



INSTRUMENT ITEMS (PROVIDED BY CONTRACTOR)

DESCRIPTION	QUANTITY	UNITS
HP 310 x 125	20	M
STRUCTURAL STEEL	600	KG
REINFORCING STEEL	114	KG
CONCRETE, CLASS B	6	CM
BENTONITE GROUT	0.5	CM
CAST IRON COVER WITH FRAME	3	EACH
CONCRETE CATCH BASIN	3	EACH
CONDUIT (50 PVC)	220	M
ELECTRICAL BOX	3	EACH
EPOXY, WELDS, MISC. ATTACHMENT HARDWARE	VARIES	VARIES

QUANTITIES ARE APPROXIMATE
 ITEMS AND ASSOCIATED WORK ARE INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (BRIDGE INSTRUMENTATION)

INSTRUMENT LIST (PROVIDED BY UMASS)

INSTRUMENT	LOCATION	MODEL	QUANTITY	DTL. SHEET
CABLING	ALL			
CASING	PILES	6400	4	29 & 30
CRACKMETER	ABUTMENT	4420	5	30
PRESSURE CELL	ABUTMENT	4815	12	29 & 30
PRESSURE CELL	WING WALL	4815	1	29
PRESSURE CELL	TEM. CORRECTION	4815	1	27
STRAIN GAGE	GIRDERS	4000	20	28
STRAIN GAGE	PILES	4000	32	29
TILTMETER	ABUTMENT	6350	2	29 & 30
TILTMETER	PILES	6150	16	N/A

STRAIN GAGE MOUNTING SHALL BE PROVIDED BY UMASS

- NOTES:
1. SENSOR CONDUIT NOT SHOWN ON INSTRUMENTATION SHEETS FOR CLARITY.
 2. CONDUIT SHALL BE FIRMLY ATTACHED TO THE GIRDERS, CROSSFRAMES, AND/OR SLAB WITH THE USE OF CONDUIT CLIPS OR OTHER MEANS APPROVED BY THE ENGINEER.
 3. CONDUIT INSTALLATION SHALL INCLUDE ALL JOINTS AND ELBOWS REQUIRED AND ALL NON-WIRED CONDUIT SHALL BE INSTALLED WITH A PULL CORD.
 4. THE INSTALLATION OF GIRDER GAGES AND ROUTING OF CABLING THROUGH CONDUIT SHALL BE PERFORMED AFTER THE GIRDER CROSS FRAMES HAVE BEEN INSTALLED AND PRIOR TO THE DECK POUR OR ABUTMENT BACKFILL.
 5. CONTRACTOR SHALL PROVIDE TELEPHONE (2 LINES) AND ELECTRIC SERVICE TO ENCLOSURE LOCATION. ENCLOSURE AND ELECTRIC SERVICE SHALL BE GROUNDED. ELECTRIC SERVICE SHALL TERMINATE IN 4 OUTLET GFI PROTECTED BOX.
 6. TELEPHONE SERVICE SHALL TERMINATE IN STANDARD RECEPTACLE WITHIN THE ENCLOSURE.
 7. THERE SHOULD BE NO WELDING OF GAGES, BOXES OR ATTACHMENTS TO GIRDERS IN THE FIELD. ANY WELDING THAT OCCURS ON THE PILES IN THE FIELD SHALL ADHERE TO SUBSECTION 506.10.
 8. THE FINAL LOCATION OF ALL GAGES, ENCLOSURES AND CONDUIT PLACED IN THE FIELD SHALL BE APPROVED BY THE RESIDENT ENGINEER AND UMASS.
 9. ELECTRICAL BOXES SHALL BE NEMA TYPE 4X WATERPROOF. LOCKING ENCLOSURES INCLUDING ALUMINUM SUBPANEL. TWO ENCLOSURES SHALL BE WALL MOUNTABLE WITH MINIMUM INTERIOR DIMENSIONS OF 1500 x 900 x 350. ONE ENCLOSURE SHALL BE FLOOR MOUNTABLE WITH MINIMUM INTERIOR DIMENSIONS OF 1500 x 900 x 400.

- LEGEND:
- DENOTES AREA OF INSTRUMENTATION INSTALLATION.
 - 4815 PRESSURE CELL (1)
 - ELECTRICAL BOX ATTACHED TO ABUTMENT

PROJECT: EAST MONTPELIER	PROJECT NO. : BRF 028-3(36)
DESIGN FILE NAME: /98b254/str/sb254instrum.dgn	PLOT DATE: 03-FEB-2009
IPARM FILE NAME: sb254pls.l	DRAWN BY: J. SALVATORI
DESIGNED BY: J. SALVATORI	CHECKED BY: J. LACROIX
SQUAD LEADER: K. HIGGINS	SHEET: 27 OF 68
INSTRUMENTATION PLAN SHEET #1	

NOT TO SCALE