

STREET LIGHTING NOTES



A. CONDUIT AND JUNCTION BOXES

- 50 MM (INSIDE DIAMETER) CONDUIT SHALL BE USED THROUGHOUT THE PROJECT. ALL CONDUIT SHALL BE PVC SCHEDULE 40 ELECTRICAL CONDUIT (UNDERGROUND) AND PVC SCHEDULE 80 CONDUIT (ABOVE GROUND AND IN CONCRETE) AS DETAILED IN THESE PLANS.
- SEE SECTION 679.04 CONCERNING THE PLACING OF CONDUIT, PULL BOXES AND JUNCTION BOXES.

B. GROUNDING

- ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.
- SEE SECTION 679.08 CONCERNING GROUNDING AND TESTING.

C. LUMINAIRES, POLES, ANCHOR BASES

- THE LIGHT POLES SHALL BE "MOLDCAST" 127 MM DIAMETER X 4.27 METER LONG STRAIGHT SHAFT ALUMINUM POLE (DB10-SR14-250). THE POLE WILL HAVE THE REQUIRED TENON ADAPTER TO FIT THE TOP MOUNTED LUMINAIRE FIXTURE. LIGHTING FOR EACH POLE SHALL CONSIST OF THREE "MOLDCAST, PEDESTRIAN CONTRA-LINE" LUMINAIRES (70MM). ONE LUMINAIRE WILL BE POLE MOUNTED (PCC) AND TWO WILL BE SCROLL ARM MOUNTED (TRA-1L). EACH POLE SHALL HAVE A WEATHERPROOF RECEPTACLE MOUNTED NEAR THE TOP OF THE POLE FOR WIRING ACCESS TO THE LUMINAIRES. THE COST AND INSTALLATION OF THE TENON ADAPTER WILL BE INCIDENTAL TO ITEM 679.45 "LIGHT POLE".
- EACH POLE SHALL BE MOUNTED TO A CONCRETE BASE WITH FOUR ANCHOR BOLTS, NUTS, AND WASHERS AS PROVIDED WITH THE LIGHT POLE. SEE "LIGHT POST BASE DETAILS" SHEET 35 FOR ANCHORAGE TO BRIDGE. WIRING ACCESS SHALL BE A 102 MM X 152 MM TAMPER RESISTANT HANDHOLE IN THE POLE BASE. THE POLE ANCHOR BASE SHALL HAVE FOUR ANCHOR BOLT HOLES AND A TWO PIECE CLAMSHELL BASE COVER.
- FINAL FINISH SHALL BE A FLAT BLACK COLOR, ACHIEVED IN TWO APPLICATIONS WITH TOUCH-UP PAINT USED AS REQUIRED AFTER POLE INSTALLATION.

D. WIRE

- ALL WIRING BETWEEN THE METER AND THE FIRST POLE AND/OR PULLBOX AND BETWEEN POLES AND/OR PULLBOXES SHALL BE COPPER AND CONFORM TO SECTION 679.02 (c). ALL WIRE SHALL HAVE TYPE XHHW INSULATION OR EQUIVALENT.
- ALL CONDUITS SHALL INCLUDE A GROUNDING CONDUCTOR.
- SEE SECTION 678.09, 679.06 AND 679.07 CONCERNING ELECTRIC POWER SERVICE AND WIRING.
- THE WIRED CONDUIT SHALL BE ATTACHED TO THE FRONT FACE OF THE EXISTING UPSTREAM RETAINING WALL AND THE FRONT FACE OF ABUTMENT ONE BACKWALL. THE COST OF HARDWARE, EQUIPMENT, TOOLS AND LABOR REQUIRED TO ATTACH THE CONDUIT, WILL BE INCIDENTAL TO ITEM 678.23 "WIRED CONDUIT".

E. GENERAL

- ALL ELECTRICAL MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE, STATE AND LOCAL CODES AND THE LOCAL UTILITY COMPANY REQUIREMENTS.
- THE LOAD ON EACH BRANCH OF A THREE WIRE CIRCUIT SHALL AS BALANCED AS POSSIBLE. LOAD TO NEUTRAL.
- CONDUIT LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE. ACTUAL LOCATIONS SHALL BE DETERMINED IN THE FIELD.
- THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES WITH UNDERGROUND FACILITIES WHEN EXCAVATING IN THE AREA OF THESE UTILITIES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR CONTACTING AND SCHEDULING WORK WITH LOCAL UTILITIES WITH FACILITIES IN THE PROJECT AREA FOR LOCATION OF POWER SOURCES.
- ONE PHOTOCELL FOR THE LIGHTING CIRCUIT SHALL BE LOCATED AT THE POWER SOURCE OR SOME COMMON POINT, AS DIRECTED BY THE ENGINEER. **ONE PHOTO CELL ON EACH POST**
- THE CONTRACTOR MAY OPEN THE BRIDGE TO TRAFFIC WITHOUT THE STREET LIGHTING IN OPERATION. HOWEVER, THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN SAFE PASSAGE OF VEHICLES WHILE WORKERS ARE COMPLETING ALL STREET LIGHTING WORK.
- SIX EXTRA REPLACEMENT BULBS SHALL BE PROVIDED AND DELIVERED TO THE CITY OF BRATTLEBORO FOR THEIR USE. THE COST OF THESE BULBS IS TO BE INCIDENTAL TO ITEM 679.50, "LUMINAIRE".
- IF THE LOCATION OF THE POWER SOURCE, JUNCTION BOX, AND METER VARIES FROM THE PROPOSED LOCATIONS SHOWN ON THE PLANS, THE NEW LOCATION WILL BE APPROVED BY THE ENGINEER AND THE TOWN OF BRATTLEBORO.

F. WORK TO BE PERFORMED BY THE CONTRACTOR

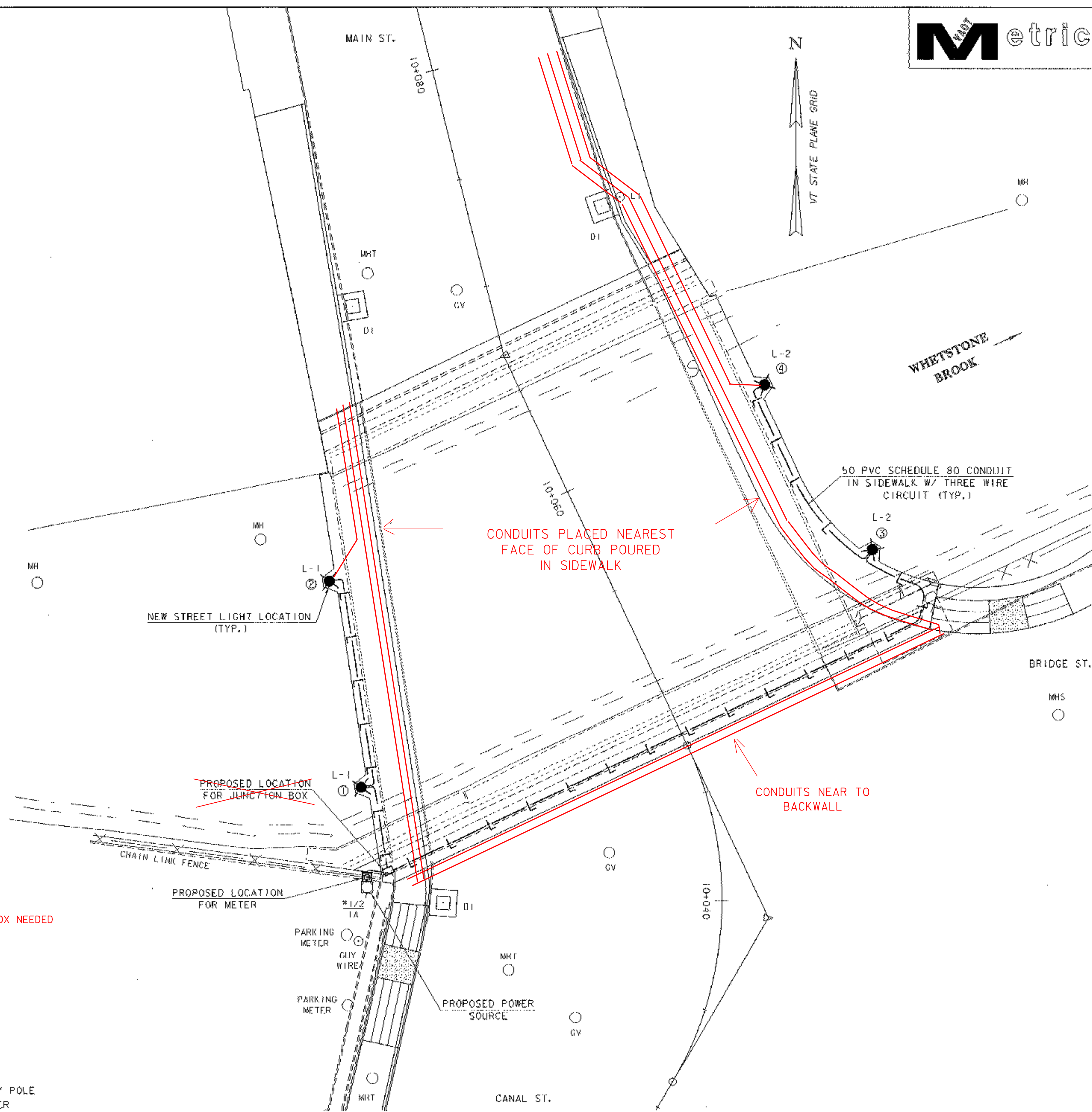
- COORDINATE ALL ITEMS REGARDING PROJECT POWER WITH THE TOWN OF BRATTLEBORO BEFORE COMMENCING WORK.
- INSTALL ALL LIGHT POLES, LUMINAIRES, WIRING AND DISCONNECT PLUG KITS.
- INSTALL ALL JUNCTION BOXES, THE CONDUIT, PHOTOCELL AND WIRING AS DETAILED ON PLAN DRAWINGS. **NO JUNCTION BOX NEEDED**
- INSTALL POWER DROP STANCHION, ~~OPTION #3~~ SEE STD. E-175M ON EXISTING POLE
- INSTALL REMOTE TWO RELAYS WITH CIRCUIT BREAKERS FOR AUTOMATIC SWITCHING OF THE TWO LIGHTING CIRCUITS.
- THE CONTRACTOR IS DIRECTED TO SECTION 679.09 REGARDING POWER COSTS FOR THE STREET LIGHTING.

STREET LIGHTING LOCATIONS TABLE				
POLE NO.	LOCATION	OFFSET*	LUMINAIRE WATTS TYPE	MOUNT HEIGHT
①	10+051.890 LT.	14.210 M	75W Me Ha	4.3 M
②	10+060.950 LT.	11.530 M	75W Me Ha	4.3 M
③	10+051.710 RT.	11.430 M	75W Me Ha	4.3 M
④	10+060.510 RT.	10.180 M	75W Me Ha	4.3 M

NOTE: Me Ha = METAL HALIDE
* = OFFSET TO CENTERLINE POLE & FOUNDATION

LEGEND

- ⊕ EXISTING UTILITY POLE
- ⊙ LIGHT POLE NUMBER
- L- PROPOSED LIGHTING CONDUIT
- L-1 CIRCUIT NUMBER
- ✱ PROPOSED ORNAMENTAL LIGHT
- JUNCTION BOX
- METER BOX
- ADDITIONAL CONDUITS INSTALLED BY TOWN FOR FUTURE USE
2' - TWO RUNS & 3/4" FOR LIGHTS



STREET LIGHTING LAYOUT

PROJECT NAME: BRATTLEBORO	PLOT DATE: 06-FEB-2003
PROJECT NUMBER: BHF 2000 (17)	DRAWN BY: G. ROY
FILE NAME: 94J078\Structures\sj078a17	CHECKED BY: T. SUMNER
PROJECT MANAGER: R. R. WHITCOMB	SHEET 30 OF 71
DESIGNED BY: G. ROY	

