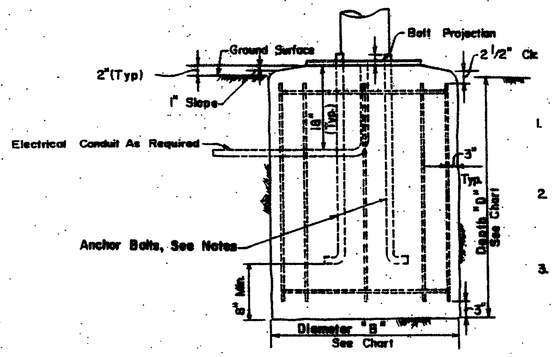
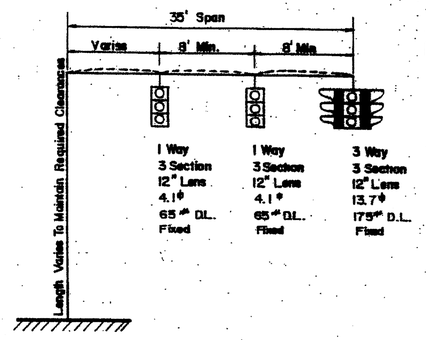
QUINCY
BREWERS CORNER AND VICINITY
MAST ARM FOUNDATION DETAILS

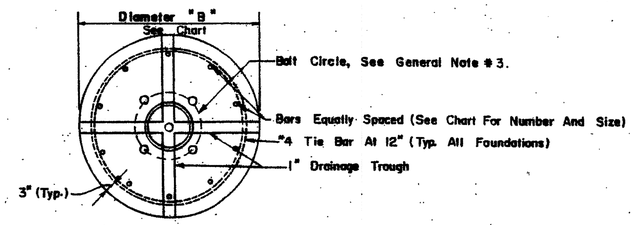


ELEVATION
NOT TO SCALE

NOTES:

1. Pole, Base Plate And Anchor Bolts Shall Be Designed By The Pole Manufacturer
2. Minimum Foundation Depth Shall Be Checked To Insure Adequate Anchor Bolt Embedment Clearance, And Projection
3. Optional End Anchorage For Anchor Bolts Can Be A Steel Plate With Threaded Holes Designed By The Pole Manufacturer





PLAN
NOT TO SCALE

IN CONTRACT

SOIL TYPE (SEE GENERAL NOTE NO. 7)	DIA. (B)= 2'-6"		DIA. (B)= 3'-0"		DIA. (B)= 3'-6"	
	DEPTH (D)	VERTICAL BARS	DEPTH (D)	VERTICAL BARS	DEPTH (D)	VERTICAL BARS
DRY SANDY SOIL	5'-9"	10#5	5'-0"	10#6	4'-9"	10#7
WET SANDY SOIL (20' MAST ARM FOUNDATION)	6'-9"	10#5	6'-0"	10#6	5'-6"	10#7
CLAYEY SOIL (MEDIUM STIFF) (35' MAST ARM FOUNDATION)	9'-9"	10#5	8'-9"	10#6	8'-0"	10#7
ALLUVIAL SOIL	14'-3"	10#5	12'-9"	10#6	11'-9"	10#7

FOUNDATION DESIGN CHART

GENERAL NOTES:

1. Foundations Shall Be Class "A" Cement Concrete Masonry.
2. Reinforcement Shall Be A.S.T.M. A615- Gr. 60.
3. Bolt Circle And Anchor Bolts To Be Provided By The Contractor. The Anchor Bolts Shall Be Supplied With A Template For Setting The Bolts And Necessary Bolt Projections.
4. Provide For Electrical Conduit As Required.
5. Excavation Shall Be By The Auger Method To The Neat Lines Of The Outside Dimension Of The Foundation Without Disturbing The Soil Around And Below The Proposed Foundation Bottom. Alternate Methods Of Excavation May Be Submitted For Approval If They Meet The Requirements Listed In The General Notes Of Sheets 3 & 4 Of The Span Wire Assembly Foundation Details & Design Charts
6. If The Soil Is Disturbed Or Removed Beyond The Neat Lines Of The Outside Dimension Of The Foundation As Specified, It Shall Be Replaced With Concrete. Any Additional Cost For The Concrete Shall Be Paid For By The Contractor
7. Determination Of Existing Soil Conditions Shall Be Made By The Design Engineer
8. Vertical Reinforcement Bars Are To Be Evenly Spaced In The Foundation As Shown
9. The Smallest Diameter Foundation Shall Be Used That Will Meet The Moment Requirement And Be At Least 16" Greater In Diameter Than The Bolt Circle Diameter
10. If A Poor Soil Or Ledge Is Encountered, (i.e., One Which Does Not Apply To The Design Charts Shown On This Sheet), An Alternative Design Shall Be Developed By The Design Engineer. Decisions Made In Notes #7 & #10, Shall Be Submitted To The M.D.P.W. For Approval. If Utilities Or Other Underground Obstructions Are Encountered, The Contractor Shall Backfill The Area To Its Original Condition Until An Alternate Design Has Been Provided By The Design Engineer.
11. The Foundations Shown On This Drawing Are For A 35-Foot Cantilevered Type II Mast Arm Carrying A Three Way, Three Section, Twelve Inch (12") Lens Traffic Signal Housing Fixed At The End Of The Arm, And A One-Way, Three-Section, Twelve Inch (12") Lens Traffic Signal Fixed Twelve Feet (12') Away, And Another One-Way, Three-Section Twelve Inch (12") Lens Traffic Signal Fixed Twelve Feet (12') Away From That.

T-102

BY: J. BELCASTRO - B.T.P.&D. & G.N. TSAKOS - BRIDGE SECTION

COMMONWEALTH OF MASSACHUSETTS
RONALD D. DESROSIERS CIVIL No. 39712 REGISTERED PROFESSIONAL ENGINEER
12/7/10

ISSUED FOR BID

SHEET 13 OF 17

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

STANDARD DRAWINGS
35' FOOT-TYPE II MAST ARM
CORED PIER FOUNDATIONS

Revised Date January 2, 1985

TRAFFIC ENGINEER — BRIDGE ENGINEER
DIRECTOR B.T.P.&D. — CHIEF ENGINEER