

VII. DRAFTING STANDARDS

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The standard symbols and line weights used in drafting CMUD water and sewer plans are given on the following pages. A legend of symbols is required with each set of construction plans and where additional symbols are required, they shall be clearly defined and included in the legend.

The standard scale for CMUD construction drawings is 1"=40' in plan view and 1"=4' in profile. Expanded detail drawings should be used whenever needed to clearly convey design details. Standard sheet size shall be 24" x 36" for construction plans and 8-1/2" x 14" for right-of-way and encroachment maps. All sheets must contain the standard CMUD title block format.

CAD or manual drawings are acceptable, but manual drawings must be neat, and the lettering must be clearly legible. All plans must be in ink on mylar or vellum.

Elevations must be shown at the left side of the profile section. Station numbering should increase from left to right and should be approximately above the corresponding plan view stationing. Both plan and profile must be shown on the same sheet. Sewer line drawings should run from left to right upstream.

Structures and appurtenances (vaults, manholes, hydrants, valves, piers etc.) should be labeled in plan and profile with station number and standard detail reference if applicable.

All underground obstructions are shown on both plan and profile (if applicable). Vertical clearance requirements are shown in profile and any requirements for Ductile Iron Pipe are shown.

Pipe sizes are shown on plan view and properly scaled on profile. Distance of water main from edge of pavement is shown. Drainage ditches are shown with direction of storm runoff. Erosion control devices are shown in plan view and properly labeled.

Bearings on sewer lines shall be labeled in the upstream direction.

The CMUD symbols library and title block format are available in Auto Cad upon request.

Subdivision sewer plans shall include lateral locations only to show how each lot will be served. It shall be noted on the plans that exact lateral locations are determined during construction, and that exact locations are required for as built records. Water service connections shall not be shown on plans but exact installed locations are required for as built records.

STANDARD SYMBOLS & LINE WEIGHTS FOR SANITARY SEWER & WATER CONSTRUCTION PLANS

SHEET 1 OF 2

	SYMBOL	PEN SIZE
EXISTING \varnothing SAN. SWR. _____	—SS—	(1) OR .50
PROPOSED \varnothing SAN.SWR. _____	=SS=	(3) OR .50 DB *
EXISTING SAN. SWR. MANHOLE _____	○	(1) OR .50
PROPOSED SAN. SWR. MANHOLE _____	●	(1) OR .50
EXISTING WATER MAIN _____	—W—	(0) OR .35
PROPOSED WATER MAIN _____	=W=	(3) OR .50 DB *
EXISTING WATER VALVE _____	—⋈—	(0) OR .35
PROPOSED WATER VALVE _____	=⋈=	(1) OR .50
EXISTING FIRE HYDRANT _____	⊕	(0) OR .35
PROPOSED FIRE HYDRANT _____	●	(1) OR .50
WATER METER _____	□	(0) OR .35
UNDERGROUND TELEPHONE _____	—UT—	(0) OR .35
UNDERGROUND CABLE _____	—UC—	(0) OR .35
OVERHEAD ELECTRIC _____	—OE—	(0) OR .35
UNDERGROUND ELECTRIC _____	—UE—	(0) OR .35
UTILITY POLE /GUY WIRE _____	⊘—	(0) OR .35
TOWER LINE _____	—⊠—	(0) OR .35
EXISTING GAS MAIN _____	—G—	(0) OR .35
GAS VALVE _____	●	(0) OR .35
EXISTING WATER OR SAN. SWR. R/W _____	— — —	(0) OR .35
PROPOSED WATER OR SAN. SWR. R/W _____	= = =	(0) OR .35
ROAD/STREET R/W _____	—R/W—	(2) OR .70
PROPERTY LINE _____	—P—	(0) OR .35

* .50 DB = DOUBLE LINE (.75 DRAWING UNITS APART FOR 40 SCALE)

STANDARD SYMBOLS & LINE WEIGHTS FOR SANITARY SEWER & WATER CONSTRUCTION PLANS

SHEET 2 OF 2

	<u>SYMBOL</u>	<u>PEN SIZE</u>
EDGE OF PAVEMENT _____	- - - - -	(0) OR .35
CURB & GUTTER _____	= = = = =	(0) OR .35
EXISTING IRON PIN _____	○	(0) OR .35
MARSH _____	— ♣ — ♣ —	(0) OR .35
CREEK OR BRANCH _____	— ··· — ··· —	(0) OR .35
RIP — RAP _____	— [chain link] —	(0) OR .35
TREE _____	— [tree symbol] —	(0) OR .35
BUILDING _____	— [hatched area] —	(0) OR .35
RAILROAD _____	— [cross-ticks] —	(0) OR .35
GUARD RAIL _____	— [T-ticks] —	(0) OR .35
PIERS _____	— [vertical bars] —	(0) OR .35
BRIDGE _____	— [bracketed line] —	(0) OR .35
FENCE (LABEL TYPE) _____	— [X-ticks] —	(0) OR .35
STREET SIGN (LABEL TYPE) _____	— [sign symbol] —	(0) OR .35
STORM DRAIN / CATCH BASIN OR DROP INLET _____	— [square symbol] —	(0) OR .35
SEDIMENT FENCE (SILT FENCE) STD. 6.62 —	— [fence symbol] —	(0) OR .35
TEMPORARY SEDIMENT TRAP STD. 6.60 —	— [trapezoid symbol] —	(0) OR .35
CHECK DAM STD. 6.83 _____	— [arrow symbol] —	(0) OR .35
TEMPORARY DIVERSION STD 6.20 _____	TD — TD — TD	(0) OR .35
TEMPORARY STREAM CROSSING STD. 6.70 —	— [crossing symbol] —	(0) OR .35
GROUND PROFILE _____	— [wavy line] —	(1) OR .50
ASPHALT (PROFILE) _____	— [hatched profile] —	(0) OR .35
CONCRETE (PROFILE) _____	— [dotted profile] —	(0) OR .35
GRAVEL (PROFILE) _____	— [stippled profile] —	(0) OR .35