSHBUTTON

- * WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

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

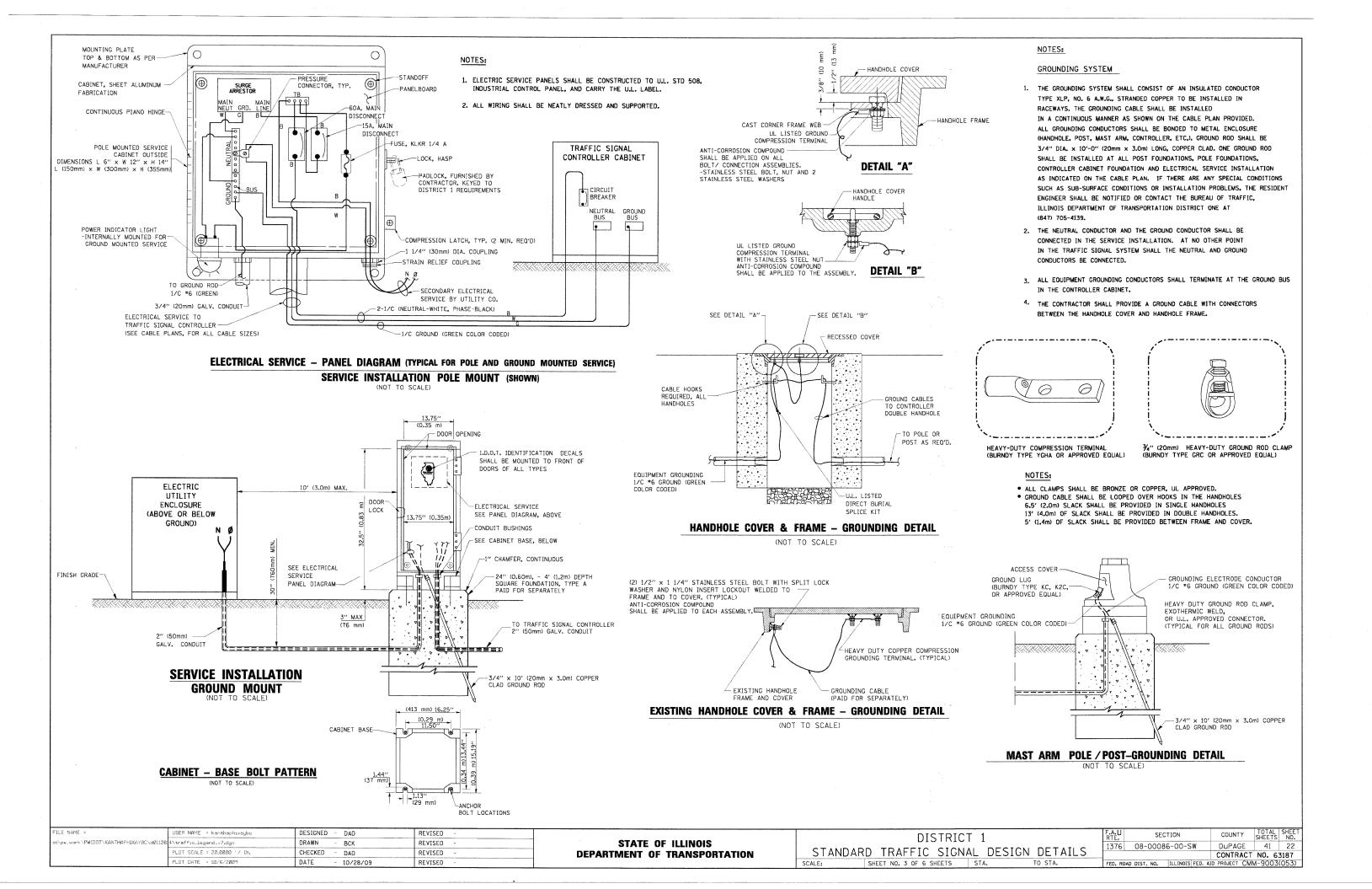
TRAFFIC SIGNAL EQUIPMENT OFFSET

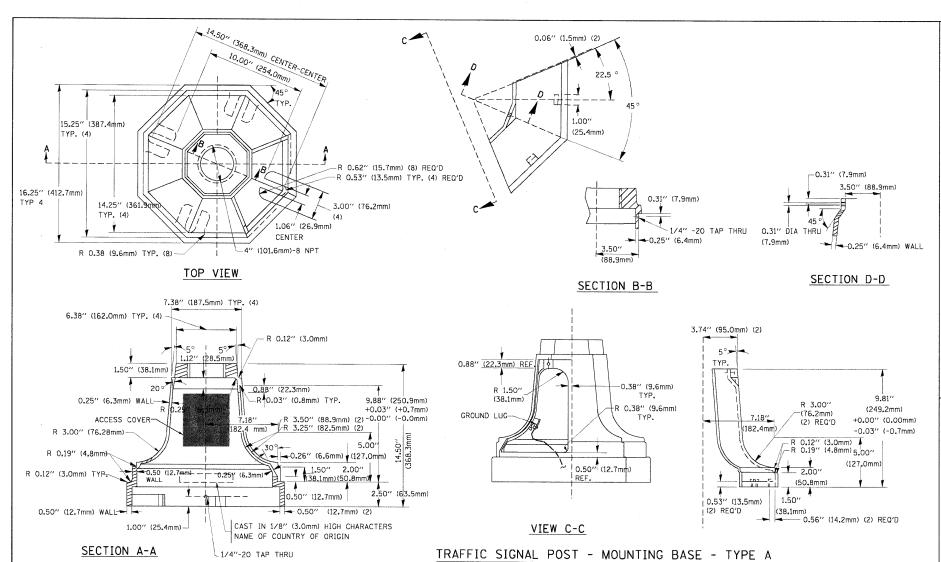
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1,2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

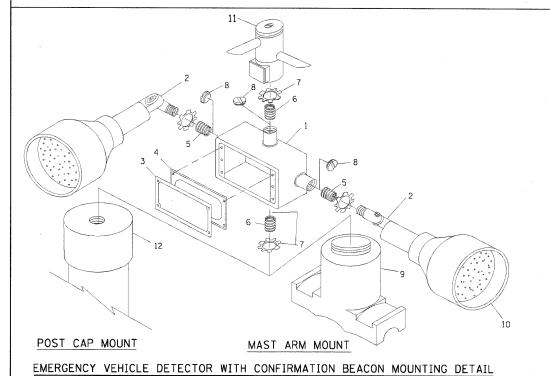
NOTES

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

FILE NAME JSER NAME = kanthaphixayb DESIGNED - DAG REVISED SECTION COUNTY TOTAL SHEE SHEETS NO. DISTRICT 1 \pw_work\PWIDOT\KANTHAPHIXAYBC\dØ112 DRAWN BCK REVISED STATE OF ILLINOIS DuPAGE 41 21 1376 08-00086-00-SW STANDARD TRAFFIC SIGNAL DESIGN DETAILS .OT SCALE = 20.0000 '/ IN. CHECKED DAD REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 63187 OT DATE = 10/6/200° DATE REVISED SHEET NO. 2 OF 6 SHEETS STA. FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT CMM-9003(053) 10/28/09







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

- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 34"(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.

(12mm) 0.25 DRAIN PORT -0.25" (6mm) 0.25"---(6mm) -0.31"(8mm) -0.20"(5mm) - ASTM A36 STEEL - ASTM A-123 HOT DIPPED GALVANIZED HEIGHT WEIGHT VARIES

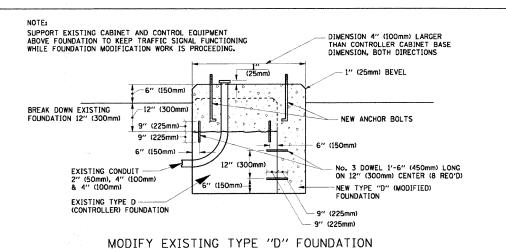
" (178mm) - 12" (300mm) 53 lbs (24kg) 9.5"(241mm) 19"(483mm) 68 lbs (31 kg) LO.75"(273mr 21.5"(546mr (178mm) - 12" (300mm VARIES 81 lbs (37 kg) 13.0"(330mm) 26"(660mm) 18.5"(470mm) 126 lbs (57 kg)

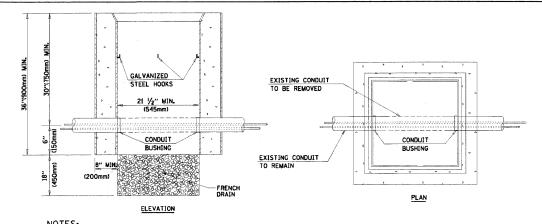
SHROUD

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
 THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.

R2.95" (75mm)

3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.





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

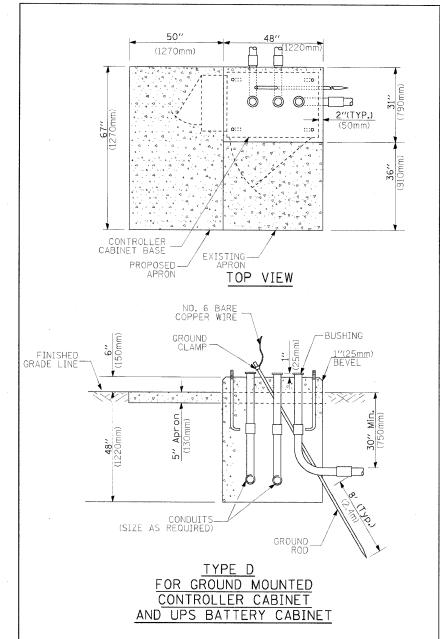
HANDHOLE TO INTERCEPT EXISTING CONDUIT

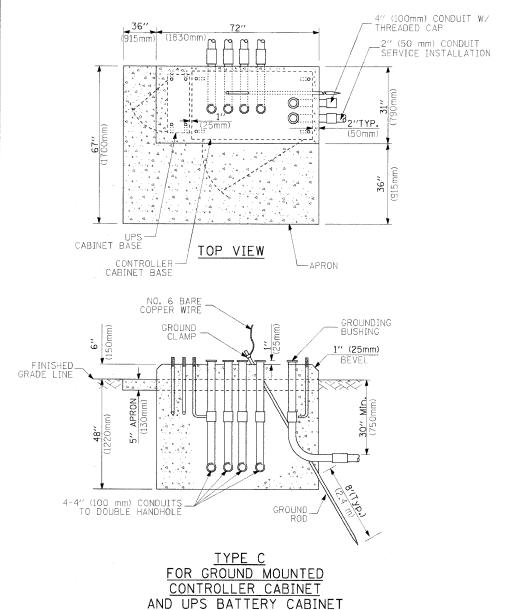
FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED - DAG	REVISED -
o:\pw_work\PWIDOT\KANTHAPHIXAYBC\dØ1126	4\traffic_legend_v7.dgn	DRAWN - BCK	REVISED -
·	PLOT SCALE = 20.0000 '/ IN,	CHECKED - DAD	REVISED -
	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

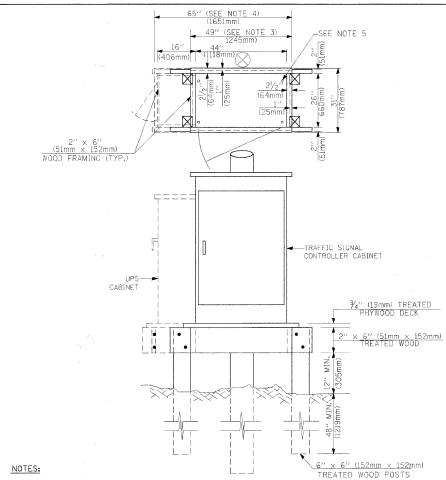
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	DISTRIC	 Г 1		F.A.U RTE.	SE	СТІО
STANDAR	D1011110		DETAILS	1376	08-0008	36-0
CALE:	SHEET NO. 4 OF 6 SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO.	ILL

COUNTY -00-SW DuPAGE 41 CONTRACT NO. 63187 LINOIS FED. AID PROJECT CMM-9003(053)







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

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

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

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

CABLE SLACK

DEPTH OF FOUNDATION

FOUNDATION

TYPE A - Signal Post

TYPE C - CONTROLLER W/ UPS

TYPE D - CONTROLLER

SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE

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	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40′ (12.2 m) and less than 50′ (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25′-0″ (7 . 6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

DEPTH 4'-0'' (1.2m)

4'-0" (1.2m) 4'-0" (1.2m)

4'-0'' (1.2m)

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

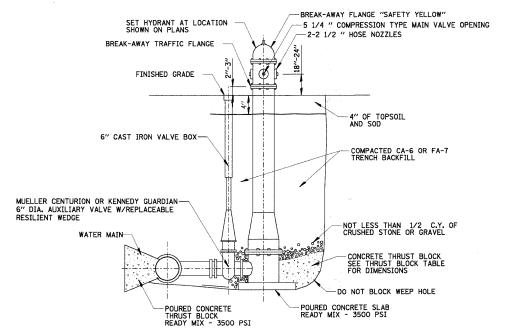
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = kanthaphixaybc	DESIGNED - DAG	REVISED -		1	DISTRICT	. 1	
c:\pw_work\PWIDOT\KANTHAPHIXAYBC\dØ1126	4\traffic_legend_v7.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS	l	01311110	1	
	PLOT SCALE = 20.0000 '/ IN.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDAF	RD TRAFFIC SIGN	AL DESI	GN DET
	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -		SCALE:	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.

	F.A.U RTE.	SEC.	COUNTY	TOTAL	SHEET NO.	
FTAILS	1376	08-00086	DuPAGE	41	24	
EIAILS				CONTRACT	NO. 6	3187
TA.	FED. RC	AD DIST. NO.	ILLINOIS FED.	AID PROJECT CM	M-9003	(053)

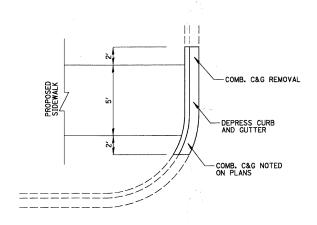
TRAFFIC SIGNAL LEGEND

			,								
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	<u>ITEM</u>	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R			EMERGENCY VEHICLE LIGHT DETECTOR	R≪	\bowtie	•	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET		E R		CONFIRMATION BEACON	R ₀ -(1	0()	•-(NO. 11 17 O, GREESS NOTES STREETING		-/	
COMMUNICATIONS CABINET	cc ^R	ECC	CC	HANDHOLE	R 🖂			COAXIAL CABLE		(C)	©
MASTER CONTROLLER		EMC	MC		R			VENDOR CABLE FOR CAMERA			
MASTER MASTER CONTROLLER	R	EMMC	MMC	HEAVY DUTY HANDHOLE	D	H AND THE REST OF THE PERSON NAMED IN COLUMN TO THE PERSON NAMED I	H				— <u>V</u> —
UNINTERRUPTIBLE POWER SUPPLY SERVICE INSTALLATION.	UPS .	EUPS	UPS	DOUBLE HANDHOLE	*SS R (Q)		3 3	COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		_6	6
(P) POLE OR (G) GROUND MOUNT	-□- ^R	- <u>-</u> -	- - -	JUNCTION BOX GALVANIZED STEEL CONDUIT		9	v	FIBER OPTIC CABLE NO. 62.5/125, MM12F		—(12F)—	
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R	P	P	IN TRENCH (T) OR PUSHED (P) TEMPORARY SPAN WIRE, TETHER WIRE.	D	**************************************		FIBER OPTIC CABLE		—(24F)—	(24F)
STEEL MAST ARM ASSEMBLY AND POLE	R	0	•	AND CABLE	π			NO. 62.5/125, MM12F SM12F		<i>y</i> –	į
ALUMINUM MAST ARM ASSEMBLY AND POLE	R			COMMON TRENCH			СТ	FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE		-	-0-
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	^R O->⊄	O-X	• ×	COILABLE NONMETALLIC CONDUIT (EMPTY) SYSTEM ITEM		S	CNC S	OROUND ROD AT (C) CONTROLLER,		· ·	C.
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	RQ————————————————————————————————————	Q———— PTZþ	PTZ	INTERSECTION ITEM		I	ΙΡ	(H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		c 	c
SIGNAL POST	R _O	0	•	REMOVE ITEM	R			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R ⊗	\otimes	•	RELOCATE ITEM ABANDON ITEM	RL A			STEEL MAST ARM POLE AND	RMF		
GUY WIRE	>R	>	>	12" (300mm) TRAFFIC SIGNAL SECTION		R	R	FOUNDATION TO BE REMOVED	<u> </u>		
SIGNAL HEAD	R →	\rightarrow	-	12" (300mm) RED WITH 8" (200mm)				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF O		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)	GE)		→ ²	YELLOW AND GREEN TRAFFIC SIGNAL FACE				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND	RMF O→¤		
SIGNAL HEAD WITH BACKPLATE	+DR	+1>>	+			R	R	FOUNDATION TO BE REMOVED	0 %		
SIGNAL HEAD OPTICALLY PROGRAMMED	_R _D′′P′′	—[>″p″	> "P"	SIGNAL FACE		G	G	SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	O-E>''F''	O-I>"F"	← "F"			•6	← Y ← G	INTERSECTION & SAMPLING (SYSTEM) DETECTOR		[IS]	IS
PEDESTRIAN SIGNAL HEAD	R -	-0	-1			R	R	SAMPLING (SYSTEM) DETECTOR		S	s <u>S</u>
PEDESTRIAN PUSHBUTTON DETECTOR	R (10)	0	•	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD			G •Y	EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECT	OR	[P]	
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETEC	TOR ® APS	@APS	APS O O O O O O O O O O O O O				◆ G	EXISTING PREFORMED INTERSECTION LOOP DETECTOR	OIV.	11 1PP1	
ILLUMINATED SIGN "NO LEFT TURN"	R	6	•	12" (300mm) PEDESTRIAN SIGNAL HEAD		(P"	"P"	PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECT PREFORMED INTERSECTION AND SAMPLING	OR		
ILLUMINATED SIGN	R			WALK/DON'T WALK SYMBOL		W		(SYSTEM) DETECTOR		PIS	PIS
"NO RIGHT TURN"		©	®	12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PREFORMED SAMPLING (SYSTEM) DETECTOR		[PS]	PS
DETECTOR LOOP, TYPE I		<u>L_</u> j		12" (300mm) PEDESTRIAN SIGNAL HEAD							
PREFORMED DETECTOR LOOP		1 P - 5	Р	INTERNATIONAL SYMBOL, SOLID		K	×	RAILROAD	SYMBO)LS	
MICROWAVE VEHICLE SENSOR	R M)J	M		PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		Q C 3 D	₽ C ★ D			EXISTING	PROPOSED
VIDEÒ DETECTION CAMERA	R. (V)	(V)	V	RADIO INTERCONNECT	## * O	###0		RAILROAD CONTROL CABINET		R R	R► ≪R
VIDEO DETECTION ZONE				DADIO DEDEATED			•	RAILROAD CANTILEVER MAST ARM	Σ	XOX X	XOX X X
PAN, TILT, ZOOM CAMERA	R PTZ 1			RADIO REPEATER	RERR	ERR	RR	FLASHING SIGNAL		∑o ∑	X+X
WIRELESS DETECTOR SENSOR	PTZIJ R		(W)	DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				CROSSING GATE		20 <u>2</u> >	X0 X=
WIRELESS ACCESS POINT	R			GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		(1)	(1)	CROSSBUCK		≥ 5	*
FILE NAME = USER NAME = kenth-		SIGNED - DAG/BCK	REVISED -			-		DISTRICT 1	F.A.U RTE.	SECTION	COUNTY TOTAL SHEET SHEETS NO.
ot\pw_work\PWIDOT\KANTHAPHIXAYBC\d0II26 4\tnaffzo_legend_v7.c PLOT SCALE = 20.000		RAWN - BCK HECKED - DAD	REVISED -	STATE DEPARTMENT	OF ILLINOIS			STANDARD TRAFFIC SIGNAL DESIGN DETAIL		08-00086-00-SW	DuPAGE 41 25 CONTRACT NO. 63187
PLOT DATE = 10/6/2			REVISED -	DEI AUGMENT			SCALE: NO	ONE SHEET NO. 6 OF 6 SHEETS STA. TO STA.	FED. ROAL	D DIST. NO. ILLINOIS FED	. AID PROJECT CMM-9003(053)



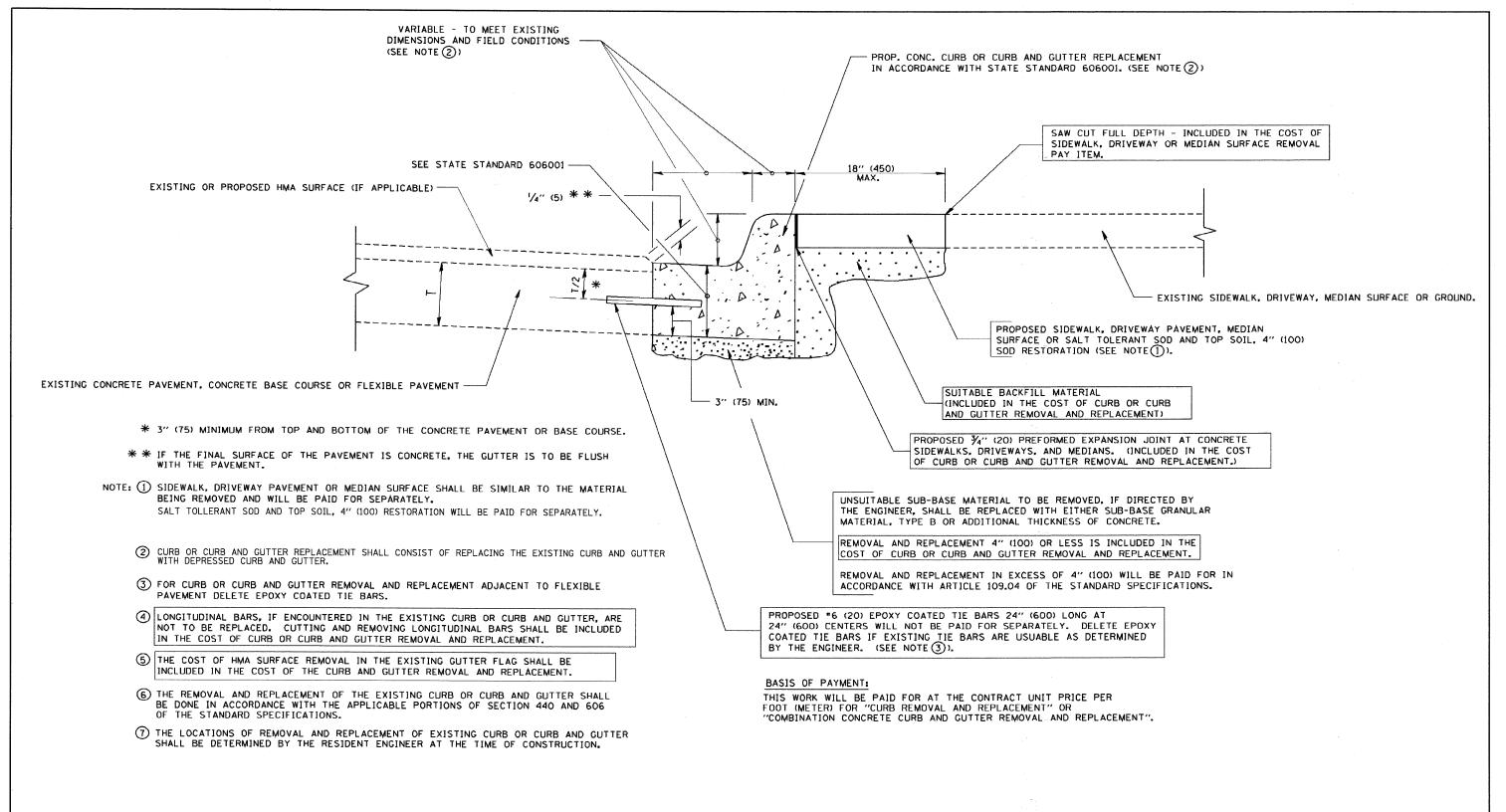
NOTE: 1. HEIGHT FROM FINISHED GRADE TO WATER MAIN ELEVATION VARIES. 2. THE FIRE HYDRANT IS VALVE ATTACHED.

FIRE HYDRANT



PROPOSED DEPRESSED CURB & GUTTER EXISTING CURB & GUTTER NOT DEPRESSED NOT TO SCALE

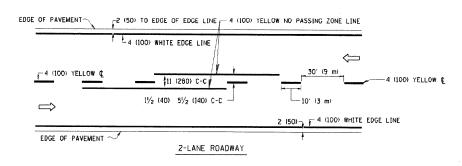
FILE NAME =	USER NAME = MAGOLDEN	DESIGNED -	REVISED -			F.A.I	U SECTION	COUNTY TOTAL SHEETS	SHEET NO.
N:\BENSENVILLE\080659\C1v1\659_det2.pln		DRAWN ~	REVISED -	STATE OF ILLINOIS	CONSTRUCTION DETAILS	137	6 08-00086-00-SW	DUPAGE 41	26
	PLOT SCALE = 20'	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		137	<u> </u>	CONTRACT NO. 6	53187
	PLOT DATE = 12/14/2009	DATE -	REVISED -		SCALE: 20' SHEET NO. OF SHEETS STA. TO ST	۸.	ILLINOIS FED.	. AID PROJECT CMM-9003 (C	

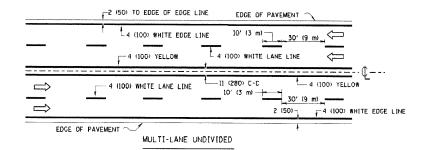


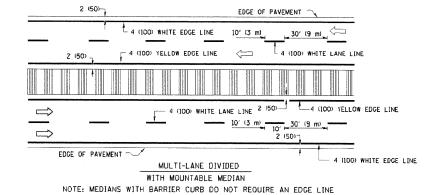
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

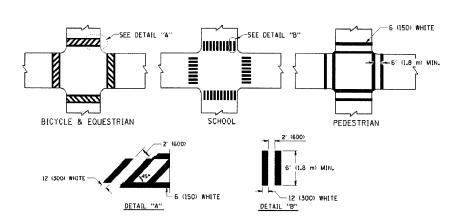
FILE NAME =	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	,	CURB OR CURB AND GUTTER	F.A.U. SECTION	COUNTY TOTAL SHEET
Ws\diststd\22x34\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		1376 08-00086-00-SW	DUPAGE 41 27
1	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - M. COMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT	BD600-06 (BD-24)	CONTRACT NO. 63187
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	AID PROJECT CMM-9003(053)



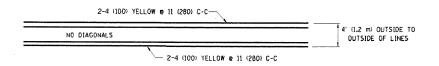




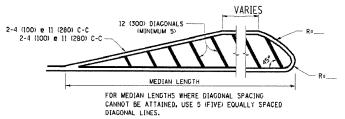
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



4' (1.2 m) WIDE MEDIANS ONLY

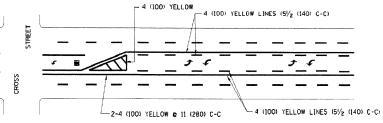


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))

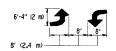
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))

150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

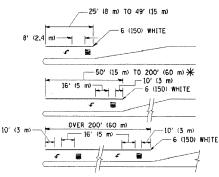


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (50 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

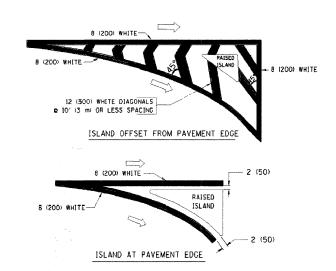


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SQ. FT. (1.5 m²) NL^{L} AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAYEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLO#	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 to 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLON: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE: FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 & 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH: 51/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
. '	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EDUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45" 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (500) APART 2' (500) APART 5' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' 11.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT. OTHERMISE, PLACE AT DESIRED STOPPHIC POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
FAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45"	SOLID	YELLOW: TWO WAY TRAFFIC WHITE:	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		ONE WAY TRAFFIC	
CORE MARKING AND CHANNELIZING LINES	8 (ZDD) WITH 1Z (300) DIAGONALS & 45°	SOLID	WHITE	DIACONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (TO km/h)) 30' (9 m) C-C (DVER 45MPH (TO km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	50LID	WHITE	SEE STATE STANDARD T80001 AREA OF: "R":3.5 50. FT. (0.33 m²) EACH "X":54.0 50. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) e 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

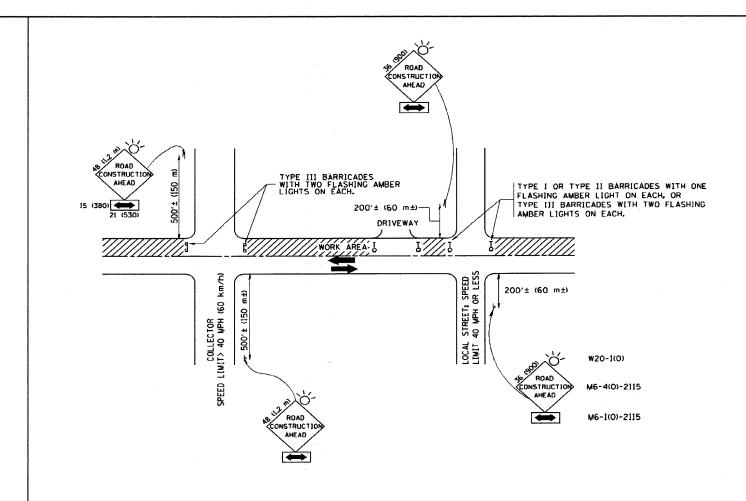
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD TROODS.

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

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	EVERS	REVISED	-T. RAMMACHER	10-27-94
c:\pw_work\pwidot\drivakosgn\d0108315\tc	3.dgn	DRAWN -		REVISED	-C. JUCIUS	09-09-09
	PLOT SCALE = 50.000 '/ IN.	CHECKED -		REVISED	-	
	PLOT DATE = 9/9/2009	DATE -	03-19-90	REVISED	-	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	DISTRICT ONE					F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	TYPICAL PAVEMENT MARKINGS						08-00086-00-SW	DUPAGE	41	28
							TC-13	CONTRACT	NO. 6	3187
	SCALE: NONE	SHEET NO. 1 OF	1 SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT CMN	<i>I</i> -9003	(053)



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEERS
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAS MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE 1, TYPE 11 OR TYPE 111 BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (50 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN POLITE
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = USER NAME = gaglianobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95

Wildiatatd\22x34\tcl8.dgn

FLOT SCALE = 50.000 // IN. CHECKED - REVISED - A. HOUSEH 10-15-96

PLOT DATE = 1/4/2008 DATE - 06-89 REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS. INTERSECTIONS. AND DRIVEWAYS				SECTION .	COUNTY	TOTAL	SHEET NO.
				08-00086-00-SW	DUPAGE	41	29
SIVE RUAUS, INTER		TC-10	CONTRACT	NO. 6	3187		
SCALE: NONE SHEET NO. 1 OF 1	SHEETS STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. A	D PROJECT CMM	-9003	(053)

