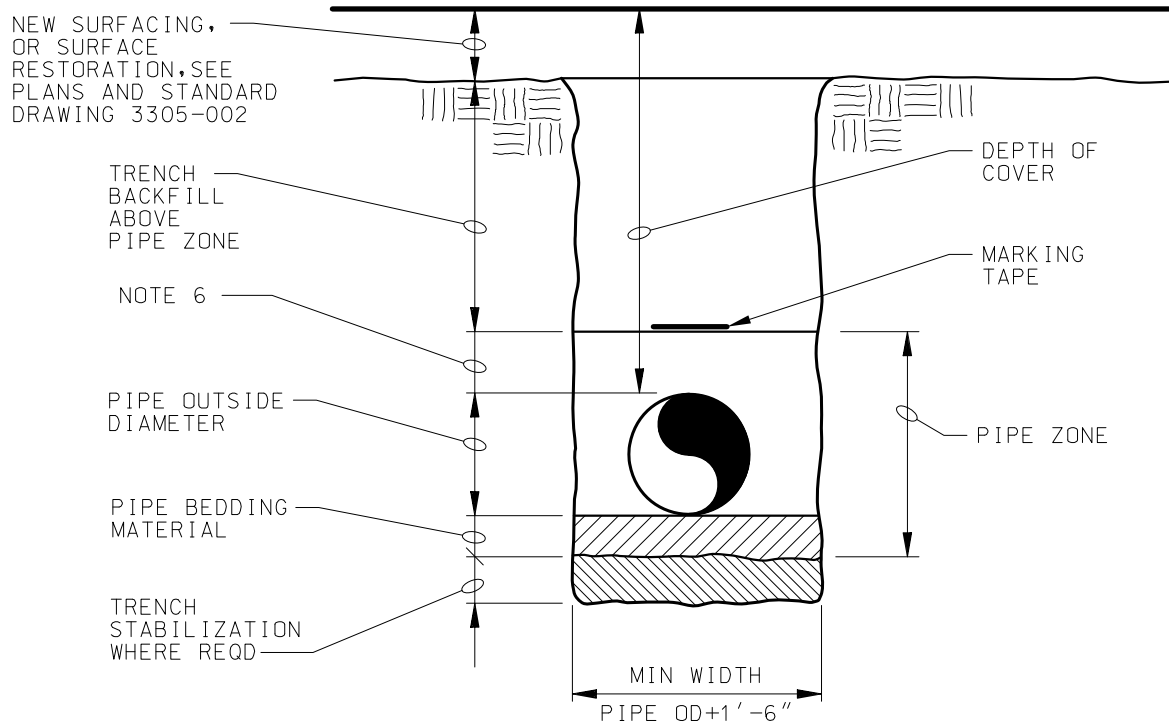


SECTION 5 STANDARD DRAWING INDEX

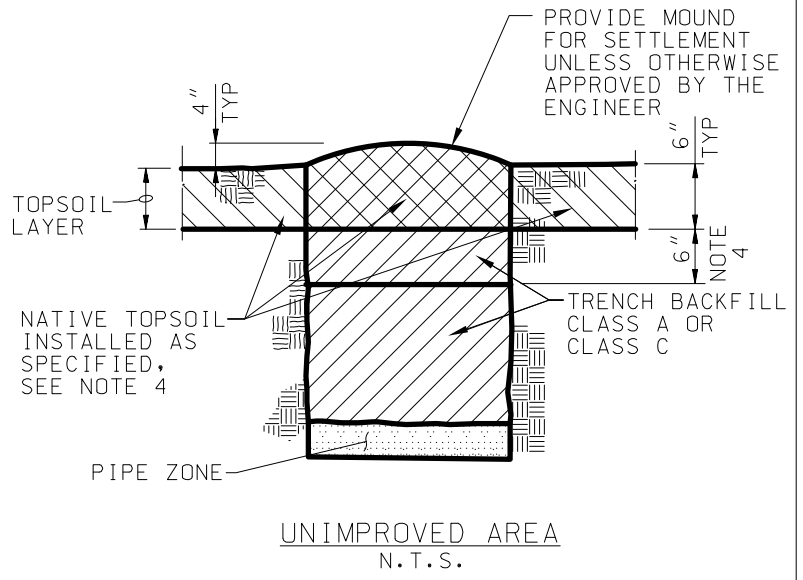
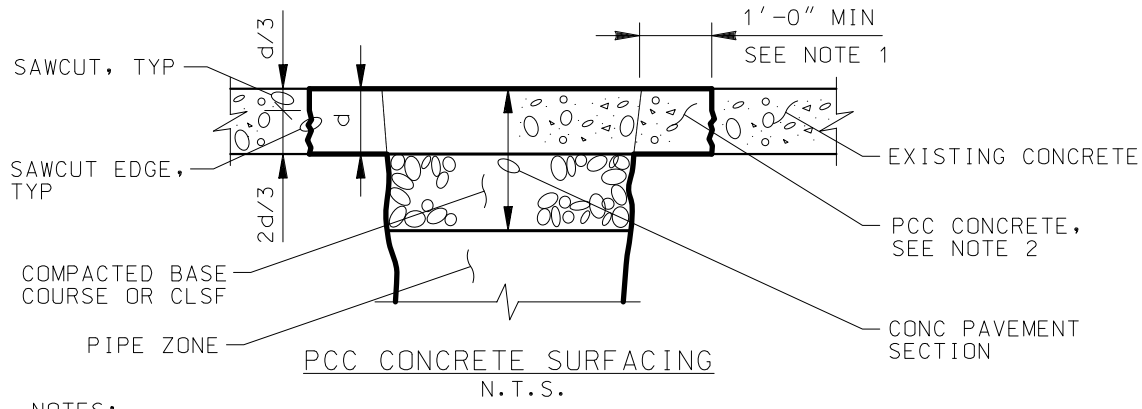
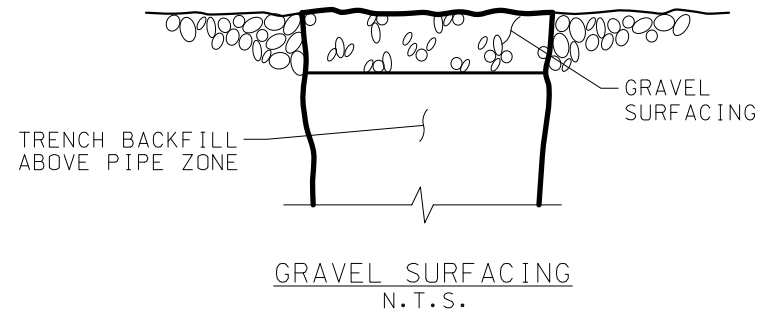
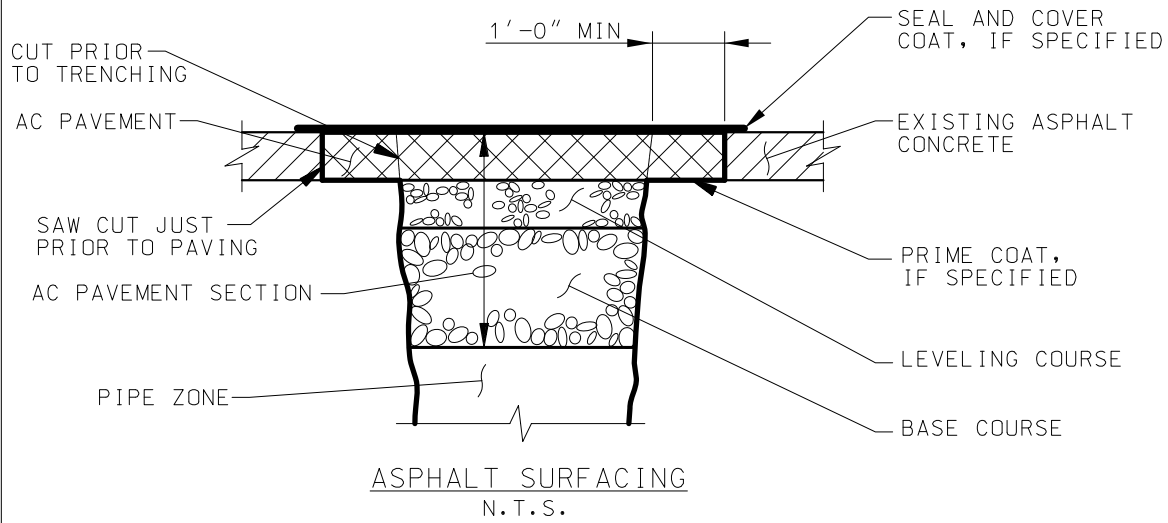
DWG NO.	TITLE
3305-001	TYPICAL TRENCH
3305-002	SURFACE RESTORATION
3305-500	SERVICE LINE STANDARD SYMBOLS AND ABBREVIATIONS
3305-505	ILLUSTRATION OF NUMBER OF SERVICE LINES REQUIRED FOR HOUSE, GARDEN HOME, TOWNHOUSE, PATIO HOME OR DUPLEX
3305-510	ILLUSTRATION OF NUMBER OF SERVICE LINES REQUIRED FOR COMMERCIAL DEVELOPMENTS
3305-515	ILLUSTRATION OF TYPICAL SERVICE LINE FOR A RESTAURANT
3305-520	ILLUSTRATION OF SERVICE LINE REQUIREMENTS FOR MOBILE HOME PARK
3305-525	SERVICE LINE DETAIL
3305-530	SERVICE LINE CONNECTION TO AN EXISTING 4" OR 6" STUB-OUT FROM MAIN SEWER
3305-535	SERVICE LINE CONNECTION TO EXISTING MAIN SEWER GREATER THAN 18"
3305-540	MAIN SEWER CONNECTION RISER
3305-545	MANHOLE SERVICE LINE CONNECTION
3305-550	SERVICE LINE CLEANOUT FOR C-900
3305-555	SERVICE LINE CLEANOUT FOR D.I.P.
3305-560	SERVICE LINE CLEANOUT FOR SCH 40
3305-565	SERVICE LINE HORIZONTAL CHANGE IN DIRECTION
3305-570	MOBILE HOME "P" TRAP
3305-575	SERVICE LINE PERMANENT CAPPING FOR ABANDONED CONNECTION TO MAIN SEWER



NOTES:

1. CONTRACTOR SHALL SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION AND SAFETY AND IN ACCORDANCE WITH CURRENT OSHA REQUIREMENTS.
2. FOUNDATION STABILIZATION MATERIAL SHALL BE INSTALLED ONLY AS APPROVED AND DIRECTED BY THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATION.
3. SEE SPECIFICATION SECTION 31 23 16 EXCAVATION AND 31 23 23 TRENCH BACKFILL.
4. COORDINATE LOCATION OF MARKING TAPE WITH SPECIFICATIONS. PROVIDE NEW SURFACING AS SHOWN ON THE DRAWINGS.
5. WHERE TRENCHES ARE IN AREAS NOT DESIGNATED TO RECEIVE NEW ASPHALT, GRAVEL OR PCC CONCRETE SURFACING, RESTORE EXISTING SURFACE USING SEED OR SOD AS DIRECTED.
6. MINIMUM DEPTH OVER PIPE IS BY SIZE AND SERVICE AS FOLLOWS:
 - a. 4" AND 6" GRAVITY SERVICE: 6" MIN.
 - b. 8" GRAVITY SERVICE AND LARGER AND ALL FORCE MAINS: 12" MIN.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
01/15	TEXT UPDATE	
MAY 2015		TYPICAL TRENCH
APPROVED: _____		STANDARD DRAWING NO. <u>3305-001</u>



NOTES:

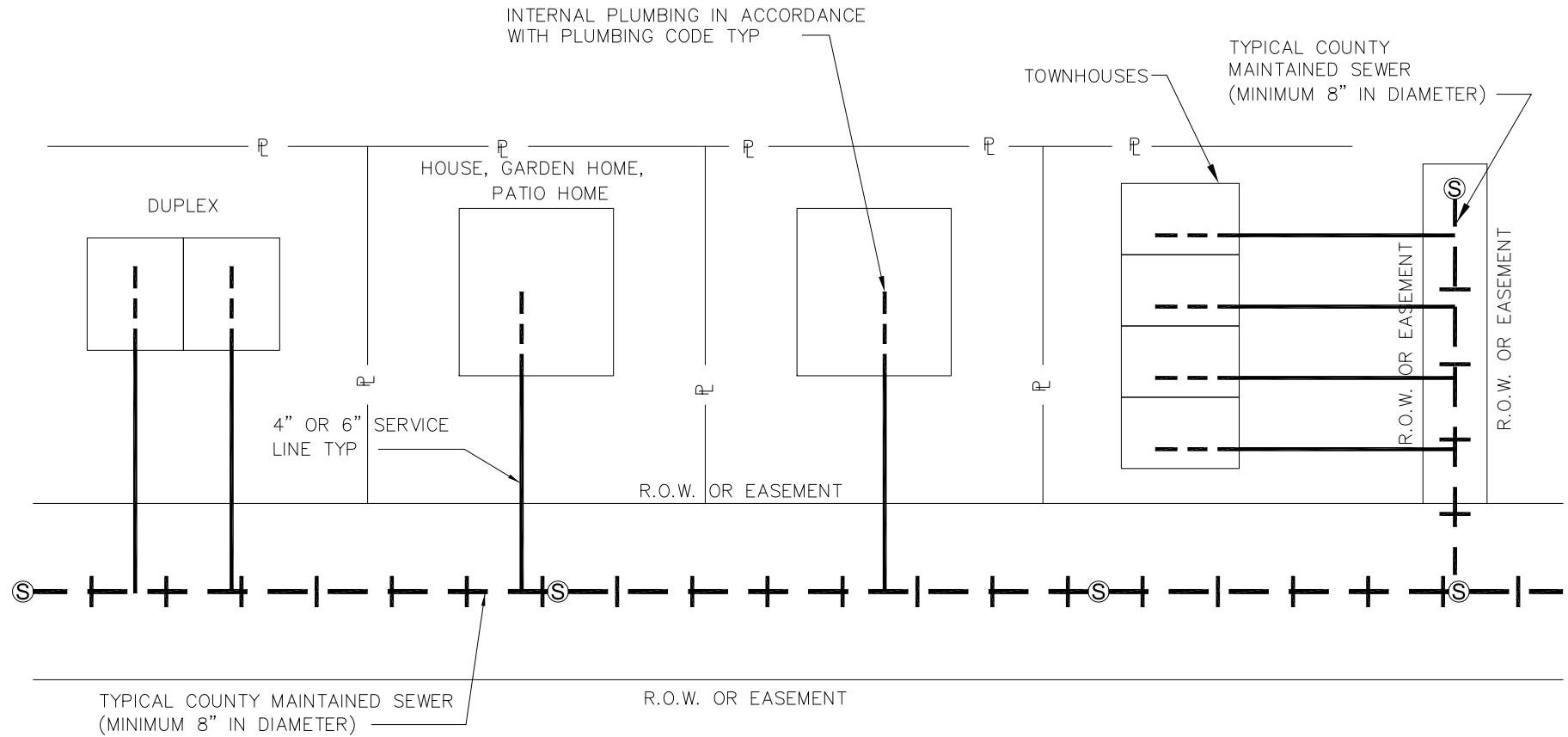
1. IF LOCATION OF TRENCH SAW CUT IS WITHIN 2 FEET OF AN EXISTING JOINT OR EDGE OF CONCRETE, REPLACE ENTIRE CONCRETE SECTION TO THE JOINT OR EDGE.
2. CONSTRUCT JOINTS ACROSS NEW CONCRETE TO MATCH EXISTING JOINT TYPES AND LOCATIONS.
3. SURFACE RESTORATION MUST BE COMPATIBLE WITH TYPE OF BACKFILL USED. COMPACTED CRUSHED ROCK AND LEVELING COURSE BASE SHOULD NOT BE PLACED ON NATIVE MATERIAL.
4. THE TOP 6" OF TRENCH BACKFILL, BENEATH THE TOPSOIL LAYER, SHOULD BE INSTALLED, SMOOTHED, BUT LEFT UN-COMPACTED.
5. TOPSOIL SHALL EXTEND BEYOND TOP OF TRENCH A MINIMUM OF 12".
6. SOD OR SEED AS DIRECTED.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
01/15	TEXT UPDATE	SURFACE RESTORATION
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. <u>3305-002</u>

Ⓢ	MANHOLE
— — —	GRAVITY SEWER WITH BELLS UPHILL
—ℙ—	PROPERTY LINE
D.I.P.	DUCTILE IRON PIPE
O.D.	OUTSIDE DIAMETER
C.O.	CLEAN OUT
SCH 40	SCHEDULE 40 PVC
C-900	PVC C900 PRESSURE PIPE

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
05/14	TEXT UPDATE	
01/15	TEXT UPDATE	SERVICE LINE STANDARD SYMBOLS AND ABBREVIATIONS
MAY 2015		
APPROVED: _____		

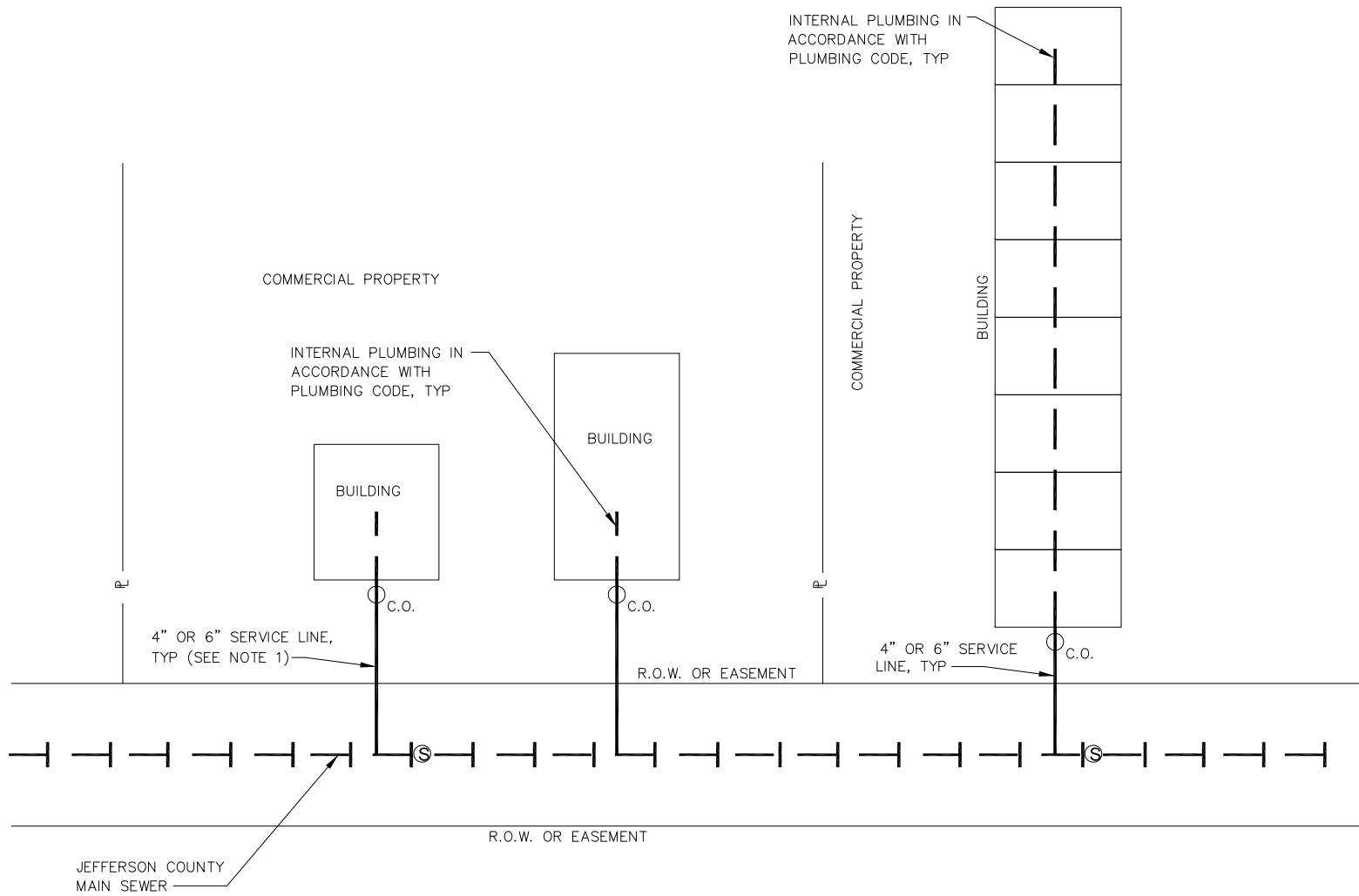
SD4000



NOTES:

1. EACH INDIVIDUAL OWNER SHALL HAVE THEIR OWN SERVICE LINE.
2. THE 8" MAIN SHALL BE DESIGNED, SUBMITTED FOR APPROVAL, AND CONSTRUCTED IN ACCORDANCE WITH THE JEFFERSON COUNTY STANDARDS FOR CONSTRUCTION OF COMMERCIAL AND RESIDENTIAL SANITARY SEWER SYSTEMS.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
11/15	TEXT UPDATE	
NOV 2015		ILLUSTRATION OF NUMBER OF SERVICE LINES REQUIRED FOR HOUSE, GARDEN HOME, TOWNHOUSE, PATIO HOME OR DUPLEX
APPROVED: _____		STANDARD DRAWING NO. <u>3305-505</u>



NOTES:

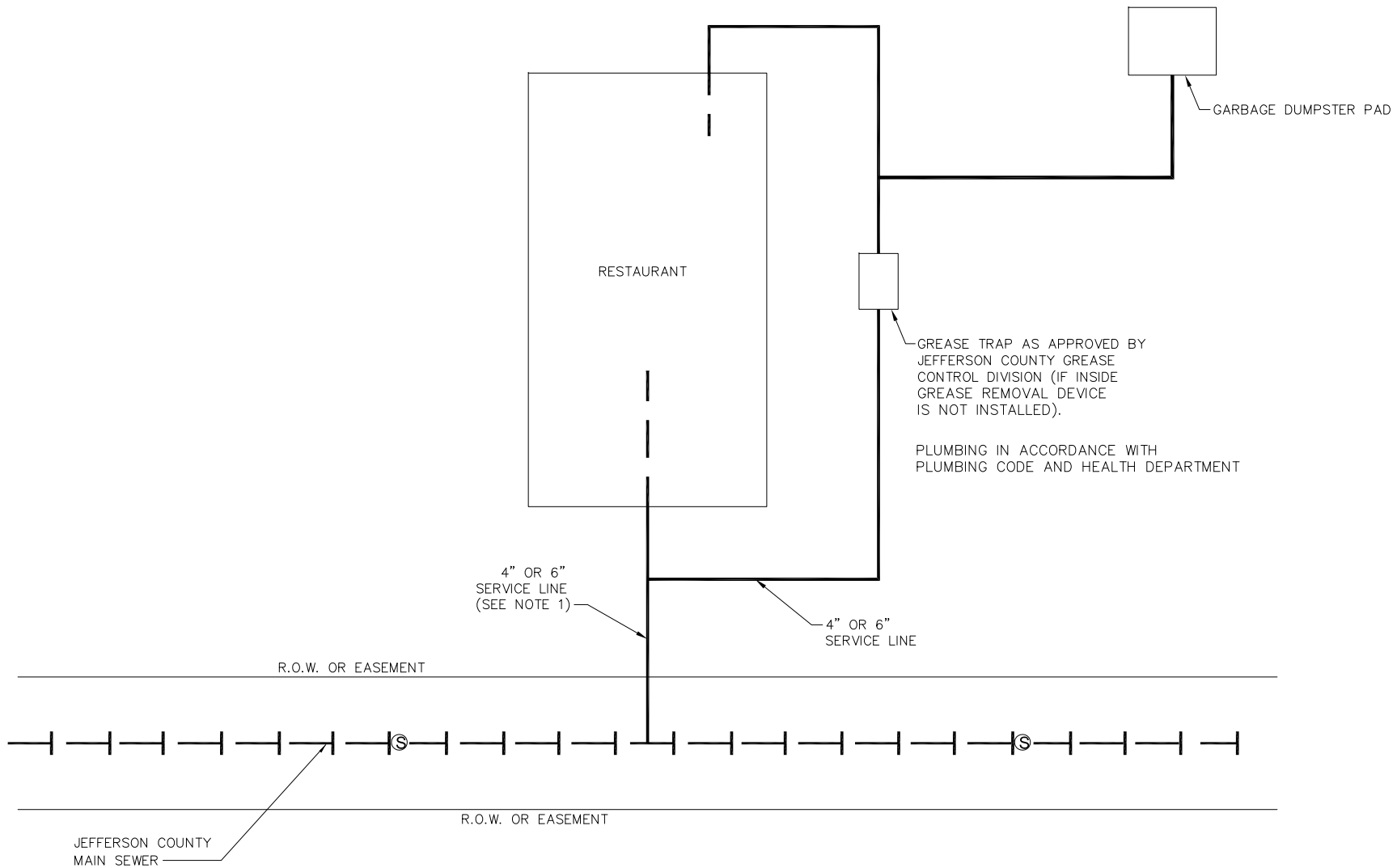
1. EACH SERVICE LINE SHALL ONLY SERVE A SINGLE PREMISE.
2. SEE SECTION 5 OF COMMERCIAL AND RESIDENTIAL SANITARY SEWER DESIGN MANUAL FOR DESIGN AND CONSTRUCTION REQUIREMENTS FOR SERVICE LINES.

DATE	REVISIONS
04/14	UPDATED NOTES AND TERMS TO BE CONSISTENT W/MANUAL
05/14	TEXT UPDATE
01/15	TEXT UPDATE
MAY 2015	
APPROVED: _____	

JEFFERSON COUNTY ALABAMA
ENVIRONMENTAL SERVICES DEPARTMENT

ILLUSTRATION OF NUMBER OF SERVICE LINES REQUIRED FOR COMMERCIAL DEVELOPMENTS

STANDARD DRAWING NO. 3305-510



NOTES:

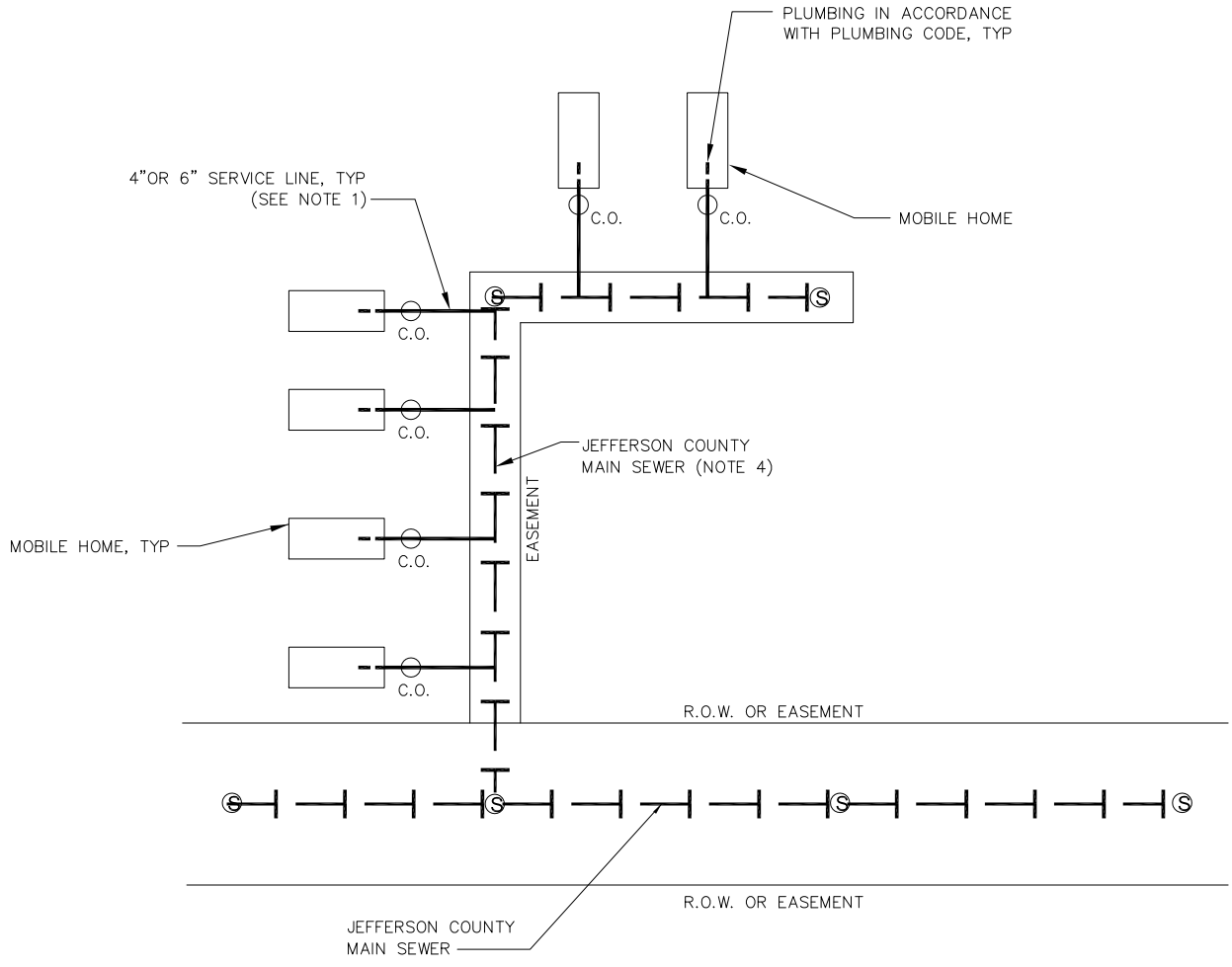
- 1. EACH SERVICE LINE SHALL ONLY SERVE A SINGLE PREMISE.
- 2. SEE SECTION 5 OF COMMERCIAL AND RESIDENTIAL SANITARY SEWER DESIGN MANUAL FOR DESIGN AND CONSTRUCTION REQUIREMENTS FOR SERVICE LINES.

DATE	REVISIONS
04/14	UPDATED NOTES AND TERMS TO BE CONSISTENT W/MANUAL
05/14	TEXT UPDATE
01/15	TEXT UPDATE
MAY 2015	
APPROVED: _____	

JEFFERSON COUNTY ALABAMA
ENVIRONMENTAL SERVICES DEPARTMENT

ILLUSTRATION OF TYPICAL
SERVICE LINE FOR A
RESTAURANT

STANDARD DRAWING NO. 3305-515



NOTES:

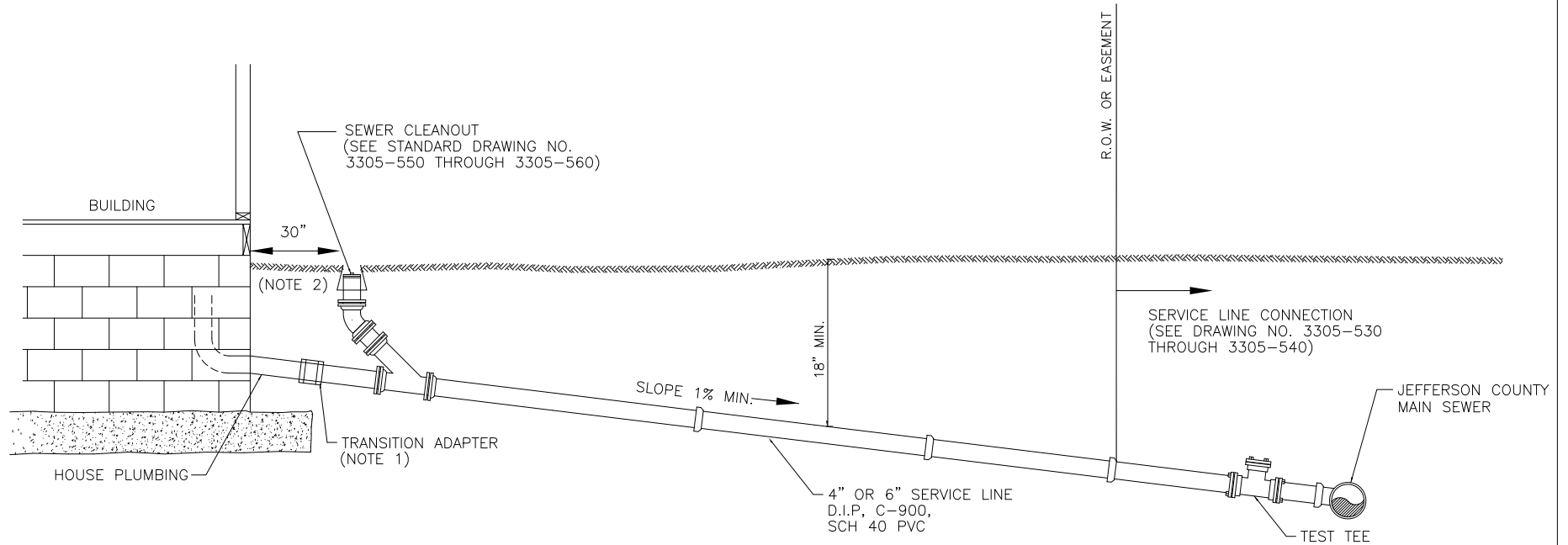
1. EACH SERVICE LINE SHALL ONLY SERVE A SINGLE MOBILE HOME.
2. SEE SECTION 5 OF COMMERCIAL AND RESIDENTIAL SANITARY SEWER DESIGN MANUAL FOR SERVICE LINES.
3. "P" TRAP SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO. 3305-570.
4. MAIN SEWER SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTION 6 OF THE COMMERCIAL AND RESIDENTIAL DESIGN AND CONSTRUCTION MANUAL.

DATE	REVISIONS
04/14	UPDATED NOTES AND TERMS TO BE CONSISTENT W/MANUAL
05/14	TEXT UPDATE
01/15	TEXT UPDATE
MAY 2015	
APPROVED: _____	

JEFFERSON COUNTY ALABAMA
ENVIRONMENTAL SERVICES DEPARTMENT

ILLUSTRATION OF SERVICE LINE REQUIREMENTS FOR MOBILE HOME PARK

STANDARD DRAWING NO. 3305-520



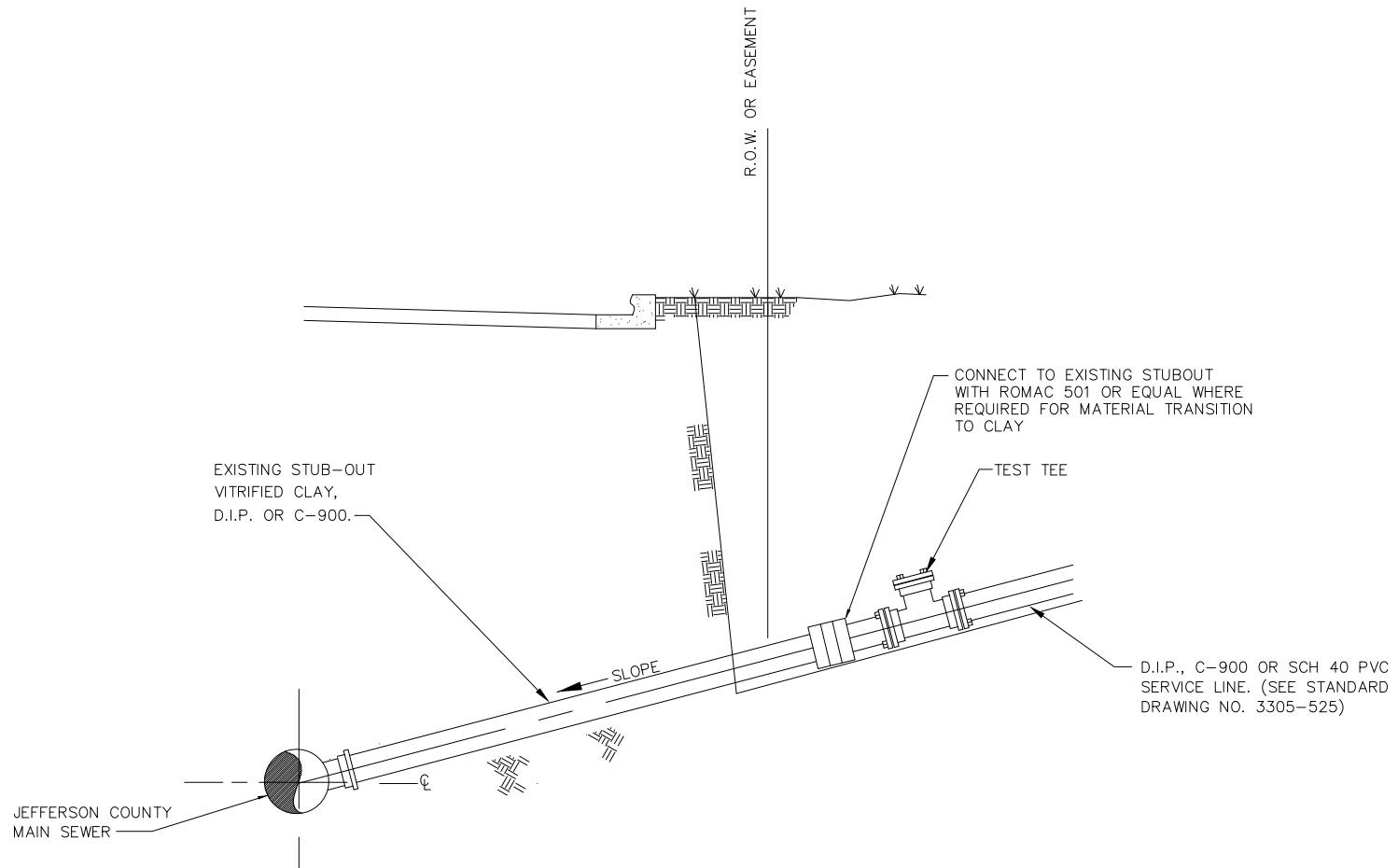
NOTES:

1. TRANSITION ADAPTER SHALL BE ROMAC 501 (OR APPROVED EQUAL).
2. SCH 40 PVC CLEANOUT MAY BE INSTALLED IF WITHIN 30" OF BUILDING. OTHERWISE SHALL BE D.I.P. OR C-900.
3. SEE DETAIL 3305-001 FOR TRENCH DETAIL AND 3305-602 FOR SURFACE RESTORATION.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
04/14	UPDATED TO MATCH MANUAL AND NEW MATERIALS	
05/14	TEXT UPDATE	SERVICE LINE DETAIL
01/15	TEXT UPDATE	
MAY 2015		STANDARD DRAWING NO. 3305-525
APPROVED: _____		

SD4035

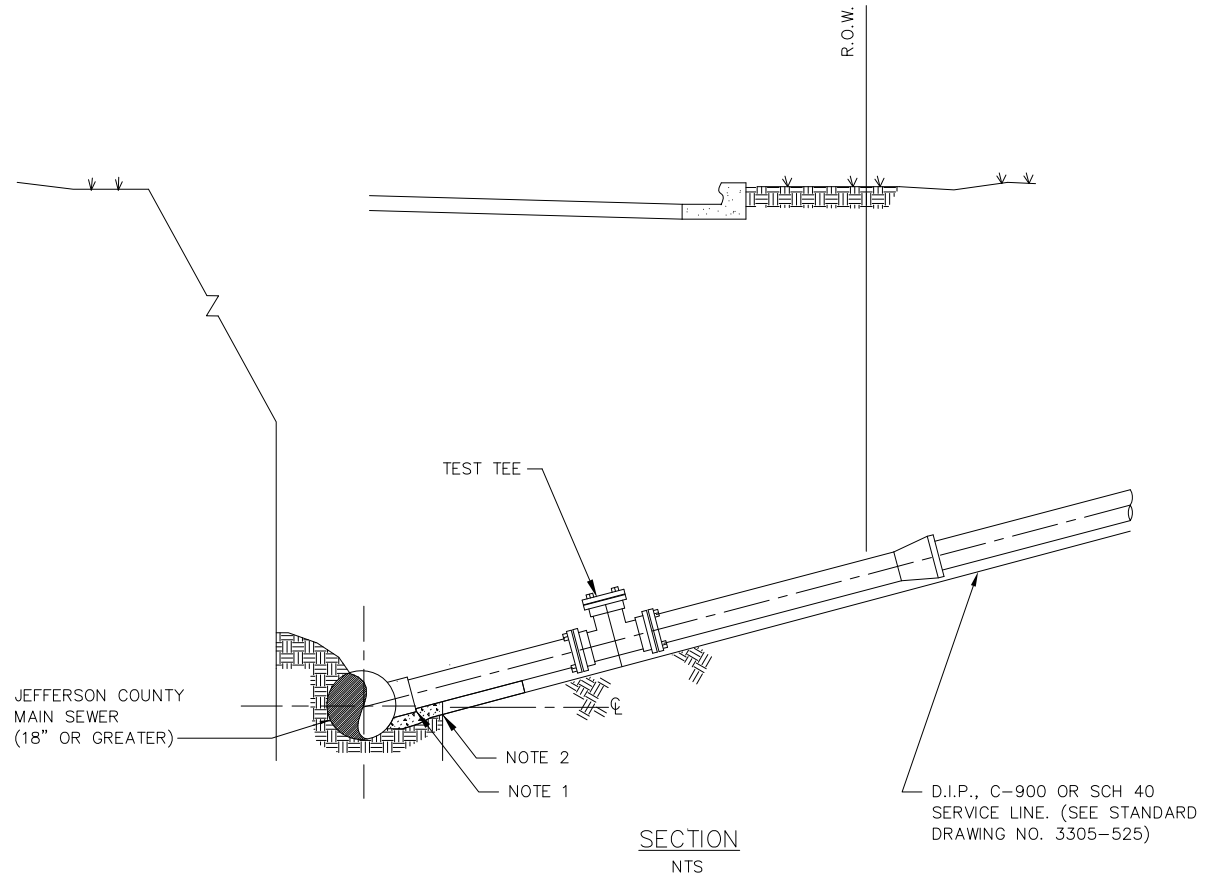
140508 1:58PM



SECTION
NTS

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
04/14	UPDATED TO MATCH MANUAL AND NEW MATERIALS	
05/14	TEXT UPDATE	SERVICE LINE CONNECTION TO AN EXISTING 4" OR 6" STUB-OUT FROM MAIN SEWER
01/15	TEXT UPDATE	
MAY 2015		STANDARD DRAWING NO. 3305-530
APPROVED: _____		

SD4040
11-04-97 11:52:00PM



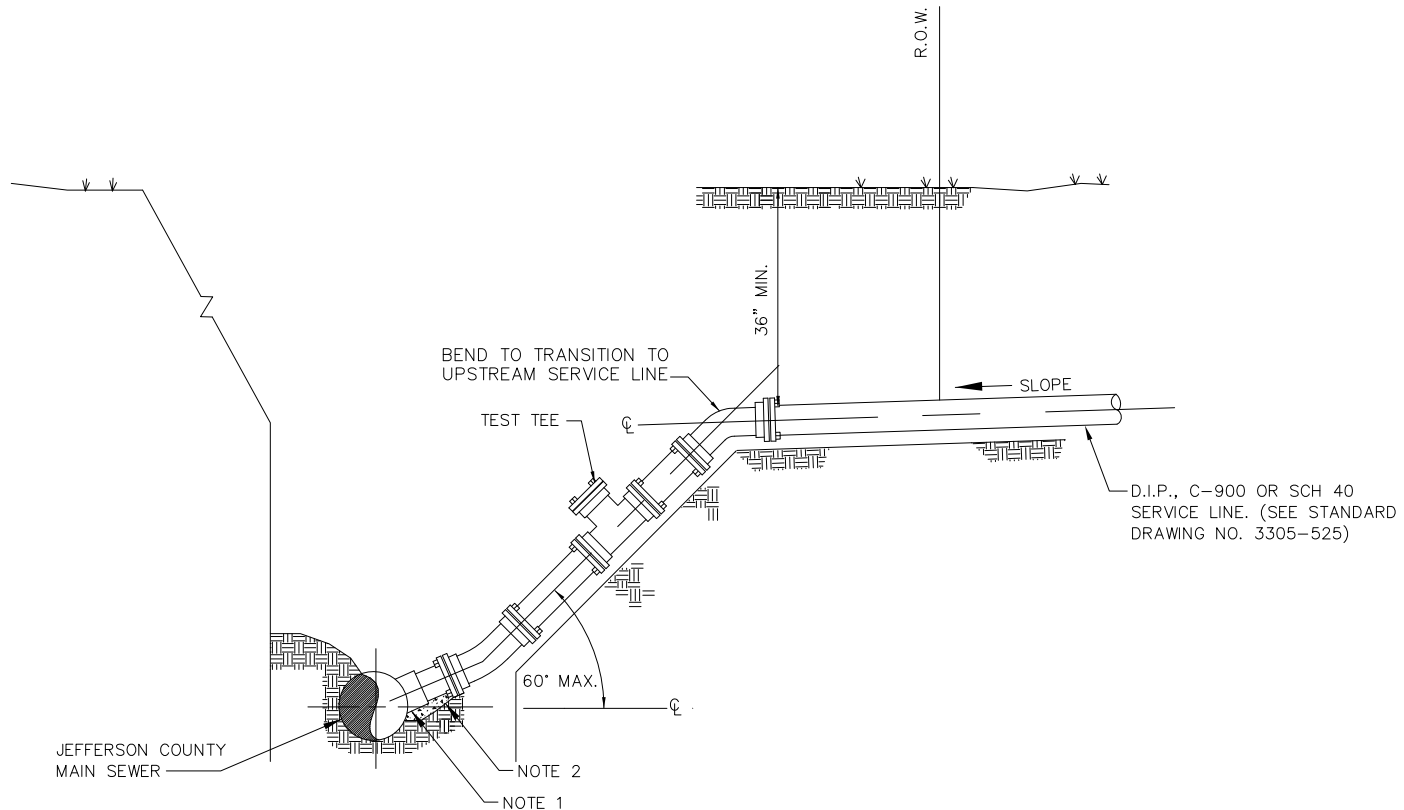
SECTION
NTS

NOTES:

1. TAP PIPE AND PROVIDE WATERTIGHT CONNECTION USING INSERTA TEE OR ROMAC CB.
2. BACKFILL UNDER TAP WITH FLOWABLE FILL. DO NOT ENCASE INSERTA OR ROMAC CB TEE IN FLOWABLE FILL.
3. BACKFILL ABOVE AND AROUND TEE WITH NO. 57 OR NO. 67 AGGREGATE.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
04/14	UPDATED TO MATCH MANUAL AND NEW MATERIALS	
05/14	TEXT UPDATE	
01/15	TEXT UPDATE	SERVICE LINE CONNECTION TO EXISTING MAIN SEWER GREATER THAN 18"
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. 3305-535

SD4070.DWG 10-12-98 1:54PM

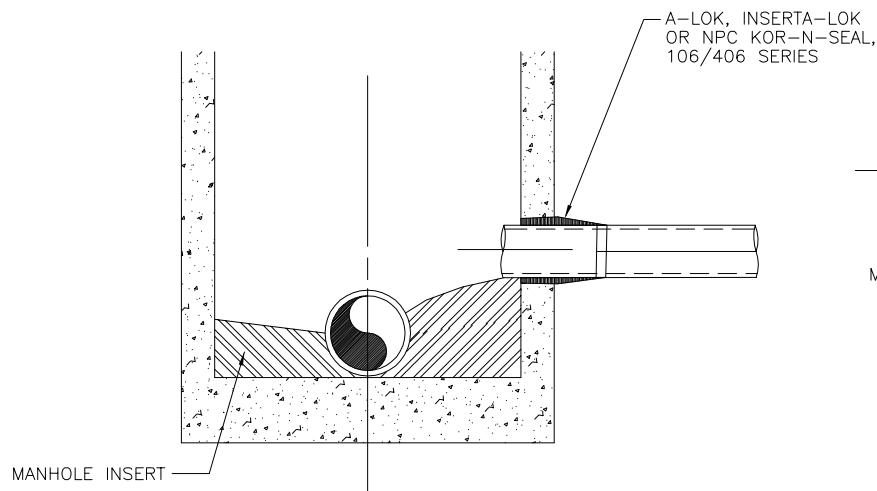


SECTION
NTS

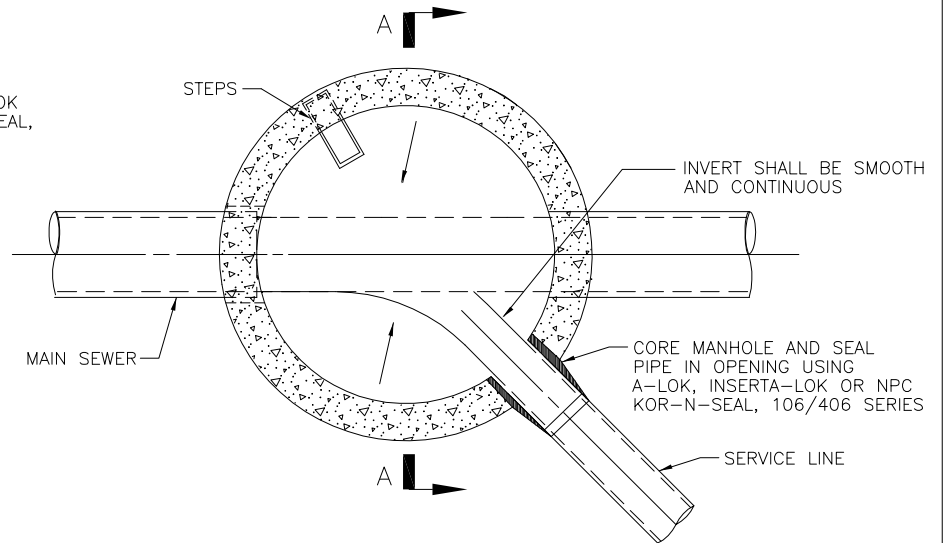
NOTES:

1. TAP PIPE AND PROVIDE WATERTIGHT CONNECTION USING INSERTA TEE OR ROMAC CB.
2. BACKFILL UNDER TAP WITH FLOWABLE FILL. DO NOT ENCASE INSERTA TEE OR ROMAC CB IN FLOWABLE FILL.
3. BACKFILL ABOVE AND AROUND TEE WITH NO. 57 OR NO. 67 AGGREGATE.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
04/14	UPDATED TO MATCH MANUAL AND NEW MATERIALS	
05/14	TEXT UPDATE	MAIN SEWER CONNECTING RISER
01/15	TEXT UPDATE	
MAY 2015		STANDARD DRAWING NO. <u>3305-540</u>
APPROVED: _____		



A-A SECTION
N.T.S.

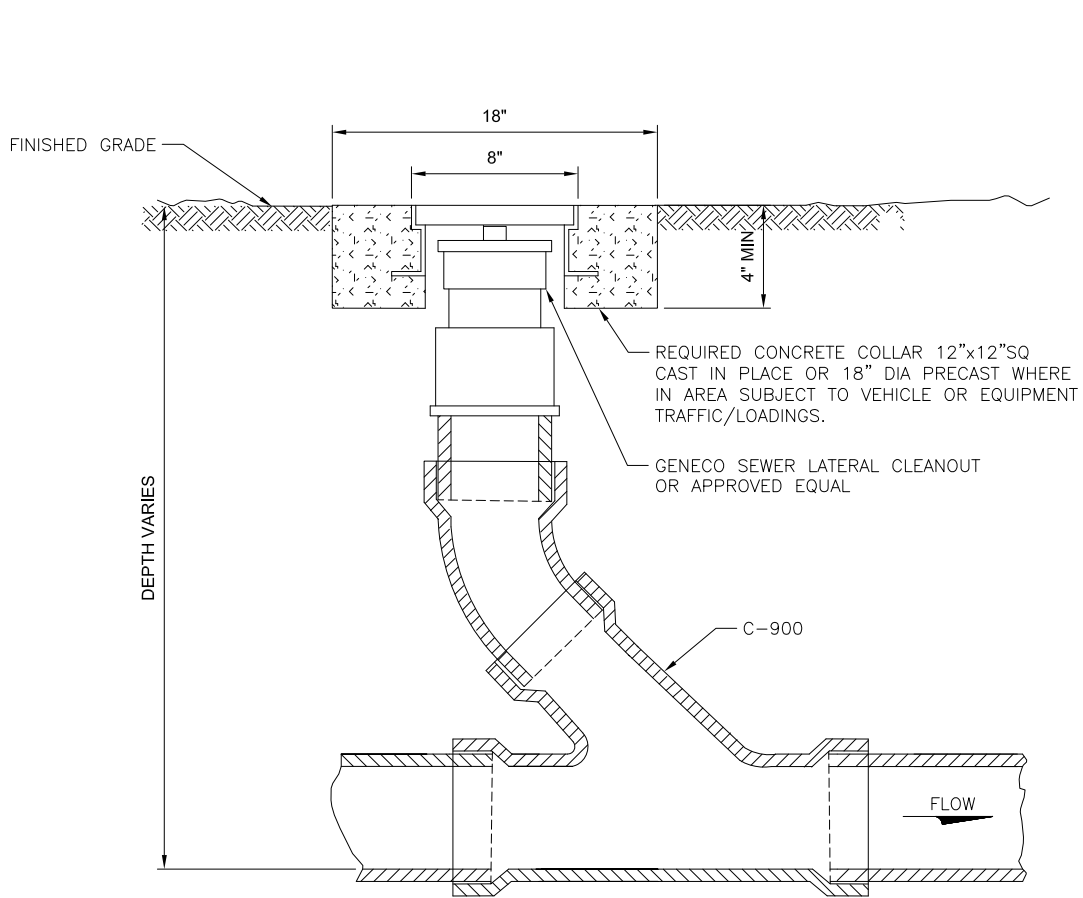


MANHOLE BASE PLAN
N.T.S.

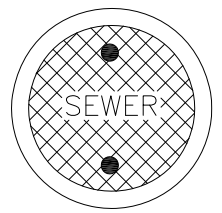
NOTES:

1. CONNECTION TO A MANHOLE REQUIRES APPROVAL OF THE ENVIRONMENTAL SERVICES DEPARTMENT.

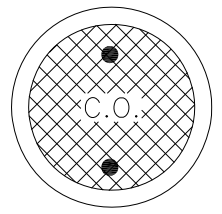
DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
04/14	UPDATE TO MATCH MANUAL AND NEW MATERIALS	MANHOLE SERVICE LINE CONNECTION
05/14	TEXT UPDATE	
01/15	TEXT UPDATE	
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. 3305-545



COVER DETAIL



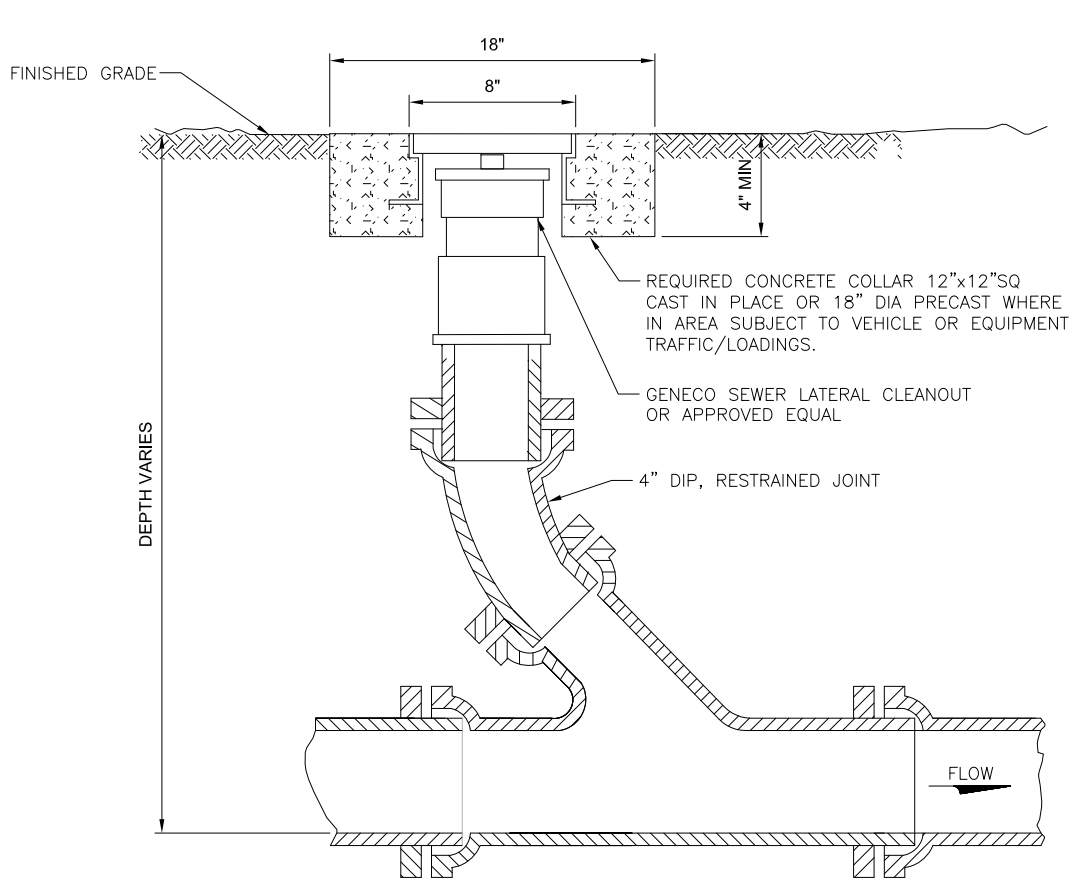
OR



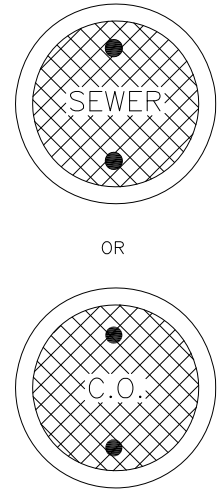
LID MUST HAVE
"SEWER" OR "C.O."
STAMPED ON IT
FROM THE FACTORY

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
04/14	UPDATE TO MATCH MANUAL AND NEW MATERIALS	
01/15	TEXT UPDATE	SERVICE LINE CLEANOUT FOR C-900
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. <u>3305-550</u>

SD4091
10-05-98 4:03PM



COVER DETAIL



LID MUST HAVE
"SEWER" OR "C.O."
STAMPED ON IT
FROM THE FACTORY

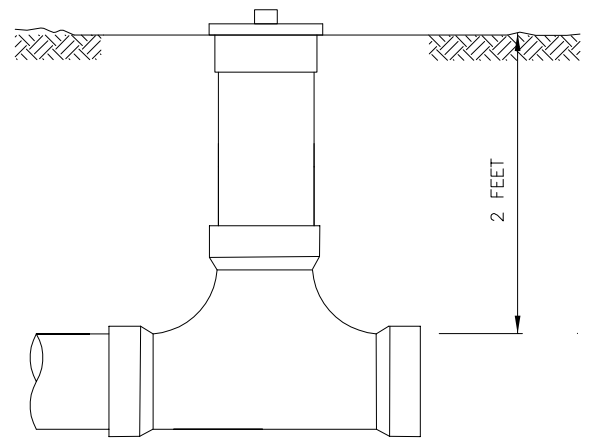
DATE	REVISIONS
04/14	UPDATED TO MATCH MANUAL & NEW MATERIALS
01/15	TEXT UPDATE
MAY 2015	
APPROVED: _____	

JEFFERSON COUNTY ALABAMA
ENVIRONMENTAL SERVICES DEPARTMENT

SERVICE LINE
CLEANOUT FOR D.I.P.

STANDARD DRAWING NO. 3305-555

TWO WAY CLEANOUT ALLOWED
IF DEPTH IS NO MORE THAN 24 INCHES



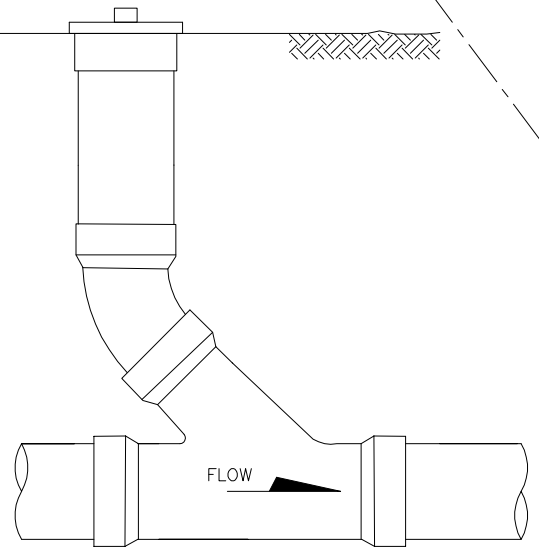
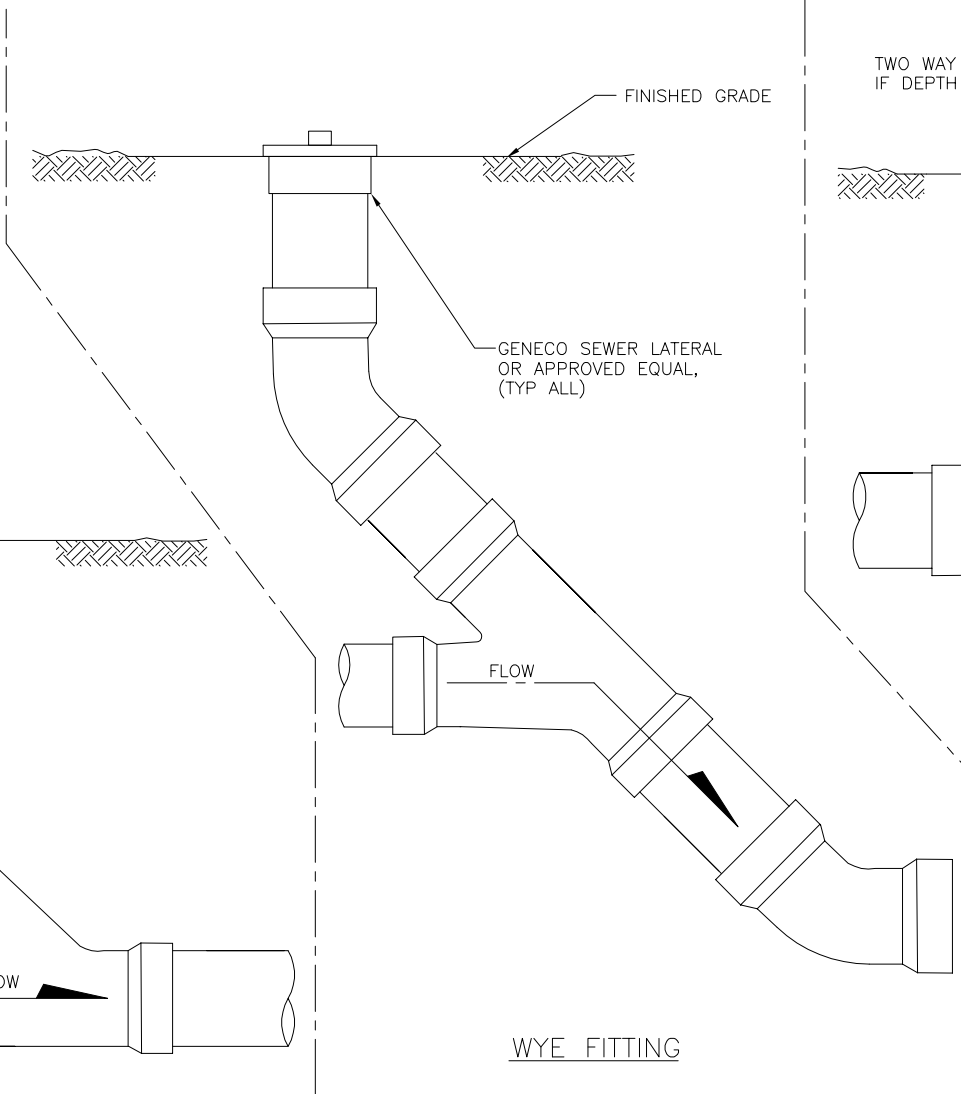
2 WAY CLEANOUT

FINISHED GRADE

GENECO SEWER LATERAL
OR APPROVED EQUAL,
(TYP ALL)

FLOW

WYE FITTING



COMBINATION WYE and 45° BEND

NOTES:

1. MAY USE SCH. 40 PVC FOR CLEANOUT IF LOCATED NO MORE THAN 30 INCHES FROM BUILDING AND OUTSIDE PAVEMENT AND WHERE NOT SUBJECT TO VEHICLE LOADS.
2. IF SERVICE LINE MATERIAL IS TO CHANGE AFTER CLEANOUT SEE 3305-525 FOR ADAPTOR.

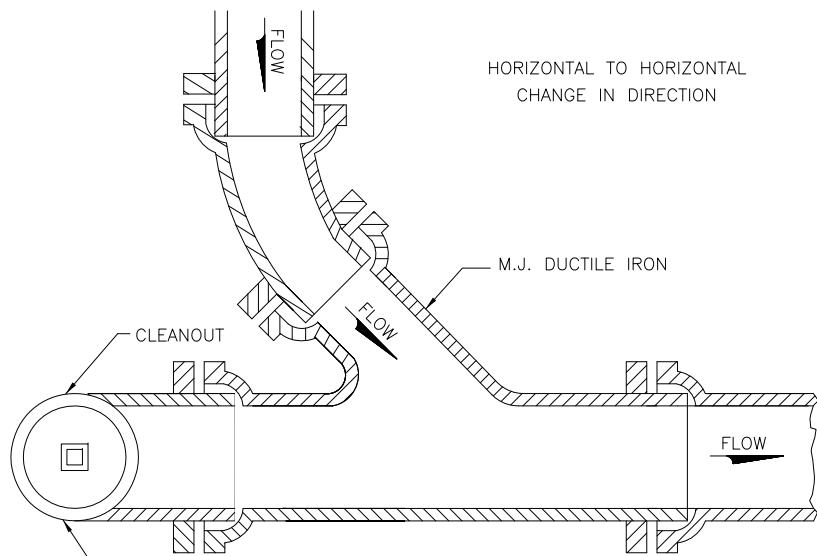
DATE	REVISIONS
04/14	UPDATE TO MATCH MANUAL & NEW MATERIALS
01/15	REMOVED COLLAR
MAY 2015	
APPROVED: _____	

JEFFERSON COUNTY ALABAMA
ENVIRONMENTAL SERVICES DEPARTMENT

SERVICE LINE CLEANOUT
FOR SCH 40

STANDARD DRAWING NO. 3305-560

SD4100
10-12-98 2:18PM



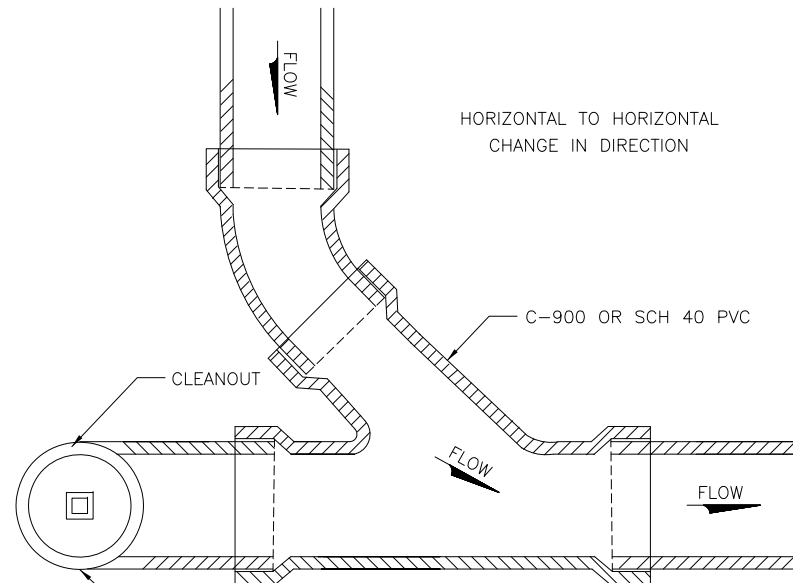
HORIZONTAL TO HORIZONTAL
CHANGE IN DIRECTION

M.J. DUCTILE IRON

CLEANOUT

SEE STANDARD DRAWING NO. 3305-555

DUCTILE IRON PIPE
PLAN VIEW



HORIZONTAL TO HORIZONTAL
CHANGE IN DIRECTION

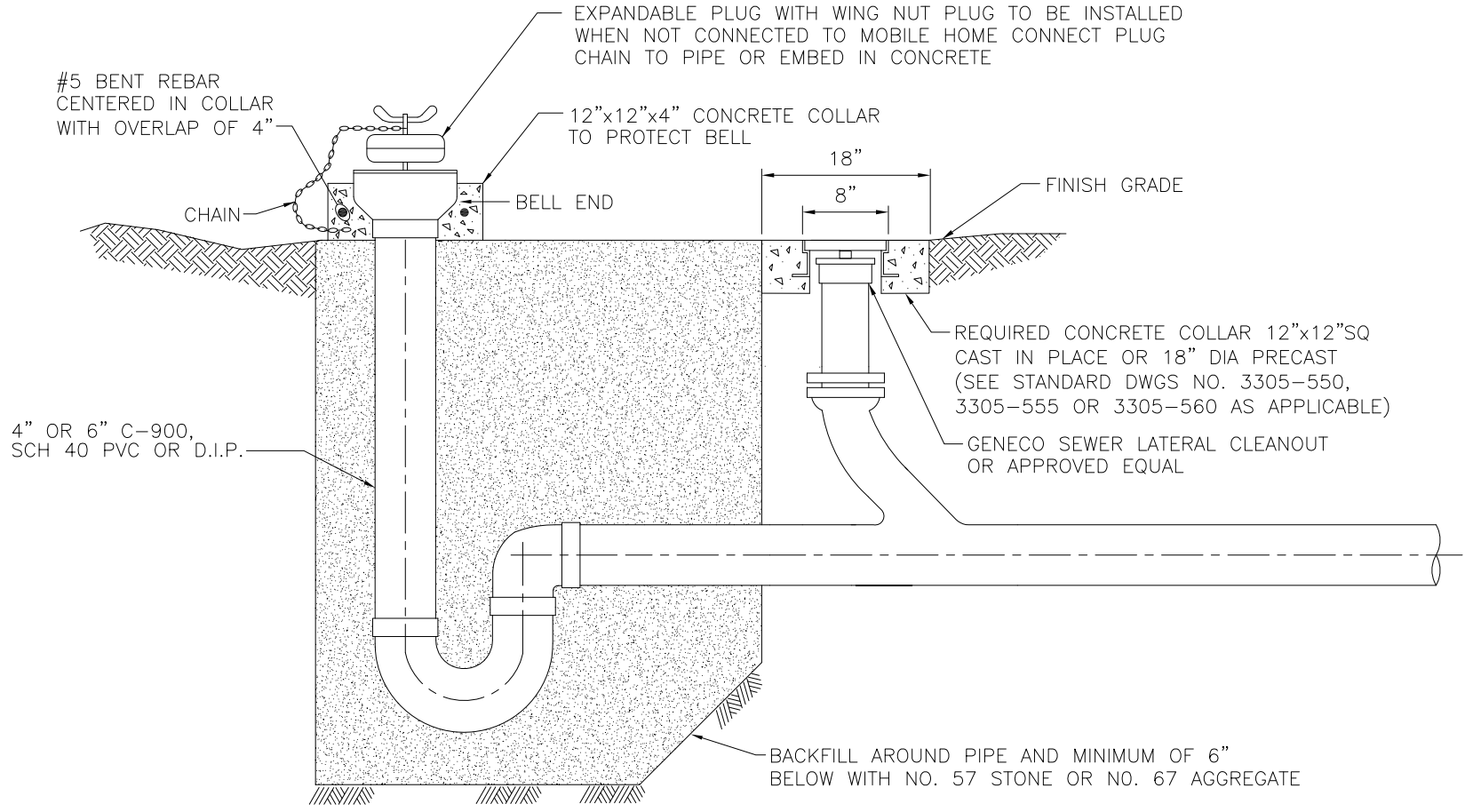
C-900 OR SCH 40 PVC

CLEANOUT

SEE STANDARD DRAWING NO. 3305-550 OR 3305-560

C-900 OR SCH 40 PVC PIPE
PLAN VIEW

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
01/15	TEXT UPDATE	
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. <u>3305-565</u>

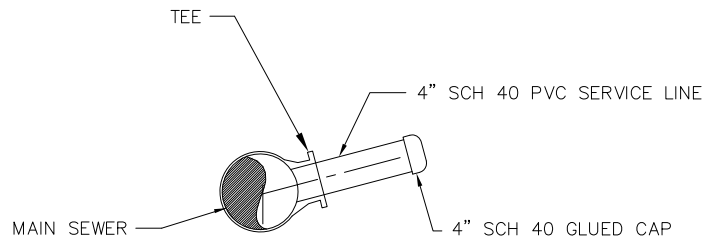


"P" TRAP
N.T.S.

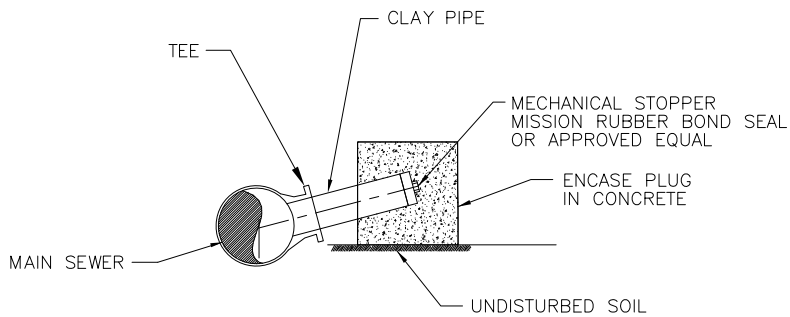
DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
04/14	UPDATED TO MATCH MANUAL & NEW MATERIAL	MOBILE HOME "P" TRAP
01/15	TEXT UPDATE	
MAY 2015		STANDARD DRAWING NO. 3305-570
APPROVED: _____		

SD4105

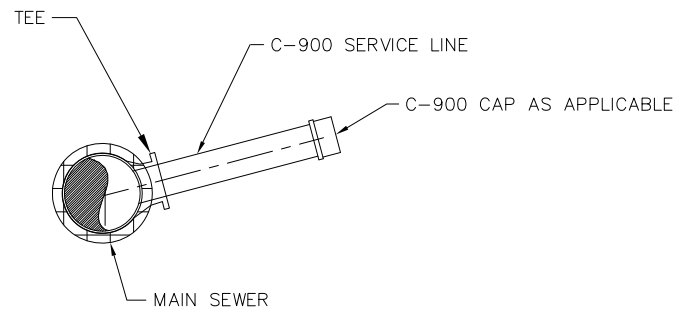
10-29-98 10:56AM



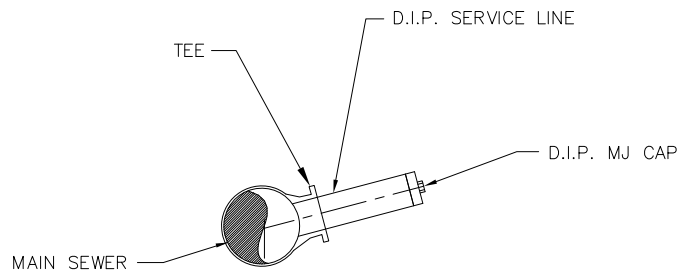
SCH 40 PVC



CLAY PIPE



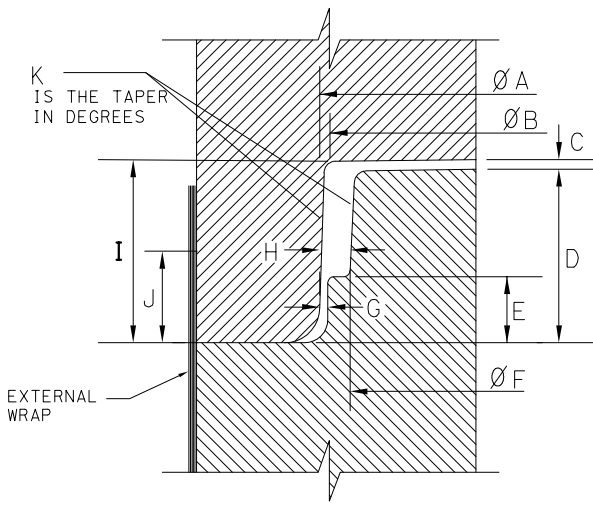
C-900



D.I.P.

GENERAL NOTE:
BACKFILL UNDER, AROUND AND 12" ABOVE EXCAVATED
SECTION OF SERVICE LINE WITH NO. 57 OR NO. 67 AGGREGATE.

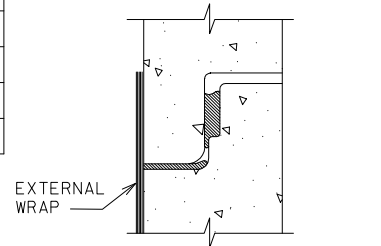
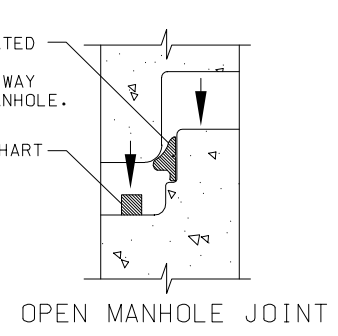
DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
01/15	TEXT UPDATE	
JAN 2015		SERVICE LINE PERMANENT CAPPING FOR ABANDONED CONNECTION TO MAIN SEWER
APPROVED: _____		STANDARD DRAWING NO. 3305-575



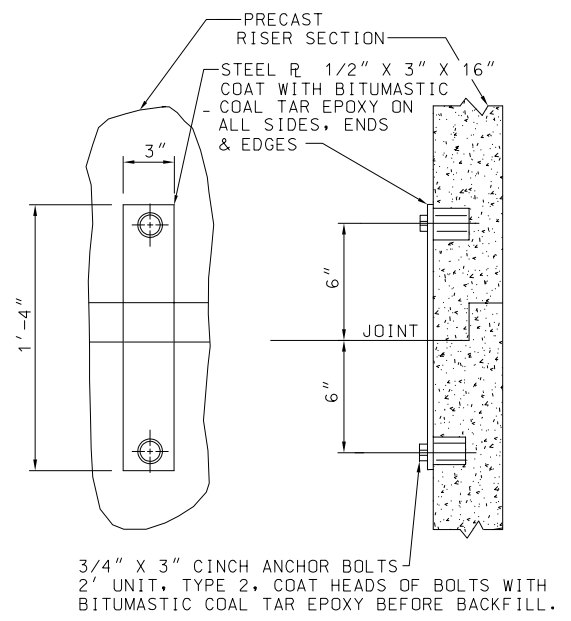
TYLOX-SUPER SEAL PRELUBRICATED GASKET TO BE PLACED FIRMLY AGAINST THE OFFSET ALL THE WAY AROUND THE SPIGOT OF THE MANHOLE.

SEE REQUIRED SIZE CHART FOR CONSEAL CS-231

CONSEAL CS-231 REQ'D SIZE CHART	
48" O.D.	3/8"
60" I.D.	3/8"
72" I.D.	3/8"
84" I.D.	3/4"
96" I.D.	3/4"



N.T.S.



SECTION F-F SECTION G-G

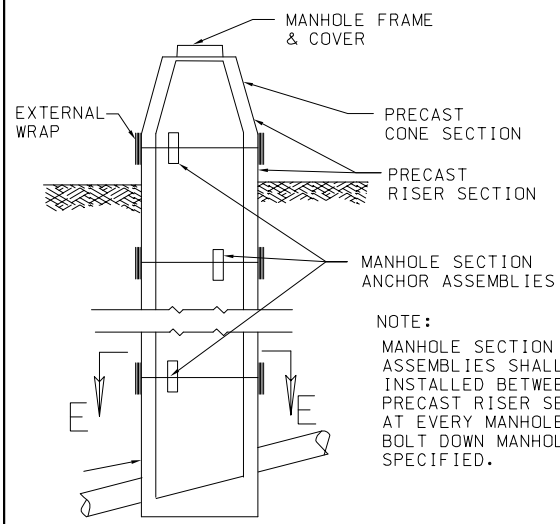
3/4" X 3" CINCH ANCHOR BOLTS 2" UNIT, TYPE 2, COAT HEADS OF BOLTS WITH BITUMASTIC COAL TAR EPOXY BEFORE BACKFILL.

3 ANCHOR ASSEMBLIES REQUIRED PER JOINT 120° APART.

Di.	ØA	ØB	C	D	E	ØF	G	H	I	J	K
48	53.121	52.966	0.125	4.125	1.600	52.217	0.146	0.452	4.250	2.033	2°
60	67.512	67.315	0.160	5.24	2.68	66.450	0.150	0.500	5.394	3.268	1.8°
72	79.362	79.105	0.160	5.24	2.68	78.233	0.150	0.500	5.400	3.400	1.8°

PRECAST MANHOLE JOINT

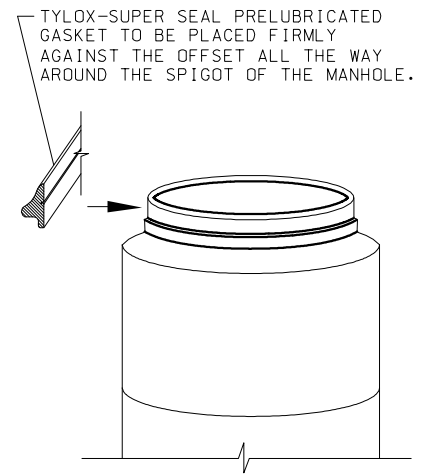
N.T.S.



MANHOLE JOINT STRAP DETAIL

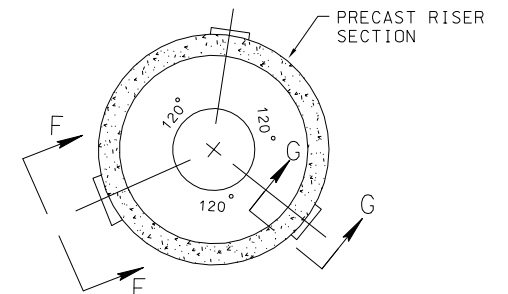
N.T.S.

NOTE:
MANHOLE SECTION ANCHOR ASSEMBLIES SHALL BE INSTALLED BETWEEN ALL PRECAST RISER SECTIONS AT EVERY MANHOLE WHERE BOLT DOWN MANHOLE IS SPECIFIED.



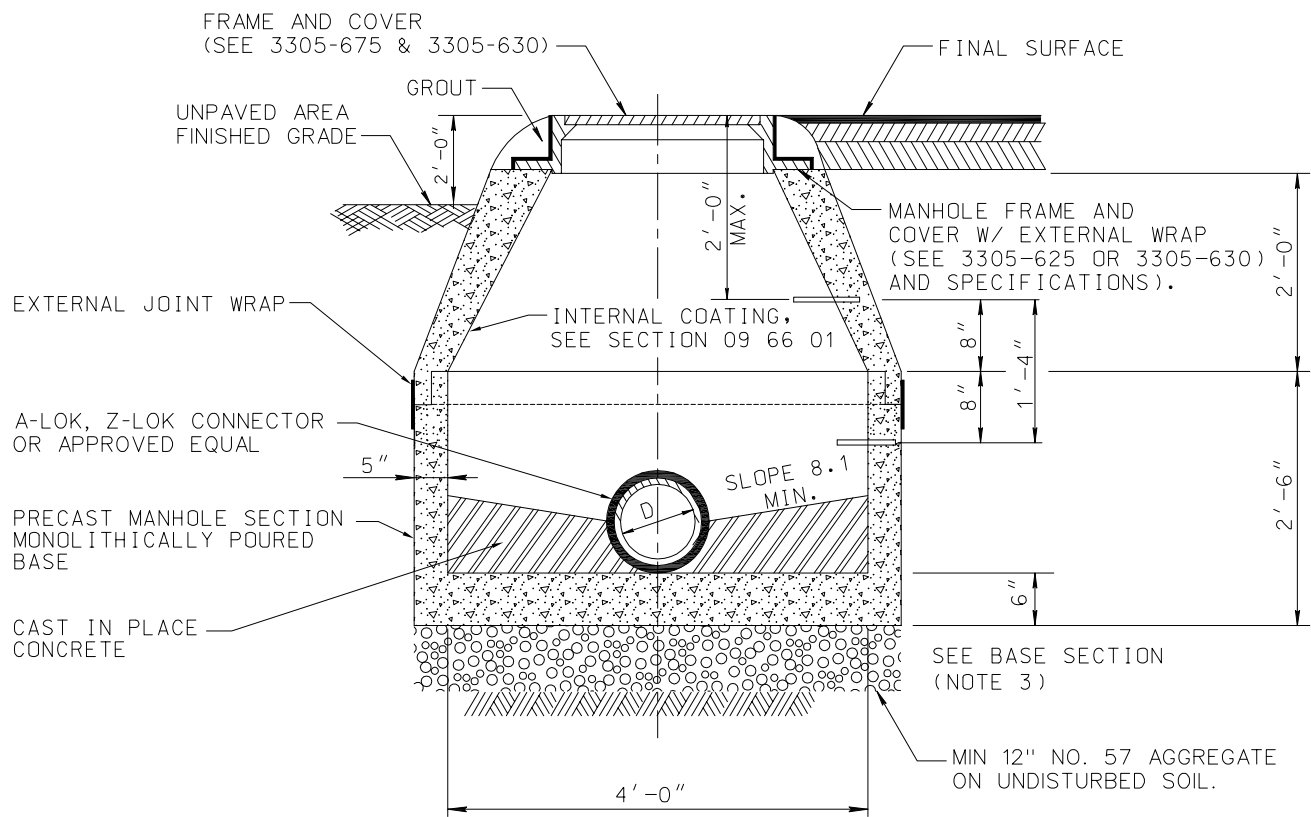
PRECAST MANHOLE

N.T.S.



SECTION E-E
TYPICAL MANHOLE SECTION ANCHOR

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
05/14	UPDATED TO MATCH MANUAL	
MAY 2015		MAIN SEWER PRECAST MANHOLE JOINT DETAILS
APPROVED: _____		STANDARD DRAWING NO. 3305-615

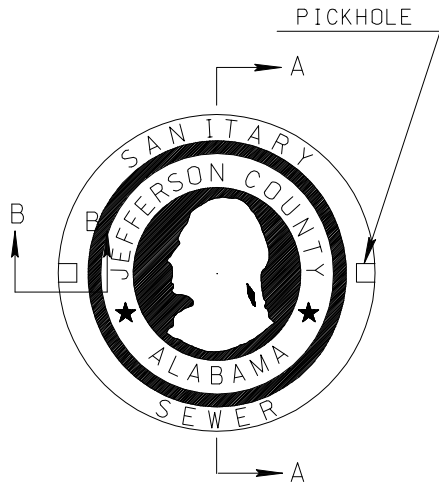


SECTION
N.T.S.

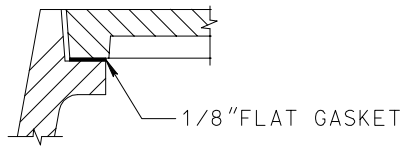
NOTES:

1. WHERE INSTALLED IN ROADWAY OR IN AREA BELOW 100' FLOOD ELEVATION WATERTIGHT MANHOLE FRAME AND COVER SHALL BE INSTALLED.
2. SLOPE OF PIPE SHALL EXTEND THROUGH MANHOLE.
3. PROVIDE EXTENDED BASE IN AREAS WITH GROUNDWATER.
4. SEE SPECIFICATION SECTION 33 05 13 MANHOLES.

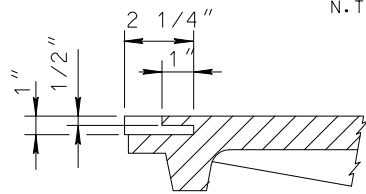
DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
05/14	UPDATED TO MATCH MANUAL AND NEW MATERIALS	MAIN SEWER MINIMUM DEPTH MANHOLE
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. 3305-620



COVER
N.T.S.



GASKET DETAIL
N.T.S.



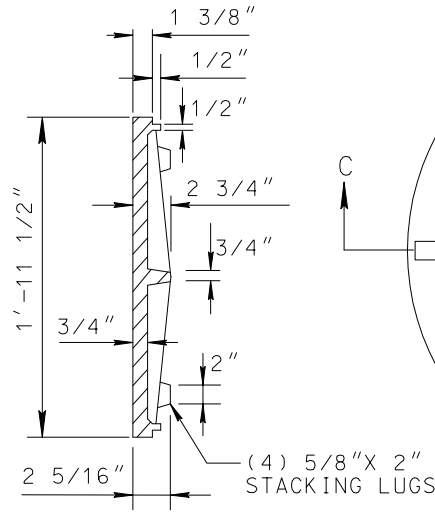
(2) TYPE TWO NON-PENETRATING PICKHOLES

SECTION B-B
PICKHOLE DETAIL

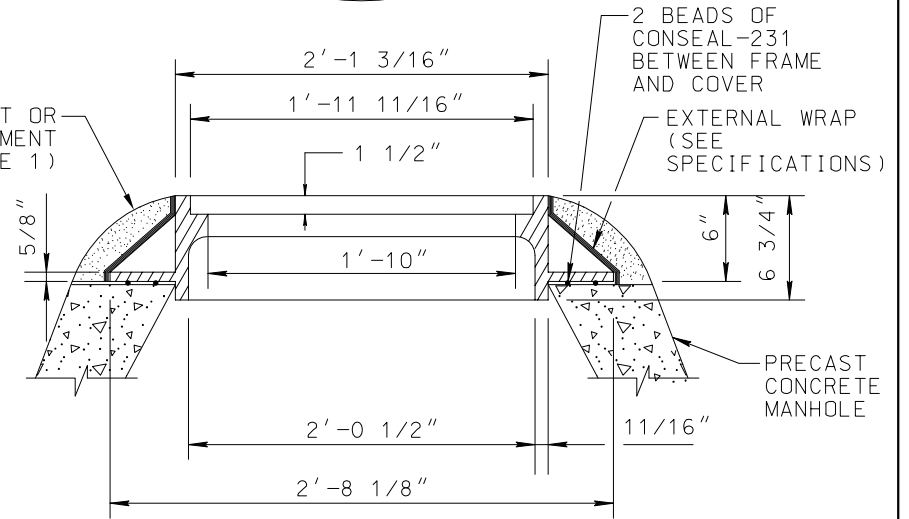
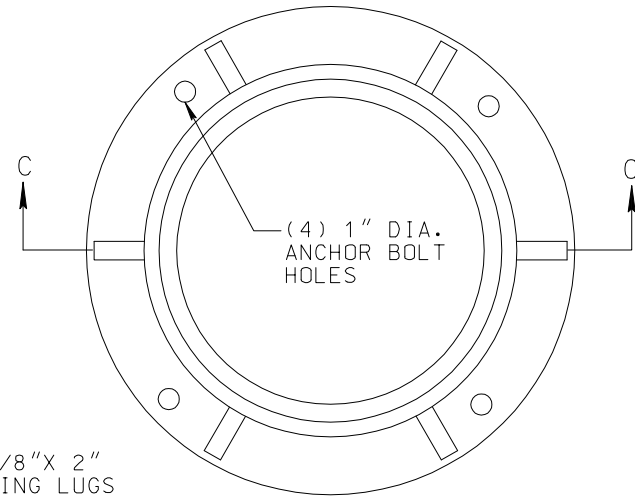
N.T.S.

NOTES:

1. WHERE INSTALLED IN ROADWAY, NO GROUT IS REQUIRED. PAVE UP TO AND AROUND FRAME. OTHERWISE GROUT AROUND FRAME TO PROTECT EXTERNAL WRAP.
2. NO REVERSIBLE FRAMES WILL BE ALLOWED.
3. SEE SPECIFICATION SECTION 33 05 13 MANHOLES.



SECTION A-A



SECTION C-C
FRAME
N.T.S.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
05/14	UPDATED TO MATCH MANUAL AND NEW MATERIALS	MAIN SEWER STANDARD MANHOLE FRAME & COVER DETAILS
MAY 2015		
APPROVED: _____		
		STANDARD DRAWING NO. 3305-625