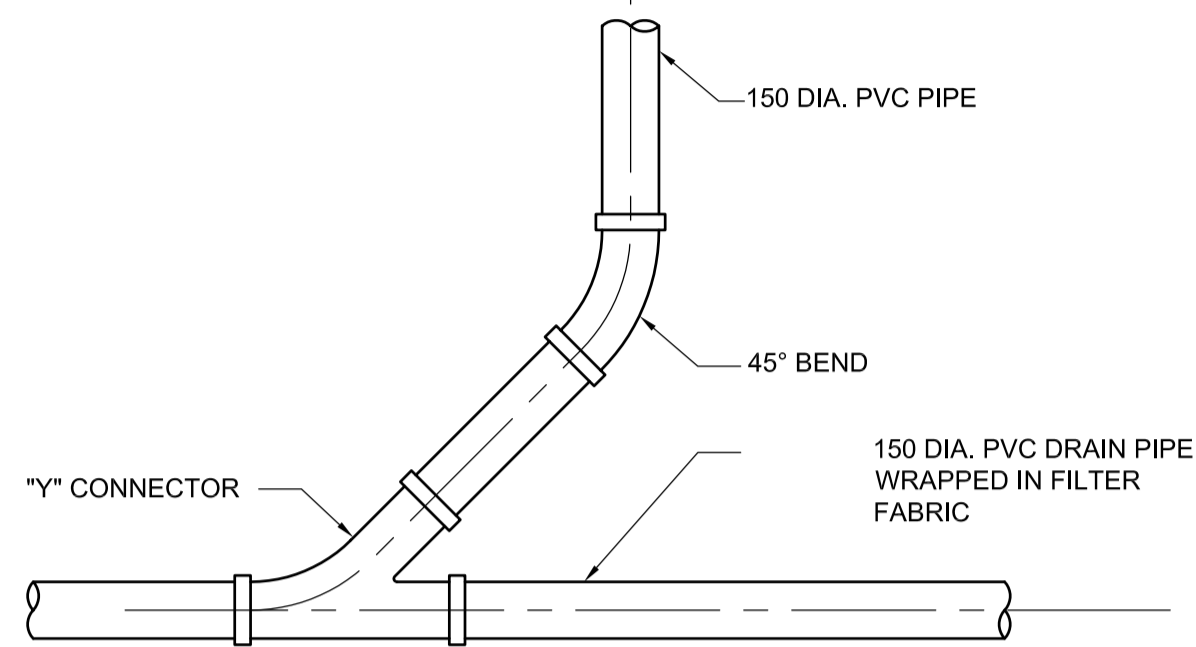
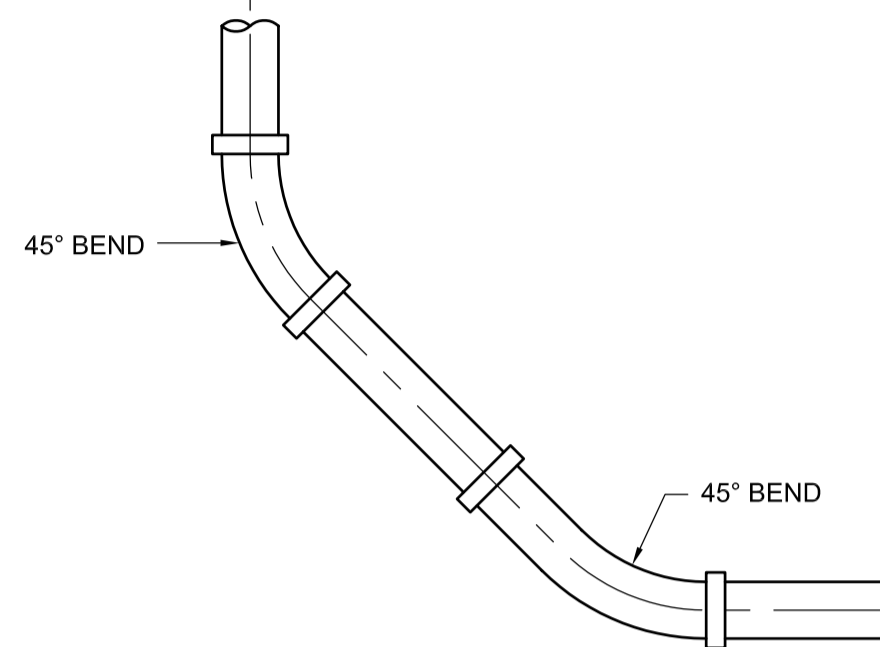


TYPICAL PAVEMENT INSTALLATION

TYPICAL PAVEMENT INSTALLATION

NOTE:
FOR LOCATIONS OF DRAIN PIPE CLEANOUT DETAILS AND CONNECTIONS REFER TO SHEETS 43 TO 48.

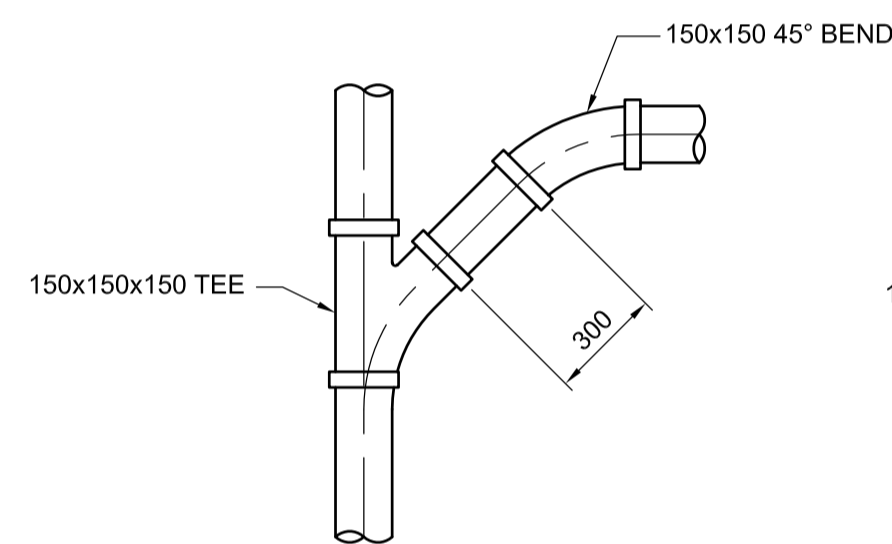


UP SLOPE END

DOWN SLOPE END

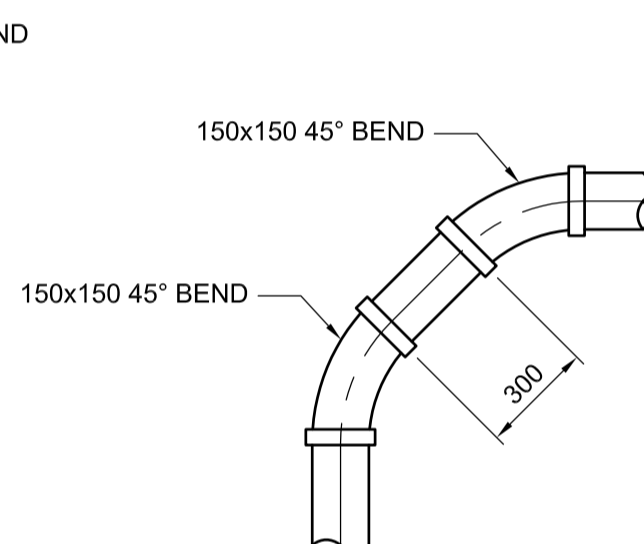
DRAIN PIPE CLEANOUT DETAIL

1:20



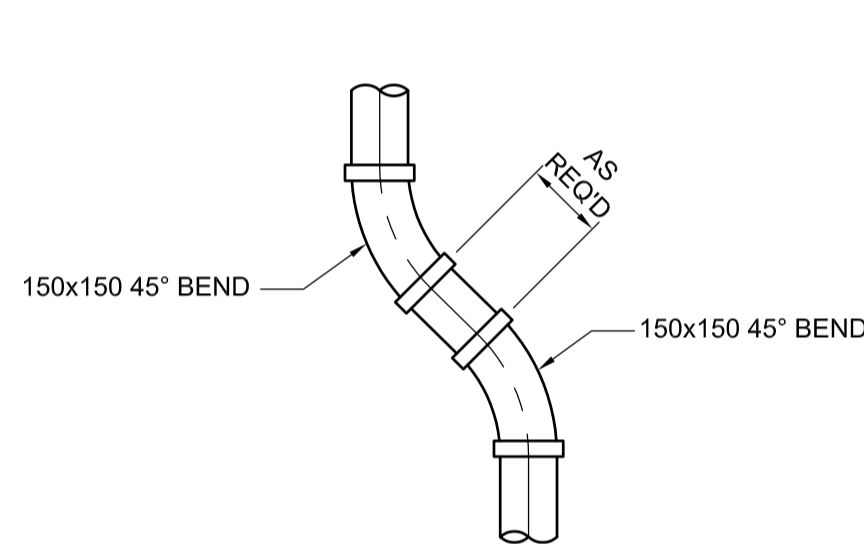
TYPICAL RISER CONNECTION

1:20



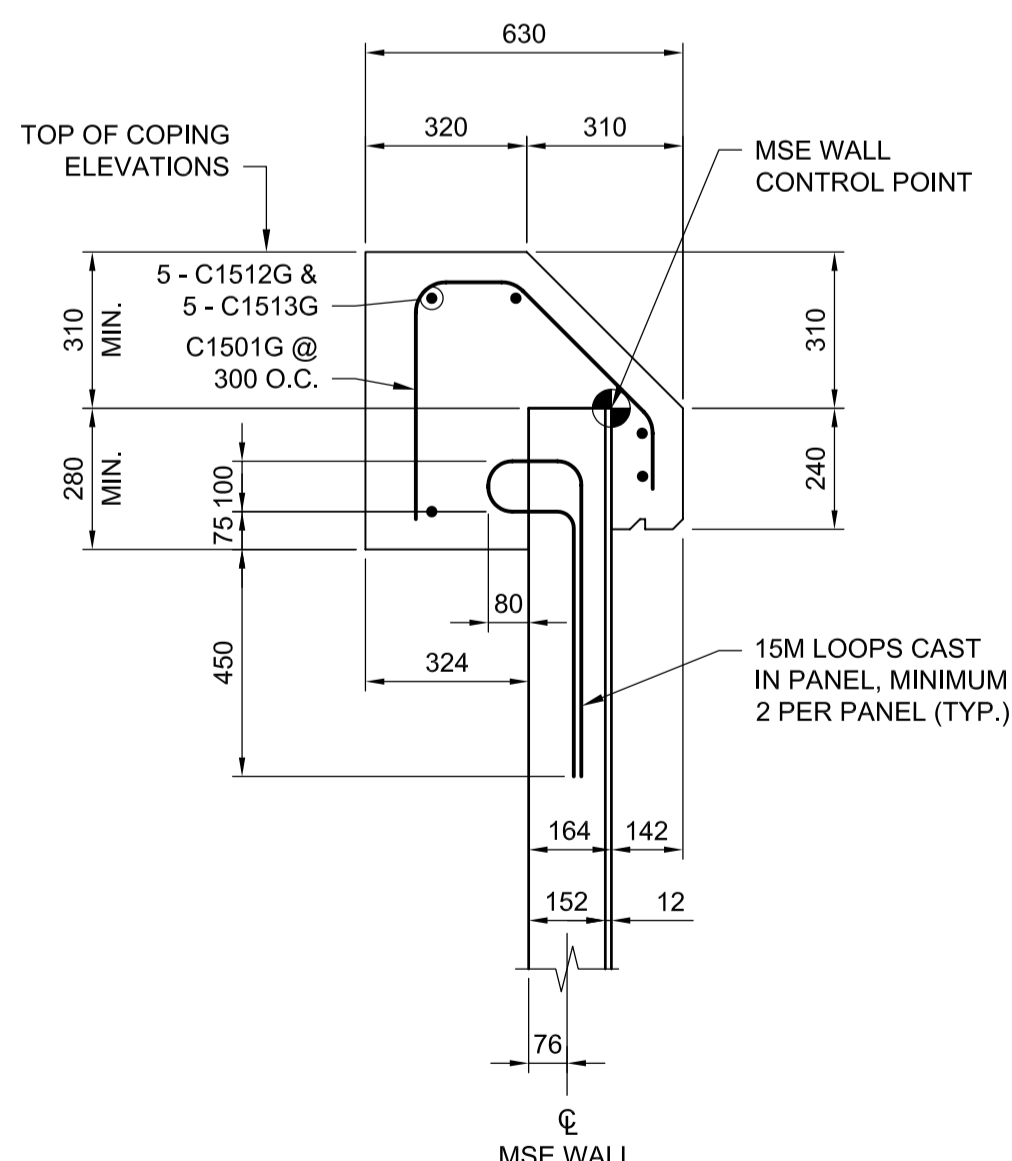
TYPICAL 90° BEND

1:20



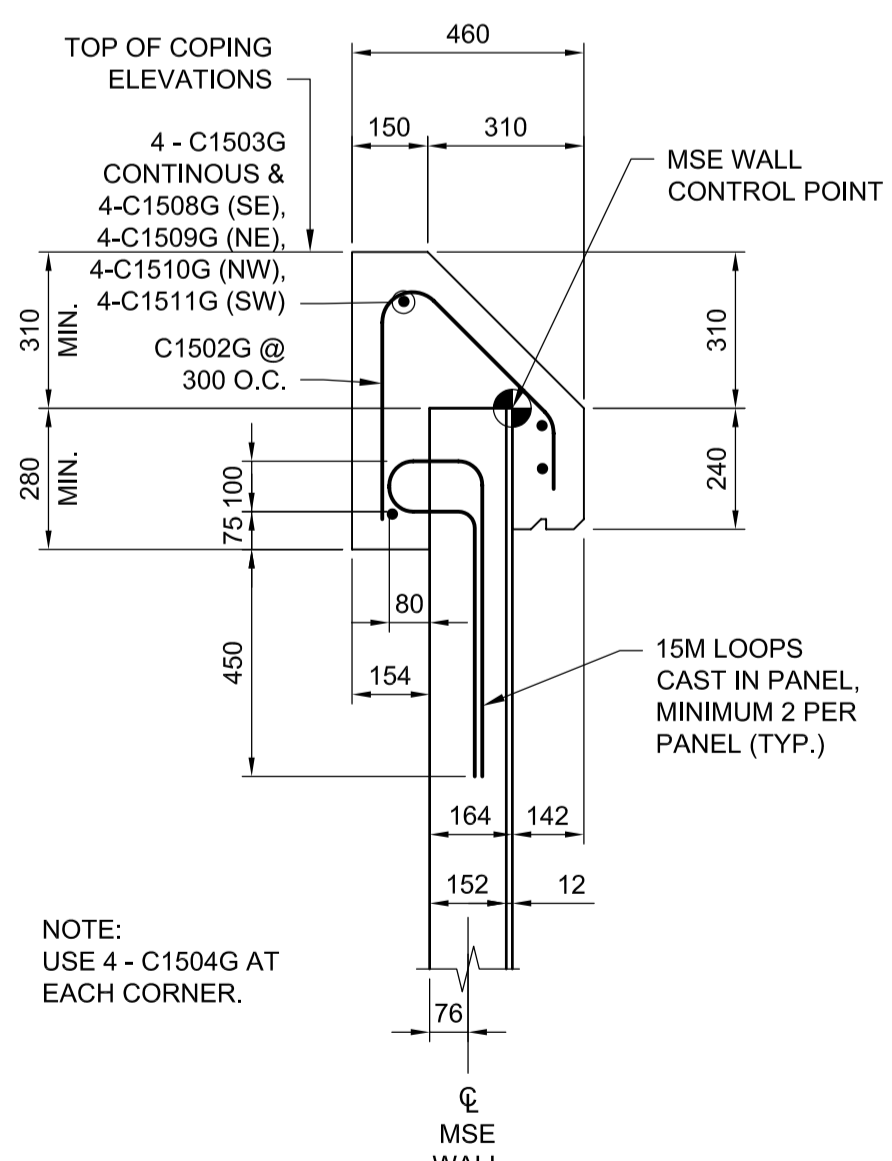
TYPICAL LATERAL SHIFT

1:20



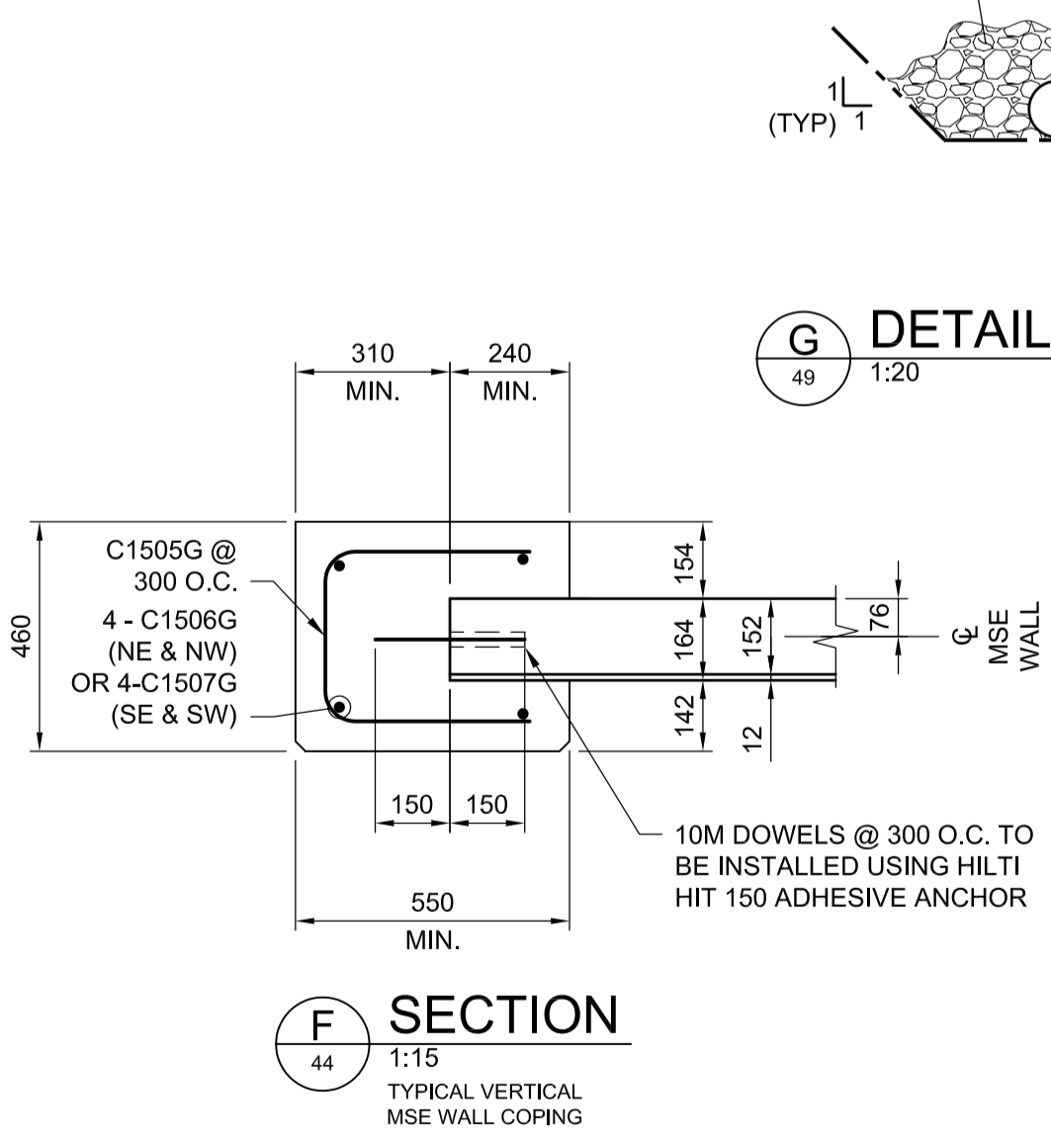
D DETAIL

1:15
TYPICAL MSE WALL COPING IN FRONT OF ABUTMENT



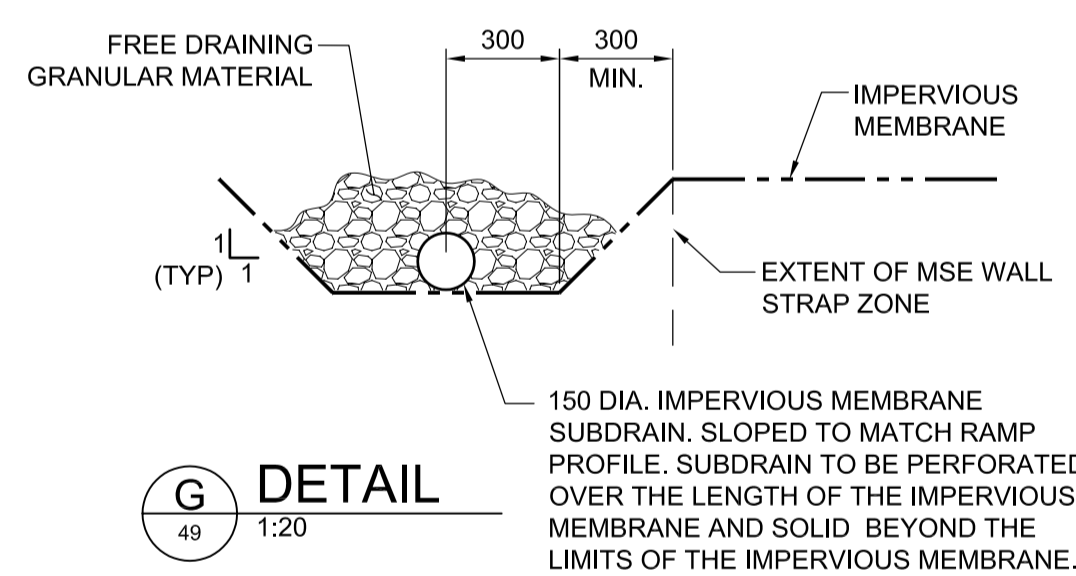
E DETAIL

1:15
TYPICAL MSE WALL COPING PARALLEL TO ROADWAY



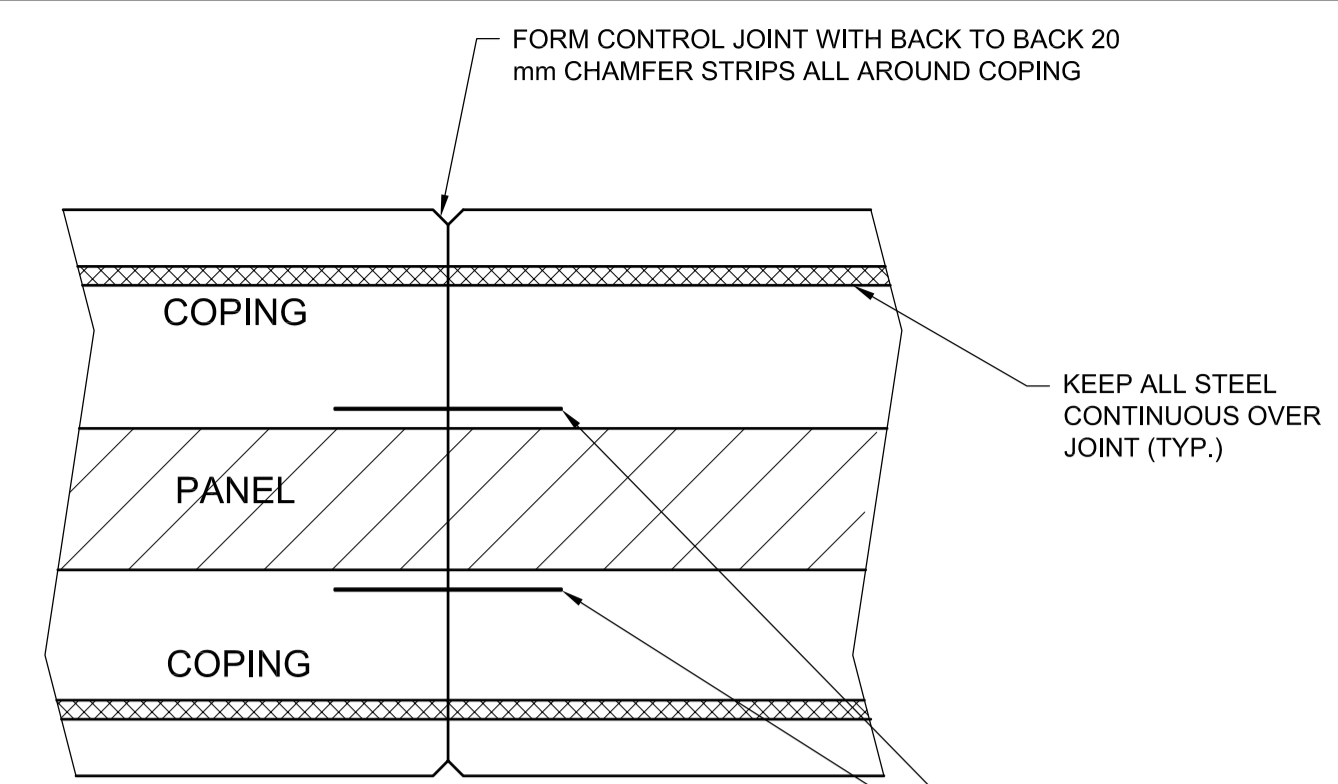
F SECTION

1:15
TYPICAL VERTICAL MSE WALL COPING



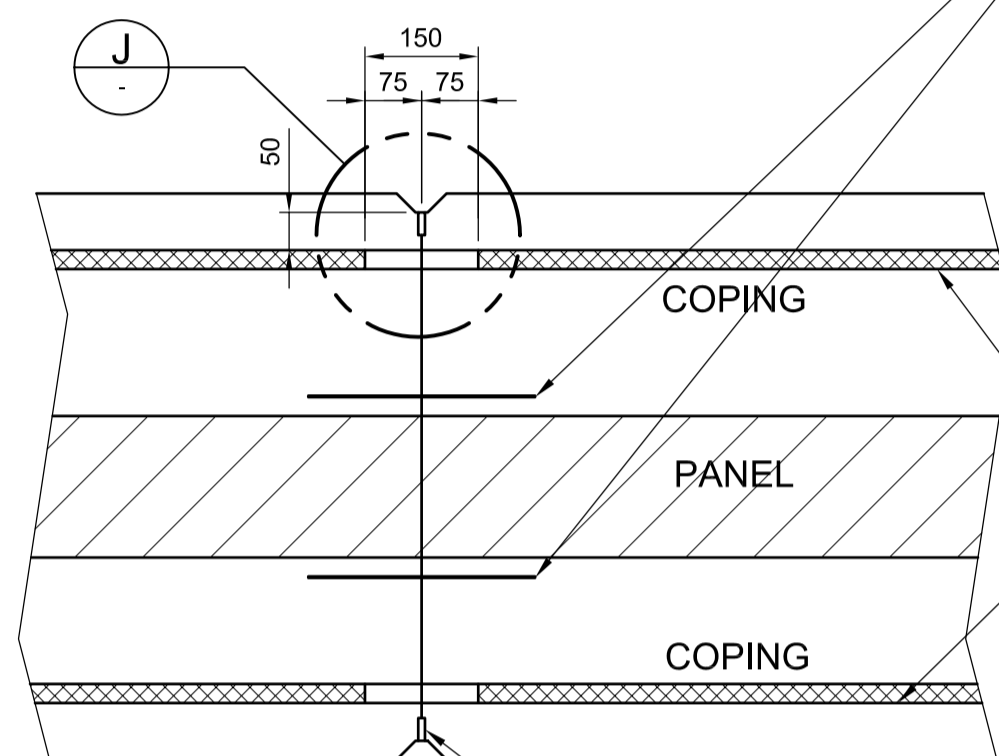
G DETAIL

1:20



TYPICAL JOINT DETAIL

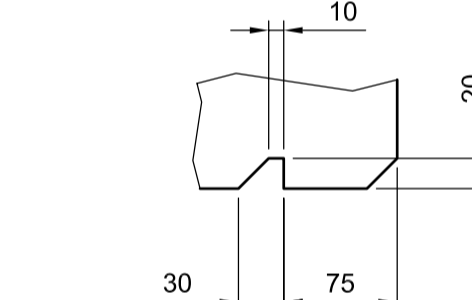
CONTROL JOINT SHALL BE PLACED AT 2000 mm OR EVERY PANEL JOINT WHICHEVER IS LESS.



EVERY FIFTH JOINT DETAIL

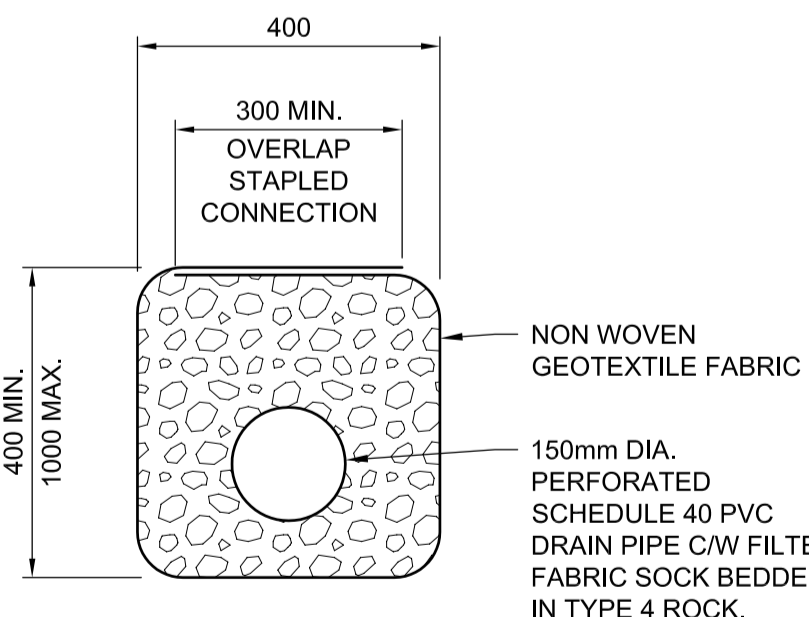
COPING CONTROL JOINT DETAILS

1:10
COPING IS SHOWN



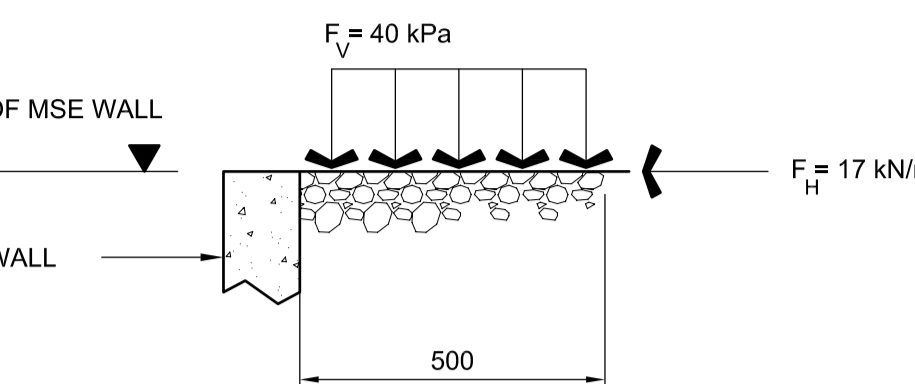
COPING DRIP DETAIL

1:5



H DETAIL

1:10



DESIGN NOTES:

- ALL DIMENSIONS ARE TO FRONT FACE OF MSE WALLS UNLESS NOTED OR DETAILED OTHERWISE
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- MSE WALL VEHICLE IMPACT LOADING DIAGRAM DUE TO UNFACTORED PL-3 VEHICLE IMPACT ONLY:

- MSE WALLS SHALL BE DESIGNED IN ACCORDANCE WITH CAN/CSA S6-06, SECTION 6.12, US DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION PUBLICATION NO. FHWA-NHI-00-043 "MECHANICALLY STABILIZED EARTH WALLS AND REINFORCED SOIL SLOPES DESIGN AND CONSTRUCTION GUIDELINES" AND SPECIFICATIONS.

- MSE WALLS SHALL BE DESIGNED FOR THE EARTH LOADS DUE TO THE FILL HEIGHTS AND HEADSLOPES SHOWN BEHIND THE MSE WALLS ON THE DRAWINGS. THEY SHALL ALSO BE DESIGNED FOR A VERTICAL LIVE LOAD SURCHARGE LOAD OF 17.6 kPa UNFACTORED APPLIED TO THE ROADWAY SURFACE.

- MSE WALL HORIZONTAL DISPLACEMENT SHALL NOT EXCEED 0.25% OF THE WALL HEIGHT AFTER ERECTION.

- MSE WALL REINFORCING SHALL HAVE A DESIGN LIFE OF 100 YEARS.

- DRAINAGE DETAILS AND EROSION PROTECTION REQUIRED BEHIND MSE WALL TO BE DETAILED BY WALL SUPPLIER.

CONSTRUCTION:

- ALL CONCRETE FOR MSE WALL AND COPING TO BE MIX TYPE "3" (f'c = 35MPa), PER SPECIFICATION.

- ALL CONCRETE FOR BARRIERS SHALL BE TYPE "3" (f'c = 35 MPa).

- ALL REINFORCING STEEL FOR MSE WALL PANELS AND COPING SHALL BE GRADE 400R OR 400W, DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18, HOT-DIP GALVANIZED.

- ALL REINFORCING STEEL FOR BARRIER FOOTING SLAB SHALL BE GRADE 400R OR 400W, DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18, PLAIN FINISH.

- ALL REINFORCING STEEL FOR BARRIERS SHALL BE STAINLESS STEEL CONFORMING TO ASTM A955M, GRADE 60 (420), TYPE 2205 DUPLEX (UNS S30803), TYPE 316 LN (UNS S31653) OR TYPE XM-28 (S24100), TYPE 2304 (UNS S32304).

- ALL REINFORCING STEEL SHALL HAVE A MINIMUM 60 +10, -0. CLEAR COVER UNLESS NOTED OTHERWISE.

- ALL EXPOSED CORNERS SHALL HAVE A 20 mm CHAMFER OR FILLET UNLESS NOTED OTHERWISE.

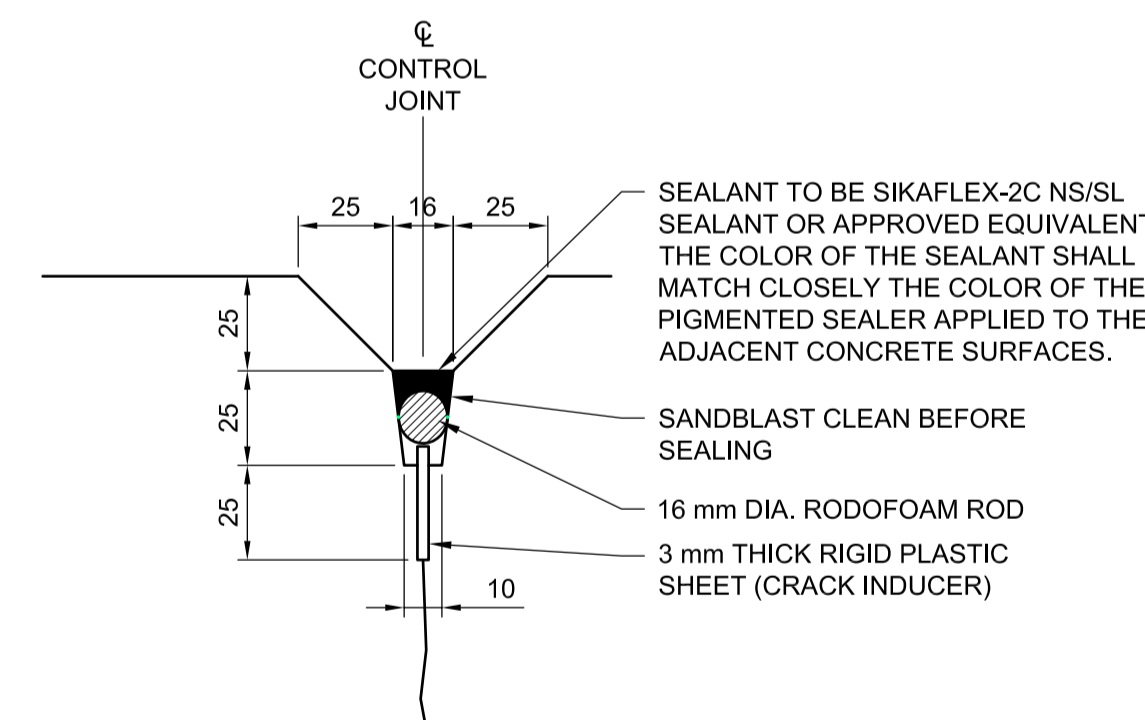
- ALL EXPOSED MSE PANEL SURFACES TO HAVE SMOOTH FINISH AS PER SPECIFICATIONS.

- SEE UTILITIES DWGS FOR RELOCATIONS OF UNDERGROUND SERVICES.

- BARRIER FOOTINGS TO BE POURED IN MAXIMUM 12m SEGMENTS. REINFORCING SHALL BE CONTINUOUS ACROSS KEYED CONSTRUCTION JOINTS.

- BARRIER FOOTING CONSTRUCTION JOINTS SHALL BE LOCATED AT BARRIER EXPANSION JOINTS.

- LINE AND ELEVATION OF BARRIER SHALL BE SET BY INSTRUMENT AFTER BARRIER FOOTING IS CAST.



J DETAIL

1:2
AT COPING ONLY

G:\CAD\126606\Contract\contract_2\Current\Struct\MSE Wall Details 2 of 3.dwg

APEGM
Certificate of Authorization
Dillon Consulting Limited (MB)
No. 1789 Date: 2013/08/01

UNDERGROUND STRUCTURES	B.M. ELEV.	DESIGNED BY	RE
SUPV. U/G STRUCTURES COMMITTEE	DATE	DRAWN BY	CGC
		CHECKED BY	SSR
		APPROVED BY	MBL
		HOR. SCALE	AS SHOWN
		VERTICAL	AS SHOWN
0 ISSUED FOR TENDER	13/08/08	DATE	2013/08/01
NO. REVISIONS	DATE	BY	DATE

DILLON CONSULTING

ENGINEER'S SEAL
PROVINCE OF MANITOBA
R.B. ERIC
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
PROVINCE OF MANITOBA
S.S. RIHAL
REGISTERED PROFESSIONAL ENGINEER

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

Waverley West Arterial Roads Project (WWARP) Part 3 - Contract 2
Route 90 to Route 165, Overpass (Kenaston Blvd.) and Associated Works

CITY DRAWING NUMBER: B242-13-50
SHEET 50 OF 128
CONSULTANT DRAWING NUMBER

CONSULTANT PROJECT NUMBER: 12-6606
MSE WALL DETAILS 2 OF 3