

ORIGINATION FORM

Proposed Revisions to a Standard Plans Index
(Please provide all information – Incomplete forms will be returned)

Contact Information:

Date: May 7, 2018
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Standard Plans:

Index Number: 446-001
Sheet Number (s): 1-4 of 4
Index Title: Concrete Pavement Subdrainage

Summary of the changes:

General Notes moved to Sheet 1, Pay Item notes moved to Specifications.
Deleted Permeable Base Details. Reorganized Index.

Commentary / Background:

Other Affected Offices / Documents: (Provide name of responsible personnel)

- | Yes | No | |
|-------------------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Other Standard Plans – |
| <input type="checkbox"/> | <input type="checkbox"/> | FDOT Design Manual – |
| <input type="checkbox"/> | <input type="checkbox"/> | Basis of Estimates Manual – |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Standard Specifications – Rick Jenkins |
| <input type="checkbox"/> | <input type="checkbox"/> | Approved Product List – |
| <input type="checkbox"/> | <input type="checkbox"/> | Construction – |
| <input type="checkbox"/> | <input type="checkbox"/> | Maintenance – |

Origination Package Includes: (Email or hand deliver package to Derwood Sheppard)

- | Yes | N/A | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input type="checkbox"/> | Proposed Standard Plan Instructions (SPI) |
| <input type="checkbox"/> | <input type="checkbox"/> | Revised SPI |
| <input type="checkbox"/> | <input type="checkbox"/> | Other Support Documents |

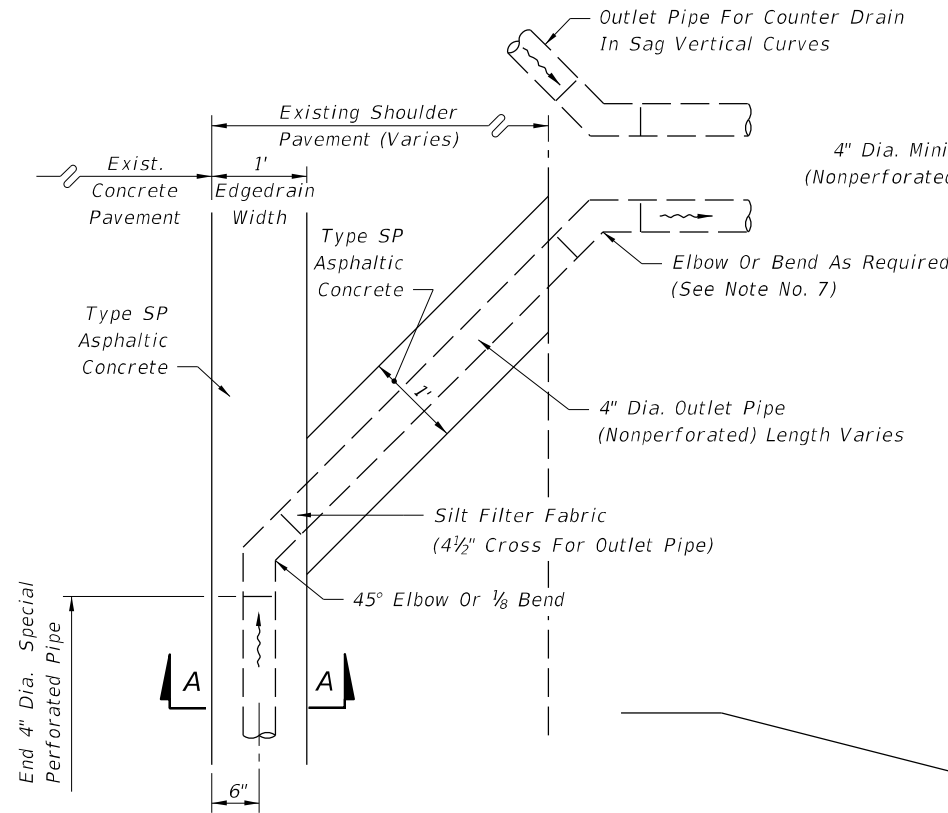
Implementation:

- Design Bulletin (Interim) DCE Memo Program Mgmt. Bulletin FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form

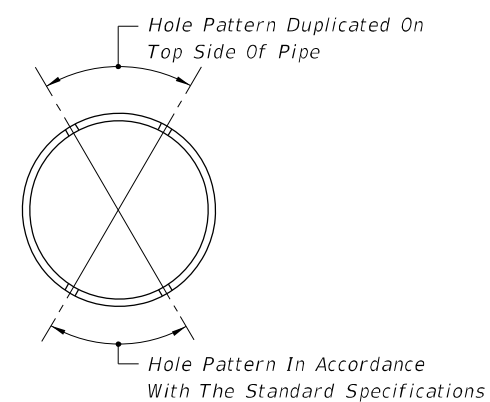
NEW SHEET 1 OF 4

"GENERAL NOTES - TABLE OF CONTENTS - DRAINCRETE SUBDRAINAGE

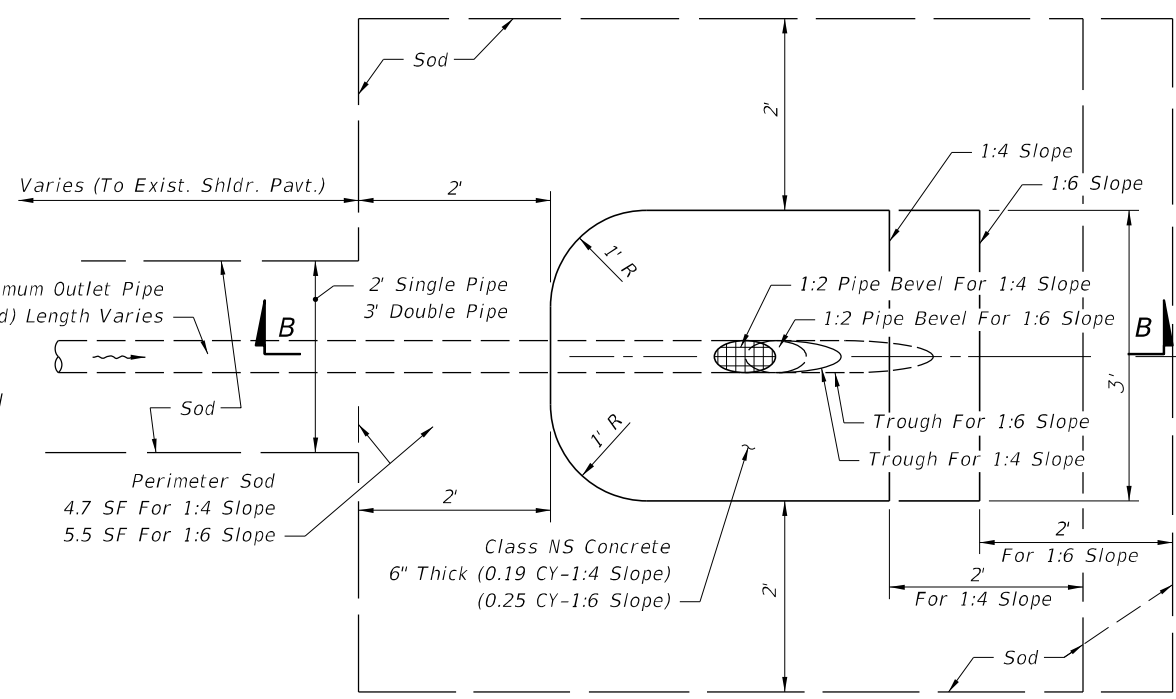


ALIGNMENT OF OUTLET PIPE

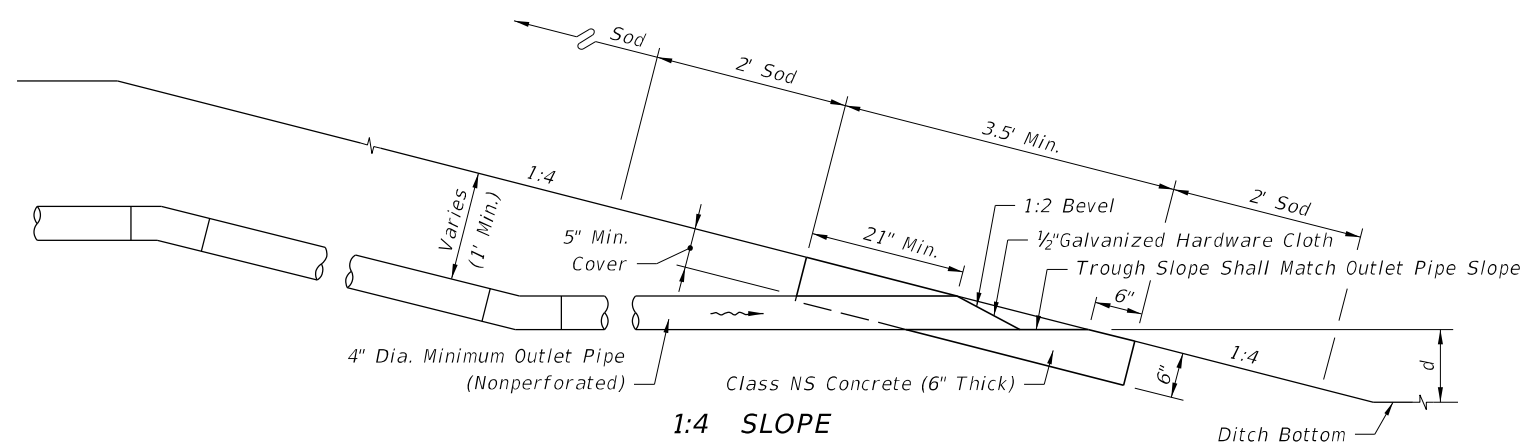
NOTE: For Section AA see following Sheets.



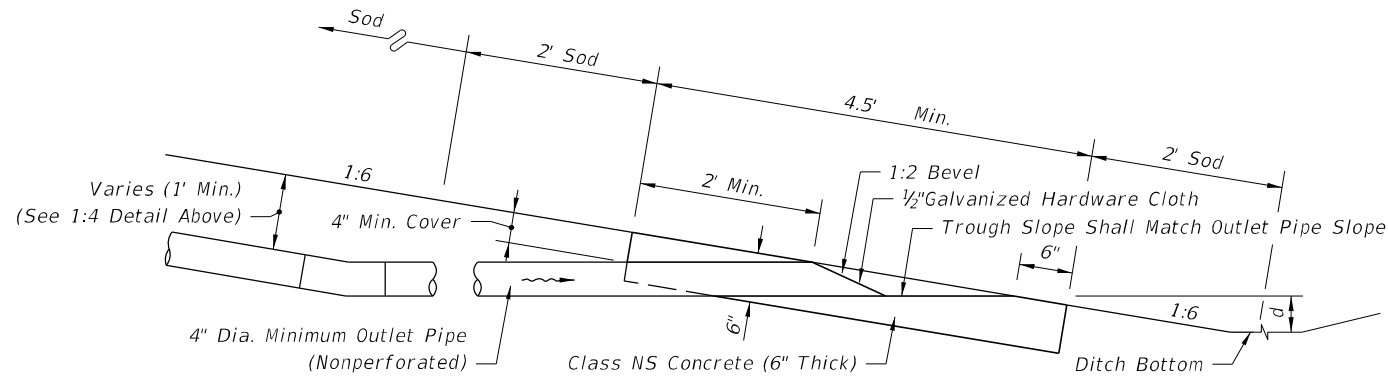
SUBDRAINAGE PIPE



PLAN - OUTLET PIPE APRON



1:4 SLOPE



1:6 SLOPE

SECTIONS BB

4\"/>

EDGEDRAIN OUTLET

$d = 1.75'$ std. for grassed ditches; $0.5'$ std. for paved ditches
[less is acceptable to provide minimum 0.1% outlet pipe slope]

- GENERAL NOTES FOR
CONCRETE PAVEMENT SUBDRAINAGE**
- No trench greater than 2' in depth will be allowed overnight. Trenches shall be barricaded at all times.
 - Concrete pavement subdrainage shall be constructed adjacent to the low edge of the roadway pavement and under travel lanes, auxiliary pavement and shoulders, as called for in the plans. When the low edge shifts between outside and inside edges of pavement the concrete pavement subdrainage shall extend 50' beyond and begin 50' before the flat point (100' overlap).

Concrete pavement subdrainage shall be placed on the low side of ramps of crossroad terminals.
 - Concrete pavement subdrainage shall be constructed on a grade parallel with the edge of pavement profile, except on profiles flatter than one-tenth percent (0.10%) the concrete pavement subdrainage shall be constructed on a grade of one-tenth percent (0.10%).
 - Immediately prior to placing the filter fabric the entire vertical face of the concrete pavement shall be cleaned to remove adhering base material and soil.
 - The Contractor shall devise a procedure for holding the filter fabric in position on the vertical face of the trench. The procedure must be approved by the Engineer prior to placement of the draincrete.
 - The upper end of each separate run of the concrete pavement subdrainage pipe shall be capped.
 - Outlet pipes shall be constructed at a maximum of 500' intervals. Elbows or 1/8 bends shall be used to connect the outlet pipe to the concrete pavement subdrain pipe. The elbows or bends shall be of the same material as the outlet pipe but compatible with the pipe.

When directed by the Engineer, outlet pipes shall be stubbed into existing inlets or into existing ditch pavements at an elevation 6" above the inlet flowline or ditch bottom. Concrete apron and bordering sod are not required for stubbed outlets, but replacement sodding will be required at trenches for pipes stubbed into paved ditches.

In sag vertical curves separate outlet pipes for concrete pavement subdrains from opposite directions shall use a single apron unless otherwise shown in the plans or otherwise directed by the Engineer.

Backfill around outlet pipes shall be of cohesive soils, draincrete will not be permitted.
 - Existing paved shoulder that is removed for the construction of outlet pipes shall be replaced with Type SP asphaltic concrete at the rate of 500 LB per SY.
 - The contract unit price for Edgedrain Outlet Pipe (4") LF, shall be full compensation for removal of existing shoulder pavement, trench excavation, pipe and fitting, concrete apron, hardware cloth, sod, stubbing into existing inlets and paved ditches, restoration of ditch pavement, backfill in place, and disposal of excess materials.

**LANGUAGE UPDATED
NOTES MOVED TO SHEET 1**

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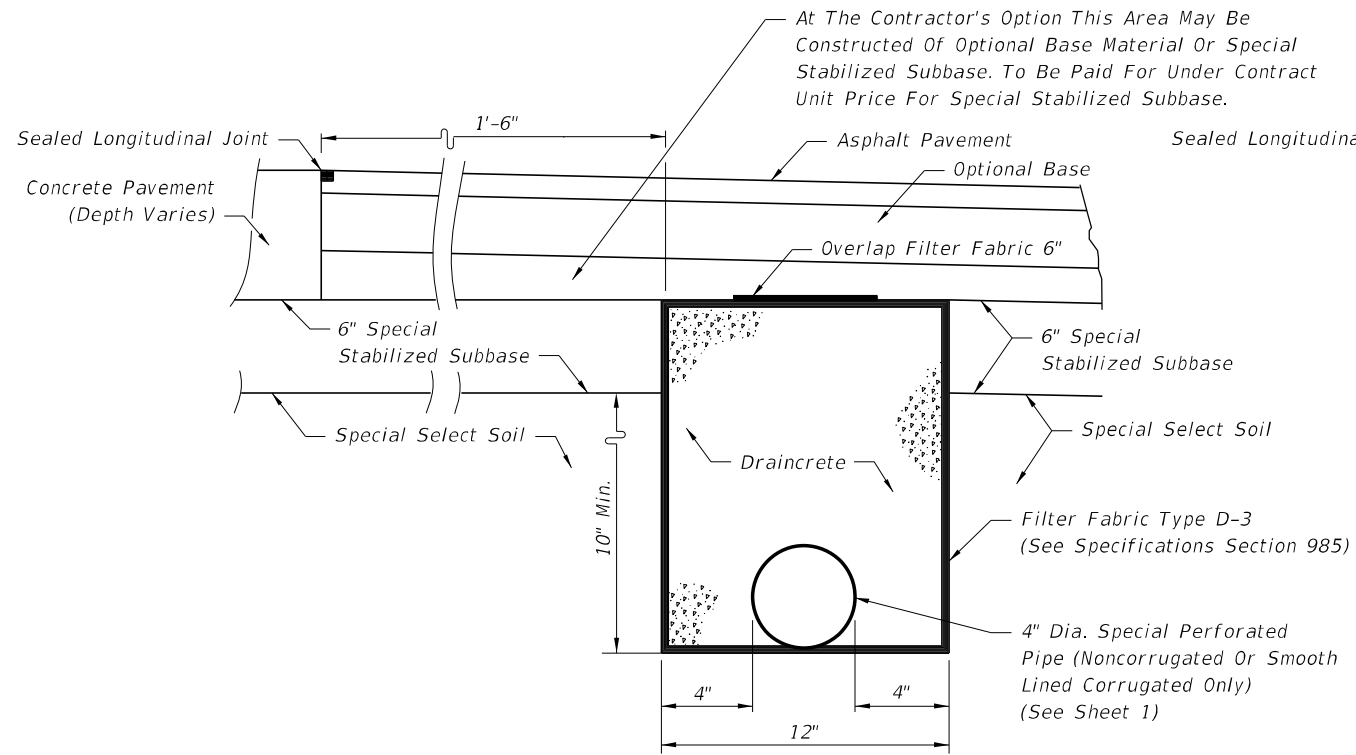
LAST REVISION	DESCRIPTION:
11/01/17	11/01/19

FDOT
FY 2019-20
STANDARD PLANS

CONCRETE PAVEMENT SUBDRAINAGE

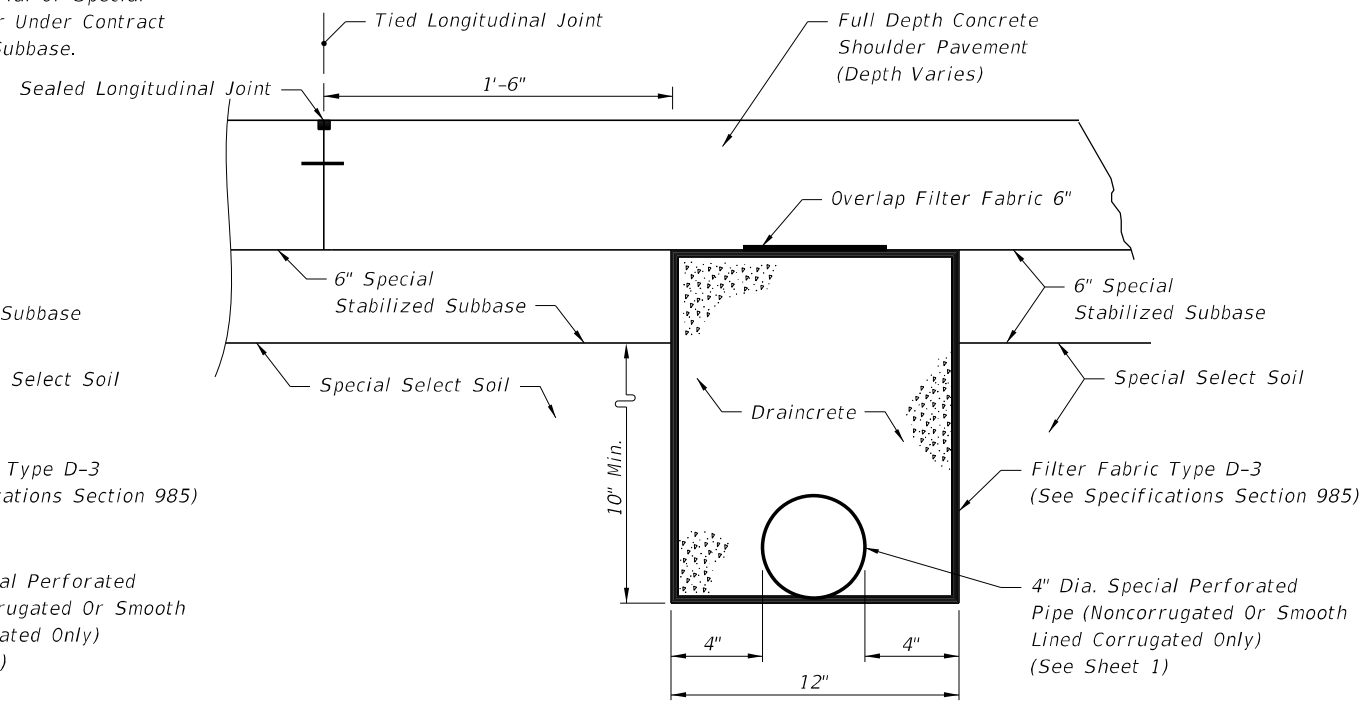
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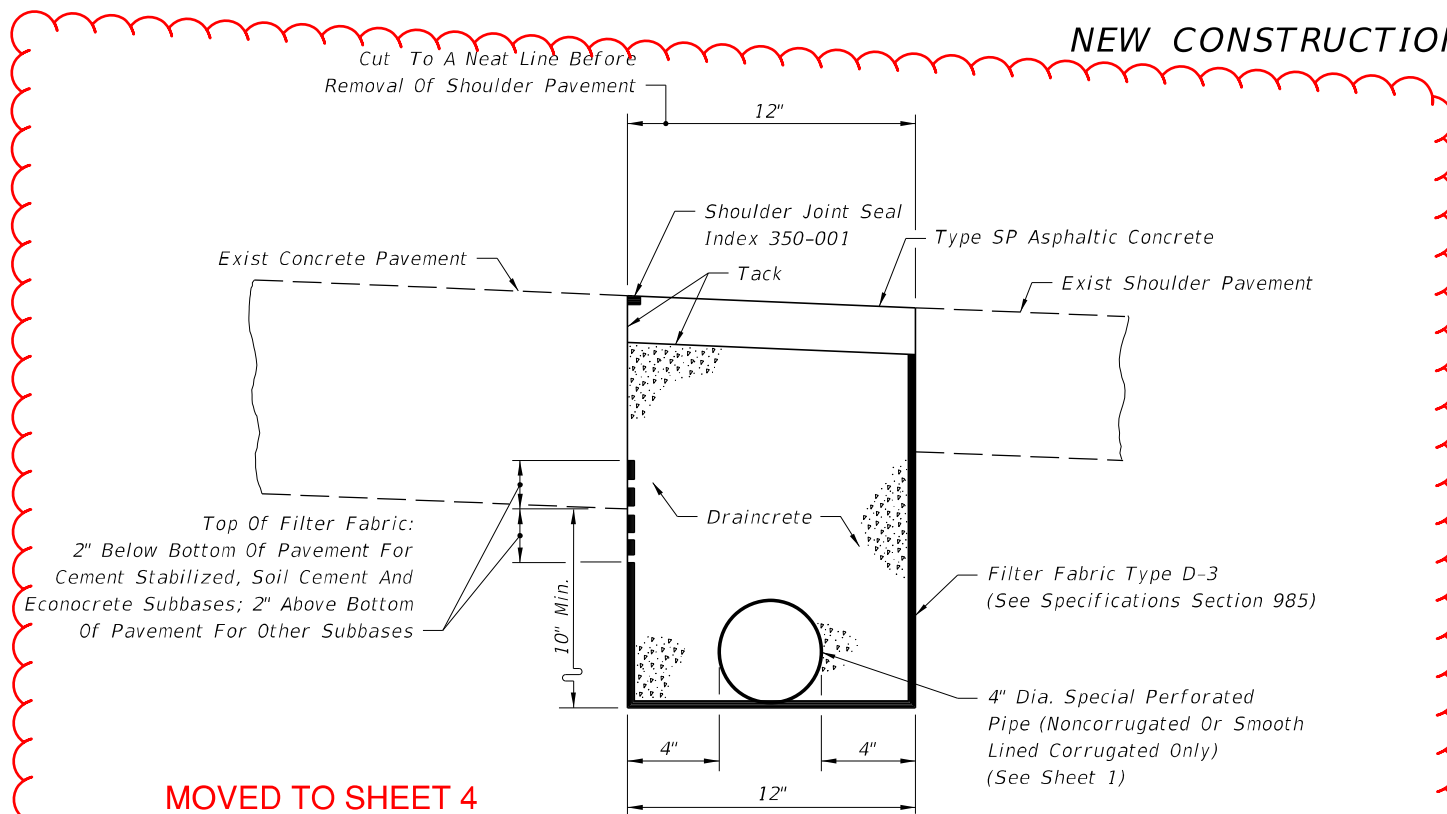
ASPHALT SHOULDERS

MOVED TO SHEET 3



CONCRETE TRAVEL LANES,
SHOULDERS, AND AUXILIARY PAVEMENT

NEW CONSTRUCTION



MOVED TO SHEET 4

REHABILITATION

DRAINCRETE SUBDRAINAGE

**NOTES FOR DRAINCRETE
PAVEMENT SUBDRAINAGE**

1. The edgedrain sections for DRAINCRETE SUBDRAINAGE are applicable to pavement construction identified as RIGID PAVEMENT on Index 120-001.
2. The contractor shall confine the construction of draincrete edgedrain to an area in which the entire operation can be carried out in five (5) work days, unless another construction period is called for in the plans, with sufficient time allowed for the draincrete to set before placement of pavement.

METHOD OF PAYMENT

NEW CONSTRUCTION: COVERED IN SPECIFICATIONS

1. The contract unit price for Edgedrain (Draincrete) LF shall be full compensation for trench excavation, disposal of excess material, filter fabric, draincrete edgedrain pipe and fittings and draincrete.
- Payment for outlet pipe shall be in accordance with General Note 9, Sheet 1 of 4.

FOR REHABILITATION:


1. The contract unit price for Edgedrain (Draincrete) LF, shall be full compensation for removal of existing shoulder pavement, trench excavation, disposal of excess materials, filter fabric, draincrete edgedrain pipe and fittings, and draincrete, necessary for edgedrain construction.

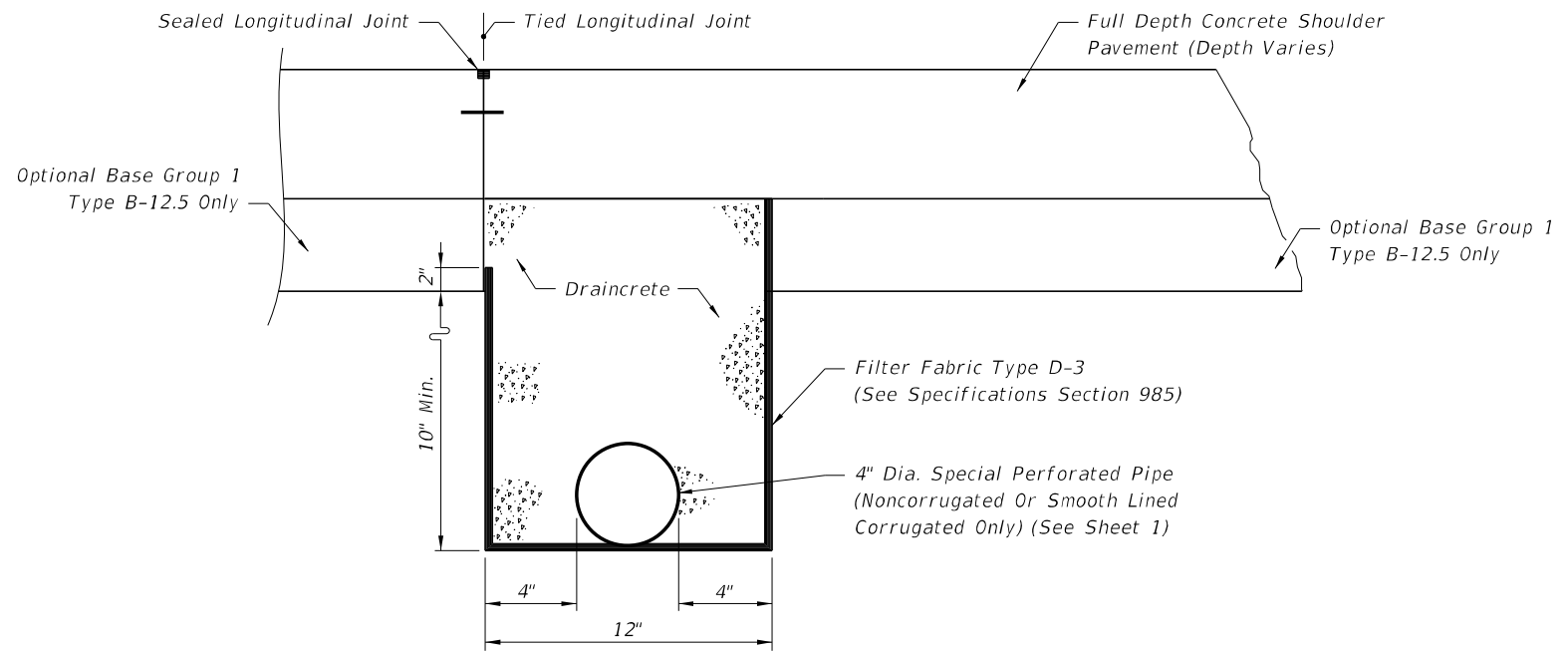
Payment for outlet pipe shall be in accordance with General Note 9, Sheet 1 of 4.

Shoulder pavement shall be paid for under the contract unit price for Type SP, Asphaltic Concrete.

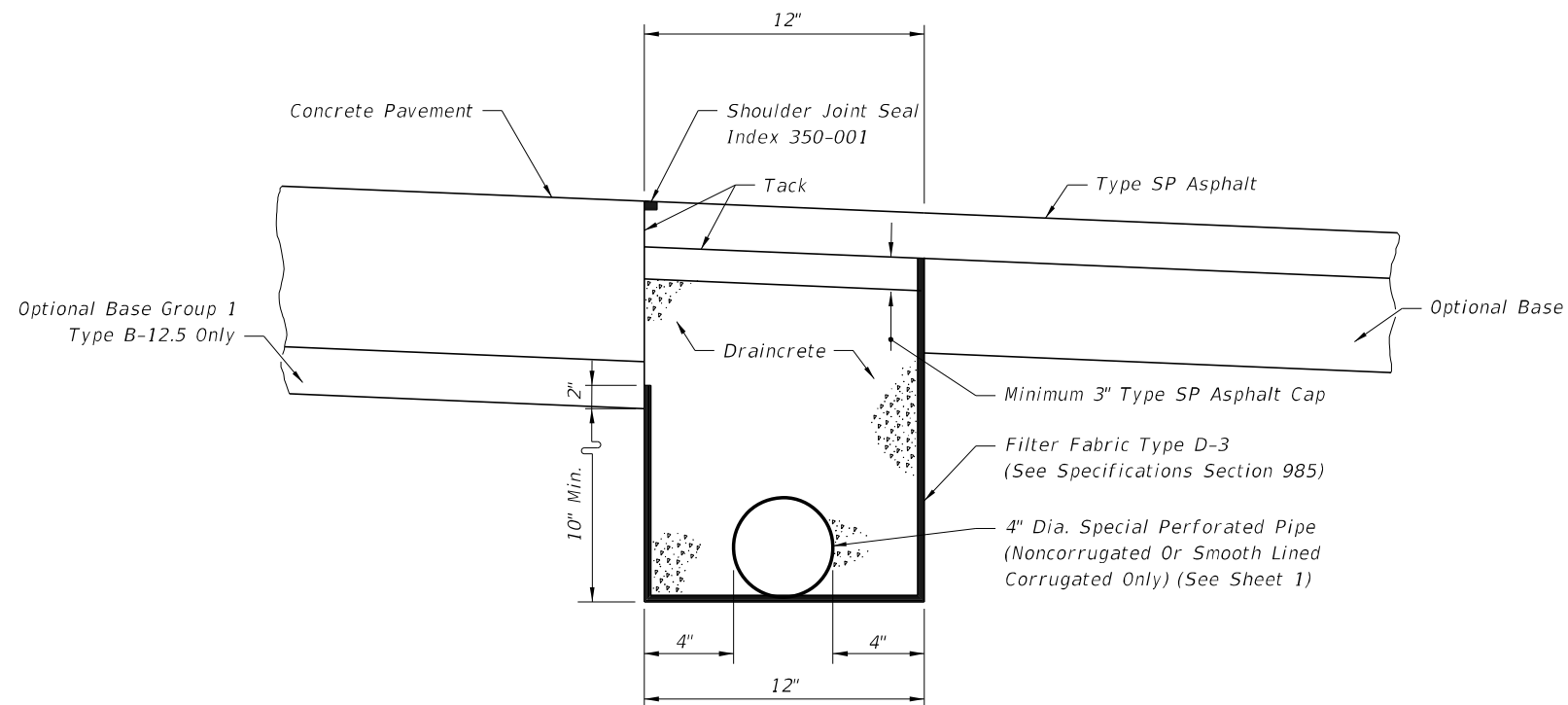
Shoulder joint seal shall be paid for under the contract unit price for Pavement Joint, LF.

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CONCRETE TRAVEL LANES,
SHOULDERS, AND AUXILIARY PAVEMENT



ASPHALT SHOULDERS

ASPHALT BASE SUBDRAINAGE

NOTES FOR DRAINCRETE
PAVEMENT SUBDRAINAGE

1. The edgedrain sections for DRAINCRETE SUBDRAINAGE are applicable to pavement construction identified as RIGID PAVEMENT on Index 120-001.
2. The contractor shall confine the construction of draincrete edgedrain to an area in which the entire operation can be carried out in five (5) work days, unless another construction period is called for in the plans, with sufficient time allowed for the draincrete to set before placement of pavement.


METHOD OF PAYMENT

NEW CONSTRUCTION:

COVERED IN SPECIFICATIONS

1. The contract unit price for Edgedrain (Draincrete) LF shall be full compensation for trench excavation, disposal of excess material, filter fabric, draincrete edgedrain pipe and fittings and draincrete.
Payment for outlet pipe shall be in accordance with General Note 9, Sheet 1 of 4.
2. Type B-12.5 shall be paid for under the contract unit price for Optional Base.
3. Shoulder pavement shall be paid for under the contract unit price for Type SP, Asphaltic Concrete.

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GENERAL NOTES FOR TREATED PERMEABLE BASE EDGEDRAIN

NEW CONSTRUCTION

1. The contractor shall confine the construction of edgedrain to an area in which the entire operation can be carried out in (5) work days, unless another construction period is called for the plans.

METHOD OF PAYMENT

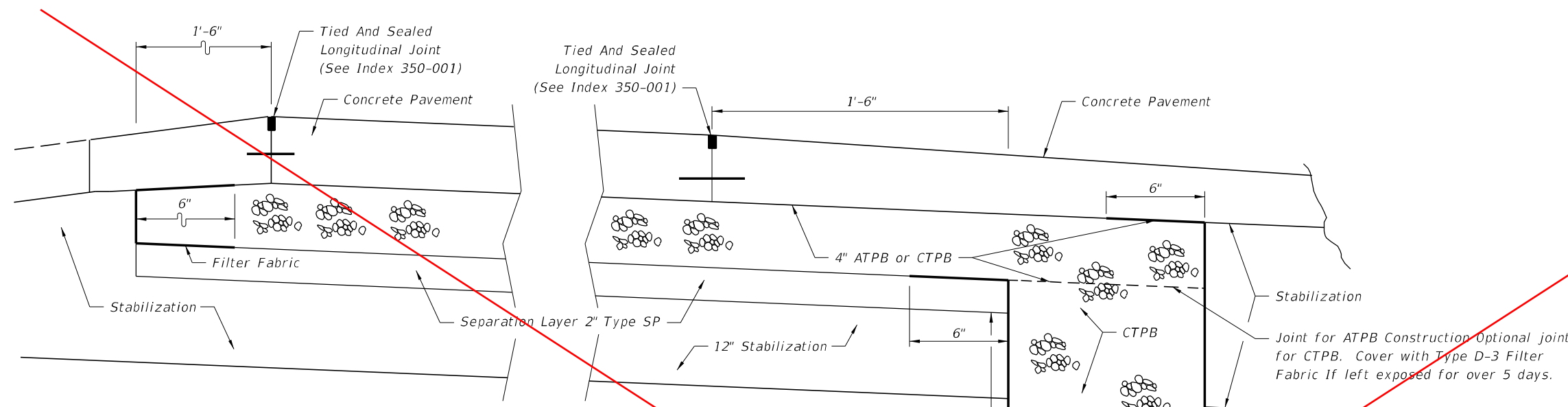
NEW CONSTRUCTION

1. Payment shall be full compensation for trench excavation, disposal of excess materials, filter fabric, pipe and fittings, necessary for concrete pavement subdrainage construction. Payment shall be included in the cost for Asphalt Treated Permeable Base, CY or Cement Treated Permeable Base, CY.

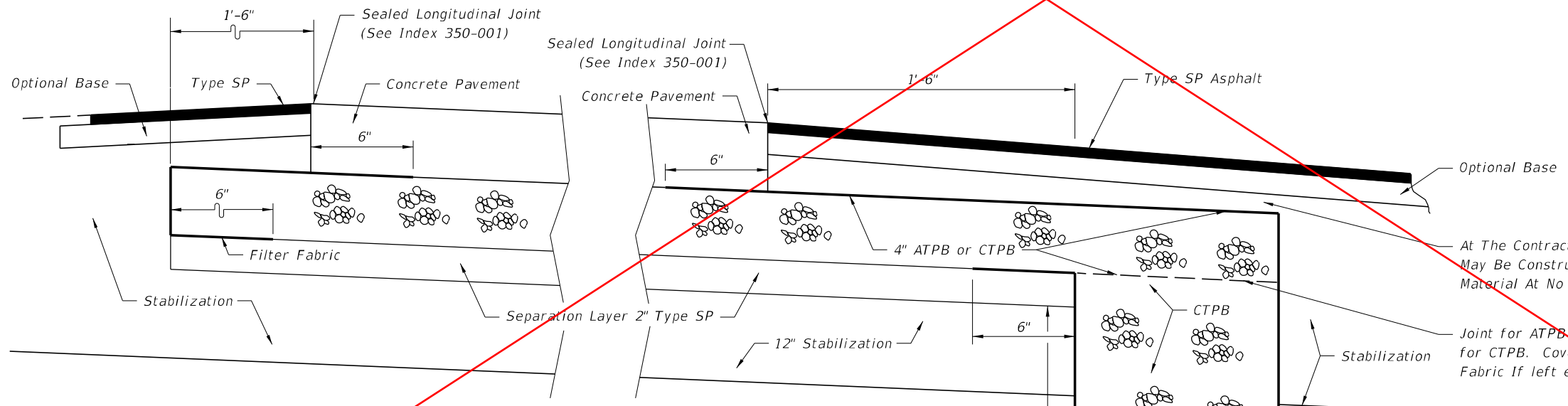
Payment for outlet pipe shall be in accordance with General Note 9, Sheet 1 of 4.

2. Shoulder pavement and separation layer shall be paid for under the contract unit price for Type SP, Asphaltic Concrete.

DELETED TREATED PERMEABLE BASE SUBDRAINAGE PER STATE PAVEMENT OFFICE



CONCRETE TRAVEL LANE, SHOULDERS, AND AUXILIARY PAVEMENT



**ASPHALT SHOULDERS
TREATED PERMEABLE BASE SUBDRAINAGE**

At The Contractor's Option This Area May Be Constructed Of Optional Base Material At No Additional Compensation.

Joint for ATPB Construction Optional joint for CTPB. Cover with Type D-3 Filter Fabric If left exposed for over 5 days.

Filter Fabric Type D-3 (See Specifications Section 985)

4" Dia. Special Perforated Pipe (Noncorrugated Or Smooth Lined Corrugated Only) See Sheet 1 of 4

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GENERAL NOTES:

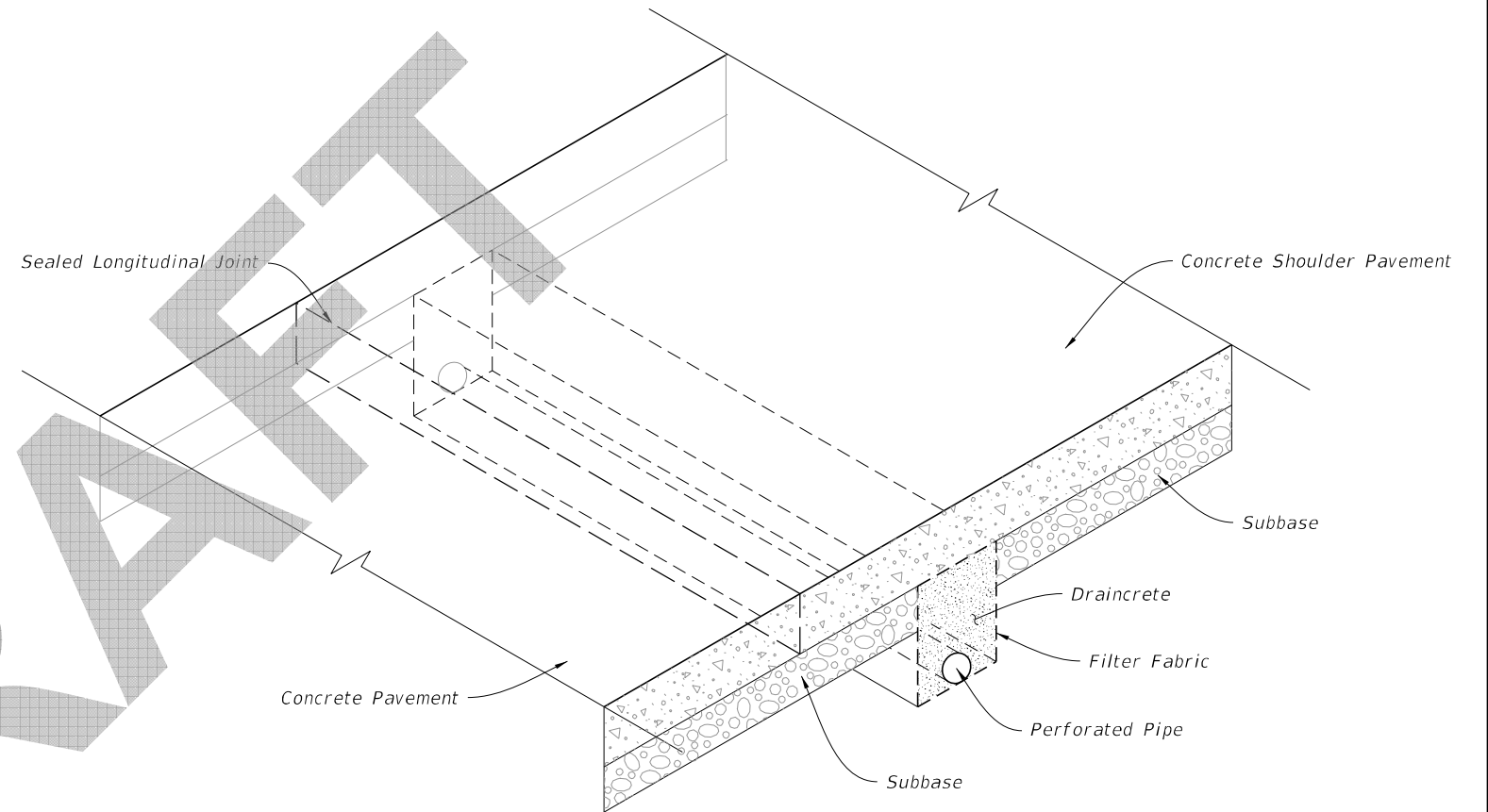
1. Do not leave trench greater than 2' in depth overnight. Barricade trenches at all times.
2. Construct concrete pavement subdrainage adjacent to the low edge of the roadway pavement and under travel lanes, auxiliary pavement and shoulders, as called for in the plans. Extend the concrete pavement subdrainage 50' beyond and begin 50' before the flat point (100' overlap) when the low edge shifts between outside and inside edges of pavement. Place concrete pavement subdrainage on the low side of ramps for crossroad terminals.
3. Install concrete pavement subdrainage on a grade parallel with the edge of pavement profile, except on profiles flatter than one-tenth percent (0.10%) install the concrete pavement subdrainage on a minimum grade of one-tenth percent (0.10%).
4. Remove adhering base material and soil from the vertical face of the concrete immediately prior to placing the filter fabric.
5. Submit a procedure for holding the filter fabric in position on the vertical face of the trench for approval by the Engineer prior to placing draincrete.
6. Cap the upper end of each separate run of the concrete pavement subdrainage pipe.
7. Install outlet pipes at 500' maximum intervals. Use elbows or 1/8 bends to connect the outlet pipe to the concrete pavement subdrain pipe. Use elbows or bends of the same material as the outlet pipe.

Stub outlet pipes into existing inlets or into existing ditch pavements at an elevation 6" above the inlet flowline or ditch bottom when directed by the Engineer. Concrete apron and bordering sod are not required for stubbed outlets, but replacement sodding will be required at trenches for pipes stubbed into paved ditches.

Install a single outlet apron for separate outlet pipes of concrete pavement subdrainage from opposite directions in sag vertical curves.

Install backfill consisting of cohesive soils around outlet pipes.
8. Replace existing paved shoulder removed for the construction of outlet pipes with Type SP asphaltic concrete at the rate of 500 LB per SY.

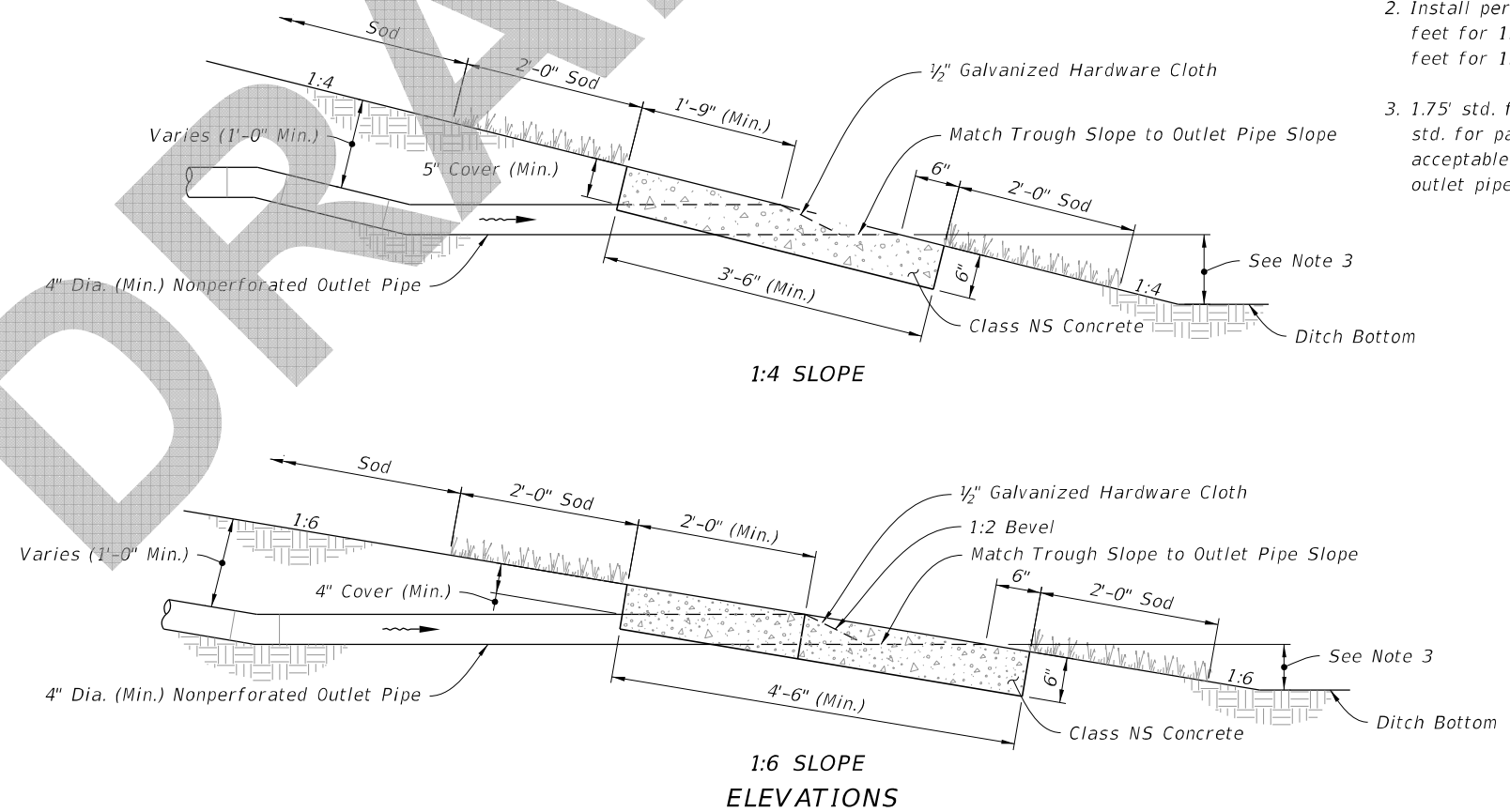
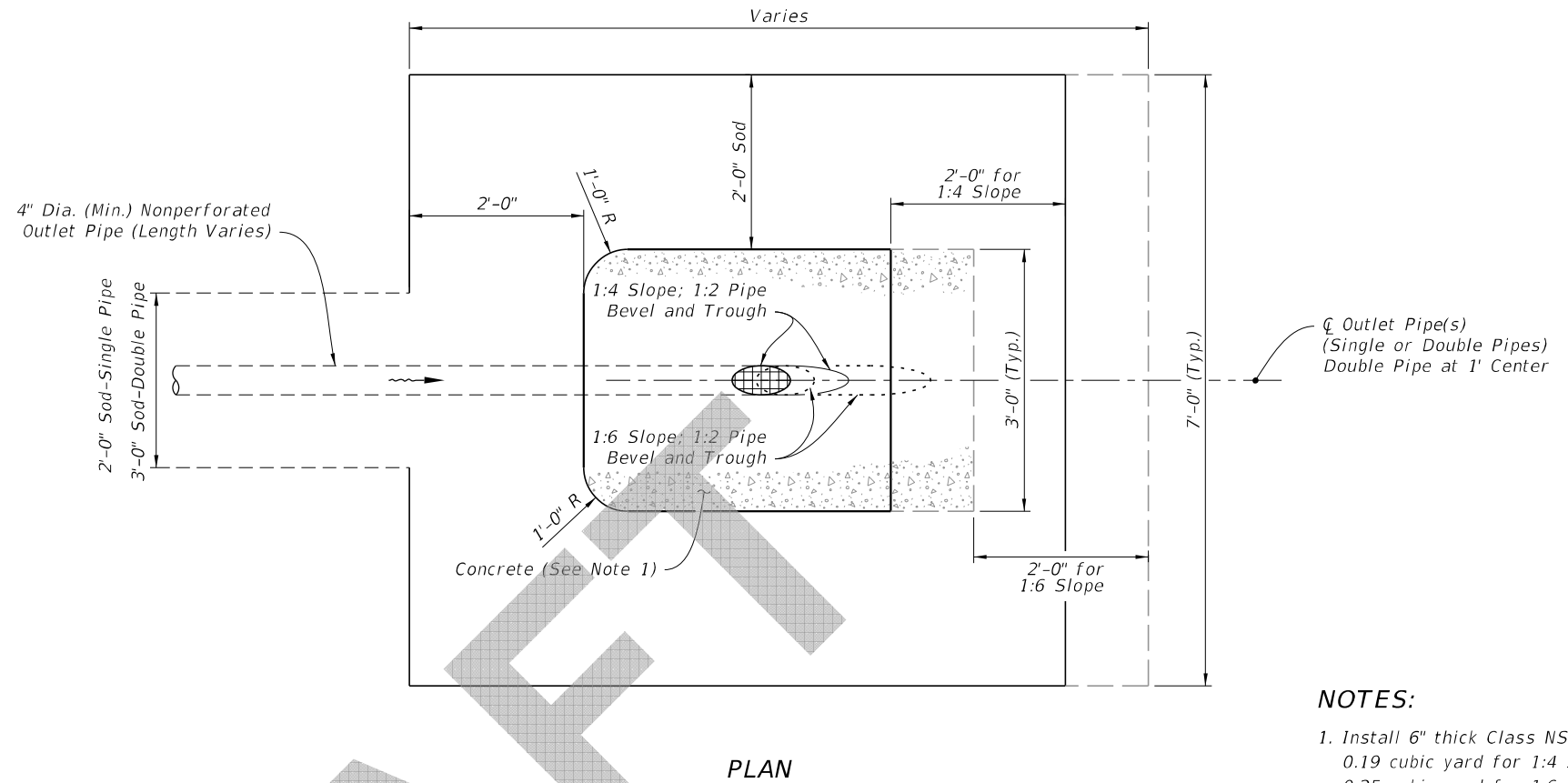
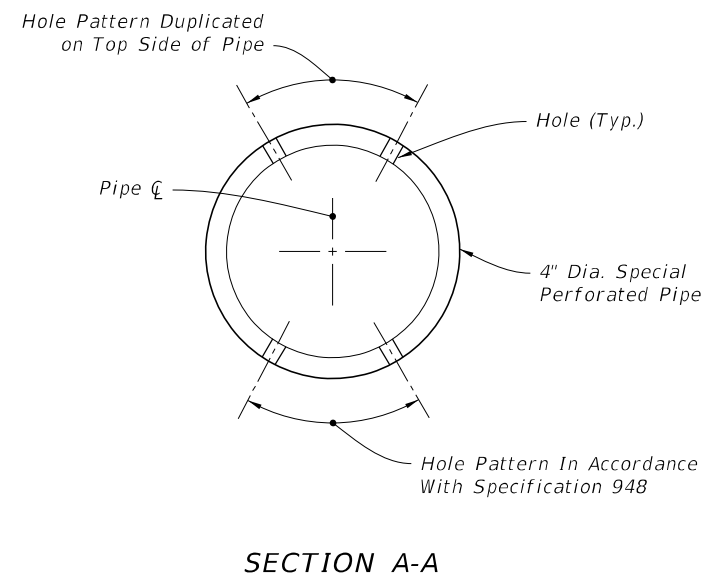
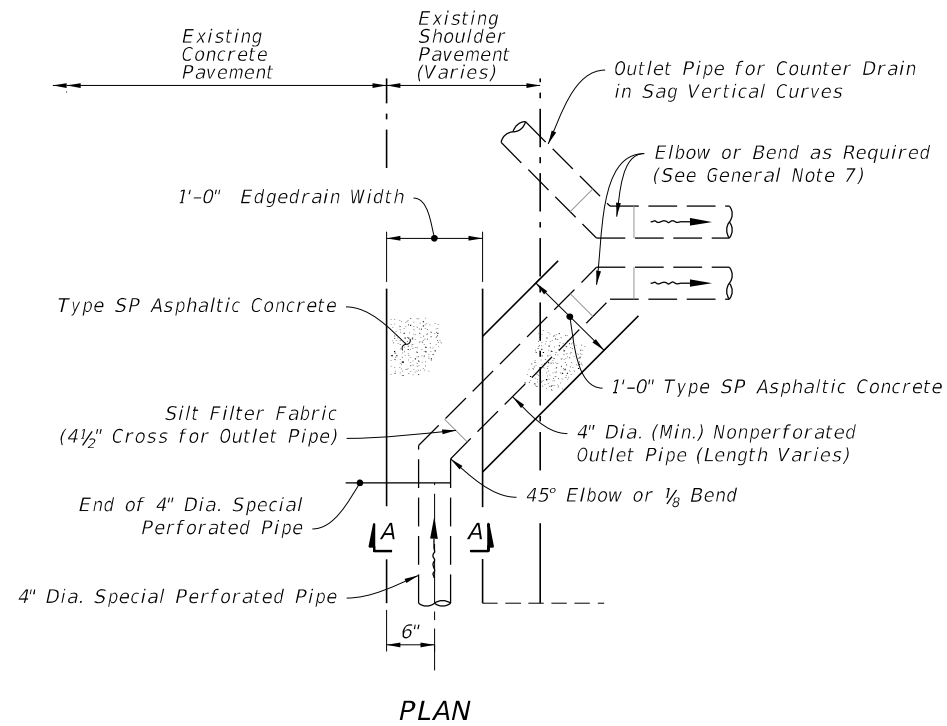
DRAFT



===== DRAINCRETE SUBDRAINAGE =====

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2	Edgedrain and Outlet
3	New Construction
4	Rehabilitation

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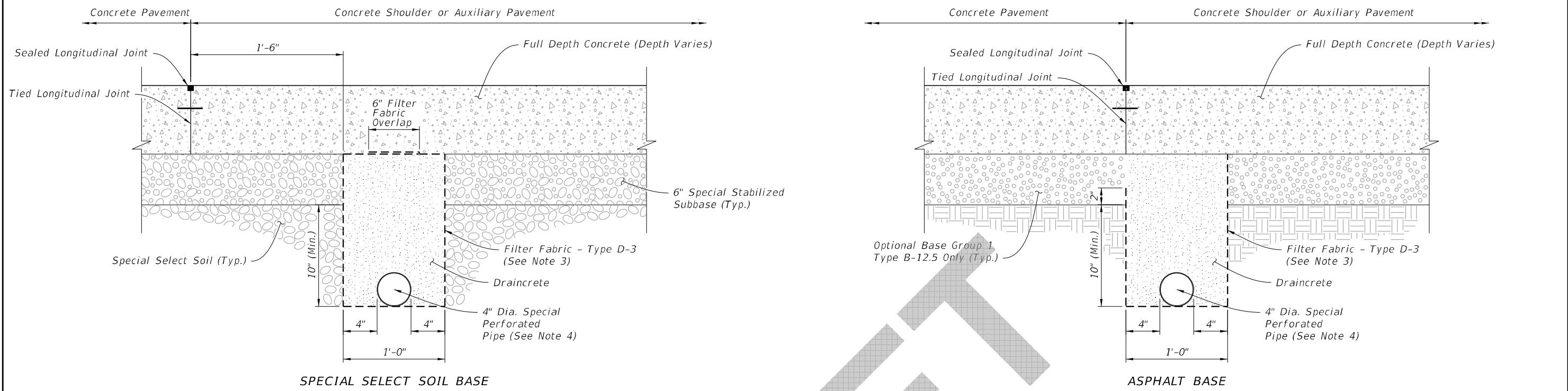
NOTES:

1. Install 6" thick Class NS concrete, 0.19 cubic yard for 1:4 slopes and 0.25 cubic yard for 1:6 slopes.
2. Install perimeter sod, 4.7 square feet for 1:4 slopes and 5.5 square feet for 1:6 Slopes.
3. 1.75' std. for grassed ditches; 0.5' std. for paved ditches [less is acceptable to provide minimum 0.1% outlet pipe slope]

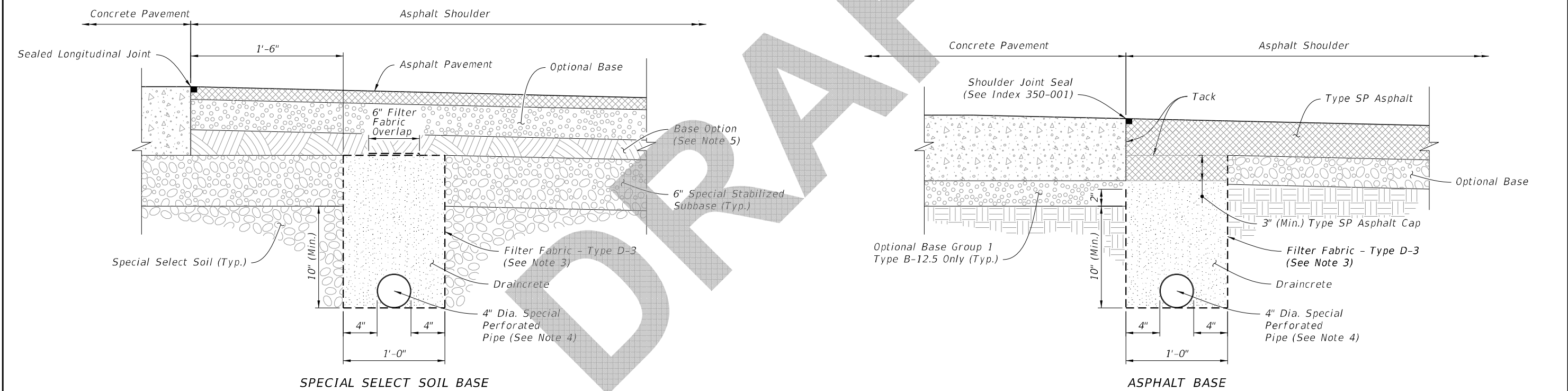
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EDGEDRAIN OUTLET

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CONCRETE SHOULDERS AND AUXILIARY PAVEMENT



ASPHALT SHOULDERS

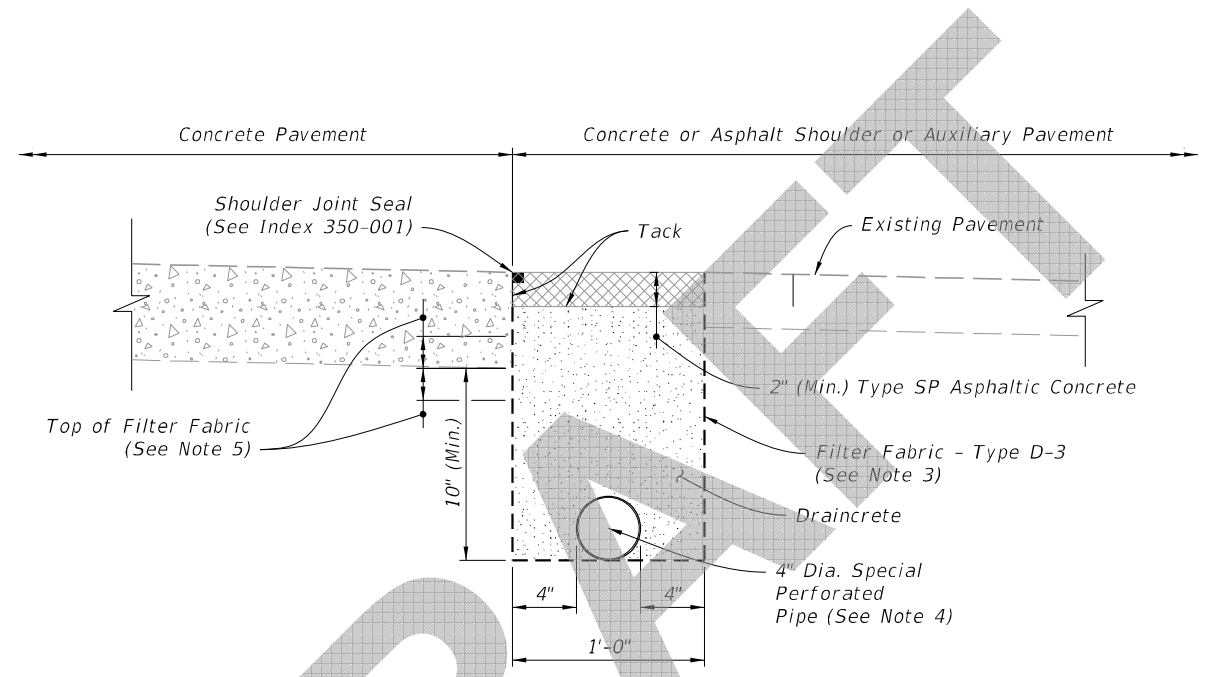
NOTES:

1. The edgedrain sections for DRAINCRETE SUBDRAINAGE are applicable to pavement construction identified as RIGID PAVEMENT on Index 120-001.
2. Confine the construction of draincrete edgedrain to an area in which the entire operation can be carried out in five (5) work days, unless another construction period is called for in the plans, with sufficient time allowed for the draincrete to set before placement of pavement.
3. Install the filter fabric in accordance with Specification 514.
4. Install only noncorrugated or smooth lined corrugated pipe.
5. At the Contractor's option this area may be constructed of Optional Base material (Specification 285) or special stabilized subbase.

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8/13/2019

NEW CONSTRUCTION

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EXISTING SHOULDERS

NOTES:

1. The edgedrain sections for DRAINCRETE SUBDRAINAGE are applicable to pavement construction identified as RIGID PAVEMENT on Index 120-001.
2. Confine the construction of draincrete edgedrain to an area in which the entire operation can be carried out in five (5) work days, unless another construction period is called for in the plans, with sufficient time allowed for the draincrete to set before placement of pavement.
3. Install the filter fabric in accordance with Specification 514.
4. Install only noncorrugated or smooth lined corrugated pipe.
5. Install Filter Fabric 2" below bottom of pavement for cement stabilized, soil cement and econocrete subbases and 2" above bottom of pavement for other subbases.

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REHABILITATION

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