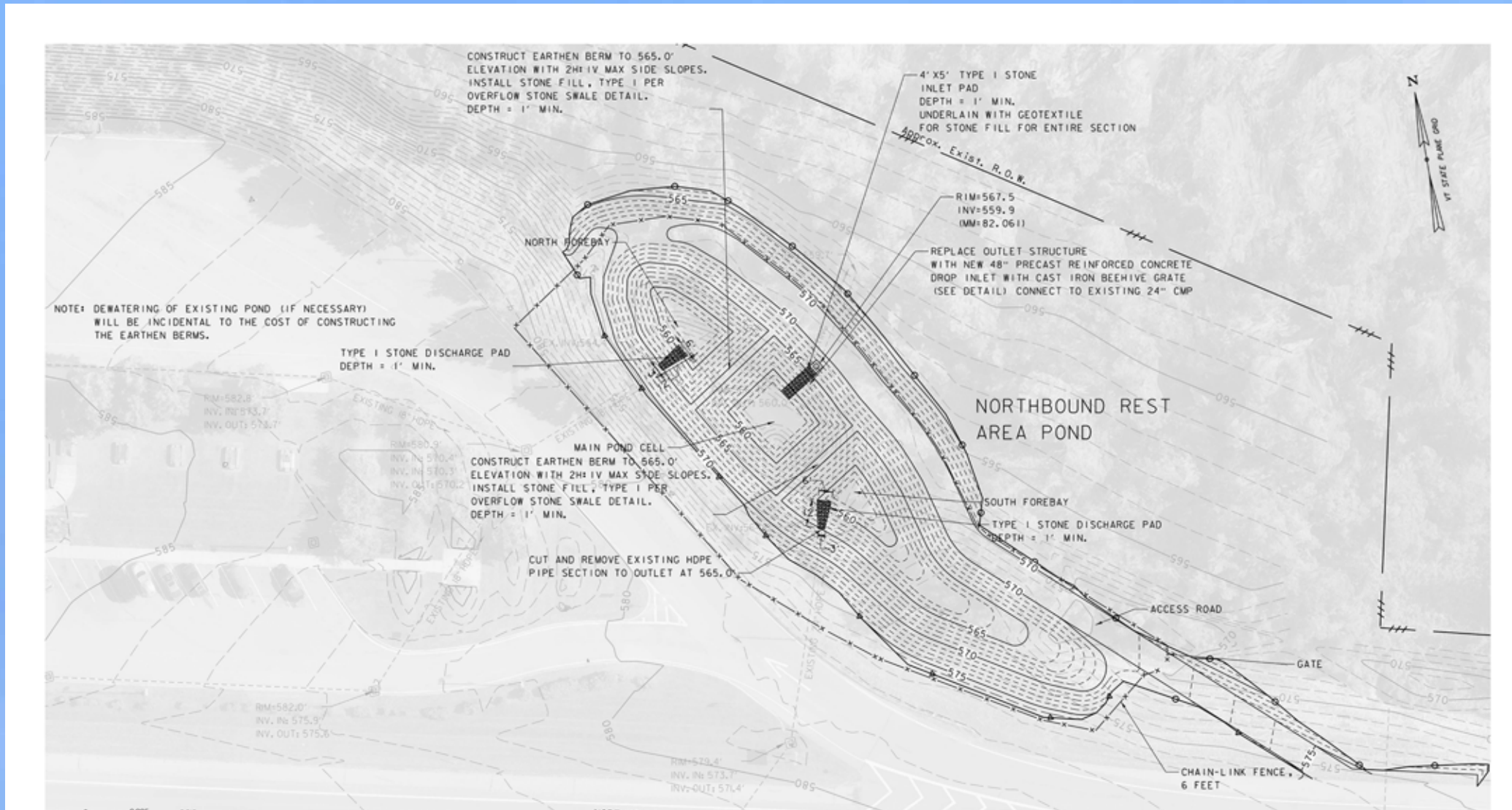
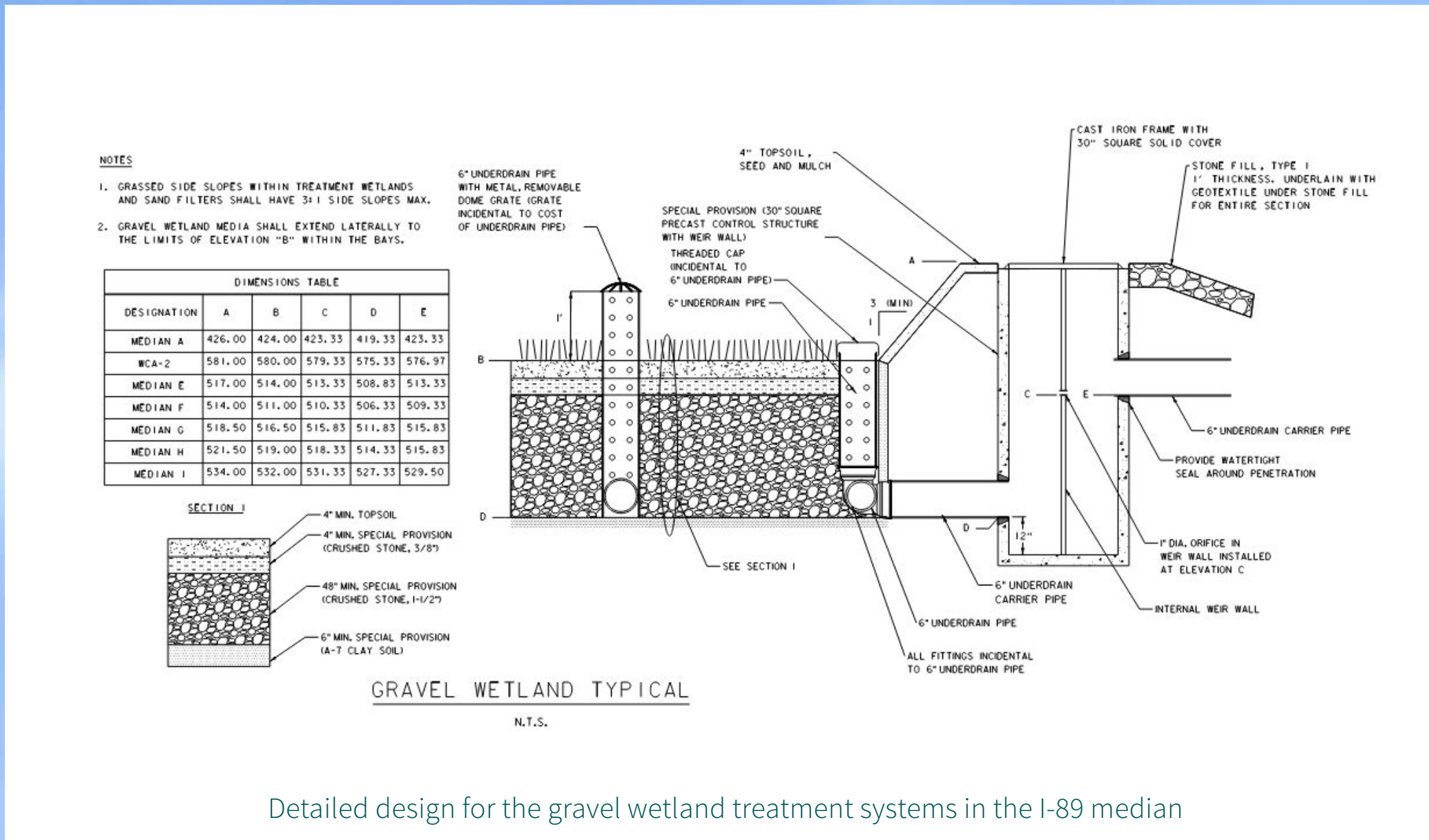


Williston Interstate Stormwater Retrofits

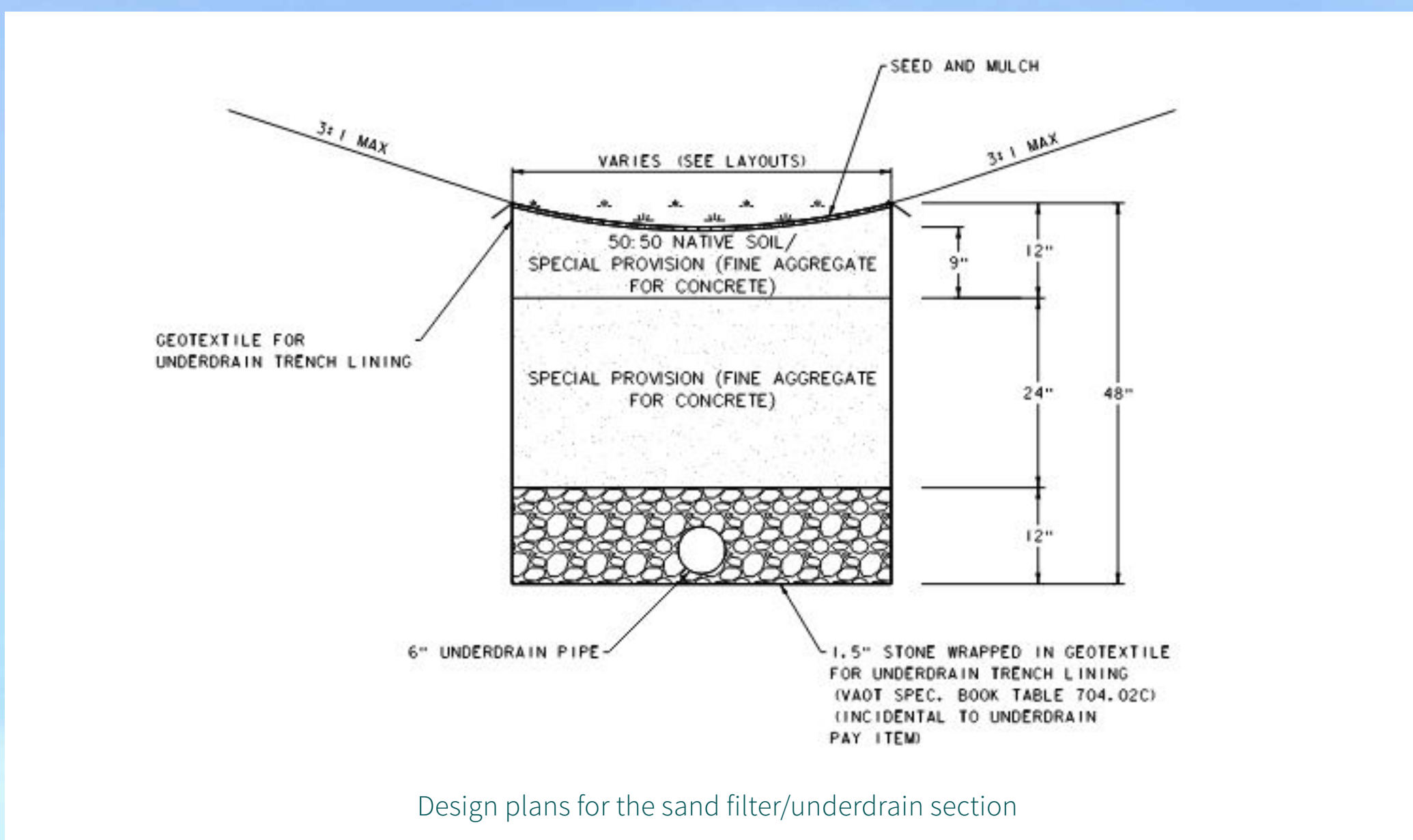
Williston, Vermont



Final design plan for the retrofit of the existing detention pond adjacent to the northbound rest area on I-89



Detailed design for the gravel wetland treatment systems in the I-89 median



Design plans for the sand filter/underdrain section

Allen Brook, a stormwater impaired watershed located in the heart of Williston, Vermont, is the town's largest watershed at 6,900 acres and intersects the state's most significant highway, Interstate 89 (I-89). When it became time for the Vermont Agency of Transportation (VTrans) to implement new stormwater treatment practices to address the impairment, VTrans engaged the Project Team to develop stormwater retrofit designs along the I-89 median in the Allen Brook Watershed. Understanding the client's goal, the Project Team developed design plans to assist VTrans in meeting its high flow reduction targets and to achieve as much phosphorus reduction as possible in accordance with the Allen Brook Flow Restoration Plan and TMDL, and the Lake Champlain TMDL.

Meeting & Exceeding the Client's Needs

After exploring multiple treatment options, the Project Team chose a design that would be the most beneficial to VTrans in terms of efficacy and cost. The final retrofit design was developed through a combination of the Project Manager's familiarity with the VTrans design development process and the Project Team's extensive experience and understanding of stormwater retrofit implementation. This blended expertise provided VTrans with seamless communication and a plan that not only met its initial needs, but exceeded expectations by adapting the conceptual treatment practices to maximize phosphorus reduction to Allen Brook and ultimately to Lake Champlain. The final plans included the design of 13 stormwater treatment practices, including 12 new practices in the I-89 median and a retrofit of the existing wet pond adjacent to the northbound rest area. This project was completed within budget and on an accelerated schedule, delivering finalized plans within one year.

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