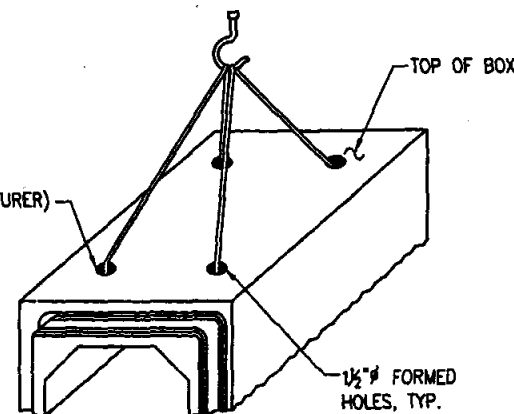


LIFTING HOLES (LOCATED BY MANUFACTURER) SHALL BE FILLED WITH GROUT BEFORE BACKFILLING IS STARTED



KEY NOTES

- ① SPACE BETWEEN ADJACENT BOXES SHALL BE FILLED WITH DRY, FINE SAND. SAND SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN ITEM 603, 9x2.5 FOOT CONCRETE BOX CULVERT (PRECAST).
- ② MANHOLE RING AND COVER SHALL BE HEAVY DUTY BUILT UP, WATER-TIGHT TYPE WITH BOLTED LID: R-1916-H, AS MANUFACTURED BY NEENAH FOUNDRY COMPANY OR ENGINEER APPROVED EQUAL.
- ③ STEPS SHALL BE IN ACCORDANCE WITH AASHTO M199.
- ④ THE DESIGN OF THE TRANSITION, SHOWN ON DWG. NO. BC6, ASSUMES "T" = 9" AND "W" = 1'-7". ADJUST DIMENSIONS OF TRANSITION AS NECESSARY TO MATCH ACTUAL PRECAST SEGMENT DIMENSIONS. VARIATIONS GREATER THAN 1 INCH WILL REQUIRE ENGINEER APPROVAL.
- ⑤ PLACE GRADE RINGS OR BRICK COURSES AS NECESSARY TO SET TOP OF MANHOLE ELEVATION AT FINISHED GRADE OR TOP OF SIDEWALK ELEVATION. PROVIDE 6" MINIMUM THICKNESS OF SIDEWALK CONCRETE ABOVE TOP SLAB OF CBC.
- ⑥ CONTRACTOR SHALL COORDINATE ANCHOR BOLT SIZE, QUANTITY AND LOCATION WITH MANHOLE RING AND COVER MANUFACTURER.
- ⑦ REMOVE ALL UNSUITABLE MATERIAL UNDER CULVERT REPLACEMENT AREA (MUCK EXCAVATION) AS DIRECTED BY THE ENGINEER. REPLACEMENT MATERIAL FOR MUCK EXCAVATION SHALL CONSIST OF AGGREGATE BASE COURSE (CLASS 4), COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY DETERMINED IN ACCORDANCE WITH AASHTO T180.
- ⑧ SUBSTITUTE AGGREGATE BASE COURSE (CLASS 6) FOR HOT BITUMINOUS PAVEMENT (GRADING S) AT ALL LOCATIONS OUTSIDE OF ROADWAY. ADJUST THICKNESS BASED ON THE TYPE OF FINISHED SURFACE MATERIAL.
- ⑨ NOT APPLICABLE OUTSIDE OF ROADWAY. IN LOCATIONS OUTSIDE OF ROADWAY, PLACE TOPSOIL AND SOD, SIDEWALK OR CONCRETE PAVEMENT AS NECESSARY.
- ⑩ 1'-0" WIDE STRIP, CENTERED OVER TRANSVERSE JOINT. TYPICAL AT ALL TRANSVERSE JOINTS.
- ⑪ 1'-0" WIDE STRIP, CENTERED OVER 1" GAP.

NOTES

1. THE INFORMATION PROVIDED ON THIS SHEET IS INTENDED ONLY FOR THE CBC REPLACEMENT LOCATED AT STATION 10+30.00 TO STATION 13+16.00
2. FOR MANHOLE RING AND COVER LOCATIONS, SEE DWG. NO. BC2.

BEDDING NOTES

1. BEDDING SHALL CONSIST OF 6 INCHES OF AGGREGATE BASE COURSE (CLASS 1) COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY DETERMINED IN ACCORDANCE WITH AASHTO T 180.

PRELIMINARY
SUBJECT TO REVISION

PBSJ

REVISIONS:	DATE:

CITY OF FORT COLLINS, COLORADO
ENGINEERING DIVISION

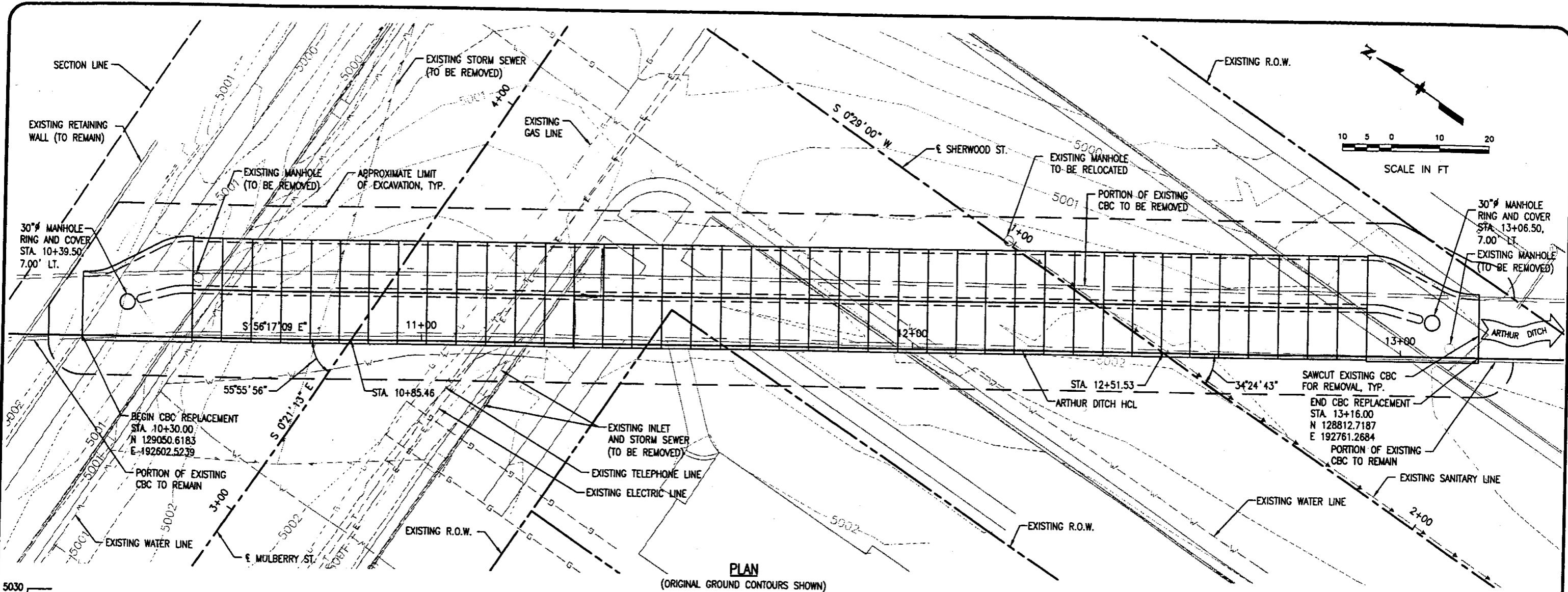


DESIGNED BY: JHW	DRAWN BY: ARP	APPROVED BY:
SCALE: NONE	DATE: 12/10/04	CHECKED BY: DATE:

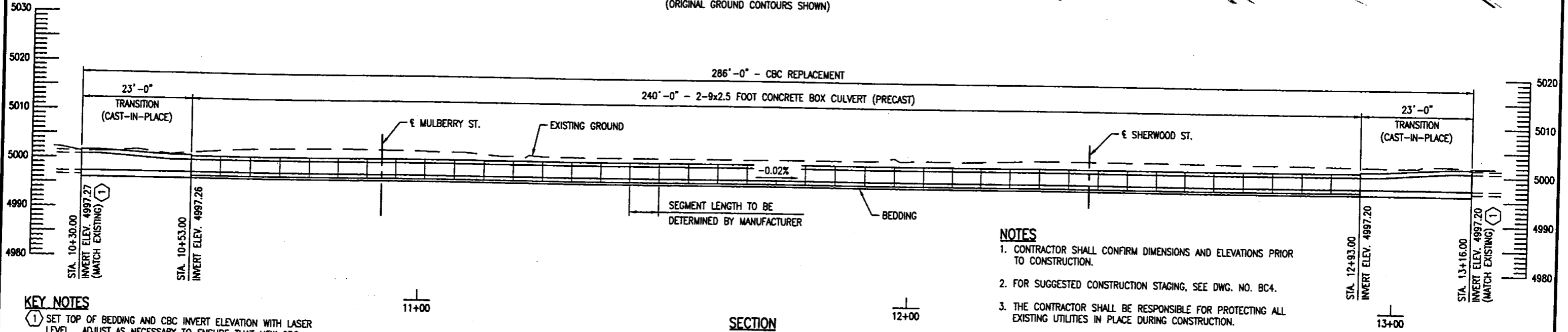
ARTHUR DITCH CBC AT MULBERRY ST.
CULVERT DETAILS

SHEET
BC5
OF
7

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PLAN
(ORIGINAL GROUND CONTOURS SHOWN)



SECTION
(TAKEN ALONG ARTHUR DITCH HCL)

- NOTES**
- CONTRACTOR SHALL CONFIRM DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
 - FOR SUGGESTED CONSTRUCTION STAGING, SEE DWG. NO. BC4.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES IN PLACE DURING CONSTRUCTION.
 - FOR ADDITIONAL LIMITS OF WORK, SEE DWG. NO. BC3.
 - FOR UTILITIES WORK, SEE UTILITY PLAN (BY OTHERS).

KEY NOTES

1 SET TOP OF BEDDING AND CBC INVERT ELEVATION WITH LASER LEVEL. ADJUST AS NECESSARY TO ENSURE THAT NEW CBC INVERT ELEVATIONS MATCH EXISTING INVERT ELEVATIONS.

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DESIGNED BY: JHW	DRAWN BY: ARP	APPROVED BY:
SCALE: 1"=20'	DATE: 12/10/04	CHECKED BY: DATE:

ARTHUR DITCH CBC AT MULBERRY ST.
GENERAL LAYOUT

SHEET
BC2
OF
7