



Siler City Stormwater Infrastructure Lookbook: Town-Owned Streets

Highest-Priority Stormwater Infrastructure Maintenance Needs
Version date: June 2020



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Completed as Part of the Siler City Stormwater Mapping and Assessment Project

Prepared by the
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in partnership with
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This project was supported by
the North Carolina Department of Environmental Quality
205(j) Water Quality Planning Grant Program



GETTING STARTED

This “Lookbook” includes the stormwater infrastructure features needing both structural improvement and cleanout as noted by TJCOG and Biocenosis staff conducting the assessment. The intent of this document is to provide Siler City staff with a method of prioritizing stormwater infrastructure maintenance needs.

Definitions

ID Codes

Each stormwater infrastructure feature has a unique ID code based on the infrastructure’s location in the grid, location on a road owned and maintained by the Town or DOT, and infrastructure type. i.e., C2TN_CB03 is a catch basin in grid square C2 which drains a town-maintained street.

The number after the infrastructure type does not have a spatial significance. It is simply used to provide a unique overall ID code, distinguishing between (in this example) all catch basins in grid square C2 on a Town-maintained road.

Please refer to grid squares in the [public webmap](#) developed by Biocenosis/TJCOG and in map books housed at the Town of Siler City.

Abbreviations

TN: Town

ST: State (DOT)

CB: Catch basin

CV: Culvert

PI: Pipe inlet

PO: Pile outlet

OF: Outfall

SL: Stormwater line

DT: Ditch

Structure Condition Rating

Good: Structure intact; no observed problems

Fair: Infrastructure may become compromised in future (i.e., minor crack around catch basin or culvert)

Needs Improvement: Structure not functional (due to visibly collapsed pipes, broken catch basin grates, infrastructure abutting sinkholes, etc.)

Cleanout Needs Rating

No: Clear or less than half blocked by debris such as leaves, sticks, trash

Yes: More than half or fully blocked by debris; or buried

Structure ID: C2TN_CB03

Date: 4/10/2019

Type: Catch Basin

Subtype: Combo Curb/Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: sinkhole forming behind

Cleanout: YES

Cleanout description: Lots of plants growing in dirt around grate. Lots of debris/veg over grate

Observed pollution: YES

Pollutant description: sediment, organics

Other comments: Cleaned by Siler City staff 5/2020



Structure ID: D1TN_CV01

Type: Culvert - Road

Diameter:

Material: Corrugated Metal

Observed condition: Needs Improvement

Comments: Culvert appears nonfunctional

Cleanout needed: YES

Cleanout description: May need replacement rather than cleanout

Observed pollution: No



Structure ID: D3TN_CV01

Type: Culvert - Road

Diameter: 12

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: half buried

Observed pollution: No



Structure ID: D3TN_CB03

Date: 2/13/2020

Type: Catch Basin

Subtype: Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Sinkhole forming

Cleanout: YES

Cleanout description: I think there's a CB under all the sand, silt, gravel

Observed pollution: YES

Pollutant description: Sand, silt

Other comments: Not sure in ROW but clear problem



Structure ID: D4TN_CV03

Type: Culvert - Road

Diameter: 12

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: Mostly buried

Observed pollution: Yes



Structure ID: E2TN_CV01

Type: Culvert - Road

Diameter: 12

Material: Concrete

Observed condition: Needs Improvement

Comments: Erosion from outflow to pond by base of telephone pole

Cleanout needed: YES

Cleanout description: downslope partly buried

Observed pollution: No



Structure ID: E3TN_CB02

Date: 2/13/2020

Type: Catch Basin

Subtype:

Cover: Grate

Box material:

Pipe connections (if visible): 3

Observed condition: Needs Improvement

Condition description: Grate secured by rock

Cleanout: YES

Cleanout description:

Observed pollution: NO



Structure ID: E5TN_CV02

Type: Culvert - Road

Diameter: 12

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: One end completely crushed causing road sink holes. Yard waste and sediment clogging pipe

Observed pollution: Yes



Structure ID: E8TN_CV01

Type: Culvert - Road

Diameter: 18

Material: Concrete

Observed condition: Needs Improvement

Comments: If Connected to CB across N fifth ave, sinkholes around that CB

Cleanout needed: YES

Cleanout description:

Observed pollution: Yes



Structure ID: F2TN_CV01

Type: Culvert - Road

Diameter: 12

Material: Concrete

Observed condition: Needs Improvement

Comments: Upslope from CB, downslope buried

Cleanout needed: YES

Cleanout description: Downslope buried

Observed pollution: No



Structure ID: F4TN_CV03

Type: Culvert - Road

Diameter: 18

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: Mostly buried in sediment and leaves

Observed pollution: Yes



Structure ID: F5TN_SL01

Type: Stormwater Line

Diameter: 12

Material:

Observed condition: Needs Improvement

Comments: Sinkhole. Leaking from join btwn terracotta and cement pipes' join. May be crushing terracotta pipe- unclear if still used

Cleanout needed: YES

Cleanout description:

Observed pollution: No



Structure ID: F6TN_CV03

Type: Culvert - Road

Diameter:

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: Buried

Observed pollution: Yes



Structure ID: F7TN_CB02

Date: 2/13/2020

Type: Catch Basin

Subtype: Curb Inlet

Cover: Concrete

Box material: Brick

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Full of leaves, can't see in

Cleanout: YES

Cleanout description: Full of leaves

Observed pollution: YES

Pollutant description:



Structure ID: F8TN_CB02

Date: 2/13/2020

Type: Catch Basin

Subtype: Combo Curb/Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Completely full of leaves, can't see in

Cleanout: YES

Cleanout description: completely full of leaves

Observed pollution: YES



Structure ID: G3TN_CB01

Date: 10/24/2019

Type: Catch Basin

Subtype: Grate Inlet

Cover: Grate

Box material: Concrete

Pipe connections (if visible): 3

Observed condition: Needs Improvement

Condition description: Found grate off, clogged with stuff

Cleanout: YES

Cleanout description: Sediment, leaves, plants in bottom

Observed pollution: YES

Pollutant description: Sediment and organic debris

Other comments: Cleaned by Siler City staff 5/2020

Separate pipe flowing to CB from outside



Structure ID: G3TN_CV01

Type: Culvert - Road

Diameter: 12

Material: Concrete

Observed condition: Needs Improvement

Comments: Cleaned by Siler City staff 5/2020

Cleanout needed: YES

Cleanout description: Outflow side totally clogged w grass, litter, sediment. Also a sinkhole above outflow

Observed pollution: Yes



Structure ID: G4TN_CB02

Date: 5/28/2019

Type: Catch Basin

Subtype: Combo Curb/Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Curb metal piece has fallen off of curb, 2 grate pieces do not appear secure.
Asphalt crumbling around grate

Cleanout: YES

Cleanout description: Bamboo, large branches, and a shoe blocking all inflow

Observed pollution: YES

Pollutant description: litter



Structure ID: G4TN_CB03

Date: 5/28/2019

Type: Catch Basin

Subtype: Combo Curb/Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible): 2

Observed condition: Needs Improvement

Condition description: Black corrugated inflow pipe at an angle, possible unsecure

Cleanout: YES

Cleanout description: Branches, litter

Observed pollution: YES

Pollutant description: branches, litter

Other comments: Cleaned by Siler City staff 5/2020



Structure ID: G4TN_CB04

Date: 5/28/2019

Type: Catch Basin

Subtype: Combo Curb/Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description:

Cleanout: YES

Cleanout description: Grate currently clear, a lot of woody leaf matter in bottom of catch basin

Observed pollution: YES

Pollutant description: leaves, branches

Other comments: Cleaned by Siler City staff 5/2020



Structure ID: G5TN_CB01

Date: 5/28/2019

Type: Catch Basin

Subtype: Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Grate appears collapsed

Cleanout: YES

Cleanout description: Covered in leaves and debris

Observed pollution: YES

Pollutant description: leaves

Other comments: Cleaned by Siler City Staff 5/2020



Structure ID: G5TN_CB02

Date: 5/28/2019

Type: Catch Basin

Subtype: Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description:

Cleanout: YES

Cleanout description: Vegetation growing inside grate

Observed pollution: YES

Pollutant description: sediment

Other comments: Cleaned by Siler City Staff 5/2020



Structure ID: G6TN_CV01

Type: Culvert - Road

Diameter: 12

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: More than half buried, can't find outflow, on private property, where sinkholes are forming

Observed pollution: Yes



Structure ID: G6TN_PI01

Date: 10/24/2019

Type: Pipe Inlet

Subtype:

Cover:

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Pipe partly broken, ditch inflow full of veg/trash

Cleanout: YES

Cleanout description: Ditch inflow full of veg/trash

Observed pollution: YES

Pollutant description: veg/trash



Structure ID: G7TN_CB04

Date: 11/7/2019

Type: Catch Basin

Subtype: Drop Inlet

Cover: Grate

Box material: Brick

Pipe connections (if visible): 1

Observed condition: Needs Improvement

Condition description: Inlet pipe half buried, standing water in basin

Cleanout: YES

Cleanout description:

Observed pollution: YES

Pollutant description: Litter and woody debris

Other comments: Business owner reports regular flooding during average rainstorm



Structure ID: G8TN_CB01

Date: 12/5/2019

Type: Catch Basin

Subtype: Combo Curb/Grate Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Completely full of leaves, can't see in at all

Cleanout: YES

Cleanout description: Full of leaves

Observed pollution: YES

Pollutant description: organic matter



Structure ID: G8TN_CB02

Date: 12/5/2019

Type: Catch Basin

Subtype: Combo Curb/Grate Inlet

Cover: Grate

Box material: Brick

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Grate cracked

Cleanout: YES

Cleanout description: Full of leaf litter

Observed pollution: YES



Structure ID: G8TN_OF01

Date: 11/7/2019

Type: Outfall

Subtype:

Cover:

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: Pipe outfalls to ditch on private property by masonic temple. Lots of litter.

Cleanout: YES

Cleanout description:

Observed pollution: YES

Pollutant description: litter



Structure ID: H5TN_CV01

Type: Culvert - Road

Diameter:

Material: Concrete

Observed condition: Needs Improvement

Comments: 2 pipes. Broken concrete lip of both pipes. Sinkhole right over pipe! Neighbors said sinkholes recently covered with gravel and asphalt, and now it's open again.

Cleanout needed: YES

Cleanout description: Partly buried, broken concrete and vegetation, standing water. Active sinkhole(s) forming over pipes.

Observed pollution: No



Structure ID: H6TN_CV01

Type: Culvert - Road

Diameter: 12

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: Downslope end buried

Observed pollution: No



Structure ID: H9TN_CV01

Type: Culvert - Road

Diameter:

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: Completely buried

Observed pollution: No



Structure ID: H9TN_CV04

Type: Culvert - Road

Diameter:

Material:

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: Fully buried on upslope end

Observed pollution: No



Structure ID: I4TN_CV01

Type: Culvert - Road

Diameter: 24

Material: Corrugated Metal

Observed condition: Needs Improvement

Comments: Partly crushed metal pipe

Cleanout needed: YES

Cleanout description:

Observed pollution: No



Structure ID: I5TN_CB02

Date: 4/15/2019

Type: Manhole

Subtype: Drop Inlet

Cover: Grate

Box material:

Pipe connections (if visible):

Observed condition: Needs Improvement

Condition description: lots of plants growing up through

Cleanout: YES

Cleanout description: Can't see structure, small trees/vines growing up through grate, overgrown

Observed pollution: YES

Pollutant description: organic debris

Other comments: Can't see number of pipes



Structure ID: I5TN_CV04

Type: Culvert - Road

Diameter: 18

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: Buried culvert connects to CB. Crack in road over culvert.

Observed pollution: No



Structure ID: K9TN_CV01

Type: Culvert - Road

Diameter:

Material: Concrete

Observed condition: Needs Improvement

Comments:

Cleanout needed: YES

Cleanout description: Downslope end buried

Observed pollution: No

