



- 54 strike and dip of beds
- 21 strike and dip of joint
- 60 strike and dip of quartz vein
- strike and dip of vein breccia
- strike and dip of slickenside giving plunge of slickenside lineations and downthrown side (D)
- 40 strike and dip of cleavage
- strike of vertical granite aplite dike

- BEDROCK EXPOSURES, CLOSELY SPACED
- BEDROCK EXPOSURE
- BOULDER; SIZE IN FT
- PLANT FOSSIL
- Contact; dashed where approximately located; solid line where closely located; DASHED-DOT LINE inferred
- fault, probable; U, upthrown; P, downthrown; well in bedrock; depth in ft
- Well in fine-grained metamorphic rock (slate?)
- Salem Diorite
- DQM Dedham Quartz Monzonite, coarse grained
- BH Bare Hill Quartz Monzonite (Lyons, 1969)
- WG Westwood Granite (Chute, 1966) Pre-Pennsylvanian Granitic Rocks (GQ-632)
- QG Quincy Granite
- Pt temporary exposure in excavation (GQ-632)
- PP Pondville Conglomerate
- R RHODE ISLAND FORMATION
- ccm cobble congl. with mudstone clasts
- cc cobble congl.
- pc pebble congl.
- gc granule congl.
- sc sandstone, coarse to very coarse-grained
- sf sandstone, very fine to fine grained
- sm sandstone, medium grained
- sh shale, siltstone, mudstone
- sp sandstone, pebbly
- Lithologic compositions given in order of importance
- sr sedimentary rock, noncalcareous WW
- mr metamorphic rock, fine grained WW
- tr igneous rock, granular

- SOURCES
- Petersen and Shaw, 1967, U.S.G.S., GQ-632
 - Shaler and others, 1899
 - Lyons, 1969, Boston U. Ph.D. thesis
 - Williams, Willey, and Tasker, 1975, Mass. Hydrologic Data Rpt. No. 16, U.S.G.S.
 - Williams and Willey, 1970, Basic Data Rpt. No. 12, U.S.G.S.
 - Chute, 1966, U.S.G.S. Bull. 1163-B
 - R Rhode Island Formation
 - P Pondville Conglomerate
- Created and revised by R.C. Lyons, U.S.G.S., 9-21-77

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UTM GRID AND 1983 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
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ROAD CLASSIFICATION
Heavy duty
Medium duty
Light duty
Unimproved dirt
Slate route

Massachusetts (Narragansett Basin) Sheet Whitman
Scale 1:31,250, 1977
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