SECTION 702 MANHOLES, JUNCTION BOXES, CATCH BASINS & END TREATMENTS

MATERIAL		REFERENCE / TESTED BY	PURP.	SAMPLED BY / METHOD	MIN. / FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
FOR DETAILS ON CONCRETE TESTS, MIX DESIGNS AND MATERIALS (ADMIXTURES, AGGREGATES, CEMENT AND WATER) SEE SECTION 901 OF THIS MANUAL. (CLASS M)										
BACKFILL	Density	702.04 701.08(c)(1) Proj. Engr.	Accept.	SEE SECTION 701 OF THIS MANUAL.						
	Flowable Fill	702.04(a)		SEE SECTION 710 OF THIS MANUAL.						
	Granular Material	702.04 701.08(c)(1) Dist. Lab	Accept.	SEE SECTION 701 OF THIS MANUAL.						
	Selected Soil	702.04 701.08(c)(1) Dist. Lab	Accept.	SEE SECTION 701 OF THIS MANUAL.						
BRICK	Sewer	702.02 1004.01 Mat. Lab	Accept.	Proj. Engr. S 601	1/25,000/ type*	5 bricks	-----	------	10 days	*Visual inspection by Proj. Engr. Sample only if questionable.
COVERS, FRAMES, & GRATES		702.02 1018.04 Mat. Lab	Accept.	WHEN QUESTIONED BY PROJ. ENGR.; ONE TENSION TEST BAR, ASTM A 48, SPECIMEN B, (THREADED), REPRESENTING LOT OF MATERIAL FROM WHICH ITEM IS CAST TO BE SUBMITTED TO CONST. FAB. INSP. SEE SECTION 807 OF THIS MANUAL.			CA 1	-----	10 days	QPL 78 only. Visual inspection by Proj. Engr. Proj. Engr. to receive Form 4148 and CA for physical and chemical properties, from the contractor.
CULVERT SAFETY ENDS	Pipe Runners & Hardware	702.04(c)(3) Proj. Engr.	Accept.	-----	-----	-----	CA 1	------	------	Visual inspection by Proj. Engr.
	Epoxy Resin Systems	702.04(c)(3) Proj. Engr.	Accept.	Proj. Engr. S 601	1/lot or Shipment	1 qt. each component friction top can	-----	1 gal	11 days	(QPL 32)
	Adhesive Anchor Systems	702.04(c)(3) 1017.02 Mat. Lab.	Accept.	Proj. Engr. S 601	1/lot or Shipment*	1 qt. each component Friction top can	-----	1 gal	11 days	(QPL 52) *Visual inspection by Proj. Engr. Sample only if questionable.
DRY-BATCHED SACKED CONCRETE	Compressive Strength	702.04(b)(4) 712.02(f) Dist. Lab	Accept.	Proj. Engr. S 601 TR 226 TR 230	1 set/ 1000 sacks 3cy/set*	1 sack 6 in. X 12 in. Cylinder mold	CA 1	-----	-----	(QPL 48) *Cylinders made from contents of sack mixed with water to produce a slump of 4 to 6 inches.
GASKET MATERIALS	Flexible Plastic Gasket	701.02 1006.06(b) Mat. Lab	Prelim. Source Approval	Const. Fab. Insp. S 601	1/size/batch/ shipment	3 ft length	-----	-----	21 days	(QPL 4)
		702.04 1006.06(b) Mat. Lab	Accept.	Proj. Engr.	*	3 ft length	CC** 1	-----	-----	(QPL 4) *Visual inspection by Proj. Engr. Sample only if questionable. **Gasket Lot no. listed on precast unit CC.
GEOTEXTILE FABRIC		702.02 1019.01 Mat. Lab	Prelim. Source Approval	Dist. Lab S 614	1/type/lot/ source/ shipment	3 lin ft/roll width of fabric*	-----	-----	7 weeks	*Sample a minimum of 18 ft^2.
		702.02 1019.01 Mat. Lab	Accept.	Proj. Engr. S 601	1/type/ source/ shipment	3 lin ft/roll width of fabric*	CD** 1 & 7	150 yd^2	11 days	(QPL 61) *Sample a minimum of 18 ft^2. **Sample when not accompanied by CD or questionable.

SECTION 702 MANHOLES, JUNCTION BOXES CATCH BASINS & END TREATMENTS (Cont'd)

MATERIAL		REFERENCE / TESTED BY	PURP.	SAMPLED BY / METHOD	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
JOINT FILLER		702.04 1005.01(c) Mat. Lab	Accept.	-----	-----	-----	-----	-----	-----	Visual inspection by Proj. Engr. Sample only if questionable.
METAL WORK COATINGS	Metal Work Paint	702.04(a) 702.02 1008.05 Mat. Lab	Accept.	Proj. Engr. S 601	1/batch	1 qt Friction top can	------	------	10 days	Visual inspection by Project Engineer.
	Asphaltic Varnish	702.02 1008.03 Mat. Lab	Accept.	Proj. Engr. S 601	1/batch*	1 qt. Friction top can	-----	-----	10 days	*Visual Inspection by Proj. Engr. sample only if questionable.
MORTAR	Cement, Sand, & Water	702.02 Proj. Engr.	Accept.	------	------	------	------	------	------	Visual inspection by Proj. Engr. Sample only if questionable.
PRECAST REINFORCED CONCRETE UNITS		702.02 1016 MFR.	Prelim. Source Approval	MFR S 301 S 601	1/3 consecutive days production	4 cyl. 6 in. x 12 in. cylinder mold	------	------	------	(QPL 77) The use of 6 in. x 12 in. compressive strength cylinder or coring for source approval or verification shall be at the discretion of the Const. Fab. Insp. Unit. *Shall not exceed 3 consecutive days production.
		702.02 1016 Const. Fab. Insp.	Verif.	Const. Fab. Insp. S 601	1/60 day/ production/ plant	1 piece or 4 cyl. 6 in. x 12 in. cylinder mold	-----	-----	-----	
		702.02 1016	Accept.	**INSPECTED APPROVED AND STAMPED BY MFR. PRIOR TO USE.**			CC 1	-----	-----	Visual Inspection by Proj. Engr. CC for Gasket Materials..
REINFORCEMENT	Bars	702.02 1009 Mat. Lab*	Accept.	Proj. Engr. or Const. Fab. Insp. S 501	1/size/grade/ 150,000 lb/ source**	48 in. length	------	------	10 days	*Dist. Lab in Dist. 02. **If listed on QPL 71, material with a CA (Distr. 1) need not be sampled. Sample for verification if questionable.
	Chairs	702.04 805 806.06 Mat. Lab	Accept.	Proj. Engr. S 501	1/type*	1 chair	------	------	9 days	*Visual inspection by Proj. Engr. Sample only if questionable. Chairs with plastic coated tips need not be sampled.
	Wire Fabric	702.02 702.04 1009.01(e) Mat. Lab	Accept.	Proj. Engr.* S 501	1/shipment	48 in. x 48 in.	------	------	11 days	*Sampled by Const. Fab. Insp. for precast items.
SACKS		702.04(b)(3) 1018.21 Mat. Lab	Accept.	Proj. Engr. S 601	1/type/ source*	1 sack	-----	-----	9 days	*Visual inspection by Proj. Engr. Sample only if questionable.
STONE		702.04(b)(5) 712.02(e) Proj. Engr.	Accept	**VISUAL INSPECTION AND/OR GRADATION CHECK (AT SOURCE, PROJ. SITE, OR BOTH, AT ENGINEER'S OPTION).***			-----	-----	-----	(QPL 2) *Mat. Lab available for assistance prior to use.