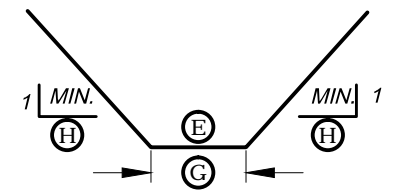
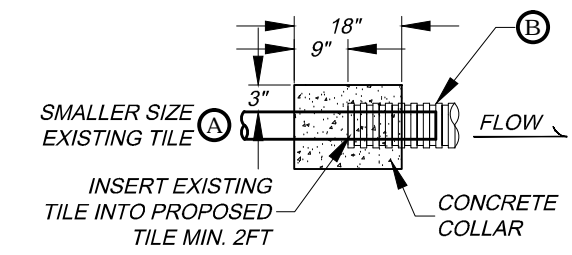
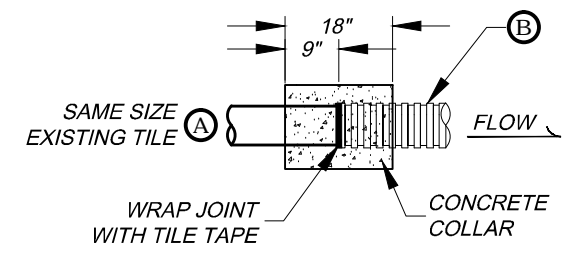
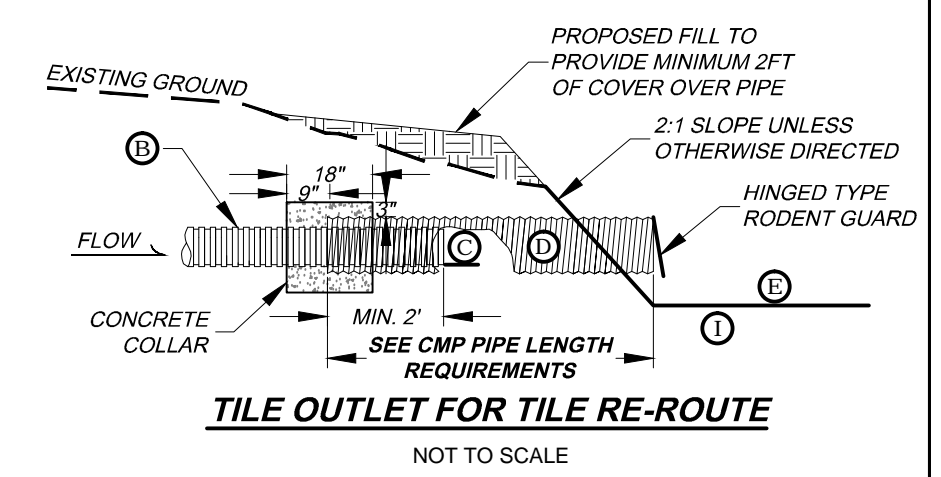
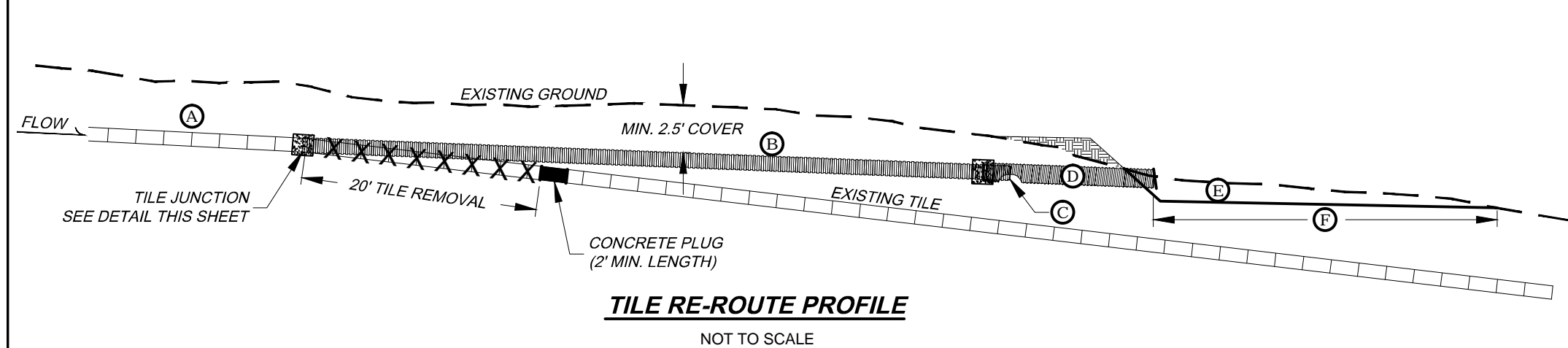


DESIGN TABLE

TILE RE-ROUTE ID #	EXISTING TILE		NEW TILE					CMP OUTLET	OUTLET CHANNEL					
	TILE DIAMETER (INCHES)	TILE MATERIAL	TILE DIAMETER (INCHES)	TILE MATERIAL (CPE OR HDPE)	PERFORATED OR NON-PERFORATED	PROPOSED TILE LENGTH (FEET)	PROPOSED TILE GRADE (%)	TILE OUTLET ELEVATION (FEET)	CMP OUTLET DIAMETER (INCHES)	BOTTOM ELEVATION (FEET)	BOTTOM LENGTH (FEET)	BOTTOM WIDTH (FEET)	SIDE SLOPE (X:1)	ROCK RIPRAP OUTLET (YES OR NO)



CONSTRUCTION REQUIREMENTS

TILE:

- FIELD VERIFY EXISTING TILE SIZE AND LOCATION PRIOR TO ORDERING MATERIALS. CONTACT THE ENGINEER IF A DIFFERENT TILE SIZE OR IF ADDITIONAL TILE ARE DISCOVERED.
- THE WORK SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE EXCAVATION AND REMOVAL OF ALL TILE DRAINAGE SYSTEMS AS REQUIRED BY THE DRAWINGS OR AS STAKED.
- CONTRACTOR SHALL REMOVE 20 FT OF THE EXISTING TILE IMMEDIATELY DOWNSTREAM OF THE TILE RE-ROUTE JUNCTION AND THE OPEN END OF THE EXISTING TILE SHALL BE EFFECTIVELY PLUGGED WITH CONCRETE MINIMUM 2 FT.
- ALL WORK RELATED TO TILE REMOVAL, CONCRETE PLUGS, AND JUNCTIONS SHALL BE DEEMED INCIDENTAL TO THE TILE RE-ROUTE INSTALLATION / CONSTRUCTION.

CMP OUTLET:
CORRUGATED METAL PIPE (CMP) SHALL BE A MINIMUM OF 16 GAUGE GALVANIZED PIPE. EITHER ANNULAR OR HELICAL PIPE IS ACCEPTABLE. FIELD CUTTING OF HELICAL PIPE WILL NOT BE ALLOWED.

ROCK RIPRAP OUTLET:
WHEN ROCK RIP RAP IS REQUIRED SEE ROCK DETAIL SHEET FOR DIMENSIONS AND QUANTITIES.

CMP PIPE LENGTH REQUIREMENTS

CMP PIPE DIAMETER (INCHES)	MINIMUM SECTION LENGTH (FEET)
8" & SMALLER	10
10" TO 12"	12
15" TO 18"	16
LARGER THAN 18"	20

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: _____
SIGNATURE: _____
LICENSE #: _____ DATE: _____

WETLAND RESTORATION PLAN

TILE OUTLET DETAIL SHEET

APPROVED BY: _____ DATE: _____

PROJECT #: _____

COUNTY: _____ PLAN SHEET OF _____

STANDARD SHEET #
BWSR-106

