1841

January 2, 2019

Ms. Amanda Lessard, AICP, Assistant Town Planner
Town of Windham
Planning Department
8 School Road
Windham, ME 04062

Response to Review Comments, Preliminary Subdivision & Site Plan Application: Cook Road Retirement Community

Dear Amanda,
We are pleased to provide the enclosed information in response to review comments from Town of Windham staff (Memo to Planning Board dated December 5, 2018 and Memo from Jon Earle Dated November 30, 2018), and to address comments raised at the Planning Board meeting on Monday, December 10. This submission also incorporates comments from staff on a draft submission that we provided via e-mail on December 17, 2018.

Our response to specific items is noted below. The revised plan set is enclosed.

Response to Memo to Planning Board dated December 5, 2018

1. We will provide evidence of financial capacity under separate cover.
2. Traffic generation for Senior Housing, Land Use Code 252 based on ITE Trip Generation Publication, 9th Edition:
   Daily - 3.44 trips/unit = 158 trips
   AM (Street) = 0.20/unit = 9 trips
   AM (Generator) = 0.39/unit = 18
   PM (Street) =0.25/unit = 12
   PM (Generator) = 0.35/unit = 16
   Saturday = 0.31/unit = 14 trips
3. Sight Distance at entrances is noted on the Site Plan:
   Route 202 – 50 mph posted speed limit: 582' left, 1,447' right (495' required)
   Cook Road – 25 mph posted speed limit: 558' left, 662' right (200' required)
4. Traffic Impact Study – We respectfully request a waiver of this requirement based on the following factors: Marginal increase over the threshold requirement (158 daily trip vs 140 trips in Ordinance); Two entrances will be constructed; and sight distance exceeds MaineDOT and Ordinance Standards.
5. A nitrate plume plan is enclosed (Attachment 1).
6. Portland Water District reviewed the plans and provided comments, which have been incorporated on the Utility Plan. We are forwarding the revised plans to PWD for their review in providing the ability to serve letter.
7. We are in the process of preparing the Maine DEP Stormwater Law and NRPA permits for the project and will submit these with the Final Plan.
8. The Grading Plan now notes which buildings require roof drain filter strips.

9. Street lights at the two dead-end roads have been removed from the plans. The plans now note a pedestrian scale street light near the clubhouse at the intersection of High Garden Drive and Eastwatch Drive.
10. The plans have been revised to show three (3) 10' x 20' parking spaces at the clubhouse in addition to six (6) 9' x 18' parking spaces. Any additional parking for clubhouse activities could be accommodated on-street along Eastwatch Drive and Winterfell Road.
11. Test pit locations have been added to the plans.
12. Street trees have been added to the Site Plan as required by the Ordinance.
13. The requested note regarding no clearing of trees outside of designated limits within 5 years of Planning Board approval has been added to the plan.
14. Net Residential Density calculations have been added to the Site Plan.
15. Proposed landscaping is shown on Sheet C-1.0.
16. The Standard Private Road note and Standard Conditions of Approval will be shown on the Subdivision Plan, which will be prepared by Wayne T. Wood & Co. and submitted with the Final Plan.
17. The project site is located primarily in the Black Brook watershed. A small area at the west side of the property (0.8 ac) drains to the Pleasant River (See Attachment 2 "USGS Watersheds").

Response to Memo from Jon Earle dated November 30, 2018:
Our response is provided on Attachment 3.

Additional Comment from Jon Earle (e-mail dated December 21, 2018)

Comment: Was LIDAR survey data used as the basis for the existing conditions topography? If so, we would ask that prior to final plan submission that the constructed stormwater BMPs be field surveyed to verify that the topography and grading for the BMPs can be constructed as shown.

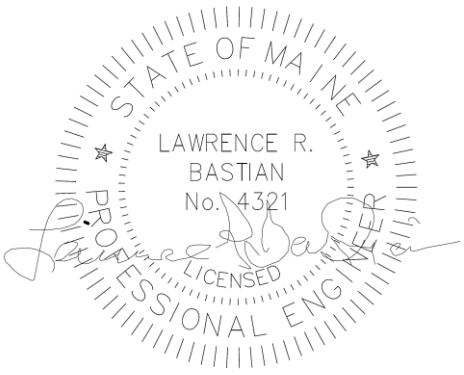
Response: LiDAR data was used to generate existing ground topography shown on the plans. We suggest that the requirement for ground topographic survey at gravel wetland #1, gravel wetland #2 and filter basin #1 be made a condition of preliminary plan approval.

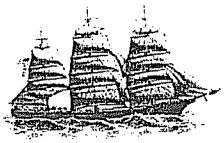
Planning Board Meeting Abutter Comments:
The owner of the abutting property to the west (Melanie Gleason) questioned whether construction of the project would increase runoff and cause flooding on their property, specifically at a wetland located at the rear of their property near the power lines. As shown in the stormwater calculations, the pre-development area draining onto the abutting property at this location is 0.80 acres (sub-catchment 4). The post-development area will be reduced to approximately 0.4 acres at this location. Post-development flows are calculated to be less than pre-development, as stated in the Stormwater Narrative. We do not anticipate any adverse downstream impacts. The remainder of the development property drains to the Black Brook watershed as noted in item 17 above.

We believe this material addresses the comments that were raised relative to the preliminary application. Please let me know if you want us to deliver copies of the revised plan set.

We are hopeful that this project can be on the agenda for the January 14, 2019 Planning Board meeting. Please contact us if you have any questions as you review the enclosed plans and information.

Prepared by:





Benj. F. Packard

Bath Savings Institution

Since 1852

January 10, 2019

Town of Windham Maine

Subject: James Cummings Project- 46 unit over 55 Condominiums

To whom it may concern:

Bath Savings Institution has an existing banking relationship with James Cummings. I am aware of the over 55 Condominium project Jim is looking to pursue in Windham and he has indicated he will look to have Bath Savings finance the project. Based on my experience with James Cummings, I look forward to entertaining the financing request upon a complete financial package of the project.

If you need further information, please contact me at (207) 371-4208.

Sincerely,

Brian C. Desjardins
Vice President/Commercial Lending

105 Front Street, P.O. Box 548, Bath, Maine 04530
Tel. 207-442-7711 Fax 207-442-9137
1-800-447-4559
Member FDIC

PLAN REFERENCE

"COOK ROAD RETIREMENT COMMUNITY, 306 GRAY ROAD, SKETCH PLAN", DATED OCTOBER 25, 2018, PREPARED BY TERRADYN CONSULTANTS, LLC.

LEGEND

- TB-121 — SUMMIT TEST BORING (BY HAND AUGER)
- (J) — SEPTIC SYSTEM AREA AND DESIGNATION LABEL
- ESTIMATED FLOW PATH & EXTENT OF 10 MG-N/L NITRATE PLUME
- EDGE OF WETLAND
- WATERSHED DIVIDE

NORTH

WATERSHED 3

WATERSHED 1

WATERSHED 2

200' SETBACK

100' MULTIFAMILY SETBACK

10' REAR SETBACK

40' FRONT SETBACK

50' WIDE R.O.W.

WETLAND AREA

AREA OF WETLAND ALTERATION

FILTER BASIN #3

FILTER BASIN #2

FILTER BASIN #1

4' WIDE PAVED SHOULDER WITH STRIPE

RECREATION AREA

CLUB HOUSE

RETAINING WALL

EXISTING HOUSE & DRIVEWAY TO BE REMOVED

FRONT OF UNITS 1-20 TO FACE GRAY ROAD & COOK ROAD

TB-101 TB-102 TB-100 TB-122 TB-121 TB-107 TB-108 TB-103 TB-106 TB-105 TB-104 TB-111 TB-113 TB-110 TB-112 TB-109 TB-114 TB-115 TB-116A TB-116 TB-117 TB-117A TB-118 TB-118A TB-119 TB-120A TB-120

UNITS 43&44 · UNITS 41&42 · UNITS 39&40 · UNITS 37&38 · UNITS 45&46 · UNITS 27&30 · UNITS 31-36 · UNITS 25&26 · UNITS 23&24 · UNITS 21&22 · UNITS 19&20 · UNITS 17&18 · UNITS 15&16 · UNITS 13&14 · UNITS 11&12 · UNITS 9&10 · UNITS 7&8 · UNITS 5&6 · UNITS 3&4 · UNITS 1&2

WELL

SITE DIST. 558' WITH LARGE TIPPLE MAPLE GONE

SITE DIST. 662' UNLIMITED TO INTERSECTION RT. 202

18" CMP CULVERT

4-WAY STOP

HIGH GARDEN DR.

COOK ROAD

WINTERFELL RD.

EAST WATCH DR.

Woods Road

GRAY ROAD (ROUTE 202)

28" CONCRETE CULVERT

APPROXIMATE LOCATION WATER MAIN

SCALE: 1" = 80'

0 40 80 160 240

PROJECT: COOK ROAD RETIREMENT COMMUNITY
306 GRAY ROAD - WINDHAM, ME

CLIENT: JIM CUMMINGS

TITLE: NITRATE-NITROGEN ASSESSMENT SITE PLAN

SCALE: 1" = 80' | DRAWN BY: KRF

DATE: DECEMBER 14, 2018 | APPR BY: SBM

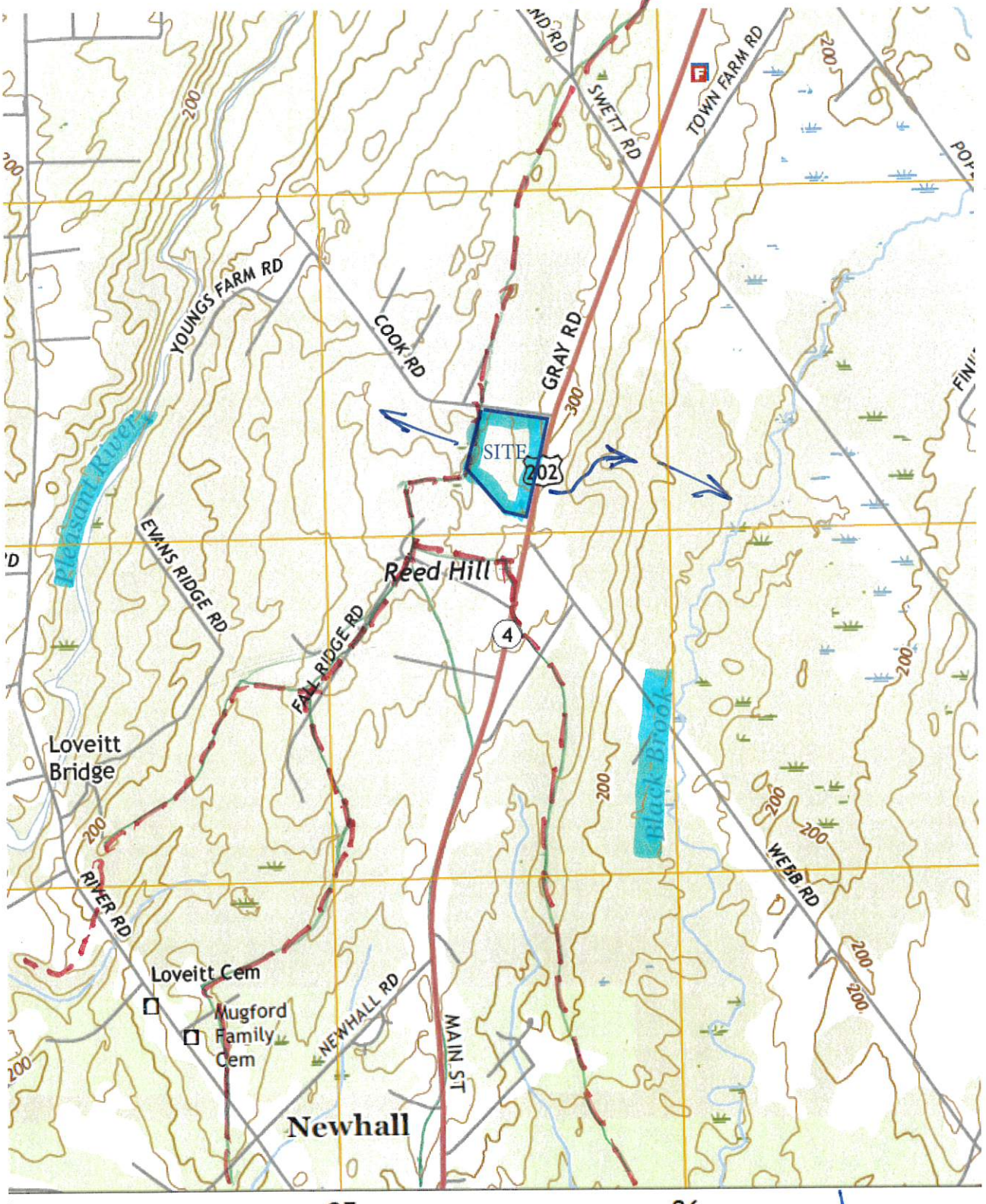
SUMMIT GEOENGINEERING SERVICES
173 PLEASANT STREET
ROCKLAND, ME 04841
Tel: (207) 318-7161
145 LISBON ST. - SUITE 101
LEWISTON, ME 04240
Tel: (207) 576-3313

PROJ.#: 18218

FIGURE: 2

ATTACHMENT 1

PLEASANT R ← → BLACK BROOK



Cook Road

USGS WATERSHEDS

12·17·2018

ATTACHMENT 2

TERRADYN RESPONSE TO COMMENTS NOTED IN BOLD ITALICS

From: Jonathan R. Earle
Sent: Friday, November 30, 2018 3:09 PM
To: 'Jeff Amos, P.E. '; Amanda L. Lessard
Subject: 18-31 Cook Road Retirement Community - Preliminary Plan Review Comments

Jeff & Amanda,

Below are my review comments for the project:

1. High Intensity Soils Waiver – The waiver request is reasonable from a stormwater standpoint based on the assumption of Class 'C' and 'D' soils in the wetland and non-wetland areas. In recent projects, we have asked the site evaluator to make a determination (based on the test pits) that the soils are generally consistent with the Medium Intensity Survey. This additional information would provide a stronger justification for the waiver.

Waiver approved 12/10/2018

2. Traffic:
    a. Provide the sight distances at the site intersections on Cook and Gray Roads.

    Noted on Sheet C-1.0, Site Plan

    b. The AM & PM peak hour trip generation (3 AM and 5 PM) seems low. I'm coming up with 12 PM peak, 9 AM peak, and 158 daily trip using ITE land use code 252 for 46 units of senior adult housing. Our ordinance requires a traffic impact study for subdivisions which generate more than 140 daily trips.

    We re-checked and came up with the same numbers

3. Provide the ability to serve determination from PWD prior to final approval when it becomes available.

Pending

4. Will a plan be provided showing the nitrate plumes at each disposal field location. A statement from Steve Marcotte was provided which indicates that the nitrate discharge will be less than 10 mg/L at the property line, but a nitrate plume plan would be helpful in support of this criteria.

Submitted 12/17/2018

5. Stormwater
    a. Basic Standards – An erosion and sedimentation control plan has been provided that meet these standards.
    b. General Standard – The narrative indicates that 99 % of impervious and 84 % of the developed areas are being treated by BMP which exceeds the standard. Table is shown to confirm these calculations on Sheet C 6.1
    c. Flooding Standard – The narrative indicates the postdevelopment flows at the two study points are at or below predevelopment levels. The HydroCAD calculation for the predevelopment conditions do not include the study point reaches for each storm event. Please provide these to verify the table in the stormwater report narrative.

    HydroCAD output for these study points is attached. Calculated flows match the previously submitted narrative.

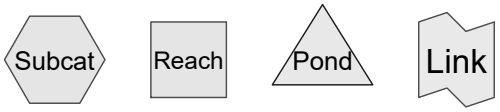
    d. Phosphorus Standard – N/A

Jon Earle, PE
Town Engineer
Town of Windham

Office: (207) 894-5900, ext. 6124

Study Point #2

Study Point #1



Routing Diagram for 1841 PRE

Prepared by {enter your company name here}, Printed 12/11/2018

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Reach SP#1: Study Point #1 Inflow=7.55 cfs 2.278 af
Outflow=7.55 cfs 2.278 af

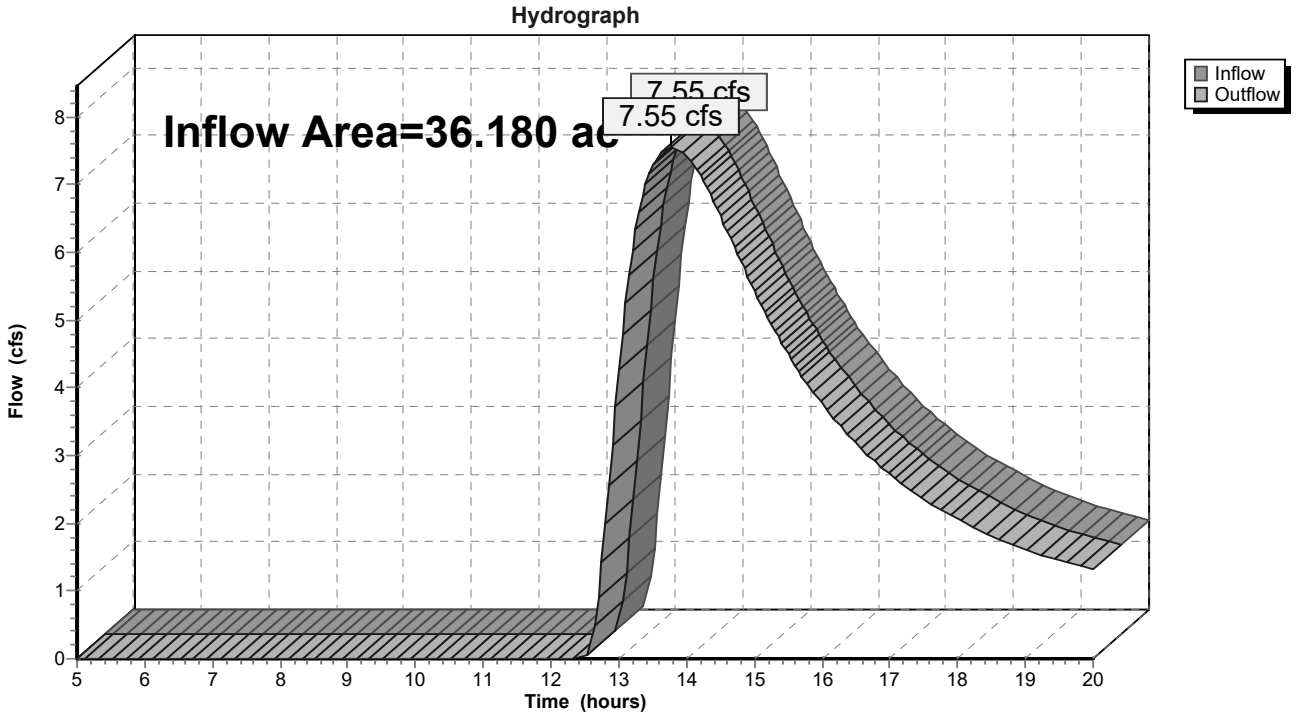
Reach SP#2: Study Point #2 Inflow=0.51 cfs 0.046 af
Outflow=0.51 cfs 0.046 af

Summary for Reach SP#1: Study Point #1

Inflow Area = 36.180 ac, 4.06% Impervious, Inflow Depth > 0.76" for 2 Year event
Inflow = 7.55 cfs @ 13.78 hrs, Volume= 2.278 af
Outflow = 7.55 cfs @ 13.78 hrs, Volume= 2.278 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach SP#1: Study Point #1

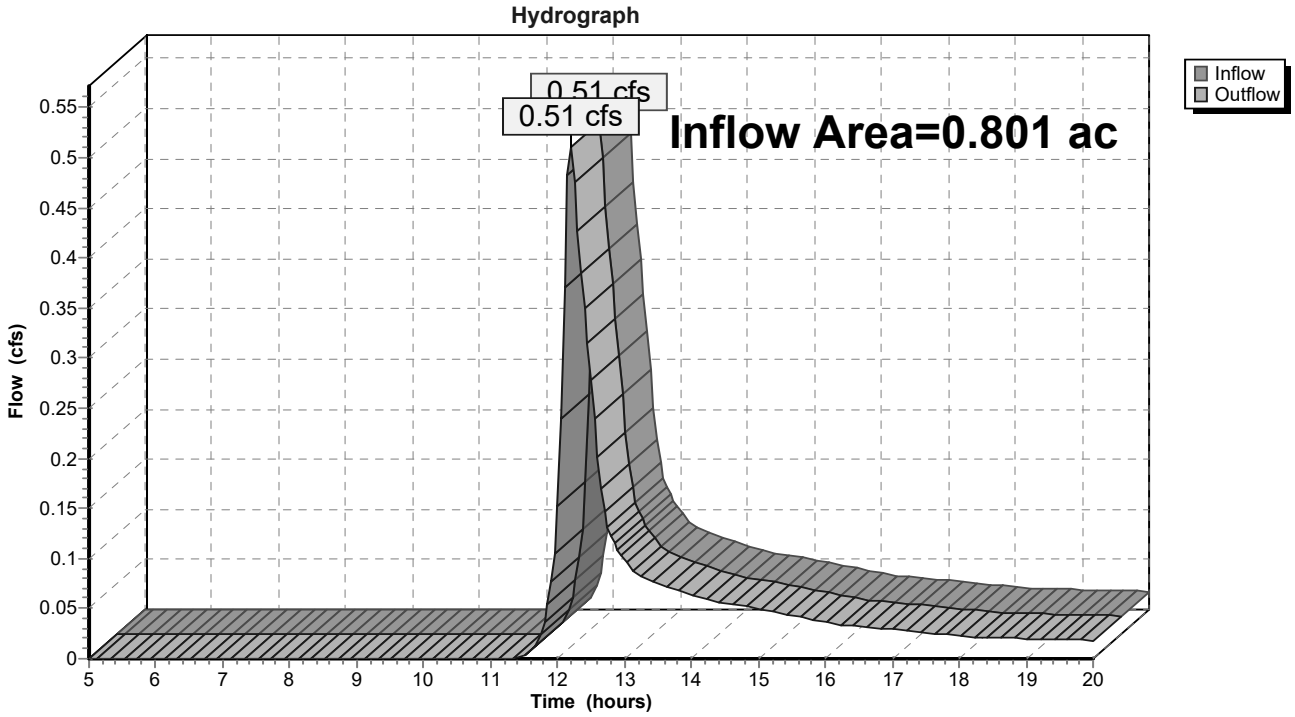


Summary for Reach SP#2: Study Point #2

Inflow Area = 0.801 ac, 0.00% Impervious, Inflow Depth > 0.69" for 2 Year event
Inflow = 0.51 cfs @ 12.20 hrs, Volume= 0.046 af
Outflow = 0.51 cfs @ 12.20 hrs, Volume= 0.046 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach SP#2: Study Point #2



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Reach SP#1: Study Point #1 Inflow=13.94 cfs 5.157 af
Outflow=13.94 cfs 5.157 af

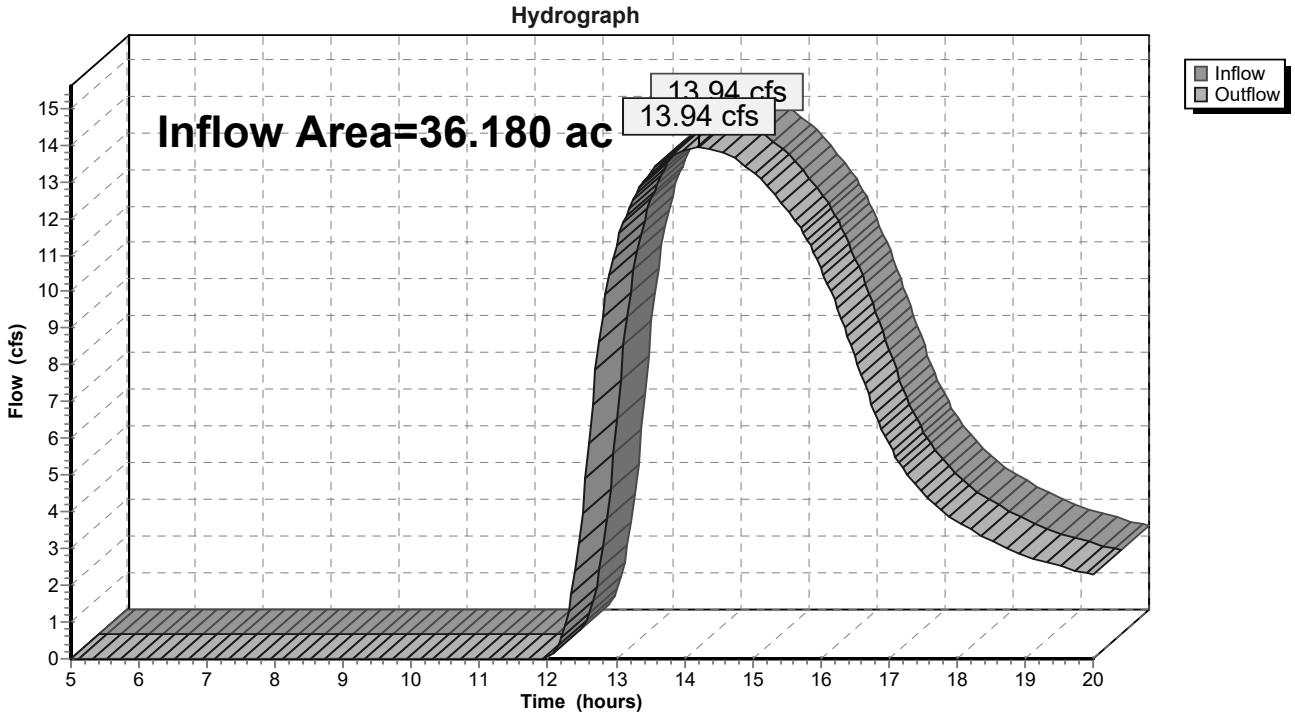
Reach SP#2: Study Point #2 Inflow=1.28 cfs 0.107 af
Outflow=1.28 cfs 0.107 af

Summary for Reach SP#1: Study Point #1

Inflow Area = 36.180 ac, 4.06% Impervious, Inflow Depth > 1.71" for 10 Year event
Inflow = 13.94 cfs @ 14.22 hrs, Volume= 5.157 af
Outflow = 13.94 cfs @ 14.22 hrs, Volume= 5.157 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach SP#1: Study Point #1

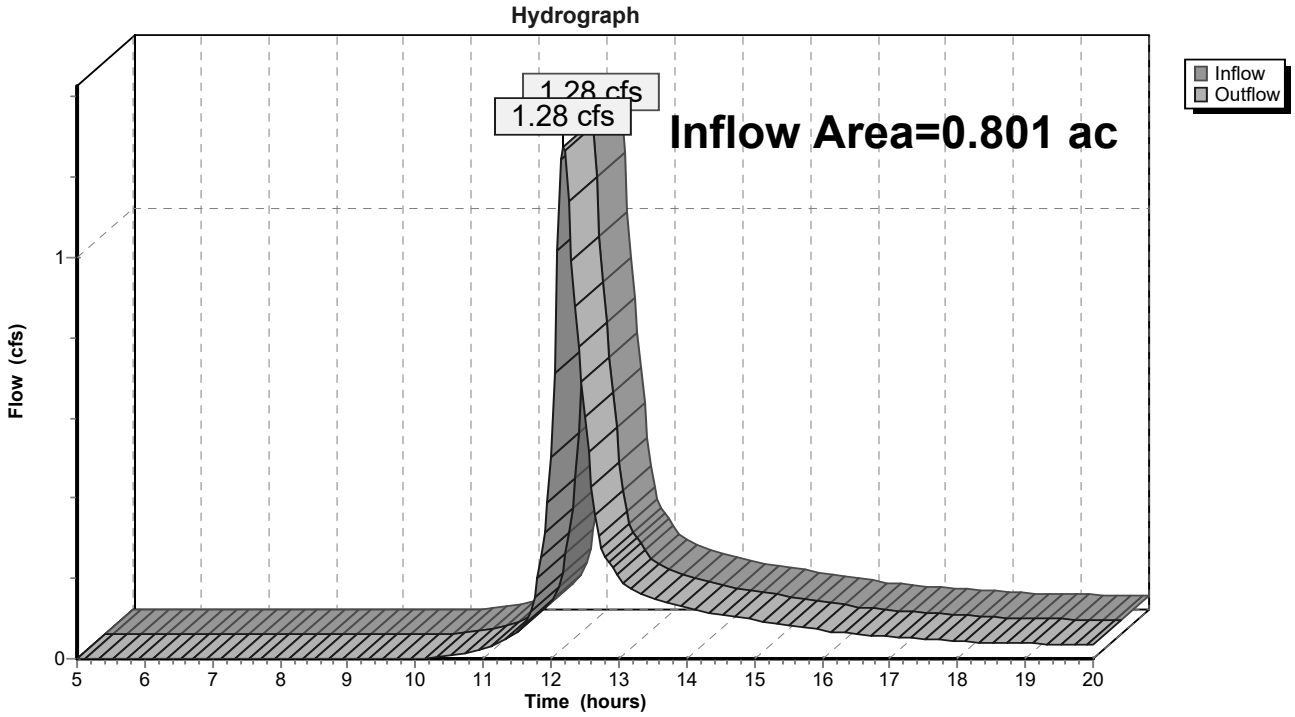


Summary for Reach SP#2: Study Point #2

Inflow Area = 0.801 ac, 0.00% Impervious, Inflow Depth > 1.60" for 10 Year event
Inflow = 1.28 cfs @ 12.18 hrs, Volume= 0.107 af
Outflow = 1.28 cfs @ 12.18 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach SP#2: Study Point #2



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Reach SP#1: Study Point #1 Inflow=17.11 cfs 7.781 af
Outflow=17.11 cfs 7.781 af

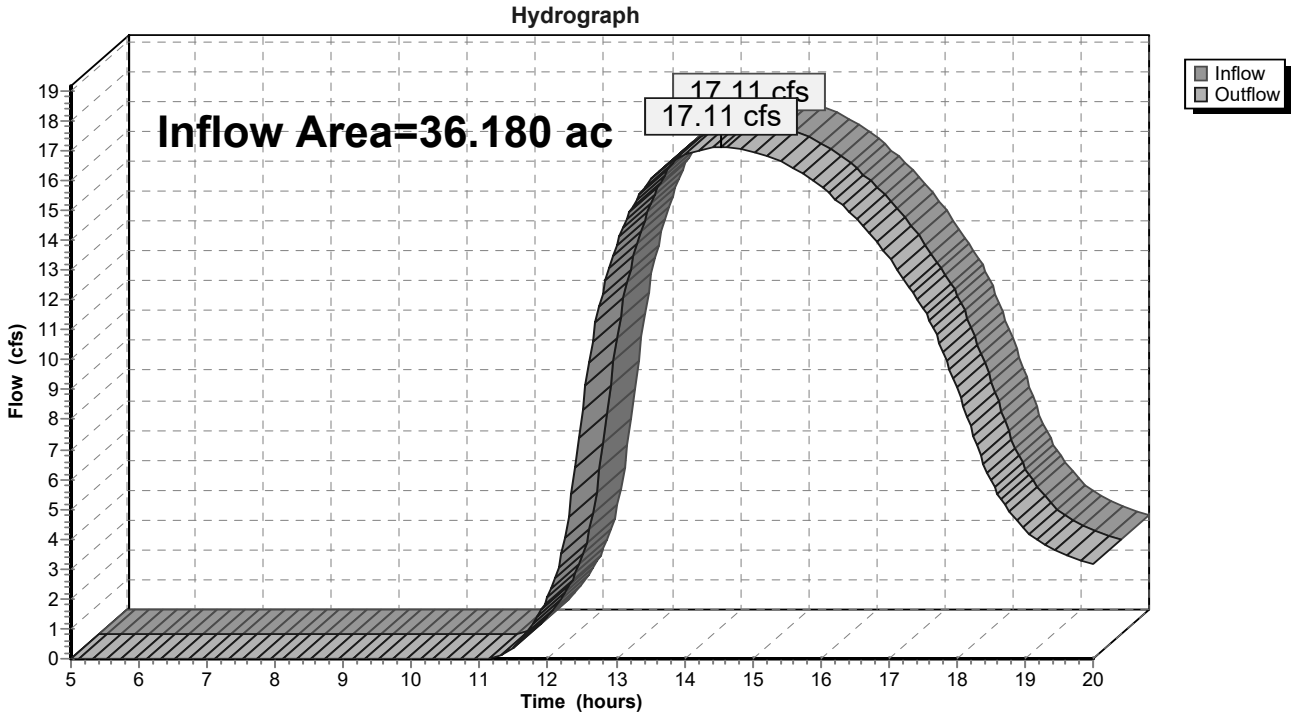
Reach SP#2: Study Point #2 Inflow=1.98 cfs 0.163 af
Outflow=1.98 cfs 0.163 af

Summary for Reach SP#1: Study Point #1

Inflow Area = 36.180 ac, 4.06% Impervious, Inflow Depth > 2.58" for 25 Year event
Inflow = 17.11 cfs @ 14.55 hrs, Volume= 7.781 af
Outflow = 17.11 cfs @ 14.55 hrs, Volume= 7.781 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach SP#1: Study Point #1



Summary for Reach SP#2: Study Point #2

Inflow Area = 0.801 ac, 0.00% Impervious, Inflow Depth > 2.44" for 25 Year event
Inflow = 1.98 cfs @ 12.18 hrs, Volume= 0.163 af
Outflow = 1.98 cfs @ 12.18 hrs, Volume= 0.163 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach SP#2: Study Point #2