

MANHOLE INSPECTION REPORT

INSTRUCTIONS: *ALL PERTINENT INFORMATION IDENTIFIED BY AN ASTERISK (*) MUST BE INCLUDED IN THE REPORT OR THE REPORT WILL BE DEEMED INCOMPLETE AND NOT ACCEPTABLE FOR REVIEW.

Proposed Actions for Wastewater Manhole Replacement or Rehabilitation for Both CIP and Non-CIP Projects

Manholes provide access to the valuable underground infrastructure of a sewer system. One or more of the following procedures shall be followed when connecting to an existing manhole. An AWU Manhole Inspection Report is required along with the plan submittals prior to AWU approval. The plans shall identify the action to be taken. If removal and replacement of the manhole is necessary, the plans shall include a wastewater bypass pumping schematic. **If the manhole is to be replaced, the inspection report is not required.** However, if during construction of the project, it is determined that manhole will not be replaced, then this report is required prior to approval of utility construction in the field. The wastewater bypass pumping schematic shall be submitted to the COA Inspector for review and approval no less than 48 hours prior to construction.

A. If the existing manhole has:

1. Brick walls
2. Inside diameter less than 48"
3. Chimney height greater than 27"
4. Less than 12" of intact concrete wall between existing openings and proposed openings, or
5. Severe deterioration of walls or base with aggregate protruding more than 3/8", missing aggregate or other indication of significant loss of wall thickness

Under the conditions above, the existing manhole must be removed and replaced.

B. If none of the conditions listed above in section A are present, but the manhole has moderate deterioration with visible aggregate then the manhole should be rehabilitated using 1" of cementitious material followed by 80 mils of epoxy using a product listed in SPLs WW-511A and WW-511, respectively or rehabilitated using between 0.25" and 0.5" of the product listed in WW-511B.

C. If the existing manhole being tied into has a 24" diameter lid, then remove and replace the cone section with a 32" diameter lid.

D. If the existing manhole being connected to is located in an unpaved area and doesn't have the current standard unpaved lid, then remove and replace the cone section, with a new cone and replace cone per standard detail 503S-6W, with a 32" diameter lid at a minimum and additional as deemed necessary.

Photos of the cone section, all flow lines, pipe sizes, direction of flow, existing and proposed invert plans will be required. Additionally, the design engineers' recommendations to address manhole rehabilitation will be required.

Page 4 of the manhole inspection report components (blue headings) should be filled in with an 'x'. The condition is based on visual inspection and professional judgment. AW will make the final determination on replacing a manhole based on this form and other relevant information.

PHOTOS OF ITEMS BELOW ARE REQUIRED TO BE EMAILED TO THE AWPE PROJECT COORDINATOR ALONG WITH THE COMPLETED WW MH INSPECTION REPORT:

1. * MH cover from above with tape measure across the top, include 2' on each side of MH cover. ***(A background of the location with the manhole in the foreground is required)***
2. * Existing WW MH Invert Detail
3. * Walls, several directions including any pipes not flowing into an invert. (i.e. the upper eye of a drop structure)
4. * Notable Issues, peeling, deterioration, solids, grease lodging, throat height including ring and cover.
5. * If the manhole is located in an unpaved areas, provide additional side view(s). Example: a manhole on a slope in a creek bed or a side slope of a road/berm.
6. * Manhole Interior measurements with tape included in the picture. Show the total height of the throat, the total dimension from lowest point inside manhole invert to the top of the rim. The width of the manhole cover opening.

GENERAL PROJECT AND MANHOLE INFORMATION

* NAME OF PROJECT _____

* PROJECT CASE NUMBER _____

* NAME OF ENGINEER/ARCHITECT OF RECORD _____

* NAME OF ENG/ARCH FIRM _____

* MH INSPECTION CONDUCTED BY _____

AUSTIN WATER MH ID. _____

DATE _____

TIME _____

NAME OF CITY OF AUSTIN INSPECTOR _____

STREET REFERENCE _____

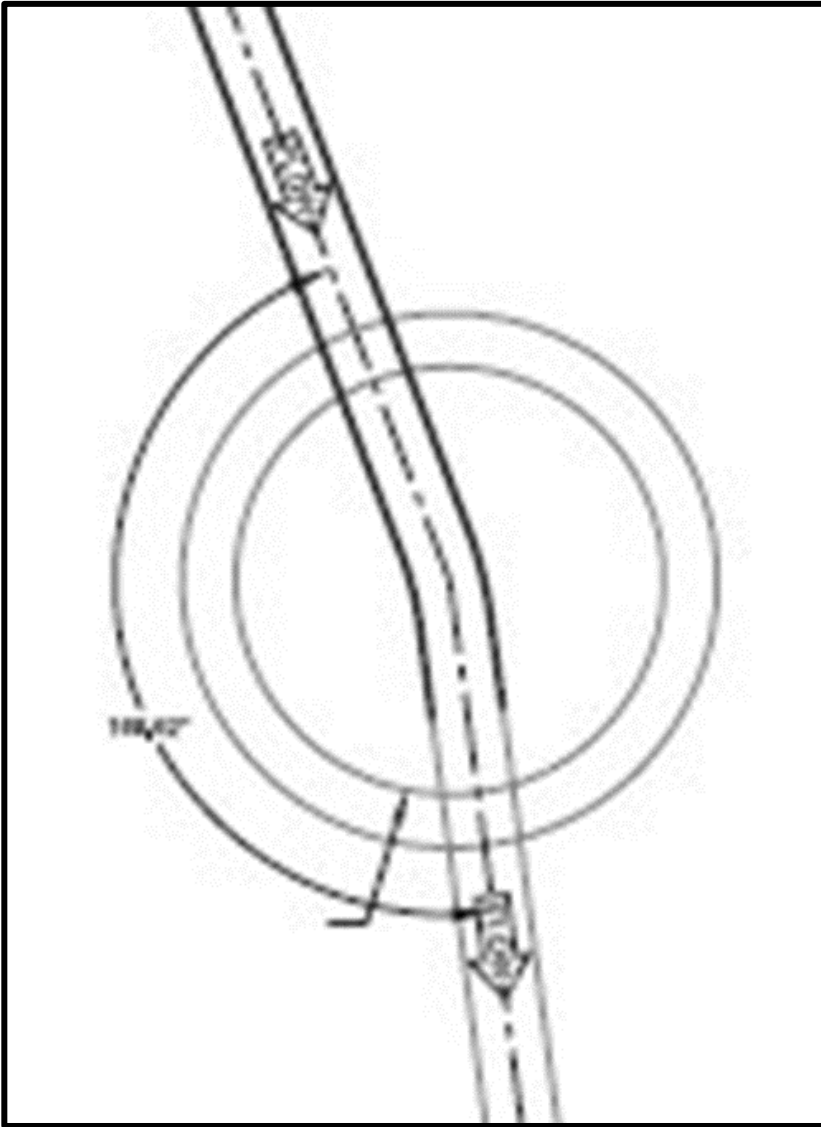
RIM ELEVATION _____

COMMON FLOW LINE ELEVATION AT INVERT _____

MANHOLE DEPTH RIM TO INVERT _____

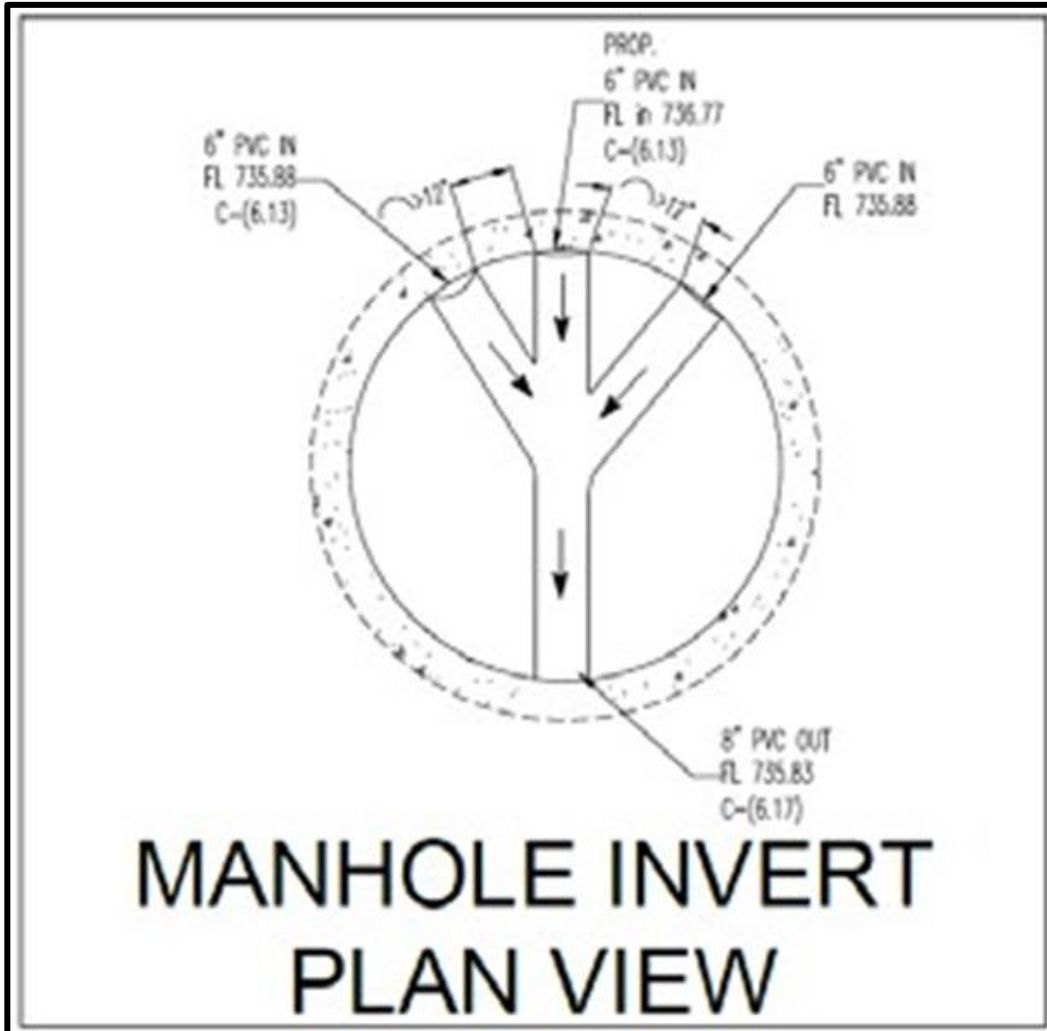
EXAMPLE OF EXISTING INVERT PLAN

Invert Details Provided for Guidance Only



EXAMPLE OF PROPOSED INVERT PLAN

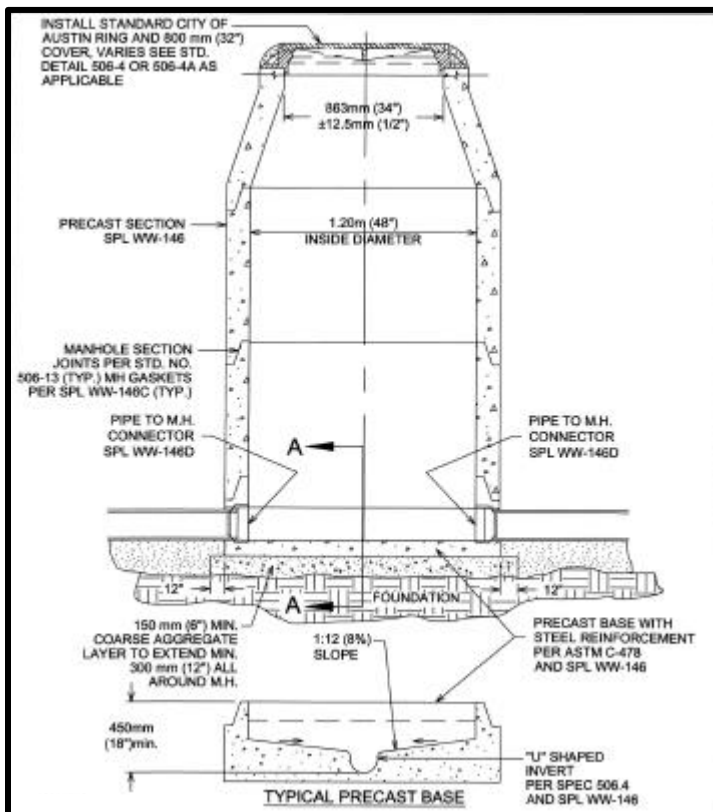
Invert Details Provided for Guidance Only



***PROVIDE APPLICABLE INFORMATION ON ENTIRE SHEET**

	PIPE SIZE	LENGTH	TO MH#	EST. FLOW	TYPE FLOW
PIPE A-					
PIPE B-					
PIPE C-					
PIPE D-					

**MH Detail Is Provided For Reference Only
Include Applicable AW Standard MH Details On Plan Set**





***PROVIDE REQUIRED APPLICABLE INFORMATION ON ENTIRE SHEET**

Conditions:		Dry	Wet	Standing Water	Frozen
MH DETAILS					
Location:	Inside Material:	MH Cover size:	MH Barrel size:	Direction Effluent:	
Roadway	Brick		48"		
Gutter	Block	24"	60"		
Paved Alley	Concrete	32"	Other (below)	# of Influents:	
Unpaved Alley	Lined		Junction Box		
Easement	Other	Other (describe)	Internal Drop Structures		
Other (describe)	Coated				
CONDITION					
Cover:	Ring & Frame	Cone & Riser:	Barrel:	Rungs:	
Serviceable	Serviceable	Serviceable	Serviceable	Serviceable	
Loose	Loose	Cracked/Broken	Cracked/Broken	Unsafe	
Below Grade	Displaced	Corroded	Corroded	Missing bolts	
Damaged	Missing Grout	Misaligned	Misaligned	Corroded	
Sealed	Raise	Infiltration	Infiltration		
Unbolted	Lower	Bad Joints	Bad Joints		
Missing					
Bench:	Channel:				
Serviceable	Serviceable				
Cracked/Broken	Obstructed				
Bad base joint	Bad joints				
	Roots at connection	Invert $\frac{3}{4}$ of pipe	100 year floodplain		
	Poor Structural	Invert full pipe			
	Corroded				
Hydraulics	Indications of Surge?:	Issues:		Describe Flow:	
	None	Grease		Steady	
	Minor	Debris		Pulsing	
	Yes, see below	Silt		Turbulent	
	(None, Minor, Some, Excessive)			Surcharging	
				Sluggish	



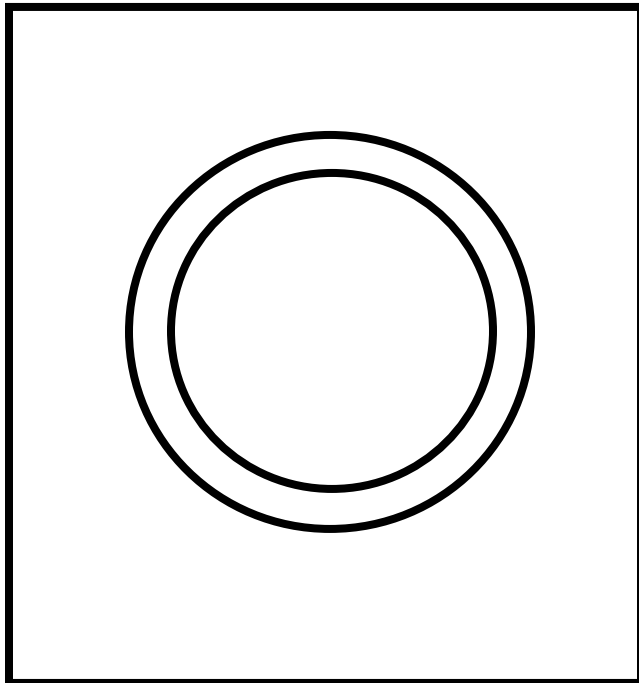
DESIGN ENGINEERS/ARCHITECTS:

PLEASE USE THIS SHEET TO PROVIDE ADDITIONAL REMARKS AND WW MH REHABILITATION RECOMMENDATIONS AND TO INCLUDE THE EXISTING AND PROPOSED WW MH INVERT DETAILS FOR YOUR PROJECT.

THE WW MH REHABILITATION RECOMMENDATIONS MUST ALSO BE INCLUDED ON THE PLANS:

REMARKS -

EXISTING INVERT



PROPOSED INVERT

