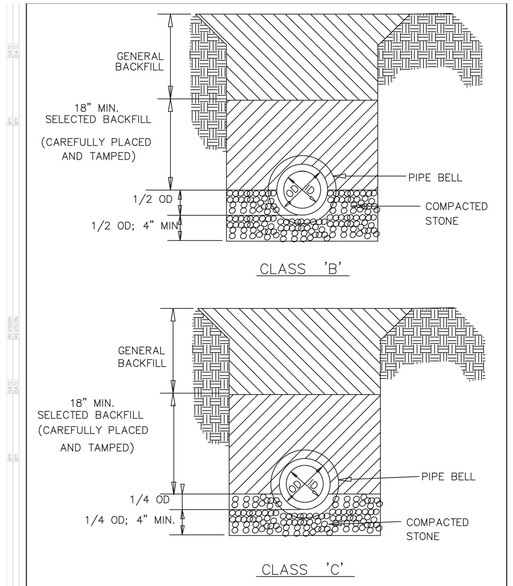
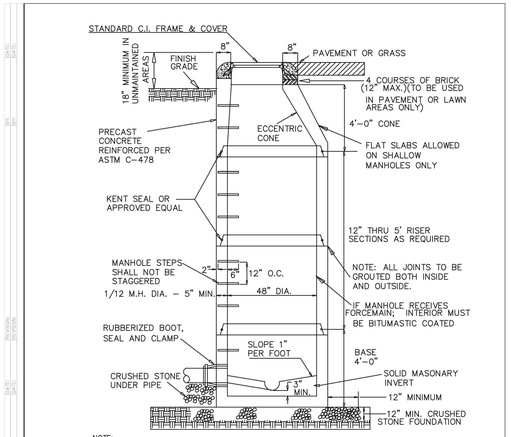


GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR	**BEDDING DETAIL**	DRAWING NO.
DRAWN BY: JCH		S2
CHECKED BY: RRP		
APPROVED BY:		
SCALE: NONE		

1 BEDDING DETAIL NTS

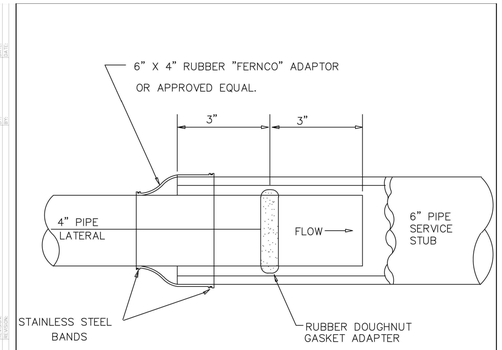


NOTE:
1. TABLES ARE TO BE GENTLY SLOPED AND TROWELED SMOOTH FROM M.H. WALL TO INVERT WALL AND CONSTRUCTED OF SOLID MASONARY.
2. BASES LARGER THAN 48" (INCH) MUST USE TRANSITION SLAB AND 48" (INCH) RISER SECTIONS
3. CONES WITH CAST IN PLACE FRAMES ARE REQUIRED ON OUTFALL SEWERS IN UNMAINTAINED AREAS.

GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR	**STANDARD PRECAST MANHOLE DETAILS**	DRAWING NO.
DRAWN BY: JCH		S7
CHECKED BY: RRP		
APPROVED BY:		
SCALE: NONE		

2 STANDARD PRECAST MANHOLE DETAILS NTS

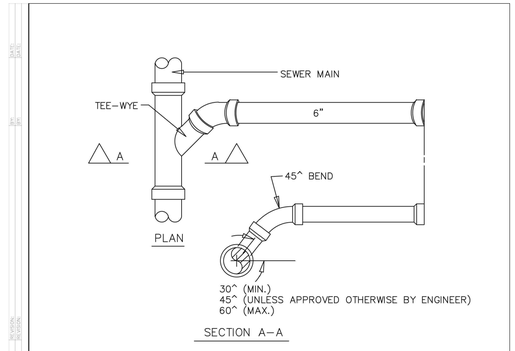


NOTE:
1. CONCRETE GROUT WILL NOT BE PERMITTED.
2. BELL MUST BE REMOVED FROM 6" SERVICE STUB.
3. DAMAGED END OF 6" STUB PIPE SHALL BE CUT STRAIGHT
4. ADDITIONAL 6" PIPE SHALL BE INSTALLED TO 5' (FEET) BEYOND THE PROPERTY LINE, THE RIGHT-OF-WAY ON STREET, OR THE EASEMENT.
5. EACH INSTALLATION MUST UTILIZE BOTH A DOUGHNUT GASKET AND A "FERNCO" TYPE ADAPTOR.

GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR	**4" PIPE TO 6" PIPE INSTALLATION DETAIL**	DRAWING NO.
DRAWN BY: ALD		S18
CHECKED BY: RRP		
APPROVED BY:		
SCALE: NONE		

3 PIPE INSTALLATION DETAIL NTS



NOTE:

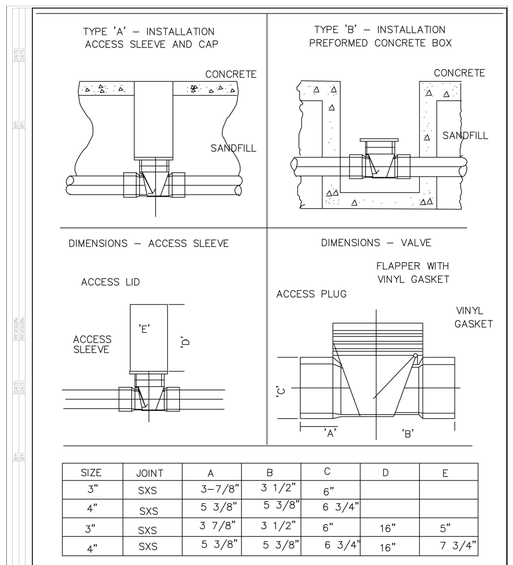
DEEP HOUSE CONNECTIONS MAY BE ALLOWED WHEN SEWER INVERT IS 12' OR MORE BELOW SURFACE.

STACKED SERVICE LINES PERMITTED UNDER ROADS ONLY WITH SPECIAL PERMISSION.

GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR	**6" SERVICE CONNECTIONS**	DRAWING NO.
DRAWN BY: JCH		S15
CHECKED BY: RRP		
APPROVED BY:		
SCALE: NONE		

4 SERVICE CONNECTIONS DETAIL NTS



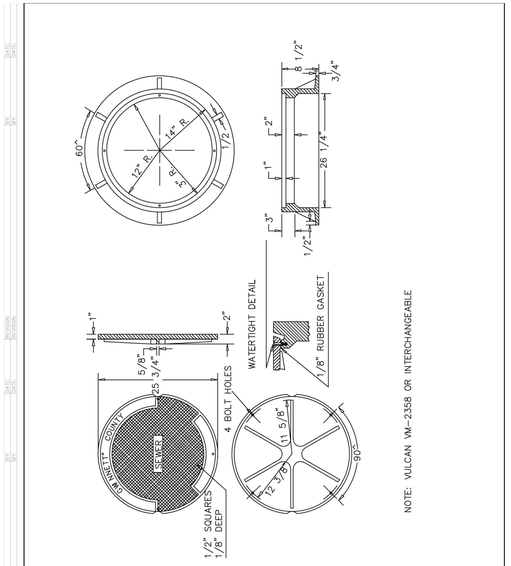
SIZE	JOINT	A	B	C	D	E
3"	SXS	3-7/8"	3 1/2"	6"		
4"	SXS	5 3/8"	5 3/8"	6 3/4"		
3"	SXS	3 7/8"	3 1/2"	6"	16"	5"
4"	SXS	5 3/8"	5 3/8"	6 3/4"	16"	7 3/4"

ABS AND PVC HORIZONTAL BACKWATER VALVE DIMENSIONS

GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR	BACKFLOW PREVENTER	DRAWING NO.
DRAWN BY: ALD		S19
CHECKED BY: RRP		
APPROVED BY:		
SCALE: NONE		

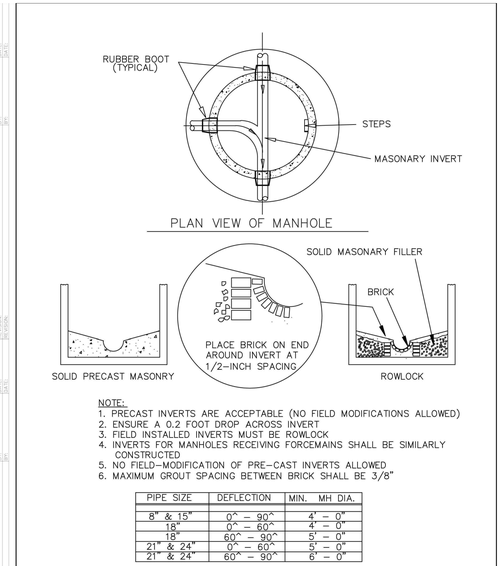
5 BACKFLOW PREVENTER NTS



GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR	**BOLT DOWN FRAME & COVER**	DRAWING NO.
DRAWN BY: JCH		S10
CHECKED BY: RRP		
APPROVED BY:		
SCALE: NONE		

6 BOLT DOWN FRAME & COVER NTS



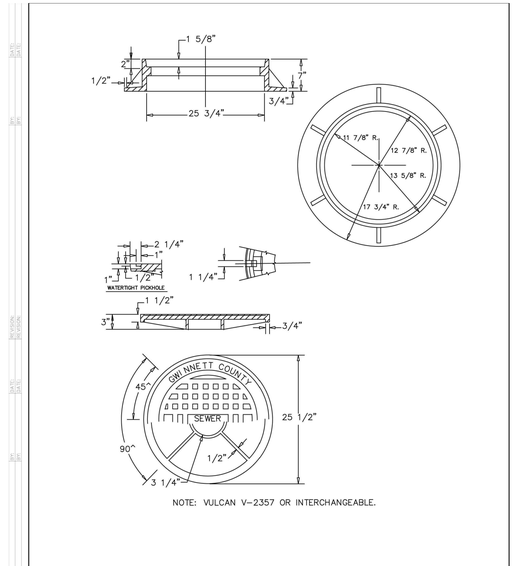
NOTE:
1. PRECAST INVERTS ARE ACCEPTABLE (NO FIELD MODIFICATIONS ALLOWED)
2. ENSURE A 0.2 FOOT DROP ACROSS INVERT
3. FIELD INSTALLED INVERTS MUST BE ROWLOCK
4. INVERTS FOR MANHOLES RECEIVING FORCEMAINS SHALL BE SIMILARLY CONSTRUCTED
5. NO FIELD-MODIFICATION OF PRE-CAST INVERTS ALLOWED
6. MAXIMUM GROUT SPACING BETWEEN BRICK SHALL BE 3/8"

PIPE SIZE	DEFLECTION	MIN. MH DIA.
8" & 15"	0^ - 90^	4' - 0"
18"	0^ - 60^	4' - 0"
18"	60^ - 90^	5' - 0"
21" & 24"	0^ - 60^	5' - 0"
21" & 24"	60^ - 90^	6' - 0"

GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR	**STANDARD INVERT DETAILS**	DRAWING NO.
DRAWN BY: JCH		S8
CHECKED BY: RRP		
APPROVED BY:		
SCALE: NONE		

7 STANDARD INVERT DETAILS NTS



NOTE: VULCAN V-2357 OR INTERCHANGEABLE.

GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

DESIGN BY: GCDWR	**TRAFFIC FRAME & COVER**	DRAWING NO.
DRAWN BY: JCH		S9
CHECKED BY: RRP		
APPROVED BY:		
SCALE: NONE		

8 TRAFFIC FRAME & COVER NTS

ingenium ENTERPRISES
PLANNING & ENGINEERING
221 ROSWELL ST.
SUITE 100
ALPHARETTA, GA 30009
770.457.8850
WWW.INGENIUMTEAM.COM

GEORGIA REGISTERED No. 038772 PROFESSIONAL ENGINEER ERIN ALEXANDER HOUSTON 2/22/13

PANDA EXPRESS
3276 LAWRENCEVILLE-SUWANEE RD.
SUWANEE, GEORGIA
D5253

PLANS FOR: PANDA EXPRESS CHINESE KITCHEN

CLIENT:
PANDA RESTAURANT GROUP, INC.
1683 WALNUT GROVE AVE
ROSEMEAD, CA 91770
PHONE: (626) 372-8119

REVISION HISTORY

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DWG NAME	160251 C04.DWG
ISSUE DATE	02/22/2013
PROJ. MGR.	EF

UTILITY DETAILS I

C04.2
SHEET NUMBER

ISSUE FOR PERMITTING/BID