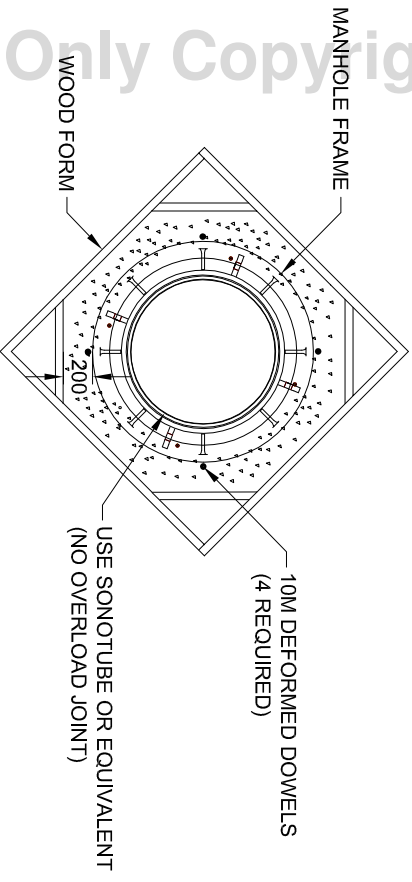
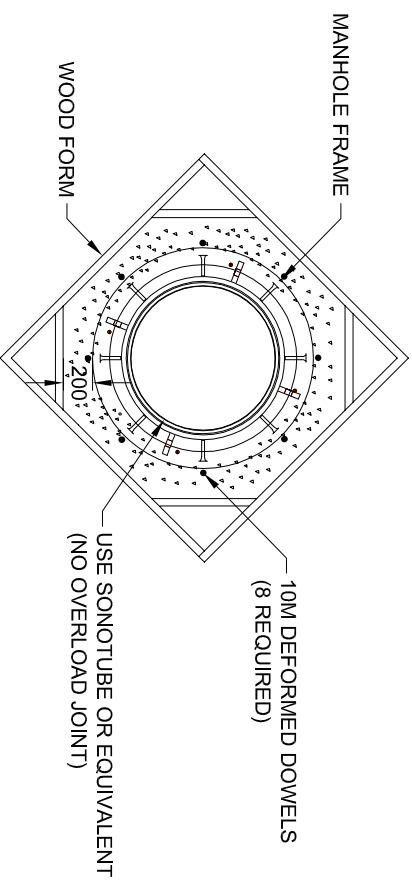


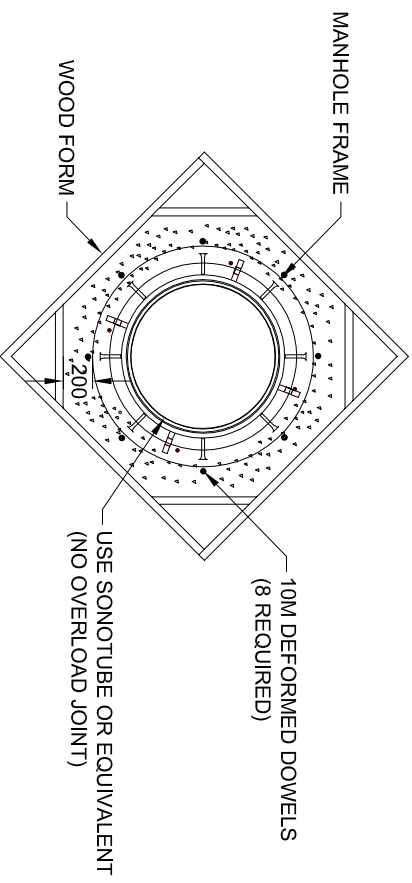
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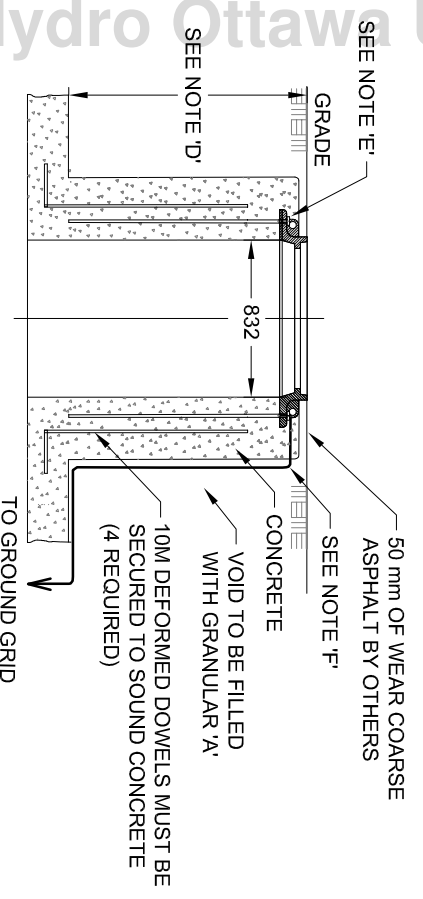
TOP VIEW - CAST IN PLACE MANHOLE COLLAR



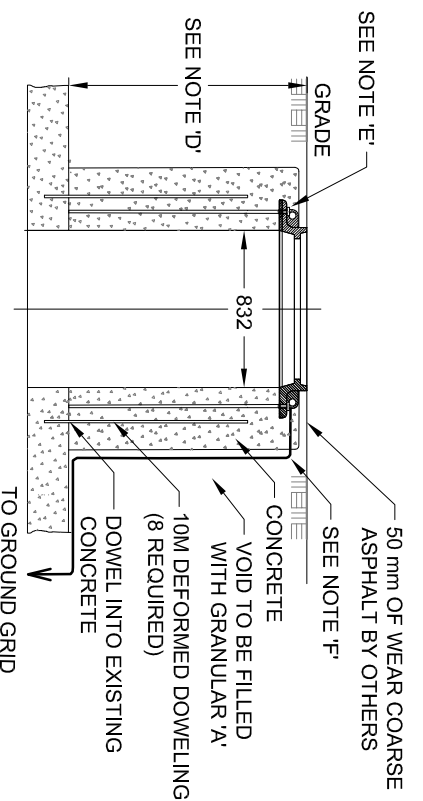
TOP VIEW - PRECAST MANHOLE COLLAR



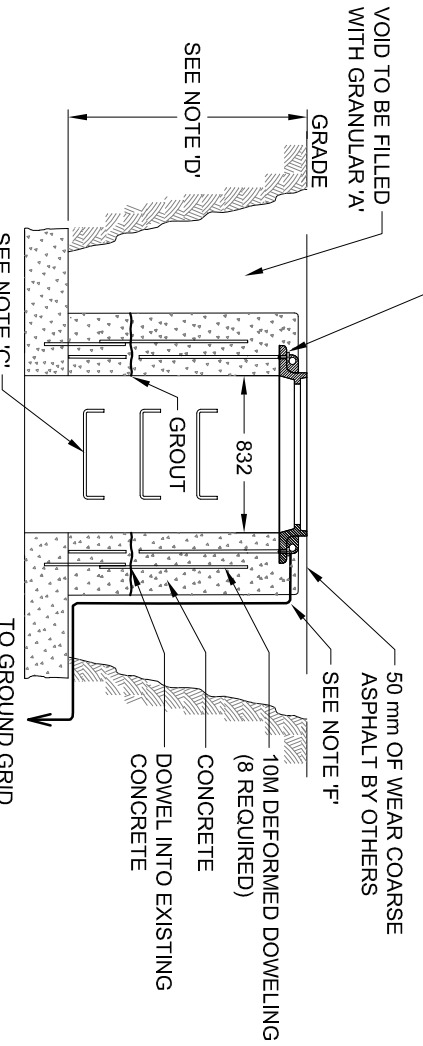
TOP VIEW - MANHOLE COLLAR REBUILD



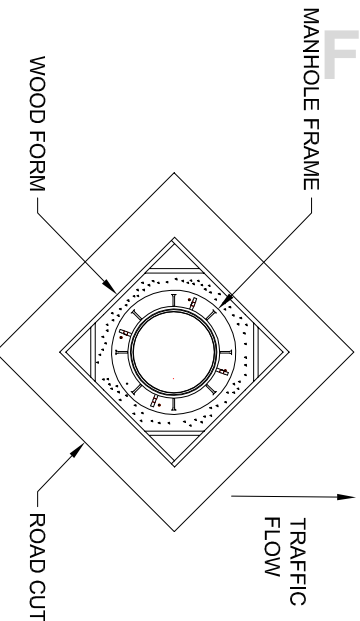
TYPICAL CAST IN PLACE MANHOLE COLLAR



TYPICAL PRECAST MANHOLE COLLAR



TYPICAL MANHOLE COLLAR REBUILD



TYPICAL ROADWAY CUT OUT DETAIL

- NOTES:
- A. ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.
  - B. CONCRETE AS PER SECTION 7.0 OF GCS0005.
  - C. STEPS TO BE INSTALLED AS REPLACEMENT UNITS ONLY. HYDRO OTTAWA APPROVAL REQUIRED.
  - D. COLLAR DIMENSION SHALL BE BETWEEN 450 mm AND 760 mm. PREFERRED DIMENSION 450mm TO GUTTER GRADE.
  - E. GALVANIZED ANCHOR BOLTS [4 x 355 mm x 16 mm] DIA. REQUIRED.
  - F. FRAME TO BE GROUNDED WHERE INSTALLED WITH PADMOUNTED EQUIPMENT OR WHERE MANHOLES ARE CUSTOMER OWNED.
  - H. REINSTATEMENT AS PER SECTION 5.0 OF GCS0005.

REVISIONS	PREP	CHKD	APPD	TITLE
REV: 2 DATE: 2007-09-28 CHANGE: DRAWING LAYOUT	GM	CP	CSM	ENGINEERING SPECIFICATION  MANHOLE COLLAR  CONSTRUCTION DETAIL
REV: 3 DATE: 2010-05-27 CHANGE: TITLE CHANGE	FB	RW	CSM	
REV: 4 DATE: 2017-03-15 CHANGE: MAJOR LAYOUT CHANGE	GM	RW	CSM	

PREP: G. MOLNAR CHKD: C. PROULX APPD: C. MALONE DATE: 2002-04-04 SCALE: N.T.S. @ ANSIB	PREP: G. MOLNAR CHKD: C. PROULX APPD: C. MALONE DATE: 2002-04-04 SCALE: N.T.S. @ ANSIB	NO: UCS0018	1 OF 1 REV: 4
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