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- EXISTING PAVEMENT SECTION
- LIMITS OF OPEN CUT
- SURFACE MIX ASPHALT
- BASE MIX ASPHALT
- SUBBASE
- NOTE
- NOTE
- BACKFILL ONLY WITH APPROVED MATERIAL PER APPLICABLE LOCALITY OR VDOT STANDARDS
- PIPE SIZE & MATERIAL AS SHOWN ON PLAN
- SEE BEDDING NOTE BELOW
- (6" IN ROCK CONDITIONS)
- 4"
- WIDTH OF TRENCH EXCAVATION
PIPE DIA. + 6" EACH SIDE (MINIMUM)
- NON-DETECTABLE WARNING TAPE, 3 TO 5 MILS IN THICKNESS, TO BE INSTALLED APPROX. 24" ABOVE PIPE AND AT A MINIMUM OF 6" BELOW GRADE (ALL PIPE)
- DEPTH VARIES
- LOCATION OF TRACER WIRE WITH NON-METALLIC PRESSURE PIPE. TRACER WIRE NOT REQUIRED FOR TYPICAL GRAVITY SANITARY SEWER. SEE DETAIL G-4
- BEDDING:** FOR WATERLINES, INSTALL BEDDING STONE TO SPRING LINE OF PIPE AT A MINIMUM, OR PER MANUFACTURER'S RECOMMENDATION. FOR SEWER LINES, BEDDING SHALL BE MINIMUM 6" ABOVE PIPE.

BEDDING AND BACKFILL UNDER PAVEMENT AND IN RIGHT-OF-WAY

08/01/15

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- ADJUSTMENT RINGS IF NECESSARY
(1" MAX ADJUSTMENT)
SEE FRAME & COVER DETAILS
- BUTYL MASTIC JOINT SEALER OR GASKETS
MEETING ASTM C443 AND ASTM C1244 TESTING
STANDARD (NO MORTAR)
- MINIMUM SLOPE FOR
SERVICE CONNECTION
4" Ø=1/4" PER 1'-0"
6" Ø=1/8" PER 1'-0"
- PRECAST HOLE
WITH FLEXIBLE
BOOT & STEEL
STEEL BAND
- SERVICE
CONNECTION
- SLOPE BENCH
1/4" PER 1'-0"
- MANHOLE WITH
PRECAST INVERT
- 2'-0"
- ARE REQUIRED)
- ECCENTRIC CONE
HEIGHT VARIES
- 1'-4" Max.
- 4'-0"
- 5" Min.
(Typ.)
- RISER
SECTIONS
HEIGHT VARIES
- BASE
HEIGHT VARIES
- 6" Min.
- STONE BASE (6" MIN. DEPTH)
#57 OR EQUIVALENT

**4' STANDARD MANHOLE
FOR PIPE 15" OR SMALLER
(FOR DEPTHS UP TO 15 FEET)**

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- STANDARD INSTALLATION (Top Diagram):**
- SOLID GLUE CAP
 - ROUGH GRADE
 - FINISHED GRADE
 - PRIVATE PROPERTY
 - RIGHT OF WAY OR LIMITS OF EASEMENT
 - CLEAN OUT BOX AND LID (SET TO FINISHED GRADE)
 - CLEAN-OUT TO EXTEND ABOVE A MIN. OF 3 FEET DURING INSTALLATION OF MAIN LINE. PLUMBER SHALL CUT STACK TO FINISHED GRADE AS SHOWN WHEN BUILDING SEWER IS CONNECTED TO LATERAL
 - PLASTIC BODY CLEAN-OUT & CAP
 - CLEAN-OUT STACK (SEE NOTES #2 & #8)
 - 45° OR 22.5° BELL & SPIGOT BEND (IF NEEDED)
 - 45° WYE (TEE NOT ACCEPTABLE) (SEE NOTE #2)
 - 45° MAX.
 - SEWER MAIN
 - 1/4" PER 1' 0" MINIMUM GRADE
 - HORIZONTAL SECTION SHALL EXTEND A MINIMUM OF 5' OR AS DIRECTED BY THE PARTICIPATING UTILITY (SEE NOTE #5)
 - 4" MINIMUM GRAVEL BEDDING #57 OR EQUIVALENT
- INSTALLATION FOR DEEP SEWER (Bottom Diagram):**
- SAME AS ABOVE
 - TEE, WYE, TEEWYE OR COMBINATION OF WYE & 45° BEND FITTINGS SHALL BE SIZED AS REQUIRED
 - 2'-0" MIN.
 - 2'-0" MIN.
 - 45° MAX.
 - 11.25° OR 22.5° BEND (SEE NOTE #2)
 - SANITARY SEWER LATERAL FOR DEEP SEWER

SANITARY SEWER LATERAL

01/01/14

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- FINISHED GRADE
- NORMAL SOIL CONDITIONS
- 3' MIN.
- (4" MIN. - 6" IN ROCK CONDITIONS)
- WIDTH OF TRENCH EXCAVATION
PIPE DIA. + 6" EACH SIDE (MINIMUM)
- NON-DETECTABLE WARNING TAPE, 3 TO 5 MILS IN THICKNESS, TO BE INSTALLED APPROX. 24" ABOVE PIPE AND AT A MINIMUM OF 6" BELOW GRADE (ALL PIPE)
- BACKFILL ONLY WITH APPROVED MATERIAL PER APPLICABLE LOCALITY OR VDOT STANDARDS
- PIPE SIZE & MATERIAL AS SHOWN ON PLAN
- FOR WATERLINES INSTALL BEDDING STONE TO SPRING LINE OF PIPE AT A MINIMUM, OR PER MANUFACTURER'S RECOMMENDATION
- FOR SEWER LINES BEDDING SHALL BE MIN. 6" ABOVE PIPE
- LOCATION OF TRACER WIRE WITH NON-METALLIC PRESSURE PIPE. TRACER WIRE NOT REQUIRED FOR TYPICAL GRAVITY SANITARY SEWER. SEE DETAIL G-4 FOR ADDITIONAL REQUIREMENTS

BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS

08/01/15

<u>SEED</u>		
APPLICATION DATES	SPECIES	APPLICATION RATES
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 -100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)

- Apply **10-10-10 fertilizer** at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:

- 1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
- 2 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.

3 - When applying Slowly Available Nitrogen, use rates available in [Erosion & Sediment Control Technical Bulletin #4](#). 2003 Nutrient Management for Development Sites at <http://www.cdr.state.va.us/swe/s&s.htm#pubs>

<u>Minimum Care Lawns</u>	<u>Per Acre</u>
- Commercial or Residential	200-250 lbs.
- Kentucky 31 or Turf-Type Tall Fescue	90-100%
- Improved Perennial Ryegrass *	0-10%
- Kentucky Bluegrass	0-10%

Minimum of three (3) up to five (5) varieties
of bluegrass from approved list for use in Virginia.

- Kentucky 31 Fescue
- Red Top Grass
- Seasonal Nurse Crop **

- Kentucky 31 Fescue 108 lbs.
- Red Top Grass 2 lbs.
- Seasonal Nurse Crop ** 20 lbs.
- Crownvetch *** 20 lbs.

150 lbs.

* Perennial Ryegrass will germinate faster and at lower soil temperatures than fescue, thereby providing cover and erosion resistance for seedbed.

**** Use seasonal nurse crop in accordance with seeding dates as stated below:**

March, April through May 15th	Annual Ryegrass
May 16th through August 15th	Foxtail Millet
August 16th through September, October	Annual Ryegrass
November through February	Winter Ryegrass

*** If Flatpea is used, increase to 30 lbs./acre. All legume seed must be properly inoculated. Weeping Lovegrass may also be included in any slope or low-maintenance mixture during warmer seeding periods; add 10-20 lbs/acre in mixes.

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