

STX EE WATERSHEDS

RETROFITS



Site Name/ID: GP-R-1 / Great Pond Parking

Watershed: Great Pond

Date: 1/26/2011

Assessed by: RAC & ACS

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: owner - EEMP? confirm w/ Paige Rothenberger

Land Use: Public Private Unknown:

Single Family Residential Multi-Fam. Residential School Golf Course Park Agricultural Road
 Commercial/Industrial Resort Marina Other: parking/access to beach & pond/dumping area

Is the site a hotspot? Yes No Unknown: Probably
Sources/pollutants observed? No Sediment Nutrients/organics Oil/grease Trash/Floatables

Existing Stormwater BMP on site? Yes No Unknown:

Soils: Unknown poor infiltration good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:
Stormwater sheet flow down existing dirt road/paths to pond & ocean.
Debris/staining from dump/trash piles & evidence of burn piles
along road east of pond. SW likely flows through refuse to
beach.
Significant gullying & erosion along road

PROPOSED RETROFIT CONCEPT (CONT. ON BACK)

Proposed Retrofit Practice(s): existing BMP upgrade new BMP

island bio/rain garden swale planter tree pits infiltration permeable paver sand filter pond
 constructed wetland proprietary practice soil amendments reforestation impervious cover removal
 rainwater harvesting disconnection Other (describe): install vehicle barrier

Area Draining to Retrofit

Hotspot Individual rooftop
 Parking Lot other small impervious area
 Street Pervious area
 Other (describe): dirt road/neighborhood to NW

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____ %

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): Storage Water Quality Recharge Gut Protection
Demonstration / Education Repair Other:

Possible Conflicts due to: Soils Access
 Adjacent Land Use Existing Utilities
 Contamination High water table
 Limited access to water Other:

Describe conflicts:

NEXT STEPS

Candidate for pilot project yep, love it OK undecided no, but keep listed no way

Follow-up needed to Complete Field Concept

Confirm property ownership Obtain existing as-builts/site plans Obtain utility mapping
 Confirm drainage area/impervious cover Obtain detailed topography Confirm soil types
 Confirm volume computations Confirm storm drain invert elevations
 Complete concept sketch Other:

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

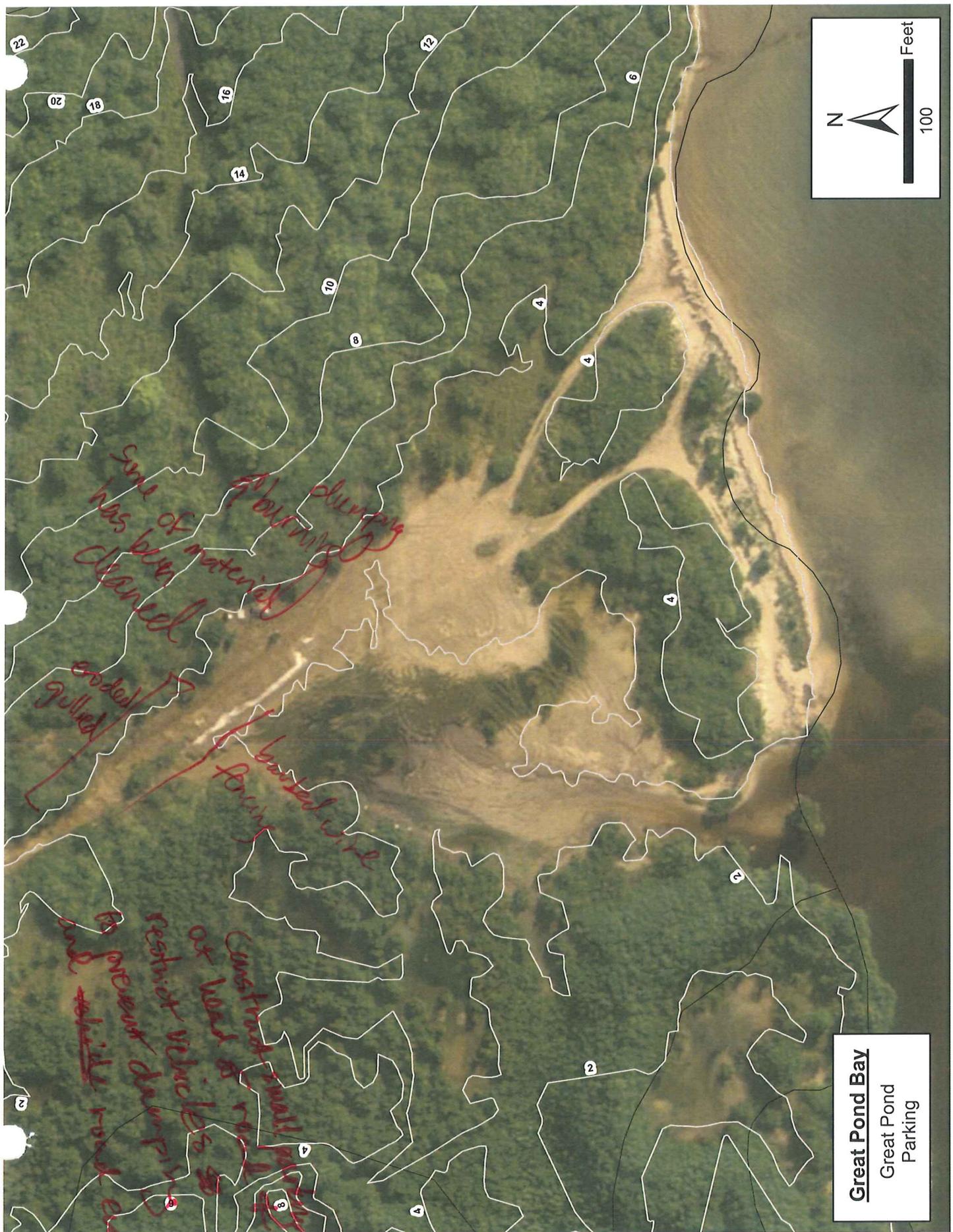
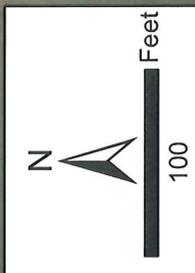
Install guardrail or other suitable barrier to restrict vehicle access (and minimize potential for dumping) on road. Restore road w/ appropriate sediment and/or gravel
- Clean/remove trash/refuse/debris to suitable off site location
- 'No dumping' signage?

Sketch and/or Sizing Calcs: see aerial

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: Low Medium High



Great Pond Bay
Great Pond
Parking

STX EE WATERSHEDS

RETROFITS



Site Name/ID: GP-R-2

Watershed: Great Pond

Date: 1/26/11

Assessed by: MW, KR, & ACK

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info:
 - EEMP
 - Paige

Land Use: Public Private Unknown:

 Single Family Residential Multi-Fam. Residential School Golf Course Park Agricultural Road
 Commercial/Industrial Resort Marina Other: _____

Is the site a hotspot? Yes No Unknown:
 Sources/pollutants observed? No Sediment Nutrients/organics Oil/grease Trash/Floatables

Existing Stormwater BMP on site? Yes No Unknown:

Soils: Unknown poor infiltration good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:
No Problems here — maybe use empty open space to grow plants for rain gardens & erosion control projects??

PROPOSED RETROFIT CONCEPT (CONT. ON BACK) NONE

Proposed Retrofit Practice(s): existing BMP upgrade new BMP

 island bio/rain garden swale planter tree pits infiltration permeable paver sand filter pond
 constructed wetland proprietary practice soil amendments reforestation impervious cover removal
 rainwater harvesting disconnection Other (describe): _____

Area Draining to Retrofit <input type="checkbox"/> Hotspot <input type="checkbox"/> Individual rooftop <input type="checkbox"/> Parking Lot <input type="checkbox"/> other small impervious area <input type="checkbox"/> Street <input type="checkbox"/> Pervious area <input type="checkbox"/> Other (describe): _____	Drainage Area to retrofit ≈ _____ acres/sq ft Imperviousness ≈ _____ % Impervious Area ≈ _____ acres/sq ft
---	---

Benefits of Retrofit (primary & secondary): Storage Water Quality Recharge Gut Protection
 Demonstration / Education Repair Other: _____

Possible Conflicts due to: <input type="checkbox"/> Soils <input type="checkbox"/> Access <input type="checkbox"/> Adjacent Land Use <input type="checkbox"/> Existing Utilities <input type="checkbox"/> Contamination <input type="checkbox"/> High water table <input type="checkbox"/> Limited access to water <input type="checkbox"/> Other: _____	Describe conflicts:
--	----------------------------

NEXT STEPS

Candidate for pilot project yep, love it OK undecided no, but keep listed no way

Follow-up needed to Complete Field Concept

<input type="checkbox"/> Confirm property ownership <input type="checkbox"/> Confirm drainage area/impervious cover <input type="checkbox"/> Confirm volume computations <input type="checkbox"/> Complete concept sketch	<input type="checkbox"/> Obtain existing as-builts/site plans <input type="checkbox"/> Obtain detailed topography <input type="checkbox"/> Confirm storm drain invert elevations <input type="checkbox"/> Other: _____	<input type="checkbox"/> Obtain utility mapping <input type="checkbox"/> Confirm soil types
--	---	--

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, approx. surface area/ depth of treatment, conveyance structures):

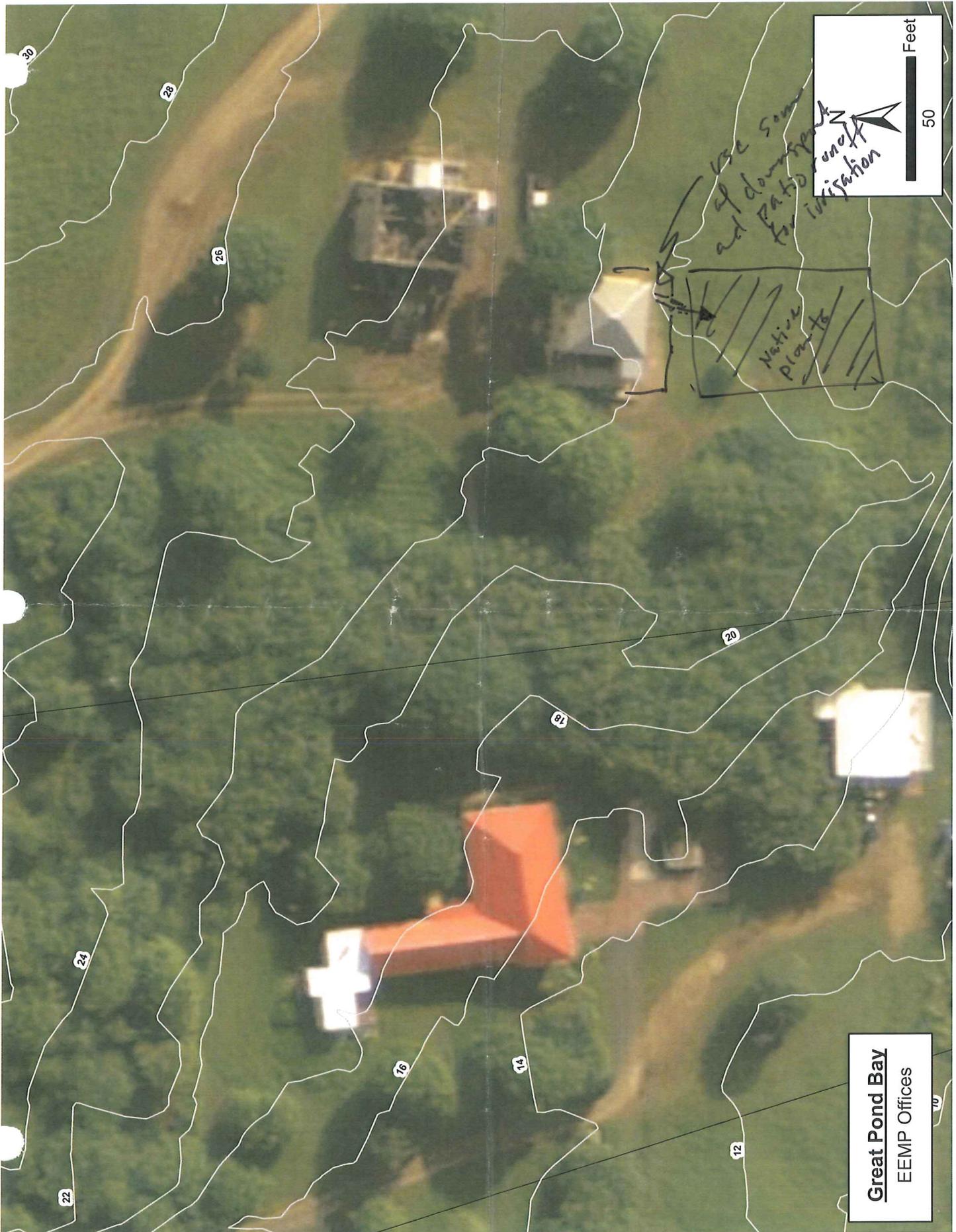
Sketch and/or Sizing Calcs:

SEE AERIAL

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: Low Medium High



Great Pond Bay
EEMP Offices

use some of downspout water for irrigation

Native Plants

Feet
50

STX EE WATERSHEDS

RETROFITS



Site Name/ID: GP-R-3

Watershed: Great Pond

Date: 1/26/14

Assessed by: MW, KR, ACK

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info:

Paige @ EEMP

Land Use: Public Private Unknown: OWNERSHIP IN QUESTION

Single Family Residential Multi-Fam. Residential School Golf Course Park Agricultural Road
 Commercial/Industrial Resort Marina Other: _____

Is the site a hotspot? Yes No Unknown:
 Sources/pollutants observed? No Sediment Nutrients/organics Oil/grease Trash/Floatables

Existing Stormwater BMP on site? Yes No Unknown:

Soils: Unknown poor infiltration good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance:

Runoff from UNPAVED AREA DRAINS DOWN THRU TRAIL/BENCH ACCESS.
2:1-3:1 slopes down trail; rills & gullies are evident.

PROPOSED RETROFIT CONCEPT (CONT. ON BACK) N/A

Proposed Retrofit Practice(s): existing BMP upgrade new BMP

island bio/rain garden swale planter tree pits infiltration permeable paver sand filter pond
 constructed wetland proprietary practice soil amendments reforestation impervious cover removal
 rainwater harvesting disconnection Other (describe): _____

Area Draining to Retrofit

Hotspot Individual rooftop
 Parking Lot other small impervious area
 Street Pervious area
 Other (describe): _____

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____ %

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): Storage Water Quality Recharge Gut Protection
 Demonstration / Education Repair Other: _____

Possible Conflicts due to: Soils Access
 Adjacent Land Use Existing Utilities
 Contamination High water table
 Limited access to water Other: _____

Describe conflicts:

NEXT STEPS

Candidate for pilot project yep, love it OK undecided no, but keep listed no way

Follow-up needed to Complete Field Concept

Confirm property ownership Obtain existing as-builts/site plans Obtain utility mapping
 Confirm drainage area/impervious cover Obtain detailed topography Confirm soil types
 Confirm volume computations Confirm storm drain invert elevations
 Complete concept sketch Other: _____

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

Sketch and/or Sizing Calcs:

SEE AERIAL

NEED TO REVISIT SITE TO IDENTIFY
POSSIBLE LOCATIONS FOR STEPS &
WATER BARS.

Existing Head Available/Where Measured:

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: Low Medium High



SITE IN PROPOSED
CAMPGROUND
(SEE PLANS)

FORMER USE
PARKING AREA

ADD BOUNDARIES
TO RESTRICT
VEHICULAR
TRAFFIC

150 FT of limit
on existing line
to beach

REPLANT

0
50
100
200 Feet

sidewalk
walkways
steps



Muddy Mongoose

Site/Road Name/ID: GP-RC-1 Rte 24 Gut Crossing Watershed: Great Pond

Date: 1/26/2010

Assessed by: PAC, KHT, ACS

EXISTING CONDITION

<input checked="" type="checkbox"/> CULVERTS	SHAPE: <input type="checkbox"/> Arch <input type="checkbox"/> Bottomless <input type="checkbox"/> Box <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Circular <input type="checkbox"/> Other:	# BARRELS: <input type="checkbox"/> Single <input checked="" type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	MATERIAL: <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Metal <input type="checkbox"/> Other:	ALIGNMENT: <input type="checkbox"/> Flow-aligned <input checked="" type="checkbox"/> Not flow-aligned <input type="checkbox"/> Do not know	DIMENSIONS: (if variable, sketch) Barrel diameter: _____ (ft) Height: _____ (ft) Culvert length: _____ (ft) Width: _____ (ft) Roadway elevation: _____ (ft)
	CONDITION: (Evidence of...) <input type="checkbox"/> In good condition <input checked="" type="checkbox"/> Cracking/chipping/corrosion <input checked="" type="checkbox"/> Downstream scour hole <input type="checkbox"/> Sediment deposition <input type="checkbox"/> Upstream erosion <input type="checkbox"/> Blockage <input type="checkbox"/> Failing embankment <input type="checkbox"/> Threatened infrastructure <input type="checkbox"/> Other (describe):		CULVERT SLOPE: <input checked="" type="checkbox"/> Flat <input type="checkbox"/> Slight (2 - 5%) <input type="checkbox"/> Steeper		
	BLOCKAGE SEVERITY: <input checked="" type="checkbox"/> none <input type="checkbox"/> minor <input type="checkbox"/> partial <input type="checkbox"/> significant <input type="checkbox"/> complete				
	Potential barrier to aquatic species? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown				
	Is it acting as grade control? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown				

<input type="checkbox"/> ROAD SEGMENTS	SURFACE: <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Unpaved: >gravel <input type="checkbox"/> Unpaved: >dirt <input type="checkbox"/> Other	STEEPNESS: <input type="checkbox"/> Pretty flat <input type="checkbox"/> Slight (around 5:1, 20%) <input type="checkbox"/> Steep (more like 2:1, 50%) <input type="checkbox"/> Big time steep ($\geq 75\%$)	ACCESS/USE: <input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Unknown	Total ROW Width: _____ (ft) Drive lane: _____ (ft) Shoulder: _____ (ft) Length of interest: _____
	Surface: <input type="checkbox"/> good condition <input type="checkbox"/> minor maintenance needed <input type="checkbox"/> large gullies and potholes Drain Inlets/Catch basins: <input type="checkbox"/> None <input type="checkbox"/> clean <input checked="" type="checkbox"/> blocked <input type="checkbox"/> other: Waterbars/dips/cross drains: <input type="checkbox"/> None <input type="checkbox"/> functioning <input checked="" type="checkbox"/> need maintenance <input type="checkbox"/> other: Ditches: <input type="checkbox"/> none <input type="checkbox"/> shallow <input type="checkbox"/> well-defined: <input type="checkbox"/> stable <input type="checkbox"/> eroded <input type="checkbox"/> excess vegetation <input type="checkbox"/> other: Discharge locations: <input type="checkbox"/> Stable <input type="checkbox"/> some erosion <input type="checkbox"/> eroded <input type="checkbox"/> other:			
	SEVERITY OF PROBLEM: <input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> Low (Explain):			
	POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: <input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW			

DESCRIPTION OF EXISTING CONDITIONS:
 wall has drainage ports - $\approx 15"$ DIP west of culvert abandoned
 two existing RCPs (15" & 24") cross road conc. flume @ outlet
 roadside swales drain to culverts, 'Muddy Mongoose' potential
 development on North side of road

NEXT STEPS

Potential Repair Candidate? YES NO OTHER:

CONTACT DPW; LANDOWNER HOA; OTHER:

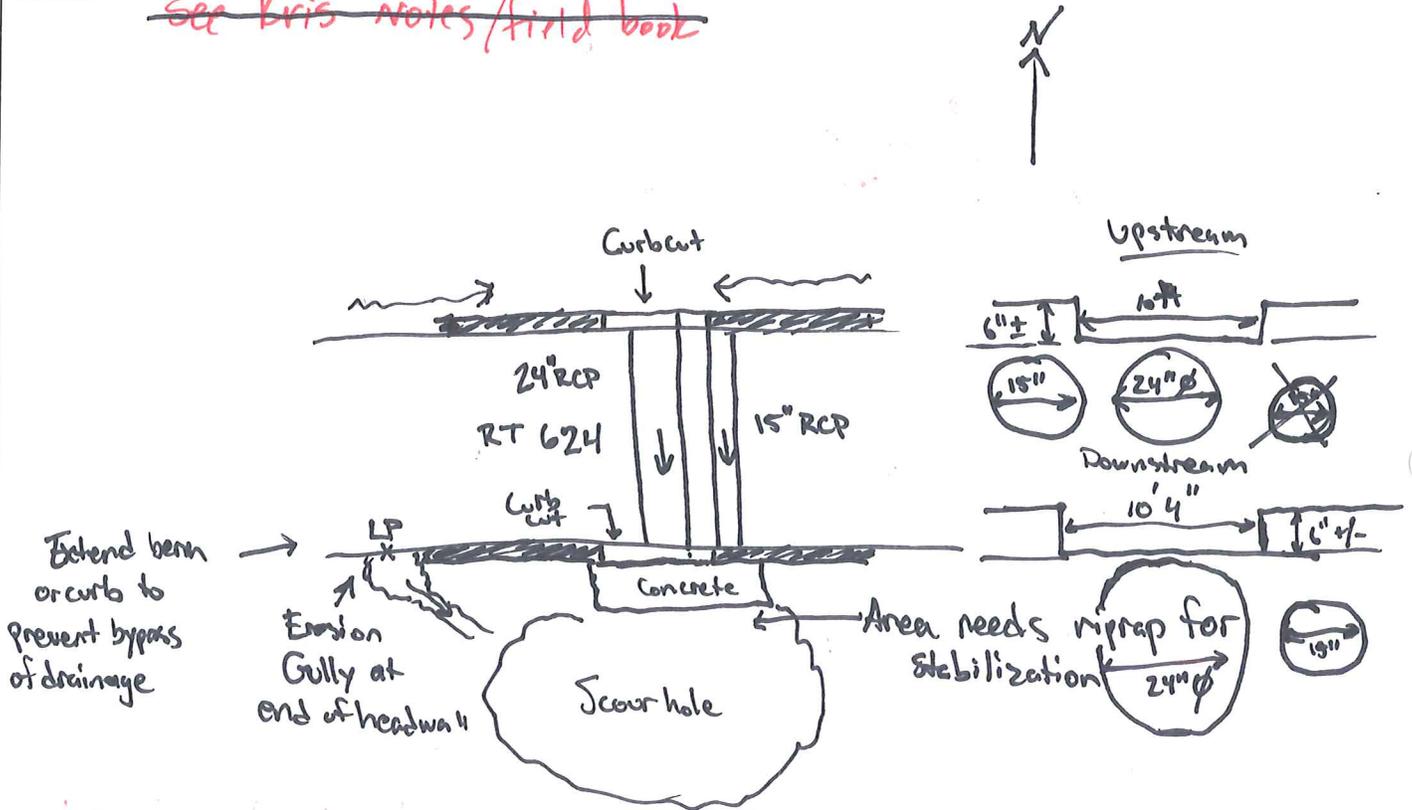
REPAIR/IMPROVEMENT CONCEPT

Narrative:

Proposed rip rap lining for scour hole to stabilize outlet stilling basin
perm @ overflow location west of culverts

Sketch:

~~see Kris notes/field book~~



Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Highly feasible but must consider development impacts

Thoughts on Maintenance Burden: Low Medium High

Muddy Mongoose development could impact capacity of culverts

STX EE WATERSHEDS

RETROFITS



Site Name/ID: GP-RC-2 Melgies on Rte 6042

Watershed: Great Pond

Date: 1/26/2016

Assessed by: PAC, ACS, KH

EXISTING SITE/STORMWATER MANAGEMENT

Site Contact Info: Melgies Grocery

Land Use: Public Private Unknown:

Single Family Residential Multi-Fam. Residential School Golf Course Park Agricultural Road
 Commercial/Industrial Resort Marina Other: _____

Is the site a hotspot? Yes No Unknown:

Sources/pollutants observed? No Sediment Nutrients/organics Oil/grease Trash/Floatables

Existing Stormwater BMP on site? Yes No Unknown:

Soils: Unknown poor infiltration good infiltration

Describe Existing Stormwater Conditions, Including Existing Site Drainage and Conveyance: gut flows from Salys Fancy neighborhood along fencing to roadway then east parallel to Rte 6042 and flooding in Melgies parking. Water then flows across road via concrete swale south to Great Pond. Pounding/debris obstructing flow at fence.

PROPOSED RETROFIT CONCEPT (CONT. ON BACK)

Proposed Retrofit Practice(s): existing BMP upgrade new BMP

island bio/rain garden swale planter tree pits infiltration permeable paver sand filter pond
 constructed wetland proprietary practice soil amendments reforestation impervious cover removal
 rainwater harvesting disconnection Other (describe): drainage improvements on uphill side

Area Draining to Retrofit

Hotspot Individual rooftop
 Parking Lot other small impervious area
 Street Pervious area 400 ft
 Other (describe): _____

Drainage Area to retrofit ≈ _____ acres/sq ft

Imperviousness ≈ _____ %

Impervious Area ≈ _____ acres/sq ft

Benefits of Retrofit (primary & secondary): Storage Water Quality Recharge Gut Protection Demonstration / Education Repair Other: drainage improvements / alleviate chronic flooding

Possible Conflicts due to: Soils Access
 Adjacent Land Use Existing Utilities
 Contamination High water table
 Limited access to water Other: _____

Describe conflicts:

NEXT STEPS

Candidate for pilot project yep, love it OK undecided no, but keep listed no way

Follow-up needed to Complete Field Concept

Confirm property ownership Obtain existing as-builts/site plans Obtain utility mapping
 Confirm drainage area/impervious cover Obtain detailed topography Confirm soil types
 Confirm volume computations Confirm storm drain invert elevations
 Complete concept sketch Other: _____

PROPOSED RETROFIT CONCEPT (CONT.)

Narrative Description (Including key elements, aprox. surface area/ depth of treatment, conveyance structures):

excavate swale/ditch along road @ base of parking lot leading from gut to swale. Pave dirt parking area @ west end of Milgies to prevent rutting and ponding.

Sketch and/or Sizing Calcs: see aerial

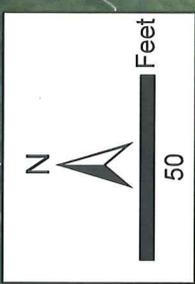
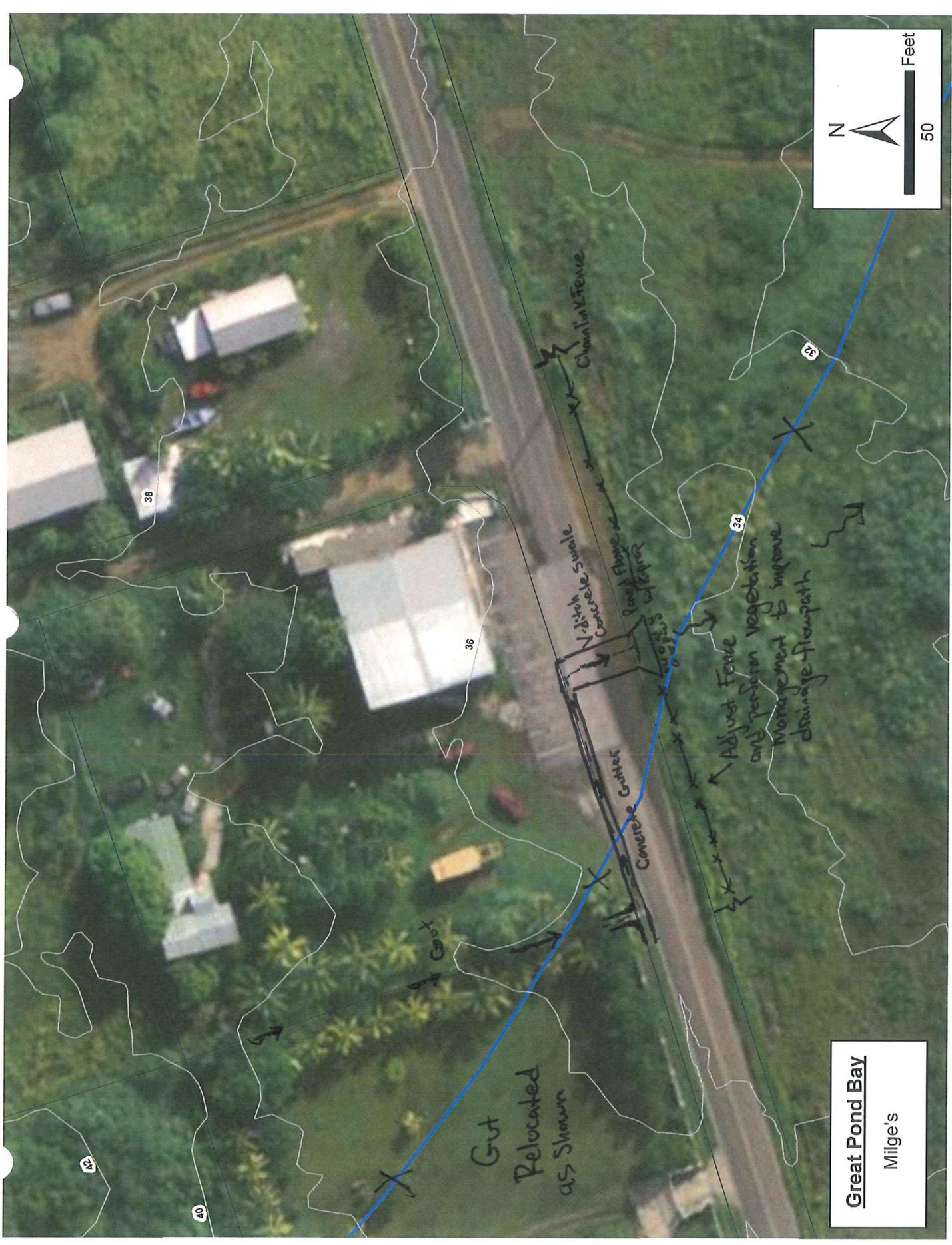
Existing Head Available/Where Measured:

None

Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: Low Medium High

GP - RC-2



Great Pond Bay
Milge's



20-50-99-2



Site/Road Name/ID: GP-RC-~~3~~4 / Marienhof

Watershed: Great Pond

Date: 1/27/2011

Assessed by: KH, ACS, PAC

EXISTING CONDITION

<input checked="" type="checkbox"/> CULVERTS	SHAPE: <input type="checkbox"/> Arch <input type="checkbox"/> Bottomless <input type="checkbox"/> Box <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Circular <input type="checkbox"/> Other:	# BARRELS: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	MATERIAL: <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Metal <input type="checkbox"/> Other:	ALIGNMENT: <input checked="" type="checkbox"/> Flow-aligned <input type="checkbox"/> Not flow-aligned <input type="checkbox"/> Do not know	DIMENSIONS: (if variable, sketch) Barrel diameter: <u>24"</u> (ft) Height: _____ (ft) Culvert length: _____ (ft) Width: _____ (ft) Roadway elevation: _____ (ft)
	CONDITION: (Evidence of...) <input type="checkbox"/> In good condition <input type="checkbox"/> Cracking/chipping/corrosion <input checked="" type="checkbox"/> Downstream scour hole <input type="checkbox"/> Sediment deposition <input type="checkbox"/> Upstream erosion <input checked="" type="checkbox"/> Blockage <input type="checkbox"/> Failing embankment <input type="checkbox"/> Threatened infrastructure <input checked="" type="checkbox"/> Other (describe): <u>eroded road sideslope</u>			CULVERT SLOPE: <input type="checkbox"/> Flat <input type="checkbox"/> Slight (2 - 5%) <input checked="" type="checkbox"/> Steeper	
	BLOCKAGE SEVERITY: <input type="checkbox"/> none <input type="checkbox"/> minor <input checked="" type="checkbox"/> ^{upstream} partial <input type="checkbox"/> significant <input type="checkbox"/> complete			IS IT FLOWING? <input type="checkbox"/> No <input type="checkbox"/> Yes	
	Potential barrier to aquatic species? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown				
	Is it acting as grade control? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown				

<input type="checkbox"/> ROAD SEGMENTS	SURFACE: <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Unpaved: >gravel <input type="checkbox"/> Unpaved: >dirt <input type="checkbox"/> Other	STEEPNESS: <input type="checkbox"/> Pretty flat <input type="checkbox"/> Slight (around 5:1, 20%) <input type="checkbox"/> Steep (more like 2:1, 50%) <input type="checkbox"/> Big time steep (≥ 75%)	ACCESS/USE: <input checked="" type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Unknown	Total ROW Width: _____ (ft) Drive lane: _____ (ft) Shoulder: _____ (ft) Length of interest: _____
	Surface: <input type="checkbox"/> good condition <input type="checkbox"/> minor maintenance needed <input type="checkbox"/> large gullies and potholes Drain Inlets/Catch basins: <input type="checkbox"/> None <input type="checkbox"/> clean <input type="checkbox"/> blocked <input type="checkbox"/> other: Waterbars/dips/cross drains: <input type="checkbox"/> None <input type="checkbox"/> functioning <input type="checkbox"/> need maintenance <input type="checkbox"/> other: Ditches: <input type="checkbox"/> none <input type="checkbox"/> shallow <input type="checkbox"/> well-defined <input type="checkbox"/> stable <input type="checkbox"/> eroded <input type="checkbox"/> excess vegetation <input type="checkbox"/> other: Discharge locations: <input type="checkbox"/> Stable <input type="checkbox"/> some erosion <input type="checkbox"/> eroded <input type="checkbox"/> other:			
	SEVERITY OF PROBLEM: <input type="checkbox"/> High <input checked="" type="checkbox"/> Med <input type="checkbox"/> Low (Explain):			
	POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: <input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW			

DESCRIPTION OF EXISTING CONDITIONS: attempt at conc. flume - eroding partial blockage of culvert inlet outlet hanging/suspended and 3ft scour hole down m. culvert undermined moderate bank erosion ~15ft wide

NEXT STEPS

Potential Repair Candidate? YES NO OTHER:

CONTACT DPW; LANDOWNER HOA; OTHER:

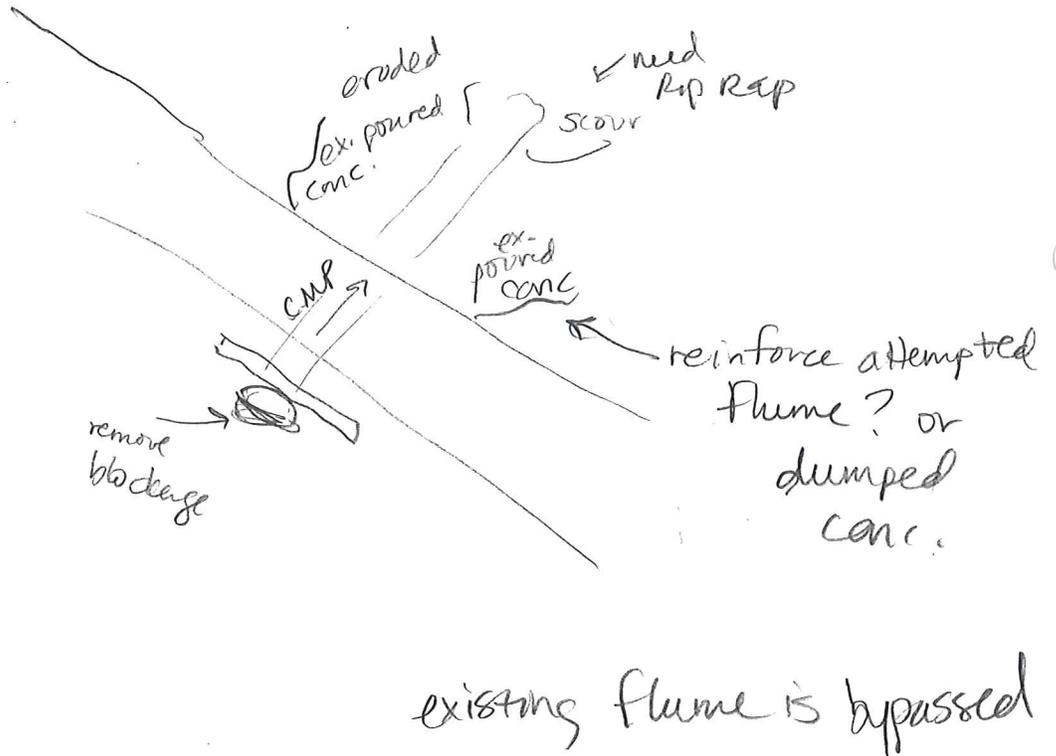
REPAIR/IMPROVEMENT CONCEPT

Narrative:

Extend paved flume stabilize below with rip rap. Fill in undermined area beneath culvert and clear blockage/debris @ inlet

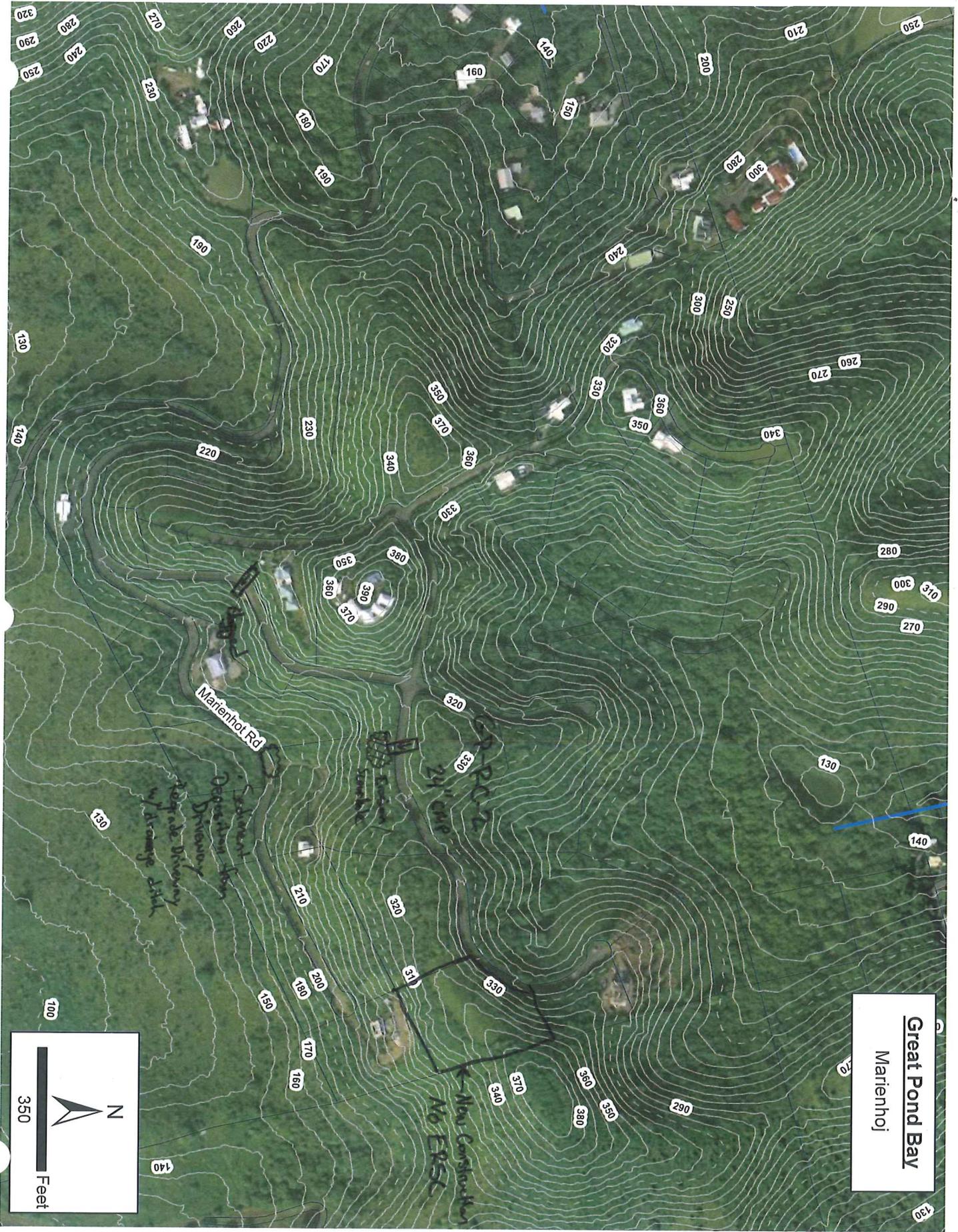
Sketch:

(Additional info in Kris field book)

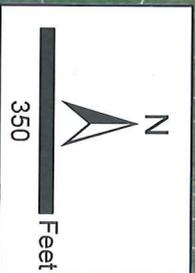


Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

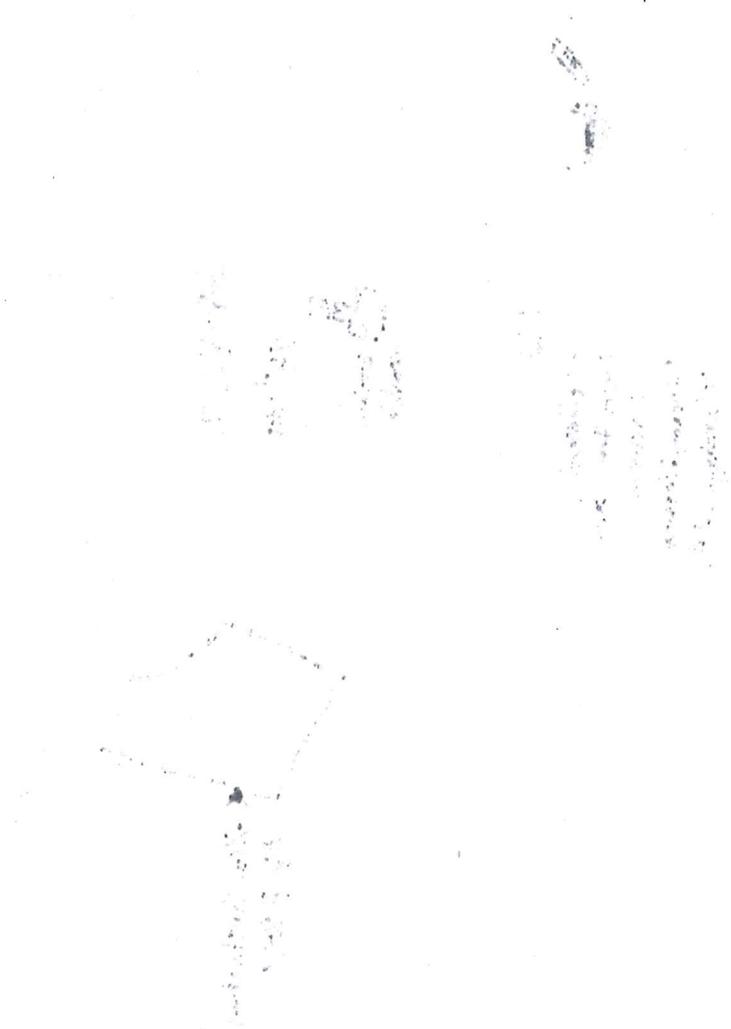
Thoughts on Maintenance Burden: Low Medium High



Great Pond Bay
Marienhofj



01-10-2017



GP-PC-~~4~~

Great Pond Bay
Marienhøj II

N

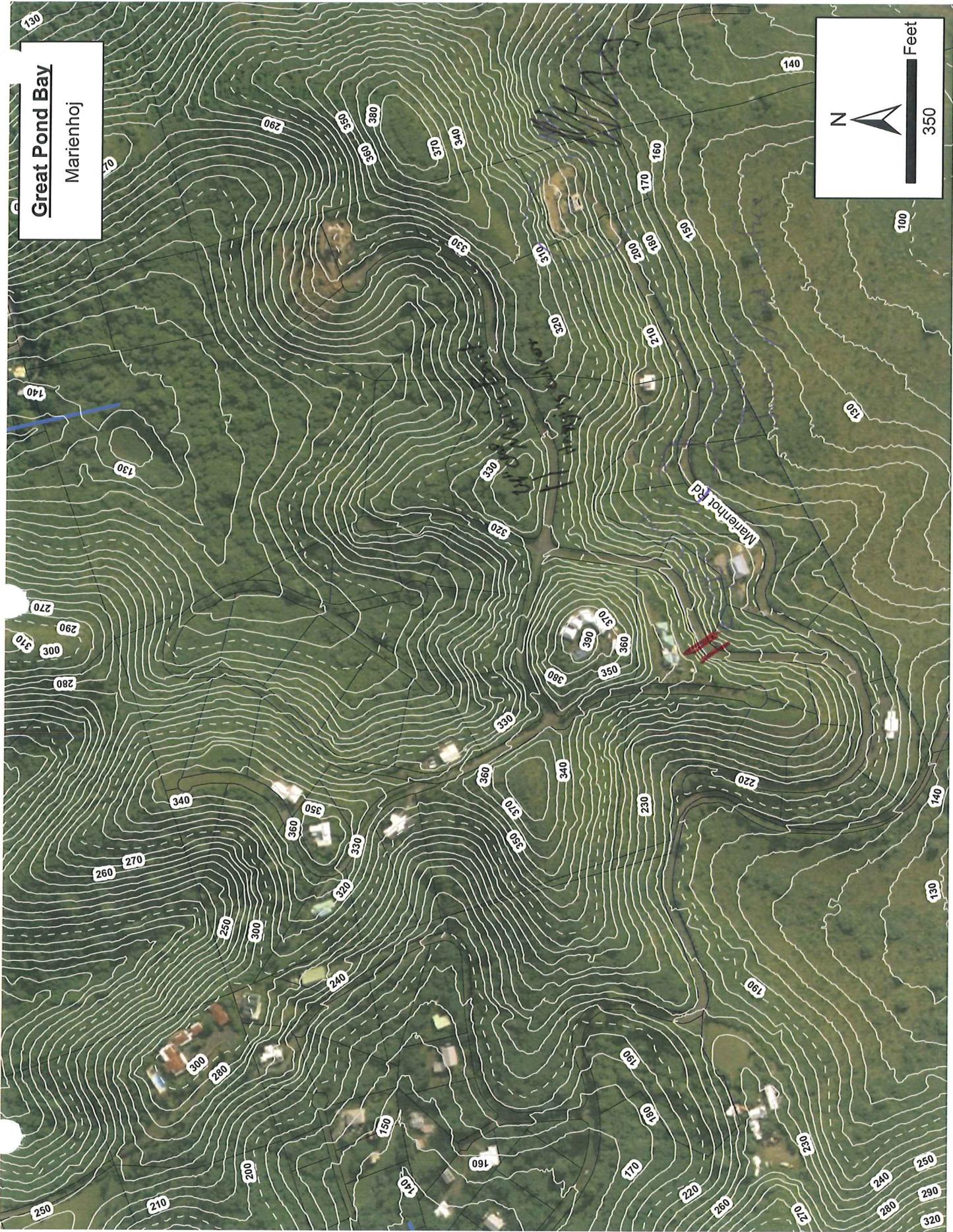
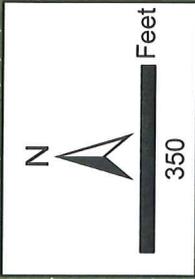


150 Feet



GP-RC-44

Great Pond Bay
Marienhof





Site/Road Name/ID: RC-33

Watershed: GP

te: Unnamed road next to WASHINGTON LN

Assessed by: Kris & Anne

EXISTING CONDITION

<input type="checkbox"/> CULVERTS	SHAPE: <input type="checkbox"/> Arch <input type="checkbox"/> Bottomless <input type="checkbox"/> Box <input type="checkbox"/> Elliptical <input type="checkbox"/> Circular <input type="checkbox"/> Other:	# BARRELS: <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	MATERIAL: <input type="checkbox"/> Concrete <input type="checkbox"/> Metal <input type="checkbox"/> Other:	ALIGNMENT: <input type="checkbox"/> Flow-aligned <input type="checkbox"/> Not flow-aligned <input type="checkbox"/> Do not know	DIMENSIONS: (if variable, sketch) Barrel diameter: _____ (ft) Height: _____ (ft) Culvert length: _____ (ft) Width: _____ (ft) Roadway elevation: _____ (ft)
	CONDITION: (Evidence of...) <input type="checkbox"/> In good condition <input type="checkbox"/> Cracking/chipping/corrosion <input type="checkbox"/> Downstream scour hole <input type="checkbox"/> Sediment deposition <input type="checkbox"/> Upstream erosion <input type="checkbox"/> Blockage <input type="checkbox"/> Failing embankment <input type="checkbox"/> Threatened infrastructure <input type="checkbox"/> Other (describe):			CULVERT SLOPE: <input type="checkbox"/> Flat <input type="checkbox"/> Slight (2 - 5%) <input type="checkbox"/> Steeper	
	BLOCKAGE SEVERITY: <input type="checkbox"/> none <input type="checkbox"/> minor <input type="checkbox"/> partial <input type="checkbox"/> significant <input type="checkbox"/> complete				
	Potential barrier to aquatic species? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown				
	Is it acting as grade control? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown				

<input checked="" type="checkbox"/> ROAD SEGMENTS	SURFACE: <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input checked="" type="checkbox"/> Unpaved: >gravel <input type="checkbox"/> Unpaved: >dirt <input type="checkbox"/> Other	STEEPNESS: <input type="checkbox"/> Pretty flat <input type="checkbox"/> Slight (around 5:1, 20%) <input checked="" type="checkbox"/> Steep (more like 2:1, 50%) <input type="checkbox"/> Big time steep (≥ 75%) <i>slight at bottom</i>	ACCESS/USE: <input checked="" type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Unknown	Total ROW Width: _____ (ft) Drive lane: <u>16</u> (ft) Shoulder: _____ (ft) Length of interest: _____
	Surface: <input type="checkbox"/> good condition <input type="checkbox"/> minor maintenance needed <input type="checkbox"/> large gullies and potholes Drain Inlets/Catch basins: <input type="checkbox"/> None <input type="checkbox"/> clean <input type="checkbox"/> blocked <input type="checkbox"/> other: Waterbars/dips/cross drains: <input type="checkbox"/> None <input type="checkbox"/> functioning <input type="checkbox"/> need maintenance <input type="checkbox"/> other: Ditches: <input type="checkbox"/> none <input type="checkbox"/> shallow <input type="checkbox"/> well-defined <input type="checkbox"/> stable <input type="checkbox"/> eroded <input type="checkbox"/> excess vegetation <input type="checkbox"/> other: Discharge locations: <input type="checkbox"/> Stable <input type="checkbox"/> some erosion <input type="checkbox"/> eroded <input type="checkbox"/> other:			
	SEVERITY OF PROBLEM: <input type="checkbox"/> High <input checked="" type="checkbox"/> Med <input type="checkbox"/> Low (Explain): <i>LOTS of DIRT Getting across main road</i>			
	POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: <input type="checkbox"/> HIGH <input type="checkbox"/> MED <input checked="" type="checkbox"/> Low			

DESCRIPTION OF EXISTING CONDITIONS:
*water pitches to left side (facing uphill) some erosion in
 could do something now to help prevent more problem*

NEXT STEPS

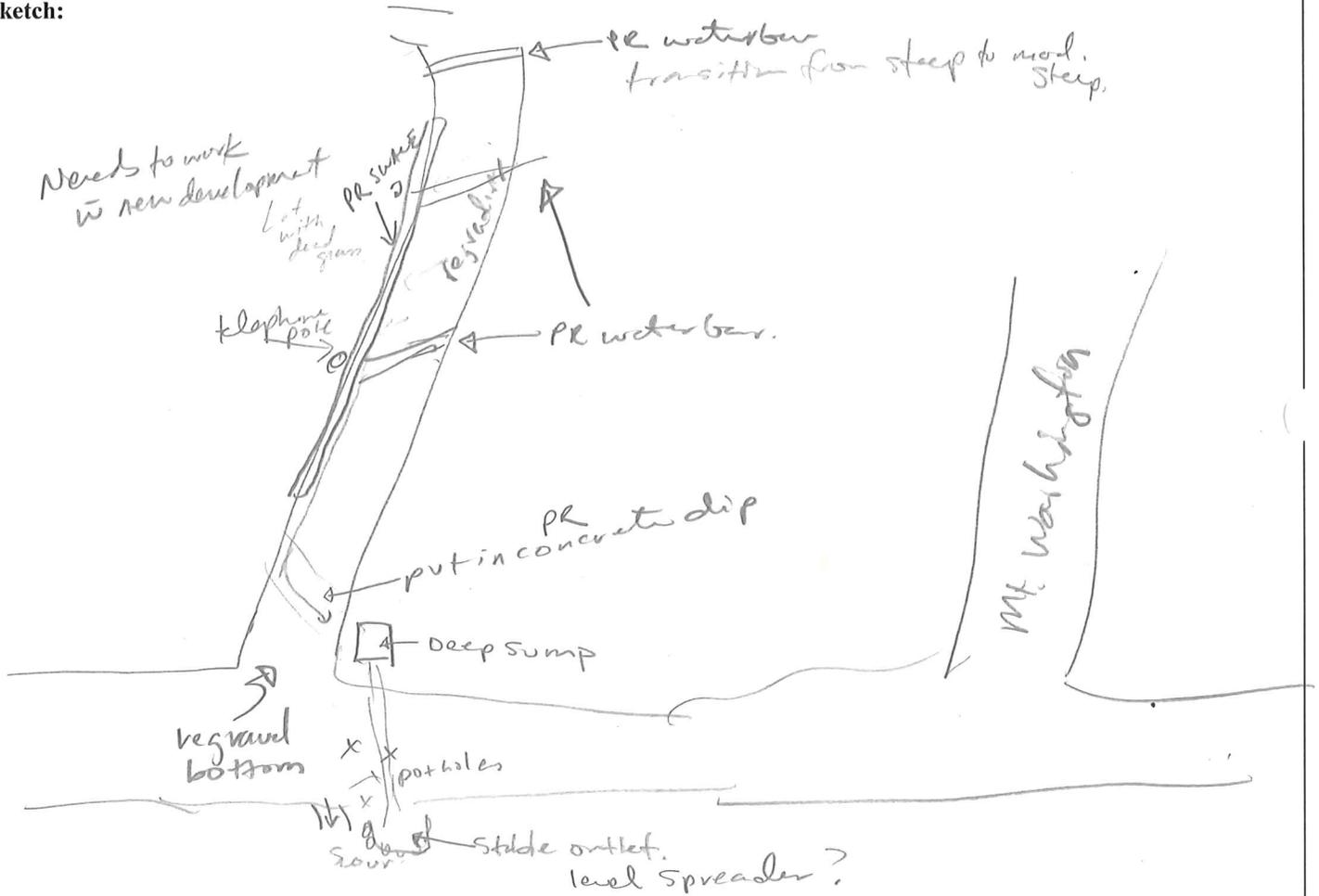
Potential Repair Candidate? YES NO OTHER:

CONTACT DPW; LANDOWNER HOA; OTHER:

REPAIR/IMPROVEMENT CONCEPT

Narrative:

Sketch:



Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: Low Medium High

will need to clean sed. out



Site/Road Name/ID: RC 34 on South Shore Rd. Watershed: GP

Date: _____ Assessed by: Kris & Anne

EXISTING CONDITION

<input checked="" type="checkbox"/> CULVERTS	SHAPE: <input type="checkbox"/> Arch <input type="checkbox"/> Bottomless <input type="checkbox"/> Box <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Circular <input type="checkbox"/> Other:	# BARRELS: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	MATERIAL: <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Metal <input type="checkbox"/> Other:	ALIGNMENT: <input type="checkbox"/> Flow-aligned <input checked="" type="checkbox"/> Not flow-aligned <input type="checkbox"/> Do not know <i>DITCH</i>	DIMENSIONS: (if variable, sketch) Barrel diameter: <u>12"</u> (ft) Height: _____ (ft) Culvert length: _____ (ft) Width: _____ (ft) Roadway elevation: _____ (ft)
	CONDITION: (Evidence of...) <input type="checkbox"/> In good condition <input type="checkbox"/> Cracking/chipping/corrosion <input type="checkbox"/> Downstream scour hole <input type="checkbox"/> Sediment deposition <input type="checkbox"/> Upstream erosion <input checked="" type="checkbox"/> Blockage <input type="checkbox"/> Failing embankment <input type="checkbox"/> Threatened infrastructure <input type="checkbox"/> Other (describe):			CULVERT SLOPE: <input type="checkbox"/> Flat <input checked="" type="checkbox"/> Slight (2-5%) <input type="checkbox"/> Steeper	
				IS IT FLOWING? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
	BLOCKAGE SEVERITY: <input type="checkbox"/> none <input type="checkbox"/> minor <input type="checkbox"/> partial <input type="checkbox"/> significant <input checked="" type="checkbox"/> complete				
	Potential barrier to aquatic species? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown <i>in DITCH</i>				

<input type="checkbox"/> ROAD SEGMENTS	SURFACE: <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Unpaved: >gravel <input type="checkbox"/> Unpaved: >dirt <input type="checkbox"/> Other	STEEPNESS: <input type="checkbox"/> Pretty flat <input type="checkbox"/> Slight (around 5:1, 20%) <input type="checkbox"/> Steep (more like 2:1, 50%) <input type="checkbox"/> Big time steep (≥ 75%)	ACCESS/USE: <input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Unknown	Total ROW Width: _____ (ft) Drive lane: _____ (ft) Shoulder: _____ (ft) Length of interest: _____
	Surface: <input type="checkbox"/> good condition <input type="checkbox"/> minor maintenance needed <input type="checkbox"/> large gullies and potholes Drain Inlets/Catch basins: <input type="checkbox"/> None <input type="checkbox"/> clean <input type="checkbox"/> blocked <input type="checkbox"/> other: Waterbars/dips/cross drains: <input type="checkbox"/> None <input type="checkbox"/> functioning <input type="checkbox"/> need maintenance <input type="checkbox"/> other: Ditches: <input type="checkbox"/> none <input type="checkbox"/> shallow <input type="checkbox"/> well-defined <input type="checkbox"/> stable <input type="checkbox"/> eroded <input type="checkbox"/> excess vegetation <input type="checkbox"/> other: Discharge locations: <input type="checkbox"/> Stable <input type="checkbox"/> some erosion <input type="checkbox"/> eroded <input type="checkbox"/> other:			
	SEVERITY OF PROBLEM: <input type="checkbox"/> High <input checked="" type="checkbox"/> Med <input type="checkbox"/> Low (Explain):			
	POTENTIAL FOR SEDIMENT LOADING TO RESOURCE AREA: <input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW			

DESCRIPTION OF EXISTING CONDITIONS:
12" RCP completely blocked; maintenance scooped out sediment w backhoe scoops

NEXT STEPS

Potential Repair Candidate? YES NO OTHER:

CONTACT DPW; LANDOWNER HOA; OTHER:

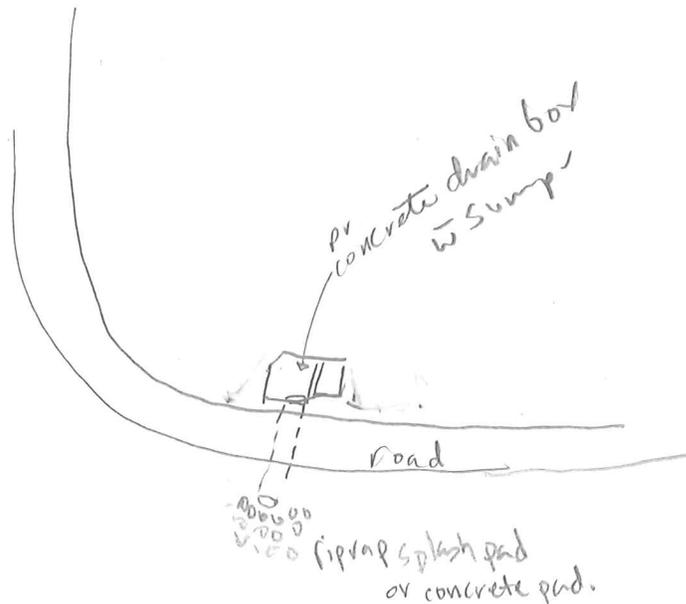
REPAIR/IMPROVEMENT CONCEPT

Narrative:

put in concrete ~~to~~ (stepped)
drain box w a sump need to flush out pipe
& stabilize outfall
may have to regrade swale.

Sketch:

Drainbox w a sump. (see Kris' notes)



Initial Feasibility and Construction Considerations/ Design or Delivery Notes:

Thoughts on Maintenance Burden: Low Medium High

will have to scoop out

Gut Restoration

QNT Restoration



Site Name/ID: GP-S#-1/Southside Rd.
 Date: 1/26/2011

Watershed: Great Pond
 Assessed by: RAC, LH, ACS

EXISTING CONDITION

LAND OWNER CONTACT INFO: UNKNOWN - Residential parcel on Solitude Road
Schuster owns nearby parcel treehouse on lot in Sally's Fancy

LAND OWNERSHIP: Private Public Unknown LAND COVER: Forest Field/Ag Developed:

LIVESTOCK ON SITE: Yes No Unknown #: _____ LIVESTOCK HAVE CURRENT GUT ACCESS: Yes No

DRAINS TO DOWNSTREAM IMPOUNDMENT OR POND: Yes No Unknown

<input checked="" type="checkbox"/> EROSION <input type="checkbox"/> Channelized	TYPE: <input type="checkbox"/> Downcutting <input type="checkbox"/> Widening <input checked="" type="checkbox"/> Headcutting <hr/> <input checked="" type="checkbox"/> Bed scour <input checked="" type="checkbox"/> Bank erosion	BANK OF CONCERN: <input type="checkbox"/> LT <input type="checkbox"/> RT <input checked="" type="checkbox"/> Both (looking downstream) LOCATION: <input type="checkbox"/> Meander bend <input type="checkbox"/> Straight section <input type="checkbox"/> Steep slope/valley wall <input type="checkbox"/> Other: DIMENSIONS: Length (if no GPS) LT _____ ft and/or RT _____ ft Bottom width _____ ft Bank Ht LT _____ ft and/or RT _____ ft Top width _____ ft Bank Angle LT _____ ° and/or RT _____ ° Wetted Width _____ ft
	THREAT TO PROPERTY/INFRASTRUCTURE: <input type="checkbox"/> No <input type="checkbox"/> Yes (Describe):	

RIPARIAN AREA

EXISTING RIPARIAN WIDTH (NO STRUCTURES): ≤25 ft 25 - 50 ft 50-75ft 75-100ft >100ft

DOMINANT COVER	Paved	Bare ground	Turf/lawn	Tall grass	Shrub/scrub	Trees	Other:
LT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DESCRIBE:

WETLANDS PRESENT: Yes No Unknown

DESCRIBE EXISTING PROBLEM

Poor road drainage management bad downstream
slow hole & headcutting. Road drainage flows through yard
and bypasses roadside curb/swall. headcutting in yard

EROSION SEVERITY	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.	Pat downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.
	5	4	1

ACCESS:	Good access: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair access: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult access. Must cross wetland, steep slope or other sensitive areas to access stream. Minimal stockpile areas available and/or located a great distance from stream section. Specialized heavy equipment required.
	5	4	1

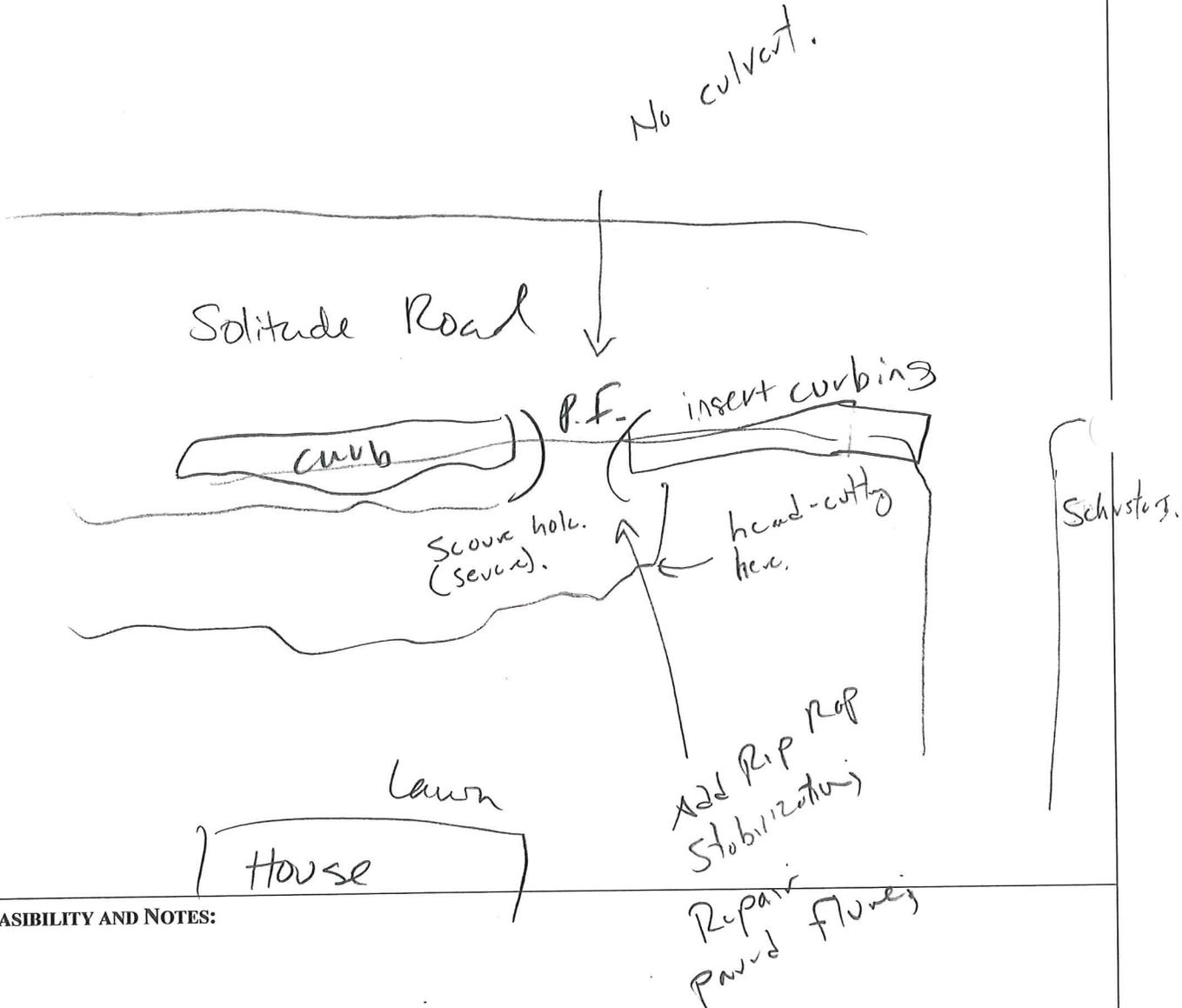
NEXT STEPS:

RESTORATION CONCEPT:

NARRATIVE

insert conc curb & paved flume
to redirect water & stabilize banks

SKETCH:



INITIAL FEASIBILITY AND NOTES:

STX EE WATERSHEDS

RESIDENTIAL



Site Name/ID: GP-RES-1 / Sully's Fancy

Watershed: Great Pond Bay

Date: 1/26/2011

Assessed by: RAC & ACS & KH

EXISTING CONDITIONS

Homeowners Association? [] No [] Yes [x] Unknown If yes, name and contact information:

Main Road Names: Southside Road, Rte 624

Approximate Neighborhood Area (acres) _____ # of lots _____ (# or % undeveloped _____)
[] Single Family Attached (Duplexes, Row Homes) <1/8 1/8 1/4 1/3 1/2 acre [] Multifamily (Apts., Condos)
[x] Single Family Detached 1/4 to 3 ac lots <1/4 (1/4) 1/2 1 1+ acre [] Other

Index of Infill, Redevelopment, and Remodeling [] No Evidence [] <5% of existing units [] 5-10% [] >10%

Waste water Management? [] Public sewer [x] On-site septic [] Small package plant
Problems observed with septic systems? [x] No [] Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type [] All Paved [] mixed, mostly paved [] mixed, mostly unpaved [x] all unpaved except 624 & Southside
Condition [] Good/mostly good (new, few areas requiring regrading or maintenance)
[x] Some road sections need attention (minor erosion, pavement repair needed, limited)
[] Significant maintenance issues (most of road network in bad shape)

Drainage: Type [] Curb/gutter [] Mixed, mostly curbed [] Mixed, mostly open section [x] Open drainage

Drain Inlets/Catch basins: [x] None [] Clean [] Blocked [] Other:
Waterbars/dips/crossdrains: [x] None [] Functioning [] Need maintenance [] Other:
Ditches: [x] None [] Shallow [] Well-defined [] Stable [] Eroded [] Full of thick vegetation [] Other:
Discharge locations: [] Stable [] Some erosion [] Eroded [] Other:

Existing Stormwater BMPs on site? [] Unknown [x] No [] Yes, describe:

Average Lot Cover: _____%bare remaining (not roof) _____%turp _____%landscape(include trees) 10-25% rooftop _____%driveway

Average Driveway: [] Impervious [x] Pervious [] Eroded [] Drain to road [] Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: [] No [] Yes, describe:

Evidence of residential encroachment on riparian/wetland buffer? [] No [x] Yes, describe: gut that flows past Milgies runs N to S through neighborhood

Evidence of Residential Pollution?
[] Limited [] Likely [] Observed for sediment loading
[] Limited [] Likely [x] Observed for oil/grease
[] Limited [] Likely [x] Observed for trash and yard waste
[] Limited [] Likely [] Observed for nutrient loading
[] Limited [] Likely [x] Observed for bacteria => lot of dogs/chickens
[] Limited [] Likely [] Observed for other:
Severity: [] Low [] Medium [] High
Describe source: => Junk yard

NEXT STEPS

SITE AERIAL INCLUDED

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- | | | |
|--|---|--|
| <input type="checkbox"/> On-site retrofit potential individual lots? | <input type="checkbox"/> Better lawn/landscaping practices? | <input checked="" type="checkbox"/> Other action(s): |
| <input checked="" type="checkbox"/> Street ROW retrofit | <input type="checkbox"/> Pond retrofit | <i>Junk yard clean-up</i> |
| <input type="checkbox"/> Parking Lot retrofit | <input checked="" type="checkbox"/> Household hazardous waste | |
| | <input type="checkbox"/> Septic improvements | |

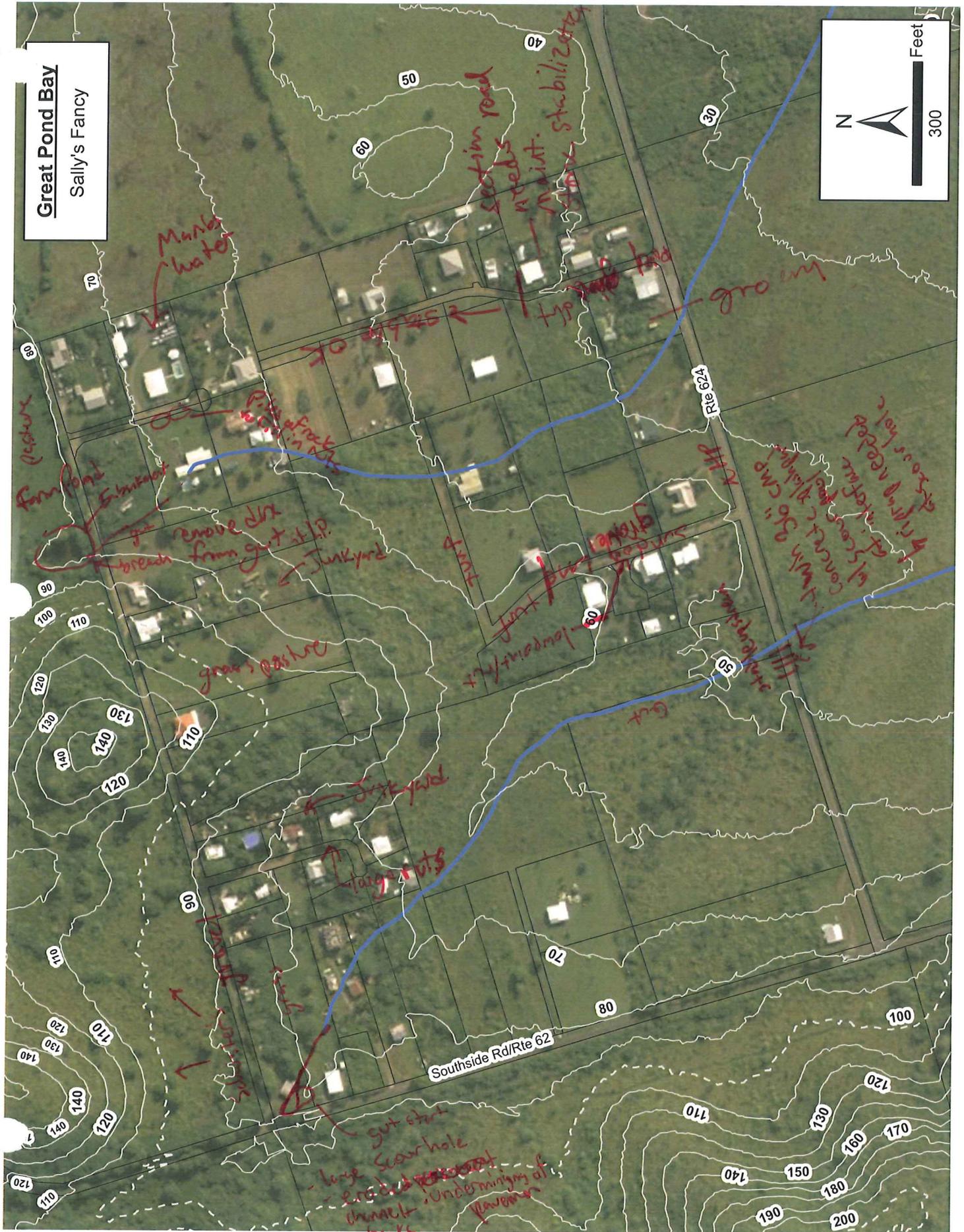
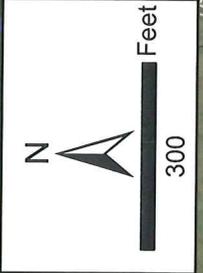
Narrative description:

Educational - Pet wastes

Sketch

See aerial

Great Pond Bay
Sally's Fancy



Mark's water

section road
needs maint.
storm stabilizator

grocery

grocery

from pond
submerged

grove dx
breach from gut + J.P.
Junkyard

grove pasture

gutter
low point
gutter
gutter

fill
with 36" concrete
with 36" concrete
filling needed
disposal hole

Junkyard

large pits

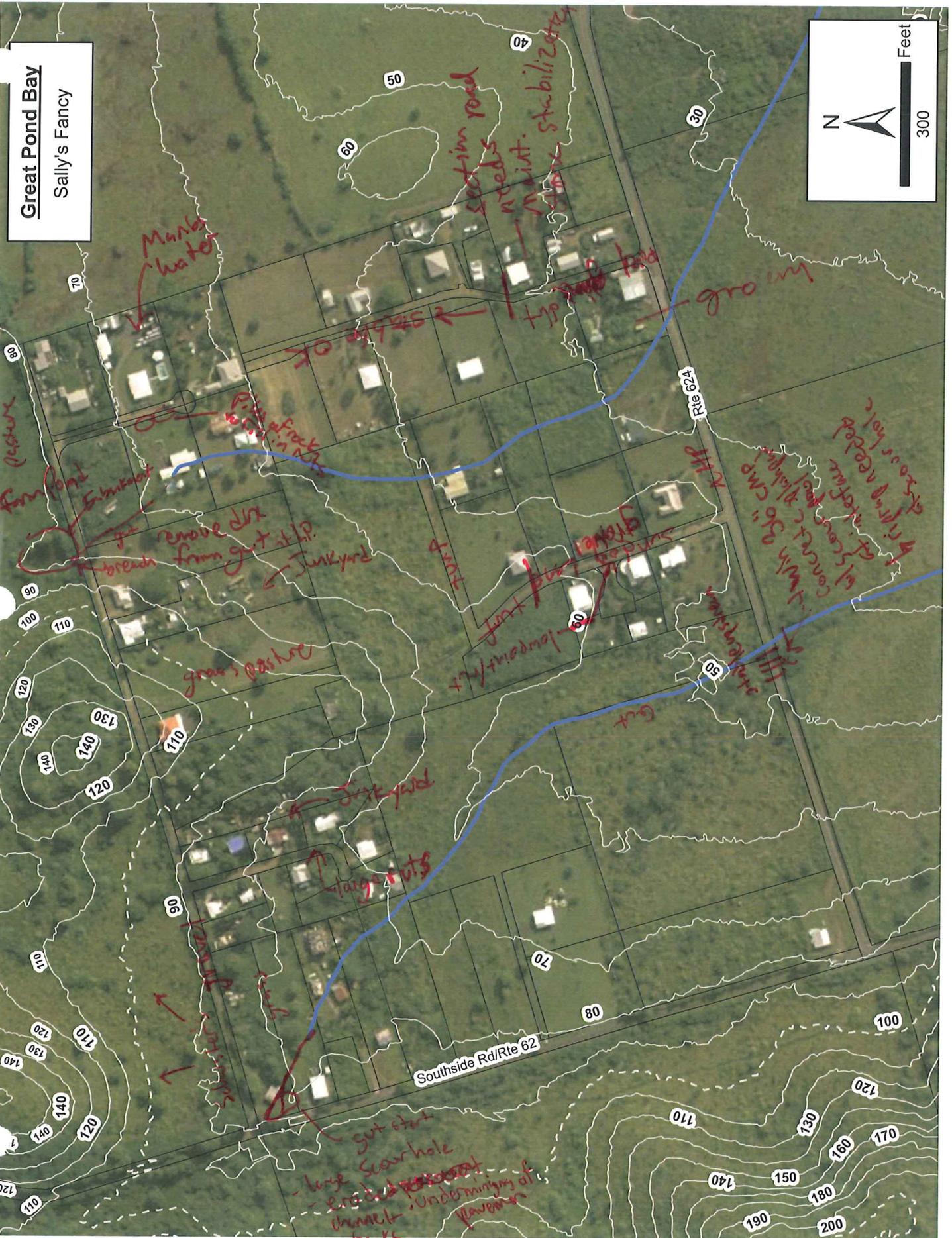
sewer line
leaking

gut start
large sewer hole
eroded
undermining of
banks

Southside Rd/Rte 62

Rte 62A

Rte 62



April 19th
Wednesday
1888

1888

1888

1888

1888

1888

1888

1888

1888

1888

STX EE WATERSHEDS

Site Name/ID: GP-RES-2/Union & Mt Washington
Date: 1/26/2011

RESIDENTIAL

Watershed: Great Pond Bay
Assessed by: RAC & ACS



EXISTING CONDITIONS

Homeowners Association? No Yes Unknown If yes, name and contact information:

Main Road Names: Sunset, Corry, Tammany, David Oliver, Seaview, Blue Dolphin, Acacia

Approximate Neighborhood Area (acres) 115 acres # of lots 302 (# or % undeveloped <25%)

Single Family Attached (Duplexes, Row Homes) <1/8 1/8 1/4 1/3 1/2 acre Multifamily (Apts., Condos)
 Single Family Detached <1/4 1/4 1/2 1 >1 acre Other

Index of Infill, Redevelopment, and Remodeling No Evidence <5% of existing units 5-10% >10%

Waste water Management? Public sewer On-site septic Small package plant
Problems observed with septic systems? No Yes (describe):

AVERAGE ROAD CONDITION

Pavement: Type All Paved mixed, mostly paved mixed, mostly unpaved all unpaved
Condition Good/mostly good (new, few areas requiring regrading or maintenance) Some road sections need attention (minor erosion, pavement repair needed, limited) Significant maintenance issues (most of road network in bad shape)

Drainage: Type Curb/gutter Mixed, mostly curbed Mixed, mostly open section Open drainage

Drain Inlets/Catch basins: None Clean Blocked Other:
Waterbars/dips/crossdrains: None Functioning Need maintenance Other:
Ditches: None Shallow Well-defined Stable Eroded Full of thick vegetation Other:
Discharge locations: Stable Some erosion Eroded Other:

Some swales/ditches on roadside

Existing Stormwater BMPs on site? Unknown No Yes, describe:

Average Lot Cover: 5 %bare 70 %turf ___ %landscape(include trees) 25 % rooftop ___ %driveway

Average Driveway: Impervious Pervious Eroded Drain to road Too variable

Evidence of rooftop or driveway runoff to road/drainage network?: No Yes, describe:

Evidence of residential encroachment on riparian/wetland buffer? No Yes, describe:

Evidence of Residential Pollution? NONE
 Limited Likely Observed for sediment loading
 Limited Likely Observed for oil/grease
 Limited Likely Observed for trash and yard waste
 Limited Likely Observed for nutrient loading
 Limited Likely Observed for bacteria
 Limited Likely Observed for other:

Severity: Low Medium High
Describe source:

NEXT STEPS

PROPOSED RESTORATION ACTIVITIES

Neighborhood-wide Actions:

- | | | |
|--|---|--|
| <input type="checkbox"/> On-site retrofit potential individual lots? | <input type="checkbox"/> Better lawn/landscaping practices? | <input type="checkbox"/> Other action(s): |
| <input type="checkbox"/> Street ROW retrofit | <input type="checkbox"/> Pond retrofit | <input type="checkbox"/> Household hazardous waste |
| <input type="checkbox"/> Parking Lot retrofit | <input type="checkbox"/> Septic improvements | |

Narrative description:

Sketch

STX EE WATERSHEDS

ROAD / GUT RESTORATION



Site Name/ID: GP-CR-1/Southside Rd.
 Date: 1/26/2011

Watershed: Great Pond
 Assessed by: RAC, LH, ACS

EXISTING CONDITION

LAND OWNER CONTACT INFO: UNKNOWN - Residential parcel on Solitude Road
Schuster owns nearby parcel treeshouse on gut

LAND OWNERSHIP: Private Public Unknown

LAND COVER: Forest Field/Ag Developed:

LIVESTOCK ON SITE: Yes No Unknown #:

LIVESTOCK HAVE CURRENT GUT ACCESS: Yes No

DRAINS TO DOWNSTREAM IMPOUNDMENT OR POND: Yes No Unknown

<input checked="" type="checkbox"/> EROSION <input type="checkbox"/> Channelized	TYPE: <input type="checkbox"/> Downcutting <input type="checkbox"/> Widening <input checked="" type="checkbox"/> Headcutting	BANK OF CONCERN: <input type="checkbox"/> LT <input type="checkbox"/> RT <input checked="" type="checkbox"/> Both (<i>looking downstream</i>)
	<input checked="" type="checkbox"/> Bed scour <input checked="" type="checkbox"/> Bank erosion	LOCATION: <input type="checkbox"/> Meander bend <input type="checkbox"/> Straight section <input type="checkbox"/> Steep slope/valley wall <input type="checkbox"/> Other: DIMENSIONS: Length (<i>if no GPS</i>) LT _____ ft and/or RT _____ ft Bottom width _____ ft Bank Ht LT _____ ft and/or RT _____ ft Top width _____ ft Bank Angle LT _____ ° and/or RT _____ ° Wetted Width _____ ft
THREAT TO PROPERTY/INFRASTRUCTURE: <input type="checkbox"/> No <input type="checkbox"/> Yes (Describe):		

RIPARIAN AREA	EXISTING RIPARIAN WIDTH (NO STRUCTURES): <input type="checkbox"/> ≤25 ft <input type="checkbox"/> 25 - 50 ft <input type="checkbox"/> 50-75ft <input type="checkbox"/> 75-100ft <input type="checkbox"/> >100ft							
	DOMINANT COVER	Paved	Bare ground	Turf/lawn	Tall grass	Shrub/scrub	Trees	Other:
	LT <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	RT <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<i>DESCRIBE:</i>								
WETLANDS PRESENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown								

DESCRIBE EXISTING PROBLEM
Poor road drainage management bad downstream
slow hole & headcutting. Road drainage flows through yard
and bypasses roadside curb/swall. headcutting in yard

EROSION SEVERITY	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.	Pat downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.
	5	4	1
ACCESS:	Good access: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair access: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult access. Must cross wetland, steep slope or other sensitive areas to access stream. Minimal stockpile areas available and/or located a great distance from stream section. Specialized heavy equipment required.
	5	4	1

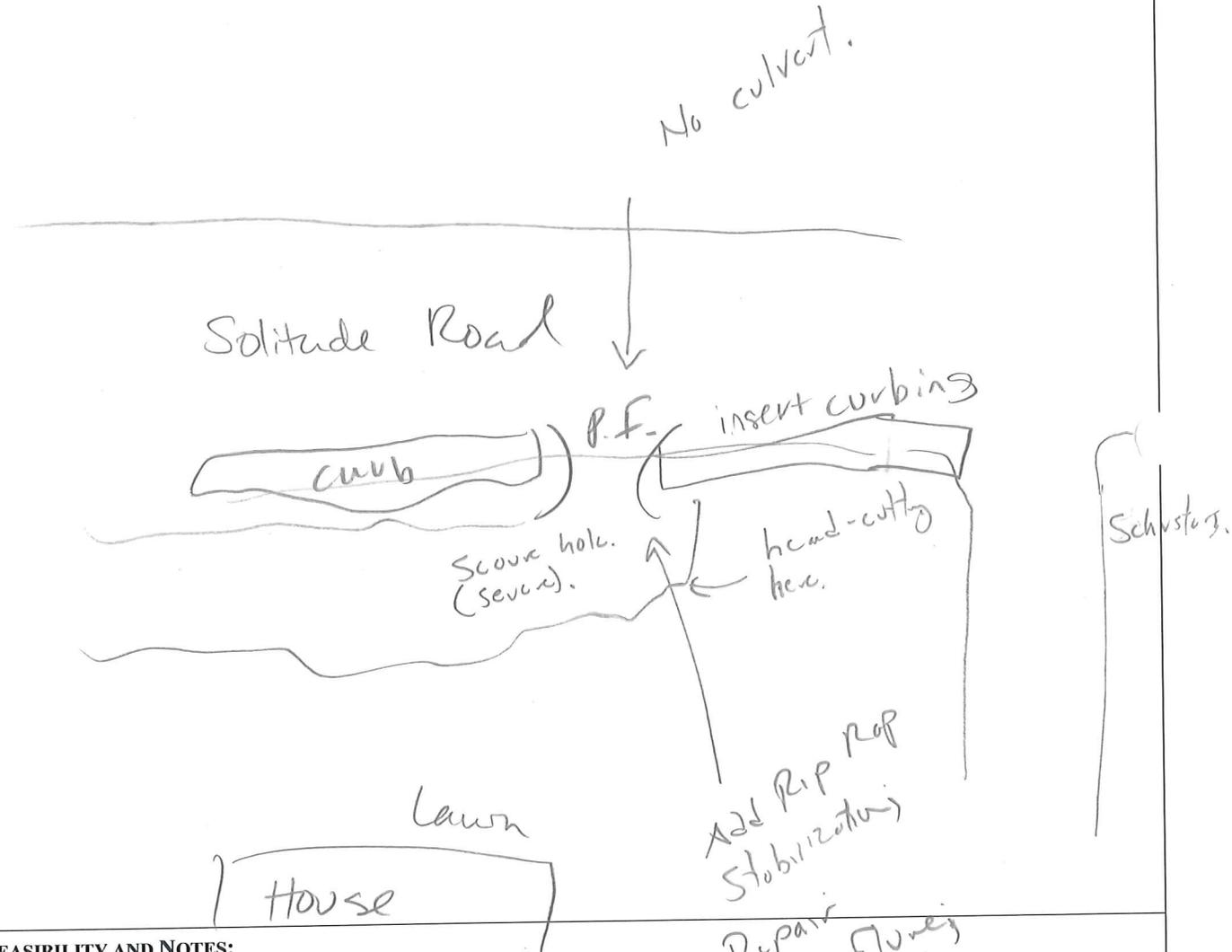
NEXT STEPS:

RESTORATION CONCEPT:

NARRATIVE

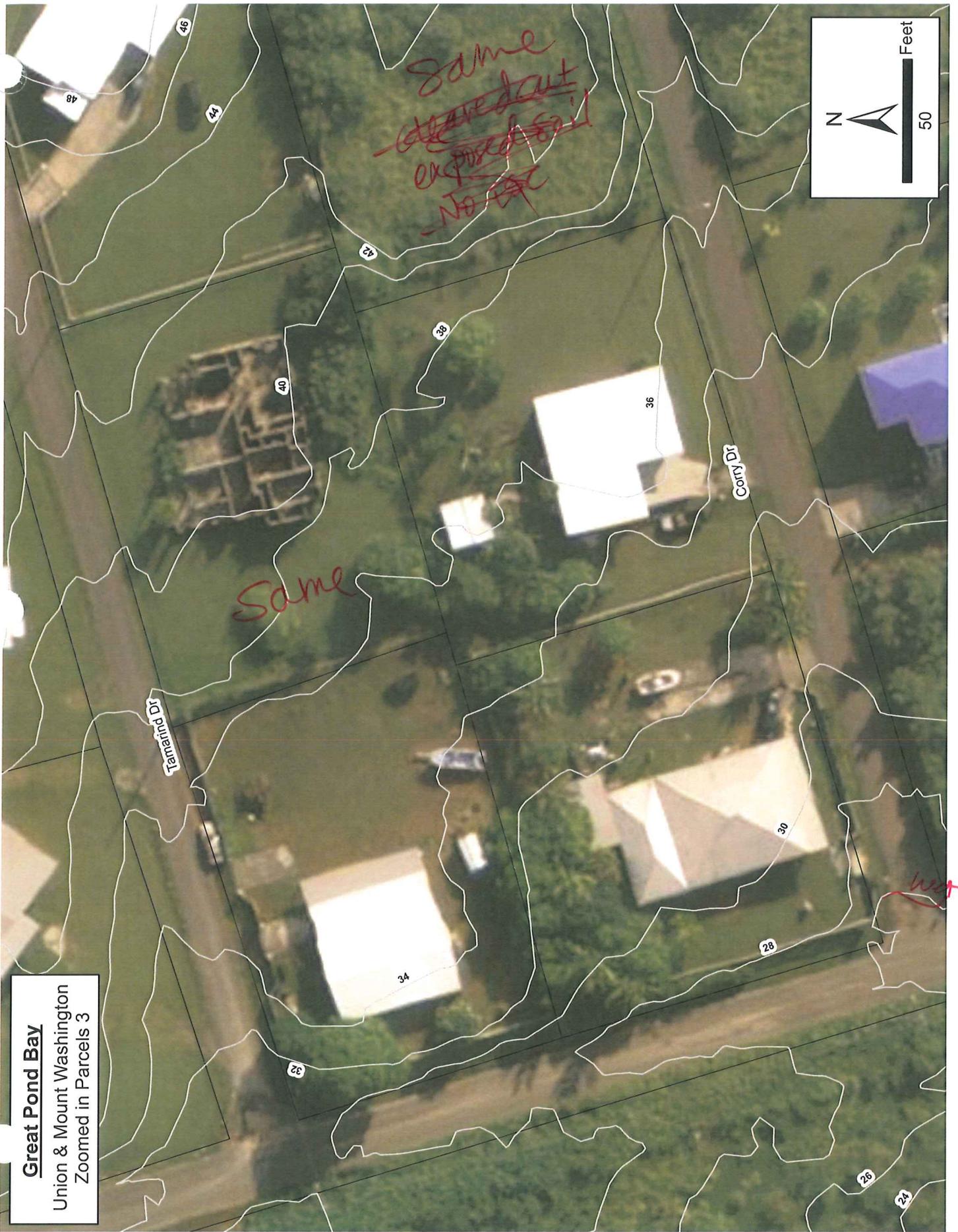
insert conc curb + paved flume
to redirect water + stabilize banks

SKETCH:



INITIAL FEASIBILITY AND NOTES:

Repair paved flumes



Great Pond Bay
 Union & Mount Washington
 Zoomed in Parcels 3

WET & ROCKY

