

## Large Maps & Drawings

### **Madison Loop – Waterfront Development Plans - #s 1 to 13 were Last Revised (4-22-19) & signed by Engineer (4-24-19)**

1. Cover Sheet
2. General Notes
3. WFD Permit Plan – Mile 10.4 – 10.6
4. WFD Permit Plan – Mile 10.6 – 10.9
5. WFD Permit Plan – Mile 10.9 – 11.1
6. WFD Permit Plan – Mile 11.1 – 11.4
7. WFD Permit Plan – Mile 11.4 – 11.6
8. WFD Permit Plan – Mile 11.6 – 11.9
9. WFD Permit Plan – Mile 11.9 – 12.1
10. Construction Details – 1
11. Construction Details – 2
12. Construction Details – 3
13. Construction Details – 4

#### Supplemental Drawings:

1. Permit Plan – Block 6302, Lot CO210 – Old Bridge – Staging Area
1. Permit Plan – Block 1501, Lot 4 – Old Bridge – Staging Area

### **Madison Loop – Freshwater Wetlands Permit Plans - #s 1 to 20 were Last Revised (4-22-19) & signed by Engineer (4-24-19)**

1. Cover Sheet
2. General Notes
3. Wetlands Permit Plan – Mile 8.57 – 8.8
4. Wetlands Permit Plan – Mile 8.8 – 9.1
5. Wetlands Permit Plan – Mile 9.1 – 9.4
6. Wetlands Permit Plan – Mile 9.4 – 9.6
7. Wetlands Permit Plan – Mile 9.6 – 9.9
8. Wetlands Permit Plan – Mile 9.9 – 10.1
9. Wetlands Permit Plan – Mile 10.1 – 10.4
10. Wetlands Permit Plan – Mile 10.4 – 10.6
11. Wetlands Permit Plan – Mile 10.6 – 10.9
12. Wetlands Permit Plan – Mile 10.9 – 11.1
13. Wetlands Permit Plan – Mile 11.1 – 11.4
14. Wetlands Permit Plan – Mile 11.4 – 11.6
15. Wetlands Permit Plan – Mile 11.6 – 11.9
16. Wetlands Permit Plan – Mile 11.9 – 12.1
17. Construction Details – 1
18. Construction Details – 2
19. Construction Details – 3
20. Construction Details – 4

#### Supplemental Drawings:

1. Permit Plan – Block 6302, Lot CO210 – Old Bridge – Staging Area
1. Permit Plan – Block 1501, Lot 4 – Old Bridge – Staging Area

**Raritan Bay Loop – Permit Plans (all were issued & signed by Engineer on 6-8-19)**

1. Cover Sheet
2. General Notes
3. Waterfront Development Permit Plan – Mile 12.0 – 14.02
4. Waterfront Development Permit Plan – Mile 26.55 – 28.90
5. Waterfront Development Permit Plan – Mile 28.90 – 30.64
6. Construction Details
7. Construction Details
8. Construction Details
1. Offshore Staging Areas (1 diagrams sheet) for Contractor Yard Block 4, Lots 1462 & 1463 (Elizabeth, NJ) & Contractor Yard Block 30501, Lot 1 (Jersey City, NJ)

## **Freshwater Wetlands Application**

June 10, 2019 - 4 pg. letter to Chris Jones – new applications incorporate all administratively complete info. from 1<sup>st</sup> 2 sets of applications, tech. meetings, correspondence, public comments & response matrix - Requests FWW IP + 401 WQC  
Responses to 8 items required to complete the environmental review noted in DEP's 6-5-19 denial  
Attached = Appendix A: Summary of prior & new submittals + Transco's Responses to Notice of Denial

APPLICATION (June 2019) prepared by Ecology and Environment, Inc. & Amy S. Greene Environmental Consultants, Inc.

Tab 1:

- Cross Reference (6/20/18 application to current & previous submittals (5pp.))
- Table Of Contents
- Permit Plan Changes since June 2018 application (1 pg.) w/ copy of DEP's FWW Application Checklist form (not filled-in)

Tab 2:

- Signatures/ authority to sign (6/6,7,10/19)
- Fee Form (3 pp.)
- Application Form – Appendix I w/chart – Existing & Additional Rights Needed for NESE LURP Permitting (2pp)

Tab 3:

- Supplemental Info – updates + updated construction schedule (noted as pp. 21-26)
- Appendix B – Figures (June 2019) = (4) 11"x17"
- Attachment C – Public Notifications & Proof of Notices – newspapers & property owners w/in 200' (4pp) with diagrams in the mailings (28 for Madison Loop + 6 for CS206)= 120 pp. addresses + 195 pp. cert. mail copies
- Appendix G – just the cover sheet: Permit Plans (prep. by William Salmon, PE – signed June 7, 2019)
- Appendix H – Stormwater Mgt. Report (June 2019) for C206 (cover sheet only) – It's separate.

Tab 4:

- Responses to NJDEP's 6-5-19 Notice of Denial (19 pp.)  
*Exhibits A to G below = about consideration of using the EPA road as an access road to CS206 -*
- Exhibit A:  
Recorded Deed of Easement for Higgins (16 pp.)
- Exhibit B:  
Opinion 98-0162 (12/30/98) = NJ Dept. of Law & Public Safety, Marci Green, Deputy Atty. General – State Agricultural Development Committee (re: easements & conveying ROW easements for construction & installation of underground pipeline)

- Exhibit C:  
Letter to Franklin Twp. attorney from Michael Rutter (5-26-17)
- Exhibit D:  
Letter to Franklin Twp. atty. From Christine Roy (6-6-19) – noted no response to 5-26-17 letter & wrote that W/T could only acquire a permanent access road easement across Higgins Easement through condemnation ... State would have to consent to condemnation in Fed. Court (re: PennEast matters) – copies to other attorneys & attached 5-26-17 letter & DEP's 6-5-19 denial
- Exhibit E:  
Franklin Twp.'s comments on FERC docket (copies of resolutions by Council, Bd. of Health & Env. Commission)
- Exhibit F:  
Letter from USEPA (3-8-17) to Christine Roy (5pp) – EPA has no property interest in the road (copies to Higgins & Ted Chase)
- Exhibit G:  
Letter from Christine Roy to USEPA (6-11-18) – water line along the access road – They would need to excavate below the frost line (36") + trench 3,100'; PSE&G advised preference for overhead electric lines, so they'd need to drill a few feet to install poles. Attached = drawing of trenching if used the EPA road (done 1-8-18)
- Exhibit H:  
NJDEP Staff Summary Report (4-6-15) = regarding Leidy Southeast Expansion – Skillman Loop (marked as pp. 25 to 46)
- Exhibit I:  
FERC Order Issuing Certificate (5-3-18)

Tab 5:

- Application / Environmental Report for NJDEP FWW IP (June 19, 2018)

Tab 6:

- Williams/Transco – letter to NJDEP, C. Jones (8-31-18) = response to deficiency letter for FWW, FHA, WFD & CW permits (2pp.) with August 2018 responses to 7/18/18 NJEP letter

Tab 7:

- Supplemental Alternative Analysis for EPA Road across Higgins Farm Superfund Site (9-12-18) (5pp) to show why the EPA road is not practicable with:  
Exhibit A: 8pp. Deed of Easement (10-2-17)

Tab 8:

- Williams/Transco – letter to NJDEP, C. Jones (9-21-18) re: 9-12-18 letter from DEP about 4 items still deficient – response (3 pp. letter + enclosures – Offshore Sampling & Analysis Plan / Quality Assurance Project Plan – Version 3.0 (Sept. 2018) – text, 11"x17" drawing & tables)

Tab 9:

- Williams/Transco – letter to NJDEP, C. Jones (2-6-19) = response to deficiency letter date 9-27-18 (6pp.) & then, section cover pages only for attachments A to J:  
Attachment A: Hydrologic Calculation Output (HydroCAD) – superseded by subsequent submittal to NJDEP, June 2019  
Attachment B: Type C Rainfall Data – superseded by subsequent submittal to NJDEP, June 2019  
Attachment C: Time of Concentration Calculations – superseded by subsequent submittal to NJDEP, June 2019  
Attachment D: Curve Numbers Calculations – superseded by subsequent submittal to NJDEP, June 2019  
Attachment E: Drainage Area Maps – superseded by subsequent submittal to NJDEP, June 2019  
Attachment F: Water Quality Storm Calculations – superseded by subsequent submittal to NJDEP, June 2019  
Attachment G: Mounding Analysis – superseded by subsequent submittal to NJDEP, June 2019

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- Attachment H: Detention Basin Test Pit Results – superseded by subsequent submittal to NJDEP, June 2019
- Attachment I: Post-Construction Stormwater Management Plans – superseded by subsequent submittal to NJDEP, June 2019
- Attachment J: Revised Freshwater Wetlands & Flood Hazard Area Plans for CS206 – superseded by subsequent submittal to NJDEP, June 2019
- Attachment K: Upland Disposal Facility Correspondence –
- 2 letters are attached (1-22-19) - from Clean Earth in Hatsboro, PA – conditional – dredge sediment would need to first go to the All Clean Bethlehem (CEB) site in PA. They reviewed analytic data sent to them from Haley & Aldrich, Inc.
    - (a) from Sayreville to Rockaway Transfer Point = 741,252 cubic yards = 1,111,878 tons
    - (b) from MP 35.21 to MP 35.49 = 13,152 cubic yards = 19,728 tons
  - Third letter (12-27-18) = from Material Solution Services in Northampton, PA – They reviewed information from Donjon Marine Co. Inc. – dredge would need to go to their Coplay Quarry Reclamation Project facility

Attachment K has sampling analytic data on a CD (in the binder). The CD is dated Feb. 2019.

Tab 10:

- Williams/Transco letter to NJDEP, Matt Resnick (4-26-19) with

Attachment 1: Madison Loop – has 150’ wetland transition area (habitat for bald eagle & osprey) – Sheets 14, 15 & 16 (FWW) and Sheets 7, 8 & 9 (WFD); decreased transition area from 150’ to 50’ on Sheets 10, 11, 12 & 13 (FWW) since it’s not exceptional resource value

Attachment 2: Onshore & Offshore HDD Contingency Plans

Attachment 3: Supplemental Information re: Looping Intensive Alternative (from June 2018 application)

Then, cover page only for: NJDEP Supplemental Information filing (April 2019)

Attachment 1 - Madison Loop Plan Set Revisions – Attachment 1 (April 2019) – 11”x17” – all signed 4/24/19

Sheets 1 to 9 = WFD for Madison Loop

Sheets 10 to 13 = Construction Details for Madison Loop

2 sheets = staging areas in Old Bridge

Sheets 1 to 16 = FWW for Madison Loop

Sheets 17 to 20 = Construction Details for Madison Loop

2 sheets = staging areas in Old Bridge

**NOTE: FWW (1 to 16) from this were included in “Dear Interested Party” letter sent 6-10-19**

Attachment 2 – Onshore HDD Contingency Plan (April 2019) (23pp.)

Attachment 2 – Offshore HDD Contingency Plan (April 2019) (23pp.)

Attachment 3 – Looping Intensive Alternative (3pp.) with fourteen (14) 11”x17” aerial maps dated 4-25-19

Tab 11:

- Cover page only: Attachment A – Land Use Permit Plans – Proposed Compressor Station 206 – superseded by subsequent submittal to NJDEP (no date)

NOTE: Separate from the binder are nine (9) large maps & drawings for CS206, signed by Engineer on 6-7-19:

1. Cover sheet

4. & 5. FHA Verification & Wetland Permit Plan

8. & 9. Construction Details

2. Overall Site Plan

6. Riparian Zone Permit Plan

**NOTE: #s 1 to 6 were included in**

3. Wetland Permit Plan

7. Access Roadway Profile

**“Dear Interested Party” letter sent 6-10-19**

Letter from Williams/Transco to NJDEP, C. Jones (5-1-19) = response to email dated 3-28-19 re: barred owl habitat (includes 6 pages of narrative + a 2 page letter)

## Tab 12:

- Responses to NJDEP Questions dated 5-3-19 (3 pp.) + Attachment 1 – High Consequence Area (May 2019) definitions/criteria (2 pp.)

## Flood Hazard Area Individual Permit including Environmental Report (June 2019)

NOTE: Things that are identical to documents in the FWW application = in red

Same June 10, 2019 letter as in FWW

Application = prepared by Ecology and Environment, Inc. & Amy S. Greene Environmental Consultants, Inc.

## Tab 1:

- Cross Reference (6/20/18 application to current & previous submittals (4pp.)
- Table of Contents
- Permit Plan Changes since June 2018 application (1 pg.) w/ copy of DEP's FWW Application Checklist form (not filled-in)

## Tab 2:

- Signatures/ authority to sign (6/6,7,10/19)
- Fee Form (3 pp)
- Application Form – Appendix I w/chart – Existing & Add'l Rights Needed for NESE LURP Permitting (2pp)

## Tab 3:

- Supplemental Information to Section 4, Environmental Report w/ attachments
- Attachment i – Proposed Design & Construction Techniques Narrative w/ updated construction schedule (June 2019)
- Attachment ii – 4 Figure Maps for CS206 (June 2019) 11"x17": tax parcel, county road, topographic & soils
- Attachment v – NJAC 7:13-12.2 & 12.3 Requirements for Stormwater Management (June 2019) – 1 pg.
- Supplemental Information: proof of notice – letter to interested parties with diagrams, addresses, certified mail copies

## Tab 4:

- Responses to NJDEP's 6-5-19 Notice of Denial (19 pp) with all the attachments (Exhibits A to I) found in FWW

## Tab 5:

Flood Hazard Area Individual Permit & Verification including Environmental Report – prepared by Ecology and Environment, Inc. & Amy S. Greene Environmental Consultants, Inc. (June 19, 2018)

- 6-19-18 Letter sending application to NJDEP, C. Jones
- Permit Plan Changes since June 2018 application – for all 3 – FWW, FHA & WFD (2 pp.)
- Q & A prepared by W/T from June 2018 (20 pp.)
- Table of Contents (2 pp.)

## Section 1:

- FHA Checklist for Individual Permit & Verification (just the State's form – nothing filled-in)

## Section 2:

- Application Form (signed 6/4 & 6/5/19)
- Attachment for Item #4 – Block & Lot and Watershed Information
- Attachment for Item #5 – Detailed Project Information
- Attachment for F & Appendix I: Fee Calculation
- Has Fee Chart with highlights indicating “previously submitted” fees + Fee Calculation Sheet with “no new fees to be paid”

- Certification – Patrick McClusky with 11”x17” chart: existing & additional rights needed (1 pg.)
- List of Block & Lot parcels & Watershed Info. (2 pp.)
- Attachment about fee calculation (1 pg.)

## Section 3:

- Introduction, Project Description & Analysis of Alternatives (11 pp.) – not dated

## Section 4:

- Environmental Report w/ Attachments
  - Attachment i – Proposed Design & Construction Techniques Narrative w/ updated construction schedule (June 2019) – 15pp.
  - Attachment ii – 4 Figure Maps for CS206 (June 2019) 11”x17”: tax parcel, county road, topographic & soils  
4 Figure Maps for Madison & Raritan Bay Loops (June 2019) 11”x17”: tax parcel, county road, topographic & soils  
List of Blocks & Lots again
  - Attachment iii - Riparian Zone Impacts Table (1 pg. text + 2 pp. 11”x17” chart)
  - Attachment iv - Analysis of Potential Adverse Impacts & Minimization of Impacts (22 pp.)
  - Attachment v - Activity Specific Requirements for Individual Permits – total of 19 pages:  
NJAC 7:13-12.1 (apply to all regulated activities)  
NJAC 7:13-12.2 (for stormwater management)  
NJAC 7:13-12.3 (for excavation, fill & grading activities)  
NJAC 7:13-12.6 (for railroad, roadway & parking area)  
NJAC 7:13-12.7 - (for bridge or culvert)  
NJAC 7:13-12.8 (for utility line)

## Section 5:

- Site Photographs with Descriptions – See Attachment 9B: Watercourse Data Sheets & Photos

## Section 6:

- Proof of notice (superseded by June 2019 submittal to NJDEP)

## Section 7:

- Correspondence (June 2018)
  - 12/7/17 (NJEP-28)
  - NJDEP’s Historic Preservation Office (HPO):
    - 3/30/17 letter to FERC
    - 2/28/17 (NJDEP-5) R. Christopher Goodwin & Assoc. to HPO with concurrence 3/22/17
    - 5/1/17 (NJDEP-3) Environment and Ecology, Inc. (E&E) to HPO with concurrence 6/8/17
    - 12/18/17 (NJDEP-3) R. Christopher Goodwin & Assoc. to HPO with concurrence 1/19/18
    - 3/8/18 (NJDEP-6) E&E to HPO with concurrence 4/9/18
  - US Fish & Wildlife Services (FWS) – NJ Field Office (June 2018)
    - 8/29/16 FWS to Transco
    - 4/17/17 FWS to Transco
    - Emails (2016 to 2018)
  - Parks & Forestry:
    - 5/19/17 Parks & Forestry to E&E with invoice and printout (species, plants) for Old Bridge & Sayreville
    - 5/19/17 – same as above for the purchased lot for CS206
    - 5/8/17 FWS “to whom it may concern” with 2 lists of threatened & endangered species – one for Madison Loop & one for CS206

Section 8:

- Permit Plan Citation – plan dated June 8, 2018 – prepared by William Salmon (just a cover page)
- Engineer’s Report – Supplemental Stream Crossing June 2018 – for Madison Loop (26 pp.)
- FHA Verification Engineer’s Report for CS206 at Block 5.02, Lot 25 only – June 2018 (9pp.)

Tab 6:

- Cover pages only for the following were provided with notation: Provided under the FWW Application June 2019
  - Responses to NJDEP Comments dated June 18, 2018
  - Supplemental Alternative Analysis for EPA Road across Higgins Farm Superfund Site
  - Responses to NJDEP Deficiency Letter of 9-12-18
  - Technical Deficiency Response to NJDEP dated 9-27-18
  - Supplemental Information Filing (April 2019)
  - Responses to NJDEP Questions dated 5-3-19

**Waterfront Development & Wetlands Act of 1970 Individual Permit including Statement of Compliance with NJDEP Rules on Coastal Zone Management (June 2019) – prepared by Ecology and Environment, Inc. & Amy S. Greene Environmental Consultants, Inc.**

In binder front pocket: 6/10/19 letter to NJDEP, C. Jones

Tab 1:

- Cross Reference (6/20/18 application to current & previous submittals (5pp.)
- Table of Contents
- Waterfront Development Changes = noted as none for Madison Loop & Raritan Bay Loop since June 2018

Tab 2:

- Signatures/ authority to sign (6/6,7,10/19)

Tab 3:

- Supplemental Information to Attachment C of Checklist –
  - Offshore Supplemental Backfill Source Sites
  - Time-of-Year Flexibility requests
- Supplemental Information to Attachment D for Item #12 – Proof of Tidelands Instrument (was submitted to Bureau of Tidelands Management on 7-18-17)
- Supplemental Information to Project Compliance with Coastal Zone Management Rules
- Appendix A – Figures (June 2019) = Tax Maps for Sayreville – onshore Raritan Bay Loop + Madison Loop (2 pp.)
- Appendix B – Correspondence
  - 7-26-18 (INT-2) Project Meeting Summary
  - 2-11-19 Transco to NOAA re: TOY restrictions (8 pp.)
  - Emails (April 2019) – NOAA has no objection to TOY flexibility request for the Atlantic sturgeon (4-3-19)
  - TOY flexibility agreed to by NOAA (4-17-19)
  - 4-19-18 (NJDEP-1) re: submarine cables with 5-9-18 concurrence
  - Attachment D – Example Permits (October 2018)
    - USACE – NY District – Sand Mining Dredge Permit (October 2018) = for Weeks Marine, Inc. in Cranford, NJ (4-21-16 to 5-21-16) = 4 pp. + 3 diagrams

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- USACE Permitted Sand Mining Area within Ambrose Federal Navigation Channel (Oct. 2018) = one map + permit (7 pp.) to Weeks Marine, Inc. for 4-7-16 to 4-6-21.
  - Appendix C – Public Notifications & Proof of Notices (June 2019) to Old Bridge, Sayreville & Middlesex County – Legal Notice + 6-10-19 Letter to Interested Party with 11”x17” maps (signed 4-24-19) - #3 to 9 (Waterfront Development Permit Plan for Madison Loop) & #3 to 5 (Waterfront Development Permit Plan for Raritan Bay Loop) – with certified mail copies showing that this was only sent to eight (8) government entities

## Tab 4:

- Responses to NJDEP’s 6-5-19 Notice of Denial (19 pp.) with all the attachments (Exhibits A to I) found in FWW

## Tab 5:

- Application for Waterfront Development & Wetlands Act of 1970 Individual Permit including
- Statement of Compliance with NJDEP Rules on Coastal Zone Management (June 19, 2018) –
- Has duplicate pages 2 – 18 and 2 – 85;
- no Appendix D;
- repeated Appendix C – notification (cover page);
- Appendix E – Permit Plan Citation (provided under separate cover – Madison Plans Superseded by Supplements to NJDEP – April 2019)

## Tab 6:

- Supplemental Information Filing – Wetland & Raritan Bay Loop Photo Log – July 17, 2018  
2 photos of the bay +  
Wetlands Data Package photos (8-15-16 to 1-12-17) +  
Watercourse Data Package photos 8-16-16 to 4-18-17)

## Tab 7:

- Cover pages only for the following were provided with notation: Provided under the FWW Application June 2019  
**Responses to NJDEP Comments dated June 18, 2018**

## Tab 8:

- Cover pages only for the following were provided with notation: Provided under the FWW Application June 2019  
**Responses to NJDEP Deficiency Letter of 9-12-18**

## Tab 9:

- Cover pages only for the following were provided with notation: Provided under the FWW Application June 2019  
**Technical Deficiency Response to NJDEP dated 9-27-18**

## Tab 10:

- Transco letter to NJDEP, R. Foster (1-11-19): Additional comments on Supplemental Reports to the DEIS re: NJDEP’s 11-7-19 comments (January 2019) – all pertains to offshore (12 pp.)

## Tab 11:

- coversheet: Supplemental Information Filing (April 2019) – see FWW June 2019 Application



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## Stormwater Management Report (June 2019) – prepared by AECOM

### Report:

- Table of Contents (2 pp.)
- Text (9 pp.)
- 11"x17" maps/drawings: eight (8)

Appendix A: Soil Re-Classification Report for CS206  
prepared by Value Engineering Inc. (from Coopersburg, PA) for AECOM (June 2019) = 65 pp.  
Note: Soil Profile Description Sheets are dated 4-11-19

### Appendix B: Soil Test Results

#### B.1

Original soil infiltration testing (Feb. 2017) from April 2017 report by AECOM with logs & photos (2-27-17) and Infiltration Test Readings 2-23-17) and Stormwater Infiltration Test Results (2-23-17)

#### B.2

Additional Infiltration Testing (April 2018) with 5-23-18 letter from AECOM to Brian Ham of Transco (3 pp. with attachments) – diagram +

Attachment A: Boring Logs & Test Pits (TP-4 to 12, 3-15-18 to 4-23-18)

Attachment B: Laboratory Testing (5-4-18)

Attachment C: Double Ring Infiltration Results (4-20-18) – 6 pp.

Attachment D: Photo Log – only thing here = organizer page frames (no photos); dated 4-20-18

Attachment E: CS206 Soil Classification Report by Cedarville Engineering Group, LLC – 11 pp. (5-1-18)

Detention Basin Soil Test Pit Results (AECOM) – January 2019 – has test pit logs & photos for TP-13 to 16 (1-16 & 1-17-19)

### Appendix C: Low Impact Development Checklist (6-1-17)

### Appendix D: Supporting Calculations

D.1 Time of Concentration Calculations (Worksheet 3: 6-6-19 & 10-9-18)

D.2 Worksheet 2 – Runoff Curve Numbers (6-6-19)

D.3 Peak Rate Analysis – Runoff Quantity (printed 6-7-19)

D.4 Groundwater Recharge Analysis (6-6-19)

D.5 Water Quality Design Storm (printed 6-7-19)

D.6 Mounding Analysis (6-7-19) with

Attachment A: Output from Excel Spreadsheet "Hantush\_USG\_SIR\_2010-5102-1110.xism" (6-7-19)

Attachment B: Infiltration Basin Profile Plan (6-7-19)

Attachment C: HydroCAD Routing Summary for Water Quality Design Storm (6-7-19)

D.7 Infiltration Basin Features (6-7-19)

D.8 Swale Design – pages have varied dates in 2017 & 2018 – There's separate pages with figures & data for Manning's an Retardance D & E for Swales 1 to 7B, 10 to 12 & 15; for Swales 8, 9, 13 & 14, they give Manning's "n" for Riprap-Lined Channels

Also provided here: Rollmax info. page, Routing Diagram, HydroCAD (printed 2-5-19), and Drainage Area Map for proposed swales (6-7-19)

- D.9 Culvert Design
  - Tables (5-21-18)
  - HydroCAD (printed 12-26-17)
  - Drainage Area Map for proposed culverts – diagram (6-7-19)
  - Stream Crossing Culvert Capacity (HY-8 Report) (Feb. 2019)
  - Tables & diagrams (no dates on pages)
- D.10 Conduit Outlet Protection – 1 table (June 2019)
- D.11 Riprap Slope Protection – table (5-14-18)
- D.12 Off-Site Stability Analysis – summary, flow chart & text (6-7-19)

Appendix E: Drawings (attached separately) –

- All thirteen (13) large drawings are dated 6-7-19 & called “Revised Basin Grading”

## **Letter & Attachments from Williams/Transco to “Dear Interested Party: (June 10, 2019)**

Letter received around CS206 only noted applications for Freshwater Wetlands & Flood Hazard Area permits.  
11”x17” Maps & Drawings included with this letter =

### **Freshwater Wetlands & Flood Hazard Area Plans (for CS206 area) – all = issued 6-8-18, last revised 6-7-9, signed by Engineer on 6-7-19**

- Cover Sheet
- Overall Site Plan & General Notes
- Wetland Permit Plan (access road)
- Flood Hazard Area Verification & Wetland Permit Plan (CS206, road, tie-in pipelines)
- Flood Hazard Area Verification & Wetland Permit Plan (upper part of CS206 lot by Carters Brook)
- Riparian Zone Permit Plan (access road)

### **Madison Loop – Wetland Permit Plan – all = signed by Engineer on 4-29-19**

- Wetlands Permit Plan – Mile 8.57 – 8.8
- Wetlands Permit Plan – Mile 8.8 – 9.1
- Wetlands Permit Plan – Mile 9.1 – 9.4
- Wetlands Permit Plan – Mile 9.4 – 9.6
- Wetlands Permit Plan – Mile 9.6 – 9.9
- Wetlands Permit Plan – Mile 9.9 – 10.1
- Wetlands Permit Plan – Mile 10.1 – 10.4
- Wetlands Permit Plan – Mile 10.4 – 10.6
- Wetlands Permit Plan – Mile 10.6 – 10.9
- Wetlands Permit Plan – Mile 10.9 – 11.1
- Wetlands Permit Plan – Mile 11.1 – 11.4
- Wetlands Permit Plan – Mile 11.4 – 11.6
- Wetlands Permit Plan – Mile 11.6 – 11.9
- Wetlands Permit Plan – Mile 11.9 – 12.1

### **Madison Loop – Riparian Zone Permit Plan – all = signed by Engineer on 6-8-18**

- Riparian Zone Permit Plan – Mile 8.57 – 8.8
- Riparian Zone Permit Plan – Mile 8.8 – 9.1
- Riparian Zone Permit Plan – Mile 9.1 – 9.4
- Riparian Zone Permit Plan – Mile 9.4 – 9.6
- Riparian Zone Permit Plan – Mile 9.6 – 9.9
- Riparian Zone Permit Plan – Mile 9.9 – 10.1
- Riparian Zone Permit Plan – Mile 10.1 – 10.4
- Riparian Zone Permit Plan – Mile 10.4 – 10.6
- Riparian Zone Permit Plan – Mile 10.6 – 10.9
- Riparian Zone Permit Plan – Mile 10.9 – 11.1
- Riparian Zone Permit Plan – Mile 11.1 – 11.4
- Riparian Zone Permit Plan – Mile 11.4 – 11.6
- Riparian Zone Permit Plan – Mile 11.6 – 11.9
- Riparian Zone Permit Plan – Mile 11.9 – Raritan Bay