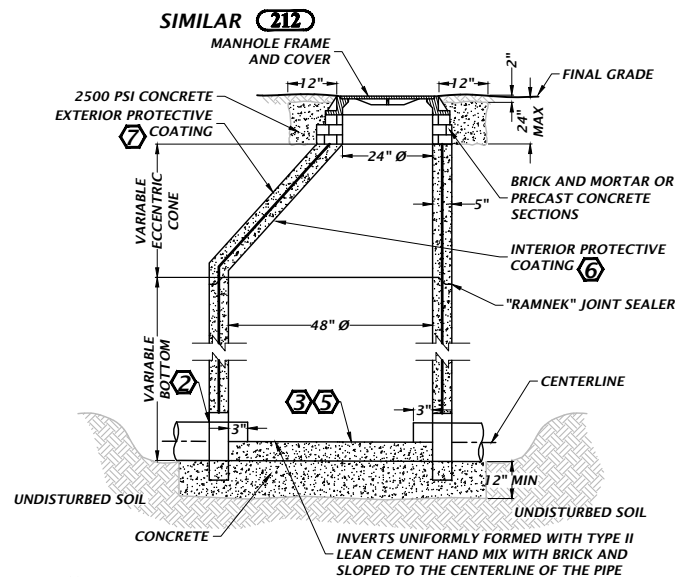
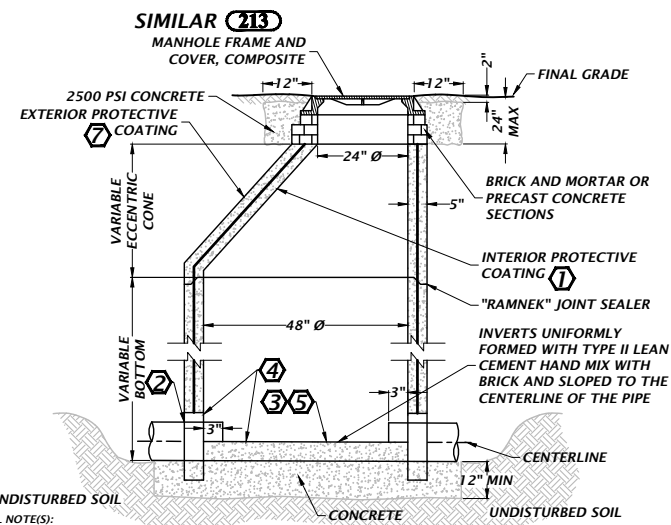


217 DOGHOUSE MANHOLE CONSTRUCTION, GRAVITY PIPE CROSS-SECTION
NTS



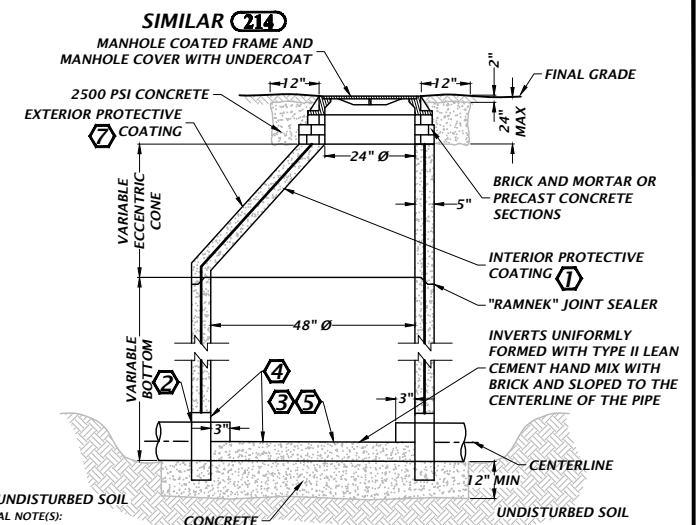
- GENERAL NOTE(S):
- USE THIS DETAIL FOR WASTEWATER WITH LIMITED AMOUNTS OF HYDROGEN SULFIDE SUCH AS MANHOLES IN SUBDIVISIONS.
 - EXISTING PIPE PASSES THROUGH MANHOLE. REMOVE ITS TOP HALF.
 - SEE (217) FOR CROSS-SECTION VIEW OF PIPE.
- KEYED NOTE(S):
- IF NECESSARY, INCREASE SIZE OF DOG HOUSE OPENING TO ACCOMMODATE PIPE SIZE. FILL-IN WITH BRICK/MORTAR MIXTURE.
 - BEFORE CUTTING PIPE, INSTALL BRICK/MORTAR MIXTURE FROM MANHOLE BOTTOM TO PIPE CENTERLINE. SLOPE TO PIPE CENTERLINE.
 - CUT AND REMOVE TOP HALF (CENTERLINE) OF (PVC) PIPE. START CUT 3-INCHES FROM MANHOLE WALL.
 - INTERIOR: TWO COATS WATER BASED EPOXY COATING. RED INITIAL COAT FOLLOWED BY GRAY FINAL COAT.
 - EXTERIOR: TWO COATS WATER BASED EPOXY COATING. RED INITIAL COAT FOLLOWED BY GRAY FINAL COAT.

218 DOGHOUSE MANHOLE CONSTRUCTION, TYPE 1
NTS



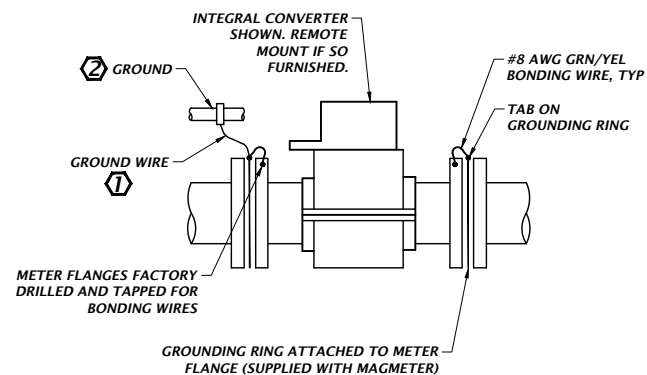
- GENERAL NOTE(S):
- USE THIS DETAIL FOR WASTEWATER WITH LARGE AMOUNTS OF HYDROGEN SULFIDE.
 - USE FOR MANHOLES THAT RECEIVE FORCE MAIN DISCHARGE EITHER DIRECTLY OR INDIRECTLY.
 - USE EITHER FOR OFF-ROAD OR CITY-ROAD LOCATIONS.
 - EXISTING PIPE PASSES THROUGH MANHOLE. REMOVE ITS TOP HALF.
 - SEE (217) FOR CROSS-SECTION VIEW OF PIPE.
- KEYED NOTE(S):
- PROVIDE AGRU SURE-GRIP YELLOW 3.0 MM THICK LINER. INSTALL AS PER LATEST VERSION OF CITY OF ALACHUA, PUBLIC SERVICES, DESIGN AND CONSTRUCTION MANUAL.
 - IF NECESSARY, INCREASE SIZE OF DOG HOUSE OPENING TO ACCOMMODATE PIPE SIZE. FILL-IN WITH BRICK/MORTAR MIXTURE.
 - BEFORE CUTTING PIPE, INSTALL BRICK/MORTAR MIXTURE FROM MANHOLE BOTTOM TO PIPE CENTERLINE. SLOPE TO PIPE CENTERLINE.
 - BEFORE CUTTING PIPE, COAT BRICK/MORTAR MIXTURE WITH RAVEN 405 EPOXY COATING. COAT MANHOLE BOTTOM AND PIPE PENETRATIONS.
 - CUT AND REMOVE TOP HALF (CENTERLINE) OF (PVC) PIPE. START CUT 3-INCHES FROM MANHOLE WALL.
 - EXTERIOR: TWO COATS WATER BASED EPOXY COATING. RED INITIAL COAT FOLLOWED BY GRAY FINAL COAT.

219 DOGHOUSE MANHOLE CONSTRUCTION, TYPE 2
NTS



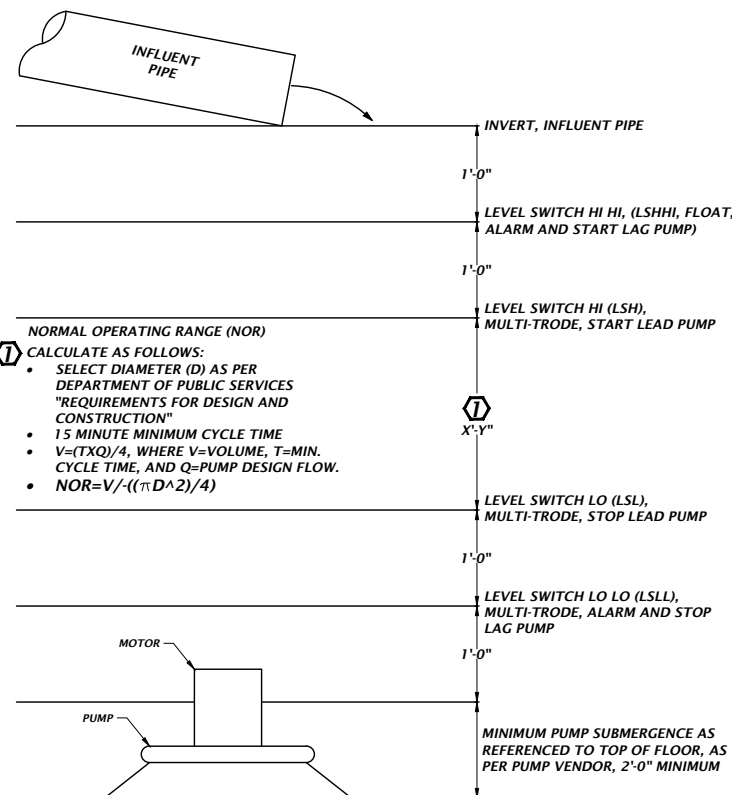
- GENERAL NOTE(S):
- USE THIS DETAIL FOR WASTEWATER WITH LARGE AMOUNTS OF HYDROGEN SULFIDE.
 - USE FOR MANHOLES THAT RECEIVE FORCE MAIN DISCHARGE EITHER DIRECTLY OR INDIRECTLY.
 - USE EITHER FOR COUNTY ROAD OR STATE ROAD LOCATIONS.
 - EXISTING PIPE PASSES THROUGH MANHOLE. REMOVE ITS TOP HALF.
 - SEE (217) FOR CROSS-SECTION VIEW OF PIPE.
- KEYED NOTE(S):
- PROVIDE AGRU SURE-GRIP YELLOW 3.0 MM THICK LINER. INSTALL AS PER LATEST VERSION OF CITY OF ALACHUA, PUBLIC SERVICES, DESIGN AND CONSTRUCTION MANUAL.
 - IF NECESSARY, INCREASE SIZE OF DOG HOUSE OPENING TO ACCOMMODATE PIPE SIZE. FILL-IN WITH BRICK/MORTAR MIXTURE.
 - BEFORE CUTTING PIPE, INSTALL BRICK/MORTAR MIXTURE FROM MANHOLE BOTTOM TO PIPE CENTERLINE. SLOPE TO PIPE CENTERLINE.
 - BEFORE CUTTING PIPE, COAT BRICK/MORTAR MIXTURE WITH RAVEN 405 EPOXY COATING. COAT MANHOLE BOTTOM AND PIPE PENETRATIONS.
 - CUT AND REMOVE TOP HALF (CENTERLINE) OF (PVC) PIPE. START CUT 3-INCHES FROM MANHOLE WALL.
 - EXTERIOR: TWO COATS WATER BASED EPOXY COATING. RED INITIAL COAT FOLLOWED BY GRAY FINAL COAT.

220 DOGHOUSE MANHOLE CONSTRUCTION, TYPE 3
NTS



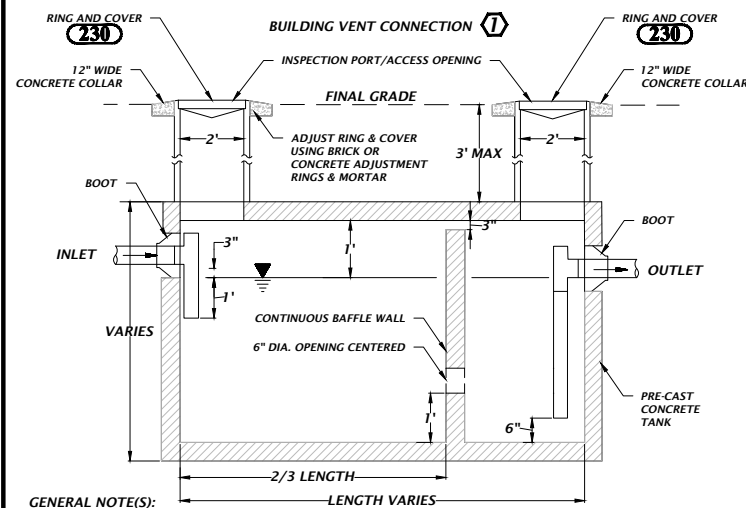
- GENERAL NOTE(S):
- USE THIS DETAIL WHEN PIPELINE IS ELECTRICALLY NON-CONDUCTIVE (NON-METALLIC OR METALLIC WITH INSIDE COATING OR LINING).
- KEYED NOTE(S):
- NO. 12 AWG INSULATED IF LENGTH IS LESS THAN 6'. IF MORE THAN 6', INSTALL CONDUCTOR IN 3/4" CONDUIT.
 - BOND MAGMETER TO ONE OF THE FOLLOWING ACCEPTABLE GROUNDS:
 - METALLIC WATER PIPE IF BURIED PORTION IS MORE THAN 10'.
 - STRUCTURAL STEEL.
 - IF BOTH OF THE ABOVE NOT AVAILABLE, INSTALL 3/4" DIAMETER x 10'-0" LONG COPPER CLAD STEEL GROUND ROD IN GROUND OUTSIDE OF STRUCTURE.

221 NON-CONDUCTIVE MAGMETER GROUNDING
NTS



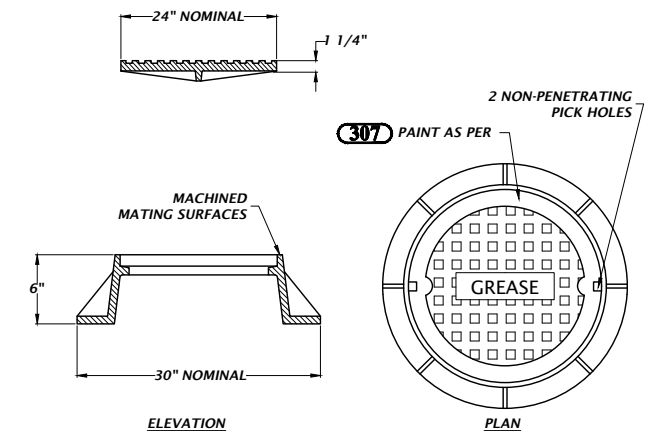
- NORMAL OPERATING RANGE (NOR)
1. CALCULATE AS FOLLOWS:
- SELECT DIAMETER (D) AS PER DEPARTMENT OF PUBLIC SERVICES "REQUIREMENTS FOR DESIGN AND CONSTRUCTION"
 - 15 MINUTE MINIMUM CYCLE TIME
 - $V = (T \times Q) / 4$, WHERE V=VOLUME, T=MIN. CYCLE TIME, AND Q=PUMP DESIGN FLOW.
 - $NOR = V / ((\pi \times D^2) / 4)$

224 LIFT STATION WET WELL DEPTH
NTS



- GENERAL NOTE(S):
- DESIGNER/OWNER SHALL SUBMIT TANK VOLUME CALCULATIONS. REQUIRED TANK VOLUME SHALL BE CONFIRMED BY CITY OF ALACHUA, 1000 GALLON MINIMUM TANK VOLUME. STRUCTURAL DESIGN SHALL BE THE RESPONSIBILITY OF THE TANK MANUFACTURER.
 - ONLY KITCHEN WASTE SHALL BE DISCHARGED INTO THE GREASE INTERCEPTOR. ALL DOMESTIC WASTE (i.e. RESTROOMS) SHALL BE CONNECTED DOWNSTREAM OF THE GREASE INTERCEPTOR.
 - MANHOLES THAT ARE NOT INSTALLED UNDER PAVEMENT SHALL HAVE A RIM ELEVATION AT LEAST 6" ABOVE FINISHED GRADE AND A 10:1 SLOPE TO FINISHED GRADE.
 - GREASE INTERCEPTOR ASSEMBLY TO BE H-20 TRAFFIC LOAD RATED - INCLUDING TANK, TANK LID, CHIMNEYS, AND MANHOLE RING & COVER.
 - NO CAPPED TEES.
- KEYED NOTE(S):
- IF REQUIRED, PROVIDE CONNECTION FOR BUILDING VENT. COORDINATE WITH BUILDING DESIGNER.

227 GREASE INTERCEPTOR
NTS



- GENERAL NOTE:
- MATERIAL: ASTM-A48 CLASS 30B GRAY IRON.
 - RING WT: 150 LBS. APP.
 - COVER WT: 130 LBS. APP.

230 RING AND COVER
NTS



02D WASTEWATER DETAILS - SEE (15) FOR ABBREVIATIONS