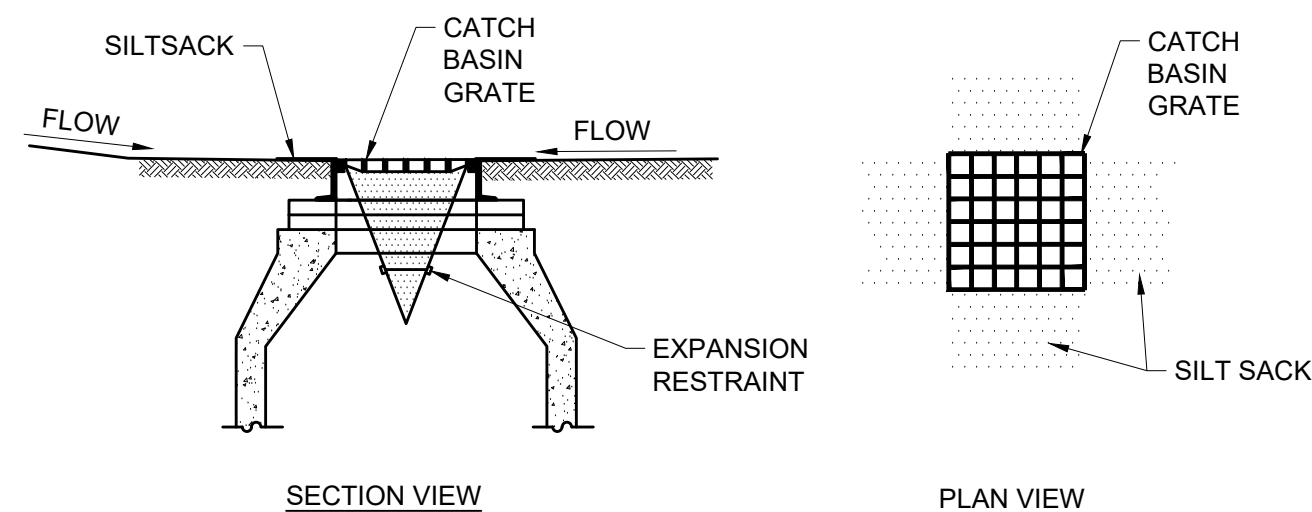


PLAN VIEW
SCALE: 1"=20'

NOTES:

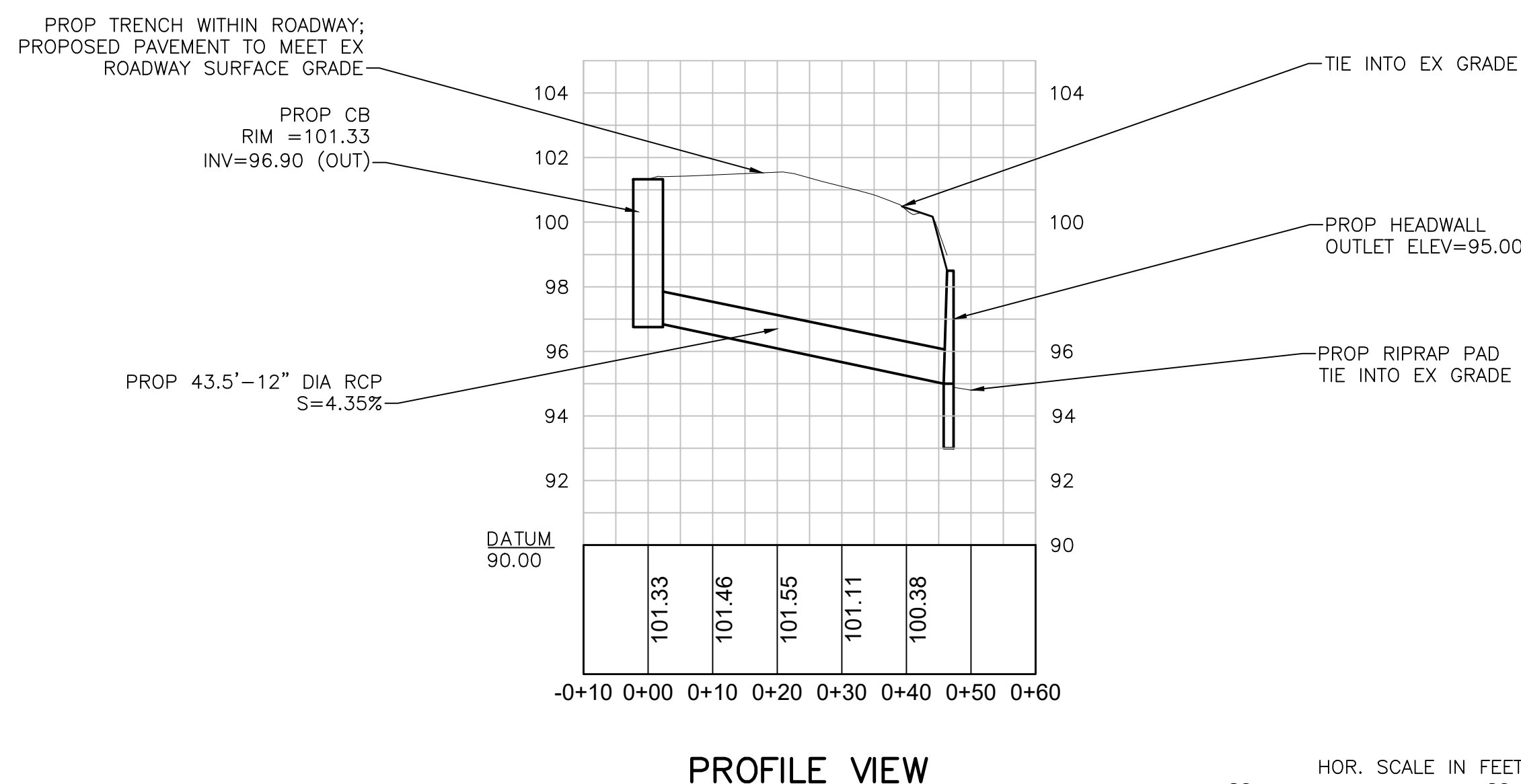
- WHERE ROADWAY SIDE SLOPES EXCEED 2H:1V, RIP RAP SLOPE REINFORCEMENT SHALL BE PROVIDED. SEE DETAIL ON SHEET C-2.
- WHERE LANDSCAPED SLOPES EXCEED 3H:1V, JUTE MESH SHALL BE PROVIDED FOR SLOPE REINFORCEMENT.
- A WAIVER IS REQUESTED FOR PROPOSED WORK WITHIN 25-FOOT NO DISTURB BUFFER.



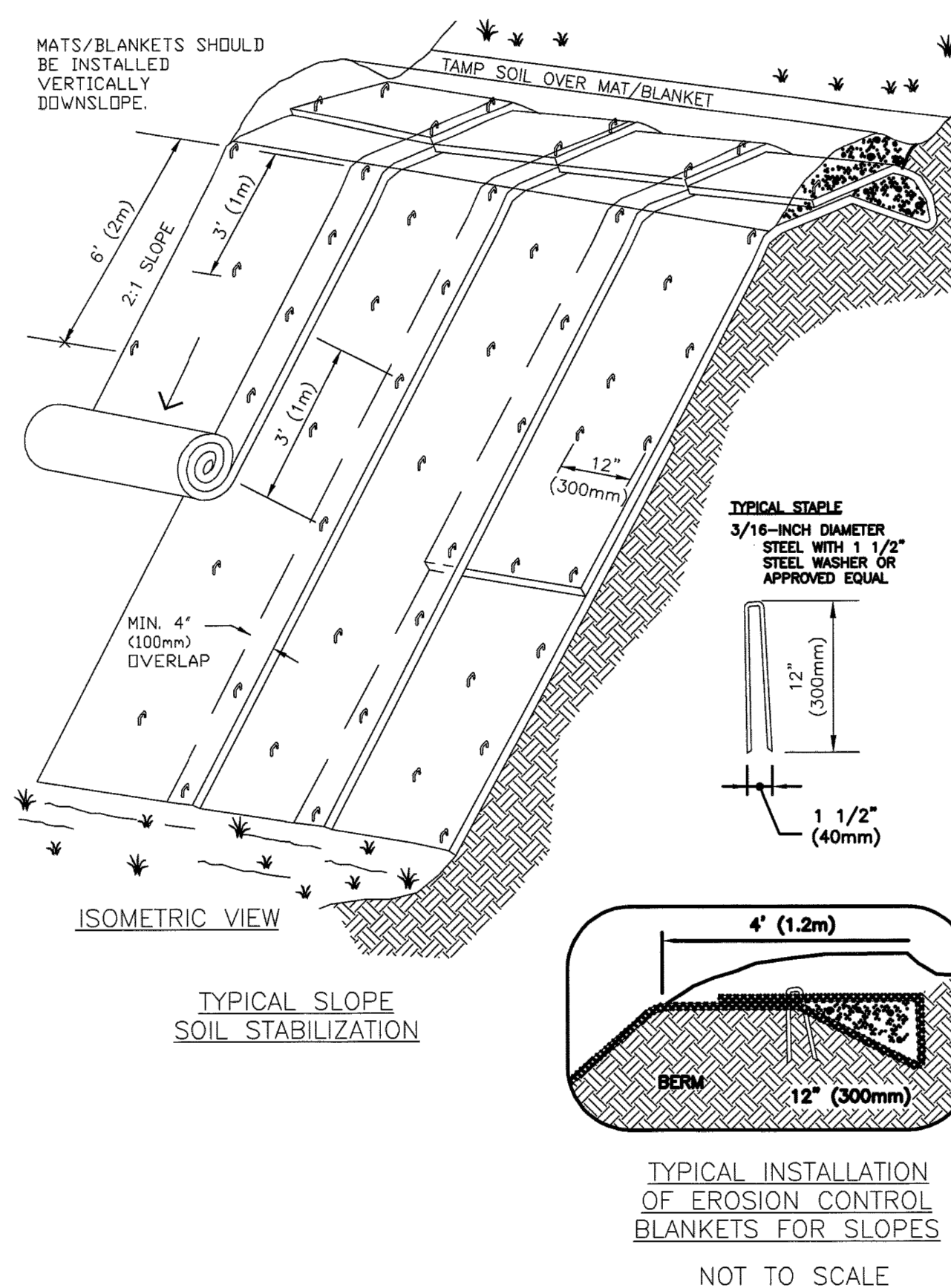
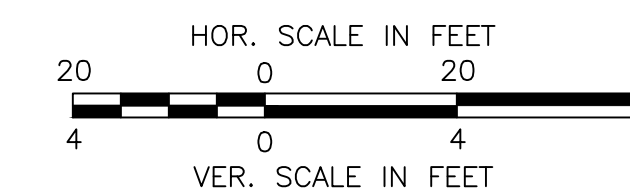
NOTES:

- INSTALL SILT SACK IN EXISTING CATCH BASINS BEFORE COMMENCING WORK, AND IN NEW CATCH BASINS IMMEDIATELY AFTER INSTALLATION OF STRUCTURE. MAINTAIN UNTIL BINDER COURSE PAVING IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
- GRATE TO BE PLACED OVER SILT SACK.
- SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

INLET PROTECTION SILT SACK IN CATCH BASIN
N.T.S.



PROFILE VIEW



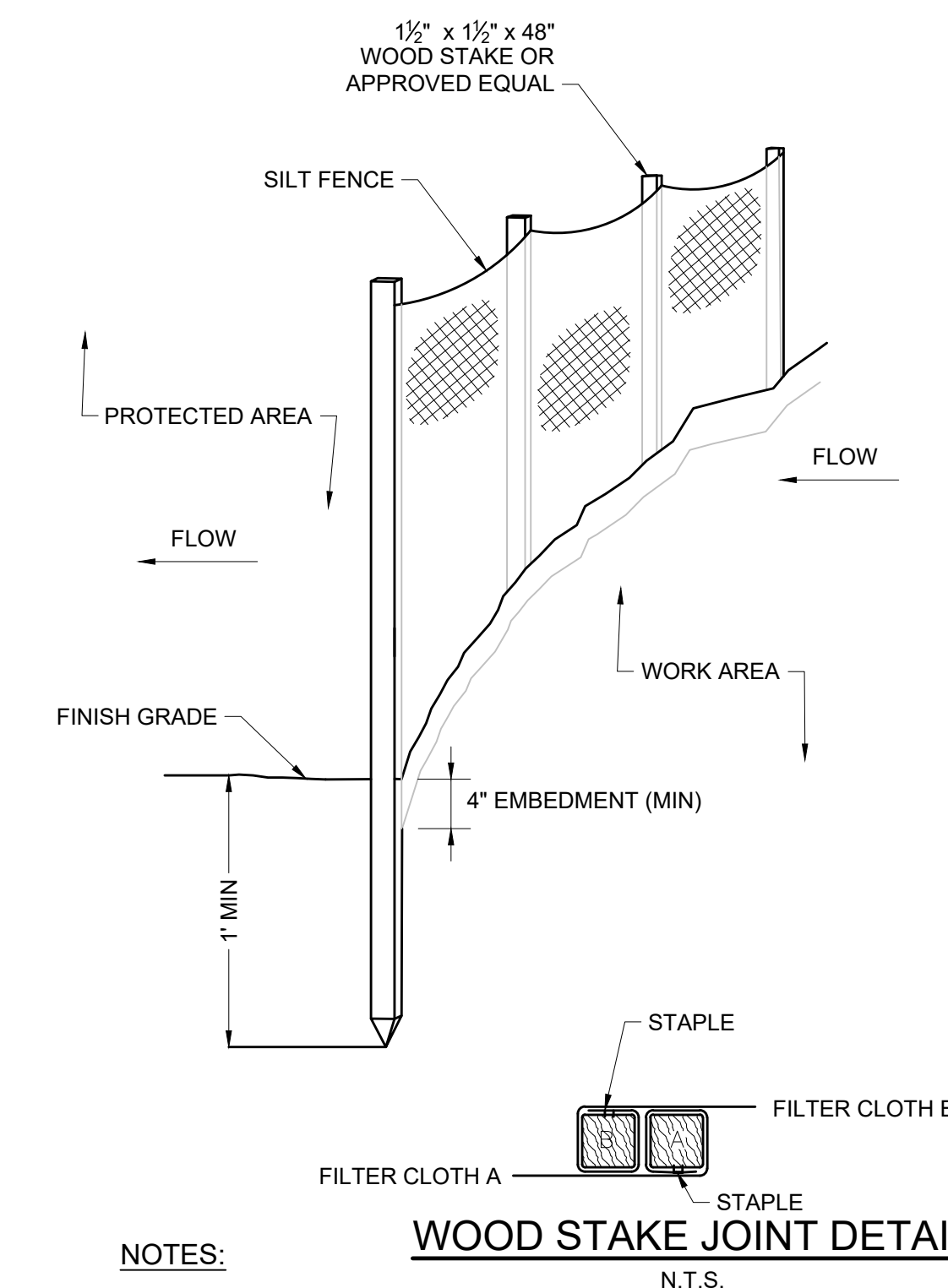
NOTES:

- BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
- ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW. LAY BLANKETS LOOSELY & MAINTAIN DIRECT CONTACT WITH SOIL - DO NOT STRETCH.
- THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
- WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE BLANKET END OVER END WITH 6 INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE BLANKET IN A 6 INCH DEEP TRENCH.
- BLANKETS SHALL BE STAPLED ENOUGH TO ANCHOR BLANKET WHILE MAINTAINING CONTACT WITH SOIL. STAPLES SHALL BE PLACED DOWN THE CENTER & STAGGERED WITH THE STAPLES PLACED ALONG EDGES. PATTERN & AMOUNT OF STAPLES VARIES BY MANUFACTURER. FOLLOW MANUFACTURERS RECOMMENDATIONS, AS REQUIRED.
- BLANKET SHALL BE NORTH AMERICAN GREEN SC-150 OR APPROVED EQUAL.

MAINTENANCE & MATS

- BLANKETS SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION & AFTER A RAINFALL IN EXCESS OF 1/2" IN A 24-HOUR PERIOD.
- FAILURES SHALL BE REPAIRED IMMEDIATELY. IF ANY OF THE FOLLOWING OCCUR THE AFFECTED AREA SHALL BE REPAIRED AND RESEEDED: SLOPE WASHOUT, MAT DISPLACEMENT, DAMAGE TO MAT. THE AFFECTED AREA SHALL BE REPAIRED & RESEEDED & MAT SHALL BE REPLACED OR RE-INSTALLED.

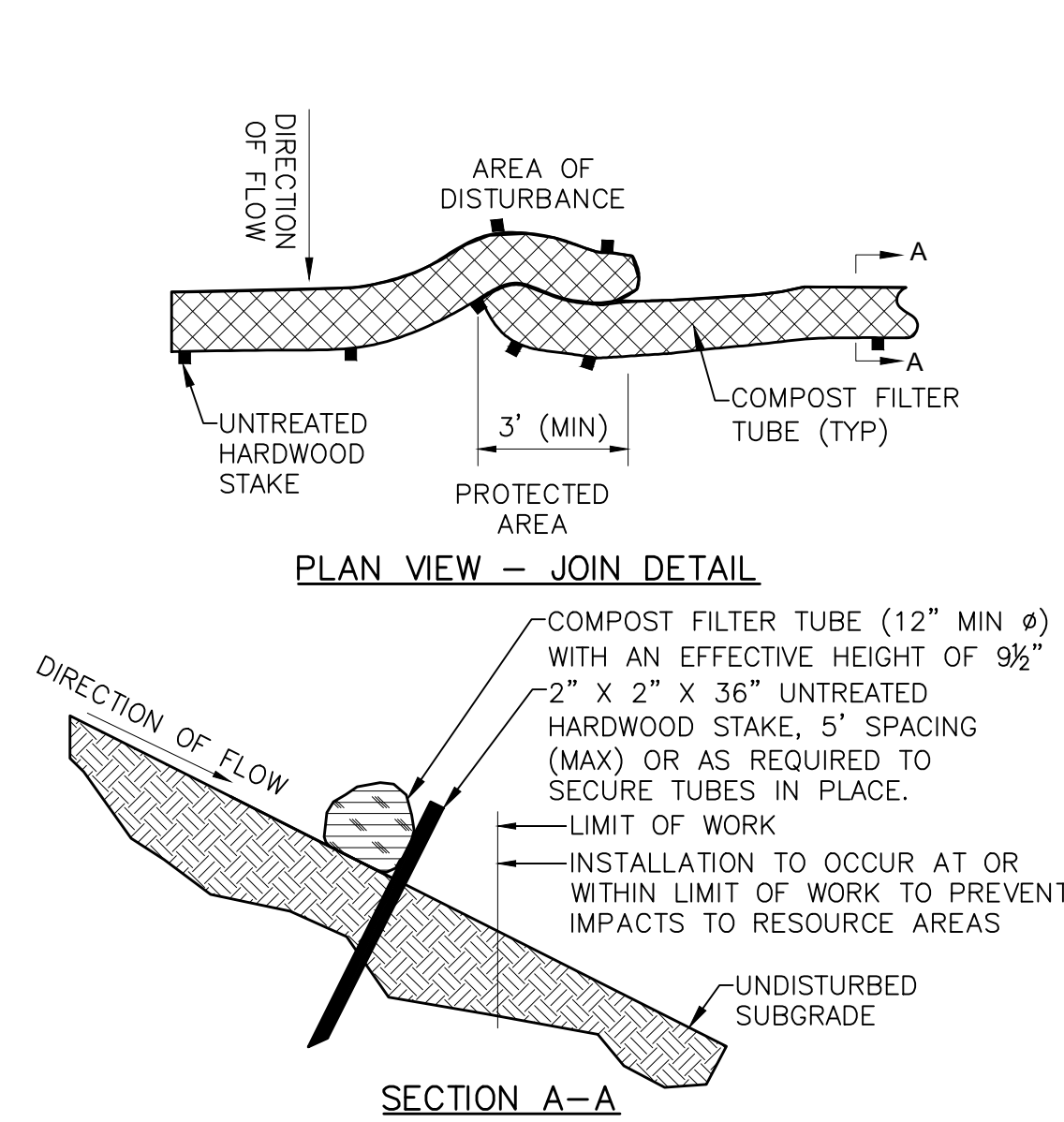
BLANKET SLOP PROTECTION FOR EROSION CONTROL
N.T.S.



NOTES:

- FILTER CLOTH SHALL BE FASTENED SECURELY TO POSTS WITH STAPLES. POSTS SHALL BE SPACED 8'-10' ON CENTER.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- ENTRENCH SILT FENCE BY 4 INCHES.
- INSPECTIONS SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED, OR WHEN SEDIMENT ACCUMULATES TO HALF THE HEIGHT OF FENCING.

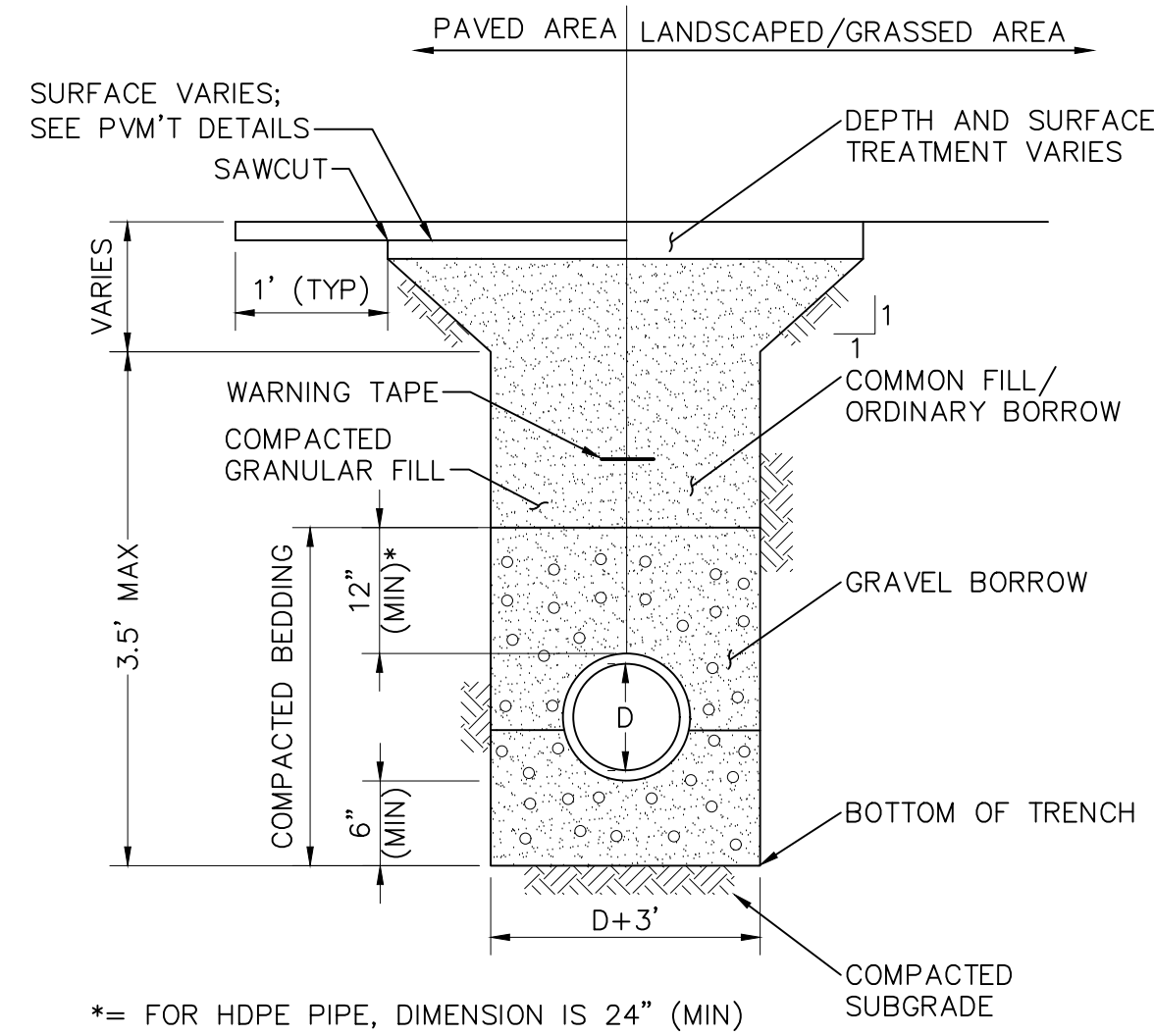
SILT FENCE
N.T.S.



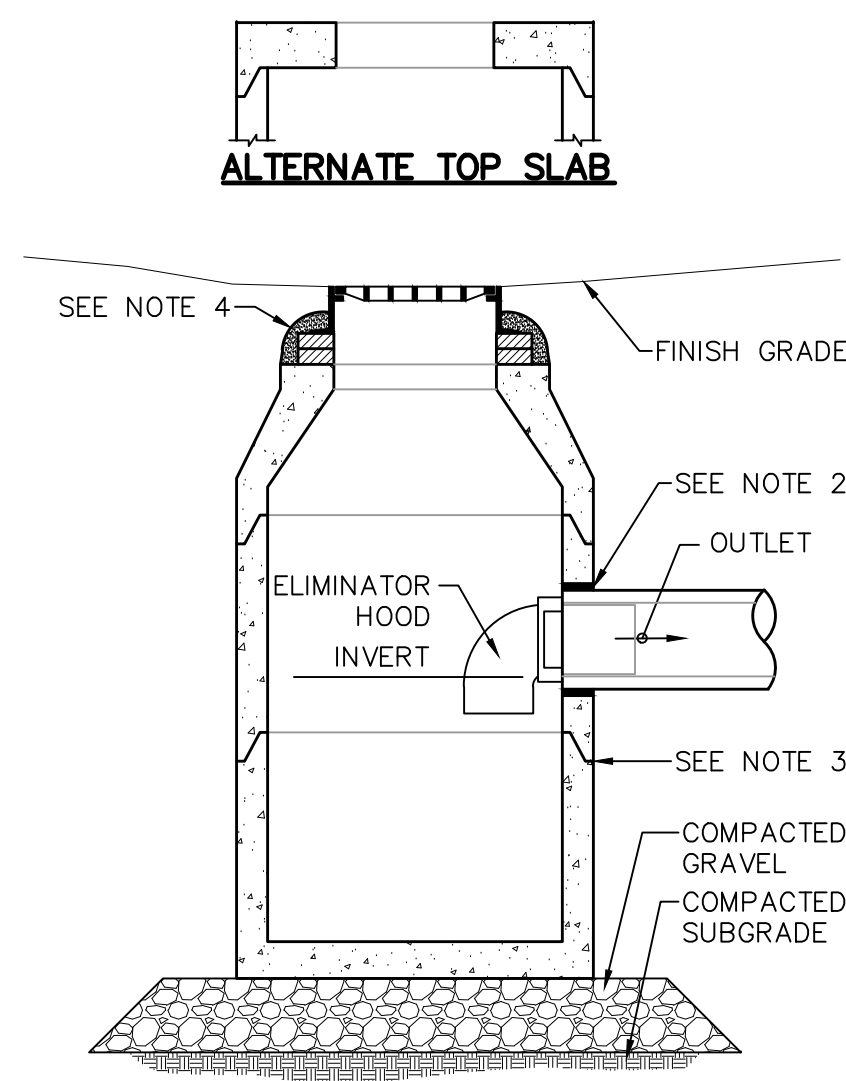
COMPOST FILTER SOCK
N.T.S.

NOTES:

1. PROVIDE A MINIMUM TUBE DIAMETER OF 12" FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.
5. TUBES FOR COMPOST FILTERS SHALL BE JUTE MESH OR APPROVED BIODEGRADABLE MATERIAL. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER.
6. TAMP TUBES IN PLACE TO ENSURE GOOD CONTACT WITH SOIL SURFACE. IT IS NOT NECESSARY TO TRENCH TUBES INTO EXISTING GRADE.
7. WHEN STAKING IS NOT POSSIBLE, SUCH AS WHEN TUBES MUST BE PLACED ON PAVEMENT, HEAVY CONCRETE OR CINDER BLOCKS CAN BE USED BEHIND TUBES UP TO 5 FT. APART OR AS REQUIRED TO SECURE TUBES IN PLACE. DO NOT PUNCTURE TUBES WITH STAKES.
8. TUBES CAN BE PLACED DIRECTLY ON EXISTING PAVEMENT WHEN NECESSARY.
9. PROVIDE A 3' MINIMUM OVERLAP AT ENDS OF TUBES TO JOIN IN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING TUBES SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.
10. SECURE ENDS OF TUBES WITH STAKES SPACED 18" APART. DO NOT PUNCTURE TUBES WITH STAKES.
11. UPON COMPLETION OF PROJECT, ALL TUBES USED FOR EROSION CONTROL SHALL BE REMOVED FROM PROJECT LIMITS.
12. COMPOST FILTER SOCK SHALL BE 18" DIAMETER ON EASTERLY SLOPE ADJACENT TO CRITICAL AREA AS SHOWN ON GRADING AND DRAINAGE PLAN.



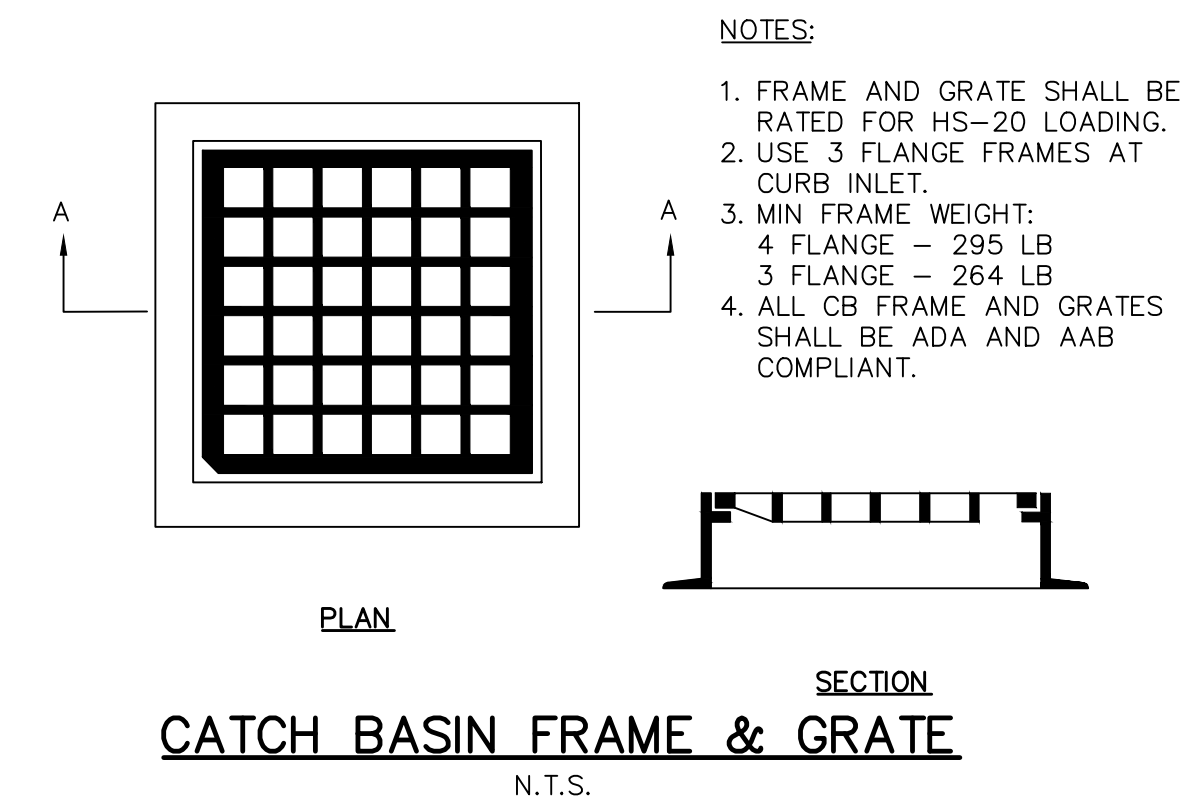
UTILITY TRENCH DETAIL
N.T.S.



DEEP SUMP CATCH BASIN WITH HOOD
N.T.S.

NOTES:

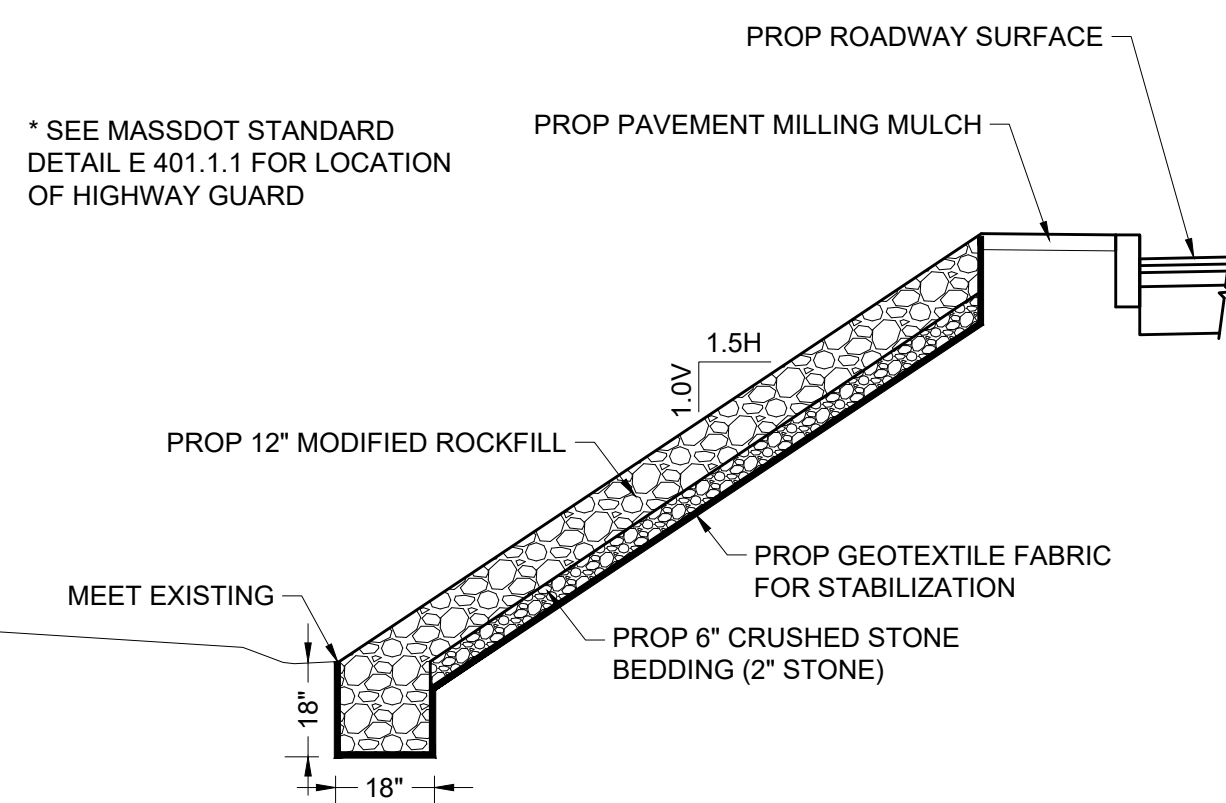
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR. (2 COURSES TYP 5 COURSES MAX)
5. PROVIDE BRICK INVERT PER TOWN OF SAUGUS STANDARDS.



CATCH BASIN FRAME & GRATE
N.T.S.

NOTES:

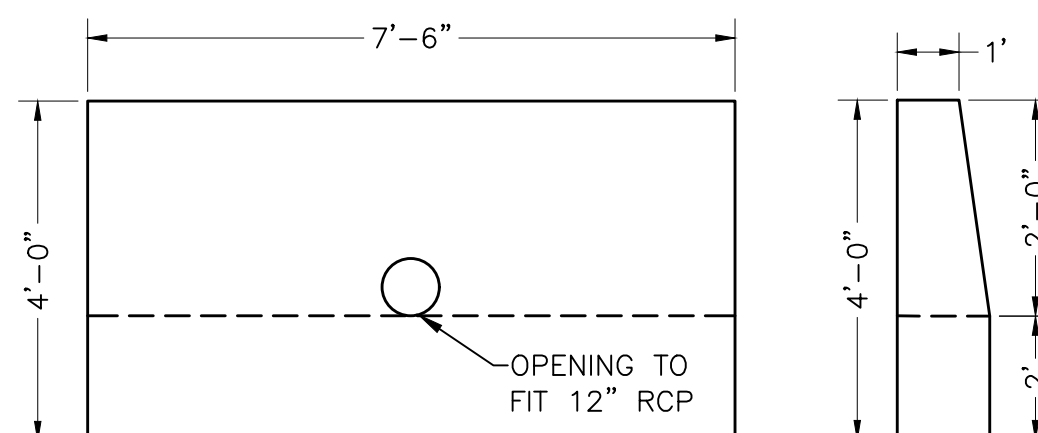
1. FRAME AND GRATE SHALL BE RATED FOR HS-20 LOADING.
2. USE 3 FLANGE FRAMES AT CURB INLET.
3. MIN FRAME WEIGHT:
4 FLANGE - 295 LB
3 FLANGE - 264 LB
4. ALL CB FRAME AND GRATES SHALL BE ADA AND AAB COMPLIANT.



NOTES:

1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. TUBE LOCATION MAY BE SHIFTED TO ADJUST TO LANDSCAPE FEATURES, BUT SHALL PROTECT UNDISTURBED AREA AND VEGETATION TO MAXIMUM EXTENT POSSIBLE.
4. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
5. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER.
6. ADDITIONAL STAKING SHALL BE USED AT THE DIRECTION OF THE ENGINEER.

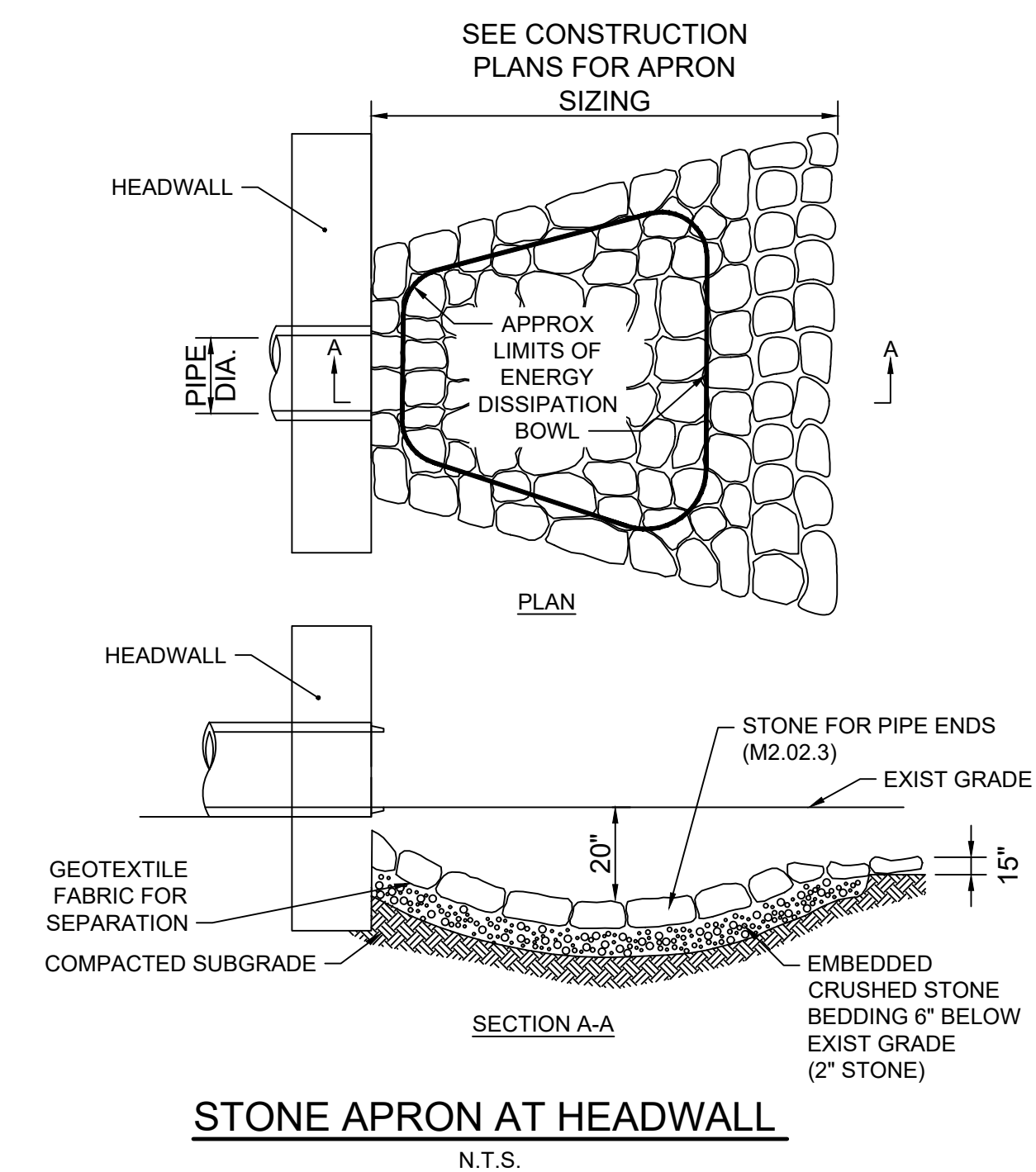
MODIFIED ROCKFILL SLOPE STABILIZATION
N.T.S.



NOTES:

1. CONCRETE SHALL BE 5,000 PSI @ 28 DAYS.
2. REINFORCEMENT SHALL MEET ASTM A-615 GRADE 60, 2" MIN. COVER #5 REBAR 12" O.C., 1.5" CLEARANCE.
3. OVERALL HEADWALL DIMENSIONS SHALL CONFORM TO MASSDOT STANDARD DETAIL FOR PRECAST CONCRETE HEADWALL.
4. WEIGHT=8,700 LBS

PRECAST CONCRETE HEADWALL
N.T.S.



STONE APRON AT HEADWALL
N.T.S.



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DESIGNED BY	DJN
DRAWN BY	RA
CHECKED BY	PFE
DATE	12/04/2020
SCALE	NTS

PREPARED FOR

Town of Boxford
7B Spofford Road
Boxford, MA 01921

REVISIONS

ISSUED FOR

Permitting

PROJECT TITLE

Proposed Drainage
Improvements

PROJECT LOCATION

Main Street
Boxford, MA

DRAWING TITLE

Construction Details



1-15-2021

PROJECT NO. T1042
TEC CAD FILE T1042_CD.dwg
DRAWING NO. C-2
SHEET 2 OF 2