



**Vermont Department of Environmental Conservation**

Watershed Management Division  
Springfield Regional Office  
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*Agency of Natural Resources*

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**AUTHORIZATION TO CONDUCT STREAM ALTERATION ACTIVITIES**

Pursuant to Section C.2.2.5 of the VT Stream Alteration General Permit (Reporting replacement of existing culverts)

Project Number: **SA-05-001-2016 Ludlow Imerys Well Culvert** LUP # 2S0185-16  
Applicant Name: Imerys Talc Vermont Contact: Terry Bane or Robin Reilly  
Mailing Address: 73 East Hill Rd, Ludlow, VT 015149 Phone: (802) 228-6400  
Project Location: East of Office and Milling Center Buildings Email: [terry.bane@imerys.com](mailto:terry.bane@imerys.com) [robin.reilly@imerys.com](mailto:robin.reilly@imerys.com)

The Secretary of the Vermont Agency of Natural Resources (VT ANR) has determined that:


1. This project authorizes the replacement of an undersized culvert with an 8' X 3' concrete box culvert on an existing woods road to provide access for a new water supply well and distribution line for the Imerys Genesis Project.
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit.
3. The proposed activity will meet the terms and conditions of the General Permit provided:
  - a) The project will be completed and approved as shown on the attached plan dated 12/4/15, prepared by Enman-Kesselring, and approved by the VT ANR as attached herein.
  - b) The project will not adversely affect the public safety by increasing flood hazards.
  - c) The project will not significantly damage fish life or wildlife.
  - d) The project will not significantly damage the rights of riparian owners.
  - e) The project will not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.
  - f) The project is conducted in a manner which minimizes or avoids any discharge of sediment or other pollutants to surface waters in violation of the VT Water Quality Standards.
  - g) The ANR River Management Engineer is notified by phone or email when construction begins and when the project is complete.
  - h) In-stream working dates for all GP activities are from July 1<sup>st</sup> through October 1<sup>st</sup>; any in-stream work outside these dates will require an Individual Stream Alteration Permit authorization by the River Management Engineer.
  - i) This authorization has been posted for three days public comment. This authorization constitutes final approval.

If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

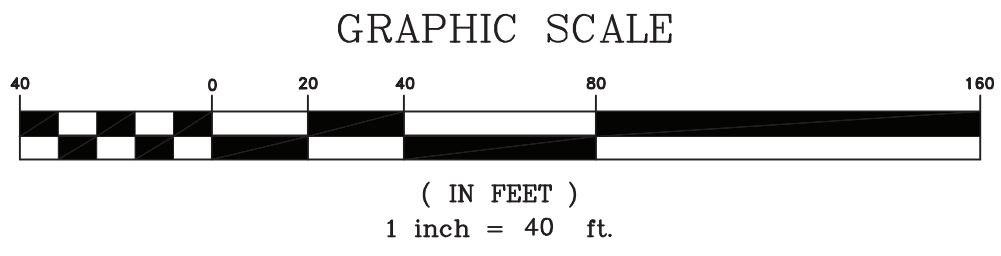
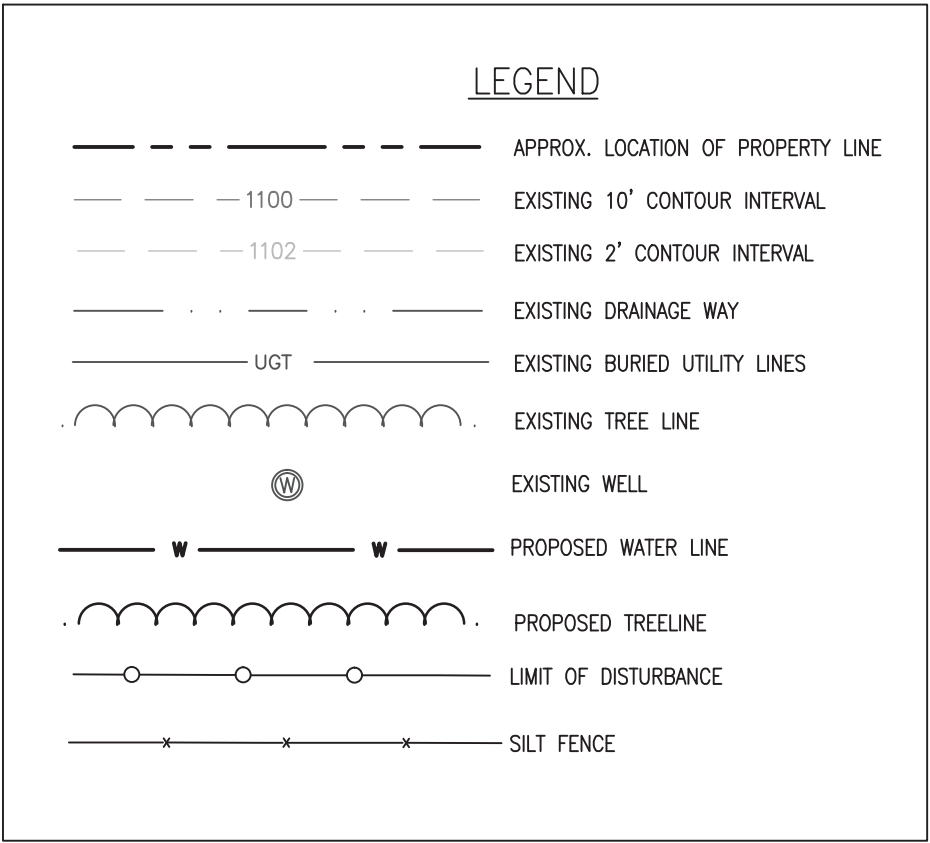
If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

Signed this 3<sup>rd</sup> day of February, 2016  
Alyssa B. Schuren, Commissioner  
Department of Environmental Conservation

This permit expires October 1, 2016.

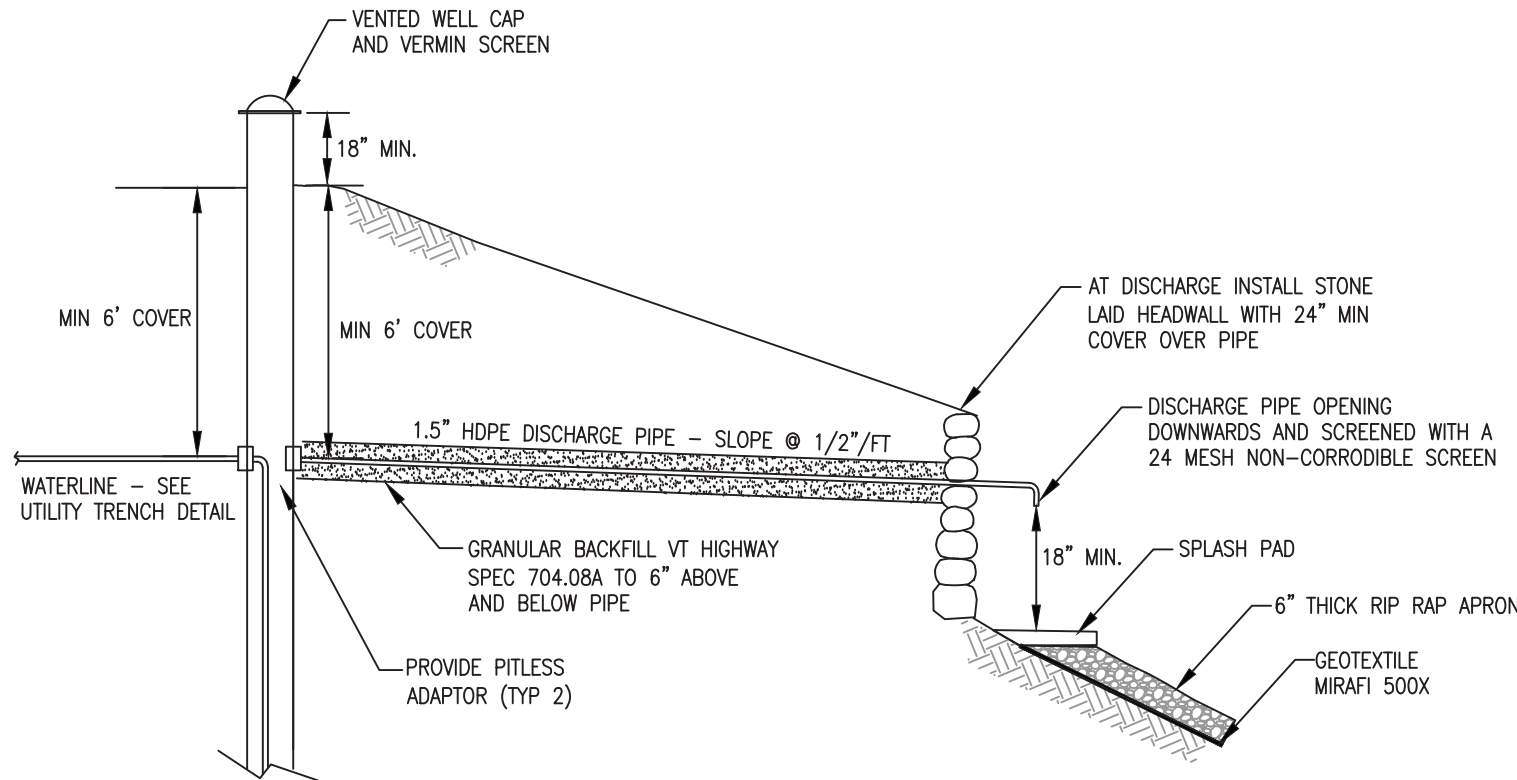
by   
Todd Menees, P.E., P.H., River Management Engineer





**KEY PLAN**

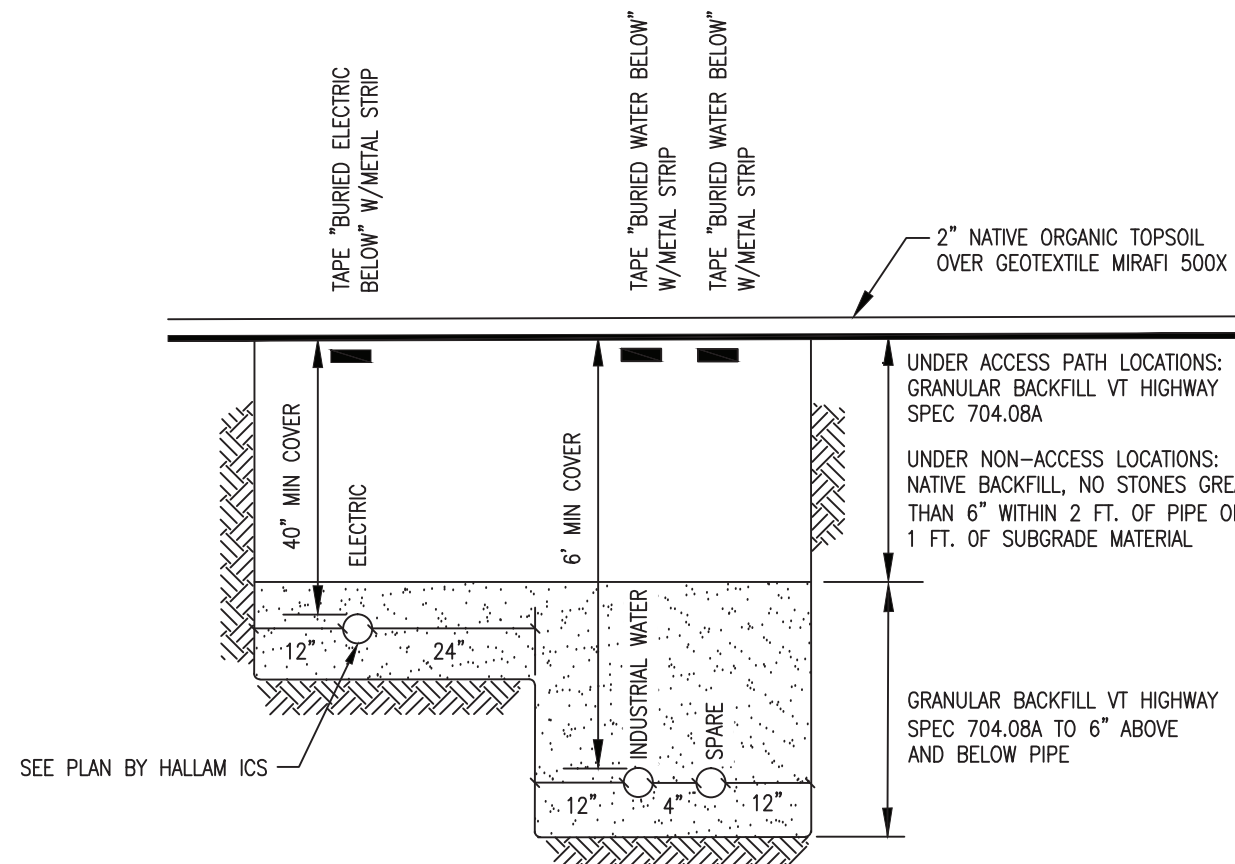
SCALE: 1" = 40'



- NOTES:**
1. THE WELL OVERFLOW SHALL DISCHARGE AT LEAST 18 INCHES ABOVE FINISH GROUND SURFACE AND SHALL DISCHARGE ONTO A SPLASH PAD. RIP RAP SHALL HAVE A D-50 OF 4". THE OVERFLOW PIPE SHALL BE LOCATED SO THAT ANY DISCHARGE IS VISIBLE.
  2. THE ABOVE GRADE PORTION OF THE OVERFLOW SHALL BE OPEN DOWNWARD AND BE SCREENED WITH A 24 MESH NON-CORRODERABLE SCREEN.

**WELL OVERFLOW DRAIN DETAIL**

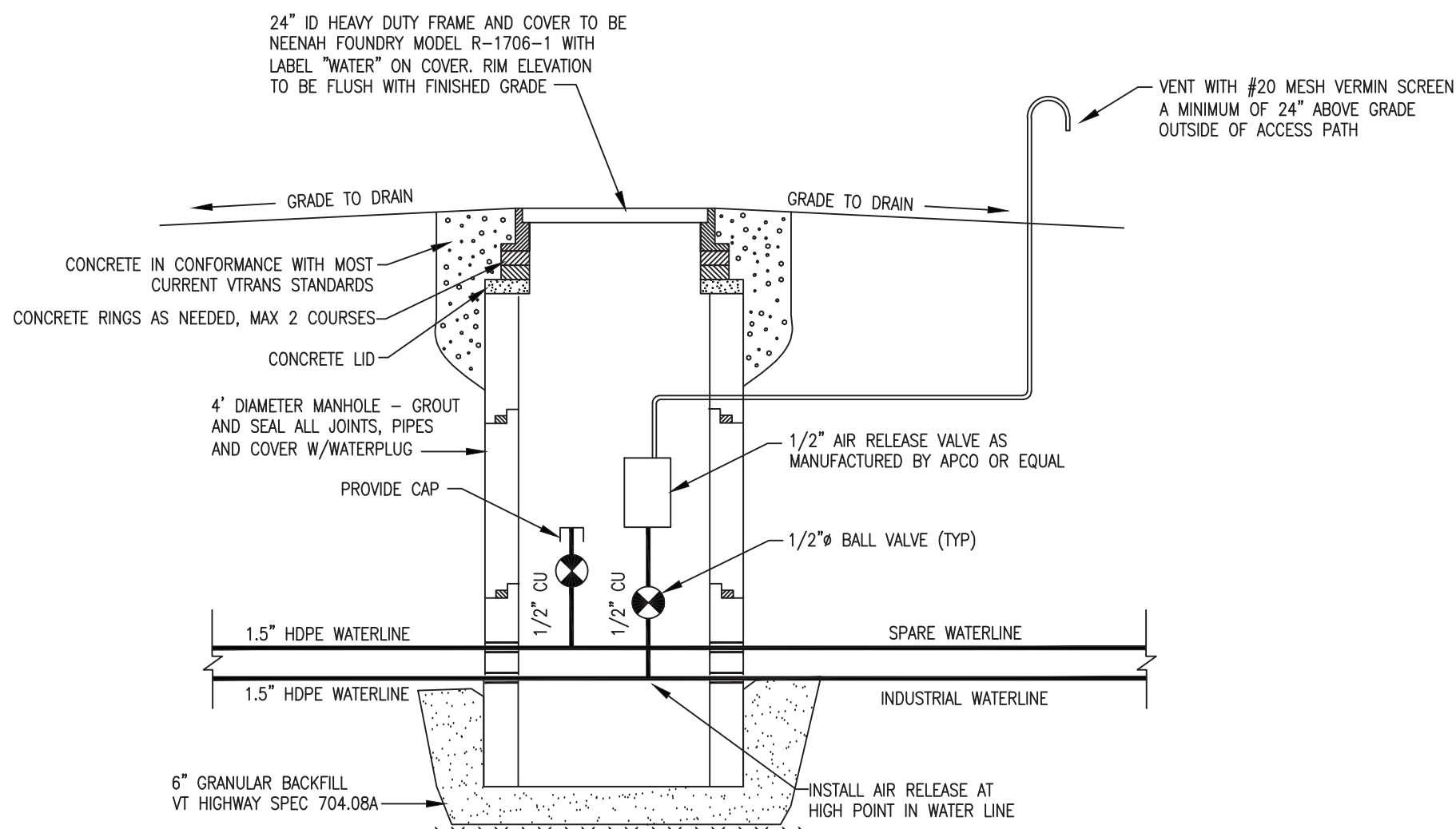
NTS



- NOTES:**
1. THE CONTRACTOR SHALL FOLLOW MANUFACTURER'S GUIDELINES FOR INSTALLATION.
  2. THE TRENCH SHALL BE PREPARED SO THAT THE PIPE MAY BE INSTALLED ON A FIRM, UNIFORM BASE, WITH STABLE EARTH OR FINE GRANULAR FOUNDATION. IF UNSTABLE TRENCH CONDITIONS ARE FOUND TO EXIST THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
  3. PIPE SHALL BE INSTALLED WITH A MINIMUM OF 6" OF BEDDING MATERIAL UNDER AND 6" ABOVE PIPE. CONTRACTOR SHALL TAKE CARE TO ACHIEVE PROPER COMPACTION BENEATH HAUNCHES.
  4. SEE PLANS AND OTHER DETAILS FOR FINISHED SURFACE.

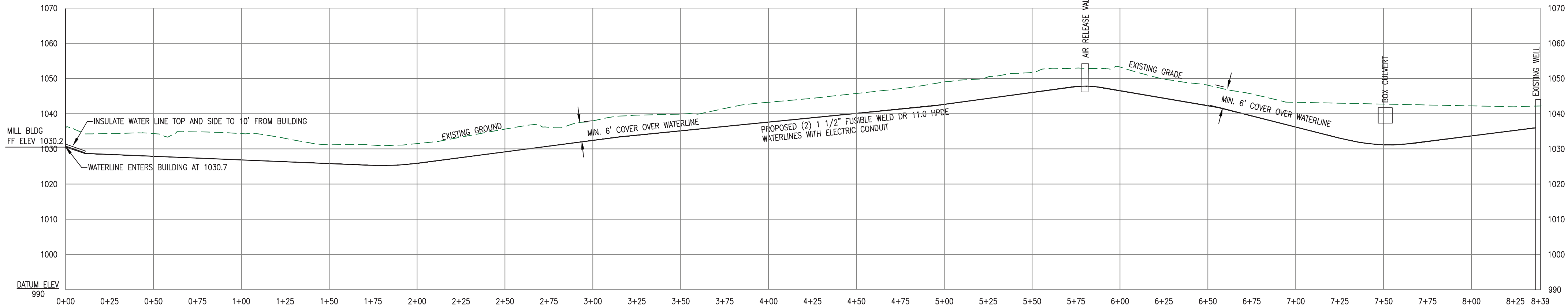
**COMBINED UTILITY TRENCH DETAIL**

NTS



**WATERLINE AIR RELEASE VALVE IN 4' DIA. MANHOLE**

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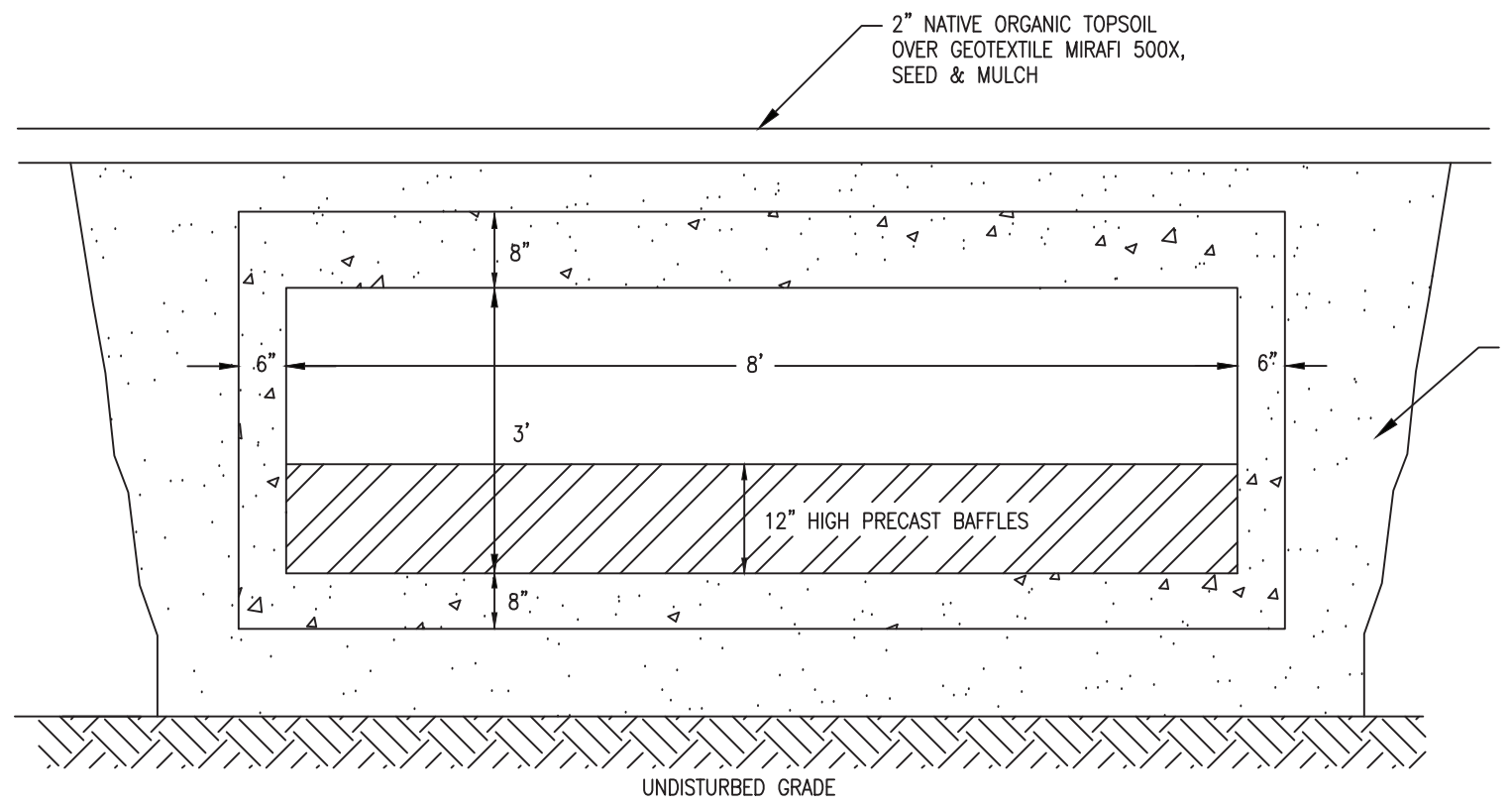


**WATERLINE PROFILE**

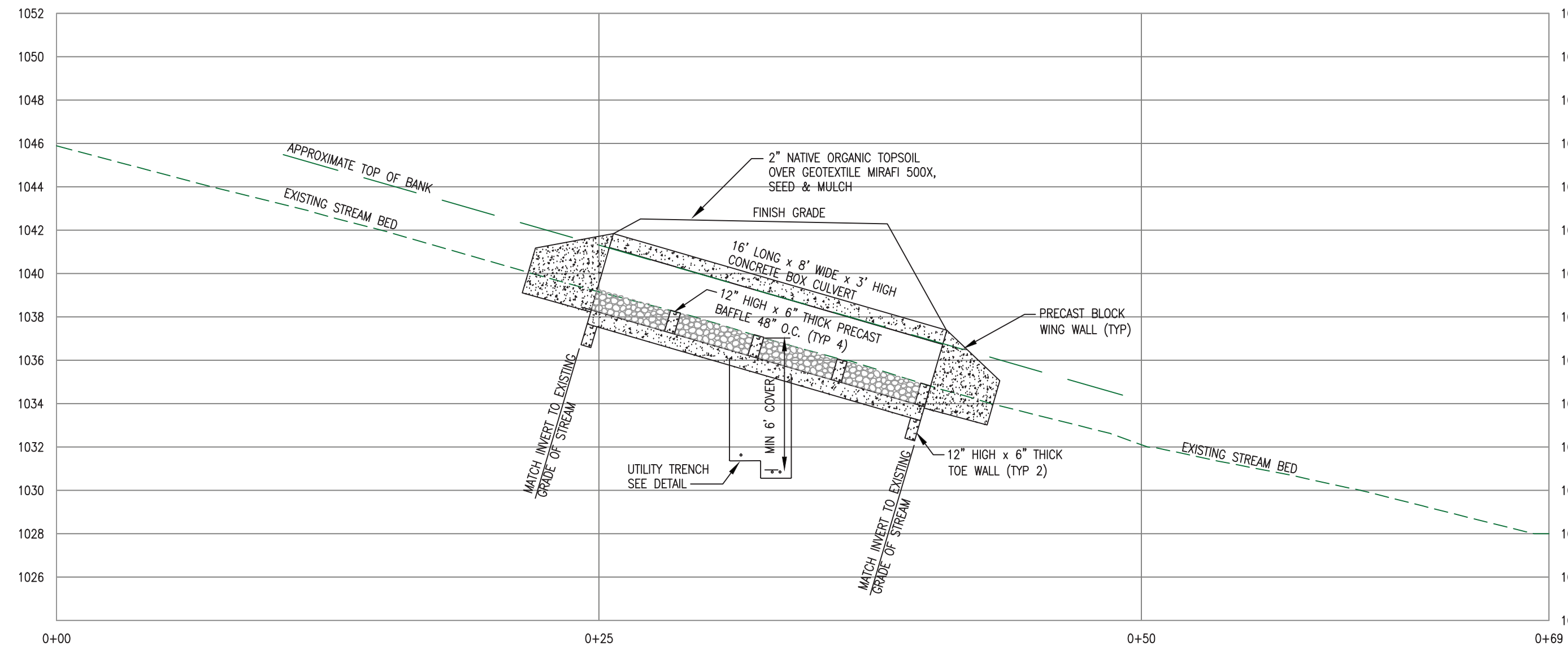
SCALE: HORIZ 1" = 40'  
VERT: 1" = 20'

**CULVERT NOTES**

1. SITE CONSTRUCTION ACTIVITIES ARE TO BE SCHEDULED FOR TIMES OF LOW FLOW OR NO FLOW IN THE TRIBUTARY. JULY OR AUGUST ARE SUGGESTED.
2. REMOVE EXISTING CULVERT AND PROVIDE TEMPORARY STREAM BYPASS TO DIVERT WATER.
3. PROVIDE PRECAST BLOCK WINGWALLS AT CULVERT ENTRANCE AND EXIT.
4. INFILL PRECAST CULVERT BAFFLES WITH D50 = 6 INCH STONE.
5. REESTABLISH STREAM CHANNEL TO PRECONSTRUCTION CONDITIONS FOLLOWING CONSTRUCTION.



**8'x3' CONCRETE BOX CULVERT CROSS SECTIONAL DETAIL**



**STREAM PROFILE FOR CULVERT REPLACEMENT**

SCALE: HORIZ 1" = 5'  
VERT: 1" = 5'



CONSULTANTS:

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**NOT FOR  
CONSTRUCTION UNTIL  
ALL PERMITS ARE  
ISSUED**

**ISSUED FOR  
ADDENDUM 3**

0	12/23/15	ADDENDUM 3 (NEW DRAWING)
No.	DATE	REVISION

REVISIONS



**IMERY'S  
GENESIS PROJECT**

LUDLOW, VERMONT

"This drawing is the property of IMERY'S TALC. It has been prepared specifically for this project and is not to be copied or used for any other purpose, location, or owner without written consent of IMERY'S TALC ©"

DRAWING TITLE:

**WATERLINE PLAN,  
PROFILE AND  
EROSION CONTROL  
PLAN**

DESIGNED: B.JE/PMC	DATE: 12/4/15
DRAWN: KSM	SCALE: AS SHOWN
CHECKED: B.JE/PMC	PROJ. No. 1414.2

SHEET NO.

**C12**

PLOT SIZE 30" x 42"