



**ILLUMINATION GENERAL NOTES:**

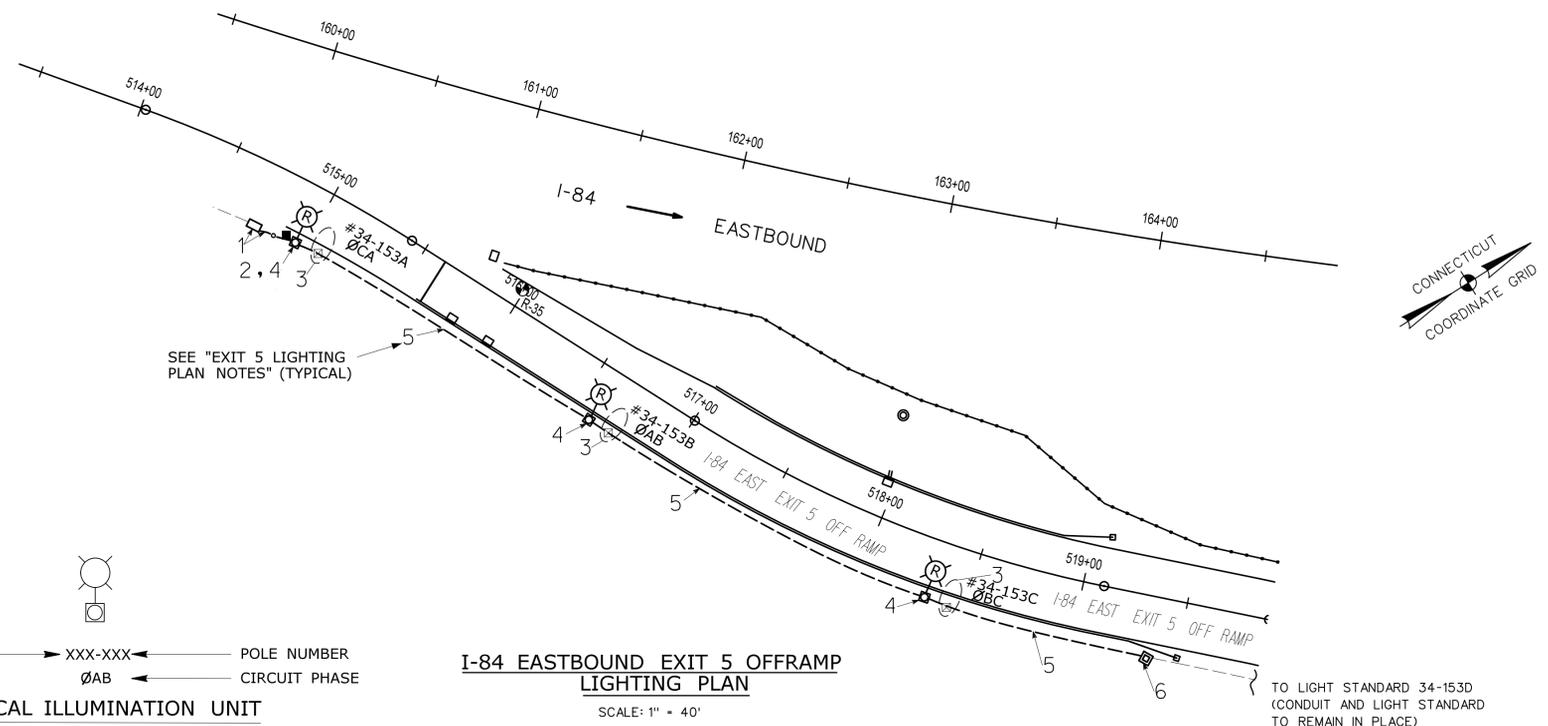
- 1) THE CONTRACTOR SHALL ORGANIZE HIS WORK SO THAT ANY PORTION OF THE ROADWAY WHICH HAS EXISTING ILLUMINATION AND IS OPEN FOR USE REMAINS LIGHTED. THE LIGHTING MAY CONSIST OF: 1) EXISTING LIGHTING, 2) NEW LIGHTING, 3) TEMPORARY LIGHTING, OR ANY COMBINATION OF THE ABOVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STAGE THE INSTALLATION OF NEW LIGHTING SO THAT ALL ROADWAYS WITH EXISTING ILLUMINATION ARE CONTINUOUSLY LIGHTED. IF IT IS NECESSARY TO INSTALL TEMPORARY POLES, LIGHTS OR CIRCUITRY, THAT WORK SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER PRIOR TO INSTALLATION, AND WILL BE PAID FOR AT THE BID UNIT PRICE FOR THESE ITEMS. WHERE INSTALLED, TEMPORARY LIGHTING SHALL BE SPACED SO AS TO MAINTAIN EXISTING ROADWAY LIGHTING AND UNIFORMITY LEVELS. THE CONTRACTOR SHALL MAINTAIN ALL LIGHTING THROUGHOUT THE DURATION OF THE PROJECT. SEE SECTION 10.00 FOR SPECIFIC REQUIREMENTS.
- 2) ALL ELECTRICAL WORK SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, CONNECTICUT STANDARD SPECIFICATIONS, AND WHERE APPLICABLE, UTILITY COMPANY REGULATIONS.
- 3) ALL NEW "COBRA HEAD" TYPE ROADWAY LUMINAIRES SHALL HAVE A MEDIUM, FULL-CUTOFF (FLAT GLASS REFRACTOR) TYPE II DISTRIBUTION.
- 4) CONDUCTORS SHALL BE COPPER, INSULATION TYPE XHHW AND RATED FOR 600 VOLTS. CONDUCTORS SHALL BE FACTORY COLOR CODED USING THE SAME CODE THROUGHOUT EACH LIGHTING CIRCUIT. THREE PHASE CIRCUIT COLORS SHALL BE AS FOLLOWS: BLUE, BLACK, RED.
- 5) INSTALL ONE NUMBER 8 BARE COPPER GROUNDING CONDUCTOR THROUGHOUT ALL LIGHTING CIRCUITS.
- 6) TAPE ALL UNUSED CONDUCTORS.
- 7) LOCATION OF EXISTING ILLUMINATION ON PLANS IS APPROXIMATE.
- 8) FOR EXISTING ILLUMINATION SEE STATE PROJECTS 34-189.
- 9) THE CONTRACTOR SHALL ABIDE BY THE CONNDOT LOCKOUT/TAGOUT PROCEDURES WHEN ACCESS TO A CIRCUIT IS REQUIRED. THE CONTRACTOR SHALL CONTACT THE DISTRICT ELECTRICAL SUPERVISOR AT TELEPHONE (203) 264-9596, WHEN ACCESS TO A CIRCUIT IS REQUIRED.
- 10) IN AREAS WHERE EXISTING LIGHT STANDARDS ARE TO BE REMOVED, EXISTING UNDERGROUND CABLE IN DUCT OR NON-METALLIC SHEATHED CABLE WHICH WILL NO LONGER BE USED, SHALL BE DISCONNECTED AND ABANDONED IN PLACE.
- 11) LIGHT STANDARD FOUNDATIONS LOCATED IN SHOULDER AREAS SHALL BE INSTALLED 4' BEHIND EDGE OF SHOULDER OR FACE OF CURB TO CENTERLINE OF FOUNDATION UNLESS OTHERWISE INDICATED.
- 12) WHERE EXISTING R.M.C. (IN STRUCTURE, TRENCH, OR UNDER ROADWAY) IS TO BE RE-USED, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING CONDUCTORS WITHIN THE CONDUIT. THE CONTRACTOR SHALL ALSO REMOVE ALL CONDUCTORS FROM EXISTING CONDUIT IN BRIDGE PARAPETS OR ROADWAY CROSSINGS WHERE THESE CONDUITS WILL NOT BE RE-USED.
- 13) PRIOR TO TRENCHING THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AND HAVE ALL EXISTING UNDERGROUND ELECTRICAL FACILITIES PROPERLY MARKED OUT INCLUDING BUT NOT LIMITED TO: TRAFFIC SIGNAL AND INTERCONNECT CABLES, INCIDENT MANAGEMENT SYSTEM AND FIBER OPTIC CABLES, AND EXISTING ILLUMINATION CIRCUITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL EXISTING FACILITIES DAMAGED BY HIS TRENCHING OPERATION.
- 14) EXISTING SERVICE LOCATIONS: 480V, 3Ø, 3 WIRE  
EXIT 5 CABINET IS LOCATED AT SCUPPO ROAD AND FAIRLAWN AVENUE, DANBURY.  
EXIT 6 CABINET IS LOCATED ON GREAT PLAIN ROAD, DANBURY.

**LEGEND**

-  EXISTING, RELOCATED LIGHT STANDARD WITH LUMINAIRE
-  ROADWAY LUMINAIRE (200 WATT H.P.S., M-FC-II, 30' MOUNTING HEIGHT, 6' BRACKET)
-  EXISTING LIGHT STANDARD TO REMAIN
-  ALUMINUM LIGHT STANDARD AND FOUNDATION (LIGHT STANDARD IS EXISTING, TO BE RELOCATED WHERE INDICATED BY SYMBOL)
-  EXISTING CONCRETE HANDHOLE TO REMAIN
-  REMOVE CONCRETE LIGHT STANDARD BASE EXISTING LIGHT STANDARD, TO BE REMOVED AND RELOCATED WHERE NOTED.
-  HANDHOLE (EXISTING, TO BE REMOVED)
-  CONCRETE HANDHOLE - TYPE 1
-  18" X 12" X 8" CAST IRON JUNCTION BOX
-  EXISTING 18" X 12" X 8" CAST IRON JUNCTION BOX
-  2" RIGID METAL CONDUIT UNDER ROADWAY (3 #2, 1 #8 GND)
-  2 1/2" RMC CONDUIT IN TRENCH (3 #2, 1 #8 GND) UNLESS OTHERWISE NOTED
-  EXISTING CONDUIT AND CIRCUITS TO REMAIN
-  CABLE IN DUCT (3 #2 CONDUCTORS) WITH 1 #8 BARE CU. GND.
-  2" RMC SURFACE MOUNTED (3 #2, 1 #8 GND)
-  EXISTING RMC UNDER ROADWAY TO BE ABANDONED
-  EXISTING RMC AND CONDUCTORS UNDER ROADWAY TO REMAIN

**EXIT 5 LIGHTING PLAN NOTES:**

- 1) DISCONNECT AND PULL BACK CIRCUIT CONDUCTORS FROM EXISTING HANDHOLE TO LB FITTING LOCATED AT SOUTHEAST WINGWALL.
  - REMOVE AND DISPOSE OF THE EXISTING 2" RMC LOCATED BETWEEN THE EXISTING HANDHOLE AT STA. 514+80 AND THE FIRST CONDUIT SPLICE POINT ON WINGWALL.
  - INSTALL 18" X 12" X 8" CAST IRON JUNCTION BOX ON WINGWALL. CONNECT EXISTING CONDUIT FEED TO JUNCTION BOX AND INSTALL 2" RMC FROM JUNCTION BOX TO NEW LIGHT STANDARD FOUNDATION.
  - SPLICE CIRCUIT CONDUCTORS IN JUNCTION BOX. EXTEND AND CONNECT CONDUCTORS FROM JUNCTION BOX TO RELOCATED LIGHT STANDARD #34-153A FOUNDATION.
- 2) REMOVE AND DISPOSE OF EXISTING HANDHOLE. INSTALL NEW LIGHT STANDARD FOUNDATION AT FORMER HANDHOLE LOCATION.
- 3) REMOVE LIGHT STANDARD FROM EXISTING FOUNDATION (RELOCATE LIGHT STANDARD - SEE NOTE #4, BELOW).
  - REMOVE AND DISPOSE OF LIGHT STANDARD FOUNDATION. REMOVE EXISTING CIRCUIT CONDUCTORS BETWEEN THE REMOVED LIGHT STANDARD FOUNDATIONS.
- 4) INSTALL LIGHT STANDARD FOUNDATION 5' TO WEST OF EXISTING FOUNDATION LOCATION (TYPICAL). SET FOUNDATION 1 1/2" ABOVE FINAL GRADE.
  - RELOCATE LIGHT STANDARD ONTO NEW FOUNDATION AND MAKE ALL CIRCUIT CONNECTIONS.
- 5) REMOVE AND DISPOSE OF THE EXISTING ABANDONED SURFACE MOUNTED CONDUIT LOCATED BETWEEN THE LIGHT STANDARDS MOUNTED ON THE BACK SIDE OF THE JERSEY BARRIER.
  - INSTALL CABLE IN DUCT (3 NO. 2 CONDUCTORS) BETWEEN RELOCATED LIGHT STANDARD FOUNDATIONS.
- 6) LAST LIGHT STANDARD ON RAMP SHALL REMAIN IN PLACE (LIGHT STANDARD NUMBER 34-153D).
  - INTERCEPT EXISTING CONDUIT AND CONDUCTORS AT APPROXIMATE STA. 519+35 WITH NEW CONCRETE HANDHOLE.
  - ROUTE CABLE IN DUCT FROM INTERCEPTED POINT AT APPROXIMATE STA. 519+35 TO THE RELOCATED LIGHT STANDARD (34-153C). MAKE ALL REQUIRED CIRCUIT CONNECTIONS.

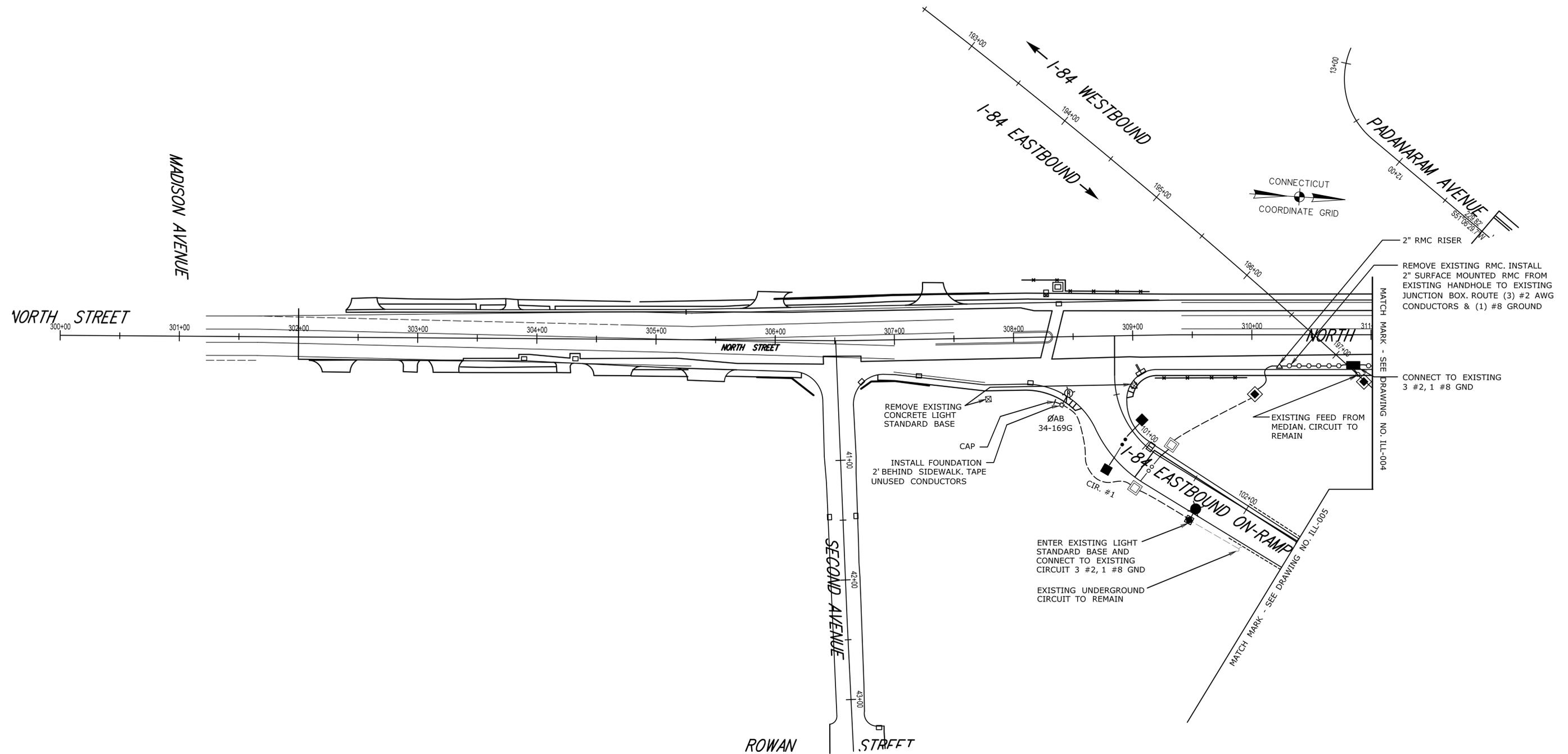


TOWN → XXX-XXX ← POLE NUMBER  
ØAB ← CIRCUIT PHASE  
**TYPICAL ILLUMINATION UNIT**

**I-84 EASTBOUND EXIT 5 OFFRAMP LIGHTING PLAN**  
SCALE: 1" = 40'

TO LIGHT STANDARD 34-153D (CONDUIT AND LIGHT STANDARD TO REMAIN IN PLACE)

REV. DATE	DESCRIPTION REVISIONS	SHEET. NO.	DIMENSIONS ARE IN ENGLISH AND METRIC (mm) UNITS. WHERE NECESSARY, CERTAIN METRIC DIMENSIONS HAVE BEEN ROUNDED OFF. METRIC CONDUIT SIZES HAVE BEEN ROUNDED TO THE NEAREST 5mm	DESIGNER: FC			PROJECT TITLE: <b>I-84 INTERCHANGE 5 &amp; 6 IMPROVEMENTS</b>	TOWN: <b>DANBURY</b>	PROJECT NO.: <b>34-313</b>
				DRAFTER: FC				DRAWING TITLE: <b>ILLUMINATION PLAN</b>	DRAWING NO.: <b>ILL-02</b>
			AS NOTED	CHECKED BY: MB	ENGINEER: OFFICE OF ENGINEERING		CADD		SHEET NO.:
				DATE CHECKED: 8/8/08	APPROVED BY:		PLOTTED		



REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER:  
FC  
CHECKED BY:  
MSB  
SCALE IN FEET  
0 40 80  
SCALE 1"=40'

**STATE OF CONNECTICUT**  
DEPARTMENT OF TRANSPORTATION

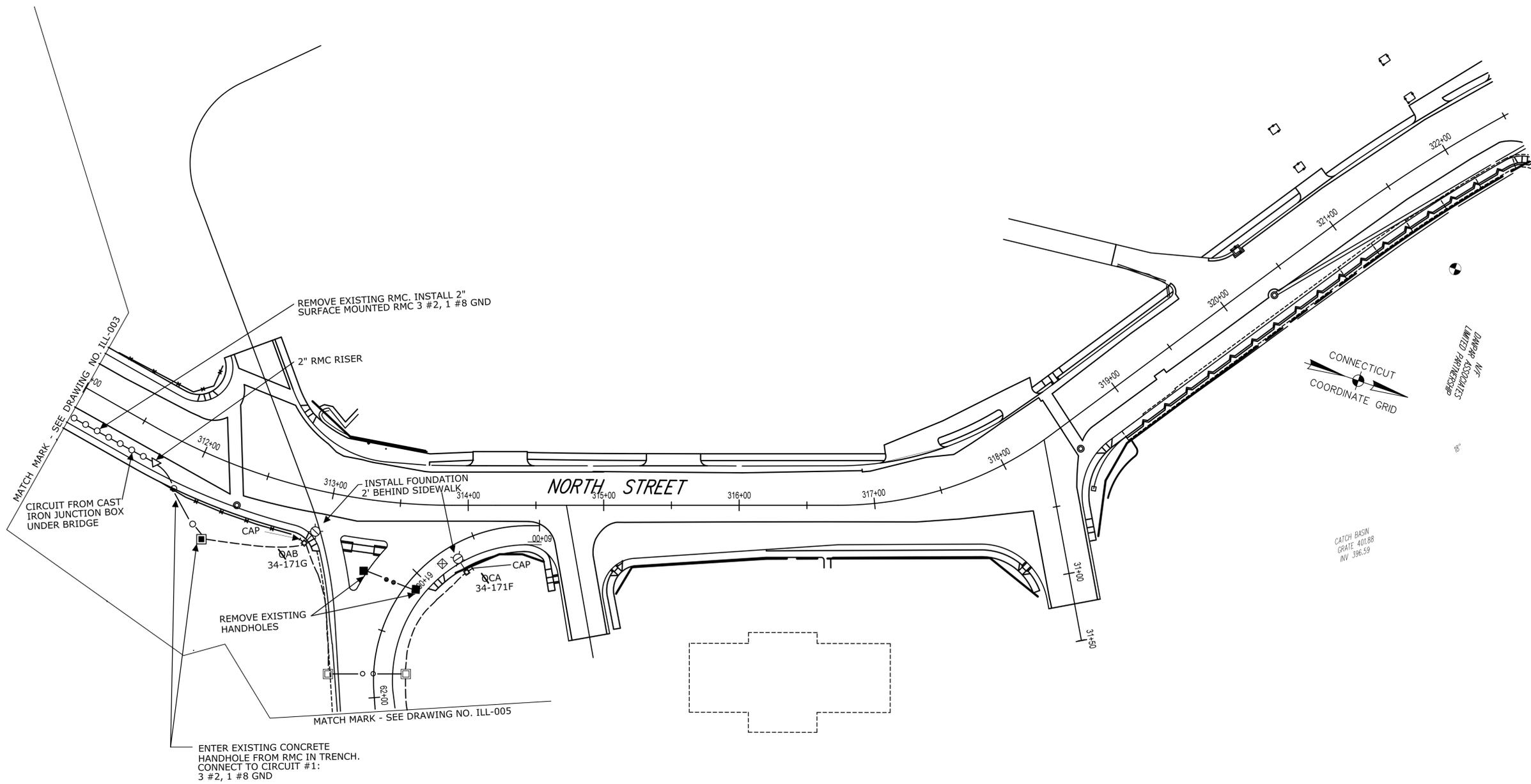
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APPROVED BY: CHIEF ENGINEER, P.E.      DATE:     



PROJECT TITLE:  
**I-84 INTERCHANGE 5 & 6 IMPROVEMENTS**

TOWN: **DANBURY**  
DRAWING TITLE:  
**ILLUMINATION PLAN**

PROJECT NO.  
**34-313**  
DRAWING NO.  
**ILL-03**  
SHEET NO.



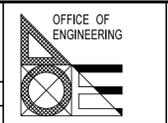
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 SCALE 1"=40'


**STATE OF CONNECTICUT**  
 DEPARTMENT OF TRANSPORTATION

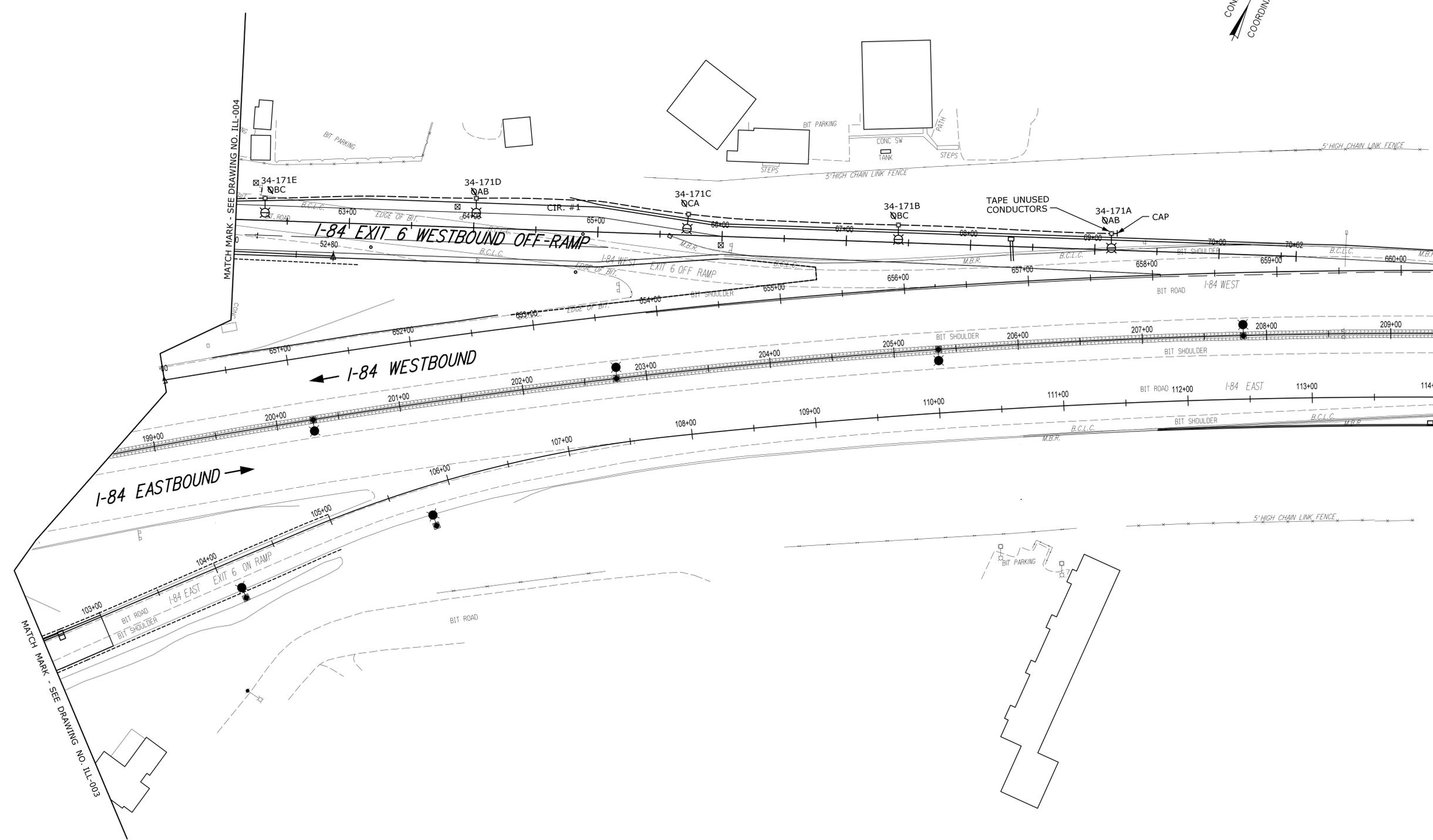
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PROJECT TITLE:  
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TOWN: **DANBURY**  
 DRAWING TITLE:  
**ILLUMINATION PLAN**

PROJECT NO.: **34-313**  
 DRAWING NO.: **ILL-04**  
 SHEET NO.:



REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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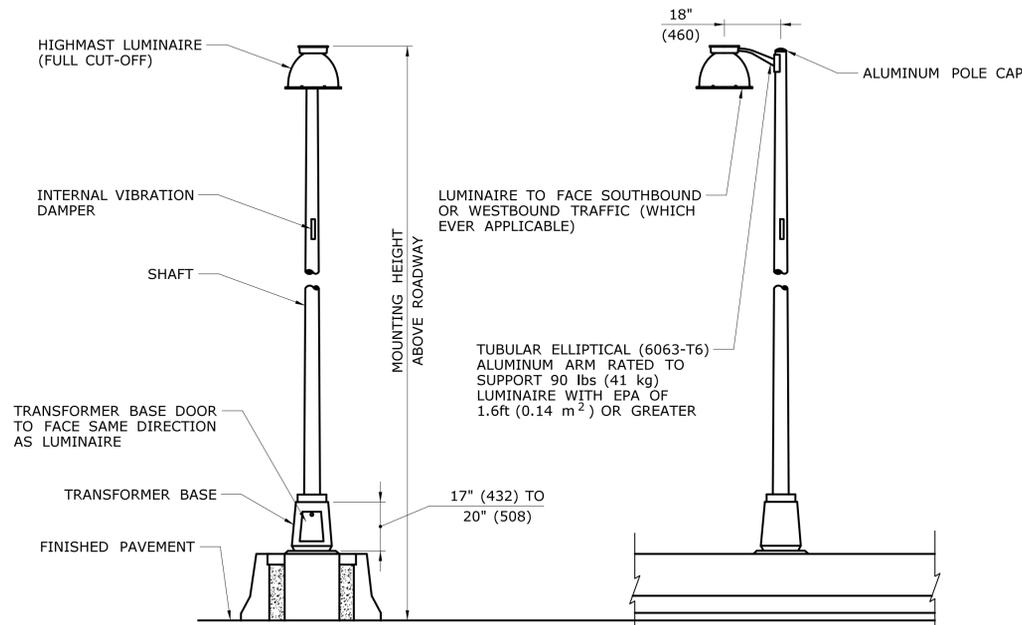
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 DEPARTMENT OF TRANSPORTATION

ENGINEER: OFFICE OF ENGINEERING  
 APPROVED BY: CHIEF ENGINEER, P.E. DATE: 1/30/2009

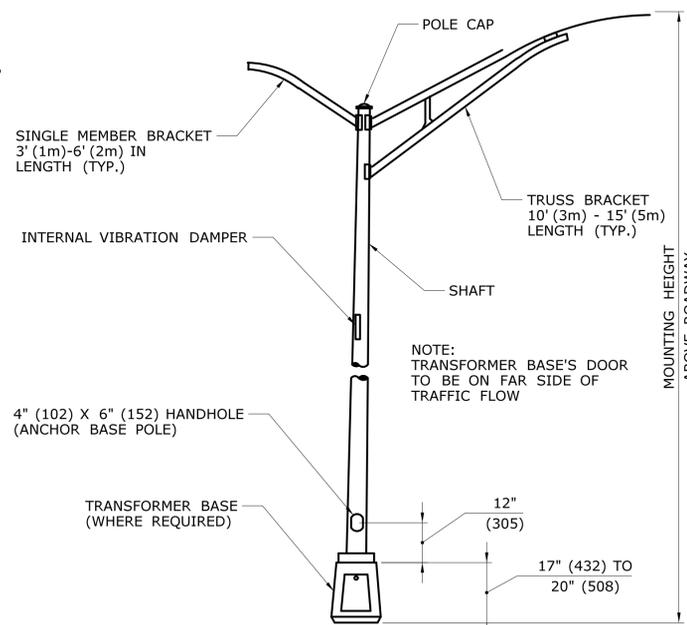
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TOWN: **DANBURY**  
 DRAWING TITLE:  
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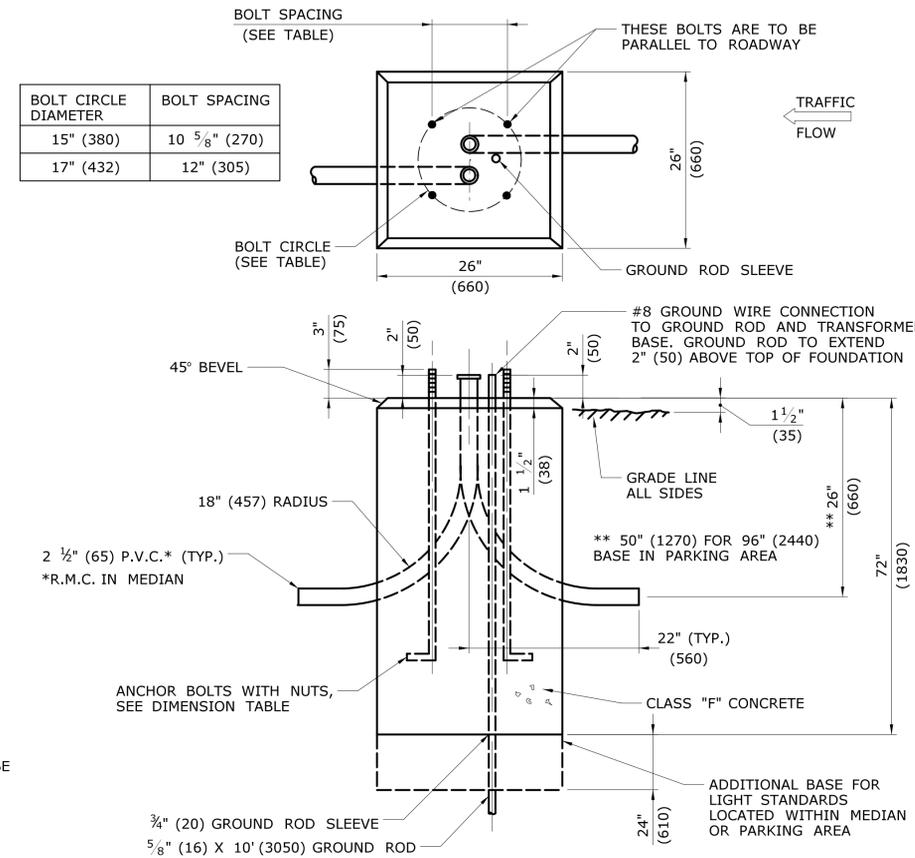
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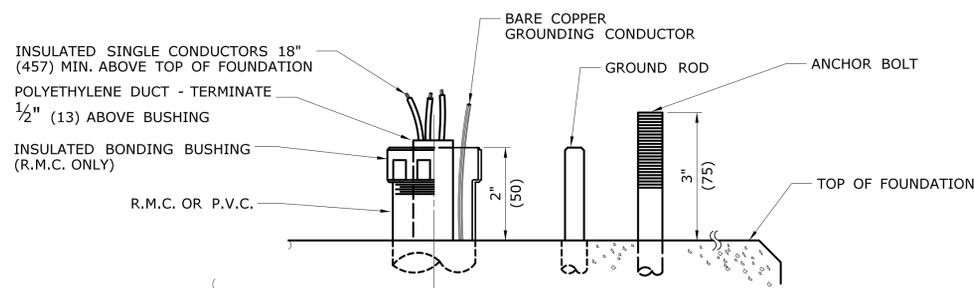
**MEDIAN MOUNTED LIGHT STANDARD WITH HIGHMAST LUMINAIRE**



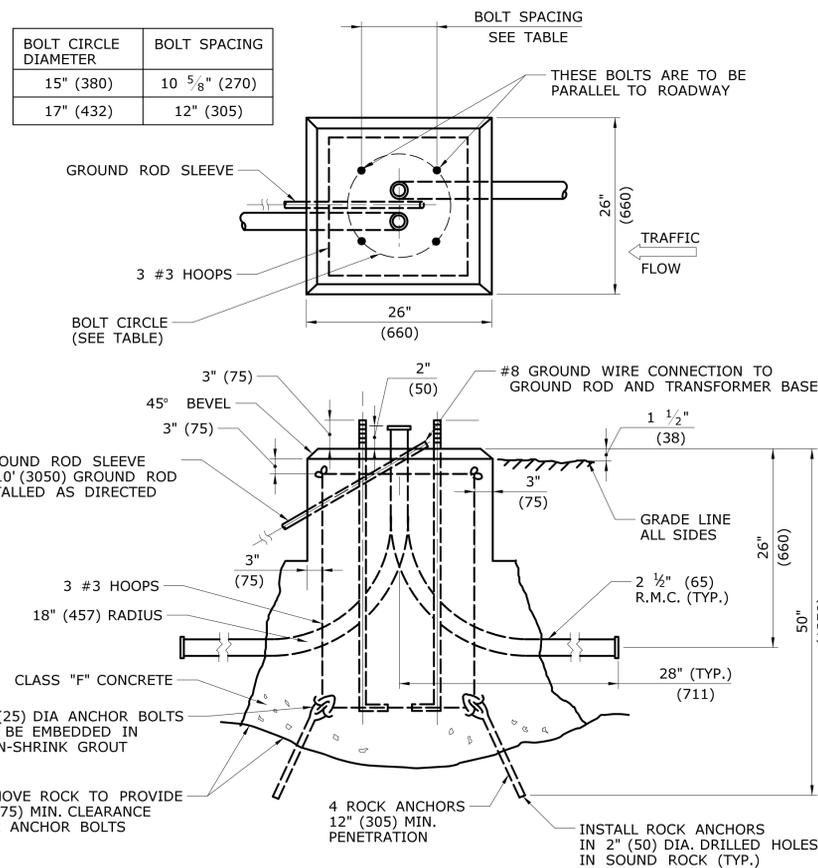
**ALUMINUM LIGHT STANDARD**



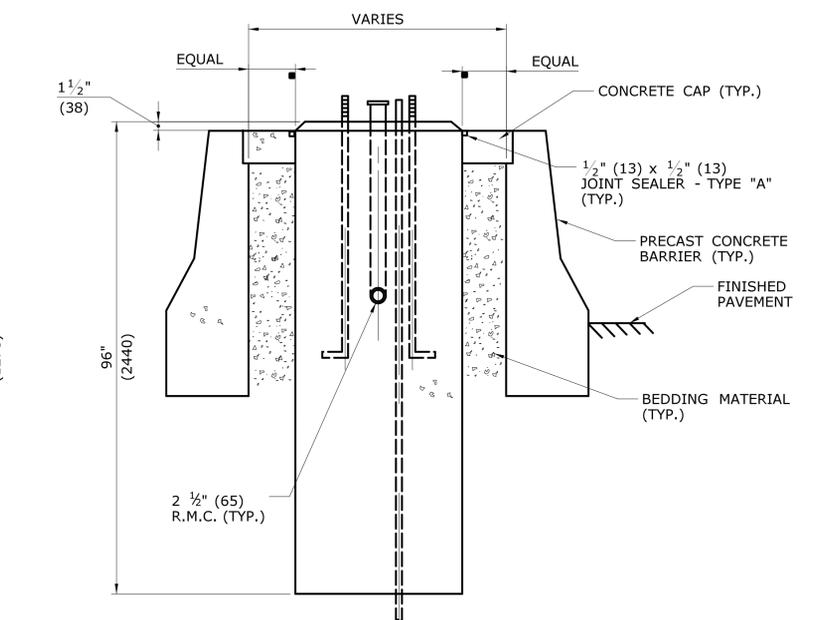
**LIGHT STANDARD FOUNDATION (TYPE I)**



**CABLE IN DUCT TERMINATION AT LIGHT STANDARD BASE**



**LIGHT STANDARD FOUNDATION (TYPE II)**



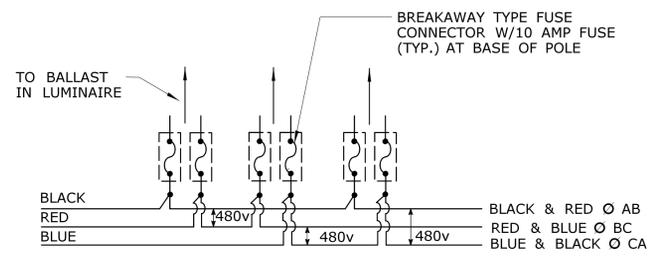
**LIGHT STANDARD FOUNDATION (TYPE I) IN MEDIAN**

MOUNTING HEIGHT	BRACKET LENGTH	SHAFT DIAMETER		SHAFT WALL THICKNESS	BASE TYPE	ANCHOR BOLT SIZE	BOLT CIRCLE DIAMETER
		BOTTOM	TOP				
30'	6'	8"	6"	0.156"	TRANSFORMER	1" X 40"	15"

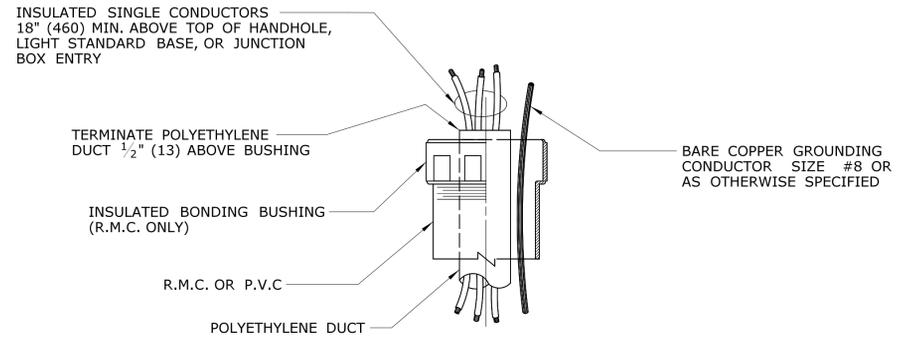
**LIGHT STANDARD NOTES:**

- ALUMINUM ALLOY SHALL BE 6063, T6 TEMPER.
- BOLT CIRCLE SHOWN IS FOR ANCHOR BASE BOTTOM OR TRANSFORMER BASE BOTTOM (WHICHEVER IS APPLICABLE).
- TO BE DESIGNED TO AASHTO "STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" FOR 90 M.P.H. (145 km/hr) WINDS.
- WELDING DESIGN AND FABRICATION SHALL CONFORM TO THE LATEST EDITION OF THE ANSI/AWS D1.2, STRUCTURAL WELDING CODE - ALUMINUM.
- FOR BASE CONNECTION WELDS, FABRICATION INSPECTION AND TESTING SHALL BE PERFORMED AS NECESSARY PRIOR TO ASSEMBLY, DURING ASSEMBLY, DURING WELDING, AND AFTER WELDING, TO ENSURE THAT MATERIALS AND WORKMANSHIP MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FABRICATION INSPECTION AND TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. VERIFICATION INSPECTION AND TESTING IS THE PREROGATIVE OF THE ENGINEER (CONNDOT).
- NON-DESTRUCTIVE TESTING FOR ALUMINUM SHALL BE AS FOLLOWS: A RANDOM 25% OF ALL BASE CONNECTION WELDS SHALL BE INSPECTED IN ACCORDANCE WITH ASTM E-165 STANDARD PRACTICE FOR LIQUID PENETRANT INSPECTION METHOD.

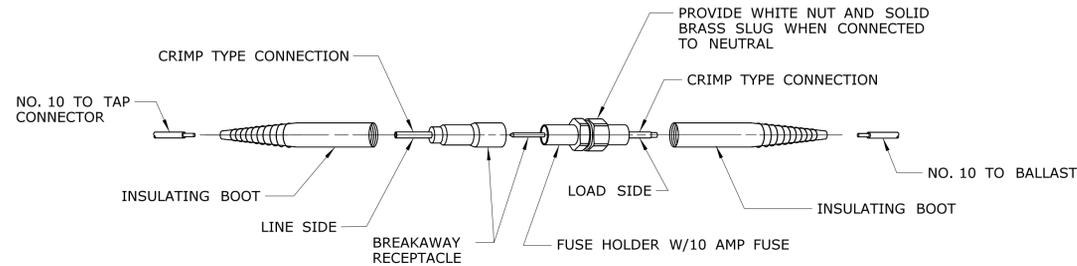
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CHECKED BY: <b>JA</b>		APPROVED BY: _____ DATE: _____	DRAWING TITLE: <b>LIGHT STANDARDS</b>	DRAWING NO. <b>ILL-06</b>	
NO SCALE	Plotted Date: 1/21/2014	Filename: ...ACTDOT-ILLUMINATION-GD.dgn			SHEET NO.



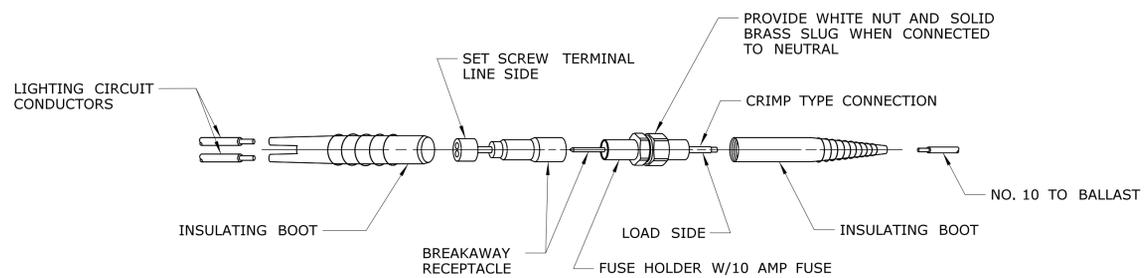
**3 PHASE 3 WIRE SYSTEM**



**CABLE IN DUCT TERMINATION AT LIGHT STANDARD BASE, HANDHOLE AND CAST IRON JUNCTION BOX**

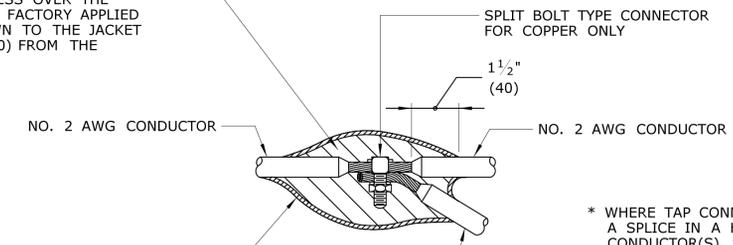


**BREAKAWAY TYPE FUSE CONNECTOR**  
TO BE USED WITH TWIN LUMINAIRE LIGHT STANDARDS (4 REQUIRED PER LIGHT STANDARD) AND UNDERBRIDGE LUMINAIRES



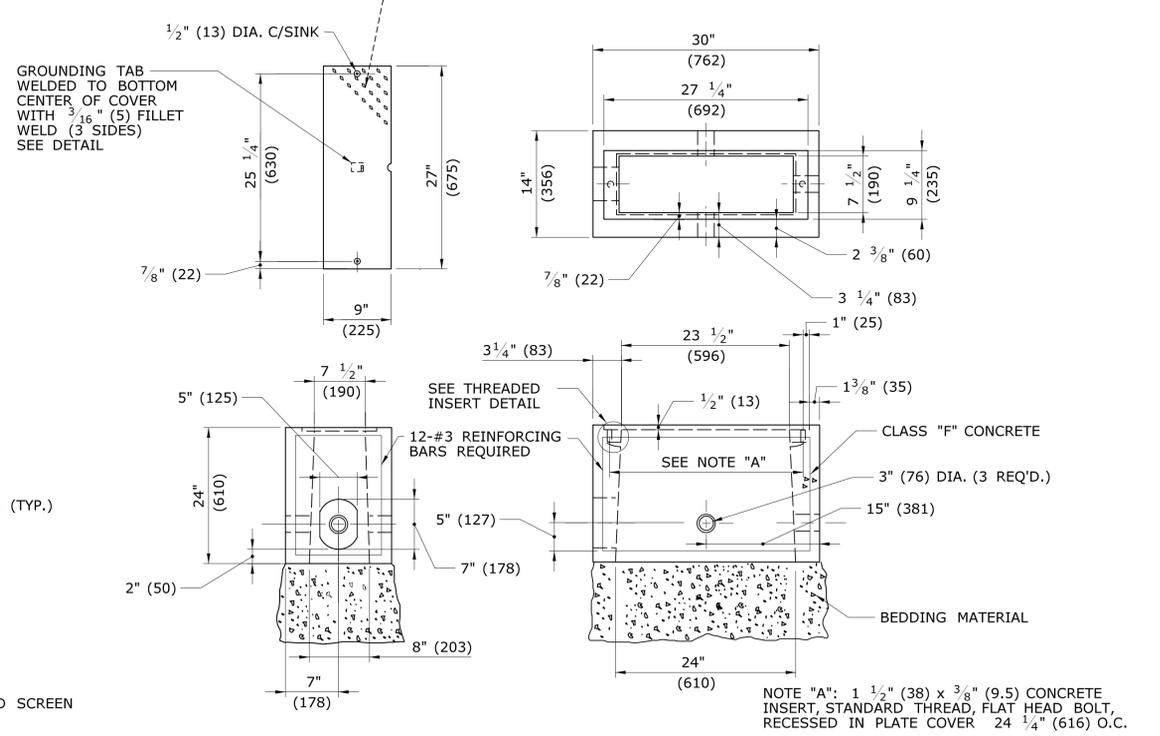
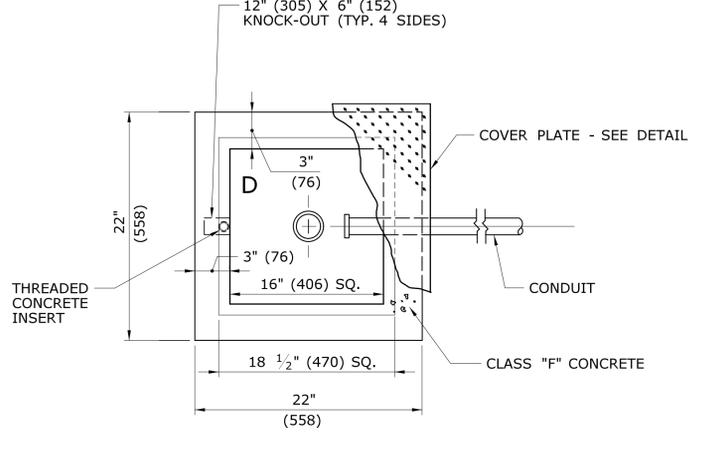
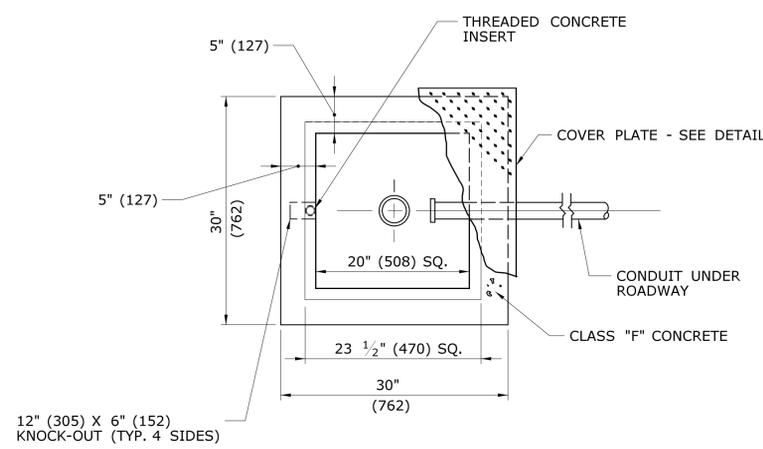
**BREAKAWAY TYPE FUSE CONNECTOR**

APPLY RUBBER SPLICING TAPE WITH APPROX. 50% OVERLAP TO A THICKNESS OVER THE CONNECTOR 1 1/2 TIMES THE FACTORY APPLIED INSULATION AND TAPER DOWN TO THE JACKET AT A POINT APPROX. 1 1/2" (40) FROM THE EDGE OF PENCIL

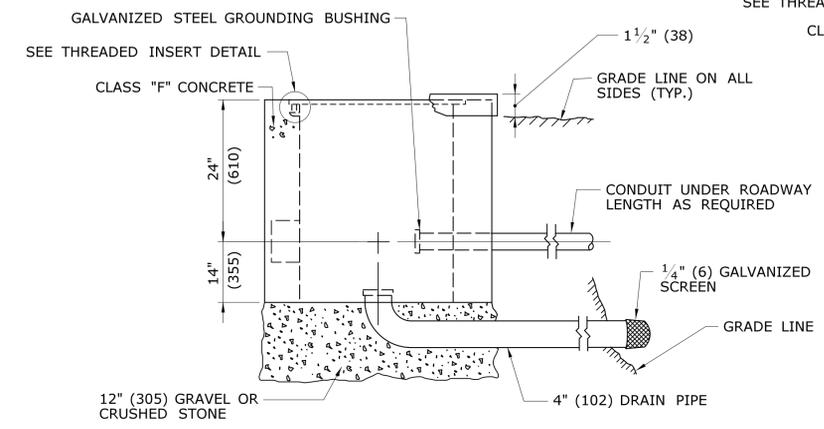


**TAP CONNECTOR**  
TO BE USED IN HANDHOLES AND W/TWIN LUMINAIRE LIGHT STANDARDS

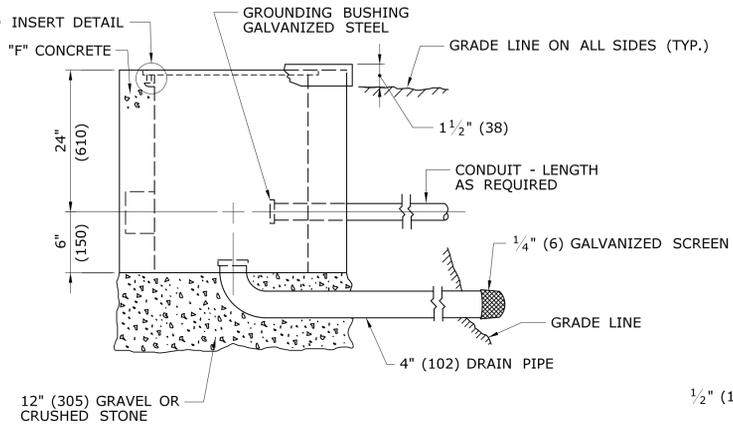
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CHECKED BY: <b>JA</b>		APPROVED BY: _____ DATE: _____	DRAWING TITLE: <b>CONNECTIONS</b>	DRAWING NO. <b>ILL-07</b>	
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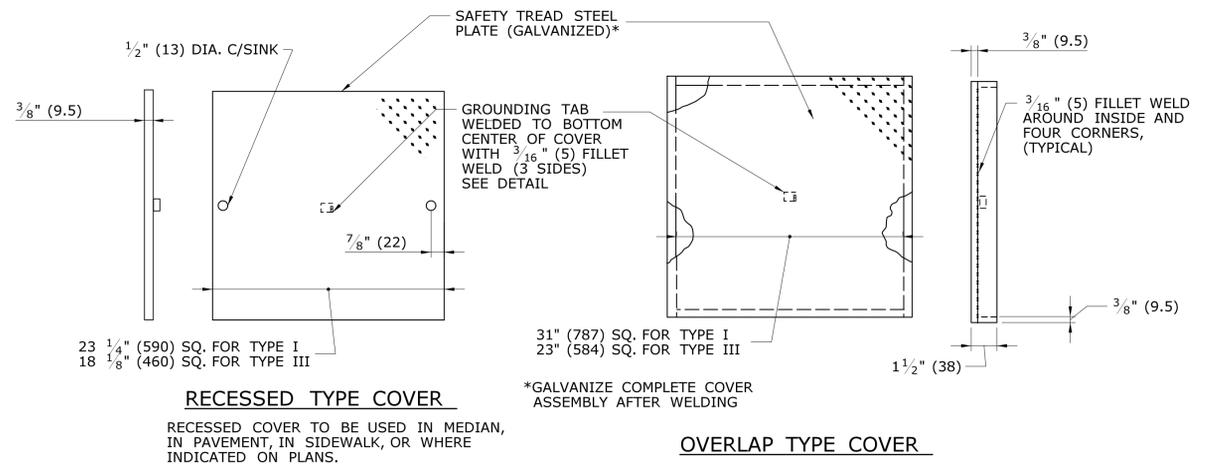
**CONCRETE HANDHOLE - TYPE III**



**CONCRETE HANDHOLE - TYPE I**

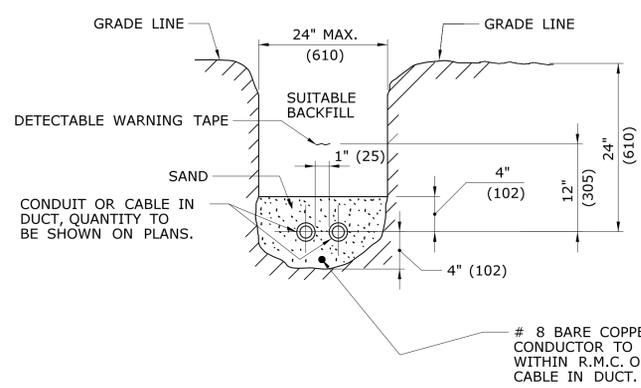


**CONCRETE HANDHOLE - TYPE III**

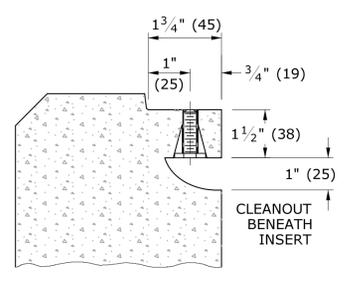


**RECESSED TYPE COVER**

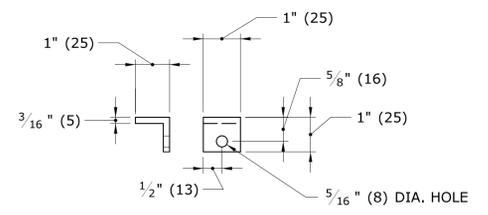
**OVERLAP TYPE COVER**



**BURIED CONDUIT OR CABLE IN DUCT**



**THREADED INSERT**



**STEEL GROUNDING TAB**

NOTE:  
ATTACH 72" (1830) LENGTH OF NO. 8 GROUND WIRE TO GROUNDING TAB WITH ONE HOLE LUG, 1/4" (M6) X 3/4" (20) LG. SST HEX HEAD BOLT, AND SST FLAT WASHER. ATTACH FREE END OF GROUND WIRE TO NO. 8 BARE GROUND WIRE IN HANDHOLE.

DESIGNER/DRAFTER: <b>MSB</b>	<p><b>STATE OF CONNECTICUT</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	SIGNATURE/BLOCK: <b>OFFICE OF ENGINEERING</b>	PROJECT TITLE: <b>I-84 INTERCHANGES 5 &amp; 6 IMPROVEMENTS</b>	TOWN: <b>DANBURY</b>	PROJECT NO. <b>34-313</b>
CHECKED BY: <b>JA</b>		APPROVED BY:	DATE:	DRAWING TITLE: <b>HANDHOLES</b>	DRAWING NO. <b>ILL-08</b>
NO SCALE	Plotted Date: 1/21/2014	Filename: ...ACTDOT-ILLUMINATION-GD.dgn			SHEET NO.