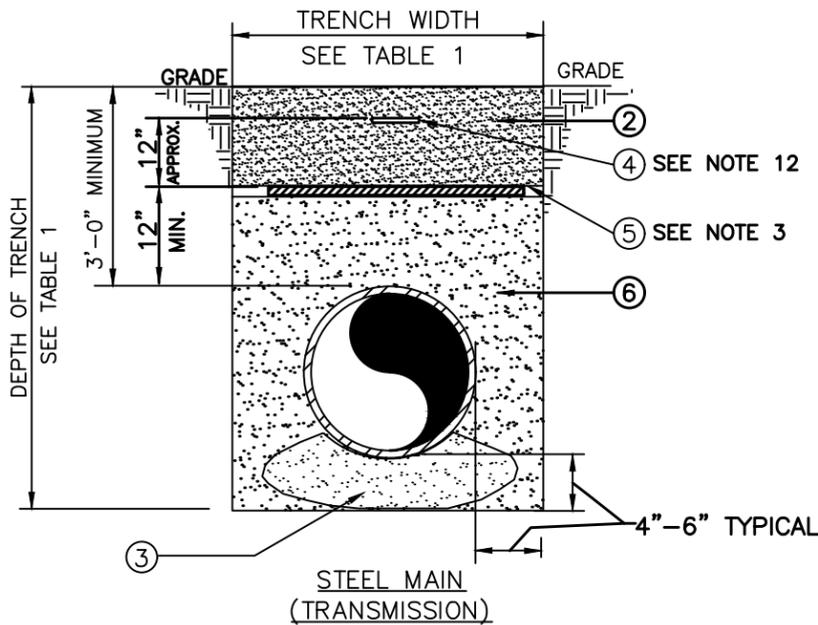
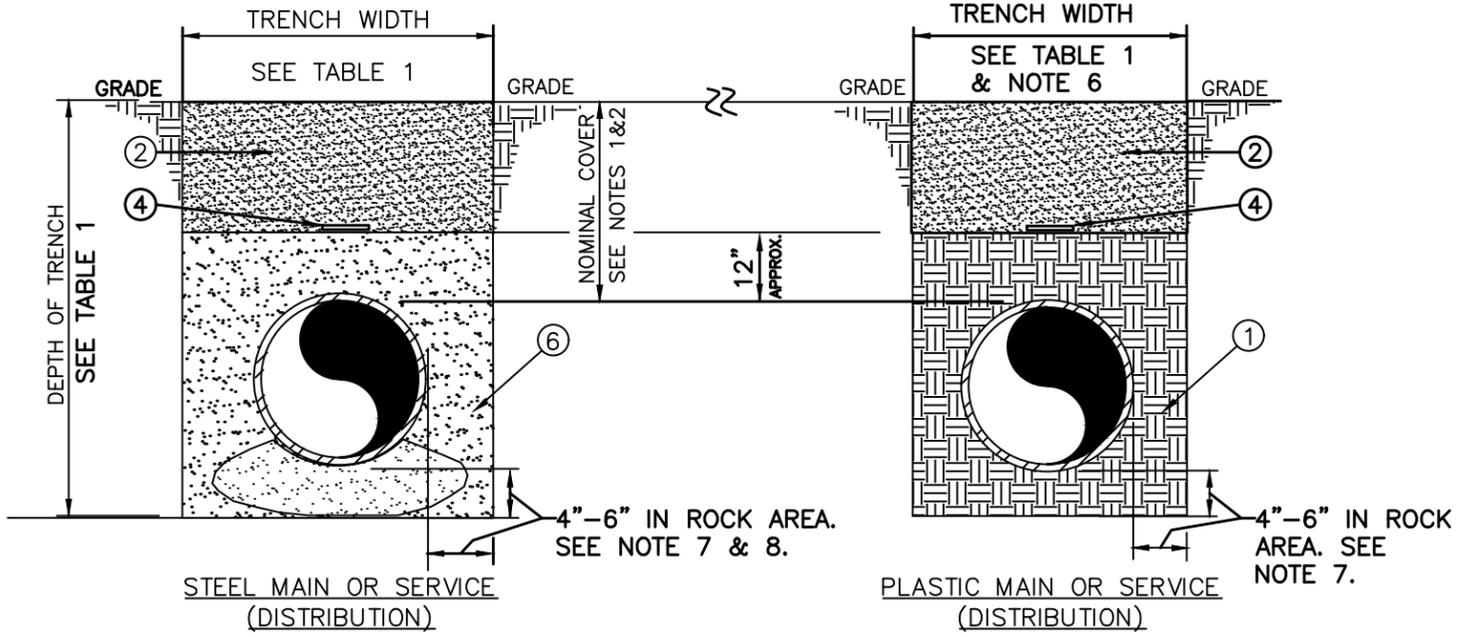


309495

REVISIONS

R. GROGAN	7/21/98	0
M. BALDOVIN	2/02/06	1
REVISED TRENCH WIDTH FOR 4" THRU 12" MAINS IN TABLE 1 REMOVED REQUIREMENT FOR SANDBAGS FOR STEEL DISTRIBUTION MAIN.		
RAJ.	2/01/06	
M. BALDOVIN	4/04/06	2
ADDED REQUIREMENTS OF SAND BAGS FOR STEEL DISTRIBUTION MAIN.		
RAJ.	4/04/06	
M. BALDOVIN	3/12/08	3
REVISED TRENCH WIDTH OF 16" AND GREATER SIZE MAINS IN TABLE 1.		
P.L.S.	1/28/08	
M. BALDOVIN	4/29/13	4
REVISED TITLE REVISED DRAWING IN ITS ENTIRETY.		
H.T.	4/24/13	
M. BALDOVIN	3/31/17	5
REVISED FILL TYPE AND DEPTHS OF ALL DETAILS. REVISED BILL OF MATERIAL AND NOTES.		
J.F.	3/23/17	
C.S.	3/31/17	
M. BALDOVIN	4/10/17	6
CORRECTED CROSS SECTION MATERIAL DESIGNATION TO STEEL.		
C.S.	4/06/17	
M. BALDOVIN	9/29/17	7
REVISED NOTE 11. REGARDING MINIMUM TRENCH WIDTH. REVISED NOTE 12. REGARDING WARNING TAPE.		
H.D.	9/18/17	
M. BALDOVIN	9/12/19	8
ADDED NOTE 14. REGARDING WOOD BED BLOCKS AND WEDGES.		
D.O.	9/12/19	
T. FLYNN	4/13/20	9
REVISED BILL OF MATERIAL TABLE: CHANGED DESCRIPTION OF ITEM 6 FROM "SAND" TO "CLEAN NATURAL SAND". ADDED DRAWING EO-8085 FOR ITEM 6 UNDER THE "SPEC. OR DWG. NO" COLUMN. ON DRAWING STEEL MAIN OR SERVICE (DISTRIBUTION), CHANGED SOIL TYPE FROM 1 TO 6. ON DRAWING STEEL MAIN OR SERVICE (DISTRIBUTION), CHANGED CROSSHATCH TO MATCH STEEL MAIN (TRANSMISSION) CROSSHATCH. ADDED NOTE 15.		
D.O.	4/13/20	

GAS OPERATIONS
CONSTRUCTION STDS.
VOLUME 2
SECTION 5



SIZE OF MAIN/SERVICE	APPROXIMATE TRENCH WIDTH (SEE NOTE 11.)	TRENCH DEPTH (MAIN)	TRENCH DEPTH (SERVICE)
1"	0'-10"	3'-6"	2'-6"
1 1/4"	0'-10"	3'-6"	2'-6"
1 1/2"	0'-10"	3'-6"	2'-6"
2"	1'-0"	3'-8"	2'-8"
3"	1'-0"	3'-8"	2'-8"
4"	1'-2"	3'-10"	2'-10"
6"	1'-4"	4'-0"	3'-0"
8"	1'-6"	4'-2"	3'-2"
10"	1'-8"	4'-4"	3'-4"
12"	1'-10"	4'-6"	3'-6"
16"	4'-4"	4'-10"	3'-10"
20"	4'-8"	5'-2"	4'-2"
24"	5'-0"	5'-6"	4'-6"
30"	5'-6"	6'-0"	
36"	6'-0"	6'-6"	

ITEM NO.	DESCRIPTION	SPEC. OR DWG. NO.	CLASS & STOCK NO.
1	SAND/ 3/8" CLEAN FILL/ RECYCLED SCREENING BACKFILL	EO-8085	-
2*	PROPERLY COMPACTED SUITABLE BACKFILL	EO-1181	-
3	SANDBAG	ASTM C-33	000-0075
4	"WARNING BURIED GAS LINES BELOW" TAPE	G-8005/ G-8100	024-6660
5	STEEL PROTECTIVE COVER	EO-6799-C	-
6	CLEAN NATURAL SAND	EO-8085	-

REFERENCE SPECS. & DWGS.:

GAS MAIN INSTALLATION G-8005
 GAS SERVICE INSTALLATION G-8100
 GAS SERVICE SIZING G-8200
 STEEL PROTECTION PLATES EO-6799-C; G-8051; G-11863
 PROPER CLEARANCES CI-920-1; EO-5570-C
 SHEETING EO-16954-B; EO-16965-B
 BACKFILLING EO-1181; EO-8085
 MARKER BALLS 502664

NOTES:

- DISTRIBUTION MAINS SHOULD BE INSTALLED WITH A MINIMUM 3'-0" COVER SO AS TO ALLOW A MINIMUM COVER OF 2'-0" ON THE SERVICE PIPING.
- FOR DISTRIBUTION MAINS OR SERVICES, STEEL PROTECTIVE PLATES ARE REQUIRED WHEN THE COVER IS LESS THAN 2'-0" (SEE SPECS. G-8005, G-8100, AND DWG. EO-6799-C).
- FOR TRANSMISSION MAINS, STEEL PROTECTIVE PLATES ARE REQUIRED FOR ALL NEW INSTALLATIONS REGARDLESS OF COVER AND IF FEASIBLE, WHENEVER AN EXISTING TRANSMISSION MAIN IS EXPOSED (SEE SPECS. G-8051, G-11863, AND DWG. EO-6799-C).
- ENSURE PROPER CLEARANCES ARE MAINTAINED BETWEEN GAS FACILITIES AND OTHER FACILITIES OR STRUCTURES (SEE CI-920-1 AND DWG. EO-5570-C).
- WHEN SHEETING IS USED, THE "TRENCH WIDTH" DIMENSION IN TABLE 1 SHALL BE MEASURED FROM THE INSIDE OF THE SHEETING.
- WHEN INSTALLING COILED PLASTIC PIPE, THE TRENCH WIDTH MAY BE LESS THAN SHOWN ON TABLE 1.
- DISTRIBUTION MAINS AND SERVICES MUST BE PROPERLY SUPPORTED ON UNDISTURBED OR WELL-COMPACTED SOIL. ALL MATERIAL USED FOR BACKFILL AND PIPE SUPPORT MUST BE FREE OF MATERIALS THAT COULD DAMAGE THE PIPE OR ITS COATING. IN A "ROCK AREA" A 4"-6" BEDDING OF SAND, 3/8" CLEAN FILL, OR RECYCLED SCREENING BACKFILL SHALL BE USED.
- FOR STEEL MAINS AND SERVICES, INSTALL SANDBAGS AT 10' INTERVALS.
- ALL REPLACEMENT DIRECT BURIED COPPER TUBING AND PLASTIC TUBING SERVICES IN 1" OR 1 1/4" CTS SIZES SHALL HAVE A PROTECTIVE SLEEVE INSTALLED (SEE G-8100).
- SEE G-8200 FOR MINIMUM SIZES OF NEW DIRECT BURIED PLASTIC, STEEL AND COPPER SERVICES OF VARIOUS PRESSURES.
- TRENCH WIDTH MAY VARY DEPENDING ON STRAIGHTNESS OF PIPE, OFFSETS, SPACE NEEDED TO ACCOMMODATE FOR WELDING, JOINING, ETC. MINIMUM TRENCH WIDTH MAY BE DICTATED BY LOCAL JURISDICTION.
- TO AVOID INSTALLING WARNING TAPE IN THE ROAD BED, WARNING TAPE MAY BE INSTALLED CLOSER TO THE STEEL PROTECTIVE COVER.
- FOR INSTALLATION OF ALL NEW MAINS AND/OR SERVICES, INSTALL ELECTRONIC MARKERS AS PER DRAWING 502664. FOR INSTALLATION OF ALL NEW PLASTIC MAINS AND/OR SERVICES ALSO INSTALL TRACER WIRE AS PER GAS SPECIFICATIONS G-8005 & G-8100.
- ALL WOOD BED BLOCKS AND WEDGES ARE TO BE REMOVED PRIOR TO BACKFILLING.
- SAND BACKFILL, CLEAN NATURAL SAND SHALL BE PROVIDED ACCORDING TO SPEC. EO-8085 AND SPEC. REQUIREMENTS OF ASTM C33 FINE AGGREGATE CRITERIA.

* OR PROPERLY COMPACTED BACKFILL MATERIAL AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODE REQUIREMENTS

TRENCH EXCAVATION FOR
 GAS MAINS & SERVICES UP TO 350 PSIG
 CONSOLIDATED EDISON COMPANY OF N.Y., INC.
 GAS OPERATIONS DEPT.
 DATE 7/21/98
 LAST REV. 4/13/20
 DWG. NO. 309495 REV. 9

THIS DWG. SUPERSEDES _ _ _ _ EO-7922