

PERMANENT ROADSIDE STORMWATER GRASS CHANNEL DESIGNED TO BE STABLE DURING 10YR STORM EVENT. A 100 L.F. PORTION OF CHANNEL WILL HAVE A LONGSLOPE OF 1.0%.

Drainage Area 3  
 TOTAL AREA- 3.783 AC.  
 IMPERVIOUS AREA- 0.430 AC.  
 PERVIOUS AREA- 3.353 AC.  
 EXCESS 1YR-1HR RUNOFF VOLUME- 1,923 C.F.

PERMANENT 50' WIDE VEGETATED STORMWATER FILTER STRIP TO REMAIN UNDISTURBED. ANY REQUIRED FILTER STRIP MUST BE CONTAINED WITHIN A PERMANENT STORMWATER EASEMENT.

PERMANENT STORMWATER LEVEL SPREADER SIZED FOR 10YR PEAK RUNOFF FLOW RATE AT 13 L.F. PER 1 CFS FLOWRATE. THE LEVEL SPREAD MUST BE CONTAINED WITHIN A PERMANENT STORMWATER EASEMENT.

PERMANENT STORMWATER INFILTRATION BASIN. DETAINS EXCESS RUNOFF VOLUME FOR 1 YEAR - 1 HOUR RAINFALL EVENT FOR DRAINAGE AREAS 1 AND 2. BASIN MAY HAVE SLOW RELEASE DISCHARGE OUTLET(S) IF SOIL INFILTRATION RATE IS NOT SUFFICIENT TO DRAIN BASIN IN 24 HOURS. THE INFILTRATION BASIN MUST BE CONTAINED WITHIN A PERMANENT STORMWATER EASEMENT.

PERMANENT STORMWATER GRASS CHANNEL DESIGNED FOR WATER QUALITY CONTROL AND STABLE DURING 10YR STORM EVENT. A 100 L.F. PORTION OF CHANNEL WILL HAVE A LONGSLOPE OF 1.0%. THE CHANNEL MUST BE CONTAINED WITHIN A PERMANENT STORMWATER EASEMENT.

Drainage Area 2  
 TOTAL AREA- 0.457 AC.  
 IMPERVIOUS AREA- 0.179 AC.  
 PERVIOUS AREA- 0.278 AC.  
 EXCESS 1YR-1HR RUNOFF VOLUME- 790 C.F.

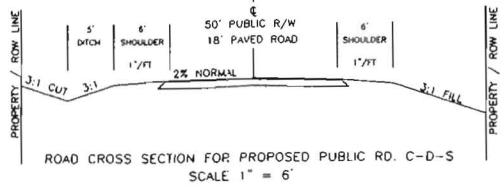
PERMANENT ROADSIDE STORMWATER GRASS CHANNEL DESIGNED TO BE STABLE DURING 10YR STORM EVENT. A 100 L.F. PORTION OF CHANNEL WILL HAVE A LONGSLOPE OF 1.0%.

TYPICAL PERMANENT STORMWATER CONTROL MEASURES FOR LOTS 4-11 MUST CONFORM TO APPENDIX 'C' OF THE CHATHAM COUNTY STORM WATER ORDINANCE. SELECT ONE OF THE FOLLOWING REQUIRED MEASURES:

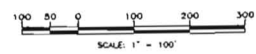
- I. All roof downspouts shall discharge onto the surface of the natural ground at-least 25 feet from the property boundary and in accordance with all applicable Building Codes;
- II. Collect the first 1/4" equivalent runoff volume from at-least 1/2 of the total roof area by connecting downspouts to operating rain barrels or cisterns.
- III. Driveways, walkways and patios shall drain into well-maintained landscaped beds using native vegetation and amended soils.

NOTES:

1. TOTAL PROJECT AREA- 25.01 ACRES
- 2a. TOTAL IMPERVIOUS AREA OF ONSITE ROAD PAVEMENT- 0.342 AC.
- 2b. TOTAL IMPERVIOUS AREA OF OFFSITE ROAD PAVEMENT- 0.018 AC.
3. TOTAL IMPERVIOUS AREA OF INDIVIDUAL LOTS- 1.267 AC.
- 4a. TOTAL IMPERVIOUS ONSITE AREA- 1.808 AC (6.43%)
- 4b. TOTAL IMPERVIOUS OFFSITE AREA- 0.018 AC
5. THE IMPERVIOUS AREAS ASSOCIATED WITH ALL NEW ONSITE AND OFFSITE ROAD PAVEMENT AND LOTS 1, 2 & 3 TOTALING 0.835 AC. WILL BE DIRECTED TO A SERIES OF PERMANENT GRASS CHANNELS, AN INFILTRATION BASIN AND GRASS FILTER STRIP BEFORE ENTERING THE STREAM BUFFER.
6. THE IMPERVIOUS AREAS ASSOCIATED WITH LOTS 4-11 ARE HANDLED ON A LOT BY LOT BASIS AND MUST CONFORM TO APPENDIX 'C' OF THE CHATHAM COUNTY STORMWATER ORDINANCE.
7. THE ASSUMED MAXIMUM IMPERVIOUS AREA FOR LOTS 1-3 IS 4.000 S.F. PER LOT. THE ASSUMED MAXIMUM IMPERVIOUS AREA FOR LOTS 4-11 IS 5,400 S.F.
8. THE STORMWATER QUANTITY CONTROL REQUIREMENTS MUST REDUCE THE 1YR - 1HR STORM RAINFALL PEAK FLOW RATE TO NO MORE THAN THE PRE DEVELOPMENT RATE.
9. THE STORMWATER QUALITY CONTROL REQUIREMENTS MUST REDUCE THE SUSPENDED SOLIDS BY 85% THAT ARE GENERATED IN THE DISTURBED AREAS.
10. ALL SITE SOILS ARE GEORVILLE SILT LOAM (GbS)
11. PUBLISHED INFILTRATION RATE RANGE (0.60-2.00 in/hr) ASSUMED INFILTRATION RATE IS 0.60 in/hr.
11. ONE FOOT CONDUIT INTERVALS PROVIDED IN THE AREA OF THE PROPOSED CUL-DE-SAC AND STORM WATER IMPROVEMENTS.
12. ALL STORMWATER CONDUITANCES AND FACILITIES MUST BE CONTAINED WITHIN A PERMANENT STORMWATER EASEMENT.



PRELIMINARY STORMWATER MANAGEMENT PLAN



**Wrenn Engineering**  
 Civil Engineering  
 Land Planning  
 Site Design

PROFESSIONAL SEAL  
 PRELIMINARY ONLY  
 NOT FOR CONSTRUCTION

SHANBLEY MEADOWS SUBDIVISION PHASE IV  
 SHEET TITLE  
 PRELIMINARY STORMWATER MANAGEMENT PLAN

REVISION HISTORY	NO.	DATE	DESCRIPTION

Senior Engineer:  
**K. WRENN**  
 Drawn By:  
**K. WRENN**

ISSUE NO.	DATE	DESCRIPTION
1		

DATE DRAWN: 10/03/00  
 PROJECT P. 10100.00

SHEET OF **PSW**