

Road Construction Notes

(All references to road shall apply to road and parking areas as well.)

- New road shall be constructed to the line and grade shown on the drawings. The road and utility locations shall be as typically detailed unless otherwise shown.
- All road and parking construction shall be completed in accordance with the Vermont Agency of Transportation "Standard Specifications for Construction" 2001, hereafter called Vermont Highway Specifications, specifications found on these plans, and project specifications. In case of conflict, the more stringent specification shall apply as determined by the Engineer.
- The Contractor shall follow Vermont Highway Specifications (2001) Section 203.11 for placing and spreading embankments.
- Fill material for road embankment shall be approved by the Engineer. Fill shall be placed in 12" lifts, wetted and compacted with satisfactory compaction equipment to 95% of maximum density (Standard Proctor).
- Road in fill sections shall be placed and compacted a minimum of 3 feet above top of any utility to be installed before trench is excavated for pipe placement. In trenches and cut sections, the Contractor shall provide all necessary sheeting, shoring and bracing to maintain compliance with all OSHA/VOSHA regulations.
- Methods for construction of subgrade shall conform to Vermont Highway Specifications (2001) 203.12 or as determined by the Engineer.
- Any subgrade or subbase disturbed by Contractor, or rendered unsuitable by construction machinery, shall be removed and replaced with approved granular backfill at the Contractor's expense. The subgrade shall be compacted to attain at least 95% of the maximum density (Standard Proctor) before placing road or embankment materials.
- The Owner shall pay for on site soils testing (compaction, sieve, and proctor).
- Sand borrow and cushion shall conform to Vermont Highway Specifications (2001) 703.03. Granular borrow shall conform to the Vermont Highway Specifications 703.04.
- Gravel subbase for pavement shall conform to Vermont Highway Specifications (2001) 704.05.
- Leveling course shall conform to Vermont Highway Specifications (2001) 704.05, fine grading. Shoulders shall conform to Section 704.12, Aggregate for Shoulders.
- Bituminous concrete pavement shall conform to Vermont Highway Specifications (2001) Section 404 and 406. Binder course shall be Type I + II, and finish wearing course shall be Type IX.
- Embankment fill for road and parking shall be a sieve specification as follows:

Sieve	% Finer
4"	100
2"	85-100
#4	60-100
#100	6 maximum
#200	12 maximum
- Dense graded crushed stone, crushed gravel and sand borrow shall not be contaminated by work. Construction traffic shall not travel over exposed areas of this material.

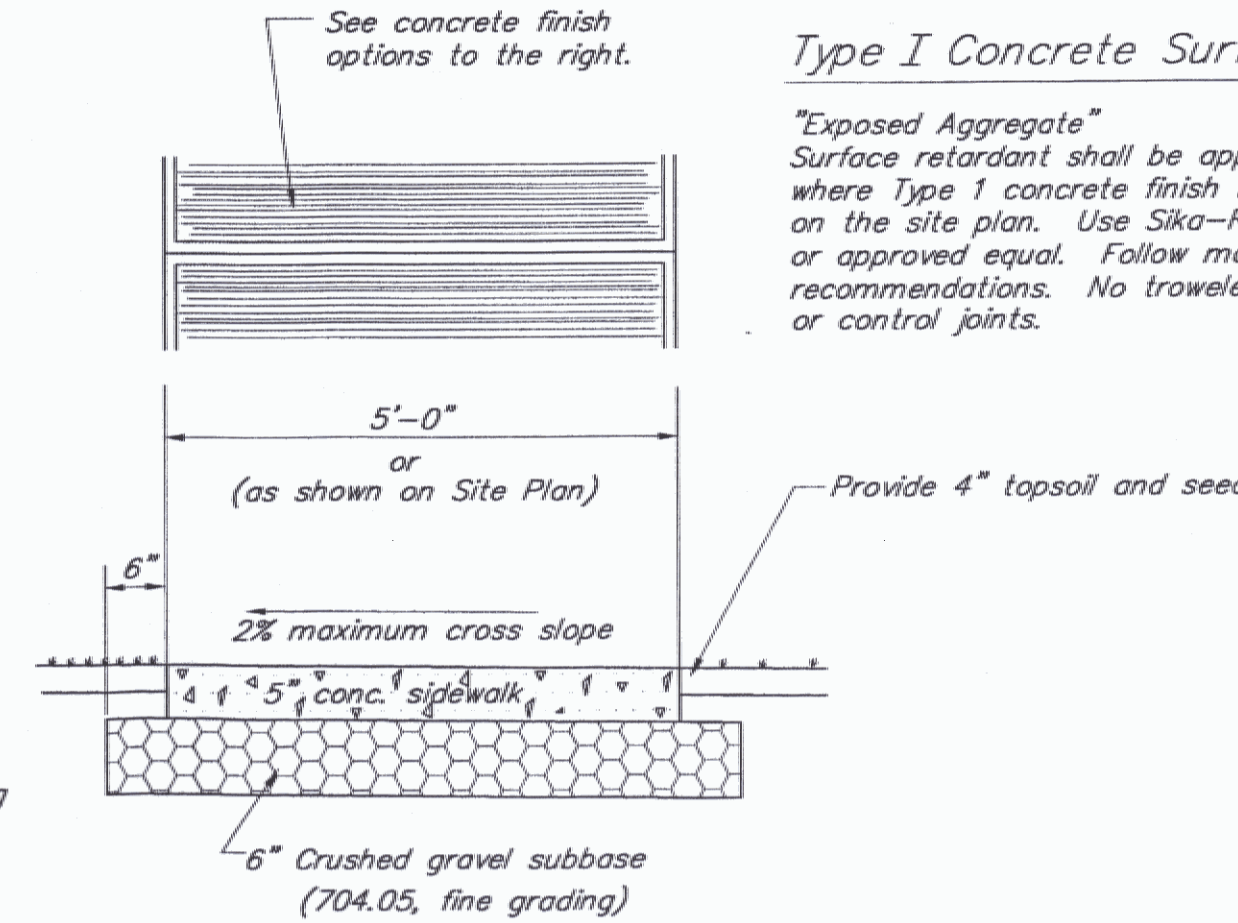
Joint filler shall be resilient non-extruding cellular fiber joint, uniformly saturated with asphalt, offering a minimum of 70% recovery after compression.

All concrete used in the construction of concrete sidewalk shall be air entrained (5 - 7%) and made with Portland cement. The concrete shall meet section 501 of the State of Vermont Standard Specification for Class A concrete and have 28 day compressive strength of 4,000 psi.

Provide expansion joint where sidewalk meets the curbs, manholes, gate valves, and other structures.

Use anti-spalling compound (Harris Emulsion Kurseal 309 or approved equal) on all concrete sidewalk according to manufacturers recommendations.

Contractor to submit shop drawings of all proposed expansion joint and scoring locations for approval. (For 5' wide sidewalk, expansion joints shall occur at 20' min. The sidewalk should be scored at 5' min.)



Typical Concrete Sidewalk Detail

N.T.S.

Type I Concrete Surface

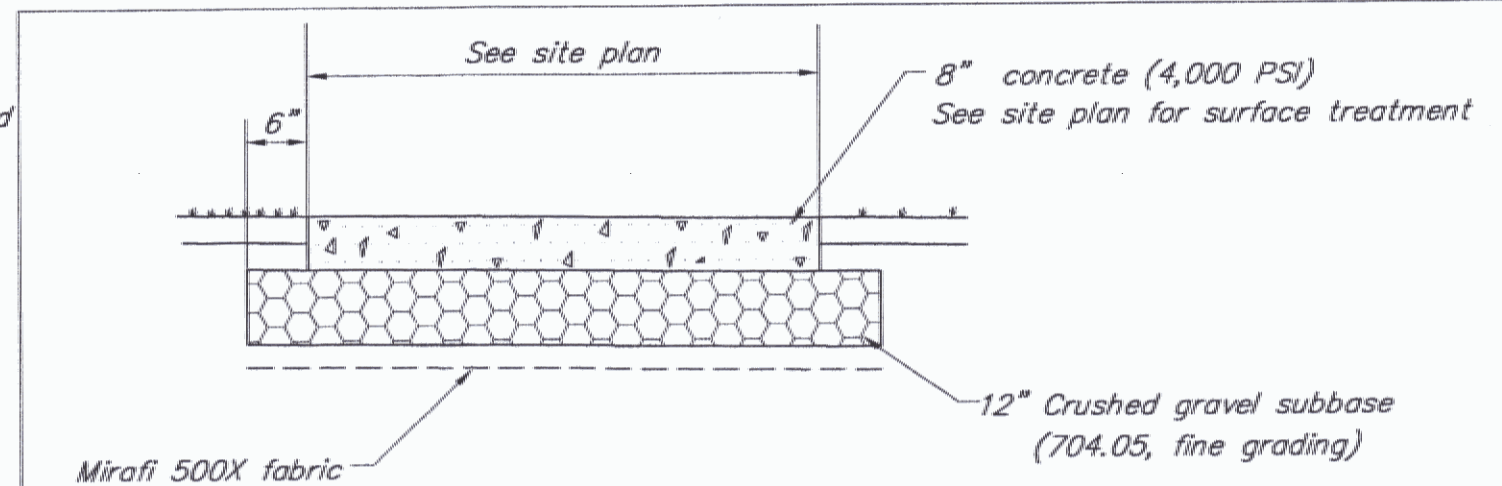
"Exposed Aggregate" Surface retardant shall be applied where Type I concrete finish is specified on the site plan. Use Sika-Rugasol-S or approved equal. Follow manufacturer's recommendations. No troweled expansion or control joints.

Type 2 Concrete Surface

"Colored Concrete" See Architect's plans and specifications for color and score pattern. Light broom finish. No troweled expansion or control joints.

Type 3 Concrete Surface

"Broom Finish" Provide broom finish to concrete, and trowel expansion and score joints.



Heavy Duty Concrete Sidewalk Detail

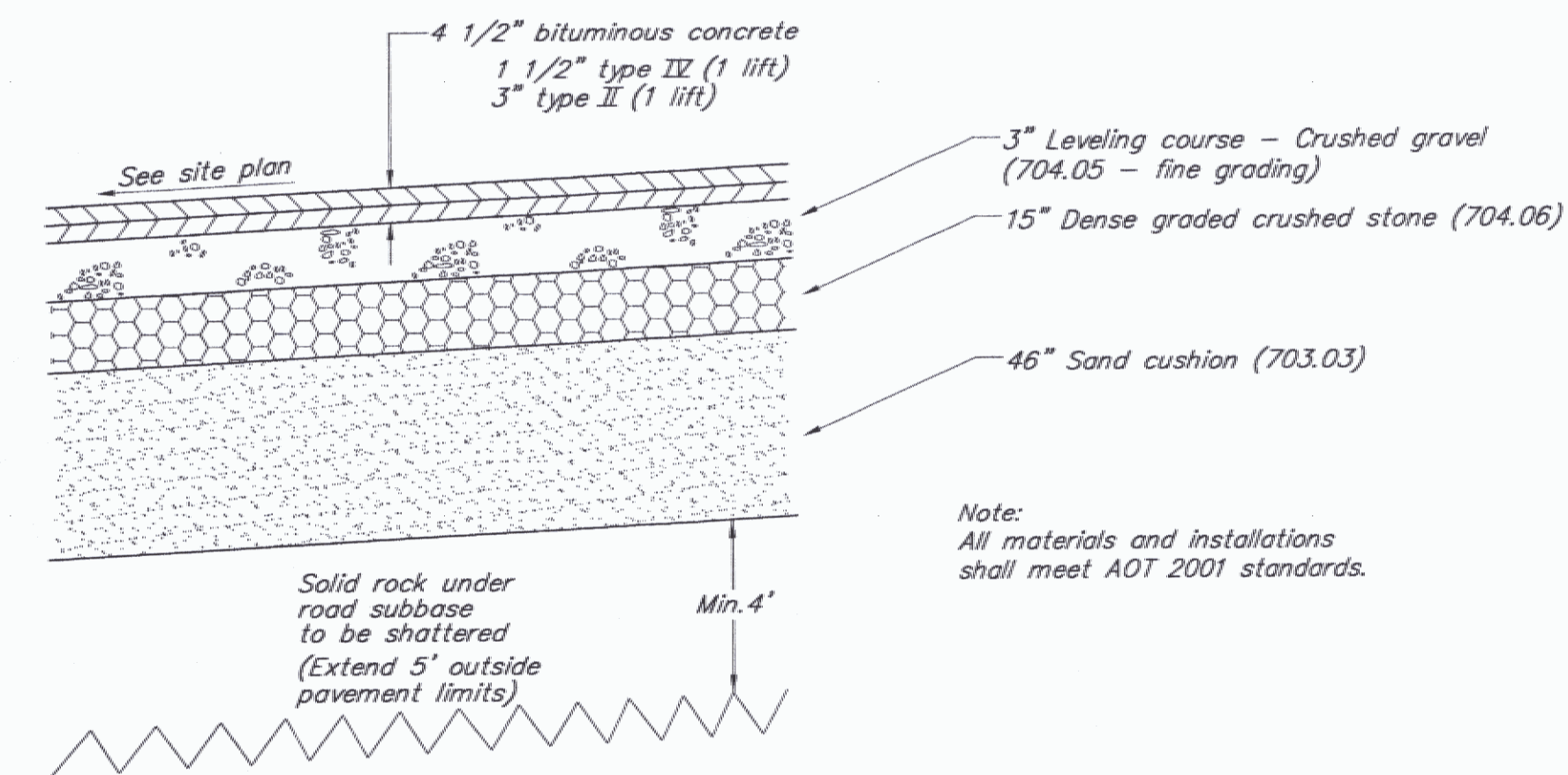
N.T.S.

NOTES:

- Includes all concrete sidewalk located between CB9 and CB10. (Northeast of proposed Welcome Center) The total area of heavy duty sidewalk in this area does not exceed 20' x 28'.
- Includes sidewalk south of storage building.
- Condenser pad (7'x4')

Note: Use this road/parking cross-section design from station C8+00 to C14+00 and associated parking.

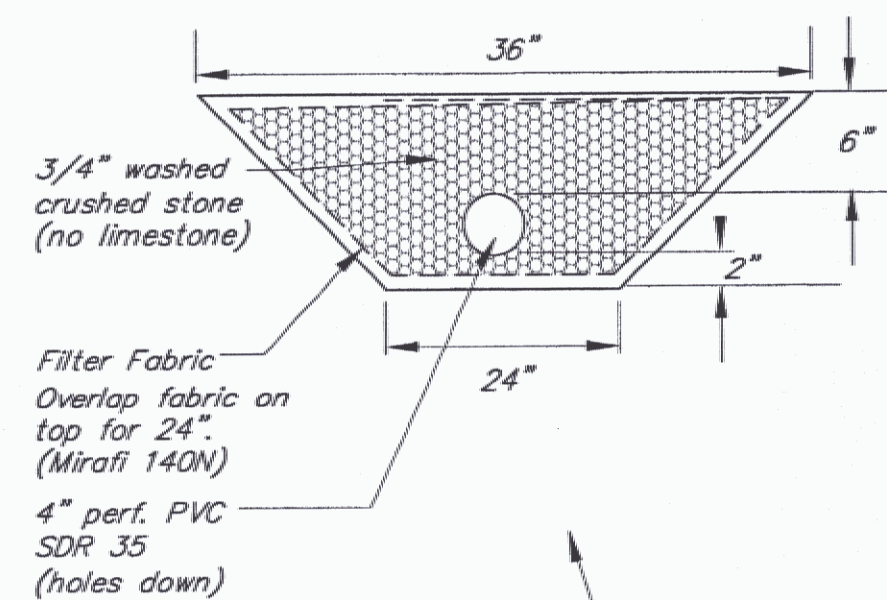
If the elevation of the ledge is less than 83 1/2" below finish grade (above road subbase), some or all of the sand cushion may not be required. Shattered ledge may be left in place instead of sand cushion if the contractor shatters rock to 116 1/2" below finish grade (4' below sand borrow), and the contractor provides a 1 foot vertical to every 25 foot horizontal transition for sand/ledge interface.



Typical Road Cross Section - Car Area

(STA. C-8+00 TO C-14+00 AND ASSOCIATED PARKING)

N.T.S.

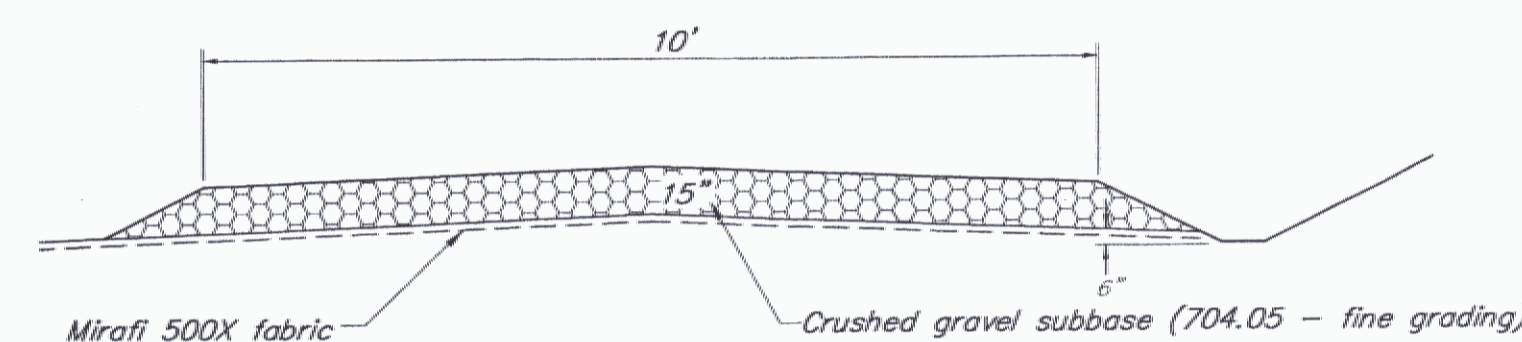


Note: Use this road/parking cross-section design in all areas outside the areas designated above.

Typical Road Cross Section - Truck Area

(ALL REMAINING PAVED AREAS OUTSIDE THE AREAS DESIGNATED ABOVE)

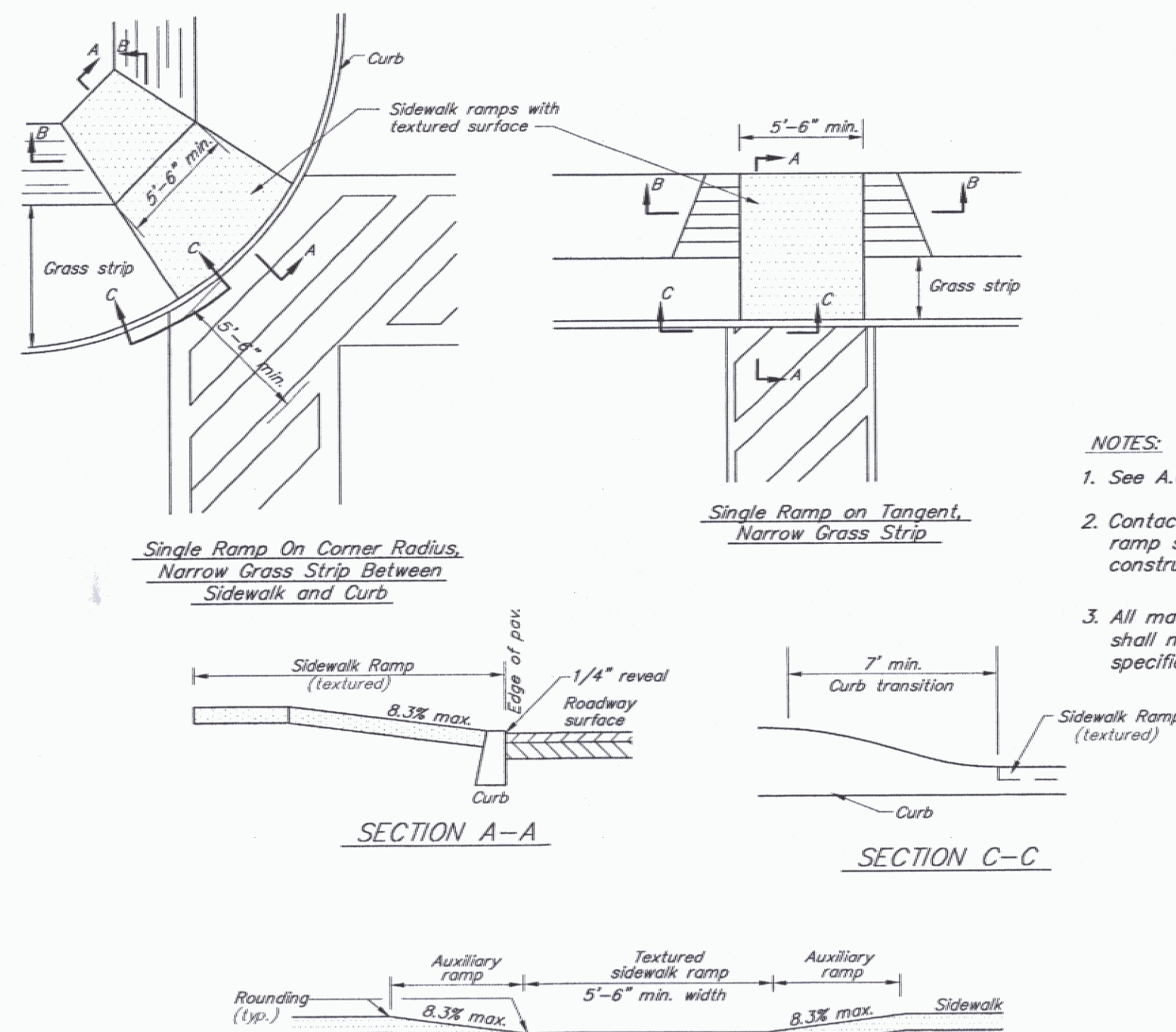
N.T.S.



Gravel Maintenance Road Detail

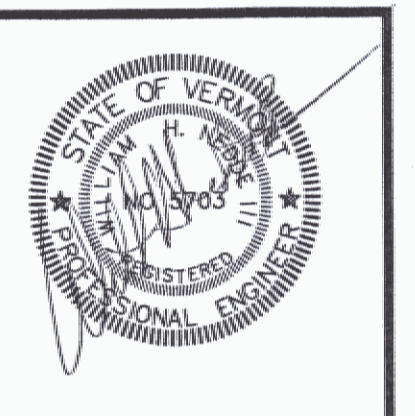
(Next to stormwater detention facility) n.t.s.

Note: All materials and installations shall meet AOT 2001 standards.



NOTES:

- See A.O.T. standard detail C-3
- Contact Engineer to confirm ramp specifications prior to construction.
- All materials and installations shall meet AOT standards and specifications.



NORTHERN ARCHITECTS

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802-658-1953

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(802) 878-0275

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7 Maple Avenue
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(802) 664-0010

STRUCTURAL
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117 SAINT PAUL STREET
BURLINGTON, VT 05401
802-660-9212

MECHANICAL/ELECTRICAL
DUFFENBERG, INC.
24 ROUTE 106, PRECISION PARK
NORTH SPRINGFIELD, VT 05450
802-886-7261

REVISIONS

PROJECT

DERBY WELCOME CENTER
PROJECT #IM 091-3(B)

NEW FACILITY

DERBY VERMONT

DATE: 01/07/02
SCALE: AS NOTED
CHECKED:
PROJECT NO: 00137

DETAILS

SC-25