NOTES:
1. REFER TO THESE SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS
2. REFER TO THESE SPECIFICATIONS FOR DRAINAGE STRUCTURE AND MATERIAL REQUIREMENTS
3. RAISE FRAME TO FINISH GRADE ONLY AFTER BASE COURSE OF PAVEMENT IS IN PLACE. RAISE FRAME TO BASE COURSE GRADE IF WEARING COURSE IS TO BE PLACED DURING NEXT CONSTRUCTION SEASON
4. FRAME AND GRATE SHALL CONFORM H-20 LOADING REQUIREMENTS
NOTES:
1. REFER TO WRITTEN THE SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS.
2. REFER TO WRITTEN THE SPECIFICATIONS FOR DRAINAGE STRUCTURE AND MATERIAL REQUIREMENTS.
3. RAISE FRAME TO FINISH GRADE ONLY AFTER BASE COURSE OF PAVEMENT IS IN PLACE, RAISE FRAME TO BASE COURSE GRADE IF WEARING COURSE IS TO BE PLACED DURING NEXT CONSTRUCTION SEASON.
4. RUBBER BOOTS SHALL BE USED AROUND ALL STORM CONNECTIONS.
5. HIGH STRENGTH NON-SHRINK GROUT SHALL BE USED TO SET FRAME AND GRADE RINGS.
6. ALL STRUCTURE SHALL BE DESIGNED AND CONSTRUCTED TO WITHSTAND H-20 WHEEL LOADING.
NOTES:

1. RAISE FRAME TO FINISH GRADE ONLY AFTER BASE COURSE OF PAVEMENT IS IN PLACE. RAISE FRAME TO BASE COURSE GRADE IF WEARING COURSE IS TO BE PLACED DURING NEXT CONSTRUCTION SEASON.

2. HIGH STRENGTH NON-SHRINK GROUT SHALL BE USED TO SET FRAME AND GRADE RINGS.

3. IN GRASS AREAS, FRAME AND COVER ARE TO BE INSTALLED A MAXIMUM OF 6" ABOVE GRADE.

4. ALL STRUCTURE SHALL BE DESIGNED AND CONSTRUCTED TO WITHSTAND H-20 WHEEL LOADING.

NOTES:

1. The contractor shall at all times keep the trenches entirely free of water until all work is finished and ready for backfilling.

2. Refer to the written specifications for backfill and compaction requirements.

3. Refer to the written specifications for storm drainage pipe requirements.

4. The sides of the trenches 4 feet or more in depth to be entered by personnel shall be sheeted, sloped, or properly supported, conforming to VOSHA requirements.

5. Pipe bedding shall be crushed stone, from 6" below the invert, to the springline of the pipe.

6. Install a continuous sheathed solid conductor copper tracer wire over pipe. The wire shall begin inside one catch basin or manhole and run to the next catch basin or manhole. Inside the basins and/or manholes, a coil of wire long enough to reach the cover shall be attached to the inside of the structure. See details 200.01 – 200.03.
BERM AS NECESSARY TO MAINTAIN DEPTH AND 0.005 FT./FT. MIN. SLOPE IN DITCH

PROVIDE 4" TOPSOIL SEED, FERTILIZE, AND MULCH

EXISTING GROUND

MAINTAIN SWALE INVERT SLOPE TO DRAIN WITH MIN. OF 0.005 FT./FT. AND MAX. OF 0.05 FT./FT

WIDTH VARIES PROVIDE MIN. OF 12"

DEPTH VARIES 12" MINIMUM

GRASS LINED SWALE

PROVIDE 18" DEPTH SEE NOTE 3

PROVIDE MIRAFI FILTER FABRIC

ANCHOR FILTER FABRIC AS SHOWN

EXISTING GROUND

MAINTAIN SWALE INVERT SLOPE TO DRAIN WITH MIN. OF 0.005 FT./FT.

WIDTH VARIES PROVIDE MIN. OF 12"

DEPTH VARIES 12" MINIMUM

STONE LINED SWALE

NOTES:

1. THE CONTRACTOR SHALL MAINTAIN THE GRASS LINED SWALE AND RESTORE EROSION PREVENTION MEASURES AFTER EACH STORM EVENT. SEE SECTION 500 OF THESE SPECIFICATIONS FOR FURTHER DIRECTION ON EROSION AND SEDIMENT CONTROL MEASURES.

2. STONE LINED SWALES SHALL BE USED FOR GRADES IN EXCESS OF 0.05 FT./FT (5.0%)

3. DITCHES SHALL BE LINED WITH A COMBINATION OF TYPE I STONE & 8" MINUS AS APPROVED BY THE TOWN OF ESSEX PUBLIC WORKS DEPARTMENT.
TRENCH CROSS SECTION

NOTE
1. THE FABRIC SHALL BE PULLED AROUND THE PIPE AND WRAPPED WITH DUCT TAPE OR WIRE TO PROVIDE A TIGHT ANCHOR.
2. CAST IN PLACE RUBBER BOOTS SHALL BE USED AROUND ALL STRUCTURE PENETRATIONS.
NOTES:
1. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE TRENCHES ENTIRELY FREE OF WATER UNTIL ALL WORK IS FINISHED AND READY FOR BACKFILLING.
2. REFER TO THE WRITTEN SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS.
3. REFER TO THE WRITTEN SPECIFICATIONS FOR STORM DRAINAGE PIPE REQUIREMENTS.
4. THE SIDES OF THE TRENCHES 4 FEET OR MORE IN DEPTH TO BE ENTERED BY PERSONNEL SHALL BE SHEETED, SLOPED, OR PROPERLY SUPPORTED, CONFORMING TO VOSHA REQUIREMENTS.
5. PIPE BEDDING SHALL BE 3/4" WASHED STONE, FROM 6" BELOW THE INVERT, TO 10" BELOW FINISH GRADE OVER THE PIPE.
6. FRAME AND GRATE SHALL CONFORM TO H-20 LOADING REQUIREMENTS.
7. A SIEVE OF BACKFILL MATERIAL SHALL BE SUBMITTED AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS PRIOR TO INSTALLATION.