



Connecticut Department of
Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Inland Water Resources Division



DAM SAFETY PROGRAM DAM INSPECTION REPORT FORM – FOR REGULATORY INSPECTION

Please complete this form in accordance with the instructions (DEEP-DAM-INST-002).

Part I: Summary of Dam Inspection

Dam Name:	House Rest Pond Dam	Inspection Date(s):	1/20/2016
Alternate Dam Name(s):	N/A	CT Dam ID #:	12812
Location (Municipality):	Simsbury	Temperature / Weather:	Clear 25°
Registered?: Yes or No If yes, provide the 9 digit registration number found on the notification letter.	Yes	Pool Level: See Instructions	= Crest of spillway
Emergency Action Plan?: Yes or No If Yes, see instructions	No	Impoundment Use: use options listed in instructions	Recreation
Hydraulic and Hydrologic Analysis?: Yes or No If Yes, see instructions	No	Stability Analysis?: Yes or No If Yes, see instructions	No
Overall Condition: (refer to Appendix A located at the end of this form) Poor			

Persons present at the inspection <i>(select the tab button in the last cell to the right to create another row)</i>		
Name	Title/Position	Representing
Stephen R. McDonnell, P.E.	Vice President	WMC Consulting Engineers, Inc.

Owners and Operators: If there is more than one owner or operator, copy the empty table below for each owner or operator and paste right below the previous table, then complete the information for each

*By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject report. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes by email via deep.damsafety@ct.gov.

Indicate if Owner or Operator: Owner

Name: Town of Simsbury

Mailing Address: 933 Hopmeadow Street

City/Town: Simsbury

State: CT

Zip Code: 06070

Phone: (860) 658-3260

ext.: N/A

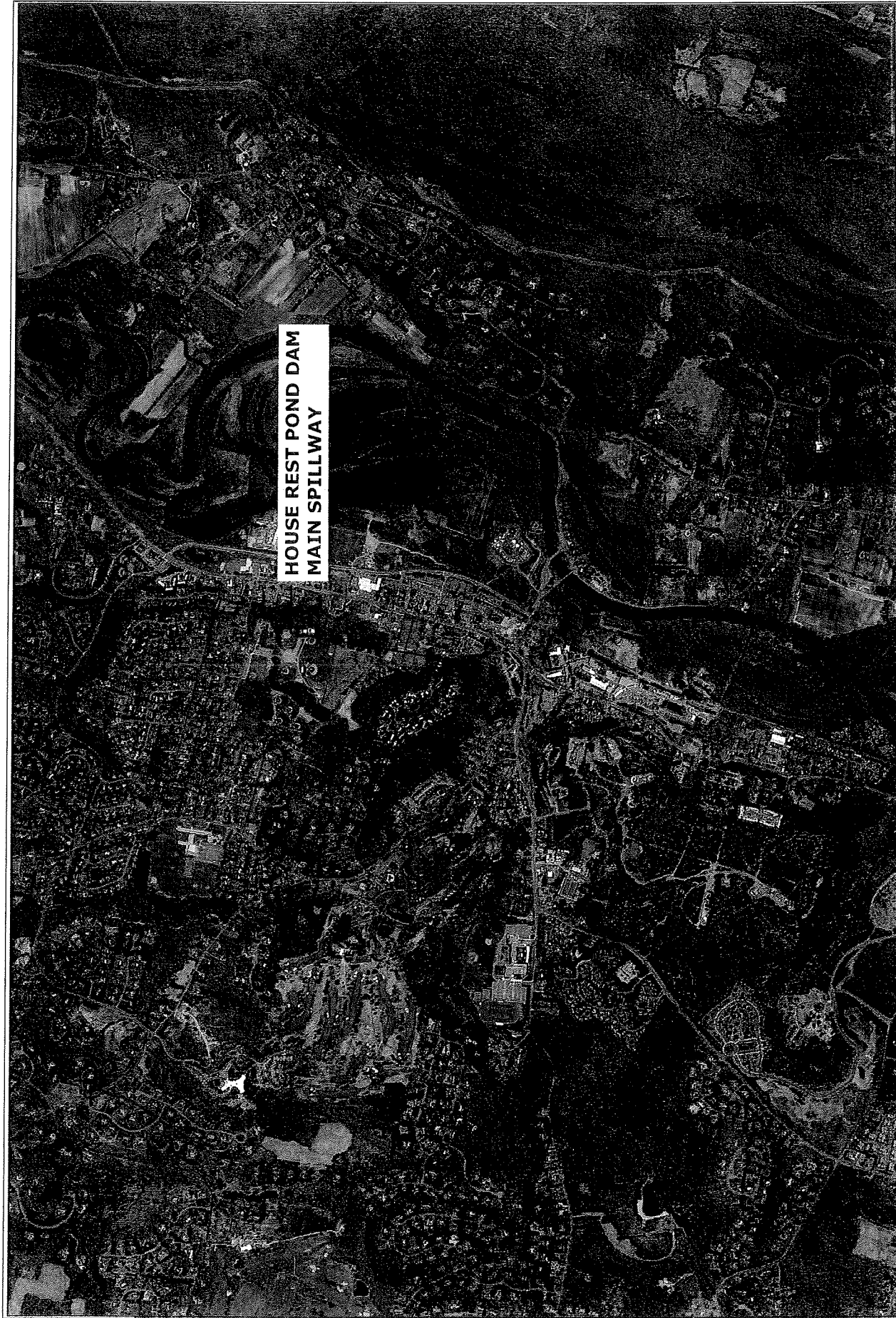
Emergency Phone: (860) 658-1973

*E-mail: jshea@simsbury-ct.gov

Part II: General Dam Information


General Description: Low Earthfill dam with masonry spillway			
Hazard Classification: BB		Dam Height (ft): 6	
Dam Length (ft): 100		Spillway Length (ft): 6	
Spillway Type: Broad Crested		Normal Freeboard (ft): 1.5	
Drainage Area (square miles): 0.25		Impoundment Area (at principal spillway crest, in acres): 0.65	
Watercourse(s): Unnamed brook near mouth of Hop Brook			

OTHER INFORMATION: (see instructions) Dam is adjacent to public library and has regular pedestrian traffic across embankment. Wood bridge crosses spillway. No low-level outlet observed.



HOUSE REST POND DAM
MAIN SPILLWAY

SUPV.	S.R.M.
DESIGN	M.E.F.
DRAWN	M.E.F.
CHECKED	
DATE	8/2/16



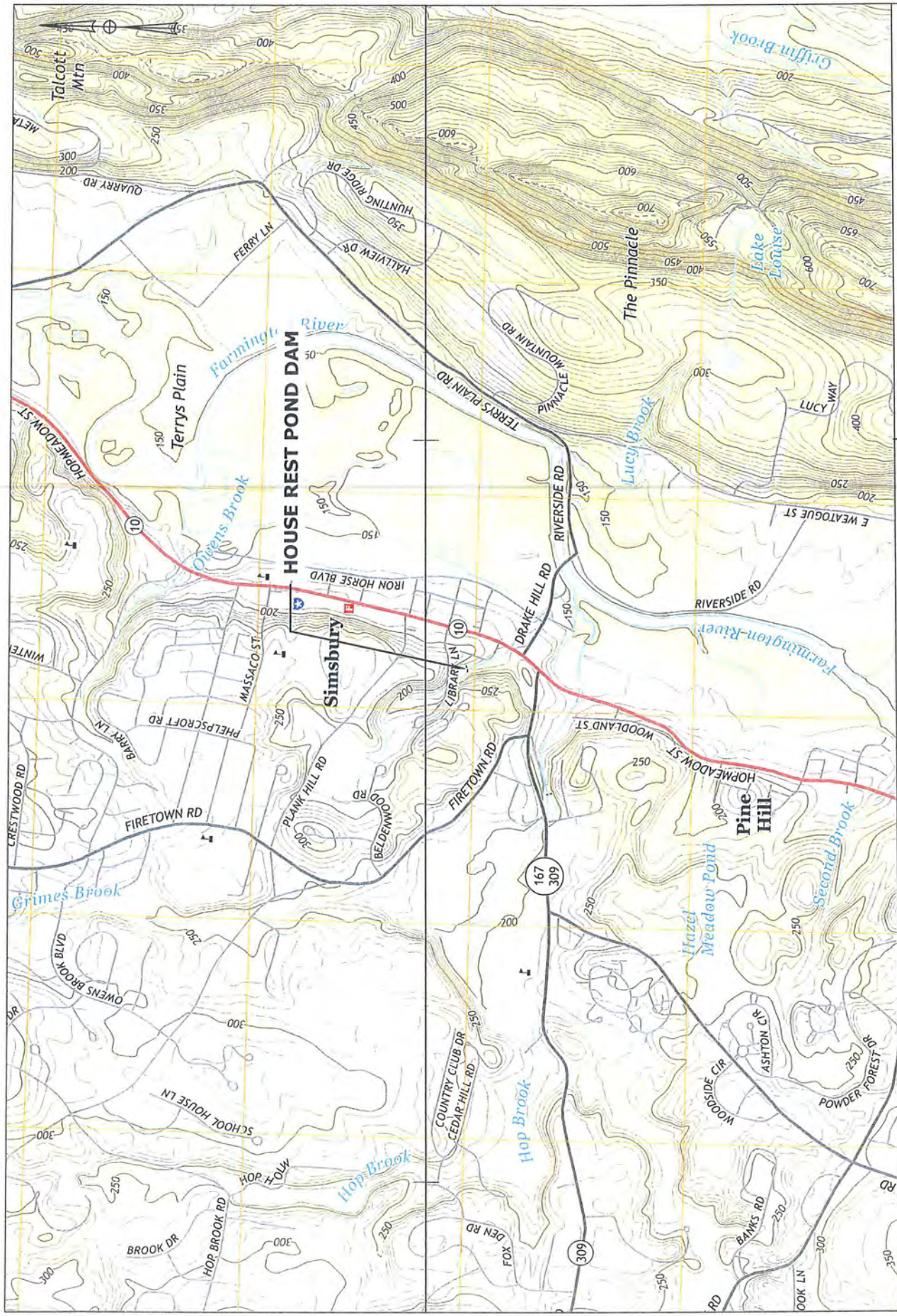
WMC
CONSULTING ENGINEERS

• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR:
TOWN OF SIMSBURY
933 HOPMEADOW STREET
SIMSBURY, CT 06070

PLYMOUTH RESERVOIR DAM - #12812
AERIAL MAP
SCALE - 1:2,000

HOUSE REST POND DAM INSPECTION	SHEET	1
- DAM INSPECTION - LOCATION - 15036.10 -	REV	0
PROJECT FILE NAME NUMBER	REV	OF
		1



PREPARED FOR:		HOUSE REST POND DAM - #12812	
TOWN OF SIMSBURY		LOCATION MAP - AVON QUAD	
933 HOPMEADOW STREET		SCALE - 1:2,000	
SIMSBURY, CT 06070			
<div><div><div></div><div>WMC</div><div>CONSULTING ENGINEERS</div></div><div><div>WENGELL, McDONNELL & COSTELLO</div><div>87 HOLMES ROAD</div><div>NEWINGTON, CT 06111</div><div>(860) 667-9624</div></div></div>	SUPV.	S.R.M.	
	DESIGN	M.E.F.	
	DRAWN	M.E.F.	
	CHECKED		
	DATE	8/2/16	
		HOUSE REST POND DAM INSPECTION	SHEET 1
		DAM INSPECTION - LOCATION - 15036.10	REV. 0
		PROJECT FILE NAME NUMBER	OF 1

Part IV: Dam/Embankment/Dike Information

Number of Dam/Embankments/Dikes: 1 (if there is more than one dam/embankment or dike, reproduce this section and paste right below the previous section)

Dam/Embankment/Dike Name (see instructions): Main

General Description: Low Earthfill embankment

General Condition: Fair

Concrete Condition: N/A

Stone Masonry: N/A

Settlement/Alignment/Movement: Minor settling

Seepage/Foundation Drainage: Ne seepage observed

Riprap: Single row of flat concrete units to right, small riprap on embankment to left, both adequate for small pond which has little wave action.

Erosion/Burrows: None

Vegetative Cover: Top of embankment mostly covered by moss.

Other: Top of embankment is uneven. Large trees growing on downstream side of embankment.

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 1: Embankment from right abutment



Photo 2: Footbridge over spillway



Photo 3: Left abutment, ruts on embankment, concrete paver protection

Part V: Principal Spillway, Training Walls, Apron

Number of Principal Spillways: 1 (if there is more than one principal spillway, reproduce this section and paste right below the previous section)

Spillway Type (see instructions): Broad crested stone masonry

General Description: Simple stone spillway with no controls

General Condition: Fair

Concrete Condition: N/A

Stone Masonry: Loose and leaking

Settlement/Alignment/Movement: Some settlement - inadequate support for footbridge

Cracks: Gaps at top of spillway

Scouring/Undermining: None observed

Seepage/Foundation Drainage: Leaking throughout

Other: Poor connection to wing walls leaves gaps to sides, wings walls nearly completely failed

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 4: Main spillway and wing walls



Photo 5: Right wing wall



Photo 6: Left wing wall

Part VI: Auxiliary Spillway, Training Walls, Apron

Number of Auxiliary Spillways: 1 (if there is more than one auxiliary spillway, reproduce this section and paste right below the previous section)

Auxiliary Spillway Type (see instructions): Right embankment

General Description: Shallow riprap lined channel, no control

General Condition: Good

Concrete Condition: N/A

Stone Masonry: N/A

Settlement/Alignment/Movement: None

Cracks: N/A

Scouring/Undermining: None

Vegetative Cover: N/A

Riprap: Good

Seepage/Foundation Drainage: N/A

Other: Spillway did not show evidence of recent use.

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 7: Auxiliary spillway at right abutment

Part VII: Downstream Channel

Number of Downstream Channels: 1 (if there is more than one downstream channel, reproduce this section and paste right below the previous section)

Channel Name (see instructions), include Watercourse Name: Natural channel for unnamed stream

General Description: Small slightly sinuous natural brook channel

General Condition: Good

Scouring: None

Debris: Small tree limbs

Riprap: None

Other: Due to leakage of spillway stream flows continuously, has natural appearance

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 8: Looking downstream from dam

Part VIII: Intake Structure(s)

Number of Intake Structures: 0 (if there is more than one intake structure, reproduce this section and paste right below the previous section)

Intake Structure Type (see instructions): N/A

General Description: N/A

General Condition: N/A

Concrete Condition: N/A

Stone Masonry: N/A

Settlement/Alignment/Movement: N/A

Cracks: N/A

Other: N/A

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part IX: Outlet Structure(s)

Number of Outlet Structures: 0 (if there is more than one outlet structure, reproduce this section and paste right below the previous section)

Outlet Structure Type (see instructions): N/A

General Description: N/A

General Condition: N/A

Concrete Condition: N/A

Stone Masonry: N/A

Settlement/Alignment/Movement: N/A

Scouring/Undermining: N/A

Other: N/A

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part X: Miscellaneous Features

List miscellaneous features: (e.g., access roads, bridges, etc.): None

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part XI: Downstream Hazard Classification Reassessment

Downstream Hazard Classification: *(provide recommendation for the hazard class based on the Dam Safety regulation. See Instructions and Appendix B.)*

Given small volume and low head, could consider revising hazard class to A

Part XII: Recommendations *(See instructions for identifying recommendations)*

Recommendations: *(Each item should be numbered)*

1. Drain pond, rebuild spillway and wing walls
2. Clear trees from embankment
3. Improve foundation for footbridge
4. Re-grade and reseed top of embankment

Part XIII: Photographs/Graphics (see instructions and [Appendix C](#))

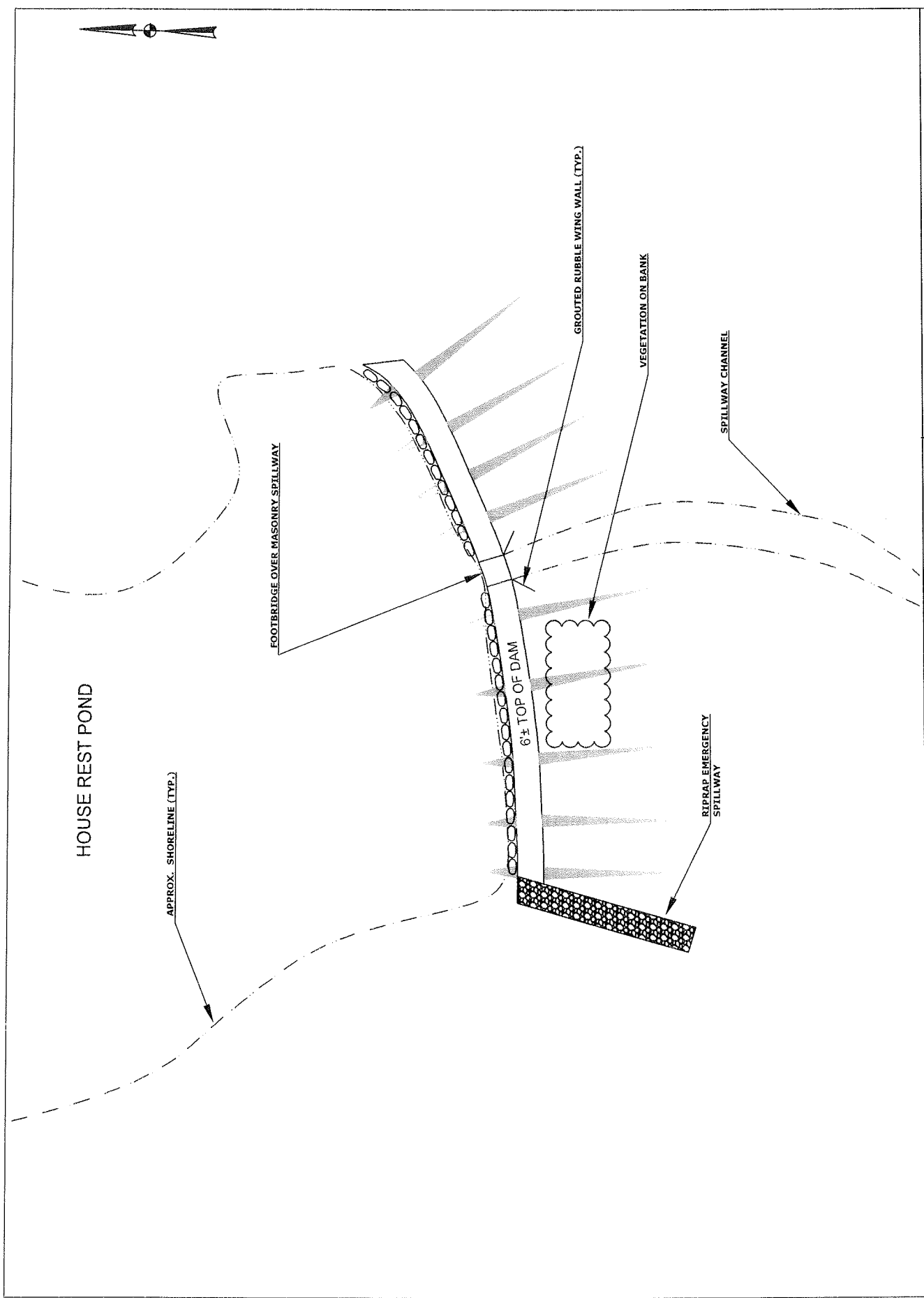
[insert photos/graphics here if not included in each part above]



Photo 9: Overview of Pond

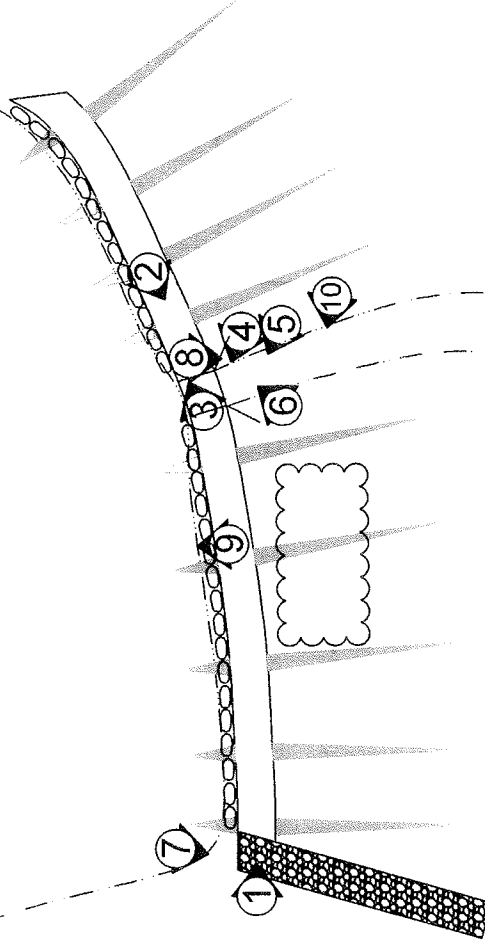
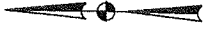


Photo 10: Vegetation on embankment



SUPV.	S.R.M.	HOUSE REST POND DAM - #12812		SHEET	1
DESIGN	M.E.F.	SKETCH MAP		LOCATION	15036.10
DRAWN	M.E.F.	SCALE - 1:30		FILE NAME	NUMBER
CHECKED				PROJECT	REV.
DATE	8/30/16				OF
		PREPARED FOR:			
		TOWN OF SIMSBURY			
		933 HOPMEADOW STREET			
		SIMSBURY, CT 06070			
		WMC CONSULTING ENGINEERS			
		WENGELL, McDONNELL & COSTELLO			
		87 HOLMES ROAD			
		NEWINGTON, CT 06111			
		(860) 667-9624			

HOUSE REST POND



SUPV. S.R.M.
DESIGN M.E.F.
DRAWN M.E.F.
CHECKED
DATE 8/30/16

WMC
CONSULTING ENGINEERS
WENGELL, McDONNELL & COSTELLO
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR:
TOWN OF SIMSBURY
933 HOPMEADOW STREET
SIMSBURY, CT 06070

HOUSE REST POND DAM - #12812
PHOTO LOG
SCALE - 1:30

PROJECT	FILE NAME	NUMBER	REV.	SHEET
HOUSE REST POND DAM INSPECTION				1
- DAM INSPECTION	- LOCATION	- 15036.10	- 0	
				OF 1

Part XV: Professional Engineer Certification

The following certification must be signed by a Professional Engineer

"I hereby certify that the information provided in this report has been examined by me and found to be true
and
correct in my professional judgment."



Signature of Professional Engineer

9/13/16

Date

Stephen R. McDonnell, P.E.

Vice President

12010

Printed Name of Professional Engineer

Title

CT P.E. Number

WMC C

Name of Firm

Affix P.E. Stamp Here



Part XVI: Owner Signature

The following statement must be signed by the Owner(s) of the subject Dam.

"The information provided in this report has been examined by me."	
Signature of Owner	Date
Jerome F. Shea	Town Engineer
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)

Note: Mail the completed inspection report to:

**DAM SAFETY PROGRAM
INLAND WATER RESOURCES DIVISION
CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106**

In addition, please send this completed report converted to Adobe portable document format (pdf) including a scan of the signature page via email to: DEEP.DamSafety@ct.gov



Connecticut Department of
Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Inland Water Resources Division



DAM SAFETY PROGRAM DAM INSPECTION REPORT FORM – FOR REGULATORY INSPECTION

Please complete this form in accordance with the instructions (DEEP-DAM-INST-002).

Part I: Summary of Dam Inspection

Dam Name:	Stoddard Reservoir	Inspection Date(s):	1/20/2016
Alternate Dam Name(s):	N/A	CT Dam ID #:	12804
Location (Municipality):	Simsbury	Temperature / Weather:	30°, clear
Registered?: Yes or No If yes, provide the 9 digit registration number found on the notification letter.	Yes	Pool Level: See Instructions	Spillway + 1"
Emergency Action Plan?: Yes or No If Yes, see instructions	No	Impoundment Use: use options listed in instructions	Recreation
Hydraulic and Hydrologic Analysis?: Yes or No If Yes, see instructions	No	Stability Analysis?: Yes or No If Yes, see instructions	No
Overall Condition: (refer to Appendix A located at the end of this form) Fair			

Persons present at the inspection (select the tab button in the last cell to the right to create another row)		
Name	Title/Position	Representing
Stephen R. McDonnell, P.E.	Vice President	WMC Consulting Engineers, Inc.

Owners and Operators: If there is more than one owner or operator, copy the empty table below for each owner or operator and paste right below the previous table, then complete the information for each

*By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject report. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes by email via deep.damsafety@ct.gov.

Indicate if Owner or Operator: Owner

Name: **Town of Simsbury**

Mailing Address: **933 Hopmeadow Street**

City/Town: **Simsbury**

State: **CT**

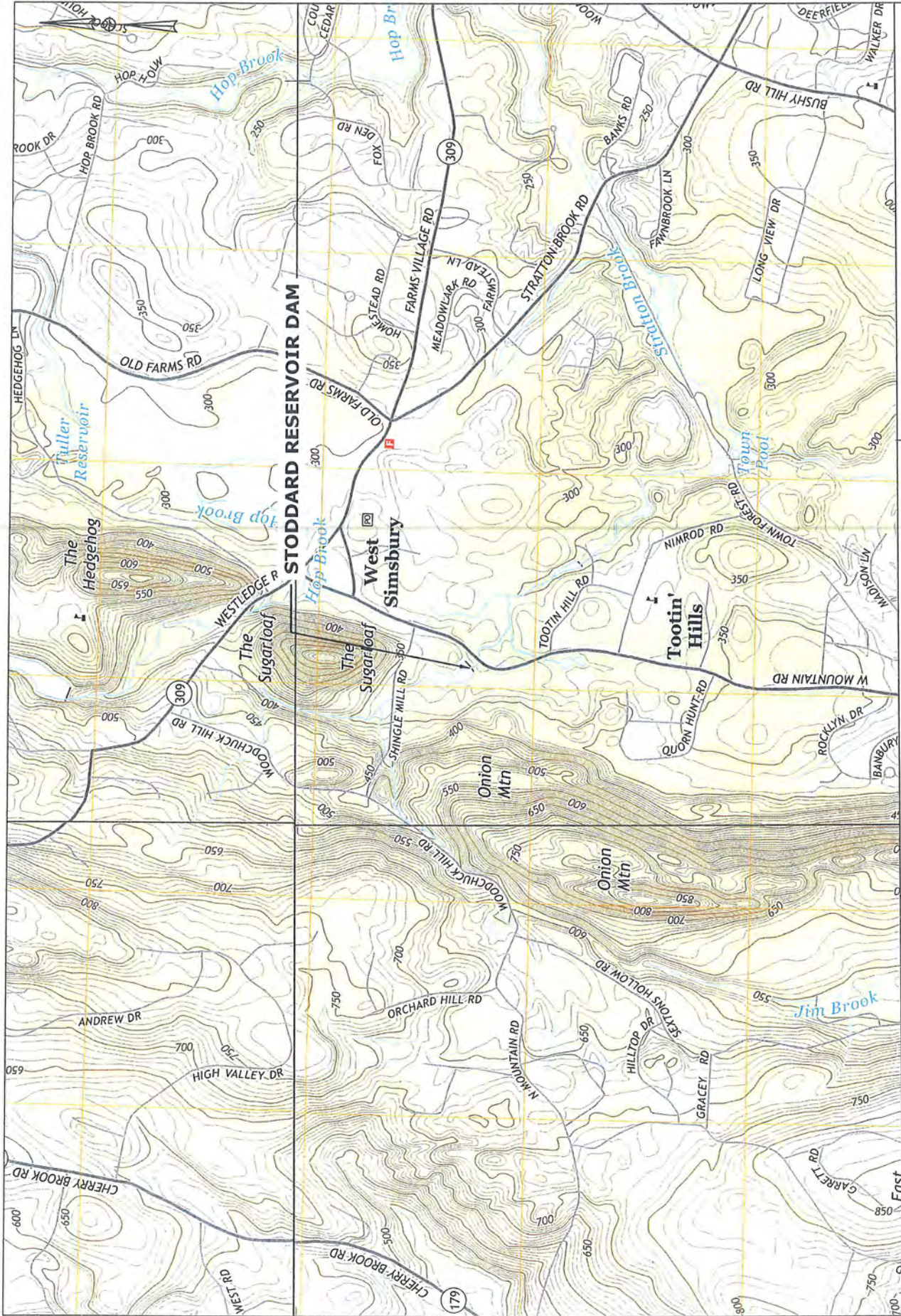
Zip Code: **06070**

Phone: **(860) 658-3260**

ext.:

Emergency Phone: **(860) 658-1973**

*E-mail: **jshea@simsbury-ct.gov**



STODDARD RESERVOIR DAM - #12804 LOCATION MAP - AVON QUAD SCALE - 1:2,000				STODDARD RESERVOIR DAM INSPECTION LOCATION - 15036.10 - 0				SHEET 1			
PREPARED FOR: TOWN OF SIMSBURY 933 HOPMEADOW STREET SIMSBURY, CT 06070				PROJECT FILE NAME NUMBER REV. OF				1			
WMC CONSULTING ENGINEERS				WENGELL, McDONNELL & COSTELLO 87 HOLMES ROAD NEWINGTON, CT 06111 (860) 667-9624				SUPV. S.R.M.			
DESIGN M.E.F.				DRAWN M.E.F.				CHECKED			
DATE 8/2/16											

Part IV: Dam/Embankment/Dike Information

Number of Dam/Embankments/Dikes: 1 (if there is more than one dam/embankment or dike, reproduce this section and paste right below the previous section)

Dam/Embankment/Dike Name (see instructions): Main

General Description: Original dam section is dry rubble masonry. Low concrete cap with cast in place main spillway cast on top of rubble dam. Left end of dam is a low Earthfill embankment.

General Condition: Fair

Concrete Condition: Fair - spillway depth and width inadequate

Stone Masonry: Fair - some leaks

Settlement/Alignment/Movement: Some movement observed, but isolated

Seepage/Foundation Drainage: No seepage from base observed

Riprap: New dumped riprap left of spillway. Appears that dam overtopped and repairs to downstream left embankment were required.

Erosion/Burrows: None observed

Vegetative Cover: Vegetation too close on left and right abutments and on downstream embankment

Other: Pipe fence and newer chain link fence installed by coring holes in top of dam.

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 1: Main section of dam & spillway



Photo 2: Leak in rubble embankment



Photo 3: Looking to right abutment



Photo 4: Left side of embankment, with dumped riprap repair



Photo 5: From spillway looking left

Part V: Principal Spillway, Training Walls, Apron

Number of Principal Spillways: 1 (if there is more than one principal spillway, reproduce this section and paste right below the previous section)

Spillway Type (see instructions): Broad Crested

General Description: Notch in cast in place cap over rubble section of dam

General Condition: Fair

Concrete Condition: Fair

Stone Masonry: N/A

Settlement/Alignment/Movement: Minor settlement of concrete cap section

Cracks: Some cracking, but not near spillway

Scouring/Undermining: None observed

Seepage/Foundation Drainage: None observed

Other: Pipe and chain link fence cross spillway, possibly causing blockage if branches wash into spillway.

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 6: Spillway - cast into concrete cap



Photo 7: Spillway downstream area

Part VI: Auxiliary Spillway, Training Walls, Apron

Number of Auxiliary Spillways: None (if there is more than one auxiliary spillway, reproduce this section and paste right below the previous section)

Auxiliary Spillway Type (see instructions): N/A

General Description: N/A

General Condition: N/A

Concrete Condition: N/A

Stone Masonry: N/A

Settlement/Alignment/Movement: N/A

Cracks: N/A

Scouring/Undermining: N/A

Vegetative Cover: N/A

Riprap: N/A

Seepage/Foundation Drainage: N/A

Other: N/A

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Error! Reference source not found.

Part VII: Downstream Channel

Number of Downstream Channels: 1 (if there is more than one downstream channel, reproduce this section and paste right below the previous section)

Channel Name (see instructions), include Watercourse Name: Stoddard Brook

General Description: short length of riprapped channel before reverting to natural channel into culvert under local roadway.

General Condition: Good

Scouring: None

Debris: Debris just below dam

Riprap: Good

Other: Channel does not show and erosion or evidence of shortage of capacity.

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 8: Debris in outlet channel just downstream of spillway



Photo 9: Outlet channel from dam to West Mountain Road culvert

Part VIII: Intake Structure(s)

Number of Intake Structures: 1 (if there is more than one intake structure, reproduce this section and paste right below the previous section)

Intake Structure Type (see instructions): Right pipe

General Description: Cast iron pipe under dam embankment

General Condition: unknown

Concrete Condition: N/A

Stone Masonry: Good

Settlement/Alignment/Movement: Unknown

Cracks: N/A

Other: Intake area not visible

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 10: Access to valve on intake

Part IX: Outlet Structure(s)

Number of Outlet Structures: 1 (if there is more than one outlet structure, reproduce this section and paste right below the previous section)

Outlet Structure Type (see instructions): Right outlet pipe

General Description: Cast iron pipe under dam

General Condition: Unknown

Concrete Condition: N/A

Stone Masonry: Fair

Settlement/Alignment/Movement: None observed

Scouring/Undermining: Minor

Other: Outlet pipe is at grade and likely not used for a significant time

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 11: Pipe Outlet with rubble masonry endwall

Part X: Miscellaneous Features

List miscellaneous features: (e.g., access roads, bridges, etc.): Walkway to right side of dam, low embankment to left, riprap repairs

Error! Reference source not found.

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)



Photo 12: Walkway around right side



Photo 13: Low embankment to left



Photo 14: Riprap repair downstream left



Photo 15: Upstream overview of dam

Part XI: Downstream Hazard Classification Reassessment

Downstream Hazard Classification: *(provide recommendation for the hazard class based on the Dam Safety regulation. See Instructions and Appendix B.)*

Current hazard classification (BB) appears to be correct

Part XII: Recommendations *(See instructions for identifying recommendations)*

Recommendations: *(Each item should be numbered)*

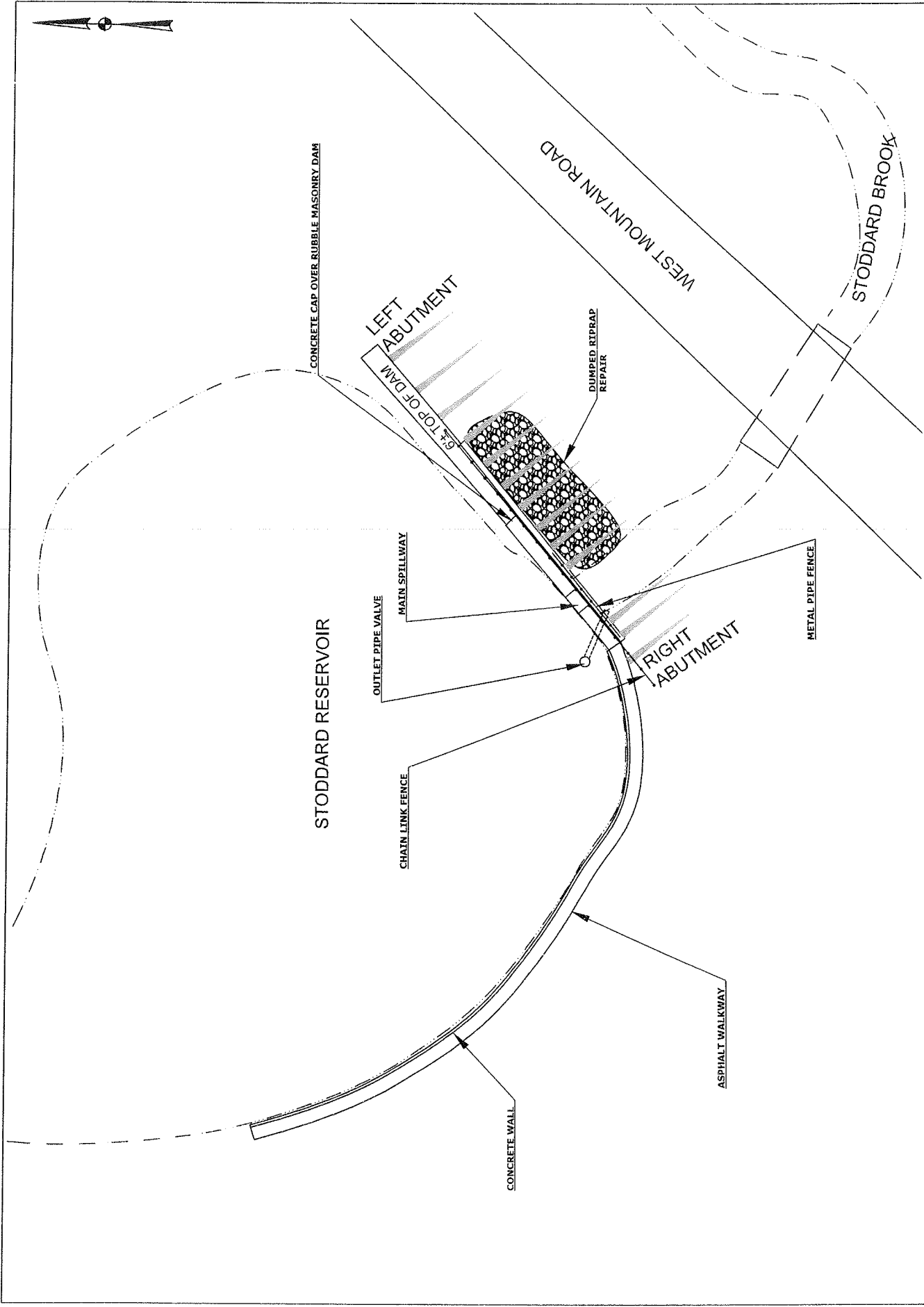
1. Given minimal freeboard and spillway capacity, a hydrologic and hydraulic analysis is recommended.
2. Based on outcome of H&H analysis, consider revisions to spillway and outlet area
3. Revise fencing to not cross revised spillway, and reduce potential for blockage of spillway.

Part XIII: Photographs/Graphics (see instructions and [Appendix C](#))

[insert photos/graphics here if not included in each part above]



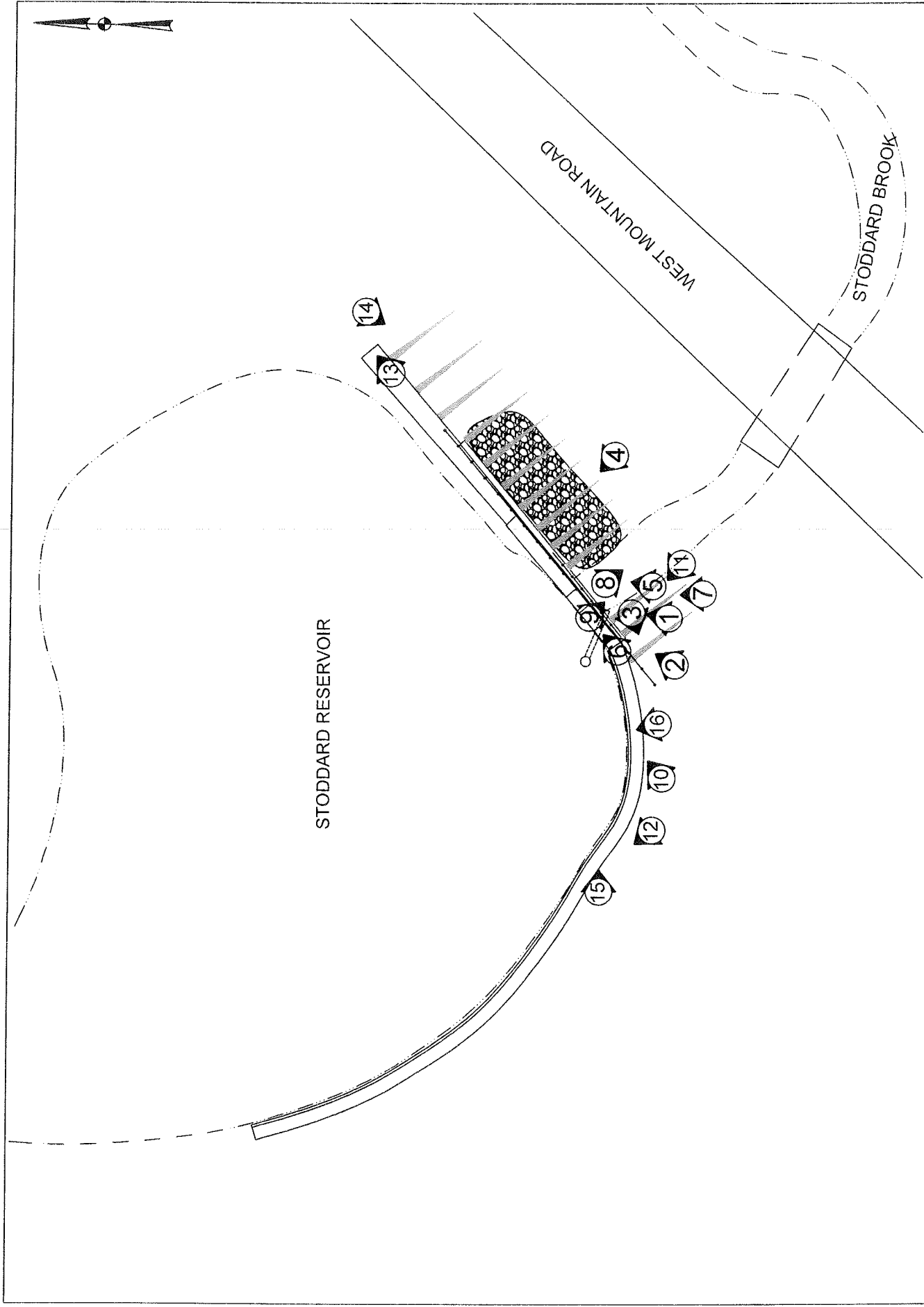
Photo 16: Reservoir overview



SUPV.	S.R.M.	STODDARD RESERVOIR DAM - #12804			SHEET	1
DESIGN	M.E.F.	SKETCH MAP			REV.	0
DRAWN	M.E.F.	SCALE - 1:50			FILE NAME	NUMBER
CHECKED					PROJECT	OF
DATE	8/26/16				STODDARD RESERVOIR DAM INSPECTION	1
					DAM INSPECTION	LOCATION
					933 HOPMEADOW STREET	15036.10
					SIMSBURY, CT 06786	0
					WENGELL, McDONNELL & COSTELLO	1
					87 HOLMES ROAD	
					NEWINGTON, CT 06111	
					(860) 667-9624	

PREPARED FOR:
TOWN OF SIMSBURY
933 HOPMEADOW STREET
SIMSBURY, CT 06786

WMC
CONSULTING ENGINEERS
WENGELL, McDONNELL & COSTELLO
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624




SUPV. S.R.M.		<div><div><div></div><div></div><div></div></div><div>WMC</div><div>CONSULTING ENGINEERS</div></div> <div><div><div></div><div></div><div></div></div><div>• WENGELL, McDONNELL & COSTELLO •</div><div>87 HOLMES ROAD</div><div>NEWINGTON, CT 06111</div><div>(860) 667-9624</div></div>	PREPARED FOR:		TOWN OF SIMSBURY 933 HOPMEADOW STREET SIMSBURY, CT 06786	STODDARD RESERVOIR DAM - #12804 PHOTO LOG SCALE - 1:50			
DESIGN M.E.F.			STODDARD RESERVOIR DAM INSPECTION						
DRAWN M.E.F.			PROJECT — DAM INSPECTION						
CHECKED			LOCATION — 15036.10						
DATE 8/26/16			FILE NAME — 0						
				NUMBER	REV.	SHEET	OF	1	

Part XV: Professional Engineer Certification

The following certification must be signed by a Professional Engineer

"I hereby certify that the information provided in this report has been examined by me and found to be true and correct in my professional judgment."


Signature of Professional Engineer

9/13/16
Date

Stephen R. McDonnell, P.E.

Vice President

12010

Printed Name of Professional Engineer

Title

CT P.E. Number

WMC Consulting Engineers, Inc.
Name of Firm

Affix P.E. Stamp Here



Part XVI: Owner Signature

The following statement must be signed by the Owner(s) of the subject Dam.

"The information provided in this report has been examined by me."	
Signature of Owner	Date
Jerome F. Shea	Town Engineer
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)

Note: Mail the completed inspection report to:

**DAM SAFETY PROGRAM
INLAND WATER RESOURCES DIVISION
CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106**

In addition, please send this completed report converted to Adobe portable document format (pdf) including a scan of the signature page via email to: DEEP.DamSafety@ct.gov