U.S. Army Garrison Fort Monmouth
Restoration Advisory Board (RAB)
July 9, 2009 ~ 7:00 p.m.

AGENDA

1. Call meeting to order.

2. Comments old business.
   - Approval of the April 1, 2009 Meeting Minutes.

3. Discuss the status of the Baseline Ecological Evaluation (BEE).

   - Tentative Schedule:
     - Check copy of BEE Work Plan will be mailed to NJDEP on July 27, 2009
     - Shaw will perform a site visit and terrain walk on August 24, 2009
     - Work Plan will be completed September 18, 2009

4. Stream Bank Stabilization Project Update
   - M3 Landfill stabilization started June 12, 2009
   - Presentation of by Princeton Hydro, Inc.

5. Discuss Underground Storage Tank (UST) and Underground Heating Oil Tank (UHOT) removals – Presented by Tecom-Vinnell Services
   - Parcel 14 – no tanks, just pipes
   - Parcel 28 – tank removed, site is clean
   - Building 556 (Field House) – no tanks, site is clean
   - Building 1203 – tank removed, site is clean
   - Parcel 51 – removed two leaking tanks, currently removing dirty soil

6. Round table discussion.

7. Public comments/questions.

8. Next RAB meeting will be held Wednesday, October 7, 2009 in Gibbs Hall at 7:00 pm.

9. Meeting adjourned.

2009 Fort Monmouth Restoration Advisory Board

Date: July 9, 2009

NAME	ORGANIZATION	ADDRESS	TELEPHONE	EMAIL	SIGNATURE
Col. Stephen Christian	U.S. Army Fort Monmonuth	U.S. Army Fort Monmouth ATTN: IMNNE-MON-ZA Fort Monmouth, NJ 07703	W - 732-532-9504	stephen.christian@us.army.mil	
Wanda Green	U.S. Army Fort Monmonuth	Directorate of Public Works 173 Riverside Drive Fort Monmouth, NJ 07703	W - 732-532-8341	wanda.green1@us.army.mil	Wanda Green
Joe Fallon	U.S. Army Fort Monmonuth	Directorate of Public Works 173 Riverside Drive Fort Monmouth, NJ 07703	W - 732-532-6223	joseph.m.fallon@us.army.mil	Joe Fallon
Larry Quinn	NJDEP Division of Publicly Funded Site Remediation	NJDEP Div. of Publicly Funded Site Remediation 401 E. State St., CN 413 Trenton, NJ 08625	W - 609-633-0766	larry.quinn@dep.state.nj.us	
Joel Grimm Per William Simmons	Monmouth Co. Dept. of Health	Monmouth County DOH 3435 Hwy 9 Freehold, NJ 07728	732-431-7456	wsimmons@co.monmouth.nj.us	
Dan Levine	Little Silver Business - Little Silver Community Hardware	44 Church St. Little Silver, NJ 07739	H-Redacted - Privacy Act W-732-747-2133 F-732-747-5420	'hardwaredan@verizon.net'	
Brain Charnick	Resident - Eatontown 2	Redacted - Privacy Act	H-Redacted - Privacy Act W-Redacted - Privacy Information C-Redacted - Privacy Act	Redacted - Privacy Act	
Edward J. Dlugosz	Resident - Eatontown 3		H-Redacted - Privacy Act W-Redacted - Privacy Information		
Frank Barricelli	Resident - Oceanport 4		H-Redacted - Privacy Act		
Jim Modlin	Resident - Oceanport 5		H-Redacted - Privacy Act W-Redacted - Privacy Information		
Pippa Woods	Resident - Tinton Falls		H-Redacted - Privacy Act W-Redacted - Privacy Information C-Redacted - Privacy Act		
James Allen	Resident - Tinton Falls 6		H-Redacted - Privacy Act		
Dianne M. Crilly	Resident - Shrewsbury 7		H-Redacted - Privacy Act		
Rosemary Brewer	Resident - Little Silver 8		H-Redacted - Privacy Act W-Redacted - Privacy Information C-Redacted - Privacy Act		
Tim Rider	U.S. Army Fort Monmonuth	Media Relations, Bldg 1207 Fort Monmouth, NJ 07703	W - 732-532-1409	timothy.rider@us.army.mil	

FORT MONMOUTH RESTORATION ADVISORY BOARD (RAB) MEETING

July 9, 2009 ~ 7:00 PM

SIGN-IN SHEET

PRINT NAME	ORGANIZATION	ADDRESS	TELEPHONE	EMAIL
ED DLUGOSZ	EEC	32 CAMPBELL DR EATONTOWN		
J Schiels	—	Redacted - Privacy Act		
TIM ROSE	POD	— FORT MONMOUTH		
THOMAS MENAPACE	BOROUGH OF SHREWSBURY	79 ROBINSON PL SHREWSBURY		
Robert Ward	Resident Shrewsbury	Redacted - Privacy Act		
Gus Fragado	Shrewsbury			
George Fitzsimmons	USAEPM			
Frank Cosentino	FMERPA	2-12 Corbett Way Eatontown	7732355966	
J Coffallon	DPW			
Harold Hornung	TVS			

FORT MONMOUTH RESTORATION ADVISORY BOARD (RAB) MEETING

July 9, 2009 ~ 7:00 PM

REQUEST TO ASK QUESTIONS

PRINT NAME	ORGANIZATION	ADDRESS	TELEPHONE	EMAIL
THOMAS MENAPACE	BOROUGH OF SHREWSBURY	Redacted - Privacy Act		
GUS FIALCADO	Shrewsbury citizen Ft. monmouth neighbor	Redacted - Privacy Act		
ROBERT WARD	SHREWSBURY RESIDENT	Redacted - Privacy Act		
BENEVIDES LOU	USA G	"	"	"
B. TT Dodge	BOROUGH OF SHREWSBURY	Redacted - Privacy Act		
John Schill	OCEANTOWN COUNCIL	Redacted - Privacy Act		—
Frank C.	FMERPA			

Princeton Hydro

Fort Monmouth
Landfill Bank Stabilization

Restoration Advisory Board (RAB) Meeting
July 9, 2009

Geoffrey M. Goll, P.E.
Vice President
Princeton Hydro, LLC

Jacob E. Helminiak, P.E., CFM
Senior Project Engineer
Princeton Hydro, LLC

Princeton Hydro

Presentation Topics

- Overall goals of the project
- Specific design approaches at each site
- Permits Issued
- Construction progress to date
- Birdsall Letter

Princeton Hydro

Overall Goals

- Long term stabilization of Landfill slopes
- Preparation for Phase II capping

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Design Approach

- Landfills M2, M3, M4, M8, M12
- Pre-application Meeting with NJDEP -- No Hydrology & Hydraulics (H&H) required by NJDEP
- Based on existing stable riprap slopes (c. 1999)
- Biolog stabilization – failure (c. 1999)

Princeton Hydro

Design Approach

- Designed to accept Phase II capping
- Slightly varied at each landfill based on site layout / constraints
- Cannot decrease channel cross-sectional area to less than pre-existing (pre-erosion) conditions
- Proposed slopes to match pre-existing slopes

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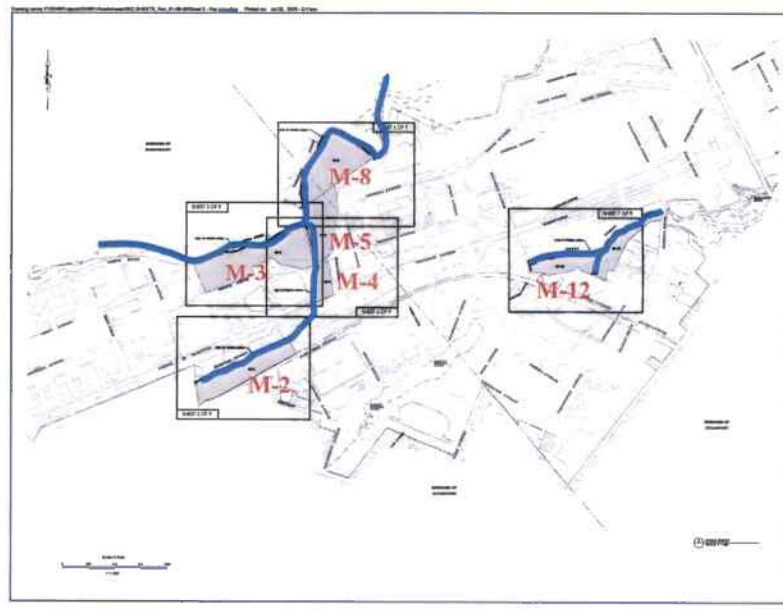

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Design Approach – M2

- Wampum Brook
- 1,224 L.F.
- Landfill South Bank - Riprap Stabilization – Detail 'C'
- Non-landfill North Bank - Concrete Removal / Stabilization – Detail 'A'
- Tie into existing stabilization upstream

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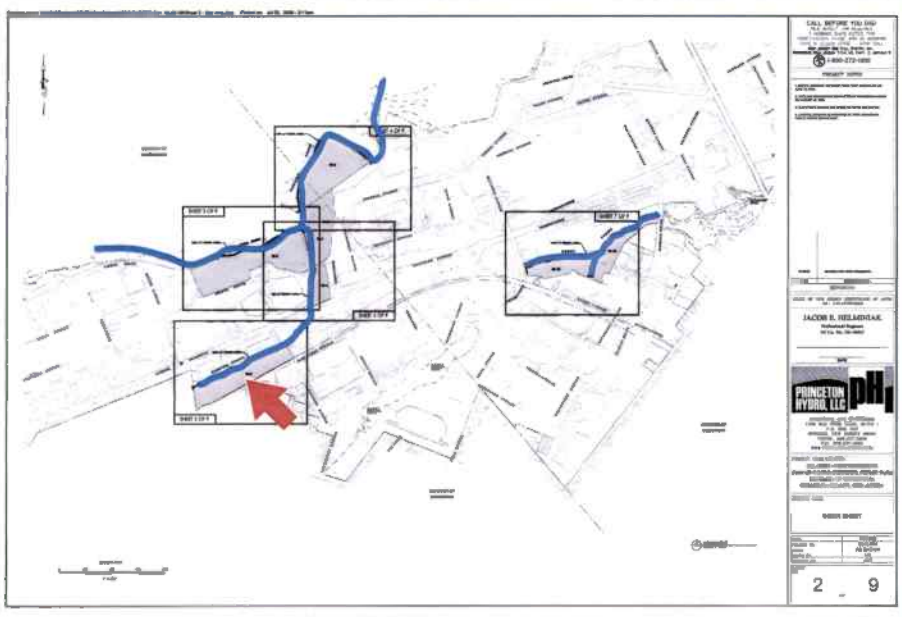

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Design Approach – M2

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Design Approach – M2

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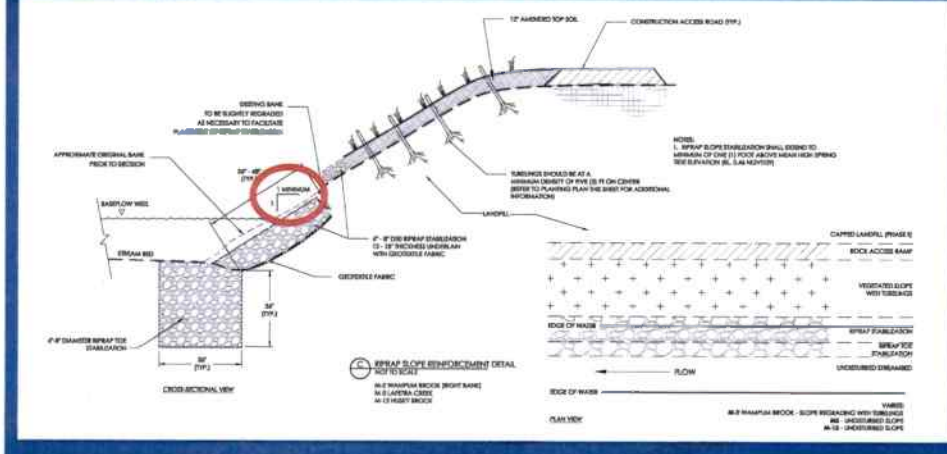
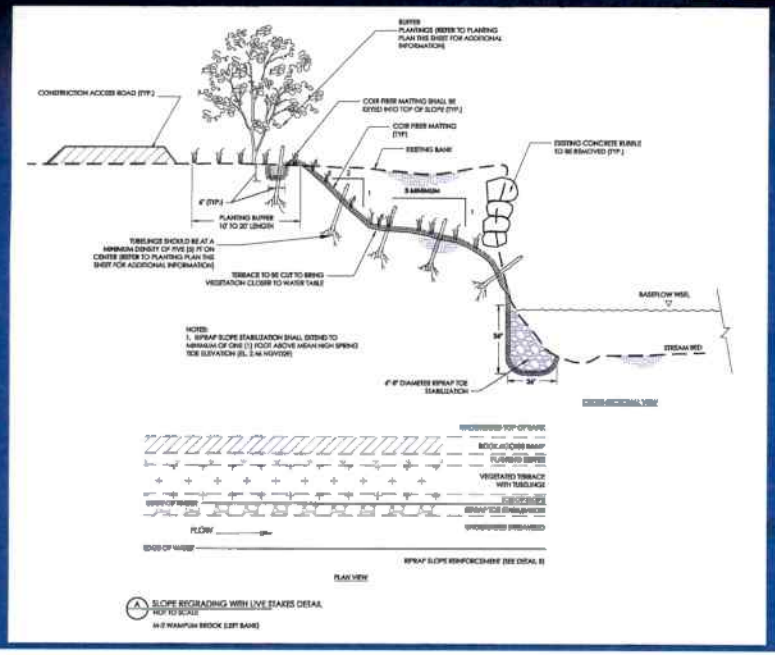
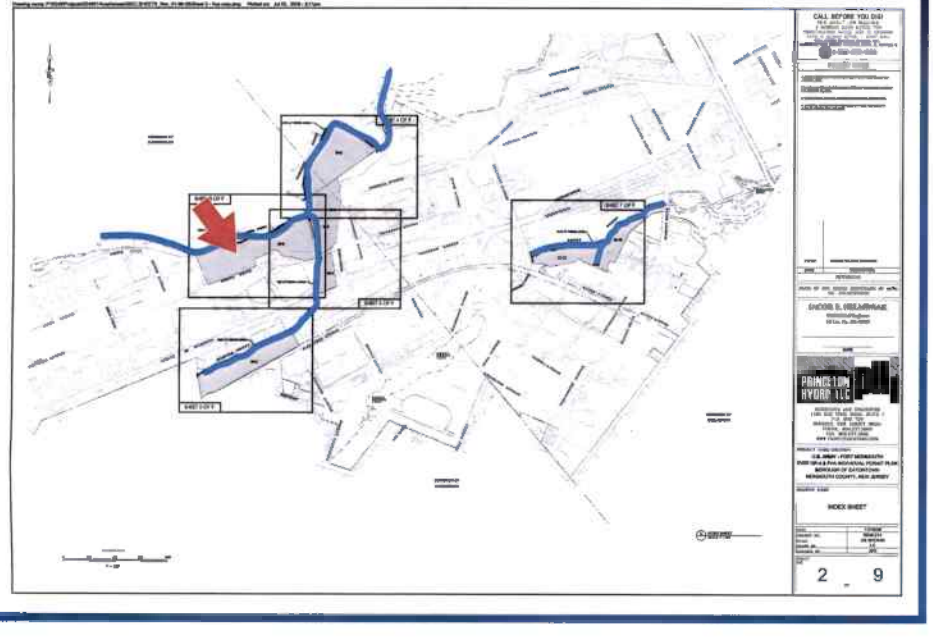
Design Approach – M2





Design Approach – M3

- Lafetra Creek
- 1,391 L.F.
- Landfill Bank -- Riprap Stabilization – Detail 'C'



Design Approach – M3

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Design Approach – M3

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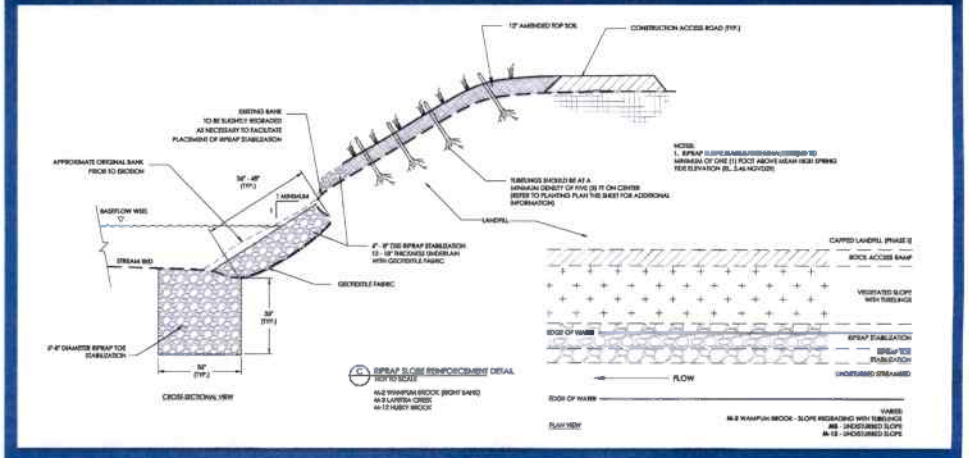
Design Approach – M3



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Design Approach – M4

- Wampum Brook
- 401 L.F.
- Both Landfill Banks -- Riprap Stabilization – Detail 'B'
- Identical to M3 / M5, but up to TOB
- Tie into existing stabilization

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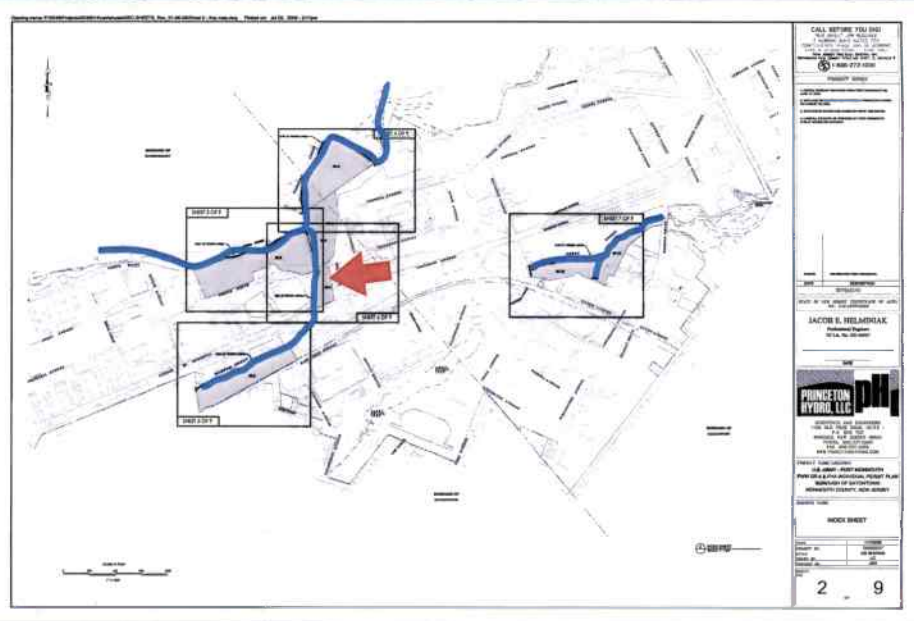

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Design Approach – M4

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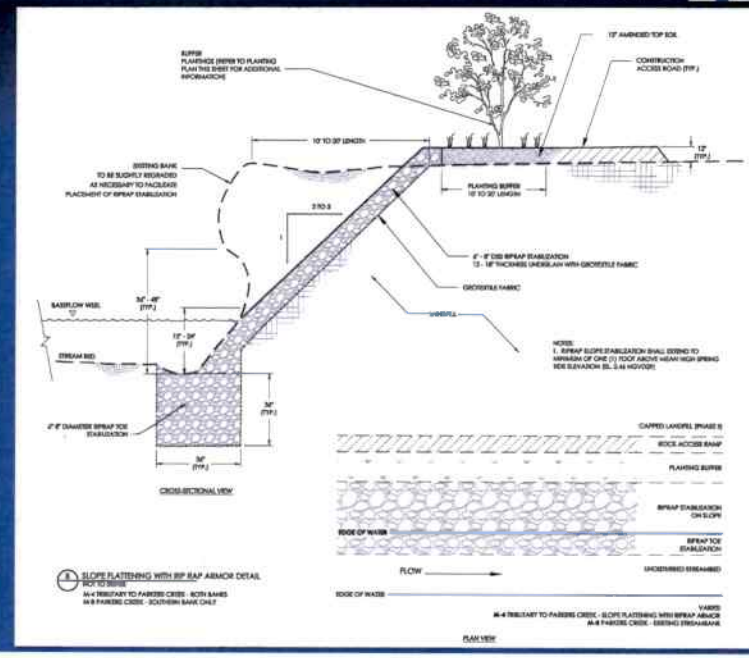

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Design Approach – M8

- Parker's Creek
- 1,572 L.F.
- Riprap Stabilization – Detail 'B'
- Tie into existing stabilization upstream (M5)

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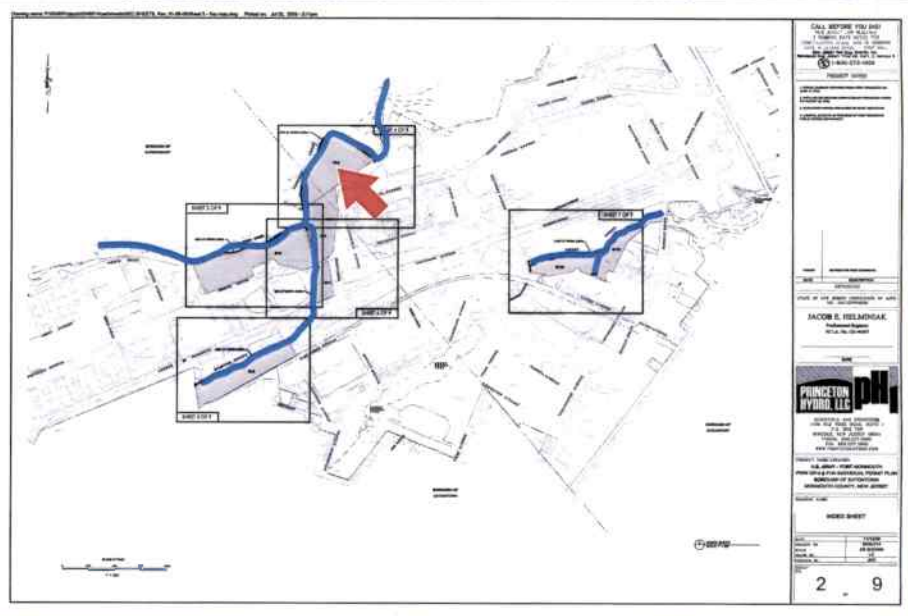

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Design Approach – M8

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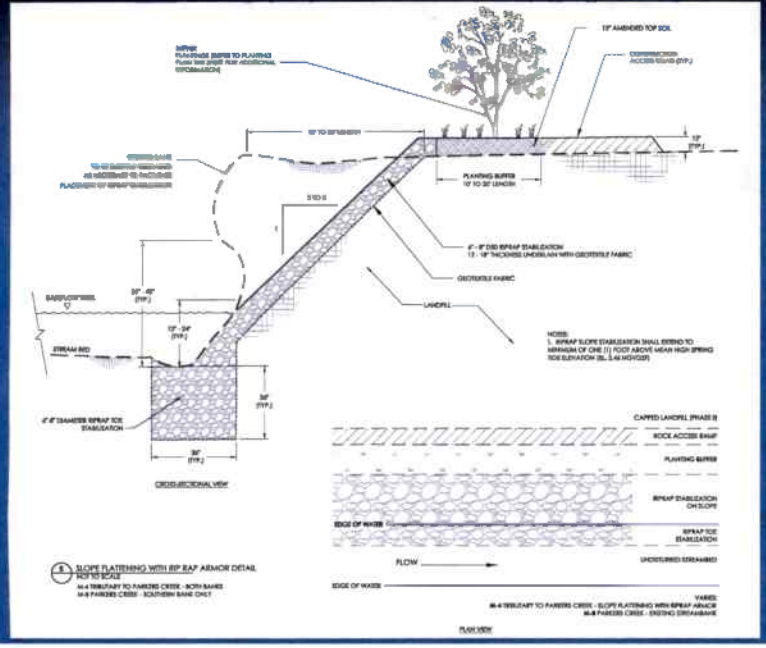
Design Approach – M8

Princeton Hydro



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Design Approach – M12

- Husky Brook
- 1,229 L.F.
- Riprap Stabilization – Detail 'B'
- Wood debris removal
- Scour pool stabilization

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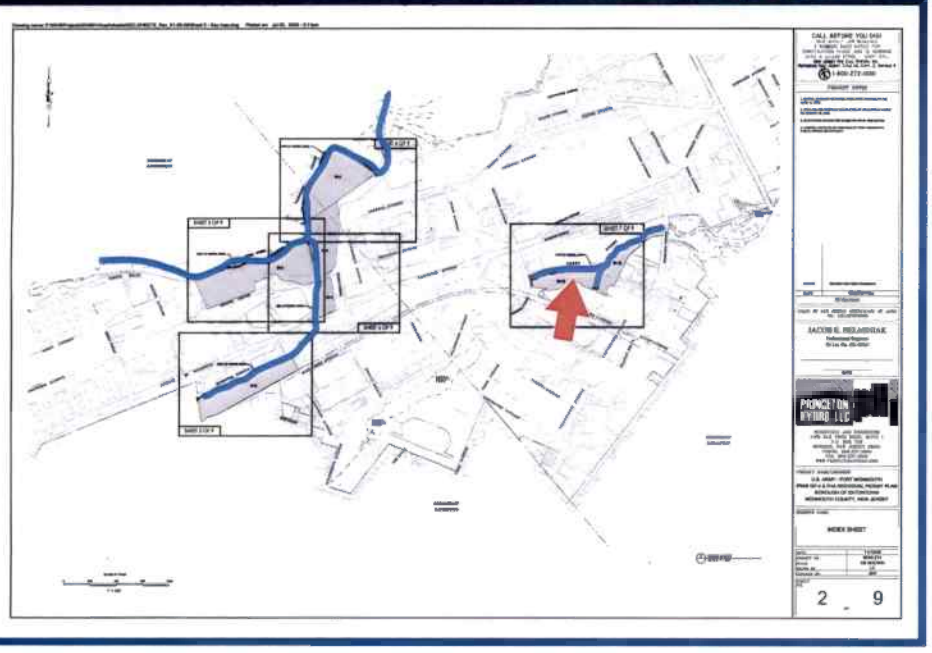

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Design Approach – M12

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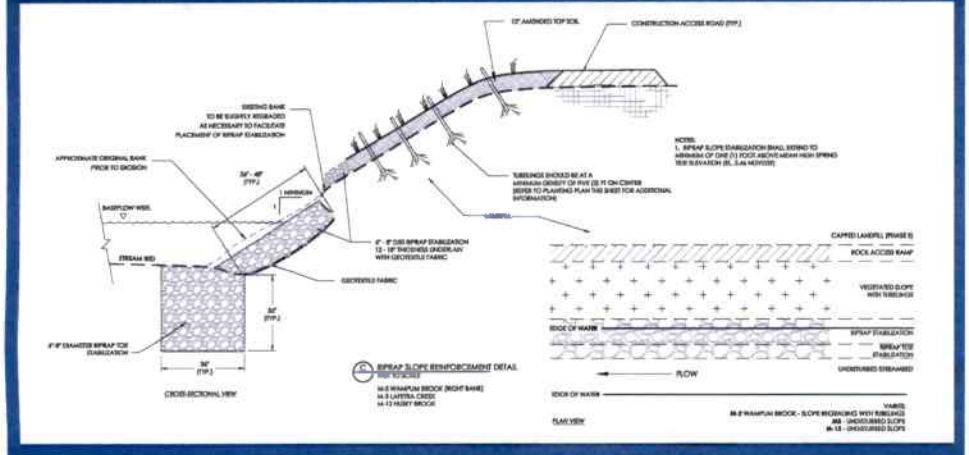
Design Approach – M12



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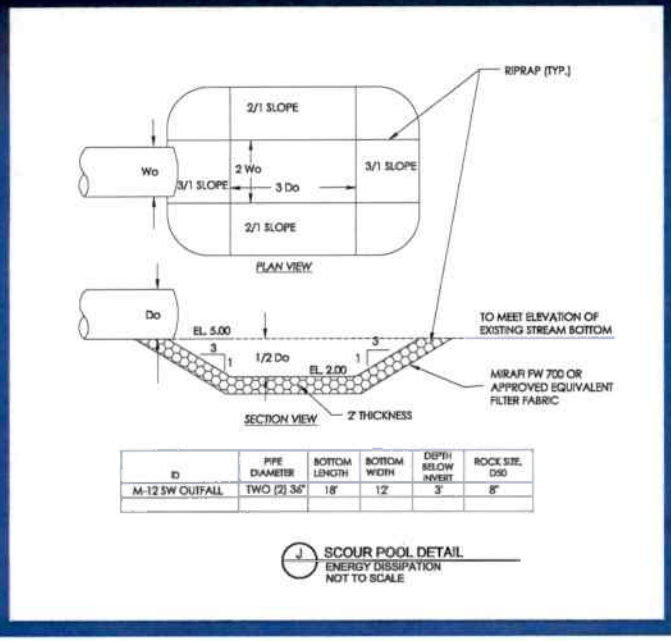
Design Approach – M12



ID	PIPE DIAMETER	BOTTOM LENGTH	BOTTOM WIDTH	DEPTH BELOW INVERT	ROCK SIZE, D50
M-12 SW OUTFALL	TWO (2) 36"	18'	12'	3'	8"

SCOUR POOL DETAIL
ENERGY DISSIPATION
NOT TO SCALE

Design Approach – M12

Design Approach – M12

Permit Approvals

- NJDEP
  - Flood Hazard Area (FHA)
  - Freshwater Wetlands (FWW)
- USACE
  - Nationwide General Permit
- Freehold SCD

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Construction Progress

- M8 clearing / preparation
- M8 stabilization installation
- M3 clearing / preparation
- Permit Amendment -- additional M3 stabilization at top of bank – under review at NJDEP

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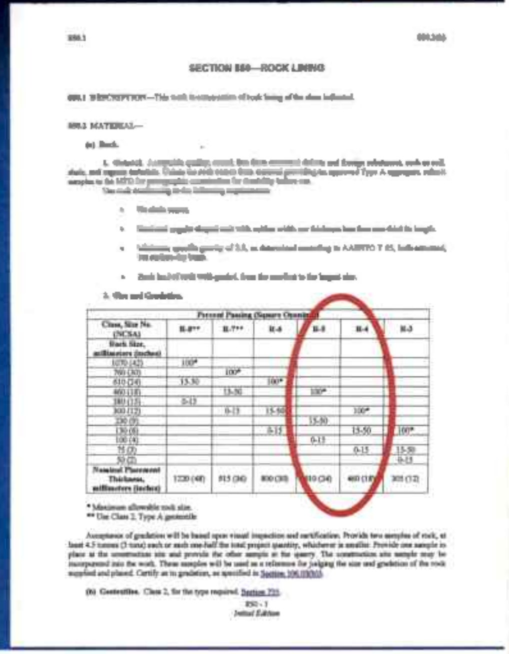
- Existing Stabilization
- R-4, R-5
- D50 = 6" – 9"



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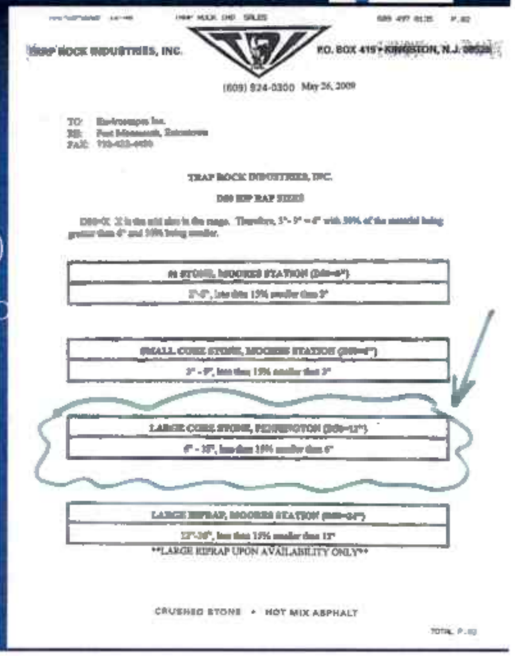
- Proposed Stabilization
- D50 = 6" – 8" (design)
- D50 = 12" (constructio



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M8 Clearing / Preparation

- Onsite for layout, selective tree removal
- No debris or waste encountered during slight regrading and preparation of slope
- Slope ~2.5 to 3H:1V
- Due to space constraints, portions of stabilization reach will not have planting buffer

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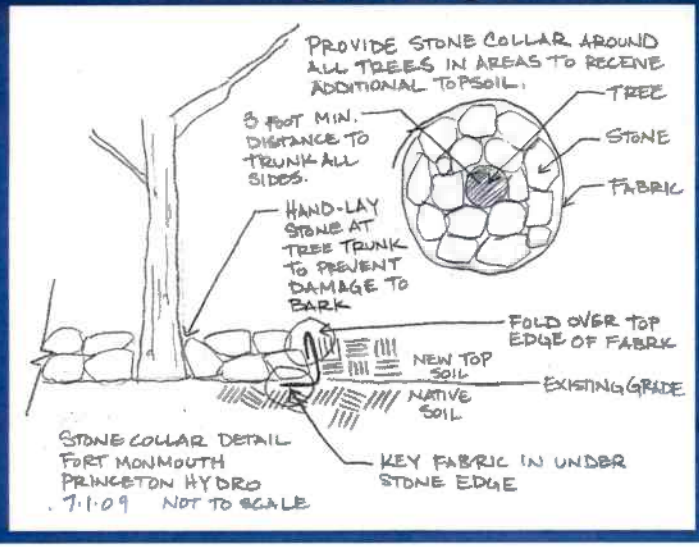
M8 Clearing / Preparation



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M8 Clearing / Preparation

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M8 Clearing / Preparation

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M8 Stabilization Installation

Princeton Hydro

M8 Stabilization Installation

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M8 Stabilization Installation

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M3 Clearing / Preparation

Underground Storage Tank (UST) removal update

Parcel 14

No Underground Heating Oil Tanks (UHOTS) were found. Piping was present in the excavation.

Parcel 28

550-gallon Steel UHOT

Parcel 28
UHOT out of excavation.

Parcel 28

No contamination found in excavation.

Building 556

Test pit in indent parking lot. No UST found. High iron layer in soil may have given false GPR reading.

Building 556

Concrete vault with steel lid found. Part of an abandoned natural gas distribution system.

Building 556

Test pit installed to look for fuel lines. No pipes were found.

Steps taken to complete the Building 1203 project: Pump out existing fuel to be reused in new AST.
Remove existing concrete pad and uncover UST.
Concrete was sent to Mazza for recycling.

Remove pea gravel surrounding UST.

Cut straps and allowed UST to float up on the groundwater.

Remove UST from excavation.

Collect closure samples and backfill excavation with pea gravel and bank run sand.

Conduct a confined space entry to clean sludge out of UST.

Label UST and transport to Mazza for disposal.

Construct form for concrete pad.

Pour concrete pad and re-grade excavation area.

Place AST on pad and install protective bollards.

Install and paint supply and return piping.

Pressure test AST and put into use.

Parcel 51

Building 750 UHOT D, 1000-gallon steel

Parcel 51

Rusting and pitting present on UHOT D

Parcel 51

Excavation after UHOT D was removed.

Parcel 51

60 cubic yards of petroleum contaminated soil was removed. The excavation was sampled and backfilled.

Parcel 51

Pumping 300 gallons of fuel and water out of UHOT E.

Parcel 51

UHOT E removed from excavation.

Parcel 51

Currently removing contaminated soil from the east and west wall of the excavation.