Pineville Land Development Standards Manual (PLDSM)

Revised February 29, 2020 – Revision 4

Pineville Land Development Standards Manual

Town of Pineville Land Development –
Revision 4 – February 29, 2020

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The above 6000 Series – Paver Details were developed using Cambridge Paver and Turfstone details as examples. Pavers manufactured by others may be used upon approval by The Town of Pineville. If others are used, they shall be comparable in quality to the Cambridge product.

Pineville Land Development Standards Manual (PLDSM) Revision Log

The log is a description of all standard revisions to the Pineville Land Development Standards Manual beginning August 1, 2019.

REVISION NO.	REVISION DATE	STANDARD NO	NAME	DESCRIPTON OF REVISION
3	8/1/2019	10.01	Major Collector Street	Revised Notes
3	8/1/2019	10.02	Minor Collector Street	Revised Notes
3	8/1/2019	10.03	Industrial Street	Revised Notes
3	8/1/2019	10.04	Industrial Street (Ditch Type)	Revised Notes
3	8/1/2019	10.04A	Industrial Local Street (No Parking)	Revised Notes
3	8/1/2019	10.04B	Industrial Local Street Parking on One Side of Street	Revised Notes
3	8/1/2019	10.04C	Industrial Local Street Parking on Both Sides of Street	Revised Notes
3	8/1/2019	10.04D	Industrial Collector Street (No Parking)	Revised Notes
3	8/1/2019	10.04E	Industrial Collector Street With Median and No Parking	Revised Notes
3	8/1/2019	10.05	Commercial Street (Special Use Conditions)	Revised Notes
3	8/1/2019	10.05A	Retail/Mixed Use Local Street With Median and Parking	Revised Notes
3	8/1/2019	10.05B	Retail/Mixed Use Local Street Parking and Green Zone Both Sides	Revised Notes
3	8/1/2019	10.05C	Retail/Mixed Use Collector Street With Bike Lanes	Revised Notes
3	8/1/2019	10.05D	Retail/Mixed Use Collector Street With Median and Bike Lanes	Revised Notes
3	8/1/2019	10.05E	Retail/Mixed Use Local Street (No Parking)	Revised Notes
3	8/1/2019	10.05F	Retail/Mixed Use Local Street Parking on Both Sides of Street	Revised Notes
3	8/1/2019	10.06	Local Residential Street	Revised Notes
3	8/1/2019	10.06A	Local Residential Street Parking on One Side of Street	Revised Notes
3	8/1/2019	10.06B	Local Residential Street Parking on Both Sides of Street	Revised Notes
3	8/1/2019	10.06C	Local Residential Street (Ditch Type)	Revised Notes
3	8/1/2019	10.06D	Local Limited Residential Street	Revised Notes
3	8/1/2019	10.07	Residential Collector Street	Revised Notes
3	8/1/2019	10.07A	Residential Collector Street (with On Street Parking)	Revised Notes and renumbered (previously 10.08)
3	8/1/2019	10.08	Residential Collector Street (with On Street Parking)	Renumbered to 10.07A
3	8/1/2019	10.08B	Local Residential Street No On Street Parking	Omitted, duplicate
3	8/1/2019	10.08C	Residential Local Street Parking on Both Sides of Street	Omitted, duplicate
3	8/1/2019	10.10A	Residential Collector Street With Bike Lanes	Revised Notes
3	8/1/2019	10.10B	Residential Divided Collector Street	Revised Notes
3	8/1/2019	10.10C	Residential Divided Collector Street With Left Turn Lane	Revised Notes
3	8/1/2019	10.10D	Residential Collector Street (Ditch Type)	Revised Notes
3	8/1/2019	10.10E	Residential Divided Collector Street Ditch Type With Median Ditch	Revised Notes
3	8/1/2019	10.11A	Residential Alley Detail One-Way Operation	Changed asphalt requirements
3	8/1/2019	10.11B	Residential Alley Detail Double Loaded With Two-Way Operation	Changed asphalt requirements
3	8/1/2019	10.11C	Residential Alley Detail Single Loaded With Two-Way Operation	Changed asphalt requirements
3	8/1/2019	10.14	Residential Cul-de-Sac	Changed road width
3	8/1/2019	10.17A	Standard Curb and Gutter	Revised Notes
3	8/1/2019	10.17B	Curb and Gutter	Revised Notes
3	8/1/2019	10.17C	Typical Section All Curb and Gutter	Omitted
3	8/1/2019	10.25A	Residential Drop Curb Type I Driveway with Planting Strip (2'-6" Curb and Gutt	Revised Notes
3	8/1/2019	10.25A1	Drop Curb Driveway without Planting Strip	Removed On-Street from title, revised notes
3	8/1/2019	10.25B	Commercial Drop Curb Type II Driveway with Planting Strip (2'-6" Curb and Gu	Updated detail reference from 10.17 to 10.17B
3	8/1/2019	10.25C	Residential Drop Curb Type I Driveway with Planting Strip (6"X18" Vertical Curl	Updated detail reference from 10.17 to 10.17B
3	8/1/2019	10.25D	Commercial Drop Curb Type II Driveway with Planting Strip (6"X18" Vertical Cu	Updated detail reference from 10.17 to 10.17B
3	8/1/2019	10.25E	Type II Modified Driveway with Planting Strip (2'-6" Curb and Gutter)	Updated detail reference from 10.17 to 10.17B
3	8/1/2019	10.25E1	Modified Driveway without Planting Strip	Updated detail reference from 10.17 to 10.17B
3	8/1/2019	10.25F	Commercial Type IV Driveway	Updated detail reference from 10.17 to 10.17B
3	8/1/2019	10.27B	Commercial Type II Driveway for 2'-0" Valley Gutter	Updated detail reference from 10.17 to 10.17B
3	8/1/2019	10.35A	Truncated Domes Plan and Cross-Section	Edited Note 6
3	8/1/2019	10.4OC	Directional Curb Ramp with Valley Gutter	Added
3	8/1/2019	10.41	Commercial Driveway with Drainage Pipe	Omitted
3	8/1/2019	20.00A	NCDOT Standards Approved for Use in the Town of Pineville	Updated sheet titles
3	8/1/2019	20.00B	NCDOT Standards Approved for Use in the Town of Pineville	Updated sheet titles
3	8/1/2019	20.00C	NCDOT Standards Approved for Use in the Town of Pineville	Updated sheet titles, removed reference to NCDOT STD 310.01
3	8/1/2019	20.05A	Slab Type Catch Basin 15" thru 38" Pipe	Updated reference to approved steps detail

REVISION NO.	REVISION DATE	STANDARD NO	NAME	DESCRIPTON OF REVISION
3	8/1/2019	20.22	Flared End Section 12" thru 72" Pipe	Removed reference to NCDOT STD. 310.01
3	8/1/2019	20.28	Subdrain Detail	Changed reference in note 6 from CLDSM TO PLDSM
3	8/1/2019	21.01	Bioretention Cross-Section	Removed Tree
3	8/1/2019	21.03	Bioretention Energy Dissipator	Omitted
3	8/1/2019	21.05	Wetpond Plan BMP Fig. 4.2.2	Added Note 3
3	8/1/2019	21.10	Wetpond Plan BMP Fig. 4.3.2	Added Note 4
3	8/1/2019	21.11	Wetpond Section BMP Fig. 4.3.2	Added Detail
3	8/1/2019	21.12	Wetpond Cross Sections BMP Fig. 4.3.3	Added Detail
3	8/1/2019	21.13	Wetland Details BMP Fig. 4.3.4	Omitted
3	8/1/2019	21.14	Wetland Planting Plan BMP Fig. 4.3.4	Changed BMP Fig. reference from 4.3.5 to 4.3.4
3	8/1/2019	21.16	Wetland Planting Plan BMP Fig. 4.4.2	Changed BMP Fig. reference from 4.4.5 to 4.4.2, added note 2
3	8/1/2019	21.17	Grass Channel BMP Fig. 4.5.2	Edited Note 1, Added Note 2
3	8/1/2019	21.18	Grass Channel BMP Fig. 4.5.3	Added Notes
3	8/1/2019	21.21	Buffer Strip BMP Fig. 4.7.3	Added Note 4 and remove 2 notes on plan view
3	8/1/2019	21.23	Underground Sand Filter	Updated per MCLDS Manual
3	8/1/2019	21.24	Surface Sand Filter	Updated per MCLDS Manual
3	8/1/2019	30.01	Temporary Sediment Trap	Added Note 2
3	8/1/2019	30.03A	Sediment Basin	Changed minimum invert elevation of emergency spillway to 1'
3	8/1/2019	30.06A	Temporary Silt Fence	Added general note 8
3	8/1/2019	30.06B	High Hazard Temporary Silt Fence	Edited general notes 1 & 4
3	8/1/2019	30.06C	Silt Fence Option 1	Added Detail
3	8/1/2019	30.06D	Silt Fence Option 2	Added Detail
3	8/1/2019	30.07	Block and Gravel Stone Inlet Protection	Added slope and dimension
3	8/1/2019	30.08	Stone Inlet Protection	Updated per MCLDS Manual
3	8/1/2019	30.10A	Temporary Rock Check Dam	Changed number from 30.10 to 30.10A, added dimension to washed stone
3	8/1/2019	30.10B	Temporary Rock Check Dam with Matting and Optional PAM	Added Detail
3	8/1/2019	30.10C	Temporary Wattle with Matting and Optional PAM	Added Detail
3	8/1/2019	30.11A	Stablized Construction Entrance	Added depth of washed stone. Changed note 6 to reference Town.
3	8/1/2019	30.11B	Construction Entrance Tire Wash	Added depth of washed stone
3	8/1/2019	30.12	Gravel and Rip Rap Filter Berm Basin	Updated per MCLDS Manual
3	8/1/2019	30.14	Temporary Stream Crossing	Updated per MCLDS Manual
3	8/1/2019	30.16	Slope Stability	Corrected reference to Temp. Silt Fence. Added note 2
3	8/1/2019	30.19	Baffle Installation	Updated per MCLDS Manual
3	8/1/2019	30.16	Slope Stability	Corrected reference to Temp. Silt Fence
3	8/1/2019	40.03	Large and Small Maturing Tree Pit with Grate in Sidewalk (Plan)	Updated references to Town from City for Tree Grate
3	8/1/2019	40.03A	Large and Small Maturing Tree Pit with Grate in Sidewalk (Section A)	Updated reference to PLDS from CLDS and updated title
3	8/1/2019	40.03B	Large and Small Maturing Tree Pit with Grate in Sidewalk (Section B)	Updated reference to PLDS from CLDS and updated title
3	8/1/2019	40.03C	Large and Small Maturing Tree Pit with Grate in Sidewalk (Section C)	Updated reference to PLDS from CLDS and updated title
3	8/1/2019	50.05A	Street Name Sign	Fixed text font to print sizes correctly
3	8/1/2019	50.05B	Street Name Sign	Fixed text font to print sizes correctly
3	8/1/2019	50.07A	Dead End Street Barricade	Update post bolt note
3	8/1/2019	50.08A	End of Roadway Marker	Updated reference to note 3
3	8/1/2019	50.09A	Parking Standards	Removed incorrect detail reference
3	8/1/2019	50.10B	Supplemental Van Accessible Sign (R7-8P)	Updated detail title to match index, updated references & dimensions
3	8/1/2019	50.11	Signage and Pavement Markings at Roundabout	Updated detail reference in notes
3	8/1/2019	50.21	Wave Rack for Bicycle Parking	Removed stray note
3	8/1/2019	60.04	Street/Parking Lot/Residential Driveway Overlay of Ex. Conc. Pavement	Removed extra word "Pavement"
3	8/1/2019	60.17	Tree Pit - Non-Compacted Root Zone Under Pavers	Added 12" Min. text for dimension
4	2/29/2020	10.01 through 10.10E	Street Typical Sections	Added reference to sidewalk base in Key
4	2/29/2020	10.06D	Local Limited Residential Street	Corrected key refering to curb type-changed from 2'-6 to 2'-0" Valley
4	2/29/2020	10.22	Concrete sidewalk	Added General Note 9
4	2/29/2020	10.41A	Heavy Industrial Driveway without Planting Strip	Added Detail
4	2/29/2020	10.41B	Heavy Industrial Driveway with Planting Strip	Added Detail
4	2/29/2020	50.05A	Street Name Sign	Added text (NCDOT Maintained Streets) to title

REVISION NO.	REVISION DATE	STANDARD NO	NAME	DESCRIPTON OF REVISION
4	2/29/2020	50.05B	Street Name Sign	Added text (NCDOT Maintained Streets) to title
4	2/29/2020	50.05C	Decorative Street Name Sign and Post	Added Detail
4	2/29/2020	50.05D	Decorative Street Name Sign and Post Notes	Added Detail
4	2/29/2020	50.05E	Decorative Street Sign Post	Added Detail
4	2/29/2020	50.09B	Parking Standards, Cont.	Revised parking bay width dimension
4	2/29/2020	50.22A	12' Decorative Lighting Post	Added Detail
4	2/29/2020	50.22B	30' Decorative Lighting Post	Added Detail
4	2/29/2020	-	Specifications and Special Provisions	Added Section 1.I; revised Section I.F.1 to require stone or geogrid base

PINEVILLE LAND DEVELOPMENT STANDARDS
SPECIFICATIONS AND SPECIAL PROVISION NOTES

Rev. February 29, 2020

The following specifications and special provisions are intended to be used in conjunction with Pineville Land Development Standard Drawings, NCDOT Roadway Standard Drawings, and NCDOT Standard Specifications for Roads and Structures for all development within the Town of Pineville unless otherwise directed by the Town Engineer.

I. STREETS

A. GENERAL NOTES

1. All work and materials shall conform to the latest edition of the North Carolina Department of Transportation Standard Specifications for Roads and Structures *unless otherwise specified in this manual*.

2. All asphalt cuts shall be made with a saw when preparing street surfaces for patching or widening strips.

3. Paper joints shall be used to seal the ends of an asphalt pour so that future extensions can be made without causing rough joints.

4. When placing asphalt against existing surfaces, a straight edge shall be used to prevent “humping” at that location.

5. Stone shall be primed if paving is not complete within seven days following stone base approval.

6. Surfaces shall be tacked when asphalt is being placed over existing asphalt streets or adjoining concrete, storm drain and sanitary sewer structures.

7. All street widening shall be constructed with full depth asphalt. No longitudinal seams shall be evident in the tire travel area of the surface coarse.

8. In rolling and hilly terrains, sweeping of the stone base and/or application of a tack coat may be required near intersections.
   These requirements will be established by the Town Inspector based on field conditions.

9. ALL concrete used for streets, curb and gutter, sidewalks and drainage structures, etc. shall have a minimum compressive strength of 3600 PSI at 28 days. This requirement shall be provided regardless of any lesser compressive strength specified in the North Carolina Department of Transportation Standard Specifications for Roads and Structures. The contractor shall prepare concrete test cylinders in accordance with Section 1000 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures at the direction of the project inspector. All equipment and cylinder molds shall be furnished by the contractor. It shall be the responsibility of the contractor to protect the cylinders until such time as they are transported for testing. Testing for projects shall be performed by an independent testing lab, at no cost to the Town. The contractor shall provide equipment and perform tests on concrete for a maximum slump and air content as defined in Section 1000 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures. These tests shall be performed at a frequency established by the inspector. Materials failing to meet specifications shall be removed by the contractor.

10. All concrete shall be cured with 100% Resin Base, white pigmented curing compound which meets ASTM Specifications C- 309, Type 1, applied at a uniform rate at one (1) gallon to 400 square feet within 24 hours of placement of the concrete.

11. All curb and gutter shall be backfilled with soil approved by the Inspector within 48 hours after construction to prevent erosion.

12. All backfill shall be non-plastic in nature, free from roots, vegetative matter, waste, construction material or other objectionable material. Said material shall be capable of being compacted by mechanical means and the material shall have no tendency to flow or behave in a plastic manner under the tamping blows or proof rolling.

13. Materials deemed by the Inspector as unsuitable for backfill purposes shall be removed and replaced with select backfill material.

14. All trenches in the street right-of-way shall be backfilled with suitable material immediately after the pipe is laid. The fill around all pipe shall be placed in layers not to exceed six (6) inches and each layer shall be compacted thoroughly.

15. Under no circumstances shall water be permitted to rise in un-backfilled trenches after the pipe has been placed.

16. Compaction requirements shall be attained by the use of mechanical compaction methods. Each six (6) inch layer of backfill shall be placed loose and thoroughly compacted into place.

17. Straight forms shall not be used for forming curb and gutter in curves.

18. All excess concrete on the front edge (lip) of gutter shall be removed when curb and gutter is poured with a machine.

19. All subgrade shall be compacted to 100% of the maximum density obtainable with the Standard Proctor Test to a depth of eight (8) inches, and a density of 95% Standard Proctor for depths greater than eight (8) inches. All tests shall be performed by developer at no cost to the Town.

20. A canvas cover or other suitable cover shall be required for transporting plant mix asphalt during cool weather when the following conditions are present:

a. Air temperature is below 60 degrees F.
b. Length of haul from plant to job is greater than five (5) miles.
c. Other occasions at the Inspector's discretion when a combination of factors indicates that material should be covered in order to assure proper placement temperature.

21. Concrete or asphalt shall not be placed until the air temperature measured at the location of the paving operation is at 35 degrees F and rising by 10:00 a.m. Concrete or paving operations should be suspended when the air temperature is 40 degrees F and descending. The contractor shall protect freshly placed concrete or asphalt in accordance with Sections 420 (Concrete Structures), 600 (Asphalt Bases And Pavements), and 700 (Concrete Pavements And Shoulders) of the North Carolina Department of Transportation Standard Specifications when the air temperature is at or below 35 degrees F and the concrete has not obtained an age of 72 hours.

22. The contractor shall maintain two-way traffic at all times when working within existing streets. The contractor shall place and maintain signs, danger lights, and barricades and furnish watchmen or flagmen to direct traffic in accordance with the latest edition Work Area Traffic Control Handbook (WATCH), Work in the right-of-way of State System Streets may require additional traffic control provisions.

23. The contractor shall do that which is necessary to control erosion and to prevent sedimentation damage to all adjacent properties and streams in accordance with the appropriate Town of Pineville Erosion and Sedimentation Control Ordinance.

24. A Professional Engineer (PE) certification of roadway construction will be required, stating construction was performed in accordance with the design standards.

B. STANDARDS OF STREET DESIGN

Note: Use of Hilly Terrain criteria is NOT permitted without PRIOR approval of the Town Engineer.

Note: Design standards will apply from the latest edition of the NCDOT design manual *Subdivision Roads Minimum Construction Standards*. Any revisions to *Subdivision Roads* will supersede the design standards given in the Pineville Land Development Standards for NCDOT maintained roads and under no circumstances shall a NCDOT standard be less restrictive than what is required by the Town of Pineville.

1. STREETS (PUBLIC and PRIVATE):

	ALL LOCAL STREETS (Except Industrial & Collector)		LOCAL INDUSTRIAL AND COLLECTOR ONLY	
	Level/Rolling	Hilly	Level/Rolling	Hilly
a. Terrain Classification	0-15%	15% +	0-15%	15%++
b. Maximum Grade	10%	12%	8%	10%
c. Design Speed (mph)	25	20	30	25
d. Minimum Radius (ft.)				
Public Street	150	90	250	175
Private Street	50	50	150	150
e. Min. Tangent between Reverse Curves (ft.) Horiz. And Vert.	50	50	100	100
f. K Values (crest/sag)	20/20	15/20	28/35	20/20

Note: Provisions of adequate stopping sight distance may require use of larger K values than the minimums listed above. The Pineville Public Works Department reserves the right to prescribe more stringent sight distance standards and/or means to achieve adequate sight distance than these listed above.

2. INTERSECTIONS:

a. PUBLIC STREET: Vertical Alignment is 5% maximum within 100 feet of intersection.
PRIVATE STREET: Vertical Alignment is 5% maximum within 40 feet of intersection.

b. Minimum Angle of Intersection is 75 degrees.

c. Minimum Curb & R/W Radius

Table 4 - Curb Radii for Local Street Intersections

From\To	R/Narrow	R/Medium	R/Wide	C/Narrow	C/Wide	Industrial
R/Narrow	35					
R/Medium	20	15				
R/Wide	15	15	10			
C/Narrow	20	15	25	35		
C/Wide	15	15	15	30	10	
Industrial	30	25	15	40	25	50

R = Residential
C = Commercial

Narrow = Pavement less than 20' wide
Medium = Pavement 20' to 24' wide
Wide = Pavement greater than 24' wide

Minimum Intersection Separation.
Along local streets 125 feet along collector streets 200 feet
Along thoroughfares to be determined by Town

Intersection offsets/separation from a thoroughfare, at signalized intersections, or at intersections that may become signalized in the future may need to be greater that these minimums and will be determined by the Town on a case by case basis.

Design criteria for arterial streets shall be established jointly by the Town Engineer and the Director of the Department of Transportation on a case by case basis using the latest edition of the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highway and Streets and/or NCDOT Roadway Design

Manual.

Intersection corner – A minimum 35’ x 35’ sight triangle (measured along right-of-way lines) shall be provided at each intersection corner. An additional 10’ x 70’ sight triangle shall be provided at intersections connecting to NCDOT maintained roadways. Other sight distance requirements may be required by the NCDOT or the Town.

Refer to the *NCDOT Subdivision Roads Minimum Construction Standards Manual* for development criteria for sites located within the Town of Pineville Extraterritorial Jurisdiction (ETJ). Forareas governed by Pineville Land Development Standards Manual and the NCDOT Subdivision Roads Minimum Construction Standards Manual, the more restrictive standard shall apply.

C. GRADING

1. Proposed street rights-of-way shall be graded to their full width for ditch type streets and a minimum of eight (8) feet behind the curb for curb and gutter sections.

2. Fill embankments shall be formed of suitable material placed in successive layers not to exceed more than six (6) inches in depth for the full width of the cross-section, including the width of the slope area. No stumps, trees, brush, rubbish or other unsuitable materials or substances shall be placed in the embankment. Each successive six (6) inch layer shall be thoroughly compacted by the sheeps foot tamping roller, 10-ton power roller, pneumatic-tired roller, or other methods approved by the Town Engineer. Embankments over and around all pipe culverts shall be of select material, placed and thoroughly tamped and compacted as directed by the Town Engineer or his representative.

D. ROADWAY BASE

1. All roadways shall be constructed with a base course as described on the appropriate Town of Pineville Land Development Standard Detail Drawing.

2. The material for stone base course shall conform to the requirements of Section 1010, Aggregate for Non-Asphalt Flexible Type Base, and Section 520, Aggregate Base course of the North Carolina Department of Transportation Standard Specifications for Roads and Structures.

3. The stone base shall be compacted to 100% of the maximum density obtainable with the Modified Proctor Test (AASHTO- T180) by rolling with ring or tamping roller or with a pneumatic tired roller with a minimum weight of ten tons. When completed, the base course shall be smooth, hard, dense, unyielding and well bonded.

4. A bituminous concrete base course, as specified on the Standard Detail Drawing may be substituted in lieu of a stone base course.

5. Asphalt base course will only be allowed within widening strips less than five (5) feet in width.

E. ROADWAY INTERMEDIATE AND SURFACE COURSE

1. All public roadways shall be constructed with an intermediate and surface course as described on the appropriate Town of Pineville Land Development Standard Detail Drawing.

2. Density tests will be required every 200 feet with a minimum of 3 tests for each roadway. Density testing reports shall be provided to the Town Public Works Director.

3. Plant mixed asphalt shall conform in all respects to Section 610 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures.

4. The final (lift of asphalt surface course for Residential /Commercial Subdivision Streets shall be withheld until the development has met the required percentage development occupancy according to Town requirements. All known base failures shall be repaired prior to application of the final lift of asphalt surface course.

5. The Town inspector shall be given a (24) twenty-four-hour notification to inspect the intermediate course deficiencies. All deficiency repairs are to be monitored by a Town Inspector and accepted prior to application of final layer.

6. Town inspectors shall be notified prior to using recycled plant mixes.

7. Failure to meet the above requirements may result in the delay or prevention of street acceptance by the Town of Pineville or NCDOT.

F. SIDEWALKS AND DRIVEWAYS

1. Sidewalks and all walkable or driveable concrete surfaces shall be constructed of not less than 3600 P.S.I. concrete and shall be minimum four (4) inches thick, constructed on an adequately graded base, except where a sidewalk crosses a driveway it shall be six (6) inches thick. Sidewalk shall be placed on a base of 6" ABC stone compacted to 95% of the maximum density obtainable with the Standard Proctor Test, OR placed on a subbase compacted to 95% density with Geogrid 1100 mat. The surface of the sidewalk shall be steel trowel and light broom finished and cured with an acceptable curing compound. Tooled joints shall be provided at intervals of not less than five (5) feet and expansion joints at intervals of not more than forty-five (45) feet. The sidewalk shall have a lateral slope of one-quarter (1/4) inch per foot.

2. Planting strip adjacent to sidewalk shall be graded to ¼ inch per foot (min.) up to 1 ¼ inch per foot (max.), except where excessive natural grades make this requirement impractical. In such cases, the Town Engineer may authorize a suitable grade.

3. Sidewalk widths shall be a minimum of five (5) feet unless otherwise specified.

4. Approval of sidewalk construction plans must be obtained as part of the plan review process... A recorded public sidewalk easement is required for all sidewalk located outside public right-of-way; the width shall be equal to the distance from the right-of-way line to the back of the sidewalk plus two feet or to the face of building, whichever is less. The sidewalk easement must be recorded with the Mecklenburg County Register of Deeds prior to issuance of a certificate of occupancy for the corresponding building(s).

5. Accessible ramps are required where sidewalks intersect curbing at any street intersection and at curbed driveway connections.

6. For Town projects only: On Commercial Type II and Residential Type I drop curb driveways with sidewalk abutting the curb (PLDS #10.24A/B/C) – the curb and gutter across the front of the driveway shall be measured and paid for under Curb and Gutter. The curb and gutter is to be measured per linear foot along the surface of the top of the curb. The concrete driveway apron is to be measured per square yard.

G. BASE COURSE STREET REPAIR

1. Structural repair areas must encompass the full travel lane of roadways.

2. Minimum base course repair patch size is 10 ft. by 10 ft.

3. Structural repairs to a road failure cannot be within 10 feet of each other, else the entire area requires structural repair.

H. SURFACE COURSE STREET REPAIR

1. Overlay patch area must encompass the full travel lane of roadways.

2. Minimum surface course repair patch size is 10 ft. by 10 ft.

3. Overlay patch area cannot be any closer than 150 feet of each other, else the entire area requires mill and replace.

I. DECORATIVE STREET SIGNS AND POSTS

1. New installed and replaced sign posts in the Town of Pineville must be approved by the Public Works Director prior to installation. The posts must conform to the Manual on Uniform Traffic Control Devices (MUTCD) and criteria shown in the Standard Details.

2. A site plan showing the proposed location of all proposed signs must be approved prior to sign placement.

II. STORM DRAINAGE

A. GENERAL NOTES

1. All work and materials shall conform to the latest edition of the NCDOT Standard Specifications for Roads and Structures. *Unless otherwise specified in this manual*. ALL concrete used for drainage structures shall have a minimum compressive strength of 3600 PSI at 28 days. This requirement shall be provided regardless of any lesser compressive strength specified in the NCDOT Standard Specifications
2. Reinforced concrete pipe may be used in all storm drain applications. High Density Polyethylene Pipe (HDPE) may be substituted for pipe diameters of 48 inches or less. Culverts 60 inches in diameter or greater may be Corrugated Aluminized Metal Pipe (CAMP) or aluminum with a minimum 14 gauge metal.
3. All pipe shall be laid with the bell or groove upgrade and the joint entirely interlocking.
4. The minimum cover for all pipes is two (2) feet measured from the final surface. Special applications for less than two (2) feet of cover will be reviewed and approved by the Town Engineer individually. The maximum cover for storm drainage pipes shall at a minimum comply with the requirements of the North Carolina Department of Transportation Highway Design Branch Roadway Design Manual, Part I, Section 5, and "Drainage Design". Storm pipe design that exceeds these criteria may be approved at the discretion of the Town Engineer.
5. All pipes in storm drain structures shall be flush with the inside wall.
6. All storm drain structures over three (3) feet and six (6) inches in height must have steps in accordance with standard details set forth in this manual.
7. The interior surfaces of all storm drainage structures shall be pointed up and smoothed to an acceptable standard using mortar mixed to manufacturer's specifications.
8. All frames, grates, rings, covers, etc., must conform to the standards set forth in this manual.
9. All graded creek banks and slopes shall be at a maximum of two (2) feet horizontal to one (1) foot vertical (2:1) and not to exceed 10' without terracing or the slopes shall be designed by a Professional Geotechnical Engineer and approved by the Town Engineer on a case by case basis.

B. HIGH DENSITY POLYETHYLENE PIPE (HDPE)

1. The Product used shall be corrugated exterior/smooth interior pipe (Type S), conforming to the requirements of AASHTO Specification M294 (latest edition) for Corrugated Polyethylene Pipe.
2. Bell and spigot joints shall be required on all pipes inside the right-of-way. Bells shall cover at least two full corrugations on each section of pipe. The bell and spigot joint shall have an "O" ring rubber gasket meeting ASTM F477 with the gasket factory installed, placed on the spigot end of the pipe. Pipe joints shall meet all requirements of AASHTO M294.
3. All HDPE pipe installed must be inspected and approved by the Town's Inspector prior to any backfill being placed. The Town inspector must be present during the backfilling operation as well.
4. Backfill material used to install HDPE pipe within the street right-of-way shall be Select Material, Class II-IV, as defined by Section 1016-3 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures. Upon submittal of written certification of material suitability by a licensed geotechnical engineer, NCDOT Class I Select Material may be used. All backfill material shall be approved by the Town inspector prior to placement of the material within the street right-of-way.
5. The minimum length of HDPE pipe permitted for use shall be four (4) feet. HDPE flared end sections are not allowed.
6. All HDPE pipe installed shall be third party certified and shall bear the Plastic Pipe Institute's (PPI) certificate sticker.

C. REINFORCED CONCRETE (RCP)

1. All concrete shall be at least 3600 PSI. Prior approval shall be obtained in order to use pre-cast storm drainage structures in any street right-of-way by Town Engineer.
2. Concrete pipe used within the street right-of-way shall be a minimum of Class III Reinforced Concrete Pipe, with a minimum diameter of fifteen (15) inches (eighteen (18) inches minimum on cross drain culverts within the ETJ). Installation of Class IV or higher concrete pipe shall be identified on the As-Built Plan and the Town inspector shall be given documentation and notification of this information prior to construction.
3. Concrete mortar joints shall be used for joining all concrete pipes. The pipe shall be clean and moist when mortar is applied. The lower portions of the bell or groove shall be filled with mortar sufficient to bring the inner surface flush and even when the next joint is fitted into place. The remainder of the joint shall then be filled with

mortar and a bead or ring of mortar formed around the outside of the joint. The application of mortar may be delayed until fill is completed when the pipe is larger than thirty (30) inches.

4. Performed joint sealer, which conforms to AASHTO specification M-198 for Type B flexible plastic gaskets, may be used in lieu of the mortar joining method.

D. INSTALLATION OF REINFORCED CONCRETE (RCP) AND CORRUGATED METAL PIPE (CMP)

1. All backfill shall be non-plastic in nature, free from roots, vegetative matter, waste, construction material or other objectionable material. Said material shall be capable of being compacted by mechanical means and shall have no tendency to flow or behave in a plastic manner under the tamping blows or proof rolling.
2. Materials deemed by the Engineer as unsuitable for backfill purposes shall be removed and replaced with select backfill material.
3. Backfilling of trenches shall be accomplished immediately after the pipe is laid. The fill around the pipe shall be placed in layers not to exceed eight (8) inches, each layer shall be thoroughly compacted to 95% of the maximum density obtainable with the Standard Proctor Test (a density of 100% Standard Proctor is required for the top eight (8) inches).
4. Compaction requirements shall be attained by the use of mechanical compaction methods. Each layer of backfill shall be placed loose and thoroughly compacted in place.
5. Under no circumstances shall water be permitted to rise in un-backfilled trenches after the pipe has been placed.

E. STANDARDS FOR DESIGN

1. All storm drainage design shall conform to the standards and specifications as provided in the Charlotte-Mecklenburg Storm Water Design Manual, North Carolina Department of Transportation Standards Specifications for Roads and Structures, Pineville Land Development Standards Manual, or the more restrictive of any standards that conflict.

2. Adequate storm drainage shall be provided throughout the development by means of storm drainage pipes or properly graded channels. All pipes shall be of adequate size and capacity, as approved by the Town Engineer, to carry all storm water in its drainage area.

3. In accordance with the Town Zoning Ordinance, the Town Engineer shall review the drainage plan for compliance with the standards contained in the current edition of the Pineville Land Development Standards

Manual and the Charlotte-Mecklenburg Storm Water Design Manual and all other relevant and appropriate standards established by the Town.

4. Sub-surface drainage shall be provided where the ground water level is likely to be near the surface. In capillary soils, the water level should be four (4) to six (6) feet below the surface to prevent the rise of moisture into the subgrade. Subdrains shall be used to lower ground water in low areas in the street.

5. The NCDOT Standard Drawings have been accepted as approved standards to be specified for Land Development projects in the Town of Pineville and Town of Pineville ETJ. See standard PLDS 20.00A, B, and C of this manual for a table listing the standards accepted. These standard drawings shall be referenced by NCDOT number or shown on all plans submitted to the Town of Pineville for approval.

III. PLAN REQUIREMENTS

A. GENERAL NOTES

1. All erosion control measures shall conform to the standards set forth in the Pineville Land Development Standards Manual, North Carolina Erosion and Sediment Control Planning and Design, or the more restrictive of any standards that conflict.

2. All storm drainage design shall conform to the standards and specifications as provided in the Charlotte-Mecklenburg Storm Water Design Manual, Pineville Land Development Standards Manual, or the more restrictive of any standards that conflict.

3. In areas where the Floodway Regulations are applicable, the FEMA Flood Fringe Line and FEMA Encroachment Line shall be shown on the preliminary plan and the final plat. An application for a Floodlands Development Permit shall be submitted to the Town in accordance with the requirements set forth in the Towns Regulations.

4. Cite all appropriate standard detail numbers for any structures or specifics used within the plans in reference to the most current copy of the Pineville Land Development Standards Manual.

B. SUBDIVISIONS & PRELIMINARY PLANS

1. The preliminary plan must include, at a minimum, the information described in the Town of Pineville Subdivision Ordinance.

2. Storm Drainage Easements shall be provided for all storm drainage pipe and shown on site plans, construction plans and plats with widths specified below. The following note shall be placed on all grading plans and plats; "The purpose of the storm drainage easement (SDE) is to provide storm water conveyance. Buildings are not permitted in the easement area. Any other objects which impede storm water flow or system maintenance are also prohibited."

PIPES

Diameter	Width
15” – 24”	15’
30” – 36”	20’
42” – 48”	25’
54” +	30’

CHANNELS

Drainage Area (Ac)	Channel Easement Width (feet)
1 – 45	20’
45 – 120	30’
120 – 500	40’
500 +	see PLDS 20.30

3. Overlapping of storm drainage easements shall be approved by the Town Engineer.

C. BOND POLICY – SUBDIVISION IMPROVEMENTS

1. Release of the final subdivision plat will not occur until the improvements required for the area of the final plat are constructed and a final inspection has been performed and found to be in conformance with the plans approved by the Town of Pineville, or a security has been posted with the Town Engineer and all required documents are received in their entirety.
2. The security shall be posted and remain in force until the construction is complete and found to be in conformance with the plans approved by the Town of Pineville. The security will be reevaluated after one year from the date of posting.
3. The Applicant shall notify the Town Engineer that construction is complete according to the appropriate subdivision ordinance and the Pineville Land Development Standards Manual before any security will be released. A final inspection will be made to check completeness of the project upon notification.
4. One type of security may be replaced by another type of security in certain situations. The amount of the replacement security will be based on the Town's Engineer Estimate of the work remaining. If the estimate of work results in a lower amount, the replacement security will be treated as a reduction. Certain situations will require an increase in a security and in such cases the replacement security shall be required to equal the higher amount.
5. A one-time reduction in security will be allowed if requested in writing by the principal party of the security. However, the security shall never be less than $15,000 for the Town of Pineville unless approved by the Town Engineer.

V. APPROVED PLANT SPECIES

The following list of trees and shrubs represent the approved plant species that may be used to comply with the Pineville Zoning Ordinance.
List subject to change

* - Not allowed for required town planting.

**- Not recommended for required town planting.

† - Cultivars under 15' tall only.

‡- Trees <25' mature height can be planted directly under power lines.

Trees 25'- 40' mature height can be planted at least 20' from power lines.

Common Name	Scientific Name	Town Tree Ordinance Approved	CIP/ROW Approved	Town Zoning Approved (**L**arge	Duke Transmission Zone(**T**) or Distribution line(**D**) Approved		Shade Tolerant	Tolerates Poor Drainage	Native	Blooming	Foliage (**D**eciduous, **S**emi-deciduous, or **E**vergreen)
LARGE MATURING TREES (50'+ H)											
Arborvitae, 'Green Giant'	**Thuja 'Green Giant'**		x					x			E
Ash, Green	**Fraxinus pennsylvanica**			L			x		x		D
Ash, White	**Fraxinus americana**	x		L					x		D
Baldcypress	**Taxodium distichum**	x	x	L				x	x		D
Beech, American	**Fagus grandiflora**	x	x	L					x		D
Birch, River	**Betula nigra**	x	x	L			x	x	x		D
Black Gum	**Nyssa sylvatica**	x	x	L					x		D
Cedar, Deodar	**Cedrus deodara**	x	x	L							E
Cedar, Eastern Red	**Juniperus virginiana**		x	L					x		E
Cryptomeria, Japanese	**Cryptomeria japonica**	x	x					x			E

Common Name	Scientific	Town Tree Ordinance Approved	CIP/ROW Approved	Twon Zoning Approved (Large or **S**mall Maturing)	Duke Transmission Zone(**T**) or Distribution line(**D**) Approved		Shade Tolerant	Tolerates Poor Drainage	Native	Blooming	Foliage (**D**eciduous, **S**emi-deciduous, or **E**vergreen)
LARGE MATURING TREES (50'+ H) continued											
Dawn Redwood	Metasequoia glyptostroboides	x	x								S
Elm, Princeton	Ulmus americana 'Princeton'		x								D
Elm, Lacebark	Ulmus parvifolia	x	x	L			x	x			D
Gingko ‡	Gingko biloba	x	x	L			x	x			D
Hackberry, Common	Celtis occidentalis	x		L			x	x	x		D
Hackberry, Sugar	Celtis laevigata	x					x	x	x		D
Hemlock, Eastern	Tsuga canadensis			L			x		x		E
Hickory, Bitternut	Carya cordiformis			L					x		D
Hickory, Pignut	Carya glabra			L					x		E
Hickory, Shagbark	Carya ovata			L					x		E
Holly, American	Ilex opaca	x	x	S			x		x		E
Honeylocust, Shademaster**	Gleditsia tricanthos inermis 'Shademaster'								x		D
Hornbeam, European	Carpinus betulus	x	x	S			x	x			D
Kentucky Coffeetree	Gymnocladus dioicus	x	x				x		x		D
Linden, Little Leaf	Tilia cordata	x					x	x		x	D
Magnolia, Cucumber	Magnolia acuminata		x						x	x	D
Magnolia, Southern	Magnolia grandiflora	x	x	L				x	x	x	E
Maple, Freeman	Acer x fremanii	x	x				x		x		D
Maple, Red *	Acer rubrum		x	L			x	x	x		D
Maple, Sugar	Acer saccharum	x	x	L			x		x		D
Oak, Black	Quercus velutina			L			x		x		D
Oak, Fastigiante English	Quercus robur 'Fastigiata'		x								D

Common Name	Scientific	Town Tree Ordinance Approved	CIP/ROW Approved	Town Zoning Approved (**L**arge or **S**mall Maturing)	Duke Transmission Zone(**T**) or Distribution line(**D**) Approved		Shade Tolerant	Tolerates Poor Drainage	Native	Blooming	Foliage (**D**eciduous, **S**emi-deciduous, or **E**vergreen)
LARGE MATURING (50'+ H) continued											
Oak, Laurel	Quercus laurifolia	x		L			x		x		D
Oak, Live	Quercus virginiana	x	x	L			x	x	x		E
Oak, Northern Red*	Quercus rubra			L			x		x		D
Oak, Nuttall	Quercus nuttalii	x	x				x		x		D
Oak, Overcup	Quercus lyrata	x	x				x	x	x		D
Oak, Scarlet**	Quercus coccinea			L					x		D
Oak, Shumard	Quercus shumardii	x	x	L			x		x		D
Oak, Southern Red	Quercus falcata	x	x	L			x		x		D
Oak, Swamp White	Quercus bicolor		x	L			x	x	x		D
Oak, Water	Quercus nigra		x	L				x	x		D
Oak, White	Quercus alba		x	L			x		x		D
Oak, Willow	Quercus phellos	x	x	L			x	x	x		D
Pecan	Carya illinoensis			L					x		D
Persimmon	Diospyros virginiana			L			x		x		D
Pine, Austrian	Pinus nigra	x		L				x			E
Pine, Japanese Black	Pinus thunbergi			L							E
Pine, Loblolly	Pinus taeda	x	x	L				x	x		E
Pine, Shortleaf	Pinus echinata		x	L					x		E
Pine, Virginia	Pinus virginiana	x	x	L					x		E
Poplar, Tulip	Liriodendron tulipfera	x	x	L			x	x	x	x	D
Sweetgum, Fruitless	Liquidambar styraciflua 'Rotundiloba'	x	x	L			x	x	x		D
Sweetgum, Slender	Liquidambar styraciflua 'Slender Silhouette'		x				x	x	x		D
Zelkova, Japanese *	Zelkova serrata			L			x				D

Common Name	Scientific	Town Tree Ordinance Approved	CIP/ROW Approved	Town Zoning Approved (**L**arge or **S**mall Maturing)	Duke Transmission Zone(**T**) or Distribution line(**D**) Approved		Shade Tolerant	Tolerates Poor Drainage	Native	Blooming	Foliage (**D**eciduous, **S**emi-deciduous, or **E**vergreen)
MEDIUM MATURING TREE (30'-50'H)											
Arborvitae, American †	Thuja occidentalis		x		D			x	x		E
Carolina Silverbell	Halesia carolina	x	x	S			x		x	x	D
Chinese Pistache	Pistacia chinensis	x	x				x	x			D
Crape Myrtle (Biloxi, Natchez)*	Lagerstroemia		x								D
Dogwood, Flowering ‡	Cornus florida	x	x	S	D		x		x	x	D
Dogwood, Kousa ‡-	Cornus kousa	x	x	S	D		x		x	x	D
Fringetree, Chinese	Chionanthus retusus	x					x			x	D
Golden Raintree	Koelreuteria paniculata		x	S						x	D
Hawthorne, Green	Crataegus viridis 'Winter King'	x	x					x	x	x	D
Holly, 'Emily Brunner'	Ilex X 'Emily Brunner'		x				x				E
Holly, 'Nellie R. Stevens'	Ilex X 'Nellie R. Stevens'		x				x				E
Holly, Savannah	Ilex X attenuata 'Savannah'		x	S				x	x		E
Hornbeam, American	Carpinus caroliniana	x	x	S			x	x	x		D
Maple, Hedge	Acer campestre		x	S				x			D
Maple, Paperbark	Acer griseum		x								D
Maple, Trident	Acer buergeranum	x	x				x				D
Redbud, Chinese ‡	Cercis chinensis	x	x		D		x			x	D
Sourwood	Oxydendrum arboreum			S			x		x	x	D

Common Name	Scientific	Town Tree Ordinance Approved	CIP/ROW Approved	Town Zoning Approved (**L**arge or **S**mall Maturing)	Duke Transmission Zone(**T**) or Distribution line(**D**) Approved		Shade Tolerant	Tolerates Poor Drainage	Native	Blooming	Foliage (**D**eciduous, **S**emi-deciduous, or **E**vergreen)
SMALL MATURING TREES (UP-25'H)											
Arborvitae, Emerald Green	Thuja occidentalis 'Emerald Green'		x								E
Buckeye, Bottlebrush †	Aesculus parviflora	x	x		T		x		x	x	D
Camellia, Sasanuqa	Camellia sasanqua		x	S			x			x	E
Cherry, Kwanzan	Prunus serrulata 'Kwanzan'	x		S						x	D
Cherry, Snowgoose	Prunus serrulata 'Snowgoose'		x							x	D
Cherry, 'Okame'	Prunus X 'Okame'	x	x							x	D
Cherry, Weeping	Prunus subhirtella pendula			S						x	D
Cherry, Yoshino	Prunus X yedoensis	x	x	S	D					x	D
Cherrylaurel, Carolina	Prunus caroliniana			S			x	x	x	x	E
Crabapple, Japanese Flowering †	Malus floribunda		x	S	D					x	D
Crape Myrtle	Lagerstroemia		x								D
Dogwood, redtwig †	Cornus sericea f. baileyi		x		D			x	x	x	D
Dogwood, Rutger's Hybrid	Cornus kousa X florida		x		D		x	x		x	D
Filbert, American	Corylus americana	x	x		T,D		x		x		D
Fringetree	Chionanthus virginiana		x					x	x	x	D
Hawthorne, Washington	Crataegus phaenopyrum	x	x	S				x	x	x	D
Holly, Foster	Ilex X attenuata 'Fosteri'	x	x	S				x	x		E
Holly, Yaupon	Ilex vomitoria		x	S			x		x		E
Magnolia, Star †	Magnolia stellata	x	x	S	D			x	x	x	D

Common Name	Scientific	Town Tree Ordinance Approved	CIP/ROW Approved	Town Zoning Approved (**L**arge or **S**mall Maturing)	Duke Transmission Zone(**T**) or Distribution line(**D**) Approved		Shade Tolerant	Tolerates Poor Drainage	Native	Blooming	Foliage (**D**eciduous, **S**emi-deciduous, or **E**vergreen)
SMALL MATURING TREES (UP-25'H)											
Magnilia, Lily Flowered	**Magnolia liliiflora**		x				x			x	D
Magnolia, 'Little Gem'	**Magnolia grandiflora 'Little Gem'**	x	x					x	x	x	E
Magnolia, 'Merrill'	**Magnolia X loebneri 'Merrill'**		x					x	x	x	D
Magnolia, Saucer	**Magnolia X soulangiana**	x	x	S	D			x	x	x	D
Maple, Armur 'Flame' †	**Acer tataricum ginnala 'Flame'**	x	x		D			x			D
Maple, Japanese	**Acer palmatum**	x	x				x				D
Maple, Purplebow/Shantung	**Acer truncatum**		x								D
Plum, Purpleleaf	**Prunus cerasifera 'Atropurpurea'**	x	x	S						x	D
Redbud, Eastern	**Cercis canadensis**	x	x	S	D		x	x	x	x	D
Serviceberry	**Amelanchier arborea**	x	x						x	x	D
Serviceberry, Shadbush †	**Amelanchier canadensis**	x	x	S	T		x		x	x	D
Waxmyrtle	**Myrica cerifera**	x		S				x			E

SHRUBS

Common Name	Scientific Name
Burford holly *	Ilex cornuta burfordi
Camellia *	Camellia japonica
Convex Japanese holly *	Ilex crenata `convexa'
Dwarf burford holly *	Ilex cornuta burfordi nana
Emily brunner holly *	Ilex "Emily Brunner"
English holly *	Ilex aquifolium
Evergreen euonymus *	Euonymus japonicus
Flowering quince	Chaenomeles speciosa
Forsythia	Forsythia intermedia
Glenn dale azalea *	Azalea hybrida
Glossy abelia *	Abelia grandiflora
Hetzi Japanese holly *	Ilex crenata `hetzi'
Hetzi jumper *	Jumperus chinesis hetzi
Indian azalea *	Azalea indica
Inkberry holly *	Ilex glabra
Japanese aucuba *	Aucuba japonica
Kaempferi azalea *	Azalea obtusum Kaempferi
Laurel *	Laurus nobilis
Loropetalum *	Loropetalum chinense
Lusterleaf holly *	Ilex latifolia
Oakleaf hydrangea	Hydrangea quercifolia
Perny holly *	Ilex pernyi
Pfitzer juniper *	Juniperus chinensis pfitzeriana

Common Name	Scientific Name
Roundleaf Japanese holly *	Ilex crenata `rotundifolia'
Sasanqua Camellia *	Camellia sasanqua
Witch-hazel	Hammamelis virginiana
Yaupon holly *	Ilex vomitoria
Wax myrtle *	Myrica cerifera
Wild olive *	Osmanthus americana
Chinese photinia *	Photinia serrulata
Mountain andromeda *	Pieris floribunda
Japanese andromeda *	Pieris japonica
Pittosporum *	Pittosporum tobira
English laurel *	Prunus laurocerasus
Podocarpus *	Podocarpus macrophyllus maki
Narrow leafed English laurel *	Prunus laurocerasus angustifolia
Scarlet firethorn	Pyracantha coccinea
Yeddo-hawthorn *	Raphiolepis umbellata
Reeves spirea	Spirea cantoniensis
Thunberg spirea	Spirea thunbergii
Bridalwreath spirea	Spirea prunifolia plena
Vanhoutte spirea	Spirea vanhouttei
Japanese yew *	Taxus cuspidata
Leatherleaf viburnum *	Viburnum rhytidophyllum
Laurestinus viburnum *	Viburnum tinus

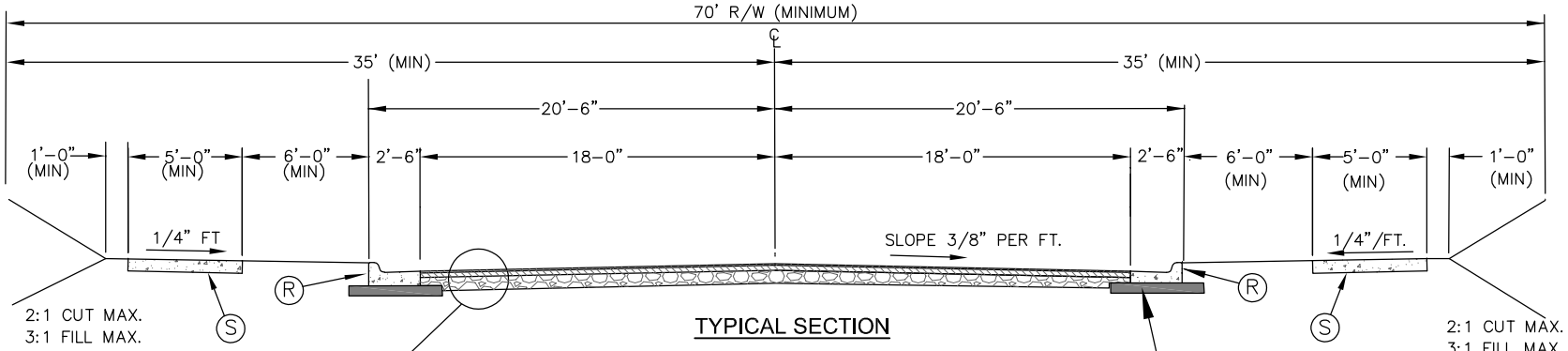
* denotes evergreen

Other species may be allowed with town approval

List subject to change

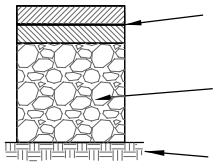
V. REFERENCES

- North Carolina Department of Transportation, most recent edition, Standard Specifications for Roads and Structures.
- North Carolina Department of Transportation, most recent edition, Roadway Standards Drawings.
- City of Charlotte Department of Transportation, most recent edition, Work Area Traffic Control Handbook (WATCH)
- Charlotte-Mecklenburg Storm Water Design Manual
- American Association of State Highway and Transportation Officials most recent edition, A Policy on Geometric Design of Highways and Streets
- North Carolina Department of Transportation, Roadway Design Manual, latest edition
- North Carolina Department of Environment and Natural Resources most recent edition, Erosion and Sediment Control Planning and Design Manual
- NCDENR, Storm Water Best Management Practices, latest edition.
- Mecklenburg County Land Development Standards Manual, latest edition.
- North Carolina Department of Transportation Subdivision Roads Minimum Construction Standards Manual, latest edition



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

(R) 2'-6" CURB AND GUTTER

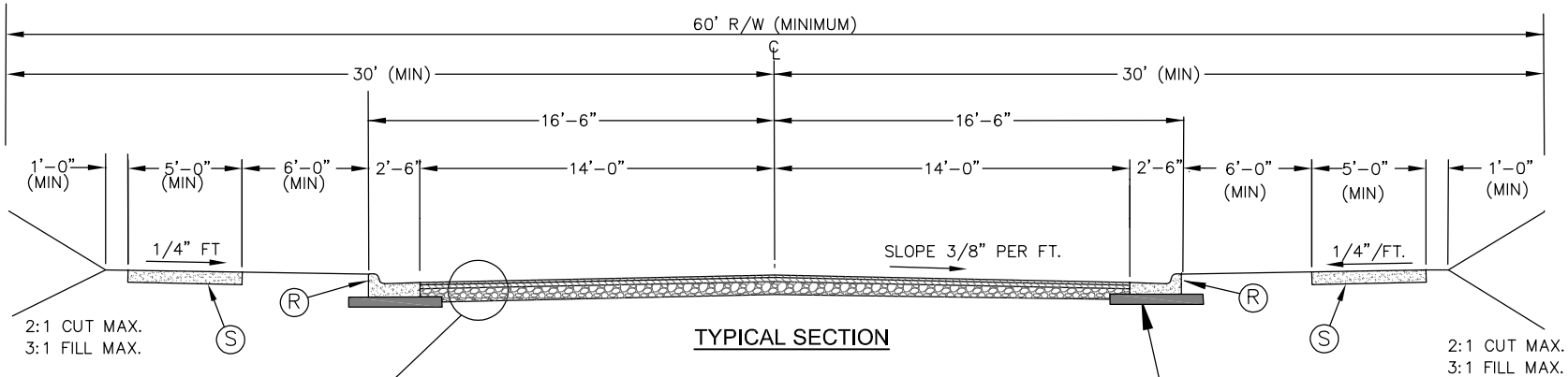
(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR. SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS-OF-WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE.
5. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS-OF-WAY SHALL BE APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION.
6. ALL PROPOSED ROADWAYS IN COMMERCIAL AND INDUSTRIAL DEVELOPMENTS SHALL BE CONSIDERED COMMERCIAL COLLECTOR STREETS.
7. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

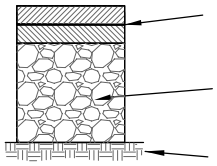
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	MAJOR COLLECTOR STREET	2/29/20
			STD. NO. 10.01 / REV. 4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

(R) 2'-6" CURB AND GUTTER

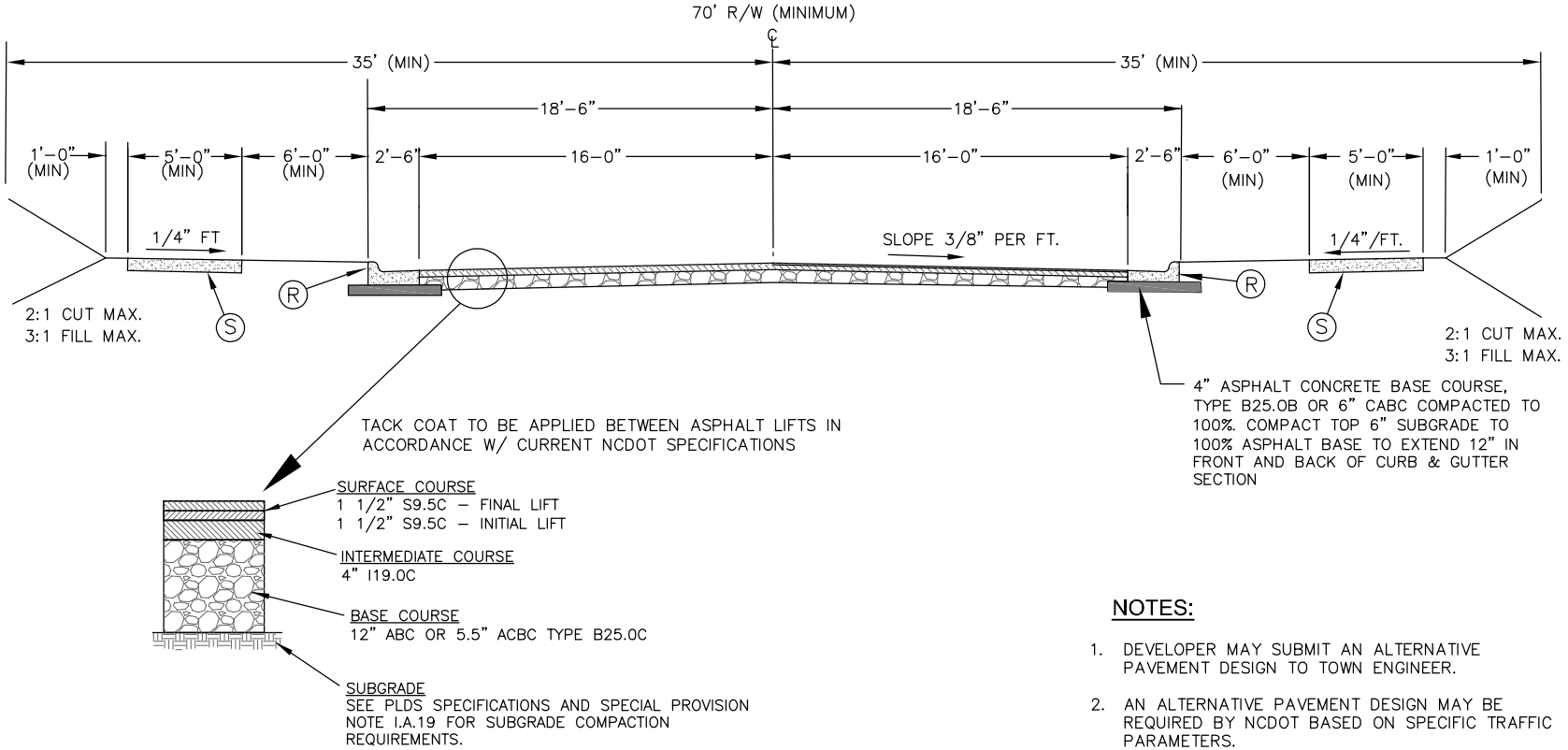
(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS-OF-WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE.
5. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS-OF-WAY SHALL BE APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION.
6. ALL PROPOSED ROADWAYS IN COMMERCIAL AND INDUSTRIAL DEVELOPMENTS SHALL BE CONSIDERED COMMERCIAL COLLECTOR STREETS.
7. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	MINOR COLLECTOR STREET	2/29/20
			STD. NO. 10.02 / REV. 4



TYPICAL PAVEMENT SECTION

KEY

(R) 2'-6" CURB AND GUTTER

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

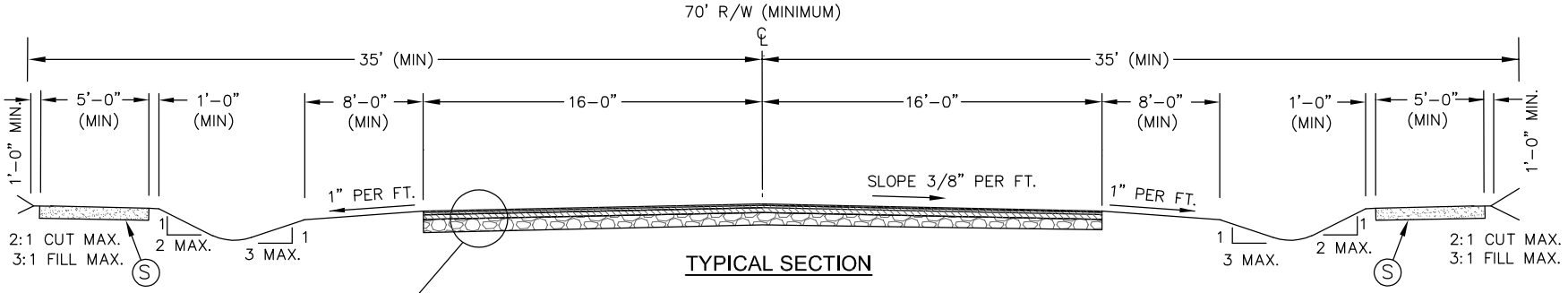
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

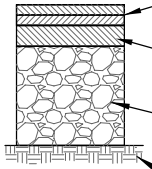
INDUSTRIAL STREET

REV. DATE	
2/29/20	
STD. NO.	REV.
10.03	4



TYPICAL SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5C – FINAL LIFT
1 1/2" S9.5C – INITIAL LIFT

INTERMEDIATE COURSE
4" I19.0C

BASE COURSE
12" ABC OR 5.5" ACBC TYPE B25.0C

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR. SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

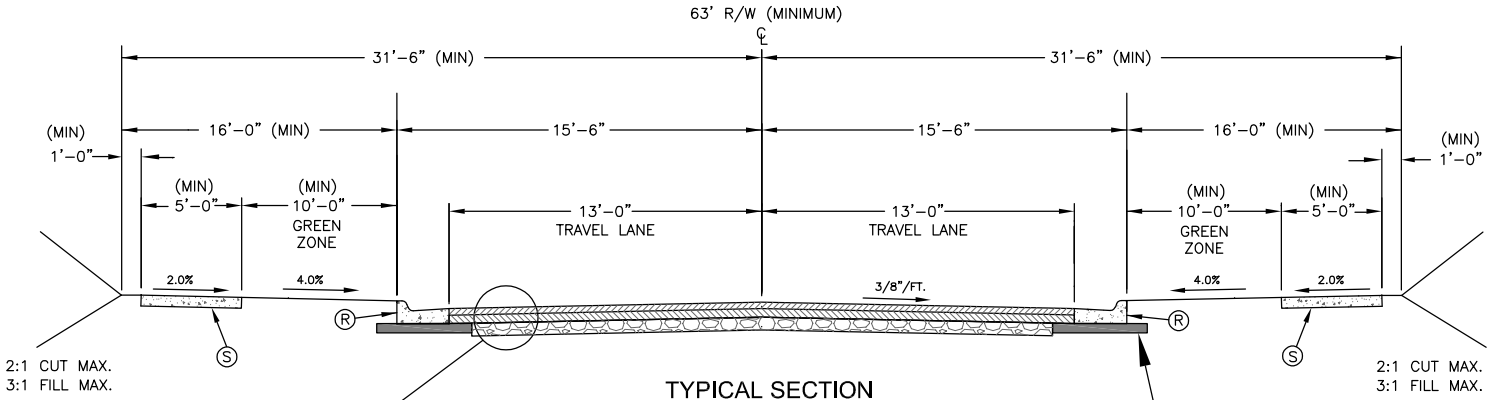
1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	INDUSTRIAL STREET (DITCH TYPE)

2/29/20

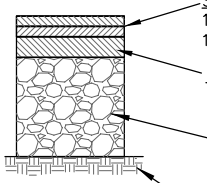
STD. NO.	REV.
10.04	4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5C – FINAL LIFT
1 1/2" S9.5C – INITIAL LIFT

INTERMEDIATE COURSE
4" I19.0C

BASE COURSE
12" ABC OR 5.5" ACBC TYPE B25.0C

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'–6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR. SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

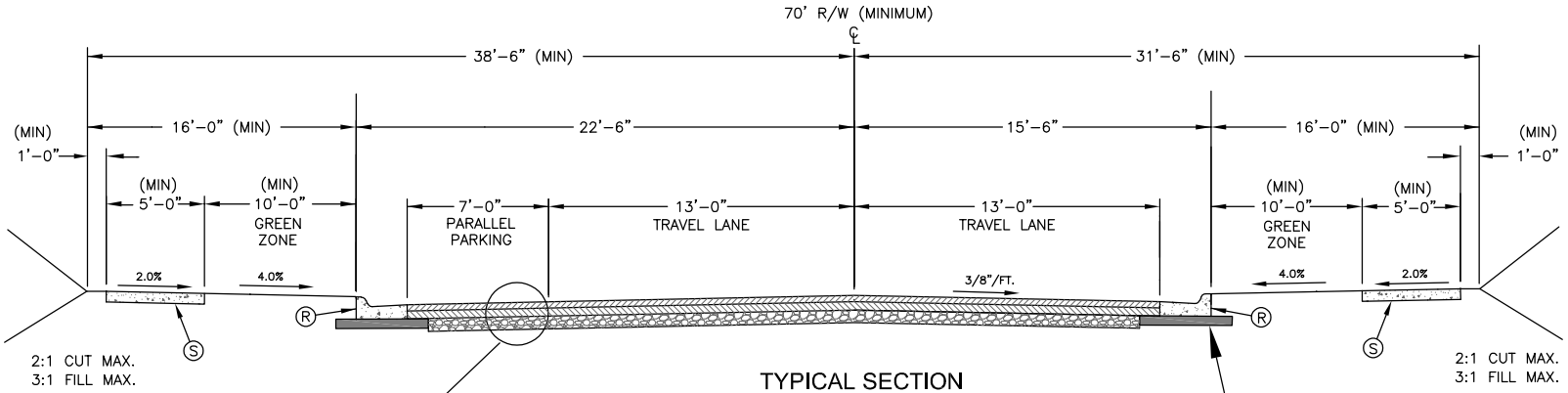
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

INDUSTRIAL LOCAL STREET NO PARKING

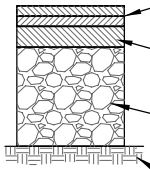
REV. DATE	
2/29/20	
STD. NO.	REV.
10.04A	4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5C – FINAL LIFT
1 1/2" S9.5C – INITIAL LIFT

INTERMEDIATE COURSE
4" I19.0C

BASE COURSE
12" ABC OR 5.5" ACBC TYPE B25.0C

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'–6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR. SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. TREE TO BE PLANTED FOUR FEET FROM SIDEWALK.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

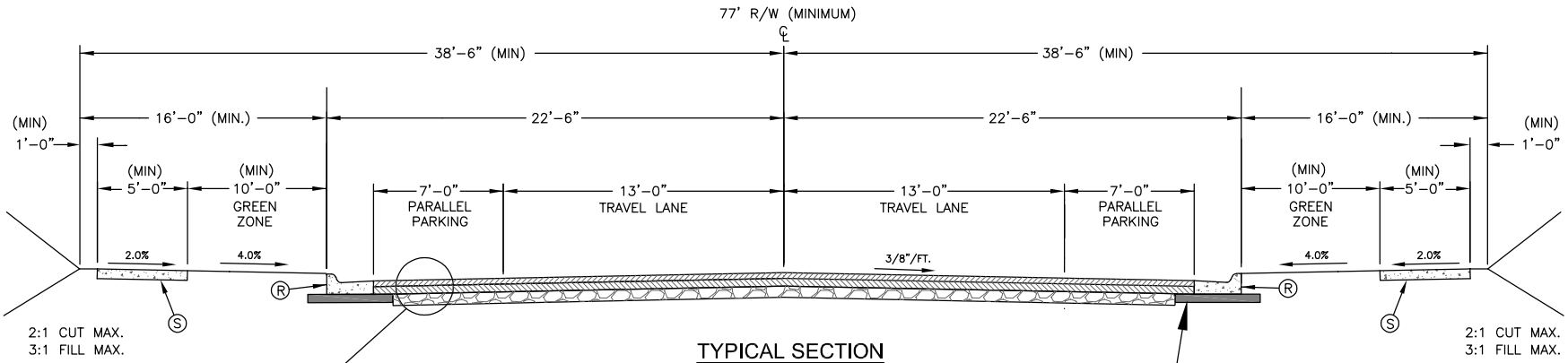
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

INDUSTRIAL LOCAL STREET
PARKING ON ONE SIDE OF STREET

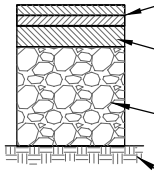
REV. DATE	
2/29/20	
STD. NO.	REV.
10.04B	4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5C – FINAL LIFT
1 1/2" S9.5C – INITIAL LIFT

INTERMEDIATE COURSE
4" I19.0C

BASE COURSE
12" ABC OR 5.5" ACBC TYPE B25.0C

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'–6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR. SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. TREE TO BE PLANTED FOUR FEET FROM SIDEWALK.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

INDUSTRIAL LOCAL STREET
PARKING ON BOTH SIDES OF THE STREET

REV. DATE	
2/29/20	
STD. NO.	REV.
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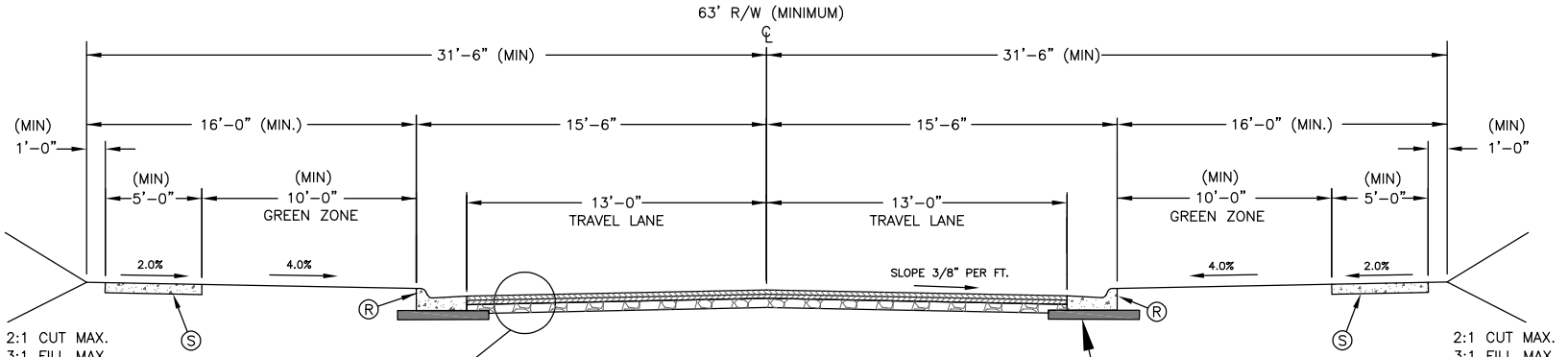
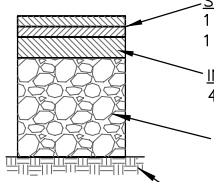


TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5C – FINAL LIFT
1 1/2" S9.5C – INITIAL LIFT

INTERMEDIATE COURSE
4" I19.0C

BASE COURSE
12" ABC OR 5.5" ACBC TYPE B25.0C

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'-6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR. SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. TREE TO BE PLANTED FOUR FEET FROM SIDEWALK.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

INDUSTRIAL COLLECTOR STREET (NO PARKING)

REV. DATE	
2/29/20	
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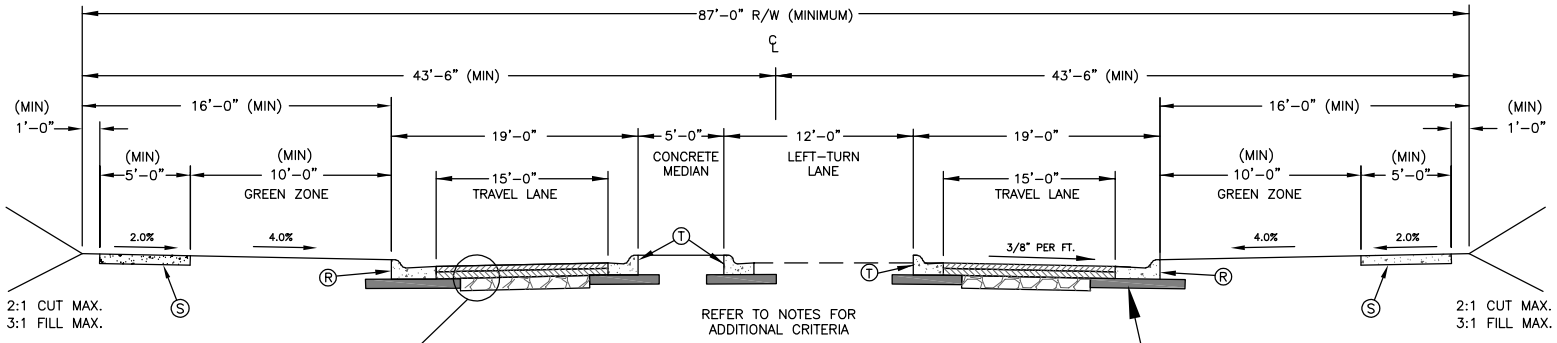
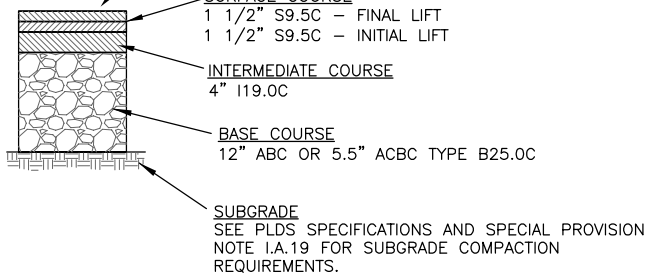


TYPICAL SECTION
(TWO LANE SECTION)

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TYPICAL PAVEMENT SECTION

KEY

- (R) 2'-6" CURB AND GUTTER
- (S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR. SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.
- (T) 1'-6" MEDIAN CURB AND GUTTER

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. TREE TO BE PLANTED FOUR FEET FROM SIDEWALK.
3. FOR MEDIAN DIVIDED FACILITIES, A MINIMUM TWENTY (20) FOOT WIDE MEDIAN WITH ONE FOOT SIX INCH CURB AND GUTTER IS NEEDED. IF A LEFT-TURN LANE IS NOT NEEDED, THE MEDIAN SHALL BE LANDSCAPED.
4. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

INDUSTRIAL COLLECTOR STREET WITH MEDIAN AND NO PARKING

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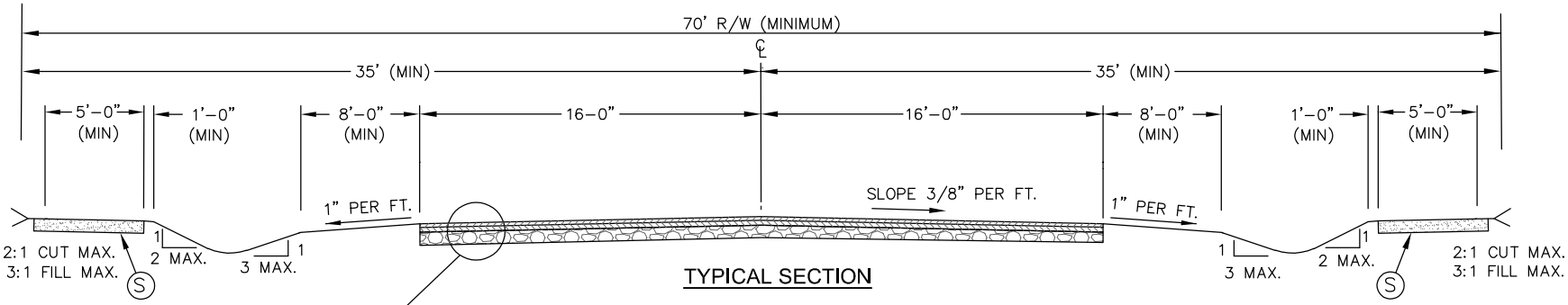
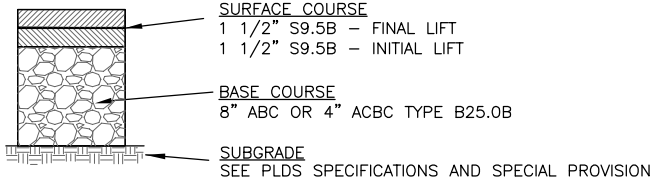


TYPICAL SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

NOTES:

1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

KEY

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

COMMERCIAL STREET
(SPECIAL USE CONDITIONS)

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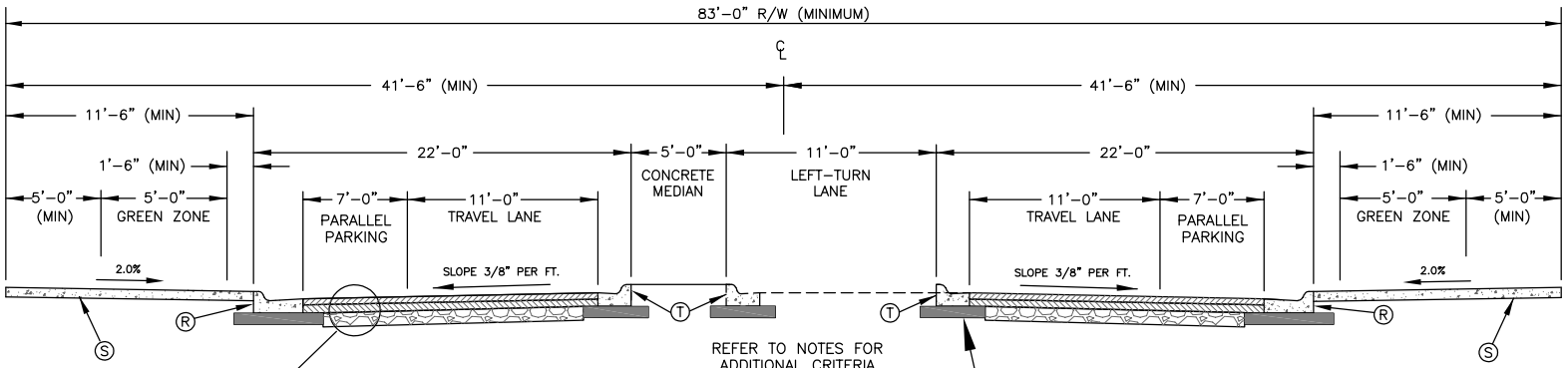
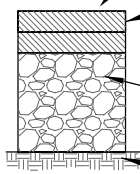


REFER TO NOTES FOR ADDITIONAL CRITERIA

TYPICAL SECTION
(TWO LANE SECTION)

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0C

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

KEY

TYPICAL PAVEMENT SECTION

Ⓡ 2'-6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

Ⓣ 1'-6" MEDIAN CURB AND GUTTER

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET..
2. REFER TO STANDARD DRAWINGS REGARDING SIDEWALK AROUND TREE GRATES. TREE GRATES SHALL BE PROVIDED WHEN TREES ARE LOCATED IN THE GREEN ZONE.
3. FOR MEDIAN DIVIDED FACILITIES, A MINIMUM SIXTEEN (16) FOOT WIDE MEDIAN WITH ONE FOOT SIX INCH CURB AND GUTTER IS NEEDED. WHERE A LEFT-TURN LANE IS NOT INSTALLED, THE MEDIAN SHALL BE LANDSCAPED.
4. REFER TO STANDARD DRAWINGS FOR PARALLEL PARKING LAYOUT.
5. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RETAIL/MIXED USE LOCAL STREET WITH MEDIAN AND PARKING

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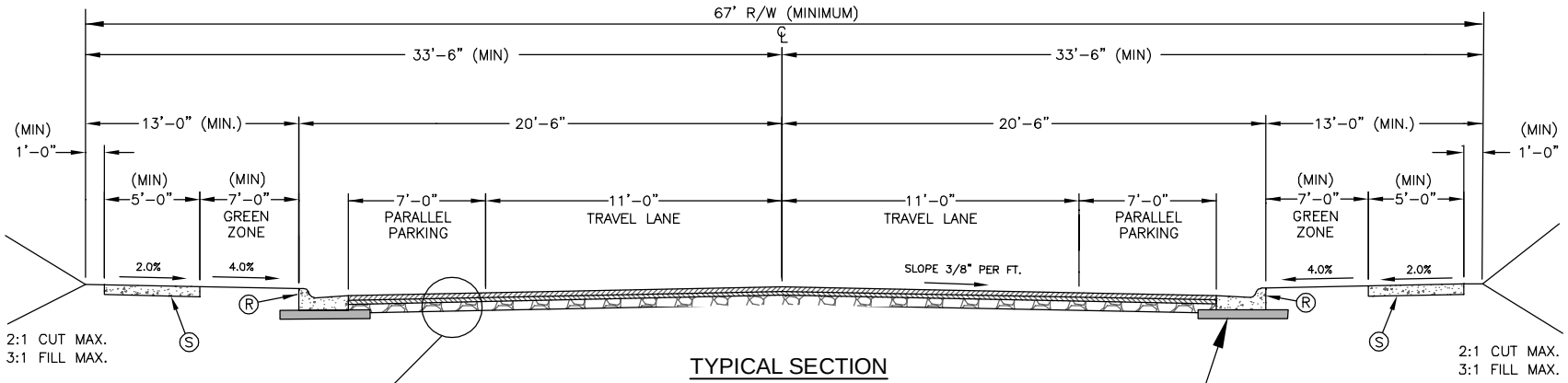
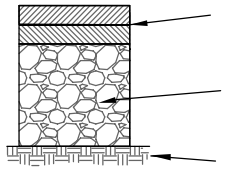


TYPICAL SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'-6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. REFER TO STANDARD DRAWINGS FOR PARALLEL PARKING LAYOUT.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RETAIL/MIXED USE LOCAL STREET
PARKING AND GREEN ZONE ON BOTH SIDES

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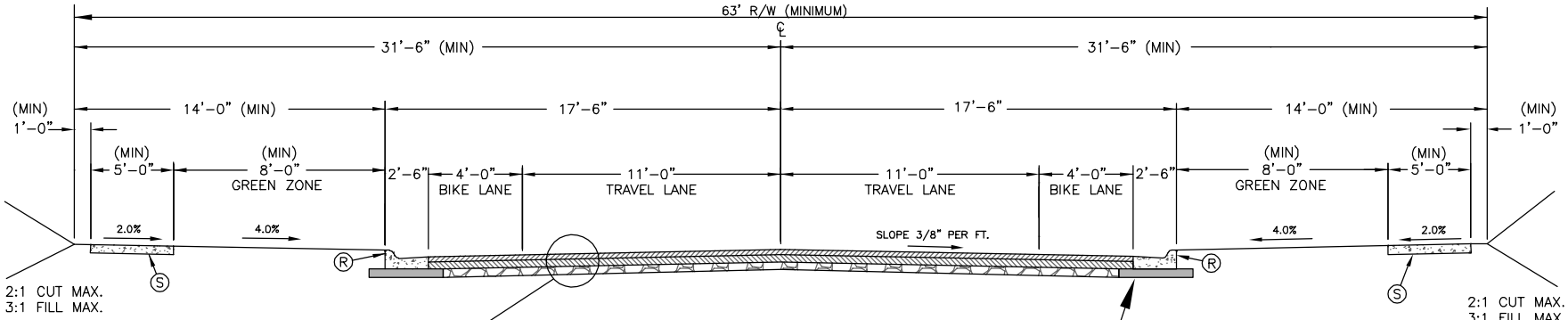
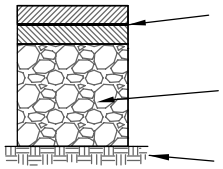


TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'–6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RETAIL/MIXED USE COLLECTOR STREET WITH BIKE LANES

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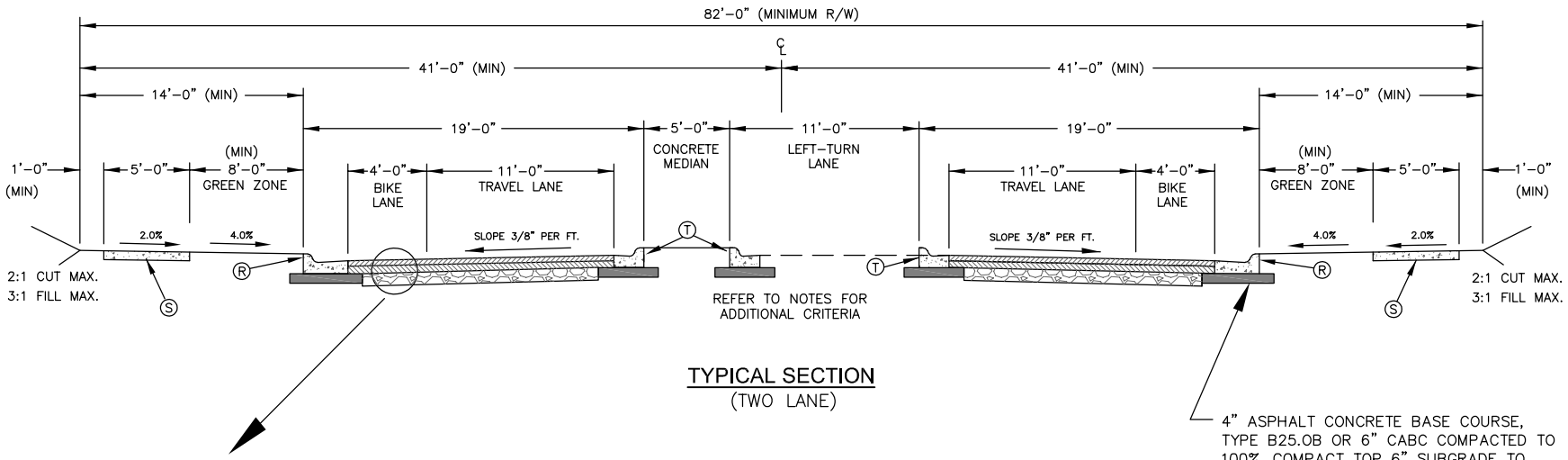
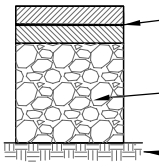


TYPICAL SECTION
(TWO LANE)

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'-6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

Ⓣ 1'-6" MEDIAN CURB AND GUTTER

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. FOR MEDIAN DIVIDED FACILITIES, A MINIMUM SIXTEEN (16) FOOT WIDE MEDIAN WITH ONE FOOT SIX INCH CURB AND GUTTER IS NEEDED. IF A LEFT-TURN LANE IS NOT NEEDED, THE MEDIAN SHALL BE LANDSCAPED.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RETAIL/MIXED USE COLLECTOR STREET WITH MEDIAN AND BIKE LANES

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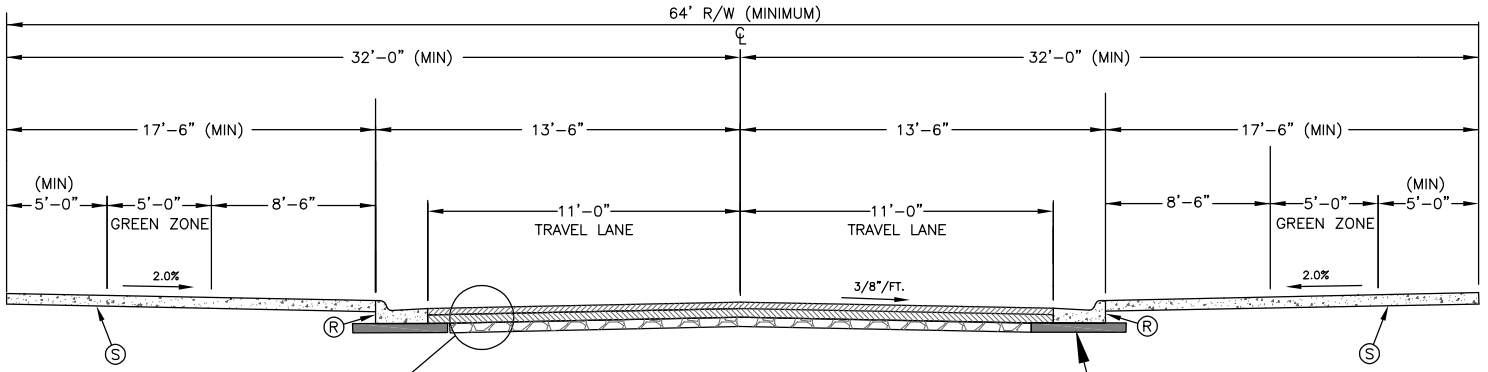
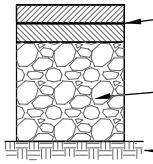
STD. NO.	REV.
10.05D	4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'-6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. REFER TO STANDARD DRAWINGS REGARDING SIDEWALK AROUND TREE GRATES.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RETAIL/MIXED USE LOCAL STREET (NO PARKING)

REV. DATE	
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STD. NO.	REV.
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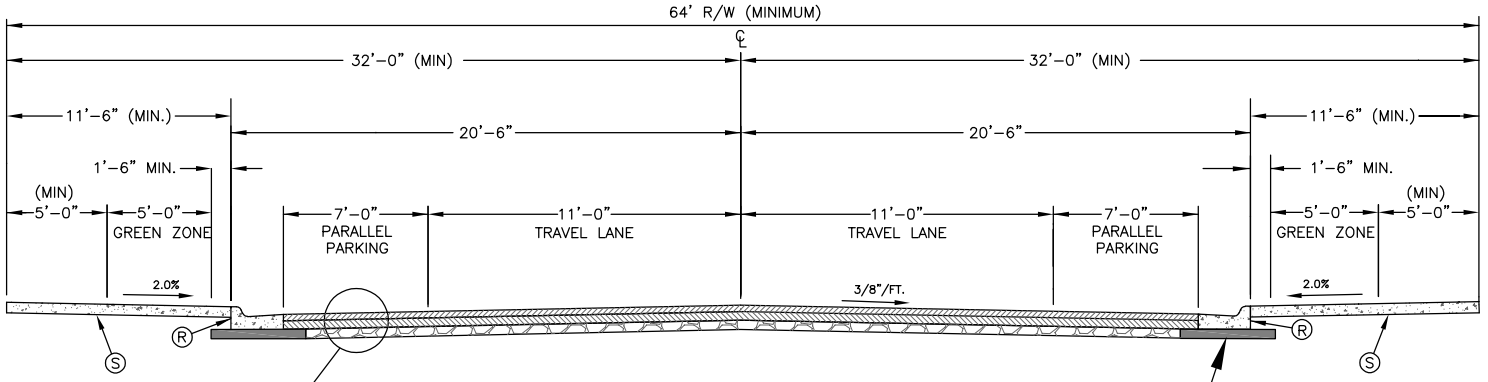
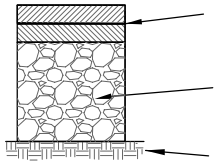


TYPICAL SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'-6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. REFER TO STANDARD DRAWINGS REGARDING SIDEWALK AROUND TREE GRATES.
3. BASE COURSE TO EXTEND SIX INCHES BEYOND BACK OF CURB THEN TAPER OUT AT A FORTY-FIVE DEGREE ANGLE.
4. REFER TO STANDARD DRAWINGS FOR PARALLEL PARKING LAYOUT.
5. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	RETAIL/MIXED USE LOCAL STREET PARKING ON BOTH SIDES OF STREET

REV. DATE	
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STD. NO.	REV.
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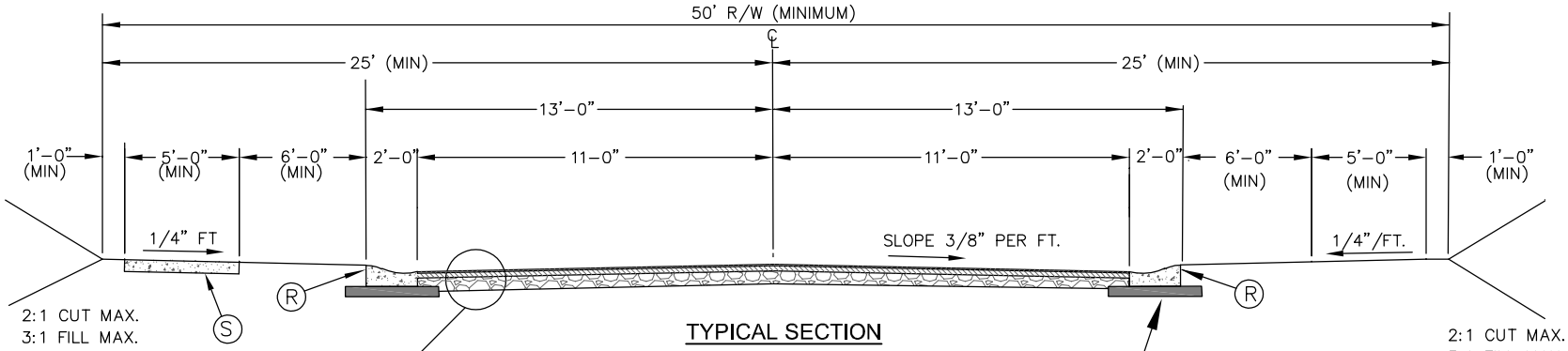
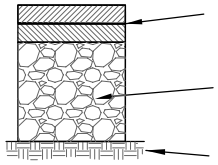


TYPICAL SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100% COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TYPICAL PAVEMENT SECTION

KEY

(R) 2'-6" CURB AND GUTTER

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. SIDEWALK WILL ONLY BE REQUIRED ON ONE SIDE OF STREET AND NOT ALONG CUL-DE-SAC "BULB".
2. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS-OF-WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE.
3. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS-OF-WAY SHALL APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION.
4. ANY RESIDENTIAL STREET THAT RECEIVES TRAFFIC FROM 150 OR MORE LOTS SHALL BE CONSIDERED A RESIDENTIAL COLLECTOR STREET.
5. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

LOCAL RESIDENTIAL STREET

REV. DATE	
2/29/20	
STD. NO.	REV.
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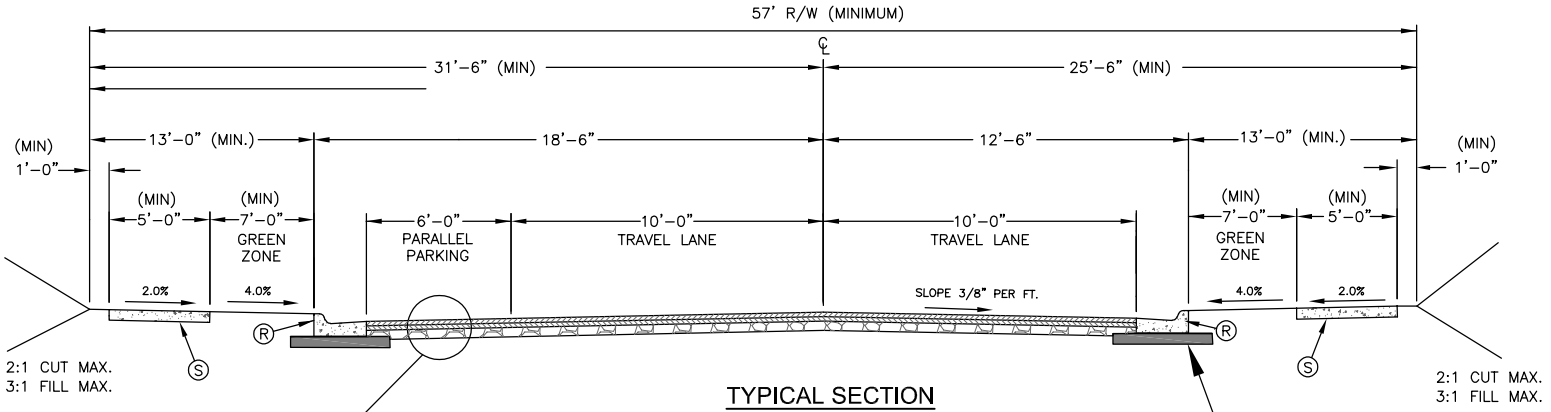
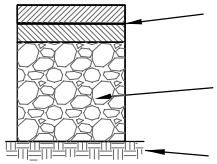


TYPICAL SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'–6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS. INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR. SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. 2'–0" VALLEY GUTTER MAY BE SUBSTITUTED FOR 2'–6" CURB AND GUTTER ON THE SIDE OF THE STREET WITHOUT PARALLEL PARKING. THIS REDUCES THE MINIMUM RIGHT–OF–WAY BY SIX INCHES. 2'–0" VALLEY GUTTER MAY NOT BE SUBSTITUTED FOR 2'–6" CURB AND GUTTER ON THE SIDE OF THE STREET WITH PARALLEL PARKING.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

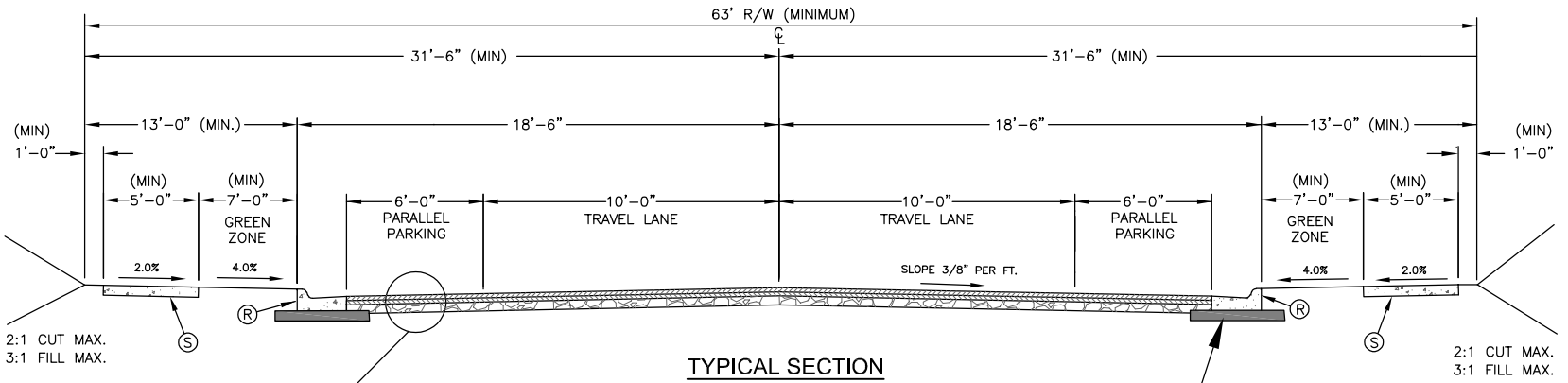
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

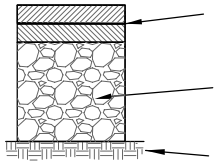
LOCAL RESIDENTIAL STREET
PARKING ON ONE SIDE OF STREET

REV. DATE	
2/29/20	
STD. NO.	REV.
10.06A	4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'–6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS–OF–WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE.
5. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS–OF–WAY SHALL BE APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION.
6. ALL PROPOSED ROADWAYS IN COMMERCIAL AND INDUSTRIAL DEVELOPMENTS SHALL BE CONSIDERED COMMERCIAL COLLECTOR STREETS.
7. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

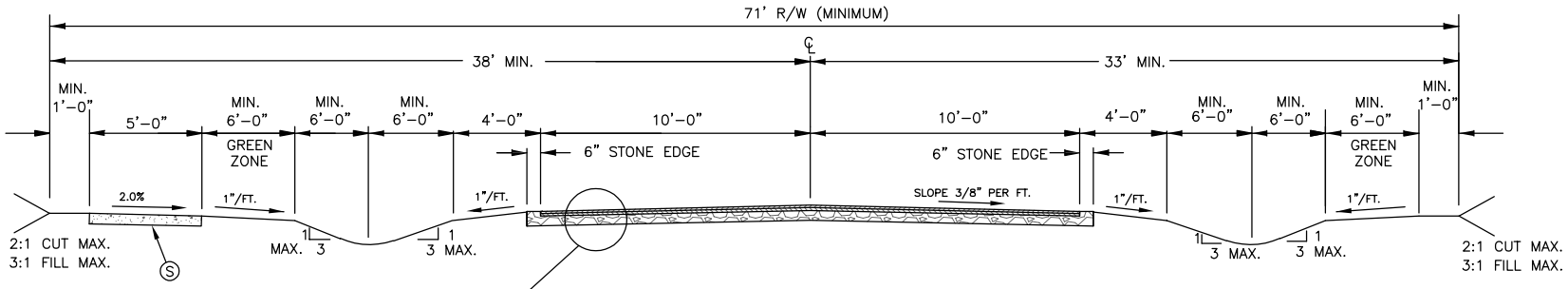
NOT TO SCALE

Pineville NORTH CAROLINA

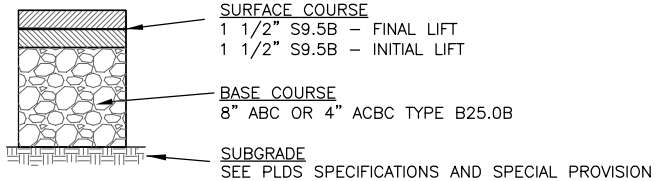
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

LOCAL RESIDENTIAL STREET
PARKING ON BOTH SIDES OF STREET

REV. DATE	
2/29/20	
STD. NO.	REV.
10.06B	4



TYPICAL SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

NOTES:

1. APPROVAL BY THE TOWN ENGINEER IS REQUIRED PRIOR TO USING DITCH TYPE SECTION.
2. TREES TO BE PLACED IN THE GREEN ZONE 3.5 FEET FROM EDGE OF SIDEWALK.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

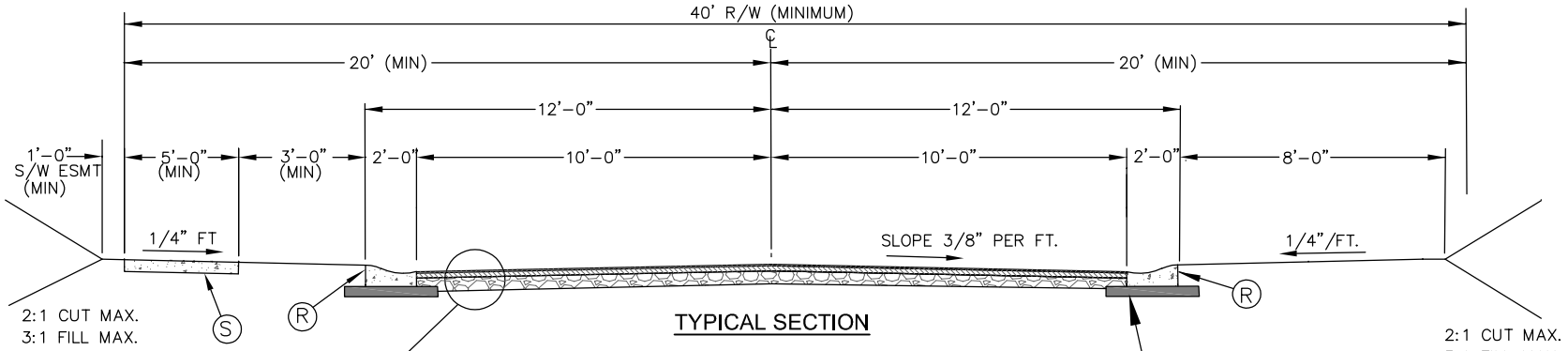
KEY

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOT TO SCALE

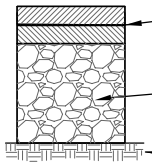
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	LOCAL RESIDENTIAL STREET (DITCH TYPE)

REV. DATE	
2/29/20	
STD. NO.	REV.
10.06C	4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

NOTES:

1. SIDEWALK WILL ONLY BE REQUIRED ON ONE SIDE OF STREET AND NOT ALONG CUL-DE-SAC "BULB".
2. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS-OF-WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE.
3. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS-OF-WAY SHALL APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION.
4. ANY LOCAL LIMITED RESIDENTIAL STREET IS RESERVED FOR RESIDENTIAL STREETS THAT ARE LESS THAN 250 FT IN LENGTH END IN A CUL-DE-SAC AND WILL NOT BE EXTENDED IN THE FUTURE.
5. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

KEY

(R) 2'-0" VALLEY CURB AND GUTTER

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

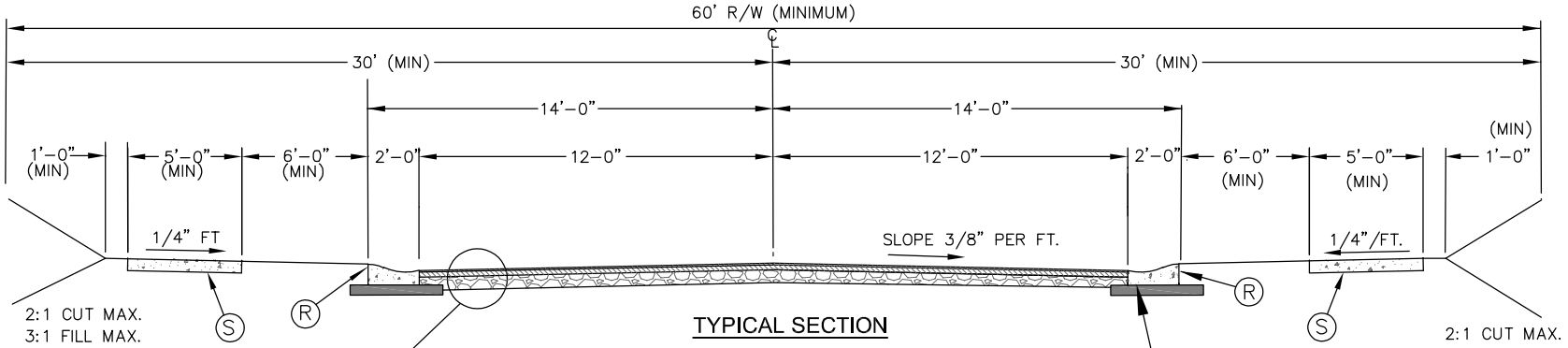
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

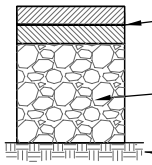
LOCAL LIMITED RESIDENTIAL STREET

REV. DATE	
2/29/20	
STD. NO.	REV.
10.06D	4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

Ⓡ 2'-0" VALLEY GUTTER

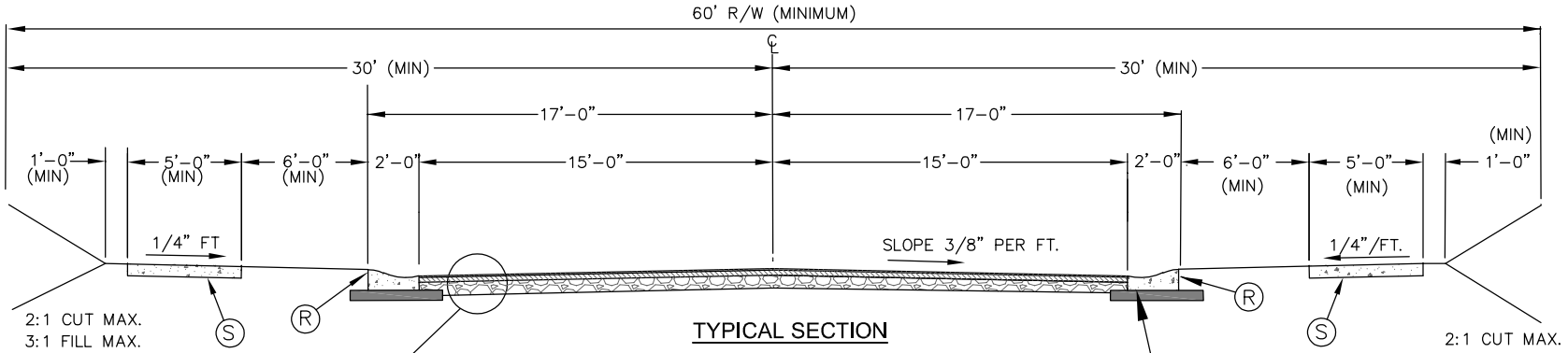
Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

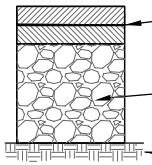
1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS-OF-WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE.
5. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS-OF-WAY SHALL BE APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION.
6. ANY RESIDENTIAL STREET THAT RECEIVES TRAFFIC FROM 150 OR MORE LOTS SHALL BE CONSIDERED A RESIDENTIAL COLLECTOR STREET.
7. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	RESIDENTIAL COLLECTOR STREET	REV. DATE 2/29/20
			STD. NO. 10.07 / REV. 4



TYPICAL SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

(R) 2'-0" VALLEY GUTTER

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOTES:

1. DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT DESIGN TO TOWN ENGINEER.
2. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY NCDOT BASED ON SPECIFIC TRAFFIC PARAMETERS.
3. SIDEWALK EASEMENT MAY BE REQUIRED.
4. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS-OF-WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE.
5. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS-OF-WAY SHALL BE APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION.
6. ANY RESIDENTIAL STREET THAT RECEIVES TRAFFIC FROM 150 OR MORE LOTS SHALL BE CONSIDERED A RESIDENTIAL COLLECTOR STREET.
7. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

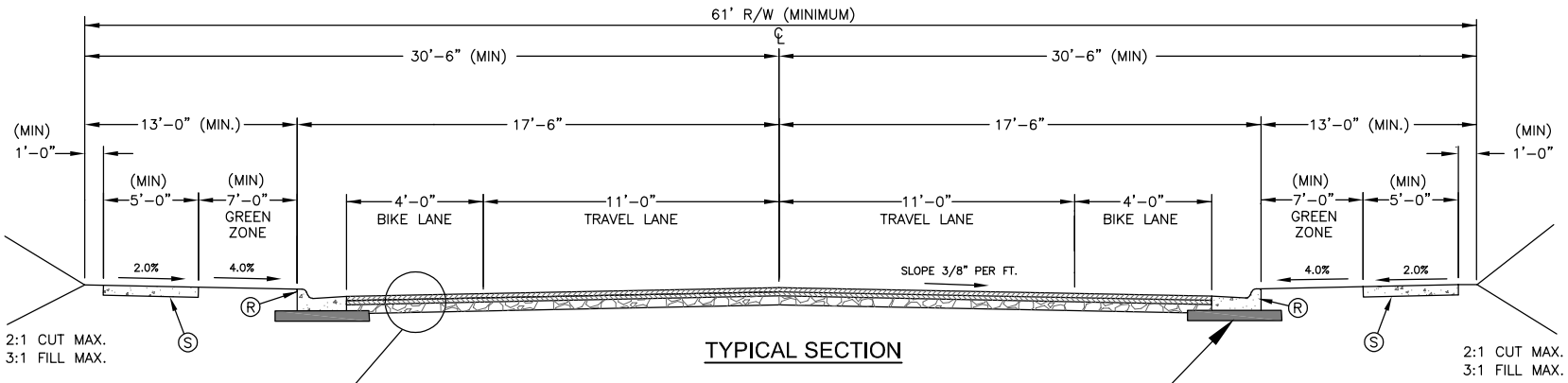
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

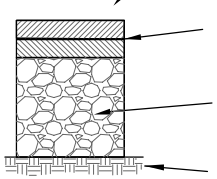
RESIDENTIAL COLLECTOR STREET (WITH ON STREET PARKING)

REV. DATE	
2/29/20	
STD. NO.	REV.
10.07A	4



TYPICAL SECTION

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. BIKE LANES TO BE STRIPED.
3. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

KEY

Ⓡ 2'–6" CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

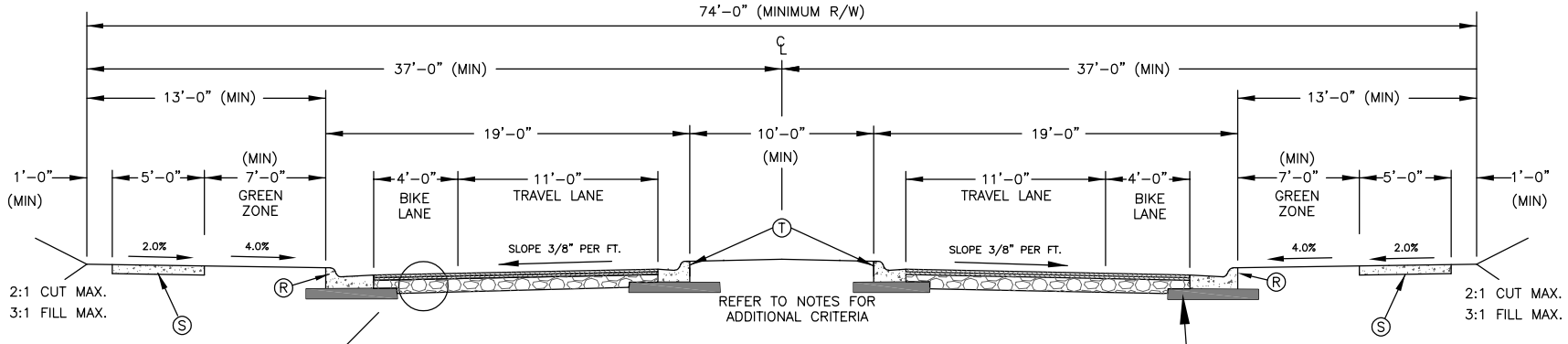
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RESIDENTIAL COLLECTOR STREET WITH BIKE LANES

REV. DATE	
2/29/20	
STD. NO.	REV.
10.10A	4

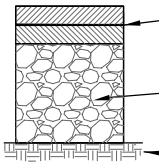


TYPICAL SECTION

(TWO LANE SECTION)

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

(R) 2'-6" CURB AND GUTTER

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

(T) 1'-6" MEDIAN CURB AND GUTTER

NOTES:

1. CURB RETURN RADIUS DIMENSIONS AT INTERSECTIONS MAY VARY DEPENDING ON MEDIAN WIDTH AND WILL BE APPROVED ON A CASE BY CASE BASIS.
2. SUBDRAINS ARE REQUIRED ON ALL MEDIANS. (TO BE TIED INTO STORM DRAINAGE SYSTEM).
3. MEDIAN PLANTINGS SHALL NOT OBSTRUCT INTERSECTION SIGHT DISTANCE REQUIREMENTS.
4. A TEN (10) FOOT WIDE MEDIAN IS REQUIRED FOR SMALL MATURING TREES. A TWENTY (20) FOOT WIDE MEDIAN IS REQUIRED FOR LARGE MATURING TREES.
5. BIKE LANE TO BE STRIPED.
6. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

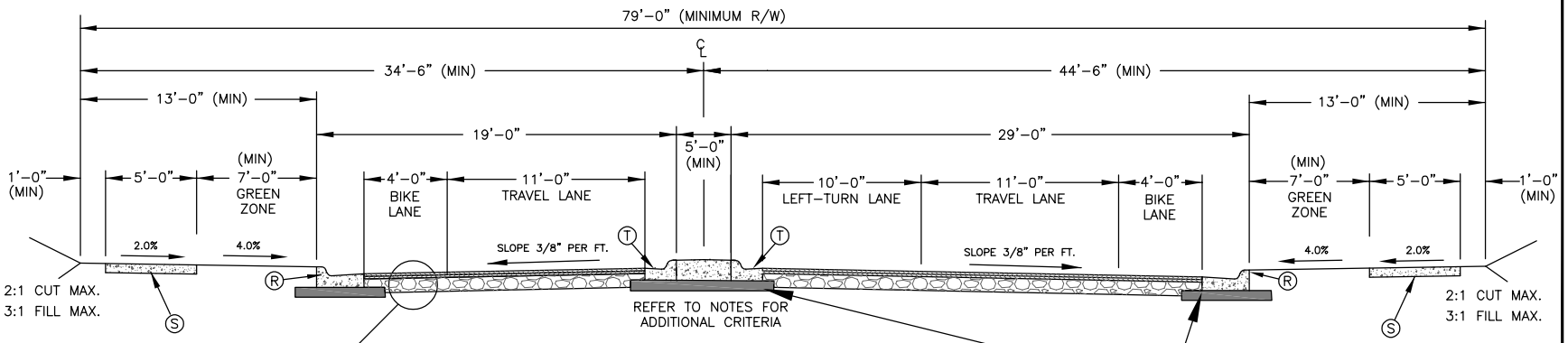
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RESIDENTIAL DIVIDED COLLECTOR STREET

REV. DATE	
2/29/20	
STD. NO.	REV.
10.10B	4

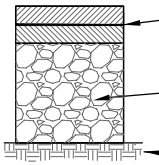


TYPICAL SECTION

(TWO LANE SECTION)

4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS



SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

(R) 2'-6" CURB AND GUTTER

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

(T) 1'-6" MEDIAN CURB AND GUTTER

NOTES:

1. CURB RETURN RADIUS DIMENSIONS AT INTERSECTIONS MAY VARY DEPENDING ON MEDIAN WIDTH AND WILL BE APPROVED ON A CASE BY CASE BASIS.
2. SUBDRAINS ARE REQUIRED ON ALL MEDIANS. (TO BE TIED INTO STORM DRAINAGE SYSTEM).
3. MEDIAN PLANTINGS SHALL NOT OBSTRUCT INTERSECTION SIGHT DISTANCE REQUIREMENTS.
4. A TEN (10) FOOT WIDE MEDIAN IS REQUIRED FOR SMALL MATURING TREES. A TWENTY (20) FOOT WIDE MEDIAN IS REQUIRED FOR LARGE MATURING TREES.
5. MONOLITHIC CONCRETE MEDIANS WITH BEVELED EDGES AND A MINIMUM WIDTH OF 6 FEET CAN BE USED IN LIEU OF LANDSCAPED MEDIANS.
6. BIKE LANE TO BE STRIPED.
7. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS.

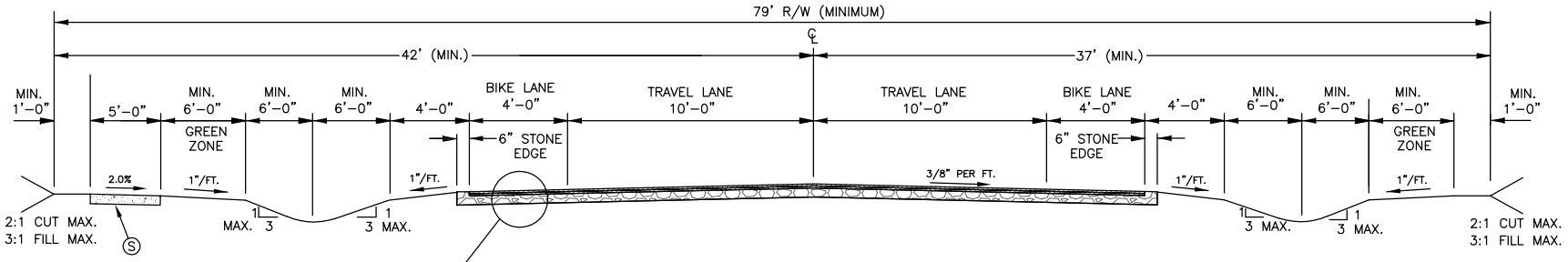
NOT TO SCALE

Pineville NORTH CAROLINA

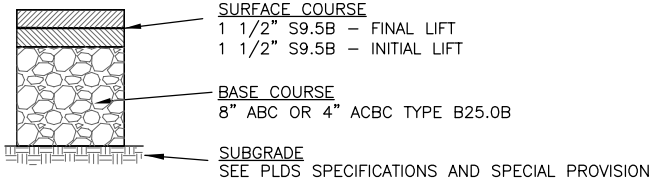
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RESIDENTIAL DIVIDED COLLECTOR STREET WITH LEFT TURN LANE

REV. DATE	
2/29/20	
STD. NO.	REV.
10.10C	4



TYPICAL SECTION



TACK COAT TO BE APPLIED BETWEEN ASPHALT LIFTS IN ACCORDANCE W/ CURRENT NCDOT SPECIFICATIONS

SURFACE COURSE
1 1/2" S9.5B – FINAL LIFT
1 1/2" S9.5B – INITIAL LIFT

BASE COURSE
8" ABC OR 4" ACBC TYPE B25.0B

SUBGRADE
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTE I.A.19 FOR SUBGRADE COMPACTION REQUIREMENTS.

TYPICAL PAVEMENT SECTION

KEY

(S) 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

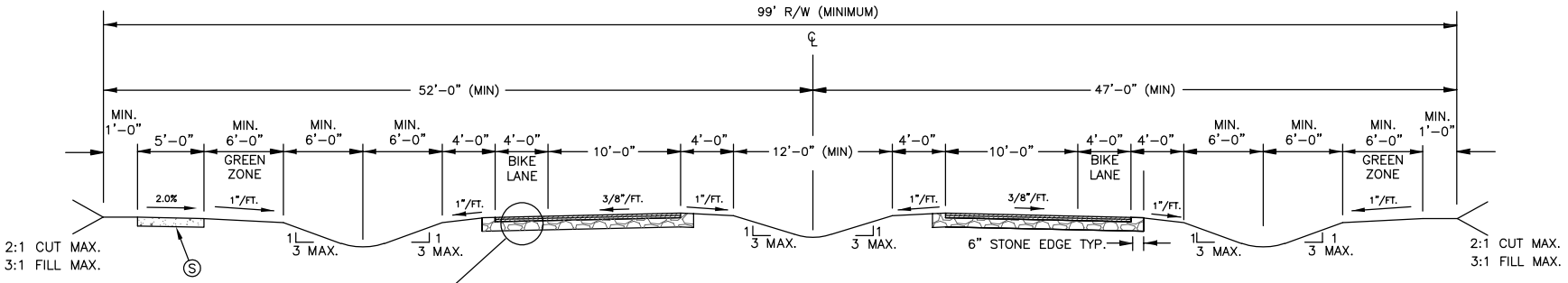
NOTES:

1. SIDEWALK LOCATED OUTSIDE OF STREET RIGHT-OF-WAY SHALL BE LOCATED IN A PERMANENT SIDEWALK EASEMENT EXTENDING 1 FOOT BEYOND BACK OF SIDEWALK.
2. TREES TO BE PLACED IN GREEN ZONE 3.5 FEET FROM FACE OF SIDEWALK.
3. BIKE LANE TO BE STRIPED.
4. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS

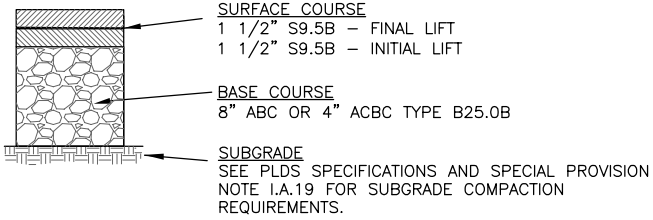
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	RESIDENTIAL COLLECTOR STREET (DITCH TYPE)

REV. DATE	
2/29/20	
STD. NO.	REV.
10.10D	4



TYPICAL SECTION



TYPICAL PAVEMENT SECTION

NOTES:

1. SIDEWALK LOCATED OUTSIDE OF STREET RIGHT-OF-WAY SHALL BE LOCATED IN A PERMANENT SIDEWALK EASEMENT EXTENDING 1 FOOT BEYOND BACK OF SIDEWALK.
2. TREES TO BE PLACED IN GREEN ZONE 3.5 FEET FROM FACE OF SIDEWALK.
3. BIKE LANE TO BE STRIPED.
4. REFER TO PLDS SPECIFICATIONS AND SPECIAL PROVISION NOTES FOR COMPACTION TESTING REQUIREMENTS

KEY

Ⓢ 4" CONCRETE SIDEWALK, 6" AT ALL DRIVEWAYS.
INSTALL DRIVEWAY APRONS W/GEOGRID 1100 TENSILE (MIN) & COMPACT SUBGRADE TO 100% STANDARD PROCTOR.
SEE PLDS SPECIFICATIONS AND SPECIAL PROVISIONS NOTE I.F.1 FOR BASE REQUIREMENTS.

NOT TO SCALE

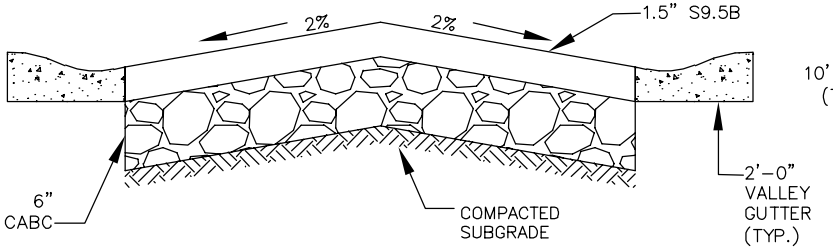
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	RESIDENTIAL DIVIDED COLLECTOR STREET DITCH TYPE WITH MEDIAN DITCH

REV. DATE	
2/29/20	
STD. NO.	REV.
10.10E	4

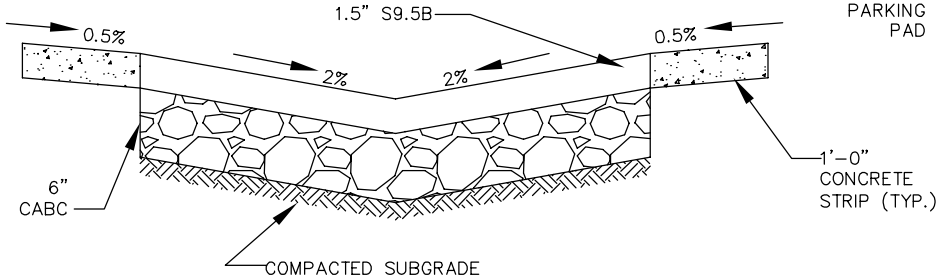
NOTES:

1. SUBGRADE SHALL BE COMPACTED TO PUBLIC STREET STANDARD.
2. STORM DRAINAGE (NOT SHOWN) SHALL BE PROVIDED AS NECESSARY.
3. ALLEYS SHALL BE CONSIDERED PRIVATE EASEMENTS AND WILL NOT BE ACCEPTED FOR MAINTENANCE BY THE TOWN OF PINEVILLE.
4. DRIVEWAYS SHALL BE SEPARATED BY AT LEAST 5 FEET, OR GREATER IF REQUIRED BY PLANNING (LOT SIZE) REQUIREMENTS AND/OR N.C. BUILDING CODE.
5. DETAIL APPLIES TO SINGLE OR DOUBLE-LOADED ALLEYS. FOR SINGLE-LOADED ALLEYS, THERE SHALL BE A 20-FOOT CLEAR ZONE FREE OF CUT SLOPES, OBSTRUCTIONS, HEDGES, ETC. FROM THE LOADED SIDE EDGE OF PAVEMENT.

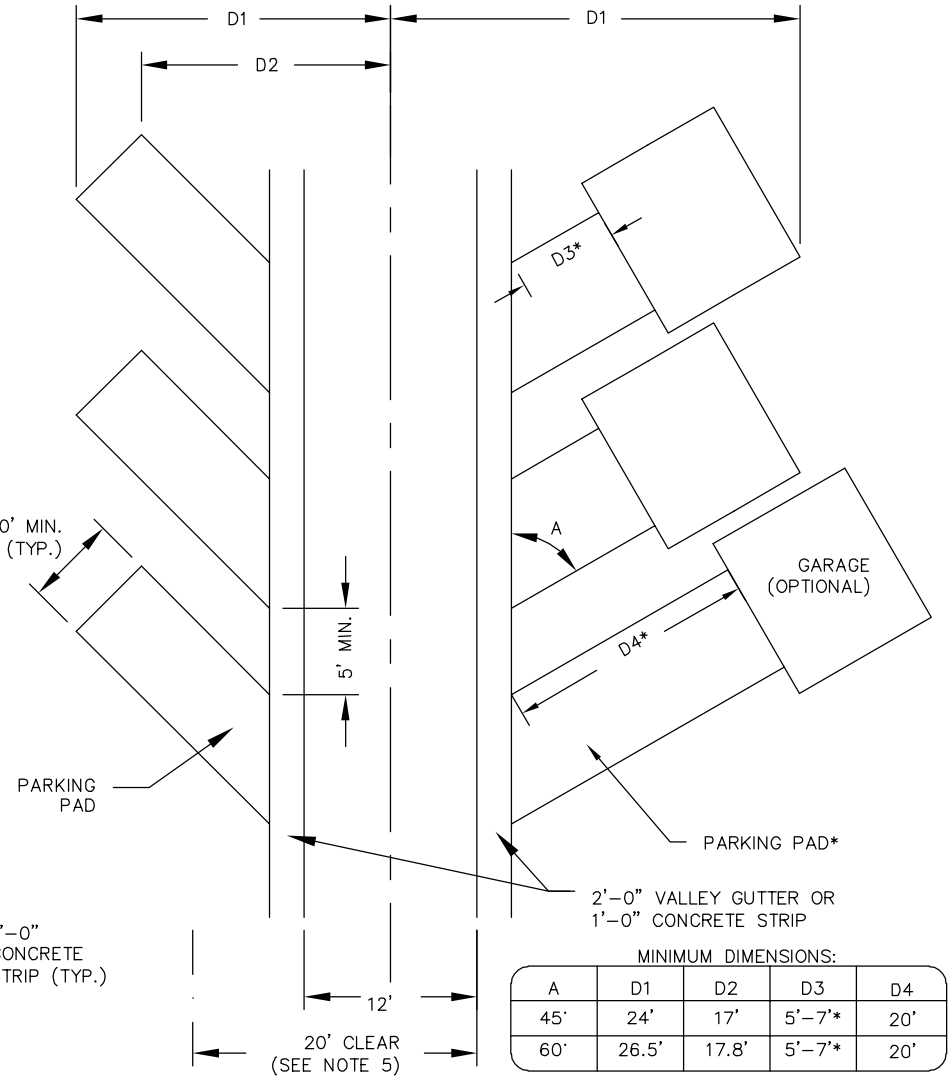
* WITH NO PARKING PAD, DIMENSION D3 IS REQUIRED TO BE MINIMUM 5' BUT NO GREATER THAN 7'. WITH PARKING PAD, DIMENSION D4 IS REQUIRED TO BE A MINIMUM OF 20'.



ALLEY WITH NORMAL CROWN



ALLEY WITH INVERSE CROWN



MINIMUM DIMENSIONS:

A	D1	D2	D3	D4
45°	24'	17'	5'-7'*	20'
60°	26.5'	17.8'	5'-7'*	20'

PLAN

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

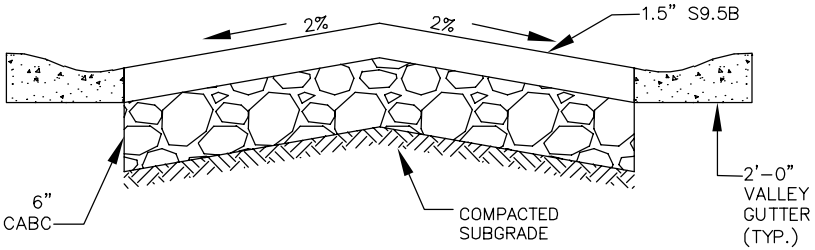
RESIDENTIAL ALLEY DETAIL ONE-WAY OPERATION

REV. DATE	
8/1/19	
STD. NO.	REV.
10.11A	3

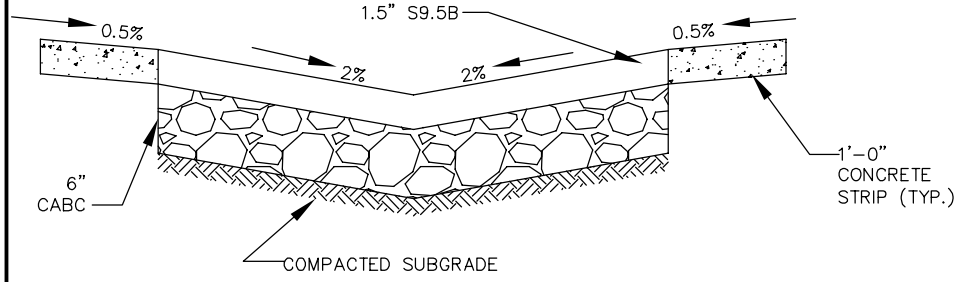
NOTES:

1. SUBGRADE SHALL BE COMPACTED TO PUBLIC STREET STANDARDS.
2. STORM DRAINAGE (NOT SHOWN) SHALL BE PROVIDED AS NECESSARY.
3. ALLEYS SHALL BE CONSIDERED PRIVATE EASEMENTS AND WILL NOT BE ACCEPTED FOR MAINTENANCE BY THE TOWN OF PINEVILLE.
4. DRIVEWAYS SHALL BE SEPARATED BY AT LEAST 5 FEET, OR GREATER IF REQUIRED BY PLANNING (LOT SIZE) REQUIREMENTS AND/OR N.C. BUILDING CODE.

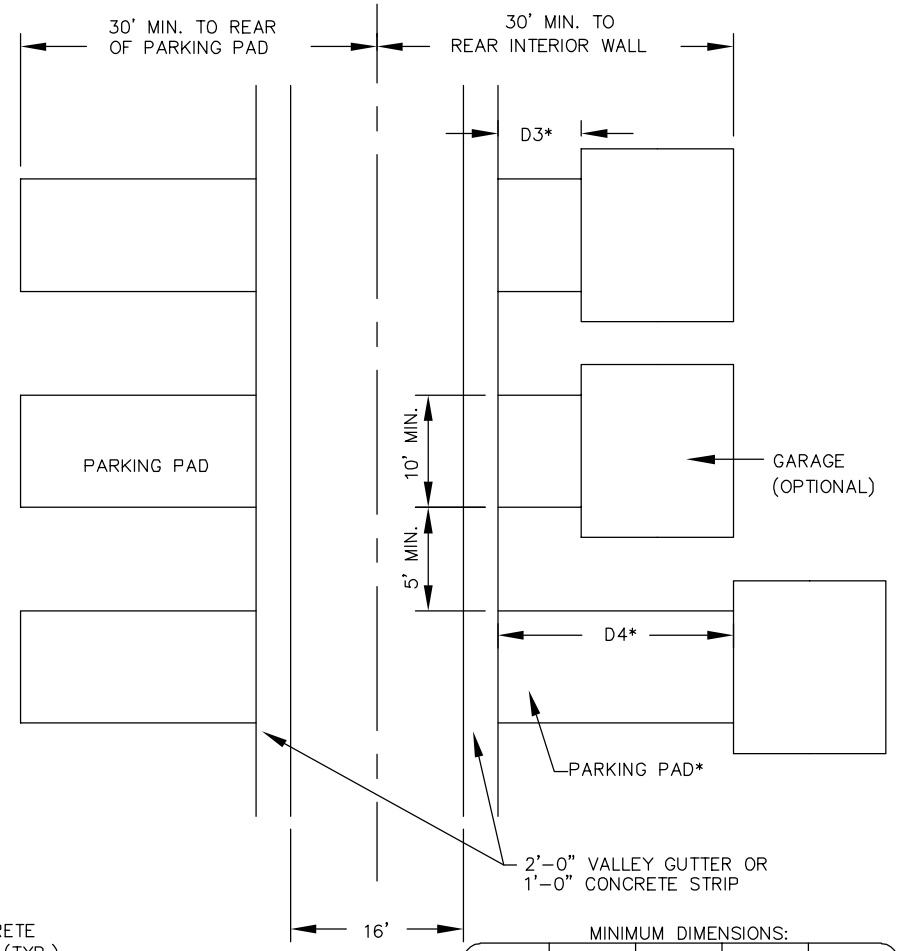
* WITH NO PARKING PAD, DIMENSION D3 IS REQUIRED TO BE MINIMUM 5' BUT NO GREATER THAN 7'. WITH PARKING PAD, DIMENSION D4 IS REQUIRED TO BE A MINIMUM OF 20'.



ALLEY WITH NORMAL CROWN



ALLEY WITH INVERSE CROWN



PLAN

MINIMUM DIMENSIONS:

A	D1	D2	D3	D4
45°	24'	17'	5'-7'*	20'
60°	26.5'	17.8'	5'-7'*	20'

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

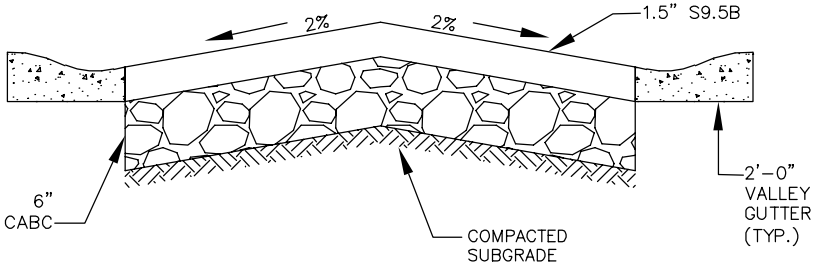
RESIDENTIAL ALLEY DETAIL
DOUBLE LOADED WITH TWO-WAY OPERATION

REV. DATE	
8/1/19	
STD. NO.	REV.
10.11B	3

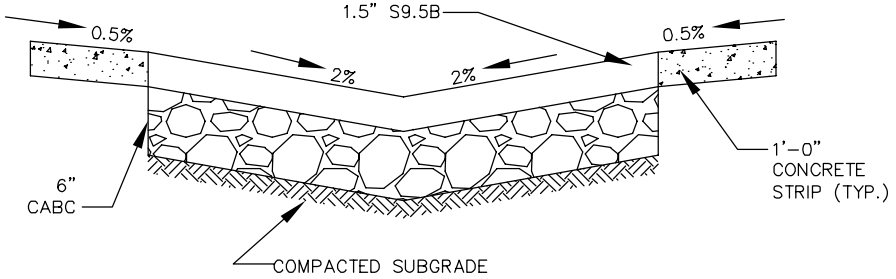
NOTES:

1. SUBGRADE SHALL BE COMPACTED TO PUBLIC STREET STANDARDS.
2. STORM DRAINAGE (NOT SHOWN) SHALL BE PROVIDED AS NECESSARY.
3. ALLEYS SHALL BE CONSIDERED PRIVATE EASEMENTS AND WILL NOT BE ACCEPTED FOR MAINTENANCE BY THE TOWN OF PINEVILLE.
4. DRIVEWAYS SHALL BE SEPARATED BY AT LEAST 5 FEET, OR GREATER IF REQUIRED BY PLANNING (LOT SIZE) REQUIREMENTS AND/OR N.C. BUILDING CODE.
5. NO CUT SLOPES, OBSTRUCTIONS, HEDGES, ETC. ON NON-LOADED SIDE OF ALLEY WITHIN 20 FEET OF LOADED SIDE EDGE OF PAVEMENT.

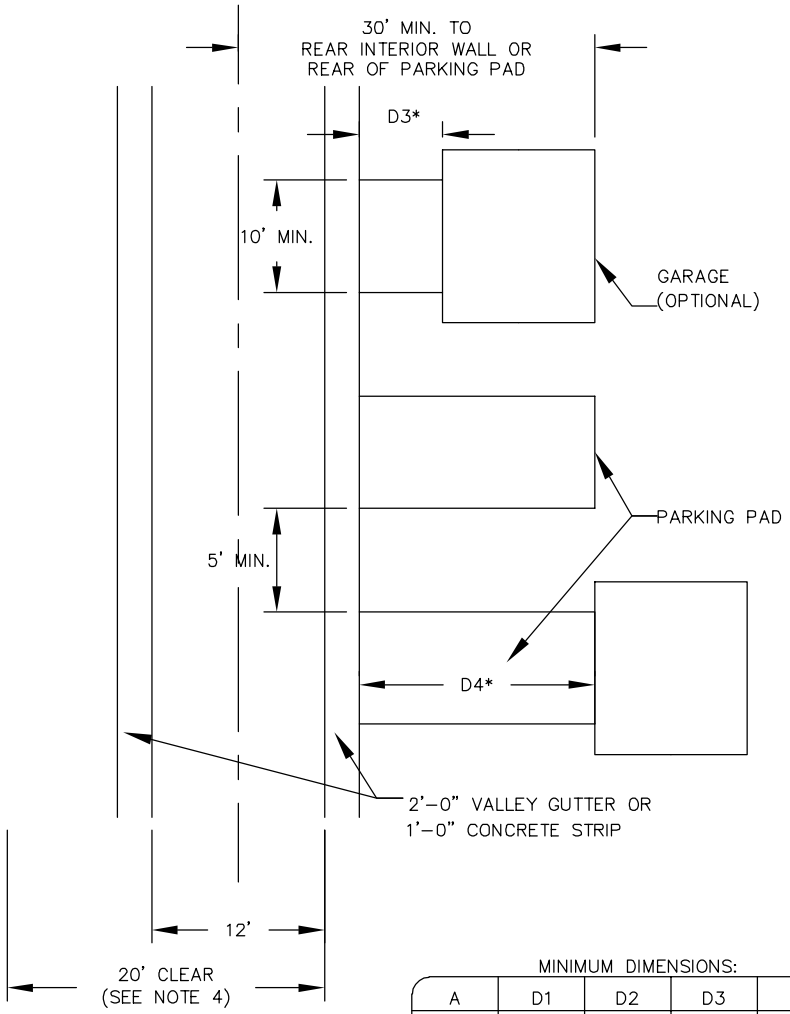
* WITH NO PARKING PAD, DIMENSION D3 IS REQUIRED TO BE MINIMUM 5' BUT NO GREATER THAN 7'. WITH PARKING PAD, DIMENSION D4 IS REQUIRED TO BE A MINIMUM OF 20'.



ALLEY WITH NORMAL CROWN



ALLEY WITH INVERSE CROWN



PLAN

MINIMUM DIMENSIONS:

A	D1	D2	D3	D4
45°	24'	17'	5'-7'*	20'
60°	26.5'	17.8'	5'-7'*	20'

NOT TO SCALE

Pineville NORTH CAROLINA

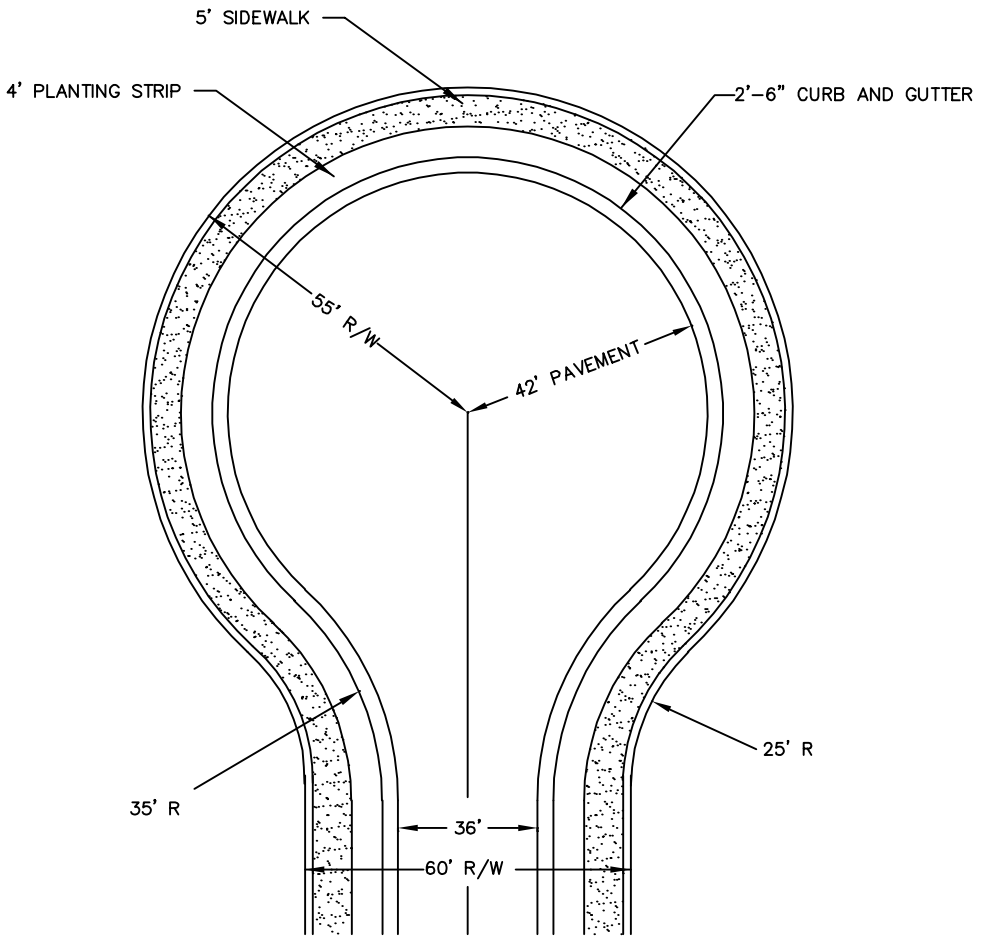
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RESIDENTIAL ALLEY DETAIL
SINGLE LOADED WITH TWO-WAY OPERATION

REV. DATE	
8/1/19	
STD. NO.	REV.
10.11C	3

NOTES:

1. ALTERNATIVE CUL-DE-SAC DESIGNS, INCLUDING ISLANDS SHALL BE SUBMITTED TO THE TOWN ENGINEER FOR REVIEW AND APPROVAL.
2. PAVEMENT SECTION SHALL CONFORM WITH THE DESIGN REQUIREMENTS FOR COMMERCIAL STREETS.
3. THE CROWN FOR PAVEMENT SHALL BE 1/4" PER FT FROM THE CENTER OF THE CUL-DE-SAC.
4. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS-OF-WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE.
5. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS-OF-WAY SHALL APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION.



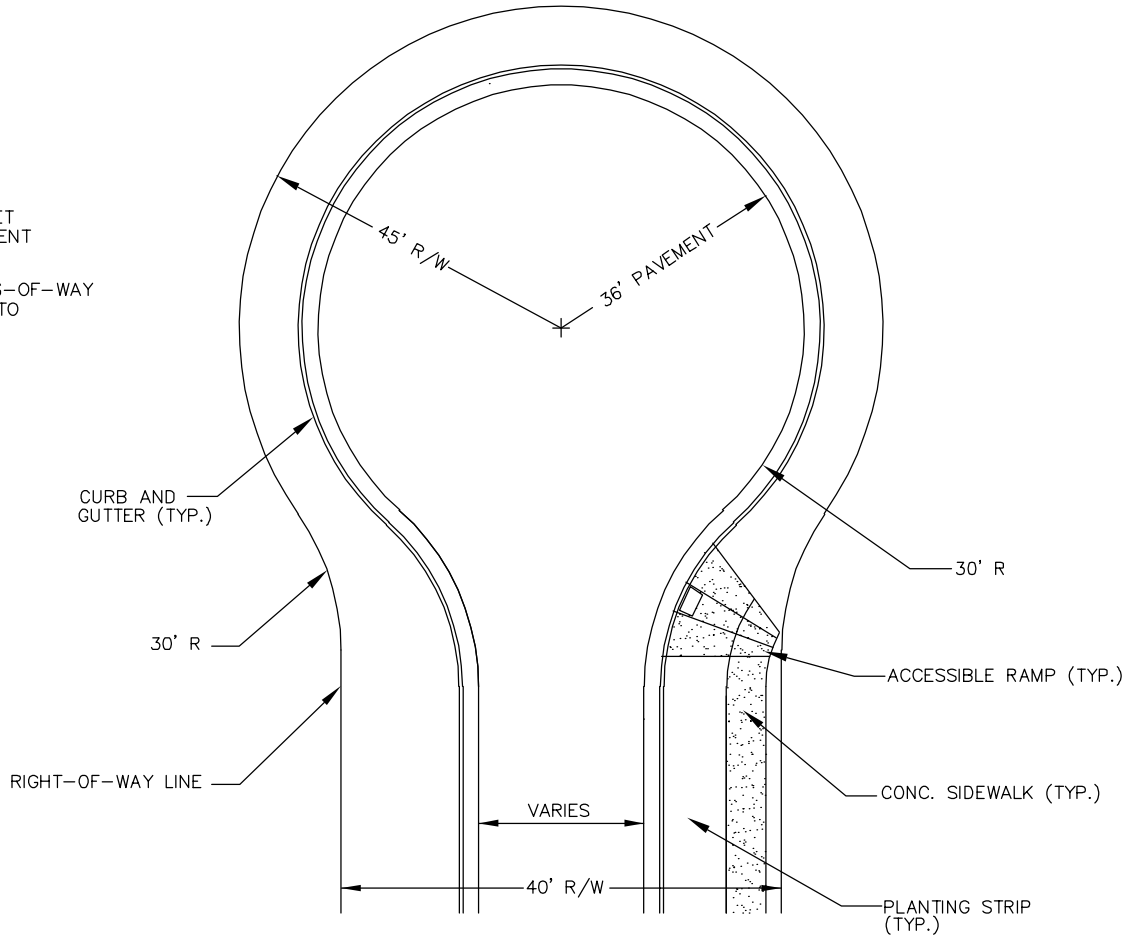
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	COMMERCIAL CUL-DE-SAC

REV. DATE	
STD. NO.	REV.
10.13	

NOTES:

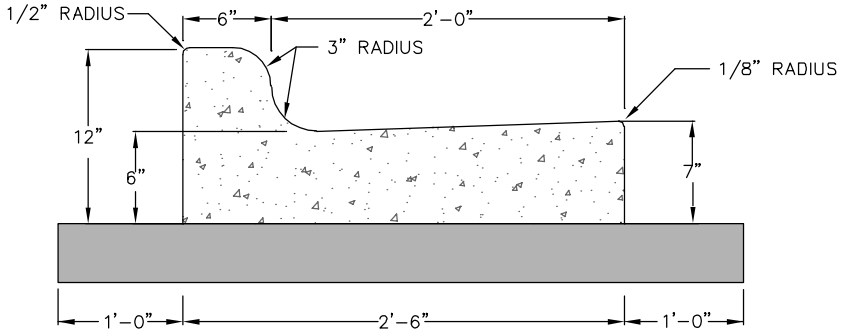
1. ALTERNATIVE CUL-DE-SAC DESIGNS, INCLUDING ISLANDS SHALL BE SUBMITTED TO THE TOWN ENGINEER FOR REVIEW AND APPROVAL.
2. SIDEWALK MAY BE REQUIRED TO EXTEND AROUND CUL-DE-SAC BULB WHERE PARKS OR SCHOOLS HAVE FRONTAGE TO THE END OF THE CUL-DE-SAC.
3. THE CROWN FOR PAVEMENT SHALL BE 1/4" PER FT FROM THE CENTER OF THE CUL-DE-SAC.
4. IRRIGATION SYSTEMS ARE NOT ALLOWED IN THE STREET RIGHTS-OF-WAY UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN ISSUED BY THE TOWN OF PINEVILLE
5. TREES PROPOSED IN THE PLANTING STRIPS OR RIGHTS-OF-WAY SHALL APPROVED BY THE TOWN OF PINEVILLE PRIOR TO INSTALLATION



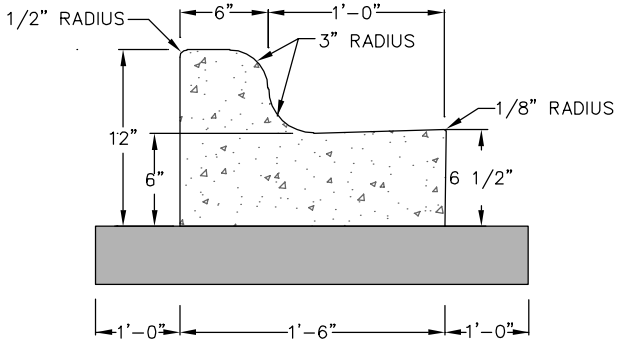
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	RESIDENTIAL CUL-DE-SAC

REV. DATE	
8/1/19	
STD. NO.	REV.
10.14	3

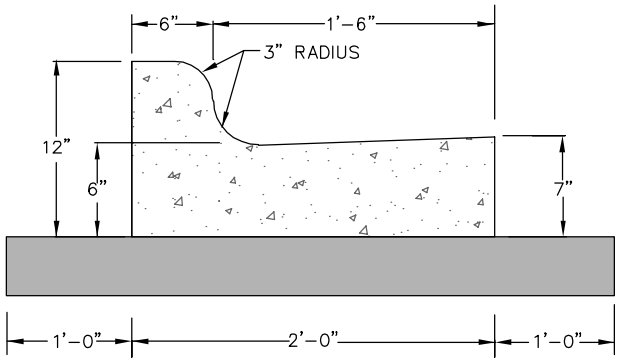


STANDARD 2'-6" CURB AND GUTTER

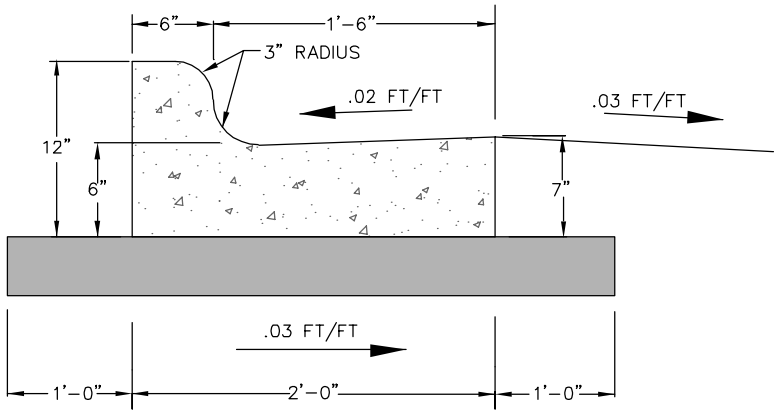


1'-6" STANDARD CURB AND GUTTER

NOTE:
4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100% ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION



2'-0" STANDARD CURB & GUTTER

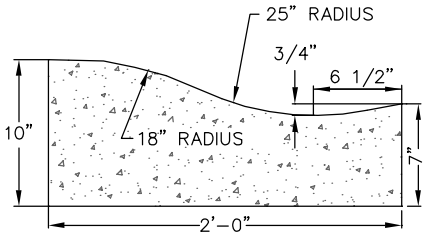


SLOPE FOR VARIABLE SUPERELEVATION RATES

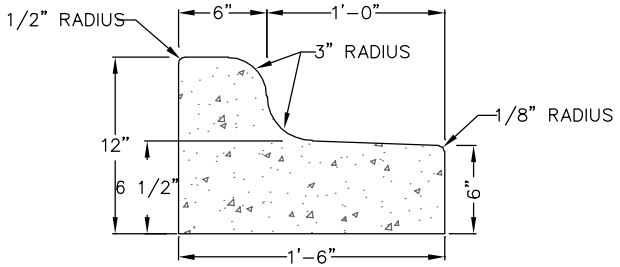
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	STANDARD CURB AND GUTTER

REV. DATE	
8/1/19	
STD. NO.	REV.
10.17A	3

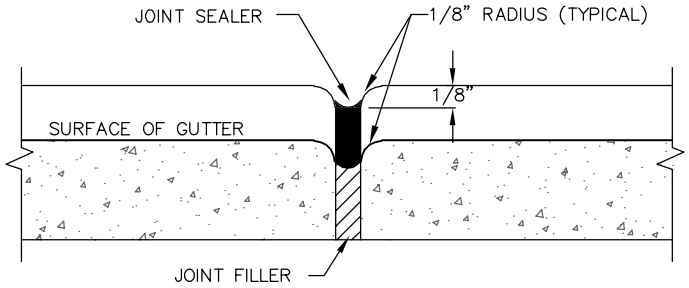


2'-0" VALLEY GUTTER

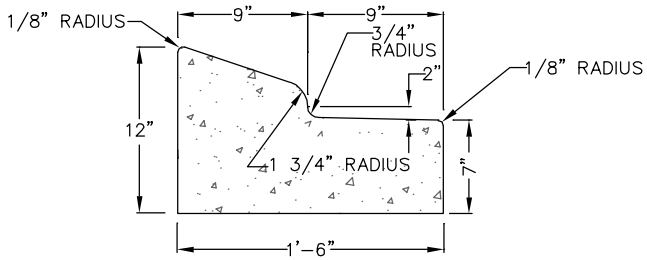


1'-6" MEDIAN CURB AND GUTTER

TO BE USED IN MEDIANS WHEN LANES ARE SLOPED FROM ISLAND OR AS SPECIFIED BY THE TOWN ENGINEER.



TRANSVERSE EXPANSION JOINT



1'-6" MOUNTABLE CURB AND GUTTER

TO BE USED IN MEDIANS ONLY: WHEN SPECIFIED BY THE APPROPRIATE TOWN ENGINEERING DEPT.

NOTES:

1. CONTRACTION JOINTS SHALL BE SPACED AT 10–FOOT INTERVALS. FOR VALLEY GUTTER, A 10–FOOT SPACING MAY BE USED WHEN A MACHINE IS USED. JOINT SPACING MAY BE ALTERED BY THE TOWN ENGINEER TO PREVENT UNCONTROLLED CRACKING.
2. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
3. ALL EXPANSION JOINTS SHALL BE SPACED AT 90–FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ABUTTING SIDEWALK.
4. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 P.S.I. IN 28 DAYS.
5. CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
6. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B OR 6" CABC COMPACTED TO 100%. COMPACT TOP 6" SUBGRADE TO 100%. ASPHALT BASE TO EXTEND 12" IN FRONT AND BACK OF CURB & GUTTER SECTION

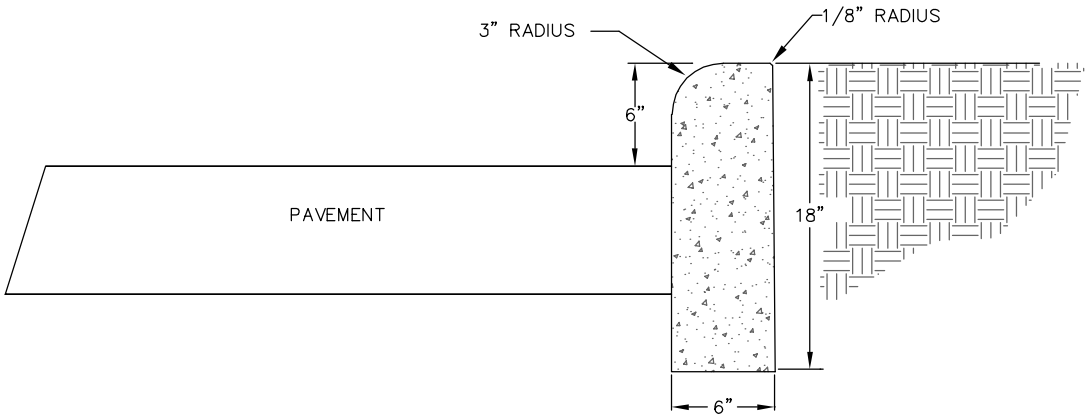
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

CURB AND GUTTER

REV. DATE	
8/1/19	
STD. NO.	REV.
10.17B	3



NOTES:

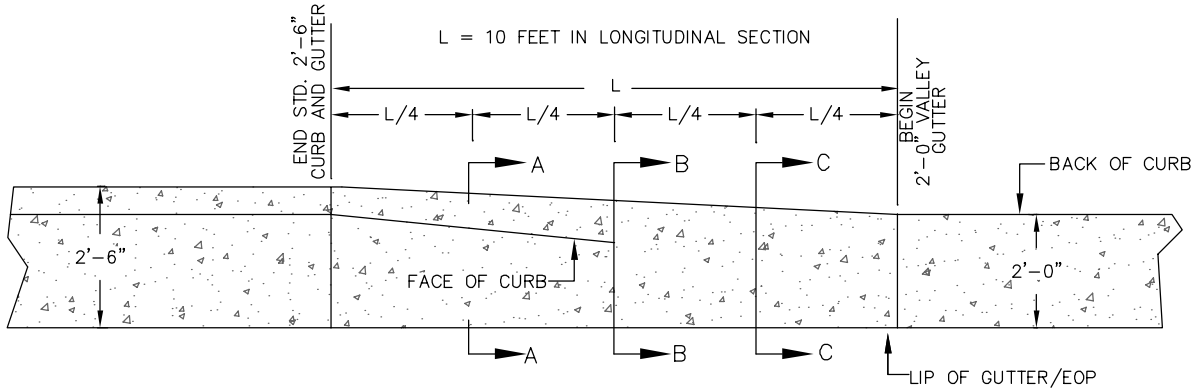
1. CONTRACTION JOINTS SHALL BE SPACED AT 10–FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
2. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
3. ALL EXPANSION JOINTS SHALL BE SPACED AT 90–FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ABUTTING SIDEWALK.
4. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 P.S.I. IN 28 DAYS.
5. CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
6. TOP 6" OF SUBGRADE BENEATH THE CURB SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY.
7. DETAIL MAY BE USED FOR PRIVATE DRIVES, PARKING LOTS, AND INTERIOR CIRCULATION DRIVE.

NOT TO SCALE

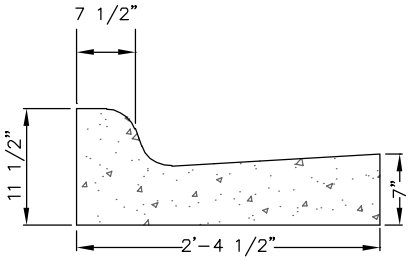
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	18" VERTICAL CURB

REV.	DATE

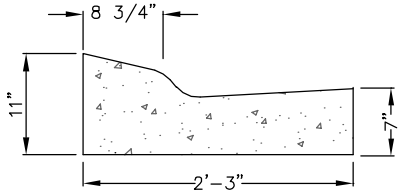
STD. NO.	REV.
10.18	



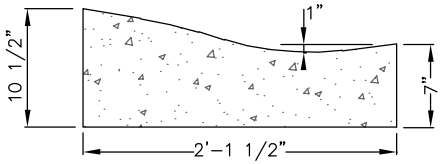
PLAN VIEW



SECTION A-A



SECTION B-B



SECTION C-C

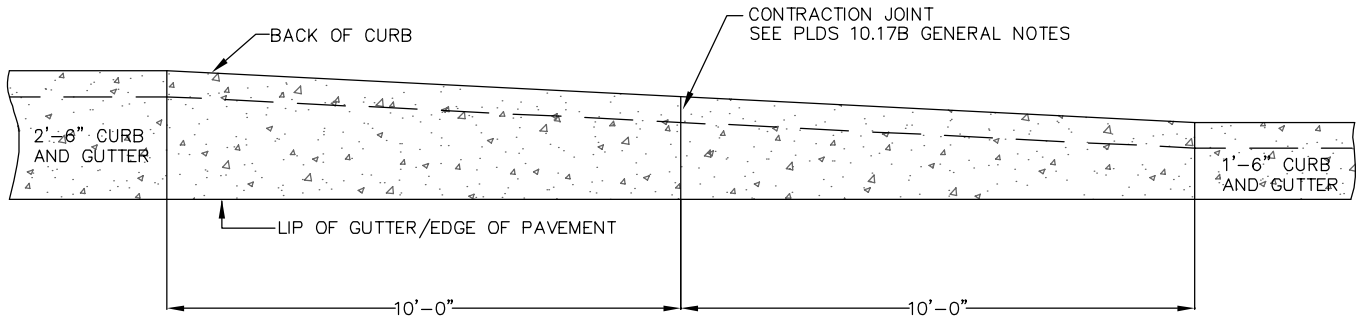
NOTES:

1. TRANSITION IS NOT TO BE LOCATED WITHIN THE CURB RADIUS.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CURB TRANSITION 2'-6" CURB AND GUTTER TO 2'-0" VALLEY GUTTER

REV. DATE	
STD. NO.	REV.
10.19	



PLAN VIEW

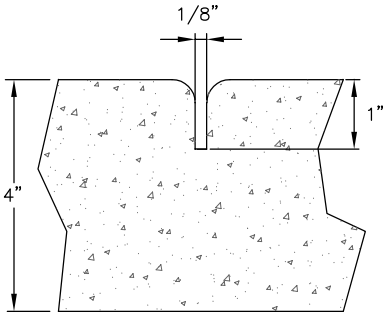
NOTES:

1. TRANSITION TO BE ALONG BACK OF CURB.

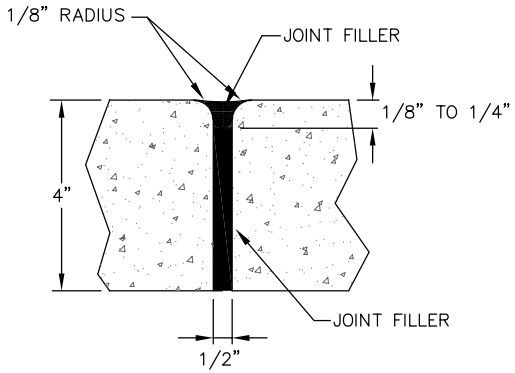
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CURB TRANSITION 2'-6" CURB AND GUTTER TO 1'-6" CURB AND GUTTER

REV. DATE	
STD. NO.	REV.
10.20	



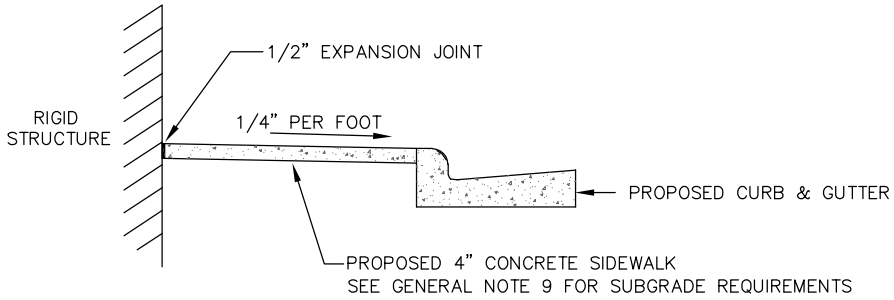
GROOVE JOINT IN SIDEWALK



TRANSVERSE EXPANSION JOINT IN SIDEWALK

GENERAL NOTES:

1. A GROOVE JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS NOT TO EXCEED 50' AND MATCHING EXPANSION/CONSTRUCTION JOINT IN ADJACENT CURB. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
2. SIDEWALK AT DRIVEWAY ENTRANCES TO BE 6" THICK.
3. WIDTH OF SIDEWALK ON THOROUGHFARE STREETS SHALL BE A MINIMUM OF 5'. WIDTH OF SIDEWALKS IN THE CENTRAL BUSINESS DISTRICT WILL BE DETERMINED BY THE TOWN PLANNING DEPT..
4. WIDTH OF SIDEWALKS ON NON-THOROUGHFARE STREETS SHALL BE A MINIMUM OF 5'.
5. SIDEWALK TO BE POURED TO END OF RADIUS AT INTERSECTING STREETS.
6. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 PSI. IN 28 DAYS.
7. ZONING CONDITIONS MAY REQUIRE ADDITIONAL WIDTH SIDEWALKS WHICH SHALL SUPERSEDE THESE STANDARD DIMENSIONS SHOWN.
8. TRANSVERSE EXPANSION JOINTS SHALL BE FILLED WITH AN ELASTIC EPOXY FROM THE FILLER TO FLUSH WITH THE TOP OF THE SIDEWALK.
9. CONCRETE SHALL BE PLACED ON MINIMUM 6" ABC STONE COMPACTED TO 95% DENSITY, OR PLACED ON SUBGRADE COMPACTED TO 95% DENSITY WITH GEOGRID 1100 MAT.

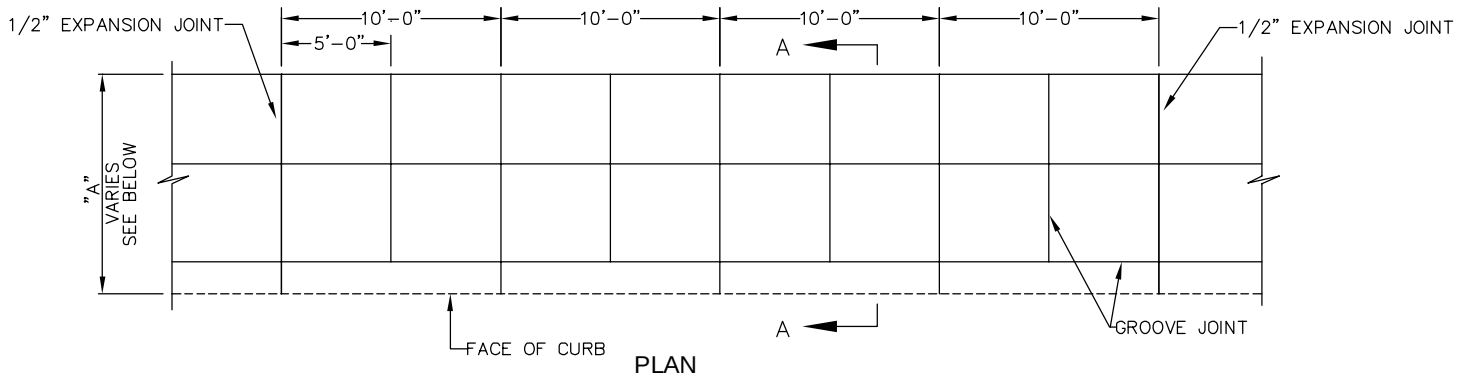


DETAILS SHOWING EXPANSION JOINTS IN CONCRETE SIDEWALK

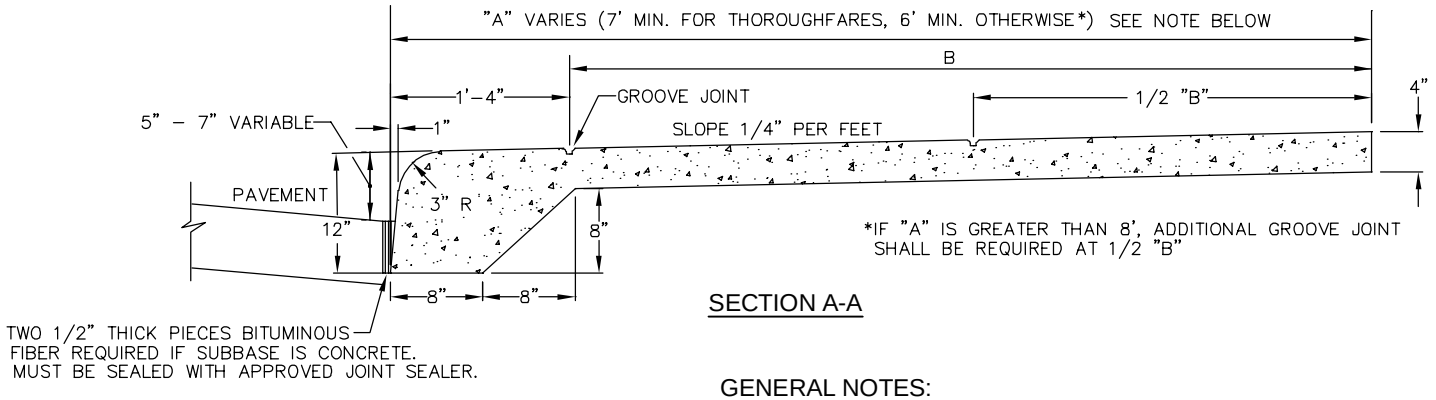
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CONCRETE SIDEWALKS

REV. DATE	
2/29/20	
STD. NO.	REV.
10.22	4



PLAN



SECTION A-A

GENERAL NOTES:

1. A GROOVE JOINT 1" DEEP WITH 1/3" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 40' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
2. ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.
3. SEE PLDS 10.22 FOR DETAIL OF EXPANSION JOINT AND GROOVE JOINT.
4. SEE PLDS 10.26 FOR DETAIL OF DRIVEWAY.
5. MONOLITHIC CURB AND SIDEWALK TO BE CONSTRUCTED ONLY WHEN REPLACING GRANITE CURB OR AT LOCATIONS APPROVED BY THE APPROPRIATE TOWN ENGINEER.

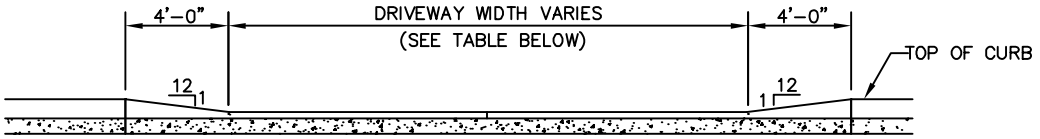
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	MONOLITHIC CONCRETE CURB AND SIDEWALK

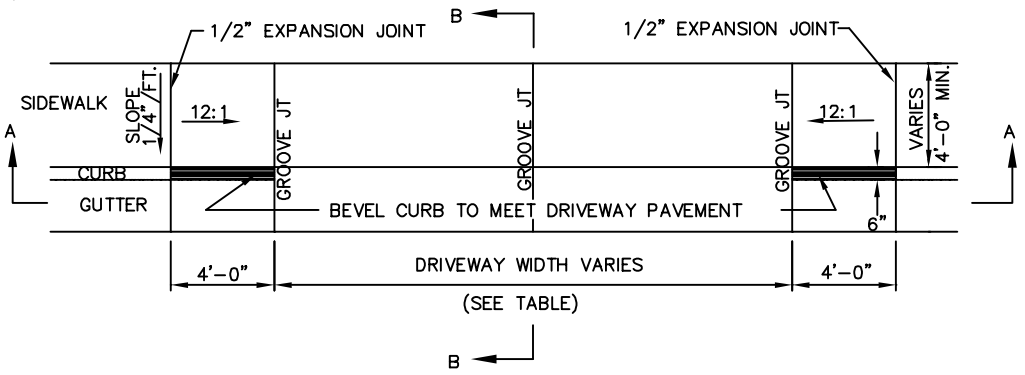
REV. DATE	
STD. NO.	REV.
10.23	

NOTE:

1. 1/2" EXPANSION JOINTS REQUIRE INSTALLATION OF ONE 1/2" THICK PIECE OF BITUMINOUS FIBER THROUGH THE ENTIRE SLAB.
2. TO LIMIT STORM WATER FLOW DOWN DRIVEWAYS, USE PLDS 10.24C FOR DRIVEWAYS NEAR LOW POINTS.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY CDOT ON GRADES EXCEEDING WHAT ARE SHOWN.



SECTION A - A



PLAN

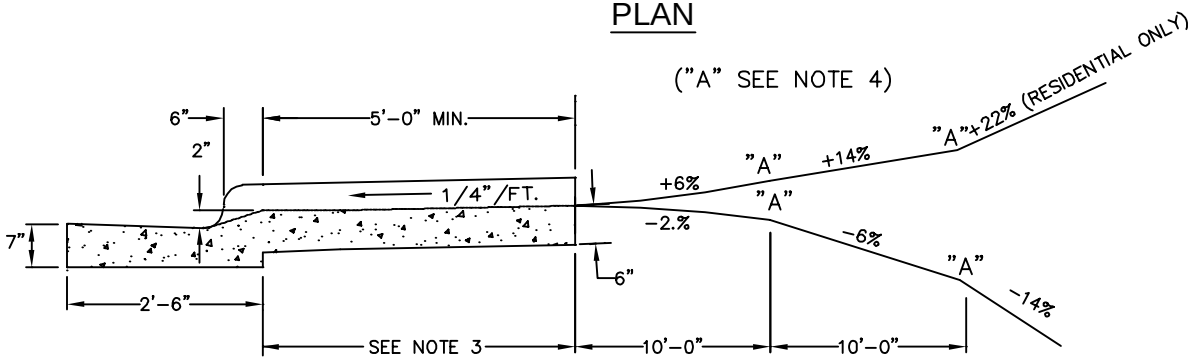
GENERAL NOTES:

ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.

ALL CURB, CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT.
SEE PLDS 10.17B FOR DETAIL OF EXPANSION JOINT AND GROOVE JOINT.

DRIVEWAY WIDTH		
TYPE DRIVEWAY	MINIMUM	MAXIMUM
TYPE I–RESIDENTIAL:		
LOCAL/COLLECTOR	10'	30'
THOROUGHFARE*	15'	30'
ONE–WAY TYPE II COMMERCIAL	20'	30'
TWO–WAY TYPE II COMMERCIAL	26'	50'

* MUST PROVIDE ON–SITE TURNAROUND



SECTION B - B

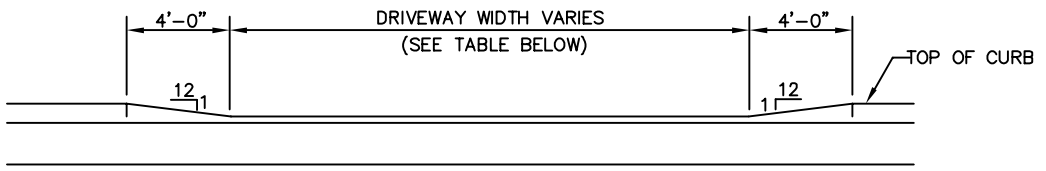
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	COMMERCIAL TYPE II AND RESIDENTIAL TYPE I DROP CURB DRIVEWAY WITH SIDEWALK ABUTTING CURB (2'-6" CURB AND GUTTER)

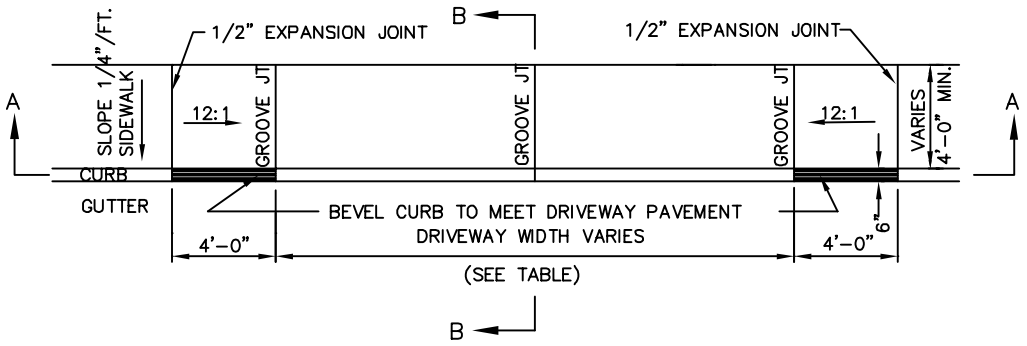
REV. DATE	
STD. NO.	REV.
10.24A	

NOTE:

1. 1/2" EXPANSION JOINTS REQUIRE INSTALLATION OF ONE 1/2" THICK PIECE OF BITUMINOUS FIBER THROUGH THE ENTIRE SLAB.
2. TO LIMIT STORM WATER FLOW DOWN DRIVEWAYS, USE STANDARD 10.24C FOR DRIVEWAYS NEAR LOW POINTS.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.



SECTION A - A



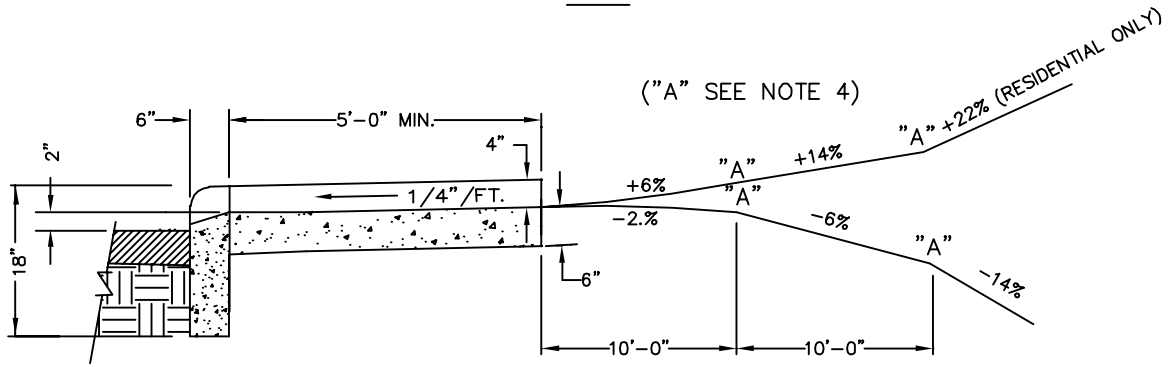
PLAN

GENERAL NOTES:

1. ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.
2. ALL CURB, CURB AND GUTTER AND SIDEWALKS ARE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR DETAIL OF EXPANSION JOINT AND GROOVE JOINT.

DRIVEWAY WIDTH		
TYPE DRIVEWAY	MINIMUM	MAXIMUM
TYPE I–RESIDENTIAL:		
LOCAL/COLLECTOR	10'	30'
THOROUGHFARE*	15'	30'
ONE–WAY TYPE II COMMERCIAL	20'	30'
TWO–WAY TYPE II COMMERCIAL	26'	50'

* MUST PROVIDE ON–SITE TURNAROUND



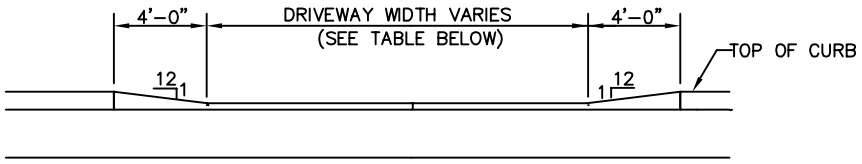
SECTION B - B

NOT TO SCALE

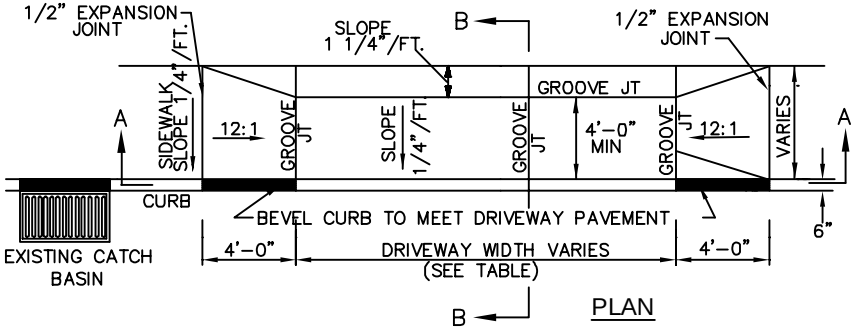
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

COMMERCIAL TYPE II AND RESIDENTIAL TYPE I DROP CURB DRIVEWAY WITH SIDEWALK ABUTTING CURB (6" X 18" VERTICAL CURB)

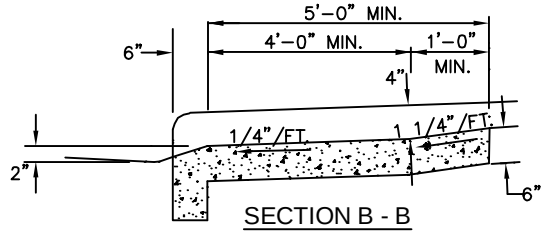
REV. DATE	
STD. NO.	REV.
10.24B	



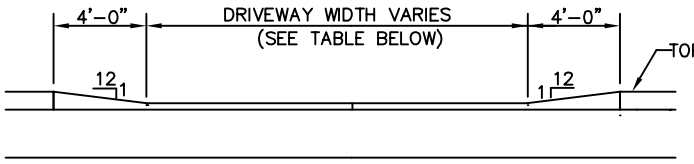
SECTION A - A



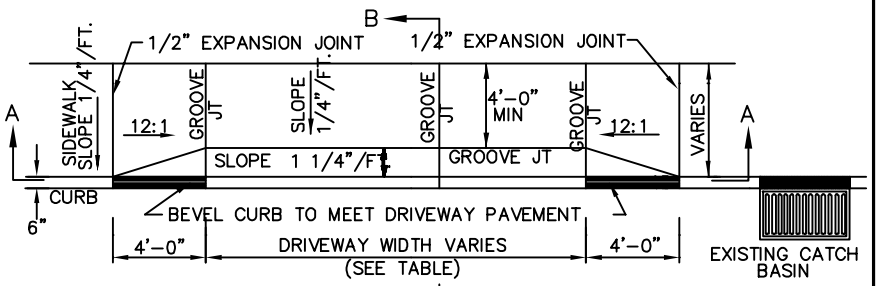
B PLAN



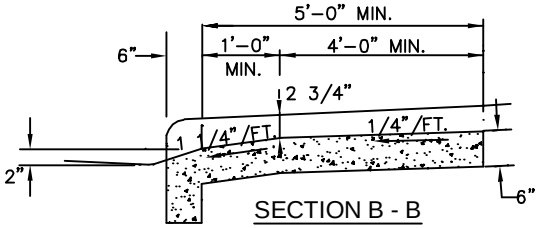
SECTION B - B



SECTION A - A



B PLAN



SECTION B - B

DRIVEWAY WIDTH		
TYPE DRIVEWAY	MINIMUM	MAXIMUM
TYPE I–RESIDENTIAL: LOCAL/COLLECTOR THOROUGHFARE*	 10' 15'	 30' 30'
ONE–WAY TYPE II COMMERCIAL	20'	30'
TWO–WAY TYPE II COMMERCIAL	26'	50'

* MUST PROVIDE ON–SITE TURNAROUND

NOTES

1. USED AT LOW POINTS IN ROADWAYS WITH 2'–6" CURB AND GUTTER OR 6" X 18" CURB AS DIRECTED BY TOWN ENGINEER.
2. SEE PLDS 10.24A & 10.24B FOR ADDITIONAL DETAILS.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.

NOT TO SCALE

Pineville NORTH CAROLINA

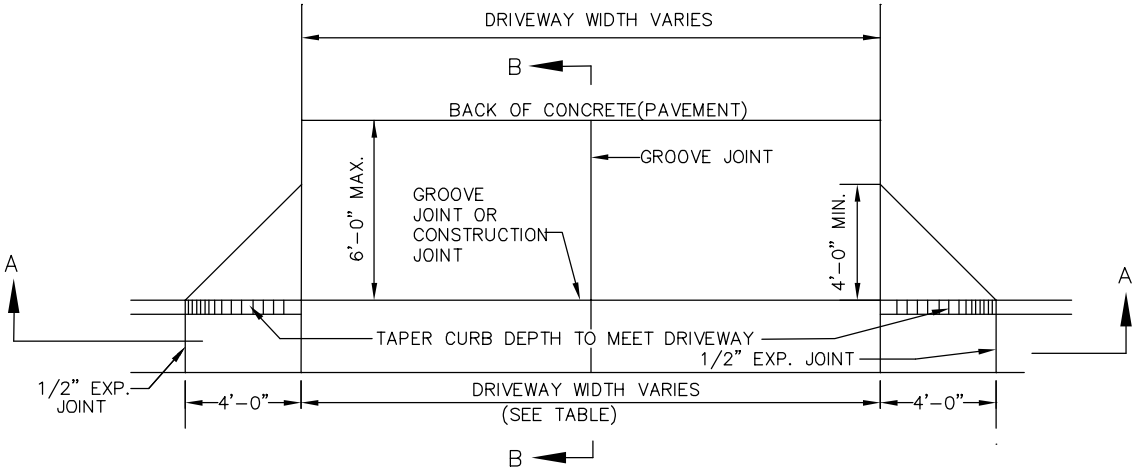
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

COMMERCIAL AND RESIDENTIAL DROP CURB DRIVEWAY WITH SIDEWALK ABUTTING CURB

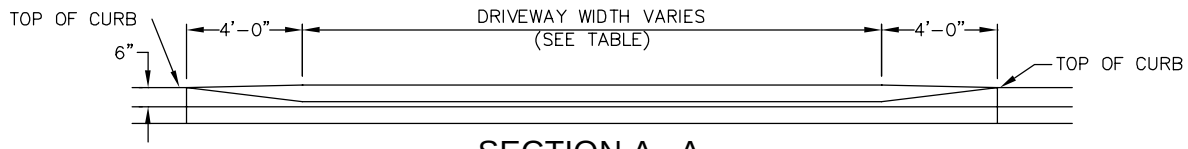
REV. DATE	
STD. NO.	REV.
10.24C	

NOTES:

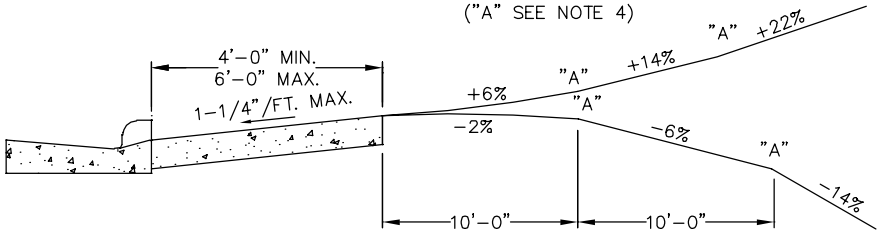
1. ALL CONCRETE TO BE 3600 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.



PLAN VIEW



SECTION A - A



SECTION B - B

DRIVEWAY WIDTH		
DRIVEWAY TYPE	MINIMUM	MAXIMUM
LOCAL/COLLECTOR	10'	30'
THOROUGHFARE*	15'	30'

NOT TO SCALE

Pineville NORTH CAROLINA

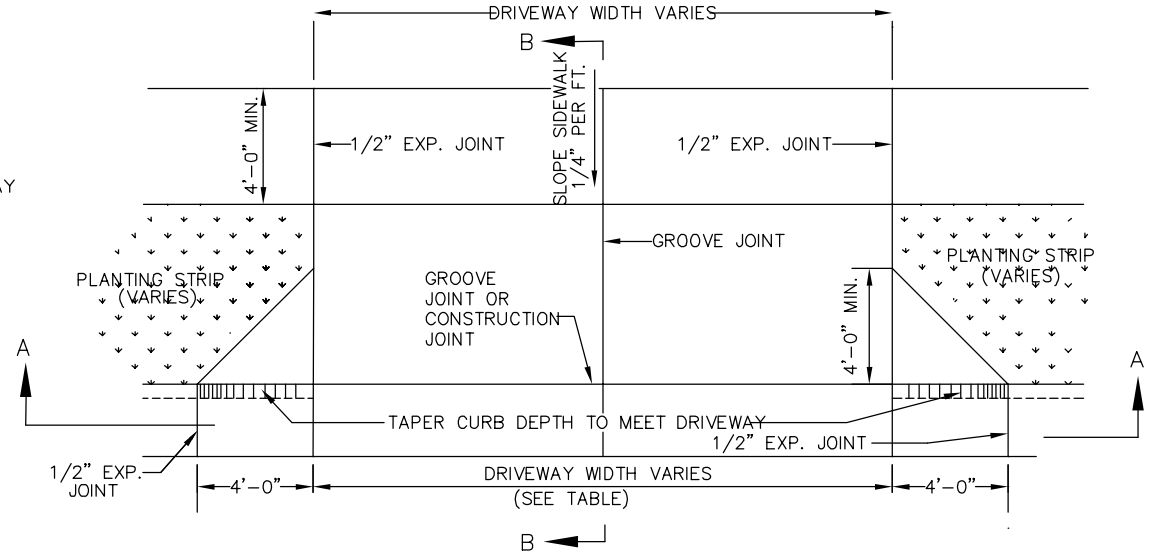
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

DROP CURB DRIVEWAY
WITHOUT PLANTING STRIP

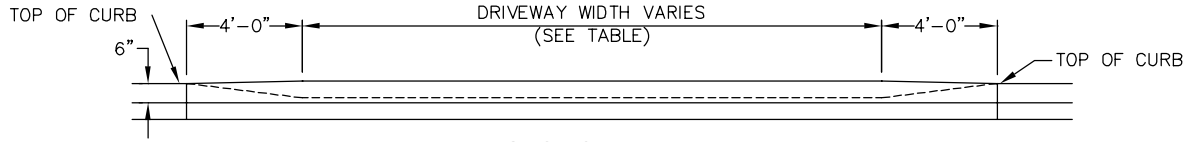
REV. DATE	
8/1/19	
STD. NO.	REV.
10.25A1	3

NOTES:

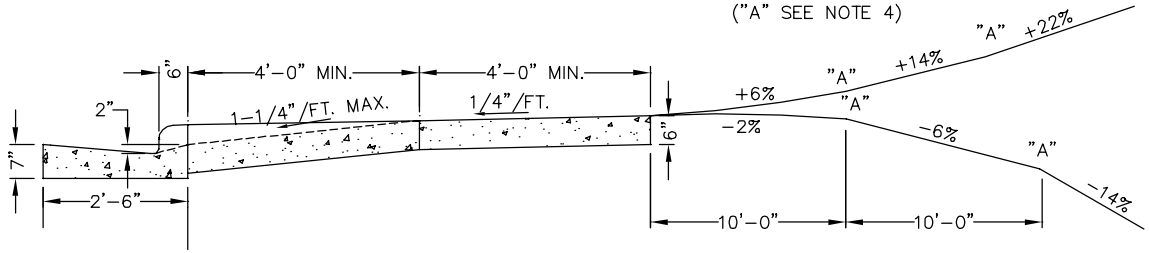
1. ALL CONCRETE TO BE 3600 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.



PLAN VIEW



SECTION A - A



SECTION B - B

DRIVEWAY WIDTH		
DRIVEWAY TYPE	MINIMUM	MAXIMUM
LOCAL/COLLECTOR	10'	30'
THOROUGHFARE*	15'	30'

* MUST PROVIDE ON-SITE TURNAROUND

NOT TO SCALE

Pineville NORTH CAROLINA

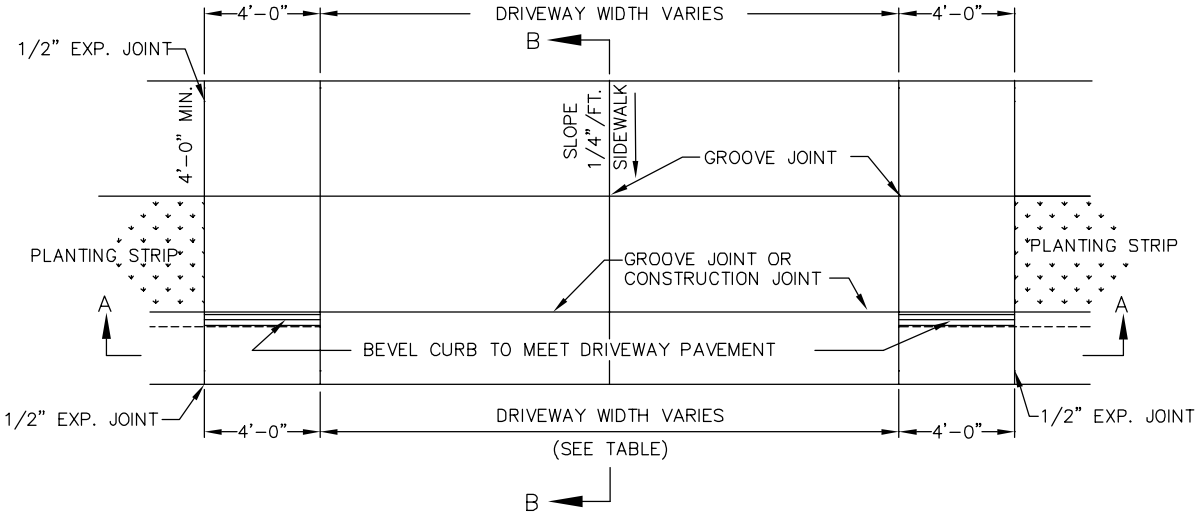
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RESIDENTIAL DROP CURB TYPE I DRIVEWAY WITH PLANTING STRIP (2'-6" CURB AND GUTTER)

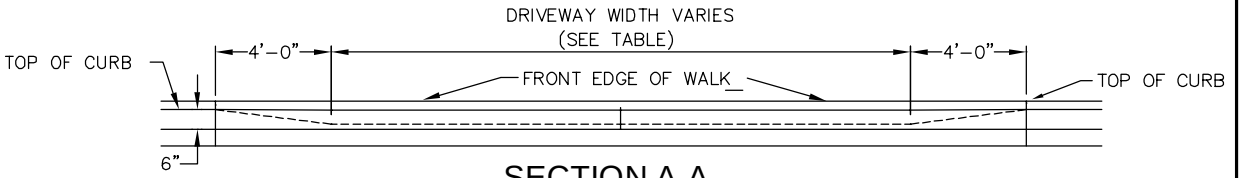
REV. DATE	
8/1/19	
STD. NO.	REV.
10.25A	3

NOTES:

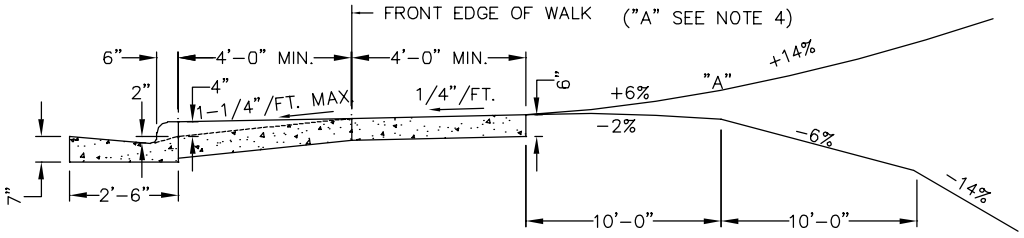
1. ALL CONCRETE TO BE 3600 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.



PLAN VIEW



SECTION A-A



SECTION B - B

DRIVEWAYS CLASSIFICATION		
TYPE DRIVEWAYS	MINIMUM	MAXIMUM
ONE-WAY TYPE II - COMMERCIAL	20'	30'
TWO-WAY TYPE II - COMMERCIAL	26'	50'*

* NEED MORE THAN ONE CONTRACTION JOINT IN CENTER.

NOT TO SCALE

Pineville NORTH CAROLINA

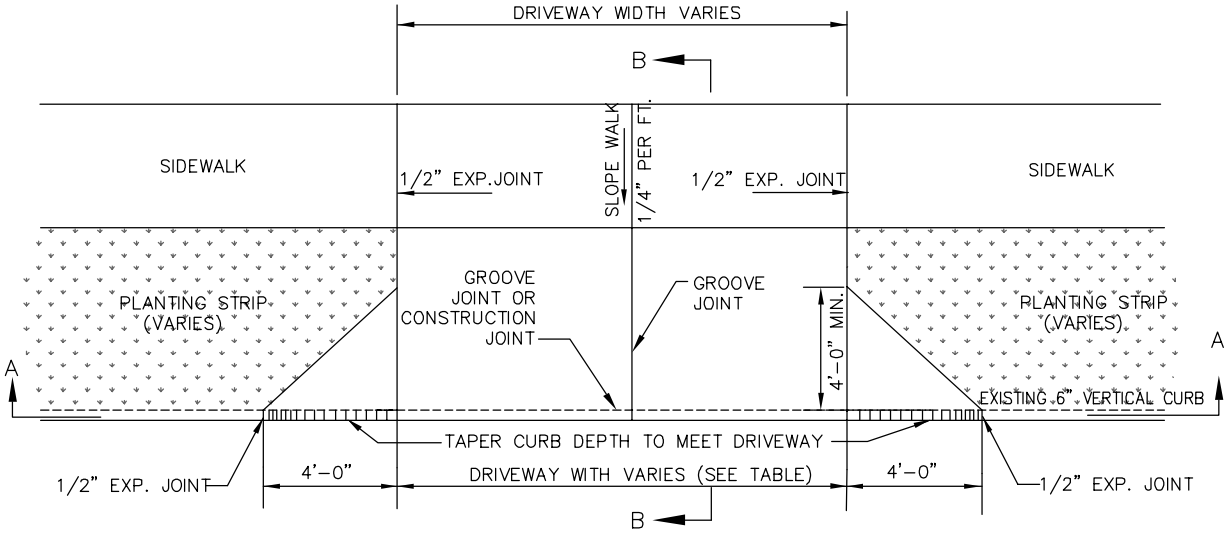
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

COMMERCIAL DROP CURB TYPE II DRIVEWAY WITH PLANTING STRIP (2'-6" CURB AND GUTTER)

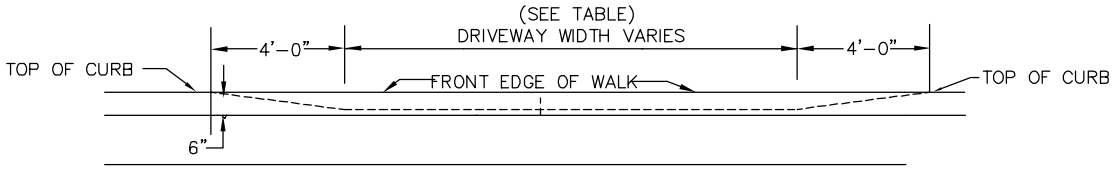
REV. DATE	
8/1/19	
STD. NO.	REV.
10.25B	3

NOTES:

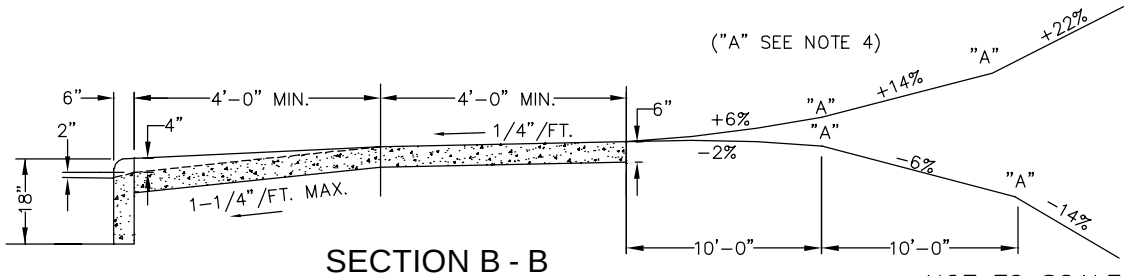
1. ALL CONCRETE TO BE 3600 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.



PLAN VIEW



SECTION A-A (ALONG FLOW LINE)



SECTION B - B

NOT TO SCALE

DRIVEWAY WIDTH		
DRIVEWAY TYPE	MINIMUM	MAXIMUM
LOCAL/COLLECTOR	10'	30'
THOROUGHFARE*	15'	30'

* MUST PROVIDE ON-SITE TURNAROUND

Pineville NORTH CAROLINA

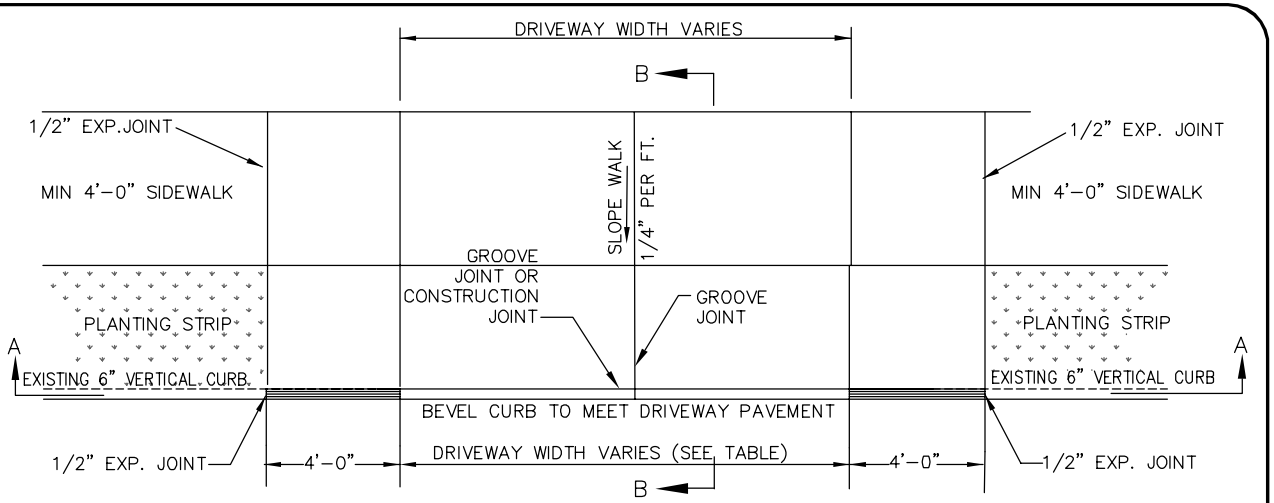
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RESIDENTIAL DROP CURB TYPE I DRIVEWAY WITH PLANTING STRIP (6" X 18" VERTICAL CURB)

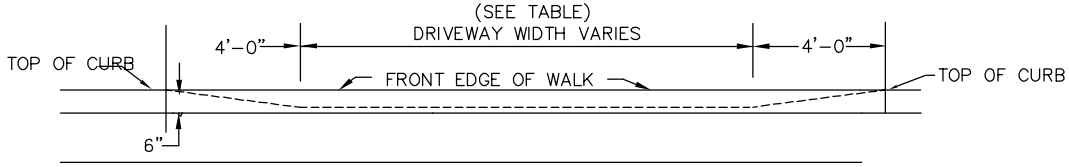
REV. DATE	
8/1/19	
STD. NO.	REV.
10.25C	3

NOTES:

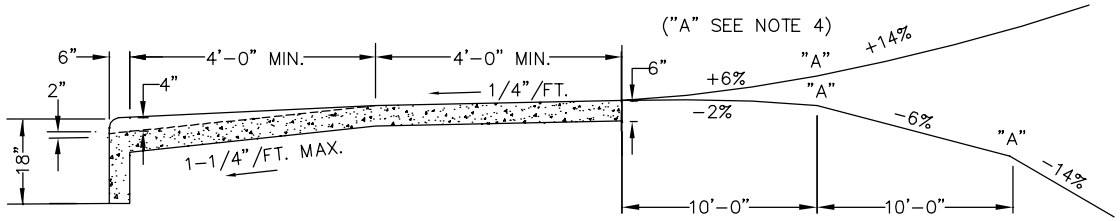
1. ALL CONCRETE TO BE 3600 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.



PLAN VIEW



SECTION A-A (ALONG FLOW LINE)



SECTION B - B

DRIVEWAYS CLASSIFICATION		
TYPE DRIVEWAYS	MINIMUM	MAXIMUM
ONE-WAY TYPE II - COMMERCIAL	20'	30'
TWO-WAY TYPE II - COMMERCIAL	26'	50'*

* NEED MORE THAN ONE CONTRACTION JOINT IN CENTER.

NOT TO SCALE

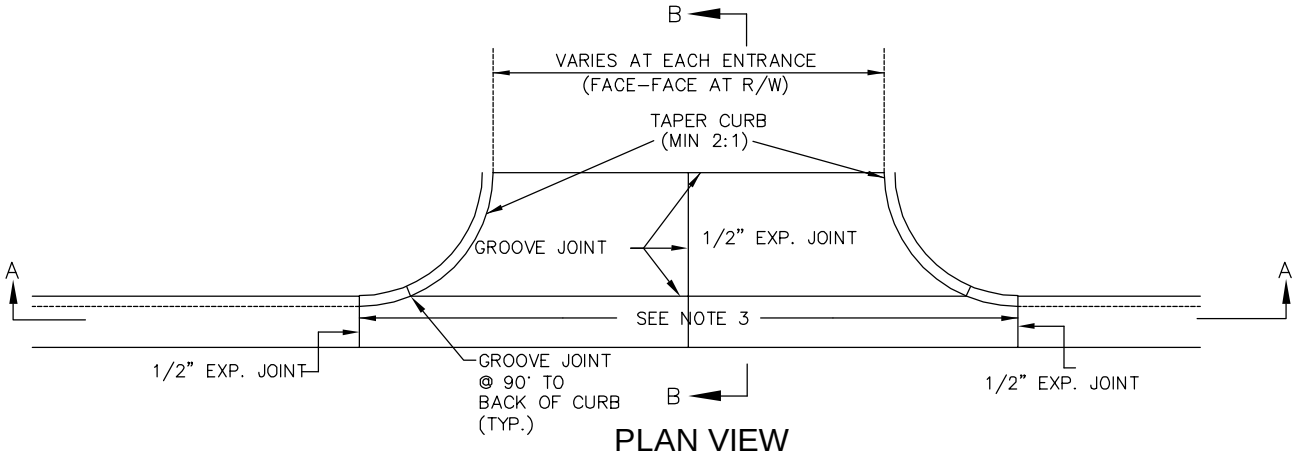
Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

COMMERCIAL DROP CURB TYPE II DRIVEWAY WITH PLANTING STRIP (6" X 18" VERTICAL CURB)

REV. DATE	
8/1/19	
STD. NO.	REV.
10.25D	3

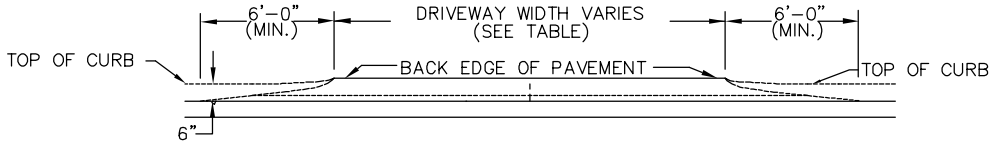
DRIVEWAY DIMENSIONS		
OPERATION/RADIUS	MINIMUM	MAXIMUM
ONE-WAY WITH 6-12 FT. RADII	20'	30'
ONE-WAY WITH 13+ FT. RADII	15'	25'
TWO-WAY WITH 6-12 FT. RADII	26'	50'
TWO-WAY WITH 13+ FT. RADII	22'	40'



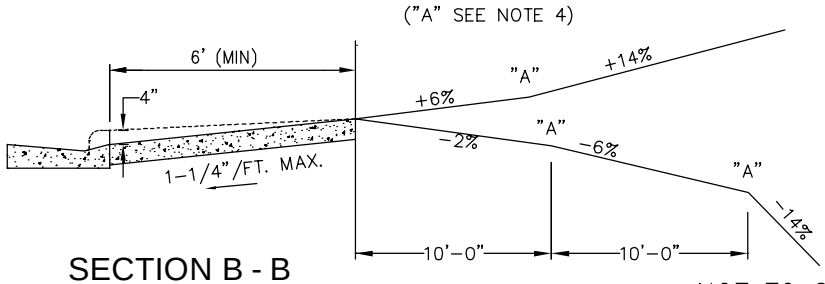
PLAN VIEW

NOTES:

1. ALL CONCRETE TO BE 3600 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.



SECTION A-A (ALONG FLOW LINE)



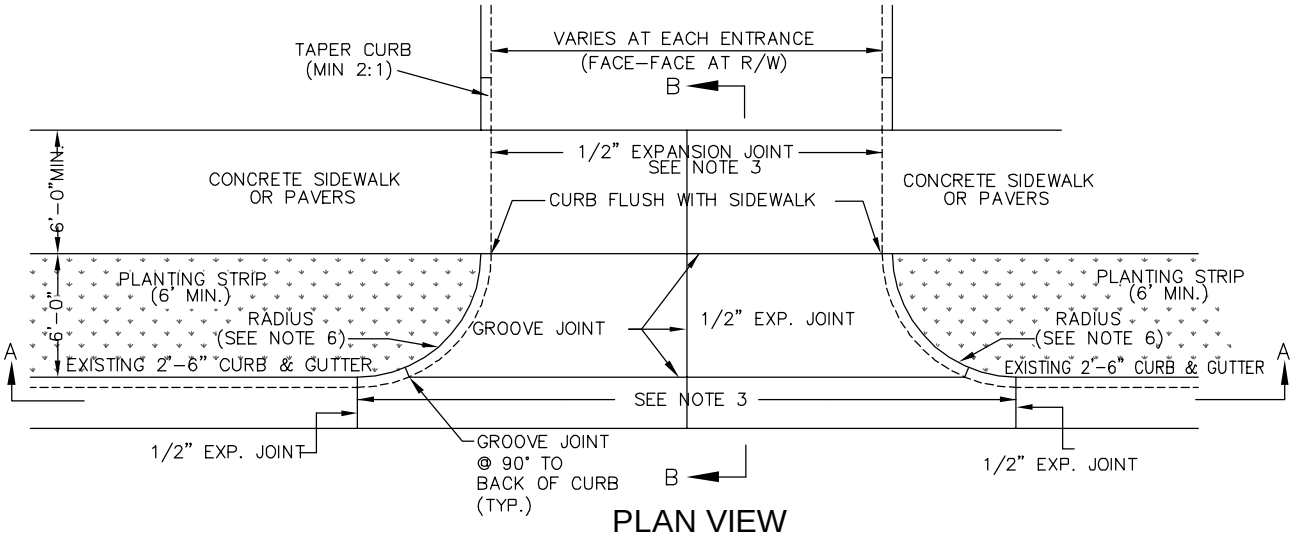
SECTION B - B

NOT TO SCALE

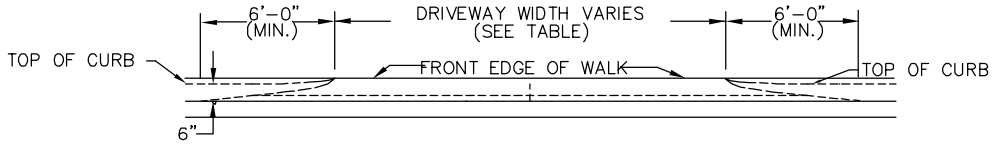
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	MODIFIED DRIVEWAY WITHOUT PLANTING STRIP

REV. DATE	
8/1/19	
STD. NO.	REV.
10.25E1	3

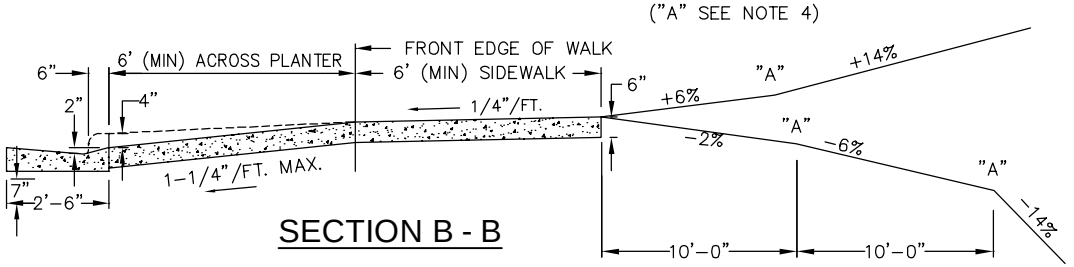
DRIVEWAY DIMENSIONS		
OPERATION/RADIUS	MINIMUM	MAXIMUM
ONE-WAY WITH 6-12 FT. RADII	20'	30'
ONE-WAY WITH 13+ FT. RADII	15'	25'
TWO-WAY WITH 6-12 FT. RADII	26'	50'
TWO-WAY WITH 13+ FT. RADII	22'	40'



PLAN VIEW



SECTION A-A (ALONG FLOW LINE)



SECTION B - B

NOT TO SCALE

NOTES:

1. ALL CONCRETE TO BE 3600 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.
6. RADII MUST BE MINIMUM 6 FEET OR THE WIDTH OF THE PLANTING STRIP, WHICHEVER IS GREATER. RADII GREATER THAN THESE MINIMUMS MAY BE REQUIRED BY TOWN ENGINEER ON A CASE-BY-CASE BASIS. FOR RADII GREATER THAN 6 FEET, THE RADII ARE TO CONTINUE AS A BAND AT-GRADE THROUGH THE SIDEWALK.

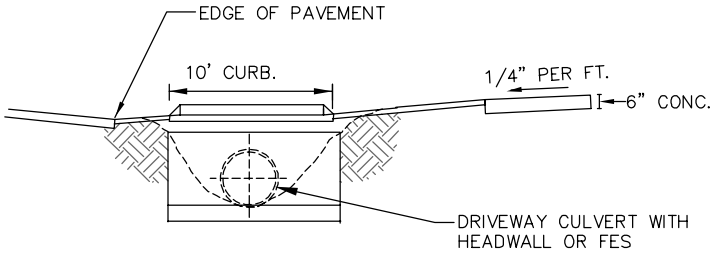
Pineville
NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

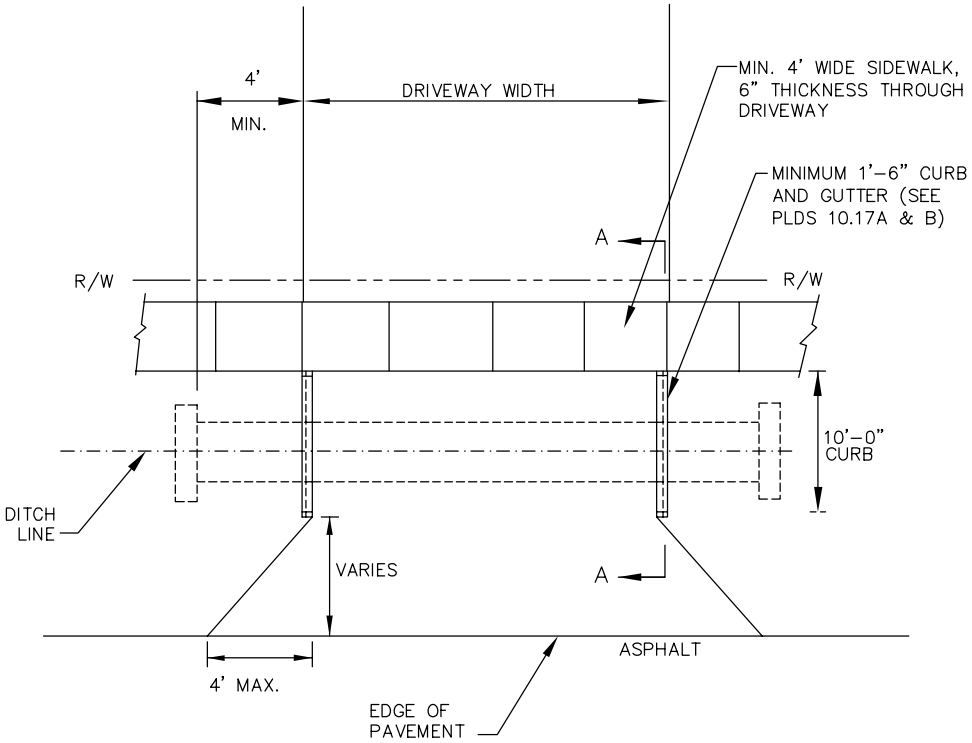
MODIFIED TYPE II DRIVEWAY
WITH PLANTING STRIP
(2'-6" STANDARD CURB)

REV. DATE	
8/1/19	
STD. NO.	REV.
10.25E	3

DRIVEWAY WIDTH		
DRIVEWAY TYPE	MINIMUM	MAXIMUM
ONE–WAY	20'	30'
TWO–WAY	26'	50'



SECTION A-A



PLAN

NOTES:

1. TO BE USED ON ROADS WITHOUT CURB AND GUTTER AND WHERE CURB AND GUTTER IS NOT BEING INSTALLED. (MUST MEET BOTH CRITERIA)
2. ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.
3. USE OF THIS STANDARD FOR RESIDENTIAL DRIVEWAY CONSTRUCTION AT THE DISCRETION OF THE TOWN ENGINEER ONLY.

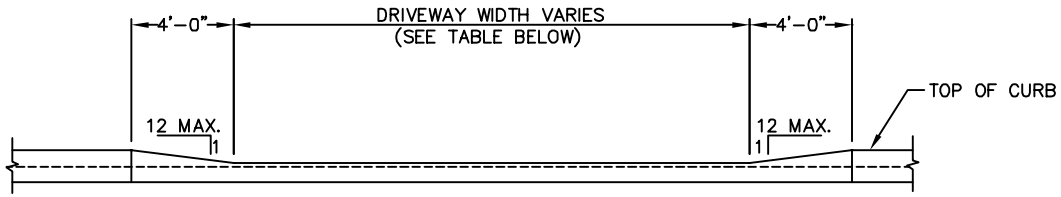
NOT TO SCALE

Pineville NORTH CAROLINA

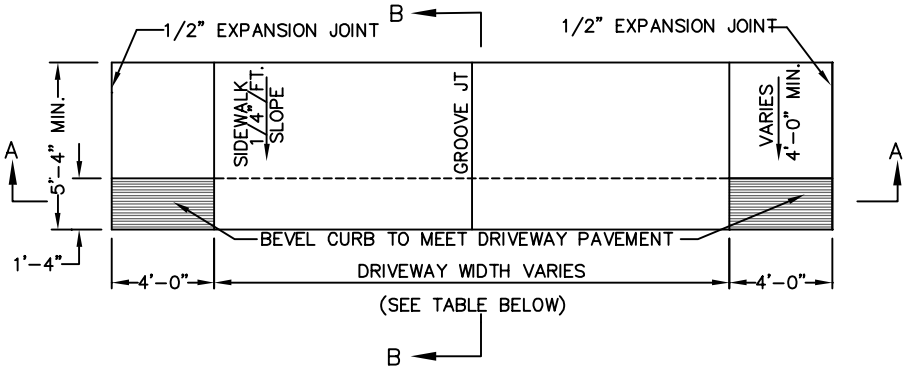
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

COMMERCIAL TYPE IV
DRIVEWAY

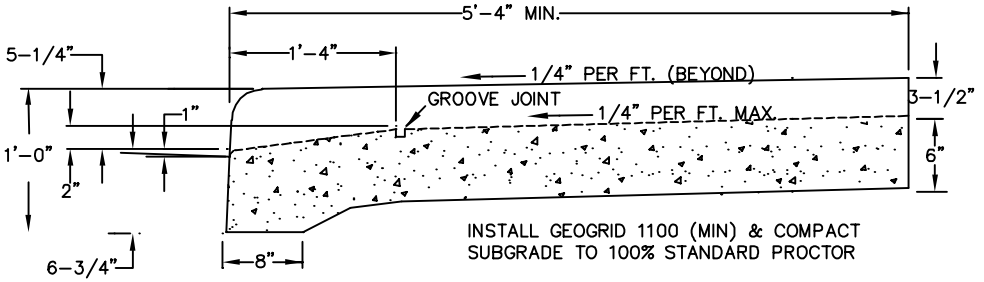
REV. DATE	
8/1/19	
STD. NO.	REV.
10.25F	3



SECTION A-A



PLAN



SECTION B - B

GENERAL NOTES:

ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.

A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE. SEE PLDS 10.22.

THIS DETAIL TO BE USED ONLY IN CONJUNCTION WITH MONOLITHIC SIDEWALK AS ON PLDS 10.23

NOTE:

ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCES, AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.

DRIVEWAY WIDTH		
TYPE DRIVEWAY	MINIMUM	MAXIMUM
TYPE E-RESIDENTIAL:		
LOCAL/COLLECTOR	10'	30'
THOROUGHFARE*	15'	30'
ONE-WAY TYPE III COMMERCIAL	20'	30'
TWO-WAY TYPE III COMMERCIAL	26'	50'

* MUST PROVIDE ON-SITE TURNAROUND

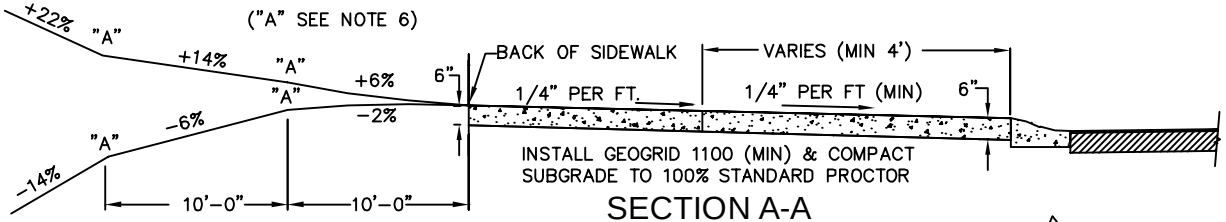
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

DROP CURB DRIVEWAY
MONOLITHIC CONCRETE CURB AND SIDEWALK

REV. DATE	
STD. NO.	REV.
10.26	1



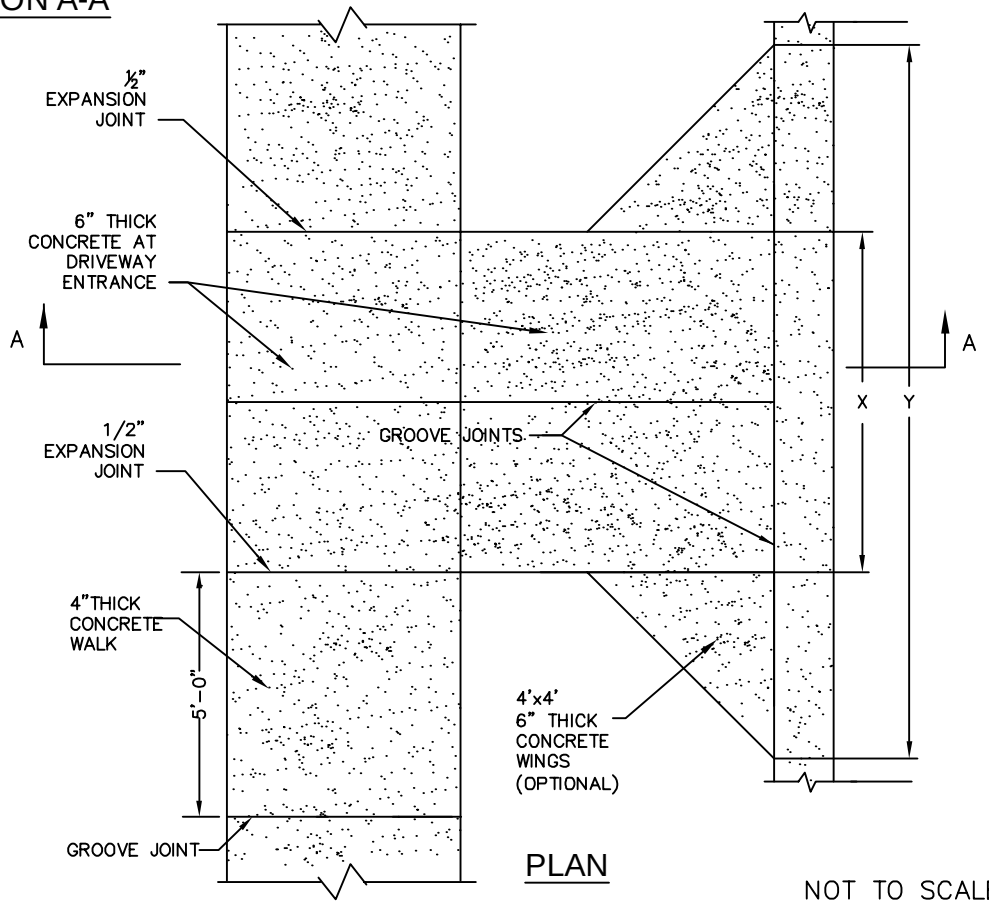
SECTION A-A

NOTES:

1. THE ELEVATION OF THE SIDEWALK SHALL BE NOT LESS THAN SIX INCHES OR MORE THAN EIGHTEEN INCHES ABOVE THE ROADWAY CROWN. THIS ELEVATION DIFFERENTIAL SHALL BE CONSISTENT WITHIN EACH BLOCK.
2. ALL CONCRETE TO BE 3600 PSI STRENGTH.
3. ALL CONSTRUCTION PRACTICES, INCLUDING COMPACTION, CURING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH THE THESE LAND DEVELOPMENT STANDARDS.
4. PLANTING STRIP SHALL BE GRADED WITH A CROSS SLOPE BETWEEN 1/2 IN. PER FOOT AND 1 1/4 IN. PER FOOT EXCEPT WHERE EXCESSIVE NATURAL GRADES MAKE THIS REQUIREMENT IMPRACTICAL. IN SUCH CASES, THE TOWN ENGINEER MAY AUTHORIZE A SUITABLE GRADE
5. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS, INCLUDING BUT NOT LIMITED TO SPACING, SIGHT DISTANCE, AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
6. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).

DRIVEWAY WIDTH		
TYPE I–RESIDENTIAL:	X	Y
LOCAL/COLLECTOR	10' MIN.	30' MAX. **
THOROUGHFARE *	15' MIN.	30' MAX. **

* MUST PROVIDE ON–SITE TURNAROUND
** MAXIMUM WIDTH INCLUDES OPTIONAL WINGS



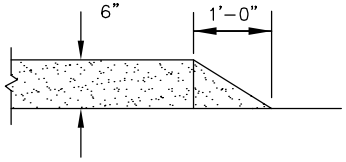
PLAN

NOT TO SCALE

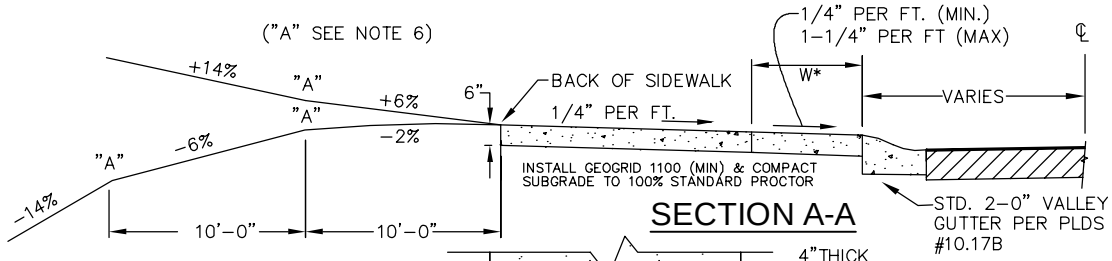
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RESIDENTIAL DRIVEWAY (TYPE I)
FOR 2'-0" VALLEY GUTTER

REV. DATE	
STD. NO.	REV.
10.27A	1



SECTION B-B



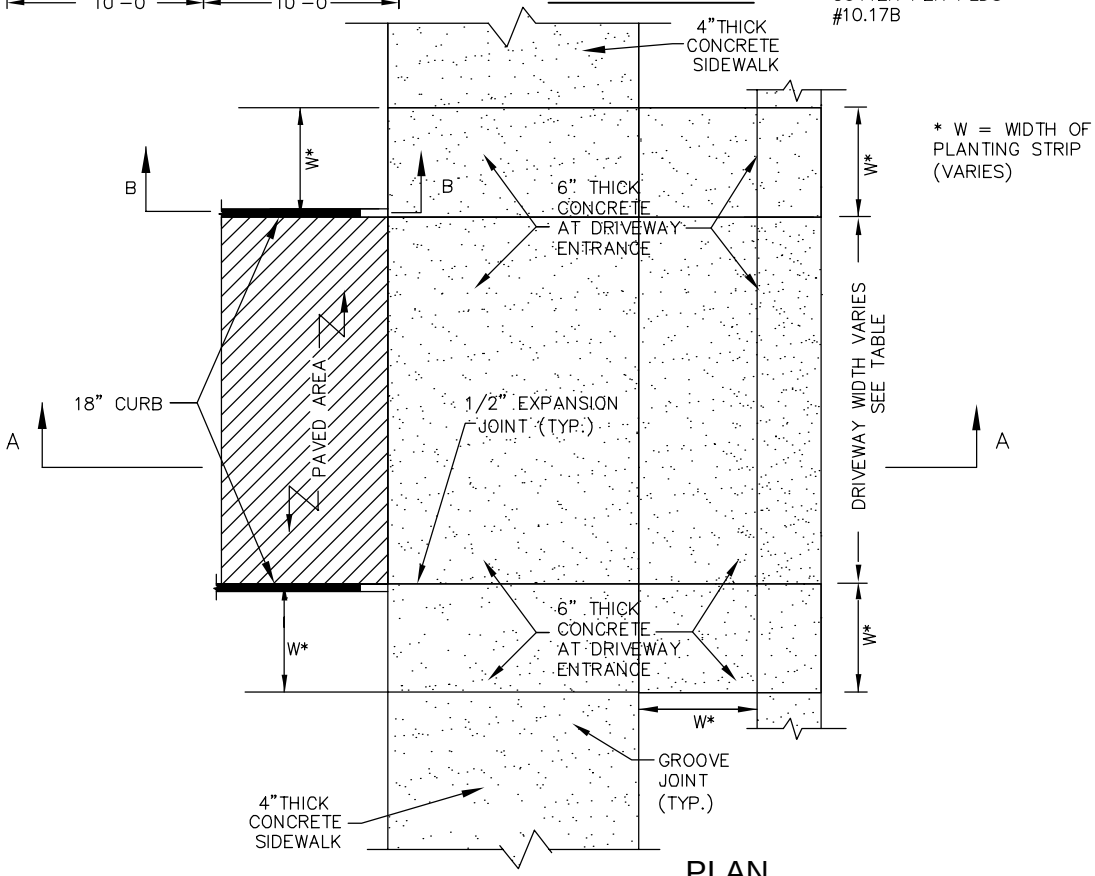
SECTION A-A

NOTES:

1. THE ELEVATION OF THE SIDEWALK SHALL BE NOT LESS THAN SIX INCHES OR MORE THAN EIGHTEEN INCHES ABOVE THE ROADWAY CROWN. THIS ELEVATION DIFFERENTIAL SHALL BE CONSISTENT WITHIN EACH BLOCK.
2. ALL CONCRETE TO BE 3600 PSI STRENGTH.
3. ALL CONSTRUCTION PRACTICES, INCLUDING COMPACTION, CURING, FINISHING, ETC. SHALL BE IN ACCORDANCE WITH THESE LAND DEVELOPMENT STANDARDS.
4. PLANTING STRIP SHALL BE GRADED WITH A CROSS SLOPE BETWEEN 1/2 IN. PER FOOT AND 1 1/4 IN. PER FOOT EXCEPT WHERE EXCESSIVE NATURAL GRADES MAKE THIS REQUIREMENT IMPRACTICAL. IN SUCH CASES, THE TOWN ENGINEER MAY AUTHORIZE A SUITABLE GRADE.
5. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS, INCLUDING BUT NOT LIMITED TO SPACING, SIGHT DISTANCE, AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
6. "A" BREAKOVER SHALL BE 8% OR LESS (A=ALGEBRAIC DIFFERENCE).
7. PRIOR APPROVAL IS REQUIRED BY THE TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.

DRIVEWAY WIDTH		
TYPE DRIVEWAY	MINIMUM	MAXIMUM
ONE-WAY TYPE II COMMERCIAL	20'	30'
TWO-WAY TYPE II COMMERCIAL	26'	50'

* MUST PROVIDE ON-SITE TURNAROUND



* W = WIDTH OF PLANTING STRIP (VARIES)

PLAN

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

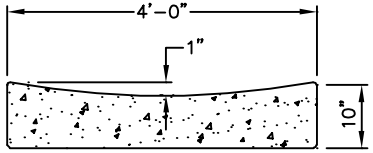
COMMERCIAL TYPE II DRIVEWAY
FOR 2'-0" VALLEY GUTTER

REV. DATE	
8/1/19	
STD. NO.	REV.
10.27B	3

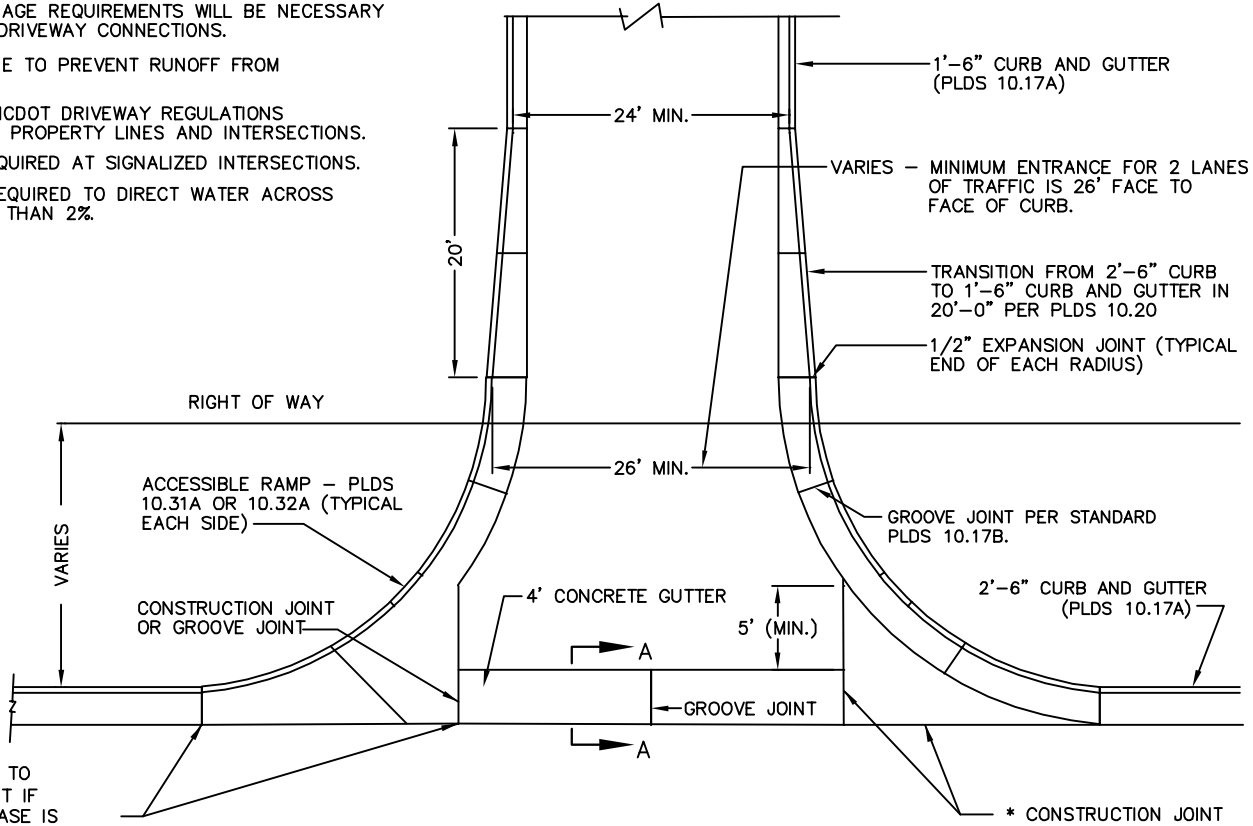
NOTES:

1. WHERE A TYPE III DRIVEWAY IS APPROVED BY THE TOWN ENGINEER THAT CONNECTS TO AN EXISTING SIGNALIZED INTERSECTION, OR AT A LOCATION WHERE A TRAFFIC SIGNAL INSTALLATION IS PROPOSED BY BASED ON A TRAFFIC IMPACT/SIGNAL WARRANT STUDY, A FULL DEPTH ASPHALT PAVEMENT (2–1/2" S–9.5 B/C AND 6" B–25.0 B/C) IS REQUIRED. THIS PAVEMENT DESIGN IS REQUIRED IN THE DRIVEWAY EASEMENT (100–FOOT MINIMUM) TO MAINTAIN DETECTOR LOOPS AND PAVEMENT MARKINGS.
2. A CONCRETE GUTTER IS TO BE USED EXCEPT AT EXISTING OR PROPOSED TRAFFIC SIGNAL LOCATIONS. AT THESE LOCATIONS ADDITIONAL DRAINAGE REQUIREMENTS WILL BE NECESSARY TO ELIMINATE THE NEED FOR GUTTER ACROSS THE DRIVEWAY CONNECTIONS.
3. THE DRIVEWAY MUST RISE 6" FROM THE GUTTER LINE TO PREVENT RUNOFF FROM ENTERING DRIVEWAY.
4. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN/ NCDOT DRIVEWAY REGULATIONS FOR SPACING, SIGHT DISTANCE, AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
5. TWO (2) ACCESSIBLE RAMPS PER CURB RETURN REQUIRED AT SIGNALIZED INTERSECTIONS.

* FOUR (4) FOOT GUTTER AND WINGS WILL NOT BE REQUIRED TO DIRECT WATER ACROSS DRIVE IF THE DRIVEWAY GUTTER SLOPE IS GREATER THAN 2%.



SECTION A-A



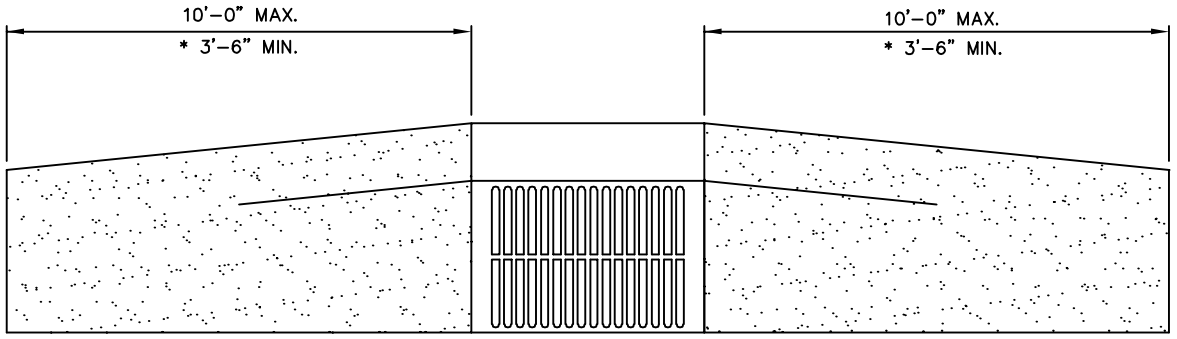
PLAN

NOT TO SCALE

TRANSITION CONCRETE DEPTH FROM 7" AT LIP TO 10" AT CONCRETE GUTTER CONSTRUCTION JOINT IF NO ASPHALT BASE INSTALLED. IF ASPHALT BASE IS USED, 7" CONCRETE DEPTH CAN BE CARRIED THROUGH THE CONCRETE GUTTER.

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TYPE III DRIVEWAY ENTRANCE

REV. DATE	
STD. NO.	REV.
10.28	



PLAN

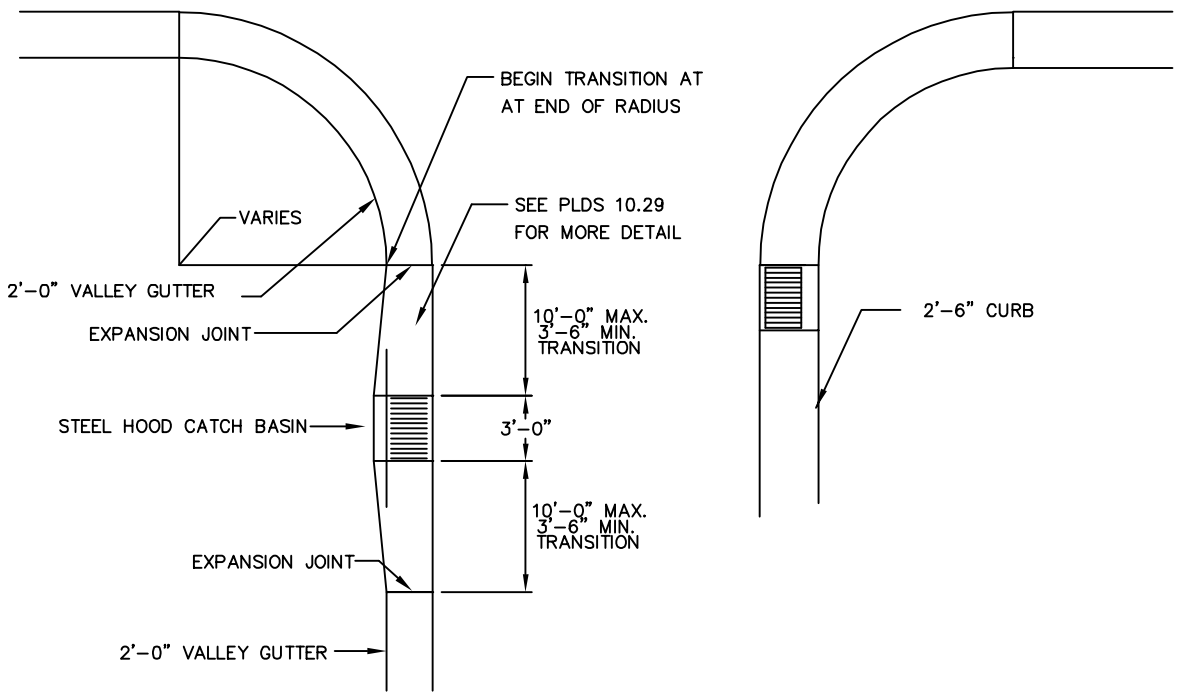
NOTE:

TRANSITION FROM 2'–6" STANDARD CURB TO VALLEY CURB AT A DRAINAGE INLET ONLY.
*SEE PLDS 10.19 FOR CROSS SECTION GEOMETRY.

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CATCH BASIN FRAME IN VALLEY GUTTER

REV.	DATE

STD. NO.	REV.
10.29	



NOTE:

1. WHERE 2'–6" CURB AND GUTTER IS USED, CATCH BASINS MAY BE LOCATED AT END OF RADIUS.
2. RADIUS AT INTERSECTION MAY VARY.

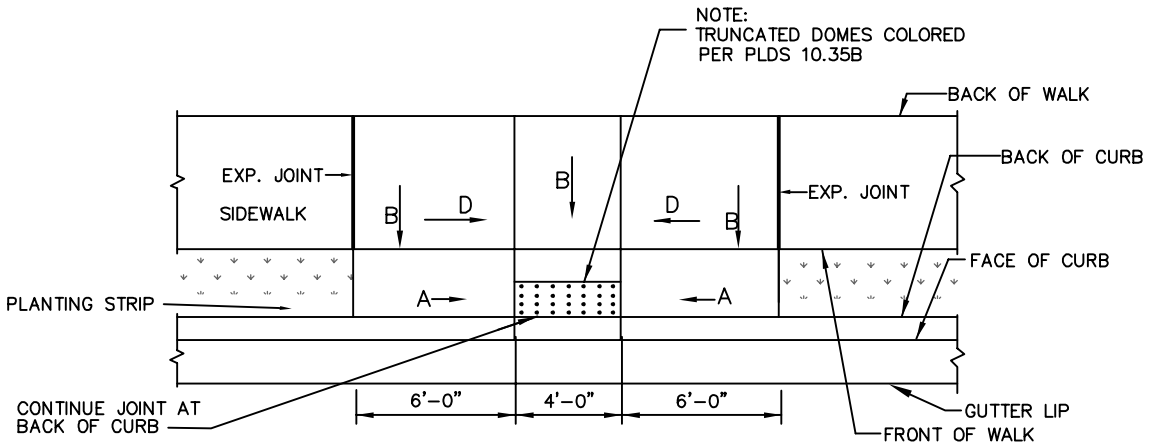
NOT TO SCALE

Pineville NORTH CAROLINA

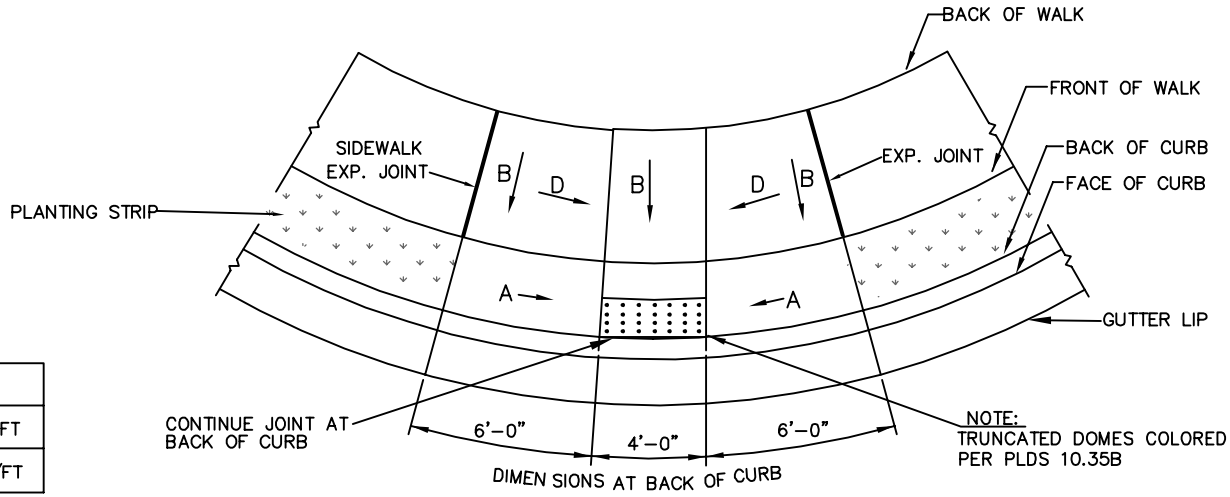
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

CATCH BASIN PLACEMENT AT INTERSECTIONS

REV. DATE	
STD. NO.	REV.
10.30	



PLAN VIEW-PARALLEL RAMP
WITH PLANTING STRIP



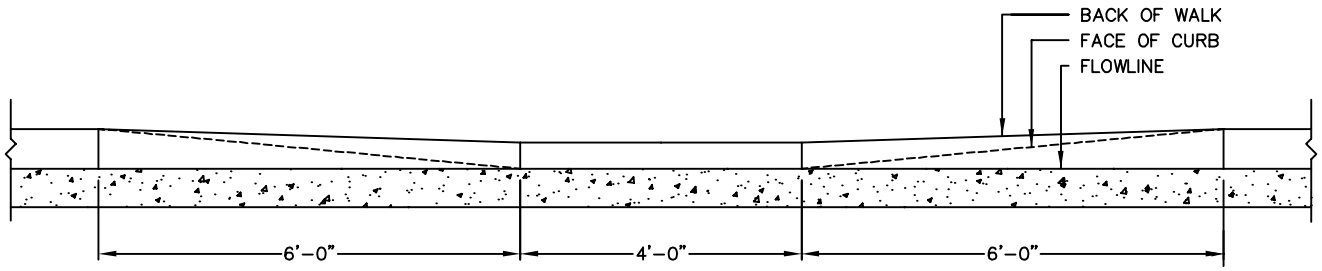
SLOPE "A" 12:1
SLOPE "B" 1/4"/FT
SLOPE "D" 3/8"/FT

PLAN VIEW-DIAGONAL RAMP WITH PLANTING STRIP

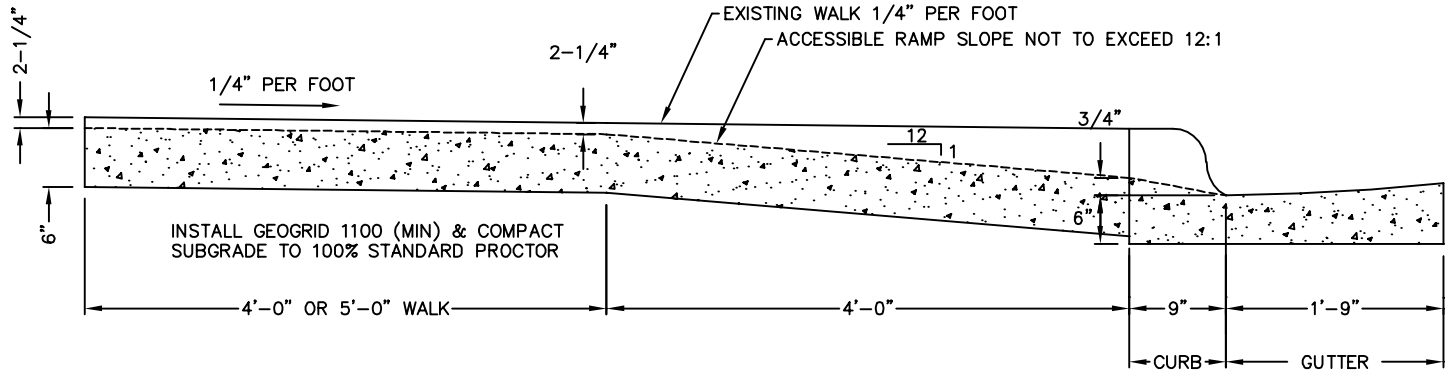
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ACCESSIBLE RAMP STANDARD WITH PLANTING STRIP (2'-6" CURB AND GUTTER)

REV. DATE	
STD. NO.	REV.
10.31A	



ELEVATION

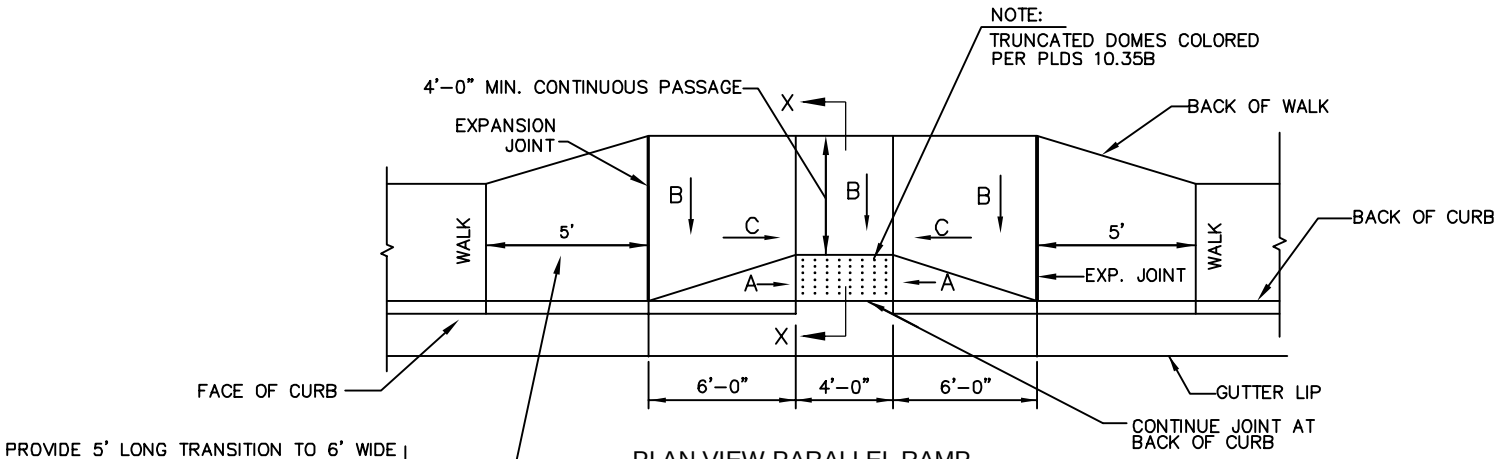


TYPICAL RAMP ℄ SECTION

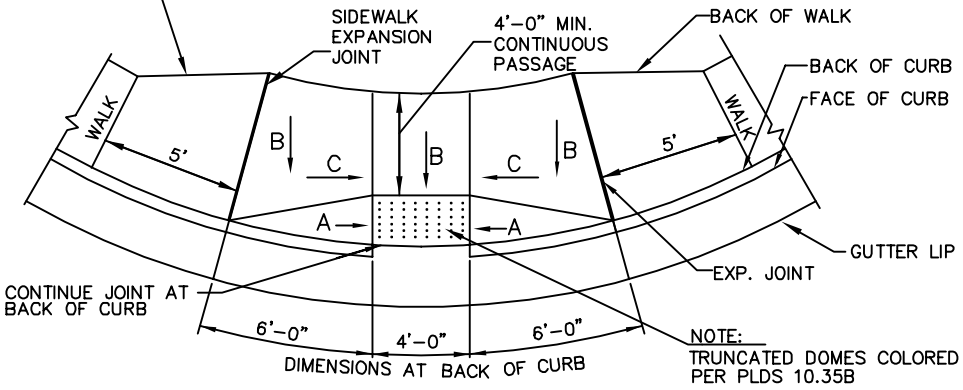
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ACCESSIBLE RAMP SECTIONS WITH PLANTING STRIP (2-6" CURB AND GUTTER)

REV. DATE	
STD. NO.	REV.
10.31B	1



PLAN VIEW-PARALLEL RAMP
WITHOUT PLANTING STRIP



PLAN VIEW-DIAGONAL RAMP WITHOUT PLANTING STRIP

SLOPE "A" 12:1
SLOPE "B" 1/4"/FT
SLOPE "C" 5/8"/FT

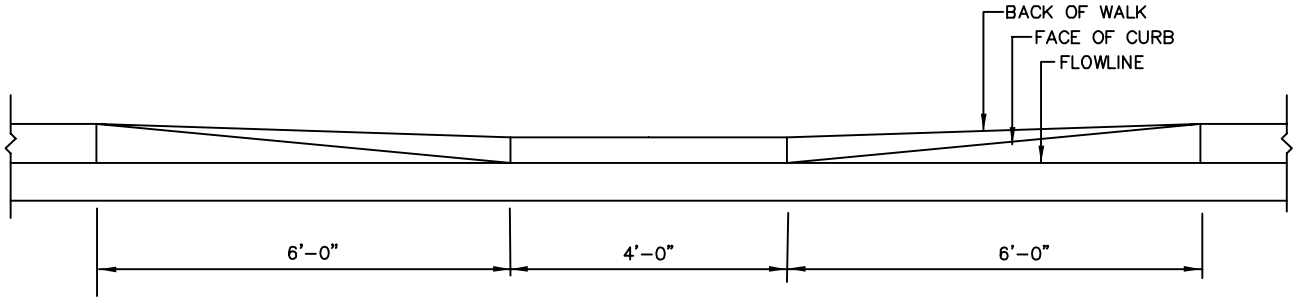
NOT TO SCALE

Pineville
NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

ACCESSIBLE RAMP STANDARD WITHOUT PLANTING STRIP (2'-6" CURB AND GUTTER)

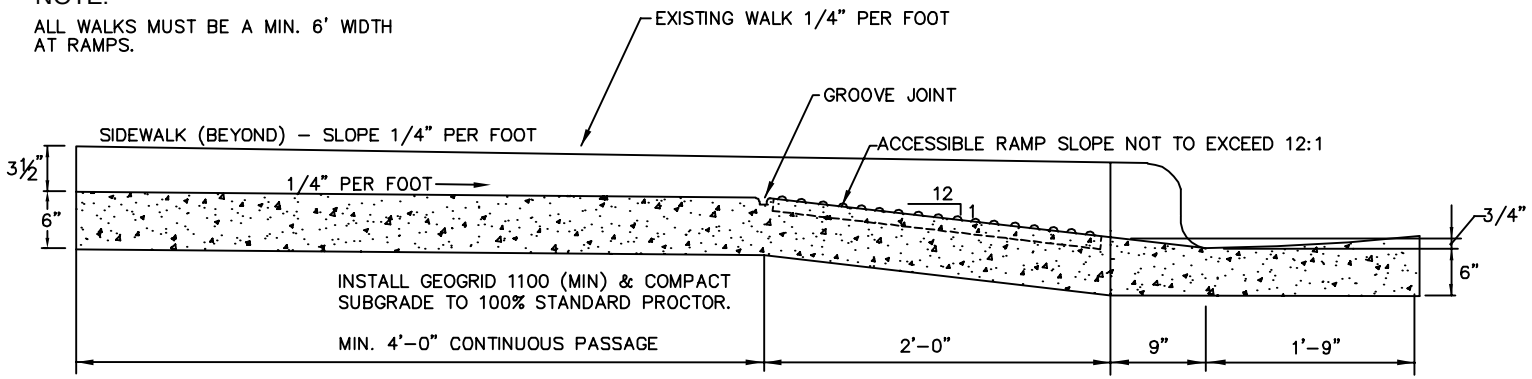
REV. DATE	
STD. NO.	REV.
10.32A	



SECTION THROUGH FLOWLINE

NOTE:

ALL WALKS MUST BE A MIN. 6' WIDTH AT RAMPS.

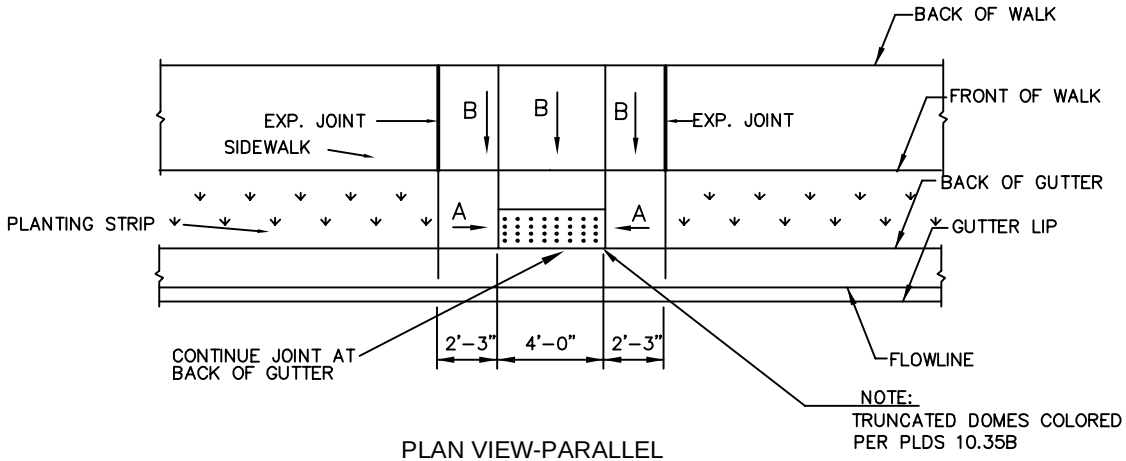


TYPICAL RAMP $\mathbb{C}$ SECTION

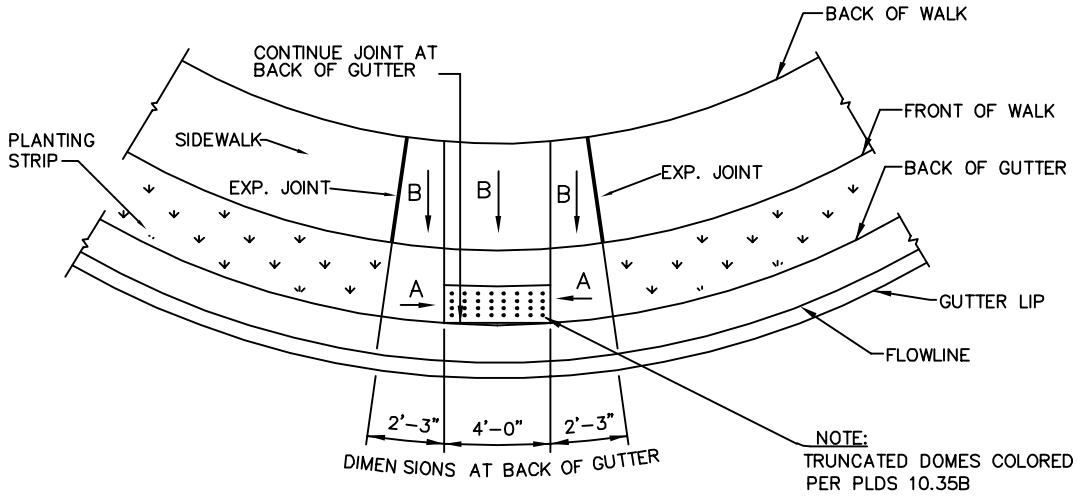
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ACCESSIBLE RAMP SECTIONS WITHOUT PLANTING STRIP (2-6" CURB AND GUTTER)

REV. DATE	
STD. NO.	REV.
10.32B	1



PLAN VIEW-PARALLEL
RAMP WITH PLANTING STRIP



PLAN VIEW-DIAGONAL RAMP
WITH PLANTING STRIP

SLOPE "A" 12:1
SLOPE "B" 1/4"/FT

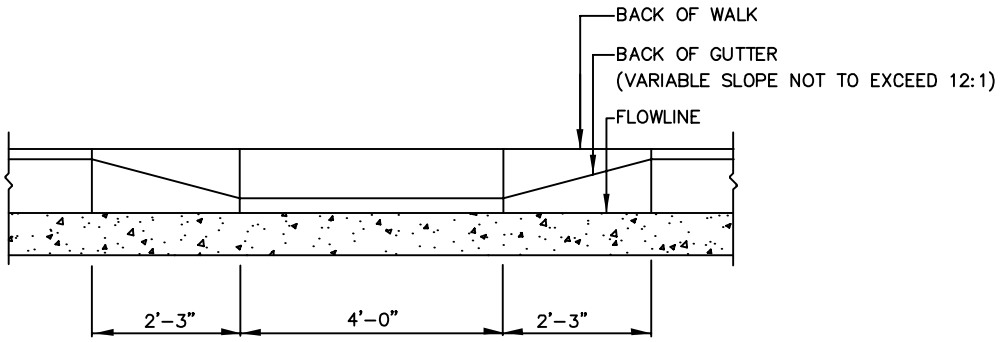
NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

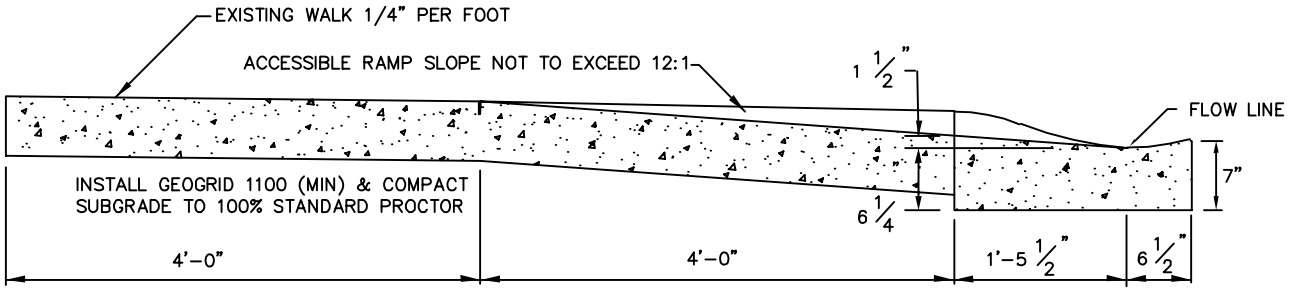
ACCESSIBLE RAMP STANDARD

(2-0" VALLEY GUTTER)

REV. DATE	
STD. NO.	REV.
10.33A	



SECTION THROUGH FLOWLINE

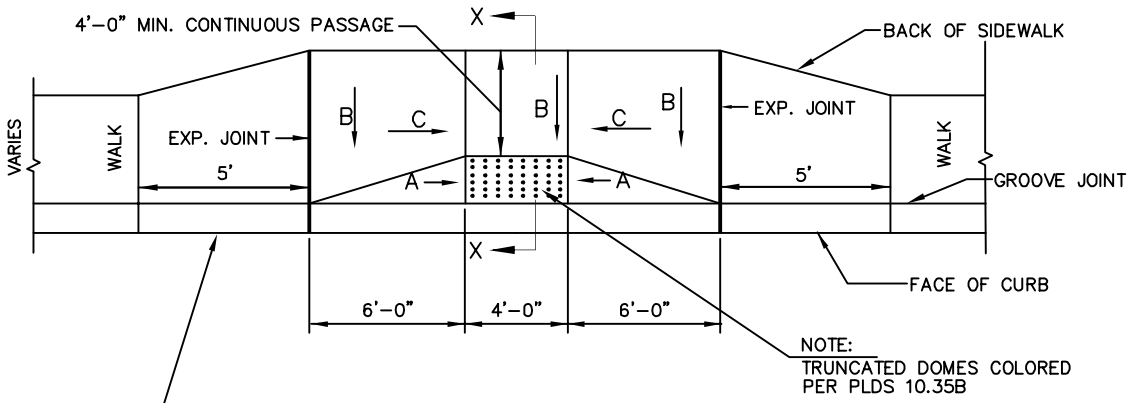


TYPICAL RAMP℄ SECTION

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ACCESSIBLE RAMP SECTIONS (2-0" VALLEY GUTTER)

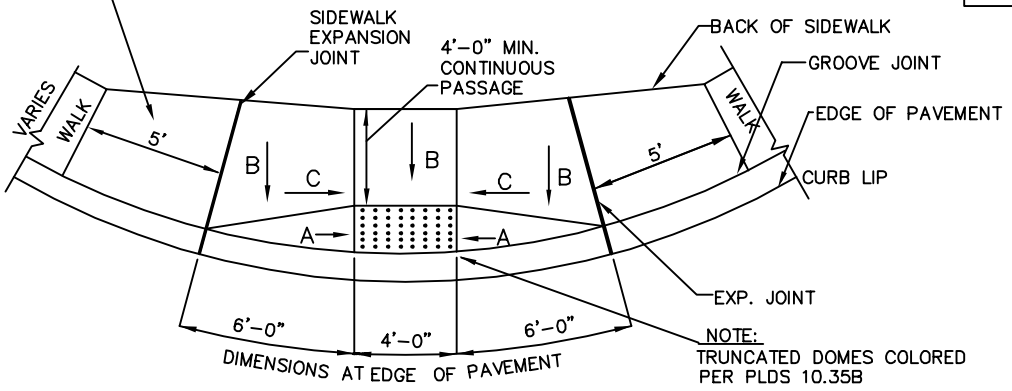
REV. DATE	
STD. NO.	REV.
10.33B	1



PLAN VIEW-PARALLEL RAMP

PROVIDE 5' LONG TRANSITION TO 6' WIDE WALK. ALL WALKS MUST BE A MIN. 6' WIDTH AT RAMP.

SLOPE "A"	12:1
SLOPE "B"	1/4"/FT
SLOPE "C"	1/2"/FT

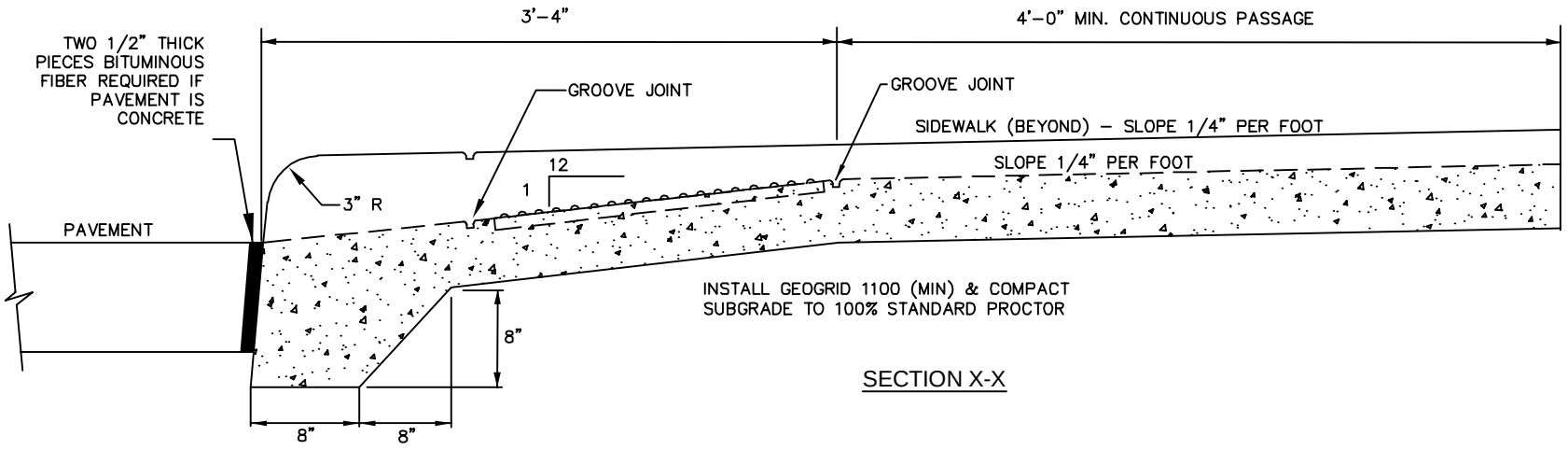


PLAN VIEW-DIAGONAL RAMP

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ACCESSIBLE RAMP STANDARD MONOLITHIC CURB AND SIDEWALK

REV. DATE	
STD. NO.	REV.
10.34A	



SECTION X-X

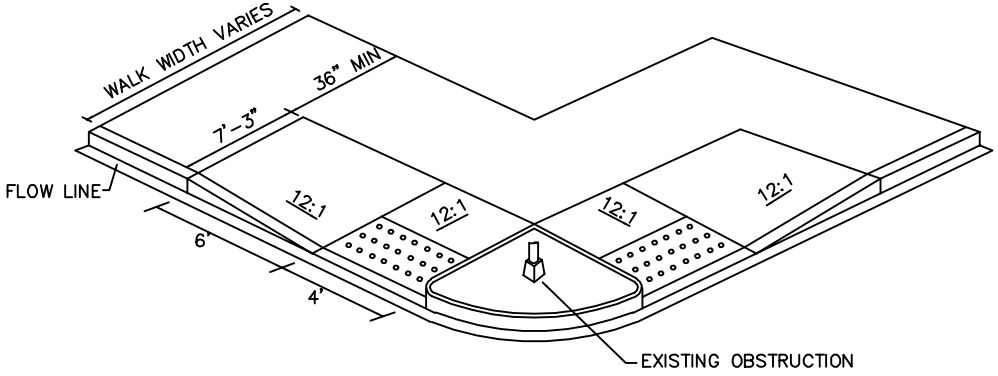
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ACCESSIBLE RAMP SECTIONS MONOLITHIC CURB AND SIDEWALK

REV. DATE	
STD. NO.	REV.
10.34B	1

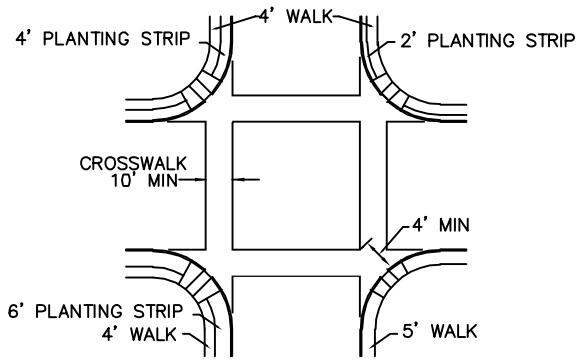
NOTES:

1. RAMP AND WING SLOPES SHALL NOT BE STEEPER THAN 12:1.
2. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA.
3. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
4. THE RAMP OPENING (AT THE FULLY DEPRESSED CURB) SHALL BE LOCATED WITHIN THE PARALLEL BOUNDARIES OF THE CROSSWALK MARKINGS. THE RAMP CENTERLINE SHALL BE LOCATED AT THE CORNER RADIUS CENTERLINE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DIAGONAL CURB RAMPS SHALL HAVE A SEGMENT OF STRAIGHT CURB AT LEAST 24 INCHES LONG LOCATED ON EACH SIDE OF THE WING SLOPE AND WITHIN THE CROSSWALK MARKINGS.
5. THE WING AND RAMP SURFACES SHALL BE 3600 PSI CONCRETE WITH A SIDEWALK FINISH IN ACCORDANCE WITH CURRENT EDITION NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
6. DRAINAGE STRUCTURES, MAST ARMS, LIGHT POLES AND OTHER OBSTRUCTIONS SHALL NOT BE PLACED IN LINE WITH RAMPS. LOCATION OF THE RAMP SHALL TAKE PRECEDENCE OVER LOCATION OF OBSTRUCTIONS EXCEPT WHERE EXISTING OBSTRUCTIONS ARE BEING UTILIZED IN THE NEW CONSTRUCTION.
7. AT ALL LOCATIONS, NOT LESS THAN 2 FEET OF FULL HEIGHT CURB SHALL BE PLACED BETWEEN THE RAMPS.
8. SEE PLDS 10.35B FOR DETECTABLE WARNING INSTALLATION.

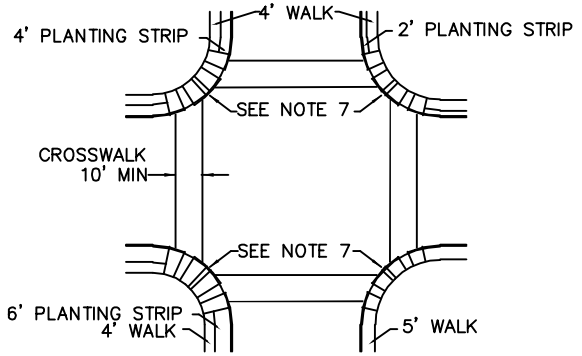


PLACEMENT FOR OBSTRUCTED CORNER RADIUS OR CORNER RADIUS LESS THAN TEN FEET

ROADWAY PLAN SYMBOL
(ACC)
FOR PROPOSED ACCESSIBLE RAMP



TYPICAL LOCATION OF ACCESSIBLE RAMPS AND PEDESTRIAN CROSSWALKS ON SUBDIVISION STREETS



TYPICAL LOCATION OF ACCESSIBLE RAMPS AND PEDESTRIAN CROSSWALKS ON THOROUGHFARES/SIGNALIZED INTERSECTIONS

SEE NCDOT STANDARD DRAWINGS

NOT TO SCALE

Pineville NORTH CAROLINA

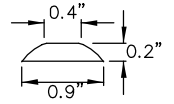
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

STANDARD PLACEMENT OF ACCESSIBLE RAMP AND GENERAL NOTES

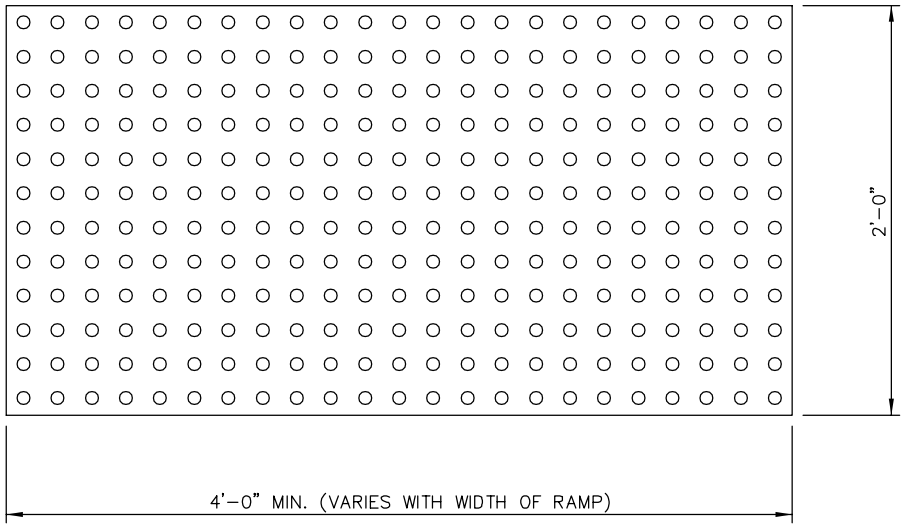
REV. DATE	
STD. NO.	REV.
10.35A	

NOTES:

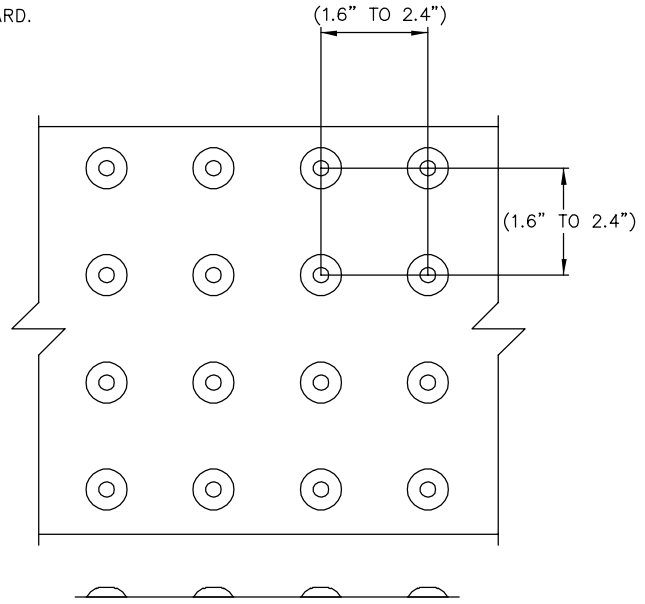
1. ALL DETECTABLE WARNING DEVICES USED IN NEW CONSTRUCTION SHALL BE OF A RIDGID PRECAST OR EMBEDDED PRODUCT APPROVED BY THE TOWN ENGINEER. RETRO FIT MATS WILL ONLY BE ALLOWEED ON EXISTING RAMPS WITH PRIOR APPROVAL OF THE TOWN ENGINEER FOR MATERIAL TYPE AND INSTALLATION (IE. RESURFACING).
2. WIDTH OF DETECTABLE WARNING AREA SHALL BE A MINIMUM OF 4 FEET AND VARY WITH WIDTH OF RAMP.
3. LENGTH OF DETECTABLE WARNING AREA SHALL BE 2 FEET REGARDLESS OF SECTION WIDTH.
4. DETECTABLE WARNING AREA CAN BE SQUARE WHERE USED IN A CURB RADIUS.
5. DETECTABLE WARNING DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
6. DECTECTABLE WARNING AREA SHALL BE COLORED BLACK.
7. IF PAVERS ARE TO BE USED, PAVERS SHALL BE 6" THICK AND CAST FROM 5000 psi CONCRETE.
8. MATS ARE TO BE RIGID WITH TURN DOWN EDGES EMBEDDED IN CONCRETE TO ELIMINATE TRIP HAZARD.



TRUNCATED DOME SECTION



TRUNCATED DOME PLAN VIEW



TRUNCATED DOME SPACING

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TRUNCATED DOMES PLAN AND CROSS-SECTION

REV. DATE	
8/1/19	
STD. NO.	REV.
10.35B	3

NOTES:

1. SEE PLDS. 10.36B FOR GENERAL NOTES AND CLEAR ZONE DISTANCES

(H) 2'–6" CURB AND GUTTER, PLDS 10.17A

(M) SAFETY RAIL, PLDS 50.04A & 50.04B

(S) 4'–0" SIDEWALK, PLDS 10.22

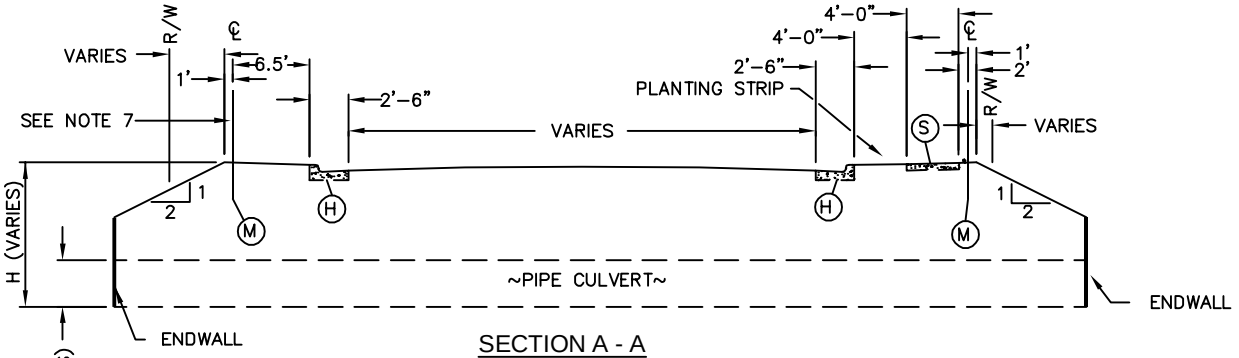
(H1) 2'–0" VALLEY GUTTER, PLDS 10.17B

(H2) CURB TRANSITION 2'–6" CURB AND GUTTER TO 2'–0" VALLEY GUTTER, PLDS 10.19

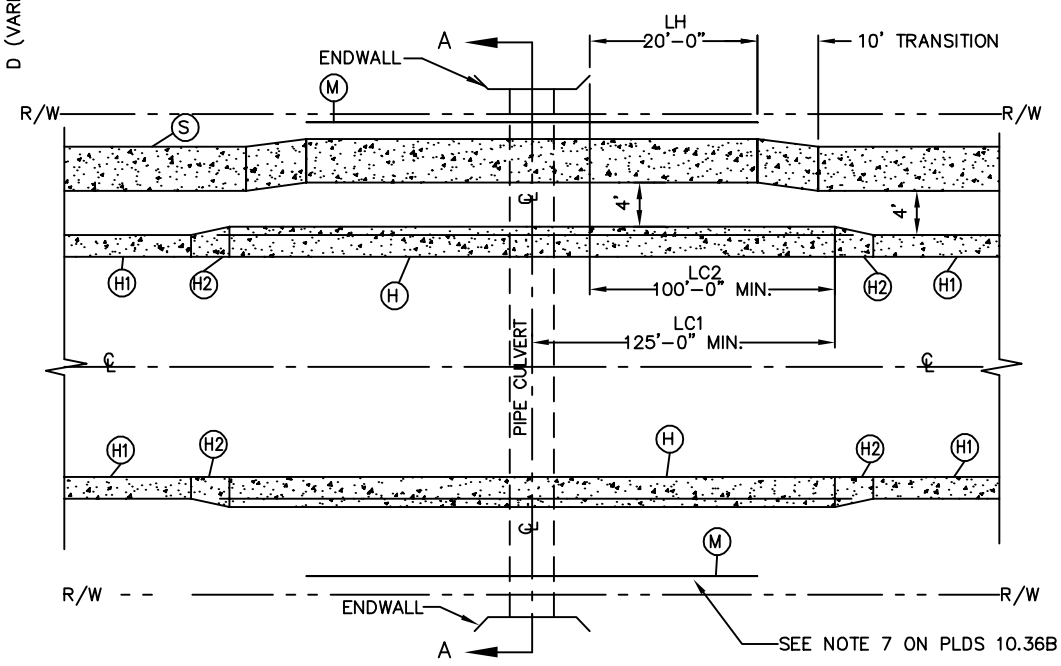
LH = DISTANCE FROM END OF WINGWALL TO END OF SAFETY RAIL.

LC1 = DISTANCE FROM ℄ OF CULVERT TO END OF 2'–6" CURB AND GUTTER GUTTER.

LC2 = DISTANCE FROM END OF WINGWALL TO END OF 2'–6" CURB AND GUTTER.



SECTION A - A



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CULVERT CROSSINGS ON RESIDENTIAL AND COMMERCIAL STREETS

REV. DATE	
STD. NO.	REV.
10.36A	

GENERAL NOTES:

1. UNLESS OTHERWISE DETERMINED BY THE TOWN ENGINEER, THE MEASURES ILLUSTRATED SHALL BE USED WHEN CULVERT DIAMETER, D, IS GREATER THAN OR EQUAL TO 24 INCHES AND WHEN THE DIFFERENCE IN ELEVATION BETWEEN THE CULVERT INVERT AND THE TOP OF SLOPE, H, IS GREATER THAN OR EQUAL TO 5 FEET.
2. INSTALLATION OF 2'–6" CURB AND GUTTER MAY NOT BE REQUIRED WHEN AN ADEQUATE CLEAR ZONE IS PROVIDED FOR VEHICLES WITH A MAXIMUM OF 6:1 SLOPE (SEE TABLE 1).
3. INSTALLATION OF SAFETY RAIL MAY NOT BE REQUIRED WHEN A 10–FOOT PEDESTRIAN CLEAR ZONE IS PROVIDED BEHIND THE SIDEWALK WITH A MAXIMUM OF 6:1 SLOPE. WHERE NO SIDEWALK IS REQUIRED, INSTALLATION OF SAFETY RAIL MAY NOT BE REQUIRED WHEN A 15–FOOT PEDESTRIAN CLEAR ZONE IS PROVIDED BEHIND THE CURB WITH A MAXIMUM OF 6:1 SLOPE.
4. FOR CULVERT CROSSINGS WITHOUT ENDWALLS, LH AND LC2 SHALL BE MEASURED FROM THE OUTSIDE OF THE NEAREST WALL OF THE CULVERT BARREL.
5. FOR MULITIPLE BARREL CULVERT CROSSINGS, LC1 SHALL BE MEASURED FROM THE CENTERLINES OF THE OUTBOARD CULVERT BARRELS.
6. WHEN NECESSARY, AS DETERMINED BY THE TOWN ENGINEER, ADDITIONAL MEASURES MAY BE REQUIRED.
7. INSTALLATION OF SAFETY RAIL IS REQUIRED ON BOTH SIDES OF STREET IF SIDEWALK IS REQUIRED ON BOTH SIDES.
8. INSTALLATION OF SAFETY RAIL IS REQUIRED ON BOTH SIDES OF STREET IF NO SIDEWALK IS REQUIRED EXCEPT WHEN A 15–FOOT PEDESTRIAN CLEAR ZONE IS PROVIDED BEHIND THE CURB WITH A MAXIMUM OF 6:1 SLOPE.
9. INSTALLATION OF SAFETY RAIL IS REQUIRED ON THE SIDEWALK SIDE OF STREET IF SIDEWALK IS ONLY REQUIRED ON ONE SIDE OF STREET. INSTALL EITHER SAFTEY RAIL OR 15–FT CLEAR ZONE ON SIDE WITHOUT SIDEWALK.
10. DESIGN ADT IS CALCULATED ASSUMING A TRIP GENERATION OF 10 DAILY TRIPS PER SINGLE FAMILY DWELLING UNIT.

TABLE 1
CLEAR ZONE DISTANCES
LOCAL, COLLECTOR, AND COMMERCIAL STREETS

DESIGN ADT	CLEAR ZONE FROM EDGE OF PAVEMENT	
	TANGENT SECTION	CURVE (WITHIN 125' OF CULVERT)
UNDER 750	10'	15'
750 – 1500	12'	18'
1501 – 6000	14'	21'
OVER 6000	16'	24'

SEE PLDS 10.36A FOR PLAN AND CROSS SECTIONAL SCHEMATICS.

NOT TO SCALE

Pineville
NORTH CAROLINA

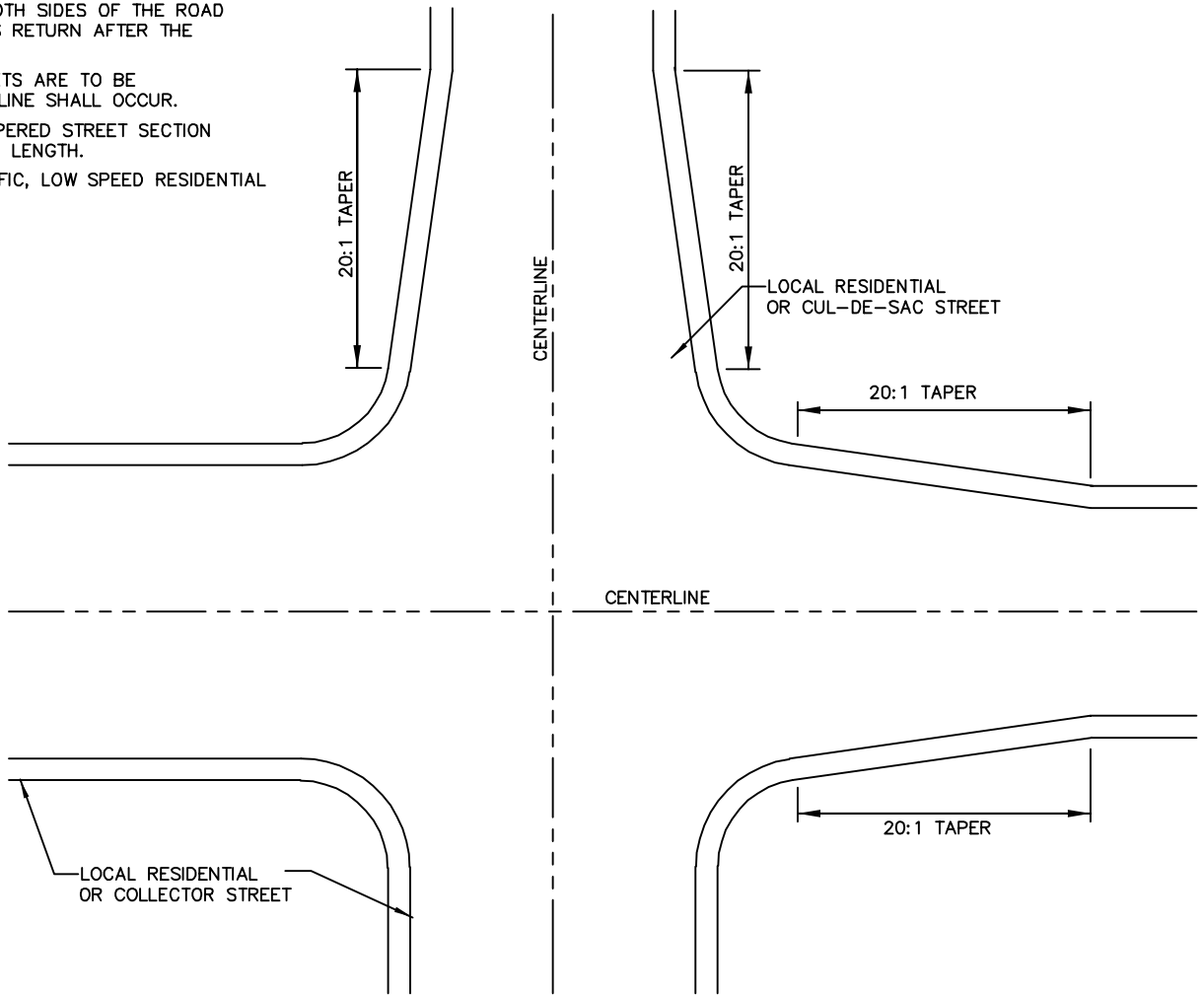
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

CULVERT CROSSINGS ON RESIDENTIAL
AND COMMERCIAL STREETS

REV. DATE	
STD. NO.	REV.
10.36B	

GENERAL NOTES:

1. ALL TAPERS ARE 20:1 AND OCCUR ON BOTH SIDES OF THE ROAD TO BE TAPERED STARTING AT THE RADIUS RETURN AFTER THE INTERSECTION.
2. CENTERLINE OF LOCAL RESIDENTIAL STREETS ARE TO BE MAINTAINED. NO SHIFTING OF THE CENTERLINE SHALL OCCUR.
3. RIGHT OF WAY AND SIDEWALK BEHIND TAPERED STREET SECTION TO TAPER OVER THE SAME STREET TAPER LENGTH.
4. DETAIL ALSO APPLIES FOR ALL LOW TRAFFIC, LOW SPEED RESIDENTIAL STREETS.



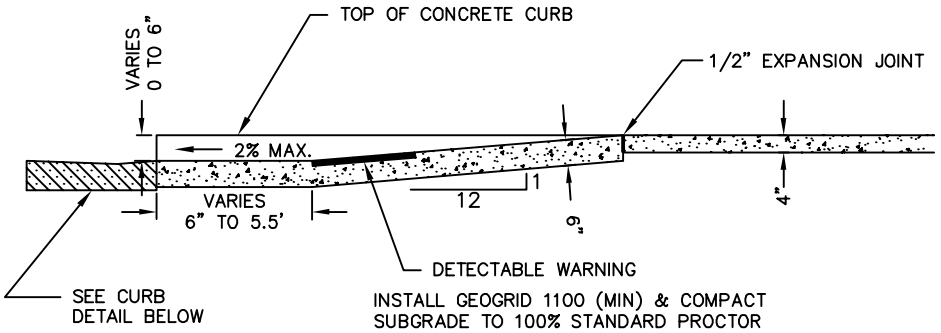
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TYPICAL RESIDENTIAL STREET TAPER

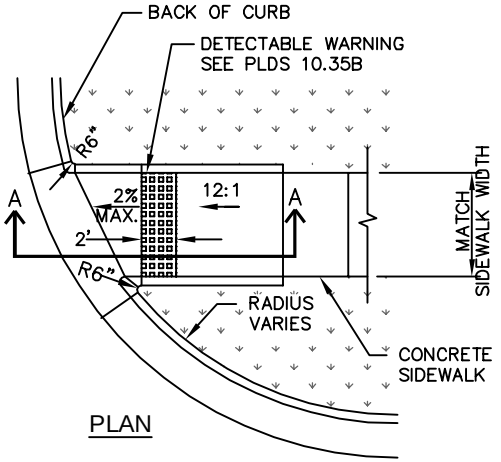
REV. DATE	
STD. NO.	REV.
10.37	

NOTES:

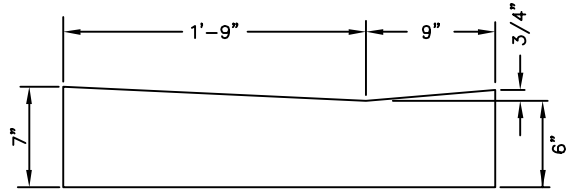
1. USE THIS DETAIL ONLY UNDER THE FOLLOWING CIRCUMSTANCES:
   - A 5–FOOT SIDEWALKS WITH CURB RADII OF 35 FEET OR LESS
   - B 6–FOOT SIDEWALKS WITH CURB RADII OF 30 FEET OR LESS
   - C 8–FOOT SIDEWALKS WITH CURB RADII OF 25 FEET OR LESS
2. DIRECTIONAL RAMPS MAY BE USED WHEN AN 8–FOOT PLANTING STRIP IS PROVIDED. DO NOT USE THIS DETAIL IF THERE IS HARDSCAPE INSTEAD OF A PLANTING STRIP.
3. ALL CONCRETE SHALL BE AT LEAST 3600 PSI.



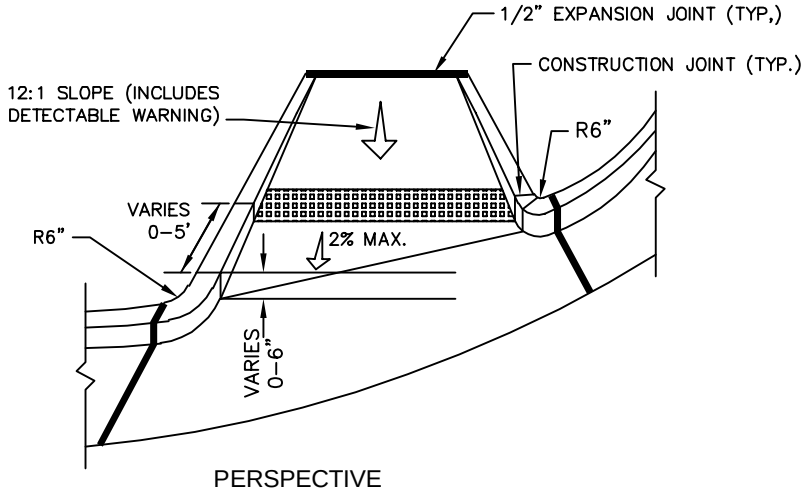
SECTION A-A



PLAN



CURB DETAIL



PERSPECTIVE

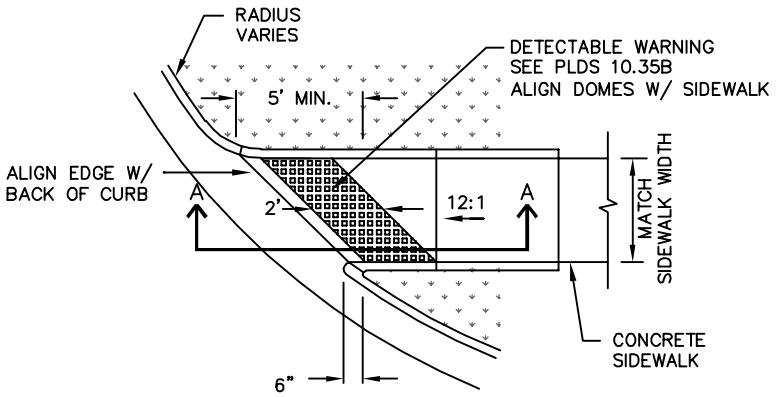
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	DIRECTIONAL ACCESSIBLE RAMP WITH SMALL/MEDIUM CURB RADII

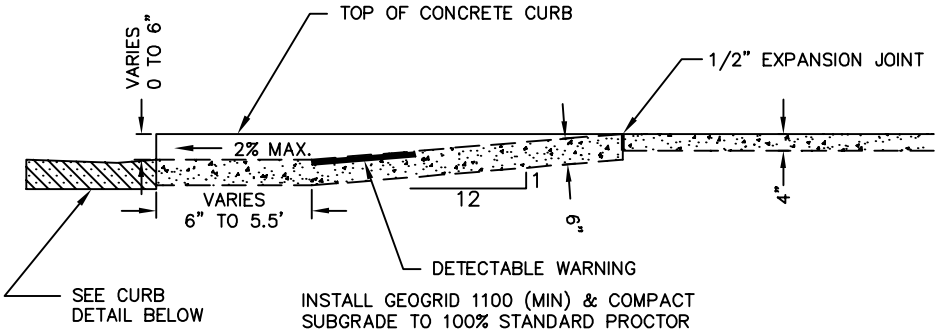
REV. DATE	
STD. NO.	REV.
10.40A	1

NOTES:

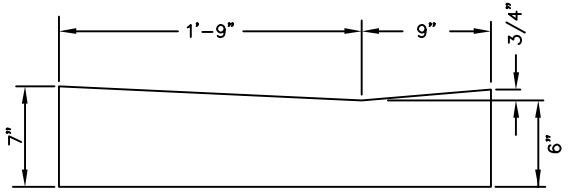
1. USE THIS DETAIL ONLY UNDER THE FOLLOWING CIRCUMSTANCES:
   - A 5–FOOT SIDEWALKS WITH CURB RADII GREATER THAN 35 FEET
   - B 6–FOOT SIDEWALKS WITH CURB RADII GREATER THAN 30 FEET
   - C 8–FOOT SIDEWALKS WITH CURB RADII GREATER THAN 25 FEET
2. DIRECTIONAL RAMPS MAY BE USED WHEN A MIN. 8–FOOT PLANTING STRIP IS PROVIDED. DO NOT USE THIS DETAIL IF THERE IS HARDSCAPE INSTEAD OF A PLANTING STRIP.
3. ALL CONCRETE SHALL BE AT LEAST 3600 PSI.
4. THE ANGLES ON THE DETECTABLE WARNING WILL VARY WITH THE CURB RADIUS AND SIDEWALK WIDTH. IN THE CONFIGURATION SHOWN IN PLAN VIEW, ONE SIDE OF THE DETECTABLE WARNING TRAPEZOID SHALL BE LOCATED AT THE TOE OF THE 12:1 SLOPE, AND THE OTHER SIDE SHALL BE ALIGNED WITH THE CURB ON THE ACCESSIBLE RAMP.
5. THE TRUNCATED DOME PATTERN MUST ALIGN WITH THE SIDEWALK TO ALLOW WHEELCHAIRS TO PASS FREELY. DO NOT ALIGN DOME PATTERN WITH THE CURB RADIUS.



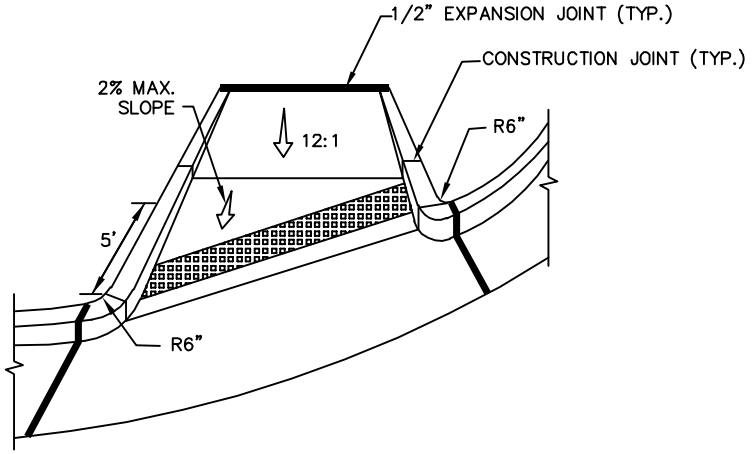
PLAN



SECTION A-A



CURB DETAIL

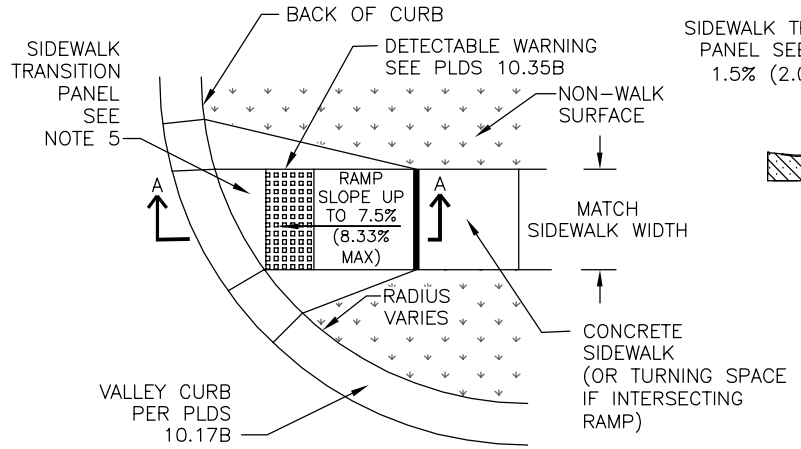


PERSPECTIVE

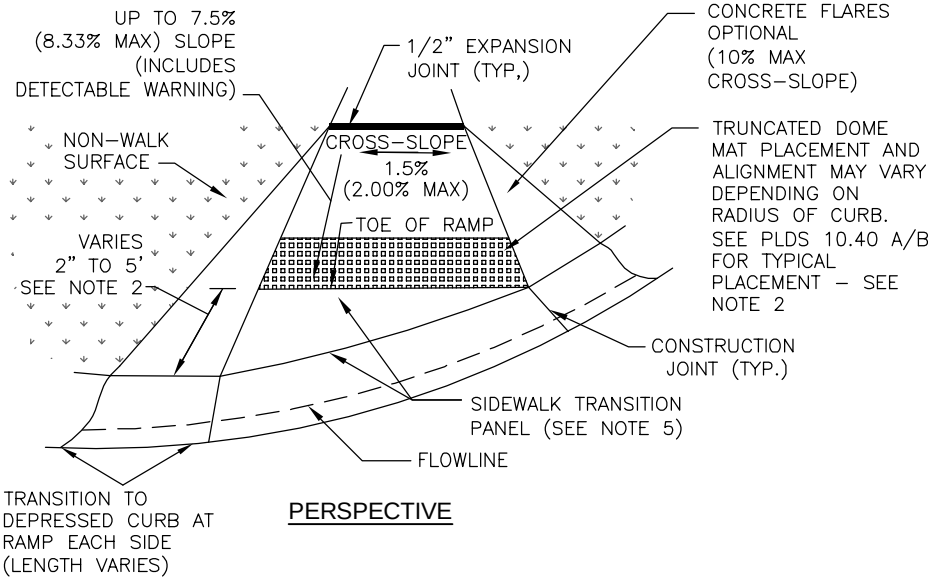
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	DIRECTIONAL ACCESSIBLE RAMP WITH LARGE CURB RADIUS

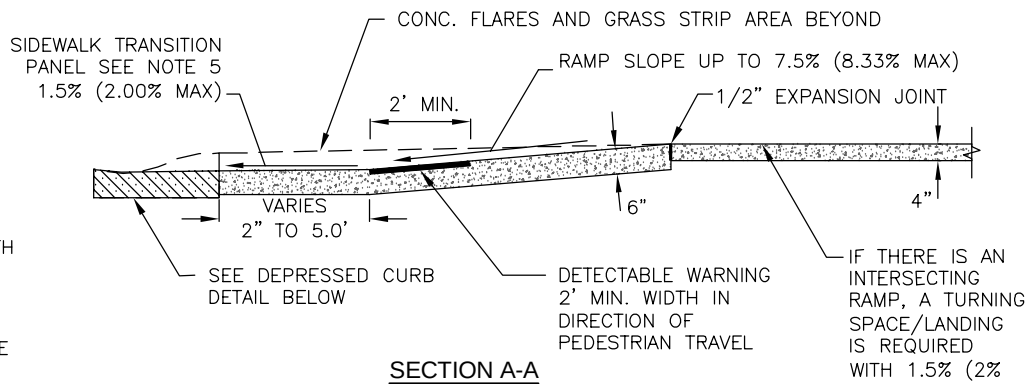
REV. DATE	
STD. NO.	REV.
10.40B	1



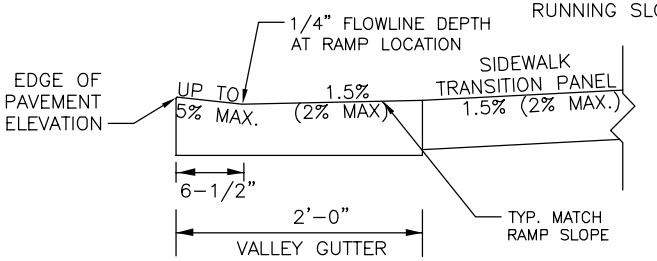
PLAN



PERSPECTIVE



SECTION A-A



DEPRESSED CURB DETAIL

MAXIMUM SLOPES FOR CURB AND GUTTER DEPRESSION AT RAMPS

NOTES:

1. USE THIS DETAIL ONLY UNDER THE FOLLOWING CIRCUMSTANCES:
   - 5-FOOT SIDEWALKS WITH CURB RADII OF 35 FEET OR LESS
   - 6-FOOT SIDEWALKS WITH CURB RADII OF 30 FEET OR LESS
   - 8-FOOT SIDEWALKS WITH CURB RADII OF 25 FEET OR LESS
2. IF CURB RADIUS EXCEEDS THOSE LISTED ABOVE, REFER TO PLDS 10.40B FOR DETECTABLE WARNING SURFACE MAT PLACEMENT.
3. ALL CONCRETE SHALL BE AT LEAST 3600 PSI.
4. ENSURE FLUSH CONDITIONS AT RAMP TO GUTTER TRANSITION.
5. SIDEWALK TRANSITION PANEL: PREFERRED 1.5% (2.0% MAX) IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. RUNNING SLOPE OF THIS AREA MUST NOT EXCEED 2%. CROSS-SLOPE MAY MATCH STREET GRADE AT BACK OF CURB WHEN STREET GRADE >2%. TRANSITION TO 1.5% (2.0% MAX) CROSS-SLOPE AT TOE OF RAMP.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

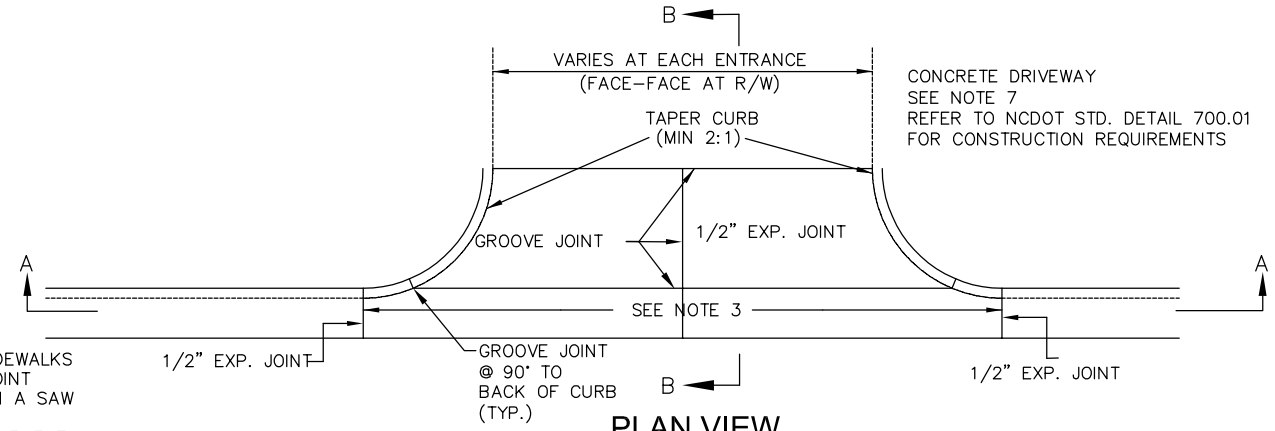
DIRECTIONAL CURB RAMP WITH VALLEY GUTTER

REV. DATE	
8/1/19	
STD. NO.	REV.
10.40C	3

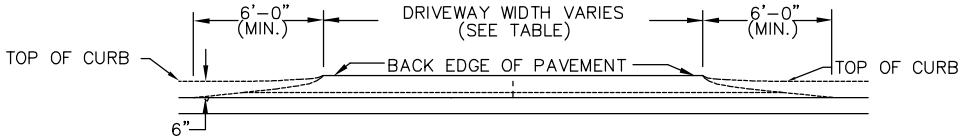
DRIVEWAY DIMENSIONS		
OPERATION/RADIUS	MINIMUM	MAXIMUM
ONE-WAY WITH 6-12 FT. RADII	20'	30'
ONE-WAY WITH 13+ FT. RADII	15'	25'
TWO-WAY WITH 6-12 FT. RADII	26'	50'
TWO-WAY WITH 13+ FT. RADII	22'	40'

NOTES:

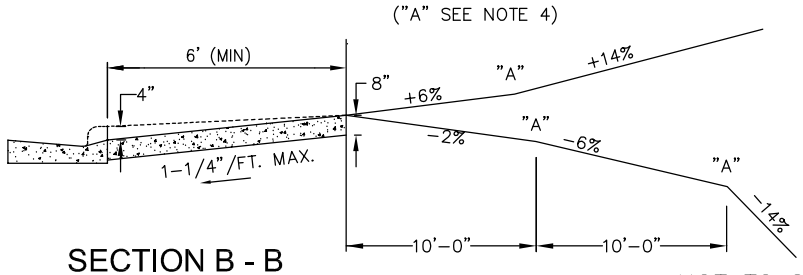
1. ALL CONCRETE TO BE 4000 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.
6. CONCRETE SHALL BE PLACED ON 8" ABC STONE WITH STONE AND SUBGRADE COMPACTED TO 95% DENSITY.
7. CONCRETE APRON AND DRIVEWAY SHALL BE PLACED ON 8" ABC STONE. CONCRETE DRIVEWAY SHALL EXTEND MINIMUM 75' FROM BACK OF APRON. SEE SECTION I.A AND I.D OF THE PLDS SPECIFICATIONS FOR COMPACTION REQUIREMENTS.
8. ANY PROPOSED VARIATIONS WILL BE REVIEWED ON A CASE BY CASE BASIS BY TOWN STAFF. AN ALTERNATE PAVEMENT DESIGN MAY BE REQUIRED BY THE TOWN BASED ON SPECIFIC PARAMETERS.



PLAN VIEW



SECTION A-A (ALONG FLOW LINE)



SECTION B - B

NOT TO SCALE

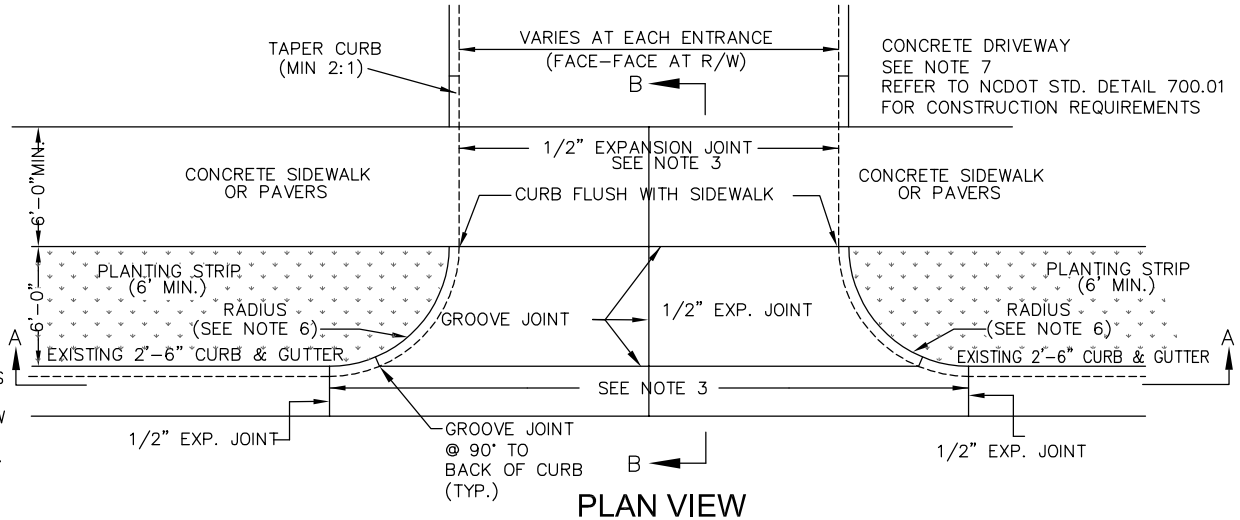
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	HEAVY INDUSTRIAL DRIVEWAY WITHOUT PLANTING STRIP

REV. DATE	
2/29/20	
STD. NO.	REV.
10.41A	4

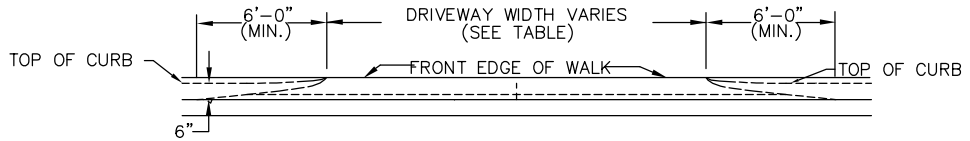
DRIVEWAY DIMENSIONS		
OPERATION/RADIUS	MINIMUM	MAXIMUM
ONE-WAY WITH 6-12 FT. RADII	20'	30'
ONE-WAY WITH 13+ FT. RADII	15'	25'
TWO-WAY WITH 6-12 FT. RADII	26'	50'
TWO-WAY WITH 13+ FT. RADII	22'	40'

NOTES:

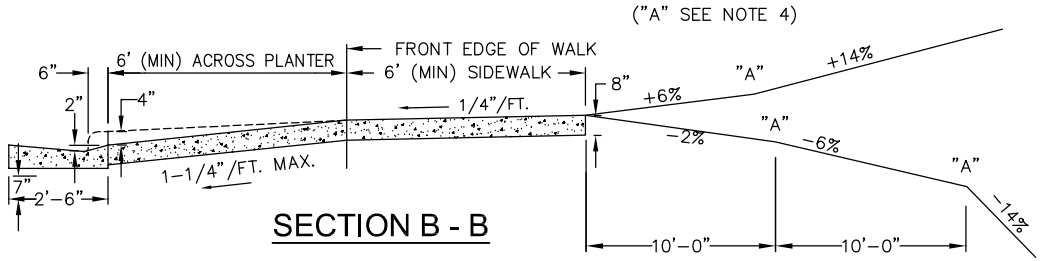
1. ALL CONCRETE TO BE 4000 P.S.I.
2. ALL CURB OR CURB AND GUTTER AND SIDEWALKS ARE TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT. SEE PLDS 10.17B FOR JOINT DETAIL.
3. ALL DRIVEWAYS MUST MEET THE CURRENT TOWN DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. "A" BREAKOVER SHALL BE 8% OR LESS (A = ALGEBRAIC DIFFERENCE).
5. PRIOR APPROVAL IS REQUIRED BY TOWN ENGINEER ON GRADES EXCEEDING WHAT ARE SHOWN.
6. RADII MUST BE MINIMUM 6 FEET OR THE WIDTH OF THE PLANTING STRIP, WHICHEVER IS GREATER. RADII GREATER THAN THESE MINIMUMS MAY BE REQUIRED BY TOWN ENGINEER ON A CASE-BY-CASE BASIS. FOR RADII GREATER THAN 6 FEET, THE RADII ARE TO CONTINUE AS A BAND AT-GRADE THROUGH THE SIDEWALK.
7. CONCRETE APRON AND DRIVEWAY SHALL BE PLACED ON 8" ABC STONE. CONCRETE DRIVEWAY SHALL EXTEND MINIMUM 75' FROM BACK OF APRON. SEE SECTION I.A AND I.D OF THE PLDS SPECIFICATIONS FOR COMPACTION REQUIREMENTS.
8. PROPOSED VARIATIONS WILL BE REVIEWED ON A CASE BY CASE BASIS BY TOWN STAFF. AN ALTERNATIVE PAVEMENT DESIGN MAY BE REQUIRED BY THE TOWN BASED ON SPECIFIC PARAMETERS.



PLAN VIEW



SECTION A-A (ALONG FLOW LINE)



SECTION B - B

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

HEAVY INDUSTRIAL DRIVEWAY
WITH PLANTING STRIP
(2'-6" STANDARD CURB)

REV. DATE	
2/29/20	
STD. NO.	REV.
10.41B	4

DWG	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
300.01	METHOD OF PIPE INSTALLATION – METHOD A	
310.02	PARALLEL PIPE END SECTION–PRECAST CONCRETE FOR 15" TO 24" PIPE	REQUIRED IN RIGHT OF WAY WITHIN THE ETJ
310.03	CROSS PIPE END SECTION–PRECAST CONCRETE FOR 18" TO 30" PIPE	REQUIRED IN RIGHT OF WAY WITHIN THE ETJ
310.10	DRIVEWAY PIPE CONSTRUCTION USING NO SPECIAL END SECTIONS	ONLY AT LOCATIONS APPROVED BY THE TOWN ENGINEER
815.03	PIPE UNDERDRAIN AND BLIND DRAIN	
816.03	GEOCOMPOSITE SHOULDER DRAIN	
838.01	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS	NOTE 1
	15" THRU 48" PIPE 90° SKEW	NOTE 1
838.02	CONCRETE ENDWALL AND SLUICE GATE 15" THRU 36" PIPE–90° SKEW	NOTE 1
838.04	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS	NOTE 1
	17"X13" THRU 71"X47" PIPE ARCH 90° SKEW	NOTE 1
838.05	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 15" THRU 48" PIPE	NOTE 1
838.06	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 17"X13" THRU 71"X47"	NOTE 1
	71"X47" ARCH PIPE	NOTE 1
838.07	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS	NOTE 1
	40"X31" THRU 66"X51" PIPE ARCH 90° SKEW	NOTE 1
838.08	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 40"X32"	NOTE 1
	THRU 66"X51" PIPE ARCH	NOTE 1
838.10	CONCRETE ENDWALL FOR OUTFALL 4', 6" OR 8" PIPE	NOTE 1
838.11	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS	NOTE 1
	15" THRU 48" 90° SKEW	NOTE 1
838.14	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 17"X31"	NOTE 1
	THRU 71"X47" 90° SKEW	NOTE 1
838.15	BRICK "L" ENDWALL FOR SINGLE PIPE CULVERTS 15" THRU 48" PIPE	NOTE 1
838.16	BRICK "L" ENDWALL FOR SINGLE PIPE CULVERTS 17"X13" THRU	NOTE 1
	71"X47" PIPE ARCH	NOTE 1
838.17	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 40"X31"	NOTE 1
	THRU 66"X51" PIPE ARCH 90° SKEW	NOTE 1
838.18	BRICK ENDWALL FOR SINGLE PIPE CULVERTS 40"X31" THRU	NOTE 1
	66"X51" PIPE ARCH	NOTE 1
838.20	BRICK ENDWALL FOR OUTFALL 4", 6" AND 8" PIPE	NOTE 1
838.21	REINFORCED CONCRETE ENDWALL FOR SINGLE 54" PIPE 90° SKEW	NOTE 1 SEE PLDS 20.17 A&B FOR SPLASH PAD
838.22	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 54" PIPE 90° SKEW	NOTE 1 SEE PLDS 20.17 A&B FOR SPLASH PAD
838.27	REINFORCED CONCRETE ENDWALL FOR SINGLE 60" PIPE 90° SKEW	NOTE 1 SEE PLDS 20.17 A&B FOR SPLASH PAD
838.28	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 60" PIPE 90° SKEW	NOTE 1 SEE PLDS 20.17 A&B FOR SPLASH PAD
838.33	REINFORCED CONCRETE ENDWALL FOR SINGLE 66" PIPE 90° SKEW	NOTE 1 SEE PLDS 20.17 A&B FOR SPLASH PAD
838.34	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 66" PIPE 90° SKEW	NOTE 1 SEE PLDS 20.17 A&B FOR SPLASH PAD
838.39	REINFORCED CONCRETE ENDWALL FOR SINGLE 72" PIPE 90° SKEW	NOTE 1 SEE PLDS 20.17 A&B FOR SPLASH PAD
838.40	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 72" PIPE 90° SKEW	NOTE 1 SEE PLDS 20.17 A&B FOR SPLASH PAD

NOTE 1: FOR ALL STRUCTURES – NCDOT REQUIRES CLASS B CONCRETE (2500 PSI). THE TOWN REQUIRES 3600 PSI CONCRETE STRENGTH @ 28 DAYS. 3600 PSI CONCRETE SHALL BE USED IN ALL TOWN PROJECTS.

NOT TO SCALE

DWG	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
838.45	NOTES FOR REINFORCED CONCRETE ENDWALL STANDARD DRAWINGS	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
	838.21 THRU 838.40	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.51	REINFORCED BRICK ENDWALL FOR SINGLE 54" PIPE 90° SKEW	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.52	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 54" PIPES 90 °SKEW	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.57	REINFORCED BRICK ENDWALL FOR SINGLE 60" PIPE 90° SKEW	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.58	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 60" PIPES 90° SKEW	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.63	REINFORCED BRICK ENDWALL FOR SINGLE 66" PIPE 90° SKEW	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.64	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 66" PIPES 90° SKEW	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.69	REINFORCED BRICK ENDWALL FOR SINGLE 72" PIPE 90° SKEW	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.70	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 72" PIPES 90° SKEW	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.75	NOTES FOR REINFORCED BRICK ENDWALL STANDARD DRAWINGS 838.51 THRU 838.70	NOTE 1 SEE STD 20.17 A&B FOR SPLASH PAD
838.80	PRECAST CONCRETE ENDWALL FOR SINGLE 12" THRU 72" PIPE 90° SKEW	
840.00	CONCRETE BASE PAD FOR DRAINAGE STRUCTURES	
840.01	BRICK CATCH BASIN 15" THRU 54" PIPE	
840.02	CONCRETE CATCH BASIN 12" THRU 54" PIPE	
840.03	FRAME, GRATES, AND HOOD FOR USE ON STANDARD CATCH BASIN	
840.04	CONCRETE OPEN THROAT CATCH BASIN 12" THRU 48" PIPE	NOTE 1; OPENINGS PERMITTED IN 4 SIDES OUTSIDE OF STREET R/W MANHOLE RING AND COVER REQUIRED IN TOP SLAB SEE PLDS 20.05 A&B
840.05	BRICK OPEN THROAT CATCH BASIN 15" THRU 48" PIPE	NOTE 1; OPENINGS PERMITTED IN 4 SIDES OUTSIDE OF STREET R/W MANHOLE RING AND COVER REQUIRED IN TOP SLAB SEE PLDS 20.05 A&B
840.14	CONCRETE DROP INLET 12" THRU 30" PIPE	NOTE 1
840.15	BRICK DROP INLET 12" THRU 30' PIPE	NOTE 1
840.16	DROP INLET FRAME AND GRATE FOR USE WITH STANDARD DRAWINGS 840.14 & 840.15	NOTE 1
840.17	CONCRETE GRATED DROP INLET TYPE "A" 12" THRU 72" PIPE	NOTE 1
840.18	CONCRETE GRATED DROP INLET TYPE "B" 12" THRU 36" PIPE	NOTE 1
840.19	CONCRETE GRATED DROP INLET TYPE "D" 12" THRU 36" PIPE	NOTE 1
840.20	FRAMES AND WIDE SLOT FLAT GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.22	FRAMES AND WIDE SLOT SAG GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.24	FRAMES AND NARROW SLOT SAG GRATES	
840.25	ANCHORAGE FOR FRAMES BRICK OR CONCRETE	
840.26	BRICK GRATED DROP INLET TYPE "A" 12" THRU 72" PIPE	
840.27	BRICK GRATED DROP INLET TYPE "B" 12" THRU 36" PIPE	
840.28	BRICK GRATED DROP INLET TYPE "D" 12" THRU 36" PIPE	
840.29	FRAMES AND NARROW SLOT FLAT GRATES	
840.30	DRIVEWAY DROP INLET	

NOTE 1: FOR ALL STRUCTURES – NCDOT REQUIRES CLASS B CONCRETE (2500 PSI). THE TOWN REQUIRES 3600 PSI CONCRETE STRENGTH @ 28 DAYS. 3600 PSI CONCRETE SHALL BE USED IN ALL TOWN PROJECTS.

NOT TO SCALE

DWG	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
840.31	CONCRETE JUNCTION BOX (WITH OPTIONAL MANHOLE) 12" THRU 66" PIPE	NOTE 1; OPTIONAL MANHOLE IS REQUIRED
840.32	BRICK JUNCTION BOX 12" THRU 66" PIPE	NOTE 1; OPTIONAL MANHOLE IS REQUIRED
840.34	TRAFFIC BEARING JUNCTION BOX FOR USE WITH PIPES 42" AND UNDER	NOTE 1; OPTIONAL MANHOLE IS REQUIRED; AS MEASURED FROM BOTTOM OF TOP SLAB -- FOR JUNCTION BOX HEIGHT 0'-4'8" USE 8" THICK WALL, FROM 4'8" HEIGHT TO 10' HEIGHT, USE 12" THICK WALL. IF PROPOSED STRUCTURE EXCEEDS 12'-0" HEIGHT A SPECIAL DESIGN WILL BE REQUIRED
840.35	TRAFFIC BEARING DROP INLET FOR CAST IRON DOUBLE FRAME AND GRATES	
840.36	TRAFFIC BEARING DROP INLET FOR STEEL (840.37) DOUBLE FRAME AND GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.37	STEEL GRATE AND FRAME	NOT FOR USE IN PEDESTRIAN AREAS
840.41	SPRING BOX CONCRETE OR BRICK	
840.45	PRECAST DRAINAGE STRUCTURE (SOLID AND WAFFLE WALL)	WAFFLE WALL IS NOT PERMITTED IN ROADWAY, PLANTING STRIPS, OR MEDIANS. ALL OPENINGS SHALL BE PRE-CAST
840.46	TRAFFIC BEARING PRECAST DRAINAGE STRUCTURE	
840.51	BRICK MANHOLE 12" 36" PIPE	
840.52	PRECAST MANHOLE 4', 5' AND 6' DIAMETER 12" THRU 42" PIPE	
840.53	PRECAST MANHOLE WITH MASONRY BASE 12" THRU 42" PIPE	
840.54	MANHOLE FRAME AND COVER	
840.60	DRAINAGE STRUCTURE STEPS	
840.71	CONCRETE PAVED DITCHES	
840.72	PIPE COLLAR	
850.01	CONCRETE PAVED DITCHES	
852.04	METHODS FOR PLACEMENT OF DROP INLETS IN GRASSED MEDIAN (USING 1'-6" CURB AND GUTTER)	
852.05	MEDIAN CURB FOR CATCH BASIN (FOR USE WITH 1'-6" CURB AND GUTTER)	
852.06	METHOD OF PLACEMENT OF DROP INLETS IN CONCRETE ISLANDS	
876.01	RIP RAP IN CHANNELS	
876.03	DRAINAGE DITCHES WITH CLASS "A" RIP RAP	
876.04	DRAINAGE DITCHES WITH CLASS "B" RIP RAP	

NOTE 1: FOR ALL STRUCTURES – NCDOT REQUIRES CLASS B CONCRETE (2500 PSI). TOWN REQUIRES 3600 PSI CONCRETE STRENGTH @ 28 DAYS. 3600 PSI CONCRETE SHALL BE USED IN ALL TOWN PROJECTS.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

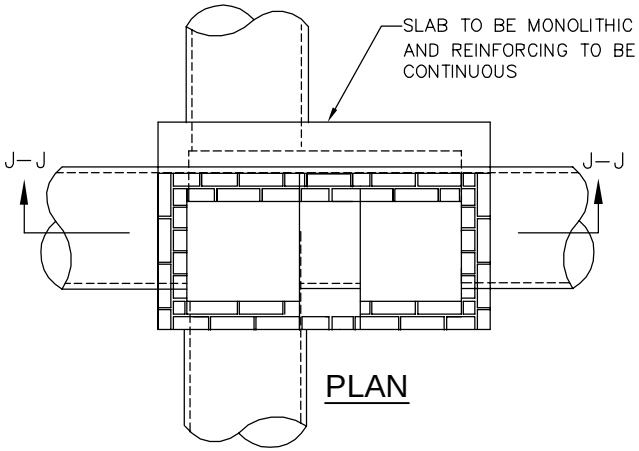
NCDOT STANDARDS
APPROVED FOR USE IN THE TOWN OF PINEVILLE

8/1/19

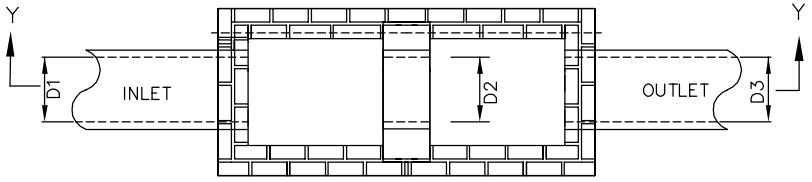
STD. NO.	REV.
20.00C	3

GENERAL NOTES:

1. SEE NCDOT STANDARD 840.01 FOR DETAILS BASED ON PIPE SIZE PER CROSS SECTION.
2. CONSTRUCT TWO SINGLE BASINS PER NCDOT STANDARD WITH DOUBLE INTERIOR WALL.
3. ALL CONCRETE TO BE 3600 P.S.I COMPRESSIVE STRENGTH.
4. BASE SLAB SHALL BE MONOLITHIC.
5. SEE PLDS #10.29 AND #10.30 FOR PLACEMENT OF CATCH BASIN.
6. PIPE SECTION D2 CONNECTING CATCH BASINS SHALL HAVE A MINIMUM DIAMETER SAME AS OF OUTLET PIPE D3.
7. ALL REINFORCING STEEL SHOWN ON NCDOT STANDARDS IS TO BE PROVIDED AS CONTINUOUS MEMBERS. (NO LAPS, USED AS A SINGLE CONTINUOUS BAR IN THE SLAB)
8. WEEP HOLES SHALL BE PLACED IN BACK WALL WITH FILTER FABRIC OR STONE ON BACK SIDE



PLAN



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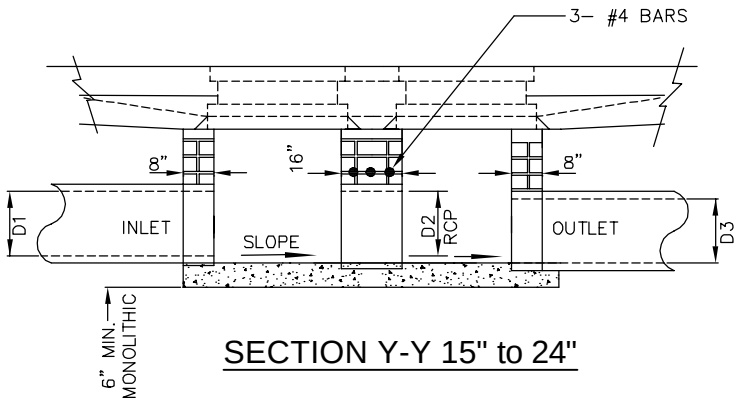
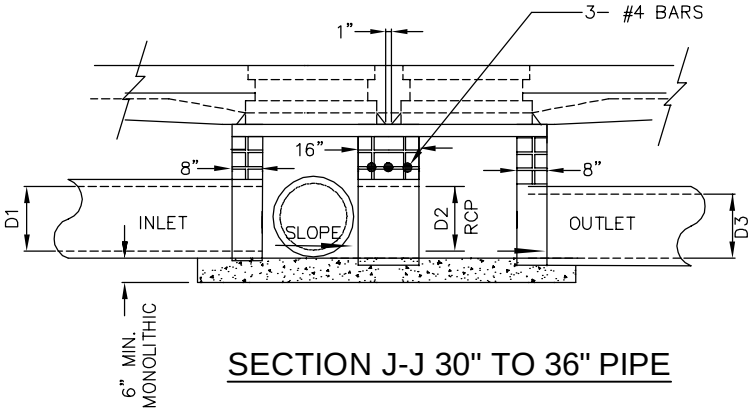


SECTION Y-Y 15" to 24"



SECTION J-J 30" TO 36" PIPE

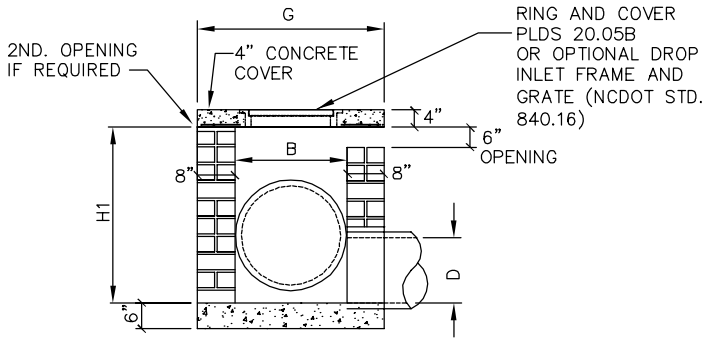
NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BRICK DOUBLE CATCH BASIN 15" THRU 36" PIPE	STD. NO. 20.03 / REV.

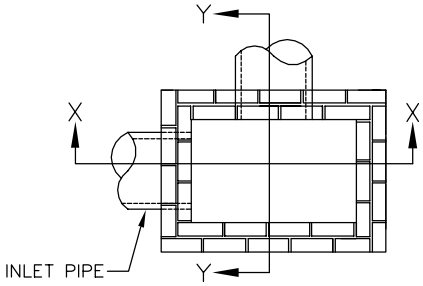
GENERAL NOTES:

1. MORTAR JOINTS SHOULD BE BETWEEN 3/8" AND 5/8" THICK.
2. ALL CONCRETE TO BE 3600 P.S.I COMPRESSIVE STRENGTH.
3. THE 6" OPENING SHOWN MAY BE INCREASED TO 8" MAX. IF DEEMED TO BE NECESSARY BY THE ENGINEER.
4. ALL CATCH BASIN OVER 3'–6" IN DEPTH SHALL BE PROVIDED WITH STEPS 1'–2" ON CENTERS. STEPS SHALL BE IN ACCORDANCE WITH NCDOT STD. 840.60.
5. CONCRETE BRICK MAY BE USED IN LIEU OF HARD COMMON CLAY BRICK.
6. JUMBO BRICK WILL BE PERMITTED.
7. FOR 8'–0" IN HEIGHT OR LESS USE 8" WALL. OVER 8'–0" IN HEIGHT USE 12" WALL TO 6'–0" FROM TOP OF WALL, AND 8" WALL FOR THE REMAINING 6'–0".
8. ALL EXPOSED JOINTS WILL BE CONCAVE TOOLED.
9. ALL PIPE IN STORM DRAIN STRUCTURE SHALL BE STRUCK EVEN WITH THE INSIDE WALL, GROUTED AND BRUSHED SMOOTH.
10. WEEP HOLES SHALL BE PLACED IN BACK WALL WITH FILTER FABRIC OR STONE ON BACK SIDE.
11. THIS CATCH BASIN IS NOT TO BE USED WITHIN STREET RIGHT OF WAY UNLESS OTHERWISE APPROVED BY TOWN ENGINEER.

DIMENSIONS OF BOX AND PIPE				REINFORCING					COVER DIMENSION	
PIPE	SPAN	WIDTH	HEIGHT	BARS – X		BARS – Y		TOTAL		
D	A	B	H1 (MIN.)	NO.	LENGTH	NO.	LENGTH	LBS.	F	G
15"	3'–6"	2'–3"	2'–7"	2	3'–4"	7	4'–7"	26	4'–10"	3'–7"
18"	4'–0"	2'–8"	2'–11"	2	3'–9"	8	5'–1"	33	5'–4"	4'–0"
24"	4'–0"	2'–8"	3'–5"	2	3'–9"	8	5'–1"	33	5'–4"	4'–0"
30"	4'–0"	3'–6"	3'–11"	2	4'–7"	9	5'–1"	37	5'–4"	4'–10"
36"	4'–0"	3'–6"	4'–6"	2	4'–7"	9	5'–1"	37	5'–4"	4'–10"
42"	4'–0"	3'–6"	4'–11"	2	4'–7"	9	5'–1"	37	5'–4"	4'–10"
48"	4'–6"	4'–0"	5'–5"	2	5'–1"	10	5'–7"	45	5'–10"	5'–4"



SECTION Y-Y



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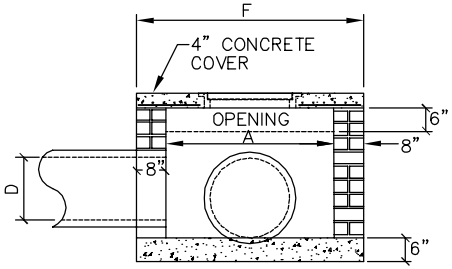
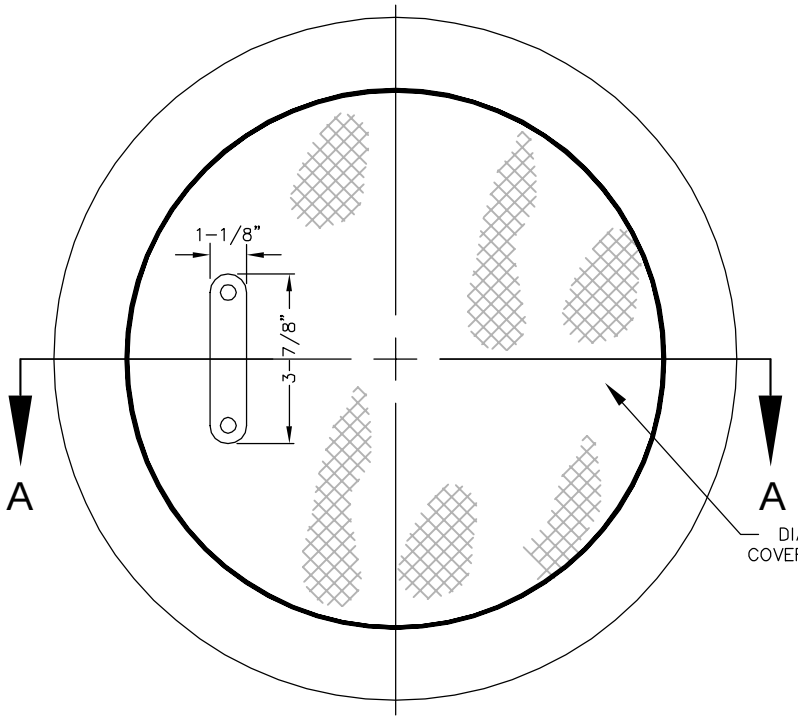


SECTION X-X

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SLAB TYPE CATCH BASIN 15" THRU 48" PIPE

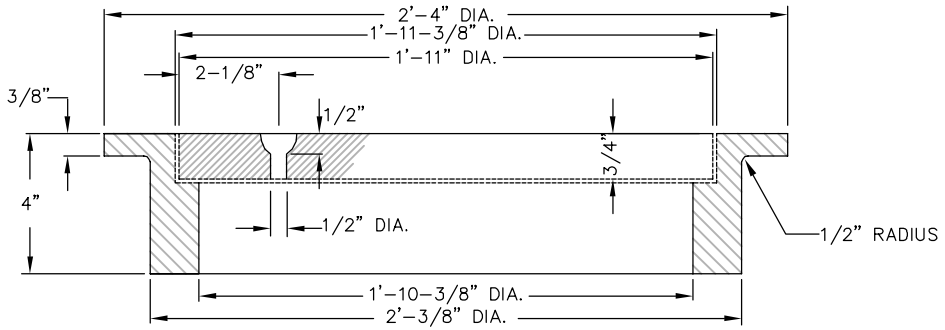
8/1/19

STD. NO.	REV.
20.05A	3



PLAN VIEW

MINIMUM WEIGHT	
RING	96 LBS
COVER	86 LBS



SECTION A-A

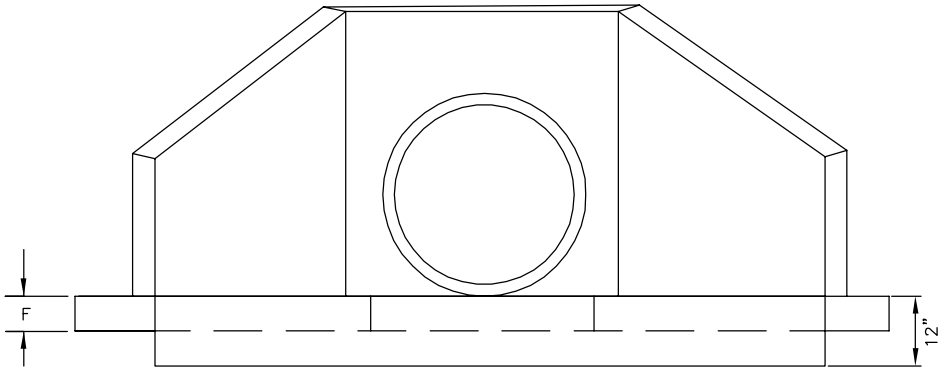
NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

MANHOLE RING AND COVER FOR SLAB TYPE CATCH BASIN

STD. NO.	REV.
20.05B	

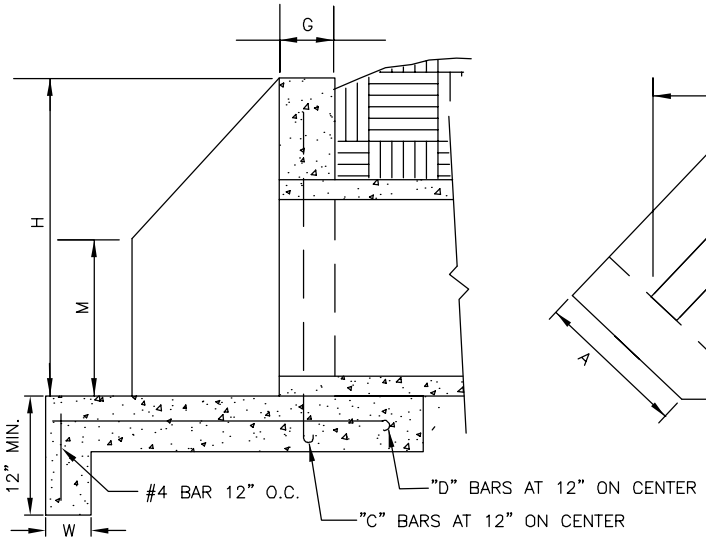
CONCRETE PIPE			DIMENSIONS									
WALL THK.	OUT DIA.	IN DIA.	H	A	B	C	E	F	G	W	K	M
2 1/4"	19 1/2"	15"	27 1/2"	20"	24"	8"	7 1/2"	4"	4"	8"	17"	10"
2 1/2"	23"	18"	31"	20"	24"	8"	9"	4"	4"	8"	17"	12"
3"	30"	24"	38"	20"	30"	8"	12"	4"	4"	8"	21"	15"
3 1/2"	37"	30"	45"	20"	44"	12"	15"	6"	8"	8"	31"	18"
4"	44"	36"	52"	32"	44"	12"	18"	6"	8"	8"	31"	22"
4 1/2"	51"	42"	59"	32"	48"	12"	21"	6"	8"	8"	34"	26"
5"	58"	48"	66"	32"	48"	12"	24"	6"	8"	8"	34"	29"
5 1/2"	65"	54"	73"	32"	54"	12"	27"	6"	8"	8"	38"	33"
6"	72"	60"	80"	36"	66"	12"	30"	8"	12"	12"	46"	36"
6 1/2"	79"	66"	87"	36"	72"	12"	33"	8"	12"	12"	51"	40"
7"	86"	72"	94"	36"	78"	12"	36"	8"	12"	12"	56"	43"



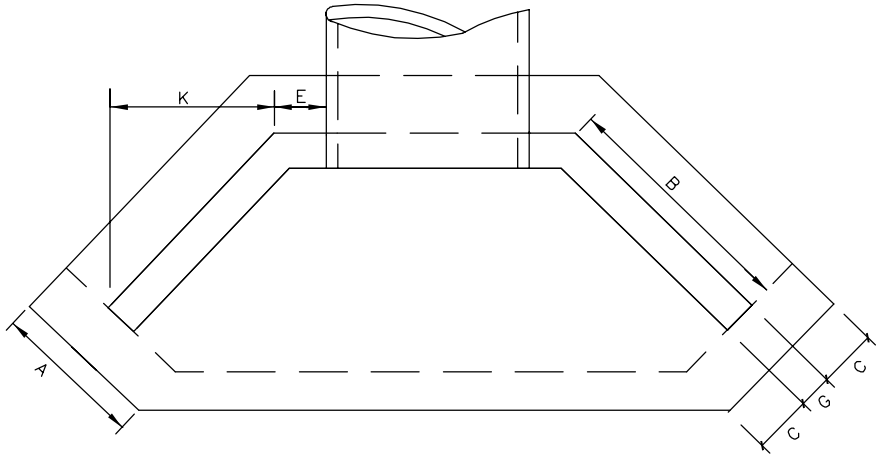
FRONT VIEW

REINFORCING

DIA.	"C" BAR		"D" BAR	
	NO.	LGT.	NO.	LGT.
15"	4	2'-0"	4	1'-11"
18"	4	2'-3"	4	2'-2"
24"	4	2'-9"	4	2'-8"
30"	4	3'-3"	4	3'-2"
36"	4	3'-9"	4	3'-8"
42"	4	4'-3"	4	4'-2"
48"	4	4'-9"	4	4'-8"
54"	4	5'-3"	4	5'-2"
60"	4	5'-9"	4	5'-8"
66"	4	6'-3"	4	6'-2"
72"	4	6'-9"	4	6'-8"



SIDE VIEW



TOP VIEW

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

CONCRETE WINGWALL WITH SPLASH PAD

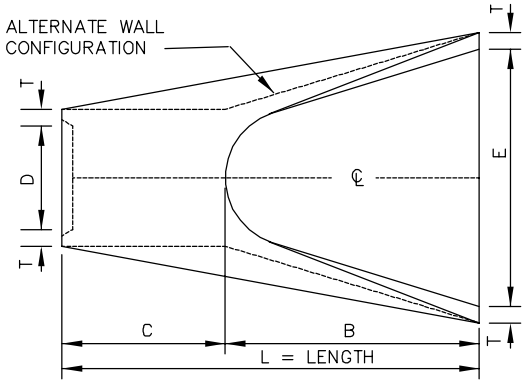
STD. NO.	REV.
20.17A	

GENERAL NOTES:

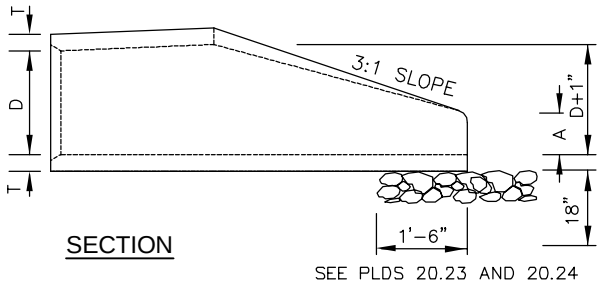
1. ALL CORNERS TO BE CHAMFERED 1" IF CONCRETE.
2. THE CONTRACTOR WILL BE REQUIRED TO PLACE 2–#6 BARS "Y" IN THE TOP OF ALL ENDWALL FOR PIPE CULVERTS 42" AND OVER WITH A MINIMUM 3" COVER AND A LENGTH OF 6" LESS THAN ENDWALL.
3. FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
4. WALL THICKNESS (T) SHOWN IS NOT TO BE INTERPRETED TO MEAN THE THICKNESS ACCEPTABLE, BUT IS USED ONLY IN COMPUTING ENDWALL QUANTITIES.
5. IF CONTRACTOR ELECTS TO USE CONSTRUCTION JOINT AT BOTTOM OF PIPE, AND POURS BASE SEPARATELY, THE TOP OF BASE SHALL BE LEFT ROUGH.
6. ALL CONCRETE TO BE 3600 P.S.I COMPRESSIVE STRENGTH.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CONCRETE WINGWALL WITH SPLASH PAD NOTES	STD. NO. 20.17B / REV.

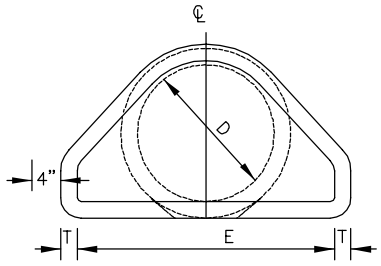


PLAN



SECTION

SEE PLDS 20.23 AND 20.24



END VIEW

TABLE OF DIMENSIONS							
D	T	A	B	C	E	L	WT.
12"	2-1/4"	4"	2'-0"	4'-1"	2'-0"	6'-1"	730
15"	2-1/4"	6"	2'-3"	3'-10"	2'-0"	6'-1"	730
18"	2-1/2"	9"	2'-3"	3'-10"	3'-0"	6'-1"	1190
24"	3"	10"	3'-8"	2'-6"	4'-0"	6'-2"	1770
30"	3-1/2"	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"	2380
36"	4"	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"	5320
42"	4-1/2"	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"	5920
48"	5"	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"	7470
54"	5-1/2"	2'-3"	5'-6"	2'-10"	7'-6"	8'-4"	8810
60"	6"	2'-6"	5'-0"	3'-3"	8'-0"	8'-3"	11180
66"	6-1/2"	3'-0"	6'-0"	2'-3"	8'-6"	8'-3"	12530
72"	7"	3'-0"	6'-6"	1'-9"	9'-0"	8'-3"	13980

GENERAL NOTES:

1. REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M170, TABLE 2, WALL B.
2. ALL CONCRETE TO BE 3600 P.S.I COMPRESSIVE STRENGTH.
3. PROVIDE TONGUE OR SPIGOT JOINT AT INLET END SECTION.
4. PROVIDE GROOVE OR BELL JOINT AT OUTLET END SECTION.
5. THE DIMENSIONS FOR END SECTIONS SHALL SUBSTANTIALLY AGREE WITH THE TABLE. MINOR VARIATIONS WILL BE PERMITTED BASED ON THE MANUFACTURER'S STANDARD FORMS AND TEMPLATES.
6. NOT TO BE USED IN NCDOT MAINTAINED RIGHT OF WAY.

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

FLARED END SECTION
12" THRU 72" PIPE

8/1/19

STD. NO.	REV.
20.22	3

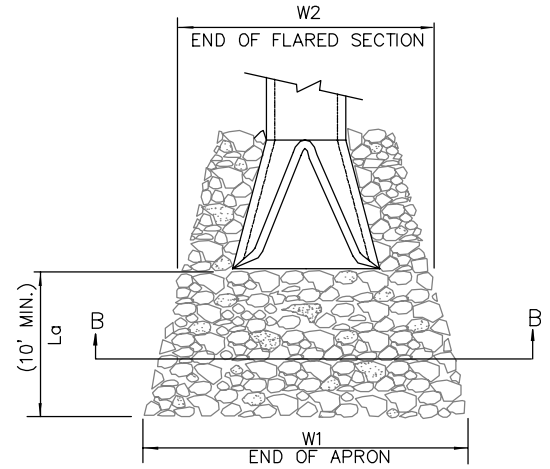
NOTES:

1. CLASS OR MEDIAN SIZE OF RIPRAP AND LENGTH, WIDTH AND DEPTH OF APRON TO BE DESIGNED BY THE ENGINEER.
2. REFER TO THE CHARLOTTE MECKLENBURG STORM WATER DESIGN MANUAL FOR RIPRAP APRON DESIGN STANDARDS.
3. RIPRAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.
4. THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIPRAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.
5. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. MAXIMUM TAPER TO RECEIVING CHANNEL 5:1
6. ALL SUBGRADE FOR STRUCTURE TO BE COMPACTED TO 95% OR GREATER.
7. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.
8. NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE PERMITTED.
9. FILTER FABRIC SHALL BE INSTALLED ON COMPACTED SUBGRADE PRIOR TO PLACEMENT OF RIP RAP.
10. ANY DISTURBED AREA FROM END OF APRON TO RECIEVING CHANNEL MUST BE STABILIZED.

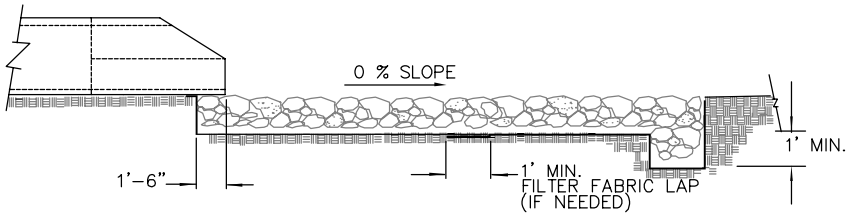
USE USDA NOMOGRAPH FROM NC SEDIMENT AND EROSION CONTROL MANUAL FOR DESIGN DATA.

OUTLET	La	W1	W2	*T	H

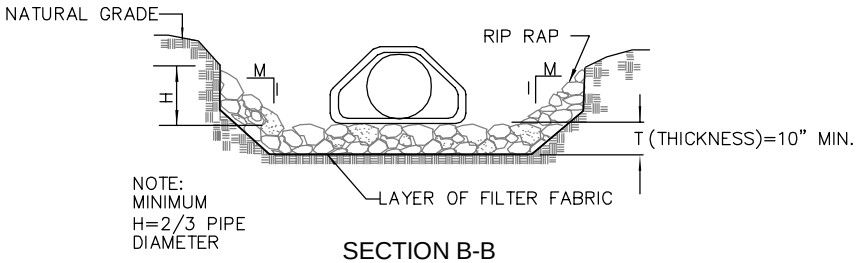
* d50 (see fig 8.06 a&b "NC SEDIMENT AND EROSION CONTROL MANUAL"
dmax = 1.5 x d50
T = 1.5 X dmax.
T(min.)=10"



PLAN



ELEVATION



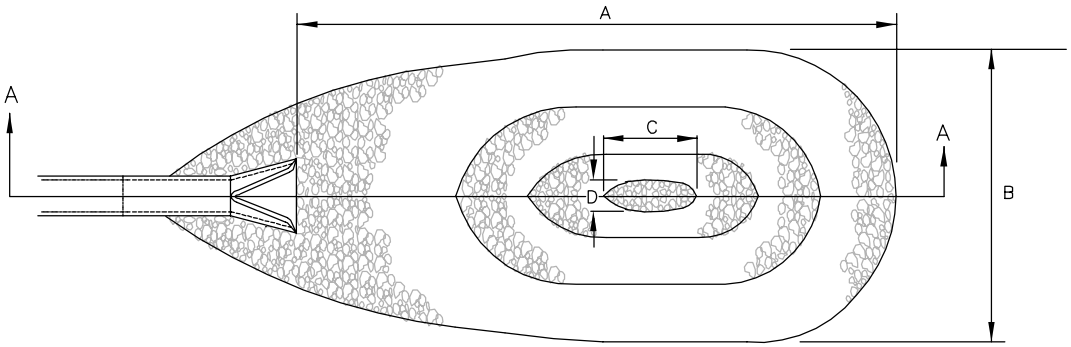
SECTION B-B

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RIPRAP APRON AT PIPE OUTFALLS OTHER THAN AT CREEK BUFFERS

STD. NO.	REV.
20.23	



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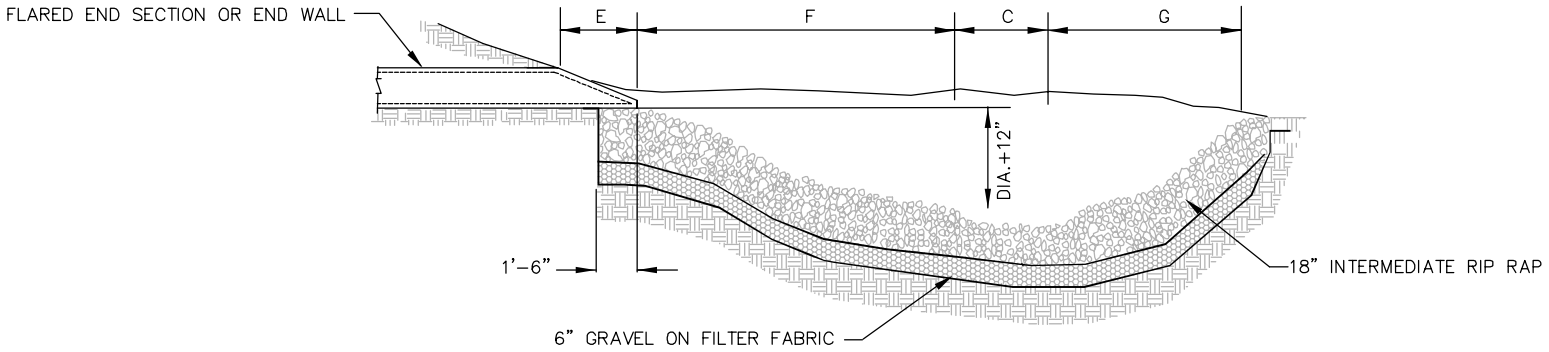


SECTION A-A

GENERAL NOTES:

1. THIS DETAIL IS TO ONLY BE USED WHEN OUTFALL HAS A CONTINUOUS FLOW OF WATER AND WITH PRIOR APPROVAL OF THE TOWN ENGINEER.

PIPE SIZE	A	B	C	D	E	F	G	WT. RIP RAP IN TONS
15"	10'	7'	1 1/2'	1'	1'	4 1/2'	3'	6
18"	12'	8'	2'	1'	1'	5'	4'	8
21"	15'	9'	2 1/2'	1 1/2'	1'	7'	4 1/2'	12
24"	17'	10'	2 1/2'	1 1/2'	1'	8'	5 1/2'	15
30"	20'	13'	3'	2'	2'	9'	6'	22
36"	24'	16'	3 1/2'	2'	2'	9 1/2'	7'	33

NOT TO SCALE

Pineville NORTH CAROLINA

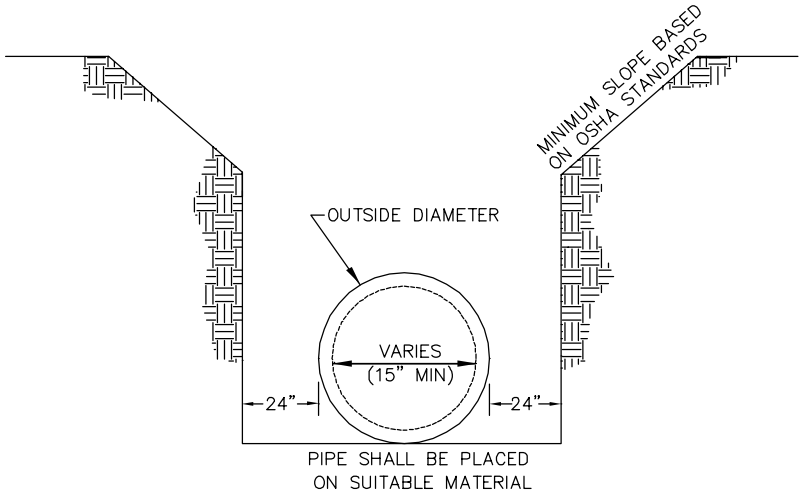
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

RIP RAP PLUNGE POOL

STD. NO.	REV.
20.24	

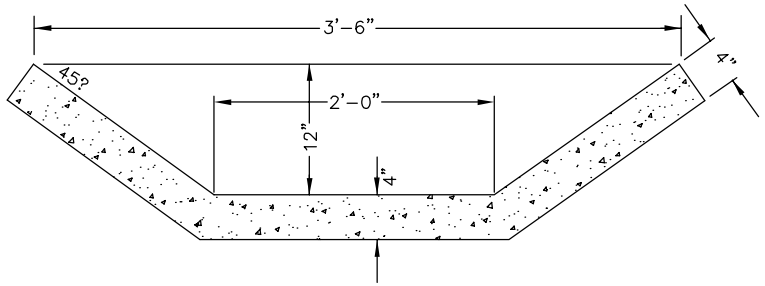
NOTES:

1. A MINIMUM OF 24" FROM OUTSIDE DIAMETER OF PIPE TO SIDE OF TRENCH MUST BE ALLOWED FOR COMPACTION OF FILL MATERIAL. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER THE PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE PLACED IN LAYERS NOT TO EXCEED 6". UNDER NO CIRCUMSTANCES SHALL WATER BE PERMITTED TO RISE IN UNBACKFILLED TRENCHES AFTER THE PIPE HAS BEEN PLACED. COMPACTION REQUIREMENTS SHALL BE ATTAINED BY THE USE OF MECHANICAL TAMPS ONLY. EACH AND EVERY LAYER OF BACKFILL SHALL BE PLACED LOOSE AND THOROUGHLY COMPACTED INTO PLACE.
2. ALL BACKFILL MATERIAL SHALL HAVE AN IN PLACE COMPACTED DENSITY OF 95% STANDARD PROCTOR.
3. THE FINAL 2' BELOW FINISHED GRADE SHALL BE 100%.
4. ALL TRENCHING OPERATIONS SHALL MEET OSHA STANDARDS.
5. BACKFILL MATERIAL BENEATH ROADWAY SHALL BE SELECT BACKFILL MATERIAL.



NOT TO SCALE

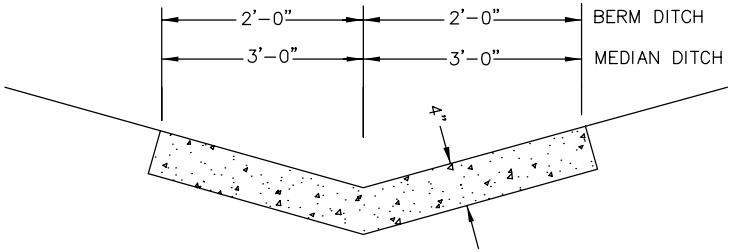
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TRENCH DRAIN FOR STORM DRAIN	STD. NO. 20.25 / REV.



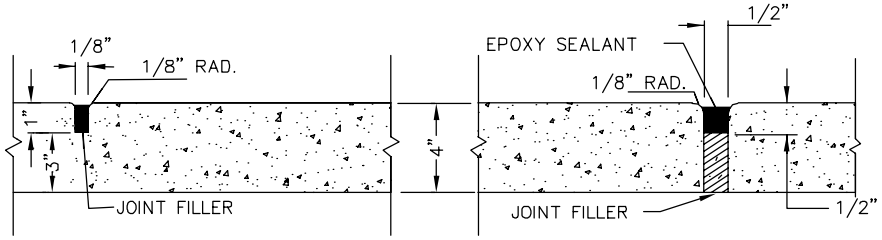
SLOPE DRAIN, BASE DITCH OR BERM DRAINAGE OUTLET DITCH

GENERAL NOTES:

1. IN THE 4" CONCRETE PAVED DITCHES PLACE 1/2" EXPANSION JOINT AT 30 FT INTERVALS AND AT ALL OTHER POINTS WHERE PROPOSED DITCHES ABUT RIGID OBJECTS. PLACE GROOVED JOINTS 1" DEEP AT 10' INTERVALS BETWEEN EXPANSION JOINTS.
2. WIDTH AND SHAPE OF PROPOSED 4" CONCRETE PAVED DITCHES SHALL BE AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.

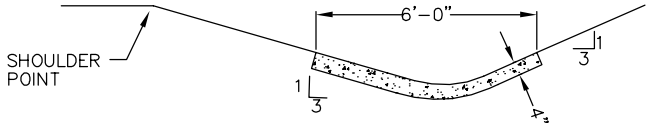


MEDIAN OR BERM DITCH

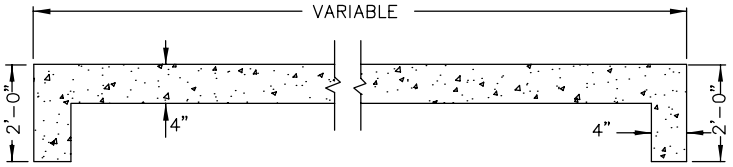


SHOWING GROOVED JOINT

SHOWING EXPANSION JOINT



SIDE DITCH

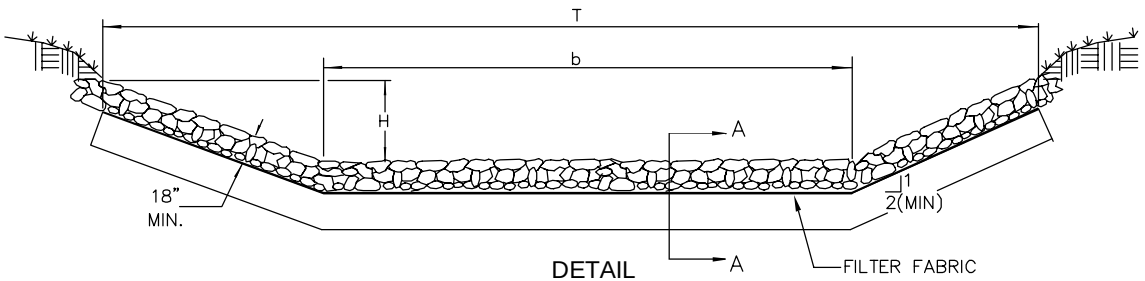


LONGITUDINAL SECTION OF PAVED DITCH

SHOWING 2'-0" CURTAIN WALL REQUIRED AT EACH END

NOT TO SCALE

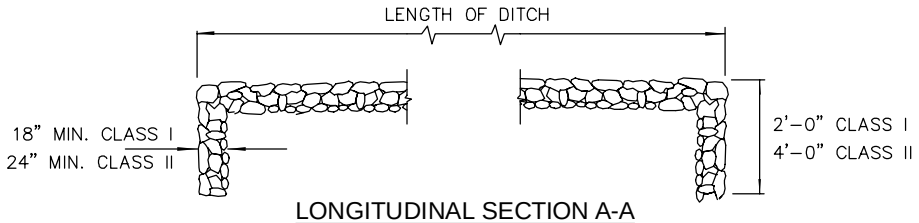
Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CONCRETE PAVED DITCHES	STD. NO. 20.26 / REV.



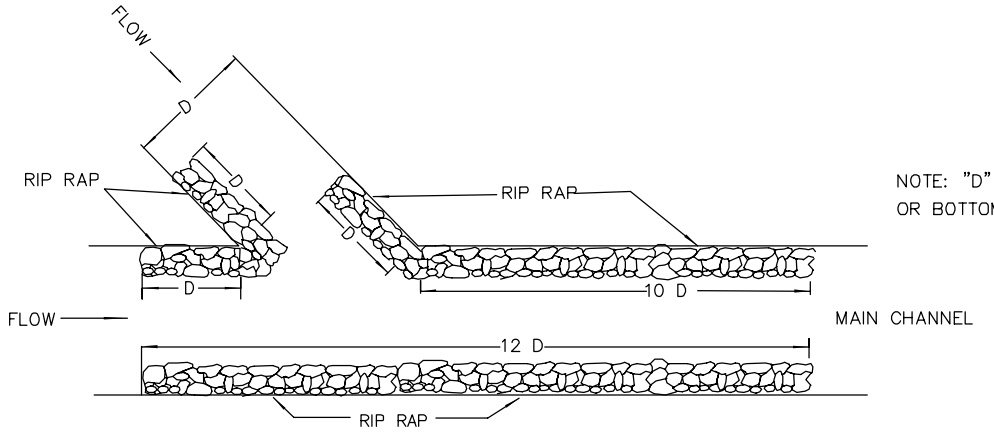
DETAIL

GENERAL NOTES:

1. IF BEDROCK IS ENCOUNTERED WITHIN THE LIMITS OF THE TOEWALL, BEGIN TOEWALL ON THE BEDROCK OR AS DIRECTED BY THE ENGINEER.
2. WHERE ONLY ONE SIDE REQUIRES RIP RAP CLASS I OR II, LIST STATION AND SIDE OF SAME.
3. CHANNEL AND RIP RAP SIZE TO BE DESIGNED BY THE ENGINEER.
4. DEPENDING ON SOIL CONDITIONS, WASHED STONE AND FILTER FABRIC MAY BE NECESSARY UNDER RIP RAP.
5. CHANNEL DEPTH "H" SHALL INCLUDE A MINIMUM 6" OF FREEBOARD.



LONGITUDINAL SECTION A-A



NOTE: "D" EQUALS DIAMETER OF PIPE OR BOTTOM WIDTH OF CHANNEL.

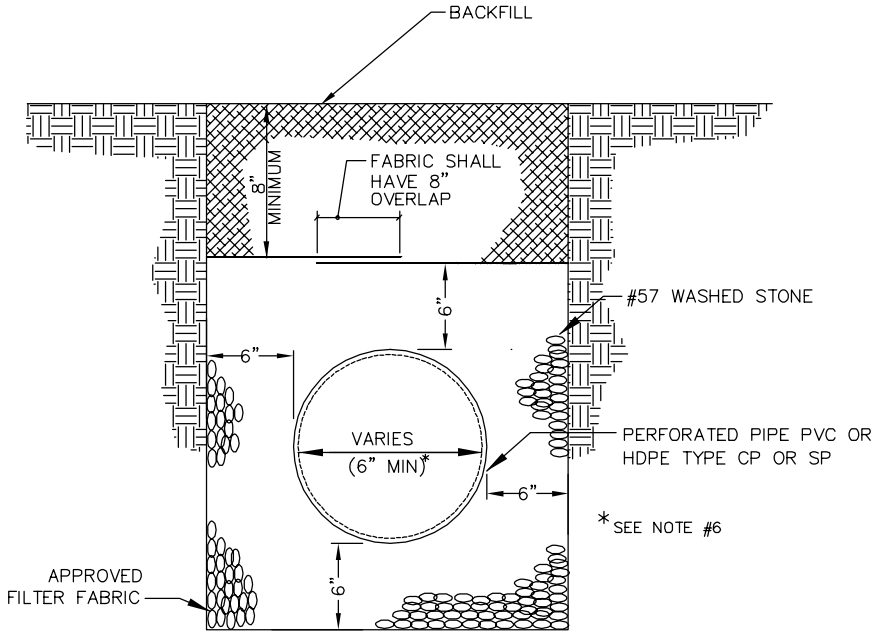
CHANNEL INTERSECTIONS

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	RIP RAP DITCHES	STD. NO. 20.27 / REV.

NOTES:

1. A MINIMUM OF 6" FROM OUTSIDE DIAMETER OF PIPE TO SIDE OF TRENCH MUST BE ALLOWED FOR WASHED STONE. THE METHOD OF COMPACTING BACKFILL MATERIAL IS SUBJECT TO APPROVAL BY THE TOWN ENGINEER. AN APPROVED FILTER FABRIC SHALL BE PLACED AROUND STONE AND OVERLAPPED 8" AT TOP WITHIN STREET RIGHT OF WAY.
2. SUBDRAIN IS TO BE A MINIMUM 6" DIAMETER PERFORATED PIPE; USE SCHEDULE 40 PVC PER ASTM D1785 OR HDPE PER AASHTO M252, TYPE CP (SINGLE-WALL, CORRUGATED) OR TYPE SP (DOUBLE-WALL, SMOOTH INTERIOR).
3. OUTLET PIPE FROM SUBDRAIN SHALL BE NON-PERFORATED UNDER PAVEMENT (INCLUDING SIDEWALKS AND DRIVEWAYS). SEE SITE PLAN FOR SLOPE OF SUBDRAIN AND TIE IN TO STORM DRAINAGE.
4. THE OUTLET PIPES SHALL BE SCHEDULE 40 (MIN.) PVC PER ASTM D2665 OR HDPE PER AASHTO M252, TYPE S (DOUBLE WALL, SMOOTH INTERIOR) UNDER ROADWAYS.
5. FILTER FABRIC SHALL BE AN APPROVED, TYPE 2 WATER PERMEABLE, SYNTHETIC FABRIC.
6. A MINIMUM 4" DIAMETER SUBDRAIN MAY BE USED IN PLANTING AREAS AS DESCRIBED IN THE PLDSM 4000 SERIES.
7. CLEAN-OUTS ARE RECOMMENDED AT ALL PIPE INTERSECTIONS AND AT A 100' MAXIMUM SEPARATION.
8. SUBDRAIN INVERTS AT CATCH BASINS SHOULD BE INSTALLED ABOVE THE BOTTOM TO AVOID SURCHARGE OF SUBDRAIN SYSTEM.
9. ALL SUBDRAINS WILL TIE INTO A STANDARD DRAINAGE STRUCTURE OR DAYLIGHT TO THE SURFACE WHERE APPROPRIATE.

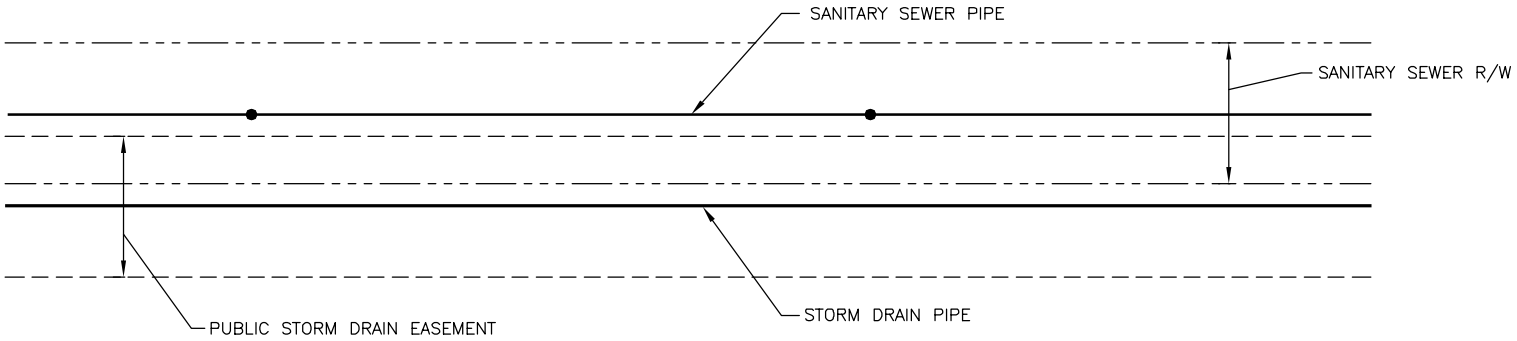


SPECIAL NOTE:

PREFABRICATED DRAINAGE MAY BE USED WITH APPROVAL OF TOWN ENGINEER.

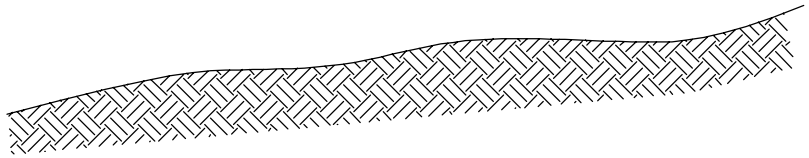
NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SUBDRAIN DETAIL	8/1/19 STD. NO. 20.28 REV. 3

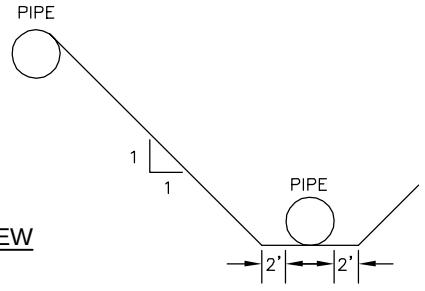


THE SANITARY SEWER AND STORM DRAINAGE EASEMENTS MAY OVERLAP; HOWEVER THE PIPE AND ASSOCIATED STRUCTURES MUST NOT BE IN THE OTHER UTILITY'S RIGHT OF WAY. THE SANITARY SEWER EASEMENT WIDTHS SHALL BE AS OUTLINED IN AGENCY'S DESIGN MANUAL. THIS DETAIL DOES NOT APPLY TO STORM DRAINAGE UTILIZING OPEN CHANNEL FLOW.

PLAN VIEW



THE VERTICAL SEPARATION GUIDELINE WILL BE USED UP TO THE POINT WHERE THE TWO RIGHTS OF WAY ADJOIN EACH OTHER.



THE SANITARY SEWER AND STORM DRAINAGE PIPES MUST BE NO CLOSER TOGETHER HORIZONTALLY THAN THE VERTICAL DISTANCE BETWEEN THE TOP OF THE HIGHER PIPE AND THE BOTTOM OF THE LOWER PIPE. A MAINTENANCE CREW MUST BE ABLE TO DIG DOWN TO THE LOWER PIPE SLOPING THE DITCH ON A 1:1 SLOPE UP FROM THE REQUIRED TRENCH BOTTOM WIDTH AND NOT EXPOSE THE HIGHER PIPE.

PROFILE VIEW

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

OVERLAPPING STORM DRAINAGE/SANITARY SEWER EASEMENTS

STD. NO.	REV.
20.29	

GENERAL NOTES:

1. FOR STREAMS CARRYING 500 ACRES OR MORE OF SURFACE RUNOFF, THE EASEMENT REQUIREMENT IS TO BE THE WIDTH OF THE STREAM FROM TOP OF BANK TO TOP OF BANK, PLUS (+) 10' ON EACH SIDE OF STREAM. (40' MINIMUM WIDTH)
2. FOR OPEN CHANNELS THE MINIMUM EASEMENT MUST CONTAIN THE WIDTH OF THE STREAM FROM TOP OF BANK TO TOP BANK.
3. WIDER EASEMENT WIDTHS MAY BE REQUIRED FOR PIPE DEPTHS GREATER THAN TEN FEET.
4. PIPE SYSTEMS AND OPEN CHANNELS ON PRIVATE PROPERTY SHALL BE PLACED IN A PUBLIC STORM DRAINAGE EASEMENT.

EASEMENT REQUIREMENTS FOR OPEN STORM DRAINAGE CHANNELS

AREA IN ACREAGE	EASEMENT REQUIREMENT
0–45 AC.	20'
45–120 AC.	30'
120–500 AC.	40'
500 AC.+	SEE NOTE

EASEMENT REQUIREMENTS FOR STORM DRAIN PIPE

PIPE SIZE	EASEMENT REQUIREMENT
15"	15'
18"	15'
24"	15'
30"	20'
36"	20'
42"	25'
48"	25'
54"+	30' MIN (VARIES)

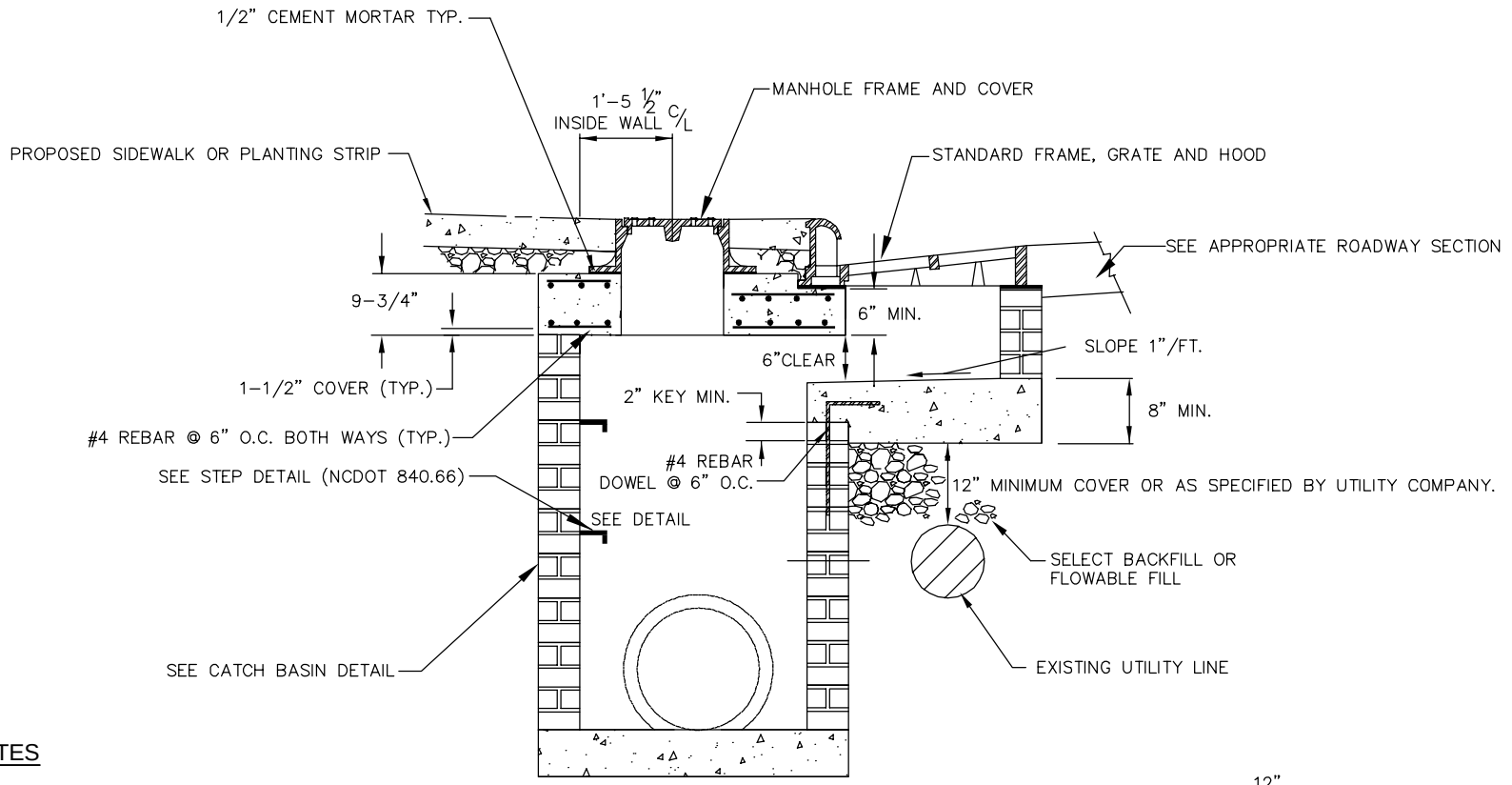
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

MINIMUM DRAINAGE EASEMENT REQUIREMENTS FOR STORM DRAIN PIPES AND OPEN CHANNELS

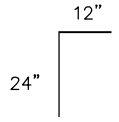
STD. NO.	REV.
20.30	



NOTES

1. PRIOR APPROVAL FROM THE TOWN ENGINEER IS REQUIRED.
2. THIS STRUCTURE IS TO ONLY BE USED ON TOWN MAINTAINED STREETS AND NOT ON NCDOT STREETS WITHOUT THEIR PERMISSION.

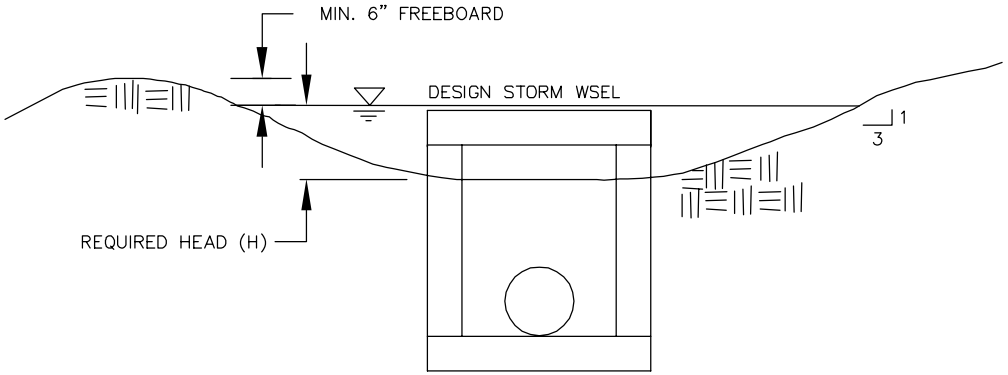
OFFSET CATCH BASIN EXISTING UTILITY CONFLICT

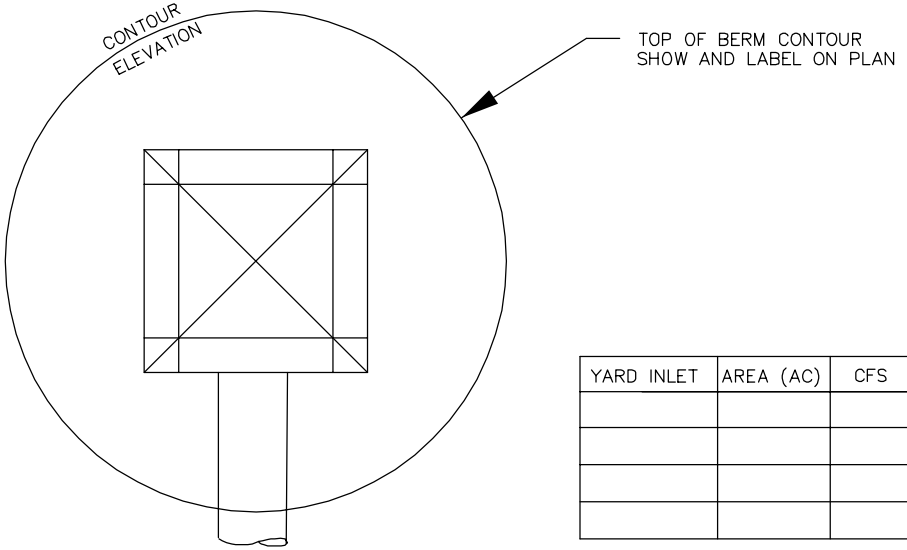


DOWEL DETAIL

NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	OFFSET CATCH BASIN	STD. NO. 20.34 / REV.





YARD INLET	AREA (AC)	CFS	HEAD H (FT)	COMMENT

NOT TO SCALE

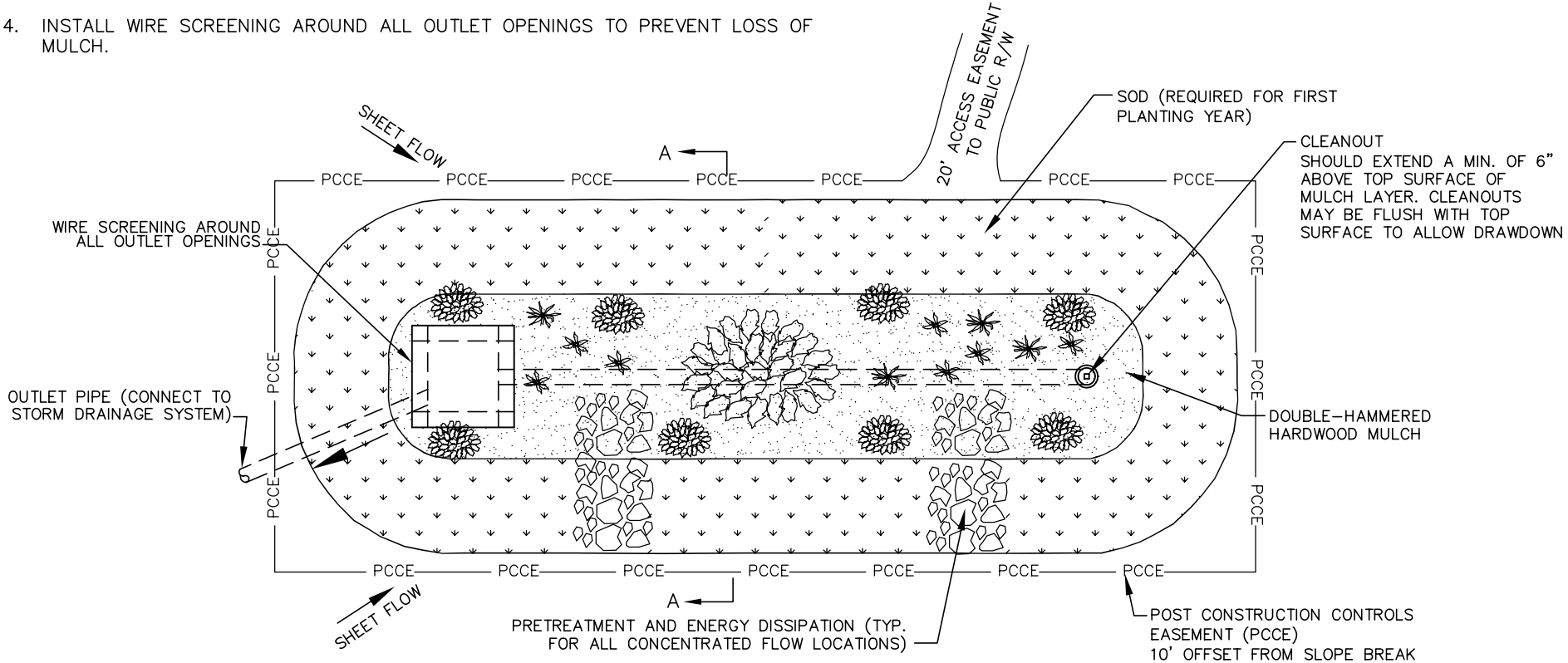
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

GRADING AT DROP INLET

STD. NO.	REV.
20.35	

NOTES:

1. ALL BIORETENTION SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%.
2. ALL DRAINAGE AREAS TO A BIORETENTION FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF AMENDED SOILS, MULCH OR PLANTINGS.
3. AMENDED SOIL WILL ONLY BE PERMITTED WITH A VALID SOIL ANALYSIS REPORT.
4. INSTALL WIRE SCREENING AROUND ALL OUTLET OPENINGS TO PREVENT LOSS OF MULCH.



PLAN

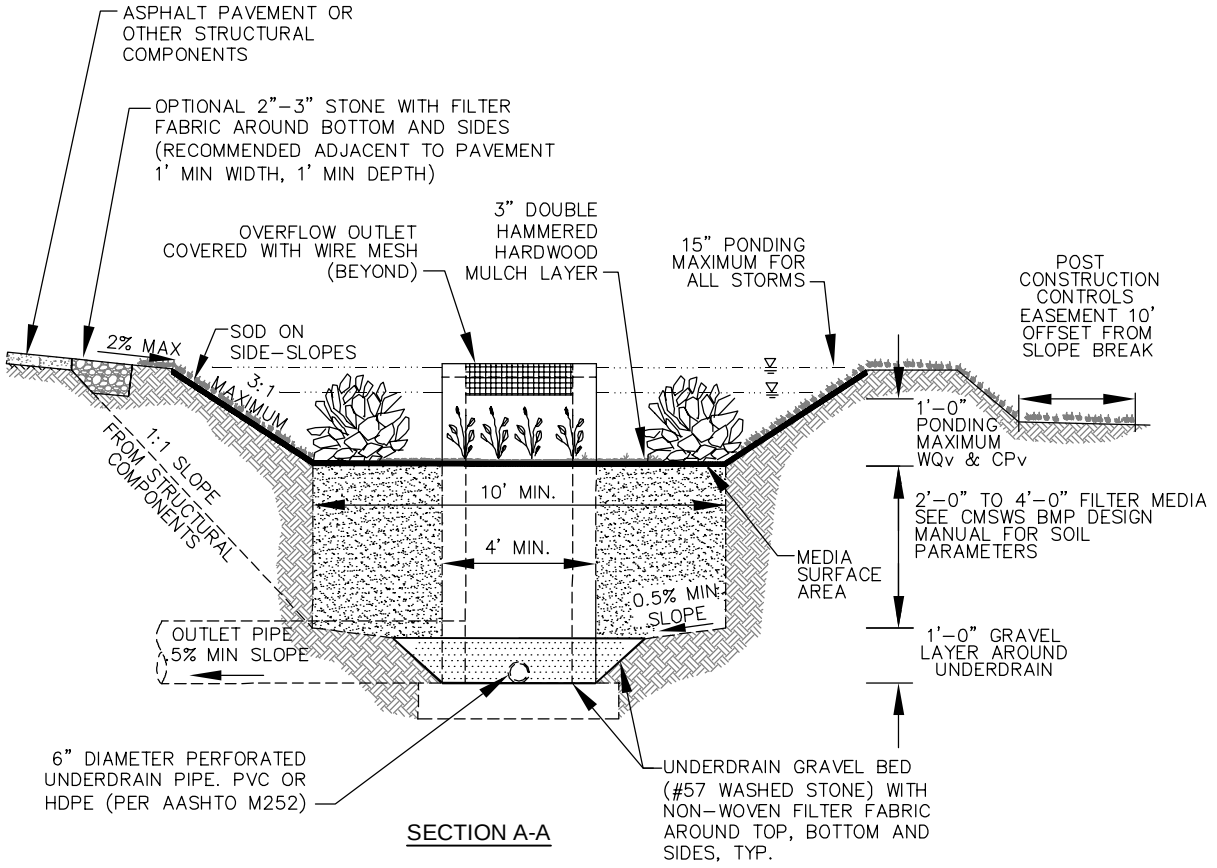
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BIORETENTION PLAN BMP FIG. 4.1.2

REV. DATE	
STD. NO.	REV.
21.00	

NOTES:

1. ALL BIORETENTION FACILITIES SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG.
2. GRADE OF 15%, MAX. CROSS-SLOPE 5%. ALL DRAINAGE AREAS TO A BIORETENTION FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF AMENDED SOILS, MULCH OR PLANTINGS.
3. AMENDED SOIL WILL ONLY BE PERMITTED WITH A VALID SOIL ANALYSIS REPORT. NO AMENDED SOIL SHALL BE ALLOWED ON THE SIDE SLOPES.
4. INSTALL WIRE SCREENING AROUND ALL OUTLET OPENINGS TO PREVENT LOSS OF MULCH.
5. PVC UNDERDRAIN PIPE SHOULD HAVE 3/8" PERFORATIONS SPACED AT 6" CENTERS, MIN. 4 HOLES PER ROW. MAX SPACING OF UNDERDRAIN PIPE IS 10 FEET ON CENTER. HDPE SHALL ADHERE TO AASHTO M252 SPECS.
6. UNDERDRAIN CLEANOUTS SHOULD EXTEND A MIN. OF 6" ABOVE TOP SURFACE OF MULCH LAYER. CLEANOUTS MAY BE FLUSH WITH TOP OF SURFACE TO ALLOW DRAWDOWN.
7. ONLY SMALL MATURING TREES ARE ALLOWED TO BE PLANTED IN THE AMENDED SOILS.
8. CMSWS REFERS TO CHARLOTTE-MECKLENBURG STORMWATER SERVICES.



SECTION A-A

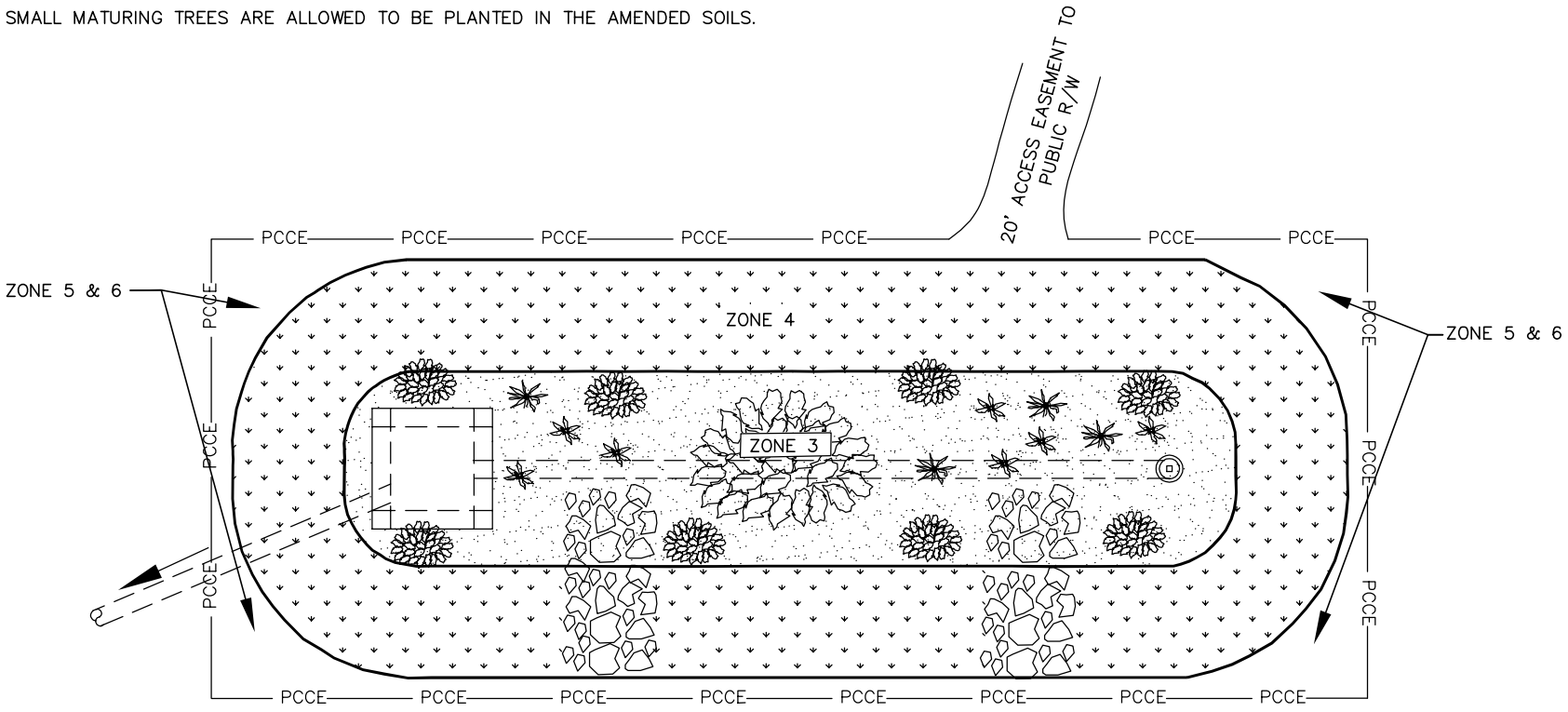
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BIORETENTION CROSS-SECTION BMP FIG. 4.1.3

REV. DATE	
8/1/19	
STD. NO.	REV.
21.01	3

NOTES:

1. PLANTING ZONES AND PLANT SELECTION PER THE CHARLOTTE–MECKLENBURG STORMWATER SERVICES BMP DESIGN MANUAL, CHAPTER 6 & APPENDICES.
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.
4. ONLY SMALL MATURING TREES ARE ALLOWED TO BE PLANTED IN THE AMENDED SOILS.



PLAN

NOT TO SCALE

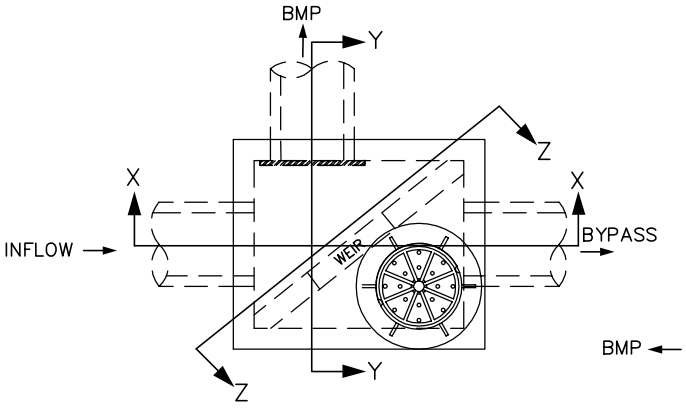
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BIORETENTION PLANTING PLAN BMP FIG. 4.1.4

REV.	DATE

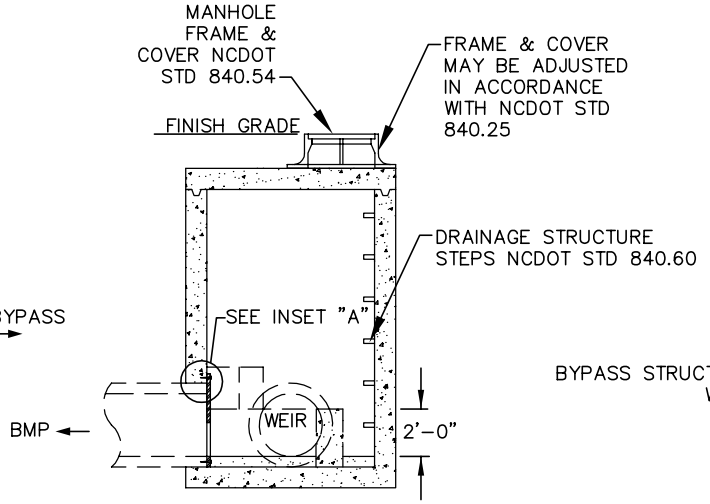
STD. NO.	REV.
21.02	

NOTES

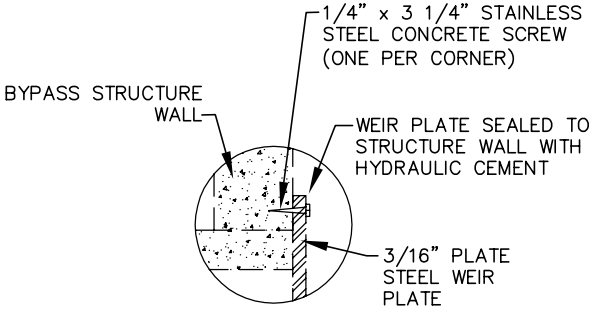
1. ALL CONCRETE SHALL BE 3600 PSI.
2. ALL JOINTS ARE TO BE SEALED WATER TIGHT.
3. WEIR IS TO BE POURED–IN–PLACE CONCRETE. REFER TO NCDOT STANDARD DRAWINGS FOR BOX CONSTRUCTION.
4. NOT ACCEPTABLE FOR USE IN STREET RIGHT OF WAY WITHOUT TOWN/NCDOT APPROVAL.



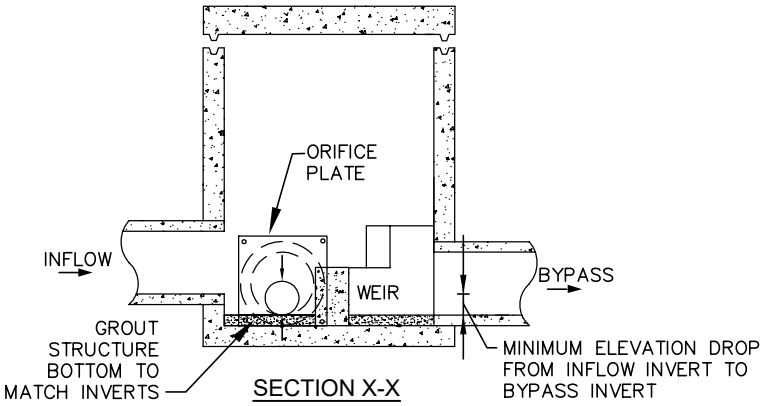
PLAN



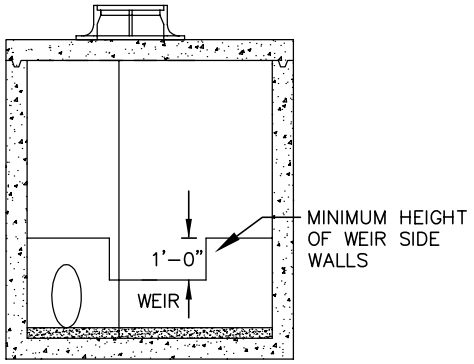
SECTION Y-Y



INSET "A"



SECTION X-X



SECTION Z-Z

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

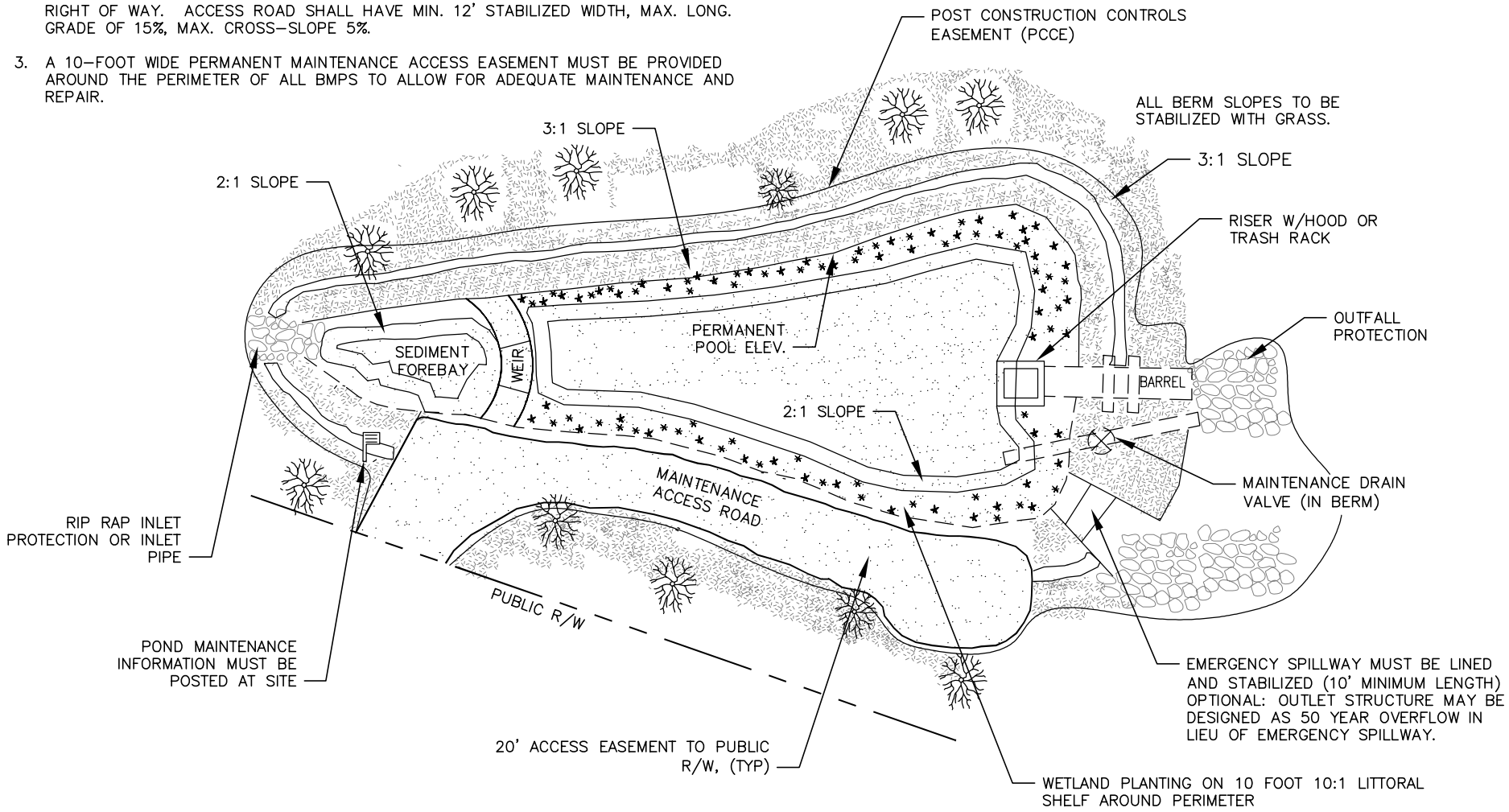
FLOW SPLITTER STRUCTURE
BMP FIG. 4.1.11

REV.	DATE

STD. NO.	REV.
21.04	

NOTES:

1. 4–6 INCH LAYER OF AMENDED SOIL IS RECOMMENDED ON LITTORAL SHELF AREA WHERE PLANTINGS ARE REQUIRED (SEE SOIL PARAMETERS IN CHARLOTTE–MECKLENBURG STORMWATER SERVICES BMP DESIGN MANUAL)
2. PROVIDE 20–FOOT ACCESS EASEMENT TO CONNECT WETPOND EASEMENT TO DEDICATED RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS–SLOPE 5%.
3. A 10–FOOT WIDE PERMANENT MAINTENANCE ACCESS EASEMENT MUST BE PROVIDED AROUND THE PERIMETER OF ALL BMPS TO ALLOW FOR ADEQUATE MAINTENANCE AND REPAIR.



PLAN VIEW

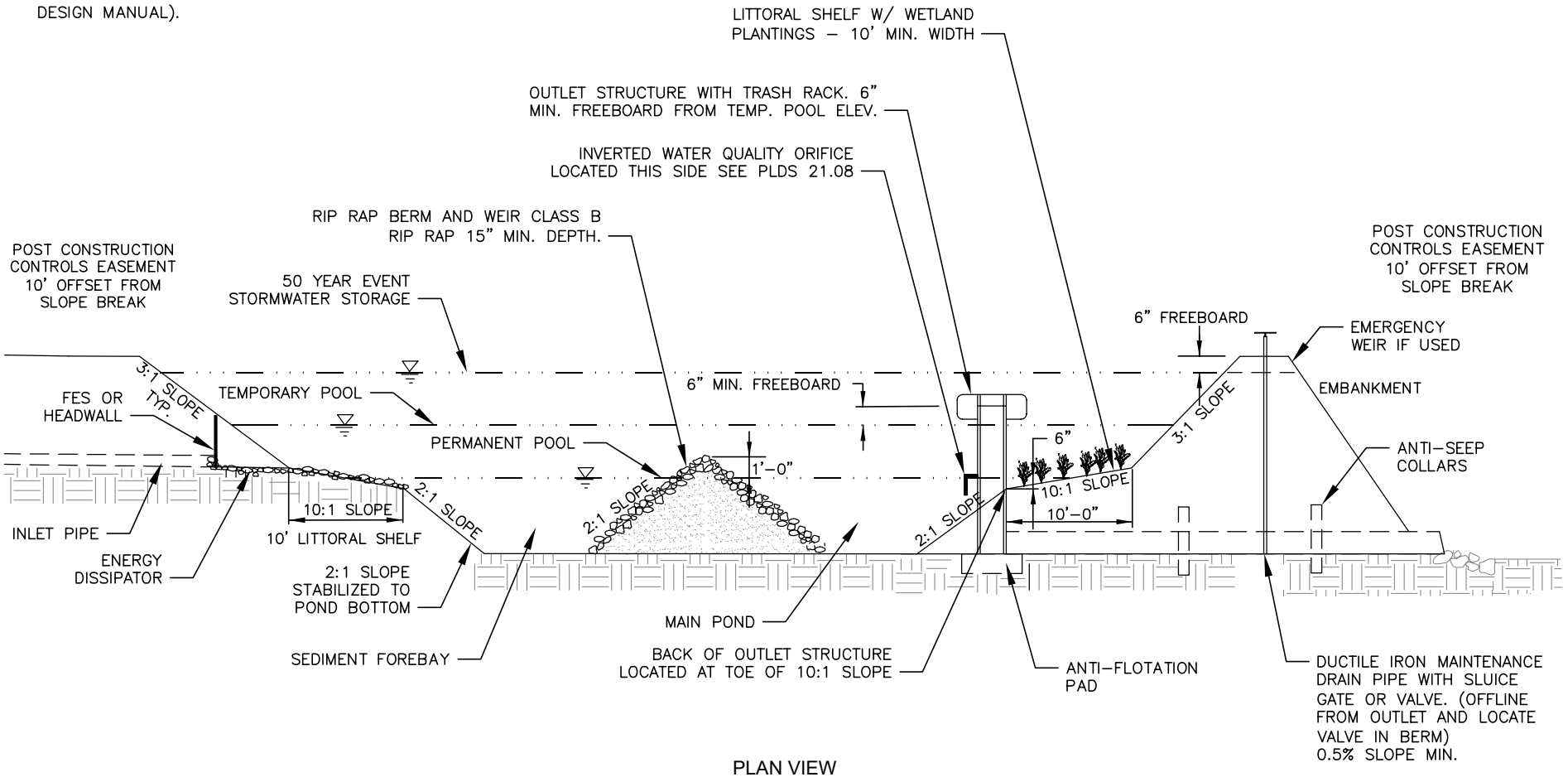
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	WETPOND PLAN BMP FIG. 4.2.2

REV. DATE	
8/1/19	
STD. NO.	REV.
21.05	3

NOTES:

1. 4–6 INCH LAYER OF AMENDED SOIL IS RECOMMENDED IN ANY AREA WHERE PLANTINGS ARE REQUIRED (SEE CHARLOTTE–MECKLENBURG STORMWATER SERVICES BMP DESIGN MANUAL).



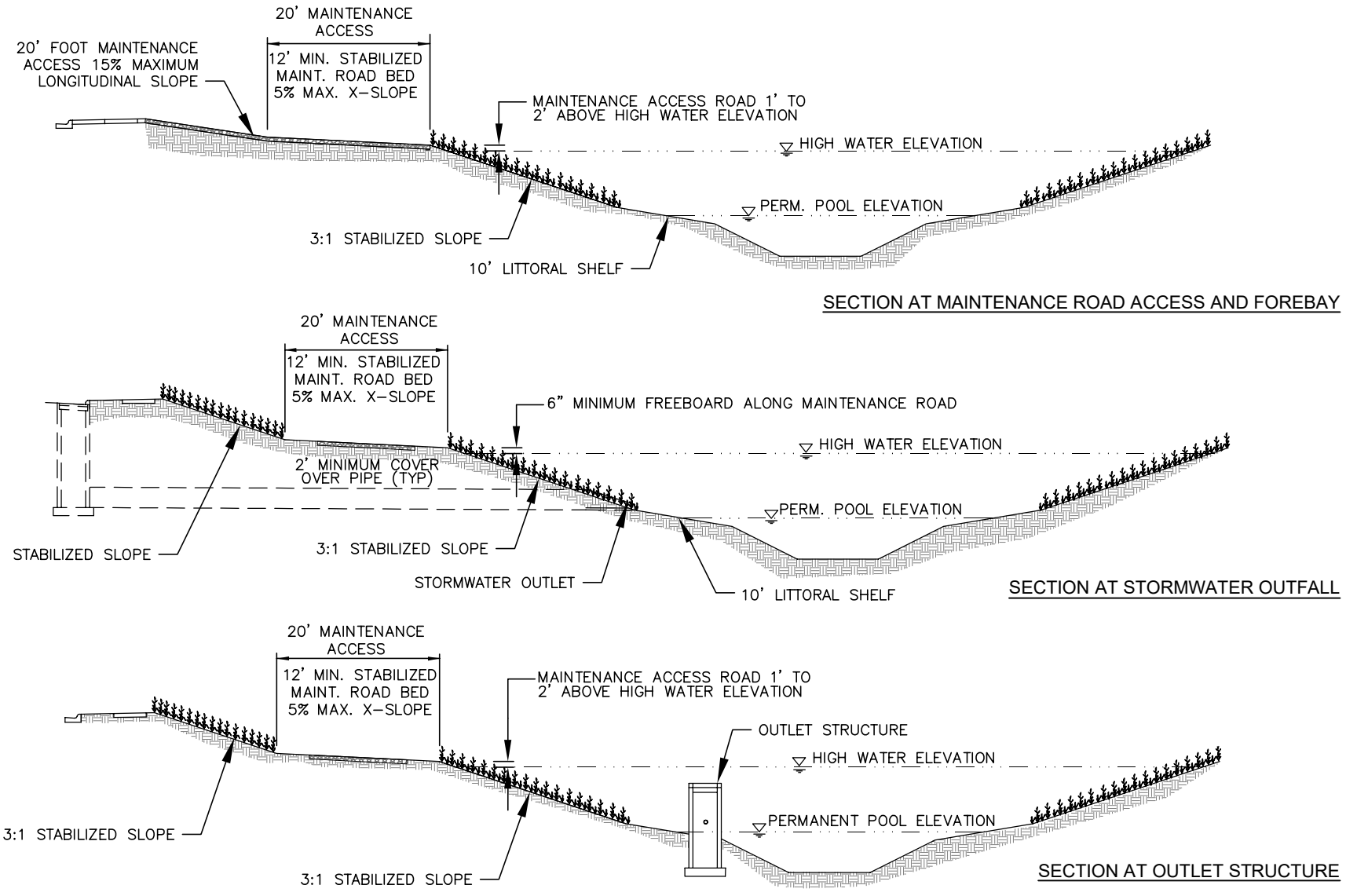
PLAN VIEW

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	WETPOND PROFILE BMP FIG. 4.2.2

REV.	DATE

STD. NO.	REV.
21.06	

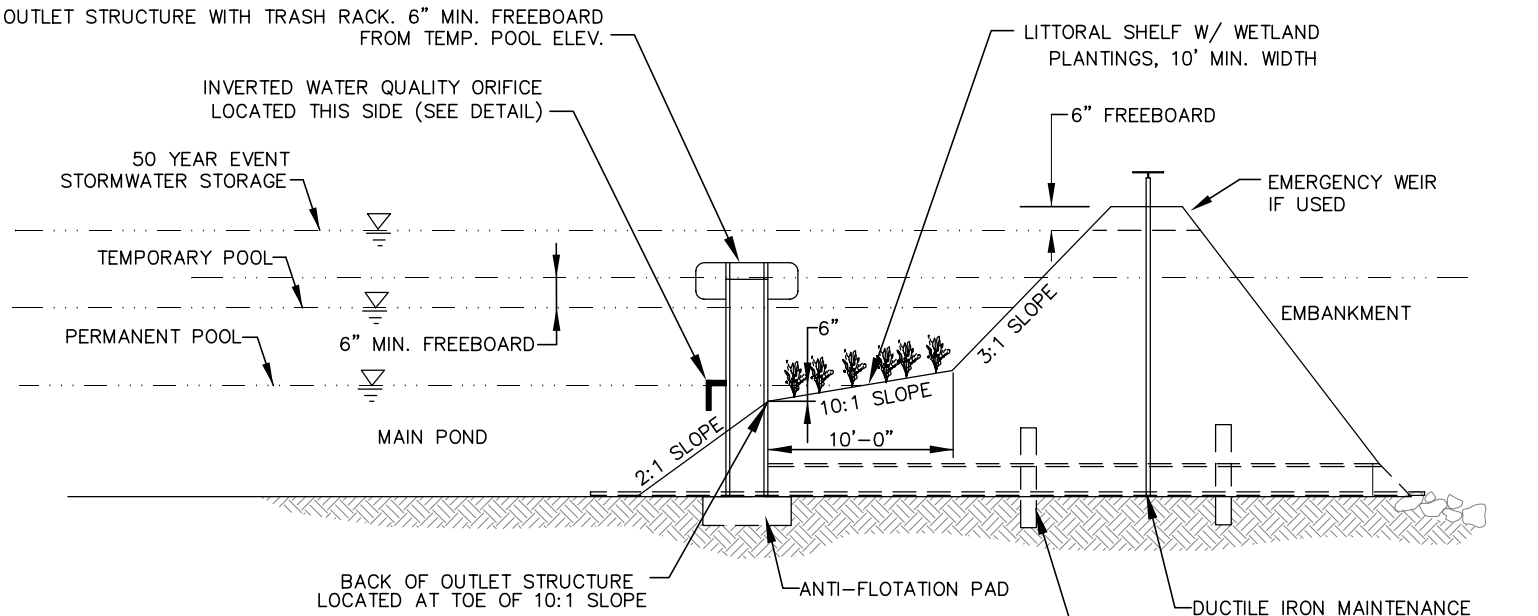


NOT TO SCALE

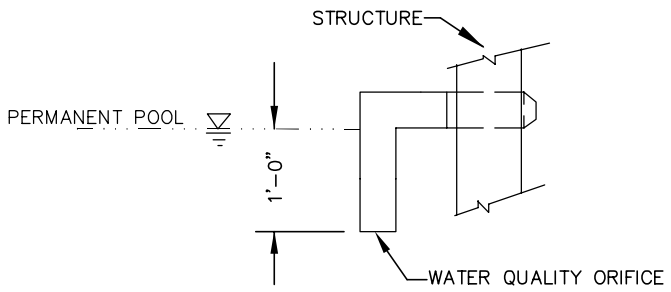
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	WETPOND CROSS SECTIONS BMP FIG. 4.2.3

REV.	DATE

STD. NO.	REV.
21.07	



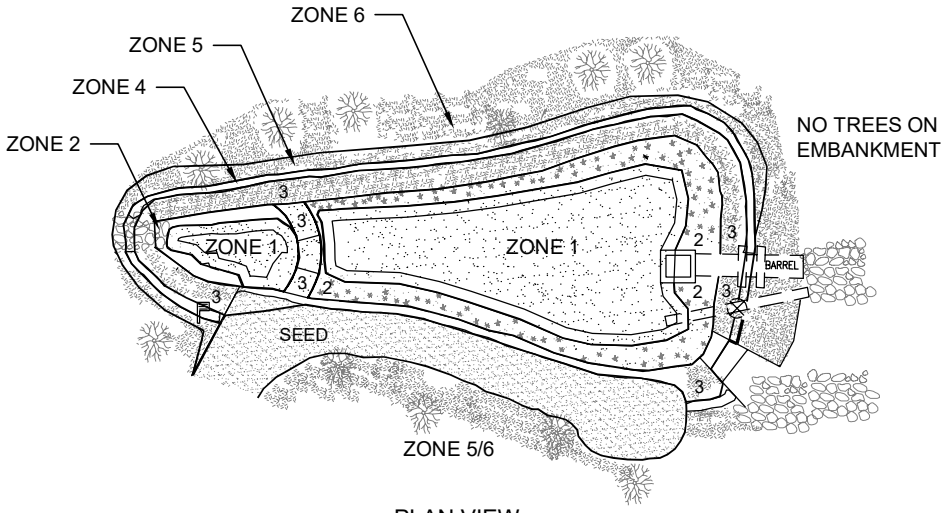
POND PROFILE



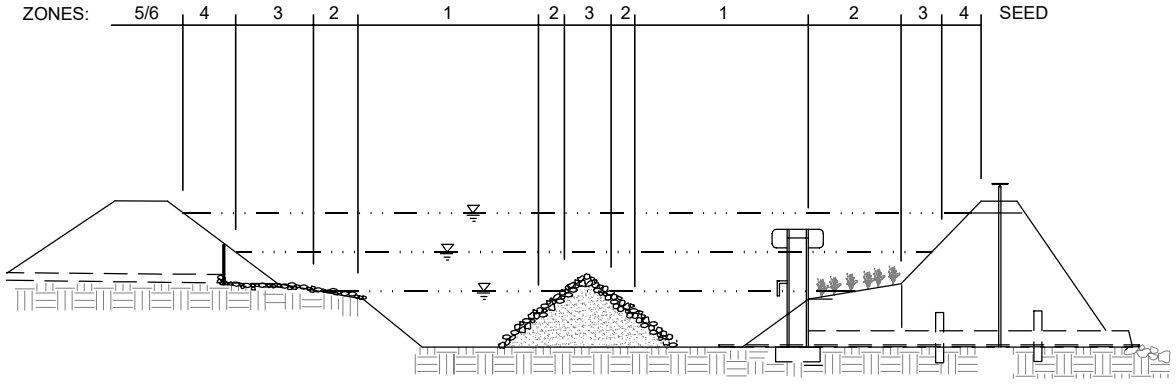
WATER QUALITY ORIFICE DETAIL

NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	WETPOND LITTORAL SHELF AND BERM DETAIL BMP FIG. 4.2.4	REV. DATE STD. NO. 21.08 REV.



PLAN VIEW



POND CROSS SECTION

NOTES:

1. PLANTINGS ZONES AND PLANT SELECTION PER THE CHARLOTTE–MECKLENBURG STORMWATER SERVICES BMP DESIGN MANUAL.
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.

NOT TO SCALE

Pineville NORTH CAROLINA

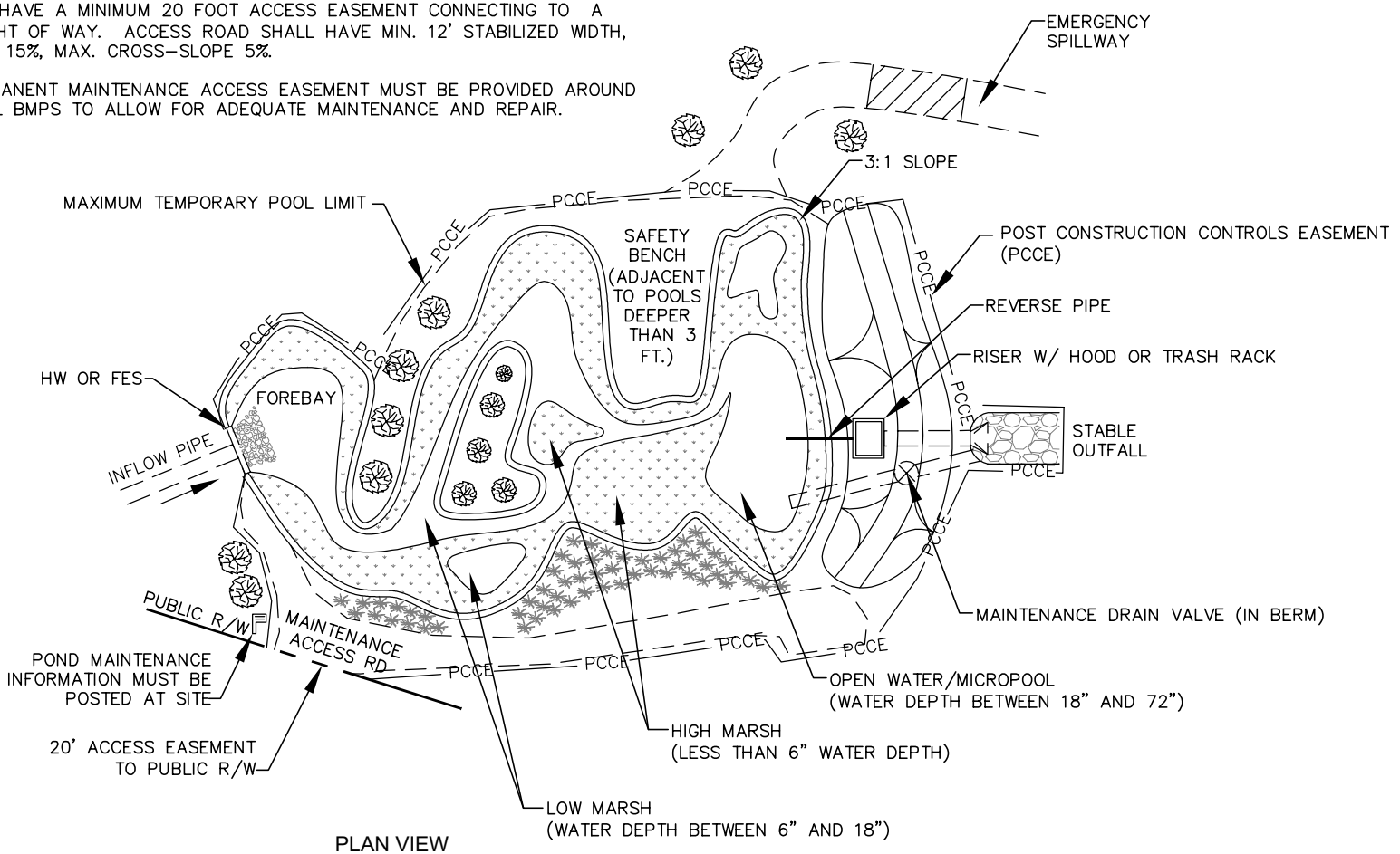
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

WETPOND PLANTING PLAN
BMP FIG. 4.2.5

REV. DATE	
STD. NO.	REV.
21.09	

NOTES:

1. 4–6 INCH LAYER OF AMENDED SOIL IS REQUIRED ON ANY MARSH AREA WHERE PLANTINGS ARE REQUIRED (SEE SOIL PARAMETERS IN CHARLOTTE–MECKLENBURG STORMWATER SERVICES BMP DESIGN MANUAL)
2. PROVIDE 20' ACCESS EASEMENT TO CONNECT WETLAND EASEMENT TO DEDICATED RIGHT OF WAY.
3. ALL WETLANDS SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS–SLOPE 5%.
4. A 10–FOOT WIDE PERMANENT MAINTENANCE ACCESS EASEMENT MUST BE PROVIDED AROUND THE PERIMETER OF ALL BMPS TO ALLOW FOR ADEQUATE MAINTENANCE AND REPAIR.

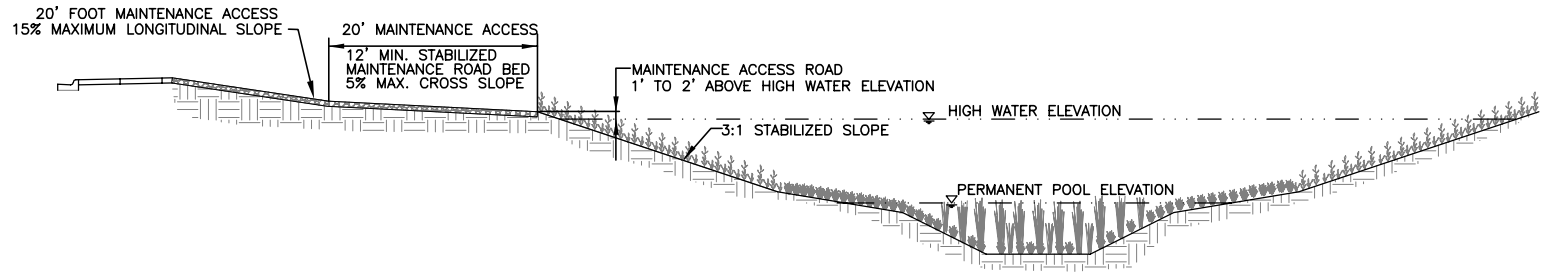


PLAN VIEW

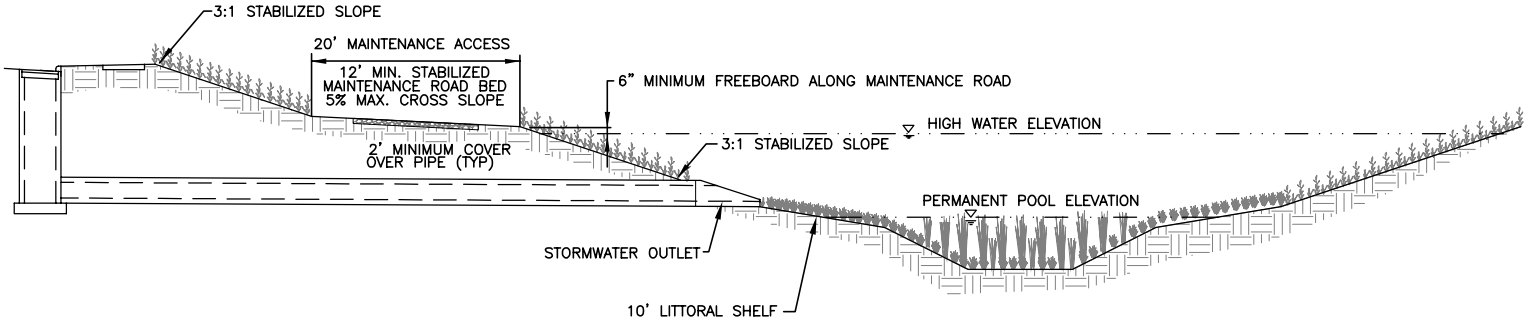
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	WETPOND PLAN BMP FIG. 4.3.2

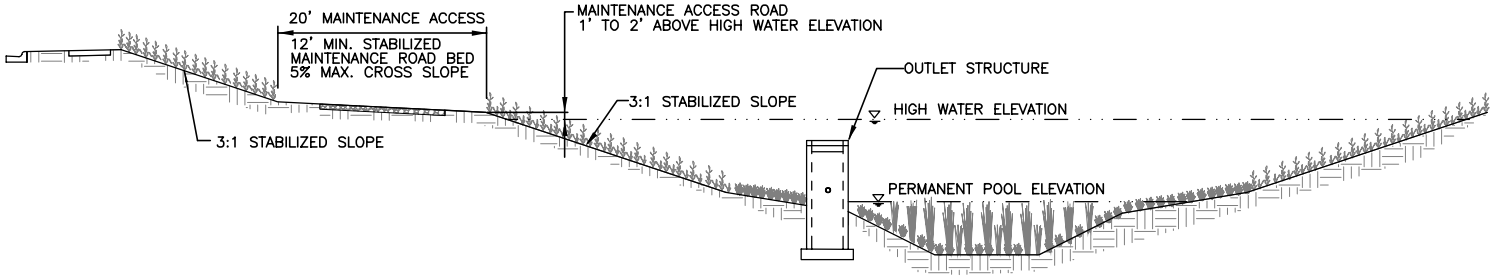
REV. DATE	
8/1/19	
STD. NO.	REV.
21.10	3



SECTION AT MAINTENANCE ROAD ACCESS AND FOREBAY



SECTION AT STORMWATER OUTFALL



SECTION AT OUTLET STRUCTURE

NOT TO SCALE

Pineville
NORTH CAROLINA

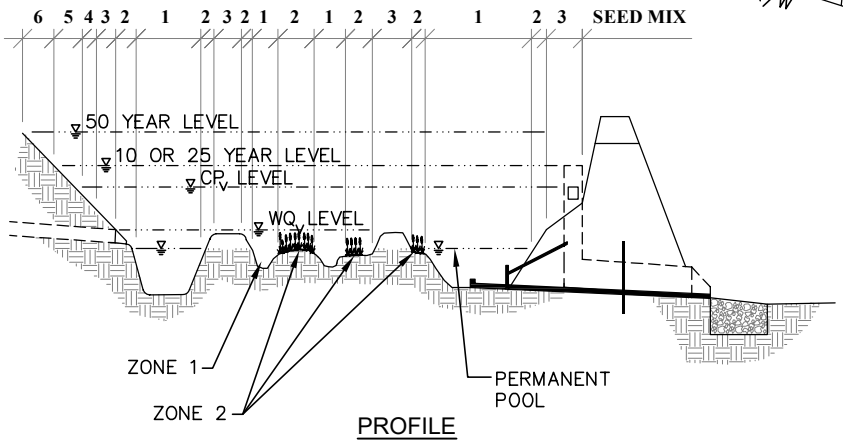
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

WETPOND CROSS SECTIONS
BMP FIG. 4.3.3

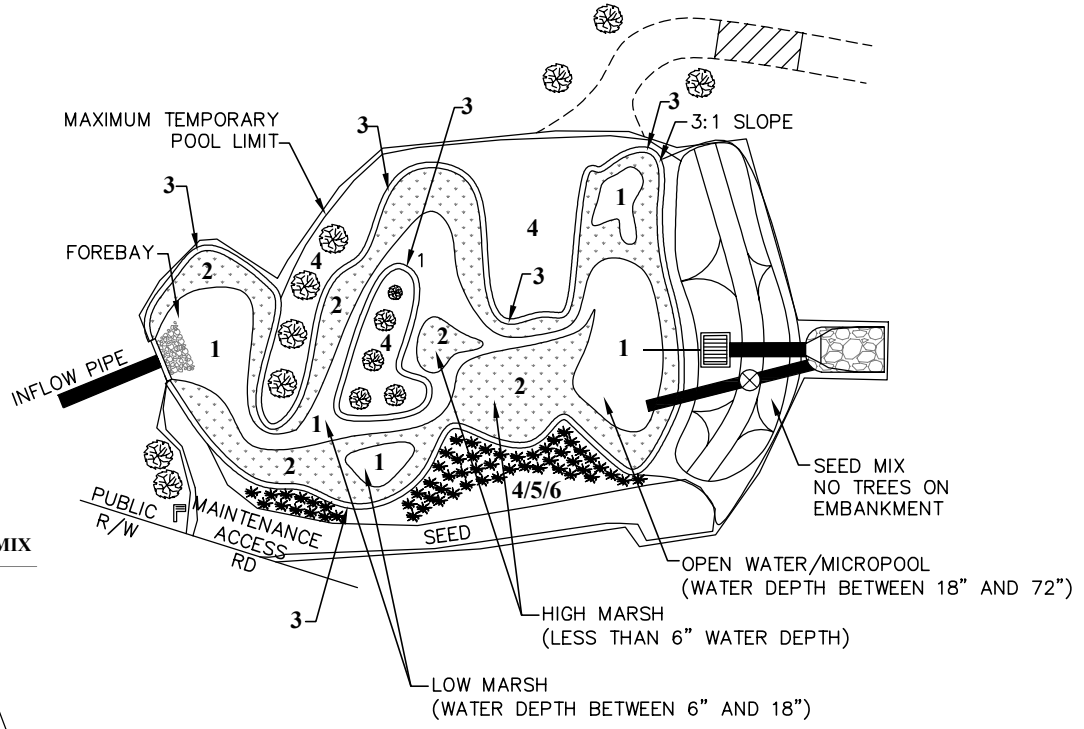
REV. DATE	
8/1/19	
STD. NO.	REV.
21.12	3

NOTES:

1. PLANTINGS ZONES AND PLANT SELECTION PER THE CHARLOTTE–MECKLENBURG STORMWATER SERVICES BMP DESIGN MANUAL.
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.



PROFILE



PLAN VIEW

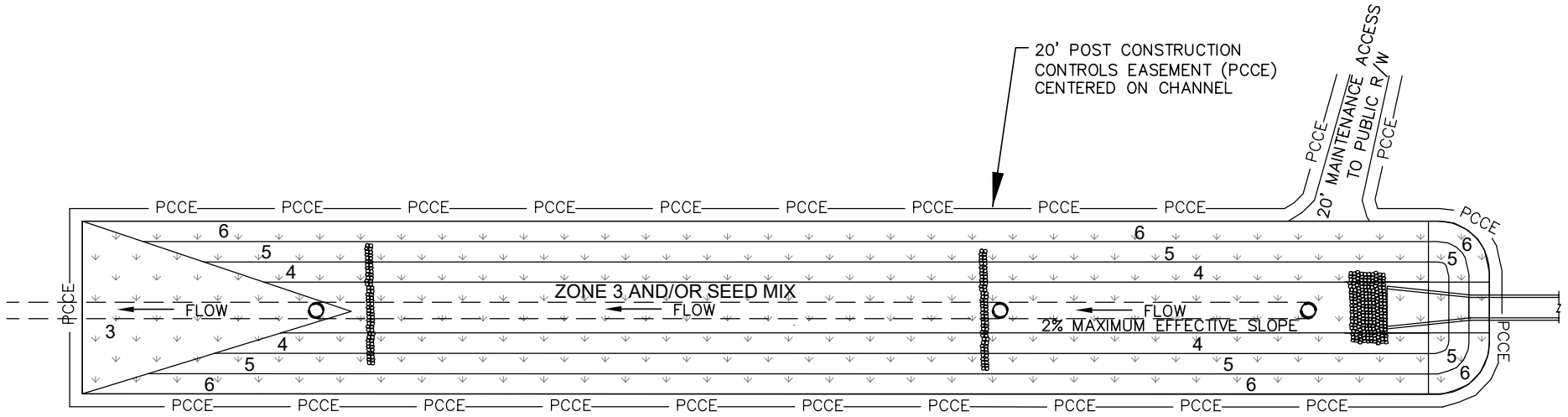
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	WETPOND PLANTING PLAN BMP FIG. 4.3.4

REV. DATE	
8/1/19	
STD. NO.	REV.
21.14	3

NOTES:

1. PLANTING ZONES AND PLANT SELECTION PER THE CHARLOTTE–MECKLENBURG STORMWATER SERVICES BMP DESIGN MANUAL.
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.



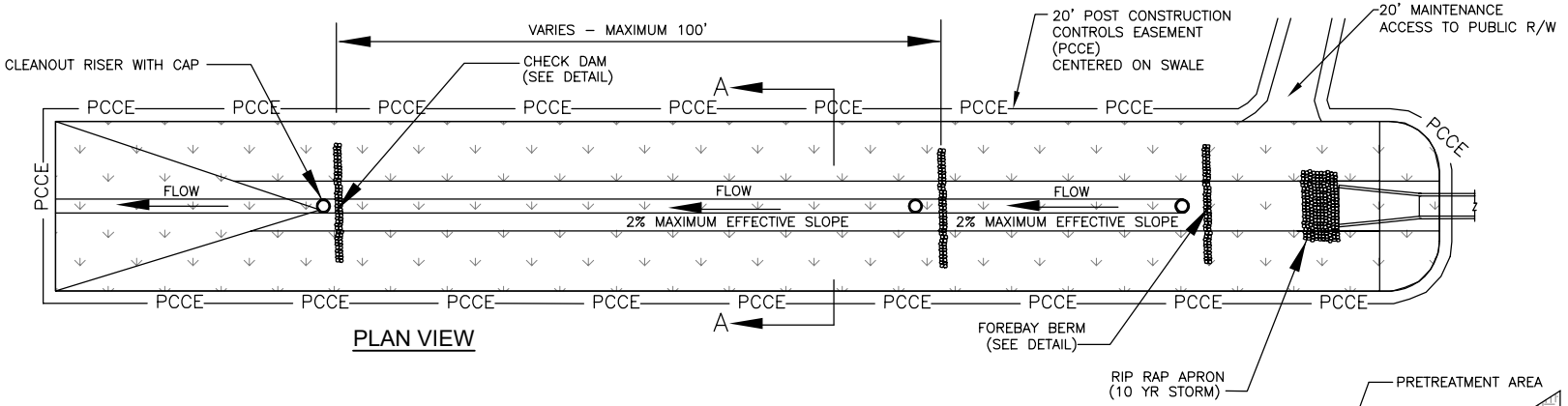
PLAN VIEW

NOT TO SCALE

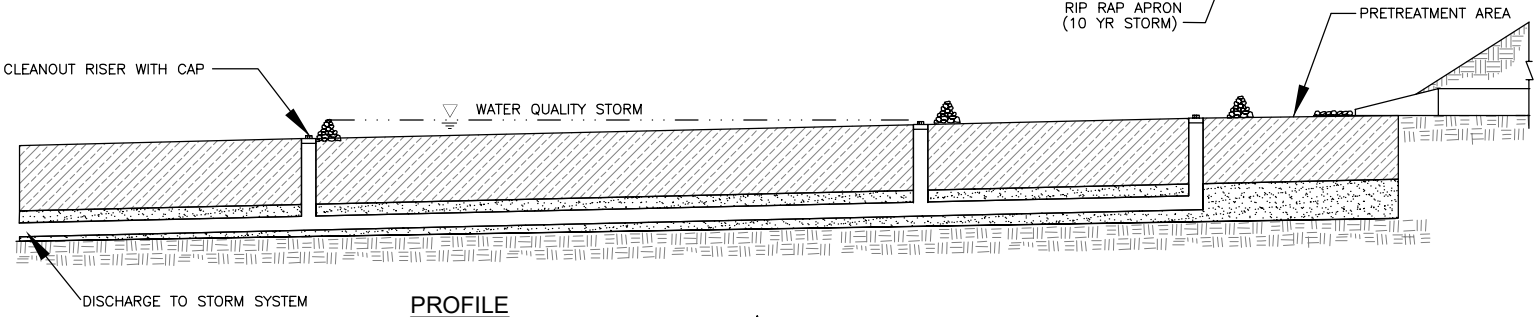
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ENHANCED GRASS SWALE PLANTING PLAN BMP FIG. 4.4.3

REV.	DATE

STD. NO.	REV.
21.15	



PLAN VIEW



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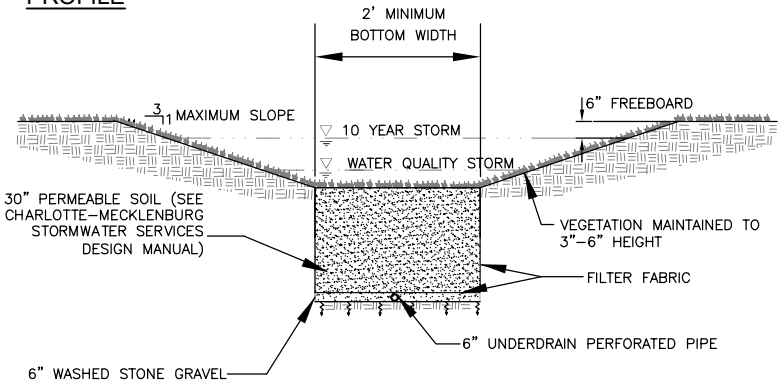
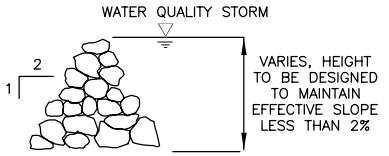


SECTION A-A



CHECK DAM and FOREBAY BERM DETAIL

NOTES:

1. ALL ENHANCED GRASS SWALES SHALL HAVE A MINIMUM 20–FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS–SLOPE 5%.
2. A 10–FOOT WIDE PERMANENT MAINTENANCE ACCESS EASEMENT MUST BE PROVIDED AROUND THE PERIMETER OF ALL BMPS TO ALLOW FOR ADEQUATE MAINTENANCE REPAIR.

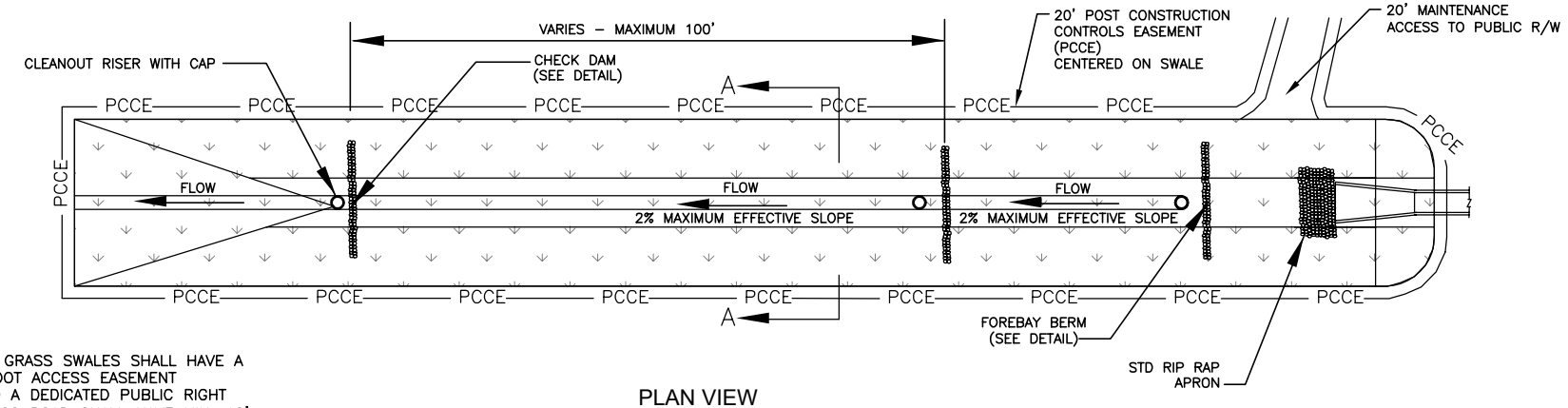
Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

WETPOND GRASS SWALE DETAILS
BMP FIG. 4.3.2

8/1/19

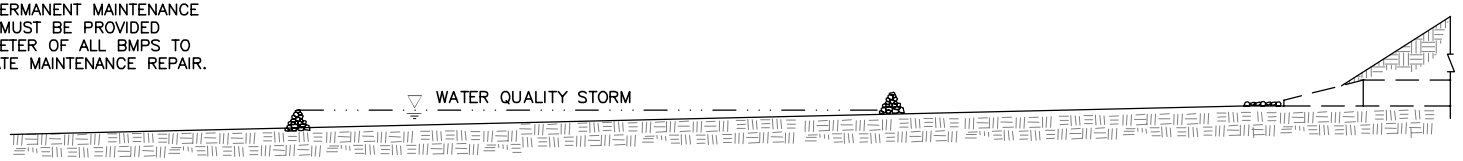
STD. NO.	REV.
21.16	3



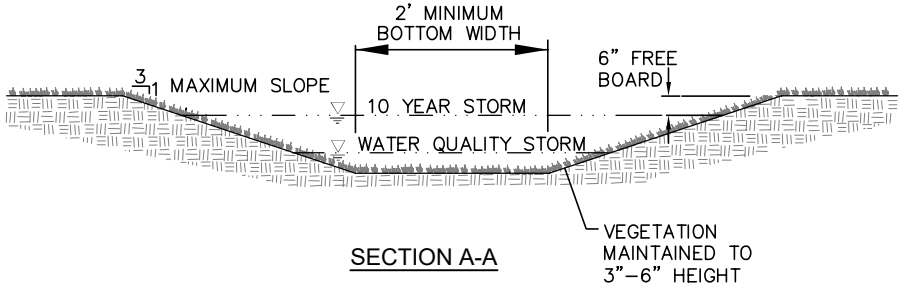
PLAN VIEW

NOTES:

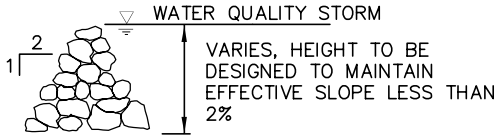
1. ALL ENHANCED GRASS SWALES SHALL HAVE A MINIMUM 20–FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS–SLOPE 5%.
2. A 10–FOOT WIDE PERMANENT MAINTENANCE ACCESS EASEMENT MUST BE PROVIDED AROUND THE PERIMETER OF ALL BMPS TO ALLOW FOR ADEQUATE MAINTENANCE REPAIR.



PROFILE



SECTION A-A

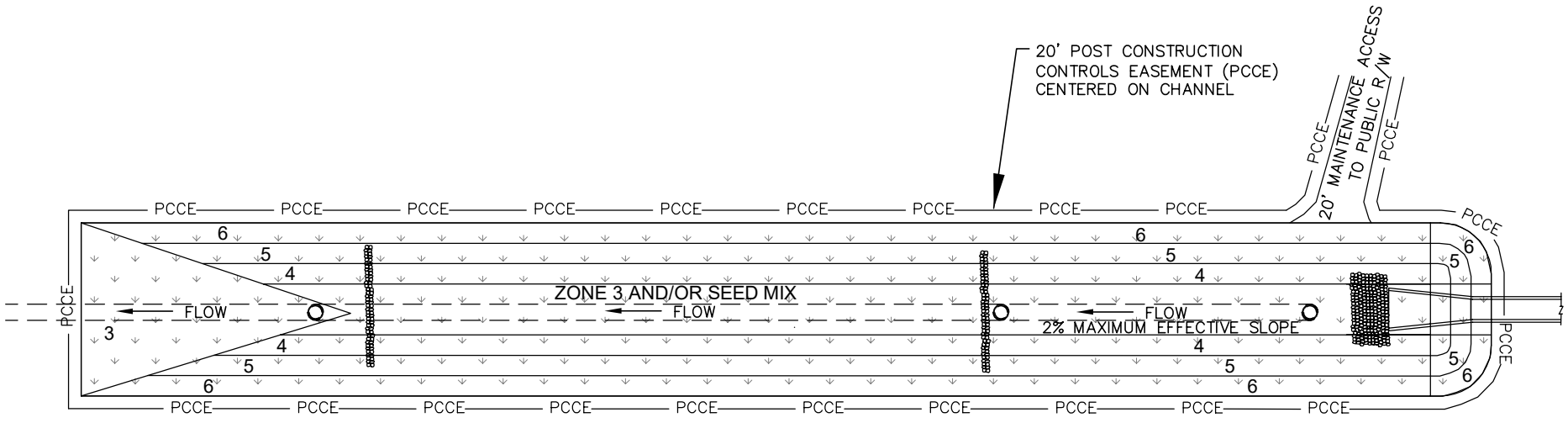


CHECK DAM and FOREBAY
BERM DETAIL

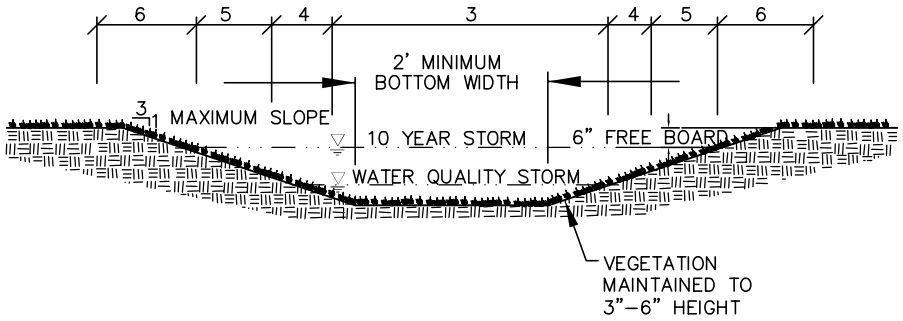
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	GRASS CHANNEL BMP FIG. 4.5.2

REV. DATE	
8/1/19	
STD. NO.	REV.
21.17	3



PLAN VIEW



SECTION A-A

NOTES:

1. PLANTINGS ZONES AND PLANT SELECTION PER THE CHARLOTTE–MECKLENBURG STORMWATER SERVICES BMP DESIGN MANUAL.
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.

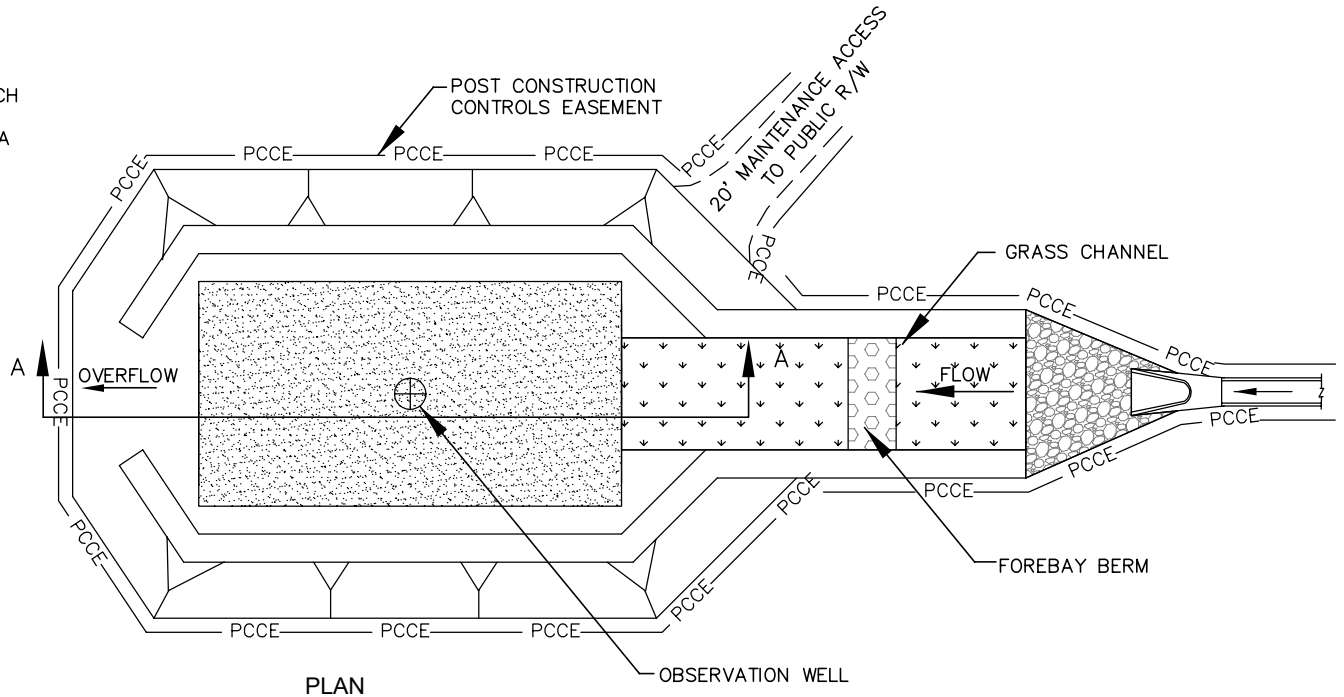
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	GRASS CHANNEL BMP FIG. 4.5.3

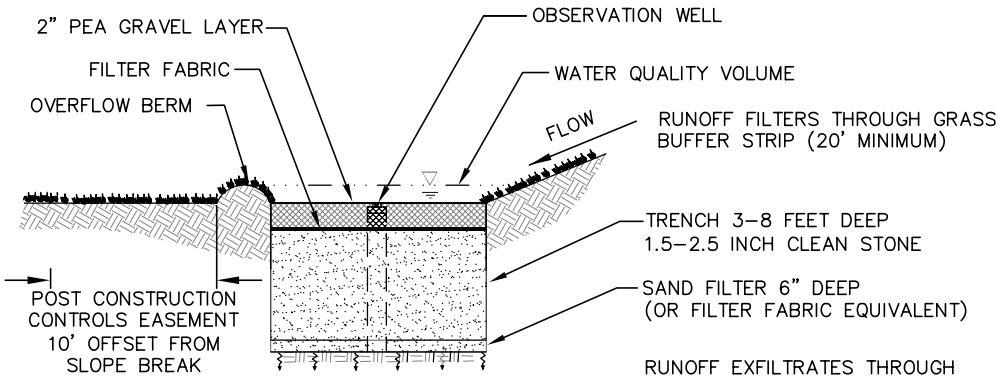
REV. DATE	
8/1/19	
STD. NO.	REV.
21.18	3

NOTES

1. CONNECT INFILTRATION TRENCH EASEMENT TO A DEDICATED PUBLIC RIGHT OF WAY WITH A 20–FOOT ACCESS EASEMENT.
2. 5 ACRE MAXIMUM DRAINAGE AREA.



PLAN



SECTION A-A

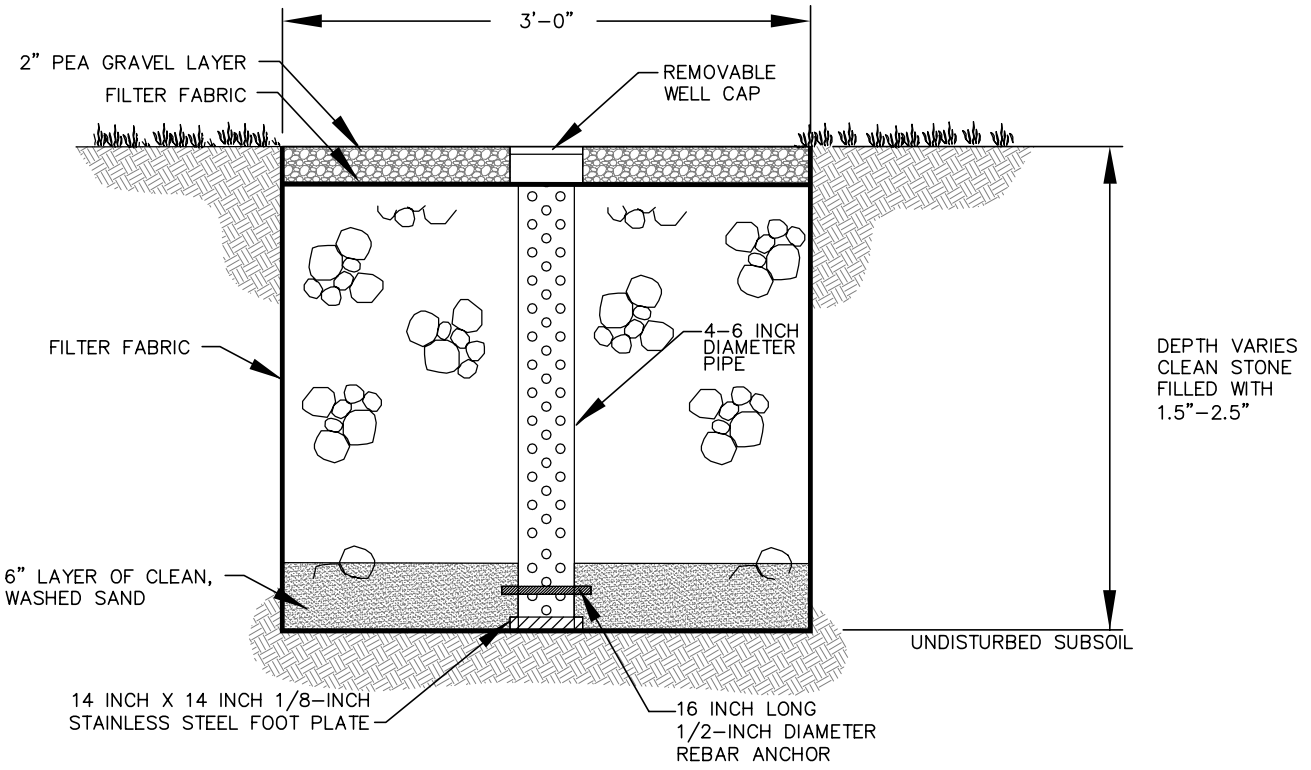
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

INFILTRATION TRENCH
BMP FIG. 4.6.2

REV. DATE	
STD. NO.	REV.
21.19	



PERFORATION HOLES TO BE 1/2 INCH DIAMETER AT
3 INCH MINIMUM VERTICAL SPACING

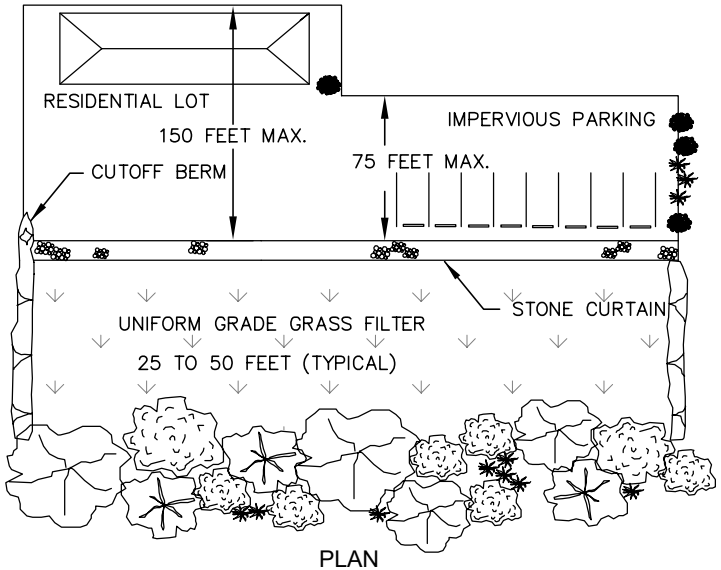
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	OBSERVATION WELL BMP FIG. 4.6.3

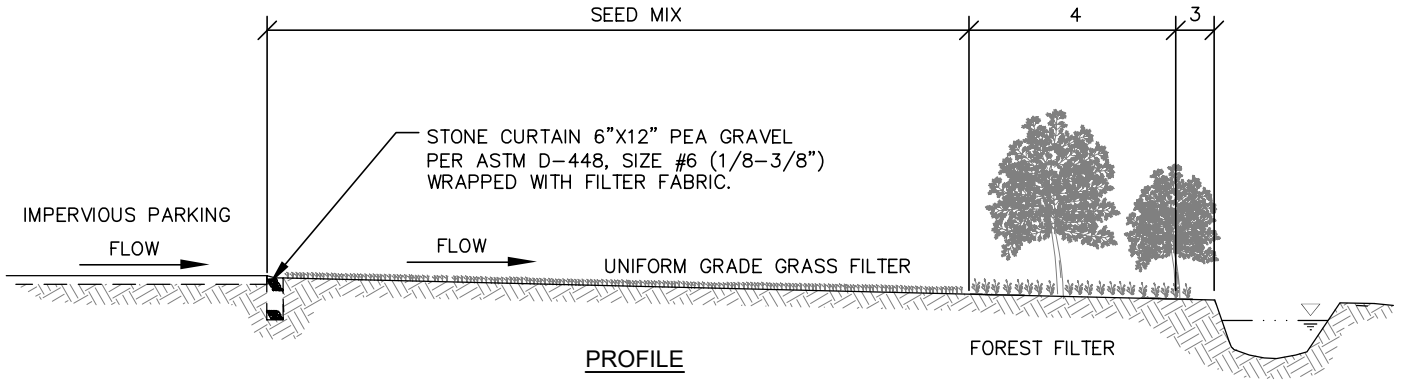
REV. DATE	
STD. NO.	REV.
21.20	

NOTES

1. MAXIMUM SLOPE 2% FOR FILTER STRIP AND 5% FOR BUFFER STRIP.
2. 5 ACRE MAXIMUM DRAINAGE AREA.
3. ALL FILTER/BUFFER STRIPS SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%.
4. A 10-FOOT WIDE PERMANENT MAINTENANCE ACCESS EASEMENT MUST BE PROVIDED AROUND THE PERIMETER OF ALL BMPS TO ALLOW FOR ADEQUATE MAINTENANCE AND REPAIR.



PLAN



PROFILE

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BUFFER STRIP BMP FIG. 4.7.3

REV. DATE	
8/1/19	
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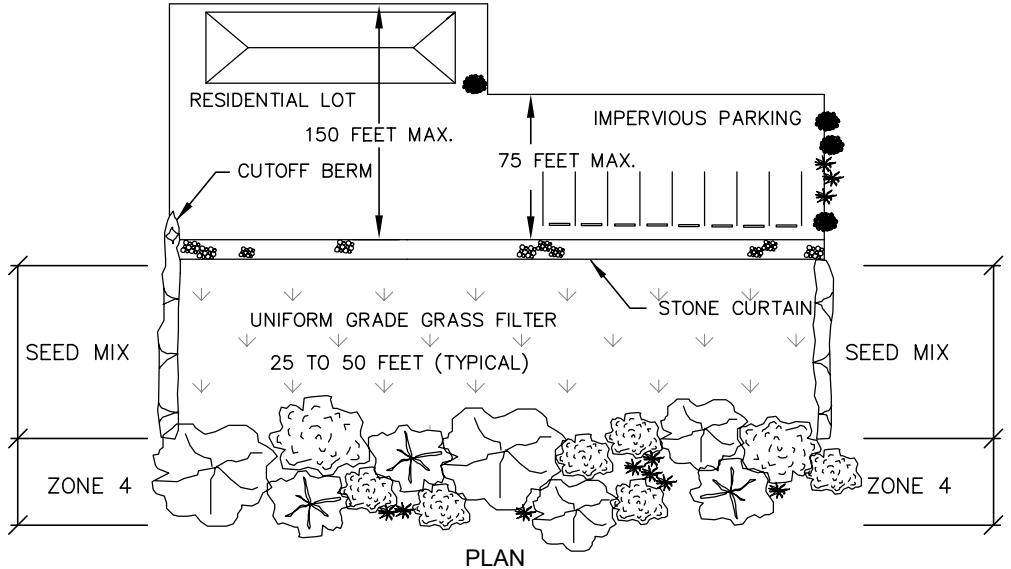
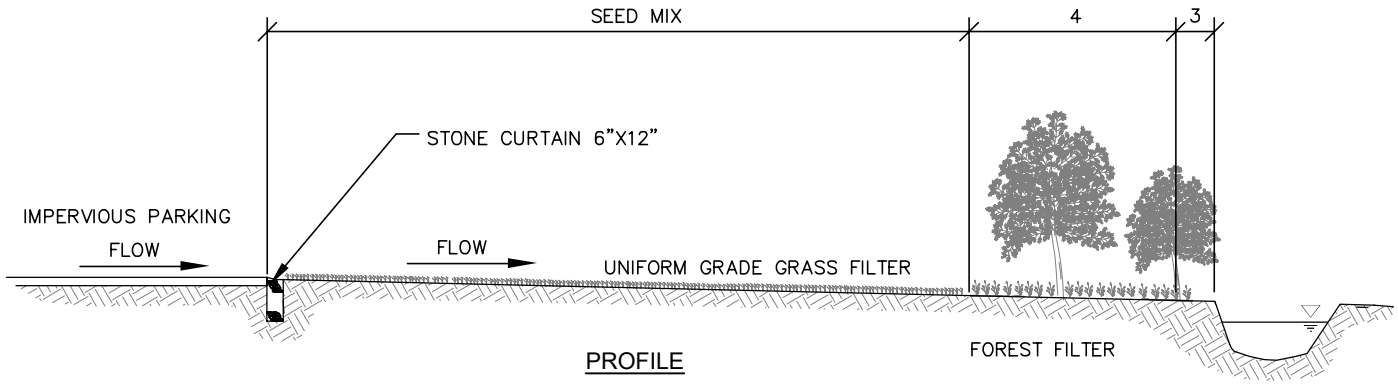
21.21	3



PLAN

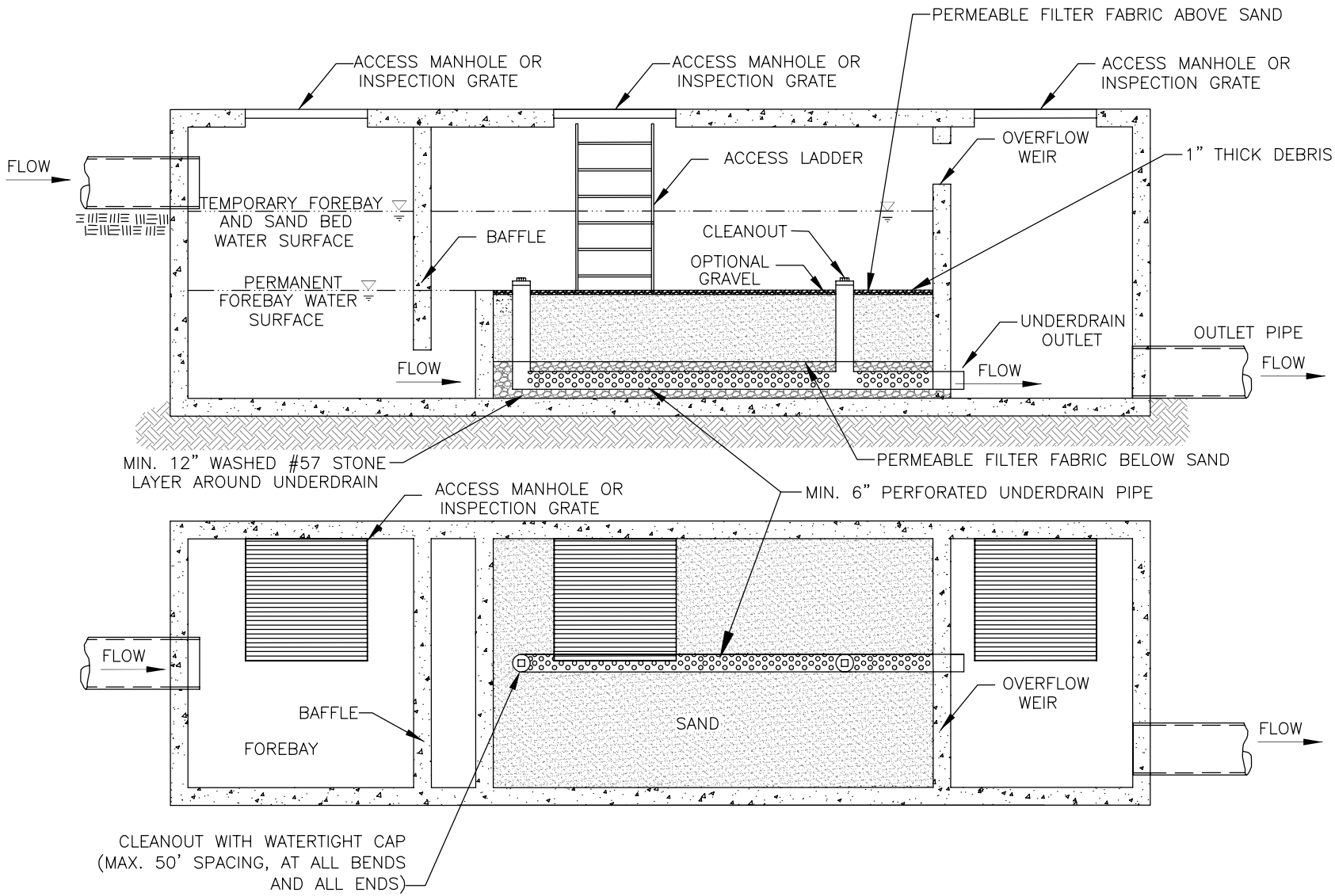


PROFILE

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BUFFER STRIP PLANTING PLAN BMP FIG. 4.7.4

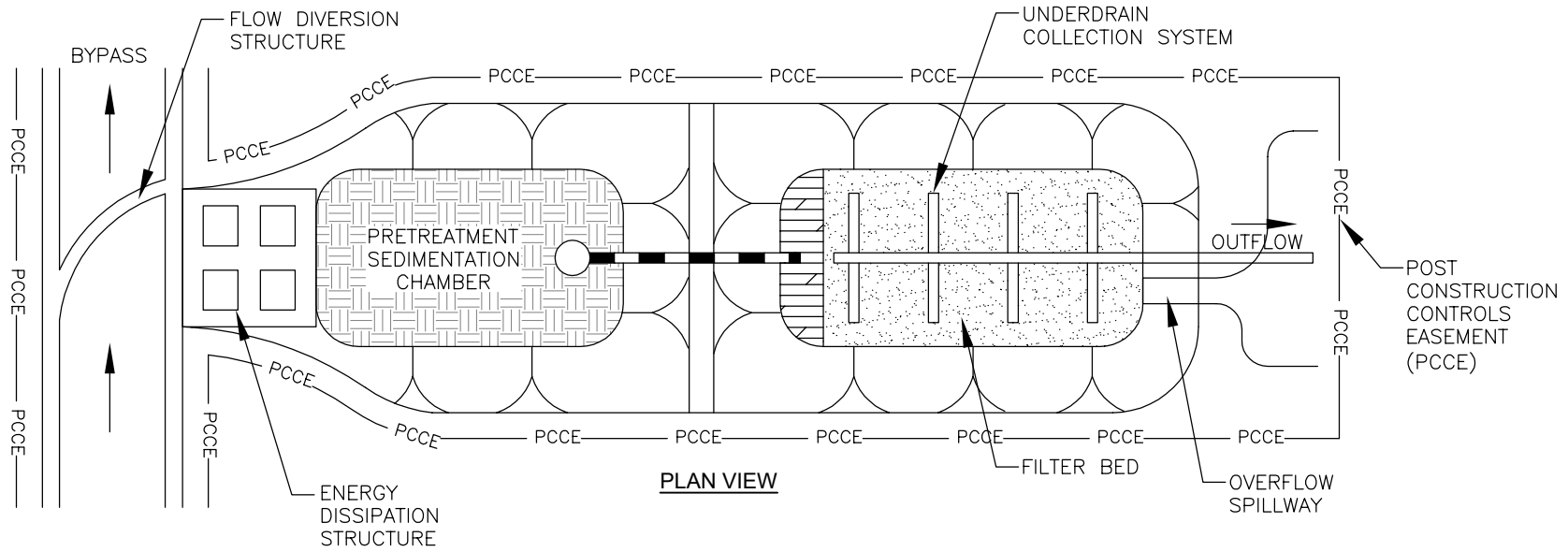
REV. DATE	
STD. NO.	REV.
21.22	



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	UNDERGROUND SAND FILTER

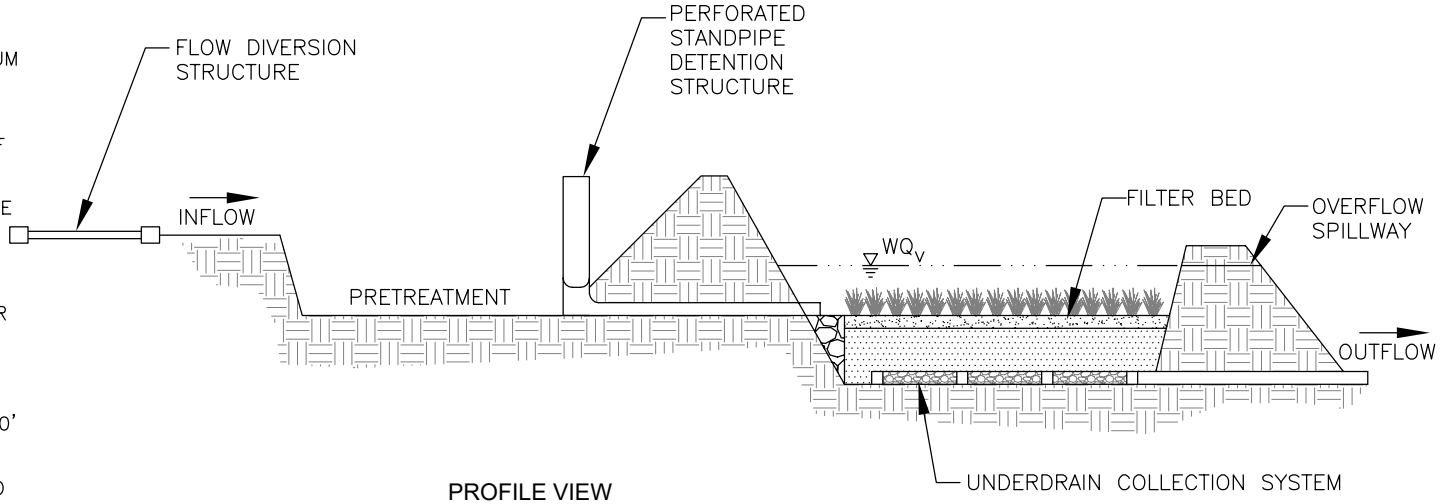
REV. DATE	
8/1/19	
STD. NO.	REV.
21.23	3



PLAN VIEW

NOTES:

1. ALL SAND FILTERS SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%. IN ADDITION, A 10-FOOT WIDE PERMANENT MAINTENANCE ACCESS EASEMENT MUST BE PROVIDED AROUND THE PERIMETER OF ALL BMPS TO ALLOW FOR ADEQUATE MAINTENANCE AND REPAIR.
2. ALL DRAINAGE AREAS TO A SAND FILTER FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF SAND.
3. CLEAN OUTS IN THE UNDERDRAIN SYSTEM ARE TO BE PROVIDED EVERY 50' AND AS DETERMINED BY THE COUNTY REVIEWER. CLEAN OUTS SHALL HAVE WATER TIGHT, VANDAL PROOF CAPS AND EXTEND 6" ABOVE THE SURFACE.



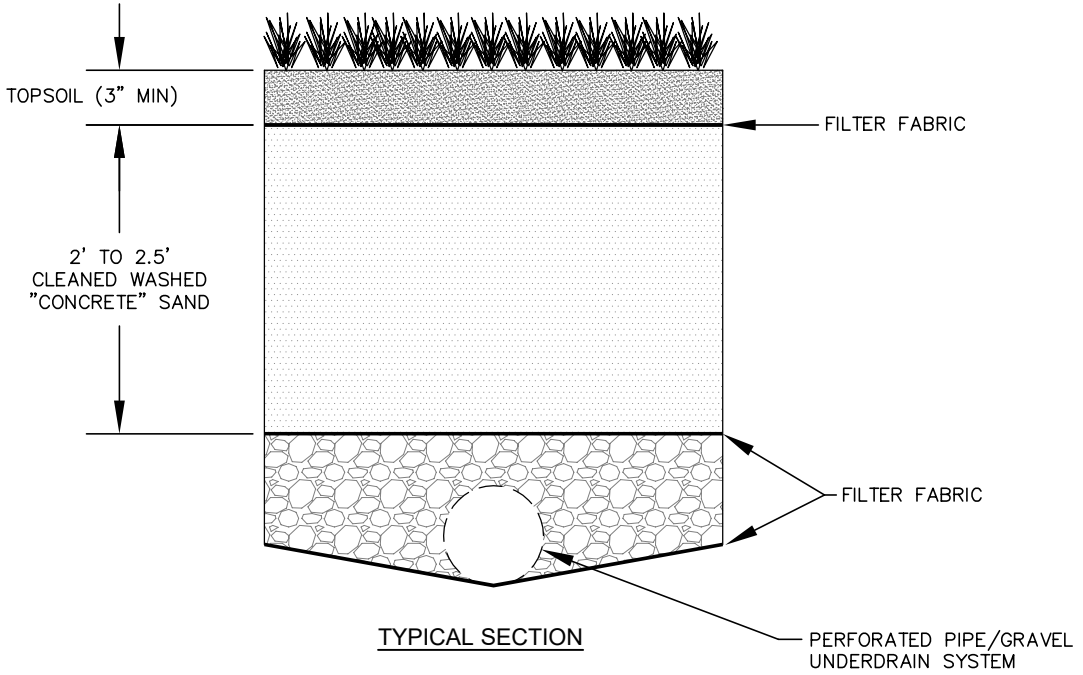
PROFILE VIEW

NOT TO SCALE

TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SURFACE SAND FILTER	REV. DATE: 8/1/19
		STD. NO.: 21.24
		REV.: 3

NOTES:

1. "CONCRETE" SAND REFERS TO SAND THAT IS COMMONLY USED IN CONCRETE MIXES.
2. ALL DRAINAGE AREAS TO A SAND FILTER FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF SAND.
3. UNDERDRAIN PIPES SHOULD BE MIN. 6" PERFORATED SCHEDULE 40 PVC (PER AASHTO M278) OR DOUBLE WALL HDPE (PER AASHTO M252). PERFORATIONS SHOULD BE 3/8" SPACED 3" ON CENTER ALONG 4 LONGITUDINAL ROWS SPACED 90° APART.



TYPICAL SECTION

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SURFACE SAND FILTER SECTION

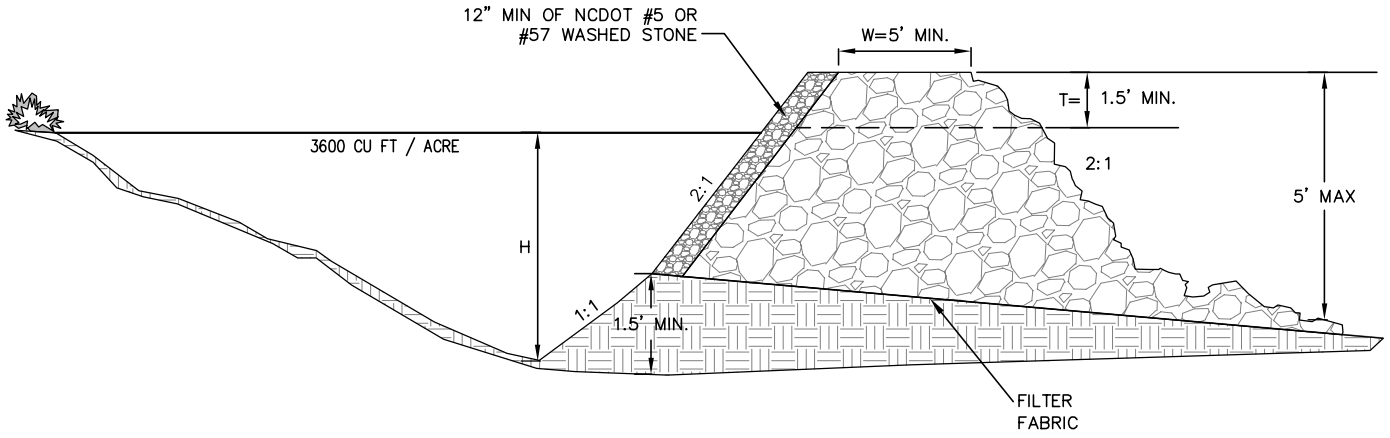
REV. DATE	
STD. NO.	REV.
21.25	

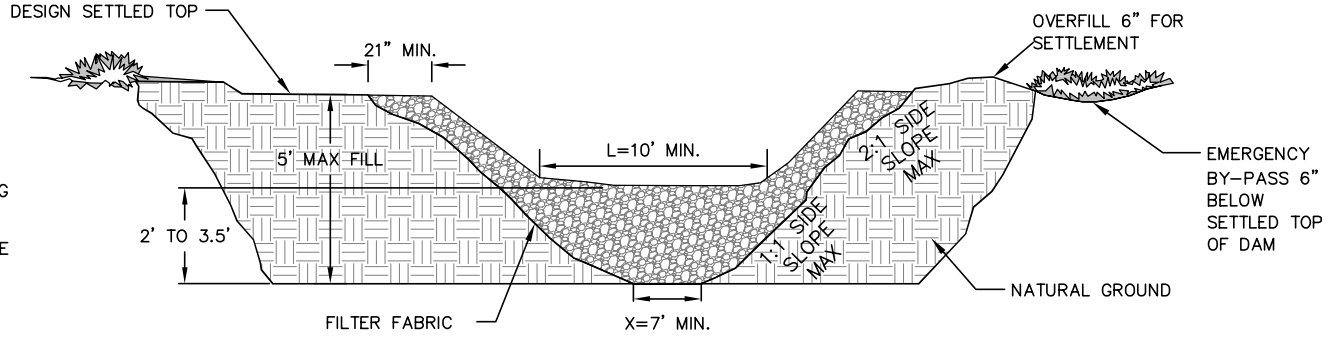
STD. & SPEC. #	TITLE	SPECIAL REQUIREMENTS & NOTES
6.11	PERMANENT SEEDING	—
6.17	ROLLED EROSION CONTROL PRODUCTS	—
6.51	HARDWARE CLOTH & GRAVEL INLET PROTECTION	—
6.60	TEMPORARY SEDIMENT TRAP	WEIR TOP WIDTH 10' MIN., BOTTOM 7' MIN.
6.61	SEDIMENT BASIN	FLASH BOARD RISER NOT PERMITTED
6.64	SKIMMER SEDIMENT BASIN	1ST BAFFLE: RIP RAP & WASHED STONE BERM 2ND BAFFLE: STANDARD BAFFLE 3RD BAFFLE: HARDWARE CLOTH SURROUNDING THE SKIMMER
NCDOT 1606.1	SPECIAL SEDIMENT CONTROL FENCE	—

THE STANDARDS & SPECIFICATIONS SHOWN ARE FROM THE "NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL" (NCESCPDM) PREPARED BY NC DEPT. OF ENVIRONMENT AND NATURAL RESOURCES (NCDENR); ALSO REFERENCE NCDOT "ROADWAY STANDARD DRAWINGS," LATEST EDITION.

THE TOWN HAS ADOPTED THE SPECIFIC STANDARDS & SPECIFICATIONS SHOWN ON THIS DETAIL AS MANDATORY MINIMUM DESIGN STANDARDS & SPECIFICATIONS. "SPECIAL REQUIREMENTS & NOTES" ARE INCLUDED WHEN THE TOWN'S CRITERIA IS MORE STRINGENT THAN THE NCESCPDM OR NCDOT STANDARDS.

TEMPORARY SEDIMENT TRAP DESIGN CRITERIA	
DRAINAGE AREA (ACRES)	< 5 AC.
MIN. LENGTH TO WIDTH RATIO	2:1
MIN. VOLUME REQUIRED	3600 (CU. FT. PER AC. DISTURBED)
SURFACE AREA REQUIRED	435 (SQ. FT. PER CFS Q10)





NOTES:

1. PLEASE REFER TO NCESCPDM SECTION #6.60 FOR ADDITIONAL DESIGN SPECIFICATIONS REGARDING TEMPORARY SEDIMENT TRAPS.
2. REFER TO PLDS 30.19 FOR BAFFLE SPACING AND INSTALLATION.

DATA BLOCK

TRAP NO.	DRAINAGE AREA (ACRES)	DENUDED AREA (ACRES)	Q_{10}	TRAP VOLUME REQUIRED (CUBIC FT.)	TRAP VOLUME PROVIDED (CUBIC FT.)	TRAP SURFACE AREA REQUIRED (SQ FT.)	TRAP SURFACE AREA PROVIDED (SQ FT.)	CLEANOUT DEPTH (FT.) H/2	H (FEET)	L (FEET)	T (FEET)	W (FEET)	X (FEET)

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

TEMPORARY SEDIMENT TRAP

REV. DATE	
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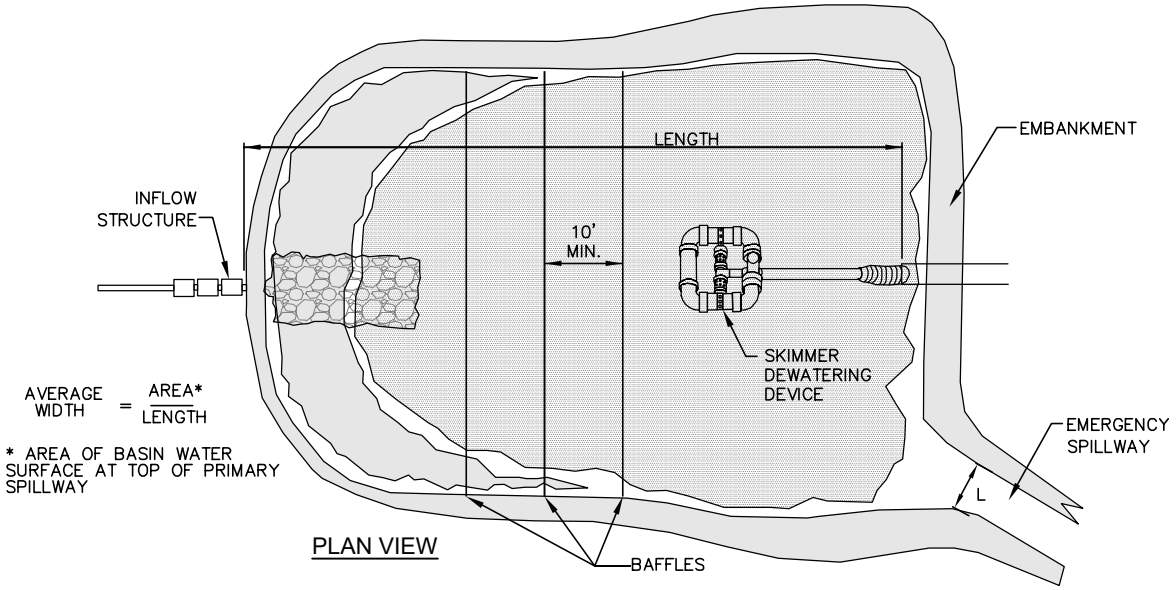
30.01	3

TEMPORARY SEDIMENT TRAP DESIGN CRITERIA	
DRAINAGE AREA (ACRES)	< 10 AC.
MIN. / MAX. LENGTH TO WIDTH RATIO	2:1 / 6:1
MIN. VOLUME REQUIRED	1800 (CU. FT. PER AC. DISTURBED)
SURFACE AREA REQUIRED	325 (SQ. FT. PER CFS Q10)



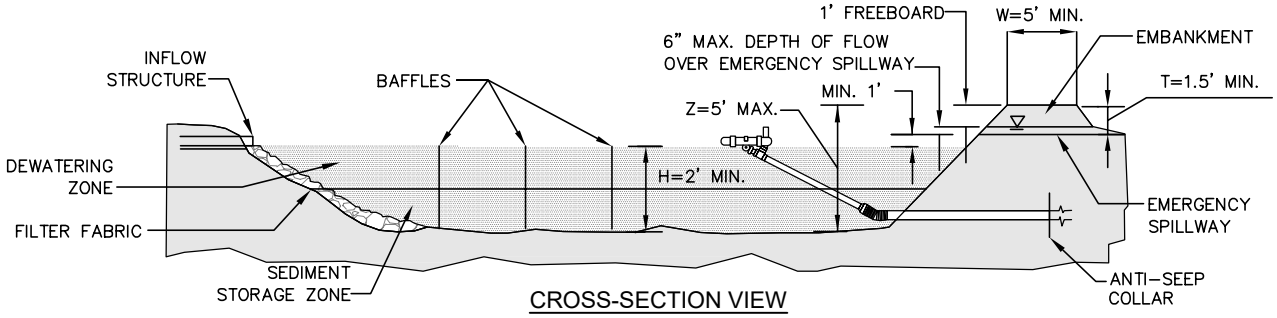
AVERAGE WIDTH = AREA* / LENGTH

* AREA OF BASIN WATER SURFACE AT TOP OF PRIMARY SPILLWAY

PLAN VIEW

NOTES:

1. REFER TO NCESCPDM SECTION #6.64 FOR ADDITIONAL DESIGN SPECIFICATIONS REGARDING SKIMMER SEDIMENT BASINS.
2. REFER TO PLDS 30.19 FOR BAFFLE SPACING AND INSTALLATION.



CROSS-SECTION VIEW

DATA BLOCK

BASIN	DRAINAGE AREA (ACRES)	DENUDED AREA (ACRES)	Q_{10}	BASIN VOLUME		BASIN SURFACE AREA		CLEANOUT DEPTH (FT) H/2	H (FEET)	Z (FEET)	L (FEET)	T (FEET)	W (FEET)	SKIMMER PIPE DIA.	SKIMMER ORIFICE DIA.
				REQUIRED (CUBIC FT.)	PROVIDED (CUBIC FT.)	REQUIRED (SQ FT.)	PROVIDED (SQ FT.)								

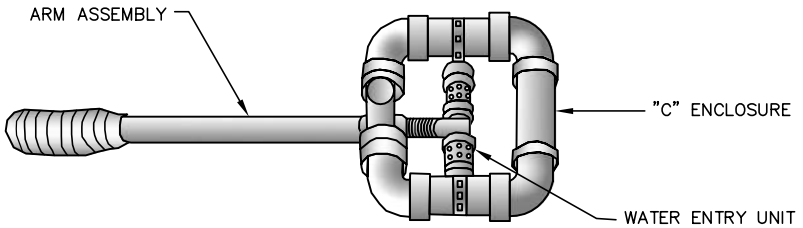
NOT TO SCALE

Pineville NORTH CAROLINA

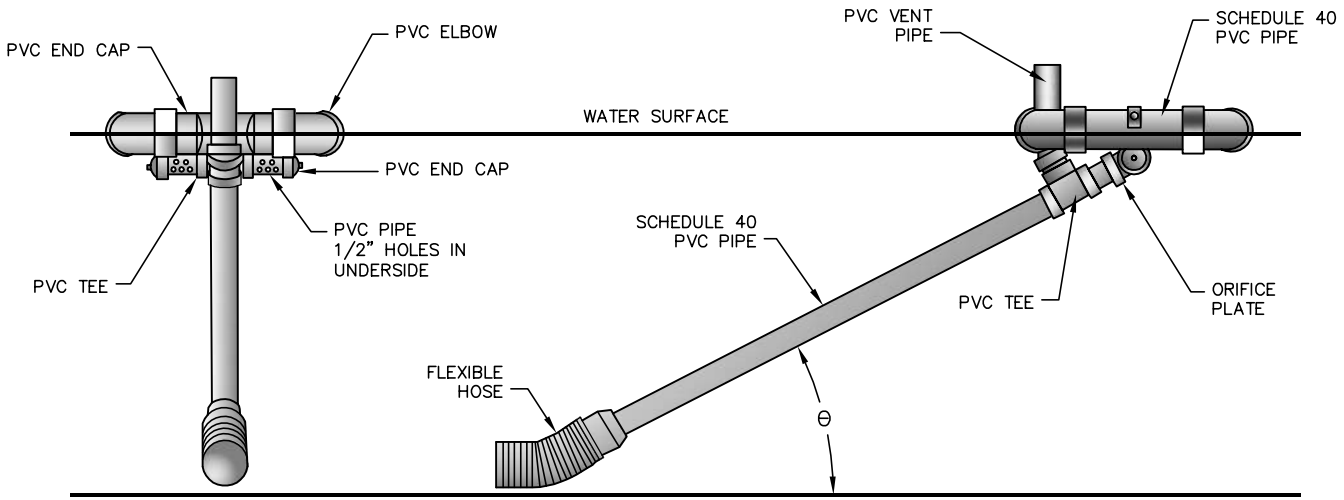
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

SKIMMER SEDIMENT BASIN

REV. DATE	
STD. NO.	REV.
30.02A	



PERSPECTIVE VIEW



END VIEW

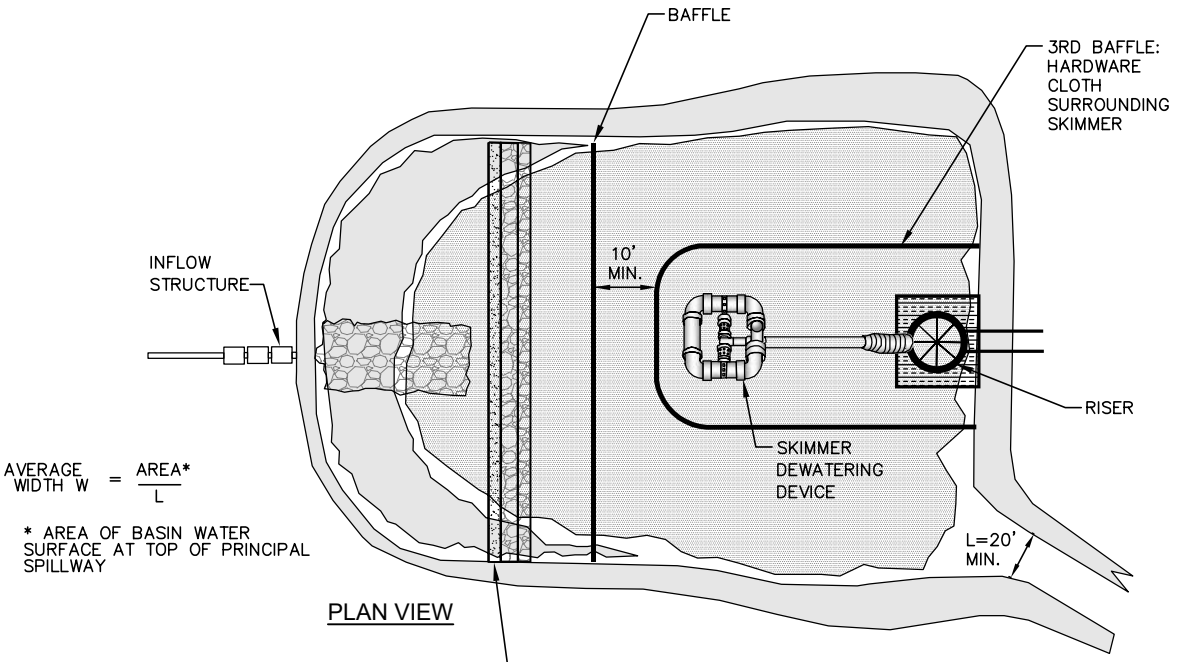
FRONT VIEW

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SKIMMER

REV. DATE	
STD. NO.	REV.
30.02B	

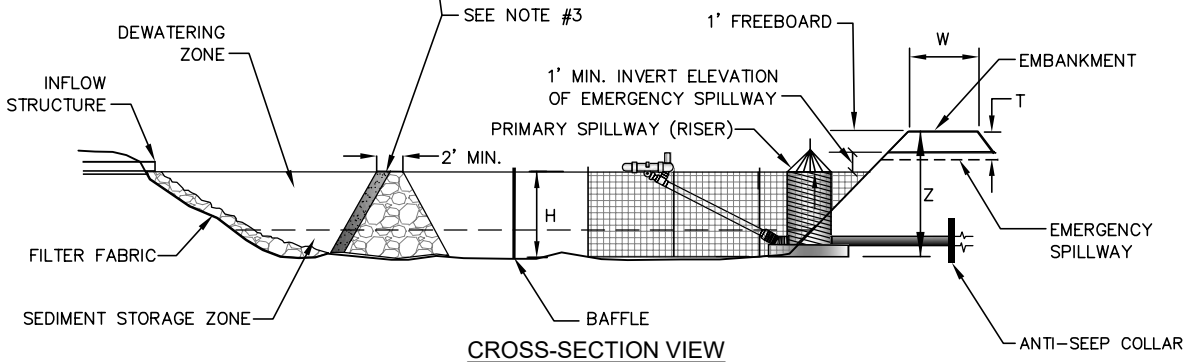
SEDIMENT BASIN DESIGN CRITERIA	
DRAINAGE AREA (ACRES)	>10 AC. <100 AC.
MIN. / MAX. LENGTH TO WIDTH RATIO	2:1 / 6:1
MIN. VOLUME REQUIRED	1800 (CU. FT. PER AC. DISTURBED)
SURFACE AREA REQUIRED	435 (SQ. FT. PER CFS Q10)



$$\text{AVERAGE WIDTH } W = \frac{\text{AREA*}}{L}$$

* AREA OF BASIN WATER SURFACE AT TOP OF PRINCIPAL SPILLWAY

PLAN VIEW



CROSS-SECTION VIEW

NOTES:

1. REFER TO NCESCPDM SECTION #6.61 FOR ADDITIONAL DESIGN SPECIFICATIONS REGARDING SEDIMENT BASINS.
2. REFER TO PLDS 30.19 FOR BAFFLE SPACING AND INSTALLATION.
3. FIRST BAFFLE IS TO BE CONSTRUCTED OF RIP-RAP AND #5 WASHED STONE, WITH A MIN. HEIGHT OF 3' AND MIN. TOPWIDTH OF 2'.
4. FLASHBOARD RISER NOT PERMITTED FOR USE

BASIN	DRAINAGE AREA (ACRES)	DENUDED AREA (ACRES)	Q_{10}	BASIN VOLUME		BASIN SURFACE AREA		CLEANOUT DEPTH (FT) H/2	H (FEET)	Z (FEET)	L (FEET)	T (FEET)	W (FEET)	SKIMMER PIPE DIA.	SKIMMER ORIFICE DIA.
				REQUIRED (CUBIC FT.)	PROVIDED (CUBIC FT.)	REQUIRED (SQ FT.)	PROVIDED (SQ FT.)								

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT STANDARDS

SEDIMENT BASIN

REV. DATE	
8/1/19	
STD. NO.	REV.
30.03A	3

GENERAL NOTES:

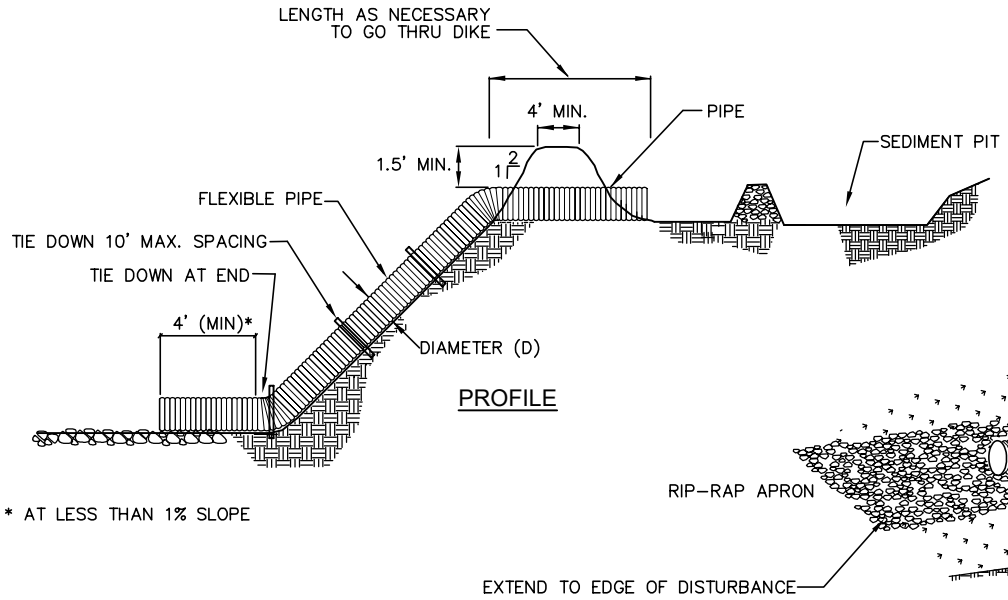
1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MATERIAL.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE BEING CONSTRUCTED. SPILLWAYS SHOULD NOT BE CONSTRUCTED THROUGH FILL SECTIONS. ALL SPILLWAYS SHOULD BE LINED AND/OR RIPRAPPED.
3. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH.
4. THE TRAP SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NECESSARY.
5. CONSTRUCTION OPERATION SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
6. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER,
7. SEDIMENT BASIN EMBANKMENTS SHOULD BE PROVIDED WITH EROSION CONTROL AND STABILIZATION.
8. STORAGE AREA MAY BE CONSTRUCTED IN ANY SHAPE PROVIDED THE MINIMUM STORAGE VOLUME REQUIREMENT IS MET. THE BASIN SHOULD ALSO BE ORIENTED SUCH THAT THE FILTER AND THE MAIN FLOW OF WATER AND SEDIMENT ARE ON OPPOSITE ENDS ON THE LONGER BASIN DIMENSIONS.
9. THE LENGTH OF THE STONE OUTLET (SPILLWAY) IS TO BE BASED ON A 10 YEAR STORM.
10. WHENEVER TOPOGRAPHY ALLOWS, THE BASIN LENGTH SHOULD BE TWICE (2X) THE BASIN WIDTH, TO ALLOW FOR SETTLING. BAFFLES SHALL BE INSTALLED IN ALL BASINS.
11. CLEANOUT STAKES SHALL BE PLACED IN ALL SEDIMENT BASINS AT THE LOW POINT IN THE BASIN. THE STAKES SHALL BE MARKED SHOWING THE HALF FULL, CLEANOUT POINT, OF THE BASIN.
12. SAFETY FENCING 3' HIGH SHOULD BE PLACED AROUND ALL SEDIMENT BASINS.
13. FOR DESIGN OF SEDIMENT BASINS, REFER TO THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
14. FOR SLOPES GREATER THAN 10' IN LENGTH AND PROTECTED BY SILT FENCE AT THE TOE OF THE SLOPE, SLOPE TERRACING WILL
15. THE BERM ON SEDIMENT BASINS SHALL BE SEEDED ONCE FINAL GRADE HAS BEEN REACHED. THE SILT FENCE MAY BE REMOVED IF PERMISSION HAS BEEN GRANTED BY THE COUNTY LAND DEVELOPMENT INSPECTOR AFTER THE GRASS HAS GERMINATED AND STABLE GROUND HAS BEEN ESTABLISHED.
16. WASHED STONE AND WIRE BACKING SHALL BE USED WITH SILT FENCE WHENEVER SILT FENCE IS PLACE AT THE TOE OF A SLOPE >10' VERTICAL OR ALONG ANY CHANNEL OR WATER COURSE WHERE 50' OF BUFFER IS NOT PROVIDED.

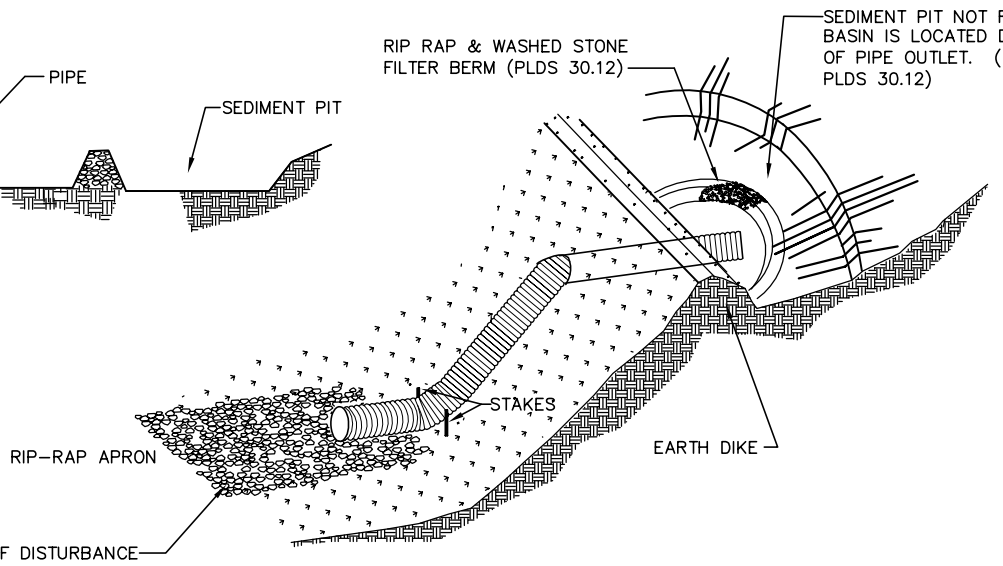
Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

GENERAL NOTES - SEDIMENT BASINS

REV. DATE	
STD. NO.	REV.
30.03B	





CONSTRUCTION SPECIFICATIONS:

1. THE TOP OF THE EARTH DIKE OVER THE INLET PIPE AND THOSE DIKES CARRYING WATER TO THE PIPE SHALL BE AT LEAST 1.5 FEET HIGHER AT ALL POINTS THAN THE TOP OF THE INLET PIPE.
2. THE PIPE SHALL BE FLEXIBLE WITH WATER TIGHT CONNECTING BANDS. FLEXIBLE PIPE SHOULD BE STAKED ON EITHER SIDE.
3. A RIP RAP APRON SHALL BE PROVIDED AT THE OUTLET, IF EMPTYING INTO A DISTURBED AREA.
4. THE SOIL AROUND AND UNDER THE INLET PIPE AND ENTRANCE SECTION SHALL BE HAND TAMPED IN 4" LIFTS TO THE TOP OF THE EARTH DIKE.
5. FOLLOW-UP INSPECTION AND ANY NEEDED MAINTENANCE SHALL BE PERFORMED AFTER EACH STORM BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT.
6. OUTLET PIPE SHOULD BE TAKEN OVER OR THROUGH ANY SILT FENCE, TAKING CARE NOT TO VOID THE EFFECTIVENESS OF THE SILT FENCE.

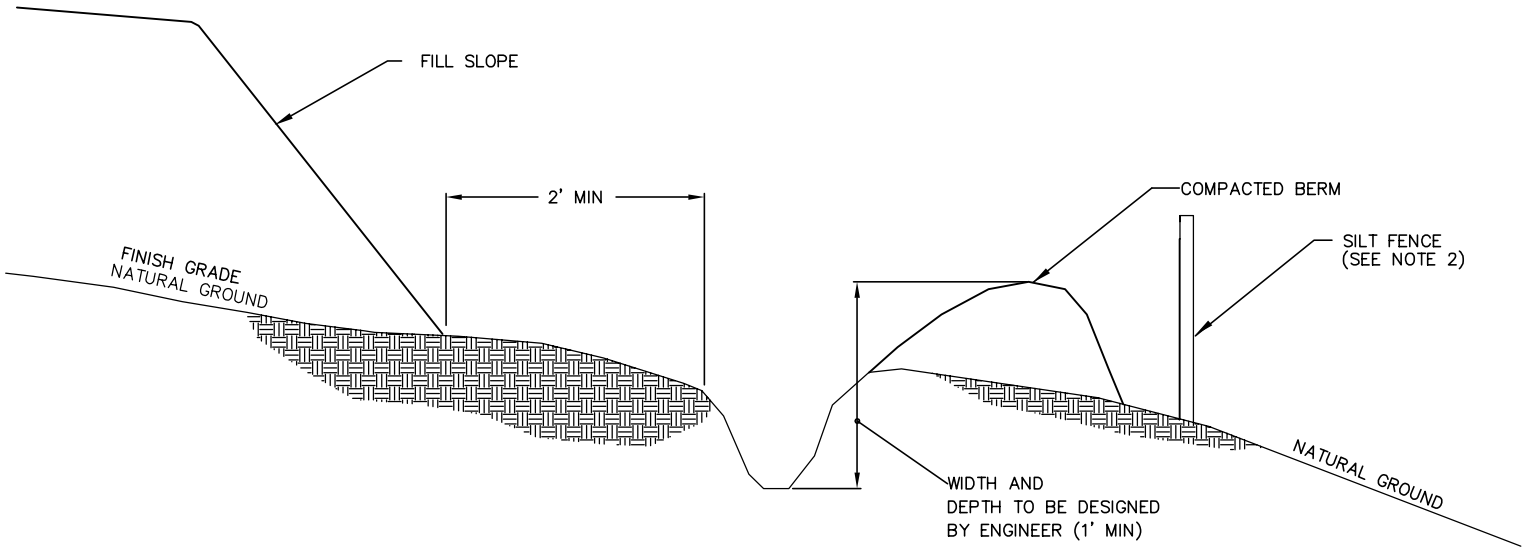
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	FLEXIBLE PIPE SLOPE DRAIN

REV. DATE	
STD. NO.	REV.
30.04	

NOTES:

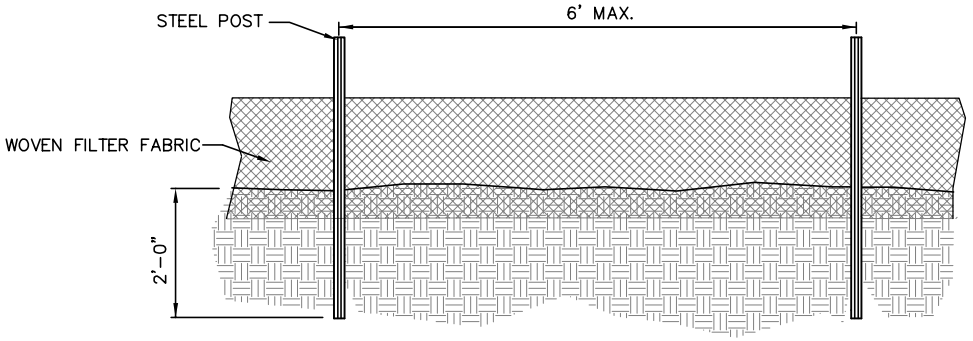
1. DITCH SHOULD HAVE LONGITUDINAL SLOPE OF 1%.
2. SILT FENCE MAY BE REQUIRED BEHIND BERM.

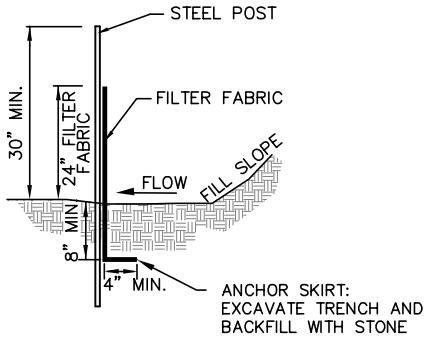


NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TEMPORARY SILT DITCH

REV. DATE	
STD. NO.	REV.
30.05	





GENERAL NOTES:

1. FILTER FABRIC FENCE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 WIRES WITH 12" STAY SPACING.
2. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
3. TURN SILT FENCE UP SLOPE AT ENDS.
4. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWIM BUFFERS, STREAMS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
5. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
6. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.62A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
7. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.
8. WOVEN FILTER FABRIC TO BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.

MAINTENANCE NOTES:

1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROXIMATE HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TEMPORARY SILT FENCE

REV. DATE	
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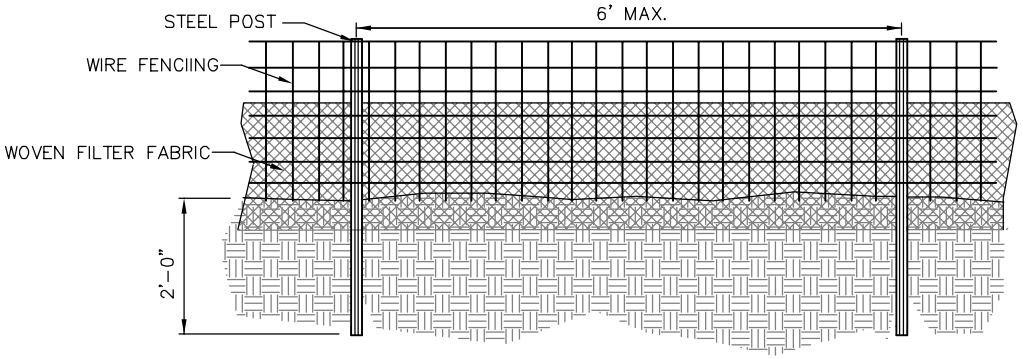
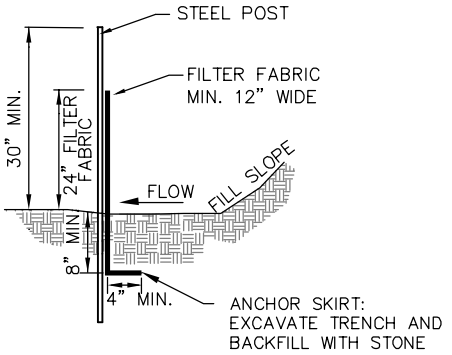
STD. NO.	REV.
30.06A	3





GENERAL NOTES:

1. FILTER FABRIC FENCE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. WOVEN FILTER FABRIC TO BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
3. STEEL POSTS SHALL BE 5'–0" IN HEIGHT AND BE OF THE SELF–FASTENER ANGLE STEEL TYPE.
4. WIRE FENCING SHALL BE AT LEAST #10 GAGE WITH A MINIMUM OF 6 LINE WIRES WITH 6" STAY SPACING.
5. TURN SILT FENCE UP SLOPE AT ENDS.
6. WIRE MESH SHALL BE MIN. 13 GAGE WITH MAXIMUM 12" OPENINGS.
7. WIRE AND WASHED STONE IS REQUIRED TO BE SHOWN ON PLANS AT THE TOE OF SLOPES GREATER THAN 10 FEET VERTICAL (2:1 SLOPE).
8. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWIM BUFFERS, STREAMS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
9. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
10. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.62A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
11. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.

MAINTENANCE NOTES:

1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

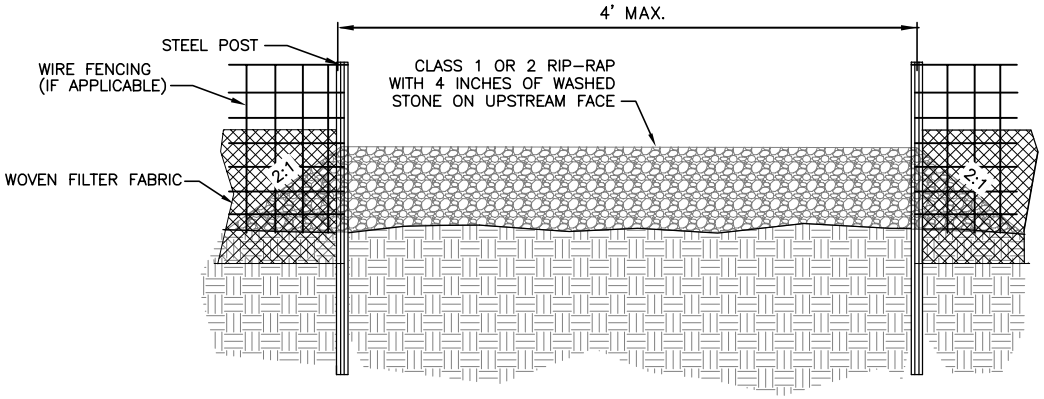
NOT TO SCALE

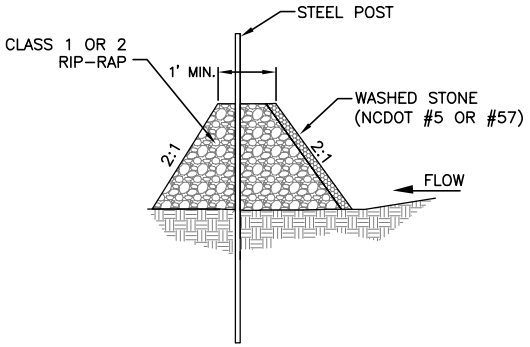
Pineville
NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

HIGH HAZARD TEMPORARY SILT FENCE

REV. DATE	
8/1/19	
STD. NO.	REV.
30.06B	3





GENERAL NOTES:

1. SEDIMENT FILTER OUTLET SHALL BE 16 INCHES HIGH BUT NO TALLER THAN 18 INCHES.
2. CLASS 1 OR 2 RIP-RAP SHALL BE USED AND COVERED WITH 4 INCHES OF NCDOT #5 OR #57 WASHED STONE ON THE UPSLOPE SIDE.
3. POSTS SHALL BE NO MORE THAN 4 FEET APART.
4. SITE OUTLETS AT ANY POINT SMALL CONCENTRATED FLOWS ARE ANTICIPATED AND AT THE DIRECTION OF THE INSPECTOR.
5. ONE ACRE MAXIMUM DRAINAGE AREA PER OUTLET.

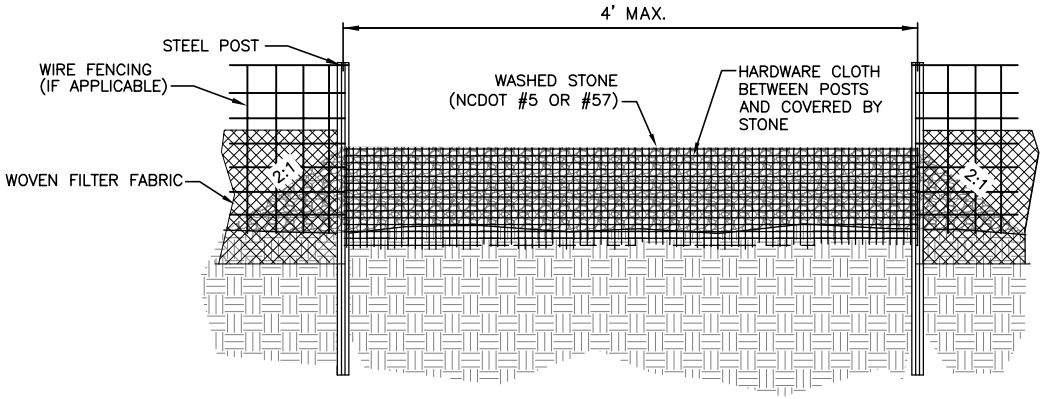
MAINTENANCE NOTES:

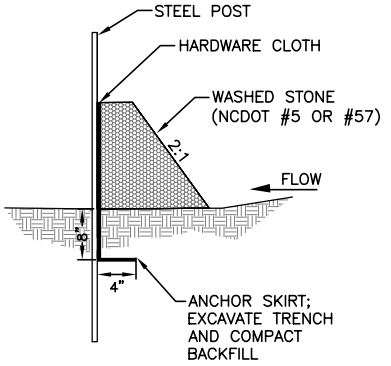
1. FILTER OUTLETS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY EVENT THAT HAS CLOGGED OR REMOVED IT.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SILT FENCE OUTLET OPTION 1

REV. DATE	
8/1/19	
STD. NO.	REV.
30.06C	3





GENERAL NOTES:

1. SEDIMENT FILTER OUTLET AND HARDWARE CLOTH SHALL BE 16 INCHES HIGH BUT NO TALLER THAN 18 INCHES.
2. HARDWARE CLOTH SHALL BE ANCHORED TO THE STEEL POSTS SECURELY USING APPROPRIATE ANCHORS. HARDWARE CLOTH SHALL BE KEYED IN A MINIMUM OF 12 INCHES IN LENGTH AND BACKFILLED PROPERLY AS SHOWN IN ABOVE DETAIL. HARDWARE CLOTH TO BE SAME AS STD. #30.09 (19 GAUGE, 1/4" SPACING).
3. POSTS SHALL BE NO MORE THAN 4 FEET APART.
4. SITE OUTLETS AT ANY POINT SMALL CONCENTRATED FLOWS ARE ANTICIPATED AND AT THE DIRECTION OF THE INSPECTOR.
5. ONE ACRE MAXIMUM DRAINAGE AREA PER OUTLET.

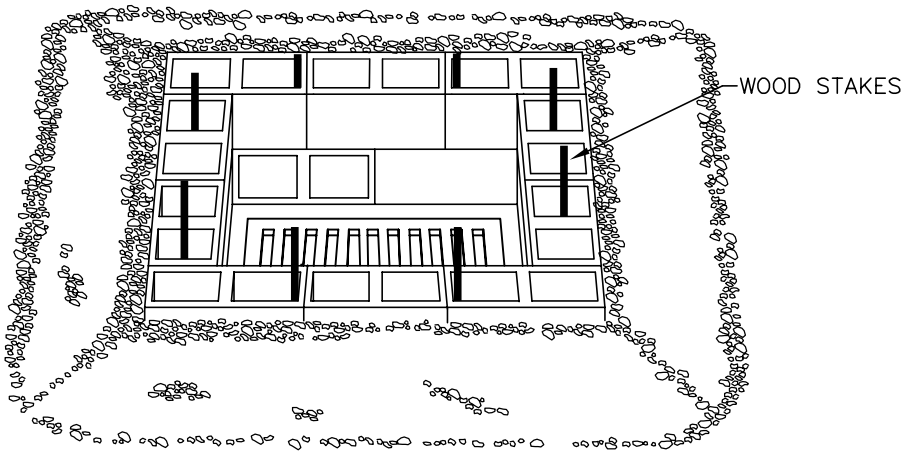
MAINTENANCE NOTES:

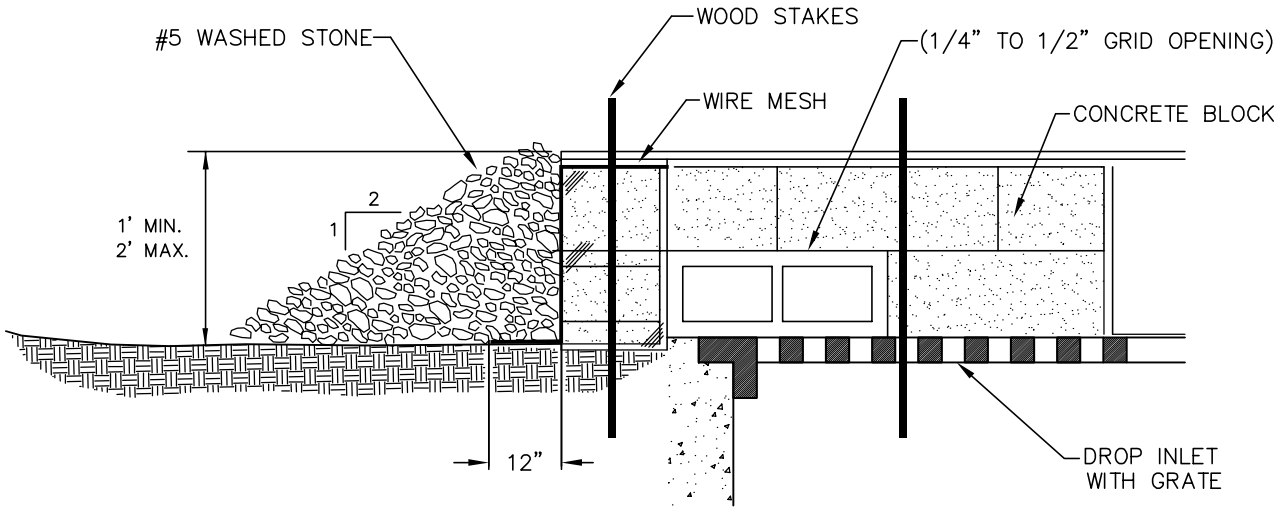
1. FILTER OUTLETS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY EVENT THAT HAS CLOGGED OR REMOVED IT.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SILT FENCE OUTLET OPTION 2

REV. DATE	
8/1/19	
STD. NO.	REV.
30.06D	3





SPECIFIC APPLICATION:

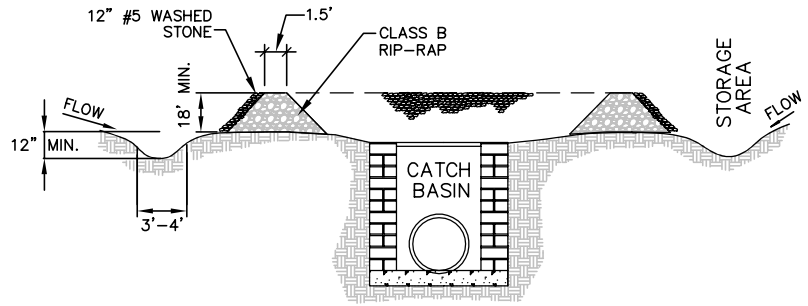
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOT TO SCALE

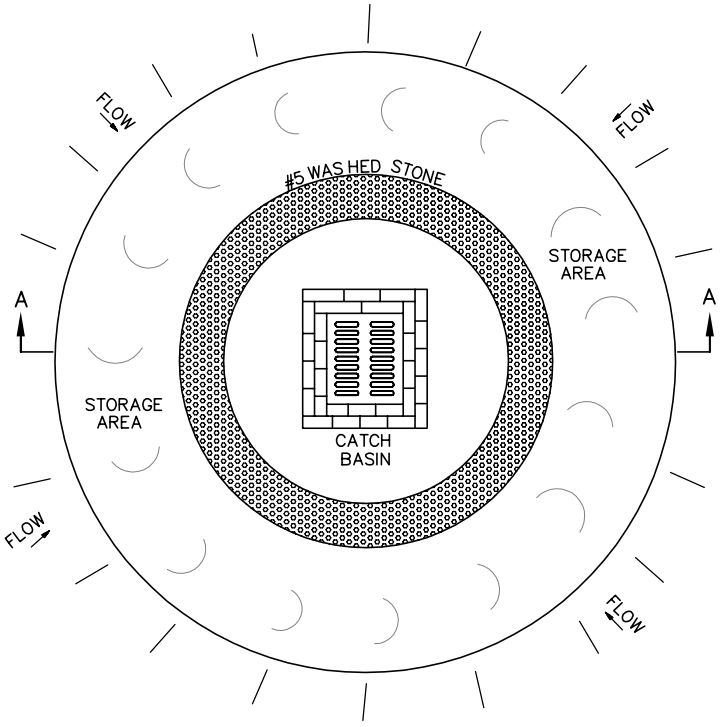
Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BLOCK AND GRAVEL STONE INLET PROTECTION	REV. DATE: 8/1/19 STD. NO.: 30.07 REV.: 3

GENERAL NOTES:

1. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
2. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
3. THE STRUCTURE SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT AFTER EACH STORM EVENT AND REPAIRS MADE AS NECESSARY.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE BASIN HAS BEEN PROPERLY STABILIZED.
6. ON LARGER DRAINAGE AREAS RIP RAP MAY BE REQUIRED UNDER THE WASHED STONE.
7. MUST BE LOCATED AT LEAST 30' AWAY FROM VEHICULAR TRAFFIC,



SECTION A-A



PLAN VIEW

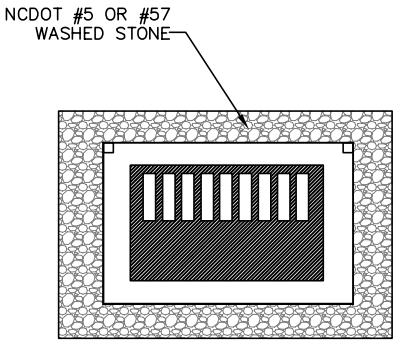
NOT TO SCALE

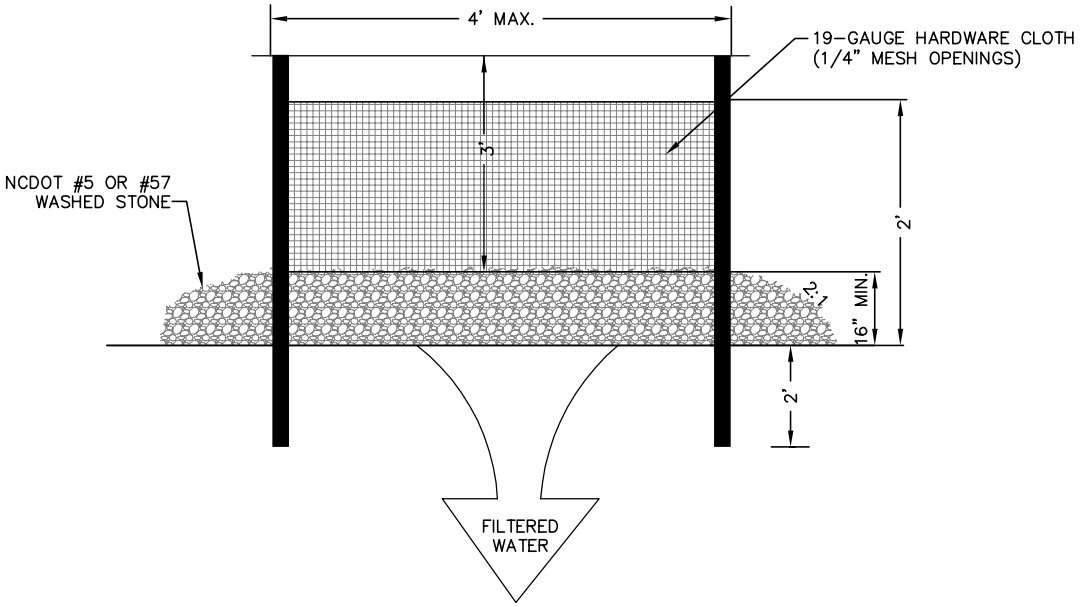
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	STONE INLET PROTECTION

REV. DATE	
8/1/19	
STD. NO.	REV.
30.08	3

GENERAL NOTES:

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5–FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 2–FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUNDCOVER.





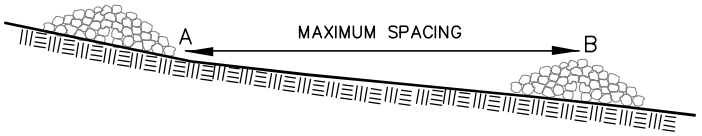
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	HARDWARE CLOTH AND GRAVEL INLET PROTECTION

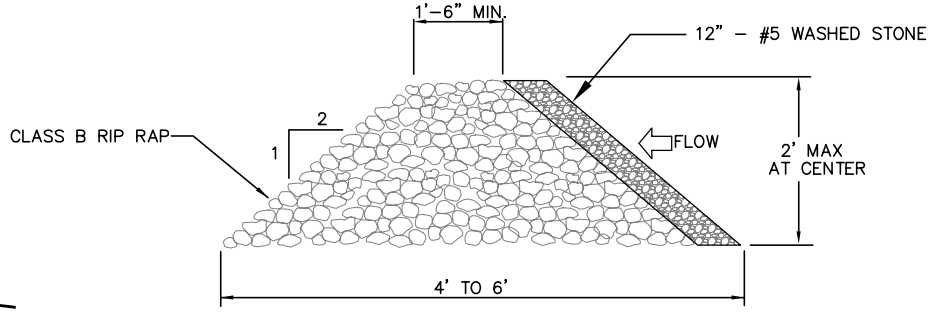
REV. DATE	
STD. NO.	REV.
30.09	

GENERAL NOTES:

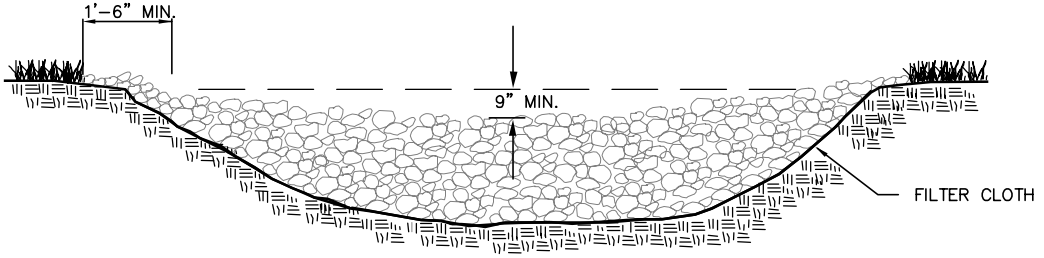
1. RIPRAP SIZE TO BE DESIGNED BY ENGINEER.
2. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.
3. ENSURE THAT MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE DOWNSTREAM DAM (SEE DIAGRAM BELOW).



A AND B ARE AT EQUAL ELEVATIONS



CROSS SECTION



PLAN

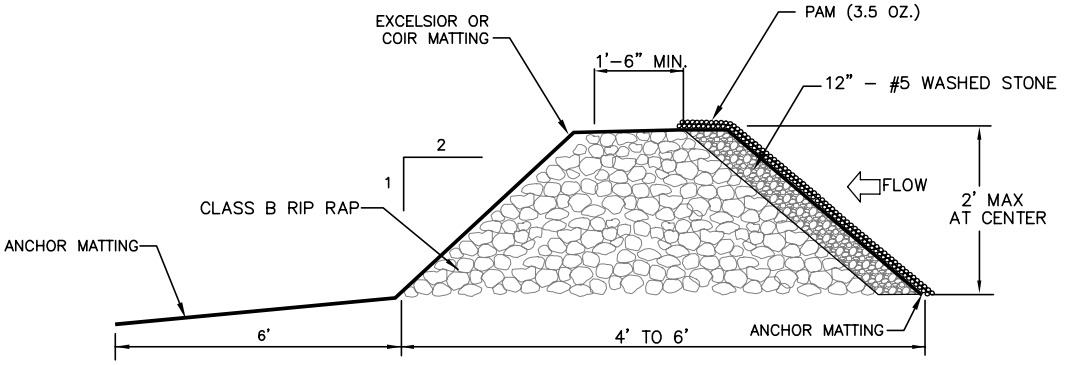
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TEMPORARY ROCK CHECK DAM

REV. DATE	
8/1/19	
STD. NO.	REV.
30.10A	3

GENERAL NOTES:

1. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.
2. ENSURE THAT MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE DOWNSTREAM DAM (SEE DIAGRAM BELOW).
3. COIR MATTING SHALL BE SUBSTITUTED FOR EXCELSIOR MATTING IN HIGH FLOW AREAS.
4. INITIALLY APPLY 3.50 OUNCES OF POLYACRYLAMIDE (PAM) TO THE FACE AND TOP OF THE CHECK DAM AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.
5. ONLY PAMs THAT PASS THE CHRONIC TOXICITY TESTING REQUIREMENTS, ESTABLISHED BY NCDWQ, MAY BE USED.
6. A SEDIMENT BASIN OR SIMILAR STRUCTURE BETWEEN THE APPLICATION POINT OF PAMs AND SURFACE WATERS IS REQUIRED.
7. SUPPLIER TO DETERMINE APPROPRIATE PAM BASED ON SOIL TYPE.



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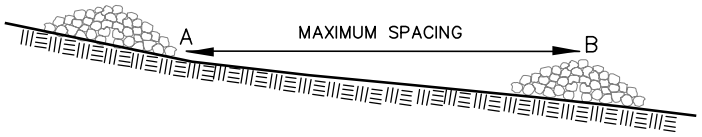
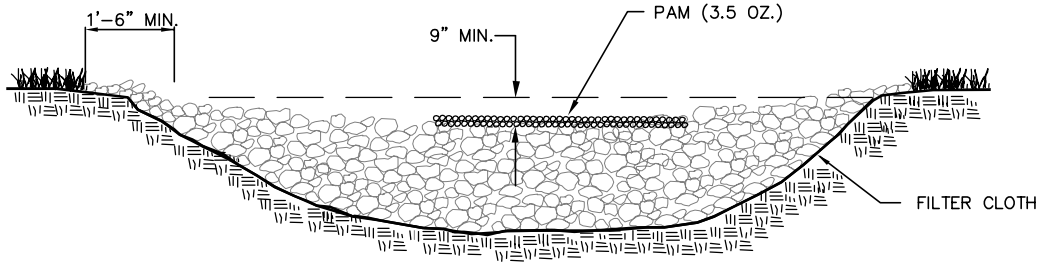


A AND B ARE AT EQUAL ELEVATIONS

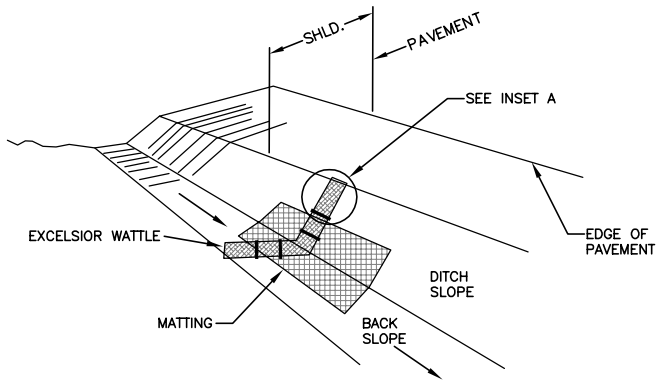


PLAN

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TEMPORARY ROCK CHECK DAM WITH MATTING AND OPTIONAL PAM

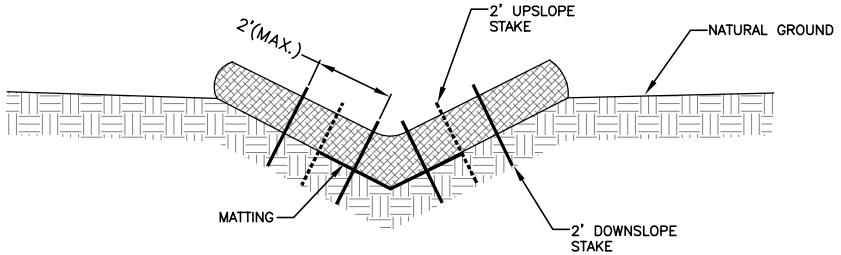
REV. DATE	
8/1/19	
STD. NO.	REV.
30.10B	3



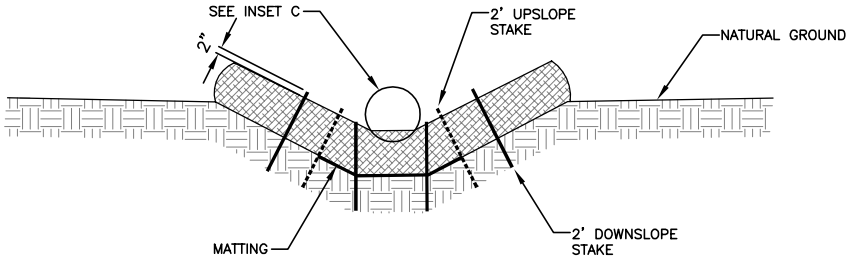
ISOMETRIC VIEW

GENERAL NOTES:

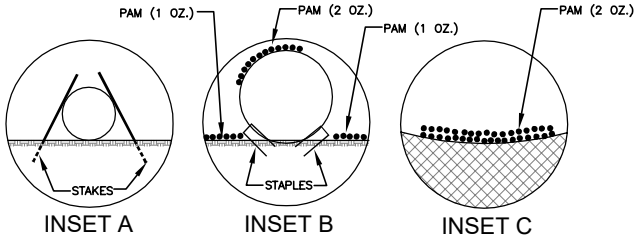
1. USE MINIMUM 12 INCH DIAMETER FIBER WATTLE.
2. USE 2 FT. WOODEN STAKES WITH A 2 IN. X 2 IN. NOMINAL CROSS SECTION
3. ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
4. INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
5. PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
6. INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
7. INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE NCDOT STANDARD SPECIFICATIONS.
8. PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.
9. INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

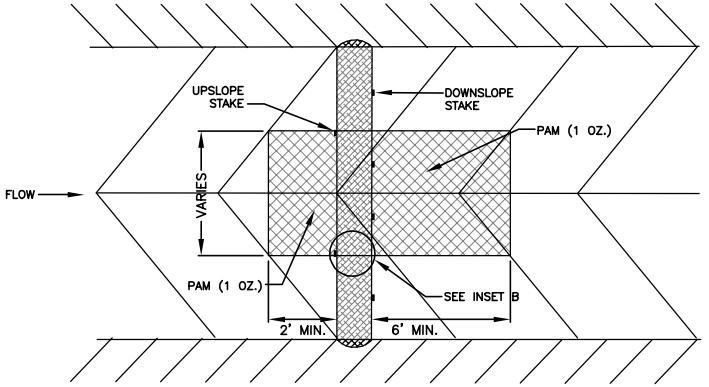


CROSS SECTION
VEE DITCH



CROSS SECTION
TRAPEZOIDAL DITCH





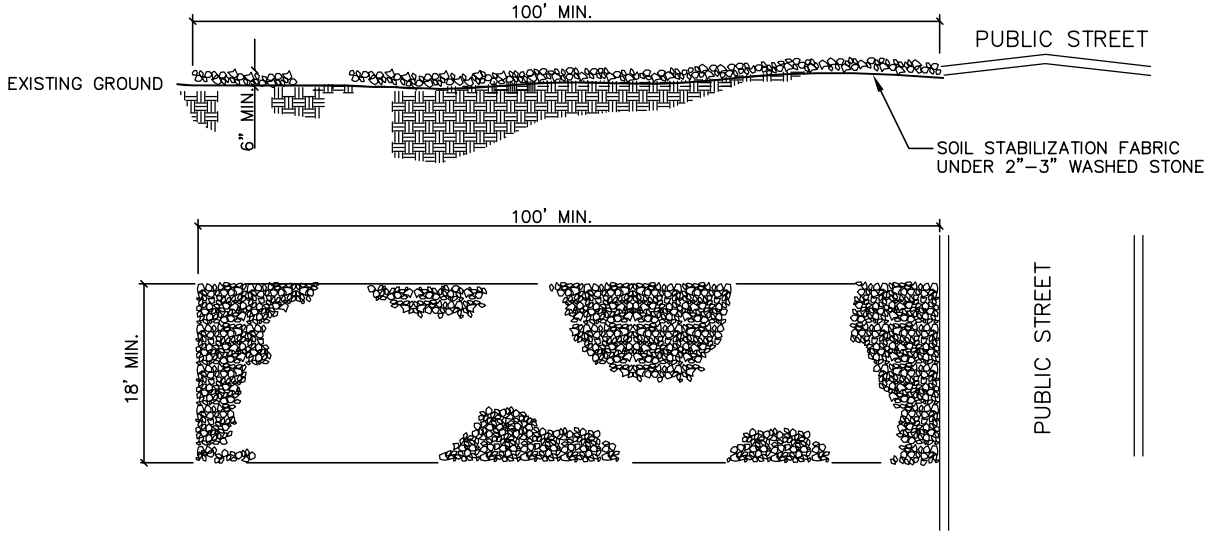
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TEMPORARY WATTLE WITH MATTING AND OPTIONAL PAM

REV. DATE	
8/1/19	
STD. NO.	REV.
30.10.C	3

NOTES:

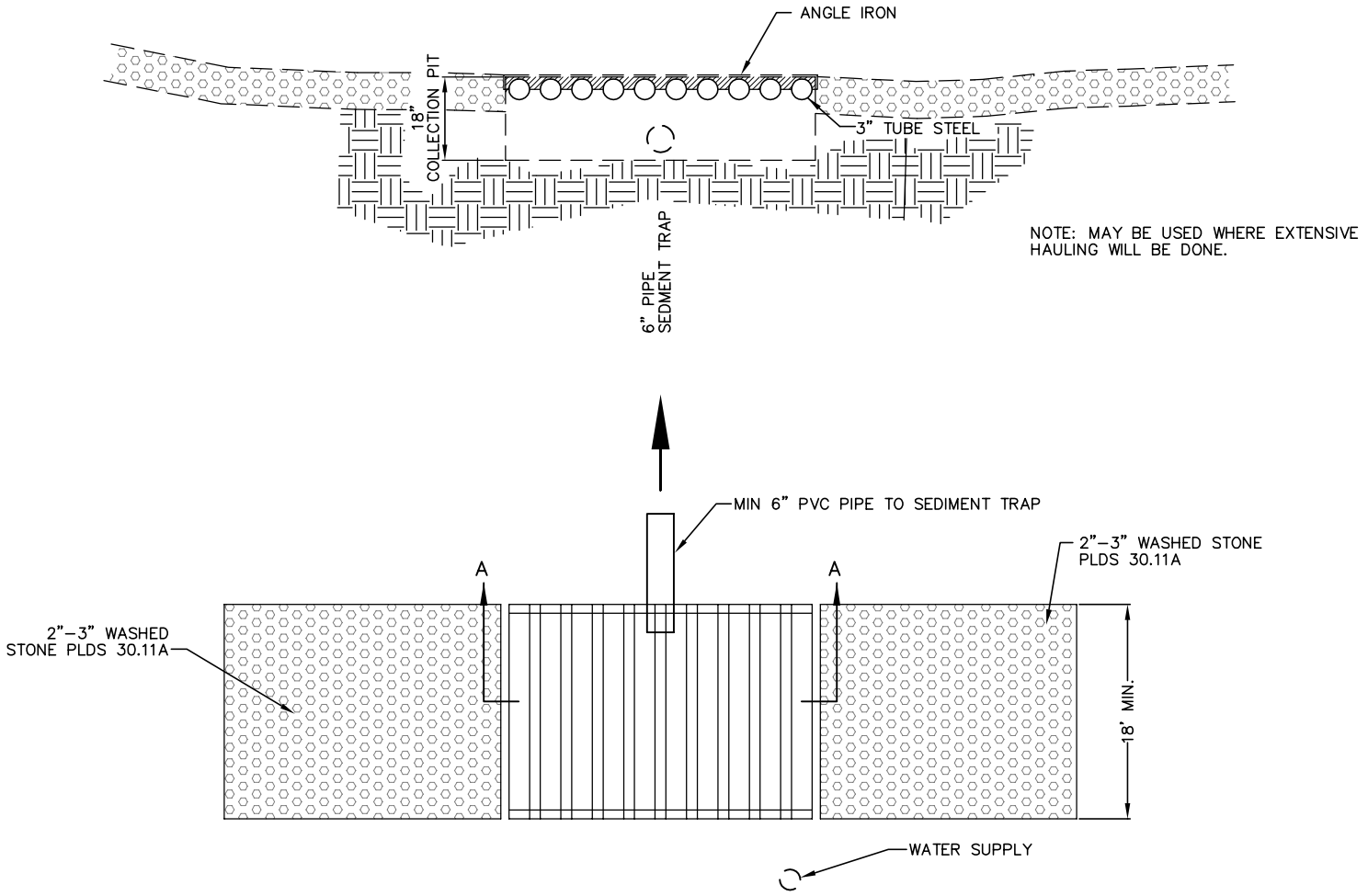
1. A STABILIZED ENTRANCE PAD OF 2"–3" WASHED STONE OR RAIL ROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN SEE PLDS 30.11B.
6. THE TOWN MAY REQUIRE A STANDARD COMMERCIAL DRIVEWAY (PLDS 10.24 & 10.25) TO ACCESS THE CONSTRUCTION SITE IF THE DRIVEWAY IS ON A THOROUGHFARE.



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	STABILIZED CONSTRUCTION ENTRANCE

REV. DATE	
8/1/19	
STD. NO.	REV.
30.11A	3



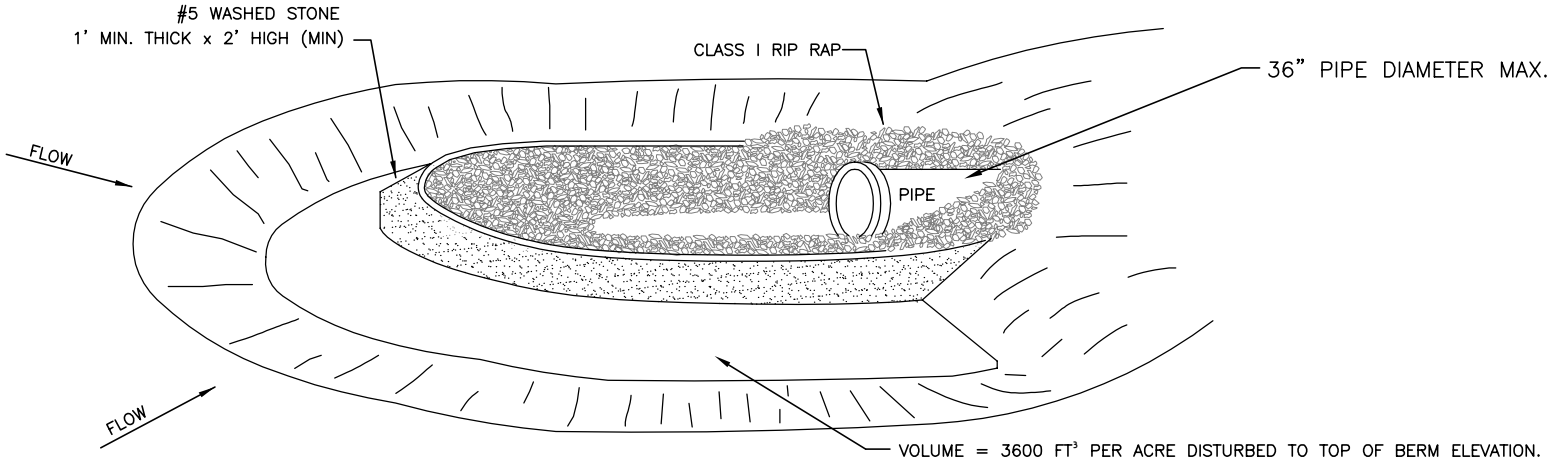
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CONSTRUCTION ENTRANCE TIRE WASH

REV. DATE	
8/1/19	
STD. NO.	REV.
30.11B	3

DATA BLOCK

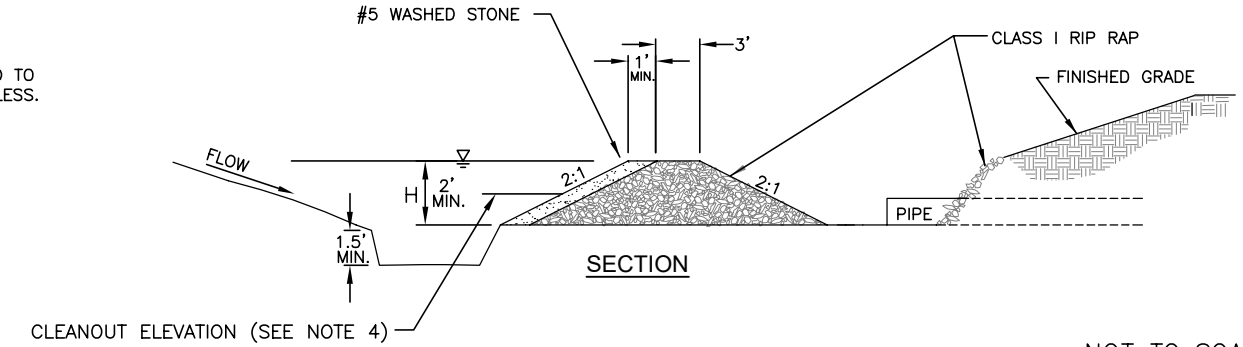
BASIN NO.	DRAINAGE AREA (ACRES)	DENUDED AREA (ACRES)	BASIN VOLUME		BASIN SURFACE AREA		CLEANOUT DEPTH H/2 (FT.)	H (FEET)
			REQUIRED (S.F.)	PROVIDED (S.F.)	REQUIRED (S.F.)	PROVIDED (S.F.)		



PERSPECTIVE VIEW

GENERAL NOTES:

1. GRAVEL AND RIP RAP FILTER BERM BASIN SHOULD BE USED TO PROTECT EXISTING PIPE INVERTS THAT DRAIN 5 ACRES OR LESS.
2. MAY BE USED AT PIPES WITH MAXIMUM DIAMETER OF 36".
3. DIMENSIONS SHOWN ARE THE MINIMUM ACCEPTED UNLESS OTHERWISE NOTED.
4. CLEANOUT PRIOR TO SEDIMENT REACHING HALF OF BERM HEIGHT.



SECTION

NOT TO SCALE

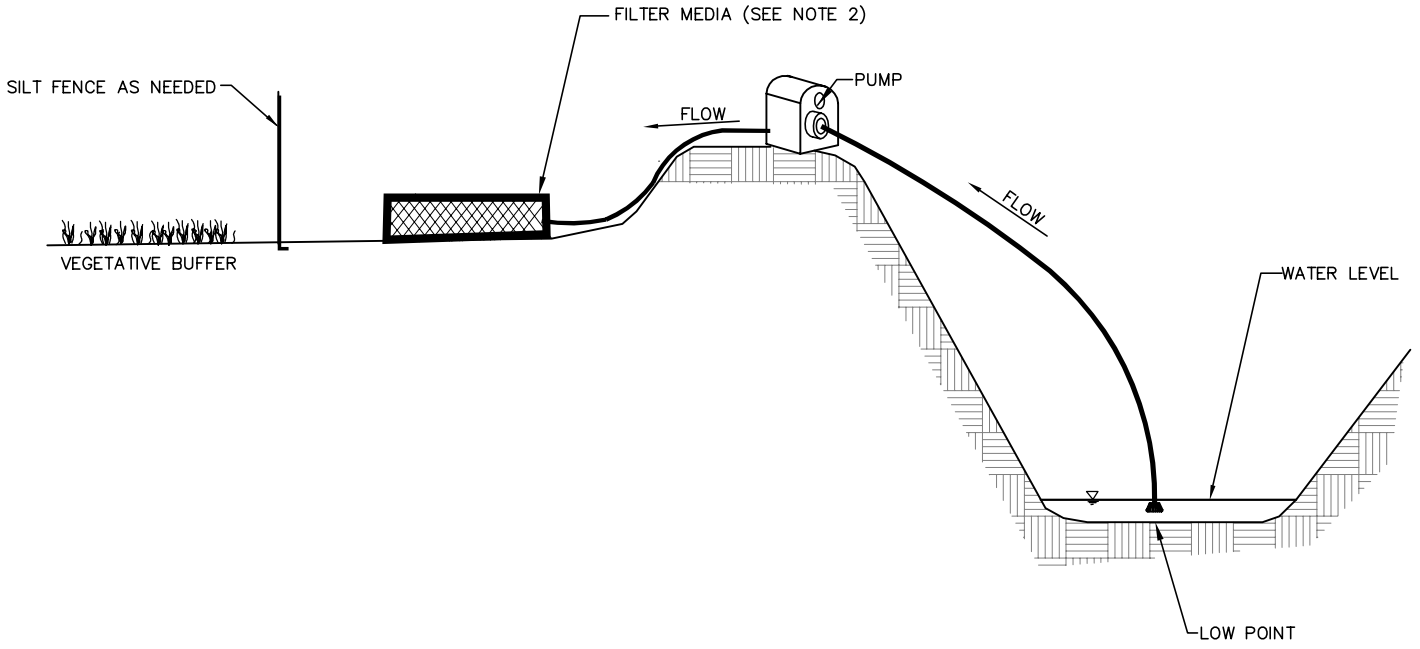
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

GRAVEL AND RIP RAP
FILTER BERM BASIN

REV. DATE	
8/1/19	
STD. NO.	REV.
30.12	3

NOTE:

1. PRIOR TO INSTALLATION, MANUFACTURER SPECIFICATIONS OF FILTER MEDIA SHALL BE PROVIDED TO THE EROSION CONTROL INSPECTOR FOR APPROVAL AND USE. DISCHARGE FROM FILTER MEDIA SHALL MEET OR EXCEED THE PROVISIONS OF THE CLEAN WATER ACT.
2. ENSURE THAT PUMP PRESSURE DOES NOT EXCEED FILTER MEDIA PRESSURE RATING.
3. FILTER MEDIA MAY BE, BUT NOT LIMITED TO, SAND MEDIA FILTRATION DEVICES, RATED FILTER FABRIC BAGS OR POLYMER BASED DEWATERING PRACTICES.
4. PUMP STRAINER SHALL NOT BE IN CONTACT WITH BOTTOM OF POND.

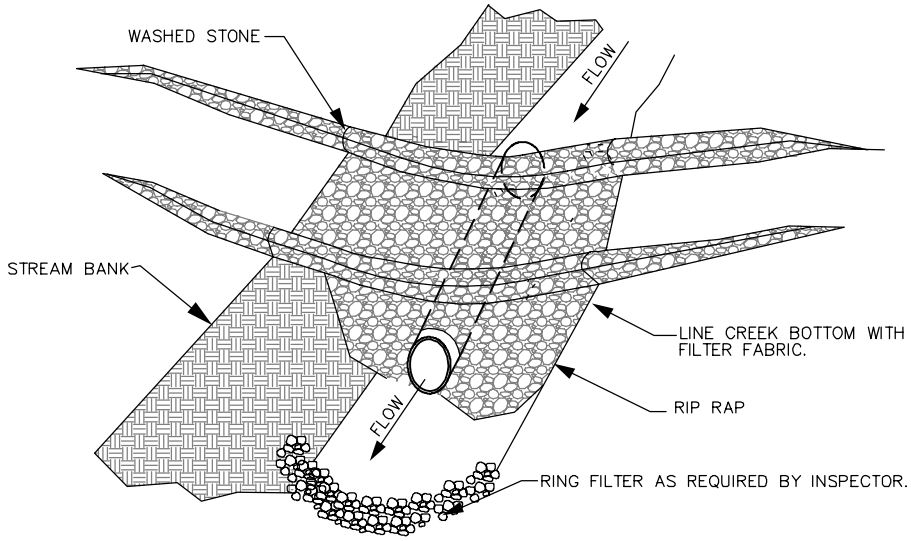


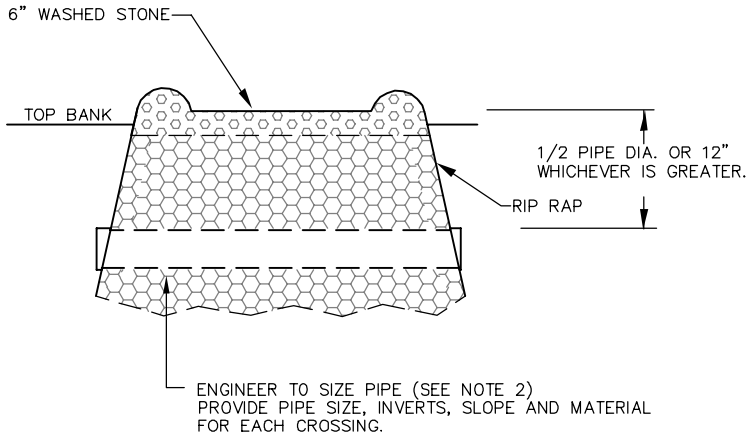
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	EROSION CONTROL DEWATERING

REV.	DATE

STD. NO.	REV.
30.13	





NOTES:

1. REMOVE THE STRUCTURE WHEN NO LONGER NEEDED. (NOT TO EXCEED 1 YEAR).
2. AS A MINIMUM, DESIGN THE STRUCTURE TO PASS 2 YEAR PEAK FLOW WITHOUT OVERTOPPING.
3. ENSURE THAT DESIGN FLOW VELOCITY AT THE OUTLET OF THE CROSSING STRUCTURE IS NON-EROSIVE FOR THE RECEIVING STREAM CHANNEL.

ADDITIONAL MEASURES MAY BE REQURIED PER THE TOWN ENGINEER BASED ON SPECIFIC SITE CONDITIONS.

NOT TO SCALE

Pineville NORTH CAROLINA

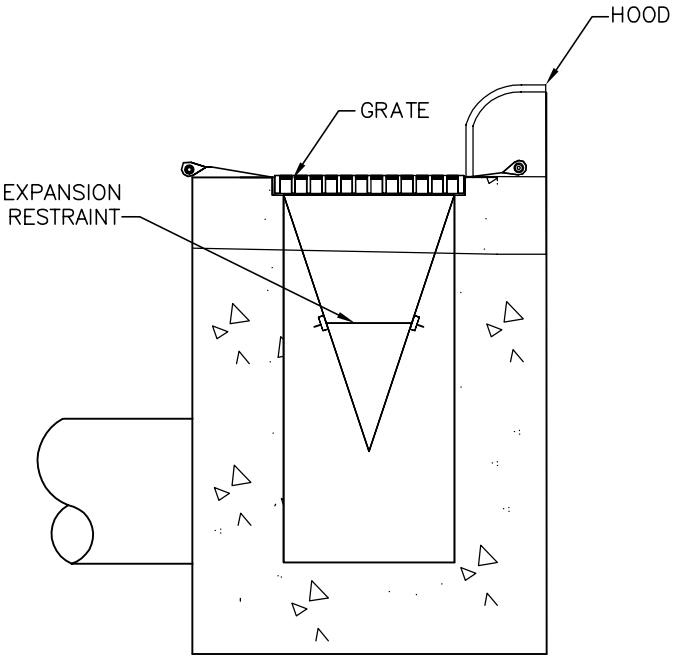
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

TEMPORARY STREAM CROSSING

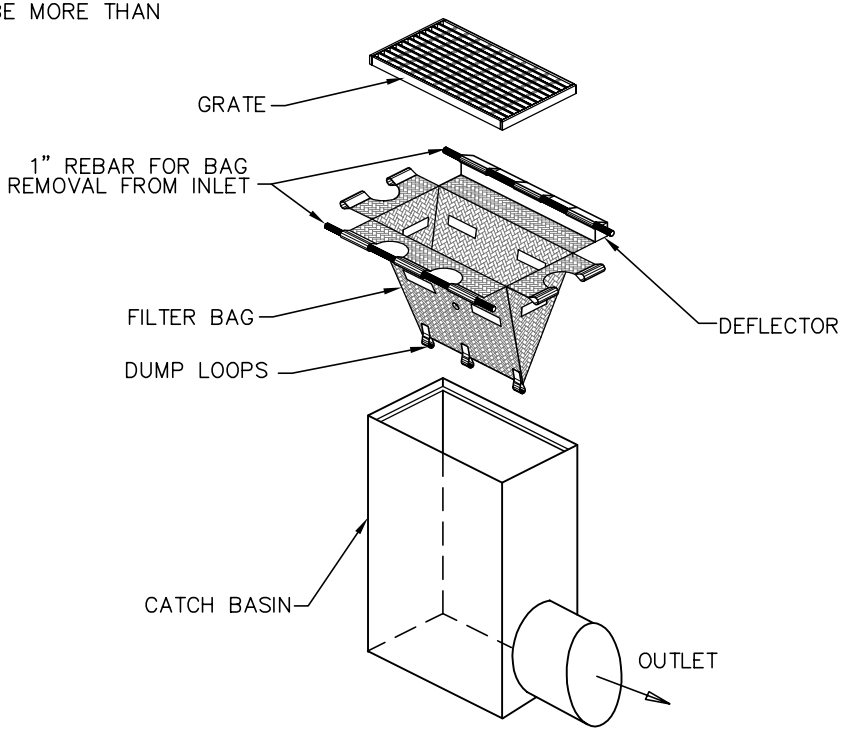
REV. DATE	
STD. NO.	REV.
30.14	

NOTES

1. INLET MAINTENANCE SHALL BE DOCUMENTED IN PROJECT LOG BOOK.
2. FILTER TYPES SHALL BE APPROVED BY THE TOWN INSPECTOR PRIOR TO INSTALLATION.
3. FILTER BAGS MAY BE REMOVED WHEN SITE IS STABILIZED AT THE DIRECTION OF THE ENGINEER.
4. FILTER BAGS SHALL BE REMOVED PRIOR TO STREET ACCEPTANCE.
5. FILTER BAGS SHALL BE CLEANED OR REPLACED ON A REGULAR BASIS (NOT BE MORE THAN HALF FULL AT ANY TIME).
6. FILTER BAGS SHALL NOT BE ALLOWED IN EXISTING TOWN OR NCDOT ROADS.



SECTION



INSTALLATION

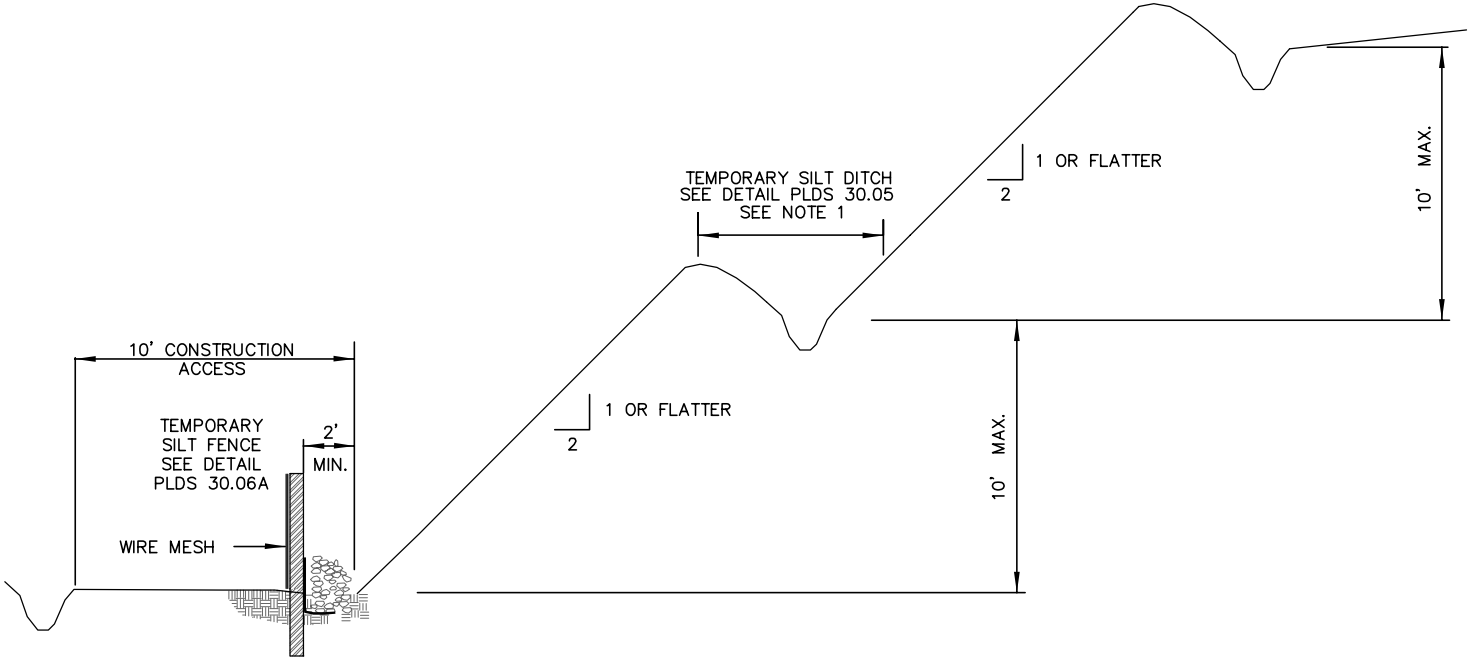
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CATCH BASIN INLET PROTECTION

REV. DATE	
STD. NO.	REV.
30.15	

NOTE:

1. DIVERSION DITCH SHOULD FLOW INTO SEDIMENT BASIN ROCK CHECK DAM, OR SLOPE DRAIN.
2. REFER TO NCESCPDM TABLE 6.02A FOR SPACING OF SLOPE BREAKS.



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SLOPE STABILITY

REV. DATE	
8/1/19	
STD. NO.	REV.
30.16	3

FOR LATE WINTER AND EARLY SPRING:

SEEDING MIXTURE
RYE (GRAIN) – 120 LB/ACRE ANNUAL LESPEDEZA (KOBE) – 50 LB/ACRE (OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE)

SEEDING DATES
JAN. 1 – MAY 1

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10–10–10 FERTILIZER.

MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL

MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

FOR SUMMER:

SEEDING MIXTURE
GERMAN MILLET – 40 LB/ACRE (A SMALL–STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE)

SEEDING DATES
MAY 1 – AUG. 15

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10–10–10 FERTILIZER.

MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

FOR FALL:

SEEDING MIXTURE
RYE (GRAIN) – 120 LB/ACRE

SEEDING DATES
AUG. 15 – DEC 30

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10–10–10 FERTILIZER.

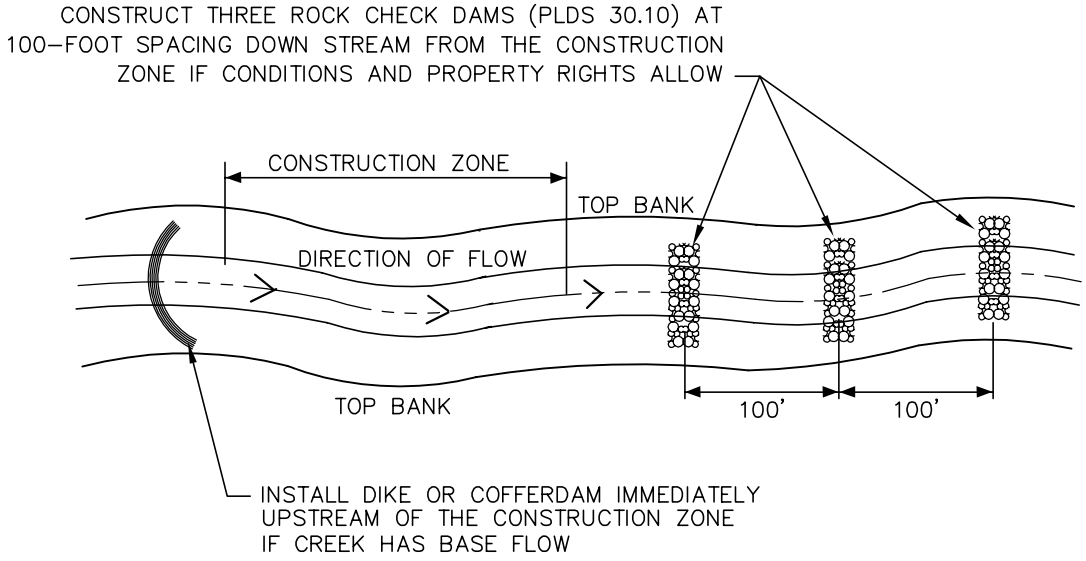
MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

FOR ADDITIONAL INFORMATION, REFER TO NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (ESCPDM), SECTION 6.10. FOR PERMANENT SEEDING SPECIFICATIONS, INCLUDING SEED BED PREP, SEASONAL LIMITATIONS FOR SEEDING OPERATIONS, THE KINDS OF GRADES OF FERTILIZERS, THE KINDS OF SEED, AND THE RATES OF APPLICATION OF LIMESTONE, FERTILIZER, AND SEED, REFER TO NCDENR ESCPDM SECTION 6.11

NOTES:

1. WORK IN CREEK SHALL BE PLANNED TO MINIMIZE THE NUMBER OF DAYS OF DISTURBANCE.
2. THE CONTRACTOR IS TO OBSERVE THE LOCAL WEATHER FORECASTS AND NOT BEGIN WORK IN THE CREEK UNLESS AT LEAST THREE DAYS WITHOUT RAIN IS ANTICIPATED.
3. ALL DISTURBED CREEK BED AND BANKS ARE TO BE STABILIZED PRIOR TO THE END OF EACH WORK DAY.
4. FOR LARGER CREEKS, CONSTRUCTION SHOULD OCCUR ON ONE SIDE OF THE CREEK AT A TIME. THE FIRST SIDE SHOULD BE STABILIZED BEFORE BEGINNING CONSTRUCTION ON THE OPPOSITE SIDE.
5. A TEMPORARY PIPE OR PUMP MAY BE INSTALLED TO CONTROL CREEK FLOW DURING CUNSTRUCTION.



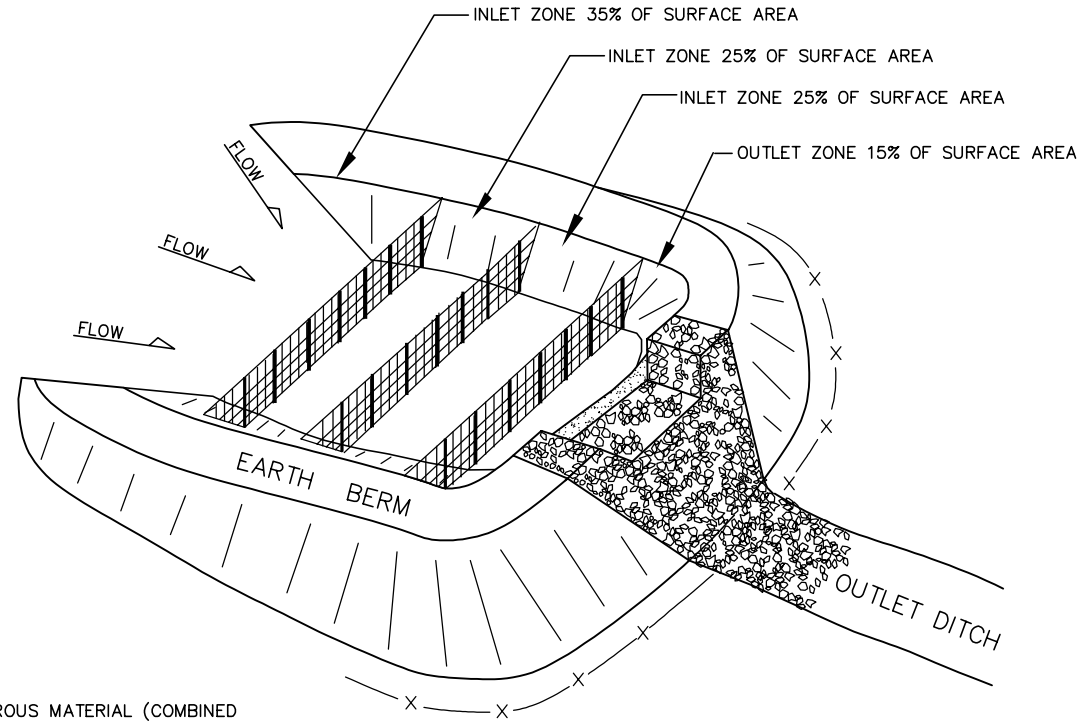
NOT TO SCALE

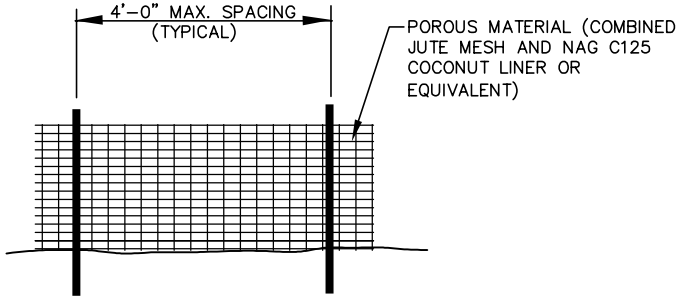
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CONSTRUCTION WITHIN CREEK BANK (FOR USE WITH ROAD CROSSINGS, UTILITY CROSSINGS & CULVERT CONSTRUCTION)

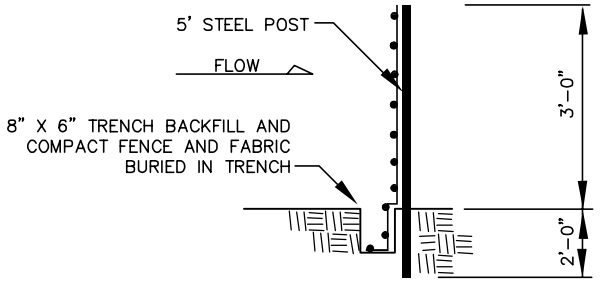
REV. DATE	
STD. NO.	REV.
30.18	

GENERAL NOTES:

1. DRIVE 5' STEEL POST AT LEAST 24" INTO SOLID GROUND.
2. USE STAPLES 1' APART HORIZONTALLY AND VERTICALLY TO ATTACH THE POROUS MATERIAL TO THE WIRE FENCE.
3. MINIMUM BAFFLE SPACING IS 10'.
4. THE FLOOR OF THE BASIN IN THE OUTLET ZONE AND BERMS SHOULD BE SEEDED IMMEDIATELY AFTER THE BASIN IS CONSTRUCTED.
5. REFER TO NCESCPDM SECTION #6.65 FOR ADDITIONAL SPECIFICATIONS.







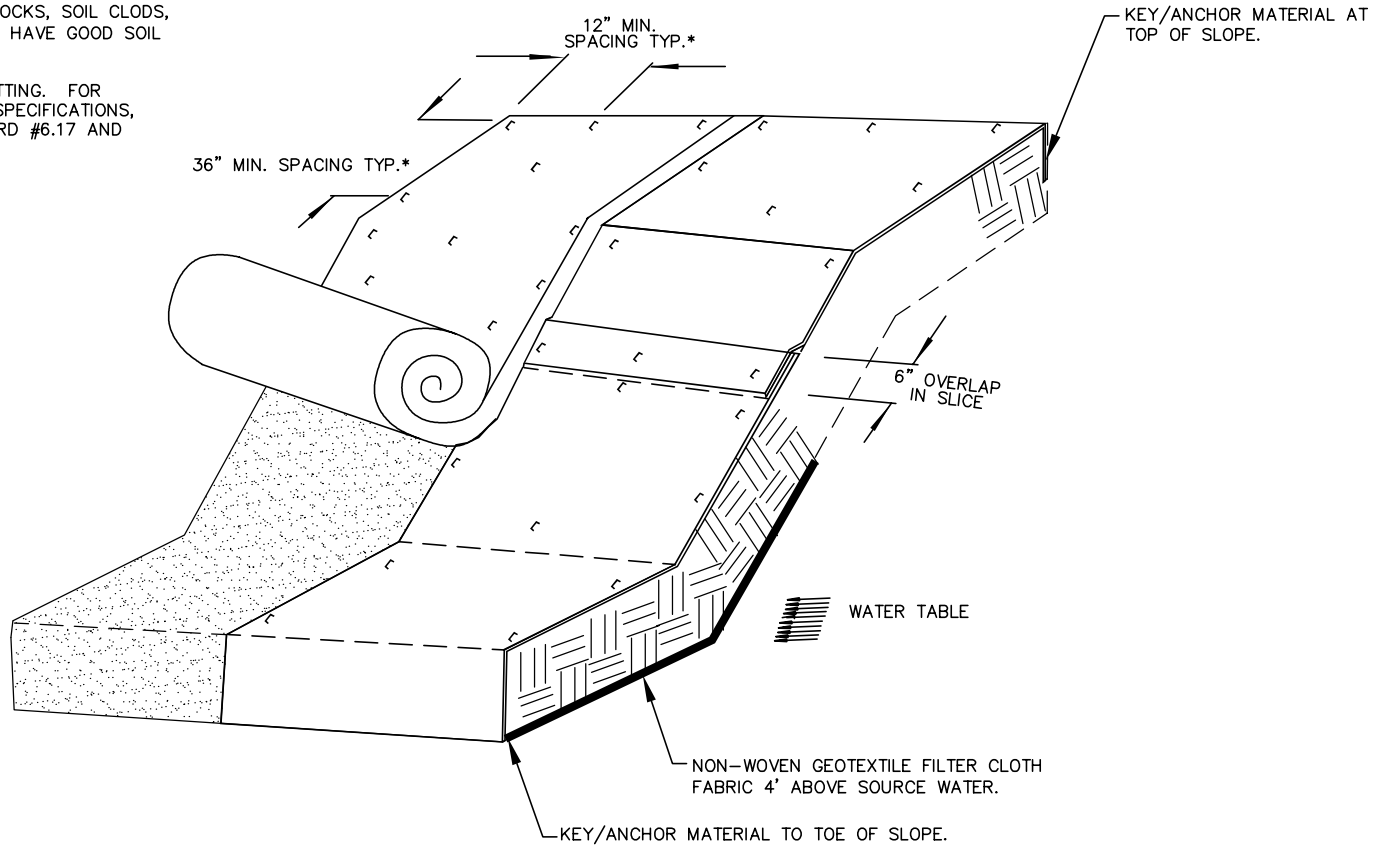
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BAFFLE INSTALLATION

REV. DATE	
8/1/19	
STD. NO.	REV.
30.19	3

GENERAL NOTES

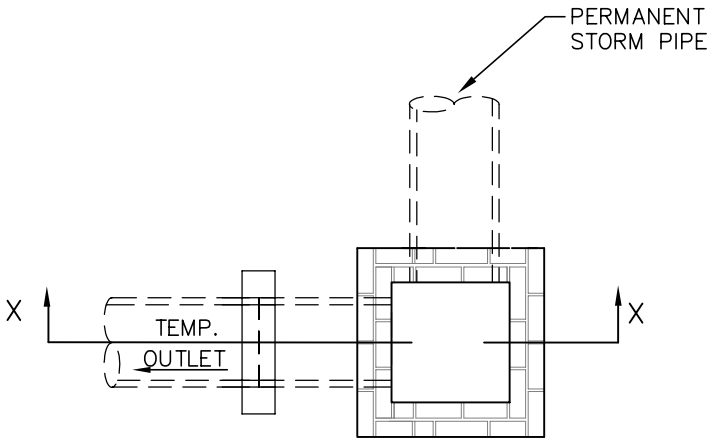
1. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
2. * DIMENSIONS SHOWN ARE MINIMUM, MANUFACTURED PRODUCTS MAY HAVE ADDITIONAL REQUIREMENTS THAT MUST BE MET.
3. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS, GRASS. MAT/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
4. THE DETAIL SHOWN IS FOR SLOPE MATTING. FOR CHANNEL OR PIPE OUTFALL MATTING SPECIFICATIONS, PLEASE REFER TO NCESCPDM STANDARD #6.17 AND MANUFACTURER'S GUIDELINES.



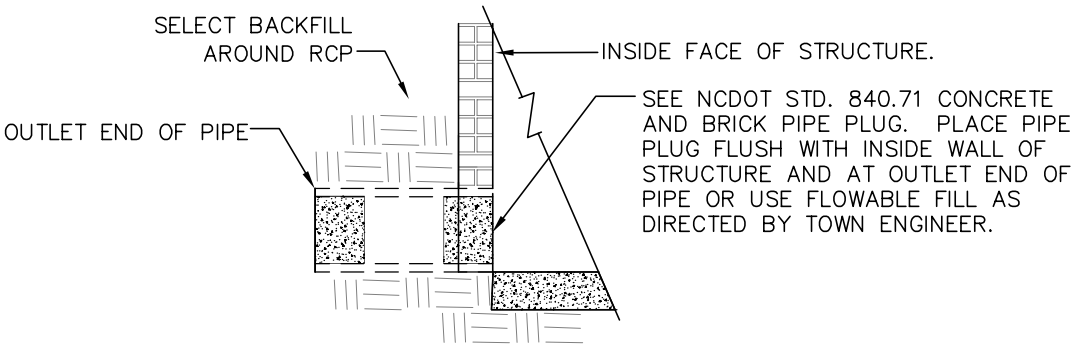
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	EMBANKMENT MATTING DETAIL

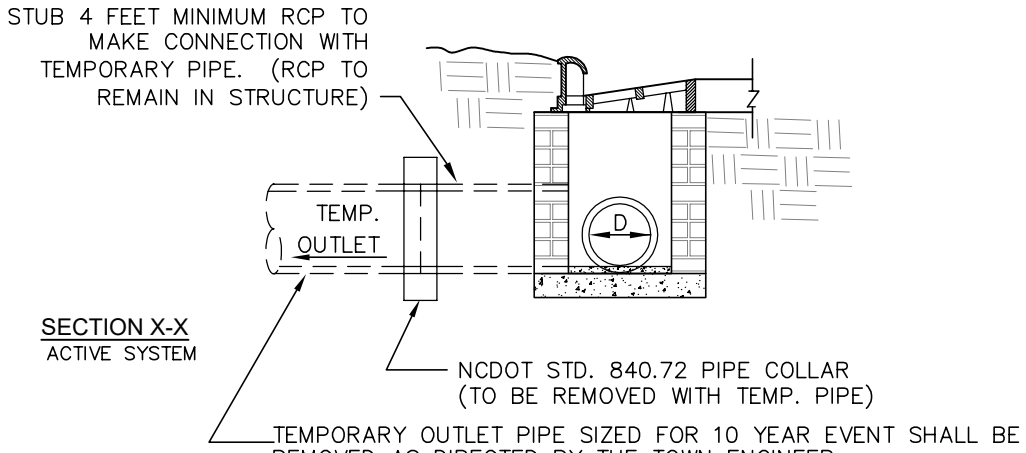
REV. DATE	
STD. NO.	REV.
30.20	



PLAN



PIPE PLUG DETAIL
AFTER REMOVAL OF TEMPORARY PIPE



SECTION X-X
ACTIVE SYSTEM

GENERAL NOTES:

1. SEE APPROPRIATE STANDARD FOR CATCH BASIN, MANHOLE, JUNCTION BOX USED.
2. ALL PIPE IN STORM DRAIN STRUCTURES SHALL BE STRUCK EVEN WITH THE INSIDE WALL, GROUTED AND BRUSHED SMOOTH.

NOT TO SCALE

Pineville
NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

BRICK STORM STRUCTURE
WITH TEMPORARY PIPE

REV. DATE	
STD. NO.	REV.
30.21	

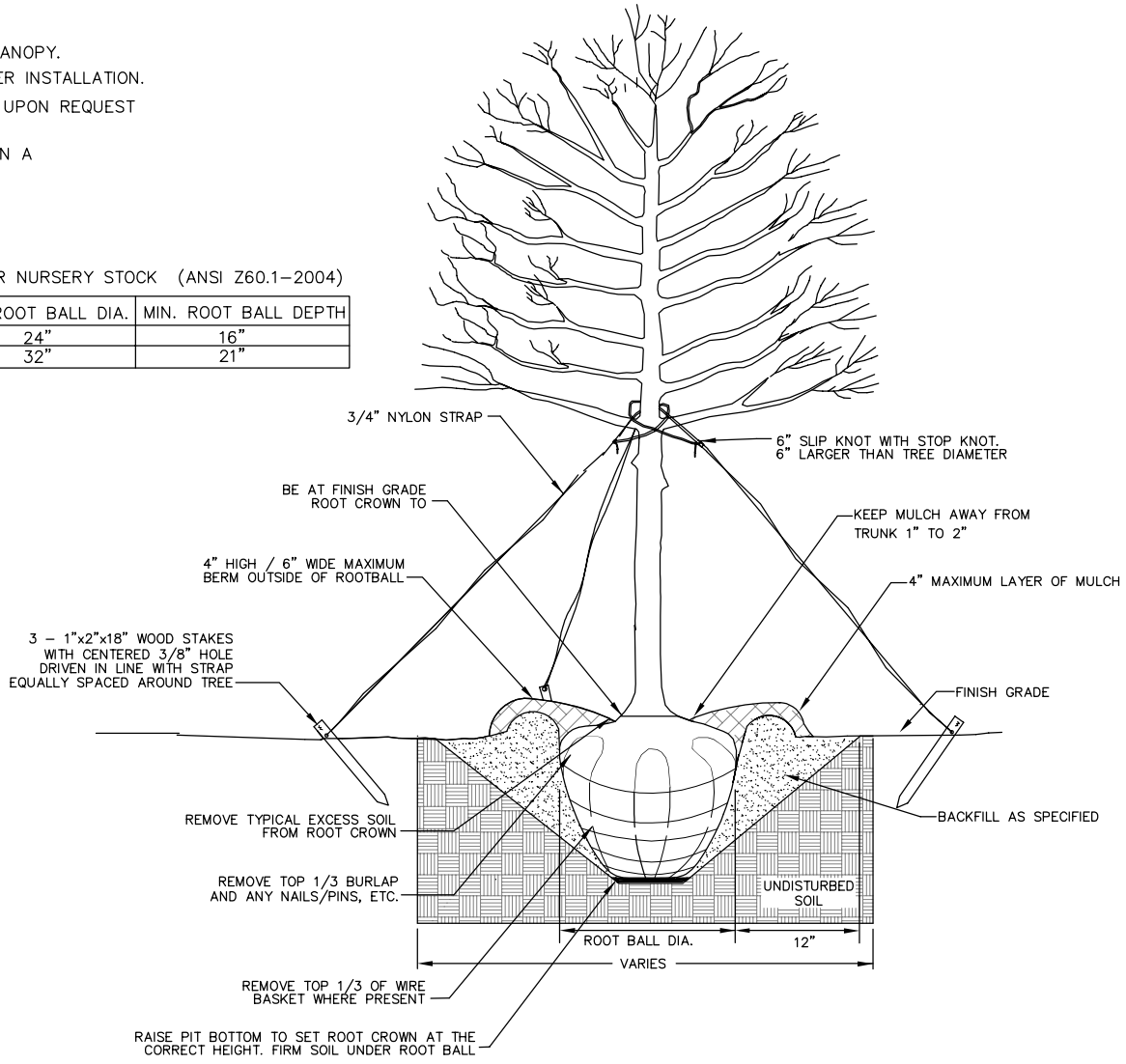
NOTES:

1. REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
3. STAKING IS REQUIRED FOR ALL TREES IN R.O.W. OR UPON REQUEST OF ARBORIST.
4. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
5. RESEED UNMULCHED, DISTURBED AREAS.

ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1–2004)

FOR EXAMPLE:

CALIPER	HEIGHT (RANGE)	MAX. HEIGHT	MIN. ROOT BALL DIA.	MIN. ROOT BALL DEPTH
2"	12–14'	16'	24"	16"
3"	14–16'	18'	32"	21"



NOT TO SCALE

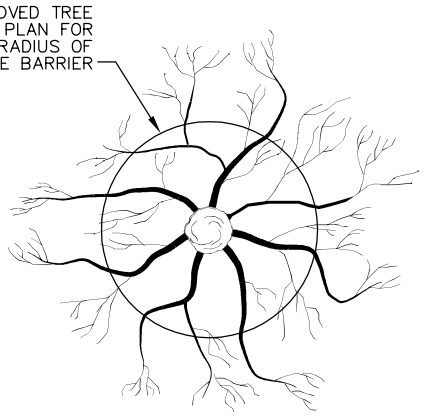
Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

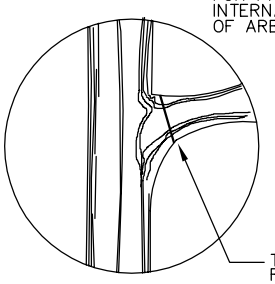
TREE PLANTING
(FOR SINGLE AND MULTI-STEM TREES)

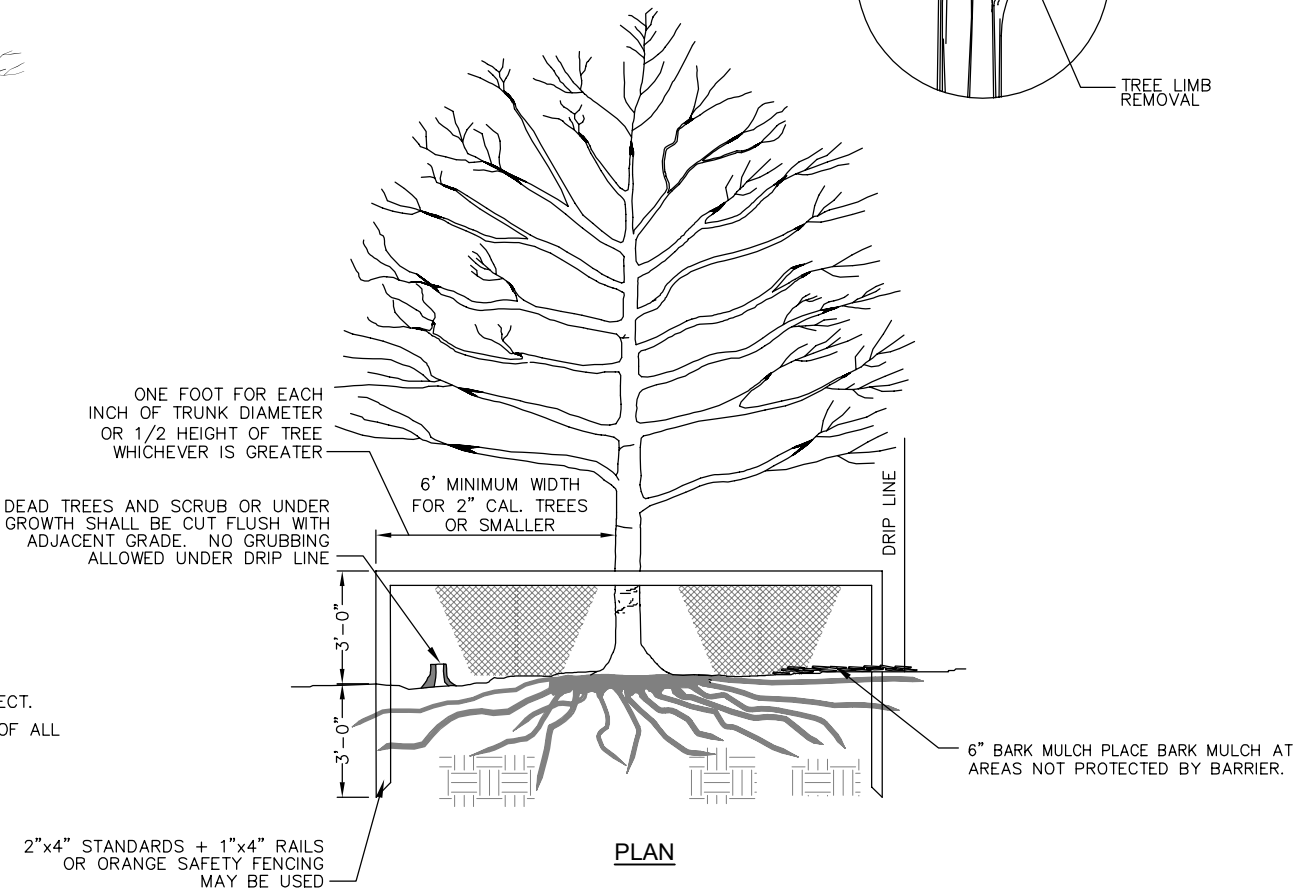
REV.	DATE

STD. NO.	REV.
40.01	



PLAN VIEW OF ROOT ZONE





PLAN

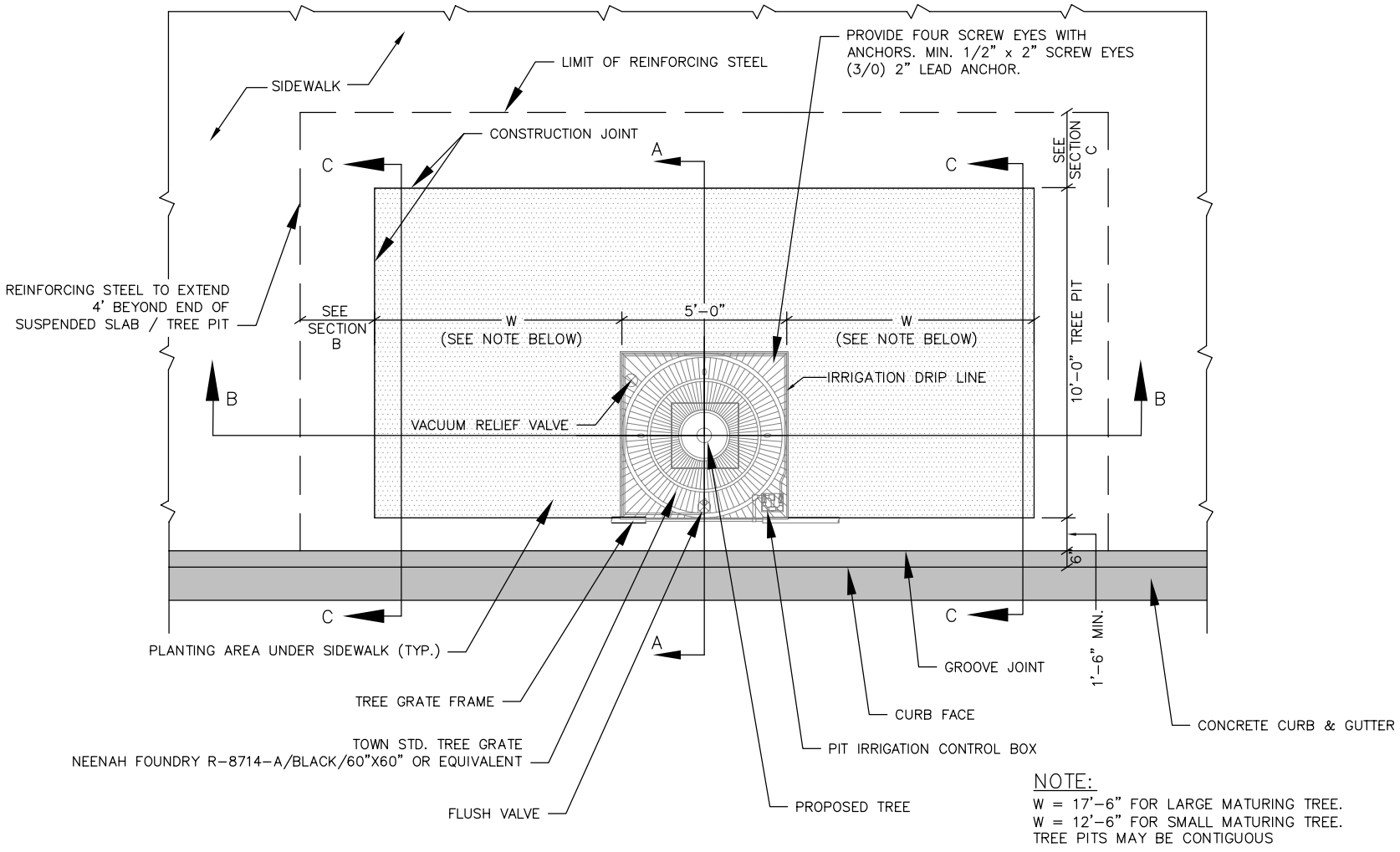
NOTES:

1. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
2. LANDSCAPING PLANS SHALL SHOW THE LOCATIONS OF ALL TREE PROTECTION FENCES.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TREE PROTECTION DETAIL

REV.	DATE
STD. NO.	REV.
40.02	

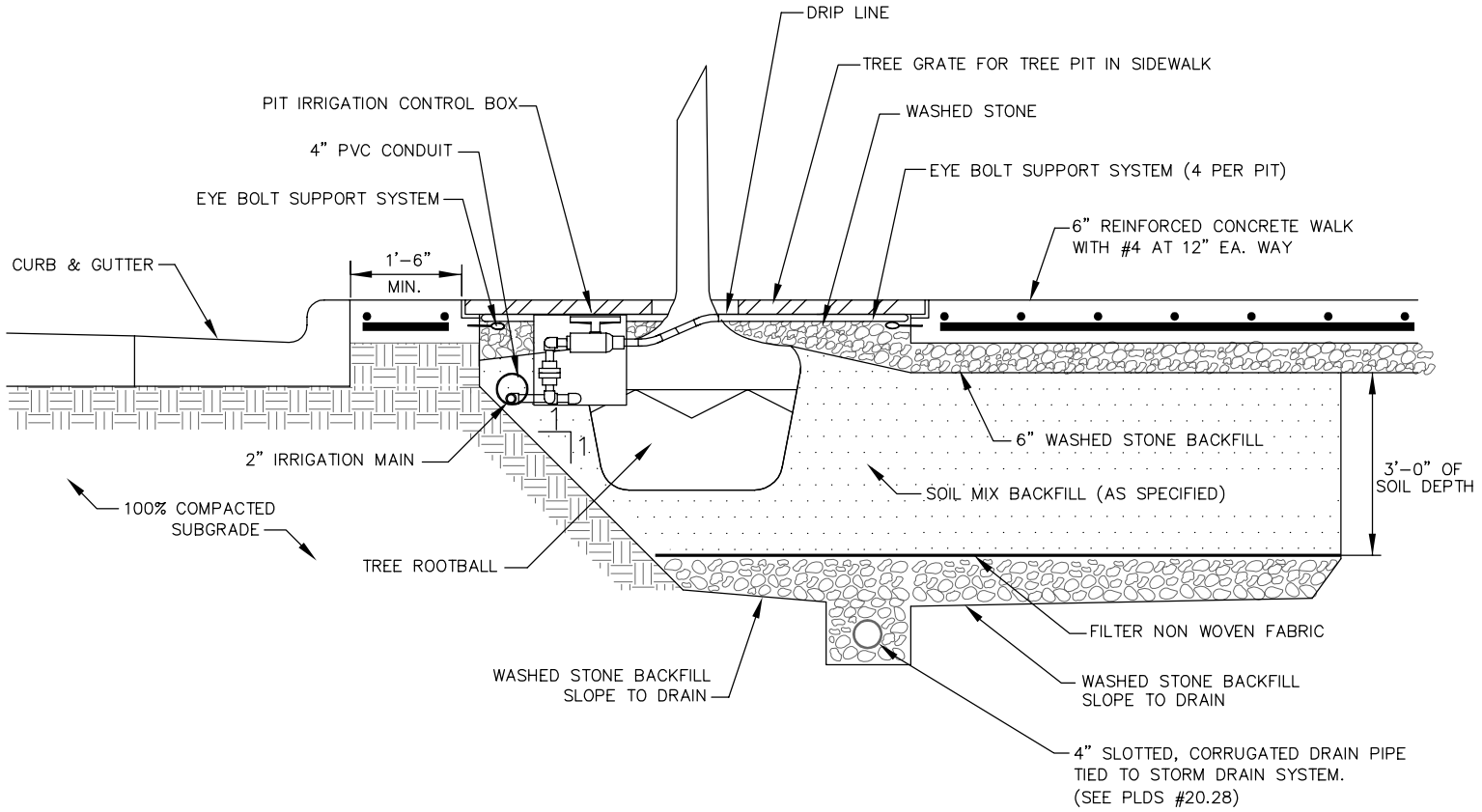


PLAN

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	LARGE AND SMALL MATURING TREE PIT WITH GRATE IN SIDEWALK (PLAN)

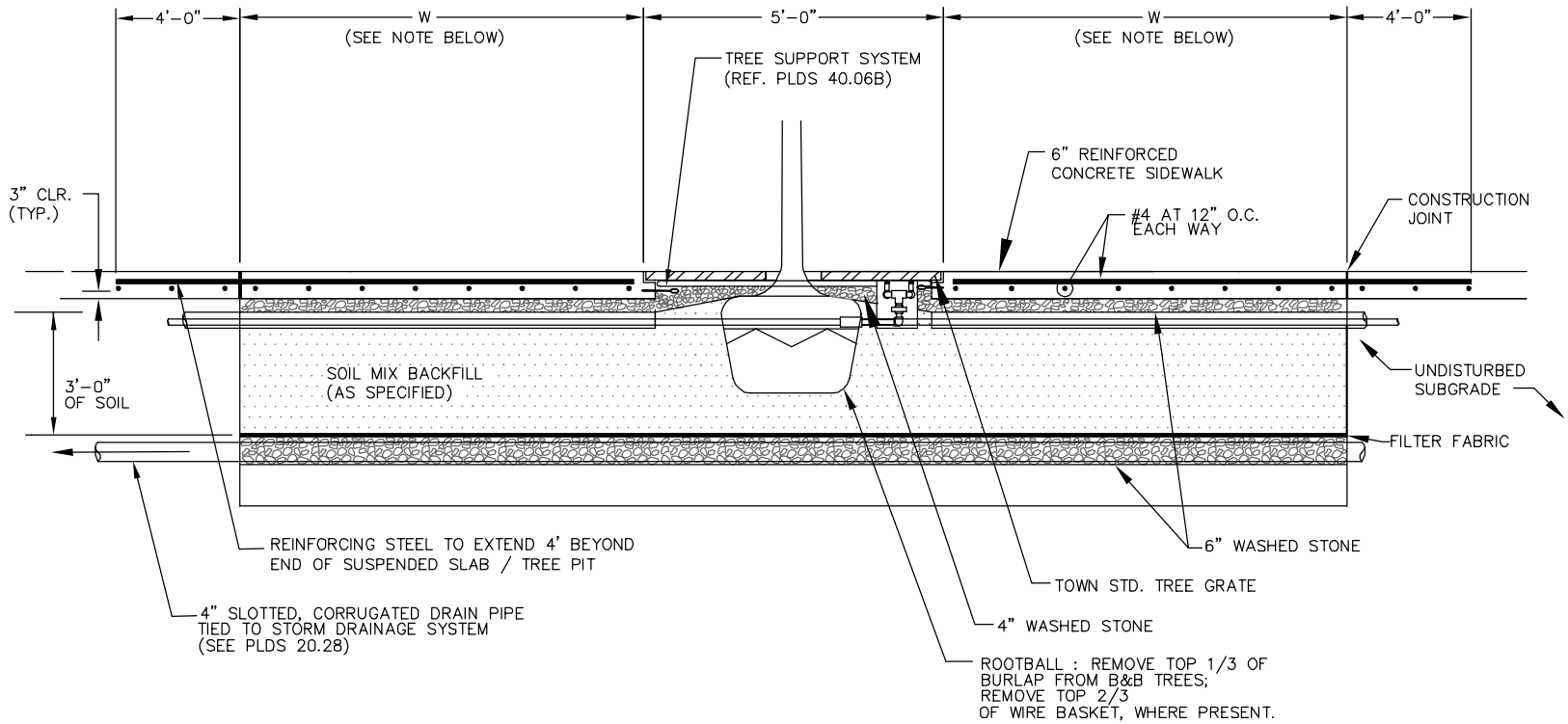
REV. DATE	
8/1/19	
STD. NO.	REV.
40.03	3



SECTION A

NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	LARGE AND SMALL MATURING TREE PIT WITH GRATE IN SIDEWALK (SECTION A)	REV. DATE: 8/1/19 STD. NO.: 40.03A REV.: 3



SECTION B

NOTE:

W = 17'-6" FOR LARGE MATURING TREE.
W = 12'-6" FOR SMALL MATURING TREE.
TREE PITS MAY BE CONTIGUOUS

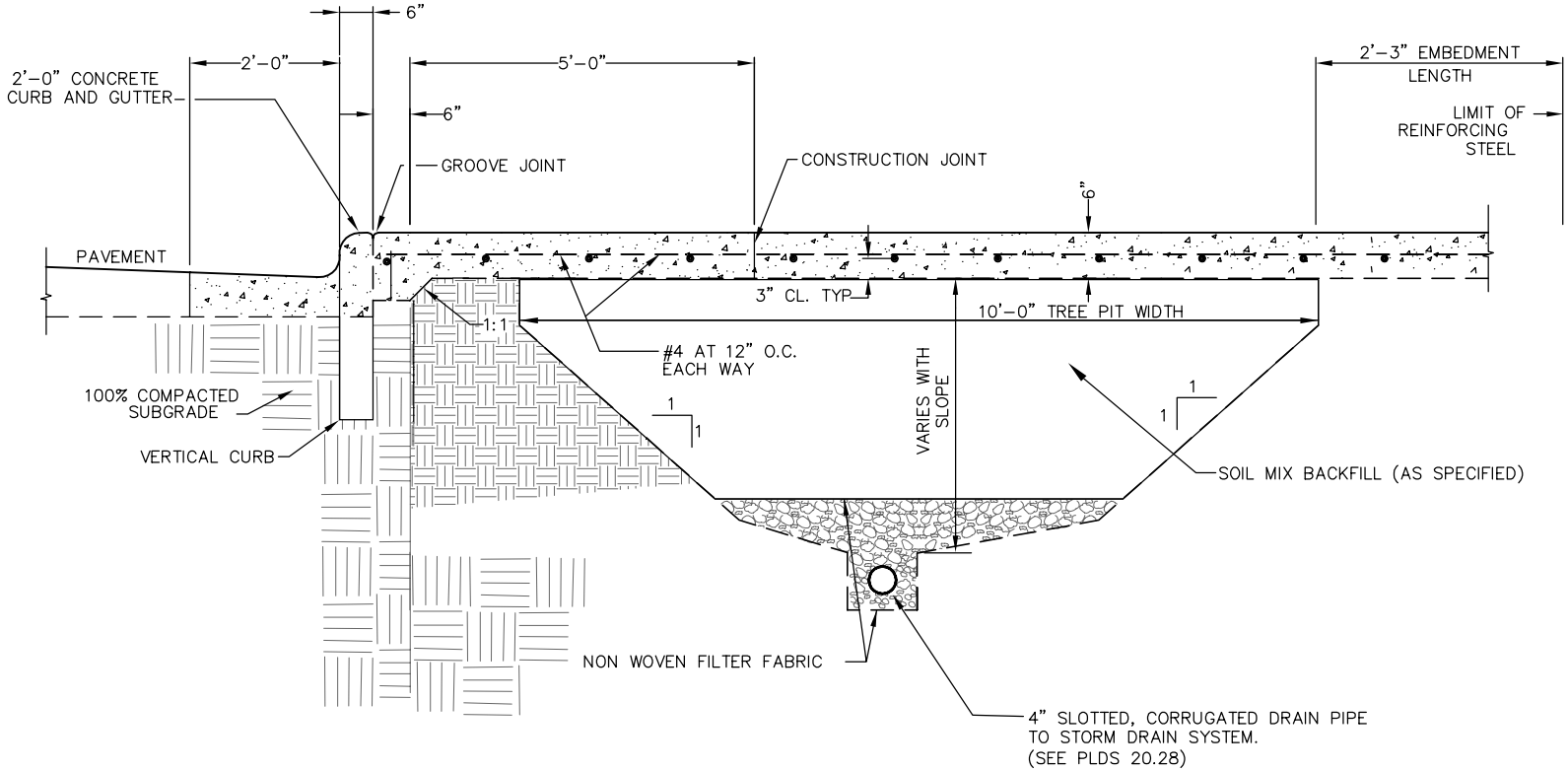
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	LARGE AND SMALL MATURING TREE PIT WITH GRATE IN SIDEWALK (SECTION B)

REV. DATE	
8/1/19	
STD. NO.	REV.
40.03B	3

GENERAL NOTES:

1. EXPANSION JOINTS ARE PERMITTED AT 40' MIN. SPACING AND NOT LESS THAN 12'–6" FROM CENTER OF TREE GRATE.
2. SEE PLDS 10.22 FOR DETAIL OF GROOVE JOINT.
3. CONCRETE SHALL BE 3600 PSI. IN 28 DAYS.
4. ALL REINFORCING STEEL SHALL BE GRADE 60.
5. USE REINFORCED STEEL BAR SUPPORTS IN COMPLIANCE WITH NCDOT STANDARD SPECIFICATION 970–4.



SECTION C

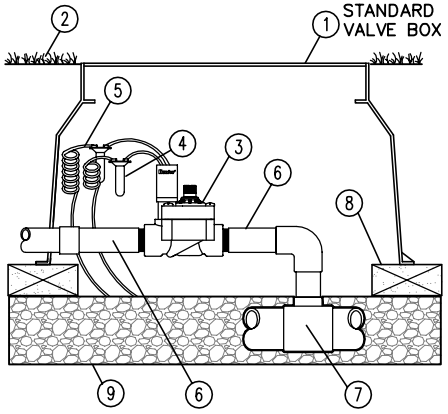
NOTE

A DRAINAGE SYSTEM IS REQUIRED AS SHOWN FOR ALL IRRIGATED PLANTING AREAS LOCATED ADJACENT TO STREET.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	LARGE AND SMALL MATURING TREE PIT WITH GRATE IN SIDEWALK (SECTION C)

REV. DATE	
8/1/19	
STD. NO.	REV.
40.03C	3



CONTROL VALVE

2 FINISH GRADE

3 CONTROL VALVE WITH FLOW CONTROL

4 WATERPROOF CONNECTORS (2)

5 18–24" COILED WIRE

6 SCH 80 T.O.E. NIPPLE

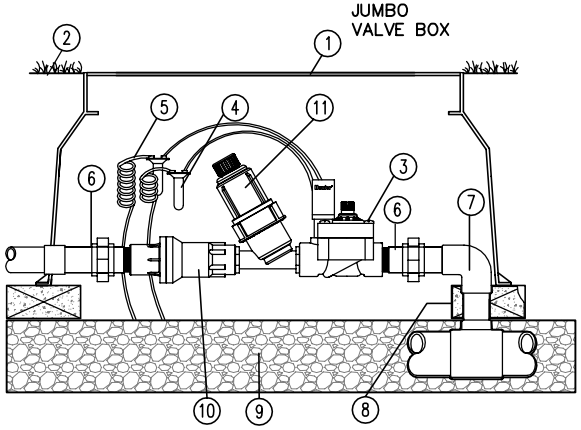
7 MAIN LINE PIPE & FITTINGS

8 BRICK SUPPORTS (4)

9 3/4" MINUS WASHED GRAVEL, MIN. 3" DEPTH

10 PRESSURE REGULATOR

11 FILTER



DRIP IRRIGATION W/ PRESSURE REGULATOR AND FILTER

NOT TO SCALE

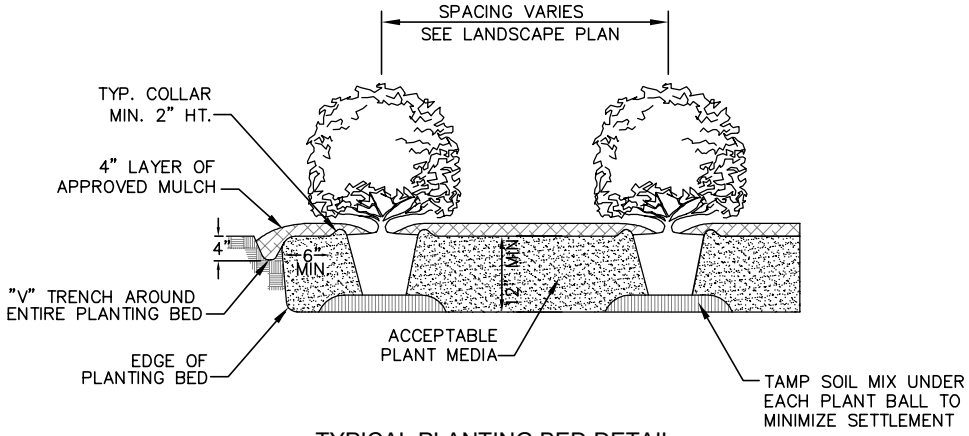
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TYPICAL VALVE AND VALVE BOX INSTALLATION

REV.	DATE

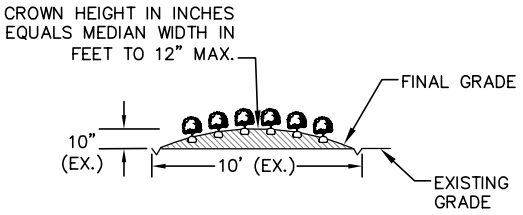
STD. NO.	REV.
40.04	

NOTES:

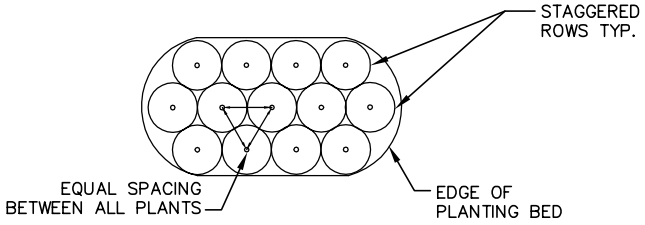
1. SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
2. INSTALL CONTAINERIZED PLANTS AT FINISHED GRADE.
3. TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
4. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
5. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.



TYPICAL PLANTING BED DETAIL



TYPICAL BED CROWNING



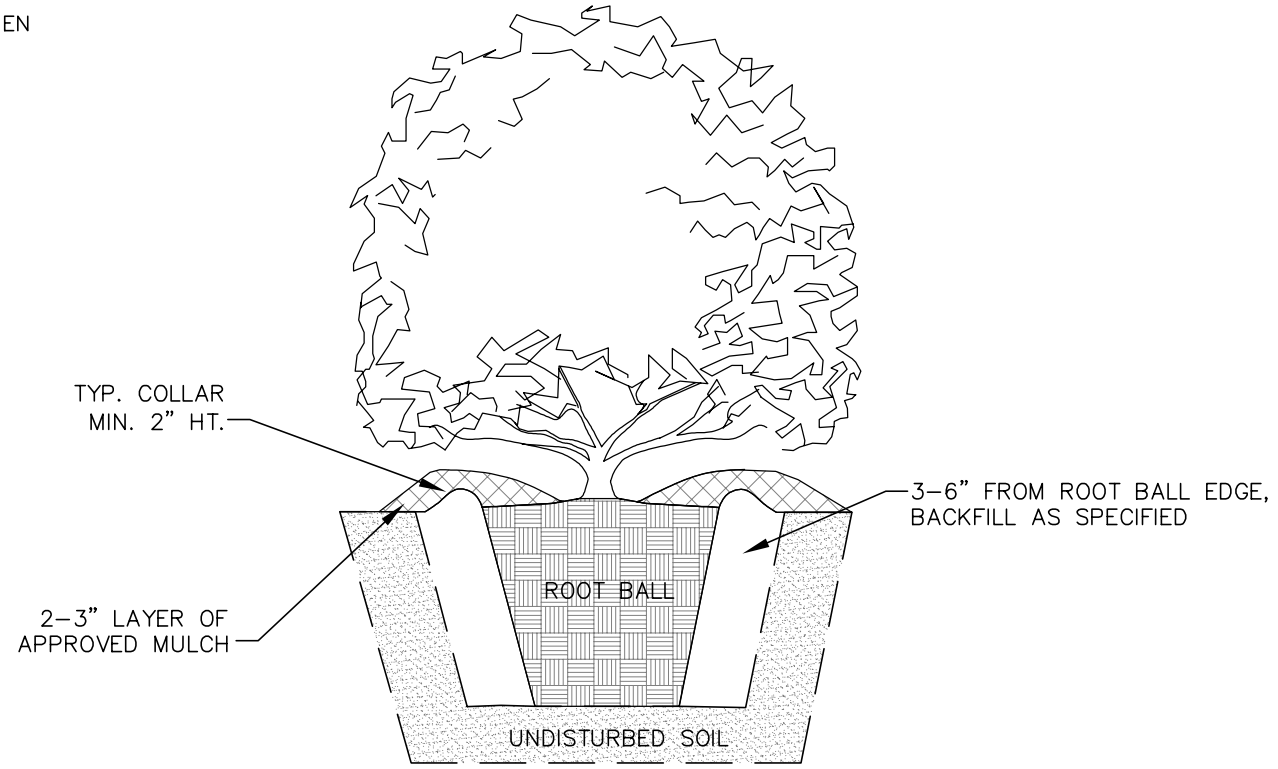
TYPICAL PLANTING BED PLAN

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SHRUB PLANTING BED
		REV. DATE
		STD. NO. 40.05A / REV.

NOTES:

1. SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
2. INSTALL CONTAINERIZED PLANTS AT FINISHED GRADE.
3. TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
4. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
5. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	INDIVIDUAL SMALL SHRUB/TREE PLANTING

REV.	DATE

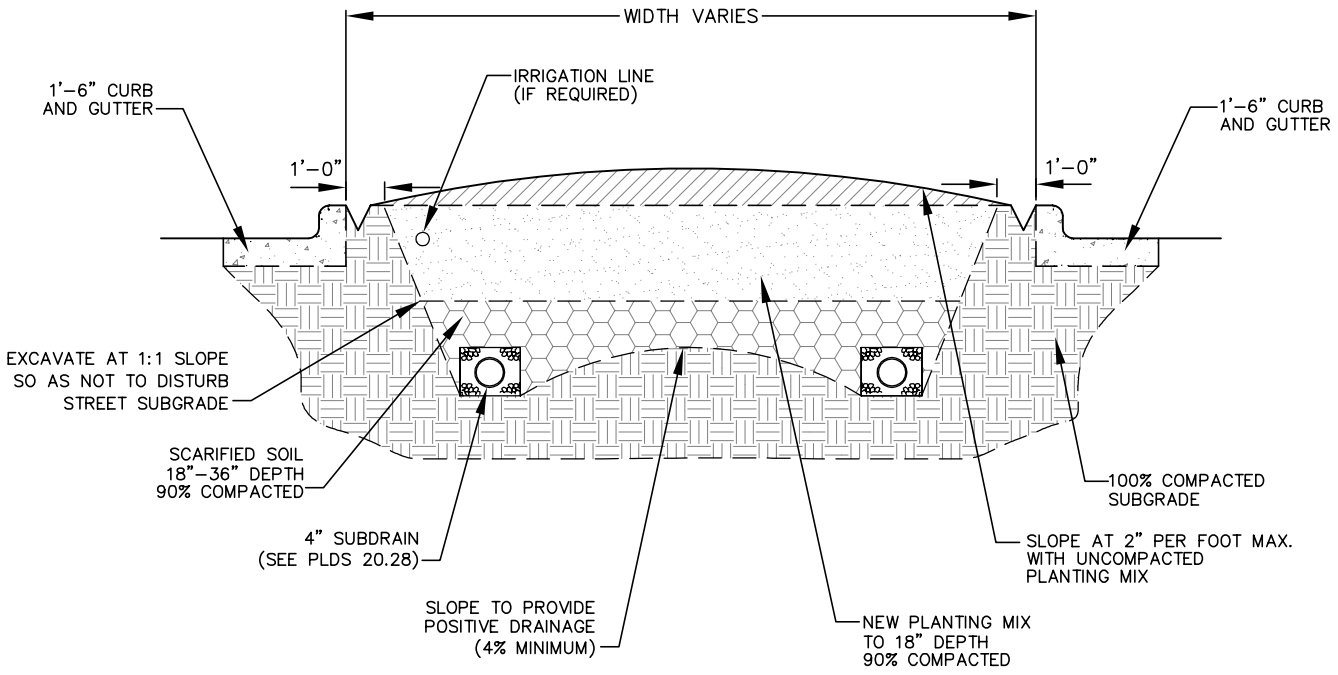
STD. NO.	REV.
40.05B	

NOTES:

1. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL, SUB-BASE AND CONSTRUCTION DEBRIS BEFORE PREPARING SOIL AND PLANTING TREES.

2. REMOVE SOIL TO A DEPTH OF 18". SCARIFY, TILL OR OTHERWISE LOOSEN THE REMAINING SOIL TO A DEPTH OF 18". ADD NEW PLANTING MIX AS SPECIFIED.

3. SUBSURFACE DRAINAGE SHALL BE INSTALLED IN ALL MEDIANS AND TIED INTO EXISTING STORM DRAIN SYSTEM. A 4 INCH PERFORATED CORRUGATED PVC DRAIN OR HDPE PER AASHTO M252, TYPE CP (SINGLE-WALL, CORRUGATED) SHALL BE INSTALLED IN EACH MEDIAN AT THE BOTTOM OF THE EXCAVATED AREA. DRAIN SHALL BE COVERED WITH A MINIMUM 6 INCHES OF #57 WASHED STONE, THEN WRAPPED WITH A SPECIFIED NON-WOVEN GEOTEXTILE FABRIC. SPECIAL CARE SHALL BE EXERCISED WHEN FILLING MEDIANS WITH SOIL SO NOT TO CRUSH OR DAMAGE THE DRAINAGE SYSTEM.



NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

MEDIAN GREATER THAN 120 INCHES EXCAVATION, DRAINAGE AND BACKFILL

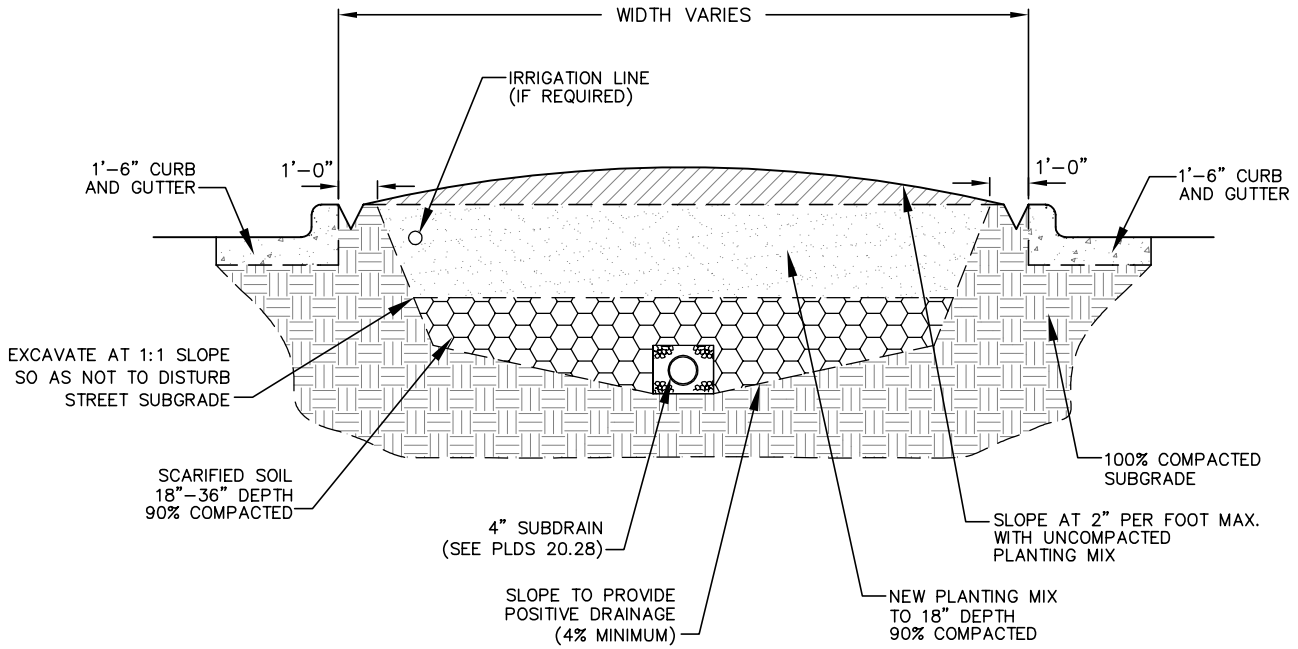
REV. DATE	
STD. NO.	REV.
40.08A	

NOTES:

1. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL, SUB-BASE AND CONSTRUCTION DEBRIS BEFORE PREPARING SOIL AND PLANTING TREES.

2. REMOVE SOIL TO A DEPTH OF 18". SCARIFY, TILL OR OTHERWISE LOOSEN THE REMAINING SOIL TO A DEPTH OF 18". ADD NEW PLANTING MIX AS SPECIFIED.

3. SUBSURFACE DRAINAGE SHALL BE INSTALLED IN ALL MEDIANS AND TIED INTO EXISTING STORM DRAIN SYSTEM. A 4 INCH PERFORATED CORRUGATED PVC DRAIN OR HDPE PER AASHTO M252, TYPE CP (SINGLE-WALL, CORRUGATED) SHALL BE INSTALLED IN EACH MEDIAN AT THE BOTTOM OF THE EXCAVATED AREA. DRAIN SHALL BE COVERED WITH A MINIMUM 6 INCHES OF #57 WASHED STONE, THEN WRAPPED WITH A SPECIFIED NON-WOVEN GEOTEXTILE FABRIC. SPECIAL CARE SHALL BE EXERCISED WHEN FILLING MEDIANS WITH SOIL SO NOT TO CRUSH OR DAMAGE THE DRAINAGE SYSTEM.



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	73 TO 120 INCH MEDIAN EXCAVATION, DRAINAGE AND BACKFILL

REV.	DATE

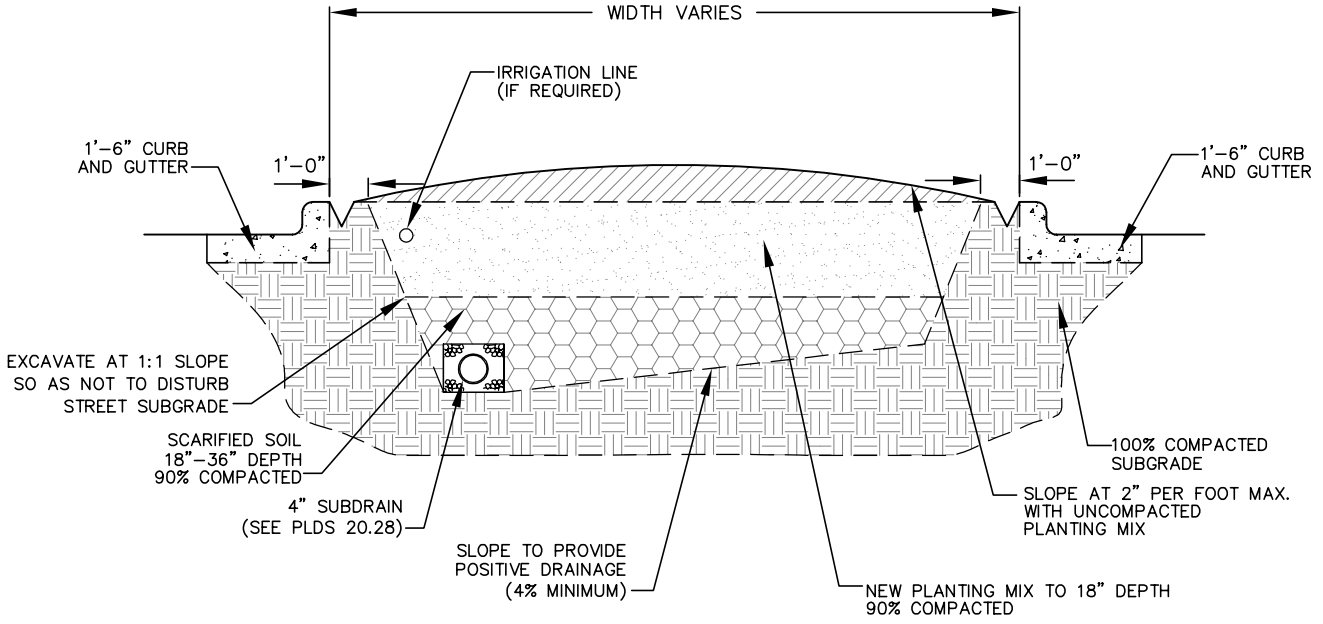
STD. NO.	REV.
40.08B	

NOTES:

1. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL, SUB-BASE AND CONSTRUCTION DEBRIS BEFORE PREPARING SOIL AND PLANTING TREES.

2. REMOVE SOIL TO A DEPTH OF 18". SCARIFY, TILL OR OTHERWISE LOOSEN THE REMAINING SOIL TO A DEPTH OF 18". ADD NEW PLANTING MIX AS SPECIFIED.

3. SUBSURFACE DRAINAGE SHALL BE INSTALLED IN ALL MEDIANS AND TIED INTO EXISTING STORM DRAIN SYSTEM. A 4 INCH PERFORATED CORRUGATED PVC DRAIN OR HDPE PER AASHTO M252, TYPE CP (SINGLE-WALL, CORRUGATED) SHALL BE INSTALLED IN EACH MEDIAN AT THE BOTTOM OF THE EXCAVATED AREA. DRAIN SHALL BE COVERED WITH A MINIMUM 6 INCHES OF #57 WASHED STONE, THEN WRAPPED WITH A SPECIFIED NON-WOVEN GEOTEXTILE FABRIC. SPECIAL CARE SHALL BE EXERCISED WHEN FILLING MEDIANS WITH SOIL SO NOT TO CRUSH OR DAMAGE THE DRAINAGE SYSTEM.



NOT TO SCALE

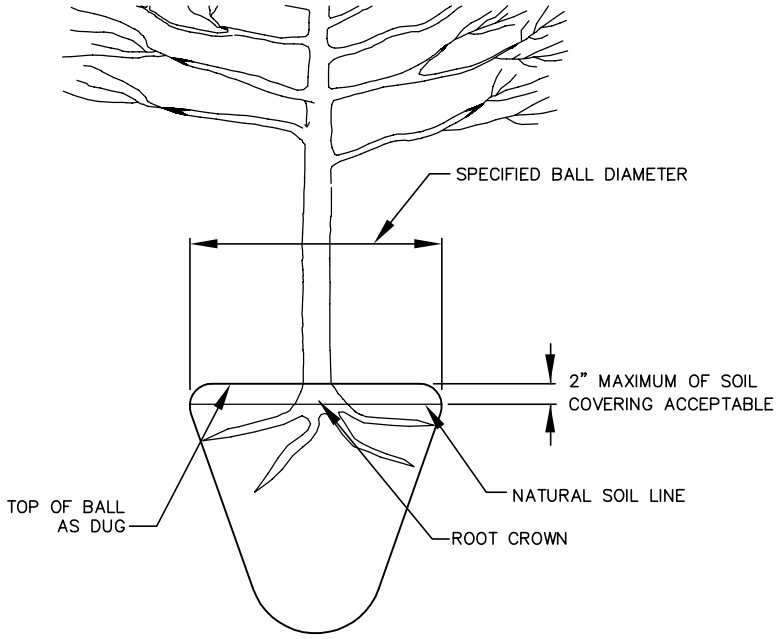
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	48 TO 72 INCH MEDIAN EXCAVATION, DRAINAGE AND BACKFILL

REV.	DATE

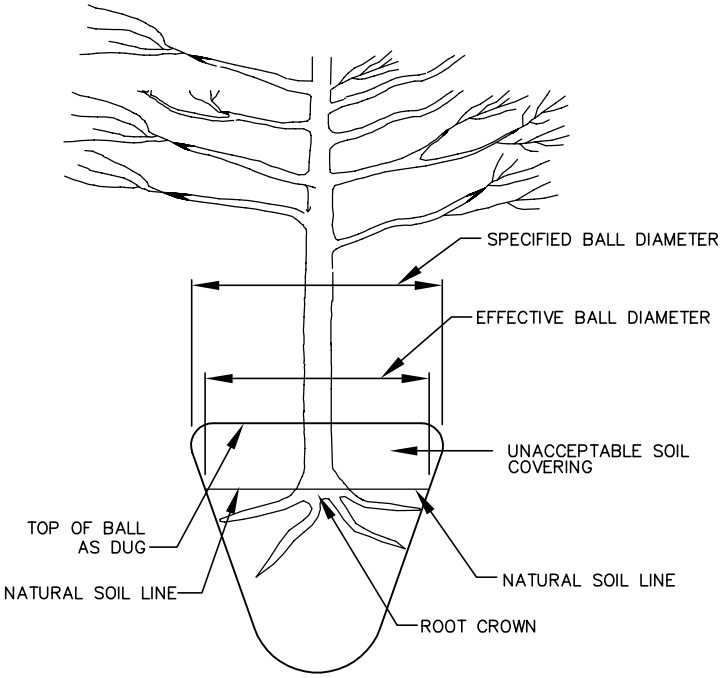
STD. NO.	REV.
40.08C	

NOTE:

1. A ROOT FLARE EXCAVATION FOR ALL TREES SPECIFIED WILL BE DONE BY THE TOWN ARBORIST TO ENSURE THAT TREES WERE NOT PLANTED/GROWN TOO DEEPLY AT SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOT BALL. IF TOWN ARBORIST DETERMINES THAT THERE IS EXCESSIVE SOIL OVER THE ROOT CROWN, THESE TREES WILL BE REJECTED.



ACCEPTABLE CONDITION
(AS DELIVERED)



UNACCEPTABLE CONDITION
(AS DELIVERED)

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ROOT FLARE DEPTHS (TREE ROOT BALL CONDITION ON TREES FROM SUPPLIERS)

REV. DATE	
STD. NO.	REV.
40.09	

PLANTINGS IN STREET RIGHT-OF-WAY

GENERAL NOTES

1. TREE GRATES AND ASSOCIATED IRRIGATION SYSTEMS ARE REQUIRED AT VARIOUS LOCATIONS TO COMPLY WITH ZONING REQUIREMENTS. ALL OTHER INSTALLATIONS OF IRRIGATION SYSTEMS WITHIN THE RIGHT-OF-WAY OF TOWN OR STATE MAINTAINED STREETS REQUIRE AN ENCROACHMENT AGREEMENT EXECUTED THROUGH THE TOWN OR NCDOT. THE TOWN'S ENCROACHMENT AGREEMENT REVIEW/APPROVAL PROCESS MAY INCLUDE ADDITIONAL REQUIREMENTS. CONTACT THE TOWN OR NCDOT FOR ADDITIONAL INFORMATION REGARDING COST, SUBMITTAL, AND LIABILITY INSURANCE COVERAGE REQUIREMENTS.

2. A DRAINAGE SYSTEM IS REQUIRED AS SHOWN FOR ALL IRRIGATED PLANTING AREAS LOCATED ADJACENT TO STREETS. ALL IRRIGATION/DRAINAGE SYSTEMS NOT REQUIRED BY THE UPTOWN STREET GUIDELINES REQUIRE AN ENCROACHMENT AGREEMENT EXECUTED BY THE TOWN OR NCDOT FOR TOWN OR STATE-MAINTAINED ROADS, RESPECTIVELY. CONTACT THE TOWN OR NCDOT FOR ADDITIONAL INFORMATION REGARDING COST, SUBMITTAL AND LIABILITY INSURANCE COVERAGE REQUIREMENTS.

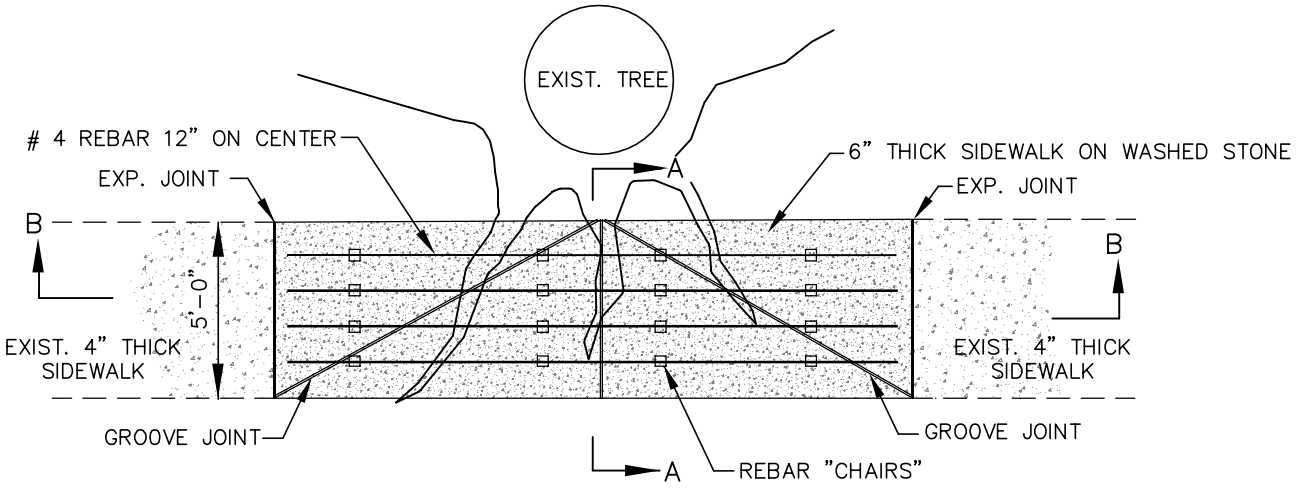
3. AN INSPECTION SCHEDULE IS NEEDED FOR TREES THAT WILL BE PLANTED IN THE STREET RIGHT OF WAY DUE TO ZONING OR OTHER REQUIREMENTS. LANDSCAPE INSPECTION INCLUDE THE FOLLOWING:

    - SUBDRAINAGE INSPECTION
    - TREE PIT/WELL OR PLANTING STRIP INSPECTION
    - SOIL MIX APPROVALS/INSPECTIONS
    - TREE APPROVALS/INSPECTIONS – PRIOR TO PURCHASING THE TREES, TO BE MADE BY THE TOWN'S REPRESENTATIVE
    - THIS MAY INCLUDE PHOTO APPROVAL OR PARTICIPATION IN TAGGING THE TREES
    - TREE PLANTING INSPECTION
    - IRRIGATION INSPECTION
    - FINAL WALK THROUGH

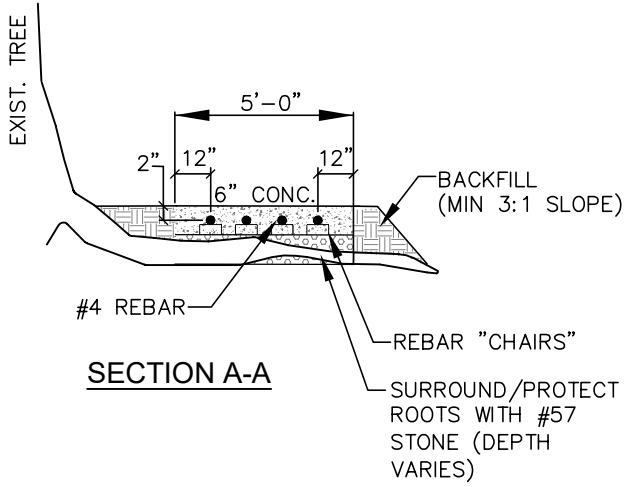
4. ALL OF THE ABOVE INSPECTIONS WILL BE PERFORMED BY THE TOWN'S REPRESENTATIVE, EXCEPT FOR THE TREE APPROVALS AS NOTED.

NOT TO SCALE

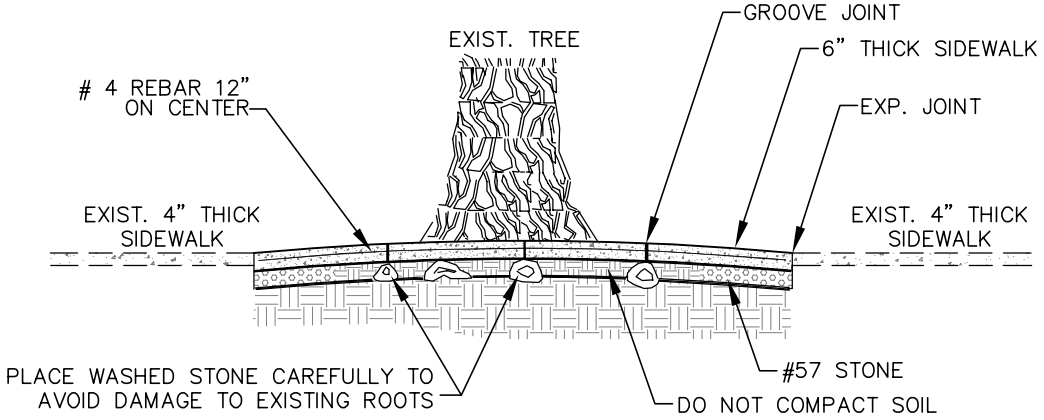
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TREE PLANTING-NOTES (DRAINAGE AND INSPECTION)	REV. DATE STD. NO. 40.10 / REV.



PLAN VIEW



SECTION A-A



SECTION B-B

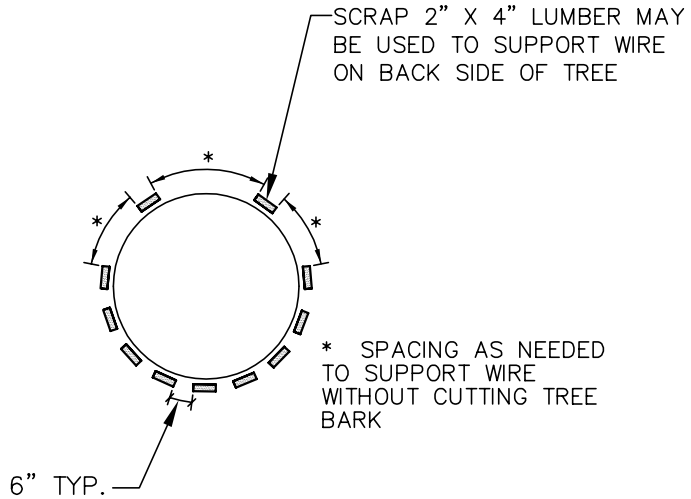
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BRIDGING TREE ROOTS

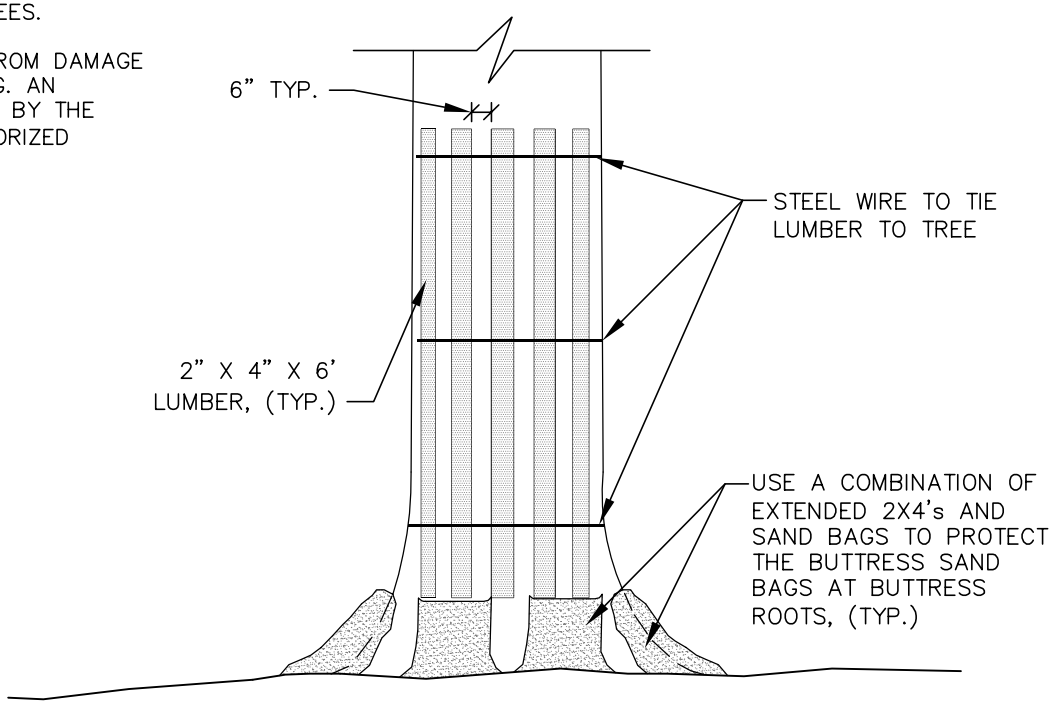
REV. DATE	
STD. NO.	REV.
40.11	

NOTES:

1. THIS TREE BUMPER DETAIL SHALL BE USED WHEN WORKING WITHIN 10' OF AN EXISTING TREE TO BE PROTECTED.
2. ALL TREES SHALL BE SAVED UNLESS NOTED OTHERWISE ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. LUMBER, WIRE, AND SANDBAGS MAY BE REUSED AT OTHER TREES.
4. THE INTENT OF THIS DETAIL IS TO PROTECT EXISTING TREES FROM DAMAGE DURING CONSTRUCTION ESPECIALLY FROM BACKHOE ARM SWING. AN ALTERNATE APPROACH MAY BE USED IF APPROVED IN WRITING BY THE ENGINEER AFTER CONSULTATION WITH THE TOWN'S DULY AUTHORIZED REPRESENTATIVE.



PLAN VIEW



ELEVATION VIEW

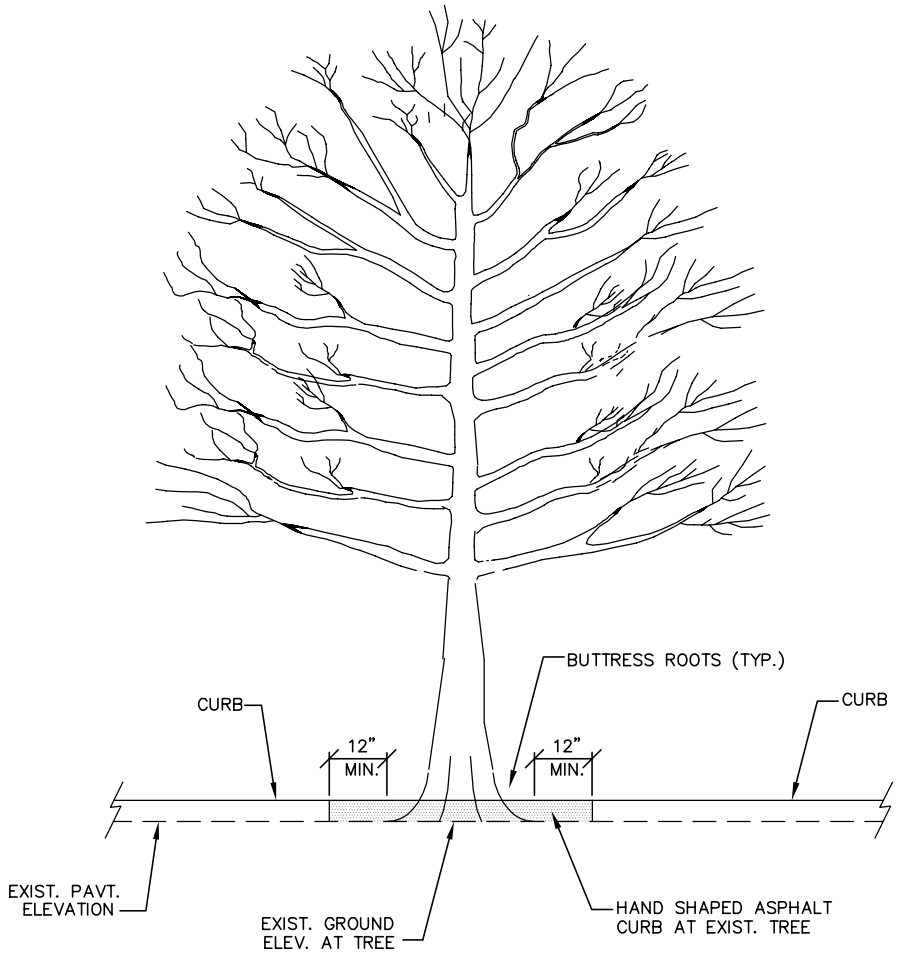
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TEMPORARY TREE PROTECTION DETAIL

REV. DATE	
STD. NO.	REV.
40.12	

NOTES:

1. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR EXISTING TREES.
2. WHERE EXISTING TREES ARE WITHIN 4' OF THE PROPOSED BACK OF CURB, THE PROPOSED CURB SHALL END A MINIMUM OF 12" FROM THE TREE'S BUTTRESS ROOTS.
3. CONTRACTOR SHALL COORDINATE WITH THE TOWN'S REPRESENTATIVE TO IDENTIFY TREES FOR WHICH THIS DETAIL APPLIES PRIOR TO CONSTRUCTION NEAR THE TREE(S).
4. NO TREES SHALL BE REMOVED UNLESS CLEARLY SPECIFIED ON THE PLANS OR IDENTIFIED BY THE ENGINEER.
5. AVOID FILL PLACEMENT NEAR TREE.



NOT TO SCALE

Pineville
NORTH CAROLINA

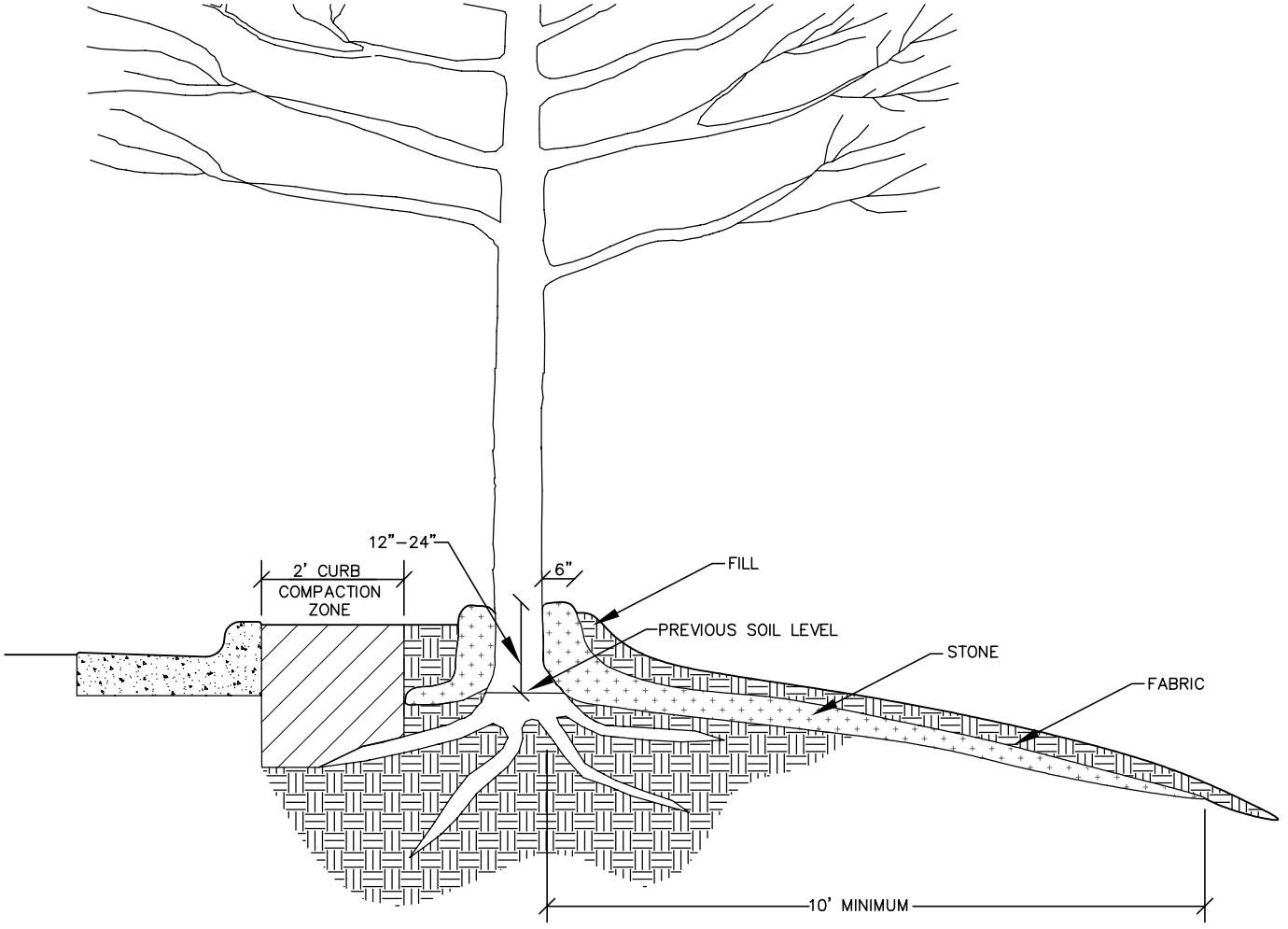
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

ASPHALT CURB PLACEMENT AT EXISTING TREES

REV. DATE	
STD. NO.	REV.
40.13	

NOTES:

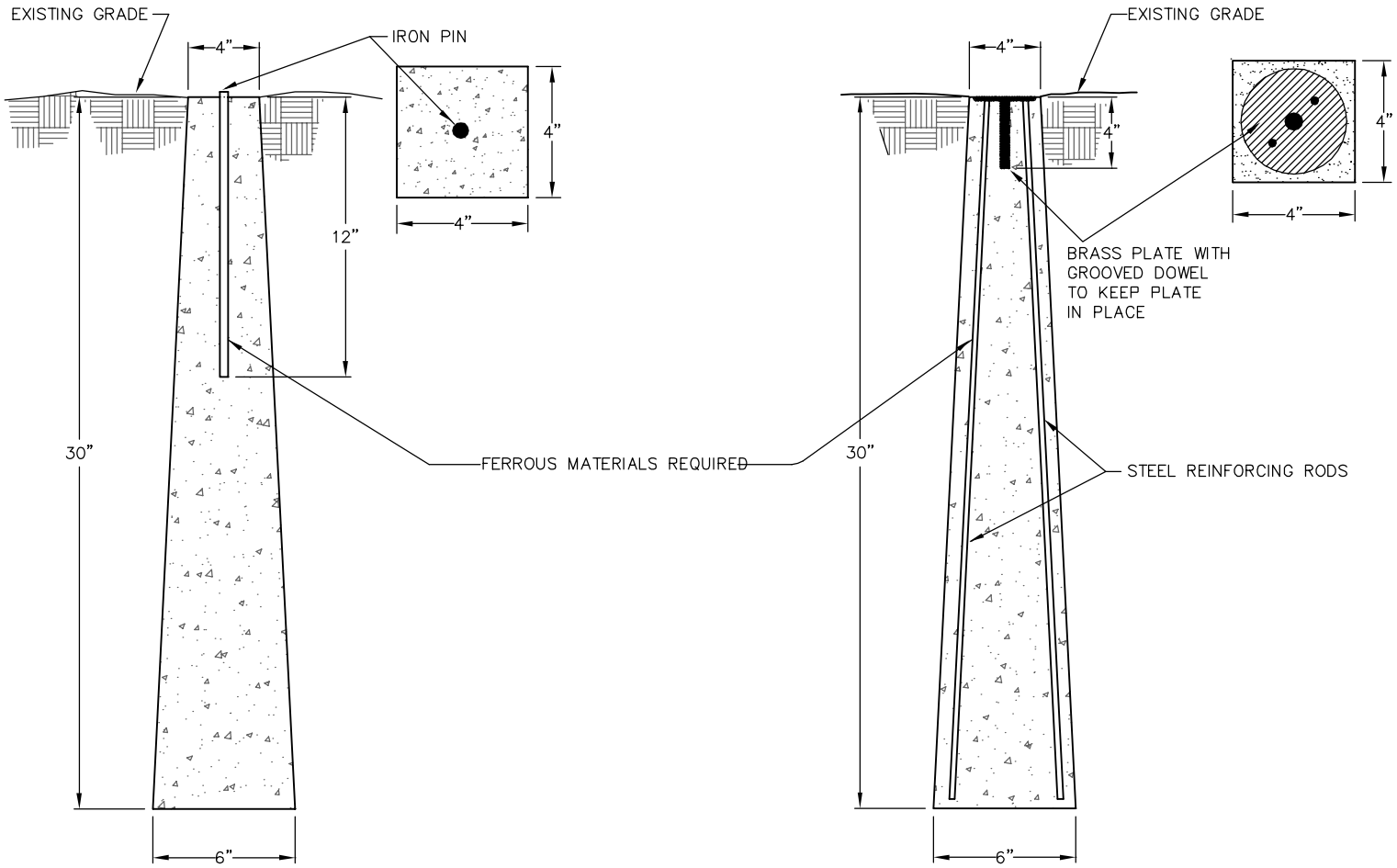
1. APPLICATION DESIGNED FOR TREES NO LESS THAN 12" IN DIAMETER.
2. FILL – SEE CLDSM – PLANTING MIX. APPLY TO A DEPTH OF FOUR (4) INCHES AT BASE OF TREE, TAPER TO GRADE. SEED AND MULCH ACCORDING TO CLDSM.
3. STONE – #5, WASHED. MAINTAIN EXPOSED SIX (6) INCH WIDTH AT TRUNK OF TREE. PLACE TO MINIMUM DEPTH OF TWELVE (12) INCHES AND A MAXIMUM OF TWENTY–FOUR (24) INCHES AT THE BASE OF THE TREE AND TAPER OUTWARD TO NO LESS THAN TEN (10) FEET.
4. FABRIC – NON–WOVEN GEOTEXTILE FABRIC, SUCH AS MIRAFI OR EQUIVALENT, PLACED BETWEEN STONE AND FILL. IT IS NOT TO COVER STONE EXPOSED AT TRUNK OF TREE.



NOT TO SCALE

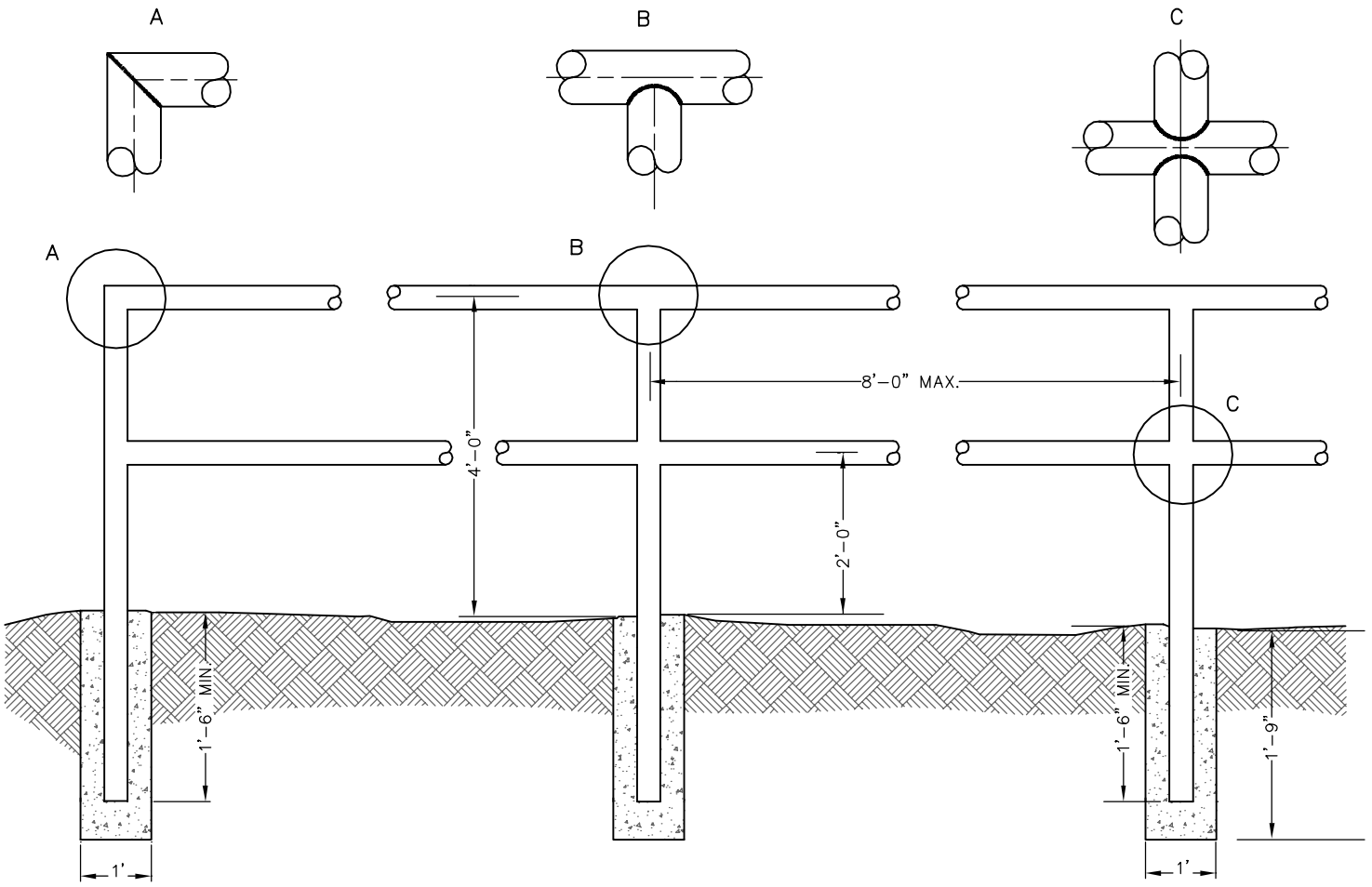
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	ROCK CHIMNEY

REV. DATE	
STD. NO.	REV.
40.14	



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TYPICAL CONCRETE CONTROL MONUMENT	STD. NO. 50.03 / REV.



GENERAL NOTES:

1. ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.
2. TYPE OF PIPE TO BE USED IS 1-5/8" MAX. O.D. BLACK IRON, LOW CARBON PIPE OR GALVANIZED.
3. ALL JOINTS TO HAVE A 1/2" FILLET WELD AT ALL JOINTS.
4. AFTER INSTALLATION PAINT ASSMBLY WITH BLACK ALL WEATHER ENAMEL.
5. SEE PLDS 50.04-B FOR WARRANTS

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SAFETY RAIL

STD. NO.	REV.
50.04A	

WARRANTS

STANDARD SAFETY RAIL (PLDS #50.04A) SHALL BE INSTALLED UNDER ANY OF THE FOLLOWING CIRCUMSTANCES IN BOTH NEW CONSTRUCTION AND IN RETROFITTING OR RECONSTRUCTION OF EXISTING ROADWAYS OR SITES:

1. WHEN THE CULVERT CROSSING DETAIL (PLDS #10.36A–B) APPLIES.
2. IF THERE IS A TWO FOOT OR GREATER DROPOFF WITHIN 2 FEET OF TH EDGE OF THE SIDEWALK (SEE DIAGRAM A).
3. IF THERE IS A 1–FOOT OR LARGER DROPOFF DIRECTLY ADJACENT TO THE SIDEWALK EDGE (SEE DIAGRAM B).
4. AT THE TOP OF ANY DROPOFF WITHIN THE PEDESTRIAN CLEAR ZONE OR WHERE PEDESTRIANS CAN REASONABLY BE EXPECTED IN THE VICINITY.
5. AT THE DIRECTION OF THE TOWN ENGINEER BASED ON FIELD CONDITIONS.

DEFINITIONS

DROPOFF –– A SLOPE OF 2:1 OR STEEPER. EXAMPLES INCLUDE HEADWALLS, RETAINING WALLS, AND CULVERTS.

PEDESTRIAN CLEAR ZONE –– 10 FEET OF ANY COMBINATION OF SIDEWALK, SLOPE, AND SHOULDER SLOPED AT 6:1 OR FLATTER. SIDEWALK DOES NOT NEED TO BE PRESENT.

SIDEWALK –– FOR PURPOSES OF THIS STANDARD, THE TERM "SIDEWALK" IS USED GENERICALLY AND SHALL MEAN ANY PATH OR SURFACE TO BE USED FOR BICYCLE AND/OR PEDESTRIAN TRANSPORTATION. EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, SIDEWALKS, BIKE PATHS, SHARED–USE PATHS, PEDESTRIAN PATHS, AND GREENWAYS.

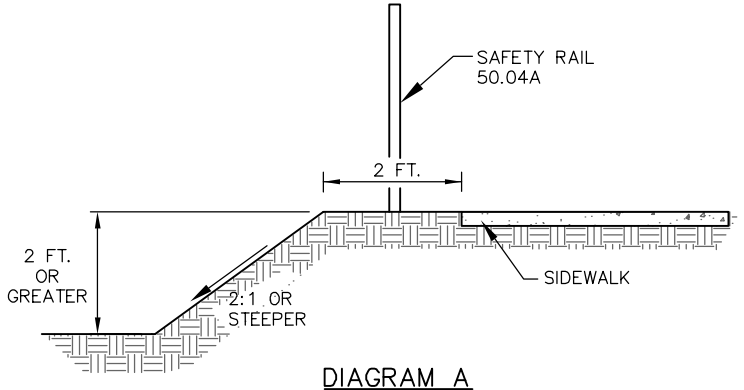


DIAGRAM A

SLOPED DROPOFF AT BACK OF SIDEWALK

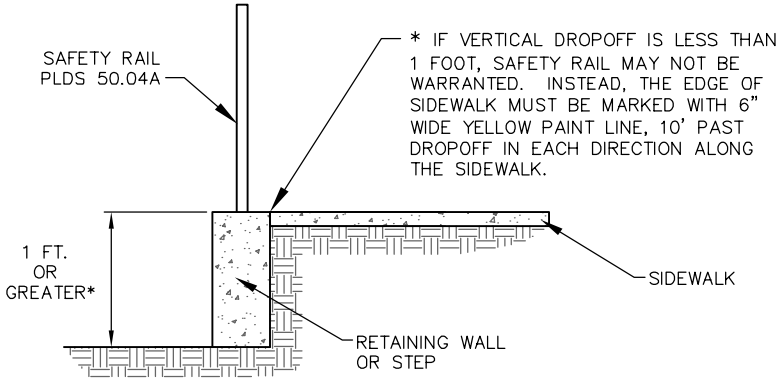
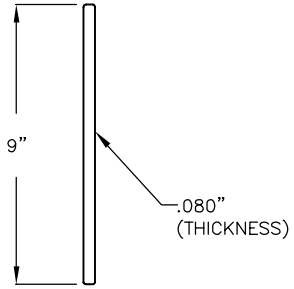


DIAGRAM B

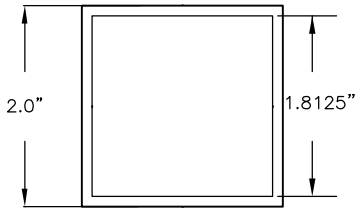
VERTICAL DROPOFF AT BACK OF SIDEWALK

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SAFETY RAIL WARRANTS

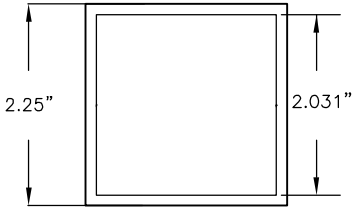
STD. NO.	REV.
50.04B	



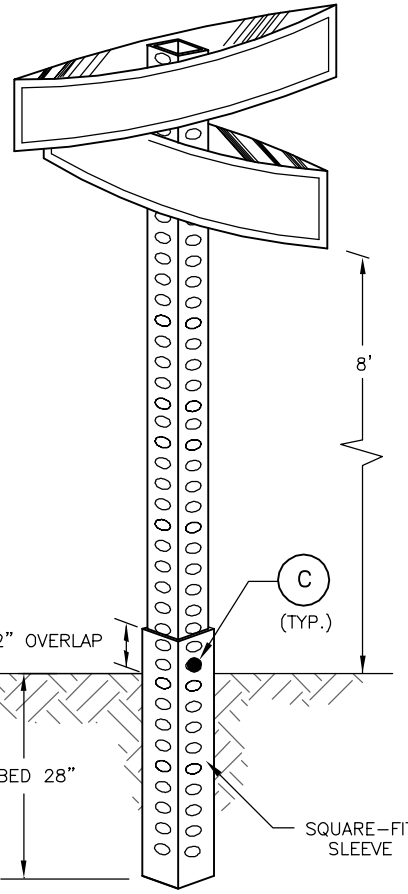
SIGN



POST
(14 GAUGE)



SQUARE–FIT SLEEVE
(12 GAUGE)



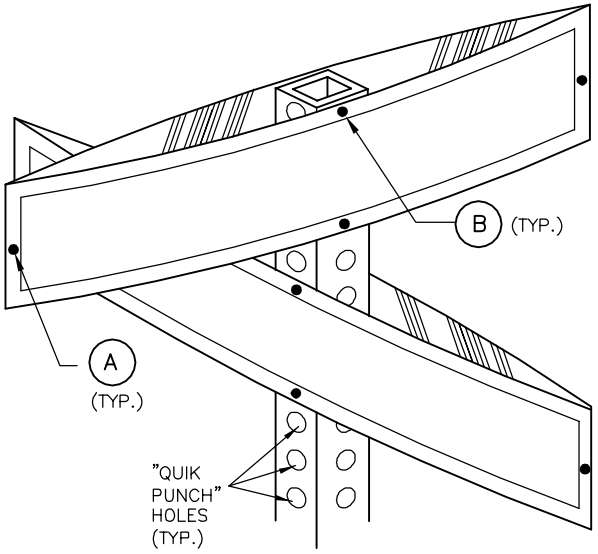
STREET NAME SIGN
POST INSTALLATION

KEY TO FASTENERS:

(A) #10–24 x 3/4" HEX HEAD MACHINE, ZINC– DEAD END
#10–24 FLANGE NUT, ZINC– DEAD END

(B) 5/16" #16 X 3" CARRIAGE BOLT, ZINC
5/16" #16 HEX NUT, STEEL

(C) 5/16" #16 X 2–3/4" CORNER BOLT (BREAKAWAY), ZINC
5/16" #16 HEX NUT, STEEL



NOTES :

1. POST SHALL BE 14–GAUGE GALVANIZED STEEL, QUIK–PUNCH, 7/16" HOLES, 1" ON CENTER, ALIGNED ON ALL SIDES, AND 2" SQUARE, 10 FEET IN LENGTH.
2. THE SLEEVE SHALL BE 12–GAUGE GALVANIZED STEEL, 7/16" HOLES, 1" ON CENTER, ALIGNED ON ALL SIDES, AND 2.25" SQUARE, 30" IN LENGTH.
3. ALL STREET NAME SIGNS ARE SUBJECT TO THE APPROVAL OF THE TOWN PLANNER OR HIS DESIGNEE.

Pineville
NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

STREET NAME SIGN
(NCDOT MAINTAINED STREETS)

2/29/20

STD. NO.	REV.
50.05A	4

NOTES

1. STREET NAME MARKERS (SNM) SHALL BE ALUMINUM, FLAT, AND HAVE DIMENSIONS AS SHOWN ON THIS DETAIL. MINIMUM LENGTH OF 24"; MAXIMUM LENGTH OF 60". THE SNM'S SHALL BE COVERED WITH WHITE HIGH INTENSITY PRISMATIC (HIP) RETRO-REFLECTIVE SHEETING (3M SERIES 3930 OR EQUIVALENT) WITH PRESSURE SENSITIVE ADHESIVE (OR EQUIVALENT TYPE IV OR HIGHER).

2. THE LETTERS SHALL BE REVERSE CUT FROM TRANSPARENT GREEN OVERLAY FILM (3M #1177 EC FILM OR EQUIVALENT MEETING FEDERAL SPECIFICATION FP-96, SECTION 178.01(A) AND ASTM D4956). THE TRANSPARENT GREEN OVERLAY FILM MUST BE PLACED ON THE SNM TO PROVIDE AN EXPOSED 0.5" BORDER OF THE UNDERLAY WHITE HIP RETRO-REFLECTIVE SHEETING.

3. THE STREET NAME SHALL BE COMPOSED OF INITIAL UPPER CASE LETTERS 6" IN HEIGHT AND CORRESPONDING LOWER CASE LETTERS 4.5" IN HEIGHT, IN FHWA "HIGHWAY B" FONT. THE STREET NAME SHALL BE LEFT-JUSTIFIED AND PLACED 0.5" FROM THE SIGN BORDER. ANY STREET NAME WITH 3 OR FEWER LETTERS SHALL BE CENTERED IN THE SIGN TEXT AREA.

   PREFIX/SUFFIX NAMES SHALL BE COMPOSED OF INITIAL UPPER CASE LETTERS 3" IN HEIGHT AND CORRESPONDING LOWER CASE LETTERS 2.25" IN HEIGHT, IN FHWA "HIGHWAY C" FONT. BLOCK NUMBERS SHALL BE 3" IN HEIGHT, IN FHWA "HIGHWAY C" FONT.

   SUFFIX NAMES AND BLOCK NUMBERS SHALL BE RIGHT-JUSTIFIED AND PLACED 0.5" FROM THE RIGHT-SIDE SIGN BORDER AND 0.25" FROM THE TOP AND BOTTOM SIGN BORDERS. PREFIX LETTERS (N, S, E, AND W) SHALL BE CENTERED AND PLACED 0.5" FROM THE LEFT-SIDE SIGN BORDER WITH 2.5" SPACING TO BEGINNING OF STREET NAME.

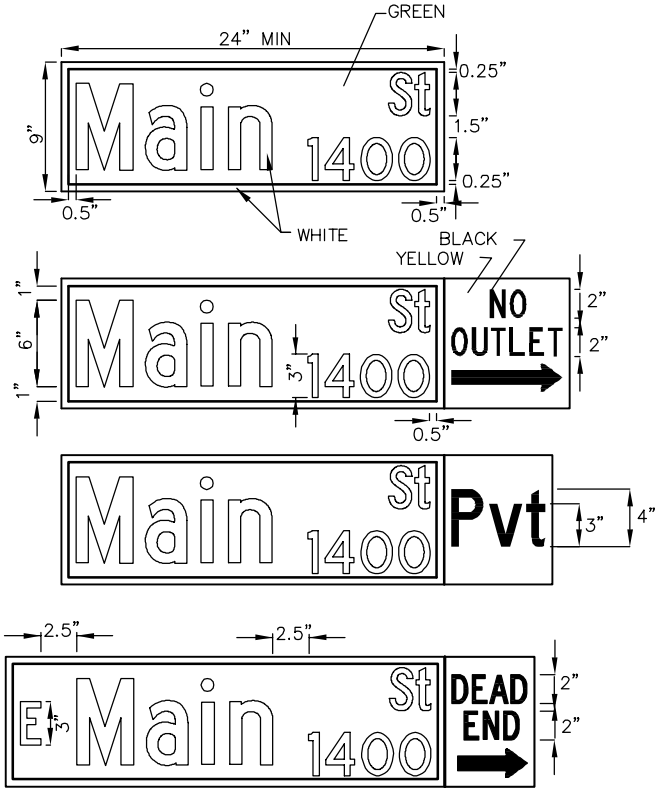
4. SUPPLEMENTAL SNM WORDING ON YELLOW HIP RETRO-REFLECTIVE SHEETING WITH BLACK VINYL LETTERS SHALL BE PLACED ADJACENT TO THE GREEN OVERLAY FILM/BORDER TO INDICATE STREETS THAT DEAD END, HAVE NO OUTLET, ETC. OR ARE PRIVATE STREETS (PVT). THE YELLOW HIP RETRO-REFLECTIVE SHEETING MUST BE PLACED ON THE SNM TO MAINTAIN AN EXPOSED 0.5" BORDER OF THE UNDERLAY WHITE HIP RETRO-REFLECTIVE SHEETING.

   NO OUTLET WITH ARROW (RIGHT OR LEFT) – PLACED ON SNM AT ENTRANCE TO A STREET OR STREET NETWORK FROM WHICH THERE IS NO OTHER EXIT. USE UPPER CASE LETTERS 2" IN HEIGHT, IN FHWA "HIGHWAY C" FONT.

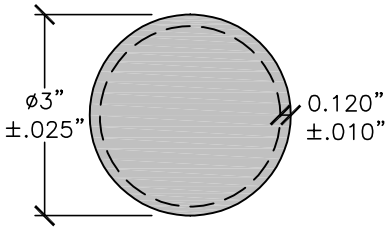
   PVT – PLACED ON SNM AT ENTRANCE TO PRIVATE STREET, USE UPPER CASE LETTER 4" IN HEIGHT AND CORRESPONDING LOWER CASE LETTERS 3" IN HEIGHT, IN FHWA "HIGHWAY C" FONT.

   DEAD END WITH ARROW (RIGHT OR LEFT) – PLACED ON SNM AT ENTRANCE TO A SINGLE STREET THAT TERMINATES IN A DEAD END OR CUL-DE-SAC. USE UPPER CASE LETTERS 2" IN HEIGHT, IN FHWA "HIGHWAY C" FONT. IF STUB STREET IS LESS THAN OR EQUAL TO 200 FEET, THEN DEAD END IS NOT NECESSARY.

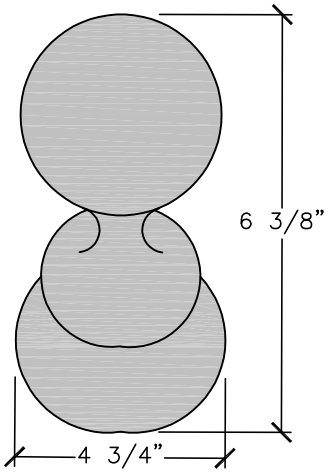
5. ALL SNMs ARE SUBJECT TO THE APPROVAL OF THE TOWN PLANNER OR HIS DESIGNEE.



Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	STREET NAME SIGN (NCDOT MAINTAINED STREETS)	2/29/20 STD. NO. 50.05B REV. 4

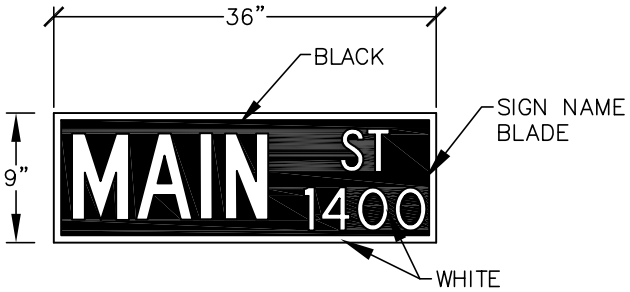


POST



GLOBE FINIAL

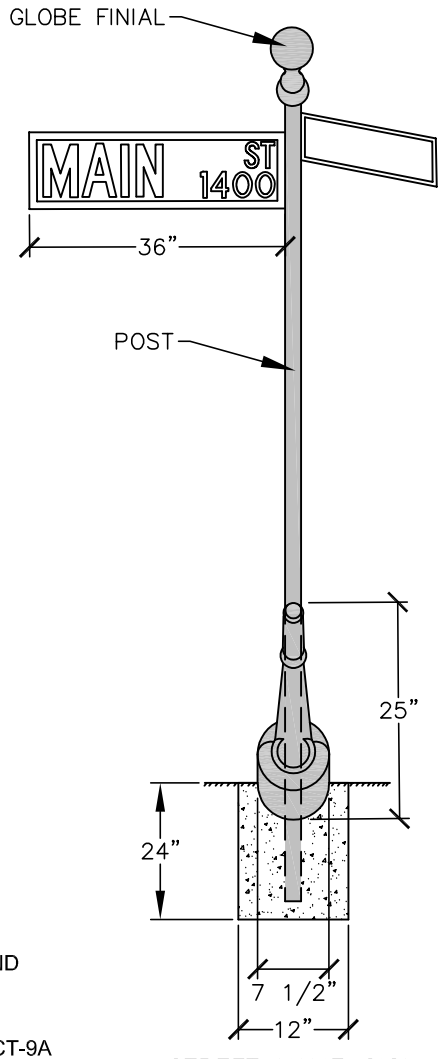
SEE NOTES ON PLDS 50.05D
FOR DESIGN SPECIFICATIONS.



DECORATIVE STREET SIGNS AND
POSTS SHALL BE MANUFACTURED BY:
SIGNATURE STREETSCAPES
2350 SOUTH GETTY STREET
MUSKEGON, MI 49444
1-800-705-1446
1-273-739-3463

PRODUCT SPECIFICATIONS:

- POST: 3" SMOOTH BLACK POST
- BASE: BS-03C CORINTHIAN BASE
- BREAKAWAY SIGN POST COUPLER: S300R 3" ROUND WITH IN-GROUND ANCHOR
- FINIAL: FN-0203 GLOBE
- BLADE HOLDER: 9" CLASSIC STREET BLADE TRIM CT-9A
- STREET SIGN SIGNS: 9" EXTRUDED REFLECTIVE BLADES. SEE NOTES ON PLDS 50.05D



STREET NAME SIGN
POST INSTALLATION

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	DECORATIVE STREET NAME SIGN AND POST	2/29/20 STD. NO. 50.05C REV. 4

NOTES

1. NEWLY CONSTRUCTED AND REPLACED SIGN POSTS IN THE TOWN OF PINEVILLE MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR PRIOR TO INSTALLATION AND PLACEMENT. THE POSTS MUST CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE CRITERIA AS OUTLINED BELOW.

2. ALL ALUMINUM PRODUCTS MUST BE PRE-TREATED BEFORE APPLYING POWDER COATING TO PREVENT ADHESION PROBLEMS AND OXIDATION UNDER THE FINISH. PARTS ARE TO BE ACID WASHED, STEAM CLEANED AND SEALED PRIOR TO POWDER COATING OR PAINTING.

3. ALL HARDWARE REQUIRED FOR INSTALLATION MUST BE STAINLESS STEEL MATERIAL.

4. A STREET PLAN SHOWING THE PROPOSED LOCATION OF ALL PROPOSED SIGNS MUST BE APPROVED PRIOR TO SIGN PLACEMENT.

5. SIZE AND LOCATION OF THE SIGN POST MUST BE APPROVED PRIOR TO INSTALLATION. THE NUMBER OF STREET SIGNS, REGULATORY SIGNS, AND LOCATION MUST BE CONSIDERED WHEN DETERMINING THE DIAMETER AND BURY DEPTH OF THE POSTS. COMBINING STREET NAME SIGNS AND REGULATORY SIGNS (I.E. STOP SIGNS, SPEED LIMIT SIGNS, ETC.) MUST BE APPROVED PRIOR TO INSTALLATION. IT IS RECOMMENDED TO CONTACT PUBLIC WORKS STAFF PRIOR TO PLACING MATERIAL ORDERS AND DURING THE INSTALLATION PROCESS TO ENSURE CORRECT MATERIAL AND PRODUCT PLACEMENT.

6. POST: SIGN POSTS MUST BE 3 INCH DIAMETER SMOOTH POST MADE OF ALUMINUM MATERIAL WITH A MINIMUM WALL THICKNESS OF 0.120 INCHES. THE PAINT SHALL BE STANDARD GLOSS BLACK POWDER COAT FINISH. THE HEIGHT OF THE POST WILL CORRESPOND WITH ITS USE. THE MINIMUM BURY DEPTH SHALL BE 24 INCHES.

7. POST BASE: ALL BASES MUST BE CORINTHIAN DESIGN FROM CAST ALUMINUM USING VIRGIN MATERIAL OF. THE POST BASE MUST BE STANDARD GLOSS BLACK POWDER COAT FINISH. SET SCREWS MUST BE STAINLESS STEEL.

8. FINIAL: ALL FINIALS WILL BE OF APPROVED GLOBE DESIGN FROM CAST ALUMINUM USING VIRGIN MATERIAL. THE FINIAL MUST BE STANDARD GLOSS BLACK POWDER COAT FINISH. SET SCREWS MUST BE STAINLESS STEEL.

9. TRAFFIC SIGNS: ALL TRAFFIC SIGNS MUST MEET FEDERAL HIGHWAY ADMINISTRATION (FHA) REQUIREMENTS. THE SIGN SHALL BE REFLECTIVE AND BE APPROVED PRIOR TO PLACEMENT.

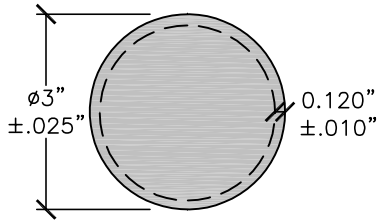
10. FLAT SIGN BACKERS: ALL FLAT SIGN BACKERS MUST BE PRECISION CUT TO ALLOW A 1 INCH OR 1 1/2 INCH VISIBLE BORDER AROUND THE SIGN, DEPENDING ON THE PANEL SIZE. THE PANEL MUST BE A MINIMUM THICKNESS OF 0.125 ALUMINUM AND POWDER COATED, SEMI GLOSS BLACK FINISH.

11. EXTRUDED SIGN NAME BLADES: STREET NAME SIGN SHALL BE 9 INCHES IN HEIGHT. THE PANEL MUST BE TWO-SIDED WITH A REFLECTIVE BACKGROUND AND REFLECTIVE LETTERING ON BOTH SIDES. THE STREET NAME LETTERING MUST BE LEFT-JUSTIFIED WITH THE STREET SUFFIX LOCATED TO THE UPPER RIGHT OF THE BLADE. THE LENGTH OF THE SIGN MUST BE SUFFICIENT TO ALLOW FOR PROPER SPACING OF LETTERING. CROWDED OR REDUCED SIZE LETTERING WILL NOT BE ALLOWED. PUBLIC DECORATIVE STREET SIGNS MUST HAVE A BLACK REFLECTIVE BACKGROUND WITH WHITE REFLECTIVE LETTERING. SUBMIT SIGN PROOF TO PUBLIC WORKS DIRECTOR PRIOR TO MANUFACTURE.

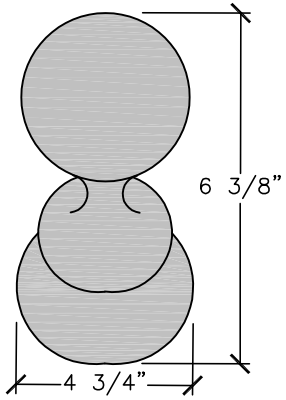
12. STREET SIGN BLADE HOLDERS: ALL BLADE HOLDERS ARE TO ALLOW FOR REQUIRED SIGN NAME BLADES, AS DETERMINED BY THE PUBLIC WORKS DIRECTOR, AND A LENGTH AS REQUIRED BY THE STREET NAME. THE HOLDERS SHALL BE FABRICATED USING 1 INCH SQUARE ALUMINUM TUBE WITH 0.125 INCH WALL. THE POST MOUNT BRACKET IS FABRICATED FROM 0.250 INCH ROUNDED CHANNEL WITH HOLES PUNCHED FOR THE USE OF 1/4 INCH HARDWARE. BRACKETS MOUNT TO POLES WITH 1/4 INCH STAINLESS STEEL BOLT WITH WASHERS AND LOCK NUTS MOUNTED THROUGH THE POLE AND SAND CAST ALUMINUM USING VIRGIN MATERIAL. PARTS ARE TO BE STANDARD GLOSS BLACK POWDER COAT FINISH.

13. INSTALLATION: POSTS SHALL BE ASSEMBLED AND DIRECT BURIED AS RECOMMENDED BY THE PRODUCT MANUFACTURER, AND SET IN CONCRETE AT A MINIMUM OF 24 INCHES DEPTH. TWO BOLTS SHALL BE INSTALLED AT THE BASE OF CONCRETE COLUMN TO PREVENT POST FROM ROTATING IN PLACE.

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	DECORATIVE STREET NAME SIGN AND POST NOTES	2/29/20 STD. NO. 50.05D REV. 4

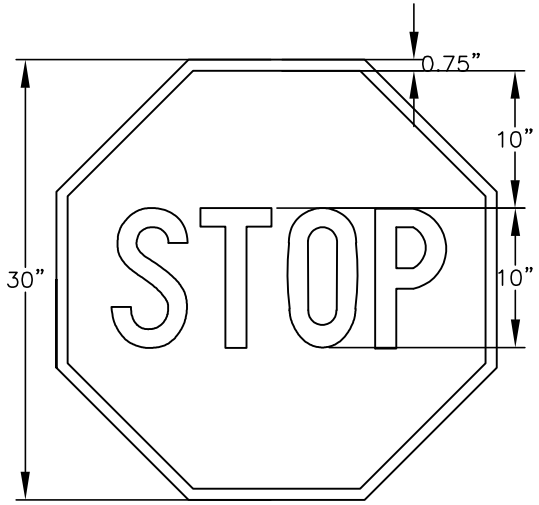


POST



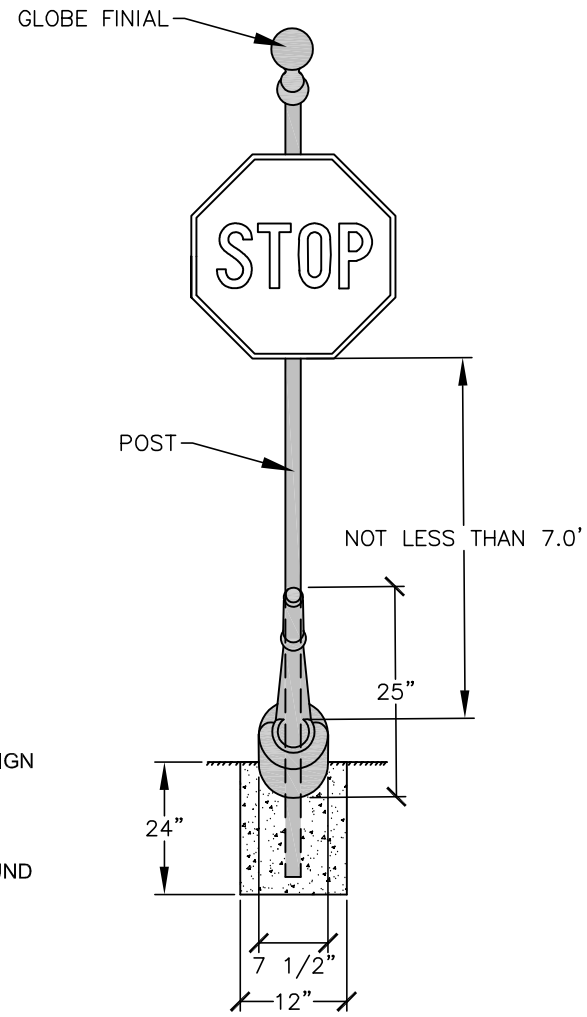
GLOBE FINIAL

SEE NOTES ON PLDS 50.05D
FOR DESIGN SPECIFICATIONS.



PRODUCT SPECIFICATIONS:

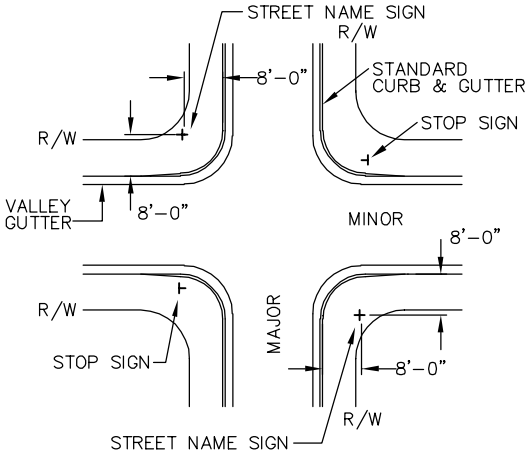
- REGULATORY SIGN: MUTCD STANDARDS (STOP SIGN SHOWN FOR REFERENCE)
- POST: 3" SMOOTH BLACK POST
- BASE: BS-03C CORINTHIAN BASE
- BREAKAWAY SIGN POST COUPLER: S300R 3" ROUND WITH IN-GROUND ANCHOR
- FINIAL: FN-0203 GLOBE



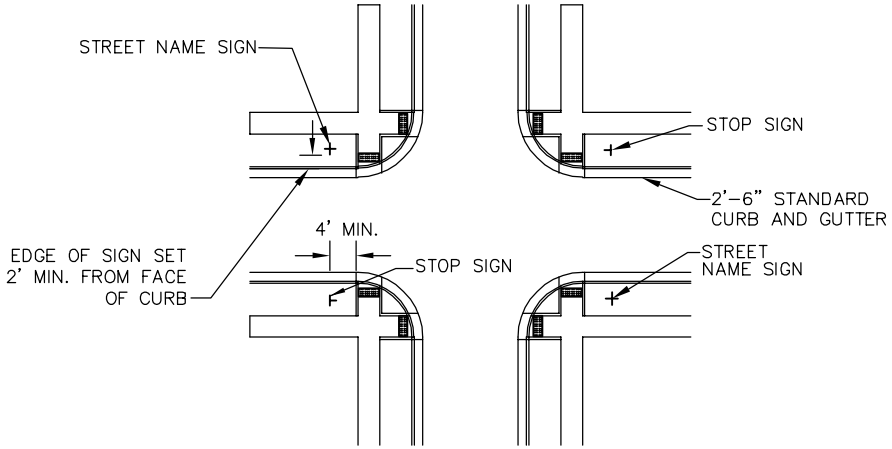
STREET NAME SIGN
POST INSTALLATION

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	DECORATIVE STREET SIGN AND POST	2/29/20
		STD. NO. 50.05E	REV. 4

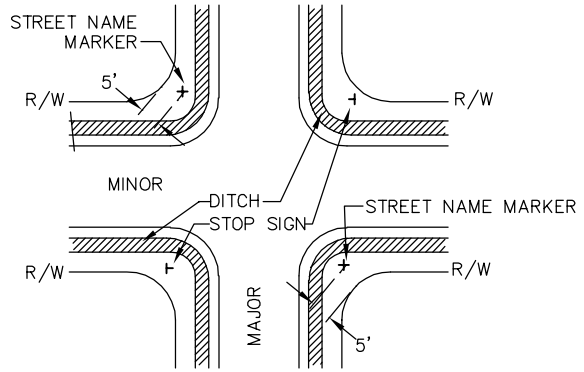
INTERSECTION with CURB and GUTTER



INTERSECTION with SIDEWALK, CURB, and GUTTER



INTERSECTION with DITCHES, and NO CURB and GUTTER



NOTES

1. TWO STREET NAME MARKERS ARE REQUIRED IF THE MAJOR STREET HAS 3 OR MORE LANES.
2. ANY VARIANCE FROM THIS STANDARD MUST BE APPROVED BY THE TOWN PLANNER

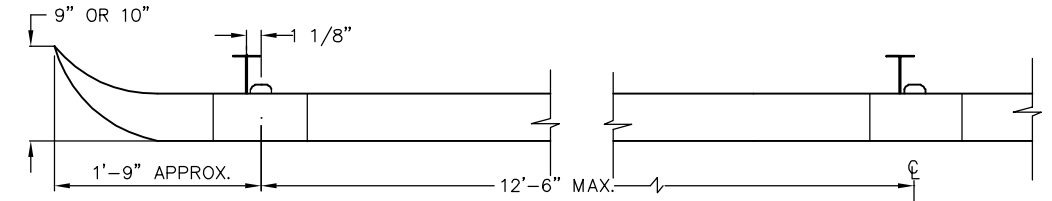
NOT TO SCALE

Pineville
NORTH CAROLINA

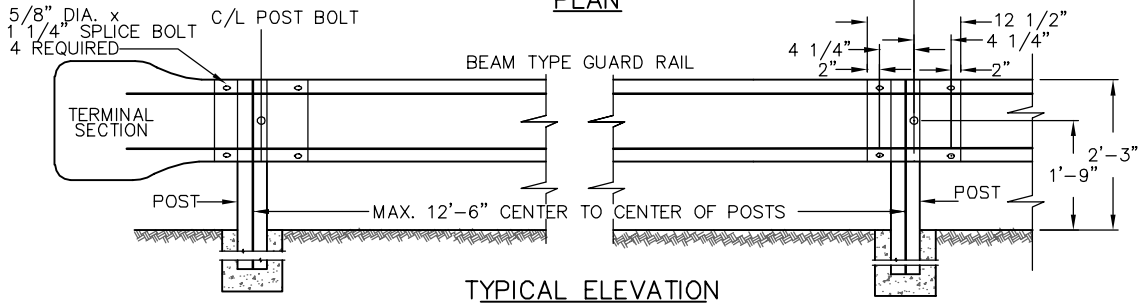
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

STREET NAME SIGN INSTALLATION LOCATIONS

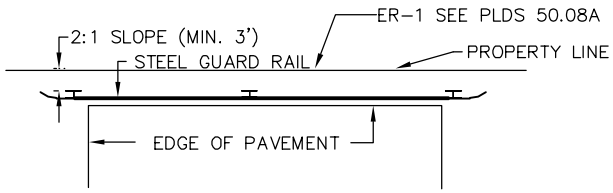
STD. NO.	REV.
50.06	



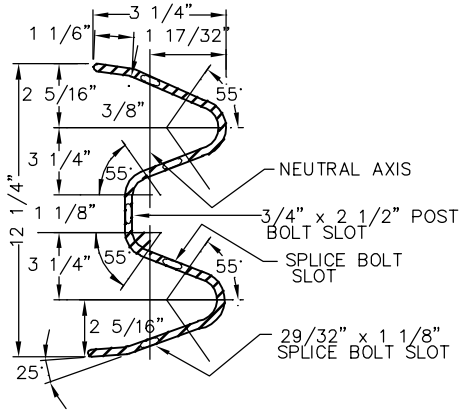
PLAN



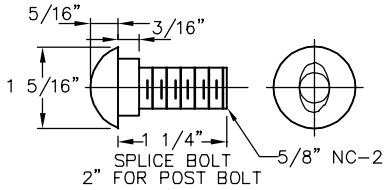
TYPICAL ELEVATION



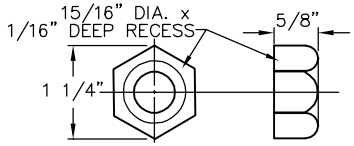
DEAD-END STREET BARRICADE



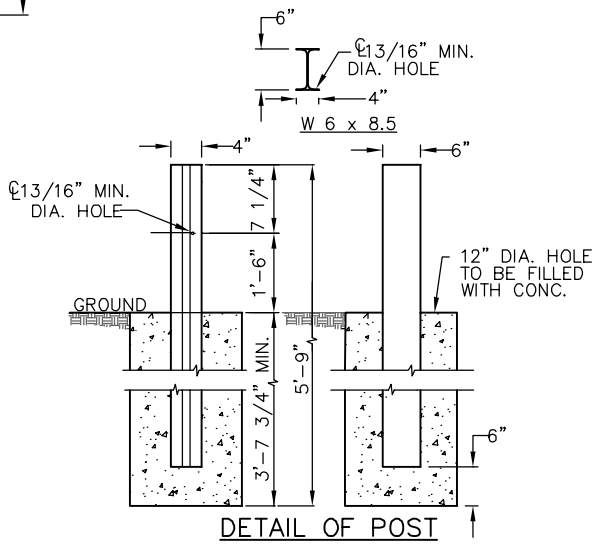
SECTION THRU RAIL ELEMENT



DETAIL OF BOLT



DETAIL OF NUT



DETAIL OF POST

NOTE

THIS DETAIL IS NOT A GUARDRAIL DETAIL. FOR ROADSIDE GUARDRAIL, SEE NCDOT STANDARD DRAWINGS 862.01-862.03

NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	DEAD END STREET BARRICADE	STD. NO. 50.07A | REV. 3

GENERAL NOTES:

1. STEEL BEAM TYPE GUARD RAILS SHALL BE INSTALLED AT THE END OF ALL DEAD–END STREETS, EXCEPT CUL–DE–SAC STREETS WHICH HAVE BEEN IMPROVED WITH A PERMANENT TURN–AROUND.

2. FOR STREETS 26' IN WIDTH THE GUARD RAIL SHALL CONSIST OF TWO(2) 12'–6" SECTIONS OR ONE(1) 25' SECTION, THREE (3) STEEL POSTS, AND TWO (2) TERMINAL SECTIONS. FOR STREETS GREATER THAN 25' IN WIDTH THE GUARD RAIL SHALL SPAN THE ENTIRE WIDTH OF THE STREET.

3. GUARD RAIL SHALL CONSIST OF RAIL ELEMENTS FABRICATED TO DEVELOP CONTINUOUS BEAM STRENGTH AND INSTALLED AS SHOWN.

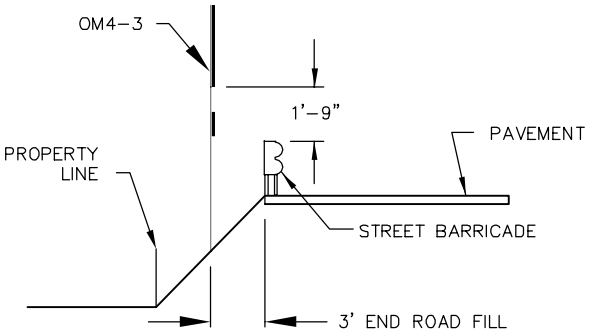
4. MINIMUM THICKNESS OF GUARD RAIL SHALL BE 12 GAGE U.S. STANDARD.
THE RAIL ELEMENT INCLUDING SPLICES, SHALL HAVE A MINIMUM ULTIMATE TENSILE STRENGTH OF 80,000 LBS.
GUARD RAIL PARTS FURNISHED SHALL BE INTERCHANGEABLE WITH SIMILAR PARTS REGARDLESS OF THE SOURCE OF MANUFACTURER.
THE HOLES FOR CONNECTING BOLTS SHALL BE PUNCHED OF DRILLED, BURNING WILL NOT BE PERMITTED.

5. THE GUARD, BOLTS, NUTS, STEEL POSTS. AND ALL OTHER METAL PARTS SHALL BE GALVANIZED TO CONFORM TO THE REQUIREMENTS FOR THE COATING CLASS, (2.50 OUNCES PER SQUARE FOOT) OF THE CURRENT SPECIFICATIONS FOR ZINC–COATED (GALVANIZED) IRON, AND STEEL SHEETS, COILS, AND CUT LENGTHS, IN ACCORDANCE WITH ASTM 123A.

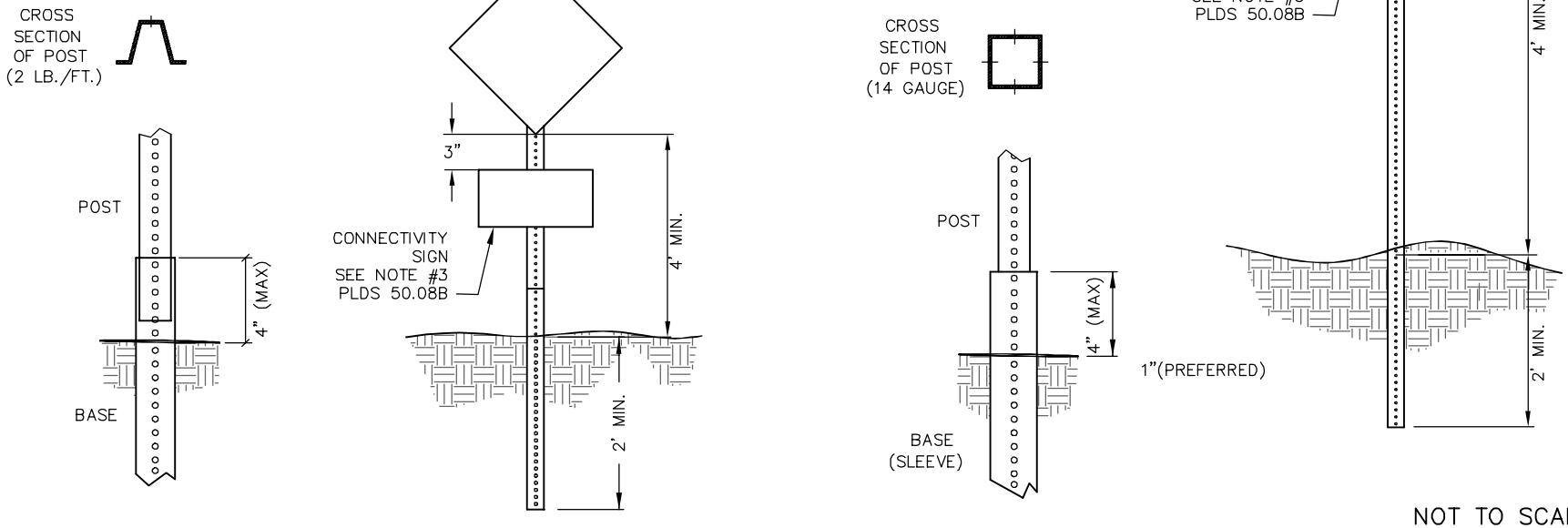
6. IF THE AVERAGE SPELTER COATING AS DETERMINED FROM THE REQUIRED SAMPLES IS LESS THAN TWO (2) OUNCES OF SPELTER PER SQUARE FOOT, OR IF ANY ONE SPECIMEN HAS LESS THAN 1.8 OUNCES OF SPELTER PER SQUARE FOOT OF DOUBLE EXPOSED SURFACE, THE LOT SAMPLED SHALL BE REJECTED, THE FINISHED SHEETS SHALL BE OF FIRST CLASS COMMERCIAL QUALITY, FREE FROM INJURIOUS DEFECTS, SUCH AS BLISTERS, FLUX, AND UNCOATED SPOTS.

7. THE GUARD RAIL SHALL BE INSPECTED TO DETERMINE THAT THE MATERIAL, DIMENSIONS, AND WORKMANSHIP ARE IN ACCORDANCE WITH THIS PLAN.

8. WHERE A DEAD–END STREET REQUIRES GUARD RAIL, END OF ROADWAY MARKER SIGNS SHALL ALSO BE REQUIRED. (SEE PLDS 50.08A & 50.08B) (ER–1).

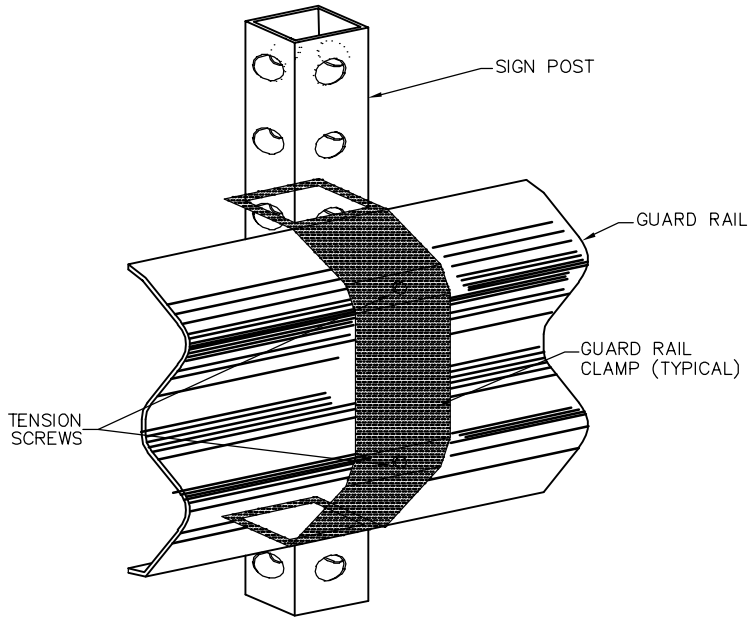


SIGN LOCATION DETAIL

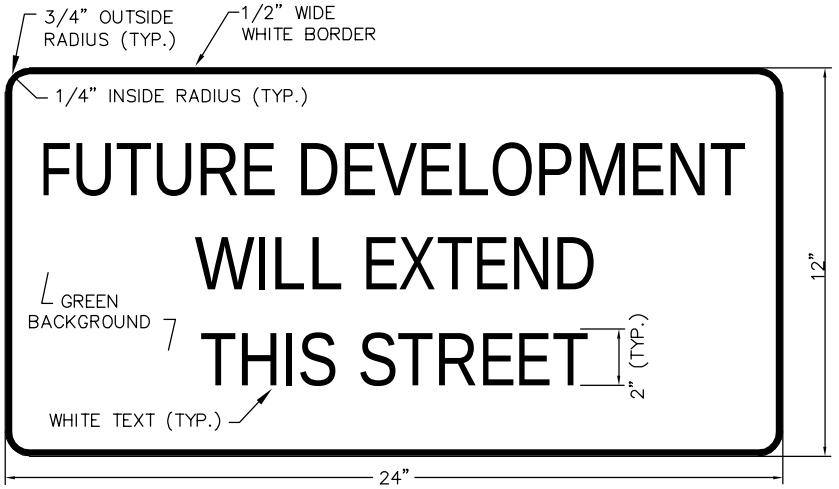


NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	END OF ROADWAY MARKER	8/1/19 STD. NO. 50.08A REV. 3



GUARD RAIL CLAMP INSTALLATION



STREET CONNECTIVITY SIGN

NOTES:

1. WHEN A DEAD-END OR STUBBED STREET REQUIRES A GUARDRAIL SECTION, END-OF-ROADWAY MARKER SIGNS (OM4-3, 24"x24", SOLID RED) SHALL BE PROVIDED.

2. SIGNS ARE TO BE PLACED BEHIND THE BARRICADE (SEE PLDS 50.07A-B), EVENLY SPACED WITH ONE SIGN PLACED AT THE CENTERLINE LOCATION AND ADDITIONAL SIGNS AT 6' O.C. (MINIMUM OF 3 SIGNS, MAXIMUM OF 5 SIGNS).

3. WHEN BARRICADE IS USED ON A STREET STUB, THE SIGN AT THE CENTERLINE SHALL BE SUPPLEMENTED WITH A STREET CONNECTIVITY SIGN.

4. ALL SIGNS/MARKERS SHALL MEET OR EXCEED MUTCD STANDARDS FOR RETROREFLECTIVITY.

1. SIGN SHALL MEET OR EXCEED CURRENT MUTCD STANDARDS FOR RETROREFLECTIVITY.

2. SIGN MATERIAL SHALL BE 0.080" THICK ALUMINUM.

3. ALL LETTERS SHALL BE SERIES B-2000 FROM THE CURRENT STANDARD HIGHWAY SIGNS MANUAL (AND ANY REVISION THERETO) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.

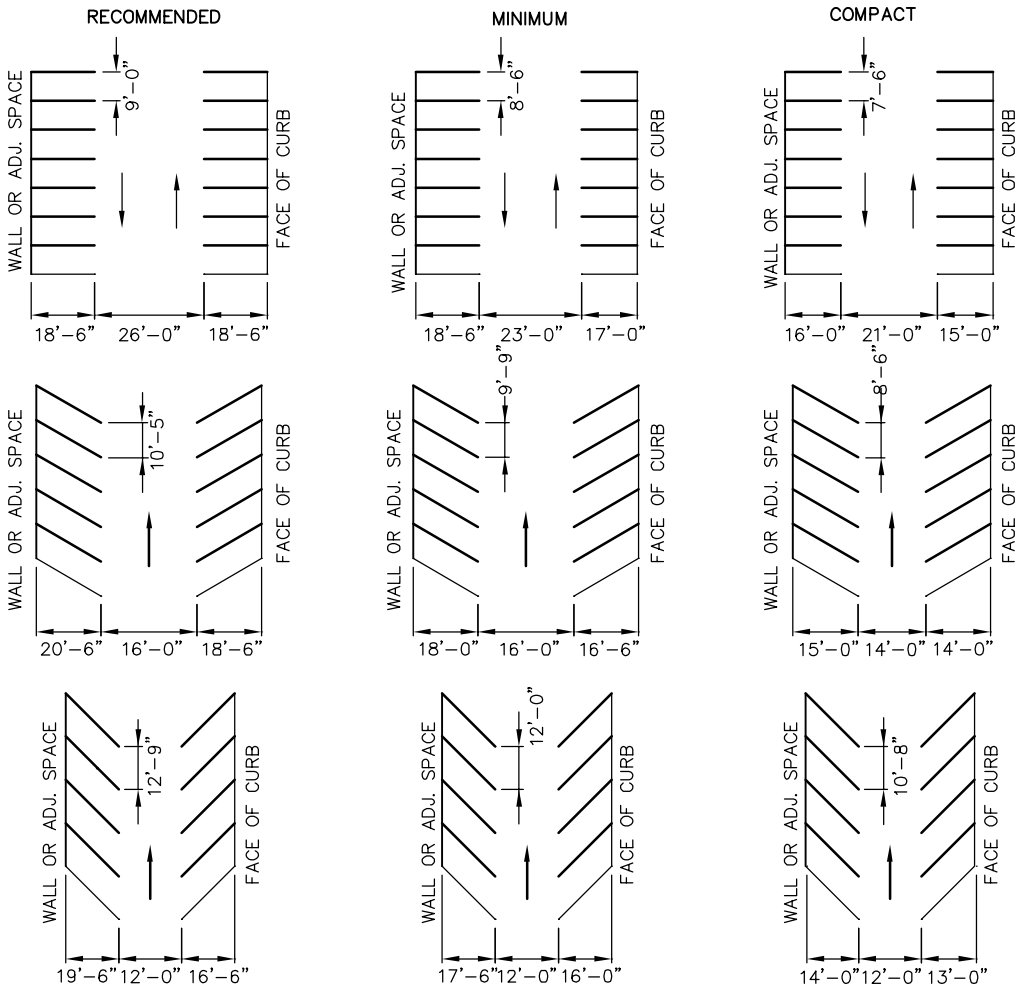
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

END OF ROADWAY MARKER
GUARD RAIL CLAMP INSTALLATION

STD. NO.	REV.
50.08B	

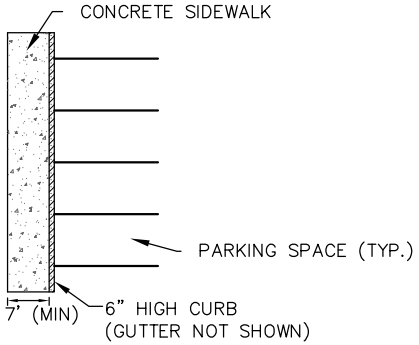


NOTES:

1. FOR ACCESSIBLE PARKING STANDARDS/SIGNAGE SEE PLDS 50.10A AND B.
2. PAVEMENT MARKINGS SHALL BE 4" WHITE PAINT.
3. ALTERNATIVE PARKING ANGLES, AISLE WIDTHS, AND OPERATION (TWO-WAY ANGLED PARKING OR REVERSE-ANGLE PARKING) WILL BE CONSIDERED BY TOWN ENGINEER ON A CASE-BY-CASE BASIS.

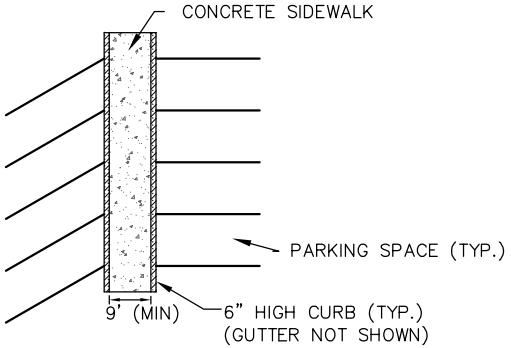
NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	PARKING STANDARDS	8/1/19 STD. NO. 50.09A REV. 3



PARKING ON ONE SIDE OF A SIDEWALK

SIDEWALK ADJACENT TO HEAD–IN OR BACK–IN PARKING SHALL BE AT LEAST 7 FEET WIDE.

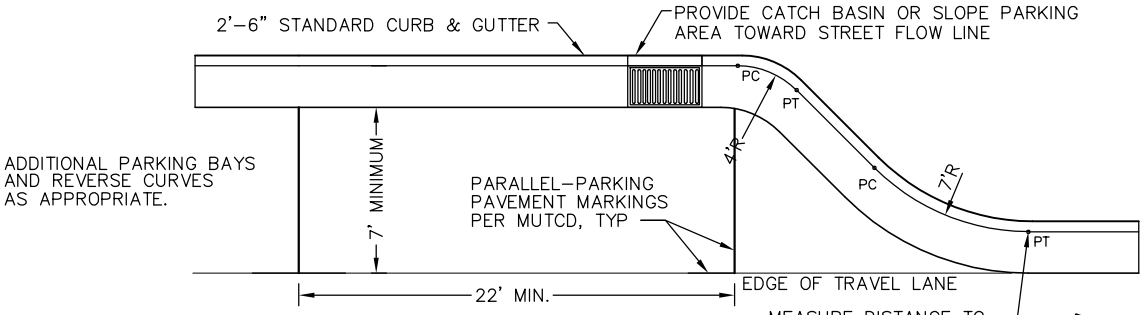


PARKING ON BOTH SIDES OF A SIDEWALK

SIDEWALK BETWEEN TWO ROWS OF HEAD–IN OR BACK–IN PARKING SHALL BE AT LEAST 9 FEET WIDE.

NOTES:

1. REVERSE CURVES NOT NECESSARY IF ADEQUATE DRAINAGE CAN BE PROVIDED THAT WILL ENSURE THAT SEDIMENT, WATER, DEBRIS, ETC., DOES NOT COLLECT IN 90–DEGREE CORNERS.
2. PARALLEL ACCESSIBLE SPACES AND LOADING ZONES TO BE REVIEWED ON A CASE–BY–CASE BASIS.
3. FOR PARKING BAYS THAT ARE 8 FEET IN WIDTH OR GREATER, THE PAVEMENT MARKINGS SHALL BE SET AT ONE (1) FOOT LESS THAN THE STALL WIDTH.
4. GREATER SEPARATION FROM INTERVENING STREETS THAN THE DISTANCES PROVIDED BELOW MAY BE REQUIRED AT THE TOWN ENGINEER'S DISCRETION.
5. POSITIVE DRAINAGE SHALL BE PROVIDED EITHER BY INSTALLATION OF APPROPRIATE DRAINAGE STRUCTURES OR SLOPE PARKING AREA TO STREET FLOW LINE. SLOPING PARKING AREA TO STREET FLOW LINE ONLY PERMITTED IF ROAD GRADE IS GREATER THAN 2%.
6. IF A BIKE LANE IS REQUIRED ADJACENT TO PARALLEL PARKING, THE MINIMUM WIDTH OF BIKE LANE IS 6'.



MINIMUM DISTANCE TO NEXT INTERVENING STREET

PARALLEL PARKING BAY LOCATED ON	DRIVEWAY	LOCAL/ COLLECTOR	TH'FARE
LOCAL/COLLECTOR	20'	20'	20'
THOROUGHFARE	20'	20'	50'

NOTES:

1. A 2–FOOT–WIDE PLANTING STRIP LOCATED AT THE BACK OF CURB CAN BE USED IN LIEU OF 2 FEET OF SIDEWALK WIDTH.
2. PARKING AT ANY ANGLE OTHER THAN PARALLEL SHALL BE SUBJECT TO THIS STANDARD.
3. IF MONOLITHIC CURB & SIDEWALK IS USED, ADD 6" TO ALL DIMENSIONS (1' IF PARKING ON BOTH SIDES).
4. WHEELSTOPS SHALL ONLY BE USED IN LIEU OF 2 FEET OF SIDEWALK WITH THE APPROVAL OF THE TOWN AND WHEN EXISTING CONDITIONS PREVENT CONSTRUCTION OF A 7–FOOT/9–FOOT SIDEWALK. WHEELSTOPS SHALL BE 6" HIGH, MADE OUT OF 3600–PSI REINFORCED CONCRETE, AND ANCHORED WITH #5 OR GREATER REBAR (2' MINIMUM LENGTH). REBAR HOLES SHALL BE GROUTED UPON INSTALLATION. WHEELSTOPS SHALL BE PLACED AT 2 FEET FROM THE EDGE OF SIDEWALK OR OBSTRUCTION.

PARALLEL PARKING STANDARDS

NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

PARKING STANDARDS, CONT.

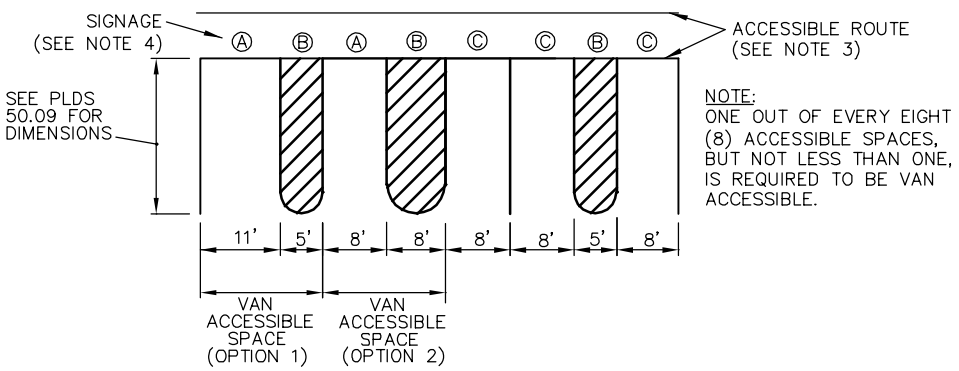
2/29/20

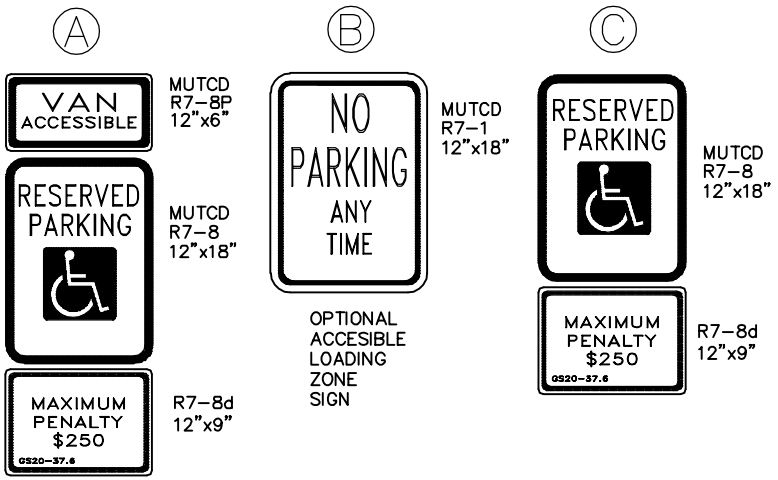
STD. NO.	REV.
50.09B	4

ACCESSIBLE PARKING REQUIREMENTS

TOTAL PARKING SPACES PROVIDED	MINIMUM NUMBER OF ACCESSIBLE SPACES SPACES REQUIRED	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED TO BE VAN ACCESSIBLE
1 TO 25	1	1
26 TO 50	2	1
51 TO 75	3	1
76 TO 100	4	1
101 TO 150	5	1
151 TO 200	6	1
201 TO 300	7	1
301 TO 400	8	1
401 TO 500	9	2
501 TO 1000	2% OF TOTAL	1 IN EVERY 8 ACCESSIBLE SPACES
1001 AND OVER	20 PLUS 1 FOR EACH 100 OVER 1000	1 IN EVERY 8 ACCESSIBLE SPACES
REF.: SECTION 208 OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN		

PARKING SPACE PAVEMENT MARKINGS





NOTES:

1. ALL 12"x18" ACCESSIBLE SIGNS (R7-8 & R7-1) SHALL BE MOUNTED AT 7 FEET FROM GRADE TO BOTTOM EDGE OF SIGN FACE (MUTCD). MOUNTING HEIGHT CAN BE REDUCED TO 5 FEET IF PLACED IN AN AREA BETWEEN SIDEWALK AND BUILDING FACE IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
2. REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPPLEMENT.
3. IF ACCESSIBLE ROUTE IS A RAISED SIDEWALK AREA, THEN RAMPS ARE REQUIRED AT LOADING ZONE AREA.
4. SIGNAGE MUST NOT OBSTRUCT ACCESSIBLE ROUTE OR RAMPS.

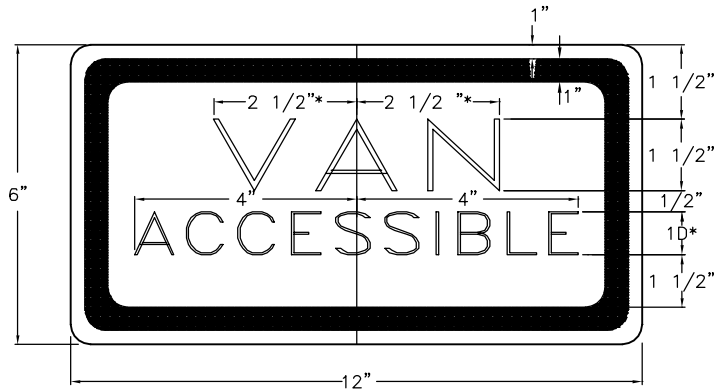
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

ACCESSIBLE PARKING AND SIGNAGE STANDARDS

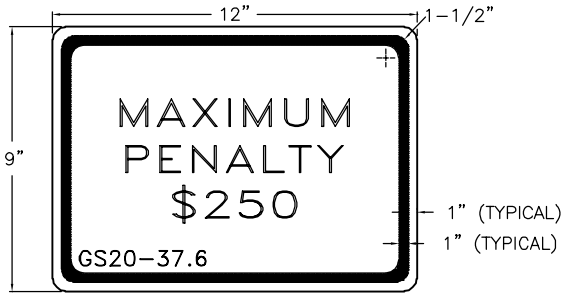
STD. NO.	REV.
50.10A	3



LEGEND AND BORDER – GREEN
BACKGROUND – WHITE

* INCREASE SPACING 50%
D–FHWA (FEDERAL HIGHWAY ADMINISTRATION/USDOT) SERIES D LETTERS

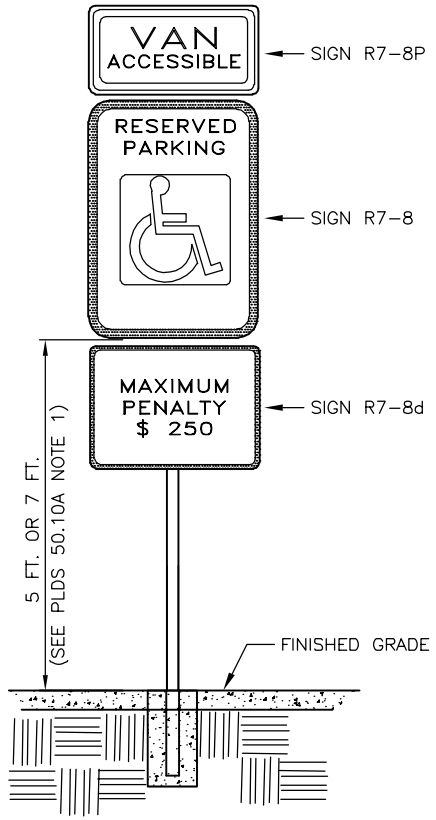
SUPPLEMENTAL VAN ACCESSIBLE
SIGN (R7–8P)



LEGEND AND BORDER – GREEN
BACKGROUND – WHITE

SIGN APPROVED FOR USE UNDER GENERAL STATUTE 20–37.6

THIS PENALTY SIGN IS REQUIRED TO ACCOMPANY ALL R7–8
PARKING SIGNS ERECTED AFTER DECEMBER 31, 1990



NOTE:

1. SUPPLEMENTAL VAN ACCESSIBLE SIGN (R7–8P) USED IF THERE IS ONLY ONE REQUIRED ACCESSIBLE PARKING SPACE (MUST BE VAN ACCESSIBLE) AND AT EACH ADDITIONAL REQUIRED VAN ACCESSIBLE SPACE. (SEE PLDS NO. 50.10A)

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SUPPLEMENTAL VAN ACCESSIBLE SIGN (R7-8P)

8/1/19

STD. NO.	REV.
50.10B	3

NOTES:

1. PAVEMENT MARKINGS TO BE PER LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

2. SIGNS TO BE LOCATED/SPACED PER MUTCD REQUIREMENTS.

3. "CIRCULAR INTERSECTION" AND "TRAFFIC CIRCLE" SUBPLATE SIGNS, AND YELLOW TUBULAR MARKERS, ARE REQUIRED ON THOROUGHFARES. COUNTY, NCDOT AND/OR TOWN WILL DETERMINE IF ONE OR MORE OF THESE ARE NECESSARY ON LOCAL OR COLLECTOR STREETS.

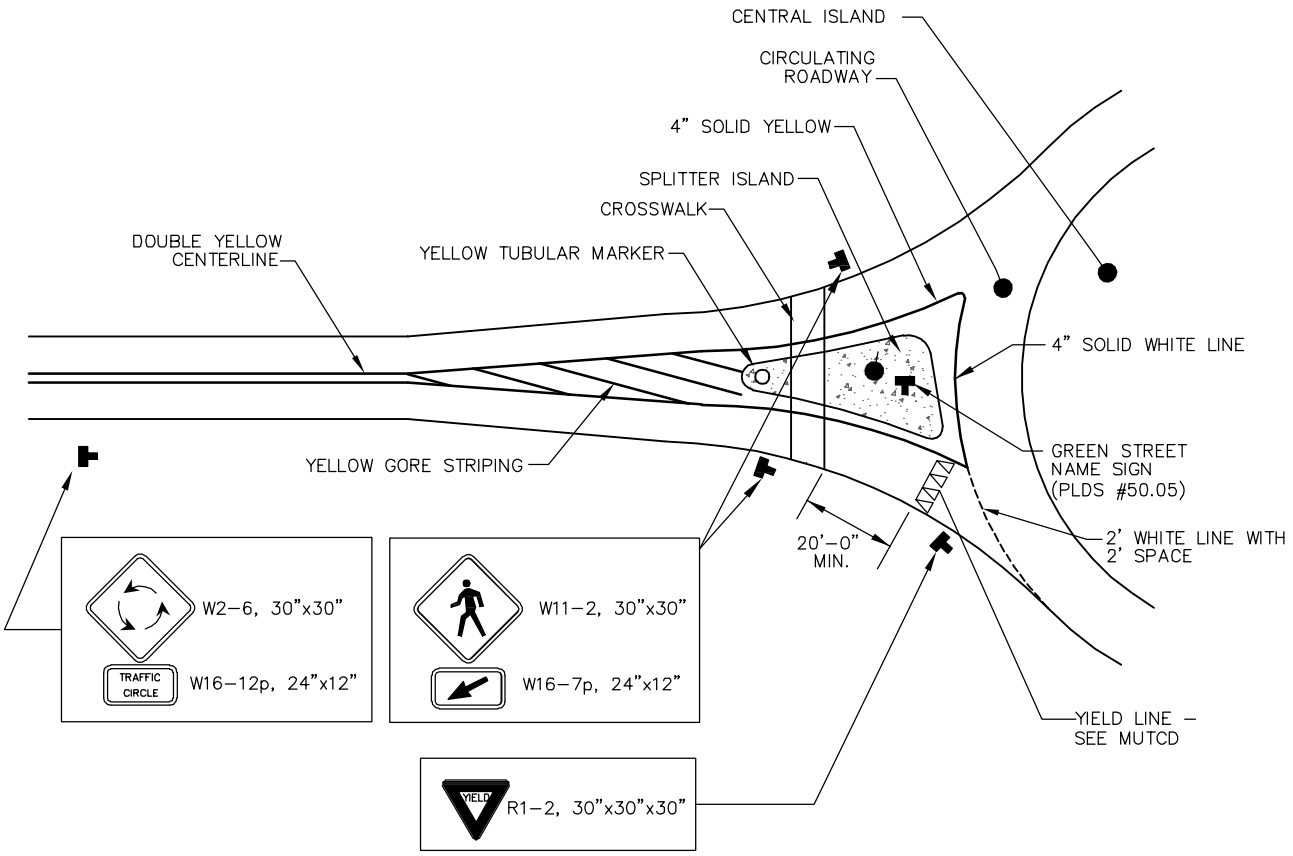
4. "PEDESTRIAN CROSSING" AND ARROW SUBPLATE SIGNS ARE REQUIRED WHEREVER THERE IS A MARKED CROSSWALK OR ON A THOROUGHFARE.

5. "YIELD" SIGNS ARE ALWAYS REQUIRED.

6. PAVEMENT MARKINGS, SPLITTER ISLAND DESIGNS, CROSSWALK, ETC., ARE SHOWN FOR CONTEXT ONLY. REFER TO THE MUTCD AND/OR THE FEDERAL HIGHWAY ADMINISTRATION'S MANUAL ROUNDABOUTS: AN INFORMATIONAL GUIDE FOR MORE DETAIL OR DESIGN INFORMATION.

7. ADDITIONAL SIGNS MAY BE NEEDED ON A CASE-BY-CASE BASIS, TO BE EVALUATED BY TOWN ENGINEER.

8. ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC.

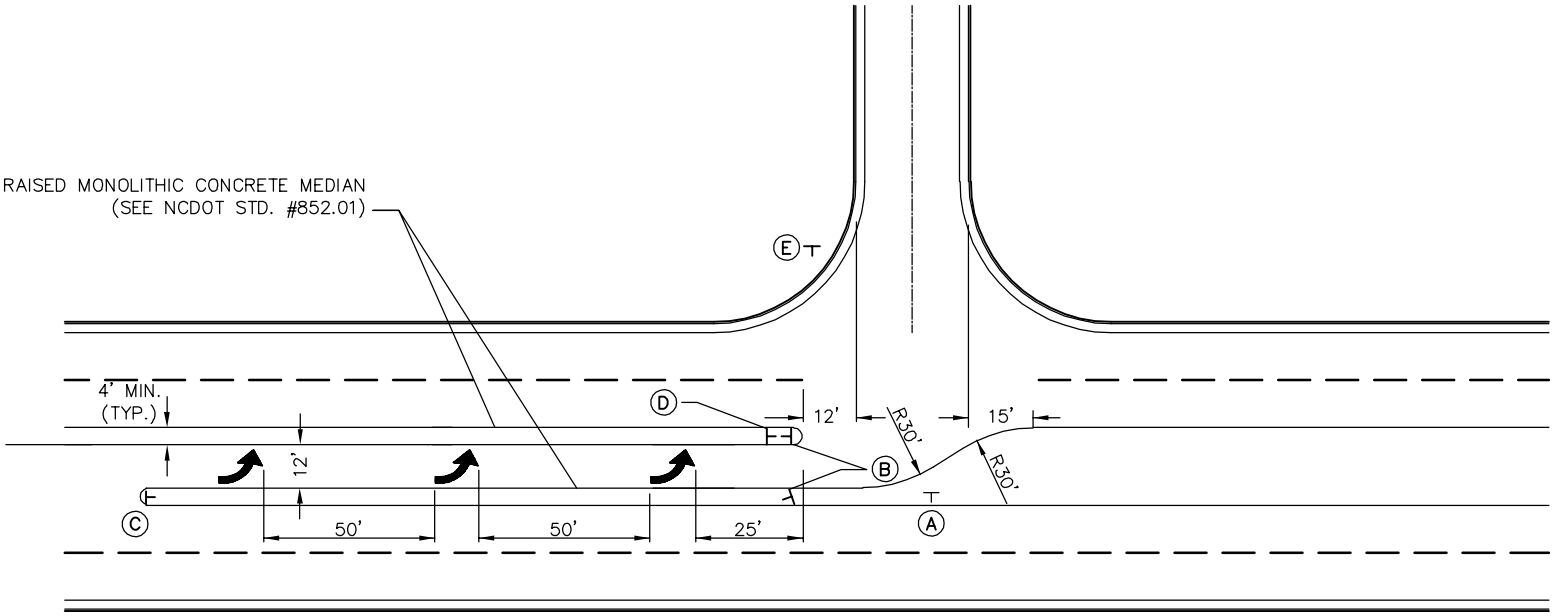


NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SIGNAGE AND PAVEMENT MARKINGS AT ROUNDABOUTS

8/1/19

STD. NO.	REV.
50.11	3



NOTES:

1. ADDITIONAL PAVEMENT MARKINGS (EDGE LINES, GORES, ETC.) ARE NOT SHOWN BUT ARE REQUIRED BY THE TOWN ENGINEER.
2. FOR DIVIDED SIDE STREETS, MEASURE THE 12 FOOT DIMENSION FROM THE FACE OF MEDIAN INSTEAD OF FACE OF CURB ON APPROACHING LANE.
3. ALL SIGNS SHALL BE MUTCD STANDARD SIGNS.

SIGN LEGEND

- (A) ONE WAY (R6-2R, 18"x24")
- (B) DO NOT ENTER (R5-1, 30"x30")
- (C) DOUBLE-DOWN ARROW (W12-1, 30"x30")
- (D) NO U-TURN (R3-4, 24"x24")*
- (E) STOP (R1-1, 30"x30")

* IF NECESSARY

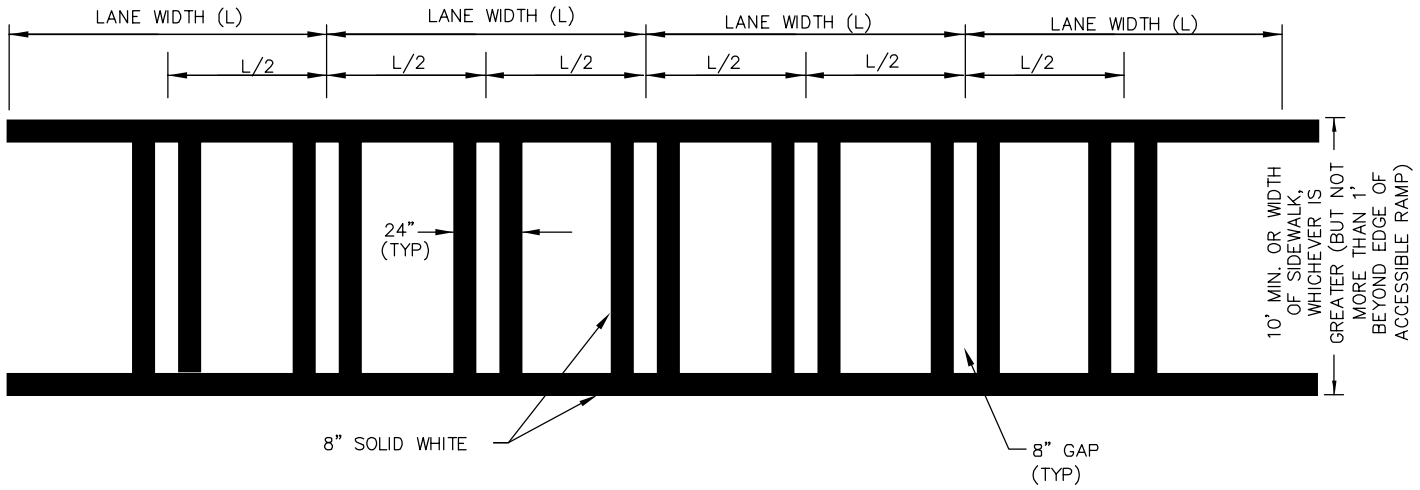
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

DIRECTIONAL CROSSOVER WITH RAISED MEDIANS

STD. NO.	REV.
50.13	



NOTES

1. PER MUTCD STANDARDS, WHEN CROSSWALK LINES ARE USED THEY SHALL CONSIST OF SOLID WHITE LINES THAT MARK THE CROSSWALK. THEY SHALL BE NOT LESS THAN 150 MM (6 IN) NOR GREATER THAN 600 MM (24 IN) IN WIDTH.
2. IF TRANSVERSE LINES ARE USED TO MARK A CROSSWALK, THE GAP BETWEEN THE LINES SHOULD NOT BE LESS THAN 1.8 M (6 FT). IF DIAGONAL OR LONGITUDINAL LINES ARE USED WITHOUT TRANSVERSE LINES TO MARK A CROSSWALK, THE CROSSWALK SHOULD NOT BE LESS THAN 1.8 M (6 FT) WIDE.
3. IF USED, THE DIAGONAL OR LONGITUDINAL LINES SHOULD BE 300 TO 600 MM (12 TO 24 IN) WIDE AND SPACED 300 TO 1500 MM (12 TO 60 IN) APART. THE MARKING DESIGN SHOULD AVOID THE WHEEL PATHS, AND THE SPACING SHOULD NOT EXCEED 2.5 TIMES THE LINE WIDTH.

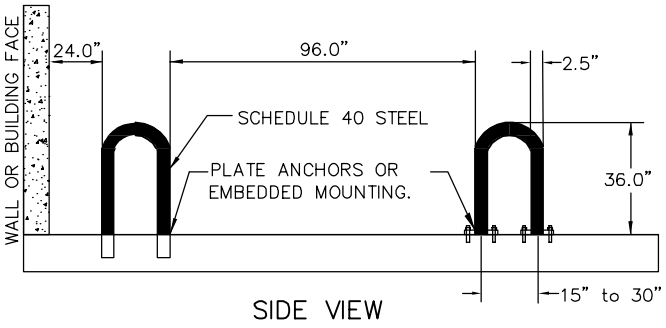
NOT TO SCALE

Pineville NORTH CAROLINA

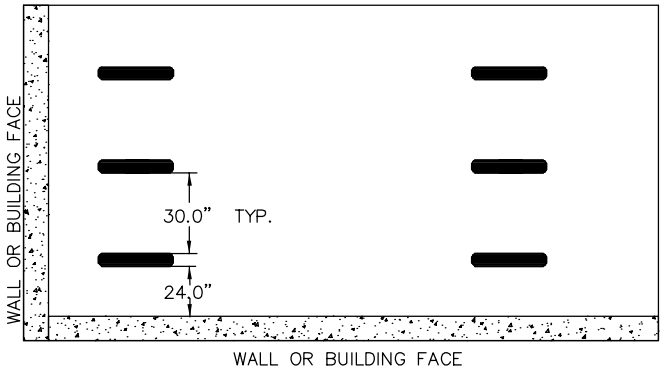
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

PIANO-STYLE CROSSWALK

STD. NO.	REV.
50.14	



SIDE VIEW



PLAN VIEW

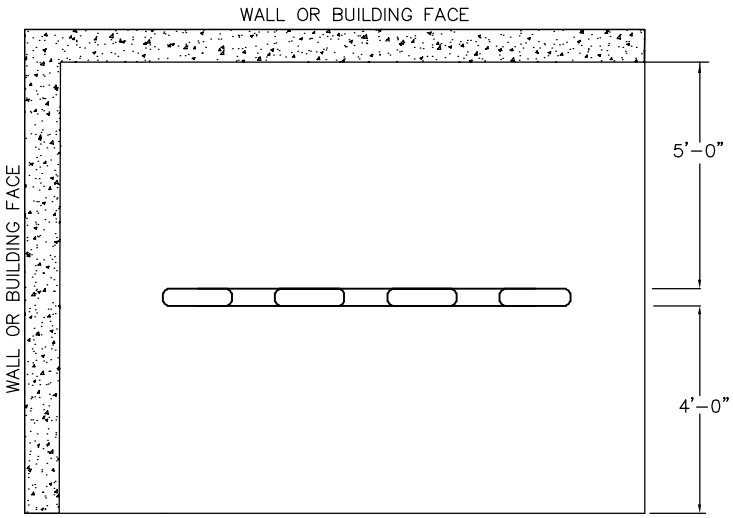
NOTES:

1. BIKE RACKS SHOULD BE INSTALLED AS PER MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.
2. ALTERNATIVE BIKE RACKS OR LOCKERS MAY BE USED BUT ARE SUBJECT TO APPROVAL BY THE TOWN OF PINEVILLE
3. ALL DIMENSIONS SHOWN ARE MINIMUM.

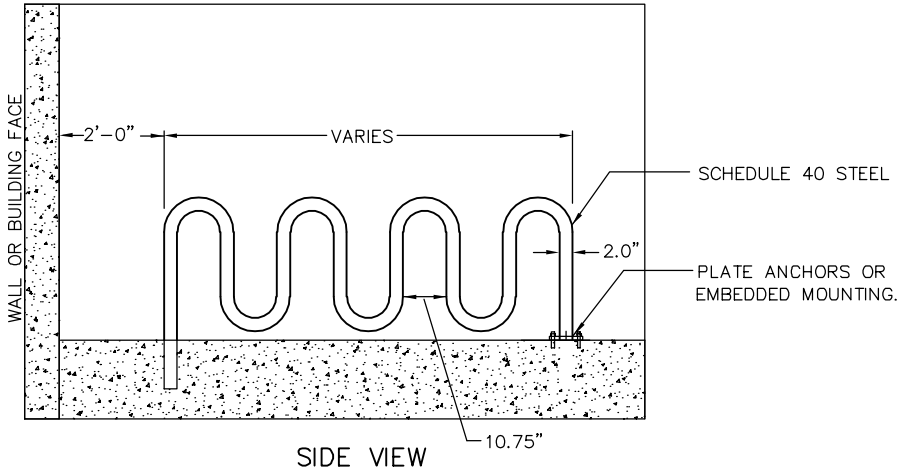
NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	INVERTED "U" RACK FOR BICYCLE PARKING

STD. NO.	REV.
50.20	



PLAN VIEW



SIDE VIEW

NOTES:

1. BIKE RACKS SHOULD BE INSTALLED AS PER MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.

2. ALTERNATIVE BIKE RACKS OR LOCKERS MAY BE USED BUT ARE SUBJECT TO APPROVAL BY THE TOWN ENGINEER.

3. ALL DIMENSIONS SHOWN ARE MINIMUM.

NOT TO SCALE

Pineville
NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

WAVE RACK FOR
BICYCLE PARKING

8/1/19

STD. NO.	REV.
50.21	3

SPECIFICATIONS

POST DESCRIPTION
THE LIGHTING POST SHALL BE ALL ALUMINUM, ONE–PIECE CONSTRUCTION, WITH A CLASSIC TAPERED AND FLUTED BASE DESIGN. THE POST SHALL BE PROVIDED WITH (1) SPECIAL LOVELAND STYLE CROSSAM, FOR TWO FIXTURES AT 180° WITH 3" TENON.

MATERIALS
THE BASE AND FLUTED TAPERED CAST SHAFT SHALL BE HEAVY WALL, CAST ALUMINUM PRODUCED FROM CERTIFIED ASTM 356.1 INGOT PER ASTM B–179–95A OR ASTM B26–95. ALL HARDWARE SHALL BE STAINLESS STEEL ANCHOR BOLTS TO BE COMPLETELY HOT DIP GALVANIZED.

CONSTRUCTION
THE SHAFT SHALL BE DOUBLE WELDED TO THE BASE CASTING AND SHIPPED AS ONE PIECE FOR MAXIMUM STRUCTURAL INTEGRITY. THE SHAFT SHALL BE WELDED INSIDE THE BASE CASTING AT THE TOP OF THE ACCESS DOOR, AND EXTERNALLY WHERE THE SHAFT EXITS THE BASE. ALL WELDING SHALL BE PER ANSI/AWS.

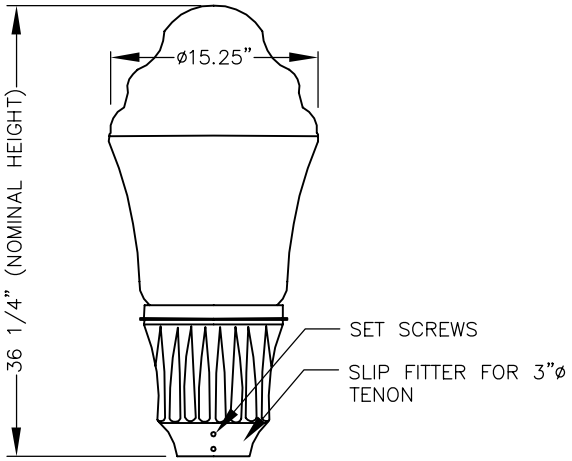
DIMENSIONS
THE POST SHALL BE 12'–0" IN HEIGHT WITH A ø17" BASE. THE SHAFT DIAMETER SHALL BE 5". AT THE TOP OF THE POST, AN INTEGRAL ø3"X5" TENON WITH A TRANSITIONAL DONUT SHALL BE PROVIDED FOR LUMINAIRE.

INSTALLATION
THE POST SHALL USE FOUR, HOT DIP GALVANIZED L–TYPE ANCHOR BOLTS TO BE INSTALLED ON A 12" DIAMETER BOLT CIRCLE. A DOOR SHALL BE PROVIDED IN THE BASE FOR WIRING ACCESS. A GROUNDING SCREW SHALL BE PROVIDED INSIDE THE BASE OPPOSITE THE DOOR.

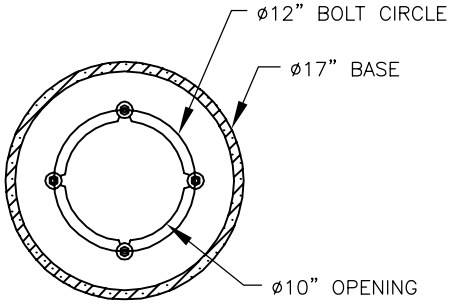
FINISH
THE ENTIRE POST ASSEMBLY SHALL BE STANDARD HOLOPHANE BLACK.

LUMINAIRE
LUMINAIRE SHALL BE GRANVILLE PREMIER II LED 2 SERIES

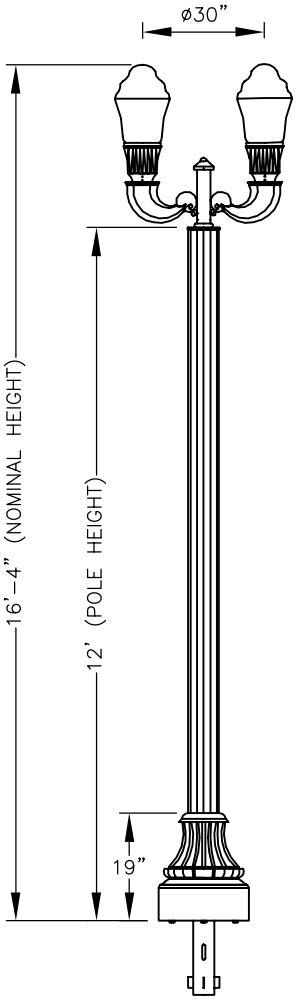
DECORATIVE POSTS AND FIXTURES SHALL BE MANUFACTURED BY:
HOLOPHANE
214 OAKWOOD AVENUE
NEWARK, OHIO 43055



LUMINAIRE DETAIL
HOLOPHANE CATALOG #:
GPD2 SERIES



ANCHORAGE DETAIL
DO NOT USE TO SET ANCHOR BOLTS
CONTACT HOLOPHANE FOR TEMPLATE



DECORATIVE POLE DETAIL
HOLOPHANE CATALOG #'S
POLE: WDA12F5J17P17DBBBK
ARM: LV30/2T3CABKH RFD47946

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	12' DECORATIVE LIGHTING POST

2/29/20

STD. NO.	REV.
50.22A	4

SPECIFICATIONS

POST DESCRIPTION
THE LIGHTING POST SHALL BE ALL ALUMINUM CONSTRUCTION WITH A DECORATIVE FLUTED CAST ALUMINUM BASE. THE PATENTED SITELINK SHAFT PROFILE SHALL CONSIST OF FOUR MOUNTING TRACKS AND CHANNELS. THE POST SHALL BE PROVIDED WITH (1) POST–TOP MEDIUM BALL FINIAL–GOLD FINISH, (1) SL SIDE–MOUNTED BOSTON HARBOR 96" ROADWAY ARM, (2) SL SIDE–MOUNTED LOVELAND CROSSARMS, (3) GASKET AND GROMMET KITS.

MATERIALS
THE BASE AND FLUTED TAPERED CAST SHAFT SHALL BE HEAVY WALL, CAST ALUMINUM PRODUCED FROM CERTIFIED ASTM 356.1 INGOT PER ASTM B–179–95A OR ASTM B26–95. THE STRAIGHT SHAFTS SHALL BE EXTRUDED FROM ALUMINUM, ASTM 6061 ALLOY. ALL HARDWARE SHALL BE STAINLESS STEEL. ANCHOR BOLTS TO BE COMPLETELY HOT DIP GALVANIZED.

CONSTRUCTION
THE SHAFT SHALL BE DOUBLE WELDED TO THE BASE CASTING AND SHIPPED AS ONE PIECE FOR MAXIMUM STRUCTURAL INTEGRITY. THE SHAFT SHALL BE WELDED INSIDE THE BASE CASTING AT THE TOP OF THE ACCESS DOOR, AND EXTERNALLY WHERE THE SHAFT EXITS THE BASE. ALL WELDING SHALL BE PER ANSI/AWS.

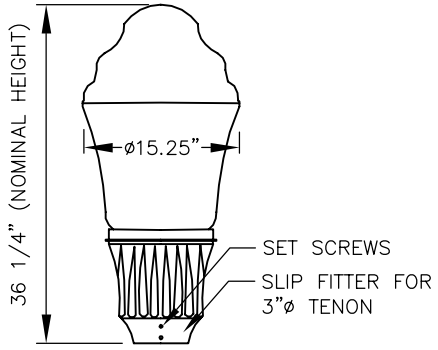
DIMENSIONS
THE POST SHALL BE 30'–0" IN HEIGHT WITH A 17" DIAMETER BASE. THE SHAFT DIAMETER SHALL BE 5.25". AT THE TOP OF THE POST, A INTEGRAL ø3"X3" TENON WITH A TRANSITIONAL DONUT AND MODIFIED PLATE FOR MOUNTING THE BRF FINIAL.

INSTALLATION
THE POST SHALL BE PROVIDED WITH FOUR, HOT DIP GALVANIZED L–TYPE ANCHOR BOLTS TO BE INSTALLED ON A 12" DIAMETER BOLT CIRCLE. A DOOR SHALL BE PROVIDED IN BASE FOR ANCHORAGE AND WIRING ACCESS. A GROUNDING SCREW SHALL BE PROVIDED INSIDE THE BASE OPPOSITE THE DOOR.

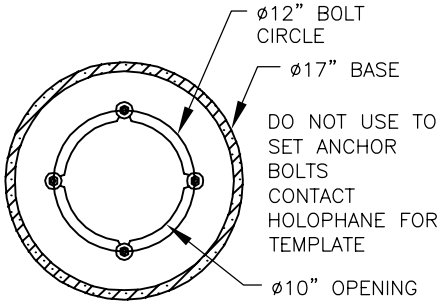
FINISH
THE ENTIRE ASSEMBLY SHALL HAVE A STANDARD HOLOPHANE BLACK FINISH.

LUMINAIRE
AUTOBAHN LED ROADWAY – LARGE SERIES
GRANVILLE PREMIER II LED 2 SERIES

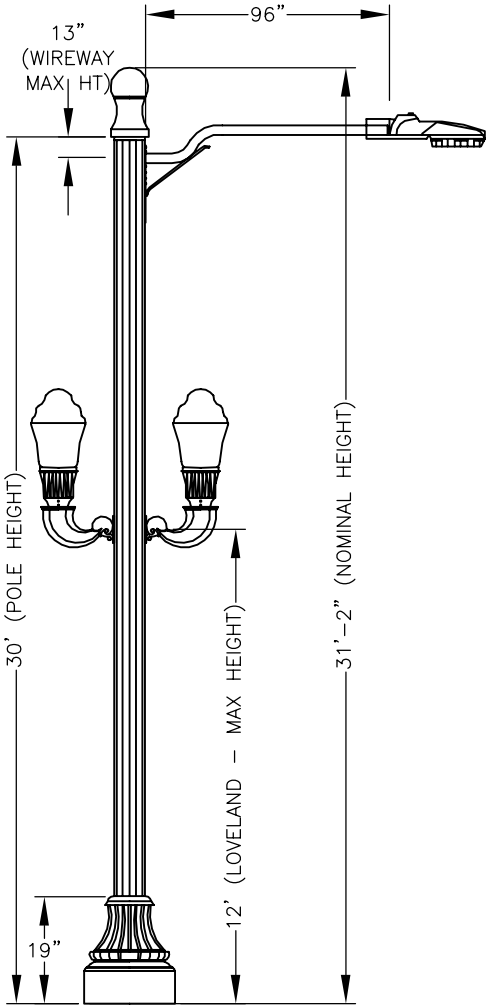
DECORATIVE POSTS AND FIXTURES
SHALL BE MANUFACTURED BY:
HOLOPHANE
214 OAKWOOD AVENUE
NEWARK, OHIO 43055



LUMINAIRE DETAIL
HOLOPHANE CATALOG#:
GPD2 SERIES



ANCHORAGE DETAIL



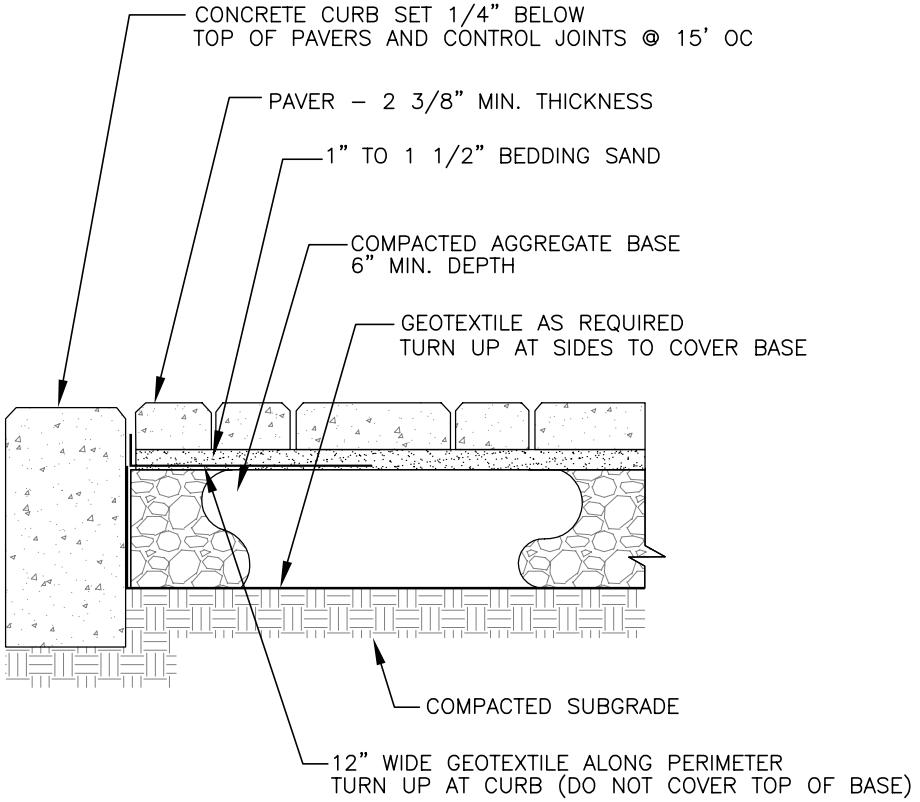
DECORATIVE POLE DETAIL

HOLOPHANE CATALOG #'S
POLE: WDA30L6J17P07-MODBK-(3)KXXXY RFD280401
ANCHOR BOLTS: AB-27-4
POST TOP FINIAL: BRFGLH RFD280401
ROADWAY ARM: SLBHC96/1LSBOL68BKH RFD280401
MID-POST ARM: (2)SLLVBO(3T3)L68BKH RFD280401
GASKET/BROMETT KITS: (3)SLGAGMKIT
FIXTURE: MGLED44KASWLHPKPCL1P7US
FIXTURE: (2)GPD2P2040KASMBK5NNUHPCS

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	30' DECORATIVE LIGHTING POST

2/29/20

STD. NO.	REV.
50.22B	4



NOTES:

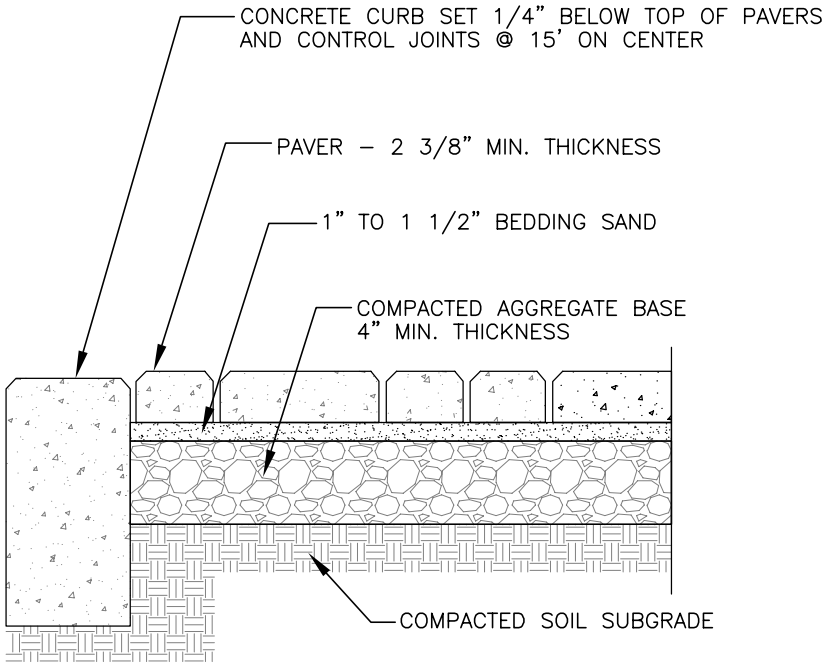
1. THICKNESS OF AGGREGATE BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE.
2. PAVERS SHOULD BE PLACED ON A CEMENT TREATED BASE IF SOIL IS EXTREMELY WEAK OR CONSTANTLY SATURATED. PAVERS CAN BE OVERLAID OR INLAID ON EXISTING ASPHALT OR CONCRETE DRIVEWAYS.
3. PLASTIC, STEEL, ALUMINUM OR PRECAST CONCRETE EDGING MAY BE USED.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	RESIDENTIAL DRIVEWAY WITH CONCRETE EDGES

REV.	DATE

STD. NO.	REV.
60.01	



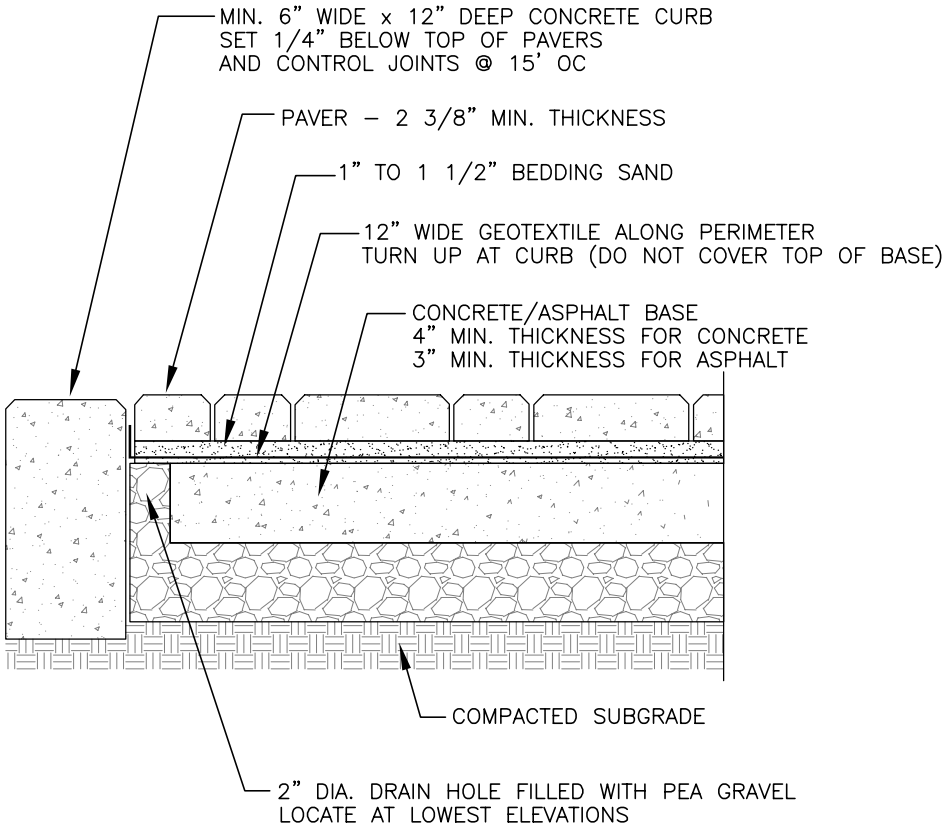
NOTE:

1. THICKNESS OF BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	PATIO/SIDEWALK/PLAZA ON COMPACTED AGGREGATE

REV. DATE	
STD. NO.	REV.
60.02	



NOTE:

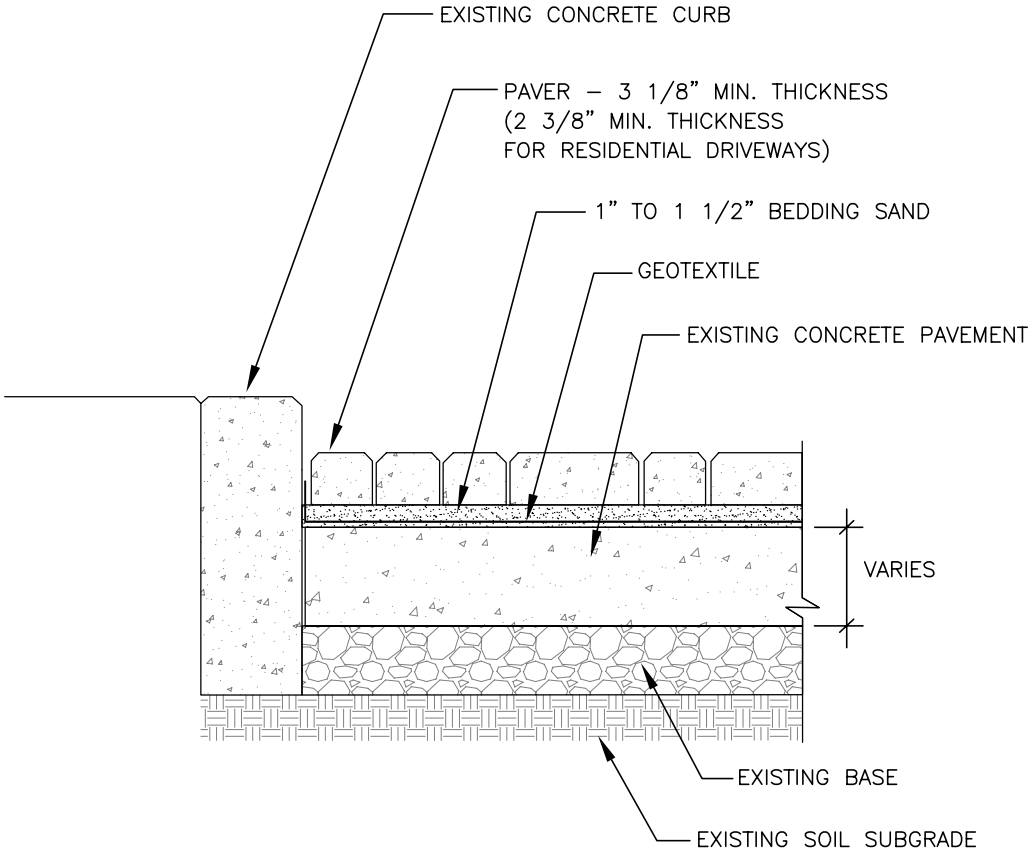
1. THICKNESS OF AGGREGATE BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	PATIO/SIDEWALK/PLAZA ON CONCRETE BASE

REV.	DATE

STD. NO.	REV.
60.03	



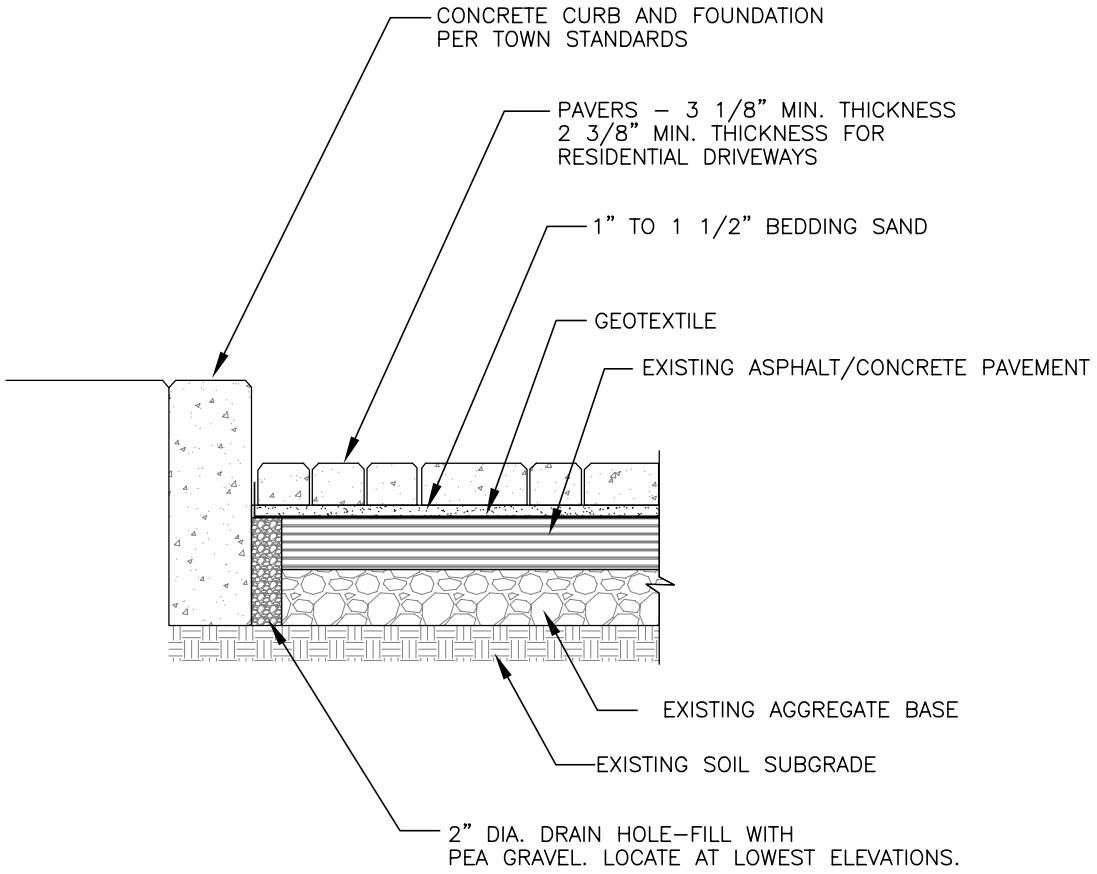
NOTE:

1. DRAIN BEDDING SAND OF EXCESS MOISTURE THROUGH PAVEMENT AT LOWEST POINT OR AT CATCH BASIN.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	STREET/PARKING LOT/RESIDENTIAL DRIVEWAY OVERLAY ON EXISTING CONCRETE PAVEMENT

REV. DATE	
STD. NO.	REV.
60.04	

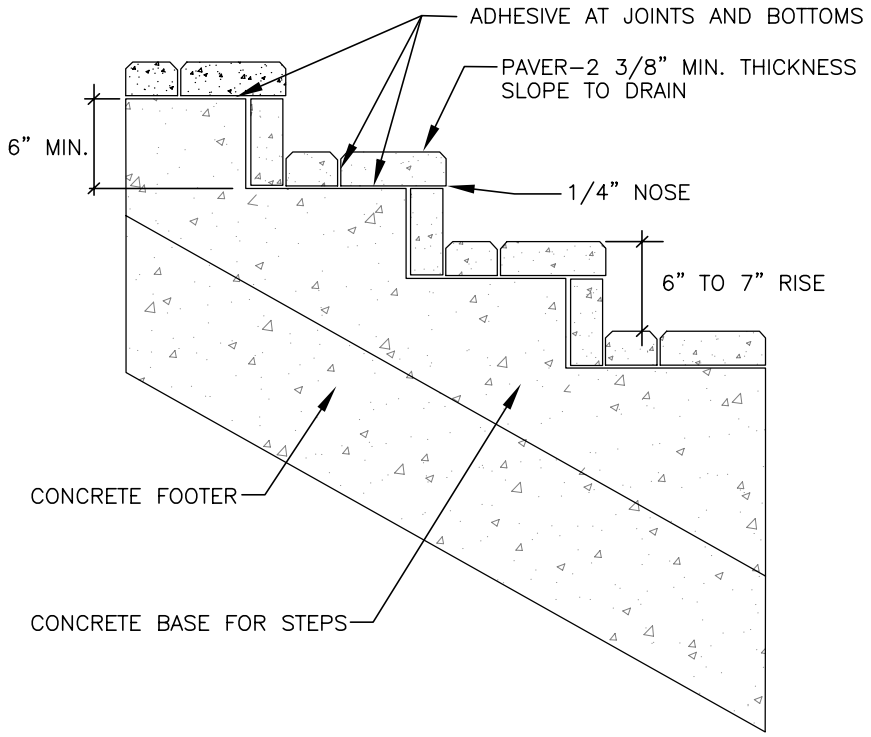


NOTE:

1. DRAIN BEDDING SAND OF EXCESSIVE MOISTURE THROUGH PAVEMENT AT LOWEST POINTS AS SHOWN OR AT CATCH BASINS.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	STREET/PARKING LOT/RESIDENTIAL DRIVEWAY OVERLAY ON EXISTING ASPHALT PAVEMENT	REV. DATE STD. NO. 60.05 REV.



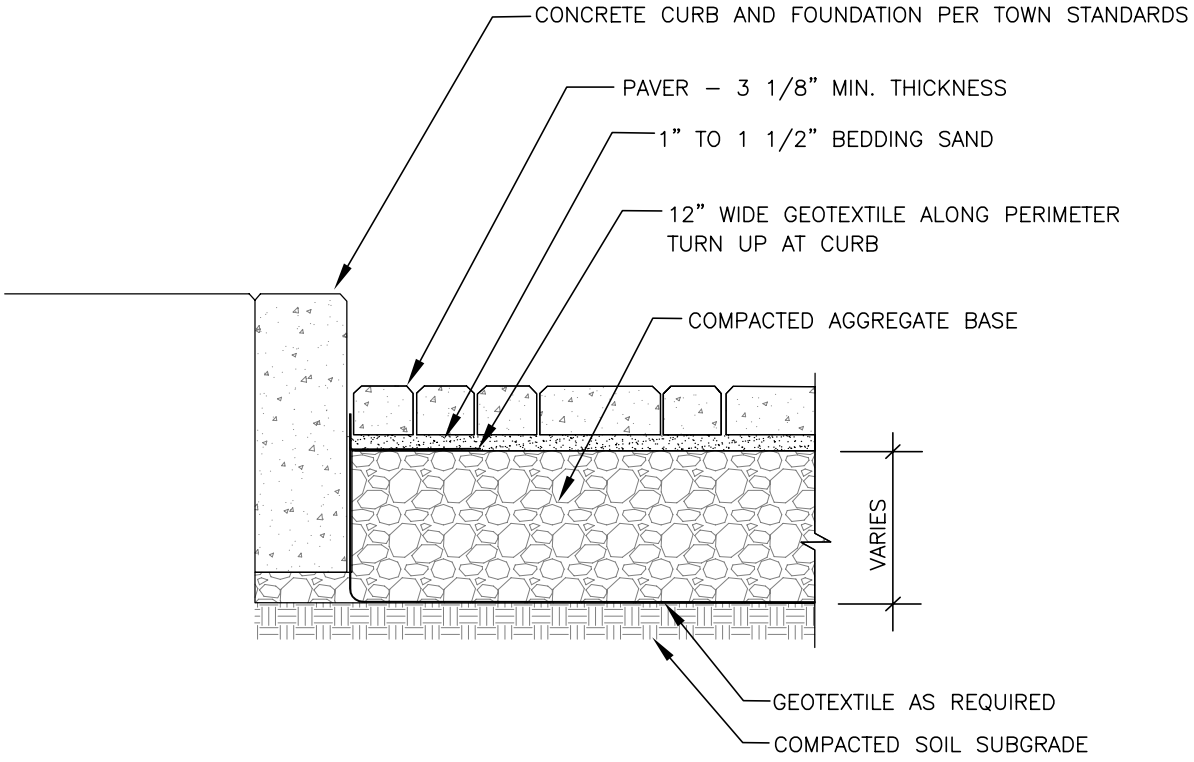
NOTE:

1. USE OF MORTAR IS NOT RECOMMENDED IN PLACE OF ADHESIVE.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	STEPS WITH PAVERS

REV. DATE	
STD. NO.	REV.
60.08	



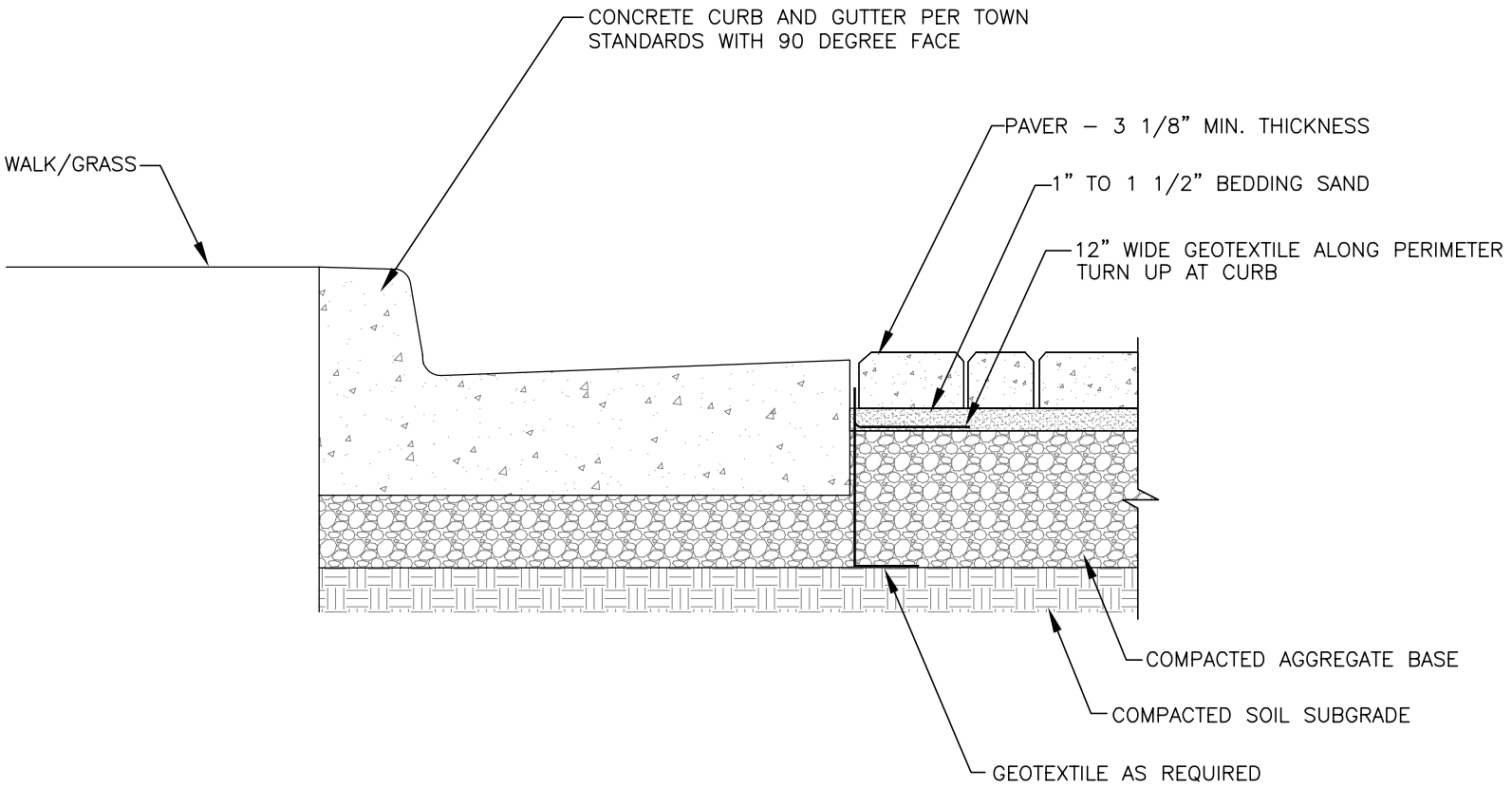
NOTES:

1. DRAIN MAY BE NECESSARY IN SLOW DRAINING SUBGRADE.
2. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE AND SUBGRADE CONDITIONS. COLDER CLIMATES AND WEAK SOILS MAY REQUIRE THICKER BASES.
3. DO NOT COVER ENTIRE TOP OF AGGREGATE BASE WITH GEOTEXTILE.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	STREET/PARKING LOT ON COMPACTED GRAVEL BASE

REV. DATE	
STD. NO.	REV.
60.09	



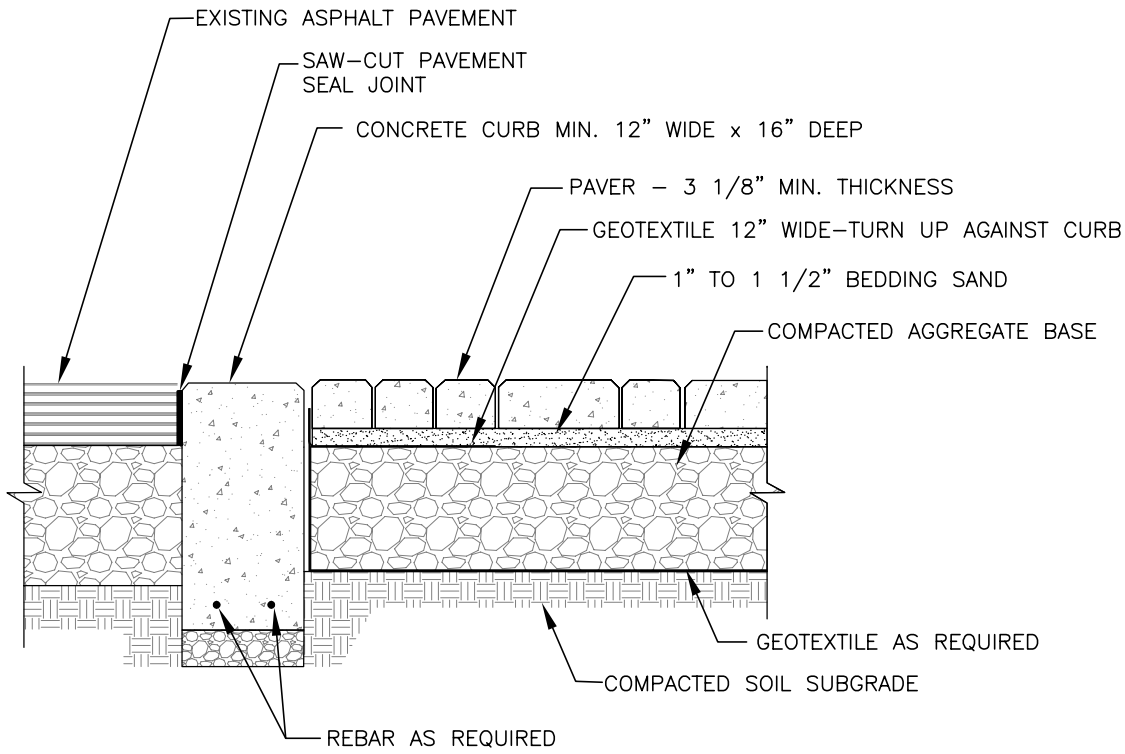
NOTE:

1. DRAIN MAY BE NECESSARY IN SOIL SUBGRADE.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CONCRETE CURB AND GUTTER WITH PAVERS

REV. DATE	
STD. NO.	REV.
60.10	



NOTES:

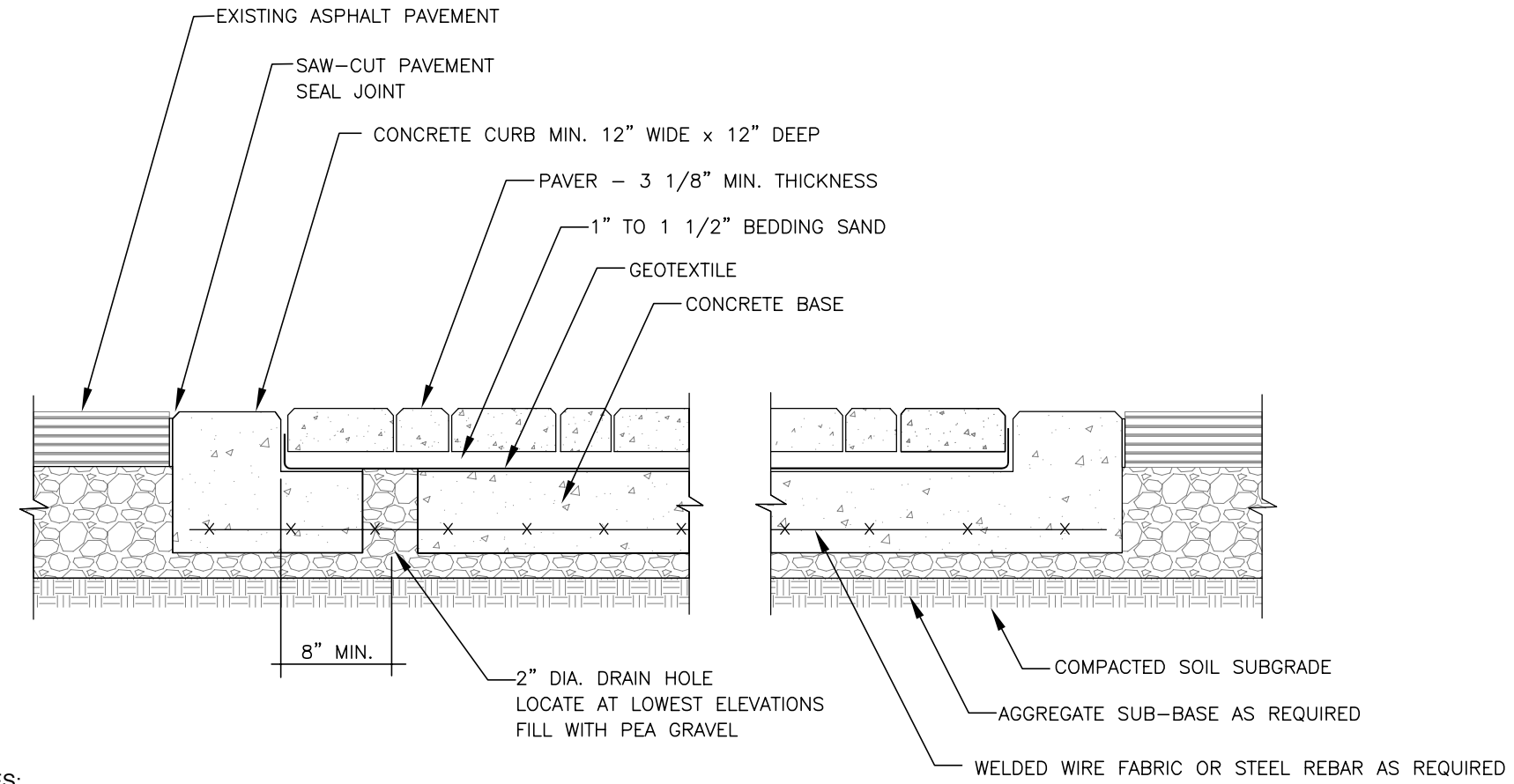
1. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE AND SUBGRADE CONDITIONS.
2. CONCRETE CURBS DO NOT DEFLECT TO THE SAME DEPTH AS PAVERS OR EXISTING ASPHALT. THIS DETAIL IS NOT RECOMMENDED FOR OTHER THAN LOW VOLUME RESIDENTIAL STREETS.
3. THICKENING ASPHALT PAVEMENT ADJACENT TO CONCRETE CURB IS RECOMMENDED.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CROSSWALK ON COMPACTED AGGREGATE BASE

REV.	DATE

STD. NO.	REV.
60.11	



NOTES:

1. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE AND SUBGRADE CONDITIONS.
2. CONCRETE BASE MINIMUM 2% SLOPE FROM CENTERLINE TO CURB.
3. DO NOT USE DRAIN HOLES TO SUBGRADE WHEN WATER TABLE IS LESS THAN 2' FROM TOP OF SUBGRADE. DRAIN TO CATCH BASINS.

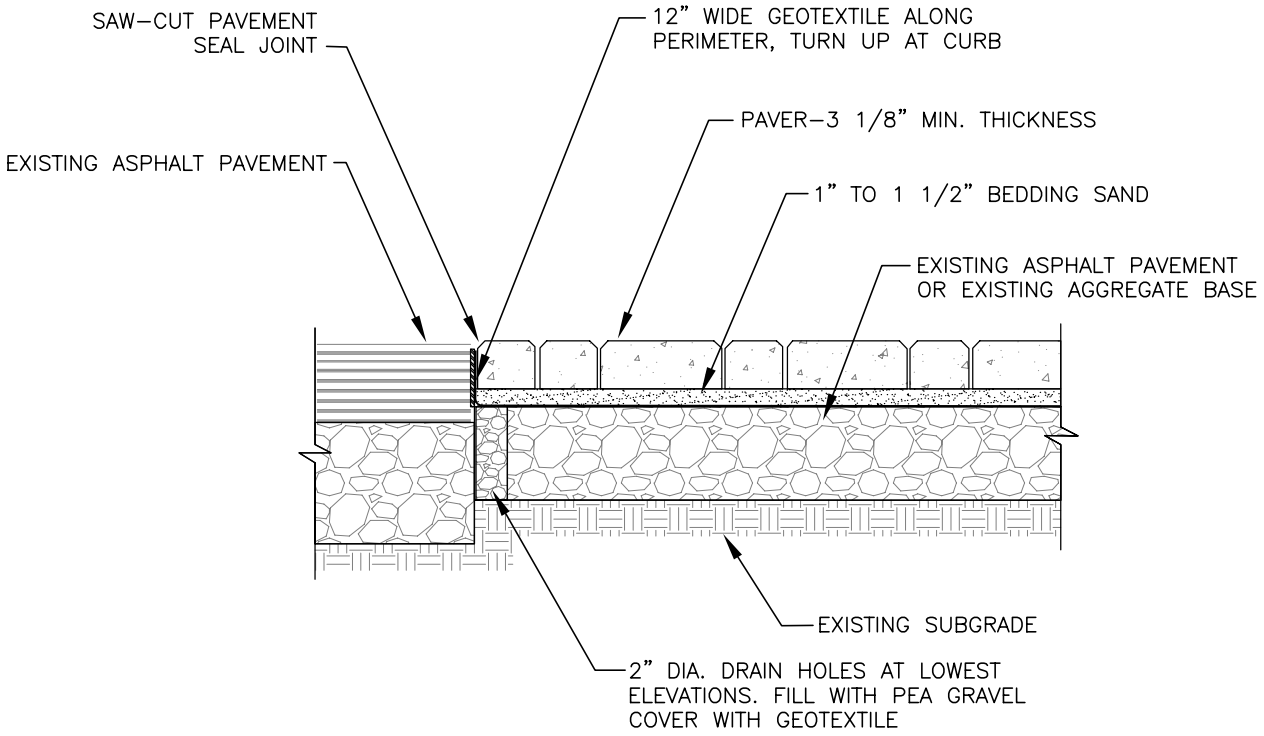
NOT TO SCALE

Pineville NORTH CAROLINA

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

CROSSWALK ON CONCRETE BASE

REV. DATE	
STD. NO.	REV.
60.12	



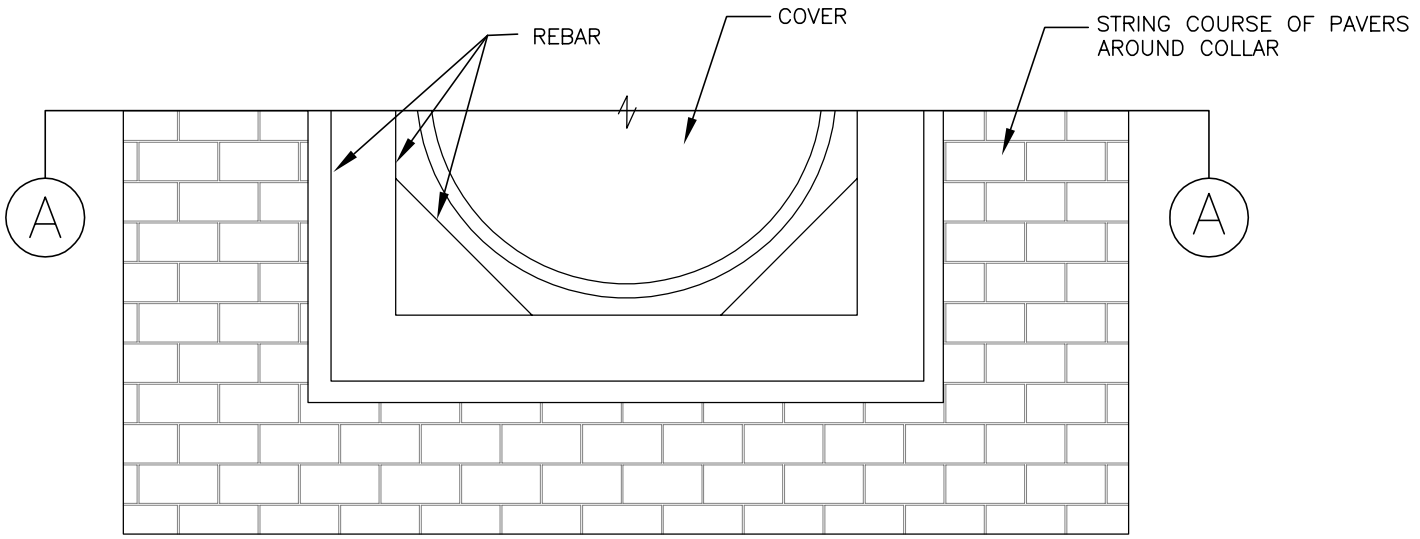
NOTES:

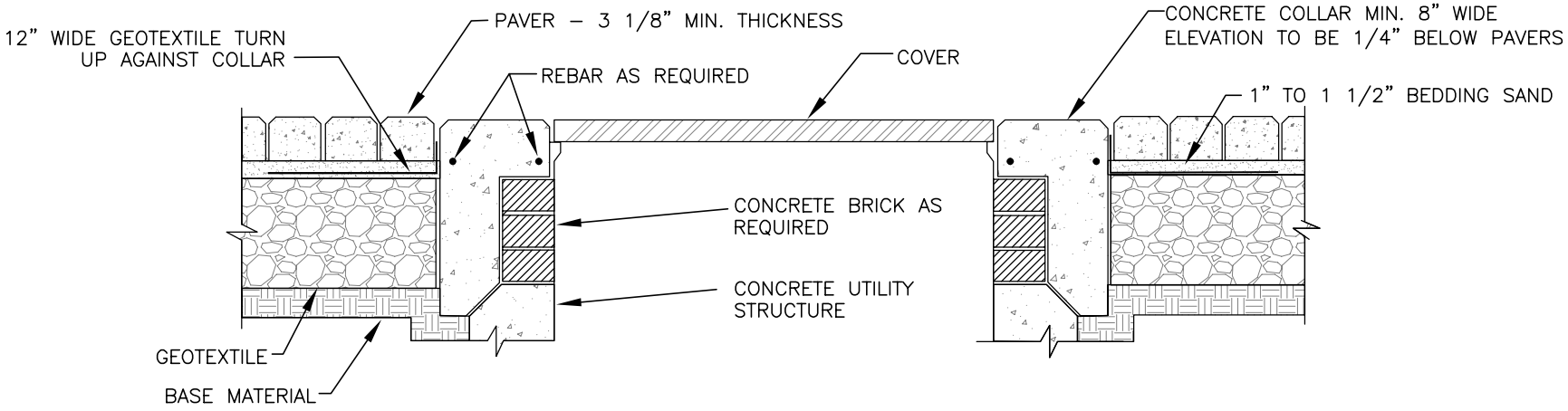
1. BASE THICKNESS VARIES W/TRAFFIC, CLIMATE AND SUBGRADE.
2. BOTTOM ELEVATION OF EXISTING ASPHALT PAVEMENT MUST BE EVEN WITH OR BELOW BEDDING SAND.
3. CONCRETE BEAMS AT ENDS OF PAVEMENT MAY BE NECESSARY IF ASPHALT IS SUBJECT TO RUTTING.
4. DO NOT USE DRAIN HOLES TO SUBGRADE WHEN WATER TABLE IS LESS THAN 2' FROM TOP OF SUBGRADE. DRAIN TO CATCH BASINS.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CROSSWALK ON ASPHALT OR CEMENT TREATED BASE

REV. DATE	
STD. NO.	REV.
60.13	



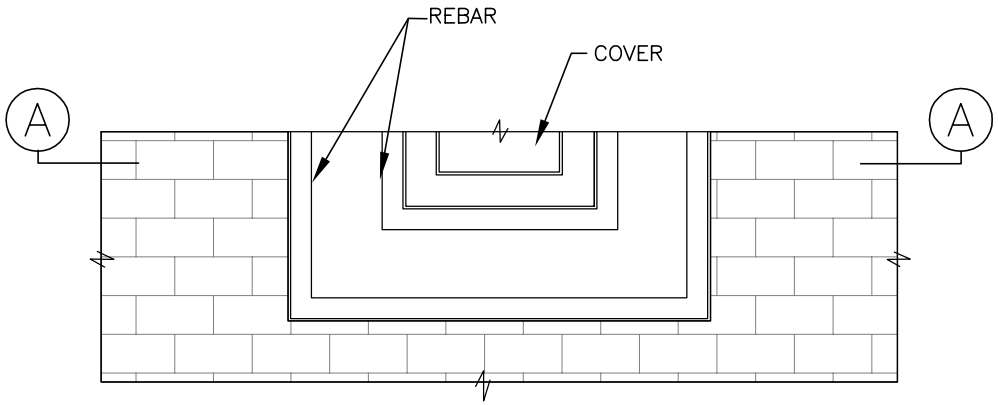


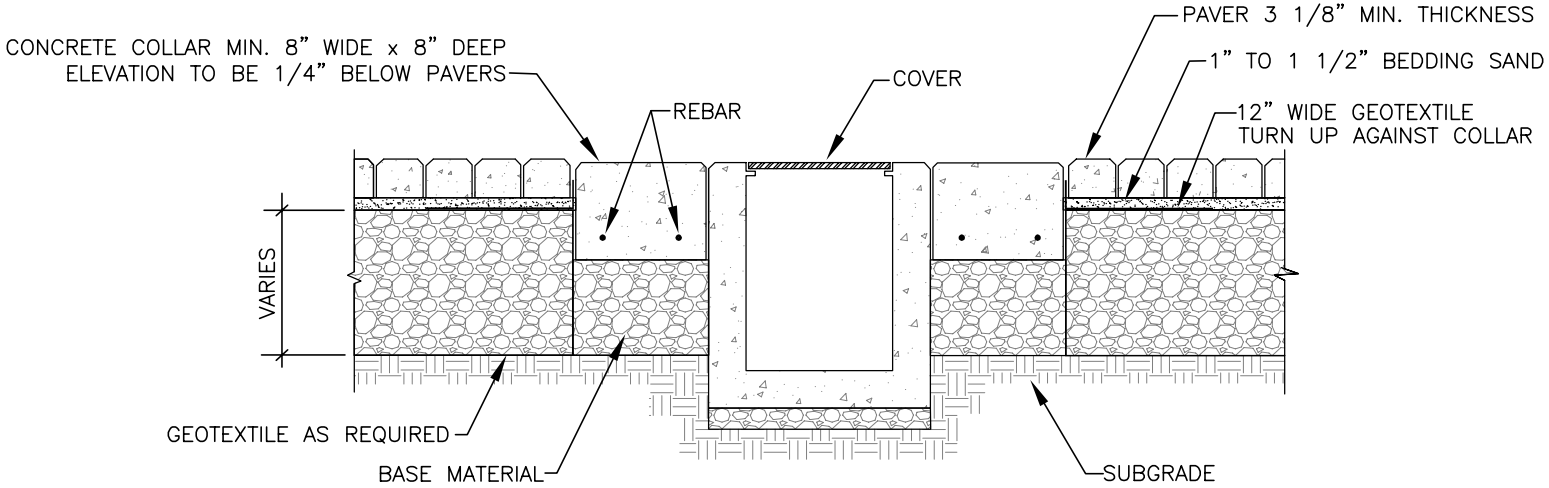
SECTION A-A

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	UTILITY STRUCTURE

REV. DATE	
STD. NO.	REV.
60.14	



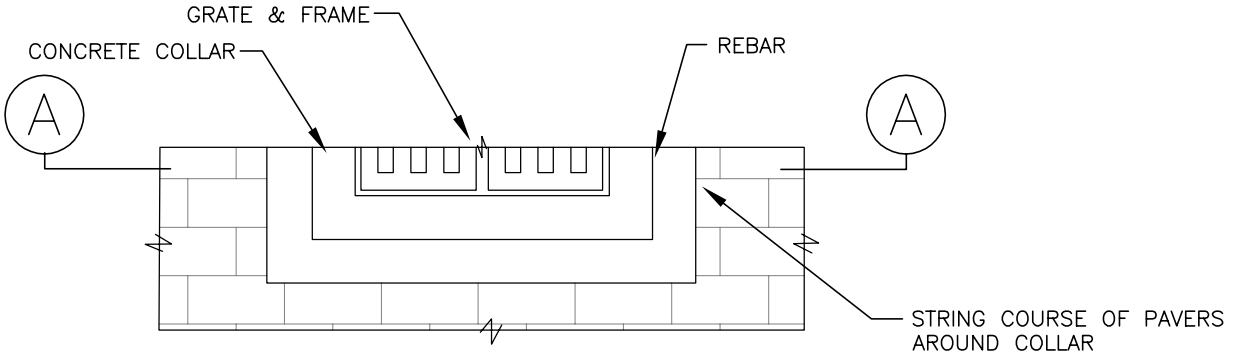


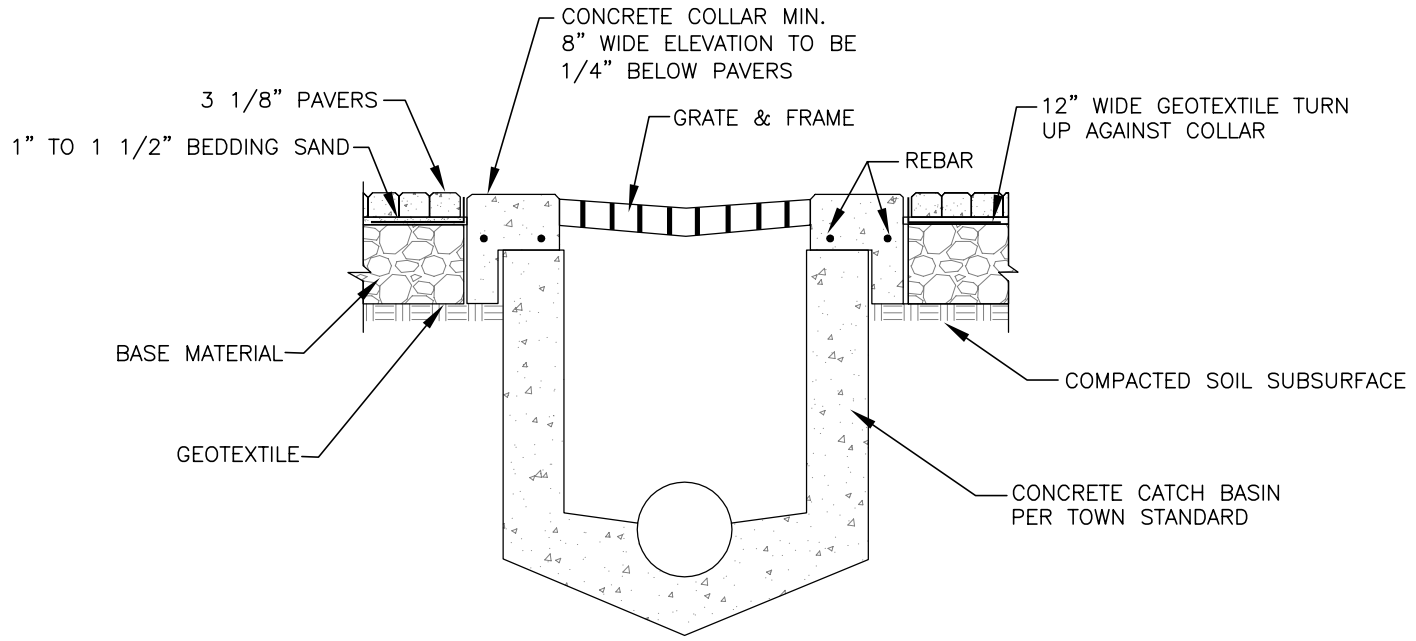
SECTION A-A

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	UTILITY STRUCTURE VALVE BOX/PULL BOX/LAMPHOLE

REV. DATE	
STD. NO.	REV.
60.15	





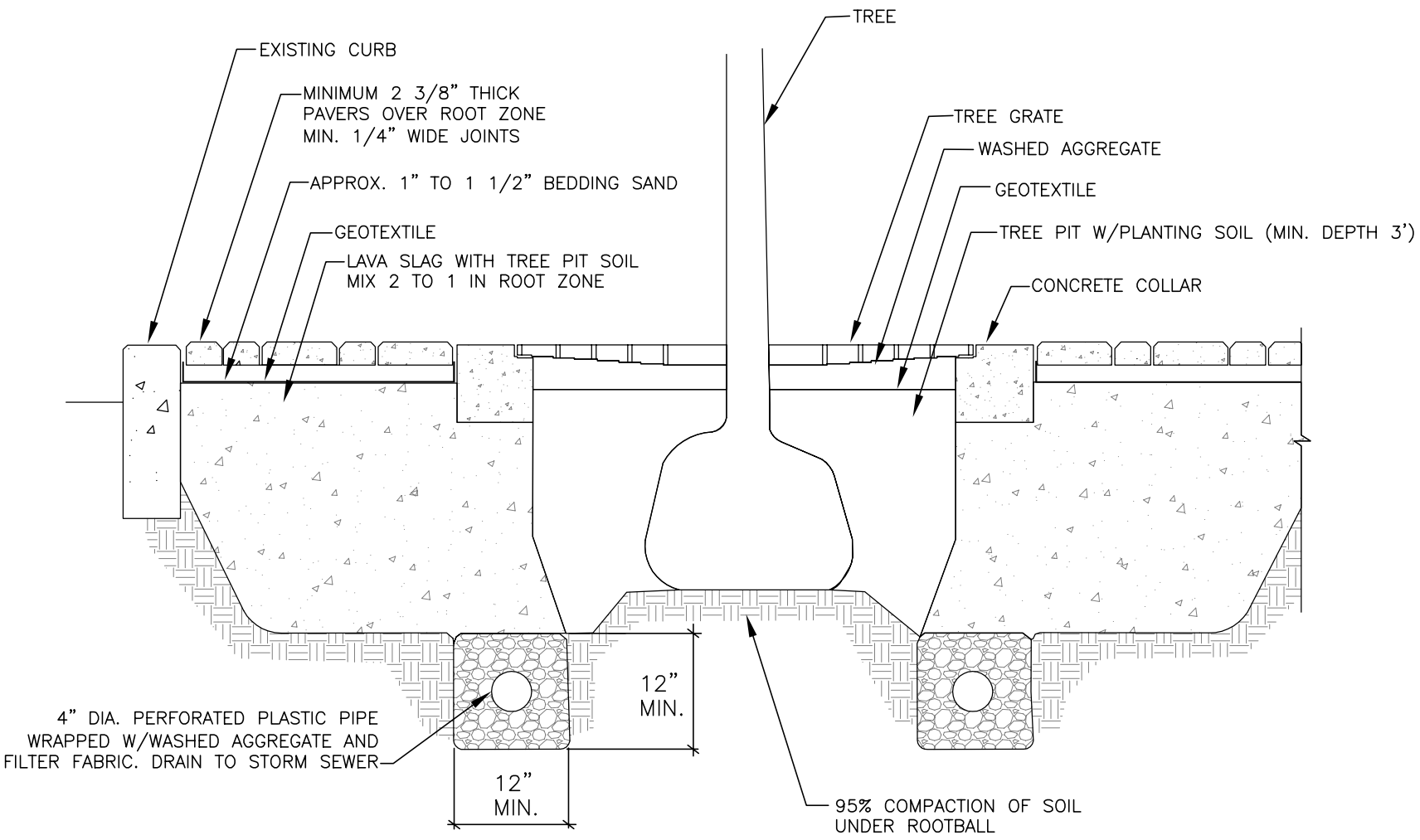
NOTE: SIZE AND REINFORCING OF CONCRETE VARIES WITH TRAFFIC.

SECTION A-A

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	CATCH BASIN

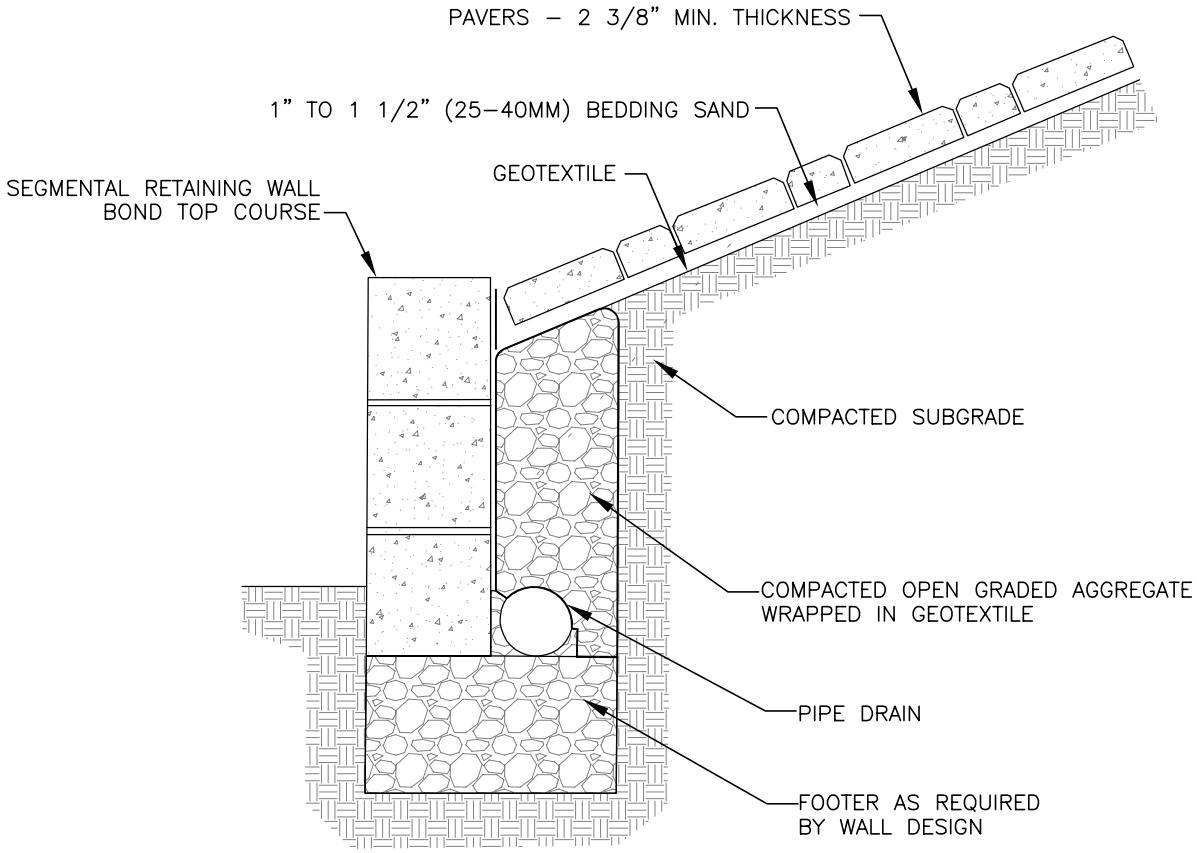
REV. DATE	
STD. NO.	REV.
60.16	



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	TREE PIT - NON-COMPACTED ROOT ZONE UNDER PAVERS

REV. DATE	
8/1/19	
STD. NO.	REV.
60.17	3

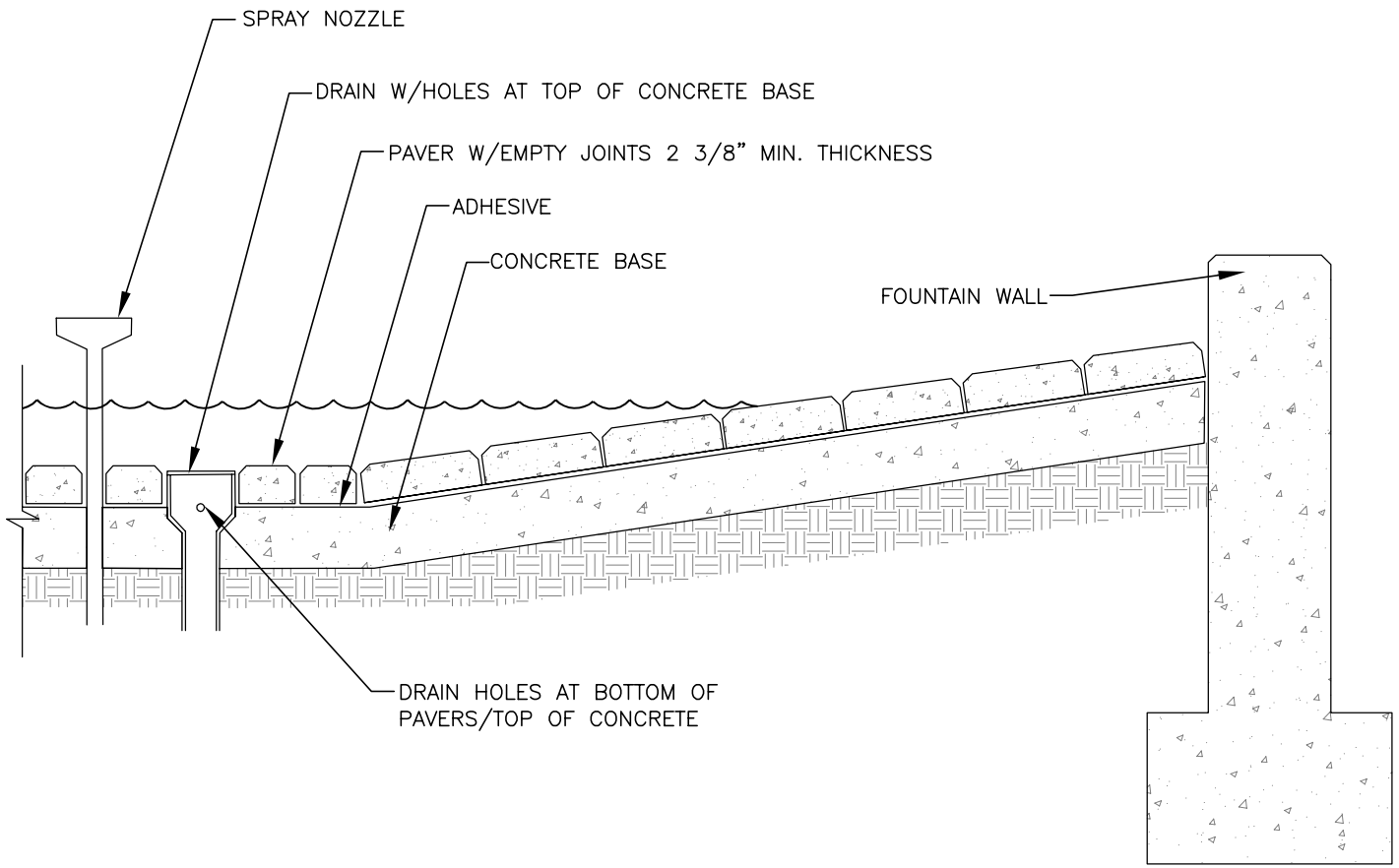


NOTES:

1. MAXIMUM SLOPE SHOULD NOT EXCEED ANGLE OF REPOSE FOR BEDDING SAND.
2. PROVIDE EDGE RESTRAINTS ON SIDES OF INSTALLATION. ENGINEERING OF THE SEGMENTAL RETAINING WALL IS REQUIRED WHEN HEIGHT EXCEEDS 4'.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SLOPE PROTECTION PAVERS	REV. DATE STD. NO. 60.18 / REV.



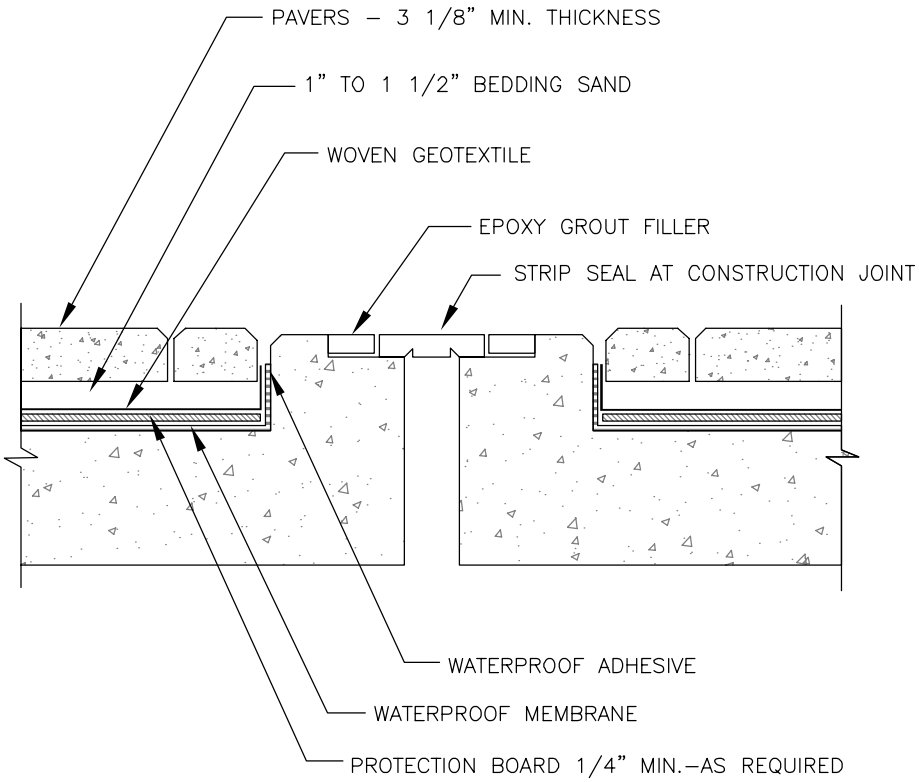
NOTE:

1. PAVERS CAN BE LAID WITHOUT ADHESIVE.

NOT TO SCALE

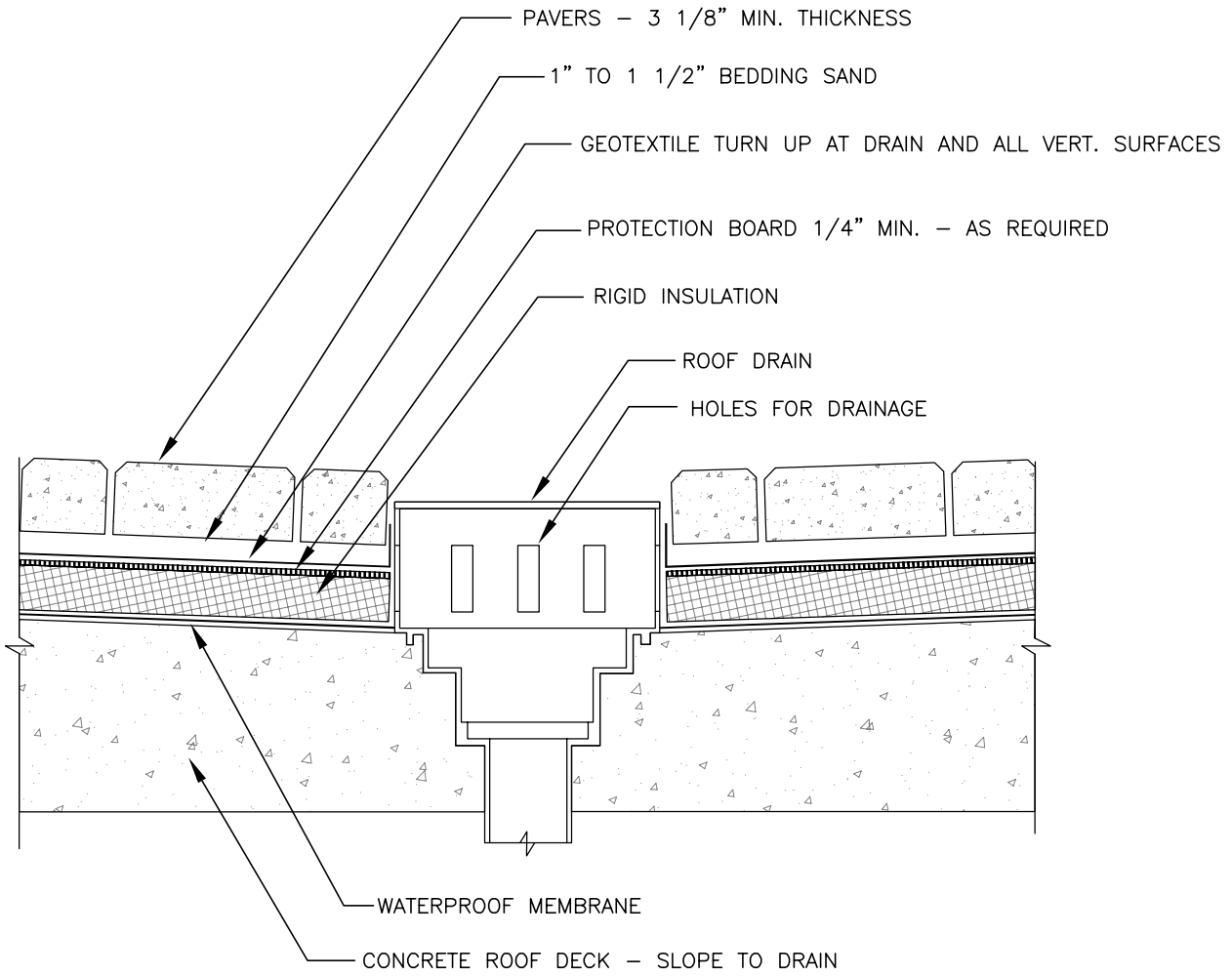
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	FOUNTAIN

REV. DATE	
STD. NO.	REV.
60.19	



NOT TO SCALE

Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	PARKING GARAGE OVER UNINHABITED SPACE EXPANSION JOINT	REV. DATE STD. NO. 60.22 REV.

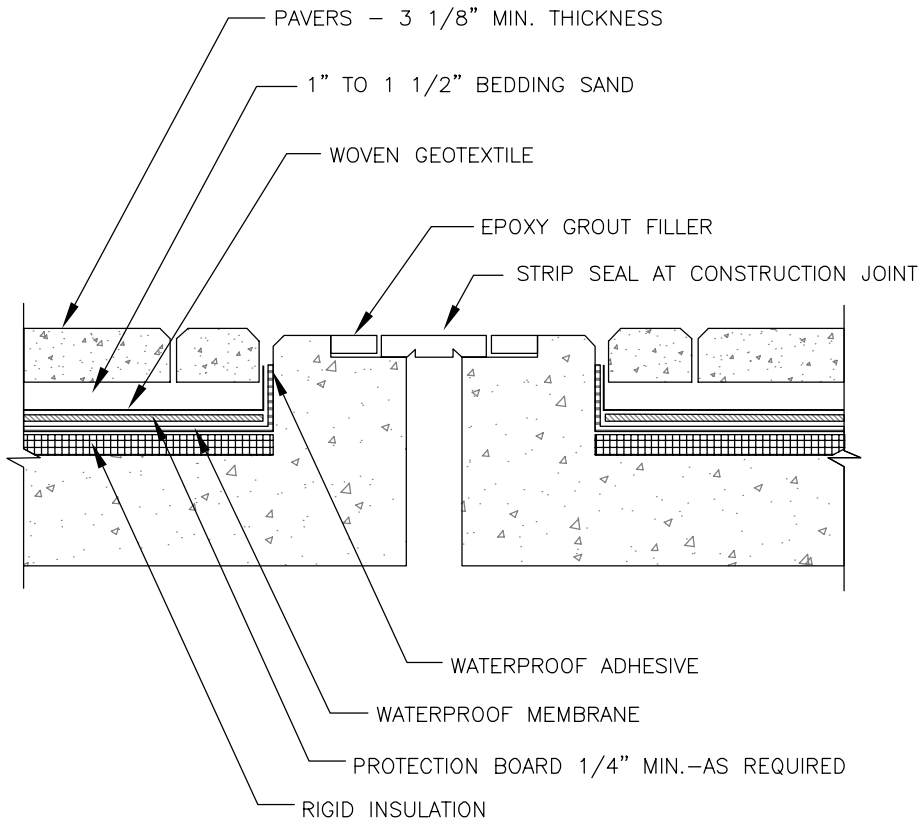


NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	PARKING GARAGE OVER INHABITED/ UNINHABITED SPACE - DRAIN

REV.	DATE

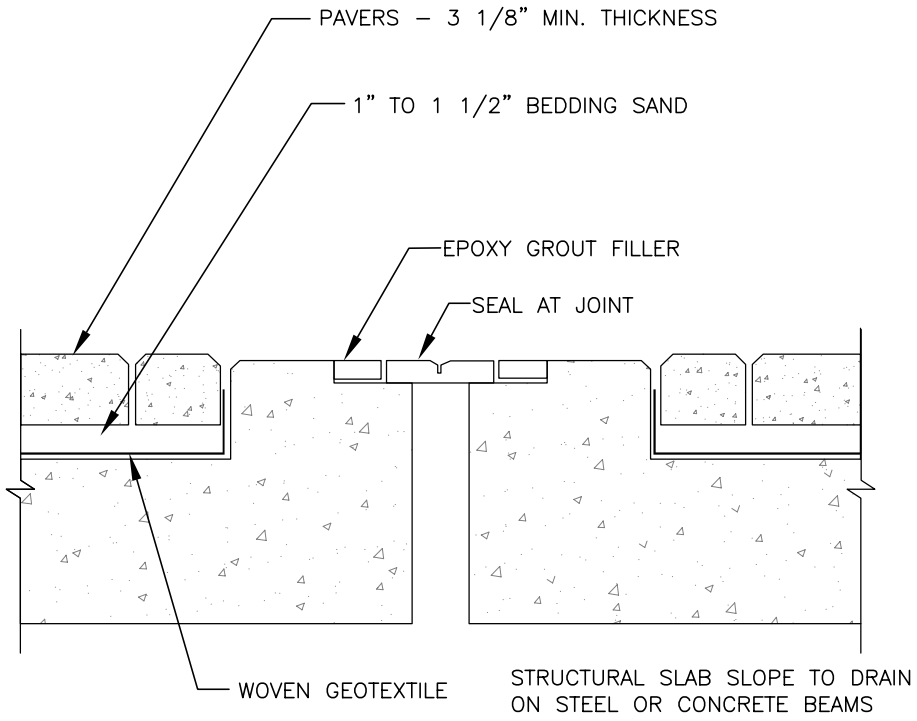
STD. NO.	REV.
60.23	



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	PARKING GARAGE OVER INHABITED SPACE EXPANSION JOINT

REV. DATE	
STD. NO.	REV.
60.24	



NOTE:

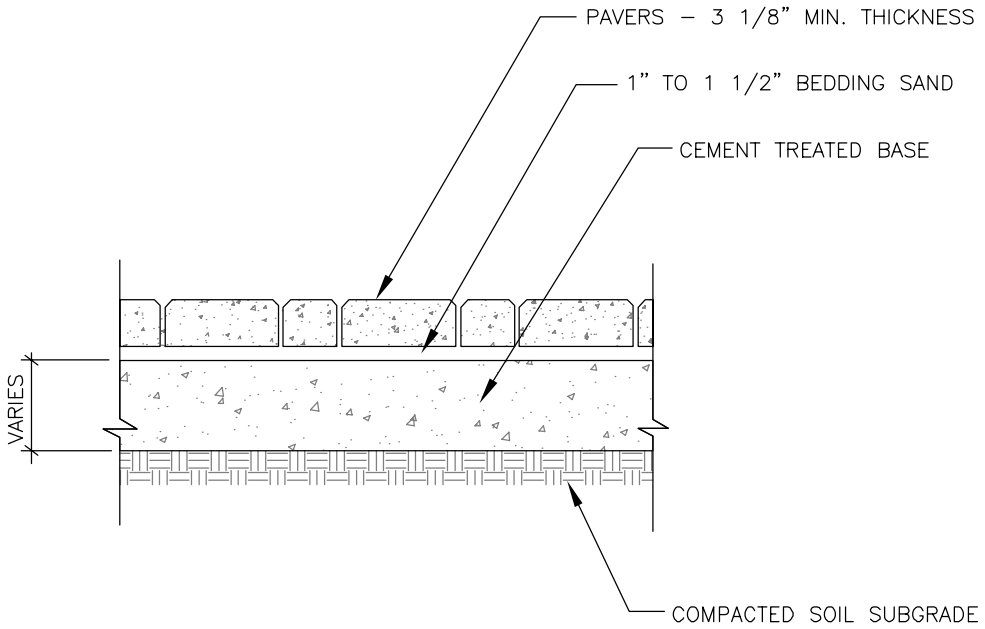
1. PROVIDE DRAINAGE OF EXCESS MOISTURE IN BEDDING SAND AT PERIMETER OF STRUCTURAL SLAB.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	BRIDGE DECK

REV.	DATE

STD. NO.	REV.
60.25	



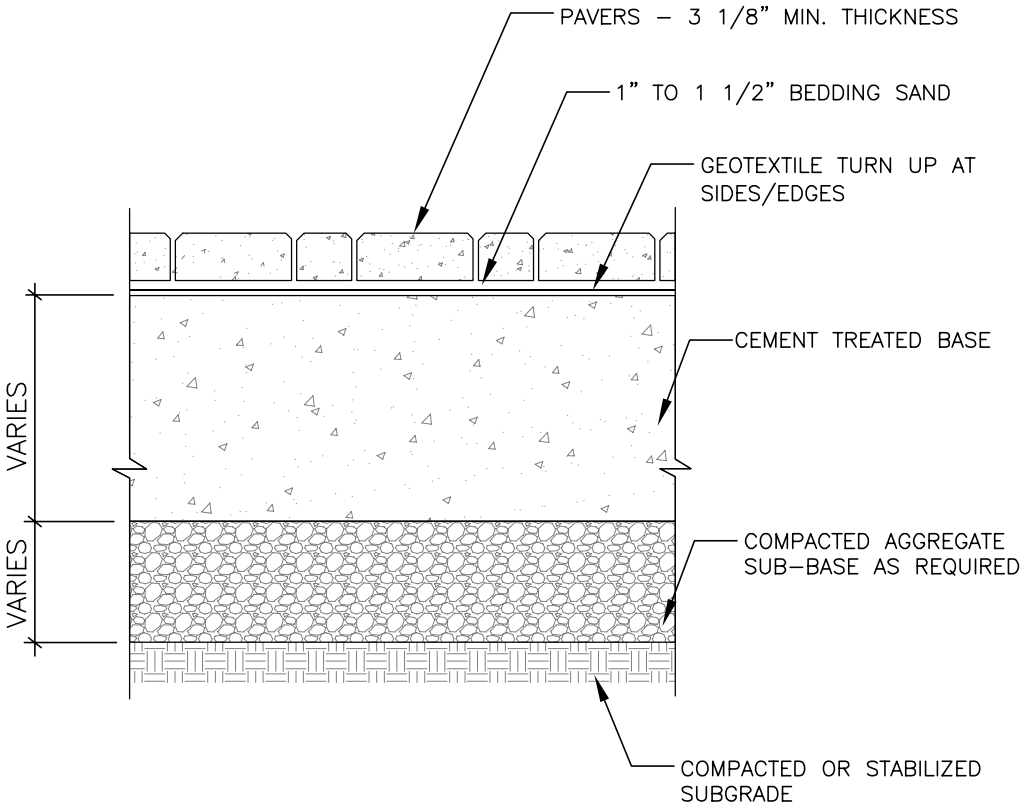
NOTES:

1. BASE, SUBBASE AND SUBGRADE THICKNESS VARY WITH LOADS, SUBGRADE STRENGTH AND CLIMATE.
2. PAVERS MAY BE INLAID ON EXISTING ASPHALT OR CONCRETE GAS STATION PAVEMENT.
3. SEALING JOINTS OF PAVERS IS RECOMMENDED.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	GAS STATION ON CEMENT TREATED BASE

REV. DATE	
STD. NO.	REV.
60.26	



NOTE:

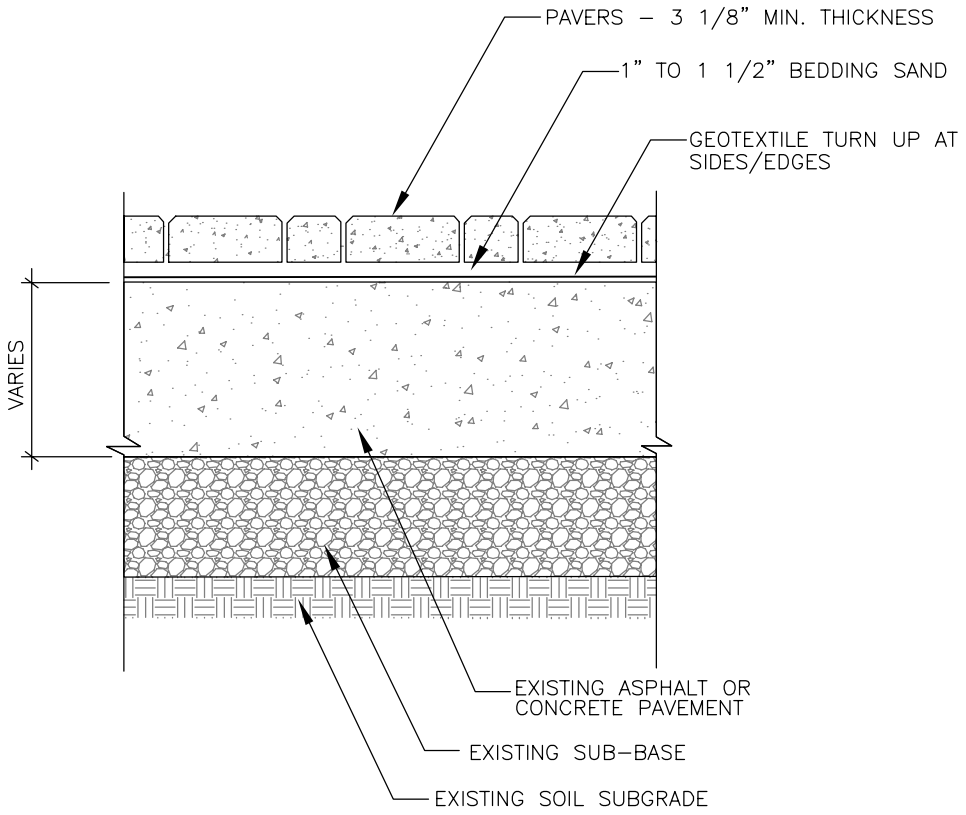
1. BASE, SUB–BASE, & SUBGRADE THICKNESS VARY WITH LOADS, SUBGRADE STRENGTH & CLIMATE.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	PORT/INDUSTRIAL/AIRFIELD PAVEMENT W/CEMENT TREATED BASE

REV.	DATE

STD. NO.	REV.
60.27	



NOTES:

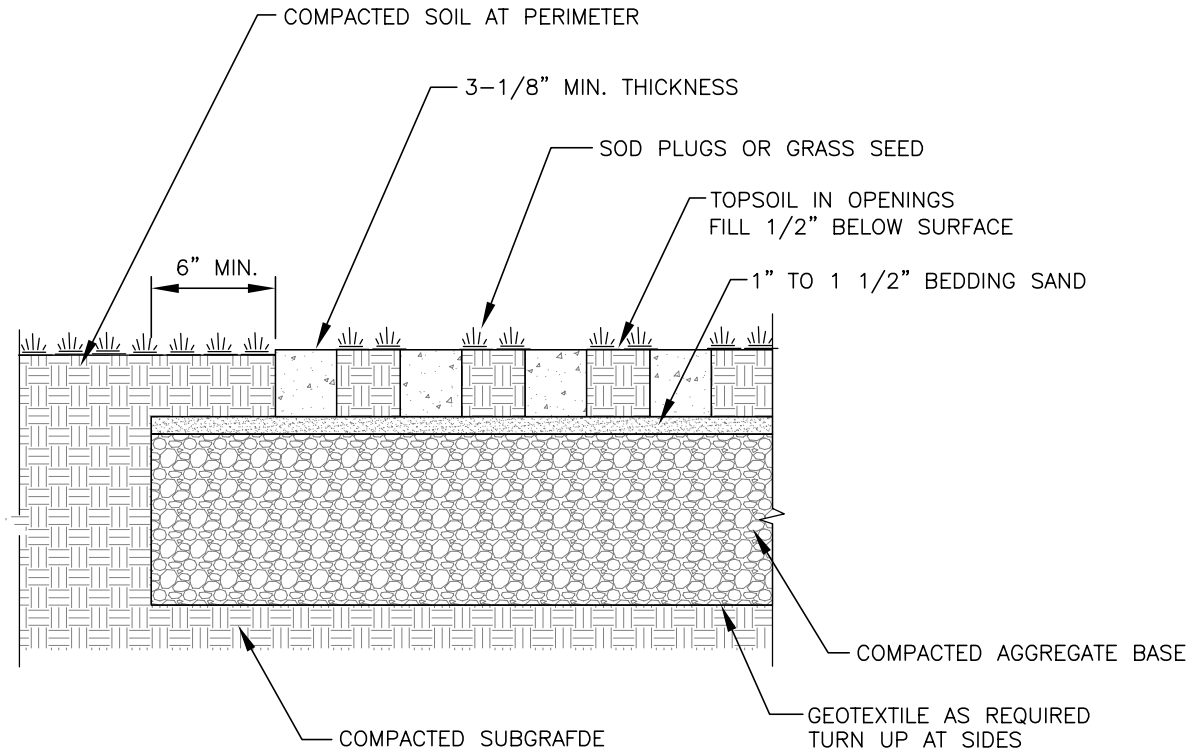
1. EXISTING ASPHALT OR CONCRETE PAVEMENT SHALL BE THOROUGHLY INSPECTED FOR AREAS IN NEED OF PATCHING OR REPLACEMENT. CONDUCT ALL REPAIRS AND FILL ALL CRACKS GREATER THAN 1/4" WIDE PRIOR TO PLACING GEOTEXTILE, SAND AND PAVERS.
2. PROVIDE DRAINAGE OF SAND LAYER THROUGH PEA GRAVEL–FILLED WEEP HOLES OR CATCH BASINS.

NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	PORT/INDUSTRIAL PAVEMENT ON EXISTING ASPHALT OR CONCRETE

REV.	DATE

STD. NO.	REV.
60.28	



NOTE:

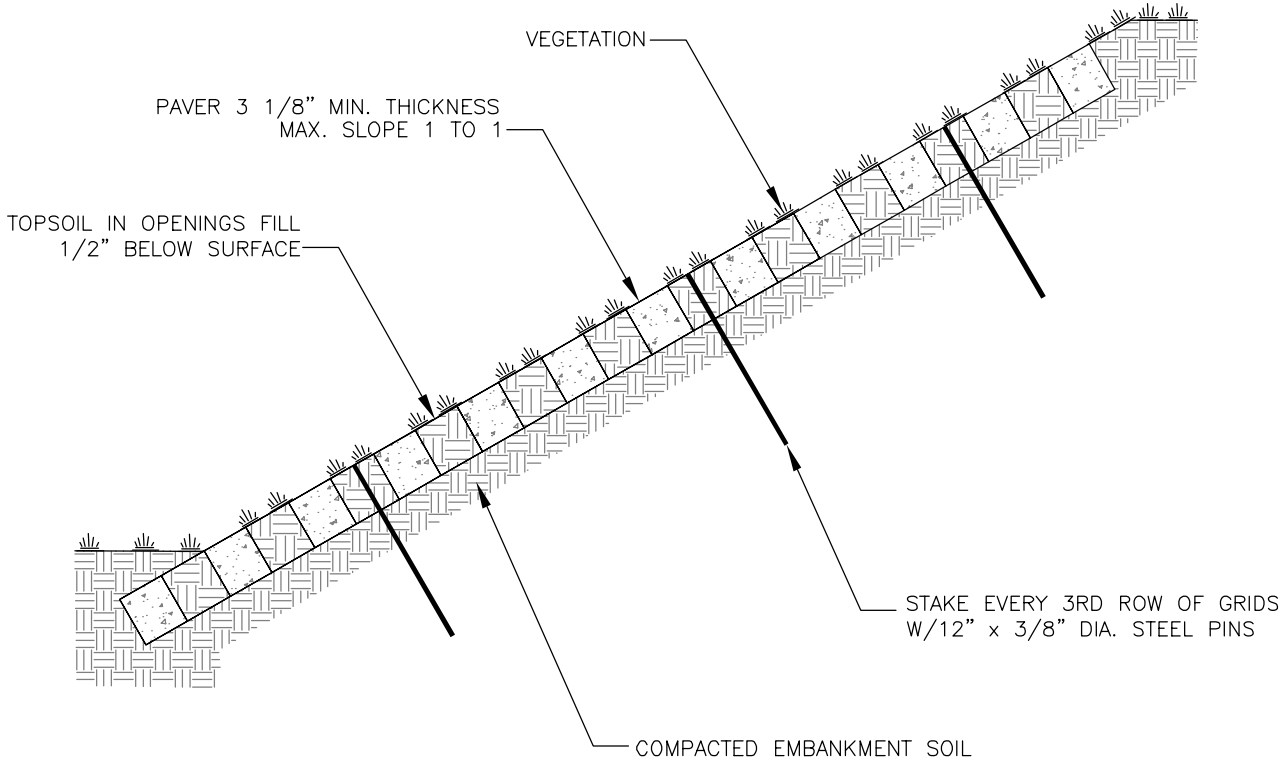
1. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE AND SUBGRADE.

2. MINIMUM BASE THICKNESS:
   6" RESIDENTIAL DRIVEWAYS
   8" FIRE LANES & PARKING LOTS

NOT TO SCALE

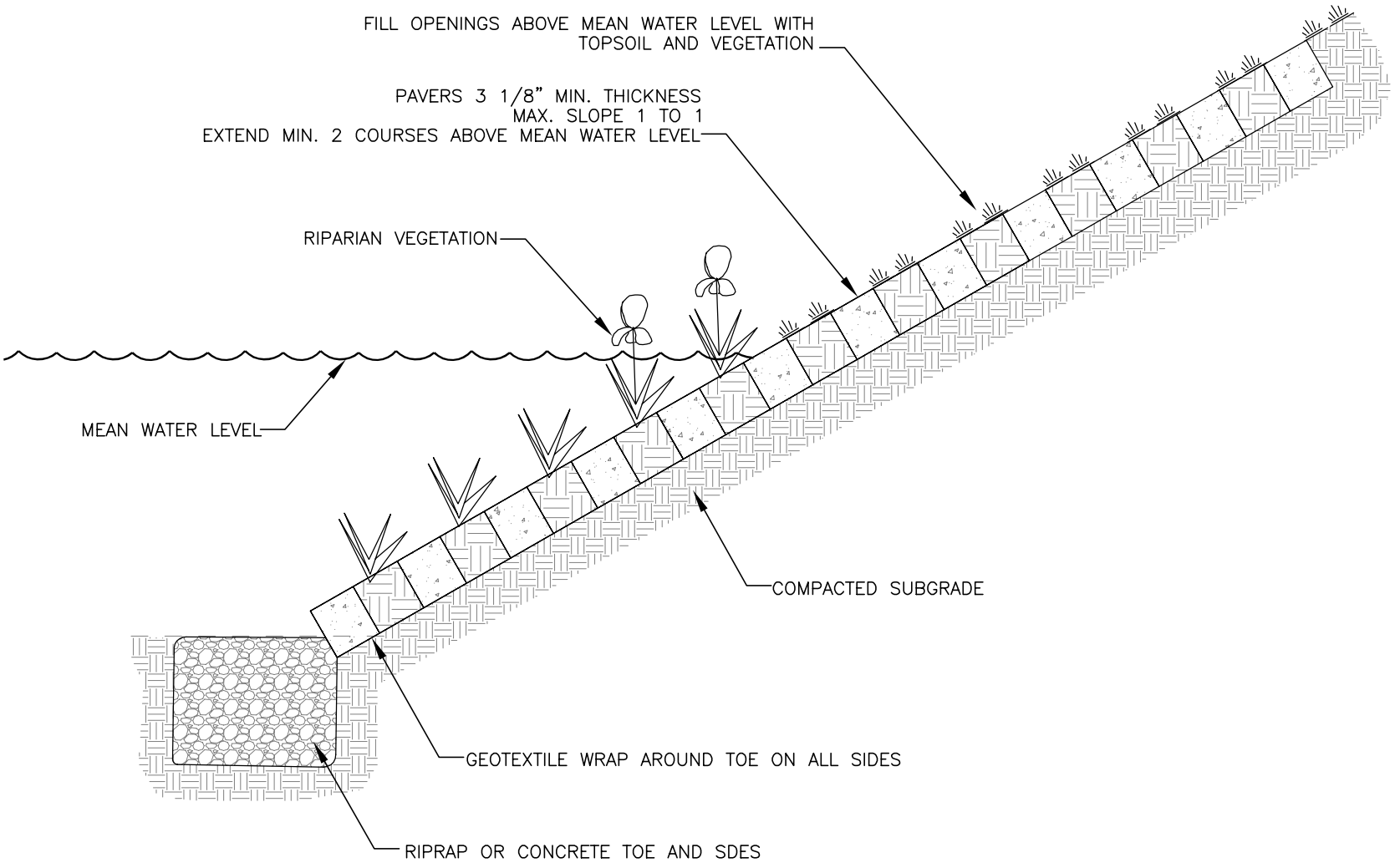
Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	FIRELANE, DRIVEWAY & INTERMITTENT PARKING

REV. DATE	
STD. NO.	REV.
60.31	



NOT TO SCALE

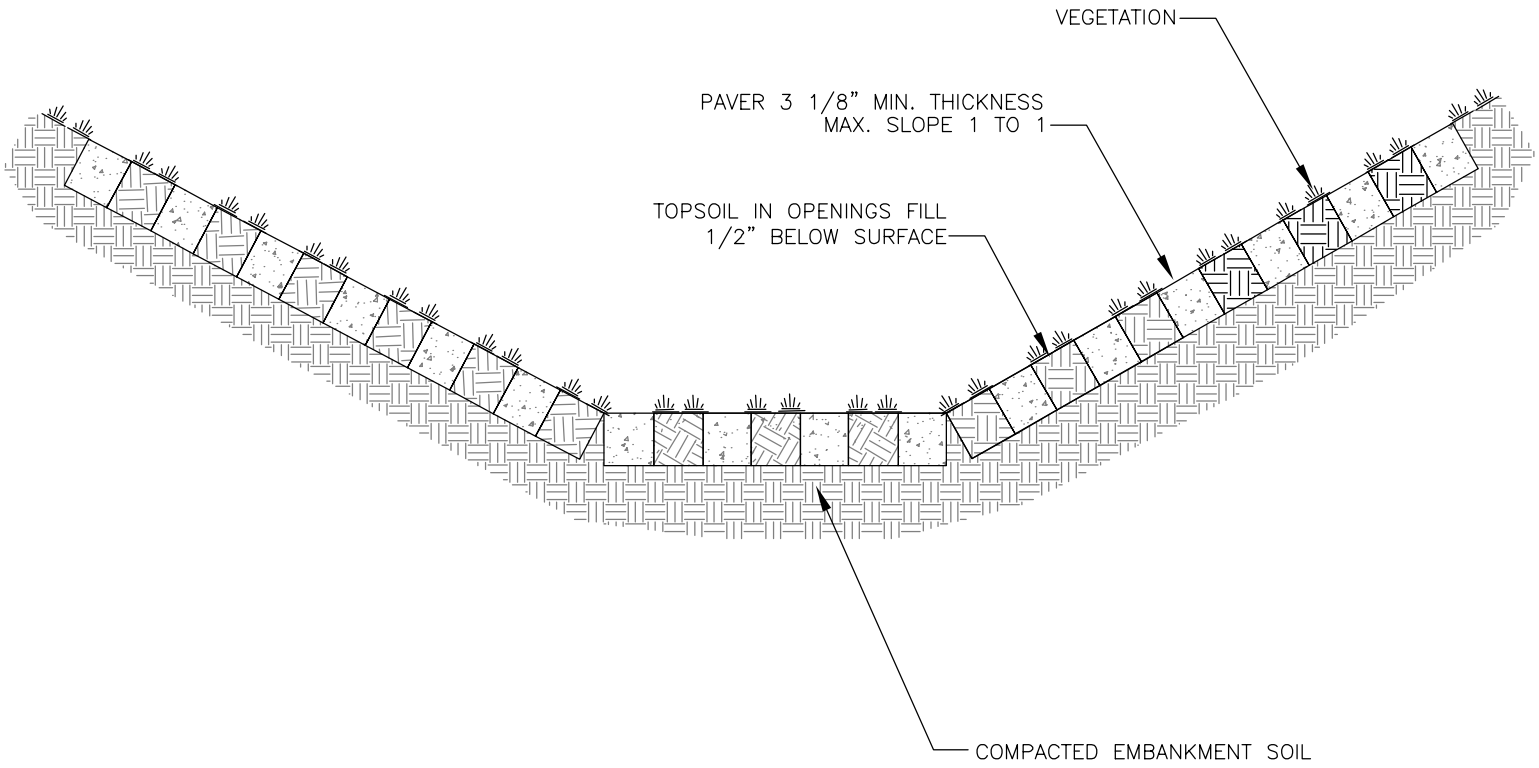
Pineville NORTH CAROLINA TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	SLOPE PROTECTION	REV. DATE STD. NO. 60.32 / REV.



NOT TO SCALE

Pineville NORTH CAROLINA	TOWN OF PINEVILLE LAND DEVELOPMENT STANDARDS	RIPARIAN STABILIZATION FOR STREAM BANKS AND LAKE SIDES

REV. DATE	
STD. NO.	REV.
60.33	



NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

DITCH LINER FOR INTERMITTENT FLOWS

REV. DATE	
STD. NO.	REV.
60.34	