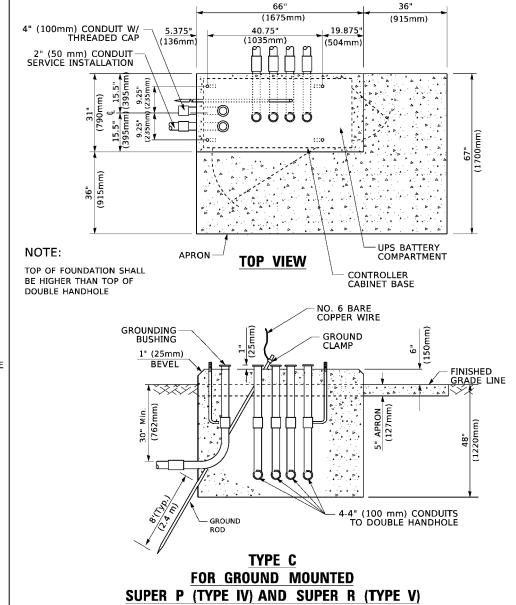
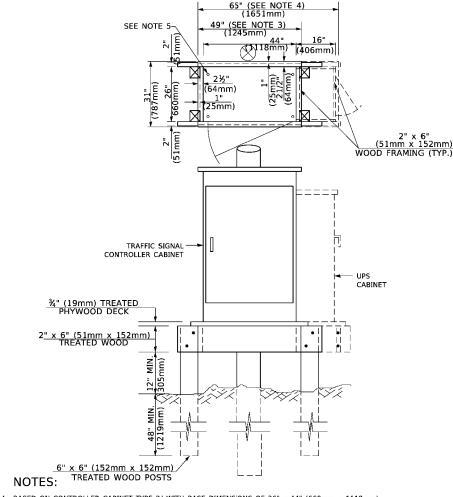


AND UPS BATTERY CABINET



CONTROLLER CABINETS



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

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

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

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

VERTICAL CABLE LENGTH

CABLE SLACK

	FEET	METER	FOUNDATION
			TYPE A - Sign
	20.0+L	6.0+L	TYPE C - CON
	13.0	4.0	TYPE D - CON
	6.0	2.0	SERVICE INST
	13.5	4.1	GROUND MOL
	13.5	4.1	TYPE A - SQU
	6.0	2.0	
GROUND MOUNT)	3.0	1.0	D.E.

DEPTH OF FOUNDATION

TYPE A - Signal Post

TYPE D - CONTROLLER

SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE

TYPE C - CONTROLLER W/ UPS

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4 _* 0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50′ (15.2 m) and up to 55′ (16.8 m)	15'-0'' (4.6 m)	36'' (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65′ (19.8 m) and up to 75′ (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)
	23 0 11.0 11.7	12 (1000mm)	30 (300)	10	0(23)

4'-0" (1.2m)

4'-0" (1.2m)

4'-0" (1.2m)

4'-0" (1.2m)

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

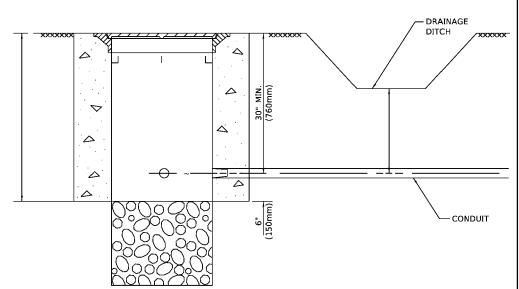
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TEARS EX/	Engineering Enterprises, Inc. CONSULTING ENGINEERS 5 belier Road 5 ugar Grove, Illinois 60554 6 30 466 6700 / www.eelieb.com	

	USER NAME = footemj	DESIGNED -	REVISED -
ı		DRAWN -	REVISED -
ı	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
1	PLOT DATE = 3/4/2019	DATE -	REVISED -

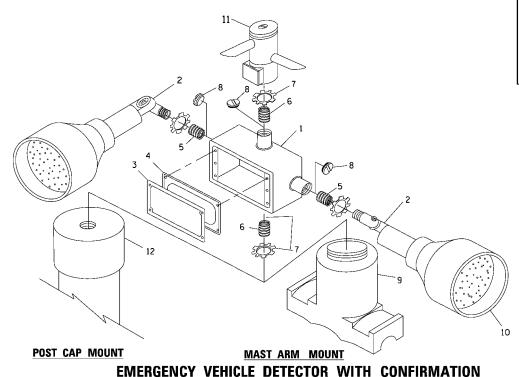
SHEET 5 OF 7 SHEETS STA.

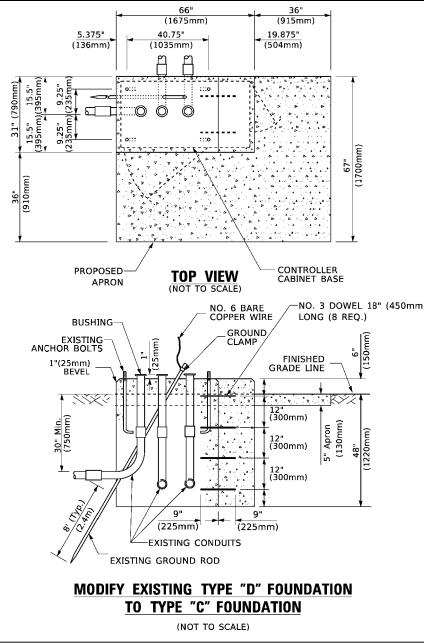
COUNTY 184 101 CONTRACT NO. 61K68 TS-05



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

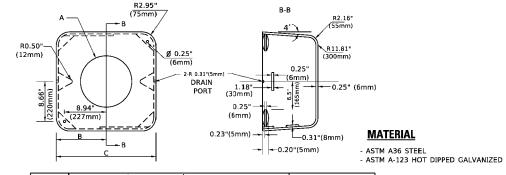
HANDHOLE WITH MINIMUM CONDUIT DEPTH (NOT TO SCALE)





IDENTIFICATION 1 OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M) 2 LAMP HOLDER AND COVER 3 OUTLET BOX COVER 4 RUBBER COVER GASKET REDUCING BUSHING ¾"(19 mm) CLOSE NIPPLE ¾"(19 mm) LOCKNUT ¾"(19 mm) HOLE PLUG SADDLE BRACKET - GALV. 6 WATT PAR 38 LED FLOOD LAMP 12 POST CAP [18 FT. (5.4 m) POST MIN.

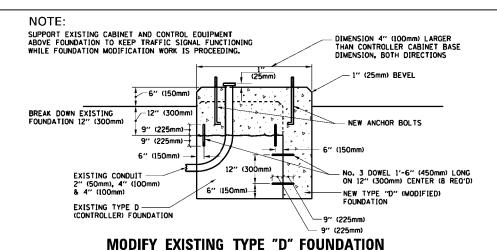
- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



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

SHROUD

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



GALVANIZED TO REMAIN <u>PLAN</u>

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.

ELEVATION

2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

Engineering Enterprises, Inc CONSULTING ENGINEERS

USER NAME = footem DESIGNED REVISED DRAWN REVISED REVISED CHECKED PLOT SCALE = 50.0000 ' / in. REVISED

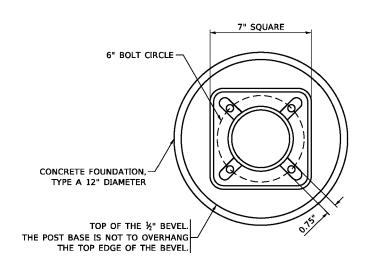
BEACON MOUNTING DETAIL

STATE OF ILLINOIS

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS SHEET 6 OF 7 SHEETS STA.

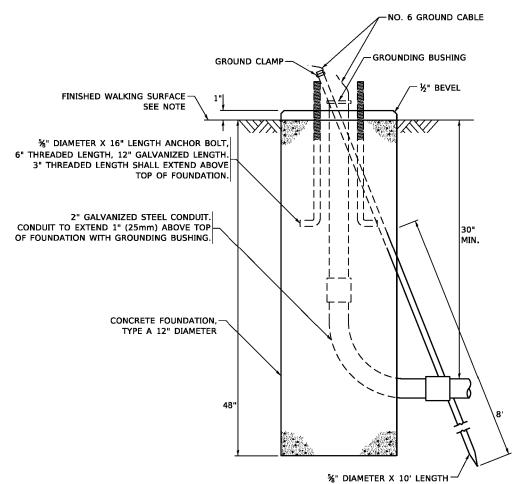
COUNTY CONTRACT NO. 61K68

DEPARTMENT OF TRANSPORTATION



BOLT PATTERN

1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



TYPE A 12-INCH DIAMETER

ALUMINUM OR GALVANIZED STEEL POST CAP SIGN (SEE SIGN TABLE) -10' ALUMINUM **PUSH-BUTTON** STATION PEDESTRIAN PUSH-BUTTON-ALUMINUM OR GALVANIZED STEEL POST, 4.5" OUTSIDE DIAMETER ALUMINUM OR CAST IRON GALVANIZED BASE CENTERED ON FOUNDATION 36" DRILLED AND TAPPED -GROUNDING HOLE

FINISHED WALKING SURFACE-

SCALE: NONE

PEDESTRIAN SIGNAL HEAD

-COUNTDOWN PEDESTRIAN SIGNAL HEADS ARE NOT TO BE USED AT RAILROAD INTERSECTIONS

DON'T CROSS TO CROSS





R10-3b

R10-3d

R10-3e

TIME REMAINING

SIGN TABLE

SIGN	DIMENSION
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 12"

- 1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
- 2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
- 3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

CONCRETE FOUNDATION,

GROUND ROD

PEDESTRIAN SIGNAL POST, 10 FT.

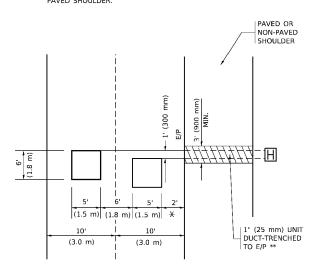
PEDESTRIAN SIGNAL POST, 5 FT.

Engineering Enterprises, Inc.	US
CONSULTING ENGINEERS	
52 Wheeler Rood Sugar Grove, Illinois 60554	PL
630,466,6700 / www.eelweb.com	PL

Engineering Enterprises, Inc.	USER NAME = gaglianobt	DESIGNED - IP	REVISED - 10-15-2020
CONSULTING ENGINEERS		DRAWN - IP	REVISED -
52 Wheeler Rood Sugar Grove, Illinois 60554	PLOT SCALE = 100.0000 ' / in.	CHECKED - LP	REVISED -
630,466,6700 / www.eeiweb.com	PLOT DATE = 11/23/2020	DATE - 10-15-2018	REVISED -

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT



* X UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

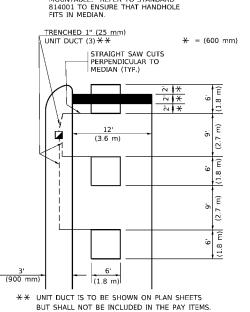
 $\frac{4}{100}$ = (600 mm)

LEFT TURN LANES WITH MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE



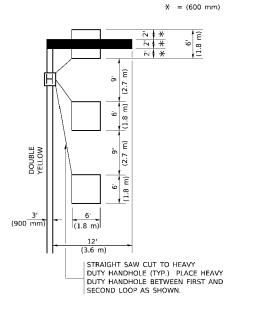
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

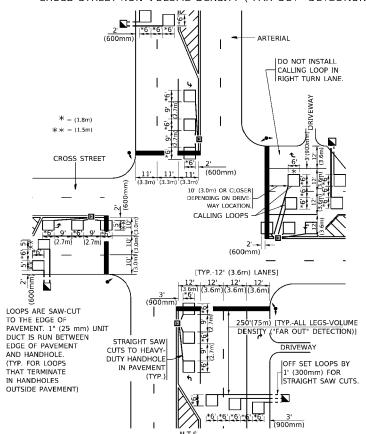
(PROTECTED / PERMITTED LEFT TURN PHASING)



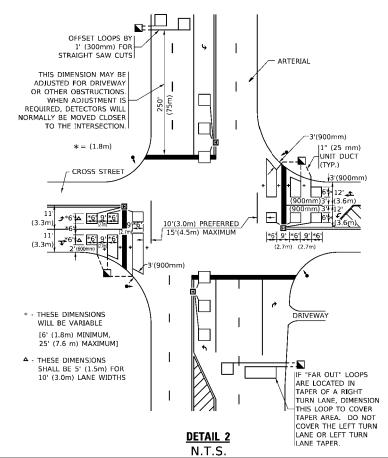
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("FAR OUT" DETECTION)



ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



VEHICLES LOOP DETECTORS

- st ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED,
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED. MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

TO STA

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

CONSULTING ENGINE

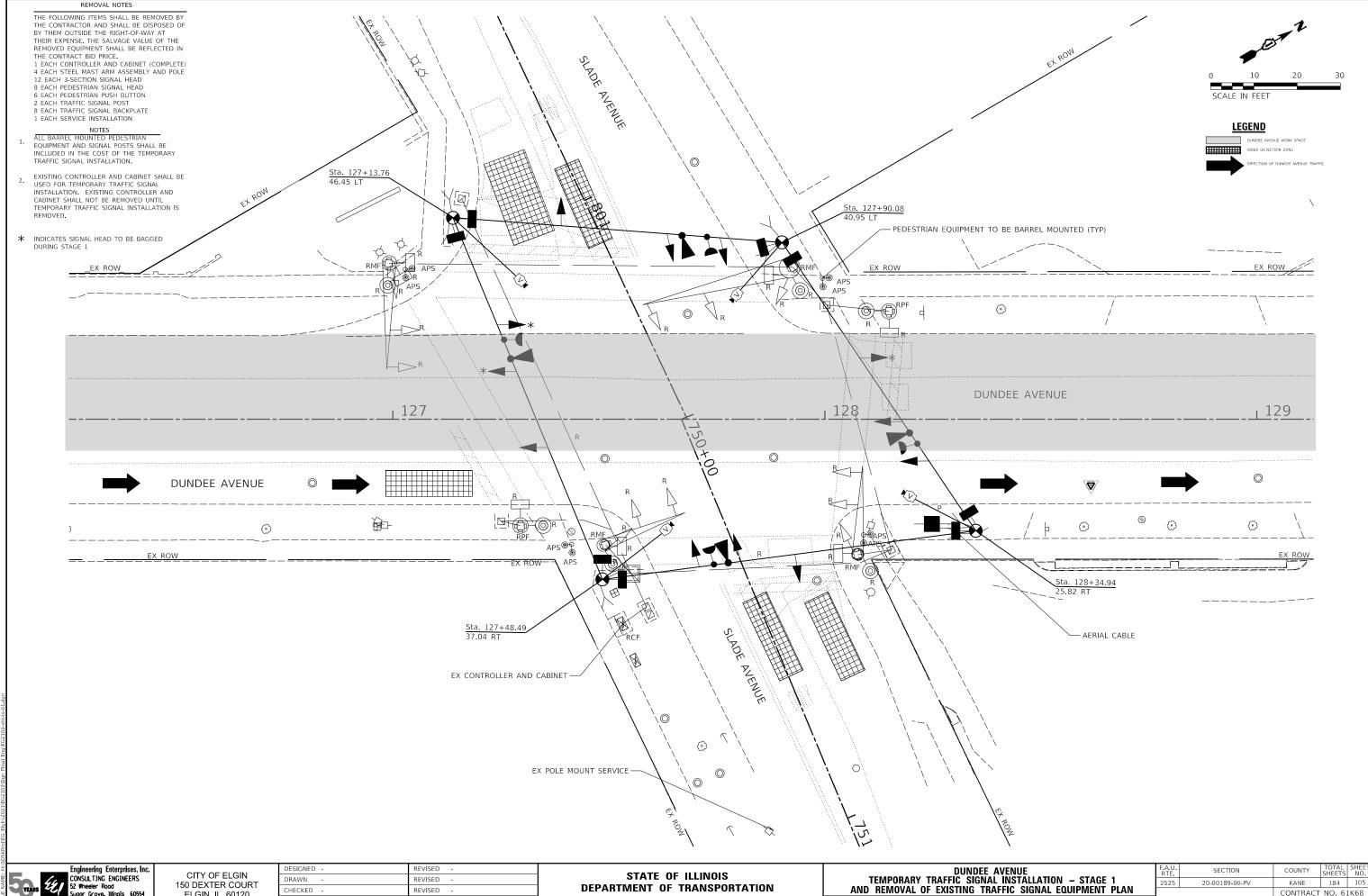
ises, Inc.	USER NAME = footemj	DESIGNED -	REVISED -
EERS		DRAWN -	REVISED -
60554	PLOT SCALE = 50.0000 ' / in.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 3/4/2019	DATE -	REVISED -

N.T.S.

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

D	ISTRICT 1	– DE	TECTO	R LOOP	INSTALLATIO	N
	DETAILS	FOR	ROAD	WAY RE	SURFACING	
	SHEET 1	OF	1 SH	EETS STA	A	TO S

ΔE.	SEC	ION			COUNTY	TOTAL SHEETS	SHEET NO.
525 20-00189-00-PV			KANE	184	104		
TS-07			CONTRACT	NO. 61	IK68		
		HILIMOTO	EED	•	D DDOIECT		



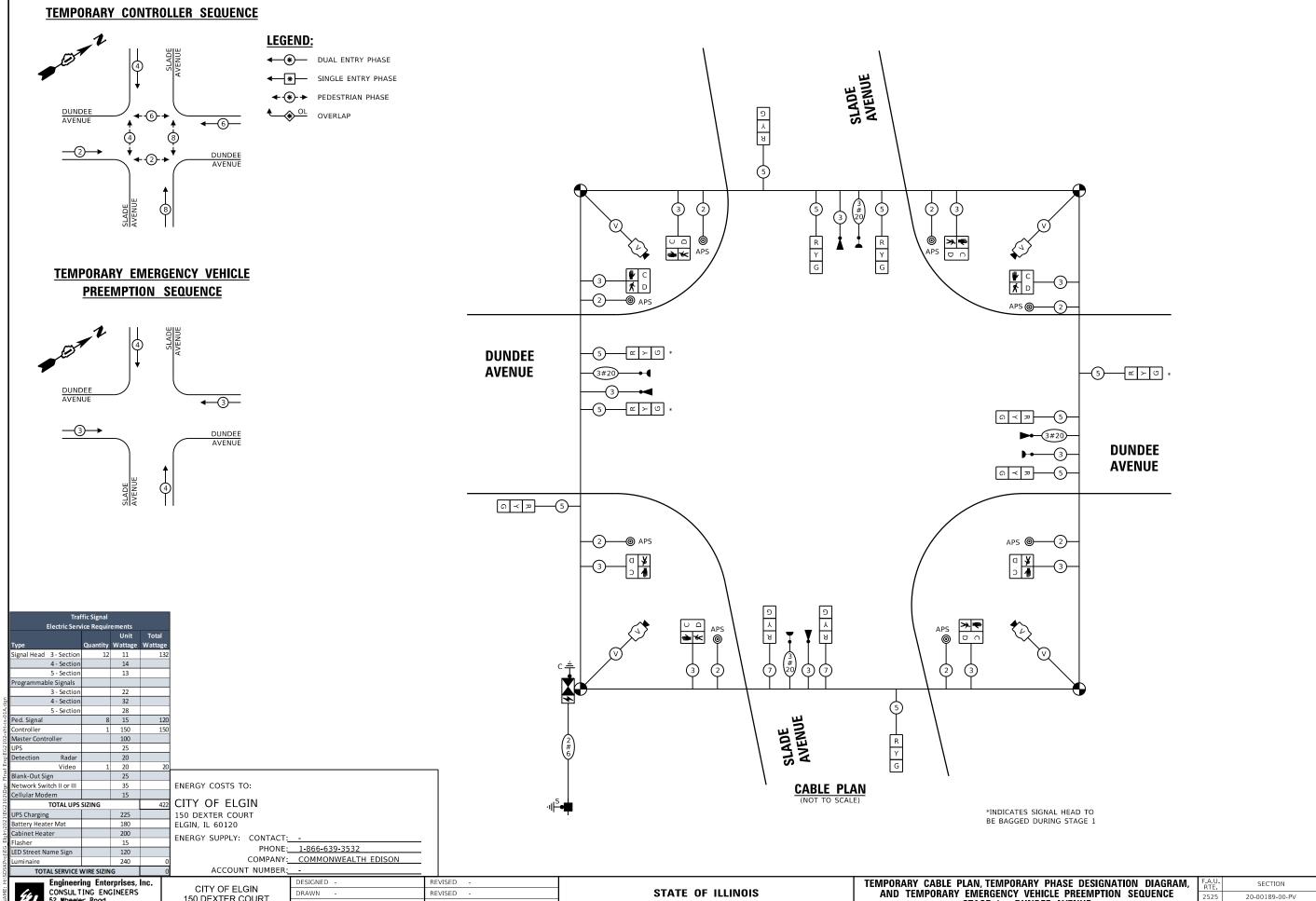
ELGIN, IL. 60120

CHECKED -REVISED DATE REVISED

DEPARTMENT OF TRANSPORTATION

SCALE: 1" = 10' SHEET 1 OF 7 SHEETS STA.

CONTRACT NO. 61K68



DEPARTMENT OF TRANSPORTATION

COUNTY

KANE 134 106

CONTRACT NO. 61K68

20-00189-00-PV

STAGE 1 – DUNDEE AVENUE

OF 7 SHEETS STA.

52 Wheeler Road Sugar Grove, Illinois 60554 630.466.6700 / www.eeiweb.com

150 DEXTER COURT

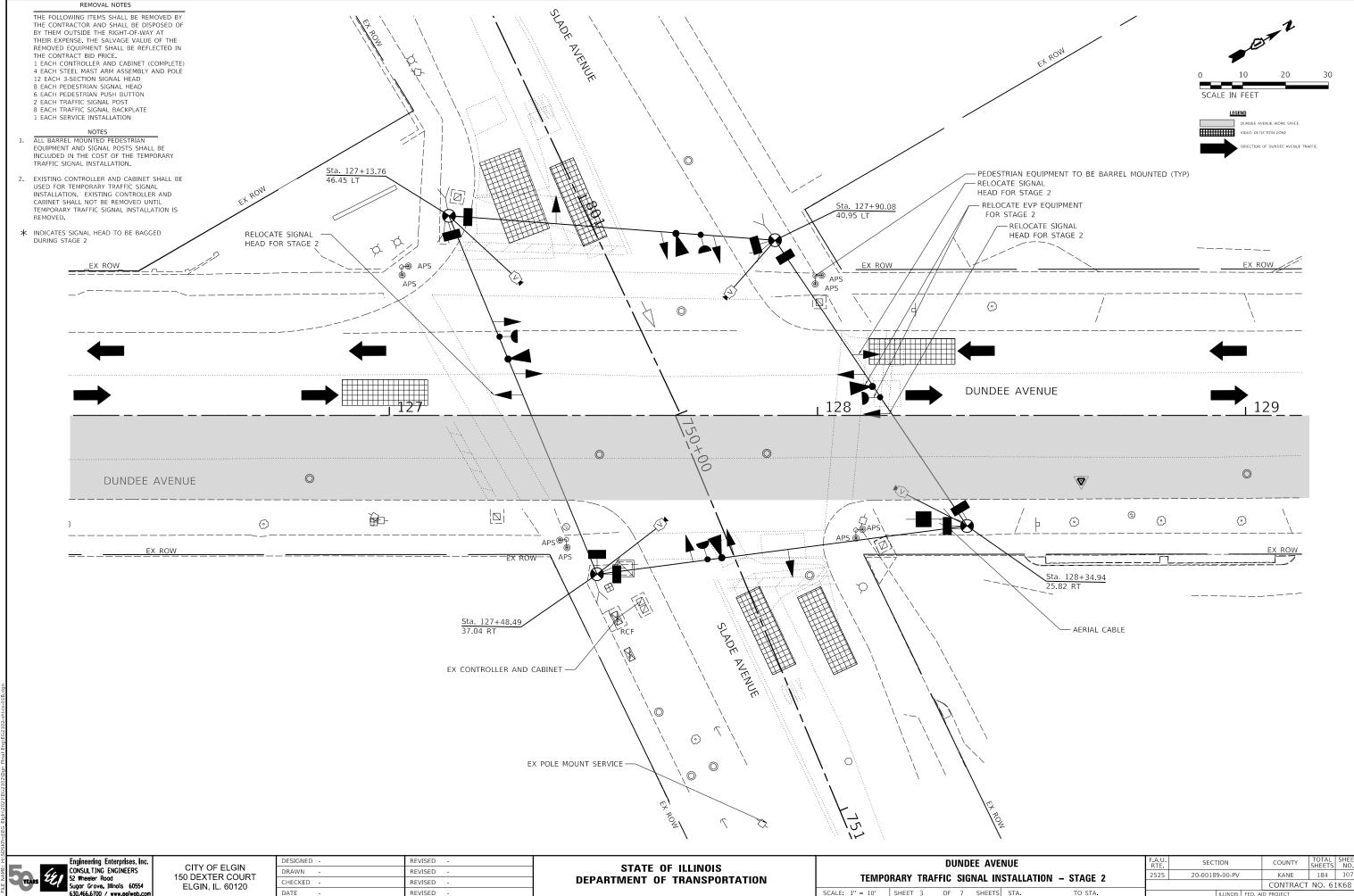
ELGIN, IL. 60120

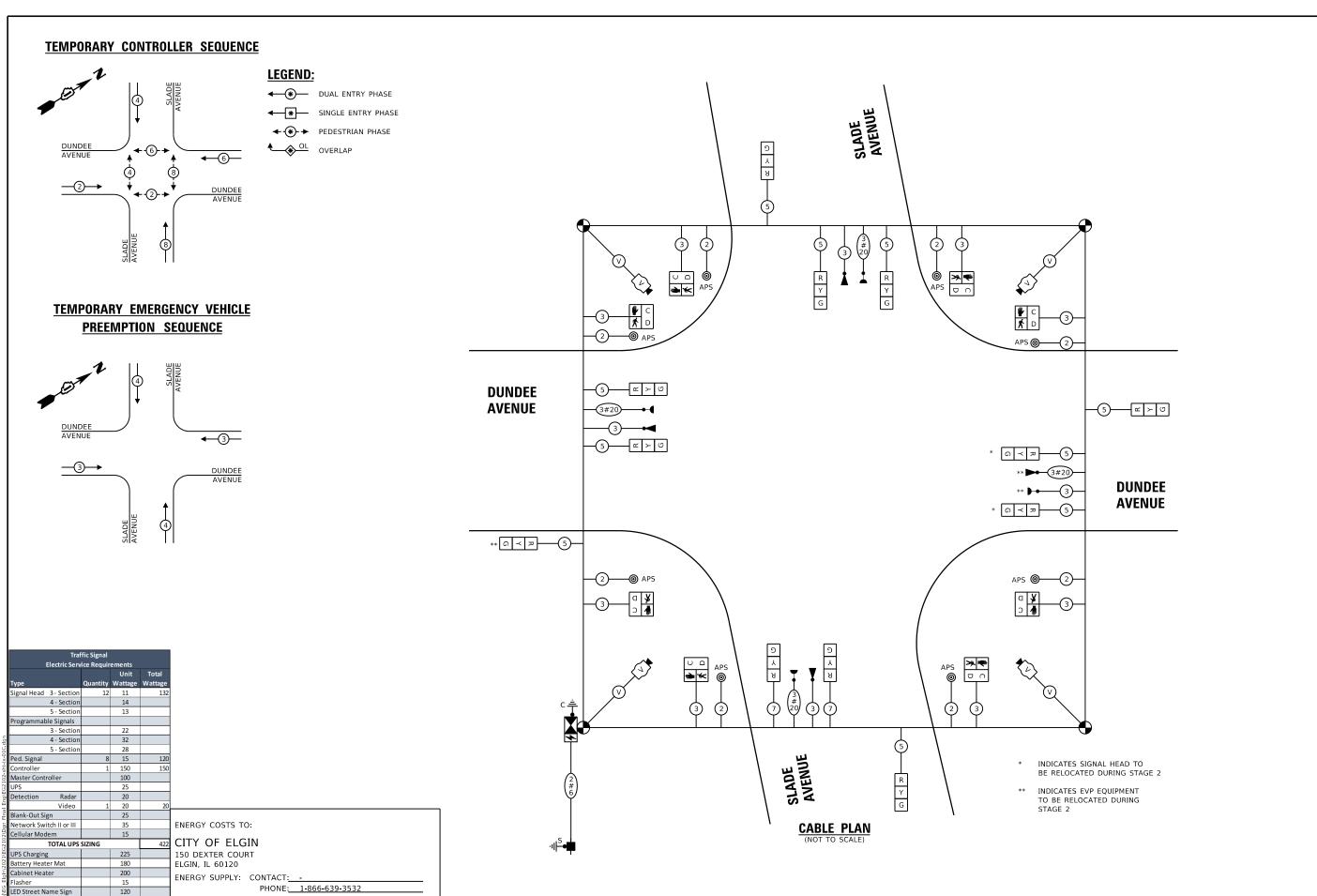
CHECKED

DATE

REVISED

REVISED





Engineering Enterprises, Inc. CONSULTING ENGINEERS 52 Wheeler Road Sugar Grove, Illinois 60554 630.466.6700 / www.eeiweb.com

CITY OF ELGIN 150 DEXTER COURT ELGIN, IL. 60120

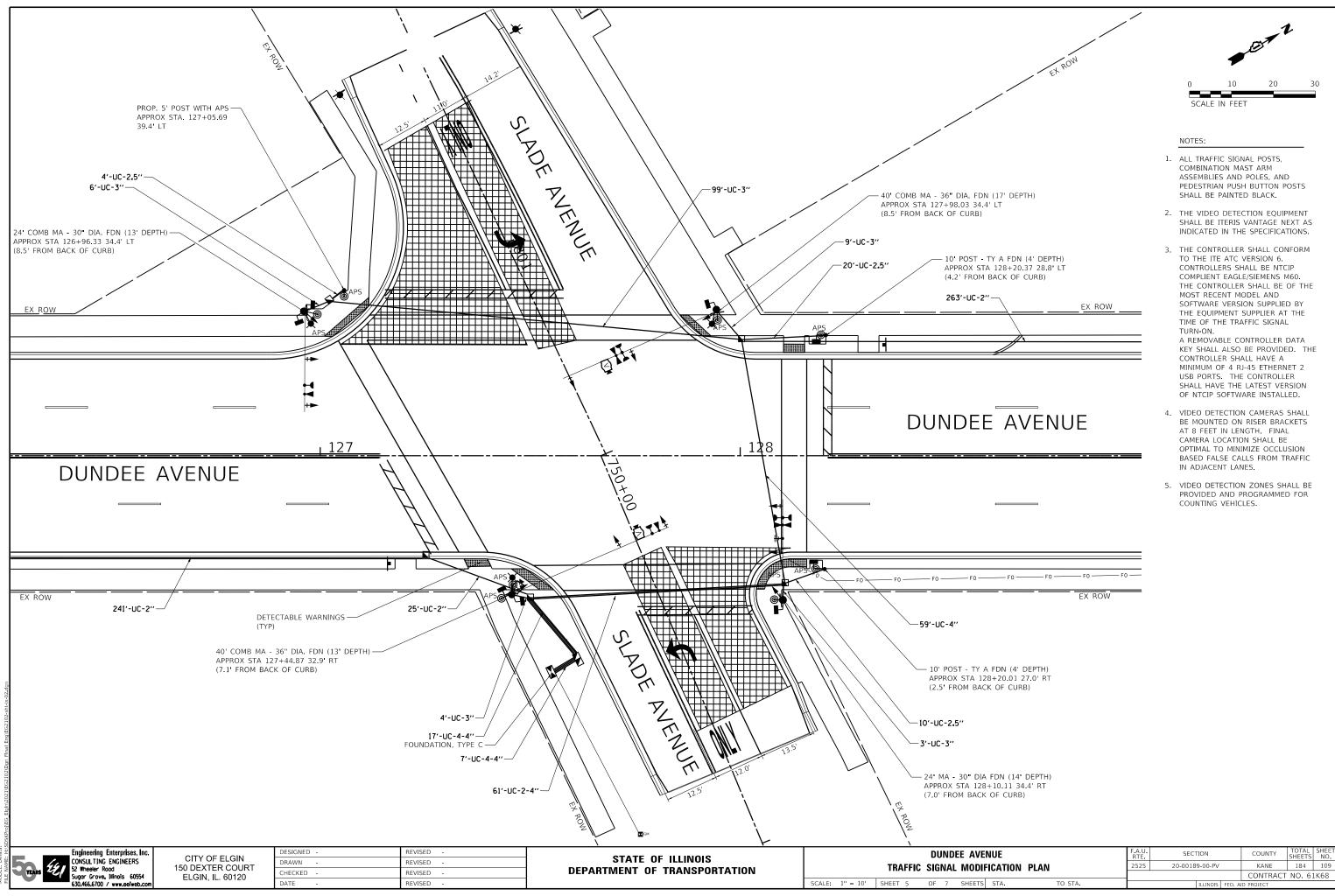
ACCOUNT NUMBER:

COMPANY: COMMONWEALTH EDISON

REVISED DESIGNED DRAWN REVISED -CHECKED REVISED DATE REVISED

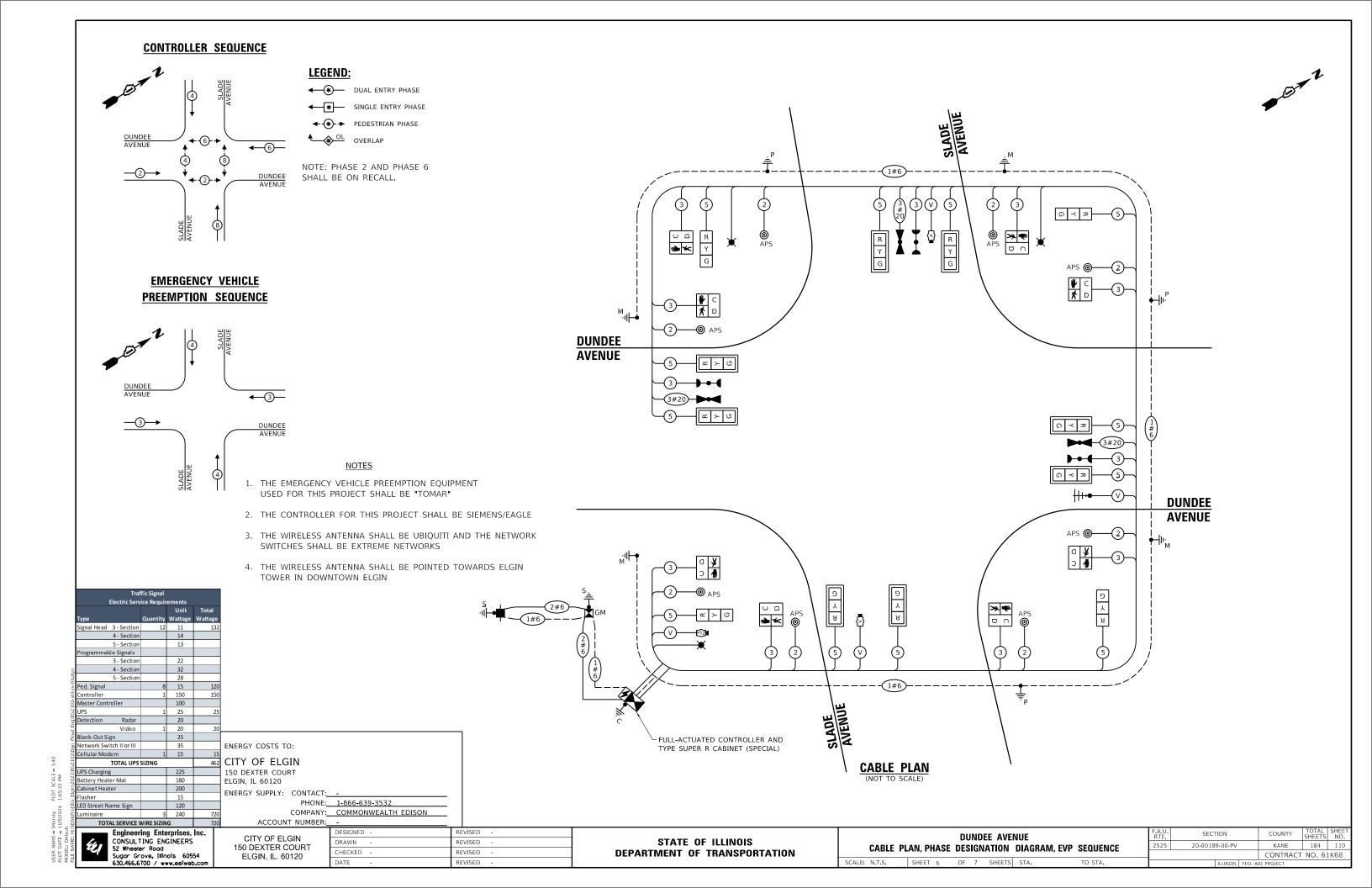
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE STAGE 2 – DUNDEE AVENUE OF 7 SHEETS STA.

SECTION COUNTY 20-00189-00-PV KANE 134 108 CONTRACT NO. 61K68



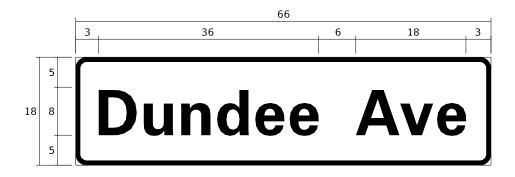
NAME = JMarvig PLOT SCALE = 1:20

DATE = 11/5/2024 1:05:32 PM

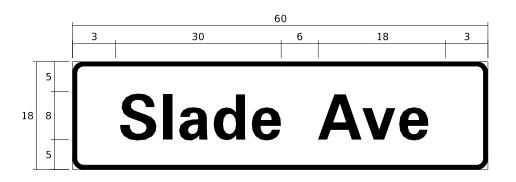


SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SIGN PANEL	SHEETING	QTY
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	8.25	1	ZZ	2



DESIGN	AREA	SIGN PANEL	SHEETING	QTY
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	7.5	1	ZZ	2

FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET

NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	31.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	838
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	34
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	121
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1,191
HANDHOLE	EACH	9
DOUBLE HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2,905
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2,240
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,359
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	50
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,055
TRAFFIC SIGNAL POST, 10 FT	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 40 FT	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	28
CONCRETE FOUNDATION, TYPE C	FOOT	3
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, POST MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
DETECTOR LOOP, TYPE I	FOOT	96
LIGHT DETECTOR	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING SERVICE INSTALLATION	EACH	1
REMOVE EXISTING CABLE FROM CONDUIT	FOOT	6,000
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3C	FOOT	266
OUTDOOR RATED NETWORK CABLE	FOOT	210
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
WIRELESS TRANSMISSION SYSTEM POINT TO POINT	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	1
MAINTENANCE OF TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL)	EACH	1
UNINTERUPTABLE POWER SUPPLY (SPECIAL)	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM	EACH	1
REMOVE EXISTING UNDERGROUND CONDUIT	FOOT	404
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
ETHERNET SWITCH, TYPE 1	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1
OPTIMIZE TRAFFIC SIGNAL SYSTEM OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
TELL STRUCT HOUSE SOURCE THINKS	LACII	

CITY OF ELGIN 150 DEXTER COURT ELGIN, IL. 60120

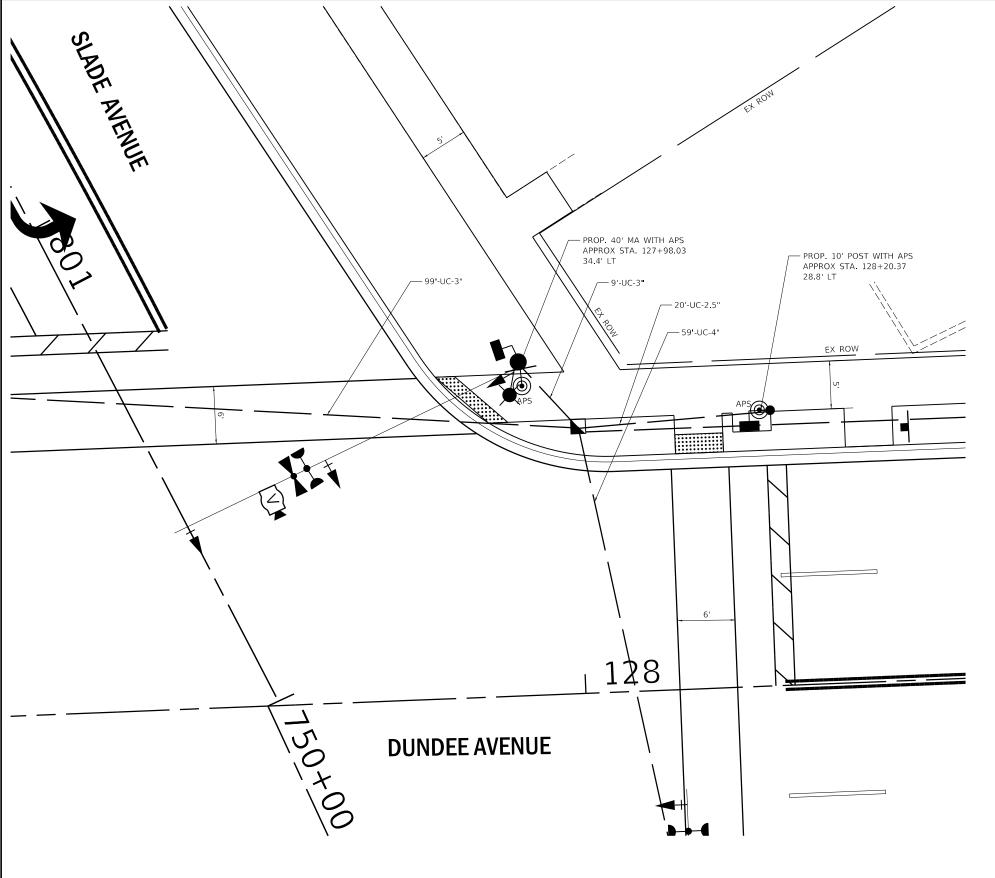
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

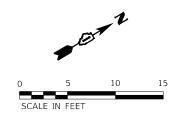
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

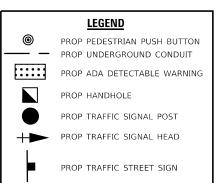
IV	IAST ARM AND	MO	UN	EE AVE TED STI JLE OF	REET NA	AME SIGNS TIES	
	SHEET 7	OF	7	SHEETS	STA.	TO	STA

SCALE: N.T.S.

F.A.U. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHE
2525	20-00189-00-PV			KANE	184	11
				CONTRACT	NO. 61	1K68
		ILLINOIS	FED. Al	ID PROJECT		







- 1. ALL STATION AND OFFSETS ARE REFERENCED TO THE DUNDEE AVENUE CENTERLINE ALIGNMENT
- ALL PEDESTRIAN PUSH BUTTON POSTS SHALL BE LOCATED AS SHOWN IN THE PLANS.
- 3. ALL PEDESTRIAN PUSH BUTTONS SHALL BE WITHIN 10 FT. FROM THE BACK OF THE CURB OR THE EDGE OF PAVEMENT FOR EACH CROSSING. THE CONTRACTOR SHALL INSTALL PEDESTRIAN PUSH BUTTON EXTENSIONS TO MEET THIS REQUIREMENT.
- 4. MOUNTING HEIGHT OF PEDESTRIAN PUSH BUTTONS SHALL BE 36 INCHES (PREFERRED) FROM THE SIDEWALK SURFACE.
- 5. SHOP DRAWINGS FOR ALL SIGNAL IMPROVEMENTS INCLUDING APS IMPROVEMENTS SHALL BE PROVIDED TO THE CITY OF ELGIN.
- A WALK THROUGH AND FINAL INSPECTION OF THE TRAFFIC SIGNAL IMPROVEMENTS SHALL BE COORDINATED WITH THE ENGINEER.
- 7. THE INSTALLATION OF ACCESIBLE PEDESTRIAN SIGNALS SHALL INCLUDE THE INTERACTIVE VIBROTACTILE PEDESTRIAN PUSH BUTTON WITH SPEAKER, AN INFORMATIONAL SIGN, A LIGHT-EMITTING DIODE (LED) INDICATOR LIGHT, A SOLID-STATE ELECTRONIC CONTROL BOARD, A POWER SUPPLY, INTERNAL WIRING AND MOUNTING HARDWARE.
- 8. THE INFORMATIONAL SIGN SHALL CONFORM TO THE MUTCD STANDARD R10-3-i (BRAILE SIGN). THE SELECTION OF THE SIGN SHALL BE APPROVED BY THE ENGINEER.

CITY OF ELGIN ELGIN, IL. 60120

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -
	•

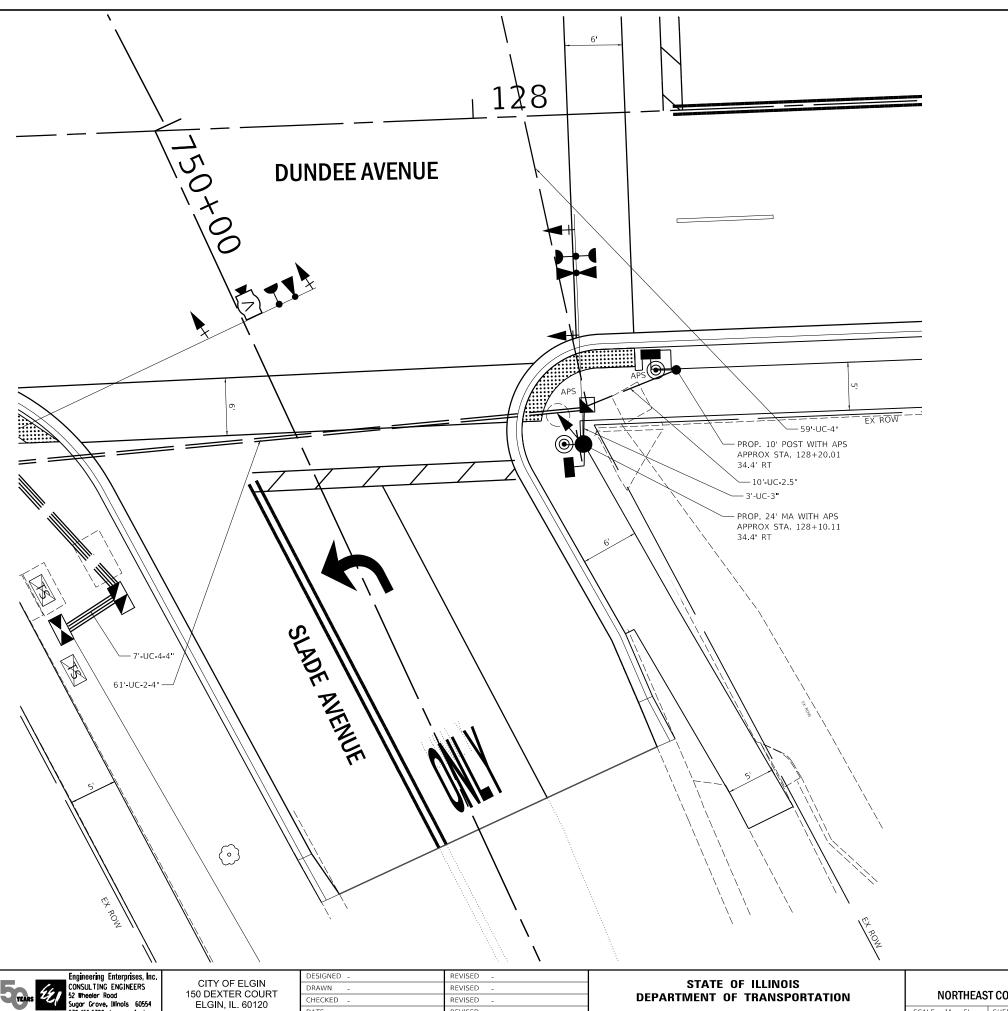
STATE OF ILLINOIS

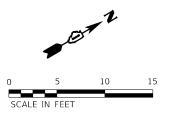
NORTHWES	T CORNER		NDEE AVE SSIBLE PE		IAN S	IGNAL DETAIL
SCALE: 1" = 5'	SHEET 1	OF -	4 SHEETS	STA.	N/A	TO STA. N/A

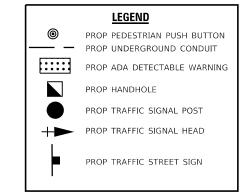
F.A.U. SECTION			COUNTY	TOTAL SHEETS	SHEE	
2525	525 20-00189-00-PV			KANE	184	112
				CONTRACT	NO. 6	1K68
	IL.	LINOIS	FED. Al	D PROJECT		

150 DEXTER COURT

DEPARTMENT OF TRANSPORTATION



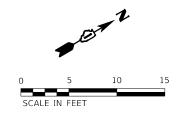


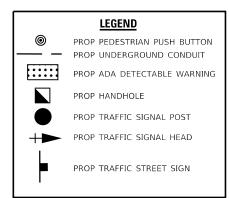


- ALL STATION AND OFFSETS ARE REFERENCED TO THE DUNDEE AVENUE CENTERLINE ALIGNMENT
- ALL PEDESTRIAN PUSH BUTTON POSTS SHALL BE LOCATED AS SHOWN IN THE PLANS.
- 3. ALL PEDESTRIAN PUSH BUTTONS SHALL BE WITHIN 10 FT. FROM THE BACK OF THE CURB OR THE EDGE OF PAVEMENT FOR EACH CROSSING. THE CONTRACTOR SHALL INSTALL PEDESTRIAN PUSH BUTTON EXTENSIONS TO MEET THIS REQUIREMENT.
- MOUNTING HEIGHT OF PEDESTRIAN PUSH BUTTONS SHALL BE 36 INCHES (PREFERRED) FROM THE SIDEWALK SURFACE.
- 5. SHOP DRAWINGS FOR ALL SIGNAL IMPROVEMENTS INCLUDING APS IMPROVEMENTS SHALL BE
 PROVIDED TO THE CITY OF ELGIN.
- 6. A WALK THROUGH AND FINAL INSPECTION OF THE TRAFFIC SIGNAL IMPROVEMENTS SHALL BE COORDINATED WITH THE ENGINEER.
- 7. THE INSTALLATION OF ACCESIBLE PEDESTRIAN SIGNALS SHALL INCLUDE THE INTERACTIVE VIBROTACTILE PEDESTRIAN PUSH BUTTON WITH SPEAKER, AN INFORMATIONAL SIGN, A LIGHT-EMITTING DIODE (LED) INDICATOR LIGHT, A SOLID-STATE ELECTRONIC CONTROL BOARD, A POWER SUPPLY, INTERNAL WIRING AND MOUNTING HARDWARE.
- THE INFORMATIONAL SIGN SHALL CONFORM TO THE MUTCD STANDARD R10-3-i (BRAILE SIGN). THE SELECTION OF THE SIGN SHALL BE APPROVED BY THE ENGINEER.

DUNDEE AVENUE NORTHEAST CORNER ACCESSIBLE PEDESTRIAN SIGNAL DETAIL SCALE: 1" = 5' SHEET 2 OF 4 SHEETS STA. N/A

SECTION 20-00189-00-PV KANE 184 113 CONTRACT NO. 61K68





- ALL STATION AND OFFSETS ARE
 REFERENCED TO THE DUNDEE AVENUE
 CENTERLINE ALIGNMENT
- 2. ALL PEDESTRIAN PUSH BUTTON POSTS SHALL BE LOCATED AS SHOWN IN THE PLANS.
- 3. ALL PEDESTRIAN PUSH BUTTONS SHALL BE WITHIN 10 FT. FROM THE BACK OF THE CURB OR THE EDGE OF PAVEMENT FOR EACH CROSSING. THE CONTRACTOR SHALL INSTALL PEDESTRIAN PUSH BUTTON EXTENSIONS TO MEET THIS REQUIREMENT.
- 4. MOUNTING HEIGHT OF PEDESTRIAN PUSH BUTTONS SHALL BE 36 INCHES (PREFERRED) FROM THE SIDEWALK SURFACE.
- 5. SHOP DRAWINGS FOR ALL SIGNAL IMPROVEMENTS INCLUDING APS IMPROVEMENTS SHALL BE PROVIDED TO THE CITY OF ELGIN.
- 6. A WALK THROUGH AND FINAL INSPECTION OF THE TRAFFIC SIGNAL IMPROVEMENTS SHALL BE COORDINATED WITH THE ENGINEER.
- 7. THE INSTALLATION OF ACCESIBLE PEDESTRIAN SIGNALS SHALL INCLUDE THE INTERACTIVE VIBROTACTILE PEDESTRIAN PUSH BUTTON WITH SPEAKER, AN INFORMATIONAL SIGN, A LIGHT-EMITTING DIODE (LED) INDICATOR LIGHT, A SOLID-STATE ELECTRONIC CONTROL BOARD, A POWER SUPPLY, INTERNAL WIRING AND MOUNTING HARDWARE.
- THE INFORMATIONAL SIGN SHALL CONFORM TO THE MUTCD STANDARD R10-3-i (BRAILE SIGN). THE SELECTION OF THE SIGN SHALL BE APPROVED BY THE ENGINEER.

TABLE 27	Engineering Enterprises, Inc. CONSULTING ENGINEERS 52 Wheeler Road Sugar Grove, Illinois 60554 630,466,6700 / www.eelweb.com	
	POOL4PP100 / MAM*661A6D*COU	

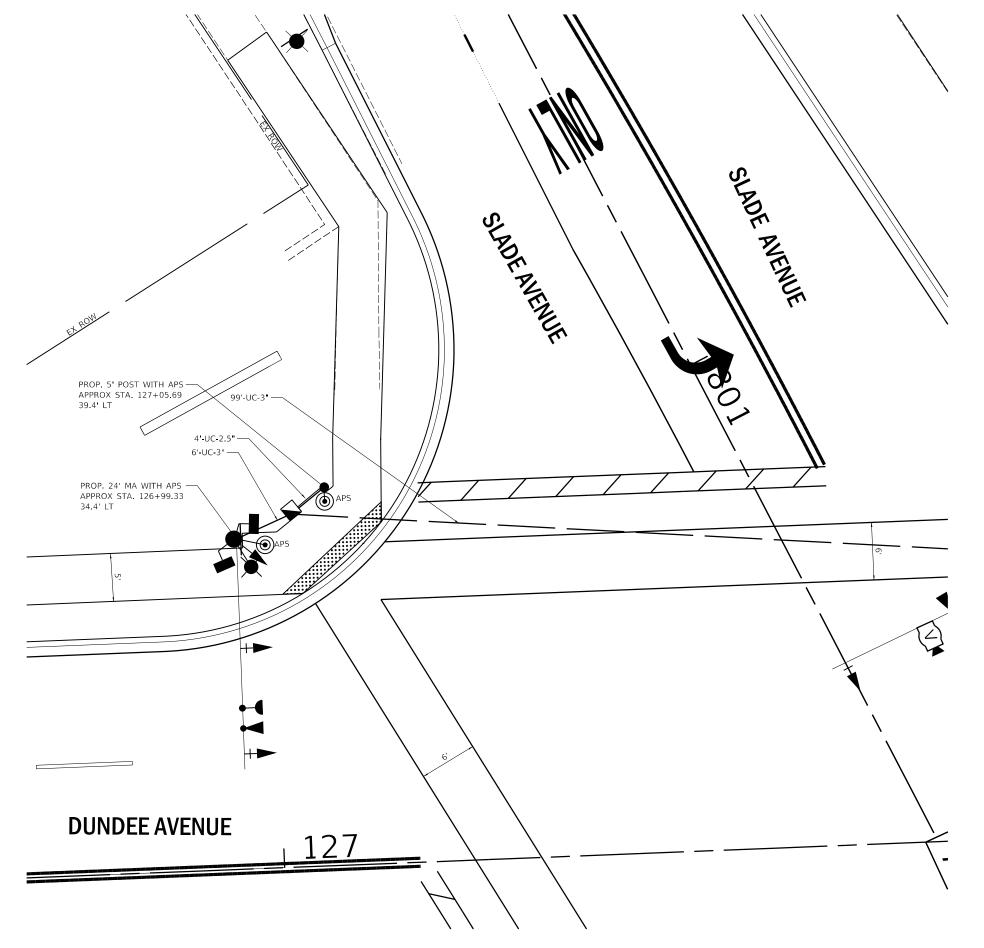
CITY OF ELGIN 150 DEXTER COURT ELGIN, IL. 60120

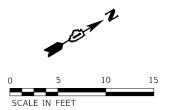
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

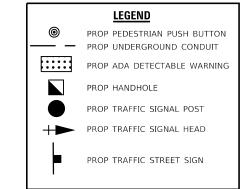
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DUNDEE AVENUE SOUTHEAST CORNER ACCESSIBLE PEDESTRIAN SIGNAL DETAIL SCALE: 1" = 5' SHEET 3 OF 4 SHEETS STA. N/A

SECTION 20-00189-00-PV KANE 184 114 CONTRACT NO. 61K68







- ALL STATION AND OFFSETS ARE
 REFERENCED TO THE DUNDEE AVENUE CENTERLINE ALIGNMENT
- ALL PEDESTRIAN PUSH BUTTON
 POSTS SHALL BE LOCATED AS SHOWN IN THE PLANS.
- 3. ALL PEDESTRIAN PUSH BUTTONS SHALL BE WITHIN 10 FT. FROM THE BACK OF THE CURB OR THE EDGE OF PAVEMENT FOR EACH CROSSING. THE CONTRACTOR SHALL INSTALL PEDESTRIAN PUSH BUTTON EXTENSIONS TO MEET THIS REQUIREMENT.
- MOUNTING HEIGHT OF PEDESTRIAN PUSH BUTTONS SHALL BE 36 INCHES (PREFERRED) FROM THE SIDEWALK SURFACE.
- SHOP DRAWINGS FOR ALL SIGNAL IMPROVEMENTS INCLUDING APS IMPROVEMENTS SHALL BE PROVIDED TO THE CITY OF ELGIN.
- 6. A WALK THROUGH AND FINAL INSPECTION OF THE TRAFFIC SIGNAL IMPROVEMENTS SHALL BE COORDINATED WITH THE ENGINEER.
- 7. THE INSTALLATION OF ACCESIBLE PEDESTRIAN SIGNALS SHALL INCLUDE THE INTERACTIVE VIBROTACTILE PEDESTRIAN PUSH BUTTON WITH SPEAKER, AN INFORMATIONAL SIGN, A LIGHT-EMITTING DIODE (LED) INDICATOR LIGHT, A SOLID-STATE ELECTRONIC CONTROL BOARD, A POWER SUPPLY, INTERNAL WIRING AND MOUNTING HARDWARE.
- THE INFORMATIONAL SIGN SHALL CONFORM TO THE MUTCD STANDARD R10-3-i (BRAILE SIGN). THE SELECTION OF THE SIGN SHALL BE APPROVED BY THE ENGINEER.

150 DEXTER COURT

DEPARTMENT OF TRANSPORTATION

- 1. THIS PROJECT INCLUDES INSTALLATION OF NEW LIGHTING ALONG DUNDEE AVE. FROM PAGE AVE. TO ENTERPRISE ST. THIS PROJECT ALSO INCLUDES THE REPLACEMENT OF LUMINAIRES ON EXISTING TRAFFIC SIGNAL COMBINATION POLES WITH LED LUMINAIRES AT THE INTERSECTION OF DUNDEE AVE. AT SLADE AVE. THE PROPOSED LIGHTING SHALL BE OWNED AND MAINTAINED BY THE CITY OF ELGIN.
- THE QUANTITIES OF RACEWAYS WHEREVER INDICATED ON THESE PLANS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLETE COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
- 3. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. TO LOCATE AND MARK/STAKE ALL
- 4. THE CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND/OVERHEAD UTILITIES PRIOR TO INSTALLATION OF LIGHT POLES AND CONDUITS. IF THERE IS A CONFLICT WITH THE LIGHT POLES/CONDUITS INSTALLATION AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL SUGGEST ALTERNATIVE LOCATIONS AND COORDINATE WITH THE ENGINEER PRIOR TO PERFORMING ANY CONSTRUCTION WORK. IT SHALL ALSO BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION ACTIVITIES.
- 5. TRENCHES FOR LIGHTING RACEWAYS SHALL HAVE A MINIMUM DEPTH OF 30".
- LIGHTING SYSTEM INSTALLATION SHALL CONFORM TO THE LATEST IDOT STANDARDS, NEC AND LOCAL CODES.
- 7. ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE UL LISTED AND LABELED.
- 8. THE CONTRACTOR SHALL TAKE PRECAUTION WHEN INSTALLING UNIT DUCT TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES AND TREES ROOTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE AS DETERMINED BY THE ENGINEER.

BILL OF MATERIALS

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	932
UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	2680
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 1/0	FOOT	105
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	20
LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP	EACH	1
LIGHT POLE, ALUMINUM, 35 FT. M.H., 8 FT. MAST ARM	EACH	17
LIGHT POLE FOUNDATION, METAL, 11 1/2" BOLT CIRCLE, 8 5/8" X 6"	EACH	17
LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	42
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	20
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6

LEGEND

ф

EXISTING LIGHTING UNIT TO REMAIN

PROPOSED LIGHTING UNIT, 35FT. MH., 8FT. MAST ARM, LED LUMINAIRE

EXISTING COMBINATION SIGNAL/LIGHT POLE, EXISTING LUMINAIRE TO BE REPLACED WITH NEW LED LUMINAIRE

UNIT DUCT, 600V, 3-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE) 1½" DIA. POLYETHYLENE

ComEd ELECTRIC SERVICE, 120/240V, 1 PHASE 3 WIRE

PROPOSED LIGHTING CONTROLLER "LC" 120/240V, 3 WIRE 100 AMP, BASE MOUNTED

UNDERGROUND CONDUIT, GALVANIZED STEEL

---- ELECTRIC CABLE IN CONDUIT 4" DIA., 3-1/C NO. 1/0

GROUND ROD 5/8" DIA. X 10 FT

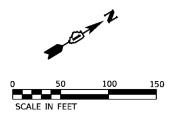
LT-01

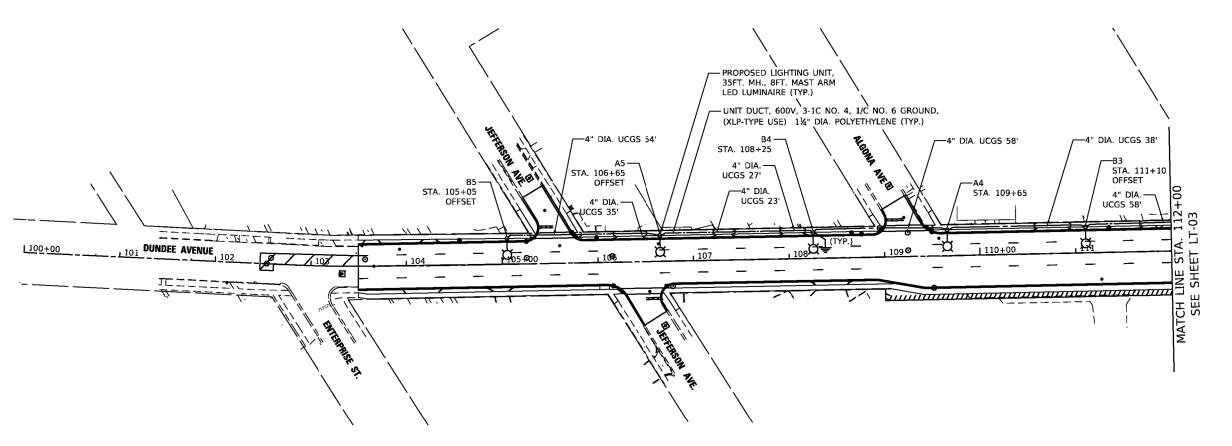
KANE **184** 116

CONTRACT NO. 61K68

COUNTY



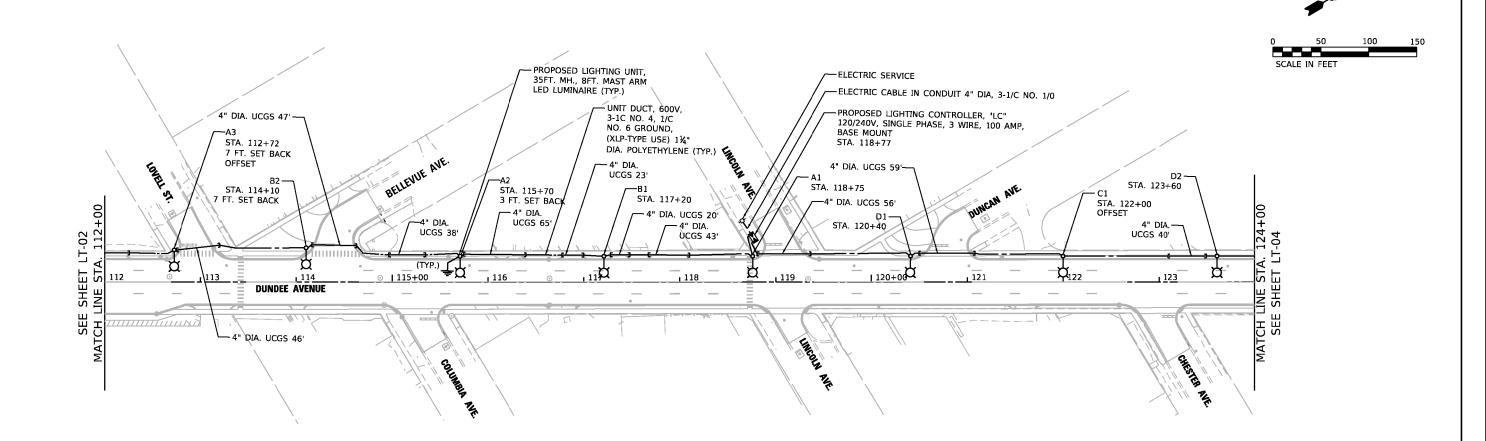




- 1. FOR GENERAL NOTES AND LEGEND, SEE SHEET LT-01.
- 2. SETBACK IS 3FT. FROM FACE OF CURB TO CENTER OF POLE.
- 3. UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
- 4. 'OFFSET' INDICATED WHERE THE LIGHTING UNIT HAS AN UNDERGROUND CONFLICT AND OFFSET FOUNDATION MAY BE REQUIRED.

DESIGNED	-	MH	REVISED	-
DRAWN	-	SR	REVISED	=
CHECKED	-	BL	REVISED	-
DATE	-	02-22-2024	REVISED	÷

SCALE: 1"=50' SHEET



- 1. FOR GENERAL NOTES AND LEGEND, SEE SHEET LT-01.
- SETBACK IS 3FT. FROM FACE OF CURB TO CENTER OF POLE, UNLESS NOTED OTHERWISE.
- 3. UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
- 'OFFSET' INDICATED WHERE THE LIGHTING UNIT HAS AN UNDERGROUND CONFLICT AND OFFSET FOUNDATION MAY BE REQUIRED.

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

CITY OF ELGIN 150 DEXTER COURT ELGIN, IL. 60120
 DESIGNED MH
 REVISED

 DRAWN SR
 REVISED

 CHECKED BL
 REVISED

 DATE 02-22-2024
 REVISED

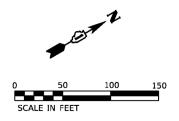
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

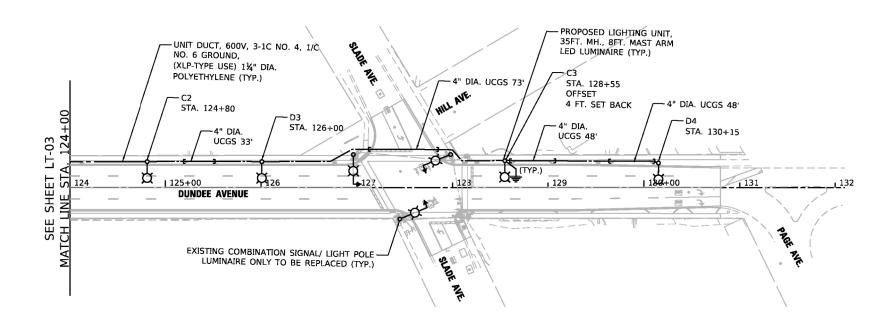
 PROPOSED LIGHTING PLAN
 F.A.U. RTE.
 SECTION

 DUNDEE AVENUE

 SCALE: 1"=50'
 SHEET
 OF
 SHEETS
 STA.
 TO STA.
 ILLINOIS

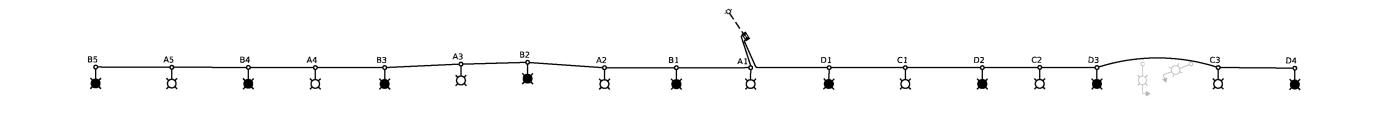
LT-03





- 1. FOR GENERAL NOTES AND LEGEND, SEE SHEET LT-01.
- 2. SETBACK IS 3FT. FROM FACE OF CURB TO CENTER OF POLE, UNLESS NOTED OTHERWISE.
- UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
- 'OFFSET' INDICATED WHERE THE LIGHTING UNIT HAS AN UNDERGROUND CONFLICT AND OFFSET FOUNDATION MAY BE REQUIRED.

LT-04



LEGEND

LUMINAIRE, LED, 120V, 1.30A, 140W, 1 PHASE, ON BLACK WIRE,

LUMINAIRE, LED, 120V, 1.30A, 140W, 1 PHASE, ON RED WIRE,

UNIT DUCT, 3-1C NO. 4, 1/C NO. 6 GROUND (XLP-TYPE USE) 1¼" DIA. POLYETHYLENE

comed ELECTRIC SERVICE, 120/240V, 1 PHASE 3 WIRE

ELECTRIC CABLE IN CONDUIT 4" DIA., 3-1/C NO. 1/0

PROPOSED LIGHTING CONTROLLER "LC" 120/240V, 3 WIRE 100 AMP, BASE MOUNTED

LOAD TABLE LIGHTING CONTROLLER "LC"

120/240V AC, 1 PHASE, 3 WIRE, 100A

	ON RE	D WIRE			ON BLACK WIRE			
CIRCUIT	TOTAL LUM.	TOTAL CURRENT IN AMPS	TOTAL WATTAGE	CIRCUIT	TOTAL LUM.	TOTAL CURRENT IN AMPS	TOTAL WATTAGE	
Α	5	6.5	700	В	5	6.5	700	
С	3	3.9	420	D	4	5.2	560	
E	-	-	-	F	-	-	-	
G			-	н	-	-	-	
TOTAL	8	10.4	1120	TOTAL	9	11.7	1260	

TOTAL LOAD IN WATTS 2380 TOTAL LOAD IN AMPS 22.10

LT-05

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

CITY OF ELGIN 150 DEXTER COURT ELGIN, IL. 60120

DESIGNED	-	MH	REVISED	=
DRAWN	-	SR	REVISED	=
CHECKED	-	BL	REVISED	=
DATE	-	02-22-2024	REVISED	-

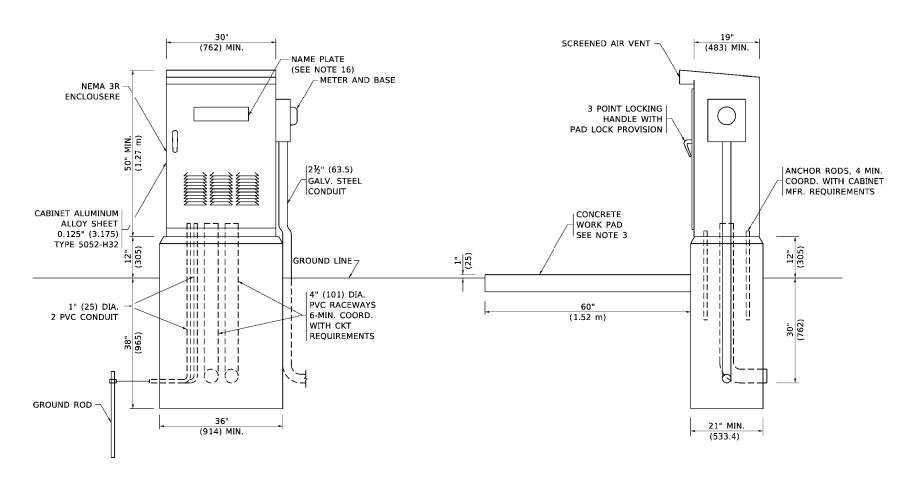
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	SIN	IGLE LIN	E WIRING	G DIAGRA	M	F.A.U. RTE	SECTION
	DUNDEE AVENUE					2525	20-00189-00-PV
		DOIN	IDLL AVE	IVOL			
SCALE: 1"=50"	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS

CIRCUIT BREAKER MAIN BREAKER (POWER) **(** TWO POSITION #2/0 TOGGLE SWITCH TOGGLE SWITCH MOMENTARY CONTACT TYPE SPDT 20 A, 240V AC AND TOGGLE SWITCH 】 国 20A, 240V, TYPE SPDT ① ¼" (6.35) MINIMUM 0 NON-ASBESTOS INORGANIC AUXILIARY NONCONDUCTING MATERIAL CONTROL RELAY-MOUNTING PANEL. (IF NECESSARY) CABINET ENCLOSURE (K) 3-1/C SERVICE ENTRANCE CABLE FROM ELECTRIC BONDING JUMPER -UTILITY METER BOX #6 AWG. 600V GROUND ROD %" (15.875) 240/480 VOLT, 1},3 WIRES, 60 CYCLES.

DIA. x 10' (3.048 m) LONG

PANEL WIRING DIAGRAM



PANEL EQUIPMENT

	BILL OF MATERIAL										
ITEM	QUANTITY	DESCRIPTION									
Α	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100 AMP. FRAME, 100 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.									
В	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.									
С	8	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.									
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER. 1 POLE, 240 V., 100 AMP. FRAME, 15 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.									
Е	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER (TIME SWITCH).									
F	1	20 AMP, 120 VOLT FUSE.									
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 Hz.									
Н	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN,									
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.									
J	1	20 AMP, 120 VOLT, DUPLEX RECEPTACLE, GFCI.									
K	1	COPPER GROUND BUS 1#4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS									
L	1	TOGGLE SWITCHES MOUNTED IN 4" (101.6) X 4" (101.6 mm) BOX.									
М	1	COPPER GROUND BUS 1#4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS.									

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
 UNLESS OTHERWISE SHOWN.
- 2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- 3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL, LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) x 60" (18.288 m) x 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- 4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- 6. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1#4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
- 7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.

SCALE: NONE

- CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.

- 10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- 11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- 12. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED. $R = RED \qquad BL = BLUEW = WHITE \\ B = BLACK \qquad Y = YELLOW \qquad G = GREEN$
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- 15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 16. 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.

LT-06

DESIGNED REVISED 08-20-04 USER NAME = footemj AMES Engineering, Inc. DRAWN REVISED CONSULTING ENGINEERS LOT SCALE = 50.0000 ' / in. CHECKED REVISED 6330 Belmont Road, Suite 4B Downers Grove, IL 60516 PLOT DATE = 4/19/2019 DATE REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUNDING CONDUCTOR #2 AWG.

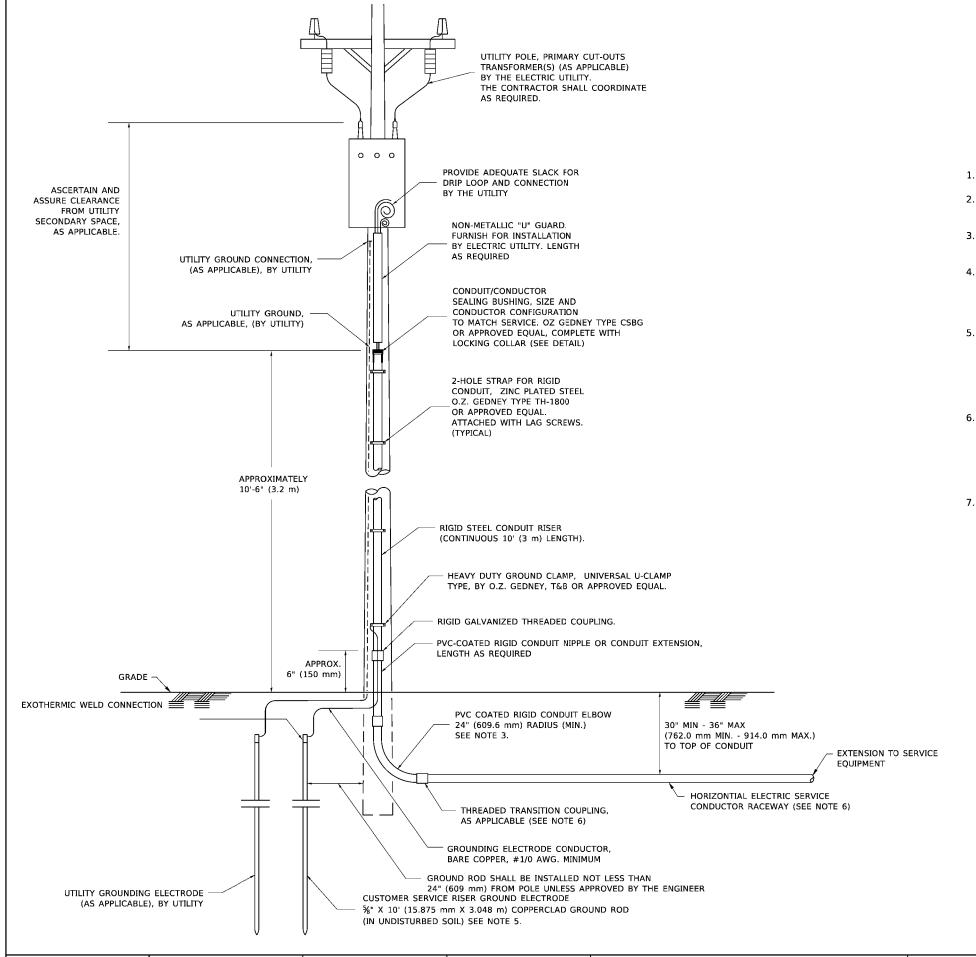
LIGHTING CONTROLLER
SINGLE DOOR
SHEET 1 OF 1 SHEETS STA.

TO STA

 FA.U. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEE NO.

 2525
 20-00189-00-PV
 KANE
 184
 121

 BE-215
 CONTRACT
 NO.
 61K68

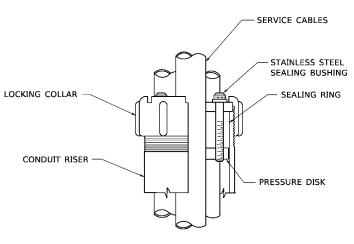


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

- 1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- 2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- 3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- 4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- 5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- 6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- 7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

LT-07

AMES Engineering, Inc.	USER NAME = footemj	DESIGNED -	REVISED - 03-03-06
CONSULTING ENGINEERS		DRAWN -	REVISED -
6330 Belmont Road, Suite 4B	PLOT SCALE = 50.0000 ' / in.	CHECKED - MEA	REVISED -
Downers Grove, IL 60516	PLOT DATE = 4/19/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ELECTRIC SERVICE				RVICE IN	STALLATION	
AERIAL, REMOTE					SCONNECT	
SHEET	1	OF	1	SHEETS	STA	TO STA

SCALE: NONE

U. SECTION COUNTY TOTAL SHEET

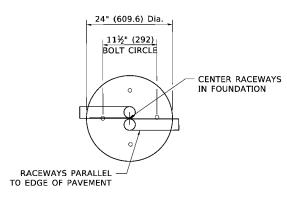
5 20-00189-00-PV KANE 184 122

BE-220 CONTRACT NO. 61K68

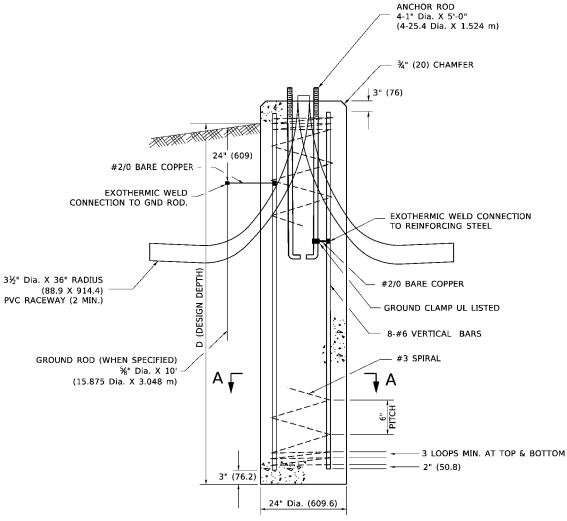
LIGHT POLE FOUNDATION DEPTH TABLE

30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION							
SOIL CONDITIONS	SINGLE ARM POLE	TWIN ARM POLE						
SOFT CLAY	11'-0"	12'-8"						
Qu = 0.375 TON/SQ. FT.	(3.35 m)	(3.85 m)						
MEDIUM CLAY	9'-0"	14'-10"						
Qu = 0.75 TON/SQ.FT	(2.74 m)	(4.52 m)						
STIFF CLAY	7'-6"	8'-7"						
Qu = 1.50 TON/SQ. FT.	(2.29 m)	(2.61 m)						
LOOSE SAND	9'-6"	10'-7"						
Ø = 34°	(2.90 m)	(3.22 m)						
MEDIUM SAND	9'-0"	9'-10"						
Ø = 37.5°	(2.74 m)	(2.99 m)						
DENSE SAND	8'-3"	9'-7"						
Ø = 40°	(2.51 m)	(2.91 m)						



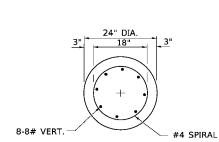
TOP VIEW



NOTES

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- 3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- 4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3#4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- 7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- 8. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- 10. ANCHOR RODS SHALL PROJECT 23#4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- 11. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 13 THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

FOUNDATION DETAIL



SECTION A-A

AMES Engineering, Inc.

CONSULTING ENGINEERS

6330 Belmont Road, Suite 4B

Downers Grove, IL 60516

THREADED

%" T. X 4" DIA.

WASHER, TACK WELDED DIA.

5" (127.0)

TOP OF ANCHOR ROD

- 4" (100) MAX.

ANCHOR BOLT DETAIL

- 60" (1500) —

FOUNDATION EXTENSION DETAIL

c.	USER NAME = footemj	DESIGNED -	REVISED -
٠.		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/19/2019	DATE -	REVISED -

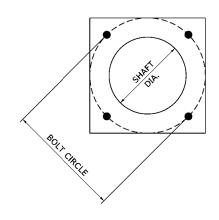
GROUND LINE

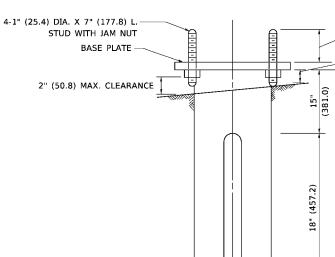
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

			LIGHT	POL	E FOUN	DATI	ON	
30′ (9.144 m) TO	35′	(10.668	m)	M.H. 11	1/2"	(292 mm) BOLT CIRCLE	
SCALE: NONE	SHEET	- 1	OF	1	SHEETS	STA	TO STA	7

	F.A.U. SECTION				COUNTY	TOTAL SHEETS	SHEET NO.
	2525	20-0018	KANE	184	123		
_		BE-300)	CONTRACT	NO. 61	IK68	
			ILLINOIS	FED. A	D PROJECT		

LT-08



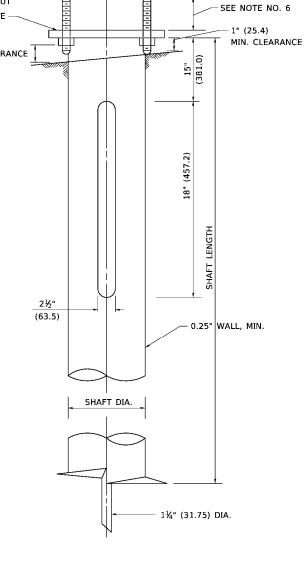


HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11½"	8%"	6 FT.	12"x12"x1"
31 FT35 FT.	11½"	8%"	6 FT.	12"x12"x1"
36 FT40FT.	15"	8%"	6 FT.	15"x15"x1¾"
41 FT45 FT.	15"	8%"	6 FT.	15"x15"x1¼"
46 FT50 FT.	15"	10"	8 FT.	15"x15"x1¼"

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)



NOTES

- 1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- 3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1#4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- 4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
- 5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- 6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- 7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- 8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDTION IS NOT ALLOWED.
- 9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- 10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (\pm 1 $^{\circ}$) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
- 11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE $(\pm 2^{\circ})$.
- 12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

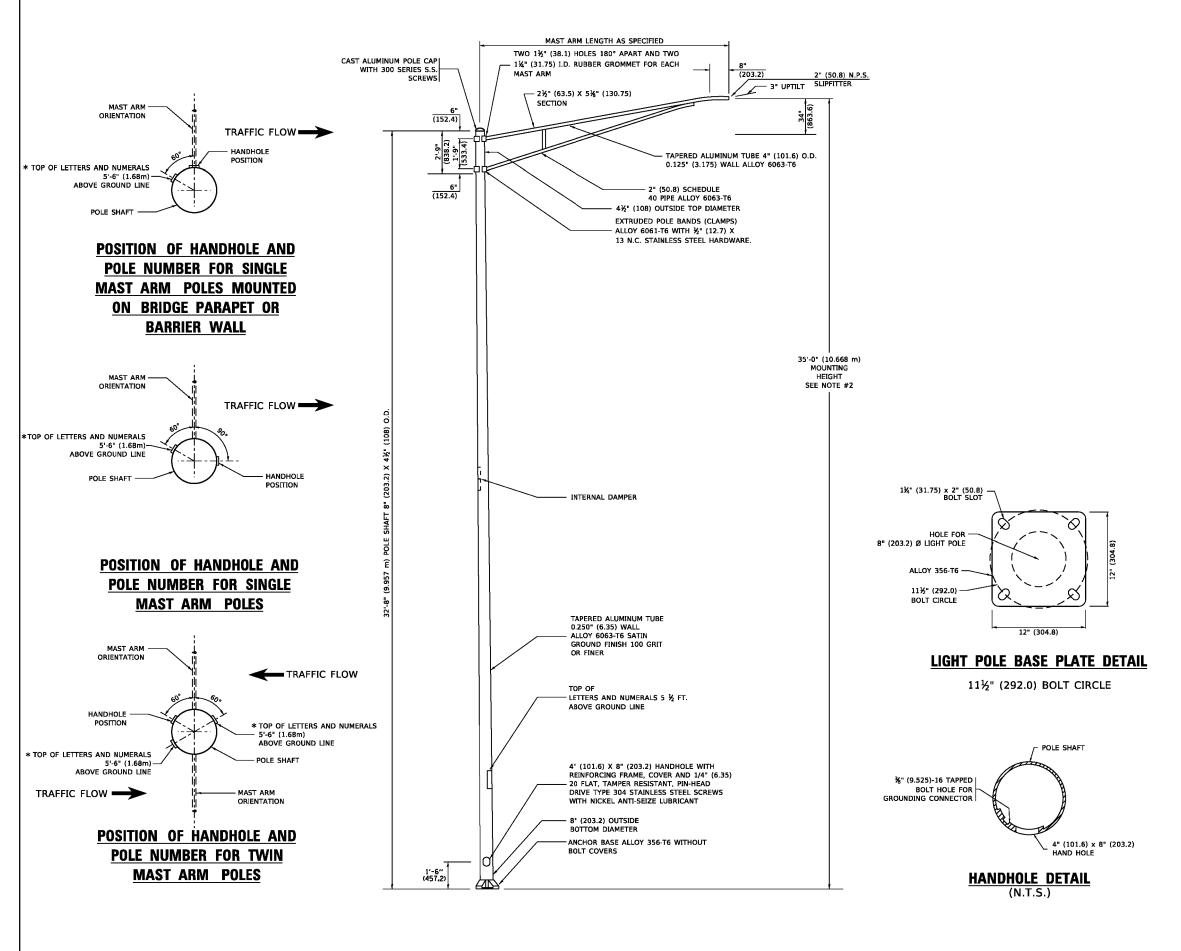
LT-09

AMES Engineering, Inc.	USER NAME = footemj	DESIGNED -	REVISED -
CONSULTING ENGINEERS		DRAWN - DLB	REVISED -
6330 Belmont Road, Suite 4B	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
Downers Grove, IL 60516	PLOT DATE = 4/19/2019	DATE - 02-27-07	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCALE: NONE

					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
LIGHT POLE FOUNDATION, METAL				2525	20-00189-00-PV	KANE	184	124	
						BE-305	CONTRACT	NO. 6	1K68
SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		



- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
 UNLESS OTHERWISE SHOWN.
- 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
- 3. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
- THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
- 5. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
- 6. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
- 7. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.

LT-10

AMES Engineering, Inc.I.	USER NAME = Lawrence.Demanche	DESIGNED -	REVISED - R. TOMSONS 09-02-03
CONSULTING ENGINEERS		DRAWN -	REVISED - R. TOMSONS 01-18-13
6330 Belmont Road, Suite 4B	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - TG 06-13-22
Downers Grove, IL 60516	PLOT DATE = 12/19/2023	DATE -	REVISED - R. TOMSONS 12-19-23

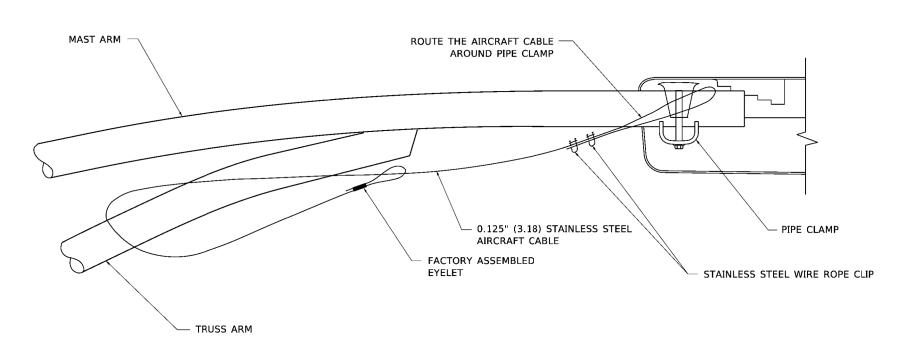
SCALE: NONE

		ALUM	IN	UM LIGH	IT POI	LE	
35'-	-0"	(10.66	8	m) MOUI	NTING	HEIGHT	
SHEET	1	OF	1	SHEETS	STA.		TO STA

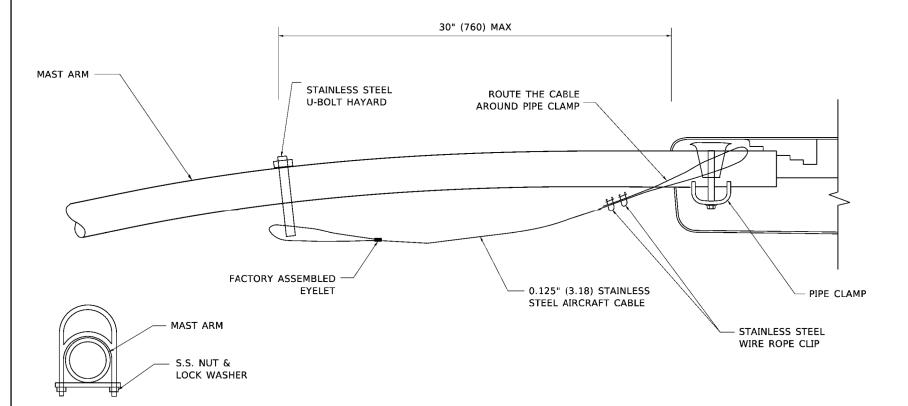
A.U. SECTION COUNTY TOTAL SHEETS NO.

525 20-00189-00-PV KANE 184 125

BE-402 CONTRACT NO. 61K68



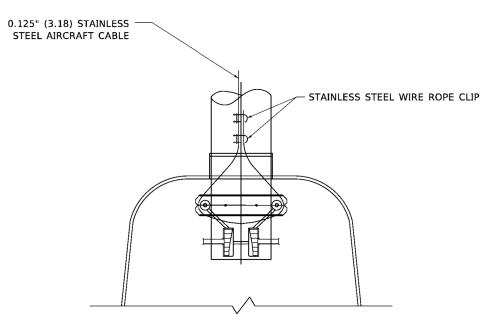
SIDE VIEW (TRUSS ARM) N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM) N.T.S.

STAINLESS STEEL

U-BOLT HAYARD



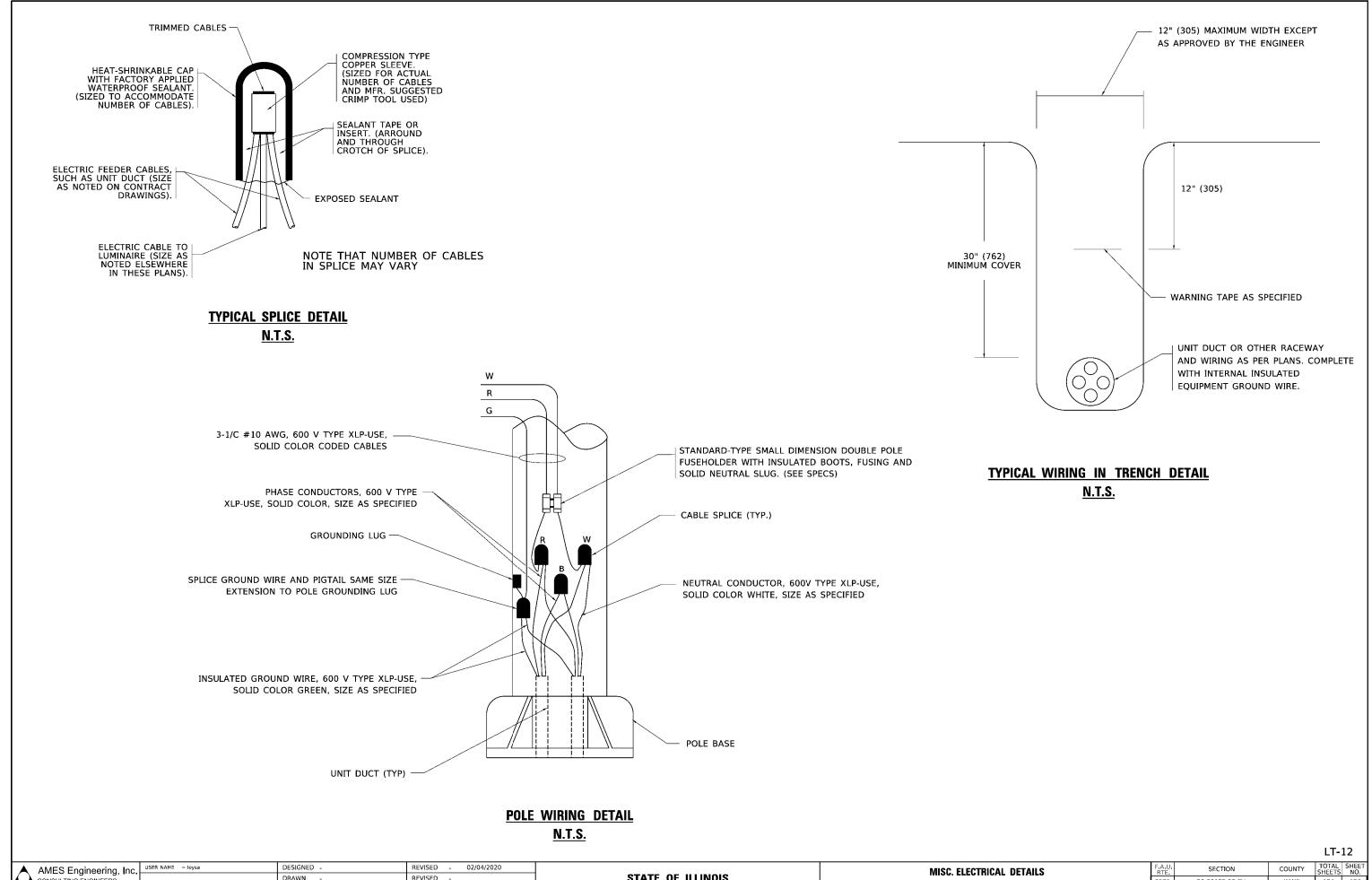
BOTTOM VIEW N.T.S.

NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
- 3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
- 4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

LT-11

	AMES Engineering, Inc. consulting engineers	USER NAME = footemj	DRAWN -	REVISED - 08-08-03 REVISED -	STATE OF ILLINOIS		LUMINA	AIRE SAI	ETY CABLE ASSEM	IBLY	2525	20-00189-00-PV	COUNTY KANE	SHEETS 184	5 NO. 126
ı	6330 Belmont Road, Suite 4B	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION							BE-701	CONTRACT	T NO. 6	1K68
	Downers Grove, IL 60516	PLOT DATE = 4/19/2019	DATE -	REVISED -		SCALE: NONE	SHEET 1	OF 1	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		



STATE OF ILLINOIS CONSULTING ENGINEERS KANE 184 127 20-00189-00-PV SHEET A PLOT SCALE = 50.0000 ' / in. CHECKED REVISED **DEPARTMENT OF TRANSPORTATION** BE-702 CONTRACT NO. 61K68 Downers Grove, IL 60516 SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA PLOT DATE = 3/2/2020 DATE 08/08/2003 REVISED .

FOUNDATION DESIGN TABLE

	DESIGN DEPTH (OF FOUNDATION	R	EINFORCEMENT	IN FOUNDATIO	DN
TYPE OF SOIL	SINGLE ARM	TWIN ARM	SINGLE	ARM	TWIN	ARM
	D	D	VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13'-0"	15'-0"	8-#6X12'-6"	#3X122'	8-#6X14'-3"	#3X141'
	(3.962 m)	(4.572 m)	(3.810 m)	(37.186 m)	(4.343 m)	(42.977 m)
MEDIUM CLAY	9'-6"	10'-9"	8-#6X9'-0"	#3X90¹	8-#6X10'-0"	#3X100'
	(2.896 m)	(3.277 m)	(2.743 m)	(27.432 m)	(3.048 m)	(30.480 m)
STIFF CLAY	7'-0"	8'-0"	8-#6X6'-6"	#3X66'	8-#6X7'-6"	#3X76'
	(2.134 m)	(2.438 m)	(1.981 m)	(20.112 m)	(2.286 m)	(23.165 m)
LOOSE SAND	9'-0"	10'-0"	8-#6X8'-6"	#3X85'	8-#6X9'-6"	#3X94'
	(2.743 m)	(3.048 m)	(2.591 m)	(25.908 m)	(2.896 m)	(28.651 m)
MEDIUM SAND	8'-3"	9'-0"	8-#6X8'-0"	#3X78'	8-#6X8'-6"	#3X85'
	(2.515 m)	(2.743 m)	(2.438 m)	(23.774 m)	(2.591 m)	(25.908 m)
DENSE SAND	7'-9"	9'-0"	8-#6X7'-6"	#3X73'	8-#6X8'-6"	#3X85'
	(2.362 m)	(2.743 m)	(2.286 m)	(22.250 m)	(2.591 m)	(25.908 m)
ROCK OR SOLIDIFIED SLAG	5'-0" (1.524 m)	5'-0" (1.524 m)	NONE	NONE	NONE	NONE

OFFSET SCHEDULE

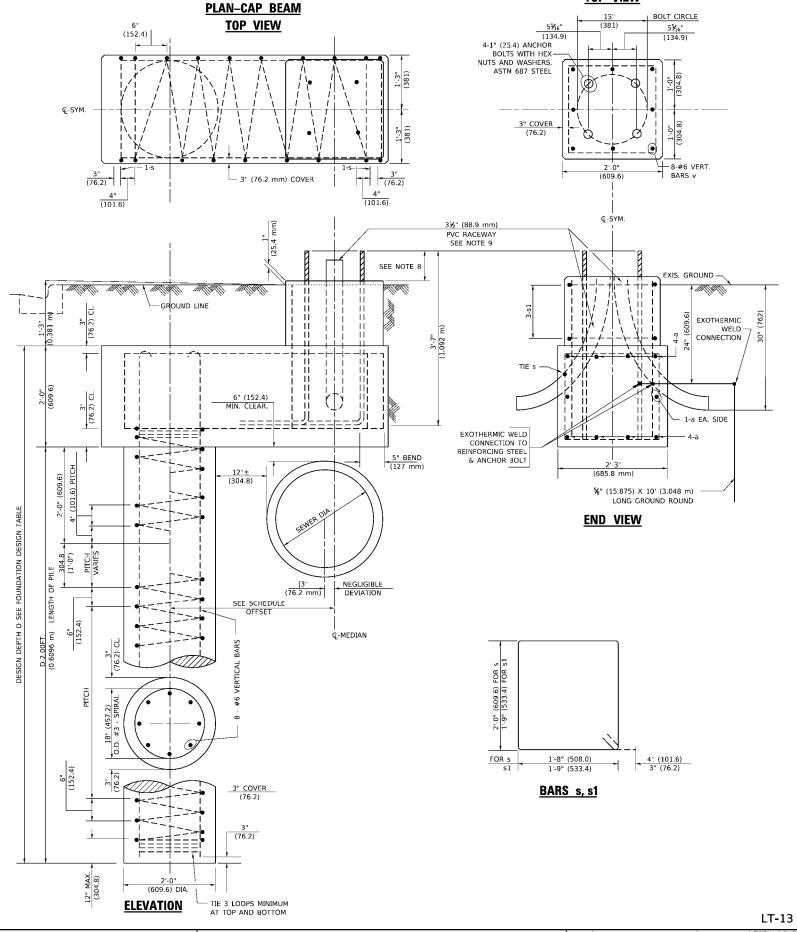
BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	-
s	12	4	8'-0" (2.438 m)	
s ₁	3	3	7'-6" (2.286 m)	0
v ₁	8	6	2'-9" (0.838 m)	
v ₂				

SEWER	PILE OFFSET	LENGTH of
DIAM. d	from Q-MED'N	BAR a
IN.	FT.	FT.
UP TO 24"	3'-3"	#6 x 5'-3"
(609.6 mm)	(0.991 m)	(1.600 m)
27" (685.8 m)TO	3'-9"	5'-9"
36" (914.4 mm)	(1.143 m)	(1.753 m)
42" (1066.8 mm) TO	4'-6"	6'-6"
48" (1219.2 mm)	(1.372 m)	(1.981 m)
54" (1371.6 mm) TO	5'-0"	7'-0"
60" (1524.0 mm)	(1.524 m)	(2.134 m)
66" (1676.4 mm) TO	5'-6"	7'-6"
72" (1828.8 mm)	(1.676 m)	(2.286 m)

NOTES

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- 3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- 4. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- 5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 6. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 7. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 23#4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- 8. RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION
- 9. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 LIGHT POLE FOUNDATION OFFSET

 40' (12.192m) TO
 47
 1/2' (14.478m) M.H., 15" (381mm) BOLT CIRCLE

 SCALE: NONE
 SHEET
 1
 OF
 1
 SHEETS
 STA.
 TO STA.

U. SECTION COUNTY TOTAL SHEETS NO. 5 20-00189-00-PV KANE 184 128

| BE310 | CONTRACT NO. 61K68 | |

TOP VIEW

Existing manhole

Core drill conc. wall

per manufacturer's recommendation

1.13 CITY OF ELGIN

SANITARY PIPE TO

EXIST. MANHOLE

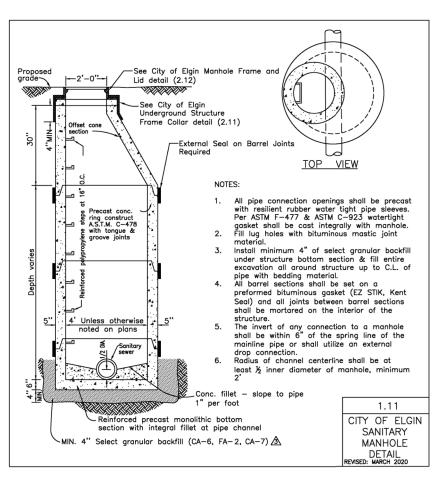
CONNECTION

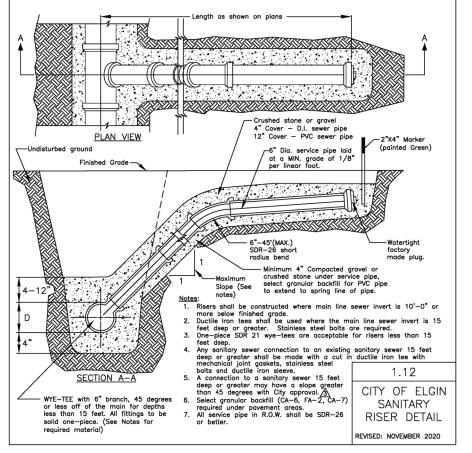
DETAIL

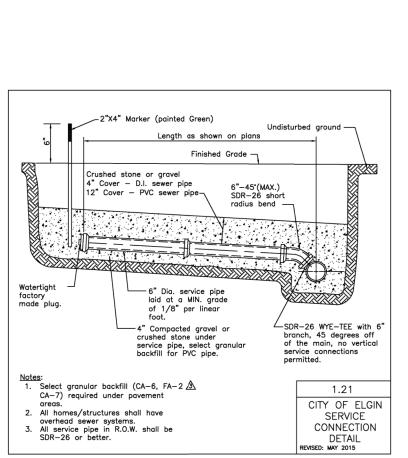
REVISED: APRIL 2020

MAX

SHEET 1A of 3







TO STA.

Internal expanding

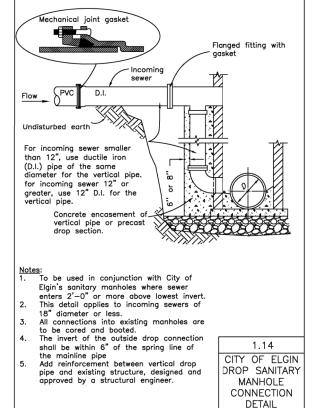
Proposed sanitary

Two Stainless

Watertight flexible rubber connector conforming to A.S.T.M. C-4443 & C-923

sewer (size as

stainless steel band



REVISED: MAY 2015

SCALE:





Т	DESIGNED -	REVISED -
ſ	DRAWN -	REVISED -
ſ	CHECKED -	REVISED -
	DATE -	REVISED -

DESIGNED -

DRAWN

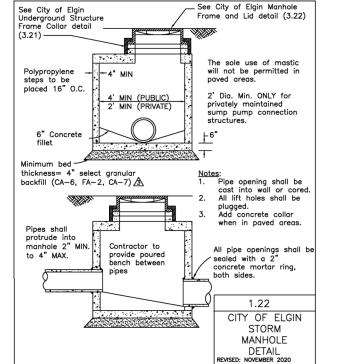
DATE

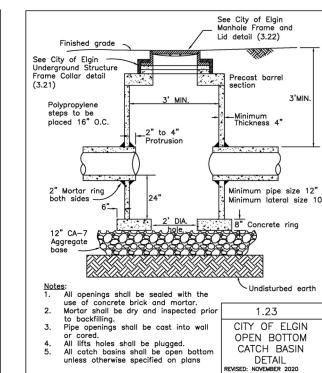
HECKED

SECTION COUNTY 20-00189-00-PV KANE 184 130 CONTRACT NO. 61K68

DETAIL

REVISED: DECEMBER 2020





| Diff. | All | Al

STANDARD

DETAIL!

Phone: 847-931-6100 Fax: 847-931-5965

1900 Holmes Roac Elgin, IL 60123 www.cityofelgin.or

ENGINEERING DEPARTMENT

<u>Z</u>

Ш

PROJ. MGR.:

PROJ. ENG.:

DRAWN BY:

DATE:

SCALE:

DATE:

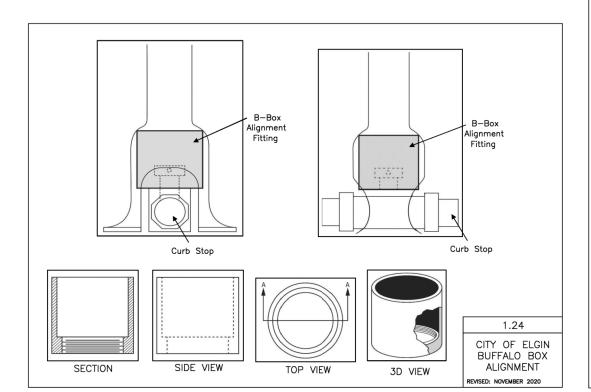
M.T.S.

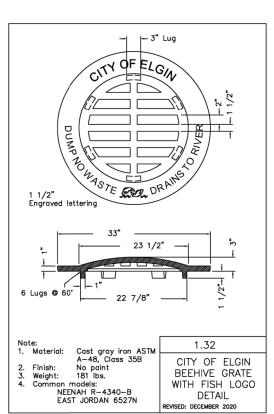
SHEET

1Bof 3

OF ELGIN

CITY





TO STA.

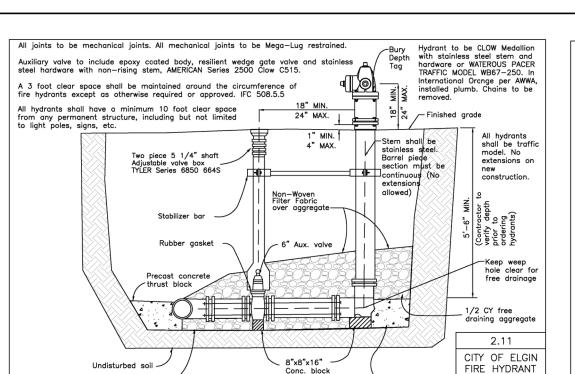
DATE

| 12/22/2020 WATER DEPARABILET — CH
| 26/23/2021 MATER DEPARABILET — CH
| 26/23/2021 MOD 3.34 UNDERDRAW DE
| 36/23/2021 MOD 3.34 UNDERDRAW DE
| 36/23/2021 MOD 3.34 UNDERDRAW DE
| 36/23/2021 MOD 3.34 UNDERDRAW DE
| 36/23/2022 MOD 3.34 UNDE
|

CITY

12-04-20 SHEET

COUNTY KANE 184 131



Conc. block

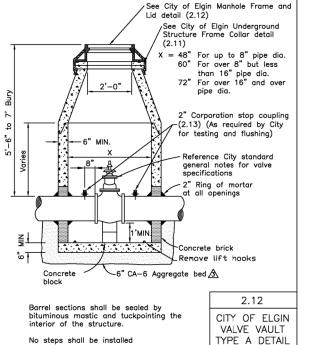
Maximum distance between the main and auxiliary valve is 10 ft.

DETAIL

REVISED: DECEMBER 2020

Concrete thrust

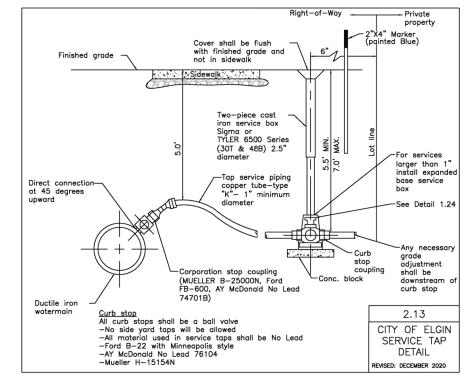
blocking

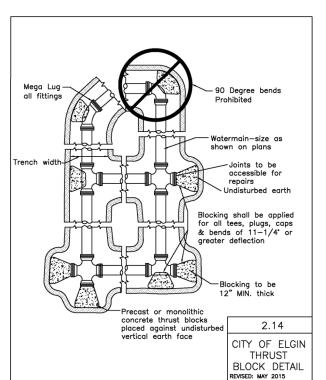


REVISED: DECEMBER 2020

SCALE:

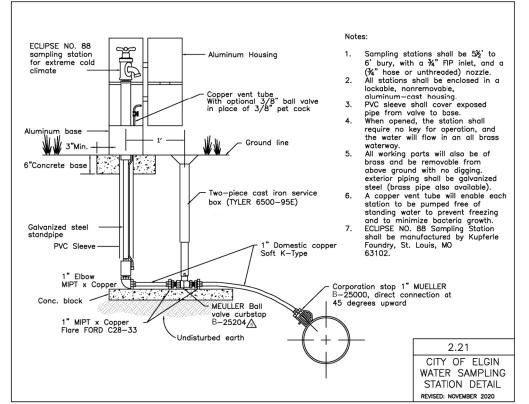
SHEET 3

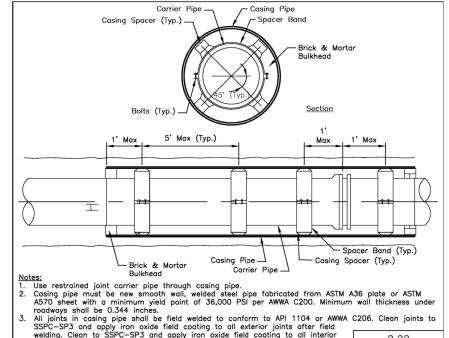




1/2 to 1 CY free

draining aggregate





	welding. Clean to 33FC-3F3 and apply from oxide field coating to all inte
	joints on casing pipe 24—inch diameter and larger after field welding.
3.	Exterior and interior of all casing pipe will be coated with iron oxide prin
	applied at a minimum of 1.5 mils thick. Hold coating back from end join
	be welded a minimum of 2 inches each side of joint.

All carrier pipe will be installed through casing pipe with casing spacers. Casin spacers shall be stainless steel with plastic runners. Casing spacers shall be cascade waterworks style CCS.

2.22 CITY OF ELGIN oints to CASING PIPE DETAIL

2A° 3 EVISED: DECEMBER 2020





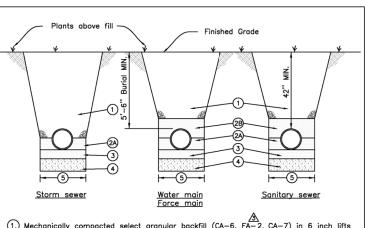
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

DATE
12/22/2020 WATER DEPARTMENT - CH
22/22/2021 AND 3.54 URDERDRAW DE
23/2021/2021 AND 3.54 URDERDRAW DE
24/2021/2024 CHANGE FA-6 TO FA-2.

PF

CITY

SHEET 2B∘ 3



(1) Mechanically compacted select granular backfill (CA-6, FA-2, CA-7) in 6 inch lifts under or within 2 feet of any pavement, curb, gutter, drive approach and sidewalk. Machine compaction of excavated material in other locations where suitable.

Storm sewer:
 A) Haunching, select granular backfill tamped into place up to spring line of pipe
 B) Initial backfill, select granular backfill tamped into place up to 12" above top of

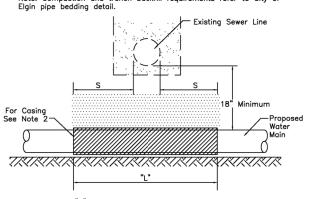
3. 4" MIN. bed mechanically compacted select granular backfill.

(4.) Unsuitable material to be removed and replaced with select granular backfill.

(5.) Trench width per IDOT standards

2.23 CITY OF ELGIN PIPE BEDDING DETAIL

Proposed water main below existing sewer line with 18" minimum Note: Compaction and trench backfill requirements refer to City of



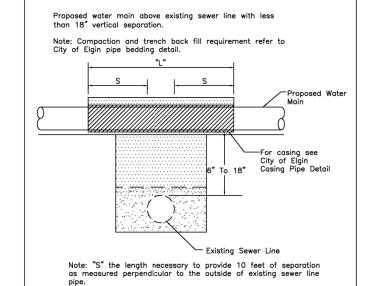
Note: "S" the length necessary to provide 10 feet of separation as measured perpendicular to the outside of existing

Notes:

Provide adequate support for existing sewer line to prevent damage due to settlement.

2. Use "L" for casing of proposed water main and seal ends of casing per City of Elgin casing pipe

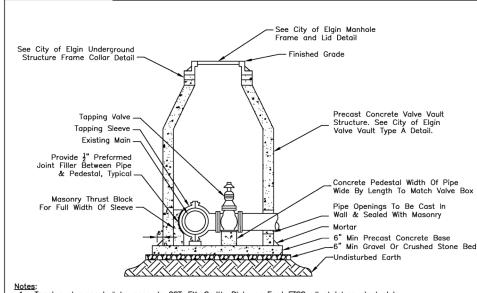
CITY OF FLGIN WATER MAIN PROTECTION AT PIPE CROSSINGS REVISED: OCTOBER 2017



Use "L" feet for casing of proposed water main and seal ends of casing per City of Elgin casing

2. Point loads shall not be allowed between water main casing and sewer.

2.31 CITY OF ELGIN WATER MAIN PROTECTION AT PIPE CROSSINGS REVISED: DECEMBER 2020



Notes:

1. Tapping sleeves shall be cascade CST-EX, Smith-Blair, or Ford FTSS all stainless steel style conforming to MSS-SP112. All stainless steel sleeves must be constructed entirely of T-304 stainless steel including flange, fasteners, and test plugs. All sleeves must be equipped with ₹ − inch test plugs to allow seal testing prior to tapping.

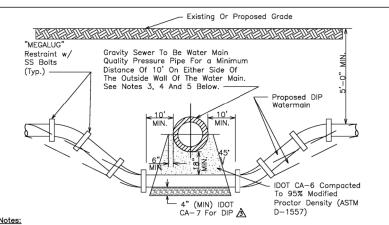
2. Tapping valves shall conform to ANSI/AWWA C-515 and shall have one flange connection with raised set ring conforming to MSS-SP60 and one Mechanical Joint Connection. Acceptable tapping valve brands are Clow and Waterous.

3. Pressure connections between pipes of the same diameter will not be allowed without City of Elain approval.

of Elgin approval.

4. Four inch taps and greater shall be made through a resilient wedge tapping valve and a tapping sleeve.
5. All pressure connections must be enclosed in a pre-cast concrete vault

2.32 CITY OF ELGIN PRESSURE CONNECTION DETAIL VISED: DECEMBER 2020



Notes:

1. Horizontal and vertical separation between water mains and sewers shall comply with applicable sections of the City of Elgin or IEPA requirements, whichever is more stringent.

2. Contractor may bend water main pipe uniformly under sewers without using fitting, provided that join deflection does not exceed 5 degrees per joint for pipe under 14" in diameter and 3 degrees per joint for pipe 14" and over in diameter. If fittings are used, continuous strapping with rods, straps, nuts and bolts below normal water main depth are required, or retainer glands may be used in lieu of strapping, Retainer glands to be "MEGALUG" Restraint w/ SS Bolts

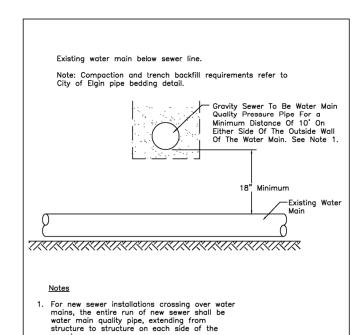
3. All sanitary sewer (including service) crossings where the water mains or water services are less than 18" vertically above the sewer shall be polyvinyl chloride pressure pipe (SDR 26–160 PSI) and shall conform with the latest revision of ASTM D-2241. Joints shall conform to ASTM D-3139 and elastometric gaskets shall conform to ASTM F-477. The same pipe and joint materials shall be used whenever water main crosses below the sewer.

materials shall be used whenever water main crosses below the sewer.

A All storm sewer (including service) crossings where the water mains are less than 18" vertically above the sewer shall be reinforced concrete pipe, ASTM C-361, Class D-25, with bell and spigot joints. The same pipe and joint material shall be used whenever water main crosses below the

For new sewer installations crossing over water mains, the entire run of new sewer shall be water main quality pipe, extending from structure to structure on each side of the crossing.

NOT TO SCALE 2.33 CITY OF ELGIN WATER MAIN CROSSING DETAIL REVISED: DECEMBER 2020



Engineering Enterprises, In ONSULTING ENGINEERS 30.466.6700 / www.eelweb.c

CITY OF ELGIN 150 DEXTER COURT ELGIN. IL. 60120

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DUNDEE AVENUE**

crossing.

SECTION COUNTY 20-00189-00-PV KANE 184 132 CONTRACT NO. 61K68

NOT TO SCALE

2.34

CITY OF ELGIN

WATER MAIN

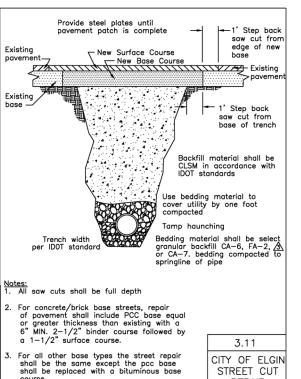
CROSSING DETAIL

REVISED: DECEMBER 2020

CITY OF ELGIN DETAILS OF 7 SHEETS STA

SHEET 3A of 3

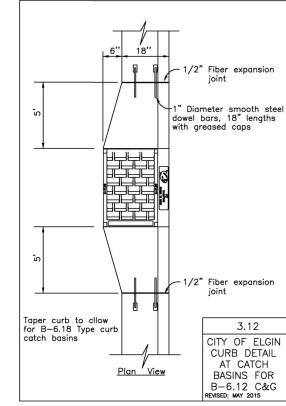
KANE 184 133

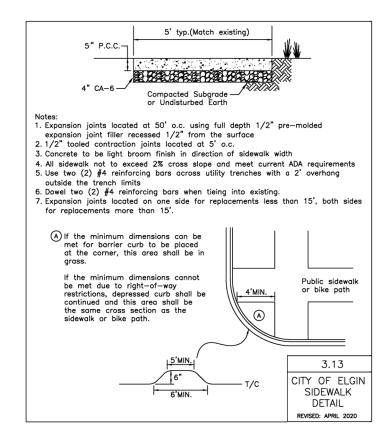


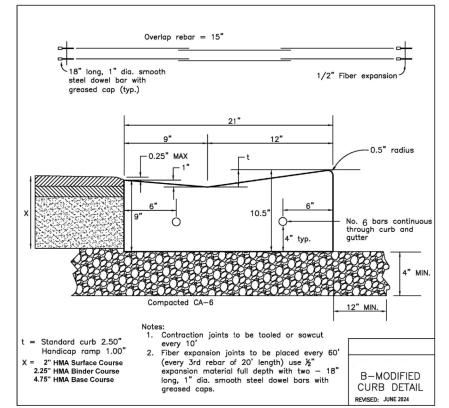
course.

No blocking for pipe construction shall be left

under pipe







TO STA.



CITY OF ELGIN 150 DEXTER COURT ELGIN, IL. 60120

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STREET CUT

REPAIR

STANDARD

REVISED: MARCH 2020

This detail illustrates the policy for frames and adjusting rings required as part of the City of Elgin Engineering and Construction Standards.

- General

 1. Adjusting rings and frames shall be aligned.

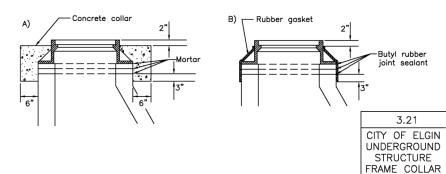
 2. Adjusting rings shall be free of any cracks, chips and damage

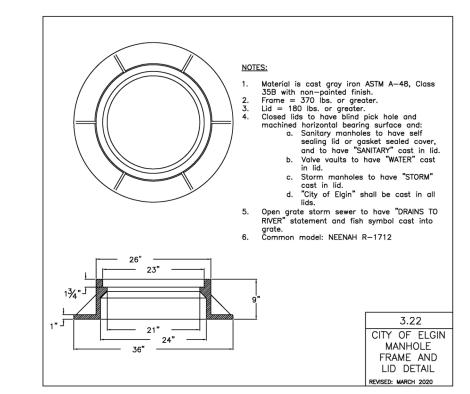
 3. Maximum adjusting height shall be 12" for storm and water structures and 8" for sanitary structures.

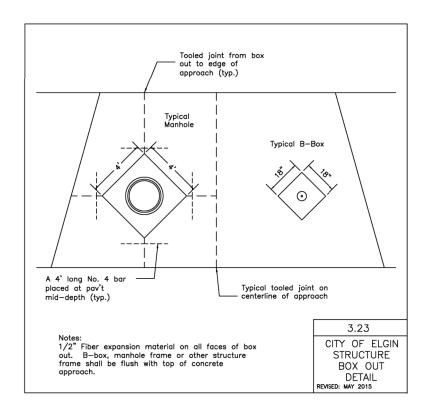
 4 Maximum of two (2).

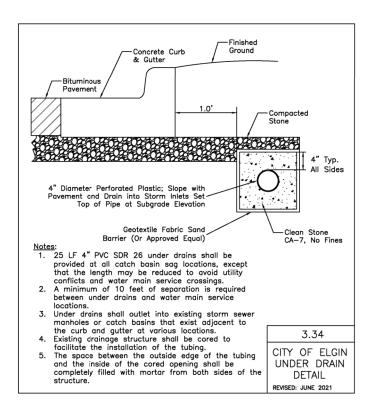
- A) <u>All public and private utilities in hard surface areas (right of way or easements)</u>
 Adjusting rings and frames shall be set in place on full mortar bed.
 A 6" wide concrete collar shall be installed from 3" below lowest ring to 2" below finish grade of top of frame in all water and sewer structures.

- B) <u>All public and private utilities in landscaped areas</u>
 Adjusting rings and frames shall be set in place with a butyl rubber joint sealant (EZ STICK, Kent Seal).
 An exterior rubber gasket shall be installed from 3" below lowest ring to 2" top of frame over all adjusting rings.











CITY OF ELGIN 150 DEXTER COURT ELGIN, IL. 60120

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

DEPARTMENT OF TRANSPORTATION

DUNDEE AVENUE CITY OF ELGIN DETAILS							
	SHEET	6	OF	7	SHEETS	STA.	TO S

SECTION COUNTY 2525 20-00189-00-PV KANE 184 134 CONTRACT NO. 61K68

STANDARD DETAILS

3B° 3

DETAILS SIGNAG

Phone: 847-931. Fax: 847-931-5

601 601

ENGINEERING DEPARTMENT

Ш

SHEET 1 of 1

CHECKED BY: ____ 01-13-04 SCALE: N.T.S.

ELGIN

ОЕ

CITY

the tube may be hot dipped galvanized to obtain a zinc weight of 1.25 ox/ft.2 of sheet,

Traffic Post

800 Wall St. Elm Grove, WI 53122 630-561-5495

Coating Properties: Polyester powder coating of the post shall be Glidden P616 Black. The coating shall be applied over the galvanized post to minimum dry mil thickness of 3.0 mils. The tubing shall be properly cleaned and pre-treated to achieve the coating properties below The following properties are based on the application of 3.0 mils of TGIC cured thermosetting polyester powder coatings applied over Bonderite "37" zinc phosphate pretreatment galvanized steel.

Posts shall be Telespar Qwik-Punch Square Sign Posts (2" x 2"), galvanized steel tubing welded to A.S.T.M. specification A-525, having a wall thickness of .083 and

Damage Resistance Pencil Hardness

Gardner Impact 160 Inch Pounds Flexibility Pass 1.8" Mandrel Adhesion No failure with 1/16" cross hatch

Corrosion Resistance Salt Spray

1/16" Creepage at 1000 hours (ASTM B 117 - Scribed) Humidity Cabinet 1000 hours - no blisters (ASTM D-1735)

Weathering Resistance Minimal change after 100 hours ASTM G26

Excellent color retention; Minimal chalking Chemical Resistance Substance Effect on Coating

Gasoline Alcohol Sodium Hydroxide None Ammonium Hydroxide None Nitric Acid Sulfuric Acid None Mineral Spirits None

Post Anchors:

Post will be anchored into the ground using the following methods

Direct into soil - Tapco V-Loc, part #34-3 with #34-4 wedge
Through concrete - Poz Loc Socket #6601 with wedge #6603 as supplied by

The POZ-LOC Sign Post Anchor System is a tubular socket system designed to be used for Type I small sign supports. The assembly consists of:

1. A galvanized 2-3/8" O.D. traffic post available in various wall thicknesses.

- A tubular socket 2-7/8" O.D. x 12 GA wall thickness x 27" long. The socket is pointed to facilitate driving into the ground and accept a standard 2-3/8" O.D. sign post, which inserts into the socket.
- A wedge which is driven between the socket and the post and functions to lock the post into the socket.
 Sign mounting brackets which clamp onto the post. These brackets allow the
- sign to be mounted at any angle or front and back of the post. Pre-punched 12

holes in the traffic post may be substituted for brackets.

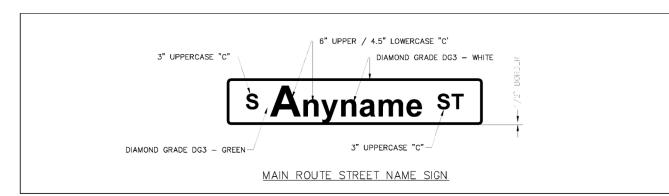
Should the post be damaged, or otherwise need to be removed, the wedge can be removed with a wedge puller, another post inserted, and the wedge replaced without disturbing the fooing. The use of a special wedge puller discourages vandalism of the sign system. This system does not require any nuts or bolts for installation of the

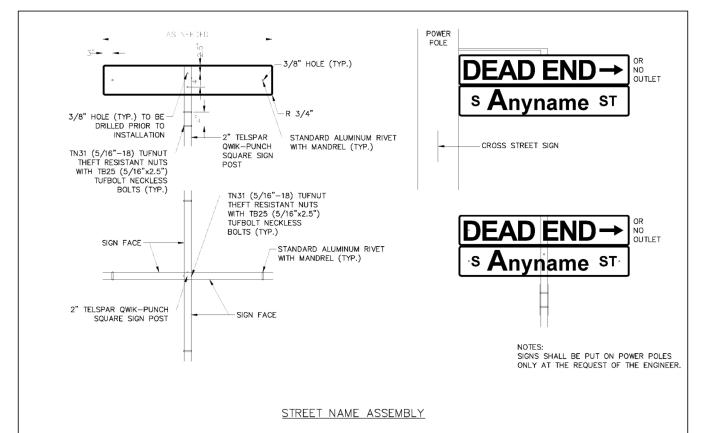
*The POZ-LOC Sign Post and Socket System meets all the requirements of the present FHWA 2200# auto crash test and also the 1800# auto crash test criteria. The POZ-LOC system is approved by the FHWA.

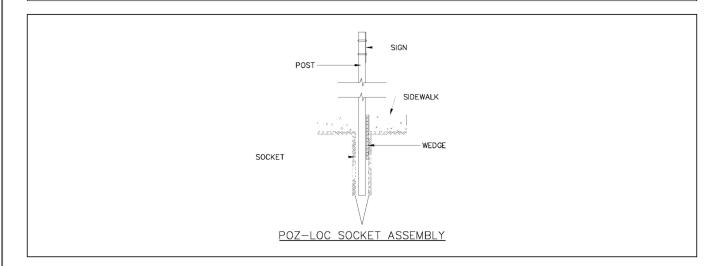
 Bolted to Sidewalk - 2 ½" x 10" aluminum tube passing through and welded to a 6" x ¼" aluminum plate. Plate is to be clearance drilled at each corner to accept a ½" Hilti Quick-bolt. Post is to be attached to the base using two aluminum drive rivets opposed to each other at 90 degrees.

> Elgin Public Works Traffic Division 1900 Holmes Road Elgin, IL 60123 847-697-3160

The new sign panels shall be completely installed prior to removal of the existing assembly. Duplicate assemblies shall not exist for periods in excess of 24 hours







City of Elgin Sign Standards

To establish positive guidelines for the manufacture, location, and installation of traffic, informational and warning signs in the City of Elgin. Requests for clarification should be addressed to the Streets Supervisor, Public Works, Guidelines for sign manufacture nent and clearance shall be followed as set forth by the latest Manual On Uniform Traffic Control Devices Edition (hereafter referred to as the MUTCD).

Sign Panels

Manufacture.

All sign faces shall be applied to .080" aluminum blank which has been properly cleaned and degreased prior to the application of the sign face. All blanks shall have standard corner radii as set forth by the MUTCD. The sign back shall not be covered or painted in any way without consent of the Director of Public Works. Holes shall be drilled and deburred to provide clearance for a 5/16" bolt and space for use on standard traffic sign posts. The words "City of Elgin" shall be stamped on all blanks.

Signs shall be sheeted with 3M materials. Either 3M Electro-Cut Film or silk-screening is permitted although silk-screened signs shall have permanent, protective overlay film (3M Series 1160) applied to resist graffiti. The words "City of Elgin" and date of manufacture in month/year code shall be visible in the lower right hand comer of the border using a maximum of 3/8" letters.

It is the City's intent to minimize the number of sign posts within the City limits. Therefore, care should be taken to install signs on existing structures whe possible. These structures include street light poles, traffic signal poles, and utility poles. Care should also be taken to ensure that signs are still placed in accordance with all applicable MUTCD standards. Signs shall be placed at MUTCD minimum distance or per City Engineer approval. Strict adherence to section 2A-22 and 2A-23 must be aintained. In instances of a curb-side sidewalk less than 5" wide, the post should be placed immediately behind the sidewalk. In cases where the sidewalk is wider or circumstances prevent it, the post shall be mounted in a Poz-Loc socket though a cored hole and held in place with a wedge (southwestern Pipe part numbers 6601 and 6603 respectively). Mortar should be applied to fill any voids between socket and sidewalk. In the event that core drilling is not feasible, an aluminum surface base as previously

Elgin has adopted a 30" x 30" (for single lane) and 36" x 36" (for 2 or more lanes) Diamond Grade DG3 stop sign protected by 3M 1160 Overlay Film as its standard. The common installation is one stop sign on each pole. All-way placards placed below the stop sign are ASTM Type III Sheeting, if applicable, MUTCD figure 2A-2 illustrates the required setback for stop signs prior to the crosswalk. A minimum of 72" must be maintained between the post and preceding edge of the crosswalk whether it is painted

Warning Signs:

Due to the nature of their message, warning signs shall be made using Diamond Grade DG3 material and shall be placed in accordance with the Table 2C-4 of the MUTCD. Care must be taken to match the correct message with road conditions.

Except where later noted, all street name signs shall use a 9" tall blank utilizing Diamond Grade DG3 6" upper/lower case Highway Gothic "C" letters on a reflective green field with a border. Road type designations, i.e. "Rd", "St", "Ln", etc. shall be of two letters except where longer abbreviations are necessary, such as "Blvd",

All signs are to have a nylon washer between the face of the sign and the fastener Signs shall be mounted using a combination of stainless steel and aluminum fasteners

- Double-face signs shall be mounted using a Vulcan VS-318 double bracket with
- SS 5/16" 18 x ½" Torx button pin head bolts and lock washers.
 Signs will be mounted to wooden utility poles using SS 5/16" x 1 ½" or 2" lag bolts. Signs of less than 9 sq. ft, that are banded to poles shall use SS 3/4" x .025
- strapping, SS straight leg brackets and SS 5/16"-18 x ¾" Torx button pin head bolts with lock washers.
- Signs over 9 sq. ft that are banded to poles shall use Signfix medium extruded
- Signs over 9 sq., it must are barried to prices shall use Signifix medium extraded channel (code #MAC MIL) and Signfix SS Universal Channel Clamps. Single-face signs on 2° posts shall use TN31 (5/16-18) Tufnut Theft Resistant Nuts with TB25 (5/16x2.5°) Tufbolt Neckless Bolts.
- Nine inch street name blades are either mounted onto 2" posts illustrated or mounted to metal light/traffic poles with a B36 Wing Bracket and steel shank rivets.

- Cantilever: VS-1C Cantilever
- 14 1/2 " Long Arm For Flat and Extruded Blades
- New Item: VS-1 Extension
 Extends arm to 29" long
- VS-B36 Metro Cantilever (For use with 9" or larger blanks) 36" Extra Long arm
- No Hardware Included-Must Field Drill
- Attach Sign Using Steel Shank Rivets

- This work will be paid for at the contract unit price per Each for STREET NAME SIGN ASSEMBLY - 9"
- This work will be paid for at the contract unit price per Each for STOP SIGN.
- This work will be paid for at the contract unit price per SQ FT for SIGN PANEL

Sign Removal

All sign panels shall be removed from the posts, the hardware and the sign posts shall be completely removed. All items shall be transported to the Elgin Public Works Building. This work shall be coordinated no less 48 hours prior to the anticipated

This work will be paid for at the contract unit price per Each for SIGN TO BE

ngineering Enterprises. In ONSULTING ENGINEERS

CITY OF ELGIN 150 DEXTER COURT ELGIN. IL. 60120

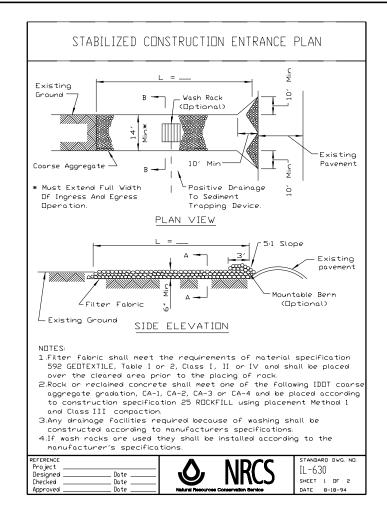
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

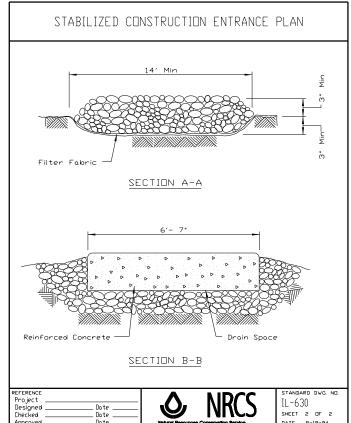
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

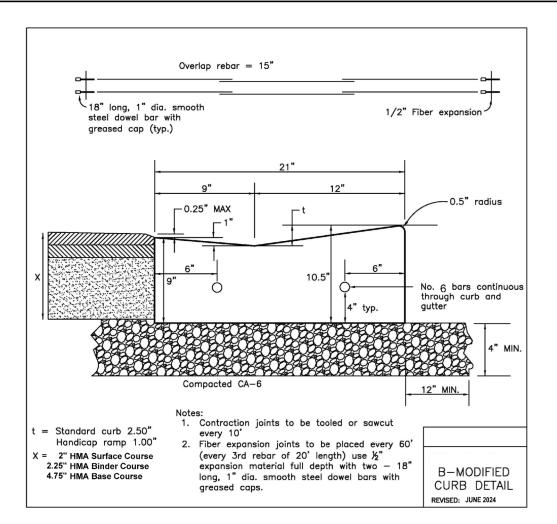
DUNDEE AVENUE CITY OF ELGIN DETAILS

F.A.U. RTE	SEC	TION		COUNT	Y	TOTAL SHEETS	SHEET NO.
2525	20-0018	9-00-PV		KANE		184	135
				CONTR.	ACT	NO. 6	1K68
		ILLINOIS	FED. A	D PROJECT			

TO STA









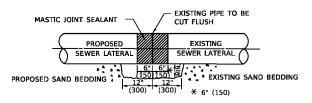


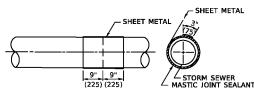
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

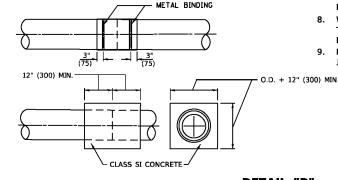
	DUNDEE AVENUE SITE DETAILS						F.A.U. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
SITE DETAILS								20-00189-00-PV		KANE	184	136
										CONTRACT	NO. 6	K68
ALE: SHEET 1 OF 1 SHEETS STA. TO STA.							ILLINOIS	FED. A	ID PROJECT			

DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



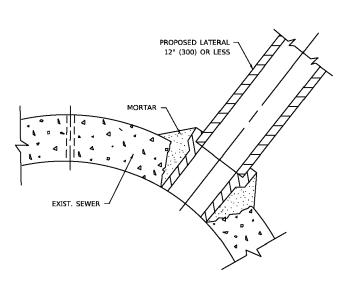




DETAIL "B" CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- 1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE
- 5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT. STARTING AT THE TOP OF THE PIPE.
- 6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES:

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS: A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

R. SHAH 09-09-94

R. SHAH 10-25-94

R. SHAH 06-12-96

K. SMITH 11-18-22

- 1. CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.
- 2. CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

- 1. TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.
- 2. REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.
- 3. TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.
- 4. CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER

TO STA.

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



ONSULTING ENGINEERS

USER NAME = Lawrence.DeManche DESIGNED -M. DE YONG DRAWN REVISED -LOT SCALE = 100.0000 ' / in. CHECKED REVISED 07-25-90 REVISED PLOT DATE = 11/18/2022

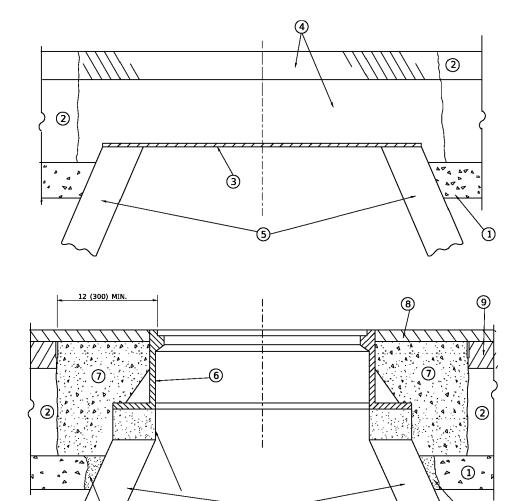
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

SHEETS KANE 184 137 BD500-01 (BD-07) CONTRACT NO. 61K68

SCALE: NONE

OF 1 SHEETS STA SHEET 1



DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

BRICK, MORTAR, OR CONC. ADJUSTING RINGS

NOTES

- 1. 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.
- 2. IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT 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.
- 4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX 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 PP-2* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- *UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

1 SUB-BASE GRANULAR MATERIAL

(6) FRAME AND LID (SEE NOTES)

2 EXISTING PAVEMENT

(7) CLASS PP-2* CONCRETE

3 36 (900) DIAMETER METAL PLATE

(8) PROPOSED HMA SURFACE COURSE

4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX

(9) PROPOSED HMA BINDER COURSE

(5) EXISTING STRUCTURE

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.

BASIS OF PAYMENT

- 1. REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
- 2. THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
- NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- 4. WHEN STRUCTURES ARE TO BE ADJUSTED OR 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 CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

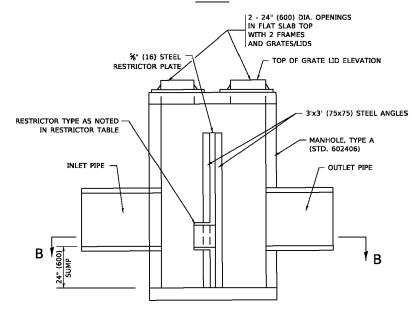


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMES AND LIDS ADJUSTMENT WITH MILLING

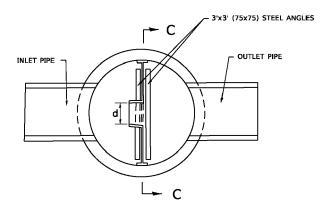
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

PLAN

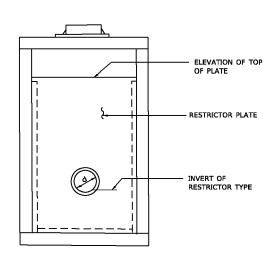


SECTION A-A

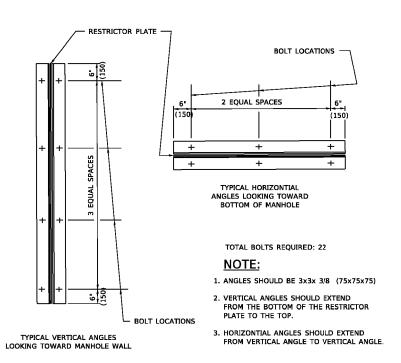
STATION AND OFFSET	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER in. (mm) (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW

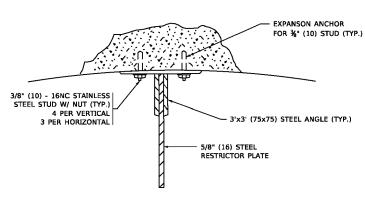


SECTION B-B



SECTION C-C





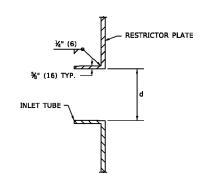
ANGLE FASTENER DETAIL

NOTES:

 ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.

BASIS OF PAYMENT:

- TO BE PAID FOR AS "MANHOLES ,TYPE A, 6 FT. {1.8 m}-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE" EACH
- 2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.



INLET TUBE DETAIL

	RESTRICTOR TYPE								
1	2	3	4	5	6				
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED				
LENGTH: X TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-½ DIA.	LENGTH: 2-½ DIA.					
C=.52	C=.61	C=.61	C=.73	C=.82	C=.98				

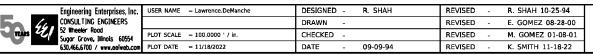
VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

STEEL ANGLE BOLTING DETAILS

SCALE: NONE

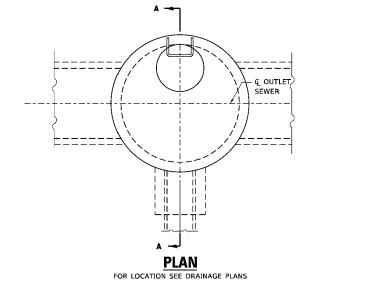
SHEET 1

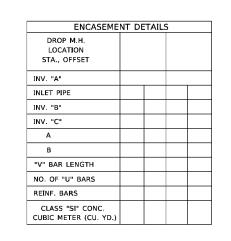
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

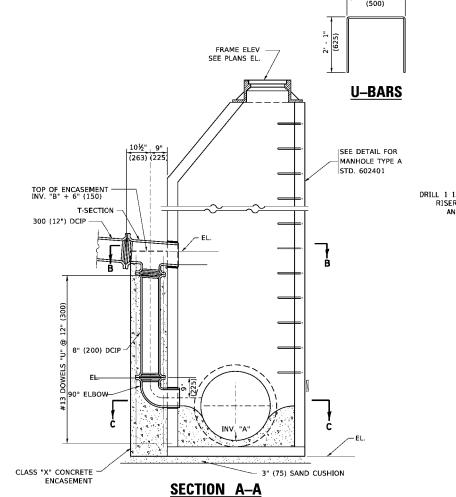


STAT	OF ILLINOIS	
DEPARTMENT	OF TRANSPORTATI	ON

MAN	HOLE W	F.A.U. RTE	SECTIO		
RESTR	ICTOR P	LATE		2525	20-00189-
IILJIII	101011 1	LAIL		В	D600-04 (I
OF 1	SHEETS	STA	TO STA.		T è







SECTION B-B DRILL 1 1/4 " (30) HOLE IN MANHOLE RISER WALLS, FILL WITH MORTAR AND INSERT DOWELS. (TYPICAL FOR ALL DOWELS) (550)

1' - 10" (550)

SECTION C-C

TYPE A1-1 MANHOLE WITH 1 DROP AND DEPTH UP TO 10' (3 m)

TYPE A1-2 " " 1 " " FROM 10' TO 15' (3 m TO 1.5 m)

TYPE A1-3 " " 1 " " FROM 15' TO 20' (1.5 m TO 6 m)

TYPE A1-4 " " 1 " " OVER 20' (6 m)

TYPE A2-1 MANHOLE WITH 2 DROPS AND DEPTH UP TO 10' (3 m)

TYPE A2-2 " 2 " " FROM 10' TO 15' (3 m TO 1.5 m)

TYPE A2-3 " 2 " " FROM 15' TO 20' (1.5 m to 6 m)

TYPE A2-4 " 2 " " OVER 20' (6 m)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

Engineering Enterprises, Inc CONSULTING ENGINEERS

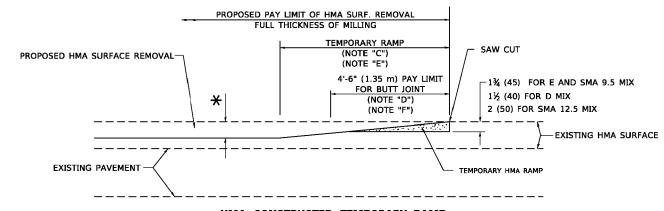
DESIGNED -REVISED -REVISED -DRAWN REVISED PLOT DATE = 3/27/2019 DATE 10-18-02 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

		_				D		F.A.U. RTE	SECT	TION		COUNTY	TOTAL SHEETS	SHEET NO.
	DROP MANHOLE DETAILS						2525	20-00189-00-PV		KANE	184	140		
								В	D600-05	(BD-16	6)	CONTRACT	NO. 6	1K68
CALE: NONE	SHEET	1	OF	1	SHEETS	STA.	TO STA.			ILLINOIS	FED. Al	D PROJECT		

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

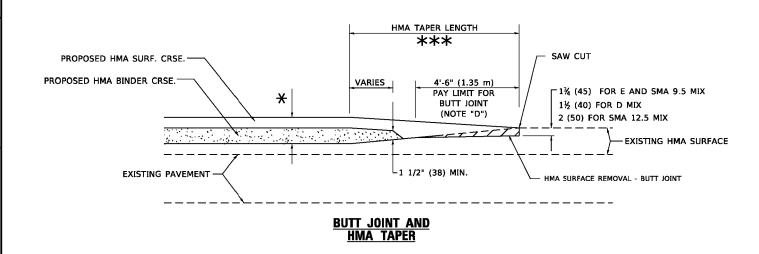


HMA CONSTRUCTED TEMPORARY RAMP

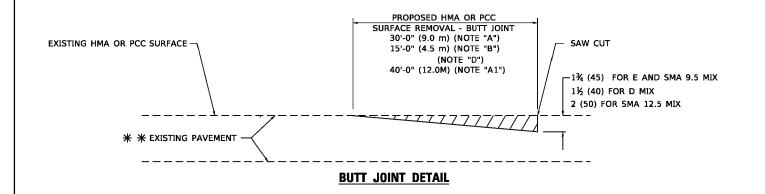
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

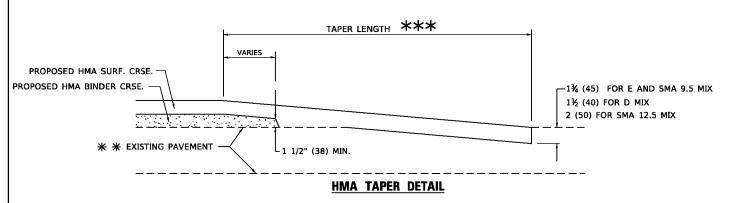
OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

GENERAL NOTES

A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

A1. INTERSTATES

B. MINOR SIDE ROADS

C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E. TAPER THE TEMP. RAMP AT A RATE OF 3' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER)
FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT"

THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

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



ses, Inc.	USER NAME	= Lawrence.DeManche	DESIGNED	-	M. DE YONG	REVISED	-	A. ABBAS 03-21-97
ERS			DRAWN	-		REVISED	-	M. GOMEZ 04-06-0
60554	PLOT SCALE	= 100.0000 ' / in.	CHECKED	-		REVISED	-	R. BORO 01-01-07
eiweb.com	PLOT DATE	= 11/18/2022	DATE	-	06-13-90	REVISED	-	K. SMITH 11-18-22

DEPARTMENT OF TRANSPORTATION

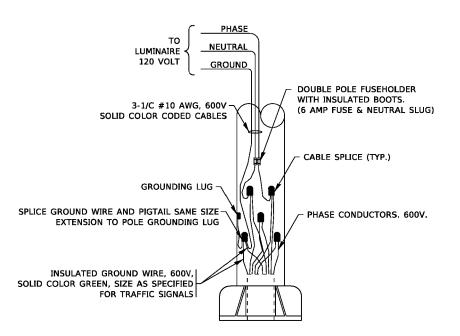
			BUTT HMA T/	JOINT A APER DI		
SCALE: NONE	SHEET	1	OF 1	SHEETS	STA.	TO STA.

KANE 184 141 BD400-05 BD-32 CONTRACT NO. 61K68

STATE OF ILLINOIS

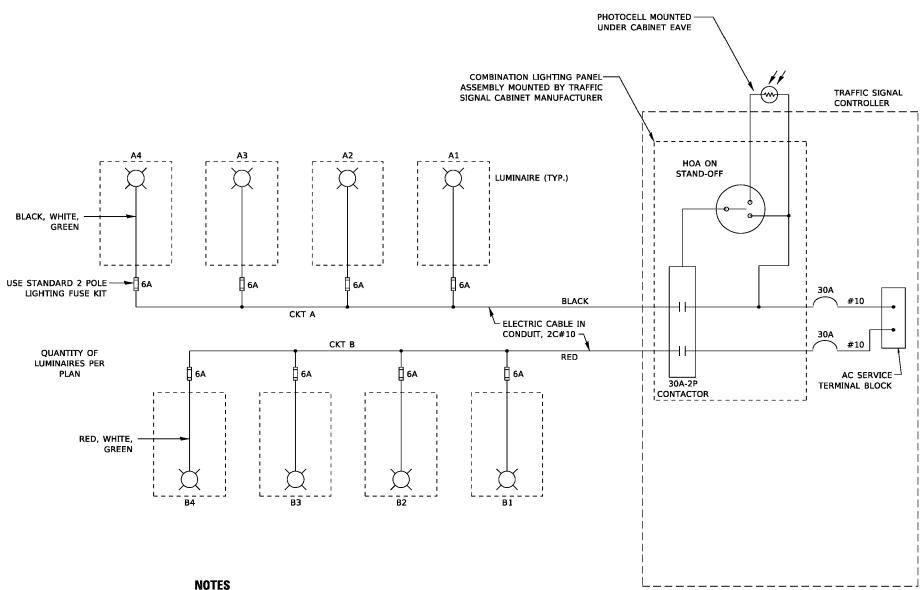
TYPICAL LIGHTING CIRCUIT

(NOT TO SCALE)



COMBINATION POLE WIRING DETAIL

(NOT TO SCALE)



- 1. 4 LUMINAIRES PER CIRCUIT, MAXIMUM.
- 2. TWO #10 (XLP-TYPE USE) CABLES TO BE USED FOR LIGHTING CIRCUITS.
- 3. ROUTE LIGHTING CIRCUITS IN TRAFFIC SIGNAL CONDUIT SYSTEM.
- 4. ALL SPLICES AND CONNECTIONS FOR ROADWAY LIGHTING SHALL BE AT POLE BASE ONLY.
- 5. FOR LIGHTING CIRCUITS, CONNECT TWO CIRCUIT BREAKERS TO AC SERVICE TERMINAL BLOCK.
- 6. ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED. (UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED).
- 7. THE H.O.A. SWITCH SHALL BE LABELED AS "LIGHTING CONTROL" WITH THE POSITIONS "AUTO", "OFF" AND "TEST" WITH ENGRAVED NAME PLATES.
- 8. LIGHTING CONNECTED TO UPS BYPASS CIRCUIT.
- 9. COMBINATION LIGHTING MUST BE INSTALLED PRIOR TO SIGNAL TURN ON.
- 10. LUMINAIRE VOLTAGE SHALL BE 120V
- 11. POLE WIRING & FUSE KITS ARE INCLUDED IN THE LUMINAIRE PAY ITEM.
- 12. THE UNDERGROUND EQUIPMENT GROUND WIRE IS SHOWN IN THE TRAFFIC SIGNAL PLANS AND IS INCLUDED IN THE SIGNAL PLANS. IT IS SHARED GROUND BETWEEN SIGNALS AND LIGHTING.

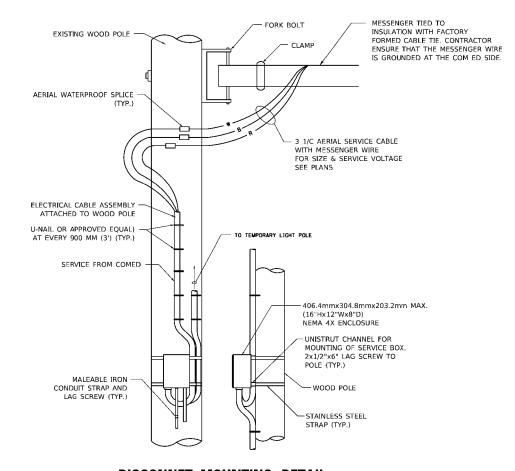
USER NAME = demanchelt DESIGNED -T.G. 4/12/2017 Engineering Enterprises, Inc ONSULTING ENGINEERS DRAWN REVISED -R. TOMSONS 3/22/18 PLOT SCALE = 100.0000 ' / in. CHECKED REVISED -T.G. 8/03/2021 PLOT DATE = 5/5/2022 DATE 08/18/2014 REVISED T.G. 5/05/2022

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SECTION SHEETS COMBINATION LIGHTING, TRAFFIC SIGNAL SCHEMATIC 20-00189-00-PV KANE 184 142 BE-240 CONTRACT NO. 61K68 SCALE: NONE SHEET 1 OF 1 SHEETS STA.

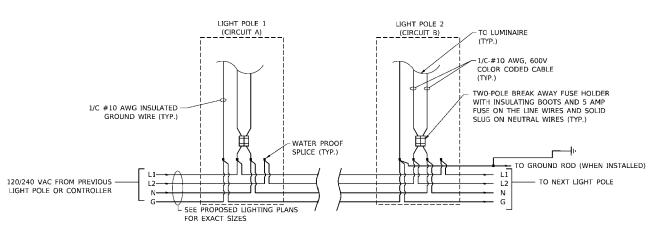
TEMPORARY SERVICE INSTALLATION DETAIL

NOT TO SCALE



DISCONNET MOUNTING DETAIL

NOT TO SCALE



LIGHT POLE WIRING DETAIL

NOT TO SCALE

SCALE: NONE

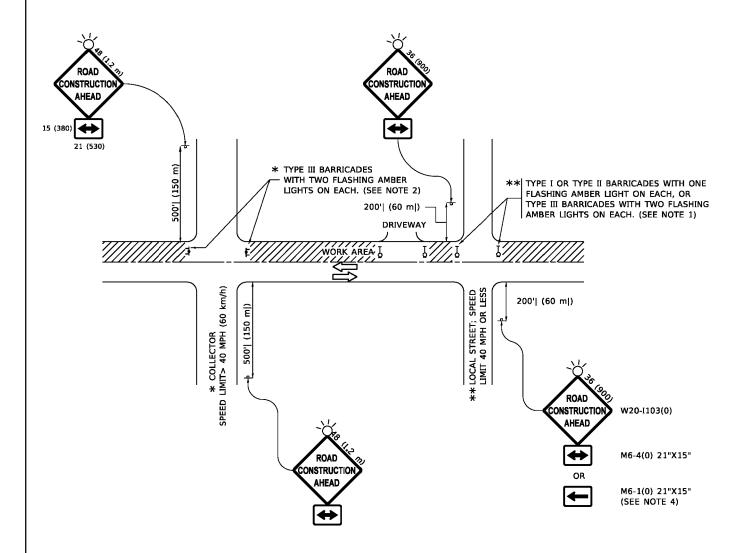


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 TEMPORARY
 LIGHTING
 AND
 TRAFFIC
 SIGNALS
 F.A.U. RTE.
 SECTION
 COUNTY
 TOTAL SHEET NO.

 FOR
 SINGLE LANE
 STAGING
 2525
 20-00189-00-PV
 KANE
 184
 143

 SHEET
 2
 OF 3
 SHEETS
 STA.
 TO STA.
 ILLINOIS FED. AID PROJECT



NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
 b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
 OF THE CLOSED PORTION.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
 4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
 BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

SCALE: NONE

- WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE
- 7. 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 inches (millimeters) unless otherwise shown.



Engineering Enterprises, Inc.

USER NAME = Lawrence. DeManche

DESIGNED - L.H.A.

REVISED - T. RAMMACHER 01-06-00

DRAWN - REVISED - A. SCHUETZE 07-01-13

Stagener Rood

Stagener Rood

PLOT SCALE = 100.0000 ' / in.

CHECKED - REVISED - A. SCHUETZE 09-15-16

630.466.6700 / www.eelveb.com

PLOT DATE = 5/3/2024

DATE - 06-89

REVISED - D. SENDERAK 05-03-24

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

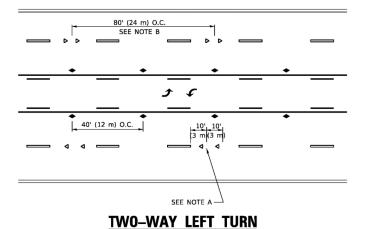
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SHEET 1 OF 1 SHEETS STA.

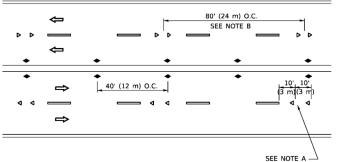
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

LANE REDUCTION TRANSITION

SEE FIGURE 3B-14 MUTCD



TWO-LANE/TWO-WAY

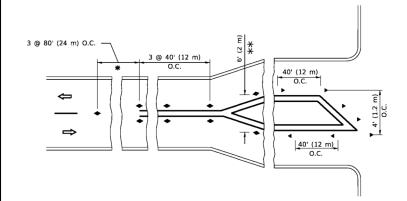


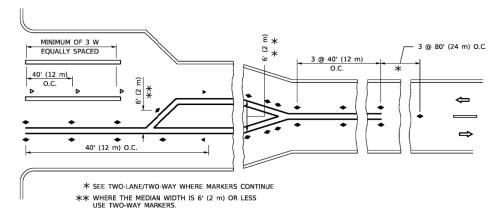


80' (24 m) O.C. SEE NOTE B | 10' 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 10' | 1

MULTI-LANE/UNDIVIDED







TURN LANES

GENERAL NOTES

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

LANE MARKER NOTES

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

DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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

Engineering Enterprises, Inc.

CONSULTING ENGINEERS

SQ Meeder Rood
Sugar Grove, Illinois 60554
630.466.6700 / www.selveb.com
PLI

 USER NAME
 = footemj
 DESIGNED
 REVISED
 - T. RAMMACHER 03-12-99

 DRAWN
 REVISED
 - T. RAMMACHER 01-06-00

 PLOT SCALE
 = 50.0000 '/ in.
 CHECKED
 REVISED
 C. JUCIUS 09-09-09

 PLOT DATE
 = 3/4/2019
 DATE
 REVISED
 C. JUCIUS 07-01-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS

RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

CALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

.035 0	KITCH WISC SHOWIN				
F.A.U. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.
2525	20-00189-00-PV		KANE	184	145
	TC-11		CONTRACT	NO. 61	K68
	ILLINOIS	FED. A	ID PROJECT		

SYMBOLS

YELLOW STRIPE

WHITE STRIPE

ONE-WAY AMBER MARKER

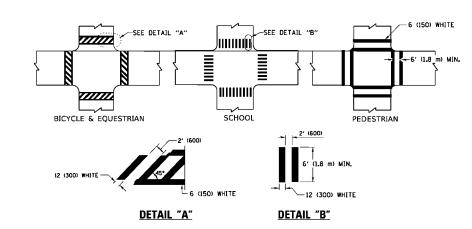
TWO-WAY AMBER MARKER

ONE-WAY CRYSTAL MARKER (W/O)

D. DALL = 1117/2024 1.03/20 Frid ODEL: Default ODEL: Default

EDGE OF PAVEMENT 2 (50) 4 (100) WHITE EDGE LINE 10' (3 m) 4 (100) WHITE LANE LINE 4 (100) WHITE LANE LINE 10' (3 m) 10' (3 m) 2 (50) 4 (100) WHITE LANE LINE MULTI-LANE DIVIDED

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

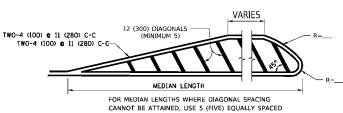
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

TWO-4 (100) YELLOW @ 11 (280) C-C 4' (1.2 m) OUTSIDE TO OUTSIDE OF LINES

TWO-4 (100) YELLOW @ 11 (280) C-C

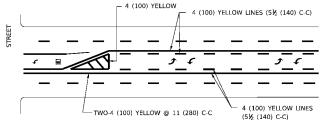
4' (1.2 m) WIDE MEDIANS ONLY

DIAGONAL LINES.

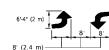


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

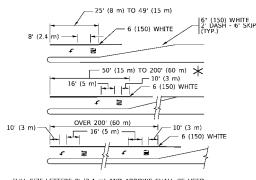


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS,



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING



The following field S^{*} (2.4 m) and arrows shall be used.

The following field S^{*} (2.4 m) and arrows shall be used.

The following field S^{*} (2.4 m) and arrows shall be used.

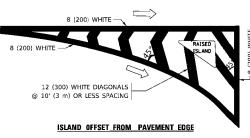
The following field S^{*} (2.4 m) and arrows shall be used.

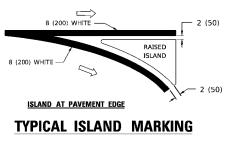
The following field S^{*} (2.4 m) and arrows shall be used.

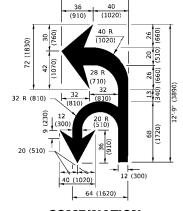
* TURN LANES IN EXCESS OF 400" (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

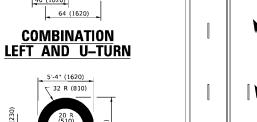
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING









LANE REDUCTION TRANSITION

D(FT)

580

665

750

SPEED LIMIT

45

50

55

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m FEACH "X"=54.0 SQ. FT. (5.0 m P
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

U-TURN

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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



Engineering Enterprises, Inc.
CONSULTING ENGINEERS
52 Theeler Rood
Sugar Crove, Illinois 60554
630,465,6700 / www.eelveb.com
PLOT DATE = 3/4/2019

 USER NAME
 = footemj
 DESIGNED DRAWN
 - EVERS
 REVISED
 - C. JUCIUS 09-09-09

 DRAWN
 - REVISED
 - C. JUCIUS 07-01-13

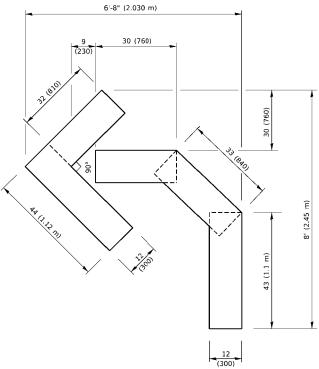
 PLOT SCALE
 = 50.0000 ° / in.
 CHECKED
 - REVISED
 - C. JUCIUS 12-21-15

 PLOT DATE
 = 3/4/2019
 DATE
 - 03-19-90
 REVISED
 - C. JUCIUS 04-12-16

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

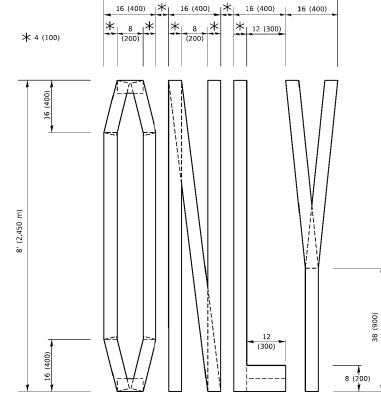
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SHEET 1 OF 2 SHEETS STA.



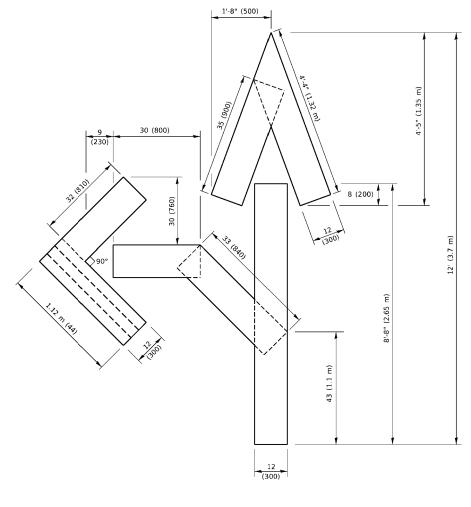
QUANTITY

4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.41 sq. m)



4 (100) LINE = 64.1 ft. (19.5 m) 21.4 sq. ft. (1.99 sq. m)

QUANTITY

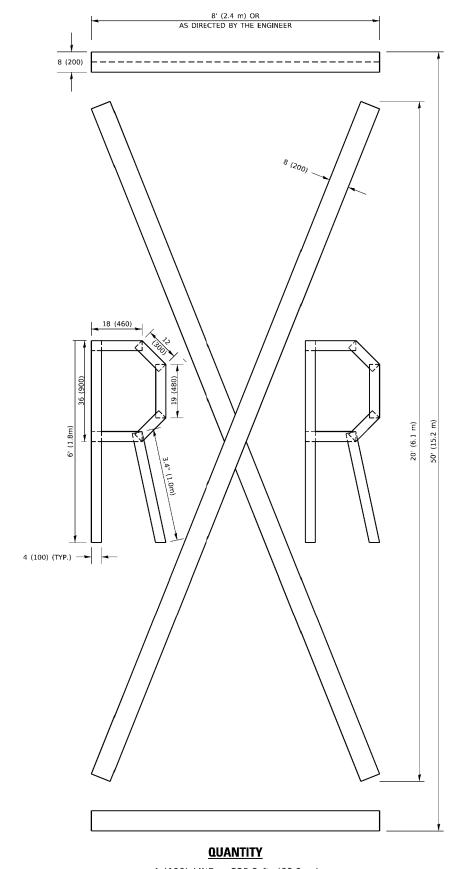


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

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



USER NAME = footemj	DESIGNED -	REVISED	- T. RAMMACHER 03-02-9
	DRAWN -	REVISED	- E. GOMEZ 08-28-00
PLOT SCALE = 50.0068 ' / in.	CHECKED -	REVISED	- E. GOMEZ 08-28-00
PLOT DATE = 3/4/2019	DATE - 09-18-94	REVISED	- A. SCHUETZE 09-15-16

4 (100)

U. E	SECT	ПОИ	COUNTY	TOTAL SHEETS	١٤	
25	20-0018	9-00-PV	KANE	184		
	TC-16		CONTRACT	NO. 61	lΚŧ	
		ILLINOI5	FED. A	ID PROJECT		

68 (1700)

54 (1350)

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 ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)

SCALE: NONE

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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



Engineering Enterprises, Inc. CONSULTING ENGINEERS

DESIGNED -R. MIRS 09-15-97 DRAWN B. MIRS 12-11-97 PLOT SCALE = 50.0000 ' / in. CHECKED REVISED -T. RAMMACHER 02-02-99 C. JUCIUS 01-31-07 DATE

DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD **INFORMATION SIGN** SHEET 1 OF 1 SHEETS STA.

TO STA.

20-00189-00-PV 184 TC-22 CONTRACT NO. 61K68

3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

 USER NAME
 e leysa
 DESIGNED
 REVISED
 C. JUCIUS 02-15-07

 PLOT SCALE
 = 50.0000 ' / in.
 CHECKED
 REVISED

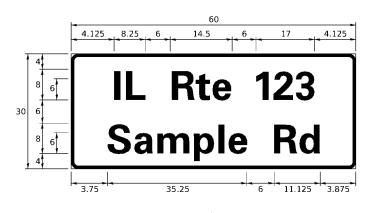
 PLOT DATE
 = 8/6/2021
 DATE
 REVISED

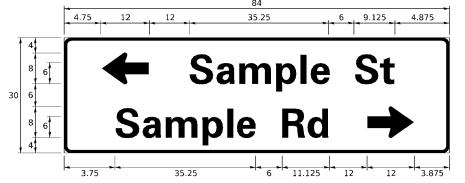
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| F.A.U. | SECTION | COUNTY | TOTAL | SHEET | SHEETS | STA. | TO STA. | SHEET | SECTION | COUNTY | TOTAL | SHEET | SHEET | STA. | SHEET | SECTION | SHEET | STA. | SHEET | STA. | SHEET | SECTION | SHEET | STA. | STA

SIGN PANEL – TYPE 1 OR TYPE 2

35.25 11.125 3.875 Sample





DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D OR C	-	1 OR 2	ZZ	

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH	(INCH)				
INAME	ADDREVATION	SERIES "C"	SERIES "D"				
AVENUE	Ave	15.000	18.250				
BOULEVARD	Blvd	17.125	20.000				
CIRCLE	Cir	11.125	13.000				
COURT	Ct	8. 250	9.625				
DRIVE	Dr	8.625	10.125				
HIGHWAY	Hwy	18.375	22.000				
ILLINOIS	IL	7. 000	8. 250				
LANE	Ln	9.125	10.750				
PARKWAY	Pkwy	23. 375	27.375				
PLACE	PΙ	7.125	7. 750				
ROAD	Rd	9.625	11.125				
ROUTE	Rte	12.625	14.500				
STREET	St	8.000	9.125				
TERRACE	Ter	12.625	14.625				
TRAIL	Tr	7. 750	9.125				
UNITED STATES	US	10.375	12.250				

GENERAL NOTES

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS: PARTS LISTING:

- J.O. HERBERT COMPANY, INC SIGN CHANNEL MIDLOTHIAN, VA

- WESTERN REMAC, INC.

WOODRIDGE, IL

SIGN SCREWS

BRACKETS

PART #HPN053 (MED. CHANNEL) 1/4" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER

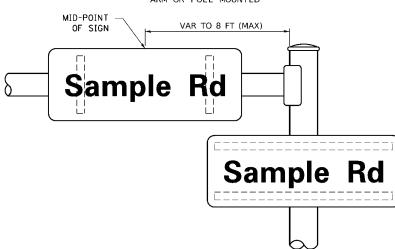
PART #HPN034 (UNIVERSAL)

CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

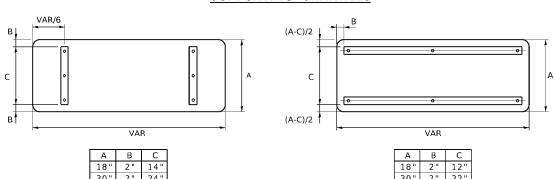
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION





SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

	FHWA SE	RIES "C"		FHWA SERIES "D"										
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACINO (INCH)							
Α	0.240	5.122	0.240	Α	0.240	6.804	0.240							
В	0.880	4.482	0.480	В	0.960	5.446	0.400							
С	0.720	4.482	0.720	С	0.800	5. 446	0.800							
D	0.880	4.482	0.720	D	0.960	5.446	0.800							
E	0.880	4.082	0.480	E	0.960	4.962	0.400							
F	0.880	4.082	0.240	F	0.960	4.962 5.446	0.240							
G	0.720 0.880	4. 482	0.720	G H	0.800	5.446	0.800							
H I	0.880	1.120	0.880	I	0.960 0.960	1.280	0.960							
J	0. 240	4. 082	0.880	J	0. 240	5.122	0. 960							
K	0.880	4. 482	0.480	K	0. 960	5. 604	0.400							
L	0.880	4. 082	0. 240	L	0.960	4. 962	0. 240							
M	0.880	5. 284	0.880	м	0.960	6. 244	0.960							
N	0.880	4. 482	0.880	N	0.960	5. 446	0.960							
0	0.720	4. 722	0. 720	0	0.800	5. 684	0.800							
Р	0.880	4.482	0.720	Р	0.960	5.446	0.240							
Q	0.720	4. 722	0.720	Q	0.800	5.684	0.800							
R	0.880	4.482	0.480	R	0.960	5.446	0.400							
S	0.480	4.482	0.480	S	0.400	5.446	0.400							
T	0.240	4.082	0.240	Т	0.240	4.962	0.240							
U	0.880	4.482	0.880	U	0.960	5.446	0.960							
٧	0.240	4.962	0.240	V	0.240	6.084	0.240							
W	0.240	6.084	0.240	W	0.240	7. 124	0.240							
X	0.240	4. 722	0.240	X	0.400	5.446	0.400							
Y 7	0.240	5. 122 4. 482	0.240	Y	0.240	6. 884 5. 446	0.240							
Z	0.480	3.842	0.480	Z	0.400	4.562	0.400							
a b	0.320 0.720	4. 082	0.480	a b	0.400	4.802	0.720							
c	0. 120	4.002	0. 240	С	0.480	4. 722	0.240							
d	0.480	4. 082	0.720	d	0.480	4. 802	0.800							
e	0.480	4. 082	0.320	e	0.480	4. 722	0.320							
f	0.320	2.480	0.160	f	0.320	2.882	0.160							
g	0.480	4.082	0.720	g	0.480	4. 802	0.800							
h	0.720	4.082	0.640	h	0.800	4. 722	0.720							
i	0.720	1.120	0.720	i	0.800	1.280	0.800							
j	0.000	2.320	0.720	j	0.000	2.642	0.800							
k	0.720	4.322	0.160	k	0.800	5.122	0.160							
I	0.720	1.120	0.720		0.800	1.280	0.800							
m	0.720	6.724	0.640	m	0.800	7. 926	0.720							
n	0.720	4.082	0.640	n	0.800	4. 722	0.720							
0	0.480	4.082	0.480	0	0.480	4.882	0.480							
p	0.720	4.082	0.480	р	0.800	4.802	0.480							
q	0.480	4.082	0.720	q	0.480	4.802	0.800							
s s	0.720 0.320	2. 642 3. 362	0.160	r s	0.800 0.320	3. 042 3. 762	0.160							
†	0.080	2. 882	0. 240	t	0.080	3. 202	0.240							
u	0.640	4. 082	0.720	u	0.720	4. 722	0.800							
v	0.160	4. 722	0.160	v	0.160	5. 684	0.160							
w	0.160	7. 524	0.160	w	0.160	9.046	0.160							
×	0.000	5. 202	0.000	x	0.000	6. 244	0.000							
У	0.160	4.962	0.160	у	0.160	6.004	0.160							
Z	0.240	3. 362	0.240	Z	0.240	4.002	0.240							
1	0.720	1.680	0.880	1	0.800	2.000	0.960							
2	0.480	4.482	0.480	2	0.800	5.446	0.800							
3	0.480	4.482	0.480	3	1.440	5.446	0.800							
4	0.240	4.962	0.720	4	0.160	6.004	0.960							
5	0.480	4.482	0.480	5	0.800	5.446	0.800							
6	0.720	4.482	0.720	6	0.800	5.446	0.800							
7	0.240	4. 482	0.720	7	0.560	5.446	0.560							
8	0.480	4. 482	0.480	8	0.800	5.446	0.800							
9	0.480	4. 482	0.480	9	0.800	5.446	0.800							
0	0.720	4. 722	0.720	0	0.800	5.684	0.800							
-	0.240	2.802	0.240	-	0.240	2.802	0.240							

CONSULTING ENGINEERS

	USER NAME = footemj	DESIGNED	-	LP/IP	REVISED	-	LP 07/01/2015
		DRAWN	-	LP	REVISED	-	
	PLOT SCALE = 50.0000 ' / in.	CHECKED	-	IP	REVISED	-	
n	PLOT DATE = 3/4/2019	DATE	-	10/01/2014	REVISED	-	

		DIS	STRICT O	NE		F.A.U. RTE	SECTION		COUNTY	TOTAL SHEETS	SHE
M	MAST ARM	MOU	UTED STI	REFT	NAME SIGNS	2525	20-00189-00-PV		KANE	184	15
		MICOI		ILLI	WAINE SIGNS		TS-02		CONTRACT	NO. 61	1K68
	SHEET	OF	SHEETS	STA	TO STA		TI I TNOTC	EED AT	D DDOJECT		

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

Engineering Enterprises, Inc. CONSULTING ENGINEERS

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF

USER NAME = footemj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

STAT	OF ILLINOIS	
DEPARTMENT	OF TRANSPORTA	ATION

EMERGENCY VEHICLE PREEMPTION													
SEQUENCE	OF OPER	ATION	- MAIN S	STREET ANI	D CROSS STREET	2525							
SCALE:	SHEET 1	OF :	2 SHEETS	STA.	TO STA.								

PREEMPTOR PREEMPTOR NUMBER 3 NUMBER 4

PROPOSED	SEQUENCE	0F	OPERATION

PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION

MOVEMENT		ر _ ء	-	l		4 ·····▶ 6 1			5 2 4			2-	▶ ← 6			7	3			4	<u></u> ↑	†				1	⁷			1 1	†		F
PHASE		1 -	- 5			1 + 6			2 + 5			2	+ 6			3 -	+ 7				3 + 8					4 + 7				4 -	⊦ 8		L
INTERVAL	1	2	3	4	5	6	7	8	9	10	11	12	13A	13B	14	15	16	17	18	19	20A	20B	21	22	23	24A	24B	25	26	27	28A	28B	A S
CHANGE TO		1+6	2+5	2+6	•/	•/	2+6	•/	•/	2+6			3- 4-	+7 +8 +7 +8		1+5 1+6 2+5 2+6 4+8	3+8	4+7	*/	*/	1+ 1+ 2+ 2+	-6 ⊦5	4+8	•/	•/	1+ 1+ 2- 2-	⊦6 ⊦5	4+8			1+ 1+ 2+ 2+	⊦6 ⊦5	Н
MAIN STREET E/B END MAST ARM AND FAR LEFT SIGNALS	R ⊸ G	R - Y	R G	R —Y	R	R	R	G - G	G - G	G - Y	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
MAIN STREET E/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
MAIN STREET W/B END MAST ARM AND FAR LEFT SIGNALS	R G	R G	R Y	R — Y	G - G	G - G	G - Y	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
MAIN STREET W/B FAR RIGHT SIGNAL	R	R	R	R	G	G	G	R	R	R	G	G	Υ	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
CROSS STREET S/B END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R G	R ——Y	R • Y	R G	R	R	R	R	R	G G	G G	Υ	R	G Y	G	G	Υ	R	R
CROSS STREET S/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	G	G	Υ	R	R
CROSS STREET N/B END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R ⊸ G	R Y	R → G	R → Y	G G	G G	Υ	R	G - Y	R	R	R	R	R	G	G	Υ	R	R
CROSS STREET N/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Υ	R	G	R	R	R	R	R	G	G	Y	R	R
PEDESTRIAN SIGNALS CROSSING CROSS STREET ON NORTHSIDE OF MAIN STREET	Н	н	Н	н	*Р	**FH	н	н	н	Н	*Р	**FH	н	н	Н	н	н	Н	Н	н	н	Н	Н	н	н	Н	н	н	н	н	н	н	D
PEDESTRIAN SIGNALS CROSSING CROSS STREET ON SOUTHSIDE OF MAIN STREET	н	н	н	н	н	н	н	*Р	**FH	н	*Р	**FH	н	н	Н	н	н	Н	Н	н	н	н	н	н	н	н	н	н	н	н	н	н	A
PEDESTRIAN SIGNALS CROSSING MAIN STREET ON EASTSIDE OF CROSS STREET	Н	н	н	н	н	н	н	Н	н	Н	н	н	н	Н	Н	н	н	Н	*Р	**FH	н	н	н	н	н	н	н	н	*Р	**FH	н	н	R
PEDESTRIAN SIGNALS CROSSING MAIN STREET ON WESTSIDE OF CROSS STREET	н	н	н	н	н	н	н	н	н	н	н	н	н	н	н	н	н	н	н	Н	н	н	н	*Р	**FH	н	н	н	*P	**FH	н	н	K

PREEMPTOR PREEMPTOR PREEMPTOR NUMBER 3 NUMBER 4 NUMBER 2

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	!	5		3	1	11	14	1	8	22	2	:6									
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER														:	2	:	3					
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1)	1K	1L	1M	1N	1P	1Q	1R	15	2	3	4	5	CLEAR TO
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	2	1E	2	1G	2	2	1K	2	2	1N	2	1Q	2	15	2	3	4	5		NORMAL SEQUENCE
MAIN STREET E/B END MAST ARM AND FAR LEFT SIGNALS	R → Y	Y	R	R	R	Υ	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	Δ
MAIN STREET E/B FAR RIGHT SIGNAL	R	Υ	R	R	R	Υ	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	Δ
MAIN STREET W/B END MAST ARM AND FAR LEFT SIGNALS	R Y	R	R	Υ	R	Υ	R	R	R	R	R	R	R	Υ	R	R	R	R	R	R	G - G	Δ
MAIN STREET W/B FAR RIGHT SIGNAL	R	R	R	Y	R	Y	R	R	R	R	R	R	R	Υ	R	R	R	R	R	R	G	Δ
CROSS STREET S/B END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R -≪ G	R	R	G - G	G	G	R	R	G	G	G G	Y	R	R	Δ
CROSS STREET S/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	R	R	G	G	G	R	R	G	G	G	Y	R	R	Δ
CROSS STREET N/B END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R ⊸ Y	Y	R	R	Y	R	R	R	Y	R	R	R	R	R	Δ
CROSS STREET N/B FAR RIGHT SIGNAL	R	R	R	R	R	R	R	R	Υ	R	R	Υ	R	R	R	Υ	R	R	R	R	R	Δ
PEDESTRIAN SIGNALS CROSSING CROSS STREET ON NORTHSIDE OF MAIN STREET	н	FH	н	н	н	FH	н	н	н	н	н	н	н	н	н	н	н	Н	н	н	н	Δ
PEDESTRIAN SIGNALS CROSSING CROSS STREET ON SOUTHSIDE OF MAIN STREET	Н	н	н	FH	Н	FH	н	н	Н	н	н	н	н	н	н	н	н	Н	н	Н	н	Δ
PEDESTRIAN SIGNALS CROSSING MAIN STREET ON EASTSIDE OF CROSS STREET	н	н	н	н	Н	н	н	н	FH	н	н	FH	н	Н	н	Н	Н	Н	н	Н	н	Δ
PEDESTRIAN SIGNALS CROSSING MAIN STREET ON WESTSIDE OF CROSS STREET	н	Н	Н	Н	Н	Н	н	Н	н	н	FH	FH	Н	Н	Н	Н	Н	н	Н	Н	Н	Δ
INTERNALLY ILLUMINATED NRT SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	Δ
INTERNALLY ILLUMINATED NLT SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	Δ

- * TO APPEAR ONLY UPON PUSHBUTTON ACTIVATION
- ** FLASHING " T'S TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.
- THIS" MOOR FLASHING" MOOTH INTERVAL MAY FINISH TIMIMG IN THE
- ⊕ BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "A" OR FLASHING "H" INTERVALS.

 "A" "AND FLASHING "H" "TIMINGS TO BE SET ONLY ON PHASES WHERE
 "A" "AND FLASHING" "ARE INDICATED IN THE SEQUENCE OF OPERATION.
- P = ILLUMINATED PERSON = WALK
- FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
- H = ILLUMINATED SOLID HAND = DON'T WALK

PHASE 2+6 SHALL BE PLACED ON RECALL.

NLT = "NO LEFT TURN" OR



NRT = "NO RIGHT TURN" OR



A RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

Engineering Enterprises, Inc.
CONSULTING ENGINEERS
52 Wheeler Rood
Sugar Crove, Illinois 60554
65 700 (Amy selve) con

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEQUENCE OF OPERATION - MAIN STREET AND CROSS STREET

ALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE. SECTION COUNTY TOTAL SHEETS NO. 2525 20-00189-00-PV KANE 184 152

TS-08 CONTRACT NO. 61K68

| ILLINOIS | FED. AID PROJECT

