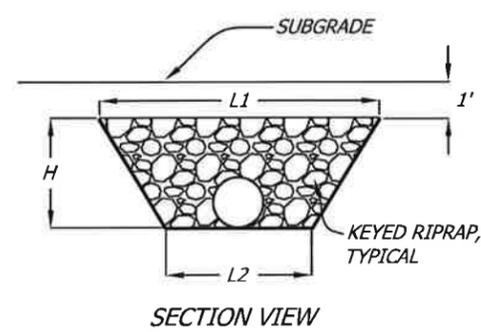
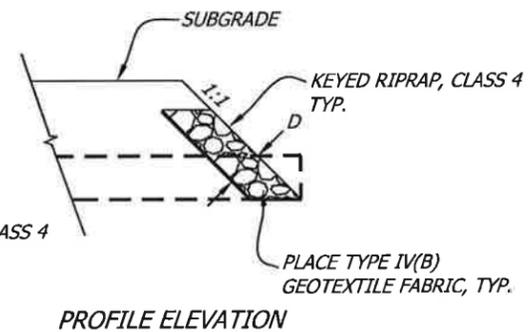


NCLS SPECIFIED ROADS DRAINAGE TYPICALS



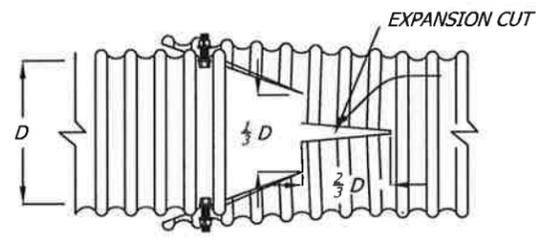
SECTION VIEW



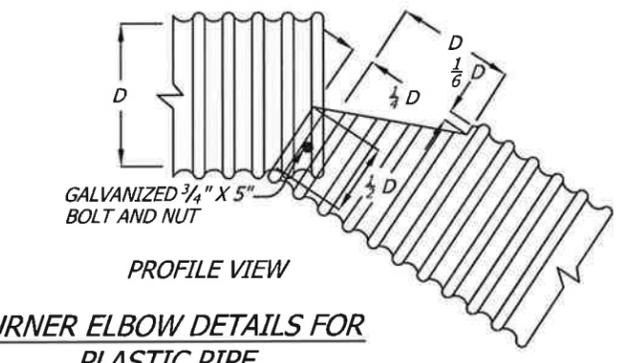
PROFILE ELEVATION

TYPICAL RIPRAP EMBANKMENT PROTECTION PROFILE VIEW

NOTE:
ELBOWS AND ANCHORS ARE INDIRECTLY INCLUDED IN THE PAY ITEM FOR THE CORRESPONDING OUTLET PIPE. ANCHORS SETS CONSIST OF TWO STEEL 6 FT FENCE POSTS (AASHTO M 281) AND NO. 9 GALVANIZED WIRE. DRIVE POSTS A MINIMUM 2 FT INTO THE GROUND. PROVIDE 3 STRANDS OF WIRE TWISTED TOGETHER AND ENCOMPASS THE ENTIRE CIRCUMFERENCE OF THE PIPE AND FENCE POSTS.

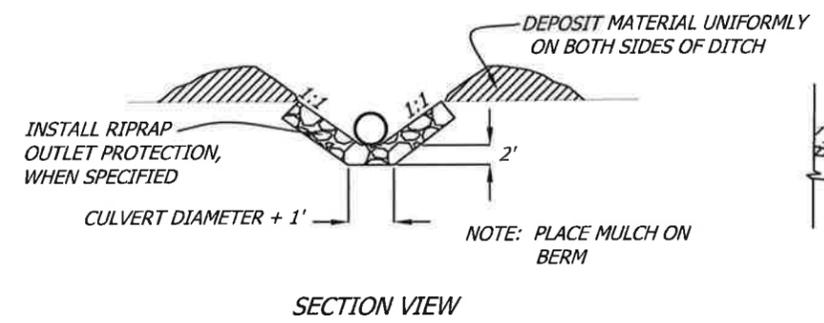


PLAN VIEW

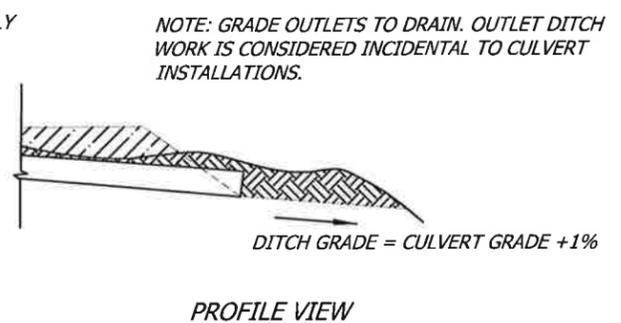


PROFILE VIEW

TURNER ELBOW DETAILS FOR PLASTIC PIPE

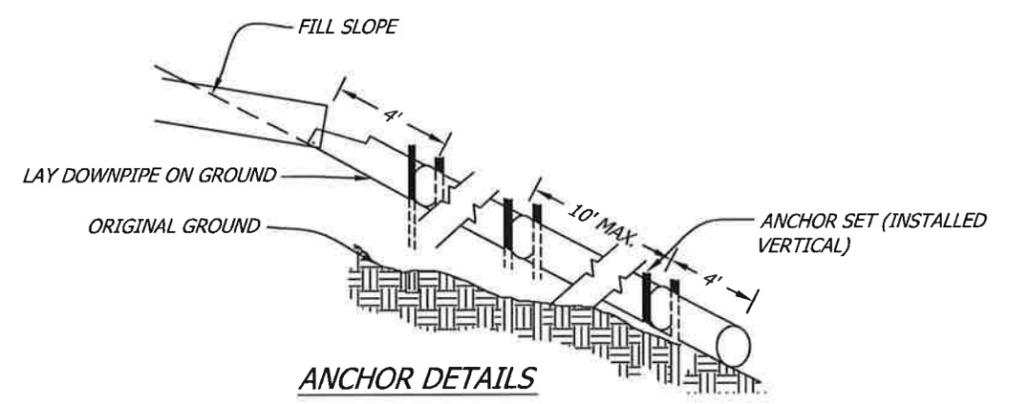


SECTION VIEW

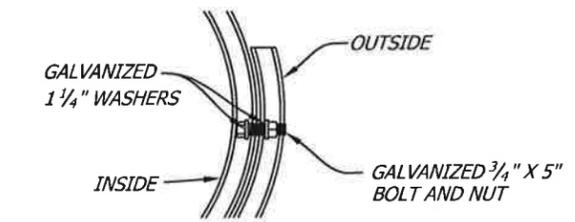


PROFILE VIEW

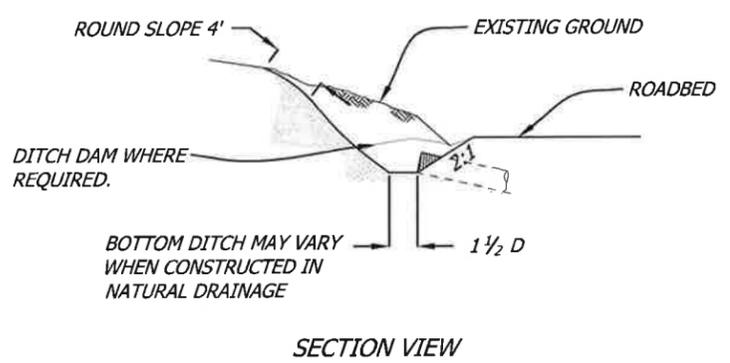
CULVERT OUTLET DITCH



ANCHOR DETAILS



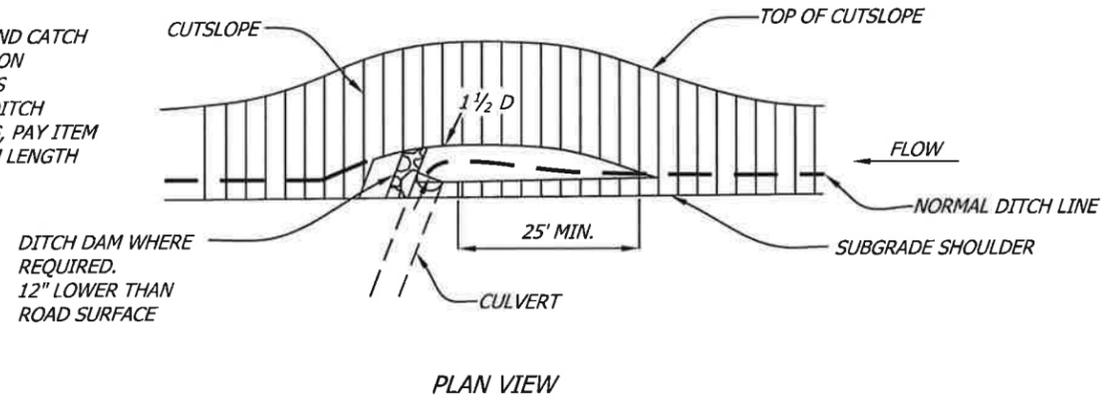
BOLT DETAIL FOR PLASTIC PIPE



SECTION VIEW

TYPICAL DITCH RELIEF CULVERT

NOTE:
CULVERT INLET AND CATCH BASIN CLEANING ON EXISTING PIPES IS INCIDENTAL TO DITCH RECONDITIONING, PAY ITEM 30304. UPSTREAM LENGTH SHALL BE 20'.

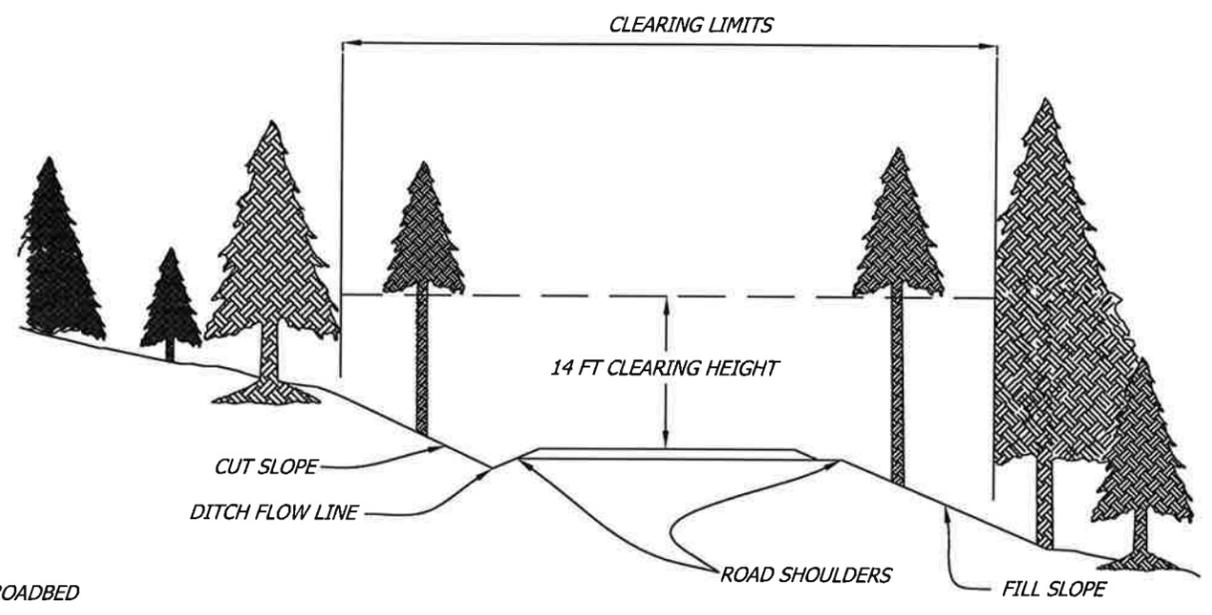


PLAN VIEW

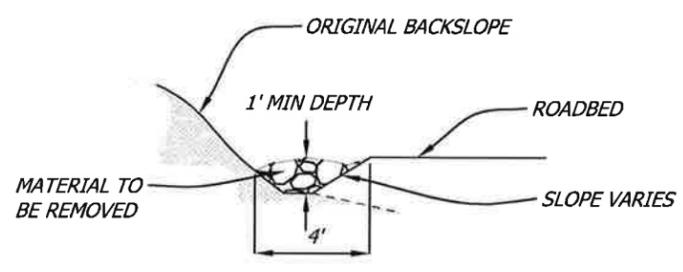
DRAWINGS N.T.S.



NCLS SPECIFIED ROADS ROADWAY TYPICALS



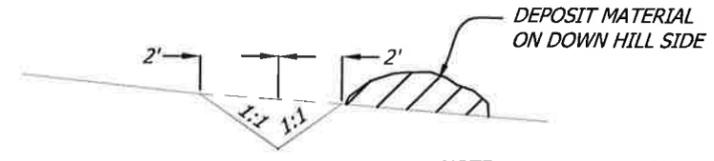
- NOTES:
1. REFER TO FP-03 AND FSSS 201, CLEARING AND GRUBBING.
 2. EXTEND AN ADDITIONAL 5' ON THE INSIDE OF HORIZONTAL CURVES WHERE DIRECTED BY CONTRACTING OFFICER TO REDUCE OBSTRUCTIONS IN SIGHT DISTANCE.
 3. DECKING LOCATIONS SHALL BE FLAGGED BY CONTRACTING OFFICER PRIOR TO WORK.
 4. CLEARING LIMITS SHALL BE 5' FROM THE SHOULDER OR 5' FROM THE TOE OF THE FILL/TOP OF CUT.
 5. TREES GREATER THAN 6 INCHES AT 4.5' ABOVE THE GROUND WITHIN THE CLEARING LIMITS ON THE FILL SLOPE CAN REMAIN.
 6. CUT OTHER VEGETATION TO A MAXIMUM HEIGHT OF 6" ABOVE THE GROUND WITHIN THE CLEARING LIMITS.
 7. LIMB TREES TO 14' ABOVE THE TRAVELED WAY SURFACE TO A LENGTH OF 4".



SECTION VIEW
DITCH RECONDITIONING
DETAIL

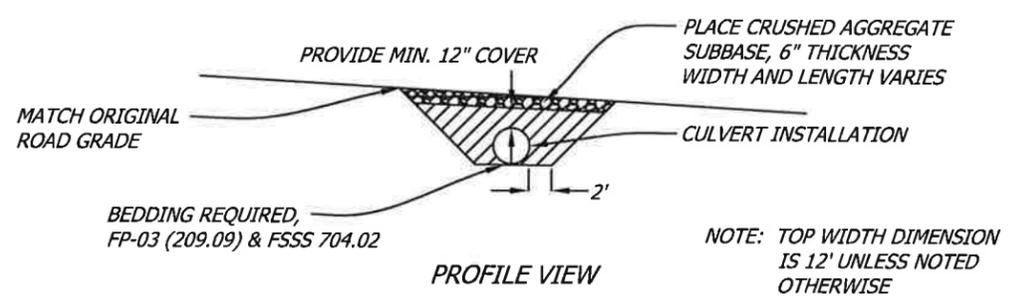
ROAD NUMBER	BEGINNING STATION OR MILE POST	ENDING STATION OR MILE POST
2043-328	0.00	0.23
2043-333	0.00	0.84

CLEARING AND GRUBBING DETAIL

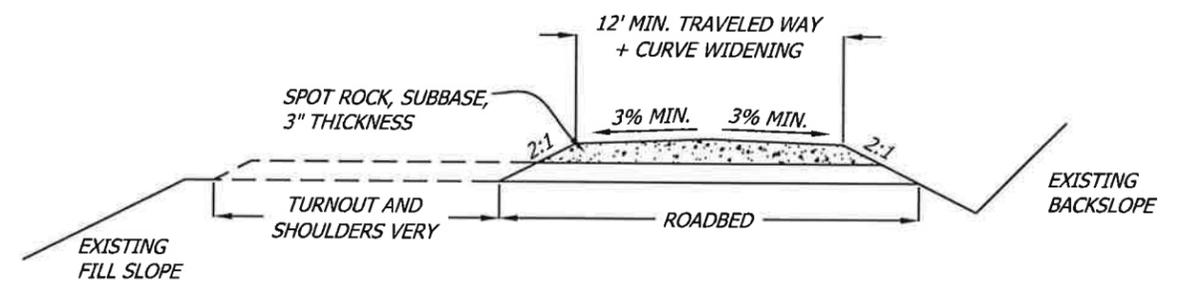


NOTE: PLACE MULCH ON BERM

LEAD OFF DITCH DETAIL



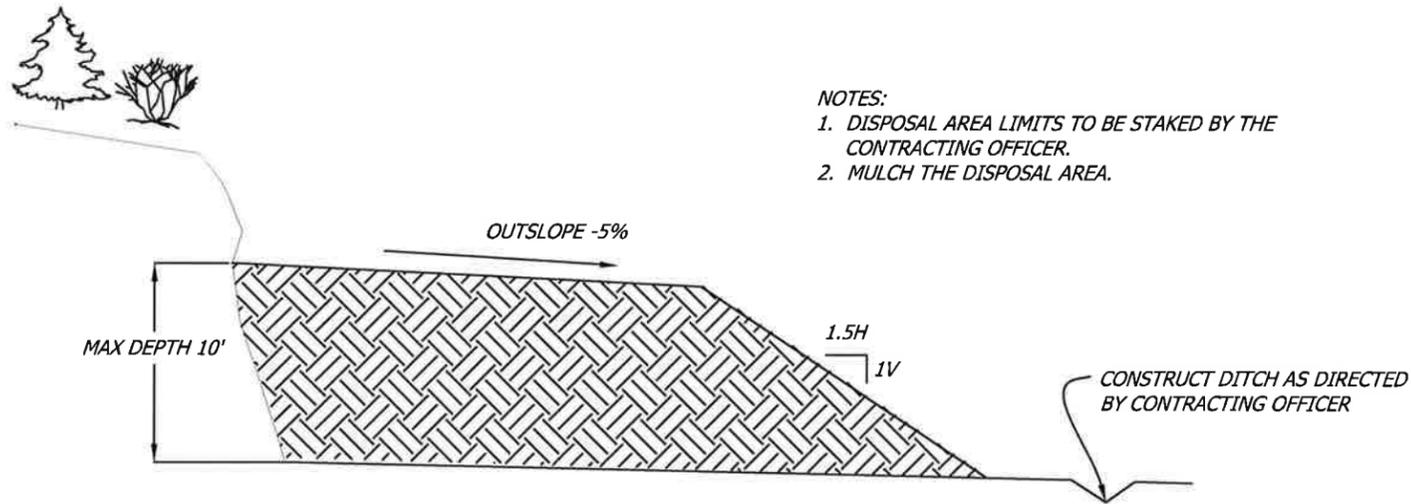
TYPICAL CULVERT AGGREGATE
REPLACEMENT



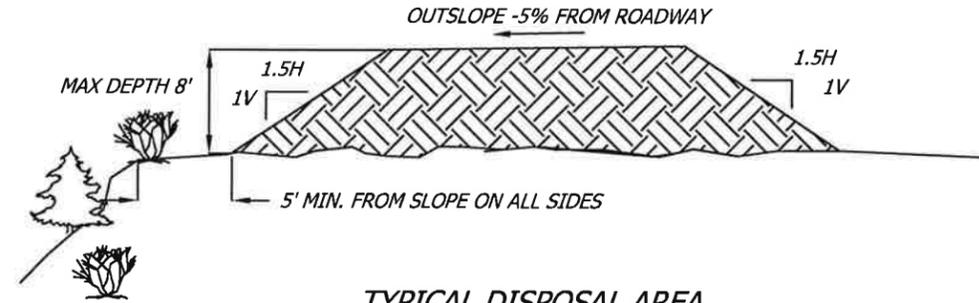
TYPICAL AGGREGATE SURFACE
ROCK PLACEMENT

- NOTES:
1. REFER TO FSSS 322 - MINOR AGGREGATE COURSES.
 2. MAINTAIN A CROWN IN SECTIONS OF ROADWAY WITH EXISTING DITCHES.
 3. CROSS SLOPE ALL HORIZONTAL CURVES TOWARDS THE INSIDE OF THE CURVE A MINIMUM OF 3% AS DIRECTED BY THE CONTRACTING OFFICER.

DRAWINGS N.T.S.



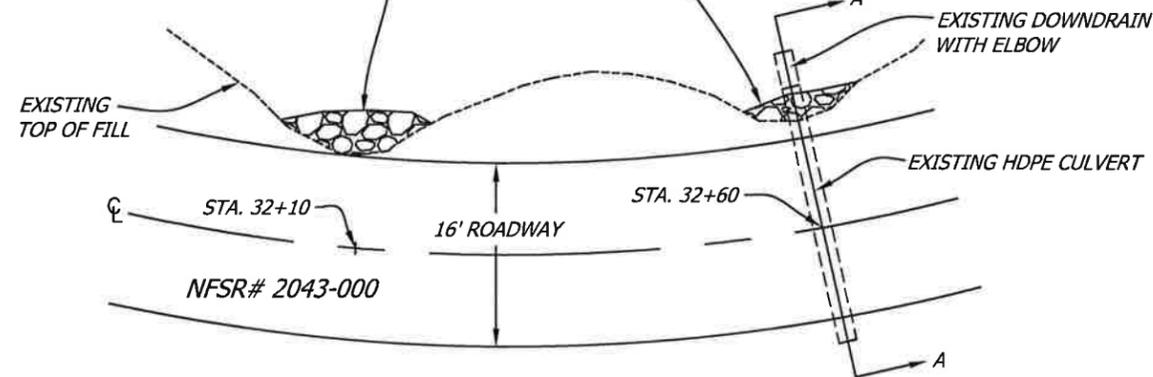
TYPICAL DISPOSAL AREA WITH VERTICAL FACE



TYPICAL DISPOSAL AREA WITH OPEN AREA

PLACE CLASS 4 KEYED RIPRAP FILL SLOPE PROTECTION. 25' L1 X 15' L2 X 10' H X 4' D WITH GEOTEXTILE FABRIC. SEE DETAIL ON SHEET 16.

PLACE CLASS 4 KEYED RIPRAP FILL SLOPE PROTECTION. 20' L1 X 10' L2 X 5' H X 4' D WITH GEOTEXTILE FABRIC. SEE DETAIL ON SHEET 16.

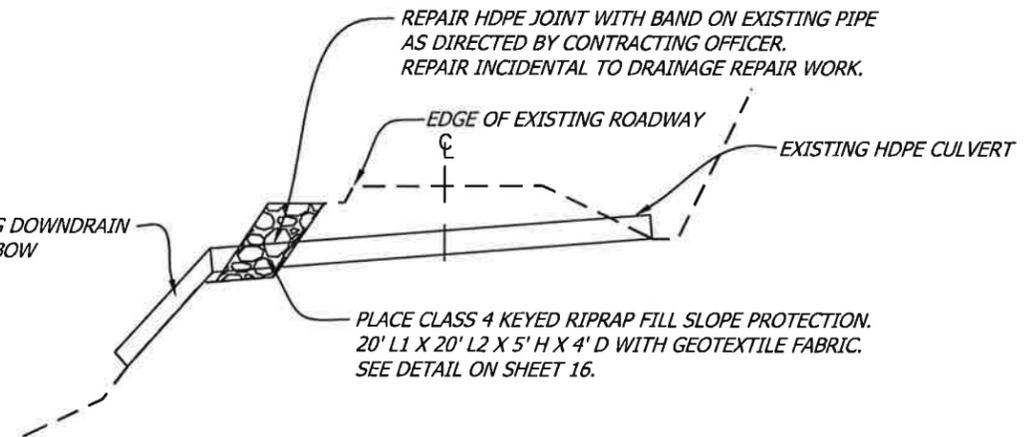


PLAN VIEW

REPAIR HDPE JOINT WITH BAND ON EXISTING PIPE AS DIRECTED BY CONTRACTING OFFICER. REPAIR INCIDENTAL TO DRAINAGE REPAIR WORK.

EXISTING DOWNDRAIN WITH ELBOW

PLACE CLASS 4 KEYED RIPRAP FILL SLOPE PROTECTION. 20' L1 X 20' L2 X 5' H X 4' D WITH GEOTEXTILE FABRIC. SEE DETAIL ON SHEET 16.



SECTION A-A

NFSR #2043-000
STA. 32+10 - STA. 32+60 REPAIRS

DRAWINGS N.T.S.

NCLS SPECIFIED ROADS

DISPOSAL TYPICALS & NFSR# 2043-000 REPAIRS

PACIFIC NORTHWEST REGION

USDA FOREST SERVICE



SHEET NUMBER TOTAL SHEETS

19 19