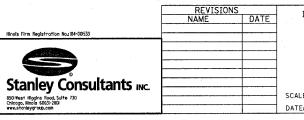


NOTES:

- 1. REMOVAL OF EXISTING TREE STUMPS IS INCLUDED IN THE COST OF SELECTIVE CLEARING.
- 2. SEE SHEET 1 OF 4 FOR LEGEND.

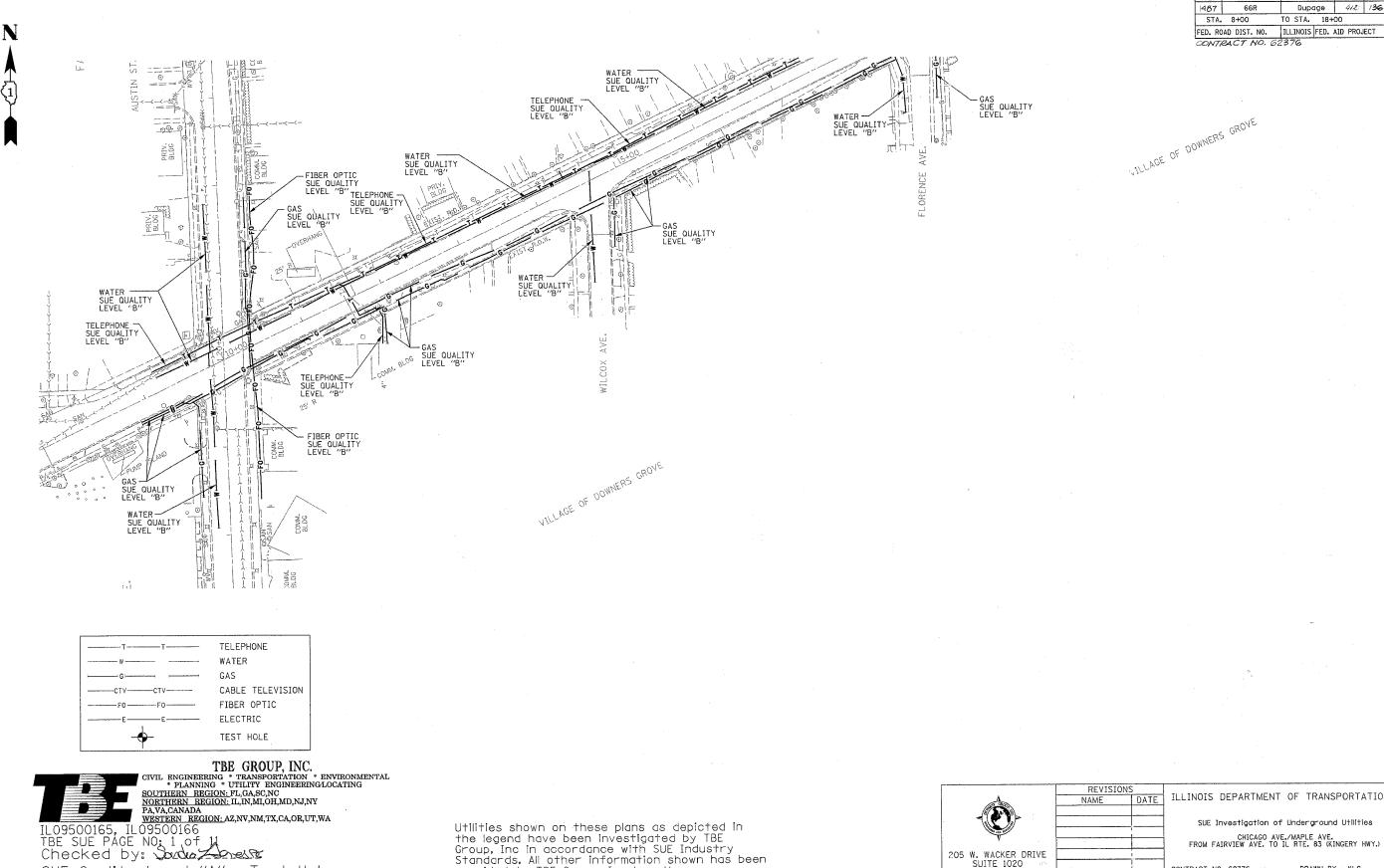


ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE IN FEET

LANDSCAPING PLAN MAPLE AVENUE / CHICAGO AVENUE SHEET 4 OF 4

SCALE: 1"=50" DATE: 07-JAN-2005 DRAWN BY: E.D. CHECKED BY: G.T.



Utilities shown on these plans as depicted in the legend have been investigated by TBE

provided to TBE Group, Inc by others.

SUE Quality Level "A" : Test Holes SUE Quality Level "B" : Designating

Group, Inc in accordance with SUE Industry Standards, All other information shown has been

205 W. WACKER DRIVE SUITE 1020 CHICAGO, IL 60606 (312) 704-1970

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUE Investigation of Underground Utilities CHICAGO AVE./MAPLE AVE. FROM FAIRVIEW AVE. TO IL RTE. 83 (KINGERY HWY.)

CONTRACT NO. 62376 DATE SQL "B": 9/17/03 DRAWN BY : KLC SCALE : 1" = 50'

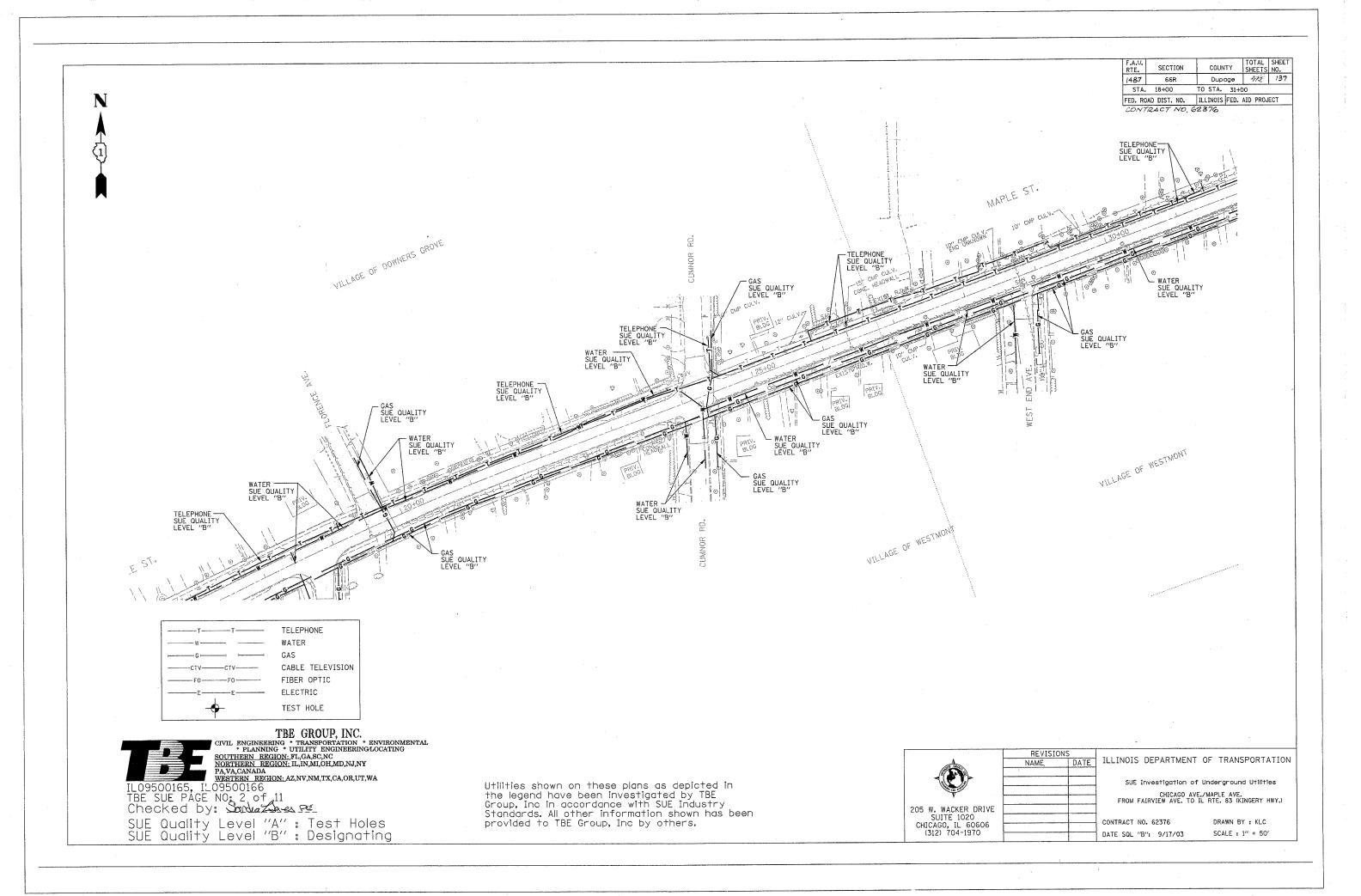
TOTAL SHEET NO.

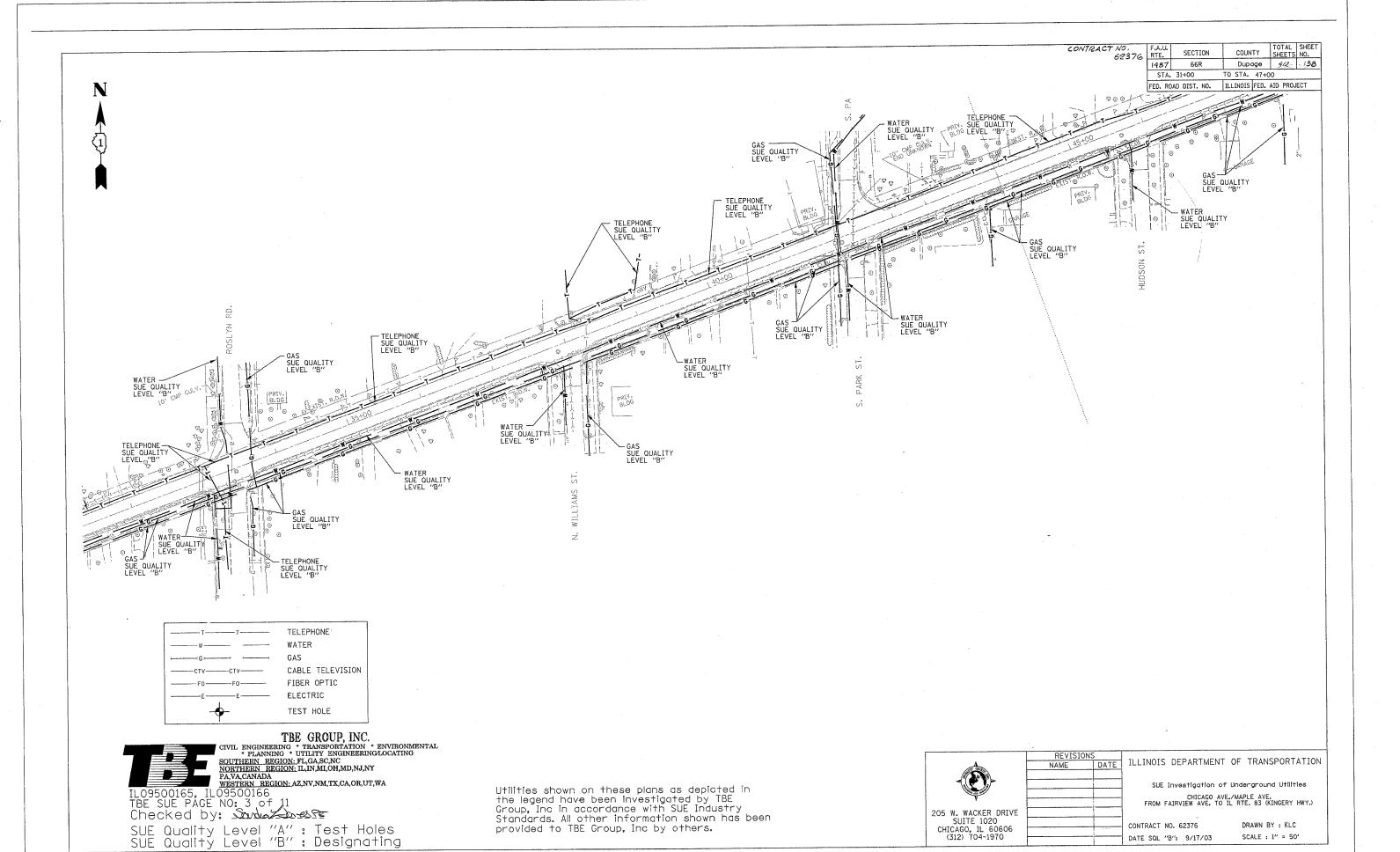
Dupage 412 136

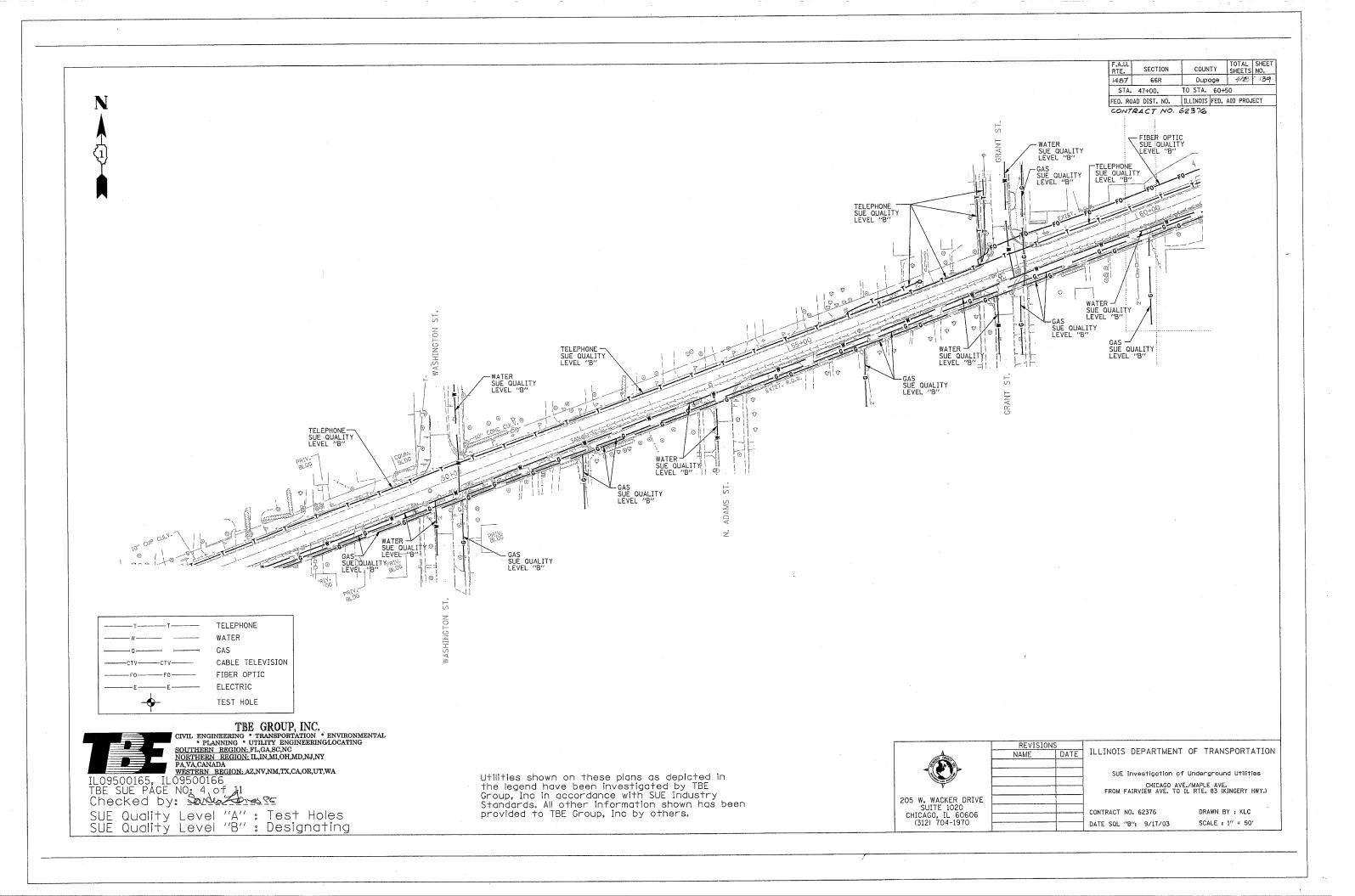
COUNTY

F.A.U. RTE.

SECTION



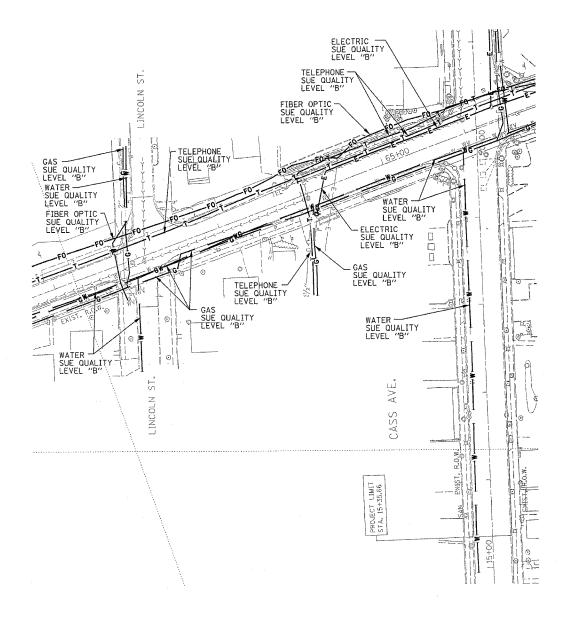




N A T

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1487	66R	Dupage	-4/2	140
STA.	60+50	TO STA. 664	-50	
FED. RO	AD DIST. NO.	ILLINOIS FED.	AID PROJ	ECT

CONTRACT NO. 62376



TELEPHONE

WATER

GENOME

GAS

CTV—CTV—CTV—CTV—CTBER OPTIC

FO—FO—FO—FO—ELECTRIC

TEST HOLE

TBE GROUP, INC.

CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL

* PLANNING * UTILITY ENGINEERINGLOCATING
SOUTHERN REGION: FL,GA,SC,NC
NORTHERN REGION: IL,IN,MI,OH,MD,NJ,NY
PA,VA,CANADA
WESTERN REGION: AZ,NV,NM,TX,CA,OR,UT,WA

IL09500165, IL09500166
TBE SUE PAGE NO: 5 of 11
Checked by: Saving Services

SUE Quality Level "A" : Test Holes SUE Quality Level "B" : Designating Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.

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REVISIONS NAME

205 W. WACKER DRIVE SUITE 1020 CHICAGO, IL 60606 (312) 704-1970 ILLINOIS DEPARTMENT OF TRANSPORTATION

SUE Investigation of Underground Utilities

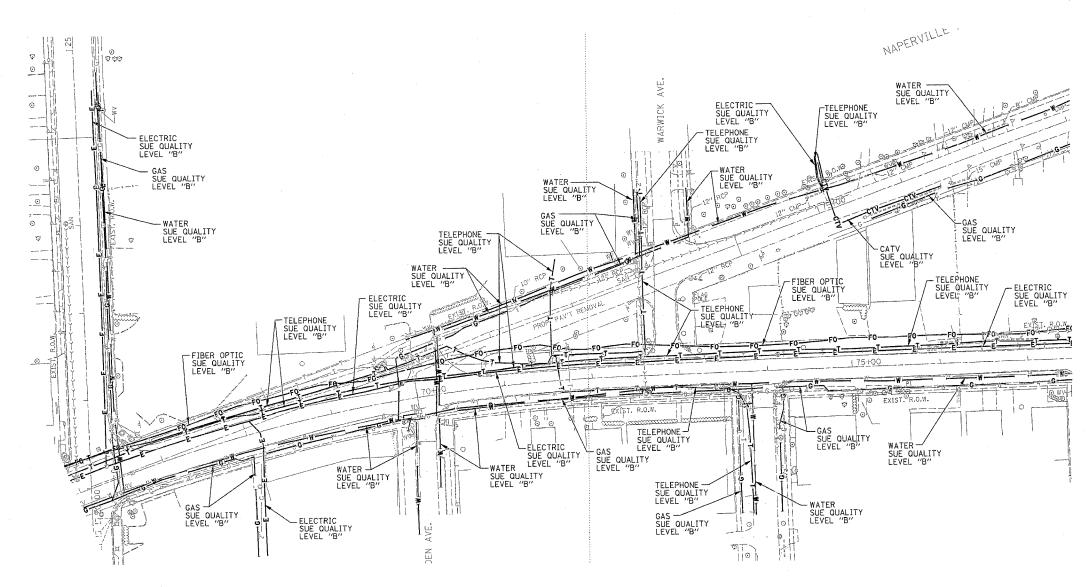
CHICAGO AVE./MAPLE AVE.
FROM FAIRVIEW AVE. TO IL RTE. 83 (KINGERY HWY.)

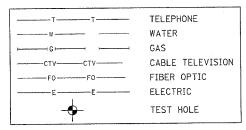
CONTRACT NO. 62376

DATE SQL "B": 9/17/03

DRAWN BY : KLC SCALE : 1" = 50"

F.A.U. RTE.	SECTION	COUNTY	TOTAL	
1487	66R	Dupage	482	141
STA.	66+00	TO STA. 774	-50	
FED. RO	AD DIST. NO.	ILLINOIS FED.	AID PROJ	ECT





TBE GROUP, INC.

CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL

* PLANNING * UTILITY ENGINEERINGLOCATING

SOUTHERN REGION: FL,GA,SC,NC

NORTHERN REGION: IL,IN,MI,OH,MD,NJ,NY

PA,VA,CANADA

WESTERN REGION: AZ,NV,NM,TX,CA,OR,UT,WA

IL09500165, IL09500166 TBE SUE PAGE NO: 6 of 11 Checked by:

SUE Quality Level "A" : Test Holes SUE Quality Level "B" : Designating

Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.

-	205	W. WACKER DRIVE

205 W. WACKER DRIVE SUITE 1020	-
CHICAGO, IL 60606 (312) 704-1970	F

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUE Investigation of Underground Utilities CHICAGO AVE./MAPLE AVE. FROM FAIRVIEW AVE. TO IL RTE. 83 (KINGERY HWY.)

CONTRACT NO. 62376 DATE SQL "B": 9/17/03

REVISIONS NAME

DRAWN BY : KLC SCALE : 1" = 50"

66R Dupage 4/2: 142 1487 STA. 77+50 TO STA. 92+00 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 62376 GAS SUE QUALITY LEVEL "B" WATER SUE QUALITY LEVEL "B" WATER SUE QUALITY GAS SUE QUALITY LEVEL "B" FIBER OPTIC SUE QUALITY LEVEL "B" VILLAGE OF WESTMONT GAS JUALITY SUE QUALITY LEVEL "B" -WATER SUE QUALITY LEVEL "B" - FIBER OPTIC SUE QUALITY LEVEL "B" GAS SUE QUALITY LEVEL "B" SUE QUALITY LEVEL "B" TELEPHONE SUE QUALITY LEVEL "B" -TELEPHONE SUE QUALITY LEVEL "B" -ELECTRIC SUE QUALITY LEVEL "B" CHICAGO AVE. - TELEPHONE SUE QUALITY LEVEL "B" -WATER SUE QUALITY LEVEL "B" FIBER OPTIC SUE QUALITY LEVEL "B" ELECTRIC SUE QUALITY LEVEL "B" 4SHED -TELEPHONE SUE QUALITY LEVEL "B" - GAS SUE QUALITY LEVEL "B" - WATER SUE QUALITY LEVEL "B" TELEPHONE -SUE QUALITY LEVEL "B" - ELECTRIC SUE QUALITY LEVEL "B" -WATER ! SUE QUALITY LEVEL "B" -TELEPHONE SUE QUALITY LEVEL "B" SUE QUALITY LEVEL "B" ELECTRIC J SUE QUALITY LEVEL "B" GAS SUE QUALITY LEVEL "B" FIBER OPTIC SUE QUALITY LEVEL "B" GAS QUALITY LEVEL "B" -FIBER OPTIC SUE QUALITY LEVEL "B" - WATER SUE QUALITY LEVEL "B" TELEPHONE CABLE TELEVISION FIBER OPTIC ELECTRIC TEST HOLE TBE GROUP, INC.

CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL

* PLANNING * UTILITY ENGINEERINGLOCATING REVISIONS NAME | DATE | ILLINOIS DEPARTMENT OF TRANSPORTATION SOUTHERN REGION: FL.GA,SC,NC
NORTHERN REGION: IL,IN,MI,OH,MD,NJ,NY
PA,VA,CANADA
WESTERN REGION: AZ,NV,NM,TX,CA,OR,UT,WA SUE Investigation of Underground Utilities Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others. IL09500165, IL09500166 TBE SUE PAGE NO: 7 of 11 Checked by: CHICAGO AVE./MAPLE AVE. FROM FAIRVIEW AVE. TO IL RTE. 83 (KINGERY HWY.)

SUE Quality Level "A" : Test Holes SUE Quality Level "B" : Designating

COUNTY TOTAL SHEET NO.

DRAWN BY : KLC

SCALE : 1" = 50"

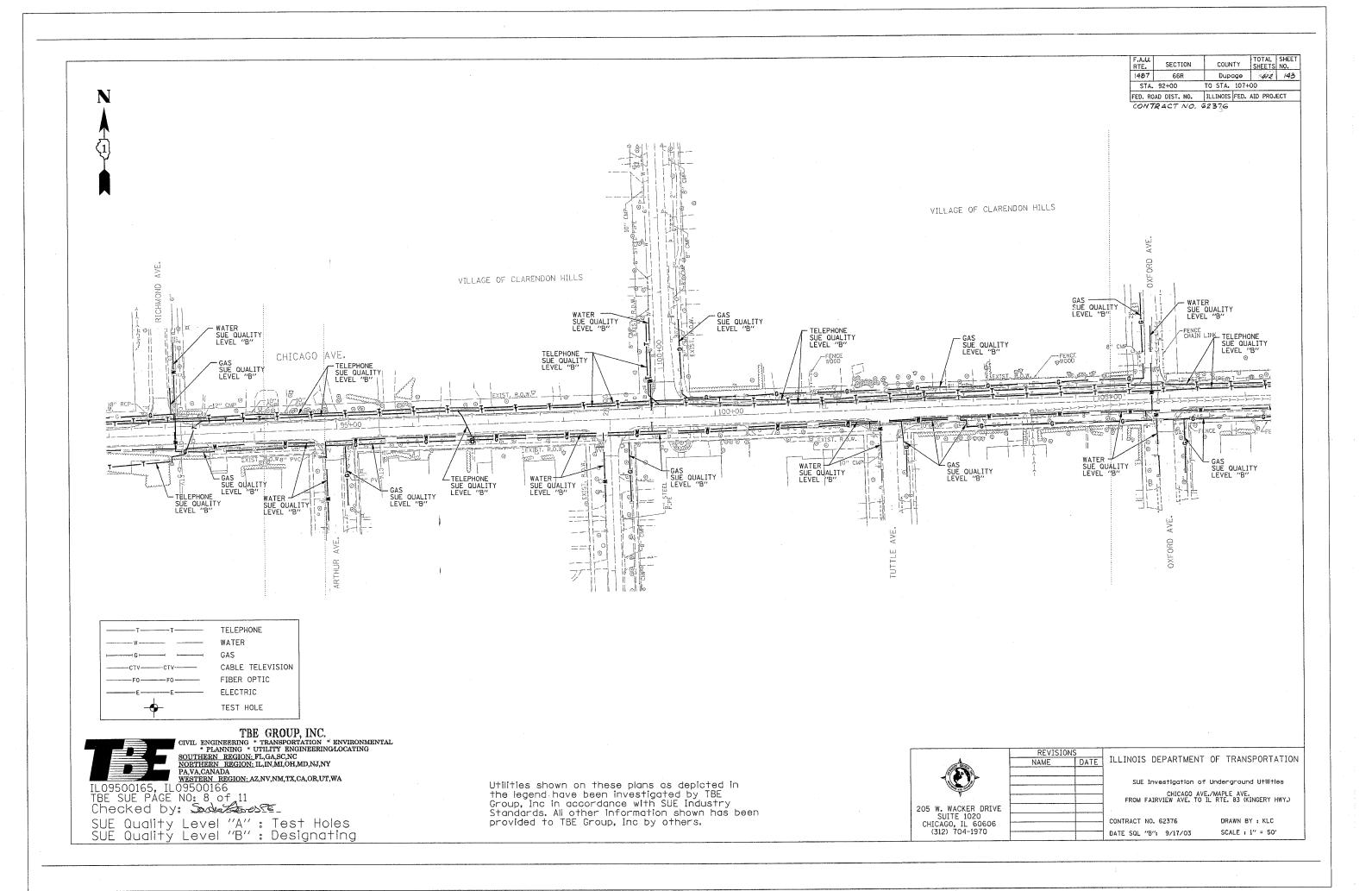
CONTRACT NO. 62376

DATE SQL "B": 9/17/03

F.A.U. RTE.

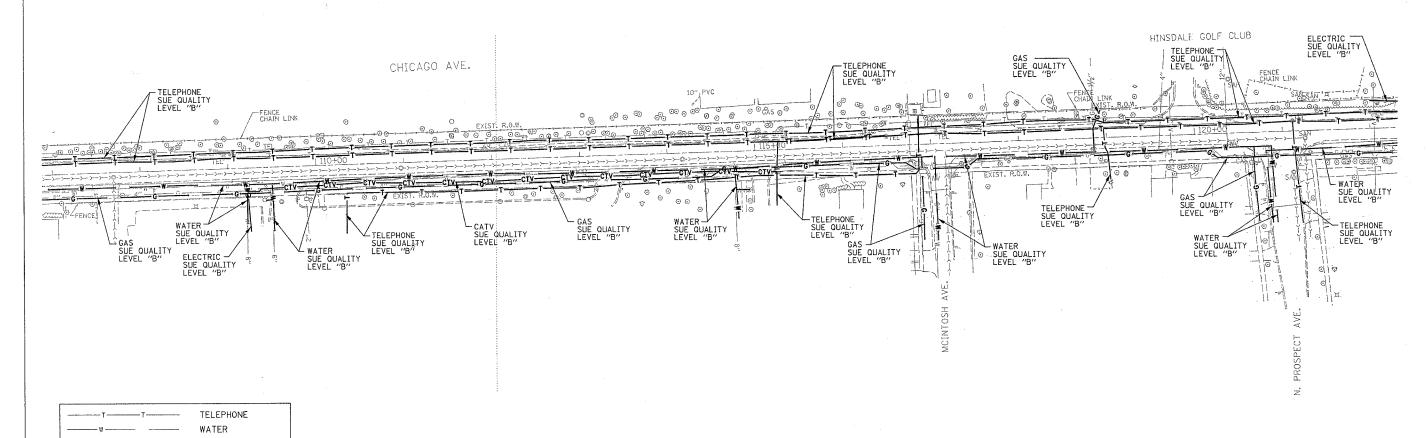
205 W. WACKER DRIVE SUITE 1020 CHICAGO, IL 60606 (312) 704-1970

SECTION



F.A.U RTE.	SECTION -	COUNT	·Y	TOTAL SHEETS	SHEET NO.
1487	66R	Dupa	ge	412	144
STA.	107+00	TO STA.	122+0	0	
FED. RO	AD DIST. NO.	ILLINOIS F	FED. A	ID PROJ	ECT
CONT	RACT NO. 6	2376			

VILLAGE OF CLARENDON HILLS



CTV—CTV—CTV—CABLE TELEVISION
FIBER OPTIC
ELECTRIC
TEST HOLE

TBE GROUI

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CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL

* PLANNING * UTILITY ENGINEERINGLOCATING

SOUTHERN REGION: FL,GA,SC,NC

NORTHERN REGION: IL,IN,MI,OH,MD,NJ,NY

PA,VA,CANADA

WESTERN REGION: AZ,NV,NM,TX,CA,OR,UT,WA

IL09500165, IL09500166
TBE SUE PAGE NO: 9 of 11
Checked by: Saving Server SE

SUE Quality Level "A" : Test Holes SUE Quality Level "B" : Designating Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.

Y

205 W. WACKER DRIVE SUITE 1020 CHICAGO, IL 60606 (312) 704-1970 DATE ILLINOIS DEPARTMENT OF TRANSPORTATION

SUE Investigation of Underground Utilities
CHICAGO AVE./MAPLE AVE.
FROM FAIRVIEW AVE. TO IL RTE. 83 (KINGERY HWY.)

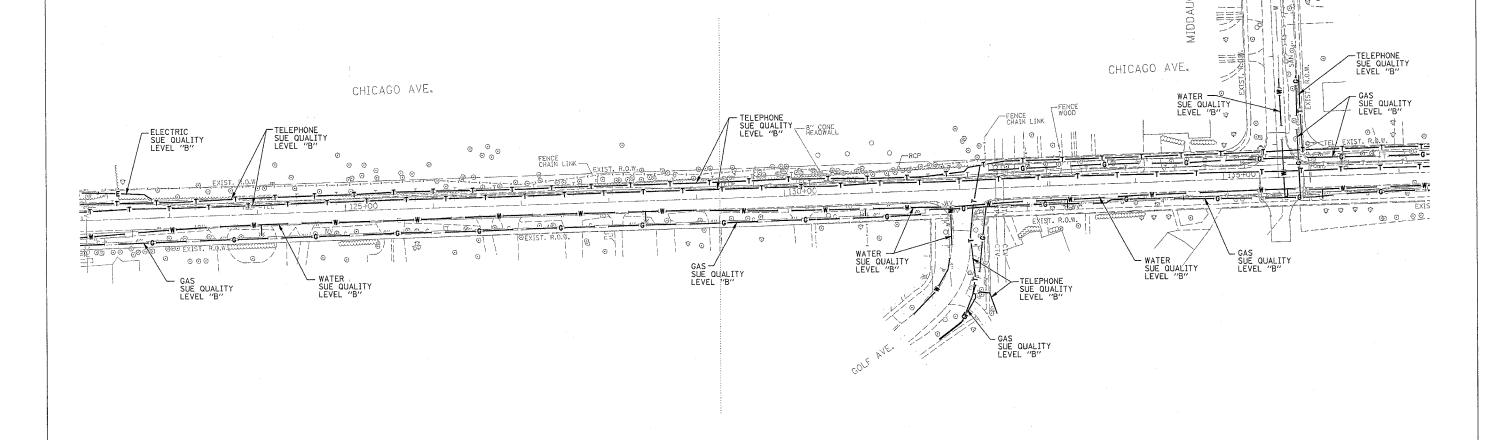
CONTRACT NO. 62376

DATE SQL "B": 9/17/03

DRAWN BY : KLC SCALE : 1" = 50'

F.A.U. RTE. COUNTY TOTAL SHEET NO. SECTION 66R Dupage 4/2 145 1487 TO STA. 137+00 STA. 122+00 FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

CONTRACT NO. 62376



TBE GROUP, INC.

CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL

* PLANNING * UTILITY ENGINEERING/LOCATING
SOUTHERN REGION: FL, GA, SC, NC
NORTHERN REGION: IL, IN, MI, OH, MD, NJ, NY
PA, VA, CANADA
WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

TELEPHONE WATER

CABLE TELEVISION FIBER OPTIC ELECTRIC TEST HOLE

IL09500165, IL09500166
TBE SUE PAGE NO: 10 of 11
Checked by:

SUE Quality Level "A" : Test Holes SUE Quality Level "B" : Designating

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REVISIONS

NAME

205 W. WACKER DRIVE SUITE 1020 CHICAGO, IL 60606 (312) 704-1970

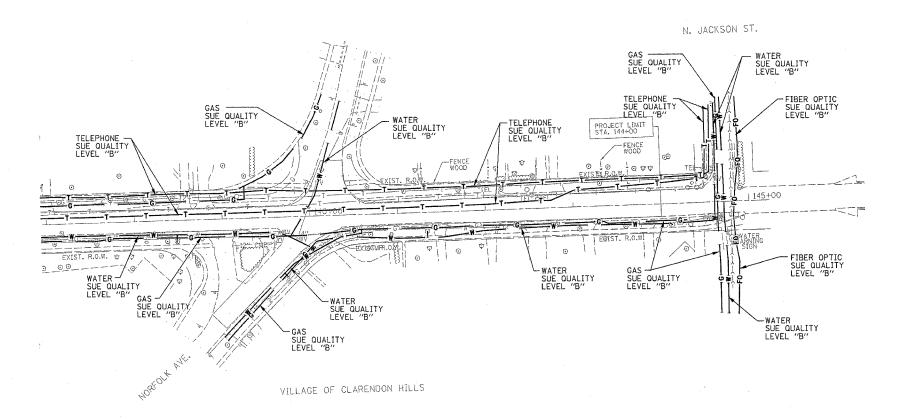
ILLINOIS DEPARTMENT OF TRANSPORTATION

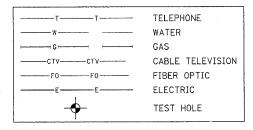
SUE Investigation of Underground Utilities CHICAGO AVE./MAPLE AVE. FROM FAIRVIEW AVE. TO IL RTE. 83 (KINGERY HWY.)

CONTRACT NO. 62376 DATE SQL "B": 9/17/03 DRAWN BY : KLC SCALE : 1" = 50'

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1487	66R	Dupage	4/2	146
STA.	137+00	TO STA. 145+	00	

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





TBE GROUP, INC.

CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL

* PLANNING * UTILITY ENGINEERING-LOCATING

SOUTHERN REGION: FL,GA,SC,NC

NORTHERN REGION: IL,IN,MI,OH,MD,NJ,NY

PA VA CANADA NORTHERN REGION: IL, IN, MI, OH, MID, NA, NY
PA, YA, CANADA
WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA
ILO9500165, ILO9500166
TBE SUE PAGE NO: 11 of 11
Checked by: Sovies See

SUE Quality Level "A" : Test Holes SUE Quality Level "B" : Designating

Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.

A GREEN CORP.	

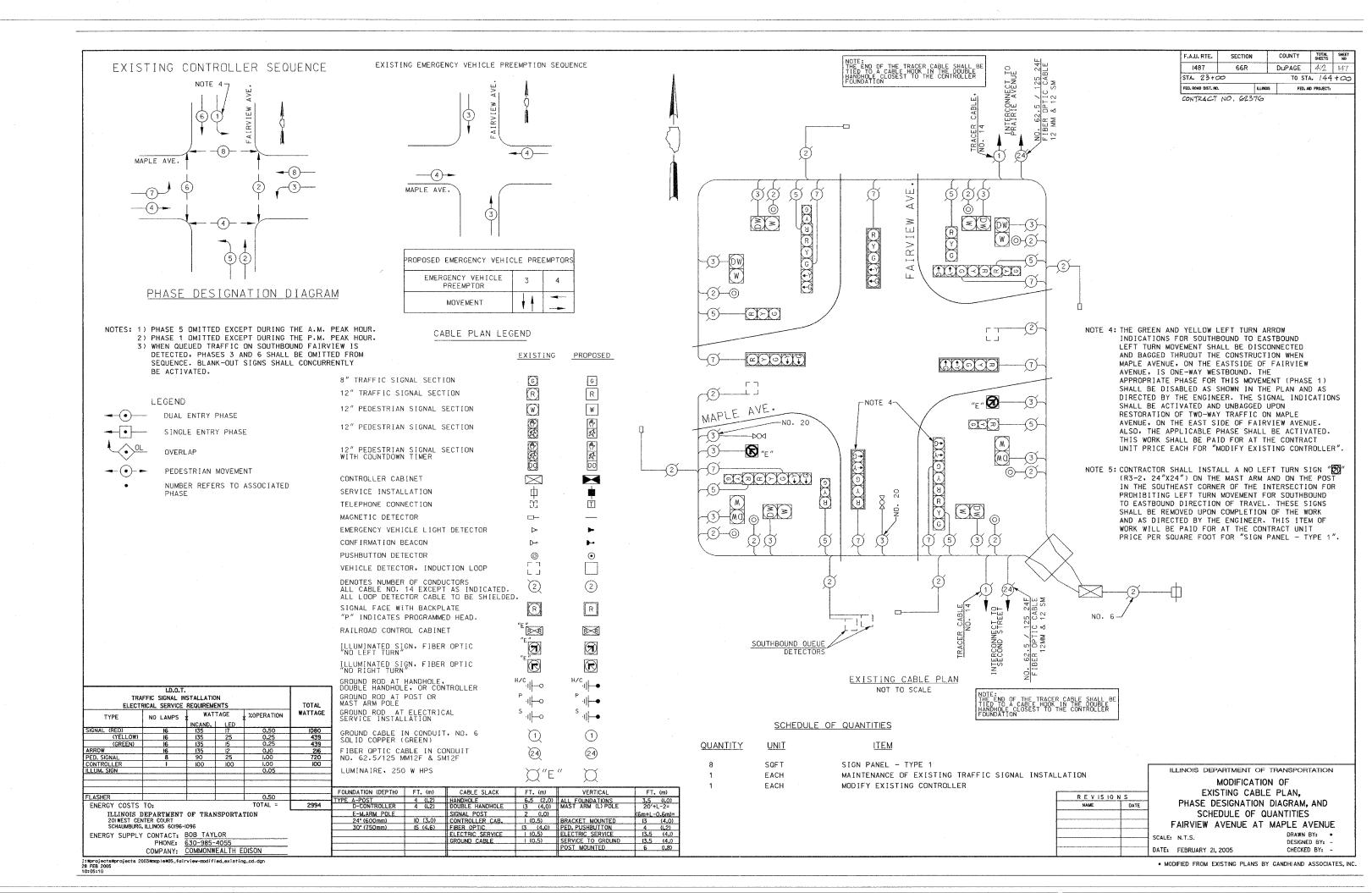
REVISIONS NAME

205 W. WACKER DRIVE SUITE 1020 CHICAGO, IL 60606 (312) 704-1970

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUE Investigation of Underground Utilities . CHICAGO AVE./MAPLE AVE. FROM FAIRVIEW AVE. TO IL RTE. 83 (KINGERY HWY.)

CONTRACT NO. 62376 DATE SQL "B": 9/17/03 DRAWN BY : KLC SCALE : 1" = 50'



NOTES FOR TEMPORARY TRAFFIC SIGNALS

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- 2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1. INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- 3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- 4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES. RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- 5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- 6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

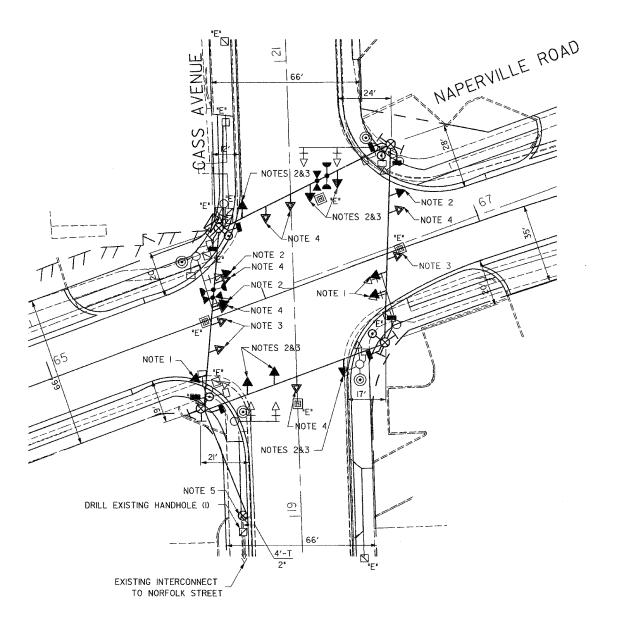
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

EACH CONTROLLER AND CABINET COMPLETE

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

- 4 EACH SIGNAL HEAD, I-FACE 3-SECTION, MAST ARM MOUNTED
 4 EACH SIGNAL HEAD, I-FACE 5-SECTION, BRACKET MOUNTED
- 4 EACH SIGNAL HEAD, I-FACE 5-SECTION, MAST ARM MOUNTED
- B EACH TRAFFIC SIGNAL BACK PLATE
- 4 EACH SIGNAL POST
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH PEDESTRIAN SIGNAL HEAD 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON
- I EACH SERVICE INSTALLATION

THE CONTRACTOR SHALL REMOVE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM DETECTOR UNITS, INCLUDING THE CONFIRMATION BEACONS, AND THE PHASING UNIT FROM THE EXISTING TRAFFIC SIGNAL INSTALLATION, STORE IT IN A SAFE MANNER, AND INSTALL THEM ON THE NEW TRAFFIC SIGNAL INSTALLATION AS SHOWN IN THE PLAN AND AS DIRECTED BY THE ENGINEER.



NOTE 1: THE SIGNAL HEADS FOR THE EASTBOUND TRAFFIC SHALL BE DISCONNECTED AND BAGGED DURING CONSTRUCTION STAGES PRE-STAGE 1, STAGE 1, AND STAGE 2, AND SHALL BE ACTIVATED AFTER ALL THE PAVEMENT GEOMETRICS ARE IN PLACE AND TWO-WAY TRAFFIC MOVEMENT IS ALLOWED PRIOR TO ACTIVATION OF THE NEW PERMANENT SIGNALS. THE CONTRACTOR CAN, HOWEVER, INSTALL THESE SIGNAL HEADS PRIOR TO COMPLETION OF STAGE 2 CONSTRUCTION AS DIRECTED BY THE ENGINEER.

NOTE 2: SIGNAL LOCATIONS FOR CONSTRUCTION STAGE PRE-STAGE I.

NOTE 3: SIGNAL LOCATIONS FOR CONSTRUCTION STAGE I.

NOTE 4: SIGNAL LOCATIONS FOR CONSTRUCTION STAGE 2.

NOTE 5: REMOVE EXISTING FIBER OPTIC CABLE 62.5/I25MM I2F FROM EXISTING CONDUIT TO HANDHOLE, SPLICE SUFFICIENT 62.5/I25MM I2F FIBER OPTIC CABLE TO EXISTING FIBER OPTIC CABLE AND INSTALL CABLE TO WOOD POLE AND AERIAL CABLE TO CONTROLLER CABINET.

F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET
1487	66R		DuPAGE	412.	148
STA. 23+0	20		TO ST	A. 144	100
FED. ROAD DIST. NO. ILLING		ILLINOIS	FED.	AID PROJECT:	

TEMPORARY TRAFFIC SIGNAL LEGEND

TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION

TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION

TEMPORARY CONTROLLER CABINET
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE

TEMPORARY SERVICE INSTALLATION

TEMPORARY PEDESTRIAN SIGNAL HEAD,
BRACKET MOUNTED

MICROWAVE VEHICLE SENSOR

PEDESTRIAN PUSHBUTTON DETECTOR

■ EMERGENCY VEHICLE LIGHT DETECTOR

CONFIRMATION BEACON

VEHICLE DETECTOR, INDUCTION LOOP

CT COMMON TRENCH

UD UNIT DUCT

---- G.S. CONDUIT IN GROUND

HEAVY DUTY HANDHOLE

EXISTING EQUIPMENT TO BE REMOVED LEGEND

← EXISTING SIGNAL TO BE REMOVED

EXISTING SERVICE INSTALLATION TO BE REMOVED

O EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED

EXISTING MAST ARM POLE AND FOUNDATION TO BE REMOVED

"E" EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED

S"E" EXISTING HANDHOLE TO BE REMOVED

EXISTING DOUBLE HANDHOLE
TO BE REMOVED

PEDESTRIAN SIGNAL TO BE REMOVED

EXISTING PEDESTRIAN PUSH-BUTTON
TO BE REMOVED

MERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED

D-O CONFIRMATION BEACON TO BE REMOVED

圖"E" EXISTING HEAVY DUTY HANDHOLE
TO BE REMOVED

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

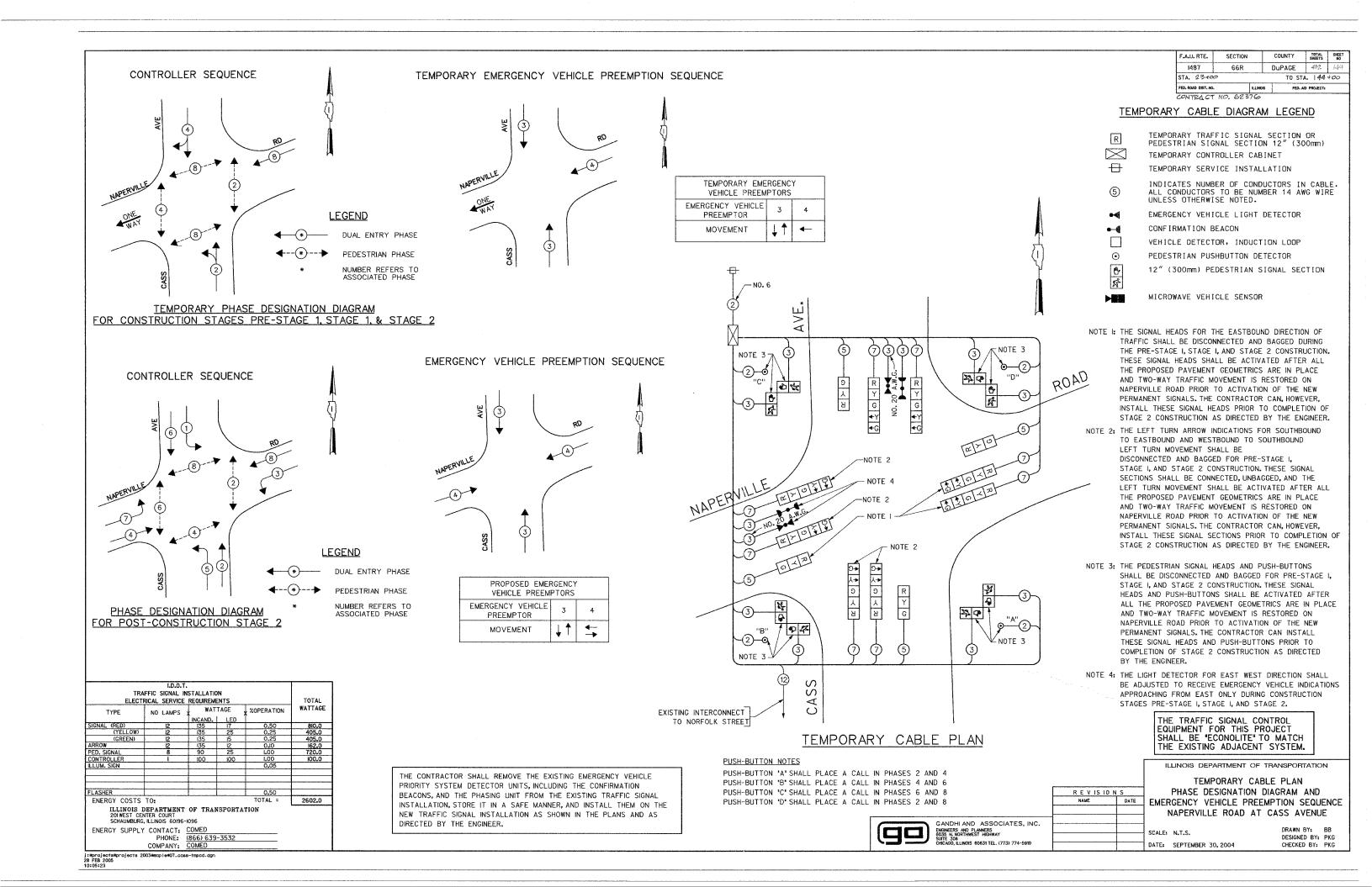
REVISIONS
NAME DATE

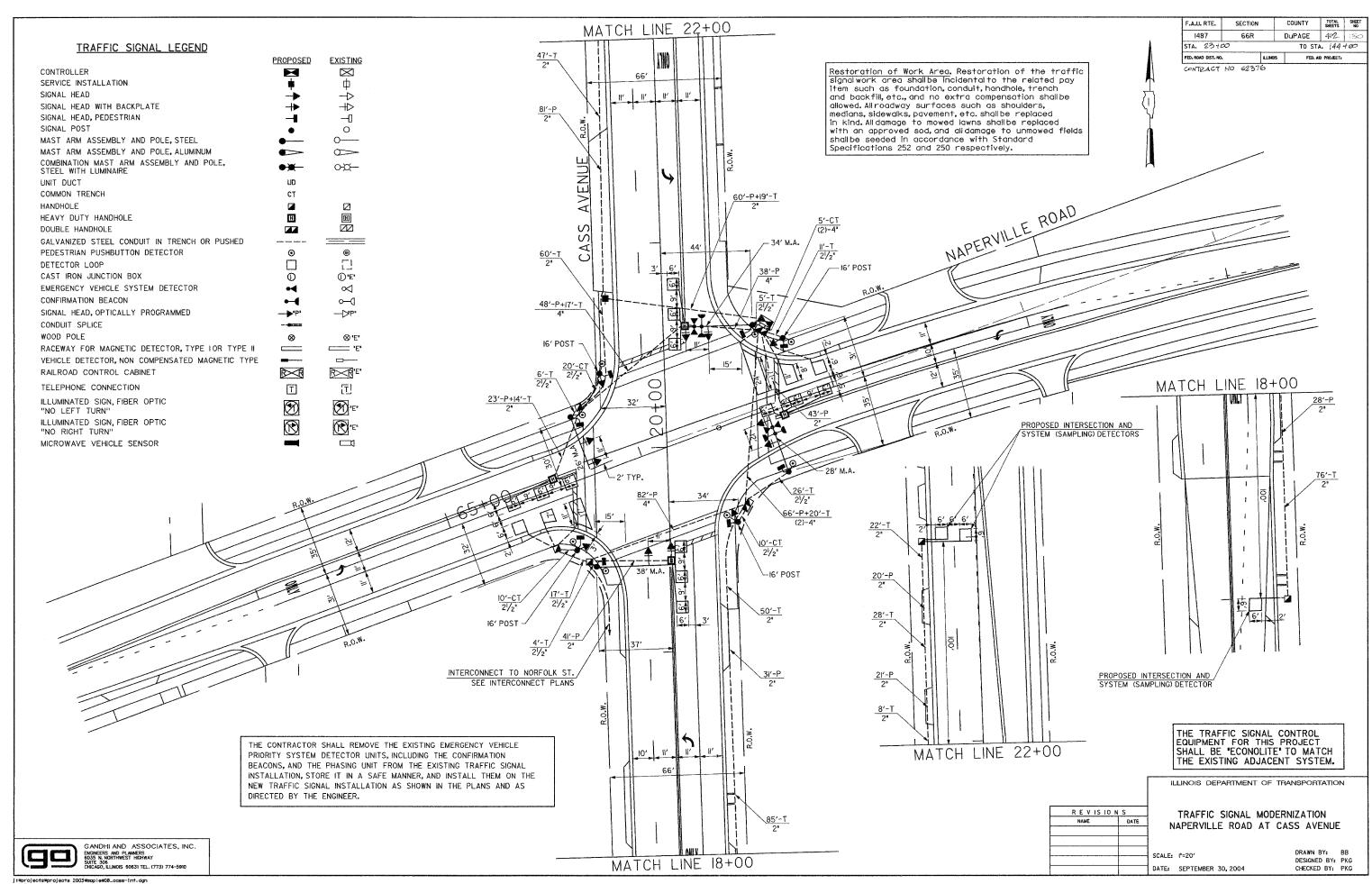
TEMPORARY TRAFFIC SIGNAL INSTALLATION
NAPERVILLE ROAD AT CASS AVENUE

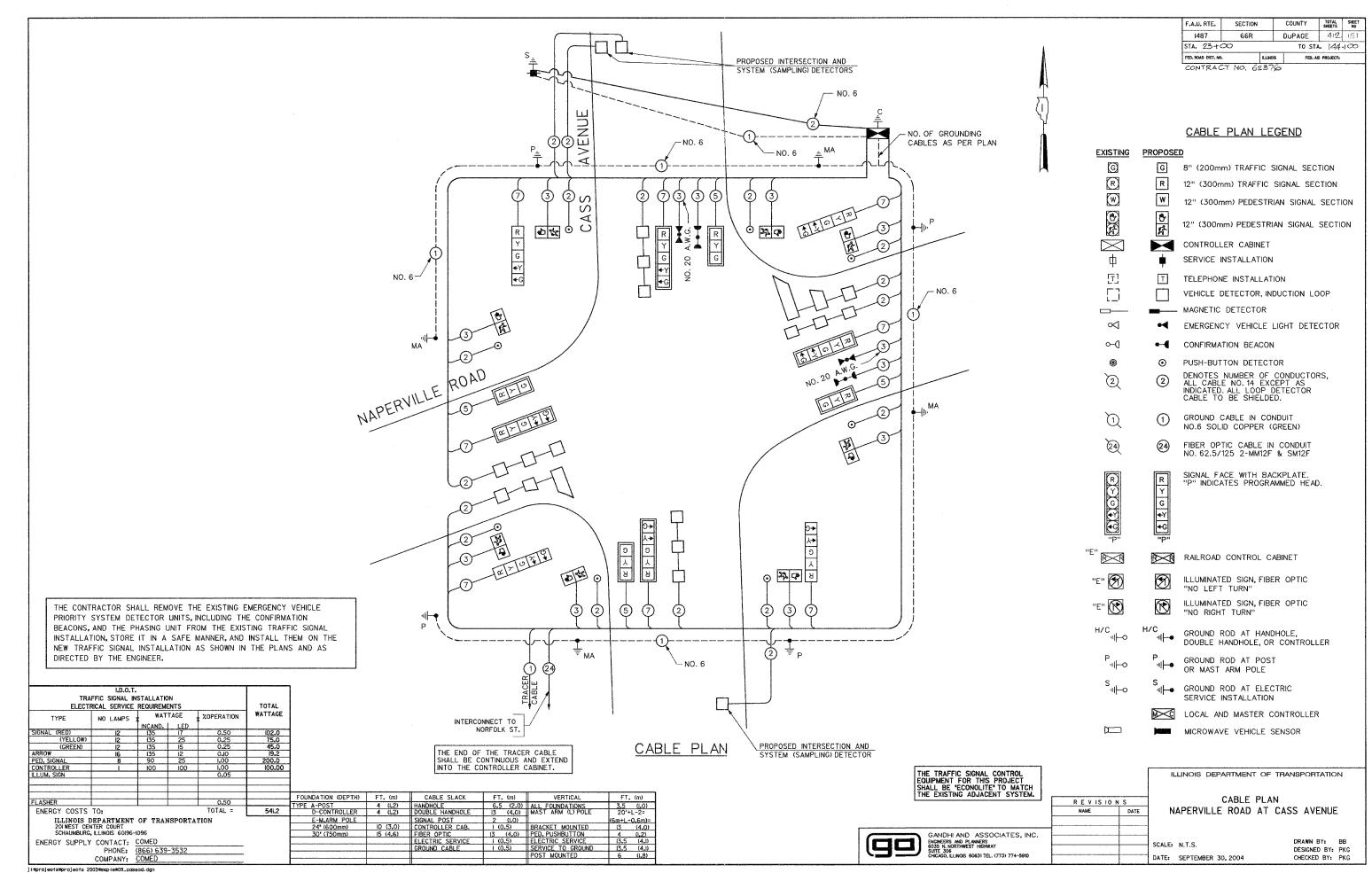
SCALE: |=20'
DATE: SEPTEMBER 30, 2004

DRAWN BY: BB
DESIGNED BY: PKG
CHECKED BY: PKG

GANDHI AND ASSOCIATES, INC.
ENGINEERS AND PLANNERS
6035 N. NORTHWEST HIGHWAY
SUITE 306
CHOAGO, ILLNOIS 60631 TEL. (773) 774-5910





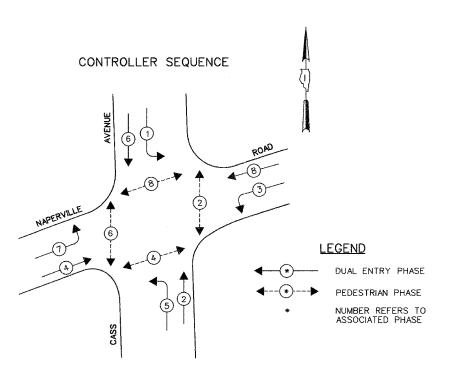


F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO
1487	66R		DuPAGE	A12.	152
STA. 23+	00		TO STA	. 144	+00
FED. ROAD DIST. NO		ELINOIS	FED. AN	PROJECTs	

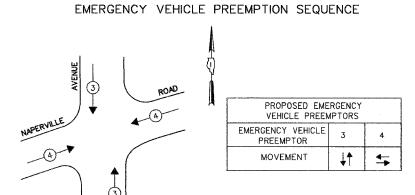
SCHEDULE OF QUANTITIES

Q	UANTITY	<u>UNIT</u>	IIEM
	30	SQ FT	SIGN PANEL - TYPE I
	324	FOOT	CONDUIT IN TRENCH, 2° DIA., GALVANIZED STEEL
	109	FOOT	CONDUIT IN TRENCH, 21/2" DIA., GALVANIZED STEEL
	57	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
	348	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
	310	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
	5	EACH	HANDHOLE
	4	EACH	HEAVY-DUTY HANDHOLE
	2	EACH	DOUBLE HANDHOLE
	445	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
		EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
		FOOT	TRANSCEIVER-FIBER OPTIC
	1177	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
	1522	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
	709	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
	1395	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
	1967	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 I PAIR
	98	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
	4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
	1	EACH	STEEL MAST ARM ASSEMBLEY AND POLE, 26 FT.
	I	EACH	STEEL MAST ARM ASSEMBLEY AND POLE, 28 FT.
	i	EACH	STEEL MAST ARM ASSEMBLEY AND POLE, 34 FT.
	1	EACH	STEEL MAST ARM ASSEMBLEY AND POLE, 38 FT.
	16	FOOT	CONCRETE FOUNDATION, TYPE A
	4	FOOT	CONCRETE FOUNDATION, TYPE D
	60	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
	8	EACH	TRAFFIC SIGNAL BACKPLATE
	9	EACH	INDUCTIVE LOOP DETECTOR
	694	FOOT	PREFORMED DETECTOR LOOP
	8	EACH	PEDESTRIAN PUSH-BUTTON
	1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
*	2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
*	1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
	9	EACH	REMOVE EXISTING HANDHOLE
	9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
	1	EACH	SERVICE INSTALLATION, POLE MOUNT
	606	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 IC
*	273	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
	4	EACH	SIGNAL HEAD, L.E.D., I-FACE, 3-SECTION, MAST ARM MOUNTED
	4	EACH	SIGNAL HEAD, L.E.D., I-FACE, 5-SECTION, BRACKET MOUNTED
	4	EACH	SIGNAL HEAD, L.E.D., I-FACE, 5-SECTION, MAST ARM MOUNTED
	8	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., I-FACE, BRACKET MOUNTED

* 100% COST TO THE VILLAGE OF WESTMONT



PHASE DESIGNATION DIAGRAM



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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PHASE DESIGNATION DIAGRAM

REVISIONS

NAME DATE

AND SCHEDULE OF QUANTITIES

NAPERVILLE ROAD AT CASS AVENUE

SCALE: N.T.S.
DATE: SEPTEMBER 30, 2004

DRAWN BY: BB
DESIGNED BY: PKG
CHECKED BY: PKG

GANDHI AND ASSOCIATES, INC.
ENGNEERS AND PLANNERS
SOSS N. NORTHWEST HIGHWAY
SUITE 306
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO				
1487	66R		DuPAGE	412	153				
STA. 23+0	2		4. 144-	00					
FED. ROAD DIST. NO.		ILLINOIS	FED. AI	FED. AID PROJECT:					

NOTES FOR TEMPORARY TRAFFIC SIGNALS

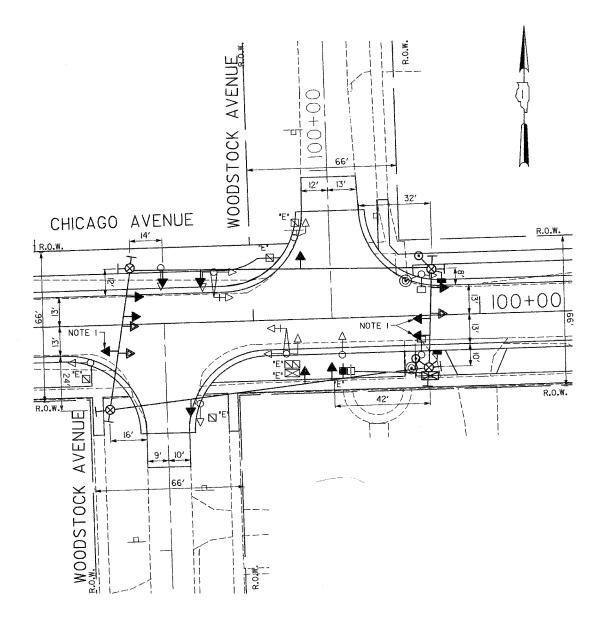
- 1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- 2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- 3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE
- 4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY
- 5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- 6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

> EACH CONTROLLER AND CABINET COMPLETE

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

6 2	EACH EACH	SIGNAL HEAD, I-FACE 3-SECTION, BRACKET MOUNTED SIGNAL HEAD, I-FACE 3-SECTION, MAST ARM MOUNTED
ž	EACH	SIGNAL HEAD, 2-FACE 3-SECTION, BRACKET MOUNTED
2	EACH	TRAFFIC SIGNAL BACK PLATE
7	FACH	SIGNAL POST
ż	EACH	ALUMINUM MAST ARM ASSEMBLY AND POLE
	EACH	PEDESTRIAN SIGNAL HEAD I-FACE
2	EACH	PEDESTRIAN PUSH-BUTTON
Ī	EACH	SERVICE INSTALLATION



NOTE I: THESE SIGNAL HEADS FOR THE EASTBOUND DIRECTION OF TRAFFIC SHALL BE DISABLED AND BAGGED DURING CONSTRUCTION STAGES PRE-STAGE, STAGE I, AND STAGE 2. THEY SHALL BE IN OPERATION AFTER ALL THE PAVEMENT GEOMETRICS ARE IN PLACE AND TWO-WAY (EAST-WEST) TRAFFIC IS RESTORED.

TEMPORARY TRAFFIC SIGNAL LEGEND

TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION

TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION

TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM

TEMPORARY CONTROLLER CABINET TEMPORARY SPAN WIRE, TETHER WIRE,

 \Box TEMPORARY SERVICE INSTALLATION

TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED

MICROWAVE VEHICLE SENSOR

PEDESTRIAN PUSHBUTTON DETECTOR

EMERGENCY VEHICLE LIGHT DETECTOR CONFIRMATION BEACON

VEHICLE DETECTOR, INDUCTION LOOP

CT COMMON TRENCH

UD UNIT DUCT

____ G.S. CONDUIT IN GROUND

HANDHOLE

H HEAVY DUTY HANDHOLE

EXISTING EQUIPMENT TO BE REMOVED LEGEND

 \triangleleft EXISTING SIGNAL TO BE REMOVED

EXISTING SERVICE INSTALLATION TO BE REMOVED

EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED 0

EXISTING MAST ARM POLE AND FOUNDATION TO BE REMOVED

EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED ⊠"E"

□ "E" EXISTING HANDHOLE TO BE REMOVED

 $\square_{E,}$

EXISTING DOUBLE HANDHOLE TO BE REMOVED

PEDESTRIAN SIGNAL TO BE REMOVED

EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED

EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED \rightarrow

CONFIRMATION BEACON TO BE REMOVED

EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED

EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

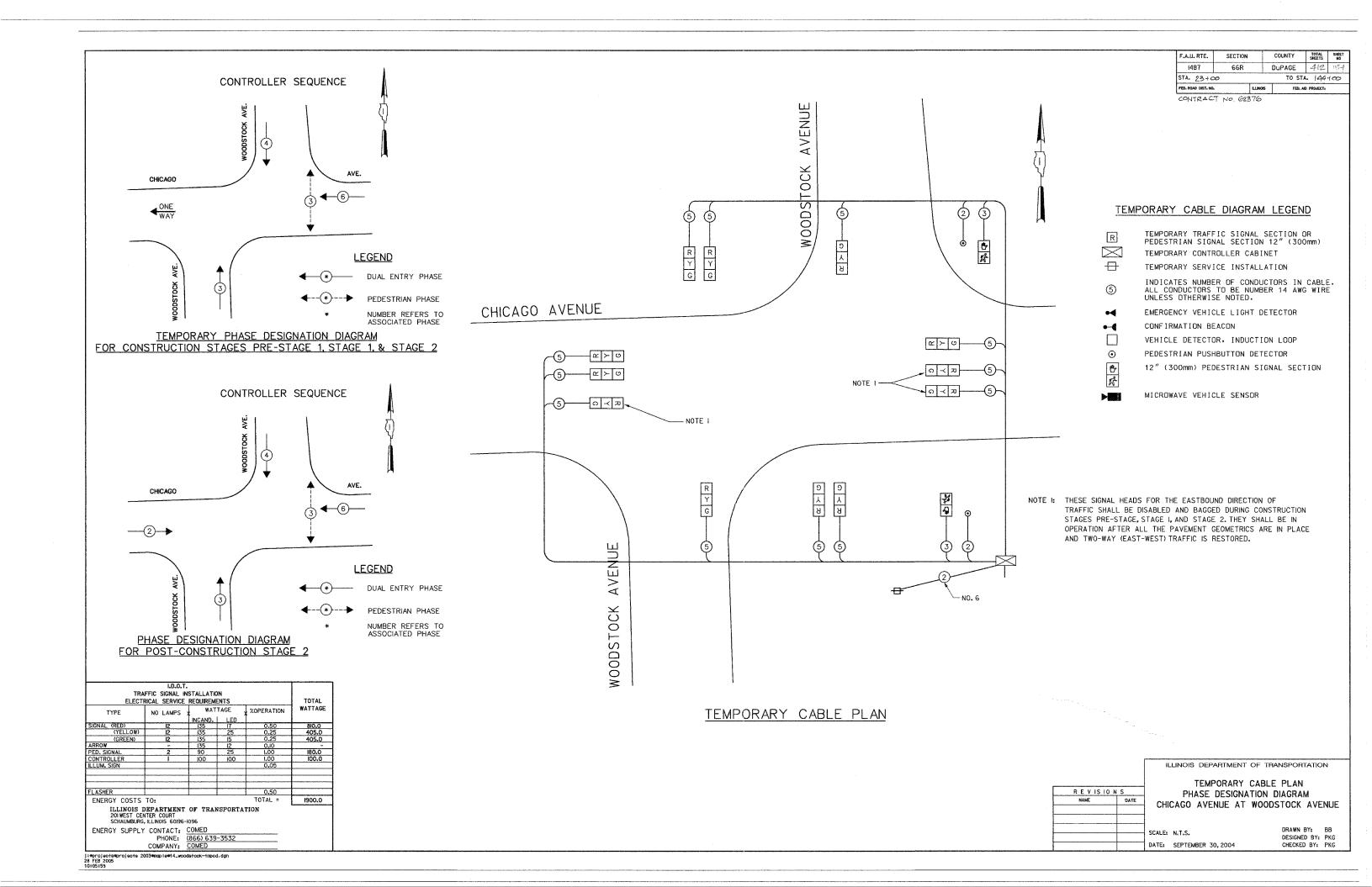
ILLINOIS DEPARTMENT OF TRANSPORTATION

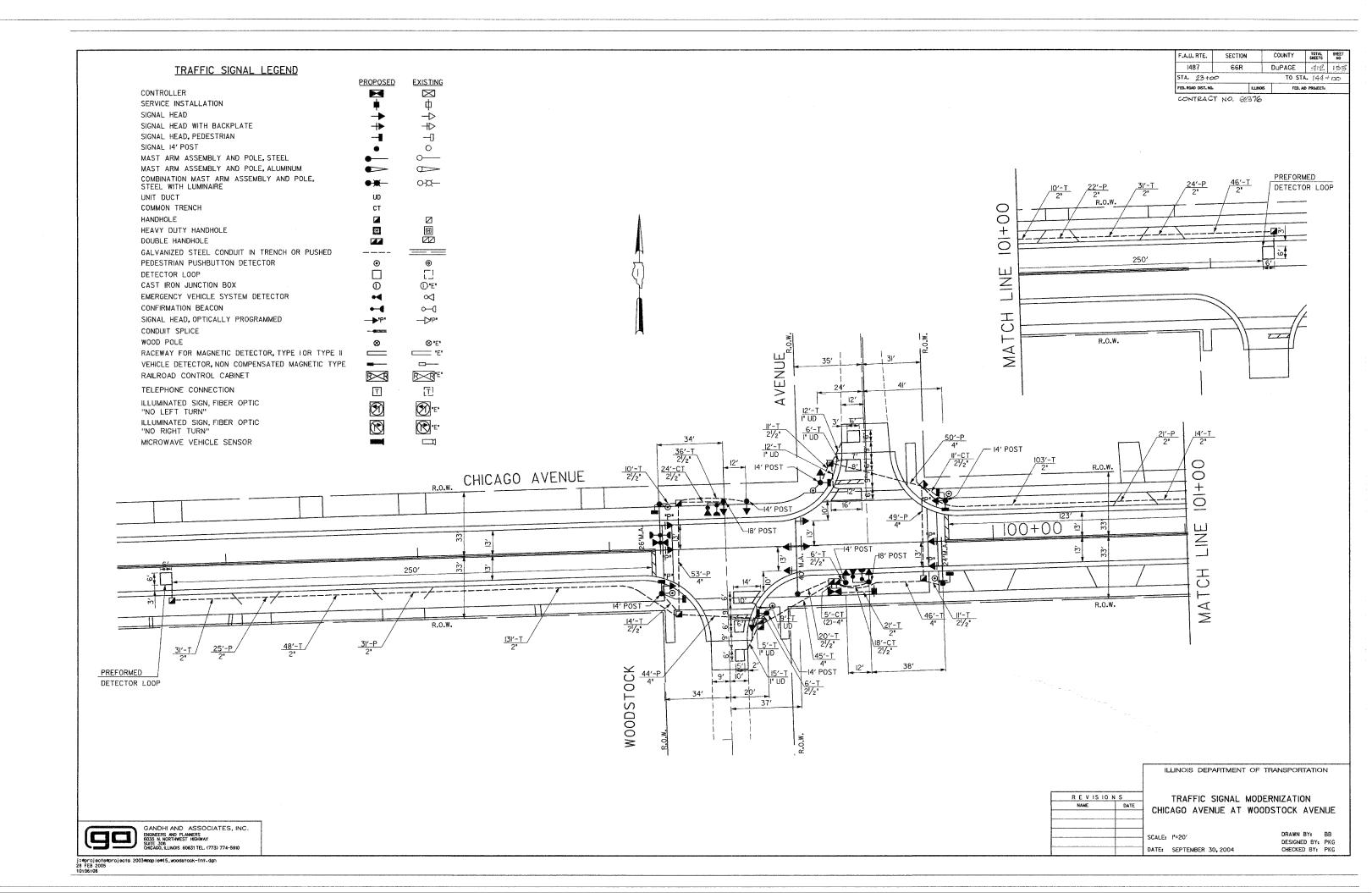
TEMPORARY TRAFFIC SIGNAL INSTALLATION CHICAGO AVENUE AT WOODSTOCK AVENUE

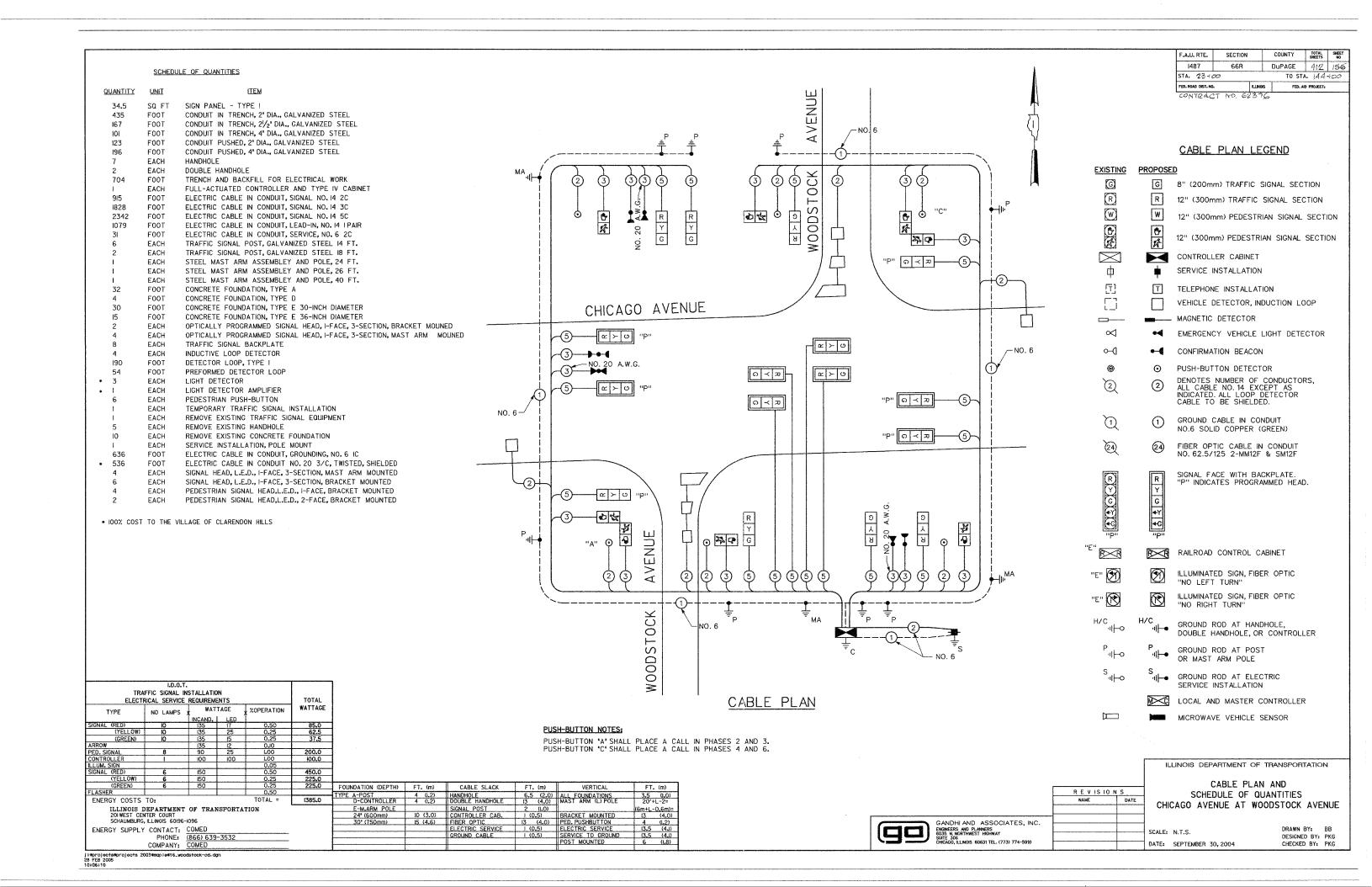
REVISIONS

SCALE: 1'=20' DATE: SEPTEMBER 30, 2004 DRAWN BY: BB DESIGNED BY: PKG CHECKED BY: PKG

GANDHI AND ASSOCIATES, INC.







SEQUENCE OF OPERATION

MOVEMENT PHASE		_	2-	1	2+6	•	-6	-				•	3	<i>J</i>						<u></u>			F L
INTERVAL	i	2	3A	3B	3C	3D	4A	4B	4C	4D	5	6	7A	7B	8A	8B	9	10	IIA	IIB	12A	12B	s
CHANGE TO			JA	36		30	74	40		70			1A 24		^{6A}		/		2-			12.5	н
CHICAGO AVENUE E/B NEAR SIDE MAST ARM SIGNALS	G	G	Υ	R	R	R	Υ	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
CHICAGO AVENUE E/B FAR SIDE MAST ARM AND FAR LEFT SIGNALS	G	G	G	G	G	G	G	G	Y	R	G	G	G	G	Y	R	R	R	R	R	R	R	R
CHICAGO AVENUE W/B NEAR SIDE MAST ARM SIGNALS	G	G	Υ	R	R	R	Υ	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
CHICAGO AVENUE. W/B FAR SIDE MAST ARM AND FAR LEFT SIGNALS	G	G	G	G	Υ	R	G	G	G	G	R	R	R	R	R	R	G	G	G	G	Y	R	R
WOODSTOCK AVENUE N/B NEAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	Y	R	R	R	R	R	R	R	R
WOODSTOCK AVENUE N/B FAR SIDE SIGNALS	R	R	R	R	R	R	R	R	R	R	G	G	Υ	R	Υ	R	R	R	R	R	R	R	R
WOODSTOCK AVENUE S/B NEAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	Y	त	R
WOODSTOCK AVENUE S/B FAR SIDE SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	Y	R	R
PEDESTRIAN SIGNALS CROSSING WOODSTOCK AVE. ON NORTH SIDE OF CHICAGO AVE.	P*	FH*	Н	Н	н	н	Н	Н	н	н	н	Н	н	н	н	н	Н	н	Н	Н	н	Н	DARK
PEDESTRIAN SIGNALS CROSSING WOODSTOCK AVE. ON SOUTH SIDE OF CHICAGO AVE.	Р*	FH*	н	Н	н	Н	Н	Н	Н	н	Н	Н	Н	н	Н	Н	Н	Н	Н	Ŧ	Н	Н	DARK
PEDESTRIAN SIGNALS CROSSING CHICAGO AVE. ON EAST SIDE OF WOODSTOCK AVE.	Н	н	н	н	н	н	н	н	н	н	н	н	Ŧ	н	н	н	Р*	FH*	Н	н	н	н	DARK
PEDESTRIAN SIGNALS CROSSING CHICAGO AVE. ON WEST SIDE OF WOODSTOCK AVE.	Н	н	Н	Н	н	н	н	н	Н	H	Р*	FH*	н	н	н	н	Н	н	н	Н	н	Н	DARK

PREEMPTOR PREEMPTOR PREEMPTOR NUMBER 3 NUMBER 4 NUMBER 5

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		ı			5		5		9		9				
EMERGENCY VEHICLE PREEMPTION SEQUENCE INTERVAL NUMBER	IA	IΒ	IC	ID	Æ	IF	IG	IH	IJ	IK	IL	IM	2	3	4	CLEAR TO NORMAL SEQUENCE
CHANGE TO	2	Ю	ID	3,4	IF	IG	2,4	3	ΙK	IL.	2,3	4				SEGUENCE
CHICAGO AVENUE E/B NEAR SIDE MAST ARM SIGNALS	G	G	Υ	R	R	Ř	R	R	R	R	R	R	G	R	R	\Diamond
CHICAGO AVENUE E/B FAR SIDE MAST ARM AND FAR LEFT SIGNALS	G	G	Υ	R	R	R	R	R	R	R	R	R	G	R	R	\Diamond
CHICAGO AVENUE W/B NEAR SIDE MAST ARM SIGNALS	G	G	Y	R	R	R	R	R	R	R	R	R	G	R	R	\Diamond
CHICAGO AVENUE W/B FAR SIDE MAST ARM AND FAR LEFT SIGNALS	G	G	Y	R	R	R	R	R	R	R	R	R	G	R	R	\Diamond
WOODSTOCK AVENUE N/B NEAR RIGHT SIGNAL	R	R	R	R	G	Y	R	G	R	R	R	R	R	G	R	\Diamond
WOODSTOCK AVENUE N/B FAR SIDE SIGNALS	R	R	R	R	G	Υ	R	G	R	R	R	R	R	G	R	\Diamond
WOODSTOCK AVENUE S/B NEAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	G	Υ	R	G	R	R	G	\Diamond
WOODSTOCK AVENUE S/B FAR SIDE SIGNALS	R	R	R	R	R	R	R	R	G	Y	R	G	R	R	G	\Diamond
PEDESTRIAN SIGNALS CROSSING - WOODSTOCK AVE. ON NORTH SIDE OF CHICAGO AVE.	FH	FH	Н	н	н	н	н	н	н	н	н	ж	н	н	Н	\Diamond
PEDESTRIAN SIGNALS CROSSING - WOODSTOCK AVE.ON SOUTH SIDE OF CHICAGO AVE.	FH	FH	Н	н	Η	н	Н	Н	Н	Н	Н	x	н	Н	н	\Diamond
PEDESTRIAN SIGNALS CROSSING - CHICAGO AVE. ON EAST SIDE OF WOODSTOCK AVE.	н	Н	Н	Н	Н	Н	н	Н	FH	н	н	FH	Н	Н	н	\Diamond
PEDESTRIAN SIGNALS CROSSING - CHICAGO AVE. ON WEST SIDE OF WOODSTOCK AVE.	н	н	Н	Н	FH	н	Н	FH	н	н	н	н	н	Н	н	\Diamond

FED. ROAD DIST. NO.		FLLINOIS	FED. A	PROJECT:					
STA, 23+0	ಾ	TO STA. 144+00							
1487	66R		DuPAGE	412	157				
F.A.U. RTE. SECTION			COUNTY	TOTAL SHEETS	SHEET				

CONTRACT NO. 62376

- * TO APPEAR ONLY UPON PUSHBUTTON ACTUATION.
- ** FLASHING 1 IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

PHASE 2 AND 6 SHALL BE PLACED ON RECALL

THIS '윤' OR FLASHING '윤' INTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE '윤' OR FLASHING '윤' INTERVALS. '윤' AND FLASHING '윤' TIMINGS TO BE SET ONLY ON PHASES WHERE '윤' AND FLASHING '윤' ARE INDICATED IN THE SEQUENCE OF OPERATION.

EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY INTERVAL 2,3 OR 4 IS TERMINATED.

> ILLINOIS DEPARTMENT OF TRANSPORTATION SEQUENCE OF OPERATION AND EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION CHICAGO AVENUE AT WOODSTOCK AVENUE

SCALE: N.T.S. DATE: SEPTEMBER 30, 2004

REVISIONS

NAME

DATE

DRAWN BY: BB DESIGNED BY: PKG CHECKED BY: PKG

ENGINEERS AND PLANNERS 6035 N. NORTHWEST HIGHWAY SUITE 306 CHICAGO, ILLINOIS 60831 TEL. (773) 774-5910

GANDHI AND ASSOCIATES, INC.

F.A.U. RTE. SECTION			COUNTY	TOTAL SHEETS	SHEET	
1487	66R	1	DuPAGE	412	158	
STA. 23 +	-00.00		TO ST	A. 144	+00	
FED. ROAD DIST. NO		&LINGIS	FED. F	PROJECT:		

NOTES FOR TEMPORARY TRAFFIC SIGNALS

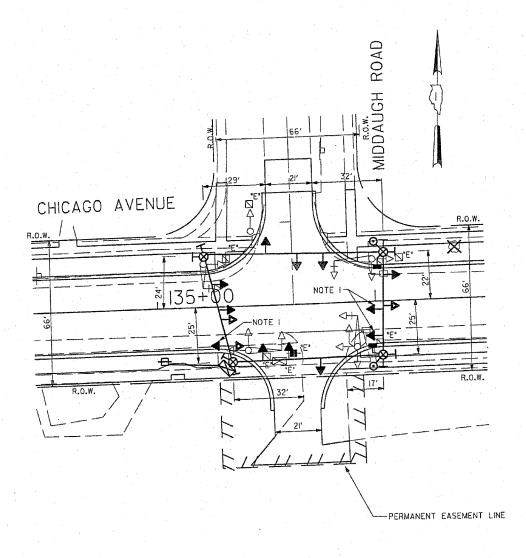
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 INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF
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 TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL
 SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD
 SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE
- 4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY
- 5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- 6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

> EACH. CONTROLLER AND CABINET COMPLETE

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

2	EACH	SIGNAL HEAD, I-FACE 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, I-FACE 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, 2-FACE 3-SECTION, BRACKET MOUNTE
Į.	EACH	SIGNAL HEAD, 3-FACE 3-SECTION, BRACKET MOUNTE
4	EACH	TRAFFIC SIGNAL BACK PLATE
1	EACH	SIGNAL POST
4	EACH	ALUMINUM MAST ARM ASSEMBLY AND POLE
2	EACH	PEDESTRIAN SIGNAL HEAD I-FACE
2	EACH	PEDESTRIAN PUSH-BUTTON
1	FACH	SERVICE INSTALLATION



NOTE I: THESE SIGNAL HEADS FOR THE EASTBOUND DIRECTION OF TRAFFIC SHALL BE DISABLED AND BAGGED DURING CONSTRUCTION STAGES PRE-STAGE, STAGE I, AND STAGE 2. THEY SHALL BE IN OPERATION AFTER ALL THE PAVEMENT GEOMETRICS ARE IN PLACE AND TWO-WAY (EAST-WEST) TRAFFIC IS RESTORED.

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM \otimes
- \boxtimes TEMPORARY CONTROLLER CABINET TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- \Box TEMPORARY SERVICE INSTALLATION
- MICROWAVE VEHICLE SENSOR
- PEDESTRIAN PUSHBUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR. INDUCTION LOOP
- CT COMMON TRENCH
- UD UNIT DUCT
- G.S. CONDUIT IN GROUND
- HANDHOLE
- H HEAVY DUTY HANDHOLE

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL TO BE REMOVED
- ___'E' EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED 0
- -0
- EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED ⊠,E.
- ⊠ "E" EXISTING HANDHOLE TO BE REMOVED
 - EXISTING DOUBLE HANDHOLE TO BE REMOVED
- PEDESTRIAN SIGNAL TO BE REMOVED \Box
- EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED 0
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED \triangleright
- CONFIRMATION BEACON TO BE REMOVED D--0
- EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED

REVISIONS

EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION CHICAGO AVENUE AT MIDDAUGH ROAD

DATE

SCALE: 1"=20"

DATE: SEPTEMBER 30, 2004

DESIGNED BY: PKG CHECKED BY: PKG

GANDHI AND ASSOCIATES, INC. ENGINEERS AND PLANNERS BO35 N. NORTHWEST HIGHWAY SUITE 306 CHICAGO, RLINOIS 60631 TEL. (773) 774-5910



TEMPORARY CABLE DIAGRAM LEGEND

TEMPORARY CONTROLLER CABINET

TEMPORARY SERVICE INSTALLATION

EMERGENCY VEHICLE LIGHT DETECTOR

VEHICLE DETECTOR, INDUCTION LOOP

12" (300mm) PEDESTRIAN SIGNAL SECTION

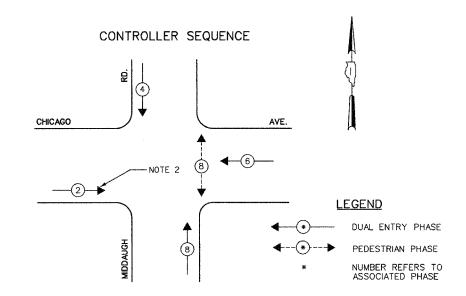
PEDESTRIAN PUSHBUTTON DETECTOR

MICROWAVE VEHICLE SENSOR

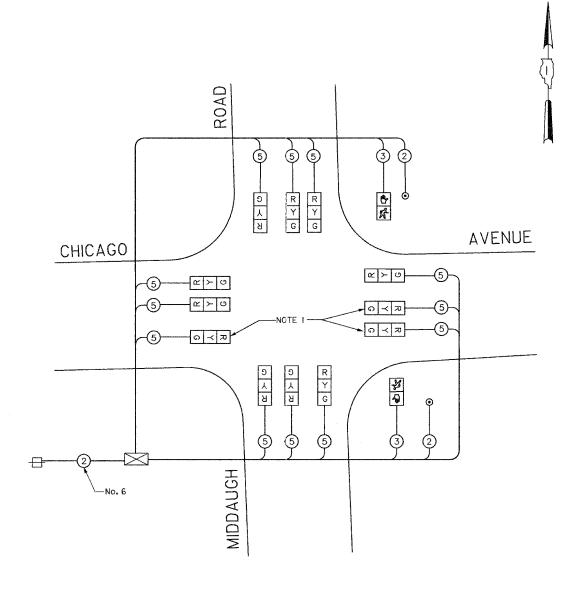
CONFIRMATION BEACON

TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)

INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.



PHASE DESIGNATION DIAGRAM



TEMPORARY CABLE PLAN

- NOTE I: THESE SIGNAL HEADS FOR THE EASTBOUND DIRECTION OF TRAFFIC SHALL BE DISABLED AND BAGGED DURING CONSTRUCTION STAGES PRE-STAGE, STAGE I, AND STAGE 2. THEY SHALL BE IN OPERATION AFTER ALL THE PAVEMENT GEOMETRICS ARE IN PLACE AND TWO-WAY (EAST-WEST) TRAFFIC IS RESTORED.
- NOTE 2: THE PHASE 2 FOR THE EASTBOUND DIRECTION SHALL BE DISABLED DURING CONSTRUCTION STAGES PRE-STAGE, STAGE I, AND STAGE 2. IT SHALL BE ACTIVATED AFTER ALL THE PAVEMENT GEOMETRICS ARE IN PLACE AND TWO-WAY(EAST-WEST) TRAFFIC IS RESTORED.

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN PHASE DESIGNATION DIAGRAM CHICAGO AVENUE AT MIDDAUGH ROAD

GANDHI AND ASSOCIATES, INC.

REVISIONS

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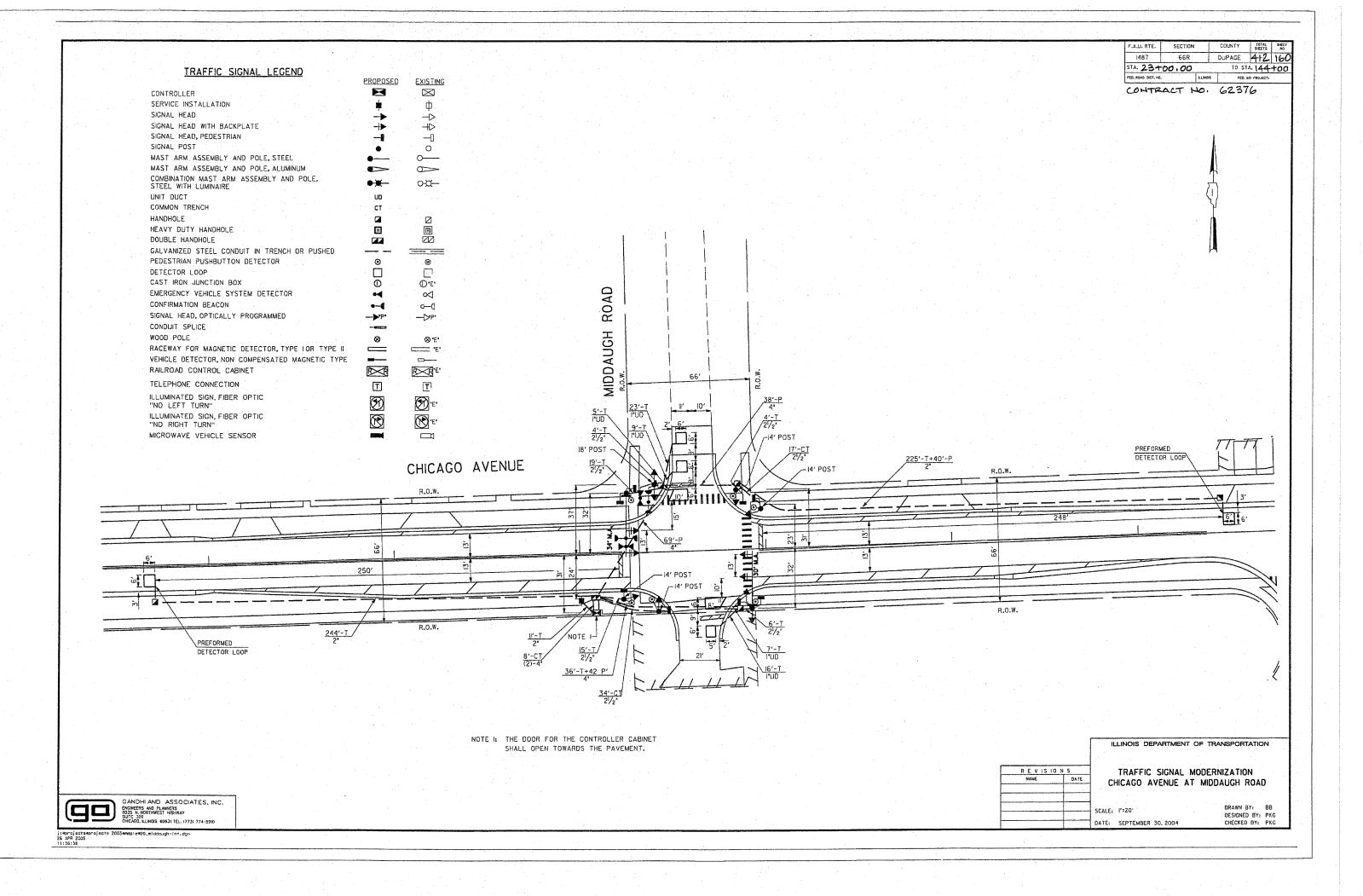
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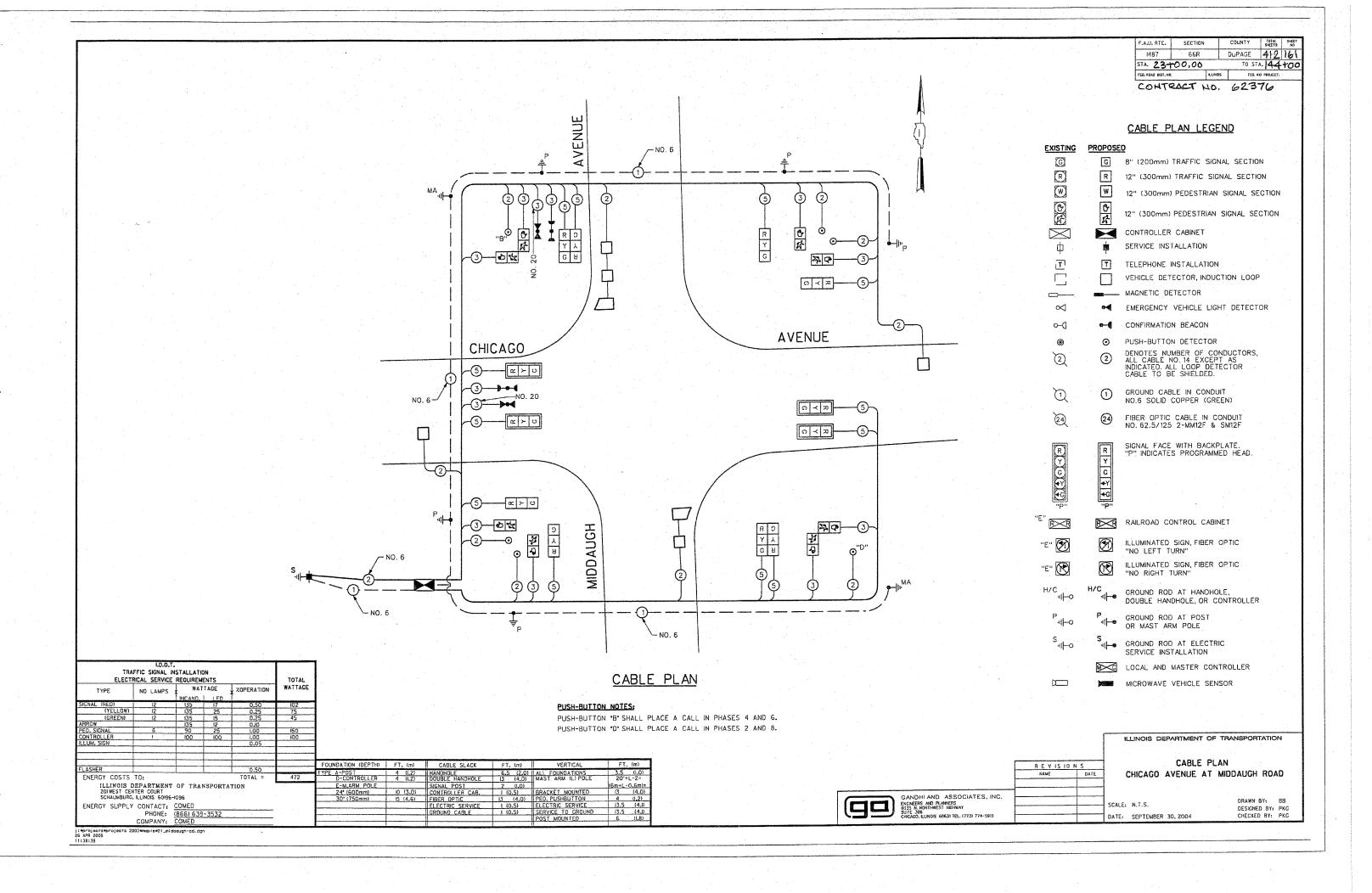
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SCALE: N.T.S. DATE: SEPTEMBER 30, 2004 DRAWN BY: BB DESIGNED BY: PKG CHECKED BY: PKG

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS								
TYPE	TYPE NO LAMPS * WATTAGE * "OPERATION							
		INCAND. I	LED	1	į			
SIGNAL (RED)	12	135	17	0.50	810.0			
(YELLOW)	12	135	25	0.25	405,0			
(GREEN)	12	135	15	0.25	405.0			
ARROW	12	135	12	0.10	162.0			
PED. SIGNAL	2	90	25	1,00	180.0			
CONTROLLER	1	100	100	1.00	100.0			
ILLUM. SIGN				0.05				
FLASHER				0.50				
ENERGY COSTS	TO:			TOTAL =	2062.0			
ILLINOIS DEPARTMENT OF TRANSPORTATION 201WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1036								
ENERGY SUPPLY	PHONE:	COMED (866) 639- COMED	-3532					



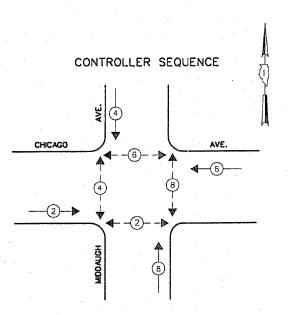


F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET			
1487	66R		DuPAGE	412	162			
STA. 23	+00.00		TO STA.144+00					
FED. ROAD DIST. N	l	KLINDIS.	FEO.	AND PROJECT:				

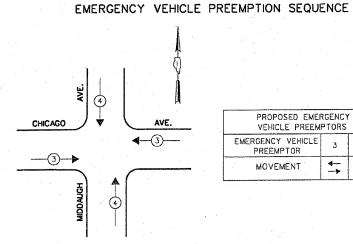
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
34.5	SQ FT	SIGN PANEL - TYPE I
480	FOOT	CONDUIT IN TRENCH, 2' DIA., GALVANIZED STEEL
99	FOOT	CONDUIT IN TRENCH, 21/2" DIA., GALVANIZED STEEL
52	FOOT	CONDUIT IN TRENCH, 4' DIA., GALVANIZED STEEL
40	FOOT .	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
149	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
5	EACH	HANDHOLE
1	EACH	DOUBLE HANDHOLE
632	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
706	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1327	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1670	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
904	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
30	FOOT -	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLEY AND POLE, 30 FT.
1	EACH	STEEL MAST ARM ASSEMBLEY AND POLE, 34 FT.
20	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE D
30	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
4	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	INDUCTIVE LOOP DETECTOR
147	FOOT	DETECTOR LOOP, TYPE I
54	FOOT	PREFORMED DETECTOR LOOP
• 2	EACH	LIGHT DETECTOR
→ 1 (4)	EACH	LIGHT DETECTOR AMPLIFIER
6	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
. 5	EACH .	REMOVE EXISTING HANDHOLE
6	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	SERVICE INSTALLATION, POLE MOUNT
398	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 IC
 295 	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
4	EACH	SIGNAL HEAD, L.E.D., I-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, L.E.D., I-FACE, 3-SECTION, BRACKET MOUNTED
2 .	EACH	SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., I-FACE, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED

• 100% COST TO THE VILLAGE OF CLARENDON HILLS



PHASE DESIGNATION DIAGRAM



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

ILLINOIS DEPARTMENT OF TRANSPORTATION

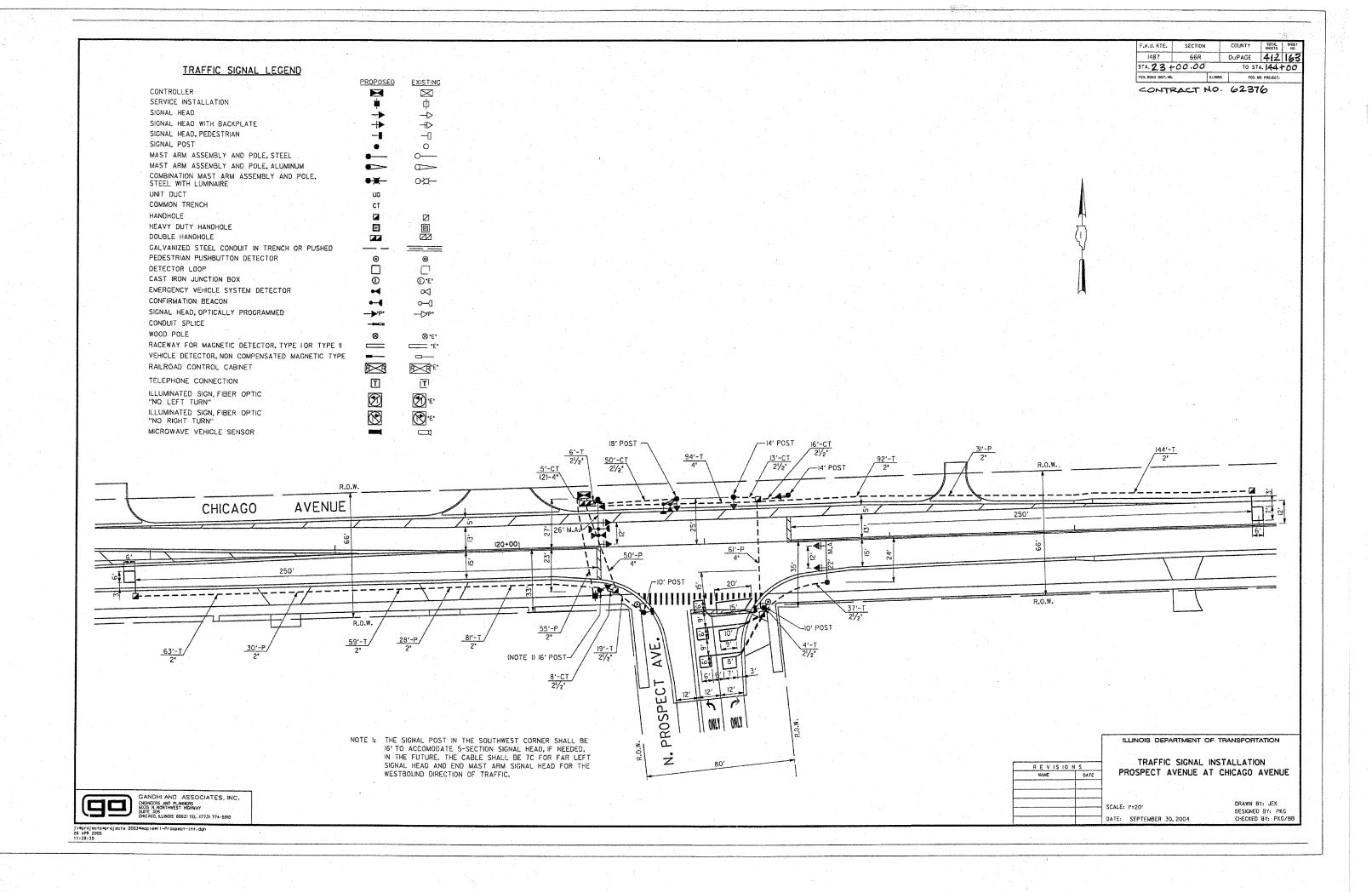
PHASE DESIGNATION DIAGRAM
EMERGENCY VEHICLE PREEMPTION SEQUENCE
AND SCHEDULE OF QUANTITIES
CHICAGO AVENUE AT MIDDAUGH AVENUE

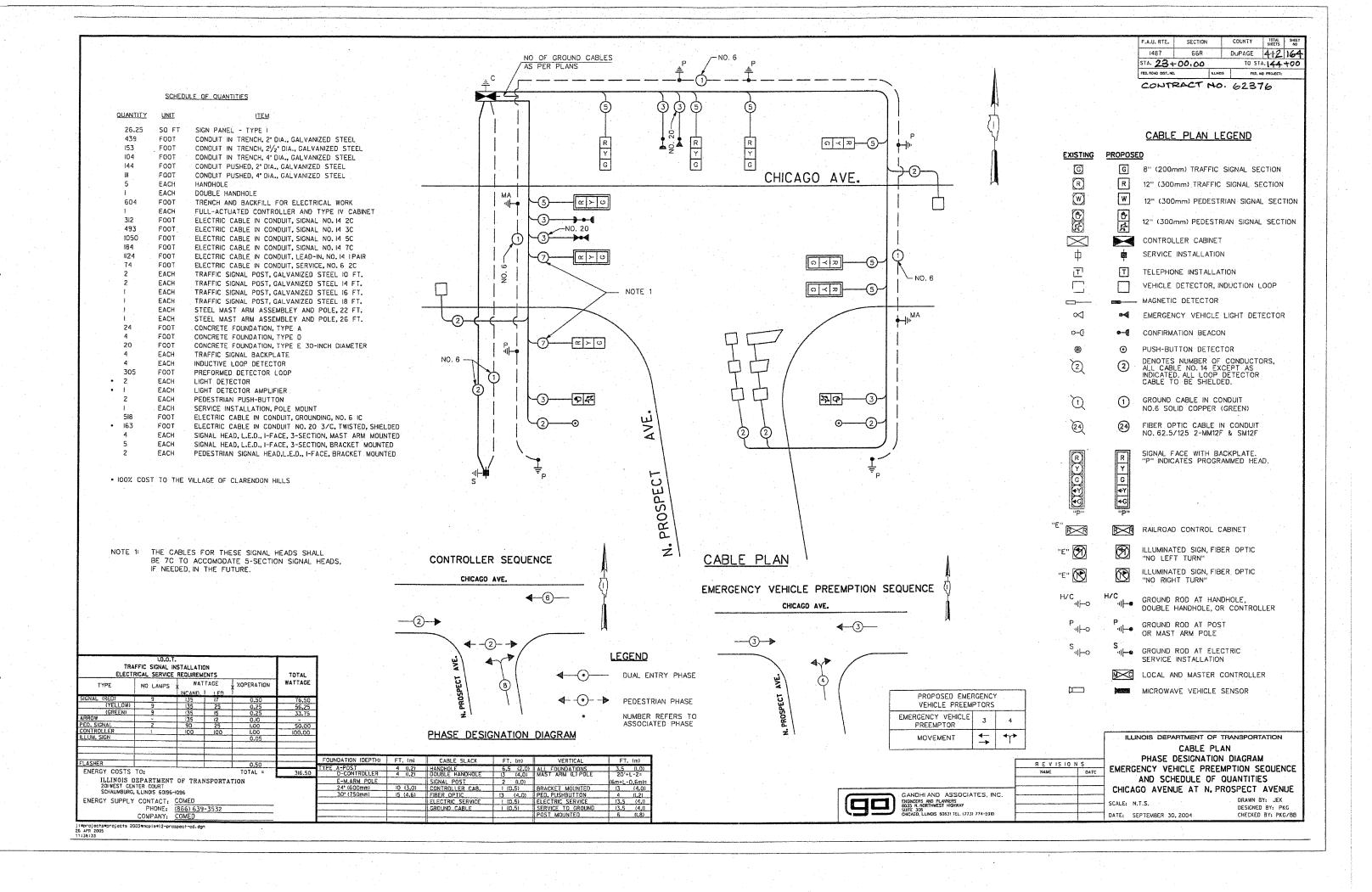
SCALE: N.T.S. DATE: SEPTEMBER 30, 2004

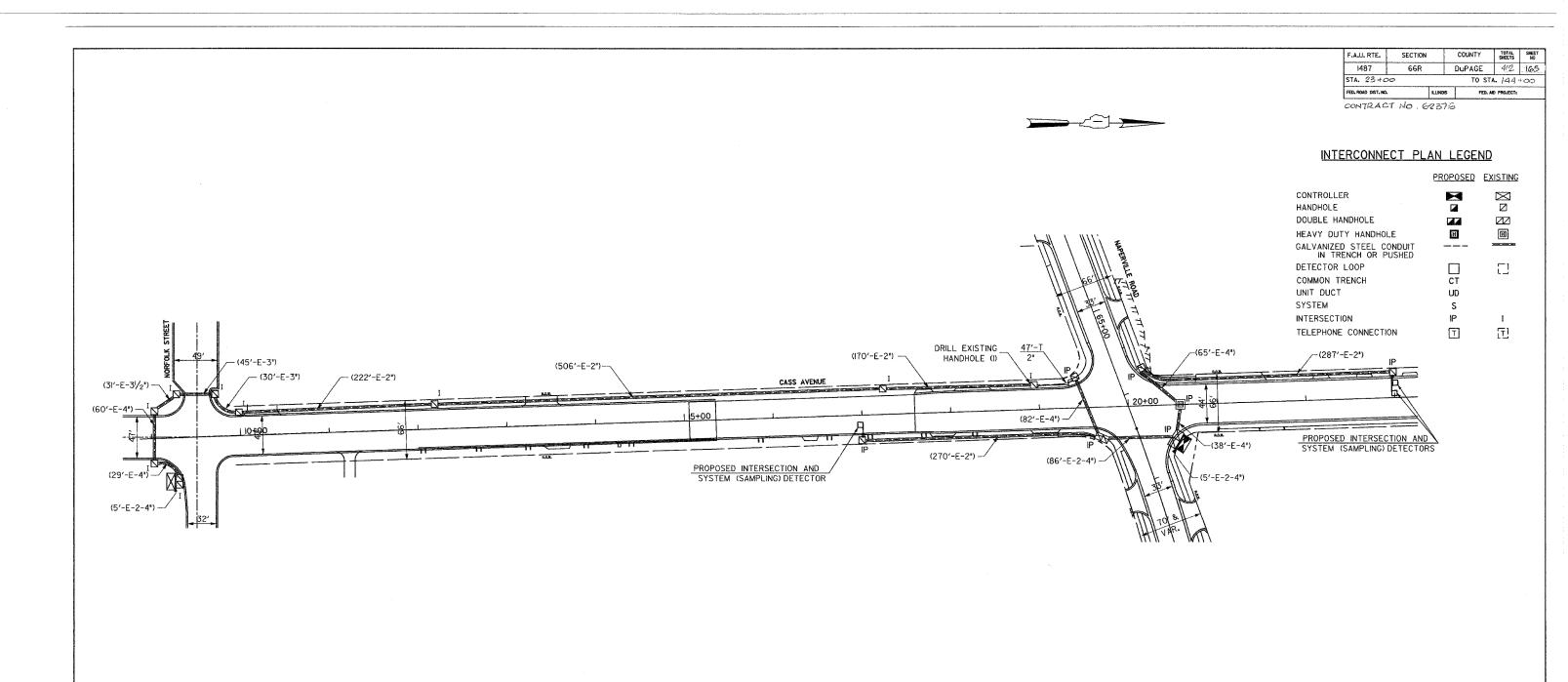
REVISIONS
NAME DATE

DRAWN BY: BB
DESIGNED BY: PKG
CHECKED BY: PKG

GANDHI AND ASSOCIATES, INC. ENGINEERS AND PLANNERS 6035 N. NORTHWEST HIGHWAY SUITE 308 CHICAGO, ILLINOIS 60631 TEL. (273) 774-5910







THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE 'ECONOLITE' TO MATCH THE EXISTING ADJACENT SYSTEM.

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INTERCONNECT
CASS AVENUE
NORFOLK STREET TO NAPERVILLE ROAD

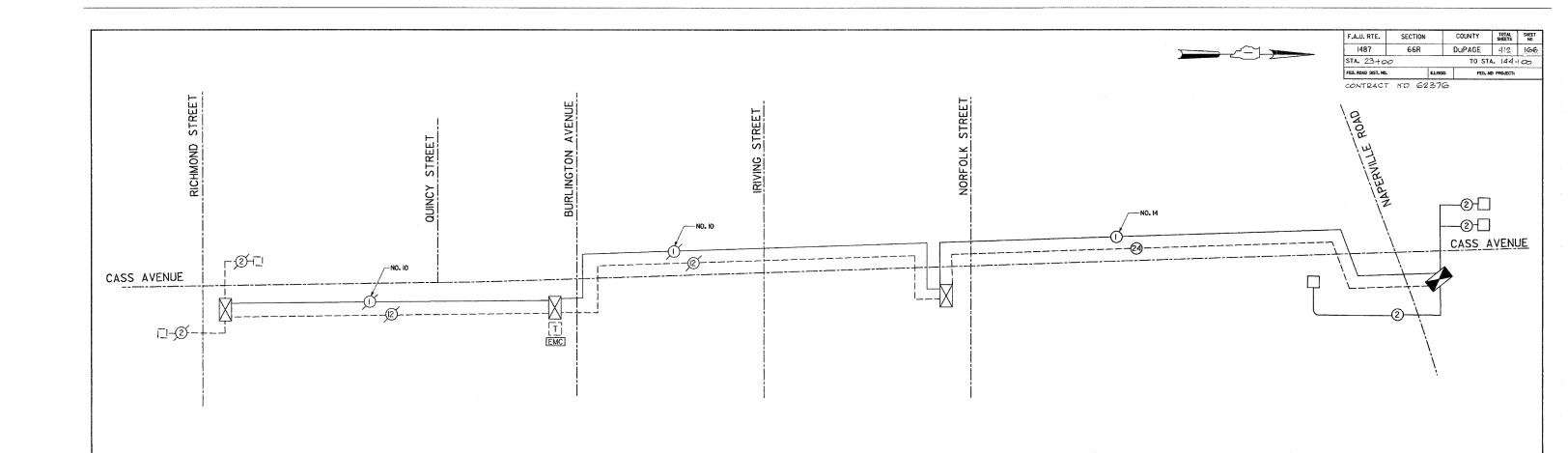
SCALE: 1'=50'
DATE: SEPTEMBER 30, 2004

REVISIONS

DATE

NAME

DRAWN BY: BB
DESIGNED BY: PKG
CHECKED BY: PKG



SCHEDULE OF INTERCONNECT QUANTITIES

QUANTITY	UNIT	<u>ITEM</u>
47	F00T	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
47	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	DRILL EXISTING HANDHOLE
1381	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
1418	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 IC
1444	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 MMI2F & SMI2F
i	L SUM	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM

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

INTERCONNECT SCHEMATIC LEGEND

\geq	EXISTING INTERSECTION CONTROLLER	PSPD	PROPOSED SAMPLING (SYSTEM) PREFORMED DE	TECTORS.	
	PROPOSED INTERSECTION CONTROLLER		EXISTING FIBER OPTIC CABLE IN CONDUIT		
EMC	EXISTING MASTER CONTROLLER	(24)	NO. 62.5/125 MMI2F & SMI2F		
MC	PROPOSED MASTER CONTROLLER	29	PROPOSED FIBER OPTIC CABLE IN CONDUIT NO. 62.5/I25 MMI2F & SMI2F		
MMC	MASTER MASTER CONTROLLER	@	EXISTING INTERCONNECT CABLE - NO. 62.5/129	5 12F.	
	EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		FIBER OPTIC CABLE		
	PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	12	PROPOSED INTERCONNECT CABLE - NO. 62.5/I FIBER OPTIC CABLE	25 I2F	
P	EXISTING INTERSECTION LOOP DETECTORS AND PROPOSED SAMPLING (SYSTEM) DETECTORS	6	EXISTING INTERCONNECT CABLE - NO.18 3 PAIR TWISTED, SHIELDED		
ES	EXISTING SAMPLING (SYSTEM) DETECTORS	,	PROPOSED INTERCONNECT CABLE - NO. 18		
PS	PROPOSED SAMPLING (SYSTEM) DETECTORS	6)	3 PAIR TWISTED, SHIELDED		
<u></u>	EXISTING SAMPLING (SYSTEM) DETECTORS.	(2)	EXISTING LOOP DETECTOR CABLE - 2/C TWIS	TED, SHIELDED	
I ESP_	PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS.	(2)	PROPOSED LOOP DETECTOR CABLE -2/C TWIS	STED, SHIELDED	
[ESPS]	EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS.		EXISTING ELECTRIC CABLE I/C (AS SPECIFIED)		
PD	EXISTING PREFORMED INTERSECTION	 1)	PROPOSED ELECTRIC CABLE, I/C (AS SPECIFIE	D)	
Lol	& SAMPLING (SYSTEM) DETECTORS	[7]	EXISTING TELEPHONE CONNECTION		
PD	PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	<u> </u>	PROPOSED TELEPHONE CONNECTION		
[ESPD]	EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS.			REVISIONS	
				NAME	DATE

GANDHI AND ASSOCIATES, INC. ENGINEERS AND PLANNERS 6035 N. NORTHWEST HIGHWAY SUITE 306 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

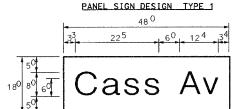
ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC CASS AVENUE RICHMOND STREET TO NAPERVILLE ROAD

SCALE: NONE

DATE: SEPTEMBER 30, 2004

DRAWN BY: BB
DESIGNED BY: PKG
CHECKED BY: PKG



SUPPORTING CHANNELS

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

acde bhikl god mnpru

21

SECOND LETTER

C D C D C D C D C D C D C D C D 14 | 14 | 15 | 12 | 14 | 06 | 10 | 11 | 14 | 06 | 10 | 11 15 20 21 | 14 | 15 | 11 | 12 | 14 | 15 | 12 | 14 | 12 | 1

22 24 20 21 14 15 16 17 16

16 | 17 | 11 | 12 | 05 | 06 | 11 | 12 | 11 | 12 | 11

16 | 7 | 2 | 4 | 06 | 10 | 2 | 14 | 12 | 14 | 12

15 20 21 12 4 06 10 2 4 2 4 4 5 4 5

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

SECTION COUNTY 1487 66R DuPAGE 4/2 167 STA. 23+00 TO STA. 1444 00 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT CONTRACT TO 62376

UPPER AND LOWER CASE

LETTER WIDTHS

	E T E R S		UPPER ETTERS		l upper Letters	E T E R S	6 INCH CASE L	LOWER ETTERS
	T E	SEF	RIES	SE	RIES	T _E	SEI	RIES
	R S	С	D	С	D	R S	С	D
	Α	36	50	50	6 ⁵	a	35	42
	В	32	40	43	53	b	35	42
	С	32	40	43	53	С	35	41
	D	32	40	43	5 ³	d	35	4 ²
	E	30	35	40	47	е	35	42
	F	3 0	35	40	47	f	23	26
	G	32	40	43	53	g	35	42
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	ı	07	07	11	2	1	11	11
	J	30	36	40	50	J	20	22
	К	32	41	43	54	k	35	42
	L	30	35	40	47	ı	į l	Į i
	M	37	45	5 ¹	61	m	60	70
	N	3 ²	40	43	53	n	35	4 ²
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	R	3 ²	40	43	53	r	26	32
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53

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43

N _U ,	6 INCH	SERIES	8 INCH	SERIES
N _{UMBER}	С	D	С	D
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3	3 ²	40	43	5 3
4	35	43	47	5 ⁷
5	32	40	43	53
6	3 ²	40	43	53
7	3 ²	40	43	53
8	3 ²	40	43	53
9	32	40	43	53
0	3 4	42	45	5 ⁵

40

43

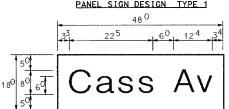
REVISIONS	
NAME	DATE
D.A.Z./D.A.G.	11/90
	6/98
CADD	10/00
i	

32

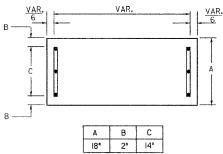
MAST ARM MOUNTED STREET NAME SIGNS

Illinois Department of Transportation
DISTRICT (

SCALE: NONE DATE: \$\$DATE\$\$

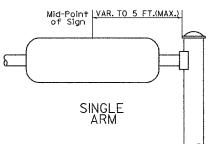


6.0 Sq. Ft. each 2 Required Design Series D



8.25 Sq. Ft. each 5 Required

Design Series D



CEG DOQR HIMN JU

SERIES

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

							SE	.CO1	4D	LET	TEF	₹					
			d e	b h m n i		f	w			s	+	٧	У	>	<	:	Z
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F-C	adhgij Imnqu	16	۱7	2 ²	24	16	۱7	12	4	14	15	4	ا5	16	17	16	۱7
R	bfkops	12	4	16	7	Ιı	12	05	06	11	2	П	2	2	14	2	4
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Ţ	† z	12	4	16	7	2	14	06	10	1	12	П	2	2	4	12	4
Ė	νу	11	2	4	5	11	12	05	06	06	10	06	10	H	2	11	2
l rx	w	11	2	4	5	Į1	2	05	06	11	2	П	12	П	2	12	4
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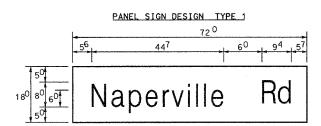
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F	adhgij Imnqu	16	۱7	2 ²	24	16	۱7	12	4	4	15	4	ا5	16	17	16	17
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T	се	2	4	16	17	2	4	0e	10	2	14	2	4	12	14	12	14
L F	r	06	10	2	4	Oe	10	03	03	05	06	05	06	06	10	0e	10
Ŧ	† z	12	4	16	7	2	14	06	10	П	2	П	2	2	4	12	14
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	SERIES	С	D	С	D	С	D	С	D	С	D	С	D	С	D	С	D
F-C	adhgij Imnqu	16	۱7	2 ²	24	16	۱7	12	14	14	15	4	5	16	17	16	۱7
R S T	bfkops	12	4	16	7	Į!	12	05	06	11	2	11	12	2	14	2	4
T	Се	2	4	16	7	2	4	0e	10	2	14	12	4	2	14	2	4
F	r	06	10	2	4	Oe	10	03	03	05	O _e	05	Oe	06	10	0e	10
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JEIT-TER	νу	11	2	4	5	11	12	05	06	06	10	06	10	11	2	11	2
	w		2	4	5	Į1	2	05	0e	11	2	П	12	11	2	12	4
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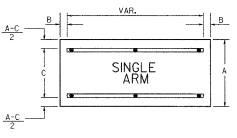
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	Spo	icing	Chart	8	Inch	Ser	ies	'C 8	& D'	
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N U	5			14	5	4	15	14	5	11	2	11	2	14	5	14	5	11	12	14	15	14	15
M B	6			16	17	14	15	14	5	2	5	12	14	14	5	14	5	11	12	14	ا5	14	15
E R	7			12	14	12	14	14	5	12	15	05	06	12	14	14	ا5	11	12	14	ا5	12	۱4
.,	8			16	17	16	17	14	ا5	12	5	۱ ²	4	14	5	6	۱7	12	4	16	17	14	5

PANEL SIGN DESIGN TYPE 1 Chicago Av



9.0 Sq. Ft. each 2 Required Design Series C



SUPPORTING CHANNELS

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

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 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6' x 6'-0' MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT 'STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS' AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND,
- 3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED
- 4. ALL BORDERS SHALL BE 34" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
- 5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNEIX ALUMINUM CHANNEL FRAMING SYSTEM ARE: * AMERICAN FABRICATION CO.
- * A.K.T. CORPORATION SCHAUMBURG, IL * TUCKER COMPANY, INC. WAUWATOSA, WI
 - CHICAGO HEIGHTS, IL * WESTERN TRAFFIC CONTROL INC. CICERO, IL

PARTS LISTING:

SIGN SCREWS

BRACKETS

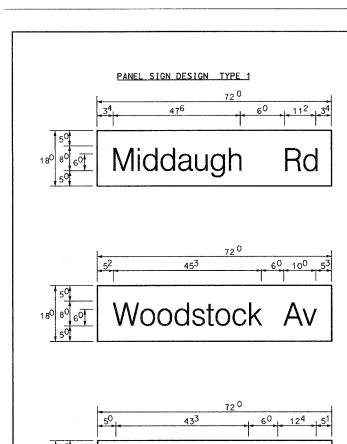
PART *HPNO53 (MED. CHANNEL) 1/4" × 14 × 1" H.W.H. #3

SELF TAPPING WITH NEOPRENE WASHER PART #HPNO34 (UNIVERSAL)

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

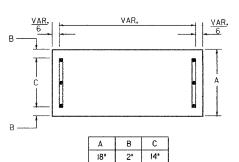
Secure Sign to Mast Arm DUAL ARM

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



Prospect

SUPPORTING CHANNELS



9.0 Sq. Ft. each

9.0 Sq. Ft. each

Design Series <u>C</u>

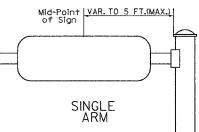
9.0 Sq. Ft. each

Design Series D

2 Required

2 Required

2 Required Design Series D



15 20 21 15 20 21 12 14 06 10 12 14 12 14 14 15 14 15 CEG DOQR 15 20 21 15 06 10 12 14 12 20 21 HIMN 22 24 20 12 05 06 11 4 06 10 12 14 12 14 12 14

Upper Case To Lower Case

acde bhikl goq mnpru

SERIES

A W X

Spacing Chart 8-6 Inch Series "C & D"

SECOND LETTER

C D C D C D C D C D C D C D C D | 4 | | 4 | | 5 | | 2 | | 4 | 06 | | 0 | | 1 | | 1 4 | 06 | | 0 | | 1 | | | 2 | | 2 | | 4

Lower Case To Lower Case

Spacing Chart 6 Inch Series "C & D"

	***************************************						SE	COI	ND	LET	TE	₹					
		a c g c	d e	p h		f	w		J	s	+	٧	У	>	<	2	Z
	SERIES	С	D	С	D	С	D	С	D	С	D	С	D	С	D	С	D
F-E	adhgij Imnqu	16	17	2 ²	24	16	۱7	12	14	ļ 4	5	4	5	16	۱7	J6	17
RS	bfkops	2	4	16	7	11	2	05	Oe	11	2	11	12	12	4	12	4
T	се	2	4	6	7	2	4	06	10	2	4	12	4	2	4	2	14
F	r	06	10	2	4	06	10	03	ОЗ	05	06	05	06	06	10	06	10
E	† z	2	4	16	7	12	4	0e	10	1	12	1	12	2	4	2	14
ĖR	νу	11	2	4	5	ĮI.	12	05	06	06	10	06	10	11	2	11	12
1	w	11	2	4	5	11	2	05	06	П	2	H	2	į!	2	2	14
	×	2	4	6	7	Į!	2	05	06	11	2	Į1	12	11	12	12	14

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

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				()			2	2	-	3	4	4	Ε,	5	6	5	7	7	8	3	9	9
	SE	RIE	S	С	D	С	D	С	D	С	D	С	D	С	D	С	D	С	D	С	D	С	D
F	0	9		16	17	16	۱7	14	5	²	14	۱4	5	4	⁵	6	۱7	2	4	۱6	17	16	17
	1			20	21	20	21	20	2 ¹	۱6	۱7	14	ا5	2 ⁰	21	20	21	4	ا5	2 ⁰	21	2 ⁰	21
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TOTAL SHEE SHEETS NO. F.A.U. SECTION COUNTY 66R DUPAGE 412 168 STA. 23+00 TO STA 144+ 00 FED. ROAD DIST. NO. [ILLINOIS FED. AID PROJECT CONTRACT NO 62376

UPPER AND LOWER CASE LETTER WIDTHS

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

E T T E R S		UPPER ETTERS		I UPPER LETTERS	L T T E R S		LOWER ETTERS
TE	SEF	RIES	SEI	RIES	T E	SEI	RIES
R S	С	D	С	D	R S	С	D
A	36	50	50	65	а	35	42
В	32	40	43	53	Ь	35	42
С	32	40	43	53	c	35	41
D	3 ²	40	43	53	đ	3 ⁵	42
E	30	3 ⁵	40	47	е	3 ⁵	4 ²
F	3 ⁰	35	40	47	f	23	26
G	3 ²	40	43	53	g	3 ⁵	42
Ξ	3 ²	40	43	5 ³	h	35	42
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K	3 ²	41	43	5 ⁴	k	3 ⁵	42
L	30	35	40	47	1	Į l	Į !
М	37	45	51	6 ¹	m	6°	70
Z	32	40	43	53	n	35	42
0	34	42	45	5 ⁵	0	36	43
P	32	40	43	53	P	3 ⁵	42
a	3 ⁴	42	45	5 ⁵	q	35	42
R	32	40	43	53	r	26	32
S	32	4 ⁰	43	53	8	36	42
Т	30	35	40	47	+	27	32
U	32	40	43	53	u	35	42
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W	44	5 ²	60	70	w	55	64
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Y	36	50	5 ⁰	66	У	46	5 ³
Z	3 ²	40	43	53	z	36	43

N _U ,	6 INCH	SERIES	8 INCH SERIES	
N _{UMBER}	С	ם	С	D
ı	2	1 4	Į 5	20
2	3 ²	40	43	53
3	32	40	43	53
4	35	43	47	5 ⁷
5	32	40	43	53
6	32	40	43	5 ³
7	3 2	40	43	53
8	32	40	43	53
9	3 ²	40	43	5 ³
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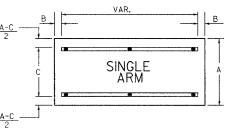
REVISIONS NAME	DATE
D.A.Z./D.A.G.	11/90
	6/98
CADD	10/00
	+

MAST ARM MOUNTED STREET NAME SIGNS

Illinois Department of Transportation
DISTRICT |

SCALE: NONE DATE: \$\$DATE\$\$

SUPPORTING CHANNELS



Α	В	С
18*	2"	12"
30"	2"	22*

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

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 834001, 834006 AND 83401, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6' × 6'-0' MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT 'STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS' AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND
- TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY. 2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- 3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED
- 4. ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
- 5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS, LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
- * A.K.T. CORPORATION SCHAUMBURG, IL * TUCKER COMPANY, INC.
- * AMERICAN FABRICATION CO. CHICAGO HEIGHTS, IL * WESTERN TRAFFIC CONTROL INC.

CICERO, IL

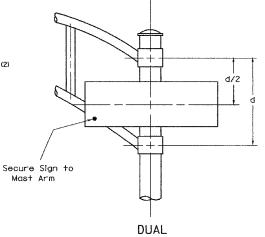
WAUWATOSA, WI

PARTS LISTING: SIGN CHANNEL SIGN SCREWS

PART #HPN053 (MED. CHANNEL)

1/4" × 14 × 1" H.W.H. "3

SELF TAPPING WITH NEOPRENE WASHER PART *HPN034 (UNIVERSAL) OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.



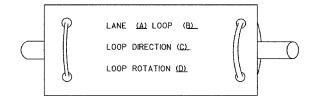
ARM SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM Shall be used. See Note #5.

j:*projects*projects 2003*maple*26_signs.dgn 28 FEB 2005

BRACKETS

- I. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6' (150 mm). UNIT DUCT 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 ISTANDARD 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 ISPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

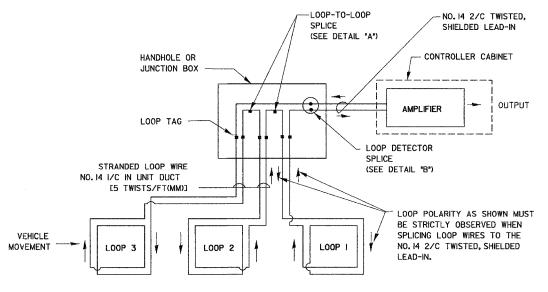
LOOP LEAD-IN CABLE TAG



- A. LANE IIS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #IIS 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.

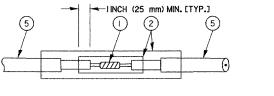
F.A.U. RTE.	A.U. SECTION		OUNTY	TOTAL SHEETS	SHEET NO.		
1487	66R	ī	UPAGE.	412	169		
STA.	STA. 23+∞ TO STA. 144+∞						
FED. RO	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						

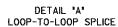
CONTRACT NO 62376

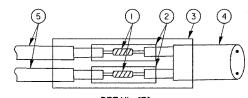


DETECTOR LOOP WIRING SCHEMATIC

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







DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

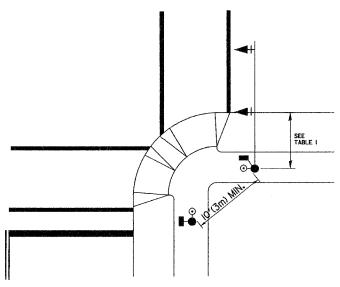
- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6' (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISION	S	ILLINOIS DEPARTMENT	OF TRANSPORTATION
NAME	DATE	ILLINOIS DEPARTMENT	OF TRANSPORTATION
		DISTRIC	T ONE
		STANDARD TRA	AFFIC SIGNAL
		DESIGN D	ETAILS
		SCALE: VERT. NONE HORIZ.	DRAWN BY: RWP DESIGNED BY: D CHECKED BY: D

\projects\projects 2003\maple\01-stc

TRAFFIC SIGNAL MAST ARM AND POST MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA, INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR CURB, SHOULDER, OR EDGE OF PAVEMENT (SEE PLANS) 5' (I.5m) MAX.

PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE I). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
1487	66R		DuPAGE	412	170
STA.	STA. 23400 TO STA. 144+00				
FED. RO	AD DIST. NO. 1	ILLINOIS	FED. AID	PROJECT	

CONTRACT NO 62376

I. AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION. EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

NOTES:

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON, PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK, AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PISSBITTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

- A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
- B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
- C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
- E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- 2. PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- 3. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- 4. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

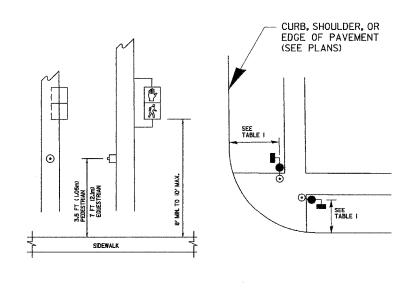


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM IOFT(3.0m)
TRAFFIC SIGNAL POST	4 FT (l.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM IOFT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (l.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM IOFT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE I	SEE NOTE I

REVISIONS
NAME
DATE

DISTRICT I

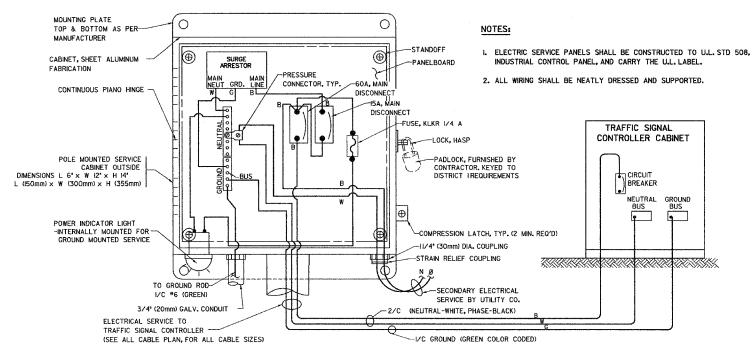
STANDARD TRAFFIC SIGNAL

DESIGN DETAILS

SCALE; VERT. NONE

DRAWN BY: RWP
DRESSIGNED BY: DAY
CHECKED BY: DAY
CHECKED BY: DAY
CHECKED BY: DAY

SCALE: HORIZ, NONE DATE 1-01-02 ESIGNED BY: DAD HECKED BY: DAZ HEET 2 OF 4



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

SERVICE INSTALLATION POLE MOUNT (SHOWN) (0.35 m) DOOR OPENING I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF DOORS OF ALL TYPES FLECTRIC 10' (3.0m) MAX. UTILITY DOOR-**ENCLOSURE** -FLECTRICAL SERVICE E LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE 13.75" (0.35m) GROUND) -CONDUIT BUSHINGS - SEE CABINET BASE, BELOW " CHAMFER, CONTINUOUS SEE ELECTRICAL FINISH GRADE 24° (0.60m), - 4' (1.2m) DEPTH SQUARE FOUNDATION PANEL DIAGRAM TO TRAFFIC SIGNAL CONTROLLER (50mm) GALV. CONDUIT 2" (50mm) GALV. CONDUIT

CARINET BASE-

SERVICE INSTALLATION

GROUND MOUNT



-3/4" x 10' (20mm x 3.0m) COPPER CLAD GROUND ROD

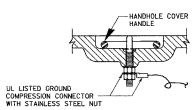
CABINET - BASE BOLT PATTERN (NOT TO SCALE)

-ANCHOR BOLT LOCATIONS

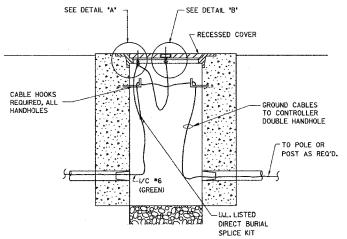
(413 mm) 16.25°

SHALL BE APPLIED ON ALL BOLT/ CONNECTION ASSEMBLIES.
-STAINLESS STEEL NUT AND 2 STAINLESS

- HANDHOLE COVER CAST CORNER FRAME WEB HE LISTED GROUND COMPRESSION CONNECTOR ANTI-CORROSION COMPOUND DETAIL "A" STEEL WASHERS



DETAIL "B"



HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

(2) 1/2' × 11/4' STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL) HEAVY DUTY COPPER COMPRESSION ∠ EXISTING HANDHOLE GROUNDING CABLE (PAID FOR SEPARATELY)

(NOT TO SCALE)

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

NOTES:

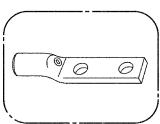
GROUNDING SYSTEM

SECTION 66R DUPAGE 412 1487 STA. 23+00 TO STA. 144+00 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

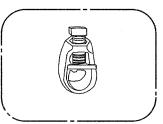
COUNTY

CONTRACT NO. 62376

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC,). GROUND ROD SHALL BE 3/4° DIA. x IO'-O° (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS. CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

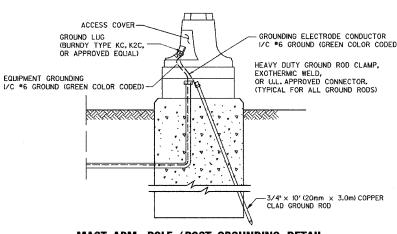


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

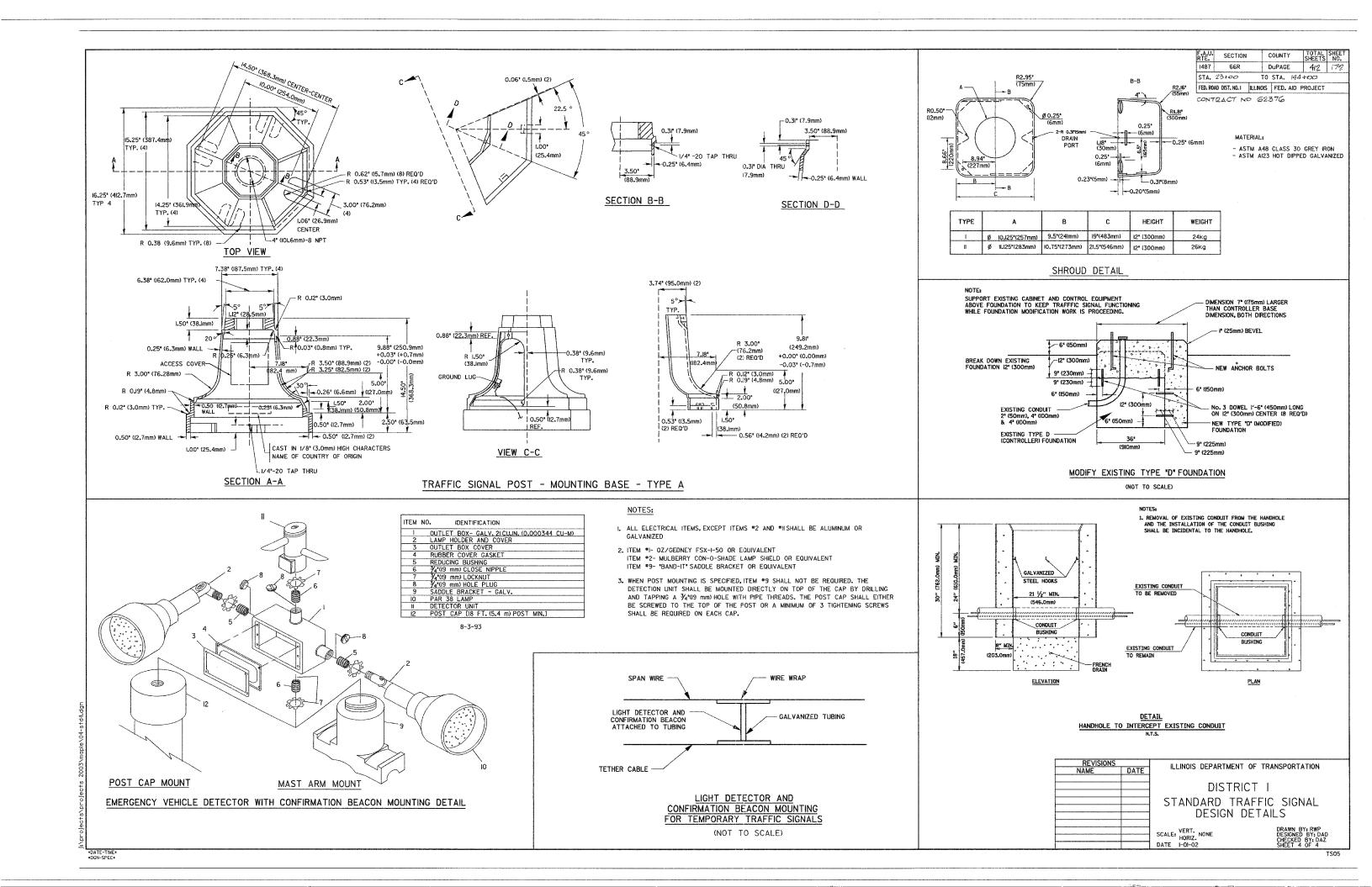
· ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. • GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (J.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST-GROUNDING DETAIL

REVISIONS NAME ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT I STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE DATE I-01-02



CONTRACT NO.

F.A RTE.	SECTION	С	OUNT	Y	TOTAL	SHEE NO.
1487	66R	D	UPA	GE	412	173
STA.	73+00.0	O TO	STA.	144	+00.0	0
FED. RO	AD DIST. NO.	ILLINOIS	FED.	AID	PROJECT	•

CONTRACT NO. 62376

GENERAL NOTES / LIGHTING PLAN

- 1. ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
- 2. THE CONTRACTOR IS TO VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES BEFORE BEGINNING ANY TRENCHING OR AUGURING OPERATIONS.
- 3. PRIOR TO INSTALLING LIGHT STANDARDS NEAR ANY EXISTING OVERHEAD ELECTRICAL FACILITIES. THE CONTRACTOR IS TO NOTIFY UTILITY COMPANY OF THE WORK IN PROGRESS.
- 4. FOR LOCATION OF ANY UNDERGROUND ELECTRICAL FACILITIES, THE CONTRACTOR IS TO COORDINATE WITH THE RESPONSIBLE UTILITY. THE CONTRACTOR SHALL ALSO NOTIFY J.U.L.I.E. TO LOCATE, MARK, OR STAKE UNDERGROUND UTILITIES.
- 5. ALL LIGHT POLES ARE TO BE 35' M.H. WITH 12' M.A.
- 6. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING, (I.e. DECORATIVE ROCKS, SHRUBS, PLANTS. SOUNDWALLS, ETC.) OR SHALL REPLACE IT, WITH THE COSTS TO BE CONSIDERED INCIDENTAL TO THIS CONTRACT.
- 7. ALL ROADWAY LIGHTING POLES SHALL BE UL LISTED.
- 8. WHERE SEPARATE CONDUIT RUNS ARE TO BE INSTALLED WITH EACH OTHER, ONE COMMON TRENCH SHALL BE USED AND SHALL BE MEASURED ONLY ONCE FOR PAYMENT, AS TRENCH AND BACKFILL.
- 9. A NYLON PULL STRING SHALL BE PROVIDED IN ALL CONDUITS THAT ARE SPARE.
- 10. POLE LOCATION AND SETBACK:
 THE CONTRACTOR SHALL LOCATE POLE FOUNDATION ACCORDING TO THE PLANS.
 THE DISTANCE FROM THE FACE OF THE TRANSORMER BASE TO THE BACK OF
 THE CURB SHALL BE MINIMUM 2 FT.
- 11. THE CONTRACTOR SHALL COMPLY WITH IDOT STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, SPECIAL PROVISIONS, AND NATIONAL ELECTRICAL CODE.
- 12. ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE U/L LISTED AND LABELED.
- 13. UNLESS OTHERWISE INDICATED, ALL ITEMS AND WORK SHOWN ON THESE PLANS ARE PROPOSED NEW ITEMS OF WORK.
- 14. THERE SHOULD BE NO UNDERGROUND SPLICES.

SYMBOLS

PROPOSED 35 FT. MH, T-BASE, 250W LUMINAIRE

EXISTING LIGHTING UNIT TO REMAIN

EXISTING LIGHTING UNIT TO BE REMOVED AND RELOCATED

LOCATION OF THE REINSTALLED LIGHTING UNIT

CAPPED CONDUIT

CONCEALED CONDUIT

GROUND ROD

UNIT DUCT 3-1/C NO. 4 AND 1/C NO. 6 GROUND 600V

(EPR-TYPE RHW) 11/4" DIA. POLYETHYLENE.

LIGHTING CONTROLLER EXISTING
ORNAMENTAL LIGHTING UNIT

 \boxtimes

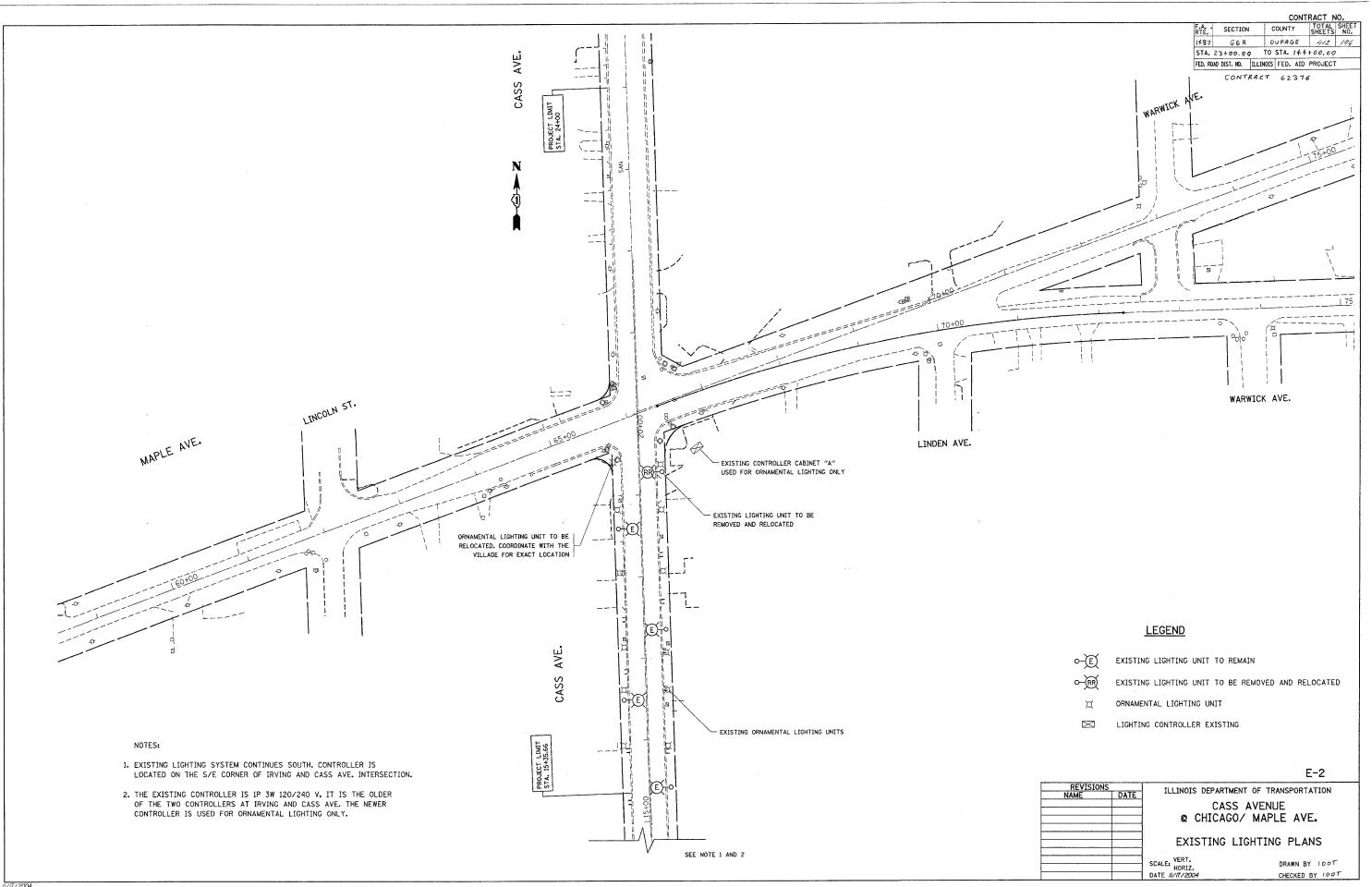
BILL OF MATERIALS

BILL OF N	VAIFKIAL	S	
ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE
UNIT DUCT, WITH 3-1/C NO. 4 AND 1/C NO. 6 GROUND 600 VOLT (EPR-TYPE RHW), 11/4" DIA. POLYETHYLENE	FOOT	1300	1300
LIGHT POLE, ALUMINUM, 35 FT. M.H., 12 FT. MAST ARM	EACH	6	6
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	80	80
GROUND ROD, %" DIA. X 10 FT.	EACH	7	7
CONDUIT PUSHED, 21/2" DIAMETER, RIGID GALVANIZED STEEL	FOOT	200	200
CONDUIT IN TRENCH, 4" DIAMETER, RIGID GALVANIZED STEEL	FOOT	550	550
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1300	1300
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	6	6
RELOCATE EXISTING LIGHTING UNIT	EACH	2	2
BREAKAWAY DEVICE, TRANSFORMER BASE (9" HIGH), 11.5" BOLT CIRCLE	EACH	7	7
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	4	4
REMOVAL OF EXISTING POLE FOUNDATION	EACH	2	2

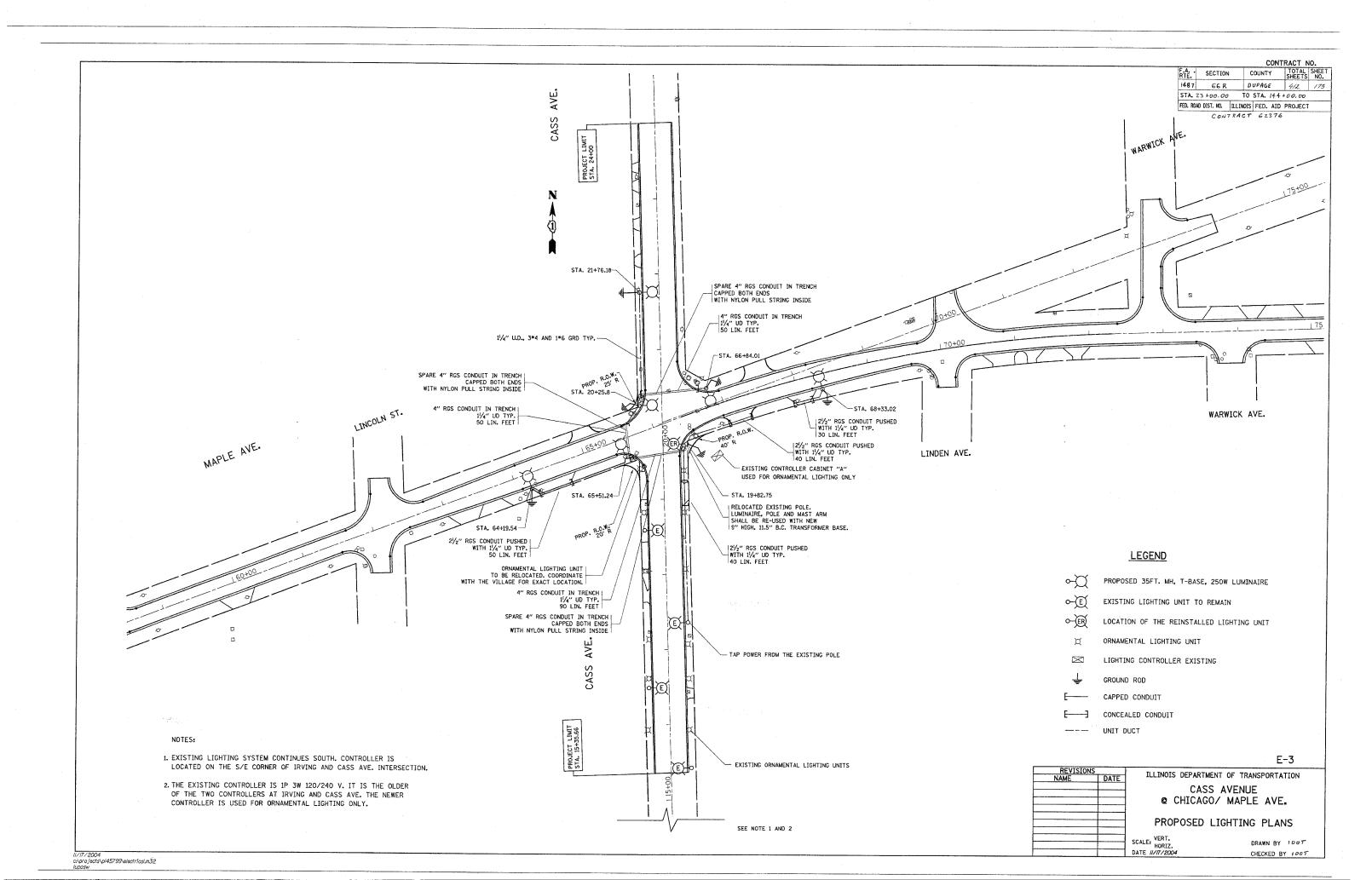
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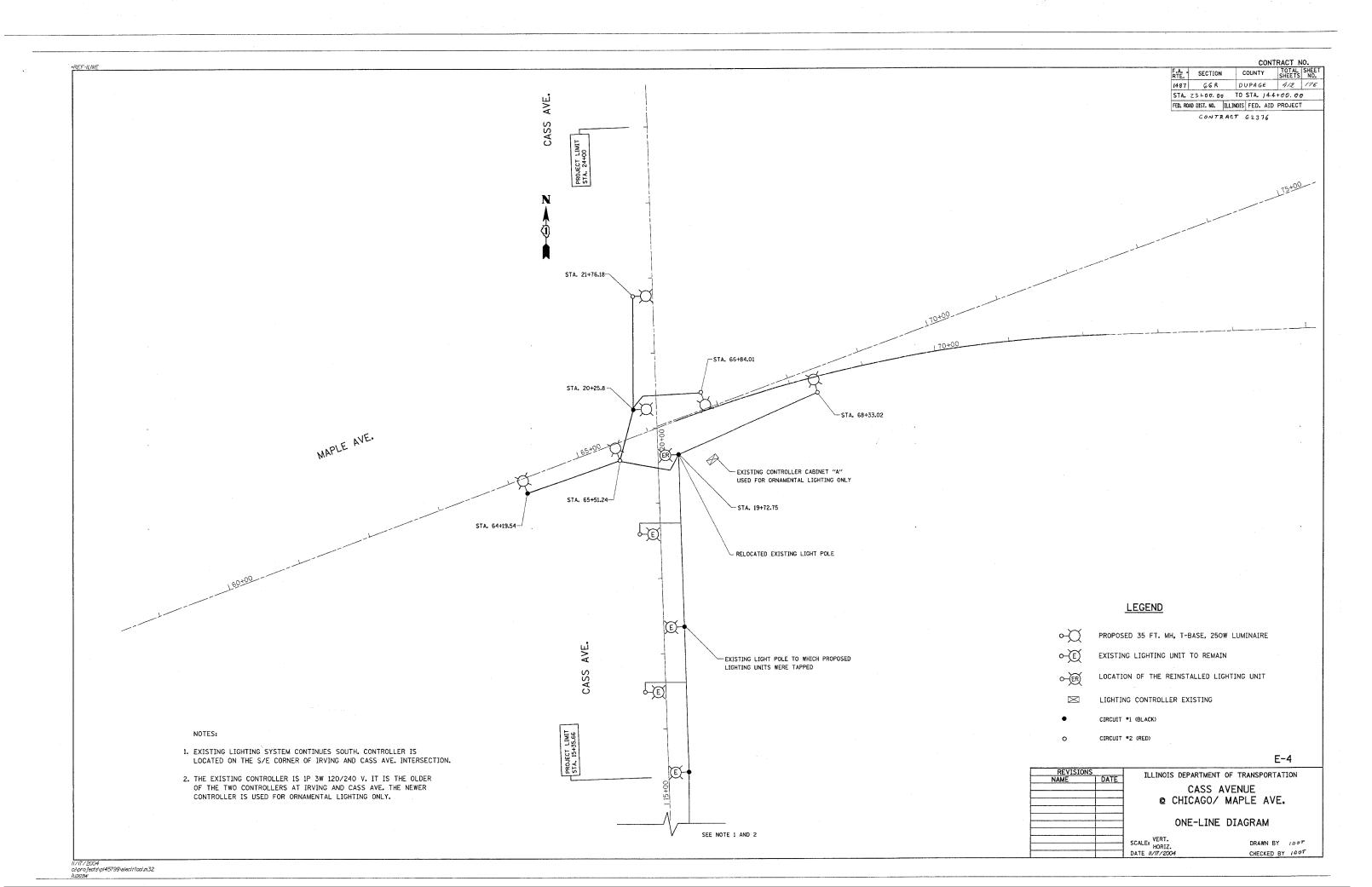
CHECKED BY IDOT

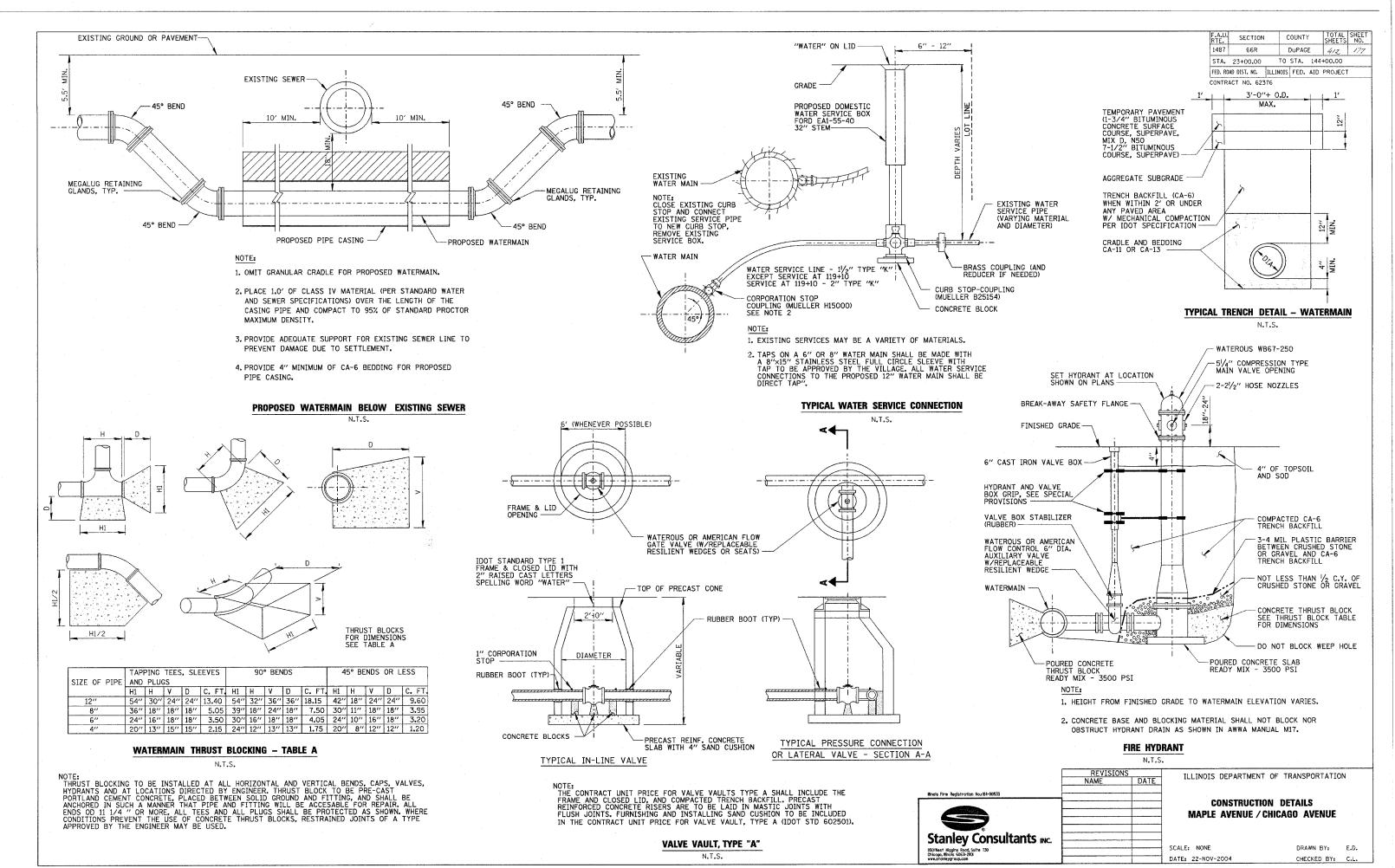
E-1
ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS DEPARTMENT OF TRANSFORTATION
CASS AVENUE
@ CHICAGO/ MAPLE AVE.
BILL OF MATERIALS
GENERAL NOTES & SYMBOLS
ALE: VERT. DRAWN BY IPOT

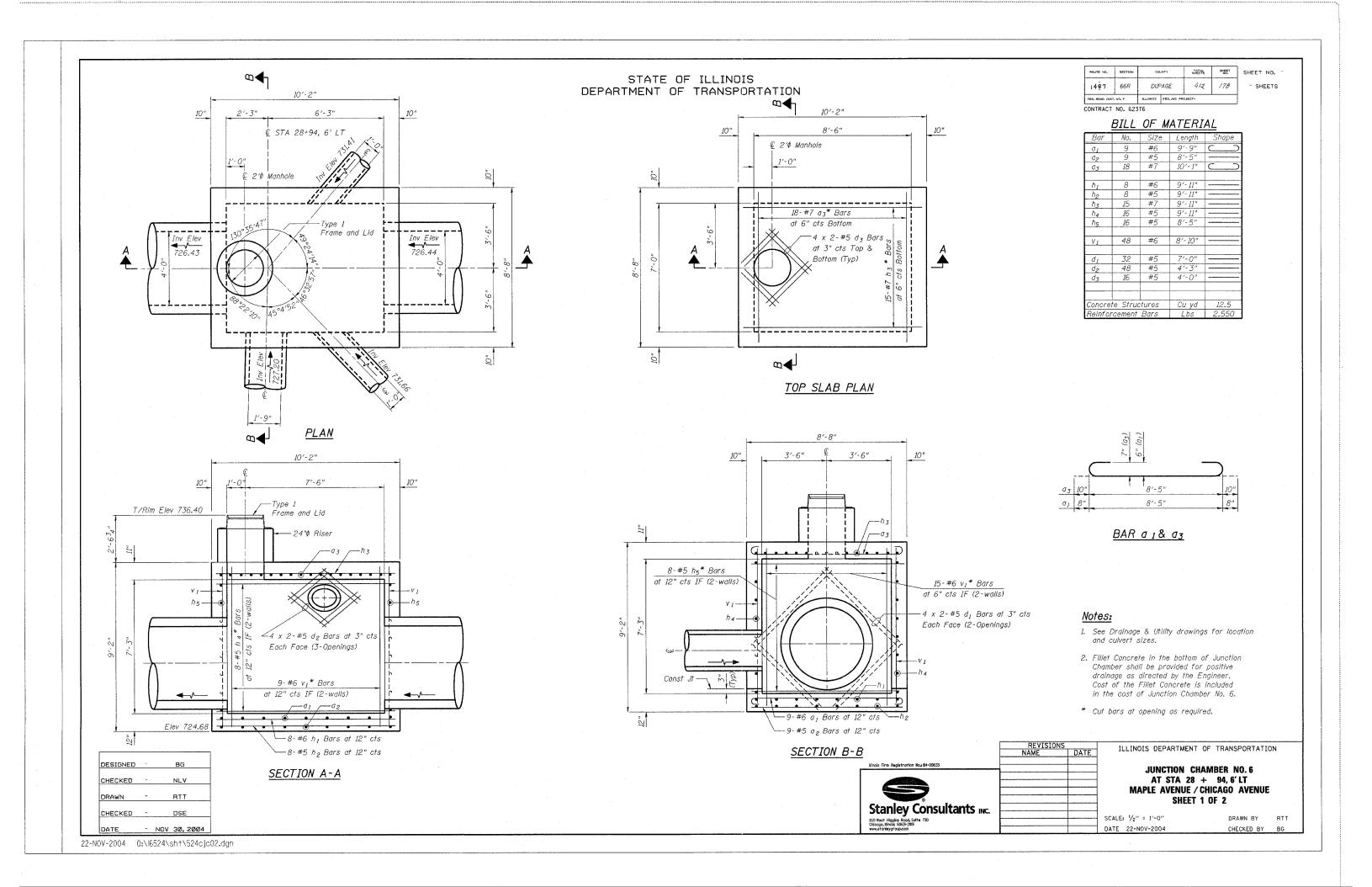


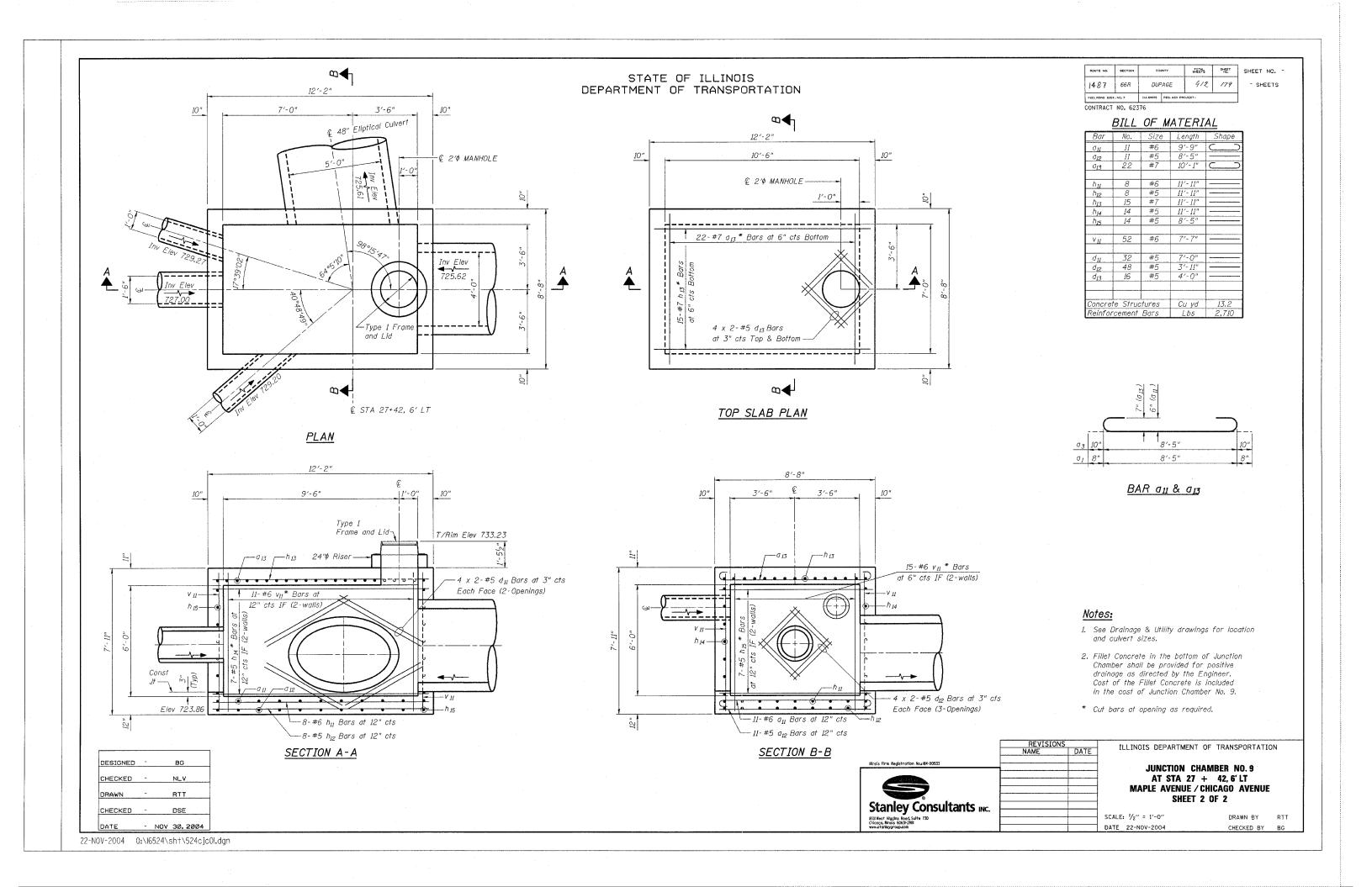
II/I7/2004 c:\projects\pi45799\electr1cal.m32 iupasw





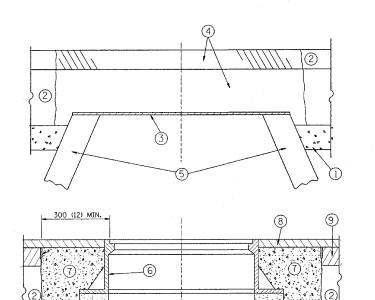






F, A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO
487	66 R	D	UPAGE	412	180
STA.	23+00.00	7 TO	STA. 14	4+00.6	00
FED. R	IDAD DIST. NO.	ILLINOIS	FEE	, AID PROJECT	

CONTRACT NO. 62376



PROPOSED

PROPOSED

SAND FILL

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAYEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE RECONSTRUCTION PAY ITEM.

- BRICK. MORTAR. OR CONC. ADJUSTING RINGS

4 .4 4

NOTES:

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 300 (12) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 900 (36) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 40 (11/2) THICK BITUMINOUS MATERIAL APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE BITUMINOUS MATERIAL AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

1 SUB-BASE GRANULAR MATERIAL

PROPOSED SAND FILL

- 2 EXISTING PAVEMENT
- 3 900 (36) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND BITUMINOUS MATERIAL
- (5) EXISTING STRUCTURE

- 6 FRAME AND LID (SEE NOTES)

- 8 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE

BINDER COURSE

9 PROPOSED BITUMINOUS CONCRETE

CLASS SI CONCRETE, BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

DATE

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE

DRAWN BY IDOT CHECKED BY 1007

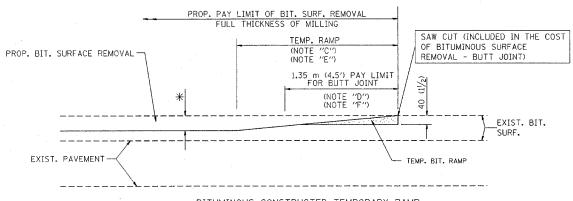
BD600-03 (BD-8)

DATE-TIME *DGN-SPEC* VI=BD8

PROP, PAY LIMIT OF BIT, SURF, REMOVAL FULL THICKNESS OF MILLING TEMP. RAMP (NOTE "C") PROP. BIT. SURFACE REMOVAL EXIST. PAVEMENT MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

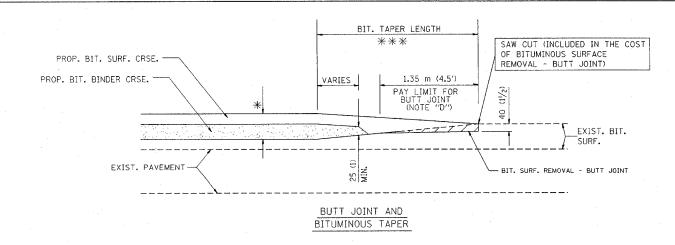
OPTION 1



BITUMINOUS CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

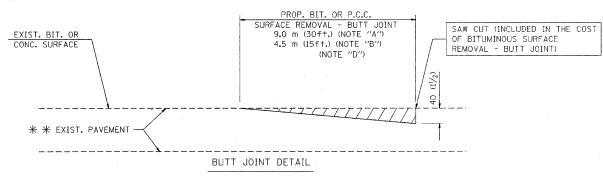
OPTION 2

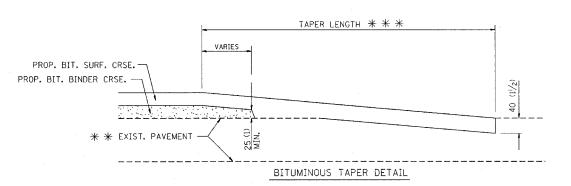
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING

COUNTY TOTAL SMEET NO 66 R DUPAGE 4/2 18/ STA. 23+00.00 TO STA. 144+00.00 CONTRACT NO. 62376





TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY

* * PC CONCRETE, BITUMINOUS OR BITUMINOUS RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.

THE BUTT JOINT WILL BE PAID FOR PER SOUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT

BASIS OF PAYMENT:

- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING BITUMINOUS SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".
- G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- # SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

 $\mbox{\em \star}\mbox{\em \star}$

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND DETAILS

3-27-92

R. SHAH

R. SHAH

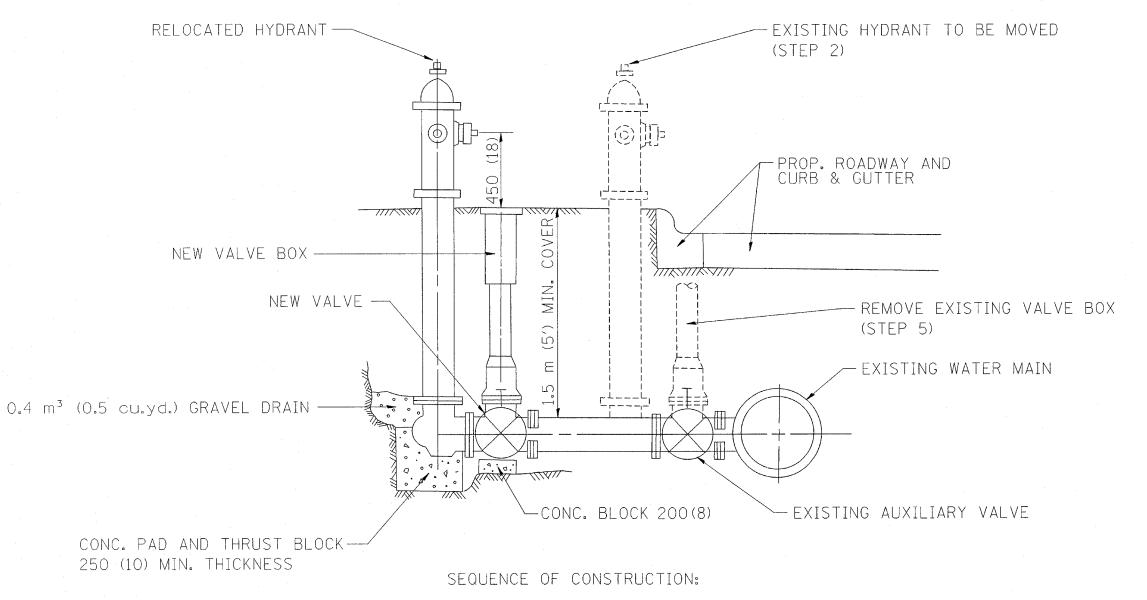
BITUMINOUS TAPER

SCALE: NONE DATE: 2004 DRAWN BY I POT CHECKED BY 100T

BD400-05 (VI=BD32)

66R DUPAGE 4/2 /82 STA. 23+00.00 TO STA. 144+00.00 FED. ROAD DIST. NO. BLINDIS

CONTRACT NO. 62376



- 1. CLOSE EXISTING VALVE.
- 2. REMOVE EXISTING HYDRANT.
- 3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
- 4. RELOCATE EXISTING HYDRANT.
- 5. OPEN EXISTING VALVE, REMOVE BOX.
- 6. BACKFILL.
- 7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS, NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

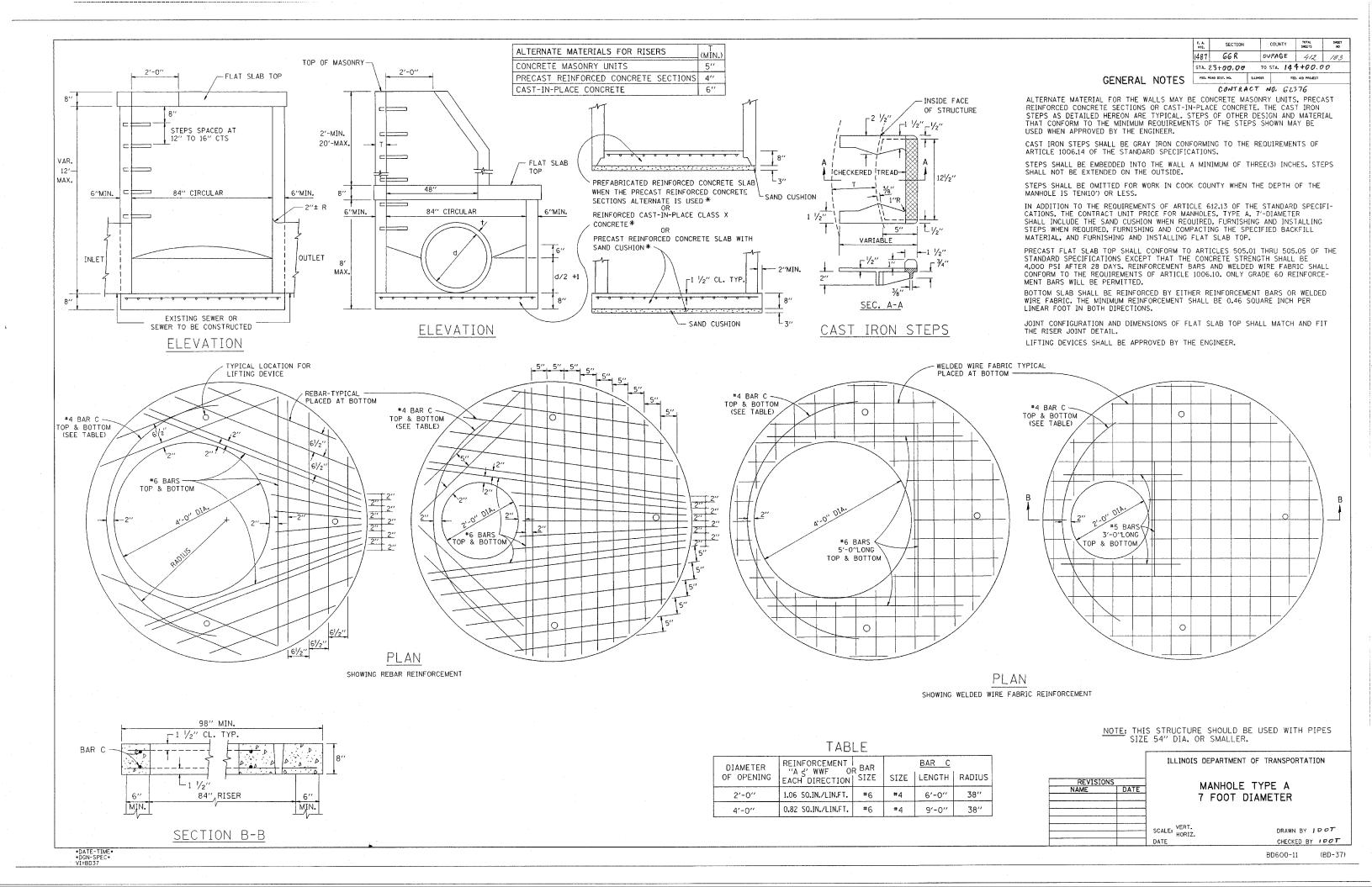
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS

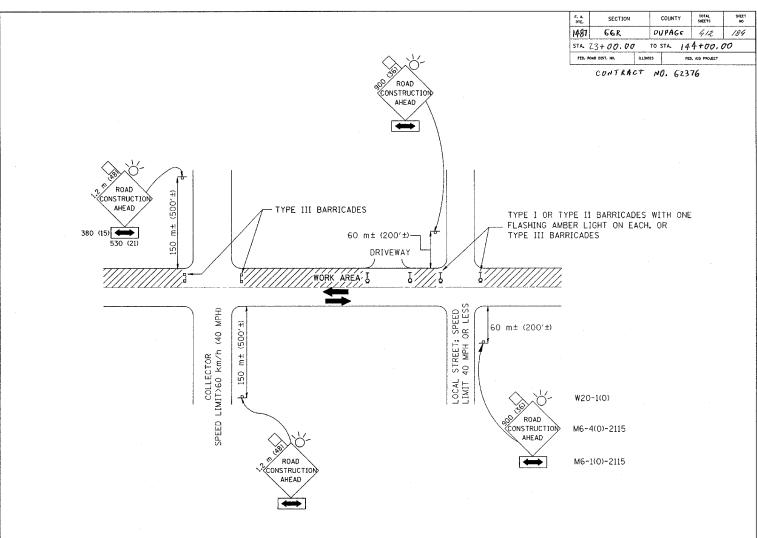
ILLINOIS DEPARTMENT OF TRANSPORTATION

FIRE HYDRANT TO BE MOVED

SCALE: NONE DATE \$\$DATE\$\$ DRAWN BY 100T CHECKED BY 1007

BD500-03





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 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- A) ONE ROAD CONSTRUCTION AHEADSIGN 900×900 (36×36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 $\mathfrak m$ (200') IN ADVANCE OF THE MAIN ROUTE.
- B) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- A) ONE ROAD CONSTRUCTION AHEADSIGN 1.2 m \times 1.2 m (48 \times 48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
- 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 BROAD LANG (OSLIPE
- 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 INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION

REVISIONS
NAME DATE
LHA 6/89
RAMMACHER 09/08/94
J. OBERLE 10/18/95
A. HOUSEH 03/06/96
DRIVEWAYS

SCALE: NONE

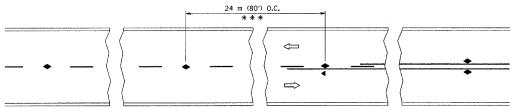
A. HOUSEH 10/15/96

CHECKED BY 100T

DGN-SPEC*

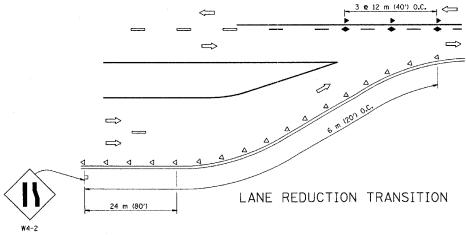
Tr.	SECTION	COUNTY	SHEET	SHEET
1487	GGR	DUPAGE	4/2	/85
STA	23+00.00	TO STA	144+00.00	
TEO. ROME DIST. NO.	ILLINOIS	FED. AND PROJECT		

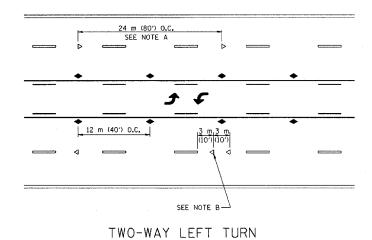
CONTRACT NO. 62376

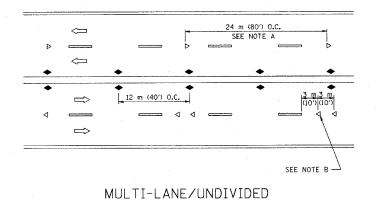


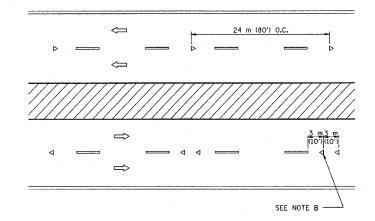
*** REDUCE TO 12 m (40') O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 70 km/h (45 M.P.H.) OR LESS.

TWO-LANE/TWO-WAY









MULTI-LANE/DIVIDED

GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
- MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

- A REDUCE TO 12 m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 20 km/h (10 M.P.H.) LOWER THAN POSTED SPEEDS.
- B. WHERE DOUBLE LANE LINE MARKERS ARE SPECIFIED, THEY SHALL BE SPACED AS SHOWN.

SYMBOLS

--- YELLOW STRIPE

WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/O)
- TWO-WAY AMBER MARKER

DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS MAY BE SPECIFIED ON HIGH VOLUME ROADS.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED. CURBED SECTIONS SHOULD BE DELINEATED WITH CURB TOP MARK-ERS.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS

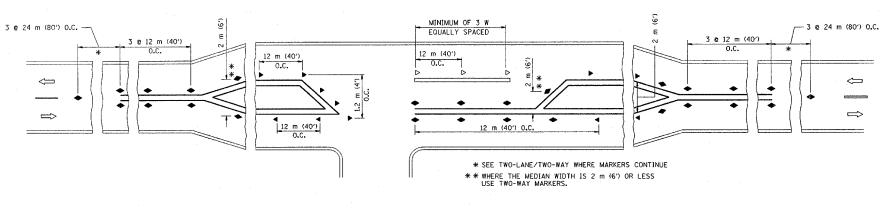
DATE
19-19-94

(SNOW-PLOW RESISTANT)

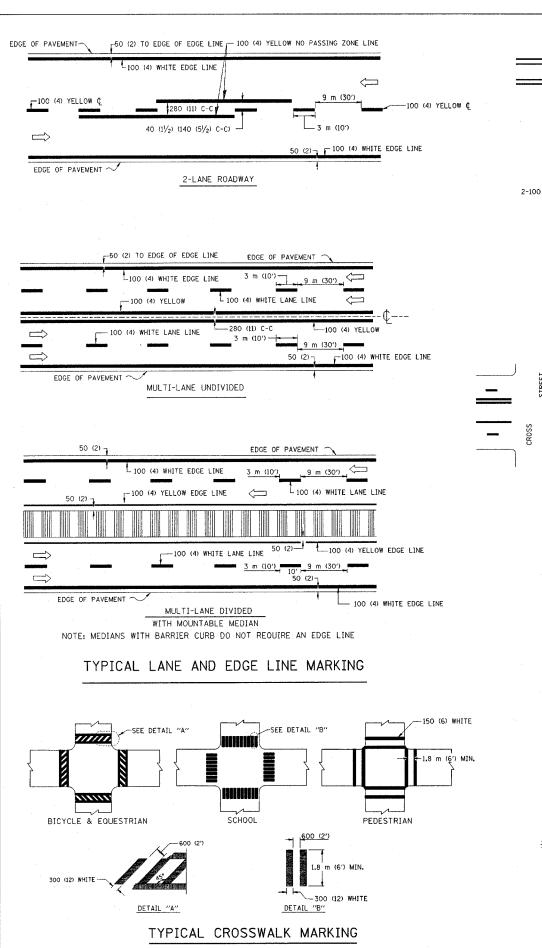
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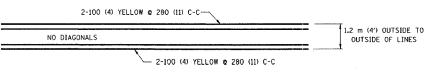
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TC-11

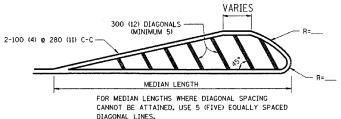


RURAL LEFT TURN



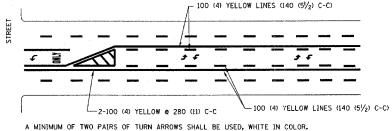


1.2 m (4') WIDE MEDIANS ONLY

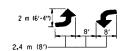


DIAGONAL LINE SPACING: 15 m (50") C-C (LESS THAN 50 km/h (30 MPH))
25 m (75") C-C (50 km/h (30 MPH)) TO 70 km/h (45 MPH))
45 m (150") C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

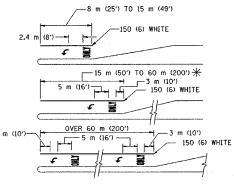


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

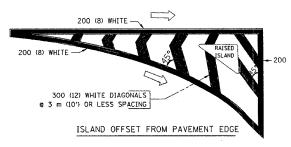


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED. \P AREA = 1.5 m 2 (15.6 SO. FT.) ONLY AREA = 1.9 m 2 (20.8 SO. FT.)

* TURN LANES IN EXCESS OF 120 m (400') 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



1487 66R DUPAGE 4/2	186
---------------------	-----

CONTRACT NO. GZ376

200 (8) WHITE 50 (2)

RAISED T ISLAND T PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (II) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5½) C-C FROM SKIP-DASH CENTERLINE 280 (II) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5½) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	2.4 m (8') LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT.
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R""-0,40 m ² (4.3 SO. FT.) EACH "X"-5,0 m ² (54.0 SO. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50°) C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75°) C-C (50 km/h (30 MPH) T0 70 km/h (45 MPH) 45 m (150°) C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 1997 AND STATE STANDARD 780001.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

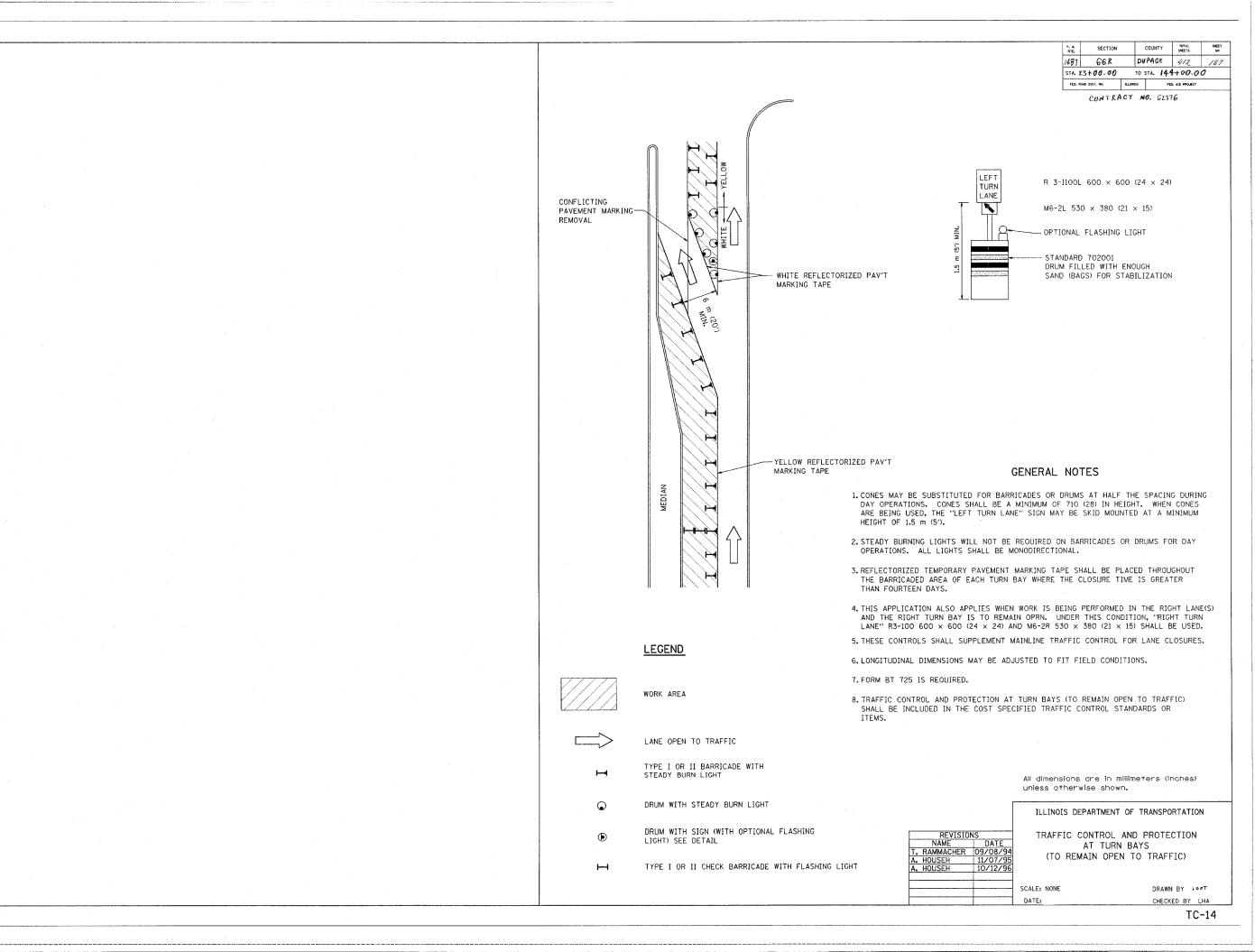
DISTRICT ONE TYPICAL PAVEMENT MARKINGS

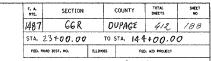
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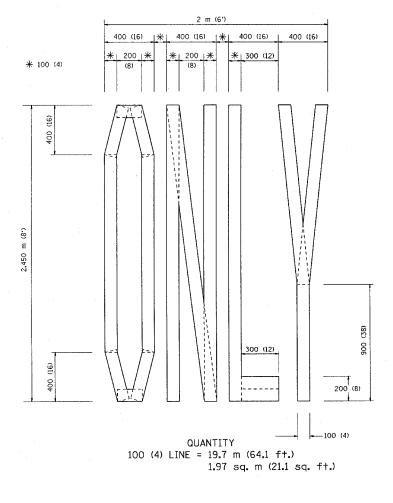
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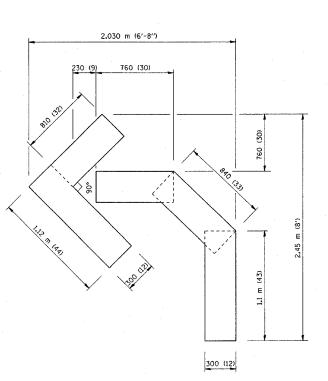
TC-13



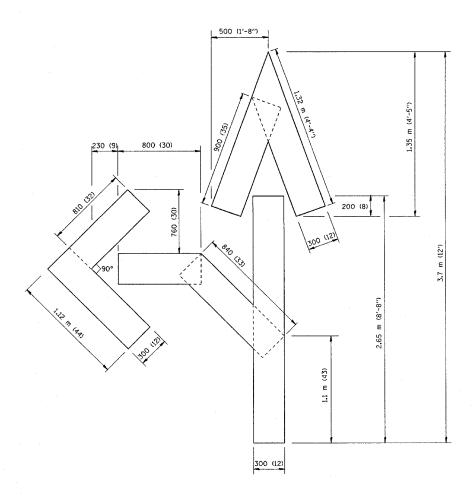


CONTRACT NO. 62376





QUANTITY 100 (4) LINE = 13.9 m (45.5 ft.) 1.39 sq. m (15.2 sq. ft.)



QUANTITY 100 (4) LINE = 25.3 m (82.5 ft.) 2.53 sq. m (27.5 sq. ft.)

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

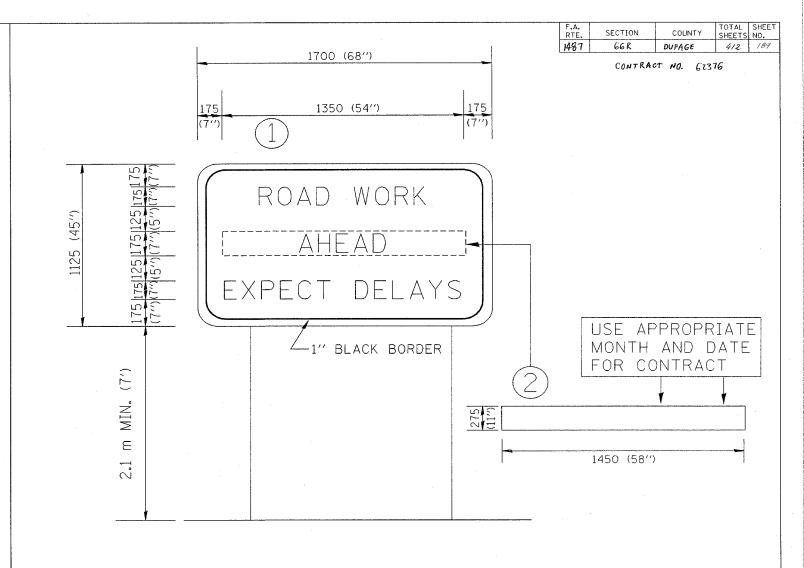
ILLINOIS DEPARTMENT OF TRANSPORTATION

REVISIONS
NAME DATE
T. RAMMACHER 09/18/94
J. OBERLE 06/01/96
T. RAMMACHER 11/04/97
T. RAMMACHER 03/02/98 TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS

SCALE: NONE DATE

DRAWN BY CADD CHECKED BY IDOT

TC-16



NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN EQUALS 1.9 SQ. M. (21.25 SQ. FT.)

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES)

UNLESS OTHERWISE SHOWN.

REVISIONS
NAME DATE
R. MIRS 9-15-97
R. MIRS 12-11-97

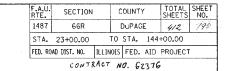
TEMPORARY INFORMATION SIGNING

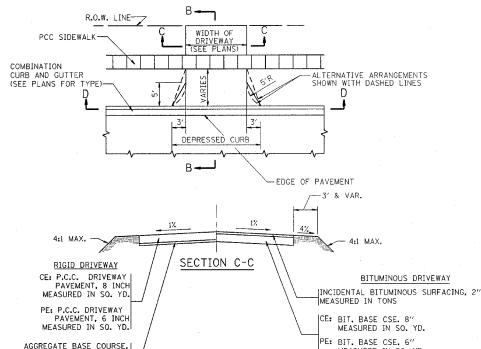
DRAWN BY: BUR. OF DESIGN

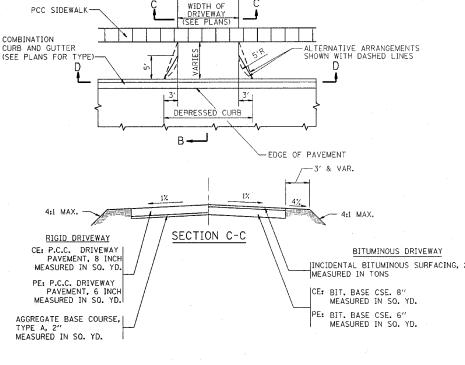
DATE CHECKED BY IPOT

DATE-TIME

DGN-SPEC

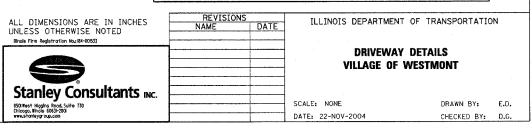


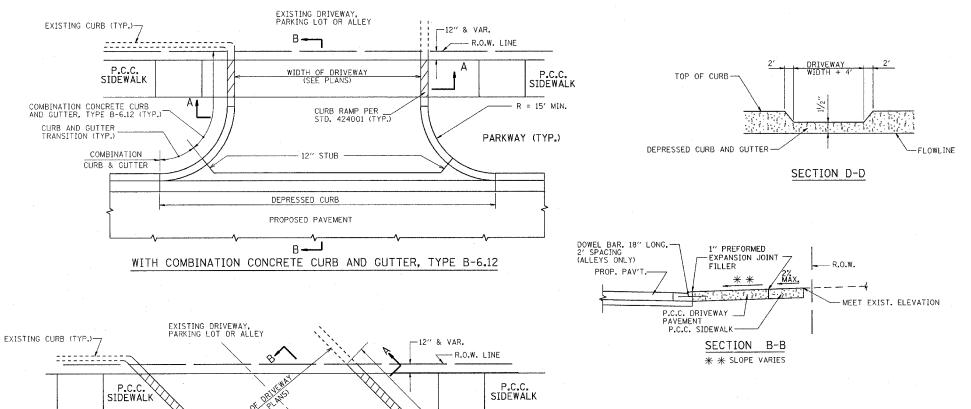




NOTES:

- DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS".
 FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS
 IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.
- COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET OR LESS FROM THE BACK OF CURB. CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB AND GUTTER.
- 3. COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.
- 4. 1" PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.
- 5. WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.
- 6. ALL DRIVEWAY CONSTRUCTION WITHIN THE EXISTING OR PROPOSED RIGHT-OF-WAY SHALL BE PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT. CONSTRUCTION BEYOND THIS LIMIT SHALL BE CONCRETE FOR EXISTING CONCRETE DRIVEWAYS AND BITUMINOUS FOR EXISTING AGGREGATE OR BITUMINOUS DRIVEWAYS.
- 7. FOR CONCRETE DRIVEWAYS WIDER THAN 14', A CONTRACTION JOINT SHALL BE LOCATED ALONG THE CENTERLINE OF THE DRIVEWAY OR SPACED A MINIMUM OF 14'.
- 8. DOWEL BARS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR COMBINATION CONCRETE CURB AND GUTTER.





COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (TYP.)

-CURB & GUTTER TRANSITION (TYP.)

-R=15' (TYP.) MIN.

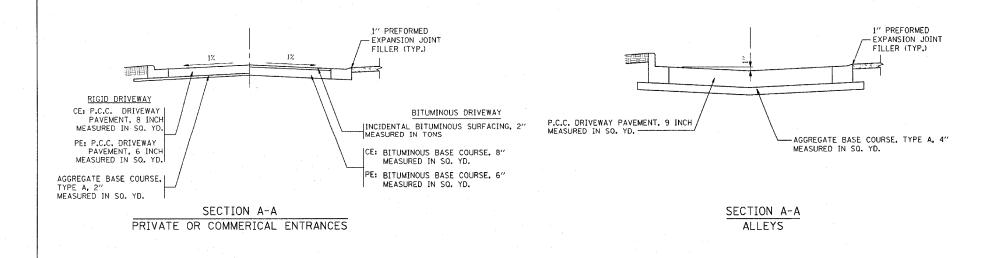
COMBINATION

CURB & GUTTER

WITH COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

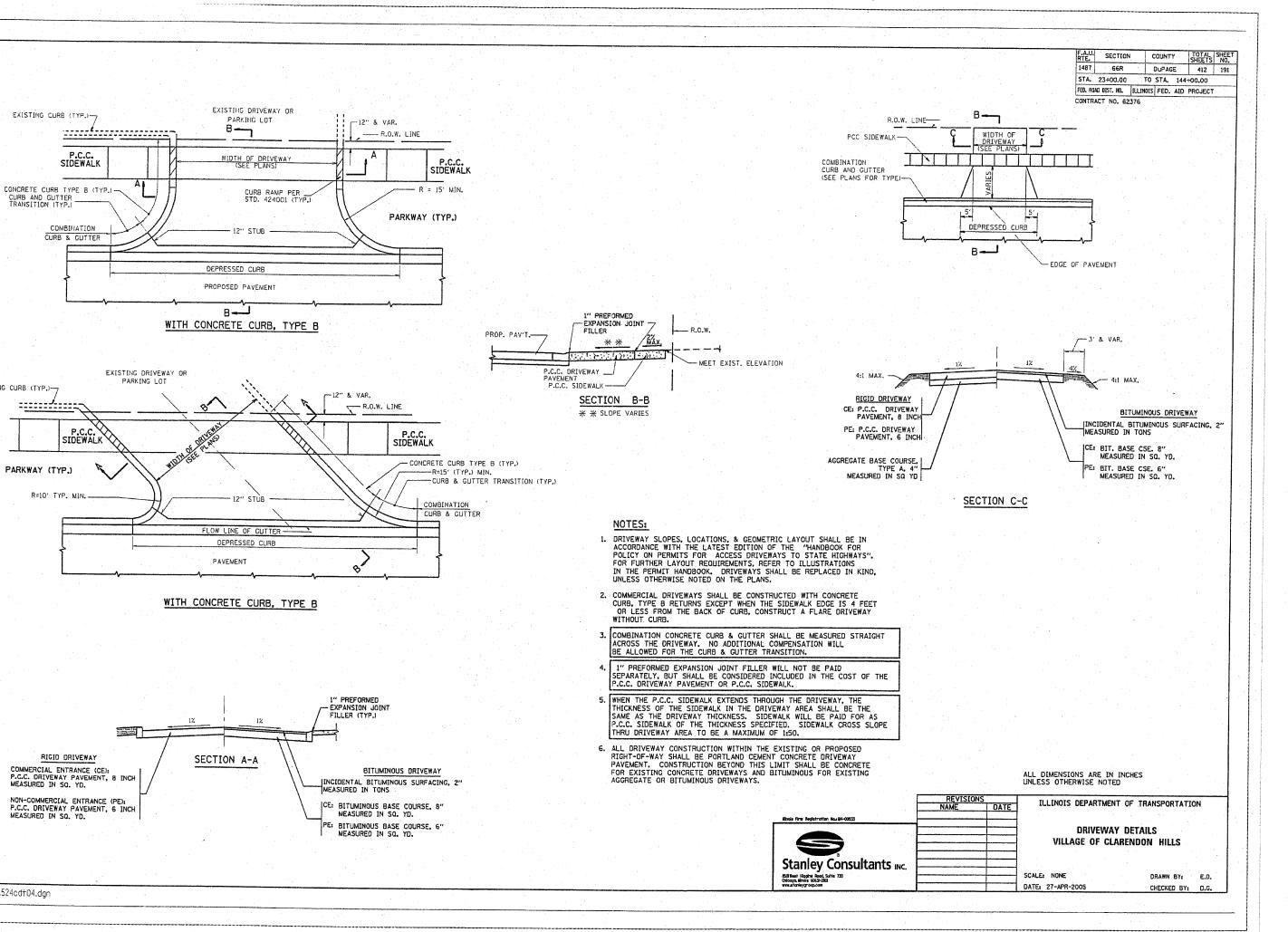
FLOW LINE OF GUTTER -DEPRESSED CURB

PAVEMEN?



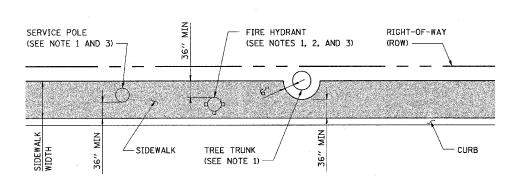
PARKWAY (TYP.)

R=10' TYP, MIN,



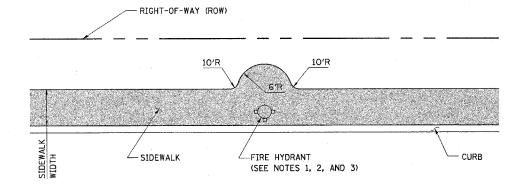
EXISTING CURB (TYP.)-

27-APR-2005 0:\\6524\sht\\524cdt04.dgn



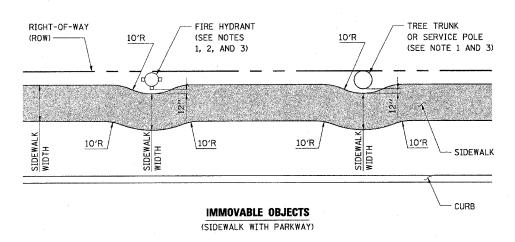
IMMOVABLE OBJECTS

(CURB-TYPE SIDEWALK, NARROW ROW)



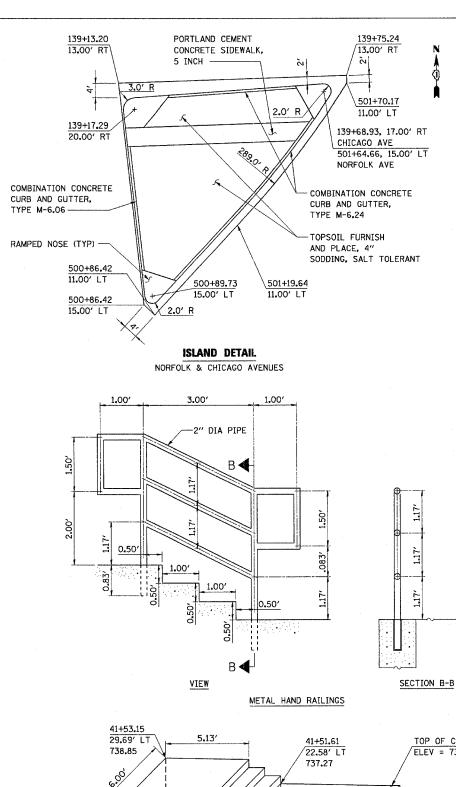
IMMOVABLE OBJECTS

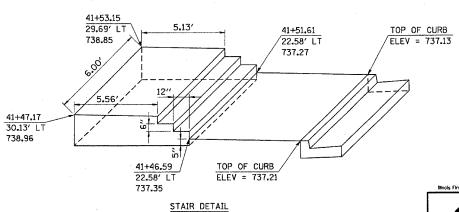
(CURB-TYPE SIDEWALK, WIDE ROW)



NOTES:

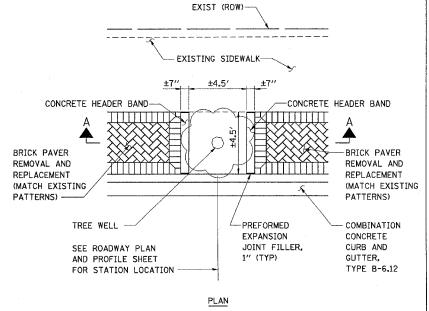
- 1. A FIRE HYDRANT, SERVICE POLE OR TREE TRUNK SHALL BE CONSIDERED IMMOVABLE ONLY WHEN DIRECTED BY THE ENGINEER.
- 2. THE VILLAGE OF WESTMONT WATER DEPARTMENT SHALL BE CONTACTED WHENEVER A FIRE HYDRANT IS FOUND TO BE IN THE PATH OF A NEW SIDEWALK, SO THAT THE FIRE HYDRANT CAN BE RELOCATED, IF POSSIBLE.
- 3. WHEN A SERVICE POLE OR FIRE HYDRANT IS LOCATED WITHIN THE SIDEWALK AREA, AND IS CONSIDERED IMMOVABLE, A 1/2" EXPANSION JOINT SHALL BE INSTALLED ENCIRCLING THE OBJECT.

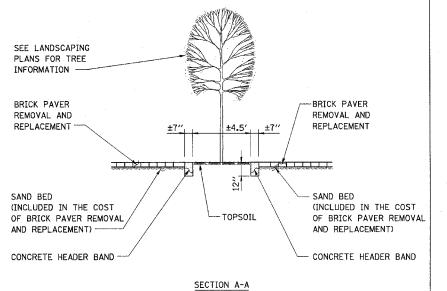




PROPOSED STAIR DETAIL @ STA 41+50

CONTRACT NO. 62376





CASS AVENUE PARKWAY DETAIL

ROADWAY DETAILS
MAPLE AVENUE / CHICAGO AVENUE

SCALE: NONE DATE: 22-NOV-2004

Stanley Consultants INC.

DRAWN BY: E.D. CHECKED BY: G.T.

1. Remove Existing Cut Flagstone Wall And Store For Re-Use.

PLAN - ORNAMENTAL PLANTER LAYOUT

- 2. Excavate As Required.
- 3. Install And Compact Leveling Pad Using A Vibrating Plate Compactor

R=4.85′

- 4. Install First Course Of Cut Flagstone.
- 5. Install Second Course Of Cut Flagstone Lapping The Stone Joints Below And At The Specified Batter (Approximately 4" Per Course)
- 6. Continue Installing Stone Courses As Described In No. 5 Above To A Maximum Height Of 1'-0" Above The Proposed Finish Grade.
- 7. Backfill And Compact The Front Face Of The Wall In Accordance With The Civil Plans.
- 8. Backfill And Compact The Backside Of The Wall With CA 7 In 6" Lifts.
- 9. Install Remaining Courses To The Final Top Of Wall Elevation As Directed By The Engineer, 1'-6" Maximum Height.
- 10. Backfill And Compact The Remainder Of The Wall As Shown In Section A.

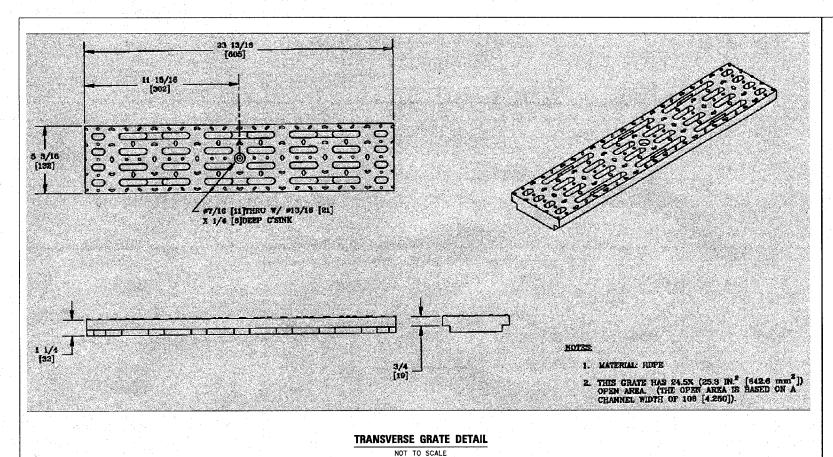
BILL OF	MATERIALS	
ITEM	UNIT	QUANTITY
Ornamental Planter	LS	1

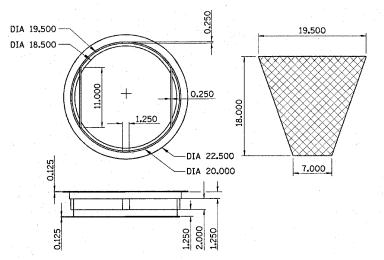
For Estimating Purposes, The Wall Measures Approximately 96 Lineal Feet Measured Along Its Outside face.

	REVISIONS	t	T1 1	LINOIS DEPARTMENT OF	TRANSPORTATI	ON	
	NAME	DATE	16.	THOTS OF WILLINGIAL OF			
				ORNAMENTAL F CHICAGO AVEN			
HRISTOPHER B. BURKE				ROAD			
NGINEERING LTD. 75 West Higgins Road, Suite 600			SCALE:	NONE	DRAWN BY	PDR	
semont, Illinois 60018			DATE:	OCTOBER, 2004	CHECKED BY	SSM	

4" CA 6 Leveling Pad

SECTION - TYPICAL WALL





SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER DETAIL

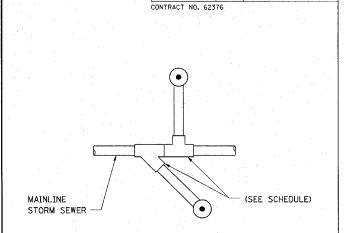
(ALL DIMENSIONS IN INCHES)

NOTES:

FRAME: TOP RING CONSTRUCTED FROM $1^1/4' \times 1^1/4'' \times 1/8''$ ANGLE. BASE RING CONSTRUCTED FROM $1^1/2'' \times 1/2'' \times 1/8''$ CHANNEL HANDLES AND SUSPENSION BRACKETS CONSTRUCTED FROM $7'' \times 17''$ FLAT. ALL STEEL CONFORMING TO ASTM-A36 REPLACEABLE BAG: CONSTRUCTED FROM 4 OZ/SOLYD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. CONNECTED TO BASE RING WITH STAINLESS STEEL STRAP & LOCK.

Stanley Consultants INC.

8501 West Higgins Road, Suite 730 Chicago, Minois 60631-2801



COUNTY

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

DuPAGE 412 194

TO STA. 144+00,00

SECTION 66R

1487

STA. 23+00.00

TYPICAL WYE-TEE STORM SEWER CONNECTION DETAIL

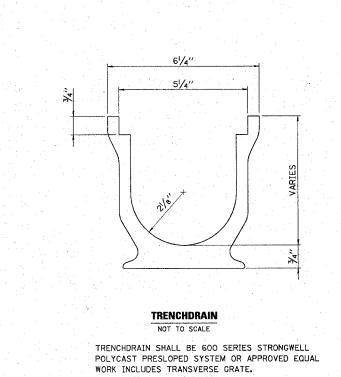
NOT TO SCALE

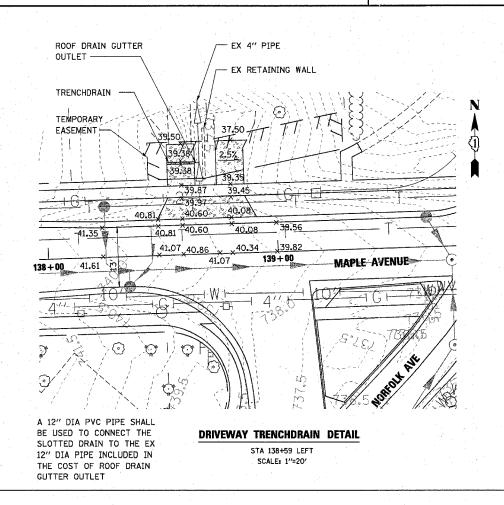
SCALE: AS NOTED

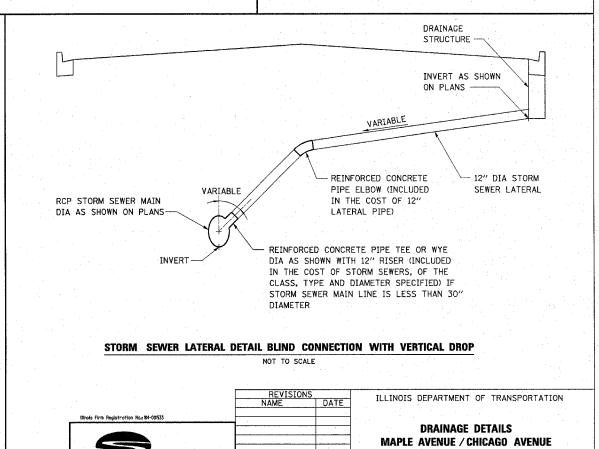
DATE: 31-MAR-2005

DRAWN BY: E.D.

CHECKED BY: G.T.





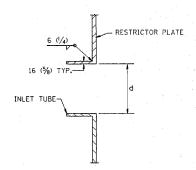


F. A. U. RTE. COUNTY TOTAL SHEETS DUPAGE 412 195 STA. 23+00.00 TO STA. 144+00.00 FED. ROAD DIST. NO. ILLINOIS FED. AND PROJECT CONTRACT NO. 62376

EXPANSON ANCHOR FOR 10 (3/8) STUD (TYP.) 10 (3/8) - 16NC STAINLESS -STEEL STUD W/ NUT (TYP.) - 75 × 75 (3×3) STEEL ANGLE (TYP.) 4 PER VERTICAL 3 PER HORIZONTIAL - 16 (%) STEEL RESTRICTOR PLATE

NOTES:

- ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.
- 2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.



ANGLE FASTENER DETAIL

INLET TUBE DETAIL

		RESTRICTOR	TYPE		
1	2	3	4	5	6
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED
ENGTH: V2 TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-1/2 DIA.	LENGTH: 2-1/2 DIA.	
C=.52	C=.61	C= 61	C=.73	C=.82	C=.98

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

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

MANHOLE WITH

RESTRICTOR PLATE

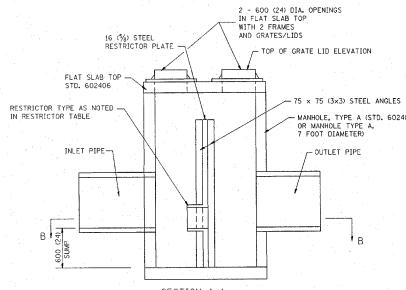
ILLINOIS DEPARTMENT OF TRANSPORTATION

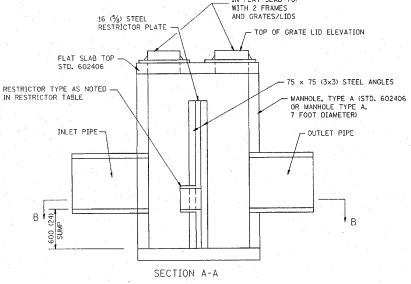
SCALE: NONE DATE: 2004

DRAWN BY: IDOT CHECKED BY: SV

BD600-04 (BD-12)

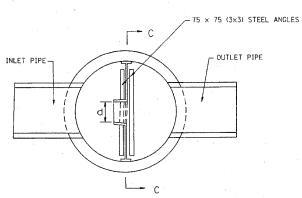
CONCENTRIC FRAME & GRATES/LIDS - AS SHOWN ON PLANS -OUTLET PIPE - INLET PIPE PLAN



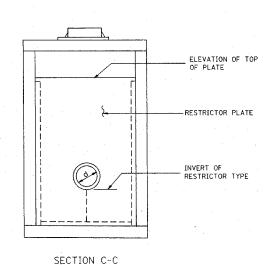


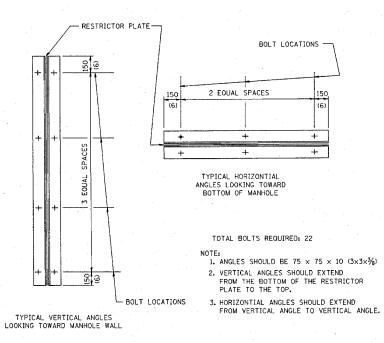
						2 - W	
STRUCTURE NUMBER	STATION	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER in (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW
10	27+38	6′	T8G (2)	. 2 .	36	725.56	731.76
223	75+68	6'	T1FCL (2)	2	18	739.76	742.22
255	84+70	6′	T8G (2)	2	14	746.38	749.25
323	112+32	7′	T1FCL (2)	2	. 18	728.26	731.86
424	130+73	6′	T8G (2)	2	15	729.10	733.52
400	143+29	6′	T1FCL (2)	2	22	721.52	724.38

BASIS OF PAYMENT: MANHOLE, TYPE A RESTRICTOR PLATE WITH THE FRAME AND GRATE AND DIAMETER SPECIFIED.



SECTION B-B





STEEL ANGLE BOLTING DETAILS

DATE-TIME *DGN-SPEC* VI=BD12

