

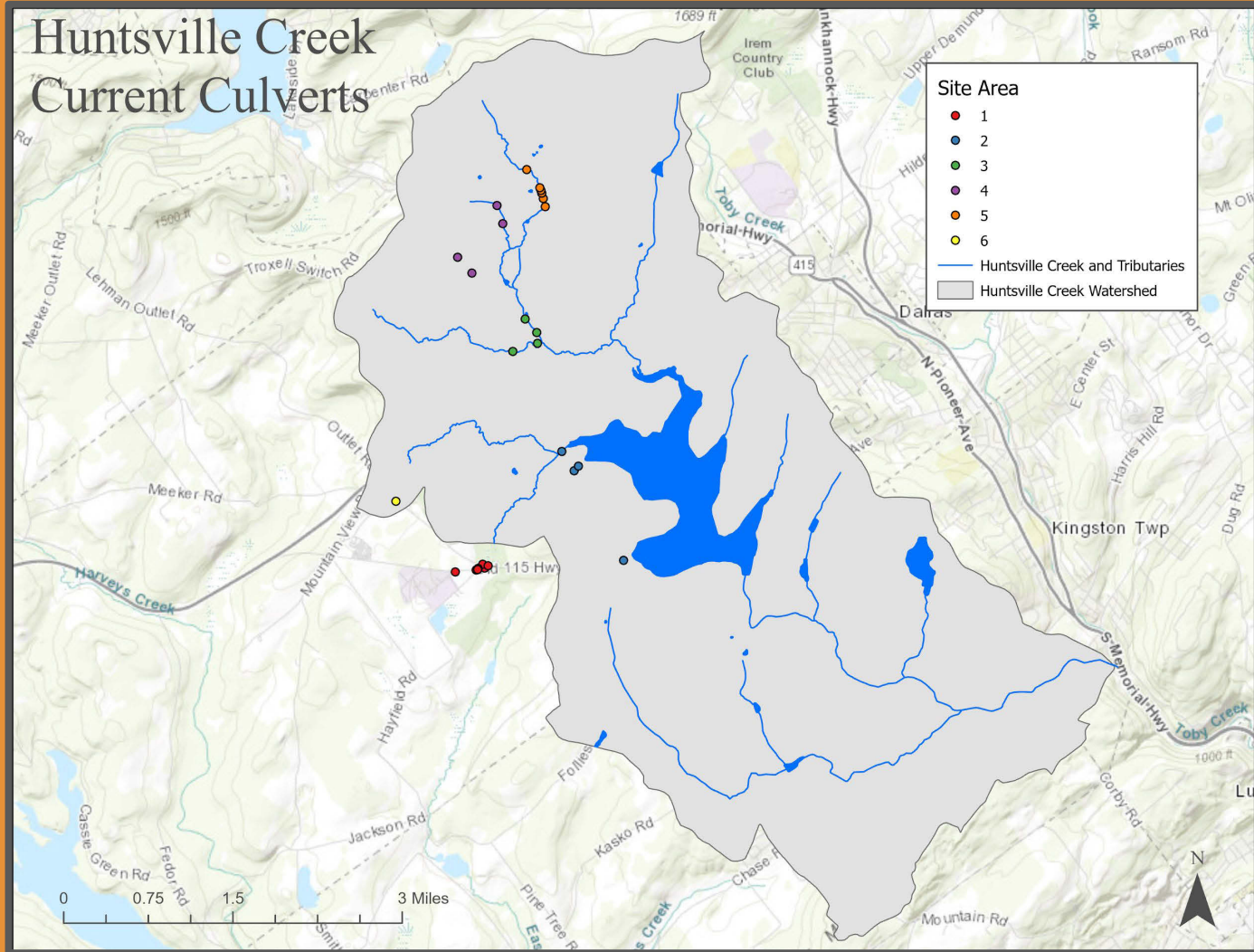
Initial Huntsville Creek Culvert Survey



Overview

Culverts were broken into site area groups for ease of mapping.

**UNT =
Unnamed
Tributary**



Site Area 1



Point 1

12" concrete culvert
carrying drainage from
Fig. 19. More than half
full of debris.

41.307928, -76.011574



Point 1

Upstream view of flow from culvert in Fig. 20 on the other side of Old Rte. 115. Full of leaf litter that is clogging the pipe.



Point 1

Downstream view of drainage from Fig. 21 and wetlands on private property into which it empties.



Point 1

Other view of wetlands in
Fig. 22.



Near 1

Build up of water on
PSU-WB soccer fields
that drains through small
concrete culvert to the
other side of Old Rte. 115



Near 1

12" concrete pipe under University Dr. at intersection with Old Rte. 115 carrying stormwater that is half full of leaf litter.

41.308052, -76.012210



Point 2

Downstream view of rectangular culvert with 18-inch HDPE pipe, mortared into larger concrete pipe with rocks.

2-3 inches of sediment outside of pipe, 1 inch inside pipe

41.308289, -76.007790



Point 2

Upstream view of same drainage from Fig. 6. It drops to a rectangular concrete culvert with an 18-inch HDPE pipe, receives flow from both Old Rte. 115 and Market St., then passes under Old Rte. 115 to the Huntsville Golf Course.



Point 3

View of square stone drop-off that holds groundwater and flow from pipe in Fig. 13. Flow drains through larger HDPE pipe to other side of small road on the golf course.

41.308512, -76.0073466



Point 3

24" HDPE pipe that carries flow from under Old Rte. 115 and Market St.

Consistent flow of groundwater under pipe that trickles down lower rocks.



Point 3

Upstream view of HDPE pipe from Fig. 14 that crosses road in the golf course. A small amount of sediment in pipe.



Point 3

Downstream of flow exiting pipe in Fig. 15, draining into wetlands on the Huntsville Golf Course.



Point 3

Larger view of drainage
and wetlands from Fig. 16

41.308512, -76.007346



Point 3

Stormwater drainage ditch carrying flow from Old. Rte. 115 just next to Fig. 13-17.



Point 4

Downstream view of Fig. 9 where flow enters another HDPE and crosses under small road in the Huntsville Golf Course.

41.308650, -76.008025



Point 4

HDPE pipe hidden by collapsed headwall across Market St in the Huntsville Golf Course.



Point 4

Upstream view of same HDPE pipe in Fig. 10 on the other side of the small road in the golf course. Half full of sediment and leafy debris



Point 4

Downstream view of Fig.
11 emptying in wetlands
at golf course

41.308650, -76.008025



Point 5

Downstream view of Fig. 5.
Drainage spreads, then tightens,
then widens and meanders
further down along Old Rte. 115

41.308252, -76.008644



Point 5

Upstream view of opposite side of HDPE culvert passing under Hayfield Rd. Some drop off and drainage spreads from pipe



Point 6

Downstream (DS) view of
culvert from Fig.1.

18-inch with some rocks
and debris blocking
drainage

41.308099, -76.008900



Point 6

Upstream (US) view of drainage from Penn State WB soccer field, leading to concrete culvert passing under Old Rte. 115

Taken 3/19/19



Point 8

Downstream view of Fig. 3. 18-inch HDPE culvert that passes under Hayfield Rd. - Some leaf matter, small white pipe from adjacent property

41.308158, -76.008703



Point 8

Upstream view of
opposite side of culvert
under Old Rte. 115. -
Completely blocked with
debris and leaf litter.



Site Area 2



Point 10

2 12" concrete pipes that
carries flow from Fig. 30

41.309044, -75.989972



Point 10

2 12" concrete pipes in square drop-off that pass under Huntsville-Idetown Rd. - Half full of leafy debris and sediment



Point 11

Downstream view of flow
spreading after crossing
under private driveway

41.317703, -75.996341



Point 11

Upstream view of small UNT
(Un-named Tributary) /run-off off
Huntsville-Idetown Rd. near reservoir



Point 11

Downstream view of UNT
in Fig. 82 crossing under
small private driveway
through HDPE pipe



Point 11

Upstream view of drainage from opposite side of private driveway. Pipe from other side is not clearly seen and flow spreads widely

Small pipe from property at 90 degree angle



Near 11

Upstream view of UNT in Fig. 82-85
closer to where it crosses
Huntsville-Idetown Rd.



Near 11

Additional flow from stormwater
draining down Huntsville-Idetown Rd.
meeting UNT in Fig. 86



Point 12

Downstream view of UNT
in Fig. 86 flowing into 18"
concrete pipe under
stone headwall as it
crosses under
Huntsville-Idetown Rd.

41.31815, -75.995799



Point 12

Upstream view of
concrete pipe in Fig. 88
on opposite side of
Huntsville-Idetown Rd.



Point 12

Downstream view of UNT
in Fig. 88-89 that leads
directly to reservoir



Point 12

Another view of UNT in
Fig. 90

41.318150, -75.995799



Point 13

Downstream view of UNT just before
it empties into reservoir

41.319565, -75.997911



Point 13

Upstream view of UNT that crosses
Huntsville-Idetown Rd.



Point 13

Downstream view of UNT
in Fig. 93 crossing under
5-6' concrete bridge

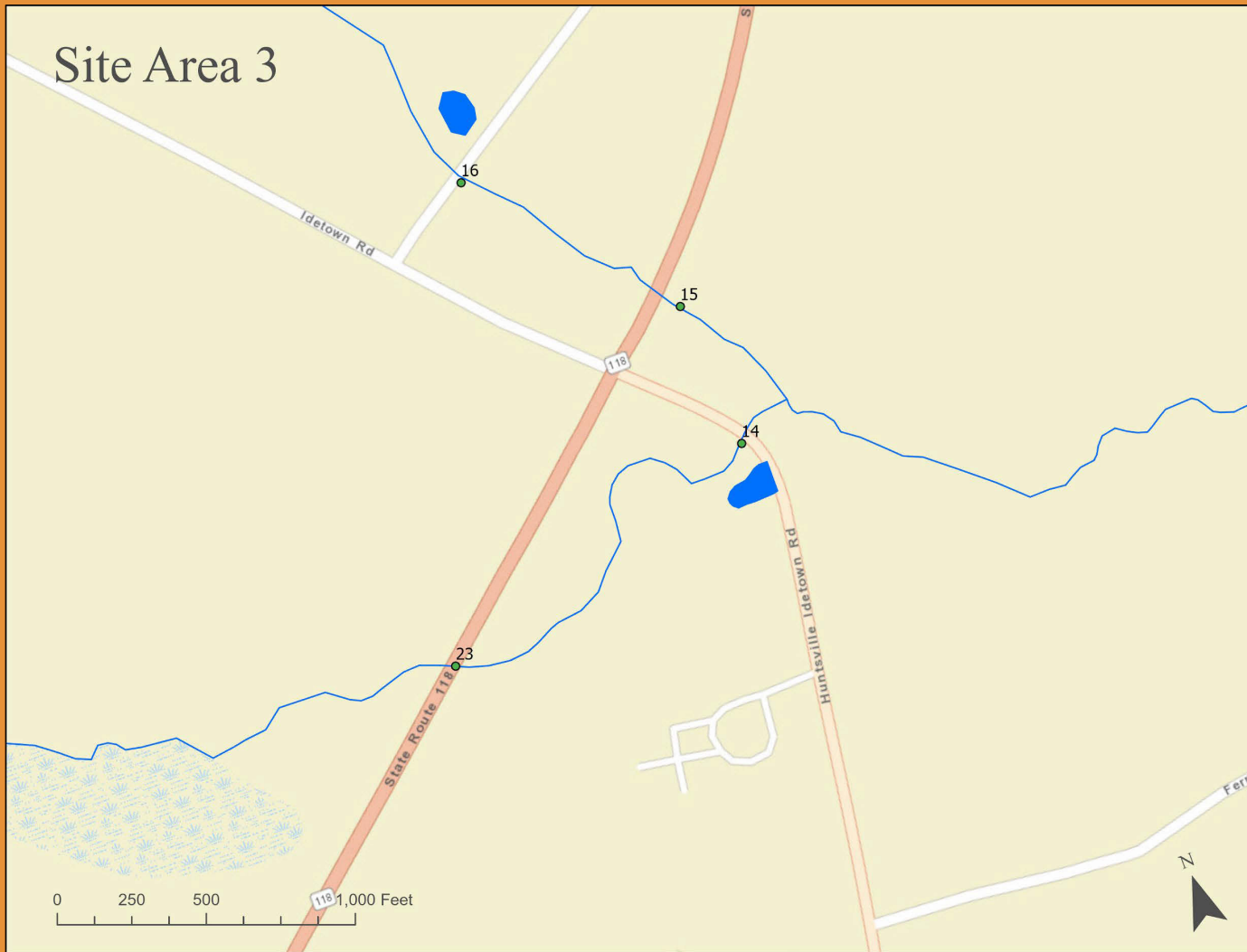


Point 13

Upstream view of bridge
on opposite side of
Huntsville-Idetown Rd.



Site Area 3



Point 14

Downstream view of UNT
from the same side as
Fig. 35.

41.329983, -76.001013



Point 14

Obstructed downstream view of Fig. 32 and the culvert. Significant organic debris in UNT just before culvert and gas pipeline passing over



Point 14

Additional view of culvert
in Fig. 33



Point 14

Partial upstream view of culvert on opposite side of Huntsville-Idetown Rd. Some debris, but not as much as opposite side



Near 14

Upstream view of UNT
that passes through
5-foot concrete, circular
culvert under
Huntsville-Idetown Rd.
just before Rte 118.



Near 14

Larger WL/HL just near
Figs. 32-36. Currently
frozen, but appears as a
body of water on Google
Earth



Point 15

Another downstream view
of UNT in Figs. 39-40.
Must pass through same
private property as Fig.
38 to access.

41.331018, -76.001113



Point 15

Upstream view of UNT and very large concrete culvert that passes under Rte. 118. Meets other UNT in Figs. 32-36.



Point 15

Partial downstream view of UNT in Fig. 39. Water narrows after culvert, but is well over 2 feet deep in some areas



Near 15

Upstream view of concrete culvert that passes under Huntsville-Idetown Rd. right at intersection with Rte. 118. On private property, but had permission from owner. Drainage meets UNT in Figs. 39-41



Point 16

Downstream view of UNT passing through Lehman Nursery before passing under Rte. 118

This UNT is the same as that in Fig. 39-41, just further upstream.

41.332345, -76.002616



Point 16

Upstream view of UNT
that passes under Park
Rd. near Lehman Nursery



Point 16

View of UNT passing under Park Rd.

Bank repair in Fig. 74 could help direct UNT to better alignment with bridge



Point 16

View of UNT on opposite side of Park Rd.



Near 16

View of bank erosion
from UNT in Fig. 73 just
before it passes under
Park Rd.



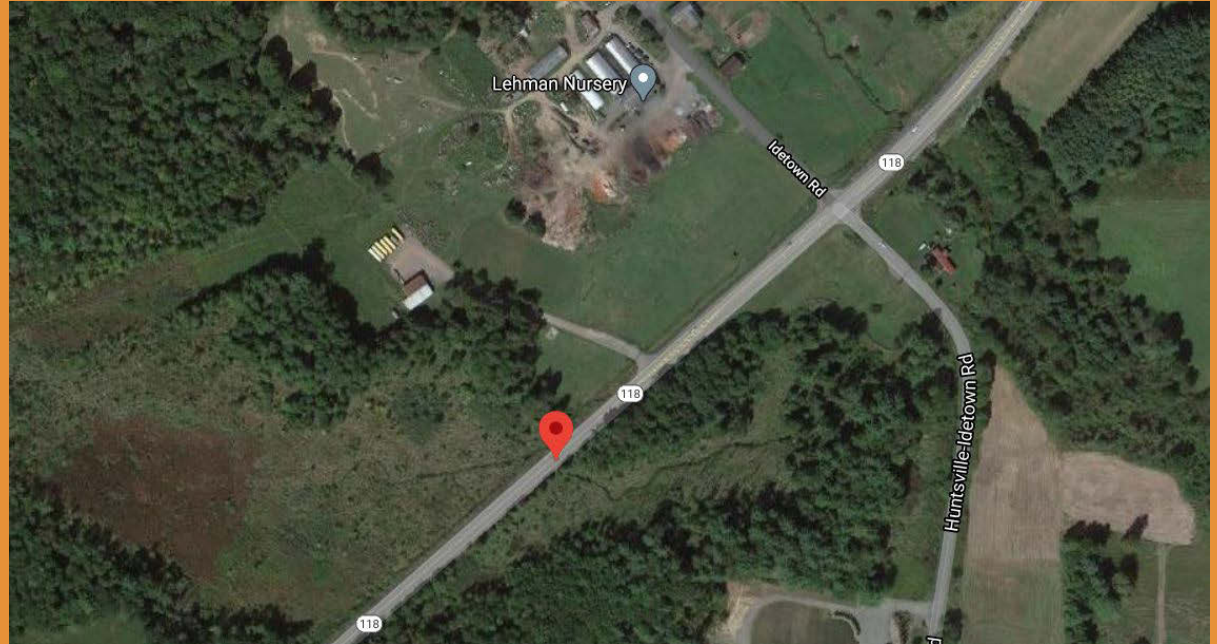
Near 16

View of wetlands on
Lehman Nursery that
feed into UNT in Fig.
73-77 on Park Rd.,
slightly closer to
intersection with Idetown
Rd.

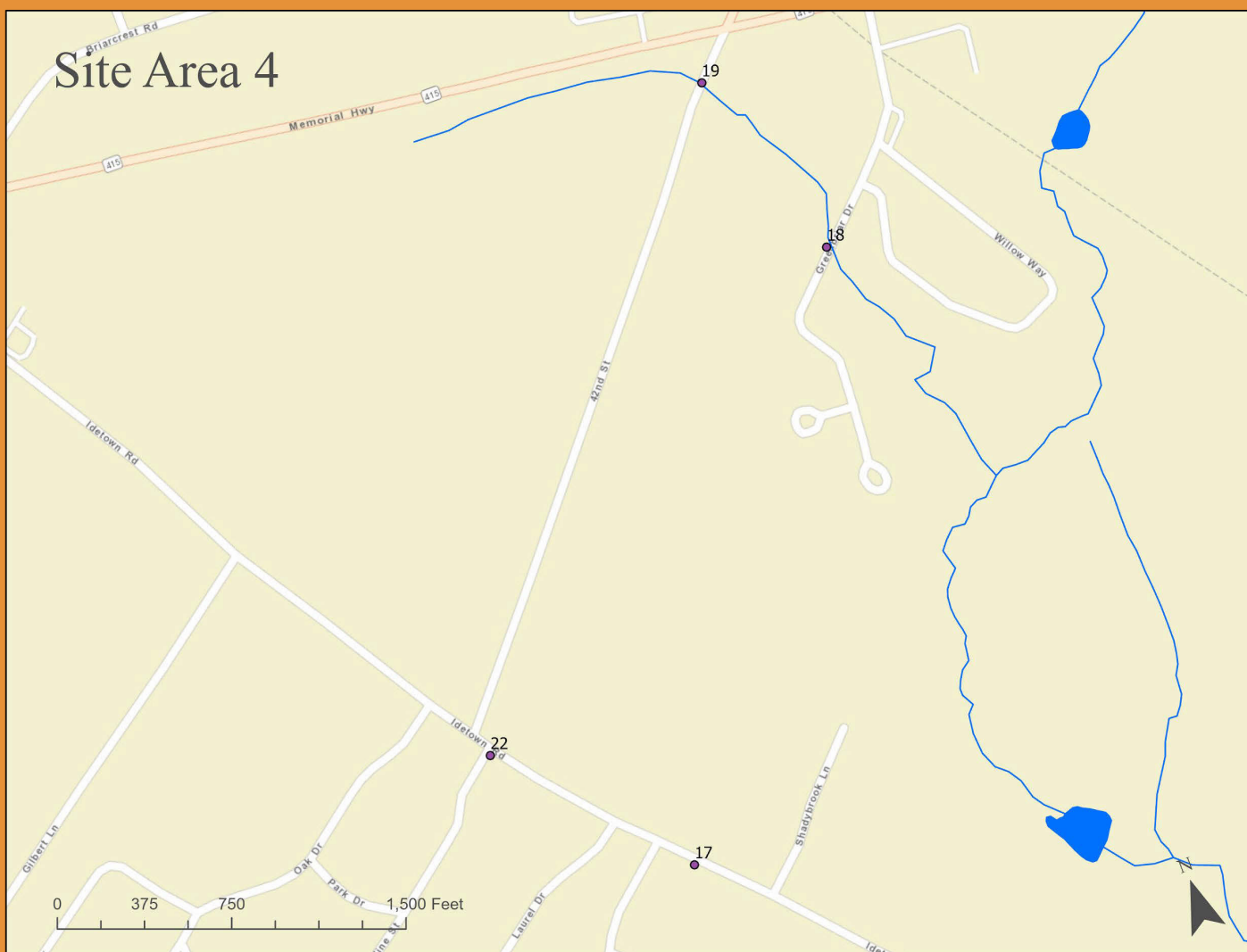


Point 23

41.32921 , -76.00418



Site Area 4



Point 17

Downstream view of flow
from Fig. 71 emptying in
WL/HL on private
property

41.336778, -76.009443



Point 17

Square culvert further
down Idetown Rd.
carrying SW through 18"
concrete pipe under
Idetown



Point 17

Close-up of pipe in Fig.
69



Point 17

Upstream view of concrete pipe from Fig. 70 on opposite side of Idetown Rd.



Point 18

Downstream view of UNT
in Fig. 53-54.

41.341529, -76.005493



Point 18

Downstream of UNT and
5' pipe that passes under
road in Village at
Greenbriar



Point 18

Upstream view of pipe in
Fig. 54 on the other side
of the road



Point 19

Downstream view of UNT
in Fig. 57-59

41.343278, -76.006215



Point 19

Upstream view of UNT
that crosses 42nd St
under 6' stone bridge



Point 19

Downstream view of
stone bridge holding UNT
in Fig. 57



Point 19

Upstream view of bridge
on opposite side of 42nd
St.



Near 19

Upstream of UNT that
crosses through 5' metal
pipe in Village at
Greenbriar



Point 22

Upstream view of
drainage from 18" HDPE
pipe connected to culvert
in Fig. 61-62 and passing
under Vine St. Also
clogged

41.338310, -76.011263



Point 22

Stormwater drains into square culvert with two 18" concrete pipes before crossing Vine St.

Leaf litter clogging the flow of water through the pipes



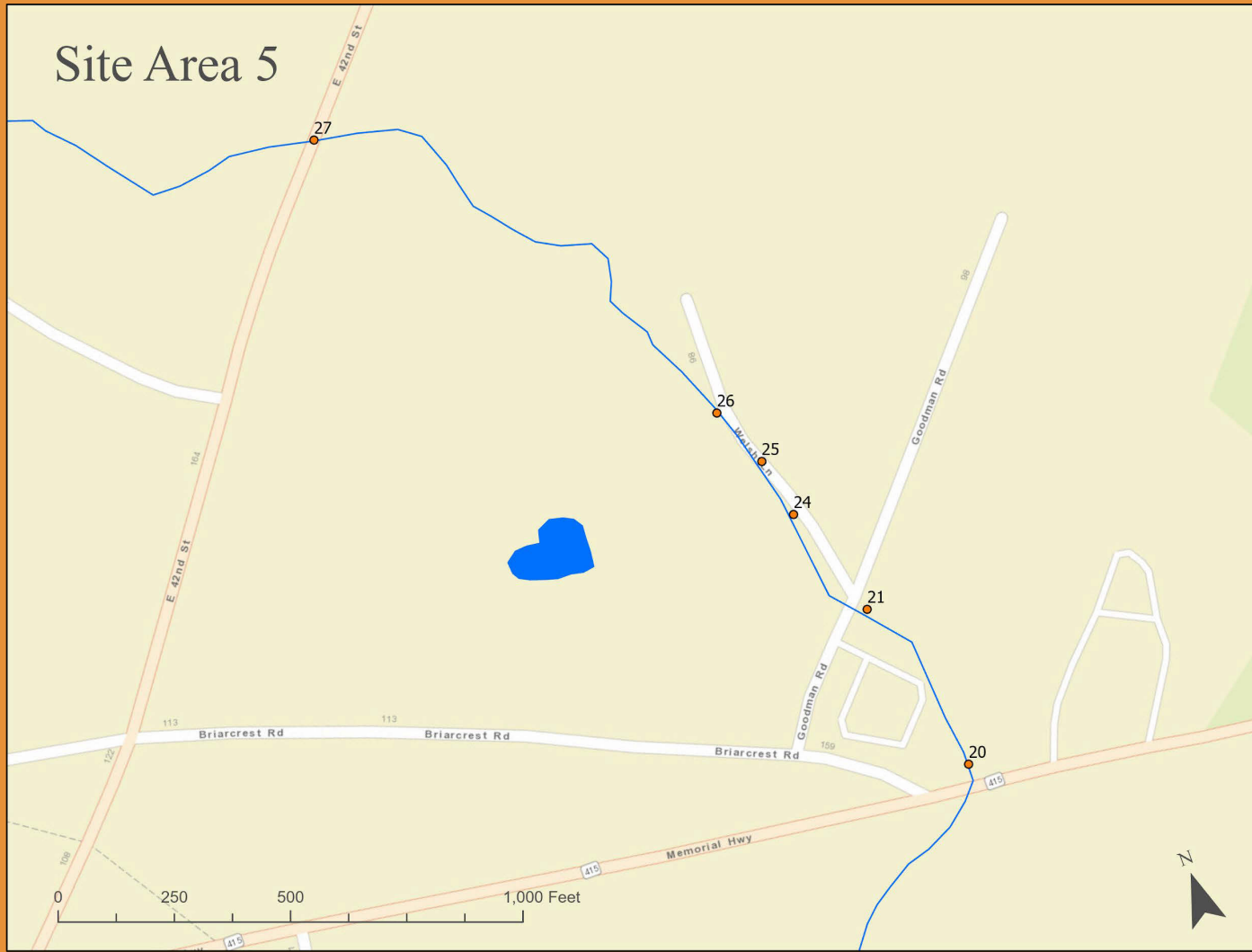
Point 22

Close-up of one pipe in Fig. 61 and leafy debris

Resident complained it regularly fills and sends flow across road.



Site Area 5



Point 20

Closer look at other side of the culvert. Could not easily access view of the UNT on that side.

41.343162, -76.000024



Point 20

Upstream view of UNT into which Fig. 43-44 empty. Passes through rectangular culvert that passes under Rte. 415.



Point 20

Downstream view of
culvert passing under
Rte. 415.



Near 20

Drainage ditch just outside Back Mountain Dance Studio with flow that empties into UNT.



Near 20

HDPE carrying flow from
Dance Studio's parking
lot into drainage ditch



Near 20

Collapsed headwall over
drain just outside of
parking entrance to
Dance Studio.



Point 21

Downstream view of UNT
in Fig. 48-50 after it
crosses under Goodman
Rd. and before it reaches
Rte. 415 as seen in Fig.
44-46.

41.343963, -76.000273



Point 21

Upstream view of same UNT from Fig. 44-46 before it passes under Goodman Rd. A Black HDPE pipe empties into UNT unaligned from Welsh Lane.

Further upstream the UNT splits and then passes under E. 42nd St.



Point 21

View of 2-3' metal pipe carrying UNT under Goodman Rd. Pipe has some build up of sediment, but flow is level through the pipe relative to the UNT



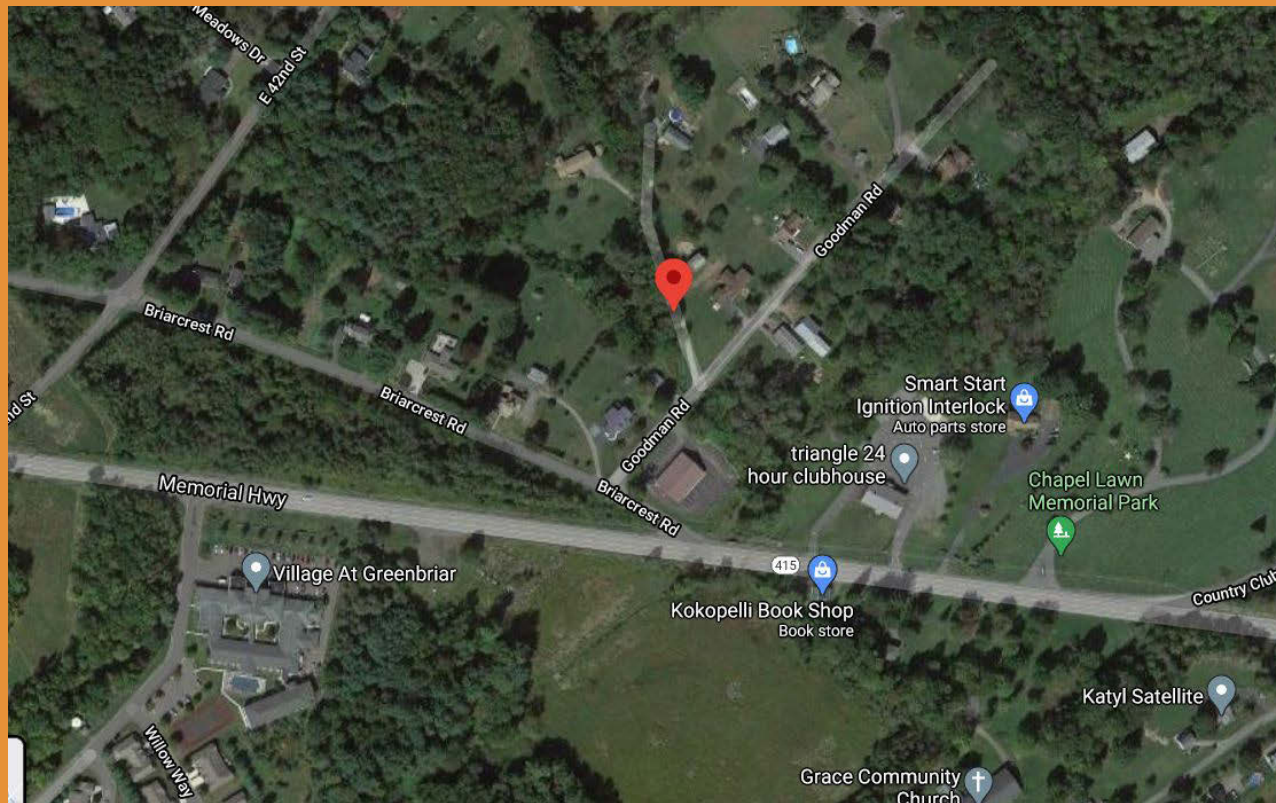
Point 21

View of metal pipe from
opposite side of
Goodman Rd.



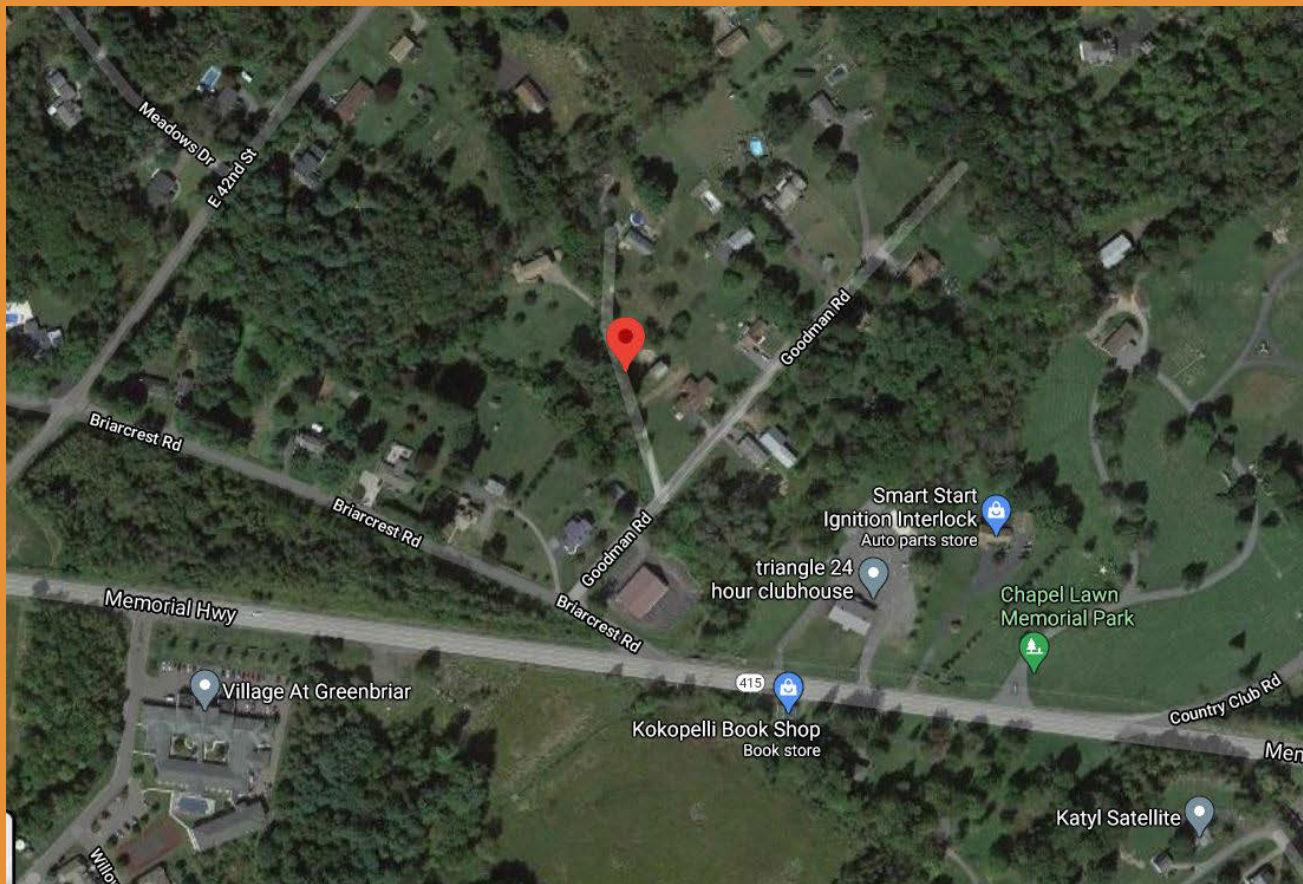
Point 24

41.34447, -76.00049



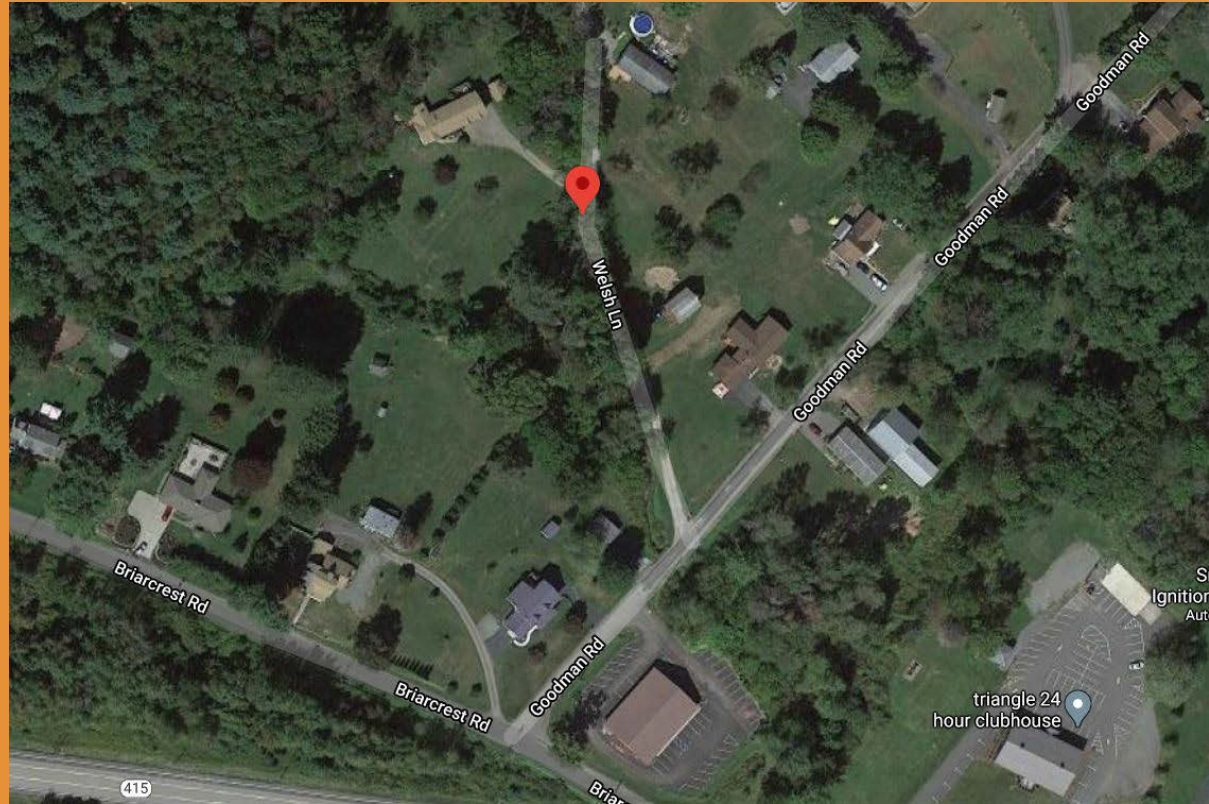
Point 25

41.34474, -76.00056



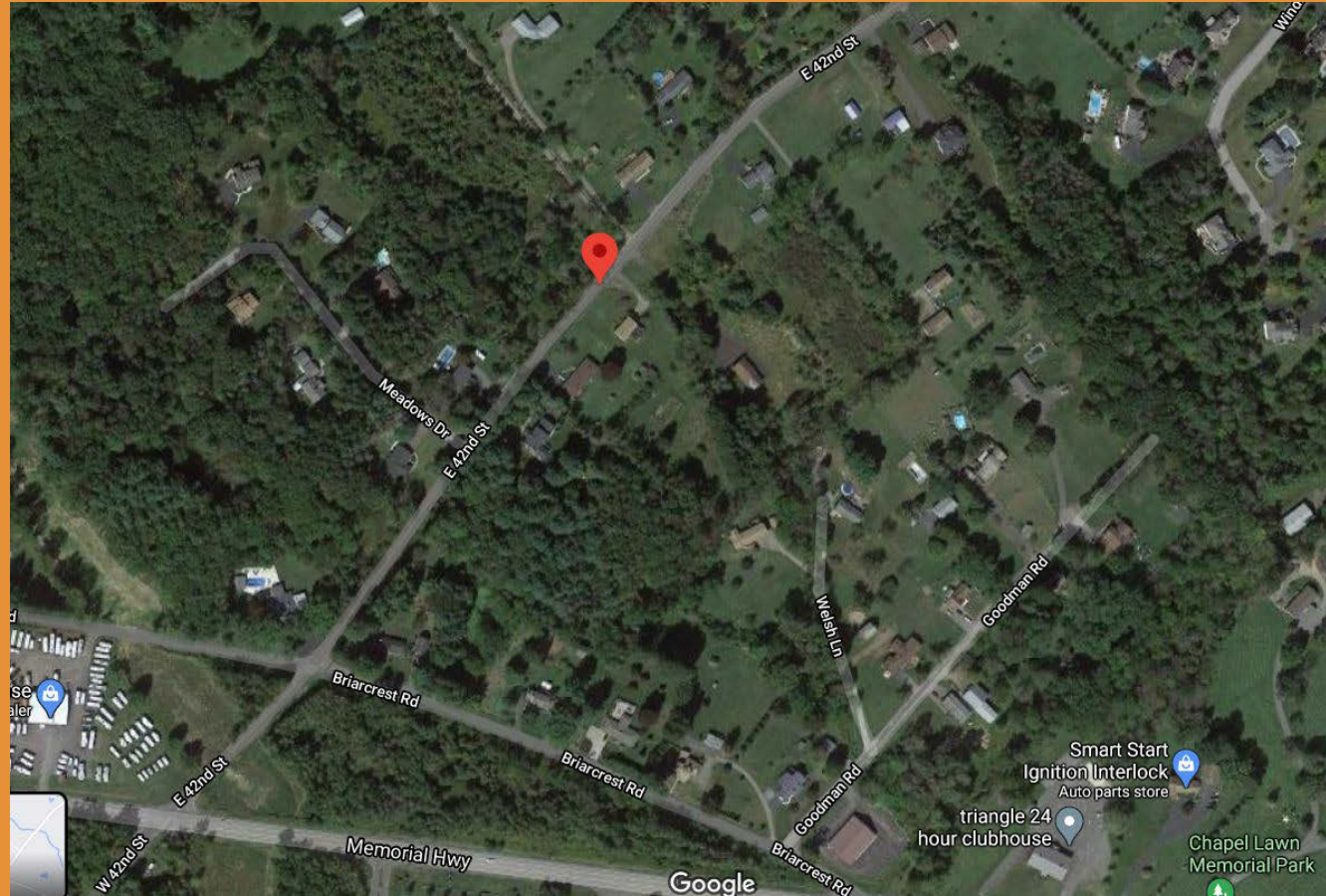
Point 26

41.34501, -76.00071



Point 27

41.34676, -76.00239



Site Area 6



0 375 750 1,500 Feet



Point 9

Downstream view of Fig. 28. Drainage does not noticeably continue much further into wetland area that is part of a private yard

41.314734, -76.019182



Point 9

Upstream view of culvert that passes under Market St. Drainage spreads widely into the wetlands



Near 9

Upstream view of 30-inch corrugated metal pipe bringing drainage from Lake Lehman Early Learning Center. Pipe is corroded along base of the structure.

Taken 3/20/19



Near 9

Downstream view of Fig. 26. 30-inch concrete culvert passing under Market St.



Figure 64

SW drainage off Idetown
Rd. with some blockage

41.309026, -75.990209



Figure 65

Square stone culvert with
18" concrete pipe



Figure 66

Upstream view of
concrete pipe from
opposite side of Idetown
Rd.

Heavy scouring and
collapsed headwall just
above top of image



Figure 67

Downstream view of
drainage from Fig. 62-63.
Flow eventually meets
UNT in Fig. 56-59.



Figure 80

Upstream view of bridge carrying UNT under Rte. 118. Could not access other side



Figure 81

Downstream view of UNT
in Fig. 80. Appears as if
UNT spreads widely
during high flow events

