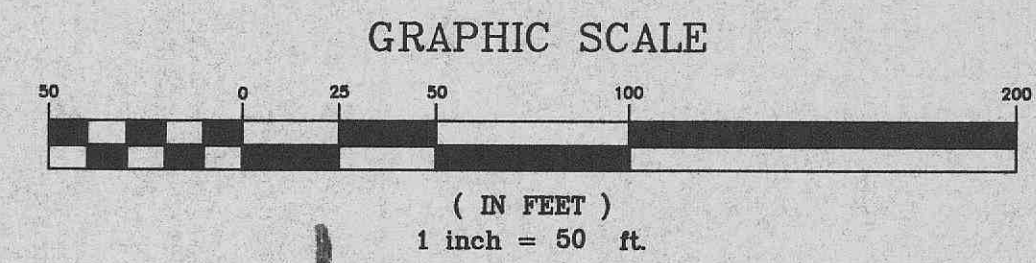


GENERAL NOTES :

- Contractor shall contact R.W. Murray Company concerning standards and specifications pertaining to any work to be performed on this project.
- Contractors shall coordinate all utility removals, disconnections, relocations, and new service connections with the appropriate agencies/companies, and include these costs in their bid proposals.
- All construction and materials used shall conform to current City of O'Fallon and St. Peters Fire Protection District, Missouri Highway and Transportation Department, and standards within their respective jurisdictions.
- Contractor to contact utility companies to locate existing underground utilities in areas of excavation work. If utilities are indicated to remain in place, provide adequate means of support and protection during earthwork operations.
- Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipes and Fittings, SDR-35.
- All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III).
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.O. See plans for gauge.
- All filled places within State, County, or City roads (Highways) shall be compacted to 90% of maximum density as determined by the "Standard Proctor Test A.A.S.H.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a Soils Engineer.
- All storm and sanitary trench backfills shall be water jetted. Clean granular fill or compacted fill may be used under paved areas or building area.
- Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plat. See record plat for location and size of easements. This does not apply to house laterals.

- All manhole and curb inlet tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stake-out of the sewer lines, all curb and grate inlets will be face staked. If normal face stakes fall in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.
- Water Lines, valves, sleeves, meters and etc. shall meet all specifications and installation requirements of City of O'Fallon and St. Peters Fire Department.
- All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
- All PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21.
- All PVC sanitary sewer pipe shall be SDR-35 or equal with crushed stone bedding uniformly graded between 1" and 1 1/2" size. This bedding shall extend from 6" below the pipe to 12" above the top of the pipe.
- All sanitary manhole tops shall be set 0.2' higher than the proposed ground except in pavement areas.
- All sanitary manholes shall have a 31 mil thick coat of coal tar pitch waterproofing.
- Manhole frame and cover shall be Clay and Boley No. 2008 for Neenah R-1736 or Deister 1315 or approved equal.
- A drop of 0.2 feet is required through each sanitary manhole.
- The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.
- Brick shall not be used on manholes.

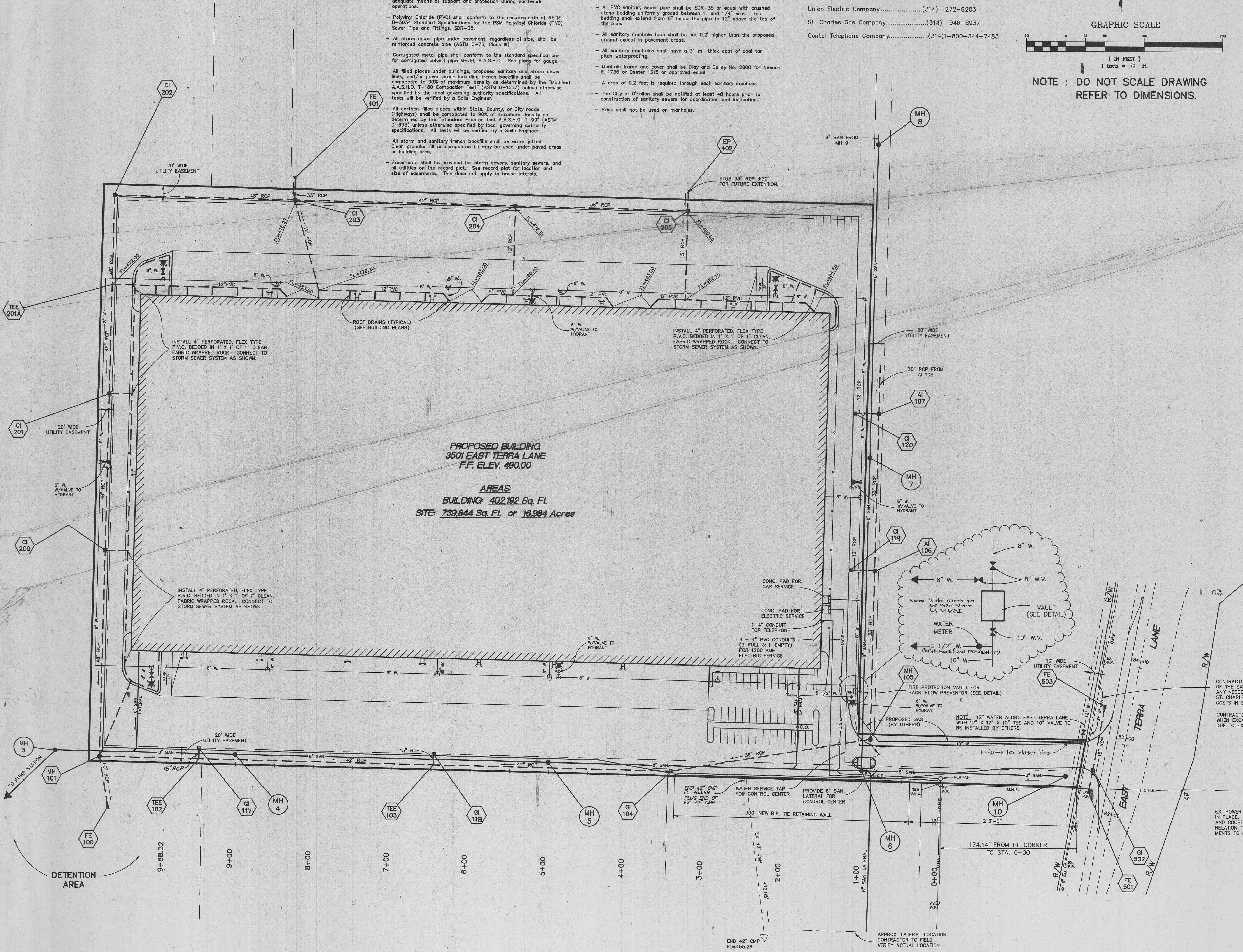
- UTILITIES TO NOTIFY**
- M.M.E.I. (Water and Sewer).....(314) 281-2858
 - Union Electric Company.....(314) 272-6203
 - St. Charles Gas Company.....(314) 946-8937
 - Centel Telephone Company.....(314)-800-344-7483



NOTE : DO NOT SCALE DRAWING REFER TO DIMENSIONS.

LEGEND

---	EXISTING CONTOUR
---	PROPOSED CONTOUR
○	EXISTING MANHOLE
●	PROPOSED MANHOLE
■	PROPOSED CURB INLET
---	EXISTING STORM SEWER
---	PROPOSED STORM SEWER
---	EXISTING SANITARY SEWER
---	PROPOSED SANITARY SEWER
---	8" W. WATER LINE WITH SIZE
▶	FLARED END SECTION
○	EXISTING POWER POLE
■	PROPOSED FIRE HYDRANT
■	PROPOSED WATER VALVE
■	PROPOSED WATER METER
■	PROPOSED "TEE" SECTION
■	PROPOSED CAP
+	TEST HOLE
○	STORM SEWER
○	SANITARY SEWER
	SILTATION CONTROL
■	GRAUTED RIP-RAP
○	EXISTING TREE LINE
■	CONCRETE
U.G.E.	UNDERGROUND ELECTRIC
O.H.E.	OVERHEAD ELECTRIC
RCP	REINFORCED CONCRETE PIPE
PVC	POLY-VINYL CHLORIDE PIPE
SAN.	SANITARY SEWER
CONC.	CONCRETE
C.O.	CLEAN-OUT
R/W	RIGHT-OF-WAY
W.V.	WATER VALVE
WM	WATER METER

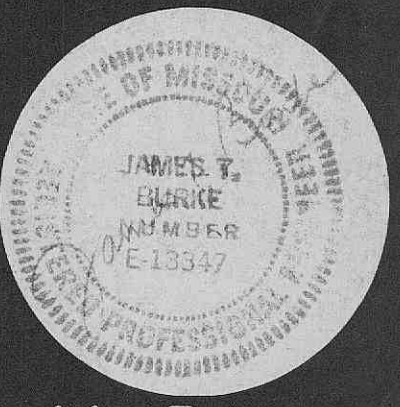


CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF THE EXISTING 6" GAS MAIN AND COORDINATE ANY NEEDED RELOCATION OR ADJUSTMENT WITH ST. CHARLES GAS COMPANY, AND INCLUDE THESE COSTS IN BID PROPOSAL.

CONTRACTOR SHALL USE CAUTION WHEN EXCAVATING AT NEW ENTRANCE DUE TO EXISTING 6" GAS MAIN.

PREPARED BY:
PICKETT RAY & SILVER
Civil Engineers
Planners
Land Surveyors
233 Mid Rivers Mall Dr.
St. Charles, MO 63376
Jan/12/11 10:29:38

WAFZ Distribution Center
OWNER: Trammell Crow Company
CONTRACTOR: R.W.Murray Co.



Revision Dates

- 3/14/90
- 3/6/90
- 2/5/90
- 1/24/90

Issue Date
1/10/90

Sheet Title
UTILITY PLAN

RWM Job Number
570

Sheet Number
C-3